Streets

The Moonee Hamlets road system will have a main collector road, local roads, car courts and pedestrian and cycle paths and routes. Each hamlet will be focused around an open space.

Access Road

The Moonee Hamlets is connected to the Pacific Highway via two access roads from the:

- North, via Flowers Drive via Hale Street and Clarke Street; and
- South West, via Montefiore Parkway.

Access from Montefiore Parkway will be the primary access to the hamlets, with access on this route providing direct access to the main street and residential streets.

Main Street

A mixed use main street will be established along an extension of Montefiore Parkway, stretching from the intersection of Hale Street. This will form the nucleus of the building. Private access roads will have restricted public Village Centre. This street will enclose an open space.

Local Roads

Local roads that will provide residential access are to utilise, wherever practicable, continuous loop roads. Cul-de-sacs are to be limited to areas where loop roads are impractical or, terminate at a destination such as a lookout or starting point for active recreation such as bush-walking.

Car Courts

Most dwellings will be accessed through pedestrian laneways in front and Car Courts in the rear of lots. Car Courts are effectively driveways from the street to the dwellings. These areas will be visually delineated from the road network and will serve a dwelling access function only.

External Traffic Improvements

The necessary external works required will be determined with RTA and local authorities based on consultant studies. Anticipated improvements include the:

- existing intersection of Montefiore Street and the Pacific Highway; and
- Hale Street and Flowers Drive Intersection.

Internal Road Hierarchy

The road hierarchy is planned around hamlets described by a network of 'open access way' roads connecting to the external public road system. Ownership of the roads will be a mix of Council and community title. Each hamlet is arranged along a central spine road that encompasses a 'hamlet common'. From this central spine a series of short car courts and pedestrian spines provide access to dwellings. The hamlets are interconnected by linking the spine roads across the hamlets and by the continuity of pedestrian ways through to neighbouring hamlets.

Public Access

'Open access ways' are defined in the Community and Land Management Act, which adopts the definition of 'public place' in the Local Government Act 1993. Open access ways can be considered also 'public roads' with the exception that the Community Association, not the Council, is responsible for maintenance. Private Access Ways will be provided where the function is for purely resident or service access to a distinct development or access.

A major section of Montefiore Street is on private land. Those private sections of the road are proposed to be dedicated.

Road Standards

AMCORD, Australian Standards and Council requirements are the guiding principles in the detailed design of roads. The achievement of urban design objectives, on-street parking, heritage preservation, stormwater management and other considerations may determine alternate design guidelines.

Traffic Calming

Contained carriageway widths, surfaces, street geometry and landscaping are to be the primary traffic calming devices in the design of access streets. Speed humps, chicanes and similar devices are not to be used. Roundabouts, where required, are to be designed to accommodate buses and large rigid trucks and will incorporate landscape beautification. Where possible traffic calming should be implemented to draw attention to key destinations and vistas through the site.

Public Transport

In order to maintain a predominantly landscaped visual Public bus is the only mode of public transport that character to the village there will not be large expanses of currently services the greater Catherine Hill Bay area. formal footpaths. As an alternative pedestrian and bicycle A northbound service connects to Charlestown and a movement through the village will be facilitated by an South bound service to Wyong. The proposed collector interconnected network of informal tracks and residential road will provide for a slightly modified bus route to pass within 400 metres (approximately 5 minutes walk) of most streets which will be cycle shared ways. Informal paths dwelling lots, should the existing bus route alter to include will be designed to connect community focal points such as the Village Centre, Village Green and neighbourhood The Moonee Hamlets. No formal agreements have been parks. On the perimeter of the settlement, informal tracks reached with the existing providers. will connect with trails into the surrounding bushland.

Traffic Generation

A traffic report by Masson Wilson Twiney is included in Parking racks or bollards will be provided in appropriate the Environmental Assessment for the development of the places around the hamlets. Concept Plan site.

