Western Australia
**Context**

The Ascot Waters project is located in Perth’s middle suburbs, on a bend in the Swan River. The site needed rehabilitation from its previous uses, ranging from a drive-in theatre, brickworks, clay pit and tip site, and the polluted Belmont drain.

The client group won the tender with an innovative plan, which diverted some of the waters of the Swan River through the site and cleaned up both the local and wider environment. The bid addressed issues such as foreshore enhancement, traffic circulation and access, affordability, and interactivity with adjacent land uses such as the baseball stadium, adjoining racecourse, and the historic brick kilns.

**Description**

The plan is a relatively dense and diverse housing precinct on an interconnected street layout with rear laneways, and park features that address the site’s drainage challenges. The design focuses on:

- Protection and enhancement of water quality;
- Community formation;
- ‘Modified Grid’ street layout;
- Mixed-use development; and
- Ascot Waters Marina for boating and water-based recreation.

**Special Features**

Ascot Waters has many special features, including:

- Quiet walkable streets furnished with footpaths, trees and underground power;
- Rear laneways providing rear access for cars, and an improved street frontage;
- High amenity open space that links with the river and lake foreshore parks and district cycleway network;
- Double frontage ‘five-pack’ housing overlooking both the marina and the street;
- Linear park and slotted pipe/bubble-up system as a nutrient management device which also protects a line of mature trees that provide a park focus;
- Fresh water lake and boardwalk which attracts waterfowl and migratory birds.

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**Ascot Waters**
Perth, Western Australia

**DEVELOPER:**
Domain Project Development Pty Ltd
Henry Walker Group
Estates Development Company

**MAJOR DESIGN CONSULTANTS:**
Taylor Burrell Barnett
Overman Zuideveld

**MAJOR TECHNICAL CONSULTANTS:**
Evangelisti & Associates
Landscape Architectural Services

**PROJECT TYPE:**
Residential, Mixed Use, Marina

**PROJECT SIZE:**
250 homes/units and mixed use

**IMPLEMENTATION STATUS:**
completed

**LOCATION:**
City of Belmont, Perth, Western Australia.
Access via Great Eastern Highway and Resolution Drive. Between airport and CBD.
Perth Streetsmart Map 344 B9.

**FURTHER INFORMATION:**
Estates Development Company
Email: estates@estates.com.au
Belmont City Council
Email: www.belmont.wa.gov.au
Belvedere Precinct
East Perth, Western Australia

Context
The Belvedere Precinct forms part of Claisebrook Village, located within the East Perth Redevelopment Area. Claisebrook Village is Western Australia’s largest inner city renewal project. The area was formerly industrial land and has been rejuvenated under the direction of the East Perth Redevelopment Authority, created under the East Perth Redevelopment Act, 1991. The Belvedere Precinct, located on the Perth City’s doorstep, is bordered by Kensington Street, Victory Terrace and East Parade and adjoins Mardalup Park and the Swan River foreshore. It was designed and developed from 1995 to 2002.

Description
The design of Belvedere East (200 lots) was developed and refined through a series of collaborative urban planning and design sessions involving the project team. It followed an intensive inquiry into the opportunities and constraints inherent to the site and its surroundings.

The final design articulates a rich and legible urban character combining a mix of single residences, home/offices, duplexes and medium-density sites to create a friendly village environment. It also conveys a strong sense of local identity and place, whilst complementing the modified grid pattern established as part of the essential urban character of the East Perth Redevelopment Area.

The urban structure is designed to facilitate walking and cycling through carefully planned linkages and street treatments that encourage a low traffic speed environment. Physical and cognitive links to the Swan River foreshore, Claisebrook Inlet and the wider East Perth Redevelopment Area are also reinforced through the design. The landscape and architectural qualities of the precinct contribute to its cosmopolitan feel and diversity. Defining elements include tree-lined streets, bold public art and a compact built form, wherein buildings of complementary height, scale and setback frame the adjacent streets and linear parkway.
Context
Following the 1996 non-binding Jindalee Enquiry by Design Workshop (see North West Corridor project) and launch of the WA Liveable Neighbourhoods Code, the WA DPI conducted the Butler-Brighton Charrette in 2001, more formally to design this area in accord with the Code, and in collaboration with Satterley, the primary developer.

Key issues to resolve included locating the route of the railway, and testing the development feasibility of a large Liveable Neighbourhoods Code project with a main street-based mixed-use town centre and neighbourhood centres. Those decisions have now been resolved, and a detailed structure plan approved. Over 350ha in the southwest of the site has already been constructed, with Stage 1 of the Brighton Village Centre on Marmion Avenue/Knightsbridge Bvd opened in late 2006. Sales of this Liveable Neighbourhoods New Urbanist development are strong, and have averaged about 50 lots per month.

Description
The plan generally exemplifies the Liveable Neighbourhoods Code and New Urbanism for a major urban fringe extension, at all scales from town and neighbourhood structuring to lot design. The proposed rail route runs through the development with stations at Butler and Brighton. Residential diversity includes terrace lots with rear lanes, cottage lots with and without rear lanes, traditional and mansion lots, and future higher density apartments. With early market acceptance, the densities are increasing with later stages.

The Brighton Village Centre at Knightsbridge Boulevard features cafes, supermarket and specialty shops. A tavern and a childcare centre are planned. The main Brighton Town Centre is now in the detailed design stage. High amenity parks were established early and rapidly became a feature. Discussions were held with local indigenous elders to identify areas of cultural significance, which could be retained as parkland features within the development. Key findings related to the importance of some prominent vegetation stands, primal sand dune and undulating nature of the land reflecting the Waugyl Dreaming Track. In response, key vegetation stands were incorporated within parks, as too were lookout points and towers providing vistas to the adjacent dunal system and coastline.
**Context**

The Capricorn Village project is on the coast north of Yanchep and forms part of the broader St. Andrews project (see separate project page), located in the north west corridor of the Perth metropolitan region, around 50km north of the Perth CBD.

The St. Andrews Plan provides for a variety of town, village and coastal activity centres connected by a mixed-use transit corridor. The Capricorn development is located in the south west corner of St. Andrews and will be linked to the proposed southern town centre by a highly urban mixed-use employment corridor. The St. Andrews project will become the economic anchor for the north west corridor.

