THE NAPIER NUWERUS NODE



URBAN DESIGN FRAMEWORK - REV 2 JANUARY 2015 - ERF 513 INFILL SITE, NAPIER - CAPE AGAULHAS MUNICIPALITY

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ADDENDUM A: PLANNING ANALYSIS AND RECOMMENDATIONS



THE NAPIER NUWERUS NODE

The Napier Nuwerus Node is situated on Erf 513 on the southern edge of Napier Town, Western Cape. The property is bound to the east by Short Street, the north by a semi-formalised street and public open space; to the west by the existing Nuwerus neighbourhood development and to the south by agricultural lands as part of the Commonage. The site is approximately 5.3Ha in area and, including the clinic, it is approximately 5.7Ha. For the purposes of this project, the professional consulting team included the proposed adjacent Health Clinic Site, as well as the adjacent public open space into the broader proposal study area.

PROJECT BRIEF

The Professional Resource Team (PRT) was appointed by the Western Cape Provincial Department of Human Settlements to develop an Urban Design Framework for the Infill Site Erf 513 for housing opportunities. The brief was to design a mixed-use precinct, incorporating IRDP housing, GAP housing, amenities, parks and other services.

THIS DOCUMENT

The purpose of this document is two-fold:

- To establish a common vision for all involved government bodies and departments for the development of the site and surrounds; allowing for alignment from all parties of budgets and implementation strategies for the successful development of the site
- To provide an acceptable vision for the public to stem concerns and address in principle objections to the development

Existing Erf 513 and the proposed Health Clinic on adjacent Erf

CONTEXTUAL OUTLINE

- Napier has a current housing backlog of 550 opportunities. Two proposed housing projects were included within the First Generation Housing Pipeline that needs to address aforementioned backlog.
- The first project proposes to upgrade the existing informal settlement that is located on the southern periphery of the existing town. There is potential to provide approximately 371 opportunities within this project; however the project is currently in early planning phases and this is subject to further investigation. The second project that was identified for Napier is the development of Erf 513 (Napier Nuwerus Node), which needs to cover the balance of the housing backlog.
- The permanent population of Napier is 4 232. With a growth rate of 1.96%, the population at the end of 2024 will be 5 239, which means the population has grown by 1 007. The population growth includes 513 individuals who will qualify for subsidised housing which means 103 additional subsidised housing opportunities will be required (at an average household size of 5); in addition to the current backlog of 550 houses. This is a total of 653 houses.
- Considering the existing housing backlog and abovementioned future growth in housing demand, it is evident that all proposed housing projects must provide opportunities optimally and utilise land that is available for development to its full potential.

HIGH LEVEL ENVIRONMENTAL ANALYSIS

- An Aquatic Critical Biodiversity Area is located near the southern boundary of the proposed development area. This drainage line is also mapped as a National Freshwater Ecosystem Priority Area (NFEPA) River. A setback line of 30m from the watercourse is proposed which needs to be maintained (refer to plan below).
- No Terrestrial or Aquatic Critical Biodiversity Areas are located on the development area itself which makes the area very suitable for development in terms of environmental suitability.

SOCIAL AMENITIES

- In terms of the Development Parameters (a quick reference for the provision of facilities within settlements of the Western Cape) published by the Western Cape Government Department of Environmental Affairs and Development Planning, the following facilities have to be provided: 1X small neighbourhood play plot sized 500m2. No other facilities are required to support the proposed development.
- A number of social amenities are proposed in this design framework, including a neighbourhood park; a place of workship/church; a community hall; a health clinic; a library and a possible crèche. While these amenities are not required for the intended population of the given development itself, the site has been identified by the client as the ideal central location for amenities and open space that can serve a broader catchment area in the town.

MOVEMENT AND ACCESS

- There are **two primary pedestrian and vehicular access routes linking the Site to the Main Road** commercial hub. These routes are located on Station Road to the west and adjacent to the Dutch Reformed Church to the east. This creates strong diagonal pedestrian desire lines across the site towards the two gateways on Main Road.
- In addition, **east-west pedestrian routes** are evident across the site links the existing Nuwerus neighbourhood on the west with the secondary school and police station to the east.
- On the western boundary, **site access** is possible to existing Nuwerus via two access points as indicated in the plans. To the east of the site, potential access points into Erf 513 are from Karee Street, Nepeng Street and Protea Street.

