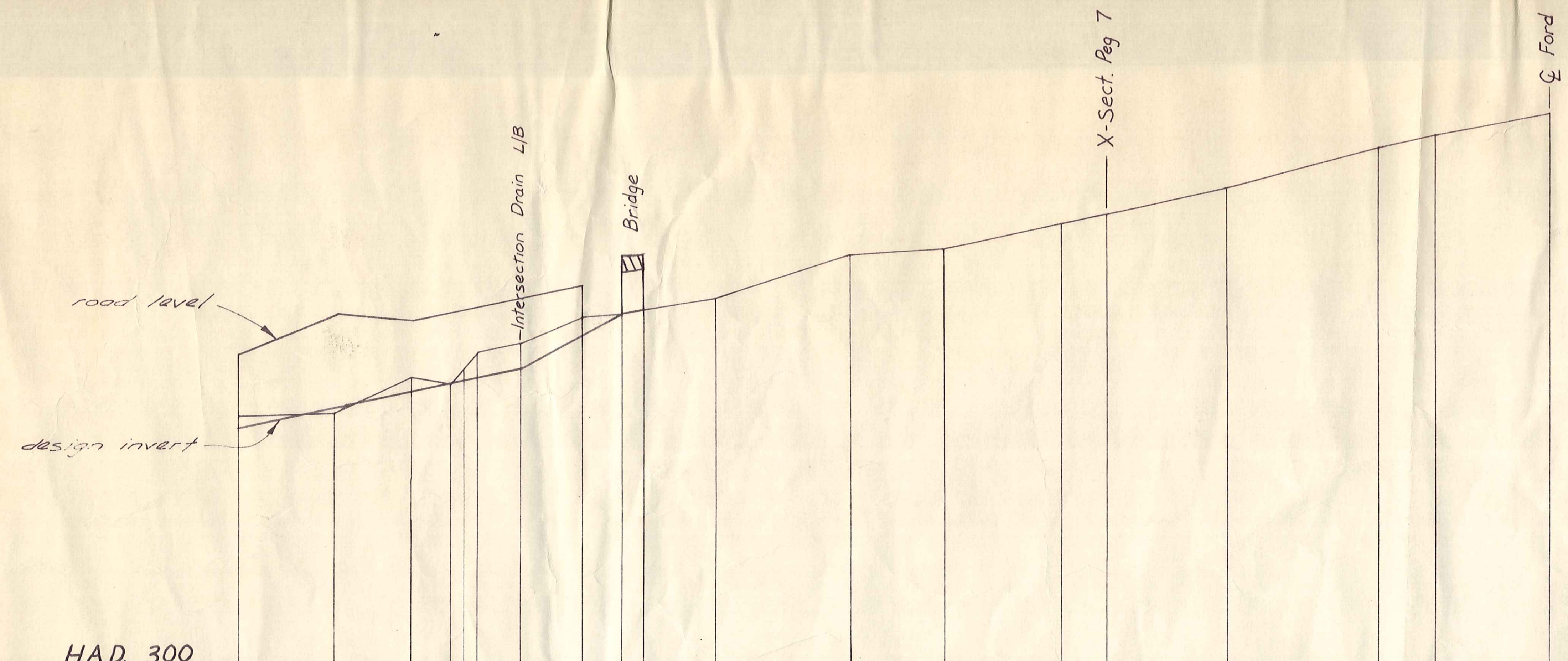
Change Bed Design to 5 metre wide with stop bank of 1·5 metre high along the side

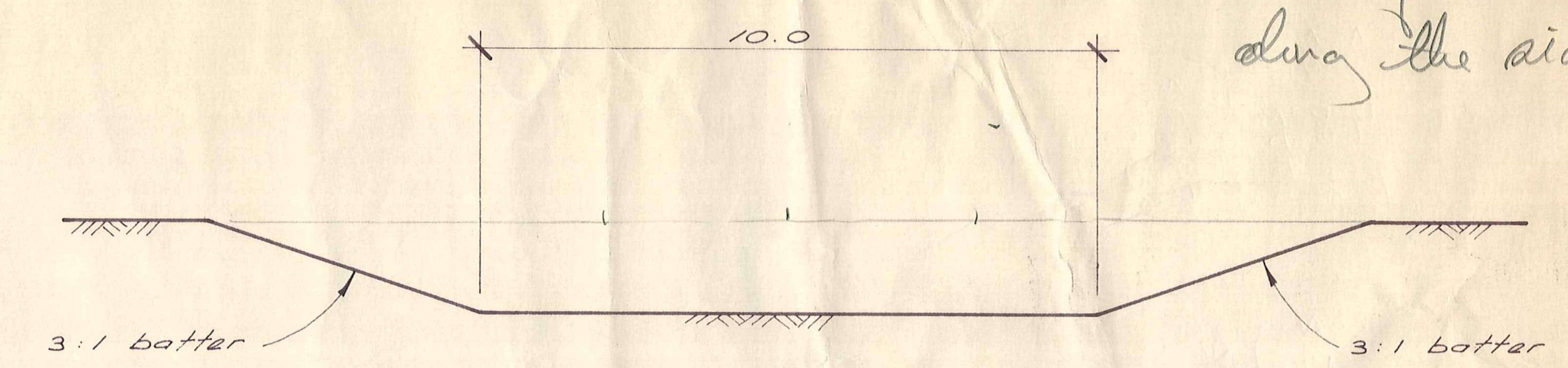


CHANNEL DISTANCE	INVERT	PEG Nº	TOP OF LEFT BANK	TOP OF RIGHT BANK	DESIGN INVERT (At 50m intervals)
600·5	305·63				
621	305·71	PEG 5			
638·5	306·51				
647	306·35				306·43
653	307·05				
662·5	307·29				306·70
676·5	307·83				
685	307·91				
690·5	307·99				
706	308·25				
		PEG 6			
734·5	309·21				
757	309·36				
783	309·90				
793·5	310·13	PEG 7	311·29	310·66	
820	310·72				
854	311·61				
866·5	311·90				
892	312·35				

H.A.D. 300

S = 0·0215

regrade invert to existing invert at bridge – rock armouring required on invert and batters for this section.

