

**BEFORE THE QUEENSTOWN LAKES DISTRICT COUNCIL HEARINGS PANEL**

**UNDER** the Resource Management Act 1991

**IN THE MATTER** of the review of parts of the Queenstown Lakes District Council's District Plan under the First Schedule of the Act

**AND**

**IN THE MATTER** of submissions and further submissions by **REMARKABLES PARK LIMITED AND QUEENSTOWN PARK LIMITED**

---

**SUMMARY OF EVIDENCE OF RICK SPEAR ON BEHALF OF REMARKABLES PARK LIMITED AND QUEENSTOWN PARK LIMITED**

**(GONDOLA CONSTRUCTION)**

**STREAM 13 REZONING HEARINGS**

**4 September 2017**

---

---

**BROOKFIELDS  
LAWYERS**

J D Young / M Goudie  
Telephone No. 09 379 2155  
Fax No. 09 379 3224  
P O Box 240  
DX CP24134  
**AUCKLAND**

## **1. QUALIFICATIONS AND EXPERIENCE**

- 1.1 My name is Rick Spear. I have been employed by Poma and Leitner-Poma of America (**LPOA**) since 1977. I was very closely involved with New Zealand lift installations at Coronet Peak, The Remarkables, Mt Hutt, Whakapapa and Cardrona. I have worked with Remarkables Park Limited (**RPL**) and Queenstown Park Limited (**QPL**) for over two years on this gondola project. My qualifications and experience are set out in my evidence in chief dated 9 June 2017.

## **2. IMPORTANT ELEMENTS OF A GOOD GONDOLA ROUTE**

- 2.1 A gondola must travel in a straight line. In order to make a turn the gondola cabins are automatically detached from the cable, transferred to the next section and reattached to the cable. Efforts are made to make these angle stations multi-purpose when feasible. Other important considerations for a gondola route are:

- (a) Slope stability (pylons and stations must be placed on solid ground);
- (b) Uphill carrying capacity (vertical rise and passengers per hour carried determine horsepower and cable diameter);
- (c) Exposure to wind (high crosswinds will trigger automatic slow and/or system stops which are not desirable);
- (d) Visual impact (every effort is made to blend in and fit with the surroundings);
- (e) Passenger evacuation (typically never an issue but a feasible evacuation plan must be implemented and practiced yearly in the unlikely event that it is necessary);
- (f) Construction accessibility (LPOA installs cableways in the mountains as a general practice and, although the RPL gondola is a challenge, we have had more difficult projects and have never failed);
- (g) Ample ridership (not an LPOA area of expertise but projections by others and our experience with tourism systems indicates that this gondola will be a success); and
- (h) Operation and maintenance costs (a key element of the financial success of the system and these costs have been calculated by LPOA and considered by RPL).

### **3. SYSTEM ANALYSIS AND ROUTE SELECTION**

- 3.1 This has been an interesting and somewhat exhausting process. LPOA engineering department have spent more time on preliminary route design on this project than any project we have been involved with in my time with the company. Given the large cost of bend/mid stations it would seem to make the most sense to make as straight of a line as possible from the Remarkables Town Centre to Remarkables Ski Area Base Lodge. Steep line options with one bend were researched both by our lift engineers and by geologists. We found a route with solid ground that would deliver 1000 passengers per hour (**PPH**) in each direction, but we were reaching the limits of cableway technology. Focus began to move to a less exposed (wind and aesthetics) line along the river and up Rastus Burn Valley. This was going well but we still faced the cableway PPH limits from the Queenstown Park Village station to the Remarkables Ski field. Once the decision was made to insert a mid-station on this slope the carrying capacity limit was increased to 2000PPH and we had a system that would address increased demand.
- 3.2 Passenger evacuation is less challenging with the new route because the line is less steep and road accesses are closer to the line and the mid-stations. Not to be discounted is that, although the final preferred alignment is longer than the initial options, it is separated into 3 independent lifts and it is inconceivable that any 2 sections would require evacuation at one time.

### **4. CONCLUSION**

- 4.1 Gondolas and trams for tourism and urban transport applications are becoming more and more common. In September 2016 we commissioned a 5 section gondola system in Mexico City for workers, school children, shoppers and tourists. It has been a huge hit. The president of Mexico attended the Grand Opening ceremony. We have installed 7 gondola systems in Medellin Columbia. We installed, operate and maintain the Roosevelt Island Tram in NYC. This tram is mostly utilised by workers and island residents transporting to and from Manhattan, but is used more and more by tourists. In my mind the two largest advantages to cableway application for urban and tourism are removing automobiles from the roads (3 electric motors drive the entire RPL system), and the small footprint actually used to transport so

many people for such a long distance (compared to roads and train tracks for example).

4 September 2017

**Rick Spear**