traralgon inner south precinct
master plan report

by hansen partnership

in association with
planning by design
charter keck cramer
tardis enterprises
brett lane & associates
peter j ramsay & associates

october 2010
Disclaimer: The statements and opinions expressed in the publication are Latrobe City Council’s and the Department and its employees are not responsible for the items prepared by Latrobe City Council and do not necessarily endorse the statements and opinions contained within the materials.
# Table of Contents

1 introduction .................................................................................................................. 5  
1.1 background................................................................................................................. 6  
1.1.1 latrobe planning scheme ..................................................................................... 6  
1.1.2 traralgon structure plan (2007) ........................................................................... 10  
1.1.3 transit centred precincts report- traralgon town summary .................................. 10  
1.1.4 latrobe city council residential land assessment............................................... 11  
1.1.5 traralgon bypass inquiry .................................................................................... 12  
1.2 aims and objectives ................................................................................................. 13  
1.2.1 aims.................................................................................................................... 13  
1.2.2 objectives .......................................................................................................... 13  
1.3 study area ................................................................................................................ 14  
1.4 key tasks ................................................................................................................ 18  
1.5 project management ............................................................................................... 19  
1.5.1 project working group ....................................................................................... 19  
1.5.2 stakeholder reference group ............................................................................. 19  
1.5.3 project manager ............................................................................................... 19  
1.5.4 project team .................................................................................................... 19  
2 analysis ...................................................................................................................... 21  
2.1 site context .............................................................................................................. 21  
2.2 land use .................................................................................................................. 23  
2.3 access and movement ............................................................................................ 26  
2.4 landscape and environment ................................................................................... 29  
2.5 cultural heritage .................................................................................................... 32  
2.6 contamination ....................................................................................................... 33  
2.7 buffer distances .................................................................................................... 34  
3 market assessment .................................................................................................... 35  
4 consultation .............................................................................................................. 38  
5 opportunities and constraints .................................................................................. 39  
5.1 opportunities .......................................................................................................... 39  
5.2 constraints ............................................................................................................. 40  
6 vision statement ...................................................................................................... 42
7 planning and design principles................................................................. 43
8 master plan implementation....................................................................... 45
  8.1 short to medium term.............................................................................. 45
  8.2 long term............................................................................................... 51
references..................................................................................................... 53

table of figures
Figure 1: Traralgon Local Structure Plan ......................................................... 9
Figure 2: Study Area........................................................................................ 15
Figure 3: Zoning............................................................................................. 16
Figure 4: Overlays........................................................................................... 17
Figure 5: Contextual Area................................................................................ 22
Figure 6: Land Use........................................................................................ 25
Figure 7: Access and Movement..................................................................... 28
Figure 8: Landscape and Environment............................................................ 31
Figure 9: Opportunities and Constraints......................................................... 41
Figure 10: Master Plan.................................................................................... 50

appendices
appendix 1 – Brett Lane & Associates Flora and Fauna Assessment
appendix 2 – Tardis Enterprises Desktop Cultural Heritage Assessment
appendix 3 – Peter J Ramsay & Associates Preliminary Contamination Appraisal
appendix 4 – Charter Keck Cramer Market Assessment
1 introduction

Traralgon is located 165km east of Melbourne and is Gippsland’s largest regional town, with a strong industry and employment base. Traralgon is home to 27,225 people (June 2006) and is experiencing positive population growth, with recent forecasts indicating that there is just four years of residential land supply remaining.

The Traralgon Inner South Precinct project was initiated by the Victorian Government’s commitment to ensure that there is adequate land readily available in regional centres for residential and employment creating uses. The commitment is being implemented through the Regional Towns Development Program, managed by the Department of Planning and Community Development (DPCD). In Traralgon it intends to consider the conversion of former industrial land towards medium density residential living and investigate options for mixed use to complement Transit Cities projects.

The Traralgon Inner South Precinct study area was identified in both the Latrobe Transit Centred Precincts Report (2004) and the Traralgon Structure Plan (2007) as a possible site to implement the transformation from industrial and mixed use to a higher density residential use.
1.1 background

A number of strategic land use studies have been completed by Latrobe City Council over the past few years. The findings from these studies, which include the Latrobe Transit Centred Precincts Report (2004) and the Latrobe Structure Plans (August 2007) coupled with the recent decision on the alignment of the Traralgon Bypass following the Minister’s Advisory Committee Review have brought forward the need for some high level strategic planning in the municipality. The Panel Report for Amendment C62 to the Latrobe Planning Scheme has also recently been released, with the recommendations to have a fundamental impact on the development of the precinct. The key relevant findings from the associated background documents are outlined below.

1.1.1 Latrobe planning scheme

The Municipal Strategic Statement (MSS) of the Latrobe Planning Scheme highlights the importance of the built environment, covering settlements, rural living, heritage, urban design and infrastructure.

Estimates of current residential land supply suggest that in Traralgon there is only a four year supply, and a priority in Latrobe’s main urban settlements is to strengthen and reinforce these centres through the provision of medium density housing close to activity centres.

Amendment C62 to the Latrobe Planning Scheme has recently been incorporated into the planning scheme, the strategies of which are outlined in Clause 21.05-6 (Specific Main Town Strategies- Traralgon) to closer align with Latrobe 2021, Council Plan, Transit Centred Precincts Reports 2004 and 2006 and the Latrobe Structure Plans August 2007.

The amendment was adopted following the release of the Amendment C62 Panel Report in July, 2009, although a number of revisions were made before its incorporation based on the panel’s recommendations. The industrial land located within the Traralgon Inner South Precinct had previously been labelled Area 3 and designated as ‘future residential’ and the report acknowledged that as the currently available land supply for residential development in Traralgon will be consumed rapidly there is a need for new areas of residential development. However, the findings of the report recommended further investigations for the majority of the study area that are fundamental to the direction of the Traralgon Inner South Precinct Master Plan.

The Panel Report found that ‘despite extensive work by Council to understand residential supply and demand, there appears to have been no parallel review of industrial land supply and demand, or of
other strategic considerations relating to industry’s future needs’ and that ‘while the Council has indicated a desire to relocate the older service industries to newer industrial areas it was unable to identify how this was to be actively pursued or a time scale for any such program’, or whether it was in fact feasible. A proper industrial strategy is required for a detailed understanding of industry supply, demand and location needs of both service industry and larger scale industrial uses in order to guide the development of the amendment.

