

MIKE NIGHTINGALE FELLOWSHIP



Changing Lives Through Sustainable Development



Paradise Found? – Can one Place Work for all its Citizens?

Mike Nightingale Fellowship with IBI Group

1 Introduction by Mike

2 Strategic Planning opportunities by Marcus Wilshire (**IBI**)

3 Affordable Housing by Liz Petrovitch (IBI)

4 Looking to the future by Mike

The Fellowship in South Africa



NATIONAL PROVINCIAL AND LOCAL INITIATIVES

HOUT BAY NEAR CAPE TOWN

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2 Hout Bay - The Place

- More than 13,000 homes - about 50,000 people
- Surrounded by mountain to the north, east and west; and Southern Atlantic Ocean to the south.
- Distinct area within wider Cape Town.
- Former fishing village.
- Dramatic topography, coast line and scenic routes.
- Village atmosphere.



MNF's VISION FOR HOUT BAY

- TO CREATE AN ENVIRONMENT IN WHICH THE WHOLE POPULATION CAN FULFIL THEMSELVES
- STRATEGICALLY, WE ARE WORKING WITH THE HOUT BAY PARTNERSHIP TO CREATE A FUTURE MASTERPLAN THAT INTEGRATES THE SEPARATE GROUPS
- ON THE GROUND, WE ARE WORKING WITH LOCAL CHARITIES TO IMPROVE EMPLOYMENT THROUGH EDUCATION AND PROVIDE AFFORDABLE HOUSING

IMIZAMO YETHU



2 The Place Imizamo Yethu

- Partly informal settlement;
- 18 ha at high density;
- Competition for resources;
- Acute housing shortage;
- High level of unemployment;
- Health issues;
- Political tensions



EVERY DAY HEROES CLUB HOUT BAY

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HERO'S JOURNEY CURRICULUM BOOKS



HOUT BAY HARBOUR WITH HANGBERG



HANGBERG



2 The Place Hangberg

- High level of unemployment;
- Health issues;
- Drug abuse;
- Poaching;
- Conflict over evictions and clearance of unauthorised structures.





LITTLE ANGELS



NEW CRECHE FOR LITTLE ANGELS





PORTIA MSAMO

MNF LOCAL
REPRESENTATIVE
BUILDING LINKS WITH
OUR HOUT BAY
PARTNERS

PORTIA IS THE
COMMUNICATIONS
EXECUTIVE OF THE
HOUT BAY
PARTNERSHIP

PORTIA IS PROJECT
MANAGING THE
REGISTRATION OF
LITTLE ANGELS

The Place urban analysis

Context:

- naturally contained and defined by:
 - mountains
 - Disa river valley
 - sea



The Place urban analysis

Context:

- three access roads: Main Rd, Victoria Rd and Chapmans Peak Drive
- BRT bus service



The Place urban analysis

Context:

