



Blue Light High-Ropes Standard Operating Procedures

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Revised By:	Dominic Crow
Authorised By:	Brendon Crompton

Purpose

This policy shows you the safe practice of the Blue Light High Ropes course. This policy needs to follow Blue Lights SMS. All staff and contractors need to follow this policy when using the Blue Light High Ropes course. This is a “living document” and may be changed following new safe practice guidelines or new equipment standards.

Responsibilities

Blue Light Rock & Ropes

Scope

Traverse along a range of different elements on the high ropes course using a top rope system.

Location

Blue Light Youth Center Papakura – High Ropes Course

Instructor Competency

Blue light internal competency signed off. Refer to Appendix (A).
Adventure Works Level 4 – High Ropes Qualification or higher

Adult Helper Competency

Physically and mentally able to follow and demonstrate duties outlined in adult induction for belaying or pastoral care

Participant Competencies

Under - 150kg (about 330.69 lb.)
Able to climb the ladder to access the High-Ropes



Technical Advisors

Internal TA: Dominic Crow - 0220326887

Technical Expert: Peter Cammell - 0274905218

Ratios

Maximum of 12 students to one instructor.

Minimum one adult accompanying group.

If there are any participant with different abilities or students with behavioural challenges which may alter them completing the activities safely the instructor consults with the lead instructor to decide as to whether another instructor / helper is required. At any point during the activity if the instructor believes there could be extra risk the instructor should stop the session and consult with the lead instructor to bring on additional support.

Risk Management

Refer to AMP.

If the instructor feels the session is unsafe, they have full authority to call a halt to the activity.

This can be but not limited to:

- Weather: Heavy rain, High winds, and thunderstorms
Refer to 30/30 rule- If you hear thunder within 30sec of seeing lightning we shut high ropes for 30min. 30min restarts after every time if this occurs again.
- Participants not listening or physically unable or medical issues
- Equipment or facilities unsafe

Call Lead instructor over if ever unsure

Personal Safety

Instructors need to always maintain personal safety. They can only instruct and perform tasks they have been trained in. No activity will run unless the lead instructor is onsite and trained in rescue for all activities running.

Blue Light Staff Responsibilities

- Blue Light staff will be trained to run the Blue Light High-Ropes and have continuous training when needed to develop skills and group management
- Blue Light staff are responsible for all safety aspects of the running of the High-Ropes
- Continuously maintain all safety equipment and facilities for the running of the High-Ropes
- To ensure everyone has signed off on the activity they are appointed to.
- Have first aid equipment & first aid certified person on site
- Have cell phone communication to the Lead Instructor
- Manage new hazards/risks as they arise, and later discuss in de brief

Call a halt to the activity if conditions or facility become unsafe

Instructor Positioning

Blue Light staff will be positioned close enough to provide direct supervision to participants belaying unless the belayer has been trained and has provided evidence through performing correct belay technique and an understanding of belaying for the High Ropes. When the instructor is confident, they may position themselves to indirectly supervise the belayer.

At all times staff will position themselves so that they can see and manage belayers, climbers, harnesses and attaching of climbers.

Pre-Activity

- Lead instructor to assess weather and determine if activity can run
- Instructors running activity are required to have read and signed the SOP and AMP
- The lead instructor needs to check ratios for groups and risk acknowledgment forms have been signed.
- Lead instructor and instructor in charge will need to review groups medical information and create plans if less able participants need added help
- Lead instructor to ensure all 3 monthly equipment inspections have been completed
- Discuss if challenge course or low rope/slacklines are running, if so, instructors need to add in brief to stay clear of High-ropes course and belayers.

Set Up

- Complete a full facility and equipment pre-use inspection, (refer to equipment section)

Approved knots for climbing wall (all with a finishing knot):

Bowline on a bite



Double figure 8 on a bite



Retraced 8



- Pull rope through SRD's using haul cords until both ends touch the ground
- Remove haul cord and place out of the way
- Tie knots on the climber's side and belay device on the other
- Tie classic prussik knot 1m after belay device
- Double check all knots are correct and dressed and ropes are not twisted

Have correct number of harnesses, helmets, and a chest harness.

Ensure rescue instructor is present and has rescue equipment.