The Panel Report concurred that ‘in the long term, the Area 3 land has potential for residential development (subject to resolution of the contamination issues) and that this may be a desirable outcome for Traralgon. The proximity to the CBD and the Transit City Precinct are important location advantages of the land.’ However, it also finds that ‘without an industry strategy which supports the cessation of industrial uses at Area 3, the justification for a transition to residential use at this location has not been established’; therefore the designation of Area 3 as ‘future residential land’ is to be removed. The report also recommends that ‘a detailed analysis of the net community benefit of this proposal, including consideration of possible contamination and consequential remediation costs needs to be undertaken in close consultation with all relevant parties including existing industrialists in the Dunbar Road / Janette Street locality to provide support for a future transition.’

As a result of the panel report, the following key relevant objectives for Traralgon have been incorporated into the planning scheme that will affect how development is to occur within the Traralgon Inner South Precinct:

- Encourage higher density housing in the Transit City Precinct.
- Future land uses and zoning in Areas 3a and 3b should be investigated subsequent to a detailed assessment of industrial land requirements for Traralgon as part of an industrial strategy.
- Encourage the early transition of industrial land uses in the southern parts of the Transit City Precinct to enable the conversion of land to residential areas.

---

Review the existing industrial area of Janette Street / Dunbar Road (Area 3a), with a view to confirming the role and viability of this area as service industrial development or conversion to residential development.¹

Following the recommendations of the Planning Panel, the exhibited Traralgon Local Structure Plan was amended. As shown in the accompanying plan, the existing industrial land within the Traralgon Inner South Precinct to the south of Janette Street is now identified to be within Area 3a, which is nominated as ‘Existing Industrial’.

¹ Latrobe City Council, Latrobe Planning Scheme Municipal Strategic Statement – Clause 21.05, January 2010, p.5.
Figure 1: Traralgon Local Structure Plan

Legend
- Panel Changes
- Township Boundary
- Non-Urban Land
- Existing Open Space
- Proposed Public Open Space
- Existing Urban Areas
- Existing Residential Opportunity
- Future Residential
- Primary Activity Centre
- Existing Industrial
- Future Industrial
- Bulky Goods Retail
- School
- Urban Coal Buffer
- Existing Floodplain
- Industrial Buffer
- Transit City Precinct
- Town Entrance
- Gateway to Latrobe City
- Possible Future Neighbourhood Centre
- Water Bodies
- Rivers/Creeks
- Proposed East-West Connection
- Transport Infrastructure
  - Main Roads
  - Roads
  - Rail Line
  - Train Station
  - Future Road Connection

LATROBE PLANNING SCHEME - LOCAL PROVISION
TRARALGON STRUCTURE PLAN (Panel Changes)

Modified: 09 Sept 2009
1.1.2 Traralgon Structure Plan (2007)

The Traralgon Structure Plan (Beca, August 2007) highlighted the need to plan for future residential needs, with relevant objectives including:

- Provide for high amenity housing choice.

- Redevelop rundown industrial sites, which are underutilised, but well located, as new residential developments. The plan notes that the ‘south of Traralgon, the industrial area bordered by Rose Street to the south, Dunbar Road to the west, Traralgon Creek to the east and residential housing to the north’ is an appropriate location for the rezoning of land to residential.

- Protect areas for future urban growth.

- Intensify the density of residential development in new residential estates.

- Encourage industry to relocate in the north/east of Traralgon and/or other towns within the Latrobe Valley.

- Establish walkable neighbourhood centres in growth areas.¹

1.1.3 Transit Centred Precincts Report - Traralgon Town Summary

The Traralgon Town Summary (David Lock Associates, June 2006) was derived from the Latrobe Transit Centred Precincts Report (2004) which identified Traralgon as one of three major centres for commercial, housing, retail and tourism activity that require more housing close to transport and services. Relevant recommendations from the Traralgon Town Summary are provided:

- There is a projected demand for approximately 500 new townhouses in Traralgon over the next twenty years. Opportunity exists for new townhouse development close to public transport on light industrial properties south-west of the station.

- Most residential development within the Traralgon core is single-storey and limited to predominantly detached housing to the south. Higher density residential development is to be

promoted within the Traralgon Station surrounds and a combination of 2-3 storey attached and semi-detached housing would provide a number of new residences in the precinct, and respect the low-rise character of the residential areas to the north and west.

- The former Council Depot site and Traralgon Concrete are located within the southern precinct edge and contain inappropriate uses for a transit precinct. This land would be suited to medium density townhouse development; however this would require the relocation of their current tenants and, potentially, decontamination.

- The incorporation of a new public park in the north-east corner of the precinct would serve the new houses plus the existing houses to the east.

### 1.1.4 Latrobe City Council Residential Land Assessment

The Latrobe City Council Residential Land Assessment (Essential Economics, July 2008) provides an analysis of the general residential market in Latrobe and notes that:

- The Latrobe residential market has recovered from the economic recession during the 1990s at a slower rate than the surrounding regions, however strong population growth over recent years has been lead by Traralgon. This is due to short-term investment commitments in certain fields including energy, agriculture, manufacturing, residential development and the public sector.

- Planned projects, together with state government policies promoting regional development, will support continued population growth.

- Traralgon has experienced the majority of growth within Latrobe, representing 70% of recent residential development between March 2006 and March 2008, the majority of which has occurred on the periphery of the town. Traralgon was the location of approximately 64% of new dwelling permits in Latrobe, illustrating the dominance of Traralgon in the Latrobe residential development market.

- Larger houses and properties are preferred by families, with new residential estates typically comprising lots of 800-1,000 square metres. Higher density housing has not proven to be popular in Latrobe, with residents preferring relatively spacious properties. 86% of occupied dwellings are detached, with higher density housing accounting for 13.6% of dwellings.

- More than 50% of residential zoned lots available for development in Latrobe are in Traralgon, which comprises of approximately 960 vacant residential zoned lots. The total residential lot potential in Traralgon is approximately 1,450 lots.
Under all growth scenarios, there is an insufficient supply of Residential 1 Zone land to meet the forecast demand for such land. The main recommendations in regards to the future requirements of residential zoned land in Traralgon are:

- Where existing Residential 1 Zone (R1Z) land can be released to the market, this should be encouraged, as there is only a 3.4 year supply of R1Z available for development. This is under a moderate growth scenario for Latrobe.

