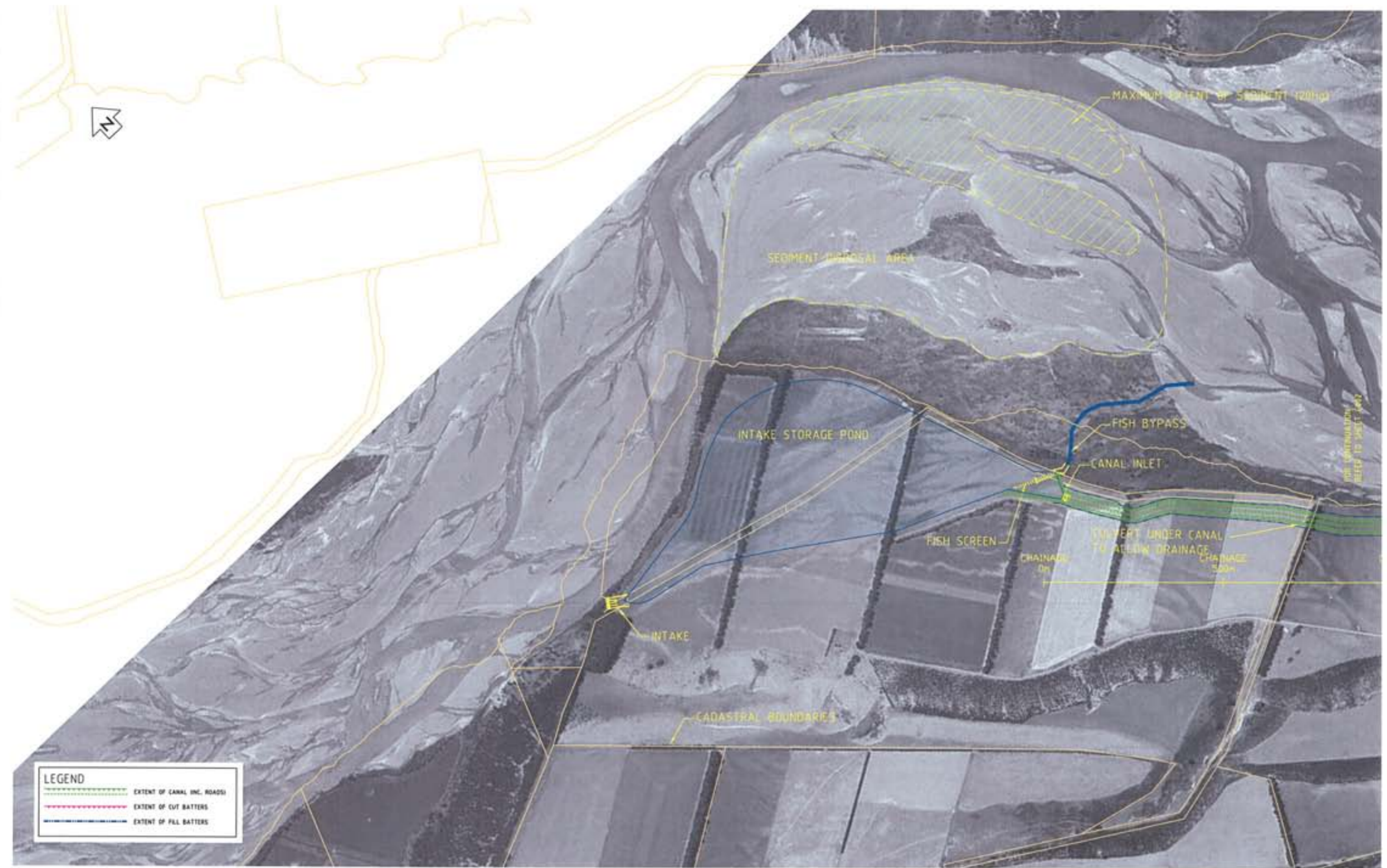


ORIGINAL SIZE A1
DO NOT SCALE - IF IN DOUBT, ASK



LEGEND	
	EXTENT OF CANAL INC. ROADS
	EXTENT OF CUT BATTERS
	EXTENT OF FILL BATTERS

NOT FOR CONSTRUCTION

REV	AMENDMENTS	INITIAL	DATE	CHECKED	DATE	APPROVED
1	MAXIMUM EXTENT OF SEDIMENT AREA					
2	LEGEND DETAILS UPDATE					

TAB/DWG : Layout1 / 21114701_C001.dwg
 SERVER : CRISTCHURCH\INZCH2585
 XREFS : X_Paving, X_Batters, X_Works, X_Intake, X_Fish Screen, X_Weirs
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FIELDBOOK	Name	Date
SURVEYED	Will Clive	--
DESIGNED	S. WOODS	08-05
DRAWN	Richard Neughton	08-05
CHECKED		
APPROVED		



ASHBURTON COMMUNITY WATER TRUST
 RAKAIA TERRACE HYDRO SCHEME
 PLAN - SHEET 1 OF 5

FOR CONSENT		
Date Drawn	30/07/2008	
Date Checked		
SCALE (A1) 1 : 5,000		
Job No.	Sheet No.	Rev.
Z1114.701	C001	F

ORIGINAL SIZE AT 1:5000 SCALE - IF IN DOUBT, ASK



LEGEND	
	EXTENT OF CANAL (INC. ROADS)
	EXTENT OF CUT BATTERS
	EXTENT OF FILL BATTERS

NOT FOR CONSTRUCTION

FOR CONSENT

REV	DESCRIPTION	INITIAL	DATE	INITIAL	DATE
1	EXTENT OF EMERGENCY OVERFLOW ADDED				
2	LEGEND DETAILS UPDATED				
APPENDICES					

TAB/DWG SERVER	Layout1 / Z1114701_C002.dwg C:\GIS\1\CHURCH\IN2\CH2580
XREFS	X_Parcel, X_Borders, X_Works, X_Drop_Type, X_Drop_Plan, X_Tailrace Fish Screen, X...
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FIELDBOOK	
Name	Date
Will Clem	---
S.WOODS	08-05
Richard Houghton	08-05

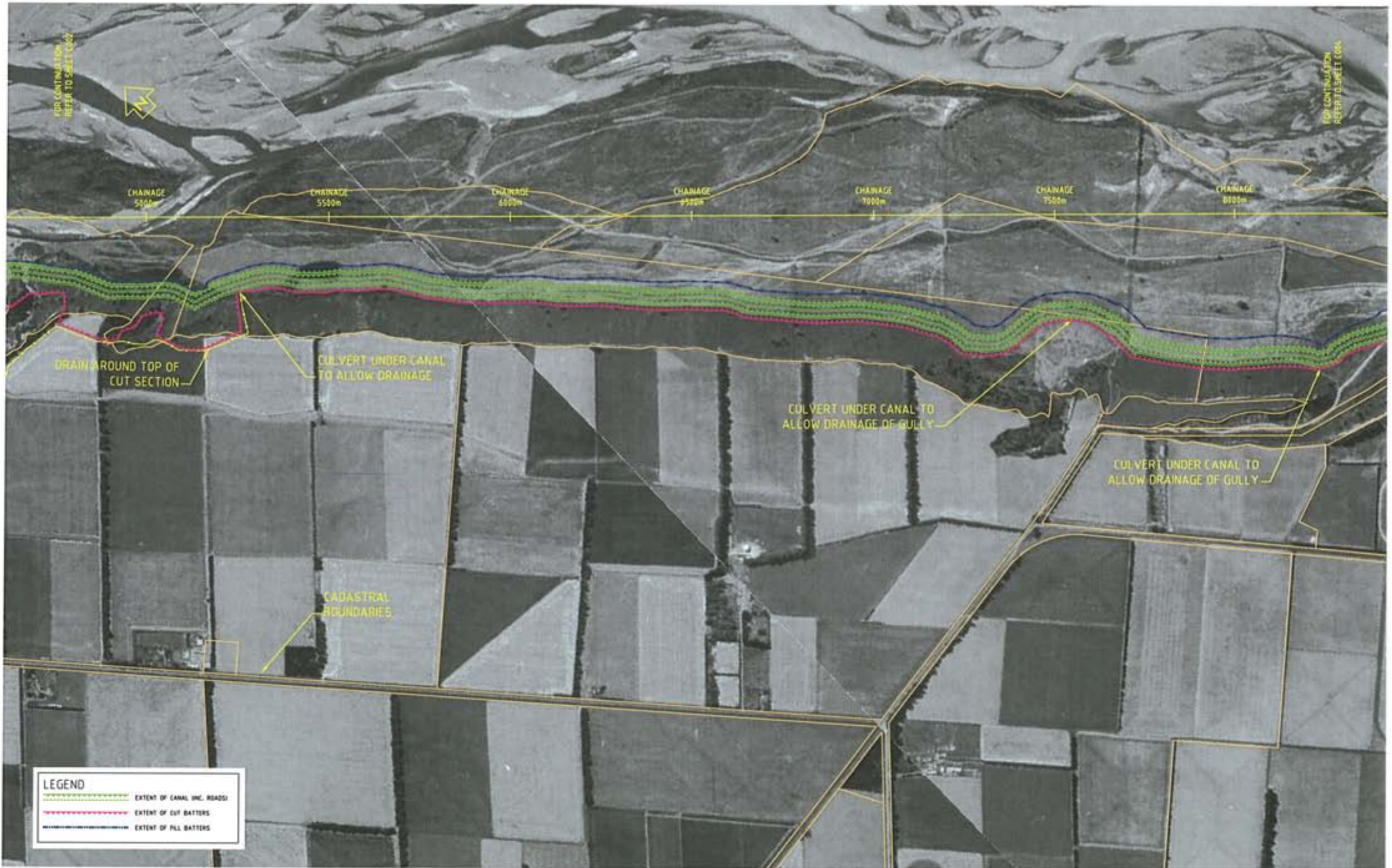
SURVEYED	---
DRAWN	Richard Houghton
CHECKED	---
APPROVED	---



