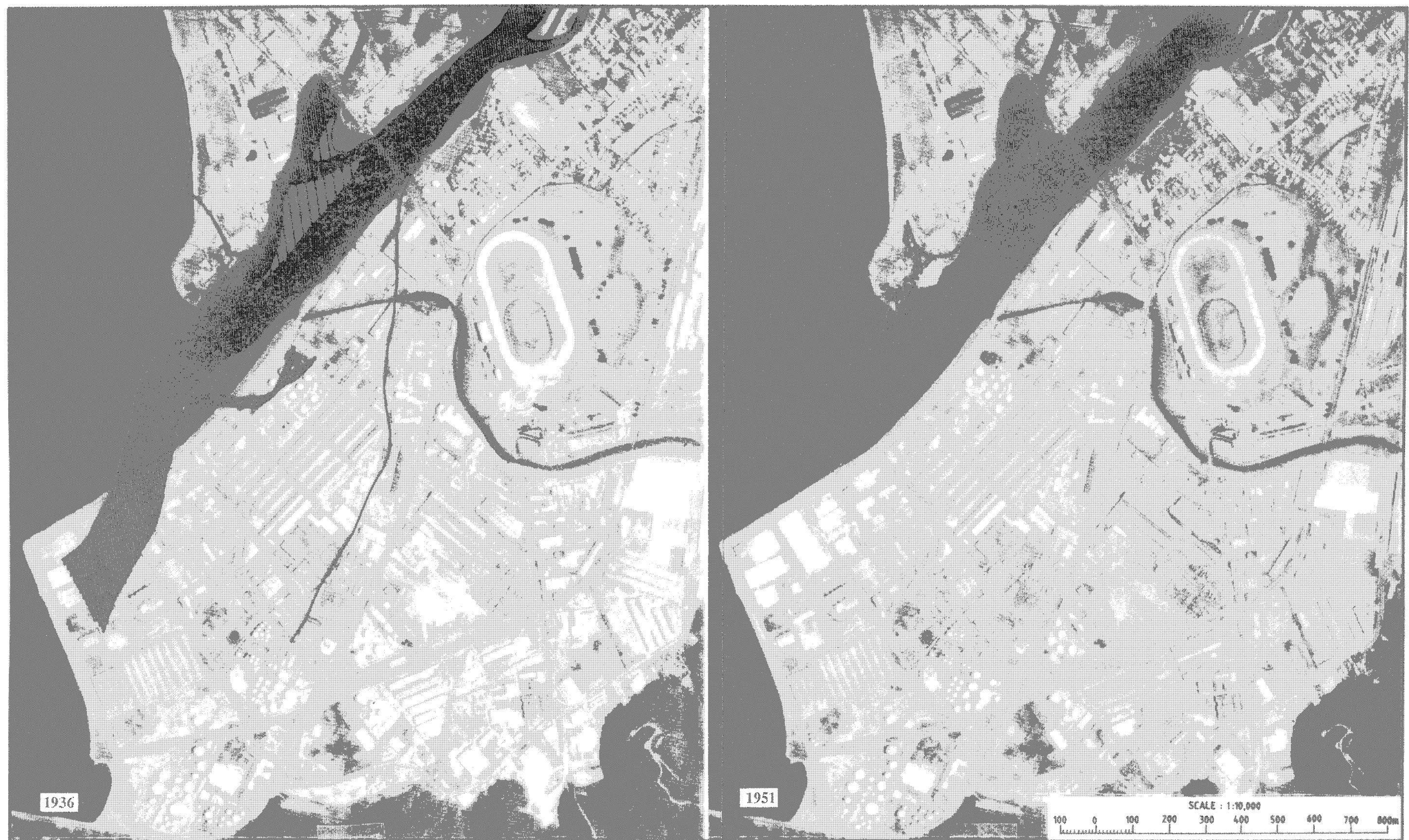


APPENDIX B

HISTORICAL RIVER ALIGNMENTS

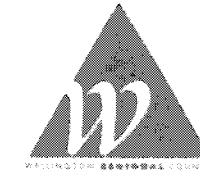


ALIGNMENT I 1936
taken from a non rectified mosaic
of Aerial contact prints.
N.Z. Army 1936

ALIGNMENT II 1951
taken from a rectified mosaic of Aerial contact prints.
N.Z. Aerial Mapping Ltd.
Hastings N.Z. 1951

KEY
 Shingle banks
 River channel

SHEET 1
 HUTT CITY
 The Estuary



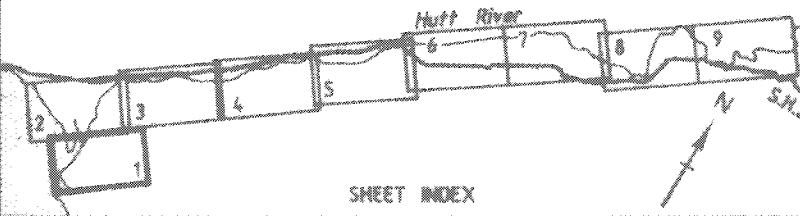
River alignment data from historical maps
and photos held by Rivers Department.
Photographic base from DOSLI
and N.Z. Aerial Mapping.
River alignment overlays produced by
Land Resources Department using WREGGIS.
Map data copyright WRC 1990.



