

Table 9.9 Summary of the project's operational greenhouse gas emissions compared to the base case

Scope	Source	Base case GHG emissions (tCO ₂ e-) ¹	Project GHG emissions (tCO ₂ e-) ¹	Difference between the project and base case (tCO ₂ e-) ¹
Scope 1	Maintenance plant and equipment	108.0	93.0	-15.0
Scope 2	Electricity consumption	1.1	1.6	+0.5
Scope 3	Maintenance plant and equipment	8.0	7.0	-1.0
	Electricity consumption	0.2	0.3	+0.1
	Embodied energy	58.0	78.0	+20.0
	Transport to and from site	10.0	15.0	+5.0
	Vehicle road use (year 2012)	316.0	430.0	+114.0
	Upstream fuel and electricity supply	67	87	+20.0
Total		568.3	711.9	+143.6

1. tCO₂e-: tonnes of CO₂ equivalent per annum.

The above estimates show that vehicle road use would be the project's greatest contributor of operational greenhouse gas emissions is vehicle road use. One of the key objectives of the project is to improve capacity and efficiency. A consequence of this increased capacity there will be an increase in vehicle emissions.

9.4.3 Mitigation measures

Greenhouse gas emissions could be reduced for both the construction and operational stages of the project by employing the following mitigation and management measures.

Construction measures

At the construction stage, the following mitigation and management measures would apply:

- Assess energy (fuel/electrical) efficiency when selecting equipment.
- Maintain equipment to retain optimal levels of energy efficiency.
- Where possible, minimise spoil generation and requirement for imported materials.
- Use recycled construction materials where practicable.
- Prepare a waste management plan for construction and demolition to maximise re-use and recycling of construction and demolition waste.
- Use local materials, wherever possible, to reduce transport emissions.
- Undertake vegetation planting and management that maximises opportunities to sequester carbon over the life of the project.

Operational measures

A key part of the project is to reduce congestion and substantially reduce the number of vehicles travelling at speeds below 20 kilometres per hour. This would reduce greenhouse gas emissions.

In addition to reduction in congestion, the following mitigation and management measures would apply to achieve operational emission reductions:

- Where feasible, use natural gas or biofuels for maintenance plant and equipment.
- Use recycled maintenance materials where practicable.
- Use renewable energy sources to power control systems, lighting and signage.

Adaptation to potential climate change impacts

The potential impacts of climate change need to be considered during all design stages to ensure the project is designed appropriately for adaptation to the future climate. Based on the future climate projections contained in *Climate Change in Australia* (CSIRO, 2007) the potential impacts of most concern to the project are temperature increases and extreme heat days, and increased rainfall and flooding.

A qualitative sensitivity assessment has indicated that the drainage basin sizes for the project would need to be increased by approximately 10 to 15 per cent to accommodate potential climate change rainfall scenarios (refer section 9.2.2). Constraints associated with the existing motorway and space limitations on this project make further alterations to pavement drainage and increases in basin sizes very challenging. As such the design cannot include margins of safety to address potential changes in climate in the future. In order to manage the potential climate change impacts on the project, materials would be selected to maximise the durability of the infrastructure and minimise the maintenance requirements.

9.5 Aboriginal heritage

9.5.1 Assessment methodology

An assessment of Aboriginal heritage potential was made for the project in accordance with the RTA's *Procedure for Aboriginal Cultural Heritage Consultation and Investigation* (RTA, 2008b). This procedure is consistent with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW, 2010) and is designed to comply with the requirements for approvals under Part 4, Part 5 as well as Part 3A of the EP&A Act. An outline of the procedure is presented in Table 9.10 below.

Table 9.10 RTA methodology for Aboriginal heritage assessment

Stage	Investigation activity
Stage 1	An internal RTA assessment to determine whether a project is likely to affect Aboriginal cultural heritage.
Stage 2	A preliminary external assessment with limited stakeholder consultation to determine whether a project requires Part 6 approval from the DECC under the <i>National Parks and Wildlife Act 1974</i> .
Stage 3	If approval is required, Aboriginal community consultation and investigation.
Stage 4	Cultural and archaeological assessments undertaken with the involvement of the Aboriginal community.
Stage 5	Implementation of the assessment process.

Note: A Part 6 approval under the National Parks and Wildlife Act 1974 is not required for projects approved under Part 3A of the EP&A Act.

