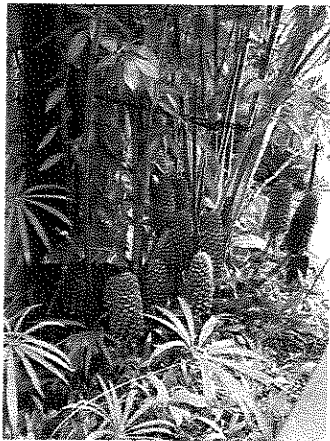
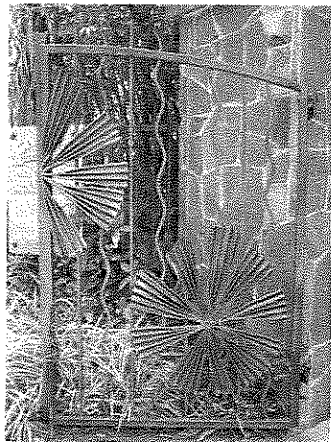




THE FLECKER BOTANIC GARDENS,
TANKS ARTS CENTRE AND
CENTENARY LAKES
CONSERVATION MANAGEMENT
PLAN



Final



A report to Cairns Regional Council

January 2009



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Executive Summary

The Cairns Regional Council (CRC) own and manage the Flecker Botanic Gardens, the Tanks Arts Centre and Centenary Lakes. These places are managed as one property. Two areas within this property have been listed as items of state significance on the Queensland Heritage Register. These are the Tanks Arts Centre registered as the WWIIRAN Fuel Installation and the Flecker Botanic Gardens. The heritage significance of these places is mirrored by the high regard that the local community have for them.

The listing of places on the Queensland Heritage Register however places legal requirements on the owner and manager of the property to manage these places in accordance with their documented significant values and this poses some challenges.

The primary values for which the Tanks Art Centre has been recognised as being of State Significance are its historic WWII buildings and history. This has important implications for the future management of the area and presents some challenging constraints and opportunities. Essentially it means that if there is a conflict between the contemporary use of the area and the historic fabric and elements then the conservation of the historic elements should take precedence. Adaptive re-use of a significant heritage site must be consistent with the conservation of the heritage significance. For the Tanks Art Centre listed as the WWII RAN Fuel installation this is especially pertinent and future development of the Art Centre must not compromise the historic values for which the site has been listed.

'Adaptive use' is not an issue with the management of Flecker Botanic Gardens which still function as Botanic Garden. Here, the challenge in managing the significance is not so much about conserving 'fabric ' or preventing change but about ensuring that 'change' in a constantly changing biological environment is responsive to the gardens rather than imposed on the gardens.

The CRC has commissioned this Conservation Management Plan (CMP) to guide the long term management of the heritage values of the property.

It is recommended that this CMP is used as the basis of a Heritage Agreement (s80 of the Queensland Heritage Act, 1992) between the CRC and the Qld Minister for Sustainability, Climate Change and Innovation who is responsible for heritage. The policies that will guide the future management of the property have been formulated to conserve the identified heritage values while acknowledging that these values will evolve over time and that continued public use and enjoyment of these places is crucial (see Section 8). This report also recommends a number of Special Exemptions be granted as part of the Heritage Agreement (see Section 9.2.2 this report and Div 2 s72 (3) QHA 1992) to allow the CRC to manage, develop and promote the property in accordance with the CMP. The exemptions generally focus on works as outlined in the CRC's MasterPlan for the site but recognise that in many cases the works in that document are conceptual and lack specific design and impact detail and indeed may change over time. In addition, the MasterPlan was prepared before a Conservation Management Plan for the QHC listed sites had been prepared and

consequently lacked sufficient consideration of the heritage issues in some areas. Therefore policies have been developed to guide future plans and act as qualifiers on the exemptions.

The exemptions are recommended subject to the adoption by the CRC of the relevant policies.

Conservation policy as outlined in this document is developed on the basic heritage conservation premise that management of heritage places and values flows from its significance. It also recognizes that while there is a legal requirement that the two listed places be managed to conserve the primary values for which they are listed the contributions of all aspects of cultural significance of a place should be respected. In the case of the two listed places this means balancing a consideration for the contemporary social values closely associated with their current use with the identified historic values.

In addition to the recommended Special Exemptions (section 9.2.2) the CMP identifies works that will require future EPA approval (Section 9.2.3). Generally these are works that require major modification of or impact to significant fabric and/or identified values and for which insufficient design detail is yet known to recommend whether or not exemptions should be granted.

A number documentation and investigations tasks have been identified that should be carried out as a matter of urgency to ensure appropriate and informed long term management of the property (see section 9.2.4 and Table 8). These include:

- The modification of the Masterplan or proposed future actions to ensure consistency with this CMP;
- The development of a database identifying significant trees/plantings and their location;
- Further archaeological assessment to refine or limit the areas of archaeological potential;
- The immediate varying of current and future contracts (where these involve subsurface excavations with identified Potential Archaeological Deposits –PADs) to include provisions for archaeological monitoring;
- The preparation of an Interpretation Plan and until its completion the installation of at least some preliminary public interpretation at the Tanks Arts Centre which explains the history of the site and the values for which it has been listed;
- Photographic documentation of any changes as they occur and the permanent archiving of these photos along with all plans and approvals documentation as part of the historic record of the site.

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Glossary of Terms and Abbreviations

Adaptation: modifying a place to suit the existing use or a proposed use (Burra Charter 1.9). Adaptation is appropriate where no other option can be applied and where such work does not detract from the cultural significance of the place.

Compatible use: a use which respects the cultural significance of a place and involves no, or minimal impact on cultural significance (Burra Charter 1.11).

Conservation: all the processes of looking after a place so as to retain its cultural significance. It includes maintenance and may ... include preservation, restoration, reconstruction and adaptation (Burra Charter 1.4).

CRC: Cairns Regional Council. Until 2008 this was the Cairns City Council.

EPA: Environmental Protection Agency (Queensland)

Fabric: all of the physical material of a place, including components, fixtures, contents and objects (Burra Charter 1.3).

Feature: An element of a site or place.

Maintenance: the continuous protective care of the fabric and setting of a place. Maintenance is to be distinguished from repair which involves restoration or reconstruction (Burra Charter 1.5).

NRW: The Department of Natural Resources and Water (Queensland).

PAD: Potential Archaeological Deposit. An area identified as having some potential to contain subsurface archaeological remains.

Place: the site, area, land, landscape, building or other work, group of buildings or other works, and may include components, contents, spaces and views (Burra Charter 1.1).

Precinct: The bounded area or site under consideration

Preservation: maintaining the fabric of a place in its existing state and retarding deterioration (Burra Charter 1.6).

QHC: Queensland Heritage Council.

Restoration: returning the existing fabric of a place to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material (Burra Charter 1.7).

Reconstruction: returning a place to a known earlier state and is distinguished by the introduction of new material (which may include recycled material) into the fabric (Burra Charter 1.8).

Setting: means the area around a place, which may include the visual catchment.

Significance: Cultural significance means aesthetic, historic scientific social or spiritual value for past, present or future generations

SoHI: Statement of Heritage Impact

Value: Cultural heritage value and cultural heritage significance are synonymous terms.

1. Introduction

This Conservation Management Plan (CMP) was commissioned by the Cairns Regional Council to comply with the requirements of the Queensland Heritage Council and Environmental Protection Agency guidelines regarding the management of places on the Queensland Heritage Register. The CMP has been commissioned following an earlier assessment of the heritage significance of the area known as 'The Tanks' and the Flecker Botanic Gardens (Gordon Grimwade and Associates 2005). That assessment found both areas to be of State significance and resulted in their listing on the Queensland Heritage Register.

In the meantime the Cairns Regional Council had commissioned EDAWgillespie to prepare a MasterPlan for future development of the study area (comprising the Botanic Gardens, the Tanks and Centenary Lakes). In this CMP the study area comprising the above three areas is referred to hereafter as the Flecker Botanic Gardens, Tanks Arts Centre and Centenary Lakes Heritage Precinct. This CMP considers the current and proposed future uses of the study area within the constraints and opportunities posed by the State Heritage Listing of components of the study area. It sets out guidelines for future management of the area designed to protect its heritage values. The proposed future uses are as outlined in the Master Plan. The MasterPlan should be reviewed and if necessary modified to ensure consistency with this CMP so that the heritage values are appropriately recognized and conserved.

1.1 Terms of Reference

This CMP covers the areas known as the Tanks Arts Centre; the Flecker Botanic Gardens and Centenary Lakes. It complies with requirements for the effective management of the State Heritage listed areas which are listed under the site names: *WWII RAN Fuel Installation (former) (see Appendix A) and the Flecker Botanic Gardens (see Appendix B)*.

The purpose of any conservation plan is to establish what is significant in a place and to develop appropriate policies to enable that significance to be retained in its future use and development (Kerr 1985:1). In this case a prior heritage significance assessment has determined that 2 components of the study area i.e the *WWII RAN Fuel Installation and the Flecker Botanic Gardens* are of significance to the heritage of the State of Queensland.

The objective of the preparation of this CMP is to provide a contemporary approach to identifying, directing and achieving long term conservation and management outcomes for the Flecker Botanic Gardens, Tanks Arts Centre and Centenary Lakes Heritage Precinct by considering:

- Ways to refine the management approach and strategically focus on the achievement of long term conservation outcomes for the Botanic Gardens Heritage Precinct to ensure the identification and retention of the heritage values of the place as a regional cultural tourism destination.
- The balanced and compatible management of cultural (including historic) values of the study area;
- The cultural heritage significance of the 'WWII RAN Fuel Installation' as an individual site as well as its contribution to a representative collection of the World War II sites throughout north Queensland and beyond;

- The cultural heritage significance of the Flecker Botanic Gardens;
- Cairns Regional Council management framework, legislative requirements and other stakeholder issues related to the management of the Flecker Botanic Gardens, Tanks Art Centre and Centenary Lakes Heritage Precinct;
- The development control planning necessary to provide guidance for conservation/development management of the place and its multiple uses including its ongoing public role and conservation/adaptation for new uses so as to ensure the retention and enhancement of the diverse significant heritage values;
- The appropriate interpretation of the sites' values to the public.

1.2 Limitations

No additional primary historical research was undertaken as part of this Conservation Management Plan. The historical research which has been previously undertaken by Gordon Grimwade and Associates for council, was comprehensive and sufficient for the current study. Nevertheless, there is always the possibility that further historical information may one day be revealed that has bearing on this study and if so such information may require a reconsideration of the CMP.

Ideally when determining the future use of significant historic places, the assessment of significance and the development of a CMP to set out the guidelines for management precede and inform decisions about future uses and the design of relevant documents such as Masterplans. In this case however the Masterplan and decisions about the future of the site along with significant budget commitments were undertaken before the CMP. It is clear from the Masterplan produced that the conservation of cultural heritage value was not a primary objective and this is a serious limitation given the current QHR listings for two parts of the area. Instead the Masterplan lists *...the important aims of the planned development process:*

- *To develop a quality, leading regional-level cultural and environmental precinct for cairns*
- *To maintain the site as a passive activity facility as part of the city wide open space and recreation network;*
- *To establish an invaluable community facility which enhances lifestyle and assists to establish a strong 'sense of place'*
- *To integrate the functions and operations of the centres to establish a united complex for community benefit. (Edawgillespie n.d:0.02)*

The proposals for the future of the site have been to some extent endorsed by the Environmental Protection Agency via approval of a number of permits to carry out various work to implement the Masterplan. The challenge for this document is to uphold the conservation of significant heritage values within the general context of defined aspirations for the future development of the site and to assist in identifying where future permits might be required and what elements of work might best be undertaken under general exemptions.

In general works outlined in the MasterPlan are endorsed under this Conservation Management Plan provided that they are undertaken in such a way that they are consistent with the policies outlined in

Section 8 that have been developed to safeguard the heritage significance of the site. The exception to this is the number and extent of the breaks in the bund wall at the Tanks Art Centre as proposed in the original Masterplan document. These are considered inconsistent with the heritage values of the site which is listed for its historical significance as a WWII RAN Fuel Installation site and as such the bund wall is an integral element of the site. This aspect of the Masterplan requires reconsideration to make it compatible with the policies as outlined.

At the time of writing this CMP the EPA had already given approval for the removal and relocation of the foam shed originally located outside the bund wall near Tank 5 (see Plate 18). At the time of writing, the new location for this structure had not yet been decided. Ideally the decision to relocate the foam shed should be reconsidered so that the complete operational system of the WWII RAN Fuel installation site can be interpreted to the public. However if the relocation of the structure proceeds then the new location should allow for interpretation as part of the system of oil storage and management and therefore ideally be outside the bund wall perhaps on the Whitlow house side of the service entrance gate near Tank 5.

1.3 Authorship and Acknowledgements

This Conservation Management Plan was written and compiled by Dr Susan McIntyre-Tamwoy of the ARC Centre of Excellence in Coral Reef Studies and the School of Arts and Social Sciences, James Cook University as a James Cook University contract project. The historical material used in this document except where otherwise stated was compiled as part of a previous study for Cairns Regional Council by Gordon Grimwade and Associates. This information was provided by the Council for use in this CMP. The history was used largely as originally written with the permission of Gordon Grimwade. No further primary historical research has been undertaken as part of this current project.

Unless otherwise stated the maps and plans in this Conservation Management Plan have been supplied by Council and were prepared by EDAG Gillespies the consultants commissioned to prepare the *Botanic Gardens/Tanks/Centenary Lakes Masterplan report* (no date).

The assistance of Alice Buhrich in providing the brief contextual information about past Aboriginal history in the Cairns area; and general advice from Duncan Ross –Watt EPA are gratefully acknowledged.

This final version of the CMP incorporates comments from an external peer review, client comments on an earlier draft and EPA comments on a final draft of the document.

1.4 Methodology and Report Structure

The Conservation Management Plan has been prepared in accordance with the philosophy and definitions as set out in the *Burra Charter* (Australia ICOMOS 1999); the *International Cultural Tourism Charter* (as adopted by ICOMOS 1999); Australian Heritage Commission's *Australian Natural Heritage Charter*; and J.S. Kerr's *Conservation Plan* (1985) as well as taking into account additional requirements which need to be considered to satisfy legislative and management needs of the Cairns Regional Council and the Queensland Heritage Council.

The structure of this report reflects the approach recommended in the Burra Charter as encapsulated in the process represented by Figure 1. Sections 1.0 to 4.0 comprise material arising from the investigation of the documentary and physical evidence relevant to understanding the place. The Assessment of Significance in Section 6.0 is an outcome of the findings of the analysis of evidence that

precedes it in Section 5. Section 7.0 outlines the major constraints and opportunities and section 8.0 and 9.0 detail the policies and their implementation. Together these latter two sections provide the strategic approach to managing the significance of the place.

1.5 Study Area

The study area for this project comprises three associated but discrete areas of land collectively referred to as the Flecker Botanic Gardens, Tanks Art Centre and Centenary Lakes Heritage Precinct (see Figure 2). This includes three management sub-precincts:

- The Flecker Botanic Gardens
- The Tanks Arts Centre and
- Centenary Lakes.

The study area is located in the suburb of Edge Hill. The northern boundary of the site is Goodwin Street and the southern boundary is Greenslopes Street. Saltwater and Lily Creeks form the eastern boundary and McCormack Street is the western boundary (see Figure 2).

The Flecker Botanic Gardens, Tanks Art Centre and Centenary Lakes Heritage Precinct is made up of 13 parcels of land (GHD 2006:12) including:

- Lot 8 on RP737210
- Lot 400 on NR 7222: Crown Land set aside for 'recreation' with Cairns Regional Council as the Trustee.
- Sub-lease over Lot400 on NR 7222 for the purpose of a kiosk.
- Lot 615 on NR 7386: Crown Land with Cairns Regional Council as Trustee. The reserve set aside for local government/ Botanic.
- Lot 349 on RP715416: freehold/Arts Centre.
- Lot 424 on RP 718008: Freehold/Arts Centre.
- Lot346 on RP 711610: Freehold Depot Dwelling.
- Lot 471 on RP 729462:Freehold/ Depot and Dwelling.
- Lot2 on RPO 736788: Freehold/ Vacant Land.
- Lot 350 on NR 3374: Commonwealth of Australia. Land extends form Greenslopes Street to Collins Avenue via Lot 615.
- Lot 343 on NR 6739: Crown Land with Sucha Singh Chohan as Trustee. Set aside for a memorial.
- Lot 1 on RP 717796: Freehold/ Vacant Land.
- Road reserves:
- Collins Avenue
- McCormack Street
- Goodwin Street
- MacDonnell Street
- Reserve on West Bank of Saltwater Creek.

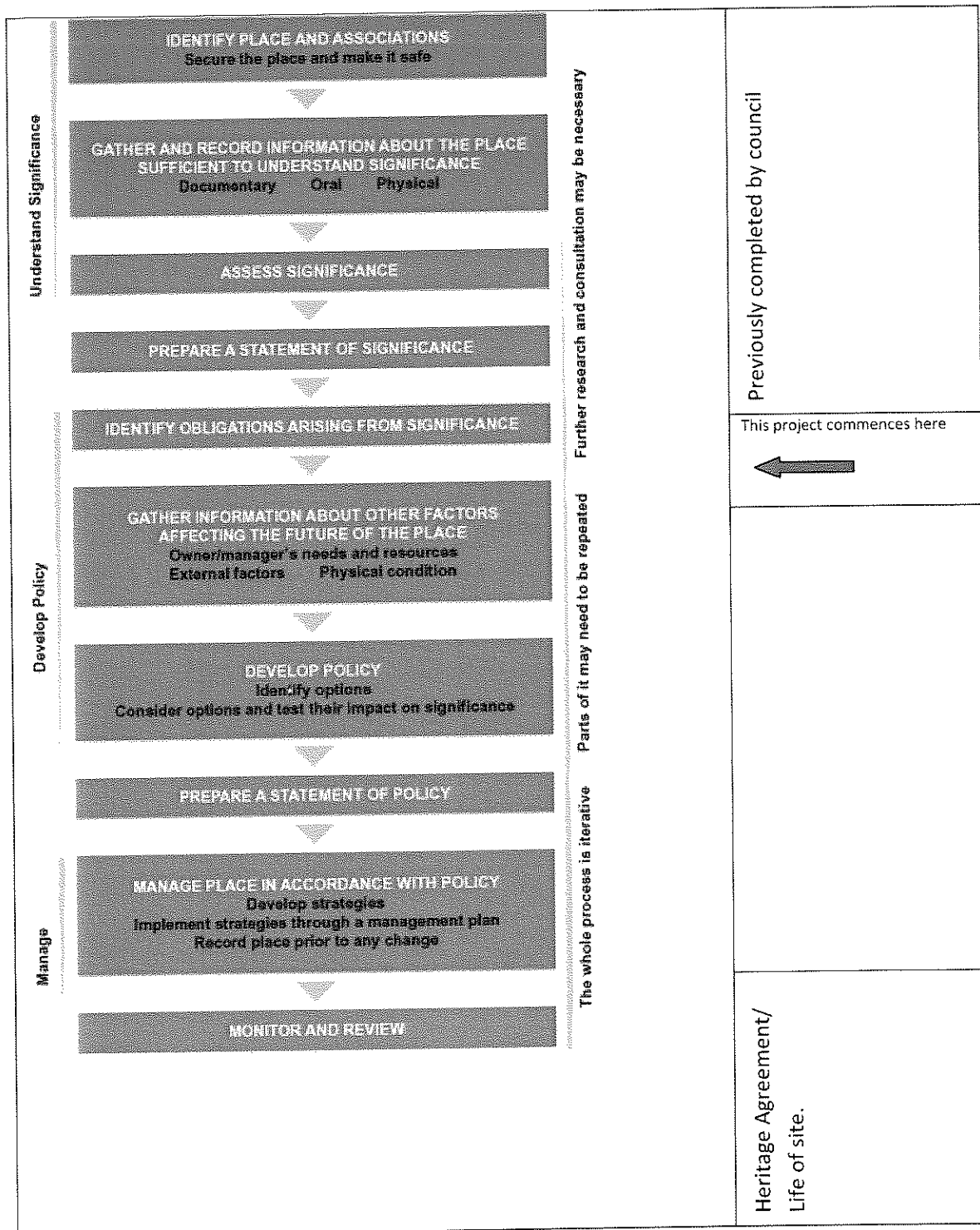


Figure 1. : The Burra Charter Process

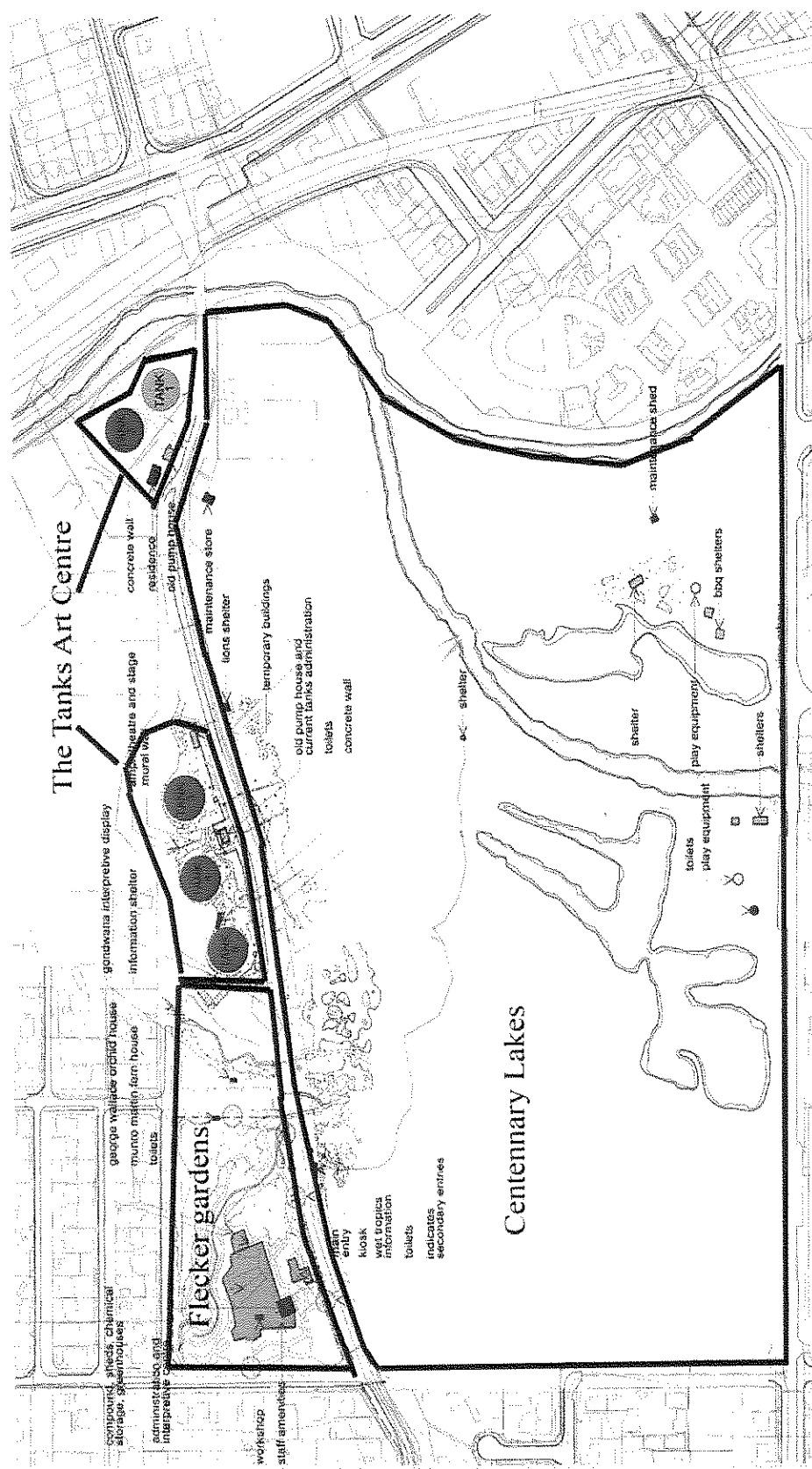


Figure 2: The location of the Study area showing the 3 discrete but related components.

(From an original plan by EDAWgillespie)

Susan McIntyre-Tamway, James Cook University

2.0 Statutory Context for management and Conservation

2.1 Historic Heritage

The Queensland Heritage Register is a list of places or buildings of cultural heritage significance in Queensland. Developed under the Queensland Heritage Act (1992), the Register recognises the value of Queensland's cultural heritage. It gives community recognition to the value and importance of significant cultural heritage places. Once a place is entered in the Register, anyone wanting to alter it must apply to the EPA for approval. Overall, the Register protects significant cultural heritage places, so that they are conserved for future generations. The register is maintained by the Queensland Heritage Council, which is established under the Queensland Heritage Act 1992. The Council consists of 12 members from a number of organisations concerned with heritage conservation and property interests throughout the state.

2.1.1 Obligations arising from the Queensland Heritage Act in relation to the current study.

The study area contains two sites registered on the Queensland Heritage Register. Gazettal on this list means that any activity that will alter or damage these sites requires prior approval from the EPA. The Queensland Heritage Council issued General Exemption (G1) on 3 December 2004 (see Appendix E). The purpose of the General Exemption (G1) is to approve a specified range of development, including building maintenance, landscape maintenance, cleaning, painting and minor repair works, without the need for further approval by the EPA.

Additional exemptions for specific sites are possible under a Heritage Agreement. This CMP will form the basis of a Heritage Agreement for this site. This agreement will include specific exemptions to allow agreed development consistent with this Conservation Management Plan (see section 9.0 for more detail).

This CMP operates in part to define activities which:

- Fall within the umbrella of 'routine maintenance' and are therefore already allowed under the standard General Exemptions (see section 6.0 and 7.0) (see Section 9.2.1)
- Establish a set of pre-agreed activities that may be subject to exemptions arising from a heritage Agreement (see Section 9.2.2) and
- Require specific approval (see section 9.2.3).

2.2 Indigenous Cultural Heritage

Indigenous cultural heritage in Queensland is protected under the Aboriginal Cultural Heritage Act 2003 which is administered by the Department of Natural Resources and Water (DNRW). The Act also includes State mechanisms for recognition of Native Title interest in cultural heritage.

The Aboriginal Cultural Heritage Act 2003 (Act No 79 of 2003) was assented to on the 6th November 2003. Its stated purpose is 'to provide effective recognition, protection and conservation of Aboriginal cultural heritage' (ACH Act, Qld 2003 Div 2. S 1). The principles underlying the main purpose of the act are enshrined in the legislation as:

- The recognition, protection and conservation of Aboriginal cultural heritage should be based on respect for Aboriginal knowledge, culture and traditional practices;
- Aboriginal people should be recognised as the primary guardians, keeper and knowledge holders of Aboriginal cultural heritage;
- To respect, preserve and maintain knowledge, innovations and practices of Aboriginal communities and to promote understanding of Aboriginal cultural heritage;
- Activities involved in recognition, protection and conservation of Aboriginal cultural heritage are important because they allow Aboriginal people to reaffirm their obligations to 'law and country';
- To establish timely and efficient processes for the management of activities that may harm Aboriginal cultural heritage. (ACH Act Qld 2003 Div 2 S 5 (a) –(e))

2.2.1 Obligations arising from the Aboriginal Cultural Heritage Act 2003 in relation to the current study.

There are no recorded Aboriginal sites within the study area and consultation with the Aboriginal community (both the Yirrganydji and the Yidinji) by Gordon Grimwade and Associates during an earlier study revealed no knowledge within the Aboriginal community of sites within this area. This does not mean that no sites ever existed within the study boundaries. The area has undergone substantial disturbance and landscape re-modelling since the arrival of settler Australians in this region. This substantial disturbance includes the creation of the saltwater and freshwater lakes in the mid to late 1970's, the excavation of the lands and construction of the Tanks during World War II along with the associated infrastructure such as the rail lines and pipelines, and the creation of the gardens themselves complete with the manager's residence (now office), the restaurant and other buildings and the paths and garden beds. Despite this, it remains possible that subsurface Aboriginal artefacts might occur in undisturbed pockets of land in association with archaeological deposits. Should such material be uncovered in the course of subsurface excavations related to future maintenance or redevelopment, then work should cease while advice is sought from the local Aboriginal community groups and the relevant officers of the Department of Natural Resources and Water. Any such discovery would add to the richness of the heritage values of the area and provide opportunities for interpretation and public education. The policy and procedures relating to inadvertent discovery of Aboriginal artefacts (or suspected Aboriginal artefacts) is outlined in Section 8.9.4.

2.3 Obligations Arising from Conservation Charters

2.3.1 The *Burra Charter* of Australia ICOMOS

The *Burra Charter* (the *Australia ICOMOS Charter for the Conservation of Cultural Significance* 1999) establishes a series of principles for the conservation of significant cultural heritage places. It states that cultural significance is 'aesthetic, historic, scientific, social or spiritual value for past, present or future generations', and that cultural significance '*is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects*'. It also notes that 'places may have a range of values for different individuals or groups'. The articles that are particularly important to this site are shown in Table 1 below.

Table 1 Burra Charter Articles of particular relevance to this project.

Article 2	Conservation and management
2.1	Places of cultural significance should be conserved.
2.2	The aim of conservation is to retain the cultural significance of a place.
2.3	Conservation is an integral part of good management of places of cultural significance.
2.4	Places of cultural significance should be safeguarded and not put at risk or left in a vulnerable state.
Article 3	Cautious approach
3.1	Conservation is based on a respect for the existing fabric, use, associations and meanings. It requires a cautious approach of changing as much as necessary but as little as possible.
3.2	Changes to a place should not distort the physical or other evidence it provides, nor be based on conjecture.
Article 4	Knowledge, skills and techniques
4.1	Conservation should make use of all the knowledge, skills and disciplines which can contribute to the study and care of the place.
4.2	Traditional techniques and materials are preferred for the conservation of significant fabric. In some circumstances modern techniques and materials which offer substantial conservation benefits may be appropriate.
Article 5	Values
5.1	Conservation of a place should identify and take into consideration all aspects of cultural and natural significance without unwarranted emphasis on any one value at the expense of others.
5.2	Relative degrees of cultural significance may lead to different conservation actions at a place.
Article 6	Burra Charter Process
6.1	The cultural significance of a place and other issues affecting its future are best understood by a sequence of collecting and analysing information before making decisions. Understanding cultural significance comes first, then development of policy and finally management of the place in accordance with the policy.
6.2	The policy for managing a place must be based on an understanding of its cultural significance.
6.3	Policy development should also include consideration of other factors affecting the future of a place such as the owner's needs, resources, external constraints and its physical condition.
Article 7	Use
7.1	Where the use of a place is of cultural significance it should be retained.
7.2	A place should have a compatible use.
Article 8	Setting
	Conservation requires the retention of an appropriate visual setting and other relationships that contribute to the cultural significance of the place.
	New construction, demolition, intrusions or other changes which would adversely affect the setting or relationships are not appropriate.
Article 9	Location

9.1	The physical location of a place is part of its cultural significance. A building, work or other component of a place should remain in its historical location. Relocation is generally unacceptable unless this is the sole practical means of ensuring its survival.
9.2	Some buildings, works or other components of places were designed to be readily removable or already have a history of relocation. Provided such buildings, works or other components do not have significant links with their present location, removal may be appropriate.
9.3	If any building, work or other component is moved, it should be moved to an appropriate location and given an appropriate use. Such action should not be to the detriment of any place of cultural significance.
Article 10	Contents
	Contents, fixtures and objects which contribute to the cultural significance of a place should be retained at that place. Their removal is unacceptable unless it is: the sole means of ensuring their security and preservation; on a temporary basis for treatment or exhibition; for cultural reasons; for health and safety; or to protect the place. Such contents, fixtures and objects should be returned where circumstances permit and it is culturally appropriate.
Article 11	Related places and objects
	The contribution which related places and related objects make to the cultural significance of the place should be retained.
Article 12	Participation
	Conservation, interpretation and management of a place should provide for the participation of people for whom the place has special associations and meanings, or who have social, spiritual or other cultural responsibilities for the place.
Article 13	Co-existence of cultural values
	Co-existence of cultural values should be recognised, respected and encouraged, especially in cases where they conflict.
Article 14	Conservation processes
	Conservation may, according to circumstance, include the processes of: retention or reintroduction of a use; retention of associations and meanings; maintenance, preservation, restoration, reconstruction, adaptation and interpretation; and will commonly include a combination of more than one of these.
Article 15	Change
15.1	Change may be necessary to retain cultural significance, but is undesirable where it reduces cultural significance. The amount of change to a place should be guided by the cultural significance of the place and its appropriate interpretation.
15.2	Changes which reduce cultural significance should be reversible, and be reversed when circumstances permit.
15.3	Demolition of significant fabric of a place is generally not acceptable. However, in some cases minor demolition may be appropriate as part of conservation. Removed significant fabric should be reinstated when circumstances permit.
15.4	The contributions of all aspects of cultural significance of a place should be respected. If a place includes fabric, uses, associations or meanings of different periods, or different aspects of cultural significance, emphasizing or interpreting one period or aspect at the expense of another can only be justified when what is left out, removed or diminished is of slight cultural significance and that which is emphasized or interpreted is of much greater cultural significance.
Article 16	Maintenance
	Maintenance is fundamental to conservation and should be undertaken where fabric is of cultural significance and its maintenance is necessary to retain that cultural significance.

Article 17	Preservation
	Preservation is appropriate where the existing fabric or its condition constitutes evidence of cultural significance, or where insufficient evidence is available to allow other conservation processes to be carried out.
Article 18	Restoration and reconstruction
	Restoration and reconstruction should reveal culturally significant aspects of the place.
Article 19	Restoration
	Restoration is appropriate only if there is sufficient evidence of an earlier state of the fabric.
Article 20	Reconstruction
20.1	Reconstruction is appropriate only where a place is incomplete through damage or alteration, and only where there is sufficient evidence to reproduce an earlier state of the fabric. In rare cases, reconstruction may also be appropriate as part of a use or practice that retains the cultural significance of the place.
20.2	Reconstruction should be identifiable on close inspection or through additional interpretation.
Article 21	Adaptation must be limited to that which is essential to a use for the place determined in accordance with Articles 6 and 7.
21.1	Adaptation is acceptable only where the adaptation has minimal impact on the cultural significance of the place.
21.2	Adaptation should involve minimal change to significant fabric, achieved only after considering alternatives.
Article 22	New work
22.1	New work such as additions to the place may be acceptable where it does not distort or obscure the cultural significance of the place, or detract from its interpretation and appreciation.
22.2	New work should be readily identifiable as such.
Article 23	Conserving use
	Continuing, modifying or reinstating a significant use may be appropriate and preferred forms of conservation.
Article 24	Retaining associations and meanings
24.1	Significant associations between people and a place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented.
24.2	Significant meanings, including spiritual values, of a place should be respected. Opportunities for the continuation or revival of these meanings should be investigated and implemented.
Article 25	Interpretation
	The cultural significance of many places is not readily apparent, and should be explained by interpretation. Interpretation should enhance understanding and enjoyment, and be culturally appropriate.
Article 26	Applying the Burra Charter process
26.1	Work on a place should be preceded by studies to understand the place which should include analysis of physical, documentary, oral and other evidence, drawing on appropriate knowledge, skills and disciplines.
26.2	Written statements of cultural significance and policy for the place should be prepared, justified and accompanied by supporting evidence. The statements of significance and policy should be incorporated into a management plan for the place.

26.3	Groups and individuals with associations with a place as well as those involved in its management should be provided with opportunities to contribute to and participate in understanding the cultural significance of the place. Where appropriate they should also have opportunities to participate in its conservation and management.
Article 27	Managing change
27.1	The impact of proposed changes on the cultural significance of a place should be analyzed with reference to the statement of significance and the policy for managing the place. It may be necessary to modify proposed changes following analysis to better retain cultural significance.
27.2	Existing fabric, use, associations and meanings should be adequately recorded before any changes are made to the place.
Article 28	Disturbance of fabric
	Disturbance of significant fabric for study, or to obtain evidence, should be minimized. Study of a place by any disturbance of the fabric, including archaeological excavation, should only be undertaken to provide data essential for decisions on the conservation of the place, or to obtain important evidence about to be lost or made inaccessible.
	Investigation of a place which requires disturbance of the fabric, apart from that necessary to make decisions, may be appropriate provided that it is consistent with the policy for the place. Such investigation should be based on important research questions which have potential to substantially add to knowledge, which cannot be answered in other ways and which minimizes disturbance of significant fabric.
Article 29	Responsibility for decisions
	The organizations and individuals responsible for management decisions should be named and specific responsibility taken for each such decision.
Article 30	Direction, supervision and implementation
	Competent direction and supervision should be maintained at all stages, and any changes should be implemented by people with appropriate knowledge and skills.
Article 31	Documenting evidence and decisions
	A log of new evidence and additional decisions should be kept.
Article 32	Records
32.1	The records associated with the conservation of a place should be placed in a permanent archive and made publicly available, subject to requirements of security and privacy, and where this is culturally appropriate.
32.2	Records about the history of a place should be protected and made publicly available, subject to requirements of security and privacy, and where this is culturally appropriate.
Article 33	Removed fabric
	Significant fabric which has been removed from a place including contents, fixtures and objects, should be catalogued, and protected in accordance with its cultural significance.
	Where possible and culturally appropriate, removed significant fabric including contents, fixtures and objects, should be kept at the place.
Article 34	Resources
	Adequate resources should be provided for conservation.

