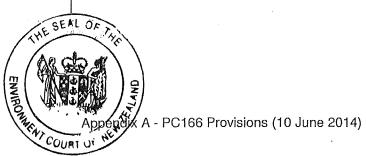
Activity Number	Details				
		location and nature of existing development and structures in it.			
	. (	Whether the subdivision, including the location of building platforms, protects or enhances the natural character of the coastal environment, and the degree to which it would affect the natural landforms and vegetation cover that affect such character and values having regard to:			
		<ul> <li>current levels of naturalness and the integrity of that part of the coastal environment; and</li> </ul>			
		<ul> <li>screening and integration potential afforded by natural landforms and vegetation.</li> </ul>			
	(1	m) Whether the subdivision and development will protect and not adversely affect in a more than minor way the natural functioning of coastal processes.			
	(I	ne) Whether the subdivision will have significant adverse effects on each of wildlife, flora and ecological values and whether such effects can be avoided or effectively mitigated.			
	· ( <u>r</u>	e) Whether the subdivision and subsequent development will adversely affect any flora or fauna species including threatened or endangered species on the site or in the surrounding area, including the area of land that extends down to the mean high water mark.			
	( <u>c</u>	e) Whether the subdivision avoids adverse effects of activities on: threatened or at risk species; indigenous ecosystems and vegetation types that are threatened in the coastal environment or are naturally rare; and areas containing nationally significant examples of indigenous community types.			
OF THE	g)	(4) Whether the subdivision avoids significant adverse effects and avoids, remedies or mitigates other adverse effects of activities on: areas of predominantly indigenous vegetation in the coastal environment; habitats that are important during the vulnerable life stages of indigenous species; and indigenous ecosystems and habitats that are found only in the coastal environment and which are particularly vulnerable to modification, including estuaries, lagoons, coastal wetlands, dunelands, intertidal zones and saltmarsh,			

(10 June 2014)

Activity	Details
Number	
	and ecological corridors.
	(qr) Vehicle access to sensitive areas should be avoided and walkway access shall be limited to a small number or defined walking paths to ensure that the adverse effects or the quality and/or remote character of the environment in the Landscape Protection Rural zone and the adverse effects on the ecological values of the dunes are avoided. Vehicle access to the beach from the site shall not be allowed except for emergency responses or management purposes.
	(re) Whether creation of any site will result in retention of a rural rather than urban character.
	(st) Measures at the time of subdivision to ensure that buildings on the new site created in area "A" on the plan in 'Appendix 14AL: Scheduled Activity 213 and Restricted Activity 352' as "Areas In Which Rural Residential New Sites Can Be Created In Accordance With Rule 14.8.2" are not visible from Te Arai Point Road, Te Arai beach, and existing local and regional reserve land (excluding any new public reserve on land in Scheduled Activity 213). Where this occurs, buildings will be considered inappropriate.
	In circumstances where one or more of the above criteria are not
	met, the proposal may be considered inappropriate and the
	Council in its discretion may refuse consent, or grant consent to a
	lesser number of sites, and/or to a different design of subdivision.
	(tुंध) Whether the local road network will function safely and efficiently when subjected to the increased traffic movements associated with any subdivision of the site.
	( <u>u</u> v) Whether stormwater runoff from roof and paved areas is discharged in a manner that is hydrologically neutral where excess flows, volumes and timing of runoff in excess of predevelopment runoff, is discharged to ground through suitable storage and soakage systems.
OF THE	(vw) The adequacy of measures to ban plants listed in the Auckland Regional Pest Management Strategy (including the research list).
	( <u>w</u> x) The extent to which the density of the proposed

pendix A - PC166 Provisions (10 June 2014)

Activity Number	Details
	development will provide for the sustainable land management of the properties.
	Additional Criteria for Consideration of the Public Reserve Created with the Subdivision
	(xy) Whether the area for incorporation into the public reserve is physically suitable for the purpose for which the reserve is created.
	(yz) Whether the area for incorporation into the public reserve is to be held as reserve able to be accessed by the public at large or is set aside for conservation or scientific purposes (subject to the Reserves Act 1977).
	(zaa) Whether the area for incorporation into the public reserve will make an appreciable improvement to the quality or quantity of the public recreation resource available in the district.
	(aabb) Whether the area for incorporation into the public reserve is of an appropriate size, shape, and contour to enable the intended function of the reserve to be achieved.
	( <u>bb</u> ee) Whether the area for incorporation into the public reserve has adequate physical and practical access to enable the intended function of the reserve to be achieved.
	(ccdd) Whether there is an adequate vegetation management plan to ensure the outcomes specified in rule (b) i) to iii) (g)(ii) and the gradual replacement of production pines with native species in areas set aside for conservation reserve.
	(dd) Whether the area for incorporation into the public reserve is of an appropriate size and proposed use and status to maintain ecological health of Te Arai stream.



## Explanation and Reasons

The intention of this rule is to provide for subdivision which significantly increases the area of public conservation and public access reserves at Te Arai, and around the Te Arai Stream and improves, where deemed appropriate by the intended reserve manager, public access to and along the foreshore of Te Arai beach. It also provides for environmental enhancement through significant native planting, protection in perpetuity of an existing wetland, creation of ecological corridors and the protection of endangered native fauna.

This rule requires a public reserve of <u>a minimum</u> 172 hectares <u>and generally as shown on the Reserve Plan</u> to be created with subdivision. This reserve area comprises the coastal dunes, a riparian margin along the Te Arai Stream and a connection between the coast and the Coal Hill Road wetland. It provides the opportunity (<u>if appropriate</u>) for a series of walking trails—public access to be established which will provided it avoids ecologically sensitive areas and ensures buffers between such trails—access and the dune structure and sites created under this rule. The rule also requires that 4.26 hectares of existing wetland plus a buffer area of 1.4 hectares on the site is to be enhanced and protected in perpetuity.

In exchange for these public benefits, 43 new lots, each capable of accommodating a household unit, may be created by the landowner.

This rule requires the 43 new house sites to be located in the three areas identified on the plan in Appendix 14AL in order to maintain the amenity and natural character values of the surrounding land, avoid impacts on ecological and cultural heritage values of the site, including endangered shorebirds, and enable a design solution which will maintain the rural character of the area.

# Add the following Restricted Activity to Rule 14.8.3 and amend Planning Map 2 by adding the symbol for Restricted Activity 352 to the land described in the Restricted Activity

Activity Number	Details	
352	Map Reference	2
	Location	Lot 1 DP 453130 (ID 581090), Lot 2 DP 453130 (ID 581091), Lots 3-5 DP 453130 (ID 581092)
	Restrictions on the Activity/Site	Replanting with other than in eco-sourced native coastal species of the area seaward of the Outstanding Natural Landscape line identified on the plan in 'Appendix 14AL: Scheduled Activity 213 and Restricted Activity 352' shall be a non-complying activity.
OF THE	Explanation and Reasons	The intention of this rule is to ensure that following felling of the existing pine trees appropriate native coastal species are replanted to enable better long term management and enhance the amenity of the coastline.

