Mildura Rural City Council

Mildura Industrial Land Use Strategy

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Mildura Industrial Land Use Strategy

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			Name/Position	Signature
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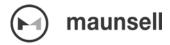
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Appendix A Draft Planning Scheme Amendment









Maunsell Australia (Maunsell) has been engaged by the Mildura Rural City Council (Council) to undertake the development of an Industrial Land Use Strategy (the Study). The key elements of this process include:

- auditing existing industrial land;
- identifying industrial opportunities;
- forecasting land needs;
- considering major transport issues; and
- developing appropriate planning strategies to provide for future opportunities.

The study report provides:

- An overview of industrial planning undertaken to date;
- A summary of the key issues gleaned from initial consultation;
- The findings of the industrial audit which also highlight industrial land development constraints within the study area;
- An overview of emerging industrial development opportunities and strategic directions for both existing and future industrial development;
- Potential policy options in response to the issues that have been identified, as well as options for Council's role in facilitating industrial development;
- Potential rezoning changes to facilitate industrial development; and
- A Draft Planning Scheme Amendment to action these directions in the Mildura Planning Scheme.

The impetus for this study was identified during the preparation of the Mildura Planning Scheme and was acknowledged by then Planning Minister Thwaites when the Scheme was approved in 1999.

The purpose of this study is to develop a strategic and statutory planning framework that will facilitate appropriate industrial land use and development within the Rural City of Mildura. The study will identify the industrial opportunities that exist for the area and provide Council, Government, developers and the community with planning direction and a policy framework to realise these opportunities.

The findings of this study have been translated into a draft planning scheme amendment to the Mildura Planning Scheme.

The Draft Planning Scheme Amendment develops strategic planning principles for each of existing and proposed industrial precincts within the municipality.

The report also makes a series of short and longer term recommendations relating to implementation of this plan, which can be summarised as follows.





Short Term

- Rezoning requests and planning permit applications which may impact on this study should be placed on hold until the findings of this study have been endorsed by Council. Figure 18 identifies the areas where rezoning requests and planning permit applications need to be placed on hold.
- Council will need to seek agreement with representatives from VicRoads that there is a need to review the findings of the Planning Study for A20 Sturt Highway in relation to relocating the Sturt Highway from Deakin Avenue to Benetook Avenue.

As a priority it is recommended that Benetook Avenue/Seventeenth Street be promoted as the major thoroughfare. At the same time, Public Acquisition Overlays (PAOs) and setbacks should be incorporated in the Planning Scheme maps to protect the future widening potential of Benetook Avenue.

- The proposed rezoning of properties along the northern and southern side of Benetook Avenue between Fifteenth and Fourteenth Streets from Rural to Business 4 should proceed only if it can be strategically justified. This rezoning seeks to promote the future development of peripheral sales and commercial uses requiring a high level of exposure. It is considered that progressing this proposed rezoning is premature at this stage and would be problematic as the strategic land use policy justification required for supporting such a rezoning has not been developed. DSE has emphasised that all planning scheme amendments must have a strategic basis within the planning scheme showing clear linkages to Municipal Strategic Statement and Local Planning Policy, therefore it is unlikely that this rezoning would be supported at this stage by an Independent Panel prior to the finalisation of this Study.
- Council should rescind land recently rezoned Residential 1 in the Irymple area. This area has been identified for future industrial expansion.
- It is not recommended that any further land be rezoned to accommodate additional industrial development within Area 1 and Area 2 of Mildura as the role and function of these two areas is already compromised by the encroachment of sensitive land uses. As outlined in this report, there is an increasing demand for peripheral sales/commercial uses along Benetook Avenue and it is recommended that the focus for additional development in Mildura be directed towards commercial/peripheral sales type development.
- Council should also investigate the opportunity to received funding through the *Pride of Place* program administered by DSE for urban design/landscape treatments such as signage, roadside furniture, tree planting and other treatment which will assist in the promotion and marketing of 'high amenity' industrial land within the municipality.





- Council will need to implement the Implementation Framework and also develop an Information Kit to ensure greatest opportunity for promotion of the Mildura Industrial Precincts.
- Council must undertake priority discussions with the Land Titles Office to progress the consolidation of titles so that the future industrial development of Block "H" can be expedited as soon as possible.
- Small lot excisions in the Irymple and other townships should be discouraged. Council will need to participate in the Rural Zones Review currently being undertaken by DSE to identify a range of suitable options to prohibit small lot excisions in rural areas abutting industrial precincts. It may be appropriate to introduce a specific Rural Policy into the Mildura Planning Scheme which provides guidance on small lot excision in the rural areas.
- The existing Merbein industrial area should be consolidated.
- The existing Red Cliffs industrial area should be consolidated.
- Council will need to undertake discussions with Department of Infrastructure, VicTrack, Freight Australia, DSE, Vic Roads and any other stakeholder to secure the relocation of the Mildura Freight Gate from the Mildura CBD to Mineral Sands Plant Area/Thurla as the short-term option. Council will need to undertake more detailed planning to identify the land parcels required for the proposed Freight Gate and supporting industrial development and services and appropriate road access immediately. It is considered that there are no other suitable sites within the municipality which would offer a feasible relocation option for the Freight Gate. The Mineral Sands Processing Plant/Thurla Area is considered the most appropriate site in terms of expansion potential, road access and appropriate buffering. This is discussed in more detail in Section 7.1 and 7.2.
- Council should investigate the opportunity to submit applications to the Regional Infrastructure Development Fund administered by Department of Infrastructure and Department of Innovation, Industry and Regional Development to secure funding for the relocation of the Freight Gate from Mildura to the Mineral Sands Plant Area/Thurla.
- The draft planning scheme amendment prepared as part of this phase of work which introduces changes to the Municipal Strategic Statement and a series of rezonings should be placed on public exhibition.





The Amendment proposes to:

- Introduce the following modifications to Clause 21 Municipal Strategic Statement:
 - Clause 21.02-3 Key Land Use themes insert text to highlight the importance relating to the relocation of the Freight Gate and rail for freight purpose from Mildura CBD.
 - Clause 21.03-1 The Vision for Mildura insert text to strengthen the vision for Mildura City in relation to expansion on the role and function of industrial precincts in Mildura.
 - Clause 21.04 Strategic Directions modify the Town Structure Plans and introduce two additional Town Structure Plans for Block "H" and Mineral Sands Separation Plant Area/Thurla to reflect the industrial strategies for the townships. Amend Clause 21.04-9 Economic Development and Tourism to implement the future industrial strategies for each township and give effect to the Mildura Industrial Land Use Strategy.
- Rezone the following land parcel from Industrial 1 (IN1Z) to Industrial 3 (IN3Z):
 Lot 10, PS79714 Eldridge Road, Red Cliffs
- Rezone from Rural Zone (RUZ) to Industrial 1 (IN1) the land referred to as Mineral Sands Processing Plant/Thurla Area.
- Introduce a Design and Development Overlay Industrial Area (DDO4) to Mineral Sands Processing Plant/Thurla Area.
- Include Mildura Airport Master Plan 2000 as an incorporated document to Clause 81 replacing Mildura Airport Master Plan 1998.

Long Term

Council will need to undertake discussions with Department of Infrastructure and DSE regarding possible reinstatement of the Morkalla line to Thurla and opportunities for further investigation of the extension of Block "H", Airport Business Technology Park, Merbein. There may be some potential problems in re-establishing the railway line along the old alignment between Red Cliffs and Thurla as Red Cliffs Historic Train utilises some of this area while Powercor also now occupy a separate portion with underground power supply along the former track alignment. However, resolution of these issues would allow potential future use of the Abbotsford Bridge to the north west of Merbein providing access to the New South Wales markets and transcontinental line. It should be noted, although the reinstatement of the railway may take some time, it does not need to impede the relocation of the Freight Gate.





 Council should undertake discussions with VicRoads in relation to the potential growth and development occurring on the western side of the municipality which would benefit from a western ring road (Meredian Road) which will provide an important connection to the Calder Highway, Carwarp/Thurla southern area to Sturt Highway and to the Abbotsford Bridge (Yelta) connection to New South Wales.









Maunsell Australia (Maunsell) has been engaged by the Mildura Rural City Council (Council) to undertake the development of an Industrial Land Use Strategy (the Study). The key elements of this process include:

- auditing existing industrial land;
- identifying industrial opportunities;
- forecasting land needs;
- considering major transport issues; and
- developing appropriate planning strategies to provide for future opportunities.

The report provides:

- An overview of industrial planning undertaken to date;
- A summary of the key issues gleaned from initial consultation;
- The findings of the industrial audit which also highlight industrial land development constraints within the study area;
- An overview of emerging industrial development opportunities and strategic directions for both existing and future industrial development;
- Potential policy options in response to the issues that have been identified, as well as options for Council's role in facilitating industrial development;
- Potential rezoning changes to facilitate industrial development; and
- Draft Planning Scheme Amendment.

1.1 Background and Impetus for Study

The impetus for this study was identified during the preparation of the Mildura Planning Scheme and was acknowledged by then Planning Minister Thwaites when the Scheme was approved in 1999.

From this time, Council has deferred undertaking the study while a number of key transport issues have been investigated which could influence industrial land demand, supply, take-up and access. These issues include the future location of the Mildura Rail Freight Gate and proposed Sturt Highway by-pass along Benetook Avenue through to Seventeenth Street.

Council has indicated that the resolution of these issues provides the opportunity to review the location of industrial land and encourage co-location with transport infrastructure. At the same time, it is also necessary to implement strategies to protect long-term operation of future industrial areas from inappropriate development, particularly residential encroachment.





1.2 Aim of Study

The purpose of this study is to develop a strategic and statutory planning framework that will facilitate appropriate industrial land use and development within the Rural City of Mildura. The study will identify the industrial opportunities that exist for the area and provide Council, Government, developers and the community with planning direction and a policy framework to realise these opportunities.

The findings of this study have been translated into a draft planning scheme amendment to the Mildura Planning Scheme.

Key issues that are influencing factors in the study area and industrial land development opportunities include:

- The potential for the municipality to capitalise on its regional transport hub role and its excellent transport linkages to Melbourne, regional and interstate markets. Traditionally road transport has been the primary method of transport for goods moving into and out of Mildura, however, it is now timely for Council to develop a rail freight interchange (as previously recommended for Red Cliffs). Rail transport is being increasingly considered for the transport of primary produce and the significant resource deposits of the region.
- The proposed Sturt Highway truck by-pass along Benetook Avenue and its possible extension to Seventeenth Street in proximity to the Airport Business Technology Park (and its redevelopment consistent with the Airport Master Plan) will also improve regional transport networks and will be a key influence in developing sustainable land use strategies.

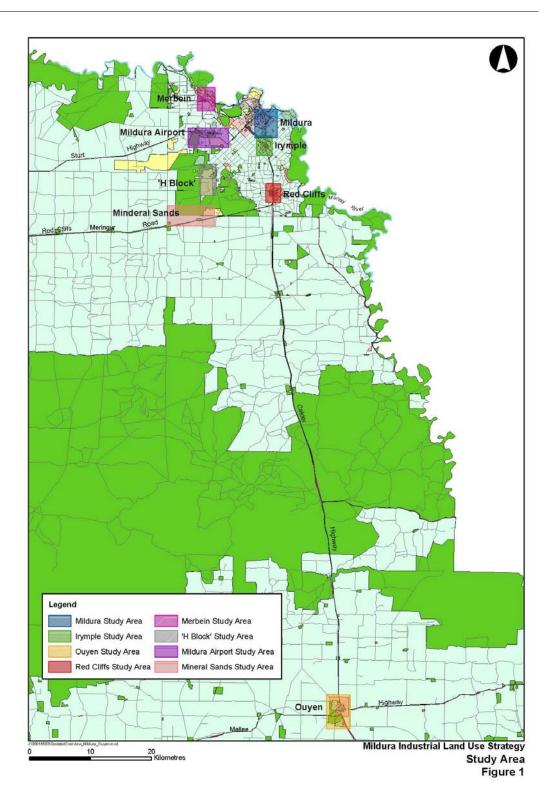
1.3 Study Area

The study area is focused on the Red Cliffs, Irymple, Mildura, Merbein and Ouyen townships.

Figure 1 illustrates the study area, including new areas of industrial development potential.



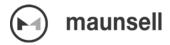












An important input to this study has been, and will continue to be, consultation with stakeholders. This has facilitated an understanding of the industrial land use issues in the study area. The stakeholders consulted thus far have included state and local government authorities and agencies, landowners, developers, business owners and local real estate agents.

Outlined below is an overview of the key issues raised during these initial consultation activities. A series of Focus Groups will also be conducted in the next phase of the Study to develop future industry development directions and opportunities, together with specific measures for catering for industry needs.

2.1 Mildura Rural City Council

Council officers raised the following issues in relation to industrial development with the study area:

- The need to relocate the Rail Freight Terminal from Mildura CBD.
- The potential development of Seventh Street for peripheral sales type uses.
- The potential expansion of peripheral sales users east of Fifteenth Street along Benetook Avenue.
- The need to investigate opportunities to encourage heavy vehicular traffic to use Benetook Avenue rather than Deakin Avenue (A20 Study).
- The potential opportunity for additional large-scale industrial development at the following three sites:
 - Block "H" which is located at the end of Twenty-Third Street off Benetook Avenue;
 - The area in the vicinity of the recently developed Mineral Sands Plant Area/Thurla, located near the corner of Benetook Avenue and Red Cliffs Meringur Road; and
 - Airport Business Technology Park.
- The need to investigate opportunities to increase the scale of the large intermodal facilities which already exist at Merbein.
- The opportunity for additional industrial development at Irymple, bearing in mind the proximity of residential development and constrained drainage network. At present, all new industrial developments in this area must retain run-off on site. However, it is noted that this current drainage arrangement is short to medium term only. It is anticipated that that this servicing constraint will be able to be overcome in the long-term, as detailed in the *Sunraysia Drainage Strategy*, which identifies a number of different scenarios to overcome these constraints, which are discussed in more detail in later sections of this Paper.





- Red Cliffs has potential for a new intermodal freight terminal, however, key constraints include proximity both of residential development and a shortage of suitable land. Melbourne Port Corporation had previously expressed interest in this site as a potential inland port.
- The primary industry at Ouyen is the Mineral Sands Plant Area/Thurla.

2.1.1 Sunraysia Mallee Economic Development Board

The SMEDB highlighted the importance of adopting a strategic regional focus for the current Study, including the consideration of all regional issues/influencing factors, which may cross municipal and/or state boundaries. Key points made include:

- The need to identify greenfield sites to accommodate additional industrial development. For example, 5-8 hectares is required for an Organic Waste Plant.
- Airport Business Technology Park has been planned and promoted as a future highly efficient multi-modal freight and passenger hub, linking road, rail and air transport to priority local and overseas ports to support future economic development and, in particular, the growth of the Tri-State region.

The SMEDB also highlighted that consideration needs to be given to the following regional constraints in relation to the Mildura Multi-Modal Hub:

- Poor connectivity to the national network;
- Inter-state rivalry and non-national network vision;
- Fragmented freight sites and systems;
- o Disparities in State laws/compliance and regulatory authorities; and
- o Lack of economies of scale to capture and sustain global market share.

2.1.2 Sunraysia Area Consultative Committee

The SACC advised that it has prepared a submission to the Austlink National Land Transport Plan. This submission focuses on the Airport Business Technology Park modal hub and its potential to link regions across state boundaries.

2.2 State Government Agencies

- Department of Sustainability and Environment (DSE) highlighted the need to consider the key regional issues which include availability of adequate infrastructure, the growing mineral sand industry, the need for land use compatibility and the need to ensure appropriate buffers. DSE advised that the Department of Innovation, Industry and Regional Development (DIIRD) has developed a *Project Clustering* industry for the region which identifies opportunities to cluster some industries such as food and wine.
- Lower Murray Water raised the following issues:
 - The current shortage of vacant industrial lots to attract major industries requiring large buffer distances and/or landholdings.





- That industrial development should occur where there is already access to adequate services such as water, wastewater, gas, transport, electricity etc. However, it is acknowledged that there may not be suitable serviced industrial land sites available and there may be a need to identify greenfield sites for longer term industrial development and planning.
- Airport Business Technology Park would be most suited to light industrial/commercial only.
- From a water supply and wastewater/trade waste perspective, additional small/medium industrial land should be along Benetook Avenue, from Fourteenth to Fifteenth Streets across to Cowra Avenue, or between Eleventh and Fourteenth Streets between Cowra Avenue and Sandilong Avenue.
- The Irymple industrial zone has good buffering, but all wastewater and stormwater need to be pumped away. Excessive development will necessitate short term wastewater pumping and rising main upgrades with rising main being relocated from Fifteenth Street to Sixteenth Street.
- Department of Primary Industry highlighted the importance of giving consideration to the Land Conservation Council – Mallee Study Report.
- **Department of Industry, Innovation and Regional Development** made the following comments:
 - The Mildura Region is horticulture based. The table grape industry is focussing on on-farm business development. The Mildura/Milburn Park winery region requires upgraded road infrastructure and access.
 - Transportation of over-dimensional freight (i.e. wine tanks) through the region is a key issue. DIIRD is trying to identify a recognised route through Mildura for these transports such as Benetook Avenue.
 - For Mildura to be considered a competitive transport hub, consideration needs to be given to the development of a rail link from Melbourne, Griffith, Sydney and Queensland.
- VicRoads highlighted the importance of giving consideration to the Planning Study A20 Sturt Highway for Mildura which concluded that Deakin Avenue and Seventh Street be retained as the Sturt Highway at this stage. It was also suggested that there was existing community acceptance of this position.

Note, this view expressed by VicRoads is contrary to Council's preferred option for a by-pass of Deakin Avenue using Benetook Avenue.

VicRoads indicated that they would give consideration to the outcome of this study in relation to recommendations for the local road network as the findings of the *Planning Study A20 Sturt Highway* for Mildura were based on traffic engineering issues and did not consider social, land use and amenity issues.

VicRoads also indicated that they are currently undertaking the *Strategy A20 Management Study* which focuses on the next fifteen years for the Sturt Highway with particular emphasis on the South Australian border.





 Freight Australia (FA) indicated that the State Government's Rail Gauge Standardisation Project is on hold. FA indicated that the project was sufficiently funded to achieve desired outcomes as the key requirement relates to track improvement.

FA advised that there were existing freight facilities at Melbourne that have the potential for upgrade. FA support the long-term vision for a future Freight Gate at the Mineral Sands Plant Area/Thurla precinct. However, they recognised that there would be significant redevelopment costs.

2.3 Servicing Authorities

Discussions were also held with representatives from service authorities to identify their role and function for the provision of infrastructure for industrial development. This is discussed in more detail in Section 4 *Industrial Areas – Existing Conditions* relating to Infrastructure (servicing).

- Powercor indicated that electricity supply is available with spare capacity in relation to Mildura, Irymple, Red Cliffs, Merbein and Airport Business Technology Park. Block "H" and the Mineral Sands Plant Area/Thurla precinct do not currently have existing spare supply capacity and a contribution may be required. Council should investigate future capacity and funding requirements.
- Origin Energy indicated that gas is only laid and connected on an as-needs basis. There is existing gas supply in Mildura, Irymple, Red Cliffs and Airport Business Technology Park. Although Block "H" does not have existing gas supply, there is an existing connection in close proximity. Existing gas with spare capacity is available at the Mineral Sands Plant Area/Thurla.
- Telstra has indicated that Mildura, Irymple, Red Cliffs, Merbein, Airport Business Technology Park and Block "H" have existing telecommunications services readily available. Provision of telecommunication to the Mineral Sands Plant Area/Thurla precinct may require upgrading.

2.4 Business Owners, Operators and Real Estate Agents

 Roccisano Real Estate emphasised that Irymple is the preferred location for the Intermodal Freight Terminal as it is the demographic centre for Mildura. They also advised that the majority of their clients required industrial/commercial premises for peripheral sales.

The highest demand is for industrial lots ranging in size from 800 to 4000 square metres, with good road access to accommodate B-doubles and a high level of exposure such as frontage along Etiwanda Avenue and Seventh Street. A number of lots in Irymple have not been selling because they do not have a high level of exposure.





Collie and Tierney

Collie and Tierney Real Estate emphasised that the majority of their clients wanted to be located in Mildura on sites with a high level of exposure for peripheral sales and bulky goods type of industries. However, they also acknowledged that there is an increasing demand for large scale industrial landholdings.

• **CPM Building Contractors** highlighted the need for additional industrial land close to Mildura.

CPM also advised that the planning approvals process can result in development delays. They mooted the need for development of trade offs with statutory authorities given developers are providing for on site retention for drainage within their developments, which incur additional costs.

