City of Lake Macquarie Heritage Study

Volume 1: Report
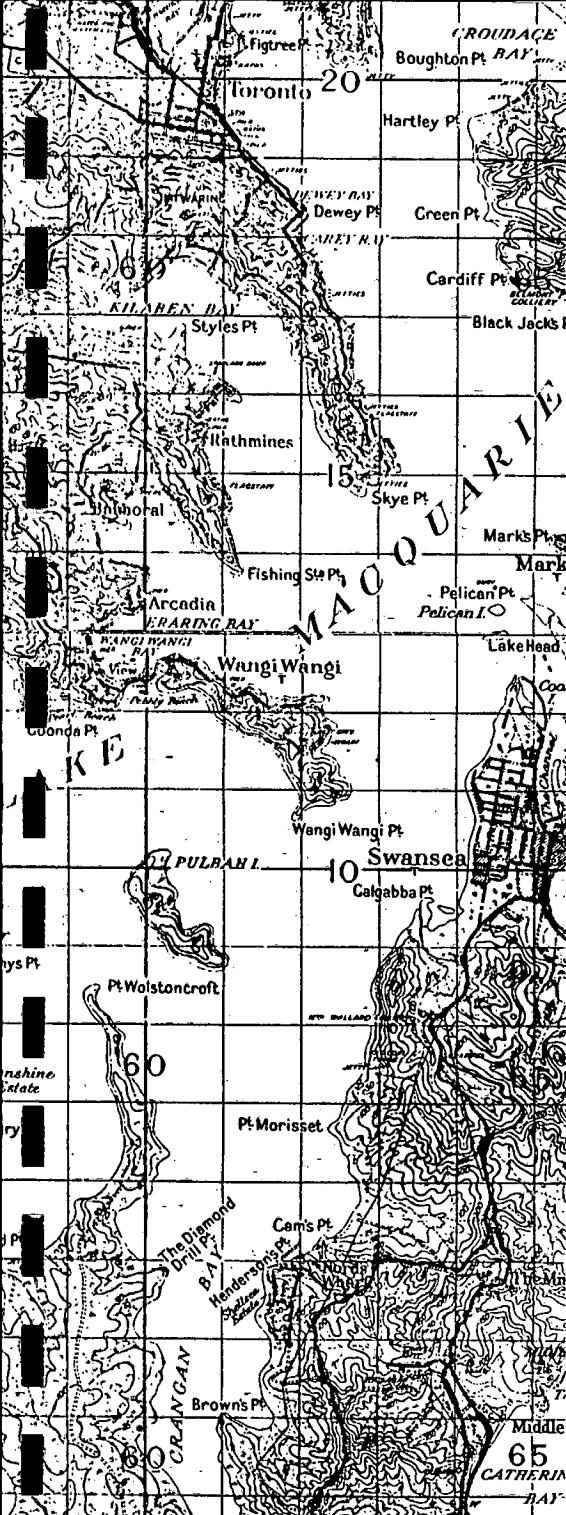
December 1993

City of Lake Macquarie Heritage Study
Final Report

Prepared for

Lake Macquarie City Council
126-138 Main Road
SPEERS POINT NSW 2284
Tel: 049 210 333

by

SUTERS ARCHITECTS SNELL

Bond and Telford Streets
NEWCASTLE NSW 2300
Tel: 049 265 222

in association with

Dr John Turner
Hunter History Consultants
2/49 Telford Street
NEWCASTLE NSW 2300
Tel: 049 265 129

and

C and MJ Doring Pty Limited
5 The Crescent
CHATSWOOD NSW 2067
Tel: 02 411 6390

December 1993

Acknowledgments

The Completion of a study of this type involves a great commitment from many people. We would like to express our gratitude to those people who have been involved in the study process, and who have provided valuable input to the direction and content of the study.

In particular we would like to thank Cathy Blunt, Strategic Planner at Lake Macquarie City Council, for her enthusiasm and commitment to the project, as well as the other Council staff who have assisted.

We would also like to thank the representatives of the Department of Planning who have provided assistance and guidance through the course of the study.

In addition, we thank all members of the Lake Macquarie community who, on a voluntary basis, provided input to the study either by supplying information on individual items or by allowing members of the team access to items of interest. Without such local knowledge and assistance our task would have been made immeasurably more difficult.

Brian Suters
SUTERS ARCHITECTS SNELL

Table of Contents

Volume 1: Report

page

List of Schedules

List of Diagrams

List of Historic Plates

List of Historic Maps

Volume 2: Inventory
Data Sheets: Arcadia Vale - Kotara South, AV-KS

Volume 3: Inventory
Data Sheets: Lake Macquarie - Yarrawong Park, LM-YP

1

1. Introduction

1.0.1 Background

This study was commissioned by Lake Macquarie City Council in February 1992. It has been prepared as a result of a grant under the Heritage Assistance Program for 1992 administered by the Department of Planning, in conjunction with funding by the Lake Macquarie City Council.

The Study team for the project comprised:

- **Suters Architects Snell**
  Co-ordination and Planning
- **Dr John Turner**
  Historic Overview
- **C. & M.J. Doring Pty Limited**
  Archaeology and Inventory

1.0.2 Report Format and Use

This final version of the report is the culmination of several draft reports which have been circulated amongst the Steering Committee, the Department of Planning and other relevant individuals.

The report content and format is based on the guidelines set out in the State Heritage Study Guidelines and the associated State Heritage Inventory Project (SHIP).

It has also been prepared with acknowledgment of the needs of the final day-to-day users. These include Councillors and Council staff, consultants in the heritage and construction fields, heritage groups, individuals who own or control heritage items, as well as those members of the broader community with an interest in their city's heritage.

The report should not be seen as a static or final document in the process of heritage conservation within the City. In particular, the need is identified for continuing review of the inventory items.

The preceding Table of Contents provides the basic reference guide for the study, however the following categories of information might form the basis of a more comprehensive index.

a. Recommended Initiatives:
   Specific recommendations of this study are covered in Section 6 under the separate headings of 'Recommendations'. In addition, there are many recommendations relating to individual items and these can be found in the relevant pages of the inventory.
b. Increasing Community Awareness:
   Items aimed at increasing community awareness of heritage issues or involvement in the conservation process are included in section 6.3.
c. Further Research:
   Items requiring further research by either the general community or heritage professionals, groups and students are covered in section 6.2.
d. Schedule of Buildings and Other Items:
   A complete summary of all items included in the inventory will be found in Appendix 8. A schedule of those items from the inventory nominated for protection under the Local Environmental Plan is included as Schedule 5.1.

Sections, Appendices, Maps and Plates are cross referenced throughout the text eg. (Section 6.3). Important points are underlined, particularly in the Historic Themes. Inventory reference numbers are noted in brackets where relevant eg.(CH-01).

1.0.3 Terminology

Throughout this study the conservation terminology used is consistent with that of the Burra Charter. This includes definitions for such terms as *preservation, restoration* and *reconstruction.* (Appendix 2)

The term *'item of environmental heritage'* is used frequently in this report. It is defined in the NSW Heritage Act 1977 as *"...those buildings, works, relics or places of historic, scientific, cultural, social,archaeological, architectural, natural or aesthetic significance".* The term *'relic'* is further defined as *"...any deposit, object or material evidence...which relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement; and...which is 50 or more years old".* An item is therefore not specifically a building, and Inventory items are noted as to their type in this regard.

1.1 Study Objectives

The Objectives of the study are:

a. **To identify and analyse the environmental heritage of the Local Government Area;**

and

b. **To make practical recommendations for its conservation and management.**

The Study Area includes the whole of the Lake Macquarie Local Government Area.

The study covers only European settlement of the Lake Macquarie area. Issues related to aboriginal or natural heritage are not addressed, though some natural features have been identified in the inventory.

1.2 Study Approach

The study approach has involved the following phases:

Phase 1.
Liaison and Data Collection

a. The National Trust
b. Department of Planning-Heritage Branch
c. Local Historical Society
d. State Rail Authority
e. Lands Department
f. Public Works Department

Phase 2.
Inventory

Collation of information into the inventory from various sources including:

a. National Trust Register 1993
b. Hunter Regional Environmental Plan 1989 - Heritage
c. Heritage Council Register
d. Register of the National Estate
e. Historical Society and other published sources
f. Royal Australia Institute of Architects
g. Institution of Engineers Heritage list
h. P.W.D. Conservation list
i. Other references as noted

Phase 3.
Historical Themes

Analysis of primary and secondary sources to identify the major Historic Themes in the development of the area, and identify potentially significant items.

Phase 4.
Archaeological Assessment

Review of potential archaeological sites and recommendations for future archaeological work.

Phase 5.
Fieldwork

Including ground survey of urban and rural areas:

a. Identification of items of possible significance.
b. Field assessment of known items.
c. Field assessment of potential items from thematic study.

Phase 6.
Regional Context

Analysis of regional context to identify the current socio-economic context and identify the potential constraints and pressures which may result from these circumstance.

Phase 7.
Planning and Development Context

Analysis of the development and planning context to identify existing trends and potential conflicts with conservation objectives.

Phase 8.
Heritage Strategy

Preparation of a strategy for heritage conservation for the area, based on the criteria identified in previous analysis, and recommendations for their implementation including:

a. Further Research
b. Increasing Community Awareness
c. Local Government Initiatives
d. An Appropriate Planning Framework

1.3 Regional Context

1.3.1 Area and Population

The City of Lake Macquarie has experienced rapid population growth in the latter half of this century, increasing from a population of 50,000 persons in 1947 to 158,000 persons in 1986. An estimate based on the 1991 census puts the current population at 168,000 persons.

Lake Macquarie City is the largest and most populous Local Government Area in the Lower Hunter, and is contiguous with the Newcastle Urban Area located immediately to the North. While geographically in a separate catchment area to the Hunter River Valley, Lake Macquarie is generally considered in socio-economic terms to be part of the Hunter, and is included in the Hunter Regional Environmental Plan.

The Lake Macquarie Local Government area covers 749 square km. incorporating the largest saltwater coastal lake (or estuarine lagoon) in Australia with a surface area of approximately 110 square kilometres. The City's boundaries to the west and north coincide approximately with the catchment of the Lake. The Council administration centre is located at Speers Point on the northern extreme of the lake.

The city is made up of a number of urban areas which have expanded from small coal mining, tourism and transportation centres. An Ordnance map dating from the 1940's shows approximately fifty settlements and localities, at a time when the population was less then 50,000 persons. The inventory list currently notes 89 separate places or areas.

Major expansion of the city has resulted in many of these small towns and villages becoming part of larger urban areas.

1.3.2 The Economy

The Growth of Lake Macquarie has resulted from a number of factors, with major aspects of the economy including:

- The expansion of coal mining to service nearby manufacturing, power generation and export markets;
- The development of tourism and recreational facilities;
- The development of the tertiary services sector; and
- The food industry, principally poultry and breakfast cereal processing.

Improvements in private transportation have also resulted in many areas of the Lake becoming more accessible for persons employed in Newcastle and other adjacent Local Government areas, allowing people to live in areas of high scenic value with an abundance of recreational opportunities.

Growth in the city has been accompanied by a corresponding expansion in the range of employment, retail and service functions.

Major industrial areas are located at Cardiff, Bennetts Green and Warners Bay, with smaller areas at Gateshead, Rathmines, Toronto, Redhead, Cooranbong and Boolaroo.

A major commercial and service centre has been developed at Charlestown, the centre of the most densely populated area within the City. Charlestown was identified in the Lower Hunter Commercial Centres Review of 1990, compiled by the Department of Planning, as the largest retail centre in the Lower Hunter after Newcastle CBD. Significant retail activities are also located at Belmont and Toronto, with lesser order centres at Cardiff, Boolaroo, Morrisset, Swansea, Wangi and Warners Bay.

Dramatic changes are also taking place in transport infrastructure, with the construction of the freeway and other roadworks making the western side of the City more accessible to traffic from the north and south of the Local Government area. Morisset, Palmers Creek and West Wallsend mark these new entrances from the freeway, and will come under pressure to expand because of this.

Coal mining in the area is being dramatically
affected by restructuring within the industry in
the Lower Hunter. A number of mines have
closed as changes in technology are
implemented and open cut ventures are
established elsewhere in the Hunter Valley.

The tourism and tertiary services sectors
have expanded, and use of the Lake as a
regional recreational resource has
significantly expanded.

HERITAGE
STUDY AREA

NEWCASTLE

BELMONT
MORISET
SWANSEA

GOSFORD

SYDNEY
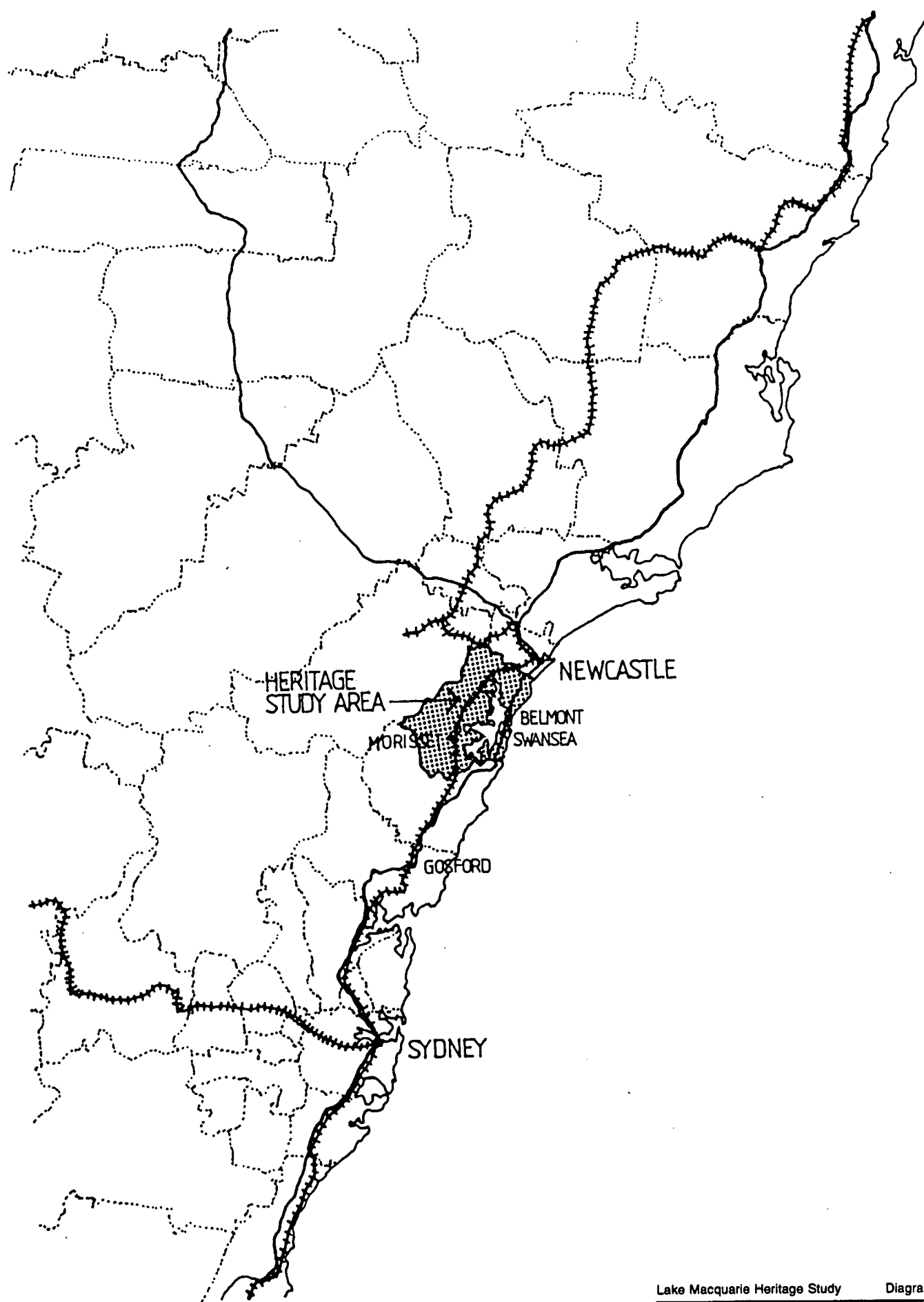
Lake Macquarie Heritage Study   Diagram

Location Diagram

Not to scale
Drawn by Suters Architects Snell

1.1

PARISH OF STOCKRINGTON

OF HEXHAM

PARISH OF KILABRING

PARISH OF TERALBA

PARISH OF NEWCASTLE

N

I.S.G.

LAKE MACQUARIE

PARISH OF COORUMBUNG

PARISH OF AWABA

PARISH OF COLA

LAKE MACQUARIE

PACIFIC OCEAN

PARISH OF MANDOLONG

PARISH OF MORISSET

LAKE MACQUARIE

PARISH OF KAHIBAH

SOUTH PACIFIC

PARISH OF JILLIBY
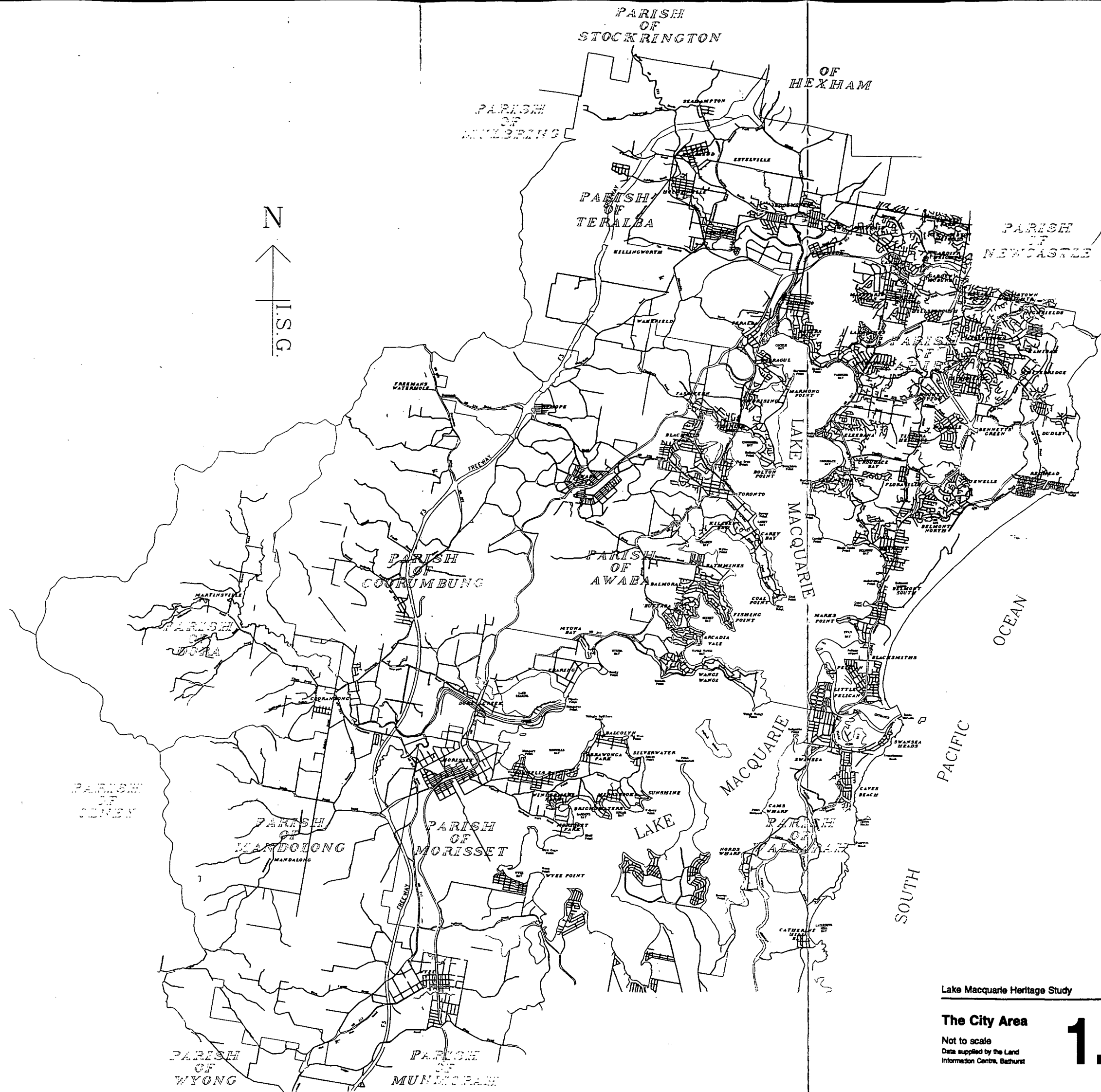
Lake Macquarie Heritage Study   Diagram

The City Area

Not to scale

Data supplied by the Land
Information Centre, Bathurst

1.2

PARISH OF WYONG

PARISH OF MUNMORAH

2

2. Statutory, Planning and Development Context

2.1 National Strategies, Controls and Registers

2.1.1 The National Trust

Although exercising no statutory control over conservation the National Trust has significant leverage, being amongst other things a strong lobby group for the heritage conservation movement in Australia.

The Trust, through its register, has identified what it believes to be some of the more significant components of our heritage. Through its committees, the Trust is able to investigate and assess specific types of items including cemeteries, industrial archaeological sites and historic buildings, urban conservation areas and landscape conservation areas.

The National Trust data sheets and map supplement have formed a valuable resource in this study. Items in the area currently listed in the National Trust Register include:

Classified and Recorded Items:

- **Quigley Burial Site**
  Ellesmere & Primrose Streets, Booragul
- **Catherine Hill Bay Urban Conservation Area**
  Catherine Hill Bay and Middle Camp
- **Catherine Hill Bay General Cemetery**
  Flowers Drive, 1km North of Post Office, Catherine Hill Bay
- **Avondale Seventh Day Adventist Cemeteries Nos 1 & 2**
  College Road, Cooranbong
- **St Patrick & St Brigid's Roman Catholic Cemetery**
  Martinsville & Babers Roads, Cooranbong
- **Residence** (formerly Post Office)
  45 Martinsville Road, Cooranbong
- **Avondale College Group** - Cooranbong
- **Preston Hall** - Cooranbong (demolished)
- **Bethel Hall** - Cooranbong
- **Chapel** - Cooranbong
- **Lambton Colliery**

- **Toronto Railway Station** (redundant)
- **Toronto - Fassifern Rail Line** (redundant)
- **Toronto Hotel**
  Victory Parade, Toronto
- **Timber Cottage**
  20 James Street, West Wallsend
- **West Wallsend General Cemetery**
  Cemetery Road, West Wallsend
- **Museum Hotel**
  Laidley & Wilson Streets, West Wallsend
- **Flats** (formerly Hotel)
  Hyndes & Wilson Streets, West Wallsend
- **Post Office**
  Carrington & Hyndes Streets, West Wallsend
- **The Store** (facade)
  Withers Street, West Wallsend
- **Shop, The Margaret Salon**
  55 Carrington Street, West Wallsend
- **Boarding House**
  61 Carrington Street, West Wallsend

The John Darling Colliery is in the process of classification. The Trust has also classified Landscape Conservation Areas at Upper Dora Creek and Glenrock-Burwood.

2.1.2 The Heritage Commission

The Australian Heritage Commission is a Statutory Authority established under the Australian Heritage Commission Act 1975. The Commission advises the Federal Minister for Arts Heritage and the Environment on all matters relating to the National Estate, and keeps a register which incorporates the most significant parts of the cultural and natural environment of Australia. Inclusion of any place on the register makes it incumbent upon Commonwealth Ministers and Authorities to avoid any action which would adversely affect that place.

There are currently several entries in the National Estate Register for the City of Lake Macquarie, these are:

Registered Places:

- **Cooranbong Post Office** (former)
  41 Martinsville Road, Cooranbong
- **Dudley Public School**
  Cnr Boundary and Ocean Streets, Dudley
- **Toronto Hotel**
  74 Victory Parade, Toronto

Registered Reserves:

- **Awabakal Nature Reserve**
- **Fennell Bay Reserve**
  Awaba Fossil Forest
- **Moon Island Nature Reserve**
- **Belmont Reserve**
  Tingira Heights Fossil Insect Beds
- **Pulbah Island Nature Reserve**

Items Under Investigation:

- **Stockton Borehole Colliery Railway and Access Road**
- **Toronto Railway Station & Masters Room**
- **Toronto to Fassifern Rail Corridor**
- **Lambton Colliery**

2.1.3 The Burra Charter

This charter has been adopted by ICOMOS Australia as a basis for conservation in Australia (ICOMOS is the International Council on Monuments and Sites, a UNESCO affiliated association of professional conservation practitioners world wide).

The Burra Charter includes statements regarding conservation principles, processes and practice, and is supplemented by guidelines for the establishment of cultural significance and the formulation of a Conservation policy and strategy for any item. (Appendix 2). The charter is broadly accepted as a basis for heritage conservation philosophy, procedures and practice throughout Australia, and is consistent with international practice.

2.2 State Policies, Ordinances and Controls

The main State controls relevant to this study are examined in the following sections:

2.2.1 Heritage Act 1977
2.2.2 Local Government Act 1993 and Associated Controls
2.2.3 The Environmental Planning and Assessment Act 1979
2.2.4 Other Acts and Controls

2.2.1 Heritage Act 1977

The Heritage Act 1977 (amended 1987) is administered by the Minister for Planning on the advice of the Heritage Council of NSW.

The Heritage Act contains provisions to facilitate conservation varying from the issue of Interim (ICO) and Permanent (PCO) Conservation Orders, through to orders preventing unauthorised demolition or alteration under relevant sections of the Act. The Heritage Council can provide benefits ranging from rating and taxation relief through to direct financial assistance, loans and loan guarantees where an item is subject to a PCO. The Minister also has the authority to waive planning restrictions for conservation projects in certain circumstances.

Items within Lake Macquarie which have been subject to orders under the Heritage Act include:

Interim Conservation Orders.

- **The Store**
  Withers Street, West Wallsend.
- **Northumberland Hotel** (former)
  Wyndes Street, corner Wilson Street, West Wallsend

Current Orders under Section 130

- **Miners Cottages Group**
  Charlestown Road, Charlestown

2.2.2 Local Government Act 1993 and Associated Controls

The Local Government Act 1993 was introduced in July 1993 and supersedes the 1919 Act (with the exception of the Savings Provisions, however these are of little relevance to this study). There is currently insufficient experience with the Act to determine its precise implications for heritage conservation, however some important issues can be identified.

The Act establishes the framework within which Local Councils operate (Clauses 21-23), both in terms of their obligations to the area's residents (such as providing services), and authority to exercise certain functions (to collect rates and enforce certain orders).

Clause 8 of the Act specifically notes several points of a council's charter, including the need to *"exercise community leadership"* and to *"properly manage, develop, protect, restore, enhance and conserve the environment of the area for which it is responsible"*. Both of these are particularly relevant to a Council's approach to its Heritage.

It also addresses specific Heritage issues, including:

- Clause 89 (3): In determining an application for development Council must consider *"any items of cultural and heritage significance which might be affected"* by that development;
- Clause 142: Similarly when issuing an Order, Council must consider *"its impact on the heritage significance of the item... give notice to the Heritage Council of the Order and consider any submission made to it by the Heritage Council"*; and
- Clause 68 (1): *"A person may demolish a building only with the prior approval of the Council."*

This last clause is a major addition to the Act in terms of heritage conservation in that it provides for demolition control. Under the 1919 Act, approval was not required to demolish a building unless it was specifically protected, for example by a PCO or ICO. This led to many important buildings being demolished without any prior warning, and hence without any time for petition by the community about the merits of such buildings and the desirability for their retention. The potential for demolition control to halt such loses is very important in terms of the management of heritage resources (Section 6.5.2.3).

A further point noted in a council's charter is the need *"to bear in mind that it is the custodian and trustee of public assets and to effectively account for and manage the assets for which it is responsible"*. This is elaborated on in various clauses including:

- Clause 403 (2): The requirement for councils to prepare draft management plans on an annual basis is identified elsewhere. This clause specifically notes that the Statement of Principal Activities in

such plans must include, amongst other things, a statement with respect to: *"activities to protect environmentally sensitive areas and to promote the ecological sustainability of the area..."*
- Clause 428 (2): A council must also prepare an annual report detailing its achievements in relation to such management plans, including statements on, amongst other things *"areas of environmental sensitivity; development proposals affecting, or likely to affect, community land or environmentally sensitive land"* and *"any environmental restoration projects"*.

While neither of these specifically note heritage and conservation as areas of concern, these should be included in any such documents. Heritage items should be seen as an essential part of our environment, and hence a part of the *"public assets"* for which council is the *"custodian and trustee"*.

The Act also establishes the grounds on which a council may approve a building application for new work, including alterations to existing items. A principal requirement is compliance with certain standards. These were previously set out under Ordinance 70, however this has now been superseded by the Building Code of Australia. Implications of both are discussed below.

2.2.2.1 Ordinance 70

Ordinance 70 has now been largely superseded by the Building Code of Australia, or BCA. (BCA does still nominate the Administrative Provisions of Ordinance 70, however these are of little relevance to this study.) Ordinance 70 affected conservation of the built environment in several ways, and many of these issues are unlikely to alter significantly under the BCA, at least initially.

Firstly, Ordinance 70 established standards for new infill buildings which may have made it difficult to sensitively integrate new with old (eg. requirements for external claddings, limitations on window openings and attachments to external walls).

Secondly, when applied to existing buildings it often resulted in a loss of internal and external detail, particularly in commercial

buildings where major alterations were required to meet fire safety and egress requirements. Late 19th and early 20th Century commercial architecture is particularly vulnerable, as such detail is integral to their design.

Finally, it created some ambiguity with respect to the requirements for above footpath awnings and verandahs, which again are part of that detail which is particularly important to much commercial architecture from the late 19th and early 20th Century.

Fire zones had been established in Lake Macquarie under Ordinance 70, with all commercial areas being within primary fire zones.

2.2.2.2 Building Code of Australia

As noted above, Ordinance 70 has now been superseded with the introduction of the Building Code of Australia. During 1992 either Ordinance 70 or BCA could be used, and from 1 January 1993 BCA became the sole control. Since its introduction five amendments have been issued, and in many ways the Code is still being fine tuned. There is currently insufficient experience with the Building Code of Australia to determine precisely its implications for heritage conservation. However all future applications will be assessed under BCA, and this will logically produce some different areas of concern in conservation terms. BCA for example, does not have provision for fire zones, which will have an impact on the requirements for materials on external walls within commercial zones. The exact implications of the code are therefore a matter which requires further appraisal.

2.2.3 The Environmental Planning and Assessment Act 1979

The Environmental Planning and Assessment Act 1979, amongst other things, establishes a framework for the preparation and implementation of Planning and Development Controls and identifies procedures to be followed and factors to be considered in these processes. Of particular significance to this study are several directions that are given by the Minister.

These include matters discussed in the following sections:

2.2.3.1 Section 117 Directions
2.2.3.2 State Environmental Planning Policies

2.2.3.1 Section 117 Directions

Section 117 (2) of the Environmental Planning and Assessment Act 1979, amongst other things, allows the Minister to direct any Public Authority having functions under the Act to exercise those functions within a specified time. Explanation of these directions is included within the Circulars issued by the Department of Planning. Some of the most relevant in this instance included:

DEP Circular No.84
Conservation, Heritage and Ecologically Significant Items and Areas

This circular has now been superseded by the Hunter Regional Environmental Plan 1989 - Heritage, (refer section 2.3.2).

A revision of the draft heritage provisions it contained has been prepared by the Department of Planning for inclusion in Local Environmental Plans. A copy of these revised Draft Model Heritage Provisions are included in this report (Appendix 1).

DEP Circular No.122
Flood Plain Development Manual

This circular relates to the development of flood prone land and procedures and policies to be adopted in the preparation of Local Planning instruments.

Requirements for elevated floor levels may create conservation conflicts within these areas when existing heritage items do not comply and/or extensions or alterations to these items are required to comply.

2.2.3.2 State Environmental Planning Policies

There are currently in excess of thirty State Environmental Planning Policies (SEPP) implemented under the Act many of which have relevance to Heritage Conservation:

The most relevant SEPP's include:

SEPP NO.1
Development Standards

Permits the variation of development standards where they may be unreasonable or unnecessary in the circumstances of the case. This provides a useful basis for concessions or bonuses to support conservation objectives.

SEPP NO.4
Development Without Consent

Permits minor changes in use to take place without the need for development consent for subdivision, shops and commercial premises, industry and light industry, alterations to buildings or works, and ancillary or incidental development. However, Clause 9 of the SEPP excludes heritage items and items within Conservation Areas from the provisions.

SEPP NO.5
Housing For Aged & Disabled Persons

This policy permits the erection of housing for aged or disabled persons on any land identified in the SEPP.

This includes a variety of residential and special uses zones, but excludes an area or zone identified for conservation purposes. Development standards for density, height, carparking and landscaping are included.

SEPP NO.25
Residential Allotment Sizes

This SEPP provides standards for the subdivision of land for residential purposes. It establishes minimum allotment sizes for single dwellings, dual occupancy developments and integrated housing developments.

It does not apply to any land which is within an area or zone identified for conservation purposes.

SEPP NO.28
Town Houses and Villa Homes

This policy forms part of a strategy for urban consolidation and generally permits the development of town houses or villa homes within a residential zone subject to a range of land suitability criteria.

Lake Macquarie has in place DCP No.9 that relates to these matters, and is exempt from this SEPP (Section 2.4.2).

SEPP No.32
Urban Consolidation

This SEPP applies to all urban land and requires that Council must consider the potential of land to be used for multi unit housing where it is no longer required for another purpose.

2.2.4 Other Acts and Controls

2.2.4.1 National Parks and Wildlife Act 1974

The protection of Aboriginal heritage, and it's care and management, are the responsibility of the director of the National Parks and Wildlife Service under the NPWS Act. The Act covers all Aboriginal relics and Places in NSW, and prohibits the knowing destruction, defacement or damage of any Aboriginal relic or place without the written consent of the Director.

Due to the possibility of vandalism, the service is reluctant to widely publicise the location and nature of Aboriginal relics and places. Council should ensure its officers are aware of the Aboriginal heritage of the City, to enable potential conflicts to be anticipated, and for conservation to be incorporated into planning strategies or plans of management. Council currently has all listed sites noted on its computer based property system, and close liaison with the NPWS should be maintained over development on all such sites.

An assessment of Aboriginal heritage was not included as part of this study.

2.2.4.2 Coal Mines Regulations Act, 1982

Recent cases have revealed a conflict between conservation objectives and the provisions of leases granted under the above act, specifically with respect to the need to *"restore"* areas once mining activity has ceased, often leaving an area of unnatural terrain and destroying all evidence of the site's significance.

For mining shafts, outlets or plant that have been abandoned, there is also provision to ensure that they are secured against access by the public. Such provisions have often been used as a reason for supporting the demolition of historic mining structures.

2.3 Regional Planning Instruments and Studies

The Lake Macquarie Area forms part of the Hunter Planning Region administered by the Department of Planning from Newcastle. The following Regional Plans are relevant.

2.3.1 Hunter Regional Environmental Plan 1989

This plan establishes the broad planning framework for the Hunter Region, and general planning objectives for a variety of issues including:

- Social Development
- Economic Development
- Land use and Settlement
- Transport
- Natural Resources
- Environmental Protection
- Conservation & Recreation

Within this plan, the Lake Macquarie area was targeted for substantial growth.

2.3.2 Hunter Regional Environmental Plan 1989 - Heritage

This plan includes measures to facilitate heritage conservation in the Hunter Region.

The plan identifies some items of State, Regional and Local significance. It also lists items requiring further investigation and

Conservation Areas. These are listed in the respective schedules below.

The plan includes requirements for the preparation of LEP's. This includes a requirement to include conservation provisions for items of Local Environmental Heritage (Schedule 3), and requires Councils to further investigate other items of potential significance (Schedule 4) to determine whether they also should be incorporated into the Local Environmental Plan Schedule. Councils are also required to examine Conservation Areas (Schedule 5) and prepare guidelines to assist in development control.

The plan also requires the referral of developments affecting items of State (Schedule 1) or Regional (Schedule 2) significance to the Department of Planning. When the item is of State significance the plan requires the Departments concurrence on such development.

The Regional Heritage Plan was prepared as a result of a study completed in 1987. This study included several recommendations of relevance to Lake Macquarie, such as the need to prioritise *'threatened'* categories of item for further investigation. Threatened categories included industrial archaeological items, commercial buildings (particularly hotels), and transportation (particularly rail).

Items within the City of Lake Macquarie which were included in the schedules are as follows:

Schedule 1
Items of State Environmental Heritage.

- **Fossil Tree Deposits** - Blackalls
- **Fossil Insect Deposits** - Tingira Heights

Schedule 2
Items of Regional Environmental Heritage.

- **Newcastle Mines Rescue Station**
  Lake Road, Cockle Creek
- **Avondale College Group** - Cooranbong

**Schedule 3
Items of Local Environmental Heritage**

- **Former Public School**
  Ocean & Boundary Streets, Dudley
- **John Darling Colliery**
  John Fisher Road, Belmont North
- **Stockton Borehole Colliery**
  Racecourse Road, Cardiff
- **Sanitarium Group**
  Freemans Drive, Cooranbong
- **Post Office** (former)
  45 Martinsville Road, Cooranbong
- **Northumberland Coal & Land Co.
  Colliery** - Fassifern
- **Killingworth Hotel**
  Killingworth Road, Killingworth
- **Lambton Colliery**
  Collier Street, Redhead
- **Manager's Residence** (former)
  Dudley Road, Redhead
- **Rhondda Colliery**
  Rhondda Road, Rhondda
- **Toronto Hotel**
  74 Victory Parade, Toronto
- **Post Office**
  Carrington & Hyndes Streets, West
  Wallsend
- **Co-Op Store** (former)
  Carrington & Withers Streets, West
  Wallsend
- **Brick Shops**
  Carrington & Withers Streets, West
  Wallsend
- **Northumberland Hotel** (former)
  Hyndes & Wilson Streets, West Wallsend
- **Baptist Church**
  Wallace Street, West Wallsend
- **Public School**
  Wallace & Withers Streets, West Wallsend
- **Museum Hotel**
  Laidley & Wilson Streets, West Wallsend

**Schedule 4 - Items requiring further
Investigation**

- **W. Young's House**
  23 Bellevue Road, Belmont
- **Hotel Belmont**
  Pacific Highway & Hitchcock Avenue,
  Belmont
- **Belmont Railway Station**
  Railway Pde, Belmont
- **John Darling Hotel** - Boolaroo
- **Wharf, Middle Camp Beach**
  Catherine Hill Bay

- **Wallarah East Pit**
  Flowers Drive, Catherine Hill Bay
- **Two Victorian Railway Cottages**
  Dora Street, Morisset
- **Council Chambers** (former)
  Main Road, Speers Point
- **Northern Extended Colliery**
  Rhondda Road, Teralba
- **Amos Bros. Quarry**
  Rhondda Road, Teralba
- **Great Northern Hotel**
  2 Anzac Parade, Teralba
- **Masonic Temple**
  Brown Street, West Wallsend
- **Catholic Church**
  Brown & Hyndes Streets, West Wallsend
- **Community Hall**
  Carrington Street, West Wallsend
- **Presbyterian Church**
  Wallace & Withers Streets, West Wallsend
- **North Burwood Colliery**
  Burwood Road, Whitebridge

Schedule 5 - Conservation Areas

- **Catherine Hill Bay Conservation Area**
- **Teralba Conservation Area**
- **West Wallsend Conservation Area**

2.3.3 Regional Heritage Studies

A series of heritage studies were carried out
for the Department of Planning during 1982.
These included two specialist archaeological
studies, a study of house styles, a study of
settlement patterns, and an historical survey
of the Region. Such studies provide valuable
background material for further research, and
should be catalogued or lodged as a group
at the Public Library to ensure this material is
readily accessible.

2.3.4 Draft Hunter Coastal Urban
Settlement Strategy

This Strategy (issued in discussion paper
form by the Department of Planning in March
1992) aims to provide a basis for the rational
and orderly release of urban land within the
coastal areas of the Hunter Region. It
identifies potential urban areas within the
coastal areas, including large tracts of land
within the City of Lake Macquarie. These
areas are consistent with those included in
the Regional Plan (Diagram 2.1).

2.4 Local Development and Building Controls

2.4.1 Lake Macquarie Local Environmental Plan 1984

Development within the City of Lake Macquarie is controlled under Lake Macquarie Local Environmental Plan 1984, as amended. This incorporates the Model Provisions (1980) and establishes zoning provisions for Lake Macquarie.

The current Local Environmental Plan does not however include any heritage conservation provisions.

2.4.2 Other Local Controls

Lake Macquarie currently has seven Development Control Plans. These include:

DCP No. 1   Wangi Wangi Commercial Centre
DCP No. 2   Development in General Industry Zones
DCP No. 3   Lake & Foreshore Development
DCP No. 4   Caves Beach/Cams Wharf Integrated Resort Development
DCP No. 5   Belmont Commercial Area
DCP No. 6   George Street Highfields
DCP No. 9   Medium Density Residential Development.

Note that DCP No. 9 supersedes DCP No. 7; Granny Flats and Dual Occupancies, and DCP No. 8; Town Houses & Villa Homes. Council also has subdivision and car parking codes in place.

At this stage there have been no particular issues of major significance in conservation terms which have been identified as arising out of these codes. However, some of these codes and DCP's require the addition of heritage considerations (Section 6.5.2.4).

2.4.3 Council Policies

Council has adopted Policy No. 88FPR432: Policy and Guidelines for the Treatment of Historic Buildings. Whilst the policy contains broad conservation objectives, they specifically relate to a process for selecting colour schemes and signage and are biased towards commercial buildings. The policy title should be amended to reflect this. Also, some terminology within the policy, specifically 'preservation' and 'restoration', are not in accordance with the definitions laid down in the Burra Charter.

Council has a tree preservation policy (Ref. 3/60/656/006 Item 1) which cover trees of *recognised cultural or historic significance*.

The Council has also commissioned a 'Vision Plan' document which contains a section on Heritage Management. It contains the broad heritage recommendation that Council should *protect and promote its heritage* and also the more specific statement that: *The recycling and re-use of heritage items is basically a question of community will and commercial viability*. The plan also includes landscape and aboriginal items of environmental significance.