2.2.2 The Australian Natural Heritage Charter

The Australian Natural Heritage Charter for the Conservation of places of natural heritage significance is a distillation of 'best practice' conservation principles for Australia, based on the consensus of a broad range of experts. It offers a framework for making sound decisions for managing and restoring natural heritage places based on the ecological processes which occur in natural systems. It also provides a process that can be used to support and implement local, state and territory, national and international policies, agreements, strategies and plans. It does not replace statutory obligations.

While parts of the study area such as Centenary Lakes appear to consist of natural vegetation most of this is regrowth augmented with plantings designed to regenerate this area. In this sense the primary values of the area are cultural although aspects of the environment will have natural values including as 'refugia' for native fauna displaced or constrained by surrounding urban development.

Table 2: Thematic Overview

The Flecker Botanic Gardens, Tanks Arts Centre and Centenary Lakes CMP Theme	State theme	National Theme
(i) Formation and modification of a natural environment	none	[(1) Tracing the evolution of a continent's special environments.] (1.2) Tracing the emergence and development of Australian Plants and animals. (1.4) Appreciating the natural wonders of Australia
(ii) Aboriginal people and the environment	None directly relevant but (2) Developing Rural economies (b) displacing Aboriginal people of some relevance	[(2) Peopling the Continent] (2.2) Appreciating how Aboriginal people adapted themselves to diverse regions before regular contact with other parts of the world
(iii) Pioneer settlement of Cairns/ (iiia) Cultural influences in the development of modern Cairns.	Establishing and Developing Towns	[(2) Peopling Australia] (2.4) Migrating [(3) Developing local, regional and national economies] (3.6) Recruitment of immigrant labour. (3.8.6) Building and maintaining railways (3.11) Altering the environment.
(iv) World War II in North Queensland	(6) Maintaining Order c) defending the country	[(8) Developing Australia's cultural life] (8.6.2) Maintaining religious traditions and ceremonies [(7) Governing. (7.7) Defending Australia
(v) Recreation	(2) Developing rural economies	[(1) Tracing the Evolution of a continent's special environments] (1.4) Appreciating the natural wonders of Australia
(vi) Cultural and eco-tourism in protected areas (vi) Educating visitors about natural and cultural values	(f) managing and conserving land, water, flora and fauna (g) encouraging the growth of tourism	(3) Developing local, regional and national economies (3.22) Catering for tourists [(8) Developing Australia's cultural life] (8.1.3) Developing public parks and gardens.

3. Contextual Historical Overview

3.1 Preamble

The accepted practice in presenting the histories of cultural heritage places and landscapes is to frame them in terms of thematic associations. Both the Commonwealth and State heritage agencies have developed standard historical themes and promote their use. It is important to remember that a thematic approach rather than a chronology is intended to provide a qualitative interpretation of the historical facts. When incorporated into the historic heritage inventories such as the Queensland State Heritage Register the thematic approach can assist researchers to identify places of interest to their studies. To be useful in this sense, the use of broad themes for each property or place facilitates comparison between places, however most practitioners acknowledge that there are problems in the standard themes developed by the State and Commonwealth agencies.

In the case of Queensland State Historic themes (see Appendix C for full list), there are some significant gaps. For example the entire process of geological history and the history of the development of biodiversity is not covered in the Queensland state themes (see Table 2). While it could be argued that Aboriginal history post European invasion may be covered to some extent within the State historical themes and sub-themes, the entire diversity of the history of Aboriginal Australians prior to the advent of white invasion is not represented in the State themes due in part to the separation of government responsibilities for Indigenous and 'Historic' heritage between two separate departments. Indigenous sites are rather defined by 'typology' i.e. site types such as fish traps, burial sites etc.

The Commonwealth 'Principal Australian Historic Themes' (see Appendix D Australia's National Heritage AHC 1997) on the other hand are divided into a series of sub themes. The sub-themes attempt to describe the range of the nation's history from the evolution of the natural landscape, through pre-European occupation by Aboriginal Australians and into the present including the contribution of European and other migrant settler Australians. However these sub-themes attempt to cover so many aspects of life on this continent that they often overlap to an extent that is not useful. In communicating the significance of a historic site it is important to select themes that are the most useful in interpreting and presenting the historic values of the specific site.

In this document therefore, relevant State and Commonwealth themes are indicated in brackets but the thematic history of the historic precinct is described in terms more specific to that place which may or may not equate directly to a State or Commonwealth theme. The most relevant State and Commonwealth themes in relation to the study area are shown in Table 2.

3.2 Historical Research and Sources

Gordon Grimwade and Associates have previously carried out extensive historical research relating to the study area for Cairns City Council. This work is documented in their report: *Cairns Botanic Gardens Cultural Heritage Study* (2005) and in an untitled resource volume comprised of copies of historical documents relating to the area. This material was made available for use in this project. No additional historical oral or archival research has been undertaken and therefore the information in Section 3 from sub-section 3.4 onwards is credited directly to Gordon Grimwade' and Associates unless otherwise stated.

3.3 Earliest Aboriginal Use and Settlement

Relevant Themes	Local	Aboriginal people of the Cairns region and the environment
	State	None relevant
	Commonwealth	peopling the continent.

Cairns is situated at the mouth of Trinity Inlet in Far North Queensland, 1712 kilometres north of Brisbane. The inlet is a fine natural harbour. In its original form Cairns consisted of mangrove swamps interspersed with sand ridges. Behind these ridges and swamps, the surrounding ranges are covered with rainforest.

The Flecker Botanic Gardens, Tanks Arts Centre and Centenary Lakes Heritage Precinct occur within an area that would have had a rich variety of natural resources, making it suitable for Aboriginal use. Easy access to the medicinal and food resources of the rainforest, wetlands, freshwater creeks and the nearby littoral zones means that the coastal plain within which the study area is located was well suited to Aboriginal occupation.

3.3.1 Pre Contact

Between 17,000 and 6000 years ago the sea levels rose 120 metres to their present position, with the Great Barrier Reef forming on what had previously been open plains (Beaton 1995:798). Archaeological research of Aboriginal occupation of coastal north Queensland indicates that marine environments and resources were utilised throughout the last phases of marine transgression, with major technological and economic changes taking place in the last 2500 years (Flood 2001:215).

The first Europeans in the Cairns region explored the coastline by boat. Captain Cook passed the area in 1788, prior to running aground near Cape Tribulation, naming topographical features such as Trinity Bay and Cape Grafton. In October-December 1848 the *HMS Rattlesnake*, while on route to meet the Kennedy expedition in Cape York, produced detailed maps of the Cairns coastline. One of these recorded “native huts” at what is now Palm Cove, a “native village” at Wangetti and “many natives” on the coast between Palm Cove and Wangetti (Cairns Historical Society Document Identification: D17068/2).

The Cairns region provided a rich and varied resource base. On land the vegetation supported a range of mammals, reptiles and birds and the plant community was diverse providing for a range of uses from food to herbal medicine, fish ‘poisons’, weaving and basket making material and wood for weapons, firesticks, etc. The Mowbray, Barron and Mulgrave Rivers, permanent creeks and freshwater lagoons provided riverine species and an extensive littoral zone provided abundant shellfish. Larger fish, together with turtle and dugong, were hunted and harpooned offshore (Burke, H., Duke, A., Sachs, K. and M. Moore 2000).

Walking tracks following ridge lines from the Macalister Range provided access between the rainforest and coastal environments. Bottoms (1999: 9-13) describes the use of tracks between Mowbray River, Flaggy Creek (where Mona Mona Mission was later established) and middle Barron River, as well as in the Barron Gorge, at Bare Hill behind the Lamb Range and Crystal Cascades. These Aboriginal walking tracks were also used by early white pioneers (eg. Smith’s and Douglas Tracks at Barron Gorge and the Bump Track at Mowbray Valley).

Previous archaeological work in the Cairns area has identified a range of cultural material in diverse environments which attest to the history of Aboriginal people prior to white settlement. Most archaeological surveys in the Cairns region have been conducted in response to development proposals. They reveal Aboriginal use of coastal mangrove areas (Greer 1988, Greer and Hatte 1989, Bird and Hatte 1995) and beaches (Horsfall 1987, Grimwade and Cribb 1991). Evidence of Aboriginal use of sand ridges has also been identified (Cribb 1995).

Other known significant Aboriginal sites in the Cairns region include rock art shelters (G. Skeene pers. comm. to A. Buhrich), walking tracks following the ridge lines from the coast into the Macalister Range (Bottoms 1999: 9-13), story places, food resource sites and post-contact sites such as Aboriginal Reserves (G. Skeene pers. comm. to A. Buhrich).

3.3.2 Post Contact

Once Trinity Inlet was chosen as the site of a port to service the expanding Hodgkinson Goldfields, and access tracks were blazed from the west into the Barron Gorge life change irrevocably for local Aboriginal people. Smithfield was established on the banks of the Barron River and a port was established on the northern side of Trinity Inlet in 1876 to provide access to the Hodgkinson goldfield. Bottoms (1999:18-19) relates the episode of initial contact between Sub-Inspector Johnstone, of the Native Mounted Police on a visit to the estuary of the Barron River, and local Aboriginal people. Johnstone describes seeing numerous Aborigines during the exploration, including "a mob of about 20, all armed with spears, on our tracks" who were likely letting the Europeans know they were being watched, or possibly escorted, through Yirrganydji territory (Bottoms 1999:19).

Aboriginal people in Cairns were forced to the margins of the developing settlement as European economic interests expanded into timber getting and farming. In 1897 the *Aboriginal Protection and Restriction of the Sale of Opium Act* was introduced. Life 'under the Act' meant that Aboriginal people were forcibly moved into government and religious missions such as Yarrabah, Mona Mona and Palm Island, and their movements and liberties were severely restricted during this time.

Despite the increasing restriction on the movements of Aboriginal people, the loss of territory and the other changes which followed white settlement Aboriginal people continued to maintain links to particular parts of their country and archaeologists working with Aboriginal people have identified a number of sites which continued to be used by Aboriginal people after the settlement of Cairns. Consultation by archaeologists (e.g Buhrich et al 2008) and historians with traditional owners of the Cairns region has shown that many places, such as story places, bush tucker collection places and waterways, continue to have cultural significance to Aboriginal people, even if no cultural material is present.

The Aboriginal consultation undertaken by Gordon Grimwade and Associates for the earlier heritage assessment confirmed that the Aboriginal community is keen to see opportunities for interpretation of their history and culture incorporated into the long term presentation of the values of the study area to the public.

3.4 Non Indigenous History

Relevant Themes	Local	Pioneer settlement of Cairns
	State	Establishing and developing towns.
	Commonwealth	Developing Local, regional and national economies
		Recruitment of immigrant labour/altering the environment. Peopling Australia: adapting to diverse environments.

The text in the section below is extracted from a report by Gordon Grimwade and Associates 2005 for the Cairns City Council. Some of the text has been rearranged to fit the current report structure but the facts, wording and findings are as originally reported.

3.4.1 European occupation

The first official party landed in Cairns on 6 October 1876. The first of the new settlers were probably timber cutters chasing the valuable cedar that could at that time be found in the coastal hills. They were closely followed by Chinese settlers. The decision in 1885 to commence the railway to Herberton from Cairns (see section 3.4.3 below) secured the future development of the town as a major settlement.

The Cairns topography was predominantly mangrove swamps and sand ridges, with the early settlement situated on the sand ridges. Once it became obvious that Cairns was growing, the swamps needed to be filled. For this the Municipal Town Council requested finances from the Government to construct a tramway to move the rock from the quarry into town (CHS 1184/A & B. Thomas CB: 1967). This is the original tramline that ran from the study area into the township. Its actual construction date is not known but probably post-dates the railway construction (see Grimwade and Associates 2005:6).

3.4.2 Chinese

It is unclear exactly when the Chinese moved to the Edge Hill area to clear land to establish a garden, but it was certainly within the first five years of the formation of Cairns. The fishpole bamboo, behind Lot 349, is an edible variety (pers com: D. Warmington, Curator, Flecker Botanic Gardens 2005). The Chinese used bamboo for various purposes, including food, and it is possible that the Chinese who first moved there planted the original specimens.

The Railway proposal plan of 1885 shows the 'Chinaman's garden' with an unidentified building at the 'three mile' (Edge Hill) (A569 E/H Map 4 CHS- see copy of plan. Grimwade & Associates 2005:4) where tanks 1 and 2 are situated today. Thomas Behan's survey plan (C 153 159) of this area marks the Chinese garden as 'cultivation'. Behan also marked a small area of cultivation as 'orchard' in his field notes for his survey of Edge Hill Station in 1891. This is presumably where Eugene Fitzalan had set up his commercial garden (Behan field notebook, Land Department mapping museum Brisbane to accompany survey plan C155.287). The Chinese moved from their garden sometime after mid 1886.

3.4.3 The Railway and Tramway

Relevant Themes	Local	Pioneer settlement in Cairns
	State	Developing transport and communication networks Developing rural economies
	Commonwealth	Developing local, regional and national economies: building and maintaining railways

The Railway to Herberton

The Chinese were still occupying their garden when an announcement was placed in the *Cairns Post* by railway contractor Percy Smith (CP 6 May 1886) who asked that draymen assemble at the three-mile at the 'Chinaman's gardens'. The rock at the base of the conical hill where tanks 1 and 2 are today, had to be cut back to make a cutting for the railway. The rubble was then crushed and used as ballast.

Cairns was a hive of activity in the early 1880's. Surveys for a railway to Herberton were being undertaken between 1882 and 1883, with Cairns, Geraldton (now Innisfail) and Port Douglas vying fiercely for the railway to commence from their respective town. The route was finally settled on the 30th October 1885 in favour of Cairns. In August 1884 the Cairns progress Association had applied for a botanic reserve. By November 1884 Cairns became a municipal council separating the interests of the town and surrounding area. Edge Hill was also becoming a fashionable place to live. By August 1885 Surveyor Behan was dividing the land around this area into substantial size lots extending along the spur of Mt Whitfield (N157.222 Survey Plan by Thomas Behan, Edge Hill, Botanic Reserve to Base of Mt Whitfield Dept., of Natural Resources and Mines).

The Cairns - Herberton Railway route was finally settled on the 30th October 1885 when the plans passed through the Upper House (Jones 1976:202). This ensured the future of Cairns. Consequently there was an influx of people who came looking for work and to settle. The initial plans for the railway were to lay the track through the Brinsmead Pass. However, last moment alterations to the plan took the alternative route north out of Cairns west of Lily Creek from Upward Street. It went along Little Street, through the Botanic Reserve (Centenary Lakes) and around the Mt Whitfield spur at Edge Hill to Stratford and Freshwater, which eliminated the need for a tunnel in the first section - and cost a great deal less.

Tenders were called for the construction of the first 8-mile section in the *Government Gazette* 11 February 1886. This was an easy section taking the rail 'to the foot of the spur near the Chinaman's gardens' (Jones 1976:204) and beyond. The railway passed north of the conical hill with the first Edge Hill station south east of the hill at the three-mile point situated near where No.1 tank sits today (Memo to the Town Clerk 29 July 1969 Appendix i).

The Council Tramway

A year later the Municipal Council was discussing the need for a portable tramway. At the 6th Special Meeting, 15 November 1887, Ald Wimble moved (seconded by Ald Kingsford), *...that the Council obtain a necessary quantity of portable tramway and trucks as municipal plant for forming the roads and alignments of the streets of Cairns.*

It is possible that the Cairns Municipal Council used the Government railway to the Edge Hill station and constructed the tramway from that point westward to the quarry reserve with portable tramline being used in the town area. The original Cairns Herberton Railway line from Cairns between Upward Street and Edge Hill at the three-mile was abandoned by the Government some time around 1905. The Government realigned the rail directly north out of Cairns. There is reason to believe that the Council appears to have continued to use the original route for their portable tramway. The embankment of the original Cairns Herberton Railway and the Cairns Quarry Tramline was bought and used by the Commonwealth in the Second World War to lay the pipeline from the Naval Fuel Tanks to the Wharf. The embankment exists today as a pathway through the Centenary Lakes.

This embankment was partly the Council's responsibility.

17th January 1888, the overseer's report then dealt with the culvert at three mile.

Moved Ald. McCoombe, seconded by Ald., MacNamara and carried.

That the proposal of Mr Watton to complete the work of raising the culvert and lengthening the approaches thereto be accepted. They constructed a box drain through the railway embankment (Council Minutes).

Once the tramline was abandoned sometime before 1923, the northern section of the embankment, south of Collins Avenue, close to the botanic reserve run by Eugene Fitzalan, became Special Lease 3150 of 4 ½ acres with the option taken up by H.K.N. MacDonnell (survey plan P/T/C A26 1923 and later numbered 6774, 1935). The town survey of 1945 shows a house in this section.

3.4.4 Sikh Cremation Ground

Relevant themes	Local	<i>cultural influences on the development of modern Cairns</i>
	State	<i>Establishing and developing towns.</i>
	Commonwealth	<i>Peopling Australia/Migrating.</i>
		<i>Developing local, regional and national economies/recruiting labour.</i>
		<i>Developing Australia's cultural life/maintaining religious traditions and ceremonies.</i>

On the perimeter of the area developed as Centenary Lakes, a small section had previously been set aside as a cremation ground for the Sikh community of Cairns. This location was approximately 170 metres north of Greenslopes Street in the vicinity of Lot 343 NR 6739. It was an unobtrusive area set within open forest which served an important role for in this ritual process. The site was later abandoned in favour of a site within the Anderson St cemetery and, subsequently, moved to the Cairns Crematorium.

The Cairns Sikh community established the cremation area in consultation with the (forerunner of) Cairns Regional Council in about 1953. It was used for a number of cremations until 1980 when it was relocated to a corner of the present Cairns cemetery. Since the Cairns Crematorium opened in 1985 cremations have been held there.

*In the Sikh community after the death of a person, the **Kirtan Solah** is read. Loud lamenting and breast-beating are strictly forbidden among the Sikhs. People gather around the body and recite the morning prayers.*

*The corpse is bathed and dressed along with the five K's (**Kanga** or Comb, **Kaccha** or shorts, **Kada** or bangle, **Kesha** or hair and **Kirpan** or dagger. Every Sikh is supposed to carry these five*

*symbols on his self all the time). The Sikhs cremate their dead like the Hindus and they do it before sunset. The eldest son of the deceased lights the funeral pyre. The priest sings the holy hymns. After the cremation, people go to the Gurudwara where some texts from the Granth Sahib are read. **Prasad**, which is cooked with coarsely ground atta, water, sugar and Desi ghee is served to the people.*

On the third day after the cremation, the relatives go to the cremation ground, take the bones of the dead and wash them in unboiled milk. Then they collect the bones and the ashes in a bag and immerse it in the Beas River or in the river flowing near their Gurudwara.

They don't observe Shraddh or Anniversary for their dead. The period of mourning for the dead can go up to 10 days, until which the holy texts from the Granth Sahib are read daily in the house. (<http://www.indianmirror.com/culture/cul2.html#sikh>)

A Cairns Sikh community leader, Mr Sucha Singh Chohan, recalls that the site was set amongst dense low scrub and access was often difficult. Cremations were infrequent and the area had to be relocated each time it was needed. At one stage the Sikh community decided to fence the area. This was completed using concrete posts and strands of plain wire. Within a few months someone came in and removed the posts and wires. Thereafter the Sikh community leaders resorted to pacing out an approximate distance from the road and searching for traces of former fires.

When a cremation was conducted timber would be stacked on site the day before. The funeral pyre would be partially built and on the day of the funeral the deceased would be laid on a stretcher in the midst of the timber. Additional timber would be placed over the top and, usually, the eldest son, would ignite the fire, which was kept burning for the remainder of the day. Three days later the site was revisited and the ashes removed. They were either returned to the deceased's homeland or scattered in a suitable river.

Sikhs first migrated to north Queensland in the late nineteenth century. This was to address difficulties many farmers were experiencing in finding labour willing to work in the tropics. This migration coincided with the better known indenturing of labour from the Solomon Islands. By 1883 there appears to have been few Sikhs willing to work in Queensland: 'Indians were unobtainable' (Bolton 1963:144). The continuing concern that the tropics were unsuited to 'white' labour resulted in planter J. Ewen Davidson heading to London to try to have the Colonial Office overturn the Queensland Government's opposition to further 'coloured' migration. He was unsuccessful. Disputes raged for the next decade but by 'the last years of the (nineteenth) century there was an influx of Indians around Cairns' (Bolton 1963:244). In part, it was an accepted alternative to further Chinese migration, which had concerned many nineteenth century Colonial Governments. Sikh migration was a little easier as Indian nationals were also British subjects and not, legally at least, 'aliens'.

For many years Sikhs worked seasonally in the cane fields from northern New South Wales (Burrows & Morton 1986: 196) to as far north as Mossman and the Atherton Tableland. Many returned to their homes in the Punjab during the 'off-season'. Gradually, however, more and more were able to secure residency in Australia and brought their families out to join them as permanent settlers.

3.4.5 WW11

<i>Relevant Themes</i>	<i>Local</i>	<i>WWII in North Queensland</i>
	<i>State</i>	<i>Maintaining order/defending the country</i>
	<i>Commonwealth</i>	<i>Governing/ Defending Australia</i>

On the 7th December 1941 Japan and America entered the Second World War (which had started in Europe on the 3rd September 1939) with the bombing of Pearl Harbour in Hawaii by the Japanese. The Japanese took Rabaul on January 1942 and Borneo a day later. Singapore fell to the Japanese on the 15th February 1942. Northern Australia was thrust into the front of the battle lines and civilians were evacuated south in anticipation of North Queensland, like the Northern Territory being attacked by the Japanese. The Battle of the Coral Sea in May 1942 saved Port Moresby for the moment, but the Japanese moved ever closer to Cape York. From September 1942 Cairns, now vulnerable to attack, became an important military base when Naval, Air Force and Army personnel, both Australian and American, arrived at this small tropical outpost to be dispersed throughout the region. Edge Hill, along with most suburbs of Cairns, was drawn into the war effort. The Commonwealth bought land at the base of Mt Whitfield to site Naval Oil Tanks (Plan of contour survey of area for proposed Naval Fuel Tanks 9/3/43). The land acquired was Lots 349 and 346. They were ideal sites, the tanks could easily be camouflaged and they were far enough away from the wharf to be of no danger to the port if there was any enemy action (see Plates 1 and 2 of the tanks under construction).

Lot 346 was situated within the old railway easement and had been used by George and Donald Pedder prior to the war. Two buildings were situated on this land, and can be seen on plans (ST 343A -undated and ST 151 Dept of the Interior, Naval Oil Tanks Cairns Land Required, 9/4/1943). The Commonwealth compensated the Pedder's for loss of their house and garden for the sum of £875 (NAA Series MP150/1 item 567/229/48 Report of land valuation Pedder 11.12.1944). These two buildings were demolished to make way for Tank 2. Map ST151 shows the original railway right of way, which was used for the pipeline taking fuel to the wharf¹.

The first two tanks to be built were No's 1 and 2 tanks. At an Allied Works Council meeting held on 8th of December 1942, the Queensland Division received Priority Certificates for 'the construction of an Oil Fuel Installation at Cairns for the Department of Navy'. Steel tanks 1 and 2 were estimated to cost £22,500 each (Minutes of meeting -secret- 131, dated 14th December 1944).

Further details regarding the construction of these two tanks were discussed at meeting no.135 on the 14th December 1942.

3281 OIL FUEL STORAGE ACCOMMODATION - CAIRNS: N(S) 62

Advance copy of requisition DNW 629/42-43 for £45,000 for oil storage accommodation at Cairns was received. The work includes the erection of two steel tanks, the first of which has A1 and the second A2 priority.

A letter was also received from the Assistant Director General of Allied Works advising that Broken Hill Pty Ltd. have been informed of the steel plate require for this work, and requesting that a covering order be placed on the firm. It was noted that arrangements in regard to other oil fuel

¹ This map incorrectly names Saltwater Creek as Lily Creek.

storage tanks have been made between the Melbourne Offices of the Allied Works Council and the Shell Co Mr Price telephoned Mr Cox, construction Manager, and requested him to get in touch with Mr Green of the Shell company to ascertain whether the Shell company, Brisbane Office, had received advice of any arrangements made for this work. It was decided to refer the question of the allocation of this work to Mr Cox for discussion, if necessary, with Mr Doig and for the submission of a recommendation. Allied Works Council, Queensland. Minutes of Meetings. (SeriesBP1/1 Vol 17 National Archives of Australia, Brisbane.)

The Commonwealth also acquired a strip of land from the Tanks at Edge Hill to No 10 Wharf to install underground fuel pipelines. The line from No's 1 and 2 tanks followed the route of the original 1885 railway line from Central Cairns to Edge Hill station which ran along a raised embankment in the eastern section of the present study area. This pipeline exists under the walking track today. Cairns Regional Council garden staff uncovered remnants of hand hewn railway sleepers when the concrete paths were laid when the Centenary Lakes Project was being undertaken. Tanks 1 and 2 were constructed in steel, as they were needed for dieseline fuel whereas the crude oil was stored in reinforced concrete. All five oil tanks were constructed and commissioned into use in 1943. Tanks 3, 4 and 5 were constructed by a team of men from Melbourne (as per instructions above) and the concrete was hand poured to build them. Some of those men wrote their names on top of the concrete of the wall that runs along Collins Avenue. These names can be seen today. The conical hill shown in the original Thomas Behan survey plans of Edge Hill had to be destroyed on two sides to make way for the first two tanks, leaving only the central core, which was needed to assist with the camouflaging of the tanks.

Due to the exposure of Tanks 1 and 2 from the air, they needed to be camouflaged. A heavy-duty steel wire was fixed to the hill above tank 2, it passed over the top of that tank and then fixed to the top of the remnant of the conical hill. It then passed over tank 1 and was secured to the top of the Bund wall. Camouflage material was then used to hide these two exposed tanks (*pers comm.*, Dave Streich Fuel Tanks Manager 2005). Tanks 3, 4, and 5 were built among the trees and required no additional camouflage. Alongside the fuel tanks, pump houses were constructed: a small one at tanks 1 and 2 and a large one at tanks 3, 4, and 5. An inventory and details of equipment and pumps can be found at NAA QL 513. There were three fire hose points on the bund walls connected to fire points on each tank; there was also a gun emplacement on the hills above the tanks.

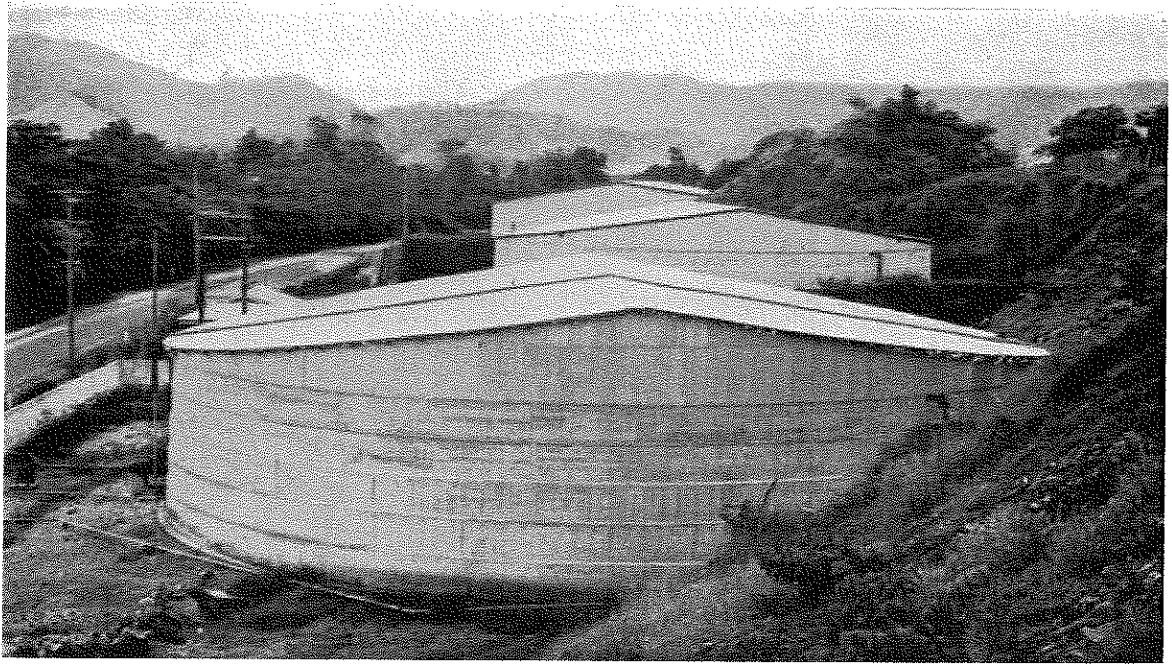


Plate 1: Tanks 3,4 and 5 during construction 1943

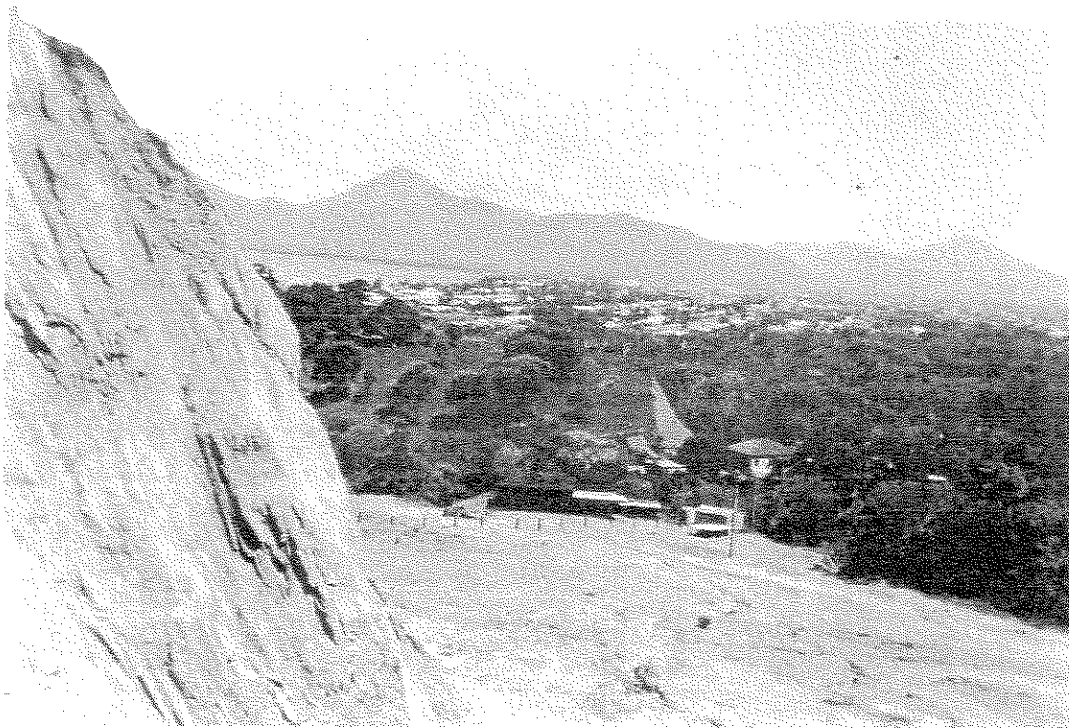


Plate 2: Excavation of the hillside to accommodate the tanks 1943

3.4.6 Post War

After the war the tanks continued to be used for fuel storage and they were rented out to fuel companies as well as being used by the Navy. In 1956 a full inventory of the naval installations was undertaken (QL513 attached inventory). Tank 1 was leased out to Caltex from 1957; however the Navy had a problem in finding a lessee for Tank 2. This was eventually solved when the Australian Meat and Grazing Company looked into the possibility of using Tank 2 for storing molasses (NAA Series J56/11 item 513/4). They took a lease on this tank from the 1st of November 1958 for a period of 6 months with an option for a further 6 months. The Australian Meat and Grazing Company initially thought they would be able to use the existing pipeline to pump the molasses from the tank to the wharf but this proved to be an unworkable idea and one that did not meet with local approval. On the 30th July 1958 Mr T. B. Payne, Chief Property Officer for the Department visited Cairns to Investigate Tank 2. He stated in his report:

There is a molasses tank at the wharf. The chairman of the Cairns Harbour Board (Mr Whitacker) is also the chairman of the Mulgrave Sugar Mill, he states that it is ridiculous to suggest that molasses could be pumped from Edge Hill to the wharf. It is most difficult to deal with molasses in an 8" pipeline (NAA QL 513/3 Folio 125).

It was a concern to the Commonwealth of Australia that Tank 2 was free from contamination by water as *the presence of water would set up a chemical action with the molasses, which would be deleterious to the tank*. The Australian Meat Company bought the 600 tons of diesel stored in tank 2 at the cost of £13 a ton. It is presumed that the Commonwealth cleaned out Tank 2 after the fuel had been sold, prior to the Meat Company using it for storing molasses. The meat company handed the tank back to the Commonwealth on the 9th June 1959 in a clean and satisfactory condition (NAA QL 513/4 KJD/JET 7 July 1959).

By September 1960 the Navy Board advised that it was unlikely that they would require tank 2 in peacetime and recommended an inspection of this tank and the others. They were hoping to be able to lease this tank on the same terms as Tank 1 once any repairs had been carried out (QL513/109 letter from the Naval Staff Officer to Chief Property Officer Brisbane). Department of Works completed an inspection of the Naval Installation in November of 1960 and the report was sent to the Navy in Brisbane on December 1st. This inspection indicated that the molasses had indeed damaged the fabric of the floor. The report stated:

The layer of scale that formerly closely adhered to the plates has now lifted away due to the delayed action of the organic acids contained in the molasses.

With removal of the scale the full extent of the corrosion can be observed and it is estimated that nearly 50% of the area of the floor of the 109 ft diameter tank would have to be renewed to put the tank in order again. To enable this work to be put in hand your requisition for £ 3,500 classified as repairs and maintenance would be required (NAA Series J56/11 Item 513/4 to Secretary, Department Navy from Department of Works).

In June 1961 it was recommended that repairs be undertaken, and that the tank be maintained in good order for further oil storage. Negotiations were undertaken with the Vacuum Oil Company as a possible lessee, but that company declined the use of Tank 2 at that time. Caltex also was not interested. It was not until 1964 that the work of repairing Tank 2 was completed. In a memo dated

7th April it was stated that... *This work has now been completed and it is assumed the tank is now fit for use in conjunction with joint use of 8" pipeline from Tank 1 (QL513/4WD/BJ5 (183) Edge Hill No. 2 Tank).*

In the late 1960s to 1970s Tank 1 was reconstructed. The floor had to be replaced and 4 steel poles were put in to hold up the new roof. A new roof was also built over the original roof on Tank 2, however the original still exists about a metre below the new one and can be seen from the inside of the tank. The original 54 telegraph poles hold up the roof from the inside (David Streich, Fuel Tanks Manager- pers Comm. 2005).

Tank 4, one of the crude oil tanks, became defunct in 1976 when a leak was detected in the plinth lining and it was no longer used for oil. Caltex remained a leaseholder of one of the tanks. In 1983 they were using Tank 5. Apart from Tank 4, which was already unserviceable, the Navy used the remainder of the tanks until they were no longer needed. All tanks ceased to be used from November 1987.

The Cairns City Council purchased the five disused Naval Oil Tanks flanking Collins Avenue from the Commonwealth in 1991 but this *...did not extend to any right title or interest of the Commonwealth of Australia in and to the then equally disused three pipelines (Grimwade and Associates 2005).* Although the Cairns City Council considered that... *the Commonwealth Government has granted to the Council ownership of the existing pipelines...* it was found that there was no evidence of a legal relinquishment of title and interest from the Commonwealth to the Cairns City Council. This pipeline runs through Centenary Lakes Park Reserve in Special Lease No. 45757, Lot 350 on Plan NR 3374. A Cairns City Council Property Condition Report undertaken on the 11th June 1991 advised that there was no information as to when Tanks 1 and 2 were constructed and the author of the report thought they dated from 1965 (This has of course since been disproved and it is known that Tanks 1 and 2 were constructed in 1943 to provide a fuel storage depot from the Naval wharf). That report recommended the destruction of all the tanks. This did not eventuate and Tanks 3, 4 and 5 were incorporated into an Arts Centre for the city in 1995 and have proved most successful. Around this time Tank 1 was modified and used as storage space.

3.4.7 The Development of the Gardens

Relevant themes:	Local:	<i>Recreation in the tropics</i>
	State:	<i>Managing and conserving the land, water, flora and fauna</i> <i>Encouraging the growth of tourism</i>
	Commonwealth:	<i>Building local, regional and national economies/ catering for tourists</i> <i>Developing Australia's cultural life/developing public parks and gardens.</i>

On Tuesday 5th August 1884, at the Cairns Progress Association meeting, Mr Wimble proposed 'That application be made to the Government, asking for the creation of a Botanical Reserve consisting 71 acres 1 rood and 4 perches. This was increased to 97 acres 1 rood and 4 perches by proclamation in April 1887 and now included section 68.

Commencing at a point 100 links east from the north-east corner of suburban section 73, and bounded thence on the north by a line bearing east ten chains; on the east by a road bearing south thirteen chains and seventy-eight links; again on the north by a road bearing east thirteen chains and eighty seven links; again on the east by a road bearing south thirty eight chains and twenty two links; on the south by a road bearing west twenty-three chains and fifty three links; and on the west by a road bearing north fifty-two chains to the roads as

shown on plan of survey deposited in the Surveyor General's Office. Given under my hand and seal ... C.B. Dutton.