Of the anticipated 55,000 jobs, around 2,280 will be within the Capricorn development.

The Capricorn Village Structure Plan was prepared in 2003. It has recently been revised to achieve a greater recognition of the unique coastal landscape, and cohesion between destinations and the new community. The revised Structure Plan also reflects the principles in the City of Wanneroo Smart Growth Policy.

**Description**

The vision for Capricorn Village is to capture a distinctive lifestyle experience within the coastal setting. Capricorn is structured around a village centre and five neighbourhood precincts. A range of residential densities will provide housing diversity, including extensive cottage lots and rear lanes. Design guidelines will encourage homes that celebrate the coastal location with verandahs, high ceilings, natural ventilation and other elements of passive solar design.

The street network has a heavy emphasis on pedestrian movement and will provide for strong east/west linkages from the beach, across Two Rocks Road and beyond to the future town centre and Yanchep National Park and north/south between Capricorn and Yanchep. A network of open spaces will provide a range of recreational opportunities and create a vibrant and robust public realm.

Ultimately, Capricorn will include a village centre sited around a one-way couplet on Two Rocks Road, the business corridor, a coastal node including tourism and resort opportunities, two primary schools, a private K to 12 school, a 160 bed aged care facility and 200 independent living units.
Claisebrook Village, part of East Perth, is on the Swan River at the eastern edge of Perth’s CBD. Until 1991, when the East Perth Redevelopment Authority (EPRA) was established, the 146ha site was industrial land including the East Perth Gasworks, scrap yards, contaminated industrial sites, empty warehouses and railway yards. A Better Cities grant of $32 million plus $100 million from EPRA catalysed the redevelopment, which has been augmented by more than $500 million in private development expenditure.

Description
Claisebrook focuses on a constructed inlet of the Swan River, and a main street to its south (Royal Avenue), with mixed-use multi-storey buildings ranging from about 3 storeys to 6 or so, in a terrific walking environment with active frontages lining all streets and the numerous public spaces. This urban village integrates residential housing, retail shops, commercial buildings, educational facilities, and 22ha of recreational parks, open spaces and other public areas.

Design Guidelines have ensured a diverse, compatible and energy-efficient urban fabric. Ten to fifteen percent of all dwellings in new developments are set aside for social or affordable housing, to encourage demographic and socio-economic diversity. Extensive landscaping, heritage preservation, public art and fountains complete a very high quality urban experience.

Context
Claisebrook Village has been developed by East Perth Redevelopment Authority (EPRA) with a focus on creating a mixed-use urban village with residential, commercial, educational and recreational spaces. The project has been augmented by private development expenditure to enhance the quality of urban experience.
Context
Under a 1997 Master Plan this WAPC-owned land was designated as a regional town centre for a developing area with an ultimate catchment population of 190,000. It will be served by a railway station on the new South West Metropolitan Railway and immediately adjoins an existing shopping centre (Gateways) that is already well served by buses. There is some existing commercial & industrial development in the Jandakot Industrial Area on the eastern side of the freeway-railway corridor, and major sporting facilities are also mooted.

The site is adjoining the Kwinana Freeway and demonstrates the challenges of providing transit-oriented development around stations located along freeways.

The project is an excellent example of Government linking the provision of new rail infrastructure with strategic landholdings to generate opportunities for higher density mixed use development. It will also demonstrate integrating an existing car-based shopping centre into a mixed-use walkable centre.

Description
The Cockburn Central Concept Plan proposes a street-based mixed-use town centre and bus interchange directly connecting to the new Cockburn railway station. It will link south to the Gateways shopping centre, with streets and urban development created between the two areas.

The regional town centre core is proposed to include a mix of cultural, civic, commercial, entertainment and residential opportunities. To the west of the centre is proposed a major regional sporting facility, integrated with water management features and bushland retention.
Ellenbrook
Perth, WA

Context
Ellenbrook is located within the Swan Valley, approximately 20km north east of the Perth CBD. Prior to Ellenbrook, the land was a sand quarry and pine plantation. A 1991 Joint Venture between the State Government and a private consortium established a three-tiered statutory framework addressing planning and design from the broad structure planning through to detailed site design.

Description
Today Ellenbrook is one of the largest and most rapidly expanding new towns in Australia. Ellenbrook is the most awarded urban development project in Australia, including most recently the UDIA 2005 Master Planned Development Award. A founding objective of the Project was its ‘village’ atmosphere with housing and services for a diverse community. Ellenbrook is structured around seven intimate villages and a town centre. The design of each village incorporates many of the principles of traditional town planning, with new design techniques that respond to contemporary society. Each village frames centrally-located facilities. The permeable street network and linear parkways allow for a highly walkable environment.

All villages have convenient access to the Town Centre with a well-defined public realm and accessibility for public transport. The Town Centre is a ‘hybrid’ design featuring a main street environment with café, tavern and commercial offices, developed externally to air-conditioned malls with a supermarket, discount department store and adjacent specialty shops. This approach offers a choice of retail environments that can be accessed individually or collectively. Both formats are performing well, with day and evening activity.

Special Features
- Wide range of housing types and lot sizes;
- Early provision of community facilities, including schools in houses/offices;
- Cable internet/community intranet;
- Comprehensive public art programme;
- Integration of affordable housing (public housing per 12 dwellings);
- Local employment strategy empowering residents to start up local businesses;
- Environmental management and energy-efficient housing designs.

