

Sandhurst
Comprehensive
Development Plan

May 1996

16th March, 1995

**SANDHURST LOCAL STRUCTURE PLAN
A PROPOSED GOLF COMMUNITY DEVELOPMENT
FRANKSTON CITY COUNCIL**

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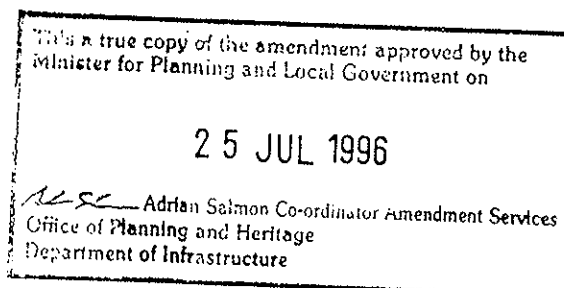
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INTRODUCTION

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EXECUTIVE SUMMARY

The Sandhurst Local Structure Plan Area

The Sandhurst Local Structure Plan (SLSP) covers a total area of approximately 309 hectares of primarily grazing land and comprises two parcels of land to the east and west of McCormicks Road and located between Wedge Road to the south and Thompsons Road to the north. The site is located within Melbourne's southeastern sandbelt and adjacent to the fastest growing residential growth corridor. The site is gently undulating, is well served by water resources, is close to railway links and is connected by the well developed arterial road system to surrounding major centres, including Cranbourne, Frankston and Dandenong, and can be provided with all of the necessary infrastructure and urban services.

Metropolitan Strategy Context

The SLSP area is located within a designated non-urban area where the planning controls do not permit residential development. An amendment to the Cranbourne Planning Scheme is required. The SLSP has been prepared having regard to the relevant regional planning policies and will be considered in the context of these existing policies and a review of metropolitan strategy with respect to the future of the non-urban areas.

The Proposed Sandhurst Local Structure Plan

The purpose of the SLSP is to enable an integrated golf course and residential development combining recreation, tourism, open space, non-urban and residential elements on the fringe of the existing urban area on land which is highly accessible, close to urban facilities and centres of employment, can be fully serviced and will satisfy a need for more diverse housing choices.

The SLSP provides for the establishment of an integrated golf and residential development containing two 18 hole championship courses, accessible to the public by green fee payment and through club membership, and a residential community comprising a variety of densities and dwelling types provided in nodes throughout the golf courses and containing up to 2500 residential lots (depending on market demand) and a population of up to 7500 persons. The SLSP also provides for a club house precinct containing a club house facility for both courses, accommodation for tourists and competitors, a recreation building, tennis courts, sports administration offices, a

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pro shop, sports medicine clinic, turf management apprenticeship school, a community node comprising primary school, pre-school, local shop and open space, and a main road convenience centre containing a petrol station, convenience shop, family restaurant, fast food outlet and video hire. Almost 50% of the land can be devoted to golf course development and open space.

The SLSP has been prepared taking into account the Local Structure Plan requirements of Minister's Direction No. 3 which apply to the South-Eastern Growth Area and by adapting the design principles of the *Victorian Code for Residential Development - Subdivision and Single Dwellings (Vic Code 1)* to this unique residential and golf community.

The Sandhurst Local Structure Plan proposes to provide a suitable interface between existing urban and non-urban areas and will create economically and environmentally sustainable use and development. Sandhurst will be developed as the new headquarters of Victorian golf and will cater for State and National level golf events ranging from junior competitions to the Victorian Open Championship.

The SLSP proposes to create a unique and high quality life style not previously available to Victorians and will provide for a diversity in dwelling densities and dwelling types not readily available within the Frankston City Council, the Cranbourne portion of the City of Casey or the general locality. The SLSP will provide for significant economic development with opportunities for both tourism and employment.

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OUTLINE OF THE SANDHURST LOCAL STRUCTURE PLAN

In summary, the main features of the SLSP (Plan 1) include:-

- * A total site area of approximately 309 hectares currently held in six ownerships and zoned Farming (Low Intensity).
- * Recognition of the existing strategic framework and integration with the adjoining residential land to the south and with surrounding non-urban areas to the north, east and west.
- * Two 18 hole golf courses and a residential community comprising a variety of densities and dwelling types containing up to 2500 lots and a population of up to 7500 persons.
- * The main (eastern) portion of the SLSP is provided with a soft green edge to Thompsons Road, Taylors Road, Wedge Road (east of McCormicks Road) and to the northern half of McCormicks Road by the golf course development which encompasses the residential areas. The northern and western non-urban interface boundaries of the smaller western portion of the SLSP will be provided with six metre wide pre-planted landscape easements
- * The main land use components and approximate areas which will make-up the SLSP are:

• Two 18 hole Golf Courses	144.0 ha.
• Residential	153.3 ha.
• Main Road Convenience Centre	0.9 ha.
• Primary School & Community Facilities	3.6 ha
• Public Open Space	7.2 ha.
- * A golf and community precinct containing club house facilities, pro-shop, tourist and competition accommodation, sports administration offices, a recreation building, tennis courts and other facilities.
- * The retention of the existing River Red Gums within the golf course, open space or other public areas to ensure their long term preservation and landscape enhancement.
- * A system of retarding basins and drainage works within the golf courses and residential areas will create attractive water bodies, lineal open space areas and

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provide for significant downstream drainage improvements and a source of water for golf course maintenance.

- * A separate public open space provision of land representing 4.5% of the residential area, including local parks/play grounds and pedestrian/bicycle linkages. The golf courses and the public open space comprises 48.9% of the total SLSP area.
- * A main road convenience centre containing a petrol station, convenience shop, fast food outlet, family restaurant and video hire is located on a site of 9,000 square metres at the southeastern corner of Thompsons road and McCormicks Road. A local shop will be provided in association with the primary school precinct. Higher order retail facilities and activity centres are already planned within the Carrum Downs ODP.
- * Community services and facilities provided within the golf club and primary school precincts, including:
 - primary school;
 - a community centre comprising recreation facilities and a recreation building;
 - a pre-school and community health centre.
- * A per hectare development levy based on an agreed maximum base lot density for all residential subdivision, including specified funding for roads, recreation facilities and community facilities.
- * Bus routes designated to ensure that a significant proportion of residents are within safe walking distance in accordance with Vic Code 1.
- * A collector road system designed to create an efficient road network, spread traffic volumes and protect local amenity.
- * Pedestrian and bicycle paths located within widened road reservations and lineal parks to ensure off road mobility throughout the residential areas.
- * Design guidelines for residential, golf course and other building development to create identity and to maintain a high standard of building design, landscape treatment and development.

THE LOCAL STRUCTURE PLAN

THE LOCAL STRUCTURE PLAN

1.0 STRATEGIC BASIS OF THE SANDHURST LOCAL STRUCTURE PLAN

1.1 Background

The SLSP is proposed over an area which is currently zoned non-urban Farming (Low Intensity) under the Cranbourne Planning Scheme. The land forms part of the non-urban area which is located between the Frankston and Cranbourne urban corridors, generally runs in a northwest to southeast direction between Dingley and Cranbourne South and is known as the "Springvale Green Wedge". The urban corridor and non-urban/green wedge planning strategy for metropolitan Melbourne was established through Amendments 3 and 21 to the then Melbourne Metropolitan Planning Scheme. These amendments were exhibited in 1971.

1.2 Purpose of Sandhurst Local Structure Plan

The purpose of the SLSP is to provide the basis for a localised review of the non-urban framework, policies and statutory provisions to enable a unique integrated golf and residential development, incorporating the new headquarters for Victorian Golf, to be established in a manner which addresses the green wedge rationale, maximises the use of existing infrastructure, provides housing variety and choice and recognises the locational and natural physical characteristics of the land. The SLSP has been prepared following a thorough investigation of the site, including an independent environmental audit of natural environment values. Investigations include a strategic and statutory planning assessment, a landscape assessment, traffic planning, an evaluation of the availability and provision of hydraulic and reticulated services and the need for and cost of infrastructure improvements to be funded by development levies.

1.3 Key Planning Principles/Factors

In order to strategically assess the study area, a number of key planning principles/factors were adopted to provide a framework for evaluating the suitability of the land for an integrated development and to guide the nature and form of the SLSP and future development within it. These key principles/factors include:-

- * The need to reassess the green wedge rationale for the land having regard to its attributes and the applicability of the current Farming (Low Intensity) Zone in light of economic impacts on owners to maintain the land for non-urban purposes, the location of the land and new opportunities for recreation, tourism and economic development.
- * Create an attractive and sustainable recreation and urban environment.
- * Provide a wider range of housing opportunities.
- * Provide a full range of urban services and facilities.
- * Acknowledge any significant environmental features.

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- * Provide efficient, functional and high quality residential areas.
- * Integrate new development with surrounding land uses.
- * Create a sense of individuality, identity and place.
- * Provide opportunities to pursue alternative forms of transport.
- * Ensure the efficient and economic provision of infrastructure.
- * Stage development in a logical and efficient manner.
- * Ensure that there is access to appropriate human services.
- * Identify costs and funding arrangements for the provision of services and facilities prior to development.

1.4 Local Structure Plan Elements

Implementation of the SLSP will necessitate an amendment to the Cranbourne Planning Scheme. This can be achieved in several ways, but each relies on the preparation and approval of a local structure plan to provide for a comprehensively planned and staged development. The SLSP adopts the elements required by the Minister's Direction for local structure plans prepared for land within the South-Eastern Growth Area and addresses the following factors:-

- location of housing areas of differing densities
- population targets for specific areas
- hierarchy and location of activity centres
- location and staging of social facilities and services, in as much detail as is possible at this stage
- hierarchy and location of public open space
- location of sites, features and objects of environmental or cultural significance
- transport and road hierarchy
- public transport routes and corridors
- bicycle paths and network
- location of major physical infrastructure

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- proposed arrangements for the funding and provision of works, physical services and facilities from public and private sources and where possible social facilities and services
- details of staging and development.

1.5 Basis for Green Wedge Determination

The urban corridor and green wedge strategy and framework plan for metropolitan Melbourne was developed over 25 years ago and has undergone both minor and major adjustments over time. Minor adjustments have included the fine tuning of the boundaries and provisions of non-urban zones and the substitution of one non-urban zone for another. Major adjustments have included the conversion of large areas of non-urban land to urban as part of the South-Eastern Growth Area Plan. The Strategic Plan contained in Clause 14 of the Regional Section of the Planning Scheme depicts the current framework. The green wedges were largely determined by a range of physical, environmental and economic constraints which were judged to restrict or preclude urban development. These constraints were identified as:-

* **Flood Control**

Areas where flood control will act as a constraint on development.

* **Water Quality**

Water supply reservoirs as catchments must be rigidly protected from pollution.

* **Water Pollution Control**

Location of existing or proposed purification plants and major trunk sewerage systems in the metropolitan region.

* **Miscellaneous and Overlay Factors**

Electricity transmission lines, electrical interference, building height restrictions and noise levels around air fields, other buffer requirements, and Statements of Planning Policy.

* **Mineral Resources**

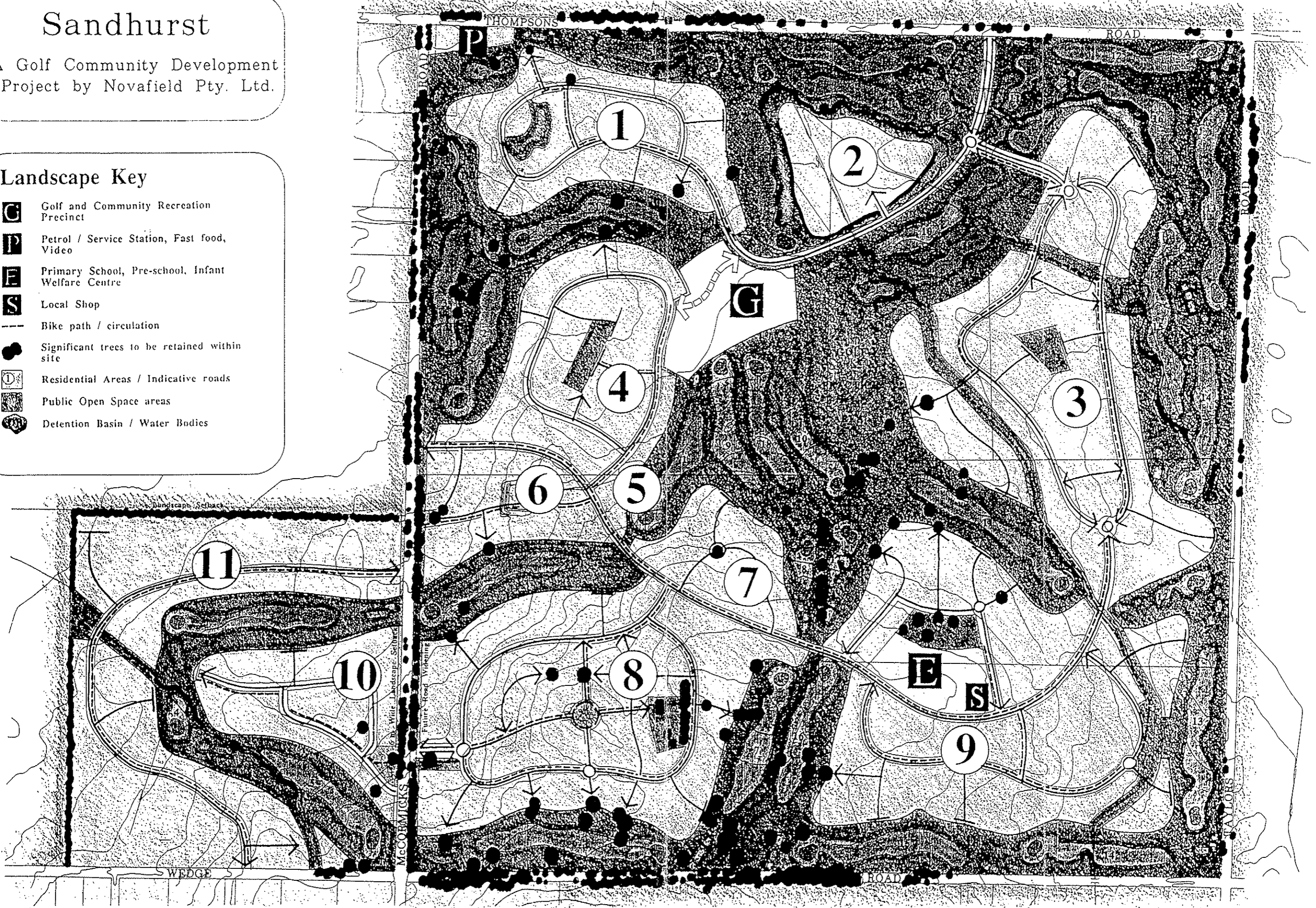
Location of proven and potential deposits and minerals, clays and sands which have commercial value and may be required for future extraction to meet building and road making requirements.