OPEN SPACE

- A large existing **natural open space** exists to the north of Erf 513, incorporating a watercourse, large stands of trees, and a number of pedestrian walkways. The area is well used by pedestrians walking to the Main Road. This space has the potential to be upgraded into a more natural open parkland as part of this development.
- There are a few, **smaller parks** both to the east and west of Erf 513, but these are not adequately landscaped nor overlooked, resulting in poorly-utilised spaces.

ACTIVITY NODES AND LAND USE

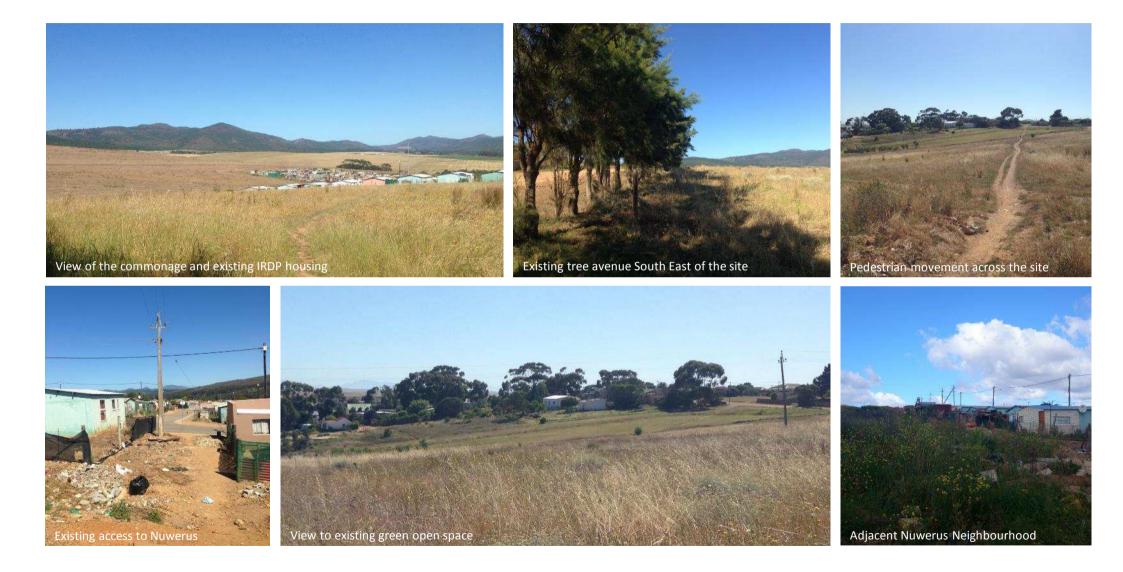
- Napier's **Main Street** currently functions as the primary location for commercial and retail activity in the town.
- Napier currently has a number of **community and educational facilities**, including a health clinic, a GP, vet, an old age home and a mortuary. There are two schools. A number of churches are positioned within Nuwerus, as well as a few formal (and smaller, informal) retail shops on more prominent street corners.
- A local activity node exists at the point where the larger open space intersects with Station Road. This comprises 3 existing churches and a shop, as well as a vacant corner site identified for another community/ church use.

