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| **High Ropes** | | | | |
| **Notes:**   * **Where a** [**CARA guideline**](https://education.qld.gov.au/curriculum/school-curriculum/CARA) **exists** and the activity requirements of the guideline cannot be met, this generic template should be used for support in determining modifications or alternative controls to ensure an equivalent level of safety. | | | | |
| **Activity scope** | | | This guideline relates to student participation in challenge high ropes courses as an activity to support curriculum delivery.  Challenge high ropes refers to any ropes activity where the participant’s safety can no longer be achieved by [spotting](https://education.qld.gov.au/curriculum/stages-of-schooling/CARA/activity-guidelines/challenge-high-ropes#spotting), and which requires safety systems such as harnesses, belay systems, specialist safety equipment or other established methods or systems.  Note: This activity does **not** include structures or elements that involve abseiling, rock climbing, artificial surfaces climbing or bouldering.  Depending on the scope of this activity, other risk assessments may be required when planning. Curriculum activities encompassing more than one CARA guideline (e.g. [challenge high ropes](https://education.qld.gov.au/curriculum/stages-of-schooling/CARA/activity-guidelines) while [camping](https://education.qld.gov.au/curriculum/stages-of-schooling/CARA/activity-guidelines)) must comply with the requirements of all CARA guidelines appropriate to the activity.  Schools should consider conducting this activity at a Department of Education [Outdoor and Environmental Education Centre (OEEC)](https://education.qld.gov.au/schools-educators/other-education/OEEC) and consult with OEEC centre staff for risk assessment requirements.  For activities conducted at a non-Department of Education venue, and/or when engaging external expertise, request written risk assessment advice and attach it to this CARA record.  For activities conducted off-site, schools must comply with the [school excursions and international school study tours procedure](https://ppr.qed.qld.gov.au/pp/school-excursions-and-international-school-study-tours-procedure) | |
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| **Inherent**[[1]](#footnote-1) **risk level** | | | | **Action required** |
|  | **Low** | Little chance of incident or injury | | * Document the activity within the three levels of planning. |
|  | **Medium** | Some chance of an incident and injury requiring first aid | | * Document the activity within the three levels of planning. * A OneSchool CARA record may also be required in accordance with school-based decisions. |
|  | **High** | Likely chance of a significant incident and injury requiring medical treatment | | * Document the activity within the three levels of planning. * Complete a CARA record in OneSchool. * Obtain approval from the principal or school leader (i.e. DP, HOD, HOSES, HOC) prior to conducting this activity. This approval is automatically requested in OneSchool when the CARA record is completed. * Obtain and document [parent consent](http://ppr.det.qld.gov.au/education/management/Procedure%20Attachments/School%20Excursions/Permission%20form%20template.DOC) (highly recommended). |
|  | **Extreme** | High chance of a serious incident resulting in highly debilitating injury | | * An alternative activity must be considered. If the activity is essential for delivery of the curriculum, control measures must be implemented to reduce the risks to achieve comparable learning outcomes. * Document the activity within the three levels of planning. * Complete a CARA record in OneSchool. * Obtain approval from principal prior to conducting this activity. This approval is automatically requested in OneSchool when the CARA record is completed. * Obtain and document [parent consent](http://ppr.det.qld.gov.au/education/management/Procedure%20Attachments/School%20Excursions/Permission%20form%20template.DOC) (mandatory). |

