Max at Kierland
Speculative Office Development

SUSTAINABILITY CASE STUDY

Quick Facts	
Location:	Scottsdale, Arizona
Site:	7.24 acres
Type:	Speculative office
Size:	257,476 SF
Project Start:	December 2005
Const Comp:	April 2008
Architect:	Keating|Khang Architecture
Contractor:	McGough Construction
Garage:	684 spaces
Surface Parking:	182 spaces
Sustainability:	USGBC Pre-certified under LEED-CS Development Certified Level
Est. Energy Savings from ASHRAE base:	500,000 kWh 82 tons of cooling $67,500 annual savings
Owner:	ING/TCC JV

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CHALLENGE

With construction nearly 75 percent complete, Max at Kierland boasts a number of sustainable features. Although the building was not originally planned to seek LEED® certification, the team determined it would be a beneficial designation to recognize its contribution to the environment, tenants, and investors. The challenge was to get the entire design and development team to look forensically at what had been done rather than the traditional design review process normally employed.

STRATEGY

By applying TCC's best development practices, the building already represented approximately 80% of the points needed for certification and all required pre-requisites. The building has achieved LEED-CS pre-certification from the USGBC. TCC is now implementing minor modifications to finalize the certification.

RESPONSE

- Reduced the heat island effect of the building by providing 75% of the parking underground.
- Exceeded local zoning open space requirements by 25%.
- Restored more than 50% of the net site area with native vegetation.
- Reduced light pollution by strategically placing exterior fixtures and using indirect light sources.
- Reduced operating costs by exceeded ASHRAE energy performance standards by 19.6%.
- Reduced solar heat gain through the use of dual glazed insulated glazing systems with "low E" and "frit" coatings.
- Reduced heat transfer into the building by installing a thermally broken curtain wall system.
- Increased occupant comfort by installing window shades on all exterior windows.
- Reduced electrical demand by installing Variable Frequency Drives (VFD's) on the building's mechanical equipment.
- Installed a high-efficiency chilled water central plant.
- Committed to purchasing 35% of the building's electrical power from renewable sources.
- Reduced water consumption by installing low flow fixtures and self generating auto flush valves in the restrooms; installed drought resistant plants with a low-flow irrigation system.
- Installed an advanced energy management system to monitor the building's systems, ensuring optimal performance.