ASHBURTON COMMUNITY WATER TRUST
RAKAIYA TERRACE HYDRO SCHEME
PLAN - SHEET 2 OF 5

Scale	1 : 5,000
Date	30/07/2008
AS No.	Z1114701
Sheet No.	C002
Rev.	F

DO NOT SCALE - IF IN DOUBT, ASK



LEGEND	
	EXTENT OF CANAL INC. ROADS
	EXTENT OF CUT BATTERS
	EXTENT OF FILL BATTERS

NOT FOR CONSTRUCTION

REV	DATE	BY	CHKD	APPD	DESCRIPTION

TAB/DWG: Layout1 / Z1114701_003.dwg
 SERVER: CHRISTCHURCH\INZCHE2505
 XREFS: X_Parcel, X_Borders, X_Works, X_Images

FIELDBOOK	Name	Date
SURVEYED	Will Climo	08-05
DESIGNED	S. WOODS	08-05
DRAWN	Richard Houghton	08-05
CHECKED		
APPROVED		

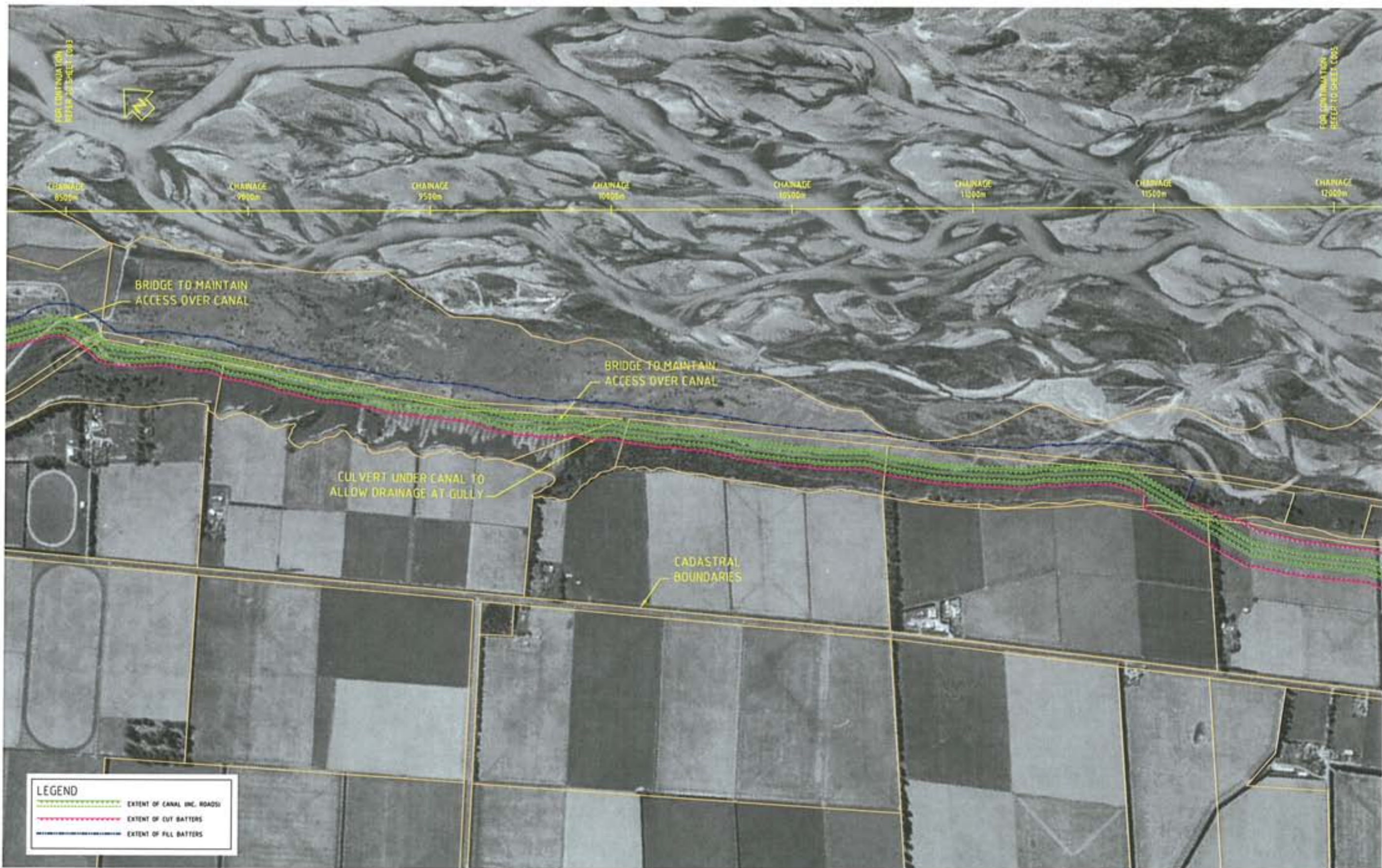


ASHBURTON COMMUNITY WATER TRUST
 RAKAIA TERRACE HYDRO SCHEME
 PLAN - SHEET 3 OF 5

FOR CONSENT		
Date Issued	11/02/2008	
Scale	1:5,000	
Draw No.	Z1114701	Sheet No. C003
Rev.		E

\\msch26\proj\proj\08\01\PROJECTS\Z11000\Z11147 - Rakaia Hydro\PCAD\Z1114701_003.dwg