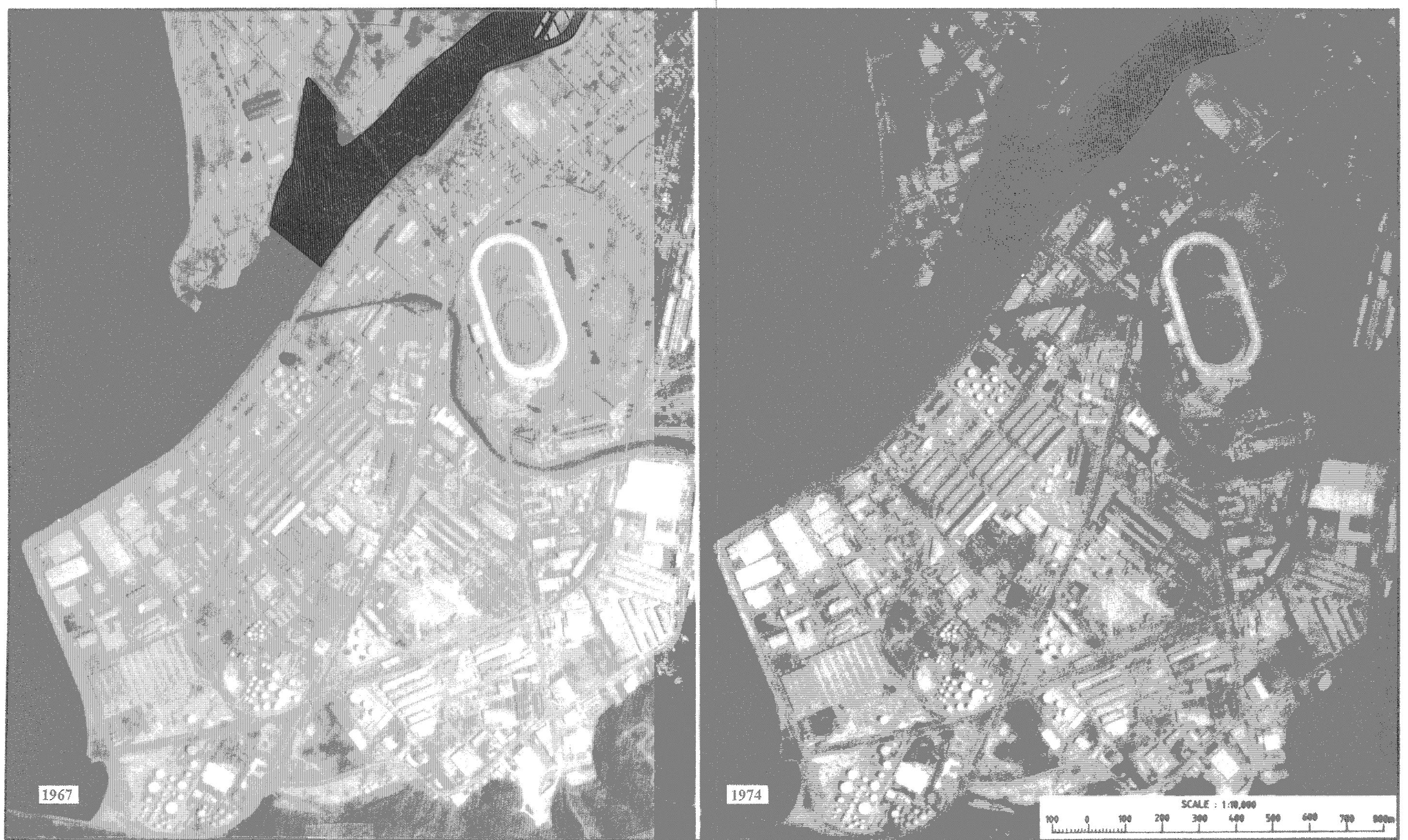
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HUTT RIVER FLOOD CONTROL SCHEME REVIEW 1990 HISTORICAL RIVER ALIGNMENTS

Appendix B



RECTIFIED PHOTO SHEET
The photobase is a half-tone engraving.
A best mean fit has been obtained from scaling data.
The photographic image is not orthogonal
and some displacement of image may occur
as a result of differences in ground elevations.
Aerial Photography SN 8457 Flown 29/1/85



ALIGNMENT I 1967 taken from Aerial contact prints Aerial Surveys Ltd. Nelson N.Z. 1967	ALIGNMENT II 1974 taken from Aerial contact prints N.Z. Aerial Mapping Ltd. Hastings N.Z. 1974	KEY Shingle banks River channel	SHEET 1 HUTT CITY The Estuary 	River alignment data from historical maps and photos held by Rivers Department. Photographic base from DOSLI and N.Z. Aerial Mapping. River alignment overlays produced by Land Resources Department using WRESSS. Map data copyright WRC 1990.	
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Catchment Engineering CONSULTING ENGINEERS Phone (04) 888 326 Fax (04) 888 288	HUTT RIVER FLOOD CONTROL SCHEME REVIEW 1990 HISTORICAL RIVER ALIGNMENTS Appendix B		RECTIFIED PHOTO SHEET The photobase is a halftone enlargement. A best mean fit has been obtained from scaling data. The photographic image is not orthorectified and some displacement of image may occur as a result of differences in ground elevations. Aerial Photography SN 8487 Plane 2071/05
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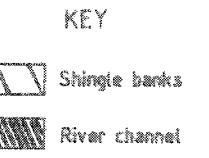


<p>ALIGNMENT I 1936 taken from a non rectified mosaic of Aerial contact prints. N.Z. Army 1936</p>	<p>ALIGNMENT II 1951 taken from a rectified mosaic of Aerial contact prints. N.Z. Aerial Mapping Ltd. Hastings N.Z. 1951</p>	<p>KEY</p> <ul style="list-style-type: none"> Shingle banks River channel 	<p>SHEET 2 HUTT CITY Petone and Lower Hutt Central</p>	<p>River alignment data from historical maps and photos held by Rivers Department. Photographic base from DOSLI and N.Z. Aerial Mapping. River alignment overlays produced by Land Resources Department using WREGBIS. Map data copyright WRC 1990.</p>	
<p>Catchment Engineering CONSULTING ENGINEERS Phone (04) 888 926 Fax (04) 888 288</p>	<p>HUTT RIVER FLOOD CONTROL SCHEME REVIEW 1990 HISTORICAL RIVER ALIGNMENTS</p>	<p>Appendix B</p>		<p>RECTIFIED PHOTO SHEET The photograph is a halftone enlargement. A best mean fit has been obtained from scaling data. The photographic image is not orthogonal and some displacement of image may occur as a result of differences in ground elevations. Aerial Photography SH 8457 Flown 28/1/95</p>	

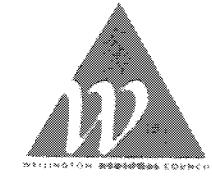


ALIGNMENT I 1967
taken from Aerial contact prints
Aerial Surveys Ltd.
Nelson N.Z. 1967

ALIGNMENT II 1974
taken from Aerial contact prints
N.Z. Aerial Mapping Ltd.
Hastings N.Z. 1974



SHEET 2
HUTT CITY
Petone and Lower
Hutt Central



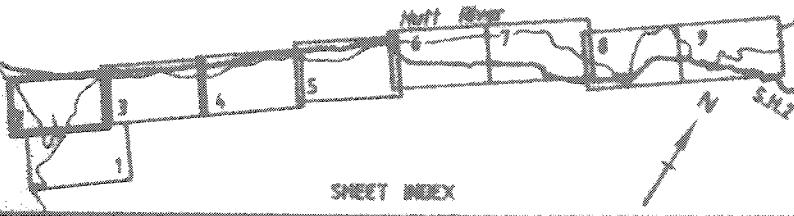
River alignment data from historical maps
and photos held by Rivers Department.
Photographic base from DSIL
and N.Z. Aerial Mapping.
River alignment overlays produced by
Land Resources Department using WRECCS.
Map data copyright LRC 1990.