- An additional 130ha of R1Z land should be identified in order to meet demand for such land over the next ten years and an additional 270ha should be identified in order to meet demand over the next fifteen years.

- Infill development will reduce the requirement for additional residential zone land.¹

1.1.5 Traralgon bypass inquiry

The Traralgon Bypass Inquiry Advisory Committee Report (July 2007) determined the alignment of the future Traralgon Bypass which was announced in January 2008. The consequence of this recommendation is that some 500 hectares of land identified in the Council adopted Traralgon-Morwell Corridor concept plan, which formed part of the Latrobe Structure Plans (2007), will now be unavailable for future residential development. Given that there are many constraints on greenfield development within Latrobe City, particularly around Traralgon, Latrobe City Council is exploring options to increase density and transition land from industrial and semi-rural uses in order to increase future residential supply.

1.2 aims and objectives

1.2.1 aims

To develop a Strategic Master Plan for the Traralgon Inner South Precinct. This includes a short to medium term action plan, together with a long term vision for the precinct.

1.2.2 objectives

The Master Plan will incorporate the strategic directions provided by the 2006 Transit Centred Precincts Report and the 2007 Latrobe Structure Plans and take on board the recommendations outlined in the Latrobe Planning Scheme Amendment C62 Panel Report. It will concentrate on best practice in urban planning principles and will require the identification of design principles to be addressed in redevelopment proposals, involving the consideration of:

- Pedestrian and bicycle connections within the precinct and through to the railway station and town centre, Traralgon Creek to the east, existing residential areas to the west and future residential development opportunities to the south;
- Housing diversity and affordability for purchasers and renters, referencing state and local planning policy;
- Best practice sustainability, including energy and water efficiency and recycling;
- Provision and design of public open space and landscape treatments that have sympathy with the broader landscape;
- Provision of local community, retail and business services, facilities and activities;
- Provision for public transport;
- Community safety, including safe design principles; and
- How the development will blend into the character of Traralgon, physically and socially.
1.3 study area

The study area, which is located south of the Traralgon town centre, is indicated in the accompanying study area diagram. It was identified in the Latrobe Transit Centred Precincts Report (2004) and Latrobe Structure Plans (August 2007), which identify the site as being a potential location for future residential development. The area was also the subject of specific comment and recommendations by the panel for Amendment C62. Land located within the study area comprises a range of zonings, including a Mixed Use Zone, Industrial 1 Zone, Public Park & Recreation Zone and two Public Use Zones as identified in the accompanying zoning diagram. The overlays diagram also indicates the Land Subject to Inundation Overlay and the Environmental Audit Overlays that exist within and around the site.

The precinct is a substantial brown-field site with a significant number of land owners. The total area of the study site is approximately 26 hectares. Part of the study area comprises the current Traralgon Depot operations and Council have resolved to relocate the Depot to a more suitable site and to facilitate the redevelopment of the site in line with Transit Cities principles. The rest of the site comprises a variety of large and small industrial uses, many of which are now either under utilised or have in fact been vacated.
Figure 2: Study Area
Figure 3: Zoning
Figure 4: Overlays
1.4 key tasks

The Traralgon Inner South Precinct Master Plan comprises two major components:

- **Market Assessment** – assessment of market demand for medium and high density residential development within the Gippsland region and Traralgon and consideration of the economic viability of converting this area to residential development.

- **Strategic Planning – Master Planning**: formulation of an overall master plan for the defined study area outlining planning and design principles to be addressed in the study area.
1.5 project management

A number of project groups have assisted in providing high level, technical and community input into the planning process. The composition of these is outlined briefly below.

1.5.1 project working group

The Project Working Group (PWG) ensures all relevant technical issues are considered, guides the work of specialist consultants and provides general direction. The PWG consists of Latrobe City Council representatives from the Transit Cities Department and will involve working closely with the DPCD’s Planning Policy Unit and other key State Government officers.

1.5.2 stakeholder reference group

The Stakeholder Reference Group provides an opportunity for key stakeholders to have input into the development of the plan. This group participated in a separate forum/workshop during the development of the plan, providing opportunities for these key stakeholders to access information and briefings on the planning process.

The Stakeholder Reference Group includes landowners and tenants, developers and real estate agents, Council officers and State Government representatives and community groups.

1.5.3 project manager

The Council’s Project Manager and key contact is Jane Burton, Manager Transit Cities, assisted by Tom McQualter, Project Officer Transit Cities.

1.5.4 project team

The project team comprised the following specialist consultants.

Hansen Partnership: Project Management, Landscape Architecture, Urban Design and Urban Planning

- Steve Schutt (Director)
- Gary Wissenden (Associate)
- Nelson Gomes (Senior Landscape Architect)
- Amelia O’Brien (Planner)
- Sarah Stevens (Landscape Architect)

**Planning by Design:** Strategic Urban Planning, Design and Activity Centre Management

**Charter Keck Cramer:** Economic and Property Market Advice

**Tardis Enterprises:** Cultural Heritage Management

**Brett Lane & Associates:** Ecosystem Assessment and Management

**Peter J Ramsay & Associates:** Environmental Management
2 analysis

2.1 site context

The location of the Traralgon Inner South Precinct study area relative to the rest of the township is illustrated in the accompanying contextual area diagram.

The precinct is located to the south of the Princes Highway and the Gippsland Railway which separates it from the Traralgon Commercial Core to the north. It is surrounded by existing residential land to the west and north-east, with rural land to the south. Residential growth is indicated to the north of central Traralgon and future residential development is intended for the existing rural area directly south of the study area.

The Traralgon Creek Corridor runs adjacent to the study area and areas of public open space around the Inner South Precinct present the opportunity for open space linkages to enhance pedestrian connectivity. The industrial and bulky goods retail precinct to the east of central Traralgon provides an area for the potential relocation of industrial activities that currently exist in the Inner South Precinct.
Figure 5: Contextual Area
2.2 land use

The analysis of land use in and around the Traralgon Inner South Precinct has identified a number of key areas, briefly described as follows, and identified in the accompanying land use analysis diagram.

**Residential**

- The proximity of the study area to central Traralgon, in particular the Traralgon Railway Station, suggests suitability for higher density forms of residential development.
- The Inner South Precinct is surrounded by single storey detached residential dwellings to the west and the north-east, that transition from a higher density lot size to the north to larger format lots to the south. A row of multiple unit residential dwellings have been constructed along Collins Street to the north-east of the precinct, and future residential growth includes large format development on existing rural land to the south.