DO NOT SCALE - IF IN DOUBT, ASK



LEGEND	
	EXTENT OF CANAL INC. ROADS
	EXTENT OF CUT BATTERS
	EXTENT OF FILL BATTERS

NOT FOR CONSTRUCTION

REV	DESCRIPTION	INITIALS	DATE

TAB/DWG	Layout1 / Z1114701_C004.dwg
SERVER	CHRISTCHURCH\RDZHC2549
XREFS	R_Borders, R_Works, R_Images, R_Parcel
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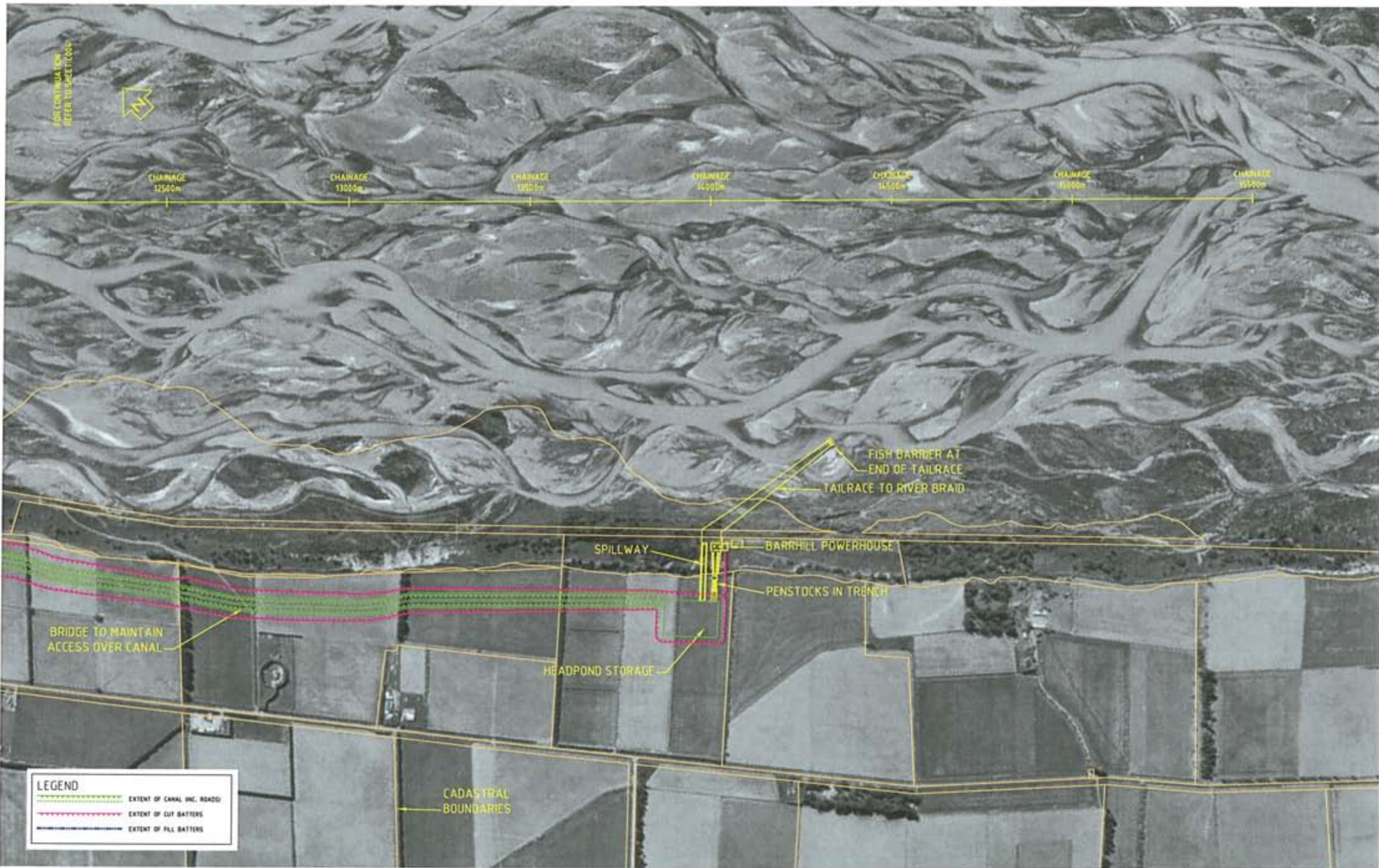
FIELDBOOK	Name	Date
SURVEYED	Will Climo	---
DESIGNED	S. WOODS	08-05
DRAWN	Richard Houghton	08-05
CHECKED		
APPROVED		



ASHBURTON COMMUNITY WATER TRUST
RAKAIKA TERRACE HYDRO SCHEME
PLAN - SHEET 4 OF 5

FOR CONSENT		
Date Issued	11/02/2008	
SCALE'S (A1)	1 : 5,000	
Draw No.	Z1114 701	Sheet No. C004
Rev.		E

ORIGINAL SIZE A1
DO NOT SCALE - IF IN DOUBT, ASK



LEGEND	
	EXTENT OF CANAL INC. ROADS
	EXTENT OF CUT BATTERS
	EXTENT OF FILL BATTERS

NOT FOR CONSTRUCTION

REV	DESCRIPTION	INITIALS	DATE

TAB/DWG : Layout1 / Z1114701_C005.dwg
 SERVER : GWS\GCHURCH\NZCH\2580
 XREFS : X_Borders, X_Works, X_Images, X_Draw_Boys, X_Drop_Pit_plan, X_Tailrace Fish Screen, X_P
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FIELD BOOK	Name	Date
SURVEYED	Will Elms	08-05
CHECKED	S Woods	08-05
DRAWN	Richard Houghton	08-05
APPROVED		



ASHBURTON COMMUNITY WATER TRUST
 RAKAIA TERRACE HYDRO SCHEME
 PLAN - SHEET 5 OF 5

FOR CONSENT		
Date Stamp	11/02/2008	
SCALE (A1)	1 : 5,000	
Job No.	Draw No.	Rev.
Z1114 701	C005	E

