

Livvi's Place, Timbrell Park, Five Dock

Australia's First Truly All Abilities Playground - "Giving Kids 1 Million Reasons to Smile"

"Today many so called all abilities playgrounds have a segregated area for kids with disabilities, isolating them from other kids both physically and emotionally. Our vision is to create more than a unique playground but an environment that fosters equality and understanding for children with disabilities. When you visit Livvi's Place you won't know it's a playground purposely designed for kids with disabilities because children of all abilities will play side-by-side, fostering acceptance and equality for children with disabilities for life." John Perkins – Founder - Touched by Olivia Foundation

Why is Livvi's Place an Australian First in All Abilities Playgrounds?

The term 'all abilities playground' has been frequently used incorrectly referring to playgrounds that meet only some of the required standards and failing to cater for all members of the community. This has led to the misconception that all abilities playgrounds exist however, this is incorrect.

Only Livvi's Place (officially opened on 15 November 2009) is truly an all abilities playground purposely designed and built to cater for all ages and all abilities making it the first of its kind in Australia.

Livvi's Place caters for a broad range of special needs in a responsible and respectful manner including mobility, vision and hearing impairments as well as spectrum disorders such as autism to provide for both physical and emotional needs regardless of age or ability.

The playground's unique design enables children and parents of all abilities and ages to play side-by-side on the same equipment, ensuring integration of children with special needs; while the holistic engineering design of Livvi's Place incorporates design features that accommodate children with a multiple variety of disabilities ensuring a safe, secure environment for all children to play.

Livvi's Place is also inter-generational with play equipment exclusively designed to enable a parent, grandparent, carer or sibling to play side-by-side on the same equipment as the child with the disability. Similarly, it also caters for parents with disabilities who are now able to play with their children empowering child and parent to experience play together.

The distinctive design of Livvi's Place offers a range of specialised equipment including a powered carousel (the first of its kind in Australia), a snakes and ladders activity path, a sensory maze, an activity climbing net, a sway bridge and wobble walk, a special all abilities ramp and slide, and much more.

Following extensive research over a two year period (both national and international), Touched by Olivia Foundation and landscape architect Ben Richards, have been unable to identify any existing playground that meets all the necessary criteria to be termed 'a truly all abilities playground'.

Now, after more than two years in the making and at a cost of more than \$AUD1Million, only Livvi's Place, Timbrell Park satisfies all required standards of all abilities playgrounds and so can truly be termed Australia's first all abilities, all generational playground.

What Makes a True All Abilities Playground?

An all abilities playground should be one that at a minimum caters for vision, hearing and mobility impairments as well as spectrum disorders. Catering for one disability, does not satisfy the definition of all abilities. A playground can only be truly considered all abilities if it adequately caters to the physical and emotional needs of all members of the community.

- **Mobility Disabilities**

Playgrounds that provide a wheelchair ramp are often termed an all abilities playground. However, the design incorporating a ramp only caters for the most visible of disabilities. Often this design limits access to the over-all playground meaning people in wheelchairs are segregated from both equipment and able bodied users.

- **Visual Impairment**

It is true that some of the newer all abilities playgrounds cater for vision and hearing impairment, but in basic one dimensional ways. For example using Braille on signage or MP3 guided tours. These examples are relevant for blind playground users, but do not cater for the wider needs of visually impaired people.

Catering for vision impairment can easily be achieved via colour and textural changes in the ground plane so people can orient themselves without having to be led. This encourages independence and allows the user to develop confidence in a public place, allowing them to practice these skills in a safe environment.

- **Hearing Impairment**

Hearing disorders are often dealt with in playgrounds as it is easy. The provision of a musical sculpture that provides a vibration that is pitch specific allows the person to experience sound.

- **Spectrum Disorders – Autism**

The disability that is rarely designed for in public spaces is that of spectrum disorders covering the various forms of autism. It is very difficult to design for individual spectrum disabilities as the general issues are so vast and dissimilar. However, careful, thoughtful design can assist with the problems commonly experienced by people with autism.

Interpersonal and social relationships are particularly difficult for people with autism. New experiences also need to be managed. Learning to socialise is key to children with autism so they are able to develop skills to manage with day to day situations. A safe and familiar playground is an ideal place to begin learning these skills for children, although daunting at times.

