

# *The International Awards for Liveable Communities*



Ministry of Municipalities Affairs  
and Urban Development



Kingdom of Bahrain



## **Arad Bay Project**

Development of the Protectorate Area in Muharraq-Bahrain 2013

# *Where is Muharraq?*

- ❖ **The Historical fortunate position has been very influential on the country's community activities.**



- ❖ **The livable community of Muharraq has a prominent impact on the urban and economic development of the province**





- ❖ Location of the project which is close to the traditional town and large catchment area of Muharraq

Muharraq Satellite Image 2013

The location of the project is also close to Arad Fort which was built in the typical style of Islamic forts during the 15th century A.D. before the Portuguese invasion of Bahrain in 1622 A.D.

# Sustainability Context:

- ❖ **The natural and built landscape is the fundamental criterion of sustainability and visibility within the wider range of Muharraq community's policies which are related to the preservation, creation and management of a sustainable society.**
- ❖ **Sustainability within this context is demonstrated by the past, present and future condition of landscapes and heritage which are developed for the creation of a liveable community.**





*Before*

**Muharraq's municipality was able to expand green areas and roadside planting. Main streets have been planted on either side and in the middle, resulting in a small number of gardens and parks in urban areas.**

**Arad Bay Project shows a process of transforming the neglected bay into a clean natural park for marine plants, fish and migratory birds.**



*After*

# *Why Arad Bay Project is one of the Environmental Best Practices?*

- ❖ **Enhancement of the Natural and Built Landscapes,**
- ❖ **Arts, Culture and Heritage,**
- ❖ **Environmental Best Practices,**
- ❖ **Community Participation and Empowerment,**
  - ❖ **Healthy Lifestyle,**
  - ❖ **Strategic Planning,**



# 1. Enhancement of the Natural and Built Landscapes:

- ❖ The island's simple topography and lack of rain or running water courses created a challenge in terms of enhancing the natural and built landscapes.
- ❖ As for livability in Muharraq city, green zoning has become among the priority objectives in recent local city plans.
- ❖ Such landscape in harsh climate is available thanks to recycled treated water ; Recycled and treated water is now used for irrigation of all landscape in Muharraq.



## Development of Dohat Arad Bay Protectorate Area Project:

The site measures 30 acres of land around picturesque 100 acres of bay sea water, for public recreation and marine ecosystem conservation project that was completed in 2011.



**Created a public walkway 3KM long with additional ancillary and recreational facilities**



**The project generated high cooperation between various agencies and active support of the community. Two bridges that connect adjacent neighborhoods across a highway was donated by a private sector in Muharraq; which is one of the best practice of Public Participation.**

## 2. Art, Culture, and Heritage

- ❖ Muharraq is indeed rich in its heritage and full of cultural activities such as art, craftsmanship, and folk dance.
- ❖ The main country's religion is Islam, but it's also open towards other religions; Catholic and Orthodox churches, Hindu temples as well as a Jewish synagogue are all present on the island.





**Music, Dance, Theatre and Fine Arts:** Muharraq is famous for poets, artists and sculpturer who regularly win local and regional awards related to various types of arts.