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| **Activity Requirements** | If any requirement cannot be met, the activity must not occur.  If any other safety recommendation cannot be met, modify the activity (or elements of it) and/or identify and use the [hierarchy of controls](https://education.qld.gov.au/initiatives-and-strategies/health-and-wellbeing/workplaces/safety/hazards) to implement alternative control measures to meet or exceed the minimum safety standard. |
| **All Risk Levels** | Reference to [Australian adventure activity standard](https://australianaas.org.au/), [challenge courses Australian adventure activity good practice guide](https://australianaas.org.au/wp-content/uploads/Challenge-Courses-GPG-v1.0.pdf) and worksafe safety alerts for high ropes adventure courses is required when planning this activity.  Permission/permits are required to be obtained from land managers (e.g. local councils or private landholders), if applicable.  Assessment and management of risks associated with [working at heights (PDF, 807KB)](https://education.qld.gov.au/initiativesstrategies/Documents/working-at-heights-guideline.PDF) must occur.  Due to the risk associated with falls from height additional fall protection must be applied.  Inspection and maintenance of the ropes course must comply with AS2316.2.2:2016—artificial climbing structures and challenge courses flying foxes and challenge ropes courses—operation requirements.  Routine visual checks must be carried out by the adult supervisor leading the activity before each use of the course to ensure there is no obvious damage; the site is safe and; the integrity of the safety systems.  Operational inspection must be carried out by an adult supervisor who has a statement of attainment from a Registered Training Organisation (RTO) covering [SISOCHC005—manage challenge course](https://training.gov.au/Training/Details/SISOCHC005) or similar every 3 months, or as indicated in the manufacturer’s instruction, to confirm no damage or degradation.  Periodic inspection must be carried out at least once every year by an independent certified inspection body (e.g. registered builder of challenge ropes courses) and to include routine visual check; operational inspection; assessment of worn components; and where the inspector deems necessary dismantling of parts; excavation to reveal condition of items underground and/or routine proof testing.  If challenge ropes course is built in trees, the trees must be inspected by a competent person annually or as advised by the manufacturer of the high ropes course.  Records and/or certification of inspections must be made available to participating schools. |
| **Planning Considerations** | |
| *Incorporate the following factors when planning risk management strategies for this activity.* | |
| **Students** | Schools must consider age, maturity and skill level of students when planning curriculum activities. Adjustments are required for [students with disability](https://education.qld.gov.au/curriculum/stages-of-schooling/p-12) to support access and participation in the curriculum. Consult with the parents/carers of students with disability, or when appropriate the student, to ensure risks related to their child's participation in the activity are identified and managed.  Schools must consult current student medical information and/or health plans in accordance with the [managing students' health support needs at school procedure](https://ppr.qed.qld.gov.au/pp/managing-students-health-support-needs-at-school-procedure). Record information about any student condition (e.g. physical or medical) that may inhibit safe engagement in the activity and include specific support measures within emergency procedures. |
| **Emergency and First-Aid** | Emergency plans and injury management procedures must be established for foreseeable incidents (e.g. rescue from height procedure).  Adult supervisors must have:   * emergency contact details of all participants * a medical alert list and a process for administering student medication * communication equipment suitable to conditions (e.g. two-way radio, mobile phone) and a process for obtaining external assistance and/or receiving emergency advice. Note that battery life can be impacted by weather conditions * recovery/rescue equipment suitable to the location (e.g. emergency position-indicating radio beacon [EPIRB], flares). * an appointed emergency contact (e.g. the Principal, a park ranger, or local police) who is provided with a route card listing activity details (outline of the route to be followed, the number and names of the party, the estimated time of departure/arrival * emergency shelter/protection locations that consider foreseeable emergencies (e.g. injury, bushfire, thunderstorm, extreme temperature).   Safety procedures must be determined for the location (e.g. attaching to safety systems, out-of-bounds areas, location of first aid support and equipment).  Access is required to [first aid equipment (DOCX, 479KB)](https://education.qld.gov.au/initiativesstrategies/Documents/first-aid-kits-facilities.DOCX) and consumables suitable for foreseeable incidents.  An adult with current emergency qualifications is required to be quickly accessible to the activity area. Emergency qualifications include:   * [HLTAID009—provide cardiopulmonary resuscitation (CPR)](https://training.gov.au/Training/Details/HLTAID009) * [HLTAID010—provide basic emergency life support](https://training.gov.au/Training/Details/HLTAID010) * [HLTAID011—provide first aid](https://training.gov.au/Training/Details/HLTAID011) * [HLTAID013—provide first aid in remote situations](https://training.gov.au/Training/Details/HLTAID013) * or equivalent competencies. |
| **Induction and Instruction** | Induction is required for all adult supervisors on emergency procedures (e.g. rescue from height) and safety procedures (e.g. attaching to safety systems). If the activity is conducted at an off-site facility, induction is to be informed by advice provided in consultation with expertise at the venue.  Instruction is required for students and adult supervisors on correct techniques (e.g. belaying, correct use of equipment). |
| **Consent** | [Parent consent](https://ppr.qed.qld.gov.au/attachment/activity-consent-form.docx) is required for all activities conducted off-site and strongly recommended for **high risk** activities conducted on-site. |