Sandhurst

A Golf Community Development Project by Novafield Pty. Ltd.

Landscape Key

- G** Golf and Community Recreation Precinct
- P** Petrol / Service Station, Fast food, Video
- E** Primary School, Pre-school, Infant Welfare Centre
- S** Local Shop
- Bike path / circulation
- Significant trees to be retained within site
- D** Residential Areas / Indicative roads
- Public Open Space areas
- Detention Basin / Water Bodies



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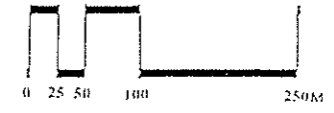
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* **Conservation Areas**

Areas of conservation, historic or scientific significance and areas of landscape interest and agricultural quality.

* **Terrain characteristics**

The physical characteristics which affect development, such as catchment boundaries, land slope and soil types.

The planning objectives identified for non-urban areas included the conservation of bushland and the retention of farmland to provide "breathing spaces" and areas of visual stimulation and recreation close to the settled areas. (*Planning Policy for the Melbourne Metropolitan Region, November 1971*).

The major factors identified by the *South Eastern Growth Area Plan - A Background Report, November 1990* which were seen to constrain urban development in the south-eastern region were:-

- Flora and Fauna
- Landscape values
- Fire hazard
- High cost of urban infrastructure
- Affects on Westernport
- Drainage and flooding
- Pressures on agriculture
- High social costs of access, isolation and reduced choice
- Metropolitan green wedge.

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1.6 Green Wedge Evaluation

The Sandhurst Local Structure Plan area has been evaluated against all of the above factors and objectives. The following assessment concludes, that on the one hand, the factors which support the green wedge rationale and constrain or preclude urban development or alternative development within non-urban areas do not apply, but on the other hand, a number of the green wedge objectives can still be achieved through an integrated use and development that retains a significant amount of open space, retains the River Red Gums, provides for landscape enhancement and blends recreation and residential development. Several urban objectives will also be achieved with respect to utilisation of existing infrastructure, consolidating an existing urban area and providing for a wider housing choice, economic development and for employment and tourism opportunities. The analysis demonstrates that the location of the land within the Springvale green wedge is no longer a reason to preclude the SLSP and the necessary amendments to the Planning Scheme. The land does not possess any important attributes which can not be preserved by implementation of the SLSP. The Planning Scheme can either be amended by replacing the Farming (Low Intensity) Zone with an urban residential zone or by varying the provisions of the former zone to enable a permit to be granted for an integrated golf course and housing development subject to the preparation and approval of a local structure plan. The former course has been adopted.

Flood Control

The subject land is traversed by two branches of the Eastern Contour Drain, but is not within a Stream and Floodway Zone or a Melbourne Water Corporation Public Use Zone, is not subject to drainage overlay controls, is not reserved or proposed to be reserved for any public purpose and does not contain any recognised or identified wetland area. The Existing open drains/floodways impose certain constraints on the land, but no more so than occurs on most urban land. The drainage constraints can be converted into opportunities within the SLSP through the creation of lineal parks along waterways and the incorporation of retarding basins within the residential and golf course development to form attractive water features, which will alleviate existing downstream drainage problems, particularly within land holdings to the west of the SLSP area, and will also provide a water supply for golf course maintenance and promote ecologically sustainable development.

Water Quality

The SLSP area is not within a water supply catchment area. The proposed retarding basins will include stormwater treatment facilities to ensure the maintenance of downstream water quality. The land does not drain to the Westernport catchment.

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Water Pollution Control

The land can be sewered by gravity main to the Melbourne Water South Eastern Purification Plant a short distance away to the west. Thus, an established major sewerage system can be utilised. A limited area at the corner of Wedge Road and McCormicks Road can be connected into the existing sewer system serving Carrum Downs.

Miscellaneous and Overlay Factors

Although several titles to the land between Taylors Road and McCormicks Road are affected by an east-west running easement in favour of the State Electricity Commission of Victoria, the easement is not required for transmission line purposes and the proposed terminal station site to the west in the City of Greater Dandenong has been sold. The easement will be expunged prior to development. The SLSP area is not subject to building height restrictions or noise effects from airfields, is not within the buffer zone to the South Eastern Purification Plant, which terminates on the western side of the Frankston-Dandenong Road, and is not limited by any Planning Scheme Overlay Controls with respect to sites of significance or by any Statement of Planning Policy such as those which cover the Dandenongs, the Westernport region, the Mornington Peninsula or the Macedon Ranges. Relevant State Environment Protection Policies can be satisfied. Thompsons Road is a main road under the Planning Scheme, and therefore, the State Planning Policy on Highway Areas applies. However, the provisions of the Policy can be satisfied through the SLSP urban design, landscape and traffic planning proposals.

Mineral Resources

The SLSP area does not contain any proven or potential deposits of minerals, clays or sands which have commercial value.

Conservation Areas

Previous studies have not identified the land as containing any significant flora and fauna or as a site having high landscape value. This has been reconfirmed by site investigations carried out in the preparation of the SLSP and by a recent independent environmental assessment. The land is mostly cleared and used for grazing and immediately adjoins an existing urban area to the south. The land does contain scattered remnant River Red Gums and these will be retained within the golf courses, open spaces or other public areas to ensure their long term preservation and to provide landscape enhancement. Thus the most significant feature of the land is protected. The land does not possess a high agricultural value and does not contain valuable or significant farming operations.

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Terrain Characteristics

The SLSP area does not have any physical characteristics which would adversely affect or preclude an integrated golf course and residential development. The land is within a drainage catchment, which although having a substantial non-urban upstream area, ultimately flows into an urban drain. The land has gently undulating topography and is suitable for both golf course and residential development. The geology of the area is based on quaternary sediments and represents soil types having a good to very good land capability rating for roads and urban subdivision for the most part (Land Resource Data Atlas, MMBW and DCF, June, 1985) and compares favourably with most existing and proposed urban areas.

Breathing Space/Recreation/Visual Stimulation

The SLSP area is used for low intensity farming, immediately adjoins the existing Carrum Downs residential area and does not have a high quality landscape. Development within the SLSP will provide for a unique lifestyle, that is a golf course community and will retain almost 50% of the land for open space and recreation purposes. A soft green edge will be provided around the land to maintain a rural appearance and the urban residential development will be integrated with two 18 hole golf courses. Breathing space will be provided within the community and will be retained between the Cranbourne and Frankston urban corridors. The significant vegetation will be retained and landscape enhancement will occur. These objectives will be fulfilled in a balanced manner.

Access, Isolation and Reduced Choice

The SLSP land is highly accessible to the arterial road network, to major activity centres and places of employment, including Cranbourne, Frankston and Dandenong. In fact, the land is almost centrally located amongst these centres. The land is less than four kilometres from the proposed railway station at Thompsons Road where electrification of the railway is nearing completion. The land is neither isolated from existing urban areas and development nor from a wider range of facilities planned or already provided within Carrum Downs. The location provides a wide choice and future residents will have ready access to all necessary community services and facilities, including schools.

Fire Hazard

The area does not have a high fire hazard potential and this consideration is not a constraint to urban development.

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Cost of Urban Infrastructure

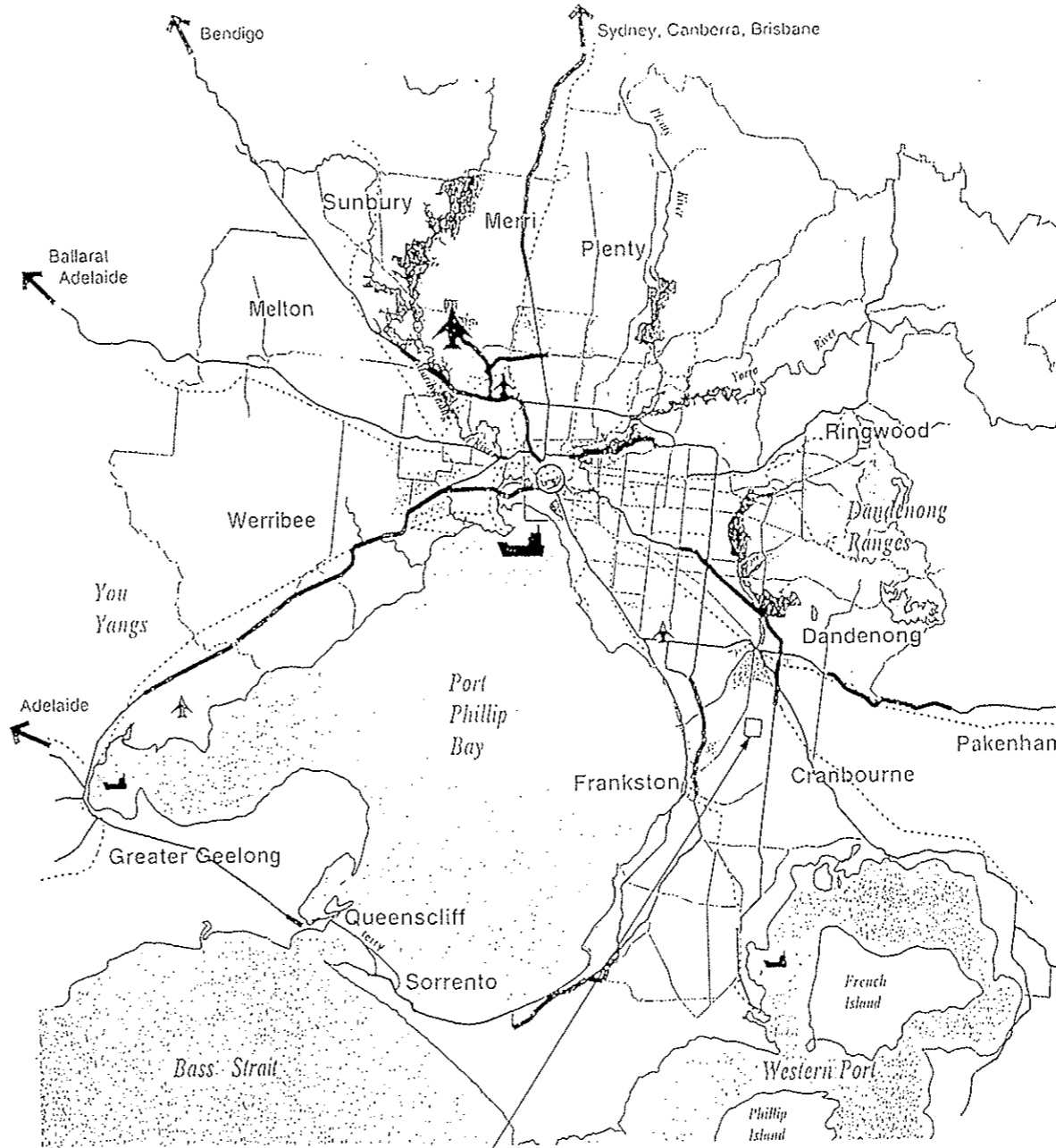
Urban infrastructure can be provided to the development within the SLSP without any cost disbenefits to the developer and without any cost burden being placed on the public purse. Proposed drainage works will bring about off-site improvements. The development will utilise the South Eastern Purification Plant facilities and all other services can be provided in accordance with normal supplier requirements. The arterial road network already exists and the proposed development will provide development levies which will proportionally fund the additional facilities or upgradings.

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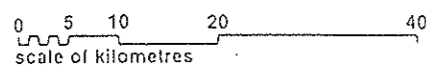
LEGEND

- Established urban areas
- Areas zoned urban
- Major industrial and commercial concentrations
- Major open space system
- CBD/CAD/Central City
- Freeways and main roads
- Railways
- Airport (main), airport (other)
- International harbour, other ports
- Major topographic feature
- MSD boundary



Sandhurst Site

Source: "MELBOURNE METROPOLITAN STRATEGY"
Department of Planning and Development



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2.0 EXISTING FEATURES OF THE AREA

2.1 Location

The SLSP area comprises two parcels of land with a total area of almost 309 hectares located along the east and west sides of McCormicks Road to the north of the Carrum Downs Township and situated approximately 750 metres to the east of Frankston-Dandenong Road. The eastern parcel has an area of approximately 264 hectares and is bounded by Thompsons Road to the north, Taylors Road to the east, Wedge Road to the south and McCormicks Road to the west. The western parcel comprises approximately 45 hectares and is located at the northwestern corner of McCormicks Road and Wedge Road. The location of the land is shown on Plan 2 - Site Locality Plan.

2.2 Existing Land Use and Development

The SLSP area is largely cleared with the exception of scattered remnant River Red Gums, some exotic species and roadside planting, is flat to gently undulating and is used primarily for grazing cattle. Land in the southeast corner is used for equestrian activities. The southwest corner of the land is traversed in a southeast to northwest direction by a watercourse and the eastern portion of the land contains two watercourses comprising the Eastern Contour Drain. The land contains several houses which are generally located around the periphery.

Land to the north of Thompsons Road and to the east of Taylors Road is used for grazing. Land to the west of McCormicks Road is used for grazing, but there is a node of rural-residential development comprising 14 two to four hectare lots at the southwest corner of Thompsons Road and McCormicks Road. Land to the south of Wedge Road between Frankston-Dandenong Road to approximately 300 metres east of McCormicks Road is developed or is being developed for urban residential purposes and open land to the east of that is used for grazing.










Except for Thompsons Road, all surrounding roads have formed and gravelled surfaces. Thompsons Road is a sealed two lane arterial which is presently carrying 11,500 vehicles per day. Wedge Road to the east of McCormicks Road has the appearance of a treelined country lane. McCormicks Road, although unsealed, serves as the preferred alternative to Wedge Road for Carrum Downs traffic travelling north to the Frankston-Dandenong Road.