2.5 Other Registers & Inventories

2.5.1 RAIA - 20th Century Buildings of Significance

The Royal Australian Institute of Architects maintains a register of important buildings from this century. Current listings within Lake Macquarie include:

- **Sanatarium Health Food Group** Factory, Office and Laboratory 1934-3

The Hunter Region Divisional Committee of the RAIA has also requested consideration be given to other 20th century buildings of more recent origin including:

- **Christchurch Anglican Church** - Toronto

2.5.2 Public Works NSW - Conservation List

a. **PWD Conservation List (1986-87)**

Items noted in the Conservation List include:

- **Dudley Public School** Ocean & Boundary Streets, Dudley (1892

by W. Kemp)
- **Dudley Public School Headmasters Residence** (demolished)
  Ocean & Boundary Streets, Dudley

b. Schools - Local List, Hunter Region

Public school buildings noted in The City of Lake Macquarie include:

- **Awaba** *   Brick   1891
- **Barnsley**   Timber 1909
- **Boolaroo** *   Brick   1897
- **Dudley** *   Brick   1892
- **Edgeworth** *   Brick   1880's
- **Morisset**   Brick   1891
  (includes residence)
- **Teralba** *   Brick   1899
- **Toronto** *   Brick   1892
  (includes residence)
- **West Wallsend**   Brick   1889

* Plans held in Newcastle.

2.5.3 Institution of Engineers

Liaison with the Institution of Engineers revealed no formal listings for the city.

2.6 Potential Conservation Issues and Threats

2.6.1 General Conservation Issues

General issues which need to be addressed in any future conservation strategy for Lake Macquarie include:

a. Planning Context

- There is a need for comprehensive LEP provisions appropriate to the area;
- There is a need for comprehensive DCP provisions to deal with development issues within the conservation areas;
- The need to identify items requiring conservation action for protection within any LEP or DCP; and
- The need for specialist input into the development assessment process.

b. Community Attitudes and Awareness

- Lack of awareness of the heritage resource;

- Lack of awareness of the cumulative effect of individual decisions on heritage items;
- Association of heritage with obsolescence, and contemporary buildings with success and growth;
- Lack of models of successful adaptive reuse;
- Ignorance of the need to consider context in the design process; and
- Design philosophies which do not incorporate awareness of heritage issues.

c. Changes in the General Pattern of Land Use

- Growth and suburban infill within small urban areas which have traditionally had a low density pattern of development;
- Increased intensity of use particularly medium density residential development or commercial development at higher floor space ratios; and
- Structural change within transport and coal mining industries.

d. Inappropriate Construction Materials and Methods

- Replacement of original building fabric with modern low maintenance materials, such as aluminium windows, fibrous cement wall cladding and concrete roof tiles.
- Lack of appropriate preventative maintenance of materials, in particular timber and ferrous metal components;
- The use of poorly manufactured materials, such as callow bricks; and
- Inappropriate repair methods, such as repointing in cement mortar over soft lime mortar.

2.6.2 Threats to Particular Categories of Heritage Item

There are many issues which relate to particular building types or categories of heritage item and which need consideration in future policy, including:

a. Residential Dwellings

Lake Macquarie contains a broad range of residential forms and styles which reflect a diverse socio-economic cross section. Negative issues associated with residential buildings include:

- Unsuitable or unsympathetic refurbishment of late 19th Century and early 20th Century building stock in order to provide:
  - Improved facilities particularly bathrooms, laundries and kitchens;
  - Less maintenance (eg. re-cladding);
  - Additional internal space; and
  - Altered windows (eg. size, material, opening mechanism and arrangement).
- Threat of Demolition particularly due to:
  - poor condition;
  - desire to replace at higher densities (redevelopment);
  - replacement with alternative land uses; and
  - relatively rarity of early building stock.
- Changes in street context due to:
  - redevelopment of adjoining sites;
  - road improvement and works programs; and
  - removal or replacement of fencing.

These threats particularly apply to small cottages associated with late 19th century coal mining settlements.

b. **Commercial Buildings**

Issues or threats to commercial buildings include:

- The need to provide contemporary services and amenities such as electricity, air conditioning, computer facilities, security etc.;
- The need to improve fire safety;
- Frequent changes in ownership or occupation;
- The desire by occupants to increase the presence of their business or modify their image through colour, graphics or modernisation of buildings; and
- Removal of important detail such as awnings, balconies, balustrades and parapets.

c. **Industrial Items**

Major issues or threats in relation to industrial items include:

- Finding appropriate and sympathetic alternative uses for redundant items or buildings designed for a specific purpose;

- Funding conservation of items with no obvious alternative use (eg. obsolete coal mines);
- Preventing the decay of items which are in a state of disuse or transition;
- Increasing the capacity of items which are poorly related to current levels of demand and service (eg. narrow wooden bridges);
- Integrating new uses in a way which retains the interpretive significance of the original item including plant and equipment;
- the need for specialist input into conservation; and
- allowing operating plants to be upgraded to meet current economic and technological requirements.

This particularly applies to coal mining, power generation and railway infrastructure.

d. **Ecclesiastical Buildings**

Major issues or threats in relation to ecclesiastical buildings include:

- Lack of awareness of conservation issues on the part of custodians;
- Financing appropriate levels of preventative maintenance at a time when congregations are diminishing;
- The temptation for churches to use subdivision of sites to provide capital for other activities;
- Changes in context due to subdivision of the curtilage of ecclesiastical buildings;
- The need for specialist professional and trade input into conservation of elements such as stonework, brickwork, leadlight, slate, etc.;
- Finding appropriate uses for obsolete churches due to rationalisation of parishes or construction of larger spaces; and
- Changes in context such as fencing landscaping etc.

e. **Public Buildings**

Major issues or threats in relation to Public buildings include:

- Finding new uses for obsolete buildings;
- Accommodating contemporary functional and service needs with traditional purpose designed building forms sometimes of high architectural quality;

- Maintaining the high architectural quality; and
- Continuing use and occupation of obsolete community halls.

f. Cemeteries and Memorials

Major issues or threats in relation to cemeteries and memorial items include:

- Decay due to exposure to the elements;
- Inappropriate maintenance practices;
- Lack of maintenance due to financial constraints; and
- Vandalism.

2.6.3 Specific Cases

The above issues have been reflected in recent times by the following specific cases in the City of Lake Macquarie:

- The proposed Disposal of Historic Railway Property, including Railway Cottages at Teralba and Awaba and the Cardiff Workshops. The Railway Cottage at Toronto was sold during the course of this study;
- Closure of branch railway lines including the Toronto and Belmont lines;
- Rationalisation of Church property, such as the proposed sale of the sites of the Anglican Churches at Catherine Hill Bay and Carey Bay;
- Closure of two historic collieries, in one case leading to the sympathetic redevelopment of the John Darling Colliery at Belmont, while in another leading to the demolition of some significant 19th Century buildings at Lambton Colliery; and
- The demolition of historic cottages in Blacksmiths and Charlestown.

In this last case, Lake Macquarie Council applied for an order under Section 130 of the NSW Heritage Act 1977 over a group of historic miners cottages in Charlestown Road. However, one cottage was subsequently demolished and the site proposed for redevelopment. This case highlights the enormous potential value in heritage conservation terms of the introduction of general demolition control in the Local Government Act 1993. Mandatory approval for all demolition work would protect items such as these cottages which are not

specifically covered by a planning instrument (such as the Local Environmental Plan), and allow the Council time to consider the items heritage (or other) value prior to any demolition being undertaken. (Section 6.5.2.3)

INDEX

Existing Urban

Potential Urban Areas

SCALE

km 2   0   2   4   6 km

Lake Macquarie Heritage Study   Diagram

Settlement Strategy

Not to scale

Draft Hunter Coastal Urban Settlement
Strategy, 1992

2.1

3

3. Lake Macquarie City Heritage Themes

3.0.1 Background

The following section provides a thematic history for the City of Lake Macquarie, based on the documentary research undertaken by Dr John Turner. It provides the historical background against which the significance of items have been assessed, and provides valuable guidance for future areas of research.

3.1 Introduction

The history of Lake Macquarie City has been moulded by its magnificent Lake and its enormous coal reserves. The Lake environment, so supportive of its Aboriginal inhabitants in prehistoric times, was less favourable for agricultural and pastoral pursuits than many other regions of New South Wales. Consequently, the Lake region was not exploited intensively in the first century of colonial development and it was under-developed by contemporary standards in that period. By those important determinants of colonial life, convictism, the squatting age, agricultural development and the gold rushes, it was little affected or completely by-passed.

Instead, the early history of the region was dominated by the exploitation of its forests and coal despite the difficult channel to the sea at Reid's Mistake which tended to negate the advantages of Lake borne transport. Until the 1880s, therefore, life around Lake Macquarie was marked by a struggle for subsistence in an isolated and under-developed region.

On the positive side, the slow pace of development in this period left large sections of land untouched, much of it in the hands of the Crown, and available for other forms of exploitation when transportation systems improved. Native flora and fauna and possibly the Aborigines benefited from the very conditions which European settlers considered prejudicial to their health and happiness.

In the railway age, say from 1883, the effective exploitation of coal and timber began and shipping on the Lake took on a secondary role. Free settlers attracted by unoccupied Crown lands and employment as timbercutters, miners and fishermen began to swell the population and contribute to urban growth. The Sulphide Corporation, attracted by coal, the prospect of cheap electricity and the wide open spaces of the region, held promise of the large scale industrial employment some residents wanted, but one swallow does not make a summer.

Moreover, at Belmont and Toronto there were the first signs of the tourism that would be important in the future. Nevertheless, the region was still sparsely settled and without local government until 1906 when it became a shire, with official recognition of its rural, undeveloped state.

In the Twentieth Century the disadvantages of the past were turned into assets by technological change and urban growth. On the one hand the motor vehicle permitted travel to work and for pleasure on an unprecedented scale and, on the other, the increasing demand for electricity for industrial and domestic purposes brought the huge steaming coal resources of the Lake region into use. First the collieries in the north and east of the area began to prosper and later, after World War II, huge new mines and power stations were opened up in the south.

Cars allowed workers to commute and also facilitated travel to holiday homes. Fleets of trucks speeded up coal deliveries and permitted the operation of otherwise uneconomic mines. Moreover, improved road networks, including the completion of the Pacific Highway, played their part in fostering population growth. In these conditions the older towns of the region were consolidated and a host of new towns and villages appeared. To serve them, services and public utilities had to be expanded and improved and the Shire began to take on the shape of a municipality and finally that of a city.

The City of Lake Macquarie is largely the product of the present century: it is a relatively new creation. Accordingly, although the pioneering farming and timber themes are present in its history they tend to be muted.

Coal mining and its spin-off, power generation, has been the most consistent and powerful industrial influence since the 1880s but there are other important themes. Of these the Great Northern Railway and its rival, the Pacific Highway, have played particularly vital roles in moulding the shape of the City. Nevertheless, it would be difficult to deny the power of the urban process itself, as a generator of the economic development that produced the City of Lake Macquarie. Australians attracted by the employment opportunities available in the Lower Hunter Valley have increasingly yielded to the lure of lake-side land and open space in their search for home and holiday sites.

3.1.1 The Lake Macquarie Setting

Lake Macquarie City is located on the mid-north coast of New South Wales, immediately to the south of the City of Newcastle, and about 100 kms north of Sydney. The lake from which the City derives its name is the largest coastal lake in Australia, having a total area of about 110 square km. It is salty, and is joined to the ocean by a narrow tidal channel at Swansea. The land area of the City is about 638 square km, and with the exception of a section of the southern shoreline, it contains the lake and the lake catchment.[1]

The dominant landscape pattern is one of low but often steep-sided hills, separated by flat valleys, with the land rising along the western boundary to the rugged escarpment of the Watagan and Sugarloaf ranges. Between Belmont and Swansea the lake is separated from the ocean mainly by low-lying dunes and swamplands. The City is underlain by extensive and valuable coal resources.

3.1.2 Basic Landforms

In simplest terms, Lake Macquarie City consists of a shallow lake-filled depression, surrounded on three sides by low hills, and rising in the west to more rugged country. On the east the lake is separated from the ocean by a sandy bar, cut by a tidal channel. The western boundary of the City lies along the central spine of the Mount Sugarloaf/Watagan Range, where the creek and river systems draining into Lake Macquarie rise. The land along this range is generally steep and rocky and covered by tall open forest.

Development along the coastline of New South Wales between the coming of the British in 1788 and the rise of the railways after 1850 was governed by the requirements of coastal shipping. As the resources of the coastal districts were very similar (agricultural land, timber and coal) those districts blessed with harbours and navigable rivers developed more rapidly than others. In this regard Lake Macquarie was disadvantaged.

The Swansea Channel connecting the Lake to the sea is about 4 km long, shallow, tidal and dangerous to shipping.[2] The lake itself was much deeper in parts and might have been navigable for small ocean going ships but the Channel made this impossible. (Map 3.1) In his Index and Directory of the Country Bordering upon the River Hunter published in 1828 Henry Dangar noted that:

> *The entrance to Reid's Mistake is unfortunately obstructed by a bar, so as to prevent the access of any vessels but those of the smallest class, there being not more than five and a half to six feet on the bar at high water.*[3]

Ironically, the region with more lakefront land than any other could not fully exploit its access to water transport in an era when shipping had a huge advantage over land transport. Its coal was known in Sydney from at least 1800 (Captain Reid's voyage) and the presence of much sought-after cannel coal was recognised as early as 1827 (Dangar) but large scale exploitation of this resource had to wait until railways reached the area in the 1880s.[4] The effective harvesting of its extensive timber resources was similarly handicapped. Transport difficulties also affected the pioneer settlers.

3.1.3 Transport - The Key to Development

The history of Lake Macquarie area may be divided into three main phases, each one controlled by the technology of its transport. In the first phase (1800-1887) the area depended on water transport and animal power for the exploitation of its natural resources. Railways and tramways

dominated the next phase which lasted from the construction of the Sydney-Newcastle line in the 1880s to the age of the motor vehicle, say the 1920s. In this third phase, which still continues, cars and trucks and the road systems they depend on have created the city as we know it.

3.2 Discovery and Early Development to 1860

The County of Northumberland was created in 1804 but its development was impeded by the prison settlement conducted at Newcastle between 1801 and 1822. For security reasons settlement was not permitted until 1821 when Governor Macquarie began to phase out the prison at the mouth of the Hunter River.

Though the entrance to the Hunter River was known by 1797 it was not until 1800 that the resources of Lake Macquarie were officially reported. Captain William Reid mistook the entrance to the Lake for the entrance to the Hunter River and took coals from the former instead of the latter. As Collins recorded in 1802:

> The Martha, having been allowed to go to Hunter River for coals in the beginning of the month, on her return, having anchored in some very bad weather in the north part of the harbour, Little Manly Bay, was by the parting of her cable driven on a reef of rocks, where her bottom was beat out. With the assistance of the officers and crew of the Buffalo, she was got off, and, being floated with calks, was brought up to Sydney, where her damages were found not to be irreparable.

> By the master's account it appeared, that he had not been in the river, but in a salt water inlet, about five leagues to the southward of the river, having a small island at its entrance. He was conducted by some natives to a spot at a small distance from the mouth, where he found abundance of coal.[5]

Another description came from the pen of Governor King in 1800:

> A small vessel went some time ago to the river between this and Port Stephens; she missed the river and got into a barr lagoon, where she got loaded immediately with very fine coals, but in coming into this harbour she got ashore and was bilged. These rivers, which abound with coals, are not accessible to larger vessels than about forty tons ...[6]

Twenty five years later the surveyor Henry Dangar provided another account of Reid's discovery:

> Reid's Mistake is situated fourteen and a half miles to the south-south-west of Port Hunter, and so called in honour of its discoverer, whose name was 'Reid', being master of a colonial coasting vessel, and intending to run into Port Hunter, whither colonial craft then resorted for coals, which were dug out of the cliff by their crews; instead of Port Hunter, this sagacious seaman took his bark into this opening, and thus, in memory of his error, the name has been given.[7]

3.2.1 Explorers and Surveyors

After Captain Reid's visit to the Swansea area in 1800, the Paterson-Grant expedition in the Lady Nelson called in briefly on its way to explore the Lower Hunter Valley in 1801. The next Europeans to visit Lake Macquarie were probably escaping convicts and their pursuers from the Newcastle penal settlement but there would also have been visits by hunting parties as shown in the published works of the Newcastle commandants, Lieutenant Thomas Skottowe and Captain James Wallis and in the paintings of convict artists.[8] (Plates 3.1 and 3.2)

When the Reverend G A Middleton, the first Chaplain appointed to Newcastle, brought a herd of cattle overland from Richmond to Wallis Plains (Maitland) and blazed a trail on the west side of the Lake, it became an escape route for convicts.[9] Two years later (21 April 1823) Major J T Morisset, the Newcastle Commandant, rode from the Hunter to Windsor over a difficult but shorter route than the one then in use, a more westerly track which exited near Singleton. Morisset's nine day journey was probably the first through the Wollombi to Wiseman's Ferry.[10] Other journeys by this route followed, each one contributing to European

knowledge of the area between the Hawkesbury and the Hunter although there is no map from this period. Maps published in London in 1825 show no knowledge of Lake Macquarie (Map 3.2) but this omission was soon to be remedied for Henry Dangar, who returned to England in 1827 showed a good knowledge of it (Map 3.3). With the arrival of surveyors to record the first land grants the details of the region's topography became known: the earliest surveyors were Dangar, Heneage Finch and James Ralfe.[11]

3.2.2 First Land Grants

That land grants were not sought for Lake Macquarie until the mid-1820s was partly the result of ignorance for the region had not been surveyed. Thus when Daniel Tyerman and George Bennet visited Newcastle in January 1825 in search of a site for a mission to the Aborigines to be established by the London Missionary Society, the Lake area was suggested.[12] No Crown land grants had been made there and it was still in the hands of the Awabakal Tribe who had fished its waters and hunted its forests for thousands of years.

Accepting the Lake area on behalf of the London Missionary Society, Tyerman and Bennett appointed the Rev. Lancelot Threlkeld (1788-1859), a missionary with experience in the Society Islands, to conduct the mission. Governor Brisbane then promised 10,000 acres of land to support it and the <u>Sydney Gazette</u> expressed its confidence in the new venture:

With a view to extending the benefits of religious and moral instruction to the benighted aborigines of this vast Continent, though in fact only an island, on which it is supposed that there are not less than three or four million of our fellow creatures in the grossest darkness, and most pitiable distress, Sir Thomas Brisbane, our excellent Governor, with his usual promptitude in such cases, has directed to be made over, at the instance of the Land Deputation, in trust for the natives exclusively, 10,000 acres of land, in the vicinity of Reid's Mistake, which lies between Port Jackson and Newcastle, and about 40 miles from the Heads. In the event of the mission at any time being

abandoned, which we think unlikely, the whole of the land in this case only will revert to the Crown.[13]

By the end of 1825 Threlkeld was setting up the mission on the north eastern side of Lake Macquarie at a place called Bahtahbah and the Government had proclaimed the boundaries of its land grant.[14] (Map 3.4) This site was chosen partly for its convenience to Newcastle, but the soils were sandy and Threlkeld did not persevere there. When the London Missionary Society withdrew its support from the mission and dismissed Threlkeld in 1828, the latter secured his own land grant of 1280 acres at Derhbambah or Ponte as the Aborigines called it, now Toronto and Coal Point (Map 3.5). Calling his estate "Ebenezer" the missionary moved there in 1830, continuing to provide religious instruction to the Awabakal in their own language and becoming a spokesman for and protector of Aborigines everywhere.

Though Threlkeld, his family and his four convict servants were the first European settlers on Lake Macquarie, they did not enjoy that distinction for long. In 1826 Lieutenant Percy Simpson, a veteran of the Napoleonic Wars and ex-commandant at Wellington Valley, chose Dora Creek as the site of two 2,000 acres grants to which he and his wife were entitled.[15] Aided by six convict servants, Simpson built a house and stockyards for cattle on the banks of Dora Creek close to the site of the Roman Catholic Church at Cooranbong.

Simpson did not make a success of his cattle station and left Dora Creek to take up a new appointment as constructor of the Great North Road in 1828: bushrangers, hostile Aborigines and a site that proved unsuitable for cattle had contributed to his difficulties.

Recognising that the Lake Macquarie region did not offer the best conditions for agricultural development, settlers did not rush to take up land there. By 1833 there had been only 13 grants to the settlers (Table 3.1) but by then many of the key sites had been occupied. Simpson had two grants at Cooranbong/Dora Creek and Dora Creek/Eraring and Captain James St John Ranclaud, an army veteran, had two holdings at the northern end of the land ("Teralba").

Table 3.1
The First Land Grants to 1833

Date Selected	Date Granted	Acreage	Selected by	Granted to	Locality
1825	-	10,000	London Miss. Society	-	Belmont district
1826	1829	2,000	Percy Simpson	Percy Simpson	Cooranbong & Dora Creek
1829	1839	2,560	J Ranclaud	David Scott	"Teralba"
1829	1839	1,280	Wm Brooks	Wm Brooks	Speers Point
1829	1839	1,280	Rev Threlkeld	R M Robey	Toronto
1829	1838	2,000	Percy Simpson	Percy Simpson	Dora Creek & Eraring
1830	1838	2,560	George Weller	George Weller	Argenton
1830	1838	2,560	Joseph Weller	Joseph Weller	Cardiff
1830	1837	1,280	J Tingcombe	J E Manning	Dora Creek
1830	1842	914	J Ranclaud	J Mitchell	Teralba
1830	1842	560	E G Cory	E G Cory	Wangi
1831	1839	1,280	J Warner	J Warner	Warners Bay
1833	1833	149	J H Boughton	J H Boughton	Reids Mistake

Source: L Nilsen (ed), Lake Macquarie Past and Present

William Brookes had selected "Lochend" (now Speers Point), George and Joseph Weller had large grants at Argenton and Cardiff and John Tingecombe had chosen land at Dora Creek. E G Cory's grant was at Wangi and J H Boughton had established the region's first industrial plant, a salt works, on the site of Swansea.[16] Using assigned convicts as a labour force and burning local coal (the first industrial use of the region's coal?) Boughton built up a holding of 600 acres and made salt from about 1834 until the end of the following year.

Another pioneer of significance was Jonathon Warner who had come to the colony as an officer in the Royal Veteran Battalion and settled on 1280 acres at Warners Bay in 1831. Influential as a settler and magistrate until his death in 1859, Warner was, perhaps, the best known of these pioneers.[17] Threlkeld, too, played an important role in his own field but he moved to Sydney in the early 1840's to assume a colonial rather than a regional role.[18]

3.2.3 Early Industries - Farming, Mining and Timber

Handicapped by dense forests, relatively poor soil and limited access to markets, the earliest farmers in the region had a struggle on their hands. At Dora Creek Simpson tried cattle and J.E.Manning, who took over the Tingecombe estate in the same locality, had a dairy farm operating in 1833. There were

signs that a village might develop around the Creek where the land was better and communication by boat was easier. In 1840 Simpson's Eraring grant was subdivided as the village of Newport but it failed and the name was then applied to the north bank of Dora Creek where there was another subdivision in 1845.[19] However little came of these early developments and the 1841 census showed only a few houses with fifteen residents at Dora Creek.

In the valleys to the west of Lake Macquarie cedar was found in relative abundance and in the 1830's it became the district's first export.[20] Extracted by gangs of timber-cutters and floated down the creeks and across the lake, this timber was valuable enough to justify such labour intensive methods of production. These itinerant workers, many of them ex-convicts and some of them runaways, were a law unto themselves and often harassed the early settlers and the Aborigines but in these remote locations there was little the authorities could do to enforce law and order.

Coal production from Lake Macquarie began at Coal Point where Threlkeld opened a mine in 1841 in order to compete with the Australian Agricultural Company's Newcastle mines.[21] Protected by an agreement with the British Government, the Company had a virtual monopoly of the colonial market until Threlkeld launched his challenge. The Crown had reserved the coal in all lands alienated

after the agreement with the Company came into force in 1830 but Threlkeld was free to mine his coal, since his grant was earlier. Nevertheless the Government denied him convict labour, as it was bound to do by the agreement with the Company, and the Coal Point mine was handicapped by the need to ship coal across the bar at Reid's Mistake. The decision to develop a mine, to build flat-bottomed boats for Lake transport and to establish a coal depot at Reid's Mistake was commercially risky. Using a non-convict workforce, not Aborigines as had been suggested, the missionary and his supporters produced enough coal to threaten the Company in the Sydney market.

As Threlkeld was first to challenge the AA Company monopoly his initiative was particularly significant, but when other producers appeared in the East Maitland-Minmi area the Company responded by sharply reducing the price of its coal. This policy and the severe depression of 1843 made the Coal Point mine uneconomic and Threlkeld was forced to assign the Ebenezer Estate to his creditors who sold it in 1844 for £3,450, a small fraction of the capital sum invested in it.

The new owner of the mine, Ralph Mayer Robey, operated its intermittently until the 1860s and another colliery was opened by William Brooks on his Speers Point Estate in 1843 but it was not successful.[22] Thus the extensive coal reserves of the Lake Macquarie region were barely touched in the pre-railway age.

3.3 Timber, Coal and Railways 1861-1894

If, by the hand of a magician, all that Europeans accomplished around Lake Macquarie in the first half of the last century could be struck from the record, would it matter?

To all intents and purposes the Lake region was untouched by the hands of Threlkeld, Simpson, Warner and the handful of pioneers who assisted them. To be sure, a few acres here and there had been cleared for farming purposes and some of the more valuable timber had been removed but all the rest must have been as it was when Captain Reid

made his mistake in 1800. The second phase would be much more exploitive and destructive.

3.3.1 Timber

The first stimulus to economic development in the second half of the last century was the growing demand for timber.[23] Responding to rapid population growth after the Gold Rushes, the timber industry entered a new commercial and technological phase involving larger timber selling agencies and steam sawmills. Several timber companies exploited the extensive hardwood forests of the Dora Creek catchments, shipping black-butt, blue gum, turpentine and tallow-wood and hugh quantities of the forest oak to be used for shingles. Tens of thousands of pit props every year were required by the expanding coal industry and as railway networks developed in the colonies and overseas the demand for sleepers rose prodigiously.

In the Lake Macquarie district the first steam saw mill appeared in 1872 at Cardiff Point near Belmont where Cumming and Lane developed a timber and shipbuilding business in association with the owner of the Awaba Park Estate, William Bell Quigley.[24] Drawing its timber largely from the latter's estate of 1750 acres around Bolton Point, this mill was preparing 100,000 spokes for export to New Zealand in its first year.

By November 1874 there were four steam sawmills in the Lake region, one at Wyee (Wakefield's), two at Cooranbong (Thomas Russell's and Robert King's) and the Belmont mill started by Cumming and Lane.[25] The Wyee mill belonged to William Wakefield, one of the constructors of the Great Northern Railway (the Murrurundi-Tamworth link), another indication of the close association between railway development and the Lake Macquarie Region. By 1879 there were five mills on the Lake shipping about 300,000 super feet of timber each month to Sydney and Newcastle distributors. In 1882 Laing and Wylie, the Newcastle timber merchants, were operating a large mill on their Rathmines estate.

In the beginning timber was carried to market in a fleet of small ketches usually built for the

purpose in and around the Lake - at Cooranbong alone, ten vessels were built in a three year period in the 1870s. Typical of these was the Emily and Mary, 60 feet long, 16 feet in the beam and 5 feet six inches in the hold - "the style of vessel that suits the Lake Macquarie trade - carrying a large cargo on a light draught of water". However, as the trade expanded steamships were employed to carry timber direct to market or to tow barges across the Lake to link up with other transport systems.[26] Steam ferry services operating from Millers Wharf, at the intersection of Cocked Hat and Winding Creeks served various lakeside destinations from the 1870s onwards. Mail was delivered by ferry and the Catherine Hill Bay mining community was provided with regular services to Cockle Creek. The opening of the Sydney-Newcastle Railway in 1889 virtually destroyed the Lake timber shipping business and most of the vessels engaged in it were converted to other uses or sold.[27] If the golden age of timber production on the west side of the Lake appeared to be passing late last century, the area's coal industry was only in its infancy.

3.3.2 Coalmining

Railways which began to appear in New South Wales in the 1850's, were to have a revolutionary effect on the transportation of primary produce of all kinds. In the coal industry their effects were more dramatic than in any other because they greatly reduced the cost of transporting coal, thereby permitting the opening up of new reserves, and they created a huge new demand for the black diamond. As a result the industry expanded rapidly, exhausting existing collieries and enhancing the value of the vast reserves of coal in the Lake Macquarie region.

3.3.3 Railways

When the NSW Government decided in 1881 to link its two separate railway networks based on Sydney and Newcastle by constructing a line between the two cities, the opening up of Lake Macquarie coal reserves was not one of its main priorities. However, the new railway allowed the northern coal district to be expanded in a southerly direction in the 1880s and this process was boosted by the stockmarket boom of that decade. By 1889 new mines were appearing all over the

north and the Newcastle Morning Herald commented:

> there is at present a greater amount of capital being expended in opening out new mines than there has ever been before in the history of the district. Within 20 miles of the port there are 18 companies opening out new collieries, the expenditure in many instances exceeding £50,000 before even a ton of coal is obtained. In every case the necessary capital has been obtained outside the district, the majority of the companies having been floated in Melbourne and London.[28]

The history of the towns of Lake Macquarie shows the profound influence of railway construction work which began in 1883 when the Amos Brothers won the contract to build the line between Gosford and Waratah. This stimulated some villages, depressed others and created brand new townships. Apart from the railway towns proper, the advent of a rail link to the Port of Newcastle allowed the opening of new collieries and they also boosted nearby towns or created their own.

Commencing at Waratah in 1883, the Amos Brothers pushed the railway south so effectively that the line opened in August 1887, serving Cockle Creek, Teralba, Awaba, Wyee (originally Norahville) and Gosford. One of the first mines to benefit from this was the South Wallsend Colliery at Cardiff South (Map 6) which had opened in 1884 in anticipation of the rail link to the Port of Newcastle. By building a short spur line the colliery was able to reach all the markets available through the busiest coal port in the Pacific region. As the line crept south other collieries were also brought into production including the West Wallsend, the Killingworth, the Rhonda, and the Seaham at West Wallsend, the Northern Extended at Teralba, the Teralba at Cockle Creek and the Northumberland at Fassifern.[30]

These new mines had difficulty in becoming established in the 1890s and often changed hands because of the depression of 1893 and severe competition in an overdeveloped industry. Nevertheless, they were sitting on top of extensive deposits of good quality coal and in time they joined several already established mines in the northern section of

the City of Lake Macquarie, such as Lambton No.2 at Redhead, Burwood at Whitebridge, the Dudley mine at Dudley and the South Waratah at Charlestown (Map 3.7). Clearly these mines played an important role in the coal industry and made a significant contribution to the development of the Lake Macquarie region. Being established late in the century they boasted more modern technology than most of the mines nearer to the Port of Newcastle and the Lambton No.2 Colliery, in particular, was made into a showpiece by Thomas Croudace, the superintendent of the Scottish Australian Mining Company, an engineer who had worked with the world famous railway pioneer, Robert Stephenson before entering on an outstanding career in the Newcastle (NSW) coalfield.[31]

3.3.4 Fishing

In a region so dominated by lake and ocean it was inevitable that Lake Macquarie settlers would turn to commercial fishing in their search for a staple industry. Chinese fishermen were active in the Swansea area in the early 1850's and by the end of that decade there were as many as 30 or 40 living on the Pelican Flats north of Galgabba where the blunt point of land between the Lake and the channel was known as "The Chinamen's".[32]

These Chinese fishermen were still very active in 1870 when the Town and Country Journal printed a detailed description of their community. As well as market gardening on a large scale, the manufacture of cabbage tree hats and catching swans for their carcases as well as their down, they fished extensively using nets and long boats and cured the catch for shipment to Sydney. Living in lined, shingled slab huts close to the Lake shore, they appear to have enjoyed good relations with other settlers in this period.[33]

European fishermen also worked the waters of the Lake, particularly from Belmont where they built many huts near the Pelican Islands. Their output reached six tons of fish per month in 1877 and there were signs that the Lake was being fished out. In response the Government Fisheries Inspector stationed at Swansea closed the Lake to commercial

fishermen in 1882.[34] An experimental fish cannery in 1864, possibly at Fishing Station Point near Rathmines or at Sugar Bay near Bulgonia, did not survive despite early success.[35]

3.3.5 The First Villages

The first village to appear in the Lake region was Newport at the mouth of Dora Creek where farmers and timbergetters formed a recognisable community in the early 1840's.[36] Two subdivisions, one to the north of Lake Eraring in 1840 and the other on the north bank of Dora Creek were both known as Newport. The second of these was more successful and a hotel and shops appear to have existed there until the depression of 1843 forced their closure. The next group of villages appeared in the 1860's when there were several new subdivisions of Crown lands under the Robertson Land Acts of 1861.

Under the terms of the new legislation hundreds of would-be land owners were attracted to the Lake area where there were opportunities to acquire a small holding for little or no outlay and live there while pursuing work in the timber, mining, shipping or fishing industries.

Anticipating this development the Government directed its surveyors to subdivide land at Cooranbong and Belmont in 1861.[37] At the former place there was an immediate response and seven lots varying in size from 10 to 272 acres were sold before the end of the year. Proximity to the wharf at Dora Creek was considered to be an attraction but the track from Gosford to Maitland was the main determinant of village layout. As Clouten explains.

> *From the point where Simpson's boundary met Dora Creek, the early land purchases fanned out predominantly in two directions: southwards for a short distance to the foot of the mountains which prevented further advancement, and westwards along the main valley of the creek to the vicinity of Martinsville today.*[38]

As required under the permissive occupancy laws the new owners had to live on their allotments and clearing for farming purposes

began at once. The majority of purchasers were Roman Catholics and before the end of 1861 a primitive church (45 x 15 ft) had been built close to the site of the present Catholic Church and a Non-Vested National School had been established making use of the same buildings. With the police post and lock-up already there, Cooranbong was rapidly taking on the functions of an established village. On Dora Creek too, Chinese market gardeners were active as they were to be at Swansea, Cams Wharf and at many other Lake locations.

Swansea, already favoured by its use as a shipping depot also benefited from the new land laws but not so directly. Land on the north shore was frozen as part of the mission reserve and much of the southern side had been granted to J.H.Boughton (Map 3.5). Selectors, therefore, had to settle away from the heads but there was a private subdivision of 20 town allotments of £8 per acre in 1863.[39] An announced Government Subdivision on the north side in the mid-1860s did not proceed but in 1874 as the population steadily grew a school was opened at Galgabba two miles south of the Channel. At that stage the village was still without a store and post office but change was on the way. Owners of coal in the Lake region brought pressure to bear on the Government and the Amos Brothers were awarded a contract to construct northern and southern breakwaters and a bridge across the Channel.

This railway bridge was ready by 1881 and a road bridge across the Channel followed in 1886 but the breakwaters were not completed until 1895. In the meantime, Swansea had become a ship building centre. As the appropriate timbers were easily obtained and the foreshores were suitable for ship construction, the industry had a long history in Swansea. One of the pioneers, Captain Thomas Boyd, built the ketch *Progress* of 30 tons, near the headland at the Pilot Station in 1880.[40] Two more sailing vessels followed in quick succession establishing the Boyd family's special place in local ship building.

A few years later the brothers Bill and Phil Forbes went to work on a ketch, the *Edith and May*, and they were active as builders and shipowners on the lake for several

decades. By the 1890s the yards were turning out larger vessels and yet another location came into use. On the riverbank on the northern side near what is now Channel St.Park, J.L.Boyd built the 78 ton *Galgabba* but the Forbes Brothers went one better with the *Phil Forbes* of 100 tons. They were joined by another builder, Bill Woodward, who produced a 200 ton barge for use on the construction of the second Swansea Bridge before establishing a well-equipped yard at Black Ned's Bay.[41]

Belmont was slower to develop with only one settler, Maurice Marks, taking up land there in 1861 and buying Portion 32 A of 187 acres, the area now bounded by Maude Street on the south and Gerald Street on the west.[42] Only three more portions (Nos.31S, 60 and 33A - all above 180 acres) of the 1861 subdivision were sold before 1871 but there was a subdivision of a different kind in 1868 when 40 acres was offered in small lots at £6 per acre. Perhaps the most significant of the settlers in this period were Thomas Williamson and Robert Kirkaldy who bought Portion 60, the area now bounded by Maude Street and Gen Streets, and built Belmont House as a guest house, later an hotel. Of this facility a visitor wrote about 1872:

> On the hillside there were splendid fruit orchards, teeming with all manner of fruits. Here in abundance grew oranges, apples, pears, bananas, figs, apricots, grapes, quinces and watermelons galore, besides many others; while beyond the orchards there was again the bush with its magnificent red, blue and grey gum trees, some of them towering to the height of two hundred and fifty feet, with a girth above the ground of thirty feet, monarchs of the bush, whilst around their feet grew the sweet-scented honeysuckle, sarsaparilla, bush oak, stringy bark, tie (sic) tree and various others almost too numerous to mention ... the house was large with extensive grounds and was a constant rendezvous for large parties of ladies and gentlemen from Sydney and other places who came for both pleasure and sport (shooting).[43]

Indicative of its growing links between the northern shores of the Lake and Newcastle, there was a bi-weekly passenger coach

between Belmont and Newcastle in 1869 and from 1875 a ferry brought travellers from Cooranbong to Belmont to take advantage of a daily passenger coach service to Newcastle. A post office was opened in 1875 with mail being carried on horseback to Newcastle twice weekly. Nevertheless Belmont's population was estimated at only 120 in 1884 and as late as 1911 there were only 58 homes and 237 persons in the village.[44]

Cardiff was another creation of the 1861 Land Act as 11 portions of the Parish of Kahibah were selected in 1862 and 1863.[45] Ranging in size from 40 to 100 acres, they show that it also began as a scattered collection of selectors cabins. The first subdivision into smaller lots did not occur until 1875 when Morgan's 60 acres in what is now Cardiff South was offered for sale. Fruit growing flourished but most paid employment came when coal mines started there later in the century. The railway came in 1887, its station (first known as Winding Creek) was opened in the following year but there was no school or post office until 1891.

Another wave of urban development occurred in the 1870s when the first subdivisions were offered for sale in Catherine Hill Bay (in 1875) and in Hillsborough and Gateshead (both in 1876).[46] As Laurie Nilsen points out Catherine Hill Bay is the oldest existing town in the City of Lake Macquarie for it was declared as the Village of Cowper on 5 April 1875. Unlike the villages appearing in the previous decade, Catherine Hill Bay was simply a coal town, opened on the shore of the Bay where the schooner Catherine Hill ran aground in 1867, to meet the needs of the miners of the New Wallsend Company which began operations in 1873. Consequently there was a sizeable population from the beginning and a store, post office and hotel followed soon afterwards. The failure of the New Wallsend Company's mine set the town back in 1877 but it limped along until the London based Wallarah Coal Company reopened the Colliery in 1890.

The population of Catherine Hill Bay was not recorded at the censuses but its isolation would have forced its miners to live locally and the size of the work force is known. There were 120 men and boys there in 1890

although the mine was not fully operational and the Company had constructed new accommodation close to the tunnel it had opened two and a half miles from the sea:

On a beautifully undulating slope overlooking the bay the company have laid out a township, and have erected some 20 four roomed cottages, each provided with a plot of ground, which the miners may obtain on lease.[47]

The Wallarah Company sent Thomas Parton, F.G.S., an ex-president of the South Staffordshire and East Worcester Mining Institute, to New South Wales to develop the mine and the redevelopment of the estate reflects his strong influence. Despite the severe hardship of having to ship plant to the head of the Lake by ketch or to Wyee and then drag it by bullock teams over difficult terrain to the site, progress was impressive. Moreover, the Wallarah Company had constructed over two miles of railway from its tunnel to the Bay to serve a massive wharf:

As Catherine Hill Bay is very exposed, great care and foresight had to be exercised in the construction of the wharf, ... As the bottom was nothing but rock, every pile used had to be fitted with an iron bolt at the end, which was drilled into the rock by divers. At the present time this wharf runs out for a distance of 1,020 ft, the planking being 30 ft above high water mark, so as to enable vessels of 3,000 tons to coal at the shoots. It is fitted with two shoots, which can be adjusted to suit the state of the tide or the size of the ship, and it is estimated that 1,000 tons of coal can be shipped in eight hours. To protect the structures during the heavy easterly gales four large iron cylinders are to be sunk at the end, while near the shoots are two fenders connected with separate piles, so that the rolling of a vessel will not damage the main structure. The depth of water at the shoots is from 25 ft to 35 ft at low water, and as this amount exists for nearly 600 ft there is ample room for the largest steamer.[48]

Charlestown also owed its existence to the coal industry for the Waratah Coal Company began to sink a shaft on its 2600 acre estate nine miles south of Newcastle in 1873.[49]

From the Company's first subdivision in 1876, Charlestown rapidly developed into a recognisable town. There were about 50 houses, a post office, three hotels, a school of arts and several stores by 1879 when the population was estimated at 400. Its position on the road linking Newcastle to the southern townships probably assisted in its commercial success.

If urban development was only steady in the 1870s, the pace accelerated markedly in the following decade in the period of great optimism and boom. Using the dates of the first successful subdivisions as an indication of commencement it is possible to identify two farming communities: Barnsley and Blackalls Park, and four mining villages: Kahibah, Dudley, Edgeworth (originally Young Wallsend) and Teralba, as beginning in the 1880s. Morisset, Fennel Bay and Marmong Point also began then but they drew life from both farming and the timber industry, while Toronto does not fit into any of these categories.[50]

Arguably the first township owing its life to the tourism and recreational qualities of the Lake, Toronto was promoted by the Excelsior Land, Investment and Building Company and Bank Limited and subdivided in 1887. By purchasing a portion of Threlkeld's original Ebenezer grant and adding the Crown's 100 foot waterfront reserve, the Excelsior Company took advantage of the opening of the railway to launch its ambitious plan to sell land and houses and build facilities for the estate. Opening a brickyard (1886), constructing the Toronto Hotel (1887) and operating its own tram service (1891) from Fassifern to Toronto, the Company made a unique contribution to the development of Lake Macquarie. (Plates 3 & 4) Openly promoting their estate as a holiday area, its enterprising directors claimed that *"a person dwelling at Toronto Estate, say three months in the year, adds 20 per cent to his life"*. Their brick hotel had:

...about thirty bedrooms besides parlours, bar, dining room, and billiard rooms. Spacious lawns were laid out beside the building, and a dancing pavilion was provided. Pleasure boats were always available to guests, and two swimming baths were created at the lakeside. A

highlight of the planning was the Toronto Boulevard, an avenue one hundred feet wide extending westward from the wharf to the boundary of the estate about three-quarters of a mile distant. On either side of the avenue ornamental trees were planted for beauty and shade, and numerous seats were placed there for the comfort of visitors and inhabitants.

It is curious that so little is known about the directors of this Company for they were showing the way of the future. How successful they were financially is also difficult to assess, but the fact that the town was still mainly limited to the triangle between Cary Street, the Boulevarde and the railway line may indicate that the Estate was ahead of its time. A second subdivision was made in 1891 encompassing Jarret, Ambrose, Renwick, North, Day and Thorne Streets, Excelsior Parade, Brighton Avenue and The Boulevarde.