A search of the following heritage databases was undertaken as part of the Aboriginal heritage assessment on 24 March 2010:

- Aboriginal Heritage Information Management System.
- NSW State Heritage Register and Inventory.
- Australian Heritage Database.

Following desktop searches, Jo McDonald Cultural Heritage Management Pty Ltd was engaged to confirm the results of the RTA's stage one assessment and to conduct a stage two assessment on any areas identified by the stage one process as having archaeological potential.

To confirm the RTA's stage one assessment, a second desktop review of the M5 corridor was undertaken to identify areas of archaeological potential. The second desktop assessment compared 1992 (pre-M5 South West Motorway) and current aerial photography.

Field inspections were undertaken on three separate days, 14 May, 3 June and 25 June 2010. Two of these field inspections informed the stage one assessment process where available desktop information was not sufficient to draw conclusions on the potential for Aboriginal heritage items or sites to be present around the M5 South West Motorway corridor. Conclusions could not be drawn at some locations generally due to gaps in available aerial imagery. All ancillary facilities identified as part of the project were considered as part of the stage one investigations. Stage

A third inspection was undertaken on sites identified as requiring a stage two assessment. This inspection focussed on areas identified in the RTA's stage one assessment as having potential for archaeological material, including potential drainage basin locations on either side of Georges River east. A representative from the Gandangara Local Aboriginal Land Council attended this inspection. Representatives from the Gundungurra Tribal Aboriginal Council and Darug Tribal Aboriginal Corporation were invited but could not attend.

9.5.2 Existing environment

Traditional owners and Native Title

The traditional owners of the project area are the Cabrogal and the Dharug (Eora) people. The project is located in the Gandangara (also spelt Gundungara and Gundungurra) Local Aboriginal Land Council area, the Tharawal Local Aboriginal Land Council and the Metropolitan Local Aboriginal Land Council area.

A search of the National Native Title Register was conducted on 30 March 2010. It found that the Dharug Tribal Aboriginal Corporation has a native title claim over the Bankstown, Canterbury and Liverpool local government areas, and the Gundungurra Tribal Council Aboriginal Corporation has a native title claim over the Liverpool local government area. Neither claim has been determined.

Potential for Aboriginal sites

Typical physical evidence of Aboriginal occupation in the Sydney region includes stone tools, stone flakes, rock engravings, midden deposits, scarred trees and grinding grooves. An archaeological predictive model (Smith, 1988) identified that sites are most likely to occur in association with water sources, especially lagoons and swamps. McDonald (1997 and 2005) refined this model by suggesting that sites located near permanent water sources were more likely to contain a higher density of objects and a greater diversity of artefact types, compared with sites near temporary water sources.

The project crosses Salt Pan Creek as well as the Georges River at two locations, Georges River east (at Moorebank) and Georges River west (at Hammondville).

The project area has been significantly disturbed by the construction and operation of the motorway. Additional disturbance has resulted from the development of adjacent roads, housing and other infrastructure.

Known Aboriginal heritage items

The Aboriginal Heritage Information Management System search identified 26 items occurring within one kilometre of the M5 South West Motorway corridor. Three Aboriginal sites were listed as occurring within, or immediately adjacent to the project corridor. These sites were destroyed in accordance with relevant permits during construction of the M7 Motorway and M5 South West Motorway.

'Collingwood', a site of State significance and listed on the State Heritage Register, is located about 400 metres from the motorway corridor and is described as a remnant cultural landscape demonstrating the layers of Aboriginal and non-Aboriginal use and occupation. The statement of significance for the item further notes that the high point of the ridgeline at Collingwood is of historic and contemporary social significance to the Tharawal and the Gundungurra peoples as a meeting place for the two Aboriginal nations, from which each respective nation could remain within sight of their country (DoP, 2007d).

Investigation results

As discussed above, the locations where construction activities are proposed were investigated in accordance with stage one of the *Procedure for Aboriginal Cultural Heritage Consultation and Investigation* (RTA, 2008b).

After a review of previous environmental assessments, historic aerial photographs and, where required, visual inspections, most locations were assessed as being significantly disturbed and that construction of the M5 South West Motorway in 1992 has, almost without exception, created such comprehensive disturbance that the potential for intact Aboriginal archaeological sites is low to nil.