Visitor Parking

The road network is to be designed to facilitate emergency Residential visitor parking is to be provided on-street to and service vehicle access. Roads and turning areas AS 2890. It is to be integrated into the fabric of the village are to be designed to discourage reversing movements. in car courts and also provided in a public carpark located Wherever possible loop access roads are to be used. on Montefiore Parkway. Retail/Commercial parking is to be provided in the Village Centre at the front and rear of premises. Sustainable Development

All roads, pedestrian and cycle routes are to be designed Access for People with Disabilities to minimise hardstand area and surface run-off and to maximise the area available for soft landscape treatment Provision for access for people with disabilities will be incorporated in accordance with AS 1482.1 as applicable. and its potential stormwater absorption. A network of mounds and swales will be utilised to distribute water runoff from hardstand areas with the objective to manage Access to Moonee Beach Access to Moonee Beach is proposed to be provided by a stormwater within the settlement footprint.

public road leading from Montefiore Parkway to the beach. Parking will be provided at the beach end with the number of carpark spaces to be determined. The provision of this infrastructure will be subject to negotiation with the NPWS. The location and configuration of the road is indicative only and subject to further detailed design definition.

Pedestrian and Bicycle Movement

Bicycle Parking

Emergency and Service Vehicle Access

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3.8 Ownership

Land ownership categories for The Moonee Hamlets are as follows:

Dedicated Lands

Land to be dedicated to the public includes the foreshore land, cliff top reserve, headland reserve, Village Park and the majority of Montefiore Street. No foreshore land will remain in private ownership.

Hamlets 1 to 5

All lots within these Hamlets will be subdivided into Torrens Title lots and Community Title lots within a larger Precinct Subdivision. The Precincts will be grouped into a Master Community Subdivision arrangement. The Village Green and part of Montefiore and Hale Street will be Master Community Property. Strata titling and neighbourhood schemes are also envisaged within Hamlet 1 for the Commercial/Retail area and Courtyard Houses.

Hamlets 6 and 7

All lots within these Hamlets will be subdivided into Torrens Title lots and possibly part of a Community Subdivision arrangement separate to the Moonee Community.

Wallarah House Precinct will remain as a single lot and will not form part of the Moonee Community.

Public Access rights and Permeability

All roads within Community/Precinct property will be 'open access ways'. Easements for public access may also be used if required.



Figure 3.8.1. The Moonee Hamlets Ownership Plan.

3.9 Service Infrastructure

Water Supply

While the site lies across the boundary of the Hunter Water Corporation and the Gosford/Wyong Water authority, an agreement has been cemented that will see the Hunter Water Corporation responsible for all water supply approvals.

Potable water is to be brought to the site from the North (Swansea) via a system of mains and reservoirs sufficient to supply the existing villages as well as the proposed development. The application of a stormwater recycling system (refer to Chapter 3.13 Environmental Sustainability) will reduce potable water demand. Design of the trunk water supply system is currently being undertaken in consultation with the Hunter Water Corporation, who is supportive of the proposal.

A water reticulation system, including supply for fire fighting purposes will be designed and installed on the site in accordance with the Schematic Utilities Services Plan.

Stormwater

The site is adjacent to a SEPP 14 Wetland, located to the South. Careful attention has been paid to ensure that no additional or untreated water discharges to the wetland. This is achieved by applying Water Sensitive Urban Design (WSUD) to the proposed hard stand areas of the site, reducing the runoff profile to natural conditions in terms of both quality and quantity. Any stormwater in excess of the capacity of the WSUD controls will be directed along the southern boundary of the site, so as not to enter the SEPP 14 wetland. Any additional stormwater attenuation that is required would be provided so as not to impact on the SEPP 14 Wetland.

WSUD In summary means:

- each road or car court will drain to a vegetated swale, which performs both stormwater attenuation and quality control functions, as well as providing the main drainage conduit from top to bottom of the site; and
- all roof water will be collected and recycled, so as to curb any increase in the annual volumetric discharge from the site. (Refer to Chapter 3.13 Environmental Sustainability).

Roof stormwater lines are shown on the Schematic Utilities Services Plan (Figure 3.9.1.)



Figure 3.9.1. The Moonee Hamlets Utilities Services Concept Plan.

Stormwater Recycling

In addition, potable water demand is to be reduced by the recycling of stormwater in accordance with the principals of WSUD. A dedicated roof water drainage system will be installed to convey rainwater from dwellings on a hamlet by hamlet basis. Each of the hamlets will then have an in ground reservoir comprising an excavated void, which will be lined and backfilled with sand to support a revegetated surface. The sand will also give a high efficacy in treating the collected water to an appropriate standard for garden watering, toilet flushing and clothes washing. Each reservoir will have a pressure actuated pump system to return the water on demand to a reticulation system servicing the dwellings from where the water is sourced. The stormwater recycling system will contribute to each dwelling's compliance with the BASIX requirements for water efficiency. Maintenance of the roof drainage pipes, the pumps and the return reticulation will be the responsibility of each of the hamlet precinct associations.

