CENTRAL OTAGO DISTRICT COUNCIL PROPOSED PLAN CHANGE 18 (PC18), EXPANSION OF INDUSTRIAL ZONE, CROMWELL

1. In accordance with Minute 2, I am a submitter and have taken the opportunity review the joint witness statement ('**JWS**') and now also make comments, specifically on the recommendations in the JWS.

2. Before I start, I want to thank the Council for making their planner available to undertake expert conferencing and their hand in preparing a JWS to look to reach a resolution with Department of Conservation ('**DoC**').

3. My position is that DoC have not got the permitted baseline effects right and have thus over inflated the effects that could arise from the proposed plan change. This is based on Ms Williams' comments at paragraph 43 of her evidence, and the effects that DoC are seeking to be addressed at paragraph 30 of Mr Chinn's evidence. In my opinion this has caused the overly onerous requirements that DoC have sought to the provisions that have been agreed to in the JWS.

4. The correct assessment for the permitted baseline and the existing environment is important as the planning framework needs to be well understood before effects can be assessed. This will essentially set the baseline for what effects and rules are acceptable in this instance. The permitted baseline/existing environment is demonstrated by the Council land holdings to the southwest and northeast of the Chafer Beetle Reserve, and also the orchard/viticulture activities that occur throughout the Cromwell basin as below:

Both Sandflat Road and Bannockburn Road have large scale forestry plantations

AND

Orchards on State Highway 6 with mature pine hedges and trees.

Rule 4.7.4(viii) Tree Planting for wood lots or forestry blocks are restricted to 2Ha but only for certain species. There are a number of forestry/wood lot trees that would be permitted under the plan because they do not have spreading vigour. These include: Alder, Southern Beech, Blackwood, Japanese Cedar, Cypress, Eucalyptus, Kauri, Larch, Poplar.

5. Why this is important is because these plantations and/or the surrounding orchards will have the following effects:

    a. ***Possible shading (or at least reduced direct sun light hours) along the reserve boundary, due to building height***. Below are the shading effects that the trees adjacent to Pearson Road have, can clearly be seen. Any hedge that a farmer would plant along a rural boundary or wood lot or forestry block would have significant shading effects as hedges are often planted on the boundary with no setback and can be as high as 15 metres. Attachment A below shows what shading effects the existing trees on the western boundary of the Chafer Beetle Reserve causes in the afternoon.

b. ***change to the surface and sub-surface hydrology along the boundary.*** While this has not been investigated, my understanding is that interception loss, evapotranspiration, and soil water extraction from pine would be worse than the current proposal of zoning the land industrial with some agreed controls around edge effects. Note orchards may have the same effect and also introduce irrigation which could impact on sub-surface hydrology. I also note that the pine forest on the southern boundary of the pine forest currently soaks up a large amount of water changing the sub-surface hydrology – a pine tree can absorb in excess of 500 litres of water a day. Further note that the soil at these boundaries would experience acidification due to the presence of pine needles.

c. ***An increased risk of fire.*** Pine would by far increase the risks of fire over and above industrial zoned land. It is not appropriate to deal with this through the resource management process other than for setbacks (these are addressed below).

d. ***The potential for new weeds to spread*** along the boundary and possibly into the reserve, from the boundary. There is a wide array of weeds present on the forested land on Bannockburn Road and in fact already present on the site as the land is currently in an unmanaged state. Industrial and with agreed controls over the land would be a far better outcome. Orchards will likely spray to keep unwanted weeds under control. The district plan, and regional plan already has controls in place for the spreading of certain plant species.

e. ***An increase in pest animals and potentially new animal pests***. The forest blocks mentioned above are unfenced and have rabbits, possums, and mice, and stray cats present. Orchards may have a lesser effect as farmers generally do not want pest either. The Regional Council has controls in place for pest species. Otago Regional Pest Management Plan 2019, deals with this and includes feral rabbits and cats.

f. The potential for more litter to arrive in the reserve (from new industrial activities neighbouring the reserve). Currently the forest blocks contain large amounts of litter and Cromwell has a number of people and groups that regularly go out and pick up rubbish in these areas. In my experience generally when land is subdivided and goes into private ownership it is kept tidy. This should not be dealt with under the District Plan.

g. ***A general increase in the probability of un-desirable human interaction and activity in the reserve.*** Forests that are in public ownership with no fencing or oversight have the potential to cause far more human interaction in the Chafer Beetle reserve than an industrial zoning. This Chafer beetle reserve is in the middle of an area with high human activity, this is essentially the opposite of the Mokomoko Dryland Sanctuary outside Alexandra. Human activity is going to be a consideration for DoC regardless of the zone next door. The RMA is not the correct process to deal with this issue.