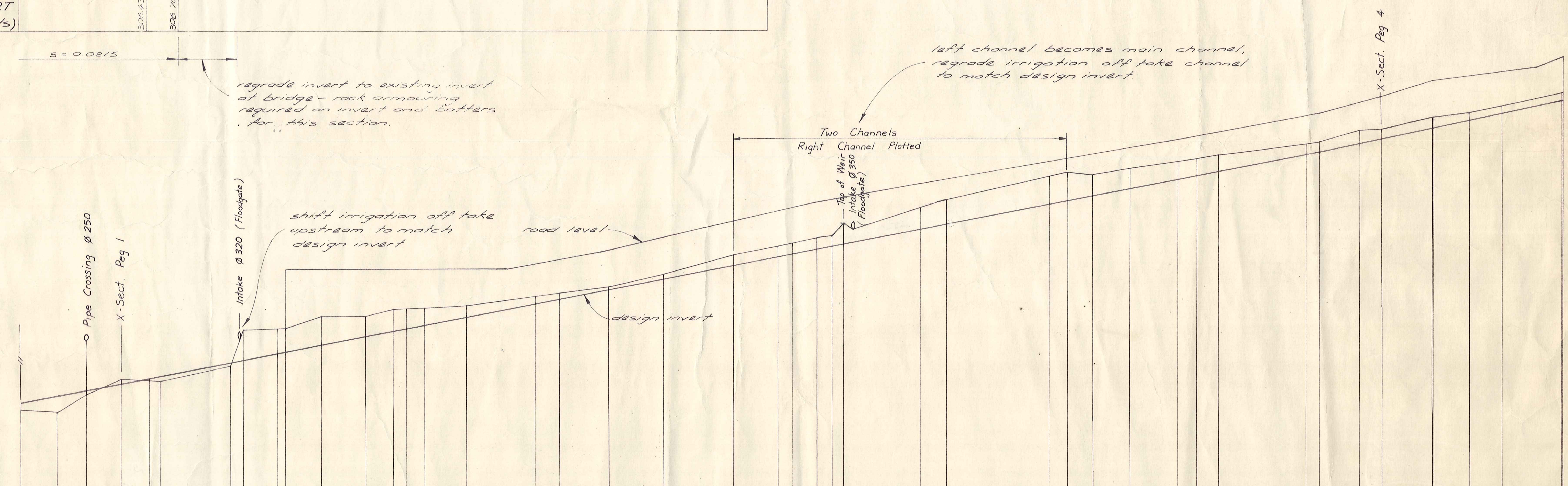


Typical Design Section 1:100

2 year return period flow = 45 m³/s (approx. 0.4m freeboard to road level)
5 year return period flow = 73 m³/s (approx. at road level)

left channel becomes main channel, regrade irrigation off take channel to match design invert.

shift irrigation off take upstream to match design invert



H.A.D. 290

CHANNEL DISTANCE	INVERT	PEG Nº	TOP OF LEFT BANK	TOP OF RIGHT BANK	DESIGN INVERT (At 50m intervals)
00	293·28				293·50
14	293·18				
25	293·86				
39	294·46	PEG 1	295·60	296·11	
					294·47
54	294·42				
81	294·99				
87·5	296·36				
					295·44
103	296·45				
117	296·58				
134	296·91				
145	297·18				
					296·41
157	297·26				
173·5	297·35				
					297·38
210	297·83				
		PEG 2			
229	298·08				
					298·35
250	298·53				
277·5	299·31				
295	299·67				
					299·37
310	300·01				
316	300·08				
320·5	300·60				
					300·29
360	301·48				
		PEG 3			
					301·26
407	302·57				
417·5	302·44				
432	302·68				
					302·23
457·5	303·09				
466	303·22				
					303·20
506	303·71				
521	304·14				
530	304·22	PEG 4	304·94	304·82	
					304·28
549·5	304·69				
564	304·89				
577	305·13				
					305·35
600·5	305·63				

S = 0·0194 S = 0·0215

Longitudinal Section 1:1000 hor. 1:100 vert.

LEVEL DATUM: OTAGO	AMENDMENTS	RECOM'D	APPD	DATE	
BEARING ORIGIN: Geodetic					
SOIL AND WATER CONSERVATION FARM PLAN No					

	NAME	DATE
SURVEYED	T.R. Milton.	April '86
AERIAL PHOTO REF.		
DRAWN	M.R. Constable	May '86
TRACED	M.R. Constable. R.A.J. Davey	May '86
TRACING CHECKED	D.J. Frew	May 86
DESIGNED	D. Frew	
DESIGN CHECKED		
RECOMMENDED	A. Smith	May '86