ADAMENT COURT OF

Add the following new Appendix 14AL to chapter 14

APPENDIX 14AL: SCHEDULED ACTIVITY 213 AND RESTRICTED ACTIVITY 352 – PLAN

(NB: the public access point is indicative, refer to rule (c)(iii))



## Appendix B

Amendments made prior to the Environment Court hearing are shown as <u>underlines</u> and <u>strikethroughs</u> in black.

Amendments offered to the Environment Court on 25 October 2013 are shown as <u>underlines</u> and <u>strikethroughs</u> in red.

Further changes dated 1 November 2013 highlighted yellow

Changes in accordance with Environment Court decision [2014] NZEnvC 98 (Decision) in <u>blue</u>.

Minor change to condition 21 by Council and consequential changes to ensure consistency amongst the conditions below or with provisions of Private Plan Change 166 in green.

Pursuant to sections 104, 104B and 104C of the Resource Management Act 1991, consent is granted to Te Arai Coastal Lands Limited to undertake the following work associated with the golf course at Lot 2, DP 453130, Te Arai:

- (a) Water permit to take up to 795m³/day of groundwater from five bores on the site (MA1(P), MA2(P), MA4(P), MA5(P), MA6(P)) and to store and use that water for:
  - (i) The establishment and maintenance of vegetative cover (predominantly grass) on the greens and surrounds, approaches, tees and surrounds, fairways and rough shown as "Extent of Irrigation Areas" on plan EC-001 prepared by Darby Partners, titled Te Arai 795 Hearing- Area of Water Use, dated 22/10/13; and
  - (ii) Potable water (no more than 10m³/day) for the golf course clubhouse and the house site "HS01" shown on the above plan.
- (b) <u>Land use consent to undertake the following earthworks associated with stage 2</u> of the golf course:
  - (i) Shaping of areas of the golf course (cut areas and fill areas B, C, D, F, G, H, I and J shown on plan EC-002A prepared by Darby Partners, titled Te Arai 795 Hearing- Earthworks and Trenching, dated 22/10/13).
- (c) <u>Land use consent to undertake the following additional earthworks associated</u> with the golf course:
  - (i) The excavation of trenches for reticulating irrigation water supply, power and telecommunication cables, and for drainage (all as shown on plan EC-002A prepared by Darby Partners, titled Te Arai 795 Hearing-Earthworks and Trenching, dated 22/10/13).
  - (ii) Construction of the water storage reservoir (shown on plan EC-003 prepared by Darby Partners, titled Te Arai 795 Hearing- Reservoir, dated 22/10/13).

1.1 Conditions

Under section 108 of the RMA, this consent is recommended to be subject to the following conditions:

Page 1

## **General Conditions**

- 1. The activity shall be carried out generally in accordance with the plans and all information submitted with the application, including the following plans, but not limited to that set out below except where expressly altered by a condition of this consent:
  - Application Form, and Assessment of Effects prepared by Brown & Company Planning Group Ltd dated 5/3/13 Specialist reports (including attached plans where applicable), letters and plans, as set out below all referenced by the Council as: L59839 (District Plan matters), 41460 (water take and use), 41461(earthworks).

Reference- number	Title	Architect/designer/- author	Date
,	Application for Long-term- Water Supply	Atkins, Holm, Majurey Ltd	4/3/13
	(application report, including assessments as set out in Appendices H & I and USLE-calculations as in Appendix J)	Brown & Company Planning Group Ltd	5/3/13
PIK/L3135- 13/cam	Groundwater Take Application	Earthtech Consulting Ltd	28/2/13
R3135-1 Rev A	Groundwater Supply- Investigations	Earthtech Consulting	5/7/12
PIK/L3135- 5/cam	S92 Responses for- Groundwater Take	Earthtech Consulting Ltd	<del>15/10/12</del>
PIK/L3135- 4/eam	S92 Responses for- Groundwater Take	Earthtech Consulting Ltd	11/9/12
A03236(I)	Tara Iti Golf Course- Additional Earthworks	Boffa Miskell Ltd	13/2/13
<del>Version B</del>	To Arai Earthworks & Water- Take, Ecological Effects- Assessment	Boffa Miskell Ltd	5/3/13
N/A	Te Arai Golf Course Plan- Changes	Clough & Associates	<del>5/3/13</del>
A\A	Archaeological Assessment, Te Arai Park: Addendum	Clough & Associates	September- 2012
A\\A	Te Arai Dune System- Investigations for the- Proposed Links Golf Course- Development	Clough & Associates	October 2012



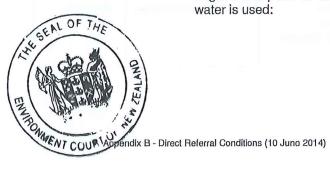
Reference- number		Architect/designer/-	Date	
BM A03416-019 Te Arai Coastal Park- Additional Ecological Surveys- 2008		Boffa Miskell Ltd	<del>July 2008</del>	
A03416	Project Te Arai Baseline- Investigations	Boffa Miskell-Ltd	July 2004	
	Resource Consent- Applications (s92 RMA- response)	Boffa Miskell Ltd	28/3/13	
	Resource Consent- Applications (s92 RMA- response)	Boffa Miskell Ltd	14/5/13	
Plans	1			
Reference number	Title	Prepared by	Date	
TI-12-2 GC-002	Golf Course Additional- Earthworks	Darby Partners	19/2/13	
EC-001A	Te Arai 795 Hearing- Area of Water Use		07/05/14	
TA-11-2 GC-004 &-GC-007	Golf Course Trenching Stage- 1-& 2 and Main Supply- Alignment Trenching Stage-1- &-2	Darby Partners	1/3/13	
<u>EC-002A</u>	Te Arai 795 Hearing- Earthworks and Trenching		22/10/13	
TI-16-12-GC- 005-&-GC-008	Golf-Course Utilities reservoir- & Irrigation Reservoir Profiles	Darby Partners	1/3/13	
EC-003	<u>Te Arai 795 Hearing-</u> <u>Reservoir</u>		22/10/13	
GC-006		Darby Partners	1/3/13	

<u>Purpose of Water Take and Use (reference 41460):</u> To take and use groundwater up to 795m³ per day and 97,850 m³/year for irrigation of 18 hole golf course and as a potable supply for activities associated with the Golf Course Club House and a single dwelling (HS01).

water is used:

Legal Description of land on which Lot 2 DP 453130, Identifier 581091

(that part shown as "Extent of Irrigation Areas" on plan EC-001A prepared by Darby Partners, titled Te Arai 795 Hearing- Area of



Page 3

### Water Use, dated 07/05/14)

water is taken:

Legal Description of land from which Lot 2 DP 453130, Identifier 581091

Map Reference of Take Points:

MA1P. NZTM 1745519mE 6000093mN

MA2P, NZTM 1745152mE 6000757mN

MA4P, NZTM 1745418mE 6001212mN

MA5P, NZTM 1745733mE 6000705mN

MA6P, NZTM 1746144mE 5999936mN

("P" = Production Bore)

MA4P and MA5P have been constructed.

