

# THE LOVETT SCHOOL

Atlanta, Georgia

## Project Purpose

The Lovett School Project owner was in the process of obtaining LEED Gold certification and was looking for water efficiency credits in that context. The owner wanted to combine the entire campus into one logical and up-to-date irrigation system. The Irrigation Consultant was involved with the planning of current and future construction projects on the campus that utilize harvested water for irrigation.

## Special Factors

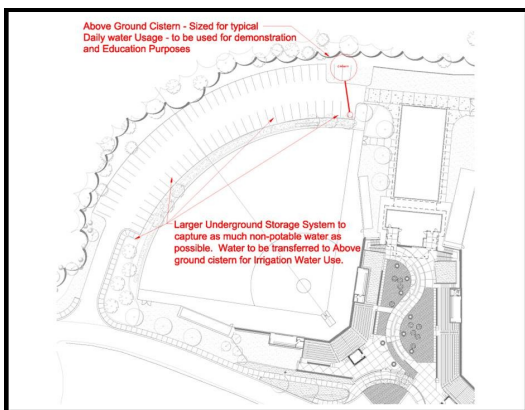
There were several challenges with this project. First, the majority of the irrigation was already in place – mostly athletic field irrigation (i.e., high water-use areas). Second, although the main water source was an irrigation pond using harvested water, the school had the priority of replenishment water being non-city, low-cost water. Therefore, a well and river transfer pump were utilized for makeup water. Finally, the two new building areas (middle school and ball fields) required very detailed planning to ensure that the water harvesting systems were sized adequately to meet system demands. The ball field portion of the project is even more unique in that all water leaving the site (above and below ground) is being harvested for future use. This was highly beneficial in meeting the high water-use demands of intensely used turf areas. It also required the development of a very large storage system. The Irrigation Consultant was able to coordinate with the entire project team to ensure that a system was developed that would meet both the harvesting requirements and irrigation needs of the site.



## Role of Irrigation Consultant

The Irrigation Consultant provided:

- Analysis of the existing irrigation systems for the site - identifying the water resources available for irrigation and determining the irrigation demands of the various systems around the Lovett School campus.
- Development of water methods to distribute these water resources throughout the campus. For areas that were not yet built or were being planned, water harvesting systems were put in place.
- Development of a master plan for the site with the owner, which included analysis and planning.
- A BMP for site water use. All planning and analysis related to the existing irrigation systems was performed directly for the owner.
- Development of water-harvesting systems that could meet the water needs of future project areas and utilize as much harvested water as possible.



## Significance

This project enhances the irrigation consulting profession by serving as a prime example of utilizing planning and analysis to dramatically reduce the amount of potable water used, and develop other low-cost alternative water-use strategies. In addition, the newly developed water-harvesting systems for the ball fields and middle school were planned to serve as demonstration and educational tools for successful water harvesting. They both utilize aboveground storage tanks, which are or will soon be equipped with readable exterior tank gauges for Lovett School to utilize in student educational activities. The Lovett School project provided the Irrigation Consultant with multiple opportunities to significantly and positively impact the environment.