6. The above effects highlighted in ***bold italics*** have been described in Mr Chinn's evidence. What has been missed here, is that in a rural environment where there is intensive horticulture; rural industry (like winemaking facilities, and contractors' yards); and woodlots have a significant effect on the environment already and is permitted. This is the amenity that is required for the rural sector in the Cromwell basin to function. Again, the site subject to the plan change is not

a remote area like perhaps some areas through the Kawarau Gorge or Mokomoko Dryland Sanctuary.

7. My view is that the proposed plan change could improve on the effects that could be expected on the Chafer Beetle reserve from the existing environment and what is permitted in that environment under the current zoning, rather than worsen the effects. DoC have not explained how they can justify the buffer that they require, they have not shown that a change to soil moisture or shading has a deleterious effect on the chafer beetles. In short a buffer does not address the effects that Mr Chinn describes. Wanting to address edge effects however, I makes the below comments on the outcomes of the JWS.

8. Below are the rules that I can agree to:

9.3.3 DISCRETIONARY (RESTRICTED) ACTIVITIES

Any activity that fails to comply with the standards set out in Rule *9.3.~~5~~6* shall be a discretionary (restricted) activity.

Council shall restrict the exercise of its discretion to the following matters:

1. The effect on the safe and efficient operation of the roading network.
2. The effect on the health, safety and convenience of people and communities.
3. The effect on amenity values of adjoining properties and adjoining resource areas, *and for sites adjacent to the Chafer Beetle Nature Reserve (Lot 1, DP18203) the effects of shading on the reserve.*

9. I **do not agree** with the following Standard (9.3.6(ii)) and will reserve my appeal rights in this regard.

Bulk and Location of Buildings

(ii) Front yards

No front yards are required

Except when the property has road frontage that is adjacent to the Cromwell Chafer Beetle Nature Reserve where a front yard setback of 5 metres is required.

10. I would be happy with a bulk and location rule that addresses shading effects, as has been indicated in 9.3.3(3) above. There have been no diagrams drawn up to try and understand shading effects. **Attachment A** includes crude diagrams (from ShadownCalculator.eu) showing what the effects for a hedge at 15m in height along the boundary would be, I have also shown what the effects of a building at 10m in height, and setback 10m would likely be. I have compared this to a building at 10m in height setback 20m and 40m. The interesting point to note is that in midwinter the shading from a building setback 10m will be the same at 9:15am as a building setback 40m will be at 9:00am.

11. The standard yard setback in the plan will be better from a shading perspective for buildings than a hedge running along the entire boundary. Therefore, the effects can be said to be less under the proposed plan change than under the current zone. However, to address DoC's edge effects concerns a yard setback on the rear yard (or all yards adjoining the Chafer Beetle reserve) could take the form of a 40 degree height restriction plane from the boundary. I believe that Standard 9.3.6(ii) should be amended as follows:

    Bulk and Location of Buildings
    (ii) Front yards
    No front yards are required

    ~~***Except when the property has road frontage that is adjacent to the Cromwell Chafer Beetle Nature Reserve where a front yard setback of 5 metres is required.***~~
    Note: See also Rule 12.7.

    Height
    Except when the property has road frontage that is adjacent to the Cromwell Chafer Beetle Nature Reserve , no part of any building shall exceed the height determined by an inclined plane inclined upwards at an angle of 45° to the horizontal provided that the apex of a single gable end may protrude through any plane to a height not greater than that permitted in (i) above and provided

    This would result in a 5-metre-high building at 5 metres off the boundary or a 10-metre-high building 10 metres off the boundary, allowing the maximum amount of sunlight into the Chafer Beetle Nature Reserve.

12. The other effects that DoC have mentioned relating to ***change to the surface and sub-surface hydrology along the boundary***, can be dealt with by inserting a permeable surface standard into Standard 9.3.6(ii) as follows:

    Permeable Surfaces
    when a property has a boundary adjacent to the Cromwell Chafer Beetle Nature Reserve the minimum area of permeable surface is 30% of the gross site area.

