High Ropes LOP'S

Each day High Ropes specialist must inspect all elements:

Zip line
Swing-shot
Vertical play pen
Two-line traverse
Climbing tree
Multi vine
Indiana jones bridge

Trees and their surroundings
Down branches
Pulley and all other hardware
Path to zip line
Gates to platforms
Inspect Harnesses
Inspect True Blue
Inspect Ropes

High Zip Line-
Pre Flight Safety:

Only campers entering 2nd grade and older may use the high ropes course

Campers must wait to use elements until called by facilitator.

The gate on the top platform to the zip line must always be locked until camper and staff have harness's on and are clipped into safety tether.

Only one camper at a time may be on the zip line. This includes the platform and stairs.

Once the 5-point safety check is performed before sending camper up an element

Counselors will assist in when help is needed

Only trained staff my run an element.

5-point safety check:

1. Shoes (laces are tied)
2. Harness: fit, tightness, 3 buckles backed up. No red showing.
3. Jewelry or necklaces are tucked in
4. One pear biners: locked, gates are down and out
5. Helmet fits and is buckled properly with a new coffee filter for each camper inside the helmet as a lininer

Zip Line

1) Before anything, delegate the role of pole retrieval person (people) to one or two counselors.

2) Ascend zip platform and clip yourself into safety line.

3) Call for a camper to come up to the zip platform.

4) Greet camper atop the zip platform

5) Clip the camper into the zip system using the front purple loop.

6) Place helmet on camper.

7) Check the camper's harness (proper fit, three buckles, and loop in back).

8) Squeeze-check all carabineers on zip system.

9) Explain the retrieval system to the camper.
    a. Counselor puts retrieval line on pole.
    b. Counselor holds retrieval line up to camper.
    c. Camper clips the line into their front purple loop
    d. Camper gives thumbs-up for pull team to pull them back.

10) Remind camper not to flip upside-down.

11) Ask if the camper understands and is okay.

12) Check and call out for the corridor to be clear.

13) Once ready, open door and allow the camper to zip.

14) As camper is zipping, lower retrieval line down to counselor.

15) Watch entire process closely.

16) Once camper is done zipping, retrieval occurs as explained in steps 6a-d

17) Bring camper back on platform.

18) Close door behind camper.

19) Ask if camper is okay.

20) Take retrieval line off and replace on tree.

21) Take helmet off.

22) Take camper off zip system.

23) Tell the camper to safely exit the zip platform using the steps.

24) Call for next camper.

Climbing Tree

1) Greet camper, and ask if they are doing okay. If not okay, reassure that everything is just fine.

2) Check camper's harness (proper fit, three buckles, and loop in back).

3) Put helmet on camper.

4) Hook belay onto the camper's front purple loop.

5) Squeeze-check the carabineer.

6) Recheck harness as above.

7) Remind camper to:
    a. face the tree at all times.
    b. use arms and legs to help climb the tree.
    c. upon descent, not spin around.
    d. upon descent, use legs to keep a safe distance from the tree.

8) Ask if the camper understands and is okay.

9) Check surroundings for loose limbs, branches, etc.

10) Allow the camper to climb.

11) Watch camper, encourage, and instruct.

12) After descent, ask if the camper had fun.

13) Take the belay system off the camper.

14) Take the helmet off the camper.

Swing - Shot

1) Delegate roles
    a. Chest Harness Counselor – to put chest harnesses and helmets on campers
    b. Ladder Counselor – to be in charge of moving ladder and spotting the campers upon their use of the ladder.

2) Stand atop ladder and call for camper.

3) Camper should arrive with chest harness, regular harness, and helmet on.

4) Tell camper to climb opposite side of the ladder that you are on.

5) Upon ascent, clip camper into Swing-Shot system.

6) Check both harnesses for proper fit.

7) Check all buckles of both harnesses and back loop of lower harness.

8) Check helmet for proper fit.

9) Ask if camper is okay.

10) Once all clipped in, allow camper to step off the ladder and dangle from Swing-Shot system.

11) Descend ladder and allow the Ladder Counselor to move ladder away from camper.

12) Clip the auto-release system into camper's back loop.

13) Clip the auto-release system into pull line.

14) Hand the camper their auto-release rope and explain the process:
    a. The pull team will hoist camper.
    b. Camper says "Stop" whenever they want to stop going up.
    c. You can give a "3-2-1" count or what is most comfortable.

d. The camper pulls the release line and swings.

15) Check for understanding and comfort.

16) Call for pull team to be ready.

17) Check area surroundings for clarity and debris.

