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2 August 2017

Katherine Hill
Resource Management Planner
Mackenzie District Council

By email: katherine@mackenzie.govt.nz

Dear Katherine

Resource Consent No. RM170104 (Classic Properties Ltd) - Request for Further Information

1 We refer to your letter of 25 July 2017 regarding the above land use consent application for the clearance of vegetation on Maryburn Station, lodged with the Mackenzie District Council on 27 June 2017 (**Application**).

2 In accordance with the request made in your letter, we provide further information below in relation to:

2.1 The extent of the clearance; and

2.2 Visual and landscape effects.

Extent of clearance

3 Your letter requests as follows:

> *Please confirm the extent of clearance of vegetation that has occurred as a result of the spraying which was undertaken on 20 December 2016.*

4 We **attach** as **Annexure A** a plan provided to our client by their contractor, which shows the extent of the vegetation cleared on 20 December 2016 in orange.

5 We further note in relation to the clearance:

5.1 The area of clearance was approximately 175 ha; and

5.2 The "wedge" within Pivot Area 3 that is not shaded orange was at that time (and has historically been) planted in rye corn.

Visual and landscape effects

6 You letter requests as follows:

> *2. The application refers to the visual and landscape effects having been assessed as part of the water permit however no further detail is offered. Please provide an assessment of the effects that was relied on in the water permit being considered and any supporting documentation*

7 In response to your request, we provide the following information:

7.1 We **attach** as **Annexure B** advice and photomontages prepared by our clients' landscape consultant, Andrew Craig, prior to the Environment Court mediation of their water permit appeal in late 2012.

7.2 We have been advised by the lawyers who represented our clients on their water permit appeal (Duncan Cotterill) that:

(a) The only challenge to Mr Craig's advice was by Mackenzie Guardians' landscape consultant, Di Lucas.

(b) The position of Mackenzie Guardians on landscape/visual effects of the irrigation areas was subsequently conveyed through a series of emails and letters relating to the suitability of the proposed Farm Environment Management Plan, conditions of the water permit and irrigation plan (i.e. location of the pivot irrigators and irrigation areas).

(c) Amendments were made to the size and positioning of the pivot areas along with substantial concessions by our client to the conditions of the water permit to reflect Mackenzie Guardians/Ms Lucas' concerns in this regard. However, no formal report was prepared.

7.3 We note that as the discussions/correspondence between the parties during the course of the mediation were on a "without prejudice" basis, any records of the same cannot be provided to the Council.

7.4 The agreement reached between all parties to our client's water permit appeal (i.e. our client, Environment Canterbury, Mackenzie Guardians, Royal Forest and Bird Protection Society Inc, Central South Island Fish and Game Council, Meridian Energy Ltd and Genesis Energy Ltd) was recorded in:

(a) consent documentation submitted to the Environment Court on 16 September 2015 and attached as Annexure D of the Application; and

(b) further described in the Joint Memorandum (dated 25 November 2015) submitted at the request of the Environment Court and attached as Annexure E to the Application (see particularly clause 6.3, on page 2, where landscape effects are addressed).

7.5 We infer from this information, and the advice from Duncan Cotterill, that the parties to the appeal (particularly ECan and Mackenzie Guardians) would not have consented to the water permit being granted subject to the agreed conditions, and the Environment Court would not have approved of the same, had there been any concerns by the parties and/or the Court as regards the visual/landscape effects of the irrigation.

7.6 A number of the conditions of the water permit agreed by all parties to the appeal and approved by the Environment Court (refer Annexure F of the Application):

(a) were informed by the assessments (including unreported assessments) of the landscape/visual effects of the consented irrigation areas undertaken by experts engaged by our client and other parties to the water permit appeal.

(b) are for the primary purpose of mitigating any potential effects of the irrigation development on the landscape and views from State Highway 8 (**SH8**), including:

(i) requirements that:

(A) water shall only be used for the spray irrigation of 386 hectares of crops and pasture for grazing, but excluding dairy cows (Condition 5); and

(B) pivots 2, 3 and 4 to be parked downwind (directed away from SH8) when not in use (Condition 9).

(ii) requirements for (via the Farm Environment Management Plan, under Condition 11):

(A) no irrigators to be used or located within the dryland areas, Tussock Recovery Area (**TRA**) adjacent to SH8, and developed dryland areas shown in the plan CRC063196A[1] (i.e. irrigation to occur only within the consented pivot areas; K-Line irrigation is prohibited around the outside of the pivot areas).

