## Surveying

**Engineering** 



6/6 Engineering and Construction (Surveying) This engineering and construction project entails surveying, analyzing and property examination at the PSU Millar Library of the University of Portland State. In doing this particular project, various considerations were taken to factors such as the popularity of the property, the public using the facilities and the pedestrian foot. The facility in this case is currently being used in accordance to its use and this therefore means that improvements in the property will help in increasing the usefulness and the functionality to the public.

The main objective of this project was to survey, analyze and take into a consideration of the current and the future use of the facility. Alternatively, the information in this case will be used in adding, changing, removing and designing new space that will be in use in future. In doing the construction project, the construction team experienced various challenges, which generally delayed the project. The two main challenges that the team faced were the problems to do with the construction instruments and the environmental issues. Generally, accurate surveying requires a clear space between the target and the surveyor. In this case, the only time that was available for the construction team was from mid-day to 3: 00 pm. While doing their work, the construction team had to deal with a hostile environment where they experienced non-stop flow of cyclists and walkers. This created a stressful working environment for the team. For effective work at the facility, the team had to request people frequently to wait for them to complete certain measurements at the facility. Despite all the obstacles experienced by the construction team at the facility, the program went on successfully without further delays.

Other challenges that the construction team experienced during the project https://assignbuster.com/surveying/ was ensuring the measurements were precise especially while making use of the total station equipment and while viewing through the prism. This was because the level concrete foundation was not perfect. In engineering and construction, there is a general rule that it is always important to ensure that the total leveling station is accurate and perfect. Extra attention and adjustments in this case had to be calculated outside since the data was displayed in order to be interpreted effectively so that the construction team can be able to obtain the exact measurements. Some of the equipment that the construction project utilized included a measuring tape, total station with prism, chalk, safety vests and colored marking pens.

The entire project was completed on May 15th 2014 around between 12: 00 and 3: 00 pm. In as much as the concrete surface was irregular and damaged, the total station was placed carefully in order to ensure that the accurate measurement data was effectively taken. From here, the results were checked extensively to avoid any errors in the work. Despite the hostile environment, which was characterized with large crowds and many cyclists, the construction was uninterrupted for the better part of the day. The construction team was recommended for their excellent work in doing the project.