



Risk Assessment

Outdoor Main Play Area

Version History

Date	Edited By (Name & Position)	Major Changes & Notes
05-08-2021	Markus Wilder (Curator)	Document Creation



Risk analysis matrix

Likelihood	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
		1	2	3	4	5
		Severity				

Risk analysis matrix key

Likelihood	
1	Improbable
2	Possible
3	Occasional
4	Frequent
5	Common

Severity	
1	None
2	Minor Injury (cuts, bruises, sickness, diarrhoea, head aches, temporary eye injuries, temporary emotional or psychological distress etc.)
3	Major Injury (lacerations, broken bones, blindness, lasting illness, brain damage, lasting emotional or psychological distress, amputation, burns, organ damage etc.)
4	Death
5	Major Incident (major injury or death of multiple people)



Activity / Item / risk	Description of the initial risk before any mitigation processes	Who may be impacted?	Likelihood	Severity	Risk	What is being done in way of mitigation?	Mitigated likelihood	Mitigated severity	Mitigated risk	Assessment officer
Access to the roof of the highest tower (called the drawbridge on the plan)	The roof of the highest tower (known as the drawbridge) covers the top of a solid wood bridge. If children were to climb on to the safety fencing on the walkway they would be able to gain access to the roof of this structure which is at a fall height of 2.1m. There is little in the way on the outside of the tower when landing other than the drawbridge component of the structure, however on the inside of the tower there is the clamber pole array as well as some ropes at various heights. There are also children of course using the equipment at ground level.	Visitors Contractors Staff	3	5	15	4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment. Equipment built to the guidelines set out in British Standards EN 1176. All areas with a fall height of 1.5m or higher have rubber mulch at a thickness of 80mm on top of type 1 giving a fall height absorption of up to 2.2m. There are no actual hand holds or steps on to the roof of this tower as not to encourage children to climb that high.	1	5	5	MW
Entering the play area	The play area is fenced off to ensure that children are less likely to run away from the area during play. As such entry to the area is via an opening in the fencing leading to a straight footpath, entering to the side.	Visitors Contractors Staff	5	3	15	The opening in the fencing is large enough to easily allow 2 way traffic. There is no play equipment directly in front of the entrance where people may run in to the slide or swing path for example. There is a transition from rubber mulch to brick paving which has a smooth transition.	2	2	4	MW
Exiting the play area	The play area is fenced off to ensure that children are less likely to run away from the area during play. As such the exit from the area is via an opening in the fencing leading to a straight footpath, entering to the side.	Visitors Contractors Staff	5	2	10	4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment. The opening in the fencing is large enough to easily allow 2 way traffic. There is no play equipment around the entrance, so as children are playing and running around, they are less likely to accidentally run direct from the play equipment to the exit. The exit leads in to the side of a straight path with another fence	2	2	4	MW



						on the opposite side to slow down the exit route. There is a transition from rubber mulch to brick paving which has a smooth transition.				
Fencing around the play area being used to play or climb on	The play area is kept secure and easy to supervise by adults through surrounding it with a wooden fence which has 2 rails along the bottom which the upright panels affix to.	Visitors Contractors Staff	5	2	10	4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment. The highest of the bottom two rails is around 0.5m off the ground and all areas have rubber mulch at a depth of 50mm on top of type 1 which gives us shock absorption for up to 1.5m. The bottom rails are only 50mm wide so they do not allow for quick play use such as running along. The edges of the timber are machine finished and slightly rounded to stop cuts if slipping while climbing along them.	2	2	4	MW
Transitioning from artificial grass to rubber mulch	The play area equipment is surrounded by a rubber mulch ground covering to act as a shock absorber, with the strip at the edge sectioned off for picnic tables being covered in an artificial grass instead.	Visitors Contractors Staff	5	2	10	Picnic tables on the artificial grass stop people being able to run in the area. There is a very slight difference in height and texture caused by the different compression rates of the 2 materials however this is not enough to cause a normal trip hazard (just a few millimeters), however monitoring required to ensure that this difference does not become greater. A thick layer of compacted type 1 underneath both surfaces to ensure that it is not likely to compress or warp further.	1	2	2	MW
Use of play equipment; 1.5m slide	At the top of one of the towers there is the entrance to an open slide with a maximum height of 1.5m and made of stainless steel construction.	Visitors Contractors Staff	4	3	12	4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment. Equipment built to the guidelines set out in British Standards EN 1176. All areas with a fall height of 1.5m or higher have rubber mulch at a thickness of 80mm on top of type 1 giving a fall height absorption of up to 2.2m. The slide is of a concave construction with a flat bottom and raised sides to stop possible falls off the side if being used properly.	2	2	4	MW