APPROVED
D.J. HAMILTON
B.E.(Hons.) M.I.P.E.N.Z.
Chief Engineer

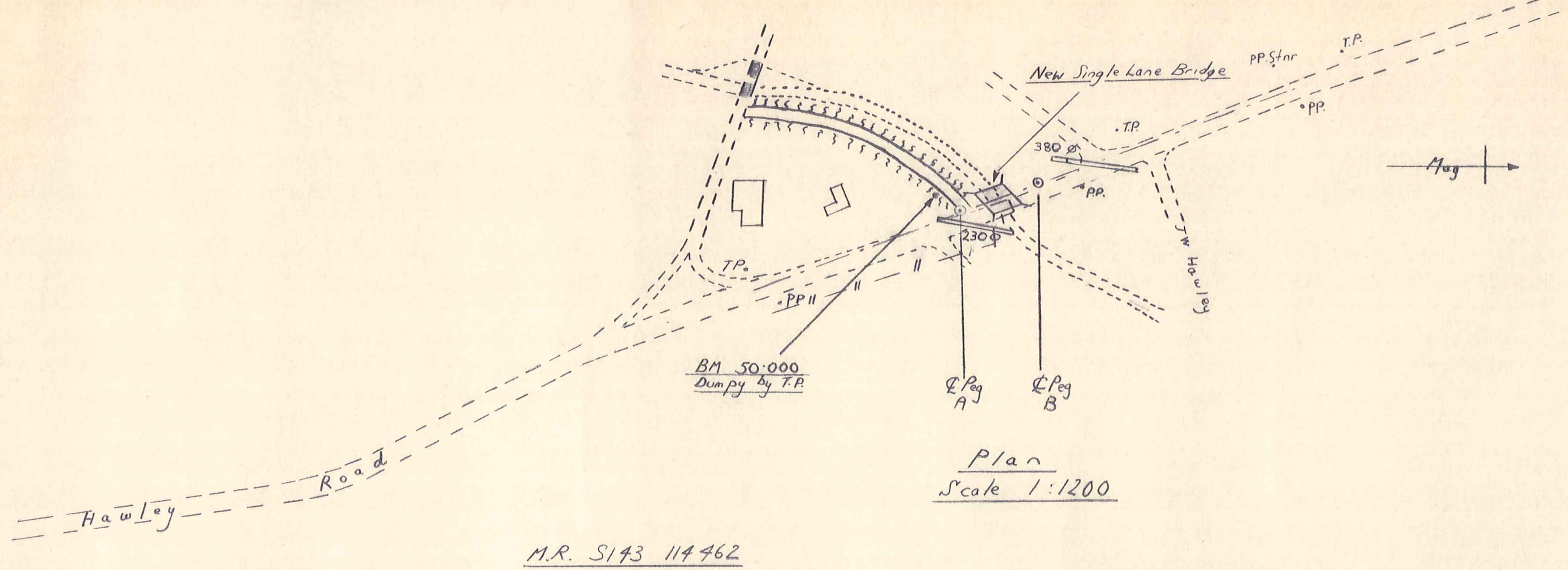
OTAGO CATCHMENT BOARD

OMEO CREEK
DESIGN CHANNEL

SCALE AS SHOWN

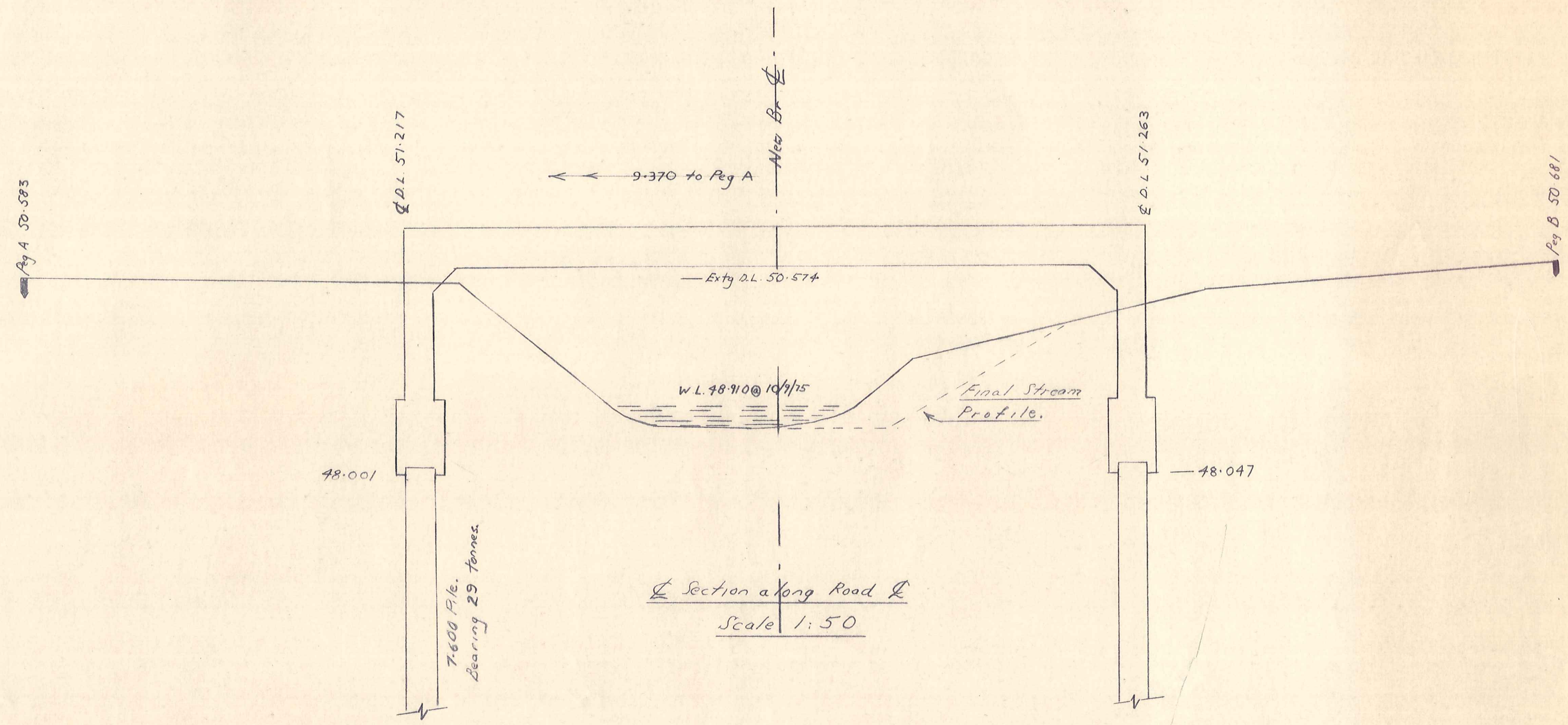
JOB No. L 11783 / 2 C. No.