18) Once ready, tell pull team to pull camper up and listen for “Stop.”

19) Once camper says “Stop” or is at the top of the tree, give for example a “3,2,1” count.

20) Camper should then pull the release rope.

21) If it does not work, coach camper until it does or bring camper back down to check for snags. Then repeat from Step 18.

22) While swinging, watch for safety.

23) While swinging, pull the pull line back down to be ready for next camper.

24) Once the camper is swinging lightly, stop camper from swinging by grabbing release rope or legs of camper.

25) Take auto-release system off camper and re-attach to pull line.

26) Call for Ladder Counselor to return ladder.

27) Help camper up their side of ladder.

28) Climb your side of ladder.

29) Ask if camper had fun.

30) Unclip the camper from the Swing-Shot system.

31) Allow camper to descend ladder and go to Harness Counselor.

32) Call for next camper.

Belayed Elements-

Vertical playpen,
Two-line traverse

Indiana jones bridge
Multi vine

Element Set-up/Take Down

Element Set Up:

- Setting up the ladder- CAUTION, be sure the right side is out, legs are secure in the ground, top wraps around the tree and angle is approximately 65-70 degrees.

- Stack ropes and visually inspect them during set up.

- String the belay rope through the shear reduction pulley by using a haul line. Secure the belay rope to the haul line with a bowline or two half hitches.

- Stack the haul line out of the way so it will not be tangled when the time comes for take down.

- Check safety and integrity of elements: debris underneath, dead limbs overhead, vandalism, clear belay path, etc.

- Check equipment with a visual inspection and set aside anything you are not confident of. Give to the Director.

- Tie the appropriate knots: Double Figure 8, with a Fisherman's back-up knot. (See Knots section)

Element Take Down:

- Untie the knot, restring the haul line and pull the belay rope through. DO NOT let go of the haul line!

- Coil the rope using the butterfly coil, put it in the right bag, and then put back in the green metal bin.

- Report any equipment or maintenance problems/concerns to the Director. Do not leave broken equipment at the challenge course.

12 Point Check & Belay Commands

12 Point Check

Climber:

1. **Shoes:** Laces are tied, bows are not too large.
2. **Harness:** Check fit, tightness, buckles backed-up. No "red" showing.
3. **One auto locking carabiner:** locked, gates are down and out. Caution about cross loading. Not opposing/reverse.
4. **Knot on rope:** Double Figure 8, with a Fisherman's back-up knot.
5. **Bling:** Jewelry that could get in the way or torn off; ear rings, necklace, whistle on a string, etc. Pens, pencils out of pockets.
6. **Helmet:** Fits and is buckled properly
7. **High-5:** Some sort of encouragement

Rope:

8. Follow the rope up and check for a twist in the rope and be sure it is in the proper location for the specific element

Belay Team:

9. **Belayer's Equipment**: All buckles on harness secure. Carabiner is locked, down and out. Belay Device correctly oriented.
10. **Belayer Brake Hand**: Option to wear a glove if preferred
11. **Back-up Belayer**: Holding rope with both hands and standing slightly back and to the side of the belayer.
12. **Anchor**: Required if the climber is the same weight or heavier than the belayer. Use an anchor if there is any question.

High Course Commands: (to be discussed and demonstrated)

- Climber: "On Belay"
- Belayer: "Belay On"
- Climber: "Climbing"
- Belayer: "Climb"

- Climber: "Falling"
- Belayer: "Fall"

- Climber: "Off Belay"
- Belayer: "Belay Off"

Additional Commands:

- "Tension"
- "Slack"
- "ROCK!" (for anything falling from height)

Belayers Responsibilities

Provides primary safety system for the climber and supervision of back-up belayers.

- Is in charge of the safety and should stay in control of the belay team, the rate the climber climbs and what is happening in and around the element. He/she asks the climber to climb slowly when necessary and asks on-lookers to stay out of the way.
- Be sure the belay rope is properly oriented and is not twisted or rubbing anywhere.
- Checks to make sure the belay team is ready, in place and understands their responsibilities
- Completes the **twelve-point** check on the climber and their own equipment.
- Checks belay position prior to the climb (see below)
- Keeps in good communication with the climber.
- Always keeps their brake hand on the belay rope and is ready to catch or arrest a descent at all times
- Keeps proper tension on belay rope, especially until climber is up 20 feet. The danger zone is 0-20' during which the rope is kept very tight.
- Checks to make sure the carabiners are not cross-loaded and do not get cross-loaded during the climb and warns the climber.
- Keeps proper position while moving in relation to climber (see below) to prevent pendulum.