However, the RTA's stage one investigations identified that the following areas required further (stage two) investigation and/or inspection:

- Proposed construction compound site at Heathcote Road (north).
- Foreshore areas of Georges River East.

The field inspection confirmed that the proposed construction site compound at Heathcote Road (north) is highly disturbed and has low to no archaeological potential.

Due to the preliminary nature of the drainage concept design, the precise location of proposed drainage basins adjacent to the Georges River east bridge was not confirmed at the time of survey. An inspection of the anticipated drainage basin locations identified that they were generally disturbed, but stands of intact vegetation were located adjacent to the previously disturbed areas. Where the proposed drainage basins have been situated in disturbed areas, the stage two assessment identified no archaeological constraints.

A desktop review of existing vegetation undertaken as part of the specialist assessment identified four areas where vegetation has not been disturbed and may have limited potential for archaeological deposits. These areas are currently avoided by the project.

9.5.3 Assessment of impacts

Potential for impact

The project would be constructed within the existing road reserve, and would generally occur within the central median. Additional works including the installation of variable message signs and maintenance bays would also be introduced within existing road reserves. While it is expected that most drainage and pollution control works would be confined to the existing motorway corridor, these elements remain the subject of a continuing design development process. Any works outside the motorway corridor or other road reserves would be the subject of more specific investigations aimed at avoiding or minimising impacts.

The archaeological potential of the M5 South West Motorway corridor and surrounding road corridors is considered to be low due to substantial previous disturbance to the area as a result of vegetation clearance, and subsequent construction and operation of these roads. The surrounding area has also been heavily disturbed by intensive urban development. This substantially reduces the likelihood that any Aboriginal objects would be found or disturbed during the construction and operation of the project.

As mentioned above, there are only three known Aboriginal sites identified within or adjacent to the road corridor, and these were legally destroyed as part of the construction of the M7 Motorway and the M5 South West Motorway toll plaza.

Aboriginal heritage sites to the north of Camden Valley Way within the M5 South West Motorway carriageway and south of the M5 South West Motorway toll plaza were identified as part of the Aboriginal Heritage Information Management System searches. These sites were destroyed under Section 90 of the *National Parks and Wildlife Act, 1974* during construction of the M5 South West Motorway and are not considered further within this assessment. No current evidence of these sites remains.

Assessment of impact

The specialist assessment concluded that, due to extensive disturbance during construction of the M5 South West Motorway and as a result of general urban development, there is low to no potential for impacts on Aboriginal cultural heritage as a result of the project.

Given that the archaeological potential of the M5 South West Motorway corridor is considered to be low to nil, Aboriginal heritage is not considered to be a constraint to the construction of the project. However, should any area of remnant vegetation in the immediate vicinity of Georges River east or Georges River west be affected as a result of detailed design requirements (eg for drainage basins), then further assessment of the potential Aboriginal heritage impacts would be required prior to the commencement of construction.

9.5.4 Mitigation measures

It is unlikely that any Aboriginal heritage items would be impacted during the construction and operation of the project within the road reserve. Nevertheless, the following safeguards would be implemented:

- Prior to the commencement of construction works, all personnel working on site will be trained about their responsibilities in accordance with the *National Parks and Wildlife Act 1974* and the procedure to follow in the event that an Aboriginal object or potential Aboriginal object is discovered.
- If Aboriginal heritage items or sites are uncovered during the construction works, all works in the vicinity of the find would immediately cease. The item or site would be reported immediately to the RTA's Aboriginal Cultural Heritage Advisor, RTA's Senior Regional Environmental Officer and the Cultural Heritage Branch of Department of Environment, Climate Change and Water. Works in the vicinity of the find must not recommence until clearance has been received from the RTA officer and the Department of Environment, Climate Change and Water.
- Where detailed design of drainage basins identifies the need to impact intact vegetation on either side of Georges River east (Hammondville and/or Milperra), either side of Georges River west or the 'island' in the middle of the Salt Pan Creek, further archaeological investigations and consultation with the Aboriginal community will be undertaken:
 - In accordance with stage three of the Procedure for Aboriginal Cultural Heritage Consultation and Investigation (RTA, 2008b).
 - In accordance with DEC 2005 Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation for Part 3A projects.
 - In consultation with RTA's Aboriginal Cultural Heritage Advisor (Sydney Region).
 - In accordance with any relevant Department of Planning conditions of approval.