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| **Supervision** | Principals make final supervision decisions for the activity. Sufficient adult supervision must be provided to manage the activity safely (including emergency situations).  For activities with students with a medical condition or disability that may impact on safety during the activity, consultation with parents is required prior to allocating supervision to determine the impact of students' medical condition or disability on safety during the activity.  The number of adult supervisors required to fulfil emergency and supervision roles must consider the nature of the activity, students’ ages, abilities and specialised learning, access and/or health needs. The [challenge courses Australian adventure activity good practice guide](https://australianaas.org.au/wp-content/uploads/Challenge-Courses-GPG-v1.0.pdf) should be consulted for supervision ratios and consideration given to:   * the nature of the challenge ropes course elements * line of sight and sound for supervision and * [belay system](https://education.qld.gov.au/curriculum/stages-of-schooling/CARA/activity-guidelines/challenge-high-ropes#belay) and transfer (dynamic, static or continuous).   Before the activity, all adult supervisors:   * must be familiar with the contents of the CARA record * must assess [weather conditions](http://www.bom.gov.au/), and obtain accurate information other expected water conditions (if applicable) prior to undertaking the activity, inspecting the intended location in order to identify variable risks, hazards and potential dangers.   During the activity, all adult supervisors:   * must be readily identifiable * must closely monitor students with health support needs * must closely monitor all students, removing participants for the safety of the group or individuals, if applicable * must comply with control measures from the CARA record and adapt as hazards arise * must suspend the activity if the conditions become unfavourable (e.g. poor visibility, extreme temperatures, high wind, rain, lightning, thunderstorms).   Recommended Supervision Ratio for High Challenge Course Elements:  When high elements are in use there must be at least one activity leader available with supervisor or manager competencies.  All people at height irrespective of the level competence must be appropriately supervised.   |  |  | | --- | --- | | Assisted or Team Belay Safety System | 1 leader : 4 belay systems / ropes |     (retrieved from challenge courses Australian adventure activity good practice guide) |
| **Supervisor Qualifications** | Principals make final decisions in determining supervisor capability (competence, relevance and currency) and are responsible for encouraging and enabling school-based activity supervisors to raise their qualifications to improve safety standards.  All adult supervisors must comply with the [working with children authority—blue cards procedure](https://ppr.qed.qld.gov.au/pp/working-with-children-authority-procedure) and be able to identify, and respond to, risks or hazards that may emerge during the activity.  A registered teacher must be appointed to maintain overall responsibility for the activity.  At least one adult supervisor is required to be:   * a registered teacher with qualifications in [SISOCHC003—lead challenge course sessions, high elements](https://training.gov.au/Training/Details/SISOCHC003) or similar and with competence (knowledge and skills) in teaching high ropes activities or * an adult supervisor other than a registered teacher, working under the direct supervision of a registered teacher, with:   + qualification or current accreditation in [SISSS00124—challenge course supervisor](https://training.gov.au/Training/Details/SISSS00124) or similar or   + [Certificate III in outdoor leadership](https://training.gov.au/Training/Details/SIS30619) or [Certificate III in sport and recreation](https://training.gov.au/Training/Details/SIS30115), similar or higher, with specialisations in appropriate activities or equivalent.   Refer to the [challenge courses Australian adventure activity good practice guide](https://australianaas.org.au/wp-content/uploads/Challenge-Courses-GPG-v1.0.pdf) and [SIS—sport, fitness and recreation training package](https://training.gov.au/Training/Details/SIS) for further information on supervisor qualifications.  **High Challenge Course Leader Competencies**   |  |  | | --- | --- | | PUAOP013A | Operate communications systems and equipment | | SISOOPS304A | Plan for minimal environmental impact | | SISOCRP302A | Conduct a High Ropes Session | | SISOCPR404A | Supervise a High Ropes Session | | SISOODR404A | Manage risk in an outdoor activity | | SISXEMR402A | Coordinate emergency responses | | SISXOHS402A | Implement and monitor occupational health and safety policies | | SISOABL301A | Assist in the facilitation of adventure-based learning activities | | SISOABL402A | Facilitate adventure-based learning activities |   (retrieved from challenge courses Australian adventure activity good practice guide) |
| **Facilities and Equipment** | The qualified adult supervisor of the activity, in consultation with the principal, determines the requirements for facilities and equipment appropriate to the local context.  Location must be suitable for the activity being undertaken. Undertake a reconnaissance of new or infrequently used locations to ascertain suitability.  Vehicle access must be available at all times.  An AS1892 compliant ladder of sufficient height to reach the closest foot peg for an adult supervisor to be able to access the course must be available.  Participants must wear [personal protective equipment](https://education.qld.gov.au/initiatives-and-strategies/health-and-wellbeing/workplaces/safety/managing/school-officers) as relevant (e.g. firmly fitting enclosed non-slip footwear, clothing appropriate to activity and weather conditions).  Harnesses, helmets, ropes and lanyards must be provided for all participants in line with the following standards and practices:   * compliant with [International Mountaineering and Climbing Federation (UIAA)](https://theuiaa.org/safety/safety-standards/), European Community (CE) standard or equivalent (refer to UIAA safety standards for more information) * harnesses must be worn at all times and fitted correctly when on course, and connected by a safety line (rope or [webbing/tape](https://education.qld.gov.au/curriculum/stages-of-schooling/CARA/activity-guidelines/challenge-high-ropes#webbing)) to an appropriate anchor point or belay * helmets must be secured and correctly fitted for the duration of the activity. * the belay system or [lanyard arrangement](https://www.worksafe.qld.gov.au/injury-prevention-safety/alerts/whsq/2018/high-ropes-adventure-courses) is appropriate for the expected fall factor of a climber. Minimise the risk of entrapment or strangulation by arranging lanyards and connecting equipment to reliably maintain a sufficient gap between each other when loaded.   Equipment must be sized to match the ability and strength of students.  All equipment must be used in accordance with the manufacturer’s instructions.  A process for checking for damage for all equipment used in the activity must be established and employed.  A log of equipment use, maintenance and inspection for each course must be kept and made available to participating schools upon request.  Equipment (e.g. harnesses, helmets, ropes, lanyards) must be retired by manufacturer’s nominated expiry date or when significant wear appears that could impact the safety of the participant. A retirement of equipment policy developed.  Procedures used for belay systems must be suitable for the equipment and the task.  An appropriate safety system must be used when at height on all high elements.  Procedures and systems used should be consistent throughout the challenge course activity session.  An adequate rescue kit must be available and suitable for unassisted abseil, and/or haul and lower rescue techniques including, but not limited to, safety equipment used by adult supervisors as outlined in the [challenge courses Australian adventure activity standard good practice guide](https://australianaas.org.au/wp-content/uploads/Challenge-Courses-GPG-v1.0.pdf).  If privately owned equipment is being used, Principal approval and owner consent/insurance details must be obtained prior to the activity. |