There was a further amendment to the original proclamation on 11 June 1892 when the area of the reserve was increased to about 108 acres 2 roods. The boundary line at this stage took into consideration the Cairns to Herberton rail line.

...again on the north by a road bearing east thirteen chains and eighty seven links, 180 degrees 30 minutes one chain and three links, and 85 degrees 46 minutes eight chains and eighty nine links; thence by a road along the railway line bearing southerly to a road two chains wide dividing this land from suburban section 130; on the south-east and again on the east by that road bearing 229 degrees about nine chains and 180 degrees 30 minutes about eight chains; on the south by a road bearing west twenty-three chains and fifty-three links; and on the west by a road bearing north fifty-two chains to the point of commencement; exclusive of surveyed roads as shown on plan of survey deposited in the Surveyor General's Office Cat No N157.222 ...

Eugene Fitzalan migrated to Australia in 1849 and settled in the Geelong area where he opened a plant nursery. He had trained in horticulture in the famous Veitch Nursery and became an ardent botanical collector. He made a name for himself in Victoria and supplied the Herbarium of Victoria with botanical specimens for many years. They still maintain a database of the plants Fitzalan sent to them. He moved to Brisbane and in 1860 he joined the survey on *HMS Spitfire* to find the mouth of the Burdekin River and travelled as far north as Halifax Bay. After his return to Brisbane, he moved north to settle in the Bowen area where he became familiar with the flora of the tropical north. In 1875/76 he was in the Daintree area collecting plants and visited Cairns in 1877 so was already familiar with the rare plants of North Queensland.

On 29 July 1886 Eugene Fitzalan was in Cairns 'seeking to select a plot of land for the purpose of cultivating shrubs, flowers and fruit trees.' (*Cairns Post*, 29 July 1886). He initially requested land close to the Barron River in Kuranda but this was refused. A botanical reserve had been announced for Cairns in the *Government Gazette* 4 December 1886, which set aside Lots 71, 74, 75 and 76.

Fitzalan came to an agreement with the Cairns Municipal Council, to establish a private nursery on or near the land that had been cleared by the Chinese gardeners at Edge Hill, next to the designated Recreation Reserve (Jones 1976:260) and to establish a botanical garden which would be open to the public. (Council minutes 18 January 1887). He did this south of the present Collins Avenue, opposite tanks 3, 4, and 5, on the north east side of Lot 75 adjacent to his own garden and plant nursery. In February 1890 he was appointed caretaker of the Botanical Gardens on £5 a year (*Cairns Post* 15 February 1890). As noted previously Thomas Behan surveyed the Edge Hill area in 1891 for the Edge Hill Railway Station. His survey plan shows, and his field notes mention, the orchard where the botanical garden existed at that time and a house is shown on the northern edge of the garden. Fitzalan also erected 'a long shed, open on the sides and roofed with coarse canvas' (*Cairns Post* 9 July 1887), where he raised seedlings and cuttings. According to this article, Eugene Fitzalan was a prolific collector of orchids: *through his energetic researches specimens of orchids, ferns and other members of the Australian flora have been sent to almost all the countries of Europe.*

Fitzalan wrote to the Municipal Council early in August 1887 asking them to make a crossing over Saltwater Creek, to give access to the Botanical Gardens (Council Minutes 16 August 1887). In 1894 Fitzalan developed the 'Chinese road'. It became his principal garden path, made from his own funds (*Cairns Argus* 7 July 1894). He strongly objected to a public road being constructed through the garden reserve. It appears that the road was adjusted round his property and passed to the north of his dwelling.

It seems that about this time he was accused of plundering² the region for rare and endangered species of orchid from Crown Land for personal gain. It is little wonder, therefore that he was not concerned with the small retainer he received from the Council. He was later allowed to continue his collecting, as a *bona fide* collector (Letter to the Town Clerk, Cairns City Council, from Public Library of Queensland 22nd December 1969, M173.456/4).

Fitzalan contracted dengue fever in 1897, terminated his contract with the Cairns Municipal Council and retired to Brisbane. He was bought out by a Mr Morgan (Letter from John Oxley Memorial Library of Queensland MI 73.24/549 Dated 20th of February 1970). The plants and improvements reverted to the council as per their original agreement.

After the departure of Fitzalan, the Cairns Municipal Council used the Recreation Reserve Lot 400 (the opposite end of the Botanical Reserve to where Fitzalan maintained the original botanical garden for the propagation of plants and shrubs. These plants were maintained for the beautification of the city and were made available members of the public. The council appointed Mr L Wright of Townsville as head nurseryman around 1923/24 and built him a basic house (with only sacking at the windows) to the west of the present office in the Flecker Gardens. Mr Wright's task was to maintain a council nursery and plant trees for the beautification of Cairns. He was not employed as Curator.

Collins Avenue (prior to current realignment project) was constructed, probably in the 1930s, and modified during the Second World War when the fuel tanks were built, and again in 1952. The initial track in that area was primarily to access the Hommelgaard's property and was referred to as the Edge Hill track (P3340 CHS).

A writer for *Northern Affairs* in May 1932 called for the establishment of a Botanical Gardens rather than simply maintaining a botanical reserve, to bring Cairns into line with other cities throughout the country. It was recognised that developing a garden would take time but a start needed to be made. This did not happen until Vince Winkel arrived in 1967. Wright maintained a propagation bush house and during his time as head gardener he established a zoo in the Botanical Reserve, Lot 400, which was popular with US servicemen during the Second World War. Wright remained in his position until 1947, when he retired. During the war the Navy fuel tanks were erected. Tanks 1 and 2, of welded steel plate were used to store diesel whereas the concrete tanks (Tanks 3, 4 and 5) stored crude oil. Fuel was reticulated along underground pipes to the Cairns Wharf. The tanks were camouflaged during the Second World War.

Mr T Mitchell became head nurseryman for the City of Cairns in 1947. During his tenure as nurseryman of the gardens the zoo was closed, for economic reasons, and a giraffe enclosure that was under construction was never put to use.

On 6 September 1948 the Cairns City Council applied to the Land Administration Board for the designation of Recreation Reserve 267 to be changed to Botanical Reserve. This application was refused. The report stated that:

The area of the Recreation Reserve used by the City Council as a Botanical Nursery and Zoo is a small area situated on the northern side of the bitumen road and west of the creek entering the Reserve from Quarry Reserve R.887.

The Department of Public Lands then wrote to Cairns City Council:

² Gordon Grimwade and Associates 2005 report has slightly different wording here and states he was 'discovered plundering...' I have changed this to 'accused' since he was later allowed to continue collecting and so the implication of ill intent in the word plundering seemed to be unsustainable.

The report furnished by the Ranger is very comprehensive, and gives full details concerning the parts of the Reserve which have been dealt with. The suggestion by the Council that the name of Recreation Reserve R.267 be changed to Botanical Reserve appears to me to be rather premature and in fact that its present name of Recreation is not an appropriate one, with the consideration that the greater portion of the area is confined to low sandy ridges and ti-tree swamp, which is of no use for recreation purposes.

The small area used by the City Council Botanical Nursery and so has not, in my opinion, a right in its first name to be in the same category as Botanical. It is mainly a nursery for the rearing of plants for transplanting into City Garden plots. To change the name of the Reserve now to Botanical would be most misleading to the public generally. Even its present name creates confusion for the simple reason that there is only a very small area which could be used for this and more often that not is occupied by Campers.

I endorse the Ranger's report on all points with the exception of excising the area used as a nursery and giving it a separate name. In this matter I would recommend that the alteration of the name of Recreation to Botanical be deferred until a more concrete proposition is put forward by the council. [Dept of Natural Resources and Mines - Freedom of Information application 2568, collection 1 Folio 32]

After Mitchell died from a heart attack while collecting specimens on Cape York in 1954, Jim Gould became head nurseryman. Gould extended the gardens and cleared a strip of grass along Collins Avenue, which was mown as lawn but he resigned in 1966 feeling frustrated at not having money to achieve anything (Winkel 1995).

Vince Winkel applied for the vacant position of Director of Parks and Recreation and came to Cairns after declining positions at Townsville and Mackay. Much of the Botanical Gardens of the early twenty-first century are the result of his efforts and those of his successor, David Warmington.

As Cairns approached its centenary Winkel's proposal to develop Centenary Lakes took shape and an enthusiastic Council enabled his vision to become a reality. An area that had, hitherto been swamp and forest was incorporated into far more extensive Botanic Gardens.

The Gardens were formally named the Flecker Botanic Gardens by the Cairns City Council in 1971. Since the creation of the botanic gardens they have developed from a local 'aspiration' into a regional tourist attraction. The inclusion of the Flecker Botanic Gardens, the Tanks Art Centre and the Centenary Lakes in one publicly managed property ensures that the gardens remain a key element in the cultural life of Cairns residents which can be shared with visitors.



Plate 3: View from the residence (now the office) looking towards Collins Ave. This area is now thickly vegetated but in 1967 when this photo was taken the area was cleared lawn with two large poinciana's along the road frontage. Photo: Winkel



Plate 4 The same general view 2008. It is impossible to get a clear view of Collins Ave from the residence/office today.

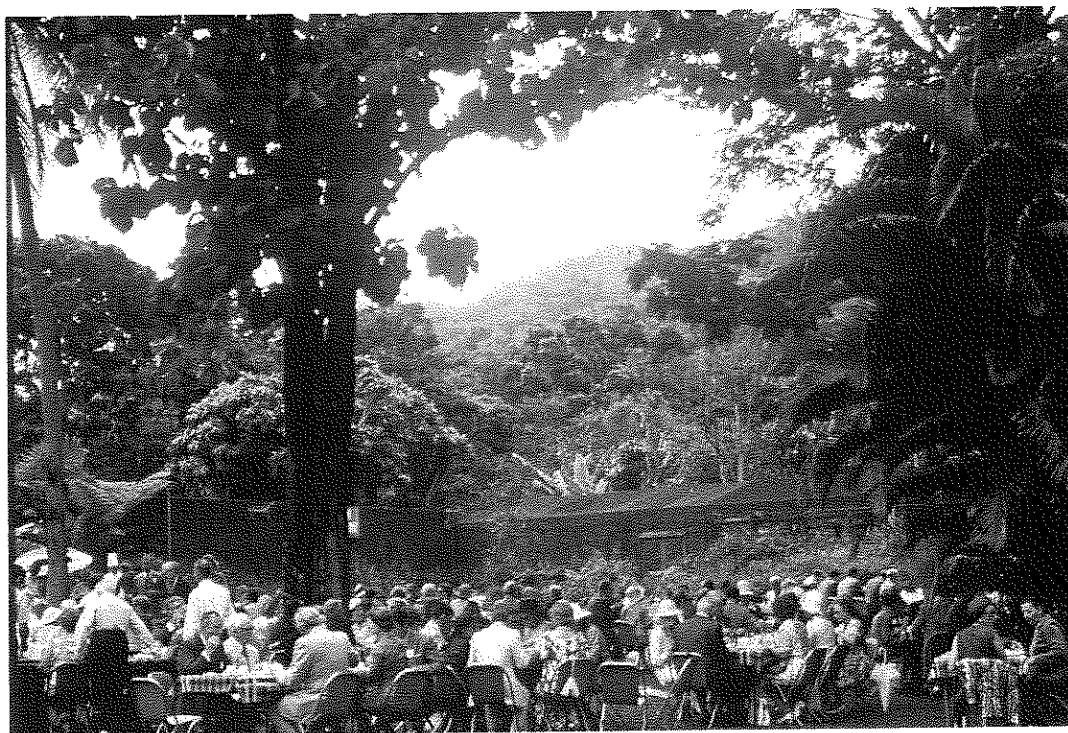


Plate 5: The Teak Lawn. The function was a lunch for the governor General in the 1970s. The fernery is in the background. Photo: Winkel



Plate 6 the same location today in 2008. The Munro Martin fernery is in the background and the Teak tree is centre.



Plate 7: This photo taken in 1978 shows a large fig tree at the site of the present café. It later blew down in a cyclone.



Plate 8: The cafe today (April 2008).

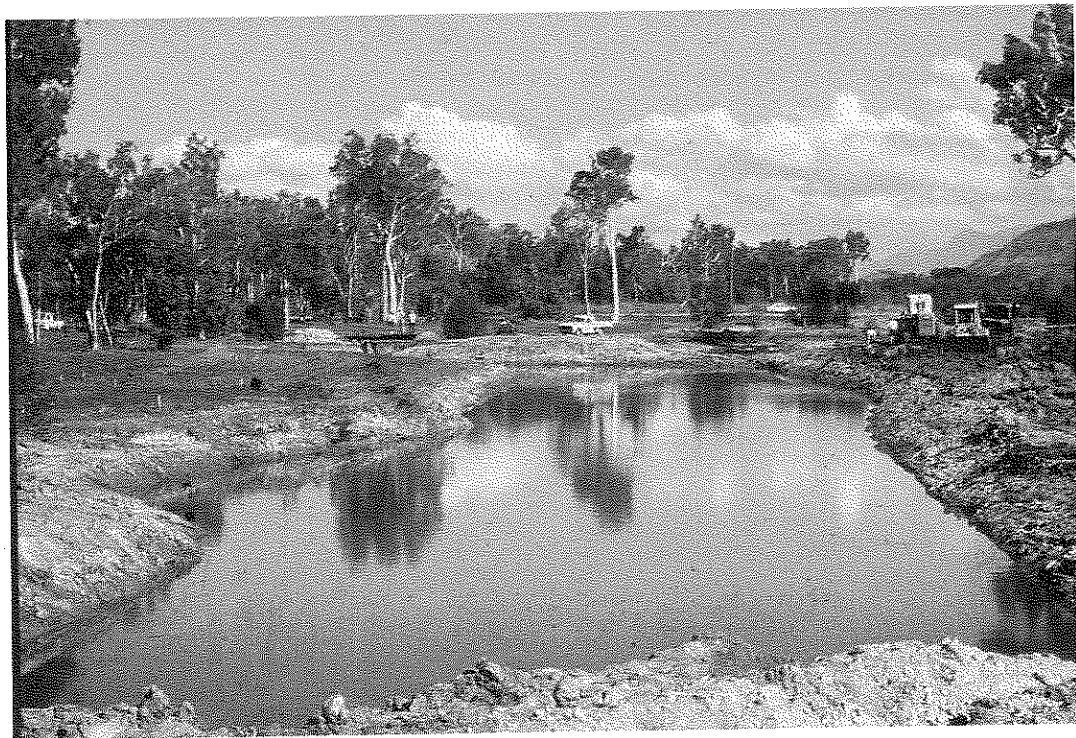


Plate 9 Construction of the salt water lake 1976. Photo Winkel

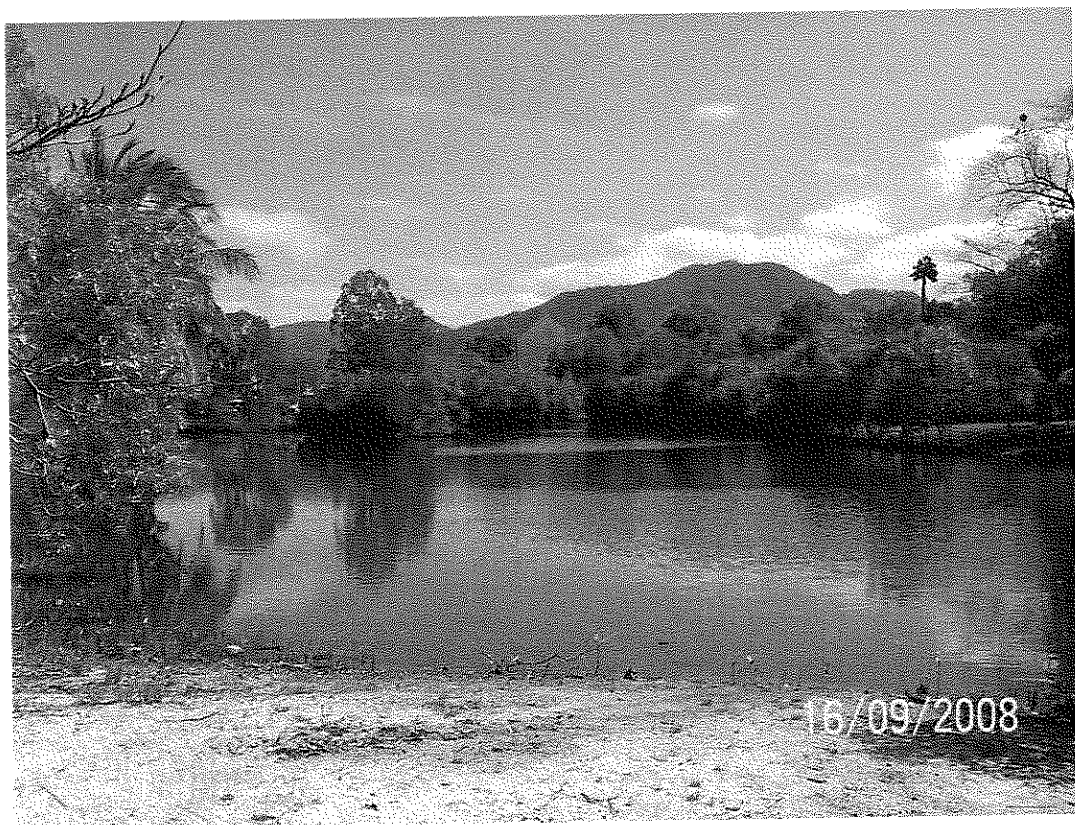


Plate 10: The saltwater lake today.

4.0 Cultural Features Overview and Description

4.1 European Cultural Features

The Botanic Gardens Heritage Precinct is a cultural landscape with a complex array of built structures, potential archaeological deposits, cultural plantings and physical landscape modifications.

4.1.1 Introduction

4.1.2 Tanks

The WWII RAN Fuel Installation site commonly known as 'the Tanks' includes 3 parcels of land and multiple structures. Most obviously it includes the 5 tanks (one of which Tank #1 has been demolished under permit), bund walls both earth and concrete, foam sheds, two pumphouses and associated pipelines.

The facility was constructed in 1943 during WWII as a response to increased military presence associated with war in the Pacific. The facility stored oil which was transported via pipeline from the tanks to the Cairns wharves. Tanks 1 and 2 were constructed first in 1943 followed closely by Tanks 3, 4 and 5. Tanks 1 and 2 were constructed from steel while Tanks 3, 4 and 5 were constructed from reinforced concrete. The former were built to store diesel fuel while the latter for the storage of crude oil.

After the Second World War the tanks were leased out to fuel companies, although Tank 2 was also used for a period in the late 1950s for molasses storage by the Australian Meat and Grazing Company. Tank 1 was re-furbished extensively in the 1970s. All Tanks were taken out of service in 1987.

Tanks 3-5 and their associated infrastructure have been adaptively re-used as the Tanks Arts Centre a regional performance and art exhibition space since 1995. Tanks 1 and 2 remained dis-used and in disrepair until 2007 when Tank 1 was demolished as part of the current re-development project.

The site also contains 2 pumphouses one of which is now abandoned and located adjacent to Tank 2 (Plate 17). The second pumphouse is currently used as an administration building for the Tanks Arts Centre (adjacent to Tank 4- see Plate 15). There are also two foam sheds both of which are located outside the bund walls. One of these associated with Tanks 1 and 2 is located on the opposite side of Collins Ave to the tanks and the other is associated with Tanks 3, 4 and 5 and is located at the western end of the site on the outside corner of the bund wall as it turns northward around Tank 5. Permission has been granted by the EPA to move the foam shed nearest Tank 5 and it will be relocated on site. In their current condition and locations they are of limited heritage value in that they are not interpreted and their connection to the site and their function would be unknown to most visitors. However, their function was vital to the operation of the site and it is recommended that these structures are interpreted to the public as part of the interpretation of the original function of the sites structures.

In addition to these structures the bund walls themselves (see Plate 11) are an important feature of the historic site. While the external bund wall around Tanks 3, 4 and 5 provides security for the site the other major function was to isolate any oil spills from the tanks. Similarly inside the main perimeter wall there is an earthen bund wall separating Tanks 5 and 4 and similarly Tanks 4 and 3. Originally these walls were crossed by stairways (see Plate 13) which can still be seen in the

overgrowth but the barriers have been broken to provide direct access between the tanks. The earthen bund wall between Tanks 3 and 4 has been modified in shape to form the grass seating area outside Tank 3 and is now known as the amphitheatre (see Plate 12).

The print studio east of Tank 3 is a skillion structure leaning onto the bund wall. The concrete bund wall forms the southern wall of the building. It has previously been used as printshop but is currently used for occasional workshops.

As well as the visible structures there is potential for archaeological deposits associated with these structures. The visible features relating to the WWII RAN Fuel Installations are indicated on Figure 3 while the potential for subsurface archaeological deposits is indicated in Figure 4.

A concrete bund wall existed around Tanks 1 and 2 and still remains along the street frontage of the property.

Most of the above ground interconnecting pipes and valves have been removed although some do remain *in situ* (see Plate 14) and others have been moved over the years so occur out of context.

A demountable building currently exists on site located inside the bund wall east of the administration building. This building is a recent addition and not associated with the historic value of the site. It will eventually be removed and since it is a demountable building its presence is totally reversible.



Plate 11: The fig trees growing over the walls enhance the abience of the site providing the visitor with the opportunity to 'discover' heritage elements. Formal gardens within the bund wall would detract from the feeling of 'ruins in the jungle' plus they would be inconsistent with the historic use of the area.



Plate 12 The small stage area outside Tank 3. The sloping earthen bund wall forms seating and a convenient amphitheatre.



Plate 13: The earthen bund walls contain heritage elements and were an integral part of the function of the WWII RAN Fuel Installation.

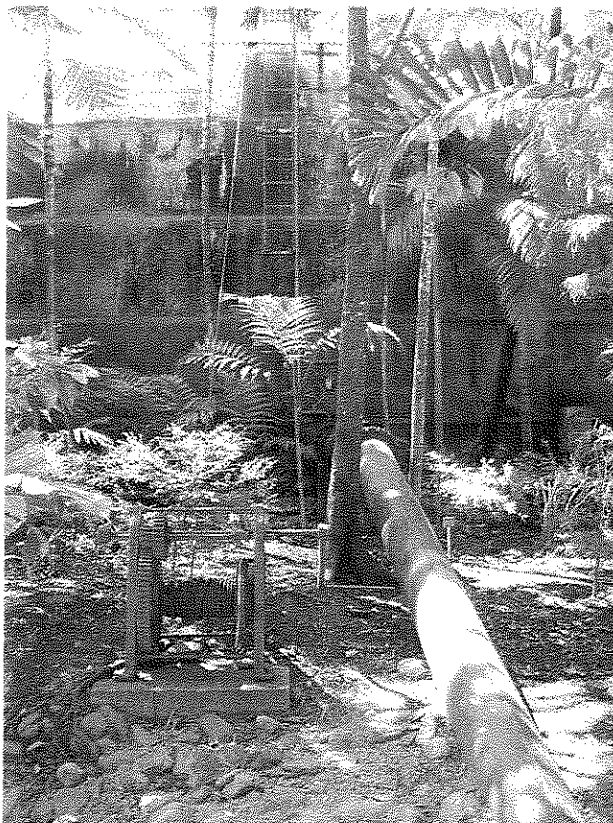


Plate 14 Features that help demonstrate the way in which the Tanks operated and which are connected are important to retain.

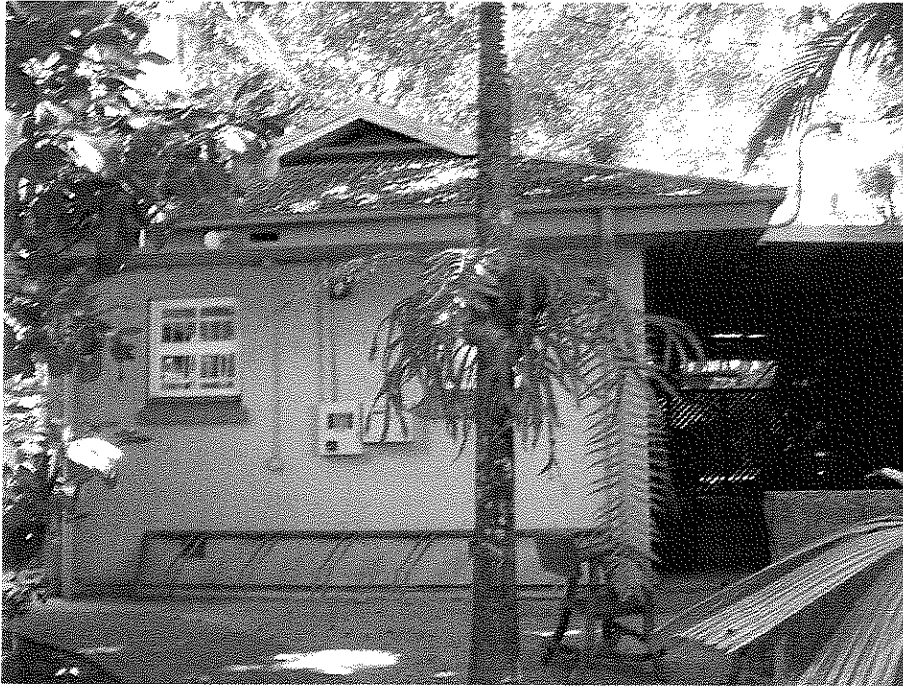


Plate 15: The current (2008) administration building and former pumphouse.



Plate 16 Currently the impacts on the original fabric are minimal.



Plate 17: Tank 2 and the associated pump house.



Plate 18: One of the two remaining foam sheds (this one outside tank 5).

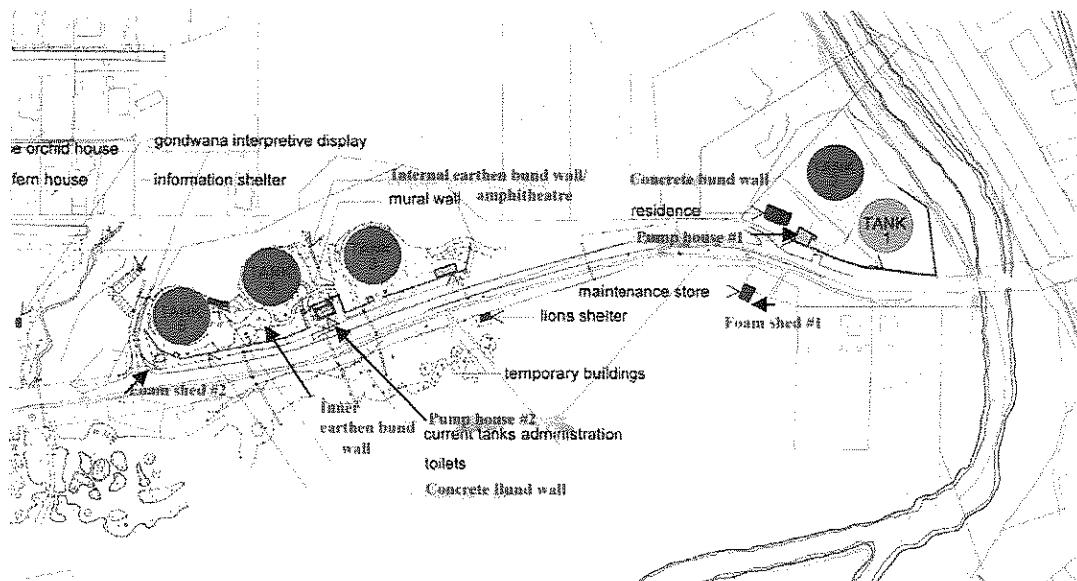


Figure 3: Main historic structures associated with the WWII RAN Fuel installation (note Tank 1 and residence have been demolished).

4.1.3 Pipeline/railway line

The original railway line was built in 1891 from Cairns to Kuranda as part of the Cairns to Herberton railway. The former Edge Hill Railway station (constructed around 1911) stood where RAN Fuel tanks 1 and 2 were later constructed in 1943. The railway line was later used to operate a tramway to transport material from the quarry at edge hill to Cairns. This was abandoned around 1923. This same easement was later used to contain the pipeline from the oil storage tanks to the Cairns wharf.

This pipeline/railway easement still exists today and contains at least part of the original pipeline.

4.1.4 The Gardens

Most of the vegetation within the study boundary consists of cultural plantings albeit with natural seeding adding to the lush rainforest effect. It can be seen from plates 3 to 9 that the vegetation during the early garden phase was dominated more by large trees scattered across lawns rather than the complex multi-storied plantings that are evident today. Elsewhere in the area now known as Centenary Lakes the natural vegetation had been subject to various disturbances and it is only from the 1970s that the area began its transition to the lush and beautiful landscape that exists today.

The gardens today are a complex interweaving of the visions of a succession of garden directors including the botanist Eugene Fitzalan in the 1880s and 1890s, Cairns City Council nurserymen and curators from the 1920s (including Winkel and the current director Warmington) and naturalist Dr Hugo Flecker from the 1930s to the 1950s. Each has contributed to the development of the gardens as a significant botanic and recreation space in Cairns with a general transition post-WWII from a disturbed and somewhat impoverished site to a lush passive recreation landscape of rainforest and wetlands.

The 'original' gardens are credited to Eugene Fitzalan and were located adjacent to Collins Ave and approximately south of Tank 3. This area has been partially affected by the recent re-design of the road however no original plantings were able to be identified prior to that work. There are several

significant rare and old growth trees amongst the plantings although these are often at risk of loss or damage during cyclones. There are also several species of other plants that were once considered rare but have now become popular and accessible such as the *Heliconia*. Some plants are likely to be historically locally significant specimens such as the mature *Cycas media* plants transplanted from Calvary Hospital to the Freshwater Lake area in 1970 (see Plate 17).

The Flecker Botanic Gardens comprising the formal gardens to the north of Collins Ave (see Figure 2) have been assessed and entered on the Queensland Heritage Register. The area which has been protected in this way is the area bounded by Collins Avenue and McCormack, Goodwin and MacDonnell streets, or more generally that part of the Precinct north of Collins St.

Generally the significance of the Gardens is associative and historical. The plantings have been reworked over time and extensive new plantings have been added particularly in establishing the lush understorey. However some plantings are likely to be of some significance in themselves. The QHR listing (Appendix B) describes these as:

*Some plantings in this area need to be considered with respect to their possible age. The corner of Collins Avenue and McCormack Street along the western boundary has a group planting including two very large hoop pines *Araucaria cunninghamii*, a Cook pine *Araucaria columnaris*, a sausage tree *Kigelia pinnata*, and a large fig tree *Ficus* spp. The association of these species in botanical gardens was not uncommon in the late 19th century, as at Queens Park, Maryborough. Further north of this group of plants, towards Goodwin Street, the association of a particularly large rain tree with a blue quandong, a damson plum, a clump of bamboo of the same species as that in the Fitzalan Gardens and mature mangoes, is seen. Rainforest understorey plants line the creek bank and pathways in this area and again the association of a blue quandong, paperbarks and a Leichhardt tree is seen...*

*... There are three open lawn areas within the Flecker Botanic Gardens: an area immediately adjacent to the main entry off Collins Avenue; a large open space used for open-air performances and large gatherings in the northeast area of the site adjacent to McDonnell Street; and a tree and shrub lined linear space along Goodwin Street. The main entry lawn has a large teak tree *Tectona Grandis*, planted in 1946, as the centre lawn specimen and the remnants of a large yellow poinciana *Peltophorum pterocarpum* to the northeast of this.*

The environmental assessment carried out by GHD (2006:34) notes that by virtue of its function as a botanical garden, there are numerous examples of species of plants within the study area that are listed as being of conservation significance. These significant plants fall into one of three categories:

*The plants are individual specimens, planted and maintained by the Botanic Gardens staff, to conserve and illustrate the genetic diversity of species that are endangered or extinct in the wild in Australia or overseas. For example, a specimen of *Syzygium glenum* (syn: *Acmena* sp "Little Cooper Creek) planted near the Red Arrow car park, is a seedling from one of only 27 known adult trees remaining in the wild.*

The plants have a specific association with the history of the Botanic Gardens and the Cairns area.

Plant species are listed under the schedules of the Qld Nature Conservation (Wildlife) Regulations 1994, or on the schedules of the Commonwealth Environment Protection and Biodiversity Conservation Regulations 2000, and have legal conservation status definitions.

In addition to individual plants being of conservation significance, vegetation community types as a whole may be regarded as being of conservation significance. These communities have been defined under the Queensland Vegetation Management Act 1999 (as regional ecosystems) and have legal conservation status in their own right. (GHD2006:34).

The environmental assessment report previously prepared for CRC (GHD2006) stopped short of identifying and mapping all specimen trees of significance and focused instead on checking the trees identified for removal in phase one of the master plan implementation primarily related the Collins avenue realignment. It will be necessary then to assess the likelihood of significant plant being affected by all proposed developments associated with the future development of the study area. Ideally a mapped register of significant plantings should be established and maintained to streamline this process (sections 4.3-4.5 of the GHD report provide more detail that would be relevant to this task).

The Queensland Heritage Register entry notes that it is not just the plants that have been identified as contributing to the significance of the gardens; the organic and vernacular landscaping elements reflect the creative enterprise and commitment of successive head nurserymen and directors to create the gardens despite limitations of budget. These feature prominently in the QHR Listing document:

The 1960s figure-of-eight walkway has persisted and Fitzalan Creek is crossed by two footbridges. The southern portion of the gully area has the oldest paving. A variety of paving materials are used, including bricks, concrete slabs and concrete "crazy paving." Retaining walls reflect this pattern: log retaining walls and concrete stone pitching in southern parts give way to block walls in northern areas. The materials used in this work are simple in contrast to the workmanship evident in its execution, which is of an outstanding quality. Railings made of galvanised pipe are placed as needed.

The implication in the listing is that the actual 'fabric' of the garden infrastructure, such as path treatments and creek lining, is significant. However, these have been assessed as part of the current conservation planning process and there is no significant fabric (see Figure 5). The materials used on the path surfaces and the creek lines comprised whatever material was to hand. Since original installation they have been repaired and patched or replaced in areas. In particular, large sections of creek lining regularly require replacement after wet season rains. While the workmanship is good it is not technically innovative and is overstated in the original listing as 'outstanding'. However, the local and personal story of the development of the gardens by successive curators and gardeners is an important part of the local history of the gardens that should be interpreted to the public.

4.1.5 Other infrastructure

A number of other buildings and structures occur within the Botanic Gardens Precinct that have not been assessed as having state significance. These include the structures within the Flecker Botanic Gardens. While the Munro Martin Fernery (c1968), the current office (former residence), the maintenance compound and the restaurant are not considered to be of State significance, their association with the botanical gardens renders them of local significance and council will need to consider this in the light of any future development proposals. In particular changes (including

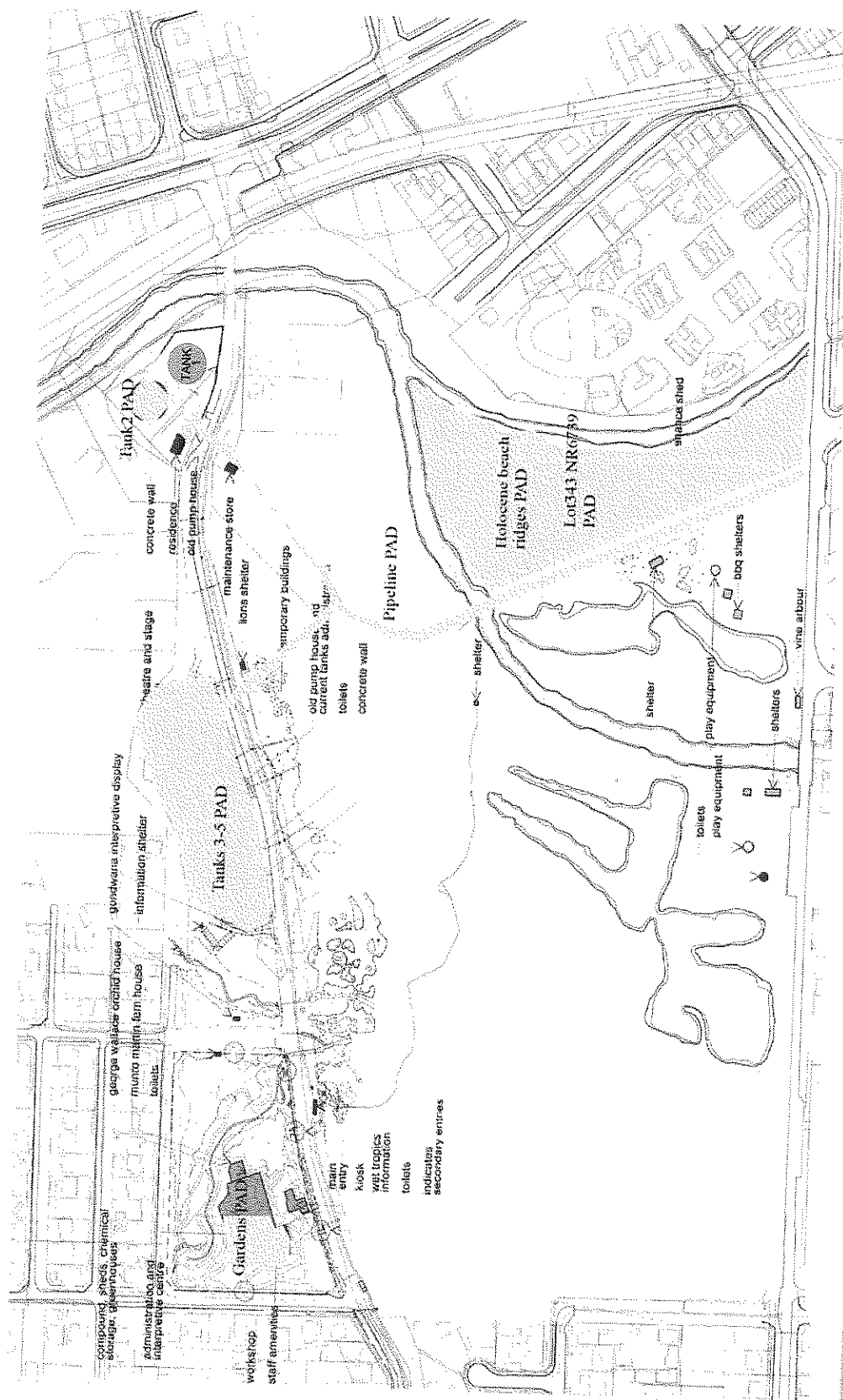
demolition and replacement) need to consider the scale of these structures and their relationship with the surrounding gardens (see sections 6.6, 6.7, 6.8).

