

Multiple Tiers to Solution for the Whitefish Town Pump Station

The town of Whitefish needed a new convenience store located at the entrance to town that would provide a wow factor and reflect the desired style of the area as a 'Gateway to Whitefish'. The site of the new convenience store has a significant grade change on the Southeast and East sides which would have limited the amount of space available for fueling stations. The best solution was to have a terraced retaining wall on those sides of the site, allowing for the fueling stations to remain on the same grade as the store. With the new updates to <u>AB Walls</u>, it was the perfect time to use the new Terrace design feature. "Always Better" is not a just a saying here at Allan Block but embedded in the culture. This applies equally to the design tools as it does to the blocks themselves. This project was the first to utilize this feature, allowing all sections of the terrace to be designed at the same time rather than as individual walls.

Project Information

Name: Town Pump Location: Whitefish, MT Products: AB Stones Size: 12,000 ft² (1115 m²) Contractor: Alpine Landscaping Designer: DCI Engineers Allan Block Manufacturer: White Block Company Inc. Spokane Valley, MT

Plan:

With such a unique site and the need for the retaining walls, they contacted Allan Block and the local manufacturer White Block to try and find a solution. Derek Jones with White Block then got involved to help facilitate communication between engineer, contractor, and the AB Engineering team to provide an approved design using Allan Block. A larger setback was desired for the retaining wall and AB Stones was a good candidate for the size of the wall. The increased setback also provided additional stability. The block colors needed to fit the overall aesthetic of the town, as this convenience store is one of the first things visitors will see upon arrival. Derek Jones was able to help by sending photos of available block colors that were already in the yard. Eventually a Project Information Name: Town Pump Location: Whitefish, MT Products: AB Stones Size: 12,000 ft2 (1115 m2) Contractor: Alpine Landscaping Designer: DCI Engineers Allan Block Manufacturer: White Block Company Inc. Spokane Valley, MT Allan Block Corporation 7424 W. 78th St. Bloomington, MN 55439 Phone: (952) 835-5309 Fax: (952) 835-0013 decision was made to go with a 60/40 blended mix of gray and tan to match the brickwork on the store itself.

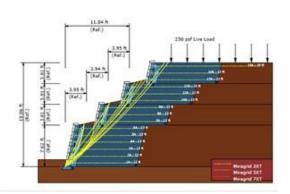






Design:

After the block type and colors were confirmed, the next step was to revise an original design and turn it into an Allan Block solution. This is where the AB Engineering was brought in to provide a preliminary design. Derek Jones, working with the contractor, was able to bring in Chris Schlegel from DCI Engineers, Inc. to



review the preliminary design and finalize the plans. There were a total of six walls on the site (counting the terraced portions as a single wall) with two having most of their length in a terraced configuration. The updates to the AB Walls software helped cut down on the design time allowing all levels of the terraces to be designed at once. Because all levels were designed together, the horizontal offsets between each were able to be included in the cross section, along with accounting for infill soil and the extra lengths of geogrid.

BUILD:

Dave Reynolds with Alpine Landscaping was key to this project. This project faced a number of challenges during the course of the construction process but Dave was able to use his experience and perseverance to meet each challenge and overcome them. A major problem that affected this project was Mother Nature. A snowstorm hit after the excavation had been completed, which got compacted into the excavated area and delayed the construction. Another challenge he encountered was the cast-in-place stairs needed to be included in the middle of the terraced wall. This



necessitated a call to the AB Engineering team who were able to work with him to answer his questions and assist with installation inquiries. Despite the challenges, the wall was completed by mid-2021 which allowed for the next phases of the construction to proceed, and the convenience store opened at the end of 2021. The addition of the Allan Block retaining wall not only helped functionally by adding more space available for fueling, but also met the town's desire for a higher-end look as you come into town.

Allan Block Corporation 7424 W. 78th St. Bloomington, MN 55439