3.3.6 The Early Churches

Apart from the Rev Threlkeld, the first clergymen to be active in the Lake area were members of the Church of England and Roman Catholic denominations, who would travel from other centres to the homes of prominent settlers to perform divine services. The Diaries of the Rev Alfred Glennie, the Anglican minister at Gosford from 1850 to 1865 speak of meetings in farmhouses until a church was built at Cooranbong in 1868 (Plate 3.5).[51] A Catholic church had been built in the same village by 1861 when it was used for a non-denominational school, but the sparsity of population around the Lake was a handicap to church construction. Belmont's first church (1876) was inter-denominational but by 1880 Charlestown had two churches. The Primitive Methodists opened one in that year with the assistance of the Waratah Coal Company's tramway: *"The trolley will leave the Waratah Crossing for the conveyance of persons wishing to attend the tea meeting and return after the meeting by kind permission of the Manager."* There was a protestant church at Hillsborough by 1876, Holmesville constructed its Congregational Church in 1903, Charlestown's first Catholic Church opened in 1904 and five years later the Methodists built at Toronto.[52]

3.3.7 Depression Slows Development

Because so many of these towns developed late in the century they were impeded by the depressed 1890s and remained fairly small. Moreover, mining towns in particular were often established on the colliery's estate and for this reason incorporation was difficult or impossible to achieve (compare with two much larger mining towns; Merewether where the owners delayed incorporation, and Minmi where it was denied by the proprietors).

Commerce was also slow to develop and most of the Lake towns only had one or two hotels and a handful of stores at the turn of the century. However, T.C. Frith & Company, later to be such a force in local retailing, had already opened up at Teralba, and co-operative stores, a characteristic of the northern mining district, had been established at West Wallsend (1891) and Charlestown (1892). Cooperative stores were also to be opened at Toronto and Cardiff in the 1920s and at Swansea, Belmont and Gateshead after World War II.[53]

3.3.8 Education

Apart from primary schools, usually public, the only other educational institutions were the Mechanics Institutes and Schools of Arts[54] (see Table 3.2).

Table 3.2
Mechanics Institutes and Schools of Arts

Institute	Year Founded	Peak no. volumes
Charlestown Literary Institute	1877	1443
West Wallsend School of Arts	1893	3166
Young Wallsend (Edgeworth) Literary Institute	1894	750
Toronto School of Arts	1894	850
Dudley School of Arts	1895	1235
Wallarah School of Arts	1899	1130
Seaham School of Arts	1901	497
Holmesville School of Arts	1908	1002
Cardiff Mechanics Institute	1910	520
Belmont School of Arts	1914	N/A

Found in all the main mining towns these organisations held occasional adult education classes, maintained lending libraries and provided rooms for a variety of social occasions. Toronto, although less affected by mining, also had a School of Arts.

3.3.9 The Effects of Development on the Aborigines

Perhaps, as a result of these developments, the Awabakal Aborigines were disappearing from the Lake which had served them so well for so long. Most is known about Black Ned and Margaret and their children, Ellen and William, for whom land was reserved at Swansea in 1870. However, when Margaret died in 1900 she was recognised as the last of the full-blooded tribespeople. The descendants of these Aborigines were still living in huts at Cams Wharf and along the railway between Swansea and Caves Beach as late as 1920.[55]

3.4 Another Century - the Pace Quickens

3.4.1 Industry & Mining

The 1890s depression slowed down industrial development throughout the Hunter Region but the Sulphide Corporation, which came to Cockle Creek in 1895, was an important exception.[56] Hailed by local interests as the beginning of a new era, the Corporation was expected to fulfil the region's hopes for a large smelting industry. Employment was expected to increase to over 1,000 and other similar enterprises were likely to follow the corporation to the region but there were transport difficulties as men laboured to move huge packages along rain-affected tracks from the railway line to the site: the spur line still lacked a vital viaduct. A large dam had to be excavated for fresh water and the Hunter District Water Board was waiting for 500 tons of pipes to come from Sydney to carry water from its main at Wallsend. Meanwhile, as the commercial works gradually moved towards completion, the experimental works, which had been brought from England was re-assembled and put into operation, exciting local observers. Roasting furnaces were ablaze, boilers under full steam and the huge works was lit up at night by 2,000 electric lights designed to permit smelting to proceed around the clock.

At the forefront of metallurgical technology, this large British Company chose its Cockle Creek site because of its proximity to coal, fresh and salt water and the Port of Newcastle. Formed to exploit the patents of the brilliant electrical engineer, E.E.Ashcroft, the Corporation intended to use electrolysis to extract zinc from Broken Hill silver-lead ores but though technically sound these patents failed in practice. Nevertheless, Geoffrey Blainey pointed out that: *"Sulphide Corporation advanced the electrolytic process further than any other individual or company in the world"*.

Fortunately for its owners and employees the Cockle Creek plant was converted successfully to orthodox silver-lead smelting from 1897. Linked to the Great Northern Railway by its own spur line, the plant became a large employer of labour (259 in 1898) but the fumes from its operations had devastating effects on nearby bushland. (Plate 3.6)

Although lead production ceased temporarily in 1922, the plant continued to produce sulphuric acid, superphosphate and fertilisers and in 1924 the Corporation again showed its versatility by beginning to manufacture cement on a large scale using shells dredged from the estuary of the Hunter River. The coming of the Sulphide Corporation to the northern end of the Lake had a significant impact on employment, on urban development and on the environment.

Another unusual industry carried on at Fassifern was the manufacture of arsenic.[57] Although evidence about its origins is scanty, the plant was in operation in the 1920s but then closed before being revived during the Second World War. Situated in a worked out portion of a Railways gravel quarry for safety and processing ore from Warialda, this plant cannot be explained in terms of the natural resources of Lake Macquarie.

At Cooranbong in 1894 a community of Seventh Day Adventists bought 1500 acres on the north bank of Dora Creek in order to establish a boarding school.[58] Calling the estate Avondale, the group began to develop educational and industrial activities which have been so important to the Lake district. The Sanitarium Health Food Company's first

factory was in operation before 1900.

Of far greater importance than any of the other engineering developments in the history of the City was the opening in 1928 of the NSW Government Railway Workshops at Cardiff.[59] Relocated from Newcastle, this plant built locomotives and repaired rolling stock and was probably the largest industrial employer the City has seen. There were 1915 workers in 1947 but the workforce was reduced as diesel locomotives came into use and by the 1970s there were only about 600.

Despite the obvious importance of these few industrial ventures, coalmining became the Lake's key industry in the railway age. The mines within the City boundaries brought growth and employment, while the astonishing scale of development of the South Maitland coalfield early in this century boosted the residential and recreational aspects of life around the lake.

In 1899 there were 12 collieries in the Lake region, ranging in output from 800 tons per annum at Threlkeld's old pit now known as South Hetton, to 180,000 tons at the Seaham mine at West Wallsend. These collieries employed over 1800 men and boys. The main mining centres were West Wallsend with three mines, Teralba and Cardiff with two mines each, and Dudley, Cockle Creek, Catherine Hill Bay and Charlestown with one mine a piece.[60] At the turn of the century there were no signs of the huge developments that were to take place in the southern part of the region for power generation purposes after World War II.

The rapid expansion of mining in the Maitland-Cessnock area between 1900 and 1914 had a marked effect on the Lake District. The lure of its waters brought miners and their families on camping holidays at Christmas and during strikes and many miners planned to retire there. This trend towards lakeside residential development was boosted by the equally rapid growth of heavy industry in Newcastle after its steelworks opened in 1915. Steelworkers, too, looked enviously at the Lake where land close to the water was cheap and this added to the push towards recreational development of the City of Lake Macquarie.

3.4.2 Local Government Develops

Local government as it is now understood did not exist in the Lake Macquarie region before it became a shire in 1906. Charlestown had been included by an historical accident in the Municipality of Waratah, but the other communities had to rely on their members of parliament for assistance in overcoming particular problems and in securing improvements to the region's infrastructure.[61]

On 6 March 1906 the Shire of Lake Macquarie was created as part of a restructuring of local government in New South Wales, and finally on 13 June 1906, when the temporary Shire Council met in the Teralba Court House, the systematic guidance and supervision of the sprawling region began.

The new Shire Council was given responsibility for an area rich in coal and timber, but handicapped by poor communications and a widely dispersed population. Lake Macquarie, though potentially an asset of enormous value, was a huge obstacle to efficient communication and the development of urban facilities. Other areas had already developed roads and bridges, water supplies and sewerage systems, gas and electricity supplies and a host of other facilities, but the Lake area had made little progress in these areas. (Map 3.9)

The Lake Macquarie Shire Council Chambers were situated in Cardiff until 1915 when the Council moved to Speers Point at the Main Road and Council Street site. From there it moved again in 1955 to the corner of Main Road and Park Street. Its current Administration Centre was built in two stages in 1977 and 1979 respectively.[62]

Recognising the problems of effectively governing the Shire's towns, the Council encouraged the formation of urban committees (Belmont 1932, Cardiff 1947) which were given some local administrative responsibilities and financed from rate revenue.[63] As the population increased the Shire was transformed into a municipality in 1977, and into a city in 1984. The Local Government Area boundaries have not changed since their establishment in 1906.

3.4.3 The Age of the Motor Vehicle

The force that would accelerate the development of the Lake Region and transform it into the modern City of Lake Macquarie was the motor vehicle. The region's coal and timber resources would have been exploited whether the internal combustion engine had appeared or not but the City's other great, perhaps most lasting, asset was attractive residential land. Its accessibility to people looking for recreational and/or residential purposes was crucial to its utilisation and the bus and car had considerable advantages over the railways, trams and ferries serving Lake Macquarie about 1920.

In the 1920s while cars were still the prerogative of a tiny minority they made little impact on urban development but motor buses improved communications for a much wider proportion of the population. Private buses began to operate in the Newcastle area in the 1920s but it was not until the next decade that services of that kind reached places like Boolaroo. Government buses were slower to reach the major Lake centres (Boolaroo and Swansea in 1937) and World War II caused reductions and cancellations.[64] Consequently, the western side of the Lake remained dependent on the railway and the trams to Boolaroo. However, that tram service was closed in 1930 because it was considered uneconomic.[65] Clearly the Lake area was ripe for private motor vehicles which could allow commuting to work and provide for leisure pursuits.

The increasing use of motor vehicles drew attention to the road network, particularly the route between Sydney and Newcastle, the two most populous centres in the state. The main route was still the indirect route via Wisemans Ferry (Map 3.8) but the Main Roads Board constituted in 1925 reviewed the situation and opted for the construction of the Pacific Highway from Sydney to Newcastle via the Peats Ferry across the Hawkesbury River.[66] This not only saved about 50 miles but greatly improved access to the towns on the eastern side of Lake Macquarie. Slowly, as the road network inside Lake Macquarie Shire improved, its potential for dormitory purposes for Newcastle workers increased and its appeal for weekend

recreation and retirement was enhanced. Accordingly, as population grew, commercial and light industrial development followed.

3.4.4 The Towns Develop

Census results are not readily available for all the major centres but Table 3.3 shows the strong growth pattern in all the main towns between 1911 and 1971 except for West Wallsend where its ailing coalmines caused a reduction in the number of houses and the population after 1921.

Table 3.3
Census results for Lake Macquarie Towns 1911-1947

Suburb Houses/People			
1911	1921	1933	1947
Belmont			
58/237	98/475	470/1940	1292/4840
Cardiff			
145/667	313/1522	881/3843	1160/4755
Charlestown			
120/515	158/736	318/1357	N/A.
Edgeworth			
58/268	81/384	111/461	153/557
Morisset			
123/640	127/1125*	199/1587*	240/2110*
Swansea			
62/279	128/539	456/1632	922/3174
Toronto			
153/629	280/1291	345/1274	528/1962
West Wallsend			
567/2723	574/2752	517/2023	475/1683

* includes Morisset Mental Hospital
Figures based on NSW Censuses, 1911-1947

As J.C.Docherty pointed out in Newcastle: The Making of An Australian City, the coal companies and family estates which owned much of the Shire's land began to take advantage of the growing demand for residential land after about 1910.[67] Access to transport was the key to these developments which occurred along the Sydney-Newcastle railway and the extension of the tramline from Wallsend to Speers Point in 1912.

The Perpetual Trustee Company of Sydney offered 105 lots at Bolton Point in 1914 with the slogan "From the Dust and Heat to the Cool Lake", and the Newcastle Wallsend and West Wallsend coal companies followed suit

with subdivisions which boosted the population of Cardiff after 1915.[68] The pace of urban development quickened in the next decade when the Trustees of the Quigley estate employed Sir John Sulman to design Marmong (later Booragul) and D.R.Israel and M.Sussman released their Lake View Estate at Wangi.[69]

Because the population of the Lake region was dispersed among a large number of townships urban services and utilities were slow to develop. Indicative of this situation, that essential of healthy urban life, a clean water supply was slow to reach the more southerly sections of Lake Macquarie.[70] Residents had to rely on rain water for drinking purposes and shortages were sometimes so severe that Lake water was used for cooking. In 1897 the Sulphide Corporation was the first to receive a supply from the Hunter District Water Board. West Wallsend and Holmesville followed in 1902 and there was then a long wait until Teralba benefited in 1916. Toronto came next in 1919; Lower Cardiff in 1922; Boolaroo in 1926; Cardiff and Charlestown in 1927; Dudley and Whitebridge in 1928; Redhead, Belmont, Booragul, Marmong Point and Warners Bay in 1929; Swansea, Swansea South and Blacksmiths in 1937; Bolton Point, Kilaben Bay and Skye Point in 1938; Rathmines in 1940; Wangi, Eraring, Dora Creek and Morisset in 1941; Avondale and Cooranbong in 1942; Marks Point in 1947; Fishing Point, Balmoral, Mount Hutton, Eleebana, Valentine and Awaba in 1948 and Barnsley in 1949. Belmont was the first Lake town to be sewered (in 1942). Sewerage schemes for Boolaroo, Speers Point, Cardiff and Toronto were finished in 1945 and other Lake centres were gradually provided for (Map 3.9).

Electricity first came to the Lake region from the Sulphide Corporation's plant which supplied the houses and streets of Boolaroo in 1920. Newcastle City Council took over this supply in 1926 and the following year Caledonian Collieries Limited opened its Cockle Creek Power House to supply the coalfields: it eventually served several towns and 17 mines.[71]

Another significant source of development was the gradual increase in holiday homes,

particularly in Toronto, Speers Point and Belmont. At first the prerogative of Newcastle's wealthy (e.g. the Winns and the Arnotts both built at Toronto in the 1890s), humbler cottages on private subdivisions (Wangi 1916) and on crown leaseholds soon followed their lead. The granting of annual holidays in 1944 strengthened this trend. Pleasure sailing developed after World War I with the opening of the Belmont Sailing Club (1920) and the Lake Macquarie Yacht Club (1929): the Speers Point Amateur Sailing Club, the Toronto Amateur Sailing Club and the Royal Motor Yacht Club followed.

The relatively undeveloped state of the Lake Region attracted other leisure activities as well. Amateur fishing continued to be the most popular pursuit but the shooting of wild fowl was also popular (e.g. at Jewells Swamp) and the Waratah Golf Club, the oldest in Newcastle, moved to its Argenton site in the 1920s.[72]

Indicative of the development of Australian nationalism and concern for local fauna and flora were noteworthy attempts to use Pulbah Island as a nature reserve. Initiated by the Australian Society of Patriots in 1917 and supported by the Shire Council and the State Government, this venture involved the construction of buildings, fence, water tanks and a wharf, but it eventually failed.[73]

3.4.5 The Impact of World War II

As the area was still mainly rural and its population dispersed, it was used for a variety of military projects during World War II and signs of these remain. At Booragul on land resumed by the Commonwealth from the Quigley Estate there was an army camp (later used as Air Force Commonwealth Cottages). This land became the Housing Commission estate. At Dudley the residence of the colliery proprietor, A.R.Cant, was used for a Red Cross convalescent hospital before it passed into the hands of the Western Suburbs Hospital. An army commando camp also exploited Jewells Swamp and Jewells Beach for training purposes but the site (between Kallaroo Road and Wommara Avenue) has since been developed.[74]

A RAAF flying boat base opened at Rathmines in 1939 had a complement of 2400 at one stage of the war. It had a dramatic impact on housing and roads in the area and was not closed until 1960.

3.4.6 Education Develops

Though the Seventh Day Adventists had their own school from the early days at Cooranbong and the Sisters of St. Joseph opened a school and convent at Charlestown in 1927, state schools have dominated the educational history of the Lake region.[75] Primary schools have been in existence in all the larger centres since late last century and an Evening School operated at Charlestown from 1899 until 1911, but high schools are a relatively recent phenomenon. Testifying to the extremely rapid population growth of the post-war period and rising educational standards, high schools were opened at Belmont (1956), Booragul (1958), Gateshead (1959), Cardiff (1962), Toronto (1962), Whitebridge (1963), Swansea (1963), West Wallsend (1964), Morisset (1965), Warners Bay (1966) and Glendale (1970). Avondale College at Cooranbong which was opened in 1896, and technical colleges at Belmont, Charlestown, Glendale and Toronto are the only tertiary educational institutions in the Lake district.

3.4.7 Hospitals and Related Services

Public hospital services began in the Lake area when Morisset Mental Hospital opened its first ward in 1909: at its peak in 1954 it had 1389 patients.[76] The Western Suburbs Hospital opened its nursing home at Dudley in 1952 and Royal Newcastle Hospital's Belmont Hospital began in 1968. In the related area of accommodation for the elderly, the Lake Region has also made progress since the C.A.Brown Village opened in 1955 and the Hawkins Masonic Village followed in 1972.

3.4.8 Giant Power Stations

As early as 1927 the Newcastle economist F R.E.Mauldon had predicted a large power station for the Lake Macquarie area but he could not have foreseen the huge scale of developments after World War II.[77] The Lake Macquarie (later Wangi) Power Station was begun in 1948 and completed in 1958 at a cost of £30 million. Involving a very large labour force over many years during construction and employing hundreds of workers during operation, the Wangi Station and those which followed it boosted populations and brought amenities to nearby towns. The Eraring Station, begun in 1975 and finished in 1984, employed 2300 constructions workers in 1981 and has a permanent staff of 600. Taking up to 6.5 million tons of coal a year from four local mines (Cooranbong, Myuna, Awaba and Newstan) it also boosted investment and employment in that industry.[78]

These massive industrial undertakings have had dramatic effects on roads, road traffic, and quality of air and water and on the landscape. At Eraring, for example, as Lake Macquarie Past and Present points out, the township has been isolated by the station and its infrastructure: *"The power station did not turn Eraring into a town but into an island, almost cut off by Lake Eraring to the south, the new highway with its flyover to the west, and the outlet canal for the cooling water to the North".*[79]

3.4.9 Charlestown Square and the Impact of Commerce

As huge as the impact of the great power stations but not nearly so obvious has been the development of commercial centres since 1979. With the population of Lake Macquarie City reaching 132,000 in 1976 and housing construction proceeding at a high rate, additional shopping centres were bound to come and Charlestown Square (opened 1979 and since enlarged) and Jewellstown (1982) were the first to develop.[80] Employing large numbers and generating huge increases in traffic, their impact on the City is enormous. Commercial development on this scale is a complete reversal of the earlier history of the Lake towns which had not been noted for the size and variety of their shopping facilities.

3.5 Lake Macquarie City - Twentieth Century Creation

A survey of the development of Lake Macquarie suggests a region born before its time. Lacking the resources most valued in the last century, it largely missed convictism, the squatting age, the gold rushes and the early urban development which left such a legacy of Victorian architecture in other cities. Not for Lake Macquarie the solid churches and grand houses that dominate older Australian city-scapes, nor does one see the huge hotels so typical of the adjacent Cessnock coalfields.

Nevertheless, the promise of the enormous Lake was fulfilled in the present century as holiday makers and commuters rushed to develop its foreshores. Lending its waters to electric power plants, the Lake also contributed to employment opportunities in the recreational industries, thereby creating a sound base for further urban development. Rich in the industrial archaeology of mines, railways, bridges and wharves from the last century, the region's main claim to heritage importance in this century rests on the urban development associated with the age of the motor vehicle.

Footnotes

1   TUNRA and Datex Co-operative Limited, *Lake Macquarie Strategic Planning Report*, Newcastle, 1977, p.2.
2   *ibid*
3   H Dangar, *Index and Directory*, London, 1828, as quoted in K Clouten, *Reids Mistake*, 1967, p.15.
4   Clouten, *op cit*, p.16.
5   As quoted in Clouten, *op cit*, p.10

6   *ibid*, p.10.
7   *ibid*, p.11.
8   The Skottowe Manuscript, Mitchell Library, and J. Wallis, *An Historical Account of the Colony of New South Wales*, London, 1821.
9   G.A. Wood, *Dawn in the Valley*, Sydney, 1972, p.16.
10 'J.T. Morisset', *Australian Dictionary of Biography*, vol 2.
11 Clouten, *op cit*, p.16 ff.
12 *ibid*, p.22.
13 *ibid*, p.23.
14 For the Threlkeld mission, see N. Gunson (ed), *Australian Reminiscences and Papers of L.E. Threlkeld*, Canberra, 1974.
15 For Simpson's career, see Clouten, *op cit*, chapter 4.
16 Clouten, *op cit*, p.154.
17 For Warner's career, see P. Murray, *Warners Bay: the early years*, Newcastle, 1988.
18 See *Australian Dictionary of Biography*, vol 2.
19 L. Nilsen (ed), *Lake Macquarie past and present*, Booragul, 1985, p.40.
20 Clouten, *op cit*, p.58
21 For the details of Threlkeld's mine, see J.W. Turner, *Coalmining in Newcastle, 1801-1900*, Newcastle, 1982.
22 *ibid*, p.118.
24 *ibid*, p.169.
25 *ibid*, p.209 ff.
26 *ibid*, p.223.
27 *ibid*, p.82.
28 As quoted in Turner, *Coal Mining*, p.107.
29 C.C. Ingleton, 'The Short North - the Sydney-Newcastle Link Railway', *Australian Railways Historical Society Bulletins*, 337 (November 1965 and January 1966).
30 For the details of these collieries, see Nilsen, *op cit*, under the various localities.
31 'Thomas Croudace', *Australian Dictionary of Biography*.
32 Clouten, *op cit*, p.119.
33 *ibid*, p.161.
34 *ibid*, p.171.
35 *ibid*, p.145.
36 *ibid*, p.109.
37 bid, p.131 ff.
38 *ibid*.
39 *ibid* and *Newcastle Chronicle*, 2 & 9 September, 1863.
40 Nilsen, *op cit*, p.85.
41 *ibid*.
42 *ibid*, p.16.
43 W.S. Parkes, *Belmont Lake Macquarie 1825-1974*, Belmont, 1974, 1974, p.81.
44 Nilsen, *op cit*, p.17.
45 *ibid*, pp.26-29.
46 *ibid*, p.29.
47 G. Kingswell, *The Coal mines of Newcastle*, Newcastle, 1890, p.65.
48 *ibid*, p.63.
49 Nilsen, *op cit*, p.32.
50 *ibid*, see entries for various localities.
51 A. Glennie, *Journals*, Gosford, 1988.
52 Nilsen, *op cit*, entries for the localities.
53 D.P. Hampton, *Retail Co-operatives in the Lower Hunter Valley*, Newcastle, 1986.
54 G. Preston, 'A Comparative evaluation of the Mechanics Institutes Movement in the Lower Hunter Valley', University of Newcastle, M. Ed Thesis, 1990.

55 Nilsen, *op cit*, p.84.
56 For the Sulphide Corporation, see J.W. Turner, *Manufacturing in Newcastle 1801-1900*, Newcastle, 1980, pp.81 ff.
57 Nilsen, *op cit*, p.265.
59 *Cardiff Workshops 75th Anniversary*, Sydney, no date.
60 NSW Mines Department, *Annual Report for 1899*.
61 F.A. Larcombe, *Local Government in New South Wales* and notes supplied by Lake Macquarie City Council.
62 *ibid*.
63 Nilsen, *op cit*, pp.18, 27.
64 *ibid*, p.85.
65 *ibid*, p.81.
66 'Historical Roads of New South Wales', *Main Roads*, March 1949 and December 1952.
67 J.C. Docherty, *Newcastle: the making of an industrial city*, Sydney, 1983, p.96.
68 *ibid*, p.95.
69 Nilsen, *op city*, p.94.
70 For the details of water supply see J. Armstrong (ed), *Pipelines and People*.
71 Nilsen, *op city*, pp.23, 35.
72 *ibid*, pp.59, 11.
73 *ibid*, p.75.
74 *ibid*, pp.24,43.
75 For the development of schools see Nilsen, *op cit*, under locality.
76 For hospitals see Nilsen, *op cit*, pp.69, 43, 15, 24, 45.
77 F.R.E. Mauldon, *A Study in Social Economics: the Hunter River Valley*, Melbourne, 1927, p.67.
78 Nilsen, *op cit*, pp.94, 48.
79 *ibid*.
80 *ibid*, p.32
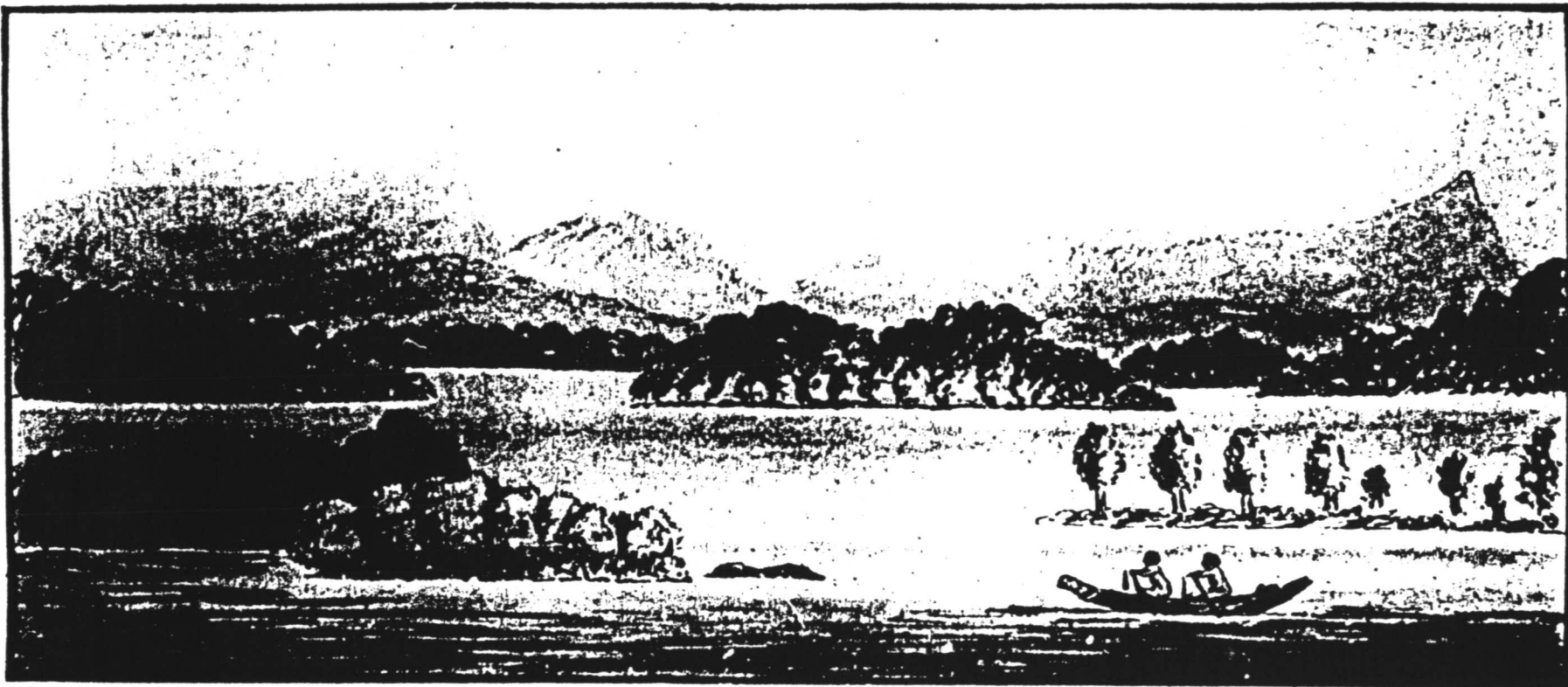
VIEW ON LAKE MACQUARIE. 1821.

INK SKETCH BY EDWARD MASON
FROM THE MITCHELL LIBRARY

MOUNT SUGARLOAF AND LAKE MACQUARIE AS THE
CONVICTS SAW THEM.

FROM THE AQUATINT AND ETCHING IN THE NEWCASTLE
REGION ART GALLERY BY JOSEPH LYCETT.
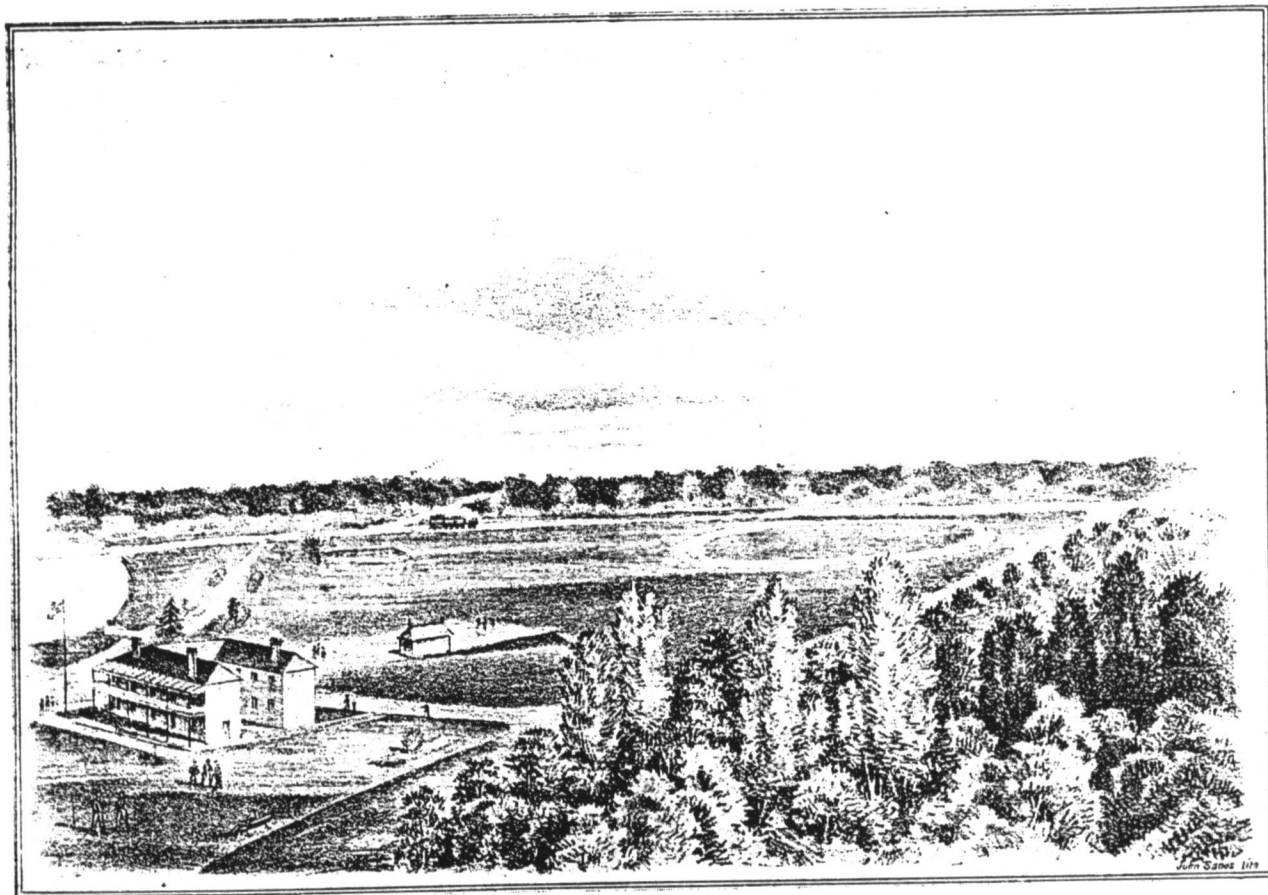
Toronto ca. 1887 showing the hotel, the racecourse, the wharf, and the old tramline.

A. THORNLEY.
Architect.

About £.1600.
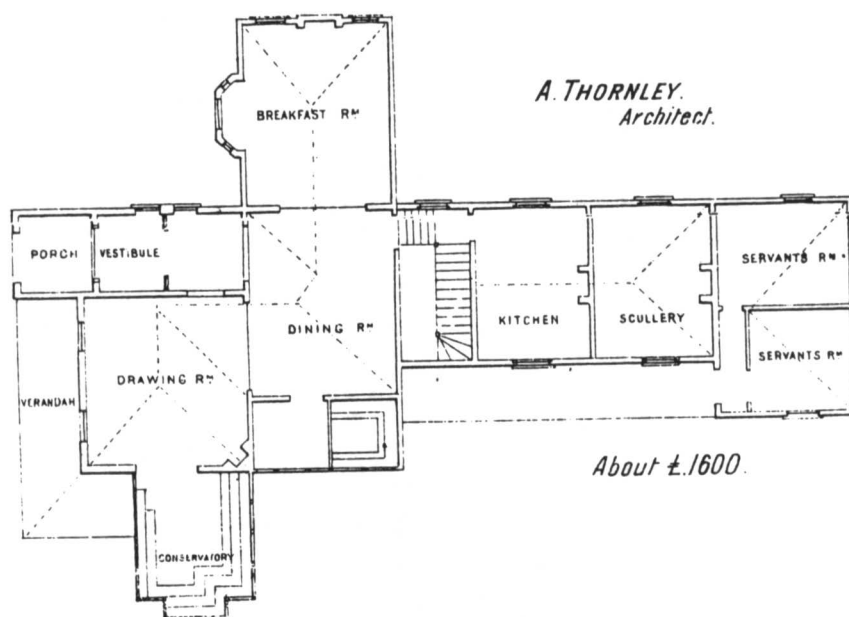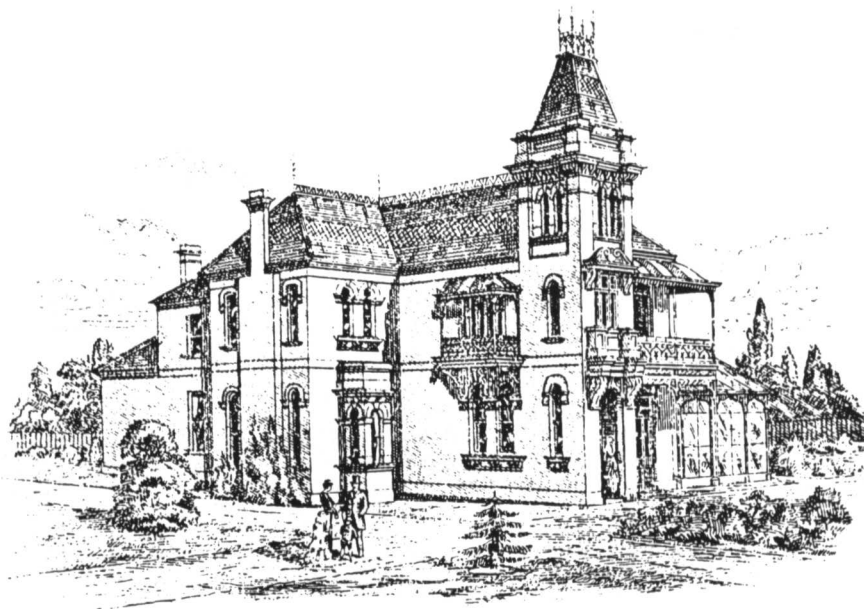
An example of the type of residence proposed by the
Excelsior Land Company for their Toronto Estate.

General view of Corumbong : Post Office, Church of England and Schools
Church erected 1868 ; then in Brisbane Water Parish. Transferred to Wickham Parish in 1874 ; to Wallsend
in 1882 ; and to Belmont in 1887
Illustrated Sydney News, March 15, 1884
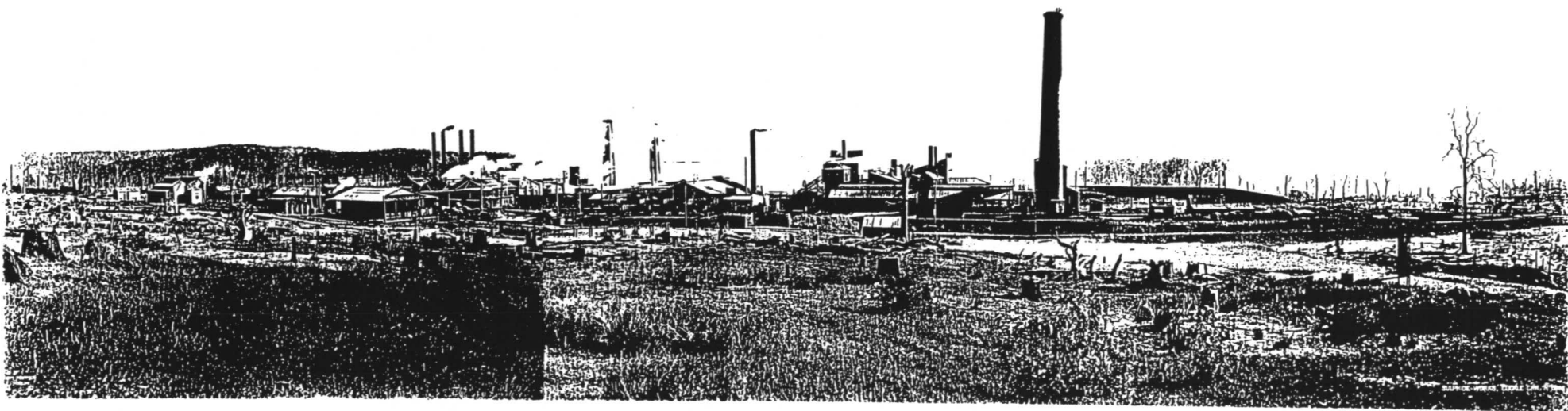
The Sulphide Corporation works, Cockle Creek, 1906.
From Edgeworth David's Geology of the Hunter River
coal reserves, New South Wales.

Lake Macquarie Heritage Study   Plate

Sulphide Corp.
Works at Cockle
Creek, 1906   3.6
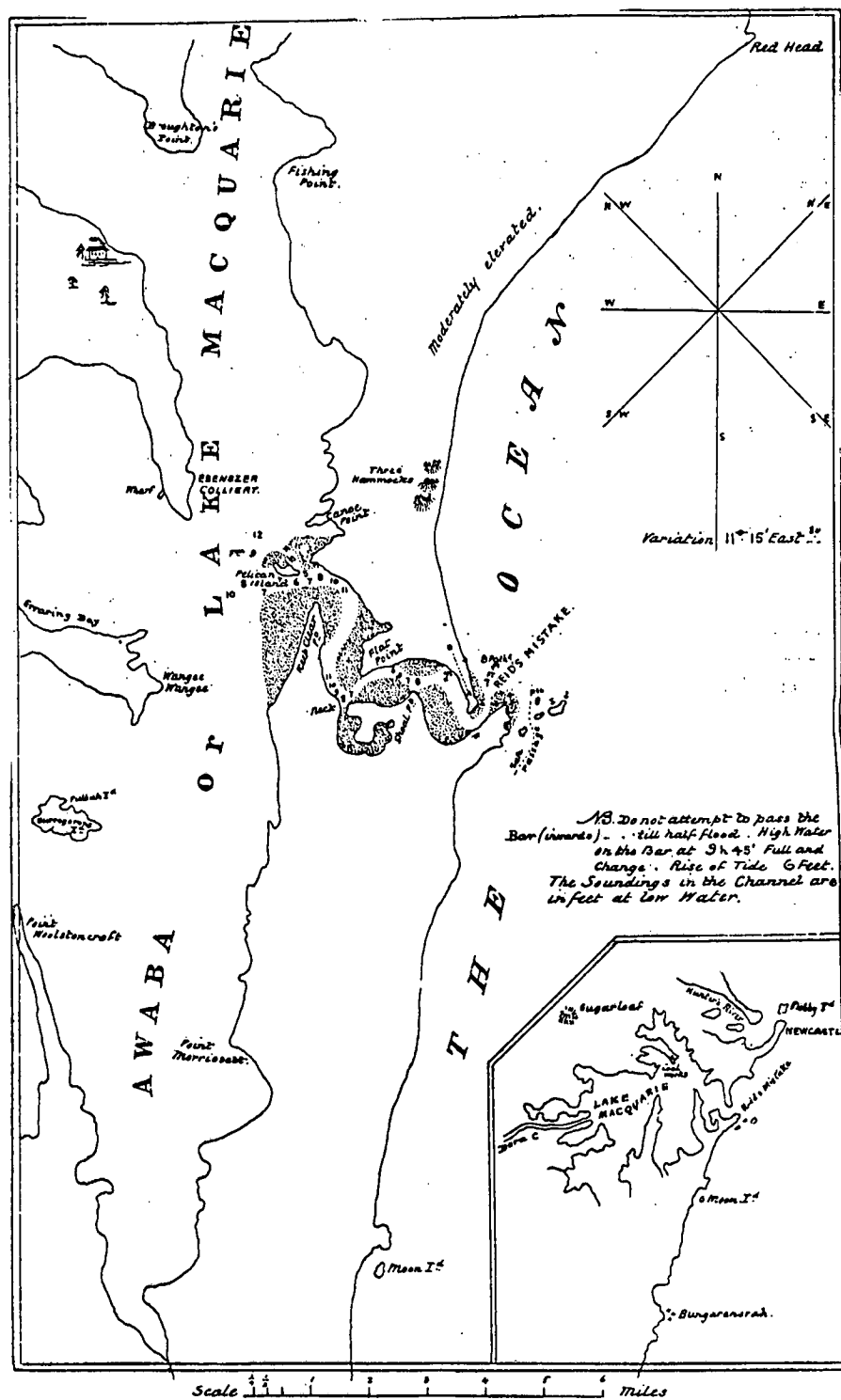
Map of Lake Macquarie sketched by W. Proctor in 1841
and lithographed by W. Baker of Sydney.
Original in Archives Office of New South Wales.

Source: N Gunson (ed), The

A MAP OF NEW SOUTH WALES, from the best Authorities, And from the LATEST DISCOVERIES. 1825.

Scale of British Miles.

London, Publish'd March 1825, by J. Souter, S.t Pauls Ch. Yard.
Reprinted by the Central Mapping Authority of New South Wales, Panorama Avenue Bathurst, from an original supplied by the Mitchell Library, Sydney, August 1982.

