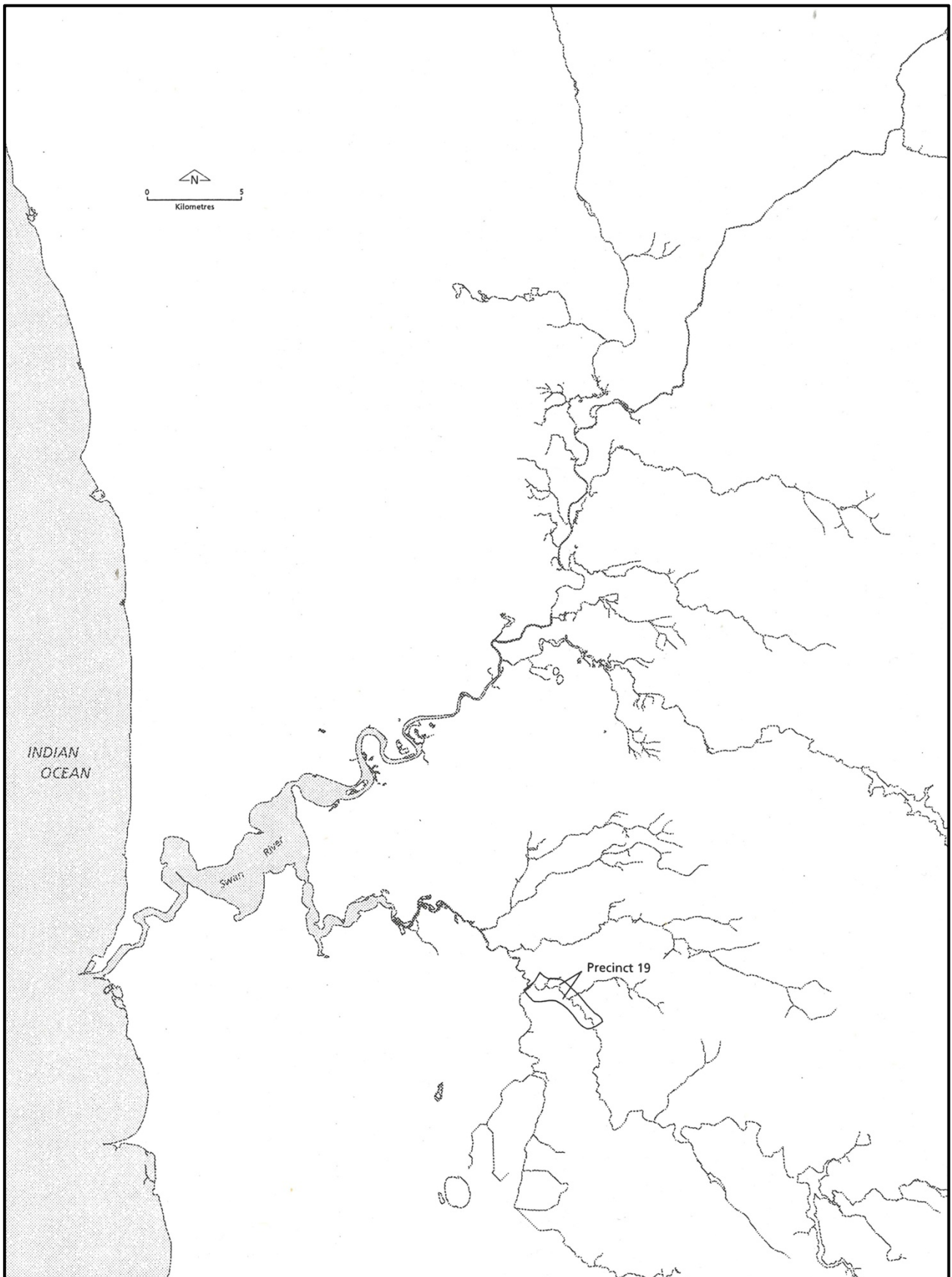


Precinct 19

Canning River – Canning-Southern River Confluence to
Tonkin Highway



Summary

Canning River – Canning-Southern River Confluence to Tonkin Highway

The Canning River loosely meanders upstream from the confluence of the Southern River. In places, the Channel splits into two smaller arms and forms alluvial islands before joining back into a Single Channel.

The river embankment becomes increasingly incised into the surrounding sediment upstream of the Southern River confluence. There are several tributaries entering the river, the most significant being Ellis Brook, which is narrow and takes an irregular meandering form.

The southern bank is part of the low undulating dune systems which dip to meet the flood plain and river channel. The northern bank is topographically higher than the southern bank and is part of the palaeo alluvial fans which spread in front of the Darling Range. The natural riparian vegetation is an attractive belt of paperbark and flooded gum. The trees are attractive for their maturity and their bending branch forms and foliage which overhang the river. The riparian overstorey is quite dense, however the understorey is prolific with weeds and indigenous species are rare. Most of the vegetation complex around the river has been cleared for grazing and horticultural purposes.

There is a diverse mix of land uses adjacent to the Canning River within this precinct and they include residential, commercial, municipal, horticultural and grazing land uses. A number of citrus orchards remain in the area, however there has been increasing demand to redevelop these properties into small residential blocks. There are several examples within this area where new homes have been built on small blocks, such as the Foreshore Place Development and around Homestead Road. Other orchard and grazing properties have become simply single residential properties with large paddock like gardens. The residential developments in Maddington range in age and style, while the majority of the Gosnells residences were built in the 1970-1980s and are quite modest and built in the fashion of their era.

Other significant land uses are the John Okey Davis Reserve and the Pioneer Park. Both reserves are valuable for their open space and access to the river. Both are well maintained and are important for emphasising the historic significance of the area.

Biophysical Processes

Geological Processes

This section of the Canning River is alluvium which is variably laterised and podsolised and is characterised as being of the Guildford Geological Formation. The adjacent Southern River passes through the younger Bassendean Sand Formation which is made up of leached Pleistocene dunes of quartz sands.