MA1P. MA2P and MA6P to be constructed within 12m of map reference coordinates.

#### **Authorised Quantities**

- The total daily abstraction shall not exceed 795 cubic metres.
- The total annual abstraction over the 12 month period commencing 1 June of any year and ending 31 May of the following year shall not exceed 97,850 cubic metres.

#### Advice Note

Should visitor or other accommodation be proposed for the site, the taking and using of water for such facilities will require separate resource consent.1

- (surrender of consents) Pursuant to section 138 of the RMA, the consent holder shall provide confirmation to the Councils satisfaction that resource consents L59805/41402/ 41403 and 41240 have been surrendered in full within 40 working days of this resource consent being granted. The consent holder shall also seek in this written notice a notice of acceptance from the Council of the surrender, pursuant to section 138 (4) RMA.
- (Council access) Servants or agents of Auckland Council shall be permitted to 3. have access to relevant parts of the site at all reasonable times for the purpose of carrying out inspections, surveys, investigations, tests, measurements and/or to take samples.
- (abandonment of works) If work on site is abandoned, adequate preventative and remedial measures shall be taken to control sediment discharge and shall thereafter be maintained for so long as necessary to prevent sediment discharge from the site. All such measures shall be of a type and to a standard which are to the satisfaction of the Team Leader, Earthworks and Contaminated Land, Natural Resources & Specialist Input Unit.

(a) of Decision

- 5. (access to consent and site personnel induction) All personnel working on the site during construction shall undergo an induction process to the site including be being made aware of and have having access to the contents of this consent document, the conditions relating to construction management and the ecological sensitivities of the site and surrounds the associated erosion and sediment plan and methodology.
- (water take for HS01) The water take for house site 1 (HS01) shall not occur until the necessary resource consents for the construction of the house have been obtained.

#### **All Charges Paid**

- 6. (charges paid) This consent (or any part thereof) shall not commence until such time as the following charges, which are owing at the time the Council's decision is notified, have been paid in full:
  - (a) All fixed charges relating to the receiving, processing and granting of this resource consent under section 36(1) of the Resource Management Act 1991 (RMA); and
  - (b) All additional charges imposed under section 36(3) of the RMA to enable the Council to recover its actual and reasonable costs in respect of this application, which are beyond challenge.
- 7. (further charges) The consent holder shall pay any subsequent further charges imposed under section 36 of the RMA relating to the receiving, processing and granting of this resource consent within 20 working days of receipt of notification of a requirement to pay the same, provided that, in the case of any additional charges under section 36(3) of the RMA that are subject to challenge, the consent holder shall-pay such amount as is determined by that process to be due and owing, within 20 working days of receipt of the relevant decision.

#### Advice Note:

Development contributions levied under the Local Government Act 2002 are payable in relation to this application. The consent holder will be advised of the development contributions payable separately from this resource consent decision. Further information about development contributions may be found on the Auckland Council website at www.aucklandcouncil.govt.nz.

## PRE-DEVELOPMENT CONDITIONS

#### **Monitoring Charges**

(monitoring fee) The consent holder shall pay the Council an initial consent 8. compliance monitoring charge of \$1024 (inclusive of GST), plus any further monitoring charge or charges to recover the actual and reasonable costs that have been incurred to ensure compliance with the conditions attached to this consent.

(monitoring fee) The \$1024 (inclusive of GST) charge shall be paid as part of the resource consent fee and the consent holder will be advised of the further

monitoring charge or charges as they fall due. Such further charges are to be paid within one month of the date of invoice.

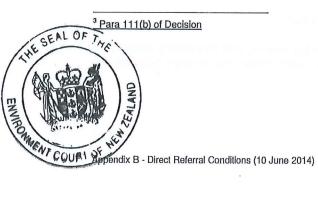
#### Advice Note:

Compliance with the consent conditions will be monitored by Council (in accordance with section 35(d) of the RMA). The initial monitoring charge is to cover the cost of inspecting the site, carrying out tests, reviewing conditions, updating files, etc, all being work to ensure compliance with the resource consent. In order to recover actual and reasonable costs, inspections, in excess of those covered by the base fee paid, shall be charged at the relevant hourly rate applicable at the time. Only after all conditions of the resource consent have been met, will Council issue a letter on request of the consent holder.

- 10. (appointed ecologist, archaeologist and site/ project manager) The consent holder shall advise the Council's Team Leader Compliance Monitoring in writing of the consent holder's appointed ecologist and archaeologist where responsibility is identified for these roles in the conditions of this consent. The consent holder shall also advise in writing the site/ project manager responsible for day to day operations of the site. The consent holder shall provide contact details for such people. This information shall be provided prior to any works commencing on site, with any change in the appointed personnel during the works advised thereafter.
- (Community Liaison Group) The Consent Holder shall establish a Community Liaison Group (CLG) within 2 months of the date of grant of this consent. The purpose of the CLG is to provide a formal mechanism for sharing knowledge and assisting with monitoring of species identified in the Ecological Management Plan (where such monitoring is appropriate and acceptable to all CLG members and the Council). The CLG shall consist of Auckland Council, Department of Conservation, the Environmental Defence Society, the Royal Forest & Bird Protection Society of NZ, Te Uri o Hau, Te Arai Beach Preservation Society, the Ornithological Society of New Zealand, and New Zealand Fairy Tern Charitable Trust-Council, the consent holder and Te Uri o Hau representatives with experience and technical knowledge of the ecological values of the area, or and may include representatives of other groups with experience and technical knowledge of the ecological values of the area, such as the Department of Conservation, the Ornithological Society of New Zealand, Royal Forest and Bird Society and the To Arai Beach Preservation Society Inc and representatives of other groups with experience and technical knowledge of the ecological values of the area (which shall be agreed with approved by the Council in advance, and is by invitation only having regard to whether such groups have demonstrated experience and technical knowledge of the ecological values of the area. ). The members of the CLG shall be established in consultation with and approved by the Auckland Council Resource Consents and Compliance Manager.
  - a. The CLG should comprise no fewer than five and no more than nine representatives from those identified above with at least one person a representative of the Council.
  - b. The role of the CLG is to provide a forum:
  - I. To facilitate communication, knowledge sharing and monitoring expertise (where appropriate) between the consent holder, the consent authorities