The features and existing conditions of the SLSP area make it well suited for an integrated golf course and residential development. The location immediately adjacent to an existing urban area will ensure that the proposed development has access to all of

Sandhurst

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Legend

-  The Site
-  Golf Course
-  Railway Station
-  Residential Zone
-  Non-Urban Zone
-  Commercial Zone
-  Industrial Zone
-  Open Space / Public Use Zone
-  Extractive Industry Zone



CONSULTANT TEAM

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HANSEN PLANNING CONSULTANTS
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Urban Design

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Landscape Architecture & Street Design

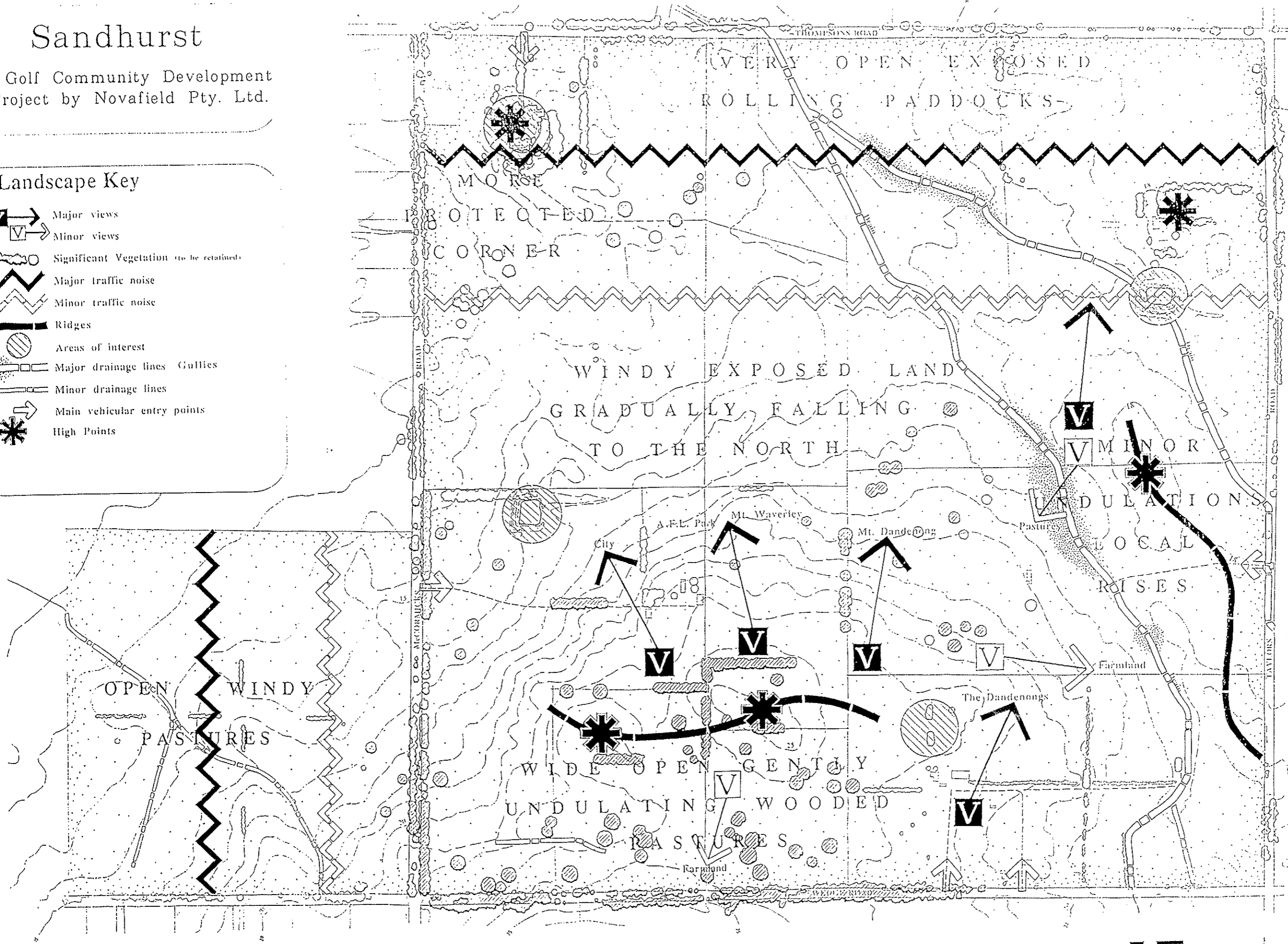
GREG TUCKER & ASSOCIATES PTY. LTD.

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Landscape Key

- Major views
- Minor views
- Significant Vegetation to be retained
- Major traffic noise
- Minor traffic noise
- Ridges
- Areas of interest
- Major drainage lines Gullies
- Minor drainage lines
- Main vehicular entry points
- High Points



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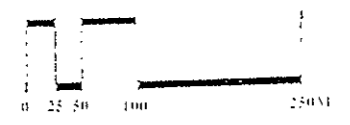
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Traffic Engineering



SANDHURST LOCAL STRUCTURE PLAN

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shopping facilities. The SLSP area has excellent arterial road and freeway connections in all directions and will be served in the future by the proposed Scoresby Freeway. Although it can be seen from Plan 3 that the SLSP will make easterly and northerly incursions into the non-urban area, the land is at the edge of this area, has a considerable urban interface to the south and a significant separation will be maintained between the Dandenong industrial area to the north and the future residential (Amendment L100) areas at Lyndhurst to the east. Almost a two kilometre separation will be retained between the future urban area to the east of Dandenong-Hastings Road and the eastern edge of the SLSP residential development.

Features identified by the Regional Context Plan include:-

- * The strategic location of the land with respect to the distribution of existing private and public golf facilities.
- * The location of District Centres at Dandenong and Frankston, the sub-regional centre at Cranbourne and other high order activity centres in the region.
- * The Carrum Downs retail and commercial area in Hall Road which is located approximately 1.6 kilometres to the south.
- * The arterial road network, including Thompsons Road, Frankston-Dandenong Road, Dandenong-Hastings Road, the Mornington Peninsula Freeway, the South Gippsland Highway and Freeway and the proposed Scoresby Freeway.
- * The adjacent urban area which extends to the northeast from Frankston.
- * The present boundaries of the non-urban area.

Future Context

The proposed SLSP represents a new concept in green wedge land use and development, particularly in relation to housing density, and will set a new trend in this regard. The proposal provides a sound management plan for a large area, unlike the existing non-urban area planning controls, which are currently subject to review. The present zoning enables golf course but not residential development. It also enables industrial types of use and large developments which generate significant truck and customer/visitor traffic, such as the Grandiflora and K.C.C. premises in Dandenong-Hastings Road, Cranbourne and Garden World at Springvale Road, Keysborough.

The SLSP will encroach into rural zoned land, but it does so in a manner which is innovative, properly planned, fully serviced, creates economic and sustainable use of the land and sets a high standard for use and development. The SLSP establishes a set of planning principles and land use planning standards for green wedge land, in the

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the relevant facilities and will form a logical but relatively minor extension to the planned urban area.

2.3 Zoning

The entire SLSP area is within a Farming (Low Intensity) Zone (53F2) under the Cranbourne Planning Scheme. Land to the east of McCormicks Road is also within the same zone, with the exception of a large Open Space reservation at the northeast corner of Frankston-Dandenong Road and Wedge Road. Land to the north of Thompsons Road is within a Farming (High Intensity) Zone with the exception of a lineal Melbourne Water Reservation for drainage purposes and an SECV Public Use Zone at the northeastern corner of Taylors Road and Thompsons Road. Land to the east of Taylors Road, to the north of Wedge Road and land to the south of Wedge Road commencing 300 metres to the east of McCormicks Road is also within a Farming (High Intensity) Zone. Land to the south of Wedge Road extending between Frankston-Dandenong Road and 300 metres east of McCormicks Road is within a Residential (Urban) Zone (53R1). Thompsons Road is within a Main Road Public Use Zone and is subject to road widening along its northern alignment.

Amendment L24 to the Cranbourne Planning Scheme proposes to include additional land to the south of Wedge Road and to the east of the existing urban area within a Residential (Urban) Zone. This amendment has been adopted by the City of Casey, but is not yet approved by the Minister for Planning.

Under the present zoning, the SLSP land may be used for a golf course subject to the grant of a permit. However residential development, and uses such as a petrol station, restaurant, take-away food premises, and convenience shop are prohibited. Thus, an amendment to the Planning Scheme is required. Approval of the SLSP may also require an amendment to the Carrum Downs Outline Development Plan, an incorporated document, which has been recently amended to include the eastern extension of the urban area proposed under Amendment L24.

2.4 Regional Context of the Sandhurst Local Structure Plan

Existing Context

The regional context of the SLSP is shown on Plan 3. The SLSP area is located within the presently designated non-urban area between the Frankston and Cranbourne urban corridors and at the northern extremity of the Carrum Downs urban area. The land is almost centrally located in the triangle formed by Frankston, approximately eight kilometres to the southwest, by Cranbourne approximately six kilometres to the east and by Dandenong, approximately eight kilometres to the north. These large urban centres provide employment, tertiary education, government services and regional

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event that other proposals seek to repeat or simulate such use and development elsewhere. The principles upon which the SLSP is promulgated include:-

- a) A 50-50 split between recreation/open space use and residential development;
- b) Ability to be fully serviced;
- c) Provision or funding of necessary infrastructure improvements and community facilities;
- d) Ability to provide environmental improvements;
- e) Arterial road access and self-contained internal road system not reliant on adjoining land;
- f) Visual integration with remaining green wedge areas;
- g) Preservation and enhancement of most significant remaining green wedge values, such as river red gum retention;
- h) Close proximity to existing urban areas and facilities;
- i) Absence of environmental and natural constraints and overlay buffer controls;
- j) Provision of significant economic development, including tourism and employment opportunities;
- k) No burden is placed on the public purse;
- l) Ability to assemble a site which has one controlling interest; and
- m) Provision of viable land use.

2.5 Landscape & Natural Environment Assessment

Assessment of the following matters through field survey and inventory, site analysis, analysis of aerial photography and liaison with relevant authorities has been undertaken in the preparation of the SLSP. Plan 4 provides a site analysis and Plan 11 depicts the locations of the photographs contained in Appendix 1.

Topography

The SLSP site is gently sloping land, rising to several high points, and falling to undulating lower and wet areas associated with natural drainage courses. Site levels range from approximately R.L. 10 to R.L. 25 metres. From the higher ground and ridge lines which exist primarily in the southwest corner of the site area, the sloping northerly aspects provide excellent long views to the north and northeast to the Dandenong Ranges. Two natural drainage courses traverse the site, flowing in a northwesterly direction after entering the site from the east along Taylors Road and the southeast corner from Wedge Road. Associated with these drainage courses are lower lying and more gently undulating zones which are subject to periodic, short term inundation.

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Vegetation

The deep grey sandy loam soils support scattered stands of remnant *Eucalyptus camaldulensis* - River Red Gum, particularly in the southwestern area of the site. Dense roadside verge vegetation consisting of *Eucalyptus camaldulensis* - River Red Gum and *Acacia melanoxylon* - Blackwood Wattle, also exists from the southwest to the northwest areas along Wedge and McCormicks Roads and to a lesser extent along Thompsons Road to the north of the site. Plan 5 provides a vegetative inventory.

The dominant vegetation is pasture grassland with some small areas of rushes and sedges, providing limited habitat areas along the degraded water courses. A number of shelter belt plantings associated with pastoral use of the site occur randomly along boundaries, defining landscape units across the site. These plantings mainly consist of *Cupressus sp. and Pinus sp.*, many of which are past maturity and showing evidence of decline, as well as a small number of recent row plantings of mixed *Eucalyptus sp. and Acacia sp.*

Drainage

Two permanent drainage courses traverse the site and converge at a broader wet area in the central north zone of the site prior to crossing under Thompsons Road and continuing northwards. A wetland/lake system is planned for this area as part of an island residential and perimeter golf course development. Two other detention basins are planned where natural drainage depressions exit the site. Environmental enhancement as part of golf course development is proposed at these locations in the northwest area of the site adjacent to McCormicks Road and at the far southwest boundary of the site.

2.6 Drainage

The SLSP is located within two designated Melbourne Water catchments established by the former Dandenong Valley and Western Port Authority and which are shown on Plan 6 - Drainage Catchment Plan.

Residentially zoned land will attract contributions.

