

Parking Assessment Prepared for

HANMER SPRINGS THERMAL POOLS AND SPA

Concial Hill Hanmer Springs



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Introduction

- Hanmer Springs Thermal Pools and Spa has commissioned Novo Group to prepare a parking assessment for the development of a 'Flyride' commercial recreation activity on the western slope of Conical Hill, Hanmer Springs.
- 2. The proposal is to construct a 'start station' with a toilet north of the summit of Conical Hill, separated from the existing viewing platform on the summit. A rail and wire system mounted on seven towers will support suspended chairs in which customers sit. A battery-powered motor unit will control the rate of descent of the chairs depending on the level of excitement desired. The chairs will return autonomously from the 'stop station' at the bottom of the ride.
- 3. No new public car park is proposed for the activity. Customers are expected to walk from the Hanmer Springs Thermal Pools and Spa or the Town Centre, and along Conical Hill Road to the base of Conical Hill, and then to use the walking tracks to reach the starting point (of the activity). However, it is anticipated that some users may drive and park, utilising some of the kerbside resource along some of the local residential streets. This report provides an assessment of the current parking demand on the local residential streets, the projected demand due to the proposed activity and reviews the effects due to this additional parking.
- 4. The proposed activity location is indicated below in **Figure 1**.

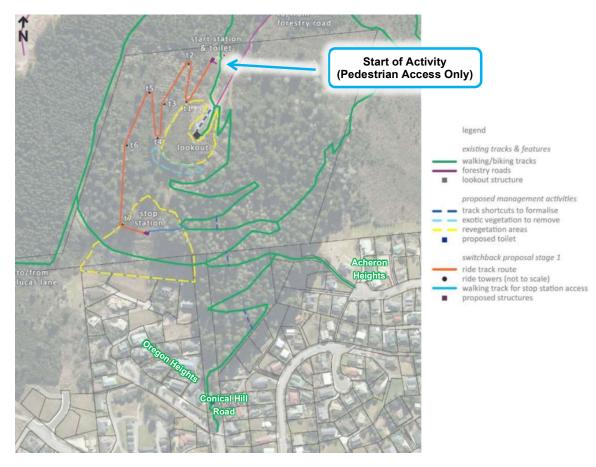


Figure 1: Site Location (Source: February 2021 - Recreation Effects Assessment submitted as part of Resource Consent)



Existing Site

- 5. The application site is part of an existing reserve on Conical Hill. The activity is proposed on the western face of Conical Hill Reserve. The proposal site is entirely bordered by the Conical Hill Reserve.
- 6. The Reserve Management Plan policy does not permit motorised vehicles other than maintenance vehicles and emergency services to drive onto reserves other than on areas designated as roadway or parking. There is therefore no current vehicle access onto Conical Hill for the public.
- 7. The nearest roads to Conical Hill Reserve, on which the public can park are sited at the base of Conical Hill, along Conical Hill Road and Orgeon Heights as well as to the east, along Acheron Heights.
- 8. There is a single pedestrian track that zig-zigs up through the reserve from Conical Hill Road up to the summit of the hill. Cycle use is not permitted on this track. The pedestrian track can be accessed from the side, part-way up from:
 - Acheron Heights (east side) via a public footpath.
 - Lucas Lane walkway (west side) via a public walking trail.
 - Majuba Walk trail (east side) which heads northeast at its mid-point.

These side accesses can be seen in a Strava map for the area as shown in Figure 2.



Figure 2: Hanmer Springs Strava Heatmap for Running (Source: © 2018:Strava)



The Proposal

9. The proposal is described as:

"A ride experience. The ride experience consists of a cable track system, which is erected on seven poles on the ride route. The gravity ride changes direction at each of the seven poles which also provide tension and anchoring for the ride. The proposal includes two additional platforms that provide for rider access – being a start station and stop station".

- 10. The ride experience requires suspended trolleys that hang from the cable track. These will be removed at the end of every day, transported in a vehicle from the site and stored overnight.
- 11. The proposal has not incorporated car access or the provision of car parking on or near the proposed site. The intention is to provide a recreation activity that is consistent with the recreation focus of the reserve. The proposal provides access to the activity by accessible (foot) paths, not vehicle access.
- 12. Participants and spectators are expected to walk up to the site using the pedestrian track to reach the start station, which is near to the summit of Conical Hill.
- 13. As trolleys need to be attached at the start of the day to the cable track system, some staff members are expected to drive up to the start station with the equipment. They will use formed forestry roads on land adjacent to the site that are managed by Rayonier Forestry. These access roads will enable access to the site from the north of Conical Hill and only be used by staff for the purpose of transporting equipment and or other operational requirements as required.
- 14. Staff numbers will vary between two and four (at peak times) with a manager attending on an intermittent basis as necessary. Staff will be present at both the start and the stop stations. Staff attending the stop station will be encouraged where possible towalk up to the stop station from the Hanmer Springs Thermal Pools and Spa or car pool and walk down when the equipment is being driven to the top of Conical Hill. If staff park on the surrounding residential streets this will be minimised where possible and staff will look to park in the less accessible locations.

