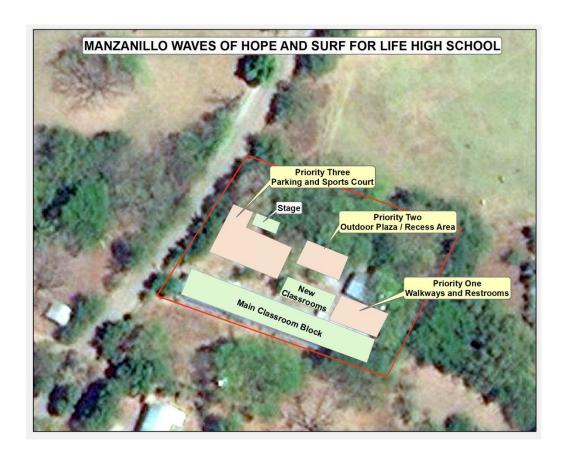


Manzanillo High School Improvement Project

This is a two part budget and proposal that outlines prioritized work necessary for the Manzanillo High School. Although functional, the school necessitates a number of improvements such as walkways, stairs, bathroom facilities, garbage facilities and outdoor space. The following highlights our ideas in priority sequence based on budget and work timeline.

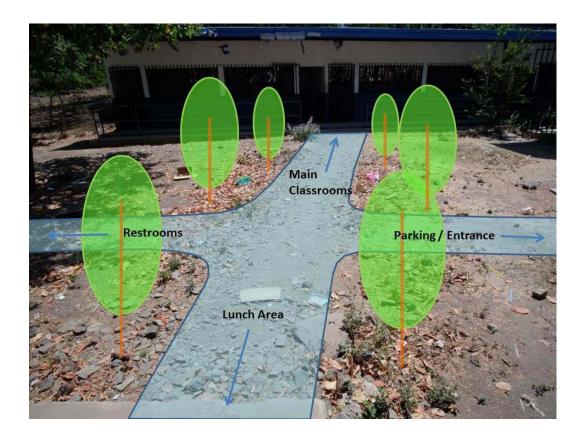


Phase One Service Retreat - One week

The back portion of the school yard is a high traffic area that is dry and dusty in the dry season and muddy in the wet season. The toilets in back are in need of repair and painting, while the main footway area could really use some walkways, planting and repair. The following images are our ideas on what this could look like with walkways made from interlocking bricks called alequin. This is the same material used for the block road that comes into the community and is advantageous because of their cost, durability in both wet and dry seasons and ease of repair.

The school restrooms are also in need of repair and maintenance including repainting, replacing broken water pipes from the cistern to the tank and from the tank to the hand-washing area, and replacing the handwashing sink.

There is also a need to build stairs at the south west end of the new classrooms building.





Stairs construction for the new classrooms



Estimated Budget (Walkways)

Blocks – $550 \times 25 = 13,750 + 4,000$ (contingency for walkway curves and extra space) = 17,750 Sand = 2,500 Gravel / Fill = 1,700 Cement for borders = 6,900 Mano de Obra (Labor) = 10,500 Total estimate = 39,350 cordobas \$1,311 USD)

Estimated Budget (Stairs)

5 bags cement including sand and gravel = 2,300 (already have blocks) Mano de Obra (Labor) = 3,000 Total estimate = 5,300 cordobas (\$176 USD)

Estimated Budget (planting/borders/soil)

6,000 cordoba (\$200 USD)

Restrooms refinishing and replacing water piping

Paint/concrete/pipes/sink and other materials = 12,000 Mano de Obra (Labor) = 6,000 Total estimate = 18,000 (\$600 USD)

Contingency

9,000 cordoba (\$300 USD)

Total Estimated Budget for Phase One Project

72,250 cordoba (\$2,408 USD)

Phase Two Service Retreat - Outdoor Plaza / Recess Seating Area

The second phase of the Manzanillo High School improvement project is a proposal to construct an outdoor plaza seating area. As most of the school grounds is open dirt, the majority of the outdoor areas are dusty in dry season and muddy in the wet season. We hope that by constructing an outdoor area using the same blocks as the walkways we will be able to reduce the amount of mud and dirt that is tracked throughout the school and provide an aesthetically appealing area for social congregation, studying and lunch breaks. The trees in this part of the school provide a natural shaded area that is currently not being utilized.

The following image provides a conceptual idea of what this area could look like. It is still necessary to provide an open area to the left of the plaza where water trucks can get access to the cistern shown on the right side of the photo.



Estimated Budget - Plaza

Blocks – $1250 \times 25 = 31,250 + 5,000$ (contingency for walkway curves and extra space) = $36,250 \times 300 = 5,000$ Gravel / Fill = $3,200 \times 300 = 12,000 = 12,$

Estimated Budget - Seating Area

45,000 (\$1,500 USD) rough estimated cost

Total Phase 2 Estimated Cost

101,450 (3,381 USD)