DEVELOPER:
Ellenbrook Joint Venture

MAJOR DESIGN:
Roberts Day Town Planning & Urban Design
Sharni Howe Architects, Cox Architects

TECHNICAL CONSULTANTS:
Cossill & Webley – Engineers
Bowman Bishaw Gorham – Environmental
Phillipa O’Brien – Cultural Planning
Sinclair Knight Merz – Traffic Engineers,
Whelans - Surveyors
Landscape Architects – P Cala & Assoc,
EPCAD,
Arbor Vitae, Tract, Blackwell & Assoc, Plan E

PROJECT TYPE:
New Town

PROJECT SIZE:
1,200ha, 30,000 residents

IMPLEMENTATION STATUS:
Town Centre under construction, 5,000 homes completed

LOCATION:
North East fringe of Perth. Perth Streetsmart Map 255 D7

FURTHER INFORMATION:
www.ellenbrook.net
www.robertsday.com.au
Context

In 1997 Gosnells was in decline: there was a 49% vacancy rate in the Town Centre, and the town had low quality streetscapes, dominated by highway retail and surface car parking. Between 1991 and 1996, 71% of clerical jobs in Gosnells disappeared. Few local streets existed in the town centre. On the plus side were the City’s grid of streets west of the rail, its remnant architectural heritage, a city centre park and the Canning River environment. The revitalization initiative was launched in 1997 in conjunction with government, business and the community under the banner “Bright Future”. The design focused on re-creating a traditional town centre.

Urban Form and Structure

The urban structure of the town centre has been substantially changed with the addition of two key streets to improve access to it and within it. A new east-west “Main Street” was built with a new level crossing across the railway to facilitate access between the Albany Highway and the main Gosnells’ residential catchment to the west. A stronger commercial hub now links both sides of the Albany Highway. Improvements include road works, streetscapes and slip lanes, and extensive public artworks.

The existing railway station has been relocated to the Main Street level crossing to provide a stronger focus to the town centre. A new link road (Federation Parade) along the Canning River (Pioneer Park) has been developed to improve circulation and create a new front to the river. Introduction of new design guidelines have restored the focus on pedestrian-friendly environments, outlook to public spaces and suitable scale and form.

Civic and Environmental Focus

Development of a new Civic Complex (The Agonis) and adjacent Town Square has re-focused attention on the town centre. The Agonis incorporates a new Library/Knowledge Centre, Meeting Rooms, Centre for Business Development (Business Incubator) and a Lotteries House in a building that balances civic identity with environmental best practice. Redevelopment of the CBD’s wildlife haven, Pioneer Park, on the Canning River is now underway, to transform it into a regional visitor drawcard with a feature tree-top walk.

Economic Performance

The project has already demonstrated these major achievements:

- Retail vacancy has decreased from 49% (2000) to 10% (2004);
- More than $8 million in inward investment before works complete (2004);
- Increased retail turnover;
- Civic spaces created, and return of civic pride;
- Decreased reports of criminal and antisocial behaviour.
**Harbour Rise**  
Hillary’s, Northern Perth, Western Australia

**Context**  
The site is located on the coast approximately 18km northwest of Perth CBD. The land is within the locality of Hillary’s and adjacent to the Hillary’s Boat Harbour and Sorrento and Hillarys beaches.

In 1948 the Estates Development Company (EDC) purchased 3000 acres of northern Perth land, most of which was developed over the following years. EDC kept one small parcel of prime beachfront property overlooking Hillary’s Boat Harbour. With the surrounding land developed, in the mid 1990’s the ‘Harbour Rise’ project was initiated, with design based on the principles of ‘New Urbanism’. Harbour Rise is one of EDC’s flagship projects.

**Description**  
The Taylor Burrell Barnett plan produced an innovative layout based on a legible, gridded road pattern including laneways for smaller lot development. The plan worked with the topography of the site to promote the location and natural attributes, affording ocean views from many areas of the estate. The plan represented an early demonstration of the *Liveable Neighbourhoods Community Design Code*, and a radical departure from the layout of surrounding cul de sac estates.

The outcome is the creation of a vibrant community focused on the coast and the Hillarys Marina. The design centres on:
- A variety of housing density;
- Community formation;
- ‘Modified Grid’ street layout;
- A walkable neighbourhood;
- Provision of proximity to local public open space to all lots;
- Mixed use development.

**Special Features**
- Quiet walkable streets with footpaths and trees;
- Laneways providing rear access for cars, creating a better street frontage without driveways;
- Housing which overlooks both public open space and the street;
- Creation of a consistent housing style through effective Housing Guidelines;
- High amenity open space that provides for variety in recreational activities;
- Benched lots to provide ocean views to all lots in the eastern part of the site;
- A high quality urban precinct featuring sculpture and ornamental retaining walls.
The Department of Housing and Works (DHW) and Water Corporation, with other government agencies, initiated the Sustainable Land Development Study to prepare a development model for Perth urban extensions that would best achieve sustainability objectives.

The Harrisdale Eco-Village site was selected as the demonstration case. The site is located in Forrestdale, approximately 19km from Perth and is adjacent to the Harrisdale Wetlands and a Bush Forever site. The land is partially included within a District Centre and located along an activity corridor, recognised in Network City, which provides opportunities for some mixed-use development. It will be developed jointly with the private sector.

The development proposes a solar-oriented street network with a variety of solar-efficient housing types and densities including cottage lots (with car courts and shared community space), detached housing lots, townhouses, maisonettes, and apartments. Mixed-use development is planned along Ranford Road to accommodate live-work, and maisonettes front Warton Road, avoiding back fences onto the arterial. Walking, cycling and access to public transport are provided for in a pleasant environment with narrow tree-lined streets and paths.

Wetlands and the Bush Forever site are protected. Water management facilitates infiltration through the street network. Waterwise landscaping is used, and a third pipe water recycling system is being investigated.

Features

- A walkable neighbourhood, mixed-use development, access to public transport and district centre;
- Mix of sustainable housing types and higher densities; and integrated public housing
- Narrower streets with parking, street trees and pathways;
- Best practice energy efficiency initiatives;
- Street network to assist water management;
- Diversity of public open space;
- Development to address major streets;
- Agency and Peer review, and triple bottom line assessment.
Harvest Lakes
Atwell, City of Cockburn, Perth, Western Australia

Context
Harvest Lakes is a new residential development and village centre located approximately 20km south of the Perth CBD and adjacent to the future Atwell Station on the Perth-Mandurah Rail line, currently under construction.