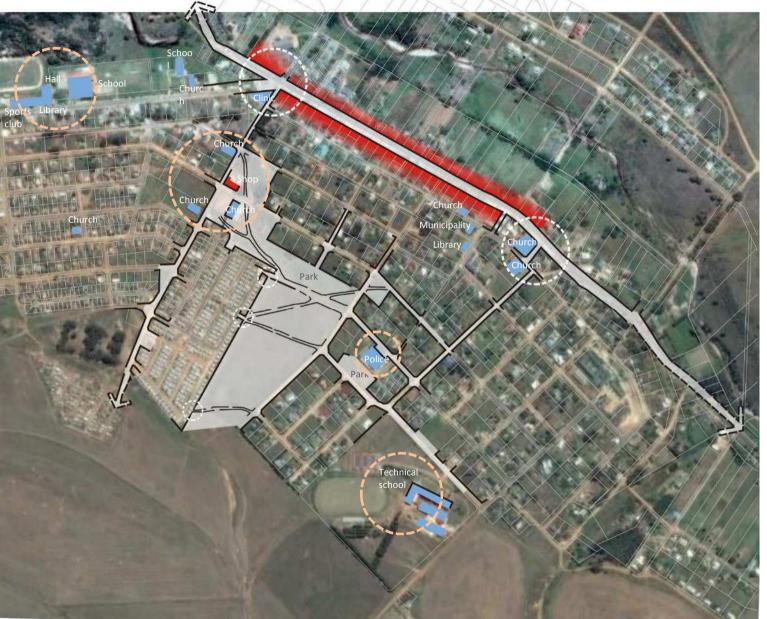
BUILT FABRIC

- The existing **Nuwerus IRDP housing** to the west of Erf 513 comprises sites approx. 150m2 each in area, with stand alone single story houses, resulting in a very smallscaled erf pattern and building scale.
- To the east of the site are **larger suburban residential houses** on larger erven approx. 900m2 in area. These are visually significantly larger than the Nuwerus erven to the west.

NATURAL SITE FEATURES

- The site experiences a steady slope down to the north towards the open space and watercourse.
- A high point of the site is located adjacent to the avenue of trees on the eastern boundary and from here the site slopes down to the south
- **Expansive views** are possible from higher areas of the site both northwards over the open space and towards the mountains in the distance as well as over the agricultural land / commonage to the south.
- Other than the **avenue of trees** along the Eastern property boundary, no further trees existing on site.
- Along the western boundary is a low **raised earth berm**, probably created by building rubble from the Nuwerus development.





MOVEMENT AND ACCESS



Primary Pedestrian and vehicular routes between site and Main Road



Existing access to adjacent Nuwerus neighbourhood

ACTIVITY NODES AND LAND USE



Activity nodes in the area (community uses, some retail, schools etc)

Gateways onto Main Road commercial hub

Existing access points into existing Nuwerus development



Existing Community facilities and Education

Commercial activity on Main Road



NATURAL FEATURES

Existing green open spaces and parks Existing watercourses and 30m setback Existing trees and tree avenues Commonage / agricultural land

BUILT FABRIC



B

в

Existing IRDP housing: Smaller property sizes with small building footprints

Existing residential neighbourhood: Larger block pattern with larger building footprints

SITE FEATURES

Estimated 1m contours (Google Earth)

----- Ridge line

North aspect to open space/ mountains

South aspect towards agricultural land

Potential Site access points

03 DEVELOPMENT VISION



KEY SPATIAL ACTIONS

- 01 Upgrade existing public open space
- 02 Create a series of community nodes along public open space and east-west link
- 03 Develop a north-south treed movement spine through development
- 04 Position a smaller local park + community node at centre of development
- 05 Create a higher density residential core at the centre of the development
- 06 Create similar scaled RDP housing erven along the western boundary
- 07 Create lower density edges along the eastern and southern property boundary

04 DEVELOPMENT PROPOSAL



DEVELOPMENT VISION

The vision for the Napier Nuwerus Node is to create a pedestrian-focused residential development which is well-integrated into the surrounding neighbourhoods. A series of community facilities will be coupled with public parks and local sports facilities along primary movement routes, which will create vibrant activity nodes accessible to both residents and a surrounding catchment area. A mix in both IRDP and Gap housing units will be provided within the development, providing the potential for a variety in size, affordability and tenure options.