    This means that noncompliance with the above standard would be a non-complying activity.

13. I agree with Paragraph 14 of the JWS in relation to lighting.

14. This plan change land (other than the approximately 8.5Ha that belongs to Cerise Orchard Limited) is land that for all intents and purposes belongs to the community of which I am a part. I find myself in a highly unusual position where the owners of the land (who are also the party with a financial interest in the land) are not represented in these proceedings. Note that it is not the role of the Council planner to represent the landowner regardless of who that owner is.

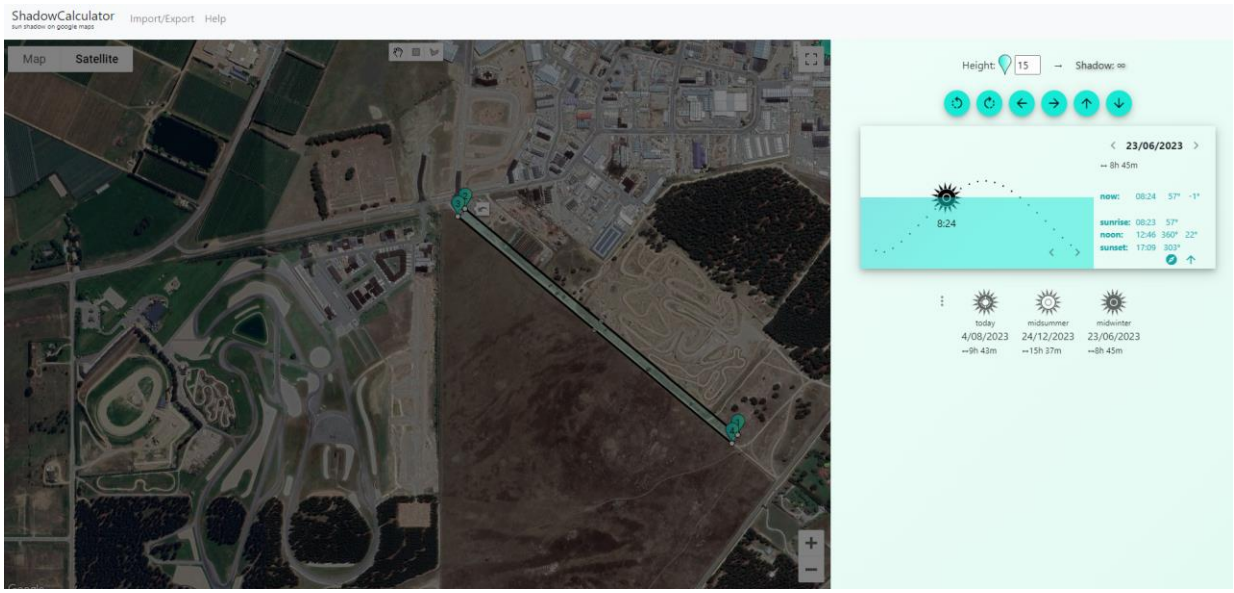
15. Cerise Orchards have had representation, but the DoC submission does not affect their land. I am therefore the only representative for the community who own the land. There has been no financial modelling around what the roads and road layout could look like and as such I can't see how a cost benefit analysis can be carried out. For that reason, **I cannot support** the Roading outcomes including the landscape buffer. A recession plane to allow sunlight over the boundary, and the permeable surface Standard will deal with potential effects in a much more practical

way than expensive roading and landscaping, that have been agreed and form part of the proposed Access and Roading – Cromwell Industrial Extension Standard **9.3.6(ix)** or the corresponding plan. I am of the view that these changes suggested in the JWS and corresponding changes to the Standards and structure plan are not accepted.

16. It may be that the landowner has a view on what a structure plan (as attached to the JWS Schedule 19.23) would look like, but perhaps this is better left for the subdivision and land use consent stage of the process.