sure consistency with Private Plan Change 166

- and people or groups with ecological knowledge and expertise directly relevant to this site.
- 11. To provide a forum f-For communicating the results of monitoring and ecological aspects of site development and management.
- For consultation by the consent holder during the preparation of the Golf Course Conservation Management Plan required in condition 70.
- The consent holder shall ensure that the CLG has formal meetings at regular intervals commencing from a date no later than 6-weeks2 months<sup>3</sup> from the granting of consent and prior to commencement of implementation of this consent. These meetings shall be held monthly during construction periods, and 6 monthly thereafter. The Council representative will act as Chairperson.
- The consent holder will not be in breach of this condition if one or more d. of the parties specified do not attend the particular meeting.
- The consent holder shall be responsible for circulating to the CLG an agenda listing matters for discussion and relevant written information regarding the matters on the agenda at least 5 working days prior to each meeting. The minutes of the CLG and details of action points to be followed up shall be forwarded to the CLG within 5 working days of each meeting being held.
- f. The consent holder shall make best endeavours to ensure that the CLG is advised of any resource consents being sought by the consent holder in relation to their site, within 5 working days of the application being lodged with the Council.
- The need for the continuation of the CLG shall be reviewed at the end of the construction period and then 12 monthly thereafter. Where all members agree, the CLG can be disestablished.
- (pre works notification) The Team Leader, Earthworks and Contaminated Land, 12. Team Leader- Water Allocation and Team Leader- Compliance Monitoring (Orewa) shall be informed in writing of the start date of the works authorised by this resource consent at least 10 (ten) working days prior to the commencement of the works.
- 13. (pre-construction meeting) Prior to the commencement of any works authorised by the granting of this consent, a pre-construction site meeting shall be arranged and conducted between Auckland Council (Natural Resources & Specialist Input team (Earthworks and Water Allocation), Compliance Monitoring team (Orewa), Cultural Heritage team, and Biodiversity team (North/ West)), and all relevant parties including the consent holders appointed ecologist, archaeologist and site/project manager. At this meeting conditions of consent shall be discussed and protection measures including silt and sediment control, vegetation and archaeological site fencing shall be inspected.



14. (Protection of wildlife) At least 15 working days prior to the commencement of any earthworks, an ecological management plan for the site that is subject to this consent (Lot 2, DP 453130) from a suitably qualified ecologist, shall be submitted to, and approved in writing, by the Councils Team Leader Compliance & Monitoring (in consultation with Councils Ecologist). The ecological management plan shall include a protocol requiring the management of any New Zealand Dotterel, New Zealand Fairy Tern, or any other species with a specific Threat Classification of either Threatened or At Risk that is found within the site throughout the stages of during either the earthworks and until all earthworks under this consent have been completed, or operational phase, and the methodology to be used in any further site clearance.

The ecological management plan shall also include address:

- A detailed scheme of protection covering all of the land within a construction an earthworks exclusion zone which will encompass the Sediment Control Protection Area, areas of significant vegetation identified in condition 15, and areas seaward of earthwork areas E, B, H, C and G as identified on the application plan area on the seaward side of the Golf Course Earthworks Exclusion Zone ("EEZ") line identified on the plan titled "Tara iti Golf Club, 795 Application, Golf Course Earthworks Exclusion Zone", Drawing Number GC 021, prepared by Darby Partners dated 18.10.13. shown on plan EC-002A prepared by Darby Partners, titled Te Arai 795 Hearing- Earthworks and Trenching, dated 22/10/13
- Any-Mmitigation measures, required as a result of the works that are the subject to this consent, including identification of areas where public access is to be avoided, using measures such as fencing and preventing vehicular access;
- A timetable for the implementation of such measures;
- Any Department of Conservation permits required;
- Monitoring of the impact of the works that are subject to this consent on the coastal dunes on the site seaward of the EEZ the areas of ecological value identified in the Ecology Report submitted with the application, or further identified in the further ecological survey work identified above; and
- Details of associated parties, methods of contact and site management should be developed shall be provided in the ecological management plan.

The works that are the subject of this consent and the requirements of the management plan shall be undertaken in accordance with works, methodologies and timing set out in the approved plan, and maintained thereafter.

(<u>protection of vegetation</u>) Prior to the commencement of any earthworks authorised by the granting of this consent, all areas of significant (being a plant over 2m in height or being a species that has a Threat Classification) native vegetation communities (including seeps) as well as any other cluster (greater than 3m x 3m in size) of native vegetation (excluding *Muehlenbeckia complexa*) within 50m of the works areas shall be identified by the consent holders ecologist and surrounded in temporary fencing of at least 1.5m in

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height (or otherwise clearly demarcated, to the satisfaction of Councils Compliance & Monitoring Officer, where fencing is not practical) to the satisfaction of the Councils Team Leader, Compliance Monitoring. No works or storage of materials shall occur within these areas. Such fencing or demarcation shall remain in place until all earthworks within the particular area have been completed.

16. (Avifauna) The consent holder's appointed ecologist shall, prior to the commencement of any earthworks and subsequently on a monthly basis if earthworks occur between August and March, visit the site and identify any New Zealand Fairy Tern nests within 500 metres, or New Zealand Dotterel or any other coastal bird shorebird nest4 with a specific Threat Classification of either Threatened or At Risk within 50 metres of the northern, southern and eastern boundary of on the site that is subject to this consent (Lot 2, DP 453130) If earthworks occur between August and March the consent holder's appointed ecologist shall provide a plan to Council's Ecologist noting the location of any nests, or confirming that no nests are present, and thereafter during this period, provide a plan showing the location of any new nests immediately following each monthly site visit. The initial plan shall be provided at least 10 working days prior to any works commencing. The location of any such nests, and the importance of the site in relation to these species in general, shall be communicated to all contractors on site. All works, including construction traffic and construction personnel on foot shall be at least 500 metres from New Zealand Fairy Tern nests and 50 metres from any other nests identified in this condition. Such nests on the site shall be fenced or otherwise appropriately demarcated during construction works in a location approved by a qualified Ecologist appointed by the consent holder with experience in shorebird management.

During earthworks, the consent holder should-shall endeavour to make regular (at least fortnightly) contact with associated parties such as official rangers and community groups during the shorebird breeding seasons (August to March) and make available contact details for those parties to advise the consent holder of observations of breeding birds.<sup>5</sup>

- 17. (herpetofauna) The capture and transfer of herpetofauna shall be undertaken in accordance with the Herpetofauna Protocol by Boffa Miskell Ltd dated 19/6/2012, Rev B except that ACO's shall remain in place for a minimum of 10 continuous weeks prior to and following their checking and clearance and the commencement of earthworks within the search area identified in the Protocol shown on the map as 'Proposed Lizard Survey Area'. The protocol shall make provision for manual searches during machine clearance in appropriate shore skink habitats such as woody debris.
- 17A. (<u>Archaeological Site Management Plan</u>) (ASMP) <u>At least 15 working days prior to works commencing t</u>The consent holder shall submit for the written approval of Council's Heritage Manager an archaeological site management plan (ASMP). The plan will include:
  - a) Identification of the Project archaeologist, their role and responsibility on the Project;
  - b) Who reports to the Project archaeologist;

Edit to ensure clarity and consistency in respect to nests to be identified
 Edits to Condition 16 in accordance with Para 111(c) of Decision