Swan Soil Association, which is found along the present stream course, is classified as being red, podsollic and undifferentiated, alluvial soils. The northern banks are part of the yellow podsollic soils of the Guildford Association. The Southern River Soil Association, which is classified as grey sand dunes with intervening clayey swamps, is evident along the Southern River and southern banks of the Canning River.

Topography

The area is part of the topographic unit called the Pinjarra Plain which consists of unconsolidated sediments of fluvial origin. These palaeo landforms were the result of the many small streams which deposited their sediment load as they left the Darling Scarp and formed the gently undulating alluvial fans. The upstream area of the precinct becomes increasingly topographically higher and the landform appears more gently undulating than the flatter area adjacent to the Southern River confluence.

Hydrological Processes

Water features

The Canning River takes the form of irregular meanders upstream from its confluence with the Southern River. The width of the channel varies; however in most sections the width is greater than the channel depth. The Canning River channel is only 2-3 metres wide; however there is evidence that the channel was quite recently wider as there has been infilling of the flood plain which is only partly vegetated. At the Southern River confluence there are narrow 2-3 metre channels. The channel splits into two anabranches in several places due to alluvial deposits and the low gradient of the river. The Southern River meets the Canning River as a T- section where bodies of water flow towards each other and continue in a southerly direction. There are several tributaries which drain into the Canning River at this precinct and the larger tributaries are located adjacent to River Avenue, upstream of Station Road and Ellis Brook.

Bathymetry

The river is very shallow in this precinct and the water depth is often less than a metre. The water is entirely fluvial in origin and there are several tributaries which drain from the surrounding land.

Flooding

Much of the lower lying area is subject to seasonal inundation, however most of the built up area has been constructed on infill above the hundred year flood level. Since the construction of the Canning Weir the volume of flood water has been reduced.

Erosion and accretion

Breaks in the riparian vegetation have caused isolated points of erosion; however as most of the river banks are covered in a dense layer of weeds, erosion is not a significant problem.

Vegetation Communities

Native

Swan Complex

The indigenous flora of this precinct is classified as being part of the Swan Complex (DCE, 1980). The vegetation ranges from fringing woodland of flooded gum (*Eucalyptus rudis*) and swamp paperbark (*Melaleuca raphiophylla*) with localised occurrence of low open forest of swamp sheoak (*Casuarina obesa*) and saltwater paperbark (*Melaleuca cuticularis*). The various communities which make up this complex are described below.

Eucalyptus-Melaleuca communities

The main complex is the flooded gum (*Eucalyptus rudis*) and swamp paperbark (*Melaleuca raphiophylla*) dominant community along this section of the Canning River and the Ellis Brook. In most areas the understorey has been replaced by exotic species; however the shrub *Astartea fascicularis* is present in this section of the river. Some of these areas have become pastured woodland, such as adjacent to Astley Street where the understorey communities have been cleared and grasses have been encouraged by land use practices. The riparian vegetation becomes particularly sparse west of Albany Highway and adjacent to the intersection of Tonkin Highway.

Eucalyptus communities

The remnant woodland sections of flooded gum (*Eucalyptus rudis*) occur as isolated islands with the understorey consisting predominantly of exotic weeds. This community occurs adjacent to Astley Street and Homestead Road.

Exotic

Exotic species are the dominant understorey species, and prominent weeds include edible fig (**Ficus carica*), bulrush (**Typha orientalis*), weeping willow (**Salix babylonica*), giant reed (**Arundo donax*), bamboo (**Bambusa* sp), dolichos pea (**Dipogon lignosus*), grape vine (**Vitis spp*), blackberry (**Rubus* sp), castor oil bush (**Ricinus communis*) and Japanese pepper (**Shinus terebinthifolius*).

Historical Land Use and Resulting Environmental Changes

The original grants included J.Hobbs (Lot 14), J.A. Dutton (Lot 15), Ferres (Lot 15A), J.O. Davis (Lot 16), D. Scott (Lot 16A), and J.R. Phillips (Lot 38).

John Okey Davies arrived from England in 1829 with his wife and children; however he was slow to take up his property (McDonald and Cooper, 1988). Some sources suggest that he was sent to the colony by an English perfume manufacturing Company and planned to use his farm at the junction of Southern and Canning Rivers for the cultivation of Arum lilies and the almond trees for the manufacture of perfume. The venture was not very successful as the London market was six months away. However the arum lilies are still present along the river today. The farm was called 'Chenies' and is now known as Homestead Park. The property ran sheep and cattle. Both Davies and his wife died in the mid 1830s leaving the property in the hands of his two teenage sons.

John Randell Phillips prepared for his journey to his Canning property at Fremantle in 1830. His crop seeds and stores were destroyed by Aboriginal burn-off in April 1830 at Fremantle and to add to his misfortunes he was later speared by Aborigines, in October 1830. Despite these delays, he chose grants later known as Maddington Park and Stoke Farm and he started establishing his properties once replacement goods arrived in December. The cost of running the farm was excessive and in 1833 Major Nairne bought Maddington Park (Carden, 1968). Phillips left to take up a post in Albany in 1840.

In 1862 Charles Gosnells bought Location 16 for 200 pounds as an investment. His heirs sold the land in 1902 to the Gosnells Estate Company which immediately set about planning a town site with 0.8 hectare blocks (McDonald and Cooper, 1988).

By 1893 the railway line from Perth to Bunbury had been officially opened which encouraged the growth of the area. Gosnells was also on the route to Fremantle and Perth and as a consequence the surrounding suburb grew as a half way junction.

In the mid 1930s, the Canning Weir was completed and since this time fine silty sediments have been deposited in the Canning River (McDonald and Cooper, 1988). During the 1930s, the confluence of the Canning and Southern Rivers was approximately 6 metres wide compared with almost half of this now.