ORIGINAL SIZE AT 1:2500 SCALE - P. 000001 - A34



PLAN VIEW BCI SCHEME
SCALE 1:2500



PLAN VIEW ACWT UPGRADE
SCALE 1:2500

NOT FOR CONSTRUCTION

REV	FOR CONSENT USE	APPROVED	DATE	DATE

TAB/DWG SERVER	Layout1 / 27th TEL_C001.dwg CHRIS CHURCH 04/04/2008
XREFS	X_Panels, X_Borders, X_Works, X_Intake, X_Fish Screen, X_Images
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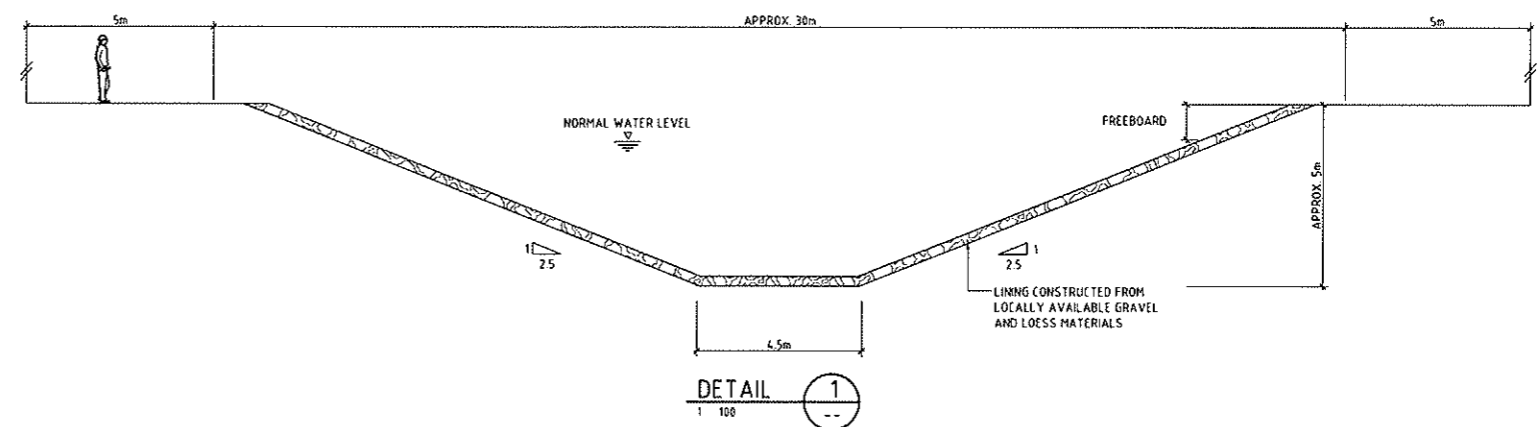
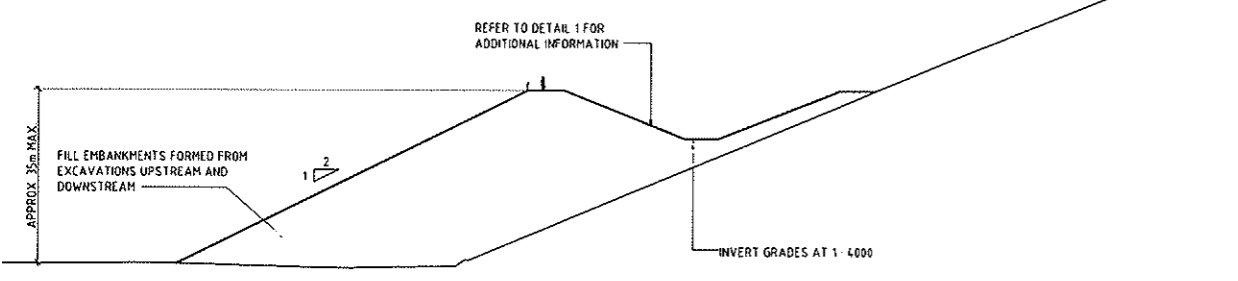
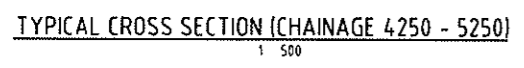
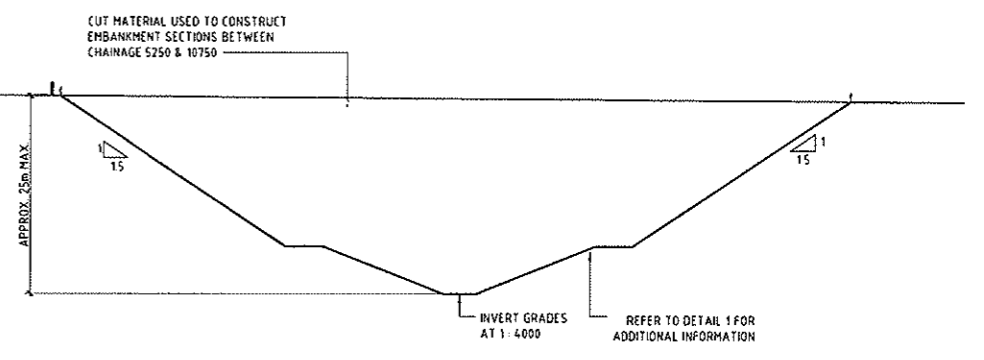
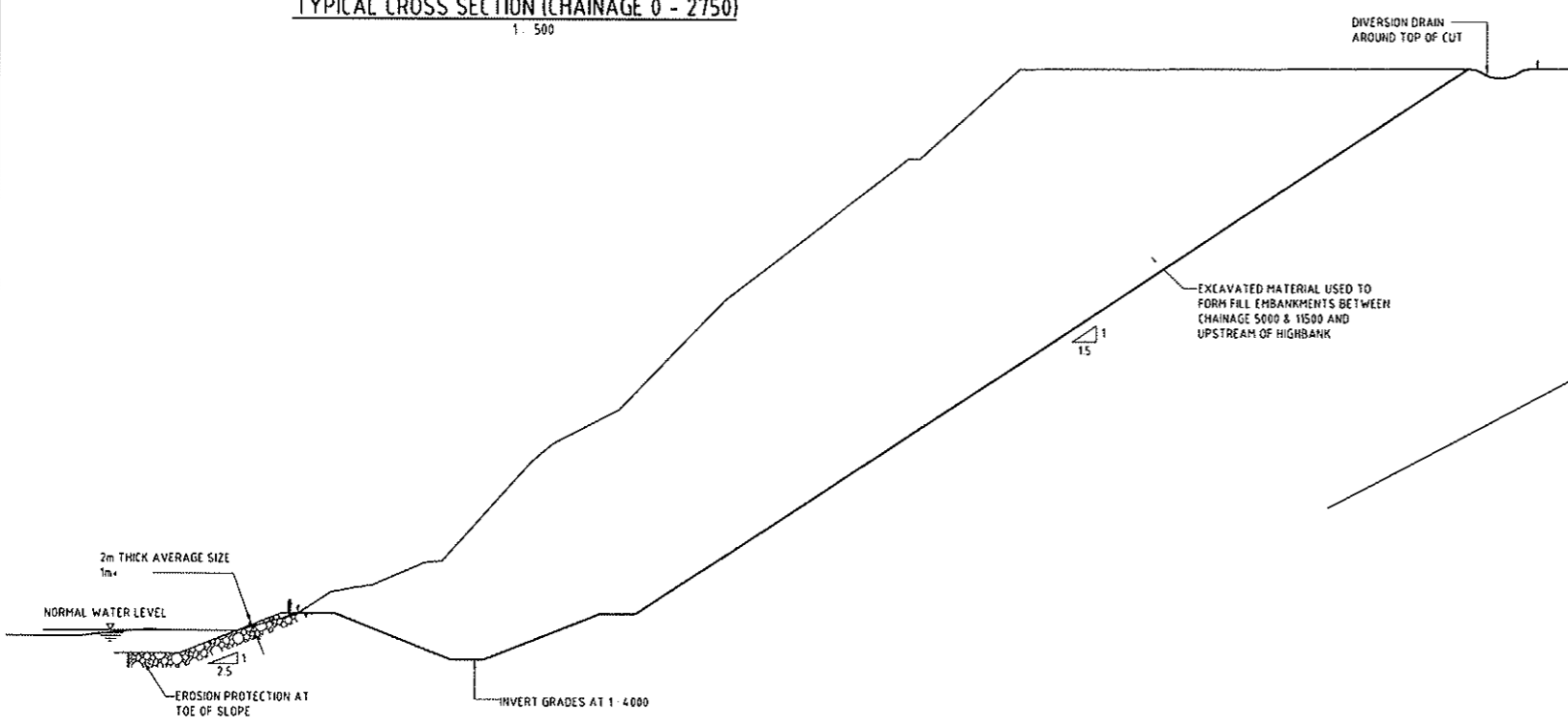
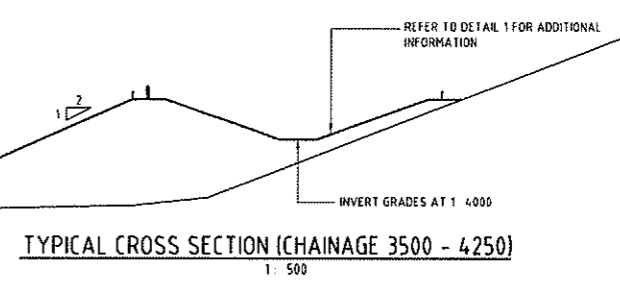
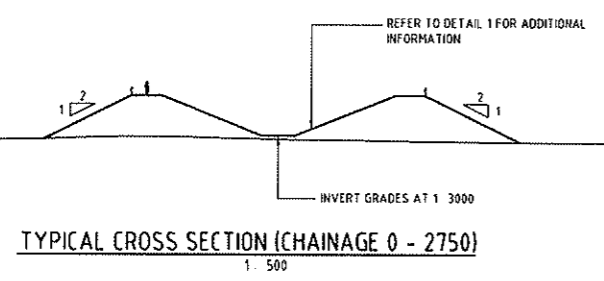
FIELDBOOK	Name	Date
SURVEYED	M. C. PRO	06-08
DESIGNED	S. WOODS	06-08
DRAWN	J. CHANDLER	06-08
CHECKED		
APPROVED		



ASHBURTON COMMUNITY WATER TRUST
RAKAIKA TERRACE HYDRO SCHEME
POSSIBLE ACWT UPGRADE TO BCI SCHEME INTAKE

FOR CONSENT
Date Stamp: 31.07.2008
SCALE(S) 1:2500
Sheet No: Z1114.701
Rev: C006
Rev: A