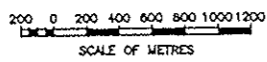
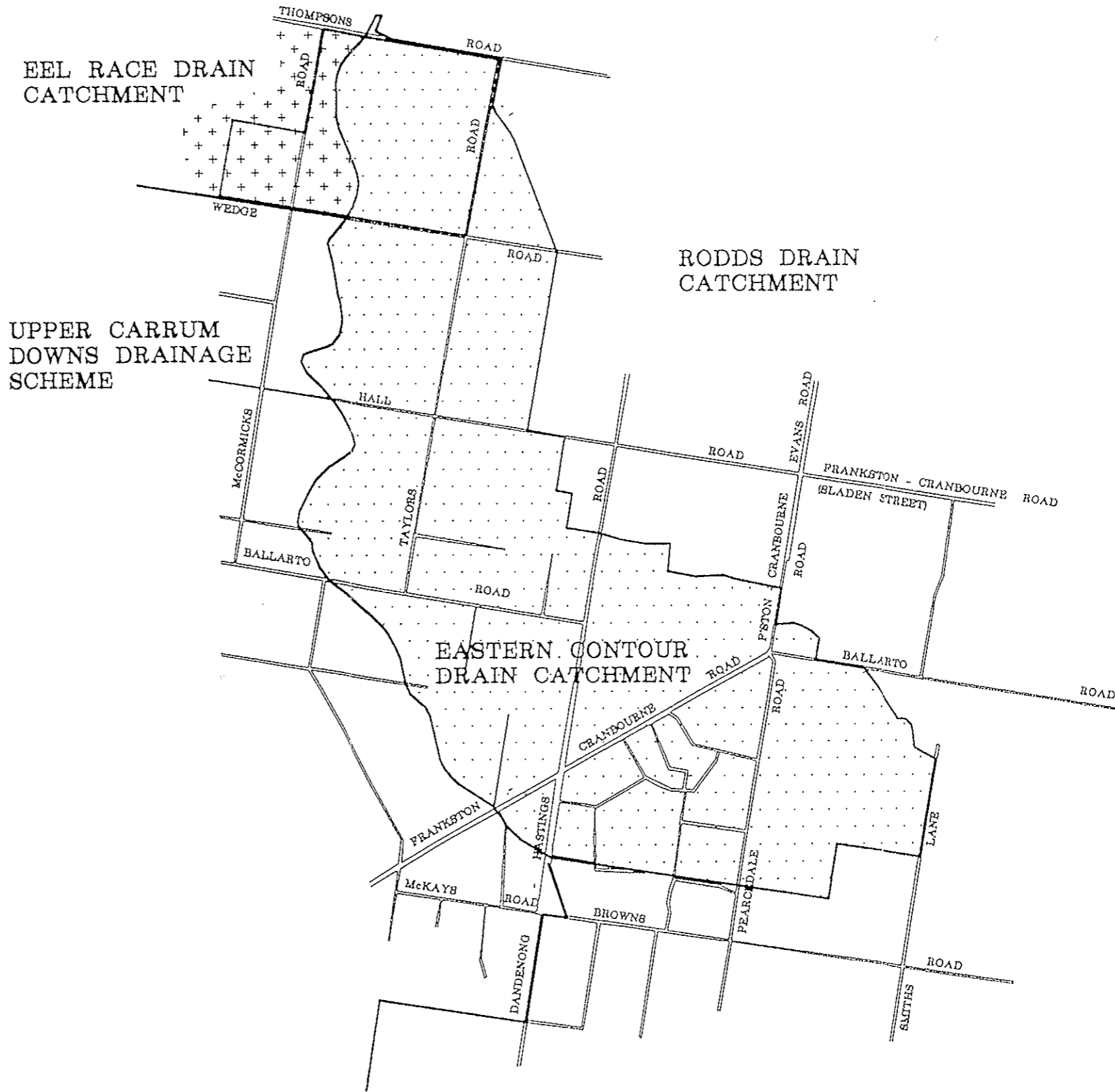
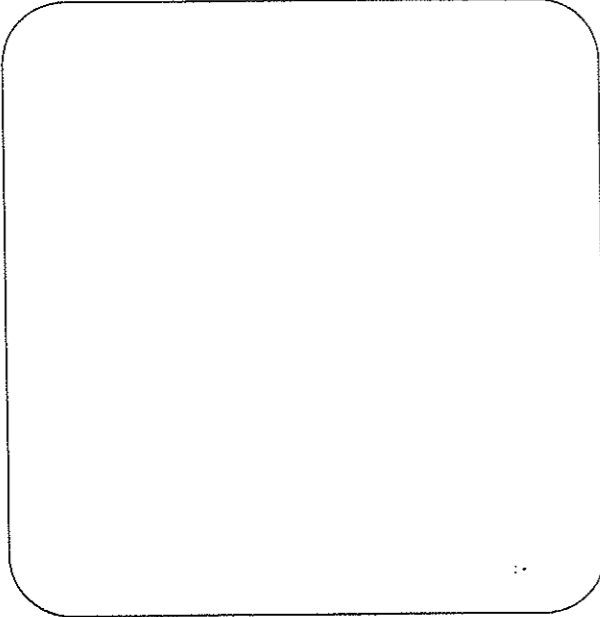
The two Melbourne Water catchments are as follows:-

- (a) Eastern Contour Drain Catchment (No. 0700)

This catchment has an approximate total area of 1832 ha., a majority of which is used for rural purposes.

Sandhurst

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Traffic Engineering

ROGERS WILKE & ASSOCIATES PTY. LTD.
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Approximately 160 ha. of the SLSP land drains to the Eastern Contour Drain at its downstream end.

Localised flooding occurs along the two open drain routes traversing Wedge Road and Taylors Road, combining and flowing into the Eastern Contour Drain to the north of Thompsons Road.

The flooding is a result of poor water flow across both Wedge and Taylors Roads and under capacity drain lines though the subject property.

To alleviate these problems larger culverts will need to be placed beneath both Wedge and Taylors Roads (1 in 5 year capacity) and the open drains excavated and formed to create larger capacity waterways. The waterways will also be formed into interconnecting lakes to complement the Golf Courses.

Provision is to be made to direct and control flows into the Eastern Contour Drain. A retarding basin of sufficient size to cater for the 100 year ARI flood is required and this may take the form of a series of lakes which again will complement the Golf Course.

The Eastern Contour Drain consists of a levee bank from Thompsons Road to the north with a Top of Bank level of 13m AHD. Melbourne Water will require some form of high flow (50-100 year ARI flood) diversion to the Contour Drain possibly in the form of mounding (Elevated Tees and Greens) or formed course fairways.

(b) Eel Race Drain Catchment (No. 1219).

This catchment has a total approximate area of 148 ha to the boundaries of the SLSP area.

The subject land is located at the upstream end of the catchment with a majority of the area used for rural purposes.

Flows from the SLSP area are to be retained in retarding basins with outflows reduced to 100 year ARI flows. It is envisaged that two additional retarding basins will be required. One located to the north west of the subject land abutting McCormicks Road (flows throttled to 1 year ARI levels) and the other to the south west at the western portion of the property and west of McCormicks Road over an existing open drain (5 year ARI levels).

Melbourne Water has suggested that a part contribution for the McCormicks Road retarding basin may be expected as an existing drainage problem downstream of the subject land will be alleviated by its construction.

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The open drains and retarding basins will form the drainage outfall options for the SLSP area. The open drain will be designed to cater for the 100 year ARI flows with a minimum free board of 300 mm.

It is envisaged that a reserve width in the order of 20 to 30m will be required and where the drains traverse residential precincts this land should be set aside.

2.7 Land Ownership

Novasfield Pty. Ltd. has assembled the SLSP area comprising 9 titles in six ownerships with a total area of 308.85 hectares. Novasfield Pty. Ltd. has either options or contracts to purchase the land subject to rezoning. Having a small number of land owners has been an important criteria in the selection and assembly of this land parcel and does not constrain the development proposals. Land ownership details are shown on Plan 7 - Ownership Plan and in the following table.

HOLDING	TITLES	AREA (ha)
HT & VJ Gardiner	2	65.49
Miramah Investments Pty Ltd	2	62.68
GM & PM Minguy	1	0.41
Whee-Kee Pty Ltd	1	40.08
R.L. Marriott	2	107.88
F. Michelmore	1	32.31
TOTAL	9	308.85

2.8 Opportunities and Constraints to Development.

The entire SLSP area contains developable land suitable for golf facilities, residential use, open space, community facilities and water features. The land is not affected by statutory road widenings or easements for trunk services and is not required for any major public use or installation. The opportunities and constraints which have been identified can be harnessed in a positive fashion for the better planning and future use and development of the SLSP area.

Opportunities

The large *Eucalyptus camaldulensis* - River Red Gums will be retained, providing excellent visual amenity and rural character to the golf course and open space areas, as

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well as to streetscapes where incorporated into residential areas within lineal parks and the like.

The undulating topography and largely cleared land will enable the elevated views with northerly aspects to be maintained to the Dandenong Ranges and foothills.

The development of areas of higher ground and ridge lines for community based facilities such as schools, recreational open spaces and roads will further enhance the visual amenity within the site.

Constraints

Significant roadside vegetation occurs along the existing and proposed collector and arterial roads around the perimeter of the site as well as along the drainage courses through the lower areas. However, these constraints provide an excellent opportunity to enhance amenity and complement the future residential development by the creation of a "green ring" around the site and offer recreation and environmental improvement opportunities along open space links, as well as the re-creation of indigenous flora stands and faunal habitats.

The drainage constraints referred to above also provide opportunities for environmental and landscape enhancement within the SLSP area and these works will bring about off-site drainage improvements.

2.9 Geotechnical

The Geotechnical Survey maps (Cranbourne Sheets) show that the SLSP area is underlain by Tertiary deposits of the Baxter Formation (ferruginous sandstone, sand, sandy clay and occasional gravel), whilst also showing a small gravel quarry at the north west corner of the subject site and Quaternary swamp deposits (peat) along the route of the contour drain.

Sands and Silty-sands are expected to exist near the surface to depths up to two (2) metres grading to clayey sands at depth. In the low lying areas the sands will tend to become saturated with a water table somewhere between seven (7) and ten (10) metres.

The sandy nature of the area is the preferred soil condition for the development of a golf course. Residential development also benefits from the soil conditions in relation to construction works.

Clayey soil found at depth may also be used in the construction of the on-site retarding basins.

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3.0 DEVELOPMENT CONCEPT

3.1 Sandhurst Local Structure Plan Overview

The overall concept of the SLSP shown on Plan 1 is to produce two championship rated golf courses complementing a high quality residential community which will provide a diversity of housing types and living environment utilising the natural topography and remnant vegetation.

The SLSP area will be dominated by the two golf courses which are intertwined with the eight discrete residential precincts containing up to 2500 residential lots abutting or enjoying views over and into the landscaped courses and the lake and open space systems.

Each of the residential precincts will be linked by pedestrian/bicycle paths, open space elements and roads where appropriate.

For the SLSP concept to become a reality it is essential that it be economically viable. The operation of two golf courses would not be economically self sufficient to support and service the necessary capital to purchase and develop a prestige sporting facility such as that proposed. Consequently sufficient land has been assembled to provide the viable and integrated development forming the SLSP.

To acquire land already zoned for residential development would be financially prohibitive because of the large tract of land required for the golf facilities. It has therefore been necessary to identify land which can be acquired at a value which enables approximately 50% to be devoted to golf and recreation and remain as essentially non-urban.

The SLSP land is adjacent to the existing Residential (Urban) Zone comprising the Carrum Downs Outline Development Plan area and can be easily serviced by relatively simple augmentation and extension of existing services.

The two principal elements of this project, the golf course and residential components, are mutually dependent upon each other and it is intended that not only will the SLSP be an integrated golf and residential community, but will also provide both quality and dormitory style accommodation for visitors and competitors, club house facilities, sporting administration and related management accommodation, a pro-shop, a sports medicine clinic and some convenience facilities such as a service station, convenience shop, family restaurant, fast food and video outlet. There is also the opportunity to develop a turf management apprenticeship school which would support the national identity of the golf complex.

A site has been identified for a primary school and pre-school centre and a community facility will be provided in the Golf clubhouse precinct comprising a building for community use and tennis courts. There will be a number of sites throughout the development suitable for local shops and particularly adjacent to the primary school precinct.

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The golf, accommodation and other non-residential components of the SLSP will create a significant number of employment opportunities for the area.

The two 18 hole golf courses will be served by the one central clubhouse precinct and will be operated on a membership basis, but will be available for public access by green fee payment. It is envisaged that both courses will be operated by one golfing body and that the headquarters for golf in Victoria will be established on the site.

3.2 Identity

The SLSP will have a unique identity provided by the integrated golf and residential community. A distinct residential environment will be provided by two golf courses threaded through and around the nodes of housing development and by the green edges on the perimeter. The identity will be further strengthened by River Red Gum retention, the use and enhancement of drainage lines, the provision of water features and by design guidelines to ensure that the total development concept is implemented.

3.3 Nodes

The SLSP will have three activity nodes which will be highly accessible to all residents. These nodes comprise the convenience centre at the southeast corner of Taylors Road and McCormicks Road, the golf club and community recreation precinct located near the centre of the site and the school and community facility precinct located towards the southeastern corner of the site. Minor nodes will be provided by the local parks distributed throughout the development, which will provide the focal points of the residential precincts defined by the surrounding golf course areas.

3.4 Edges and Interfaces

The *rural* nature and *rural laneway* feel of the site and perimeter roads will be maintained in the integrated golf and residential development in a number of ways.

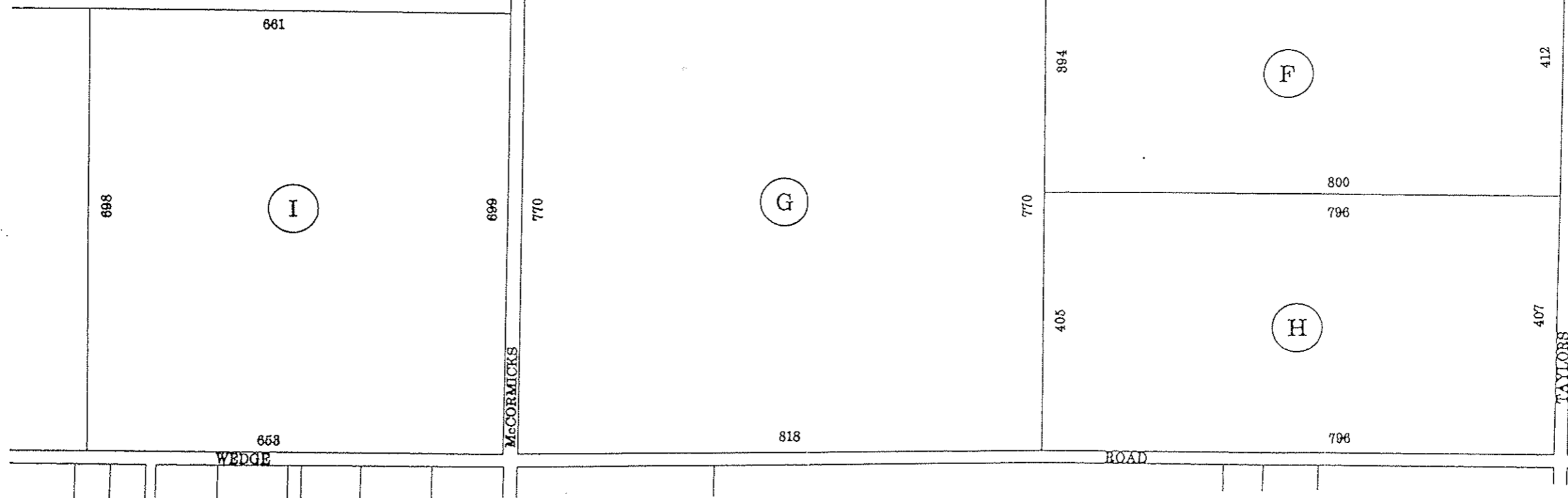
- (i) A *green ring* will be achieved by the design of the golf courses providing a significant set-back zone between the perimeter roads and residential areas ranging in depth from 80-150 metres, significant roadside vegetation and remnant tree retention within this zone will further soften edges and maintain the 'rural' character of the development.
- (ii) Access from perimeter roads to the Sandhurst development will be kept to a minimum, with entry/exit points limited to Thompsons and McCormicks Roads only.