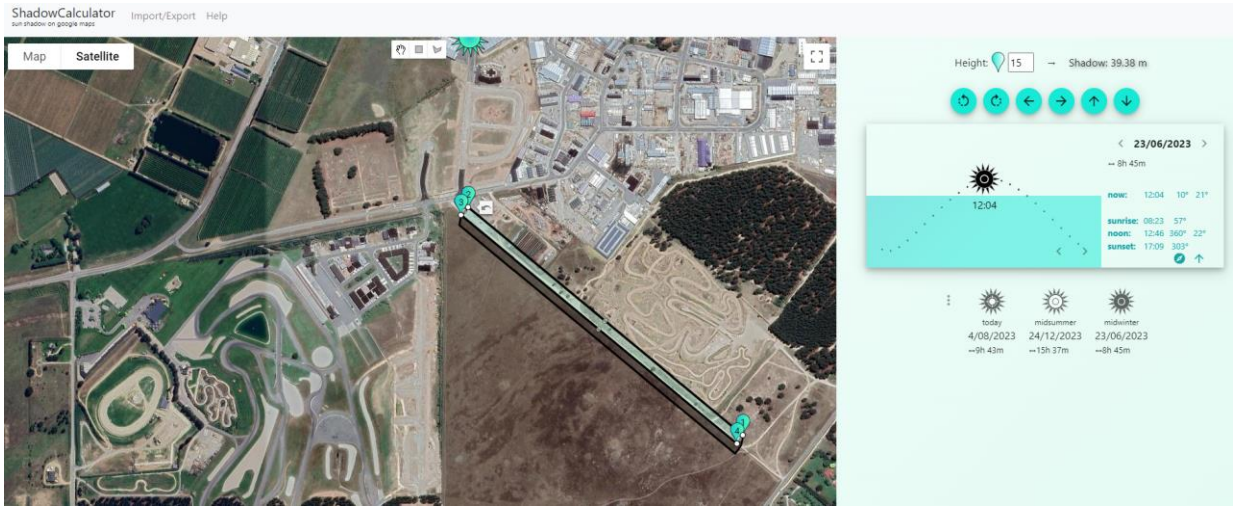
17. Lastly, I will note that DoC have said that the Chafer beetle reserve is not the ideal shape as a triangle and that something that is more circular would be more desirable. This part of DoC's evidence made the most sense to me rather than just randomly grabbing land. A land exchange to better reflect the requirements for protecting Chafer Beetles would of course be a matter for the landowner and DoC to discuss under a different process.