Present Land Use and Social Patterns

At this precinct, the Canning River has a diverse mix of land uses including residential, commercial, municipal, horticultural and grazing land uses. The residential area of Gosnells nests into the area between the Southern River and the Canning River. The houses are modest and typically in the designs fashionable at the time of construction. These are placed on quite large blocks and are typically single storey. Along Homestead Road, the new housing developments are on smaller blocks and the properties often have adjoining front gardens. The houses however are all individually built and are all single storey small homes.

Between Albany and Tonkin Highways, there are several large rural properties on the eastern bank of the river. These are mainly used as pasture for horses and cattle and there are fewer orchards than on the western Section of the river.

The Gosnells Hotel and Railway Market are prominent features in the area. The market several retail outlets have been built in a style complimentary to the adjoining Gosnells Hotel. Within the building a 270 tonne steam train has been placed as part of the historic precinct and to attract customers into the centre.

The City of Gosnells council offices and municipal buildings are adjacent to the river and provide services such as a library, hall and child minding facilities.

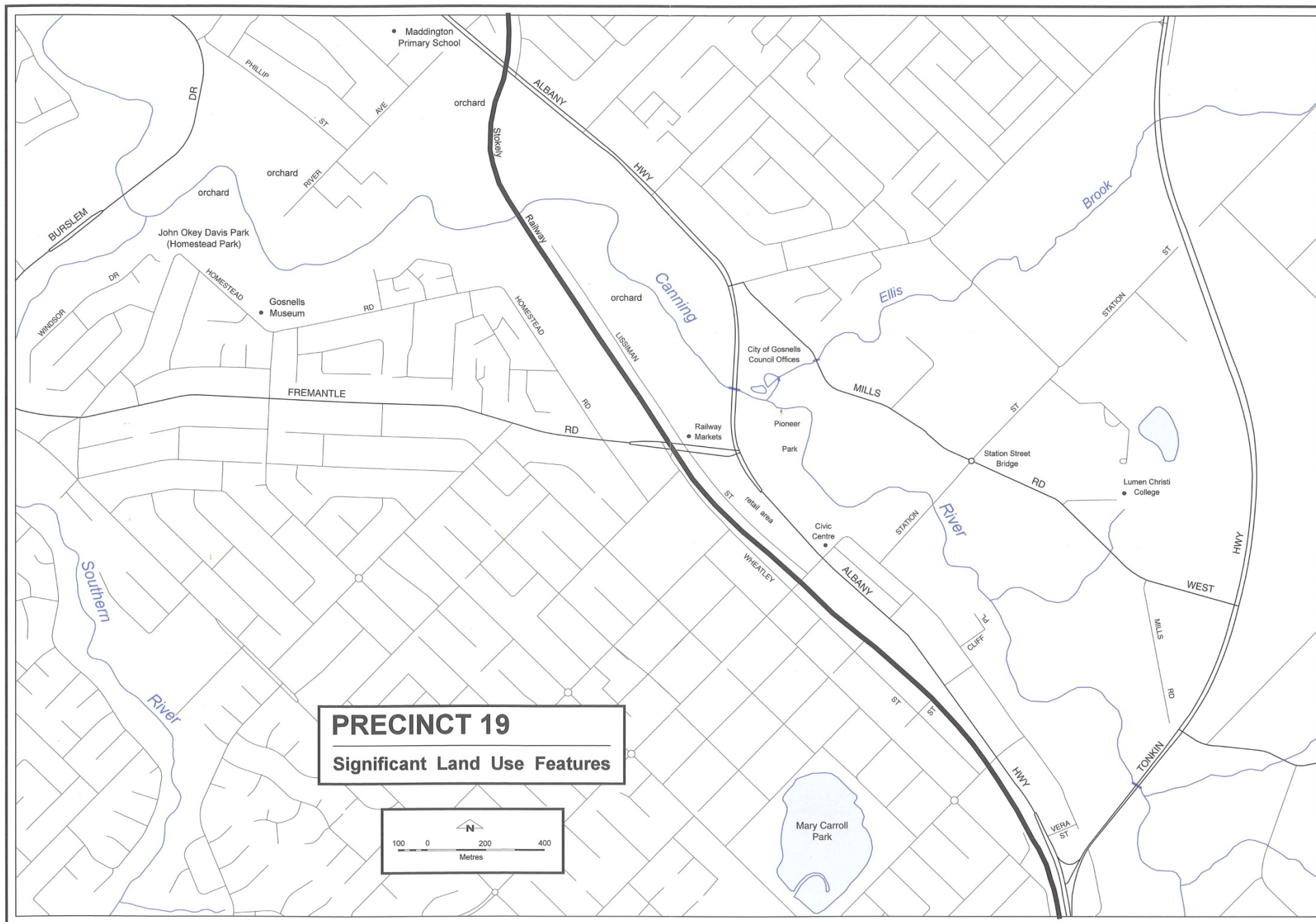
Recreation nodes

The Gosnells Museum is the old Wilkinson Homestead which is located in part of the John Okey Davis Park. The park provides an area of open space and access to the river foreshore. There are seats and barbecues as well as a toilet block.

Pioneer Park is a well designed for community activities and other recreation. The park has several barbecue facilities, wheel chair access, an amphitheatre and other amenities.

Public access

Public access to the foreshore is difficult in most of the precinct. John Okey Davis Park and Pioneer Park have dual use paths and access to public land. However most of the land surrounding the river is private or restricted for railway reserves.



Sites of Nyungar & Wider Australian Community Significance

Aboriginal significance

The entire Canning River has been recorded as a useful track to the Darling Range for the local Nyungars. There have not been any specific sites identified as having significance to Nyungar within this precinct. However there is a Nyungar legend that the local people lived on flat land adjacent to the river. The account tells how the tribe which lived in the area had a snake that they would look after and feed. The snake would play with the children. The group would go into the desert on their search for food. One time the tribe went for such a long time that when they returned they found the snake ill. The old people tried to look after him, but were tired and soon had to sleep. In the morning they woke to find that the snake had died and turned into a long row of hills. The people were no longer sad at his death but knew that the snake was still with them.