If you are unsure of anything consult with lead instructor

Make sure instructors have:

- Harness-Prussik, anchor chain, belay device & 2x karabiners (1x needing to be steel)
- Helmet
- Closed toe shoes
- Cell phone
- Appropriate clothing for weather
- First aid kit in tower

Make sure participants and adult helpers have:

- Closed toe shoes
- Appropriate clothing for weather
- Hair tied back
- Loose jewelry removed or hidden



Brief to Group

Introduce yourself & Activity

- **Introduction to self and activity**
 - Explanation of elements
 - Difficulties of each
 - Rotation end time
 - Explain challenge by choice
- **Rules and safety**
 - No walking under climbers
 - No climbing without belayers
 - Students to keep clear of belayers position/route
 - Where to stop climbing
 - How to come down
- **Harness fitting** (*refer to helmet and harness section*)
- **Helmet fitting** (*refer to helmet and harness section*)
- **Climber and Belayers roles and responsibilities.**
(*This needs to be done verbally and demonstrated*)
 - How to open and attach karabiners- for climbers, belayers and prussic
 - Basic spotting and ladder holder if needed (instructor discretion)
 - Climbing calls, options could be “climber ready”, “Belayers ready?”
- **Belay training** (*Refer to belay section*)
 - Pull, Lock, Grab and Slide technique
 - Proper lowering technique
 - Prussic and bucket (*if needed*)
- **Everyone to perform horizontal practice**
Start first climber

Adult Brief

Cover emergency procedure if instructor is incapacitated to get two students to get closest instructor (*Abseiling or Rock Climbing*) if no other activities are operating the closest staff member will be (*office*)
To remove the rest of the students to other side of tower

Responsibilities during activity:

- Pastoral care
- Reinforcing boundaries or other guidelines the instructor may put in place
- Belaying participants

Running of the Activity

- Before first climb make all participants aware that safety squeeze needs to be shown to instructor before climbing and needs to make sure belay team has confirmed verbally, they are ready for climber to climb
- Throughout coach belayers with technique advice and when anchor is required
- Through session manage all participants stay in High Ropes area
- Add extra challenges when needed
- If at any point belayers have completed two climbers without instructor needing to intervene the instructor can decide to supervise belayer indirectly but continue to monitor at all times. Belayer needs to be aware that before climbers leave the ground instructor still needs to double check and before climber is lowered instructor needs to be informed before descent begins.
- During activity instructor should be visually checking all participants harnesses before climber leaves the ground and placing chest harness on participants when needed



- Ensure if there is a climber heavier than the belayer yourself or appoint another participant to assist in weighting the belayer while the climber is on the activity. (refer to belay section to how to weight belayer correctly)

At any time if instructor feels like the session is unsafe, they can call a halt to the session

Pack Down and Post Activity

- As equipment is packed down check for wear and tear
- All gear to be stored back in tower, if gear is wet ensure dehumidifier is switched on
- Roller door to be closed and tower door locked
- Any equipment issues or issues that arise during session are to be recorded on a debrief form and given to program co coordinator
- Any incidents recorded on Audit
- De-brief to be completed as soon as practicable

Belay Technique

If you ever think the climber is heavier than the belayer get another participant to be the belayers "anchor" by holding the harness not the gear loops.

If using a slot device, a prussik is required, if using a locking assist device prussik is up to instructor discretion.



Regardless of device used, belaying is required for all steps referred to below

Pull rope through device	Pull hand into the Lock position	Grab locked rope	Slide hand back to starting position	Repeat



To Lower

Slot Device

- Ensure participant has all their weight on the rope
- Use “grip & release” technique to control their speed to the ground

