# Parents for Joy, Atascadero All-Inclusive Playground

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Parents for Joy is an organization that was created in 2014 by a group of parents and families living around the Atascadero community who have children with special needs. The group raised over one million dollars to build a playground that enhances the safety of both children and adults with special needs, regardless of what needs they possess. Nick Volluci and Harrison Tucker, the author, were chosen to assist on this project in order to provide a high quality and methodical product that catered to the special requirements set forth by the owners, Parents for Joy and the City of Atascadero. The author was seeking the opportunity to provide a service to the special needs community because of his heavy personal involvement with disabled children throughout his life. This project provided an opportunity to learn about Project Management in a highly-passionate and emotional project environment. Construction activities spanned from May 1<sup>st</sup>, 2018 (groundbreaking) to April 5th, 2019. The project team was more than pleased to present them with the first fully inclusive park on the Central Coast.

Key Words: Parents for Joy, Accessible, Park, Atascadero, Project Management

#### Introduction

Having family with special needs entirely changes your perception of the life in which they have been chosen to live. Having been heavily involved in volunteering for adaptive programs for the majority of my life, I have so much empathy towards the special needs community. It has also given me the ability to see inadequacy in accessibility that public community projects like playgrounds typically result in. One of my primary goals while seeking a senior project was to make an impact on a community that has had such a profound impact on myself and the person I've become today. I was not only able to provide for the special needs community, but also apply a 'Learn by Doing' approach to project management and construction during the course of this projects entirety based on what I have learned as a Construction Management major at Cal Poly. I am thankful this playground will benefit this community for decades to come, as well as hopefully set a standard of inclusivity for the projects that are funded with public dollars to help the whole community.

During my completion of Senior Project Methodology in May, Nick Volluci and I were asked through the College of Architecture and Environmental Design (CAED) at Cal Poly for help on an existing fundraising project. Phil Barlow, Senior Project Director, forwarded an email from CAED Personnel Analyst Kate Auslen, asking for assistance on a project which Kate had personal stake in. Though the project itself had a projected cost of nearly one million dollars, there was no project management team or general contractor to assist the owners during construction. Cal Poly Alumni, Taylor Hamil, stepped up to volunteer and requested two Construction Management Majors to assist with project deliverables for the playground.

The city of Atascadero was desperately in need of a community playground that was all-inclusive. The owners, Parents for Joy had explained the difficulty of trying to provide physical activities for their (special needs) children that remained safe and possible for them to play on. There was a substantial amount of design criteria; the owners expressed great interest in non-abrasive surfaces, full range of equipment that provides access to wheelchairs or paralyzed individuals, as well as alternative means of main structure access which would prevent the necessity for stairs in order to use slides and other 'treehouse' features.

The project was very unique because of the large amount of fundraising required in order to fully construct the project. Lots of the project would require not only donated materials, but also donation of labor and it was made

clear to me that I would be required to communicate and coordinate with subcontractors very frequently. Working closely alongside Taylor Hamil, I was performing the duties and responsibilities of a superintendent throughout the project's duration. I was primarily in charge of scheduling and communicating with subcontractors in order to understand project durations and schedule. Nick Volluci was primarily in charge of the budget and contracts combined with research initiatives to better understand the community we were serving.

### **Construction Process**

The groundbreaking occurred May 1<sup>st</sup>, 2018 with a goal of being completed by the end of the year. Unfortunately, we were immediately affected by unforeseen circumstances. Beginning with the site preparation for our initial regrade, which was expected to last a total of thirteen working days - ended up taking several months to complete. During the initial construction of Colony Park Community Center (2009), the city and contractor had not adequately drawn their utilities as-builts. As a result, misplaced electrical lines and undiscovered plumbing lines prevented the project from performing any cut exercises during excavation. Because of the risk of striking city electrical lines, we were unable to perform an excavation according to our previously approved civil plans. In turn, we were asked to meet and revise the grading plan with our civil engineer. Although we considered surveying for additional utilities, we had already found two existing lines and predicted there would most likely be more. So, we decided with the civil engineer to add fill and bring the park up in elevation. Unfortunately, the redesign forced us to rethink the layout of our playground structure as well. After about four months of delays as a result of the civil re-design as well as a large cost impact, the grading contractors were able to finish the job and move forward with equipment submittals by request of the owner.