As with the entire Canning area, once the colonists began settling along the river there was antagonism between the two communities. One hostile incident occurred when John Randel Phillips was clearing his land on the south-eastern section at Stoke Farm (McDonald and Cooper, 1988). He was approached by a party of eight Nyungars and was speared because he was destroying the Nyungar livelihood. Unwarranted attacks were made by the settlers. For example, one of William Nairne's labourers shot at a group of Aborigines to show his companion how '*natives were treated in other colonies*'. Later in 1839, the retaliations continued when 12 year old John Burtonshaw-Cox was killed by Men-dick while minding Phillips' sheep and goats. Men-dick eluded the settlers for some time before being captured. He was hung and his body left as a warning to other Nyungars.

Other significance

The Wilkinson House is conserved as a museum of Gosnells history and is also known as Orange Tree Farm. There is a pioneer graveyard within the John Okey Davis Reserve.

Conservation Areas

Wetlands

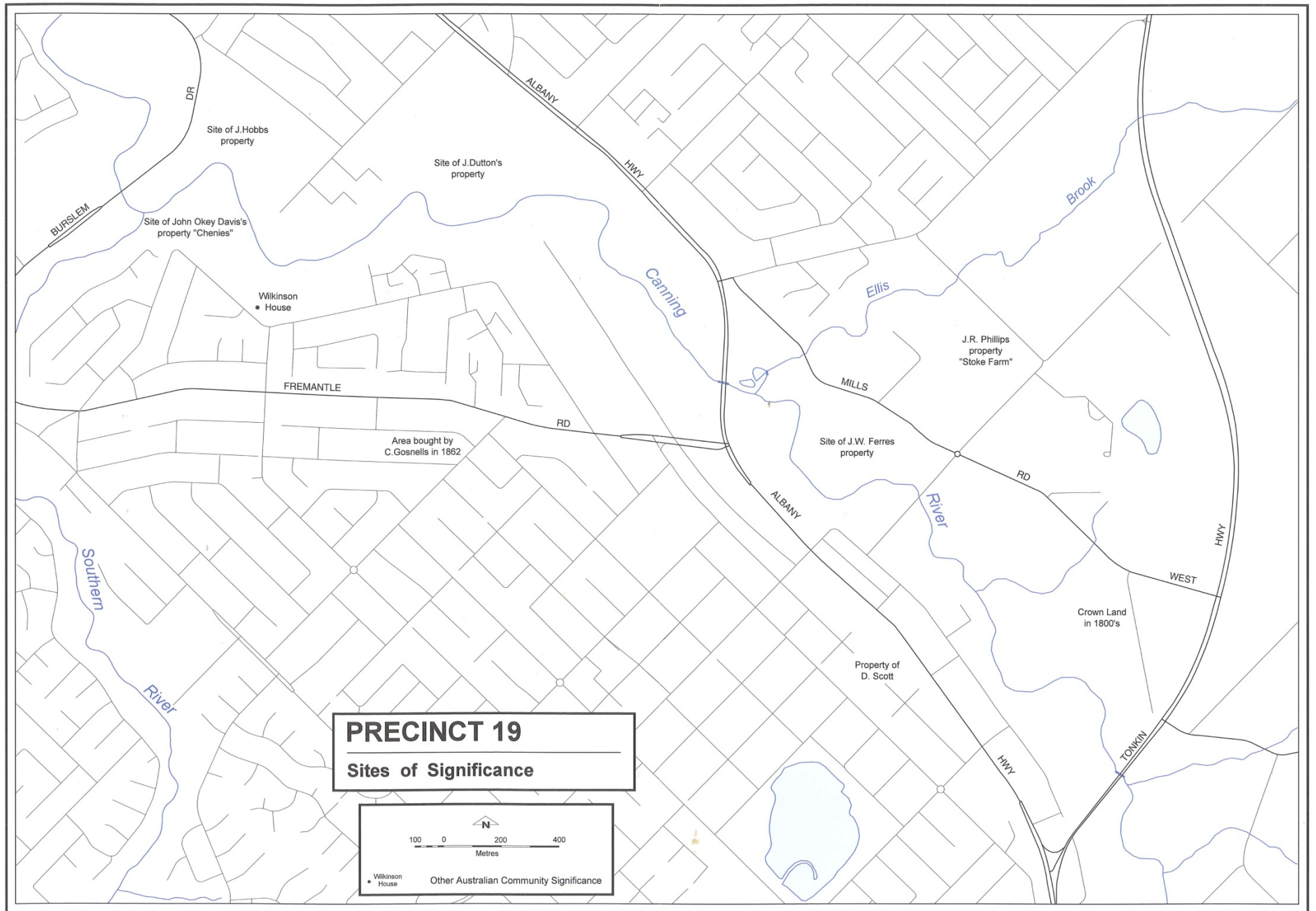
The section of Canning River in this precinct has been identified as a multiple use management category by WAWA, (1993). These wetlands are perceived as having a significant number of ecological, hydrological and social functions which must be considered in the context of 'sustainable' catchment management. It is recognised that these cleared woodlands and

grasslands provide a valuable pasture for grazing and also support bird feeding and breeding grounds.

System 6

M75 Upper Canning and Southern Rivers

The recommended area-comprises the Canning River and its fringes from Nicholson Road Bridge to the boundary of State Forest, together with those parts of the Southern and Wungong Rivers within the City of Gosnells. Bickley Brook and the Southern River confluences have banks which are well covered with flooded gum and paperbarks. Grasses and weeds abound. The Southern River from its confluence with the Canning River to its continuation as the Wungong River is fairly well wooded with flooded gum on both banks, although the ground flora has been mostly lost. Along the lower reaches there are paperbark and *Acacia saligna* and patches of *Juncus* and *Baumea* species. Along the Wungong River remnants of woodland of jarrah and marri occur in places on the slopes above the banks with an understorey which includes large clumps of *Cyperus vaginatus* and occasional *Lobelia olata* and *Acacia saligna*. The area constitutes open space of regional significance because of its high conservation and recreational values, its proximity to Perth's residential areas and regional roads passing through the area.