CMA

Map of the
RIVER HUNTER
and its Branches.
Shewing the Lands reserved therein for Church purposes
THE LOCATIONS MADE TO SETTLERS,
and the Minerals and part of the Tracks of the
Australian Agricultural Company,
together PORT STEPHENS with the
Colony, in Union with Reports, Maps & of
LONDON MISSIONARY SOCIETY and
Lake Macquarie
NEW SOUTH WALES.

HARTWHISTLE   WOOPERTON   ALLONDALE   BRANXTON

GLETON   STAMFORDHAM   HEDDON   GOSFORTH

MID

WHITLEY   STOCKRINGTON   MORPETH

OUTTE

HEXHAM   ALNWICK

LAKE MACQUARIE

GLOUCESTER

NEWCASTLE

STOCKTON

LAKE MACQUARIE
1828

Source: K H Clouten, Reid's Mistake
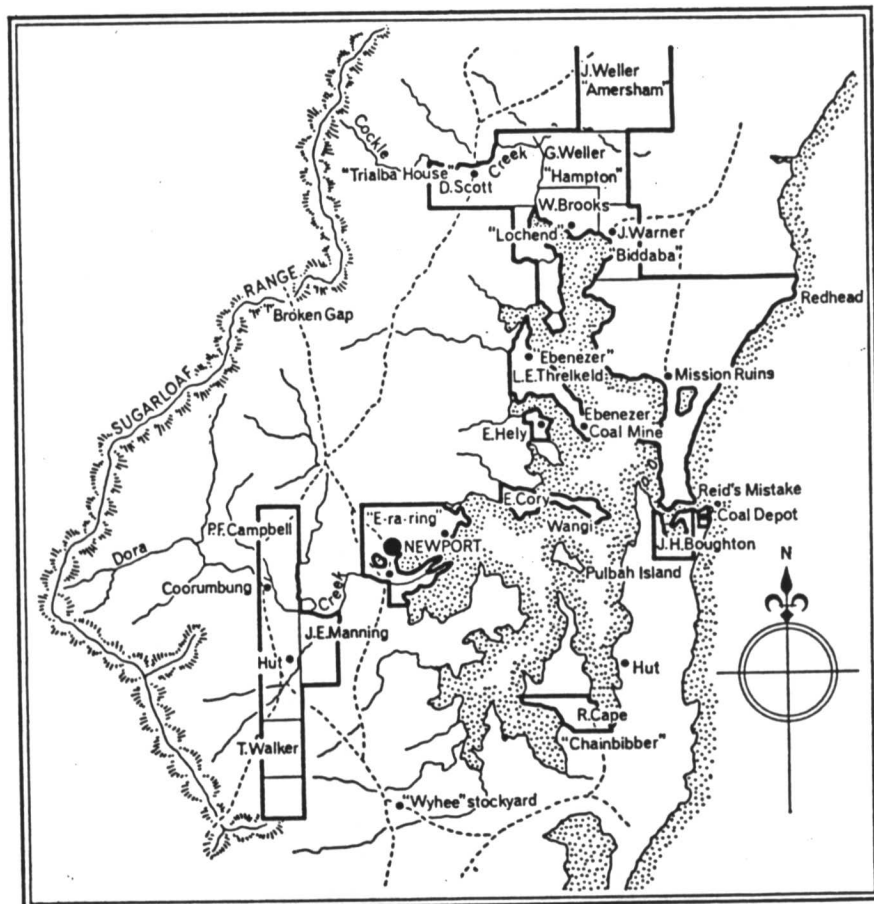
LAKE MACQUARIE
1841

Source: K H Clouten, Reid's Mistake.
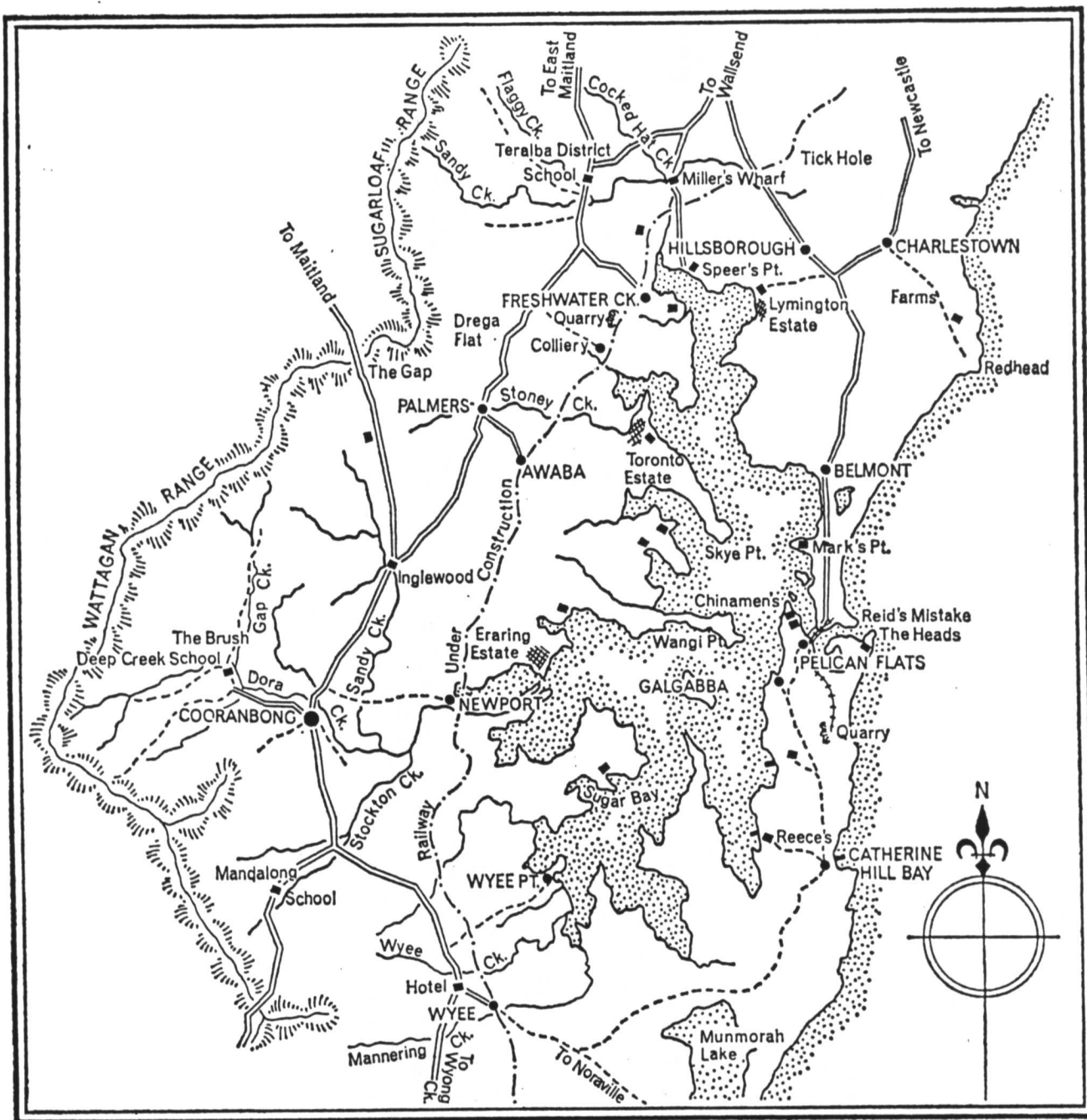
LAKE MACQUARIE

1885

E Tonks, History of Redhead Colliery,
Newcastle, 1985

City of Lake Macquarie Heritage Study   Map

Redhead Estate
and Coal Co.
Railway

3.7

Jorry's Plains

PATRICK'S PLAINS
Singleton

Warkworth

Whittingham

Broke

Maitland

Morpeth

Cesanock

WALLIS PLAINS

Hexham

Wollombi

Nobby's Head
Newcastle
(Kings Town)

Putty

Newport

Reid's Mistake
Swansea

Catherine Hill
Bay

Mt Manning

Kulnura

Wyong

St Albans

Ten Mile
Hollow

Wisemans
Ferry

Gosford

Calga

Brisbane
Water

Maroota

Parr's
Brush

Peat's Ferry

BROKEN BAY

Pitt Town
McGrath's Hill

Glenorie

Windsor

Dural

Hornsby

Rogans
Hill

Pennant
Hills

Parramatta

Abbotsford

PORT JACKSON

SYDNEY

OCEAN

PACIFIC

PACIFIC

SCALE
10   20
MILES

Locality Map.

March, 1949   MAIN ROADS.

Historical Roads of New South Wales.
Roads from Sydney to the Hunter River
Valley and Newcastle.
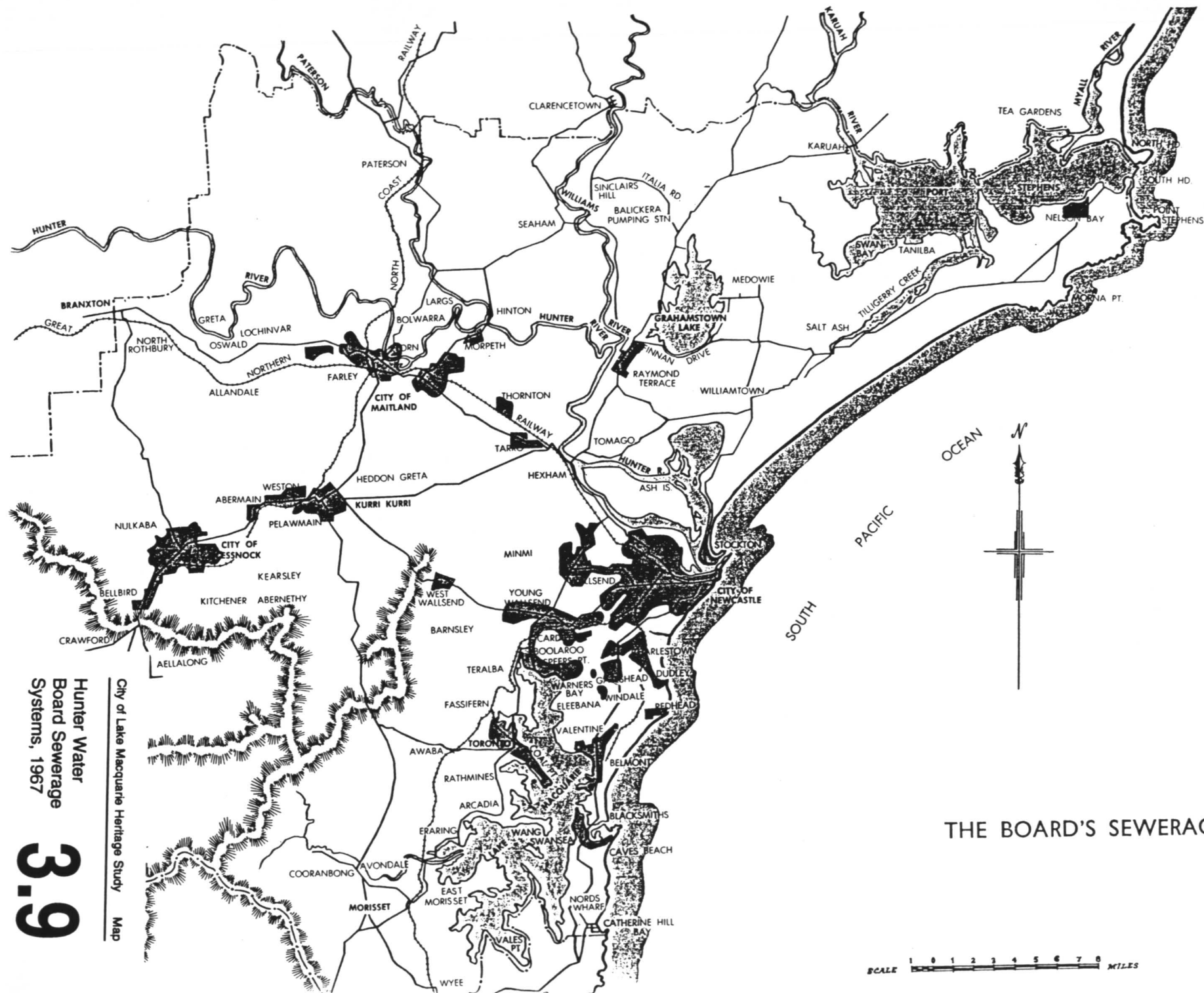
THE BOARD'S SEWERAGE SYSTEMS, 1967

151°30'
33°0'
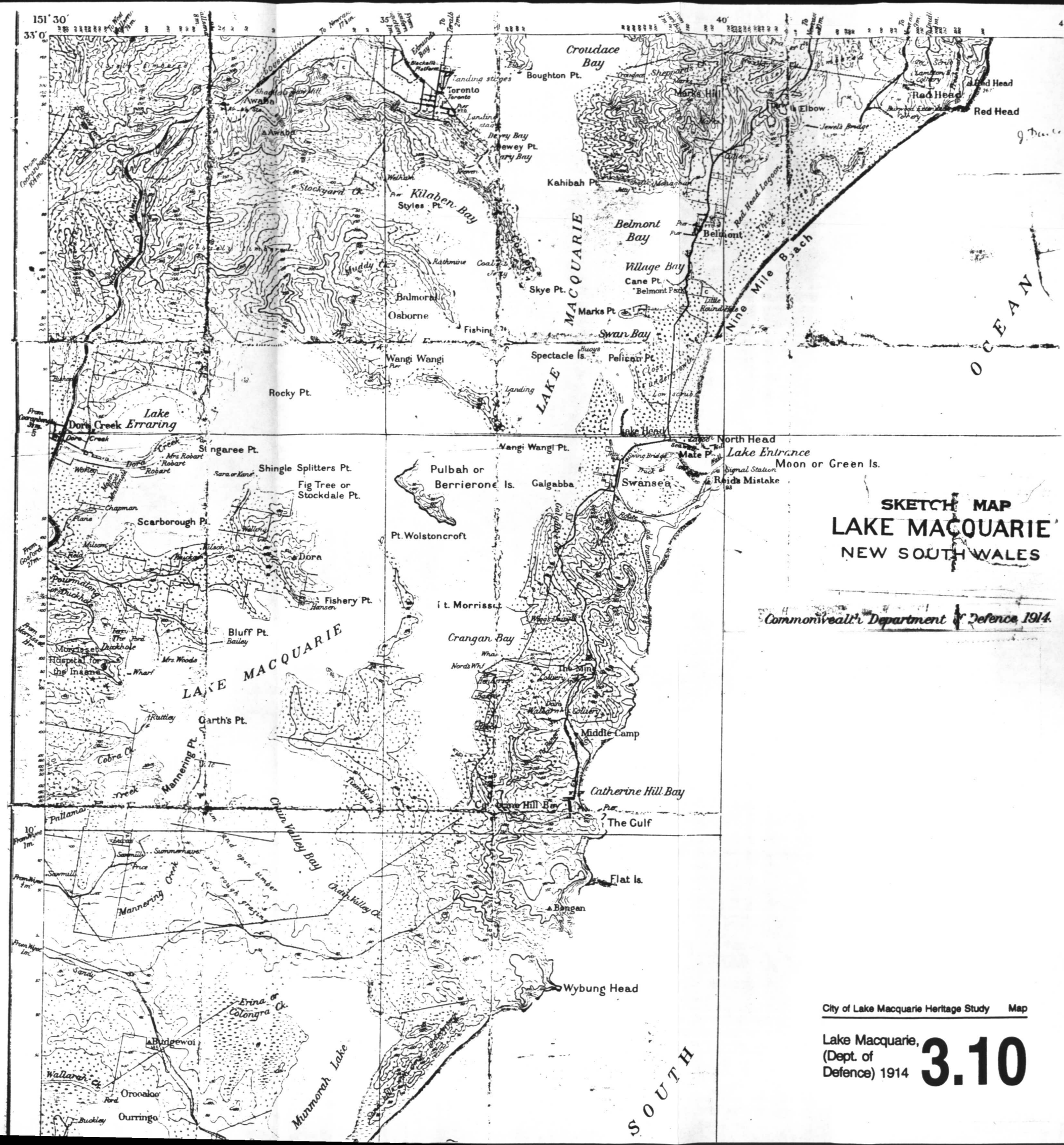
SKETCH MAP
LAKE MACQUARIE
NEW SOUTH WALES

Commonwealth Department of Defence, 1914

Croudace Bay
Boughton Pt.
Toronto
Awaba
Marks Hill
Red Head
Derwy Bay
Kahibah Pt.
Belmont Bay
Belmont
Stockyard Ck.
Kilaben Bay
Styles Pt.
Village Bay
Cane Pt.
Belmont Park
Muddy Ck.
Rathmore
Skye Pt.
Balmoral
Osborne
Marks Pt.
Fishing
Swan Bay
Wangi Wangi
Spectacle Is.
Pelican Pt.
Rocky Pt.
Lake Erraring
Dora Creek
Nine Mile Beach
OCEAN
Nangi Wangi Pt.
North Head
Lake Entrance
Moon or Green Is.
Singaree Pt.
Shingle Splitters Pt.
Pulbah or Berrierone Is.
Galgabba
Swansea
Reids Mistake
Fig Tree or Stockdale Pt.
Chapman
Scarborough Pt.
Dora
Pt. Wolstoncroft
Fishery Pt.
t. Morrisset
Bluff Pt.
Bailey
Crangan Bay
Hospital for the Insane
Wharf
LAKE MACQUARIE
Garth's Pt.
The Min
Middle Camp
Cobra Ck.
Catherine Hill Bay
Mannering Pt.
Dora Creek
The Gulf
Pattamar
Dora Valley Bay
Flat Is.
Mannering Creek
Bangan
Erina or Colongra Ck.
Budgewoi
Wybung Head
Wallarah Ck.
Orooaloo
Ourringo
Murmorah Lake
SOUTH

NEW SOUTH WALES
LAKE MACQUARIE

AUSTRALIA 1:63.360
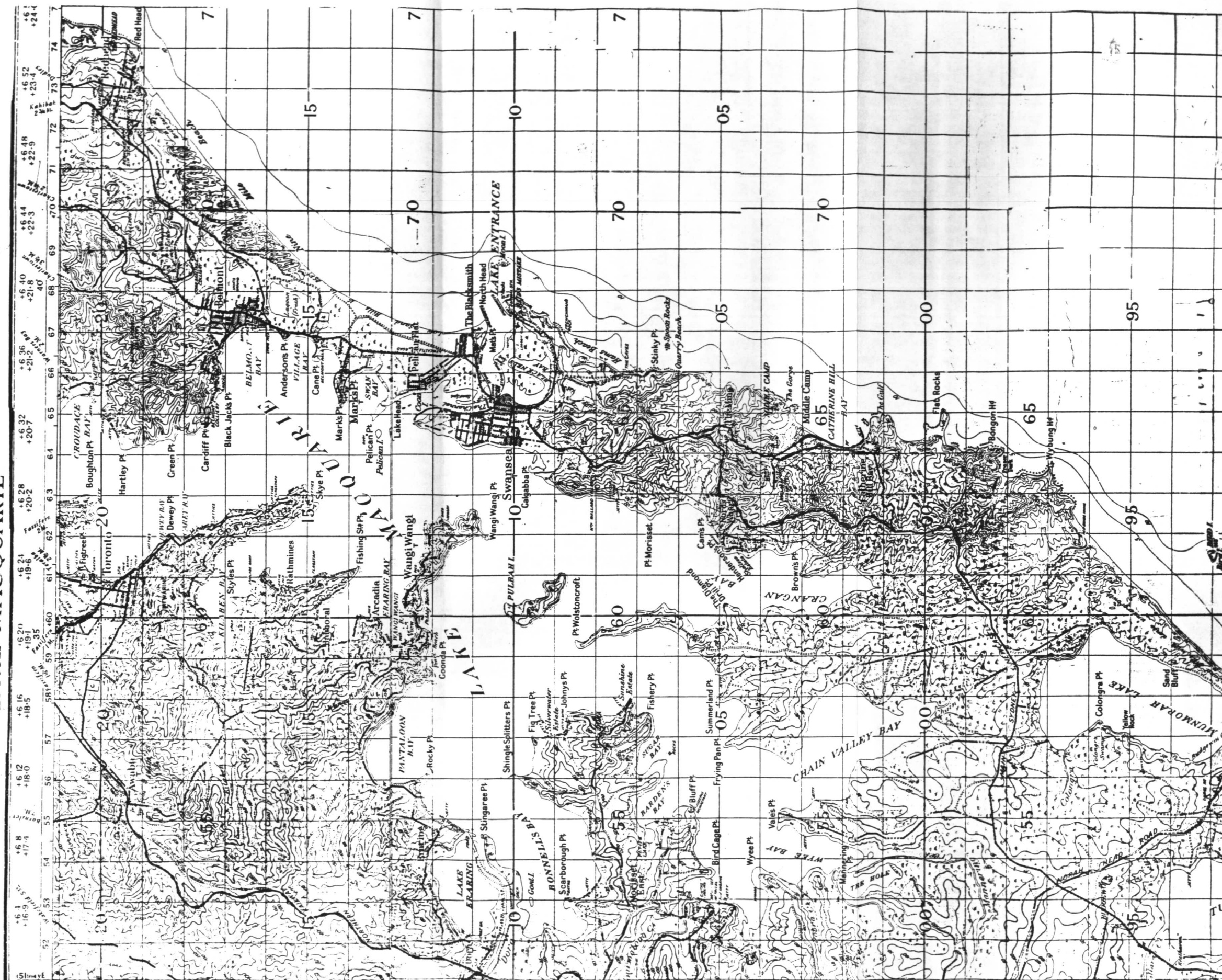
4

4. Comparison of Physical Evidence with Historical Themes

The preceding Thematic History forms the basis for the analysis of the heritage significance of items within the City. The purpose of this Section is to review the relationships between the historic themes identified therein, and the physical remains of items known to exist that represent those themes.

These items have been identified during the study area survey conducted by Carl and Margret Doring. Specific heritage items referred to in this section are cross referenced to the Inventory by means of their reference number. The numbering system is explained in the Inventory Index (Appendix 8.1). Further relevant information is included in the Inventory Summaries (Appendices 8.2 & 8.3) and the data sheets (Volumes 2 & 3).

The thematic study identifies the important phases in the development of what is now known as The City of Lake Macquarie. In particular, changes in modes of transportation, the development of the timber and coal mining industries and the arrival of tourism in the late 19th Century have had an important impact on the pattern of settlement, and changing roles and importance of small settlements and urban areas.

The towns and their hinterlands still retain many structures and buildings which reflect these underlying themes. These help to build up a picture of early life in the area and the socio-economic circumstances that existed during various phases of development of the area.

As previously noted, an assessment of Landscape or of Aboriginal Archaeology did not form part of this study. However, some particular items of local landscape have been noted and included in the inventory. These are usually places which have some historical significance, or which have influenced development of the City in some way. These include Mount Sugarloaf (WW-46), Pulbah Island (LM-01) and Reids Mistake (SD-03).

4.1 Early Settlement

The earliest European activities in the study area related to exploration, small farming, timber cutting (and splitting or milling) and coal mining. Because of this low-key development Lake Macquarie has no grand structures or obvious archaeological ruins from the early 19th century (such as Parramatta's Elizabeth Farm or the First Government House site in Sydney), and the City's early buildings are more likely to have been simple structures with a limited life that would have left little trace of their existence. Lake Macquarie does however have some evocative sites, and some archaeological sites which have interesting potential for exploration and interpretation.

4.1.1 Exploration

Major Morisset, head of the military contingent at Newcastle, was one of the earliest explorers of the western side of the lake. He is said to have camped under a particular tree (MS-10) which still exists in the town named after him.

There appears to be no physical reminder of Reid's celebrated Mistake (SD-03) at the mouth of the Lake, but the ruins of a railway and a mine adit a few kilometres north at Glenrock Lagoon (KH-01) are a vivid reminder of the discovery of workable coal at Glenrock. The discovery was supposedly made only a few years after the settlement of Newcastle, and was of enormous consequence in the subsequent development of the Hunter Region. However the seam was not commercially exploited until 1850, some years after the first coal mines in the Lake Macquarie district had been opened (see below).

4.1.2 Coal Mining

The earliest Lake Macquarie mines included the Reverend Threlkeld's 1841 mine at Coal Point (CP-01) and the Warner family's mine at Warners Bay (WB-03) possibly dating from the 1830's. Although neither could be searched for during the survey, they are a possible archaeological resource and should be located and recorded.

4.1.3 Timber Cutting

Timber cutting was another early industry around the lake. The earliest phases of this industry were limited to small groups of men working at cedar cutting or shingle splitting. Some timber mills are mentioned in histories of the area, and although extensive relics of these must still survive, none were located during the survey. Some traces of timber cutters activities are said to still survive in the remote bushland around Cooranbong (CB-37) and Martinsville (MV-05), and these should be sought out and recorded. Memories of the shingle splitters are embodied in the name of Shingle Splitters Point in Balcolyn (BC-01).

4.1.4 Farming

Although farming was an early activity in Lake Macquarie, it appears to always have been fairly marginal except in limited areas, mostly in the country south-west of the lake. The most successful agricultural activity may have been the fruit growing near Martinsville (MV-04).

Some dwellings seen during the survey started their lives as farmhouses, or look as if they may have done so. "Woodside" at Martinsville (MV-02) was the home of orchardists, and appears to have been built about 1890. The houses in Cooranbong at 8 Kings Road (CB-06) and 3 Kings Road (CB-07) may have been farmhouses when they were built, possibly in the late 1880's, and there is also a house at the east end of Seaham Street in Holmesville (HV-20) which could have been a farmhouse before the street was subdivided.

Very few, if any, historic farm buildings have survived. There is an interesting dairy (CB-27) in the Avondale College or Sanitarium Factory grounds which could have been built in the 1930's. During the survey we were told of the last original Mission building at the Bethshan Mission in Wyee (a timber slab dairy from c.1910), having been demolished the previous year. There could still be archaeological relics of the dairy or other original "Bethshan" farm buildings near the existing modern buildings.

In 1906 the Inspector General of Mental Hospitals announced that it was intended to use land at Morisset Hospital as an *"Industrial Farm Colony for suitable patients"*. The Hospital Farms (MS-30) are thought to have operated until recently, but their exact location and any surviving buildings were not identified during the survey.

4.2 Transportation

The development of different modes of transportation has played a strong role in determining the pattern of settlement around Lake Macquarie. This could be due to the relative lack of success of agricultural pursuits compared with the adjoining areas of the Hunter Valley.

Shipping and water navigation was the most significant means of transport in the first half of the 19th century, but at that time had little influence on settlement patterns. This would change somewhat with the turn of the century development of Lake Macquarie as a holiday destination, with regular ferry services.

The inauguration of the Main Northern Line of the Railways in 1887 had a major effect on the local economy and sped up the development of natural resources, particularly coal and tourism.

Many local roads were built and improved in the 1920s, following the growth in number of private and commercial motor vehicles. The opening of the Pacific Highway in the 1930s brought more people in from the south, and had some influence on the pattern of settlement and tourism.

Some examples remain of structures which reflect transport themes, and the extent of significant remains associated with each is discussed in the sections below.

4.2.1 River and Sea Transport

a. Lake Wharfs and Jetties

No remains of early wharfs on the Lake have been identified. There are jetties still at locations such as Speers Point and Belmont, where the ferry wharfs were, but these are substantially or wholly new structures, and are not necessarily in the same place as the original structures. Nevertheless the new structures can be seen to represent the

historic use of the waterway. The many relics of earlier jetties and wharfs could not be identified with any certainty, but they are vital parts of the heritage of the City of Lake Macquarie. This study recommends a project to identify the significant relics and prepare an inventory and conservation policy for these items (Section 6.2.1.2).

b. Open Sea Wharfs

The wharf structure and coal loader at Catherine Hill Bay (CH-14) is relatively new, but it is built in the same location and in a very similar form, carrying out the same function as the original. It makes a major contribution to maintenance of the historic landscape at Catherine Hill Bay.

c. Ship Building

Several locations were suggested as places where ship building was carried out, but no remains of ship or boat building yards were seen during the survey.

d. Ferry Services, Punts and Punt Crossings

No remains have been found of early ferry services, punts or punt crossings. Two boats at present working on the Lake were found to have interesting histories in their own right, and have been noted as contributing to the interpretation of the ferry boat heritage of the Lake (LM-02 & 04).

4.2.2 Rail Transport

a. The Main Northern Line

The railway has been significant in the development of Lake Macquarie and several of the villages exist solely because of the construction of the railway (Teralba, Fassifern, Awaba, Morisset). A number of items along the permanent way have been noted as part of the historic railways infrastructure.

- **Bridges**

    At Cockle Creek (AG-02), only the cast-iron piers of the original bridge remain after the deck and girders were demolished in 1992, but at Dora Creek the

original bridge (DC-01) has found a new use carrying the main road across the creek.

- **Railway Stations**

    The only station on the line which survives in anything like its original form is Fassifern (FF-03), also significant as the terminal station for the now redundant Toronto branch line. (See below)

- **Railway Housing**

    The Stationmasters' and other railway staff cottages were early markers of development, particularly in the villages which started because of the railway. These cottages have mostly survived in better condition than the station buildings. There are good examples of pairs at Awaba (AW-05 & AW-08) and Morisset (MS-01 & MS-03), and single cottages at Teralba (TA-12) and Fassifern (FF-01).

- **Workshops**

    For most of the last 60 years, Cardiff Railway Workshops (GD-01) have been one of the biggest single employers of labour in Lake Macquarie, and one of the three most important non coal or power related industrial ventures in the City. Although the Workshops have virtually closed down, most of the early buildings survive.

b. The Fassifern to Toronto Branch Line

This line (RT-11) is almost unique in New South Wales, being a branch line built solely to service a tourist destination. It still retains ninety percent of its permanent way and other infrastructure, including bridges (FF-02 and BK-02), Stations (BK-03 and TT-11) and a Stationmaster's House at Toronto (TT-22). Unfortunately, a section of the permanent way was recently (1993) broken at the Toronto end during local road works. Apart from this the track is still complete, and could be reused for light rail or a cycleway.

c. Colliery Railways and Tramways

One of the richest aspects of Lake Macquarie's heritage is the fascinating

network of former branch railways and tramways which carried coal from the mines to its destinations. Destinations ranged from primitive jetties on the Lake (WB-03), to the great coal loaders in Newcastle via the Raspberry Gully Line (RT-06), the Belmont Line (RT-04), the Seaham and West Wallsend Line (RT-09), numbers of sidings from the Great Northern Line such as at Teralba (TA-00), other branch lines and, much later, to the great Power Station at Wangi (RT-13).

Some of these railways are now purely archaeological sites, almost lost to memory and difficult to re-trace, including the Raspberry Gully Line, The Awaba to Wangi Line and the South Cardiff tramway (CS-01). The Belmont Line (RT-04) still has its permanent way partially intact, and is certainly not lost to memory. Like the Toronto line, it is eminently suitable for some form of reuse.

This study recommends the recording and use of these railways and tramways as the basis for a network of cycleways and industrial heritage trails throughout the Local Government Area (Section 6.3.2.2).

d. The West Wallsend and Speers Point Steam Trams

The West Wallsend and Speers Point to Newcastle Steam Trams (RT-01 & 02) were a vital connection with the larger population centre of Newcastle for many years, and are still fondly remembered by many older people of the City. They reduced the isolation of the mining town of West Wallsend, and brought many people from West Wallsend, Newcastle and further afield to the Lake for a day trip or a holiday.

The trams and tram lines have long gone, however it is still possible to trace their route from Wallsend.

4.2.3 Road Transport

• **Kerb and Guttering**

Most surviving early road infrastructure was associated with the development of road transport in the first half of the 20th Century. However very little of the road

structure dating from before World War Two has not been reworked. There is said to be some cut stone kerb and guttering surviving from Depression Roadwork Gangs in West Wallsend (WW-34), but this has not been confirmed.

• **Roadways cut in rock**

Some early roadworks associated with timber cutting are said to survive in the south-western part of Cooranbong (CB-37), but the continued existence of these is also not confirmed.

• **Corduroy Roads**

There has been reference to the use of 'corduroy' road construction in various parts of the study area such as Mandalong, but the location and significance of any early remains is not known. Some modern roadwork c.1965 across the north end of Mannering Bay was built in corduroy, but this has been so overlaid with successive improvements as to be unrecognisable.

• **Steel Girder Bridges**

The most interesting road bridge in Lake Macquarie is the steel through-girder bridge over Dora Creek (DC-01), formerly the rail bridge. This is an excellent example of the reuse of superseded bridgeworks, and its transformation of the main road down the west side of the lake was a catalyst for the great expansion of development in the Westlakes area in the late 1950s and 1960s.

• **Timber Trestle Bridges**

The early timber road bridges over Cockle Creek at Teralba and the Lake's Entrance at Swansea have both long gone, and most other road bridges were either very minor or altered out of recognition. However one traditional and picturesque c.1920s rural style trestle bridge survives over Dora Creek at Martinsville (MV-03). It is a type once found by the thousand all over the State, but now rapidly being replaced as development spreads and roads are widened. There may be some other traditional timber bridges in Lake

Macquarie, but none were noted during the survey.

- **Lift Bridges**

  The present lift bridges at Swansea (SS-03) are quite modern, and have little intrinsic heritage value as yet. Their main interest is in the history and heritage significance of the Channel crossing.

4.2.4 Pedestrian Bridges

The most interesting pedestrian bridge in Lake Macquarie must have been the long bridge which hopped across the 'Five Islands' at the mouth of Cockle Creek. Unfortunately this was demolished when the Watkins bridge was built in 1973. One minor footbridge over the railway survives at Glendale (GD-02), at the Sulphide Junction Station outside the Cardiff Railway Workshops. This is a fairly minimal timber trestle structure which is of historic interest by virtue of its use by the thousands of men who travelled to work there by train from 1929.

At the other end of Lake Macquarie, a suspension footbridge over Dora Creek at Cooranbong (CB-09) leads to the Sanitarium Health Foods Factory from a residential area. The existing bridge appears to be of fairly recent construction, but is said to have been progressively repaired in the same place for a long time. It is used by many factory employees who walk to work.

4.3 The Coal Mining Industry

Ever since the development of the railways in the late 1880s, the economy of Lake Macquarie has been largely dependant on coal. The list of Lake Macquarie coal mines and former coal mines fills most of a page. Many have disappeared, almost without trace. These include mines at South Cardiff where part of a former tramway still exists (CS-01).

The coal mining sites of Lake Macquarie cover almost the complete history of coal mining in NSW, starting with the ruins at Glenrock Lagoon (KH-01), where it is possible that the first discovery of coal in Australia was made in 1791 by escaped convicts (Ref. Branagan), through to the explosion of development in the 1880's. Some of the

seams are still being exploited today, such as Awaba State Coal Mine (AW-07), West Wallsend No.2 (KW-09) and Stockton Borehole (TA-19), and at new mines to the southern end of the Lake: Myuna at Wangi; Cooranbong at Dora Creek.

In terms of the heritage of Lake Macquarie the coal mines provide:

- The most interesting archaeological sites, being at West Wallsend (WW-02), Booragul (BU-01) and probably Glenrock (KH-01);
- Historic Townscapes at Catherine Hill Bay (CB-00) and West Wallsend (WW-00);
- Architectural gems at Lambton Colliery (RH-01) in Redhead, partially demolished in 1993;
- Romantic landscapes at Mt Sugarloaf No.1 (WW-47), Glenrock and Booragul again;
- Development potential at Lambton, Rhondda (TA-17), Seaham Nos. 1 & 2 (SH-04, KW-08) and West Wallsend Extended (KW-04);
- Development potential realised at John Darling (BN-01) in North Belmont;
- Interpretation opportunities at working collieries, possibly as stops along an Industrial Heritage Trail, exist at Awaba State Coal Mine (AW-07) and West Wallsend No.2 Colliery (KW-09); and
- Interpretation opportunities at former collieries exist, also as stops along heritage trails.

4.4 Industry other than Coal Mining

4.4.1 Dairy Farms and Orchards

There may be a few dairy farms still operating in outlying districts, but apart from the Sanitarium Farm at Cooranbong (CB-27) the industry seems to have effectively vanished. The land was probably always marginal for this purpose, and with the introduction of bottled milk, processed at central locations outside the Lake area, the local market for wholesale milk disappeared.

Orchards were once important in Lake Macquarie, particularly the orange orchards in Warners Bay (WB-02) and Martinsville (MV-

02 & 04). The orchards have vanished from the more urban areas like Warners Bay, and have become a marginal activity elsewhere.

4.4.2 Timber Milling

No physical evidence of early timber mills was found in the survey. This is not to say that such evidence does not exist, but it is not obvious, and former locations were not pinpointed in the references consulted. Because of the limitations of the study it was not possible to make protracted searches for individual sites.

The only active sawmill known of in the study area is Sylvester's at Martinsville, and that is understood to have been started in the 1950s. Other sawmilling firms (Wakefields, Laing & Wylie etc.) which may have been well known in the district, no longer exist, or have moved elsewhere, and were not found in this survey. In the book 'The Brush - Memories of Martinsville', the author describes the gradual dissolution of Espley's mill, which closed in the 1920s and took more than 40 years to disappear. Other mills in closer settled areas nearer the Lake were subject to much greater development pressure, and could have disappeared under a housing estate within a matter of months.

4.4.3 Brickworks

Brickmaking was a relatively early industry in Lake Macquarie. Brickyards were usually set up on land at the fringes of the developing towns. None of the brickworks is thought to have lasted more than 15 or 20 years at the most, and there is no evidence of any construction of kilns or of motor powered brickmaking machinery. The bricks were probably handmade and fired in clamps, so that when the market ran out the brickworks would have crumbled away much as the sawmills did, leaving little or no evidence of their existence.

However the products of Lake Macquarie's brickworks have survived very well. Bricks from Reynolds Brickworks (WW-55) west of the town of West Wallsend were used in many of the town's buildings, and were chosen by the Department of Public Works for the Post Office (WW-13) where they can still be seen. Bricks made at a now vanished

Holmesville yard (HV-01) seem to have been used in every chimney in town. When the Hotel at Edgeworth (EW-04) was built, a clamp was set up in the yard to provide bricks, and the same source is said to have been used for the School (EW-06) and Schoolmaster's House (EW-07) across the road. All these buildings appear to be in excellent condition still.

4.4.4 Fishing

There have always been a number of professional fishermen on the Lake but nothing in the way of an established fish market, canning factory or similar infrastructure survives. The principal evidence of the existence of the industry is the fishing boats, but identification of historic fishing boats was unfortunately outside the scope of this study.

Until recently, there were a number of primitive but highly evocative 19th Century fishermen's cottages around the foreshores of the Channel, at Swansea and Blacksmiths. Only one could be found in the course of this survey (BL-01) and that, because of its primitive construction and small size, is under potential threat.

4.4.5 Food Processing

The Sanitarium Company produces breakfast cereals and other processed foods at its very large factory in Cooranbong (CB-26) - surprisingly large to find in an isolated rural setting. When the factory was established at the turn of the century, the main means of transport for the coal used in the factory and for the goods coming out of it was by water, up and down Dora Creek. Now the power comes along a wire, and the goods go out by truck.

4.4.6 Chemicals

The Sulphide Corporation (BR-07) was established at Boolaroo in 1895, to take advantage of the nearby railway transport and of the Lake Macquarie coal. This chemical plant, still active after nearly 100 years, is one of the historically most significant sites in Lake Macquarie. It is thought that none of the original 1895 plant or buildings have survived, but some of the buildings could date

from the 1920s or 1930s. Undertaking a thorough inspection of the site was beyond the scope of this study, however its importance merits a full archaeological study (Section 6.2.1.2).

4.4.7 Quarrying

Quarrying in the district has been almost wholly a local industry, with the products of the earliest quarries used for ballast in the construction of railway lines, and those of later quarries used in local roads. There are dozens of small former quarries around the Lake, most of them well hidden from view. A few have been noted as particularly significant, for varying reasons.

South-west of the present village of Teralba (TA-00), on the slopes of Billygoat Hill, the contractors for the Main Northern Line opened a quarry for railway ballast in 1884. This particular quarry was the reason for the earliest development of Teralba, preceding even the opening of the Main Line. It is noted as part of the Conservation Area around Teralba.

West of Teralba, along the Rhondda Road, is the biggest active quarry in Lake Macquarie. It was opened in 1903 (TA-21), and has been operated by various owners for most of the time since then. On the other side of the Lake in Speers Point, a much smaller operation of the side of Munibung Hill (SP-15) has left a spectacular stepped cliff on the hillside, which can be seen from across the Lake, and is a local landmark.

4.4.8 Heavy Engineering

The Cardiff Railway Workshops (GD-01) were a vital part of the transport network throughout the northern region, maintaining and repairing the locomotives of the Northern Line. It was also for many years the only place in NSW, outside the Eveleigh Workshops in Sydney, where the building of locomotives was undertaken.

4.4.9 Power Generation and Distribution

The generation of electric power has been an industry in Lake Macquarie for most of the past century. Electricity was first generated

by the colliery companies to provide safe lighting for their mines. It is said that one of these lighting plants was built at the Pacific Colliery's ventilation shaft and fan house on Marmong Creek. Some traces of it probably still survive on that site (BU-01) among a rich collection of archaeological relics. This study recommends that funding be sought for a comprehensive archaeological study and management plan for this site (Section 6.2.1.2).

As the use of electricity spread, and the need for power extended to the outside community, and to machinery for the mines, some of the colliery companies built quite large power stations. One such in Lake Macquarie was the Cockle Creek power Station (TA-19) built in 1927. At its height this power station generated 10 megawatts and supplied 17 mines and 5 towns and villages with electricity. Cockle Creek Power station was demolished c.1980, but its site remains undeveloped and has considerable archaeological interest.

Lake Macquarie is also home to the first of the big coalfields power stations at Wangi (WG-01). Now disused, Wangi is one of the most important heritage items in the Lake Macquarie area, and an important building with great potential for re-use.

Not far away from Wangi is Eraring Power Station (ER-01), one of the newest and biggest power stations in the state. Lake Macquarie thus can demonstrate evidence of all the stages of coal burning Power Station development, from primitive early lighting plants to the giant modern boilers and turbo-alternators.

The Newcastle Substation at Killingworth (KW-02) is one of the biggest electrical substations or switching stations in the State. It was first built to handle the power generated at Wangi Power Station, and since then has grown with the power industry to become the centre of the network of huge power stations in the Hunter region.

4.5 Urban Areas and Villages

4.5.1 Urban Conservation Areas

An earlier study of the City of Lake Macquarie, for the Hunter Regional Environmental Plan Heritage Study, indicated that there were three priority Conservation Areas within the city boundaries. These areas are Catherine Hill Bay, Teralba and West Wallsend, all as listed in Schedule 5 of the Regional Environmental Plan (Section 2.3.2).

The REP suggests that urban conservation areas such as these '...can contain a number of historic buildings or may have a character and appearance worthy of conservation. They can help to illustrate several historic themes or ages of past development.'