Playgrounds for children with spectrum disorders need to contain safe zones that are visually cued so they are quickly identifiable. These zones allow the children to assess any activity that they find threatening from a distance. With time, and it could take years, it is hoped that these children will learn to be comfortable with the playground and won't feel threatened by the activity and begin to participate (socialise).

A well designed playground can also introduce equipment that encourages eye contact with other users, which in itself is socialising. While this activity may happen incidentally, if it occurs in an enjoyable environment, the incident has a low threat value and so becomes more acceptable.

- **Grown Ups Play Too!**

The final element of a truly all abilities playground is if it also caters for adults. A playground should not be designed simply for kids, but adults to, as children want to interact with their parents, grandparents and so on. Playground equipment is traditionally designed for a child's size and as a result excludes adults. A playground is supposed to be a family friendly community asset, by excluding adults it fails to meet this standard.

What Makes the Combined Design Elements Unique?

- **Pathway Design & Construction**

The footpath in and around the playground has been specifically designed to allow visually impaired and blind people to orient themselves around the playground safely without having to be led by a carer. It has also been designed with spectrum disorders in mind so it can be viewed as a safe zone in which a child can experience the playground without interacting with anyone. The grade and width also ensures wheelchairs can get to every part of the playground.

The path is a constant 1800mm wide and constructed from concrete with a brush finish. The construction joints are grey silicone, instead of the usual black mastic, and the tool joints are saw cuts instead of the traditional dummy joints. This method of jointing reduces the visual clutter of the path and makes for a calmer surface for the spectrum kids to navigate. It also creates a smoother surface for cane users to navigate along.

Either side of the path has a 500mm wide band of yellow rubber soft fall. This is the most visible colour to visually impaired people; it provides a great contrast to the grey of the concrete path and the blue rubber on the other side. The texture difference between the concrete and the rubber will also allow people with a cane to recognise when they are leaving the path.

The yellow bands structure the path and define it from the rest of the playground areas where the high activity occurs. This provides a safe zone for the spectrum kids. The intent is that they will, with time, become comfortable within the playground whenever they are between two yellow lines, allowing them to traverse the entire playground, which will aid in beginning social interaction.

- **Rubber Soft Fall Design**

The rubber soft fall consists primarily of blue and grey with some yellow. Blue and grey have been picked for their contrasting colour. The grey will indicate the fall zones of each piece of equipment and the blue represents the rest of the area. This allows vision impaired kids to identify where it is safe to walk. They can navigate safely between pieces of equipment by themselves. This is one of the reasons why the equipment is predominately made up of individual pieces. The fall zones don't overlap making navigation easier.

Play Equipment

The play equipment comprises of off the shelf items, customised off the shelf items and custom pieces.

The items have been selected to provide a graduated selection of different activities e.g. there are three levels of climbing and four types of swinging to accommodate different levels of ability, confidence and age.

With regards to swinging there are the traditional senior and junior swing elements, a Birds Nest Swing and a modified piece for vertical movement.

- **The Birds Nest Swing**

The Birds Nest Swing is a copy of a UK piece that allows an adult to swing with a child in a circular net. This can be enjoyed by children of any ability while the adult provides physical and/or emotional support or is just there to participate. This piece has been used in a few Sydney playgrounds already.

- **Tandem Bull Rider**

The modified piece is a Tandem Bull Rider with modified seats to allow an adult to sit behind a child. Again this could be just to participate, but also allows an adult to use their torso and knees to support a child with limited mobility. This piece was chosen and modified because it provides for vertical movement, which Occupational Therapists believe is very important for a child's development, but is seldom achieved for kids in wheelchairs. It is also a good piece because all participants have to face each other and make eye contact, which is especially good for developing social skills in people with autism. As it is a custom made piece it has never been used before.

- **Slippery Slide**

The slippery slide from the timber access ramp surrounding the merry-go-round has been specifically designed to accommodate an adult and a child for all the same reasons mentioned above. The platform

at the top of the slide allows an adult to lift a child out of a chair and support them down the slide. The stairs beside the slide have a long tread so that the empty chair can then be pushed down the stairs rather than around the whole ramp, so that the child is not left at the end of the slide for a couple of minutes waiting for the chair, which could be humiliating. The deck of the slippery dip is constructed from stainless steel instead of plastic. Plastic, which is what most slippery dips are made from, can cause static electricity, which can damage Cochlear implants.