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| **Who will be leading the activity?** | | |
| **Staff/Other Participants** | | |
| **Family Name** | **Given Name** | **Type** |
| Roberts | Zach | Teacher |
| Kleinschmidt | Rod | Teacher |
| Hodgson | Kevin | Teacher |
| Cinelli | Alex | Teacher |
| Nash | Liz | Teacher |

Risk Management Matrix – High Ropes

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| **Likelihood** | **Consequence** | | | | | | |
|  | People | Injuries not requiring treatment  *E.g.* *splinter or scratch* | Injury requiring 1st aid  *E.g. bruise or rope burn* | Serious injury requiring ambulance assistance  *E.g. fracture* | Injury requiring hospitalisation  *E.g. fall with suspected back injury* | Death or life-threatening *injuries E.g. neck entrapment* |
|  | Equipment | Replacement – no disruption to activity  *E.g. stiff carabineer* | Small disruption to activity  *E.g. Snagged rope* | Unable to proceed  *E.g. Frayed rope* | Major disruption closing part of the course  *E.g. Snapped cable* | Major disruption closing the whole course.  *E.g.*  *Poles splintering* |
|  | Environment | Change of daily temperature  *E.g. Afternoon activity* | Short term influence  *E.g. Gusty and showers winds* | Minor long-term damage  *E.g. Water seepage from underground spring* | Extensive Environmental damage  *E.g. Human impact on the tracks beneath the elements* | Widespread damage  *E.g. Cyclonic damage* |
|  |  | **Insignificant** | **Minor** | **Moderate** | **Major** | **Catastrophic** |
|  | **Risk Matrix** | **1** | **2** | **3** | **4** | **5** |
| Almost Certain | **5** | medium | High | High | Extreme | Extreme |
| Likely | **4** | Low | medium | High | High | Extreme |
| Possible | **3** | Low | medium | medium | High | Extreme |
| Unlikely | **2** | Low | medium | medium | High | High |
| Rare | **1** | Low | Low | medium | medium | High |