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HUTT RIVER FLOOD CONTROL SCHEME REVIEW 1990 HISTORICAL RIVER ALIGNMENTS

Appendix B



RECTIFIED PHOTO SHEET
The photograph is a half-tone enlargement.
A best mean fit has been obtained from scaling data.
The photographic image is not orthogonal
and some displacement of image may occur
as a result of differences in ground elevations.
Aerial Photography SH 8457 Flown 23/1/95

1936

1951

SCALE : 1:10,000
100 0 100 200 300 400 500 600 700 800m

ALIGNMENT I 1936
taken from a non rectified mosaic
of Aerial contact prints.
N.Z. Army 1936

ALIGNMENT II 1951
taken from a rectified mosaic of Aerial contact prints.
N.Z. Aerial Mapping Ltd.
Hastings N.Z. 1951

KEY
 Shingle banks
 River channel

SHEET 3
HUTT CITY
Melling to Avalon



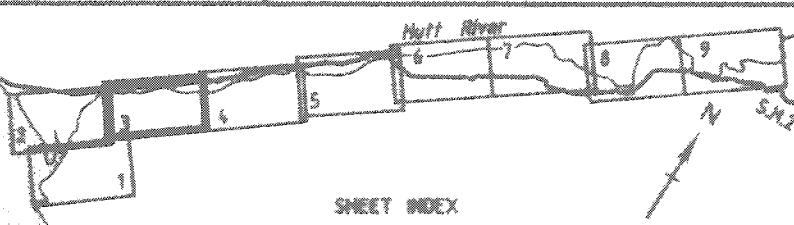
River alignment data from historical maps
and photos held by Rivers Department.
Photographic base from DOSLI
and N.Z. Aerial Mapping.
River alignment overlays produced by
Land Resources Department using WREGIS.
Map data copyright WRC 1990.



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HUTT RIVER FLOOD CONTROL SCHEME REVIEW 1990 HISTORICAL RIVER ALIGNMENTS

Appendix B



RECTIFIED PHOTO SHEET
The photobase is a halftone enlargement.
A best mean fit has been obtained from scaling data.
The photographic image is not orthogonal
and some displacement of image may occur
as a result of differences in ground elevations.
Aerial Photography SN 9457 Flown 20/1/85

1967

1974

SCALE : 1:10,000

100 0 100 200 300 400 500 600 700 800m

ALIGNMENT I 1967
taken from Aerial contact prints
Aerial Surveys Ltd.
Nelson N.Z. 1967

ALIGNMENT II 1974
taken from Aerial contact prints
N.Z. Aerial Mapping Ltd.
Hastings N.Z. 1974

KEY
 Shingle banks
 River channel

SHEET 3
HUTT CITY
Melling to Avalon



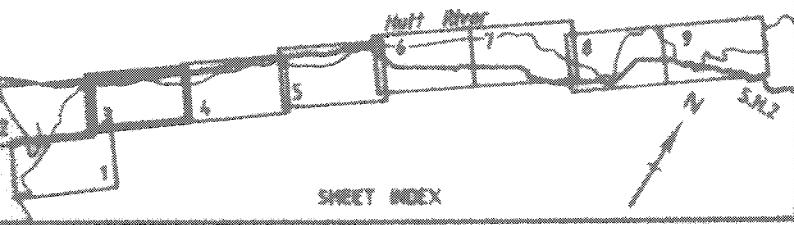
River alignment data from historical maps
and photos held by Rivers Department.
Photographic base from DOSLI
and N.Z. Aerial Mapping.
River alignment overlays produced by
Land Resources Department using WREGGS.
Map data copyright WRC 1990.



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HUTT RIVER FLOOD CONTROL SCHEME REVIEW 1990 HISTORICAL RIVER ALIGNMENTS

Appendix B



SHEET INDEX

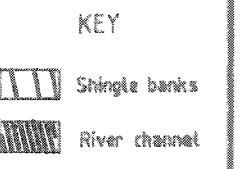
RECTIFIED PHOTO SHEET
The photobase is a half-tone enlargement.
A best mean fit has been obtained from scaling data.
The photographic image is not orthogonal
and some displacement of image may occur
as a result of differences in ground elevations.
Aerial Photography SN 8457 Sheet 20/1/65

1936

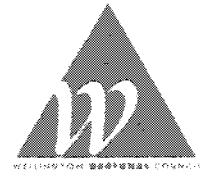
1951

ALIGNMENT I 1936
taken from a non rectified mosaic
of Aerial contact prints.
N.Z. Army 1936

ALIGNMENT II 1951
taken from a rectified mosaic of Aerial contact prints.
N.Z. Aerial Mapping Ltd.
Hastings N.Z. 1951



SHEET 4
HUTT CITY
Tafta



River alignment data from historical maps
and photos held by Rivers Department.
Photographic base from DOSLI
and N.Z. Aerial Mapping.
River alignment overlays produced by
Land Resources Department using WREGGS.
Map data copyright WRC 1998.



SCALE : 1:10,000
100 0 100 200 300 400 500 600 700 800m

<p>Catchment Engineering CONSULTING ENGINEERS Phone (04) 888 928 Fax (04) 888 288</p> <p>HUTT RIVER FLOOD CONTROL SCHEME REVIEW 1990 HISTORICAL RIVER ALIGNMENTS</p>	<p>Appendix B</p>	<p>Hutt River</p> <p>SHZ</p> <p>SHE</p> <p>1 2 3 4 5 6 7 8 9</p> <p>SHEET INDEX</p>	<p>RECTIFIED PHOTO SHEET</p> <p>The photobase is a halftone engraving. A best mean fit has been obtained from scaling data. The photographic image is not orthogonal and some displacement of image may occur as a result of differences in ground elevations.</p> <p>Aerial Photography SH 8457 Plough 2871/85</p>

1967

1974

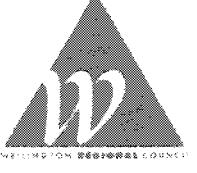
SCALE : 1:10,000
100 0 100 200 300 400 500 600 700 800m

ALIGNMENT I 1967
taken from Aerial contact prints
Aerial Surveys Ltd.
Nelson N.Z. 1967

ALIGNMENT II 1974
taken from Aerial contact prints
N.Z. Aerial Mapping Ltd.
Hastings N.Z. 1974

KEY
 Shingle banks
 River channel

SHEET 4
HUTT CITY
Taita



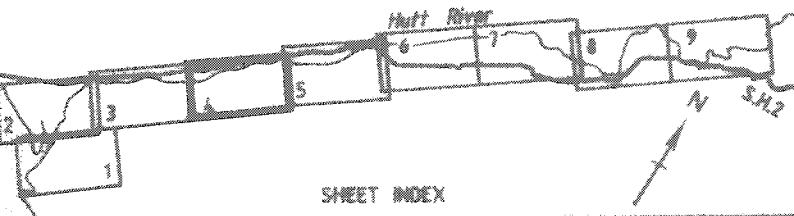
River alignment data from historical maps
and photos held by Rivers Department.
Photographic base from DOSLI
and N.Z. Aerial Mapping.
River alignment overlays produced by
Land Resources Department using WREGIS.
Map data copyright WRC 1998.