Description
Harvest Lakes uses traditional neighbourhood design principles to create a ‘liveable neighbourhood’. The project will yield around 1,000 residential lots of various sizes for a range of housing types. The development demonstrates application of the WAPC Liveable Neighbourhoods Code including lot size diversity, an interconnected street network, mixed land uses and development focussed around an accessible village centre and prominent neighbourhood parks. Streets are oriented to take advantage of park vistas, to focus linkages to the Village Centre and to enable north/south and east/west lot orientation for passive solar energy gains.

The main street-based Village Centre provides for a flexible urban structure with the capacity to accommodate a variety of land uses, including apartments, integrated aged care, civic spaces and retail and commercial uses. The mix and intensity of uses within the Village Centre will serve to support the forthcoming train station. A home-store providing for the daily convenience needs of residents will serve the northern precinct and a primary school is to be centrally-located. Parks are designed to retain remnant vegetation and wetland areas, as well as for accessibility.

Special Features
Harvest Lakes is Western Australia’s first large-scale ‘GreenSmart Village’ designed to minimise the impact on the environment. ‘GreenSmart’ has been developed by the Housing Industry Association to guide designers, developers and builders towards practices that reduce environmental impacts. The project was awarded the UDIA ‘Water Sensitive Urban Development Award’ and ‘Environmental Excellence Award’. Features that contributed to this accolade include lots oriented for passive solar benefits, energy-efficient housing design and materials and stormwater recycling.

The success enjoyed by this project in the marketplace confirms the high level of demand for sustainable environmental practices and design.
Context
The new Joondalup City Centre began in 1976 with the Joondalup Centre Act and the public Joondalup Development Corporation, which in 1992 was merged into LandCorp, the State's development agency. The city centre was established to serve the rapidly-growing northern corridor of Perth.

Joondalup City Centre is 26km north of Perth’s CBD, 4km inland from the ocean and with a lake on its east. It is served by passenger rail and has good freeway access, and has several educational institutions, health campus, council offices and major sports facilities. The construction of Joondalup is nearing completion, and recent developments are able to take advantage of this critical mass of urbanisation.

Joondalup's 1995 Development Plan identified several ‘main street’ districts, and of particular interest are City North (just north of Shenton Avenue and Moore Drive), Lakeside (east of Lakeside Drive) as well as the central mixed use streets around Reid Promenade and Boas St.

Description
These are generally very successful mixed-use neighbourhoods with interconnected streets, actively-fronted by two to four-storey buildings, with good streetscapes and walkability. Private developers have constructed many of the buildings according to detailed urban design guidelines issued by LandCorp. Local shops merge well with three-storey home businesses and medium-density terraces, many with rear lanes.

Joondalup City North was the first precinct. It pioneered rear lanes and smaller terrace lots, as well as live-works. A small local neighbourhood centre has established on Regents Park Rd near Notting Hill St.

The Lakeside Precinct is generally denser than City North. It has extensive rear lane studio units, which have appealed to the students at the Joondalup Campus of Edith Cowan University. Recently a substantial apartment complex has been added. This precinct demonstrates excellent provision of active frontage to busy Lakeside Drive arterial.

The central mixed-use precinct is emerging as a restaurant and office precinct, as well as a business enterprise node. The two small narrow streets (Central Walk and Reid Promenade) are reminiscent of King St in central Perth.

Throughout Joondalup City Centre, the public realm is of a high quality, with excellent footpaths, verge planting, urban art, tree retention and park establishment. This provides a unifying and complementary setting to the generally high standard of built streetscapes.
Context
Lakelands is located midway between Rockingham and Mandurah, with the South West Railway to be constructed through the centre of the site, and the future ‘Road A’ and Kwinana Freeway on the eastern boundary. The site has been cleared and used for farming, however many mature tuart trees remain. Working closely with the City, the developer has identified and retained many trees.

Description
The Taylor Burrell Barnett Outline Development Plan produced an innovative gridded layout with some laneways, which not only fitted into the site’s natural attributes and views to the east over the Paganoni and Black Swan Lakes, but also responded to the environmental and physical constraints such as the retention of remnant bushland and tuart trees, improving fauna movement between wetlands, and supporting the future train line and station. The outcome is a diversity of development in recognition of the close proximity of the site to wetlands, major infrastructure and regional retail components.

The design focuses on:
- Protection and enhancement of wetlands;
- Community formation;
- Highly connected street layout;
- Mixed-use development opportunities;
- Mixed-use town centre.

Special Features
- Laneways to provide rear access for cars in key locations, resulting in an improved street frontage through the absence of garages;
- High amenity open space that preserves existing mature trees and promotes walkability between the town centre, train station and schools;
- Double frontage ‘four-pack’ housing overlooking areas of open space;
- Atlantis cells and slotted pipe/bubble-up system to minimise use of drainage basins, protect mature trees and add to the recreational amenity of the project;
- Black Swan Lake boardwalk to encourage waterfowl and migratory birds whilst providing an attractive parkland setting for residents and visitors.
Context
Western Australia is unusual in that the State Government’s Western Australian Planning Commission (WAPC) is responsible for planning approval of all subdivisions in the state. It also plays a key role in structure planning.

The WAPC recognised in 1995 that if current suburban growth was continued, then a range of problems were likely, including traffic, infrastructure, employment, social and environmental matters typical of suburban sprawl. As precedents, in 1991 Victoria had produced VicCode 1 (Victorian Code For Residential Development – Subdivision and Single Dwellings) and in 1995, the Commonwealth Government released AMCORD 95. Both these documents provided for more innovative, cost-effective, land-efficient and sustainable new urban development.

In 1996 the WAPC initiated the Liveable Neighbourhoods Project, using a series of design workshops for industry and government stakeholders to inform the content of a Code that responded to the WA context. The most significant of these was the Jindalee Comparative Design Workshop. (See Perth North West Corridor project).

The first edition of LN was produced in 1997, and issued as an optional alternative policy for consideration of subdivision applications and structure plans, predominantly for residential urban extensions. A second edition was issued in 2000. From 1998 to 2004, LN has catalysed a significant change in the form of urban development in WA, particularly in Perth. Most recent subdivisions now have interconnected streets with active frontages to arterials and parks. There is greater housing diversity; with neighbourhood or village centre. Most have a far higher standard of environmental and landscape response. (See Wellard, Harvest Lakes, Somerly and Brighton projects for some examples of the application of LN).