KEY FEATURES

- 01 Community Hall
- 02 Church
- 03 Shared
- 04 New Clinic as per existing land use application
- 05 Upgrade of Existing Public Open Space
- 06 Adjacent community node in Nuwerus (Churches, retail)
- 07 Napier Library
- 08 Creche and aftercare facility
- 09 Children's play area
- 10 Local public park and outdoor gym
- 11 Multi-purpose sports court
- 12 IRDP double story rowhouse units around shared parking courts
- 13 IRDP housing (mix single and double storey units)
- 14 GAP housing along eastern edge
- 15 IRDP 'Agri plots'
- 16 Road link into existing Nuwerus neighbourhood
- 17 Potential additional road link
- 18 Existing stand of trees

05 LAND USE BUDGET

RATIONALE

While IRDP and GAP houding forms the majority area in the development, a significant percentage of land area is also maintained for community related uses and open space. The proposed housing is a mix of IRDP houses (both single story and double story), as well as slightly higher density rowhouses and lower density GAP housing. Three housing density options have been proposed, which are covered in Section 8.



plan is reflective of Density option B

Community Facilities	Approx Site area	Building area	notes		
Community hall			Shared treed court can be used for parking or church and		
church	3 445	420m2	community functions or markets. Caters for approx. 400 people each		
Clinic	4 890	800m2	As per existing subdivision and building plans		
Creche, aftercare, kids play area	1 730	745m7	Shared entrance and facilities (e.g. ablutions) with library. Creche caters for approx. 50-70 kids		
Library		370m2	2x libraries currently 160m2 and 180m2 respectively		

Total 10 065m2 (17.4%)

Open spaces and Roads	Approx area	Building area	notes
Local park	2545	-	Incl. outdoor gym and kids play area
Multipurpose sports court	2 545	35x20 (700m2)	Used for basketball, mini soccer, netball
Other open spaces	1 230		
Agricultural plots	3 380		
Roads and public courts	10 445		

Total 17 600m2 (30.5%)

Residential	Average Site area per unit	Approx unit size	notes
IRDP rowhouses	Approx 52.5m2 (3.5x15m)	40-45m2	Each unit is double story and has a private internal staircase accessing the upper floor. Each unit is located on a private erf. Units are positioned in groups of 4 and are positioned around shared parking courts.
IRDP houses	Approx 112.5m2 (7.5x15m)	30-40m2	Combination of double and single story – either semi detached or stand alone
GAP houses	200m2 (10x20m)	45-50m2	Double story units either semi detached or stand alone
	Total 30 075m2 (52.1%)		

Total Site Area 57 740m2 (5.77 Ha)

COMMUNITY FACILITIES AND OPEN SPACES

CRECHE AND LIBRARY









DESCRIPTION

An integrated facility that provides a safe, focused space for children during the day; and scholars after school. The two existing separate libraries in Napier will be combined to form a single public library facility for the town.

CHURCH AND COMMUNITY HALL



DESCRIPTION

The church and community hall will sit adjacent a shared landscaped court which could be used for larger functions, informal gatherings or parking. With the clinic, these facilities will create an activity along the upgraded open space.

COMMUNITY FACILITIES AND OPEN SPACES

MULTI PURPOSE SPORTS COURT AND OUTDOOR GYM

NEDBANI vuma Primary School, Pietermaritzburg Outdoor gym, Dlamini Eco Park, , Soweto

DESCRIPTION

The multi purpose sports court can be used for mini soccer, netball and basketball and will have a high quality, durable surface, providing a hub of activity for children and adults alike the area. There is potential to include an outdoor gym area in the park, which could create activity during both the week and weekend within the park.

LOCAL PARK AND KIDS PLAY AREA



DESCRIPTION

The local park is seen as an integrated space with the adjacent sports court, outdoor gym, library and crèche/aftercare facility. The primary focus will be on providing children-orientated spaces to play

06

COMMUNITY FACILITIES AND OPEN SPACES

NORTH-SOUTH SPINE AND PEDESTRIAN COURTS







DESCRIPTION

The north-south movement spine and associated open spaces will be treed to create a pleasant green link between the houses in the south and community facilities in the north.

UPGRADE OF ADJACENT PUBLIC OPEN SPACE



DESCRIPTION

The proposed upgrade to the adjacent public open space is a crucial component of the Napier Nuwerus Node. This space will provide a more public 'front' to the community uses and will help to integrate the development into the broader community. There is also potential to include urban agriculture areas into this open space, or as stand-alone communal areas within the development, as indicated on the plan.