F.B. L.B. 436 SHEET 2 OF 3

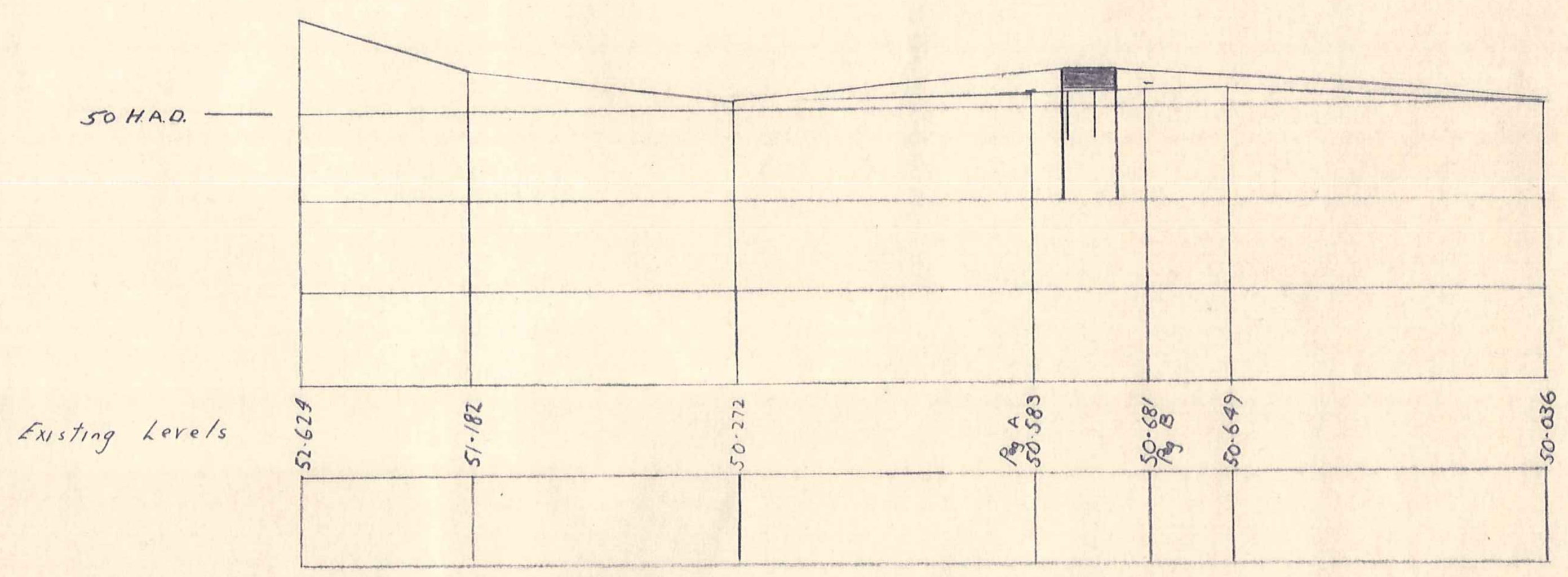


Plan
Scale 1:1200

M.R. S143 114462

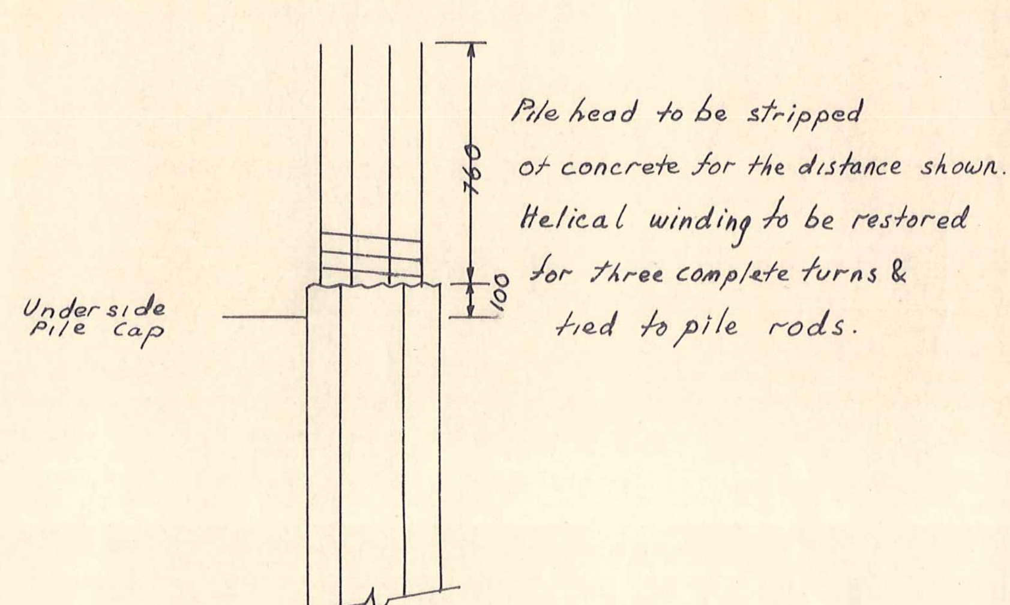


℄ Section along Road ℄
Scale 1:50

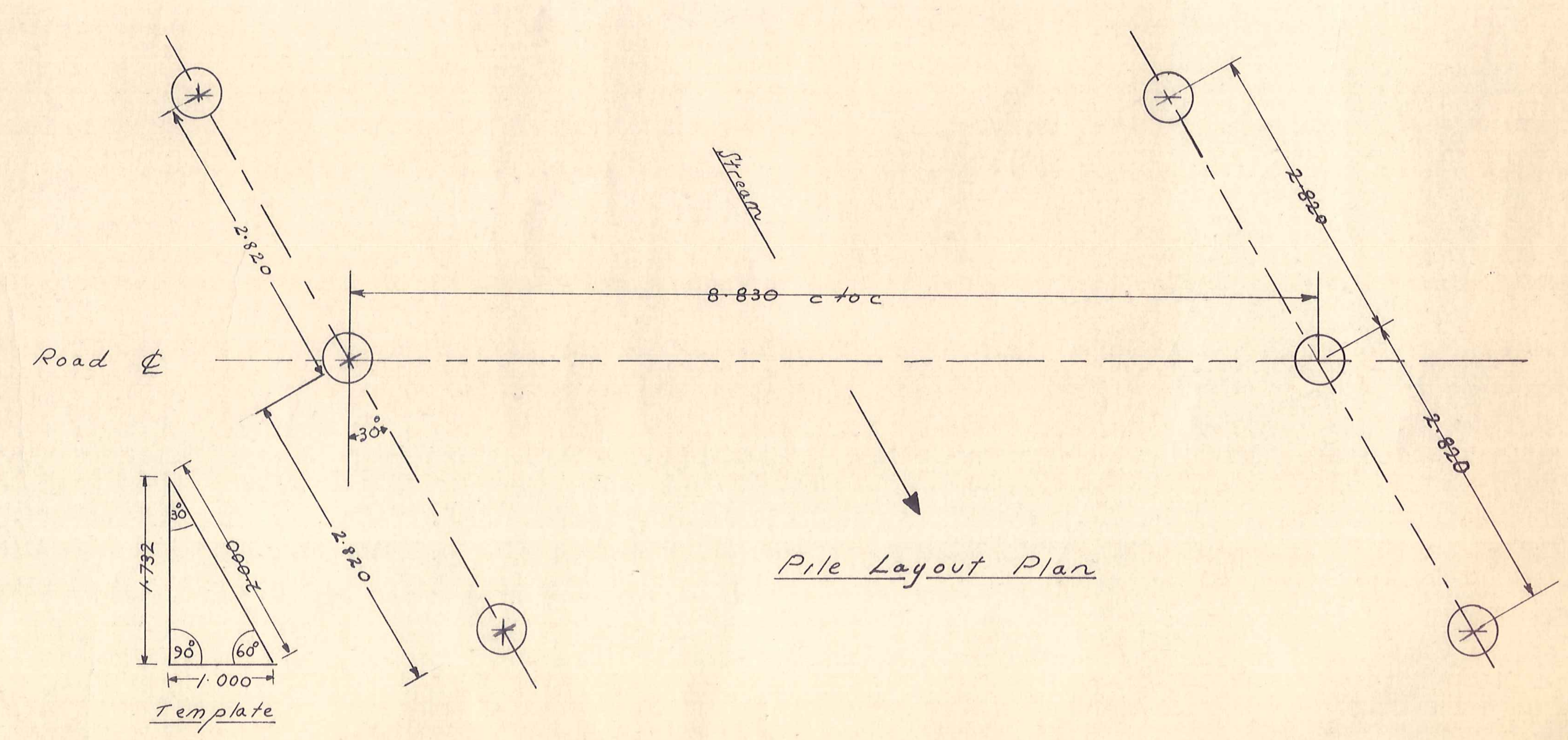


Longitudinal Section
Scale Horiz : 1:1200
Vert : 1:200

Skew : 30°
Catchment Area 48 km²
Waterway Area 9.5 m²
Stream Gradient 1 in 57



Pile Head Stripping Detail



Pile Layout Plan

DUFFILL WATTS & KING
CONSULTING CIVIL & STRUCTURAL ENGINEERS
Dunedin P.O. Bx 5269 Ph 77 241 Invercargill P.O. Box 576 Ph 3049