4.1.6 Archaeological Potential

In any area such as the current study area where there has been a layering of historical activity and where gaps in the available documentary information exist, there remains the potential for additional physical evidence to be buried as archaeological evidence. Archaeological evidence might include for example, buried paving and garden beds from old superseded paths in the gardens themselves, remains of the zoo and the animal enclosures that once existed there, skeletal remains from exotic animals that died and were buried on site. In relation to the tanks archaeological remains would include the buried pipelines and railway tracks as well as drainage works, the lost belongings of the armed forces personnel who worked there such as pipes, buttons, tools, tobacco tins etc.

Such material where it exists often helps to illustrate the history of the area in a way that fills in the gaps left by the documentary record. It can add a very human dimension to official records or indeed can provide technical information to do with failed enterprises or technology and earthworks. Archaeological deposits can be very important features of cultural heritage sites and must be taken into account in any CMP, particularly in relation to items of identified state significance.

There has been no prior archaeological assessment of the study area and so a precautionary approach has been taken here. Some parts of the study area have been assessed as being more likely than others to contain extant archaeological deposits and to illustrate this; an archaeological zoning plan has been prepared (see Figure 4). Future investigation may serve to refine this zoning plan by demonstrating that deposits do, or do not, exist in certain areas and thereby reducing the zones to areas of higher probability or perhaps eliminating them altogether.



8.11

Figure 4: Areas of Potential Archaeological Deposit (based on original map by EDAA Gillespie)

4.1.7 The Chronological Development of the Precinct

Table 3: Important Dates in the development of the precinct

Date	Development		Comment
1884 (5 th August)	Cairns Progress Association proposes creation of a Botanical Reserve.	71 acres 1 rood and 4 perches	Noted as established on the survey plan -proposed Herberton Railway PERMT Survey A569E/H Map 4.
Pre 1885	Chinese gardens established along what is now Collins Avenue		
1887 (April)	Cairns Botanical Reserve proclaimed.	97 acres 1 rood and 4 perches.	
1887 (January)	Fitzalan and Cairns Council agree to him establishing a private nursery close to the original Chinese market garden and a botanical garden open to the public on Lot 75 (part of the proclaimed reserve).		
1890 (February)	Fitzalan officially appointed caretaker of the Botanic Gardens on £5 per year.		Source: Cairns Post 15th February 1890.
1891	Edge hill Area surveyed for Edge Hill Railway Station by Thomas Behan.		
1892 (11 th June)	Cairns Botanical Reserve increased to about 108 acres 2 roods.		
1897	Fitzalan contracts Dengue fever terminates his contract and retires to Brisbane.		
1897-1900	James Morgan replaces Fitzalan.		The location of the Zoo is unclear but anecdotally it is said to have been situated in the vicinity of the current compound behind the residence/office.
1901-1906	Charles Gurd replaces Morgan at original reserve location.		
From 1906	Council operated a Council nursery on Recreation Reserve Lot 400 (the opposite end of the Botanical Reserve to where Fitzalan maintained the original garden)	Gurd continues to manage the nursery in the new (current location)	
c.1911	Edge Hill Railway station constructed	Around vicinity of current location Tanks 1 and 2.	
1923/24	Mr L Wright of Townsville appointed as head nurseryman	Built house to the west of the present house/office in Flecker gardens. Maintained a propagation bush house and established a Zoo at some point prior to WWII.	In the grounds of council nursery in recreation reserve.
c. 1930s	Collins Avenue constructed		
1933	Dr Hugo Flecker established the North Queensland Naturalists' Club herbarium in the recreation reserve.		
1943	Tanks 1 and 2 constructed Collins Ave modified		
1947	Mr L. Wright retired Mr T. Mitchell appointed as Head Nurseryman	Zoo closed and giraffe enclosure under construction at time of Wright's retirement	Gap in information who operated as care taker or head nursery main between 1947 and the arrival of Vince

The Flecker Botanic Gardens, Tanks Arts Centre and Centenary Lakes Heritage Precinct Conservation Management Plan

		discontinued.	Winkel in 1967?
1948 (September 6 th)	Cairns Council applied to Land Administration Board for designation of Recreation Reserve 267 to be changed to Botanical Reserve. Application refused.		
1949	Herbarium relocated to Kuranda Barracks on Cairns esplanade.		
1952	Collins Ave modified again		
Early 1950's	Current red brick administration building built as a house for Tom Mitchell.		
1953	Cairns Sikh Community establishes the Sikh cremation area	Approx 170m north of Greenslopes Street in vicinity of Lot 343 NR 6739.	Relocated to Cairns Cemetery in 1980. Since 1985 Cremations held at Cairns Crematorium.
1954	Mitchell died of a heart attack in Cape York while collecting specimens. Jim Gould appointed head nurseryman. Gardens extended and strip along Collins Road maintained as mown lawn.		
1958	Native Botanic Preservation Society founded by the North Queensland Naturalist Club to construct a Botanic Garden.		
1961-64	Tank 2 repairs to flooring.		
1966	Jim Gould resigned.		
1967	Vince Wrinkle appointed		
1967-1971	Herbarium briefly relocated to the gardens.		
c.1970	Tank 1 floor replaced Tank 1 roof replaced including insertion of 4 new steel poles to hold the roof up Tank 2 new roof (over original roof)		
1971	Gardens formally named 'Flecker Botanic Gardens' by Cairns City Council.		
1976	Tank 4 stopped being used.	Leak detected in plinth lining	
1982	The Gardens Entrance gates were installed to Commemorate the 50 th anniversary of the North Queensland Naturalists Club.		
1987	All Tanks ceased being used. The Restaurant at the Botanic Gardens was opened		
1991	Cairns City Council buys all 5 tanks from the Commonwealth.		
1995	Tanks 3,4 and 5 are incorporated into the Tanks Arts Centre and the pump house converted to an Administration building		
c1995	Tank 1 is modified for storage		
2006	Fire station demolished	Formerly on Lot 1 RP17796 near the Foam Tank on the opposite side of Collins Ave to Tanks 1 & 2.	Demolished during realignment of Collins Ave.
2007	Tank1 is demolished and Collins Avenue is realigned as Phase 1 of the Master plan implementation.		



Plate 19: the First Heliconia planted in the gardens in 1970. Photo: Winkel



Plate 19: 1970 Cycas media has just been transplanted to a location near the Freshwater Lakes.

4.1.8 Fauna

A faunal survey was undertaken in the study area as part of the Environmental Assessment (GHD: 2006) in the Master Planning process. That assessment noted that habitat integrity was relatively low and that overall the study area '*cannot be said to be critical habitat to any unique suite of fauna*' (GHD2006:52). However it is clear that native fauna inhabit the area including birds, bats, butterflies and bats. The GHD survey noted that:

Only 3 fauna species of conservation significance have been recorded from the Botanic Gardens area, these included

- *Pteropus conspicillatus* (Spectacled Flying Fox), vulnerable under the EPBC;
- *Casuarius casuarius* (Southern Cassowary) endangered under the EPBC and NCA and
- *Rostratula australis* (Australian Painted Snipe), listed under the Migratory Bird provisions of the EPBC.

Added to this is the Rufous Owl (*Ninox rufa queenslandica*) observed during the 2006 survey (GHD2006:54).

In addition the location of the study area amidst urban development means that the possibility of the area acting as essential *refugia* to some species should be considered in future planning. The environmental assessment concluded that: *The refugial values of the (Study Area)... are generally very high at a site and local level, and are high at a regional level by virtue of the representation of the large body of freshwater present year round* (GHD 2006:52).

4.1.9 Scenic qualities

The study area is recognised as a place of local beauty. In fact through its very development as a garden landscape it has been designed to have a high scenic quality. The dense semi-formal plantings of the area known as the Flecker Botanic Gardens contrast with the more natural ecosystem landscapes of the Centennial Lakes area. The Tanks is also of high scenic value. An important element here is the juxtaposition of industrial structures and dense foliage especially the large fig trees that have enveloped the bund walls and which contribute to the impression of loss and discovery that visitors experience when exploring this area.

4.2 Aboriginal Cultural Heritage

4.2.1 Local Archaeological Context

Previous investigations of the study area have revealed no physical evidence of past Aboriginal occupation of the area. This of course does not necessarily mean that Aboriginal people did not use this area in the past. Archaeological sites occur in locations where Aboriginal people in the past have left tangible evidence of their use of an area. For example, such physical evidence might be in the form of stone tools that were left at campsite or middens comprising the remains of shell fish or animals consumed by people at a campsite. Modifications to the landscape since the time when such evidence was first deposited affect the likelihood that such material survives to the present day. For example, the modifications to the Tanks area during WWII are likely to have destroyed any Aboriginal sites (if they ever existed) in the area as too is the disturbance to the Centenary Lakes area caused by the creation of the lakes.

4.2.1 Archaeological Potential for Aboriginal sites

It is worth remembering that the archaeological evidence of past Aboriginal use of the area may persist in small pockets of undisturbed land if such occur, especially where these coincide with areas most likely to have been used by Aboriginal people for campsites such as the banks of creeks and elevated well drained areas adjacent to freshwater swamps. A slim chance therefore always remains that such archaeological evidence may be discovered during earth works in such locations.

The environmental assessment prepared by GHD (2006) describes the area between Saltwater and Lily Creeks in the Centenary Lakes area as: *the remnants of ancient Holocene beach ridge/swale systems. Saltwater Lake was created through the excavation of a typical swale representative of these systems (GHD2006:24)*. Such Holocene beach ridges close to the rich food resources of creeks and wetlands would normally be regarded as having high potential to contain Aboriginal sites; however the likelihood of sites remaining intact is reduced by the amount of earth works which have occurred in this area due to realignment of creeks and the creation of the Saltwater Lake. The likelihood of Aboriginal burials or indeed minor middens remaining is further reduced by the acid soils which would affect the survivability of some types of archaeological deposit. The area should be considered to have low to moderate potential until such time that it has been systematically investigated. The most likely site type remaining would be sparsely deposited or isolated stone tools.

5.0 Contextual Synthesis

5.1 Preamble

Earlier assessments (Gordon Grimwade and Associates 2005) of the precinct identified nine areas of interest.

1. Tanks 1 to 5 and associated pipelines;
2. Sikh Cremation Ground (often incorrectly referred to as the Hindu Cremation Ground);
3. Chinese market gardens;
4. 'Original' gardens;
5. Cairns Herberton railway and Municipal tramway route;
6. Flora and fauna of interest to Aboriginal traditional owners;
7. Flecker Botanic Gardens;
8. Collins Avenue; and,
9. Centenary Lakes.

Items 1, 3, 7 and part of 6 are incorporated within the current State Heritage Register listings for the Flecker Botanic Gardens and items 1, parts of 4 and 5 are included in the WWII RAN Fuel Installation listing and 2 and 9 and parts of 5 and 6 are within the Centenary Lakes precinct. The proposed council re-design of Collins Ave has been completed.

5.2 Synthesis

5.2.1 Understanding of the significance of the development of the Gardens [local regional and national]

While it would perhaps be simpler if the gardens had been created in a linear or checkerboard progression of oldest plantings in one area and newest in the other, thus allowing direct connections between historical associations and the plantings, this is not the case. It is not a matter of simply identifying the oldest or 'original' gardens and freezing them in time in terms of the plantings and design. In fact as we have seen the 'original' gardens no longer exist except perhaps in individual species and plants that have been incorporated into the cultural landscape. The location of the 'original' gardens is thought to have been south of Tank 3 and so has been impacted on by the various changes to Collins Avenue and probably by the construction of the WWII Fuel Installation.

The significance of the gardens lies in both their historic association and in their dynamic nature created through a continual re-working by a combination of successive curators and natural forces such as cyclones and severe storms. Botanic Gardens employee Peter Shanahan comments that *'cyclone damage is viewed by staff at the gardens as an 'opportunity' to add new plantings as it results in an unexpected change in the gardens through the changes in canopy and therefore localized habitat'*. The continual dialogue between curatorial ambitions and nature is what creates the significance of the plantings. The challenges that this poses for the long-term management of significance are discussed in Section 7.0 'Opportunities and Constraints Arising from Significance'.

The significance of the Flecker Botanic Gardens has already been assessed and found to be of State Significance (see Section 6 following). However that is not to say that the other vegetated areas of the precinct are not also of significance. While the historical significance of the WWII structures are the primary values in the Tanks Arts Centre, undoubtedly the vegetation contributes to the ambience of the site. It contributes strongly to visitor impressions of exploring the past; a past that has been partially reabsorbed by nature. In historical terms it highlights the enormous endeavour involved in building WWII infrastructure throughout a tropical north Queensland landscape; an endeavour that extended far beyond this one installation.

The area south of Collins Avenue makes up the bulk of the study area and has not been identified as being of State significance. Nevertheless it is clearly of high local significance and incredibly valued by the Cairns local community and visitors to the area. Sometimes parks and recreation reserves are gazetted in response to pre-existing community significance and in other cases such as this one the very act of establishing a reserve begins the process of significance building. Communities begin to value recreation areas as they experience them and their attachment to such places tends to grow over time. While there are fewer legal constraints to changes in areas which are of local significance, the onus remains on the site managers (in this case Cairns Regional Council) to manage them in the interests of stakeholders. In the case of the Centenary Lakes precinct the inclusion of areas such as the Sikh Cremation Ground add an important connection to specific sectors of the community.

5.2.2 Analysis of the industrial/ architectural elements

The industrial and architectural elements of significance are largely concentrated within the Tanks Arts Centre Precinct and relate to the WWII RAN Fuel Installation. While subsequent use of the area since 1995 has overlain a contemporary social value relating to the Arts community and its patrons it is important to remember that the primary values for which it has been recognised as being of

State Significance are its historic WWII buildings and history. This has important implications for the future management of the area and presents some challenging constraints and opportunities. Essentially it means that if there is a conflict between the contemporary use of the area and the historic fabric and elements then the conservation of the historic elements should take precedence.

Tank 1 has been demolished and archaeological deposits (if any existed) associated with Tanks 1 and 2 have been lost as the potential for these do not appear to have been considered, assessed or investigated prior to the major demolition and site clearance works. There is considerable risk that the connectivity between the various elements i.e how they worked as a system will be lost if plans to remove large parts of the bund wall and other changes are implemented. This will result in structural elements remaining largely as art objects but losing much of their historic significance. This is discussed further in Section 7.

5.2.3 The importance and rarity of the natural environment

The study area while comprised predominantly of natural elements is a cultural landscape that has been created to showcase tropical vegetation and even ecosystems. It is not considered particularly rare or important as a 'natural' environment. Although clearly it has the potential now to act as important *refugia* for native species and the lakes provide important wetlands habitat for birds.

5.2.4 Understanding the potential Aboriginal value of the area

No specific Aboriginal sites have been identified within the study area. Given the degree of subsurface disturbance of the area through the construction of the gardens themselves the construction of the Tanks during WWII and the creation of the lakes it is unlikely that significant Aboriginal sites survive intact. However where undisturbed subsoil exists it remains possible (while of low probability) that some Aboriginal relics remain attesting to the use of the area prior to European settlement.

A prior environmental assessment (GHD2006) identified that the area within the Centenary Lakes section of the site which is between Saltwater and Lily creeks was formed by remnant Holocene beach ridges and swales. While it is likely that much of this area has been disturbed, the extent of that disturbance is at present unquantified. The possibility that archaeological evidence remains of early (Holocene) Aboriginal occupation of this landscape must be considered. For this reason, for the purposes of this CMP, this area has been assessed as having low to moderate archaeological potential and is shown as a PAD (Potential Archaeological Deposit) on Figure 4. Future investigation may serve to further refine this assessment or to demonstrate that due to past ground disturbance no potential exists.

The prior historic assessment (Gordon Grimwade and Associates 2005) points out that the contemporary Aboriginal community see opportunities presented by the gardens to interpret the local indigenous history to the public especially in relation to Indigenous use of plants for food, medicine and other domestic purposes. This will be discussed further in Section 6.0.

6.0 Significance Assessment

The processes and methodologies for assessing heritage significance have been well debated within the heritage profession (see for example Heritage Office and Dept Of Urban Affairs and Planning 1996; Kerr 1990; McIntyre-Tamwoy 2000, 2002; Byrne 2001; Page, Gilbert and Dolan 1998; Byrne, Brayshaw and Ireland 2000; Australia ICOMOS 1996, 1999; Marquis-Kyle and Walker 2004; Sullivan and Bowdler 1984).

In Australia heritage legislation and the management of heritage places is based on the principle of cultural significance. Cultural significance is not a static concept. The cultural significance of a place or object may change over time. In general the criteria for assessment used by the Federal government, NSW and Queensland are based on the tenets of the Burra Charter (Australia ICOMOS Burra Charter 1999). Specifically the Burra Charter states that:

Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations.

Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups (Burra Charter 1999 Article 1.2). The terms 'values' and 'significance' are often used interchangeably in heritage management in Australia. Essentially these terms refer to the degree and nature of the importance of a place or object to individuals, communities and /or the nation.

6.1 Basis of Assessment

Assessment of cultural significance can be undertaken in a number of ways. The Burra Charter of Australia ICOMOS divides significance into aesthetic, historic, scientific and social categories. JS Kerr's *The Conservation Plan* (National Trust of Australia (NSW) 3rd Edition 1990) considers the concept of cultural significance according to three qualities:

- The ability of the place to demonstrate a process, custom or style; associational (historical) links for which there may or may not be surviving evidence; and
- Formal or aesthetic qualities.

The Commonwealth government has developed a series of assessment criteria have been developed for use in assessing heritage items, places or natural environments. These criteria are broadly related to those presented in the Burra Charter and those developed by the Queensland heritage Council.

The assessment criteria used by the Queensland Heritage Council, now comprise four 'nature of' and 'associational' criteria and two 'degree' criteria, which are used to consider the significance of the site and its rarity and integrity.

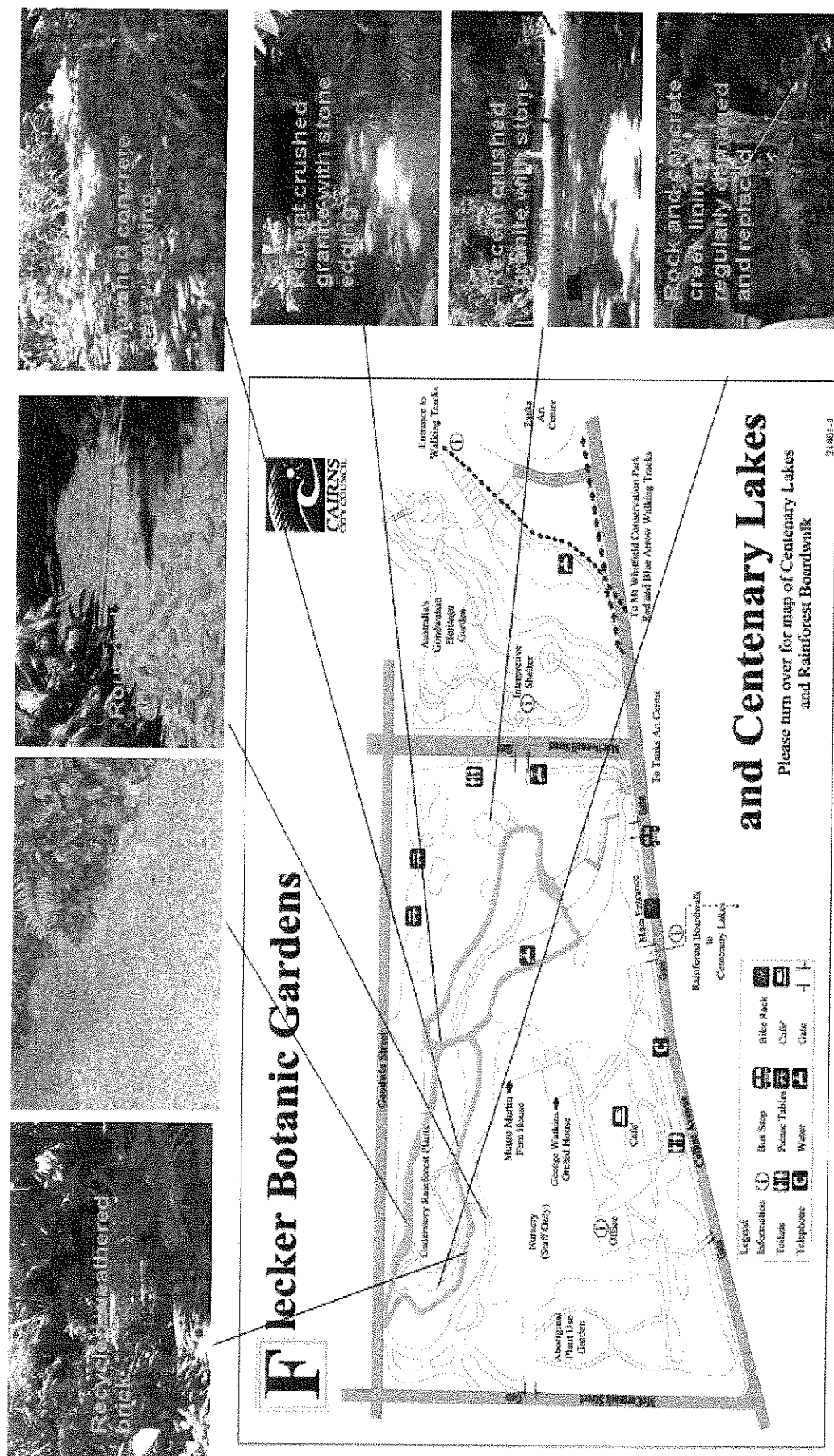


Figure 5: Path & Creek Treatments. The Figure-of-Eight pathway is in green.

6.2 Consideration of Significance Assessment Criteria

Statements of Significance for the two State listed places within the study area have already been prepared as part of the listing process. A statement of cultural significance describes the importance of a place and the values that contribute to its importance. The statement of significance is based on the assessment of value against specific criteria. The information contained in the listing is the outcome of this assessment and is provided below. This in turn provides the basis for the development of the conservation policies which follow in section 8 and *which address how the significance of the place can be retained, by applying the principles and practice of the Burra Charter*(Marquis Kyle and Walker2004 :80).

In preparing this CMP it was not part of the brief to review or revise the significance for which the heritage items were listed. The CMP is intended to respond to the existing listings. However, preparation of the policies to guide the conservation of the significant values requires the identification of fabric and intangible attributes that contribute to the significance of the place. As a result of this process sometimes earlier assessments must be clarified as in the case of the Flecker Botanic Gardens below.

6.2.1 Flecker Botanic Gardens

The Gardens i.e that area north of Collins Avenue and bounded by McCormack Goodwin and McDonnell Streets have been entered on the Queensland Heritage Register. The assessment lists the site as being significant in terms of:

- Criterion A: The place is important in demonstrating the evolution or pattern of Queensland's history
- Criterion D: The place is important in demonstrating the principal characteristics of a particular class of cultural places.
- Criterion E: the place is important because of its aesthetic significance.
- Criterion H: the place has a special association with the life or work of a particular person, group or organization of importance in Queensland's history.

The section below provides the existing assessment against criteria that is included on the current Queensland Heritage Register listing.

Criterion A:

1880s-1982 (fabric) 1880s-1960s (historical) 1880s - (social).

The place demonstrates the development and continued management of a botanic garden in a regional city as a theme in the evolution and pattern of Queensland's history. The Flecker Botanic Gardens (earlier Cairns Botanical Gardens) was established in 1886 as part of a recreation reserve. From the 1930s the Flecker Botanic Gardens has fulfilled the traditional functions of a botanical gardens, including increasing horticultural knowledge about local plants with a view to developing their economic potential, sharing of this knowledge and seed stock with like-minded institutions nationally and internationally, providing an attractive and educative venue for public recreation, and in some instances providing plant material to the public.

Criterion D:

The place is important in demonstrating the principal characteristics of a substantial wet tropics public botanical gardens that has evolved over time, including early groupings of exotic and indigenous plantings (early to mid 20th century) and the botanical display garden, designed and developed by curator Vince Winkel in the 1960s. Important characteristics also include: infrastructure associated with displaying the gardens, especially that dating from the 1960s-1980s (including the figure-of-eight walkway (see figure 5), other pathways, retaining walls, footbridges, paving, railings, drainage systems, and raised and built up garden beds); the provision of specialist displays; specimen plantings of trees and shrubs; and the incorporation of open lawn areas within the design. The current Gardens, developed during the 1960s demonstrate plantings, displays, plant collections, bridges and visitor facilities similar in concept to other regional botanic gardens.

Criteria E:

The visual display of the plant material in the Flecker Botanic Gardens captures the exuberant ambience associated with imagery of the "lush tropics". Large trees, both native to this habitat and exotic, provide the planting structure and canopy framework for the understorey collection and display of colourful orchids, gingers, aroids and ferns. The natural topography of gentle foothill and slopes, creek, gully and swampland has been sensitively incorporated into the design of the display. The aesthetic of the site has quietly evolved with, and emerged from, its natural environment rather than being designed to dominate and overpower its space in the landscape. This contributes to the enduring charm of the place as a recreational venue.

Criterion H:

The place has a special association with the work of naturalist Dr Hugo Flecker in the mid-20th century. The North Queensland Naturalist Club was established in 1932 by Dr Flecker. He housed its extensive herbarium collection in the gardens from 1933 until 1949. This collection returned to the Flecker Botanic Gardens briefly from 1967 to 1971. It is now incorporated into the CSIRO collection. Since the 1930s, the place has had a special association with the work of the Cairns City Council in developing and promoting the Botanic gardens as a place of recreation and, since the 1960s, as an internationally recognised source of scientific information and education in the wet tropics of Australia.

Discussion:

The current listing claims that the Flecker Botanical Gardens are of State significance under criterion D Criterion D: *The place is important in demonstrating the principal characteristics of a particular class of cultural places*. The garden infrastructure including the pathways and landscaping fixtures are listed as contributing to this significance. This could be taken to imply that the 'fabric' used in the path treatments and creek linings at the Flecker Botanic Gardens, is significant. Elsewhere in the listing document the workmanship in these areas is described as being of 'outstanding' quality.

The claim that the Flecker Botanical Gardens meets criterion D for listing is not substantiated by the evidence. No significant fabric occurs in the landscaping elements described (see Figure 5) and the workmanship while adequate and suitable to the function cannot be described as 'outstanding' in terms of creativity, innovation or finish. Rather the use of vernacular and recycled material in the garden infrastructure contributes to the ambience of the tropical forest lined creek as described in

Criterion E. Further while the Flecker Botanic Gardens may share similarities with other small regional gardens it lacks many of the characteristics of larger exemplar gardens.

6.2.2 The WWII RAN Fuel Installation (The Tanks)

The group of structures known as 'the Tanks', have also been previously assessed and entered on the Queensland Heritage List. The area gazetted is defined as

'the former WWII RAN Fuel Installation at Edge Hill, located 5 kilometres north of the original port of Cairns in the foothills of Mt Whitfield Range...[it is] located in 3 non-contiguous land parcels. ...Site 1: Tanks 1 and 2 (Lot 346 on RP 711610) Land parcel 346/RP711610 is located on the north side of Collins Avenue near the eastern entrance to the Flecker Botanical Gardens, on a former railway reserve. It contains tanks 1 & 2, a pump house, an earth bund and a concrete bund...Site 2: Support structures (Lot 1 on RP 17796) Land parcel 1/RP17796 is located on the south side of Collins Avenue, opposite Tanks 1 and 2, on part of the original Cairns –Herbeton Railway alignment. It contains two small former support structures associated with the WWIIRAN Fuel Installation: a fire station (garage) and foam tank....Site 3: Tanks 3,4 and 5 (Lot 349 on Rp715416 and Lot 402 on SP201236) Land parcel 349/RP715416 is located on the north side of Collins Avenue approximately 500 metres west of tanks 1 and 2 on a former quarry site. It contains Tank 3, 4 and 5, a concrete bund, former foam shed and a former pump house.' (EPA listing/place ID 602605)

This site and its components have been collectively assessed as having significance under Criteria A, B, D, E and H as follows:

Criterion A:

The former WWII RAN Fuel Installation is important in demonstrating the impact of WWII on far north Queensland. Its construction was given the highest priority under the National Security regulations. Its Strategic location in the foothills of the Mt Whitfield Range, 5 kilometres from the port and with dense surrounding vegetation, demonstrates the importance of selecting a secure location for the storage of naval fuel supplies during times of war.

Criterion B:

The installation is a rare surviving purpose built WWII Naval Fuel storage facility associated with the Pacific war and located in an urban setting.

Criterion D:

The installation which comprises five large fuel tanks, two pump houses, concrete and earth bunds and ancillary structures (including a fire station and foam tank) , is important in demonstrating the principal characteristics of its type. The complex reveals information about construction techniques, materials, form design and location of structures specifically designed for storage of naval fuel in 1943. Because of its relative intactness Tank 2 is particularly noted for this criterion.

Criterion E:

The tanks particularly demonstrate elements of form, scale and material that contribute to the aesthetic significance of the site. Tanks 1 and 2 contain aesthetic value as industrial ruins in an urban environment; the scale of, circular form and rusting exteriors form the main aesthetic elements. Tanks 3, 4 and 5 contain high aesthetic values as industrial ruins in a heavily vegetated

urban environment. Vegetation such as *Ficus* spp., and orchids contribute to the aesthetic values of the place.

Criterion H:

The installation has a special association with the work of the Allied Works Council, which made a substantial contribution to the construction of defence facilities in Queensland, particularly in northern Queensland and often in difficult terrain, during WWII.

6.4 Relative Significance values

The Queensland Heritage Register Listings are slightly problematic in that they list indiscriminately (particularly in relation to the Flecker Gardens) all features of the two sites without assessing their relative significance in terms of their contribution to the overall site significance. This has management implications. For example the listing for the Flecker Botanic Gardens (see Appendix B) lists all the 'beds'. Existing general exemptions mean that disturbance to the beds to maintain them is allowed but actually abandoning, or reconfiguring beds would not be. Similarly 'lawns' are listed as a site component and in the same way- mowing the lawns would be maintenance but deciding to change lawns into gardens would not be covered under maintenance.

This section attempts to tease out the contribution of individual elements to the overall significance and this in turn is then used to develop management actions and guiding principals or policies that will inform the long term management and also justify the special exemptions sought through a heritage agreement.

The following Tables (Table 4 and 5) identify and rank the relative significance of individual elements of the study area based on historic information and fabric evidence.

Associated management actions are provided in Section 8.0. Areas of failed or replaced fabric and areas that represent remnants of former complexes or systems are generally rated lower than the intact item would be.

Table 4: Ranking and associated contribution to significance

5	Very high contribution to the Significance of the place.
4	High contribution to the Significance of the place.
3	Some contribution to the Significance of the place.
2	Low contribution to the Significance of the place.
1	No contribution to the Significance of the place.
0	Detracting Element

Table 5: Item and Significance Value (See Table for Significance Management)

Item	Significance Value	Comment
The WWII RAN Fuel Installation (The Tanks) – State Significance		
Tank #1	N/A	Has already been demolished. The location will be interpreted via footprint design.
Tank #2	5	Should be conserved and interpreted with reversible and minimal alteration of original fabric.
Tank #3	5	Should be conserved and interpreted as part of overall complex. Some minimal alteration affecting original fabric has already taken place in the adaptive re-use to arts centre. Future alterations should be reversible.
Tank #4	5	Should be conserved and interpreted as part of overall complex. Some minimal alteration affecting original fabric has already taken place in the adaptive re-use to arts centre. Future alterations should be reversible. Irreversible impacts such as the installation of sub floor sump and pumps will require a SoH once the design has been chosen and the extent of change is known.
Tank #5	5	Should be conserved and interpreted as part of overall complex. Some minimal alteration affecting original fabric has already taken place in the adaptive re-use to arts centre. In particular around 12 roof support poles have been removed to make way for the stage. Future alterations should generally be reversible however the removal of 4 more poles is required to provide improved visual access to the stage and permanent support for stage lights may require some strengthening.
Demountable building	1	This building is not related to the historic period for which the site is significant. While it adds no aesthetic or historic value it is sitting on short piers and is reversible- so causing little physical impact and may be removed at any time.
Pumphouse (near Tank 2)	5	Should be retained and interpreted. Its location at the proposed car park and its simple rugged construction would lend itself to being an ideal location for the primary interpretation facility where visitors could access story board type information before proceeding to the arts centre.
Pumphouse (near tanks 3-5)	5	Currently used for administration. An adaptive re-use consistent with its heritage value should be identified. It has space for some outdoor seating area on the eastern side which could be extended once the nearby demountable building is removed. The general structure should remain and be interpreted. Some irreversible changes such as plumbing and electrical works may be required to facilitate this change in use but structural changes will be minimal.
Foam Shed #1	4	On the opposite side of Collins Ave to Tank 2 and its pump house. The structure is suffering from white ant damage in the timber frame. If feasible it should be retained and interpreted. Given the visual separation provided by Collins Ave consideration should be given to relocating it closer to the other structures (although functionally it should remain outside the bund wall) for interpretative purposes.
Foam shed #2	4	Is located outside the bund wall near Tank 5. EPA has given permission to move this small structure. If it is relocated it should be interpreted. As these structures were deliberately located outside the bund wall (in case of spillage/fire) they can appear unrelated to the main complex of structures inside. Currently most visitors would be unaware of the connection between this structure and the rest of the Tanks site. For

		interpretive purposes it should remain outside the bund wall perhaps further along the western wall- if it is to be retained.
Bund wall Concrete	5	The bund wall is an essential design element of the Fuel installation. It also contributed to the ambience of the place today enhancing the concealed nature of the ruins within and providing an atmosphere of mystery and privacy which promises 'discovery'.
Bund wall earthen	5	The internal bund walls incorporate features such as drains and stairways and are an essential element which contributed to the historic function of the fuel installation.
Amphitheatre	4	The amphitheatre is created from the reshaping of an internal earthen bund wall between Tanks 3 and 4. The internal bund walls were an integral functional design element of the Naval fuel storage facility and should be maintained. Minor alteration such as the installation of anchor points for shade sails or electrical cabling to speakers etc are considered minor and acceptable (although see section 8 re pre-cautions in relation to possible archaeological evidence. Staff has also flagged the possibility of adding steps up over the rear of the bund wall from Tank 4 to assist traffic flow and access to the top of the amphitheatre during performances. This is considered preferable to removing more of the bund wall for widening paths. Stairs over the bund wall are consistent with the original access from one side to the other.
Stairs over bund walls between Tanks 3 and 4 ;and 4 and 5	4	Two sets of original stairs used to cross the bund wall remain. They are largely overgrown and in danger of being totally subsumed by large trees. They should be interpreted as ruin elements of the site.
Pipe work, valves and other industrial elements	5	Where these exist <i>in situ</i> they are of high significance. Over the years that the site has been owned by the Cairns Regional Council many of these items have been removed from their original context to more convenient locations so exist as 'sculptures' in the gardens. The re-location of <i>in situ</i> items should cease and an attempt be made to identify <i>in situ</i> items and retain and interpret them.
Entrance gates opposite Tank 4	3	The gate is made up of welded artwork incorporating relics from the industrial site. The historic relics appear to have been cannibalized for some years to create art. Although continued action of this kind is no longer legal since the listing of the site on the Queensland Heritage Register, such art works may be regarded as significant in themselves as a) a testament to the social value of the place and b) the sites recent history as a centre for local artistic interpretation. Given the weight (and age) of some of the art works, particularly the entrance gateway it is recommended that the structure be assessed and any necessary maintenance works required to conserve it carried out. If this artwork is decommissioned then the artefacts that comprise it should be conserved. The item could also be conserved as an item in its own right demonstrating a past era in the treatment of heritage artefacts.
Wrought Iron gates to Tanks 3, 4 and 5.	3	The Naval Fuel Storage Facility has not been listed for its contemporary social value however it is arguably important to the people of Cairns in part due to its recent role as a hub for artistic endeavour. The wrought iron gates/doorways are an introduced element required when holes were cut into the reinforced concrete walls of each tank to provide access to the interior. The iron structures complement the industrial nature of the site.
Toilet Block	1	The toilet block is a modern amenities structure and has no historic significance. It is located between Tanks 4 and 5.
Timber and iron print studio.	1	The exact age of this building is not known. It is reported to have been built by Council around 1994/5. It is not present in an aerial photo believed to be circa 1968 (GHD2006:19). It is of no historic value. One of its primary walls is actually the perimeter bund wall to which the building is attached.
Moveable cultural heritage not associated with the WWII RAN Naval	1	Several moveable heritage items have been moved to the site which have no connection to the site e.g a plough. They add no significance

Fuel Installation		to the heritage item and may be removed or relocated as appropriate. If identified for disposal relevant historical museums should be given first option to acquire the items as gifts.
Flecker Gardens Site – State Significance		
Original gardens site (south of Tank 3)	2	Partially affected by the realignment of Collins Ave. Requires Interpretation-no physical evidence of the original site remains.
Restaurant (including toilets)	1	The restaurant is a commercial structure overlain on the listed heritage place. It is not identified in the listing as significant in its own right however the function of a café/restaurant facilitates community use and enjoyment of the gardens and the current structure does so in a way that does not overwhelm the aesthetic of the gardens themselves. While the building may be altered or replaced the principal of blending in with the gardens of facilitating access and appreciation of the gardens without dominating them should apply to the design of any new structure.
House /office	3	The house- now used as an administration building -is another relatively recent addition to the Gardens. It was built in the early 1950's for the then curator Tom Mitchell. It is probably most closely associated with Vince Winkel who took over as Curator of Parks and Gardens in 1966 until 1984 in part because he developed this section the Botanical Gardens under a 5 year plan. Until then this area was characterised by lawns and large trees. The Gardens as we see them today in the area bounded by Collins Ave, McCormack, Goodwin and McDonnell streets were developed by Winkel (refer to Plates 3 and 4 for example of this change).
Compound	2	The compound relates to the period from the 1950's onwards. However there is some anecdotal evidence that suggests that this may have been the area within which the zoological gardens operating between 1936 and 1953. Current gardens staff has found what may be the remains of enclosures around the outside of the compound wall. For this reason and because there is likely to have been little subsurface disturbance to the compound area over the intervening years this area has been identified as having archaeological potential to contain buried remains relating to this use. Archaeological investigations should precede redevelopment of this area.
Compound wall	3	See above. The significance of this area may increase if archaeological evidence is found to exist.
Paths - location	3	The paths, bridges and walkways date mainly from the period of Vince Winkel's 5 year plan to develop the current botanical gardens i.e from 1967 onwards. As such they are the earliest evidence of the creation of the modern gardens. They bear witness to the personal vision of the curator operating within a very limited budget and are testament to the modest but determined evolution of the gardens as a community initiative.
Path treatments-fabric	2	The treatments are varied and opportunistically use materials available within a limited budget (see Figure 5). There is no significant fabric although the mix of recycled finishes in the NW corner of the Gardens (see figure 5) provides an opportunity to interpret Winkel's vision an determination.
Creeks	4	The two natural watercourses of Fitzalan and Crowley Creeks are an integral part of Winkel's modern Botanic Gardens. These creeks have been partially modified –rock lined etc as they pass through the gardens. They revert back to ill defined natural water courses feeding the freshwater swamps once they cross south of Collins Ave.
Orchid house	2	Again refurbished in 1986 after cyclone Winfred. The orchid house is obviously an important 'Functional element' of the botanical gardens but in itself the structure is not significant. The evolution of the gardens will at some point require the orchid house to be rebuilt, replaced or expanded and this should be allowed subject to the

		principals outlines in Section 8. The history of this evolution should be interpreted in information about the gardens.
Munro- Martin Fernery	2	Constructed of galvanized pipe frame work and galvanized mesh. This building is typical of the low key (and low budget) infrastructure that characterizes the development of the gardens throughout the 50's 60' and 70's. It was refurbished in 1986 following cyclone Winifred. The evolution of the gardens will at some point require the Fernery to be rebuilt, replaced or expanded and this should be allowed subject to the principals outlines in Section 8 The history of this evolution should be interpreted in information about the gardens.
Figure 8 landscape design	4	Winkel's figure 8 landscape design is still evident in the north western garden. This should be kept as a basic element in any future developments. It can provide the focus for interpreting the evolution of the gardens.
Other landscape elements	2	Lawns, garden beds, individual plantings (except significant specimen plants) all of course are important to the enjoyment of the place however the way these elements are configured should be allowed to be influenced by the creativity and management of garden curators through time.
Specimen species/trees	5	The GHD 2006 report identified that a number of significant plants/species existed within the gardens. It should be a matter of priority for these to be identified and mapped so that they can be conserved and are not inadvertently compromised in future redevelopment or management of the gardens.
Entrance Gate to teak lawn	4	The Gates were erected in 1982 to commemorate the 50 th anniversary of the formation of the North Queensland Naturalists Club and have high social value.
Centenary Lakes site- Local Significance		
Original railway easement/pipeline route	4	The pipeline route still exists through the study area as a walkway and is likely to contain the original pipes
Pathways (general)	2	No particular significance to other pathways and it is expected that pathways may change over time as management needs dictate.
Sikh Cremation Ground	3	The Sikh Community considers this site to be 'a place of remembrance and sacred to the memory of those who were cremated there (Mr SS Choham pers comm. in Grimwade and Associates 2005:23)
Creek lines	3	Saltwater and Lily Creeks are the two main watercourses in this area. They are an integral part of the landscape. However both have been modified and in particular Saltwater Creek has been partially realigned in the creation of the Freshwater Lake
The Saltwater Lake	3	Remnant Holocene beach ridges in this area should they still remain may contain evidence of past Aboriginal use of the area. The Lake itself is clearly an important visual element of the landscape.
The Freshwater Lake	3	Similarly the Freshwater Lake was created in the late 1970's but has since become an important landscape element of the extended gardens.