Attachment A

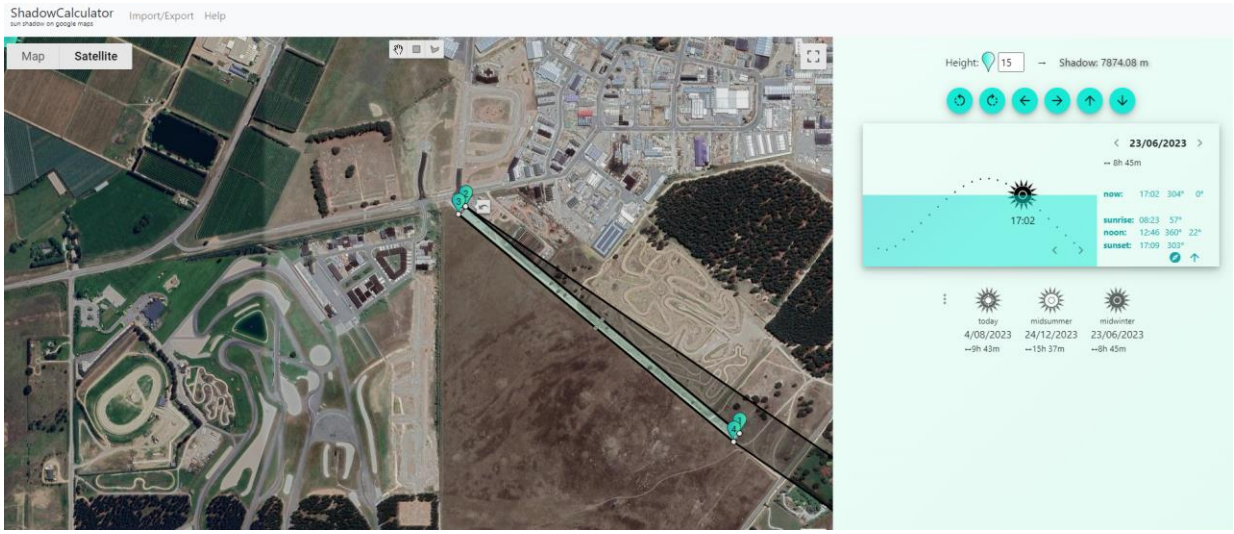


Mid-Winter at 8:24am the entire valley is in the shade still

Mid-winter at 9:00am a hedge will shade a portion of the site



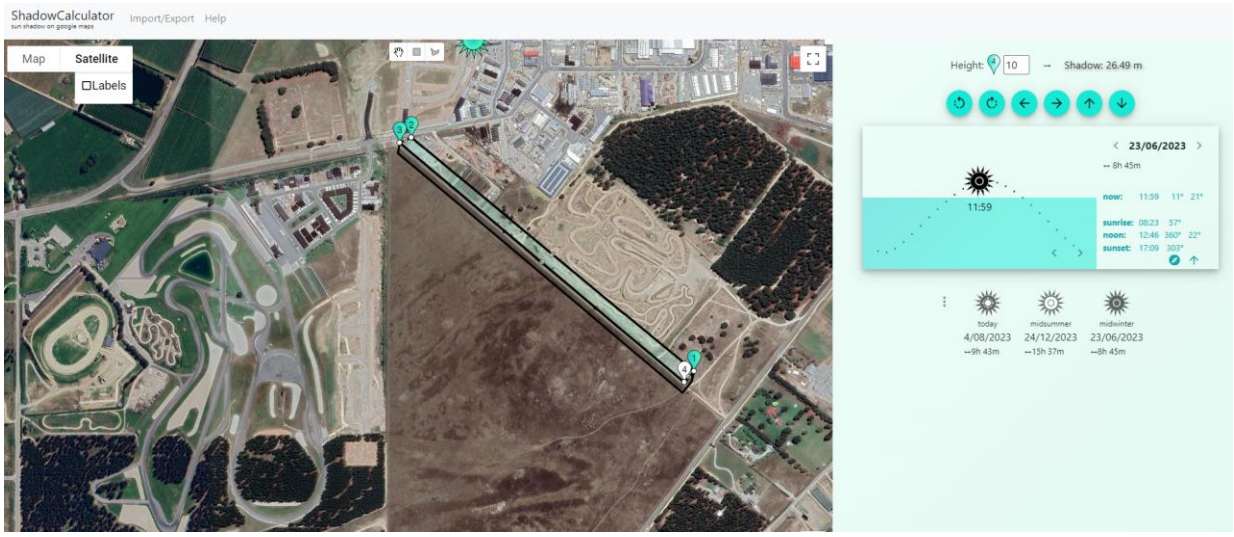
Mid-Winter by 12:00pm the smallest effect will be shading over a part of the boundary



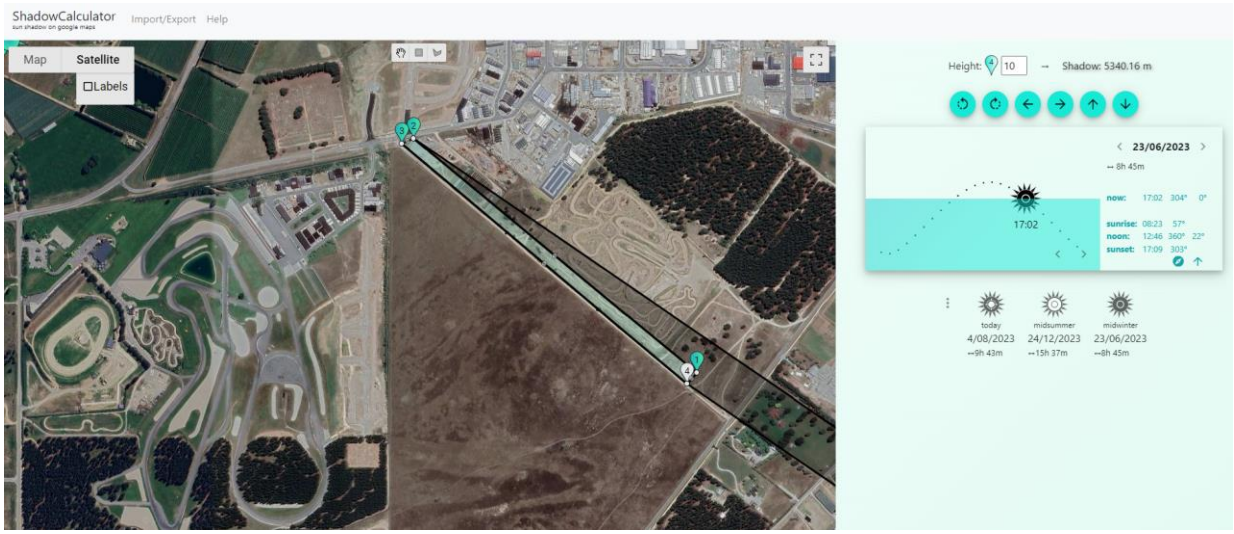
Mid-Winter by 5:00pm the shadow will be away from the Chafer Beetle reserve.