Balclutha P.O. Box 220 Phone 1425

VINCENT COUNTY COUNCIL

OMEO CREEK BRIDGE
HAWLEY ROAD - EARNSCLEUGH

AMENDMENTS

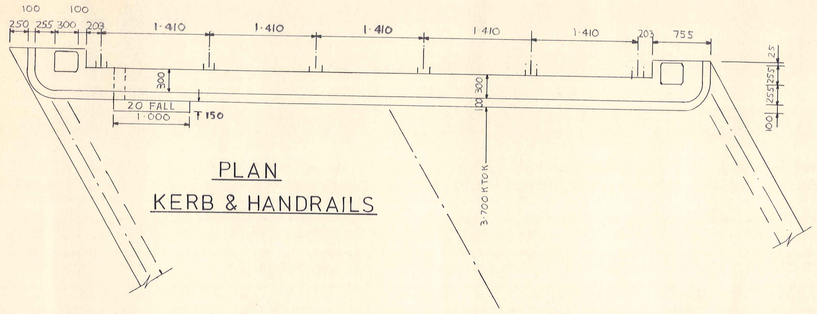
NO.	BY	DATE		Appvd
1	B.B.N.	Feb '76	Stream Profile & Waterway reduced from 13 m².	

	NAME	DATE
Surveyed	B.B.N.	Sept
Drawn	B.B.N.	1975
Calculations	"	Feb 1976
Traced	G.C.S.	" "
Checked	[signature]	" "
Approved	[signature]	

JOB NO. 7554

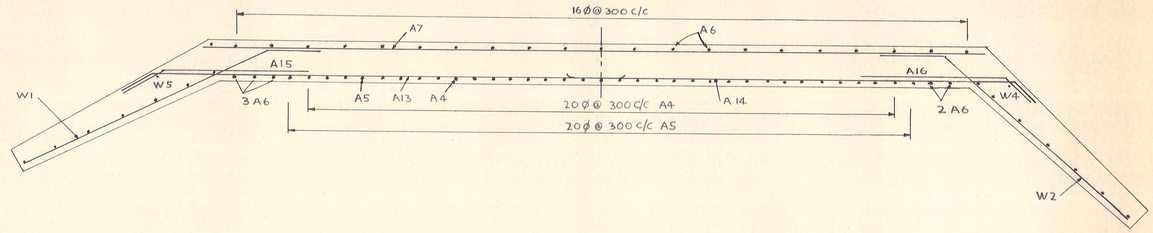
Sheet No 1 of ... shts

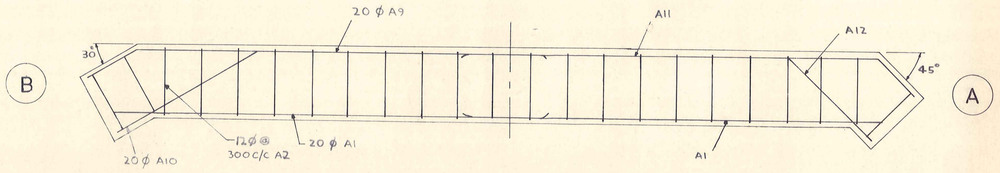
File | L.B. 84 | F.B.