Landscape Description

Precinct Description

Waterform and natural riparian zone

The Canning River forms loose meanders upstream from the Southern River confluence. Parallel to Windsor Drive, the river has split into two Channels forming flat alluvial islands. The Canning River channel is very narrow and shallow and the river almost appears as a small creek in places during periods of low water flow. There are several tributaries entering the river, the major one being Ellis Brook. Two man-made lakes are located on higher land adjacent to Ellis Brook and the Canning River. The waterform is particularly attractive when the river meanders and the high clayey channel banks are exposed creating a complex and interesting form.

The natural riparian vegetation is an attractive belt of paperbark and flooded gum. For the most part, the trees that remain are attractive for their maturity and their bending branch forms and foliage which overhang the river. The overstorey is quite dense, however the understorey consists of mainly weed species. The area is frequently inundated and often becomes water logged in the lower gradient of the downstream section of the precinct.

Landform

The southern bank of the Canning River is part of the low undulating dune systems which dip to meet the flood plain. Upstream of the Southern River confluence, the river channel becomes increasingly incised into the surrounding landscape as the river forms a lower gradient route through the surrounding steeper landform.

Much of the flood plain has been infilled for housing developments and therefore there are several sloping infilled embankments in front of the housing estates. At Pioneer Park the landform varies from the gravelly outcrops on the higher land which give way to a steep embankment adjacent to the flat river flood plain. The soil appears clayey where exposed. One of the attractive features of the precinct is that the Darling Range acts as a backdrop to the Canning River. The face of the scarp appears quite steep and the slope rises quite quickly to the undulating series of hills that form the Darling Range. Several quarry faces punctuate the slopes and alluvial fans of the range at Orange Grove and Martin. The exposed granite contrasts with the surrounding dark grey green of the hills vegetation and therefore is a prominent landscape feature.

Vegetation

The vegetation along Windsor Drive, Gosnells, is particularly attractive as there is mature eucalypt woodland with an understorey of acacia and grasses. The foliage is so dense that the river channel cannot be seen by the viewer; however breaks in the lower storey reveal that arum lilies are abundant within the river channel and damplands. The main complex is the flooded gum and paperbark community. These two trees are particularly attractive as they complement each other both in tree form and foliage types.

The taller flooded gum emerges from the dense canopy of the smaller paperbarks. In most areas the understorey has been replaced by exotic species; however the shrub *Astartea fascicularis* is present in this section of the river. Some of these areas have become pastured woodland such as adjacent to Astley Street where the understorey communities have been cleared and grasses have been encouraged by land use practices. The remnant orchards provide an interesting land use vegetation complex along the river and their cultivated forms are attractive visual focal points within the urban environment.

At Pioneer Park an attractive stand of flooded gum and paperbark adjacent to a mowed flood plain provides a pleasant parkland. Much of the parkland near the amphitheatre is lawned and due to the adjacent steep embankment the trees have an attractive parkland enclosure characteristic. The form and height of the trees is quite apparent to the river user as all the amenities are positioned within the vegetation complex. There are several trees which overhang the meandering riverform and they give a dappled light effect on the water surface. There is an abundance of weeds in the understorey and the most prolific is the bright green bridal creeper.

Upstream of Pioneer Park much of the vegetation has been cleared for grazing and the result is a belt of riparian vegetation around the riverform and the adjacent cleared pasture land. The vegetation appears dense and the paperbarks form a band of dense canopy over which the flooded gum form a less dense foliage strata. The understorey is a thick covering of weeds.

Riparian land use

John Okey Davis Park is attractive for its old orchards and olive trees which have been retained on the banks of the flood plain and gently sloping hills. Most of the park is a wide open field which meets the riparian fringing vegetation at the base of the flood plain. There are several barbecue facilities and a toilet block which is placed in a rather prominent location on the 'hill'. There are few trees to screen this building.

The toilet block building has been built in a 'colonial' brick style to fit in with the historic building of Wilkinson House.

A drain enters the Canning River in front of the Foreshore Place housing estate and has some paperbarks and an understorey of weeds. On the opposite bank a small stream acts as a drain to surrounding areas. It is surrounded by orchards and adjacent is the Stokely Railway Bridge. The section of river adjacent to the bridge and railway line is difficult to access due to private property and restricted land. It is unattractive due to the lack of riparian vegetation. The vegetation is cleared around the railway and from the adjacent properties.

Pioneer Park is an attractive area of open space which has been carefully planned with a steeply sloping embankment forming an enclosed flood plain. The garden has steep slopes from the Gosnells Municipal Centre to the flood plain. It has barbecues, seats, an amphitheatre, sundial garden, gazebo garden and wheel chair access. The amphitheatre was funded by Readymix which has its name made up in a tile fresco which is one of the many patterns on the steps and stage of the amphitheatre. In tribute to the pioneers of the area, there are several flat metal 'cut out' type statues of pioneers. Adjacent to the council library and arts centre there is a continuation of the tile designs with an Aboriginal design, and there are also three totem poles like sculptures in tribute to local flora and fauna as well as a mural for Multicultural Year. Unfortunately, there is a large amount of graffiti on the statues and benches which detract from what would be a very pleasant parkland. Other small acts of vandalism also detract from the riverfront such as several Shopping trolleys in the river. Within the park is the City of Gosnells Junior Park Ranger Gazebo which has been constructed by the youth group and a garden of citrus, olives and cherry has been retained in the historic style of small horticultural properties in the area. The sundial garden has a good display of local native species and non endemic native species, in particular the ground covering grevilleas.

