Before a joint hearing of the

Dunedin City Council	**LUC-2016-230 and LUC-2013-225/A**
Otago Regional Council	**RM16.138**
Waitaki District Council	**201.2016.779 and 201.2013.360-1**

Under	the Resource Management Act 1991
In the matter of	applications by Oceana Gold (New Zealand) Limited for resource consents for the Coronation North Project

Statement of evidence of Kurt Bowen for Oceana Gold (New Zealand) Limited

X October 2016

Applicant's solicitors:
Anderson Lloyd
Stephen Christensen | Pip Walker
Level 10, Otago House, 481 Moray Place, Dunedin 9016
Private Bag 1959, Dunedin 9054
DX Box YX10107 Dunedin
p + 64 3 477 3973 | f + 64 3 477 3184
stephen.christensen@al.nz | pip.walker@al.nz

anderson lloyd.

Qualifications and experience

1 My name is Kurt Alistair Bowen. I am a registered professional surveyor with Paterson Pitts Group.

2 My qualifications and professional experience are as follows:

(a) Registered Professional Surveyor, with the New Zealand Institute of Surveyors,

(b) Licensed Cadastral Surveyor,

(c) Bachelor of Surveying, 1997, University of Otago,

(d) 18 years' experience in private practice surveying with Paterson Pitts Group, much of this time directly related to cadastral subdivision projects.

Scope of evidence

3 In October 2016, OceanaGold asked me to provide a professional opinion on the accuracy of the legal road alignment known as Golden Point Road, where this corridor extends south from Horse Flat Road. In particular OceanaGold asked me to comment on whether the legal road corridor might coincide with an existing farm track. This evidence comprises the result of my investigations into this matter.

4 I consider that this evidence is within my area of expertise.

5 I confirm that I have read the expert witness code of conduct and that I agree to comply with it. This evidence has been prepared in accordance with it.

6 In preparing this evidence I have reviewed:

(a) The submission of Mr Roy.

(b) The WDC/DCC Recommending Report in relation to my area of expertise, in particular pages 28 – 32 paragraphs 93 – 97 (sic).

History of the road

7 A copy of each of the plans referenced in my evidence is attached at **Appendix A**.

SO 629 - 1888

8 The road in question first appears on SO 629 (Mar 1888) as a dashed irregular corridor travelling in a north-west to south-east direction and crossing over Horse Flat Road. This corridor is annotated as 'track' on SO 629.

9 SO 629 does not show any dimension or definition information relating to this track on its plan face. The fact that the edges of the corridor are dashed and that there is no dimension or definition information suggests to me that the alignment of this track is of an indicative nature. Certainly, the plan does not provide sufficient information for the alignment of the track to be mathematically defined to a high degree of accuracy. This is not uncommon for surveys of this era, and it is likely the surveyor of the time simply sketched the track alignment based on his visual observations of the features relative to the broader landform.

10 SO 629 shows the track in the same colouring as Horse Flat Road. While the track corridor is not named in the manner of a well-defined road alignment, the colouring used suggests to me that the surveyor in 1888 believed the track to be legal (and therefore available to the public).

SO 1476 - 1888

11 The track in question is shown on SO 1476 (also Mar 1888), in what appears to be the same alignment as drawn on SO 629.

SO 16901 - 1969

12 SO 16901 (Sept 1969) respects the alignment of the track corridor as shown on SO 629. SO 16901 names the track as 'Golden Point Road' and defines the width of this corridor to be 100 links (20.12m).

SO 21847 - 1986

13 SO 21847 (Jan 1986) respects the alignment of Golden Point Road as shown on SO 629, and the width of the road, being 20.12m, as shown on SO 16901. SO 21847 is the first plan to show the road corridor clearly as a legal road (fully separated from the adjacent land rather than being displayed with dashed edges). It is also relevant that SO 21847 has produced scaled distances between the edges of Golden Point Road and nearby boundary positions. These distances were scaled from SO 629. SO 21847 effectively establishes an accurate mathematical definition of the intersection points between Golden Point Road and the peripheral property boundaries as a result of these scaled distances.

DP 22318 - 1991

14 DP 22318 (Aug 1991) respects the alignment of Golden Point Road as shown on SO 629, SO 16901 and SO 21847. DP 22318 is particularly relevant to this assessment as this plan shows the alignment of a formed track, labelled

'Centreline of formed Rd' located parallel to the Golden Point Road alignment and approximately 200m to the southwest.

SO 23740 - 1992

15 SO 23740 (Jan 1992) shows the Golden Point Road corridor, again in a consistent alignment as the earlier plans.

SO 444480 - 2011

16 SO 444480 (Dec 2011) was undertaken for the purposes of formally closing the section of Golden Point Road south of Horse Flat Road. SO 444480 defined the road corridor in the same alignment as the earlier plans. I understand that the legal work to give effect to the road legalisation shown on SO 444480 has not yet been completed.

Analysis

17 I understand that the formed track shown on DP 22318 at approximately 200m to the southwest of the Golden Point Road alignment is still present (conversely, I assume that the present-day track is the same track as shown on DP 22318). It is this track that I have been asked to provide an opinion on, and specifically whether the legal alignment of Golden Point Road might more correctly coincide with the formed track.

18 There is only one method a surveyor might be able to use to reach the conclusion that the correct legal alignment of the road is intended to be coincident with the formed track. This would be by way of a 'better fix' methodology. A 'better fix' definition can only be applied if-

(a) The extent that the difference in the positon of the measured feature to its original position is less than the estimated accuracy tolerance inherent in the reference plan. I.e. the measured position of the feature needs to be located within the realms of what the original surveyor might have been expected to draw on the plan given the 'indicative' nature of that information; and

(b) The surveyor is convinced that he or she has identified an original feature which is shown on the reference plan, and that his/her measurements of that feature do not agree with the positons indicated by the reference plan.

19 To estimate the likely accuracy of the track alignment as shown originally on SO 629 I have considered a number of factors, firstly my knowledge and experience with similar situations, secondly the road alignment relative to other reference features on the previous plan, and thirdly the consideration of aerial photography imagery.

20 In respect of my knowledge and experience with similar situations, I have found that a 'better fix' survey is a relatively common exercise when addressing the movement of an irregular road alignment (in a rural environment) by distances of up to approximately 5-10m. On rarer occasions, this 10m could be exceeded, however I cannot recall coming across a 'better fix' survey that successfully realigned a road by more than about 20m. There may be an exception to this, as discussed below in Paragraph 27.

21 In respect of considering the road alignment relative to other features, there is one reasonably important deduction that I can make. On SO 629, there is a boundary mark shown on Horse Flat Road at the northern end of the boundary between Sec 5 and Sec 6. The 'track' shown on SO 629, which is the subject of this assessment, is clearly shown on the eastern side of this boundary mark. The existing formed track, which is shown on DP 22318, is clearly shown on the western side of the northernmost peg on Lot 1 of that plan. Deduction of the distance dimensions along Horse Flat Road, using DP 22318 and SO 629, tells us that the noted peg from DP 22318 is located at a distance of 140.17m to the southwest of the noted boundary mark from SO 629. With this in mind, if the legal road alignment was intended to match the existing formed track alignment, it would have to be concluded that the surveyor in 1888 has drawn the legal road alignment on the incorrect side of the nearby road peg shown on SO 629. I would find it exceptional if this is what has occurred. The indicative accuracy of the surveyor's drawing would not, in my opinion, have extended to such a degree that the track on SO 629 could have been drawn on the incorrect side of a boundary mark that had been established as part of the same survey.

22 I now refer to the attached aerial photography image at Appendix B, which has been overlayed as accurately as possible with the current cadastral boundary information from Land Information New Zealand. This image shows both the alignment of the existing formed track and the alignment of the Golden Point Road corridor (as per SO 629). The two alignments are separated by a distance of approximately 200m. The first thing that I have observed in comparing the aerial photograph image with the features on SO 629 is that the topographical information does not match particularly closely between these documents. The Horse Flat Road and Deepdell Creek features are reasonably consistent, but the ridges, valleys and streams that extend between Horse Flat Road and Deepdell Creek do not agree with any sense of reliability. It is therefore difficult to identify whether the track shown on SO 629 was originally intended to coincide with a particular geographical feature that exists today.