- c) Any identified archaeological sites requiring supervision (including as a minimum recorded sites R08/108, R08/190 and R08/186), and the measures to be undertaken to protect and manage these sites;
- Whether NZHPT and/or Auckland Council heritage and/or iwi supervision is required for the specific site (the latter to be determined through consultation with the relevant iwi groups); and
- e) Accidental discovery protocols in accordance with Condition 17BA in the event that unknown archaeological sites are uncovered.
- f) The ASMP must subsequently be updated to reflect any archaeological sites discovered and the requirements of any SASMP approved under condition 17C.6
- 17B (<u>archaeological procedures</u>) If any archaeological sites, including human remains, are exposed during site works, then the following procedures shall apply:
  - Immediately it becomes apparent that a possible archaeological or traditional site has been exposed, all site works in the immediate vicinity shall cease;
  - (b) The site supervisor shall immediately secure the area in a way that ensures that any artefacts or remains are untouched and notify the Project archaeologist;
  - (c) The Project archaeologist shall inspect the site to assess the relevance of the find, and then the Auckland Council (Cultural Heritage Manager and Compliance & Monitoring Officer) shall be advised of the significance;
  - (d) If the site is confirmed to be an archaeological site by the Project archaeologist, the site supervisor shall then notify tangata whenua, the New Zealand Historic Places Trust, and the Auckland Council that an archaeological site has been exposed so that appropriate action can be taken;
  - (e) In the case of human remains, the NZ Police shall be notified.
- 17C (Specific Archaeological Site Management Plan) Where a site is confirmed to be an archaeological site by the Project archaeologist in accordance with Condition 17B(d), then the Consent Holder shall submit to the Cultural Heritage Manager, Auckland Council, for written approval, a Specific Archaeological Site Management Plan (SASMP) for the particular archaeological site that has been discovered detailing what measures will be taken to either:
  - protect and preserve the archaeological site, or
  - record the information that has been discovered (in the event that the site is destroyed or modified).

Where the SASMP that is submitted proposes to destroy or modify the archaeological site, the SASMP must explain why destruction or modification of the site is required, and why this cannot be avoided while proceeding in general accordance with the plans approved by the Council under Condition 1

<sup>&</sup>lt;sup>6</sup> Edits to Condition 17A in accordance with para 111(d) of Decision

When approving the ASMP, the Manager shall have regard to:

- The extent to which avoiding destruction or modification of the archaeological site, while acting in general accordance with the approved plans, is reasonably practicable; and
- Any other archaeological sites that have already been discovered and protected by the Consent Holder, and the extent to which these protected sites preserve a representative sample of archaeological sites.

No destruction or modification of an archaeological site is allowed unless in accordance with a SASMP authorised under Condition 17C.

- 18. (ASMP and contractors) All contractors and subcontractors working on the Project shall be trained on the archaeological requirements set out in the ASMP, and a copy of the ASMP shall be kept on the site at all times.
- 19. (demarcation of sites) Prior to and for the duration of earthworks, recorded archaeological sites R08/108, R08/190 and R08/186 shall be demarcated and remain fenced off from the remainder of the site to prevent inadvertent damage to them. The location and form of the demarcation shall be as agreed in advance with Councils archaeologist.
- 20. (ERMP) At least 15 working days prior to works commencing, the consent holder shall provide an Earthworks and Revegetation Management Plan (ERMP) for to the Team Leader- Resource Consents (with input from the Specialist Landscape and Manager Biodiversity) for their written approval.

This ERMP shall be prepared in conjunction with a suitably qualified landscape architect. recognise its objectives which are The objectives of the ERMP are:

- a) To minimise and control sand, dust and sediment run-off and sand erosion that may arise from the works;
- b) To provide appropriate grass cover on greens, tees and fairways on land where works that are the subject of this consent occur;
- c) To plant in appropriate species (native or non-native) the bunded sides of the reservoir;
- d) To plant in appropriate native species on the balance of balance land disturbed by activities authorised by this consent (including within 10m of any seep) where works that are the subject of this consent occur in order to maintain and enhance the natural character and indigenous biodiversity of the area;
- e) To protect the biodiversity through an active pest management programme;
- f) Prepare a Vegetation Management Plan with a methodology and programme for the retention of pine and/or gradual conversion to long term sustainable tree species to enable the reservoir to be screened from public external views.

With respect to (a) to (d) above, the Earthworks and Revegetation SEAL Management Plan shall include, but not be limited to:

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<sup>&</sup>lt;sup>7</sup> Edit in response to Paras 76 and 113 of Decision

- i. Revegetation using a selection of suitable native species that are likely to survive in the prevailing environmental conditions of the site and assist the control of erosion;
- ii. In respect of (d), plantings shall consist of species that are likely to have grown naturally in the locality and are eco-sourced from eastern Rodney Ecological District. Plant selection shall take into account the suitability of local threatened plant species for planting;
- iii. Revegetation planting methodology, including the species planting location and density; size at planting, ground and soil preparation;
- iv. Maintenance for planting, including replacement of failed plants;
- v. Weed control including site preparation and ongoing management (relating to the wider site also);
- vi. Animal pest control (relating to the wider site also);
- vii. Monitoring of planting, erosion, weeds and animal pests;
- viii. Duration of the ERMP, including proposed mechanisms for the maintenance of planting and the control of erosion, weeds and animal pests over the long term. The ERMP shall provide for active maintenance for a period of no less than 7 years following planting, and general maintenance thereafter.

(Advice Note: There are ongoing obligations relating to the conservation management of the site beyond the construction phase in condition 70)

The ERMP shall be implemented on a progressive basis, with works occurring as soon as practical following the completion of earthworks in that particular area (but no later than the following planting season in relation to revegetation and no later than 90 days following completion of earthworks in relation to regrassing). The consent holder shall provide written advice from its appointed ecologist on no less than a yearly basis to Councils Team Leader, Compliance & Monitoring regarding the success or otherwise of the plantings. Once established, vegetation shall be maintained thereafter and weed and pest control shall be undertaken on an on-going basis to ensure the viability of the planting required by this condition.

Note: The plan required by condition 20 shall be compatible with the plans required by condition 21 and 4746. One plan, having identified input and review from the consent holders ecologist, landscape architect and archaeologist, may be submitted where it provides the details and information, and meets the relevant objectives, set out in each condition.

21. (Planting/ Management Plan ERMP Details for pine removal and transition to native vegetation) The pines surrounding the reservoir identified on the plan provided by Darby Partners Limited titled "795 Hearing — Reservoir: Vegetation Management Plan" TA\_11\_2 EC-004 dated 8/5/14 shall be retained until a detailed planting and pine management plan is approved outlining the transition from pine to predominantly native species. At least 2045 working days prior to werke—any removal of the pines referred to above en-site<sup>8</sup> a detailed planting and management plan from a suitably qualified and professional landscape architect (including input from the consent holders.)

<sup>&</sup>lt;sup>8</sup> Edit to ensure clarity in respect to pine removal and vegetation management

ecologist regarding appropriate species) implementation and maintenance programme for a minimum of seven years, shall be submitted to and approved by the Team Leader- Resource Consents in consultation with Councils Specialist Landscape.