DO NOT SCALE - IF IN DOUBT, ASK



TYPICAL CANAL DIMENSIONS AND LINING

NOT FOR CONSTRUCTION

REV	AMENDMENTS	INITIAL	DATE	CHECKED	APPROVED

TAB/DWG	Layout1 / Z1114701_C010.dwg
SERVER	CHRISTCHURCH (NZCH2501)
XREFS	
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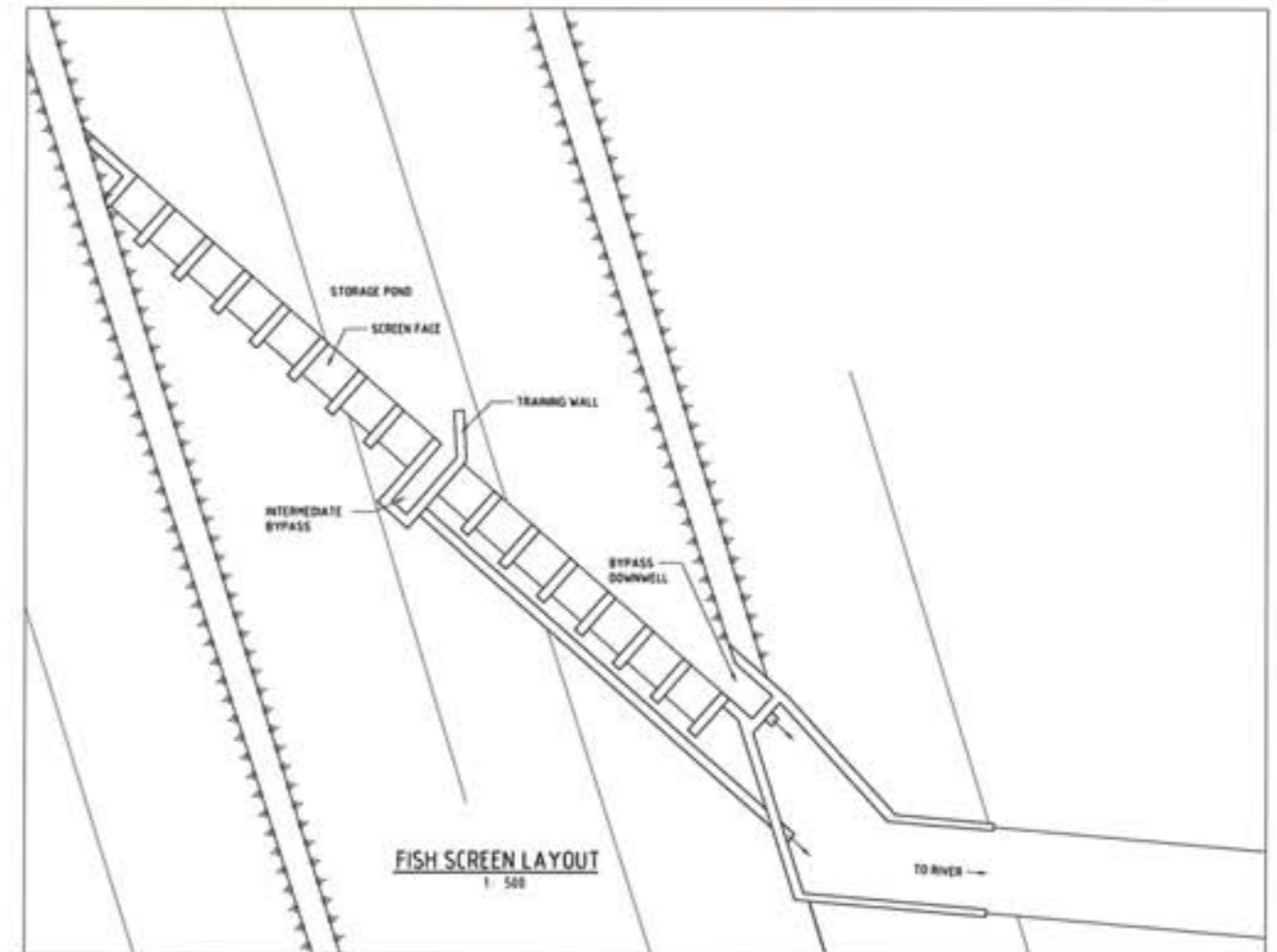
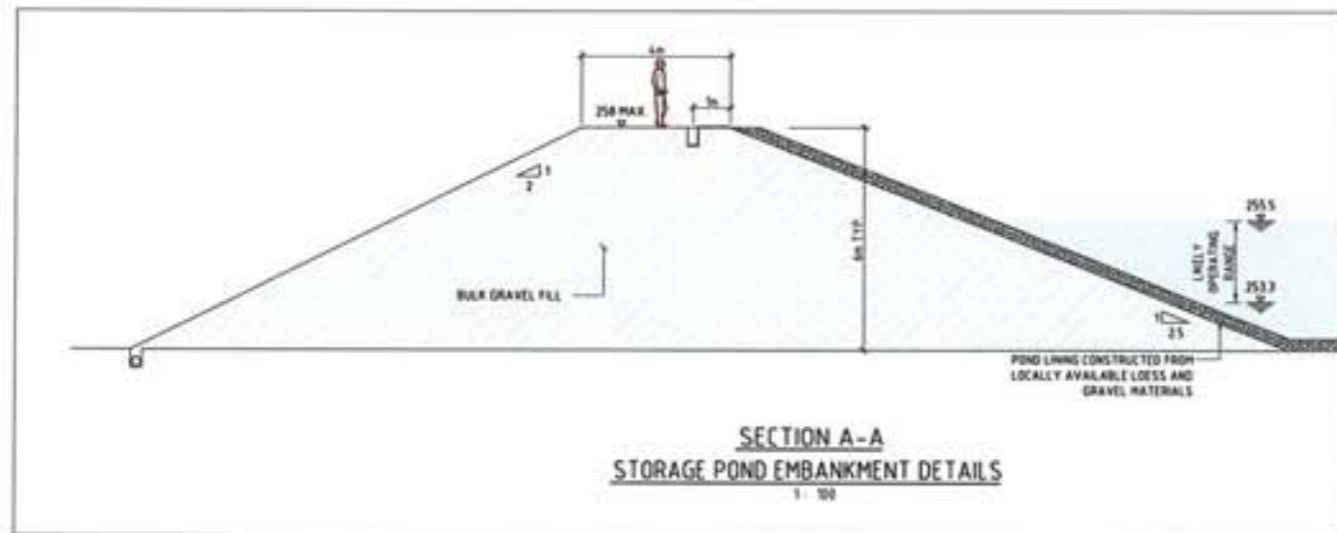
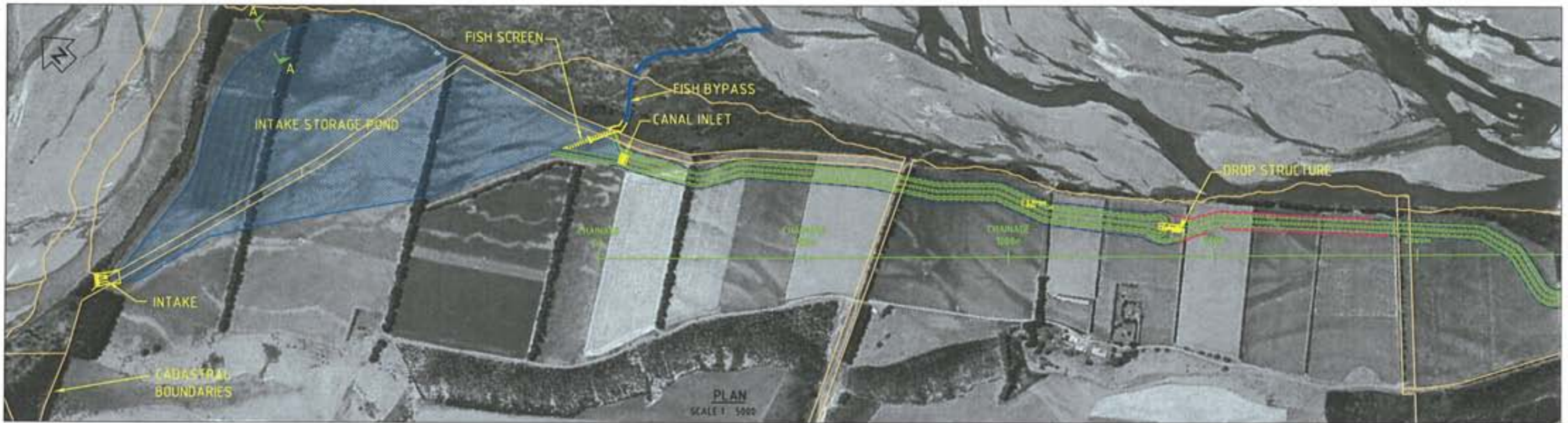
FIELDBOOK	
Name	Date
SURVEYED	Will Climo
DESIGNED	S. WOODS
DRAWN	Richard Houghton
CHECKED	
APPROVED	



RAKAIJA COMMUNITY WATER TRUST
RAKAIJA TERRACE HYDRO SCHEME
TYPICAL SECTIONS

FOR CONSENT
Date Stamp: 08/02/2008
SCALES (A1): 1:500 / 1:100
Job No: Z1114701
Sheet No: C010
Rev: E