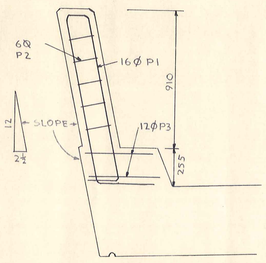
PLAN
KERB & HANDRAILS

SCALE=1:40





PIER CAP
SCALE=1:25



END POST
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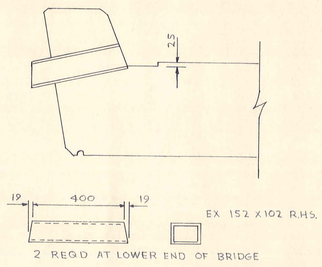
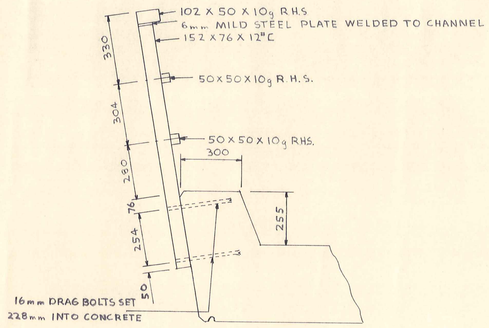
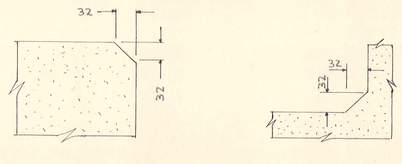


DETAIL OF DRAINAGE
SCALE=1:15

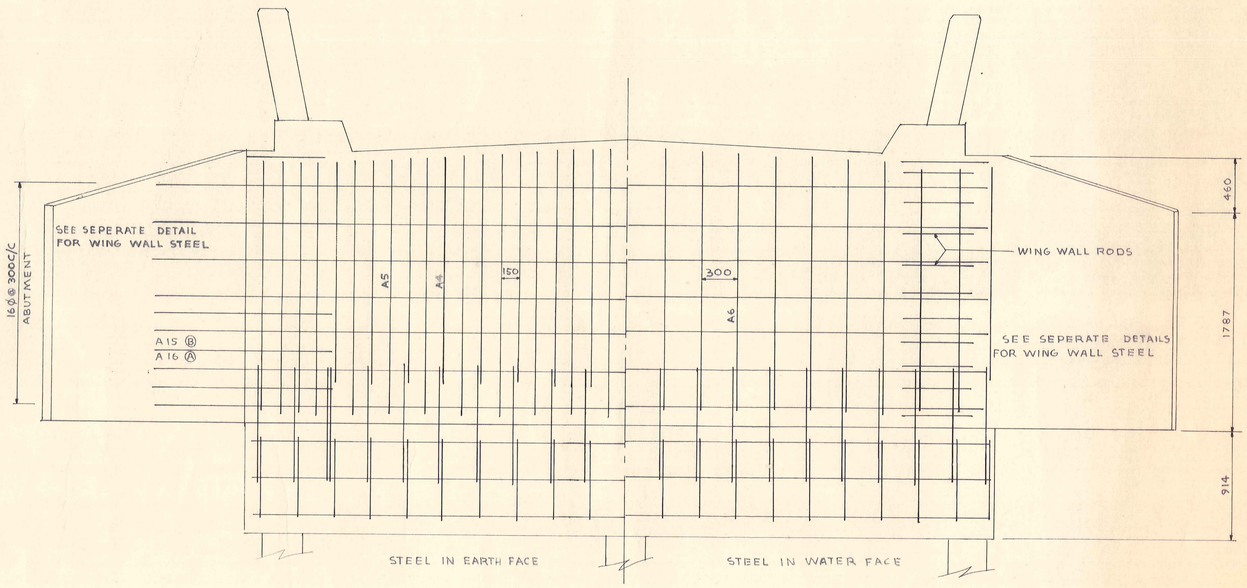


HANDRAIL DETAIL
SCALE=1:15

NOTE: ALL BOLT HOLES TO BE ON ℄ OF 152mm X 176mm CHANNEL. DRILL RAILS ON SITE. ALL R.H.S. TO BE SEALED AT END WITH 3mm M.S. PLATE. ALL BOLTS, NUTS AND SPRING WASHERS TO BE GALVANISED. BOLTS TO BE 12mm DIAMETER



CHAMFER & FILLET DETAILS
N.T.S



ABUTMENTS
SCALE=1:25

DUFFILL WATTS & KING
CONSULTING CIVIL & STRUCTURAL ENGINEERS
Dunedin P.O. Box 5269 Ph. 77 243 Invercargill P.O. Box 576 Ph. 3049
Balclutha P.O. Box 220. Phone 1425

VINCENT COUNTY COUNCIL

OMEO CREEK BRIDGE

HAWLEY ROAD — EARNSCLEUGH

AMENDMENTS				
NO.	BY	DATE		Appvd.