23 An interesting point of comparison between the existing formed track alignment and the road corridor as defined by SO 629 is that the existing track manoeuvres through several sharp bends at its southern end, before it crosses into the legal road corridor. This is a different pattern than what we might expect to see with a

'better fix' situation, in which the formed track would more gently transition away from the legal road corridor. I would expect that had the surveyor in 1888 observed the original track in the shape depicted by the existing formation, then the dashed corridor marked on SO 629 would have included these sharp bends.

24 In terms of whether the existing formed track is the same original track as shown on SO 629, I have not seen any evidence that would support this conclusion. The survey plans described above simply annotate these features as 'track'. They do not state the age or nature of any associated features which might otherwise enable me to correlate these features.

Conclusion

25 Based on the above analysis, I conclude the following-

(a) I do not believe that there is sufficient inaccuracy within SO 629 which would enable a surveyor to confidently conclude that the true alignment of Golden Point Road should be coincident with the existing formed track. The relocation of this alignment by some 200m would be an exceptional determination, and one that would require a high level of supporting evidence. The research that I have undertaken supports the opposite conclusion.

(b) The aerial photography image is relatively inconclusive in regard to matching the topography from SO 629 with the current geographical features. However, the sharp bends that are obvious at the southern end of the existing formed track suggest that this track was not constructed with the belief that it followed the legal road corridor.

(c) Therefore, in my opinion the existing formed track is not the same feature as the original track shown on SO 629 (which subsequently became Golden Point Road).

(d) Finally, the survey plans subsequent to SO 629 have all depicted the Golden Point Road corridor consistently and correctly.

26 With the above conclusions in mind, in my opinion the most appropriate course of action available to relocate the Golden Point Road corridor would be by way of a legalisation survey, in which the existing corridor would be formally closed and the new road corridor formally taken.

Exception

27 Referring back to Paragraph 20, the exception that I have found in regard to a 'better fix' survey is in fact something that I have come across with the research undertaken for this evidence. Further to the south of the section of Golden Point

Road that is the subject of this assessment, survey plans SO 20166, SO 20167 and SO 20168 (all Sept 1979) together define the section of Golden Point Road between Deepdell Creek and Macraes Back Road. These plans are all titled 'Road Redefinition'.

28 The original alignment of Golden Point Road, through the section defined by the three SO plans above, is shown predominantly on SO 421 (Sept 1891). Comparison of the alignment of the road corridor shown on SO 421 with the same road corridor as shown on the newer SO plans shows some reasonably significant differences. These differences appear to be larger than the 20m shift that I have noted in Paragraph 20 above, and furthermore the newer definition includes several sharp bends that are not shown originally.

29 The 'Road Redefinition' titles suggest to me that the newer surveys did claim a 'better fix' as the reason for the shift in the road corridor. Certainly, the new road alignment does appear to follow the formed road closely. It would appear that the surveyor for SO 20166, SO 20167 and SO 20168 was able to feel confident in his determination that the most appropriate method to realign the unformed road corridor to match the formed road feature was by way of a 'better fix' survey.

30 I cannot explain why a 'better fix' methodology seems to have been applied to the south of the subject region in 1979, as this inconsistent with my experience. It is possible that the survey regulations and/or accepted practice that was in place in 1979 supported this action, or alternatively a special dispensation might have been issued (possibly with consent of the affected landowners) which allowed this to occur. Regardless of how this was achieved in 1979, I do not believe that a 'better fix' survey could be carried out under the current Rules for Cadastral Survey 2010 to achieve a similar outcome in the area that this report focuses on.

31 I note the following assumptions and limitations to my evidence above:

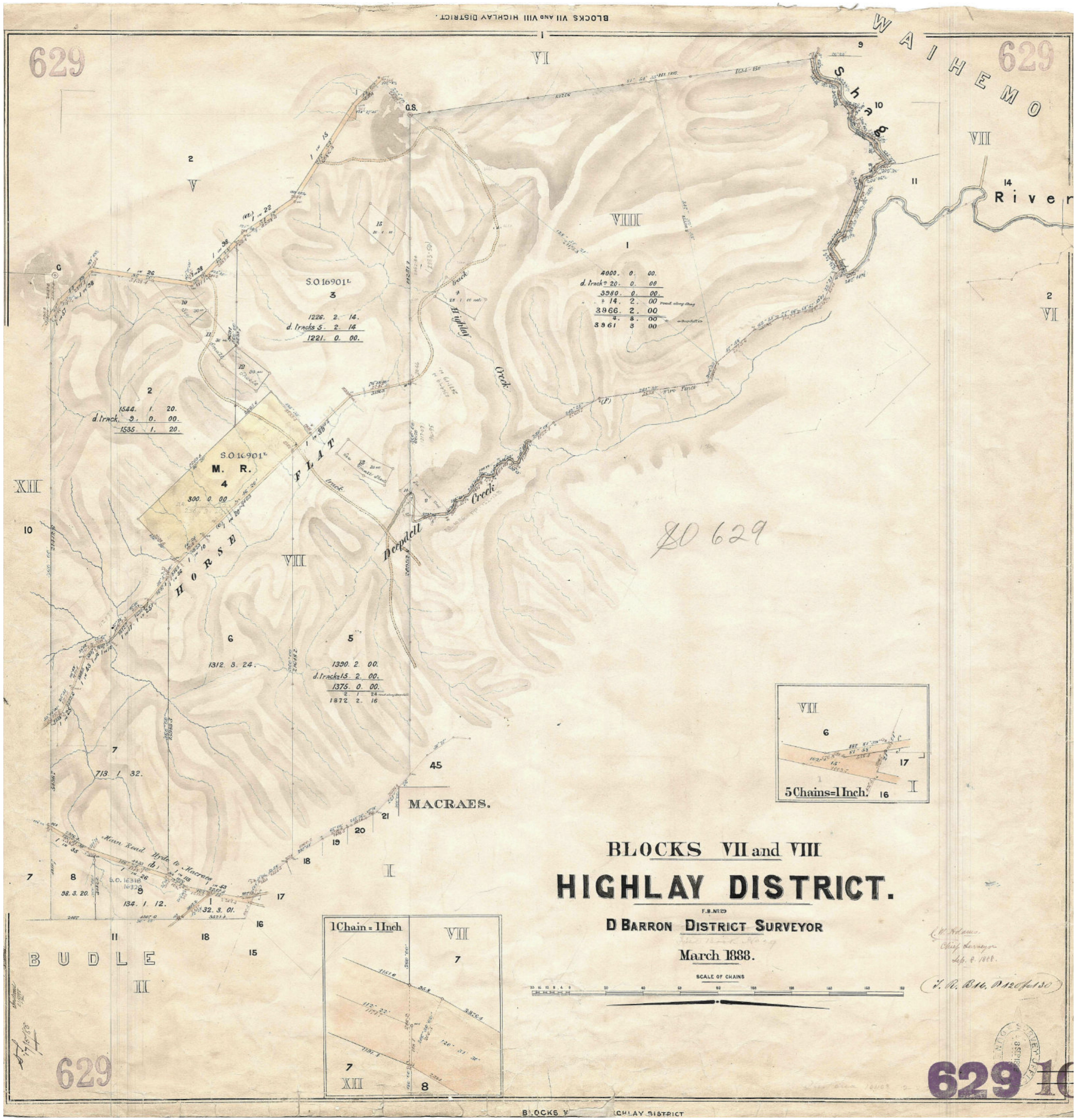
32 I have not reviewed any legal or authoritative documentation other than the survey plans described above.

33 I have assumed that the there are no errors contained within the survey plans used for my research.

Kurt Bowen

14 October 2016

Appendix A – Plans


BLOCKS VII AND VIII HIGHLAY DISTRICT.
629
WAIHEMO
Shag
River
G.S.
S.O 16901
M. R.
HORSE FLAT
Highlay Creek
Deepdell Creek
MACRAES.
Main Road Hyde to Macraes
BUDLE
5 Chains = 1 Inch.
1 Chain = 1 Inch
BLOCKS VII and VIII
HIGHLAY DISTRICT.
D BARRON DISTRICT SURVEYOR
March 1888.
SCALE OF CHAINS
SO 629

1476

Plan of

SMALL GRAZING RUNS

Being portions of

SWINBURN HIGHLAY & ROCK & PILLAR DISTS.