Preliminary analysis suggests that lots in Hamlet 1 that are located along the cliff top can be drained to a reservoir proposed for the western side of Hale Street; however, final levels may mean this can not be achieved. For those lots that cannot drain to a hamlet reservoir, a separate single lot stormwater recycling system will be provided. Stormwater reservoir sites and reticulated recycled water mains are shown on the Schematic Utilities Services Plan (Figure 3.9.1.)

Sewer

The site will be serviced by a combination of gravity mains, pump stations and rising mains to deliver sewage to the northernmost tip of the development (WWPS B) on Figure 3.9.1. A pump station will be installed at this point to transfer waste water to another pump station at Middle Camp and then into the existing network at Wallarah. Trunk sewer services will have sufficient capacity, to accommodate connection of the existing Catherine Hill Bay Village, as well as other future proposed development within the region.

Preliminary analysis shows that the entire site can be drained by gravity to the proposed sewer system, however detailed design may require the installation of a common effluent pumping system for the cliff top lots at the eastern side of the site.

Design for the trunk sewer system is currently being undertaken in consultation with the Hunter Water Corporation, who is supportive of the proposal.

Electricity

Electricity is to be supplied to the site from a new Zone Substation, to be designed and installed by Energy Australia in accordance with capacity identified in the Lower Hunter Regional Plan. Energy Australia is currently planning to accommodate the new zone substation in their forward network planning and is supportive of the proposal.

Up to five local kiosk substations would be required on the site to break supply down from 11KV to 415V three phase (240V single phase). These have been tentatively located adjacent to Montefiore Parkway, to permit access for maintenance and installation vehicles. Indicative locations of the kiosk substations are shown on Figure 3.9.1.

Street lighting will be provided in accordance with Australian Standard 1158 and could be provided by a range of mains supplied, solar powered or combination fittings. Where possible, solar power will be used to improve the efficiency of street lighting in accordance with the principles of ecologically sustainable development (ESD). Lighting to pedestrian pathways will be provided by a series of low level bollards, utilising the most efficient light sources reasonably available at the time, ie Light Emitting Diodes (LEDs).

Electricity supply will be reticulated throughout the proposed development in Common Services Trenches, as identified on Figure 3.9.1. Common Service Trenches will also carry telecommunications cabling as well as electrical services.

December 2007

3.10 Built Form

Objectives

The building envelope and built form objectives are to provide reference points for the relevant Consent Authorities' merit-based assessment of Development Applications at The Moonee Hamlets.

They are to:

- ensure that all hamlets share an architectural language to provide a consistent image throughout the development and enable visual cohesion to The Moonee Hamlets as a whole;
- recognise that the built form take its cues from the existing village;
- acknowledge and enhance the prominent visual relationship of the site to the coast and its environs;
- provide a vision for the future built character of the The Moonee Hamlets:
- establish principles of building arrangements and envelopes and their relationships to site features, adjacent development and the public domain;
- acknowledge and enhance the existing structure of Catherine Hill Bay Village and its relationship with the coast and surrounding bushland; and
- ensure the scale of the future built character is generally consistent with that of the existing village.

Streetscape and Public Domain Character The vision for The Moonee Hamlets is a:

- cohesive small scale building context in a natural setting visually dominated by the landscape:
- streetscape of one and, two storey structures that generally address the public way with verandahs and low height street front elements;
- mixed use main street where shops have articulated facades to the street:
- public domain formed by rectilinear built forms with simple geometric roofs and linear ridgelines; and
- series of streets and public open spaces defined by buildings and landscape, framing the ocean and bushland in the background.