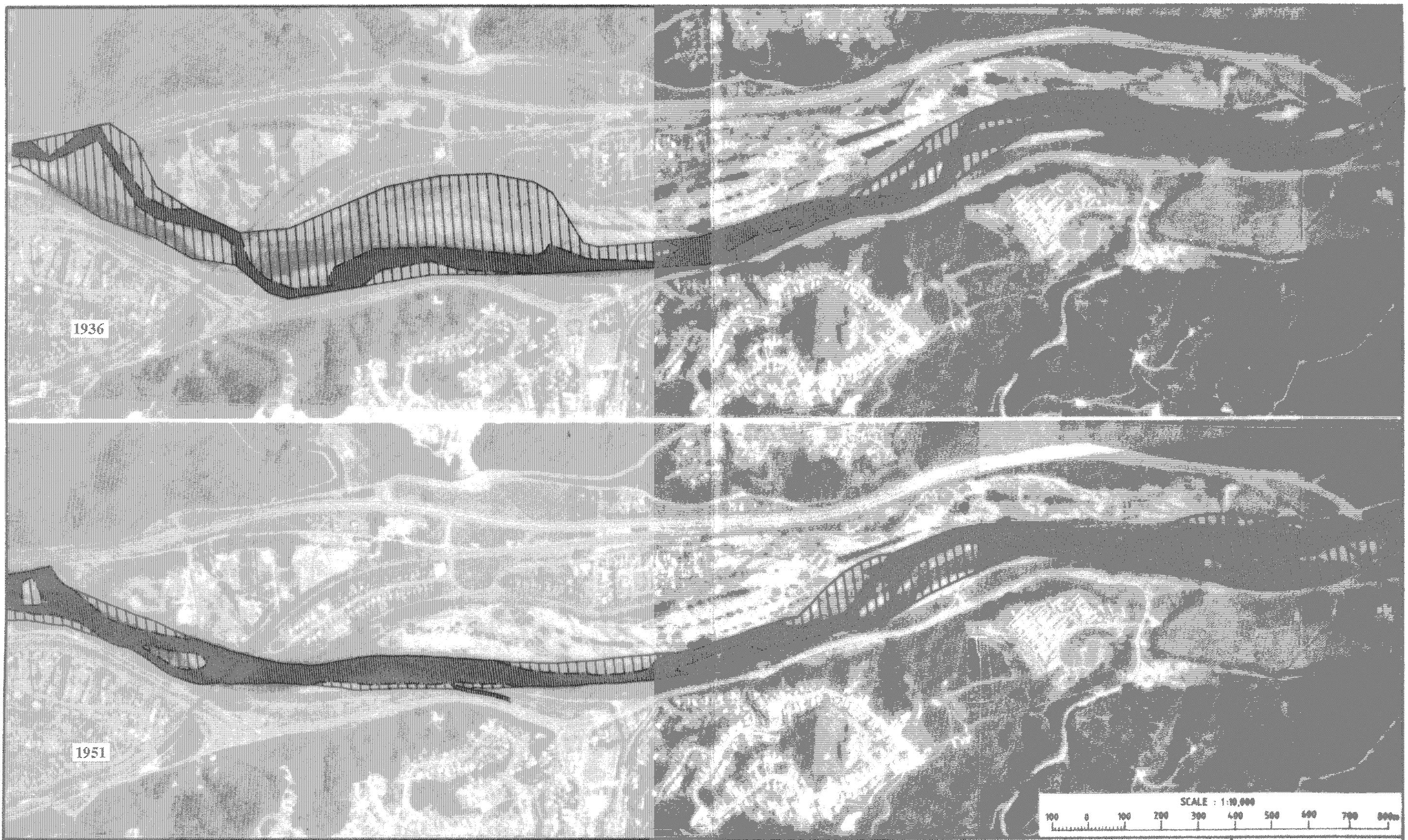

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HUTT RIVER FLOOD CONTROL SCHEME REVIEW 1990 HISTORICAL RIVER ALIGNMENTS

Appendix B



RECTIFIED PHOTO SHEET
The photobase is a halftone enlargement.
A best mean fit has been obtained from scaling data.
The photographic image is not orthogonal
and some displacement of image may occur
as a result of differences in ground elevations.
Aerial Photography SH 8457 Flown 28/1/95



ALIGNMENT I 1936
taken from a non rectified mosaic
of Aerial contact prints.
N.Z. Army 1936

ALIGNMENT II 1951
taken from a rectified mosaic of Aerial contact prints.
N.Z. Aerial Mapping Ltd.
Hastings N.Z. 1951

KEY
 Shingle banks
 River channel

SHEET 5
HUTT CITY
Taita Gorge



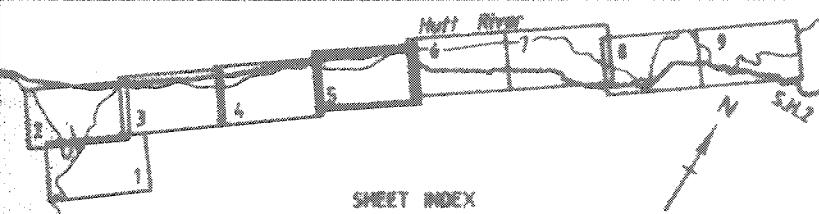
River alignment data from historical maps
and photos held by Rivers Department.
Photographic base from DOSLI
and N.Z. Aerial Mapping.
River alignment overlays produced by
Land Resources Department using WREGIS.
Map data copyright WRC 1990.



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HUTT RIVER FLOOD CONTROL SCHEME REVIEW 1990 HISTORICAL RIVER ALIGNMENTS

Appendix B



RECTIFIED PHOTO SHEET
The photograph is a halftone enlargement.
A best mean fit has been obtained from scaling data.
The photographic image is not orthogonal
and some displacement of image may occur
as a result of differences in ground elevations.
Aerial Photography SN 8457 Flown 28/1/85

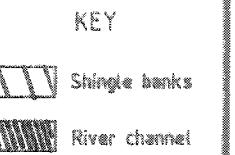
1967

1974

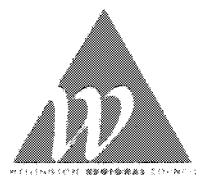
SCALE : 1:10,000
 100 0 100 200 300 400 500 600 700 800m

ALIGNMENT I 1967
 taken from Aerial contact prints
 Aerial Surveys Ltd.
 Nelson N.Z. 1967