**Kinchant Outdoor Education Centre**

**Risk Analysis and Management System**

**Activity/Situation:** High Ropes **Last Updated:** 01/02/2022

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| **RISKS**  **Accident, injury**  **other forms loss** | Asthma  Emotional and Physiological trauma  Exacerbating previous medical conditions  Anxiety with heights  Head / Facial Injury  Unconsciousness  Death  Loss of self-confidence and self-esteem  Hair / Clothing entanglement  Physical exhaustion  Reduced Involvement  Rope burn  Rope tangles  Loss of balance while dismounting platform  Injury to self or others  Equipment loss and damage | Person falling from   * ladder * Platform * Staples * Element * Ground   Person slipping from/ off   * ladder * Platform * Staples * Element * Ground   Equipment dropped or falling from   * Ground * Platform * Staples * Element * ladder | Exposure to adverse weather  Insects  Bites and stings  Infections  Sunburn  Dehydration / Heat exhaustion / Heat stroke  Muddy / slippery area due to underground spring  Animal’s wild and domestic entering activity area.  Equipment Entanglement (safety rope snagging on buoy)  Rope slippage / elongation  Harness mal-function  Anchor cable braking  Broken / damaged seat |

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| **People** | | | | | | | |
| **CAUSAL FACTORS**  Hazards, perils, dangers | Consequences | Likelihood | Rating | **RISK MANAGEMENT STRATEGIES**  Strategies to reduce perceived risk rating to acceptable & manageable levels to maintain a safe, secure working environment | Consequences | Likelihood | Rating |
| Movement  Collision with:   * others 3,3 Medium * ground crew 3,3 Medium * general camp community. 2,1 Medium | 3 | 3 | Medium | * Clearly define areas of movement * Group to stay together moving about from one element to the next * Area cordoned off to alleviate the movement of spectators and participants in neighbouring activities * Closely monitor all movement | 2 | 2 | Medium |
| Inappropriate behaviour  Misbehaviour. 3,3 Medium  Special needs students. 4,3 High  Students' poor cognitive ability. 4,3 High  Inattentive 3,3 Medium  Disobedience 3,3 Medium  Unfocused 3,3 Medium | 3 | 3 | Medium | * Set clear behaviour expectations. * Implement behaviour management strategies. * Ensure a supportive learning environment. * Ensure realistic personal goal setting, include real choice in terms of entry and exit options. * Establish a positive rapport. * Establish effective communication pathways between staff and participants. * Share common expectations with regard to participant performance, equipment use etc. * Reinforce the rule that participants who demonstrate or threaten to behave in a manner which has the potential to physically, emotionally or psychologically injure themselves or another may not participate in a high ropes session. * Negotiate clear role description for all staff and students. * Provision to modify or abort the activity as situation dictates. |  |  |  |
| Medical problems.  Pre-existing medical conditions 3,3 Medium  Fatigue & Exhaustion 3,3 Medium  Climber’s excessive weight 3,3 Medium Physical health & fitness 3,3 Medium Excessive weight impact on belayers 3,3 Medium  Loose clothing/jewellery/hair. 3,2 Medium  Emotional distress(anxiety, peer pressure) 3,3 Medium | 3 | 3 | Medium | * Provide physical aids appropriate to the needs of the participants. * Vigilant supervision. * Session to be appropriate/modified to medical needs. * Secure long hair appropriately. * Participants are to use their own cups or water bottles. * Detailed medical history for all participants to be held by Admin. * Leader to be familiar with and understand medical synopsis. * Ensure the individual's medication is carried/available. * Emergency equipment immediately available * Gloves and resuscitation mask to be available. * Ensure realistic personal goal setting, include real choice in terms of entry and exit options. | 2 | 2 | Medium |
| Staff Competencies  Insufficient belayers. 5,2 High  Too large a group. 4,3 High  Poor belaying technique. 5,3 Extreme  Poor group control. 4,3 High  Poor instruction skills. 4,3 High  Poor communication. 4,3 High  Lack of equipment knowledge. 3,3 Medium  Lack of technical skills. 4,3 High  Trapped on rope 5,3 Extreme Leader inexperience 4,2 High  Inexperienced peer belayers 5,3 Extreme | 4 | 4 | High | * Staff trained in emergency procedures * Peer belaying – B1 & B2 tethered with sling to reduce any weight disequilibrium * When the climber reaches the platform, B3 to tie a safety knot in the rope 1 metre back from the B2 prussic. * During peer belaying, B3’s safety knot to stay in the rope until the climber’s feet have left the footline. * Appropriate program sequencing e.g. to avoid participant and instructor fatigue. * Appropriate sequencing to establish a level of trust and co-operation. * Assess suitability of activity in consultation with Admin. Staff, and the student if required. * Assessing participants' ability with regard to maturity, cognitive ability, physical strength and emotional readiness. * Clear briefing and appropriate sequencing. * Consider belay group appropriate to size groupings. * Consider readiness to learn, level of skill acquisition, age, maturity, ability and experience in sequencing and briefing the activity. * Proven and demonstrated leader competence. | 3 | 2 | Medium |
| Climbers  Lack of understanding of activity  Procedures 4,3 High  Unaware of appropriate climbing technique 3,3 Medium  Unaware of appropriate dismounting  and descending technique 3,3 Medium  Unaware of the correct use of equipment 3,3 Medium  Unaware of appropriate technique to  assist other climbers 3,3 Medium  Unaware of appropriate technique to  traverse element 3,3 Medium  Overly excited on the activity 3,2 Medium  Trapped on rope  (due to ceased carabineers). 3,3 Medium  Failure to be element / platform  safety while descending 4,3 High  Rope burn 2,2 Medium  Finger jam 3,2 Medium  Clothing jams 3,2 Medium  Lack of appropriate / effective  communication 4,3 High | 3 | 3 | Medium | * Personal check prior to PPE fitting (enclosed footwear, suitable and modest clothing, hair tied back, removal of jewellery and body piercings) * Explicit explanation and demonstration of PPE (harness and helmets * Explanation and explicit instruction of how to belay, spectate, hold the ladder, climb, get on the platform, help other climbers, balance, and dismount and descend appropriately. * Clear explanation and demonstration of fitting karabiners * Demonstrate and explain the whole process of student group “hooking up”, climbing, helping each other, balancing, dismounting, descending as well as having the belay team perform their roles and show their responsibilities. * Students are encouraged to give themselves a target to reach before descending. * Explain and discuss communication and calls to be used before the ascent and after completing the descent. * Instructors aware and practised in use of belay line to assist the ascent and descent of the climber. * Discuss the calmness in communication and calming techniques * Review program focuses and assist students with dealing with anxious situations. | 3 | 2 | Medium |
| Belay Team  Assistants unaware of appropriate  belay technique 4,2 High  In experience with appropriate  belay technique 4,2 High  Inappropriate belay position assumed 3,3 Medium  Lack of appropriate / effective  communication 4,3 High  Rope burn 2,2 Medium  Finger jam 3,2 Medium  Clothing jams 3,2 Medium | 4 | 2 | High | * Ensure a supportive learning environment * Students in the belay area or awaiting their turn to wait for the instructions of the instructor or respective B1 * Demonstrate and explain the whole process of the belay drill and progression as well as having the belay team perform their roles and show their responsibilities * During set-up of equipment, all ropes and equipment checked to ensure smooth transition between B3, B2 and climber * Ensure B1 belayers can demonstrate an effective 5 step belay technique. | 3 | 2 | Medium |

