

2.0 Understand site context

At the start of the design process, the project team should find ways to understand and optimize the relationship between the project site and its surroundings.

A thorough understanding of the site's natural and urban context will help inform an optimal site layout. This understanding will also support many design objectives, including:

- improved outdoor thermal comfort;
- energy use reduction;
- water conservation; and
- ecological enhancement.

Natural systems, such as existing habitat and topography, and urban systems, such as nearby community facilities, can be examined in separate assessments or together. Ultimately all site information should be integrated to identify opportunities and constraints associated with building on a particular site.

The project team should ensure that they adhere to the vision set out in Plan 2030. Any significant or valuable natural systems identified in the natural systems analysis should be adequately protected. If protection is not possible and a strong rationale is given for development, the adverse impacts of development on natural systems must be mitigated or compensated. A Natural Systems Design and

Management Strategy must be prepared to ensure the long term survival and management of the landscape and habitat areas.

The project team will then be able to move on to the next step in the process: planning the site layout.

Useful resources:

- UPC Plant Information Database and UPC Coastal Development Guidelines (www.upc.gov.ae)
- Geographical information database for UAE (<http://geoportal.abudhabi.ae>)
- Google Map/Earth
- EnergyPlus Weather Data (<http://apps1.eere.energy.gov>)
- Interpretation Manual of Major Terrestrial Natural and Semi-natural habitat types of Abu Dhabi Emirate, Gary Brown and Benno Boer, Environmental Research and Wildlife Development Agency, September 2004.
- Terrestrial Environment of Abu Dhabi Emirate, Environment Agency Abu Dhabi, 2008 (www.ead.ae)
- Handbook for Phase 1 Habitat Survey – a technique for environmental audit, JNCC, 2007 (www.jncc.gov.uk)

- Environment Agency (<http://www.ead.ae>)
- Union for Conservation of Nature, IUCN, (www.iucn.org)
- Wild Flowering Plants of UAE, Environmental Research and Wildlife Development Agency, 2002
- Birds of Abu Dhabi – Checklist, Environmental Research and Wildlife Development Agency, July 2001
- Vascular Plants of Abu Dhabi Emirate, Gary Brown and Sabitha Sakir, August 2004
- Regulation and Supervision Bureau (RSB) (www.rsb.gov.ae)
- Abu Dhabi Water and Electricity Authority (ADWEA) (www.adwea.com/en/index.html)
- Abu Dhabi Water and Electricity Company (ADWEC) (www.adwec.ae)
- Abu Dhabi Distribution Company (ADDC) (www.addc.ae)
- Al Ain Distribution Company (AADC) (www.aadc.ae)
- Abu Dhabi National Energy Company (TAQA) (www.taqa.ae/en/uae.html)
- Abu Dhabi Transmission and Dispatch Company (TRANSCO) (www.transco.ae)