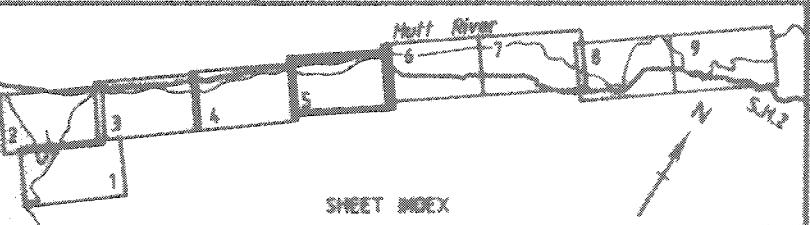
ALIGNMENT II 1974
 taken from Aerial contact prints
 N.Z. Aerial Mapping Ltd.
 Hastings N.Z. 1974

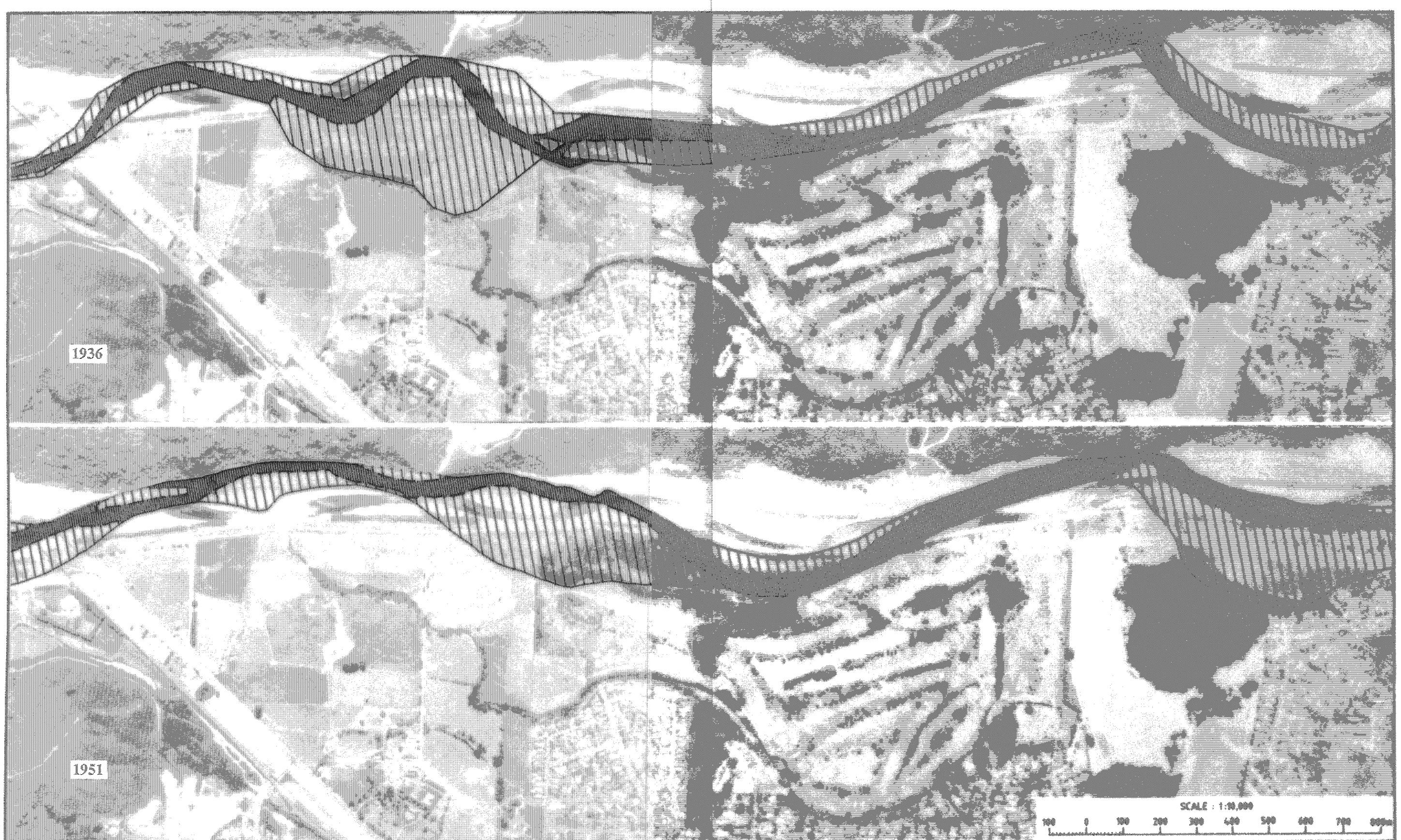


SHEET 5
 HUTT CITY
 Taita Gorge



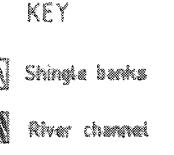
River alignment data from historical maps
 and photos held by Rivers Department.
 Photographic base from DOSLI
 and N.Z. Aerial Mapping.
 River alignment overlays produced by
 Land Resources Department using WREGIS.
 Map data copyright WRC 1990.



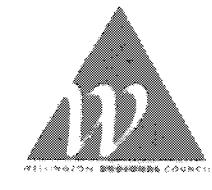


ALIGNMENT I 1936
taken from a non rectified mosaic
of Aerial contact prints.
N.Z. Army 1936

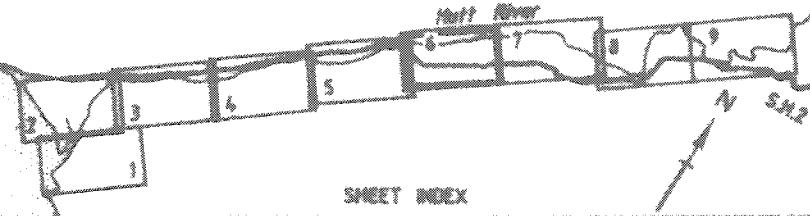
ALIGNMENT II 1951
taken from a rectified mosaic of Aerial contact prints.
N.Z. Aerial Mapping Ltd.
Hastings N.Z. 1951