4.5.2 Catherine Hill Bay

4.5.2.1 The New Wallsend Coal Company Settlement

The settlement at Catherine Hill Bay (CB-00) grew in three separate stages. The first was started in 1873 by the New Wallsend Coal Company, and was centred around the location of the existing coal loader jetty. This was the same site as the first coal mine, which was a tunnel into the cliff connected directly with a jetty, so that coal from the tunnel could be loaded straight into a ship at the end of the jetty. The south end of the present REP Conservation Area corresponds with part of this territory, but does not include the original mine site, the jetty, or the former Mine Manager's House.

The New Wallsend Coal Company collapsed in 1877, but not before the establishment of a small town. For a description of the site, Clouten (see refs.) quotes an article from the Miner's Advocate of 10th June 1874:

The manager's house is situated on a hill and commands an excellent view of the ocean, the pitworks, and the surrounding hills which are, for the most part, very barren looking. What is called the township is a little further in. We found about twenty houses and several tents, with a butcher shop and store, but there is

as yet no public house. The houses are very small, but substantially built, and erected with a degree of uniformity not frequently followed in new settlements.'

By 1876 there were two hotels, a Post Office and Store, as well as a Butcher, a Baker and a Policeman. By 1879 the town was deserted, and remained so for ten years. Remarkably, more than half of the 20 small houses still exist (including CH-05, 06, 07 & 08) in the same visual relationship to the Mine Manager's House (CH-13) and the Pit Head/Jetty (CH-14) as they had in 1874. These small cottages are perhaps the oldest surviving buildings in Lake Macquarie.

4.5.2.2 Mine Camp

The second stage of Catherine Hill Bay development was 4 kilometres north of the jetty, in the hills at a site called Mine Camp (CH-33). The Wallarah Coal Company started a new pit there 1889. Mine Camp had houses as well as the usual pithead structures. It had a Post Office from 1903 to 1952. A railway (CH-16) was built to take the coal to a new jetty on the original mine site.

The Mine Camp site is not included in the REP Conservation Area. It is said that all buildings at Mine Camp have been removed or demolished, but the 1985 CMA 1:25000 map shows old quarries (for brick clay?), and possibly a pond for steam engines as well as several buildings. A locked gate prevented inspection of Mine Camp as part of this survey. It would be advisable to conduct an archaeological survey of the complete length of the Colliery Railway before dismissing the significance of the Mine Camp site.

4.5.2.3 Middle Camp

In 1910 another subdivision was developed about halfway between the first two settlements. A cemetery (CH-32) had been dedicated here in 1894 behind the beach. A large coal cleaning, sorting and storage depot was developed behind the Cemetery. Middle Camp had a number of miner's cottages all built to the same design (many still exist, see CH-21, 32 & 33), a Hall (CH-22), a School (CH-23) and a Store (CH-26). A group of managerial type houses and some workshops (CH-27, 28 & 29) in Colliery Road (or Middle

Camp Road) west of the 1910 subdivision, were probably built in about the 1920s, possibly around a second Wallarah pithead of which no obvious traces survive.

The REP Conservation Area at Middle Camp includes only the two rows of 1910 miner's cottages along Flowers Drive and the road which joined Mine Camp and the coal loader jetty.

4.5.2.4 Proposed Amendments to the Catherine Hill Bay Conservation Area

The Middle Camp part of the existing REP Conservation Area omits the buildings in Colliery (or Middle Camp) Road, the Colliery Works, the Cemetery, the Hall, the existing School building and School House (CH-23 & 24) and two church sites (CH-18 & 19).

In addition, halfway between Middle Camp and the jetty there is a solitary house (CH-17), said to have been the Winding House for another mine shaft (which may date from a short-lived venture of 1875) and, near the churches, the abandoned and rusted remains of an old Cornish boiler.

The former railway passed by and linked most of the sites between Mine Camp and Catherine Hill Bay, and it is proposed that an enlarged Conservation Area should include the whole of the railway route as well as the three settlements. (Map CH)

4.5.3 Teralba

Teralba, like Fassifern, Awaba and Morisset, was founded only because of the coming of the Main Northern Line railway. The coal mines which ensured its survival were started later. Teralba started close to a quarry opened by the Railway contractors on the side of Billygoat Hill where the main line was pushed through to Fassifern. The town grew along both sides of the line to the north-east, and between the two collieries which were opened soon after the railway, that is Gartlee (TA-16) & Great Northern. When the Railway deviation around the east side of Billygoat Hill was opened in 1903, the town centre moved to the east.

4.5.3.1 Proposed Amendments to the Teralba Conservation Area

The existing REP Conservation Area covers only the area of later development and ignores the archaeological sites near the old railway reservation, the two collieries and streets on the west side of the Railway. Two of the more important buildings, Snedden's House (TA-11) and the Stationmaster's House (TA-11), are on the west side.

The significance of Teralba as a conservation area lies just as much in its archaeological potential as in its 20th Century business centre. It is proposed to outline a larger Conservation Area to take in the 19th and 20th Century centres, including the mines and original quarry. (Map TA)

4.5.4 West Wallsend

The development, characteristics and significance of West Wallsend township is discussed in the inventory entry for the town (WW-00). As noted therein, West Wallsend is one of the most significant historic townscapes in Lake Macquarie, and this has been recognised in the REP.

4.5.4.1 Proposed Amendments to the West Wallsend Conservation Area

Like the delineated conservation areas for Teralba and Catherine Hill Bay, the REP plan of West Wallsend Conservation Area has omitted the coal mine and the transport networks which gave the town its life and ensured its continuing existence.

The proposed new boundaries for the Conservation Area would take in West Wallsend No.1 Colliery site (WW-02), the Football Ground (WW-01), the Cemetery (WW-50), the Railway (RT-09), house sites associated with the former colliery management (WW-43 & 44) and the Steam Tram route (RT-01), as well as the commercial and residential centre. (Map WW)

4.5.5 Other Towns or Villages

A list of all the 'suburbs' or administrative areas in the City of Lake Macquarie is given in the Summary of Inventory Items, numbering 89 altogether. Heritage items, or

sites of some heritage significance, were found in 55 of the suburbs, but only a few suburbs had a residential or commercial nucleus with a number of surviving historic buildings or sites. The larger commercial and/or residential urban centres are briefly commented on below:

Belmont

Belmont has a commercial area strung out along the Pacific Highway, but the items noted in the inventory are located outside this centre, and except for one house which is a former private hospital (BM-04), are related to a Lakeside lifestyle.

Boolaroo

A small commercial centre, growing from the Sulphide Corporation at the north end, has changed very little in 70 years, leaving an interesting collection of shops and other businesses lining Main Road. Few of the buildings are individually of high heritage significance, but collectively they are evocative of their period, and their streetscape qualities are well worth retaining. The new Main Road at Boolaroo, from the Sulphide Corporation Boundary to about Eighth Street, would be a good subject for the Main Street Programme (Section 6.3.2.1), and could be recognised as a small Conservation Area.

Cardiff

Cardiff is a larger commercial centre than Boolaroo. It originally stretched far up the hill past the present Cardiff Railway Station, but has gradually retracted down the hill and spread out sideways to its present boundaries. The surviving historic buildings are scattered along Main Road, and although some individual sites have considerable local significance, these are mostly widely separated, and have little coherence as an historic streetscape.

Charlestown

This is the largest commercial centre in Lake Macquarie, and although the most recent large developments such as Charlestown Square have happened on the west side of the Pacific Highway, away from the original

'Main Street' on the east side of the Highway (Smith Street), very little has been left of 19th Century, or even of early 20th Century Charlestown.

Cooranbong

Cooranbong appears always to have been a village without a centre, or with several different centres over time. A rich and varied collection of heritage sites is scattered over a wide area. Although it is not the centre or at the centre of the village, the Avondale College is a strong nucleus in itself, with all the Adventist buildings, including the Sanitarium Factory, forming an identifiable group. The Adventist Group (CB-15) is suggested as the subject of a small Conservation Area.

Dudley

The village is almost all residential, with virtually no commercial area, and with the former coal mine infrastructure practically obliterated. Nevertheless it has a strong identity as a former mining village, and this would be reinforced by recognition of a Residential Conservation Area around Frog's Hollow (DL-11).

Holmesville

Holmesville is essentially a satellite village of West Wallsend, and except for the Post Office Store and a Hotel is almost all residential. It was developed not long after West Wallsend but has not retained the same coherence in housing types. Three groups of buildings have retained the general character of their historic origins, and these areas are suggested as the subject of small Conservation Areas separate from West Wallsend.

Morisset

Morisset, like Teralba, developed as a railway town. It has a moderate sized commercial street, focused on the Railway Station. Apart from two railway cottages there are a few buildings of moderate significance, but no 'Main Street' buildings from the 19th Century have survived.

The great mental hospital was developed entirely separately from the town, but is still an important part of Morisset. The historic buildings and landscapes of the hospital have recently come under much pressure from new government health policies. Recognition of the heritage significance of the site to the Lake Macquarie area would benefit from its declaration as a conservation area.

Speers Point

Like Cooranbong, Speers Point is a town without a centre. Most of its development happened after the Steam Tram service to the lake started, and apart from the almost coincidental location of the Shire Council's administrative centre there in 1915, Speers Point's development was nearly all related to the Lake as a holiday place. A fair number of the inventory items listed for Speers Point started their lives as holiday houses, or were in some way related to the holiday population.

Toronto

Toronto started life as a tourist and holiday destination, and although most of the houses are now permanent residences for people who commute to work elsewhere, it has somehow retained its lakeside resort flavour for more than 100 years. A large number of former holiday houses still exist, strung out around the Lakeshore from Fig Tree Point to Dewey Point, and many of these have retained their historic integrity. It may be appropriate to create a Conservation Area which takes in the area around the Lake from Fig Tree Point to Dewey Point, including the houses near Renwick Street, the Railway Station, the Hotel, some of the commercial area and the east end of Brighton Avenue.

4.5.5.1 Proposed Additional Conservation Areas

As noted above, various areas within the City additional to those recognised in the REP are worthy of the recognition and protection offered by their listing as a conservation area. The following areas should be considered for inclusion as Conservation Areas in the LEP:

- **Boolaroo**
  Main Road from Sulphide Corporation to Eighth Street. (Map BR)

- **Cooranbong**
  The Adventist group of buildings at Avondale College and the Sanitarium Factory. (Map CB)
- **Dudley**
  Area around Frogs Hollow. (Map DL)
- **Holmesville**
  Three groups of buildings within the original settlement area. (Map HV)
- **Morisset**
  The mental hospital and its grounds, including the outlying Maximum Security Division, farms and dam. (Map MS)
- **Toronto**
  The area around the Lake from Fig Tree Point to Dewey Point. (Map TT)

In addition to these, a conservation area is proposed at:

- **Rathmines**
  The former RAAF flying-boat base, including the Catalina slips and remaining buildings (Section 4.6.10). (Map RM)

4.6 Particular Building Types

The inventory includes a diverse range of building types which reflect aspects of the development of the Lake Macquarie area.

4.6.1 Commercial Buildings

Most of the earlier commercial buildings reflect the semi-rural character of the villages. Until the 1920s there were very few prestige commercial buildings of brick construction or more than one storey, the 1906 Co-op building at West Wallsend (WW-26) being one of very few examples. T.C.Frith's weatherboard store at Teralba (TA-03), built about 1915, or the c1900 Post Office Store at Holmesville (HV-09) are more typical, but these two stand out because of their virtually unaltered condition.

Mullard's Chambers at Morisset (MS-04) or the pairs of brick shops at Cardiff (CF-02 & 3), with shops downstairs and residences upstairs, reflect the style of many urban commercial streetscapes of the 1920s. The former Department Store in Boolaroo (BR-08) was an indication of the prosperity of this suburb in the 1920s, but sadly the building has now lost its parapet.

Most petrol stations, until the 1950s, consisted of a couple of petrol pumps on the footpath outside a general store or repair shop. Specially designed petrol stations or motor garages were unusual then, and surviving examples are extremely rare now. Lake Macquarie has two early petrol stations, one from the 1920s in Speers Point (SP-29), and one from the 1940s in Boolaroo (BR-04). Both are individual and idiosyncratic in design, and both are very expressive of their particular periods.

Banks and other financial organisations would have played some part in the development of Lake Macquarie, but they have left no legacy of grand buildings such as we still find in the larger country towns of NSW. Perhaps Lake Macquarie was too close to Newcastle to warrant investment in such building stock.

4.6.2 Hotels

In contrast to the paucity of high finance to attract grand banking chambers, there was plenty of ready cash to justify the setting up of hotels and pubs near the gates of every coal mine in the district. A few of these have vanished almost without trace (eg. the pub at Rhondda Colliery), but others, built in the Victorian or Edwardian traditions, have survived and continue to serve a changed clientele. Typical of the Victorian era coal mine pubs are the Museum Hotel at West Wallsend (WW-41), the Royal Crown at Dudley (DL-08), the former Northumberland Hotel at West Wallsend (WW-38) and the former Killingworth Hotel(KW-03).

There has been a coal miners' hotel at Catherine Hill Bay since the 1870s (probably the oldest liquor licence in Lake Macquarie). It is doubtful if the existing Wallarah Hotel (CH-04) retains much, if any, of the original structure, but the hotel has great historical significance.

Travellers' Inns played no part in early Lake Macquarie. Colonial traffic mostly bypassed the area on inland roads or by sea. The Swansea Hotel (SS-02) occupies the site of one of several hotels which were built when the first bridge over the Lake channel was opened. On the west side of the Lake, the site of the c1885 Palmer's Inn (AW-01) needs to be identified, on the first north-south road

east of the Watagan.

However even Palmer's Inn was built for the convenience of the Main Northern Line Railway builders, rather than the traditional traveller. By the late 1890s the tradition of Railway Hotels was taking over from the Travellers' Inn tradition, but Lake Macquarie has only one of these, the Great Northern at Teralba, rebuilt in 1923, and thus reflecting a typical style of suburban pub from the 1920s.

The Toronto Hotel (TT-09) reflects a different tradition of resort and holiday hotels. It was built by the developers of Toronto, who used the branch railway and this large residential hotel as the principal attractions for the sale of land in the area. This grand Victorian hotel has been extensively altered, but retains its almost romantic ambience and landmark form.

4.6.3 Boarding Houses

As a consequence of the development of the Lake as a tourist resort, a number of boarding houses for cheap family Lakeside holidays were opened. 'The Moorings' (TT-06), on the Lake shore at Toronto is typical of conversions of former family holiday houses. 'Kurrawilla' at Nords Wharf (NW-01) was built as a holiday boarding house in the 1920s. There may be others which have not been identified in this survey.

4.6.4 Public Buildings

a. Local Government

Since 1915, the centre of Local Government in Lake Macquarie has been Speers Point. Unfortunately, the ornate Edwardian Shire Council Offices built at that time were demolished to make way for the present City Council Offices in the late 1970s. A little of the Shire Council's heritage survives in the 1955 Council Chambers (SP-25) across the Main Road from the present offices.

b. Regional, State and National Government

The 1955 Shire Offices now contain Regional organisations such as the local Water Board Office. In Argenton, the Newcastle Mines Rescue Station (AG-01) has tremendous

historical significance, but virtually nothing is left of the original buildings except a representative Dutch gable at the front. The associated houses have importance as rare 'on the job' housing for other than managerial staff.

The only national government building of any particular architectural merit is the Post Office at West Wallsend (WW-13). The very fine 1880s Post Office at Cooranbong (CB-03) survives intact, but is no longer a Post Office.

There are several rather charming, small, 1890s brick buildings, including two at Holmesville (HV-08) and Charlestown (CT-04) which resemble many built by the Public Works Department at the time, and which may have been Police Stations or Registry Offices or similar state buildings.

4.6.5 Public Halls

Three timber framed, weatherboard clad halls at Catherine Hill Bay (CH-22), Dudley (DL-06) and West Wallsend (WW-23) are of particular interest. They were built between 1890 and 1910 as large but fairly simple structures. All appear to have been little used in recent years, but still evoke a great deal of the social history of their communities. The three have been altered to a greater or lesser extent over the years, however retain an excellent potential for restoration and rehabilitation to become community centres again.

4.6.6 Sport, Recreation and Entertainment

The district has few buildings, of any age, related to sport and outdoor recreation. Grand-stands at the former Boolaroo Race Course, and an old dressing shed at the West Wallsend Football Ground (WW-01) have all been demolished.

The cinema as a form of entertainment was rapidly adopted by the Lake communities, and became an important recreational outlet for nearly 50 years until superseded by television. West Wallsend still retains remnants of the brick projection box at an outdoor cinema (WW-22) which opened in 1911. In Teralba (TA-01) and Toronto (TT-10) the former 1920s Cinemas have found new uses as antique and second hand

furniture shops. The only building still operating as a cinema is the Lake Cinema at Boolaroo (BR-03), but this appears to be a much later construction than either Toronto or Teralba.

4.6.7 Health Services

a. Cottage Hospitals

The first major Lake Macquarie community hospital was built in Belmont in the 1960s. Before then there were several small cottage hospitals, mostly operated as maternity hospitals by local nurse/midwives or doctors. Two buildings in particular at Belmont (BM-04) and Charlestown (CT-02) were identified in this survey both as former hospitals and as houses of moderate distinction in their towns.

b. Surgeries

Two small buildings in Cardiff were identified as a Doctor's Surgery (CF-04) and Dentist's Surgery (CF-07) respectively. Both have lost much of their original setting, but remain interesting reminders of the formerly bustling Main Road streetscape.

c. RAAF Hospital

At Rathmines, the former RAAF Hospital survives as an entrance to the former Flying Boat Base precinct, and has retained its hospital function and maintained its significance through its use as the entrance to a modern Nursing Home.

d. Morisset Hospital

The vicinity of Morisset was chosen, in 1906, both for its remoteness and for its beautiful Lakeside setting, as the site for a great State Hospital (MS-11). The Morisset hospital buildings have stood the test of time. They still, after 60 to 80 years, show evidence of fine design and sound construction in their continuing suitability for a hospital function. Some of the hospital buildings are items of State Environmental Heritage Significance, but the hospital also has great local significance and is proposed for listing as a Conservation Area. (Section 4.5.5.1)

4.6.8 Educational Buildings

a. State Public Schools

As in most NSW towns of the 1890s to the 1920s, the Public Works Department provided at least one example of advances in institutional architectural design in the local State Primary School buildings. Lake Macquarie has none of the very large school buildings like those found in most cities, but it does have some good examples from schools founded at that time which remain as illustrations of the fine construction and craftsmanship which could be achieved in the district.

West Wallsend School (WW-31) has a range of buildings for a fast-growing population, illustrating the changes in styles from 1890 to about 1910. Dudley (DL-04) has a large (and expensive looking) 1892 Classical Revival style school building, suitable for a town intended to be a great mining centre. Awaba (AW-02) has a small and simple but well-built 1891 one roomed country schoolhouse, suitable for this railway workers' village.

b. Private Schools

With the exception of a small Parish School in the Catholic Convent at West Wallsend (WW-14), which was opened in 1912, the few private schools in Lake Macquarie are all thought to be modern. The Christadelphian School at Rathmines (RM-04) borrows its significance from the Catalina Flying Boat Base buildings it occupies. The new Baptist school at Belmont (BN-01) gets its significance from the former John Darling Colliery it occupies.

c. Tertiary Colleges

The Avondale College at Cooranbong is part of the Adventist Group and has a number of significant buildings including the 1890s Bethel Hall and College Hall, the 1930s Music Hall and Science Hall, and the 1940s Auditorium.

4.6.9 Ecclesiastical Buildings

The population of Lake Macquarie has always been spread over a large number of small villages and towns, with very few having had congregations large enough to support a full time minister or priest, or build more than the simplest place of worship before the 1950s.

One exception was West Wallsend, which had one of the largest populations in the Shire at the turn of the Century, and a brickworks turning out an excellent product. West Wallsend has three brick churches built between 1900 and 1910. These churches are a simple vernacular Gothic Presbyterian Church (WW-33), a more ornate Methodist Church (WW-28) and a highly decorated Baptist Church (WW-35).

Most other churches in the district were simple, gable roofed, weatherboard clad buildings, and almost all have been altered in some way, either by recladding or having new windows fitted. There are a few interesting modern churches, including the unfinished St Kevin's in Cardiff, from the 1930s, and the 1954 Chapel at Morisset Hospital.

4.6.10 Military Buildings

The only military buildings of consequence in Lake Macquarie are those of the former RAAF Catalina Flying Boat Base at Rathmines (RM-00). Only a few of the buildings which once covered the base area still remain there, but these are sufficiently varied to be representative of the types involved, and give the flavour of the former Workshops and Barracks. Sufficient buildings and infrastructure are intact to warrant the declaration of a conservation area covering the base site. (Section 4.5.5.1)

4.6.11 Industrial Buildings

The major industries in Lake Macquarie were discussed in Section 4.3 and 4.4. The buildings associated with the significant industries have a wonderful variety, ranging from the purely functional structures of the chemical industry at the former Sulphide Corporation (BR-07), to the German Expressionist tour-de-force of the 1940s Wangi Power Station (WG-01), the Art Deco brickwork and interiors of the 1933 Sanitarium Health Foods Factory (CB-26), to the traditional saw-tooth truss buildings of the 1928 Cardiff Railway Workshops (GD-01), or to the Victorian detailing of the 1890s Lambton Colliery at Redhead (RH-01).

4.6.12 Residential Dwellings

a. Miners' Cottages

The residential buildings included in the inventory, like the life and work of the district, are dominated by the coal mining industry. Miners' or workmen's cottages have mostly been built in groups of similar design. Some have been listed in groups and some individually.

The oldest known cottages in Lake Macquarie are the small gable roofed brick cottages built in 1874 along Clarke Street at Catherine Hill Bay. Other large and representative groups include 1890s cottages at West Wallsend, in Carrington Street and elsewhere and the 1910 cottages along Flowers Drive, in Middle Camp at Catherine Hill Bay.

Two cottages with most of their original detailing intact and in good order are in Carrington Street, West Wallsend (WW-08) and Main Road, Cardiff (CF-17). These both have particular significance because of their intactness and representative qualities.

b. Other Cottages

The Railways built cottages for their Stationmasters and Gatekeepers and some of these survive. One cottage of a pair at Awaba (AW-08), while not in good condition, has been very little altered and retains a small kitchen wing under a separate roof.

Possibly the most interesting and historically significant of all the cottages are the most humble ones, which include a tiny all corrugated iron shanty/cottage of c1880 at Blacksmiths (BL-01), a primitive mudbrick Depression era cottage at Eraring (ER-05), and the extraordinary collection of weekend shacks and boathouses turned Depression era houses at Little Pelican (LP-01).

c. Colliery Managers' Residences

The Colliery Managers' Houses are hardly mansions, but they are much more substantial than the average workers' cottage. The most interesting examples are an 1889 Victorian Georgian Residence, which is the only surviving relic of the Redhead Colliery (RH-07), the nearby 1924 Federation Arts and Crafts "The Gables" (RH-04), built for the Manager of the Lambton Colliery, Andrew Snedden's Federation Queen Anne house in Railway Street Teralba (TA-11), and the management row of five 1920s Federation Bungalows at the former John Darling colliery in North Belmont (BN-04).

d. Holiday Houses

Toronto, as one of the most popular holiday destinations for Newcastle gentry, and with an abundance of elevated sites on the Lakefront, has the greatest concentration of former holiday houses distinguished mostly for their style and size. The Winn and Arnott families, summer visitors from Newcastle, built a series of Houses near Renwick Street (TT-16, 17, 29, 38 and 43). The local publican built an eccentric house with an octagonal tower. (TT-20). A Mr McGeachie (the Manager of West Wallsend Colliery) built a Victorian Italianate villa in Brighton Avenue (TT-23) which is reputed to have been stayed in by the then Prince of Wales on his 1920s Australian visit.

Speers Point has a variety of interesting houses, but apart from "The Knoll" (SP-16), a large 1920 Federation Bungalow, there are few houses of similar consequence to those Toronto houses noted above. One modest Speers Point cottage (SP-12), built in economical materials in the purest Federation Arts and Crafts style, was probably architect designed. It once had an identical neighbour, now unfortunately much altered.

e. Other Houses of Note

"Awaba" at Booragul (BU-02), a large and elegant 1927 house, belonged to local landowners. "Yarragee" at Belmont (BM-01) was built by an early settler at Belmont, and later owned by a businessman who became Mayor of Newcastle. "Sunnyside" at Cooranbong (CB-31) was built for the founder of Adventism in Australia. Residences Nos. 1 and 3 (MS-19 and 24) at Morisset Hospital are splendid Federation Queen Anne houses that were built for the Hospital Manager and the Medical Superintendent.

4.7 Other Items

4.7.1 Artefacts

Several unusual items, which don't fit into any of the previous categories,have been listed in the inventory. These include:

- a garden fence in Blackalls Park (BK-01) which consists of cemented together slices of fossil tree section, said to have been collected from the Fossil Tree Reserve (BK-04) nearby;
- the top of the headframe from the West Wallsend No. 1 colliery at West Wallsend (WW-02) was cut off and removed to Freemans Waterhole, from whence it would be desirable that it be returned;
- a Minenwurfer (1st World War German Mortar) on a stand in Speers Point Park (SP-37); and
- various Cornish and Lancashire boilers, and one egg-end boiler, left lying around near former coal mine sites (BN-01, RH-02, CH-01 & 20).

4.7.2 Cemeteries, Gravesites and Memorials

a. Cemeteries

Of the established cemeteries, the most significant are the Cooranbong Catholic Church Cemetery (CB-02), the Whitebridge Cemetery (WH-01) and the West Wallsend Cemetery (WW-50).

b. Gravesites

Two instances have been found of solitary marked gravesites, unconnected with an established cemetery, at Cooranbong (CB-01) and Booragul (BU-03). In both cases the graves were found to be significant because the persons whose graves were marked were well known as pioneers of their districts.

c. Memorials

A number of memorials were noted, most related to the First World War. The most interesting of these were at Killingworth (KW-05) and Dudley (DL-02). A memorial at Rathmines (RM-07) specifically relates to the men who flew in the Catalina Flying Boats in the Second World War. In the Public School grounds at West Wallsend, a memorial to local coal miners has been set up (WW-32).

4.7.3 Natural Areas, Reserves and Trees

A number of trees, or groups of trees, have become important elements of the Lake Macquarie landscape. One tree of particular note is said to mark Major Morisset's campsite (MS-10). At Pelican Flat, a large group of Cabbage Tree Palms and Paperbarks (PF-01) are indicative of the original vegetation covering the area.

Listed reserves which are important in the history of Lake Macquarie include Mt Sugarloaf (WW-46) and Pulbah Island (LM-01).

5

5. Statement of Significance

5.1 Summary Statement of Environmental Heritage Significance

The heritage significance of the City of Lake Macquarie derives mainly from the natural geography and geology of the region, and has been little influenced by artificial political factors. These geographical and geological influences include:

a. The poorness of the surface soil which discouraged agricultural development.
b. The barrier of the Sugarloaf Range against ready access to the area and the development of overland transport routes.
c. The lack of a deep-water port for shipment of the area's natural resources.
d. The presence of huge and readily exploitable deposits of coal.
e. The lake itself, in terms of fishing, transportation, recreation and the supply of cooling water for power stations.

This has led to the City's built heritage being predominantly small scale buildings within isolated villages, lacking the grand commercial and civic buildings common to most Australian city centres. Thus the range of heritage items is not confined to a small number of highly significant works, but is embodied in a wide variety of buildings, relics and places which reflect the history of the area and its people.

5.2 The General Nature of the Heritage of the City of Lake Macquarie

The history of European settlement and development of the City of Lake Macquarie, and hence its heritage significance within the context of the State, derives mainly from the geography and geology of the region, and has been little influenced by artificial political factors. In particular, this local history has been dominated by the poorness of the surface soil, by the barrier of the Sugarloaf Range, by the lack of a deep-water port, by the presence of huge deposits of coal, and by

the Lake itself - claimed to be the largest inland body of salt-water in Australia.

The Sugarloaf Range and the generally rough and infertile nature of the land offered a barrier to land transport and discouraged traffic through the district or early agricultural development of the area that is now the City of Lake Macquarie. Consequently, the catchment area of Lake Macquarie developed later than the Hunter River Valley, which had more fertile soil and easier access to the ports of Newcastle or Morpeth.

With a relatively infertile hinterland, with poor terrain for land transport, with only shallow-draft harbours, and being located not far from the excellent deep-water ports of Sydney and Newcastle, Lake Macquarie tended to be ignored and by-passed for the first 50-75 years of European occupation of Australia. Lake Macquarie has never developed a major agriculture or shipping industry, and had only sparse settlement for minor agriculture or timber-getting until the mid-19th Century. This early period of European settlement has left little in the way of physical heritage.

When major development and settlement of the Lake Macquarie area occurred in the mid and late 19th Century, this was due mainly to the exploitation of its coal resources. The extraction of coal, and the transport of coal by rail or ship to customers in other parts of the country or overseas, dominated the 19th Century economic and urban development of the region. In the late 20th Century coal still shapes the local economy, the regional development, and the working lives of the population, either in the extraction and export of the coal itself, or in the value-adding conversion of coal to electrical energy and the transmission of the electricity to other parts of the state.

Thus Lake Macquarie's coal resources have been a very significant factor in the development and economy of the region and of the state, and has left the area with a considerable amount of heritage of local, regional or even state significance embodied in the relics of the coal extraction and transport industry, in the power generation and transmission industry, and in the townships which grew to serve the people working in those industries.

With a few notable exceptions, other industrial development in Lake Macquarie has been on a small scale to serve local needs (eg. brickworks or timber mills), and has left a heritage of local significance only. The most notable exceptions are the Cardiff Railway Workshops at Glendale, the Pasminco (formerly Sulphide Corporation) ore treatment plant at Boolaroo, and the Sanitarium Health Foods factory at Cooranbong, all of which are significant works at a State level.

The second major influence on the development of the City of Lake Macquarie was the Lake itself. Commercially, the saltiness of the Lake water and the shallowness of the lake entrance at Swansea has prevented its use for agricultural irrigation or as a modern shipping port, and has restricted its commercial use to small fishing boats and small local ferries. The most important commercial application of the Lake has been as a source of cooling water for a series of major power stations, beginning with Wangi, which were located on the coalfields but supplied power to the whole State, particularly Sydney.

The Lake has had other major influences on the history and heritage of the City of Lake Macquarie. As a physical barrier to land passenger transport (at least until the advent of the motor car), it has caused urban development to be scattered around the lake perimeter close to existing or former coal mines etc., without generating any one dominant urban centre. This has led to the built heritage being on a small village-like scale, without the grand commercial and civic buildings found in say Sydney or Newcastle.

The Lake has long been a focus of recreational activity, for boating, swimming, picnics and camping, and has much socially significant physical heritage associated with this function, for example in the form of modest or grand holiday homes. Increased mobility of the family car means that it is now more feasible for people to live at the Lake and commute elsewhere to work, and in future the attractive lakeside lifestyle will become even more significant as an everyday way of life and as a major influence on the future residential development of the City.

It is evident that future development of the

City will be dominated by the pattern of attractive residential development around the purlieus of the Lake, and there is a risk that the City could forget its important industrial beginnings. Recognition and interpretation of the City's industrial heritage through this study, and subsequent implementation of the study's recommendations, will help to prevent Lake Macquarie becoming a city without a history.

5.3 Range of Heritage Values in the City of Lake Macquarie

As outlined in the Heritage Assessment Guidelines of the NSW Department of Planning, the heritage of a place can combine one or more of a range of qualitative cultural values, usually classed as being of historic, scientific, social, archaeological, architectural, aesthetic, natural or Aboriginal significance. This study of the City, and the resultant heritage Inventory, did not address matters of Aboriginal significance within the City, but did cover items representing the other heritage values. Some examples of items in the City heritage inventory which illustrate the various types of heritage value are given below.

5.3.1 Examples of Historic Significance

- Glenrock Lagoon at Kahibah is the probable site of the first coal discovery by Europeans in NSW. (KH-01)

- 'Reid's Mistake' at Swansea Heads marks the discovery of Lake Macquarie. (SD-03)

- Lambton Colliery at Redhead is the last NSW colliery site with surviving 19th century buildings. (RH-01)

- Wangi Power Station was the first NSW coalfields power station serving the State. (WG-01)

- West Wallsend Soccer Club is the oldest in NSW and possibly the oldest in Australia. (WW-01)

5.3.2 Examples of Scientific Significance

• Coal Mines: The many mines of various types and ages illustrate the development of mining technology, from primitive early 19th Century adit mining, through organised late 19th Century shaft mining, to fully mechanised 20th Century mines.

• Industrial Safety: The research and educational work of the Newcastle Mines Rescue Station at Argenton has been at the forefront of mine safety for many years. (AG-01)

• Steam Boilers: There are various examples of steam boiler technology, including early egg-end boilers, Cornish and Lancashire boilers, the largest chain-grate boilers in Australia (Wangi), and modern pulverised fuel boilers at Wangi (WG-01) and Eraring (ER-01).

• Fossil Deposits: There are nature reserves marking the discovery of fossilised trees at Blackalls (BK-04), and fossilised insects at Tingira Heights (TH-01). These are already recognised as being of state significance.

• Areas of remnant indigenous vegetation: Includes trees, shrubs, herbs and grasses.

5.3.3 Examples of Natural Significance

• Lake Macquarie itself.

• Pulbah Island in Lake Macquarie. (LM-01)

• Moon Island off Swansea Heads (a sanctuary for seabirds). (SD-04)

• The Cabbage Tree and Paperbark stands on the Lake flats at Pelican Flats. (PC-01)

5.3.4 Examples of Archaeological Significance

• Former coal mines have archaeological significance (including those whose underground workings have been sealed, but could possibly be reopened and

investigated in future) in that they could be used to demonstrate past mining technology and illustrate the working life of former miners.

• Early worker's cottages and houses, and their immediate surrounds, have the potential to reveal information about construction materials and methods and about the way of life of the owners or tenants.

5.3.5 Examples of Social Significance

• The form of the private mining towns, with separate cottages on generous blocks of land, usually available for private ownership, represents an enlightened attitude of the mine owners towards the mine workers, especially when compared with conditions in British and American coal mining towns of the period.

• The social impact of the steam trams to Speers Point (RT-02) and cross-country to West Wallsend (RT-01), and of the railway lines linking the various communities and the work centres.

• The Lake and its shore as a continuing recreational resource, for picnicking or enjoying the breeze, for sailing, swimming, fishing and 'simply messing about in boats' for over 100 years, first for summer visitors, then day trippers, and now for commuters from the City as well.

• The numerous small local cemeteries which record the names of local families, many still living in the area, and indicate dates of settlement and the close-knit nature of the local communities.

• Legacies of the Depression era, such as the 'Golden Mile' relief road-work in West Wallsend (WW-34), a primitive mudbrick cottage at Eraring (ER-05), and the weekend shacks and boathouses turned into Depression era houses, to be found in a number of places around the Lake.

• William Dobell's home at Wangi (WG-04), for its association with the life and artistic work of one of Australia's best-known painters.

5.3.6 Examples of Architectural Significance

- The Quigley house at Booragul (BU-02), designed by a well known local architect in a style advanced for its time and for the area, and a distinctive small house in Speers Point (SP-12), by an unknown architect, which is a superb expression of a Federation Arts & Crafts design.

- Some of the State public schools, illustrating typical advanced design for better teaching and the stylistic changes brought by different Government Architect's periods in office.

- Successful use of Art Deco design ideas on a large scale in a functional application at the 1933 Sanitarium factory buildings (CB-26). The factory looks as good today as when it was built 60 years ago.

- The application of Expressionist design ideas and high quality craftsmanship and details to an industrial structure at Wangi Power Station (WG-01).

5.3.7 Examples of Aesthetic Significance

- The Lake and views to and from it.

- Mt Sugarloaf and the Sugarloaf Range (WW-46).

- The buildings noted in 3.8.3.6 above - the Quigley house, the Sanitarium factory, Wangi Power Station - and others such as the Bethel Hall (CB-18) and College Hall (CB-21) at Avondale College, Andrew Snedden's house on the hill at Teralba (TA-11), and the Medical Superintendent's House at Morisset Hospital (MS-24).

- The walled prison hospital at Morisset (MS-25).

- Streetscapes in Catherine Hill Bay (CH-00) and West Wallsend (WW-00).

- Waterlilies and reeds on the dam at Morisset (MS-29).

- Groups of trees such as the Bunya pines at Eraring (ER-08), Norfolk Island pines at

Shingle Splitters Point (BC-01), the avenue and Lakeside gardens at Morisset Hospital (MS-11).

5.4 The Heritage Inventory

5.4.1 Assessment of Levels of Significance

Where assessing levels of significance in this study, we have adopted a qualitative terminology which sets out five levels of significance. Individual heritage items or sites are assessed as having Very Low, Low, Moderate, High or Very High Significance, in a Local, Regional or State context. The level of Local Significance of individual items is reported in our inventory sheets, but items of very low significance were omitted from the inventory. The level of regional or state significance is not reported unless it is appreciable.

Although we have assessed the level of significance of individual items in the heritage inventory, we have not given an assessment of the level of heritage significance to the City as a whole.

5.4.2 The Scope of the Heritage Inventory

A basic finding of this heritage study is that the physical heritage of the City of Lake Macquarie is not confined to a small number of highly significant buildings of outstanding architectural merit, but is embodied in a wide variety of buildings, works and places which reflect the history of the area and the life and work of the people who lived there. Consequently, this heritage inventory includes a large base population of items of high or moderate local significance, together with a smaller number of items of very high local significance, and a few items of state significance.

The inventory items at the higher end of the significance spectrum will warrant legal protection given by inclusion in the appropriate schedules in the City of Lake Macquarie Local Environmental Plan, and possibly through statutory protection initiated by the Heritage Council.

The bulk of inventory items of lesser significance may not warrant the degree of individual legal protection given by inclusion in the LEP. However, they should be recognised as making a major contribution to the City's heritage, individually or collectively, and the City should take steps to encourage the owners to maintain the fabric and integrity of those items in a way that preserves and enhances their contribution to the local environment.

For example, the City could award plaques to items of local significance, and could require owners to seek special approval and/or heritage advice before altering or demolishing those items. Further, the City Council should take the significance of these items into account when considering development applications concerning or indirectly affecting those items. These ideas are explored in some detail later (Section 6).

There were many borderline items on the grey edges of the heritage spectrum, which make some contribution to the local heritage environment but which have not been included in the inventory. The decision not to include those items was based on various factors, such as the detraction of unsympathetic alterations to the item itself, or the detraction of unsympathetic surroundings. In many cases, potential inventory items were not included simply because the inventory already contained a large number of comparable items (eg. miners' cottages) and it was not feasible to include all examples of that type.

5.4.3 Completeness of the Heritage Inventory

In view of the large area within the boundaries of the City of Lake Macquarie, the hundreds of heritage items covered, and the limited research resources available, it has not been possible during the study to thoroughly investigate the individual sites listed in the Inventory. A primary purpose of the inventory is in alerting the City Council, the Council's Officers and the Community, to the presence of the various items of heritage value. The City must encourage future research to confirm and add to the very brief historical notes and description given in the inventory sheets (Section 6.2.1.1).

An inventory list of this type can never be final, and should be subject to periodical revision. It is likely that future research will show that some significant items were overlooked or undervalued during this present Study, or may have become rare examples of their type due to the loss of similar items, and these items should then be added to the inventory. It is also likely that further information will show that the assessed significance of some listed items should be increased or decreased, and that some items should be totally removed from the inventory because they were not as important as they were thought to be when the list was compiled.

Community attitudes to heritage resources will also change with time, and items currently considered to be of low heritage status may gain in significance to be considered important heritage items at some point in the future. However, we recommend that future revisions should not remove listed items which were of significance but have subsequently been destroyed. Rather, such items should remain in the inventory - marked as destroyed - as a record and reminder of the heritage which has been lost to the City.

5.4.4 State Heritage Inventory Project

Part of the initial proposal for the inventory was to include references to the historical themes established by the State Heritage Inventory Project (SHIP themes). For a number of reasons however these have not been included on the data sheets at this point.

The scope of the inventory, some 500 items, was significantly more than envisaged in the initial brief. The time required to analyse and note the relevant themes for such a number of items would have been considerable, and would have caused the study team to scale down research in other areas which were considered more important at this point in time. Also, many of the SHIP themes defined are of little relevance to Lake Macquarie, while others might properly have been noted against almost every inventory item. The Gold Rushes for example are a separate SHIP category, but are of virtually no relevance to the area, while all other mining

is included under Extraction and Processing and allows for no specific reference to the immense impact the presence of coal has had on the area.

Space has been allowed on the inventory sheets for inclusion of SHIP themes in the future. The definition of the themes is sometimes quite subjective, and in order to ensure compatibility with other studies conducted in the state this should be undertaken by someone familiar with the system.

5.5 Schedule of Heritage Items and Conservation Areas Nominated for Protection under the Local Environmental Plan

Heritage items from the inventory which are considered to have a High or Very High Local significance, or which have appreciable Regional or State significance, are proposed for inclusion in a Schedule of Heritage items nominated for protection under the City of Lake Macquarie Local Environmental Plan. A schedule of these items follow (Schedule 5.1). An explanation of the codes used in the schedule is included.

A schedule of proposed amendments to existing or additional Conservation Areas nominated for protection under the LEP is also included (Schedule 5.2).

Note that not all inventory items are proposed for protection, but only the most significant as noted above. A summary of the inventory is included in this report (Appendix 8), with data sheets for all inventory items in separate volumes of the report (Volumes 2 & 3).