(B) no cattle grazing on the area of land subject to the Sustainable Management Covenant shown in the plan CRC063196A;

(C) no stock grazing within the TRA shown in plan CRC063196A;

(D) no soil cultivation within the TRA, and limitations on the type of cultivation that can occur within the dryland and developed dryland areas shown in plan CRC063196A.

(E) no sowing of non-indigenous species within the TRA and limitations on the types of non-indigenous species that can be sowed in the dryland and developed dryland areas shown in plan CRC063196A.

(F) no planting of exotic trees within the TRA, dryland and developed dryland areas shown in plan CRC063196A.

(G) no buildings/structures within the TRA, and only non-roofed sheep/cattle yards within the dryland and developed dryland areas shown in plan CRC063196A.

(H) no buildings/structures within the irrigation areas, except irrigators and non-roofed sheep/cattle yards.

(I) no burning within the TRA.

7.7 We are advised by our clients that the agreement reached between the parties also included the following:

(a) A reduction in the irrigation area from 414ha to 380ha on landscape and ecological grounds.

(b) A further 90ha of land being retired for tussock recovery (comprising the TRA).

(c) The preservation of a corridor of land through the centre of the development, which encompasses the Mackenzie District Plan's Site of Natural Significance 50 and has been transferred to the Crown (now administered by the Department of Conservation). We are advised by our client that this corridor was gifted to the Crown in response to the request by Mackenzie Guardian's landscape consultant (Ms Lucas) that grazing not be allowed within the corridor (on landscape/visual grounds).

(d) The requirement for the pivot irrigators to not have lights to ensure compliance with the Mackenzie District Plan's rules regarding external lighting within the Aoraki Mackenzie International Dark Sky Reserve.

[1] This Plan forms part of the irrigation consent/water permit and forms Annexure B to the Application. It also appears on page 23 of Annexure A to the Environment Court's Determination in Annexure F to the Application.

7.8 We **attach** as **Annexure C** photographs taken by our client showing wind-blown soil loss from, and hieracium growing on, land within consented irrigation areas “Pivot 3” and “Pivot 4”. These photos demonstrate the significant visual effects that will occur if the consented irrigation cannot proceed in spring this year.

8 Should you have any questions regarding the above and attached information, please contact us at your earliest convenience. Thank you.

Yours faithfully
Tavendale and Partners

Georgina Hamilton
Senior Associate
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Email: georgina.hamilton@tp.co.nz
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Annexure A - Extent of Vegetation Clearance

Job Sheet

TRACMAP ONLINE

Order ID	497581	**Work Dates**	19/12/2016 - 20/12/2016
Address		**Notes**	
Contractor	Prosser Contracting Ltd	**Products**	
Customer	Unassigned: martin murray	**Distance**	153.38 km
Due Dates	N/A	**Working**	

Annexure B – Landscape Advice and Photomontages

ANDREW CRAIG
LANDSCAPE ARCHITECT LTD

Advice

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Classic Properties Limited CRC063106

Appeal to a decision declining an application to take water and spray irrigate up to 416 hectares at Maryburn Station

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Introduction

My name is Andrew Craig. I am a registered landscape architect. I hold a Bachelor of Arts degree and a post graduate diploma in Landscape Architecture. I am also an associate member of the New Zealand Institute of Landscape Architects, and have been practising since 1987. For 5 years until mid-2009 I was employed by Peter Rough Landscape Architects Ltd. I now operate my own landscape architecture consultancy. Before that I was employed by the Christchurch City Council for 13 years, working in the area of environmental policy and planning. Prior to that I worked for a short time with the Department of Conservation where I was based in Hokitika. Most of my work since graduation and to date has involved landscape assessment and the development of landscape policy. On an ad hoc basis I also teach landscape architecture at Lincoln University.

As a consultant I have assessed many proposals on behalf of applicants and various Councils. I am an experienced witness and have presented landscape evidence on numerous occasions at hearings and the Environment Court.

In preparing this advice I review and comment on the Commissioner's Decision with regard to the landscape matters they identify as contributing to consent being declined for the above application.

In preparing this advice I have read the Environment Court's Code of Conduct for expert witnesses, and comply with it. My qualifications as an expert are set out above. I confirm that the issues addressed in this advice are within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

Landscape matters addressed in the Decision

These are summarised as follows:

- The effects arising from the proposed irrigation will *'…markedly detract from the outstanding*[1] *natural character of the landscape.'* [para.12.18].
- Adverse effects on views where the separation distance of 130m from State Highway 8 to the pivot irrigators is not sufficient to overcome these effects. [para. 12.19]
- There is a high level of visibility toward the proposed irrigators from SH8. [para. 12.26]
- The proposed irrigation will detract from the "*true Mackenzie landscape"* [para. 12.20]

[1] The Environment Court (2011 / 387) has found that the Mackenzie Basin is an outstanding natural landscape. The decision is interim and has been appealed to the High Court.