F.S.N125

SURVEYED BY D. BARRON DIST. SURVEYOR.

March 1888

SCALE OF CHAINS

1476

1476

1476

17

16901

The WAIHEMO COUNTY COUNCIL certifies that there is no operative district scheme under the TOWN AND COUNTRY PLANNING ACT 1953 which affects this subdivision shown on the below mentioned plan.
Dated 26-11-1969
County Clerk.

The WAIHEMO COUNTY COUNCIL hereby consents to the laying out and the granting of the Right of Way over Pt Sec 10 in favour of Sec. 11 pursuant to Section 40, Counties Amendment Act 1961
Subject however to the following conditions :—
(1) That the said private way be kept clear and free of all buildings walls fences hedges obstructions hoardings and obstacles of every kind.
(2) .....

Dated this 26th day of November 1969
In Witness whereof the COMMON SEAL of the COUNCIL was hereto affixed in the presence of:—
J. F. Kinney Councillor
G. McCathie Chairman

ENLARGMENT "A"
Scale:— 6 chains to an inch

ENLARGMENT "B"
Scale:— 2 chains to an inch

Roads are legal by Sec 110(e) P.W. Act 1928

For Surveyor's Report
See Plan File

Received 8-12-69 J.S.Ford
File RLF 346
Instructions
Reference Plans SO 626, 628, 629
Field Book 1760 pp. 22-27
Traverse Book 168 pp. 181-184
Examined by J.S.F. 19/12/69
Recorded E.W.M. 19/12/69 AM 401-402
Plan in order for approval
J.S.F. 19/12/69

PLAN of SECTIONS 10 & 11 (FORMERLY Sec 3A) BLK VII AND SECTION 1, BLOCK VI, HIGHLAY S.D.
OTAGO LAND DISTRICT WAIHEMO COUNTY COUNCIL
Scales— 20 chains to an inch
Surveyed by N.& E.S. Peterson Ltd (Balclutha) SEPT. 1969

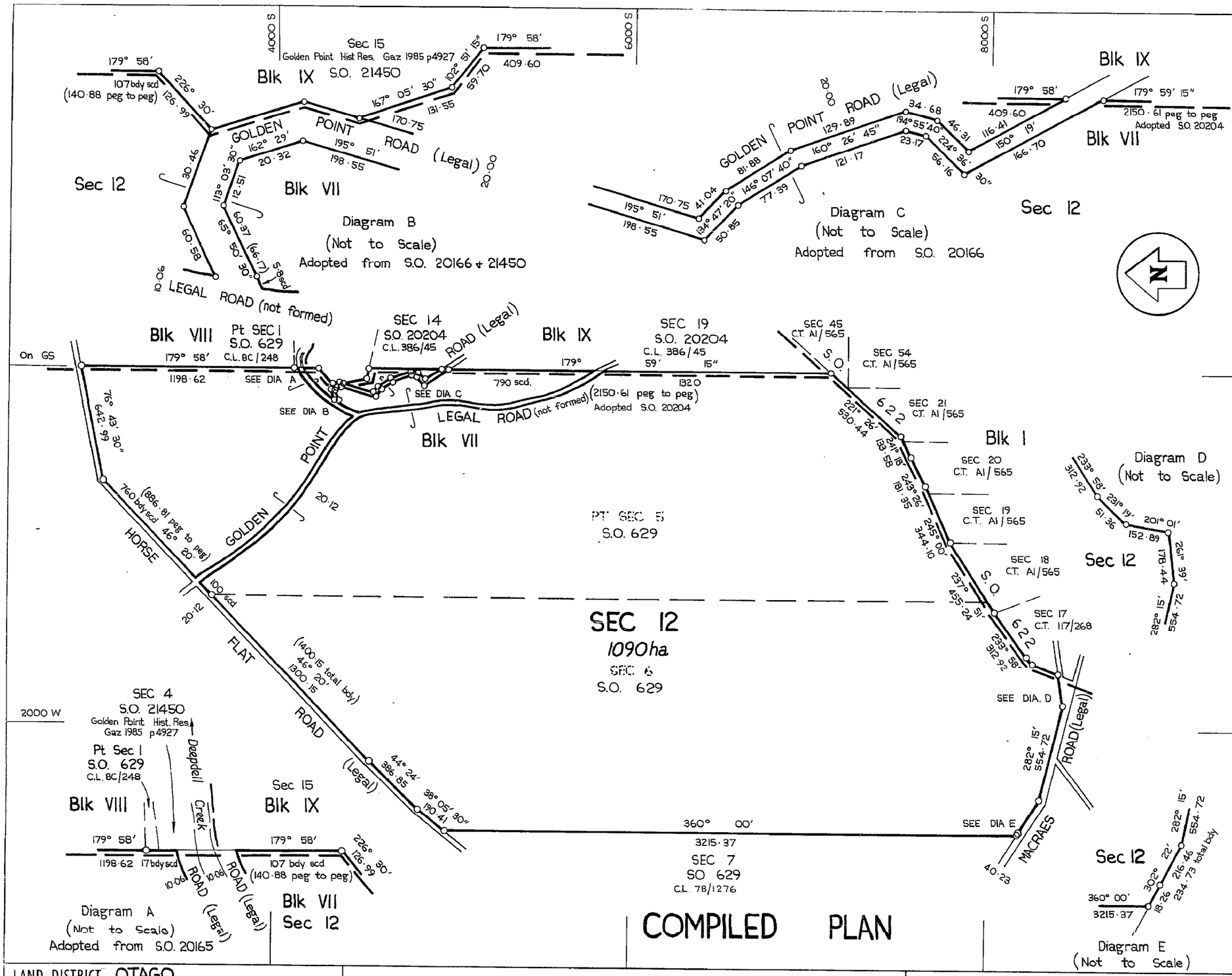
I, Graeme Alexander Cheney, of Balclutha, Registered Surveyor and holder of an annual practising certificate, hereby certify that this plan has been made from surveys executed by me; that both plan and survey are correct and have been made in accordance with the regulations under the Surveyors Act, 1966
Dated at Balclutha this 27th day of November 1969
Registered Surveyor.

Approved
Chief Surveyor 19/12/69

16901

TOTAL AREA 6086a. 1r. 20p

16901



Approvals

FORMER DESCRIPTION

Part Section 5 and Section 6
Block VII Highlay S.D.

Adopted from S.O. 629 unless otherwise shown

Datum: Old Cadastral

Orgin: Trig GS Highlay S.D.

Total Area 1090ha

Comprised in C.L. 4C/920 Bal.

~~I, Registered Surveyor and holder of an annual practising certificate (or who may act as a registered surveyor pursuant to the proviso to section 32(2) of the Surveyors Act 1966) hereby certify that this plan has been made from surveys executed by me or under my directions, that both plan and survey are correct and have been made in accordance with the Survey Regulations 1972.~~

~~Dated at this day of 19 Signature~~

~~Field Book p. Traverse Book p.~~

Reference Plans S.O. 622, 629, 20166, 20204
S.O. 21450, 20165

Examined L Stapleton Correct 27/8/86

Approved as to Survey 27/8/86

281 & 186 Chief Surveyor

~~Deposited this day of 19~~

~~District Land Registrar~~

File DPF 1162
Received 25·3·86
Instructions

SO 21847

LAND DISTRICT OTAGO

SURVEY BLK. & DIST. VII HIGHLAY S.D.

NZMS 261 SHT I42 RECORD MAP No 662

PLAN OF SECTION 12

TERRITORIAL AUTHORITY WAIHEMO COUNTY

Compiled in Survey Office

Scale 1:15 000 Date January 1986

M.A. Elliott Jan 86'

W.N. HAWKEY, SURVEYOR-GENERAL, DEPARTMENT OF LANDS AND SURVEY, NEW ZEALAND

DIAGRAM C
Not To Scale

DIAGRAM B
Not To Scale

DIAGRAM D
Not To Scale

DIAGRAM A
Not To Scale

Approvals
1. All Distances Measured By E.D.M.
2. For Details Of Occupation See F.N.