PROPOSED SCHEDULE

OF HERITAGE SITES AND ITEMS

Lake Macquarie Heritage Study   Schedule

**Schedule of Items
of Env. Heritage
Significance**

5.1

PROPOSED SCHEDULE OF HERITAGE ITEMS

ITEM No.	DESCRIPTION and LOCATION	TYPE		SIGNIFICANCE		
				S	R	L
ARGENTON – AG	**ARGENTON – AG**					
AG-01	NEWCASTLE MINES RESCUE STATION, 533 LAKE Rd, ARGENTON		GO		H	V
AG-02	Former COCKLE CREEK RAILWAY BRIDGE, ARGENTON	w	BR		H	V
AG-03	COCKLE CREEK RAILWAY BRIDGE, ARGENTON	w	BR		M	H
AG-05	CHURCH & CHURCH HALL, 475/7 LAKE Rd, ARGENTON		CH			H
AG-06	SPEERS POINT TRAM ROUTE, WINDING CREEK, ARGENTON	a	RT		M	H
				S	R	L
AWABA – AW	**AWABA – AW**					
AW-04	RAILWAY STATION BUILDINGS, ADELAIDE St, AWABA		RT		M	H
AW-05	STATIONMASTER'S HOUSE, 1 WILTON Rd, AWABA		DW		M	M
AW-07	AWABA STATE COAL MINE, 17 WILTON Rd, AWABA		EX	M	H	V
AW-08	RAILWAY STATION COTTAGE, ADELAIDE St, AWABA		DW		M	V
				S	R	L
BARNSLEY – BY	**BARNSLEY – BY**					
BY-02	JOHNSTON FAMILY PRIVATE CEMETERY, TAYLOR Av, BARNSLEY	c	CE		L	H
BY-03	BARNSLEY PUBLIC SCHOOL, APPLETREE ROAD, BARNSLEY		SC		L	M
				S	R	L
BELMONT – BM	**BELMONT – BM**					
BM-01	HOUSE "YARRAGEE", 23 BELLEVUE Rd, BELMONT		DW		H	V
BM-02	LAKE MACQUARIE YACHT CLUB, 9 ADA St, BELMONT		SP		M	H
BM-04	Fmr "ROSLYN" PRIVATE HOSPITAL, 5 GEORGE St, BELMONT		ME		M	H
BM-05	HOUSE, "THE BENNALS", 47 WALTER St, BELMONT		DW		M	V
BM-08	FORMER FERRY WHARF, off BROOKS Pde, BELMONT	w	WH		H	H

PROPOSED SCHEDULE OF HERITAGE ITEMS	PAGE 1

PROPOSED SCHEDULE OF HERITAGE ITEMS

ITEM No.	DESCRIPTION and LOCATION	TYPE	SIGNIFICANCE S R L
BELMONT NORTH – BN	**BELMONT NORTH – BN**		S R L
BN-01	SCHOOL, Fmr JOHN DARLING COLLIERY, JOHN FISHER Rd, BELMONT NORTH.	c EX	H V V
BN-04	Fmr STAFF HOUSES, COLLIERY ROW, off JOHN FISHER Rd, BELMONT NORTH.	c DW	H V
BLACKALLS PARK – BK	**BLACKALLS PARK – BK**		S R L
BK-01	FOSSIL TREE SECTIONS, 23 VENETIA Ave, BLACKALLS Pk	a AR	H V V
BK-02	RAILWAY BRIDGES, RAILWAY Pde, BLACKALLS PARK	w BR	R V
BK-03	RAILWAY STATION, SOUTH PARADE, BLACKALLS PARK	w RT	H
BK-04	FOSSIL TREE RESERVE, FENNELL BAY, off ALDON Cr, BLACKALLS PARK.	c NA	– – –
BLACKSMITHS – BL	**BLACKSMITHS – BL**		S R L
BL-01	FISHERMAN'S COTTAGE, 167 UNGALA St, BLACKSMITHS	DW	M H
BOOLAROO – BR	**BOOLAROO – BR**		S R L
BR-01	GROUP OF 4 COTTAGES, CREEK RESERVE Rd, BOOLAROO	DW	M H
BR-02	BOOLAROO POST OFFICE, 91 MAIN Rd, BOOLAROO	GO	L H
BR-04	FORMER MOTOR GARAGE, 19 MAIN Rd, BOOLAROO	GA	M H
BR-05	COMMERCIAL HOTEL, 2 MAIN Rd, BOOLAROO	HO	H H
BR-06	HOUSE "ALIDA", 48 LAKEVIEW St, BOOLAROO	DW	H
BR-07	PASMINCO METALS-SULPHIDE, MAIN Rd, BOOLAROO	c FW	M H V

PROPOSED SCHEDULE OF HERITAGE ITEMS   **PAGE 2**

CITY OF LAKE MACQUARIE   HERITAGE STUDY

ITEM No.	DESCRIPTION and LOCATION	TYPE	SIGNIFICANCE		
			S	R	L
BOORAGUL – BU	**BOORAGUL – BU**				
BU-01	COLLIERY RELICS, UPPER MARMONG CREEK, BOORAGUL	a EX		H	V
BU-02	HOUSE "AWABA", FIRST STREET, BOORAGUL	DW		H	V
BU-03	QUIGLEY GRAVE, PARK PARADE, BOORAGUL	c CE		M	V
			S	R	L
CARDIFF – CF	**CARDIFF – CF**				
CF-01	ROW OF 4 SHOPS with COTTAGES, MAIN ROAD, CARDIFF	SH		L	M
CF-02	BRICK SHOPS, 281, 283, 285 MAIN ROAD, CARDIFF	SH		L	M
CF-04	FORMER DOCTOR'S SURGERY, MAIN ROAD, CARDIFF	ME		L	H
CF-05	HOUSE, 6 MICHAEL STREET, CARDIFF	DW		L	H
CF-08	CARDIFF MASONIC HALL, 4 MARGARET St, CARDIFF	CH		L	H
CF-09	HOUSE, 309 MAIN ROAD, CARDIFF	DW			H
CF-15	SAINT KEVIN'S COTTAGE, 230a MAIN Rd, CARDIFF	DW			H
CF-16	SAINT KEVIN'S CHURCH, MAIN Rd, CARDIFF	CH			H
CF-17	Former MINER'S COTTAGE, 251 MAIN ROAD, CARDIFF	DW		M	V
			S	R	L
CARDIFF SOUTH – CS	**CARDIFF SOUTH – CS**				
CS-01	Fmr COLLIERY TRAMWAY, MACQUARIE Rd, CARDIFF SOUTH	a RT		M	H

PROPOSED SCHEDULE OF HERITAGE ITEMS

ITEM No.	DESCRIPTION and LOCATION	TYPE		SIGNIFICANCE		
				S	R	L
CATHERINE HILL BAY – CH	CATHERINE HILL BAY – CH					
CH-00	CATHERINE HILL BAY CONSERVATION AREA	c	TO	H	H	V
CH-03	POLICE Stn & LOCK-UP, 23 CLARKE St, CATHERINE HILL BAY		GO		H	V
CH-04	WALLARAH HOTEL, 24 CLARKE St, CATHERINE HILL BAY		HO		M	H
CH-05	COTTAGES, 8, 10 & 12 CLARKE St, CATHERINE HILL BAY		DW		M	H
CH-06	COTTAGES, 19 & 21 CLARKE St, CATHERINE HILL BAY		DW		M	H
CH-07	COTTAGE, 17 CLARKE St, CATHERINE HILL BAY		DW		M	H
CH-08	COTTAGES 9, 7, 5 & 3 CLARKE St, CATHERINE HILL BAY		DW		M	H
CH-10	COTTAGE, 3 LINDSLEY St, CATHERINE HILL BAY		DW		M	H
CH-12	COTTAGE, 11 LINDSLEY St, CATHERINE HILL BAY		DW		M	H
CH-13	"WALLARAH HOUSE", HALE St, CATHERINE HILL BAY		DW		M	H
CH-14	COAL LOADER JETTY, CATHERINE HILL BAY	w	WH	M	H	V
CH-16	CATHERINE HILL BAY COLLIERY RAILWAY	a	RT		H	H
CH-17	HOUSE & 4 NORFOLK PINES, FLOWERS Dr, CATHERINE HILL BAY		DW			H
CH-19	ANGLICAN CHURCH, FLOWERS Dr, CATHERINE HILL BAY		CH			H
CH-21	STREETSCAPE, FLOWERS Dr, MIDDLE CAMP, CATHERINE HILL BAY	c	TO	H	H	V
CH-22	HALL, NORTHWOOD Rd, MIDDLE CAMP, CATHERINE HILL BAY		EN		M	H
CH-24	HOUSE, 26 FLOWERS Dr, MIDDLE CAMP, CATHERINE HILL BAY		DW			H
CH-27	HOUSE, COLLIERY Rd, MIDDLE CAMP, CATHERINE HILL BAY		DW		M	H
CH-32	CEMETERY, NORTHWOOD Rd, MIDDLE CAMP, CATHERINE HILL BAY	c	CE		M	H
				S	R	L
CHARLESTOWN – CT	CHARLESTOWN – CT					
CT-01	MINER'S COTTAGES GROUP, CHARLESTOWN Rd, CHARLESTOWN		DW		M	V
CT-02	OFFICE OF J.R. FACE MP, 23 SMITH St, CHARLESTOWN		DW		M	H
CT-03	COTTAGE, 32 SMITH STREET, CHARLESTOWN		DW		M	H
CT-04	BRICK COTTAGE, 36 SMITH STREET, CHARLESTOWN		DW		M	H

PROPOSED SCHEDULE OF HERITAGE ITEMS	PAGE 4

PROPOSED SCHEDULE OF HERITAGE ITEMS

ITEM No.	DESCRIPTION and LOCATION	TYPE		SIGNIFICANCE		
				S	R	L
COAL POINT - CP	**COAL POINT - CP**					
CP-01	THRELKELD'S MINE, COAL POINT Rd, COAL POINT	a	EX	M	H	V
				S	R	L
COORANBONG - CB	**COORANBONG - CB**					
CB-01	"FROST'S REST", Cnr BABERS & FROST Rds, COORANBONG	c	CE			H
CB-02	CATHOLIC CHURCH & CEMETERY, 6 MARTINSVILLE Rd, COORANBONG		CH		H	H
CB-03	fmr POST OFFICE, 41 MARTINSVILLE Rd, COORANBONG		GO		H	V
CB-06	HOUSE, 3 KINGS ROAD, COORANBONG		DW			H
CB-07	HOUSE, 8 KINGS ROAD, COORANBONG		DW			H
CB-08	COORUMBUNG CEMETERY, MARTINSVILLE ROAD, COORANBONG	c	CE			H
CB-09	SUSPENSION FOOTBRIDGE, PRIVATE Rd, COORANBONG	w	BR		M	H
CB-10	HOUSE, 549 FREEMANS DRIVE, COORANBONG		DW			H
CB-15	THE ADVENTIST GROUP, COORANBONG	c	SC	H	H	V
CB-17	WATER TOWER, CENTRAL AVENUE, COORANBONG	w	WA	M	H	V
CB-18	BETHEL HALL, AVONDALE COLLEGE, COORANBONG		SC	M	H	V
CB-21	COLLEGE HALL, AVONDALE COLLEGE, COORANBONG		SC	M	H	V
CB-22	SCIENCE HALL, AVONDALE COLLEGE, COORANBONG		SC		M	H
CB-23	"THE LAURELS", 3 CENTRAL Ave, COORANBONG		DW		M	H
CB-24	AUDITORIUM, AVONDALE COLLEGE, COORANBONG		SC		-	H
CB-26	SANITARIUM HEALTH FOODS FACTORY, COLLEGE Rd, COORANBONG		FW	H	H	H
CB-27	SANITARIUM DAIRY FARM, CENTRAL Ave, COORANBONG		FA		L	M
CB-28	"THREE BELLS", 597 FREEMANS DRIVE, COORANBONG		DW		M	H
CB-29	COTTAGE, 661 FREEMANS DRIVE, COORANBONG		DW			H
CB-31	"SUNNYSIDE", AVONDALE ROAD, COORANBONG		DW	M	H	V

ITEM No.	DESCRIPTION and LOCATION	TYPE	SIGNIFICANCE		

PROPOSED SCHEDULE OF HERITAGE ITEMS

ITEM No.	DESCRIPTION and LOCATION	TYPE		S	R	L
DORA CREEK – DC	DORA CREEK – DC					
DC-01	ROAD BRIDGE, WALMSLEY St, DORA CREEK	w	BR		L	H
DC-02	HOUSE, 16 DORA STREET, DORA CREEK		DW			H
DC-03	HOLMES STORE, 3 WATT STREET, DORA CREEK		SH			H
				S	R	L
DUDLEY – DL	DUDLEY – DL					
DL-01	CAST IRON RESERVOIR, DUDLEY Rd, DUDLEY	w	WA	H	V	V
DL-03	TWO MINER'S COTTAGES, 125 & 127 OCEAN St, DUDLEY		DW		L	H
DL-04	PUBLIC SCHOOL, Cnr OCEAN & DUDLEY Sts., DUDLEY		SC		M	H
DL-06	PENSIONER'S HALL, OCEAN STREET, DUDLEY		EN		M	V
DL-07	OCEAN VIEW HOTEL, OCEAN STREET, DUDLEY		HO			H
DL-08	ROYAL CROWN HOTEL, OCEAN STREET, DUDLEY		HO			H
DL-09	FORMER MINER'S COTTAGE, 31 THOMAS St., DUDLEY		DW		M	H
DL-10	FORMER MINER'S COTTAGE, 29 THOMAS STREET, DUDLEY		DW		L	H
DL-11	FROG'S HOLLOW CONSERVATION AREA, DUDLEY	c	TO			H
				S	R	L
EDGEWORTH – EW	EDGEWORTH – EW					
EW-07	SCHOOLTEACHER'S RESIDENCE, MINMI Rd., EDGEWORTH		DW			H
				S	R	L
ERARING ER	ERARING ER					
ER-01	ERARING POWER STATION, ROCKY POINT Rd., ERARING		EL	H	H	H
ER-03	HOUSE AND GARDEN, 45 PAYTEN STREET, ERARING		DW		M	H
ER-05	ADOBE (MUD BRICK) COTTAGE, 6 PAYTEN STREET, ERARING		DW		M	V

PROPOSED SCHEDULE OF HERITAGE ITEMS   **PAGE 6**

PROPOSED SCHEDULE OF HERITAGE ITEMS

ITEM No.	DESCRIPTION and LOCATION	TYPE		SIGNIFICANCE		
				S	R	L
FASSIFERN – FF	**FASSIFERN – FF**					
FF-01	FASSIFERN RAILWAY COTTAGE, WALLSEND RD., FASSIFERN		HC		·L	M
FF-02	TORONTO RAILWAY OVERBRIDGE, FASSIFERN Rd, FASSIFERN	w	BR		H	H
FF-03	FASSIFERN RAILWAY STATION		RT		H	V
				S	R	L
FREEMANS WATERHOLE – FW	**FREEMANS WATERHOLE – FW**					
FW-01	HEADFRAME, fmr MINING MUSEUM, FREEMANS WATERHOLE	w	AR	H	H	V
				S	R	L
GLENDALE – GD	**GLENDALE – GD**					
GD-01	CARDIFF RAILWAY WORKSHOPS, MAIN ROAD, GLENDALE	c	FW	M	H	V
				S	R	L
HOLMESVILLE – HV	**HOLMESVILLE – HV**					
HV-04	BRICK HOUSE, 47 APPLETREE ROAD, HOLMESVILLE		DW			H
HV-06	BRICK HOUSE, 54 APPLETREE ROAD, HOLMESVILLE		DW			H
HV-07	HOUSE, 20 WILLIAM STREET, HOLMESVILLE		DW		M	V
HV-08	Fmr POLICE STATION, Cnr WILLIAM & CHARLOTTE Sts, HOLMESVILLE.		GO		M	V
HV-09	POST OFFICE STORE, GEORGE St., HOLMESVILLE		SH		M	V
HV-11	HOLMESVILLE HOTEL, Cnr GEORGE & CHARLOTTE Sts., HOLMESVILLE.		HO		M	H
HV-20	HOUSE, 32 SEAHAM STREET, HOLMESVILLE		DW		M	H
HV-21	SOUTH CONSERVATION AREA, APPLETREE ROAD, HOLMESVILLE	c	TO		L	H
HV-22	CENTRAL CONSERVATION AREA, HOLMESVILLE	c	TO		L	H
HV-23	EAST CONSERVATION AREA, SEAHAM STREET, HOLMESVILLE	c	TO		L	H
HV-24	RAILWAY STATION, KILLINGWORTH Rd, HOLMESVILLE	a	RT		M	H

PROPOSED SCHEDULE OF HERITAGE ITEMS   **PAGE 7**

PROPOSED SCHEDULE OF HERITAGE ITEMS

ITEM No.	DESCRIPTION and LOCATION	TYPE	SIGNIFICANCE		
			S	R	L
KAHIBAH – KH	**KAHIBAH – KH**				
KH-01	GLENROCK RAILWAY & ADIT, GLENROCK LAGOON, KAHIBAH	a EX	H	H	V
			S	R	L
KILLINGWORTH – KW	**KILLINGWORTH – KW**				
KW-02	ELCOM NEWCASTLE SUBSTATION, KILLINGWORTH Rd,	w EL	M	H	H
KW-03	Fmr KILLINGWORTH HOTEL, THE BOULEVARDE, KILLINGWORTH	HO			H
KW-04	WEST WALLSEND EXTENDED COLLIERY, KILLINGWORTH	a EX		L	M
KW-05	SOLDIER'S MEMORIAL, THE BROADWAY, KILLINGWORTH	w CE			H
KW-06	COTTAGES, 31 & 33 THE BROADWAY, KILLINGWORTH	DW			H
			S	R	L
KOTARA SOUTH – KS	**KOTARA SOUTH – KS**				
KS-01	SOUTH WARATAH COLLIERY, off KIRKDALE Dr, KOTARA SOUTH	a EX		L	M
			S	R	L
LAKE MACQUARIE – LM	**LAKE MACQUARIE – LM**				
LM-01	PULBAH ISLAND, LAKE MACQUARIE	c NA			H
LM-02	M.V. "WANGI QUEEN", LAKE MACQUARIE	w AR			H
LM-04	M.V. "MACQUARIE LADY", LAKE MACQUARIE	w AR			H
			S	R	L
LITTLE PELICAN – LP	**LITTLE PELICAN – LP**				
LP-01	14 LITTLE PELICAN COTTAGES, LITTLE PELICAN RESERVE	DW		M	V

PROPOSED SCHEDULE OF HERITAGE ITEMS   **PAGE 8**

PROPOSED SCHEDULE OF HERITAGE ITEMS

ITEM No.	DESCRIPTION and LOCATION	TYPE	SIGNIFICANCE		
			S	R	L
MARTINSVILLE - MV	**MARTINSVILLE - MV**				
MV-01	PUBLIC SCHOOL, MARTINSVILLE Rd, MARTINSVILLE	SC		L	H
MV-02	"WOODSIDE", WILKINSON ROAD, MARTINSVILLE	FA		L	H
MV-03	DORA CREEK BRIDGE, OWENS ROAD, MARTINSVILLE	w BR		L	H
MV-04	"WONGA HILL", OWENS ROAD, MARTINSVILLE	FA		L	H
			S	R	L
MORISSET - MS	**MORISSET - MS**				
MS-01	STATIONMASTER'S HOUSE, DORA STREET, MORISSET	DW		L	H
MS-08	MORISSET HIGH SCHOOL, 33 BRIDGE STREET, MORISSET	SC			H
MS-10	TREE, MORISSET'S CAMPSITE, MACQUARIE St, MORISSET	c NA		H	H
MS-11	MORISSET HOSPITAL CONSERVATION AREA, MORISSET	c TO	H	H	V
MS-12	MORISSET HOSPITAL - WARDS 5 and 6	ME	M	M	H
MS-13	MORISSET HOSPITAL - WARD 9, CLINICAL DEPARTMENT	ME	M	M	H
MS-14	MORISSET HOSPITAL - WARD 10	ME	M	H	V
MS-15	MORISSET HOSPITAL - THE CHAPEL	CH	L	H	H
MS-16	MORISSET HOSPITAL - RECREATION HALL	EN	M	H	V
MS-17	MORISSET HOSPITAL - THE MAIN STORE	FW		L	M
MS-19	MORISSET HOSPITAL - RESIDENCE No.1	DW	M	H	V
MS-20	MORISSET HOSPITAL - WARD 17, GENERAL PSYCHIATRY	M	M	H	V
MS-21	MORISSET HOSPITAL - "BUNDARA" P.R.S.	ME	M	H	V
MS-23	MORISSET HOSPITAL - WARD 12	ME	M	M	H
MS-24	MORISSET HOSPITAL - RESIDENCE No.3	DW	M	H	V
MS-25	MORISSET HOSPITAL - MAXIMUM SECURITY DIVISION	c ME	H	H	V
MS-26	MORISSET HOSPITAL - COTTAGE ROW	DW	M	M	V
MS-29	MORISSET HOSPITAL - WATER SUPPLY DAM	w WA		H	V

Suters - Doring - Turner Study (1992-93)

PROPOSED SCHEDULE OF HERITAGE ITEMS

ITEM No.	DESCRIPTION and LOCATION	TYPE		SIGNIFICANCE		
				S	R	L
NORDS WHARF – NW	NORDS WHARF – NW					
NW-02	NORDS WHARF, NORDS WHARF ROAD, NORDS WHARF	w	WH		L	M
				S	R	L
PELICAN FLAT – PF	PELICAN FLAT – PF					
PF-01	CABBAGE TREES, North of SOLDIERS Rd, PELICAN FLAT	c	NA		L	M
				S	R	L
RAILWAYS & TRAMWAYS – RT	RAILWAYS & TRAMWAYS – RT					
RT-00	RAILWAY and TRAMWAY CONSERVATION AREAS	c	RT			V
RT-01	WEST WALLSEND STEAM TRAM LINE (from WALLSEND)	a	RT	M	H	V
RT-02	SPEERS POINT STEAM TRAM LINE (from WALLSEND)	a	RT		H	V
RT-03	GREAT NORTHERN RAILWAY (GARDEN SUBURB TO WYEE)	w	RT	H	H	V
RT-04	BELMONT RAILWAY (HIGHFIELDS to BELMONT)	a	RT		H	V
RT-05	BRANCH LINES FROM THE BELMONT RAILWAY	a	RT		M	M
RT-06	RASPBERRY GULLY LINE RAILWAY (KOTARAH SOUTH)	a	RT		L	H
RT-09	SEAHAM, WEST WALLSEND, FAIRLEY & KILLINGWORTH RAILWAY	a	RT		H	V
RT-10	RHONDDA COLLIERY RAILWAY (TERALBA)	a	RT		L	H
RT-11	FASSIFERN to TORONTO BRANCH RAILWAY LINE	a	RT	H	H	V
RT-12	NEWSTAN COLLIERY RAILWAY SIDINGS (near FASSIFERN)	w	RT		L	M
RT-13	AWABA to WANGI POWER STATION BRANCH RAILWAY LINE	a	RT		H	V
RT-14	WYEE COAL CONVEYOR RAILWAY LOOP	w	RT		L	M
RT-15	CARDIFF SOUTH COLLIERY TRAMWAY (also Item CS-01)	a	RT		M	H
RT-18	CATHERINE HILL BAY COLLIERY RAILWAY (also Item CH-16)	a	RT		H	H

PROPOSED SCHEDULE OF HERITAGE ITEMS	PAGE 10

PROPOSED SCHEDULE OF HERITAGE ITEMS

ITEM No.	DESCRIPTION and LOCATION	TYPE		SIGNIFICANCE		
				S	R	L
RATHMINES - RM	**RATHMINES - RM**					
RM-00	former RAAF FLYING-BOAT BASE, RATHMINES	c	TO	M	H	V
RM-01	CATALINA MEMORIAL NURSING HOME, DORRINGTON Rd, RATHMINES		ME		H	V
RM-02	COMMUNITY HALL, STILLING St, RATHMINES		EN		H	V
RM-03	CATAMARAN CLUB, STILLING St, RATHMINES		SP		M	H
RM-04	CHRISTADELPHIAN SCHOOL, STILLING St, RATHMINES		SC		H	V
RM-05	FLYING BOAT RAMPS, off STILLING St, RATHMINES	w	WH		M	H
RM-06	RATHMINES BOWLING CLUB, STILLING St, RATHMINES		SP		M	H
RM-07	CATALINA WAR MEMORIAL, CATALINA PARK, RATHMINES	w	CE	M	M	H
RM-08	RATHMINES HOLIDAY CAMP, STILLING St, RATHMINES		HO		M	M
RM-09	BRICK STORE, STILLINGS STREET, RATHMINES		FW		M	M
RM-10	BOAT SLIP, STYLES Pt, off OVERHILL Rd, RATHMINES	w	WH		L	M
				S	R	L
REDHEAD - RH	**REDHEAD - RH**					
RH-01	LAMBTON COLLIERY, COLLIER St, REDHEAD	c	EX	H	V	V
RH-02	fmr COLLIERY BOILERS, off REDHEAD Rd, REDHEAD	w	AR		M	V
RH-03	UNDER-MANAGER'S HOUSE, off COLLIER St, REDHEAD		DW		M	H
RH-04	"THE GABLES", 87 REDHEAD Rd, REDHEAD		DW		H	V
RH-05	HOUSE, 65 COWLISHAW St, REDHEAD		DW		M	V
RH-07	MINE MANAGER'S HOUSE, 21 ELSDON St, REDHEAD		DW		H	H

PROPOSED SCHEDULE OF HERITAGE ITEMS   PAGE 11

PROPOSED SCHEDULE OF HERITAGE ITEMS

ITEM No.	DESCRIPTION and LOCATION	TYPE	SIGNIFICANCE		
			S	R	L
SPEERS POINT – SP	**SPEERS POINT – SP**				
SP-02	HOUSE, 33 COUNCIL STREET, SPEERS POINT	DW		L	H
SP-03	HOUSE, 10 COUNCIL STREET, SPEERS POINT	DW		L	H
SP-04	HOUSE, 8 COUNCIL STREET, SPEERS POINT	DW		L	H
SP-08	HOUSE, 18 ALLEY STREET, SPEERS POINT	DW		L	H
SP-09	HOUSE, 37 ALLEY STREET, SPEERS POINT	DW		L	H
SP-10	COTTAGE, 64 SPEERS STREET, SPEERS POINT	DW		L	H
SP-11	HOUSE, 66 SPEERS STREET, SPEERS POINT	DW		L	H
SP-12	HOUSE, 41 ALBERT STREET, SPEERS POINT	DW		M	V
SP-13	HOUSE, 74 SPEERS Street, SPEERS POINT	DW			H
SP-14	HOUSE, 214 THE ESPLANADE, SPEERS POINT	DW		L	H
SP-16	HOUSE "THE KNOLL", 374 THE ESPLANADE, SPEERS POINT	DW		H	V
SP-17	HOUSE, 332 THE ESPLANADE, SPEERS POINT	DW		L	H
SP-18	HOUSE, 328 THE ESPLANADE, SPEERS POINT	DW			H
SP-19	HOUSE, 302 THE ESPLANADE, SPEERS POINT	DW			H
SP-20	HOUSE, 298 THE ESPLANADE, SPEERS POINT	DW		L	H
SP-23	HOUSE, 282 THE ESPLANADE, SPEERS POINT	DW		L	H
SP-25	Fmr LAKE MACQUARIE COUNCIL CHAMBERS, 143 MAIN ROAD, SPEERS POINT	GO		M	H
SP-26	HOUSE, 141 MAIN ROAD, SPEERS POINT	DW			H
SP-29	SPEERS POINT GARAGE, 155 MAIN ROAD, SPEERS POINT	GA		M	H
SP-30	HOUSE "SHANGRILA", 157 MAIN ROAD, SPEERS POINT	DW		M	H
SP-31	HOUSE, 159 MAIN ROAD, SPEERS POINT	DW			H
SP-34	LAKEVIEW St THEATRE, LAKE VIEW St, SPEERS POINT	EN		M	H
SP-36	SHELTER SHED, SPEERS POINT PARK, SPEERS POINT	PA			H
SP-37	MINENWERFER (or GERMAN MORTAR), SPEERS POINT PARK	w AR		–	H

PROPOSED SCHEDULE OF HERITAGE ITEMS

ITEM No.	DESCRIPTION and LOCATION	TYPE	SIGNIFICANCE		
			S	R	L
SWANSEA - SS					
SS-02	THE SWANSEA HOTEL, 196 PACIFIC HIGHWAY, SWANSEA	HO		M	H
SS-03	SWANSEA BRIDGE, PACIFIC HIGHWAY, SWANSEA	w BR		M	M
			S	R	L
SWANSEA HEADS - SD					
SD-02	COAST GUARD Stn, REIDS MISTAKE HEAD, SWANSEA HEADS	GO			H
SD-03	REID'S MISTAKE HEAD & CHANNEL, SWANSEA HEADS	c NA		H	V
SD-04	MOON ISLAND, near REIDS MISTAKE, SWANSEA HEADS	c NA	M	M	M
			S	R	L
TERALBA - TA					
TA-00	TERALBA CONSERVATION AREA	c TO		M	H
TA-03	SHOP, cnr YORK STREET & ANZAC PARADE, TERALBA	SH		H	H
TA-08	HOUSE, "MOIRA", 59 YORK STREET, TERALBA	DW		L	H
TA-09	TERALBA PUBLIC SCHOOL, YORK STREET, TERALBA	SC		L	H
TA-10	GREAT NORTHERN HOTEL, 2 ANZAC PARADE, TERALBA	HO		M	H
TA-11	HOUSE, "A.S.", 101 RAILWAY STREET, TERALBA	DW		M	H
TA-12	STATION MASTER'S COTTAGE, RAILWAY STREET, TERALBA	DW		L	H
TA-13	TERALBA CEMETERY, BILLYGOAT HILL, TERALBA	a CE		M	H
TA-16	GARTLEE MINE, McEWAN STREET, TERALBA	EX		L	H
TA-17	RHONDDA COLLIERY, RHONDDA ROAD, TERALBA	EX		M	H
TA-18	Fmr COCKLE CREEK POWER STATION, LINK St, TERALBA	a EL	L	M	H
TA-19	STOCKTON BOREHOLE COLLIERY, POWERHOUSE Rd, TERALBA	w EX		L	M

PROPOSED SCHEDULE OF HERITAGE ITEMS   **PAGE 13**

PROPOSED SCHEDULE OF HERITAGE ITEMS

ITEM No.	DESCRIPTION and LOCATION	TYPE	S	R	L
TINGIRA HEIGHTS - TH	**TINGIRA HEIGHTS - TH**				
TH-01	NATURE RESERVE, BURTON ROAD, TINGIRA HEIGHTS	c NA	–	H	H
			S	R	L
TORONTO - TT	**TORONTO - TT**				
TT-01	HOUSE "MANUKA", 182 EXCELSIOR PARADE, TORONTO	DW			H
TT-06	"THE MOORINGS", 2 JARRETT STREET, TORONTO	HO		M	H
TT-08	TORONTO CEMETERY, AWABA ROAD, TORONTO	c CE		M	H
TT-09	TORONTO HOTEL, 74 VICTORY PARADE, TORONTO	HO		H	H
TT-10	Fmr TORONTO CINEMA, 66 VICTORY Pde, TORONTO	EN		H	H
TT-11	Former RAILWAY STATION, VICTORY PARADE, TORONTO	RT	M	H	V
TT-12	FRITH'S STORE, 66-72 THE BOULEVARDE, TORONTO	SH		M	H
TT-15	REGATTA'S RESTAURANT, THE BOULEVARDE, TORONTO	SH			H
TT-16	ROYAL MOTOR YACHT CLUB ANNEXE, BATH St, TORONTO	SP		H	H
TT-17	KIM'S RESTAURANT, ARNOTT Ave, TORONTO	SH		H	H
TT-18	BOATMAN'S COTTAGE, Lakefront, ARNOTT Av, TORONTO	DW		H	H
TT-19	BOATHOUSE & WINCHES, Lakefront, ARNOTT Av, TORONTO	SP		L	H
TT-20	DONNELLY'S HOUSE, 4 ARNOTT AVENUE, TORONTO	DW		H	H
TT-21	"BURNBRAE", 32 RENWICK STREET, TORONTO	DW		L	H
TT-22	TORONTO RAILWAY COTTAGE, 98 BRIGHTON Ave, TORONTO	DW		M	H
TT-23	HOUSE (McGeachie's), BRIGHTON AVENUE, TORONTO	DW		H	H
TT-29	CONVENT of MERCY, 26 RENWICK St, TORONTO	DW		M	H
TT-30	HOUSE, 23 RENWICK STREET, TORONTO	DW			H
TT-38	COTTAGE, 6 RENWICK STREET, TORONTO	DW		M	H
TT-42	HOUSE, 16 HUNTER STREET, TORONT	DW			H
TT-43	WINN'S HOUSE, 19 HUNTER St, TORONTO (FIG TREE POINT)	DW		M	H

PROPOSED SCHEDULE OF HERITAGE ITEMS   **PAGE 14**

PROPOSED SCHEDULE OF HERITAGE ITEMS

ITEM No.	DESCRIPTION and LOCATION	TYPE		S	R	L
WANGI WANGI (or LAKEVIEW) - WG	WANGI WANGI - WG			S	R	L
WG-01	WANGI POWER STATION, LAKEVIEW or WANGI WANGI		EL	H	V	V
WG-04	DOBELL HOUSE, 47 DOBELL DRIVE, WANGI WANGI		DW		M	H
				S	R	L
WARNERS BAY - WB	WARNERS BAY - WB					
WB-01	"ALI'S PALACE" 6 FAIRFAX ROAD, WARNERS BAY		DW			H
WB-02	FIRST ORANGE ORCHARD, WARNERS BAY	a	NA	M	H	V
WB-03	MINE PITHEAD & COAL TRAMWAY TO LAKE, WARNERS BAY	a	RT		M	V
				S	R	L
WEST WALLSEND - WW	WEST WALLSEND - WW					
WW-00	WEST WALLSEND TOWNSHIP (CONSERVATION AREA)	c	TO		H	V
WW-01	WEST WALLSEND FOOTBALL CLUB GROUND, JOHNSON PARK, W.W.	w	SP	M	H	V
WW-02	WEST WALLSEND (No.1) COLLIERY, off WILSON St, W.W.	a	EX	H	H	V
WW-05	COTTAGE, 12 CARRINGTON STREET, WEST WALLSEND		DW			H
WW-06	COTTAGE, 15 CARRINGTON STREET, WEST WALLSEND		DW			H
WW-08	"EARSDON COTTAGE", 20 CARRINGTON ST, WEST WALLSEND		DW		M	V
WW-10	SHOP, 47 CARRINGTON ST, WEST WALLSEND		SH		M	V
WW-11	HOUSE, 47 CARRINGTON ST. WEST WALLSEND		DW		M	V
WW-12	FORMER SHOP & HOUSE, 52 CARRINGTON ST, WEST WALLSEND		DW			H
WW-13	POST OFFICE & RESIDENCE, 54 CARRINGTON ST, WEST WALLSEND		GO	L	M	V
WW-14	CATHOLIC CHURCH & CONVENT, 5 HYNDES St, WEST WALLSEND		CH		M	H
WW-15	SOLDIER'S MEMORIAL & PARK, 49 CARRINGTON St, W.W.	w	CE		M	H
WW-16	WORKER'S CLUB, 51 CARRINGTON ST., WEST WALLSEND		EN		M	M
WW-18	CLYDE INN HOTEL, 57 CARRINGTON ST., WEST WALLSEND		HO		M	H
WW-19	HOUSE, 59 CARRINGTON ST., WEST WALLSEND		DW		M	H

CITY OF LAKE MACQUARIE   HERITAGE STUDY

PROPOSED SCHEDULE OF HERITAGE ITEMS

ITEM No.	DESCRIPTION and LOCATION	TYPE	SIGNIFICANCE		
			S	R	L
WEST WALLSEND - WW	**WEST WALLSEND - WW**				
WW-22	fmr OUTDOOR CINEMA, CARRINGTON ST., W.WALLSEND	EN		M	H
WW-23	Former SCHOOL OF ARTS, 65 CARRINGTON ST., WEST WALLSEND	EN	L	H	H
WW-26	WEST WALLSEND CO-OP., CARRINGTON & WITHERS Sts, W.W.	SH	M	H	V
WW-31	WEST WALLSEND PUBLIC SCHOOL, BROWN St, WEST WALLSEND	SC		M	H
WW-32	MINER'S MEMORIAL, WITHERS & BROWN Sts, WEST WALLSEND	w CE		L	H
WW-33	PRESBYTERIAN CHURCH, WITHERS & WALLACE Sts, W. WALLSEND	CH		M	H
WW-35	BAPTIST CHURCH, 49 WALLACE STREET, WEST WALLSEND	CH		M	H
WW-38	Fmr NORTHUMBERLAND HOTEL, cnr WILSON & HYNDES STS, W.W.	HO			H
WW-39	COTTAGE, 53 WILSON STREET, WEST WALLSEND	DW		L	H
WW-40	COTTAGE, 8 LAIDLEY STREET, WEST WALLSEND	DW		L	H
WW-41	MUSEUM HOTEL, 70 WILSON St., WEST WALLSEND	HO		M	H
WW-46	MOUNT SUGARLOAF and the SUGARLOAF RANGE	c NA	L	H	V
WW-47	MOUNT SUGARLOAF No.1 COLLIERY, Mt SUGARLOAF	a EX		M	H
WW-50	WEST WALLSEND CEMETERY, CEMETERY Rd, WEST WALLSEND	c CE		H	V
WW-52	WEST WALLSEND VALVE HOUSE & UNDERGROUND RESERVOIR	WA		H	H
			S	R	L
WHITEBRIDGE - WH	**WHITEBRIDGE - WH**				
WH-01	WHITEBRIDGE CEMETERY, DUDLEY ROAD, WHITEBRIDGE	c CE		H	V
WH-02	HOUSE, 65 BURWOOD ROAD, WHITEBRIDGE	DW		M	H
WH-08	RAILWAY CUTTING & BRIDGE, DUDLEY Rd, WHITEBRIDGE	w RT		M	V
			S	R	L
WYEE - WY	**WYEE - WY**				
WY-02	WYEE CHANNEL, SUMMERHAYES ROAD, WYEE	w WA		L	M
WY-04	COAL CONVEYOR, WYEE RAIL LOOP to VALES POINT	w AR		L	M

PROPOSED SCHEDULE OF HERITAGE ITEMS   **PAGE 16**

Suters - Doring - Turner Study (1992-93)

PROPOSED AMENDMENTS TO EXISTING OR

ADDITIONAL CONSERVATION AREAS

A. **Proposed Amendments to Existing Conservation Areas**

- **Catherine Hill Bay Conservation Area**
  It is proposed to enlarge the area to include the former railway route which passed by and linked most of the sites between Mine Camp and Catherine Hill Bay, as well as the three separate settlements. (Section 4.5.2.4) (Map CH)

- **Teralba Conservation Area**
  It is proposed to outline a larger Conservation Area to take in the 19th and 20th Century centres, including the mines and original quarry, and sites of archaeological potential. (Section 4.5.3.1) (Map TA)

- **West Wallsend Conservation Area**
  The proposed new boundaries for the Conservation Area would take in various historic sites, the steam tram route, as well as the commercial and residential centre. (Section 4.5.4.1) (Map WW)

B. **Proposed Additional Conservation Areas**

- **Boolaroo**
  Main Road from Sulphide Corporation to Eighth Street. (Section 4.5.5) (Map BR)

- **Cooranbong**
  The Adventist group of buildings at Avondale College and the Sanitarium Factory. (Section 4.5.5) (Map CB)

- **Dudley**
  Area around Frogs Hollow. (Section 4.5.5) (Map DL)

- **Holmesville**
  Three groups of buildings within the original settlement area. (Section 4.5.5) (Map HV)

- **Morisset**
  The mental hospital and its grounds, including the outlying Maximum Security Division, farms and dam. (Section 4.5.5) (Map MS)

- **Rathmines**
  The former RAAF flying-boat base, including the Catalina slips and remaining buildings (Section 4.6.10). (Map RM)

- **Toronto**
  The area around the Lake from Fig Tree Point to Dewey Point. (Section 4.5.5) (Map TT)

Lake Macquarie Heritage Study   Schedule

**Schedule of
Conservation
Areas**

5.2

Suters - Doring - Turner Study (1992-93)

6

6. Recommendations for Heritage Conservation in the City of Lake Macquarie

6.0.1 Philosophical Basis for Conservation

The ICOMOS Australia Charter for the Conservation of Places of Cultural Significance (The Burra Charter) and associated guidelines should be adopted as the philosophical basis for Heritage conservation within the City of Lake Macquarie. The procedures outlined in *The Conservation Plan* by J.S. Kerr, issued by the National Trust of Australia (NSW) 1985, should provide a basis for future decision making regarding particular items or areas.

6.1 Important Components of a Balanced Heritage Conservation Strategy in Lake Macquarie

6.1.1 Further Identification of Heritage Resources

This component is of particular significance as it identifies what is significant and why, providing an essential resource for future decision making about broad planning issues or individual development proposals.

The inventory of heritage items has been established as a computer database, with printed copies of the data sheets included in this report (Volumes 2 & 3). It is important that the inventory as given not be seen as the last step. There is a need to constantly review and augment the inventory and to carry out further assessments. In particular it will be necessary to:

a. Encourage further research which will provide a better understanding of the heritage resource.
b. Carry out further conservation assessments of important items, particularly those subject to short to mid term threat and those which are underutilised or in transitional use.

c. Carry out archaeological surveys of areas identified as having archaeological potential.
d. Carry out more detailed design studies of particular groups or precincts of importance.
e. Carry out plans of management for important heritage works or places.
f. Identify ways redundant heritage items may be reutilised.

These aspects are discussed further in Section 6.2.

6.1.2 Increasing Community Awareness and Support

Increasing the community's awareness and support is an important component of any conservation strategy.

Strategies for increasing community awareness of its heritage should include:

a. Identifying what items are important and why.
b. Identifying important qualities or characteristics.
c. Advising on appropriate responses to the design and maintenance of heritage items, or referral to others suitably qualified to provide such advice.
d. Indicating how individuals can help achieve an overall conservation program.
e. Identifying the need for and/or providing funding for conservation works.
f. Acknowledging and promoting excellence in conservation works.
g. Increasing community access and use of heritage items.

These strategies are discussed further in Section 6.3.

6.1.3 Local Government Initiatives

Local Government can play a direct role and lead the way in heritage conservation through its own activities, including:

a. Ensuring heritage issues are considered in devising works and maintenance proposals.
b. Reviewing practices which modify the visual context of heritage items particularly:

- street planting programs including replacement or maintenance;
- roadworks including kerb and guttering, road widths and verge treatments, traffic control structures such as roundabouts; and
- street furniture design and location.

c. Setting an example with works on Council owned properties.

These initiatives are discussed further in Section 6.4.

6.1.4 Establishing an Appropriate Planning and Development Framework

The establishment of an appropriate planning framework is perhaps the key to ensuring conservation of heritage. Significant aspects of the planning framework include:

a. Awareness of responsibilities under existing legislation including the Heritage Act and the Environmental Planning and Assessment Act.

b. Awareness of actions available under existing legislation to protect items under immediate threat.

c. The establishment of a statutory planning framework which minimises threats to heritage as a result of:
   - ignorance of an item's importance;
   - inappropriate zoning and landuse; and
   - inappropriate standards for the intensity of use.

d. The establishment of appropriate development control plans and advisory information providing information on appropriate design responses for future development affecting:
   - individual heritage items; or
   - conservation areas or groups.

e. Ensuring heritage issues are adequately considered in the evolution of future planning strategies.

f. Providing access to specialist design or technical skills or advice during the design and redesign stages of projects.

g. The formulation of planning strategies.

h. Acceptance of conservation as an important objective and the adoption of objectives for heritage conservation.

i. Ensuring comprehensive conservation plans are prepared for major items of the environmental heritage.

j. Allowing for new items to be added to the list of items of Environmental Heritage Significance.