- There appears to be no means of satisfactorily avoiding, remedying or mitigating the adverse effects described above. [para. 12.27].

- The proposal would result in *"…significantly more than minor…"* adverse effects and therefore would be inappropriate in the outstanding natural landscape (RMA s6(b)) of its setting. [12.40].

- With regard to RMA s7(c) the proposal will not maintain or enhance amenity values of the environment. [para.15.10].

- With reference to the Mackenzie ONL decision (2011 - NZEnvC 387) and in particular the Mackenzie District Plan Policy Schedule[2] the Commissioners found that the chief concern arises with the visual effects of irrigation and intensification, particularly on the 'Scenic Viewing Areas' (SVA) identified in the MDP. [13.16 – 13.33].

- That it is inappropriate to have intensification alongside the SVA. [13.31]

Other visual effects arise from the greening of the landscape and in particular the displacement of tussock grasslands with improved pasture or other forms of land cover. Such effects already occur within the command area arising from the presence of green feed such as rye corn – see the **Figure 1** photograph below.

Figure 1 *Photograph showing green stock feed contrasting with tussock grasslands beyond. Note the presence of the transmission lines to the left beyond which the irrigators will be located. The tussock grasslands seen in the distance between the transmission lines will be retained as a condition of consent.*

In the Decision an observation made by the Environment Court[3] is cited[4] regarding the character of vegetation alongside SH8 with respect to Maryburn. It states; *"We consider that a reasonable compromise if such rights* (to irrigate) *are granted is to create the Scenic Grasslands only over the areas within this property and on the eastern side of the state*

[2] Env Ct Decision (2011/387)'A: Schedule of Policies 3B1 to 3B16; page 168
[3] Op. cit
[4] Commissioner's Decision para. 13.33

highway which are remnant tussock, i.e., have not been converted nearly fully to exotic pasture." The court then noted that further evidence is required before it could make a final call on the matter. A condition of consent is offered to provide for such an outcome.

Another effect to consider is that arising from the principal of foreshortening. This effect occurs where views that recede into the background appear to occupy less space than foreground views. What this means for irrigated areas is that the amount of space they occupy in the visual field is significantly diminished with distance. In this case such an effect is exacerbated by the 130m setback from SH8. This effect is shown on the **Figure 2** photograph

Figure 2 *Showing the effects of foreshortening. The area between the orange arrows appears much wider than that between the white. The actual distance between the white arrows is 550 m whereas between the orange arrows it is 140m, even though the latter appears much wider.*

Design response to the decision

Given that the chief concern arising from the landscape matters addressed in the decision relate to visual effects the response has been to find a way to minimise these. This involves relocating the pivot points as far as possible from SH8 while enabling irrigation of the command area as originally applied for. Consequently the pivot points have been shifted between 250m to 375m from the highway. The pivot points are the permanent or immovable structures of the entire pivot, and because of this the visual effects caused by them are fixed. The pivot arm, on the other hand, is moveable, and so its visual effects will vary. As a result it will be capable of approaching the highway where for all proposed irrigators the closest they will get is 130m. When this close they will have greater visual effect than the more distant pivot point, but this will diminish considerably when the pivot arm is farthest from the road.

Because the pivot arms are mobile, the effects on views from the highway can be controlled to such an extent that they will be negligible. As alluded, this will however vary depending on how they are positioned in relation to the highway.

The visual effects of the irrigators are shown on the photo-montage attachment. These show the irrigators parallel to the highway; and perpendicular to it at their closest and farthest points. As expected the irrigators are most visually prominent when closest to the highway, but as shown in the photo-montages the visual effects even at this point is negligible. Views to the eastern hills and mountains enclosing are not adversely interrupted by the presence of the pivot irrigators. As mentioned, the aim is to minimise their visual effects and this is one method of achieving this.

As shown in the photo-montages the visual effects of the irrigators can be summarised as follows:

- None will intrude the skyline.
- Within the arc parallel extending farthest from the highway the irrigators do not interrupt the landform transition point which occurs between the plains and surrounding mountains.
- As shown in the photo-montages the pivot points are at such a distance that they are barely visible from the highway.
- That unlike the opaque screening effects associated with buildings, the lightweight transparent construction of pivot irrigators enables the background to remain visible through them.
- The area of land between the existing transmission line which runs 130 metres from, and is parallel to, the highway will not be subject to intensification.
- As is evident in the photo-montages the existing tussock where it occurs within the 130m setback will be retained.