Crime Prevention Through Environmental Design • Territorial Reinforcement

The development has been designed with regard to the principles of crime prevention through environmental design (CPTED). These are principles of design adopted by police forces around the world to encourage crime minimization through design. The development will make a positive contribution to security in the commercial precinct increasing levels of passive surveillance. There are four key action areas in CPTED:

Surveillance

The proposed development maintains strong visual surveillance on public areas. The Village Green, Hamlet Commons and pocket parks are open on all sides and surrounded by roads or other public ways allowing for open sightlines and good surveillance by passers-by. Bush corridors contain a network of through paths that link seamlessly to the car court and pedestrian lane network. Public areas are also overlooked by the dwellings. This will ensure that there is always strong surveillance of public areas. In the Village Centre a number of CCTV cameras providing additional surveillance and security. Car courts and pedestrian lanes are, for the most part, straight and are fully visible from the spine road of the hamlet. Individual dwellings and shops will have articulated living edges in the form of bay windows, porches, and decks that allow for activities and surveillance of public ways.

Access Control

Dwellings will have their own locks and security facilities. Dwellings will be located in clusters along car courts which will provide a sense of community 'ownership' and surveillance of these access points.



Figure 3.10.1. View of the existing village from Flowers Drive.

Figure 3.10.2. Existing view looking South along Clarke Street.



Figure 3.10.3. Recently altered and extended Catherine Hill Bay residence.

There is clear delineation between private and public domains. Each lot will be clearly defined by planting and/or low height fencing in contract to the openness of the common areas. A clear sense of identity is provided by the hamlet layout principle whereby all dwellings in a hamlet are accessed from a main spine road which encircles the Hamlet Common. Individual dwellings and shops will have articulated living edges in the form of bay windows, porches, and decks that allow for activities and provide a sense of 'evident ownership' of private areas.

Space Management and Maintenance

As the area is managed under community title the area will be kept in good repair with graffiti removed, lighting maintained and facilities cleaned on a regular basis. This, along with strong surveillance will ensure that the area remains secure.

Building Types

The following residential building types will be built in The Moonee Hamlets responding to different locations, market sectors and lifestyles.

Single Houses

Single dwellings, with gardens in a visual setting dominated by landscape. The scale of the existing coastal cottages has been referenced in the scale of the proposed houses, by breaking down the building into several pavilions. The character of the existing village houses has also been reflected in the new houses by using materials and building elements such as the covered verandah and the pitched roofs. The pavilion elements will serve to define exterior rooms for family living and, where site slopes permit, will step up or down the slopes further defining a smaller scaled massing.

Courtyard Houses

Small scale single storey attached residential dwellings with courtyard gardens. These dwellings, located in the Village Centre, are built around landscaped walled courts allowing for a true indoor/outdoor living experience.

Courtyard houses feature large sliding glass walls that allow the main living spaces to flow out into the courtyard.

A large sliding gate in the courtyard wall provides access to the community green space and allows the private courtyards to be opened up to the outside on occasion.

Mixed Use Shoptop Dwellings

The mixed use building type will be located in the Village Centre. The ground floor will accommodate retail/ commercial spaces to create an active street front with residential accommodation located above. A variety of articulated roof and massing forms will provide a liveliness to the streetscape and add a sense of individuality to these buildings.

Each shoptop dwelling will have an upper level verandah for dining and relaxing while looking out over the Village Centre Common.









Hamlets House

Figure 3.10.4. Indicative House Plans.

Courtyard House



Shoptop House

Building Height

The predominant condition in Catherine Hill Bay, particularly established development along Clarke Street is single storey to the street and some with two storeys behind. Consistent with existing development, new built form will consist of both one and two storey structures.

Building Heights in Hamlet 1

In the Village Centre Hamlet building heights are to be designed to minimise the impact of new development and to ensure that buildings are appropriately scaled to the existing village as well as in relation to street widths and open spaces. Buildings are limited to one storey in this area except for shoptop housing which is permitted to be two storeys. Loft spaces will not be included as a storey where they do not significantly alter the roof design or building bulk.

Building Heights in Hamlets 2 through 7

Building heights in Hamlet 2 through 7 are to be designed to minimise the impact of new development on adjoining areas and to ensure that buildings are appropriately scaled in relation to streets and open spaces. Buildings are to be a maximum of two storeys. Loft spaces will not be included as a storey where they do not significantly alter the roof design or building bulk.

Architectural features such as lanterns, cupolas and balconies may project above this height where they do not form more than 25% of a buildings profile measured in the horizontal direction on the longest side.