Locking Assist Device

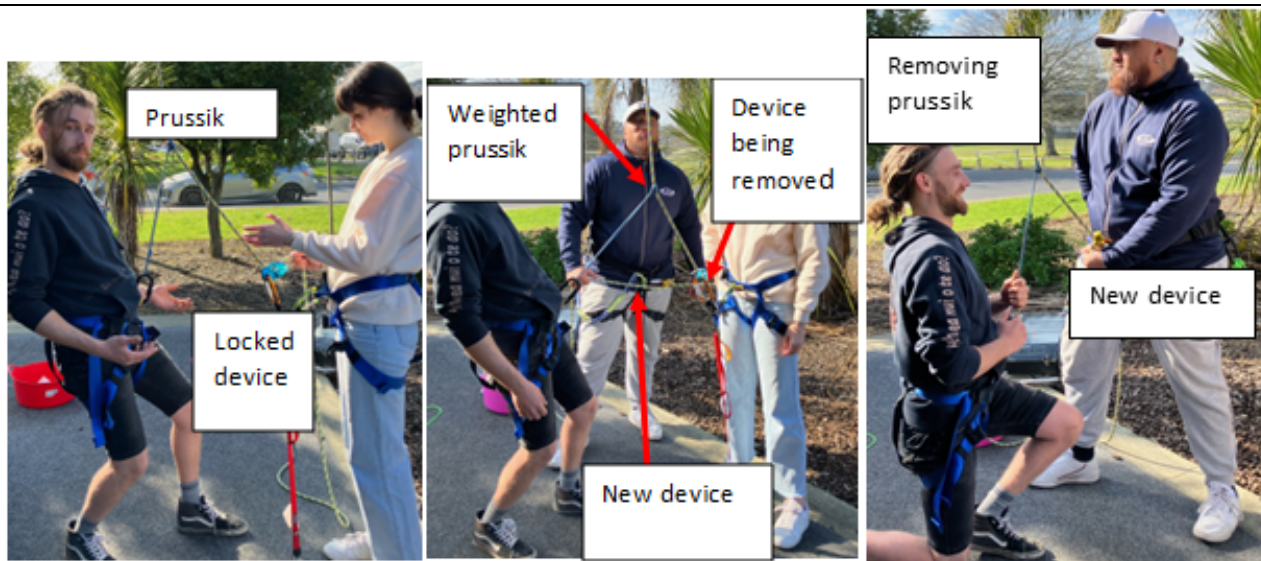
- Ensure participant has all their weight on the rope
- Grip the rope next to your hip with your right hand
- Put pressure on the brake handle pulling it towards you
- Use your right hand to control the speed of decent

High Ropes Rescue

All instructors running Rock climbing are required to have a Prussik, Anchor chain, belay device & 2x locking karabiners. Even if they are not signed off to perform rescues, they need to be competent in tying a prussik until the rescue instructor arrives to perform the complete rescue.

Weighted Belay transfer

1. Ensure belayer is locking off the device
2. Tie prusik to belay rope above belay device and attach to yourself or 3rd person using a locking karabiner
3. Attach a belay device under the prussik and secure it to new belayer
4. Tension the prusik to give slack to the first belayers device and remove it.
5. Tighten any remanding slack between prussik and new belay device
6. Remove prussik and allow new belayer to continue belaying



Gear Retrievals-

Could be used but not limited to if a haul cord is dropped or an SRD need replacing.

Climb pole using fall arrest lanyards, get into a good working position, attach lanyard 1 to cable with gear needing to be retrieved, place pulley with karabiner between lanyard 1 and the pole. Place lanyard 1 through pulleys karabiner and attach back to your belay loop. Weight test system, then remove lanyard 2 and attach to cable and roll out to gear needing to be retrieved.

Using the cable pull yourself back (if you find this difficult before attaching pulley to cable attach a rope to the pole and attach the other end to your harness, when needing to come back use rope to haul yourself back to the pole) When back at the pole attach lanyard 2 to pole, create a working position and remove pulley. Climb back down using fall arrest lanyards safely.

Cut away

1. Climb pole using fall arrest lanyards, get into a good working position. Place pulley on belay cable, connect steel karabiner with rope attached, keep rope in a karabiner on gear loops and climb back down to the element using fall arrest lanyards.
2. When above the element thread rope into the slot device and attach to the 2nd and 3rd loop of your anchor chain with a locking karabiner, thread the rope below your slot device through the Gri Gri and attach it to harness belay loop with a locking karabiner. Weight test your system then remove your safety lanyards and walk on element to your stuck participant. Lower yourself until your waist is around shoulder height of your participant, lock your Gri Gri.
3. Attach your anchor chain to participant with as much tension as possible, then attach karabiner to fall arrest lanyard working point and to the participants belay loop or karabiner they are being belayed with.
4. Double check all karabiners are locked, and anchor chain is as tight as possible.
5. Ensure participant is looking away and hands on theirs or your gear loops, double check which is their belay rope and cut it
6. Unlock your gri gri and lower yourselves slowly.

Rescue / stuck climber – Hoist transfer lower

1. Climb pole using fall arrest lanyards, get into a good working position. Place pulley on belay cable, connect steel karabiner with rope attached, keep rope in a karabiner on gear loops and climb back down to the element using fall arrest lanyards.
2. When above the element thread rope into the slot device and attach to the 2nd and 3rd loop of your anchor chain with a locking karabiner, thread the rope below your slot device through the Gri Gri and attach it to harness belay loop with a locking karabiner. Weight test your system then remove your

safety lanyards and walk on element to your stuck participant. Lower yourself until your waist is around shoulder height of your participant, lock your Gri Gri.

