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## Land Development - Tree 4 Hope

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# Land Development - Tree 4 Hope

## Presenters: Caleb Light and Jorge Zambrano III

### Introduction

The Land Development Team for Tree 4 Hope has been asked to improve the outdoor facilities Hope Academy in Santa Lucia Milpas Altas, Guatemala. The first goal of the project was to design the school's parking lot to support the cars and busses going in. The second goal was to design a single dual-sport sports court that allows both soccer and basketball to be played. The third goal was to provide the school with a playground that is directed towards STEAM (science, technology, engineering, art, and math)

### Client

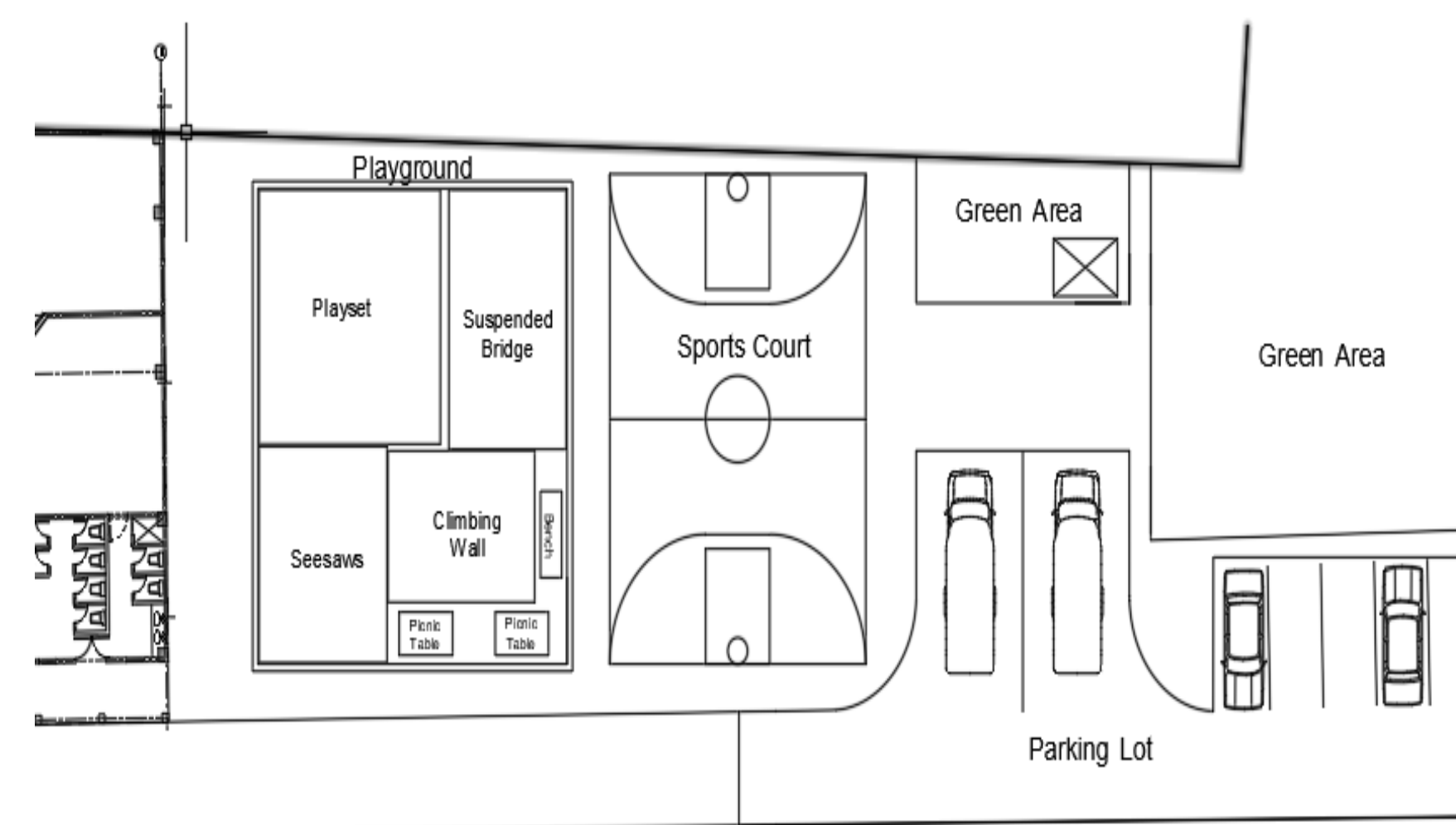
The Land Development Team has partnered with Tree 4 Hope and Hope Academy located in Santa Lucia Milpas Altas, Guatemala. The team worked with David Hope-Tringali and Julio Herrera to complete this project.

### Site Development

Existing Conditions



Final Layout



### Results

The completed site design includes the location, dimensions, and grading for the parking lot, sports court, and playground. All the drawings for the parking lot and sports court were done in AutoCAD and the drawings for the playground equipment were done in SolidWorks. The final cost estimate of the project including necessary materials and rentals is about 230,142 Guatemalan Quetzal, which translates to 29,918 United States Dollars.