- The plan shall relate to the pine area surrounding the reservoir (to the extent that it is required to screen the reservoir and water treatment facilities9, the reservoir "sand borrow area" (refer to the plan by Dodd Civil, reference 452 Rev A, 453 Rev A) and the gradual replacement of these pines with predominantly native species to ensure an on-going visual screen as viewed from the west, as well as to planting within the 200 metre setback from Mean High Water Springs to prevent public access to sensitive ecological areas as identified in the ERMP required by condition 14.
- 11. The plan shall include details of the plant sizes (Pb Grade) at the time of planting, intended species (predominantly native, reflecting the local native biodiversity), and density of planting. Native plants shall be sourced from the local Ecological District.
- III. The plan shall detail planting methodology, on-going maintenance and include measures to control weed and animal pest species within the areas to be planted and shall be consistent with the approved ERMP. This management shall occur to the satisfaction of Councils Compliance Monitoring Officer on an on-going basis.
- IV. The plan shall have due regard to pine needle drop and the impact of this on plant success, along with the impact of wind throw in the event that pines surrounding the "visual screening pines" are removed.
- The plan shall include provisions for replacement of plants that die or are in poor health.
- The planting shall be implemented and maintained in accordance with the approved ERMP<del>Planting/Management Plan-10</del> within the first planting season following the completion of the reservoir or as otherwise detailed in the approved plan. Once established the planting is to be maintained thereafter.

Note: The plan required by condition 21 shall be compatible with the plans required by conditions 20 and 4746. One plan, having identified input and review from the consent holders ecologist, landscape architect and archaeologist, may be submitted where it provides the details and information, and meets the relevant objectives, set out in each condition.

22. [Deleted] 11 (Traffic Management Plan) At least 10 working days prior to the commencement of any earthworks the consent holder shall submit a traffic management plan to Auckland Transport for written approval (refer s.109.2 of the "Standards for Engineering Design and Construction".) Auckland Transport shall approve the plan prior to the commencement of any works on the site (such approval shall not be unreasonably withheld). The traffic management plan shall at a minimum, include:



Paras 49 and 111(e) of Decision
 Edit to ensure clarity and consistency with "ERMP" references
 Para 111(f) of Decision. "Deleted" inserted as a placeholder to retain condition numbering

The matters to be addressed under the Code of Practice for Temporary Traffic Management;

- Control of construction access to the site and traffic control adjacent to the site;
- The protection of the public;
- The route that shall be used by trucks travelling from the Te Arai quarry to the site;
- An assessment of any issues in terms of traffic visibility, and measures
  proposed (subject to any agreement required from Auckland Transport)
  to improve visibility (including any necessary works on Pacific Road);
- Details of signage to be used along the route warning local road users of increased truck movements and any recommended reduced speeds during the construction period.
- The duration of the works and likely number of vehicle movements.
- The hours of operation for the trucks (shall not include Saturdays or Sundays).

The Approved Traffic Management Plan shall be provided to Auckland Councils Development Engineer prior to commencement of any earthworks.

Once the traffic management plan has been approved, a copy of the approved plan shall be kept on site at all times.

The measures set out in the traffic management plan shall be complied with at all times until works on the site are completed.

23. (reservoir design) At least 15 working days prior to earthworks commencement of this consent ing on site 12 a final reservoir design plan and construction methodology shall be submitted to the Team Leader, Earthworks and Contaminated Land, Natural Resources & Specialist Input Unit and Councils Development Engineer.

## Groundwater quality baseline

- 24. (water sample) Following the construction of each production bore, a water sample shall be collected, analysed and the original laboratory results recorded and kept to establish baseline groundwater chemistry characteristics. Samples shall be collected and analysed in accordance with APHA "Standard Methods for the Examination of Water and Wastewater" (latest Edition) or the equivalent as approved in writing by the Team Leader, Water Allocation. Analysis will be for the following parameters:
  - a) pH
  - b) Conductivity at 25°C (mS/m)
  - c) Potassium (K)



<sup>12</sup> Para 111(g) of Decision

- d) Chloride (CI)
- e) Silica (SiO<sub>2</sub>)
- f) Sulphate (SO<sub>4</sub>)
- g) Total Alkalinity (CaCO<sub>3</sub>)
- h) Calcium, Magnesium and Total Hardness (CaCO<sub>3</sub>)
- i) Sodium (Na)
- j) Nitrate (NO<sub>3</sub>-N)
- k) and any other parameters required to obtain an ion balance for the sample of between 95 and 105%

The bores being sampled shall be purged by pumping for sufficient time to allow the volume of water contained in the bore to be completely replaced three times by water from the surrounding rock. Record shall be kept of the length of time and approximate rate of pumping required to purge the each bore and the results forwarded to the Team Leader, Water Allocation within two months of sample being taken.

- 25. (water level measurements) Following the construction of each production bore, provision at the top of the bore for water level measurements shall be made and be maintained so that a probe can be lowered vertically into the bore between the riser pipe and casing to measure the static water level in the bore within an access tube. Access to the wellhead for water level measurement can be achieved by having an access hole of at least 2 centimetres in diameter at the top of the bore. In order to keep out foreign matter, the hole should be fitted with an easily removed plug.
- 26. (water quality sampling) Following the construction of each production bore, provision at the top of the bore for water quality sampling shall be made and be maintained so that a sample of water can be taken from the bore for water quality analysis. This is to be achieved by fitting a tap or hand valve as close to the pump outlet as possible and before the water enters any storage tank or filter. It should have approximately 0.3 metre clearance above ground level or other obstruction to allow a sample bottle to be filled.
- 27. (water meter) Following the construction of each production bore, a water meter with electronic pulse output capability, which shall measure the total quantity of water being taken, shall be installed on the outlet of each bore pump. The water meter must be capable of measuring to an accuracy of at least plus or minus 5% and it is to display to at least 1 cubic metre. The meter must be fit for the purpose and water it is measuring, and be tamper-proof and sealed. The meter is to be installed to the manufacturer's specifications and to the satisfaction of the Team Leader- Water Allocation.
- 28. (a) 29(a)(water level float switch) Following the construction of each production bore a water level float switch, (or equivalent) which shall respond to changes in water level, shall be installed in the monitoring bore of similar construction immediately adjacent to the production bore. The water level float switch (or equivalent) shall be installed at a level in monitoring bores MA4, MA5, MA6, MA1 and MA2 that does not allow pumping (excluding in-well head losses) to extend below mean sea level in production bores MA4P; MA5P, MA6P, MA1P



- and MA2 P. The water level float switches must be fit for the purpose, and installed to the manufacturer's specifications and to the satisfaction of the Team Leader- Water Allocation at Auckland Council.
- 28. (b) 29(b) (initial monitoring data) In order to determine the trigger levels in the monitoring bores that would provide the stated minimum pumping levels in the production bores, initial monitoring data or pumping tests of 1 days duration shall be undertaken with water levels being monitored in both the production bore and the adjacent monitoring bore. The measured data, and analysis of the data (including the estimated in-well head losses) and the trigger level proposed for the monitoring bore shall be provided to the Team Leader- Water Allocation Auckland Council, for approval.
- 28. (c) 29(e) (on-going monitoring) Monitoring of water levels in the monitoring bores and the production bores shall be undertaken during the irrigation season and the trigger level may be reviewed from time to time as additional longer term data becomes available, as part of a s128 RMA review under condition 68.
- 28. (d) 29(d)(further testing) If float switches or equivalent are placed in production bores, the stated trigger levels in condition 28(b), adjusted for in-well head losses, will apply.

