Tallow Creek Village

ECONOMIC
SOCIAL
ENVIRONMENTAL
CIVIC LEADERSHIP

SOCIAL HABITAT
HOUSING
CONNECTING PEOPLE WITH PLACE

NAHC Celebrating 10 years

DOCUMENT PREPARED BY SOCIAL HABITAT - MALCOLM PRICE + STEVE DRAKE + MICHAEL DOWLING

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Introduction

Tallow Creek Village is our proposal for an affordable housing urban village, set appropriately within a beautiful natural environment. We seek to partner with Byron Shire Council to realise intentions of social justice, environmental restoration, sustainability and economic contribution, by developing a "Build to Rent" affordable housing community on the currently degraded South Byron Sewerage Treatment Works site.
There is a fly video of the developed scheme located online at the URL address of:

https://www.youtube.com/watch?v=SI6CSLAe3Wo

Contribution to broader community ----- Build to rent housing features

Contributions to Byron Community

This section articulates the social and environmental benefits our proposal will provide

It is appropriate within a for profit tender that undertakings to community stakeholders should be guaranteed. The commitments may hold risk, however the financial benefits can be offset by the margin of profit, the margin within a not for profit proposal does not allow for this level of risk

Community Engagement

We propose a place making approach to negotiate wider social and environmental benefits with council and the community. Proposed benefits do relate to the Byron Shire Council's 2022 Social Plan, however they need to be tested by deeper engagement with the local community and stakeholders interested in this site. This process is difficult to conduct within a commercial tender. We propose a process to allow:

- Trust and understanding to be established between parties;
- Clear determination of needs and capacities, in order to create shared sustainable amenities and services as part of place making process.

Our current proposed Social and Environmental Benefits

- 50% of housing for around 200 people to be guaranteed secure long term social and affordable housing, with specific target groups such as:
  - Arakwal traditional owners;
  - Key worker groups such as employees of the National Parks service;
  - Note this benefit assumes the yearly lease payment to council is low or nothing and is directly equated to substituting a financial return with affordable housing.
- 100% of housing would be secure long-term housing for local residents, not accessible for short term visitor rental.
- An iconic integrated zero emission development that models aspects of environmental sustainability, social equity and economic renewal and sets a benchmark for equitable and environmentally sensitive new development in Byron Shire.
- Environmental restoration of the site undertaken in partnership with community stakeholders;
- Parking and facilities for locals and visitors to access Tallow Creek and Tallow Beach;
- Shared community facilities that may include meeting and office space for community groups. This needs broader community engagement to determine need, capacity and long-term feasibility.
- An accessible transport strategy focused on a hub/community facility. We propose to negotiate a solution in the spirit of Council's Strategic Transport Statement (Transport Policy) 2019. The exact nature of our proposal will change, as transport technology is changing quickly, however our current proposal has the following characteristics:
  - Integration with current public transport, by providing a bus stop;
  - Convenient car-pooling for residents including electric car charging station and workshop;
  - Pooled bicycle, electric bicycle and other forms of personal transport storage;
  - Secure ground level storage for bicycles and other emerging personal transport;
  - Exploration of options to use the railway corridor for multimodal transport; and
  - Flexible but limited local car parking for resident's vehicles.

"Build to Rent" Housing Features

We propose developing a 100% "Build to rent" model of housing that supplies long-term lease secure housing that is professionally managed. This is a common housing option in Europe and North America, but not in Australia. The primary difference of "Build to Rent" compared to traditional "build to sell" models of housing, predominant in Australia, is that the owner is also the manager and provides professional property and tenancy management. Investment and ownership is for the long term and seeks stable low yield return, usually over more then 50 years. This means inherent to the model the owner/manager will prosper by spending a more up front and will design cleverly for quality, durability and flexibility. It is in the best interests of a Build to Rent development to have good consistent occupation and low long-term life cycle costs rather then low upfront construction costs. This equates to the following characteristics

- Long term leases that confer rights and a sense of pride and ownership to the tenant;
- A community development/ place making approach to develop a stable cohesive community, including providing features such meeting space, recreation space, food gardens and rental work space;
- Flexible housing stock and tenancies that allows for tenant up and downsizing;
- Durable low maintenance housing stock;
- Sustainability features that reduce development running costs, but more importantly reduce utility costs of tenants;
- Proactive tenancy management that helps tenants facing social or financial problems to manage their difficulties.

As well as lessening some of the disadvantages of renting, there are also areas where Build to Rent adds value to the renter's experience.