For buildings that are setback 10metres from the boundary the effects will be as follows:

Mid-winter at 9:00 am a building at 10m set back by 10m will shade a large portion of the site

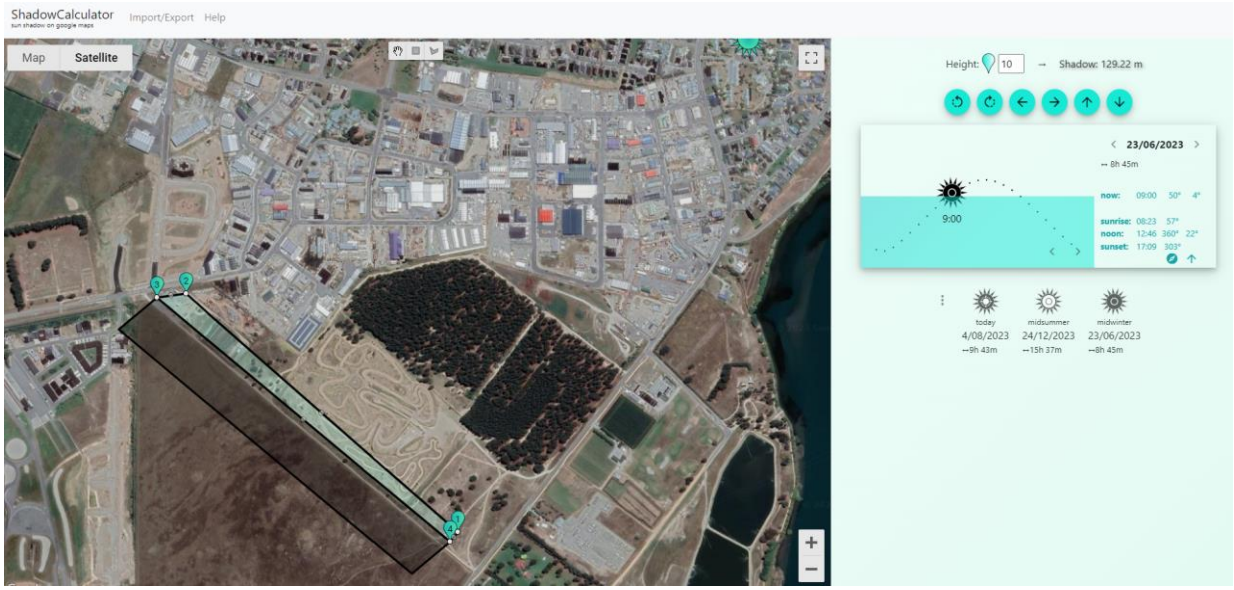


Mid-winter at 12:00 pm a building at 10m set back by 10m will have the smallest effect will be shading over a part of the boundary.