**Open space**

- Burnet Park is a prominent piece of public open space that is located within the Inner South Precinct. Nearby is the Duncan Cameron Memorial Park to the north-west and Traralgon Reservoir Conservation Reserve to the south-west.
- The Traralgon Creek also presents an environmental corridor that could integrate with the open space network of the precinct and encourage pedestrian connectivity.

**Community and Educational facilities**

- There is the potential for the existing community facilities and service clubs along Hickox Street to be consolidated and relocated. This is an important opportunity to build strategic connections and integrate them within the public open space.
network and land associated with the existing educational facilities, including the Latrobe Special Development School and the Cooinda Hill Education Facility.

**Vacant Land**

- The Boral site has been recently purchased and Council understands that the new owners are interested in residential development opportunities.
- The previous Council Depot site also has potential to become some of the first land available for residential development.
- A number of other vacant land parcels within the precinct would appear to be suitable for residential development, following contamination assessment and the consideration of industrial relocation.

**Industrial**

- The Inner South Precinct currently consists of predominantly industry related activity, which includes a range of smaller light industrial uses and industry related retail as well as the larger operations of the Unimin lime manufacturing plant, Traralgon Concrete Products and EDI Asphalt.
- Unimin Traralgon is licensed through the Environmental Protection Authority (EPA) and is the largest and most established of these industrial companies. Existing use rights will allow them to continue their current operations, although any expansion of operations would require a further EPA Works Approval.
Figure 6: Land Use
2.3 access and movement

The analysis of access and movement in and around the Traralgon Inner South Precinct has identified a number of key elements, briefly described as follows, and identified in the accompanying access and movement analysis diagram.

**Pedestrian and bicycle access**

- Current pedestrian movement between southern residential areas and central Traralgon, particularly the railway station, through the study site needs improvement through the establishment of preferred pedestrian routes through the streetscape environs.
- Pedestrian and bicycle access between areas of public open space within and around the precinct need to be resolved and link into existing parkland shared trails.
- Access to the existing informal pedestrian path along the Traralgon Creek is poor; therefore potential connections into central Traralgon along this corridor are restricted.

**Vehicle access**

- The existing local road pattern is largely established and already provides a framework for movement within the precinct. Roads are generally wide and would appear to be able to accommodate additional demand associated with increased residential development.
Roads within the precinct are extensively used by industrial traffic, with the only vehicular access point into the site from the south being an unsealed route along Dunbar Road. The potential extension of Rose Avenue as indicated in the Latrobe Structure Plan and the construction of the Traralgon Bypass would take the pressure off the existing major intersections to the north of the study area.

There are three other vehicular access points for the precinct to the north, via Dunbar Road, Bourke Street and Short Street.
Figure 7: Access and Movement
2.4 landscape and environment

The analysis of the physical landscape and environment of the Traralgon Inner South Precinct has identified a number of key elements, briefly described as follows, and identified in the accompanying landscape and environment analysis diagram.

**Open Space**

- Burnet Park is located within the Traralgon Inner South Precinct which provides a local parkland environment for the community. The Duncan Cameron Memorial Park to the north-west includes a sporting oval and club facilities and an environmental wetland is located within the Traralgon Reservoir Conservation Reserve to the south-west. The Traralgon Creek also presents an open space corridor along the eastern boundary of the site.

**Views**

- There are existing views from the south-west part of the precinct to the Traralgon Railway Reservoir Conservation Reserve.
- The existing industrial uses on the site present many poor visual interfaces along the streetscapes which make for a poor pedestrian environment.
A Flora and Fauna Assessment has also been carried out by Brett Lane & Associates (October 2008) to identify any significant environmental issues that may impact on the proposed development of the land for residential uses. The report describes the flora and fauna of the study area based on the review of existing information and field investigations, with the key findings outlined below.

**Vegetation Assessment**

- The study area supports native vegetation in the form of ten scattered trees within public open parkland in the western part of the study area, with species including Gippsland Red Gum and River Red Gum.
- Remaining vegetation consists of planted trees, commonly located within parkland and along road reserves and a hedge of Cypress Pine trees along the south-eastern boundary of the study area.
- The Traralgon Creek constitutes an environmental corridor of creek line vegetation, which is an important contributor to the future character of the precinct.

**Habitat assessment**

- The study area supports three main habitat types:
  - The built up area, comprising of the buildings, roads and paved areas associated with residential and industrial areas are considered to provide low quality habitat for fauna.
  - Vacant land parcels and open parklands are considered low to moderate quality for fauna.
  - A small dam on the Cooinda Hill Education Facility comprises an aquatic environment that is considered moderate quality for fauna as a habitat for frogs and waterbirds.
- The adjacent Traralgon Creek habitat is considered moderate quality for a variety of fauna along the flyway and wildlife corridor.
- The Traralgon Railway Reservoir Conservation Reserve is located to the south-west of the study area and is considered to have high conservation and habitat value.
Figure 8: Landscape and Environment
2.5 cultural heritage

A Desktop Cultural Heritage Assessment of the study area was carried out by Tardis Enterprises (November 2008) to review the Aboriginal and historic cultural heritage of the area and the potential impact the proposed activity may have on known and potential heritage values. The assessment notes that:

- There are no previously recorded Aboriginal or historic sites within the activity area, however there are eight within 2km of the site. These include one scarred tree and seven low density surface stone artefact scatters, with those assessed ranging from low to moderate significance.

- There is a low level of potential for previously disturbed low density Aboriginal stone artefacts, which if existed, would provide very little scientific information and require minimal management due to historic land use practices.

- There is low to moderate potential for low to moderate density Aboriginal stone artefact scatters within 200m of current and previous water courses and drainage lines.

The report provides three recommendations regarding Aboriginal and historic heritage:

- All Aboriginal sites are protected under the *Aboriginal Heritage Act 2006* and all Historic sites are protected under the *Heritage Act 1995*. Therefore, all sites must be treated according to requirements of the Act.

- If high impact activities proposed by the Traralgon Inner South Master Plan are outside of culturally sensitive areas (50m from a recorded site and 200m away from a named waterway) there is no trigger for a mandatory Cultural Heritage Management Plan (CHMP). If any significant ground disturbance works as described under the *Aboriginal Heritage Regulations 2007* are to take place within a sensitive area a CHMP is required for these areas prior to any development taking place.