7.0 Opportunities and Constraints arising from the Significance

7.1 Opportunities and constraints Flecker Botanic Gardens –State Heritage Listed Site

Managing the significance of the Flecker Botanic Gardens is not about preventing change but about ensuring that change is responsive to the gardens rather than imposed on the gardens. To this end any structural intrusions into the gardens need to be preceded by a detailed survey of the plants in the immediate vicinity prior to the design stage so that buildings can be designed around the significant plantings rather than the plantings moved to accommodate the buildings. The Master Plan (EDAWgillespie: n.d) includes concept plans for replacement of the orchid house and fernery. There is little innate heritage value in these structures and it is reasonable that they be updated or expanded as part of the evolution of the normal evolution of the botanic gardens, however there is a legal constraint as these structures are listed on the State Heritage listing, therefore it is recommended that specific exemptions be sought in regard to these buildings subject to the policy guidelines in section 8 (particularly 8.6, 8.7 and 8.9). See section 9.2.2 for a full list of recommended exemptions.

Similarly, the Masterplan provides for a new upgraded restaurant. This is also considered reasonable subject to the guideline policies in section 8 (especially 8.8.3). While there is no inherent heritage value in the current building it is mentioned on the Flecker Botanic Gardens listing on the Queensland Heritage Register and so alteration or replacement will need to be covered by special exemptions or be subject to Development Application.

There are opportunities to further develop the gardens by moving the existing compound but the possibility of archaeological evidence relating to the former zoological gardens existing in this area needs to be considered.

The current heritage listing also refers to the garden infrastructure including path treatments and creek lining. As has already been clarified there is no innately significant fabric involved in these works (see Figure 5). However retention where possible of the range of material will provide an opportunity to interpret the recent history of the current gardens. However, there is no restriction on the repair or replacement of the materials used where needed to ensure public safety and functionality. An exemption covering such work is recommended to avoid ambiguity (see 9.2.2 point 24).

It is essential that future works in the Flecker Botanic Gardens are consistent with the policies outlined in this CMP. This includes works outlined in the Masterplan which was prepared prior to the CMP as well as any works proposed for the life of this CMP.

7.2 Opportunities and Constraints- WWIIRAN Fuel Installation- State Heritage Listed Site

In relation to the Tanks Arts Centre- the existing buildings and structures relating to the WWII RAN Fuel Installation are the primary significant elements and the place has been listed on the Queensland Heritage Register for the historic values associated with the site and **not for values associated with the current use as gallery/ performing space**. The place has been assessed as having State level significance in terms of its historic values and while clearly the social values associated with the current arts centre are of local importance they are not associated with the same legal and management constraints. This is extremely important to remember and represents a major shift in the brief provided to EDAWgillespie in preparing the Masterplan where the primary directives centred on the proposed future use, although incorporating to some extent the existing historic site elements. This is not to say that the two (i.e the gallery Arts Centre and conservation of the heritage values) are incompatible but it does require a recognition that incremental and repeated attrition of the fabric of these elements can lead to serious impacts on the heritage values. In this regards it is well to refer to the Burra Charter for national standards. Specifically the following:

- The aim of conservation is to retain the cultural significance of a place (Article 2.1)
- Conservation is based on a respect for the existing fabric, use associations and meanings, It requires a cautious approach of changing as much as necessary but as little as possible (Article 3.1)
- Changes to a place should not distort the physical or other evidence it provides, nor be based on conjecture (Article 3.2)
- New construction, demolition, intrusions or other changes which would adversely affect the setting or relationships are not appropriate (Article 8).

Article 15 relates to change and points out that:

- Change may be necessary to retain cultural significance, but is undesirable where it reduces cultural significance. The amount of change to a place should be guided by the cultural significance of the place and its appropriate interpretation.
- Changes which reduce cultural significance should be reversible, and be reversed when circumstances permit.
- Demolition of significant fabric of a place is generally not acceptable. However, in some cases minor demolition may be appropriate as part of conservation. Removed significant fabric should be reinstated when circumstances permit.
- The contributions of all aspects of cultural significance of a place should be respected. If a place includes fabric, uses, associations or meanings of different periods, or different aspects of cultural significance, emphasising or interpreting one period or aspect at the expense of another can only be justified when what is left out, removed or diminished is of

slight cultural significance and that which is emphasised or interpreted is of much greater cultural significance.

It is important therefore to keep in mind that change to original structures needs to be **minimised** and should not detract from the significance of a place. This requires designers to think creatively about the design of changes and the technologies that they would use to incorporate appropriate seating, air-conditioning and lighting fixtures. Ideally changes and the introduction of new fabric to structures should be reversible. For example the inclusion of removable seating is preferred over changes that involve reconstruction of walls and floors. Luckily most of the visitors to the Tanks Arts Centre enjoy the venue for its alternative and 'industrial' nature and there remain abundant opportunities to present and interpret the site in ways that will enhance visitor experience.

The vision should not be to create a standard convention centre/ purpose built theatre space- that vision would be more appropriate to a new venue in a different location and retro fitting this into a State listed industrial heritage site would be inappropriate and inconsistent with responsible heritage conservation. However despite this rather blunt warning many of the changes sought to enhance the commercial and professional standard of the gallery and performance space at the Tanks Arts Centre could be achieved using reversible technologies and changes. Table 5 was compiled by Cairns Regional Council and highlights the changes that staff seek as desirable or necessary. Many of these changes could involve major inappropriate interventions in the heritage elements OR they could be carried out in such a way that they have a minimal impact and are reversible.

In particular while it is understood that the current toilet facilities may not be adequate for expanded visitation and use of the area, the addition of multiple toilet facilities across the confined area represented by the historic site within the bund wall and then replicated in each Tank will involve major disturbance to the area as it will require the laying of plumbing throughout the site. This is a major intrusion and requires re-consideration. Any such proposal will require a full archaeological investigation of the areas to be disturbed and EPA permits. In heritage terms it would be preferable if the current toilet block could be upgraded and any additional facilities incorporated outside the bund wall perhaps associated with the parking area or bus drop off area.

The Masterplan also called for multiple breaks to be created in the bund wall to incorporate '*the Tanks visually and physically into the overall fabric of the redevelopment*' (EDAWgillespie n.d:4.09). This is inconsistent with the management of the listed heritage values of the site. The bund wall is of primary significance and the historic function of the wall was to 'exclude' and 'contain', thereby creating an absolute distinction between inside and outside space.

Talking to Cairns Regional Council staff it is clear that plans for the site are continuing to develop since the completion of the Master Planning exercise. Table 5 below is an amalgamation of the range of issues and possible solutions that are being considered by staff for the upgrading of the Tanks Arts Centre. It is essential that future works within the Tanks Art Centre are consistent with the policies outlined in this CMP. This includes works already outlined in the Masterplan which predated this current document and any works proposed in the future.

There is currently no public interpretation relating to the history of the WWII RAN Fuel installation and the role that this complex played as part of an extensive network of infrastructure rapidly

constructed to service the war effort in North Queensland. An Interpretation Plan is required as a matter of urgency and onsite interpretation should be provided as part of the upgrade of the Tanks Art Centre.

7.3 Opportunities and Constraints- Centenary Lakes Precinct

Other opportunities present themselves for interpretation in the overall study area including the Sikh cremation ground, ecosystem rehabilitation, the vegetation of the Cairns Region and the tropics in general, the history of the gardens and Aboriginal uses of plants and animals.

The only heritage constraints in the Centenary Lakes Area consist of

- The historic railway easement and pipeline route;
- The former Sikh cremation ground, and
- The possibility that some archaeological deposits relating to Aboriginal occupation of the area remaining in the Holocene beach ridges between Lily Creek and Saltwater Creek.

While there are fewer heritage constraints in the Centenary Lakes area, it is nevertheless a requirement that future developments in the area are consistent with this CMP to ensure the conservation of the existing heritage values.

Table 6: Council Aspirations Tanks Arts Centre

Tanks Future Development Vision for Masterplan

Venue	Main Operations	Development Needs/Issues	Ideal Solutions	Comment Arising from Significance
TANKS ARTS CENTRE -GENERAL	Multi-function living arts and cultural centre with national and international profile Daily program from 10 am to 1am attracting wide range of visitor and local audiences	Storage Drainage Lighting Air conditioning Sound and lighting Pathways – wheel chair access Security Parking closer to venue (elderly & disabled) Drop off for coaches Ticket Link parking Artistic features on promenade Water Features (incorporated into drainage system) Focal signage and entranceway features (undercover path into Tank 4) Operating Systems: Payroll Invoices / purchase orders Booking system Artist engagement Staff management	Masterplan redevelopment is seen as a start but additional investment needs occur to achieve long term objectives Water features that serve a drainage purpose in the wet season	The area within the bund wall should be kept free of intrusive structures and water features that are largely inactive in the dry but active in the wet will require further design. Assess impact at design stage. New additions should generally occur outside the bund wall. New drainage works will require archaeological monitoring or investigation. Upgrading of pathways etc within the bund wall should be kept to minimum required for safety and if they involve subsurface disturbance will require archaeological investigation. Stairs over the internal bund wall are acceptable and preferable to widening of paths and removal of earthen bund.

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TANK 5	Main Performance, Concerts, Event Presentations	Needs to be more user friendly eg, remove entranceway bump	Remove some poles to improve sightlines	All changes should be reversible and should not impact on original fabric.
The main performance/presentation venue for premier attractions	Meeting foyer /entrance hub/ ticketing area		Strengthen roof supports for proper rigging	Changes which can be implemented as free standing reversible changes such as partitioning, floating floor i.e DO NOT INVOLVE STRUCTURAL CHANGE TO THE TANK OR SUBSURFACE GROUND DISTURBANCE – can be undertaken without EPA approval.
	Sealed floor		Fully functional green room with toilets and shower	
Eventual usage for late night programming (jazz/“unplugged” quieter music/comedy/cabaret)	Permanent sound and lighting		Raked seating	Removal of 2 poles (roof supports) is sought to improve audience visual access to stage area – since about 12 have already been removed this is not seen as a major issue unless it contributes to failure of the roof. Additional professional stage light rigging may also involve changes to roof supports. It is unclear what the extent of impact will be at this stage and so a SoHI will be required to consider these combined activities.
	Poor backstage area – need ‘green’ room		Acoustic deadening (ie spray foam on rear walls, heavy drapes, structures to break up reflections)	
	Wings on side stage		Install permanent professional level sound and lighting for performance, also general room lighting	
	Lighting throughout		Install permanent bio box fully wired to stage	
	Flooding issues (rain through gates)		Curtains – permanent rear drapes, opening drapes on centre bar and front of stage	
	Storage		Side legs	
	Curtains/sound damping/ flexible for use as more intimate space (and as possible alternative to more expensive acoustic solutions)		Seal floor	
	Disability access to stage		Create a permanent entrance foyer with eftpos and cashier (data link)	
	Rigging - certified, able to fly equipment (and people)		Platform for photography, filming	
	Temperature control		Permanent catering area and bar with plumbing	
	Fire alarm		Air-conditioning	
	Seating		Doors (weather and sound complaint issues)	
	Elevated tech operator bio-box			
Communication - phone/data/intercom				
Catering area/bar				
Visibility blocked by poles				Spraying permanent material onto walls and installation of plumbing/toilets etc are major structural changes and require an SoHI (carried out by a qualified heritage practitioner) and EPA approval. Reversible alternatives such as independent acoustic skins that can be removed do not require specific approval.

TANK 4	Acoustics			
	Gallery, Shopfront, Cultural Interpretive Product, Live Artist Display	Security	Development of infrastructure of all new operational functions (will need partitions etc)	Upgrade lighting – Switches etc
	Main daytime focal point and customer catchment area.	Lighting switches, one central point	Security – proper entrance etc, also address dust issues	The same applies to Tank 4. Changes which can be implemented as free standing reversible changes such as partitioning, removable storage etc i.e DO NOT INVOLVE STRUCTURAL CHANGE TO THE TANK OR SUBSURFACE GROUND DISTURBANCE – can be undertaken without EPA approval.
	To be developed as all day attraction, exhibition and retail centre for Tanks products, incorporating ongoing exhibition of Cultural Interpretive Product (authentic Tanks interactive interpretation project); rotating exhibition program; indoor film screenings etc.	Gallery lighting needs upgrading	Air-conditioning	
	Ideally connected conceptually/physically (ie., covered walkway) to main shop and merchandise store area (current main office) –although note current alternative plan is that the pumphouse/current admin building be made into a café (Chris Stannard).	Security	Rip out existing gallery, replace with high grade movable partitions/walls	
		Communications phones/intercom/data communications/eftpos	Put wharf in CIP	
		Wharf - needs better placement/incorporation into CIP	Permanent sound and media infrastructure	The installation of sub floor pumps will require excavation of the floor and presumably the creation of a sump as there is no existing under floor cavity. A SoHI should be prepared once the actual extent of disturbance required is known.
		Real sink	Washing/disposal facilities	
		Storage - gallery tools and supplies	Storage – need for artwork, materials, hardware – plinths/easels etc	
		Fan are noisy	Shock-mount or replace fans	Drainage works and plumbing and other intrusive works require EPA approval and should be preceded by archaeological investigation.
		Leaking floor and roof	Air conditioning	
			Sealed floor	Covered walkways should be avoided as they break up the internal bund area. 'Conceptually' these areas were not connected in this way. If considered necessary between the entrance and Tank 4 then the design should reflect the industrial nature of the site.
			Repair roof	
			Extraction fan (reduce heat)	
			Drainage to prevent flooding	
			Doors	
				The addition of a container to the external rear of TANK 4 between the Tank and the amphitheatre bund wall does not require approval as it is a reversible action.
	Visual arts space with professional infrastructure, yet still multipurpose exhibition area. Flexible partitions/walls to accommodate multiple exhibitions.			
	Main operations in summary:			
	Gallery shop-front – local artist product, merchandise			

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Interpretive Product Exhib (permanent/renewable)		
Exhibition space (eg., living artist displays) and indoor mini-theatre		The lighting in the gallery is lightweight moveable LCD lights strung on horizontal cables. Currently these are either fixed directly to the poles with small bolts or to wooden brackets which have been added around the poles and which do not directly impact the poles themselves. The latter method is preferred for new additional lighting. As a general rule the lighting should be set up so that it is flexible enough to avoid cumulative impacts from new holes being drilled in poles over successive reconfigurations of the lights. The Wharf sculpture is specified in the Queensland Heritage Listing and is therefore protected under the provisions of the listing. However it is not directly relevant to Tank 4. It's removal to and conservation in, another part of to another part of the site is acceptable if required for safety or other reasons and so this contingency is allowed for in the Special exemptions requested for the site.
Main gallery		
TANK 3	Corporate Functions, Community Access Space, Alternative/additional Exhibition Space	Mezzanine for technical storage/controls
	Capable for Circus programming and other community projects/events	Amphitheatre entrance / chairlift for wheelchairs
	Multipurpose Workshop zone/Film studio	Reversible changes are allowed without EPA approval.
		Rigging which stands independently for circus acts/ trapezes etc is also allowed. Anchor points in the floor already exist and others similar are considered acceptable and are
		Rigging points Poles obstruct view Acoustics Lighting (in and out) Moveable dividers/partitions/ curtains/ shape on wall/ insulation on roof

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Corporate Hire functions/events (incl catered)		Toilets	Retractable theatre seating		provided for in the Special exemptions requested.
AMPHITHEATRE	Optional additional exhibition Gallery	Air flow ie fans	Fix roof		
		Plumbing	Lighting like Tank 4 (ie work lights), rigging for specific events, ambient/gallery and centralised lighting zone		The changes for permanent industrial sized extractor fans to exhaust chemical fumes would require major alteration of the fabric and EPA approval. Other options should be considered such as hired free standing extractor fans.
		Outside pathway- lighting, access persons with or without disabilities			
		Infrastructure and workspaces	Extractor fans, quiet fans walls/poles		
		Communications - intercom, phone, data access points	Hot and cold basin access, water fountains, drainage to sewer, toilets nearby outside (printing hub/atco)		
		Drainage	New wider pathway with external lighting		
		Entrances not weather proof	Storage space adjacent to gate entrance (ie circus gear) tables and chairs		
			Intercom/phones/public phone/data connections		
			Removal of some poles and installation of rigging for event lighting and circus		
			Weather-proof doors inside gates		
			New staging ie tongue and groove decking on surfaced concrete		
	Performance, Film screening, Workshops	Enhance infrastructure	Fairy lights in ground, edge of stage, lighting on steps, work lights everywhere		Steps over the bund wall are preferred to widening the pathways. Levelling of existing pathways to allow better wheelchair access is acceptable subject to the special exemptions requirement in relation to archaeological monitoring of earthworks/excavations within the bund wall.
	Multi-use area – ie workshop zone during school holidays etc	Entry points ie poor access for disability	Screen, PA and points for internal projection		
	Open air film screenings and function space	Cliff face access and back garden area access	Back staircase (beside tank 4), staircases on "sides", wheel chair zone		
		Sun on stage	Reshape terrace and install edge lighting		Installation of shade clothes/sails do not require EPA approval
		Mosquitos/midgies	New path to stage: wide, flat, minimal slope		anchor points are requested in the special exemptions. Consideration should be given to minimising
		No screen	Shade cloth sail over stage and possibly		

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		No edge on terrace	similar retractable over audience	impact on original fabric of such anchor points.
		Lighting (poor, not dimmable)		
		Pathway inadequate.		
Fig Tree and Outside Tank 4/5	Meet and greet, Cocktail, Mini performance area	Fig tree roots		Unnecessary intrusive features which involve disturbance to the subsurface should be avoided and will require prior archaeological investigation.
	Outdoor covered meeting area – multi-use	Lighting		
	Catering hub and cafe	Power points inadequate	Design public art and kids fun area	
	Paved area	Garden / landscape maintenance	Pave gravel areas	
	Public arts/kids fun stuff	Licensed area	Create functional catering area	
	Water features/sculptures/public art	Paving from fig tree upwards (where there is no grass)	Improve gardens (Botanic Gardens input)	
	Bush tucker - edible plants	Rubbish – need bins	Drainage incorporating water features – a feature art piece	
		Flooding	Install permanent feature lighting for trees etc	
				The proposed catering hub breaches the bund wall and involves a building that straddles the space now occupied by the bund wall and some area on either side (i.e outside and inside the bund wall). This is potentially a major intrusion however some architectural design techniques may be able to be used which minimises this intrusion for instance which allows the outer face often structure to mimic the bund wall. This development will require preparation of a SOH1 and separate EPA approval.
				The addition of formal gardens and 'bush tucker' would detract from the industrial/historic integrity of the area. The area within in bund wall would traditionally have been kept clear the subsequent regrowth adds to the overgrown ruin ambience but an extension of formal planting would be inappropriate and unnecessary, especially with the botanic gardens adjacent.

PUMPHOUSE/CURRENT ADMINISTRATION BUILDING	Conversion to a suitable adaptive re-use consistent with retention of its heritage values. Alternative possibilities are a shop and/or interpretation centre.			This is considered a suitable adaptive re-use. A SoHI will be required once designs are finalised and design should minimise impact to original fabric.
PRINT/STUDIO	Final use to be reviewed Multi –arts space – visual arts / wet area Multiple spacers Dedicated workshop room – mirrors/dance floor/curtains Kids friendly, safe Proper infrastructure ie plumbing Storage	Existing area – needs sorting / appropriate storing of materials Too small Not weather proof Uneven pavers on floor Poor access - need better for people / disabilities Potable water Lighting Toilets	Input into design of building to address issues Data connections/phones/etc Projection and screen Kitchenette Air conditioning	This building is not listed in the Queensland Heritage Register listing. It uses the concrete bund wall as one of its load bearing external walls. It does not appear to have been extant in 1968 see aerial photo in GHD2006 report. While the structure is in keeping with the industrial nature of the site and so is not considered intrusive it is also not considered essential. Provision to modify or demolish as required is requested in the Special exemptions for the site
TANK 2	One proposal is to conserve the tank as is with large perhaps changing art installation inside viewed from small existing small opening (Stannard)		Plans for this tank have yet to be finalised One proposal is to keep the tank as is	Reversible changes or additions do not require EPA approval. Use such as suggested is considered reversible.
PUMPHOUSE AT TANK 2	Plans have not been finalised			This building would lend itself to being an interpretation point as it will be situated in the future car park for the TANKS arts centre and as such will be the point of arrival for many visitors

8. Conservation Policy

8.1 Introduction

This section outlines the policy framework for the future management of the historic heritage resources and values of the Flecker Botanic Gardens, Tanks Arts Centre, and Centenary Lakes Heritage Precinct. The policies in this section are presented as a hierarchy:

- A head policy acts as a vision statement
- Framework policies guide actions in each functional area of planning and operations and
- Detailed policies provide the 'what –to-do' in each planning and operational area.

The State significance of parts of this site i.e the Tanks Art Centre and the Flecker Botanic Gardens has already been established and underpins the commitment required to maintain this significance. The remainder of the area is of high local significance to the Cairns community and while this means that there are less statutory constraints imposed on Cairns Regional Council in relation to the introduction of new elements and fabric in this broader area, nevertheless the value to the local community must be considered in future planning.

The primary differences that set the study area apart from other regional botanical gardens and from other recreational areas managed by the CRC are:

- The inclusion of the World War II heritage features of State significance;
- The incorporation of performance and gallery functions within the botanical gardens and historic features.

There are other ways in which the area is similar to other regional gardens and to other recreational areas managed by the CRC and these also need to be taken into account. These include:

- The use of the area by Cairns residents and visitors for passive recreation purposes;
- The way in which the gardens work to showcase the local and regional vegetation in this case rainforest and wetlands;
- Limitations faced by the CRC in the allocation of financial and staff resources.

The following policy section attempts to take account of all these factors i.e the typical and the unique into consideration. In particular it is recognised that CRC manages its heritage items within a context of limited financial resources. However an asset management approach, where heritage conservation happens through a recurrent program rather than relying on a windfall of external funding, is required to manage the significance of the resource. A focus on staff training in relation to heritage assessment and consent processes is recommended as is an increased investment in the interpretation of the WWII historic elements.

8.2 Head Policy- Vision Statement

The conservation, management and interpretation of the historic heritage resource and values within the Flecker Botanic Gardens, Tanks Art Centre and Centenary Lake Heritage Precinct recognizes the State Significance of the Gardens and World War II remains and the local significance of the remainder of the study area. The State significant elements are concentrated around the Tanks Arts Centre and the Flecker Botanic Gardens but other historic elements extend into the broader area.

The CRC will manage the Flecker Botanic Gardens, Tanks Arts Centre and Centenary Lakes Heritage Precinct as a dynamic cultural Landscape showcasing the heritage of Cairns' past and presenting the vitality of contemporary cultural heritage of the Cairns community. To achieve this, the CRC will commit resources commensurate with the significance of the WWII historic heritage within the area and its status as a gazetted area of State Significance. The CRC will undertake conservation and interpretation programs to assist with the recognition and maintenance of the historic significance of the World War II elements. The management of historic resources will use best practices processes for assessments and consents. Interpretation will focus on two stories:

- The World War II history of the region and
- Changes to the natural landscape over time and the evolution of the current cultural landscape.

This area will be promoted as a local and visiting cultural tourist destination with a focus on the Tanks Art Centre as a vibrant art and performance space which provides historic ambience and an alternative experience to modern auditoriums and galleries; and on the Flecker Botanic Gardens as a passive recreation and educational area where visitors can learn about and experience, the tropical environment of the region. In keeping with this, the nature of conversions and intrusions into the historic site will be such that they do not detract from the historic value. Installations in the Flecker Botanic Gardens will be designed so that they do not dominate the gardens but rather are responsive to the environment. Staff and interpretation resources will be provided to sustain a high quality visitor experience and maintain the cultural heritage features.

8.3 Conservation, Planning and Assessment

8.3.1 Rationale

Given the State heritage listing of the Flecker Botanic Gardens and the WWII RAN Fuel Installation site and their associated features, the EPA is a key player in the development consent process. In broad terms the CRC needs to have a clear understanding, through consultation with this agency, about the decision-making process and where and when approvals need to be obtained. Generally speaking proposals for future works that involve changes to the fabric of the identified historic elements associated with the WWII installations if not covered by general and/or special exemptions (see Section 9) will require a Statement of Heritage Impact which assesses the impact of work proposals and addresses options for carrying out the activity and mitigative measures. This document would form part of the usual planning documents such as Review of Environmental Factors. Changes or additions consistent with this CMP and covered by general and /or special exemptions do not require the preparation of a SoHI or EPA approval.

8.3.2 Framework Policy for Conservation Planning and Assessment

The CRC will seek the endorsement of this document by the EPA. It will adopt this Conservation Management Plan as a framework document for the management of the cultural heritage values of the area. The CMP will form the basis of a Heritage Agreement between the Queensland Minister for Sustainability, Climate Change and Innovation and the CRC. The CRC recognizes its responsibilities for ongoing consultation and consent, where required, from the EPA. This CMP identifies additional conservation planning and assessment requirements to be undertaken prior to the implementation of certain works.

8.3.3 Detailed Policy for Conservation Planning and Assessment

- The endorsement of the EPA will be sought for this CMP
- While the curtilage of the registered State Significant sites is currently that area defined as the Flecker Botanic Gardens (see Appendix B & Figure 2) and that area known as the WWII RAN Fuel Installation (see Appendix A); the broader area which is the subject of this CMP (i.e including Centenary Lakes; see Figure 2) should be included on Council's Local Heritage inventory.
- The CRC will continue to consult with, the Friends of the Botanic Gardens, the Sikh community, the local Aboriginal community, the local Historical society, the EPA and any other relevant community stakeholders.
- An Interpretation Plan will be prepared particularly for The Tanks WWII historic features but also covering themes such as the evolution of the Flecker Botanic Gardens, the natural environment and changes to the environment over time.
- Major changes (not covered by special exemptions) including changes to the fabric of the historic structures of the WWII structures relating to the RAN Fuel Installation, or the introduction of major new elements such as buildings and structures within the gardens must be preceded by a Statement of Heritage Impact. Such documents need to be prepared in accordance with the Burra Charter and QHC Guidelines. In summary a Statement of Heritage Impact identifies and evaluates positive and negative heritage impacts of specific proposals, is consistent with the CMP and is usually prepared in association with any other planning documents required for Development Approval such as a Review of Environmental Factors or Environmental Impact Statement prepared in relation to a proposed activity.
- The CRC will undertake regular training/refresher seminars for its staff, including site inductions, on required heritage assessment and consent process, including internal processes and those flowing from obligations under the Queensland Heritage Act.

8.4 Cairns Regional Council Corporate Responsibility

8.4.1 Rationale

It is important to place the historic heritage resources and the values of the WWII RAN Fuel Installation (the Tanks) and the Flecker Botanic Gardens within the broader legislative responsibilities of the Cairns City Council. It is also important that the CRC acknowledges responsibility for managing these significant resources.

8.4.2 Framework Policy for CRC Corporate Responsibility

The study area is an exemplar site in terms of the CRC's corporate responsibilities for managing recreational land in trust for present and future generations of Cairns residents. It is a place of special importance to the people of Cairns and it has also been recognised as being of significant value to the people of Queensland generally.

8.4.3 Detailed Policy for CRC Corporate Responsibility

- The CRC will establish a clear decision-making process that utilises appropriate skills and experience and is inclusive of all values in assessing and determining proposed action.
- Recurrent funds will be provided to cover the ongoing conservation planning and maintenance of historic resources.
- Specific funding will be allocated to provide heritage interpretation at the site.
- The CRC will consult with all relevant stakeholders in carrying out its responsibilities at this site.

8.5 Management of Heritage Significance

8.5.1 Rationale

A fundamental aspect of heritage conservation is that management decisions about a place should be based on its significance. This policy is a foundation policy and should be read in conjunction with policies specific to identified significant features/elements that follow.

8.5.2 Framework Policy for the Management of Heritage Significance

The management of the historic resources within the heritage precinct shall be based on the State Significance of the historic WWII RAN Fuel Installation (known as the Tanks), the State significance of the Flecker Botanic Gardens and the relative significance and contributions that each element makes to the whole area. The management of historic resources shall be in accordance with the provisions of the *Burra Charter* (Australia ICOMOS 1999). The management of historic resources shall aim to avoid impacts and maximize the retention of significance, retain and conserve significant fabric and provide a practical balance between use, appreciation and conservation.

8.5.3 Detailed Policy for the Management of Heritage Significance

- The curtilage for the historic heritage resources is the entire area known as the Flecker Botanic Gardens, Tanks Arts Centre and Centenary Lakes Heritage Precinct as shown in Figure 2.
- Within that broader curtilage there are two sites of gazetted state significance, the remainder of the area is of local significance. These areas will be managed in accordance with their significance.
- The heritage significance of known elements has been assessed (see section 5) and archaeological zoning plan has been developed (see Figure 4) to mitigate impact on both known and potential, as yet undetected, archaeological heritage elements.
- The appropriate conservation process (as defined by the *Burra Charter*) for individual elements should be relative to the significance of the element:

- Exceptional significance: preservation, restoration and limited reconstruction of lost or damaged elements;
 - High Significance: preservation, restoration and reconstruction of lost or damaged elements and minor adaptive re-use associated with an historic use or for interpretation;
 - Moderate significance: preservation, restoration and reconstruction and adaptive re-use associated with use appropriate for the area as a whole; and
 - Little significance: can either be retained or removed to improve the setting of elements of greater significance.
- The retention of heritage significance is a management objective in the Botanic Gardens Heritage Precinct and catch- up conservation and cyclical maintenance works will be undertaken to retain significance
 - In planning new works the heritage impacts of the proposed activity on the significance of the element, its setting and the significance of other elements in the vicinity will be considered.
 - In making management decisions all the cultural heritage values of the area will be considered. Where there is a conflict between the tourism or public use and the cultural values the precautionary principle should be invoked.
 - Assessment processes will engage appropriate specialists, be transparent, involve public comment, and peer review.

8.6 Landscape Conservation

8.6.1 Rationale

The landscape, within which the historic elements are set, is in turn a cultural landscape which has developed from substantial modification of the natural landscape over time. The cultural landscape features include the garden plantings and the constructed lakes and pathways. The gardens are both significant in themselves and in providing the aesthetic backdrop for the WWII historic elements that comprise the Tanks Arts Centre.

8.6.2 Framework Policy for Landscape Conservation

Significant cultural landscape features will be conserved and interpreted as part of a whole landscape approach to heritage conservation. These cultural features include elements such as the original railway easement (later used as a pipeline easement associated with the tanks), pathways in the Flecker Botanic Gardens, significant plantings, the man-made lakes in the Centenary Lakes area; and the Sikh cremation ground.

Within the state significant precincts of the Tanks Arts Centre and the Flecker Botanic Gardens no new landscape element or other structures should be introduced that would change the landscape character of the setting or have a negative visual impact on significant elements. Where there is a conflict between developments proposed to increase public use of the area and the cultural values then a precautionary approach which conserves the historic significance should be adopted. The

public use of the entire area provides an ideal opportunity to interpret the historic features and the evolution of the gardens. The created wetland and rainforest areas of Centenary Lakes provide the opportunity to engage the public on issues such as regeneration and rehabilitation as well as the importance of these two ecosystems.