In 2004 a major analysis, consultation and comprehensive review of LN occurred, culminating in the issue of Edition 3 in October 2004. This edition is issued as a draft policy for comment, prior to anticipated formal adoption of LN as WAPC policy.

LN has been internationally-recognised as one of the most innovative and comprehensive regulating documents for shaping more sustainable and liveable outcomes for urban extensions. It is now widely used outside WA. LN received a CNU Charter Award in 2000.

Description
LN is structured as a performance-based code/policy. The original editions of LN had six design elements, while the new edition has eight. These elements are:

- Community Design
- Movement Network
- Lot Layout
- Public Parkland
- Urban Water Management
- Utilities
- Activity Centres and Employment
- Schools

Each element has an Introduction, detailing the key differences from conventional development practice, plus Objectives and Requirements. LN also includes a range of supporting information, including appendices on Site and Context Analysis, the Design Process and Pedsheds (walkable catchment assessment).
Mandurah Ocean Marina
Mandurah, Western Australia

Context
Located 72 km south of Perth, Mandurah Ocean Marina is an aquatic playground offering the coveted lifestyle associated with glorious beaches, fine fishing and abundant water sports.

Description
The Mandurah Marina project comprises tourist, marine, commercial and residential components, with strong links into the existing cultural and town centre precincts.

Key attributes of the project include (a) creation of a marina for professional and recreational boating, (b) development of a tourist destination and permanent residential/commercial development, and (c) creation of public access to most of the waters edge.

The Marina is being developed by LandCorp – the Western Australian land development agency – and is managed by the City of Mandurah. The State Government is providing $58 million for the Marina's infrastructure. The marina is expected to create over 600 full time jobs and generate about $900 million in economic activity in the Peel region, over a 20-year timeframe. The Marina is fast becoming a tourism icon for the Peel Region and has already demonstrated significant economic and community benefits.

A significant portion of land in the Marina has been dedicated to public open space, including foreshore areas, boardwalks, headland viewing points, landscaped streets and piazzas.

The Marina’s North Harbour was completed in August 2001 with all residential and commercial land sold within a short timeframe. Ocean Marina Pointe, a mixed-use project, has sold and mostly constructed all residential properties and commercial units, along with the Seashells Resort Mandurah, with tourism units, commercial units and residential penthouses and villas. Dolphin Quay features waterfront market stalls, shops, cafes and restaurants for the North Harbour.

Special Features
- The South Harbour features a network of Venetian-style waterways lined with apartments, shops, and family homes and is expected to become a tourism landmark.
- A pedestrian bridge linking the North and South harbour is now open, and provides a direct link to Mandurah's city and cultural precinct.
- The Family Chalet Park provides affordable accommodation that is close to a new swimming beach and local tourist attractions.
- Detailed design guidelines guide built form and deliver maritime character.
Context
The site is located on a peninsula immediately north of the Bunbury CBD adjacent to both Koombana Bay and the Indian Ocean.

Description
The Marlston Hill and Waterfront project involved the redevelopment and rehabilitation of a port-related industrial area, which comprised petrol tankers, sewerage farm, oil tanker and railways. The objective in developing Marlston Hill was to create a ‘Port Village’ atmosphere with the association of port and marina activity in Koombana Bay being considered to be a positive attribute, similar to Fremantle.

The Structure Plan provided the framework for residential development indicating the main access roads, public open space and residential density. The radiating streetpatterns respond to the hill, dominated by the existing lookout, and act as a termination point to Victoria Street, a key CBD street. The houses have views orientated towards Koombana Bay, offering northern orientation and protection from prevailing south-west winds. The waterfront mixed-use development is on the sheltered eastern side.

The Government is now investigating transforming the Bunbury Outer Harbour (north of Marlston Hill) from an ageing industrial site into a world-class waterside development. Preliminary investigations in 2004 suggest that redevelopment of the Bunbury Outer Harbour could include a mix of tourism, residential, retail and commercial development opportunities. A significant feature of the redevelopment would be the return of public access to 5km of prime waterfront land.

Special Features
- Seamless extension of the Bunbury CBD street grid over previously port land.
- By incorporating traditional relationships of built form to streetscapes, with an understanding of contemporary architecture, the project helps to reunite Bunbury with its harbourfront.
In Perth’s east, the town of Midland flourished until the 1970’s, serving Perth’s hinterland and capitalising on its position at the confluence of major road and rail routes eastward. Then inter-related problems caused Midland to decline. Midland’s Industrial Economy collapsed with the closure in 1994 of the Railway Workshops, comprising the southern half the town’s core, and isolated by the wide freight railway. Planning decisions and expanded arterial roads further isolated parts of Midland from each other. A large stand-alone enclosed shopping mall developed on a major arterial and sapped energy from Midland’s struggling original town centre. Midland’s traditional main street converted to a pedestrian mall, limiting custom from the street, and causing shops to struggle. Midland became a town in decline.

**Project Description**

In 1997 the Shire of Swan and others hired ESD to lead the Midland Revitalisation Charrette. Proposed outcomes were quickly approved in principle, and implementation commenced. The Midland Redevelopment Authority (MRA) was formed, with jurisdiction over much of central Midland. The State relocated the WA Police Service Operations Support Facility to the Railway Workshops site. Since 2000 the MRA has had the Planning Group revise and refine the Charrette vision and plans, and the MRA and private developers continue implementing them. The Railway Workshops are redeveloping into a unique and vibrant TOD with 2000 residents, predicted to stimulate $688 million dollars of investment and 5000 jobs. Planning reflects the heritage of the Workshops site and integrates the traditional Midland centre.