9.6 Non-Aboriginal heritage

9.6.1 Existing environment

Database search

A search of the following databases was undertaken on 26 May 2010 as part of the non-Aboriginal heritage assessment:

- Australian Heritage Database (Australian Heritage Council).
- Register of the National Estate (Australian Heritage Council).
- Commonwealth Heritage List (Australian Heritage Council).

- NSW State Heritage Register and Inventory (NSW Heritage Branch).
- RTA's s170 Heritage and Conservation Register.
- Heritage schedules from the Canterbury Planning Scheme Ordinance, *Liverpool Local Environmental Plan 2008* and *Bankstown Local Environmental Plan 2001*.

This search found that the eastern end of the motorway corridor traverses the Pallamanna Parade Urban Conservation Area, an indicative place listed on the Register of the National Estate. No other heritage items were located within the subject site. Figure 9.5 below shows the location of identified items of non-Aboriginal heritage.

Items of heritage significance

The following items of non-Aboriginal heritage significance, located within the vicinity of the motorway corridor, are listed on state and national heritage databases:

- Kitchener House, Voyager Point, a small section of Bankstown Airport, Pallamanna Parade Urban Conservation Area, Welfare Avenue Urban Conservation Area and Norfolk Avenue Urban Conservation Area. These are listed on the Register of the National Estate.
- A small section of Ingleburn Army Camp and the Defence National Storage and Distribution Centre. These are listed on the Register of the National Estate and the Commonwealth Heritage List.
- Collingwood Heritage Precinct is listed on the Register of the National Estate and on the State Heritage Register as a State significant site. It demonstrates occupation and use by Aboriginal and non-Aboriginal people, and the significant transition of the place from an agricultural estate to an industrial estate during the 19th century.
- The Beverly Hills Railway Station group is listed on the State Heritage Register. It is an example of the new design for station buildings first introduced around 1929 on the suburban lines then being constructed (East Hills and Bankstown–Regents Park).

The following items are listed by the *Liverpool Local Environmental Plan 2008* and are located within the study area:

- Obelisk and milestone, Discovery Park, Collingwood Heritage Precinct at 40 Atkinson Street, Liverpool.
- McGrath Services Centre Building (formerly Challenge Woollen Mills, and Australian Paper Company's Mill) at Shepherd and Atkinson streets, Liverpool.
- Casula Powerhouse (former power station) at Casula Road, Casula.
- Clinch's Pond at Heathcote and Church roads, Moorebank.
- Hammondville Home for Senior Citizens at Judd Avenue, Hammondville.
- Kitchener House (formerly 'Arpafeelie') at Moorebank Avenue, Moorebank.
- Australian Army Engineers Group, including Royal Australian Engineers Memorial Chapel, Royal Australian Engineers Monument, Major General Sir Clive Steele Memorial Gates, Cust Hut at Moorebank Avenue, Moorebank.
- Hammondville Home for Senior Citizens at Judd Avenue, Hammondville.
- St Anne's Anglican Church, corner of Walder Road and Stewart Avenue, Hammondville.
- Pirelli Power Cables and Systems Building (formerly MM Cables Factory, and Cable Makers Australia Factory Pty Ltd) at 3 Bridges Road, Liverpool.

- Plan of Town of Liverpool (early town centre street layout). Streets in the area bounded by the Hume Highway, Copeland Street, Memorial Avenue, Scott Street, Georges River and Main Southern Railway Line (excluding Tindall Avenue and service ways).
- Apex Park (first Liverpool Cemetery), at Elizabeth Drive and Castlereagh Street, Liverpool.

The following item is listed on the *Canterbury Planning Scheme Ordinance* and is located within the study area:

- The rear of 1353 Canterbury Road, Punchbowl – St. Saviour Cemetery.

The following items are listed on the *Bankstown Local Environmental Plan 2001* and are located within the study area:

- Revesby Primary School, 84 The River Road, Revesby.
- Former Milperra Soldier Settlement, Bullecourt Avenue, Fleurbaix Avenue, Ashford Avenue, Milperra.



9.6.2 Assessment of impacts

The eastern end of the subject site traverses the Pallamanna Parade Urban Conservation Area, an indicative place listed on the Register of the National Estate. As construction would be predominantly undertaken within the existing road reserve, it is unlikely that the urban conservation area would be affected by the construction and operation of the project.