**High quality of precious metal jewels and natural pearls are part of Bahrain's economy and tradition.**

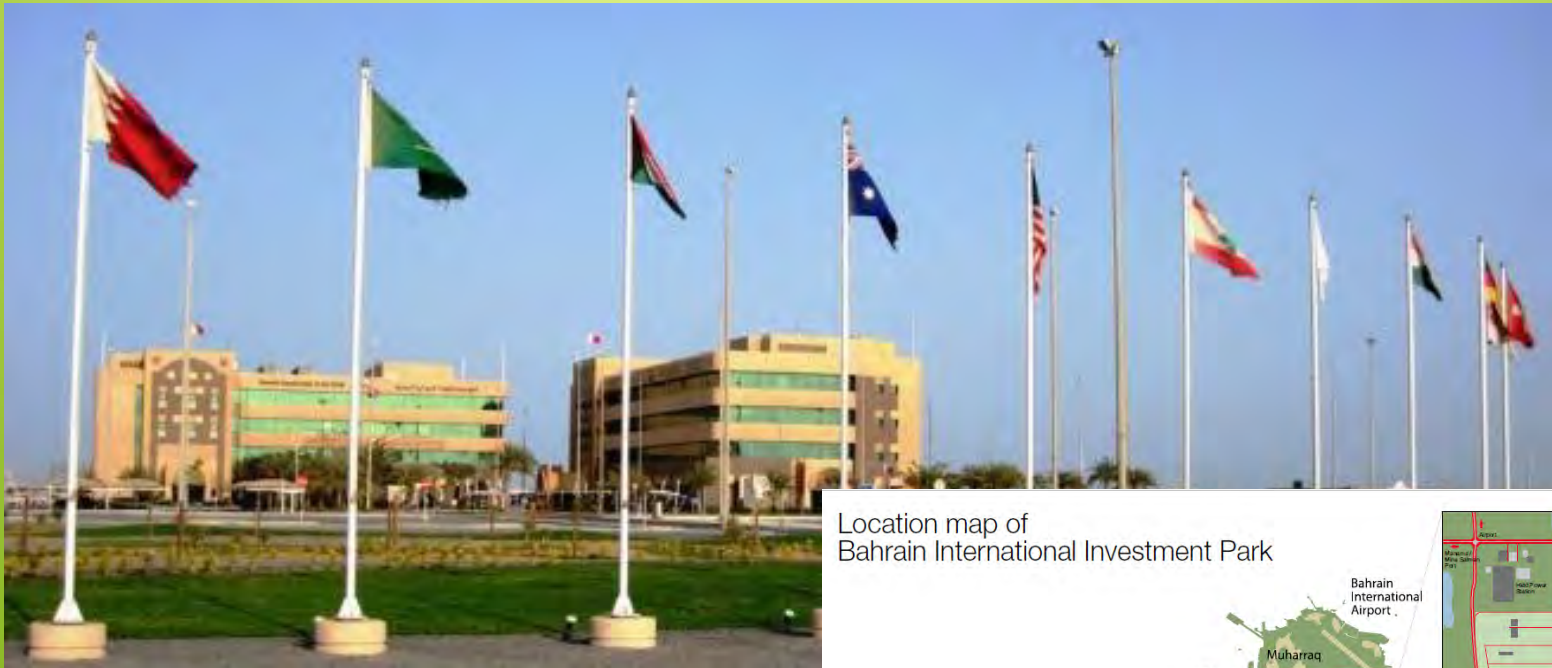
### 3. Environmental Best Practices:

- ❖ **Various initiatives were introduced to ensure not only the implementation of environmental practices but the encouragement of innovative solutions by present establishments in the city.**
- ❖ **Best practices are a feature of accredited management standards such as ISO9000 and ISO14001. Up to April 2013, over 300 companies and enterprises have certified as ISO9000 and ISO14001 in Bahrain; Muharraq has 88 alone, are located at Bahrain International Investment Park (BIIP).**
- ❖ **This is done by providing sustainable development policies, such as waste management, water conservation and reduction, air quality, energy conservation and conversion programs for efficient lighting and reduction of light pollution.**



### 3.1. Bahrain International Investment Park:

- ❖ Incentives are provided by BIIP to any successful initiative that has evident and tangible impact on improving people's quality of life and are the result of effective partnerships between the public, private and civic sectors of the society; which are also socially, culturally, economically and environmentally sustainable.



Location map of Bahrain International Investment Park

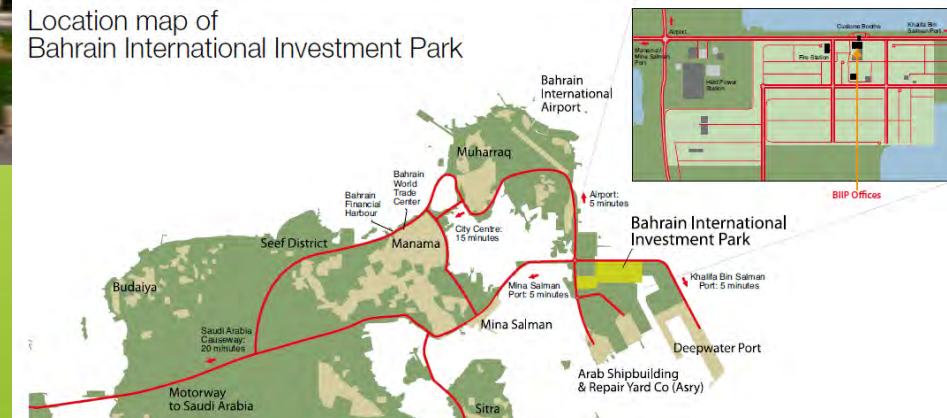


Photo and Plan illustrating Khalifa Wharf, Industrial and Investment Zone in Muharraq

## 3.2. Signature Bahrain:

- ❖ **Bahrain Green Awards was created as a platform to showcase green initiatives in order to inspire and stimulate others for the benefit of the environment locally, regionally and globally.**