- Keeps full attention focused on the climber at all times.

- Encourages climber as appropriate and instills confidence and trust.

- Checks to see the belay rope is properly positioned in the event of a fall so the climber will not get burned (7-12 feet back and away).

- Instructs the climber in how to be lowered safely.

Position of Belayer:

- At beginning stand so pulley is closest to the tree being climbed, this position will prevent the climber from a pendulum.

- 7-12 feet out from belay cable- standing too far back may create too much slack so climber may hit the ground in a fall or pull belayer toward the element so he/she can't arrest a fall.

- 7-12 feet in front on traversing elements with foot cables (may need to switch to prevent a zip) so when climber descends the rope or cable won't burn them on the descent

- On traversing elements belay from a position that is up hill of the drape to prevent a zip line toward the middle of the cable.

- Exception: 7-12 feet behind on traversing elements with logs so the climber can't grab the wrong rope and get a burn and so the rope won't be in the way of climber's sight for placing their feet on the log/bridge.

- Belayers should be braced to catch a fall, one foot in front, knees bent, slight squat.

- Anchored by someone holding on to the back of the belayer's harness if the climber is heavier than the belayer. If there is any question, use an anchor.

BELAY TEAM SUPPORT ROLES

Secondary/Back-Up Belayer:

- When the climber is being lowered, the back-up belayer gives out slack so that the primary belayer can control the descent.

- If a belayer should fail in their duties during a fall, the back-up belayer would hold the rope toward the ground.

- Stands to the side with slack in rope that comes down to knees

- Gives attention to their climber. Limit talking and other distractions to instill confidence in the climber.

- Holds rope with two hands and stands back and to the side of the primary belayer's dominate hand, slack to knees to allow primary belayer control.

Anchors:

- The anchor is always required if the primary belayer weighs the same or less than the climber. Anchors are optional if the belayer weighs more than the climber, especially if the belayer has experience. If in doubt, use an anchor.

- The anchor is responsible for keeping the primary belayer on the ground during a fall. If the anchor allows the belayer to go off the ground, the climber will descend further and possibly hit the ground. Anchors hold onto the rear belay loop, hold the belayer down and move along with the belayer.

- On traversing elements, the anchor should move with the primary belayer in either direction and parallel to the element, but never forward toward the element during a descent.

- If you think a controlled lower will pull the primary belayer off the ground, the anchor should kneel to limit the primary belayer being pulled up.

Rope Coiler:

- This is an optional role. Demonstrate how to butterfly coil. Coilers are helpful to keep our ropes clean and if the group is large enough, it is good to involve more people.

Ladder Holder:

- This is an optional role. Hold onto the back of the ladder on the sides (not the rungs) and do not look up (so that they don't get dirt in their eyes).

LOWERING CLIMBERS

Types of Descents/Lowers:

NOTE: Check your position to make sure you're approximately 7-12' left or right to the climber so they will not be burned by the rope and to prevent a pendulum swing.

Unplanned Descent

- When a climber falls unexpectedly. The belayer stops the climber with proper braking ASAP if the climber falls while climbing the tree.
- On some traversing elements, it is important to allow the climber to descend just below the element and then arrest the fall so the climber won't fall back toward the element and get injured.

Controlled Lower

- Climber moves to the middle of the element when possible to prevent a zip line fall due to cable drape.
- Climber turns perpendicular to the element (cable, log or bridge), facing away from the belayer.
- Climber holds the belay rope just above the knot. Not too high on the belay rope and not an element rope or cable.
- Belayer pulls up the slack and keeps tension on the belay rope. Pull up more slack for heavier climbers.
- Climber leans back, keeps feet spread apart for balance and on the cable or log until their feet are higher than their head.
- OPTION A: Belayer slowly lets climber lean back and lowers them down with proper speed (slowly to prevent rope wear).
- OPTION B: Belayer may lower the climber just below the element and then make the arrest to prevent the climber from falling back into the element.

Speed of Descent

- Climbers must not be lowered too fast during a lower or once the arrest has been made. The climber should be lowered slowly especially when they are about to touch the ground. This procedure protects the ropes from unnecessary wear, shearing and glazing and keeps the climber from spraining an ankle when they reach the ground.
- In general, belayers stand 7-12' out and 7-12' to the side of the climber to prevent a rope burn on the climber. Lowers that can create a zip line effect can be limited by belayers positioning themselves on the "uphill" side of the drape of the cable's center.