**Recent Progress**

- Construction of Juniper Gardens;
- 70 townhouse lots sold in Woodbridge Lakes and construction commenced;
- Masterplan for Workshops Village and subdivision works completed with Heritage Strategy and Management Plan;
- Plan for 450-room hospital;
- Construction of large format retail on Lloyd Street;
- Construction of public works, landscape and public art installations;
- Completion of Midland Gate Shopping Centre extensions;
- In 2006 TPG prepared for the City of Swan a Masterplan for redevelopment of the Midland Oval. The Plan retains a central park and pocket park, introduces a boulevard, and features 3-6 storey apartments and small-lot mixed-use development. The draft Masterplan is out for public comment.
Perth’s North West Growth Corridor/Jindalee Plan
Butler to Two Rocks, Perth, WA

Context
Perth’s North West Growth Corridor (north of Lukin Drive) is 25 km long and 3-4km wide, framed by national park to the east and north. It is generally undeveloped and is easy to build on, with gentle dunes transitioning to beautiful beaches. Linear transit-oriented development is ideal for this long site.

WA has always proactively planned for growth, and by the mid 1990’s the entire corridor was already planned as highly-organised suburban sprawl. By 1996 the State knew that major traffic and infrastructure problems would occur if sprawl development models continued. As part of research for the WA Liveable Neighbourhoods Design Code (see separate project) the State held the Jindalee Enquiry by Design Workshop, to test by comparative design, whether the 5,000ha Jindalee area (now Brighton) might be re-designed to better achieve the State’s policies for urban sustainability. Informed by the outcomes of that workshop, the State issued the Liveable Neighbourhoods Code in 1997 as an optional code for urban extensions.

The Jindalee Plan also stimulated interest in the development community, and with leadership from WA DPI and City of Wanneroo, the NWC is now developing as New Urbanism/Smart Growth. Preparation of Regional, District and Local Structure Plans have been progressing for the NWC since 1997. Development is now underway, predominantly at Brighton, but also at Capricorn Village north of Yanchep (see Brighton, St. Andrews and Capricorn Village project pages).

Description
This Jindalee Enquiry by Design Workshop plans show a clear ‘hypothetical’ Liveable Neighbourhoods growth model. The Jindalee Plan showed vastly improved performance for all sustainability indicators in the State’s policies. Jindalee’s Regional Plan shows three groups of walkable neighbourhoods clustering to form towns, whose centres have rail stations. Earlier planning had the railway continuing northward beside a planned freeway along the eastern edge of the corridor.

The detailed Jindalee Plan shows an interconnected street network with ‘Integrator Arterials’ and ‘Neighbourhood Connectors’ spaced about 800m apart, to ‘feed’ each neighbourhood centre with passing trade and bus service. Site-specific responses give local character to the urban fabric. Jindalee has a main street-based town centre, running from Marmion Avenue to the proposed station.
Context
Situated 4.5km south of the popular Fremantle fishing boat harbour, the Port Coogee Marina Development project has been the subject of substantial and protracted negotiation, consultation, research and design since 1992. Following exhaustive stakeholder consultation and environmental assessment a Local Structure Plan has now been adopted which will guide the development of a Marina, diverse residential, commercial, retail and public amenity uses.

Description
This development will transform existing industrial landholdings into a marina and residential development. The Plan addresses the objectives and expectations of the community and government stakeholders, providing a high quality water-based community with a diversity of uses and facilities. The Marina Village is the focus of this development, as well as the broader community nearby. The project accommodates for a possible future passenger rail station adjacent to the project. The plan embraces the Liveable Neighbourhoods Community Design Code.

Port Coogee's main street-based marina village is designed as a social and tourist focal point surrounded by a range of businesses including cafes, restaurants, retail outlets, aquatic based activities and tourism businesses.

Special Features
- Laneways (in prescribed locations) providing rear lot access for cars and an improved streetscape.
- Public open spaces with coastal views.
- Boardwalks, landscaped foreshore areas, cycle ways, fishing platforms and a public swimming beach.
- Building Guidelines and Detailed Area Plans for housing and built-form compatibility.
Context
Busselton is a coastal resort town located approximately 225km’s south of Perth, within easy access to the wine growing region in the adjacent Margaret River area, nearby National Parks, and the coast. Busselton is one of the fastest growing local authorities in Regional Australia. In response to an Urban Growth Strategy adopted by the Shire, Satterley Property Group is developing this logical extension of the existing town.

Description:
Provence is one of the first multi-village master-planned communities to be developed in the Busselton region with approx 2,700 dwellings to be developed. The plan has an integrated network of streets allowing residents easy access to parks and shops. The Village Centre is situated on the key axis roads and is the project’s focal point. The Village Centre is co-located with one of 2 schools which helps minimise vehicle trips whilst maximising exposure to businesses located within the Village Centre.

A range of residential lot densities is provided. Cottage (higher density) lots surround the Village Centre, to help create a “critical mass” for the Village Centre. Detailed Area Plans ensure the intent of the design is followed through to construction.

An extensive landscaping strategy has included the retention of existing vegetation and the enhancement of a previously degraded wetland. Ecological Links as well as management plans to facilitate fauna movement, including the Western Ringtail Possum and the Western Grey Kangaroo, have been implemented.

A variety of frontage options to the parks enhance public safety by increasing passive surveillance. Water-wise strategies which address drainage, nutrient & pollution management and mosquito management have been implemented.

The overall design facilitates pedestrian movement through strong pathway/road linkages between public open space, the proposed Village Centre, the existing Georgiana Molloy Anglican School, the proposed public school and the greater residential precinct adjacent to Provence.
In 1950 the State Government established a new public housing estate called ‘Maniana’. It was within the gridded neighbourhood of Queens Park but featured new planning concepts including cul-de-sacs, pedestrian access ways and duplex and triplex housing clusters.

Refurbishment of the timber-frame and asbestos cement sheet-clad housing in the 1970’s prolonged the life of the estate, but by 2003 the estate had become notorious for its social dysfunction, and the housing stock was in dire need of redevelopment. The Department of Housing and Works established a New Living Project and selected developer Peet Ltd as private sector partner to assist in delivering and underwriting the project, with The Planning Group as urban design consultants.

The intention was a re-subdivision of the area to create a ‘Liveable Neighbourhood’ with a substantially-reduced proportion of public housing. Demolition of the housing stock commenced in 2004 after relocation of affected residents.