 Airport Business Technology Park advised that their future strategic vision relates to the promotion of the airport as a multi-modal hub which will provide for a range industrial/ commercial precincts including Austlink Driver Training School, Kart Club, non aviation and aviation related development, Hangar site (available for public lease), non aviation (freight) and additional infrastructure (roads) as outlined in the Airport Master Plan 2000.

Development of this site as a multi-modal transport hub will include extension of the rail link from Merbein to the airport. Relocation of the multi modal transport hub would capitalise on existing transport networks including air, road and buses.

It is understood that there is the opportunity for the airport to purchase/acquire Commonwealth land located on its boundary.

Recent industrial/commercial operations that have located within the Airport precinct include Tandou (wine producers - 5400 sqm lease) and Accountancy Practice (2500 sqm lease) who also intend leasing a private hangar. A number of other warehousing/storage and freight and trucking companies have expressed potential interest in leasing land at this site.

The Airport managers indicated that there is a need to develop infrastructure to the precinct, in particular, a new north-south road along the site's western boundary. It is understood that a funding application in this regard is currently being processed by DIIRD.

The long-term plan is to market the airport as a suitable location for industrial/ commercial development.

- Wakefield Transport highlighted the importance of identifying Merbein as the preferred location for a Regional Intermodal Freight Terminal since:
 - It is already a registered/operational Inland Port (with direct links back to Melbourne Port);





- It has the opportunity to expand on readily available land;
- It currently handles all importing and exporting for Fosters, Saw Mills, Mildura Fruit Company, NCF Farm, Roberts Estate and Irymple Citrus Products and also has the opportunity to further grow this service;
- It is strategically located to avoid Mildura CBD and transport cargo/freight from New South Wales and South Australia;
- It is strategically located within the Deakin Development;
- o It provides an existing value-adding service to customers;
- Minimal land use conflicts would result as generally all surrounding areas are well buffered and all heavy vehicle access is direct from the Calder Highway; and
- o The site currently has 24 hours access (within the rail easement only).

Wakefield Transport support the concept of extension of the rail freight line to Airport Business Technology Park, however, they are not clear as to how this could be funded.

The Company recognises the need for development of additional greenfield industrial areas within the municipality. They advised that the government has recently gazetted the rail easement extending west from Red Cliffs to the Mineral Sands Plant Area/Thurla, generally following the alignment of Red Cliffs Meringur Road. This area may provide the opportunity for future industrial land development if rail access becomes available.

- SJ Weir (local building developers) highlighted that the following issues need to be considered in relation to future industrial planning:
 - Review residential encroachment to industrial areas, eg Benetook Avenue, transport depot interchange interfacing with residential area.
 - Review road width, which is insufficient for separation.
 - Review the type of industrial use in relation to the proximity of the residential area. The remaining areas within the City boundaries are limited with land size, road access and operation of B double trucks.
 - Review the opportunity for/appropriateness of industry operating 24 hours 7 days per week.
 - \circ $\,$ Ensure delivery and pick up times suit production schedules.





- Review the size of land parcels available. Lots need to be sized to suit future development with headwork charges to be carried over until the ongoing developments occur.
- Noise and pollution abatement need to be addressed with separation, screening and setbacks.
- Areas need to be zoned to allow for reactive development when a prospective industry can be enticed and encouraged to establish in the district.
- The future industrial areas need to be in proximity of the existing highways and rail transport network.
- The industrial areas need to be reviewed for DISPLAN disaster planning arrangements.
- The existing mine processing site at Koorlong is a good example of placement of services to an industry that is well separated from residential and urban areas.
- The land at the Airport Business Technology Park is suitable for industry on a lease arrangement but should have a maximum time period to allow the future of the airport to be developed as and when required.
- The future planning needs to be in five-year plans with a range up to 15 years. Direction and scope is needed for all to see and be confident with.
- Tasco Inland Australia indicated that their tanks located at 220 Tenth Street would be able to be re-located, however, costs associated with the relocation would be expensive. They also indicated that any relocation would provide the opportunity to scale down their operations.
- Grain Co indicated that there may be a future opportunity to relocate their operations, including administration offices and storage facilities to a new Greenfield site.

2.5 Advisory Groups

- Irymple Progress Association highlighted that industrial development has not occurred quickly in Irymple as more developments has taken place at the edge of Mildura along Benetook Avenue and Etiwanda Avenue.
- **Ouyen Inc** highlighted the need for strategic planning within the Ouyen township, as there is no identified industrial precinct. The lack of strategic planning is compromising the future growth of Ouyen.





2.6 Focus Groups

A series of targeted focus groups for the study area focusing on Red Cliffs, Irymple, Mildura, Merbein and Ouyen, as well as two specific focus groups for key developers and the general community, were held during this initial phase of the Study. The purpose of the sessions was for stakeholders to provide input to the future direction of industrial development within the municipality, focussing on existing industrial precincts, emerging opportunities such as Airport Business Technology Park, Block "H", Mineral Sands Plant Area/Thurla and relocation of the Freight Gate.

Outlined below is a summary of key issues from these focus group sessions. For further information, including a list of attendees, refer Appendix A.

Key Developer Focus Groups

- There is a strong market demand for land across a broad range of sizes from the traditional estate sized blocks to the larger land holdings for big business(es) such as 20-30 hectares.
- The existing supply of industrial land is constrained by buffer zone problems and access issues.
- The Mineral Sands Plant Area/Thurla could be seen a potential site for greenfield development. These greenfield opportunities should be able to be efficiently serviced.
- The airport should be seen a greenfield site opportunity, building on the initiatives of the master plan.
- Sector-specific industry clusters should be investigated further and targeted to areas.
- Block "H" (old Irymple township site) could be seen as a potential greenfield site.
- The strategy should reflect on the loss of industrial opportunities over the previous 10 years as a justification for this process.
- The possible relocation of the Mildura Freight Gate from the railway station to the south east Mildura industrial area was seen to be too short-sighted. This facility should be further out of town on a greenfield site where there are no constraints. The value of land in the southeast industrial area is too high to facilitate its relocation to this area. The rail line between Irymple and Merbein via Mildura should be relocated and routed via Thurla, Block "H", Airport and Merbein. There are 12 intersections with this portion of the current alignment. The relocation of Freight Gate and any new rail proposals will influence the future direction of industrial development within the municipality of Mildura.
- The fuel depots in the northwest are located next to schools and should be relocated as part of this strategy.



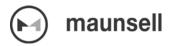


- There was a general feeling amongst stakeholders that industrial areas were encompassing Mildura township which will inhibit further growth.
- Mildura and Irymple may consolidate one day and this should be part of the strategic process.
- The long-term residential growth strategies in the south east of Mildura will exacerbate the current interface problems.
- The TAFE and Education Department own significant portions (182 properties) of land through the CBD and industrial areas. This land is leased to private uses and the income is put into a trust fund and returns income to schools in the area. There is no intention for this land to be disposed of, thus inhibiting and fragmenting growth in the existing industrial areas in Mildura. Further investigations have revealed that there are limited opportunities for purchase of these properties as it is extremely unlikely that the Education Department would place these properties on the market.
- The peripheral sales area to the west of Benetook Avenue on Fifteenth Street should be extended to the east of this intersection but not as far as Irymple.
- The Federal Government have developed an initiative called AustLink that is administered by the Sunraysia Area Consultative Committee and provides funds for infrastructure initiatives.

General Community Focus Group

- The residential development of land (Stage 3) in the block bound by Etiwanda Ave, Fourteenth Street, Benetook Avenue and Fifteenth Street was not supported by the group as this will result in continued land use conflicts. The proposal has been placed on hold pending the outcome of this strategic review.
- Whilst it was recognised that Vic Roads still supports the use of Deakin Avenue for heavy vehicles, the group was supportive of Benetook Avenue providing this function.
- The railway line from Irymple to Merbein is a key constraint for future developments. This was seen as discouraging Vic Roads investment/upgrading of Benetook Ave.
- There is a current AustLink funding bid submitted for the development of a multimodal hub at the airport (SACC).
- The current Merbein rail freight interchange is a massive operation that will continue to have impacts on Mildura until the rail line is relocated.
- The petrol depots are poorly located adjacent to sensitive uses and an alternate location should be identified through this process.





• The *Sunraysia Drainage Strategy* will have an impact on the location of industrial uses – there is a need to recognise the drainage constraints of land.

Mildura Focus Group

- The SEDB has promoted the airport multi modal hub project and is supportive of the relocation of the railway line out of the Mildura urban area and aligning it with the Mineral Sands Plant Area/Thurla, the Airport and Merbein. They recognise this is a high cost initiative (\$20-50 million) and a long-term option.
- There was a general concern regarding the possible extension of Business 4 land further east of Benetook Avenue to connect Irymple.
- The Mineral Sands Plant Area/Thurla should be the focus of greenfield developments as this area is well serviced (gas, town water, electricity and sewerage all connected). The power may require upgrading in this location. The area is more suitable to noxious-type industries that require a significant buffer.
- The airport would provide for more business park type uses consistent with the level of activity proposed in the master plan.
- The drainage strategy proposes development at Lake Hawthorn and then developing in an easterly direction so developer contributions can part-finance then upgrade of drainage that is required.
- The Council owned Block "H" land is well located to link with the Multi Modal corridor. All services are available within this area.
- The Koorlong Sewerage Plant (near Mineral Sands Plant Area/Thurla) was established in 1984 to provide for long-term industry growth.
- Kulkyne Way to the southeast has seen significant viticulture development with Lindemans and Zilzie and many packing sheds. This area could almost be seen as a node of development in itself.

Irymple Focus Group

- The connection of Irymple to Mildura is likely but will occur in 20 years plus.
- In the early 1990's Council developed the Irymple industrial estate. There is a lot of zoned vacant land and development should be focussed there.
- The group was aware of the buffer zone/green belt that is part of the Council strategy to maintain/separate urban areas of Mildura and Irymple. Irymple should maintain its own separate identity.
- The further extension of Business 4 land along Fifteenth Street, between Mildura and Irymple will have a detrimental impact on Irymple developing in its own right.
- There is a fragile commercial base in Irymple that is affected by commercial development in Mildura.





- Capacity should be allowed for in the industrial estate for its expansion should a large business locate in Irymple.
- Irymple should not be seen as possible location for the fuel depot relocation out of Mildura.
- There is a sense that the Council has not provided support to the Irymple industrial estate. Council should encourage more industry to Irymple.
- The group recognised that drainage is the major impediment to further development.
- Sunbeam employs 70-75 people at the manufacturing site and 50 at the new headquarters site. The future development of the business will rely on the intensification of use of existing land and the need for further storage facilities.
- A small cluster is developing already. A tank farm has recently established in the southern part of the estate, next to the tank manufacturer (AMG) and tank insulator. The tank farm has just taken its first vintage and is based on the overflow storage of product from wineries that do not excess storage capacity. This has commenced in the last few months and is a good example of co-location of uses in action.
- Three new businesses have located in the estate that directly service the Mineral Sands Plant Area/Thurla.

Identified threats are:

- Road access B-doubles find it difficult to turn right in to Fifteenth Street from Koorlong Ave. The dimensions and layout of this intersection and the railway crossing are not appropriate for B-doubles.
- Drainage severe constraint. Further development may require off site drainage works. The drainage strategy should prioritise works for Irymple.

Identified opportunities are:

- Future location of the relocated Freight Gate to the rear of Sunbeams office headquarters between Fifteenth and Sixteenth Streets.
- A welcoming community for new investment.
- The estate is well separated from the majority of residential development.

Red Cliff Focus Group

- The group advised that Kerry Logistics are investigating purchasing packing sheds for a 700 pallet cool room (fruit) in the old Aurora Store.
- The group accepts that greenfield development is not acceptable adjacent to the urban area.





- The Melbourne to Darwin Rail Link may come through to the south of Red Cliffs, cross the river and connect to Broken Hill.
- Yatpool on the Calder Hwy south of Red Cliffs should be investigated further for industry.
- The existing sewerage farm is inadequate to cope with additional industry. It can
 accommodate additional residential growth however should a major trade waste
 industry start up the system would be overloaded.
- Council should develop industrial land and sell to recoup costs.
- The existing commercial development along Fifteenth Street in Mildura takes business away from Red Cliffs.
- The inter-modal facility should locate at the rail spur intersection, south of Red Cliffs at Werrimul.
- Residential development at Koorlong may constrain the development of Block "H". There are environmental (vegetation) issues that would need to be overcome.
- Opportunities for the Freight Gate (intermodal facility) are:
 - \circ $\,$ A local supportive transport industry; and
 - o Possible increased residential population
- Constraints for the Freight Gate are:
 - o Fitzroy/Nardoo railway crossing and the intersection with the Calder Hwy;
 - Location of the primary school;
 - o Increased freight and heavy vehicle movement along Calder Hwy;
 - o 24 hour operation will have amenity issues; and
 - o Taking the Freight Gate out of Mildura will put more trucks on the road.

Merbein Focus Group

- Wakefield Transport established 8 years ago and has progressively bought land to expand. Industrial land in the south east along the railway line is not owned by Wakefield. However they wish to purchase or lease it. It is anticipated that full development of current opportunities will be exhausted in 5 years.
- Wakefield Transport are currently discussing with DSE/Freight Australia in relation to improvement in rail capacity in the existing area.
- The operation of Wakefield Transport was initially 24 hour/7 days but is now restricted to 7am-9pm due to residential impacts south of the channel.



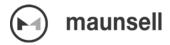


- The operator has discussed with Department of Primary Industry the piping of the channel to provide a buffer to the residential areas and use for non obtrusive uses (i.e. parking, storage).
- Coolroom operations suffer the most from residential encroachment.
- In regard to the Freight Gate, its relocation to the south east industrial area of Mildura may be satisfactory if only 'smalls' (small packages) are transported. If larger packing and equipment is used this would not be a viable long-term option. Freight Australia operate under a Community Service Order (CSO) that requires the operator to maintain its handling of 'smalls'. They would be likely to discontinue this once the CSO expires as it is unprofitable. Council will need to spend a lot of money for a long-term option.
- The relocation of the railway line should be addressed in the bigger picture of the trans-continental railway line. There should be allowance for the use of the Abbotsford Bridge to the north west of Merbein to access the NSW markets and the transcontinental railway line.
- The roads require general improvements and routes should be prioritised for heavy vehicles – Benetook Avenue should continue to be used for heavy vehicles.
- Dow Avenue could be a location for the relocated railway line.









This section considers the strategic planning policy context for the project starting at the state level with the Agenda for New Manufacturing and Growing Victoria Together policy, which is Government's overarching policy and governance framework.

3.1 Land Use Planning

3.1.1 State Planning Policy

Agenda for New Manufacturing

The Agenda for New Manufacturing is the State Government's policy for new manufacturers. It is founded on the Government's vision statement, *Growing Victoria Together* (November 2001), its business statement, *Building Tomorrow's Business Today* (April 2002), and industry input via the strategic Audit of Victorian Industry and the Manufacturing Industry Consultative Council.

The seven items on the agenda are:

- Accelerating innovation;
- Growing exports;
- Championing manufacturing;
- Creating high-performance workplaces;
- Building skills;
- Attracting investment; and
- Achieving environmentally sustainable manufacturing.

This policy highlights the important role that government will play in supporting manufacturing.

Growing Victoria Together

GVT is the State Government's policy for governance of the State.

Key elements of the policy relevant to this study include the following:

Growing and Linking all of Victoria

- Upgrading transportation systems, standardising rail gauges etc.
- Improving regional infrastructure, better linking Melbourne and regional ports to industry and agricultural centres across Victoria.

Promoting Sustainable Development

• Encouraging a better quality of life now, and for the future generations by ensuring a balanced approach to the economy, society and environment.

More Jobs and Thriving Innovative Industries Across Victoria

• Promoting the creation and use of new ideas and technologies to attract investment and employment in new and existing industries.





3.1.2 State Planning Policy Framework

The State Planning Policy Framework (SPPF) provides a context for spatial planning and decision making by planning and responsible authorities. It is comprised of a statement of general principles for land use and development planning and specific policies dealing with sectorial issues.

The State Planning Policy seeks to ensure that the objectives of planning in Victoria (as set out in Section 4 of the *Planning and Environment Act 1987*) are fostered through appropriate land use and development planning policies and practices which integrate relevant environmental, social and economic factors in the interests of net community benefit and sustainable development.

State planning policies in the SPPF relevant to the assessment of land use issues for the Mildura Industrial Land Use Strategy include:

- Settlement (clause 14) with respect to Planning for Urban Settlement (14.01);
- Environment (15) with respect to Floodplain Management (15.02), Salinity (15.03), Air quality (15.04), Noise Abatement (15.05), Open Space (15.10), Energy efficiency (15.12);
- Economic Development (17) in relation to Mineral Resources (17.08);
- Business (17.02);
- Industry (17.03);

The objective of **Clause 14.01 Planning for Urban Settlement** relates to ensuring a sufficient supply of land is available for residential, commercial, industrial, recreational, institutional and other public uses. In planning for urban growth, planning authorities should encourage the consolidation of existing urban areas and especially higher density and mixed-use development near public transport routes. Mildura township has been experiencing increased pressure for residential and rural residential development on the fringe. In particular, there has been some inappropriate residential subdivision located within, and adjacent to, industrial areas in Mildura, Red Cliffs and Irymple.

The objective of **Clause 15.10 Open Space** is to assist the creation of a diverse and integrated network of public open space commensurate with the needs of urban communities and rural areas.

The objective of **Clause 17.02 Business** relates to encouraging developments which meet the community's needs for retail, entertainment, office and other commercial services and provide net community benefits in relation to accessibility, efficient infrastructure use and aggregation and sustainability of commercial facilities.

Clause 17.03 relates to **Industry** and is aimed at ensuring the availability of land for industry, and facilitating the sustainable development and operation of industry and research and development activity.





Clause 17.3 states:

Existing industrial areas that include key manufacturing or processing industries; a major clustering of allied industries; key industrial infrastructure should be protected and carefully planned where possible to facilitate further industrial development (Victoria Planning Provisions, State Planing Policy, Clause 17.03)

The importance of economic development is expressed in **Clause 17.08 Mineral Resources** which is aimed at protecting identified mineral resources, encouraging mineral exploration and mining in accordance with acceptable environmental standards and providing a consistent planning approval process.

The objective of **Clause 17.05-2** relates to agriculture and aims to ensure that the State's agricultural land is protected from the unplanned loss of high quality productive agricultural land due to permanent changes of land use. It enables the protection of productive farmland, which is of high quality and strategic significance in the local or regional context.

3.1.3 Other State Policies

Mallee Regional Catchment Strategy

The *Mallee Regional Catchment Strategy* (1997) provides an overarching strategic direction for natural resource management in Mallee region. The Strategy sets out a detailed description of the region, defines goals for the region, provides an assessment of priority land care and other issues to be addressed, and details programs recommended for implementation.

Specific goals and programs relating to salinity, biodiversity, water, soil, vegetation and regional development are included in this Strategy.

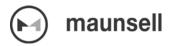
Linking Victoria – Victoria's Rural Arterial Road Network Strategy (VicRoads) Linking Victoria sets out a clear and community-orientated strategy for developing and managing these important roads. It responds to the needs of users and presents a range of affordable and properly targeted initiatives to provide Victoria with a quality road network, now and in the future.

Overall, the strategy highlights the need for an integrated approach for future transport/land use development. The inclusion in the industrial land use strategy of road network and land use considerations will improve the safety, efficiency and capacity of the road network and the industrial areas.

3.1.4 Regional and Local Planning Polices

There are a range of regional and local policies, strategies and reports that are relevant to the study area, which summarised as follows.





North West Freight Transport Strategy 2002

The *North West Freight Transport Strategy* (2000) is aimed at further developing the transport networks of north west of Victoria to support the efficient movement of freight to markets and producers.

The main aim of the strategy is to:

"...develop a freight transport strategy for the north west of the state having regard to the anticipated growth in the agricultural and mining sectors"

The strategy makes recommendations for all levels of Government and private sector stakeholders to consider in planning and developing the region's networks and land uses.

