

Corpus Christi Air Traffic Control Tower (CRP ATCT)

Executing Water ECMs using the ESPC ENABLE

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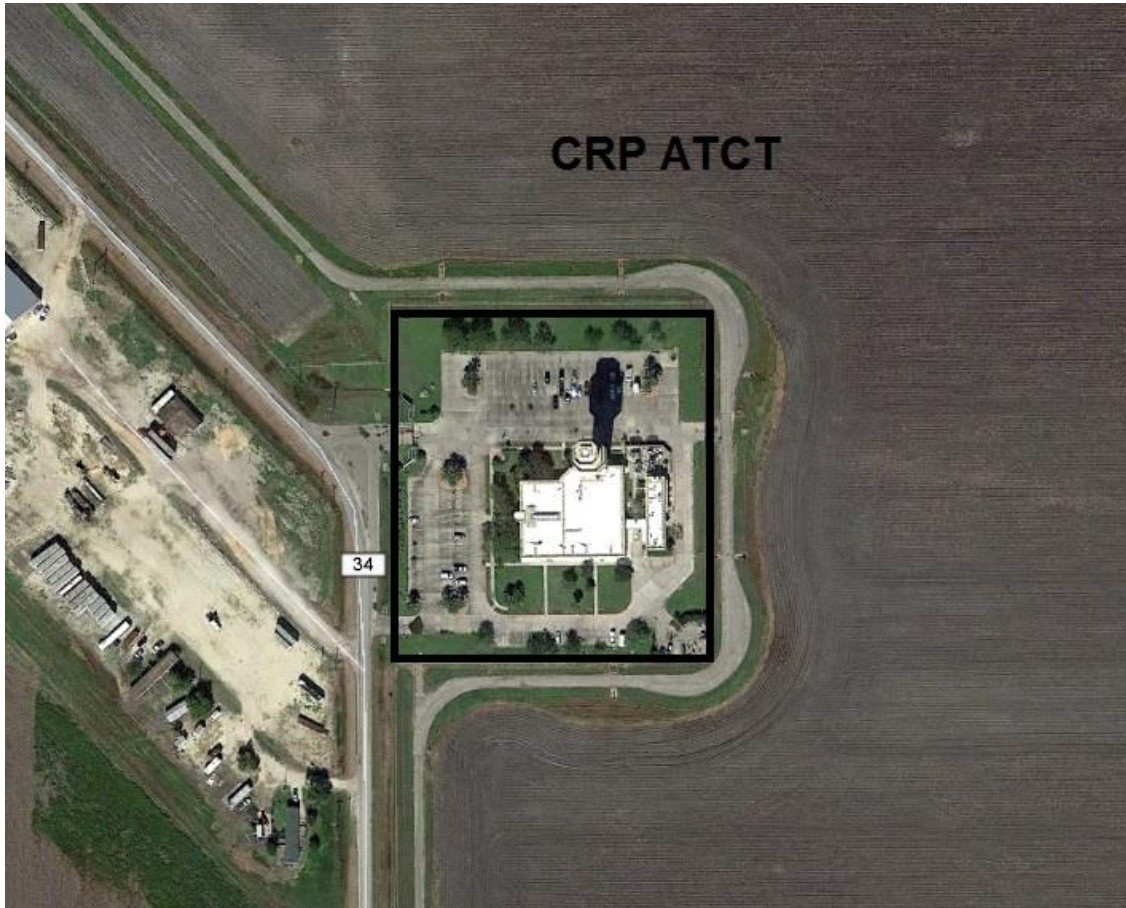


Energy Savings Performance Contract - ENABLE

- **Identified a site with multiple, unfunded energy/water needs**
- **ECMs completed:**
 - PV System (ground mounted, elevated)
 - Boiler Upgrade
 - Computer Room-Air Conditioner Replacement
 - Lighting Upgrade (internal, external)
 - **Xeriscaping/Irrigation Repair**



CRP ATCT (used for example)



- **Commissioned in 2002**
- **24/7 facility**
 - Two breakrooms
 - Two main restrooms
 - Two small restrooms
 - Showering facilities
- **5+ acre site**

Water Conservation

- **Fixture replacements**
 - Removed 4 1.6 gal/flush toilets with 0.8 gal/flush
 - Replaced 11 1.5 gpm and 3 2.2 gpm aerators with 1.0 gpm
 - Three shower heads (1.5, 2.0 and 3.0 gpm) replaced with 1.5 gpm shower head
- **Landscape reduction**
 - Elimination of high-water use landscape
 - Removed grass and non-native plants
 - Existing irrigation system was in need of repair
 - Costs to repair were used to offset the cost of this ECM (which helped make it viable)
 - Most irrigation was removed, small area was repaired for foundation support
- **Condensate collection from HVAC**
 - This ECM was investigated but was not cost effective and was therefore not used

Water Conservation

- **Prior to project**
 - Building used 106k gal/yr
 - Landscape used 1,800,000 gal/yr
 - Broken pipes leaking
 - Cost to repair was \$12,760
- **Completion**
 - Saved 1,803,836 gal/yr
 - Cost Savings
 - \$12,677/year in water, sewer fees
 - \$7,306 landscape and sprinkler repair (O&M savings)
- **Year-1 Savings**
 - Water ECMs have performed as promised and the achieved savings are about equal to estimated
 - Overall project achieved \$83,955 savings in year one (estimated to be \$78,887)





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