ORIGINAL SIZE A1
DO NOT SCALE - IF DOUBT, ASK



NOT FOR CONSTRUCTION

REV	AMENDMENTS	INITIAL	DATE	INITIAL	DATE
		CHECKED		APPROVED	

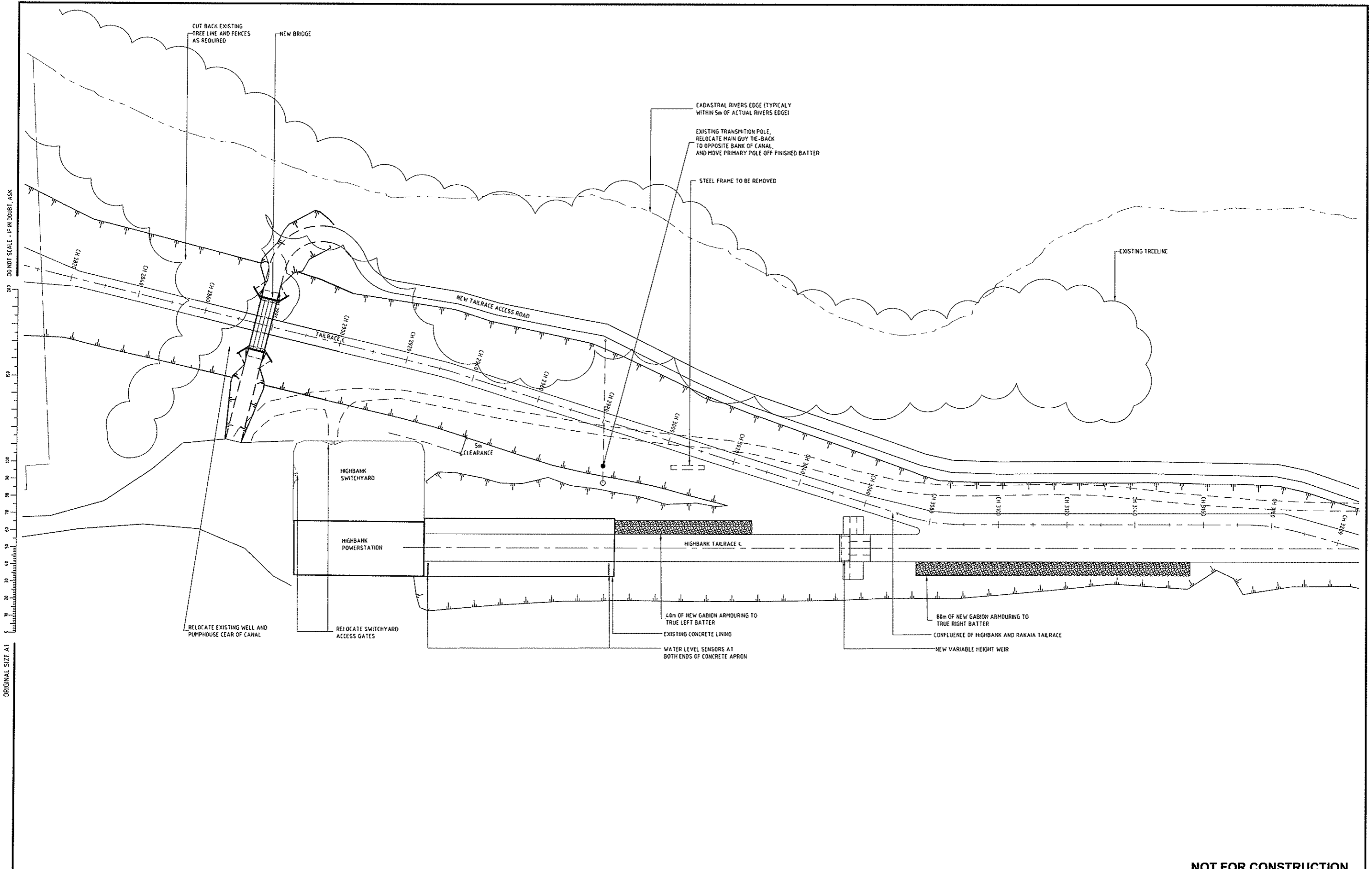
TAB/DWG: Layout1 / Z1114701_C011.dwg
 SERVER: DWG1CHURCH\INZCH2540
 XREFS: X_Marks, X_Images, X_Intake, X_Fish Screen, X_Drop, X_Bypass-Intake, X_Drop_Pit, X_...
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FIELDBOOK	Name	Date
SURVEYED	Will Come	---
DESIGNED	S. WOODS	08-05
DRAWN	Richard Houghton	08-05
CHECKED		
APPROVED		



ASHBURTON COMMUNITY WATER TRUST
 RAKAIA TERRACE HYDRO SCHEME
INTAKE STORAGE POND DETAILS

Client Name	FOR CONSENT		
Date Issued	12/11/2007		
SCALE(S) AS NOTED			
Job No.	Draw No.	Rev.	
Z1114 701	C011	B	



NOT FOR CONSTRUCTION

REV	AMENDMENTS	INITIAL	DATE CHECKED	INITIAL	DATE APPROVED

TAB/DWG : Layout1 / Z1114701_C012.dwg
 SERVER : CHRISTCHURCH (NZCHC2501)
 XREFS : X_Highbank_Bridge, X_Cadastral

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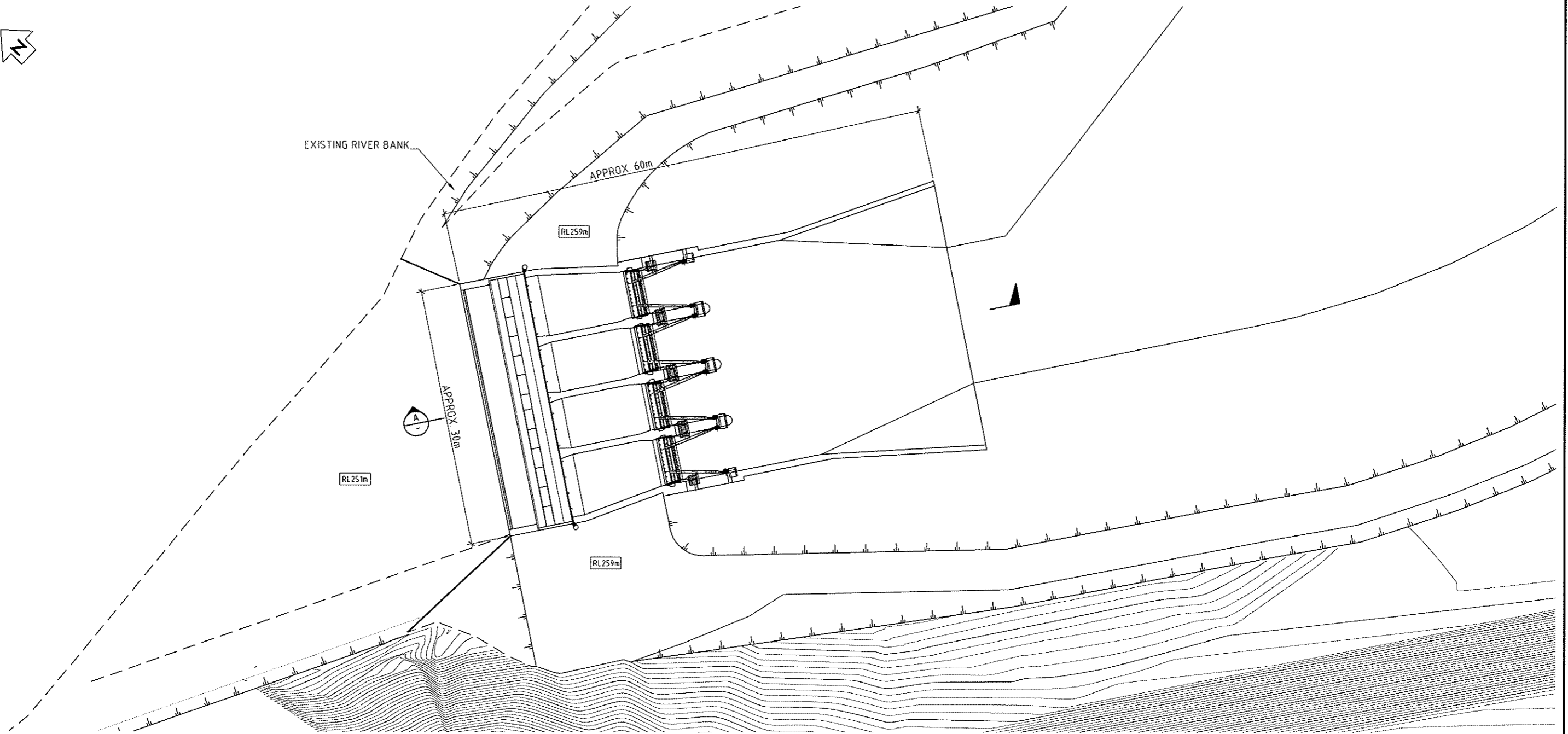
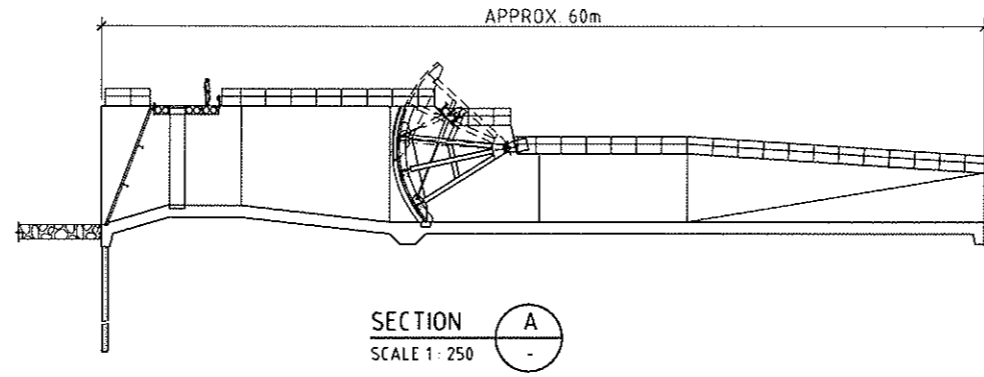
FIELDBOOK		
Name	Date	
SURVEYED	Will Climo	--
DESIGNED	Bryan E Peters	08-07
DRAWN	Richard Houghton	08-07
CHECKED		
APPROVED		



ASHBURTON COMMUNITY WATER TRUST
 RAKAIA TERRACE HYDRO SCHEME
**HIGHBANK
 SITE PLAN**

Status Stamp	FOR CONSENT		
Date Stamp	18/02/2008		
SCALES (A1)	1 : 500	Sheet No.	Rev
Z1114701	C012	A	