### Conclusions

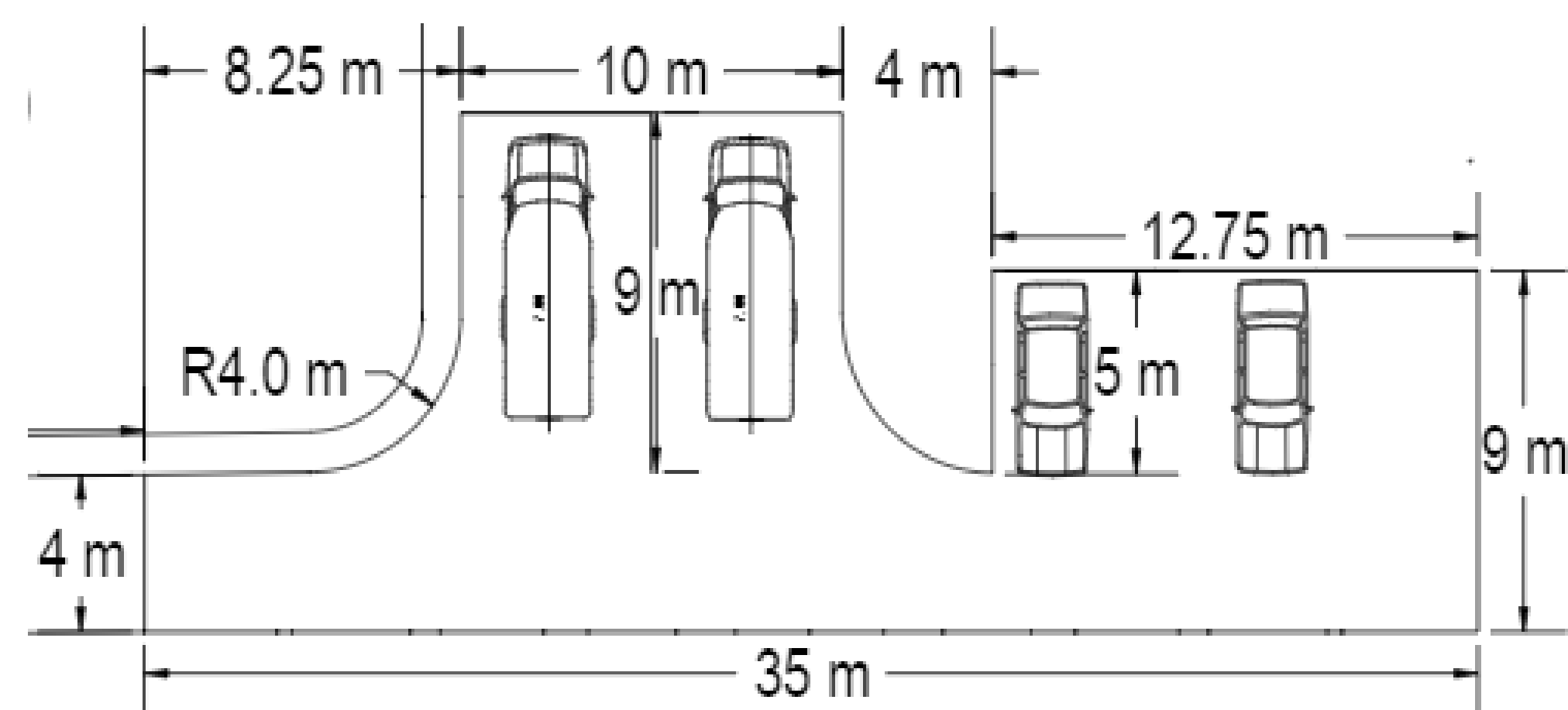
The Land Development Team has completed the final drawing package and playground details. These drawings will be given to David Hope-Tringali and Julio Herrera to be used for construction in the coming months.

