

BEFORE THE ENVIRONMENT COURT
I MUA I TE KOOTI TAIAO O AOTEAROA

Decision No. [2020] NZEnvC 189

IN THE MATTER of the Resource Management Act 1991 (**the Act**)

AND of an appeal pursuant to s 120 of the Act

BETWEEN WESTON LEA LIMITED

(ENV-2019-AKL-308)

Appellant

AND DIRECTOR-GENERAL OF CONSERVATION

(ENV-2019-AKL-310)

Appellant

AND HAMILTON CITY COUNCIL

Respondent

Court: Environment Judge J A Smith

Chair: Commissioner K E Prime
Commissioner A P Gysberts

Hearing: 31st August 2020 – 4th September
(7th – 9th September (including site visit))

Appearances: Dr R Makgill and M Doesburg for Weston Lea Limited (**Weston Lea**)
Ms V Tumai and Ms M Hooper for Director-General of Conservation (**DOC**)
Ms M Mackintosh and K Dibley for Hamilton City Council
Mr P Lang for Riverlea Environment Society Incorporate (**RESI**)
Mr P Anderson and W Jennings for Royal Forest & Bird Protection Society of NZ Inc. (**Forest & Bird**)

Date of Decision: - 6 NOV 2020

Date of issue: - 6 NOV 2020



INTERIM DECISION OF THE ENVIRONMENT COURT

A: The Consent is to be granted subject to conditions to be amended as set out in this Decision.

B: We instruct the Applicant to prepare a draft set of conditions to follow the terms of this Decision. We understand that such work is already well advanced and direct that it be circulated to the other parties in 20 days for comment. The parties need to focus clearly on the matters that are determined by this Court and the exhaustive work that has already be done by all parties to try and refine the conditions otherwise.

C: Many of the conditions can simply be restructured in terms of this Decision. The parties are to liaise with a view to providing a final copy to the Court within a further 20 working days with a memorandum advising:

(a) whether there is a disagreement on any of the particular conditions; and

(b) the position of each party on such conditions;

(c) whether the Court can then make any final decisions to the wording that may be in disagreement.

D: If the parties are not able to reach an accord in this regard, they are to advise the Registrar who will arrange for a telephone conference and/or further hearing as may be necessary to finalise the wording.

E: Costs are reserved pending the final decision.

REASONS

Introduction

[1] Weston Lea seek to develop land on the southern side of Hamilton and adjacent to the Waikato River (**Amberfield Development**). The land is currently utilised as a Dairy Farm and forms part of a wider rural unit zoned within the Hamilton District.



[2] The land has however been identified for future residential growth over many years and more formally recognised in structure plans. The opposite side of the Waikato River is already developed as residential and industrial land, although the river margin has been maintained both with some original and newly established native bush enhanced by RESI and Hamilton City Council.

[3] The land to the west of the Amberfield Development is largely still rural. There is some residential associated with the farming units and further to the west, probably around two kilometres distant, residential encroachment is occurring from State Highway 3 to the east.

[4] The river corridor is a long established habitat for the New Zealand Long Tail Bat and there are roosting populations along the river. Relevant for the purpose of this hearing is the fact that there are bat populations to the west of the site at Sandford Park and also immediately opposite this development at Hammond Park and also further to the south, not only on the river but in various gullies. The Southern-link Motorway Project for Hamilton also involved Long Tail Bat habitat.

[5] The owners of the land have farmed this property for many decades. Recognising its future urban zoning they now seek to develop the land from its current dairy farm for residential purposes. As we will discuss later the earlier planning stages for this area do not appear to have explicitly considered the Long Tail Bat or its habitat and range. This has only become evident at the time of this application for consent.

[6] Nevertheless, the matter proceeded to a hearing before Commissioners who after considering the matter extensively including issues relating to Long Tail Bats, decided that a consent could be granted subject to relatively stringent conditions. They adopted an adaptive management regime for the Bat provisions. Only this aspect of the decision was appealed.

The Appeals

[7] Both Appellants, DOC and Weston Lea do not appeal the Decision as a whole. Both have explicitly targeted their appeals to terms and conditions of the consent relating to the habitat and protection of the Long Tail Bat. Very fairly all parties supporting the various positions before this Court have made it clear that this is not a hearing to revisit the grant of Consent itself.



[8] It is recognised that a consent can be properly granted for the Amberfield Development. However, the issue is the most appropriate terms and conditions to protect the values and attributes of the habitat of the Long Tail Bats and to ensure that the Bats themselves, (to the extent that this is possible), may continue to benefit from the values and attributes of the area and thrive.

The context of this Appeal

[9] We emphasise that all parties before this Court recognise the fundamental importance of protecting the values and attributes of the Long Tail Bat habitat and the continuing reinforcement of that habitat for the Long Tail Bat population. The issue is not one solely affecting this site. This site forms a small but important part of the home range of local Long Tail Bats including the Hammond Park Bats in particular. However the habitat of these Bats and their home range is relatively extensive. It appears to include the stretch of the Waikato River from above Sandford Park and continuing downstream well past the Amberfield Development.

[10] It was accepted by all witnesses that these Bats are highly mobile and utilise different parts of the habitat for different purposes and a combination of those purposes at various times of the night. The River might be seen as the main corridor with the gullies and crossings used to access other parts of the habitat or indeed as short-cuts from one part of the River to another.

[11] It is clear from the evidence given in this case that a unified catchment approach to the Bat's habitat and protection needs to be adopted. Cases such as this and that relating to the Southern link have highlighted the need for a unified approach to the Bat population in this area. We note in particular that recent calculations accepted by experts at this hearing show an alarming decline in the Bat population with a predicted continuing decline in current circumstances of between 6 percent and 9 percent per annum in the following years. This is alarming given that this species is threatened nationally critical, i.e., close to extinction.

[12] We again reiterate that no party before this Court derogated from this position. The Applicant has retained a number of top specialists in this field as have the other parties. Their common aim has been to achieve not only the security of this habitat for the Long Tail Bats and its future persistence but to establish an improvement to the Bat population in the medium to long term.



The Scope of this Appeal

[13] We have gone to some length to explain the context of this Hearing because of the possible perception that this Hearing was about whether or not residential development could occur. We reiterate that no party before this Court seeks that the Consent be refused. To that end, the availability of the site for residential development is accepted. Most of the conditions and aspects of the proposal are accepted.

[14] The Amberfield Development involves something in the region of 840 lots over a total development area of around 105 hectares. The River margins and an ecological corridor running East-West, (known as the **East West Corridor**), are set aside as a Bat Priority Area (**BPA**) and are intended to become ecological reserve in due course. Attached to the East West Corridor is an area also intended to be vested as an Ecological Reserve known as **Knoll Park** being the high point on the Amberfield Development site at around 45 metres. Nearby is an original residence and it sits on a relatively steep slope falling to a lower terrace.

[15] The matter is best demonstrated by the Diagram showing the Amberfield Development with the contours on it and is annexed and **marked A**. However, to understand it in its full context we also annex a copy of the Development Plan with the Bats' Priority Areas (**BPAs**) shown and **marked B**.

The issues

[16] The principles of the approach to habitat preservation is not in dispute although the treatment of the BPA at its margins is a matter on appeal. Also, on appeal is the area of the East West Corridor and particularly the configuration into the site from the Eastern side, the configuration of the Reserve into the site and also the area to the South of the East West Corridor (Southern Buffer).

[17] In the end the parties agreed on the following issues for the purposes of this Hearing:

- (1) The sequencing and deferral of the development of some lots within the North Eastern area (particularly related to the area adjacent to the East West Corridor);



(2) Issues relating directly to development:

- (i) adjacent to the central passage, including a 50 metre buffer to the south of the East West Corridor;
- (ii) the removal of Road 2 (adjacent to the River);
- (iii) details relating to the covenants to be attached to the properties associated with the East West Corridor; and
- (iv) the set-back of buildings from the East West Corridor boundary.

(3) Management Plans:

- (i) the objectives and purpose of the Management Plans;
- (ii) the process by which those Management Plans are to be adopted and/or changed;
- (iii) third party involvement in the development of the Management Plans; and
- (iv) review of Management Plans.