- Imagine knowing the people who live in this community well enough to be able to find someone to look after your children while you go to the dentist.
- Having someone to look after your pet when you go to work or on holidays could be the difference between being able to keep a pet or not.
- What value would you place on being able to contribute to the setup of refuse recycling on site?
- BTR will implement Placemaking to actively draw together the residents into a community. How many people live in Byron Bay and don't know the neighbours in their own complex or street?
- Shared community spaces are an important part of the design. Even if you live in a one-bedroom unit, you will be able to arrange a birthday party, a yoga workshop or even a low-budget wedding using the common facilities. Workshop and storage spaces are included in the design.






Contribution to broader community ----- Build to rent housing features

Affordable Housing Model

What is Affordable Housing?

Affordability is a contested concept, however within our model it is based on a tenants ability to pay rather then a relationship to market rent. Tenants in affordable housing will pay a maximum of 30% of their gross income. Note we have tested models at 75% market rent.

Need

Byron Shire because of the ratio of income to rent has recently been nominated as having the highest levels of rental stress in Australia. Additionally because of the characteristics of the local visitor economy, in particular the "Air BnB effect" there is a scarcity of any type of permanent accommodation. This has a warping effect on the composition of the community and local economy.

The substantial projected increase in visitor numbers over the next 10 years will make this worse. This proposal seeks to address both issues:

Affordable housing will be developed for the most stressed groups including people over 55's, woman in particular, young families, typical social housing users and a range of key workers. Provision of permanent market housing will have great value for the Byron Shire community and economy.

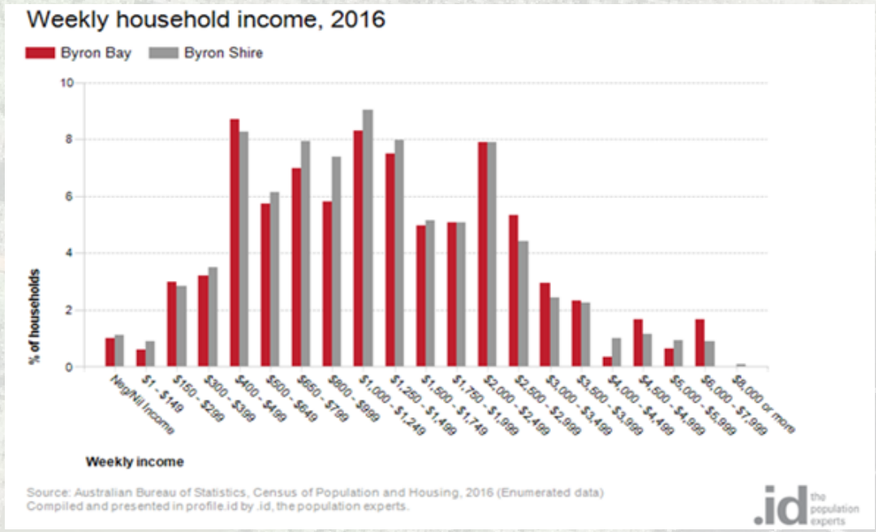
This development will provide a combination of permanent, secure and affordable rental housing that can be flexibly reconfigured to meet emerging social and economic needs and changing demographics.

Mix of Tenures

Around 20% of affordable housing can be achieved through a cross subsidy of the market and affordable housing components of the development. A greater proportion of affordable housing can be achieved, up to 50% if there is a structural subsidy from government or philanthropic sources, such as NRAS Mark 2. The combination of security over the land and a four-year planning timeframe provides a great opportunity to negotiate further subsidies.

Land Structure

Under the proposed long-term land ownership of Byron Shire within a long-term lease or "Build to Rent" partnership there would be little need to strata title or subdivide the development. This lack of legal division and clever design allows reconfiguration flexibility as circumstances change. This model should



	Gross Income	% income spent on rent at $650	% income spent on rent at $532pw
Café or shop assistant	$45,000 pa	75%	60%
Key professional (teacher)	$70,000	50%	40%
Professional Couple	$100,000	35%	30%

Using the measure that an affordable rent is less than 30% of gross income, clearly only the top income earners can pay these rents affordably.
This also shows that there is no capacity for people earning less than $100,000 pa to cross subsidise the rent for people on lower incomes

Who are we trying to help?

In Byron Bay around 20% of the households earn a weekly income between $1,000 to $1,500 who fall in the mid-range income group and they our target cohort.
About 50% of households earn less than this range and the remaining 30% earn above this range. The maximum rent that our cohort of households can afford is between $300 to $450 per week.
For people earning $1,000 per week there is a gap of $232 between the break-even rent and the rent that is affordable by this cohort.