8.6.3 Detailed Policy for Landscape Conservation

The Flecker Botanic Gardens

- The gardens are a product of the creative plantings of successive Garden directors/managers and the influence of each is interwoven into the current Gardens. The focus is on tropical plants and the opportunity for passive enjoyment of these by the public in a safe and tranquil setting and for informing the public on important aspects of the regions environment.
- The history of the development of the gardens including Centenary Lakes will be interpreted to the public through appropriate signage and other initiatives.
- The vernacular flavour of parts of the garden arising from the works from the 1960s-80s was identified as a significant aspect contributing to the heritage significance of the place in the QHR listing. These features include the so called figure-of eight walkway/garden layout, retaining walls footbridges paving and railings that reflect the organic evolution of the gardens and the use of recycled materials. These landscape elements have been reviewed in the course of the current study and it is clear that there is no significant fabric in the path and creek treatments themselves. Retention of the other features such as path and creek treatments will however be maximised as far as possible through an agreed program of cyclical maintenance and landscape planning which will not only assist in the conservation of these features but (should such arise) will identify situations where conservation is no longer viable in a timely manner which allows options of retention and replacement to be considered in the context of an assessment of the heritage impact of these options.
- The meandering nature of the so called figure-of-eight layout and pathways will be retained as this contributes to the feeling of exploration and interpretation on the history of the evolution of the gardens will be provided along the route.
- New elements may be added to the gardens but these should respond to the gardens rather than requiring intrusive re-modelling of them.
- Any new elements, structures or buildings need to be sympathetic to the current garden specifically avoid impact on significant plants or plantings. In other words structures must be designed to fit the gardens rather than the gardens being remodeled to accommodate new structures.
- Wherever possible the vernacular and organic features such as paths and embankments made from whatever materials where to hand should be retained as evidence of the evolution of the gardens.
- Research and management activities will include

- the development and maintenance of an information base on all plants within the gardens and make it appropriately accessible;
 - exploring appropriate opportunities to partner with the Australian Tropical Forest Institute and Herbarium in research or data sharing.
- Host and support training courses for parties interested in practical techniques for growing native vegetation local to the Cairns region and vegetation regeneration.
- Maintain best practice in sustainable resource management in the day to day operations of the Gardens, particularly:
 - efficient use of electricity and water;
 - recycling of water involving nutrient stripping and biological filtering; [is this practicable given the small scale of the gardens]?
 - recycling waste materials;
 - dealing with rubbish efficiently by sustainable means; and
 - recycling garden/nursery waste and construction materials.
- Develop the information base and make it appropriately accessible.
- Maintain a comprehensive documented collection of the Australian flora in the gardens with appropriate flagging of endemic, rare and/or threatened species.
- Develop and distribute local flora lists for use by the residents of Cairns and in re-vegetation programs in cooperation with other conservation programs.
- Provide a plant identification and advice service.
- Contribute to the sustainable use and management of the Australian flora where opportunities arise:
- Conducting and making public horticultural research relevant to the gardens.
- Collecting and maintaining genetically significant stocks of threatened species including variants, particularly those of the local region, through:
- Developing the collections to complement current or likely species recovery plans, emphasizing a regional focus;
- Highlighting the dangers of environmental weeds including the transfer of plant genetic material between organizations such as botanic gardens.
- Promote indigenous cultural heritage, particularly the understanding and affinity of indigenous peoples with the land and its natural ecology by:

- Consulting with indigenous communities re interpretation and education programs at the gardens; and
- Providing traineeships for indigenous people where possible.

The Tanks Arts Centre

- The gardens provide the backdrop for the historic WWII features and add to the ambience of the current performance and gallery uses.
- The WWII structures which comprise the Tanks Arts Centre are of State significance and will be conserved in accordance with the principles outlined in the Burra Charter and in keeping with their significance (specific policies are provided below in section 8.7).
- The landscape potentially contains archaeological deposits which must be considered in future management and works as no archaeological investigations have been undertaken to date. Therefore, subsurface disturbance of the ground within the bund wall requires prior archaeological assessment or monitoring during works. Special exemptions are sought to cover monitoring without individual permits (see section).
- The WWII structures will be publicly accessible and interpreted to the visiting public.

Centenary Lakes Area

The Landscape of the Centenary Lakes area has been substantially modified since the late 1970's. It's potential to contain intact archaeological deposits has been compromised by this disturbance. There is limited archaeological potential associated with the pipeline route and remnant Holocene beach ridges reports to exist between Lily and Saltwater creek. This potential should be managed as outlined in section 8.9.

8.7 Built Heritage Conservation

8.7.1 Rationale

The CRC will conserve all existing buildings relating to the WWII RAN Fuel Installation and will protect the setting of these buildings. Conservation processes that are appropriate to the level of significance (see Tables 5 and 6) will be used. Uses will be compatible to the history and relative significance of the building (see Managing Change section 8.8). Catch –up conservation works and a cyclical maintenance program shall be documented and undertaken by appropriate specialists.

8.7.2 Framework Policy for Built Heritage Conservation

The Cairns Regional Council will conserve all existing buildings from the WWII period and will protect the setting of these buildings. Conservation processes that are appropriate to the 'State' level of significance of these buildings will be used. Uses will be compatible to the history and relative significance of the buildings in so far that they provide for access by the public to the buildings in their setting and appropriate access to interpretation. Catch-up conservation and a cyclical maintenance program shall be documented and undertaken by appropriate specialists.

8.7.3 Detailed Policy for Built Heritage Conservation

- Conservation policy for individual buildings is provided below as Table 6 but refer also Table 5 for more detail on significance.
- In managing built heritage it is important to understand that in most cases these items will be associated with some archaeological potential and management actions taken to modify and conserve building fabric needs to consider the impact on associated deposits (see Section 8.9)
- A program of cyclical maintenance for built heritage items should be developed.
- There should be no reconstruction of demolished historic buildings within the WWII RAN Fuel Installation but interpretation of former building locations (e.g Tank #1, fire station and pipeline route) is desirable.
- The current timber and iron print/studio east of Tank 3 is of little historic significance and is not specifically listed on the State heritage listing. It may be removed, maintained or adapted as required. If upgraded it should maintain the current industrial aesthetic.
- An adequate recurrent budget should be allocated to undertake catch up and cyclical maintenance of State Heritage Register listed buildings and structures.
- Catch up and cyclical maintenance should be undertaken utilizing appropriate heritage expertise.
- Any archaeological investigation undertaken in the course of works on heritage buildings/structures should be undertaken by suitably qualified archaeologist (see section 8.9).

Table 7: Conservation Policy for Individual Building Elements.

Element name	Significance Ranking	Policy
Tank 1	No longer present	Removed
Tank 2	Exceptional	Prepare Statement of Heritage Impact Prior to any works proposals. Prepare building cyclical maintenance schedule and implement. Install interpretation.
Tank 3	Exceptional	Prepare Statement of Heritage Impact Prior to any works proposals which involve irreversible change. Prepare building cyclical maintenance schedule and implement. Upgrade interpretation.
Tank 4	Exceptional	Prepare Statement of Heritage Impact Prior to any works proposals which involve irreversible change. Prepare building cyclical maintenance schedule and implement. Upgrade interpretation.
Tank 5	Exceptional	Prepare Statement of Heritage Impact Prior to any works proposals which involve irreversible change.. Prepare building cyclical maintenance schedule and implement. Upgrade interpretation.
Pump house #1	Exceptional	Prepare Statement of Heritage Impact Prior to any works proposals which involve irreversible change. Prepare building cyclical maintenance schedule and implement. Upgrade interpretation.
Pump house #2	Exceptional	Prepare Statement of Heritage Impact Prior to any works proposals which involve irreversible change. Prepare building cyclical maintenance schedule and implement. Upgrade interpretation.
Foam Shed 1 (Opposite Tank 2)	High	Prepare Statement of Heritage Impact Prior to any works proposals. Realignment and widening of Collins Ave has increased visual separation of this structure from the other elements. Consideration should be given to moving it to a location outside the bund wall but closer to the pump house for interpretation. Prepare building cyclical maintenance schedule and implement. Include in interpretation of site.

Element name	Significance Ranking	Policy
Foam Shed 2 (opposite Tank 5 – outside bund wall)	High	Approval to move this item has been granted by the EPA prior to this CMP. New placement should remain outside the bund wall (possibly along west wall farther away from Collins Avenue). Review the decision to remove as part of the SoHI and consider insitu retention and interpretation. Prepare Statement of Heritage Impact Prior to any works proposals. Prepare building cyclical maintenance schedule and implement. If relocated include in interpretation of site.
Timber and iron print/studio	Low	Not of historic significance may be retained or removed.
Restaurant Flecker Gardens	Local significance – social	Significance lies in the importance to local community of this meeting place and not in the fabric of the building. Retain or replace as required but replacement to be within same footprint and should not detract from the gardens. Any new proposal should prepare a State of Heritage Impact on the gardens.
Residence/off ice		Retain. Interpret and adaptively re-use
Maintenance compound gardens		Retain or replace as required subject to archaeological investigation – see section 8.9
Munro Martin Fernery		Retain or replace as required subject to Section 8.8.
Orchid House		Retain or replace as required subject to Section 8.8
Toilet block south gardens	Not significant	Replace as required
Toilet block North Gardens	Not significant	Replace as required
Entrance gate pavilion	Local Significance	Retain and conserve

8.8 Management of Change/Adaptive Re-use

8.8.1 Rationale

The first choice for ongoing use of historic buildings is of course a continuation of their historic use. However as in the case of the WWII RAN Fuel Installation this is not always possible or practical. In such cases adaptive re-use of the buildings can provide the best conservation option for the structures or buildings. Adaptive re-use invariably involves some change to the heritage structures in the form of the addition of new structures or the adaptation of existing buildings. The extent of acceptable change depends on the significance of the place and the reason for change. Whatever that reason it is important however to ensure that any adaptive re-use follows the golden rules of heritage conservation i.e to enhance rather than detract from the heritage significance of the place, to involve minimal interference of the historic fabric, to provide opportunity for interpretation of the heritage significance and for changes to be both documented and reversible.

One of the issues encountered in relation to the Tanks Arts Centre and the Flecker Botanic Gardens (but particularly the former where the current adaptive use is different to the historic use), is that the Masterplan outlining future developments pre-dated the conservation planning for the heritage site. This meant that some developments proposed such as multiple breaches of the perimeter bund wall are **not** consistent with the conservation of the heritage values of the property and will need to be reconsidered. Site managers have indicated that they are re-thinking many of these options in the light of identified heritage issues. The policies below in combination with the other policies outline in Section 8 are provided to help guide the decision making in relation to future use and developments.

8.8.2 Framework Policy for Management of Change

The significance of elements within the site will guide the extent of appropriate change or adaptation allowed at the site. Development controls will limit new structures within the existing WWII RAN Fuel Installation (the Tanks) site. Within the State heritage listed Flecker Botanic Gardens site the scale of new structures will be consistent with the scale of current buildings and based on the premise that they are designed to accommodate the garden rather than the garden being fitted around the structures.

8.8.3 Detailed Policy for Management of Change

- Significance will guide the degree of adaptation (refer to Table 5 and 6)
- At least one of the tanks (Tank 2) will remain largely un- modified and used for interpretive purpose.
- Tanks 3-5 will have minor modifications to accommodate their current and future use as performance space and/or gallery exhibition space.
- Changes or adaptive uses that are reversible and have no lasting impact on original fabric do not require further approvals from the EPA.

- Changes that are not reversible to involve loss of or impact to the original fabric and which are not covered by special exemptions (see Section 9) do require approval from the EPA and a Statement of Heritage Impact must be prepared as part of the approval process.
- With the exception of the proposed catering hub- no additional buildings will be constructed within the WWII RAN Fuel Installation (The Tanks) site. Any essential new future buildings will be located outside this area.
- In relation to the catering hub (which current concept plans show intruding half inside and half outside the bund wall) consideration should be given to locating it wholly outside the bund wall or designing the structure in such a way that impact on the bund wall is visually reduced.
- New buildings within the state heritage listed, Flecker Botanic Gardens must be appropriate to the gardens in design and size and should not occupy a greater footprint than they currently do.
- All of the Botanic Garden Heritage Precinct should be available for public access except for required maintenance compounds and office area.
- Adaptation and change which requires subsurface excavation / earth works must consider archaeological potential in the areas indicated (see Figure 4 and section 8.9 below).

8.9 Archaeology

8.9.1 Rationale

Historical archaeological deposits have the potential to fill gaps in the historic record and provide new information to enlighten our understanding of heritage places. The buildings that remain on site are a subset of the full range of places that once existed on the site throughout the period of its primary significance. There are no known Aboriginal archaeological sites within the study area and no sites of high archaeological potential to contain Aboriginal sites have been identified, however it remains possible that where undisturbed sub-surface deposits occur that such sites may exist.

8.9.2 Framework Policy for Archaeology

The management of the historic archaeology within the study area will recognize the potential for undetected archaeological deposits associated with the WWI RAN Fuel Storage Facility (including the pipeline) and the early evolution of the Flecker Botanic Gardens to provide important social information relevant to the history of these sites.

It is a requirement of the Queensland heritage Act (s89) that archaeological artefacts that may be significant to the heritage of the state are recorded and assessed and reported to the EPA as soon as practicable. The Historic Inventory Form preferred by the EPA is attached as Appendix F. This highlights the need to further investigate the identified Potential Archaeological Deposits and/or to have excavations within them monitored by a qualified archaeologist. Should evidence be found during a subsurface excavation then work must cease until it is adequately assessed and recorded.

It is possible that work may not be able to proceed as planned if items of high significance are found and are required to be retained *insitu*. However given the nature of the use of the area it is

considered most likely that isolated items may be found that can be recorded and removed and curated. Items such as buttons, coins, bottles, tools etc relating to the WWII RAN Fuel Installation may be uncovered from time to time. Such items will be recorded, assessed and retained on site or in a secure, designated storage area provided by council. In general the aim should be to interpret and display such items on site.

Management will also acknowledge that while there are no known Aboriginal sites within the study area there remains minor potential for such sites to exist sub-surface undetected and that if such a site were to be detected in the future it would provide an important opportunity to interpret local Aboriginal history prior to European settlement of the area. In particular the area identified in the Environmental planning report carried out by GHD (2007) as comprising remnant Holocene beach ridges may have some potential to contain archaeological evidence relating to Aboriginal occupation of the area and should be further assessed to determine if this is the case or not.

As there is no known archaeological evidence of Aboriginal occupation or use of the study area. The management of the 'potential' for unpredicted archaeological evidence of Aboriginal occupation within the study area recognizes the low potential of the area to contain intact deposits relating to Aboriginal occupation and addresses the issue of inadvertent finds or suspected finds during routine activities or future developments.

8.9.3 Detailed Policy for Historic Archaeology (including Potential Archaeological Deposits)

- The archaeological potential across the study area is indicated in Figure 4 the archaeological zoning plan.
- The archaeological potential of the study area will be managed in accordance with the archaeological zoning Plan.
- The potential for historical archaeological deposits to exist in the WWII RAN Fuel Installation site within the bund wall will be considered in the assessment of environmental /heritage impacts for any proposed future works.
- Assessment or investigation of archaeological, deposits will be undertaken by a qualified archaeologist.
- All archaeological finds will be recorded and assessed and reported to the EPA on the Historic Inventory Form (Appendix F) as required under s89 of the Queensland Heritage Act.
- A record the Historic Inventory Forms will be kept with the artefacts which will be curated on site or in a secure store provided by CRC.
- A copy of the Historic Inventory Forms and any reports detailing archaeological investigations will be made publicly available through the local history collection in the Cairns Library.
- Within the area surrounding Tank 2 (which has been heavily disturbed during the demolition of Tank 1) the only area considered to have archaeological potential is the under floor area

of the Pump house and the construction zones of Tank 2 and the pump house and the connecting pipelines.

- Any proposed future disturbance to the railway easement and pipeline route will consider its archaeological potential.
- Should unexpected finds occur during excavation in any part of the property, work should cease until the finds have been assessed by a qualified archaeologist and the appropriate course of action determined.

8.9.4 Detailed policy for discovery of Aboriginal archaeological sites/artefacts.

Archaeological material relating to Aboriginal occupation or use of the area is not considered likely, due in part to past land-use disturbance since non-Indigenous settlement in the area. However should artefacts or sites be found or reported the following apply:

- Any evidence of Aboriginal occupation or use of the area will enhance the cultural heritage values of the area.
- If artefacts (or suspected artefacts) are found they will be inspected by a qualified archaeologist to determine if they are in fact artefacts;
- The location of any archaeological material/ artefacts will be recorded and protected until its significance is assessed.
- Once assessed the archaeological material will be managed accordingly.
- If the archaeological material/ artefacts is discovered during construction works or excavation then the following steps will be followed:
- Any work which would impact the possible site will cease immediately. Work may continue in other areas which would not affect the site.
- The item or deposit; and its location or setting should be photographed as soon as possible.
- If there is any doubt as to whether the material is actually an artefact or archaeological deposit relating to Aboriginal occupation or use, a qualified archaeologist will be retained to determine its nature.
- If it is determined **NOT** to be an artefact or archaeological evidence of past Aboriginal occupation or use of the area then work may continue and no further action will be required.
- If it **IS** identified to be an artefact or archaeological evidence of past Aboriginal occupation or use of the area then a representative of the Department of Natural Resources and Water and representative so the local Aboriginal community should be immediately consulted. Management of the site or artefact should arise from that consultation.

- Wherever possible such evidence should be preserved *insitu*. If this is impossible due for instance to damage during the process of discovery then all efforts should be made to conserve and interpret the material onsite, subject to Indigenous community agreement.

8.10 Moveable Heritage, Research and Records

8.10.1 Rational

Cultural heritage is made up of both the *insitu* structures and deposits of the site and of moveable elements. Moveable heritage elements relevant to the study area include the historic photos and records relating to the development of the botanical gardens and the WWII RAN Fuel installation. There are no known moveable artefacts relevant to these sites however it remains possible that such elements will be revealed during future archaeological investigations. If this occurs the Cairns Regional Council will incorporate these into interpretive displays.

8.10.2 Framework Policy for Moveable Heritage, Research and Records

It is a requirement of the Queensland heritage Act (s89) that archaeological artefacts that may be significant to the heritage of the state are recorded and assessed and reported to the EPA as soon as practicable (see Section 8.9.2). All moveable heritage items relating to the Flecker Botanic Gardens and the WWII RAN Naval Installation will be recorded, catalogued and stored in a secure location on site such as the proposed new administration building. Until such time as a secure on site store can be provided they may be kept in a secure store provided elsewhere. However they will be returned to the site as soon as possible. In general the aim should be to interpret and display such items on site. A copy of relevant inventory forms and if relevant reports will be kept with moveable heritage items. Generally the practice of using moveable heritage items to make sculptures that has been the practice in the past will cease. Such activity without permit constitutes an offence now that the site has been listed on the Queensland Heritage Act. Such items as now exist should be maintained on site as evidence of the contemporary use of the site.

8.10.3 Detailed Policy for Moveable Heritage, Research and Records

- A collection of slides are kept at the Flecker Botanic gardens that document the plants included in the collection and incorporates a small number of historic photos donated by Vince Winkel (former curator). These will be kept in appropriate climatic conditions and a master copy of the catalogue will be maintained and archived centrally by the Cairns Regional Council.
- Any artefacts discovered during future works or archaeological investigations will be appropriately recorded and curated and where possible included in interpretive displays.
- The method of recording of any archaeological finds will include completion of the EPA Historic Inventory Form
- Most documents relating to the state heritage listed sites are copies of documents held in other archives but nevertheless these constitute an important local historical resource and the council will lodge copies in appropriate public archives such as the local Cairns Regional Council and the Historical society so that they are publicly available.

8.11 Interpretation

8.11.1 Rationale

Two sites within the study area have been listed on the State Heritage Register. The history and significance of these places needs to be interpreted to the public in order that the significance of these places is properly understood.

8.11.2 Framework Policy for Interpretation

The entire study area will have an interpretation plan prepared which integrates the interpretation of the two state heritage listed places within the general interpretation of the entire study area. The interpretation will provide visitors with adequate information to understand the history and significance of the WWII RAN Fuel installation site, the history and significance of the Flecker Botanic Gardens; as well as the larger scale messages relating to the region, the tropical environment that are relevant to a regional botanical garden precinct.

8.11.3 Detailed Policy for Interpretation

Interpretation and education within the Flecker Botanic Gardens will be aimed at:

- Influencing public opinion and attitudes on environmental issues, particularly those relevant to the tropical region'
- Providing opportunities for visitors to learn about the local and regional vegetation including its use by the original Aboriginal owners and the early non-indigenous settler community.
- Exploring and promoting indigenous peoples' knowledge of biodiversity and ecology, use of the land, and its relevance to the needs of plant conservation.
- Promoting sustainable development, particularly interpreting the critical role of plants in tropical North Queensland;
- Promoting the importance of the maintenance of plant biodiversity: the role and importance of in situ and ex situ conservation and the need for an integrated approach;
- Introducing a program of interpreted garden displays on conservation of plant biodiversity, individual taxa, plant communities, ecosystems and landscapes, relevant to tropical north Queensland. Themes to focus on are rare, threatened, and particularly endangered species, wetland and rainforest communities, plants used traditionally by Indigenous Australians.
- Recognizing the special contribution of the people of State/regional and local importance to the development of the Gardens (e.g Hugo Flecker, Eugene Fitzalan, Munro-Martin family).

Interpretation and education within the WWII RAN Fuel Installation Precinct will be aimed at:

- Understanding the historical significance of the structures and the role that the installation played in the large Far North Queensland war effort.
- Understanding the contemporary social significance of the site as a centre of community creativity.

9.0 Conservation Policy Implementation

There is little point in developing conservation policies unless they are to be implemented and unless they are implemented it is unlikely that the conservation values of the place will be conserved. Central to the successful implementation of the conservation policy is an agreement between the minister responsible for Heritage Conservation and the property Managers (Cairns Regional Council). Although enquires were made of the EPA they could provide no examples of successful heritage agreements at this time. However this site is a perfect opportunity to develop such an agreement given its strong community social value and its current use. The proposed Heritage Agreement would include a range of specific exemption under the Heritage Act which would empower Cairns Regional Council to actively manage the site.

9.1 Introduction

At the moment all works within the listed boundaries of the site apart from routine maintenance which is covered under the Queensland General Exemptions (see Appendix E) requires EPA approval. Maintenance in the general exemptions is limited to the tasks listed below in section 9.2.1. Other works require specific approval and necessitate approaching the EPA with each proposed change. It is almost certain that current management is technically in breach. Given the nature of the use of the two sites, day to day management involves a certain amount of disturbance that falls outside the definition of general maintenance.

There are two ways in which exemption certificates may be approved i.e under a heritage Agreement in which the Minister and the property owner/manager agree that certain developments and activities will be allowed and that the place will be managed in an agreed way; or on a case by case assessment. The latter is currently the process followed for the study area. On this matter the Act states:

- (3) An exemption certificate may be given to carry out development on a registered place only if the development—*
 - (a) is permitted under a heritage agreement for the place; or*
 - (b) will not have a detrimental impact on the cultural heritage significance of the place. (QHA 1992 Div 2 s72 (3))*

The purpose of the Conservation Management Plan is to ensure that the site is appropriately managed and to provide guidance on how the approval process might be rationalized to achieve the required level of protection in the most efficient way possible. This can best be done under a Heritage Agreement that incorporates a range of exemptions under the Heritage Act.

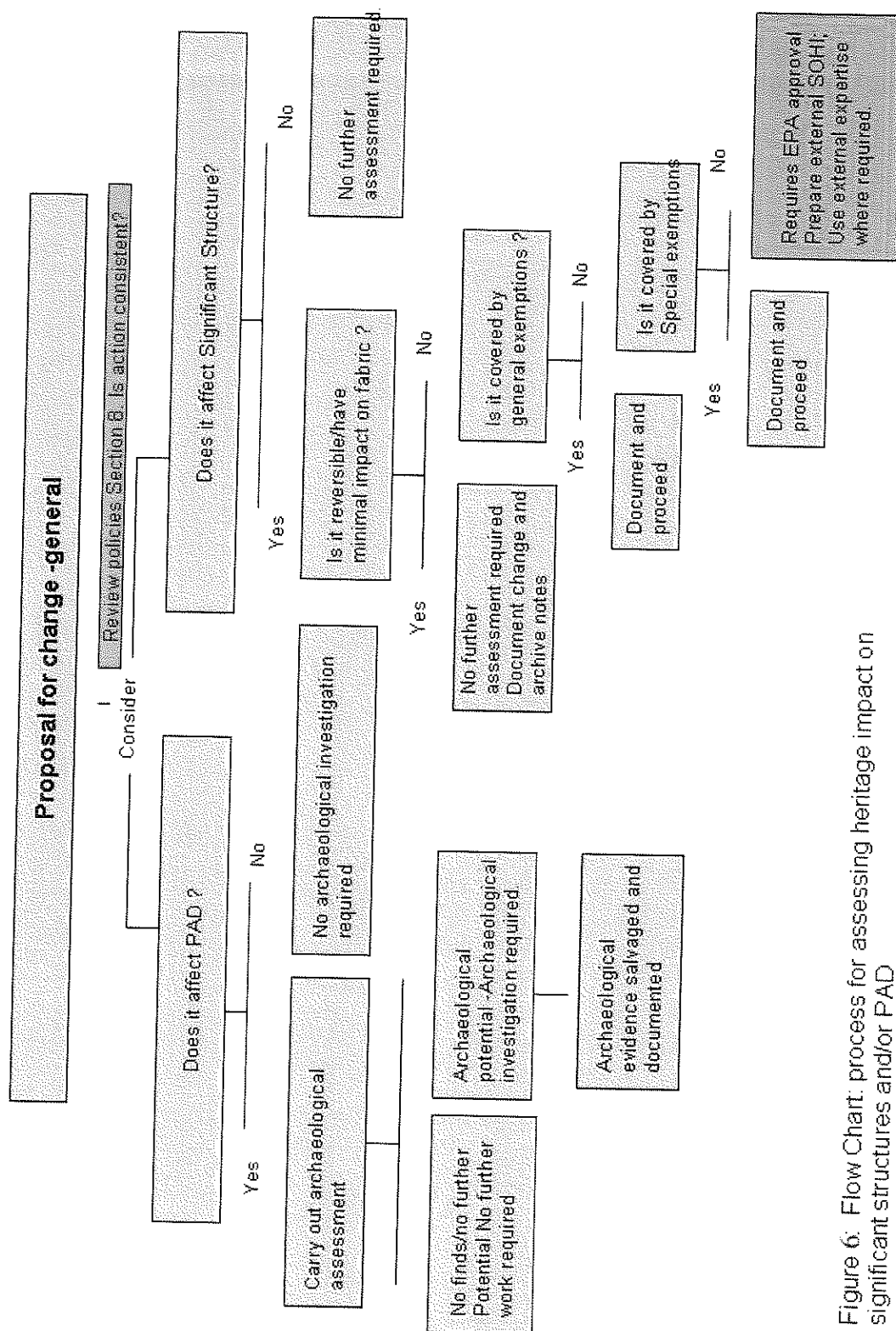


Figure 6: Flow Chart: process for assessing heritage impact on significant structures and/or PAD

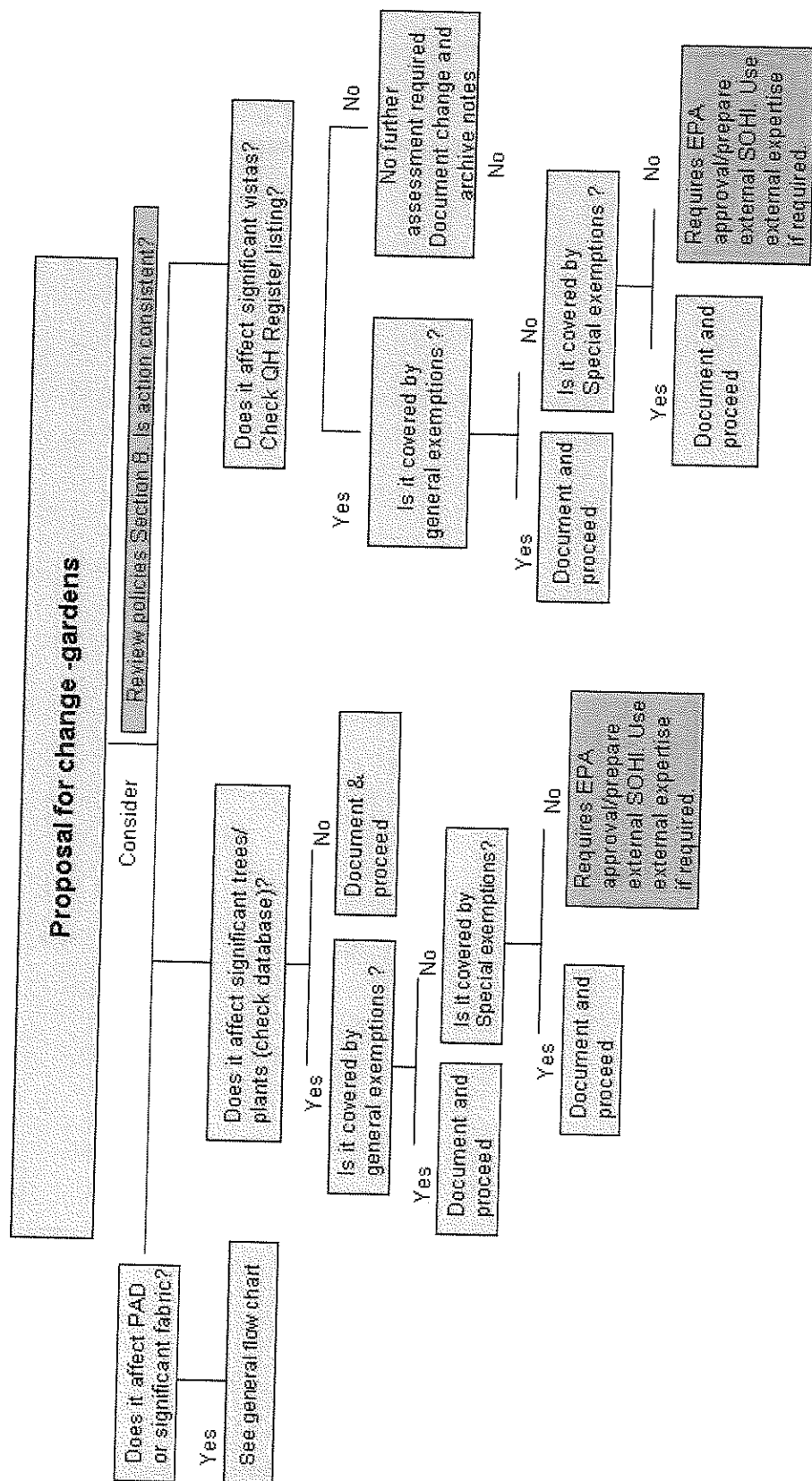


Figure 7: Flow Chart: process for assessing heritage impact on trees and vistas

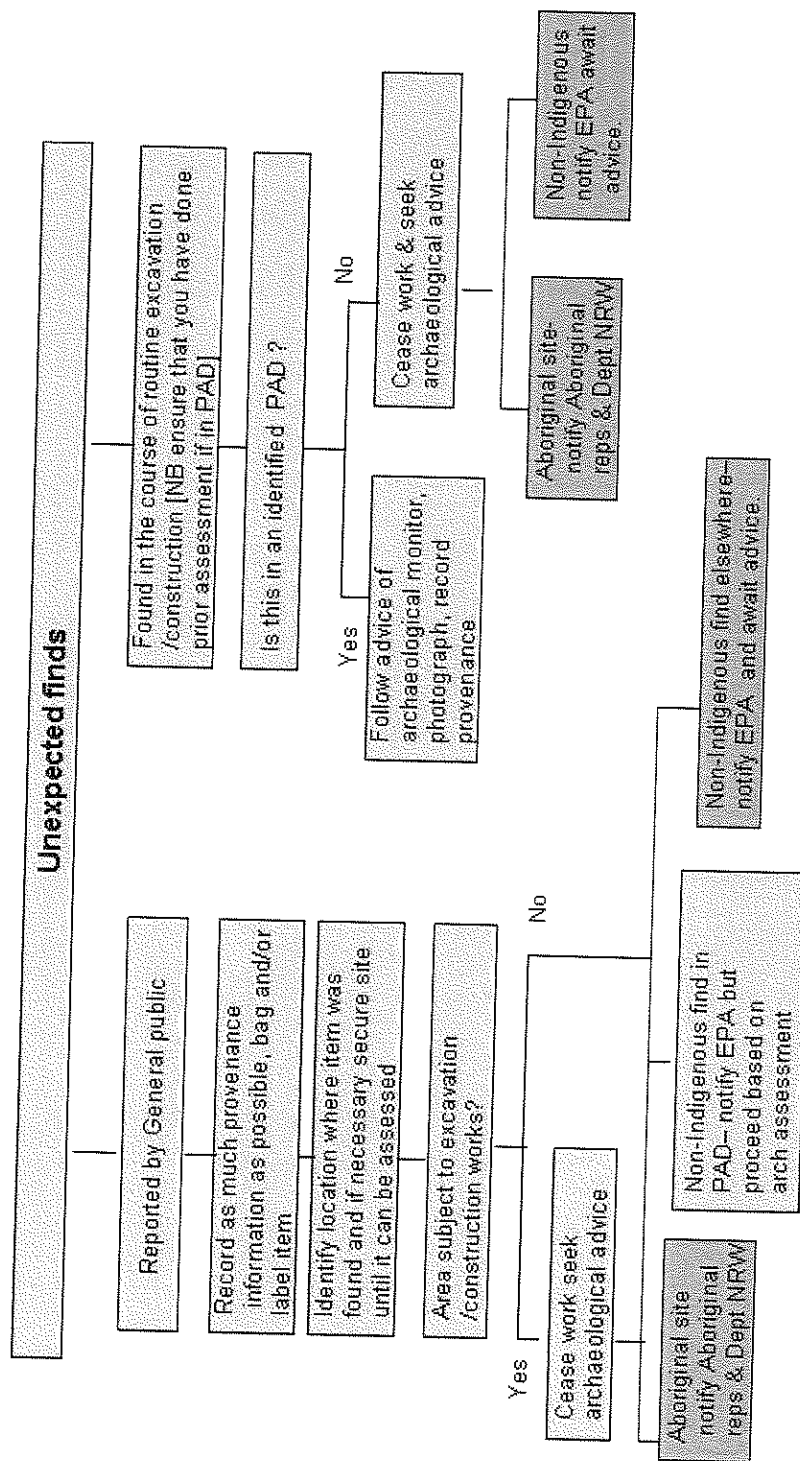


Figure 8: Flow Chart: process for handling unexpected finds.

9.2 Implementation

It is important to understand that until such time as a Heritage Agreement is in place then only the General Exemptions below apply. The Special Exemptions listed in 9.2.2 are 'recommended' exemptions and may be varied slightly in any final negotiated agreement. The final agreement reached should therefore be appended to this Conservation Management Plan to avoid confusion or this CMP should be formally endorsed as part of the Agreement. The exemptions are recommended pending adoption of the conservation policies in Section 8. As in all CMPs it is important to acknowledge that this document should be reviewed every 5 years to ensure that the policies are effective and to provide a timely check that recommendations have been implemented.

Several flow charts have been prepared as a general guide to assessing the heritage impact of proposed activities (see Figures 6 and 7) and for the handling of unexpected finds (Figure 8). These general guides should be read in conjunction with the policies in Section 8 and the general and special exemptions.

When work is proposed at either of the two heritage listed sites the impact of the works on the heritage values must be considered. This assessment should be documented. Such a document is usually referred to as a Statement of Heritage Impact (SoHI). Depending on the nature and complexity of the works proposed this can either be a very simple document or a large project in itself. The questions that should be considered are very straightforward and a simple outline of what should be included is attached as Appendix G. In essence the document sets out the nature of the work proposed and its likely impacts on the heritage item; what measures have been considered to mitigate any negative impact so that someone assessing or approving the work can make an informed decision on whether or not the impacts are acceptable.

It is worthwhile completing a SoHI even when approval for works is an internal process as it provides a transparent process for ensuring that the heritage significance has been considered and also meets the requirement that council document all changes to the site. For any approvals that must be sought from the EPA it is essential that such a document is prepared to support the application and in many cases specialists expertise form a heritage expert may be required.

9.2.1 Maintenance and General Exemptions for Works to a Heritage Item

General Exemptions already apply to the two state heritage listed places i.e the Flecker Botanic Gardens and the WWIIRAN Fuel Installation site. The nature of the works is strictly limited to routine maintenance and does not cover works for changes of function, expansion or redevelopment. The works allowed under this general exemption are listed below.

Building Maintenance limited to the following:

- inspect and treat for termites and other insect pests;
- polish, paint, wax and oil surfaces previously treated with these coatings;
- service equipment to keep it in good working order;
- resecure and tighten fixings of loose elements of building fabric;
- maintain plumbing and drainage systems in good working order;
- remove surface deposits, organic growths or graffiti using low pressure water (less than 100psi at the surface being cleaned) or other non-damaging agents, neutral detergents and mild brushing and scrubbing as appropriate for the surface;

- clear paths and drains;
- clean in accordance with the cleaning guideline.

Landscape maintenance limited to the following:

- weed;
- water;
- top-dress;
- fertilise;
- mow;
- trim hedges;
- renew bedding displays;
- remove dead trees and plants and replant with the same species or cultivar;
- control diseases and weeds;
- replant to conserve the landscape character or planting theme;
- replant with the same species or cultivar in the event of loss of significant planting;
- prune to 20% of the crown (within two years) to control size, improve shape, flowering or fruiting;
- prune to remove diseased, dead or dangerous material;
- manage trees in accordance with Australian Standard *Pruning of amenity trees AS4373*;
- maintain existing hard landscape elements including roads, driveways, tennis courts, pools, paths, fences, gates, walls and edges, pavilions, arbours and gazebos, bush houses and the like, drains, culverts, water reticulation facilities and other utilities.

Painting limited to the following:

- prepare the surface by cleaning, hand scraping and hand sanding;
- use an undercoat over existing paint work;
- use a paint type appropriate to the substrate and surviving paint layers;
- paint in an existing colour;
- paint in a colour scheme that has been approved by the Queensland Heritage Council;
- paint the interior of non-significant buildings in any colour; *except* if the paint finish is the original paint finish.