(4) Monitoring:

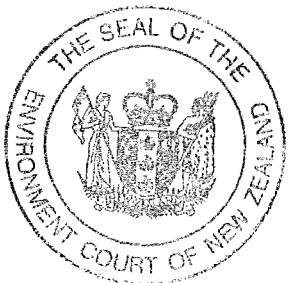
- (i) the purpose of monitoring including on-site, landscape and the purpose in particular relating to whether or not causation was an issue for the purpose of monitoring.

(5) Lighting Standards:

The Lux level at the habitat or within the habitat including:

(a) whether:

- (i) this should include before or after screening,
- (ii) it should be at a point or on a vertical plane.



- (b) at the boundary of the BPA and within; in particular, relating to both residential and Council owned road reserves;
- (c) the colour temperature of residential lighting; given that the colour temperature for Council road reserves was 2,700 kelvins; and
- (d) the mechanism for lighting controls over land development after the deposit of subdivision plans.

(6) Predator Control and Cats:

- (i) There was agreement that there would need to be predator controls within the Bat Priority Area. It appears to be agreed rats and mustelids should be banned as pets.
- (ii) Forest & Bird seek a condition prohibiting cats from within the subdivision and requiring covenants to this effect within all relevant sale and purchase agreements in favour of the Council.
- (iii) other parties sought that there be no cat ban or that there be a modified covenant simply warning others of the predator controls.
- (iv) no party sought an Order in relation to dogs for reasons we will explain in due course.
- (v) It appears the parties have agreed that rats, and mustelids should be banned in any event.

(7) Monetary bond-v- Guarantee and Timing for payment for the protection measures required for Bat habitat and protection.

The wording of conditions to achieve the above.



Court's Jurisdiction

[18] The above was the common position of the parties as to the issues before the Court. These were modified slightly during the hearing. No party seeks that there be a refusal of Consent or that Condition be altered beyond the scope of the various issues we have already identified.

[19] In terms of the Act, this Court is not entitled on this Appeal against Conditions to address the merits of the Application, its wider impact under s 6(c) or in fact wider issues relating to the catchment approach to Bat habitat management and protection.

[20] The Council is investigating the question of the significant natural areas within its District and in particular issues relating to Bats. We understand the Council is looking to introduce significant changes in the near future. In the meantime, we are obliged to consider this Application in terms of the Plan as it is currently promulgated and in terms of the issues now arising.

[21] We reiterate that the approach on this property can only be a small part of the overall management response to the significant decline of the NZ Long Tail Bat in this area. Notwithstanding this, all parties agree to the extent to which the Consent conditions are open we are to conclude what type of conditions would most appropriately provide for the protection of Long Tail Bats, the values and attributes of Long Tail Bat habitat within the Amberfield site and the long term protection of the Long Tail Bat within this development.

The approach to protection of significant habitat

[22] All parties agree that whether we take an approach to the protection of significant habitat under s 6(c), under the Regional Policy Statements and Plans or under Chapter 20 of the District Plan, there is a need to avoid adverse effects on the values and attributes of the habitat on the BPA. Furthermore, the parties appear to agree that we should take steps to provide for the safety of Bats within that area in order that they can receive the benefits of the habitat itself.

[23] Mr Serjeant for the Applicant says that although there is argument about the direct applicability of Chapter 20 given the failure to identify SMA's within the District Plan, he considers that it provides the most relevant guidance to Ecological Consent Conditions.



[24] Dr Makgill puts the matter in this way:

Irrespective of whether you rely on s 6 (c) of the Act or see a more directive role for Chapter 20 of the District Plan "all roads lead to Rome".

Tainui Raupatu Claims (Waikato River) Settlement Act 2010

[25] Again, there is no dispute that all parties respect the mana whenua of Tainui in respect of the Waikato River and the terms of the Settlement Act which are deemed to be part of the Regional Policy Statement. The vision and strategy prevail over any inconsistent National Policy Statement, s 12 of the Settlement Act and the vision and strategy for the River is contained at s 17 of the Act. The Consent Authority and the Court in this case must have regard to the Tainui Environmental Plan as a relevant consideration under s 104(1)(c).

[26] The requirements under s 47 of the Act apply to the use of or activities on the surface of the Waikato River and thus are not directly relevant in this case. Nevertheless, issues in relation to the catchment including, in our view, the riparian margins as well as the waterways which lead to the River require a particular sensitivity and consideration of the vision and strategy for the River. We do not say this to criticise any party given that all parties including Tainui accept that the Application seeks to achieve this. The issues relating to the BPA also collaterally achieve the objectives of the vision and strategy and in fact the Settlement Act as a whole.

[27] In our view, there can be no doubt that providing for the habitat of the New Zealand Long Tail Bat, particularly by reinforcing water quality, riparian margins and gullies leading into the River improves the mauri of the Waikato River and therefore the mana of the Iwi and the purposes of the Settlement Act.

[28] Again, this is a theme entirely consistent with the Statutory and other provisions we have already identified.

The Regulatory Planning Framework

The Waikato Regional Policy Statement 2016

[29] The Waikato Regional Policy Statement (RPS) presents the currently-agreed environmental policy framework for the Waikato Region. Since becoming operative in



May 2016, it has provided a comprehensive overview of the resource management issues for the region and the ways in which integrated management of the region's natural and physical resources will be achieved. It is the baseline for the analysis of environmental effects generated by activities and for the subsequent development of management responses in respect of the avoidance, remediation or mitigation of adverse environmental effects.

[30] The RPS includes provisions which have been developed in order to create some structure and formality within which the management of natural and physical resources might be pursued. These include the Future Proof Strategy of urban settlement and Te Ture Whaimana o Te Awa o Waikato - the vision and strategy for the Waikato River. Even these two, apparently unrelated sections of the RPS, combine to create an undeniable baseline against which to measure the effects of activities.

[31] Important elements of this baseline are the provisions setting out the vision and strategy for the Waikato River. While the quality of the river and its immediate environs may not be attributes one might instinctively link to the matters subject of these proceedings, the nexus is, nonetheless, clear to the Court. These provisions link the biodiversity outcomes sought by the relevant provisions of the plan and which are pivotal to the legitimacy of the Amberfield Development proposal with the actual details of the proposal itself. Healthy ecosystems, supporting resilient biodiversity, are critical outcomes that must arise from the development of Amberfield.

[32] This baseline is further developed in Chapter 11, *Indigenous Biodiversity*, of the RPS. This chapter and its contents are fundamental to the proposed activities at Amberfield particularly in the light of the unique presence of the Long-tailed Bat. The Court is of the view that, equally important and relevant, and supported by even more specific provisions, is the matter of biodiversity itself.

[33] The Court concludes that the provisions of Chapter 11 of the RPS should dictate the actions taken in respect of the on-going validity and survival of the known indigenous bio-diversity in the locality. The policies, implementation methods, and rules of this chapter are as on point with respect to the valuable qualities of the site short of the document simply being an instruction manual to the preservation and enhancement of the long-tailed bat. The relevance of these matters is undeniable.



[34] At the same time, the RPS reveals an unfortunate lacuna in respect of the breadth of its provisions as these relate to avoiding adverse environmental effects of activities on significant natural areas. In particular, the RPS fails to identify the significant habitat of long tailed bats in the Waikato Region or Hamilton City. While the principles underpinning significant habitats are embraced, the relevant elements are discussed very generally only and without any spatial identification or focus.

The Waikato Regional Plan 2007

[35] The Waikato Regional Plan 2007 (WRP) implements the Waikato Regional Policy Statement through the policies and methods. It sets out to manage the natural and physical resources of the Waikato Region. However, upon close examination, the scope and extent of the provisions of the WRP reveal an early policy framework and a lack of consideration to the relevant resource management matters relevant in these proceedings.

[36] The WRP authors acknowledge adopting a single process in the development of the plan. Notwithstanding the scale of the region, the consultative document produced by the Council for the purposes of community engagement enabled people with an interest in the management of natural and physical resources to express their views on and contribute to the directions being taken.

[37] The authors further acknowledge that the plan does not address all the resource management issues in the region and that the plan should be viewed as an evolving document.

Hamilton District Plan 2017

[38] In accordance with the provisions of s 75 of the Act, the operative Hamilton District Plan 2017 (HDP) gives effect to the provisions set out in the Waikato Regional Policy Statement. The purpose of the HDP is to enable the Council to carry out its functions under the Act. Of most relevance to these proceedings, and as agreed by the parties¹, are the provisions of Chapter 20, *Natural Environments*.