Weekly income	$1,000
Affordable rent	$300
Break even rent	$532
Gap in rent	$232pw






Place Making, Management & Governance

Placemaking

is a multi-faceted approach to the planning, design and management of public spaces. Placemaking capitalizes on a local community's assets, inspiration, and potential, with the intention of creating public spaces that promote people's health, happiness, and well being. We seek to develop a strong stable resilient community

The place making process will create a seamless transition to the management and governance of the village
The place making processes has two constituencies, which need to be complimentary

- The broader community will be engaged to fashion the final concept of the village. Engagement focuses on composition of the new community; and the broader social and environment features and amenity.
- The Tallow Creek Village "Build to Rent" community. The composition of the community will be determined by.

  - a. Community need as established by research. The assumed current target groups are seniors overs 55's (woman in particular), young families, local Arakwal people, typical social housing users and a range of key workers.
  - b. Engagement with the broader community, which may include creating a tenant group. This will include theme and values testing. Common examples are attitudes to pets and cars. Within Byron support of its unique flavor might emphasise inclusion of artists.
  - c. Blending of people with needs, skills and demographics that will create a cohesive community. There would likely be a cap on the proportion of tenants with significant tenancy management issues.

The internal place making process initially focused on:

- Negotiation of governance structure particularly definition and demarcation of rights and responsibilities of management and tenants;
- Definition and personalising of space, how much can a tenant change in their space;
- How do tenants organise to engage with management

In effective "Build to Rent" developments it is assumed there will be a level of community decision making and greater self determination. The aims are social cohesion and long stable tenancies.

Design Concept

Design Concept

Tallow Creek Village is designed as a "built to rent" village, with a permanent mixed population of around 400 people. The village core is designed as a highly walkable environment that would include an array of village services and opportunities to work from or near home. All inhabitants can live a cosmopolitan life, while living within 100m or two minutes walk of being in a beautiful natural coastal heath and wetland habitat

A core of around 20-30% of buildings and design elements will be built onsite, these will include: some housing, applied elements like balconies, stairwells, landscape features and all functionally specialised buildings.

Note apart from the Alternative Transport Hub Community, this scheme does not attempt to predict the precise nature of these specialised functions as this would occur within an indepth place making/community consultation phase, accompanied by detailed business feasibility. There would be great opportunity for both small educational, health and environment businesses and institutions.

The bulk of buildings 70-80% will be modular elements built off site. Using a modular system has the virtue of a flexibility of configuration, quality control, cost control, convenient construction programming and the ability for residents to personalise their private spaces more easily.

The architecture character of the scheme is created by this combination of features and the sustainable technology elements such as solar panels. The overall impression is of a permanent village that has always been there, but which, has immense flexibility to have parts reconfigured as the demographics and nature of the village changes. For example virtually all of the ground floor spaces that address the internal street can be easily configured as car parking, storage, work-spaces or residences with disability access. In a similar way the vertical circulation, stairwells, can have lifts retrofitted for future disability access.

Zones

The village is designed around six zones of activity and layers of privacy, which is reflected in the planning and the architecture.

Zone 1 - Shared public zone

This is a 50m zone along the Northern edge of the site that will be totally accessible and usable by the general public. This zone includes, the bicycle and vehicle access and the alternative transport hub/community centre, the only building within this zone. There will be a public bus stop and transition orchard courtyard between this and zone 2. This works well for providing an asset protection zone for fire planning and safety

Zone 2 - Community Courtyard

The overall concept is organised around this courtyard, an open public village green. This is the communities' heart; it is the space of greatest expression of the evolving community. It is organised within a colonnaded arbor around a large grassed space. This space could be used for recreation including a children's playground, or food gardens, a decision delegated to the residents.

Zone 3 - Urban Street

The street is a cool shaded space that has the design language of a walking street, along which there are a number of smaller communal nodes, where there are opportunities for cafes, small courtyards and works spaces. It provides access for vehicles and some around 60 car parking spaces .

Zone 4 - Private circulation spaces

These are small private shared spaces, normally configured around clusters of residences, and transitions between larger communal spaces. These spaces take on importance for simple interactions, circulation and utilities such as solar chimney's and water storage.

Zone 5 - Residences

These are predominately the modular elements based on a 4.5m width, or when back to back is 9m wide, two 4.5 x 13.5m modules back to back, can be configured to create a range of dwelling types.