Existing Site Parking Review

Survey

- 15. A peak parking demand survey for the site was conducted on Saturday, 24 April 2021 between 11am and 2pm. This survey date coincided with the last school holiday and ANZAC public holiday to capture peak trading periods associated with the Hanmer township.
- 16. The Hanmer Springs Thermal Pools occupancy rates have been used as a proxy to determine the 'busyness' of the Hanmer Springs village. On the day surveyed, the number of visitors to the Thermal Pools and Spa was 70% compared to the absolute peak demand in the year (New Year's Day and Easter), however it was 140% compared to a standard weekend day average across the year. As the Hanmer Springs Thermal Pools and Spa are the largest attraction to Hanmer Springs, this would suggest that the town was heavily occupied. It was also noted at the time of the survey, that there were a limited number of properties available for booking overnight stays in.
- 17. Hanmer Springs is a popular destination within the South Island for visitors including tourists. Typically, Hanmer Springs is quieter during weekdays and more pronounced on the weekend with mid-day Saturday typically being the busiest. This period was therefore chosen as an appropriate peak hour to



survey. The following day (Sunday) was not suitable for survey as this was ANZAC day and there was restricted shop trading in the morning, which would have impacted on parking.

- 18. The survey included on-street parking along streets closest and most accessible to Conical Hill on Saturday. The streets included (as shown below in **Figure 3**):
 - Thomas Hanmer Drive (first 120m)
 - Oregon Heights
 - Conical Hill Road (between Oregon Heights and Chalet Crescent)
 - Chalet Crescent (between Alpine Avenue Conical Hill Road)
 - Acheron Heights



Figure 3: Parking Areas Surveyed

19. The streets surveyed are shown in **Photographs 1, Photographs 2, Photograph 3, Photograph 4**, and **Figure 4**.



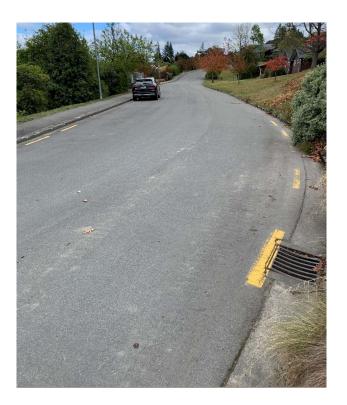


Photographs 1: Views Along Oregon Heights, Northwest and Southeast, respectively



Photographs 2: Views Along Oregon Heights, South and North, respectively





Photograph 3: View Along Thomas Hanmer Drive, West



Photograph 4: View Along Acheron Heights, Before the Bend and Round the Bend, respectively





Figure 4: View Along Chalet Crescent, East (© 2021 Google)

20. The survey results are summarised in **Table 1**, **Table 2**, and **Table 3** below.

Parking Supply

21. **Table 1** shows the total existing on-street parking supply along the various streets assessed. These have been separated into the two distinct areas as shown in **Figure 3** (Conical Hill Road & Connections and Acheron Heights)

Table 1: Parking Supply Adjacent to Conical Hill

Location	Supply Regular Spaces					
Conical Hill Road & Connections						
No.1 Oregon Heights (north side)	13					
No.2 Oregon Heights (south side)	0					
No.3 Conical Hill (top, west side)	0					
No.4 Thomas Hanmer Drive (north side)	104m/6.5m* = 16					
No.5 Thomas Hanmer Drive (south side)	109m/6.5m* = 16					
No.6 Conical Hill (east side)	15					
No.7 Conical Hill (lower, west side)	5					
No.8 Chalet Crescent (north side)	11					
No.9 Chalet Crescent (south side)	11					
Total	87					
Acheron Heights						
No.10 Acheron Heights (western end, north side)	5					
No.11 Acheron Heights (western end, south side)	4					
No.12 Acheron Heights Southern side	7**					
No.13 Acheron Heights (northern side)	10					
Total	26					

Notes: * Supply based on the road length and average length of a vehicle.

^{**} The four spaces on the inside of the bend were not included due to the possible gradient of the road and perceived steepness. See **Photograph 4**.



- 22. All of these car parks are available to the general public with no parking restrictions.
- 23. Thomas Hanmer Drive (8.5m), Chalet Crescent (9.0m), Conical Hill Road and Acheron Heights (8m) are all able to accommodate parking on both sides of the road.

