



PROJECT:

# Super America

Leading the way with sustainable solutions

## LOCATION

Ham Lake and Wyoming,  
Minnesota

## PROJECT TYPE

Commercial Development

## COMPLETION DATE

1997

### NEED

Super America Corporation contacted JW NAWE in 1997 with two "problem" sites. Each was in a highly desirable location, but both lacked sewer service. Soil and space limitations restricted the options for conventional septic systems.

The proposed gas station and convenience store was confronted with onsite wastewater treatment problems even before a construction permit was issued. Regulatory agencies were very concerned about the poor soil conditions (clay) at this site. A standard septic system would have taken valuable land and would have had a short life, thereby requiring upgrading in a short period of time.

At another location the area available for treatment and disposal was too small for conventional onsite systems. A high strength waste from the Super Mom's bakery and car wash also complicated the situation.

### SOLUTION

Because the area available for infiltration was limited at both sites, JW NAWE designed subsurface flow constructed wetland systems. Wastewater is treated in a lined cell where bacteria are allowed to degrade the waste to provide clean water for disposal.

A second unlined wetland infiltration cell provides additional nutrient uptake in the plants and infiltration of pretreated effluent into the soil.

### BENEFIT

Both stores have advanced wastewater systems that treat high strength waste in a limited area. The treatment efficiency of the subsurface flow wetlands allows both facilities to successfully utilize the limited space available in this high-traffic commercial corridor.



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