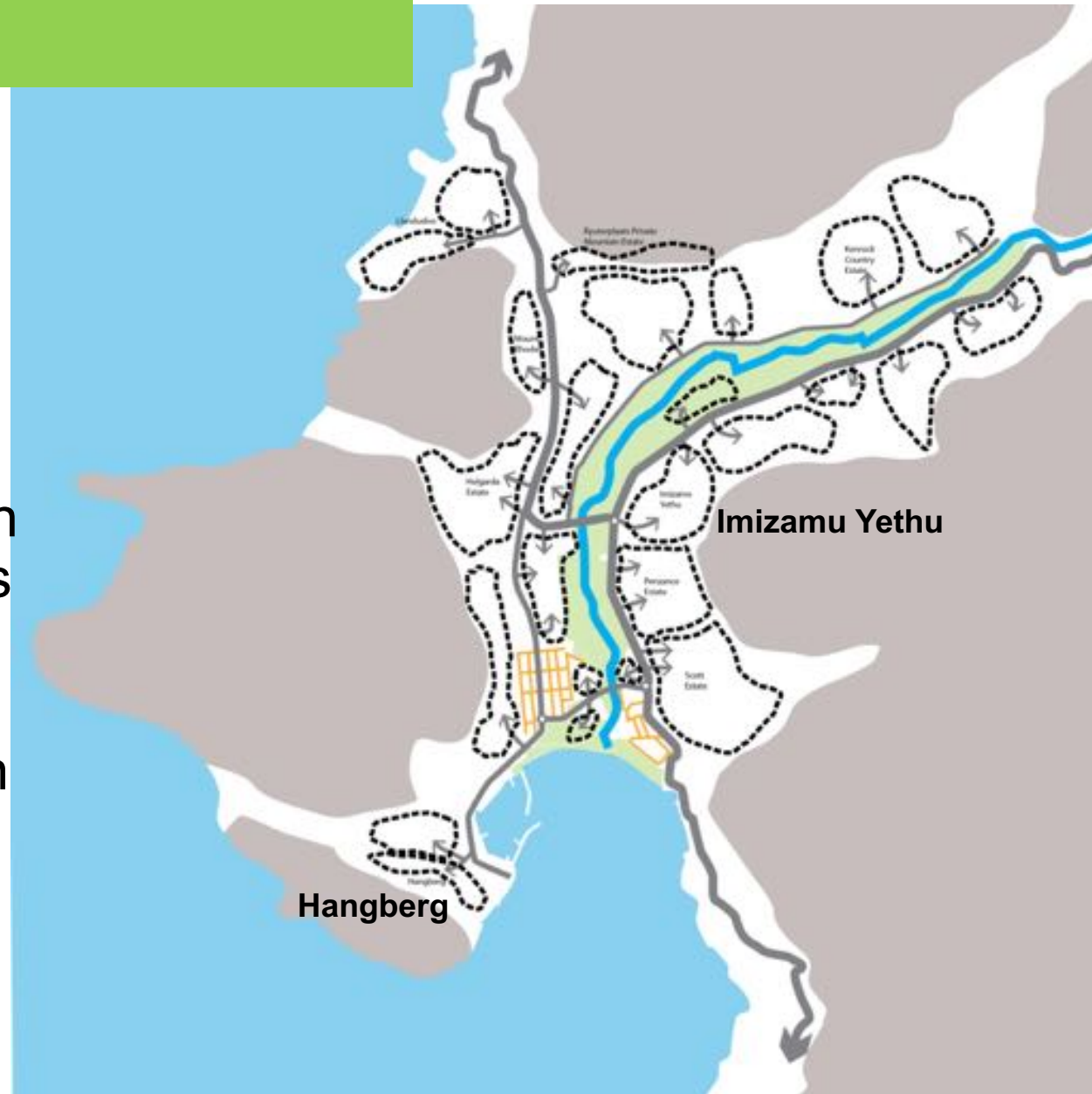
- development encroaching on mountain slopes and river flood plane;
- limited available development land



The Place urban analysis

Context:

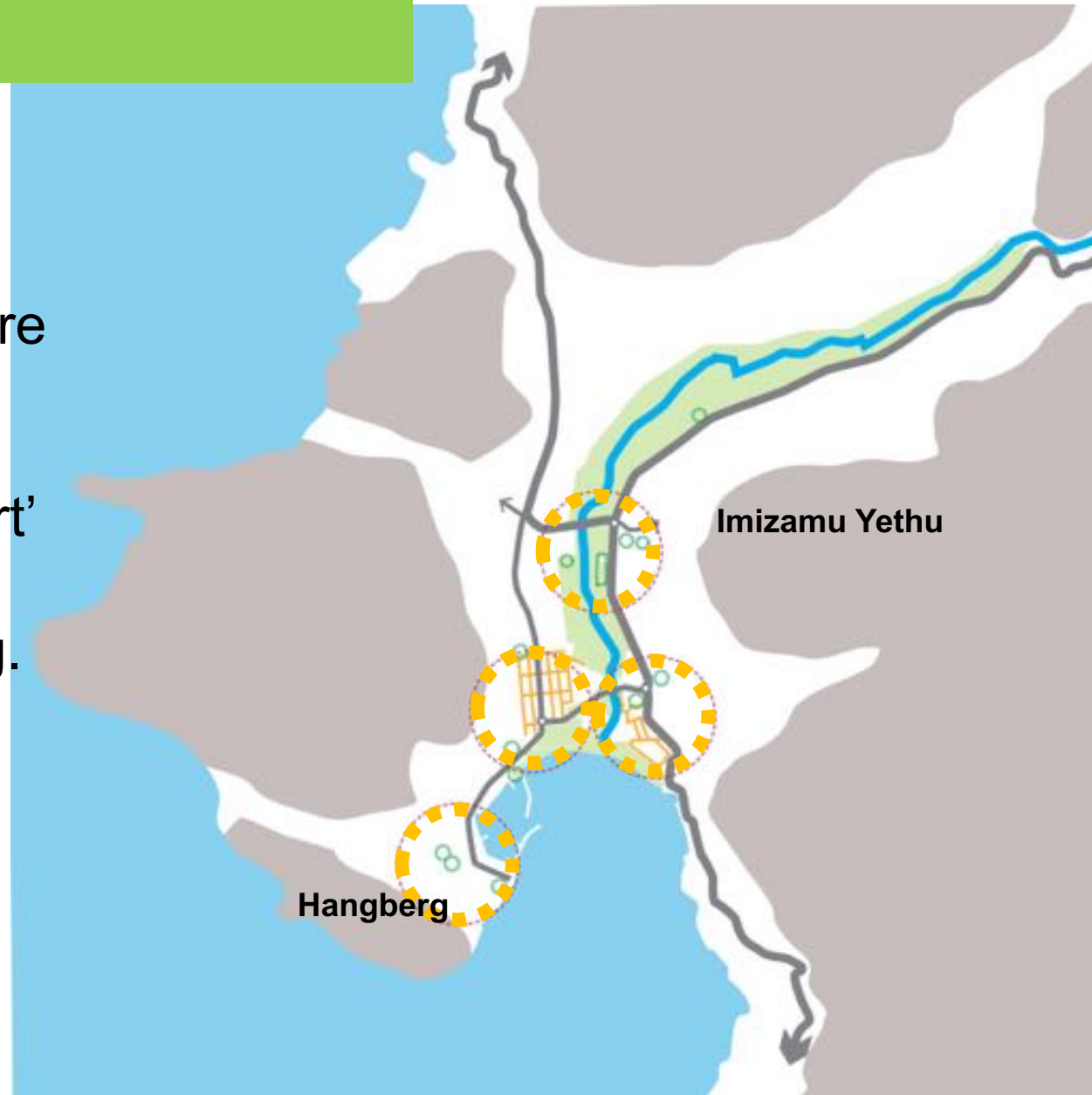
- Hout Bay is many, fragmented places.
- Enclaves of development often with only one or two access points.
- 'gated' communities block future integration especially in central (riverside) areas.