3. Attach your anchor chain to participant with as much tension as possible, then attach karabiner to fall arrest lanyard working point and to the participants belay loop
4. Double check all karabiners are locked, and anchor chain is as tight as possible.
5. Ask belayer to undo knot on their device and see if you can loosen their system, if unable attach a prusik on the participants rope as high as you can, attach the 3:1 system with the teeth to prussic and attach the pulley end to the participant.
6. Haul until you can see the participants rope loosen. Double check your anchor chain & lanyard attachments and remove their rope from their harness. Lower the 3:1 system until all their weight is back onto your harness. Remove the 3:1 from their harness.
7. Unlock your gri gri and lower yourselves slowly.

Harness & Helmet Fitting

Helmet

- Long hair tied up but below helmet line
- Cradle of helmet to sit 2 fingers above eyebrows on forehead
- Helmet adjustment tightened firmly
- Chin strap tightened so cannot slide off the chin



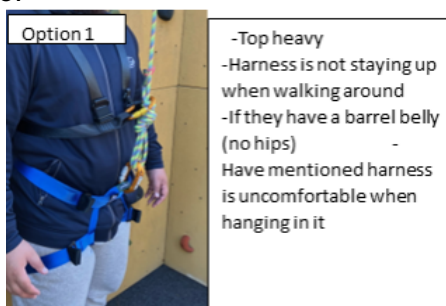
Harness

- Everything removed from participants pockets
- Harness above all clothing
- Waist tightened first and above hips of participant
- Leg loops not twisted and tightened last




Chest Harness

Criteria to assess if participant needs a chest harness could be one of these suggestions but not limited to:



Option 2



Equipment	
Equipment	Pre-Use Inspection
Dynamic Ropes	Excessive fraying, soft or hard spots, Stiffness, Glazing, difference in diameter, obvious cuts, any core fibers visible
Karabiners	Rust, excessive wear, stiff moving parts, visible deformities
Prussic	Excessive fraying, soft or hard spots, Stiffness, Glazing, difference in diameter, obvious cuts, any core fibers visible, knots loosening or orientated incorrectly
Helmets	Fraying or cuts on chin strap, cracks or deformities of shell, rusting
Harnesses & chest harnesses	Fraying, stitching coming undone, cuts or tears in the fabric
Rope buckets	In one piece and clean inside
Rescue kit <ul style="list-style-type: none"> - Fall arrest lanyards - Static Rope - 2x belay devices (1x slot device & 1x locking assist) - 2x steel karabiners - 4x Triple lock karabiners - 2x slow drawers - Pulley - Scissors - 3:1 system 	All parts checked as above and accessible 
Facilities	
	Pre-use Inspection
Top anchors, Cables	Mallions, 'U' bolts & SRDs orientated correctly, Haul cord travelling under SRD guides, no fibers showing on cable, no tension on redundant halos
Poles	No major splinters or cracks
Wall & holds	No visible splinters or cracks, No gaps between features and wall
Surrounding area	Clear of clutter



3 Monthly Inspections – Completed by Programme Coordinator – Recorded in database.

Equipment	Maintenance
Hardware	Water to clear grit and dirt then silicone spray and aired out before in contact with soft gear.
Soft Gear	Cleaned in warm water with very mild detergent when needed

Element Specific Procedures

Lowering procedures:

All elements lower participant on the inside of the course and belayers stay outside of the course. All lowering from elements should be done as close to the middle of the element as possible.

Front Attachment: Participants will be asked to face their belayer and lean back keeping their feet wide to keep balanced. They will be asked to keep their feet on their element until their head is the same height as their feet. When taking their feet off their element they will be encouraged to hold their hand out in front to push the element away.

Traditional High Ropes High Beam

Participants	One or two
Instructor competency	One participant-Leader Level/Two Participants Instructor level
Description	1 Participant walks along the high beam to the other side back to the center to be lowered. 2 participants- when at the top one participant will blindfold the other, they then need to trust the other to guide them to the other side
Special considerations	<ul style="list-style-type: none"> • Beam can be slippery when wet 2 participants <ul style="list-style-type: none"> • Make sure you manage ropes when participants are trying to dismount, lowering one first and waiting for the belay team to move before lowering the next • Belayers to be aware of the obstacle course when walking • First climber to climb and wait on the beam and allow space for the second