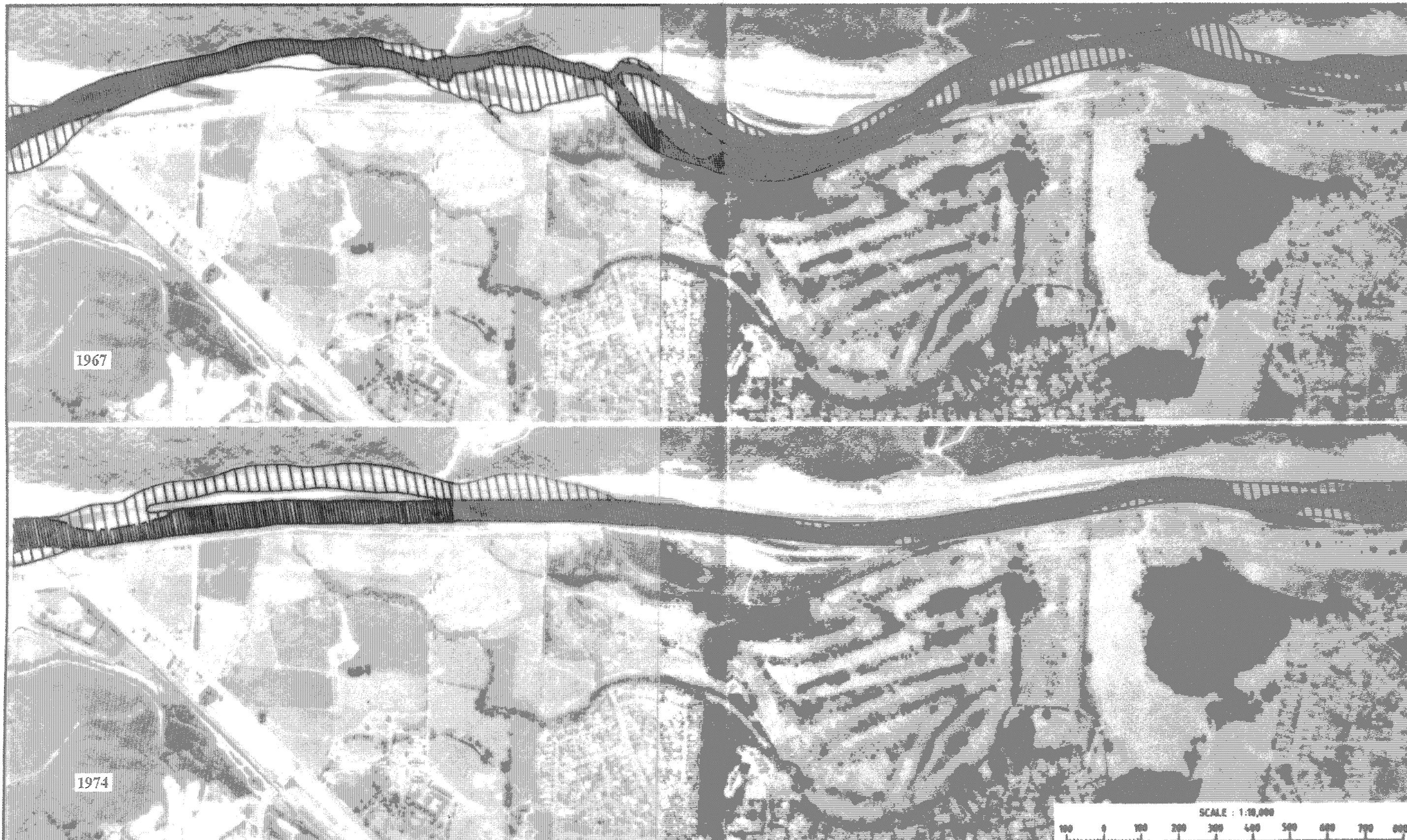


SHEET 6
UPPER HUTT CITY
Silverstream to
Barton's Bush



River alignment data from historical maps
and photos held by Rivers Department.
Photographic base from DOSL
and N.Z. Aerial Mapping.
River alignment overlays produced by
Land Resources Department using WREGIS.
Map data copyright WRC 1990.





1967

1974

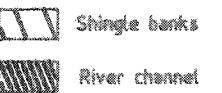
SCALE : 1:10,000

100 1 100 200 300 400 500 600 700 800

ALIGNMENT I 1967
taken from Aerial contact prints
Aerial Surveys Ltd.
Nelson N.Z. 1967

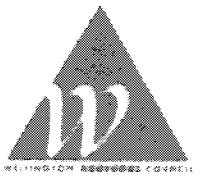
ALIGNMENT II 1974
taken from Aerial contact prints
N.Z. Aerial Mapping Ltd.
Hastings N.Z. 1974

KEY

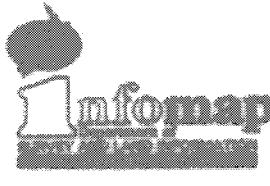


SHEET 6

UPPER HUTT CITY
Silverstream to
Barton's Bush



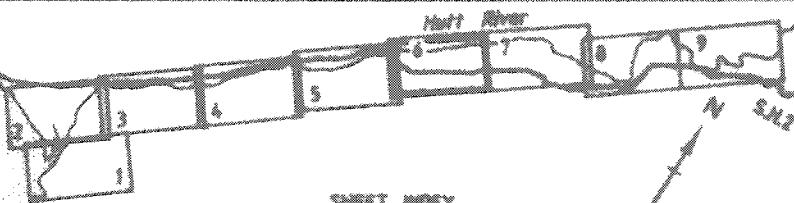
River alignment data from historical maps
and photos held by Rivers Department.
Photographic base from DSBLI
and RZ. Aerial Mapping.
River alignment overlays produced by
Land Resources Department using WRCSSS.
Map data copyright WRC 1993.



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**HUTT RIVER FLOOD CONTROL
SCHEME REVIEW 1990
HISTORICAL RIVER ALIGNMENTS**