Use of play equipment; 2.1m slide	At the top of one of the towers there is the entrance to an open slide with a maximum height of 2.1m and made of stainless steel construction. On the plan this is shown by the 2.1m tubular slide which we changed from the original plan.	Visitors Contractors Staff	4	3	12	4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment. Equipment built to the guidelines set out in British Standards EN 1176. All areas with a fall height of 1.5m or higher have rubber mulch at a thickness of 80mm on top of type 1 giving a fall height absorption of up to 2.2m. The slide is of a concave construction with a flat bottom and raised sides to stop possible falls off the side if being used properly.	2	2	4	MW
Use of play equipment; accessible swing	There is an accessible swing which is of a larger rigid bucket seat type construction complete with a full harness.	Visitors Contractors Staff	5	3	15	4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment. The rubber mulch on the ground around the swings is a very different colour to the mulch around the climbing equipment (green rather than red) making a very obvious visual distinction encouraging people to look up in this area to see the swings in use. Equipment built to the guidelines set out in British Standards EN 1176. Around swings there is a fall height absorption requirement of 1.5m. We have rubber mulch at a depth of 50mm on top of type 1 which gives us this level of shock absorption. Heavy duty frame made from 150mm diameter timber to a height of 2.4m with no way to encourage or support climbing to the top of the frame.	2	3	6	MW
Use of play equipment; Beanstalk climb wall	A climbing wall is available on the side of one of the towers allowing children to use plastic hand and foot holds to climb to a maximum fall height of 1.8m.	Visitors Contractors Staff	3	3	9	4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment. Equipment built to the guidelines set out in British Standards EN 1176. All areas with a fall height of 1.5m or higher have rubber mulch at a thickness of 80mm on top of type 1 giving a fall height absorption of up to 2.2m.	2	2	4	MW



						Climb wall foot and hand holds purpose made for climbing equipment using injection moulding of strong HDPE plastic.				
Use of play equipment; Clamber poles (The major component of the clamber castle)	The main part of the play area is made up of a large number of wooden posts which cross one another at various heights, angles and orientations up to a height of 2m for children to climb on.	Visitors Contractors Staff	4	3	12	<p>4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment.</p> <p>Equipment built to the guidelines set out in British Standards EN 1176.</p> <p>All areas with a fall height of 1.5m or higher have rubber mulch at a thickness of 80mm on top of type 1 giving a fall height absorption of up to 2.2m.</p> <p>Some of the poles have been flattened on top to allow for a straight area to stand on, however the circumference of the poles makes for easy standing by users anyway (image 1).</p> <p>On the flat posts a unique to the company engraving method ensuring that a cross hatch pattern has been carved in to the wood for added grip, especially when wet (image 2).</p> <p>On the cut ends of the timber rounds the sharp edges have been bevelled over to prevent cuts and scrapes (image 3).</p> <p>In some areas foot holds have been cut in to some of the steeper angled posts, with these being horizontal with ground level. The cut edges have been sanded slightly but not fully bevelled to ensure that these small toe holes have enough surface area to be effective (image 4).</p>	2	3	6	MW
Use of play equipment; Climbing net	A vertically oriented net is strung between 2 poles (the lower horizontal and the upper at a slight angle) allowing children to climb along it horizontally at heights carrying from 0.5m at the lower pole and up to a maximum fall height of 1.5m at the highest angled point of the upper pole.	Visitors Contractors Staff	3	3	9	<p>4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment.</p> <p>Equipment built to the guidelines set out in British Standards EN 1176.</p> <p>All areas with a fall height of 1.5m or higher have rubber mulch at a thickness of 80mm on top of type 1 giving a fall height absorption of up to 2.2m.</p> <p>The ropes of the climbing net are secured with a bolt at each intersection to ensure that they cannot slip and either trap body</p>	1	2	2	MW



