HABITAT, **BYRON BAY**



Giving public space the leading role in greenfield development

Better look and feel: Habitat is a new model for successful and sustainable greenfield development, balancing urban growth and increasing options for diverse and healthy living. Image: Christopher Frederick Jones.

QUICK FACTS

PROJECT TYPE:

Mixed-use greenfield development integrating residential, commercial, retail, and recreational uses

LOCATION: 1 Porter Street, Byron Bay

REGION: North Coast

ABORIGINAL CUSTODIANS **OF THIS COUNTRY**¹: Bundjalung people

CLIENT: Bayshore Development Pty Ltd (private developer)

PROJECT SCALE: Large: 82+ dwellings plus retail and commercial spaces, one to three storeys SITE AREA 49,210 m² FLOOR SPACE RATIO 0.17:1

PROJECT COST: \$40 million +

YEAR: Master planning started 1998; construction started 2016; ongoing

PROJECT TEAM:

ARCHITECTURE **DFJ** Architects URBAN DESIGN **Rod Simpson** ENVIRONMENTAL PLANNING GeoLINK PLANNING

Planners North STRUCTURAL AND CIVIL ENGINEERING AND SURVEYING Ardill Payne & Partners

SERVICES ENGINEERING **MDA** Consultants CONSTRUCTION

Agcorp BUILDER, POCKET LIVING PRECINCT **GCB** Constructions

PROCUREMENT PROCESS:

Traditional procurement with competitive tender and construction management

AWARDS:

- 2018 Australian Institute of Architects (AIA) NSW Country Division Awards: Winner, Commercial Architecture Award; Winner, Multiple Housing Award; Commendation, Small Project (for Habitat Recreation)
- 2018 Planning Institute of Australia NSW Awards for Planning Excellence: Winner, Best Planning Ideas - Large Project



GOVERNMENT ARCHITECT NEW SOUTH WALES

CASE STUDY

Habitat is a model project for sustainable greenfield development and genuine place making, demonstrating how integrated commercial, retail, and residential spaces can provide a dynamic setting for working and living.

Located 4 km outside the Byron Bay town centre, connected via bus, cycleway, and solar train, the development is a new "village centre" for local businesses, with shops, services, and activities that extend and support the Byron Arts and Industry Estate.

The development is proceeding in stages, based on a comprehensive master plan designed to satisfy local demand for mixed-use, live-and-work accommodation that is both affordable and provides a good quality of life with a minimal environmental footprint.

Generating a new development concept for greenfield sites

The Habitat master plan sets out a detailed framework for mixed-use land subdivision, shared infrastructure and services, and a high-quality, generous public domain with communal facilities.

A hierarchy of wide streets, narrower lanes, and walkways provides a generous pedestrian network allowing for easy movement, incorporation of services, and integration of landscaping. Within this grid layout, shallow development blocks create thin building sections, providing excellent amenity for occupants. Buildings are generally two storeys high, making for a comfortably human-scaled environment. Every opportunity is taken to green the spaces between buildings with pergolas, planter beds, and gardens.

Open spaces within the layout become an important focus for collective activity. Vehicle parking enhanced by garden beds is predominantly located at the perimeter of the site to prioritise walking and cycling throughout.

Integrating with the natural environment and landscape

The project responds to and connects with its broader surroundings – the opposite idea to a "gated community", which does not encourage pedestrian permeability. A 3000 m² section of the site has been used to extend the neighbouring wetland, creating new habitat for fauna including local vulnerable frog species. Rainforest plants are used for shade while indigenous coastal heath planting provides a lush understorey.

Better for people:

Habitat's master plan sets out a hierarchy of attractive, connected, landscaped, human-scaled spaces. Image: Christopher Frederick Jones.





Better value: Habitat's well-designed commercial spaces service the Habitat community, and the broader Byron Bay Arts and Industry precinct. Image: Christopher Frederick Jones

Better working: Habitat provides new prototypes for accommodation that integrate working and living spaces with shared facilities. Image: Christopher Frederick Jones.

Starting with versatile commercial spaces The initial stage of the project was the commercial component fronting the main street. A series of two-storey buildings interconnected by broad external walkways defines a central landscaped courtyard. This fosters activity and passive surveillance over the courtyard.

Retail spaces opening up to the courtyard at the ground floor level have a reciprocal relationship with the professional suites located on the upper floor. Simple, large, open-plan spaces allow for a flexibility of occupation capable of accommodating small start-up businesses through to more established enterprises as well as coworking or incubator spaces. Shared amenities, reception areas, and meeting rooms support the tenancies. Fibre-tothe-premises broadband to all workplaces ensures excellent digital connectivity.

