



## GRAYHAWK, SCOTTSDALE, ARIZONA

# Development

### WILCOX ROLE

During this project Wilcox played a major role on the design development team. Grayhawk is a planned community located in North-Central Scottsdale. The entire project totals over 2,300 acres of mixed uses including: single-family residential, multi-family residential, open space amenities, resort, employment uses, municipal uses and medical facilities.

### PROJECT DESCRIPTION

#### Drainage

Wilcox developed a Master Drainage Plan for a 2.5 square mile watershed located in the North Scottsdale Alluvial Fan area tributary to Grayhawk. Using the HEC-1 computer program, simulations were prepared for existing and proposed conditions to estimate storm water runoff. Preliminary design was prepared for proposed drainage infrastructure, such as flood control channels, storm water detention basins, culverts and bridge crossings. Wilcox managed project coordination among the cities of Scottsdale and Phoenix, the State Land Department, the Bureau of Reclamation and private property owners.

#### Water Distribution System

Wilcox prepared the water distribution system master plan for the Core North area. The master plan modeled 14.7 miles of pipe covering approximately four square miles with an average demand of approximately 4 million gallons per day. The master plan estimated water demand, based on current City of Scottsdale criteria, determined the storage required for the proposed development and located pressure zone boundaries. The model incorporated both proposed and existing well sites.

#### Circulation

With direction from the City of Scottsdale and other sub-consultants, the Circulation Master Plan was prepared which provided the basis for the roadway network including street cross sections, signal locations, turning lanes, bus bays, etc. Our team also prepared the overall circulation master plan exhibit showing the components of the report.

#### Infrastructure Design

Design documents were prepared including:

- 2.5 miles of water transmission main extension
- 2 miles of sewer main extension
- 3 miles of drainage channels with capacity from 100 to 1500 CFS.
- Major street development including 0.75 miles of Thompson Peak Parkway (6-lane arterial roadway)
- 0.5 mile of Hayden Road (4-lane arterial roadway)
- 2.5 miles of Grayhawk Drive (a major Grayhawk arterial street)
- 0.5 miles of Scottsdale Health Care Drive (local commercial roadway).

#### Land Development

To date, the firm has processed preliminary and final plats along with subdivision plans for 10 parcels within Grayhawk. We have also prepared construction documents for Grayhawk park, El Dorado School, Avian Condominiums and Grayhawk Resort.

#### Survey

The survey team played an integral part in the development of approximately 2,300 acres at Grayhawk. This included preparing 5 state plats, 8 subdivision plats, 6 maps of dedication and ALTA surveys over all parcels prior to development including post-development ALTA's over the Talon & Raptor Golf Courses. In addition, the survey team performed construction staking for all development.