In relation to Mildura, and to this study, the strategy includes the following key actions:

- Government and Council directions for supporting expansion of the Merbein Intermodal Facility as a regional resource;
- Protecting options for an inter-modal facility at Red Cliffs, serving bulk loading of the Mineral Sands Plant Area/Thurla operation and containers supplementing the Merbein facility as a short term option or alternatively, reinstating a spur line between Red Cliffs and Thurla along the former Morkalla Line reservation to permit direct loading of mineral sands onto rail. This would need to be considered as part of a long-term option.
- Identification of Buronga-Mildura South Road (Benetook Avenue) as a major freight route through Mildura and as preferred National Highway link. This action states that Council is industrial land framework should consider Buronga-Mildura South Road as the axis of a freight-oriented industrial zone. The Planning Study should include an extension of Benetook Avenue (at least to B road standard) southwards from Calder Highway to reconnect with Sturt Highway via Sixteenth or Seventeenth Street and a review of duplication requirements along the Sturt Highway north of Dow Avenue.
- Relocating the Mildura Freight Gate facility from the Mildura waterfront. The new location would be preferably located east of Benetook Avenue and west of Cowra Avenue. This would be a short term or temporary option only as the area is already constrained by resident encroachment. The relocation of the Freight Gate from the Mildura waterfront will permit development of proposals focussing on redevelopment and rationalisation of existing rail facilities at the Mildura Station site. Council has recently appointed a consultant to prepare a master plan and Design Guidelines for the Mildura Marina, Riverfront and Railway Sub Precincts to provide a strategic framework to connect Mildura to the Murray River. The total area incorporates three sub-precincts, which include the Marina, Railway and Riverfront so it is imperative that this Freight Gate be relocated to achieve this vision.





- Opportunities to develop an intermodal facility at Red Cliffs could be integrated with potential mineral sands storage/loading facilities on an existing track east of Kauri Street. Development of this site would be the most cost effective means of providing additional container/dry bulk loading facility south of Mildura. Although land is available to expand this facility the area is compromised by encroachment of residential development and other sensitive land uses. A potential alternative or additional option for consideration is the re-establishment of a rail line from Red Cliffs to Thurla. This track could utilise the Morkalla Rail Line reservation with sand loading facilities adjacent to the Murray Basin Titanium Mineral Separation Plant at Thurla.
- Council should protect land for a consolidated petroleum storage and distribution centre, including suitable zoning and protection from future residential and commercial encroachment. Two site options have been identified including the current Caltex Siding which is probably not suitable, or co-location with the relocated Mildura Freight Gate. It will be important to ensure that these buffer areas are not compromised.
- Government act to retain ownership of the Red Cliffs-Morkalla Rail Reserve to protect the future option of extending direct rail access to Thurla and the Deakin Project area.
- Council considers the Red Cliffs inter-modal facility, including it in a industrial framework and MSS and protect access to track.
- Council and DSE to identify opportunities to support development of the Merbein inter-modal facility.
- Council includes a site for the relocated Mildura Freight Gate in the Framework Plan and moves to protect access to the rail reserve.
- Council decide on a preferred petroleum relocation site and factor into industrial land planning framework/MSS.

Council has advised that these and other recommendations of the *North West Freight Study* have not been adopted by Council. Indeed a key component of the current study includes the identification of preferred location for the Freight Gate Terminal.

It should be noted that the disused rail easement (former Morkalla line) extending from Red Cliffs to the Mineral Sands Plant Area/Thurla generally following the alignment of Red Cliffs Meringur Road, has now been protected as a rail easement. This will provide the opportunity for the reinstatement of a spur line between Red Cliffs and this area.

Regional Land Use Strategy: Volume 1 The Strategy 1999

The Regional Land Use Strategy is a jointly developed Regional Land Use Strategy developed between Mildura Rural City Council, Wentworth Shire Council and SunRISE21 for the combined region of interest that encompasses the total area administered by both Councils.





The strategy provides direction for future development that takes into account the Region's requirement for economic, social and environmental sustainability.

Objectives of the Regional Land Use Strategy were to:

- Develop a regional land use strategy upon which the future horticultural, agricultural, industrial and urban development of the area can be planned into the 21st century.
- Ensure issues critical to the sustainability of horticulture are fully incorporated in the strategy and that initiatives developed for areas outside of the irrigated agricultural zone do not compromise that sustainability.
- Ensure that the natural environment is protected.
- Develop strategies for meeting the range of residential needs for the Region.
- Facilitate a common planning strategy across State and local Government boundaries.

The strategy highlights that industrial and manufacturing uses have traditionally focused on packaging and processing of agricultural and horticultural produce. Recently, value-adding opportunities have been developed such as citrus juicing and wine production. These industries have been locating in horticultural areas away from towns.

In relation to industrial land use in Mildura, the strategy states:

- Mildura and Irymple industrial areas will only meet short-term needs and are unlikely to satisfy long-term needs or industries which may require separation from urban areas; and
- Industrial development should be focussed around the Airport Business Technology Park, and should be located in areas that are either serviced or can be serviced by reticulated water, sewerage and drainage and are in highly accessible areas on sealed roads.

Airport Business Technology Park Master Plan 2000

The Airport Business Technology Park Master Plan 2000 provides a strategic airport planning document that will enable the Council to develop the Airport Business Technology Park in a staged and logical manner for aviation, industrial and commercial purposes.

In relation to the current Industrial Strategy, the *Airport Business Technology Park Master Plan 2000* identifies a preferred master plan which includes areas for development specifically for a freight / cool store area, non aviation (freight), Aust-Link, kart club and non-aviation and aviation-related development.





Council is currently considering an amendment to the Mildura Planning Scheme that would rezone the airport from a Public Use Zone to a Special Use Zone. The amendment also modifies the Municipal Strategic Statement (MSS) and existing Airport Environs Overlay (AEO) and introduces a Design Development Overlay (DDO).

Overall the new planning framework and controls will allow the Airport Business Technology Park to develop as a precinct for economic development and employment as a regional passenger and freight centre, and a precinct for both aviation and non-aviation uses that include industrial and warehouse type developments.

The Mildura Multi-Modal Hub

The SEDB have developed a strategy that focuses on the development of a multimodal freight hub in Mildura to meet the needs of the 'Tri-State Region' – Victoria, South Australia and New South Wales.

The multi-modal freight hub would include freight and passenger with links to the road, rail and air transport to priority ports and the world to support future economic development.

The envisaged multi-modal freight hub would include:

- Information and reception centre;
- Bus, truck, van and car terminal;
- Air, road and rail interface;
- Transit, circulation and parking;
- Cold storage facilities;
- Customs and quarantine services;
- Hotel/motel, night shelters and food services;
- Garage, fuelling, repair, weighbridge and training facilities;
- Individual sidings for bulk users and common siding for retail users, goods yards;
- Inter-modal container and cargo exchange terminal;
- Specialist sprinter and double-decker train handling;
- Warehouse and transit sheds with cold storage; and
- Information, scheduling, ticketing and reception centre.





The strategy also envisages the Mildura Multi-Modal Hub to be a special economic zone that would be a duty free import/export zone. It would include manufacturing, assembly, trade and transfer operations, commercial /industrial park facilities, research, technological and logistics. The strategy also envisages a university institute of transport and logistics.

It is argued in the strategy that a multi-modal transportation hub would support primary industry and agri-enterprise and would further underpin the viable development of the emerging industry in the Murray Basin – Mineral Sands. In addition the strategy also proposes a new rail link from Mildura to Adelaide.

The Murray Basin Mineral Sands Infrastructure Planning Study 2002 Sinclair Knight Merz carried out a planning study in relation to the future of the Mineral Sands industry in the Murray Basin area.

The study found that there is likely to be sufficient potential in the Basin to support mining and processing for 30 or more years. However, this can only be achieved if there is adequate infrastructure to enable the Murray Basin to be developed to its full potential. Other findings included:

- Development potential there is an estimated potential quantity of around 60 million tonnes of coarse grained mineral sands in five main opportunity zones within the broader Murray Basin region with an estimated value of \$13 billion. Extensive deposits of fine-grained mineral sands could become a significant additional component of Murray Basin production in the longer term.
- Jobs the mineral sands industry could create around 450 direct, full-time jobs and 1100 indirect jobs in regional Australia.
- Infrastructure needs infrastructure deficiencies have been identified which require upgrading to support the development of mining, processing, bulk transport and export operations associated with the mineral sands industry in the Murray Basin
- The Murray Basin Mineral Sands area is broken up into five different zones that have potential product flows. Of relevance to the current study are:
 - Pooncarie located north-east of Mildura in south west New South Wales. Deposits include the Gingko and Cylinder deposits. Transport, water resource, energy and telecommunications infrastructure is required to service and assist these areas.
 - Swan Hill located south-east of Mildura in north central Victoria crossing the Murray River to include a section of south central New South Wales. Deposits include the Wemen deposit, Kulwin and Woornack-Rownack deposits. Transport, water resource, energy and telecommunications infrastructure is required to service and assist these areas.





- The study recommends upgrading the existing broad gauge lines and upgrading and gauge standardisation of the Mildura Line north of Lascelles with a new rail line connection to the Hopetoun grain line, and the Mildura-Ouyen-Pinnaroo line section to provide direct connection to Port Adelaide.
- Mildura is identified as prime location for a mineral separation plant.

Mildura Retail Strategy 2000

Essential Economics in conjunction with Research Planning and Design Group developed the *Mildura Retail Strategy* in 2000. Of relevance to this study is the identification of Fifteenth Street for development of peripheral sales and bulky goods. Council is currently updating this strategy.

Planning Study for A20 Sturt Highway Mildura 2002

VicRoads has carried out a planning study investigating the future development of the Sturt Highway through Mildura. The study investigated the movement of interstate traffic through Mildura and the impact of maintaining the Sturt Highway declaration on Deakin Avenue and Seventh Street or relocating to the Buronga-Mildura South Main Road (Benetook Avenue / Seventh Street).

The key findings of the study are outlined as follows:

- 2% of vehicles per day on Deakin Avenue were heavy vehicles (semi trailers and B Doubles) and 11% of those vehicles were found to travel through Mildura between 11pm and 6am.
- The majority of traffic using Deakin Avenue is locally generated.
- Deakin Avenue has sufficient capacity for up to eighty years based on 1% growth. The Sturt Highway is currently operating at level of Service B which is of a standard where stable operating traffic flow occurs, manoeuvring is only slightly restricted, and stopping delays are low.
- Noise level testing along Deakin Avenue indicates an ambient noise level typical of urban arterial roads.
- Based on the findings listed above, it was concluded by VicRoads that Deakin Avenue and Seventh Street be retained as the Sturt Highway at this stage.

It should be noted that since the release of this study VicRoads has announced the proposed implementation of a 50kph speed limit along a section of Deakin Avenue.

A key component of the current study includes the consideration of the land use impacts of maintaining Deakin Avenue and Seventh Street as the Sturt Highway.





Sunraysia Drainage Strategy 2002

The Sunraysia Drainage Task Force was formed by the Mildura Rural City Council in 2000. The Task Force appointed Sinclair Knight Merz to complete a Current Situation Report, develop an Urban Stormwater Quality Management Plan and deliver the *Sunraysia Drainage Strategy*.

Drainage in Sunraysia Region is managed by a number of different organisations therefore the drainage strategy has direct linkages to other regional and state strategies and plans.

The region suffers from inadequate drainage infrastructure. Approximately 40% of the area drains to the Murray River or the flood plain and the remainder to inland water bodies.

In relation to the specific locations covered by the Mildura Industrial Land Use Strategy, the Drainage Strategy states:

Mildura

- Actual development has occurred at twice the rate assumed in the Mildura Planning Scheme.
- Very little or no drainage infrastructure exists in the undeveloped parts of Mildura Irymple zoned for development.
- Contributions from developers have not been sufficient to fund offsite drainage works.
- A lack of overall planning has led to stand-alone systems with inadequate outfall capacity.
- With the amount of development in the irrigation areas there has been a doubleup with urban and irrigation drainage systems covering the same areas.
- There is potential to reduce pollutant runoffs using the wetlands etc as first-flush runoff.
- Conversion from irrigation to urban development may have an impact on flows to Lake Hawthorn.
- Future disposal options include the *Mildura Merbein Groundwater Interception* Scheme and Lake Hawthorn Drainage Disposal Scheme.
- Locations of areas of additional development have been prioritised taking into account several factors such as cost, locations of Stage 2 and 3, proximity to existing development, maintaining the greenbelt between Irymple and Mildura and providing a separation between Mildura and Nichols Point and the locations of future development beyond Stages 2 and 3.





- Priorities were assigned to areas of potential future development.
- There will be a take up of land currently used for irrigated agriculture for future development.
- Where the Mildura Urban area drains into the Murray River, the Task Force are looking at various options:
 - o Option A1 Combine selected outfalls to Wetland.
 - o Option A2 Redirect flows to Rifle Butts Swamp.
 - o Option A3 Re-use in nearby parks and gardens, woodlots.
- Looking to reduce the reliance on the river as an outfall for nutrient-rich and saline drainage water and stormwater.
- Potential for more drainage to enter Kings Billabong for rural residential development with tight controls.
- Rifle Butts Swamp could possibly receive a greater volume of urban stormwater, diverting it from the Murray.
- At Lake Hawthorn, urban development is likely to reduce run-off to this lake, but may need to be operated at a lower level to allow for storm water run-off capacity.

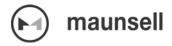
Irymple

- The availability of sewerage and stormwater drainage can have a significant influence on development costs. The landlock catchment around Irymple is an area that will need to be serviced by a pumped drainage system, which is particularly expensive.
- Three different scenarios have been developed for Irymple, they are:
 - o additional development in Irymple.
 - o development restricted to those areas currently zoned residential, commercial and industrial use in the MSS. An additional area of about 140 ha.
 - o as in above but with additional area indicated by Council as suitable for future expansion, a total of 220 ha.
- Drainage options for the Irymple area are:
 - o Option C1 Pumped discharge to Lake Ranfurly East and Lake Hawthorn.
 - o Option C2 Pumped discharge to Cardross Lakes.
 - o Option C3 Re-use in irrigation system.

Merbein

- There are significant salt loads and poor quality drainage waters discharging to the river.
- The flood plain is being degraded by drainage from various areas.





- The discharge of untreated urban stormwater from Merbein to the flood plain is causing degradation.
- Area has experienced very slow urban growth in recent years and it is understood there is sufficient residential land available through infilling to cater for development in the foreseeable future.
- There is some scope for minor expansion of the Merbein Irrigation District and it is assumed that it will be taken up within the next 10 years.
- A drainage option with respect to the Merbein District is to: redirect drainage shafts catchment flows to SRWA Basin 1 (Option G1).
- There is a need to reduce the reliance on the river as an outfall for nutrient rich and saline drainage water and stormwater.

Red Cliffs

- Reduction in irrigation drainage flows may threaten the long-term sustainability of Cardross Lakes.
- Basin 12 could be ineffective in removing nutrients from drainage water.
- Drainage shafts are possibly still being used for drainage disposal.
- The area has experienced very slow urban growth in recent years and it is understood there is sufficient residential land available through infilling to cater for development in the foreseeable future.
- It is understood there is little scope for expansion of the irrigated area of this precinct.
- There is potential for current drainage infrastructure to be used to alleviate surface flooding.
- Excess capacity could be used for drainage from new developments.

Mildura Riverfront Master Plan

As mentioned earlier, Council has recently commissioned the preparation of Master Plan and Design Guidelines for the Mildura Marina, Riverfront and Railway Sub-Precinct to provide a strategic framework to connect Mildura to the Murray River.

The master plan study area encompasses three main sub-precincts. These are located on the Murray River side (north east) of Seventh Street from the lock to the marina development site immediately east of the Sturt Highway.

This impetus for developing the master plan has reinforced the importance of relocating the Mildura Freight Gate from the town centre, to a more appropriate land use environment which has good buffering and potential for expansion over time.









This section provides an overview of the industrial precincts in regard to land use and compatibility, access, zoning and overlays, consistency of planning controls; infrastructure provision and environmental constraints.

4.1 Mildura

4.1.1 Physical Location

The Mildura Industrial area consists of two areas (Refer Figure 2). Area 1 is located between San Mateo Avenue, Cureton Avenue, Benetook Avenue (Buronga – Mildura South Road) and Eleventh Street. Area 2 is located between Eleventh Street, Benetook Avenue (Buronga – Mildura South Road), Fourteenth Street and Cowra Avenue.

4.1.2 Land Use and Land Use Compatibility

The land uses located in Area 1 and Area 2 consist of a mixture of light and heavy manufacturing, agricultural sales, warehousing, storage and distribution and wine and fruit associated production. Both Industrial Area 1 and Area 2 have adjacent residential land use and rural uses such as grape and fruit growing and general farming.

The types of companies / industries located in the Mildura Industrial area include:

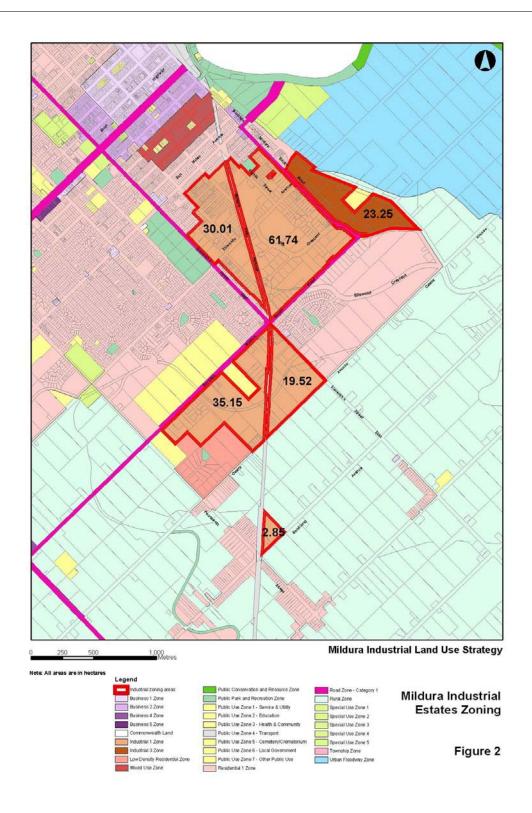
- J.C.L.A. Steel Framing;
- One Steel Metal and Fabricated Steels;
- Mildura Welding Sales and Irrigation (manufactures);
- Mel Schmidt Panel Works;
- Transcool;
- Visy Board;
- Rosco's Machinery and Mechanical Services;
- Kitchen Creations;
- John Judd Industries (Panel Beating and Abrasive Blasting); and
- Haeuslers Farm Supplies.

4.1.3 Access

Both Industrial Area 1 and 2 have good road access from Eleventh Street and Benetook Avenue (Buronga – Mildura South Road). The Mildura – Yelta Railway Line dissects through both Area 1 and 2 and there is a siding into Area 2.











4.1.4 Zoning and Overlays

Pursuant to the Mildura Planning Scheme, Figure 2 shows the land use zoning in Mildura Industrial Area 1 and 2. Industrial Area 1 is predominantly zoned Industrial 1 pursuant to Mildura Planning Scheme. There is a smaller area of land located east of Benetook Avenue (Buronga – Mildura South Road) that is zoned Industrial 3 Zone, a portion of this area has been recently sub-divided and is known as the Dolphin Estate.

As articulated in the Mildura Planning Scheme, Figure 3 shows the overlays that apply to Mildura Industrial Area 1 and 2. The *Design Development Overlay 4* – *Industrial Areas* covers both sites. The *Land Subject to Inundation Overlay 1* and the *Environmental Significance Overlay 1* – *Watercourse and Wetlands Protection Area,* covers a small portion of the Industrial Area 1.

Consistency of Planning Controls

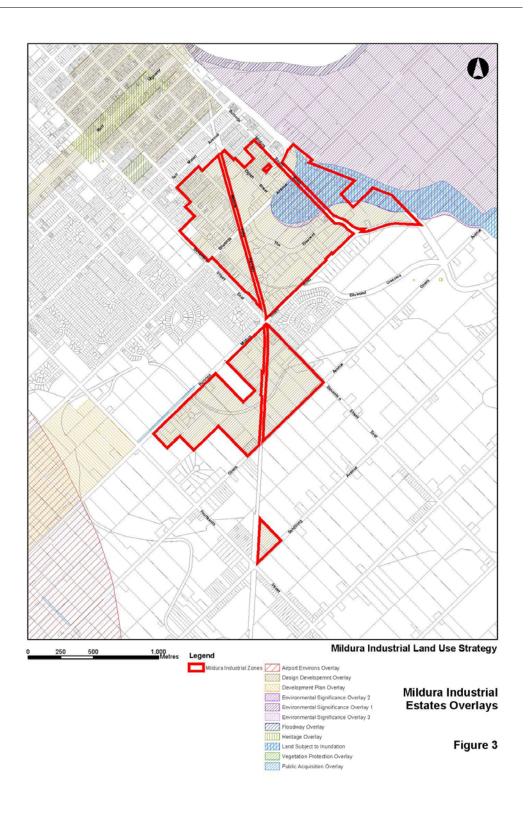
There are some clear inconsistencies with some planning zones within the Mildura precinct which are described below:

- The proximity of Residential 1 zone to both the Industrial 1 zone within Area 1 and 2 already significantly compromises the development opportunity of the Industrial 1 zone already. Some existing uses such as One Steel Metal and Fabricated which requires a buffer distance of 500 metres are no longer able to achieve their respective buffer distances to sensitive land uses.
- The proposed rezoning application to allow Stage 3 residential development of land in the block bounded by Etiwanda Avenue, Fourteenth Street, Benetook Avenue and Fifteenth Street is not consistent with orderly and proper planning and will further compromise the role and function of industrial development in Area 2 as it will introduce sensitive land uses to the area. It is recommended that Council not support this rezoning application.
- A key issue raised in the focus group sessions relates to investigating the opportunity of introducing a Business 4 zone on the northern side of Benetook Avenue between Fourteenth and Fifteenth Streets to promote peripheral sales and associated commercial uses. These uses require a high level of exposure which will increase over time if Benetook Avenue becomes the preferred route for Sturt Highway. VicRoads has indicated that Benetook Avenue is wide enough to accommodate service lanes with acquisition of some existing houses on the northern side of Benetook Avenue.