#### **DEVELOPMENT IN PROGRESS CONDITIONS**

- 28.29. (construction noise) All construction noise associated with the proposed activity shall comply with and shall be measured and assessed in accordance with, the NZS 6803:1999 Acoustics Construction Noise and relevant amendments.
- 29.30. (construction hours) All, earthworks and construction works shall be restricted to the hours between 7.00 am to 6:00 pm Monday to FridaySaturday. No such work shall occur on Saturdays, Sundays or public holidays.
- 30.31. (vehicle storage) Any machinery, vehicles, equipment or materials associated with the earthworks activity shall be stored in a location which is screened from view as far as practicable as viewed from the public access easement on the site (noted as Area C on DP 138524), Te Arai Beach, or from an adjoining site.
- 31.32. (native vegetation removal) No significant (being a plant over 2m in height s or being a species that has a Threat Classification) native vegetation communities (including seeps) or any other cluster (greater than 3m x 3m in size) of native vegetation (excluding Muehlenbeckia complexa) is to be cleared or otherwise adversely affected by the works proposed.
- 32.33. (earthworks location) No earthworks shall occur seaward of the Golf Course (Stage 2) area shown on Darby Partners' Plan EC-002A titled "Te Arai 795 hearing Earthworks and trenching, dated 22/10/2013" nor<sup>13</sup> within 10m of any watercourses or seeps.
- 33.34 (trenches) Trenches shall be backfilled to existing ground level.
- 34.35. (amendment to Erosion & Sediment Control Plan) Any subsequent amendments to the Erosion and Sediment Control Plan referenced in the general conditions, and/or the methodology must be approved by the Teams SEAL OF

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<sup>13</sup> Para 111(h) of Decision

- Leader, Earthworks and Contaminated Land, Natural Resource and Specialist Input Unit, in writing prior to any amendment being implemented.
- 35.36. (seep or groundwater) During works, if any previously unidentified seep or area of groundwater is encountered, works shall cease until suitable erosion and sediment controls can be installed.
- 36.37. (inspection notes) Inspection advice notes issued on site by the Auckland Council or its representatives are to be actioned within the timeframes stipulated. Where there is disagreement as to the suitability of the action requested, immediate contact with the Team Leader, Earthworks and Contaminated Land, Natural Resource and Specialist Input Unit, Auckland Council is required.
- 37.38. (erosion and sediment control) Erosion and sediment control measures shall be constructed and maintained in accordance with Auckland Regional Council's Technical Publication 90; Erosion and Sediment Control Guidelines for Soil Disturbing Activities in the Auckland Region and any amendments to this document, except where a higher standard is detailed in the documents referred to in conditions above, in which case the higher standard shall apply.
- 38.39. (road deposition) In the event that any sediment & or soil is deposited onto the site's surrounding roading network, immediate action to clean the surrounding roading network shall be undertaken.
- 39.40. (progressive stabilisation) The site shall be progressively stabilised against erosion as soon as practicable as earthworks are finished over various areas of the site. Site stabilisation shall mean when the site is covered by a permanent erosion proof ground cover such as aggregate and includes vegetative cover which has obtained a density of more than 80% of a normal pasture sward.
- 40.41. (erosion and sediment control) Erosion and sediment control measures shall be inspected to ensure effective operation on a daily basis and within 24 hours of a significant storm event during construction by the contractor. Any maintenance needs identified during the inspections, to ensure the devices continue to operate at full operational capacity shall be carried out as soon as practicable.
- 41.42. (Earthworks) Earthworks proposed on site shall be undertaken in compliance with either condition 43(a) 42(a) or 43(b) 42(b) below:
  - a) The proposed earthworks shall be carried out under the observation of a Chartered Professional Engineer. On completion of earthworks for the final dune profile and the irrigation reservoir, an Earthworks Completion Report and a modified Certificate in the form of Appendix J of the "Standards for Engineering Design and Construction" or similar certificate acceptable to the Council, signed by the Chartered Professional Engineer who designed and supervised the works, shall be provided to the <u>Council's</u> Consents Engineer; or
  - b) The bulk earthworks required by this consent shall comply with the Council's "Standards for Engineering Design and Construction" Engineering Plans, as specified in the "Standards", shall be submitted to the Council's Consents Engineer, and approval thereto received in writing, prior to the commencement of any works on the site.



Subject to the prior approval of the Council, the final layout, position and contour of the earthworks undertaken in accordance with condition 42(a) or 42(b) may vary from that shown on the plans referenced in condition 1, provided that:

- the area and volume amounts of earthworks above shall be in accordance with that shown on the plans referenced in condition
   1:
- compliance with all other conditions of this consent shall be maintained (including, but not limited to, the eenstruction golf course earthworks exclusion zone required by condition 14, the protection of vegetation required by condition 15, the protection of avifauna required by condition 16 and the protection of archaeological sites identified under condition 17A)

Advice Note: In complying with the "Council's Standards for Engineering Design and Construction", the bulk earthworks once completed, are expected to be stable, including against surface erosion, and to a suitable standard that is "fit for purpose" rather than to a higher standard that is suitable for residential foundation construction.

#### **Bore Construction Conditions and maintenance conditions**

42.43. (monitoring bores) Within three months of the commencement date, monitoring bores shall be established as described in Schedule A.

Schedule A – Monitoring Bores.					
No.	Bore ID	Map Reference NZTM 2000 (E / N)	Bore Head RL(m)(GL) (TBC)	Screen Interval RL(m)	Formation
MA1	28645	1745518 6000093	15.8	-6.2 to -18.2	Middle Sand Aquifer
MA2	28645	1745152 6000757	14.9	-4.1 to -16.1	Middle Sand Aquifer
MA3	28645	1745315 6001559	11.7	-12.3 to -19.3	Middle Sand Aquifer
MA4	28645	1745428 6001212	14.4	-3.6 to -21.6	Middle Sand Aquifer
MA5	28645	1745734 6000711	13.3	-6.7 to -19.7	Middle Sand Aquifer
\MA6	28645	1746144	15.5	-4.5 to -21.5	Middle Sand Aquifer

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		5999936			
MA7	28645	1745655 5999386	15.2	0.2 to -10.8	Middle Sand Aquifer
MB1	28888	1744927 6000912	12.7	<del>12.3</del> 9.7 to <del>12.4</del> 9.3	Wetland standpipes
MB2	28888	1744764 6001116	12.5	<del>12.5</del> 10.6 to <del>10.6</del> 12.2	Wetland standpipes
МВЗ	28888	1744931 6000941	13.4	-1.6 to -20.6	Middle Sand Aquifer

- 43.44. (monitoring bores) Monitoring bores of construction and locations as specified in Schedule A shall be maintained. In the event that any of the monitoring bores are destroyed, become inoperable, or the bore landowner not allowing access, then that bore shall be substituted with another constructed, or otherwise identified as suitable, with the written approval of the Team Leader, Water Allocation.
- 44.45. (bore references) Within three months of the construction of production bores MA4P, MA5P, MA6P, MA1P and MA2P plus monitoring bores listed in Schedule A, the elevation of the top of the casing and the NZ Transverse Mercator map reference shall be measured and recorded to an accuracy of 0.01 metres and 2 metres respectively, and forwarded to the Team Leader, Water Allocation.