COMMON ERRORS

Common belay errors:

- Not keeping the rope extra tight until the climber reaches at least 20 feet up on the tree. A fall from that height is more likely to cause an injury.
- Not incorporating an anchor when needed. It may allow climber to fall further if the belayer gets pulled up into the air.
- Letting go of the rope when taking up slack. This can cause a severe fall and injury if a fall occurs.

- Improperly pulling out too much slack with the brake hand which creates too much slack and hard to manage.
- Not being braced when a fall occurs.
- Standing straight out from climber, not 7-12' behind or ahead. The climber may hit rope and receive a rope burn.
- Standing toward center of element while climber starts up tree which causes pendulum swing.
- Not correcting a twist in the belay rope before the climber begins the climb. The friction creates rope wear.
- Keeping the belay rope too tight during a traverse. This holds the climber back, climber must pull the pulley along.
- Letting the climber descend too far in a fall. It is dangerous and wears out ropes faster.
- Not letting the climber fall under an element in some situation which may cause them to hit their head during a traversing element.
- Allowing climber's carabiners to become cross-loaded.

Common Errors of Climbers:

- Climber climbs the tree too fast for belayer to keep rope tight. Too much slack means a longer fall and possible injury.
- Climber using a LEAP anchor for climbing by putting their fingers into it. In a fall this could result in a broken finger.
- Climber grabs the wrong rope in a fall. It may cause a burn to the hands.
- Climber gets inverted due to body type. A chest harness should be used for participants with a high center of gravity.
- Climber allows carabiners to get cross-loaded

General ropes course rules and safety guidelines:

- Inspect the following while setting up the course: ropes, carabiners, harnesses, helmets, belay devices, and check gloves for holes.
- Visually inspect each element and look for: dead limbs overhead, loose limbs or down trees leaning on belay cable glass, rocks, roots, dead limbs, stumps underneath.
- Never step on a belay rope.
- Helmets must be worn by each climber on high elements
- A properly fitting leather glove may be worn on the brake hand of the primary belayer.
- If available, spotters should hold the ladder and spot the climber until climber is at least ten feet up

Common Misunderstandings:

Belay systems do not give, it is a fixed point

- *False: No, ropes stretch, trees bend in.*

The tighter the belay, the more secure it is.

- *False: It may pull climber off the element or impede their progress.*

Keeping a tight belay rope helps the pulley move across the cable.

- *False: A tight belay will slow pulley and may cause wear on pulley or cable.*

Stopping a fall immediately is always the best thing to do.

- *Not always, control climber's fall below element before stopping him/her.*

Lowering people down is the same for each element.

- *False: Each one is different, have them grab above knot, lean back, protect head.*

The belay rope is always a good security point for the participant to grab onto.

- *False: Grabbing the ascending rope will cause a burn, holding rope attached to harness is ok.*

The tightness of the belay rope should always be the same for each element.

- *False: It should be tight while climbing the tree but some elements need slack.*

Belayers need not be anchored.

- *False: Lighter belayers or those outweighed by the climber need an anchor to prevent possible injuries.*

The free end of the belay rope will take care of itself.

- *False: Have a third person keep it out of the way of the belayers.*

It doesn't matter where you stand while belaying.