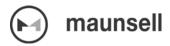
Consideration also needs to be given to possible rezoning of the properties fronting the southern side of Benetook Avenue between Fourteenth and Fifteenth Streets to further strengthen the opportunity for peripheral sales and associated commercial uses.











 Given the proximity of residential development and other sensitive land uses to existing Industrial Precincts Areas 1 and 2, there is limited opportunity for consideration of further industrial development through rezoning.

As identified in Section 4.1.6, the Dolfin Estate in Area 2 is the most recent released industrial land. This area is generally well-buffered to sensitive land uses and therefore land take up and development has been relatively successful.

It is not recommended that any areas abutting Area 1 and Area 2 be identified for further industrial development.

The key advantages of clustering these type of uses along the northern and southern side of Benetook Avenue includes utilisation of existing infrastructure, development of a clear strategic role for this section of Benetook Avenue, preventing further fragmentation of the non-urban corridor between Mildura and Irymple and being consistent with orderly and proper planning.

 There is a current planning permit application which will allow for additional residential development in the low density residential zone Area 2 west of the existing low density residential subdivision. If approved this additional residential development will further reduce the role and function of industrial precinct by allowing sensitive land uses to locate beside an Industrial 1 zone.

A decision may need to be made regarding the rationalisation of this undeveloped low density residential land.

The isolated pockets of residential land within Area 2 as shown on Figures 2 and 3 are not consistent with the Industrial 1 zoning.

4.1.5 Infrastructure (Servicing)

The following comments are related to infrastructure provision for Area 1 and Area 2:

- PowerCor has indicated that there are no power constraints.
- Origin Energy has indicated that gas is readily available but is subject to a user pays systems.
- Some drainage constraints issues exist in proximity to the rail line precinct.
- Council's Traffic Engineers indicated that there is a need for Benetook Avenue to be classified as the preferred Sturt Highway. This will require investigation opportunities for widening of the road reserve if commercial and peripheral sales uses are to be encouraged along Benetook Avenue.





4.1.6 Land Take Up Rates (Vacant Lots)

As illustrated in Figure 4, there is a very high level of occupancy in both Area 1 and Area 2. The Dolfin Industrial Estate in the Area 1 has some vacant sites due to its recent development.

Area 1 has approximately 3.36 hectares of vacant industrial land which is currently occupied by grapevines and 3.27 hectares of unsubdivided vacant industrial land. The remaining 9.93 hectares of industrial land is already subdivided.

Area 2 has approximately 10.1 hectares of vacant industrial land which is currently occupied by grapevines. However, the future industrial development of this land is constrained by existing residential development and potential future residential development.

Area 2 also has approximately 1.61 hectares of vacant industrial land which is already subdivided.

West of Area 2 abutting the industrial precinct is a vacant parcel of land that may be suitable for light industrial development or peripheral sales/commercial uses.

4.1.7 Environmental

As mentioned earlier, a small portion of Area 1 is affected by the *Environmental Significance Overlay* – *Schedule 1 to the Environmental Significance Overlay*. The portion of Area 1 affected by this overlay means that future development site should be responsive to avoid any detrimental impacts on the Murray River.





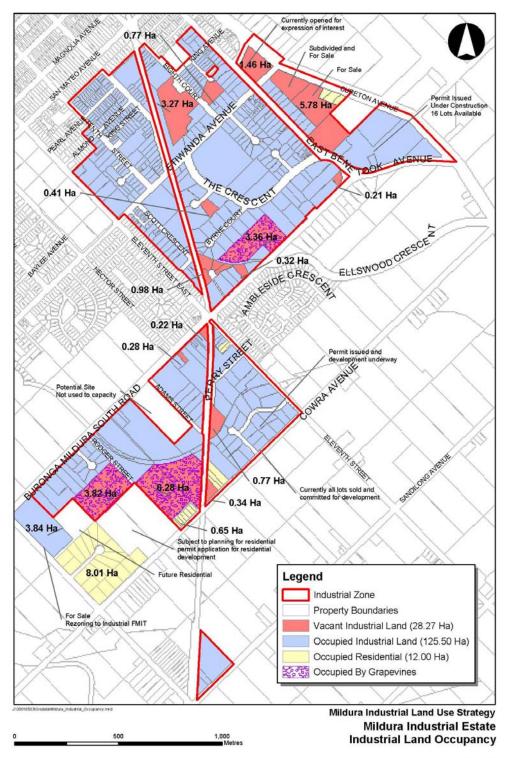


Figure 4





4.2 Irymple

4.2.1 Physical Location

The Irymple industrial area is located off the Calder Highway between Irymple Avenue, Karadoc Avenue, and Sixteenth Street (refer Figure 5). It should be noted that this subdivision was initiated by Council and has experienced development constraints relating to provision of drainage. This is discussed in more detail in the infrastructure section.

4.2.2 Land Use and Land Use Compatibility

The land uses located in the Irymple Industrial area consist of a mixture of light and heavy manufacturing, agricultural sales, warehousing, storage and distribution and wine and fruit associated production.

The types of companies / industries located in the Irymple Industrial area include:

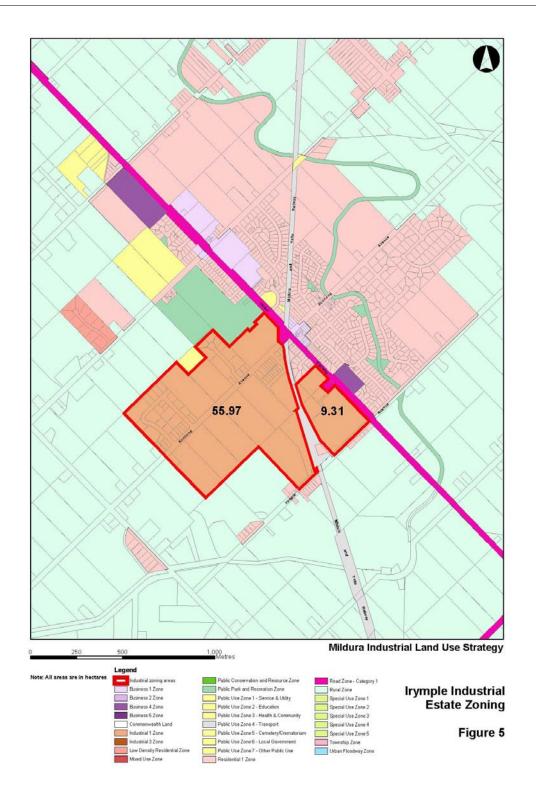
- Sunbeam fruit receiving and processing;
- Sunraysia Plastic and Paper Recycling;
- AndPak Industries;
- A & G Engineering and Steel Fabricators;
- Mildura Powder Coating;
- Giofrelle Refrigerated Storage, Transport and Freight; and
- MAW Crash Repairs.

The Irymple industrial area has both adjacent residential and rural land uses such as grape and fruit growing and general farming. Some residential land use is located both within the industrial estate and abutting industry. Surrounding pockets of residential land use, including small lot (from small lot excision) in a rural zone, constrain future and further industrial development in Irymple.

It should be noted that the land within Irymple industrial estate has been identified by a number of stakeholders as high quality agricultural land for the wine industry. Therefore careful consideration will need to be given to protection of this important agricultural reserve at the expense of further industrial development.













Koorlong Avenue

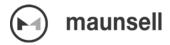


Supreme Grape Packers



Phil Carters Service Centre





4.2.3 Road and Rail Access

Irymple Industrial area has reasonable road access from the Calder Highway. However, B-Doubles find it difficult to turn right into Fifteenth Street from Koorlang Avenue. The dimension and layout of this intersection and railway crossing is not appropriate for B-Doubles.

The Mildura – Yelta Rail Line runs through the eastern corner of the industrial area.

4.2.4 Zoning and Overlays

Pursuant to the Mildura Planning Scheme, Figure 5 shows the land use zoning in the Irymple Industrial area. The industrial area is zoned Industrial 1. There is a smaller area of land located west of Koorlong Avenue that is zoned Public Use Zone 6 – Local Government and the Mildura – Yelta Railway Line is zoned Public Use 4 Zone.

As articulated in the Mildura Planning Scheme, Figure 6 shows the overlays that apply to the Irymple industrial area. *The Design Development Overlay 4 – Industrial Areas* covers both sites. The *Airport Environs Overlay* also covers all land.

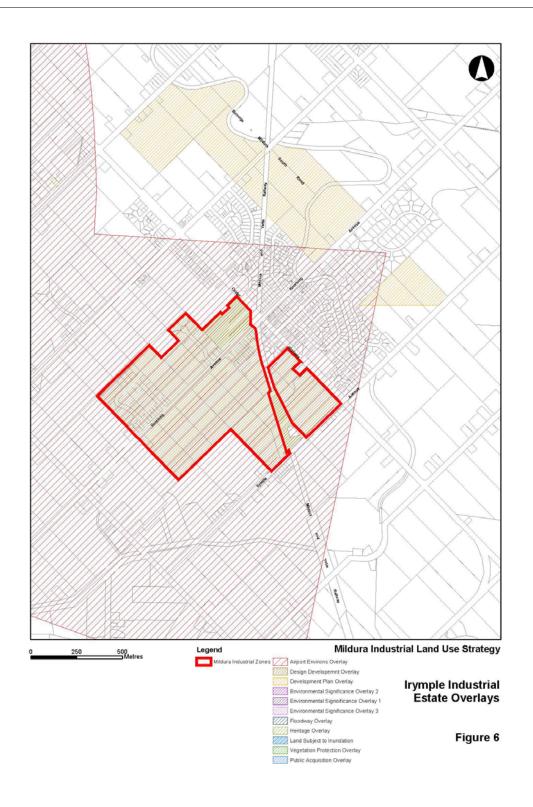
Consistency of Planning Controls

There are some inconsistencies with some of the planning zones within the study area which are described below:

- The Residential 1 zone abutting the industrial precinct to the south is not consistent with the Industrial 1 zoning. However, it is noted that Sunbeam Fruit receiving and processing plant is located on the Industrial 1 zoned land occupying frontage to Irymple Avenue west of the railway line and has generous setbacks within their land which reduce potential amenity impacts on neighbouring residential properties.
- The existing residential subdivision comprising approximately fifteen occupied residential lots west of the railway line and south of Koorlong Avenue is not consistent with Industrial 1 zone and compromises its role and function, therefore impeding potential future industrial development.
- A key issue for consideration relates to small lot excision within the rural zone. These small lot excisions often introduce sensitive land uses to areas which may compromise the role and function of existing zones which in this instance the role of Industrial 1 zones has been compromised. The issue of small lot excision within the Rural Zone is currently being considered as part of the Rural Zone Review being undertaken by DSE. It is recommended that Council continue to participate in this review process and investigate opportunity to prohibit small lot excisions in rural zone in proximity to industrial precincts.
- It is recommended that the planning scheme amendment rescind Council's recent Residential 1 rezoning.











4.2.5 Infrastructure (Servicing)

The following comments are related to infrastructure provisions:

- Gas is in readily available;
- Drainage is a major constraint; and major improvements are required;
- There are no power constraints; and
- Re-use of grey water and industry processed water to be encouraged.

4.2.6 Land Take Up Rates (Vacant Lots)

Irymple industrial area has low vacancy rates and has only two new industrial sites under construction.

Preliminary investigations have indicated that land take up at lrymple has been relatively slow.

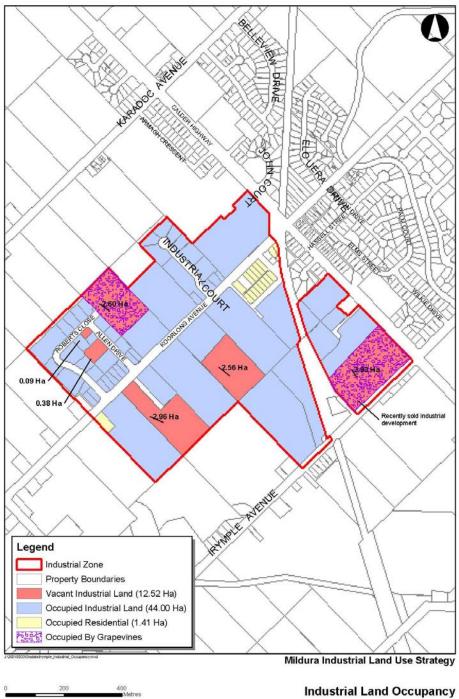
As illustrated in Figure 7, Irymple has 12.52 hectares of vacant industrial land which indicates that 28% of the site is vacant. It should be noted that these figures include 3.93 hectares of vacant industrial land occupied by grapevines which has recently been sold for industrial development.

4.2.7 Other (Environmental)

There are no environmental constraints affecting the site.







Industrial Land Occupancy

Figure 7





4.3 Merbein

4.3.1 Physical Location

The Merbein industrial area consists of four separate areas that are dissected by the Mildura to Yelta Railway Line. They are located off the Calder Highway, between Channel Road, Game Street, Mead Street and Surgey Street

4.3.2 Land Use and Land Use Compatibility

The land uses located in the Merbein Industrial area are mostly freight and logistics and warehousing, storage and distribution uses.

Merbein is a registered inland port with opportunity for further expansion. As outlined above, Merbein is a registered inland port with 24 hours access within the rail easement, providing value adding services in terms of exporting and importing to the following industries:

- Fosters Pty Ltd;
- Merbein Saw Mills;
- Mildura Fruit Company;
- NCF Farms;
- Roberts Estate; and
- Irymple Citrus Products.

The types of companies/industries located in the Merbein industrial area include:

- Sunbeam fruit receiving and processing;
- Wakefield Iron Horse Transport and Freight;
- Irymple Citrus Producers;
- Logistics Freight Storers;
- Cuppers Transport;
- Game Street Storage; and
- Irymple Packing.







Cuppers Transport



Residences Game Street



Irymple Packaging

The Merbein industrial area has residential land use located immediately adjacent to it, and to the north. There is also a pocket of residential development in the south western side of the industrial area resulting from rural small lot excisions. Other land uses in the vicinity of the Merbein industrial area include rural uses such as grape and fruit growing and general farming. There are isolated pockets of residential development surrounding the Merbein industrial area that will require buffering if Merbein is to be developed and promoted as a regional intermodal facility.



It should be noted that the land both surrounding Merbein Industrial estate has been identified by a number of stakeholders as high quality agricultural land for wine industry. Therefore careful consideration will need to be given to protection of this important agricultural resource, at the expense of further industrial development.

4.3.3 Road and Rail Access

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The Merbein industrial area has very good road access from the Calder Highway. However, the roads require general improvements and routes need to be prioritised for heavy vehicles.

The Mildura – Yelta Rail Line runs through the entire industrial area. The relocation of the railway line needs to be addressed in the broader context of the transcontinental railway line. Allowance should be made for the future use of Abbotsford Bridge to the north west of Merbein to access NSW markets and the transcontinental railway line.

In addition, with potential growth and development with the western side of Sunraysia the need for a Western Ring Road (Meredian Road) will become important to provide connection to Calder Highway, Carwarp/Thurla southern area to Sturt Highway and to the Abbotsford Bridge (Yelta) connection to New South Wales.

4.3.4 Zoning and Overlays

Pursuant to the Mildura Planning Scheme, Figure 8 shows the land use zoning in the Merbein Industrial area. The industrial areas are zoned Industrial 1 Zone. The Mildura – Yelta Railway Line is zoned Public Use 4 Zone and there are portions of land zoned Public Use Zone 1 – Service and Utility and Public Use Zone 2 – Eduction.

As articulated in the Mildura Planning Scheme, Figure 9 shows the overlays that apply to the Merbein industrial area. *The Design Development Overlay 4 – Industrial Areas* and the *Airport Environs Overlay* also covers all land.

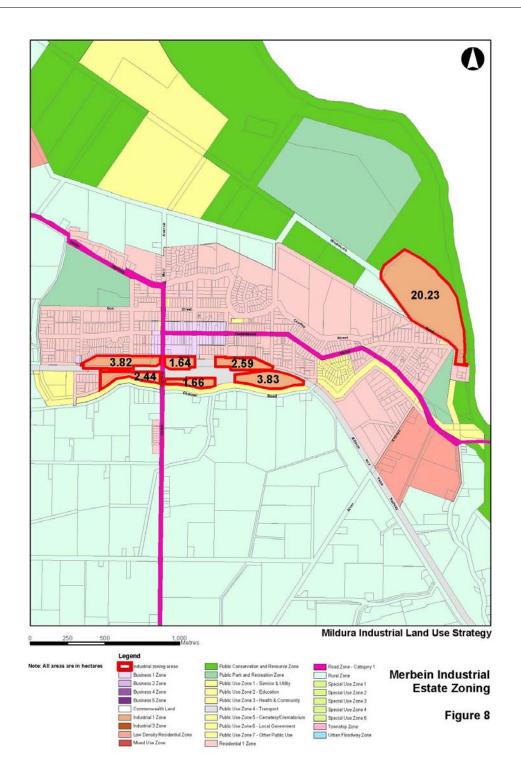
Industrial Area 2 is zoned Industrial 1 with a small portion of land located in the middle of the area zoned Public Use 6 – Local Government (old Council depot) pursuant to the Mildura Planning Scheme.

The Mildura – Yelta Railway Line that passes through Industrial Areas 1 and 2 is zoned Public Use 4 Zone – Transport, pursuant to Mildura Planning Scheme.

maunsell

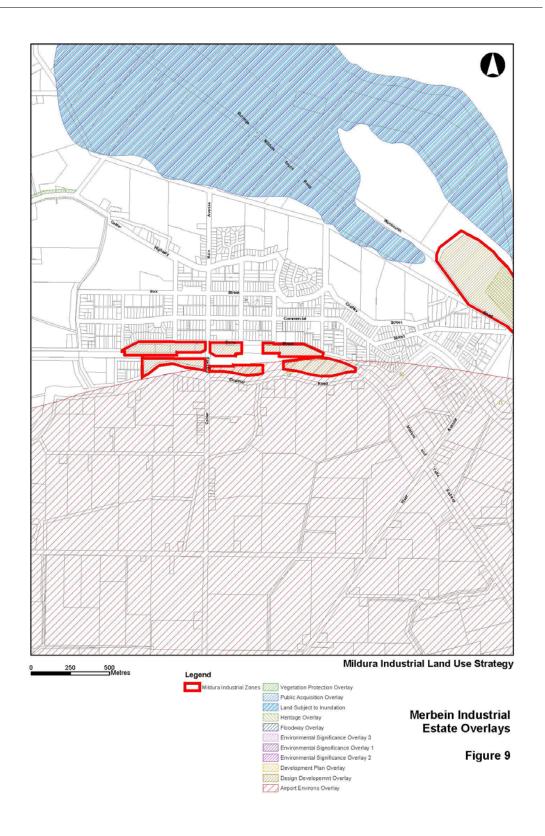




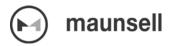












Consistency of Planning Controls

There are some inconsistencies with some of the planning zones within the study area which are described below:

- The residential zoned land located on the northern side of Game Street and west of Wakefield Transport is not consistent with the Industrial 1 zone. The proximity of the residential zone severely compromises the development opportunity of the Industrial 1 zone. Already some uses are no longer able to achieve their respective buffer distances to sensitive land uses. For example, Wakefield Transport operation was initially 24 hours 7 days a week but has been restricted due to rural residential development in the rural zone south of Channel Road. Representatives from Wakefield Transport have advised that their coolroom operations suffer the most from residential encroachment.
- A key issue for consideration relates to small lot excision within the rural zone. These small lot excisions often introduce sensitive land uses to areas which may compromise the role and function of existing zones which in this instance the role of the industrial 1 zone has been compromised. The issue of small lot excision within the Rural Zone is currently being considered as part of the Rural Zone Review being undertaken by DSE. It recommended that Council continue to participate in this review process and investigate opportunity to prohibit small lot excisions in rural zone proximity to industrial precincts.
- It is recommended that industrial development in Merbein be consolidated and contained within existing industrial precinct.