The Place urban analysis

Context:

- community infrastructure is dispersed and piecemeal.
- no clear centre or 'heart' to the area.
- Duplicated facilities e.g. health



Re-imagining Hout Bay - Proposition

Hout Bay is one Place, that meets the needs of all its people:

Harbour as economic driver:

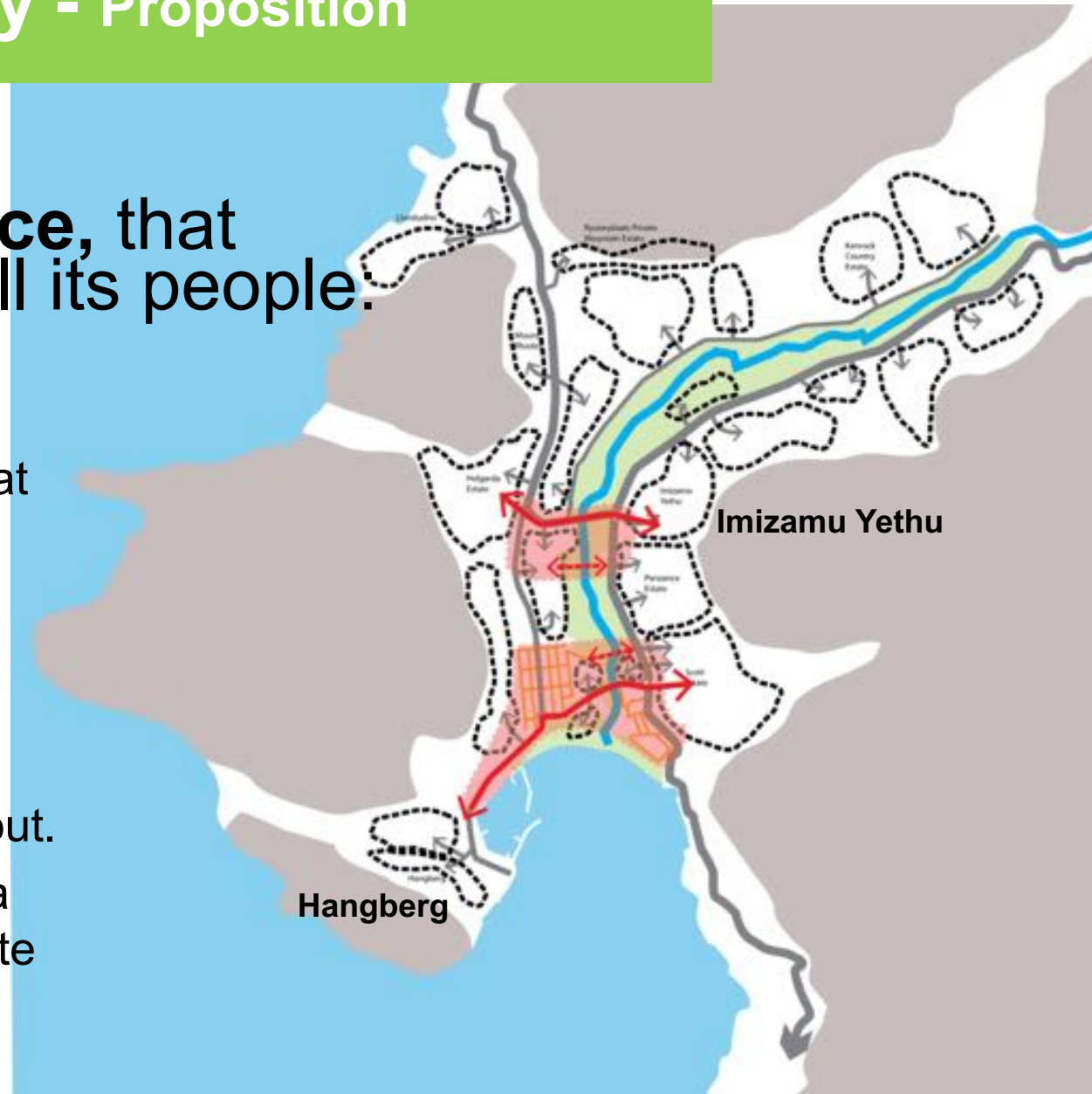
- Attractive coastline and distinctive character for tourism and leisure;
- Potential for sensitive harbour development.
- Accessible to all communities.
- Local employment opportunities