[39] These provisions respond to the imperatives of the Act in respect of the protection

¹ Agreed Statement of Facts 2, Relevant Objectives and Policies of Hamilton City Operative District Plan, Common Bundle p 275



of areas of significant indigenous vegetation and significant habitats of indigenous fauna as a matter of national importance. In formal terms, Chapter 20 identifies areas of significant indigenous vegetation, biodiversity and habitats of indigenous fauna which qualify as Significant Natural Areas. To realise this ambition, the plan contains a number of sites that qualify for inclusion.

[40] The sites are identified in the Planning Maps and are listed in Schedule 9C: *Significant Natural Areas*, in Volume 2, Appendix 9. To date, such Significant Natural Areas (SNAs) include identified areas of the Waikato River corridor and gully areas, peat lakes and wetlands and remnant indigenous vegetation or trees. It therefore comes as a surprise to the Court, in light of the warranted concern held for the future of the Long-tailed Bat, that no commonly identified and generally agreed Bat Protection Area is currently contained in Schedule 9C.

[41] This is an unfortunate oversight. It is a matter requiring urgent redress. In fairness, we understand this to be the case with the necessary policy development work being undertaken by the Council.

[42] At the same time, the oversight cannot be ignored. There is a diminishing population of an endangered species of native New Zealand fauna, deemed to be so rare as to be classified “Nationally Critical” pursuant to the New Zealand Threat Classification System. Given the acknowledged adverse effects from land use development, appropriate steps need to be taken based on Part 2 of the Act s 6(c) and relevant plans.

[43] The City has a simple process in respect of identifying and protecting SNAs. It is an on-going process with the end result that there may no longer be any qualifying feature unscheduled. As restoration efforts continue in the City, additional Significant Natural Areas may be created. These will be added to Schedule 9C through changes to the plan through the First Schedule process under the RMA.

[44] The Objective of Chapter 20 of the HDP is clear: “*Significant Natural Areas are protected, restored and enhanced.*” In this instance, the Court has found sufficient support in the provisions of this chapter to exercise discretion and reach conclusions as to the BPA’s in this case.



The Statutory mechanisms for achieving habitat and ecological outcomes

[45] It is intended that the BPAs are set aside as part of the Amberfield Development and eventually vested as ecological local purpose (ecological reserves). In this way the ecological primacy of their reservation is acknowledged. At the same time this mechanism does not in itself prevent access to such reserve areas but means that such access would be in the context of its ecological features.

[46] One of the matters on which the experts agreed is that reasonable use by people during the day (especially with the construction of paths) is not likely to disturb the Bat population. However, it does require that the area is protected from light and noise disturbance at night as we will discuss in more detail shortly.

[47] Accordingly, a local purpose reserve could achieve a proper balance between day-time use by the public and night-time reservation as dark and quiet areas. Although this matter was not explicit at the commencement of the Hearing the Applicant acknowledged the requirement to have survey plans consistent with reservation as local purpose (ecological reserve) as a condition vesting under s 223 of the RMA as acceptable. All other parties seem to be content that this was an appropriate approach.

Possible change to the Development

[48] One matter that was highlighted to the Court late in the Hearing was that there were negotiations underway between the City Council and the Developer for the utilisation of some 115 of Amberfield Development (just to the South of the 2 super lots shown in **attachment B**) as a sports ground. Dr Makgill acknowledged that any utilisation of the area as a sports ground would need to give special consideration to the adjacent BPA and achieving the darkness and non-disturbance requirements of the Consent.

[49] Although no explicit evidence was given on the topic nor is the matter the subject (at this stage) of any diagrams, we understand it was intended to include such a condition. We make it clear that we are proceeding on the basis that any alternative use would have to achieve the same boundary conditions as for the BPA for any other development with the Zone. This has particular implications for the use of any sports ground for night-time lighting or events given the potential for significant light and/or noise disturbance of the adjacent BPA.



The River margins

Although the light disturbance issue was originally an argument about deferral and screening of BPA the core issue is the potential disturbance of Bats within Amberfield Development. With the exception of the East West Corridor which crosses the contour of the river terrace, the majority of the BPA is on the lower contours of the property adjoining the river or the gullies which feed into the river. The contour is a series of terraces on the subject property from the low lying river or gully bottoms around contour 20 metres through to the high points on the property around 40 to 45 metres.

[50] At the Southern end of the Amberfield Development the terracing occurs between the Southern gully and the River with the high point in the middle of the site and the stepped terraces towards the Waikato River. Over the site North of the Southern gully inland areas are at around the 40 metre contours with several high points around 45 metres including the Knoll. This is then stepped down towards the River around 5 metres over a short distance and another flat area before there is another 5 metre step down to around the 25 to 30 metre contours. The contour is more compressed towards the Southern part of the site and at the Northern tip of the site on the North Eastern terrace. There is however a more expanded area where the River turns from its eastward travel towards the South.

[51] Although we do not have contours for the opposite side of the River the contours in places appear to be higher than this site and is in almost all places significantly more sharply incised. The exception to this is the gully around Hammond Park and that related with Mangaonua Stream.

[52] Homes are clearly visible along the top edges in places particularly on the Southern part of the site as well as several large businesses including P F Engineering. There is significant housing in the area of Riverlea including a number of businesses such as P F Engineering and others along the edge of the Mangaonua Stream. However, penetration of light from those premises is likely to be minimal due in part to the height of those above the River and the North Eastern terrace and in part due to the tree structure along the riverbank in this area.

The Pastoral Amberfield site

[53] The subject site is currently more open and currently utilised for pasture above



the 20 metre contour. Much of the gully area through the Southern gully is also occasionally grazed. The area east to the Southern gully, in particular, is a relatively easy contour between 30 and 40 metre contours as is most of the land adjoining Peacocke Road.

[54] Much of the wildlife habitat, particularly on the southern part of the site, occupies areas which are more deeply incised and below the general land area. Towards the North Eastern end (particularly North of the East West Corridor) the change in land height is more gradual and there are expansive views both toward the Riverlea area from the site and towards the Amberfield Development from a number of positions within the bush at Riverlea, particularly, the public board walk.

[55] Currently, the view from the opposite side of the river is a pastoral one given that the viewing points are in many cases slightly higher than the land form on Amberfield. With the introduction of residential as shown in the Plans, this view will change. Nevertheless, at the current time the vegetation along the riverbanks are very closely confined to the River itself as the banks rise steeply to around the 20 metre contour and the vegetation clings essentially to the sides of the Riverbanks. At the North Eastern corner there is a wider view, and this is grazed to a lower contour although there is still a drop from the edge to the River.

[56] The exact extent of the proposed BPA and the commencement point of the proposed Road 2 in the North East Terrace was difficult for us to tell from our site visit. There has been a significant amount of planting in the North eastern terrace which is now relatively closely planted and for the most part merges into the existing vegetation at the top of the riverside. This will reinforce the riparian edge over time.

[57] We also noted during our site visit that noise from the P F Engineering site was clearly heard within the environment during the day. However, we are told that this premise does not operate at night.

[58] Around the East West Corridor, we were able to hear significant chain sawing work on the opposite bank of the river on one of the larger riverside properties. We also note that several of those properties have expanded their grassed areas nearly to the river level and that these now contain built structures. There is potential for those areas to impact in terms of light upon the River area generally and even on the opposite side of the River on the Amberfield Development.



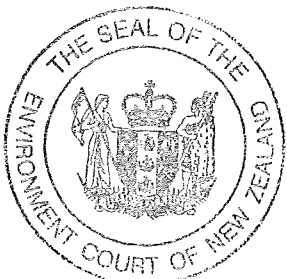
Development Deferral for North Eastern Terrace

[59] Nevertheless, we still consider there is potential for light from both residential and roading on Amberfield to reach the BPA without appropriate controls. In many of these places, particularly on the North Eastern Terrace, we have concluded that the area required for noise and light attenuation will not be able to be achieved without relatively dense planting adjacent to the road. In particular, we are concerned that vehicles travelling into the area may have a light projection impact into the BPA and even as far as the River without some form of control.

[60] While we will deal with the appropriate levels in due course, we have concluded that the areas on the North Eastern Terrace and as far as the central road marked as far south as E3 should not be able to commence building including preparatory works for sites until such time as the lighting requirement within 3 metres of the boundary of the BPA has been achieved.