Sandhurst

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PANEL	TITLE	PROPRIETOR	AREA Ha
A	9755/454	H.T. & V.J. GARDNER	1.00
B	9755/455	H.T. & V.J. GARDNER	64.49
C	9755/456	MIRAMAH INVESTMENT PTY. LTD.	80.40
D	8699/370	G.M. & P.M. MINGUY	0.41
E	8530/849	WHEE-KEE PTY. LTD.	40.08
F	5302/009	MIRAMAH INVESTMENT PTY. LTD.	32.28
G	7180/535	R.L. MARRIOTT	61.68
H	5925/450	F. MICHELMORE	32.31
I	5140/787	R.L. MARRIOTT	45.20
TOTAL			308.85

NOTE : 1. ALL DIMENSIONS AND AREAS ARE SUBJECT TO CONFIRMATION BY SURVEY.
2. ALL LAND UNDER CONDITIONAL CONTRACT OF SALE TO NOVAFIELD PTY. LTD.



CONSULTANT TEAM

0 25 50 75 100 125 150
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LEDRIE CLARKE & ASSOCIATES
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Urban Design
GRADIE DENTLEY LANDSCAPE ARCHITECTS
Landscape Architecture & Urban Design

ANTHONY GARDNER & ASSOCIATES
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Traffic Engineering

INGERS MAHE & ASSOCIATES PTY. LTD.
Property Consultants & Valuers

Sandhurst

VICTORIAN HEADQUARTERS OF GOLF

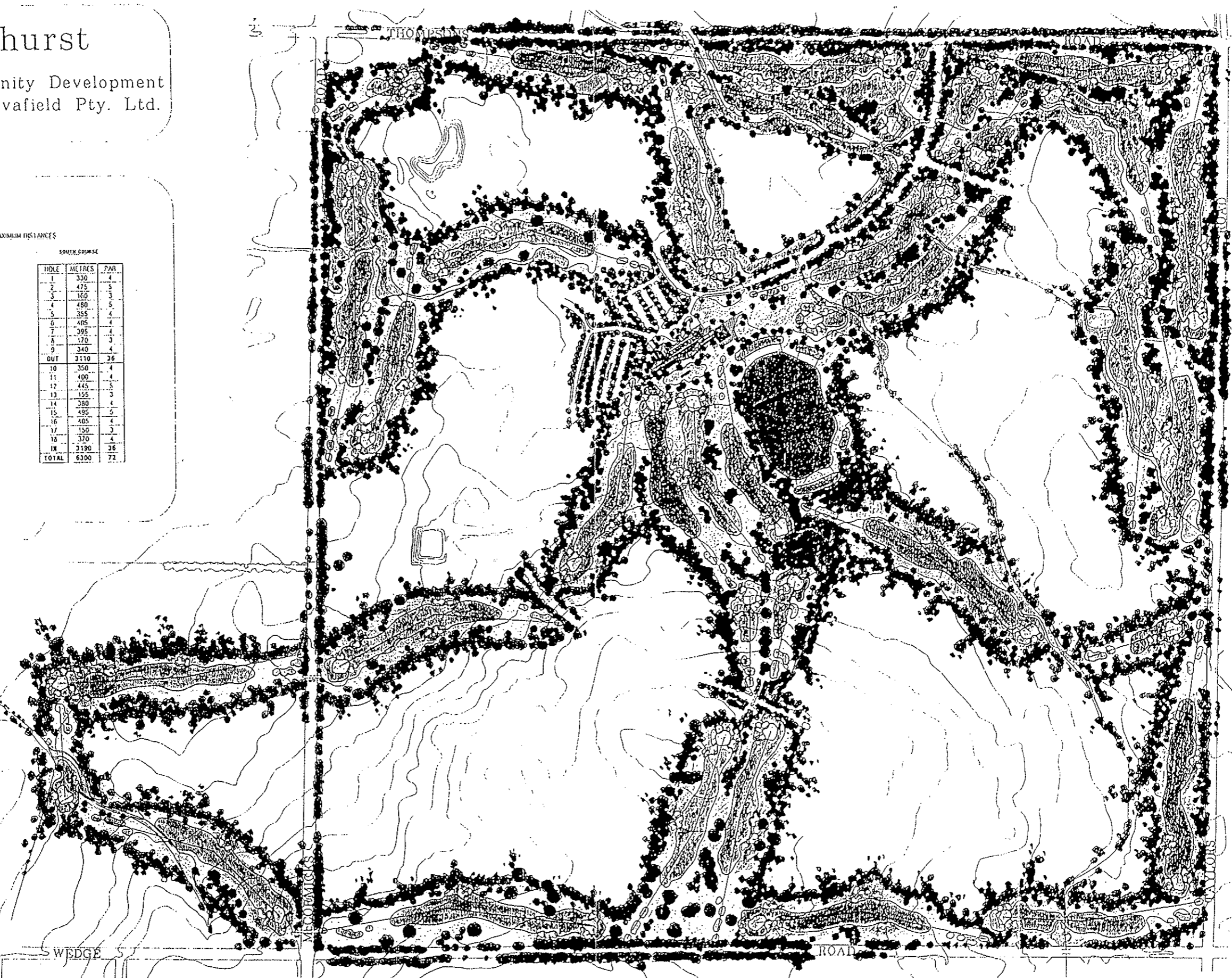
Ownership Plan

Sandhurst

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SCORECARDS MAXIMUM DISTANCES

NORTH COURSE			SOUTH COURSE		
HOLE	METRES	PAR	HOLE	METRES	PAR
1	400	4	1	330	4
2	365	4	2	475	5
3	510	4	3	160	3
4	180	3	4	480	5
5	385	4	5	355	4
6	490	5	6	405	4
7	155	3	7	395	4
8	415	4	8	170	3
9	380	4	9	340	4
OUT	3280	36	OUT	3110	36
10	400	4	10	350	4
11	165	3	11	400	4
12	395	4	12	445	5
13	485	5	13	155	3
14	380	4	14	380	4
15	510	5	15	495	5
16	350	4	16	405	4
17	175	3	17	150	3
18	410	4	18	370	4
IN	3280	36	IN	3190	36
TOTAL	6560	72	TOTAL	6300	72



SCALE OF METRES

CONSULTANT TEAM

PAROISSIEN GRANT & ASSOCIATES PTY. LTD. Project Management, Civil Engineering, Surveying & Estate Design	HANSEN PLANNING CONSULTANTS Strategic, Statutory Planning & Urban Design	ANTHONY CASHMORE & ASSOCIATES Golf Course Architects	ROGERS MILNE & ASSOCIATES PTY LTD Property Consultants & Valuers
LEONIE CLARKE & ASSOCIATES Property Development Facilitation & Negotiation	GRARME BENTLEY LANDSCAPE ARCHITECTS Landscape Architecture & Urban Design	GREG TUCKER & ASSOCIATES PTY LTD Traffic Engineering	

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- (iii) Landscaped tree reserves six metres wide will be provided along both sides of McCormicks Road where residential development is proposed. This is in addition to road widening requirements.
- (iv) As proposed residential development along Wedge Road to the east of McCormicks Road will face existing urban development and zoning, an interface treatment is not proposed in this location.

Sympathetic fencing treatments and the provision of buffer planting will further soften edges at golf, residential, road and pasture interfaces throughout and around the SLSP area in order to maintain the rural character.

3.5 Landmarks & Focal Points

The SLSP recognises that natural features of the site provide valuable elements on which the framework of residential and golf course development can be based. Some of these features are depicted in the photographs contained in Appendix 1.

The SLSP provides opportunities to incorporate these elements, such as improving the visual amenity and maintaining landscape integrity in the long term.

Within the site these elements include the large *Eucalyptus camaldulensis* - River Red Gums, the high points and ridgelines and associated views, and the natural water courses which traverse the site. The areas of public open space, linear parks and the golf courses will provide additional focal points or view corridors to them.

3.6 Landscape Theme

Streetscapes, open space and golf course landscape areas will be considered as a whole throughout the site. The strong existing *Australian* character of large remnant trees will be incorporated and extended and the environmental enhancement of existing natural features such as drainage lines, will occur within golf courses. High quality open spaces in residential areas will be developed, linking community facilities and focal areas.

3.7 Golf Course Design and Facilities

3.7.1 The Golf Courses

The two golf courses proposed within the SLSP have been designed to achieve the following objectives:-

SANDHURST LOCAL STRUCTURE PLAN

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- (a) To provide two 18-hole courses of international championship quality in terms of construction standards, golf strategy and land formation.
- (b) To present a landscaped and maintained open space context for as many of the residential allotments as possible.
- (c) To assist materially in the macro-drainage pattern for the site by providing useful retarding basins and strategic waterbodies in the natural golf context.
- (d) To provide golf terrains and facilities capable of satisfying the Victorian Golf Association's requirements for its State Headquarters.

The layout of the courses shown on Plan 8 allows for four 9-hole loops commencing at, and returning to the one Clubhouse focus. Each of the loops has a par of 36, with two par-3 holes and two par-5 holes well distributed in the order of play.

Nevertheless, the balance of the hole lengths has been designed such that there is naturally a 'north' course and a 'south' course. The 'north' course has been deliberately designed to be more challenging, and would be suitable for use as a tournament venue. The 'south' course would more immediately appeal as an excellent all-purpose community golf venue. The brief to the architect, however, is that both courses should be available for visitor play. To this end, several tee areas have been designed for each hole, allowing widely different golf challenges to be selected by golfers of varying skills.

The routing achieved with the 'north' course design deliberately expands across the northern and eastern boundaries of the site so as to increase the broad green spaces and feeling defining the residential development. And wherever possible, roads defining the site have an adjacent golf course green belt.

The routings also minimise the number of times golfers will need to interface with roads serving the residential nodes. Where such interfaces occur, a suitable geometry of road and pedestrian underpass will ensure safety for players in each case.

Because of the quality of courses required, the design uses 'pairings' of adjacent fairways wherever possible, thus opening out as broad a vista as possible for the golfers, and allowing generous tree planting and landscaping episodes. Where single fairway links are unavoidable, the width of the overall play area, boundary to boundary at drive length and through to the green site is always more than 110 metres, compared with international guidelines recommending 90 metres.

A most generous practice fairway has been located close to the Clubhouse precinct. It allows drives up to 300 metres long, and has practice tees at each end so that different wind conditions can be examined. It is intended that defined 'targets' in the form of greens and bunkers will be constructed within the broad practice fairway to allow the feeling of playing into real situations with various clubs.

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Flexible practice putting greens and areas for practising pitching, chipping, and bunker play have also been designed for. The intention is to provide an excellent range of practice and teaching areas suitable for international visitors and the Victorian Golf Association's requirements.

Irrigation of all play areas of the two courses and practice areas is intended, including the primary rough. All irrigation needs should be handled from water stored on site through linked drainage basins and other water bodies. A total annual irrigation requirement of about 210 megalitres has been considered, taking into account the natural rainfall of the area and the hybrid couch grasses intended for the fairways, tees and primary rough. Although minimum draw-down of water storage bodies is envisaged for aesthetic and environmental reasons, the banks of all such basins will be graded and grassed so that visual and other problems will be avoided.

3.7.2 The Clubhouse Facilities

To serve this double golf course arrangement, a significant land parcel has been allocated to allow for all facilities normal for such a complex.

The following have been planned for :

- (a) Carparking for approximately 350 cars, in two main nodes so as not to present a monolithic hard area. Dense appropriate landscaping of these areas is intended, and informal additional carparking areas are available.
- (b) Clubhouse, containing social gathering areas, bars, diningroom and bistro, kitchen and service areas, offices, administration, gaming room, meeting rooms, change rooms, toilets, and showers to a high standard.
- (c) Pro-shop, providing an excellent range of sporting goods and sports clothing, indoor teaching and video facilities, golf cart garaging, and storage.
- (d) Accommodation for approximately 120 visitors, both tourists and people seeking intensive teaching of golf skills, in a live-in context.
- (e) Tennis courts and other appropriate recreation areas.

The building complex is to be two-storey, with some spaces built into pitched roof forms, and terrace areas giving onto the golf courses and landscaped grounds.

A close inter-relation between an articulated building format and extensive landscaped gardens is to form part of the architectural vocabulary. The building should make a clear

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statement of quiet high standards, of welcome, and of community pride. It should act as a strong focus for all residents and visitors.

A flexible section of the administration areas will allow the various State golfing bodies and related groups to be properly housed under one roof.

3.7.3 The Maintenance Compound

A properly equipped and flexible golf course maintenance compound has been planned for, as centrally as possible, yet as far away from residential nodes as practicable.

The compound will serve all maintenance of golf course play areas, as well as tree plantations throughout the estate, water courses and storage basins.

A large turf nursery is intended to facilitate grassing of the courses and other lawn areas within the SLSP.

3.8 Integration with the Carrum Downs Outline Development Plan

At present, the Carrum Downs Outline Development Plan (ODP) prepared by the former City of Cranbourne provides for a population of approximately 30,000 within the urban residential zoned area to the south of the SLSP area principally between Wedge Road and Ballarto Road. The ODP provides for a per lot development levy of \$950 to assist in the funding of the cost of accelerating road programs, fencing of reserves and sites for community facilities and sets out a framework for the road layout, public open space, community facilities and commercial facilities.

With the exception of a district level playing field located at the northeast corner of Wedge Road and Frankston-Dandenong Road, the ODP area is confined to the south of Wedge Road and extends up to approximately 600 metres to the east of McCormicks Road. The ODP has an interface of almost 1.3 kilometres to the SLSP area and provides for district playing fields, a secondary school and major retail, commercial and community services and facilities, all of which are sufficiently close to the SLSP area and connected via arterial or distributor roads. The SLSP can augment the recreation facilities, more fully utilise public facilities such as the secondary school and support the retail and commercial centres. The ODP and SLSP areas can be functionally integrated whilst still retaining individual community identities. The SLSP provides a logical extension to the Carrum Downs ODP and promotes urban consolidation.