- ❖ **This environmental practice has initiated a movement to support those organizations and individuals who are making a difference in Bahrain's environment.**

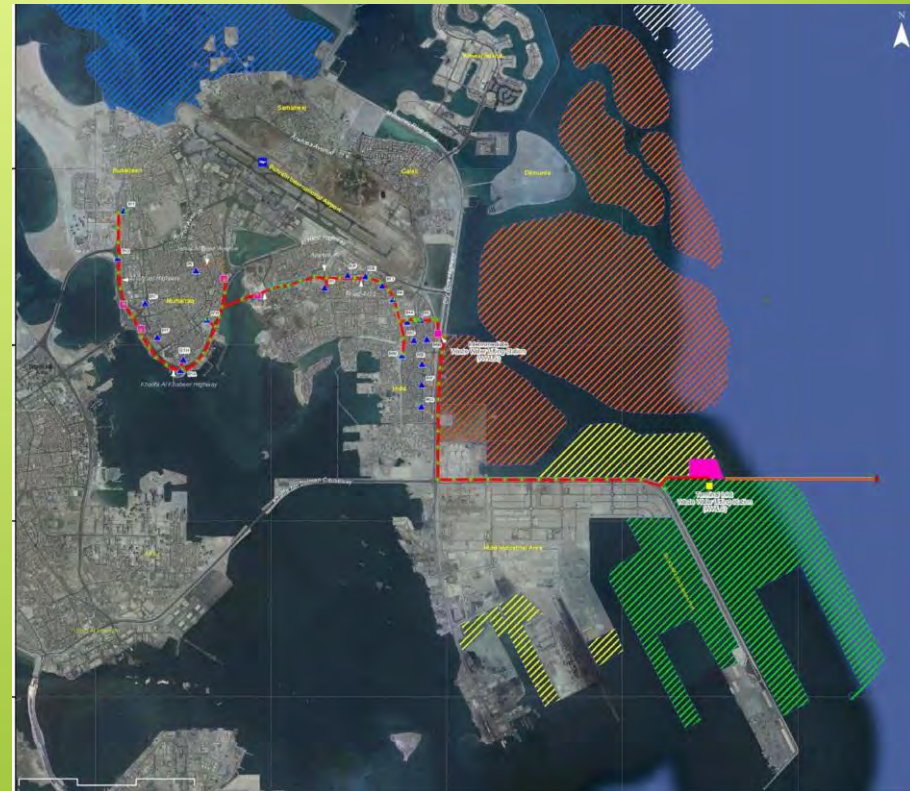
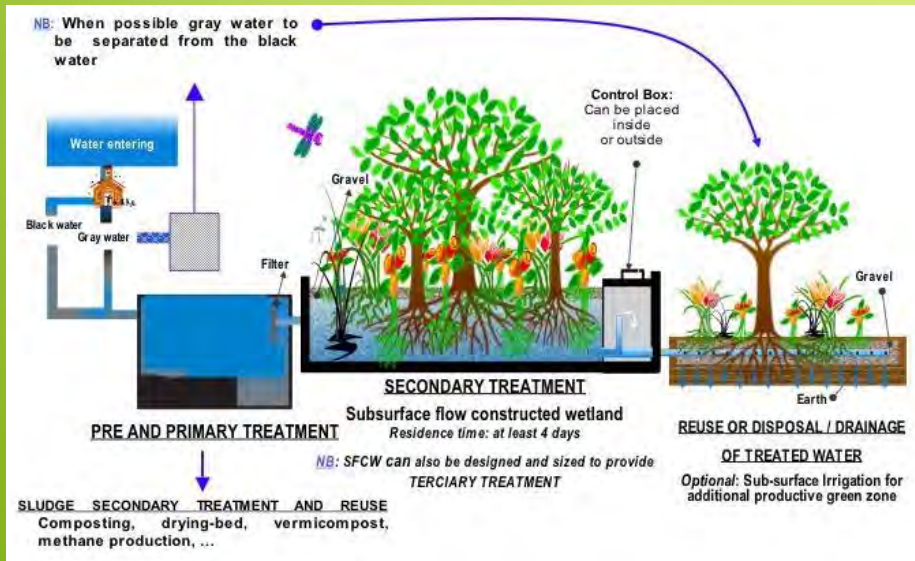
Initiatives from UK under the Prosperity Fund have been launched as a project that provides opportunities for the Kingdom of Bahrain to reduce energy intensity and CO2 emission for the first time.