07 RESIDENTIAL UNITS

RATIONALE

The brief for this project was to provide a mix of integrated subsidized and partysubsidized housing that will assist in addressing the critical shortfall in the housing need in the area. The brief further promoted the need for 'high density' housing types that are aesthetically pleasing. With this in mind, this Urban Design Framework proposes three specific typologies in this development, as described below, creating a mix in unit sizes, erf sizes, location and level of subsidy for the beneficiary endusers. The framework further proposes three different density options for the development (covered in section 08)

Housing Typologies

- a) IRDP houses
- b) IRDP rowhouses
- c) GAP houses

[A] IRDP HOUSES







DESCRIPTION

The IRDP housing units will be a combination of single detached units and single/doublestorey semi-detached units. The units will range in size (approx. 30-35m2 for single story units and 35-45m2 for double story units) on erven approx. 110-120m2 each. The semidetached units will allow for parking of cars to the side of the building; and will be positioned closer to the front boundary to create a vibrant street environment, with potential to expand the houses to the side or rear of the property.

[B] IRDP ROWHOUSES





DESCRIPTION

The higher density rowhouse units will be positioned in the centre of the development. When compared to the IRDP single or double story houses, these units provide beneficiaries the luxury of a larger unit size (approx. 45m2) with the convenience of a reduced erf size approx. 50-60m2 . Each unit will have 2 floors with a private internal staircase, on a private erf. Rowhouses will comprise approximately 3-4 units in each block. Each unit will have a front courtyard and a garden/parking area to the rear of the unit.

[C] GAP HOUSING



DESCRIPTION

The GAP housing units will be provided as semi-detached single story units. GAP housing units will allow for potentially slightly higher specs internally as well as allowance for front walls and gates facing the street boundaries. The houses will be on erf sizes approx. 200m2 each. The semi-detached units will allow for parking of cars to the side of the building, with potential to expand the houses to the side or rear of the property.

08 DENSITY OPTIONS

LOWER DENSITY OPTION (A)

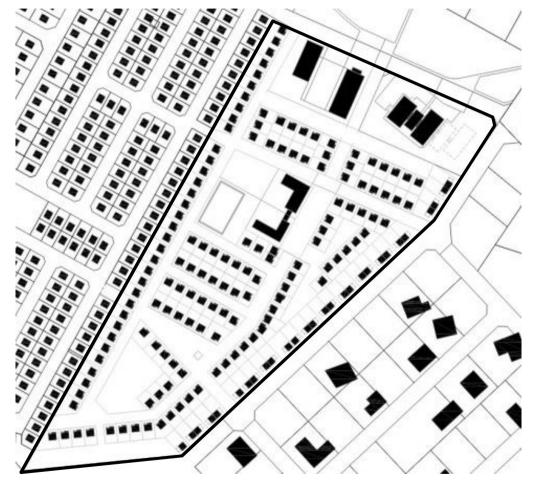
This option proposes a single housing typology similar sized erven and unit sizes as per the adjacent Nuwerus community i.e. a single storey detached house on a 150m2 erf. Total number of units in this option = 170 units.

Residential	Average Site area per unit	Approx unit size	notes	no. units	% mix
IRDP row houses	Approx 52.5m2 (3.5x15m)	40-45m2	Each unit is double story and has a private internal staircase accessing the upper floor. Each unit is located on a private erf. Units are positioned in groups of 4 and are positioned around shared parking courts.	0	0.0
IRDP houses	Approx 112.5m2 (7.5x15m)	30-40m2	Combination of single/double story demi-detached units; and single story detached units	143	83.6
GAP houses	200m2 (10x20m)	45-50m2	Single-storey semi-detached units	28	16.4
	Total 30 075m2 (52.1%)			170	100

LOWER DENSITY OPTION (A)



GAP houses



Indicative Figure-ground plan indicating footprints of built forms (n.t.s. in document)

08 DENSITY OPTIONS

MEDIUM DENSITY OPTION (B)

This option utilises a mix of approx. 40% rowhouses, 50% IRDP houses and 10% GAP houses. Total number units achieved = 262 units. This option allows for a varied mix in erf sizes and dwelling unit sizes, as well as inclusion of different income beneficiary groups. Total number of units in this option = 262 units.