COORDINATES		
Mark	mN	mE
O.I.B. VII L.T.P. 21581 T.B. 248 p 99	671·11	-2808·91
O.I.S. I L.T.P. 21581 T.B. 248 p 99	-884·04	-2425·70
I.T. I	2176·22	-3792·19
I.T. III	1434·76	-3310·75
I.T. VII	-1576·61	-2775·12
I.T. VIII	-1839·16	-2757·09
I.T. IX	-2343·67	-2947·04

Datum : Old Cadastral
Origin : Trig C Highlay S.D.
Circuit : Observation Point

Total Area

Comprised in

I JAMES MARTIN POTTER of CROMWELL
Registered Surveyor and holder of an annual practising certificate (or who may act as a registered surveyor pursuant to section 25 of the Survey Act 1986) hereby certify that this plan has been made from surveys executed by me or under my directions, that both plan and survey are correct and have been made in accordance with the Survey Regulations 1972 or any regulations made in substitution thereof.
Dated at Cromwell this 3rd day of September 1991 Signature

Field Book 2464 p 73-79 Traverse Book 253 p. 139 - 141
Reference Plans L.T.P. 21581 D.P.'s 21219, 21303
S.O.'s 622, 623, 629 21847 23093, 16901
Examined Correct

Approved as to Survey
20 Nov 1991
Chief Surveyor

Deposited this 2nd day of July 1992
District Land Registrar

File
Instructions

Received 15 (10) 91

DP22318

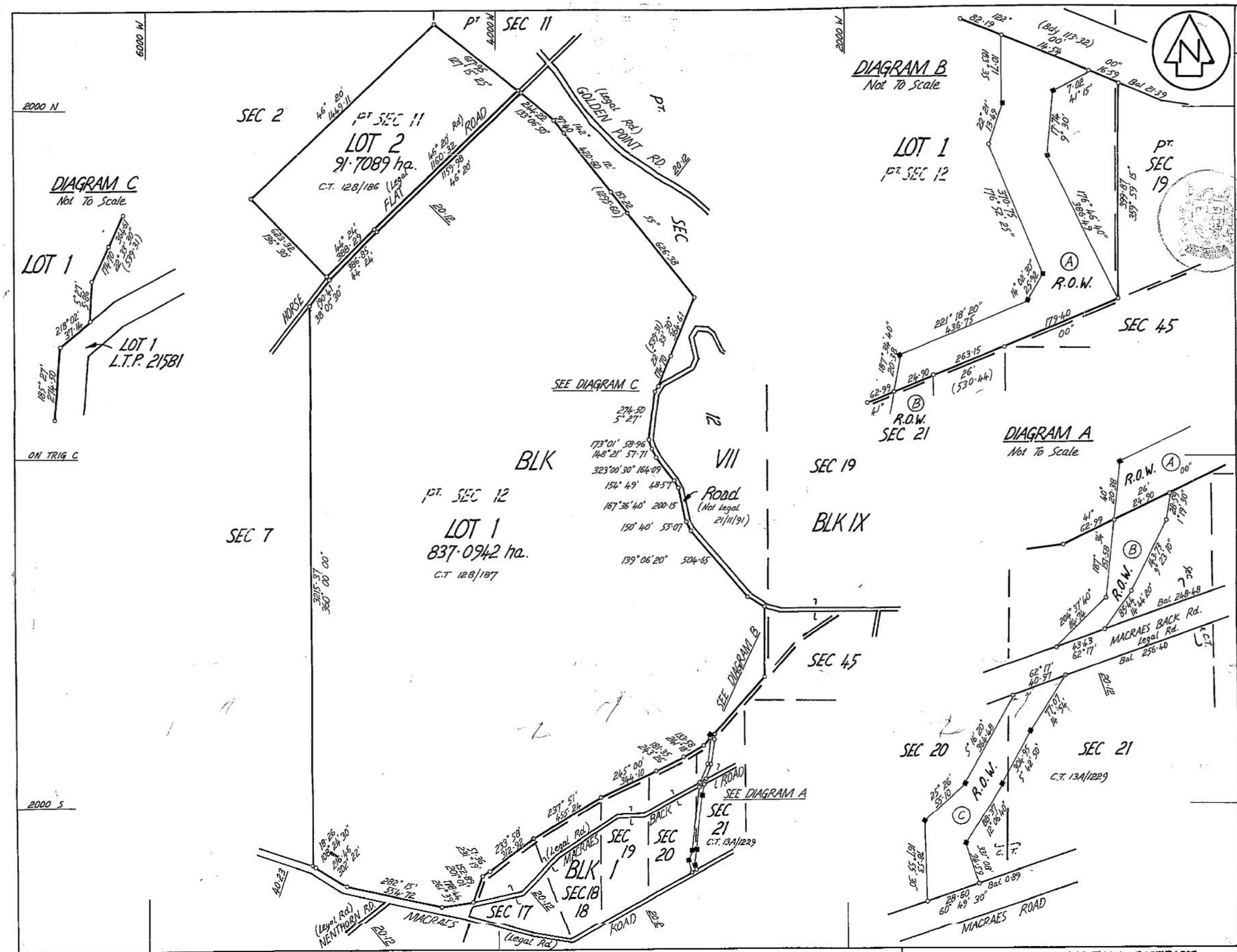
LAND DISTRICT OTAGO
Survey Blk. & Dist. I & VII HIGHLAY S.D
NZMS 261 Sheet I42 Record Map No. 662 I42/1918 & 2018

LOTS 1 & 2 BEING SUBDN OF SEC'S 11 & 12 BLK VII & R.O.W OVER SEC'S 20 & 21 BLK I HIGHLAY S.D.

TERRITORIAL AUTHORITY WAITAKI DISTRICT
Surveyed by PATERSON PITTS PARTNERS LTD
Scale 1: 15,000 Date AUGUST 1991

ID 144/4.4

DOSLI FORM D15



NEW ZEALAND MINING COMPANY LIMITED THE COMMON SEAL OF

Approvals Registered Owner :

The Waitaki District Council certifies that :

1. This plan of subdivision is approved pursuant to Section 305(1) of the Local Government Act 1974 by delegated authority pursuant to Section 715 of the Local Government Act 1974 signed on this 9th day of JULY 1991 subject to such conditions as are set out in paragraph (3) hereof.
2. This plan is in accordance with the requirements and provisions of the said operative District Scheme at that date, and that
3. The conditions referred to in paragraph (1) hereof are :
   Nil conditions hereon or on the approved scheme plan

In witness whereof the Common Seal of the said Council was hereunto affixed in the presence of

Mayor

District Manager

Pursuant to a resolution of the Waitaki District Council passed on the 7th day of July 1991 approving pursuant to Section 348 of the Local Government Act 1974 the Right of Way shown hereon the common seal of the said Council was affixed hereto in the presence of

Mayor

District Manager

OPTIONAL EASEMENTS

Shown	Purpose	Serv. Ten	Dom Ten.
(A)	Right of Way	Lot 1 Hereon	Sec's 13, 14, 18 & 19 Blk IX Highlay S.D. (C.T 12C/562)
(B)	Right of Way	Sec 21 Blk 1 Highlay S.D.	
(C)	Right of Way	Sec's 20 & 21 Blk 1 Highlay S.D	

Datum : Old Cadastral
Origin : Trig C Highlay S.D.
Circuit : Observation Point

Total Area 928·8031 ha.

Comprised in Pt C.T 128/186, Pt C.T 128/187 & C.T 13A/1229 (Easement Only)

I, JAMES MARTIN POTTER of CROMWELL
Registered Surveyor and holder of an annual practising certificate (or who may act as a registered surveyor pursuant to section 25 of the Survey Act 1986) hereby certify that this plan has been made from surveys executed by me or under my directions, that both plan and survey are correct and have been made in accordance with the Survey Regulations 1972 or any regulations made in substitution thereof.

Dated at Cromwell this 3rd day of September 1991. Signature

Field Book 2464 p. 73-79 Traverse Book 253 p. 139-141
Reference Plans L.T.P. 21581 D.P's 21219, 21303
S.O.'s 622, 623, 629, 21847, 23093, 16901
Examined DP Lawson Correct rutherfurd

Approved as to Survey

Chief Surveyor

Deposited this 20th day of July 1992

District Land Registrar

File
Received 15/10/91
Instructions

DP 22318

LAND DISTRICT OTAGO
Survey Blk. & Dist. I & VII HIGHLAY S.D.
NZMS 261 Sheet I42 Record Map No. 662 I42/19.18 & 20.18

LOTS 1 & 2 BEING SUBDN OF SEC'S 11 & 12 BLK VII & R.O.W OVER SEC'S 20 & 21 BLK 1 HIGHLAY S.D.