- ❖ **Even though it is a contribution to the cause, the awards require collective efforts and active participation of Bahrain's business community to sustain and make it a national success.**



### 3.3 Development of Sewage Treatment Plant and Sewer Conveyance System Project at Muharraq (On a Build, Own, and Operate Model)

The new Muharraq sewage treatment plant reinforces and is in line with Bahrain 2030 National Plan and Environmental strategy for Muharraq city.



**The plant is designed to have a lifespan of 25 years. The sewage treatment plant has been designed to treat up to 100,000 m<sup>3</sup> of raw sewage per day with room for expansion to treat up to 160,000m<sup>3</sup> per day.**

## 4. Community Participation and Empowerment:



- ❖ **Community participation approving traditional areas in Muharraq.**
- ❖ **NGOs are widely recognized in Muharraq's community as leading impartial corporate sector groups.**



**Two bridges that connect adjacent neighborhoods across a highway donated by private sector in Muharraq; which is located in Arad Bay Project.**



**Bahraini women accounted for 34.3% of the total labor force recorded in the Civil Service Bureau. This is the highest rate in the GCC countries, and approximates that of the European Union countries.**



**Capacity- Building Workshop by Tamkeen ( Empower in Arabic) and Civil Service Bureau to empower women in Muharraq committee.**

## 5. Healthy Lifestyle:

- ❖ **Quality of life in Bahrain means achieving high-level of human development.**



- ❖ **Cooperation between the Ministry of Health and Ministry of Municipalities Affairs and Urban Planning has provided walkways in different areas in Muharraq.**

***" All population has access to quality health care throughout life time"***

***The Vision of the Ministry of Health in Bahrain***

## ❖ A- Bahrain National School Health Program BNSHP include:

- 1 - BNSHP: A defined strategy and policy direction with (objectives, guidelines and standards).
- 2- The challenge for children and adolescents.

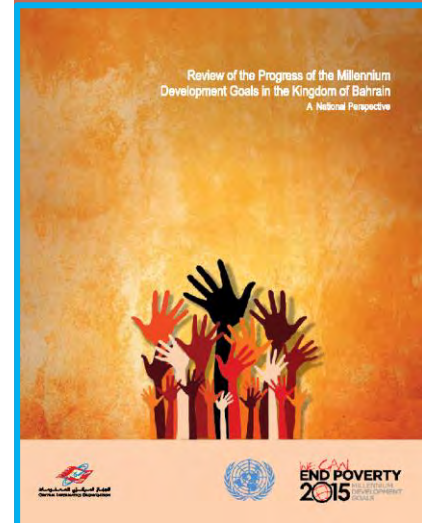
## ❖ B- Healthy and Active Lifestyle:

- 1- Healthy Living Program,
- 2- Lose Weight, Begin a Fresh Start,



3- Dilmunia Health Project:  
Manmade Island of 125 hectares and a cost of \$1.6 billion, Dilmunia Health Island Project was officially launched off Muharraq's North East coast.