ORIGINAL SIZE A1 DO NOT SCALE - IF IN DOUBT, ASK



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REV	AMENDMENTS	INITIAL	DATE	INITIAL	DATE
		CHECKED		APPROVED	

TAB/DWG : Layout1 / Z1114701_C020.dwg
 SERVER : CHRISTCHURCH (NZCH2501)
 XREFS : X_Earthworks, X_Contours, X_intake, X_intake

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FIELDBOOK		
	Name	Date
SURVEYED	Will Climo	--
DESIGNED	S.WOODS	08-05
DRAWN	Richard Houghton	08-05
CHECKED		
APPROVED		

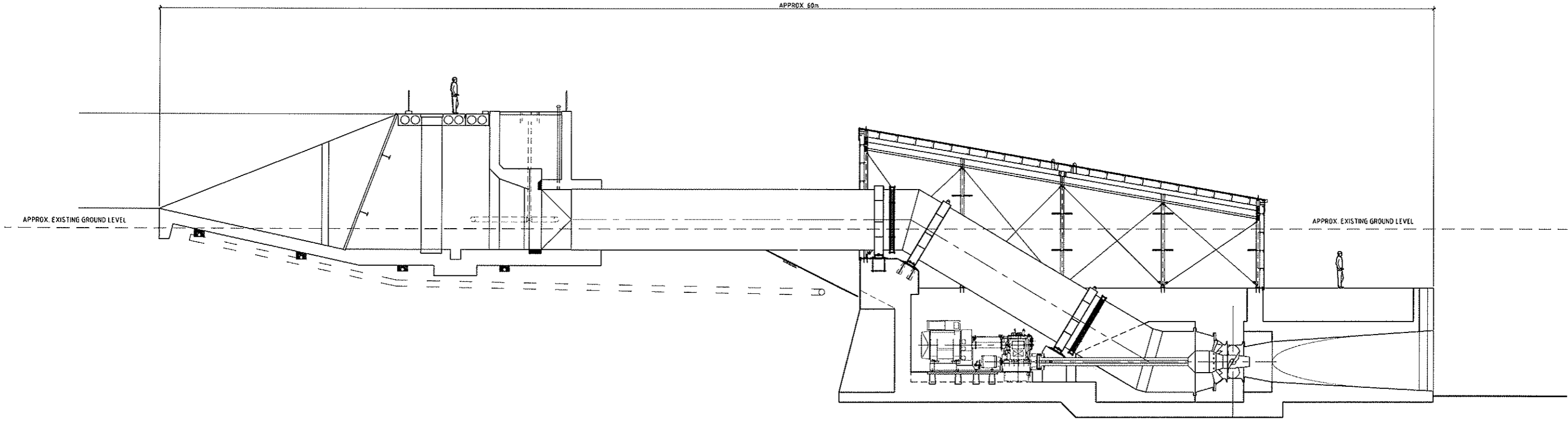


ASHBURTON COMMUNITY WATER TRUST
 RAKAIA TERRACE HYDRO SCHEME
 SCHEME INTAKE STRUCTURE

Stamp	FOR CONSENT		
Date Stamp	12/11/2007		
SCALES (A1)	1:250	Sheet No	Rev.
	Z1114701	C020	A

ORIGINAL SIZE A1
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APPROX 60m



NOT FOR CONSTRUCTION

REV	AMENDMENTS	INITIAL	DATE	INITIAL	DATE
		CHECKED		APPROVED	

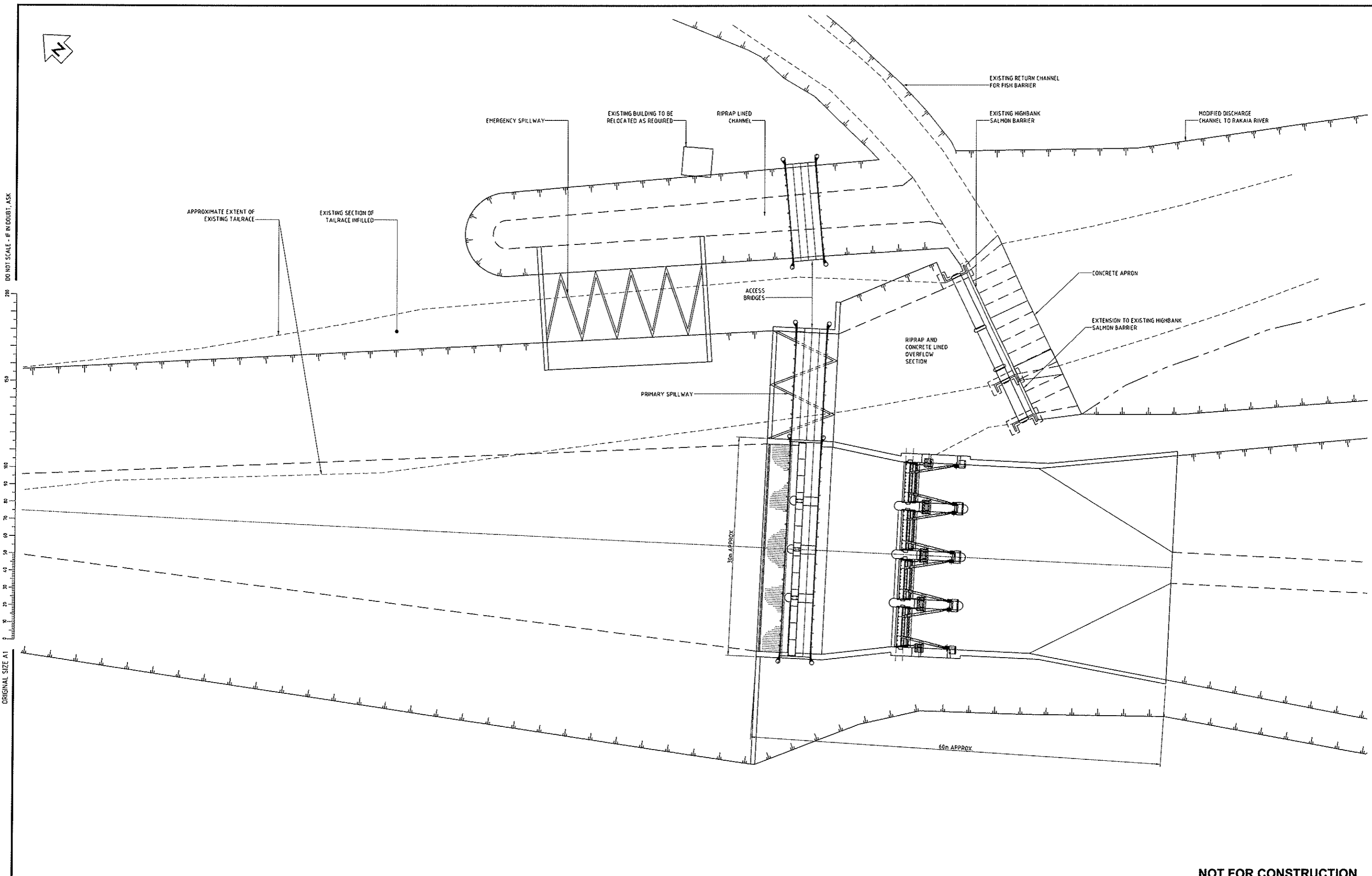
TAB/DWG : Layout1 / Z1114701_C021.dwg
 SERVER : CHRISTCHURCH (NZCH2501)
 XREFS : X_Drop_PH_plan, X_Drop_Bypass-Intake, X_Drop_PH_sec1
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FIELDBOOK		
	Name	Date
SURVEYED	WILL CLIMO	--
DESIGNED	S. WOODS	08-05
DRAWN	Richard Houghton	08-05
CHECKED		
APPROVED		



ASHBURTON COMMUNITY WATER TRUST
 RAKAIA TERRACE HYDRO SCHEME
TYPICAL DROP STRUCTURE POWERHOUSE

Status Stamp	FOR CONSENT		
Date Stamp	12/11/2007		
SCALES (A1)	1 : 100	Job No.	Sheet No.
	Z1114701	C021	Rev A



NOT FOR CONSTRUCTION

REV	AMENDMENTS	INITIAL	DATE	INITIAL	DATE
D	BRIDGE NOTE ADDED	JSC	06/08	SJW	06/08
C	EXISTING RETURN CHANNEL, SPILLWAYS ADDED	JSC	05/08	SJW	05/08
B	EXISTING TAILRACE ADDED				