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| Equipment | | | | | | | |
| **CAUSAL FACTORS**  Hazards, perils, dangers | Consequences | Likelihood | Rating | **RISK MANAGEMENT STRATEGIES**  Strategies to reduce perceived risk rating to acceptable & manageable levels to maintain a safe, secure working environment | Consequences | Likelihood | Rating |
| Equipment failure  Personal   * Harness 4,2 High * Helmet 4,2 High * Carabiner 4,3 High   Access   * Step ladder 3,2 Medium * element hardware 4,2 High * platform 4,2 High * poles 5,1 High * staples 4,1 Medium * stays 4,1 Medium   System   * gear line 4,2 Medium * belay cable 5,2 High * gloves 2,2 Medium * knots 4,3 High * pulley 4,2 High * prussic loop 3,2 Medium * rope 4,2 High * rope bag 1,1 Low * ATC 3,2 Medium   Stay   * Anchors 4,1 Medium * Cables 4,1 Medium * attachment hardware 4,2 High | 4 | 3 | High | * Assessment of individual with regards to body shape, weight or confidence. * Use of fully body harness or combination chest harness where appropriate * Assessment of participant ability to use equipment. * Briefing including an awareness of the hazard. * Briefing on correct use and awareness of consequences of incorrect use of PPE * Regular inspection and maintenance of all equipment. * Withdraw, appropriately mark and dispose of unserviceable and faulty equipment * Periodic Safety audits conducted yearly by an independent certified inspection body (Project Adventure). * Regular inspections carried out by a competent KOEC staff member with ‘manage challenge course’ qualifications. * Secure course to prevent ground access when not under supervision. * Separation of retired gear and usable gear. * Staff ability to recognise worn or faulty equipment. * Use according to manufacturer's specifications. * Use effective backstop belay method. * Vigilant supervision. * Visual inspection of ropes, webbing and hardware during session. * Visual inspection of the course prior to session. | 3 | 2 | Medium |
| Equipment management  Inappropriate attire. 3,3 Medium  Incorrect fitting PPE 4,3 High Incorrect use of equipment 4,3 High  Accidents using equipment 4,3 High  Incomplete rescue pack 4,3 High | 4 | 3 | High | * Individual staff kit to include multi tool, rope knife, gloves, spare prussic, alloy karabiners, “Figure of 8” belay device, “pluck-off” sling * Rescue pack to include Lobster claws, additional karabiners, tapes, slings, static rope, pulleys, ground anchor, chest harness, leg stirrup and haul system * Rescue pack to be readily available to be accessed in “rescue situations” * KOEC instructors to be trained to use elements of the rescue pack and trained in appropriate rescue procedures * Belayer 2 - a back-up belayer with prussic back-up. * Belayer 3 - rope manager, safety officer and back-up knot tier. * Use reciprocal belay system (Team complements each other) * Ensure all participants wear a helmet on the course. * Ensure participants have adequate footwear, appropriate clothing, removed or taped jewellery and secured long hair. * Leader competence in use of equipment. * Maintaining a log on the belay ropes. * Check the fitting of harnesses and helmets. * Briefing to avoid damage to environment & equipment. * Belaying process/ lowering must be smooth. **No drops or extra release of rope or bouncing of students** * **Student may perform aerials but no inversion** | 3 | 2 | Medium |
| Equipment security  Equipment loss. 3,3 Medium  Security of system elements. 4,3 High  (unsupervised usage) | 4 | 3 | High | * On completion of activity, ladders to be taken down and chained out of reach to deny access to elements. * Leader to account for all equipment at the end of the session. * Course to be set up for each group. * Correctly storing and maintaining gear. * Course built by Adventure Training Systems. | 2 | 2 | Medium |