Re-imagining Hout Bay - Proposition

Hout Bay is one Place, that meets the needs of all its people.

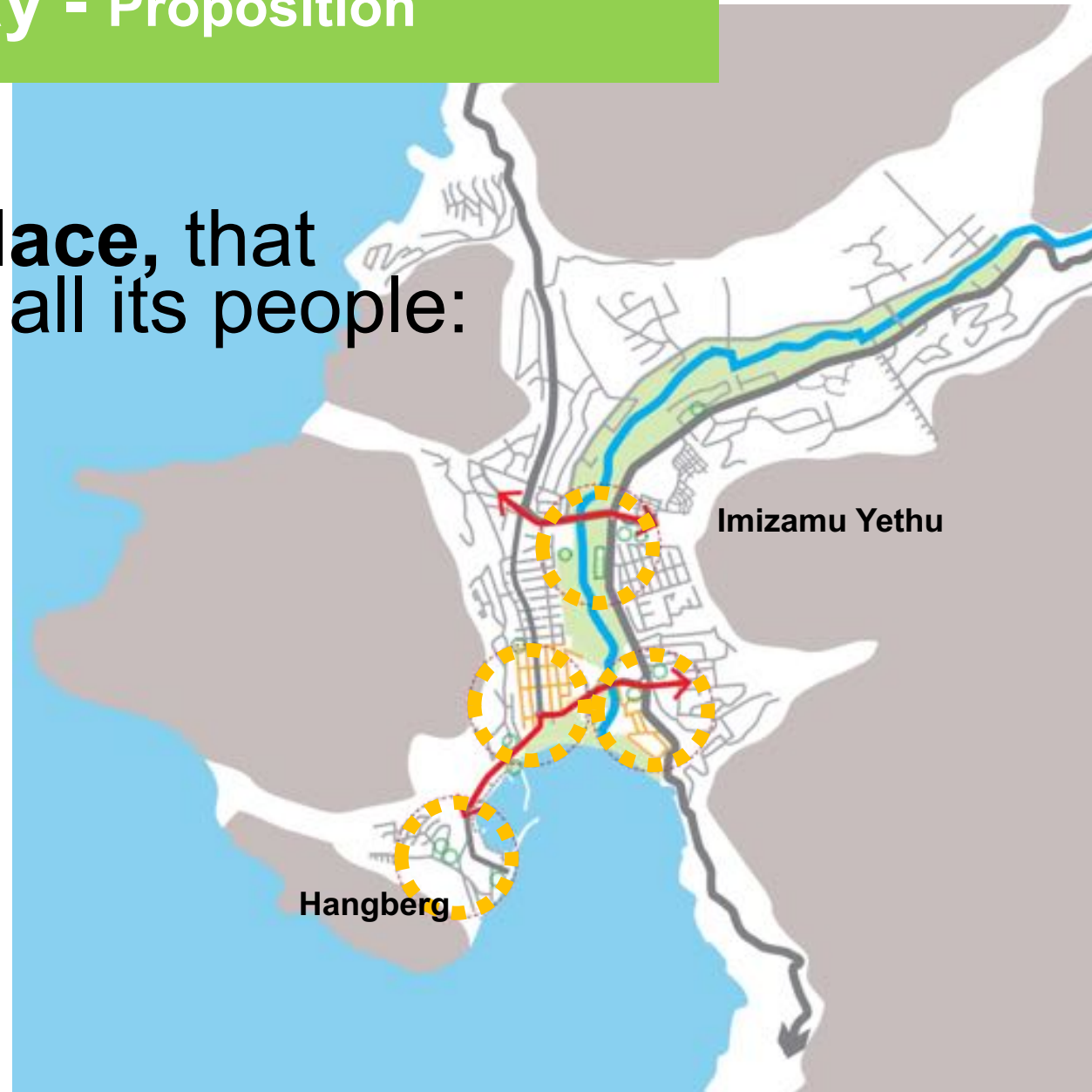
- This requires recognition that a community is a mix of people with different needs; and
- Hout Bay should become a place that reflects this principle in its form and layout.
- a distinct centre to provide a sense of arrival and co-locate important amenities and services.