Existing Peak Parking Demand

24. **Table 2** and **Table 3** summarise the number of cars observed parking on-street on Conical Hill & Connections and on Acheron Heights, respectively. There was little variation in parking demand along Acheron Heights with a peak of four vehicles recorded over 2.5 hours. This indicates that existing parking demand is driven by local residents, who park long term. For Conical Hill Road & Connections, the peak parking demand for on-street parking was between 11:00-12:00 with a maximum demand of 20 vehicles observed over the 3-hour survey. This translates into a car parking occupancy of less than 23%.

Table 2: Conical Hill Road & Connections - On-Street (Weekend) Peak Parking Demand - 24 April 2021

Time	No.1	No.4	No.5	No.6	No.7	No.8	No.9	Total No. Parking
11:00	5	0	1	9	3	0	0	18
11:30	6	0	1	9	3	0	1	20
12:00	4	0	0	6	2	0	1	13
12:30	4	0	0	3	2	0	1	10
13:00	0	0	0	5	3	0	1	9
13:30	1	0	0	6	4	0	1	12

Notes: No.2 and No.3 parking supply locations had no parking supply because of no-stopping restrictions so were omitted.

Table 3: Acheron Heights - On-Street (Weekend) Peak Parking Demand - 24 April 2021

Time	No.10	No.11	No.12	No.13	Total No. Parking
11:00	2	1	0	0	3
11:30	2	1	0	1	4
12:00	2	1	0	1	4
12:30	2	1	0	1	4
13:00	2	1	0	1	4
13:30	2	1	0	1	4

Spare Capacity

25. Based on the parking demand observed and the parking occupancy, the spare capacity is shown in **Table 4**.



Table 4: On-street Parking - Spare Capacity

Time	Total On-Street Supply	Total On-Street Parking Demand	Spare Capacity			
Conical Hill Road & Connections						
11:00	87	18	69			
11:30	87	20	67			
12:00	87	13	74			
12:30	87	10	77			
13:00	87	9	78			
13:30	87	12	75			
Acheron Heights						
11:00	26	3	23			
11:30	26	4	22			
12:00	26	4	22			
12:30	26	4	22			
13:00	26	4	22			
13:30	26	4	22			

Projected Parking Demands

- 26. The Flyride will have a capacity limit defined by the time it takes the chairs to return to the summit. The maximum limit is for 60 persons per hour.
- 27. The Flyride will be booked on-line for certain time slots. This will limit the number of people turning up to partake in the activity. This combined with the capacity limit of the equipment will effectively control the number of people turning up at the activity.
- 28. Guests to Hanmer Springs Thermal Pools and Spa will be targeted for the Flyride. **Figure 5** shows the target audience and age splits for the proposed activity.

THE TARGET CUSTOMERS

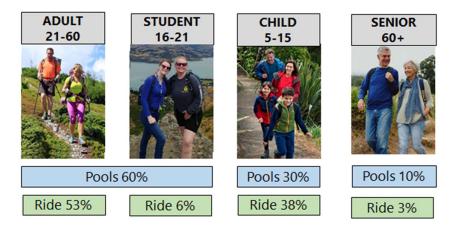


Figure 5: Target Customers for the Flyride



This is projecting a significant majority as being adults or older (70%) partaking in the activity. It is reasonable to assume that a large proportion of users will be able to walk to the activity.

- 29. The projected peak parking demand is based on the following assumptions:
 - Hourly Peak Demand = 60 users. This is based on the capacity of the equipment.
 - Minimum duration parked = 1.5 hr (90 minutes). The time required to walk up to the Station from the bottom of Conical Hill is approximately 30min. If this is combined with a 15 min safety briefing for the activity and/or use of the toilet facilities, then it is envisaged that groups who park will need at least 90 min to be able to walk to the activity and for spectators to walk back to the vehicle.
 - The worst case is assumed to be that fifty percent of customers will drive and park on the nearby residential roads.
 - Two customers per parked vehicle. Generally, couples, families or groups visit Hanmer Springs rather than single persons. If a vehicle parked on one of the local roads, it is envisaged that the vehicle will carry more than one person. In the last two months (March-April 2021), Hanmer Springs Thermal Pools and Spa has reported an overall average of 3.5 persons per group that have visited the pools in the summer months (this is averaged across family and non-family groups). It is envisaged that if any vehicle parked on the road, that it would carry 3.5 persons. It is therefore assumed, that on average two persons from each vehicle parked would partake in the proposed activity as a minimum.
- 30. The anticipated peak parking demand is $(60 \times 50\% \times 1.5)/2 = 22.5$ vehicles = 23 vehicles.
- 31. As a sensitivity test, if the percentage who drove was increased to 75%, then this would equate to a parking demand of 33.75 = **34 vehicles**.
- 32. It is worth noting that some of the users may travel to the start station by cycle using the various cycle trails available.
- 33. Based on a peak parking demand of 23 cars, there is more than adequate on-street parking to accommodate these vehicles on the following streets:
 - Conical Hill Road (20 supply) spare capacity for eight vehicles
 - Oregon Heights (13 supply) spare capacity for seven vehicles
 - Thomas Hanmer Drive (32 supply) spare capacity for 31 vehicles

Note that these three streets can also accommodate a parking demand of 34 vehicles if required as they have spare capacity for 46 vehicles in total. There is also Chalet Crescent that can be parked on if required.