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3.9 Staging of Development

It is anticipated that residential development within the SLSP will commence at the north of the subject land. The northern golf course and the club house facility will be constructed as part of this first stage.

The development staging concept is to produce a residential component to complement the development of the clubhouse precinct and northern golf course. The commencement of development from the south, despite the availability of limited service facilities at Wedge Road (especially sewer outfall and water supply) would not create an integrated development.

The initial stages will require major external works such as outfall sewer (gravity) to the west and water supply works from the south. Other services can be provided and present no restrictions to the immediate development of the area.

The staging will then continue from the north to the south and east providing golf course frontages to a majority of the dwellings whilst limiting the amount of traffic generated onto McCormicks Road.

Development of the SLSP area further south will require an extension of services, apart from water supply, and the construction of the second golf course and the upgrading of McCormicks Road.

It is estimated that the residential component and the two golf courses will be constructed over a period of eight years.

SANDHURST LOCAL STRUCTURE PLAN

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4.0 POPULATION

4.1 Total Population Estimate

It is estimated that SLSP could have a maximum population of approximately 7,500 persons based on a maximum lot yield of about 2500 and an average household size of 3.0 persons.

4.2 Future Population Profile

Because of the nature of the proposed development, the future population profile and household size is likely to be different to other residential areas in the former City of Cranbourne and may contain a higher proportion of retired couples and established families with older children.

This population is anticipated to consist of:

- * 30% childless couples
- * 60% ready made families
- * 10% established individuals

The structure of the SLSP population is projected to be:-

- * 3750 Adults (50%)
- * 1125 Teenagers (15%)
- * 1500 children (20%)
- * 1125 Older people (15%)

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5.0 LAND USE AREAS, HOUSING DENSITY AND HOUSING MIX

5.1 Land Use Areas

The major land use areas are shown in the table below:-

LAND USE	AREA
Total Site Area	309.0 hectares
Golf Courses and Golf and Community Precinct	144.0 hectares
Public Open Space	7.2 hectares
Primary School and Community Facilities Precinct	3.6 hectares
Main Road Convenience Centre	0.9 hectares
Net Residential Area	164.2 hectares

5.2 Housing Density

The SLSP provides for approximately 2500 lots within the net residential area (but including the primary school site) and this determines the maximum possible housing density. The housing density calculation varies depending on whether the total site area is used or whether the areas of the two golf courses, the golf course precinct and the main road convenience centre are excluded. The ultimate housing density will depend on a number of variable factors, but will fall within the density range anticipated within the South-Eastern Growth Area, having regard to objectives such as diversity and choice. The significance of the maximum density or lot yield is that it is proposed that development levies are to be paid on a per hectare basis and that the per hectare figure is calculated on the expected maximum lot yield and density to ensure that sufficient funding is available (Refer to Section 12.0).

5.3 Housing Mix

A mix of housing types, lot sizes and locations will be provided throughout the SLSP area in order to accommodate the projected population profile. Lot sizes will range between approximately 250 square metres and 1000 square metres and housing will vary between two storey multi-unit development and large detached houses. At the maximum possible yield of 2500 lots, average lot size is in the order of 500 square metres.

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The SLSP recognises the environmental value of the remaining natural features within the site and the importance of orientation of lots to open space areas, including the golf courses, in order to maximise aspect, views and to capitalise on aesthetic values. A large percentage of the lots will have either golf course or public open space frontages and these lots will also be varied in size and in the housing type constructed on them. In general, higher densities will be provided close to neighbourhood and community/recreation facilities and close to open space areas and key transport routes, including bus routes along collector roads. Lower density housing will generally occur away from areas of high activity and closer to the environmentally sensitive elements within the development area.

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6.0 ACTIVITY CENTRES AND PRECINCTS

6.1 Nodes of Activity

The SLSP contains three primary nodes of activity being:-

- a) The main road convenience centre at the northwest corner of the site;
- b) The centrally located golf and community recreation precinct; and
- c) The primary school precinct towards the southeastern corner of the site.

Having regard to the proximity of the SLSP area to the Frankston and Dandenong District Centres, shopping facilities at Cranbourne and Hampton Park, the planned 16,000 square metre shopping centre on the southern side of Hall Road and a further 10.4 hectares being set aside for non-retail commercial around the Carrum Downs Community Centre on the northern side of Hall Road, no major activity centres are proposed.

6.2 Main Road Convenience Centre

A main road convenience centre is proposed at the southeastern corner of Thompsons Road and McCormicks Road on a site of approximately 9,000 square metres. This centre will comprise a petrol station, convenience shop, fast food outlet, family restaurant and video hire and will be designed to complement the balance of the development and the main road corner location. It will place these uses in a location which will keep higher traffic volumes out of the residential precincts, but which is highly accessible and can also serve a wider area and passing traffic. The provisions inserted in the Planning Scheme as a result of Amendment RL155 will apply.

6.3 Primary School Precinct

The primary school precinct will form a neighbourhood activity node of 3.6 hectares and will include a site for a pre-school, an infant welfare centre and a local shop and will be combined with a public open space area of one hectare. This neighbourhood activity node will be located along the looping collector road providing connections to McCormicks Road and Thompsons Road and will be connected into the lineal open space system and the pedestrian and bicycle path network.

6.4 Golf and Community Recreation Precinct

This precinct will contain the club house facilities for the two golf courses and a community recreation facility and building. The golf club facility will house the new headquarters of Victorian golf, provide accommodation for tourists and competitors

SANDHURST LOCAL STRUCTURE PLAN

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and contain sports administration and management offices, pro-shop, a sports medicine clinic, a turf management apprenticeship school and associated car parking.

SANDHURST LOCAL STRUCTURE PLAN

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7.0 COMMUNITY FACILITIES AND SERVICES

7.1 Aims

The following aims have been identified to enable the community to have an acceptable and functional environment:

- * Social and recreation facilities designed to maximise community involvement and easy access to neighbourhoods.
- * Housing types that will provide flexibility and a range of options for varying family sizes and age structures.
- * A practical but innovative neighbourhood plan for the design of streets and walking and bicycle paths.
- * Attractive landscaping and design of public and commercial buildings that reflect a common theme in keeping with the location.

7.2 Facilities and Services

The following essential community services and/or sites will be provided to cater for the full development within the SLSP. These facilities are grouped where possible to improve efficiency and accessibility and are located along collector roads.

- * One primary school site. There is no immediate need for a primary school as adequate provision is available with existing and planned facilities in nearby residential areas. Timing will depend on population growth trends and the requirements of the Directorate of School Education. Secondary School facilities are provided at nearby Carrum Downs.
- * A community building and recreation facilities located within the golf course precinct.
- * An extensive off street pedestrian and bicycle path network will link residential areas with activity precincts, the open space and recreation areas.

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8.0 OPEN SPACE

8.1 Amount

The SLSP provides a total area of public open space of 7.2 hectares within the residential areas, representing 4.5 % of the net residential area of 164.2 hectares. This does not include the active and passive open space areas provided within the golf course development, which has a total area of 144 hectares and represents approximately 46.6% of the total SLSP area. The golf course and public open space areas represent approximately 48.9% of the total SLSP area. There will be public access to the golf courses and club facilities.

The SLSP recognises the need to provide high quality useable public open space within the residential precincts. With careful planning from the initial stages, the valuable natural features and rationalised circulation links will be incorporated in this development.

8.2 Components

Apart from the golf courses, the public open space areas will be provided in the form of local parks. The function of local parks is to provide space for informal, non competitive, recreational and relaxation opportunities within the local neighbourhoods. These open spaces can be either for specific purposes, eg. children's playgrounds, or for multi-purposes, and linked with shops, schools and community facilities.

Key location criteria include:

- Central to catchment and within 300 metres of all households.
- Easily accessible and visible from adjacent streets.
- Away from major collector roads.
- Linked to open space/pedestrian and bicycle path networks and other complementary facilities.

These open space areas will be supplemented by linear drainage reserves, water features, detention basins incorporated into the overall open space network, and visual links to the golf course perimeters. Ample district level open space areas are either planned or provided to the north and south of Wedge Road within the Carrum Downs Outline Development Plan.

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8.3 Development of Facilities

The SLSP will provide for the full establishment and maintenance of the active and passive open space areas up until development is completed. The location of specific facilities has not been identified on the SLSP, however, it is anticipated that such facilities will be located centrally within the golf and community recreation precinct and will be determined at the planning permit stage.

Facilities may include tennis courts and playgrounds of various sizes. The provision of such open space facilities will remain flexible to accommodate the changing needs and expectations of the community and will enhance the value and useability of the open space provided. The golf courses will also be available to the public and will considerably broaden the open space and recreational/sporting opportunities within the SLSP.

8.4 Pedestrian/Bicycle Paths in Primary Collector Street Scheme

The SLSP shows the major collector streets and a framework of access streets, open space linkages and drainage corridors. Within this framework a safe and connected system of pedestrian and bicycle access is provided, useful for access to the primary school site, local community facilities and other interchange points on external networks. Through the use of open space links/corridors wherever possible, the quality of experience will be increased, promoting interaction between residential areas and recreational facilities.








Essential criteria in the location of circulation routes include:

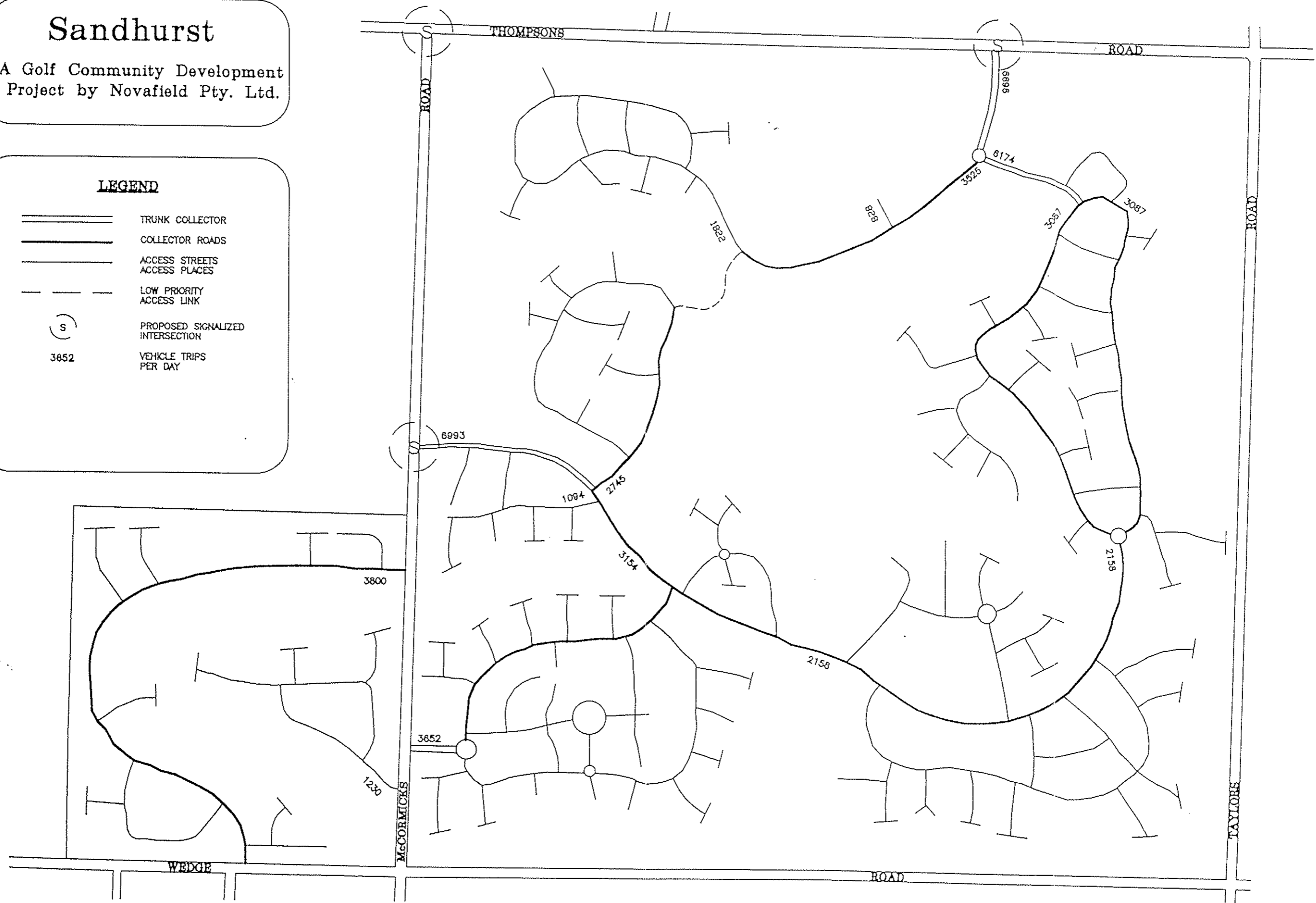
- Serving individual local neighbourhoods and connecting into the main network.
- Provision of the most direct route to primary school and community/recreation facilities.
- Utilisation of open space, lineal/corridor links wherever possible.
- Minimising crossing points of major collector streets.
- Providing links to external/transport network interchanges.

Sandhurst

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LEGEND

-  TRUNK COLLECTOR
-  COLLECTOR ROADS
-  ACCESS STREETS
-  ACCESS PLACES
-  LOW PRIORITY ACCESS LINK
-  PROPOSED SIGNALIZED INTERSECTION
-  VEHICLE TRIPS PER DAY



0 25 50 75 100 125 150
SCALE OF METRES

PANDESEN GRANT & ASSOCIATES PTY. LTD.
Project Management, Civil Engineering,
Surveying & Estate Design

LEONIE CLARKE & ASSOCIATES
Property Development Facilitation & Negotiation

HANSEN PLANNING CONSULTANTS
Strategic, Statutory Planning &
Urban Design

GRACIE BENTLEY LANDSCAPE ARCHITECTS
Landscape Architecture & Urban Design

CONSULTANT TEAM

ANTHONY CASHMORE & ASSOCIATES
Golf Course Architecture

GREG TUCKER & ASSOCIATES PTY. LTD.
Traffic Engineering

ROBERTS WAHNE & ASSOCIATES PTY. LTD.
Property Consultants & Valuers



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9.0 ACCESS

9.1 Road System

Primary arterial road access to the SLSP area is provided by Frankston-Dandenong Road, located roughly one kilometre to the west, and Dandenong-Hastings Road which is located about two kilometres to the east.