Residential	Average Site area per unit	Approx unit size	notes	no. units	% mix
IRDP row houses	Approx 52.5m2 (3.5x15m)	40-45m2	Each unit is double story and has a private internal staircase accessing the upper floor. Each unit is located on a private erf. Units are positioned in groups of 4 and are positioned around shared parking courts.	102	38.9
IRDP houses	Approx 112.5m2 (7.5x15m)	30-40m2	Combination of single/double story demi-detached units; and single story detached units	132	50.4
GAP houses	200m2 (10x20m)	45-50m2	Single-storey semi-detached units	28	10.7
	Total 30 075m2 (52.1%)			262	100

MEDIUM DENSITY OPTION (B)



IRDP houses

08 DENSITY OPTIONS

HIGHER DENSITY OPTION (C)

This option proposes a single housing typology across the site – the rowhouse unit i.e. a group of 4 attached double story units each on 52.5m2 size erven. Total number units achieved = 377 units.

Residential	Average Site area per unit	Approx unit size	notes	no. units	% mix
IRDP row houses	Approx 52.5m2 (3.5x15m)	40-45m2	Each unit is double story and has a private internal staircase accessing the upper floor. Each unit is located on a private erf. Units are positioned in groups of 4 and are positioned around shared parking courts.	349	92.6
IRDP houses	Approx 112.5m2 (7.5x15m)	30-40m2	Combination of single/double story demi-detached units; and single story detached units	0	0.0
GAP houses	200m2 (10x20m)	45-50m2	Single-storey semi-detached units	28	7.4
	Total 30 075m2 (52.1%)			377	100

HIGHER DENSITY OPTION (C)



THE WAY FORWARD

This document is the product of an internal process of the professional resource team, working with both the Cape Agulhas Municipality and the Department of Human Settlements, Western Cape Government.

The proposals contained herein are to be tested further by both the municipality and the provincial authorities, and is to undergo participation processes to ensure that the proposals are appropriate for the needs of the intended recipients.

The document puts forward a number of density options with associated different housing typologies. The client body (Municipality and Provincial authority) would have to decide on a preferred development density to be able to take the project forward.

The key consideration informing the above decision is whether fewer, but larger stands are to be provided, or whether a greater number of beneficiaries are to be supplied with housing, at the cost of smaller properties. Participation processes will assist in informing this decision.

To assist in the decision making process, it was discussed with the client body to develop proposed unit typologies to clearly illustrate the impact of the above decision of the possible top structures. It was recommended that three typologies be considered, free standing houses, semi-detached houses, as well as double storey row housing.

It is recommended that the professional resource team be appointed to prepare the above typologies before further participation processes are undertaken to ensure that the different development options are clearly illustrated.

STATUTORY PROCESS REQUIRED

With the development proposal as it currently stands, two statutory processes will have to be initiated in order to procure the necessary approvals for the project to proceed.

Environmental Authorisation (EA) in terms of the National Environmental Management Act, 1998 (Act 107 of 1998)

- A Basic Environmental Impact Assessment will be required if the entire area identified for development, is developed. In order to avoid the requirement of an EIA, the proposed site development footprint (including access roads, required open space and area of the project) should be reduced to less than 5 hectares. If an EIA is required, a Visual Impact Assessment may also be required.
- A Notice of Intent to Develop is required to be submitted to Heritage Western Cape in terms of Section 38 of the National Heritage Resources Act. This could form part of the EIA process.
- A Water Use Authorisation Application is required in terms of Section 21 of the National Water Act as the site is located within 500 meters from a National Freshwater Ecosystem Priority Area (NFEPA) wetland. This can however form part of the EIA process.

Approval in terms of the Land Use Planning Ordinance, 1985 (no.15 of 1985)(LUPO) Once a layout and development concept has been finalised, an application can be drafted in order to obtain land use approval in terms of LUPO. This will involve the submission of a land use application to the relevant authorities, advertising of the application for comment/objections and final consideration and approval by the Cape Agulhas Municipality