

# Kitty Hawk Subdivision

## | Civil Engineering

**LOCATION:**

Corpus Christi, TX

**CLIENT:**

John Bratton

**RVE ROLE:**

Project Manager

**Project Description:** Planning for a 250 acre large lot residential development. Planning included a master layout plan and a master drainage plan which included internal drainage and a major open channel providing for drainage of upstream properties. Planning also involved rezoning and preparation of a preliminary plan

with utility layouts.

Unit 1, a 51 acre development, required design of streets, waterlines, storm sewers, outfall structures and a major drainage channel serving a major drainage basin. Included in this project was the preparation of the land title survey, preparation of preliminary and final plats, preparation for the rezoning of the property, preparation of legal descriptions for easement recordation, collection of field data and preparation of topographic maps for design base maps and subsequent surveys for control points and construction surveying, and surveys to establish horizontal and vertical control.



A drainage master plan was developed to serve the entire drainage basin. RVE established required right-of-way widths, channel sizing and culvert sizing. The ditch and culverts were designed for a 25 year storm event, but has the capacity to pass the water of a 100 year storm event. Hydraulic losses across culverts were calculated and flow lines of the ditch were adjusted accordingly. Construction of the first phase of the master drainage channel was included with the subdivision construction.

**Services Provided:**

- Boundary Surveying
- Topographic Surveying
- Master Development Plan
- Master Drainage Plan
- Zoning Application
- Preliminary Plat
- Final Plat
- Paving and Drainage Plans
- Water Plans
- TxDOT Driveway Permit