Context

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Description

The new Quattro (formerly Maniana) precinct is shown in orange on the Queens Park master plan. There is a variety of lot sizes ranging from 350sqm to 600sqm. The redeveloped village centre at the Wharf/Maniana St. corner will now be more walkable for residents due to the new street layout. To encourage pedestrians, avenue planting will be maximised, creating public promenades that are interesting, safe and legible. The street layout also ensures easy pedestrian access to bus stops. Development will assist in creating a more safe and liveable neighbourhood through CPTED principles.

The master plan protects key environmental areas and incorporates significant cultural and environmental features, as well as offering the community a new focal point in the form of a park and linear green spine.

Community consultation has been critical to the acceptance of the project by the existing community. Community development will be a key strategy in the creation of a proud and engaged community inclusive of existing and new residents. A component of affordable housing will be included in the project.

Special Features

- New Urbanism structure planning principles applied in retrofitting a conventional suburban development.
- Cul-de-sac heads linked to enhance walkability.
- Safety and legibility re-introduced into system.
Context
St. Andrews is the northernmost segment of Perth’s North West Growth Corridor, covering about 5500ha, stretching along 11km of the Indian Ocean, with parkland framing its east and north. Gently rolling dunes characterise most of the largely greenfield site, which surrounds the small villages of Yanchep and Two Rocks.

Tokyu and the City of Wanneroo are parties to the St. Andrews Strategic Co-operation Agreement with the State Government (1999).

Located more than 10km beyond the present urban fringe, St. Andrews’ rationale for early development approval for its ultimate development population of 150,000 is its economic strategy. According to the 2004 St Andrews Concept Plan, the economic focus “would recognize St. Andrews as the centre of its region and the natural hub for an extended hinterland. Population-based jobs would contribute about half of 55,000 anticipated jobs. The remainder would be sourced through the IDEAS project, which aims to provide a suite of externally-oriented economic activity which has markets outside the region.”

Description
The Concept Plan shows a mixed-use transit boulevard up the middle of St. Andrews, lined with three and four-storey mixed-use buildings, as its proposed economic armature, with mixed-use transit-towns forming at the major intersections with east-west arteries, spaced about 2km apart. Heavy rail from Perth’s CBD would meet St. Andrews’ southernmost town at a bi-modal interchange with its proposed light rail or bus rapid transit service up the transit boulevard. The significant traffic loads at main intersections along the transit boulevard are shown distributed into ‘dual couplets’, or paired one-way streets, which reduce carriageway widths and increase turning capacity.

Along with major employment along the transit boulevard, local employment and services would develop in the several village centres either side of the transit spine, and on the coast, as shown on the Concept Plan in red. The Southern Enterprise Centre is currently being planned to provide for a range of pioneer businesses.

Stage 1, Capricorn Village (designed by Roberts Day Group) is under construction. It is structured as five neighbourhoods with 2700 lots, tourist node, two primary schools, a private K to 12 school, a 160 bed aged care facility and 200 independent living units, and a village centre sited around a one-way couplet on Two Rocks Road. See separate project page.
Somerly
Clarkson, Perth, WA

Context
Somerly is located 31 kilometres north of Perth in the city's fastest growing region. Somerly will eventually include more than 1900 new homes with more than 5400 residents. Somerly is focussed around the recently-opened Clarkson Station representing the new terminus of the Perth's northern railway.

Immediately to the west of Somerly lies the Clarkson Ocean Keys Town Centre, a hybrid main street/enclosed mall centre that is continuing to be developed to enhance its mixed-use main street character, particularly along Ocean Keys Boulevard. A new Council library with cafe and a Youth Centre have opened on Key Largo Drive.

Description
The design for the Somerly Estate has been based on the Liveable Neighbourhoods Code principles (see separate project), which includes innovative design to improve lifestyle and build community by promoting ‘nodal development’ – walkable neighbourhoods clustering around a small town centre which supports the use of public transport systems. The Station Precinct has incorporated the principles of Transit Orientated Development (TOD) by integrating the station with a bus interchange, Main Street commercial and medium-density residential.

Special Features
Somerly takes the very best features of some of Perth's popular inner city developments and combines them with the opportunities and affordability of a custom-made development in Western Australia’s fastest growing residential area. Its traditional street grid is a feature. Somerly combines the best of established facilities with the ability to choose from a wide range of block sizes and homes that cater for different lifestyles - just minutes from the beach.

The Somerly Town Centre, integrated with the bus and train station, will be the focal point for a dynamic community, where people can enjoy the convenience of local shops, library and schools and take time to relax in the cafes, restaurants or landscaped parklands throughout Somerly.


**Subi Centro**  
Subiaco, Perth, WA

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**AGENCY:**  
Subiaco Redevelopment Authority

**MAJOR DESIGN CONSULTANTS:**  
The Planning Group

**MAJOR TECHNICAL CONSULTANTS:**  
Various

**PROJECT TYPE:**  
Major mixed-use urban regeneration

**PROJECT SIZE:**  
Approx 1 sq km

**IMPLEMENTATION STATUS:**  
Substantially developed

**LOCATION:**  

**FURTHER INFORMATION:**  
SubiCentro:  
www.sra.wa.gov.au  
Sustainable Home:  
www.subiacosustainable.com.au

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**Context**

The Subi Centro project is located 3kms from the CBD and covers some 40ha of former industrial land, generally to the north and west of the Subiaco railway station. Subiaco is a historic inner suburb of Perth, focused around the vibrant retail strip of Rokeby Rd. A key initiative was the undergrounding of the railway line that had previously divided Subiaco. The project is an exemplar of urban regeneration sympathetic to its heritage context, and has been extensively awarded. The award-winning City of Subiaco Sustainable Demonstration Home has been built at 2 Allora Avenue.

**Description**

Master planned by The Planning Group, the project began in 1994 with two years of public consultation prior to community acceptance of the final plans. Now, 10 years on, the project is nearing completion and incorporates over 1000 new dwellings with a further 350 to be constructed. Relatively dense townhouse and rear lane development predominate, but there are also apartments, live-works and shop-top housing.

Subi-Centro has also provided for extensive business development. An additional 50,000sqm of commercial floor space accommodates over 3000 new employees helping support 7000sqm of additional retail. A high quality public realm has enhanced the development appeal. An additional 3ha of high quality parkland links the project area from east to west and beyond, via a network of parks, with links to the Perth Bicycle Network.