Re-imagining Hout Bay - Proposition

Hout Bay is one Place, that meets the needs of all its people:

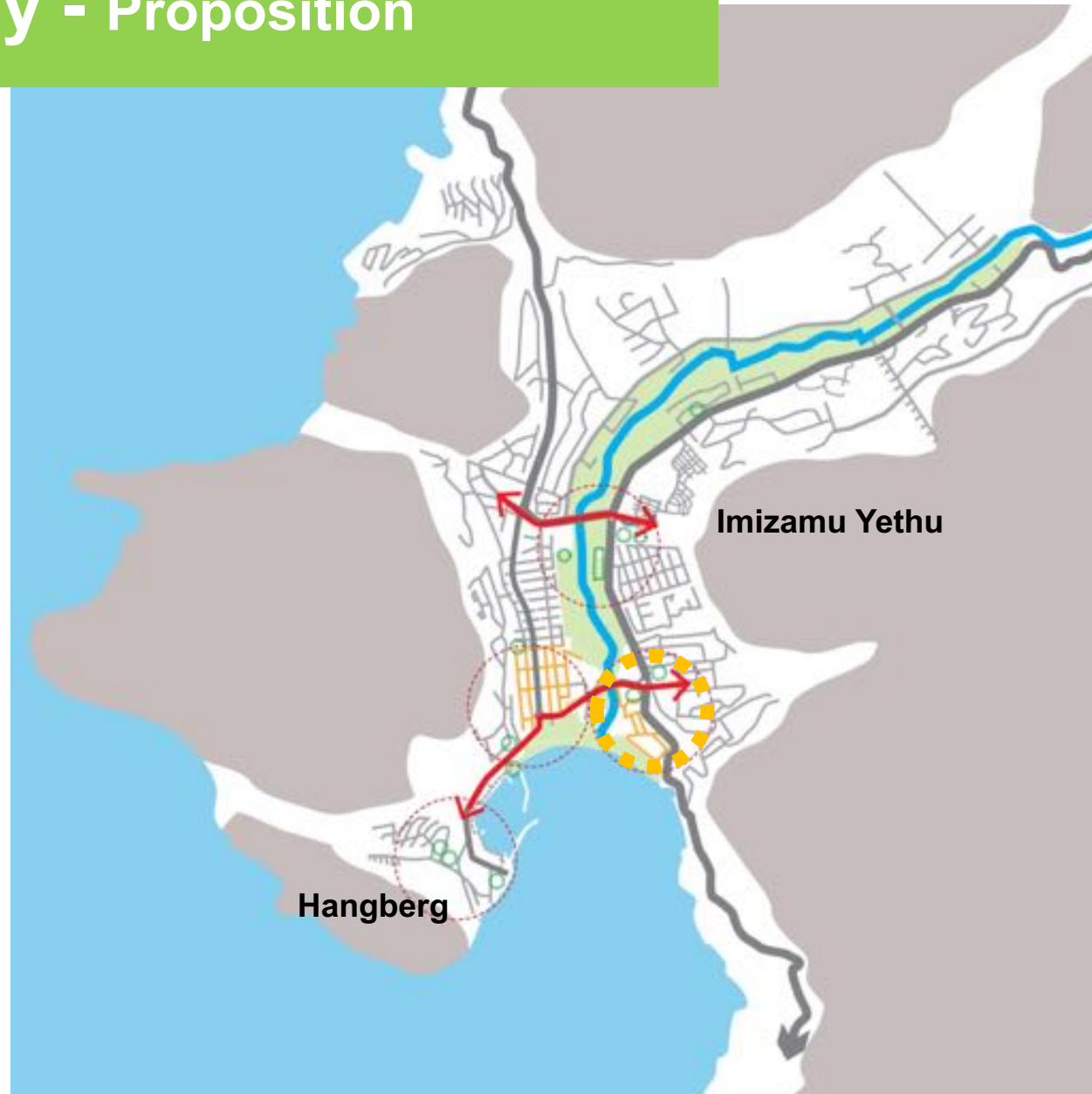
- A walkable place where shops, schools and healthcare are easy to get to.
- reduce dependency on private cars.
- A compact place – use land more efficiently.
- link centers with bus services



Re-imagining Hout Bay - Proposition

New Health Centre:

- focus on the most accessible and connected locations for community infrastructure.
- replace three facilities that served separate communities.
- define a neutral territory.
- intensify activity within walking distance of center.



