

Mayflower Mountain Resort Budget Summary

A new world class skiing location known as Mayflower Mountain Resort is under construction near Jordanelle Reservoir in Wasatch County Utah. The resort's public infrastructure will be owned and maintained by the Utah Military Installation Development Authority (MIDA). MIDA is in the process of creating a Public Improvement District (PID) to maintain the improvements. TROCO Engineering was asked to help MIDA develop an infrastructure management plan and budget for the PID. The following is a description of the tasks and methodology used to develop the maintenance budgets for the Mayflower Mountain Resort PID.

INFRASTRUCTURE

The infrastructure quantities were obtained from the various approved plan sets, permits, and studies and that represent the project area. As in all construction, there are many modifications that require adjustments to the plans. Much time and effort were used to find the most current plan sets. These were cross referenced with studies and permits to derive the most accurate numbers that represent the project area. The infrastructure quantities shown in the infrastructure spreadsheets are for budget purposes only. Actual and complete quantities for infrastructure inventory accounting will be obtained when as-built drawings are submitted by the developer.

Methodology

The majority of the quantities were obtained by calculation. Roads and storm drain lengths were calculated station by station. Quantities of each item between stations were recorded and summed.

Items such as signs, street lights, fire hydrants, and pavement markings were counted, recorded and summed.

Retaining walls and structure quantities were taken from permits or measured from the plans.

Detention basin quantities were measured from the plans rather than from those provided in the studies or tabulated on the plans. Typical plan and study quantities only included the pond and not the entire site around the pond. For budget purposes, the entire pond site was included. It was felt that the additional pond area was important to be include in the maintenance of the PID.

BUDGET

Unit Prices Costs

It was assumed that the Mayflower Mountain Resort PID will be maintained through contracted services. The majority of the unit price costs used in the budget were obtained by contacting contractors, maintenance companies and collecting current year bids from several cities. Some numbers were estimated by TROCO Engineering based on over 40 years experience in the industry.

Method

The budget is based on quantity takeoffs described in the infrastructure section of the summary. The annual budget reflects portions of the total infrastructure quantity that is estimated by maintenance strategies common to the engineering and public works industry. Some budget numbers were used to build fund balances to account for larger infrastructure repair or replacement in the future.

Description Annual Maintenance Strategies

The following are examples of maintenance strategies and how they were used in the budget study:

- The budget assumes that every road and paved trail will be crack sealed ever year, slurry sealed every three years, and overlayed every twelve to sixteen years.
- The budget assumes that striping and pavement markings will be refreshed every year.
- The budget assumes that detention ponds, will be maintained every year.
- The budget assumes that catch basins, storm drain junction boxes, and manholes will be maintained every year.
- The budget assumes storm drains will be video inspected every three years.
- The budget includes landscaping that will be seasonally maintained to industry standards.
- The budget includes annual maintenance of portions of the following items based on estimated damage from accidents and wear and tear: street lights, guardrails, signage, sidewalk, curb and gutter.
- The budget includes numbers for maintenance of some items for which the scope cannot be quantified. These annual budget numbers are used to build up a fund balance to handle maintenance and replacement of failed infrastructure. These items include retaining walls, structures, and storm drain repair.

Capital Improvement Projects (CIP)

The budget includes the following CIP projects: salt storage building, snow handling facility and improvements to the Marina West detention pond. The budget assumes that all CIP projects will be completed the first four years of operation of the MIDA PID. These are rough estimates that were derived by conversations with mechanical engineers, architects, planners and contractors. These numbers will need to be modified once an actual location for the snow handling facilities is determined and the Marina West Detention Pond Study is complete.

CONCLUSION

The information provided by TROCO Engineering is a tool of budgets and maintenance strategies. Using this as a tool, the MIDA PID maintenance manager will adjust the budget annually based on current year's expenses and projected costs of the upcoming budget year. Fund balances play a major role in the budgeting process. As the PID builds fund balances, the budget should be adjusted to reflect actual higher and lower fund balances.