						parts of pinch skin and hair (image 5).				
Use of play equipment; crows nest swing	There is a large crows nest style swing which has a large rigid ring with netting spanning across it.	Visitors Contractors Staff	5	3	15	<p>4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment.</p> <p>The rubber mulch on the ground around the swings is a very different colour to the mulch around the climbing equipment (green rather than red) making a very obvious visual distinction encouraging people to look up in this area to see the swings in use. Equipment built to the guidelines set out in British Standards EN 1176.</p> <p>Around swings there is a fall height absorption requirement of 1.5m. We have rubber mulch at a depth of 50mm on top of type 1 which gives us this level of shock absorption.</p> <p>Heavy duty frame made from 150mm diameter timber to a height of 2.4m with no way to encourage or support climbing to the top of the frame.</p>	2	3	6	MW
Use of play equipment; drawbridge	There is access to a low platform inside the towers via a slightly sloped entry bridge which leads to a maximum height of around 0.6m.	Visitors Contractors Staff	2	3	6	<p>4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment.</p> <p>Equipment built to the guidelines set out in British Standards EN 1176.</p> <p>All areas with a fall height of 1.5m or higher have rubber mulch at a thickness of 80mm on top of type 1 giving a fall height absorption of up to 2.2m.</p> <p>The drawbridge decking is made from decking boards with grooves cut into it to improve friction.</p> <p>The decking boards can be climbed or slipped down at the edge where they have been sanded at an angle to remove the sharp edge (image 6).</p>	1	2	2	MW
Use of play equipment; Fireman's pole	A powder coated steel pole extends from one of the towers through an opening allowing children to hold on and slide down this pole vertically from a maximum fall height of 2.1m.	Visitors Contractors Staff	4	3	12	<p>4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment.</p> <p>Equipment built to the guidelines set out in British Standards EN 1176.</p>	2	3	6	MW



						All areas with a fall height of 1.5m or higher have rubber mulch at a thickness of 80mm on top of type 1 giving a fall height absorption of up to 2.2m.				
Use of play equipment; gaps under the castle walls being climbed under	The castle walls do not go all the way down to the ground, leaving larger gaps in some places which some smaller children may be able to climb underneath or put their heads through in order to try.	Visitors Contractors Staff	3	3	9	4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment. Equipment built to the guidelines set out in British Standards EN 1176. The ground is made from soft rubber mulch which can be compressed slightly with enough force. Wooden panels are removable should this be required. In areas where there may be a panel as much as 25cm off the ground and a head can fit through but not the rest of the body the width of each panel is 20cm which should allow enough room for heads to come back out without having to remove panels.	1	3	3	MW
Use of play equipment; log ladder	Access to the upper walkway (solid bridge) of the main structure is gained by using a log ladder at a slight angle, leading in through a doorway cut in to the wall. The top of this ladder is at a fall height of 1.5m.	Visitors Contractors Staff	5	2	10	4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment. Equipment built to the guidelines set out in British Standards EN 1176. All areas with a fall height of 1.5m or higher have rubber mulch at a thickness of 80mm on top of type 1 giving a fall height absorption of up to 2.2m. The poles have been flattened on top to allow for a straight area to stand on (image 1), with a unique to the company engraving method ensuring that a cross hatch pattern has been carved in to the wood for added grip, especially when wet (image 2).	2	2	4	MW
Use of play equipment; Lower Scramble nets	The play area has 2 scramble nets at the top of the clamber logs which are positioned at a fall height of 1.5m.	Visitors Contractors Staff	4	3	12	4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment. Equipment built to the guidelines set out in British Standards EN 1176. All areas with a fall height of 1.5m or higher have rubber mulch at a	2	2	4	