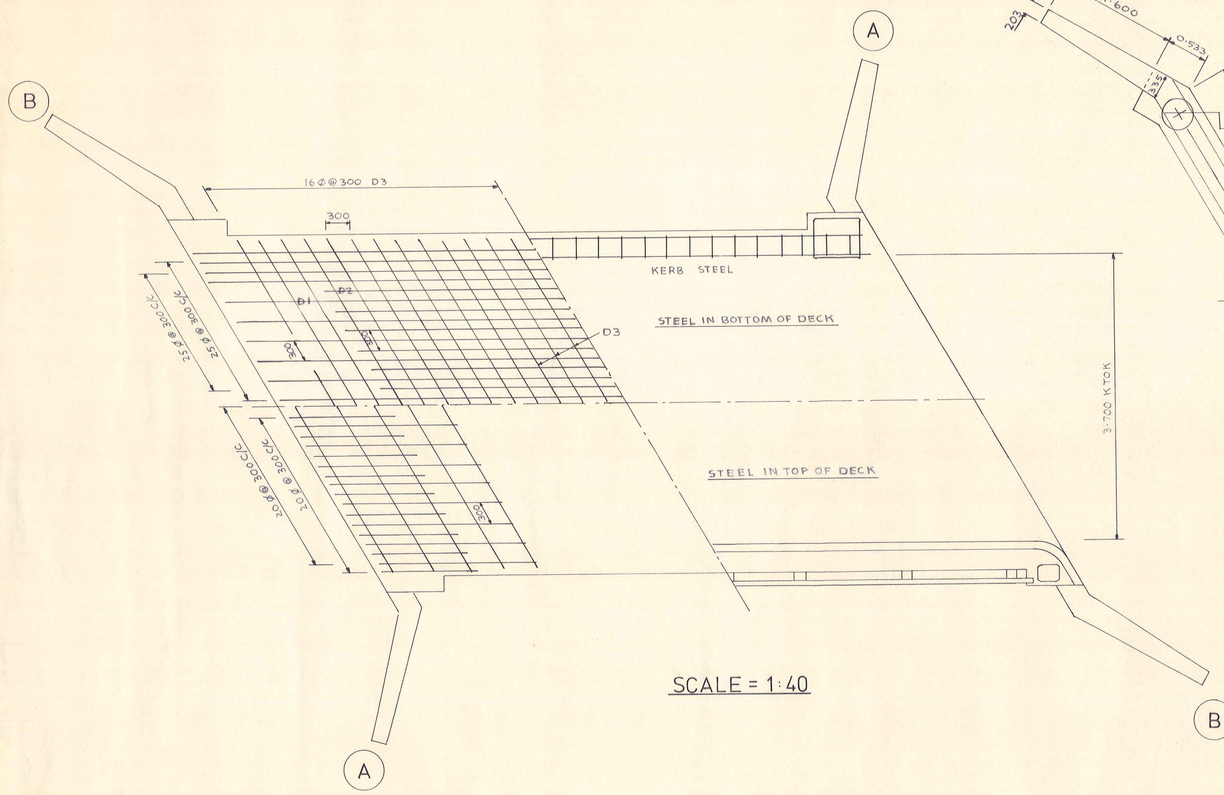
	NAME	DATE
Surveyed	B.B.N.	Sept '75
Drawn	G.C.S. & B.B.N.	March '76
Calculations	B.B.N.	"
Traced	G.C.S.	"
Checked	B.B.N.	
Approved		

JOB NO. 7554

Sheet No 2 of shts

File L.B. F.B.

ORIGINAL SIZE mm INCHES



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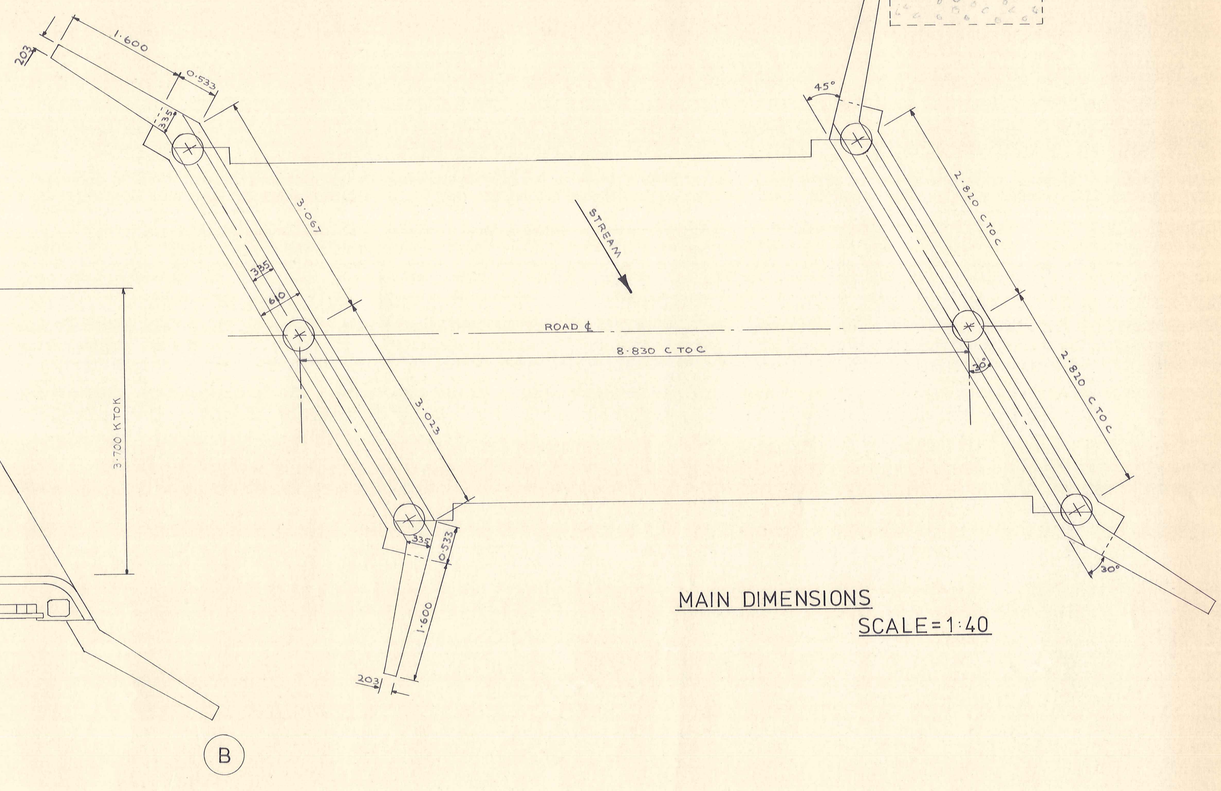
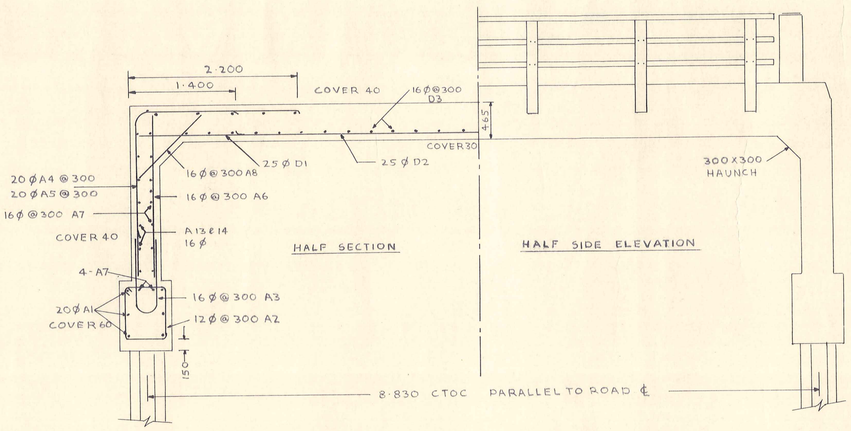