Station Street crossing is a one lane crossing of the Canning River. It has white painted rails and is a low form bridge. Adjacent to Cliff Place is an area of open space which provides pedestrian access to a river foreshore. Upstream of Station Street access to the foreshore is difficult. The area has the overstorey of flooded gum, however the understorey consists mainly of weeds and the local council mows the weeds to create a parkland environment.

Tonkin Highway crossing is a large concrete piled bridge which crosses the gully-like cross section of the Canning River. The bridge is relatively low formed. Adjacent to the bridge are the overhead main Server powerlines which have conspicuous supporting towers.

Land use

The roadside plantings along Windsor Drive consist of jacaranda which is inconsistent and detracting from the adjacent riparian vegetation. Houses have been demolished at the end of Windsor Drive and the mature trees of the gardens have been retained and include maple and box trees. Replacing the older large blocks is a new housing development which has involved infilling and levelling of the land and the creation of a steep bank and retaining wall adjacent to the topographically lower river and flood plain.

Wilkinson House is of valuable historic significance as it was the residence of early settlers along the river. Its conversion to a local history museum has allowed old agricultural equipment to be kept in the grounds providing visual interest to the area. The building's roof is painted a soft rosy red which is quite attractive; however the walls have been painted a rosy pink, which makes the building quite prominent. The colour is not in keeping with the era in which the house was built nor does it enhance the area. It would be more appropriate to at least paint the walls a lighter toned colour. The building and grounds are well maintained and although access is only available on the weekends, visual access through the wire fence is possible.

There are several orchard properties along Homestead Road, although most have become simply single residential properties. One of the older properties is 'Shangri-la' which has an old metal arch at the head of the driveway and is one of the more attractive properties along the road. These large blocks and associated orchards are becoming increasingly rare, as the subdivision is occurring, for example at the Foreshore Place Development on the north side of Homestead Road and the subdivision between Fremantle and Homestead Roads. These new houses are built in the fashion of the 1990s and have new neat gardens and in the case of the Foreshore Place Development are separated from the river by landfill and a fence.

At Gosnells, the railway crosses the Canning River in line with Lissiman Street. It passes adjacent to several orchards and acts as a barrier to the river. The Gosnells Hotel and Railway Market are located at the junction of Fremantle Road, Albany Highway, the Canning River and the Railway. The new markets are designed to be consistent with the Federation styled Gosnells Hotel and the hotel has been renovated using similar materials and paint colours.

The City of Gosnells council office is a new mid 1980s building located within a landscaped garden. The building is of pale brick with orange tiles and it is located on higher land while beneath it is an artificial lake and the Canning River.

The river has been incorporated as a landscape feature of the park rather than a separate entity which is an excellent example of retaining the riverform and vegetation within an urban environment. The gardens around the council office have several poplars, flower beds and lawn. The several municipal buildings between Pioneer Park and Albany Highway have been built over time using different materials and in several styles.

The residential area of Maddington contains a mix of house styles ranging from small weather board homes built earlier this Century, to new houses built in the last decade. The residential area for the most part is separated from the northern bank of the river by Albany Highway. On the southern bank upstream of Ellis Brook, the residential development fronts onto the river and is not separated by a road. Within this residential area there is a range of houses which vary in age, style and size and includes single residence and flats. The orchard and pasture blocks continue on the northern banks between Ellis Brook and Tonkin Highway. The native vegetation has mostly been cleared and the paddocks have a few single tree stands. Wire fences extend down to the edge of the orchard properties and access to the river is restricted.

Landscape Interpretation

Dominant Landscape Character

There are several different landscape characters along this section of the Canning River. The most significant is the remnant rural landscape. A number of old citrus orchards are present along the northern section of the precinct; however these are being quickly replaced by suburban subdivisions. At the southern section of the precinct, the rural landscape is made up of horse agistments and cleared pasture.

There is a very narrow ribbon of riparian vegetation south of the Albany Highway crossing of the Canning River. The Mills Road East area is a rural landscape which is visually discrete due to the riparian vegetation acting as a screen to the Gosnells suburban area. The riparian vegetation is made up of tall flooded gum, with an understorey dominated by paperbarks. As the fields in front of the riparian vegetation are cleared, the stratification of the trees can be easily viewed.

The John Okey Davis Park and Gosnells City Council grounds are attractive open parklands. The park has some remnant orchards; however the land is mainly grassland with a backdrop of remnant vegetation along the Canning River. The Gosnells City Council grounds have been landscaped with lawn and exotic plants. There is a section of remnant riparian vegetation along the Canning River and adjacent stream. The result is a parkland with an attractive backdrop of vegetation along the lines of a classical garden.

The suburban area of Gosnells and Maddington consists of mainly modest houses, often with large blocks. The houses built in the mid 1990s are generally on smaller blocks originating from a large rural block. Along Albany Highway, ribbon development Shopping centres occur. These are generally modest developments with conspicuous advertising and signage. The railway cuts through the rural and suburban areas and is a significant landscape element in both landscape character types.

Significant Viewscapes

The John Okey Davis Park is an attractive element in the suburban landscape, and the Gosnells museum and orchards evoke a historical feeling.

The Gosnells City council offices have attractive gardens which can be viewed from Albany Highway. The Railway Market area is made up of several buildings which were either built at the turn of the Century or have been built in a complementary style. This area is a significant landscape element which is important in creating a local landmark for Gosnells from Albany Highway.

Conforming and Non Conforming Elements in the Landscape

There are a few old citrus trees along the banks of this development and they are rather attractive as a reminder of historical land uses, however the entire bank is covered in weeds and the neglected nature of the banks is environmentally unacceptable, although from a landscape perspective the scene is rather overgrown and appealing.