						thickness of 80mm on top of type 1 giving a fall height absorption of up to 2.2m. Size of the netting does not allow a child old enough to use this type of equipment to easily fall through the netting, however there is space at the side of the netting to fall. The ropes of the climbing net are secured with a bolt at each intersection to ensure that they cannot slip and either trap body parts of pinch skin and hair (image 3).				
Use of play equipment: openings and windows	The play area has a total of 16 openings and windows which children can pass through and which are surrounded by plastic motifs.	Visitors Contractors Staff	5	3	15	4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment. Equipment built to the guidelines set out in British Standards EN 1176. The surrounds are made by injection moulding of strong HDPE plastic to ensure that the surfaces are durable, safe and non-absorbent whilst remaining softer than materials like acrylic or steel. The edges of the openings have been bevelled over slightly to remove any sharp edges in areas where skin (especially heads) may scrape along the edge (image 7).	3	2	6	MW
Use of play equipment: Rapunzel climb wall	A climbing wall is available on the side of one of the towers allowing children to use plastic hand and foot holds to climb to a maximum fall height of 2.1m.	Visitors Contractors Staff	3	3	9	4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment. Equipment built to the guidelines set out in British Standards EN 1176. All areas with a fall height of 1.5m or higher have rubber mulch at a thickness of 80mm on top of type 1 giving a fall height absorption of up to 2.2m. Climb wall foot and hand holds purpose made for climbing equipment using injection moulding of strong HDPE plastic.	2	2	4	MW
Use of play equipment: solid bridge access from the clamber poles and ropes	There are ropes which can be climbed on to give access to 2 plastic panels at the side of the solid bridge which have been engineered to allow this transition as they contain a few hold openings. These are made from plastic which will	Visitors Contractors Staff	4	3	12	4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment. Equipment built to the guidelines set out in British Standards EN 1176.	2	3	6	MW



	be slippery when wet and are at a maximum fall height of around 2.1m heading back across the suspended ropes as well as the edge of the clamber logs.					All areas with a fall height of 1.5m or higher have rubber mulch at a thickness of 80mm on top of type 1 giving a fall height absorption of up to 2.2m. Hand hold containing panels purpose made using injection moulding of strong HDPE plastic. On the cut ends of the timber rounds the sharp edges have been bevelled over to prevent cuts and scrapes (image 3).				
Use of play equipment; standard swings	There are 2 configurations, each of 2 individual swings.	Visitors Contractors Staff	5	3	15	4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment. The rubber mulch on the ground around the swings is a very different colour to the mulch around the climbing equipment (green rather than red) making a very obvious visual distinction encouraging people to look up in this area to see the swings in use. Equipment built to the guidelines set out in British Standards EN 1176. Around swings there is a fall height absorption requirement of 1.5m. We have rubber mulch at a depth of 50mm on top of type 1 which gives us this level of shock absorption. Heavy duty frame made from 150mm diameter timber to a height of 2.4m with no way to encourage or support climbing to the top of the frame.	2	3	6	MW
Use of play equipment: Traverse climb wall on clamber castle	A number of plastic foot and hand holds are attached to the outer walls of the front of the castle (in 2 locations) allowing children to climb along the wall horizontally. The lower foot holds are at heights of up to 0.6m. At one end of these traverse climb walls the last foot hold transfers to a window access area for the	Visitors Contractors Staff	5	2	10	4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment. If children were to climb up using the hand holds to push up with their feet and climb over the top of the balcony the maximum fall height at the top of the fencing would be under 2.1m. Equipment built to the guidelines set out in British Standards EN 1176. All areas with a fall height of 1.5m or higher have rubber mulch at a thickness of 80mm on top of type 1 giving a fall height absorption of up to 2.2m.	2	2	4	MW