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| Environment | | | | | | | |
| **CAUSAL FACTORS**  Hazards, perils, dangers | Consequences | Likelihood | Rating | **RISK MANAGEMENT STRATEGIES**  Strategies to reduce perceived risk rating to acceptable & manageable levels to maintain a safe, secure working environment | Consequences | Likelihood | Rating |
| Environmental danger  Expose to environment  (Hyperthermia, hypothermia, heat stroke,  dehydration, sunburn) 4,3 High  Insects, ants and wasps 4,3 High  Deterioration or damage to equipment  (rust, rot) 4,3 High  Animals (wildlife and domestic) entering  equipment area 3,2 Medium  Muddy and slippery surface due to  underground spring. 3,2 Medium | 4 | 3 | High | * Adequate briefing and sequencing of potential issues * Animals/insects removed. * Appropriate environmental briefing and sequencing. * Create an awareness of any environmental hazard (long grass, ants, and wasp nests etc.). * Ensure equipment is returned and stored appropriately away from environmental elements (sun, rain, direct UV rays) * Ensure rescue equipment is available and positioned near the shed to be readily used. * Equipment not left out in the open for extended time. * General on-site maintenance *i.e. mowing and hardening of site with sand or crusher dust when boggy or muddy.* * Use equipment only under a certified leader’s supervision. * Vigilant supervision. * Visual check of course prior to use. | 2 | 3 | Medium |
| Weather conditions  Weather extremes 5,2 High  (Cyclone, lightning, high winds)  Moderate weather conditions 3,3 Med  (gusty winds & rain)  Equipment damage (sun, rain & dirt) 3,3 Med  Heat. 4,3 High Limited visibility (rain, sun). 4,4 High Strong winds. 3,2 Med  Sun and adverse weather conditions. 4,5 Extreme | 4 | 4 | High | * Professional Course inspection after severe weather event (cyclone) * Select another activity if the weather is too bad. * Leader competence - knowledge of local weather patterns and ongoing monitoring, first aid. * Exit the course if the weather becomes unsuitable. * High Ropes should not be used in electrical storms. * Encourage participants to drink water, ensure participants have water bottles and opportunities to drink. * Suitable medication, first aid readily accessible. * Implement sun safe strategies. * Modify activity/task to suit weather conditions or abort. * Participants to wear suitable protective clothing. | 2 | 3 | Medium |
| Environmental Footprint  Human impact. 4,3 High  Repetitive injuries (neck). 3,4 High Height and gravity. 5,5 Extreme  Disturbance of flora and fauna 3.3 Medium | 4 | 3 | High | * Use environmental management strategies to reduce human impact eg use paths to minimise compaction. * Use minimal impact strategies. * Take regular breaks as required to vary posture. * Participants' medical history assessed. * Participant awareness of the potential hazard. * Participants instructed and supervised to walk carefully along the paths. * Rope bags used by third belayer. * Modify course access to alleviate/address environmental factors. * Monitor participant behaviour and attitudes prior to and during the use of the course. | 2 | 2 | Medium |