Other mitigating factors

As mentioned in my original evidence presented to the Commissioners, there exist a number of mitigating factors. In summary these include:

- The more spectacular and significant views are to the west of the Main Divide including Aoraki / Mt Cook.
- That people travelling SH8 are more inclined to focus on the hills and mountains encircling the Mackenzie Basin, although it is acknowledged that the foreground plains significantly contribute to their setting.
- That area containing the proposed irrigators does not include any recognised outlooks or scenic stopping points such as those found at Lakes Pukaki and Tekapo.

- The landscape setting of the proposed pivot irrigators and their immediate surrounds do not contain any significant landscape features such as water bodies, water courses, rock outcrops or especially notable native vegetation.

Recommended conditions of consent

1. That tussock farmland located between the existing transmission lines (more or less at 130m setback from State Highway 8 will not be subject to further improvement other than that which exists.

   Reason: To maintain greater natural character relative to the areas beyond which are subject to improvement arising from irrigation.

2. When not in use the irrigator arm is to be parked at the farthest point perpendicular to State Highway 8.

   Reason: To minimise visual effects as viewed from SH8.

Conclusion

The Commissioner's concerns contributing to the decline of consent is clearly focussed on visual effects arising from the presence of the irrigators; particularly on those travelling SH8. Overcoming these effects fundamentally relies on avoidance measures as it is difficult to mitigate the visual effects of irrigators through screening. In any event the latter technique would be undesirable and counter to the District Plan's aspirations for the particular setting of the proposed irrigators.

The aim of avoidance therefore rests on minimising visual effects. As discussed this involves locating the pivot point as far as practical from the highway in combination with controlling the location of the pivot arm when it is not being used. The photo-montages irrefutably demonstrate the effectiveness of this.

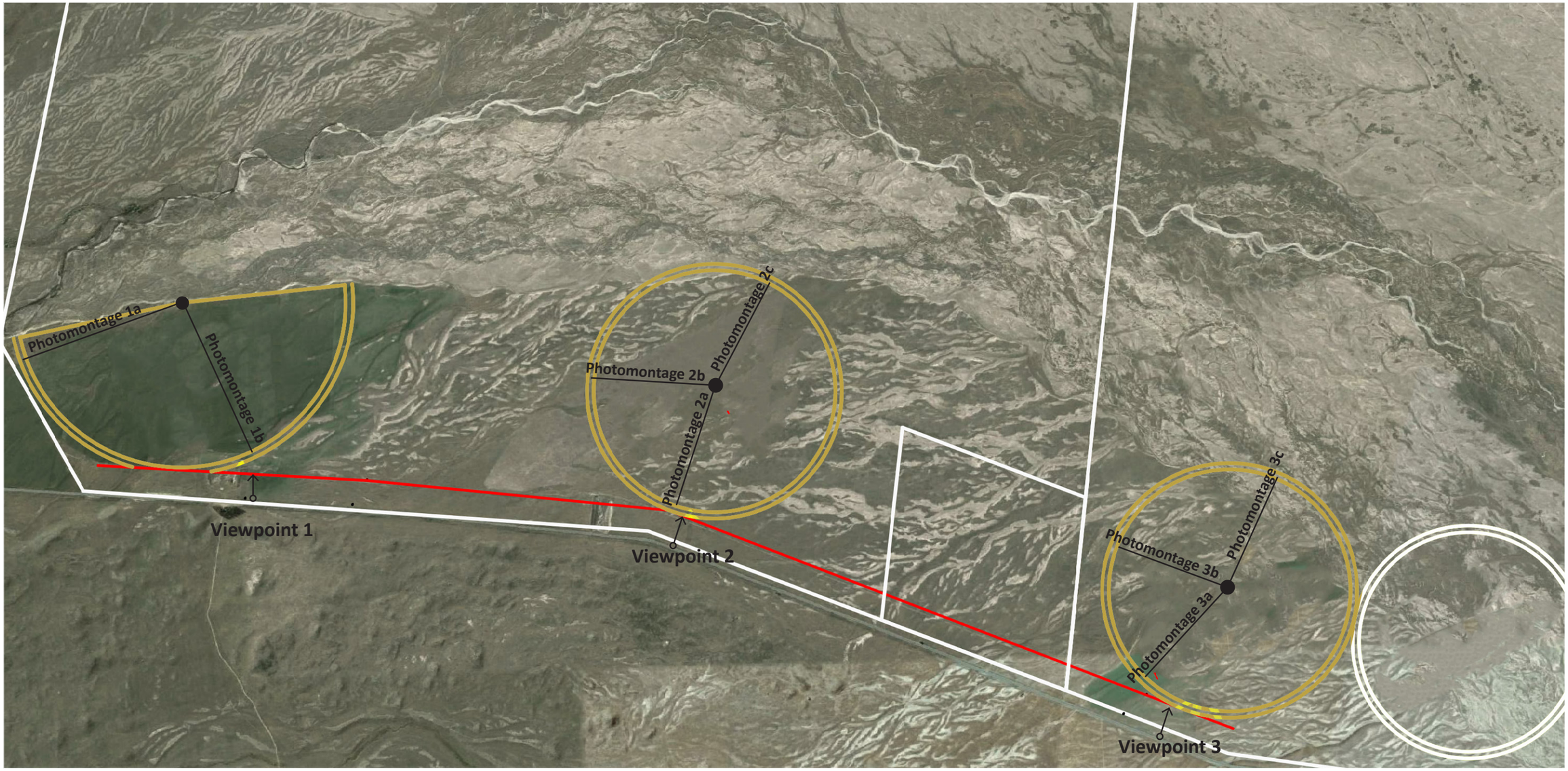
As discussed other visual effects arise from the greening of the landscape. These effects already exist, and apart from this have no intrusive impact on the expansive views across the Mackenzie Basin as seen from SH8. Further the existing greenery will be little different from that caused by irrigation and so it cannot be considered an unexpected effect. In this regard even given that the landscape is considered outstanding, it is one that is nonetheless informed by current conditions which will not be discernably different from that following irrigation for the reasons described above.