[61] The applicant would need to satisfy the Council at the time of the certificate that the light and other disturbance requirements can be met. A vertical plane at that point 3 metres in from the boundary of the BPA throughout the entire BPA (including Knoll Park and East West Corridor) is required. Our reasoning for this is:

- (1) It was acknowledged that the outcomes for this area were in part, at least dependent upon achieving a density of planting sufficient to attenuate light;
- (2) It was not in dispute that the Bats required a dark and undisturbed area in order to be able to utilise the area as habitat. Without it the values of this habitat would be severely derogated.
- (3) There are already controls during the construction period sufficient to satisfy us that activities that might disturb the BPA would not occur during initial earthworks and/or during the construction of roading, infrastructure or the planting involved.
- (4) We are satisfied that the conditions are clear that no disturbance activity can occur after dusk or before dawn.



[62] We conclude the Applicant's witnesses have not properly and fully considered the impact of car headlights upon the BPA. Having regard for the colour temperature of these lights being between 4,000 and 6,000 kelvin (more blue light) and the Lux achieved at the BPA without attenuation even with dipped lights, we are satisfied that there must be screening in place and modelling to ensure that vehicle lights, street lights and residential lights do not exceed the appropriate luminosity beyond 3 metres inside the boundary of the BPA. We do not understand that the Applicants sought to derogate from that proposition for the purposes of this hearing.

The light levels within the Bat Priority Area

[63] Although several of the witnesses indicated an acceptable upper limit for Bats of 0.3 lux, no witness suggested this was a desirable light level throughout the BPA. Mr Kessells was clear as were most of the other witnesses that the appropriate level to secure high quality Bat habitat was less than 0.1 lux. This is a higher degree of darkness. It inevitably requires light be attenuated before it reaches the BPA in order to ensure that it can be sufficiently attenuated to 0.1 lux within 3 metres of the boundary.

[64] We have concluded that 0.1 lux standard should be achieved within 3 metres of the boundary of the BPA on all boundaries whether they are residential or within the public areas.

Light temperature

[65] In relation to the public areas, the temperature of the lighting is to be achieved at 2,700 Kelvins. Almost all the areas in question with the exception of Knoll Park and parts of the East West Corridor are bounded by road and therefore would be controlled by this condition. It is clear to us after hearing from the witnesses, particularly Mr McKensey that directional lights will need to be used for streets and that the lights should be wherever possible directed to the inland side of the road to ensure that they are attenuated adequately at the boundary of the BPA.

[66] Nevertheless, with the requirement for a 0.1 lux at a vertical plane 3 metres inside the habitat, this will require the applicant to demonstrate that they can achieve that through modelling proven by design and field tested as appropriate through the course



of the development. We consider that the 2,700 kelvin limit is appropriate for the public roads. The question for us is whether that is an appropriate level in respect of the residential areas.

[67] For the residential areas that have a road between themselves and the habitat we are satisfied that a 3,000 kelvin control would be sufficient. The road lighting control condition will achieve the addition and attenuation required for residential areas.

[68] The area of concern relates to those residences that immediately adjoin Bat Priority Areas. There are a number of properties that bound BPAs that are not part of the East West Corridor. We consider there is no difference in principle between these properties, 3 at the North Western end of the Northern Terrace and around 5 adjoining the Southern gully area and they should be treated on the same basis as for the East West Corridor and Knoll Park.

[69] Accordingly, the issue of the Lux level and colour temperature are also relevant to the conclusions in respect of the East West Corridor. We have concluded that the same control should apply to those eight properties as to the light properties for the East West Corridor. We now go on to discuss that and our conclusions in that regard which include the light controls in respect of the East West Corridor.

East West Corridor

[70] This is based around a line of Poplars planted in the 1970s and now utilised by Bats for a commute from the River to the East to the West. It probably includes commutes to Sandford Park area and diversions through to the North along another existing line of shelter. Having heard all the evidence, we are satisfied that this North Eastern Terrace is utilised by Bats generally and that they would commute, forage and socialise in this area. An aerial plan showing the certificate of title line of poplars and the proposed BPA and roads through it is attached and **marked C**.

[71] In particular we note there are a number of large trees around the Knoll Park area, currently the curtilage to the large house. The East West Corridor also leads towards another house on Peacocke Road, now owned by the City Council and to an area of Hedgeline species and another contour drop moving through the West to North. The area serves part of the wider corner of the River as it turns from the West to the South and bat soundings show that the Bats have used the area from the North Western corner



through the North Western Eastern Terrace for a number of purposes including as a "short-cut".

[72] The current Poplars on the East West Corridor are utilised but also have undergrowth which is likely to harbour insects in season and also provide shelter in windier times. The East West Corridor rises from the River relatively steeply and it then crosses the area of Road 2, slightly, some 5 to 10 metres on the river side of an existing track. The land then levels for a short distance before climbing very steeply around 8 to 10 metres up to the Knoll area. This represents a significant change in contour.

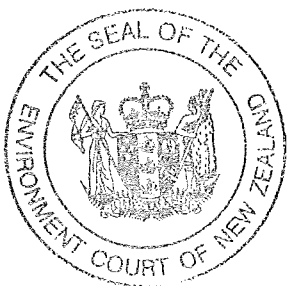
[73] We are told and accept that Bats would tend to use a gradient approach to fly up the rise perhaps moving from side to side or starting at a much greater height to achieve the elevation needed. We accept that currently they are likely to use both sides of the East West Corridor and if using the Southern side, may tend to move further to the South to try and achieve a more graded uplift to the upper level.

[74] This area be seen on the map **attachment A & B**. The trees take a turn from the top of the Knoll and currently the Northern side of the Shelter Belt is relatively close to section 140. Having seen the contours involved we consider this is inappropriate. We consider that the same distance between the trees should be provided on the Northern side and Southern side of the East West Corridor to give the Bats ample room to climb in flight and forage as necessary.

[75] When we looked at the tree positioning according to Mr O'Callaghan's map annexed hereto **and marked C**, we noted that all of the trees in the East West Corridor are slightly to the North of the existing certificate of title line. We have concluded that the most appropriate way to give distances for the purpose of this Decision is from the existing certificate of title line. To that end, we intend to adopt a standard distance to the South of the line for length of the East West Corridor. Where it deviates at the western end near Peacockes Road, we extrapolate the line boundary directly on for the purposes of the calculation of the distances.

The Northern Buffer

[76] All trees are already to the North of the certificate of title line. Accordingly, there would be some 4 - 5 metres from the CT line to the far side of the tree line for most of the Shelter Belt. We have adopted 5 metres for the purposes of this hearing.



[77] To the South of the boundary line there is already a separation of some 2 to 3 metres from the centre of the stems, but this does vary over its length and is a little unclear. We consider that the certificate of title line therefore should constitute the boundary from which the calculation for the Southern edge should be made for the BPA.

[78] Having closely examined the site, the evidence of the parties and the various diagrams and plans that have been produced, we have concluded that a distance of 15 metres from the certificate of title line should be provided to the south of that certificate of title line along its entire length and the extrapolation to Peacocke Road to provide a suitable and meaningful BPA.

[79] In respect of an equivalent distance of BPA to the North of the Certificate of Title line we have concluded that the East West Corridor area should constitute a north distance of 20 metres from the certificate of title line. The end result being that there should be approximately 15 metres either side of the centre line of the trees. Our reasoning for this is as follows:

(a) We heard detailed evidence on the habitats of Bats so far as that is known and we accept:

1. That the Bats use the East West Corridor for foraging and socialising in addition to commuting;
2. Bats would use both sides of the East West Corridor particularly; and
3. Bats need an area on both sides to protect them in wind conditions even once the new habitat is established on the Northern side. Whilst Bats on the North side may reduce their reliance upon the Southern side of the Buffer, we have concluded that such a "habitat area" will still be required.
4. This will have an impact at the Eastern end of the Corridor to the extent it will require a reduction in the Southern boundary of Lot 141 to ensure it is no less than 20 metres at its Eastern point from the certificate of title tree line. The line should also deviate slightly North along the boundary to encourage Bats



towards Knoll Park. There is enough width to the North within Knoll Park itself and there is also a necessity to address this issue as it relates to the road which is part of the BPA as we will discuss in due course.