4.3.5 Infrastructure (Servicing)

The following comments are related to infrastructure provision:

- Origin Energy has indicated that gas is readily available but no requests for servicing have been received.
- Powercor indicated there are no power constraints.
- Major drainage works are required.
- VicRoads and Council's traffic engineers agree that there is good road and rail access (all rail crossings will be signified over the next 2-3 years).

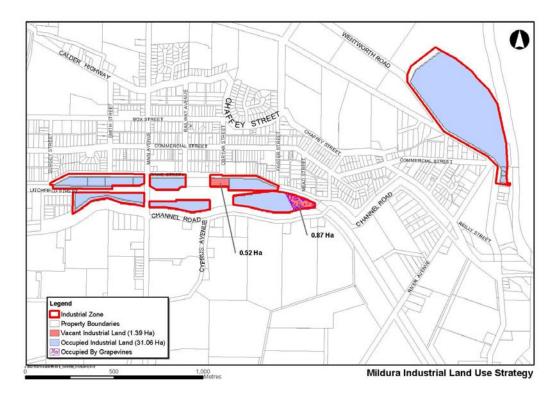
4.3.6 Land Take Up Rates (Vacant Lots)

Although there is warehouse type building stock the majority of it is old and run down and remains vacant. There is significant opportunity for redevelopment. Wakefield Transport has the opportunity to lease an additional 30 hectares from VicTrack to expand the intermodal facilities. However, it is anticipated that full development of current opportunities will be exhausted in five years.

As illustrated in Figure 10 there is only 1.3 hectares of vacant industrial zoned land.







Merbein Industrial Estate Industrial Land Occupancy

Figure 10

4.3.7 Other (Environmental etc)

There appear to be no environmental constraints in the Merbein industrial precinct with the exception of the proximity of residential development.

4.4 Red Cliffs

4.4.1 Physical Location

The Red Cliffs industrial area is located west of the Calder Highway approximately between Westcliffs Avenue and Nardoo Street. The Mildura to Yelta Railway Line runs to the east of the industrial area. A significant portion of this industrial estate is of old, low quality building stock which is poorly located between pockets of residential development.

4.4.2 Land Use and Land Use Compatibility

The land uses located in the Red Cliffs Industrial precinct are a mix of light and heavy industrial uses.





The types of companies/industries located in the Merbein industrial area include:

- Red Cliffs Minimix Concrete Batching;
- Wakefield Iron Horse Transport and Freight;
- Red Cliffs Engineering;
- Aurora Packaging;
- Mildura Rural City Council Depot;
- Sunraysia Rural Water Authority;
- H. & J. Hunt & Son Water Tanks;
- Crash Repairs;
- R & G Batteries;
- Mallee Electrics; and
- Vine Leaf Engineering Steelyard Wine production equipment production.



Mildura Former Fruit Packaging (currently purchased by Wakefield Transport)





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ACTIVITY LOCATION AND DEVELOPMENT PLANNING



Laurel Street-Residences



Wakefield Transport

The Red Cliff industrial area has pockets of residential zoned and residential land use within the industrial area. There is also residential land use located on industrial zoned land. The proximity of existing residential development already compromises the role of the industrial estate and will severely constrain any further industrial development particularly the development of a Freight Gate terminal.

It should be noted that the land both within and surrounding Red Cliffs Industrial Estate has been identified by a number of stakeholders as high quality agricultural land for the wine industry. Therefore, careful consideration will need to be given to protection of this important agricultural resource.

4.4.3 Road and Rail Access

The Red Cliff industrial area has poor road access from the Calder Highway via local roads through residential areas. The Mildura – Yelta Rail Line runs to the east of the industrial area and there is a large rail siding into the industrial area.

Although the North West Freight Transport Strategy identifies Red Cliffs as a possible location for an intermodal facility, there are a number of limitations which suggest this may not be an appropriate location, such as proximity of residential land and shortage of suitable land.

Mildura Industrial Land Use Strategy





4.4.4 Zoning and Overlays

Pursuant to the Mildura Planning Scheme, Figure 11 shows the land use zoning in the Red Cliffs Industrial area. The industrial areas are zoned Industrial 1 Zone. The Mildura – Yelta Railway Line is zoned Public Use 4 Zone and there are portions of land zoned Public Use Zone 1 – Service and Utility and Public use Zone 6 – Local Government.

As articulated in the Mildura Planning Scheme, Figure 12 shows the overlays that apply to the Red Cliffs industrial area. *The Design Development Overlay 4 – Industrial Areas* is the only overlay applying to this area.

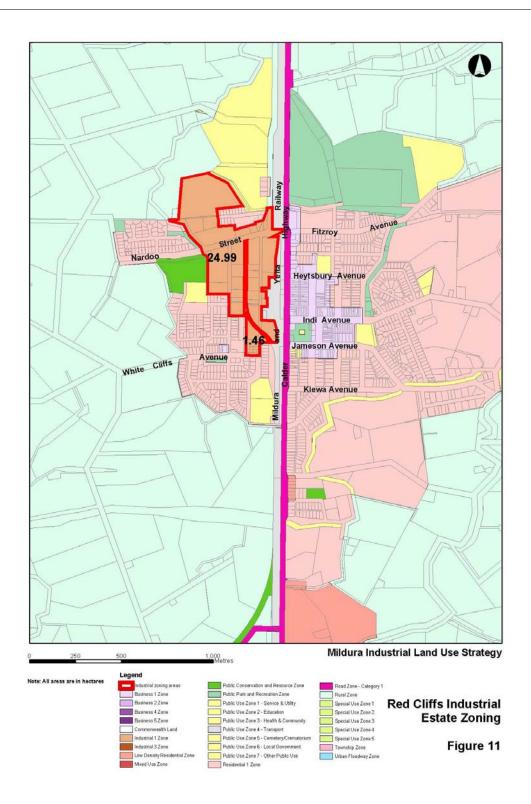
Consistency of Planning Controls

There are some inconsistencies with some of the planning zones within the study area which are described below:

- There is no provision for a buffer between the existing and potential Industrial 1 land uses and this sensitive land use. The proximity to the school which is zoned Business 4 to Red Cliffs Industrial precinct compromises existing and future industrial uses including possible relocation of the Freight Gate from Mildura as it would not be possible to attract industrial uses that require 24 hour operation and access.
- The residential zone abutting the Red Cliffs industrial precinct to the north, east, west and south severely compromises the development opportunity of the Industrial 1 zone. There is limited opportunity within the Red Cliffs precinct to attract industries that require 24 hour operation and heavy vehicle access as all traffic would need to be through residential precincts.
- A key issue for consideration relates to small lot excision within the Rural Zone, as previously mentioned. These small lot excisions often introduce sensitive land uses to areas which may compromise the role and function of surrounding zones such as industrial 1. As previously mentioned, consideration should be given to this issue through the Rural Zones Review and investigate opportunity to prohibit small lot excision in rural zone in proximity to industrial precincts.
- It is recommended that as part of the planning scheme amendment there needs to be some rationalisation of the Industrial Zoning to Industrial 3 to accurately reflect both existing and future industrial development patterns.

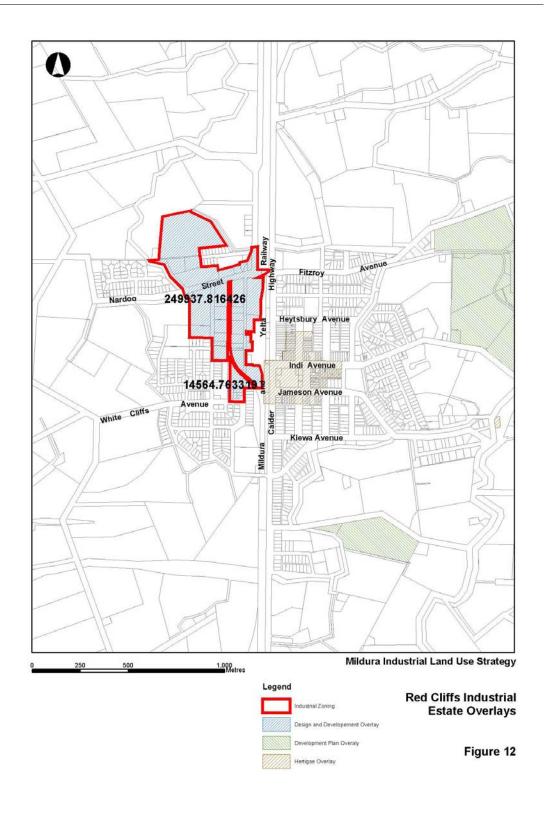
















4.4.5 Infrastructure (Servicing)

The following comments are related to infrastructure provision:

- Origin Energy has indicated that gas is readily available.
- Powercor has indicated that power is available but upgrades would be subject to additional funding through user pay system.
- Telstra has indicated that telecommunications is readily available.
- The existing sewerage farm is inadequate to copy with any additional industry. It can accommodate additional residential growth, however, should a major trade waste industry occur in the precinct, the system would be overloaded.

4.4.6 Land Take Up Rates (Vacant Lots)

There are a number of vacant sites in the Red Cliffs industrial area. As illustrated in Figure 13 there is approximately 6.57 hectares of vacant industrial land currently occupied by grapevines, however, this land is constrained by neighbouring sensitive land uses such as residential and may be more suitable to attracting light industrial uses.

In addition, there is 2.4 hectares of vacant industrial zoned land, however, the future industrial development of all three land parcels is compromised by the proximity of residential development. The land parcels would be suitable to more light industries uses which do not adversely affect the amenity of surrounding sensitive land uses.

4.4.7 Other (Environmental)

There appears to be no environmental constraints within the Red Cliffs Industrial precinct. However, consideration should be given to protecting the environmental values of land within Public Conservation and Resources Zone immediately west of the Red Cliffs Industrial precinct, south of Nardoo Street.





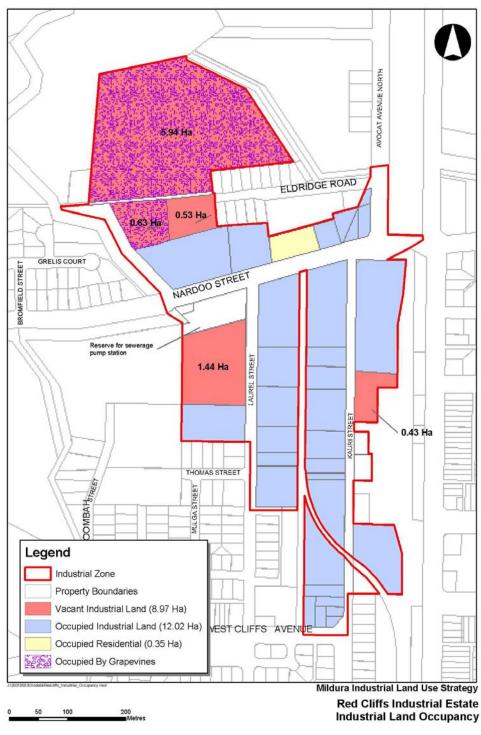


Figure 13





4.5 Ouyen

4.5.1 Physical Location

Ouyen is located south of Mildura and is situated on the Calder Highway.

4.5.2 Land Use and Land Use Compatibility

The land uses located in Ouyen are a mix of rural industry and commercial uses. The types of companies/industries located in the Ouyen township zone include:

- Plumbing supplies;
- Water authority depot;
- Saleyards;
- Grain supplies;
- Rural depot;
- Rural Machinery Sales;
- Petrol depot;
- Form supplies;
- Works depot; and
- Town Water Storage

In addition approximately 2-3 kilometres north of the Ouyen township, Grain Co has stockpiles for their operations.

4.5.3 Road or Rail Access

Ouyen Township is well serviced by both road and rail.

4.5.4 Zoning and Overlays

Pursuant to Mildura Planning Scheme, Figure 14 shows the land use zoning in the Ouyen area. There are no industrial 1 Zones within the Ouyen Township.

The majority of the Ouyen Township is within the Township zone. The area surrounding the township zone is within a rural zone.





4 Audit of Industrial Areas

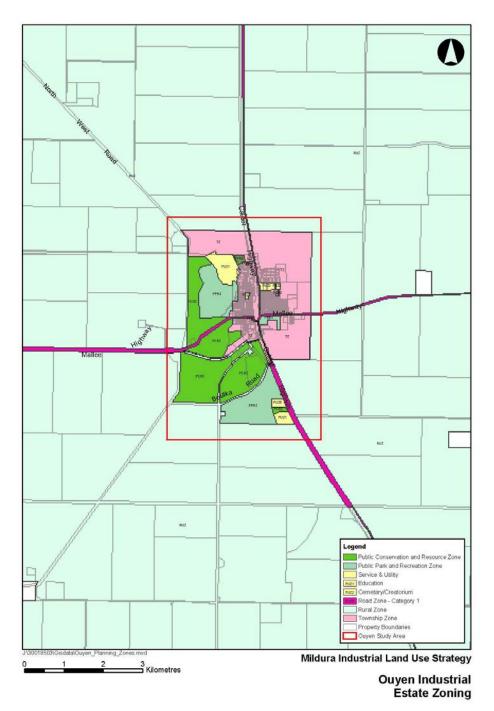


Figure 14





4 Audit of Industrial Areas

4.5.5 Infrastructure (Servicing)

The following comments are related to infrastructure provision:

- Origin Energy has indicated that gas supply is not currently available, and is subject to local demand.
- Powercor indicated that radial power supply into Ouyen is poor but if there is a sudden increase in local demand, upgrades to the line would be able to meet expectations.
- The Ouyen water supply finishes at the boundary of residential area.
- Stormwater is fully contained on site.
- Telstra advised that there are existing telecommunications to the pre unit.

4.5.6 Land Take Up Dates (Vacant lots)

Given there is no specific industrial zoning, in Ouyen, consideration could be given to formalising the area to the northern side of town which presently accommodates relevant activities with an allowance for future servicing activities.

Consistency of Planning Controls

It is not recommended at this stage any changes to the existing zoning configuration for Ouyen. However, there are some modifications to the Structure Plan for Ouyen (refer Section 9) which provide future opportunity for industrial development.

4.6 Zoning and Overlay

The following is a summary of some of the zones and overlays that are relevant to the Industrial areas across Mildura:

- The **IN1Z** is the main zone to be applied in industrial areas and provides for manufacturing industry, storage and distribution of goods and associated uses in a manner, which does not affect the safety and amenity of local communities.
- The IN3Z is designed to be applied as both a buffer between the industrial 1 or 2 zones and residential areas, and to industrial areas where special consideration is required because of industrial traffic using residential roads, unusual noise or other emissions impacts or to avoid inter-industry conflict.
- The PUZ1, PUZ2, PUZ4 and PUZ6 zones allow for the use of public land for service and utility, public education, transport, local government and other public uses.
- The DDO4 applies to industrial areas that are located off Benetook Avenue and / or adjacent to residential zoned land and provides setback, landscape, design and height parameters for industrial developments.





4 Audit of Industrial Areas

- The LSIO ensures that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, is compatible with the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity.
- The ESO1 Watercourse Protection statement of significance highlights that the Murray River is an important water supply, tourism, recreational, landscape, cultural and environmental asset. It is considered important to maintain and improve Murray River environment and ensure that the intensity of development on riparian and riverfront land does not result in increased flood hazards, conflicts among recreational uses, boating congestion, loss of riparian vegetation and wildlife habitat, visual impacts and/or declining water quality.

AEO – Seeks to ensure that land use and development are compatible with the operation of airports in accordance with the appropriate airport strategy or master plan and with safe air navigation for aircraft approaching and departing the airfield. To assist in shielding people from the impact of aircraft noise, the overlay requires appropriate noise attenuation measures in new dwellings and other noise sensitive buildings.









5.1 Economic Context

This section of the paper provides an overview of Mildura its economic context as well as its economic outlook, economic activity structure, employment features, property trends, industrial types, industrial land supply and relevant infrastructure characteristics.

Location

Located on the Murray River in the most north-western part of Victoria, Mildura is relatively isolated from major centres of similar size. The Rural City of Mildura encompasses both extensive areas of rural land and a significant urban area with a total of 22,214 square kilometres. Apart from Mildura the other urban concentrations include Red Cliffs, Merbein and Ouyen. In terms of regional urban activities, the centre of Wentworth over the Murray River in New South Wales should also be taken into account as complimenting Mildura's economic activities.

Approximately 560 kilometres from Melbourne, currently Mildura is 450 kilometres from Adelaide and 1100 kilometres from Sydney making it a tri-state regional economic hub. The road routes to Melbourne include the Calder Highway and a combination of the Western, Sunraysia and Calder Highways, whilst the Sturt Highway leads to Adelaide. Mildura is linked by rail to the Ports of Melbourne, Geelong and Portland, and acts as a major Freight Gate for freight Australia's rail freight business

Population

At the time of the 2001 Population Census , Mildura Rural City had a resident population of 49,283 persons. Addition of the population of Wentworth of 7,078 brings the regional total to 56,361 persons.

The Department of Infrastructure in year 2000 predicted a population of 57,126 persons for Mildura in 2021, a 16% increase over 20 years. Consequently Mildura has a growing scale of local population which in itself generates service industry growth.

Selected characteristics of the City's population structure in 2001 include a median age of 35 years, a median weekly income of \$333, 10.3% of the population born overseas and a mean household size of 2.6 persons,

Economic Activity Structure

Agriculture dominates Mildura's economic activity structure, representing 19% of the value of production and with the main elements being grape, citrus fruit and wheat production. Added to these are a range of vegetables, avocados, asparagus, sheep for wool and meat and beef production.

Of the manufacturing activities, food processing leads with a range of service-related activities and more recently, mineral sands processing. Tourism is prominent as are retail and transport operations.



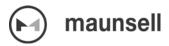


Table 2.1 contains the value of output generated by various activities in the Mildura region for the year 1998 as prepared by the Department of Local Government.

Pertinent features include the following:

- Agriculture and horticulture as the most significant with \$314.1 million.
- Second ranking goes to food, beverages and tobacco manufacturing with \$209.6 million activities.
- Transport and storage follows with \$161.5 million.
- Similar in scale are construction (\$109.3 million) and aviation and aerospace (\$103.7 million).
- Tourism, recreation and entertainment is significant with \$79.6 million, not far behind is health services with \$89.2 million.
- Other manufacturing activities generating over \$10 million are metal products, basic and other chemicals and machinery and equipment, with wood and paper products at \$9 million.

It is important to highlight that mineral processing was not really present when these figures were compiled. Prevailing estimates of the mineral sands potential in the wider Murray Basin suggests a reserve of 60 million tonnes of coarse grains worth \$13 billion. Over the next 10 years the Basin could produce 700,000 million tonnes or more per annum, which could result in 450 direct permanent jobs and an additional 1,100 flow-on employment opportunities.

Mildura Region	\$million	Percent %
Agriculture & horticulture	314.1	21.8
Aquaculture	0.7	
Livestock	38.0	2.6
Forestry & logging	2.9	0.2
Construction	109.3	7.6
Aviation & aerospace	103.2	7.2
Non-metallic mineral products	7.4	0.5
Metal product manufacturing	14.7	1.0
Motor vehicle and part manufacturing	5.4	0.4
Prefabricated building manufacturing	1.0	
Food, beverage and tobacco manufacturing	209.6	14.5
Furniture manufacturing	3.7	0.3
Machinery and equipment manufacturing	12.9	0.9
Rubber and plastics manufacturing	4.7	0.3

 Table 2.1:
 Value of Output by Activity Classification, 1998



Mildura Region	\$million	Percent %	
Textile, clothing, footwear and leather manufacturing	0.7	0.1	
Textiles and clothing manufacturing	3.6	0.3	
Wood and paper manufacturing	9.1	0.6	
Basic and other chemical manufacturing	14.5	1.0	
Food retailing	31.5	2.2	
Personal and household good retailing	45.9	3.2	
Printing publishing and recorded media	9.7	0.7	
Petroleum and coal manufacturing and refining	8.1	0.6	
Oil and gas exploration	8.0	0.6	
Data processing and call centres	11.8	0.8	
Transport and storage	161.5	11.2	
Telecommunication services	20.1	1.4	
Finance and insurance	42.9	3.0	
Property services	41.2	2.9	
Health services	89.2	6.2	
Information technology	4.3	0.3	
Tourism, Recreation and entertainment	79.6	5.5	
Entertainment and recreation	28.3	2.0	
Multimedia	4.5		
Total	1443.6	100.0	

Source : NEIR and EAU Industry classifications

Employment Features

Table 2.2 records the top 10 activity areas by employment size, key results including the following:

- Of a total number of 3,205 businesses, agriculture and horticulture contributed about 38%, of which 97% had up to 20 employees.
- All businesses had predominantly less than 20 employees with only 126 businesses overall having between 20 and 99 employees.
- There were 28 sole traders, all but one being in agriculture and horticulture.