TERRITORIAL AUTHORITY WAITAKI DISTRICT
Surveyed by PATERSON PITTS PARTNERS LTD
Scale 1:15,000 Date AUGUST 1991

ID 144/4.4

DOSLI FORM D15

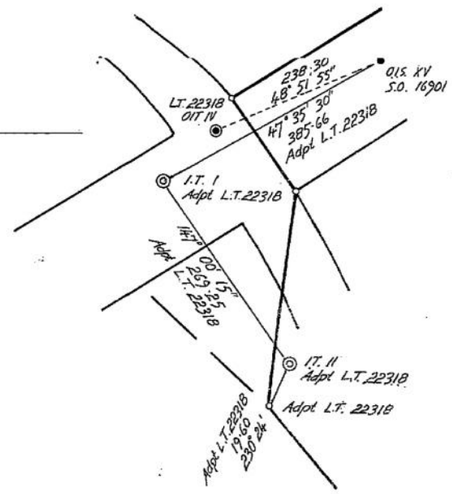
4000 W | 3000 W | 2000 W

3000 N

2000 N

1000 N

DIAGRAM C
Not To Scale.



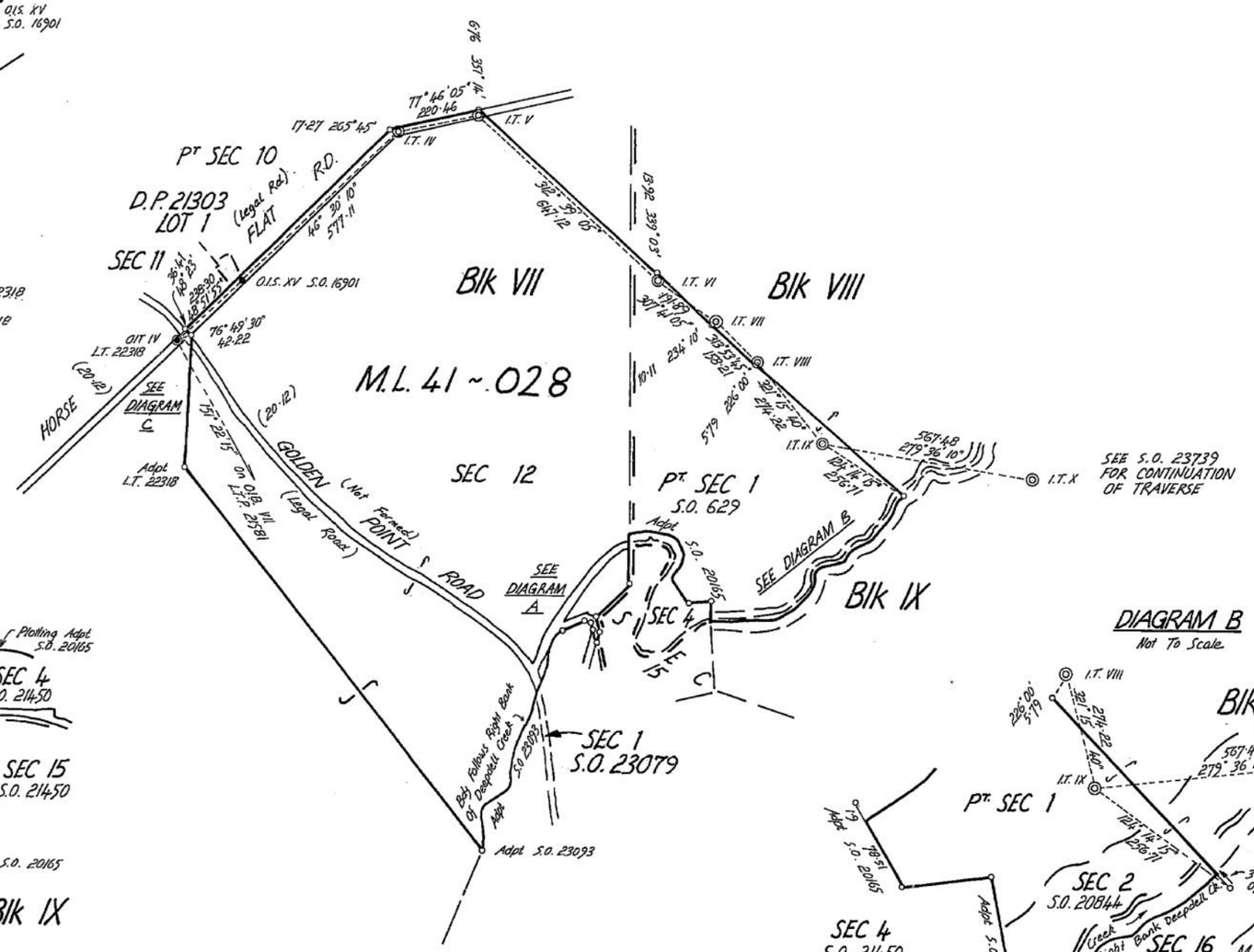


DIAGRAM A
Not To Scale.

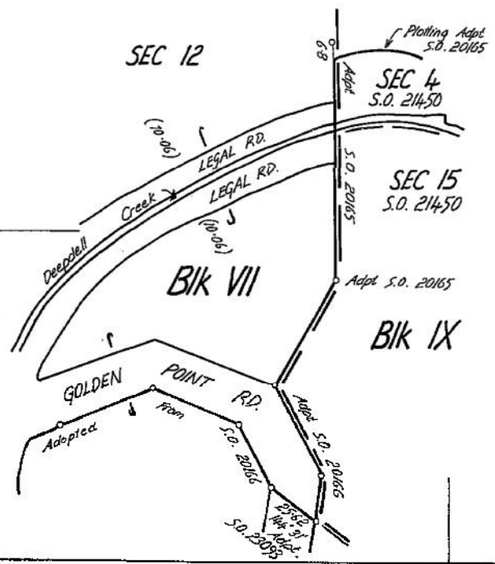


DIAGRAM B
Not To Scale.

CLASS C SURVEY

LAND DISTRICT OTAGO

Survey Blk. & Dist. BLKS VII, VIII & IX Highlay

NZMS 261 Sheet I42 Record Map No. 662

I.D. 142 / 4.3 & 4.4

MINING PERMIT APPL 41 - 028

TERRITORIAL AUTHORITY Waitaki District Council

Surveyed by PATERSON PITTS PARTNERS LTD.

Scale 1: 10,000 Date JAN 1992

Approvals

Notes : All Distances Measured By E.D.M.
No occupation on pegged Boundaries

COORDINATES		
Mark.	m.N.	m.E
O.I.S. XV S.O. 16901 T.B. 253 p. 139	2436·31	-3507·43
I.T. V	2880·19	-2873·34
I.T. VII	2324·37	-2245·53
I.T. IX	2000·74	-1959·93

Concurrent With S.O. 23739

Datum : Old Cadastral
Origin : Trig C Highlay S.D.
Circuit : Observation Point

Total Area

Comprised in

I, James Martin Potter of Cromwell
Registered Surveyor and holder of an annual practising certificate (or who may act as a registered surveyor pursuant to section 25 of the Survey Act 1986) hereby certify that this plan has been made from surveys executed by me or under my directions, that both plan and survey are correct and have been made in accordance with the Survey Regulations 1972 or any regulations made in substitution thereof.