Zone 6 - Ecological Services

The development is set on the most degraded section of the site, the intention would be to regenerate the coastal health forest around the external perimeter of the core development area.






Site Planning

MAIN ENTRY

Proposed Transport hub/ Community facility including

- Community meeting and office space
- Electric car pool, charging station and workshop;
- Bicycle & electric bicycle pool;

Village Green

Colonnaded central community space, use will be determined by the community, could be recreational or food gardens..

Internal Street

Walking Street, that allows access to cars at low speed, spaces fronting street likely to be a combination of car parking (up to 60 spaces), work space s and one bedroom apartments.

Permanent Buildings

Built onsite, to be configured as apartments or could be configured as a specialist functions, such educational, commercial or medical.

Two Storey Inner Apartments

Inner ground floor micro-apartments suitable to be clustered as boarding houses or group dwelling for seniors and disability housing.
First floor apartments are suitable as on bedroom 50sqm and two bedroom 65sqm units

Three Storey Apartments

Outer Modular apartments that step down to existing pond, upper floor to be high value rental properties with a view

Solar Power Station

Photo voltaic arrays to be located on North facing roofs, initially up to around 200KW.

Layout Options

Modular Housing Planning

- Modules are 4.5m wide and 13.5m or 12m long.
- Modules are designed to be stacked as two or three storey buildings, (these plans show some of the housing options possible)

Typical Units

First & Second Floor Options

- Two Bedroom 62sqm apartment with 13sqm balcony
- One Bedroom 52sqm apartment with 10sqm balcony
- Three Bedroom 108sqm apartment with two balconies 12sqm & 21sqm

Ground Floor Options

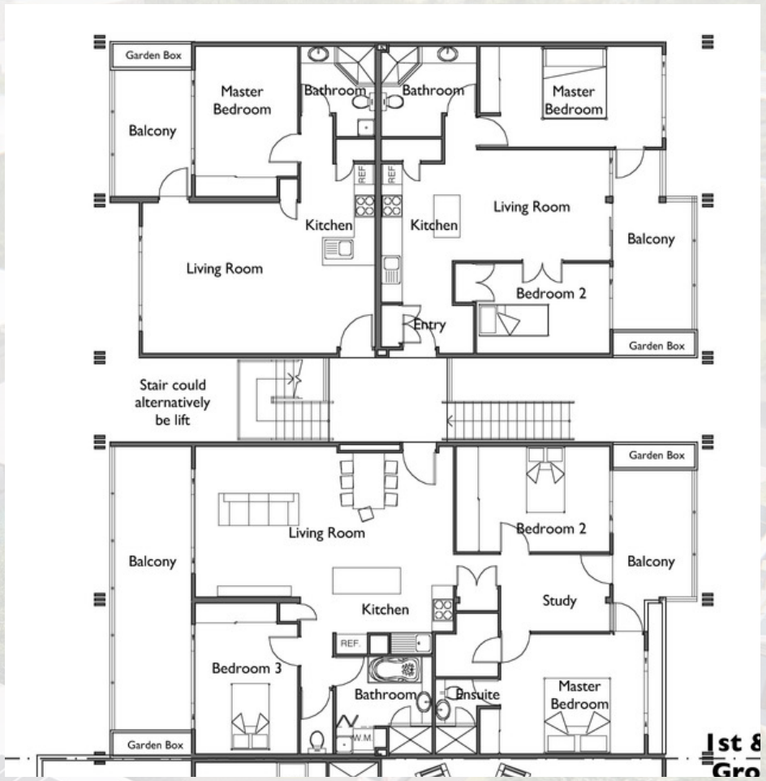
- Micro Bedsitter 25sqm Apartments
- Two Bedroom 58sqm Apartment with private courtyard