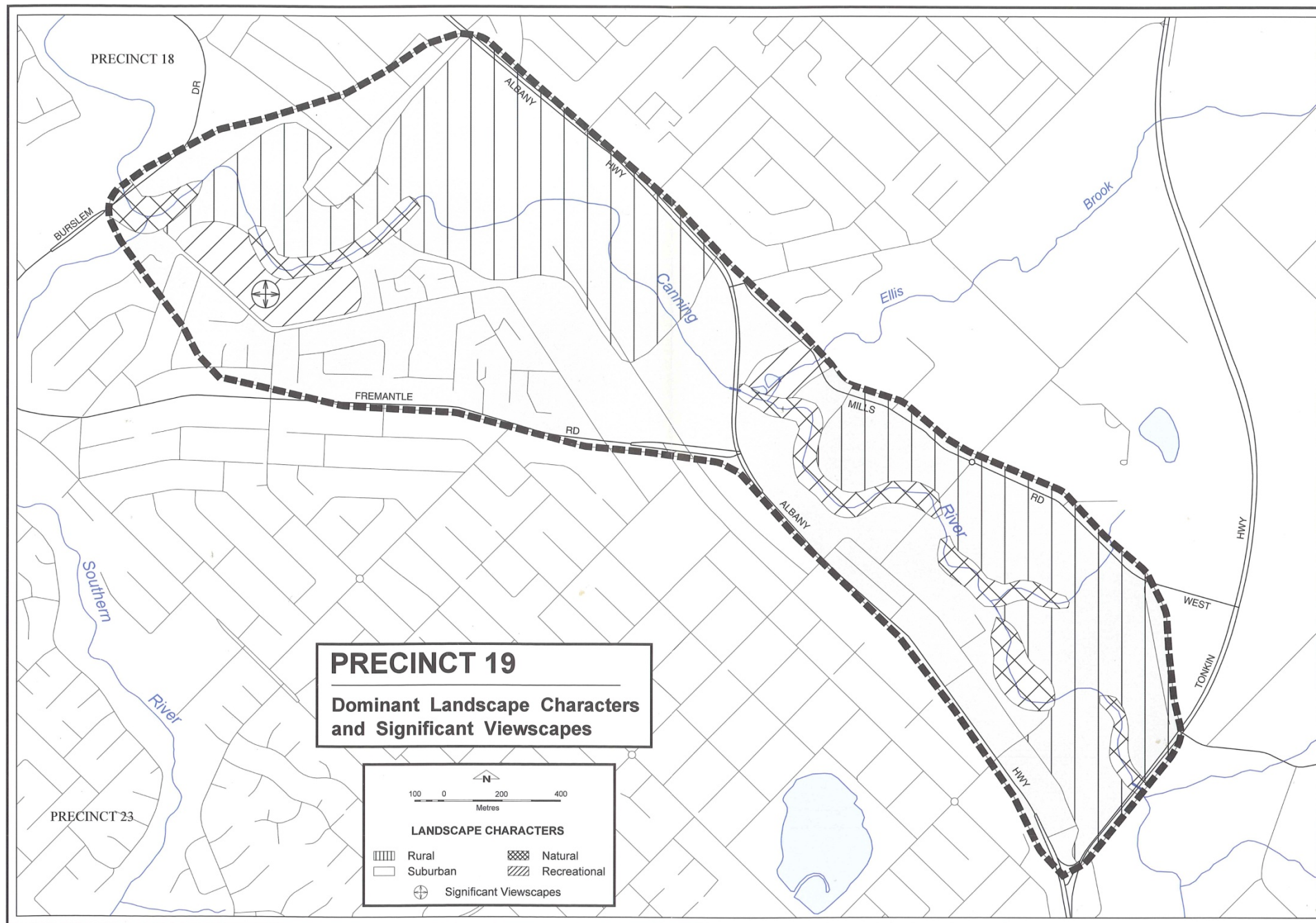
Pioneer Park is an attractive area of open space. It is valuable for being close to municipal and commercial areas. Unfortunately, despite efforts to make this park attractive and to celebrate the historic and Aboriginal significance of the area, the park has been subject to vandalism which makes the water user less likely to enjoy the area. The understorey consists of weeds. It should be possible to rehabilitate the area.

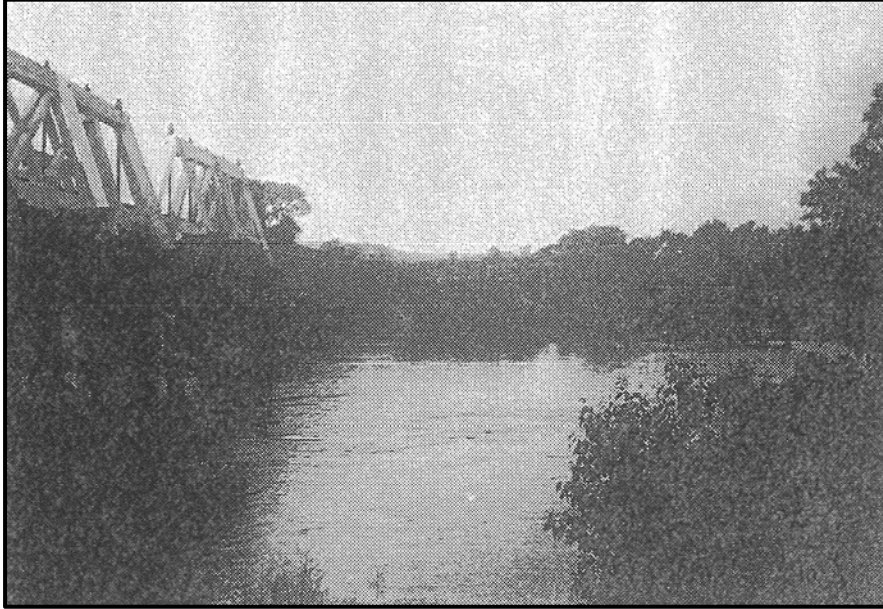
Recommendations for Maintenance and Enhancement of the Present Landscape Character

- Ensure that the Railway Market area remains a local landmark with important historical elements conserved.
- Consider the importance of the rural landscape and the protection of those elements which make up the rural landscape
- Maintain and enhance the riparian vegetation as it provides an important ribbon of natural landscape character in a suburban landscape.
- The paint colour of Wilkinson House needs to be appropriate to the era in which it was built, or at least should be a less vivid pink.