- If a CHMP is not required under the *Aboriginal Heritage Act 2006*, it is suggested that the proponent consider undertaking a voluntary CHMP to manage the risk associated with potential harm to Aboriginal cultural material.
2.6 contamination

A preliminary contamination appraisal was carried out by Peter J Ramsay and Associates (October, 2008) that assessed external areas of the site and reviewed the history of the site for information on past and present land uses and developments in order to advise on the potential environmental implications for the proposed development of the land for more sensitive uses.

The site contains numerous allotments which are used for a range of commercial and industrial activities. It was found that the main potentially contaminating activities and occupants on site include a petrochemical storage depot, Unimin lime plant, EDI Asphalt, Traralgon Concrete, a motor vehicle servicing workshop and a garden supply nursery, as well as a number of soil stockpiles on site.

The site inspection and preliminary site history review identified a number of potential contamination sources at the site, which include:

- Potential for soil and groundwater impacts to have occurred in sites used for industrial manufacturing and chemical storage.
- Potential for pesticide and herbicide impacts to have occurred in the allotment that has been used as a nursery.
- Potential for imported soil stockpiles on site to contain elevated levels of chemical contaminants.
- Potential for fill that has been imported onto the site for levelling purposes to be contaminated.

In view of the potential contamination sources identified, it is noted that further investigation into site conditions for each allotment would be necessary. An Environmental Audit Overlay (EAO) would be required to be applied over any industrial sites that are proposed for residential uses.
2.7 buffer distances

Recommended thresholds also exist from offensive industrial activities uses to nearby sensitive uses, as outlined in Clause 52.10 of the Latrobe Planning Scheme. This is to ‘define those types of industries and warehouses which if not appropriately designed and located may cause offense or unacceptable risk to the neighbourhood’ and refers to the minimum threshold distance from any part of the land with an adverse amenity potential use to land in a residential zone. The recommended threshold distances outlined for the offensive industries within the study area are a 500m threshold for the Unimin Plant and EDI Asphalt and 100m for Traralgon Concrete Products.

These threshold distances are also noted in EPA Victoria’s Publication on ‘Recommended Buffer Distances for Industrial Residual Air Emissions’ (July 1990). This notes that the provision of an adequate buffer distance allows industrial emissions, due to odour, dust and noise, to dissipate without adverse impacts on sensitive land uses.

Residential development is still possible within the threshold or buffer distances, subject to planning assessment and approval. During the assessment of future residential development proposals within the precinct it will be necessary to ensure that potential off site impacts from existing industry within the precinct are appropriately addressed. An example of recent residential development around the precinct that dealt with these conditions was the residential subdivision development to the north of Unimin along Morrison Street. This development was approved with conditions including double glazed windows and soundproofing.
3 market assessment

The ability to meet future demand for residential dwellings in Traralgon is dependent upon identifying appropriate development sites and providing the planning structure to support residential development. A market assessment was undertaken by Charter Keck Cramer in January, 2009 to identify the opportunity for residential development within the Traralgon Inner South Precinct, noting that the presence of the Unimin plant and the contamination of sites will impact on the viability of residential development. The assessment reviewed relevant background documents and analysed factors influencing residential market conditions and housing preferences within Traralgon, particularly relating to ongoing population and economic growth. The residential market analysis notes that the Department of Planning and Community Development (DPCD) recently released population projections that predict that the population of the region will increase by over 58,000 or 35% over the period 2006-2036. The economic viability of residential development within the study area was then assessed.

The study indicates that purchasers of residential properties primarily come from within Traralgon, although 30% of purchasers originate from outside of the Latrobe region. The median prices and sales of residential properties have experienced strong growth over the past five years reflecting positive economic conditions. The implications of the population and economic growth trends for the area are expected to be a continued demand for traditional housing forms to accommodate young working families and potentially strong growth in demand for smaller, low maintenance dwellings to accommodate Gippsland’s ageing population.

The market analysis noted that:

- There is a market preference for low density housing and residential lots compared to metropolitan areas, with the higher density housing market in Traralgon largely limited to townhouses and units. Therefore, any attempt to alleviate the identified shortage of residential land through encouraging medium density housing is unlikely to have a significant impact.

- The strong preference for low density housing is also due to relatively low residential land values, and property values and rents would need to increase significantly to encourage a shift in housing preferences away from traditional detached dwellings. The trend in the median price of houses, units and residential lots in Traralgon has generally followed consistent patterns of growth, which is characterised by slow growth from 1990 - 2001 and high rates of growth from 2002 - 2008.
Over 1990 – 2008 growth in the median price of houses and residential lots was more consistent that residential units, and from further analysis of residential sales it is particularly evident that from 2001 onwards there is a strong ongoing market preference for lower density dwellings.

- Demand for higher density residential development within the study area will be determined by population growth and the market value of different housing forms relative to their development cost. Although there is limited potential for a shift in housing preferences towards higher density dwellings, smaller lot subdivisions have the opportunity to provide affordable housing for younger homebuyers or the ability for older households to downsize.

The economic viability of residential development within the study area will be dependent upon a number of considerations being:

- The market value of land within the area for residential uses relative to its existing industrial use, particularly the presence of the Unimin plant, and existing low amenity values relating to areas south of the railway line.
- The cost of remediating the area for residential uses relative to any additional value that this may generate.
- The development risks associated with remediation and redevelopment of the area for residential uses.

The key conclusions from this assessment are that:

- Due to the expressed housing preference for low density dwellings and the affordability of residential land in Traralgon, the current housing mix is expected to be largely maintained, which is also due to the ability to easily access the town centre from across Traralgon’s urban area. Therefore, higher density residential development in the form of non-detached (multi-level) townhouses and apartments is not the preferred housing type, despite strong population growth and positive economic conditions.
- Single level dwellings on small allotments rather than higher density, multi-level dwellings are the most preferred form of residential development within the study area, and will accommodate the population growth of older residents.

As part of the Traralgon Activity Centre Structure Plan (Hansen Partnership, 2010) a further assessment was undertaken by Tim Nott in July, 2010 to analyse the supply and demand issues for retail activity, office development and medium density housing in the centre of Traralgon.
This acknowledges the market assessment undertaken by Charter Keck Cramer for the Traralgon Inner South Precinct, noting that it was quite conservative about the prospects for medium density housing in Traralgon, particularly apartment development, and that it did not discuss the preferences of a small but growing proportion of households for inner city living.