Appendix B

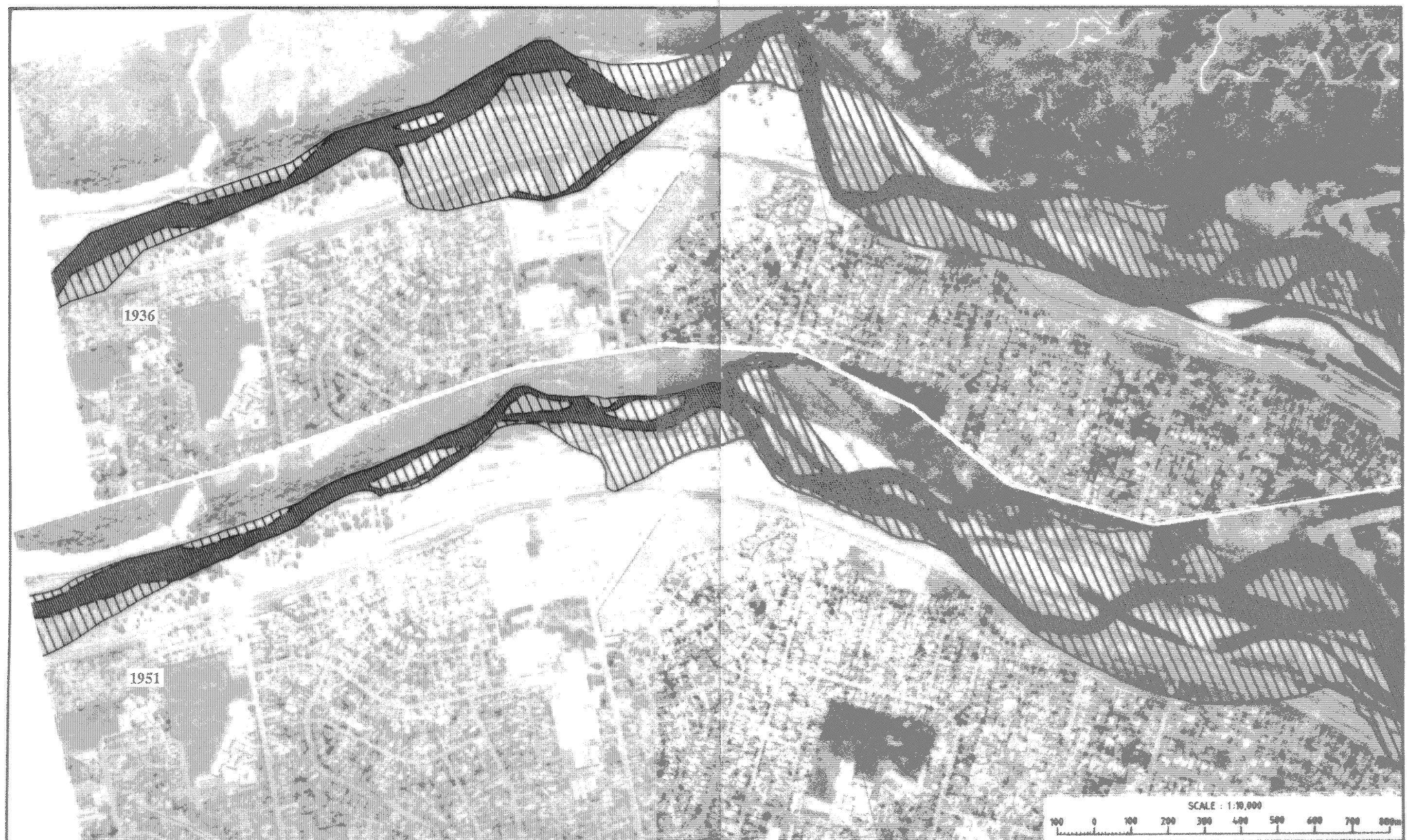


SHEET INDEX

ORTHOPHOTO SHEET
This orthophoto is a differentially
rectified aerial photo, the photo detail
conforms to normal mapping accuracy.

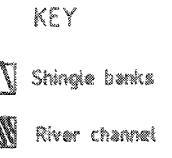
Level Dates : Wellington Datum 1953
New City Datum (M.S.L. 0)

Orthophoto from Aerial Survey No. SH 4179 Plan 16/1700

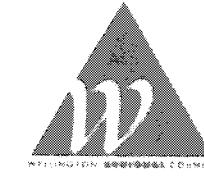


ALIGNMENT I 1936
taken from a non rectified mosaic
of Aerial contact prints.
N.Z. Army 1936

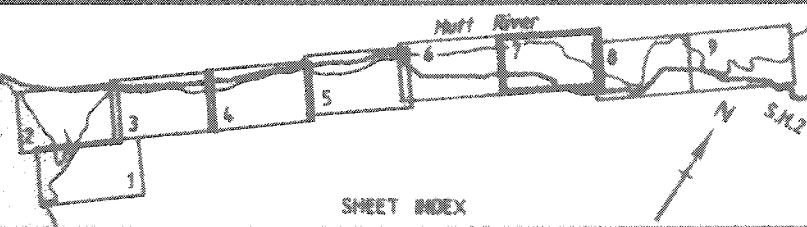
ALIGNMENT II 1951
taken from a rectified mosaic of Aerial contact prints.
N.Z. Aerial Mapping Ltd.
Hastings N.Z. 1951



SHEET 7
UPPER HUTT CITY
Moonshine to Totara Park



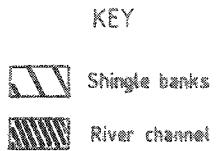
River alignment data from historical maps
and photos held by Rivers Department.
Photographic base from DOSLI
and N.Z. Aerial Mapping.
River alignment overlays produced by
Land Resources Department using WREGGS.
Map data copyright WRC 1990.



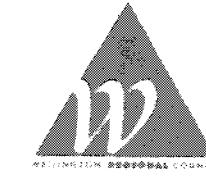


ALIGNMENT I 1967
taken from Aerial contact prints
Aerial Surveys Ltd.
Nelson N.Z. 1967

ALIGNMENT II 1974
taken from Aerial contact prints
N.Z. Aerial Mapping Ltd.
Hastings N.Z. 1974



SHEET 7
UPPER HUTT CITY
Moonshine to
Totara Park



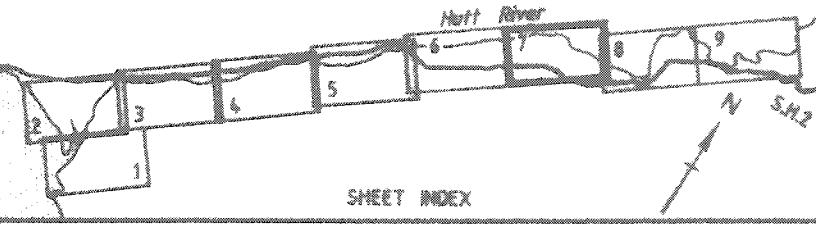
River alignment data from historical maps
and photos held by Rivers Department.
Photographic base from DOSLI
and N.Z. Aerial Mapping.
River alignment overlays produced by
Land Resources Department using WREGENS.
Map data copyright WRC 1990.