Solar Access, Light and Privacy

The location, planning and orientation of buildings and open space is to maximise opportunities for solar access, natural light and privacy to dwellings and assist with the achievement of BASIX requirements.

Mass and Proportion Objectives:

Objectives.

- To ensure the scale of new development is compatible with existing village structures.
- To provide for a viable pedestrian streetscape framing, view corridors and allowing breezes through.
- To maintain a residential scale that allows the natural environment to visually dominate.

Roof Form

Objectives:

- To enable the natural environment to visually dominate The Moonee Hamlets.
- To minimise the visual prominence of roofs being overlooked by residents at higher elevations.
- To provide an articulated skyline to the village from distant viewpoints.
- To provide visual relief to the streetscape.
- To provide articulated roof profiles against the sky. Hipped and gable type roofs, with wide eaves are to be the predominant roof form.
- To integrate all roof top services, vents and lights into the roof design.



Figure 3.10.5. Building height diagram.

Figure 3.10.6. View of Village Centre verandah.

Figure 3.10.7. Buildings are composed of smaller volumes. Figure 3.10.8. Future character of The Moonee Hamlets.

Façade Treatment

Objectives:

- To enrich the streetscape in detail.
- To break down the scale of facades, particularly those defining streets, by modulation of light and shade through articulated secondary architectural detail, contrasting with heavier wall and roof elements.
- To include elements such as eaves, sun control, hoods, louvres, shutters, pergolas, verandahs, balconies, balustrades, porticos, loggias, dormers, roof lanterns and ventilators as part of the scaling devices so that the façade is seen as a total design.



Address The Public Way Objectives:

- To provide active frontages for public ways which reinforce security and sense of community.
- To define public ways so that dwellings have their primary access and address from public laneways or streets.

Setbacks

Objectives:

- To provide amenity while allowing for interaction. Setbacks for streets will be determined by amenity and landscape performance requirements. Setbacks on pedestrian lanes shall be smaller than those on car courts to foster neighbourhood interaction.
- Generally setbacks at car courts shall be deep enough to allow a visitor car to park in the dwelling driveway.
- Generally setbacks on the pedestrian lanes or front of houses shall allow for a minimum of 2m of landscaping in front of any portion of the structure.

Colour and Light Objectives:

- To enhance the amount of light and reflected light available to public and private domains in a comparatively dense built environment.
- The predominant wall colours are to complement the surrounding environment.
- The predominant colour for secondary architectural detail is to be white.

Ancillary Built Elements

All built elements (fences, garden and retaining walls etc) not part of a building are to be designed to blend into the landscape or be sympathetic with the main building to minimise their visual intrusiveness.



Figure 3.10.9. Address the public way.

Figure 3.10.10.Figure 3.10.11. ConsistentUse environmental colours.light coloured detailing.

Figure 3.10.12. Deep eaves provide shade. Figure 3.10.13. Pedestrian lanes provide human scale access.



Figure 3.10.14. Front porches and verandahs provide places for neighbourhood interaction.

The Moonee Hamlets - Indicative Materials Selection



PAINTED TIMBER OR POWDERCOATED DOORS & WINDOWS - SLIDING OR FRENCH DOORS FINISHED WITH DULUX 'STONE WHITE'

The Moonee Hamlets - Ancillary Elements





Hipped Roof over Porch.



Sloped Roof over Porch with Bay Window.

Figure 3.10.16. Alternative Front Porch Details.

łt_____



Reduced Dormer with Bay Window.





Bedroom Bay Window - Option 1





Bedroom Bay Window - Option 2

Figure 3.10.17. Alternative Bay Window Details.



Figure 3.10.18. Optional Carport Pergola - Painted Timber.

Front elevation - Option 1

Front elevation - Option 1

3.11 Heritage Conservation

The primary objective of heritage conservation will be to recognise and reinforce the existing historic landscape setting of the village and its relationship to surrounding natural landscape features.

Hamlets that are scheduled as heritage items in the LMCC screened by substantial landscaping to the South East. LEP 2004 are limited to:

- 'Wallarah House' (The Mine Manager's Residence, 1a Keene Street, Lot 2031, DP 841175); and
- The Catherine Hill Bay Colliery Railway (Mine Camp to the coal loader jetty).

