

Risk Assessment – Gravity

Version 3		Completed By TW		Last Updated March 2019	
Area of Potential Risk	Risk assessment 1-5				How the risk can be minimised
	Participant		Staff		
	Likely to occur	Degree of injury likely	Likely to occur	Degree of injury likely	
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	
Slips Trips & Falls					
1. Changes in ground level	1	3	1	3	1a. Gravel path from entrance to stairway check on a daily basis
2. Stairs & Rails along trench	1	3	2	3	2a. Stairs have bannisters usable by both children and adults and rails are far enough apart that participants never have to step over them
3. Steep banks along trench	1	3	2	3	3a. Entire activity area is fenced and only participants are allowed entry under the direct supervision of the Instructor. At most 6 participants will be in the Swing area at any one time and they will not be allowed around the edges of the trench.
4. Equipment left on ground	1	3	2	3	4. Only harnesses are permitted to be stored at ground level and they must be in a specific highly visible container stored up against the fence
Fall From Height					
1. Person Falling From Swing - PPE failure or Instructor error	1	5	1	4	<p>1a. All PPE equipment is checked the morning of use as part of the Opening Checklist</p> <p>1b. Equipment is then double checked before each use by the operating instructor</p> <p>1c. Swing beam, attachment points, winch cable and winch housing to be visually inspected each morning before first use</p> <p>1d. Participant are attached to two separate connection points. One is directly onto the swing beam and the second is via a sling wrapped around the swing beam</p> <p>1e. All Instructors must have been passed as competent by Ian Roberts (Technical Advisor) and show 15 perfect completions from harnessing right through to the participants exiting the activity. These 15 completions to be monitored by a lead instructor</p>
2. Items / Equipment being dropped or coming loose from Swing	1	3	2	3	<p>2a. Participants are not allowed any loose items on Gravity (coins, keys, phones etc). Instructor's must double check with all participants before harnessing</p> <p>2b. Connecting Karabiners must be squeeze checked by the instructor to ensure they are closed correctly before participants are winched up</p>
Collision of Moving Objects					
1. Participant collide with Gondola	1	5	0	0	<p>1a. The Gondola is built on wheels that fit into two sliding tracks. Before the participants start to get winched up, the gondola must be pushed back out of the way. Once the gondola is in its correct position it is impossible for the swing or its participants to come in contact with it</p> <p>1b. Instructor must push gondola back all the way to the bottom of the stairs. They must then ensure the gondola is clipped on and secured in place to ensure it can not be moved or roll away</p>

2. Participants collide / get caught on any ropes or cables	2	4	0	0	<p>2a. All PPE, ropes and lanyards to be in proper location and in good order before swing can be opened each morning</p> <p>2b. While winching, the trigger cord (attached to release mechanism) must be kept under control at all times. Either kept in the hands of the instructor or tied off onto the specific tie off point</p> <p>2c. Only trained instructors can instruct this activity. Any modifications or alterations to the trigger rope must go through the site manager</p>
3. Participants head collide with swing bar	1	3	0	0	<p>3a. The instructor must ensure all participants are seated correctly and have their hands on the handle bars before the swing can be released.</p> <p>3c. Additional padding to be wrapped around the handle bar on the swing beam</p>
4. Participants collide with instructor or spectator	1	3	0	0	<p>3a. The instructor must ensure that the entire fenced off swing area is clear of any other instructors or members of the public before they can release the swing.</p> <p>3c. The instructor must also be standing directly in front of the winch box and under the release mechanism while releasing the swing</p>
Suspension Trauma					
1. Participant being left weighted in harness too long	2	3	0	0	1a. Participants slip from their podium seats, will only be weighted in their harness for a maximum of 90 seconds before the Gondola is pushed back in place and the participant can then stand up again.
Manual Handling and Repetitive Stress Injury					
1. Instructing requires some repetitive tasks and some manual handling	1	3	2	3	<p>1a. Participants are not allowed to do any manual handling</p> <p>1b. Staff are trained to be efficient with their movements</p> <p>1c. Staff are to be rotated through different positions throughout the day and trained in manual handling</p>
Working at Height					
1. Monthly maintenance checks on cable, pulley and winch	0	0	3	5	<p>1a. Checks to be carried out by designated maintenance person only or principal contractor only after specialist training.</p> <p>1b. Correct PPE to be worn</p> <p>1c. Maintenance person must always have a second person within earshot of them when working at height</p>
Engineering Hazards					
1. Swing connecting Cable	1	5	1	5	<p>1. Cable to be inspected regularly by Maintenance team</p> <p>2. All ground anchors are to be visually inspected at the start of each day and fully inspected by the maintenance team on a monthly basis</p> <p>3. To be inspected regularly by Maintenance team</p>
2. Ground Anchors	1	5	1	5	
3. Swing bearings and back ups	1	5	1	5	
Adverse Weather Conditions					
1. Heavy rain, wind, thunder and lightning may make the zipwire un-operable	3	3	0	0	<p>1. A test swing is to be carried out each morning before opening to assess the effect that the wind is having</p> <p>1a. Strong crosswinds can affect the swing beam. They must be monitored and assessed by the Manager on duty and close if necessary</p> <p>1c. Heavy rain may make ground conditions under foot too slippery. Manager must monitor regularly and close if necessary</p> <p>1d. A visible lightning strike within the area will result in the immediate closure of the zip. It will remain closed until there has been a 30min period without lightning</p>

RISK ASSESSMENT LEVELS

Likely to occur	Level 5	Very likely, almost certain
	Level 4	Likely to occur, easily precipitated by slight carelessness
	Level 3	Quite possible
	Level 2	Possible – a low or minimal risk
	Level 1	Not at all likely except under freak conditions
Degree of injury likely	Level 5	Potential for multiple deaths
	Level 4	Death or serious injury to an individual (RIDDOR)

Level 3	Individual off work for three or more days (RIDDOR)
Level 2	Minor injuries (person able to continue after being given first aid)
Level 1	No risk of injury or disease