Increasing options for diverse and healthy living

Mixed-use accommodation options satisfy a genuine demand from the local community to be able to combine their domestic living space with their workplace, conveniently and affordably. Terrace buildings provide dedicated ground-floor "home offices" which are directly connected to the dwelling above, yet cleverly separable from living spaces.

Other aspects of the development are currently under construction or due to begin soon. "Pocket living" dwellings will provide compact accommodation at a more affordable price, enabling people to live in the community they are employed in. Single-level ground floor units will lead out to small courtyard gardens while upper-level mezzanine units will have a large balcony.



Providing shared facilities for recreation

Habitat's workers and residents share communal recreational facilities including a swimming pool and children's pool, change rooms, ping-pong pavilion, barbecue area, bicycle parking, community garden, and shaded lawn. A sculptural transparent roof creates a point of difference and marks out these uses as a gathering point within the development. Rainwater is harvested for the pools and bathrooms. The facilities are deliberately externalised to take advantage of daylight and fresh air and eliminate the need for mechanical ventilation or artificial lighting.



Better for community: Habitat's centrally located recreation facilities provide an opportunity for residential neighbours and fellow workers to meet and socialise. Image: Christopher Frederick Jones.

Design objectives for NSW

Seven objectives define the key considerations in the design of the built environment.



Better fit contextual, local and of its place



Better performance sustainable, adaptable and durable



Better for community inclusive, connected and diverse



Better for people safe, comfortable and liveable



Better working functional, efficient and fit for purpose



Better value creating and adding value



Better look and feel engaging, inviting and attractive

Find out more ga.nsw.gov.au

Responding to climate impacts by building in sustainability

Passive sustainable design is fundamental to the entire development. Building orientation is optimised for daylight, breezes, views, and privacy. Large expressive eaves ensure solar control while sliding doors, louvres, and clerestory windows provide operability for ample natural ventilation.

Solar panels are installed on each building, feeding into a site-wide embodied energy network with a battery system to reduce energy demand. Electric car charging points are provided in the public realm, and street lighting uses low-voltage LED fittings. Timed sensors are used to activate lighting in common areas.

Individual water tanks on dwellings provide a source of water for the occupants as well as assisting with overall stormwater management. Recycled sewer water is used for landscape irrigation.

Using standard materials and methods to achieve a high-quality result

A low-key palette of high-quality, sustainable materials creates robust, environmentally responsible buildings which are responsive to the local context and climate. A subtle shift in scale, composition, and detailing denotes the difference between the commercial and residential components. Construction methods are simple and standardised. Finishes have been chosen for their fire and acoustic properties without requiring further aesthetic treatment such as painting or lining. Services are exposed. Off-the-shelf products are used where possible and adjusted for improvement where necessary.

Successful delivery of the project has involved a large, multidisciplinary team of contributors and collaborators including environmental consultants, engineers, landscape architects, and artists. Retaining the architect's services throughout the project has ensured a continuity of concept and design quality.

Good process: embrace a new model for greenfield development

The impetus for this project was the developer's determination to find a better way to build a new neighbourhood genuinely aligned with people's needs and desires. In particular, the developer recognised that people wanted to live and work in close proximity, and in an area with a sociable, active, high-quality public realm.

1. Horton D (creator) & AIATSIS (1996), AIATSIS map of Indigenous Australia, Aboriginal Studies Press, Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), and Auslig/Sinclair, Knight, Merz. Working in collaboration from the outset with the architect and urban designer, the project team could see great potential in rethinking the way greenfield sites are conceived and planned, based around highquality public spaces, supported by shared facilities and services.

The vision for the project initially did not fit neatly within existing planning frameworks, however, this was resolved through a master planning process involving extensive consultation with Byron Shire Council and the wider community.

A mixed-use zoning enabled the overlapping commercial and residential uses to occur and a site-specific development control plan was prepared to guide the outcomes. Community title schemes were used to structure the ownership and maintenance of the various interrelated aspects of the project, and strata title to subdivide private components.

Habitat is the result of a long-term approach to planning, development, and delivery. While the end result will always be different in every case, depending on the context and people's needs, this way of establishing a new neighbourhood has established a successful model for other greenfield sites.

Key considerations

The primary design element for the development is the public realm. A wellconsidered and proportioned street and block layout provides plentiful open space and landscaping as the backdrop within which the buildings are set.

The buildings are designed with a "long-life, loose-fit" ethos and composed of durable materials which will enable them to readily adapt to changing demands over time.

MORE INFORMATION

GANSW policies:

Better Placed: An integrated design policy for the built environment of NSW

Greener Places: An urban green infrastructure design framework for NSW

GANSW guides:

Integrating Urban Design

Urban Design for Regional NSW

- **GANSW** advisory notes:
- How to develop a design brief
- Collaboration
- Strategic visioning
- Urban design frameworks
- Master plans

This case study has been developed in conjunction with the Urban Design for Regional NSW guide.