[80] It appears to us that there is likely to be sufficient room 20 metres from the certificate of title boundary on the Western side. We consider that where it reaches the boundary of the adjacent property owned by the Hamilton City Council, then the existing distance from the extrapolated line is sufficient given that the Poplars currently deviate to the North just prior to that boundary.

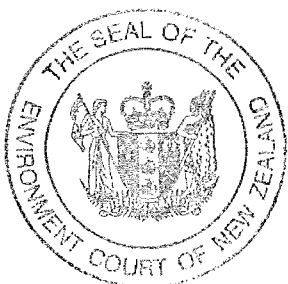
[81] Accordingly, we would extrapolate the boundary line of the property with a straight line through the CT going to the West until it reaches the Peacockes Road boundary. We appreciate this could be less than 20 metres in places. This is not a great moment given the existence of a significant line of trees on the boundary of the property already creating protection to the North with the planting of new trees within the areas that we have discussed. This should create a protected corridor for Bats in any event.

The Southern Buffer

[82] The Southern buffer to the East West Corridor was the most significant issue on evidence before us and there were strongly held views by all experts. Those views for the Department of Conservation supported by Drs R and I Stirnemann was that a buffer of 50 metres to the South was appropriate. However, as matters transpired this seemed to serve several purposes:

- (a) the creation of further habitat to the South which would then create another linear feature which would protect Bats flying along that.
- (b) Providing further insect habitat both within that alley and with underplanting further to the South; and
- (c) Providing further opportunity beyond that for light attenuation.

[83] We have concluded that from the certificate of title line a further 15 metres to the South would give sufficient room to:



- (a) create space for insects to gather and fly within 5 to 10 metres of the leaves of the East West Corridor existing poplars;
- (b) the opportunity for inter-planting and under-planting along the Poplars and adjacent to them; and
- (c) the opportunity for habitat planting within the BPA to attenuate light from the properties to the South.

[84] On this basis, we have concluded that with a control of 0.1 lux 3 metres within the BPA boundary, this should achieve a minimum distance between the trees and the 0.1 lux of approximately 10 metres. We do not agree that there should be the creation of another linear feature along the southern side of the tree line. However, we do agree that the existing East West Corridor should be reinforced and inter-planted. We also agree that attenuation planting on the Southern boundary will have the effect of reducing light and creating more insect activity of benefit to the Bats.

[85] The question that concerns DOC witnesses and all others including RESI, Forest & Bird is the potential for activities to occur on the properties to the South which may impact upon the Bats in the following ways:

- (a) Vehicle lights penetrating into the area;
- (b) The construction of outside features, such as gazebos, lights, and swimming pools that may come close to the boundary and therefore impact with noise and light; and
- (c) The potential for cooler temperatures (blue light) to adversely affect the Bats even if meeting the 0.1 lux requirement.

[86] In the end we have concluded that most of these features are addressed directly by the requirement for the 15 metre BPA line to the South of the certificate of title. We do acknowledge the concerns about the introduction of light or noise sources immediately adjacent to the boundary of these properties. We note in particular that this area with high trees around 20 to 25 metres is on the Northern side of the proposed Amberfield house sites and the shadow from these trees may impinge upon the enjoyment of the properties.



[87] We conclude that the practical reality needs to be made very clear to prospective purchasers because the trees are essential for the maintenance of the BPA habitat. The 15 metre set back from the boundary line will attenuate some of the shadowing effects. We have concluded that a further 5 metre building line restriction covering the construction of structures including lighting and buildings, swimming pools, gazebos, caravans and any other form of occupied space would be sufficient to ensure the area remains a dark area. We keep in mind that the 0.1 lux light requirement is required to be achieved at all times at 3 metres within the BPA boundary and it can be measured within the public space. Compliance therefore can be measured and checked if necessary.

[88] Given our conclusion on this matter and the fact that we have adopted a light level of 0.1 lux, we have concluded that the slight variation in colour temperature is not of critical importance in this case. This is due to the following factors:

- (1) The 0.1 low lux level is achieved at 3 metres within the BPA;
- (2) The control of the BPA planting by the developer and subsequently the Council to achieve appropriate attenuation if necessary;
- (3) The ability to control the limits in terms of the Council requirements i.e., 0.3 lux requirements by the Council should achieve the desired outcomes in any event given the distance to the habitat; and
- (4) The desire of landowners to set the properties back from the trees to achieve sun.

[89] To the West of Road 1, we have concluded that the southern side of the East West Corridor will be treated in the same way. The line should be the same on both sides on the basis that we have already described.

Although we were told this could mean the loss of up to 6 or 7 lots, we think this is an over-estimate. Given the reduction in land available it is likely that some 3 lots will be lost, and a reconfiguration of the sites would be necessary. Our view is whatever the consequences of this we adopt the most appropriate step to achieve the resilience of the BPA through the East West Corridor.



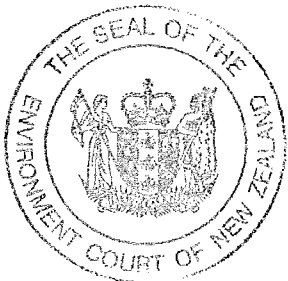
The Roads

[90] There was a significant dispute about roads. The s 274 Parties were concerned that proposed roads should not enter the BPA East West Corridor. By the time of the hearing this had developed into the roads being cul de sac. As the case developed it appeared to us there was a prospect of Road 2 being turned into a shared-way for the use of pedestrians, cyclists and cars. If controlled as a low speed area, say 20 to 30 kilometres, it could be utilised on a much more pedestrian friendly basis without the requirements for the double width road that was originally proposed.

[91] In discussions with Mr O'Callaghan it appears that with benching and battering of Road 2 through the Shelter Belt, the number of trees to be removed could be reduced to 1 or 2. From our site visit, we suspect that with a 4 metre width road, this could be achieved with removal of a single tree. We recognise however, that the root system of two other trees might be affected.

[92] Overall, we conclude that a narrow Road 2 of one lane through the BPA could be constructed. This would be much narrower than shown on **attachment C** (perhaps around 3.5 metres). Further there are good site lines so that vehicles could wait until the way was clear of pedestrian, cyclists and cars before travelling through. A particular low speed design would make this area more beneficial for the Bat habitat adjacent and also, we suspect for both residents in the area and visitors. We note particularly that this route would be attractive for those wishing to walk either through the subdivision for recreation or to the shopping centre to the South. We understood that the applicant accepted that this was appropriate subject to final design.

[93] In relation to Road 1 through the BPA **attachment C** currently shows a two lane Road. For Road 1 we were initially attracted to the concept of a split carriageway with a central island for large trees. The central island trees would help maintain canopy cover for the BPA over Road 1 (or close to it). Having visited the site, we now wonder whether we could minimise the removal of existing trees and maintain a two-way road through the BPA, narrowed to something in the order of 7 metres, with an upper gantry constructed crossing for commuting Bats. In our view, this would mean that there would simply be no parking on the side of the road and that the formation would be narrowed at this point to make it clear that this was not an area for stopping of vehicles.



[94] The reason we mention this is the potential to use a more formalised Bat crossing such as those shown to us by some of the witnesses. These constitute a gantry-type structure from which the Bats do not view the traffic or lights below them when they are crossing at a height greater than say, 6 to 8 metres.

[95] We are concerned as to whether this is a realistic possibility given the potential for vandalism and for people to try and access the gantry system, However, we do note that these solutions have been used overseas and would give a darker environment for Bats crossing the road than could be achieved even with the mid-road crossing canopy.

The Western end of the Corridor

[96] Coming now to the western end, it is clear to us that there needs to be an extension of the tree line towards Peacockes Road to reinforce the tree structure of the neighbouring property and also enable the Council and future developers to consider how Bats can cross Peacockes Road and utilise the habitat further to the West. We consider that a simple re-design by Bat Ecologists and Terrestrial habitat experts would be able to continue the type of features already planned for the East West Corridor and Knoll Park.

Maintaining non-disturbance for Bats

[97] As is clear, we envisage the East West Corridor and Knoll Park being dark areas with the 0.1 lux limit being required around 3 metres of all of the outer limits. This will require particular thought to be given to areas such as the roadside on RD 1 and in particular in relation to traffic movements in RD 1 and RD 2. No one has suggested a different light limit to us and we are most concerned that we do not start to encroach upon the East West Corridor through light levels which will dissuade Bats from crossing either of the roads or using the East West Corridor completely.