### Acknowledgments

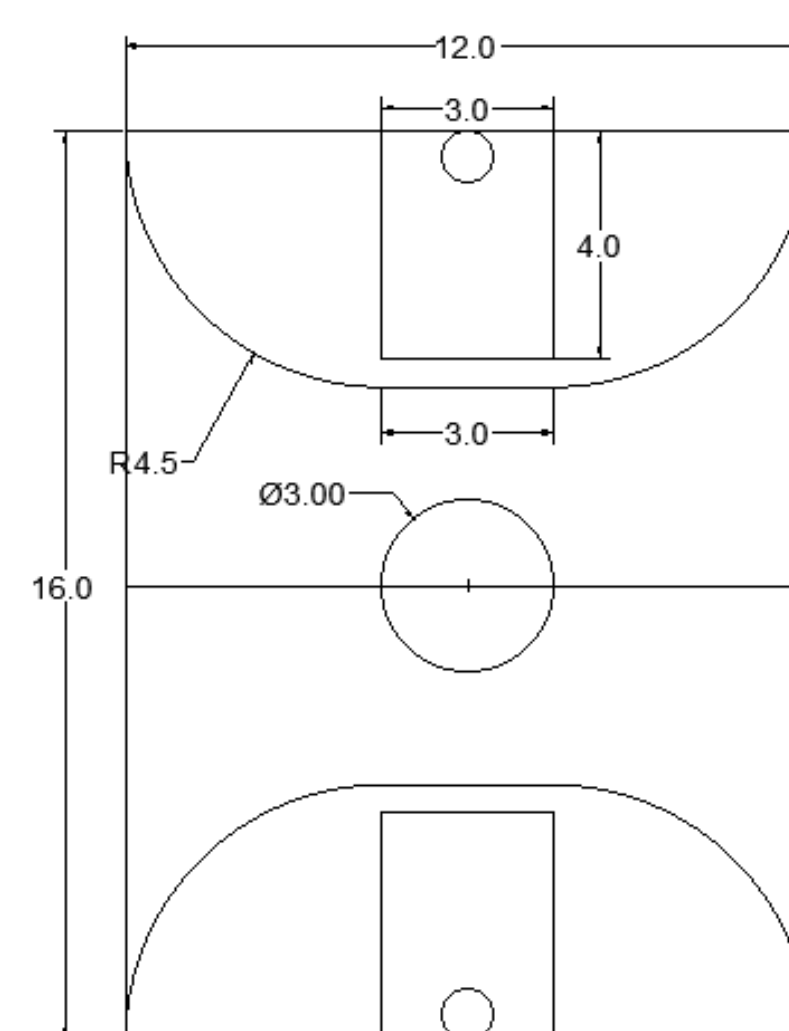
Prof. Scott Heisey  
David Hope-Tringali  
Andy Erikson  
Julio Herrera  
Julio Lopez

### Final Designs

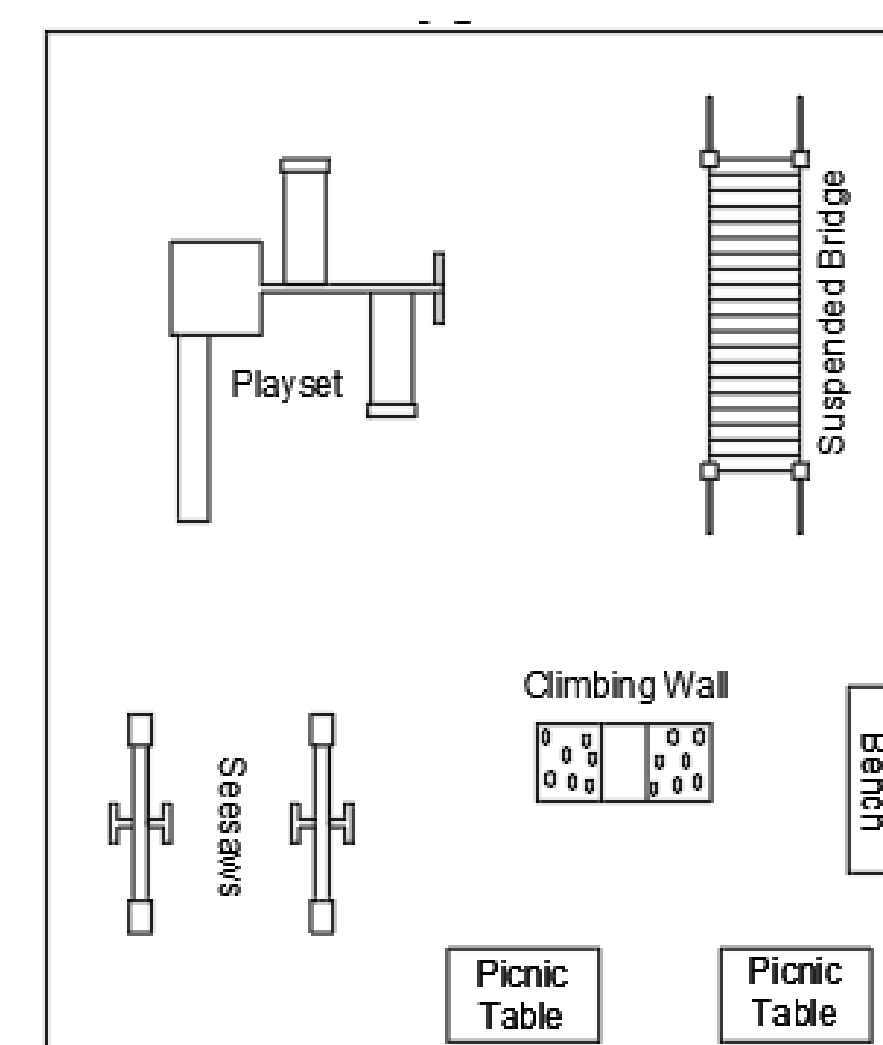
Parking Lot



Sports Court



Playground



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