The more recent report by Tim Nott suggests that inner city living is a concept that is coming, and that there is, or soon will be, a market for quality apartments in the Traralgon Activity Centre (TAC). Discussions with real estate agents and community members reflected the desire by a growing number of households to reduce their carbon footprint whilst being able to take advantage of the easy access to shops, café culture and nightlife. It was also noted that demand for such accommodation will be bolstered by the development of the TAFE at the station precinct, which is within close proximity to the Traralgon Inner South Precinct.
4 consultation

The Traralgon Inner South Precinct has many stakeholders and interested parties that need to be engaged and consulted throughout the process. In preparing this plan, the project team has sought to implement innovative community engagement and consultation mechanisms that help ensure a broad cross section of the community, landholders and other community groups have the opportunity to input into and be kept informed of the planning process. In brief, the program of consultation undertaken is outlined as follows, in line with Latrobe City Council’s Community Engagement Strategy:

Issues Consultation

In December, 2008, the project team facilitated a workshop event with invited stakeholders and representatives of the range of groups which use and value the Traralgon Inner South Precinct and surrounds. This included consultation with landowners and tenants, developers and real estate agents, Council officers and State Government representatives and community groups. The intent of the workshop was to identify and record those major issues which the master plan should consider, and to begin to imagine a vision for the future of the Traralgon Inner South Precinct.

‘Inquiry by Design’ Consultation

In March, 2009, the project team facilitated a workshop event with stakeholder groups to present, discuss and refine the information contained within the draft master plan diagrams. These sessions again included liaison with landowners and tenants, developers and real estate agents, Council officers and State Government representatives and community groups.

Project Working Group Meetings

At regular intervals throughout the project, the project team has consulted with the Project Working Group.
5 opportunities and constraints

A number of opportunities and constraints identified through the analysis and consultation phases of the project are briefly described as follows, and identified in the accompanying opportunities and constraints diagram.

5.1 opportunities

- Improve residential amenity and pedestrian connections to the station precinct, town centre, adjacent residential areas, recreation areas and waterways.

- Enhance Traralgon Creek as high quality ecological and recreational corridor forming the eastern boundary of the precinct.

- Create linkages between areas of public open space that connect to the Traralgon Creek corridor.

- Existing residential neighbourhoods to the north, west and south of the precinct have an amenity and character which should inform that of future residential development within the precinct.

- Future residential development to the south of the precinct will establish another residential interface to the precinct.

- A possible future east-west road connection across the Traralgon Creek would integrate residential areas and provide alternative access opportunities for industrial activities, thus significantly reducing any need for industrial transport to travel through residential areas.

- Co-location of community facilities and activities within the open space network, including new facilities for service clubs, will allow for consolidation, more effective open space and the creation of more efficient redevelopment sites.
- Provision of open, accessible higher density residential development, integrated with the public realm and existing residential areas, within walking distance of both the town centre and railway station.

- Potential relocation of industrial land uses in a separate, designated and established precinct on the eastern side of the town, dependent upon the outcomes of a detailed industrial study.

### 5.2 constraints

- Potential site contamination.

- Poor current image and perception of the area.

- Tenure of existing operational industrial land uses, specifically Unimin, EDI Asphalt and Traralgon Concrete Products, with respect to both general amenity and specific EPA & Planning Scheme regulations/requirements.

- Multiple ‘managers’ of, and fragmented use of, public (crown) land.

- Ongoing environmental impact of major industrial activities on the residential amenity of the area.

- Vehicular access to industrial activities will continue to impact on residential amenity.

- Fragmented ownership of private land and multitude of small land parcels.

- Flooding characteristics of Traralgon Creek.

- Complicated traffic access and limited access points due to the railway and creek.

- Current and future residential market conditions.

- Untested nature of higher density residential development in the Traralgon property market.

- Economic issues associated with potentially relocating industries to alternative sites (e.g. potential loss of jobs and business viability).
opportunities

1. Improve residential amenity and pedestrian connections to the station precinct, town centre, adjacent residential areas, recreation areas and waterways.
2. Enhance Traralgon Creek as quality ecological and recreational corridor forming the eastern boundary of the precinct.
3. Create linkages between areas of public open space that connect to the Traralgon Creek corridor.
4. Existing residential neighbourhoods to the north, west and south of the precinct have an amenity and character which should inform that of future residential development within the precinct.
5. Existing open residential development in the south will establish another residential interface to the precinct.
6. A possible future east-west road connection across the Traralgon Creek would integrate residential areas and provide alternative access opportunity for industrial activities, thus significantly reducing any need for industrial transport to travel through residential areas.
7. Co-location of community facilities and activities within the public open space network, including new facilities for service clubs, will allow for consolidation, more effective open space and the creation of more efficient development sites.
8. Provision of open, accessible higher density residential development, integrated with the public realm and existing residential areas, within walking distance of both the town centre and railway station.
9. Potential relocation of industrial land uses in a separate, designated and established precinct on the eastern side of the town, dependent upon the outcomes of a detailed industrial study.

constraints

a. Potential site contamination.
   b. Poor current image and perception of the area.
   c. Tenure of existing operational industrial lands, specifically Unimix, EDI Asphalt and Traralgon Concrete Products, with respect to both general amenity and specific EPA and Planning Scheme regulations and requirements.
   d. Multiple "managers" of and fragmented use of public (core) land.
   e. Ongoing environmental impact of major industrial activities on the residential amenity of the area.
   f. Inadequate access to industrial activities or continued impact on residential amenity.
   g. Fragmented ownership of private land and multitude of small land parcels.
   h. Flooding characteristics of Traralgon Creek.
   i. Complicated traffic access and limited access points due to the railway and creek.
   j. Current and future residential market conditions.
   k. Restricted nature of higher density residential development in the Traralgon property market.
   l. Economic issues associated with potential relocating industries to alternative sites (eg: potential loss of jobs, and business viability).

Figure 9: Opportunities and Constraints
6 vision statement

The Traralgon Inner South Precinct is an existing area of industrial and mixed use that is envisaged to become a valuable supply of residential land in the long term as Traralgon’s population continues to grow.

As the site transitions from its current situation to Council’s long term vision as a precinct of mixed density housing, the Master Plan will allow for residential uses and industrial activity to co-exist in a way that is not detrimental to residential amenity and streetscape attractiveness.

