

# High Volume Fly Ash for Texas Parks Building

Before construction began on the new park headquarters building at Lake Somerville State Park, the Texas Parks & Wildlife Administration decided it had a great opportunity to get involved with sustainable building practices. Using High Volume Fly Ash (HVFA) in concrete structures at the site was one of the main sustainable building components used in the project.

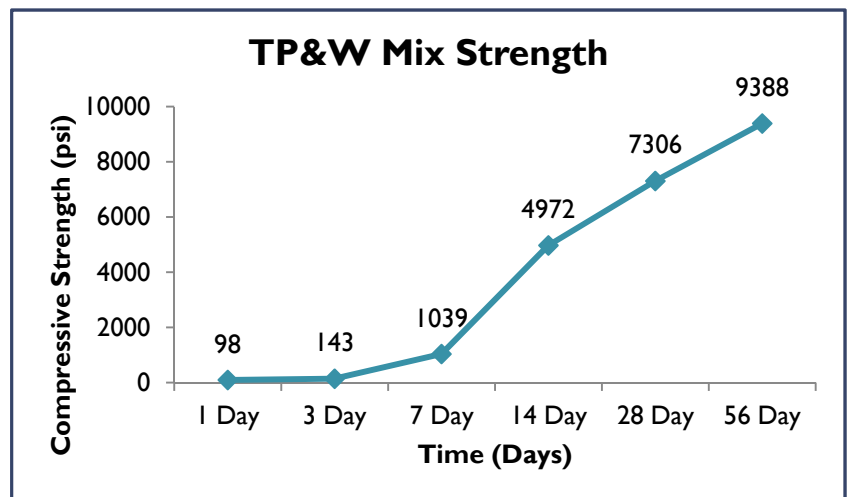
Although it was a relatively small pour of 80 cubic yards, it was the first HVFA mix design used by the Texas Parks and Wildlife Administration and its contractor, QuadTex Construction. They chose a mix design of 75% fly ash in order to make the concrete as environmentally positive as possible. The HVFA replacement was such a success that the TP&W Director of Design, John Warrick, plans to use HVFA mixes on all future TP&W projects.

Concerns that set times would be too long, strengths would diminish, and finishing would be very difficult because of the amount of fly ash proved to be groundless. The set time varied insignificantly from a straight sack mix design, strengths were higher than anticipated, and finishing and curing were not an issue. The anticipated strength was 5000 psi at 28 days. The actual strength ended up at more than 7000 psi in 28 days, far surpassing the anticipated strength.

Fly ash was the perfect product for this project because of its sustainable features. Along with building environmentally friendly concrete structures, the contractor enjoyed improved strengths, lower water/cement ratio, improved workability, decreased permeability and increased durability – all benefits of using HVFA mix designs.

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*HVFA mix design helped meet the sustainable building needs of the Texas Parks and Wildlife Administration at its new park headquarters building at Lake Somerville State Park near Somerville, Texas.*  
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Using HVFA in this project allowed the TP&W to produce a more durable and sustainable foundation for its new headquarters. The ground breaking success of this HVFA project has helped the TP&W join the green building movement and leads the way for future green construction practices.



*Finishing the 75% fly ash concrete was done with ease, despite initial concerns that finishing would be more difficult compared to conventional concrete.*

For more information or answers to questions about the use of fly ash in specific applications, contact your nearest Headwaters Resources Technical Sales Representative or call 1-888-236-6236.

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