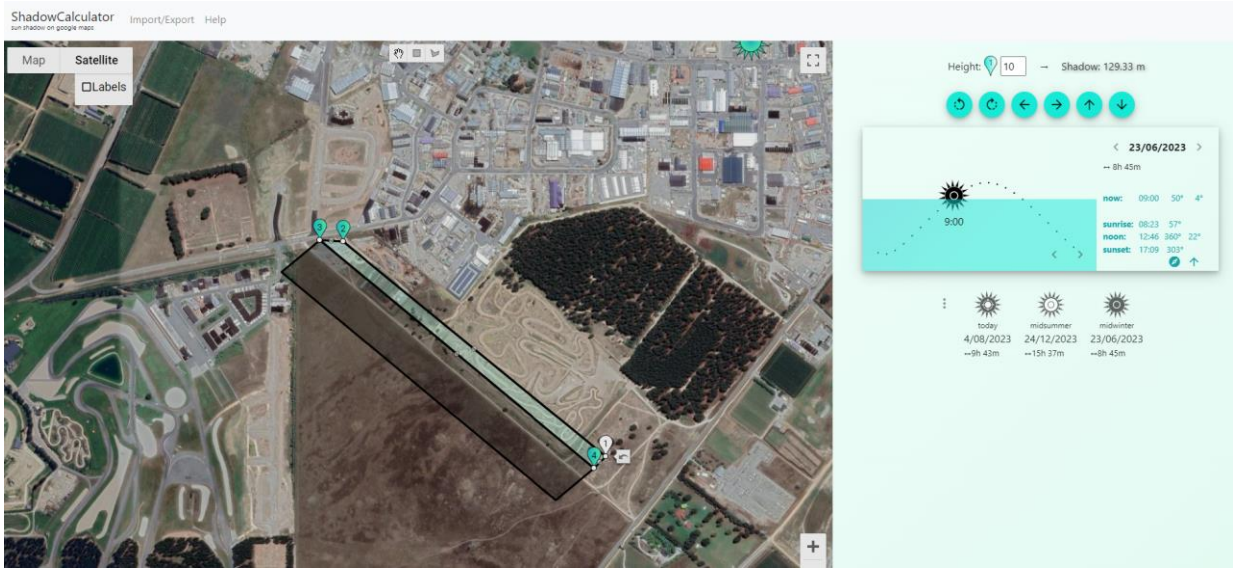
Mid-Winter by 5:00pm the shadow will be away from the Chafer Beetle reserve.

Below is a Mid-winter 9:00 with a building at a height of 10m setback by 20m



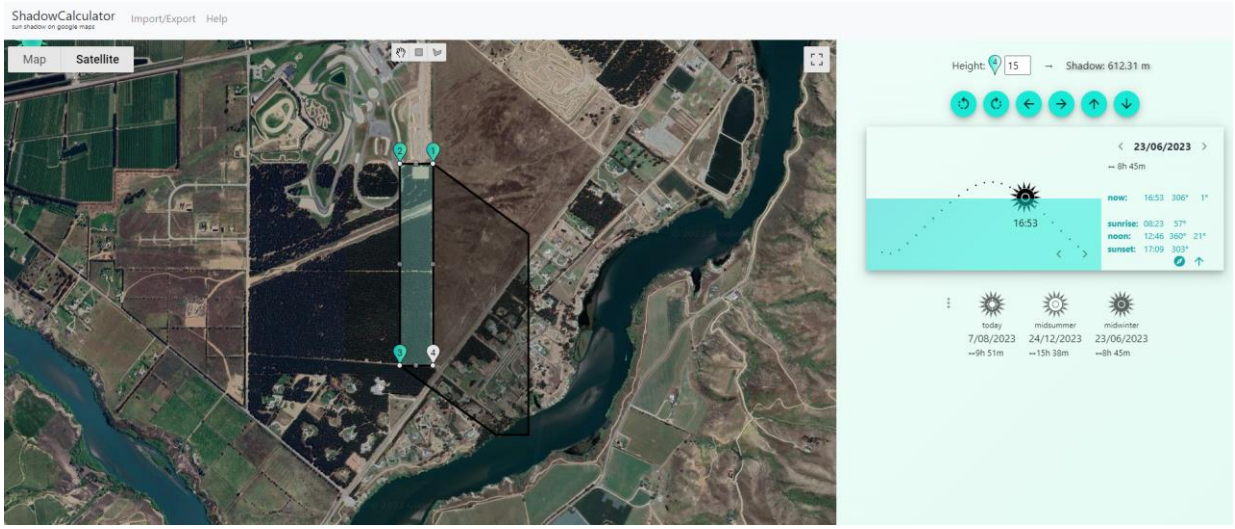
Mid-winter at 9:00am a building at a height of 10 metres setback 20 metres will shade a portion of the site.

Below is a Mid-winter 9:00 with a building at a height of 10m setback by 40m



Mid-winter at 9:00am a building at a height of 10 metres setback 40 metres will shade a portion of the site.

Shading from pine tress on the western boundary of the Chafer Beelte Nature Reserve.



Mid-winter at 4:50pm trees at 15 metres in height on the boundary.