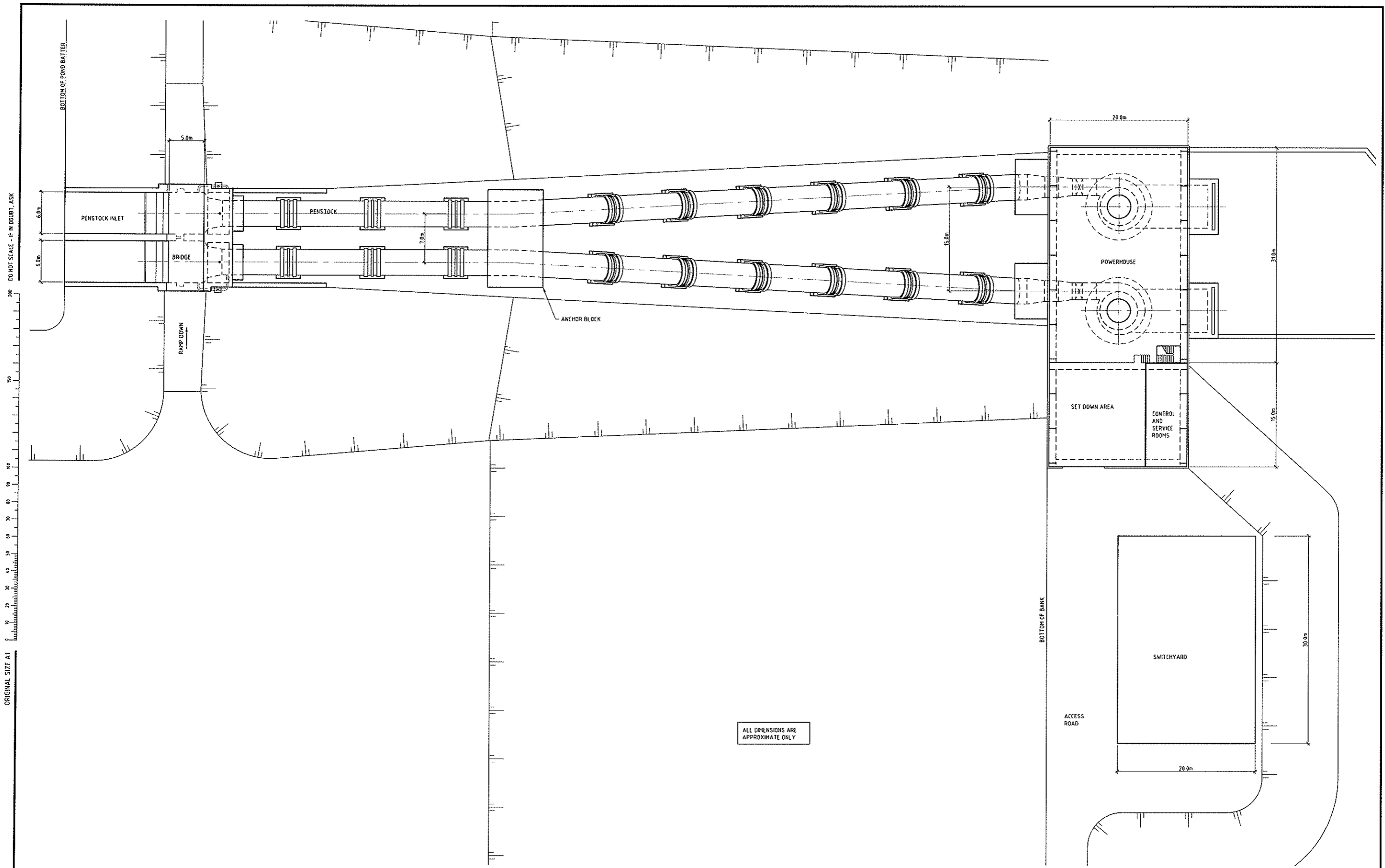
TAB/DWG	Layout1 / Z1114701_C022.dwg
SERVER	CHRISTCHURCH\INZCH2501
XREFS	X_Tailrace Fish Screen, X_2nd-Intake x_2nd-intake gate, X_WORKS, X_Tailrace Fish

FIELDBOOK		
Name	Date	
W CLIMO	--	SURVEYED
S WOODS	08-05	DESIGNED
R HOUGHTON	08-05	DRAWN
		CHECKED
		APPROVED



ASHBURTON COMMUNITY WATER TRUST
 RAKAIA TERRACE HYDRO SCHEME
 HIGHBANK FLOW CONTROL STRUCTURE

Status Stamp	FOR CONSENT		
Date Stamp	09/06/2008		
SCALES (A1)	1	250	
JOB No.	Z1114701	Sheet No.	C022
Rev.			D



ORIGINAL SIZE A1
DO NOT SCALE - IF IN DOUBT, ASK

ALL DIMENSIONS ARE APPROXIMATE ONLY

NOT FOR CONSTRUCTION

REV	AMENDMENTS	INITIAL	DATE	INITIAL	DATE
		CHECKED		APPROVED	

TAB/DWG : Layout1 / Z1114701_C030.dwg
 SERVER : CHRISTCHURCH (NZ) (CH2501)
 XREFS : X_AEWI PH PLAN & SECT

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FIELDBOOK		
	Name	Date
SURVEYED	Will Climo	--
DESIGNED	N. DEVLIN	10-07
DRAWN	G. MURRAY	10-07
CHECKED		
APPROVED		

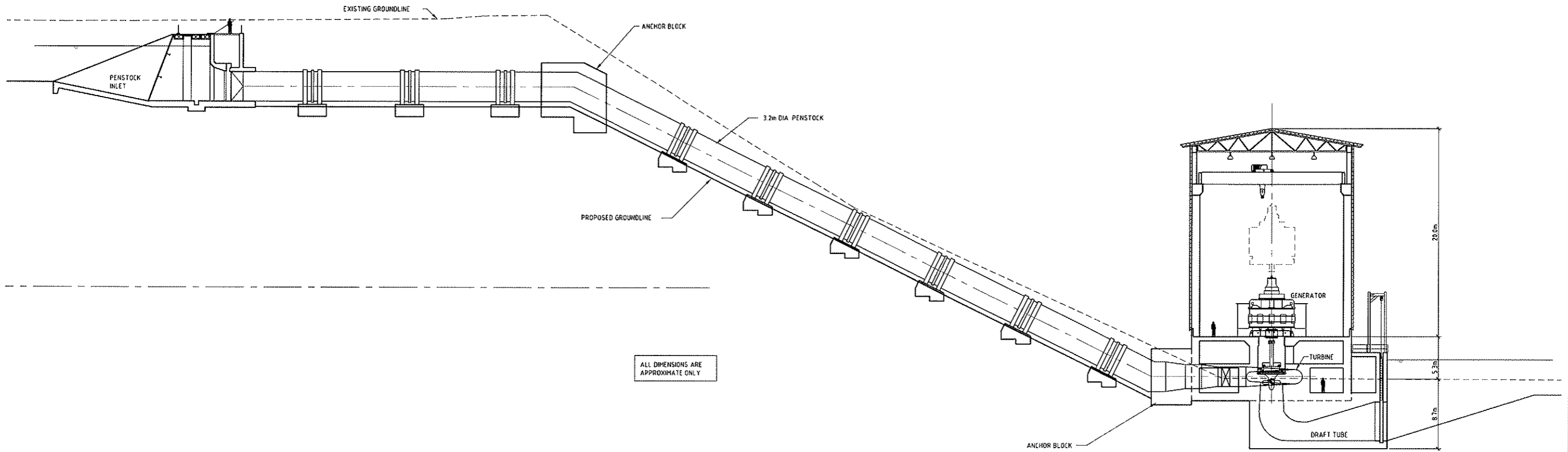


ASHBURTON COMMUNITY WATER TRUST
 RAKAIA TERRACE HYDRO SCHEME
**BARRHILL POWERHOUSE
 LAYOUT PLAN**

Status Stamp	FOR CONSENT		
Date Stamp	12/11/2007		
SCALES (A1)	1:250	Sheet No	Rev
	Z1114701	C030	B

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ORIGINAL SIZE A1



ALL DIMENSIONS ARE APPROXIMATE ONLY

NOT FOR CONSTRUCTION

REV	AMENDMENTS	INITIAL	DATE	INITIAL	DATE
		CHECKED		APPROVED	

TAB/DWG : Layout1 / Z1114701_C031.dwg
 SERVER : CHRISTCHURCH (NZ) (C2501)
 XREFS : X_ACWT PH PLAN & SECT

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FIELDBOOK		
	Name	Date
SURVEYED	Will Climo	--
DESIGNED	N. DEVLIN	10-07
DRAWN	G. MURRAY	10-07
CHECKED		
APPROVED		



ASHBURTON COMMUNITY WATER TRUST
 RAKAIA TERRACE HYDRO SCHEME
 BARRHILL POWERHOUSE
 PENSTOCK AND POWERHOUSE SECTION

Status Stamp	FOR CONSENT		
Date Stamp	12/11/2007		
SCALES (A1)	1 : 250	Sheet No	Rev.
	Z1114701	C031	B