[98] To that end, we discussed with the parties the potential to introduce for the **construction period** a "no go area" within any of the BPAs. Works in the BPA would require a particular management plan and permission of a committee (established to consider the management plans for the BPA). We consider that it is appropriate to impose conditions requiring the entire BPA, including RD 1 and RD 2, to be fenced off prior to the construction work starting and for those areas to be developed under separate management plans after specific authority is given.



[99] The focus of those particular plans beyond the general objectives and policies as a whole, would be to ensure that during establishment of Amberfield:

- (a) there is no temporary or permanent disruption of the Bat habitat to prevent commuting, foraging and socialisation;
- (b) any annoyance of Bats particularly through noise or light;
- (c) to avoid the storage of any machinery, lighting or other activity in those areas at any time; and
- (d) to allow those areas to be subject to construction works in terms of strict application of plans to ensure the avoidance of effects.

[100] For most of the site, such exclusion would be of little moment after any minor earthworks around the edges that may be necessary. In respect of the central East West Corridor however, this will require additional thought and a management plan. We note that the site is accessible on the North Western Terrace from a point further to the North. This is currently one of the access roads on to this farm and in our view is the natural entry point for construction work on the site. We would have thought the North Eastern Terrace would give access and provides more than adequate room for storage of machinery equipment and materials and already has within it several sheds and yard areas. The northern end is also the most likely area to be first developed on the North Eastern Terrace.

[101] Similarly, for areas to the South, the Road access E2 and E3 would be unaffected by this constraint as well as the areas further to the South. The additional two areas that would probably be subject to specific need for management plans would be the two bridges across the Southern gully. These areas appear to be more developed than the current areas, but we suspect it is intended that early planting occur in some of those areas.

[102] Overall, we cannot see at any stage, any particular concerns with utilising a “no go” approach to the East West Corridor and Knoll Park BPAs in respect of this development.



[103] Overall, we consider that some control to ensure the integrity of the BPA during construction and pending the finalisation of the residential area is critical for the values and attributes of the habitats and the Bats themselves.

Predators and Cat Bans

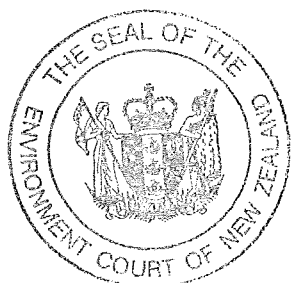
[104] There was no dispute between the experts that cats, rats and mustelids could have a significant impact upon Bat populations. Visual evidence included one photograph of a feral cat that had managed to kill something in the order of 100 Short-tail Bats in little less than a week. All experts retain the same concerns. The issue was not as to the potential for cats to have impacts but whether or not a ban of owners having pet cats (Cat ban) was the most appropriate response.

[105] Ms Flynn for the Applicant made the point that cats in themselves have an impact upon rat populations who are also predators of Bats. She acknowledged that only feral cats would be likely to attack mustelids and we could not rely on the cat as a known predator for mustelids. Although it was not explicitly discussed by the parties, there seems to be support for at least a ban upon rats and mustelids within this subdivision given the susceptibility of the Bat population. This does not appear to be disputed although there was no direct evidence on the point.

[106] Although in initial evidence there had been a suggestion that dogs should be banned, all witnesses acknowledged that dogs did not constitute a threat for Bats, or any other relevant species present in this area. In particular no party sought a ban in respect of dogs, and we do not consider it to be before us on the evidence.

[107] The Council submit that in relation to Cat Ban a district wide approach should be taken. The Council is reluctant to have a cat ban at Amberfield and points particularly to the difficulties of enforcing such a rule in a subdivision. They say this would rely on reporting by others and it would be almost impossible to prove ownership of the cat.

[108] Although we acknowledge this point we take a different approach. If there is a condition and covenant banning cats, this would mean that the owners of cats would not be able to complain in the event that the predation controls installed killed or targeted cats. Moreover, the Courts experience with other conditions of this type is that they are essentially self-policed by the residents who take ownership of the conditions and bring pressure to bear on other parties for compliance.

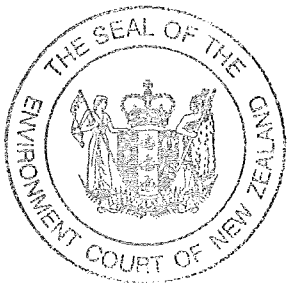


[109] Whilst we acknowledge the difficulties in enforcement, these would exist whether or not there was a cat ban in this case or there was a By-Law banning such cats. Overall, we conclude that these types of considerations are neutral to whether a Cat ban should be required.

Reason for Cat Ban

[110] We have concluded after some discussion that the logic supporting a cat ban in this area is almost irresistible for the reasons as follows:

- (i) there is no doubt that cats predate on Bats.
- (ii) they constitute a threat to Bat safety.
- (iii) We are in doubt that the number of cats in this area is currently at a relatively low rate even including feral cats.
- (iv) We are satisfied that the introduction of another 840 residents would significantly increase the density of cats (albeit household cats) within this area.
- (v) We acknowledge the evidence that even domestic cats have a reasonably large range, some 300 metres radius, which would clearly include most of the BPAs within this subdivision.
- (vi) Whilst a district wide approach might be appropriate, particular reasons for one in this case relate to the BPA and the fact that this is a habitat for a threatened nationally critical species. This is not the case throughout all of Hamilton.
- (vii) At the moment the River separates this site from the majority of the cat population which would be on the other side of the River. We recognise the River as a difficult barrier given the size of the River and its swiftness.
- (viii) Finally, we recognise the precedent value of this. This is one of the most sensitive areas for Bats in the current development and



the future development of Peacockes Road. As noted by others, if a cat ban is introduced and subsequently removed, that does not create any particular difficulties. The inverse of not introducing it and then seeking to introduce it if there is a significant predation on Bats is that such retrospective action would be virtually impossible.

[111] We conclude that the imposition of a cat ban is appropriate and does not constitute a significant constraint on the developer. It fits well within the ethos of this area as an ecological development area which is also dog friendly.

The conditions of consent and monitoring

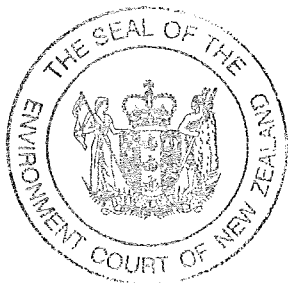
[112] We are reluctant to become embroiled in the fine wording of the conditions given our conclusions on the significant points. Overall, we consider that these directions will enable the parties to finalise the conditions. They are already well advanced.

[113] It is clear that the parties now all agree that there should be a committee to review management plans and make recommendations to the consent holder. If those recommendations are not adopted by the consent holder, we consider there should be a power of review to the Council under ss 127 and 128 of the RMA as appropriate and the Council has the power to review the conditions of consent and management plans to that extent.

[114] So far as monitoring is concerned it is the view of the Court that monitoring should clearly serve the purposes of the objectives of the BPA and core to this is:

- (a) Maintain and improve the values and attributes of the BPA habitat;
- (b) Provide for the safety of Bats through controls in respect of disturbance (noise and lighting);
- (c) Protection from predators; and
- (d) Protection of roosting sites.

[115] Monitoring will enable the information of whether anything that is being done by



the developer is having a direct adverse effect on the Bats but its purpose largely is to ensure that the longer term objectives of the Plan are to be achieved.

Monetary Bond

[116] We agree with the applicant that most of the requirements in the conditions of consent particularly as we have envisaged them are “up front”. The development is to take place in accordance with it and any failures during that process could lead to the hold-up or cessation of work on the subdivision. Any on-going obligations at the end of the subdivision can be covered through 223 or 224 certificate condition obligations. We would imagine for example, ongoing obligations for monitoring or transition of management in respect of reserves to the Council would be covered in such a way.

[117] We are not satisfied that further monetary Bonds are required in the circumstances of this case and concerns would be reflected in the way in which conditions are framed. We also suggest a way in which we can ensure that compliance is achieved is to ensure that the 223(3) Certificate for later stages also require compliance with any conditions of earlier stages. This enables an ongoing and rolling control.