As shown in Table 2.3, the largest employer activities are health services, tourism, recreation and entertainment, food retailing and personal and household goods repairs. Of the top 10, construction ranks sixth, food beverages and tobacco eighth and transport and storage ninth.

For the September Quarter, 2002, Mildura had an unemployment rate of 6.74% with 23,171 employed people in the labour force.





Table 2.2: Number of Busines					on
Industry Sector	N	umber of E	Employ	ees	Total
industry Sector	Up to 20	20 to 99	200 +	Sole operator	No.
All Industries	3,051	122	4	28	3205
Agriculture and horticulture	1,171	7	-	27	1,205
Construction	247	1	-	-	248
Personal and household retailing	232	3	-	-	235
Tourism, recreation and entertainment	160	19	-	-	179
Data Processing and call centres	148	2	-	-	150
Health services	121	9	1	-	131
Transport and storage	111	4	-	-	115
Food retailing	94	11	-	-	105
Multimedia	69	1	-	-	70
Finance and insurance	65	3	-	-	68
Source: DEET					

Table 2.3:Selected Industry Sectors Ranked by Number of Employees
(Top 10) 2000, Mildura Region

	Employees
All Industries	15,121
Health services	1,786
Tourism, recreation and entertainment	1,619
Food retailing	1,131
Personal and household goods retailing	1,064
Data processing and call centres	864
Construction	788
Agriculture and horticulture	767
Food, beverage and tobacco manufacturing	519
Transport and storage	489
Finance and insurance	319
Source: DEET	

Source: DEET

5.2 Property Trends

Usually the requests for building approvals and planning applications provide a reasonable basis for determining the rate of take-up based on a trend analysis. However Council does not maintain its records for this material in a form which makes the clear identification of specific industrial related details. Building permits combine both commercial and industrial information. For example, building approvals per annum for the combined category ranged between 86 and 119 for the period 1997 to 2002 financial years.





Therefore Valuer General data has been sourced to estimate the number of sales, as a guide. Relevant figures are as follows:

Year		Number of Sale	S
	Factories	Vacant Land	Other Industrial
1996	4	11	5
1997	2	11	4
1998	4	3	2
1999	3	4	7
2000	1	7	6
2001	4	-	6
Total	18	40	30
Average/year	3	6.7	5

Table 2.4:Valuer General Sales Data

In the context of this information "factories" means premises used for manufacturing purposes, "vacant" land is a property which usually has no permanent structures on it whilst "other industrial" includes warehouses, warehouse /showroom, cool store, abattoir and unspecified activities.

The median block size for vacant industrial land sales recorded for this period averaged out at around 3560 square metres. This suggests about 23,850 square metres or about 2.4 hectares of land sold each year.

5.3 Industry Trends Across Victoria

In 1999-2000, the most notable industry types with the largest contribution to the manufacturing industry value in Victoria included.

- Machinery and equipment manufacturing, where motor vehicle and part manufacturing was the most substantial.
- Food beverage and tobacco manufacturing, where the dairy product manufacturing, fruit and vegetable process and wine manufacturing were the most substantial.
- Petroleum, coal, chemical and associated product manufacturing where medicinal and pharmaceutical product manufacturing, petroleum refining and plastic injection moulding were the most substantial.

Victorian manufacturing employment increased slowly from June 1995 to June 1997 and then increased by 3.3% at the end of June 1998. The two years since June 1998 has seen a decrease in employment in thus area. Over the five years (1995 to 2000) employment fell by 3.0% although the fall over the last 2 years has been 7.0%. Unfortunately information from this analysis by the Victorian Government is not available for 2001 and 2002.





Table 2.5 lists the latest ABS Business Register Counts, September 1998 by industry.

Table 2.5: Business Numbers by Industry, September 1998					
Food, beverages & tobacco	30	25.9			
Textiles, clothing & footwear	4	3.4			
Wood and paper products	11	9.5			
Printing, publishing etc	10	8.6			
Petroleum & chemical	8	6.9			
Non-metallic minerals	6	5.2			
Metal products	14	12.1			
Machinery & equipment	20	17.2			
Other manufacturing	13	11.2			
Total manufacturing	116	100.0			
General construction	90	21.5			
Construction trade services	177	42.2			
Road transport	113	27.0			
Services to transport	10	2.4			
Storage	29	6.9			
Total related activities419100.01					

Source: ABS Business Register Count, September 1998

This information suggests the following for Mildura:

- The number of manufacturing activities is less than 25% of other activities likely to be occupying land set aside for industrial purposes.
- Construction related and road transport operations dominate the activity categories.
- Food and beverage is the main manufacturing with machinery and metal related manufacturing similarly important in terms of the number of establishments.

5.4 Industrial Land Supply

As part of the current study, a land use survey was undertaken which indicated approximately 278 hectares of zoned industrial land in the Mildura Rural City, of which 81.11% is occupied and 18.9% is vacant. Such an outcome tends to run counter to the common perceptions that Mildura is quite short of industrial land for future development as will be further discussed below. However, this land use supply estimation process does not take account of the actual amount of vacant land which is available for purchase and the areas which are held by existing operators for expansion of their activities in the future. Added to this are complications as to the size of subdivided lots and the ability to amalgamate them, as well as the nature of ownership.





In order to facilitate the uptake of the vacant land a more detailed determination of the status of this land would assist, e.g to the extent that it is held for expansion, the difficulty in organising the parcels for sale or lease. This process should involve discussions with the relevant landholders as to their intentions and identifying means by which mutually acceptable ways of facilitating utilisation of the land could be agreed. However, it is stressed that it is not the role of Council or other authorities to dictate as to how landholders deal with their land.

According to the recent land use survey, this land supply is distributed as follows:

	Industrial	ly Zoned La	nd			
Locality	Zoned	l Land	Occupied Land		Vacant Land	
Locality	hectares	percent	hectares	percent	hectares	percent
Mildura	165.8	59.6 100.0	137.5	58.8 62.9	28.3	53.8 17.1
Red Cliffs	21.4	7.7 100.0	12.4	5.8 57.9	9.0	17.1 42.1
Merbein	33.0	11.9 100.0	31.6	14.8 95.8	1.4	2.7 4.2
Irymple	57.9	20.8 100.0	44.0	20.6 75.5	13.9	26.4 24.5
Total	278.1	100.0 100.0	225.5	100.0 81.1	52.6	100.0 18.9

Table 2.6:Mildura Industrial Land Use Survey Results (Feb 2003) –Industrially Zoned Land

Note :No industrially zoned land in Ouyen

Notable features of this land supply distribution are as follows:

- Mildura's dominance in the supply of existing industrial zoned land with almost 60% of the total and also of the proportion and amount of vacant industrial land, i.e. 55.3% and 28.3 hectares respectively.
- Irymple is also well served by industrial zoning with 57.9 hectares, of which 13.9 hectares is vacant.
- Merbein has 33.0 hectares of zoned industrial land. However, only 1.4 hectares is vacant land, whilst Red Cliffs has corresponding figures of 21.4 and 9.0 hectares.

In assessing this land supply and status situation it should be kept in mind that not all industrial activity takes place on industrially zoned land. Some is found in commercial zonings by right of permits or ongoing use rights, while in rural areas there are the likes of wineries and the Murray Basin Titanium separation plant, located on rural zoned land. With regard to Ouyen township, it should be noted that there are isolated commercial/light industrial land uses. However, the potential for future expansion of industrial uses within Ouyen township is limited.





Based on the outcomes of the consultation process and field observations, other, relevant features of the land availability situation include the following:

- Most of the industrial land in the Mildura urban area is occupied by activities, some of whom have made provision for expansion on site. The recently developed Dolphin estate has some vacant lots.
- Irymple Township has some vacant industrial areas but does not possess a significant reserve for the future.
- Merbein has some government land which could be converted to industrial type uses and poor quality vacant premises which could be redeveloped.
- Red Cliffs has some vacant industrial land parcels which are expected to be absorbed for use within the next 5 years.
- Identified locations which are not specifically designated for industrial activity include Block "H" or the originally designed Irymple township site, Airport Business Technology Park environs and land at Thurla near the Murray Basin Titanium Mineral Sands Plant Area/Thurla. Previous research has identified land suitable for industrial development at Yatpool, although it is a considerable distance from Mildura Township.
- Ouyen has no specifically zoned industrial land but has large areas of township and rural land which could be adapted to small scale light industrial uses.
- The role of Wentworth as a supplier of new industrial land is important. However, it is currently faced with land rights complications in securing rezoning but has at least one large tract of industrial land which may need some services provided, especially water.
- Another consideration is the limited opportunity to free up land that held by TAFE and the Education Department to the open market. This is a complex process and can not be relied upon as a future source of land for industrial activity.

5.5 Industrial Development Outlook

On the basis of the statistical research, community and stakeholder consultation, assessment of the local industry profile and the industrial land review, an assessment of the forecast for industrial land has been prepared. It should be stated that forecasting future land requirements over the medium to long-term can be difficult to make with accuracy, particularly in this case, where the data has not been accurate or complete.

Future Land Requirements

It has been demonstrated in the past that Mildura does not have sufficient suitably zoned industrial land to satisfy the types of demand which it is facing. This is illustrated by the difficulty in finding large sites for transport related activities, the





Mineral Sands Plant Area/Thurla and establishing tank farms away from the vineyards.

At this juncture it is appropriate to point out that industrial land is also used extensively for non-manufacturing activity such as transport and storage, building related activities and indoor recreation. To some extent, such activities are dependent on population growth.

Activities which are favoured for future development on industrially zoned land within the Mildura region include the following:

- Transport and storage, given that Mildura is the third largest transport distribution centre in Victoria due to its strategic road and rail connections to capital cities and ports as well as having over 50% of its products bound for export. For example, Wakefield Transport is loading a train with 25 to 40 carriages each day to send to the Port of Melbourne.
- Food and beverages, with a major involvement in packing, sun-drying and crushing of fruit and vegetables. For example, wine exports have increased two-fold in the last decade, with the region being the largest wine grape producing area in Australia (28% of the total crush) and being a home to major national producers such as Southcorp, Beringer Blass, Simeon and BRL Hardy. The dried fruits industry is also undergoing significant expansion.
- Construction activities, due to the continuing growth in residential and economic activity, in terms of private investment and public funding of major infrastructure. Illustrative projects include the new Murray River bridge crossing at Robinvale bridge rail gauge standardisation from Mildura to North Geelong, a new \$8.9 million court house, a \$30 million upgrade of the Mildura Centre Plaza and the ongoing expansion of regional wineries.
- Metal and engineering activities, influenced by the growth in construction activities and the expansion in economic activity, building on an already strong employment base.
- **Mineral sands processing**, as witnessed by the recent MBT development at Thurla and future outlook for the industry as already discussed.

An overall important consideration in planning for industrial land provision for growth activities is that in general about 70% of manufacturing growth occurs as a result of existing activities expanding

Industrial Land Demand

Estimation of the demand for industrial land has to take into account:

• The nature of the activities to be accommodated on the industrial land and their land parcel size requirements.





- The rate of take up of the land in the future.
- Particular factors which are likely to influence this situation.

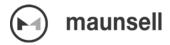
Already listed are the types of activities to be accommodated, with their indicative land area requirements being as follows.

- Transport and storage generally range in area from less than one hectare to five hectares, with the greatest concentration up to three hectares. However some large scale operations such as Wakefield Transport at Merbein are in the order of 30 hectares or more.
- Food and beverages industries usually occupy 0.25 to two hectares although some sites of five hectares or more may be needed for activities such as abattoirs and poultry processing. If tank farms are included in this category the land area could well lift to five hectares or more.
- Construction activity in this local context is usually one hectare or less in scale, whilst elsewhere it may be more like two hectares.
- Metal and light engineering activities are contained on sites up to one hectare, usually with two hectares as a maximum.
- Mineral sands processing and handling are generally in the range of 15 to 30 hectares.
- Land requirements for indoor recreation of a community nature are usually satisfied with a land provision of up to two hectares, allowing for on-site parking.

Among the distinctive factors which may affect the scale and location of industrial land provision in the region are the following:

- Given the increasing importance being placed on lifestyle and catering for tourists, considerable emphasis is being devoted to protection of the natural environment and aesthetic appearance, including flora, fauna and cultural heritage.
- The proximity of industrial development to residential land use is a sensitive issue. This may warrant closer attention by the formulation and application of performance standards.
- Encroachment of residential, retail or industrial activity onto adjacent vineyards is an issue which needs to be reconciled, especially in terms of priorities.





- Whether or not the linear extension of peripheral sales along major roads such as Fifteenth Street is preferable to the development of more concentrated groupings remains a debatable matter. This has ramifications for any new large industrial areas created, such as Block "H", where short-term allowance could be made for a combination of peripheral sales and factory outlet activities.
- Some attention should be paid to the Austlink proposal espoused by the Sunraysia Area Consultative Committee in order to provide funds for infrastructure initiatives.
- Careful consideration of the location of railway lines and associated freight handling facilities is essential in directing the location of future industrial activity.
- In an area so focussed on the use of irrigation, the issues of where it is likely to be extended and its land use and drainage implications need to be appraised in determining the location of future industrial development. A step in this direction has been taken in the form of the *Alfred Deakin irrigation Development Feasibility Study*, June 2001. This study found that progressive development of irrigation facilities over time was sustainable resulting in an \$84 million income generated from increased horticultural activity over a 10 year period.
- Based on the previous analysis and case study experience, it is assumed that the likely demand for undeveloped industrial land is likely to be an average of 2.5 to 3.0 hectares per annum over the next 20 years. To put this assumption in context, the industrial land strategy for Bendigo estimates new industrial development to require an amount of 2.5 to 3.25 hectares per year over 20 years.
- Utilising the calculations of average annual take-up, an estimate of the basic cumulative additional available industrial land required is as follows:

2008: 12.5 to 15 hectares 2013: 25 to 30 hectares 2018: 37.5 to 45 hectares 2023: 50 to 60 hectares.

Theoretically there is almost sufficient vacant zoned land (52.6 hectares) to cover what is estimated to be the additional take-up in 20 years time. However, as indicated, much of this land may not be readily or ever available on the open industrial land market. One particular illustration is land held by TAFE and the Education Department.

Perhaps as, if not more significant, is the suitability of the available of the vacant land in terms of location, site area or transport access. Over half of the vacant land is in, or adjacent to, the Mildura urban area which would not necessarily suit particular types of activity. Included in this category would be large transport operations, mineral sands processing and some elements in food processing.

Furthermore, care has to be taken not to rely solely on the average growth as a determinant of what land should be provided at any time. **Therefore the provision**





of land for future industrial activity should be based on ensuring there is adequate <u>capacity</u> and not relying on prospective take-up. By example the Murray Basin Titanium development required about 30 hectares in its own right at two years notice.

The conclusion of this assessment is that there is a requirement for additional zoned land in order to facilitate the accommodation of particular industrial activities and especially for those activities requiring large land areas.

5.6 Key Directions for Industrial Development

When planning for the provision of new industrial land account should be taken of a number of principles which are as follows:

- For each industrial precinct make allowance for the growth of local service activities requiring only small land parcels and which are easily accessible to the respective urban area.
- Along with the designation of any land for future industrial activity growth, estimate the infrastructure funding likely to be needed and put in place the appropriate financial budget allowances.
- The sequencing of any industrial land release will be in an orderly manner having regard to the provision of services, the extension of already-serviced land, rather than "leap frogging" and the perceived rate of take-up where practical.
- Take full account of the sensitivity of the local natural and built environment according to the types of industry being planned for and the associated buffer requirements.
- Ensure that full advantage is taken of the location of major support infrastructure, such as important roads, rail connections, water supply distribution and drainage networks and of ease of access to main gas and electricity supply sources.









To develop a robust strategic framework to guide industrial development, it is important to have an understanding of how the planning system enforces/regulates buffer distances between those type of industries which may have of site amenity impacts.

Clause 52.10 of the Victoria Planning Provisions defines those types of industries and warehouses which if not appropriately designed and located may cause offence or unacceptable risk to the neighbourhood.

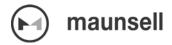
The following table to Clause 52.10, Victoria Planning Provisions outlines the threshold distances for different types of production, use or storages which is the basis upon which the buffer distances have been assigned to land uses within the study area.

Type of Production, Use or Storage (Purpose)	Threshold Distance (metres)	Notes	
Food, Beverages and Tobacco			
Abattoir	500		
Smallgoods production	100		
Manufacturing of milk products	300		
Production of vegetable oils and fats using solvents	300		
Flour mill	300		
Bakery (other than one ancillary to a shop)	100		
Seafood processor	500		
Maltworks	300		
Tobacco and cigarette production	500		
Poultry processing works	100		
Freezing and cool storage	150		
Milk depot	100		
Food or beverage production other than above		Note 1	
Textiles			
Dyeing or finishing of cotton, linen and woollen yarns and textiles	300		
Carpet backing with latex	300		
Production of artificial fibres and textiles			
 cellulose nitrate or viscose fibre, cellophane or artificial rubber 	1,000	Note 2	
 other synthetic fibres and textiles 	500	Note 2	
Treatment or production of textiles			
 using carbon disulphide 	500	Note 2	
 using other substances 		Note 1	
Rope, cordage and twine production	100		
Wool scouring	200		
Wood, Wood Products and Furniture			
Sawmill	500		





Type of F	roduction, Use or Storage (Purpose)	Threshold Distance (metres)	Notes
Charcoal product	ion		
 by the retort 	process	500	
 other than by 	the retort process	1,000	
Wood preservation	on plant	100	
Wood-fibre or wo	od-chip products	1,500	
Joinery		100	
Paper and Pape	r Products		
Paper or paper p	ulp production:		
 involving con materials 	nbustion of sulphur or sulphur containing	5,000	Note 2
 from semi-pr 	ocessed materials	100	
 from prepare 	d cellulose and rags	200	
 by other met 	hods than above		Note 1
Chemical, Petro	leum and Coal Products		
Chemical fertilise	r production	1,000	Note 2
Industrial gases p	production	1,000	Note 2
Polyester resins	production	1,000	Note 2
Synthetic resins a	and rubber production other than above	1,000	Note 2
Ammunition, expl	osives and fireworks production	1,000	Note 2
Formaldehyde pr	oduction	300	Note 2
Paints and inks			
 manufacture 		1,000	Note 2
 blending and 	mixing only	300	
Pharmaceutical a	nd veterinary production	1,000	
Biocides producti	on and storage	1,000	
Soap and other d	etergents production	300	
Cosmetics and to	ilet preparations production	100	
Inks production		300	
Petroleum refiner	у	2,000	Note 2
Briquette product	ion	300	
Other petroleum	or coal production	500	Note 2
Organic industria	chemicals production other than above	1,000	Note 2
Inorganic industri	al chemicals production other than above	1,000	Note 2
Chemical produc	s other than above	300	Note 2
Non-metallic Mi	neral Products		
Glass and glass	production including glass wool	500	
Rock wool manuf	acture	500	
	and pipe refractories with a design production 0,000 tonnes a year	200	



	Type of Production, Use or Storage (Purpose)	Threshold Distance (metres)	Notes
Се	ment production in amounts:		
•	up to 5,000 tonnes a year	300	
•	between 5,000 and 150,000 tonnes a year	500	
•	exceeding 150,000 tonnes a year	1,000	
Со	ncrete batching plant	300	
Bit	umen batching plant	500	
Со	ncrete article or stone article production	100	
Pla	aster or plaster articles production	100	
Ва	sic Metal Products		
Wc	orks producing iron or steel products in amounts:		
•	up to 1,000,000 tonnes a year	100	
•	exceeding 1,000,000 tonnes a year	1,000	
Pro	oduction of non-ferrous metals as:		
•	aluminium by electrolysis	2,000	
•	other non-ferrous metals in amounts:		
•	up to 100 tonnes a year	100	
•	between 100 and 2,000 tonnes a year	300	
•	exceeding 2,000 tonnes a year	500	
Fa	bricated Metal Products		
Str	uctural or sheet metal production	500	
Wc	orks producing iron or steel products in amounts		
•	up to 1,000,000 tonnes per year	100	
•	exceeding 1,000,000 tonnes per year	1,000	
Во	iler makers	100	
Ab	rasive blast cleaning		Note 1
Mi	scellaneous Manufacturing		
Re	ndering and casings works	1,000	
Lea	ather tanning and dressing	300	
Lea	ather and artificial leather goods production	300	
Ru bla	bber production, using either organic solvents or carbon ck	300	Note 2

Table 2.7 below outlines some examples of buffer distances and purposes for different land uses within the study area based on the Table to Clause 52.10.