Dated at Cromwell this 10th day of February 1992 Signature J. M. Potter

Field Book 2472 p. 60-64 Traverse Book 253 p. 184-186
Reference Plans S.O.'s 629, 16901, 20165, 20166, 20204, 20844, 21450, 21847, 23079 23093 D.P. 21303, L.T.'s 21581 22318
Examined C. Kelly Correct MBuellwood

Approved as to Survey
20/5/92
Chief Surveyor

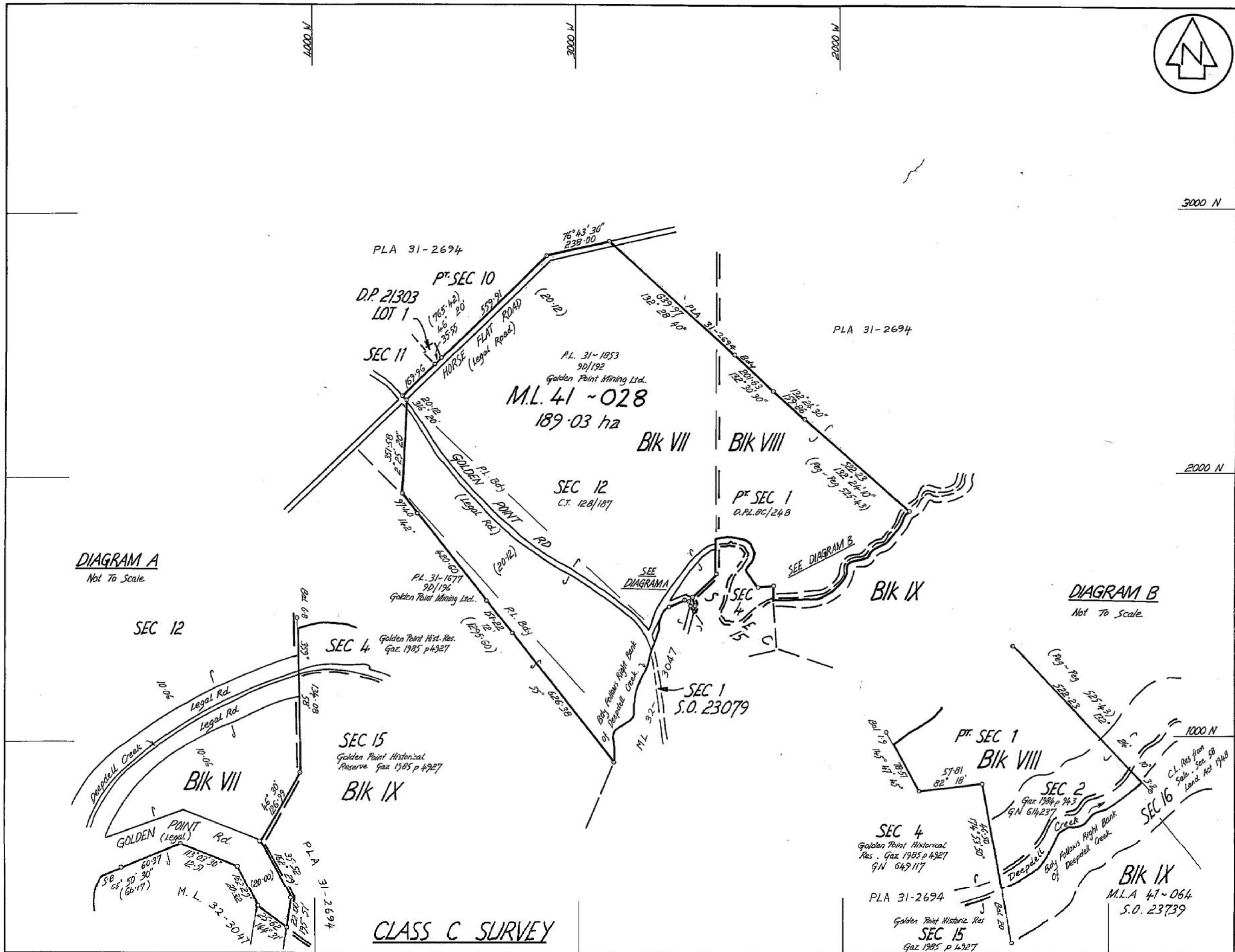
Deposited this day of 19
District Land Registrar

File
Received 24/2/92
Instructions

SO 23740

W.A. ROBERTSON, DIRECTOR GENERAL/SURVEYOR GENERAL, DEPARTMENT OF SURVEY AND LAND INFORMATION, NEW ZEALAND

DOSLI FORM 015


4000 W
3000 W
2000 W
3000 N
2000 N
1000 N
N
PLA 31-2694
Pt SEC 10
D.P. 21303
LOT 1
SEC 11
HORSE FLAT ROAD
(Legal Road)
P.L. 31-1853
9D/192
Golden Point Mining Ltd.
M.L. 41 ~028
189·03 ha
Blk VII
Blk VIII
SEC 12
C.T. 128/187
Pt SEC 1
D.PL.8C/248
GOLDEN POINT RD
(Legal Rd)
SEE DIAGRAM A
SEE DIAGRAM B
Blk IX
SEC 4
SEC 15
P.L. 31-1677
9D/196
Golden Point Mining Ltd.
P.L. Bdy
Bdy Follows Right Bank of Deepdell Creek
SEC 1
S.O. 23079
ML 32-3047
DIAGRAM A
Not To Scale
SEC 12
SEC 4
Golden Point Hist. Res.
Gaz. 1985 p4927
Legal Rd
Deepdell Creek
SEC 15
Golden Point Historical Reserve Gaz 1985 p 4927
Blk VII
Blk IX
GOLDEN POINT Rd
(Legal)
M. L. 32-3047
PLA 31-2694
CLASS C SURVEY
DIAGRAM B
Not To Scale
Pt SEC 1
Blk VIII
SEC 2
Gaz 1984 p 943
GN 614237
SEC 4
Golden Point Historical Res. Gaz 1985 p 4927
GN 649117
Deepdell Creek
Bdy Follows Right Bank of Deepdell Creek
SEC 16
C.L. Res from Sale Sec 58 Land Act 1948
Blk IX
M.L.A 41-064
S.O. 23739
PLA 31-2694
Golden Point Historic Res
SEC 15
Gaz 1985 p 4927

Approvals

Concurrent With S.O. 23739

Datum : Old Cadastral
Origin : Trig C Highlay S.D.
Circuit : Observation Point

Total Area 189·03 ha.

Comprised in 128/187 (PT) D.P.L. 8C/248

I, James Martin Potter of Cromwell Registered Surveyor and holder of an annual practising certificate (or who may act as a registered surveyor pursuant to section 25 of the Survey Act 1986) hereby certify that this plan has been made from surveys executed by me or under my directions, that both plan and survey are correct and have been made in accordance with the Survey Regulations 1972 or any regulations made in substitution thereof.

Dated at Cromwell this 10th day of February 1992 Signature J.M. Potter

Field Book 2472 p. 60-64 Traverse Book 253 p. 184-186

Reference Plans S.O's 629, 16901, 20165, 20166, 20204, 20844, 21450, 21847, 23079, 23093 D.P. 21303, LT 22318

Examined C. Kelly Correct [signature]

Approved as to Survey 20/5/92 Chief Surveyor

Deposited this .... day of 19

District Land Registrar

File Received 24/2/92 Instructions

SO 23740

LAND DISTRICT OTAGO

Survey Blk. & Dist. Blks VII, VIII & IX Highlay

NZMS 261 Sheet I42 Record Map No. 662

MINING PERMIT APPL 41-028

TERRITORIAL AUTHORITY Waitaki District Council

Surveyed by PATERSON PITTS PARTNERS LTD.

Scale 1:10,000 Date JAN 1992

I.D. I42/43,4·4

W.A. ROBERTSON, DIRECTOR GENERAL/SURVEYOR GENERAL, DEPARTMENT OF SURVEY AND LAND INFORMATION, NEW ZEALAND

[redacted]

DOSLI FORM D15

Title Plan - SO 444480

Survey Number	SO 444480
Surveyor Reference	13426 Golden Bar Road
Surveyor	Anthony Denys Hosken
Survey Firm	Paterson Pitts Partners Ltd (Dunedin)
Surveyor Declaration	I Anthony Denys Hosken, being a licensed cadastral surveyor, certify that: (a) this dataset provided by me and its related survey are accurate, correct and in accordance with the Cadastral Survey Act 2002 and the Rules for Cadastral Survey 2010, and (b)the survey was undertaken by me or under my personal direction. Declared on 19 Dec 2011 09:48 AM