## POST-DEVELOPMENT CONDITIONS

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45.46. (archaeological site vegetation plan) Suitable vegetation cover shall be established and maintained on recorded archaeological sites R08/108, R08/190 and R08/186 in order to stabilise the erosion of the sites and prevent visitor access on to or across the sites in order to protect them. This shall be accomplished by providing an archaeological site vegetation plan.

An archaeological site vegetation plan shall include the measures set out in condition 20 (i) – (viii) and the following:

- a. Revegetation using a selection of suitable native species for establishment on archaeological sites that are likely to survive in the prevailing environmental conditions of the site and assist with the control of erosion and visitors.
- b. Revegetation planting methodology, including planting location and density, size at planting (Pb Grade), ground and soil preparation,
- c. Maintenance for planting, including replacement of failed plants;
- d. Weed control including site preparation and on-going management,

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<sup>14</sup> Edits to Schedule A table in accordance with para 111(i) of Decision

- e. Animal pest control,
- Monitoring of the on-going successfulness of planting for erosion and visitor control.

The archaeological site vegetation plan shall be approved in advance by the Councils Cultural Heritage Manager and undertaken under the supervision of the consent holders appointed archaeologist. The planting shall take place in the first planting season following the completion of earthworks approved by this consent.

Please note requirements of the New Zealand Historic Places Trust and Historic Places Act in this regard <u>must be met. 15</u>

Note: The plan required by condition 4746 shall be compatible with the plans required by conditions 20 and 21. One plan, having identified input and review from the consent holders ecologist, landscape architect and archaeologist, may be submitted where it provides the details and information, and meets the relevant objectives, set out in each condition

- 46.47. (Archaeological monitoring) The degree of success of measures taken to protect recorded archaeological sites R08/108, R08/190 and R08/186 will be monitored on an annual basis and results reported to the Auckland Council Heritage Manager. Annual monitoring shall continue until such time as the Auckland Council Heritage Manager confirms in writing that annual monitoring is no longer required.
- 47.48. (removal of erosion and sediment control measures) Written notice shall be given to the Team Leader, Earthworks and Contaminated Land, Natural Resource and Specialist Input Unit, prior to any erosion and sediment control measures being removed and completion of the operation.
- 48.49. (fertiliser and pesticide management plan) The consent holder shall provide a plan detailing how the application of fertilisers, pesticides or any other chemicals are to be utilised and applied to the land to prevent adverse effects on water quality of surface or ground water sources, or coastal waters. This plan shall be provided to the Councils Team Leader Compliance Monitoring for approval in writing, within 6 months of the date of this consent.

#### Water Use Monitoring

- 49.50. (meters) The water meters shall be maintained in accordance with the requirements of condition 2827 and in working condition at all times.
- 50.51. (meter certification) Evidence (a certificate of confirmation) that the meters required in accordance with condition 2827 above has been verified insitu as accurate, by a person who is suitably qualified, shall be submitted in writing to the Team Leader, Water Allocation by 30 June 2014, and at five yearly intervals thereafter in the month of June.
- 51.52. (meter reading) The meters required in accordance with Condition 2827 shall be read at weekly intervals and records kept of each date and corresponding water meter reading. The records for the preceding quarter shall be submitted to the Team Leader, Water Allocation by no later than 10 working days after 28 February, 31 May, 31 August and 30 November each year.

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<sup>15</sup> Para 111(j) of Decision

#### Groundwater drawdown limit

- <u>52.53.</u> (water level float switches) The water level float switches shall be maintained in working condition at all times.
- 53.54. (drawdown) In the event that groundwater drawdown caused by the production bores is such that the water level in the corresponding monitoring bores with the float switches, installed and maintained in accordance with condition 2928 above, equals or falls below the trigger value then the Consent Holder shall notify the Team Leader, Water Allocation within two days.

### Production bore groundwater level monitoring

54.55. (production bore water levels) Water levels in the production bores shall be measured and recorded at fortnightly intervals during the 4 month period commencing 1 August and ending 30 November each year from the date of commencement of this consent, to monitor aquifer water level recovery. The water level shall be measured from the top of the casing, and shall be recorded as depth below casing and height above mean sea level to the nearest 0.01 of a metre (i.e. the nearest centimetre). The water level shall be recorded only after pumping water levels have fully recovered to nonpumping levels. The bores shall not have been pumped for at least 24 hours prior to the water level measurement being taken, or alternatively recovery to non-pumping levels measured in the bores shall be verified by taking a series of four or more water level measures made at intervals over a one hour period that are all within 0.02m of each other and are not showing a rising or falling trend. Records shall be kept of each date and corresponding water levels. The records for the preceding quarter shall be submitted to the Team Leader, Water Allocation by no later than 15 working days after 28 February, 31 May, 31 August and 30 November each year.

## Monitoring of effects on groundwater levels and wetlands

- 65.56. (monitoring bore water levels) Water levels in the monitoring bores MA3, MB3 and MA7 shall be measured and recorded at fortnightly intervals from the date of commencement of this consent, to monitor the effect of summer water take on surrounding groundwater levels, and determine the seasonal water level variation. The water level shall be measured from the top of the casing, and shall be recorded as depth below casing and height above mean sea level to the nearest 0.01 of a metre (i.e. the nearest centimetre). Records shall be kept of each date, time and corresponding water levels. During the irrigation season, the water level should be measured prior to when the production bores ceases pumping for the day. The records for the preceding quarter shall be submitted to the Team Leader, Water Allocation by no later than 15 working days after 28 February, 31 May, 31 August and 30 November each year.
- 5657(a) (standpipe water levels) Water levels in the monitoring standpipes bores MB1, MB2, and MB3 shall be measured and recorded at weekly intervals during the 6 month period commencing 1 November and ending 30 April each year from the date of commencement of this consent, to monitor the effect of the take on wetlands. The water level shall be measured from the top of the casing, and shall be recorded as depth below casing and height above mean sea level to the nearest 0.01 of a metre (i.e. the nearest centimetre). Records shall be kept of each date, time and corresponding water levels. Once sufficient data has been recorded to establish such effects to the satisfaction