						Climb wall foot and hand holds purpose made for climbing equipment using injection moulding of strong HDPE plastic.				
Use of play equipment: Traverse climb wall on ground	Away from the main climbing structure is a plastic traverse wall (split horizontally with foot holes on the bottom piece, hand holes on the top piece and a gap in between), mounted on upright posts. The bottom row has foot holes at heights of between 0.4 and 0.5m. The plastic of the foot holes may become slippery when wet. If children manage to pull themselves up and wish to climb on to the top of the equipment (which will be difficult to do) there would be a maximum fall height of 2.1m.	Visitors Contractors Staff	5	2	10	4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment. Equipment built to the guidelines set out in British Standards EN 1176. The foot holes are large enough that should a child slip through and fall to the ground, the opening will not grab the leg or foot in a way which will make it get stuck or risk it creating a break point. The insides of the hand and foot holes are smoothed at the edge making a bevelled rather than sharp edge. All areas with a fall height of 1.5m or higher have rubber mulch at a thickness of 80mm on top of type 1 giving a fall height absorption of up to 2.2m.	2	2	4	MW
Use of play equipment; Upper Scramble nets	The play area has 2 scramble nets at the top of the clamber logs which are positioned at an angle with the lower half being at a fall height of 1.5m and the upper half having a fall height of 2m.	Visitors Contractors Staff	4	3	12	4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment. Equipment built to the guidelines set out in British Standards EN 1176. All areas with a fall height of 1.5m or higher have rubber mulch at a thickness of 80mm on top of type 1 giving a fall height absorption of up to 2.2m. Size of the netting does not allow a child old enough to use this type of equipment to easily fall through the netting, however there is space at the side of the netting to fall. The ropes of the climbing net are secured with a bolt at each intersection to ensure that they cannot slip and either trap body parts of pinch skin and hair (image 3).	2	2	4	MW
Use of play equipment; Vertical climbing logs	There are 2 vertical poles which have horizontal foot hold cut in to them with the lowest being just above ground height, allowing kids to climb up them on to the	Visitors Contractors Staff	4	3	12	4 signs around the play area at an A3 size to remind parents and guardians that children must be supervised while using play equipment.	2	3	6	MW



	clamber logs at a maximum fall height of 1.5m.					Equipment built to the guidelines set out in British Standards EN 1176. All areas with a fall height of 1.5m or higher have rubber mulch at a thickness of 80mm on top of type 1 giving a fall height absorption of up to 2.2m. The edge of the horizontal plane has been sanded but not bevelled to ensure that there is still enough room for a secure foot hold. These are just toe grip holds and as such if a fall were to occur it is not likely that the person will hit themselves or cut themselves on the corner (image 8).				
Zoonoses	<p>Whilst this area is not close to any animal enclosures which are likely to affect this section in a significant way, we do have free roaming and wild birds which live at or visit the park and can get access to the play equipment.</p> <p>Animals can naturally become infected with zoonotic diseases, which may be internal parasites (such as worms), external parasites (such as ticks) and other diseases such as rabies.</p> <p>Due to the global COVID-19 pandemic which has had such a huge impact on how we work, this is specifically tackled in this section.</p>	Visitors Contractors Staff	2	5	10	<p><i>This risk and mitigation is a standard field for a number of our animal related risk assessments. For details about specific zoonoses please consult the zoonotic disease information library. In particular the zoonoses which are applicable to this risk assessment would be those which have the following species as vectors:</i></p> <ul style="list-style-type: none"> • Wild birds either direct or to transmit diseases from other parts of our collection. • Helmeted guineafowl. • Domestic chickens • Crowned cranes (in case of a code blue) • Macaws (in case of a code blue) • White storks (in case of a code blue) <p><i>Other potential code blues animals such as primates can be more widely considered under the below mitigation measures.</i></p> <p>Veterinary healthcare plan in place as designed by Burnham House Veterinary Surgery to cover items such as disease control, vaccinations, faecal screening and the routine use of wormers etc. BALAI regulations and rabies quarantine (where necessary for animals coming from another country) followed for new individuals coming into the park. Regular visual inspection of animals for parasites such as ticks. Enclosures built to a high standard and regularly inspected and</p>	1	5	5	MW