Survey Details

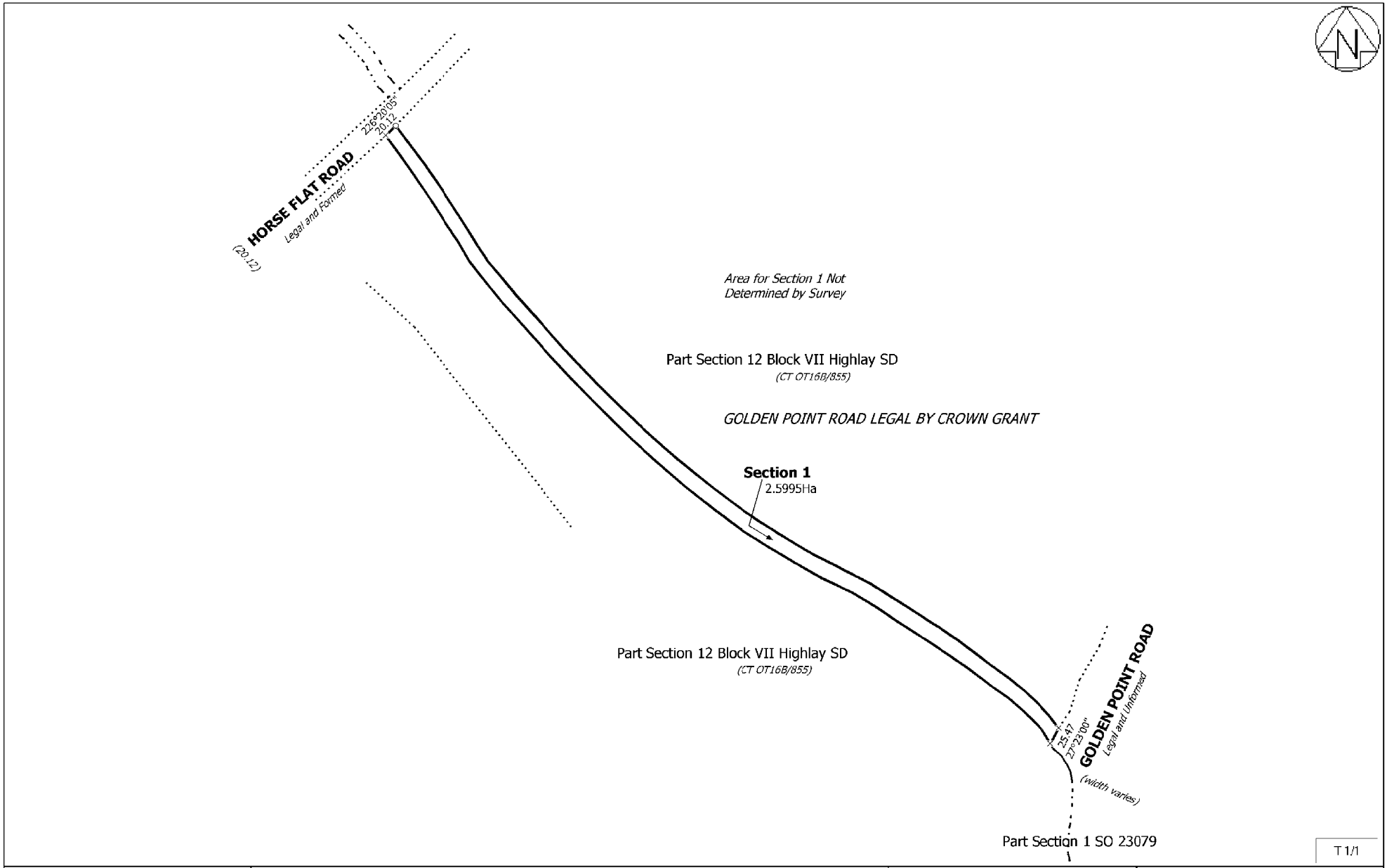
Dataset Description	Section 1		
Status	Approved as to Survey		
Land District	Otago	**Survey Class**	Class B
Submitted Date	19/12/2011	**Survey Approval Date**	19/12/2011
		Deposit Date	

Territorial Authorities

Waitaki District

Created Parcels

Parcels	Parcel Intent	Area	CT Reference
Section 1 Survey Office Plan 444480	Legalisation	2.5995 Ha	
Total Area		2.5995 Ha	



Land District: Otago Digitally Generated Plan Generated on: 19/12/2011 10:17am Page 2 of 2	Section 1	Surveyor: Anthony Denys Hosken Firm: Peterson Pitts Partners Ltd (Dunedin)	Title Plan SO 444480 Approved on: 19/12/2011

800 mN

1000 mN

1200 mN

1400 mN of Trig C

2700 mW of Trig C

DEEPDELL CREEK

Legal Rd. (not formed) (10·06)

65° 50' 30" 80·58

60·37

195° 51' 198·55

00"

170·75 (192·75)

22·00

See Diagram

Part Sec. 5
C. L. 4C/920
S. O. 20165

2500 mW

Part Section 5
S. O. 629

C. L. 4C/920
STAG PASTORAL COMPANY LTD.

ROAD

224° 36' 30" 56·16

23·17

160° 26' 45" 121·17

146° 07' 40" 77·39

131° 47' 20" 50·85

18·76

22·28 (41·04)

81·88

129·89

46·31

34·68

194° 55' 40"

BLK. BDY. 2150·61 calc.

19'

00" 166·70

(328·00)

150° 161·30

(510·49)

BLK. BDY. 409·60 calc.

POINT

BLOCK VII

BLOCK IX

(LEGAL)

Part Section 10
S. O. 421

C. L. 386/45
F. J. O'CONNELL

GOLDEN

136° 52' 99·60

79·29

200

194·08

JOINS S.O. 20167

2300 mW

5° 85cd. 66·17

60·37

65° 50' 30" 60·58

113° 03' 30" 12·51

195° 51' 00" 198·55

162° 29' 20·32

20·00

170·75 (192·75)

22·00

35·52

30·46

Diagram
Not to scale.

DATUM. Old Cadastral

CO.ORDINATES. In terms of Trig C
Highlay S. D.

Total Area

Comprised in

I MALCOLM JOHN POLLITT of DUNEDIN
Registered Surveyor and holder of an annual practising certificate hereby certify that this plan has been made from Surveys executed by me or under my direction that both plan and Survey are correct and have been made in accordance with the regulations under the Surveyors Act 1966

Dated at DUNEDIN this 26TH day of FEBRUARY 1982 Signature M Pollitt

Field Book 2096 p 24, 27-30 45-46 Traverse 215 145-149
2158 20-22

Reference Plans S.O. 421, 629, 20165, and 20167

Examined H K Shand 25/5/82

Approved as

27 5 82

~~Deposited this day of 19~~

~~District Land Registrar~~

LAND DISTRICT OTAGO RM. 662
SURVEY BLK.& DIST. VII&IX, Highlay
NZMS 261 SHEET No. I 42

ROAD REDEFINITION

LOCAL AUTHORITY Waihemo County
Surveyed by M. J. Pollitt
Scale 1 : 2000 Date Sept. 1979

File 8/201/24 , 9/267
Received 1·3·82
Instructions Job No 78/127

S.O. 20166

2200 mW of Trig C

2000 mW

1800 mW

JOINS S.O.20166

Part Section 10
C. L. 386/45
F. J. O'CONNELL

800 mN of Trig C

GOLDEN POINT ROAD
(LEGAL)

20·00
136° 52'
79·29
99·60
53° 01' 20"
64·41
76·59
85° 08'
37·16
26·10
114° 57'
63·48
61·52
95° 51'
(49·60)
27·36
48·08
22·24
123° 19'
64·75
67·23
82° 50'
20·45
34·62
45° 20' 30"
80·67
77·76
97° 05'
110·02
98·56
107° 08' 30"
173·60
199·03
41° 20'
41·13
62·07
93° 53'
31·15
23·67
11·84
81·67
35° 50'
146° 26'
47·59
34·89
162°
215·10
213·94
50'
20"
20·00

S. O. 4 2 1

600 mN

Section 4
C. L. 386/45
F. J. O'CONNELL

S. O. 4550

JOINS S.O.20168

Approvals

DATUM. Old Cadastral

CO.ORDINATES. In terms of Trig C
Highlay S. D.