Industrial Area	Land Use	Buffer Purpose	Buffer Distance
Mildura	One Steel Metal and Fabricated Steels	Residual/Amenity	500 metres
Irymple	MAW Crash Repairs	Residual	100 metres
Irymple	Sharp Engineering	Residual/Amenity	500 metres
Merbein	Mildura Fruit Company	Residual	100 metres
Merbein	Logistics Freight Storers	Residual	150 metres (freezing and cool storage)
Red Cliff	Vine Leaf Engineering	Residual	300 metres

As outlined above, there are a number of different types of industry, some requiring buffer thresholds and some not requiring any buffers that are co-existing in close proximity. Although there is little evidence of interrelated industry conflict, it would appear based on the industrial audit that some uses are incompatibility located.

To ensure the orderly and proper planning of the area, it is not appropriate for residential land to be directly adjacent to Industrial 1 uses as it limits the opportunity to attract a wide scope industrial activities.

It appears that further land use compatibility issues will arise in the industrial precinct and residential areas, or residential areas will be rationalised as a number of the industrial uses are no longer able to achieve their required buffer threshold buffer distances from sensitive land uses. Consideration also needs to be given to the issues associated with small lot excision within the Rural Zone as this allows sensitive land uses to potentially locate in close proximity to the Industrial 1 zone. The following sections make more specific comments in relation to this issue.

There is a need to identify land within the study area where industries which require significant buffer threshold distances and/or large landholdings to sensitive land uses are to locate. If an area is clearly defined it would be possible to avoid potential for both inter-industry conflict and conflict with sensitive uses.

It is imperative that no more ad-hoc residential re zonings occur within the study area until a clear strategic framework which guides the location of future industrial development within the study area is established.









Outlined below is a summary of the emerging opportunities/issues based on the industrial audit, a number of discussions with state government agencies, business operators, owners, servicing authorities, council representatives and feedback from both focus group sessions, council presentations and stakeholder workshops.

7.1 Relocation of Mildura Freight Gate

7.2 Freight Gate

The relocation of the Freight Gate from Mildura CBD is required for the city to achieve its Sunraysia 2000 visions of integrating Mildura with its waterfront. The Mildura Riverfront Master Plan will be a key mechanism for achieving this connectivity and for relocating the Freight Gate from the centre.

Prior to considering the potential sites for relocation of the Freight Gate it is critical to have an understanding of the locational requirements for Freight Intermodal terminals. The *North West Freight Transport Strategy* identifies the following requirements for Freight Gate sites:

- Suitable location on the rail network which avoid stationary trains blocking road crossings and permit through-train operations where required;
- Good direct access to the major road network;
- Proximity to producers and processing facilities;
- Adequate storage or cooling facilities where appropriate;
- Surrounded by compatible land uses with room to expand and co-locate supporting industries; and
- Strategically located to ensure that significant volumes of traffic can be handled on a regular basis.

Consideration needs to be given to the abovementioned requirements when identifying a preferred location for the future Freight Gate. Table 2.8 highlights the opportunities and constraints associated with each of the Freight Gate potential sites.

The relocation of the Freight Gate needs to be considered in conjunction with the interstate, regional and local rail networks which will assist in facilitation of future growth and potential of Mildura in terms of future industrial, commercial and business opportunities.

To strategically facilitate future growth and potential of Mildura in terms of future industrial, commercial and business opportunities. It will be critical to provide for the long-term new rail link north from Mildura to the transcontinental line. Such a link would provide future transportation and access opportunities to Sydney, Perth, Adelaide, Alice Springs and Darwin.





Consequently on a regional and local scale the proposed site for the future Freight Gate must be able to accommodate rail, have sufficient space for expansion, well buffered from sensitive land uses (ensure 24 hour, 7 day operation), minimal environmental constraints and access to future infrastructure.

Table 2.8 (Opportunities and Constraints Matrix) suggests that in terms of land use compatibility, planning controls, access, environmental, land availability and infrastructure the Mineral Sands Plant Area/Thurla is most suitable site for the relocation of the Freight Gate. Despite the recent closure of the Mineral Sands Plant Area/Thurla, due to the worldwide downturn in the mineral sands market, this site is still suitable as the short-term strategic location for relocation of the Freight Gate and to provide greenfield industrial development opportunities.

It is recommended that Council work with both the Department of Sustainability and Environment and Department of Infrastructure in securing land at this site for the future short-term Freight Gate site. The key advantages of this site are described in Table 2.8 and are summarised below:

- Greenfields site;
- Well buffered to sensitive land uses;
- All infrastructure readily available;
- Require rezoning of additional land from rural zone;
- Require reinstatement of the Morkalla line via Thurla;
- Reduce amenity impacts for road freight operations into Red Cliff; and
- Strategically located to ensure significant traffic volumes could be handled with road upgrades.





Criteria	Red Cliffs	East Mildura	Merbein	Airport Business Technology Park	Mineral Sands Plant Area/Thurla	Block "H"
Land Use Compatibility	Constraints Proximity of residential land uses severely compromise this site as a potential Freight Gate. 	 Constraints Residential encroachment Only be useful for transportation of 'smalls". If larger packing & equipment is used this would not be a viable long- term option. Long-term option is expensive. The proposed rezoning application to allow Stage 3 residential development of land in the block bounded by Etiwanda Avenue, Fourteenth Street, Benetook Avenue and Fifteenth Street is not consistent with orderly and proper planning & will further compromise the role and function of industrial area. 	residential land uses severely compromise this site as a potential Freight Gate.	 Opportunities Strategically located to provide for additional industrial land and commercia development, as it is generally well buffer to sensitive land uses. 	 Protect site from possible encroachment of sensitive land uses 	 Opportunities Greenfield's site Excellent opportunity for the location of industries requiring large buffer distances and landholding such as Freight Gate.
Planning Controls	Constraints Although there is suitable appropriately zoned land it's role and function is compromised by abutting residential zoned land.	suitable appropriately zoned land, it's role and function is compromised by both residential land uses within the industrial zone and proximity of residential	west of Wakefield Transport is not	 Opportunities Rezoning of additional land abutting the airport from Rural to Specia Use may be required. This site is not constrained by surrounding residential zones. 	Use –	Opportunities The land is zoned Public Use zone 6- Local Government

Table 2.8: Freight Gate Sites – Opportunities and Constraints Matrix





Criteria	Red Cliffs	East Mildura	Merbein	Airport Business Technology Park	Mineral Sands Plant Area/Thurla	Block "H"
Access	Constraints Potential increased freight and heavy vehicle movement along Calder Highway		 Constraints The roads require general improvements and routes should be prioritised for heavy vehicles. Opportunities Provide strategic vision involving the possible relocation of the existing rail line between Irymple and Merbein via Mildura via Thurla, Block "H" and Merbein. 	Merbein via Airport Business Technology Park and potentially Block "H" which would be costly. Opportunities Provide strategic	Morkalla Line via Thurla, which may be costly. Opportunities Provide strategic vision involving the possible relocation of the existing rail line between Irymple and Merbein via Mildura via Thurla, Block f "H", Airport Business Technology Park and Merbein. This would allow potential future use of the Abbottsford Bridge to the north d west of Merbein to access NSW markets and transcontinental line. Remove the requirement for a short road leg to a Red Cliffs facility,	the Morkalla Line via Thurla which then continuing to Merbein via Airport Business Technology Park and potentially Block "H" which would be costly.





Criteria	Red Cliffs	East Mildura	Merbein	Airport Business Technology Park	Mineral Sands Plant Area/Thurla	Block "H"
Environmental	Constraints • 24-hour freight operations would impact on the amenity of surrounding land uses including both residential and local primary school.	amenity of surrounding sensitive land uses.	Constraints The operation associated with Wakefield Transport was initially 24/7 but has now been restricted to 7am - 9pm due to residential impacts south of the Channel Road	Constraints Any future development of Freight Gate would need avoid any detrimental impact on the State Forest Opportunities The State Forest will function would provide an exceller buffer between any possible Freight Gate site and sensitive land uses 	into Red Cliffs	Constraints Any future development of Freight Gate would need avoid any detrimental impact on the State Forest Opportunities The State Forest will function would provide an excellent buffer
Land availability (including land tenure)	Constraints Although land size has good dimensions, linea along the railway line, it is compromised by residential development 	,	within the next five years. 1	Opportunities The airport is surrounded by significant amounts of Commonweal Land. Potential opportunity to purchase additional land, which would provide for suitable land for future Freight Gate site.	 Opportunities The land is in large freehold landholdings, which would assist in the facilitation of any future acquisition requirements or development proposals. 	already in Council
Infrastructure	Opportunities • Existing infrastructure is available	Opportunities Existing infrastructure is available 	Opportunities Existing infrastructure is available 	Opportunities • Existing infrastructure is available	 Opportunities Existing infrastructure is available. Koorlong Sewerage Plant (near Thurla) was established in 1984 t provide for long-term industry growth. 	3

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7.3 Block "H"

As illustrated in Figure 15 Block "H" is located at the western end of Twenty-third Street and was the site originally planned for the township of Irymple and occupies an area of approximately 551.73 hectares.

Block "H" is generally isolated from any other development and surrounding land uses include undeveloped rural land, Drag Racing Strip and Motor Racing Circuit.

There maybe some native vegetation issues given the proximity of this site to the state forest.

These potential issues will need to be resolved in conjunction with representatives from DSE during subsequent planning stages.



Block "H"

7.3.1 Zoning and Overlays

Block "H" is zoned Public Use Zone 6 – Local Government and there are no overlays affecting the site.

7.3.2 Road and Rail Access

Block "H" has an Indicative road network layout that is part of the original township layout. The existing road layout will require upgrading including Benetook Avenue, near Koorlong and upgrade Twenty-third Street including reclassification to a main road.



Block "H" Access Road





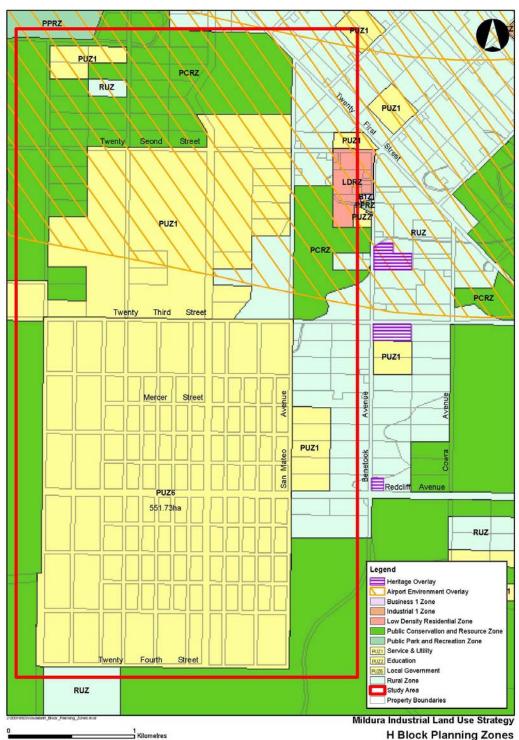


Figure 15





There is a possibility for future rail to the site which would involve the reinstatement of the Morkalla Line via Thurla which then continuing to Merbein via Airport Business Technology Park and potentially Block "H".

7.3.3 Infrastructure (servicing)

There are no services currently connected to the Block "H" area although it is understood that there are service available to be connected.

Servicing authorities have confirmed:

- No stormwater drainage is presently available reasonably easy to provide nearby FMIT facility;
- Gas is readily available about half a kilometre away from the site; and
- The current power supply is very low capacity, substantial upgrades would be required.

7.3.4 Other

Council has indicated that there are a number of different land titles exist for Block "H". These land parcels will need to be merged to issue a consolidated title and road reserves before the development of the land could proceed. Due to the potential long lead times associated with the consolidation, it is recommended that Council investigate opportunities to expedite this process with the Land titles office as a matter of urgency.

7.3.5 Consistency of Planning Controls

As outlined in Section 6, when planning for new industrial development, it is imperative that the role and function of buffers protect both industry from encroachment of sensitive land use and protect existing sensitive land uses from potential adverse impacts from proposed industrial development be articulated at the planning phase of development.

Both EPA and DSE are trying to encourage new industrial development (greenfield development) to accommodate required buffers on site, that is within existing property boundaries. The advantage of this approach is twofold. Firstly it provides certainty to both industry operators that their operations will not be compromised/restricted due to encroachment of sensitive land uses and owners/occupiers of nearby sensitive land uses that their amenity will not be reduced. Therefore, for Block "H" it is recommended that future industrial development be encouraged to provide/ accommodate required buffer distance on site, within property boundaries. Furthermore, industries which require significant buffer distances be encouraged to locate within the 'core' of the zone.

A key issue for consideration relates to small lot excision within the rural zone. These small lot excisions often introduce sensitive land uses to areas which may compromise the role and function of existing and proposed zones. The issue of small lot excision is currently being considered as part of the Rural Zone Review being undertaken by DSE. It is recommended that Council continue to participate in this review process and investigate the opportunity to prohibit small lot excision in rural zone in proximity to industrial precincts.





7.4 Airport Business Technology Park

As illustrated in Figure 16, the Airport Business Technology Park is located at the corner of Nineteenth Street and Walnut Avenue. Airport Business Technology Park is strategically located to provide for additional industrial and commercial development as it is generally well buffered to sensitive land uses.

As discussed earlier, the new planning framework will allow the Airport Business Technology Park to develop as a precinct for economic development and employment as a regional passenger and freight centre and a precinct for both aviation and non aviation uses that include industrial and warehouse type developments.

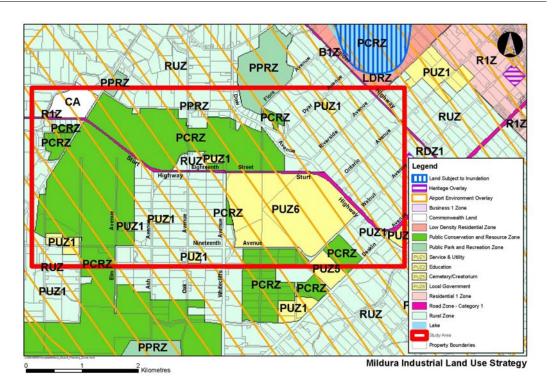
Airport Business Technology Park is surrounded by Commonwealth land. There is an opportunity for the airport to purchase additional land which would provide for suitable land for industries that may require large landholdings and/or buffer distances.

7.4.1 Zoning and Overlays

The Airport Business Technology Park is currently undergoing a rezoning process being rezoned from Public Use 6 – Local Government to Special Use Zone. The rezoning process will also introduce a new *Airport Environs Overlay* 1, which will replace the existing *Airport Environs Overlay* 1 and 2 and a new *Design Development Overlay* for the control of buildings and structures near the airport for the Obstacle Limitation Surfaces Plan (OLSP).







Airport Business Technology Park Zones

Figure 16

7.4.2 Road And Rail Access

The Airport Business Technology Park is accessed off Nineteenth Street and Walnut Avenue. There is a very good access to the site via the Sturt Highway.

There is a possibility for future rail to the site which would involve the reinstatement of the Morkalla Line via Thurla, then continuing to Merbein via Airport Business Technology Park and potentially Block "H". Consideration would need to be given to possible funding options to achieve these outcomes, potentially using funding mechanisms such as the Regional Infrastructure Development Fund.

7.4.3 Infrastructure (Servicing)

Servicing authorities have confirmed that;

- Gas is readily available if there is sufficient demand, the nearest connection is located in Sixteenth Street;
- No stormwater system exists;
- Power is currently available; and
- Telecommunications are available.





7.5 Mineral Sands Plant Area/Thurla

The Murray Basin Titanium (MBT) Mineral Sands Processing Plant is located on the north east corner of Benetook Avenue and Red Cliffs–Meringur Road and is surrounded by rural land, much of it relatively undeveloped and predominantly in private ownership. As mentioned earlier, the MBT Mineral Sands Processing Plant has now closed due to a worldwide downturn in mineral sands market. As such this general locality provides a very good opportunity for future industrial land requiring relatively large land parcels and or buffer distances.

The area surrounding the existing plant will provide an excellent opportunity for future industrial land requiring large landholdings and/or buffer distances.

This area also provides the most strategic location for a future Mildura Freight Gate as it is well buffered to sensitive land uses, it provides opportunity for future expansion and has ready, access to a road network which has potential to carry high volumes of traffic.



Land Surrounding Mineral Sands Plant Area/Thurla







Mineral Sands Processing Plant (now closed)

7.5.1 Zonings and Overlays

As illustrated in Figure 17 the Mineral Sands Plant Area/Thurla is zoned Rural with the exception of a Public Conservation and Resource Zone north of Wildga Road, west of Benetook Avenue and the area south of the Mineral Sands Plant Area/Thurla. The sewerage treatment plant is zoned Public Use Zone 1 and located on the north eastern corner of Benetook Avenue and Wilga Road.

Consideration will need to given to the potential environmental values of this precinct, given its proximity to the state forest.

7.5.2 Road and Rail Access

The closed Mineral Sands Processing Plant has excellent access to road network via Red Cliffs-Meringur Road direct to Calder Highway or via Benetook Avenue to Sturt Highway. The key advantage of this location is that it avoids the need for heavy vehicle traffic to travel through Mildura, thereby minimising potential land use conflicts.

This area also provides for potential opportunity for introduction of rail as the disused rail easement (former Morkalla Reserve) west of Red Cliffs to Thurla has been protected and identified as an important strategic asset to support the efficient movement of freight to the markets and producers. Clearly, the future provision of a rail link is a key influence in the consideration of this site for future industrial development of the Freight Gate.

Note, it is important to acknowledge that there may be native vegetation issues and problems with the underground power in Red Cliffs/Thurla railway easement. Therefore, the possibility of having to identify a new rail easement cannot be eliminated. It has been suggested that consideration should be given to a new connecting section of railway from Carwarp, running beside Carwarp North West Angle Road. This could be a strip of land 30 metres wide adjacent to the road reserve and basically open farming land.







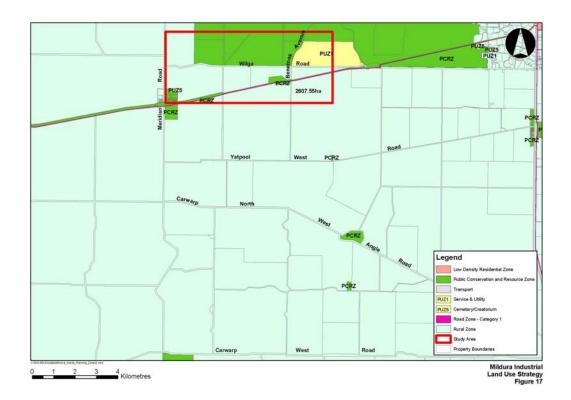
Road Intersection – Mineral Sands Processing Plant (now closed)



Former Mineral Sands Processing Plant Trucks







7.5.3 Infrastructure (Servicing)

There is an existing easement north of the Mineral Sands Plant Area/Thurla site that will allow for future infrastructure provision.

Servicing authorities have confirmed that:

- Gas to the Mineral Sands Plant Area/Thurla already exists and there is capacity to accommodate increased demand;
- Power is considered sufficient to service the existing Mineral Sands Plant Area/Thurla, however, upgrades would be required to provide for additional capacity. The Red Cliffs Plant would need to increase loading capacity if this was the case;
- Telecommunications would require upgrades;
- There is no stormwater infrastructure; and
- There is adequate availability of reticulated water which will cater for additional capacity. A number of servicing authorities have indicated that existing power cables are located within the rail easement. This may become a potential constraint in relation to reinstatement of this line. It is recommended that Council investigate these options in more detail.





7 Emerging Opportunities/Issues

7.5.4 Other

It is recommended that given the strategic location of this area that Council pursue this as the preferred site for relocation of the Freight Gate from Mildura CBD. Furthermore, it is recommended that a planning scheme amendment be drafted to promote this area as suitable for industries requiring large landholdings and/or significant buffer distances and facilitate the appropriate rezoning.









8.1 Industrial Precinct Strategies

Outlined below are key strategic directions for each of the industrial precincts developed as part of this study:

 Mildura: the primary emphasis should be on activities servicing local urban needs and also those of industrial and commercial activities in the wider region with most enterprises on a small to medium scale.

In particular, an opportunity exists to encourage the development of peripheral sales and commercial uses along Benetook Avenue between Fourteenth and Fifteenth Streets.