The site North of Montefiore Street is located within the Catherine Hill Bay Heritage Conservation Area. The subject site is also adjacent to the heritage listed 'Coal Loader Jetty' and a number of listed houses along Clarke and Lindsley Streets.

It is the intention of the Concept Plan to restore and adaptively reuse Wallarah House as a residential dwelling. This may include additional separate buildings to the South of Wallarah House not within the sensitive view curtilage. The Concept Plan has defined a precinct around Wallarah House, extending to include the Jetty Master's Cottage, to be reserved for future development consideration of a limited nature.

The Colliery Railway line corridor and any remains are to be conserved and will be interpreted as an extension of the Coal Loader Jetty.

Although not heritage listed, the potential exists to adaptively reuse other items of historical interest such as the Jetty Master's Cottage and the Bin Building. The top of the Bin Building is proposed to be a 'viewing' platform, below which will be residential or mixed use spaces accommodated in the stepped structure of the building.

Careful consideration of views and vistas, their retention and enhancement, is a significant requirement of conservation planning. No new buildings will be located between Wallarah House and the Jetty Master's Cottage, resulting in the retention of the visual and landscape setting of Catherine Hill Bay historic village, noted as an aim of the LMCC Heritage Guidelines. The Concept Plan does not compromise distant views from the significant vantage points:

- South along Flowers Drive; and
- North and South from the intersection of Montefiore and Clarke Streets

The Concept Plan expands the view curtilage of Wallarah House, taking in the Jetty Master's Cottage and extending to the historic village with planned landscaping. The proposal is for the Colliery Railway line to be contained within a corridor curtilage in combination with a pedestrian walk along the cliff top. The curtilage of Catherine Hill Bay village is not affected by the proposal as new development The buildings and structures contained within The Moonee is located on the other side of the southern ridge, or

> Proposed architectural design will be contemporary and not attempt to imitate existing structures.



Figure 3.11.1. Engraving of Wallarah House 1897. (Source: Town and Country Journal December 1897)



Figure 3.11.2. Wallarah House 1890s. (Courtesy of EJE)



Figure 3.11.4. Bin Building viewed from the Jetty.



Figure 3.11.3. Site Plan indicating heritage items in red.



Figure 3.11.5. The Jetty, Bin Building and Wallarah House viewed from the beach.



3.12 Community Facilities

The Moonee Hamlets community facilities proposed in this plan are:

Open Space and Recreation

Adjacent to the existing village a significant portion of land will be given over to public open space. The portion of land East of the existing Clarke Street housing will be set aside as open space to provide a curtilage for the existing historic village and enable permeability between the existing residential settlement and the Catherine Hill Bay Beach. In addition the coastal foreshore, a sea cliff reserve and a headland park as indicated within the Concept Plan area have also been handed over to public use to enable ease of access to elevated vistas of the coast.

An open space network will be provided within The Moonee Hamlets Concept Plan. These spaces range from a Village Green to neighbourhood parks.

The Village Green is sized to enable informal Community activities.

Clearly defined access to Monee Beach is provided from the hamlets and the Village Green via pedestrian/cycle paths located along the bushland corridors and informal pathways located within the Asset Protection Zone (APZ).

The paths link in with existing bush trails on the headland and the proposed Coastal Walk to create an accessible pedestrian recreational network for the enjoyment of local residents and visitors

The APZ walking trails connect with the internal road network, enabling pedestrian and bicycle connectivity throughout the Village Hamlets, including walkable access to the Village Centre.

Item Description

- 1 Village Green
- 2 Bin Terrace
- 3 Playing Field
- 4 Village Park
- 5 Tennis Courts
- 6 Community Building
- 7 Swimming Pool
- 8 Coastal Walk
- 9 Headland Reserve
- 10 Hamlet Commons
- 11 Managed Bush Corridors
- 12 Bush Walks
- 13 Beach Access Parking



Figure 3.12.1. The Moonee Hamlets Community Facilities.

Village Centre

A Village Centre will be established on the main access road to the settlement. It will be a combination of neighbourhood, commercial and convenience shops grouped about a main thoroughfare to provide for the daily requirements of local residents and visitors. To enhance security, vitality and communal ownership shoptop housing is to be incorporated into the centre.