Total Area

Comprised in

I MALCOLM JOHN POLLITT of DUNEDIN
Registered Surveyor and holder of an annual practising certificate hereby certify that this plan has been made from Surveys executed by me or under my direction: that both plan and Survey are correct and have been made in accordance with the regulations under the Surveyors Act 1966
Dated at DUNEDIN *this* 26TH *day of* FEBRUARY *1982* *Signature*

Field Book 2096 *p* 29-36 *Traverse Book* 215 *p* 145-149

Reference Plans S.O. 421, 4550, 20165, 20166, and 20168

Examined H.K. Shaw

Approved as to Survey 25/5/82

25 5 82 Chief Surveyor

~~Deposited this day of 19~~

~~District Land Registrar~~

File 8/201/24, 9/267
Received 1·3·82
Instructions Job Nº 78/127

S.O. 20167

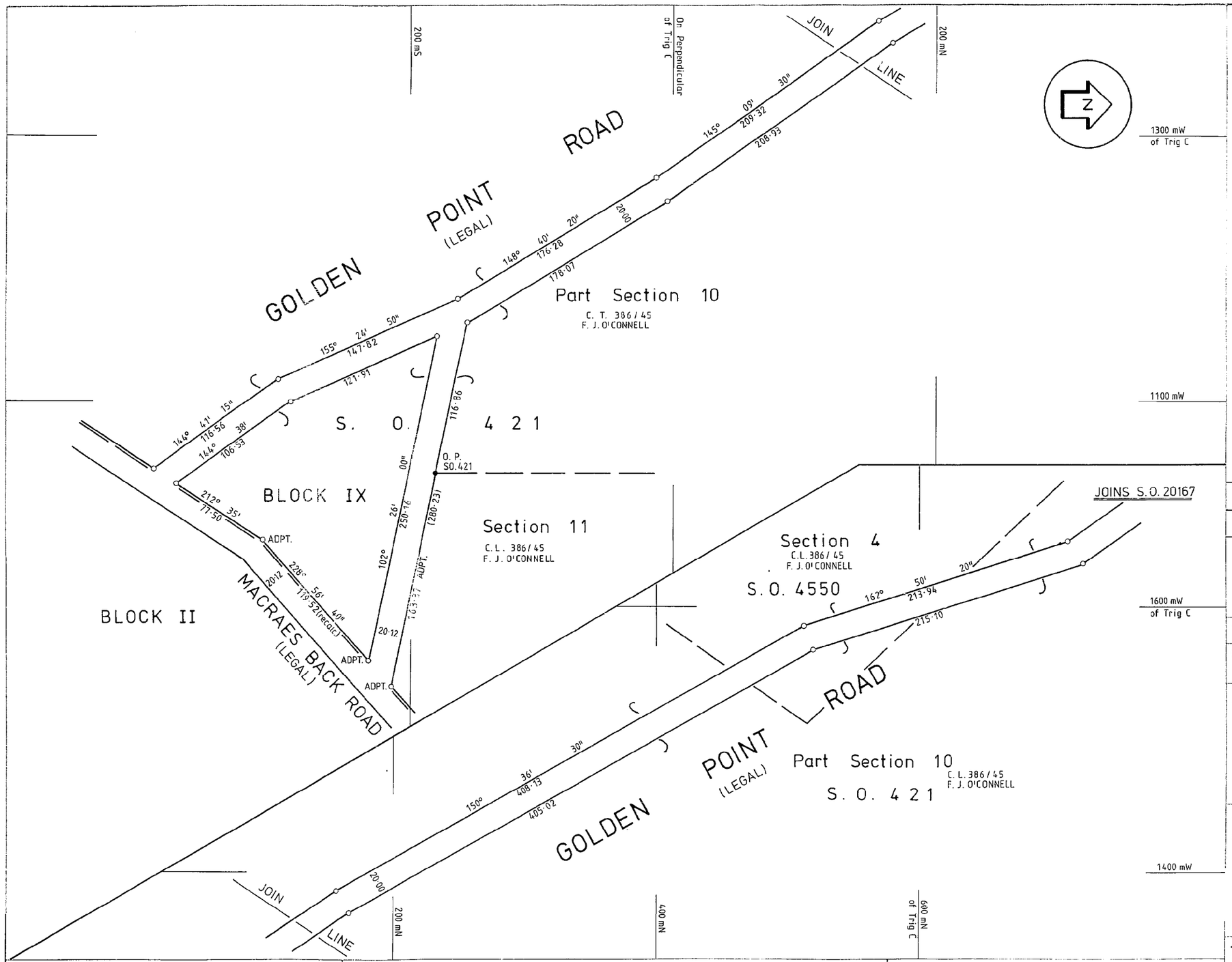
LAND DISTRICT OTAGO RM. 662
SURVEY BLK.& DIST. IX Highlay
NZMS 261 SHEET Nº. I 42

ROAD REDEFINITION

LOCAL AUTHORITY Waihemo County
Surveyed by M. J. Pollitt
Scale 1 : 2000 Date Sept. 1979

P. D. HASSELBERG, GOVERNMENT PRINTER, WELLINGTON, NEW ZEALAND. 1981

T. L. Stirling, Surveyor-General, Department of Lands and Survey, Wellington.



All adopted work is from S. O. 421

For "Origin of Bearings" see S. O. 20165

DATUM. Old Cadastral.

CO.ORDINATES. In terms of Trig C
Highlay S. D.

Total Area

Comprised in

I MALCOLM JOHN POLLITT of DUNEDIN
Registered Surveyor and holder of an annual practising certificate hereby certify that this plan has been made from Surveys executed by me or under my direction, that both plan and Survey are correct and have been made in accordance with the regulations under the Surveyors Act 1966
Dated at DUNEDIN *this* 26TH *day*
of FEBRUARY 1982 *Signature*

Field Book 2096 p 35-38, 40 *Traverse* 215 145-149

Reference Plans SO. 421, 4550, 20165, and 20167

Examined N.R. Shaw

Approved 25/5/82

27 5 82 Chief Surveyor

~~Deposited this day of 19~~

~~District Land Registrar~~

LAND DISTRICT OTAGO RM. 662
SURVEY BLK.& DIST. IX Highlay
NZMS 261 SHEET No. I42

ROAD REDEFINITION

LOCAL AUTHORITY Waihemo County
Surveyed by M. J. Pollitt
Scale 1 : 2000 Date Sept. 1979

File 8/201/24 , 9/247
Recorded 1·3·82
Instructions Job No 78/127

S.O.20168

421

421

SHAG RIVER.

W A I H E M O D I S T .

Deepdell Creek

VIII

IX

X

VI

III

VII

H I G H L A Y D I S T .

Mining Reserve

Block VI

Palmerston Fire Library Endow.

MT. HELLENE

LEGALISATION CARD

Main Road

Macraes to Palmerston.

TOWNSHIP OF MACRAES.

II

I

McCormicks Creek

D U N B A C K D I S T

B U D L E D I S T

VII

VIII

DUNBACK HILL.

LEGALISATION CARD

Plan of

W A I K O U A I T I R I V E R

LEGALISATION CARD

421

IX 421

SECTIONS	10-12	BLOCK	IX	HIGHLAY	DIST.
"	1	"	VII	BUDLE	"
"	1	"	X	WAIHEMO	"
"	2,3,7-9	"	VI	DUNBACK	"
"	6	"	VIII	"	"
"	1 & 2	"	X	"	"
"	1-6	"	XI	"	"

Surveyed by D. Barron Dist. Surveyor.

SEPT. 1891.

SCALE OF CHAINS.

E.B.No. 36 Pages 1-70.

(Dunback Portfolio)

Appendix B – Aerial image

PATERSONPITTSGROUP
Surveying • Planning • Engineering
Your Land Professionals
www.ppgroup.co.nz
0800 PPGROUP

DUNEDIN:
229 Moray Place.
PO Box 5933,
Dunedin 9058.
T 03 477 3245
F 03 474 0484
E dunedin@ppgroup.co.nz

Client/Location:

Oceania Gold - Macraes
Deepdell / Horse Range Road

Purpose/Drawing Title:

Cadastral Boundary Overlay of 1988
Aerial Photo

Surveyed by:		Original Size:	Scale: 1:7500
Designed by:		A3	
Drawn by:	M.WYLIE		DO NOT SCALE
Checked by:			
Approved by:	K.BOWEN		
Job Ref: D14440		Sheet No: 1 of 1	Revision No: / Date Created: 12/10/2016

PLOT DATE: 12 October, 2016 - 2:49 PM BY: Mark Wylie