Re-imagining Hout Bay - Propositions

Hout Bay is one Place, that meets the needs of all its people:

Walkable places:

- scale based on comfortable walking distances.
- a choice of routes that feel safe and attractive.
- ‘eyes on the street’ provide passive policing that helps deter crime.
- less car usage, congestion and pollution.
- Supported by viable public transport.



Re-imagining Hout Bay - Propositions

Hout Bay is one Place, that meets the needs of all its people:

- **Baywalk:** pathway connecting the communities of Hout Bay;
- improve community cohesion and safety;
- increase foot-fall past local businesses; and
- boost tourism and jobs.



3 Working with the community for better housing ⁽⁵

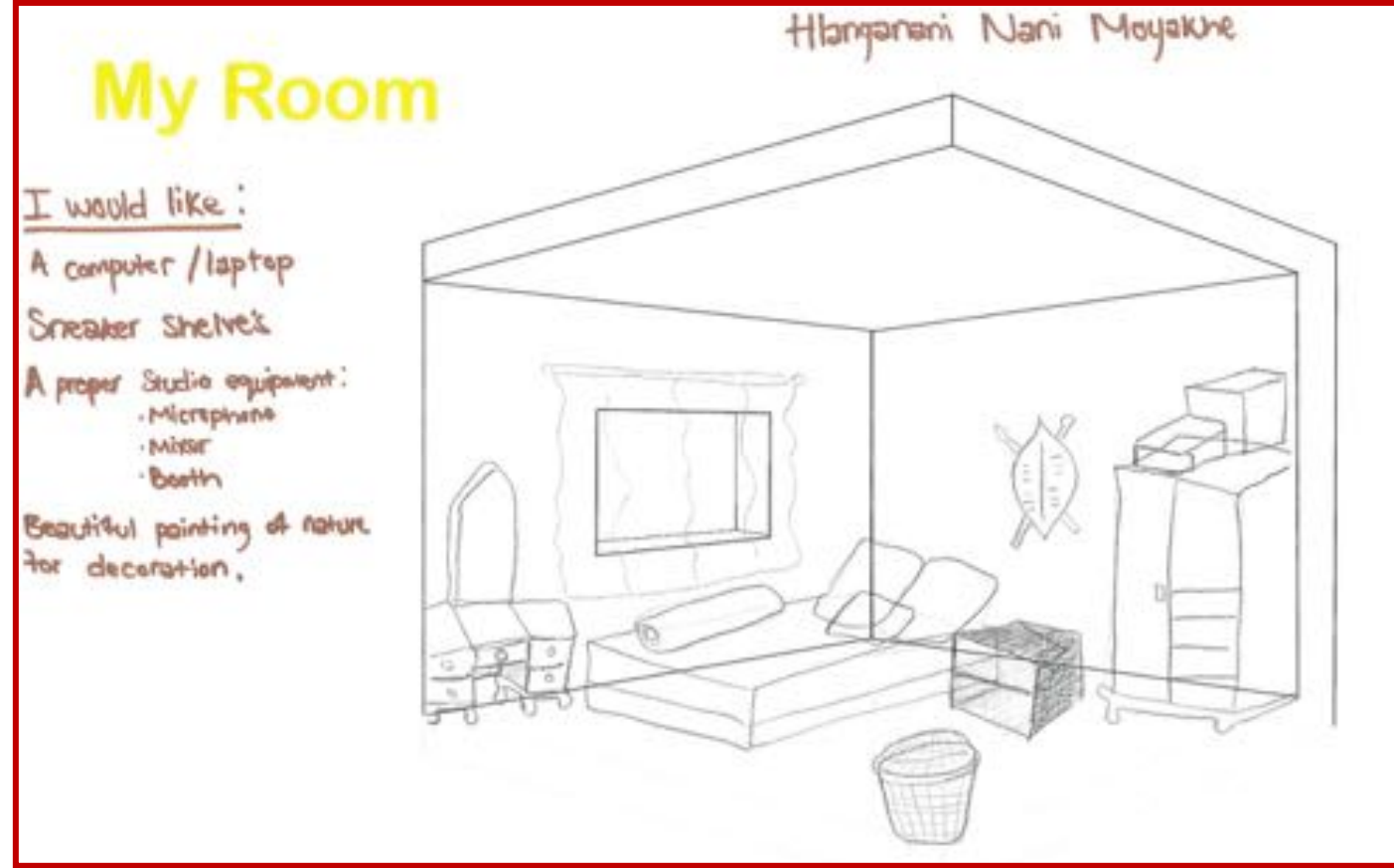
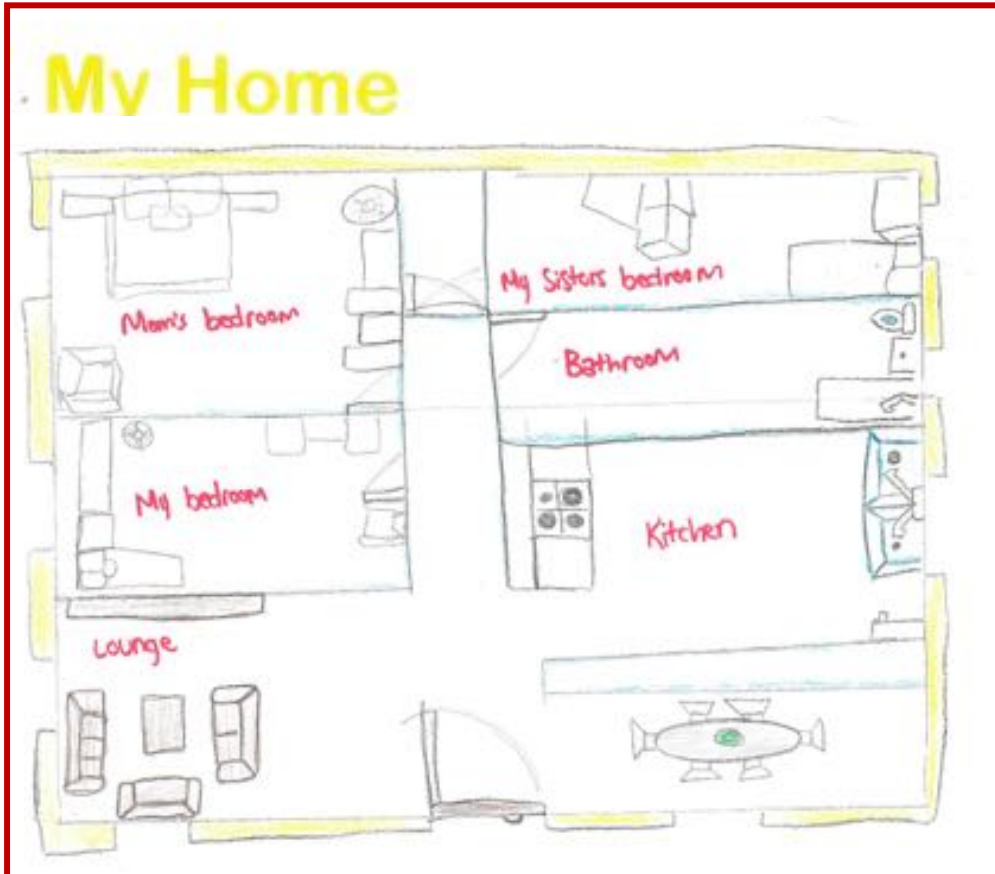
mins)