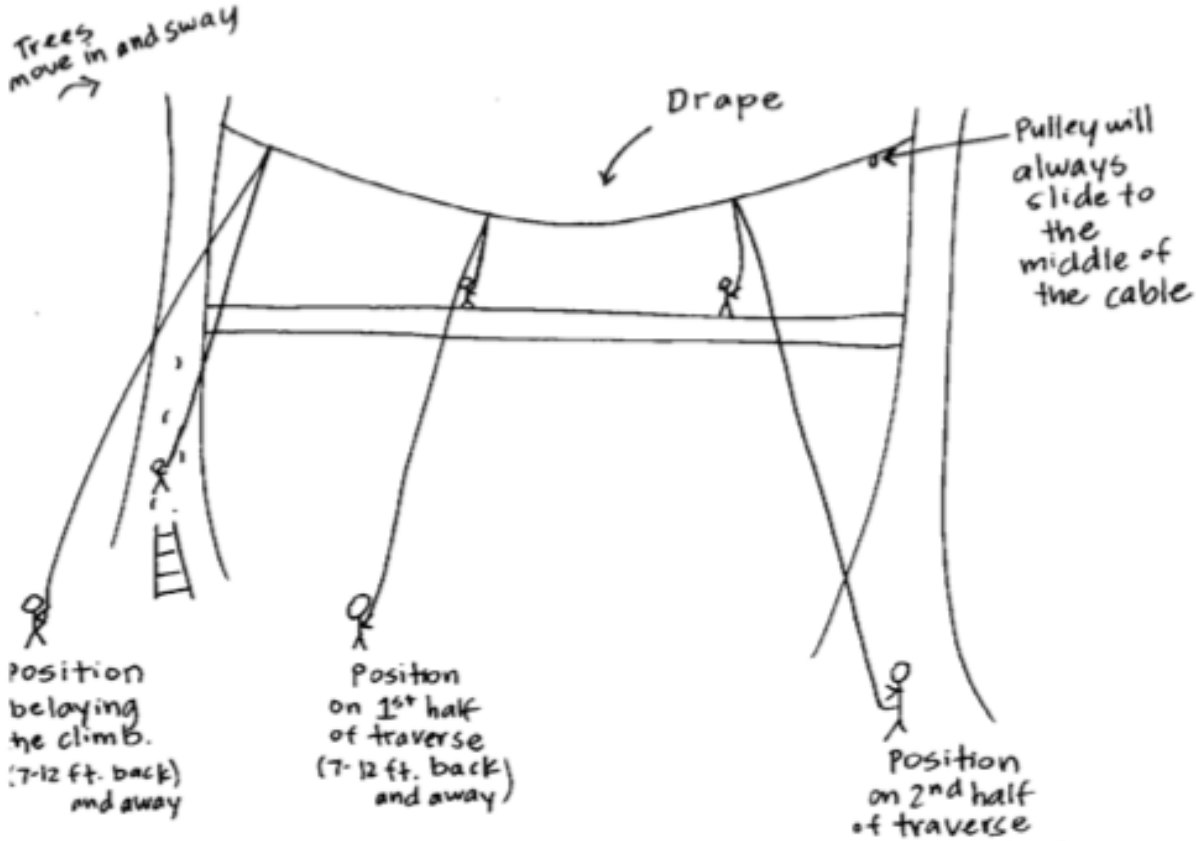
- *False: Standing too far out could cause a severe fall because too much rope is out and you could get pulled toward tree. Standing in line with the climber while traversing may cause a severe rope burn if they fall and hit the rope.*

The climber should only descend on the near side of the element.

- *False: Even though it is easier to get the rope for next climber, it does not matter. Not all falls are planned.*

Back-up belayers always make the belay system safer.

- *False: Not necessarily- the primary belayer could cause an injury by not keeping the proper amount of tension in the rope or by belaying from the wrong belay spot even if the secondary belayer performed their job perfectly.*



Exceptions: Catwalk and Indy Bridge stay behind the whole time
*See Element Specific LOP's. (ie. any element without something to hold onto.)

Equipment Maintenance and Inspection:

• During the course of the summer equipment must be inspected daily. All carabineers, must be visually inspected to make sure gates all work and the integrity of the devise is up to standards. All other equipment such as harnesses, helmets and other hardware must be inspected to make sure they are working and up to standard.

• At the end of each day all equipment must be stored in designated area and locked up.

• If something is broken or not working correctly it must be taken out of service, communicated with the director and replaced as soon as possible.

*Each day you must log how much the ropes was used in the ropes log.

Communication / EAP:

If a problem arises and a camper gets stuck on a high element call for Matt. Use the tall 16 foot ladder or call the fire department if unable to reach camper.

• If the camper is not able to walk to the nurse, have a JR. counselor go get the nurse.

• Inform a head counselor.

• Tell the camper that everything will be ok.

• Take the rest of the group under the building and have them do a small mats activity with the mats specialist and councilors.

• When everything is over meet with your ropes and mats team and address any safety issues or concerns that lead up to the incident with a head councilor or the director.

*In the event of thunder and lightning take everyone off the high ropes course and bring them to the low ropes pavilion.

Special Cleaning and Sanitizing instructions High Ropes and equipment.
At the beginning of each day you will pick up your pump sprayer. They will be prefilled with the solution you will use to sanitize after each period

Sanitizing instructions
When a group comes to High Ropes you or the senior counselor will have the group wash their hands or use hand sanitizer before the period begins. Clean and sanitized equipment should be

ready for the group. **Before a camper goes up on an element they must sanitize their hands.** At the end of the period when you dismiss your groups you must spray down benches and ladders. Wipe down buckles on harnesses, carabineers and helmets with a cleaning wipe. Be mindful of spraying solution when it is windy out or around campers and counselors.

Other tasks

You must arrive by 8:30 each day. You will have your temperature taken once you arrive and must wash your hands. You will be given a morning and afternoon assignment.