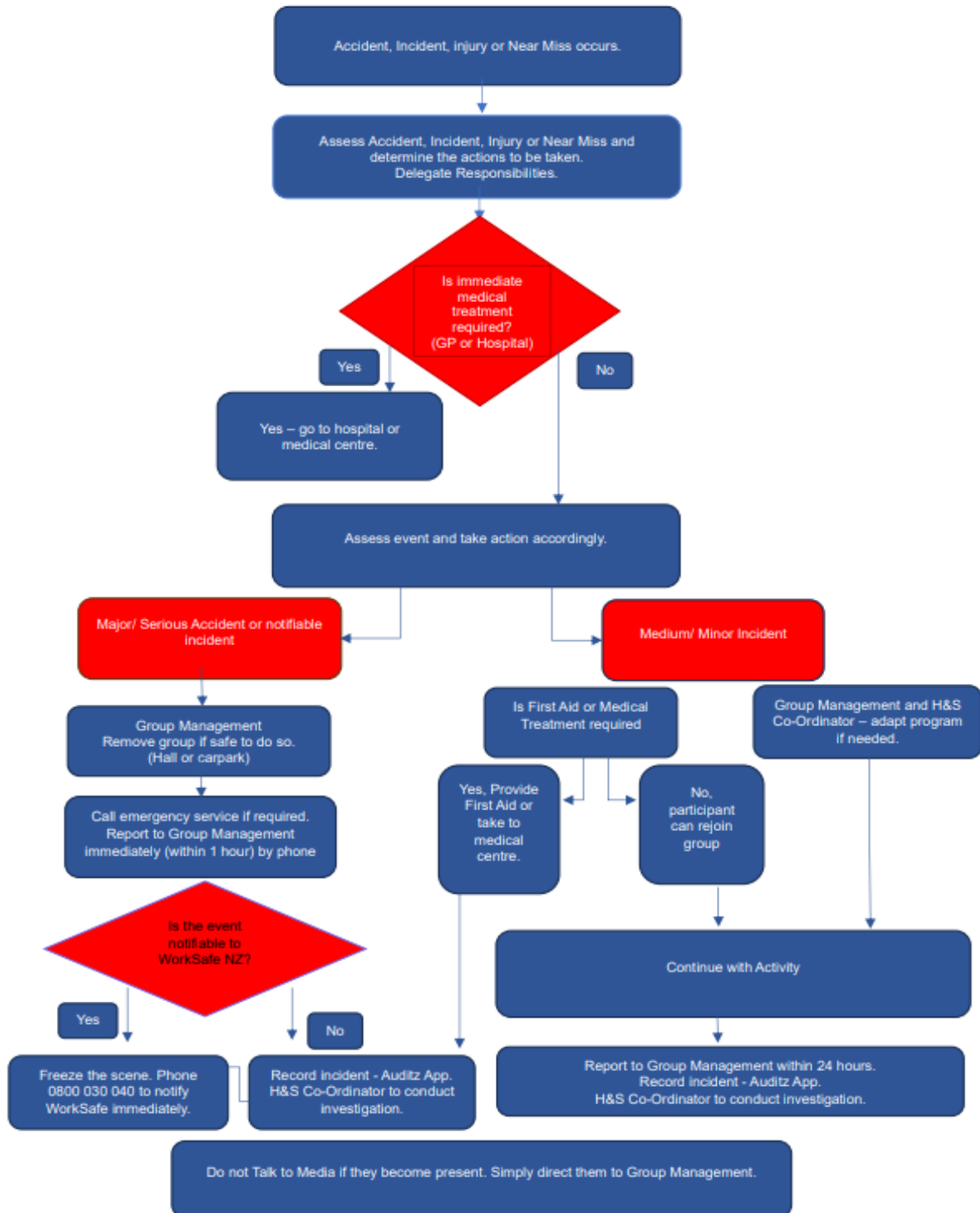
Chicken Walk

Participants	One or two
Type	One participant-Leader Level/Two Participants Instructor level
Description	There are two-foot cables running parallel. The objective is to support the other participants in walking from one side to the other. Participants can also try the task by themselves.
Harness	Front attachment
Special considerations	<ul style="list-style-type: none"> • When climbing make sure climbers climb on the outside of the cable closest to the middle of the high ropes. • Ask participants to stand with both their feet on the inside cable 2 participants <ul style="list-style-type: none"> • Make sure you manage ropes when participants are trying to dismount, lowering one first and waiting for the belay team to move before lowering the next • First climber to climb and wait on the chicken walk and allow space for the second

Appendix B Emergency Response Plan



INCIDENT REPORTING PROCEDURE





Employee Declaration

The Safe Operating Procedure for **High Ropes** have been covered in this session and I have been given the opportunity to ask questions and review the information provided. I fully understand the procedures and agree to comply with them.

Employee Name	Signature	Date