Frankston-Dandenong Road functions as an important inter-regional route, and is the principal link between Frankston and Dandenong. In the vicinity of the SLSP area, the road is configured as a four-lane divided carriageway, and is carrying in the order of 22,000 vehicles per day.

Dandenong-Hastings Road is also an important inter-regional route, and is one of the principal linkages between the Mornington Peninsula and the rest of metropolitan Melbourne. The road is presently being upgraded to a four-lane divided carriageway, with the section south of Wedge Road recently being completed, and the section north of Wedge Road to the South-Eastern Freeway anticipated to be completed within about 12 months. Given its connectivity to the South-Eastern Freeway, and anticipated future traffic levels, consideration is being given to this road ultimately being upgraded to at least six lanes divided, and possibly forming a freeway-standard extension to the South-Eastern Freeway.

Direct arterial road access to the SLSP area is provided by Thompsons Road, which provides a direct connection between the site and the primary arterial road network. Thompsons Road, which forms the northern boundary of the SLSP area, functions as a secondary arterial road carrying in the order of 11,500 vehicles per day, and is presently constructed as a two-lane undivided carriageway within a 20 metre reservation. It is noted however that a road widening reservation has been provided along the northern side of Thompsons Road in the vicinity of the site. This will enable Thompsons Road to be upgraded to a four-lane divided carriageway which will be necessary to accommodate future traffic growth. The timing of this upgrading is however uncertain.

The remaining roads in the vicinity of the SLSP area reflect rural rather than urban road standards, constructed as unsealed 5 - 6 metre carriageways within (approximately) 20 metre road reserves. These roads presently carry low traffic volumes, although the role of McCormicks Road is increasing in importance as it provides a direct linkage between Thompsons Road and residential development in the Carrum Downs area.

Traffic on the section of McCormicks Road north of Wedge Road is anticipated to grow to around 16,000 vehicles per day, where the bulk of this will comprise traffic generated by development within the SLSP area. This volume of traffic can be accommodated on a two-lane undivided carriageway within the existing 20 metre road reserve. However, as noted above, this road is also likely to accommodate traffic from the developing areas south of

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Wedge Road, which may necessitate a higher standard cross-section to accommodate this additional traffic.

Wedge Road, forming the southern boundary of the SLSP area, is envisaged by the authorities as ultimately forming a significant east-west arterial road extending easterly to Camms Road. Traffic generated by the SLSP site is not anticipated to have a significant impact on Wedge Road given the proposed access arrangements. Accordingly, future traffic volumes are likely to be such that they can be accommodated on a two-lane undivided carriageway within the existing 20 metre reservation. It is proposed that the "country lane" appearance of Wedge Road to the east of McCormicks Road be retained.

Taylor's Road, forming the eastern boundary of the SLSP area, is unlikely to require upgrading in the absence of further residential (or other) development directly feeding onto it. In any event, the high capacity links of Frankston-Dandenong Road and Dandenong-Hastings Road would carry the bulk of north-south traffic movements. This tends to suggest that Taylor's Road is unlikely to require upgrading beyond that of a secondary arterial road which can be accommodated within the existing road reserve.

Given all the above, it emerges that the roads bounding the SLSP area are all likely to form future arterial roads. The traffic and access design of the SLSP has been cognisant of this likely future scenario.

9.2 Public Transport Facilities

The closest public transport facility to the SLSP area comprises the two bus routes which presently run along Frankston-Dandenong Road:

- **Route 830** which connects Frankston Railway Station to Dandenong Railway Station; and
- **Route 831** which also connects Frankston Railway Station to Dandenong Railway Station via a different route to Route 830.

The two existing bus routes are presently too remote to service the SLSP site in their present form. In the short to medium term therefore, public transport facilities to service the SLSP area will require a new bus service, or a modification to an existing service. While the PTC presently have no plans for such a service, new bus routes are considered as new urban areas develop, and services would generally be provided where warranted by demand.

Further opportunities are provided by recent innovations such as 'dial a bus' and other para-transit services which provide demand responsive mini buses as feeder services to arterial road bus routes or railway stations.

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In this context, the most important feature of the SLSP is that it provides an internal road network which is suitable for bus and other public transport operations. Accordingly, the SLSP facilitates this by the provision of a collector road network which enables a reasonably direct bus service within the SLSP area, while at the same time maximising household accessibility to potential bus routes. In this respect, the SLSP has sought to provide for 90 per cent of houses to be within 400 metres of a future potential bus route.

Electrification of the Cranbourne rail line will provide a high quality linkage between Cranbourne and major metropolitan activity nodes such as Dandenong and the Melbourne CBD. It is expected that the rail service will be complemented by bus feeder-services between railway stations and residential areas, including the SLSP area.

9.3 Pedestrian and Bicycle Linkages

The then Shire of Cranbourne developed a bicycle network and priority programme in 1993. The principal objective of the programme is to provide a comprehensive and integrated network of bicycle paths which link the various urban areas of the city.

At present, there are no existing or proposed linkages in the immediate vicinity of the SLSP area. However, bicycle linkages are proposed as part of the programme along both Dandenong-Frankston Road and Dandenong-Hastings Road. An off-road linkage along either Thompsons Road or Wedge Road would enable the SLSP area to effectively link in to the regional bicycle path network. The provision of the 'green belt' around the perimeter of the SLSP site would provide ample opportunity for the provision of such a facility.

In terms of the internal bicycle network, the SLSP provides a comprehensive bicycle and pedestrian network which links the residential areas as well as important bicycle trip generators such as schools and other activity centres.

9.4 Traffic and Access Elements of the Sandhurst Local Structure Plan

The principal traffic and access elements of the SLSP, which are shown on Plan 9, can be categorised as:-

- (i) The interface to the external road network, and consequent provision of new road reservations and/or arterial roadworks;
- (ii) Specific traffic control treatments; and
- (iii) The internal road hierarchy.

Each of these is discussed in turn as follows.

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Interface to the External Road Network

The interface to the external road network is characterised by orientation towards Thompsons Road and McCormicks Road. This achieves a number of important traffic and non-traffic objectives, namely:

- (i) It facilitates the provision of an uninterrupted 'green belt' around the perimeter of the SLSP area;
- (ii) It acknowledges the predominant trip-making patterns, which are likely to see most trips oriented towards the north (to Dandenong and the greater metropolitan area) and, to a lesser extent, Frankston;
- (iii) It enables utilisation of the existing road infrastructure, i.e. Thompsons Road; and
- (iv) It also provides an opportunity to accommodate the increasing volumes of traffic generated south of Wedge Road, seeking access to Thompsons Road.

Accordingly, the SLSP allows for the upgrading of McCormicks Road between Wedge Road and Thompsons Road, and the section of Wedge Road between McCormicks Road and the western-most access point to the Estate.

In addition, and given that the site is effectively bound by future arterial roads, access to the surrounding system has been provided by a number of appropriately located access points (configured either as 'trunk collectors' or lower order roads, depending on the traffic volume) which concentrate traffic, thereby minimising the number of arterial road intersections.

Traffic Control and Traffic Management

It is anticipated that full development of the SLSP area will necessitate traffic signals at the following locations:

- Thompsons Road/trunk collector;
- McCormicks Road/Thompsons Road;
- McCormicks Road/northern trunk collector.

The appropriate form of traffic control at the remaining access points, and also the intersection of McCormicks Road with Wedge Road, are likely to depend on future traffic growth along McCormicks Road, particularly as it relates to ongoing residential development south of Wedge Road. These intersections will need to be monitored, and appropriate traffic control measures implemented as circumstances warrant.

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Internal Road Hierarchy

The internal road hierarchy has been developed in accordance with the principles embodied in the '*Victorian Code for Residential Development*' (VicCode), and is set out schematically in Plan 9. Plan 9 also shows the anticipated traffic volumes on selected streets within the Estate."

The internal network is characterised by a functional road hierarchy comprising:-

- (i) A number of *trunk collectors* which serve as the principal access routes between the subdivision and the arterial road network;
- (ii) A number of *collector streets* which distribute traffic between lower- order streets and the trunk collectors, or directly onto adjacent arterial roads; and
- (iii) A network of *access streets* and *access places*.

The internal road network reflects the following desirable objectives:

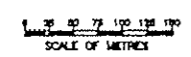
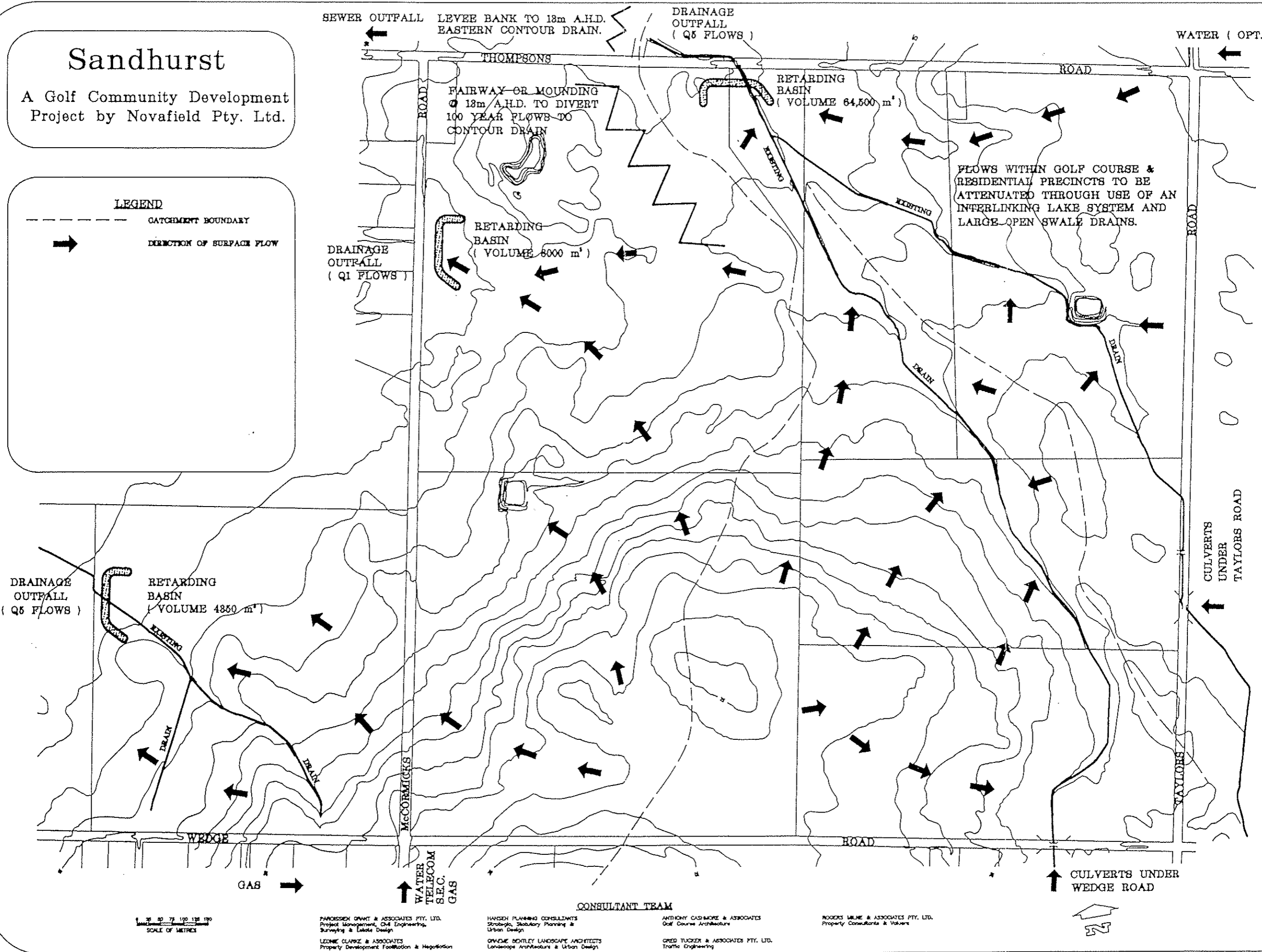
- (i) A distinction between *traffic function* roads and *access function* roads. The trunk collectors serve as the focal points and principal access routes between the arterial network and the subdivision, and thus function as the principal *traffic function* roads. No direct access to lots is provided along these roads. Conversely, the *access* function is dominant for the remaining streets;
- (ii) The network layout generally provides fairly direct access between lots and the external road network;
- (iii) The road layout is also reasonably permeable in respect to internal movements. That is, while the street layout is designed to discourage vehicle '*rat-running*', and also restricts speeds and volumes, it provides reasonably connective routes between origins and destinations for residents moving within the subdivision.

Sandhurst

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LEGEND

- - - CATCHMENT BOUNDARY
- DIRECTION OF SURFACE FLOW



- CONSULTANT TEAM**
- PARSONS BRINCKERHOFF & ASSOCIATES PTY. LTD.
Project Management, Civil Engineering,
Surveying & Estate Design
 - HAYDEN PLANNING CONSULTANTS
Strategic, Statistical Planning &
Urban Design
 - ANTHONY GASHMORE & ASSOCIATES
Golf Course Architecture
 - ROGERS MILNE & ASSOCIATES PTY. LTD.
Property Consultants & Valuers
 - LEONIE CLARKE & ASSOCIATES
Property Development Facilitation & Negotiation
 - GRADIE MOYLEY LANDSCAPE ARCHITECTS
Landscape Architecture & Urban Design
 - GREG TUCKER & ASSOCIATES PTY. LTD.
Traffic Engineering

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10.0 ECONOMIC DEVELOPMENT, TOURISM AND EMPLOYMENT

10.1 The SLSP represents a significant economic development which will have a positive impact and will provide economic benefits to the local and State economies. It will attract golf related tourism from both interstate and overseas and will provide for a significant amount of permanent and part time employment during the construction phase and into the future. The benefits to the economy will far outweigh the loss of 309 hectares of grazing land which is making a minimal contribution to the Victorian economy in terms of jobs, income and revenue, capital investment and tourist expenditure. Jobs will be created at the proposed retail facilities, in the tourist accommodation and restaurants, for golf course maintenance and management, through the expanded headquarters for Victorian golf administration and in running major and minor golf championships, including the Victorian Open. The residential development will attract a population of up to approximately 7,500 persons who will use local facilities, stimulate the local economy and create the opportunity for further jobs and economic growth in the established urban areas.