Of significance is the arrangement of this development and its concentration around the Subiaco Train Station and a new supermarket-based node. Since the rail undergrounding in 1999, station patronage has nearly tripled and significant structural changes can be seen in the broader Subiaco business district as a result, with the northern end of Rokeby Road undergoing a renaissance. In the latter years of the project, attention has been given to the provision of affordable and special needs housing, some of which is under construction. The State Government target of 15% affordable housing is to be met by specific government housing projects, joint ventures and developer bonuses.
Context

Vale is a 537ha property located within the Swan Valley viticultural area. It operated for over 50 years as a commercial farming venture, with important wetlands and bushlands that were conserved. The site was mostly cleared pasture including remnant large trees, a wide range of vegetation types, wetland and woodland areas, and creeks with large dams. This provided an opportunity to create a distinctive development that respects local character and preserves important conservation values, whilst meeting the lifestyle aspirations of future residents.

This project is located next door to the Ellenbrook New Town.

Description

Over the next 12 years, Vale is developing into a 4,500 home master planned community that supports the best of the natural and European heritage of the Swan Valley. Town Planners, Chappell Lambert & Everett in association with Multiplex Living are committed to produce a cutting edge New Urbanist design, set within the special landscape setting of the site.

The Vale design has:

- A modified street grid approach together with a comprehensive pedestrian and cyclist network
- A strong focus on lot orientation for solar access
- A wide range of lot and dwelling types and densities
- Two main street-based town centres providing a mix of retail shopping, lifestyle and health services, and office space.

Special Features

- Integrated housing build-outs
- Corner stores and home business sites at neighbourhood centres
- Diversity of open spaces and recreation opportunities
- Protection of conservation areas
- Integrated drainage, open space and nutrient management system
- A private boarding school integrated with Village Centre 1
- Fibre optic link to every home
Context

The site is located 1km south of the Kwinana Town Centre. It was a key vacant site bisected by the Perth to Mandurah Railway (under construction) with the new Wellard station centrally-located.

In March 2002, Peet & Co submitted a joint venture proposal, including a Structure Plan and vision, to Landstart for the Leda (locality name) project. Peet & Co was appointed as preferred tenderer and a design review process followed, involving PEET, Town of Kwinana and the Public Transport Authority to enhance delivery of a transit-oriented development.

Description

A pioneering suburban planned transit village, The Village at Wellard is a traditional-style village with a modern train station at its heart. The new railway line will bring this vibrant community within just 20-30 minutes of Perth’s CBD by late 2006.

The Structure Plan is based on the following principles:

- Wellard Village is designed around Traditional Neighbourhood principles, including a village centre, station precinct, mixed housing types, educational facilities and open space.
- A village core within the heart of the centre will encourage a strong sense of community, with mixed uses in the village centre to encourage social interaction, supported by a permeable street and pedestrian access system between neighbourhoods.
- A pedestrian-friendly street environment with good access to the new railway station to help reduce car-dependency and support alternative forms of transportation, and supported by a path network, to provide links between key land uses and regional facilities.
- The Village Centre will also provide a bus station, a lively café strip, shops, community and medical facilities, key government agencies, a commercial centre and landscaped parks. The village centre is designed to allow for change in land use over time.

Securing the construction of the Wellard Railway Station has resulted in the development densities being increased to beyond those originally considered acceptable to the market. The community has responded well to the smaller lots, with early stages selling fast.

Wellard

South West Perth, WA

DEVELOPER:
Joint Venture between WA Department of Housing & Works and Peet & Company Ltd

MAJOR DESIGN CONSULTANTS:
Taylor Burrell Barnett

MAJOR TECHNICAL CONSULTANTS:
TABEC Engineering
ATA Environment
EPCAD Landscape Architects
Creating Communities
Linc Marketing
ERM Traffic Consultants
Fugro Surveys
Patrick Partners

PROJECT TYPE:
Urban extension - Transit-Oriented Village

PROJECT SIZE:
320 hectares. 2700 lots and village centre

IMPLEMENTATION STATUS:
Structure Plan approved. Stage 1 and 2 under construction

LOCATION:
Wellard Road, Wellard (south of Parmelia Ave). Perth Streetsmart Map 552 A10

FURTHER INFORMATION:
www.thевillageatwellard.com.au
The Wungong Project Area is located at Brookdale, around 28km south-east of Perth, within the Armadale Redevelopment Authority Area. The site is 1500ha and bisected by the Wungong River. When urbanised, the area will accommodate around 40,000 people. The land is under-used and environmentally sensitive, with a high water table. It is held in a variety of private and Crown landholdings. Its urbanisation is important to support the revitalisation of Armadale as one of Perth’s key regional centres.

The objectives of the Project are to produce a master plan to facilitate feasible private sector development of this challenging area. The ARA seeks to demonstrate best practice in sustainable urban extensions including innovation in urban landscapes; resource protection and enhancement; urban water management and built form (including energy efficient housing).

Wungong adopts the Liveable Neighbourhoods approach to design. The urban structure has one strong town centre, with eleven walkable neighbourhoods clustered around it. There is a well-connected and legible street network to promote walking, cycling and public transport, access to facilities and solar orientation of dwellings. A strong focus has been the protection and enhancement of existing wetlands and vegetation; however this is done in a manner that does not compromise the efficient urbanisation of the area.

A variety of housing types and densities, including mixed use and home-based business, will be provided in neighbourhood catchments serviced by activity centres (providing retail/commercial/entertainment activities), public transport, public open space and education.

Urban water management is based on the integration of road and park avenues, public open space, waterways, wetlands and Living Streams. These areas also provide opportunities for recreation. A recycled water system is proposed for public and limited private irrigation.

Special Features:
• A sense of place - main street town and neighbourhood centres, high quality streetscapes;
• Environmental protection – streams, wetlands and vegetation, with an integrated urban water management system
• Wide range of housing types and densities;
• Aboriginal heritage sites in the area recognised and protected;
• Inter-connected street network and walking, cycling and public transport;
• Microclimate design through landscaping, orientation of streets, wind protection, and porous surfaces.