The area occupied by the M5 South West Motorway and its surroundings has been extensively modified by industrial and residential development. It is unlikely that any unidentified non-Aboriginal heritage items would be found or disturbed during the construction and operation of the project.

As listed in section 9.6.1, a number of heritage items are located within the vicinity of the motorway corridor. None of the proposed construction site compounds nor the variable message sign sites would be located on any heritage sites.

The proposed construction site compound at Moorebank Avenue would be located directly adjacent to the Australian Army Engineers Group (listed on the *Liverpool Local Environmental Plan*), and Kitchener House (listed on the Register of the National Estate and the *Liverpool Local Environmental Plan*). However, it would not directly affect these heritage sites, and visual impacts (if any) would be temporary.

There may be limited visual impact on heritage items caused by the location of a number of variable message signs near listed heritage items. These variable message signs would have a display board about seven metres wide and 1.7 metres high and would be suspended a minimum of 5.5 metres above the road. The proposed location of these signs and any nearby heritage items are described in Table 9.11.

Table 9.11 Location of proposed variable message signs in relation to listed heritage items and areas

Area	Locality	Variable message sign ID	Heritage item
Hume Highway, south of Liverpool	Southbound between Memorial Avenue and Macquarie Street	1	Corner of Hume Highway and Memorial Avenue. Adjacent to Plan of Town of Liverpool (listed on the <i>Liverpool Local Environmental Plan</i>) and about 500 metres from Apex Park (first Liverpool Cemetery) (listed on the <i>Liverpool Local Environmental Plan</i>).
Newbridge Road, west of Moorebank Avenue	Eastbound approaching Moorebank Avenue	3	Newbridge Road, near Haig Avenue. Across the road from and within about 40 metres of Pirelli Power Cables and Systems Building (listed on the <i>Liverpool Local Environmental Plan</i>).
Newbridge Road, east of Moorebank Avenue	Westbound approaching Moorebank Avenue	4	Newbridge Road, near Bridges Road. Within about 200 metres of Pirelli Power Cables and Systems Building (listed on the <i>Liverpool Local Environmental Plan</i>).
Moorebank Avenue, south of the M5 South West Motorway	Northbound approaching the M5 South West Motorway	16	Moorebank Avenue, near Anzac Road. About 300 metres from Kitchener House (listed on the Register of the National Estate and <i>Liverpool Local Environmental Plan</i>) and the Defence National Storage and Distribution Centre (listed on the Register of the National Estate and the Commonwealth Heritage List).

While the proposed variable message signs would not have a direct (i.e. physical) impact on any of the above listed heritage items or areas, there is the potential for these structures to result in visual impacts. Visual impacts may occur if a variable message sign is deemed to detract from the heritage setting of the heritage item. However, as there is a degree of flexibility regarding the exact locations of these signs, there is scope to avoid or at least minimise visual impacts by locating the signs a suitable distance from any heritage items.

9.6.3 Mitigation measures

While impacts on non-Aboriginal heritage items are not expected, the following management measures would be implemented to minimise the risk of unforeseen accidental impacts during construction:

- During detailed design, proposed variable message signs will be located to avoid visual impacts on heritage items, wherever possible.

If an item (or suspected item) of non-Aboriginal heritage is discovered during construction, all work in the area of the find would cease and would not recommence until the heritage value and associated protection and approval requirements have been determined. The RTA would also notify the RTA Senior Environmental Specialist (Heritage) to determine the appropriate course of action.

9.7 Socio-economic and land use

9.7.1 Existing environment

The M5 South West Motorway is the main link between Sydney airport and south-western Sydney. It connects the economic centres of Sydney's central business district, Sydney Airport and Port Botany with greater western Sydney. It plays a key role in the wider metropolitan transport system and in Sydney's economic productivity. The M5 South West Motorway services local, regional and national demands and provides key connections for freight, commercial and commuter traffic. It also provides access to employment, retail, commercial and entertainment areas.

The M5 South West Motorway's road corridor passes through the suburbs of Beverly Hills, Narwee, Riverwood, Padstow, Revesby, Panania, Milperra, Hammondville, Holsworthy, Moorebank, Wattle Grove, Liverpool, Casula, Lumea, and Prestons. These suburbs are located within the Canterbury, Bankstown and Liverpool local government areas.