Existing Facilities

The Moonee Hamlets will underpin the existing community facilities located in Catherine Hill Bay, including the surf club and hotel. The Hamlets may also increase the patronage of the existing bus service that may increase the frequency of service to the Catherine Hill Bay as a whole.





Figure 3.12.2. Portion of Concept Plan site West of Hale Figure 3.12.3. Existing Surf Club. Street to be dedicated to public open space.



Figure 3.12.4. Portion of Concept Plan site coastal foreshore to be dedicated to public open space.

3.13 Environmental Sustainability

In May 1992 the principles of ecologically sustainable development were agreed by the Australian and Commonwealth and State Governments through the Intergovernmental Agreement on the Environment. The development of new communities in this Concept Plan has been guided by these principles of ecologically sustainable development. Some of the ways in which these principles have been addressed follow:

1. The precautionary principle

The precautionary principle stipulates that if there are threats of serious environmental damage that the lack of scientific certainty should not be used as a reason for postponement of action to address these threats.

Whilst there are no serious environmental threats on the sites covered by this Concept Plan there is a danger that, with its future unresolved, the intact vegetation areas of Catherine Hill Bay might have become fragmented and degraded through permissible land uses. Under the Concept Plan these areas will be dedicated to the National Park estate, managed for conservation, and protected in perpetuity.

2. Intergenerational equity

This principle seeks to ensure that the present generation meets its needs in a manner that does not compromise the ability of future generations to meet their needs. According to the State Government's Lower Hunter Regional Strategy the Lower Hunter Region needs to find room for 115,000 homes in the next 25 years. The Moonee Hamlets site is a brownfield site that will allow 600 of these dwellings to be accommodated without disturbance of new areas of vegetation. This reuse of land that has had past development use will minimise green field sites that will need to be subjected to urbanization elsewhere in the region and will protect those areas for future generations.

The dedication of 310ha for national parks including areas of lake and coastal foreshore will also protect these areas to ensure that they remain available, in current condition or better, for the enjoyment of future generations.

3. Conservation of biodiversity and ecological integrity

The conservation of biodiversity and ecological integrity should be fundamental factors in decision making. This Concept Plan not only ensures that there is a significant conservation offset to a minimal development impact, it also takes a whole series of best practice measures to secure the ecological integrity of the site.

Within the area to be developed, wherever possible, natural vegetation will be restored on the site in such a way that it can have a relationship with other remnant bushland augmenting habitat for native fauna. The landscape plan encourages trees throughout the site and the community has been designed to ensure that landscaping can be dominant providing shade as well as a green backdrop. Green corridors within the area to be developed will provide a network of open space totalling around 19ha.

Stormwater will be carefully managed to match pre-development flows and quality and will be recycled on the site. Homes will be built to be energy and water efficient complying with BASIX standards as a minimum and the provision of facilities within walking distance as well as the design of the community will encourage reduced car usage. Materials will be selected to minimise local and global environmental impacts as well as to serve an aesthetic function. The development will provide reticulated sewerage to all dwellings including the existing community which currently has no access to sewer.

4. The valuation principle

That improved valuation; pricing and incentive mechanisms should be promoted. The conservation measures integrated into this development will be reflected in pricing. All residents will participate in a community title scheme giving a direct financial incentive in the ongoing sustainable management of the site.

Specific ESD Initiatives

The following ESD opportunities and initiatives are intended to be implemented:

- The street pattern is to maximise solar access.
- Priority in planning is weighed to pedestrian and cycle permeability and public transport.
- All major destinations, such as the Village Centre and Village Green are located with easy access to a bus route.
- A comprehensive pedestrian/cvcleway network provides safe and convenient and attractive links between facilities.
- Deciduous trees and shrubs are proposed to the North of internal and external living spaces to maximise solar and light availability in winter.
- The North and East orientation and slope provides access to sea breezes.
- The street pattern provides breeze (and view) corridors to inner areas of the site, maximising opportunities for natural ventilation.
- The proposed built form controls are formulated to ensure a minimum three hours solar access every day of the year to the main living areas of the house.
- The high landscape to building ratio will increase filtration and reduce stormwater runoff.
- An extensive portion of existing spoiled area will be revegetated in native species.
- Hardstand areas, roads and other impervious surfaces are minimised by adapting AMCORD minimum road/ shareway standards.