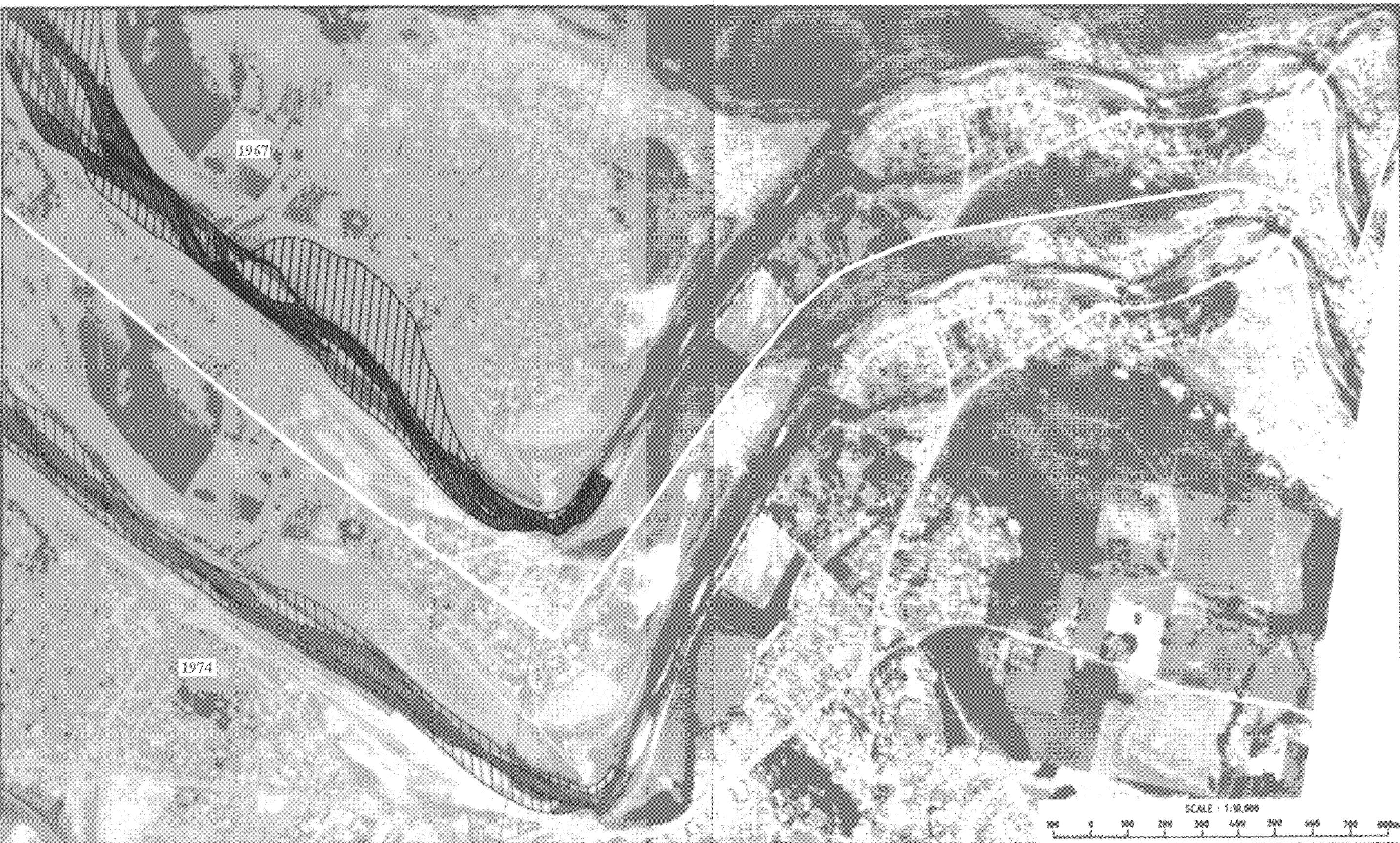
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HUTT RIVER FLOOD CONTROL SCHEME REVIEW 1990 HISTORICAL RIVER ALIGNMENTS

Appendix B

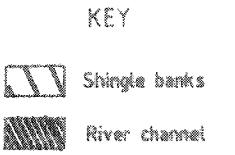


ORTHO PHOTO SHEET
This orthophotomap is a differentially
rectified aerial photo, the photo detail
conforms to normal mapping accuracies.
Level Datum : Wellington Datum 1953
New City Datum (M.S.L. 0)
Orthophoto from Aerial Survey No. SN 8909 Flown 16/1/88.

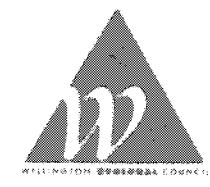


ALIGNMENT I 1967
taken from Aerial contact prints
Aerial Surveys Ltd.
Nelson N.Z. 1967

ALIGNMENT II 1974
taken from Aerial contact prints
N.Z. Aerial Mapping Ltd.
Hastings N.Z. 1974



SHEET 8
UPPER HUTT CITY
Maoribank



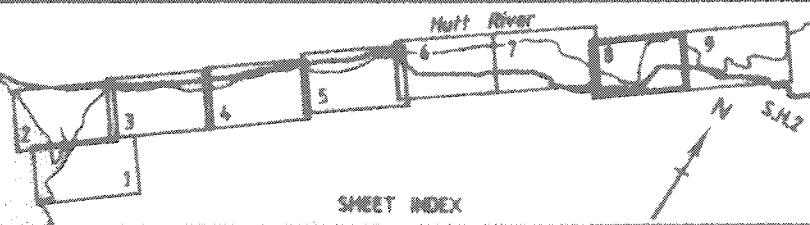
River alignment data from historical maps
and photos held by Rivers Department.
Photographic base from DOSLI
and N.Z. Aerial Mapping.
River alignment overlays produced by
Land Resources Department using WREGGIS.
Map data copyright WRC 1990.



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HUTT RIVER FLOOD CONTROL SCHEME REVIEW 1990 HISTORICAL RIVER ALIGNMENTS

Appendix B



ORTHO PHOTO SHEET
This orthophotomap is a differentially
rectified aerial photo, the photo detail
conforms to normal mapping accuracies.
Level Datum : Wellington Datum 1953
New City Datum (M.S.L. 0)
Orthophoto from Aerial Survey No. SH 2999 Flown 16/1/86.

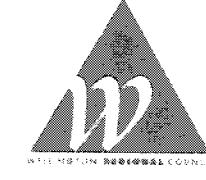


ALIGNMENT I 1936
taken from a non rectified mosaic
of Aerial contact prints.
N.Z. Army 1936

ALIGNMENT II 1951
taken from a rectified mosaic of Aerial contact prints.
N.Z. Aerial Mapping Ltd.
Hastings N.Z. 1951

KEY
 Shingle banks
 River channel

SHEET 8
UPPER HUTT CITY
Mairibank



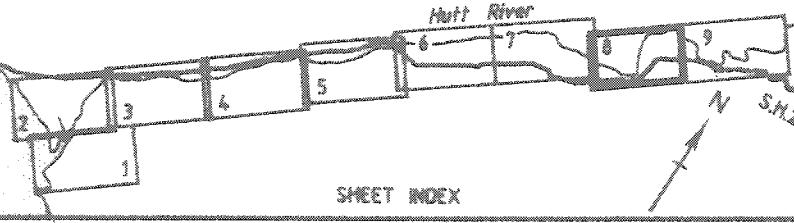
River alignment data from historical maps
and photos held by Rivers Department.
Photographic base from DOSLI
and N.Z. Aerial Mapping.
River alignment overlays produced by
Land Resources Department using WREGGIS.
Map data copyright WRC 1990.



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HUTT RIVER FLOOD CONTROL SCHEME REVIEW 1990 HISTORICAL RIVER ALIGNMENTS

Appendix B



SHEET INDEX

ORTHO PHOTO SHEET
This orthophotomap is a differentially
rectified aerial photo, the photo detail
conforms to normal mapping accuracies.
Level Datum : Wellington Datum 1953
New City Datum (M.S.L. 0)
Orthophoto from Aerial Survey No. SN 8989 Flown 16/1/80.