Following the re-grade, we had to ask our primary earthwork contractor, Viola, to dig trenches for concrete footings, perforated storm drain. Other than one small issue with conflicting lines as a result of the regrade which I discuss later, we suffered no issues in the trenching process. The following weeks I was in contact with JJ Fisher, our concrete subcontractor, in order to install all forms, rebar and backfills for their respective foundational components. Over the course of the next month, layout of our concrete access ramp was performed alongside the pouring of the concrete footings, curbs and main concrete pad underneath the play structure.



Figure 1: 3-Dimensional Birds-Eye View of Joy Park Rendering

Following the installation of our concrete pad and foundations, was achieving the safety factor required by the owners mandated Pour-In-Place (PIP) Rubber surface. With a high cost of \$140,000.00, the rubber surface was selected as one of the main methods of universal inclusion. What sets this park apart from most "accessible" parks is the PIP surface that allows wheelchairs and limited-mobility individuals to access all parts of the park area. The PIP serves as a wonderful non-abrasive material with the rigidity and durability required in providing access to wheelchairs and safety to special needs children.

Lastly was the installation of the playground equipment and structure. There was a great deal of back and forth communication required between our suppliers, designers and owners in order to figure out exactly which pieces of equipment must be ordered. This process had to be perfect, as we had already fallen behind schedule due to lost time during our regrading. The long-lead items had to be custom ordered from the playground equipment supplier, so it was critical they were ordered to comply with owner requests, as they could not be changed.

Although the majority of the construction is complete and the project has been opened for the public, checklist items remain before closeout can be completed fully. Unfortunately, because of our commitment for handrails and fencing as a donation, we have been struggling to acquire the free material promised to us by suppliers in a timely manner so that we may fully turnover the project. I will continue working on closeout until approximately July.





Figure 2: Groundbreaking Ceremony on May 1st at Colony Park, Atascadero

#### Deliverables

The playground was completed on Friday, April 5<sup>th</sup>, just a few months after the anticipated completion date of December's end. Although the project was completed about 10% over budget, fundraising continues through donation campaigns and other forms of support. Taylor Hamil, Nick Volluci and I were working together to facilitate the completion of this project. Nick Volluci focused on managing the budget and expenses during construction. I focused on the scheduling aspect of the project, as well as construction supervision and coordination.

As a "Construction Supervisor," I completed multiple project schedules and construction reports. The project schedule was the most difficult and demanding portion of the project for me. This was my first time building a project schedule without provided task durations. This was especially difficult to quantify and estimate because of the unpredictability in labor supply, as well as the failure to achieve timeliness in much of the construction. As a result, I failed to accurately assess the duration of the project from my standpoint. Although, unforeseen circumstances played a large factor in these delays and were close to unavoidable.

I discussed earlier in the project the re-grading problem which resulted in a substantial loss of time that I did not anticipate. Later on, we also realized there was an issue with the route of utility layouts. These issues of re-routing a stormwater drainage system prevented utility connections resulting in another short delay.

While physical deliverables were important, a substantial amount of the work required by me was subcontractor coordination and communication. I also played a large role in supervision, observation and (at times) assistance with construction over the duration of the project activities. This was new for me, as it was my first time being

involved in a supervisory role where informal negotiation and "bartering" was required. Smaller items like fencing takeoffs were also done.

Nick Volluci played a large role in this project as the Cost Manager and researcher. Because the project was made possible by a large number of donors and sponsors, the project always had to maintain a goal of achieving the least expensive route. A large amount of volunteer hours were required by both contractors and stakeholders alike. The project continued to move along despite lapses in availability from our laborers and volunteers.

It was very rewarding to provide a near finished product by the end of this year. Construction activities had been taking place for nearly an entire year. On behalf of Nick Volluci and myself, we would like to thank everybody who helped with the project, most notably, our sponsors and fundraisers. In addition, the Parents for Joy organization raised money and extended their generosity in time and hard work. We would like to thank our advisor, Phil Barlow for his assistance and direction on this rewarding opportunity. We also would like to thank Taylor Hamil, Cal Poly alumnus and lead project manager, for being a close mentor and giving us a great 'Learn by Doing' approach to this Senior Project. It was an honor to be involved.