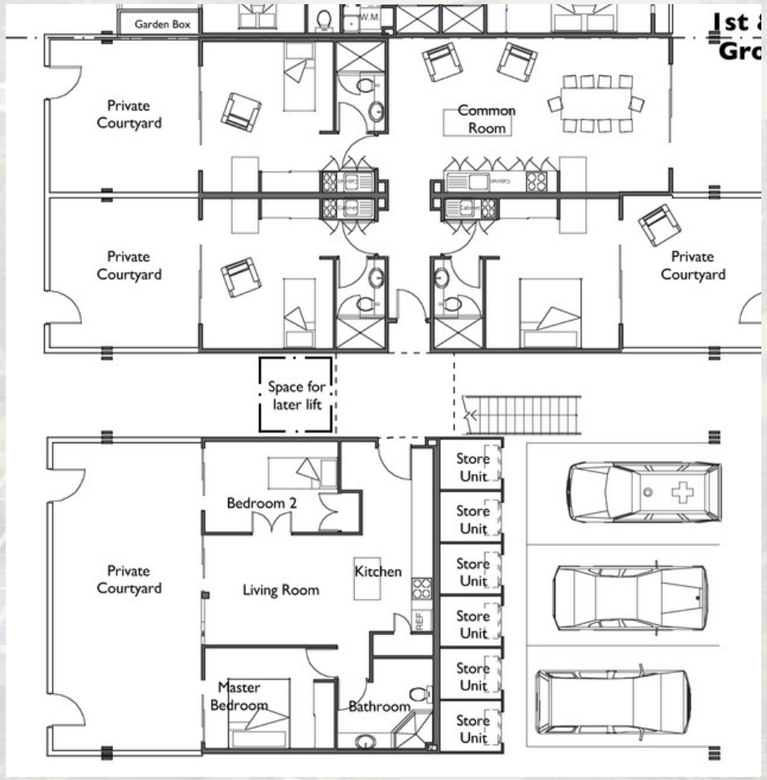
Can be clustered with one common room per seven apartments to make a boarding house or group home configuration
Highly suitable for seniors (over 55) and people with a disability

Entry and Vertical Circulation Zone (Note option to retrofit lift)

Roadside can be three bays of parking with ground level private storage units.

Ground could be configured as 50sqm work space off street





Design Concept

Sustainable Design & Infrastructure Features

Planning and Landscape

The development is designed for a population of roughly 400 people with a range of self-contained service amenity to achieve a village community dynamic.

- This combination of size, internal governance and appropriate infrastructure creates a small village economy with a level of self-reliance;
- The scheme has flexibility to integrate: space for work and play facilitates; development of small enterprises and cultural projects; locate strategic commercial and Not for profit educational, medical or environmental services, which is about a sustainable community and use of resources.
- The village footprint is dense, less then 2 hectares, which, allows infrastructure to be efficient, including a range of shared facilities and amenities.
- The master plan has a efficient legible circulation pattern and defined layers of privacy.
- "Build to Rent" housing is inherently sustainable because of its emphasis on life cycle costing.

Building Systems

The building systems emphasise quality, durability, sustainably and flexibility. The development is conceived as roughly 20% built onsite of natural materials like rammed earth, plantation, engineered and recycled hardwood, while 80% is built as modular units offsite. This methodology allows:

- Efficiency in the programming of construction;
- Quality control and minimal material wastage; and
- Use of healthy materials with low embodied energy and good thermal performance

Telecommunication and Connectivity

The size and compactness of the development allows:

- Connection of low cost hi-speed internet;
- Sophisticated monitoring and evaluation of utilities by managers and residents.
- Combined with an adaptable building system, this allows smart efficient upgrades as new technology becomes available.
- Local smart phone based intranet to coordinate services such as car and bike pooling.

Energy Cycle

The village will have zero carbon emissions or better, achieved through:

- Thermally efficient 7 Green star rated buildings;
- Its own solar power station, initially around 200KW with room to expand.
- Solar hot water
- Solar passive design, for example all vertical circulation is designed as solar chimneys.

Water Cycle

It will have a sophisticated water demand management system including onsite water harvesting, storage and recycling of greywater in gardens and through toilet cisterns. The stormwater system will include effective surge capacity and a range of landscape features to moderate and filter water being discharged locally to Tallows Creek. Smart metering will allow clever and efficient use.

Transport

Providing alternative shared and renewal energy transport options and reducing the need to travel and are the main sustainable transport strategies, specifically reliable public and community transport, and pooled transport including bicycles, electric bikes and electric cars.

Community Governance

The village will be formed through a sophisticated place making community development process. Tenancies and properties will be managed professionally, while tenants will be given democratic governance over important aspects of the village's future. The main purpose of this is to create a sustainable coherent community over the long term..

Construction Process

1. Contract Stage 1 of modular housing units to be built off site

2. Earthmoving

3. Begin laying major infrastructure, water, power, telecommunications, stormwater

4. Construct large shed as an all weather assembly, storage and construction and fit out area.

5. Construct roads

6. Begin construction of permanent buildings

7. Install/assemble modular units probably in stages

8. Install, vertical circulation zones, balconies and major roof

9. Engage with prospective tenants relating to aspects of fit out, mainly internal, but could include external painting.

10. Develop landscape around development

11. Rehabilitate/ convert construction shed as the alternative transport community hub.

Design Concept