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11.0 HYDRAULIC AND RETICULATED SERVICES

The Melbourne Water Corporation (MWC) is the responsible Authority for drainage, sewerage and water supply facilities in the SLSP area. Telecom, the Gas and Fuel Corporation and the SECV are the responsible authorities for telecommunications, gas supply and electricity supply respectively.

11.1 Water Supply

Water supply is to be sourced from one of two locations:-

- (i) From Ballarto Road north along McCormicks Road to the subject site. Melbourne Water have programmed the construction of 450/300/225 mains along McCormicks Road to service future residential demand, in accordance with the Carrum Downs Local Structure Plan prepared by the City of Cranbourne, in the 1996/1997 financial year.

To satisfactorily service the SLSP area the proposed main will require upgrading to 600/450/300/225 mains plus the construction of a new reservoir and possible booster pump at Gamble Road.

The developer will be required to fund the cost to upsize the mains and the reservoir construction (including booster pump). If the development proceeds prior to 1996/1997, the developer would also be required to fund all the works, as an interest free loan, to Melbourne Water, to be refunded over a fixed and defined period determined by Melbourne Water.

- (ii) From the Hallam Road Main at Huntington Drive along Evans and Thompsons Road to the subject site. This supply would require the construction of a 525 diameter main over approximately 2.9 km. The developer would be required to fund the cost to provide this main with no refunds envisaged from Melbourne Water.

11.2 Sewerage

A permanent gravity outfall constructed from the north west corner of the subject site, west to the existing Carrum Downs Outfall sewer (1500 dia.) located at the intersection of Worsley Rod and Thompsons Road will form the sewer outfall facility servicing the development.

The developer will be required to fully fund the cost to provide this main with no refunds envisaged from Melbourne Water.

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The parcel of land to the west of McCormicks Road will, in preference, be sewered via a gravity system directed to the north west corner of the main land parcel. Should this option prove unsatisfactory, a small pump station and rising main will be required at the north west corner of the minor land parcel pumping the waste to the east and into the gravity system.

11.3 Gas

Gas mains exist in Wedge Road (at Frankston/Cranbourne Road to the west) and McCormicks Road to the south.

Gas supply will be available to the SLSP area. The Gas and Fuel Corporation normally supply gas to residential developments free of charge, however in this instance upsizing of Gas supply mains to service the area may mean a charge being applied.

11.4 Electricity

High voltage overhead lines exist in Thompsons Road and Wedge Road. The SECV envisage a possible upgrading exercise of their plant to service the subject site.

Electricity supply within the development area will be underground in keeping with current trends and SECV policy.

11.5 Telecom

Telecom have recently constructed a new telephone exchange in the Range View Estate to the south of the SLSP area.

Telephone lines will be sourced from this exchange north along McCormicks Road to the subject site.

The developer will be required to fund the cost of trenching the Telecom service.

It is envisaged that the Telecom service will also include, apart from telephone, cable television facilities.

11.6 Drainage

Drainage details are shown on Plan 10 - Engineering Services Plan. Drainage works within the Eastern Contour Drain catchment will include the construction of a retarding basin at Thompsons Road sized to contain a 100 year ARI flood at a controlled 5 year ARI outflow into the Eastern Contour drain and the construction of culverts under Taylors Road and

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Wedge Road in conjunction with the excavation of the existing open drains that traverse the site to improve the flow of water and decrease the extent of localised flooding.

The preliminary volume of storage required for the retarding basin at Thompsons Road has been assessed at 64,500m³ the location of which is shown on Plan 10.

Drainage works within the Eel Race Drain Catchment will include the construction of two retarding basins at the locations described in section 2.7 (Refer Plan 10).

The retarding basin located to the north west of the site abutting McCormicks Road is to be sized to cater for a 100 year ARI flood at a controlled 1 year ARI outflow into an existing drain to the west.

The preliminary volume of storage required for the retarding basin at this location has been assessed 8000m³.

The retarding basin located to the south west and west of McCormicks Road is to be sized to cater for a 100 year ARI flood at a controlled 5 year ARI outflow into an existing drain to the west.

The preliminary volume of storage required for the retarding basin at this location has been assessed at 4350m³.

Both retarding basins in this catchment alleviate existing drainage problems within the land holdings to the west.

It is envisaged that the retarding basins will form part of the lake system within the golf courses complementing also the residential development.

Stormwater runoff from the residential precincts shall be piped and directed at controlled locations into the open drain system which will act as a storage and settlement system with pollutants removed via appropriate vegetative planting, prior to entering the main retarding basins and the outfall drains external to the site.

Stormwater runoff from the golf course will be collected in open swale drains and directed into the open drain system which will also act as a means to remove pollutants generated from golf course operations (fertilisation etc).

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11.7 Direction of Development

Development will commence from Thompsons Road in the vicinity of the northern golf course and proceed in an easterly and southerly direction utilising a majority of the services either existing or proposed.

Residential development will take advantage of the northern golf course construction and the lake features (retarding basins) that will be created.

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12.0 DEVELOPMENT LEVIES

12.1 Introduction

Development contributions (levies), in addition to essential infrastructure, will be made within the context of the draft Sandhurst Development Contributions Policy (not adopted) of the Frankston City Council. The SLSP has been prepared having regard to identified characteristics and features of the environment, the likely needs of the future resident population and the special characteristics desired to be embodied within a golf community, including the physical infrastructure.

It is recognised that development in the SLSP area must proceed as far as practicable with the provision of adequate services and community facilities to cater for the resident population. The payment by developers of a per hectare development levy, over and above the services and facilities provided or funded under the provisions of the Subdivision Act, will facilitate the supply of essential infrastructure to the area, the need for which is generated by the development.

Within the SLSP area, residential subdivision will be subject to an estimated per lot levy of \$1800 to be paid at a per hectare rate. The levy will relate to the following components in accordance with Table 12.1:-

- * Community services and facilities
- * Recreational facilities
- * External Road Construction

The estimated per hectare levy value is related to a maximum yield of 2482 lots from the net residential area of 164.2 hectares. A lesser lot yield or density will therefore not reduce the available funding. The basis for a levy calculation is set out in the following sub-sections.

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TABLE 12.1

INDICATIVE DEVELOPMENT CONTRIBUTIONS & APPORTIONMENT
SANDHURST PROJECT INFRASTRUCTURE COMPONENTS

COMPONENT		TOTAL COST \$000 's	DEVELOPER'S SHARE %	DEVELOPER'S COSTS \$000
1	<u>Community Services and Facilities</u>			
	Recreation - Multi-purpose community building	210	100	210
	Tennis Courts	150	100	150
	Community building/tennis court land	200	100	200
	Landscaping and carparking for community facilities	50	100	50
	Pre-school centre	170	75	127.5
	Infant welfare centre	160	50	80
	Land for Pre-school and infant welfare centre	140	62.5	87.5
	Landscaping and carparking for centres	60	62.5	37.5
		1140		942.5
2.	<u>Recreational Facilities</u>			
	Development and landscaping of open space	670	40	268
	Fencing of open space	50	40	20
	Bicycle path network	500	25	125
		1220		413
3.	<u>External Road Construction</u>			
	McCormicks Road Construction	1844.5	100	1844.5
	Land for reservation /tree reserve widening	243	100	243
	Wedge Road (part only) Construction	239.7	75	179.8
	Thompsons Road - Vic Roads Intersections	1340.3	33	446.8
	- Thompsons Road	180	100	180
	- Thompsons Road/McCormicks Road	180	66	120
	- McCormicks Road intersection (1)	50	100	50
	- Wedge Road intersection (1)	50	100	50
		4127.5		3114.1
	TOTAL COST	6487.5		4469.6
	TOTAL LAND AREA (including golf courses)			309 ha.
	RESIDENTIAL LAND AREA (including public open space, Primary School, & community facilities).			164.2 ha.
	TOTAL NO. OF LOTS			2482
	CONTRIBUTION PER LOT			\$1800
	CONTRIBUTION PER Ha. (Residential Land)			\$27,208

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NOTES:	(i)	Above components exclude any recognition of public access to the golf courses and club facilities
	(ii)	No inclusion made for Wedge Road between westernmost access to Sandhurst project & Frankston-Dandenong Road.
	(iii)	No inclusion made for Wedge Road (between McCormicks Road & Taylors Road) and Taylors Road, however the Sandhurst Project will make no demands on these roads and consequently should not be required to make any financial contributions.
	(iv)	Percentage share attributed to developer subject to further negotiations and adjustments.
	(v)	Per hectare value based on maximum yield of 2482 lots from 164.2 hectares at the equivalent of \$1800 per lot.

This levy is a preliminary estimate and may be varied as a result of further negotiations between the Council, relevant authorities and the proponent or developer based on Table 12.1.

12.2 Funding of External Road Construction

With total development of the SLSP area, there are a number of transport-related infrastructure works necessary to accommodate the level of traffic generated.

Firstly, Thompsons Road is anticipated to carry an additional 12,000 vehicles per day as a result of the development. Thompsons Road is presently constructed as a two-lane undivided sealed carriageway, and as such has a nominal capacity of some 16,000 vehicles per day. Given that Thompsons Road is presently carrying 11,500 vehicles per day, the additional traffic loaded onto Thompsons Road would take the total traffic volume to a level which would normally necessitate a four-lane undivided carriageway. However, there are plans to upgrade Thompsons Road to this level even in the absence of the residential development proposed by the SLSP. Accordingly, it is arguable that the cost of the upgrading is attributed to VicRoads. Naturally an upgraded Thompsons Road would enable significant growth in inter-regional traffic which could be expected to account for the majority of future traffic carried on Thompsons Road. Furthermore, the fact that the Thompsons Road upgrading is not currently in VicRoad's 10 year program suggests that any developer contribution would fail the 'accountability' test established in the Eddie Barron case. In these circumstances, a general contribution towards the upgrading of Thompsons Road is not warranted.

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Secondly, McCormicks Road, which is presently constructed as an unsealed five metre carriageway, will carry the bulk of traffic generated by the development. There would appear to be two options here:

- (i) The Estate is anticipated to generate volumes in the order of 16,000 vehicles per day along McCormicks Road. For this traffic volume, a two-lane undivided cross-section would be adequate, and in these circumstances the full cost of road construction would be attributable to the Sandhurst Development; or
- (ii) McCormicks Road is likely to form an increasingly important road linkage for the emerging residential development south of Wedge Road. In these circumstances, a section of McCormicks Road between Thompsons Road and Wedge Road could be anticipated to carry traffic volumes well in excess of 16,000 vehicles per day, suggesting a four-lane undivided cross-section. However the marginal cost associated with construction above and beyond a two-lane undivided carriageway should be attributed to the broader community.

Finally, the section of Wedge Road between McCormicks Road and the western-most access point to the Sandhurst Development is unlikely to carry traffic above and beyond that generated by the development. Accordingly, construction of a sealed two-lane undivided carriageway along this section of Wedge Road would be partly attributable to the developer. However, it is not considered necessary for SLSP development to fund the construction of Wedge Road between the westernmost site access and Frankston-Dandenong Road and between McCormicks Road and Taylors Road or Taylors Road.

In respect to other traffic infrastructure, the traffic signals likely to be required at the access points to the Estate would normally be wholly attributable to the developer, as they are necessitated solely by development traffic. On the other hand, traffic control infrastructure at the intersection of Thompsons Road/ McCormicks Road are likely to benefit local and interregional traffic in addition to that generated by the Sandhurst Estate. Accordingly, an equitable cost attribution for these facilities would be on the basis of the relative volumes of traffic

12.3 Funding of Recreation Facilities

In addition to the 4.5% public open space provision (7.2 hectares) to be distributed throughout the residential area and the two golf courses (which represent 46.6% of the total SLSP area) establishment of open space areas and facilities will be provided in the following components:-

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- * Active Open Space
 - * Local Open Space and Playgrounds
 - * Bicycle Paths#
 - * Drainage line and Retarding Basin Enhancement
- # Provision of approximately 10 kilometres of separated bicycle and pedestrian paths, including lighting, constructed along the collector roads and some other streets as indicated on the SLSP.

12.4 Funding of Community Services and Facilities

A wide range of community facilities are proposed or are already provided within the Carrum Downs Outline Development Plan area to the south. Within the SLSP area it is proposed to provide local facilities to serve the neighbourhood to be created, having regard to the golf and recreation based residential area to be created. Facilities proposed to be provided are:-

- * A golf and community recreation precinct containing the club house facilities for the two 18 hole courses, tennis courts and a community building.
- * Land for a preschool and infant welfare centre adjacent to the primary school site and associated buildings and works (refer to Table 12.1).

12.5 Funding Mechanisms & Safeguards

The levy will be paid through either payment in kind and/or a cash contribution to be negotiated with Council prior to the issue of a Statement of Compliance for each stage of development as it proceeds. The development levy will be adjusted annually in accordance with the Consumer Price Index and will be provided for in a Section 173 Agreement between with the Council and the Developer or required by way of permit condition. The payment of levies can be two tiered so that funds or works in lieu are provided by either the developer/subdivider or the home builder at the time when they are needed.

A consistent set of funding procedures and safeguards must be formulated for inclusion into development agreements. The agreements should recognise the value of works provided, the total scheme for the development of roadworks within the area, the value of early provision of works or funds, and the difficulties in funding early overweight contributions.

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There should be safeguards to enable providers of funds to ensure that benefit accrues to the subject developments through application to appropriate works and a method of independent resolution of dispute is required.

The extent to which State and Council funds are applied to the development of the sub-regional road network should also be taken into account. Traditionally, rates and taxes have been applied in part to the funding of the transport network, and therefore some balance needs to be determined.

* END OF SLSP DOCUMENT *

APPENDICES

APPENDIX 1

PHOTOGRAPHS

&

PHOTOGRAPHIC LOCATIONS

(Plan 11)



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APPENDIX 2

REFERENCES

1. Cranbourne Planning Scheme (Anstat Reprint No. 1, September, 1994)
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