- **Custom Merry-go-Round**

A custom merry-go-round has been designed for this playground. It has the ability to take ten people, of which up to six could be in a wheelchair, or the special chairs, which will take up to four, built in to the piece or standing. The wheelchairs are strapped to the deck for safety and the chairs on the piece have belts as well. The piece is mechanically powered by a motor that is capable of two controlled speeds. One speed is 5m/second which conforms to the Australian Standard and the other is 2m/second which will accommodate those kids who can't safely do the top speed. There is also a safety kill switch if there is a problem. The merry-go-round has purposefully been positioned within an enclosed space as the "ultimate prize". This piece is considered attractive to all users including children with spectrum disorders. If they want to experience this piece they will need to a) enter an unfamiliar enclosed space and b) possibly have to interact with other users. This piece can be used by every member of the community regardless of age and ability and hence it is the main attraction.

In several instances the playground design ensures that the equipment is comprised of individual pieces, each with a single use to make the activity level and function predictable. This not only allows for a clear indication in the ground plane of which areas are safe and which aren't, (explained under Rubber Soft Fall Design) but also means a Spectrum child can reasonably assess what they will encounter if they choose to engage with that piece of equipment.

- **Snakes and Ladders Path**

This provides a structured graduated challenge, which is not restricted by grades, steps or enclosed spaces that all ages, sizes and abilities can engage with. The options are that a person can take the long way and follow the path or take short-cuts, which increase with difficulty the further along the path you travel. A person in a wheelchair will only be able to take the bridge short-cut, but can participate with other users visually or verbally along the whole path.

The path is covered in rubber soft fall and patterned as a snake with numbers on it, much like a board game. The purpose of the numbers is to try and encourage spectrum kids to engage in the path. A lot of kids with autism control their anxiety by counting, in their head or out loud. By providing numbers in the ground plane, with practice, they will be able to count their way along the path calmly.

- **Musical Sculpture**

These musical sculptures can be found in many all abilities playgrounds as they are fantastic for kids and adults. Not only are they tuned to be correctly pitched, but they are also designed so that deaf people can experience them via vibrations.

The deck bells, which are constructed into the deck leading up to the metal slide, create a vibration that can be felt through the frame of a wheelchair. The deck bells will be tuned so that the pitch mimics the journey i.e. the pitch will rise as you ascend and lower as you descend. This will add another dimension to the experience for the kids that won't be able to use the slide, but want to experience every part of the playground.

- **Natural Areas**

These areas are important for all members of the community to provide some connection with nature and an opportunity for unstructured play. As well as planting these areas will include natural elements, like stepping stones and logs, for coordination and balance activities.

These areas are obviously not accessible by everyone, but provide an opportunity for individual play, which is particularly important to some spectrum kids. It also provides other safe areas for them that are separated from the high activity areas, where they can observe from a safe distance.

- **Safety Fence & Gate**

Safety fences are common in playgrounds and this one also has one, but it has a wheelchair gate as well. The wheelchair gate is configured in a similar manner to an air lock, which is operated electronically. On approach to the first gate the user activates a switch which opens it. Once through this gate another gate is encountered, which cannot be opened until the first gate is secure. This ensures that people getting wheelchairs in do not have to prop open gates, which may allow another child to get out of the playground area and into an unsafe situation.

- **Accessible Toilet**

Accessible toilets are not uncommon in a public toilet block, but this one has an extra and important feature.

This toilet includes an electric adult change table, which allows for full grown child/adults who rely on nappies to be attended to privately. With the table being electric it means that the carer only has to do minimal lifting.

The accessible toilet will also have a lockable storage area for special schools who use the playground regularly to store items that cannot be left in the playground permanently so they don't have to transport them every time.

- **Accessible Set-down**

Another common feature of facilities designed to cater for people with a disability is an accessible set down. This one has been positioned to ensure that children with spectrum disorders will have a visual connection with the playground before they get out of the car.

- **MP4 Guided Tour**

Carers often manage outings with spectrum kids with picture cards. These give a visual itinerary of the outing and prepare them for what they will experience. Council aims to create an MP4 guide of the playground as an alternative to these picture cards, which will begin at the car park.

This means the children are introduced to the whole playground and become familiar with it prior to even leaving home or the classroom and so minimise potential anxiety.

Livvi's Place - Timbrell Park

Welcome to Inclusive Play!