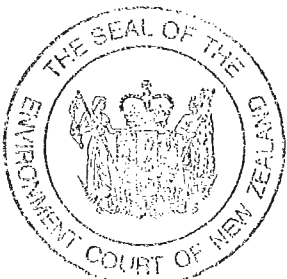
The First Instance Decision

[118] Under s 290A of the Act the Court must have the same regard to the first instance decision. In this case a full evaluation is not required given the consent itself and the majority of conditions imposed on the grant are not subject to appeal. The variations to conditions are refinements on the conditions to protect Bats and their habitats.

[119] The imposition of an adaptive management regime in the primary decision was criticised by a number of parties. We can see the logic of this approach, but it is difficult to specify environmental bottom lines for an endangered species in retrospect.

[120] By the time of the hearing the parties' evidence and approach had become more refined. The focus turned to appropriate conditions to ensure Bat Habitat and promote Bat safety and success as far as possible within the bounds of the Appeal.

[121] Accordingly, we see the changes now proposed as a refinement of a thorough and considered first instance decision.



Part 2 of s 104(1) of the Act

[122] We have dealt with evaluating the best conditions to achieve the objective of the Act, Plans and Consent as we have considered the various controls. Given the parties have had a singular objective with these conditions and refined the issues we conclude the best conditions will better meet the purpose of the Act, Plans and Consent.

[123] We conclude the conditions when refined will as we have concluded achieve sustainable management in developing an important residential resource while safeguarding the ecosystem essential for the New Zealand Long Tail Bat.

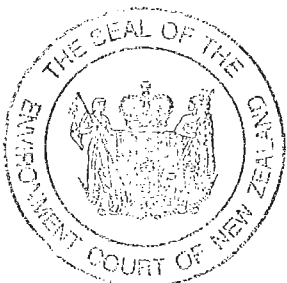
[124] The Long Tail Bat is at a critical stage in Hamilton. Hamilton needs urgent work to maintain and improve Bat habitat largely based around the Waikato River and its gullies. The ongoing encroachment of residential activities around the edges of the River could be the final blow for the Bats.

[125] We are satisfied that the conditions of this consent give a positive way forward to improve the habitat and prospects for the New Zealand Long Tail Bat in Hamilton. However, this is simply one part of a much wider catchment that needs to be addressed as a matter of urgency. Issues around avoiding disturbance on the river corridor from light and noise providing suitable areas for roosting on the river and through its adjacent gullies and improving the habitat quality are all critical if the species is to continue in this area.

[126] The Council acknowledges the importance of this matter and we recommend they urgently establish a catchment wide group. This could be based on the one envisaged in this Decision. This should look at some critical steps to achieve the improvement to the values and attributes of the local Bat habitat and the long term protection of the New Zealand Long Tail Bat.


Final Instructions

[127] We instruct the Applicant to prepare a draft set of conditions to follow the terms of this Decision. We understand that such work is already well advanced and direct that it be circulated to the other parties in 20 days for comment. The parties need to focus clearly on the matters that are being determined by this Court and the exhaustive work that has already be done by all parties to try and refine the conditions otherwise.



[128] Many of the conditions can simply be restructured in terms of this Decision and we would anticipate the parties would then liaise with a view to providing a final copy to the Court within a further 20 working days to the extent there is a disagreement on any of the particular conditions. The position of each party should be noted in that Memorandum with the intention that the Court could then make any final decisions to the wording that may be in disagreement. If the parties are not able to reach an accord in this regard, they are to advise the Registrar who will arrange for a telephone conference and/or further hearing may be necessary to finalise the wording.


For the court:

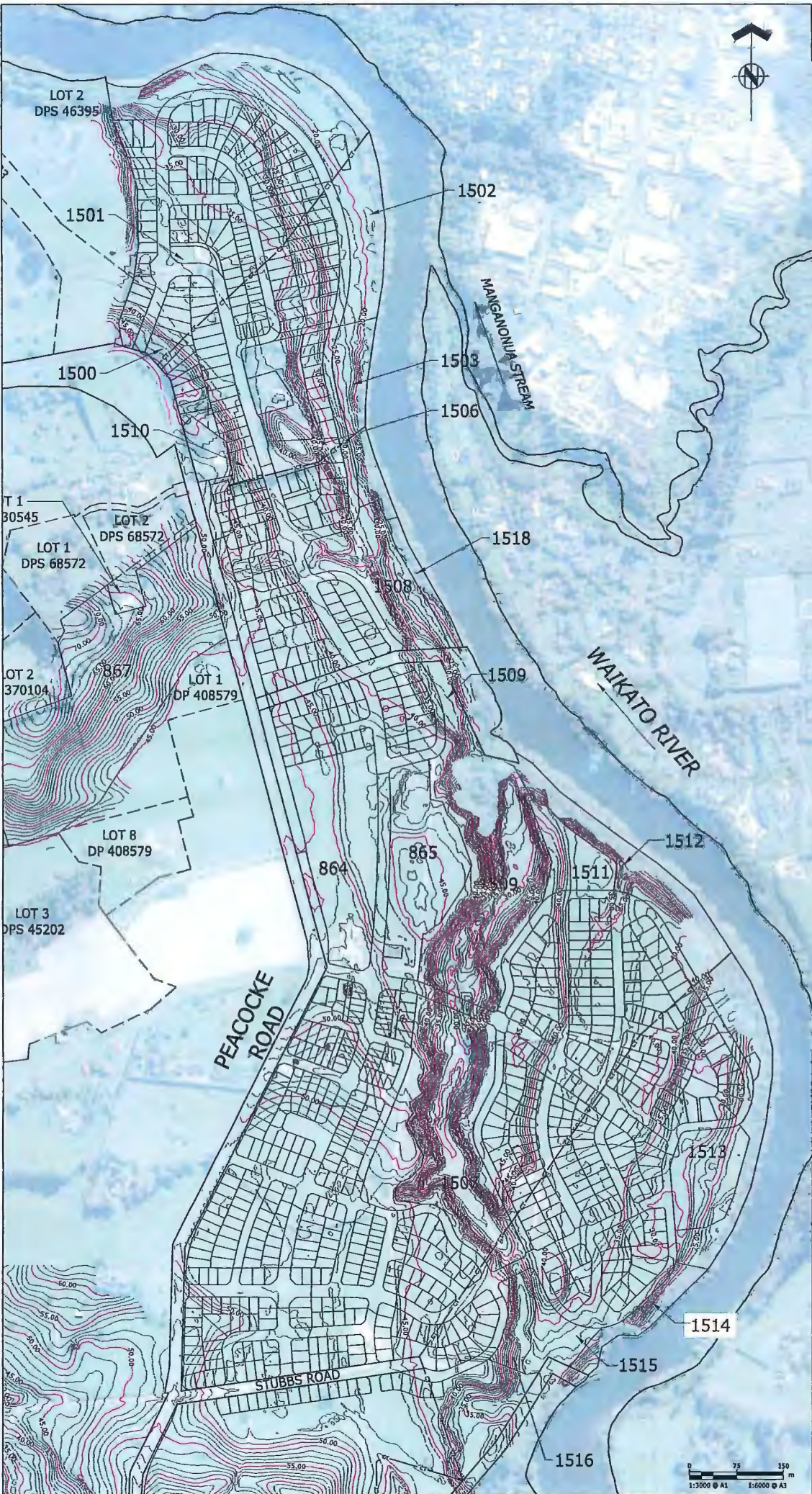


J A Smith
Environment Judge



'A'


ASSOCIATION OF CONSULTING ENGINEERS NEW ZEALAND
 150 9001 QUALITY ASSURED
THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED OR ALTERED, WITHOUT THE WRITTEN PERMISSION OF PARAGON GEOSPATIAL CONSULTANTS LIMITED. NO LIABILITY SHALL BE ACCEPTED FOR UNAUTHORIZED USE OF THIS DRAWING.