*Figure 3:* Grand Opening Ceremony at Joy Park Playground – Colony Park Community Center of Atascadero

## **Lessons Learned**

This was my first large project which I have been able to see completed from start to finish. I learned many important lessons about my capabilities as a young construction manager, as well as a lot about myself. Helping people with special needs has been a focal point of my life. Growing up with disabled grandparents was something that taught me so much about empathizing with a community that is not able to access the same things as people who are not hindered by physical or mental disabilities. Wood chips, for example, might seem like a good fit for a playground like this; but unfortunately, it doesn't suit people in wheelchairs or people like my grandmother and grandfather who are unable to detect shifts in texture, as well as maintain adequate balance on sloped or mounded surfaces. These nitpicky details are things that people fail to realize or understand about people adapting to living with disabilities.

I learned a lot about construction scheduling, as well as estimating time and resources required for activities in order to build a schedule. It was an expansion from my comfort zone, as I've never had to build a ground-up project schedule without provided or accurate durations. I bettered myself as a construction manager by attempting and revising the schedule several times with Taylor Hamil, Cal Poly alumnus and current Project Manager at a Paso Robles residential construction firm. While I have had the opportunity at Cal Poly to learn and obtain different methods of scheduling, I had never had an opportunity to actually satisfy a legitimate project and formulate my own means of achieving schedule numbers in a way similar to this.

I was incredibly thankful for the opportunity to learn at such an impactful level, as well as have the opportunity to play a large role in a project of this size – something that Cal Poly CM uniquely provides to their students.

#### Reflection

This project was truly a test of patience and will. It was very difficult to help run a project for an entire year in the midst of lab courses, internships and holiday vacations. It was a valuable lesson for me in terms of both work ethic and dedication, because of the time required during classes, etcetera. I figured out new ways of multi-tasking both inside and outside of class that fostered a good learning environment while taking on additional work. Trying to balance over 20 units/quarter alongside a year-long senior project was the most challenging task of my educational career. This experience also helped me to learn the importance of using available resources. Our project manager, Taylor Hamil, was incredibly supportive throughout this process with answering our questions about project status, estimating, durations and scheduling.

Additionally, this project really made me feel connected to the special needs community. I discussed in my paper the disadvantages I saw my own family presented with in public areas such as playgrounds. Wood chips, for example, might seem like a good fit for a playground like this; but unfortunately, it doesn't suit people in wheelchairs or people like my grandmother and grandfather who are unable to detect shifts in texture, as well as maintain adequate balance on sloped or mounded surfaces. These nitpicky details are things that people fail to realize or understand about people adapting to living with disabilities. When I was younger, my grandmother and grandfather who are not able to use stairs safely, were never able to access playground equipment with me. Simple changes to design and a few extra dollars go a long way in benefitting the community and the people who partake in community events. The love we felt from this community as well as the feeling of reciprocation from us was a rewarding experience I hope I am able to perform again once I establish my own career. There is a certain satisfaction that is not achieved through commercial construction which I achieved on this project – that is seeing the smile of children who knew this park was built for them. It is one thing to build an adaptable space; it is another thing to build the whole space in order to make sure they are fully capable of using the space regardless of their needs. At the grand opening, children in wheelchairs and walkers were ecstatic to be able to go up into a treehouse and actually use the slides - for some of them it was their first time doing so! Hearing impaired children had stainless steel slides installed to minimize static energy to their hearing aids, while adults with special needs had custom swings they could fit in that included restraints. The mutual respect and appreciation between our most important stakeholders, the children of Atascadero, and ourselves was one of the most beautiful relationships I've made in my life.

I spent so much time at the project site and working alongside kids and owners that I will never forget the memories I made here at Cal Poly and the Joy Park Playground. After multiple days of cleaning, site preparation and punch list items, we were able to present a well-received project to Parents for Joy and the Atascadero community. Hundreds of people including the mayor, KSBY, and other notable figures attended the grand opening. Nobody was happier than the kids though, and we were ecstatic to make that happen for them. Again, on behalf of Nick Volluci and I, we would especially like to thank the kids who use our project every single day and experience the playground the way it was meant to be experienced: purely enjoyable, never stressful and always safe. We would like to thank our advisor Phil Barlow for the help in acquiring the project and for supporting us throughout with information pertinent to completing a great product for the city. Lastly, we would like to thank our teammate, Taylor Hamil who volunteered alongside us to make this amazing playground turn from an Atascadero dream, into a reality.