Precinct Specific References

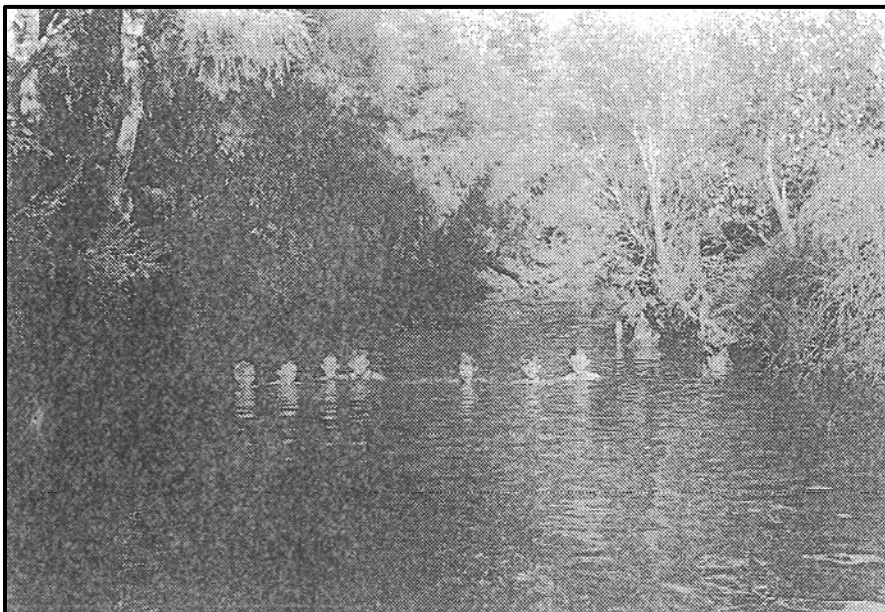
McDonald and Cooper, W. 1988. **The Gosnells Story**. City of **Gosnells**.





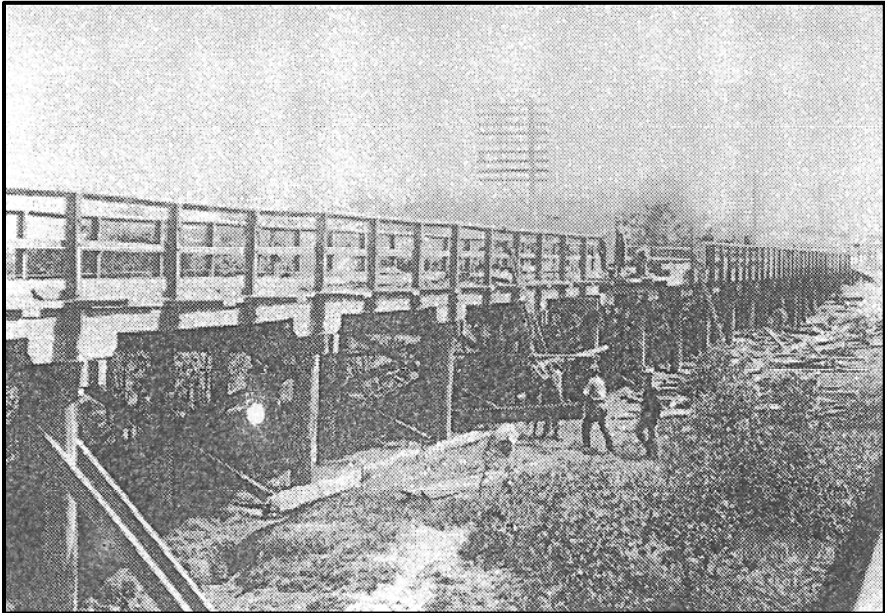
Railway Bridge near River Avenue, Maddington. c1926.

Swan River Trust.

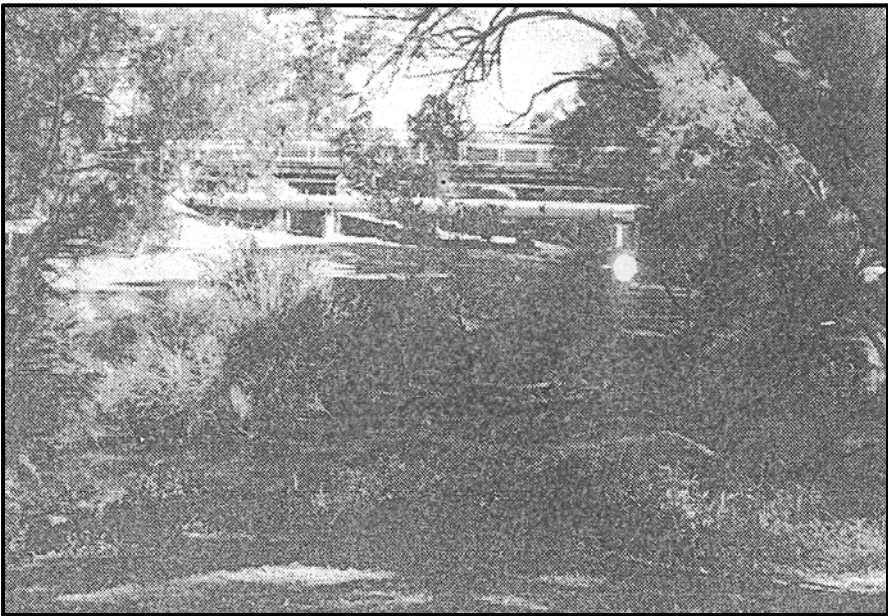


Green's swimming pool, upstream of River Avenue, Maddington, 1920s.

Swan River Trust.



Bridge repair, Gosnells, 1920s.
Battye Library 816B/164



Albany Highway Road Bridge, Gosnells, 1997.
Swan River Trust.