

CLIENT:
Love's Travel Centers

OBJECTIVE:
Design large truck and car full-service center from existing abandoned, two-pump gas station



CHEYENNE, WYOMING

LOVE'S TRAVEL CENTER

Challenges	Solutions
Busy interchange (I-25/College Dr.) with constant high volume of traffic	Constant interface and coordination with WYDOT was required for necessary access without disrupting traffic flow
Outlying location made it cost-prohibitive to bring Cheyenne water to site	Designed one mile of offsite sewer to tie into existing facilities, plus drilled an additional onsite well to accommodate water demand
Existing topography and lot size limited site layout alternatives	Designed two-level property at the back of the lot, and separated the traffic flow at site entrance
Major drainage problems created by I-25 runoff	Designed large detention facility for both onsite and offsite runoff through underground storm sewer
Easements for fiber optics, phone lines and other utilities cut through the middle of the property	Significant relocation of utilities required extensive coordination with multiple source representatives

RESULTS SUMMARY:
Transforming a simple two-pump gas station into a full-service truck center might be considered a relatively simple Engineering project ... on a large, square plot of land. But the restrictions of the 10 acres lot and its odd shape limited the design choices for BenchMark Engineers, plus its distance from Cheyenne brought Additional challenges to the team.



BME utilized the largest portion of the site for the building, located at the back of the lot, designing a multi-level station to maximize the space. This enabled them to resolve the traffic access and flow issue by separating cars from trucks upon immediate entrance to the site and directing each vehicle to its respective service area.

BenchMark bypassed the water and sewer obstacles by designing solutions both on and off the location. A one-mile sewer was installed to tie into existing facilities, and an additional well was drilled onsite to accommodate the high demand. They also added a large detention facility through an underground storm sewer system To address both onsite and offsite runoff from I-25. The client claims this facility to be among their busiest of 94 locations nationwide, serving approximately 800 vehicles daily.