The environmental and recreational assets of the Traralgon Inner South Precinct will be enhanced and expanded upon, to allow new pedestrian linkages and community connectivity within and around the precinct. The area’s proximity to central Traralgon will allow for the creation of pedestrian links into the town centre and surrounding residential areas.

The formulation of a Master Plan for the Traralgon Inner South Precinct will contribute to greater residential amenity, environmental sustainability, community safety and housing diversity that is fully integrated with the broader open space network and Traralgon community.
7 planning and design principles

The master plan has been developed on the basis of an agreed set of fundamental design and community development principles, outlined below.

- Protect and enhance the local character of residential neighbourhoods surrounding the precinct.
- Introduce housing into the precinct, at a density that reflects its proximity to central Traralgon and transport networks.
- Ensure that future residential development is fully integrated with the public realm and is readily accessible and forms part of the broader residential areas.
- Ensure that future residential development is fully integrated with the broader open space network integrating all residential areas to the south of the railway, linking the areas to central Traralgon, the railway station, education and recreation areas.
- Encourage new built form which supports concepts of environmental sustainability, including spatial design, water efficient design, solar efficiency, energy efficiency and promotes the use of recycled materials.
- Encourage a variety of lot and housing sizes at a higher density than the residential average for Traralgon.
- Ensure that the transition of the precinct from industrial to residential is undertaken in a coordinated and staged manner which acknowledges and respects existing industrial businesses operating within the precinct, and where appropriate facilitates their relocation to Traralgon's eastern industrial precinct, or other preferred location.
- New residential developments within the industrial threshold distance should ensure appropriate consideration of potential pollution and contamination issues, potentially using screening or vegetative buffers as a boundary between the two uses.
- Existing precinct features, such as established vegetation and existing roads should form the basis for the layout and image of new development.
- Create permeable pedestrian-friendly streets and spaces, which are easy to navigate, are of high amenity and contribute to neighbourhood character and encourage people to walk and cycle in preference to car travel.
• Community facilities, which may include new facilities for the existing services clubs, should be located within the precinct’s open space network, with provision for pedestrian and bicycle connections to other open spaces and to central Traralgon.

• Discourage the establishment of, or significant expansion of highly offensive uses in the industrial area which may detrimentally affect the safety and amenity of more sensitive land uses.
8 master plan implementation

8.1 short to medium term

A number of existing industrial land uses in the study area, most notably the operations of the Unimin Plant, Traralgon Concrete and EDI Asphalt, will delay the immediate residential rezoning of land across the study area, due to contamination and existing buffer requirements. Residential development is still possible within the threshold or buffer distances however appropriate consideration of potential pollution and contamination issues will be necessary. An industrial study will also be required before Council’s long term vision to transform the whole precinct into residential can begin to be considered. This will need to consider the availability of suitable alternative sites for industrial activity, as well as an analysis of the net community benefit of any relocation. Existing use rights also need to be considered and taken into account for the range of smaller light industrial land holdings within the study area, and the master plan needs to be flexible enough to accommodate their presence until an assessment of Traralgon’s industrial activities is carried out and a strategy is created to pave the way for future development of the precinct.

The formulation of the master plan for the Traralgon Inner South Precinct considered a range of scenarios for the study area that were developed to consider the staging process by which the introduction of residential development into the precinct could occur. These situations assessed the potential for residential development based on whether Unimin, Traralgon Concrete and EDI Asphalt were to remain or be relocated, as well as the implications of their associated threshold zones. The master plan, which is identified in the accompanying diagram, provides an outcome for the precinct in the short to medium term and incorporates the following recommendations:
Residential

- Introduce residential development into the precinct that builds upon the existing residential frontage along Allard Street to the north, and extends across the land currently zoned mixed use. This land does not require rezoning for residential development and also provides some flexibility depending on the outcomes of further contamination assessment and implications of the EPA recommended thresholds.

- Encourage consolidation of smaller land parcels which are not viable for development on their own. Incentives may be necessary for developers to buy larger land parcels in order to facilitate site clean up and proceed with development negotiations. Incentives may entail benefits such as the facilitation of investment through identifying potentially suitable premises, support in dealing with legislative and approval process, rate relief or waiving of council fees, all of which are outlined in the Economic Development Assistance Policy (May, 2009). Existing substantial land parcels in single ownership such as the Traralgon Depot site and Traralgon Concrete create good potential for more immediate development opportunities. Discussions for development of the former depot site are already underway and some existing businesses have indicated that relocation may be possible if the conditions are appropriate.

- Implement residential development in the form of medium density (maximum 450sqm) lots, which will allow the precinct to blend into the surrounding character of Traralgon and provide the opportunity for industrial uses to co-exist. This lot size would allow for the development of at least 180 lots as indicated in the Master Plan diagram, which is reflective of its proximity to central Traralgon and the Traralgon Railway Station.

- Ensure that any rezoning proposals are accompanied by an Environmental Audit Overlay (EAO) that would allow sensitive uses, in particular the residential use and development of previously industrial zoned land. An individual environmental assessment, such as the one that has already been completed for the Depot site, will also be necessary for any site intended for residential development to review the history of the land and potentially contaminating site activities and extensive testing of soils, ground water and site hydrogeology.

- The land designated as residential is located within the 500m recommended threshold from the major industrial use, therefore as outlined in Clause 52.10, appropriate consideration of potential pollution and contamination issues will necessary, with screening or vegetative buffers a possible boundary between the two uses.
Industrial

- Allow the land to the east of Dunbar Road to the south of the proposed residential blocks (Area 3a) to continue its industrial activities until future land uses are further investigated through a detailed assessment of Traralgon’s industrial land requirements. This industrial area includes the large industrial facility of Unimin, which will be allowed to continue its current operations under its EPA license.

- Prevent the establishment or significant expansion of any highly offensive uses in the industrial area. Non-offensive industrial uses however can continue, thus ensuring that development opportunities are not blocked in the short to medium term. Development opportunities that may be suitable for this area would be activities and businesses that do not affect the safety and amenity of the adjacent, more sensitive land uses and require minimal infrastructure.

Public open space

- Enhance existing public open space and establish open space linkages within and around the Traralgon Inner South Precinct. This will connect existing areas of open spacing, providing improved pedestrian accessibility along the Hickox Street avenue,
linking Burnet Park, the Duncan Cameron Memorial Park and the Traralgon Railway Reservoir Conservation Reserve.