The M5 South West Motorway is tolled. However, with the M5 cashback scheme, NSW residents may claim back the value of tolls (excluding GST) paid while using privately registered vehicles on the motorway.

Demographic profile

As at June 2007 there were about 680,000 residents living in the south west region, representing 10 per cent of the NSW population. The average age of the region's residents was 36 years compared to the State average age of 39 years. This implies a greater proportion of people of working age requiring efficient transport.

The 2006 Census recorded the population of the Liverpool local government area as about 165,000 people, Bankstown local government area as 170,500 people and Canterbury local government area as about 130,000 people (ABS, 2006). There was an increase in population since the 2001 Census of around 43,000 people. The total population of the suburbs through which the M5 South West Motorway traverses is about 210,000 people, within around 150,000 separate households. Population growth is expected to continue due to new urban release areas in the South West Growth Centre and the Western Sydney Employment Hub.

Socio-economic profile

Overall, the region is less well off than the state average, with higher housing densities, lower incomes and a greater proportion of public housing. This indicates a need to provide greater enabling infrastructure to support economic and social development of the region. This is borne out by the following data.

The economy of the Liverpool, Canterbury and Bankstown local government areas is generally based on manufacturing, retail trade, construction, health care and social assistance. These industries employed about one-third of the employed resident population of the local government areas in 2006 (ABS, 2006). Six major business parks are located in the Bankstown and Liverpool local government areas.

The NSW Government's Metropolitan Strategy (DoP, 2005) acknowledges that Bankstown local government area has significant economic infrastructure. It is the only metropolitan local government area with a major centre (Bankstown central business district), specialised centre (Bankstown Airport/ Milperra industrial park) and strategic corridor (the M5 South West Motorway). The local government area also contains more than 10 suburban shopping centres and six well-established industrial employment parks (BCC, 2008). All of these land uses create significant demand for transport and access.

As at March 2009 there were about 400,000 people within the region in the labour force, representing 11.1 per cent of the state's workforce (ABS, 2009). At this time, the region's unemployment rate was 7.8 per cent compared with 5.2 per cent across the State. The 2006 Census information found that about 25 per cent of the region's labour force travel between 10–50 kilometres from home to work.

In 2007, the average taxable income of Canterbury and Bankstown residents was \$35,132 while for Fairfield and Liverpool residents it was \$35,077. This compares with an average taxable income for NSW residents of \$44,574. Incomes are less than the state average, and there is a lower proportion of highly paid employment in the region. This also implies a need to provide equitable access to employment centres as a means of raising economic wellbeing.

At the 2006 Census, there were about 260,000 residences within the region. This comprised about 187,000 houses, 72,000 units and townhouses and 1,000 other house types. Houses in the region had an average of 3.1 bedrooms and averaged three residents. This compared with a state wide average of three bedrooms and 2.6 residents per house. This implies a greater housing density of people per house, representing larger family units. At June 2008, 5.4 per cent of the region's residents were public housing tenants, compared with 2.5 per cent across the state.

As at the 2006 census there were 368,000 vehicles registered to households in the region, with 86 per cent of households owning an average of 1.5 vehicles.

Residents in the region rely heavily on the road network to get to work. Around 88 per cent use a motor vehicle as their prime transport means to work, compared with 80 per cent statewide. For the Canterbury and Bankstown local government areas, about 11 per cent of trips are taken on public transport, with eight per cent for the Liverpool local government area. This widespread motor vehicle use is despite the fact that all major centres for the Bankstown, Canterbury and Liverpool local government areas are served by trains and buses. The lower patronage of public transport in the region is generally due to the geographically dispersed population and population densities.

Overall, the region is less well off than the state average, with higher housing densities, lower incomes and a greater proportion of public housing. This indicates a need to provide greater enabling infrastructure to support the economic and social development of the region.

Land use

The area surrounding the project is characterised by an extensive transport network and associated infrastructure. The project is located in a highly urbanised area with land use varying from low to high density residential development, commercial and industrial areas, educational institutions and recreational and open space uses including parks, reserves and golf courses. Land use is shown in Figure 9.6.

From King Georges Road to Fairford Road, the land use on either side of the existing M5 South West Motorway typically comprises low-density detached residential dwellings with pockets of higher density development. There is some industrial development and areas of open space. Salt Pan Creek also traverses this area and Salt Pan Reserve, a large area of open space, lies adjacent to Salt Pan Creek.