**Muharraq  
Quality of  
Life has met  
the UN  
Millennium  
Development  
Goals  
since 2010.**



<http://www.undp.org.bh/Files/2010MDGProg/2010MDGBHRPROGRESS.pdf>

## 6. Strategic Planning:

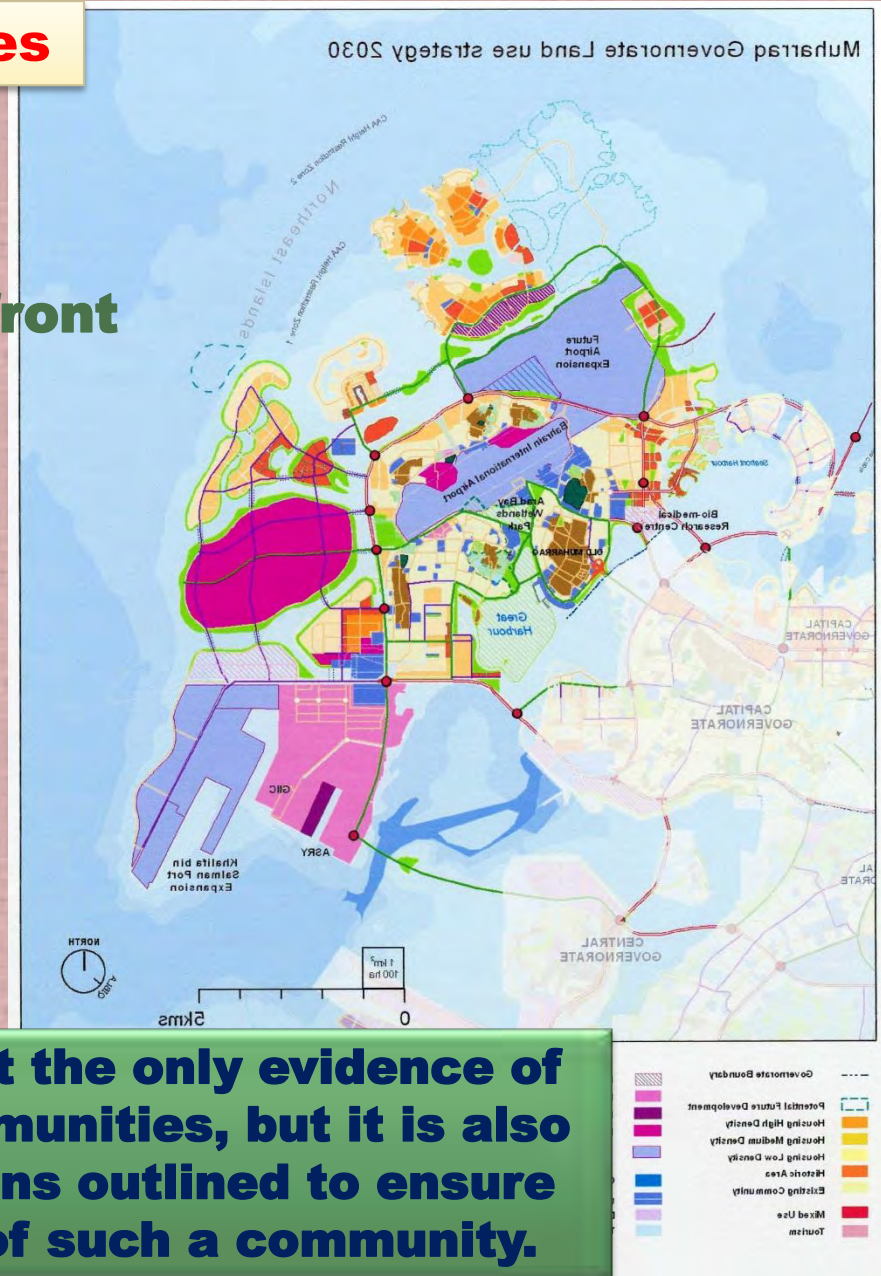
### Muharraq Concepts and Principles

- ❖ The Old City of Muharraq
- ❖ The Communities
- ❖ Create Open Spaces & waterfront
- ❖ Economic Development
- ❖ Improve Transportation & Traffic System

#### Development Vision:

The vision is to create a governorate that enhances and safeguards Muharraq as the cultural, economic portal and gateway to Bahrain.

Muharraq's current prosperity is not the only evidence of it being an example for livable communities, but it is also seen in the structured strategic plans outlined to ensure the continuation and development of such a community.



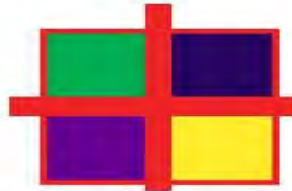
# Hierarchy of Plans:

Structural Plan



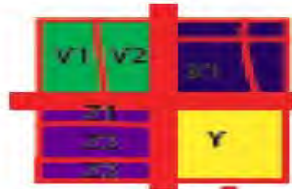
- Long term objectives and strategies for physical development
- Policies and programme for implementation and delivery
- Conformity with general policies of the Kingdom
- Comprises reports and maps
- Subject to periodic review

Master Plan



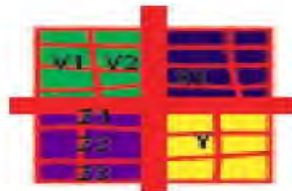
- Physical planning guidelines to implement Structural Plan
- Key themes: Land use, amenity, public utilities and services
- A medium term plan (5 year review)
- Conformity: Zoning and determination of building regulations must conform with approved masterplan

Detailed Plan



- Means of realising general policies and programmes contained in structural and master plans
- Determines population and building densities to accord with land use identified in masterplan
- Assessment of requirements for public services and allocation of land for roads and utilities
- Preparation of building regulations and planning standards

Subdivision



- Key plan implementation tool - All development projects are subject to subdivision
- Must be consistent with the general planning requirements of the Kingdom
- Involves the creation of plots in accordance with building regulations for zoning
- Subdivision results in creation of new titles deeds as pre-requisite for building permits

Building Permit



- Consenting regime for new development – applications assessment against conformity of project against building regulations
- Applications considered by the Municipality and OSS and can be made as 'Preliminary' and/or 'Final'
- Process ensures coordination with utilities and service providers