Overall, it is my opinion that suitable and appropriate measures will be taken to minimise visual effects. While it is accepted that there will be some effect, these will not be unacceptable when the avoidance measures are taken account of within the context of the setting.

Photo-montage Method

The method for preparing the photomontages involved taking photographs on site using a 4m high pole located at the pivot point and end point on the pivot arm. The highest point on a pivot irrigator is at the top of the mid span arch which is 4m. The pole points therefore give an accurate on site dimension upon which the pivot irrigator image can be inserted and correctly scaled into the photograph.

The two photographs below are examples show the poles at various distances as seen from SH8. The arrow denotes the top of the 4m pole, where in the top photograph it is closest to the highway and in the lower farthest from the road. The irrigator image is then scaled to fit between the two poles, thereby showing the correct size and perspective within the context of its setting.



Pivot Irrigation Location Plan | Arrows indicate location of photomontage viewpoints.

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DRAWING REVISIONS

REV	DATE	DESCRIPTION
A		

	INITIAL	DATE
DESIGNED		000912
DRAWN	EG	260912
CHECKED		
APPROVED		

CLIENT **CLASSIC PROPERTIES LTD.**

MARYBURN PROPOSED PIVOT IRRIGATION
PHOTOMONTAGES

DRAWING NUMBER: **MB#-A3-P1-HR**
FILENAME: **Maryburn.indd**
SCALE Not to Scale

Viewpoint 1 | Photomontage 1a

Viewpoint 1 | Photomontage 1b

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MARYBURN PROPOSED PIVOT IRRIGATION
PHOTOMONTAGES

DRAWING NUMBER: **MB#-A3-P2-HR**
FILENAME: **Maryburn.indd**
SCALE Not to Scale

Viewpoint 2 | Photomontage 2a

Viewpoint 2 | Photomontage 2b

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MARYBURN PROPOSED PIVOT IRRIGATION
PHOTOMONTAGES

DRAWING NUMBER: **MB#-A3-P3-HR**
FILENAME: **Maryburn.indd**
SCALE Not to Scale

Viewpoint 2 | Photomontage 2c

Viewpoint 3 | Photomontage 3a

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MARYBURN PROPOSED PIVOT IRRIGATION
PHOTOMONTAGES

DRAWING NUMBER: **MB#-A3-P4-HR**
FILENAME: **Maryburn.indd**
SCALE Not to Scale

Viewpoint 3 | Photomontage 3b

Viewpoint 3 | Photomontage 3c

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MARYBURN PROPOSED PIVOT IRRIGATION
PHOTOMONTAGES

DRAWING NUMBER: **MB#-A3-P5-HR** FILENAME: **Maryburn.indd** SCALE Not to Scale

Annexure C – Photos of wind-blown soil and hieracium