This planning framework is discussed further in Section 6.5.

6.2 Further Identification of Heritage Resources

The heritage study itself provides a sound database to assist future decision making. Some 500 items have been investigated, with 262 included on the draft schedule for listing under the LEP.

In carrying out this task, it was impossible to be comprehensive in assembling and correlating all the field and historical data which is relevant to establishing the individual and relative importance of items on the schedule. Indeed, there is a wealth of information within historical society records, individual documents, and other archives which could at some future date be correlated with physical evidence on the ground.

Accordingly, there is a need to allow for supplementary information to be added to the inventory and to follow up with more specialised research of particular issues or individual items. This includes studies of both documentary evidence (written or verbal) and physical evidence (archaeological or architectural).

Encouragement should be given by Council to further research and study which enhances the understanding of Lake Macquarie's heritage. Such studies might be undertaken by heritage consultants, historical societies, or students studying heritage related courses. One particular opportunity is the sponsorship, by Council or local business of historical or heritage research by tertiary or post-graduate students. Alternatively, existing courses may be able to use 'case studies' involving relevant research as part of the course structure.

This research could be particularly useful in assembling relevant historical information for some of the key items subject to threat, or in developing a better picture of particular historical themes.

6.2.1 Recommendations

Recommendations for future research are covered below in the following Sections:

6.2.1.1 General Historical Research:
Where community groups or individuals might participate

6.2.1.2 Specialised Research Areas:
Where specialist input would be required

6.2.1.1 General Historical Research

There are many areas of research that interested individuals or groups such as the Historical Society might participate in or initiate. These include:

a. Inventory Information

A possible project that historical societies or groups might undertake would be to review and build upon the information included in the inventory, particularly the historical notes and references associated with each entry.

b. Historical Themes

A project which could involve preliminary work by the historical society would be to further analyse the themes identified in Dr John Turner's report as significant within the Lake Macquarie area, including the following:

- Coal mining
- Early settlement
- Major industry
- Hotels
- Religious Activities
- Housing
- Holiday resorts and recreational facilities

6.2.1.2 Specialised Research Areas

There are other areas of research that would require professional participation, and Council should investigate means of funding such projects, including:

a. Landscape

While a study of landscape did not form part of this study, tasks were identified that should be carried out.

These tasks include compiling a register of significant plantings and indigenous flora to ensure the many significant individual trees and estates are protected. Also, all future landscape proposals for urban areas should include an analysis of existing vegetation and, where possible, reinforce and complement the existing significant vegetation.

b. Archaeological Surveys

Various sites with archaeological potential have been identified during the study area survey. Funding should be sought for comprehensive archaeological studies of these places. These include:

- Booragul Colliery relics (BU-01)
- Threlkeld's Mine (CP-01)
- Warner's mine (WB-03)
- wharf structures and jetties (LM-03)
- Sulphide Corporation site (BR-07)
- traces of timber cutting (CB-37 & MV-05)
- Toronto Branch Rail Line (RT-11)
- Catherine Hill Bay Mine Camp (CH-33) and railway (CH-16)
- Rhondda Colliery (TA-17)
- West Wallsend No.1 Colliery (WW-02)
- Billy Goat Hill Cemetery, Teralba (TA-13)
- Morisset Hospital dam and farms (MS-29 & MS-30)
- Mt Sugarloaf No.1 Colliery (WW-47)
- Rathmines RAAF Camp (RM-00)
- Cockle Creek Power Station (TA-18)
- Pulbah Island (LM-01)

c. Heritage Assessment, Conservation Policies and Plans

The future conservation of items of environmental heritage significance depends to a large extent on the quality of information available to assist in establishing significance and priorities, and access to knowledge of contemporary conservation practice. There are many items in the inventory that require the preparation of individual conservation assessments. This process is particularly important for operating industries where constant changes are occurring in technology and infrastructure.

Council should encourage the preparation of heritage assessments and conservation policies or plans as part of development applications affecting items included in the

inventory, where appropriate, or for significant items subject to frequent change.

d. Redundant Heritage Items

Many old buildings and structures end up abandoned as they have either outlived their function, or the function has outgrown the building. In any case they are seen as redundant and left to deteriorate. However these items can be a valuable resource, and generally have potential for reuse or adaptation in such a way that they become of use again to the community and retain their heritage significance.

Buildings are the most obvious items suitable for reuse. A scheme exists in Britain that identifies derelict historic buildings, sometimes little more than ruins, and promotes their redevelopment. A similar scheme could be initiated here.

Council owned properties would be a suitable basis for initial appraisal, as noted below (Section 6.4.2.3).

In Lake Macquarie however, a particular opportunity exists in the many redundant rail and tram permanent ways. These are potentially of immense importance to the City, including all their associated structures such as stations, bridges and platforms. A feasibility study should be undertaken to identify potential new uses for these ways which might include walking trails (Section 6.3.2.2), or even the reintroduction of a public transport system such as light rail.

6.3 Increasing Community Awareness and Support

6.3.1 The Importance of Community Awareness

An important characteristic of the heritage of Lake Macquarie is that the majority of items included in the inventory are in private ownership, be it by an individual or by a company. This applies through the whole range of inventory items, from individual houses (which as a group make up more than a third of the inventory), to the commercial and industrial buildings which are often the major or 'key' items of significance,

either within a particular area or within the city as a whole. Accordingly, the conservation of a large part of the heritage of Lake Macquarie is affected by decisions made by these individual property owners within the community.

Whilst most people appreciate the value of major heritage items, few realise the cumulative effects of day to day decisions made about their own homes or business premises. Few people are aware of the particular characteristics or qualities which are important to the style or period of items over which they have control, and knowledge about fundamental conservation practices amongst both the community and building trades appears to be low. Common misconceptions mean that many people may initially object to buildings under their control being included in the inventory as a 'heritage item'. In some Local Government Areas, identification of a building as a heritage item in an inventory has been followed by its hasty demolition, for no good reason and with no particular plans for redevelopment.

Council has taken the first steps in addressing this lack of community awareness by the commissioning of this study, and the distribution of a brochure explaining the basis for the study. However, it is vital that the public, particularly those who control heritage items, be properly informed about the content of this study, and of any guidelines or regulations that may arise out of its recommendations.

6.3.2 Recommendations

There are a number of opportunities or actions that Council should initiate to increase general community awareness and support for heritage issues. These recommendations are covered below in the following sections:

6.3.2.1 General Community Awareness:
    Includes items and characteristics
6.3.2.2 Increasing Community Access to
    Items of Significance
6.3.2.3 Advice to people considering
    modifying, altering, or adding to items
    of environmental heritage significance
6.3.2.4 Advice to purchasers of property:
    Includes items of significance

6.3.2.1 General Community Awareness

There are several actions Council can take to assist in increasing community awareness of heritage conservation. These include:

a. Promotion and Exhibition of the Lake Macquarie Heritage Study

The completion of this Heritage Study provides a unique opportunity to bring into focus what is known about the heritage of Lake Macquarie, issues affecting conservation, and opportunities for the future. The following actions are recommended for promotion and exhibition:

* Exhibition of the study for a period no less than 28 days;
* Displays to be mounted in a number of venues including the Public Library and Administration building.
* Brochures to be produced and circulated to the owners of items on the inventory outlining the objectives of the study, and summarising significant findings;
* Copies of the final study report being forwarded to interest groups including:
    1. Local historical society
    2. National Trust of Australia (NSW)
    3. Royal Australian Institute of Architects
    4. Royal Australian Planning Institute
    5. Institute of Engineers, Australia
    6. Australian Heritage Commission
* Notification of the study to be sent to relevant Government Departments, Statutory Authorities and significant landowners such as mining companies and industrial organisations.

These actions are considered to be a high priority.

b. Preparation and Distribution of Brochures:

A brochure has been prepared identifying the basis of this study. Further brochures should be prepared which outline:

* Important themes in the history of Lake Macquarie;
* Objectives for Heritage conservation in Lake Macquarie;
* Heritage Conservation incentives;
* Characteristics of the major styles and periods of buildings in Lake Macquarie, such as Victorian, Late Victorian and Federation;
* Issues and principles for Residential Buildings including;
    - Additions
    - Modifications to the exterior
* Issues and principles for Commercial Buildings including;
    - Additions
    - Modifications to the exterior
* Issues and principles for Industrial sites including;
    - Modifications
    - Archaeological relics
* Conservation issues affecting significant heritage items including;
    - Conservation study process
    - Conservation Practice
    - Conservation Plans

These brochures should be available at all key sources of Council Services, free or at a nominal cost. Consideration should be given to annexing brochures to Section 149 certificates and sending them out with rate notices at regular (perhaps five yearly) intervals.

These actions are considered to be a high priority.

c. Encouraging Periodic Displays, Exhibitions and Seminars

Council should consider supporting regular displays or exhibitions relating to particular aspects of heritage conservation in Lake Macquarie.

These could be the result of research or other activity sponsored by Council and could involve the historical society, academic institutions, or a Heritage Adviser (Section 6.3.2.3).

d. Interpretive Material

Information for local persons and visitors about specific heritage items and themes is of particular importance in promoting heritage. Plaques, heritage walks, and audio visual material are particularly important in increasing public awareness, and are appropriate media for schools.

It is recommended that historical markers be

provided for the items included in the Local Environmental Plan, where appropriate. These should be supported by professionally illustrated and comprehensive interpretive brochures. In addition, an overview of the important historical themes, relating the history of the area to remaining physical evidence, should be prepared. This would expand the promotional material available for tourism, and would be appropriate for use in educational establishments.

e. Local Heritage Awards

Consideration should be given to the establishment of local heritage awards for research, promotion and/or conservation projects. These could include monetary awards for research, or in the case of conservation projects, a plaque recognising the achievement and outlining the historical significance of the item to which it relates. Sponsorship for such awards could be sought from community groups, locally based companies, or organisations associated with heritage and conservation.

The awards should allow for a reasonably diverse range of heritage and conservation projects to be eligible, ranging from conservation projects and archaeological studies to additions, infill development, conservation plans or assessments and historical research.

d. Main Street Programme

The Main Street Programme is an initiative of the NSW Department of Planning, designed to encourage the revitalisation and promotion of town centres. The programme aims to identify important elements of a town centre or main street, including its organisation, design, heritage, business and promotion, emphasising the individual character of each town.

The Toronto Chamber of Commerce has recently instigated the Main Street Programme in the Toronto Central Business District. The programme is organised by a Main Street Committee and funded by contributions from business owners. Involvement in the programme should be encouraged and monitored by Council.

6.3.2.2 Increasing Community Access to Items of Significance

There are many items of heritage significance within the City which are underutilised or redundant. This means their value largely goes unnoticed, leading to severe deterioration or loss of important fabric over time. These items can have major tourist potential, and may be utilised to benefit the public and enhance this potential in various ways, so increasing the communities awareness and appreciation of heritage issues, including:

a. Heritage Walks, Trails and Cycleways

Heritage walks, trails and cycleways should be established throughout the City, linking items relating to particular heritage themes or areas. Such walks are common in historic cities world wide, with particularly good examples being Liverpool, Leeds and Bath in the UK and Uster in Switzerland. They can also form part of the local pedestrian and cycle routes from place to place in the city.

Suitable interpretive material should be provided along the route, such as the historic markers noted above, and supported by professionally illustrated and comprehensive brochures. Assistance for brochures should be sought from the Department of Lands, which has been responsible for the preparation of historic walk brochures throughout New South Wales.

While Conservation Areas are particularly appropriate for heritage walks due to their concentration of heritage items, they need not be limited in scale and may take on the form of a tour by bicycle, horse or car over large areas including reserves or redundant rail lines.

b. Redundant Rail and Tram Permanent Ways

Lake Macquarie contains a multitude of such permanent ways. For a number of reasons these are ideal for development as trails open to the public:

• They often travel through areas of scenic beauty otherwise inaccessible to the public;
• They provide a well formed and relatively

level path, with creek crossings and the like in place and generally intact, perfect conditions for walks and bicycle rides;

- They can form part of the local network of transport routes from place to place;
- Along the routes are located other redundant heritage items, including railway stations, gatekeepers' and stationmasters' residences, coal mining and processing facilities. These would be suitable for use with new functions associated with the trails, such as caretakers cottages, hostels, cafes and interpretive displays or museums; and
- They would be maintained as permanent public rights-of-way, allowing ready access for emergency vehicles, and perhaps eventually for their return as a public transport route.

Suitable lines include the now redundant Toronto line (RT-11), the Belmont line (RT-04), the West Wallsend line (RT-09) and the Wangi Power Station line (RT-13).

c. Pulbah Island

Pulbah Island (LM-01) was declared a reserve in 1929 and has had various structures erected and subsequently abandoned over the years. It is possible that the island could be established once again as a reserve open to the public.

It is recommended that a heritage assessment and conservation management plan be prepared for the island.

6.3.2.3 Advice to People Considering Modifying, Altering or Adding to Items of Environmental Heritage Significance

There are several ways that Council can provide assistance to people considering modifying, altering or adding to items of significance, including:

a. Access to Information

Council staff should have access to information to provide some guidance to persons wishing to carry out works affecting items of environmental heritage significance. This should include:

- An information package, including the appropriate brochures noted earlier as well as copies of brochures issued by other relevant bodies such as the Heritage Council or National Trust.
- Access to a library of reference material relevant to heritage conservation, including publications noted in Appendix 5.
- A list of sources from which other relevant material can be obtained.

This material should be accessible at both the Planning and the Environmental Sciences Department Counters to enable access during counter enquires. Staff should be familiar with the material to ensure they can refer to relevant items during public enquires.

Public accessibility would be further enhanced by acquiring copies for the Public Library and the Regional Library in Newcastle.

b. Heritage Centre

Council should investigate the establishment of a Heritage Centre in a place with ready public access, either within Council offices, the Municipal Library, or in a 'shop front' location. Such a centre should:

- Locate all relevant heritage information, including a copy of this study and the full inventory of data sheets, as noted above. It should also contain relevant heritage acts, codes, policies, guidelines for conservation practice, and other published books or journals that may be of particular relevance.
- Provide a location where projects can be discussed with relevant specialists, Council staff and a heritage adviser (see below).

c. Heritage Adviser

Funding from the Department of Planning has been approved towards the appointment of a Heritage Adviser for the area. Such an adviser might be either employed by Council as a staff member, or retained as a consultant on-call.

A heritage adviser would be able to:

- Provide useful input into Council's consideration of the design aspects of projects

affecting heritage items or conservation areas;

• Provide input into the development of heritage strategies and guidelines;

• Assist in establishing a staff training program on heritage issues;

• Act as a point of contact between individuals and Council on specific heritage items where development is proposed, ensuring all parties are aware of the heritage issues involved before any application is made, avoiding misguided applications from the start; and

• Assist in the development of a programme to encourage and define further research themes (Section 6.2).

It is recommended that Council should proceed with the appointment of an Heritage Adviser and identify funding for this purpose in subsequent years.

d. Heritage Advisory Service

Council should also consider the establishment of a register of suitably qualified consultants in the heritage field operating locally. Such a register could include architects, planners, engineers, archaeologists and other heritage specialists. Leichhardt Council has maintained such a register for some years. It might also include suppliers, building contractors and other tradesmen who specialise in restoration work or products.

The register would be a referral guide only, and no one consultant could be nominated by the Council to undertake specific tasks or projects. Notwithstanding this, certain consultants will be more suited to specific tasks than others. The consultants on such a register would also provide a base for workshops on heritage issues, such as when revising Council policies and guidelines.

The precise framework, advertisement and maintenance of such a register would need to be further assessed.

6.3.2.4 Advice to the Purchasers of Property.

Information should be included on Section 149 certificates about the implications of heritage controls.

In particular under the provisions of Section 149 (5), advice should be included on relevant issues outlined within the heritage study.

Council should consider appending a copy of the heritage brochure with section 149 certificates where an item is within a conservation area or is included in the heritage inventory, or adjacent to an item listed in the inventory.

6.4 Local Government Initiatives

This section refers to actions with respect to decision making about areas or properties with which Council is directly involved either through responsibility for ownership or management. Principally these include:

• Sites, items or buildings owned by Council;

• Reserves under the care control and management of Council; and

• Other public places or areas dedicated to the public for which Council has a responsibility, particularly public roads.

6.4.1 Importance of Local Government as a Role Model

Actions by Council within these areas are particularly important because they demonstrate the importance and priority Council places on conservation. The Council should act as a role model, illustrating how adopted policies can successfully be implemented. In addition, the actions of Council within Public places are of prime importance in establishing or conserving the ambience or visual quality of those places, and are therefore important to the context of surrounding heritage items.

6.4.2 Recommendations

Important recommendations for Council Initiatives are covered in the following Sections:

6.4.2.1 Improving Staff Awareness and Expertise: including relevant Council departments and general awareness

6.4.2.2 Review of Works and Maintenance Practices

6.4.2.3 Council Owned Heritage

6.4.2.1 Improving Staff Awareness and Expertise

It is important that staff be aware of the heritage of Lake Macquarie, the processes of conservation, and its implications for their own special area of expertise or control.

Particular work tasks or areas for which an understanding of heritage conservation is important include:

a. Environmental Sciences

Relevant areas include:

- Fire Safety
- Building application assessment

Many conflicts with respect to heritage conservation arise from the need to recycle buildings which are considered obsolete with respect to servicing, functional and technological standards. This particularly applies to fire safety.

The staff of the Environmental Sciences Department (otherwise known as Health and Building) need to have an awareness of when conservation issues are relevant to a particular project, an understanding of alternative ways of achieving the objectives of The Building Code of Australia, and an overview that will allow an intelligent assessment of the relative importance of heritage and other issues in a particular instance.

In addition, some works which may have implications for items of environmental heritage significance may not require development consent. It is important that Environmental Sciences staff have an awareness of when heritage issues may be involved (for example by affecting the context of an adjoining item) to enable these issues to be considered in the design stage. It is important that all projects, including those initiated by Council, are checked against the current inventory of heritage sites and its guidelines.

b. Engineering Works and Parks and Gardens

Relevant areas include:

- Road and Traffic Management Structures
- Street signage, lighting and graphics
- Street furniture
- Street trees
- Park management
- Subdivision control
- Public utilities
- Road and Bridge maintenance and construction

The above activities represent a significant proportion of Council expenditure within Lake Macquarie, and are particularly important to the context of the City's heritage as they form part of the environment in which heritage items are situated and are perceived by the public.

Particular issues that need to be reviewed or assessed in both capital works and maintenance programs include:

- The need to maintain a standing archaeological brief for remains associated with the early settlement and industrial sites of Lake Macquarie (as required under the Heritage Act);
- The need to incorporate heritage and visual assessments into engineering designs, in particular with respect to pavement widths, kerb and guttering, and traffic management proposals including roundabouts;
- The need to establish requirements for recording of heritage items subject to demolition, and even more importantly reassessing the need for demolition;
- The need to review Council Policies with respect to tree lopping and new street planting;
- The need to conserve heritage items within streets and open spaces including street lighting, median strips, early cut stone kerbing and concrete kerbing; and
- The need to liaise with other service authorities which have an impact on streetscape particularly the electrical supply authority with respect to maintenance practices for street trees if opportunities for using bundled cable or underground power exist.

c. Town Planning:

Relevant areas include:

• Strategic Planning
• Development Control

Town Planning staff should be the first line of communication for all development proposals. Planning instruments developed within the department also play a significant role in ensuring conservation is on the agenda at an early stage in the policy formulation and development process.

Planning staff need to have an awareness of when heritage conservation issues may have relevance to an issue or project, as well as accepted practice for integrating conservation into the policy formulation, advisory and development assessment process. They should also be able to direct people to relevant sources of information and advice.

The need for liaison with other Government Departments with responsibility for Heritage matters is particularly important, including the National Parks and Wildlife Service and the Department of Planning.

Other issues which also come within the ambit of Council's Town Planning Department, and which are currently considered as part of the planning and development process, include:

• The need to establish appropriate standards for the selection and design of street furniture, lighting and graphics;
• The need to establish a framework to the design of street spaces and siting of street furniture which responds to the heritage context;
• The need to prepare and implement plans of management for open space areas;
• The need to consider heritage issues in subdivision design - particularly where subdivision affects the existing street alignments and curtilage of heritage items or the centre of urban blocks; and
• Design of heritage trails, cycleways and the like.

d. Property Management

Staff involved with management of Council owned properties should have an understanding of which Council owned properties are indirectly or directly affected by conservation considerations.

Recurrent management practices should be reviewed to take into consideration conservation issues.

Heritage conservation issues should be incorporated into the brief for alterations, additions or other adaptation of buildings or other heritage items.

e. Possible Training Programs

Staff training could be implemented through compulsory seminars arranged for staff, either through consultants or by involving staff from the Heritage Branch of the Department of Planning. Consideration should be given to the appointment of a heritage adviser who could also provide input into staff training (Section 6.3.2.3).

Training sessions should include input and discussions on:

• The Burra Charter as a philosophical basis for conservation.
• The particular heritage of Lake Macquarie.
• Heritage issues in Lake Macquarie.
• Implications for Development control.
• Implications for Building works.
• Implications for works and maintenance.
• Opportunities for Council projects.
• Inter-departmental co-ordination.

Support should be given for staff to attend relevant conferences and seminars, such as those run by the Department of Planning and ICOMOS, with the papers being circulated to other Council Staff and subsequently added to the professional library. It is important however that all relevant staff and Councillors receive some basic training, and in this respect in-house training is preferable.

f. Educational Assistance

Council has in place a policy (Ref. 3/70/534-/001 Item 1) designed to encourage and facilitate further education of Council staff

where this is considered beneficial to Council, that is, to increase the ability of that person to carry out their task. The assistance is generally in the form of leave with or without pay. Staff undertaking heritage related studies should be eligible for such assistance.

6.4.2.2 Review of Works and Maintenance Practices

As noted above, there is a need to ensure that an integrated approach is taken to heritage conservation and that the issue is considered by all staff who have a direct or indirect involvement with the issue. It is essential that Council lead by example, and decisions or actions taken by Council have a significant impact on the context of many important items or areas. This particularly applies within the Conservation areas.

The most important areas that Council can act to demonstrate its commitment to conservation are:

- Through the review of practices and policies for street tree planting, lopping and removal or replacement;
- Through the preparation and implementation of plans of management for key open space areas;
- Through the conservation of heritage items within streets including street lighting, median strips, early cut stone and/or concrete kerbing;
- Through a revision of road width standards and the incorporation of heritage and visual assessments into the design of traffic management and street drainage systems;
- Through the selection and sensitive siting of appropriate street furniture, street signage and other graphics; and
- Through Liaison with other Government Departments and Service Authorities to ensure heritage conservation issues are incorporated into the design of installation and recurrent maintenance practices.

6.4.2.3 Council Owned Heritage

Other local government areas have been able to achieve a great deal of prominence and community support and respect by carrying out successful restoration, adaptation, or infill projects with Council owned properties.

These projects can set the standard for design and conservation practice and illustrate what can be done with commitment to heritage conservation objectives and principles. This should include the requirement that any work be preceded by a Conservation Plan.

Council should take all opportunities to demonstrate good conservation practice and ensure all proposals involving Council buildings or sites include conservation considerations and design principles within the design brief.

A list should be prepared of all Council owned properties which have potential for inclusion in such a program, and strategies should be devised for future maintenance, development and adaptive reuse of these items as appropriate.

6.5 Establishing an Appropriate Planning and Development Framework

6.5.1 Awareness of Existing Responsibilities and Statutory Framework

A range of mechanisms established at the state and regional level is already available to Council to achieve the conservation objectives noted in this report. They include:

6.5.1.1 Heritage Act 1977

Amongst other powers and responsibilities, the Heritage Act provides a basis for ensuring conservation of items by means of:

- Permanent Conservation Orders (Section 44);
- Interim Conservation Orders (Section 26);
- Orders preventing harm to buildings commonly known as Anti-demolition Orders (Section 130);
- Orders preventing harm to relics (Section 139); and
- Emergency Orders restricting harm when an item is under immediate threat and is not covered by another conservation instrument (Section 136).

There have already been some such orders in force in the City (see Section 2.2.1).

Restrictions on the time allowed for such orders to be put in place once an application is made are also specified (Section 133). Additionally, the administration of some of the Acts provisions, principally orders under Section 130, may be delegated from the Heritage Council to other authorities such as local councils (Section 169) on a temporary basis. This allows councils to provide protection for items such as those proposed for inclusion in the LEP schedules, should they become threatened while the LEP is being prepared.

6.5.1.2 Environmental Planning and Assessment Act 1979

The Environmental Planning and Assessment Act, amongst other things, provides the basis for the preparation of Local Environmental Plans (LEP) and Development Control Plans (DCP). Thus the control over items provided under the Act is integral with localised provisions.

Section 90 of the Act is of particular relevance as it lists matters for consideration in the determination of Development Applications. This specifically includes:

* The provisions of any Environmental Planning Instrument eg. Lake Macquarie LEP (Sections 2.4.1 and 6.5.2.1);
* The provisions of any Development Control Plan formulated under Section 72 (Sections 2.4.2 and 6.5.2.4-5);

as well as more general considerations such as:

* The effect of the development upon the landscape or scenic quality of the locality;
* The character location, siting, bulk, scale, shape, size, height, density, design, or external appearance of the development;
* The relationship of that development to development on adjoining land or on other land in the locality; and
* whether any trees or other vegetation on the land should be preserved.

The City of Lake Macquarie LEP was created under such terms in 1984. While it does

provide a reasonable basis for the inclusion of heritage provisions, certain modifications are suggested to bring it into line with current guidelines. Additional Development Control Plans or amendments to existing plans and policies are also required. Suggested items are noted in subsequent sections.

6.5.1.3 Hunter Regional Environmental Plan 1989 - Heritage

The Hunter Regional Plan already includes measures to facilitate heritage conservation in the region, as previously discussed (Section 2.3.2). It contains heritage provisions which correspond closely to those contained in the Draft Model Heritage Provisions (Appendix 1). These provisions have to date been the basis for determining the fate of heritage items within the area where redevelopment of heritage items has been proposed, as they establish the mechanisms under which consent to such development are to be decided. These provisions will remain in place irrespective of any amendments to the LEP.

6.5.2 Recommendations

Whilst the Instruments and Acts noted in Section 6.5.1 above provide an appropriate basis for heritage conservation within Lake Macquarie, there is a need to adopt more specific objectives and principles to guide Conservation Practice within the City. In addition there is a need to make a number of changes to existing policies and procedures to ensure Conservation objectives are achieved. These are covered in the following Sections:

6.5.2.1 Modifications to the City of Lake Macquarie Local Environmental Plan 1984
6.5.2.2 Administration of Section 130 Orders under the Heritage Act
6.5.2.3 Demolition Control
6.5.2.4 Amendments to Existing Controls
6.5.2.5 Future Controls
6.5.2.6 Other Local Government Initiatives

6.5.2.1 Modifications to the City of Lake Macquarie Local Environmental Plan 1984

As noted previously, the existing Local Environmental Plan does not contain any heritage provisions. The following modifications are therefore recommended:

a. Heritage Clauses

The inclusion of supplementary clauses relating to **conservation incentives, historic interiors, potential historical archaeological sites, aboriginal relics, and conservation plans**. This may be done by adopting in full the standard provisions recommended in the **Draft Model Heritage Provisions** (Appendix 1), including all of the optional provisions relating.

Provisions similar to these already exist in the Regional Plan. Lake Macquarie Council has expressed a desire to provide controls with a strong emphasis on a commitment to the retention of heritage items wherever possible. Such provisions would require the approval of the Department of Planning, and Council would need to define why such modifications were appropriate. The provisions should be written by a specialist familiar with the field, and could use the Draft Model Heritage Provisions as a basis.

The heritage clauses should be reviewed on a regular (five yearly) basis to ensure they are consistent with current practice.

b. Schedule of Heritage Items

Inclusion of the revised **Schedule of Sites and Items of Environmental Heritage significance** as recommended in this study. That is, all items in the inventory noted as being of high or very high Local significance, or of appreciable State or Regional significance (Schedule 5.1).

c. Conservation Areas

The creation of new and amendment of existing **conservation area** boundaries as recommended in this study (Schedule 5.2), and review of these boundaries where they result in irreconcilable conflicts.

6.5.2.2 Administration of Section 130 Orders under the Heritage Act

As previously noted, under Section 169 of the Heritage Act the Department of Planning may delegate the administration of Section 130 Orders from the Heritage Council to local councils. Such delegation has previously been granted to several councils including Ku-ring-gai, Penrith and the City of Sydney.

As a short term measure, Council should seek delegation of the administration of Section 130 orders. This could be carried out once a draft LEP which incorporates appropriate heritage provisions is adopted by Council, and may be revoked once items in the schedule have been incorporated into a Local Environmental Plan.
However, should demolition control be introduced as provided for under the new Local Government ACT, as noted below, this action may not be necessary.

6.5.2.3 Demolition Control

With the introduction of the new Local Government Act earlier this year (Section 2.2.2), there is provision for Council to introduce Demolition Control. That is, just as an application to build or develop a site must be approved by Council, so would an application to demolish an existing building be required.

This would apply to all buildings in the City, not just those noted as a heritage item, and would give the whole community the opportunity to decide whether a building was worthy of preservation, not just the individual who happens to control it at a particular point in time. Most Councils currently have Tree Preservation Policies in place, and it seems appropriate that buildings should be placed under the same terms of control.

Considerations might include not only the buildings heritage significance, but its contribution to the streetscape, potential for reuse and proposed replacement. Under Clause 95 (1) of the Local Government Act provision is made for Councils to grant *in principal approvals*. This would allow them to grant approval for demolition on the proviso that Development and Building Applications for the replacement building are approved, so

that the relative merits of old and new might be assessed, and lessening the risk of prominent buildings within a streetscape being demolished to leave only a vacant site, awaiting an unknown future development.

Such controls have been in place in some Victorian Local Government areas for a number of years. Advice on the implementation and operation of such controls might best be achieved initially by discussions with appropriate Victorian Councils about their experience and systems, or with the Victorian Local Government Association.

6.5.2.4 Amendments to Existing Controls

a. Development Control Plans and Codes

Recommended modifications to existing development control plans and codes are as follows:

* Subdivision Code (Ref. 3/39/351/003 Item 1) amended to ensure important cultural landscapes and the curtilage of important heritage items are not inappropriately subdivided. This includes Strata schemes in relation to the subdivision of individual buildings of significance;
* Car parking code amended to include design and siting guidelines to avoid the creation of gaps or inappropriate infill in commercial streets, or the use of inappropriate sites such as corners;
* Fence/Retaining wall policy amended to include recommendations for appropriate forms of fencing and setbacks for heritage items or within conservation areas;
* Allotment Layout policy (Ref.3/39/351/003 Item 2) amended to ensure the character of conservation areas and streets generally is not destroyed by inappropriate subdivision layouts.
* DCP No.9 amended to include heritage clauses as per the above issues.

b. Development and Building Application Forms

The existing Development and Building Application forms used by Council may require revision, either to the Applicants or the Council Office Use sections, to include Heritage Issues when the recommendations made in this study are implemented.

6.5.2.5 Future Controls

a. Development Control Plans and Codes

A series of more specific Development Control Plans or Guidelines should be prepared addressing heritage issues in Lake Macquarie. These should include:

* Control of actions which may affect items of heritage significance directly (through demolition, neglect or modification), or indirectly (through changes in context);
* Control of development within identified conservation areas (such as infill or extensions) including general design and siting guidelines rather than blanket zoning;
* Control of development within the central precinct of all commercial areas, to encourage both the retention of heritage items and the revitalisation of these areas in preference to large periphery developments;
* Control of advertising signs and graphics in conservation areas and commercial precincts; and
* Control of communications, service or mechanical equipment, such as satellite dishes, antennae, air conditioning plant, automatic teller machines etc.

In addition, it is important to ensure that heritage considerations are included in the formulation process for future council plans and policies. In particular, the following issues should be included in this process:

* Identifying items that are within the area covered by, or may be affected by, the plan or policy;
* Identifying important characteristics of the visual context of the area covered by the plan or policy; and
* Liaison with other bodies or authorities, in particular the National Parks and Wildlife Service and the Heritage Branch of the Department of Planning.

Section 7 of this report includes Heritage objectives for the City of Lake Macquarie which could be adopted as part of a Development Control Plan for heritage conservation.

b. Archaeological Management Plan

This study has identified many significant archaeological sites within the City, and indicates the need for further investigation in some cases. An Archaeological Management Plan would further assist Council in protecting its heritage. The intention of such plans are to "*alert management authorities when important archaeological resources are threatened and outline the appropriate ways to deal with any proposed disturbance.*"

In light of the high number of archaeological sites identified in the City, Council should consider undertaking an Archaeological Management Plan, with financial assistance from the Department of Planning.

c. Annual Management Plans and Reports

The Local Government Act specifies the need for councils to prepare draft Plans of Management, and to report annually on their achievements in respect to these plans (Section 2.2.2). These should include issues related to heritage conservation.

d. Terminology

The Conservation Terminology used in all future Council documents and plans should be consistent with that of the Burra Charter (Appendix 2). This includes such terms as *preservation, restoration and reconstruction.* The terminology of existing Council Codes, Plans and Guidelines should also be revised.

6.5.2.6 Other Local Government Initiatives

There are a number of other initiatives that Council can implement or expand to indicate its support for Heritage Conservation.

a. Rating

Amendments to the Local Government Act implemented in January 1990 permits Councils to consider a differential rate for properties protected under the Local Environmental Plan. Information on this issue is available in Local Government Circular 89/30 - Major Changes to the Rating Legislation for 1990.

It is recommended that Council consider the application of a differential rate for properties included in the Local Environmental Plan.

b. Floor Space Transfers

Amendments to the Local Environmental Plan could incorporate provisions to allow floor space rights to be transferred to adjacent land, or other suitable sites, where this facilitates conservation of an item of environmental heritage significance. Such allowances have been made previously in New South Wales.

It is recommended that Council consider such provisions and the preparation of development guidelines for when such action is appropriate.

c. Development and Building Application Fees

Consideration should be given to waiving or donating back Development and Building Application Fees for applications involving items of environmental heritage significance, where the application facilitates conservation of the item.

A precedent for this has been set by other Local Government areas, such as Manly and Ashfield, who waive Development Application Fees for items included in their LEP. Guidelines would need to be developed to determine when such action is appropriate.

d. Other Council Fees and Contributions

Apart from the above fees, Council is entitled to obtain contributions in lieu of the provision of certain items in any new development, such as open space or car parking requirements. Such requirements are often impossible to meet when redeveloping heritage items due to site limitations, and in these cases the waiving of contributions encourages the preservation of that item.

Council has made a precedent for such action by waiving some $24,000 in Section 94 contributions for the redevelopment of a cottage at 36 Smith Street, Charlestown, on the basis that the developer would make a public contribution by retention and refurbishment of the cottage. The

development was subsequently modified to retain and complement the cottage.

e. Update of Council Records

Council should arrange for regular updating of its computer and rating records to ensure items of heritage, or properties adjacent to items of heritage are identified. This should include all items included in the full inventory (Appendix 8) as well as listings by all relevant bodies such as the National Trust, not only those scheduled in the LEP (Schedule 5.1).

It is important that heritage matters are considered where proposed developments may adversely affect nearby heritage items. While written or computer based records may identify immediately adjacent items, maps are useful to ensure that all affected items are considered, for example in a street where a number of heritage items exist, or where an item forms part of an important vista. For this reason it is important that the reference maps showing the heritage items included in this report, or items subsequently added to the inventory, are also regularly updated.

f. Liaison on Aboriginal Relics

While the study of items of aboriginal significance did not form part of this study, it must be noted that the importance of liaison between Local Government and the National Parks and Wildlife service cannot be understated. It is recommended that Council continue the current practice of liaison during the plan preparation and development control processes, and maintain a listing of such sites in its property records.

g. Local Heritage Assistance Fund

Local Heritage Assistance Funds may be used for a variety of purposes associated with conservation, including restoration works, enhancement of buildings or landscapes, awards or research. Such funds are administered locally by a Heritage Committee or similar group, who may take advice from a Council appointed Heritage Adviser. Assistance may be provided as low or interest free loans, or by direct grants, usually on a dollar-for-dollar basis. By the use of loans, capital will be consistently returning to create a rolling fund, ensuring the maximum benefit can

be offered to the community.

Such funds provide practical help to the owners of heritage items, ultimately benefiting both the individual and the community. It also discourages the common occurrence where re-cladding, re-roofing and window replacement is carried out, destroying important details of a style.

Such funds may be established under provisions of the Local Government Act. Blacktown, Hawkesbury, Gosford and Broken Hill City Councils have established such funds. These have received funding from a variety of sources including the New South Wales Heritage Assistance Program. Similar schemes operate in Victoria. In one instance, the three rural shires of Beechworth, Chiltern and Yackandandah have established a joint restoration fund.

It is recommended that Council consider the possibility of establishing a Local Heritage Assistance Fund and provide it with an annual budget allocation, perhaps based on a percentage of rates received from properties included in the LEP schedule and/or the inventory.

h. Cataloguing of Relevant Studies

Council should arrange to catalogue all heritage, archaeological and similar studies submitted to the Council. This includes existing studies such as those noted in Section 2.3.3: Regional Heritage Studies, or future research as noted in Section 6.2: Further Identification of Heritage Resources.

Such studies are also often undertaken as a prerequisite for a Development Application, or when revising local or regional policies and guidelines. Copies of these reports should be lodged as a collection, either at Council Offices, the public library, or a Heritage Centre.

These studies represent a valuable resource, yet all too often, once they have served their initial purpose, they are filed away and forgotten. Subsequent studies may undertake initial research duplicating previous studies. By cataloguing and lodging such reports as they are produced, the collection will build over the years to provide a

comprehensive and readily accessed heritage resource for the City.

Drawings produced for Building and Development applications related to heritage items can also provide a valuable record of such items, and these might also be included in such a cataloguing system.

6.5.3 Emergency Provisions

Whilst the heritage study provides a statement and list of all items of which the study team is currently aware, it is always possible that additional items may be found as further research takes place and/or evidence is uncovered. It is important therefore that Council is aware of the mechanisms for heritage conservation that are available in 'emergency' situations.

The most important source of protection is the NSW Heritage Act which provides a framework for issuing Permanent or Interim Conservation Orders, or orders preventing harm to buildings works or relics (Section 6.5.1.1). In particular, section 136 of the Act provides a basis for emergency protection should an item, which is believed to be important, not be covered by other provisions and become threatened. It is designed to allow time for an item to be adequately assessed prior to a decision being made about its future. Section 139 of the Heritage Act is also of relevance due to the large number of archaeological sites in Lake Macquarie.

Council can also use relevant provisions of Section 90 of the Environmental Planning and Assessment Act to implement control over matters affecting heritage items (Section 6.5.1.2).

However as previously noted, provision for demolition control has been included in the new Local Government Act (Section 6.5.2.3). If demolition control is implemented by Council, the need for such emergency measures should be dramatically reduced.

74

7

7. Heritage Objectives for the City of Lake Macquarie

7.1 Background

In developing strategies for conservation of the heritage of the City, it is important that all participants in the development process, including the decision makers, have a clear sense of direction and common purpose.

Although it is neither practical nor desirable to authentically recreate what existed at the turn of the century or any other particular point in time, it is desirable and important to ensure that in adapting Lake Macquarie to contemporary needs, heritage issues are fully considered, and the visual effects of change are taken into account.

7.1.1 Why Conserve our Heritage

The City of Lake Macquarie still has a substantial stock of 19th Century and early 20th Century residential, commercial, industrial and other significant buildings and structures intact. Specific reasons for conserving heritage items are often difficult to define, however the following broad range of issues demonstrate why it does indeed make great sense to encourage their conservation.

* The retention of Heritage items, and the reinforcement of the historic ambience associated with these, allows future generations to interpret and understand the unique forces which shaped the development of Lake Macquarie, and their relevant place in Australian history. In short, they help us to understand our culture.
* Heritage items are a tangible record of the area's history in a way that documents can never be, as they demonstrate the layering of events through history. Once lost, heritage items can never be regained.
* A shared heritage helps to bind people together, as an awareness of and respect for its heritage gives a community a sense of continuity with the past and into the future, rather than seeing the present as an isolated event.
* We should see ourselves as custodians of our heritage for only a short space of time, rather than as owners of items in perpetuity. Custodianship implies the need to hand something on in a better state than we received it.
* The character of our existing environments is established largely by its physical surroundings, both natural and man-made. Heritage items are often particularly important here, especially when a number of items exist in close proximity, in which case their importance may be identified by the creation of a designated conservation area. As such they provide a unique visual identity to each of our communities. However the particular elements that create this character are often not perceived by the community until they are lost, and hence the character altered irrecoverably.
* Heritage items are a material resource that should not simply be discarded once they have outlived their initial function. Just as we are encouraged to recycle our waste, so we should recycle redundant buildings and other heritage items. Old buildings have proven their adaptability to a variety of uses over the years, in contrast to many modern buildings which are often difficult to adapt. Even where it is decided to demolish an item its elements should be set aside for reuse, or where particularly important exhibited and recorded as historic items in their own right.
* Heritage items are an economic resource for the community to exploit just like any other commodity, though they are often perceived only as a financial burden. They have definite economic potential in terms of tourism, and may be adapted to new uses often at a low cost in comparison to a new building.
* The retention of heritage items should not be seen as stifling contemporary design but as complimentary to it, each representative in some way of the tastes and attitudes of its period. This allows us to compare new against old, and hence to make an informed judgement as to the relative merits of each, and so ultimately to decide whether a new development is actually an improvement on what went before or not.

7.1.2 Councils Approach to Conservation

In the course of this study it has been readily apparent how proud the local community is of its past, particularly of its coal mining heritage.

Council has a responsibility to its own residents, and to other citizens, to conserve the area's heritage in this regard. As previously noted the Local Government Act notes that part of a Council's charter is to *"properly manage, develop, protect, restore, enhance and conserve the environment of the area for which it is responsible"*, and *"to bear in mind that it is the custodian and trustee of public assets"*.

It is important that Council defines what it wants to achieve in Heritage terms, and what are the needs for conservation peculiar to the area which are not already covered by State or National legislation. This study has started the process, it is now up to council to implement the recommendations made in the study as appropriate.

Future policy formulation and decision making by council with respect to both private development and public works or activities should therefore aim to:

* Protect the most important heritage items within the City of Lake Macquarie;
* Maximise the potential to reinforce the historic ambience of urban and rural areas, villages and industrial sites; and
* Minimise any action that will weaken or detract from this ambience.

