Building a Handicap Accessible Entrance and Gabion Wall

As people age, their bodies naturally deteriorate and often times people are confined to wheelchairs in order to get around. Uneven and unstable ground is a large obstacle for people who live confined to a wheelchair. This project was derived and designed in order to help a family with multiple family members bound to wheelchairs to allow them an easier point of access into the home. The project itself consists of the construction of a concrete walkway and a gabion wall to provide some additional aesthetics. The concrete pathway ranges from the driveway to a paver pathway that curves around the side of the house, creating a flat, stable path to push a wheelchair. The gabion wall sits parallel to the concrete pathway and then makes a 90° turn toward the street. While constructing the project, I needed to install some sleeves underneath the concrete path to route some drain pipes and TV & Phone lines as well as a 3rd sleeve for future use. The deliverables for this project include the concrete pathway and the gabion wall, with the sleeves being an added scope of work.

Key Words: Concrete, Wheelchair, Gabion Wall, Construction

Steps Taken
1. Call 811 to locate all underground utilities located in project area
2. Remove gravel pathway and excavate 5" of soil for specified layout of pathway.
3. Locate all future drain lines and excavate an extra 5" for drain pipe sleeve in 2 locations.
4. Locate and excavate 18" from grade and place 2 1/4" PVC conduits for TV and Phone lines.
5. Level out concrete pathway area to allow for a 4" concrete slab
6. Build formwork, place vapor Barrier, place and tie #4 rebar for the concrete walkway
7. Place concrete, consolidate, level it out, apply broom finish, groove control joints.
8. Remove form boards and clean-up site from concrete placement.
9. Excavate various depths for Gabion wall foundation and for drain pipes.
10. Assemble drain pipe system and backfill trenches.
11. Assemble the gabion wall cages and place the rocks inside.

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Fall 2018