Minor repairs limited to the following:

- **Metal Roofing Repairs**
 - refix gutters, downpipes and drains;
 - patch roof sheeting;
 - insert slip sheets within the roof covering;
 - re-roll damaged sheets;
 - re-nail loose roof sheeting;
 - replace small amounts of roof sheeting;
 - patch flashings and cappings;
 - replace small amounts of flashings and cappings;
 - patch roof ventilators;
 - patch rainwater heads;
 - install reversible leaf guards;
 - repaint roofing elements in the existing colour;
 - reinstate roofing elements where original is known and is matched exactly.
- **Slate and Terracotta Roof Repairs**
 - refix gutters, downpipes and drains;
 - temporarily fix slipped slate tiles with zinc or copper clips;

- re-nail loose battens;
- replace small amounts of tiles;
- patch flashings;
- re-point cappings;
- replace small amounts of flashings and cappings;
- patch roof ventilators;
- patch rainwater heads;
- install reversible leaf guards;
- reinstate roofing elements where original is known and is matched exactly.

Minor Repairs limited to the following:

- **Timber Repairs**
 - patch timber elements (e.g. window and door frames);
 - fix new members alongside existing framing members in concealed areas;
 - fix supporting metal plates to existing members in concealed areas;
 - repair a damaged portion of a timber element using a lap, butt or scarf joint;
 - splice floorboards;
 - replace small amounts of floorboards;
 - paint a margin on exposed end grain a verandah floor (even if not existing);
 - restump provided that the new stumps match the existing timber and size, are replaced in the same locations and the building remains at the same level as existing;
 - re-level building or structure provided not raising or lowering;
 - replace decayed fence posts (match existing) in hardwood bedded to protect the base from decay, pre-coated with bituminous-based compound or metal shoes in a concrete sleeve;
 - re-instate timber details to match original exactly.
- **Timber Doors and Windows Repairs**
 - refix loose architraves, decorative trims and mouldings;
 - cut out decay and patch damaged door and window fabric;
 - replace wedges and reglue loose joints;
 - strap loose joints with steel or brass angles;
 - hand sand window elements in binding windows;
 - replace worn cotton sash cords;
 - replace deteriorated putty;
 - replace missing glazing bars and tongues;
 - replace deteriorated sill fronts.
- **Door and Window Hardware Repairs**
 - repair/recondition original hardware into working order;
 - reinstate missing hardware to match original if known;
 - remove paint from painted over hardware such as key plates and covers;
 - install temporary locks to retain security;
 - install locks to upgrade security;
 - install electronic security systems if there is no damage to the fabric.
- **Metal Repairs**
 - clean;
 - apply fish oil-based coatings to cast iron work to deter rust;
 - patch in-situ;
 - recast broken, missing or seriously corroded elements to match the original;
 - repair to retain the function of the element.
 - refix palisade fencing stays;

- reset palisade fence shafts in molten lead.
- **Stone and Masonry Repairs**
 - clean with water; or
 - clean with water and appropriate detergent;
 - remove organic growth and creepers;
 - remove graffiti.
- **Steel Framed Windows and Doors Repairs**
 - repair corrosion -
 - remove the glass and putty;
 - abrade, fill or grind off rust down to bright metal; then apply a good zinc-rich primer; before
 - reglazing and building up the paint finishing coats (in existing or original colour scheme); and
 - ensure a watertight paint seal between putty, glass and frame.
- **Services Repairs**
 - replace services such as cabling, plumbing, wiring and fire services using existing service routes, cavities or voids;
 - repair water, gas and electrical supply;
 - repair telephone and other communication services;
 - repair and replace roof drainage, surface and subsurface sewerage and stormwater systems;
 - repair fire detection and control systems, including smoke and heat detectors, fire sprinkler systems and associated alarms and communication systems;
 - repair security systems and components such as fencing and surveillance systems that are present to maintain security;
 - repair electricity, gas and heating systems including the replacement of non-original light fittings in original or later locations;
 - upgrade wiring and install new power boards and circuit breakers;
 - repair ventilation and air conditioning systems;
 - repair water storages, dams, ponds, watercourses, batters, sea walls and other flood and erosion mitigation measures;
 - repair lightning conductors.

Any other works not listed below requires the approval/ specific exemption of the EPA. Clearly the general exemption is not comprehensive enough to allow the Cairns Regional Council to manage the sites for their current uses in the long term. For example the general exemptions for landscape maintenance do not allow for the management at Flecker Botanic Gardens to change the concept and design of certain garden beds from say Bush Tucker to another theme. In the case of the Tanks Arts Centre most of the works required are not covered under the maintenance and repairs allowed. For this reason it is recommended that Special Exemptions are granted under a Heritage Agreement (see 9.2.2 below for the list of Special Exemptions recommended)

9.2.2 Special Exemptions

Exemptions proposed under a heritage agreement are another limited and specialized area of development. Heritage agreements are entered into by the Minister of the EPA and the owner of the registered place and can include work of a specified kind that has been negotiated with the Queensland Heritage Council. It is proposed that the Cairns Regional Council and the Minister enter into a Heritage Agreement that delegates authority for the approval of works listed below to the Cairns Regional Council subject to the conditions as outlined.

Exemption certificates only exempt development from the need to obtain further approval from the EPA under IDAS. Exemption certificates do not exempt that development from complying with other state and local statutory requirements.

It is proposed that works including the following be listed under specific exemptions authorized by a Heritage Agreement between Cairns Regional Council and the Minister. These works should include the following.

At the Tanks Art Centre:

1. Demolition, replacement or upgrading of the toilet where this does not involve further subsurface disturbance outside the footprint of the existing toilet block;
2. Replacement, rebuilding or upgrading of the existing toilet block where this involves subsurface disturbance outside the footprint of the existing building but subject to archaeological monitoring.
3. Replacement, rebuilding or upgrading of the timber and iron workshop which postdates the WWII RAN Fuel installation, located within the bund wall (eastern end), subject to the industrial nature of the site being reflected in the design of any upgrade or replacement and archaeological monitoring of subsurface disturbance.
4. Removal of demountable building within bund wall.
5. Drainage works, plumbing and other works which involve subsurface disturbance and that are consistent with this CMP and subject to condition 6 below.
6. Archaeological investigations (whether for research, delimitation of the area of potential, pre-development investigation or monitoring) of the area identified as having archaeological potential can be carried out without individual permit. This is agreed on the basis that such investigations are carried out by qualified archaeologists and reports of the methodology, finds and management outcomes are provided to the EPA and made publicly available through the Cairns Regional Council Library.
7. Internal works to the Tanks or other historic buildings that are fully reversible and/or do not involve damage or loss of original fabric.
8. Internal works to Tanks and other historic buildings that require minor disturbance to fabric and which involve minor visual intrusion e.g addition of 1-5 anchor points in floors (such as exists already in Tank 3) where these are installed flush with the current floor surface.
9. The installation of additional gallery lighting in Tank 4 where this is designed to minimize impact on fabric (e.g roof support poles) and for future flexibility.
10. Steps over the earthen (internal) bund wall between Tanks 3 and 4 where any subsurface disturbance is monitored by an archaeologist (as in exemption 6 above).
11. Disturbances to the 'amphitheatre'/ bund wall to allow for lighting and sound cabling (subject to 6 above).

12. Installation of reversible canopy shade, sails or similar to the stage/amphitheatre area including the installation of anchor points and /or free standing pole supports subject to 6 above (but see also 30 below).
13. Removal of two more roof support poles in Tank 5 to improve sight lines to stage assuming that this does not require major structural changes to the roof itself (if major structural change necessary then SoHI and DA required).
14. Addition of professional stage lighting support in Tanks 5 (similar to Tank 3) assuming this can be established without causing redesign of roof.
15. Emergency major pruning/removal of dangerous trees following cyclone damage where required (minor pruning is allowed currently under General Exemptions).
16. All changes and alterations including repainting or repairs or alterations which introduce new fabric to non significant heritage structures i.e the toilet block, the demountable building and the timber and iron workshop.

At the Flecker Botanic Gardens:

17. Demolition of the Munro Martin fernery
18. Replacement of the fernery assuming that the building footprint remains the same and the design avoids damage to any significant plantings identified by the Gardens' curator and is otherwise consistent with this CMP (particularly policies in sections 8.6, 8.7 and 8.8). Statement of Heritage Impacts to be assessed by Council as part of Development Approval process.
19. Demolition of the existing orchid house.
20. Replacement of the orchid house assuming that the design avoids damage to any significant plantings identified by the Gardens' curator and is otherwise consistent with this CMP (particularly policies in sections 8.6, 8.7 and 8.8). Statement of Heritage Impacts to be assessed by Council as part of Development Approval process.
21. Redevelopment of the restaurant assuming that any future building occupies the same footprint as the current restaurant avoids damage to any significant plantings as identified by the Garden's curator and is otherwise consistent with this CMP (particularly policies in sections 8.6, 8.7 and 8.8). Statement of Heritage Impacts to be assessed by Council as part of Development Approval process.
22. Demolition and removal the existing maintenance compound subject to archaeological investigation of the compound and its surrounding garden beds with a view to identifying elements of the historic zoological gardens.
23. Relocation of the maintenance compound to the area identified in the Masterplan in the eastern part of the Centenary Lakes area (subject to 19 below).

24. The upgrade and repair of pathways as part of a cyclical maintenance program developed to implement a Landscape Maintenance Schedule for the Gardens. The latter to be available for stakeholder review.
25. Replanting of individual beds with different species subject to protection of identified significant plants/trees (see 41 below).
26. Archaeological investigations (whether for research, delimitation of the area of potential, pre-development investigation or monitoring) of the area identified as having archaeological potential can be carried out without individual permit. This is agreed on the basis that such investigations are carried out by qualified archaeologists and reports of the methodology, finds and management outcomes are provided to the EPA and made publicly available through the Cairns Regional Council Library.
27. Emergency major pruning/removal of dangerous trees following cyclone damage where required (minor pruning is allowed currently under General Exemptions).
28. Removal of diseased trees or plants.
29. The addition of new garden beds which do not detract from the original design intent (refer to Heritage Listing for more detail).
30. All changes, and alterations including repainting or repairs or alterations which introduce new fabric to non significant heritage structures i.e toilet blocks, fernery, orchid house, restaurant, as long as cognizant of the requirements to maintain setting and context of the fernery and orchid house as outlined in the heritage listing.

9.2.3 Work that requires EPA approvals and relevant documentation levels.

Generally:

31. Any subsurface works in the area identified as having archaeological potential in Figure 4 that has not been subject to an archaeological investigation carried out by a qualified archaeologist and where monitoring is not undertaken;

At the Tanks Art Centre:

32. Demolition of the tanks, bund wall, administration building (gardens), foam sheds or pump houses (including current Tanks administration building). SoHI must be prepared to accompany any applications. These items have been identified as key features of the place in the QHR listing and as such demolition is inconsistent with the conservation of this heritage item;
33. Works which involve significant loss of or impact to, the original fabric of the Tanks, bund walls, administration building or pump house. SoHI must be prepared to accompany any applications;
34. Development approval of works associated with future adaptive re-use of Pump house 1 and 2 require the design to consider the impact on significance and the preparation of a SoHI.

35. Installation of sub floor pumps and drainage proposed for Tank 4 (but also for any other) requires a SoHI once the degree of disturbance to fabric is known.
36. Installation of a permanent roof to stage or amphitheatre area requires a SoHI once design is known.

At the Flecker Botanic Gardens:

37. Development approval for new orchid house, restaurant, and fernery require the design to consider impact on significance and the preparation of a SoHI.
38. Redesign and/or removal of the Figure-of-eight landscape design (see Figure 5).

9.2.4 Work recommended to be carried out urgently.

Several tasks are required in the immediate to mid term to ensure the heritage values are managed appropriately. These are primarily additional planning and documentation tasks which have not yet been carried out. These tasks include:

39. Section 87 of the Queensland Heritage Act requires CRC to ensure that essential maintenance is carried out on regular basis heritage listed places from weather, fire and vandalism. A cyclical maintenance schedule should be prepared for the WWII RAN Fuel Installation sites and appropriate funds allocated to implement it.
40. Similar to the above a Landscape Maintenance Schedule is recommended for the Flecker Botanic Gardens. This would also assist in identifying any works required which are not covered in the existing general exemptions or the proposed Special Exemptions and allow sufficient time to seek approvals.
41. Preparation of a database identifying significant trees/plantings and their location within the gardens. [Timing –within 12months and prior to demolition to redevelopment of any buildings].
42. Archaeological assessment if CRC seeks to delimit the area identified as having archaeological potential , or if not then
43. The varying of current (and future) contracts (involving sub surface excavation) in identified area to include archaeological monitoring (e.g it was noted in a recent site visit that excavations outside Tank 5 revealed buried surface layers). [Timing- immediately].
44. The installation of at least preliminary (while awaiting 45 below) interpretation at the Tanks Arts Centre that explains the history of the site and the values for which the site is listed [Within 6 months]
45. Preparation of an interpretation plan consistent with this CMP [Timing within 12 months].
46. Develop guidelines for users regarding special events and festivals based on the General Exemptions and insert appropriate clauses in the hire of facilities contracts which apply to the sites so that users are aware of the temporary works and requirements allowed under General Exemptions.

47. Photographic documentation of any changes as they occur within the WWII RAN fuel Installation site. Such records to be annotated and archived by CRC as a permanent record of alterations along with all plans and approvals documentation. This archive to be publicly available for research purposes.

9.3 General Recommendations

It is recommended that:

48. This CMP be formally adopted by the CRC and endorsed by the QHC.
49. This CMP form part of a Heritage Agreement between the Minister responsible for heritage and the CRC
50. That the Heritage Agreement incorporates the Special Exemptions detailed in 9.2.2.
51. That this CMP be reviewed after no later than 5 years to ensure that policies are being followed and are still appropriate and that recommendation have been implemented.
52. Implementation of actions according to the timetable in Table 8 or as otherwise set out in the heritage agreement.

Timeframe for Recommended Outstanding Actions	
Heritage Agreement between CRC & Minister for Sustainability, Climate Change and Innovation.	2009
Preparation of an Interpretation Plan	12/2009
Install Interpretation	3/2010
Landscape Management Plan & Maintenance schedules for Flecker Botanic Gardens	12/2009 the reviewed every 3 years tied to CRC financial calendar.
Photographic Documentation of changes at the Tanks Art Centre and the Flecker Botanic Gardens.	Ongoing
Develop Guidelines for users/special events to ensure use is consistent with CMP and Heritage Agreement.	Within 3 months of signing of Heritage Agreement.
Prepare cyclical maintenance schedule for WWII RAN Fuels Installation structures and identify and allocate budget.	6/2009
Prepare database of significant trees and plants	12/2010
Review CMP	2013

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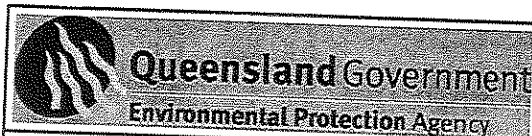
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Appendix A: Heritage Listing WWII RAN Fuel Installation.



WWII RAN Fuel Installation (former)

Place Details

Place ID	602605
Place Name	WWII RAN Fuel Installation (former)
Alternative Name	
Place Classification	Landscape Built
Place Category	Defence
Place Type	Depot - fuel
Place Components	Pump house Tank - storage Bund/s Garage Trees/Plantings Embankment - railway

Location

Address	Collins Avenue
Property Name	
Town / Suburb	EDGE HILL
Post Code	4870
LGA	CAIRNS CITY COUNCIL
Context Study Region	Far North Region

Cultural Significance

Principle Period of Significance

1880s, 1940s (fabric, historical)

Criterion A

The former WWII RAN Fuel Installation is important in demonstrating the impact of WWII on far north Queensland. Its construction was given the highest priority under National Security regulations. Its strategic location in the foothills of the Mt Whitfield Range, 5 kilometres from the port and with dense surrounding vegetation, demonstrates the importance of selecting a secure location for the storage of naval fuel supplies during times of war. The installation is a rare surviving purpose-built WWII Naval fuel storage facility associated with the Pacific war and located in an urban setting.

Criterion B

Criterion D

The installation, which comprises five large fuel tanks, two pump houses, concrete and earth bunds and ancillary structures (including a fire station and foam tank), is important in demonstrating the principal characteristics of its type. The complex reveals information about construction techniques, materials, form, design and location of structures specifically designed for storage of naval fuel in 1943. Because of its relative intactness, Tank 2 is particularly noted for this criterion.

Criterion E

The tanks in particular demonstrate elements of form, scale and

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Criterion H

History
History

material that contribute to the aesthetic significance of the site. Tanks 1 and 2 contain aesthetic value as industrial ruins in an urban environment; the scale, circular form and rusting exteriors form the main aesthetic elements. Tanks 3, 4 and 5 contain high aesthetic values as industrial ruins in a heavily vegetated urban environment. Vegetation such as *Ficus* spp. and orchids contribute to the aesthetic values of the place.

The installation has a special association with the work of the Allied Works Council, which made a substantial contribution to the construction of defence facilities in Queensland, particularly in northern Queensland and often in difficult terrain, during WWII.

The former RAN Fuel Installation at Edge Hill, about five kilometres north of the Cairns city centre, was constructed in 1943 in response to the increased military presence associated with the Pacific war effort. The installation comprised five large fuel storage tanks, earth and concrete bunds around the tanks, auxiliary buildings and an underground pipeline from the tanks to Cairns wharves. Most of these structures have been incorporated into the Flecker Botanical Gardens, a recreational precinct at the southern foothills of the Mt Whitfield range. Tanks 3-5 have been adaptively re-used as the Tanks Arts Centre, a performance and display space. Cairns was established in late 1876 as a port to service the Hodgkinson goldfield. In the mid-1880s the Cairns to Herberton Railway was surveyed through the Mt Whitfield range and in 1885 the low swamp lands south of Mt Islay were surveyed into large suburban sections. In December 1886 four of these were gazetted as a temporary recreation reserve of over 71 acres (about 29 hectares). This was extended in 1887 to comprise an area of over 97 acres (about 40 hectares), and by 1892 contained 108.5 acres (approximately 44 hectares). The recreation reserve was gazetted permanently in 1921, as 109.5 acres (just over 44 hectares). In 1886 an area of 31.5 acres (about 12.75 hectares) on Mt Islay, just north of the recreation reserve and adjacent to the railway, was gazetted as a quarry reserve for the Cairns Municipal Council. This was used for only a few years, the rock being considered too shaly and soft for road fill. In 1908 the gazettal was rescinded. Cairns' position as the principal access port to the hinterland mining districts was consolidated following completion in 1891 of the Cairns to Kuranda section of the Cairns to Herberton railway. A stopping place, railway siding (for municipal quarry purposes) and shelter shed were constructed a Mt Islay at the three-mile in 1888-89, and was named Edge Hill. In 1911 the line was moved 300 metres east to the other side of Saltwater Creek where a new railway station was erected. The former Edge Hill Railway Station stood where RAN fuel tanks 1 and 2 were constructed in 1943. For some years the Cairns Town Council continued to transport quarry material from Edge Hill to Cairns via its own tramway, using the former railway alignment, but this was abandoned by 1923. In 1940 about 10 acres (4 hectares) at Mt Islay, above the recreation reserve, again was gazetted as a municipal quarry, this time for land reclamation purposes. The base of Mt Islay lay within the recreation reserve and from 1940 the slope adjoining the gazetted quarry was excavated as part of the quarry workings. During World War Two Cairns became an important military base in the Pacific region. From September 1942, military personnel began to arrive for deployment. Providing the infrastructure to support the allied war effort at Cairns became a priority, and the decision to build Royal Australian Navy fuel storage tanks in Cairns was given under the highest level of National Security. Early planning positioned the fuel installation behind wharf no.8 at the dockyards on Trinity Inlet,

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but as both the Australian and United States navies intended to expand warehouse storage facilities in this area, an alternative site was sought. Two Australian Navy staff visited Cairns in late 1942 and approved a site at Edge Hill that could be camouflaged from the air and would be difficult for an aerial enemy force to attack. It was also sufficiently distant from the wharf precinct to be of little danger to the port if there was enemy action. The site chosen was on the southern slopes of the Mt Whitfield Range (Mt Islay), adjacent to the recreation reserve. Part of the site was located within a quarry reserve (R.903), part within the recreation reserve (R.267 - now known as Flecker Botanical Gardens) and part on a disused railway reserve. Three large concrete and two large steel fuel tanks were built and commissioned for use by the Royal Australian Navy and the United States Navy in 1943. Up to eight tanks were planned but only five were constructed. The Allied Works Council, established in February 1942 to co-ordinate civilian construction of Allied military defence facilities in Australia, undertook site preparation and construction of the tanks, auxiliary buildings, bunds and underground pipeline. The first two tanks were built on the former railway reserve on the north side of Collins Avenue. This land had been leased privately prior to the war and two small buildings were demolished to make way for Tank 2, which lay on the former railway alignment. Tank 1 was constructed on the site of the former Edge Hill Railway Station. Because these tanks were intended to hold diesel fuel they were constructed in plate steel, sourced from Broken Hill Pty Ltd. There were significant delays during construction, with correspondence between Main Roads, Allied Works Council and the Australian Navy revealing the frustration of all concerned in a project that was considered vital to the Allied war effort. Confusion as to where the steel tanks were to be sited, a lack of graders and poor planning hindered construction. Adjacent to tanks 1 and 2 a small pump house was constructed and an underground fuel pipeline was laid from the pump house along the former Cairns-Herberton railway embankment and under the streets of North Cairns to Trinity Wharf. South of Collins Avenue, opposite Tanks 1 and 2 and on the former railway alignment, a fire station (garage) and foam tank were constructed. Tanks 3-5 were sited further west, on the former quarry located partly within the recreation reserve and partly within a quarry reserve. This area was already partly excavated. Further excavation, including removal of a rocky outcrop, was undertaken during the second half of 1943 to create a level site for tanks 3-5. Tanks 3-5 were sited away from the first two tanks for several reasons. Firstly the landscape was prohibitive and part of the hill had to be removed, with the core left for camouflage, before all five tanks could be constructed. Secondly, having tanks 3-5 located at some distance from tanks 1-2 decreased risk to the whole installation. Thirdly, existing mature trees and the topography could be capitalised on to camouflage tanks 3-5 (tanks 1 and 2 relied on heavy steel cables and netting material as camouflage). Because tanks 3-5 were intended for the storage of crude oil they were constructed in reinforced concrete. This was hand-poured by a team of contractors from Melbourne, with some workers inscribing their names in the concrete bunds surrounding the tanks. A second pump house was constructed adjacent to tanks 3-5, and an underground fuel pipeline was laid from this pump house south east across the adjacent recreation reserve to join the pipeline from tanks 1 and 2 along the disused railway embankment. The former fuel pipeline still runs under north Cairns. In March 1944 the Commonwealth government requisitioned part of the quarry reserve above tanks 3-5 to establish an observation and communications post for the

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	protection of the fuel storage tanks below. After the war the Commonwealth removed the structures associated with the observation post on Mt Islay, but decided to retain the fuel storage tanks for their intended purpose. In the late 1940s and early 1950s the Commonwealth formalised its occupation of the land, gaining title to Lot 346 (tanks 1-2), Lot 348 (fire station and foam tank) and Lot 349 (tanks 3-5) and taking up an easement over the pipeline (Lot 95A) as far south as Little Street. The tanks continued to be used for fuel storage by the Australian Navy and private fuel companies. Tank 1 was leased to Caltex from 1957 and the Australian Meat and Grazing Company leased tank 2 from November 1958, to store molasses. In 1964 work was undertaken on Tank 2 to repair damage from the molasses and Tank 1 was reconstructed. A new roof, supported on four extra steel poles, was constructed over the original, which is still visible from inside the tank. The original timber pole supports also survive in situ. Tank 4 became inoperable in 1976 when it began leaking crude oil. Caltex continued use of at least one of the tanks until 1983 and the Australian Navy used the remainder until 1987. In 1991 Cairns City Council purchased all 5 tanks, but not the pipeline, from the Commonwealth, and the land was transferred to the Council. In 1995 tanks 3-5 were refurbished as the Tanks Arts Centre, hosting art exhibitions, performing artists, children's workshops and markets. In 1991 Cairns City Council purchased all 5 tanks, but not the pipeline, from the Commonwealth, and the land was transferred to the Council. In 1995 tanks 3-5 were refurbished as the Tanks Arts Centre, hosting art exhibitions, performing artists, children's workshops and markets.
Description	
Designer Name	
Style	
Period	World War II (1940 - 1945)
Builder Name	
Construction Date	1943 - 1943
Construction Method	
Fabric (Exterior Structure)	
Fabric (Roof)	
Roof Form	
Description	The former WWII RAN Fuel Installation at Edge Hill is located 5 kilometres north of the original port of Cairns, in the foothills of the Mt Whitfield Range. The installation, built into the side of Mt Islay, comprises five large fuel tanks (three in concrete, two in steel), earth and concrete bunds, two pump houses, a fire station (garage), foam tank and part of a disused railway embankment, located within three non-contiguous land parcels. Associated with the installation is a fuel pipeline in Commonwealth ownership, which cannot be included in the Queensland Heritage Register entry for the former WWII RAN Fuel Installation. Site 1: Tanks 1 and 2 (Lot 346 on RP711610) Land parcel 346/RP711610 is located on the north side of Collins Avenue near the eastern entrance to the Flecker Botanical Gardens, on a former railway reserve. It contains tanks 1 and 2, a pump house, an earth bund and a concrete bund. Tanks 1 and 2 are welded steel circular structures set on concrete foundations. Tank 1 has external steel stairs and pipe fixtures have been removed. Floor panels, roof cladding and steel roof framing have been replaced. Air vents and a doorway have been cut into

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the side of the tank. Tank 2 is the northern-most tank and remains relatively intact. The outlet service pipes and internal timber uprights and ceiling are intact. The primary modification is the replacement of the roofing with 'Spandex' cladding and the addition of a galvanised or Zinalume 'collar' immediately below the roofline. There is a bund of formwork concrete, approximately 1.5 metres in height, around Tank 1. This is topped with three strands of barbed wire strung between angled metal posts. Tank 2, which is situated on higher land than tank 1, has an earth bund faced around the base with dry-stone rubble, roughly coursed. To the west/south west of the tanks a pump house is situated close to the Collins Avenue road alignment, outside the bunds. This is a small, single-storeyed, in rendered masonry building with a gambrel roof clad in corrugated iron and steel sheeting (possibly replacing corrugated fibrous cement sheeting). The structure rests on a concrete slab. In the front wall there are windows and a pair of large double doors opening to Collins Avenue. Site 2: Support structures (Lot 1 on RP17796) Land parcel 1/RP17796 is located on the south side of Collins Avenue, opposite Tanks 1 and 2, on part of the original Cairns-Herberton Railway alignment. It contains two small former support structures associated with the WWII RAN Fuel Installation: a fire station (garage) and foam tank. The former fire station is located on the western side of this allotment close to the Collins Avenue road alignment. It is a small, single-storeyed, gable-roofed garage clad with fibrous-cement sheeting on the walls and corrugated fibrous-cement sheeting on the roof. It has a skillion-roofed side extension, the walls of which are clad in corrugated steel and the roof in corrugated galvanised iron. The whole rests on a concrete slab. The front elevation principally comprises three sets of double garage doors - one in the gabled section and two in the skillion side extension - opening onto Collins Avenue. The former fire station was demolished in late 2006 to make way for the realignment of Collins Avenue. Also on this land parcel, but separated from the fire station by the former railway embankment, is the former foam tank. The tank is rectangular in shape, of pressed metal with a flat galvanised iron roof supported on timber framing. The whole rests on a brick base that in turn sits on a concrete slab. At the rear the slab extends beyond the current structure, where there are the brick base remnants of other partitions. A metal pipe is connected to the top of one of the walls of the tank and extends into the ground. It has a tap and stop-cock mid-way along its length. Site 3: Tanks 3, 4 and 5 (Lot 349 on RP715416 and Lot 402 on SP201236) Land parcel 349/RP715416 is located on the north side of Collins Avenue approximately 500 metres west of tanks 1 and 2, on a former quarry site. It contains tanks 3, 4 and 5, a concrete bund, a former foam shed and a former pump house. This site has been redeveloped as the Tanks Art Centre. Tanks 3, 4 and 5 are reinforced concrete structures on concrete slabs. Tank 3 is eastern-most and is used for performing arts. Large holes have been cut into the walls of the tank, one for access and one opening onto an outside stage facing a grassed amphitheatre. Roofing materials and internal fittings have been replaced. Tank 4 is located in the centre of the site, facing the gated entrance to the Tanks Art Centre. It is used as a gallery and has recent interior wall partitions to facilitate art displays. Doors and ventilation holes have been cut into the walls of the tank. Part of the early Trinity Wharf has been placed inside the tank as a sculptural feature. The fabric consists of heavy timber logs with oyster encrustations and industrial scale links and chain. This sculpture forms a tangible link between Trinity Wharf and the naval fuel storage tanks, reflecting the physical link via the underground

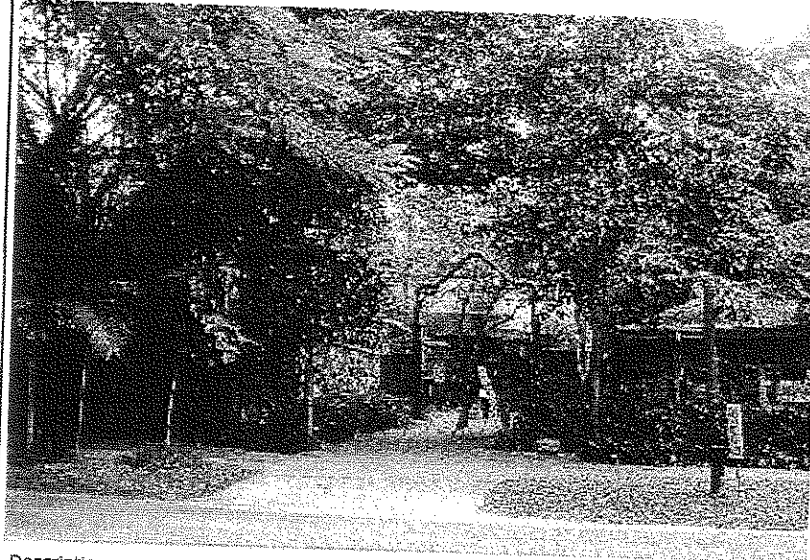
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pipeline. Tank 5 is western-most and has had similar modifications to tanks 3 and 4. It has openings for ventilation and access cut into the walls and has had roofing materials replaced. A bund of formwork concrete about 1.5 metres in height extends along Collins Avenue for the length of the Tanks Arts Centre, overgrown with vegetation such as trees and orchids. Large figs (*Ficus* spp.) and other tropical species contribute to the landscape within the Tanks Art Centre. Just outside the bund, close to the Collins Avenue road alignment and just to the east of the entrance to the Tanks Arts Centre, is a former pump house of similar construction to the pump house associated with tanks 1 and 2. It is a small, single-storeyed building in rendered masonry, with a gambrel roof clad in corrugated fibrous-cement sheeting. It functions as the administration building for the arts centre. A second foam shed is located in the south western corner of Lot 349 just outside the bund wall and facing Collins Avenue. Sharing the same dimensions as the foam shed on Lot 1 RP17796, and resting on a brick base sitting on a concrete slab, this shed has been modified over time. Double doors have been created in the western wall to allow the shed to be used for storage purposes.

Keywords

Keywords

Images



Description Tanks Arts Centre located within Flecker Botanical Gardens

Media Author

Media Date

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Registers and Inventories

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Description	Tank 2
Media Author	
Media Date	
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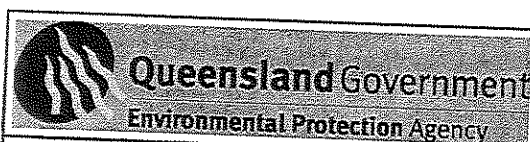
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Appendix B: Heritage Listing Flecker Botanic Gardens.