However, no matter how much legislation is enacted to control the use and conservation of heritage items, unless the general principal of heritage conservation has the support of the community, such legislation will have little effect. In light of recent cases where council has unsuccessfully attempted to prevent redevelopment of heritage items, they are currently in a unique position to be able to assess the merits of such legislation. In this respect it is important that council makes a stated policy of its intentions to preserve heritage items wherever possible, and to educate the community about heritage issues.

The conservation approach adopted therefore should involve protection of areas and items which demonstrate the themes, periods and events which are important aspects of the social history of the region. Subsequent sections outline broad heritage objectives and specific policies for heritage conservation in Lake Macquarie respectively (Sections 7.2 & 7.3).

As previously noted, the philosophical basis for heritage conservation within the City of Lake Macquarie should be the Australia ICOMOS Charter for the Conservation of places of significance (The Burra Charter) and its guidelines (Appendix 2).

7.2 Broad Heritage Objectives for Individual Items of Environmental Heritage Significance

7.2.1 Heritage Objectives

To retain and enhance those items known to have been an important part of the early life; which represent important themes in the development of the area, and/or which contribute significantly to townscape character.

In particular this should include:

* Industrial sites representing the various themes of coal, power, chemicals, food processing and railways;
* Significant individual items, representing the importance of Lake Macquarie as a centre of Public Administration, Ecclesiastical and Education Activities;
* The Commercial areas which reinforce the formal design principles applied to the subdivision of Lake Macquarie and include good examples of late 19th Century and early 20th Century commercial buildings; and
* Residential areas developed in the mid to late 19th Century and early 20th Century and which contains a diverse range of styles and residential types representing a broad socio-economic profile.

7.2.2 Conservation Principles

Items of Environmental Heritage Significance are noted in the inventory (Appendix 8). The inventory includes many items whose conservation is considered essential. They may be important for the following reasons:

- Because they are individually historically or architecturally significant; and/or
- Because they reflect significant historical themes; and/or
- Because they are prominent city landmarks or significant visual foci; and/or
- Because they were significant in the daily lives of the community and serviced important industrial, administrative, cultural, educational, social or religious roles.

The general principles for conservation of Lake Macquarie's Heritage have been defined under the following Section headings:

7.2.2.1 Retention of Items
7.2.2.2 Modifications or Changes in Image
7.2.2.3 Additions to Items
7.2.2.4 Context of Items
7.2.2.5 Historical Analysis

7.2.2.1 Retention of Items

- **Encourage**

a. Retention and upgrading of heritage items.

b. Incorporation of items into major redevelopment where this takes place.

c. Heritage assessments to further define why an item is significant and establish the most appropriate conservation action.

- **Prevent**

a. The loss of heritage items; and

b. The loss of those parts of items which contribute to their visual or historical significance and promote interpretation of the original function, use or importance of the item.

7.2.2.2 Modification or Changes in Image

- **Encourage**

a. The preparation of conservation assessments prior to approving modifications to heritage items;

b. The conservation of components, elements and qualities which have led to the inclusion of an item in the inventory;

c. Adoption of appropriate conservation practices such as reconstruction, restoration or adaptive reuse as appropriate, bearing in mind the condition of the item and opportunities for its reuse;

d. The removal of detracting elements such as unsympathetic additions or infill, air conditioning and other plant, service pipes, unauthentic awnings, fascias, signage and the like;

e. The reconstruction of original detail only where this is based on a thorough assessment of the original building including assessment of documentary, photographic and other evidence as noted in the Appendices;

f. The painting of heritage items where appropriate in colour schemes suitable to their period; and

g. The use of graphics of a style and form which relates to the style and form of the architecture.

- **Discourage**

a. Facelifts or other actions which result in the loss of original finishes on buildings. Actions which should be prevented include:

  - The removal of original windows and doors and their frames;
  - The removal of detail such as parapets, gables, cornices, rendered relief, balustrades etc;
  - The removal of original verandahs or awnings;
  - Modification of windows and door opening proportions;
  - Covering or recladding original

facades and introduction of vertical or angled fascias;

- Colour schemes which conflict with the style of the building;
- Rendering of walls and fascias;
- Construction of brick feature walls;
- Painting of previously unpainted facades;
- Removal of paint by sandblasting or other abrasive techniques;
- The use of incongruous or inappropriate roof materials; and
- The application of mock details:
  - Shutters
  - Classical columns
  - Lacework
  - Quasi historical windows and doors.

7.2.2.3 Additions to Items

• **Encourage**

a. Additions to buildings which are sympathetic to the item in terms of:

- Siting and setbacks
- Composition and fenestration design
- Scale
- External form particularly roof and parapet form
- Materials, particularly walls and roof
- The proportion of window and door openings
- The treatment of details such as shopfronts, awnings and verandahs
- The treatment of boundary fencing and landscaping.

b. Additions which respond to the original design intent or principles.

• **Discourage**

a. Additions which dominate or conceal the original building;

b. Additions which confuse interpretation of the extent of the original building;

c. Additions which detract from the quality of the curtilage; and

d. Additions with strongly contrasting design treatments.

7.2.2.4 Context of Items

• **Encourage**

a. Upgrading of the immediate street context, in particular by careful attention to the siting and selection of street planting, pavings, street furniture and signage;

b. The development of built form on adjacent land which is sympathetic in siting, design, and scale to the item;

c. Protection of the group significance of items where items are located in close proximity; and

d. The reconstruction of authentic fencing.

• **Discourage**

a. Development on adjacent land which dominates as a result of scale, form, colour or materials;

b. Concealment of an item by street planting;

c. Unsympathetically located and/or designed street furniture, traffic management structures or utility installations in particular: bus shelters, light and electrical poles, traffic lights and signs, roundabouts etc.; and

d. Removal of authentic fencing, landscaping, pavings and items of street furniture.

e. Unsympathetic subdivision of the curtilage.

7.2.2.5 Historical Analysis

• **Encourage**

a. Further research into the historical significance of items on the list on a priority basis with emphasis on those items about which little is known;

b. The establishment of a repository for historic photographs and records which could be useful for the preparation of conservation plans on individual items; and

c. Further research into potentially important rural items as details become known.

7.3 Broad Heritage Objectives for Identified Conservation Areas

7.3.1 Heritage Objectives

To protect specific areas which, through their coherence of character based on the presence of a number of heritage items, demonstrate:

* The relationship between settlement pattern, water, rail and road transport;
* Early development themes such as the coal industry and timber cutting;
* The size, scale, character and style of development within each area of different periods of evolution and maturity;
* The relative importance of individual urban areas and villages at various periods; and
* The townscape and landscape setting within which items of individual heritage significance developed.

Also, to identify, protect and reinforce the qualities and characteristics that create the historic ambience of the identified conservation areas.

7.3.2 Conservation Principles

The analysis of each conservation area has identified the importance of each element in terms of its individual historical importance. A further assessment should be carried out to establish the townscape or landscape significance of each site to enable the principles below to be adopted. Individual principles have been developed for:

7.3.2.1 Key Items
7.3.2.2 Contributory items
7.3.2.3 Non contributory items
7.3.2.4 Detracting items
7.3.2.5 New development
7.3.2.6 Public areas
7.3.2.7 Open Spaces

7.3.2.1 Key Items

This category includes the most significant townscape and heritage items within an area, i.e. contributory items which because of their siting or location have a greater impact on street character. This typically may include corner sites, development on ridges or knolls, or items terminating street views.

These include items which are of individual heritage significance and therefore listed within the Inventory of Items of Environmental Heritage Significance which are covered by the objectives and principles established in Section 7.2.1-2. The importance of these items is reinforced where they are located within a conservation area.

7.3.2.2 Contributory Items

These items are also individually significant as they collectively contribute to street character and are therefore important to the ambience of each conservation zone. This includes the items in the extended list of items of Heritage significance.

* **Encourage**

a. Retention of items which contribute to street character;

b. Continued use or adaptive reuse of contributory items;

c. Integration of contributory items into redevelopment proposals;

d. Authentic restoration of the exterior of contributory items and retention of original detail;

e. The retention of qualities and detail which form part of the stylistic character of the building;

f. The retention of the setting between the building and the street in particular gardens and landscape;

g. The maintenance or construction of appropriate fencing; and

h. The siting of additions behind the building or to the side where this can be achieved without compromising the character of the item. (refer diagram 7.1)

* **Discourage**

a. The loss or concealment of contributory items;

b. Changes which erode the character of contributory items including the removal of detail, changes in finishes etc.;

c. The addition of unsympathetically sited or designed additions or structures;

d. Re-roofing in materials which are incompatible with the style of the building;

e. Re-cladding in materials which are incompatible with the style of the building; and

f. Removal of fencing or the construction of new unsympathetic fencing.

7.3.2.3 Non Contributory Items

This category would include sites which do not significantly contribute to street character. Whilst they may help maintain the scale and rhythm of the street, they neither contribute to nor detract from street quality.

Items which can be described as non-contributory could include:

a. Items which are not prominently sited;

b. Items of a later period to the predominant character and which are considered to be secondary in importance; or

c. Potentially contributory items which have been modified, poorly maintained, or are of lesser architectural quality.

• **Encourage**

a. The upgrading of items which have been modified or poorly maintained;

b. Restraint of the visual prominence of these items within the street; or

c. Redevelopment in a way which respects the scale and form of the other items within the street and reinforces the rhythm of the street, perhaps even accentuating the presence of surrounding key or contributory items.

• **Discourage**

a. Actions which accentuate the visual

presence of non-contributory items; or

b. Redevelopment which does not achieve the objectives noted above.

7.3.2.4 Detracting Items

This would include sites that detract from streetscape quality and can include:

a. Vacant or poorly maintained land and buildings; or

b. Recent development which is poorly related to the scale, form and character of other development.

• **Encourage**

a. Sensitive infilling of vacant sites;

b. The use of appropriately scaled landscape elements where breaks are created in the street, for example by car parking;

c. The use of street planting to reduce the visual impact of detracting items;

d. The removal of detracting elements such as additions to potentially contributory items; and

e. The redevelopment of detracting buildings in a way which is sympathetic to overall streetscape character.

7.3.2.5 New Development

Ensure that new development within conservation areas is compatible with the existing visual, historical, built and landscape character.

• **Encourage**

a. New development which does not dominate the scale of existing development;

b. If appropriate, the breaking up of the massing of larger developments into smaller units which reflect architectural forms common in the area;

c. New development which is compatible with the predominant built forms typical in the

area;

d. Materials and colours which are compatible with those used in existing contributory buildings;

e. The siting of new development in a way sympathetic to adjacent buildings;

f. The adoption of traditional fencing forms; and

g. Landscape arrangements which are compatible with the architectural style of the building.

• **Discourage**

a. New development which dominates the scale of existing development;

b. New development which is inappropriately visually prominent due to siting or the use of strongly contrasting forms, colours or materials;

c. The development of non traditional gardens particularly "bush" gardens; and Mock 'styles' for example arches and brick piers supporting verandahs etc.

7.3.2.6 Public Areas and Street Spaces

The major objectives for the treatment of street spaces should be to provide a context which enhances the setting of individual heritage items and conservation areas by:

• Unifying streetscapes;
• Emphasising key heritage items or contributory buildings;
• Playing down non contributory items or detracting elements; and/or
• Defining conservation areas.

• **Encourage**

a. The provision and maintenance of street planting, which achieves the above objectives;

b. The removal of aerial electrical cables or introduction of bundled cables to minimise tree lopping;

c. The development or adoption of a consis-

tent range of street furniture and pavings including:

- Seats and tables
- Tree grates and guards
- Rubbish receptacles
- Street lights
- Information kiosks
- Street signage
- Street graphics in general
- Historic markers
- Kerbing
- Kerb cross overs
- Bus shelters Bollards
- Planters
- Manhole covers
- Telephone booths

d. Coordinated siting and design of the above elements;

e. Kerblines which reinforce the traditional linear or grid type of street layouts where appropriate; and

f. Street treatments that reinforce the identities of each precinct or group.
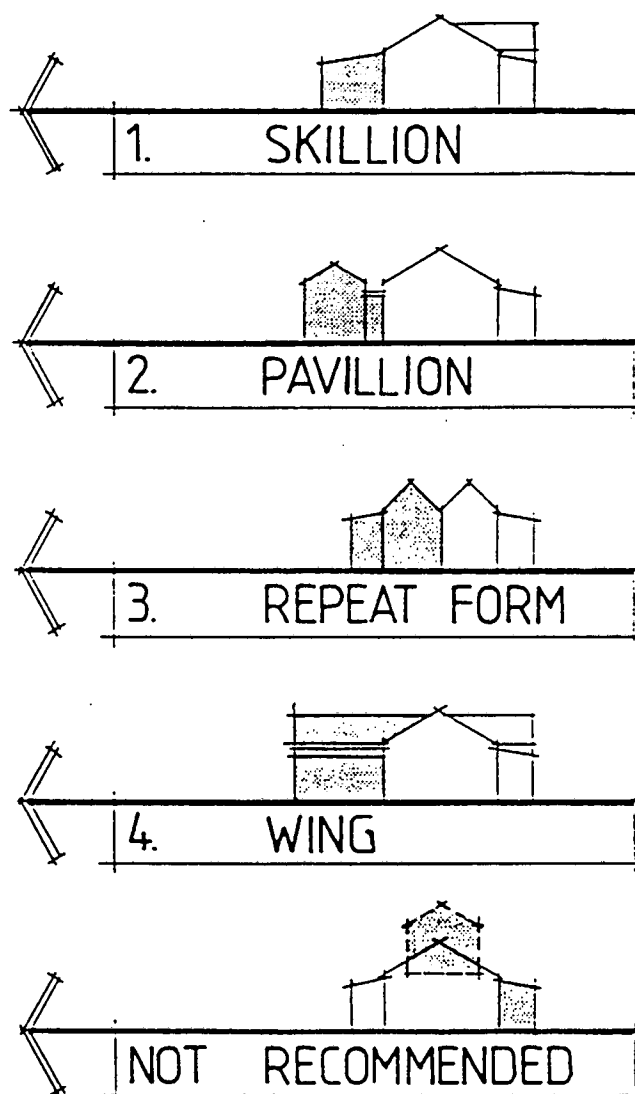
7.3.2.7 Open Spaces

The major objectives for open spaces should be to provide an appropriate setting for recreational activities, while reinforcing the context of heritage items and exploiting the potential of archaeological sites.

• **Encourage**

a. The development of Plans of Management for key open spaces which have heritage significance or are adjacent to heritage areas.

b. Inclusion of the following considerations in the preparation of the Plans of Management:

- Historical use of the open space (past activities).
- Existing uses, possible uses and their appropriateness.
- Site drainage and slope.
- Scenic quality and ridge top protection.
- Views into, out of or across the open space.

- The relationship to surrounding spaces and streets.
- The nature of the edge of the open space.
- The existing internal and external planting structure.
- The relationship to built form and heritage items located in and around the open space.
- Existing planting or indigenous flora.
- Potential historical archaeological items
- Pedestrian access into and through or across the open space.
- Vehicular access and car parking.
- Utility and other services particularly aerial cables.
- Public amenities.
- Pavings, furnishings, equipment and lighting.
- Fencing.
- Maintenance and security.
- Prevention of rubbish dumping.

c. The Plans of Management should provide a basis for development of these open spaces in a manner which enhances the context of heritage items and facilitates continued use and conservation of heritage items.

• **Discourage**

a. Fragmented decision making which erodes the quality of the open space;

b. Development of reserve areas in a way which fragments or detracts from the context of heritage items.

Siting of Additions

SUITABLE FOR 2,4 OR ASSYMETRICAL TYPE

SUITABLE FOR 2,4 OR ASSYMETRICAL TYPE

SUITABLE FOR 2 OR 4 ROOM TYPE

SUITABLE FOR 4 ROOM OR ASSYMETRICAL TYPE

AVOID INFILLING OF VERANDAHS, ROOF ADDITIONS AND / OR FRONT OR SIDE EXTENSIONS

ADDITIONS SHOWN SHADED

1. SKILLION

2. PAVILLION

3. REPEAT FORM

4. WING

NOT RECOMMENDED
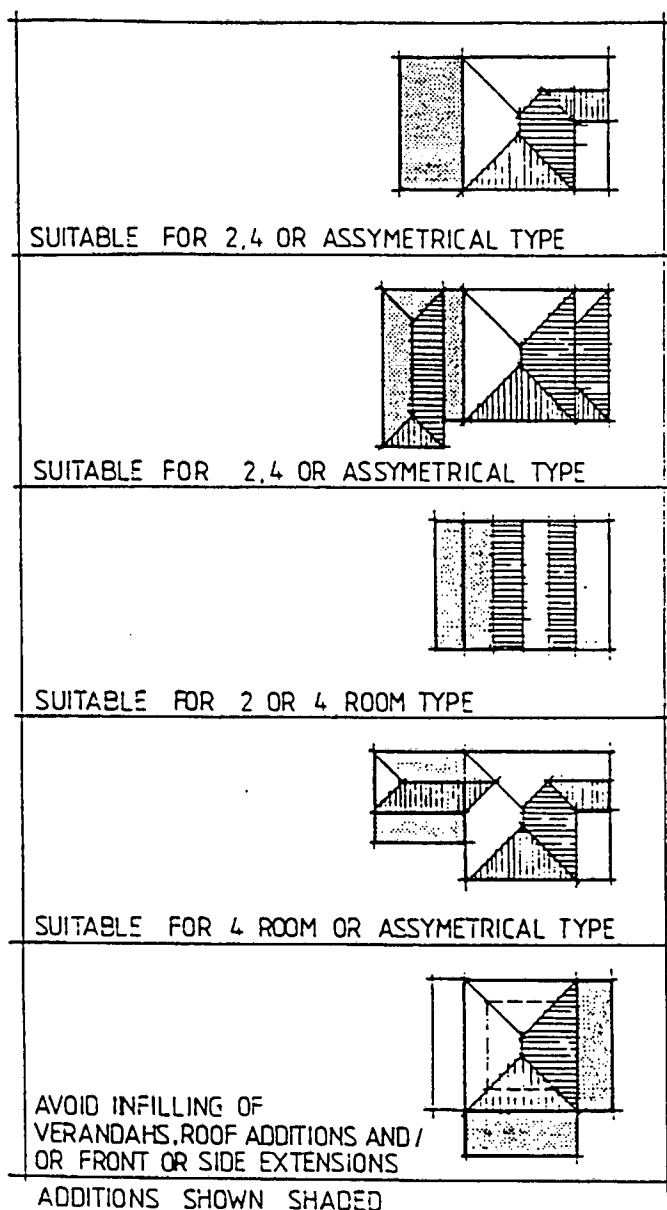
Modifications which should be Discouraged

AVOID MODIFICATIONS TO ROOF FORM & MATERIALS

AVOID CHANGES IN PROPORTIONS OF WINDOW OPENINGS

AVOID REMOVAL & INFILLING OF VERANDAHS OR CONSTRUCTION OF BRICK OR MOCK COLUMNS
AVOID MOCK DETAIL GENERALLY

AVOID REMOVAL OF ORIGINAL CLADDINGS & DETAIL SUCH AS AWNINGS, BARGE DECORATION ETC.

Lake Macquarie Heritage Study   Diagram

Additions and Modifications
Not to scale
Drawn by Suters Architects Snell

7.1

Two Room Cottage Type

A common early house type, most date from 1870-1890.

1. Roofs
- Gable roof most common, although some are hipped.
- Pitch varies from 30° to 45° for earlier examples.
- Corrugated iron most common cladding, sometimes over original shingles.

2. Walls
- Mainly timber framed and boarded types.
- Many have asbestos/fibrous cement or aluminium cladding over original weatherboards.

3. Verandahs
- Commonly skillion or bullnose with vertical boarded stop ends, a few having returned ends.
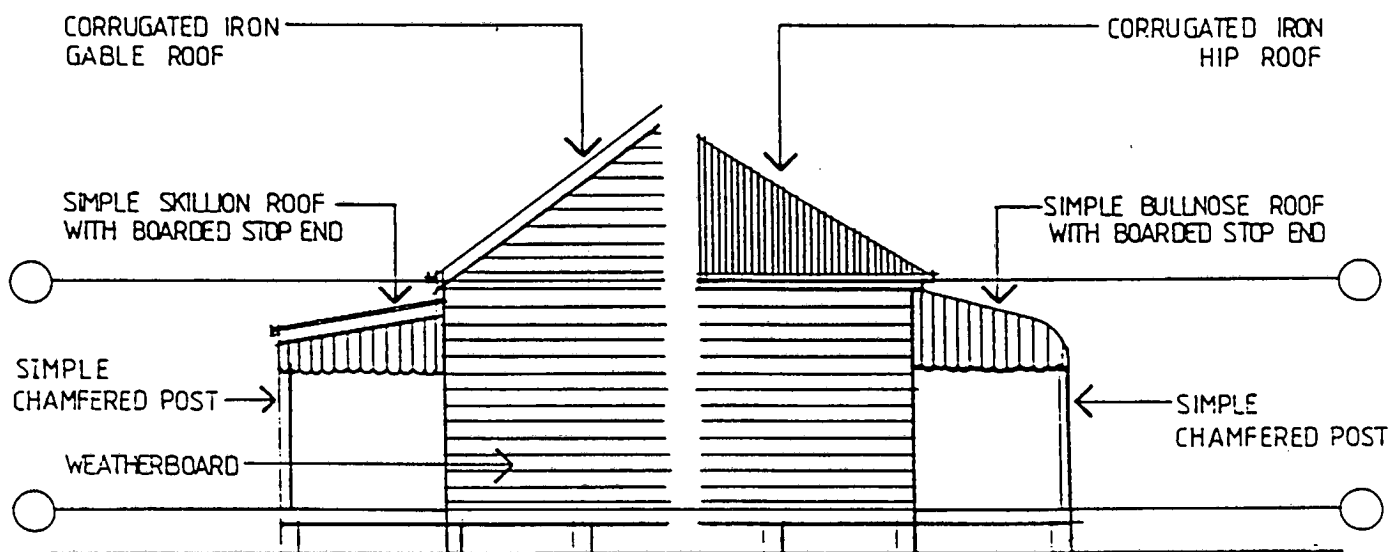- Supported on simple timber posts.

4. Windows
- Predominantly double hung, many with six paned sashes.
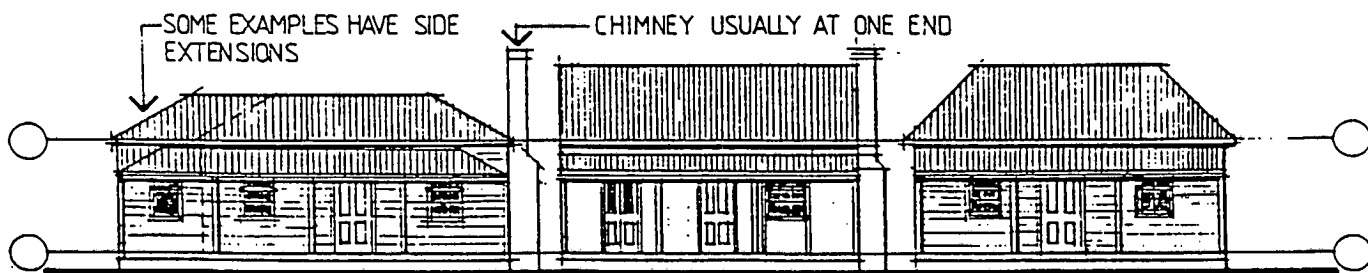- Usually vertically proportioned.

5. Doors
- Predominantly four panel type.
- Some have French doors.

6. Decoration
- Generally little or no decorative treatment other than subtle shaping of structural elements eg. verandah brackets, posts and boarded stop ends.

CORRUGATED IRON GABLE ROOF

CORRUGATED IRON HIP ROOF

SIMPLE SKILLION ROOF WITH BOARDED STOP END

SIMPLE BULLNOSE ROOF WITH BOARDED STOP END

SIMPLE CHAMFERED POST

SIMPLE CHAMFERED POST

WEATHERBOARD

TYPICAL DETAILS

SOME EXAMPLES HAVE SIDE EXTENSIONS

CHIMNEY USUALLY AT ONE END

LOW PITCH HIP ROOF

STEEP PITCH GABLE

STEEP PITCH HIP

ROOF FORMS

Four Room Cottage Type

Another common early house type, most date from 1890-1915. Styles include simplified Victorian and Federation.

1. Roofs
- Almost always corrugated iron and hipped.
- Roof pitches 30-35°, some earlier examples up to 45°.

2. Walls
- Almost always weatherboard, either rusticated or chamfered, though may also be in masonry.
- Front walls commonly have vertical grooves to imitate stonework.

3. Verandahs
- Commonly skillion or bullnose with vertical boarded stop ends or returned ends.
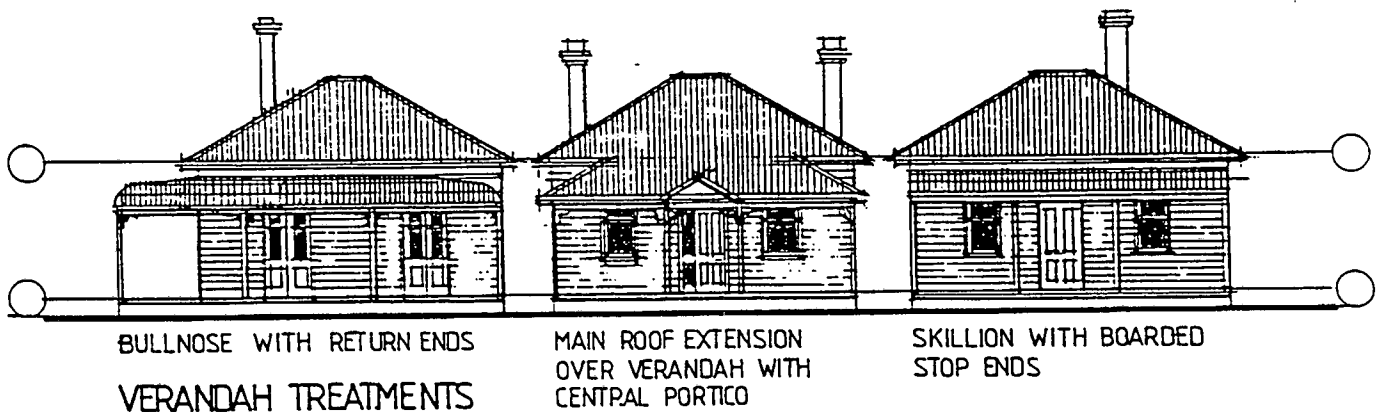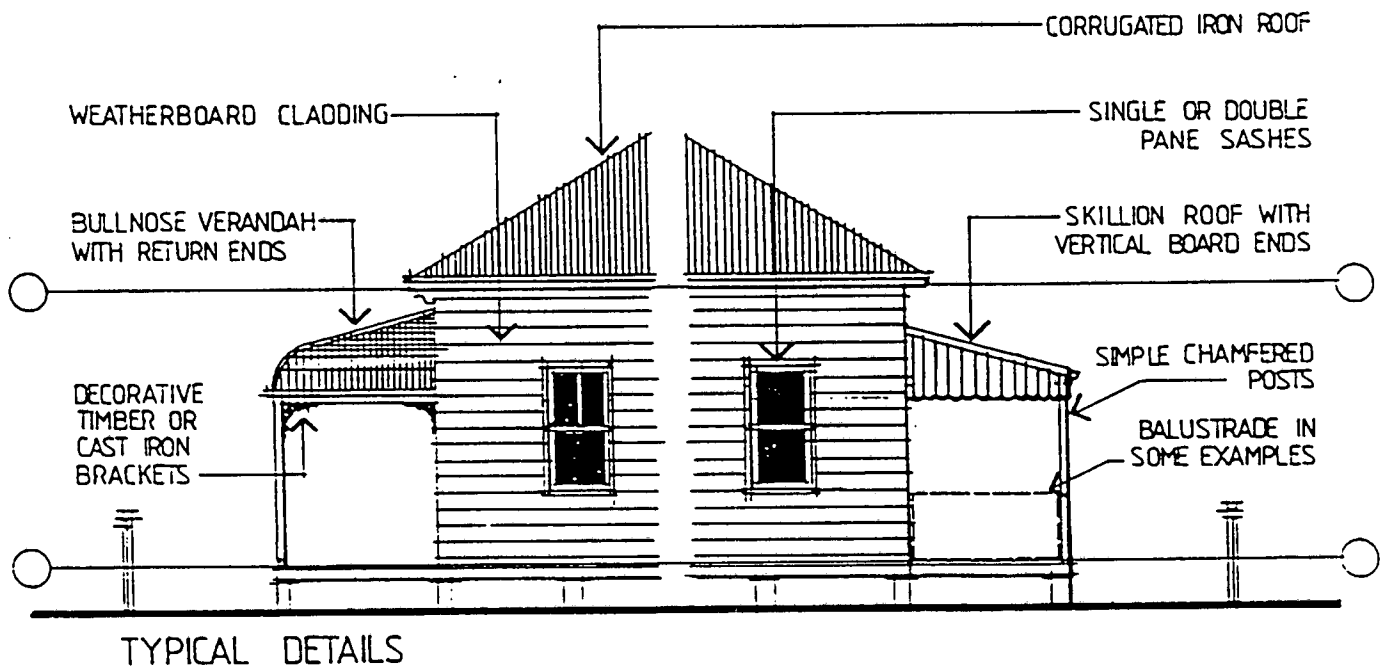- Chamfered timber posts with decorative brackets.

4. Windows
- Predominantly double hung with single or double pane sashes, though early examples may have six pane sashes.
- Usually vertically proportioned.

5. Doors
- Predominantly four panel front doors, with double sidelights common.
- Some examples may have French doors.

6. Decoration
- Generally decoration is minimal, such as timber tracery brackets and corbelling of chimney.
- Some examples may have cast iron verandah columns, brackets, or valances.

CORRUGATED IRON ROOF

WEATHERBOARD CLADDING

SINGLE OR DOUBLE PANE SASHES

BULLNOSE VERANDAH WITH RETURN ENDS

SKILLION ROOF WITH VERTICAL BOARD ENDS

DECORATIVE TIMBER OR CAST IRON BRACKETS

SIMPLE CHAMFERED POSTS

BALUSTRADE IN SOME EXAMPLES

TYPICAL DETAILS

BULLNOSE WITH RETURN ENDS

MAIN ROOF EXTENSION OVER VERANDAH WITH CENTRAL PORTICO

SKILLION WITH BOARDED STOP ENDS

VERANDAH TREATMENTS

Assymetrical Cottage Type

Most date from 1890-1925. Styles vary from Mid Victorian Gothic to Late Federation. Some Assymetrical cottages are modified two or four room cottage types from earlier periods.

1. Roofs
- Almost always corrugated iron, hipped with a projecting gable.
- Some later Federation examples may have asbestos cement shingles or French pattern terracotta tiles.
- Roof pitches around 30°.

2. Walls
- Almost always rusticated weatherboard.
- Some later Federation examples may have asbestos cement panels to gables.

3. Verandahs
- Commonly skillion or bullnose with vertical boarded stop ends or returned ends.
- Some later Federation examples may have main roof extended across verandah, and dwarf brick walls and piers.
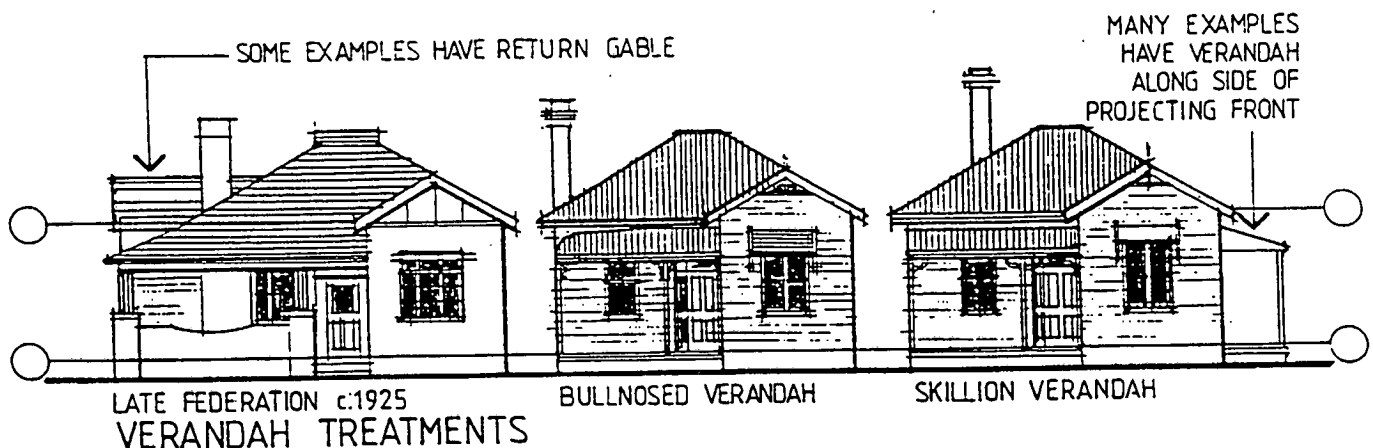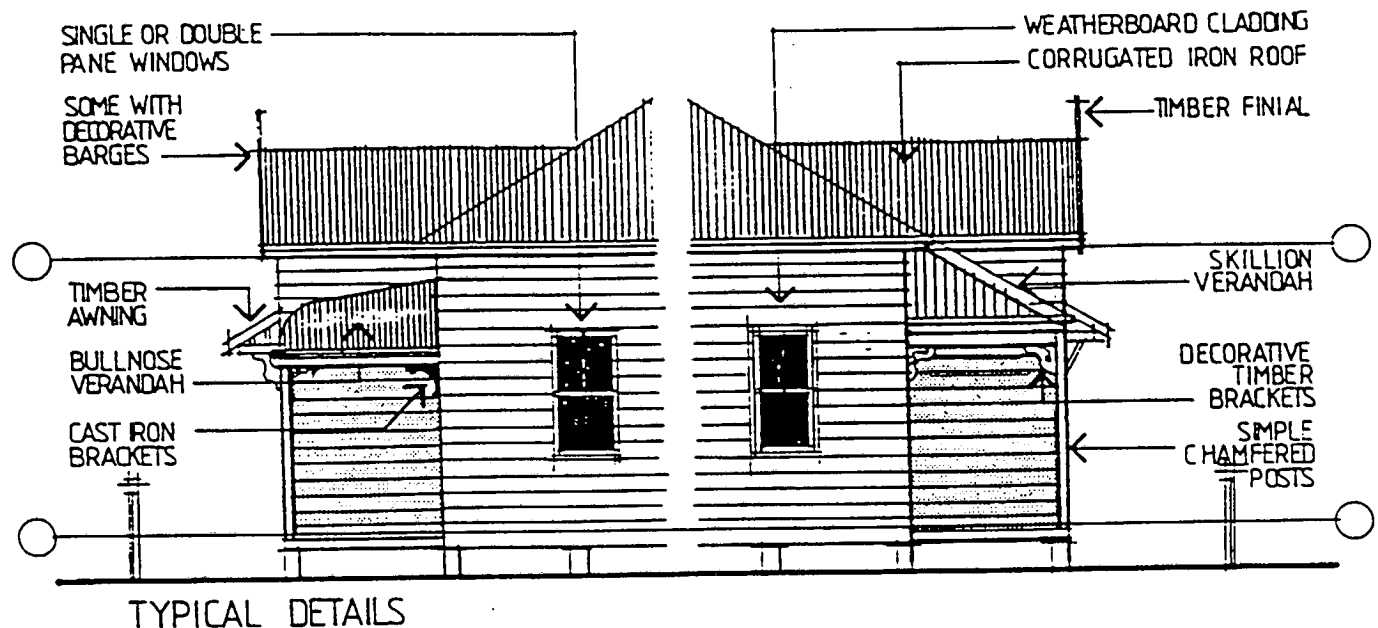- Supported on chamfered timber posts.

4. Windows
- Predominantly double hung with single or double pane sashes, though later examples may have multiple paned sashes.
- Later Federation examples usually have twin double hung or casement windows to the principal rooms.
- Usually vertically proportioned.

5. Doors
- Predominantly four panel, later examples may have a single glazed panel above the midrail.
- Some have double or single sidelights to the front door.

6. Decoration
- Generally decoration is minimal, such as timber tracery brackets and corbelling of chimneys.
- Some examples may have cast iron verandah columns, brackets, or valances.
- Some examples of applied decorative elements, such as simple gable finials and tracery, or awnings to principal windows.

TYPICAL DETAILS

SINGLE OR DOUBLE PANE WINDOWS
SOME WITH DECORATIVE BARGES
TIMBER AWNING
BULLNOSE VERANDAH
CAST IRON BRACKETS
WEATHERBOARD CLADDING
CORRUGATED IRON ROOF
TIMBER FINIAL
SKILLION VERANDAH
DECORATIVE TIMBER BRACKETS
SIMPLE CHAMFERED POSTS

VERANDAH TREATMENTS

SOME EXAMPLES HAVE RETURN GABLE
MANY EXAMPLES HAVE VERANDAH ALONG SIDE OF PROJECTING FRONT

LATE FEDERATION c.1925   BULLNOSED VERANDAH   SKILLION VERANDAH

A1

A1. Draft Model Heritage Provisions for Inclusion in LEP

DRAFT MODEL HERITAGE PROVISIONS

DEFINITIONS

"alter" in relation to a heritage item or to a component of a heritage conservation area, means:

    (a)   make structural changes to the exterior; or

    (b)   make non-structural changes to the detail, fabric, finish or appearance of the exterior, not including any maintenance necessary for its ongoing protective care, which does not adversely affect its heritage significance;

"conservation plan" means a document establishing the heritage significance of a heritage item or a heritage conservation area and identifying the conservation policies and management mechanisms that are appropriate to enable that significance to be retained;

"demolition" in relation to the heritage provisions of this plan means the damaging, defacing, destroying or dismantling of a heritage item or of a component of a heritage conservation area in whole or in part;

"heritage conservation area" means an area of heritage significance so identified in this plan and includes components such as buildings, works, relics, trees or places;

"heritage item" means a building, work, relic, tree or place of heritage significance identified in this plan;

"heritage significance" means historic, scientific, cultural, social, archaeological, architectural, natural or aesthetic significance;

"archaeological site" means a site of archaeological significance so identified in this plan;

"potential archaeological site" means a site so identified in this plan or one which the consent authority considers to have potential archaeological significance;

"relic" means any deposit, object or material evidence relating to:

    (a)   the use or settlement of the area, not being Aboriginal settlement, which is more than 50 years old; or

    (b)   Aboriginal habitation of the area both prior to and concurrent with its occupation by persons of European extraction, including human remains.

STANDARD PROVISIONS CONTROLLING DEVELOPMENT

1. Aims and Objectives

NOTE: The following introductory wording is required if the heritage aims/objectives are separate from others in the instrument.

The aims and objectives of this plan in relation to heritage are to:

(a)   conserve the environmental heritage of the land to which this plan applies;

(b)   integrate heritage conservation into the planning and development control processes;

(c)   provide for public involvement in the conservation of environmental heritage; and

(d)   ensure that any development does not adversely affect the heritage significance of heritage items and heritage conservation areas and their settings.

2. Heritage Items and Heritage Conservation Areas

(1)   A person must obtain development consent to carry out the following development:

(a)   to demolish, alter or damage a heritage item or component of a heritage conservation area;

(b)   to move a relic or excavate land for the purpose of discovering or moving a relic; or

(c)   to erect a building on to or subdivide, land on which a heritage item is located or which comprises a heritage conservation area.

(2)   Development consent is not required under this clause if the consent authority is of the opinion that the proposed development would not adversely affect the heritage significance of the heritage item or heritage conservation area.

(3)   When determining a development application required by this clause, the consent authority must take into consideration the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area.

3. Development in the Vicinity of Heritage Items and Heritage Conservation Areas

When determining an application to carry out development on land in the vicinity of a heritage item or a heritage conservation area, the consent authority must take into consideration the likely effect of the proposed development on the heritage significance of the heritage item or heritage conservation area and their settings.

4. Heritage Advertisements

(1) A consent authority must exhibit and consider submissions in relation to development applications for the following development:

(a) the demolition of a heritage item; and

(b) the demolition of a component of a heritage conservation area.

(2) Sections 84, 85, 86, 87(1) and 90 of the Act apply to the exhibition of those development applications.

5. Notifications to the Heritage Council

(1) Before granting consent to an application to demolish a heritage item, the consent authority must notify the Heritage Council of its intention to do so and take into consideration any comments received from the Heritage Council within 28 days of the notice being sent.

6. Development of Archaeological and Potential Archaeological Sites

(1) Where the land to which a development application refers is an archaeological site or is a potential archaeological site, the consent authority may not grant consent unless:

(a) in the case of a site of European heritage significance, any necessary excavation permit under the Heritage Act, 1977 has been granted;

(b) in the case of a site of Aboriginal heritage significance, the Director of National Parks and Wildlife has been notified of the proposal and the Director's requirements have been met;

(c) in the case of an archaeological site, it has considered a conservation plan which includes an assessment of how the proposed development would affect the conservation of the relic, site or place; and

(d) in the case of a potential archaeological site, it has considered an assessment of the impact of the proposed development on the heritage significance of any relic, site or place.

7. Conservation Incentives

(1) The consent authority may grant consent to an application involving the use, for any purpose, of a building that is a heritage item or is within a heritage conservation area or of the land on which the building is erected even though that development is prohibited elsewhere in this plan, if it is satisfied that:

(a) the proposed use would not adversely affect the heritage significance of the item, conservation area or the amenity of the area; and .

      (b)   the conservation of the building depends on the granting of such consent.

(2) When considering an application to erect a building on land on which a heritage item is sited or on land within a heritage conservation area, the consent authority may for the purpose of determining:

      (a)   the floor space ratio; and

      (b)   the number of parking spaces to be provided on the site,

exclude from its calculation of the floor space of the buildings erected on the land the floor space of the building, but only if the consent authority is satisfied that the conservation of the building depends upon it making such an exclusion.

OPTIONAL PROVISIONS

Heritage Items and Heritage Conservation Areas
(Add to clause 2)

(1) (d) make structural changes to the interior of a building or work listed in Part 2 of Schedule Z.

(4) The consent authority may require that a conservation plan accompany a development application to enable it to fully consider the impact of the proposal on the heritage significance of the item and its setting, or of the conservation area.

(5) When considering applications for consent to erect a new building in a heritage conservation area, the consent authority must make an assessment of:

      (a)   the pitch and form of the roof;

      (b)   the style, size, proportion and position of the openings for windows and doors; and

      (c)   whether the colour, texture, style, size and type of finish of the materials to be used on the exterior of the buildings are compatible with the materials used in the existing buildings in the heritage conservation area.

Heritage Advertisements
(Add to clause 4)

      (c)   The use of a building or land referred to in clause 6 for a purpose which, but for that clause, would be prohibited under this plan.

HERITAGE/ADAM/K/KOKOT, MOD. HER. PROVISIONS/BE0