- Red Cliffs: also servicing local needs and also catering for wine industry specialist requirements at a small to medium scale, as well as possibly expanding its transport role.
- Merbein: allowing for the growth of the existing activity types subject to the available land supply opportunities including what is now government controlled land (VicTrack).
- **Irymple**: continuing to meet local needs and fostering growth of existing activities whilst also attending to specialist needs of the horticultural industry.
- Ouyen: the most appropriate location for future industrial development in Ouyen is in the area on the northern side of the township. This area, like the whole of Ouyen, is currently Township Zone and based on future demand, Council should investigate the need to rezone for specific industrial uses.

Of the prospective new areas under consideration emphases should be as follows:

Block "H": catering for light to large scale engineering and transport servicing activities as well as some food processing and kindred activities. Another opportunity, possibility in the short-term is accommodating larger scale peripheral sale and factory outlet operations, which it is no longer feasible to establish in the denser urban context. This would allow for advances in retail technology especially, such as where more customer involvement in product assembly is involved. Whilst peripheral sales operations benefit from main road exposure, they also are the subject of much less frequent shopping trips than other retail forms and so can very well rely on establishing a distinctive identity. Furthermore the travel distance from central Mildura is not very onerous, especially if it is made only once every month, three or six months.

Also tending to be located on industrial are larger scale recreation activities which are land expensive to locate in predominantly residential or commercial urban areas.

 Mineral Sands Plant Area/Thurla: accommodating larger scale activities involved in primary product processing, transport and storage, and some of which





may be considered to have adverse impacts on any nearby residential areas.

This site provides an excellent opportunity for the future location of the Freight Gate.

 Airport Business Technology Park: some emphasis on aviation service activities as well as on limited scale storage and distribution operations, commercial technology and business services. There is an excellent opportunity to promote the Airport Business Technology Park.

8.2 Review Structure Plans

DOUGLAS MARCH AND ASSOCIATES DMA

ACTIVITY LOCATION AND DEVELOPMENT PLANNING

The following table summaries the potential planning framework for implementation of the Mildura Industrial Land Use Strategy.

Stra		
Planning Framework	Implementation of the Mildura Industrial Land Use Strategy	Comments
State Planning Policy Framework	No change	The Mildura Industrial Precinct is not of state significance.
Local Planning Policy Framework	No change	
Municipal Strategic Statement	The following changes will also need to be made to the MSS:	
	 Clause 21.02-3 Key Land Use themes- importance relating to the relocation of the Freight Gate and rail for freight purpose from the Mildura CBD 	
	 Clause 22.03- 1 -Strengthen the vision for Mildura Rural City in relation to the expansion on the role and function of industrial precincts in Mildura. 	
	 Clause 21.04 – identify the key industrial areas and refer to the need for the development of Mildura Industrial Local Planning Policy in the implementation section. The following modifications will need to be made the Town Structure Plans: 	

Table 2.9: Implementation Framework for Mildura Industrial Land Use Strategy



Planning Framework	Implementation of the Mildura Industrial Land Use Strategy	Comments
	 Mildura The area identified for Residential Development Stage 3 needs to be amended to provide for: Future opportunities for promoting peripheral sales and commercial uses (which require a high level of exposure) along both the north and south sides of Benetook Avenue between Fifteenth and Fourteenth Streets. Future road widening of Benetook Avenue between Fourteenth and Fifteenth Streets to provide future service roads. 	To facilitate the future promotion of peripheral sales and commercial use along the northern and southern side of Benetook Avenue between Fifteenth and Fourteenth Street a rezoning of the area from rural to business 4 will be required. To protect Benetook Avenue for futur road widening between Fourteenth and Fifteenth Streets Council will need to work with VicRoads to identif future land requirements to be
	Irymple	protected through introduction of Public Acquisition Overlay.
	 The area identified for promotion of continued industrial expansion should be amended to encourage light industries to locate on the edge of the industrial precinct to protect the industrial interface. 	Rescind Council's recent Residential 1 rezoning.
	 Merbein Reference needs to be made to the importance of discouraging the location of sensitive land uses resulting form inappropriate rezoning or small lot excisions in the Rural zone south of Channel Road which may further compromise the role and function of the Merbein industrial activities. 	may exist with the Rural Zones Review to participate in this process



Planning Framework	Implementation of the Mildura Industrial Land Use Strategy	Comments
	 Red Cliffs The area identified for industrial development opportunities: North of Eldridge Road should be amended to encourage light industrial development, which does not compromise surrounding sensitive land uses. West of Laurel Street should be amended to encourage light industrial development which do not compromise surrounding sensitive land uses. Southern end of Red Cliffs precinct should be amended to encourage light industrial development which does not compromise surrounding sensitive land uses. 	To ensure that the area north of Eldridge Road is developed for light industrial purposes to provide an interface to surrounding sensitive lar uses it is recommended that it be zoned to industrial 3. Note this area is vacant industrial land occupied by grapevines, a rezoning from industria 1 to 3 will not impact on any pre- existing industrial issues. Given a significant portion of the industrial precinct west of Laurel Street and the south tip of precinct a already characterised by industrial uses, it is not appropriate to rezone this land to industrial 3 at this stage. However, this should be a long-term strategic vision of Council.
	Ouyen At this stage there are no proposed changes to the Ouyen Township. 	The appropriate location for industria development is in the northern side of the township.
	 Block "H" A town structure/action plan needs to be introduced for the Block "H" area. This plan will articulate the process for future development 	To facilitate industrial development a significant portion of Block "H" will need to be rezoned from public use t Industrial 1. The Design Development Overlay – Industrial Areas (DDO4) will also need to be introduced over the site.
	 Mineral Sands Plant Area/Thurla A town structure/action plan needs to be introduced for the Mineral Sands Plant Area/Thurla. This plan will articulate the process our outer development 	To facilitate Industrial development a significant portion of Mineral Sands Plant Area/Thurla will need to be rezoned from Rural to Industrial 1. The Design and Development Overla (DDO4) will also need to be introduced over the site.
	 Clause 21.04-9 Economic Development & Tourism – Clearly articulate the role and function of each of the industrial precincts. 	





9 Planning Scheme Amendment





9 Planning Scheme Amendment

The Planning Scheme Amendment to the Mildura Planning Scheme relates to both existing and proposed industrial precincts within the municipality.

The amendment is required to implement the Mildura Industrial Land Use Strategy which identifies industrial opportunities that will exist for the area and provide Council, Government, developers and the community with planning direction and a policy framework to realise the opportunities.

The Amendment proposes to:

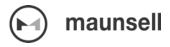
- Introduce the following modifications to Clause 21 Municipal Strategic Statement:
 - Clause 21.02-3 Key Land Use Themes insert text to highlight the importance relating to the relocation of the Freight Gate and rail for freight purpose from Mildura CBD.
 - Clause 21.03-1 The Vision for Mildura insert text to strengthen the vision for Mildura City in relation to expansion on the role and function of industrial precincts in Mildura.
 - Clause 21.04 Strategic Directions modify the Town Structure Plans and introduce two additional Town Structure Plans for Block "H" and Mineral Sands Separation Plant Area/Thurla to reflect the industrial strategies for the townships. Amend Clause 21.04-9 Economic Development and Tourism to implement the future industrial strategies for each township and give effect to the Mildura Industrial Land Use Strategy.
- Rezone the following land parcel from Industrial 1 (IN1Z) to Industrial 3 (IN3Z):
 - Lot 10, PS79714 Eldridge Road, Red Cliffs
- Rezone from Rural Zone (RUZ) to Industrial 1 (IN1) the land referred to as Mineral Sands Processing Plant/Thurla Area.
- Introduce a Design and Development Overlay Industrial Area (DDO4) to Mineral Sands Processing Plant/Thurla Area.
- Include Mildura Airport Master Plan 2000 as an incorporated document to Clause 81 replacing Mildura Airport Master Plan 1998.

For a copy of the draft planning scheme amendment including explanatory report and notice refer to Appendix A.









10.1 Implementation Strategy

Customarily where a requirement for additional industrial land is identified, a schedule for the provision of this land is provided. In this instance the situation is simple due the extrapolated trend for future take up resulting in a suppositional equivalent or less than what is currently designated as vacant industrial land. The very real qualifications to this situation have already been explained.

As a consequence the future supply timing is not so much influenced by the trend but by providing opportunities for the accommodation of the types of industrial activity which are increasingly likely to want to locate in the Mildura region. Hence it is proposed that as a guide, allowance be made for significant scale industrial activities to locate or agglomerate on a more regular basis over the next 20 years. Some of these, as has been demonstrated, could require areas of 20 to 30 hectares or more.

For working purposes feasible targets could be the provision of:

- An additional 50 hectares fairly immediately over the next two or three years;
- A further 50 hectares over the ensuing 5 years; and
- Possibly another 50 hectares or more over the following 10 years.

It is stressed that this is only a guide and a situation which needs careful monitoring over time. Provision of land in advance does not necessarily mean that it be fully prepared and serviced but that it be designated as available for future industrial development. This designated status could take the form of a specific zoning or some other statutory means.

To illustrate the practicality of this future provision, it could well be that another mineral sands operation requiring more than 20 hectares is a contender in the immediate future or short term, along with a possible replication of the current Wakefield scale operation for transport and storage. Tank farms may be appropriately agglomerated in one location.

Implementation of this Mildura Industrial Land Use Strategy will require a co-ordinated approach. Responsibility will need to be shared by Local and State Government, industry, community and agencies alike.

An approach to processes to be followed when implementing a strategy of this nature has been formulated on the basis of similar work performed by part of the consultancy team. This experience is readily applicable to the Mildura situation and takes the form of the following stages:

Stage 1: Ensure Adequate Land Provision and Availability

- Adopt the proposed land supply strategy outlined in Section 8, with specific regard to
- Treatment of the existing zoned areas;





- Identification of land suited to future industrial use as the demand determines; and
- Preparation of an appropriate schedule for the servicing of land as required.

Stage 2: Review Town Structure Plans

 Review and amend existing Town Structure Plans for the existing industrial precincts

A first step in this process is to progress the action plans required for each new precinct, such as Mineral Sands Plant Area/Thurla, Block "H" as well as the key directions of the Airport Business Technology Park Master Plan. This process involves encouraging and facilitating lot consolidation, improving transport access and circulation, upgrading aesthetic appeal and providing buffers in relation to adjoining land uses.

These action plans should be guided by the specific outcomes recommended for each precinct, outlined in Section 8, including the designation of buffer zones, designed to protect the amenity of surrounding areas.

Secure community acceptance and support for land provision and organization actions through information dissemination and conduct of discussion sessions.

Stage 3: Secure Rezoning of Sites

 Initiate and prepare rezoning requests for specific sites as recommended and contained in Section 11 of this Industrial Land Use Strategy. The site specific rezoning requests should be considered as an overall amendment to the scheme which would incorporate further changes and recommendations to the Municipal Strategic Statement.

Much of the strategic content contained within this report can form the basis of the review and assist in formulating a specific local planning policy relevant to industrial development in Mildura.

Stage 4: Fostering Beneficial Use of Industrial Land

Through the process of preparing this strategy it was identified that further improvements can be made by Council to assist in expanding and developing economic investment in Mildura. More specifically, it is recommended that Council focus resources on supporting and facilitating the growth of existing industry to no lesser extent than trying to attract external industries to the area.

An appropriate philosophy to adopt is one being very well prepared to accommodate the expansion of existing activities and those industries to which it is best suited, in preference to adopting a significant pro-active program. It is in this context that the following set of actions is proposed.





This can be done by:

- Allocating specific resources to economic development facilitation within Council;
- Liaising between government departments and levels to secure additional funding;
- Review of statutory planning processes to ensure an efficient timely and cost effective process; and
- Ensure that the distinctive merits of Mildura as an industrial location are contained in any informational material prepared
- Prepare an industrial land and opportunity information kit to be available for general distribution and use in response to relevant enquiries. This kit should include not only data on land supply, services and zonings but also market relevant material such as population characteristics, other activities and residential environment. Importantly it should be kept up to date.
- Maintain structured regular contact with existing operators. It is highly
 desirable that this contact be of a personal, face to face nature, to display both
 interest and discover directly concerns and opportunities. The justification for this
 is the demonstrated experience that most industrial growth comes from existing
 activities as well as retaining them. Letters or pamphlets are inadequate since
 they do not demand attention or response.
- To further demonstrate interest and encourage growth, it would be worthwhile **conducting workshops** informing businesses about contemporary trends.

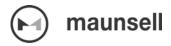
In terms of incentives avoid heavy reliance on "handouts". These handouts include offers of free land and/or rate holidays and financial grants. Most industrial activities which are likely to be worthwhile and long-term contributors make their own decisions on more fundamental factors which are resource and market based. Another increasingly important consideration relates to lifestyle opportunities for both employers and workers. At the same time Council has to appear to be even handed insofar as it does not disadvantage existing industrial businesses in the endeavour to attract new enterprises. This is not to say that no incentives should be offered, but any decisions must be balanced in term of community interest.

Overall, the most appropriate theme is one of being well prepared to accommodate and facilitate growth in the use of industrial land.









11.1 Recommendations

Outlined below is a recommended process for implementation of the Draft Mildura Industrial Land Use Strategy:

11.2 Short Term

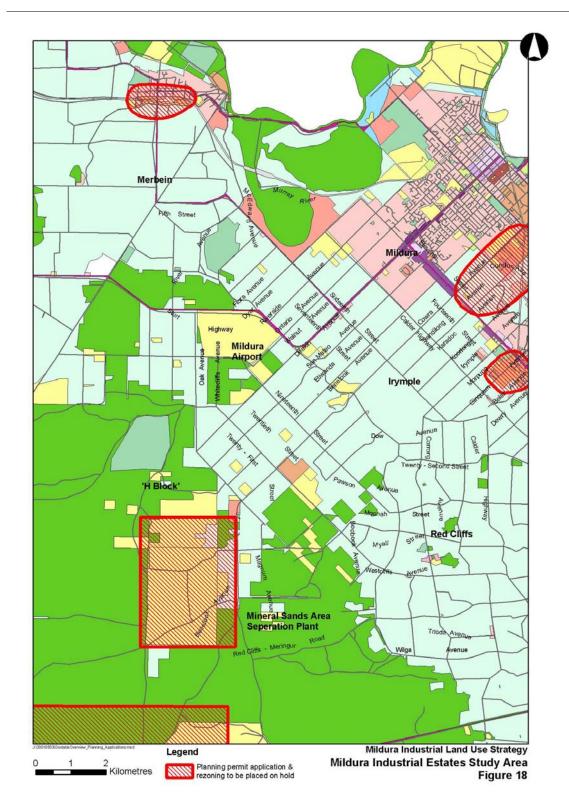
- Rezoning requests and planning permit applications which may impact on this study should be placed on hold until the findings of this study have been endorsed by Council. Figure 18 identifies the areas where rezoning requests and planning permit applications need to be placed on hold.
- Council will need to seek agreement with representatives from VicRoads that there is a need to review the findings of the Planning Study for A20 Sturt Highway in relation to relocating the Sturt Highway from Deakin Avenue to Benetook Avenue.

As a priority it is recommended that Benetook Avenue/Seventeenth Street be promoted as the major thoroughfare. At the same time, Public Acquisition Overlays (PAOs) and setbacks should be incorporated in the Planning Scheme maps to protect the future widening potential of Benetook Avenue.

- The proposed rezoning of properties along the northern and southern side of Benetook Avenue between Fifteenth and Fourteenth Streets from Rural to Business 4 should proceed only if it can be strategically justified. This rezoning seeks to promote the future development of peripheral sales and commercial uses requiring a high level of exposure. It is considered that progressing this proposed rezoning is premature at this stage and would be problematic as the strategic land use policy justification required for supporting such a rezoning has not been developed. DSE has emphasised that all planning scheme amendments must have a strategic basis within the planning scheme showing clear linkages to Municipal Strategic Statement and Local Planning Policy, therefore it is unlikely that this rezoning would be supported at this stage by an Independent Panel prior to the finalisation of this Study.
- Council should rescind land recently rezoned Residential 1 in the Irymple area. This area has been identified for future industrial expansion.
- It is not recommended that any further land be rezoned to accommodate additional industrial development within Area 1 and Area 2 of Mildura as the role and function of these two areas is already compromised by the encroachment of sensitive land uses. As outlined in this report, there is an increasing demand for peripheral sales/commercial uses along Benetook Avenue and it is recommended that the focus for additional development in Mildura be directed towards commercial/peripheral sales type development.





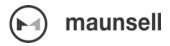






- Council should also investigate the opportunity to received funding through the *Pride of Place* program administered by DSE for urban design/landscape treatments such as signage, roadside furniture, tree planting and other treatment which will assist in the promotion and marketing of 'high amenity' industrial land within the municipality.
- Council will need to implement the Implementation Framework and also develop an Information Kit to ensure greatest opportunity for promotion of the Mildura Industrial Precincts.
- Council must undertake priority discussions with the Land Titles Office to progress the consolidation of titles so that the future industrial development of Block "H" can be expedited as soon as possible.
- Small lot excisions in the Irymple and other townships should be discouraged. Council will need to participate in the Rural Zones Review currently being undertaken by DSE to identify a range of suitable options to prohibit small lot excisions in rural areas abutting industrial precincts. It may be appropriate to introduce a specific Rural Policy into the Mildura Planning Scheme which provides guidance on small lot excision in the rural areas.
- The existing Merbein industrial area should be consolidated.
- The existing Red Cliffs industrial area should be consolidated.
- Council will need to undertake discussions with Department of Infrastructure, VicTrack, Freight Australia, DSE, Vic Roads and any other stakeholder to secure the relocation of the Mildura Freight Gate from the Mildura CBD to Mineral Sands Plant Area/Thurla as the short-term option. Council will need to undertake more detailed planning to identify the land parcels required for the proposed Freight Gate and supporting industrial development and services and appropriate road access immediately. It is considered that there are no other suitable sites within the municipality which would offer a feasible relocation option for the Freight Gate. The Mineral Sands Processing Plant/Thurla Area is considered the most appropriate site in terms of expansion potential, road access and appropriate buffering. This is discussed in more detail in Section 7.1 and 7.2.
- Council should investigate the opportunity to submit applications to the Regional Infrastructure Development Fund administered by Department of Infrastructure and Department of Innovation, Industry and Regional Development to secure funding for the relocation of the Freight Gate from Mildura to the Mineral Sands Plant Area/Thurla.





 The draft planning scheme amendment prepared as part of this phase of work which introduces changes to the Municipal Strategic Statement and a series of rezonings should be placed on public exhibition.

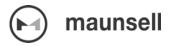
The Amendment proposes to:

- Introduce the following modifications to Clause 21 Municipal Strategic Statement:
 - Clause 21.02-3 Key Land Use themes insert text to highlight the importance relating to the relocation of the Freight Gate and rail for freight purpose from Mildura CBD.
 - Clause 21.03-1 The Vision for Mildura insert text to strengthen the vision for Mildura City in relation to expansion on the role and function of industrial precincts in Mildura.
 - Clause 21.04 Strategic Directions modify the Town Structure Plans and introduce two additional Town Structure Plans for Block "H" and Mineral Sands Separation Plant Area/Thurla to reflect the industrial strategies for the townships. Amend Clause 21.04-9 Economic Development and Tourism to implement the future industrial strategies for each township and give effect to the Mildura Industrial Land Use Strategy.
- Rezone the following land parcel from Industrial 1 (IN1Z) to Industrial 3 (IN3Z):
 Lot 10, PS79714 Eldridge Road, Red Cliffs
- Rezone from Rural Zone (RUZ) to Industrial 1 (IN1) the land referred to as Mineral Sands Processing Plant/Thurla Area.
- Introduce a Design and Development Overlay Industrial Area (DDO4) to Mineral Sands Processing Plant/Thurla Area.
- Include Mildura Airport Master Plan 2000 as an incorporated document to Clause 81 replacing Mildura Airport Master Plan 1998.

11.3 Long Term

Council will need to undertake discussions with Department of Infrastructure and DSE regarding possible reinstatement of the Morkalla line to Thurla and opportunities for further investigation of the extension of Block "H", Airport Business Technology Park, Merbein. There may be some potential problems in re-establishing the railway line along the old alignment between Red Cliffs and Thurla as Red Cliffs Historic Train utilises some of this area while Powercor also now occupy a separate portion with underground power supply along the former track alignment. However, resolution of these issues would allow potential future use of the Abbotsford Bridge to the north west of Merbein providing access to the New South Wales markets and transcontinental line. It should be noted, although the reinstatement of the railway may take some time, it does not need to impede the relocation of the Freight Gate.





 Council should undertake discussions with VicRoads in relation to the potential growth and development occurring on the western side of the municipality which would benefit from a western ring road (Meredian Road) which will provide an important connection to the Calder Highway, Carwarp/Thurla southern area to Sturt Highway and to the Abbotsford Bridge (Yelta) connection to New South Wales.





Appendix A Draft Planning Scheme Amendment