- Establish a new vegetated corridor to the north of Janette Street, allowing connections from Burnet Park which is an existing valued piece of open space, to Traralgon Creek.

- Establish new community facilities on the crown land along the northern edge of the Cooinda Hill Education Facility. This could accommodate the existing service clubs (Traralgon Lions Club and Traralgon Apex Club) and its location will prompt its integration into the precinct’s open space network.

**Vehicular access**

- Build new roads upon the existing grid layout of the surrounding urban fabric and existing streets in the precinct and accommodate for the different levels of housing density as the area transitions from industrial to residential from north-west to south-east. Roads are to act as boundaries between different uses, allowing development within the area to occur in precincts.

- Incorporate the link between Rose Avenue and Traralgon Creek Road to the east that is outlined in the Latrobe Structure Plan. This connection could allow a possible entrance to Unimin from the south which would reduce industrial traffic along the residential streets, and would send traffic, particularly trucks, to the Hyland Highway and proposed Traralgon Bypass without passing through the residential precinct.

**Pedestrian and bicycle access**

- Establish preferred pedestrian routes along Hickox Street, Collins Street and the new vegetated avenue north of Janette Street with shared paths that allow connectivity through the precinct along high amenity streetscapes. Pedestrian and bicycle connections should also be created to link the precinct with the town centre and Traralgon Railway Station to the north, Traralgon Creek to the east, the existing residential areas to the west and future residential development to the south. Further details of connections around the train station are to be explored by the concurrent Traralgon Station Precinct Master Plan, which will affect access and egress of the Inner South Precinct.

- Enhance the Traralgon Creek environmental corridor through recreational shared paths along the west side of the creek to improve access and integration of the precinct.
These recommendations and the accompanying master plan give a realistic vision for the precinct in the short to medium term. The master plan responds to the opportunities and constraints associated with the existing conditions and demands of the study area and surrounds, and allows for the introduction of residential development on existing mixed use land. The master plan should be included as a reference document within the Latrobe Planning Scheme, to inform and assist statutory planning assessments of new developments and uses within the Traralgon Inner South Precinct.
planning and design principles

1. Protect and enhance the local character of residential neighbourhoods surrounding the precinct.
2. Introduce housing into the precinct, at a density that reflects its proximity to central Traralgon and transport networks.
3. Ensure that future residential development is fully integrated with the public realm and is readily accessible and forms part of the broader residential area.
4. Ensure that future residential development is fully integrated with the broader open space network integrating all residential areas to the south of the railway, making the areas to centre Traralgon, the railway station, education and recreation areas.
5. Encourage new built form which supports concepts of environmental sustainability, including spatial design, water efficient design, solar efficiency, energy efficiency and promotes the use of recycled materials.
6. Encourage a variety of lot and housing sizes at a higher density than the residential average for Traralgon.
7. Encourage the transition of the precinct from industrial to residential is undertaken in a coordinated and staged manner which acknowledges and respects existing industrial businesses operating within the precinct, and where appropriate facilitates their relocation to Traralgon's eastern industrial precinct, or other preferred location.
8. New residential developments within the industrial threshold distance should ensure appropriate consideration of potential pollution and contamination issues, potentially using screening or vegetative buffers as a boundary between the two uses.
9. Existing precinct features, such as established vegetation and existing roads should form the basis for the layout and image of new development.
10. Create pedestrian-friendly streets and spaces, which are easy to navigate, are of high amenity and contribute to neighbourly character and encourage people to walk and cycle in preference to travel.
11. Community facilities, which may include new facilities for the existing services state, should be located within the precinct's open space network, with provision for pedestrian and bicycle connections to other open spaces and to central Traralgon.
12. Discourage the establishment of, or significant expansion of, highly intensive uses in the industrial area which may detrimentally affect the safety and amenity of more sensitive land uses.

Figure 10: Master Plan
8.2 long term

Latrobe City Council’s long term vision for the precinct is its transformation into residential, with the relocation of industrial uses to a separate precinct within Traralgon. Given the outcome of the Amendment C62 Panel Report and the recommendations contained within, a detailed industrial strategy will need to be carried out before such relocation can be considered, to ensure that the assumptions behind Council’s residential vision for the area are well founded.

This industrial land use strategy should acknowledge that there are significant existing major industrial businesses in the study area, however could potentially indicate how these users could be encouraged to relocate from the area. The study should assess whether their relocation would be beneficial economically and to the community, and where the most appropriate location for them is. Depending on the outcome of this study, the long term objectives of Latrobe City Council for a residential precinct could potentially begin to be facilitated and incorporated into the Latrobe Planning Scheme. This would begin the transformation of the site from industrial to a residential precinct, which should be accompanied by a series of planning controls that would inform how development is to occur.

Assuming that this process is facilitated, Latrobe City Council’s vision for the Traralgon Inner South Precinct as a residential precinct is still the ultimate goal, and in the long term should incorporate the following recommendations to build upon the short to medium term master plan:

- Continue the development of residential lots from the north west to south east, with medium density development (450sqm lots) to the north towards the town centre, standard residential development (600sqm lots) immediately south of Janette Street and low density development (750sqm lots) further south, following the existing fabric of the surrounding residential lots. Without the restriction of Unimin, this layout could allow for the development of approximately 400 lots in total, with 54% allocated as medium density, 20.5% standard density and 25.5% low density. It should be ensured that any rezoning of land that would allow sensitive uses should again be accompanied by an Environmental Audit Overlay (EAO), in particular the residential rezoning of previously industrial zoned land.

- Prepare a Development Plan Overlay (DPO) and a Development Contributions Plan Overlay (DCPO) to stipulate how the development of residential lots and public open space should proceed, including a detailed layout of roads and lot sizes to facilitate its new residential use. Development contributions from residential establishment in the precinct could also allow for the
potential creation of a new area of public open space to the east of the study area alongside the
creek corridor.

- Ensure that an environmental assessment reviewing potential contamination of previous site
activities and testing of soils, ground water and site hydrogeology is undertaken for any site
intended for residential development. Given the industrial history of the study area, its
transformation into a residential precinct would entail significant costs associated with remediation
to render the land suitable for residential development and occupation.

These recommendations reflect the strategic direction for a broader plan for Traralgon and Latrobe
City, subsequent to further investigations within a detailed industrial study. Through an analysis of the
benefits of industrial relocation out of the precinct, this could in turn provide justification for the
transition of the Traralgon Inner South Precinct towards Council’s long term residential vision.
references