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| **EMERGENCY** | General:  (a) First Aid kits.  (b) Instructors skilled at group management and rescue situations.  (c) Qualified First Aid person on hand.  (d) Two-way radio network for immediate assistance.  Leader effecting emergency procedure   1. *Leader remains on the ground.*   In responding to a participant in need of assistance the Leader must:  (a) Identify the student in difficulty.  (b) Communicate with the participant if possible.  (c) Brief other staff and students if required.  (d) Assist the participant in an effective and appropriate way.   1. *Leader ascends the high element.*   If the Leader is ascending the course to provide assistance they must:  (a) Inform the other staff.  (b) Ensure the safe operation of the belay system in use.  (c) Collect emergency response gear (elements from the rescue pack).  (d) Make themselves safe.  (e) Maintain communication with the participant if possible.  (f) Determine the preferred method for their own descent.  (g) Determine the method of assistance to the participant or the descent of the participant.  (h) Move to the participant and lock off.  (i) Make the participant safe with a back-up anchor if the belay remains directly unsupervised.  (j) Provide assistance to allow the participant to continue or return the participant to the ground. |
| **RELEVANT INDUSTRY STANDARDS APPLICABLE** | * Refer to 'Common Practices for the Installation of Challenge Ropes Courses in Australia'. * Adventure Training Systems Manual. * Australian Adventure Activity Standards * AS 2316.2.1:2016 Artificial climbing structures and challenge courses Part 2.1: Flying foxes and challenge ropes courses—Construction and safety requirements (EN 15567-1:2007, MOD) * AS 2316.2.2:2016 Artificial climbing structures and challenge courses Flying foxes and challenge ropes courses – Operation requirements (EN 15567-2:2007, MOD) |
| **POLICIES AND GUIDELINES RECOMMENDED** | * EQ Workplace Health, Safety and Wellbeing - First Aid * EQ Health/ safety / management - Health & Safety recording and notification * EQ CARAS - Curriculum Activity Risk Management * EQ Health and Wellbeing Policies - Sun Safety * Individual School Health & Safety Policies * Refer Centre specific “Standard operational procedures” * Maximum group size of 20 (recommended 16) with one Centre staff plus one adult per element to be used. * KOEC staff only to provide belay training the assisting adults * Correct and proficient belay technique must be demonstrated by assisting personnel prior to assisting in the high ropes session * Yr 11 and 12 permitted to belay peers, therefore used as adult belayer. * Age group - minimum Year 5 and above. |
| **SKILLS REQUIRED BY STAFF** | * First Aid and Emergency Qualifications; HLTAID009—provide cardiopulmonary resuscitation (CPR); HLTAID010—provide basic emergency life support; HLTAID011—provide first aid; HLTAID013—provide first aid in remote situations; or equivalent competencies. * Group control and management in an outdoor setting. * Proficient in usage of equipment. * Proficient in carrying out rescues. * Competent in rope work for climbing. * Good interpersonal communication skills. * Effective processing skills. * Competence (demonstrated ability to undertake the activity) in recognised safety systems used in ropes courses (recognised belaying techniques for high ropes courses). * Competence (demonstrated ability to undertake the activity) in effecting a rescue from any activity on the ropes course. * Competence (demonstrated ability to undertake the activity) as an instructor. |
| **FINAL DECISION ON IMPLEMENTING ACTIVITY** | Choose one |
| Accept √ Reject  After consideration of the probability of the risk occurring, how often the participants are exposed to the hazards associated with the risks and the possible consequences, all of the above risks are unacceptable and hence control/management strategies will be implemented. |

**Approval Details**

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| Submitted by: | |
| Name: Zach Roberts | Position: Principal |
| Email: zrobe47@eq.edu.au | |
| Signed: | Date: 01/02/2022 |

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| Approval *(only required for high or extreme risk activities)* | | |
|  | Approved as submitted | |
|  | Approved with the following conditions: | |
|  | Not approved for the following reasons: | |
| Visiting staff approved to facilitate activity: | | |
| Signed (visiting school principal): | | Date: |

1. *The inherent risk level is determined before any control measures are put in place. Refer to the* [CARA planner](https://education.qld.gov.au/curriculum/school-curriculum/CARA). [↑](#footnote-ref-1)