Listening Exercise

What Do the communities in Hout Bay Need?

- MNF held workshops with children from the after schools clubs,
- Local adults
- MNF local representative Portia.



Listening Exercise & Observations - Outcome?

- More space
- Privacy
- Security
- Outside space
- No land rights
- Vulnerability to eviction, flood, fire, theft
- Lack of basic infrastructure- roads, sewerage, public services
- Lack of communication from authorities
- Vibrant, close knit communities



Possible Response?

New, Safe Housing : Sandbags

- Sandbag or earth construction ancient form of construction dating back thousands of years seen throughout Africa, Middle East and Europe.
- South Africa - global leaders in sand bag construction, have national building code approval.
- Ecobeam technologies was set up by Michael Tremeer in later 90s to assist the homeless, squatters in SA.
- Became primarily used by wealthy people building eco homes.



Sandbag: Facts

- 95% drop in CO2 emissions compared to conventional brick construction . (1msq wall compared)
- Thermally stable and wind, fire, flood, earthquake, bullet proof.
- No professional skills required to build, local people
- Requires little to no electricity to construct. Renewable energy sources can be easily plugged in.
- Housing can be built incrementally over time to suit community.
- Job creation, knowledge exchange, future maintenance by users.
- Approx supply cost of bags & beams for 2 units 36sqm, USD1000
- MNF sponsorship – enabled Moose to set up his own building business (see above)
- Nightingale Manor in Hout Bay is a sandbag structure Funded by MNF



Components

- Polypropylene geo textile bags filled with sand or local earth / aggregate
- Bags slot into modular, lightweight ecobeams (made easily on site)
- Windows, doors, drainage, electrics slot into / between modules
- Clad with natural breathable lime or clay plaster, concrete plaster or corrugated iron sheet.
- Roof trusses clad with corrugated iron or traditional insulated roofing
- Extra storey easily added in time.



