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## **Profile Surveys for Chairlifts**

Riblet can prepare quotations given only reasonably accurate horizontal length and vertical rise data for a chairlift. When the time comes to actually design the lift's profile layout, we need accurate, on-the-ground profile survey data.

We are happy with a simple list of horizontal stations and corresponding ground elevations, on paper or in electronic format readable with Excel 97. If you wish to plot the points, our usual drawing scale is 1"=40'. We prefer lower terminal location shown at left end of the drawing. Should you wish to make a CAD drawing, we use Autocad R14 at this time. Metric surveys are fine, though we prefer feet for lifts in the U.S. The survey should be made carefully, as survey busts can cause major complications in the construction of a lift. After you have selected an alignment for the lift, the following notes should help with making a suitable survey:

- Continue the survey at least 100 feet beyond each end of the proposed lift line.
- Provide horizontal stations from bottom to top. Station 0 + 00 should be about 100 feet downhill of the proposed lower terminal.
- Install hubs frequently enough so that tower locations can be easily found.
- Shoot elevations every 50 to 100 horizontal feet on uniformly sloping ground; more frequently if ground is uneven.
- Provide cross slope information if cross slope exceeds 10%.
- Note each side of any roads, trails, areas of poor ground, and any area where a tower is not desirable.
- Note rock outcroppings, mine shafts, immovable stumps, buried or overhead power lines, water lines, ponds, rivers, streams, swamps, wetlands, and the like.
- Note desired terminal locations.
- Provide snow depth information.