Flecker Botanical Gardens

Place Details

Place ID	602541
Place Name	Flecker Botanical Gardens
Alternative Name	Cairns Botanic Gardens Edge Hill Nursery Fitzalan's Botanical Gardens
Place Classification	Landscape Built
Place Category	Parks / Gardens / Trees
Place Type	Garden - botanic
Place Components	Gate - entrance Trees/Plantings Bridge - foot/pedestrian Wall/s - retaining Lawn/s Natural landscape Office/Administration building Paving Garden - layout Road/Roadway Garden - rainforest Fernery Pathway/Walkway Garden - bed/s

Location

Address	Collins Avenue
Property Name	
Town / Suburb	EDGE HILL
Post Code	4870
LGA	CAIRNS CITY COUNCIL
Context Study Region	Far North Region

Cultural Significance

Principle Period of Significance	1880s-1982 (fabric) 1880s-1960s (historical) 1880s - (social)
Criterion A	The place demonstrates the development and continued management of a botanic garden in a regional city as a theme in the evolution and pattern of Queensland's history. The Flecker Botanic Gardens (earlier Cairns Botanical Gardens) was established in 1886 as part of a recreation reserve. From the 1930s the Flecker Botanic Gardens has fulfilled the traditional functions of a botanical gardens, including increasing horticultural knowledge about local plants with a view to developing their economic potential, sharing of this knowledge and seed stock with like-minded institutions nationally and internationally, providing an attractive and educative

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	Criterion D Criterion E Criterion H History History	venue for public recreation, and in some instances providing plant material to the public. The place is important in demonstrating the principal characteristics of a substantial wet tropics public botanical gardens that has evolved over time, including early groupings of exotic and indigenous plantings (early to mid 20th century) and the botanical display garden, designed and developed by curator Vince Winkel in the 1960s. Important characteristics also include: infrastructure associated with displaying the gardens, especially that dating from the 1960s-1980s (including the figure-of-eight walkway, other pathways, retaining walls, footbridges, paving, railings, drainage systems, and raised and built up garden beds); the provision of specialist displays; specimen plantings of trees and shrubs; and the incorporation of open lawn areas within the design. The current Gardens, developed during the 1960s demonstrate plantings, displays, plant collections, bridges and visitor facilities similar in concept to other regional botanic gardens. The visual display of the plant material in the Flecker Botanic Gardens captures the exuberant ambience associated with imagery of the "lush tropics". Large trees, both native to this habitat and exotic, provide the planting structure and canopy framework for the understorey collection and display of colourful orchids, gingers, aroids and ferns. The natural topography of gentle foothill and slopes, creek, gully and swampland has been sensitively incorporated into the design of the display. The aesthetic of the site has quietly evolved with, and emerged from, its natural environment rather than being designed to dominate and overpower its space in the landscape. This contributes to the enduring charm of the place as a recreational venue. The place has a special association with the work of naturalist Dr Hugo Flecker in the mid-20th century. The North Queensland Naturalist Club was established in 1932 by Dr Flecker. He housed its extensive herbarium collection in the gardens from 1933 until 1949. This collection returned to the Flecker Botanic Gardens briefly from 1967 to 1971. It is now incorporated into the CSIRO collection. Since the 1930s, the place has had a special association with the work of the Cairns City Council in developing and promoting the Botanic gardens as a place of recreation and, since the 1960s, as an internationally recognised source of scientific information and education in the wet tropics of Australia. The Flecker Botanic Gardens, a public reserve south of Mt Islay in the Mt Whitfield Range, was established in the mid-1880s as part of a recreation reserve, just a decade after the town of Cairns was first surveyed in 1876 as a port to service the Hodgkinson goldfield. Although never officially gazetted for botanic garden purposes, Botanic gardens were developed in the recreation reserve at its inception. The work of botanist Eugene Fitzalan in the 1880s and 1890s, Cairns City Council nurserymen and curators from the 1920s and naturalist Dr Hugo Flecker from the 1930s to the 1950s, has contributed to the development of the gardens as a significant Botanic and recreation space in Cairns. Of cultural heritage significance the garden area is bounded by Collins Avenue and McCormack, Goodwin and McDonnell Streets. In 1884 the Cairns Progress Association had advocated for a Botanic garden to be established in the vicinity of Cairns. During the 19th and early 20th centuries botanic gardens were considered important for recreation, the preservation of indigenous vegetation, the display of native flora and fauna, and the acclimatisation of economically useful plants. In November 1886 an area of about 71 acres (29 hectares) west and south of Mt Islay, comprising suburban sections 71, 74,
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75 and 76 (surveyed in 1885), was gazetted as a temporary reserve for recreation under the control of Cairns Municipal Council (established in 1885). This land comprised the southern and western foothills of Mt Islay and a lowland swamp. Previous non-indigenous use of the land had been restricted to timber cutting, the forming of tracks through the rainforest scrub to assist with timber extraction, and Chinese market garden cultivation in the northeast corner of the reserve. The site was located approximately three miles (5 kilometres) from the centre of Cairns adjacent to the recently surveyed Cairns to Kuranda railway right of way, which would make it publicly accessible. In April 1887 suburban section 68 was added, to create a reserve of over 97 acres (about 40 hectares). A further 11 acres (4.45 hectares) was added in May 1892, when swampy land lying between the recreation reserve and the railway line was incorporated into the reserve, including an area at the foot of Mt Islay, west of Saltwater Creek, previously cultivated by Chinese market gardeners under special lease. In December 1886 the Cairns Municipal Council came to an agreement with Eugene Fitzalan, a trained botanist, to establish an ornamental garden on the recreation reserve, sufficiently attractive to entice the public. In return Fitzalan was permitted to sell refreshments (which would enhance the public appeal of the gardens) and to operate a private commercial nursery from the reserve. He was appointed caretaker of the reserve with a nominal annual salary of £5. Eugene Fitzalan (1830 - 1911) was born in Londonderry, Ireland and was a botanical collector in England and Mexico before arriving in Australia in 1849. He was a keen orchid collector, and on at least one occasion collected with Baron von Mueller, who regarded Fitzalan's specimens very highly. Fitzalan had at least two orchids named after him by von Mueller. He made many botanical expeditions in Victoria and along the Queensland coast on the Spitfire in 1860, at Mount Elliot with botanist John Dailachy in 1863 and in the Daintree area in 1875, before arriving in Cairns in 1886. He developed nurseries in Geelong, Brisbane and Bowen and collected specimens for the Herbarium of Victoria. A number of Fitzalan's specimens were sent to Kew Gardens, London, where they were examined by taxonomist George Bentham for inclusion in the botanical volumes of *Flora australiensis*. At least nine plant specimens were named after him: *Atractocarpus fitzalanii*; *Eria fitzalanii*; *Euulophia fitzalanii*; *Lepistermon fitzalanii*; *Macropteranthes fitzalanii*; *Musa fitzalanii*; *Psychotria fitzalanii*; and *Randia fitzalanii*. The latter is a native gardenia that today is used extensively for commercial purposes. Fitzalan developed about 5 acres (2 hectares) in the northeast of the reserve as an ornamental botanic garden (known variously as Rosebank or Fitzalan's Botanic Gardens), largely on the site of earlier Chinese market gardens. An 1891 survey plan indicates that Fitzalan's early gardens were located on section 75, just south of Collins Avenue, below what is now the Tanks Arts Centre. This was a short distance from the railway line near the cutting at the Three Mile, where the Edge Hill Railway Station was constructed in 1888-1889. Access to the gardens was made easier in 1887 when a crossing was made over Saltwater Creek. Between 1887 and 1891 Fitzalan landscaped the ground, planted colourful garden beds and constructed a perimeter fence to keep out goats. He built a small cottage in the garden and established the Edge Hill Nursery, constructing a long shed roofed with coarse canvas in which he raised seedlings and cuttings and in 1887 cut a main garden path, about 9 feet wide, through the reserve at his own expense, planting specimen and fruit trees along its length. In 1891 this pathway was surveyed as Edge Hill Road (Collins Avenue from 1934). He also formed other

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paths opening off this track, including a circular walking track through the rainforest. Among the plants cultivated by Fitzalan were 50 varieties of roses, 11 varieties of hibiscus, orchids, ferns, rain trees, native myrtle and local plants from the adjacent Mt Whitfield Range. He also grew coffee, and grafted orange, lemons and mangoes, which he made available to residents of the area. He exported large numbers of orchids, palms and palm seeds, ferns and other plants to Europe, and received specimens from other parts of Australia to trial in a tropical environment. Fitzalan relinquished his caretaker role in 1897 due to poor health. In 1906 the Cairns Council Nursery was established. The function of this nursery was the propagation of plants and shrubs to supply municipal needs. Fitzalan's garden and nursery continued on this site under the curatorship of James Morgan (1897 - 1900) and Charles Gurd (1901 - 1906) until it was moved to its current site in 1906. Charles Gurd continued as curator until 1923 when Les Wright was appointed nurseryman. In December 1921 the reserve was declared a permanent recreation reserve of 109.5 acres (just over 44 hectares) under the trusteeship of Cairns Town Council. In 1923 Les Wright was appointed as Council's nurseryman a position he held until 1947. Wright was permitted to construct a house (no longer standing) on the reserve, adjacent to the nursery. From the early 1930s there were community calls for the establishment of a formal botanical garden within the recreation reserve. Momentum came largely from Dr Hugo Flecker (1884 - 1957) and the North Queensland Naturalist Club, which he founded in 1932. Melbourne-born Flecker was a radiologist with a strong interest in natural history, especially toxic plants and animals. He undertook valuable work on the Queensland Finger Cherry and the Tar Tree and identified the deadly box jelly, *Chironex fleckeri*. From 1935 he contributed a weekly column to the Cairns Post on behalf of the Naturalist Club, in which he publicly advocated the establishment of a Botanic garden at the recreation reserve. In 1933, with encouragement from the Queensland Government Botanist, Cyril White, Flecker established the North Queensland Naturalists' Club Herbarium in the grounds of the council's nursery in the recreation reserve. The club's collection grew from around 1,600 specimens in 1937 to about 5,000 in 1950 and an estimated final collection size of around 10,680 specimens. The collection proved popular with visitors, enhancing their experiences of the gardens. Until 1949 specimens were housed at the gardens in a storeroom supplied and erected by the Cairns City Council, then the collection was moved to the former Kuranda Barracks on the Cairns Esplanade. It returned briefly to the Cairns Botanic Gardens from 1967 to 1971, but is now fully incorporated in the general collection at the CSIRO Division of Forest Research at Atherton. In 1934-35 a significant advance was made with around 25 acres (10 hectares) of the reserve on the lower slopes of Mt Islay cleared of heavy undergrowth and planted with young trees. The mayor of Cairns advised that the reserve would be planted with "permanent trees which are noteworthy for their ornamentation and their regularity of design, planted at pre-determined distances, so that they will provide permanent avenues of great beauty." Trees and shrubs of a less "permanent" nature were to be removed and relocated to other parts of the reserve allowing for the development of avenues lined with pine, acacia, palms, Poinciana and others. This project continued until 1940 when part of the recreation reserve (suburban section 74, north of the council nursery) was converted to a Quarry Reserve for war purposes and part of the 1930s gardens work was destroyed by quarrying. It appears that oil palms, poincianas, hoop pines, two rubber trees, a Dillenia, a Schizolobium, an Indian

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mango, a Wongi plum, a Terminalia and a Malay Apple were planted during this period by Les Wright. As part of the re-development and in common with formal Botanic gardens, in 1936 the Cairns City Council established a zoological garden in the reserve, to display native birds and animals. This enhanced the appeal of the gardens to visitors, locals and tourists alike, and was popular with American and Australian soldiers during World War Two. Les Wright was appointed curator. Succeeding curators continued to build up the collection but the zoo was closed in 1953 for economic reasons. Following Wright's death in 1947, Tom Mitchell was appointed to the curator's position. He held this position until his death in 1953. A red brick house was built for Mitchell in the early 1950s. This house today houses the Garden's information centre and administration offices. Mitchell died in 1953 and the position was taken up by Jim Gould until 1966. In 1966 Cairns City Council appointed Vince Winkel as Curator of Parks, Gardens and Reserves, a position he held until 1984, and in March 1967 adopted a five-year plan to develop 8 acres (3.24 hectares) in the northwest of the Edge Hill reserve as a small botanical gardens. Collins Avenue and McCormack, Goodwin and McDonnell streets bordered the site. Winkel designed the new garden, laying out a figure-of-eight walkway. The site was cut diagonally by a small creek over which a bridge was erected, and the banks of the creek were planted with various trees including Cassia, Bauhinias, Parka, Caesalpinia, Tabebuia and Semecarpus australiensis, known as the Tar tree. Galvanised pipe railings were placed as needed and where necessary banks were retained with a variety of materials, predominantly small concrete slabs. Garden beds and path edges were built up and retained with flat and smooth river stones. A variety of materials were used for paving in this area: bricks, broken concrete slabs set into the path, and concrete "crazy paving." Walking areas such as footbridges and steps were rendered "non-slip" with the application of exposed aggregate concrete. The focal point in the centre of the figure of eight was a fernery, constructed in 1968 to house the fern collection of the early and influential Munro-Martin family. It featured a miniature waterfall and pond with water lilies and fish. Near the fernery was the Curator's office which housed the Flecker Herbarium, a grass hut used as a shelter shed, and a picnic area with swings and a large dug out canoe for children to play in. In 1971 the Cairns City Council named its new garden the Flecker Botanic Gardens to commemorate Dr Flecker's contribution to botany. (The name has since been applied to the whole of the recreation reserve). At this time there was a collection of over 100 different species of native orchids growing on a line of palms, and over 100 species of palms including oil palms and royal palms in the area facing Collins Avenue. North of this area and facing McCormack Street was a densely wooded area containing earlier plantings. After 1966 this area was cleared of lantana and undergrowth and pathways established. Among the plantings at this time were coffee, tea, cocoa, tumeric, ginger, curry leaf and other medicinal plants including Taraktogenos from Burma. The largest tree in this area at this time was the Samanea saman or Rain Tree from South America, and well advanced were two Hevea brasiliensis, a source of rubber, ready for tapping. A "fine specimen" of breadfruit was growing in front of the curator's office in 1973. In 1974 the Flecker Botanic Gardens was listed in the International Directory of Botanical Gardens, following an invitation received from the Association of Botanical Gardens (now The Botanic Gardens Conservation International) in Edinburgh. At this period the gardens held an amazing variety and quantity of ferns, some of

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	which were exceptionally rare. Flecker Botanic Gardens remains a member of this Association. During the 1970s the Flecker Botanic Gardens contributed to plant exchanges with overseas agencies, the acclimatisation of plants, and cataloguing plants for ready reference. Visitor experience and enjoyment was enhanced with the addition of aviaries in 1974 to house pheasants, peacocks and bush turkeys, and the children's playground was extended with the installation of a tree house. In 1982 new entrance gates were erected at the 1971 Flecker Botanic Gardens to commemorate the 50th anniversary of the founding of the North Queensland Naturalists' Club. Cyclones have had a significant and devastating effect on the flora of the botanical gardens. In February 1986 cyclone Winifred caused extensive damage and many trees, some nearly 100 years old, were severely damaged. A number of plants were lost at this time to theft. Following the cyclone a three-year plan was implemented by Cairns City Council to upgrade the gardens. This included the redevelopment of the Munro-Martin Fernery and the orchid propagation house; tree labelling including Braille tree labels; continuation of botanic records; construction of paving; and an Aboriginal wild food walk. A restaurant was constructed near the curator's office, opening in January 1987. At this time tourist operators considered the Flecker Botanic Gardens the third most popular tourist attraction in the region, with a visitor rate of 100,000 per annum. Public awareness of the gardens increased with the formation of the Friends of the Botanical Gardens in 1989. During the 1990s the educative function of the botanic garden was emphasised. Interpretative services and guided walks were introduced and an annual Botanical Garden Festival introduced. Flecker Botanic Gardens continues its important Botanic role, extending its collection of endangered species from the Wet Tropics World Heritage Area and providing assistance to both national and international scientific work. The garden maintains national and international memberships such as the Royal Australian Institute of Parks and Recreation, and Botanic Gardens Conservation International, and is noted nationally and internationally for its collections of palms, gingers and aroids.
Description	
Designer Name	
Style	
Period	Late 19th century (1870s - 1890s)
Builder Name	
Construction Date	1886 - 1960s
Construction Method	
Fabric (Exterior Structure)	
Fabric (Roof)	
Roof Form	
Description	The Flecker Botanic Gardens is bounded by Collins Avenue and McCormack, Goodwin and MacDonnell streets. Some plantings in this area need to be considered with respect to their possible age. The corner of Collins Avenue and McCormack Street along the western boundary has a group planting including two very large hoop pines <i>Araucaria cunninghamii</i>, a Cook pine <i>Araucaria columnaris</i>, a sausage tree <i>Kigelia pinnata</i>, and a large fig tree <i>Ficus</i> spp. The association of these species in botanical gardens was not uncommon in the late 19th century, as at Queens Park, Maryborough. Further north of this group of plants, towards

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Goodwin Street, the association of a particularly large rain tree with a blue quandong, a damson plum, a clump of bamboo of the same species as that in the Fitzalan Gardens and mature mangoes, is seen. Rainforest understorey plants line the creek bank and pathways in this area and again the association of a blue quandong, paperbarks and a Leichhardt tree is seen. The 1960s figure-of-eight walkway has persisted and Fitzalan Creek is crossed by two footbridges. The southern portion of the gully area has the oldest paving. A variety of paving materials are used, including bricks, concrete slabs and concrete "crazy paving." Retaining walls reflect this pattern: log retaining walls and concrete stone pitching in southern parts give way to block walls in northern areas. The materials used in this work are simple in contrast to the workmanship evident in its execution, which is of an outstanding quality. Railings made of galvanised pipe are placed as needed. Over time a number of these have been replaced with timber railings. Where necessary banks are retained with a variety of materials, predominantly small concrete slabs approximately 75mm high x 300mm long x 250mm deep, laid into the banks. Garden beds and path edges are built up and retained with flat and smooth river stones, generally the size (but not the shape) of lawn bowls balls, bedded horizontally. Walking areas such as footbridges and steps are rendered "non-slip" with the application of exposed aggregate concrete utilising large river-washed pebbles approximately 20 to 50 mm in diameter. Understorey plantings in the Fitzalan Creek gully area have no doubt changed over time. Today aroids, ginger and Asian species dominate the head of the gully and a variety of tropical ground cover species enjoy the canopy provided in the lower area of the gully by remnant vegetation including impressive specimens of the paperbark *Melaleuca leucadendron*, damson plum and Leichhardt trees. There are three open lawn areas within the Flecker Botanic Gardens: an area immediately adjacent to the main entry off Collins Avenue; a large open space used for open-air performances and large gatherings in the northeast area of the site adjacent to McDonnell Street; and a tree and shrub lined linear space along Goodwin Street. The main entry lawn has a large teak tree *Tectona Grandis*, planted in 1946, as the centre lawn specimen and the remnants of a large yellow poinciana *Peltophorum pterocarpum* to the northeast of this. The latter tree shows the scars of significant storm damage over time and today provides the support for a collection of epiphytic plants. Along the MacDonnell Street boundary and immediately adjacent to the open-air performance area, are a number of very large and mature trees including a Bayur tree *Pterospermum acerifolium*, a multi-trunked mock orange *Murraya exotica*, a *Cassia javanica*, and a multi-trunked Tar tree. These specimens are particularly mature and are species that could well have been used in earlier planting schemes. Buildings have a minimal visual presence on this site. The 1968 Munro-Martin Fernery is constructed of galvanised pipe framing approximately 50mm in diameter with a central barrel vault and side aisle areas sheeted with galvanised steel mesh and enclosed externally with shade cloth. Timber lattice panels flank the front entrance. The fernery is in clear view across the lawn from the main entrance gate to the Flecker Botanic Gardens. Adjoining the Munro-Martin Fernery to the west is the George Watkins Orchid House (1986) constructed from similar materials but on a smaller scale. Neither of the structures housing the fernery or the orchid collection is considered to be of cultural heritage significance. The commemorative entrance gates (1982) are constructed with decorative stonework. Other built elements in this area of the

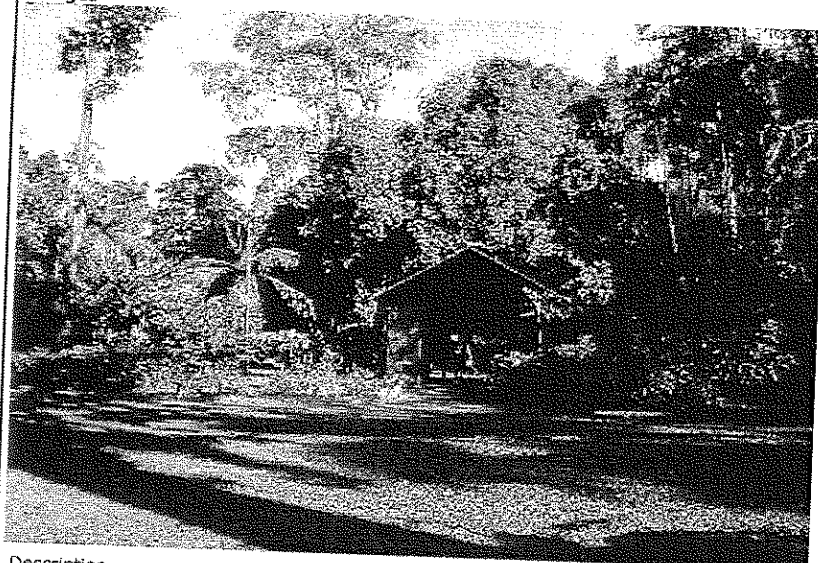
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gardens lie buried under the exuberant foliage and are "discovered" when wandering the various pathways. These include the red brick curator's office and information centre (1950s), a restaurant (1987) and two toilet blocks. The placement and scale of these buildings on the site is significant, rendering them unobtrusive in the landscape. However, the structures themselves are not considered to be of high cultural heritage significance. Fencing around this area of the gardens is not significant.

Keywords

Keywords

Images



Description

Entrance to gardens

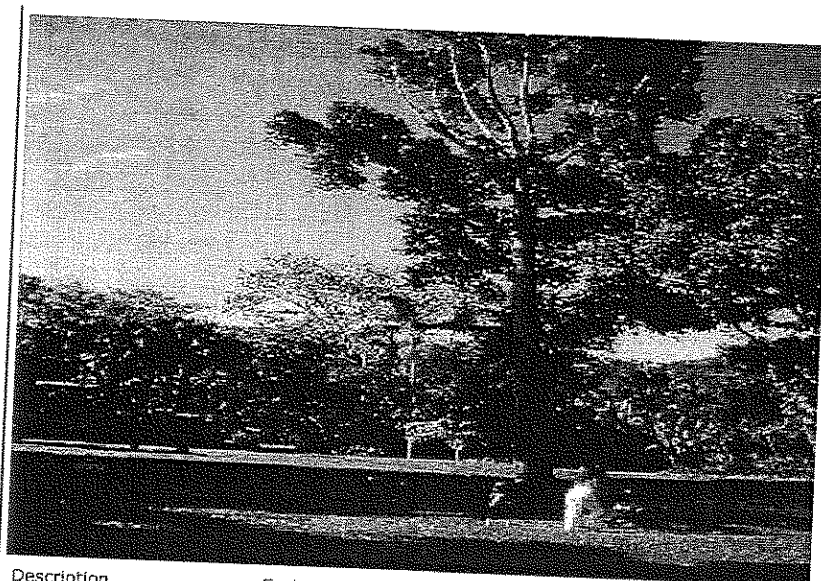
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Media Date

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Description	Eastern portion of gardens
Media Author	
Media Date	
Copyright	EPA/QPWS

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Appendix C: List of Queensland Historic Themes.

Historical Theme	Subthemes
1. Surveying and exploring the landscape	(a) looking for land with pastoral, agricultural or extractive potential
2. Developing rural economies	(a) establishing pastoral empires (b) displacing aboriginal people/frontier conflict (c) exploiting natural resources e.g. timber, minerals, coal, gas, oil (d) encouraging selection, closer settlement and immigration (e) developing agriculture and agriculture-related industries (f) managing and conserving land, water, flora and fauna (g) encouraging the growth of tourism
3. Developing transport and communication networks and infrastructure	(a) establishing roads and road transport services (b) establishing ports (c) developing shipping services (d) providing postal, telegraphic and telephone services (e) creating rail links (f) establishing air services (g) establishing information services and developing information technology
4. Establishing and developing towns	(a) selecting township sites (b) establishing local government (c) providing public services (d) planning urban environments (e) housing urban populations
5. Developing secondary and tertiary industry	(a) developing manufacturing and heavy industry (b) encouraging the building and construction industry (c) providing services - professional, financial, commercial, hospitality, etc
6. Maintaining order	(a) policing and maintaining law and order (b) developing government and public administration (c) defending the country
7. Educating a rural community	(a) establishing schools (b) encouraging adult self-education (c) providing tertiary education
8. Providing health and welfare services	(a) developing health services (b) caring for those in peril or in need (c) providing for the dead
9. Developing social and cultural institutions	(a) establishing religious institutions (b) forming secular associations, institutions, organisations and societies (c) remembering the fallen

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Appendix D: Commonwealth Principal Australian Historic Themes.
(Extract from Australian Heritage Commission 2001. *Australian Historic Themes: A framework for use in heritage assessment and management*. Commonwealth of Australia)

ABOUT THE THEMATIC FRAMEWORK

Themes are webs we weave to better understand the history and storylines of a place. They are not rigid straitjackets into which we must place our heritage assessments.

Jean Domenech, 1991

FRAMEWORK DESIGN

The Thematic Framework comprises nine Theme Groups which encompass and are elaborated by a network of more specific themes. Themes are further expanded into more focussed sub-themes.

The Theme Groups are:

- 1 TRACING THE EVOLUTION OF THE AUSTRALIAN ENVIRONMENT
- 2 PEOPLING AUSTRALIA
- 3 DEVELOPING LOCAL, REGIONAL AND NATIONAL ECONOMIES
- 4 BUILDING SETTLEMENTS, TOWNS AND CITIES
- 5 WORKING
- 6 EDUCATING
- 7 GOVERNING
- 8 DEVELOPING AUSTRALIA'S CULTURAL LIFE
- 9 MARKING THE PHASES OF LIFE

The consistent organising principle for the Thematic Framework is *activity*. By emphasising the human activities that produced the places we value, and the human response to Australia's natural environment, places are related to the processes and stories associated with them, rather than to the type or function of place. The themes do not invalidate classifications such as type and function. Themes are simply another way of investigating and interpreting the history of a place.

The themes are not intended to follow a chronological order. Rather, they are generic, and designed to be applied and interlinked, regardless of the period or place. They embrace prehistory to the modern period and a multiplicity of human activities. The wording of the themes is designed to be gender and age inclusive—covering men, women and children.

The Framework is not arranged as a hierarchy which gives priority, weighting and privilege to some themes. Nor is it a checklist which prescribes a minimal approach. It has been applied in some organisations as an aid in cataloguing museum collections so as to enrich the historical context and stories behind the objects displayed.

Figure 1 shows how the Theme Groups relate to place. They are non hierarchical and one place may have many themes, reflecting current thinking on the significance of place and the way we look at the past, reconstructing it as an integrated, diverse, complex human experience. Each Theme Group represents a significant aspect of the human experience, and the terms used expand our notions of historical activity.

Appendix E: General Exemptions and Specific Exemption Application.

EXEMPTION CERTIFICATE GENERAL EXEMPTION (G1)

This certificate
Exemption Certificate – General Exemption (G1)
is issued by the Queensland Heritage Council
under s.37 of the *Queensland Heritage Act 1992* and
applies to all places in the Queensland Heritage Register
except those places expressly excluded by
the Queensland Heritage Council pursuant to a notice of revocation.



John Bramcock
Chair, Queensland Heritage Council
Resolution 170.55
3 December 2004



EXEMPTION CERTIFICATE
GENERAL EXEMPTION (G1)

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EXEMPTION CERTIFICATE GENERAL EXEMPTION (G1)

PREAMBLE

DEVELOPMENT IN A REGISTERED PLACE

All development in a privately-owned registered place, unless it is emergency work, requires approval by the Queensland Heritage Council under a development permit or an exemption certificate.

All development by the State in a registered place, unless it is emergency work or covered by an exemption certificate, requires a recommendation by the Queensland Heritage Council.

An exemption certificate is issued for development that does not cause detriment to or impact on the cultural heritage significance of a registered place. Development carried out in accordance with an exemption certificate does not require any further approval by the Queensland Heritage Council.

GENERAL EXEMPTION (G1)

This **Exemption Certificate – General Exemption (G1)** applies to all places in the Queensland Heritage Register. The development listed in this Exemption Certificate is approved by the Queensland Heritage Council as exempt development under s.35(4) and s.37 of the *Queensland Heritage Act 1992*. It may be undertaken without further approval by the Queensland Heritage Council provided it is carried out in accordance with this Exemption Certificate and corresponding guidelines (as amended from time to time).

The General Exemption (G1) applies only to specified development in the following categories:

- ▶ building maintenance;
- ▶ landscape maintenance;
- ▶ painting; and
- ▶ minor repairs.

The development must be carried out doing as much work as is necessary to repair and secure and to make a place function, but as little as possible, so the history of the place can continue to be recognised in its physical material and not detrimentally impact on the cultural heritage significance of the place.

EFFECTIVE

This **Exemption Certificate – General Exemption (G1)** is effective from 3 December 2004.

EXEMPTION CERTIFICATE
GENERAL EXEMPTION (G1)

Description of exempt development

BUILDING MAINTENANCE

The following building maintenance works are permitted under this General Exemption (G1) and are exempt development under s.35(4) of the *Queensland Heritage Act 1992*.

1. maintenance of any building, structure or monument where maintenance is the continuous protective care of existing material;
2. maintenance of an item to retain its condition or operation;
3. removal of surface deposits, organic growths or graffiti using low pressure water (less than 100psi at the surface being cleaned) or other non-damaging agent, neutral detergents and mild brushing and scrubbing as appropriate for the surface;
4. clearing of paths and drains; and
5. cleaning undertaken in accordance with the cleaning guideline [General Exemption (G1) guideline G1.1.3].

Building maintenance work does NOT include:

- removal of or damage to existing materials; or
- introduction of new materials.

EXEMPTION CERTIFICATE
GENERAL EXEMPTION (G1)

Description of exempt development

LANDSCAPE MAINTENANCE

The following landscape maintenance works are permitted under this General Exemption (G1) and are exempt development under s.35(4) of the *Queensland Heritage Act 1992*.

1. the processes of gardening, namely:- weeding, watering, mowing, top-dressing, hedge clipping, bedding displays, removal of dead trees and plants, replanting the same species or cultivar, disease and pest control and fertilising necessary for the continued health of plants;
2. replanting to conserve the significant landscape character or planting theme;
3. in the event of the loss of any significant planting, replanting with the same species;
4. pruning to control size, improve shape, flowering or fruiting and the removal of diseased, dead or dangerous material, not exceeding 20% of the crown of a tree within a period of 2 years; and
5. maintenance of existing hard landscape elements including roads, driveways, tennis courts, pools, paths, fences, gates, walls, edges, pavilions, arbours and gazebos, bush houses and the like, drains, water reticulation facilities and other utilities.

Landscape maintenance work does NOT include:

- removal, major alteration or destruction of any significant above-ground features or sub-surface archaeological artefacts or deposits; and
- damage or major alterations to layout, garden walls and edges, surfaces, contours, plant species, or other significant landscape features.

EXEMPTION CERTIFICATE
GENERAL EXEMPTION (G1)

Description of exempt development

PAINTING

The following painting works are permitted under this General Exemption (G1) and are exempt development under s.35(4) of the *Queensland Heritage Act 1992*:

1. painting that uses the existing colour scheme; or
2. painting that uses a documented surface preparation, paint system and colour scheme that has been approved by the Queensland Heritage Council; and
3. painting of an interior area of a building which has been approved by the Queensland Heritage Council as not being of cultural heritage significance.

Painting work in 1. and 2. must also

- use an undercoat over existing paint work as an isolating layer to provide a means of protection for significant earlier layers or to provide a stable basis for repainting; and
- use a paint type or system that is appropriate to the substrate and does not endanger the survival of earlier paint layers; and
- prepare the surface by cleaning, hand scraping and hand sanding only; except that an orbital sander may be used as a smoothing / finishing tool.

Painting work NOT permitted under the General Exemption (G1) includes:

- painting over an original finish; or
- painting over or removing wallpaper that is an original or significant finish; or
- painting over a surface that has never been painted; or
- painting over a varnished surface; or
- removal of all paint to the substrate; or
- disturbance or removal of earlier paint layers other than that which has failed by chalking, flaking, peeling or blistering.

EXEMPTION CERTIFICATE
GENERAL EXEMPTION (G1)

Description of exempt development

MINOR REPAIRS

The following minor repairs are permitted under this General Exemption (G1) and are exempt development under s.35(4) of the *Queensland Heritage Act 1992*:

1. repair or replacement of missing, damaged or deteriorated physical material that is beyond further maintenance and that matches the existing physical material in appearance, material and method of fixing; and
2. replacement of services such as cabling, plumbing, wiring and fire services that use existing service routes, cavities or voids or replace existing surface mounted services.

Repairs MUST

- be based on the principle of doing as little as possible and only as much as is necessary to retain and protect the element;
- maximise protection and retention of physical material and include the conservation of existing detailing; and
- match like with like.

Repairs MUST NOT

- involve a high proportion of the physical material of an element or of the place;
- involve damage to or removal of significant physical material;
- use new materials that exacerbate the decay of existing physical material due to chemical incompatibility;
- obscure existing physical material; or
- limit access to existing physical material for future maintenance.

EXEMPTION CERTIFICATE GENERAL EXEMPTION (G1)

CONDITIONS

These conditions apply for all exempt development in the categories of building maintenance, landscape maintenance, painting and minor repairs listed in the General Exemption (G1).

1. The only development authorised by this Exemption Certificate is the work listed and described in this certificate issued by the Queensland Heritage Council.
2. The works must only be carried out in accordance with the current approved guidelines.
3. All exempt development is to be planned and carried out in a manner that prevents damage to the physical material of the registered place.
4. If original or previously hidden or inaccessible details of the place are revealed which relate to its significance, then the exemption covering this development will cease and the Environmental Protection Agency is to be notified as soon as possible.
5. Notwithstanding the granting of this Exemption Certificate the Queensland Heritage Council may revoke the exemption certificate or amend the exemption certificate (including conditions) if the cultural heritage significance of the place is at any time threatened or harmed.
6. This Exemption Certificate is effective from the date of issue until amended or revoked by the Queensland Heritage Council.
7. It is the responsibility of the owner of the registered place to ensure that all development is carried out in accordance with the Exemption Certificate.

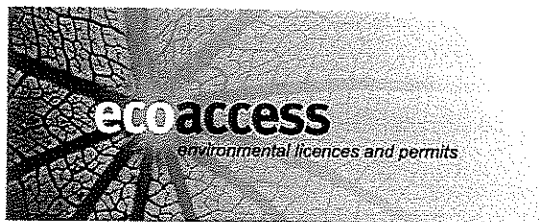
NOTE

Nothing in this Exemption Certificate exempts owners or their agents from the responsibility to obtain relevant planning or building approvals from the responsible authorities.

GENERAL EXEMPTION (G1) GUIDELINES

All exempt development must be carried out in accordance with this Exemption Certificate and the corresponding guidelines. These are the General Exemption (G1) guidelines.

Exemption certificates: overview	G1.4.1 Minor repairs: approvals – what and why
General exemptions: overview	G1.4.2 Minor repairs: metal roofing
Lead paint: cautionary note	G1.4.3 Minor repairs: slate and terracotta roof tiles
Asbestos: cautionary note	G1.4.4 Minor repairs: timber
G1.1.1 Building maintenance: approvals – what and why	G1.4.5 Minor repairs: timber doors and windows
G1.1.2 Building maintenance: inspections	G1.4.6 Minor repairs: window and door hardware
G1.1.3 Building maintenance: cleaning	G1.4.7 Minor repairs: metal work
G1.2.1 Landscape maintenance: approvals – what and why	G1.4.8 Minor repairs: stone / masonry
G1.2.2 Landscape maintenance: outline	G1.4.9 Minor repairs: steel framed windows and doors
G1.3.1 Painting: approvals – what and why	G1.4.10 Minor repairs: services
G1.3.2 Painting: maintenance	
G1.3.3 Painting: glossary	



Application form

Cultural Heritage

Exemption certificate (State-owned registered place)

Exemption certificates may be issued by the Queensland Heritage Council for certain types of development listed under Section 46(5)* of the *Queensland Heritage Act 1992*. Applications for an exemption certificate must provide sufficient information to fully illustrate the proposal and must include:

- the completion of this form;
- photographs and/or drawings of the existing condition of location of the proposed development;
- a description, drawings and/or details of the proposed development; and
- a statement of impact (the impact of the proposal on the cultural heritage significance of the place).

Lodge your application with the **Ecoaccess Customer Service Unit (ECSU)** in Brisbane.

Information sheets and guidelines for development covered by exemption certificates are available from the Environmental Protection Agency (EPA) website or local EPA office. You may find it helpful to discuss your proposals with your local EPA office before submitting your application.

Place affected by proposed development

Name of place			
Address			
Real property description (Lot/Plan)			
Queensland Heritage Register number			
Local government details			

Applicant details (must be the owner)

Name			
Address			
Telephone (Business hours)		Fax	
Telephone (After hours)		Email	

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Environmental Protection Agency
www.epa.qld.gov.au ABN 87 221 158 785



Application form
Exemption certificate (State-owned registered place)

Agent details (if applicable, eg: architect, builder, solicitor etc)

Name			
Address			
Telephone (Business hours)		Fax	
Telephone (After hours)		Email	

Please tick (in the right hand column below) the exemption being applied for with this application. You may tick more than one box.

Proposed development for exemption under s.46		Submission requirements	
			✓
a)	Maintenance work	Submit details sufficient to demonstrate the existing condition of the place, the proposed development and a statement of impact to the ECSU.	☐
b)	Minor repair work	Submit details sufficient to demonstrate the existing condition of the place, the proposed development and a statement of impact to the ECSU.	☐
c)	Other minor work	Submit details sufficient to demonstrate the existing condition of the place, the proposed development and a statement of impact to the ECSU.	☐
d)	Liturgical purposes	Submit details sufficient to demonstrate the existing condition of the place, the proposed development, a statement of impact and a <u>certificate</u> authorised by an official of the religious organization to the ECSU.	☐
e)	Heritage Agreement	Submit details of the Heritage Agreement to the ECSU.	☐
f)	No impact on significance (for works that do not fit categories a-e)	Submit details sufficient to demonstrate the existing condition of the place, the proposed development and a statement of impact to the ECSU.	☐

Application form
Exemption certificate (State-owned registered place)

Description of the proposed works (include work methods and materials to be used)
(if insufficient space, please attach details)

Estimated cost of proposal \$	Drawings / work methods attached YES / NO	Photographs attached YES / NO

Statement of impact (demonstrating no impact on cultural heritage significance)
(if insufficient space, please attach details)

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Application form

Exemption certificate (State-owned registered place)

Applicant's name (owner)

Applicant's signature (Owner)

Date

Please return 3 copies of your completed application to:

Ecoaccess Customer Service Unit

Environmental Protection Agency

PO Box 15155

City East

Queensland 4002.

Enquiries: 1300 368 326

Facsimile: (07) 3115 9600

Email: eco.access@epa.qld.gov.au

Forms can be hand delivered to:

EPA Customer Service Centre

Ground floor

160 Ann Street

Brisbane

*References to section numbers in the *Queensland Heritage Act 1992* refer to Reprint No. 3 published on 8 July 2006. A full list of renumbered sections can be found in Endnote # 8 in the Act.

Susan McIntyre-Tamwoy, James Cook University

artefact composition and density description etc)

Archaeological context (tick all that apply)

☐ Above ground ☐ Below ground ☐ Submerged ☐ Potential ☐ Other	
Artefact Density (count/m ²)	Overall dimensions ☐ Measured ☐ Approximation Length (m): Width (m):
Depth of Deposit:	Visibility (% overall site visibility):
Site condition Disturbance: ☐ Heavy ☐ Moderate ☐ Minor ☐ Undamaged Describe:	

Site sketch/plan (note each grid square measures 1cm x 1cm)

Scale 1cm =

NW

NE

SW

SE

Please attach any extra information, including GPS points and photos taken of the site. Include explanatory note(s) for each photo and date(s) taken.

Townsville Manager, Cultural Heritage Pallarenda Road PO Box 5391 Townsville, QLD 4810 Phone: (07) 4722 5338 Fax: (07) 4722 5331	Rockhampton Manager, Cultural Heritage 61 Yeppoon Road PO Box 3130 Rockhampton Shopping Fair, QLD 4701 Phone: (07) 4936 0577 Fax: (07) 4936 2212	Townsville Manager, Cultural Heritage Pallarenda Road PO Box 5391 Townsville, QLD 4810 Phone: (07) 4722 5338 Fax: (07) 4722 5331	Rockhampton Manager, Cultural Heritage 61 Yeppoon Road PO Box 3130 Rockhampton Shopping Fair, QLD 4701 Phone: (07) 4936 0577 Fax: (07) 4936 2212
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Appendix G: Standard Questions to cover in a Statement of Heritage Impact.

Cover page to include the following:

Statement of Heritage Impact for [Project title]

This statement forms an adjunct to the
[Statement of Environmental Effects/DA/etc] for

Date: [date]

Reference: Registered Item on the
Queensland Heritage
Register. [name/gazettal
date]

Address and property description [address]

Prepared by: [name of officer or
consultant]

For: [Client if relevant]

The following heads should be covered in a SoHI. It should also include a map, plan or drawing to indicate where the proposed work will take place. It is always a good idea to include any photos or drawings that will illustrate the nature of the work, impact, disturbance. Remember if this SoHI is to be externally assessed then it needs to lead the assessor through the process from understanding the nature of the work, it's potential for disturbance or impact and the measures that you propose to minimise to mitigate that impact. If the assessment is handled externally, the assessor may or may not know the site well.

The SoHI then forms a record that you should archive documenting changes and proposal relating to the heritage item. It should be archived with the files relating to the heritage site.

Introduction

The Proposal

The Heritage Impact of the Proposal

1. Why is the new development required to be adjacent to the heritage item?
2. The following aspects of the proposal respect or enhance the heritage significance of the item and conservation area for the following reasons:
3. The following aspects of the proposal could detrimentally impact on heritage significance.
4. The following sympathetic solutions in relation to the Aboriginal Place have been considered and discounted for the following reasons:
5. The following impact mitigation measures will be instigated:

Attachments

1. Heritage Listing Information

References