Safety

34. The NZ Transport Agency Crash Analysis System (CAS) was reviewed to identify crashes that have been reported along Conical Hill Road, Oregon Heights, Thomas Hanmer Drive and Chalet Crescent in the five-year period ending 4 May 2021 (as illustrated in **Figure 6**).



- 35. Two non-injury crashes were reported in this period, as shown in **Figure 6**. Both involved vehicles failing to take the moderate bend at the end of Oregon Heights when driving back down the road. Both resulted in the vehicle leaving the road and causing damage to property/lamp posts.
- 36. One of the crashes involved an intoxicated driver and the other involved an inexperienced driver, driving too fast, late at night in winter conditions with the road surface heavily gritted.
- 37. There are no crash trends that can be drawn from the crash data over the last five years.



Figure 6: CAS Database Study Area and Crash History

Discussion

- 38. There is spare parking capacity on Conical Hill Road and Oregon Heights to accommodate the majority of the on-street parking needs for the activity, noting that the value of 50% of customers estimated as driving and parking on the local streets is a conservative estimate. It is anticipated to be far less, particularly, as Hanmer Springs has historically been recognised as a consolidated township that is pedestrian-orientated. Typically, drivers park once in the township either near the pools or where the main retail area is and then walk between a variety of individual sites and activities rather than relying on dedicated private on-site parking for each individual site.
- 39. If on-street parking cannot be accommodated along Conical Hill Road and Oregon Heights, then there is further on-street parking along Chalet Crescent or along Thomas Hanmer Drive. Even for the sensitivity test of 34 vehicles (if 75% of customers assumed to drive), these streets can easily accommodate the additional 11 spaces.
- 40. Any parking for the Flyride is not anticipated on Acheron Heights for the following reasons:
 - It is unlikely people will drive an additional 600-700m uphill to find an on-street car park when
 there is more than enough on-street parking availability on Conical Hill Road and the adjacent
 road connections (i.e. Oregon Heights, Thomas Hanmer Drive, Chalet Crescent).
 - All promotional material associated with online booking system and activity will promotes the Conical Hill Road as the key point of access.



- Acheron Heights is not a through road and not an intuitive location for the general public to use. Parking along this road therefore has a limited attraction.
- The public footpath access from Acheron heights through to Conical Hill is only well known to locals and not to people from outside the area.
- 41. If the Flyride does generate parking along Acheron Heights, the effects will be **less than minor** for the following reasons:
 - These are likely to be local residents that live locally and close by so the parking numbers will be very small.
 - There is spare capacity for at least 22 vehicles to park along Acheron Heights which is more than adequate to accommodate parking needs if required.
- 42. It is worth noting that cars can park on the local roads without compromising the safety and efficiency of road users.

Conclusion

- 43. The proposed Flyride activity on the western slope of Conical Hill will be accessed by pedestrians using the existing walking trails through the reserve. No new public car parking is proposed for the activity. Customers are expected to walk from the Hanmer Springs Thermal Pools and Spa or the Town Centre and along Conical Hill Road to the base of Conical Hill, and then to use the walking tracks to reach the starting point (of the activity).
- 44. The observed maximum on-street parking demands, on a Saturday (ANZAC weekend) was 20 vehicles between 11.00-12.00. This included Conical Hill Road, Oregon Heights, Thomas Hanmer Drive and Chalet Crescent. These streets were observed to have spare capacity for a further 67 vehicles to park on-street.
- 45. The peak parking demand for the Flyride activity is projected to be 23 vehicles. With a surplus supply of 67 on-street available parking spaces, there is sufficient space available to accommodate this projected peak demand.
- 46. As a sensitivity test, 75% of customers were assumed to park by car on the local residential roads rather than walk up Conical Hill Road. This generates a parking demand of 34 vehicles, which can be accommodated by the 67 on-street available parking spaces.
- 47. There were no crash trends that can be drawn from the crash data over the last five years.
- 48. On-street parking by customers is not anticipated along Acheron Heights. If there are additional parking demands, these are expected to be by local residents and the street is capable of accommodating these demands with spare capacity for at least 22 vehicles.
- 49. Overall, there is sufficient on-street parking available to accommodate the projected peak parking demand by the proposed Flyride activity including the sensitivity test. This parking can occur along the local streets without compromising the safety or efficiency of the frontage roads. Accordingly, we can support the proposal from a parking perspective such that the effects on the traffic environment can be considered as being acceptable and less than minor.