HC AUCKLAND OFFICE
 24 NORTH HOBSON STREET SOUTH
 AUCKLAND 1011
 T +64 9 973 8888
 W www.hurongroup.co.nz

1	FOR INFORMATION	HEAT	01.09.20
REF	REVISIONS	BY	DATE
CLIENT:			
WESTON LEA LIMITED AMBERFIELD PEACOCKE ROAD HAMILTON			
TITLE:			
SCHEME PLAN OVERALL LAYOUT EXISTING CONTOURS			
DESIGNED:	DATE: 01.09.20	SIGNED:	M.TORCKLER
DRAWN:	DATE: 01.09.20	SIGNED:	M.TORCKLER
CHECKED:	DATE: 01.09.20	SIGNED:	B.LINGER
APPROVED:	DATE: 01.09.20	SIGNED:	B.LINGER
ISSUE STATUS:		FOR INFORMATION	
PROJECT No:	9820-141842-01	SCALE:	1:3000 - A1 1:6000 - A3
DRAWING No:	141842-SK526	REV	1

"B"

This graphic has been prepared by Boffa Miskell Limited on the specific instructions of our Client. It is solely for our Client's use in accordance with the agreed scope of work. Any use of reference by a third party as to this party's part only. Where information has been supplied by the Client or obtained from other external sources, it has been assumed that it is accurate. No liability or responsibility is accepted by Boffa Miskell Limited for any errors or omissions, to be evident but they arise from inaccurate information provided by the Client or any external source.



KEY

- Earthworks Boundary
- Bat Priority Areas (220,539 m²)
- Bat Priority Areas (85,018 m²)
(existing planting in Waikato River Riparian Area)

Total area: 305,557 m²

NOTES
Bat Priority Areas as defined in paragraph 12(a) of Joint Witness Statement - Ecology - Dated 10 July 2020



Boffa Miskell Limited
Level 3 South Bloc
140 Angelsea Street, Hamilton 3204
PO Box 1094, Hamilton 3240, New Zealand
Tel: +64 7 960 0006
www.boffamiskell.co.nz

REV	DATE	DESCRIPTION
A	31.08.20	FOR INFORMATION

APPROVED CLIENT
Weston Lea Limited

CONSULTANTS

FOR INFORMATION

**AMBERFIELD PEACOCKE
STRUCTURE PLAN**

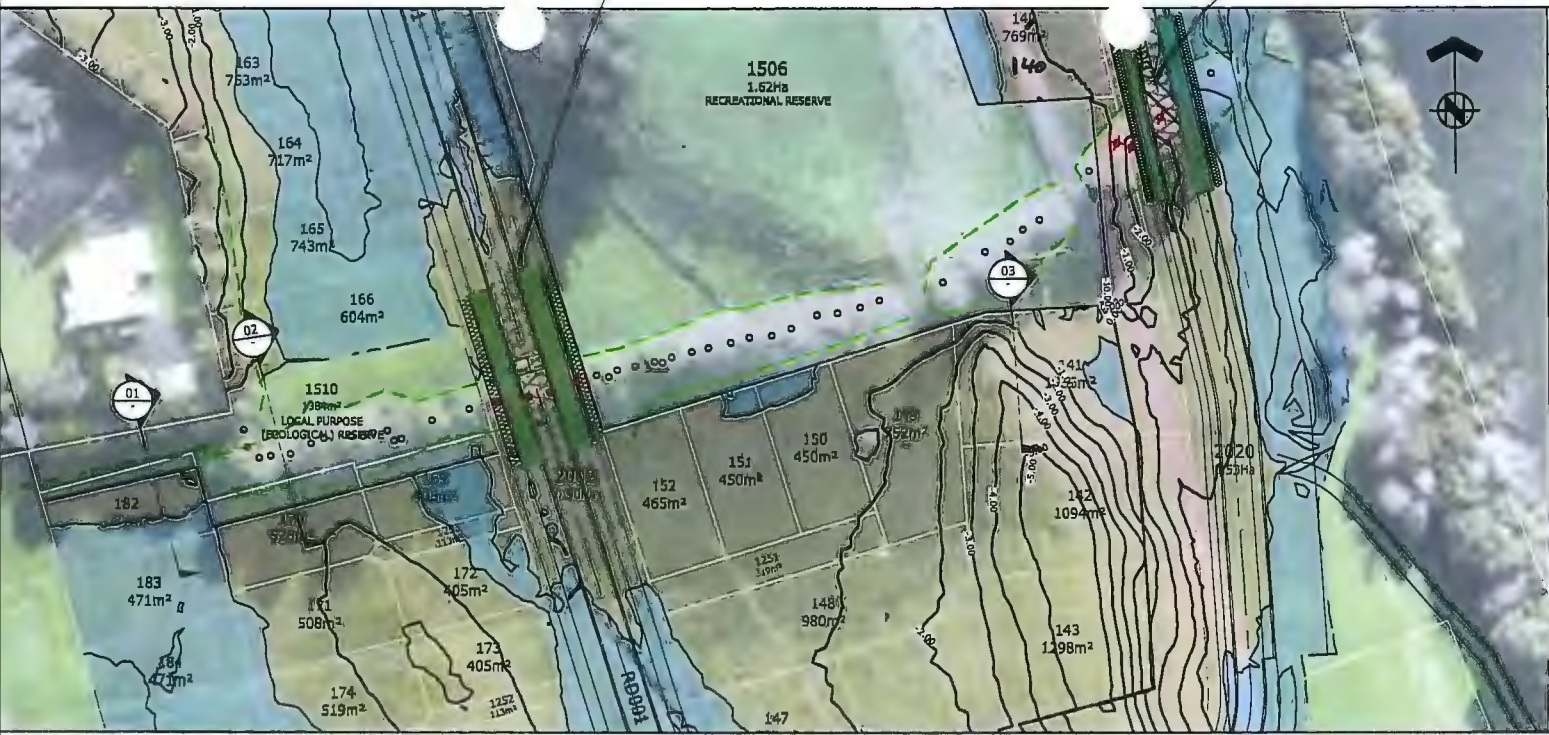
BAT PRIORITY AREAS

Design	BFO	Scale	1:3,500 @ A1	Date	31.08.20
Drawn	BFO	Check	AB	1:7000 @ A3	

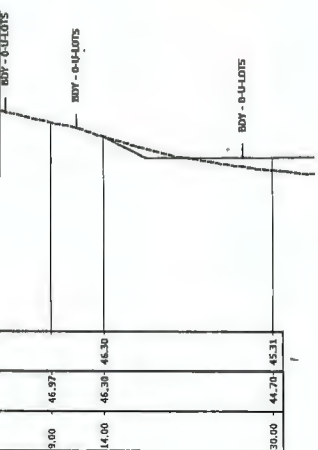
DRAWING NO.	REVISION
A17134_097	(A)

Road 1

Road 2



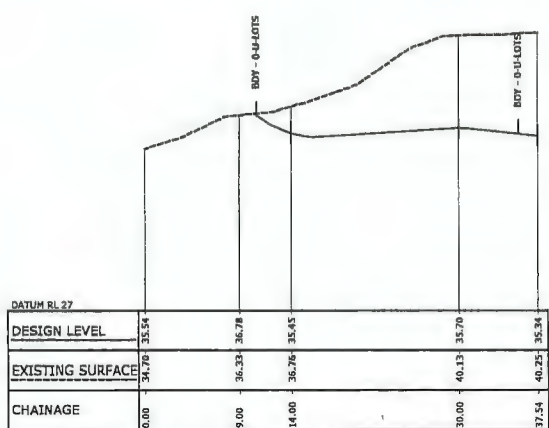
OPTION A ROADING LAYOUT



DATUM RL 35						
DESIGN LEVEL						
EXISTING SURFACE	42.65	42.71	42.71	42.75	42.87	43.11
CHAINAGE	0.00	8.19	14.00	19.00	25.00	31.64

EW Shelterbelt 02 SECTION

1:250 HORIZ.
1:125 VERT.



DATUM RL 27					
DESIGN LEVEL					
EXISTING SURFACE	34.70	36.33	36.78	40.13	40.25
CHAINAGE	0.00	9.00	14.00	30.00	37.54

EW Shelterbelt 03 SECTION

1:250 HORIZ.
1:125 VERT.

FOR INFORMATION

REFER TO APPROVED MASTER DRAWINGS FOR ORIGINAL SIGNATURES FILE: HAMILTON_C:\US2\ENERGY\WORKSPACE\DATA\

ACIN...
THIS DO...
GRATES...
LIMITED...
LEO...
ENVIRON...
1:250 HORIZ.
1:125 VERT.
PROJECT...
TITLE...
DATE...
DRAWN...
CHECKED...
APPROVED...
ISSUED...
PROJECT...
SHEET...
DRAWING...
14