					<p>maintained to ensure that they remain escape proof. Pest control carried out within the park to try to eliminate the spread of parasites through animals such as rabbits. Foot dips used at the entrances of enclosures where possible zoonoses (in particular digestive issued caused by Balantidium for example) are known. Animal keepers are not allowed to have access to the play equipment. 2 hand sanitisers are available in the play area.</p> <p>Please note: Information specific to COVID-19:</p> <p>For a period of time from 2019 through to 2021 and likely on-going past this point the whole world was affected by the COVID-19 pandemic, a zoonotic disease. As this is likely to remain a concern for some time to come the following precautions are in place:</p> <p>People who report being positive for COVID-19 or have been asked to isolate by the NHS are required to follow national guidance. We follow national rules on self isolation for staff including the requirement for them to use the online self reporting system.</p>				
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Routine Sign Off Sheet

To be signed off once per quarter by someone who is not an assessment officer mentioned in the main risk assessment.
Any changes which need to be action to be updated on the front cover once updated in the risk assessment.

Please note that changes and additions in the risk assessment may be made by an assessment officer already present in the risk assessment on behalf of the person reviewing the document.

Date	Name	Changes?	Date	Name	Changes?



Image 1

Image 2





Image 3



Image 4

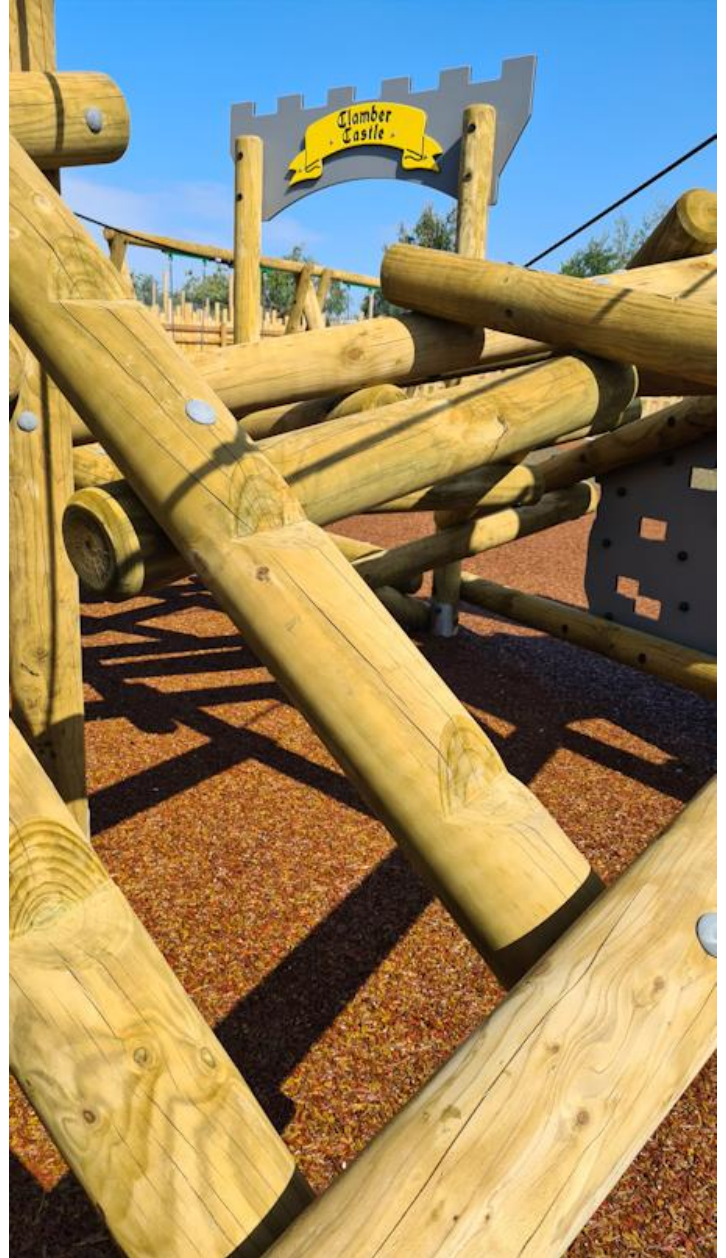




Image 5

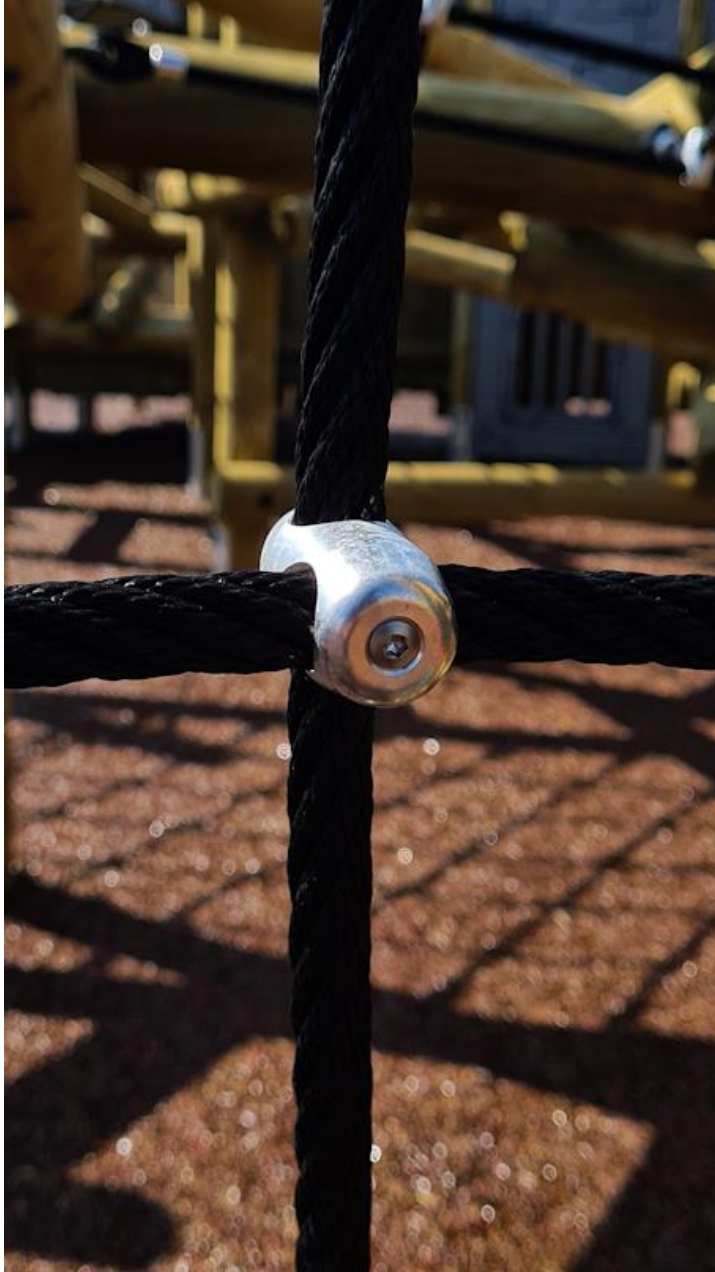


Image 6





Image 7



Image 8