Fill

- The thermal properties dictated by the kind of fill used.
- Sand dune encroachment is a big problem in Hout Bay
- This sand can provide the perfect fill for the Hout Bay ecobag housing scheme



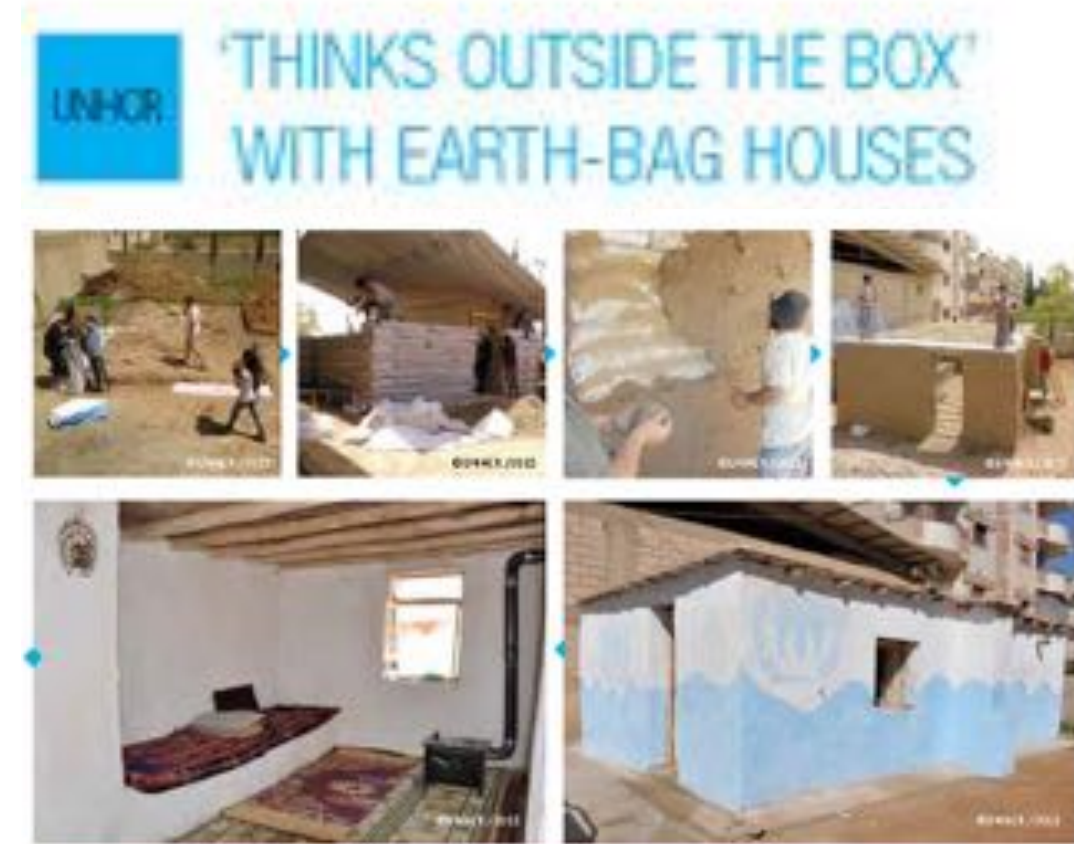
Sand Bag Houses Win Global Competition

- In 2008 SA architects MMA won a global architecture competition - Design Indaba 10x10 for new low cost housing for Freedom Park township near SA



The Future

- **Sand bag housing classed as temporary housing by UNHCR**
- This means refugees can experience the safety and quality of a permanent home without losing their status and rights
- The average time a person spend living in a refugee camp is 17 years
- 2016 the UNHCR planning to expand the earthbag shelter solution to other areas of need within the world.
- Using benign waste from other industries such as mining for bag fill creating closed loop sustainable system for the future.
- Hout Bay – pioneering new uses for sand bag housing



'Compared to tents the earth bag built house has many advantages without being a permanent construction and can be easily dismantled and the material re-used.' (UNHCR Shelter 2015)

Looking to the Future

- **What are next steps for MNF in Hout Bay?**

Keep supporting the Hout Bay charities on the ground eg LITTLE ANGELS NEW CRECHE



UNLOCK THE STRATEGIC POTENTIAL OF HOUT BAY

eg DEVELOPMENT OF THE WATERFRONT



NEW CENTRAL CLINIC FOR HOUT BAY

CATZ ARCHITECTS

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What next? - International Collaboration

- Using imaginative Town Planning and innovative affordable housing as catalysts for social integration and economic opportunities.
- Developing Effective Policy alongside delegates from developing countries. E.g. MNF have been invited to attend a Crown Agents course in November with Poplar Harca Housing Association.

THANK YOU