Infrastructure Services

A third pipe water supply system will be provided in The Moonee Hamlets to supply recycled roof water to all dwellinas.

3.14 Remediation

An Environmental Site Assessment has been undertaken. Phase 1 and Phase 2 studies have identified likely contamination areas and assessed these for actual contamination.

The only potential contaminant found on the site was hydrocarbons that, on the basis of chemical analysis, were determined to be coal fines in sedimentation dams. Future removal of concrete slabs in the coal washery area may require further assessment.

Hazardous materials have been removed and demolition/ removal of mine infrastructure continues.

The site will be remediated as necessary to residential standards and verified by certification.



Figure 3.14.1. Aerial view of former coal workings in Catherine Hill Bay.





Figure 3.14.6. Former coal workings on top of headland.

3.15 Development Staging

The project staging is intended to provide for a lively Village Centre Hamlet with its adjacent residential community of Hamlet 2 as the nucleus of the community. This will set the feel and character of the community at the outset and allow the community to grow in an orderly manner as demand occurs.

Implementation will occur as follows:

Stage 1 – Civil Works, Landscaping and Buffer Zones

Establish the buffer zone with the existing village, develop the primary infrastructure for the Village Centre Hamlet and Hamlets 2 through 5 South of Montefiore Parkway. The APZ will be established to protect the site and the bush corridors and major master community green spaces will be established. The Coastal Walk and other walking trails will also be included. Significant areas of existing landscape to remain will be rehabilitated as appropriate.

Stage 2 – Village Centre Hamlet and Hamlet 2

Establish the Village Centre with its primary public spaces such as the Village Centre Common, Bin Terrace and links to the Coastal Walk and Headland Reserve. The Village Centre northern and southern residential areas will be created along with the buildings along Main Street. 69 dwellings will be provided including 4 dwellings in an adaptive reuse of the Bin Building along with up to 1800 m² of commercial space.

Hamlet 2 will be established including the residential areas and the Hamlet Common. Links from the hamlet to the surrounding bushlands will be made. 108 dwellings will be provided. No commercial space is included in this precinct.

Stage 3 – Hamlet 3

Hamlet 3 will be established including the residential areas and the Hamlet Common. Links from the hamlet to the surrounding bushlands will be made and the local road system will connect to that of Hamlet 2 across the bush corridor to the East and to the Village Green loop road to the North. The exact number of dwellings is still to be confirmed, but will not exceed 93. No commercial space is included in this precinct.

Stage 4 – Hamlet 4

Hamlet 4 will be established including the residential areas and the Hamlet Common. Links from the hamlet to the surrounding bushlands will be made and the local road system will connect to that of Hamlet 3 across the bush corridor to the East and to Montefiore Parkway to the North. The exact number of dwellings is still to be confirmed, but will not exceed 160. No commercial space is included in this precinct.



Figure 3.15.1. The Moonee Hamlets Staging Plan.

Stage 5 – Hamlet 5

Hamlet 5 will be established including the residential areas and the Hamlet Common. Links from the hamlet to the surrounding bushlands will be made and the local road system will connect to that of Hamlet 4 across the bush corridor to the East and to Montefiore Parkway to the North. The exact number of dwellings is still to be confirmed, but will not exceed 86. No dedicated commercial space is included in this precinct.

Stage 6 – Hamlets 6 and 7

Hamlets 6 and 7 will be established and will include the hamlets themselves with their public open spaces and the required APZ for each hamlets. Some access improvements will also be undertaken for secondary access through the bush to the collector roads.

The number of dwellings provided in the final stage of implementation will be controlled to ensure that a maximum of no more than 600 dwellings is provided in the overall development. No dedicated commercial space is included in this precinct.

PRECINCT NAME	STAGE	MAXIMUM NUMBER OF DWELLINGS	COMMERCIAL AREA (m²)	MAXIMUM RESIDENTIAL FLOOR AREA (m ²)*
Hamlet 1 - Village Centre	2	69	1800	20,000
Hamlet 2	2	108		34,000
Hamlet 3	3	93		29,000
Hamlet 4	4	160		50,000
Hamlet 5	5	86		27,000
Hamlet 6	6	79		25,000
Hamlet 7	6	55		17,000
TOTAL		650		202,000
Total number of dwellings will not exceed 600.				

* Floor area excludes garages, driveways and balconies.