MAIN DIMENSIONS
SCALE = 1:40



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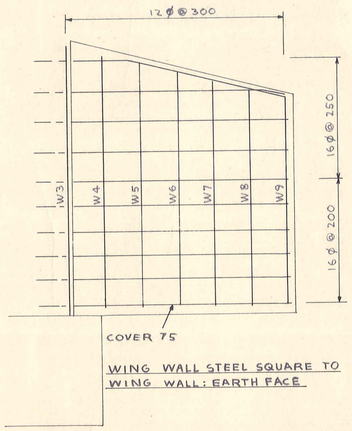

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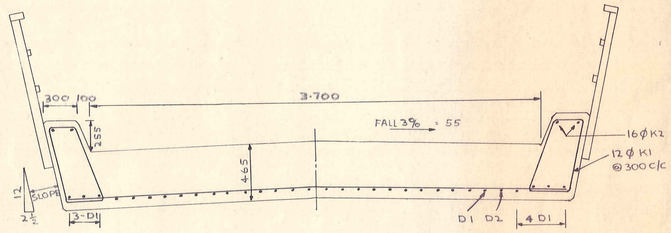

DECK SECTION SQUARE TO ROAD ℄
SCALE = 1:25

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VINCENT COUNTY COUNCIL

OMEO CREEK BRIDGE

HAWLEY ROAD — EARNSCLEUGH

AMENDMENTS				
NO.	BY	DATE		Appvd.

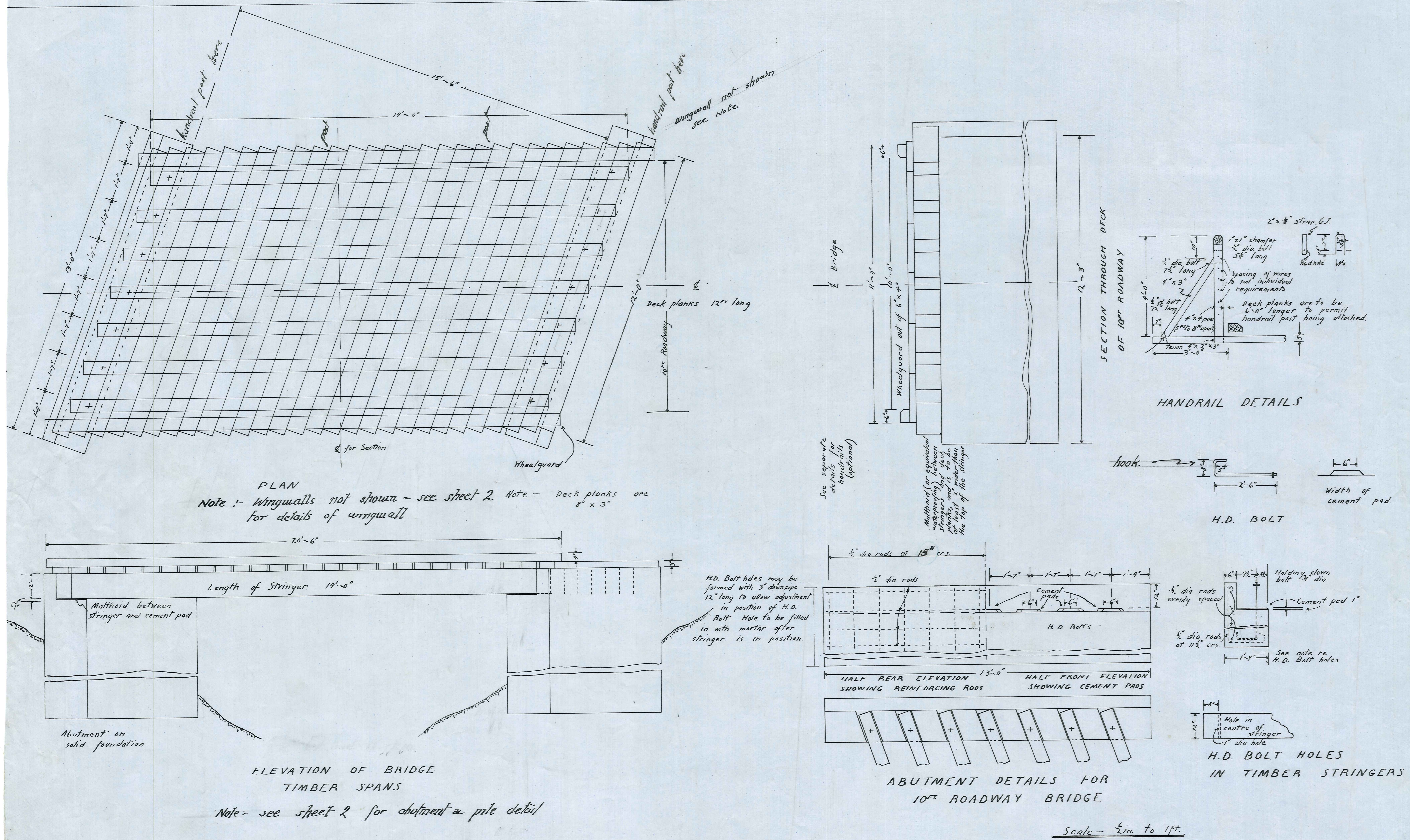
	NAME	DATE
Surveyed	B.B.N.	SEPT '75
Drawn	BBN & G.C.S	MARCH '76
Calculations	B.B.N.	"
Traced	G.C.S.	"
Checked	B.B.N.	
Approved		

JOB NO. 7554

Sheet No. 3 of sheets

File | L.B. | F.B.

ORIGINAL SIZE mm INCHES



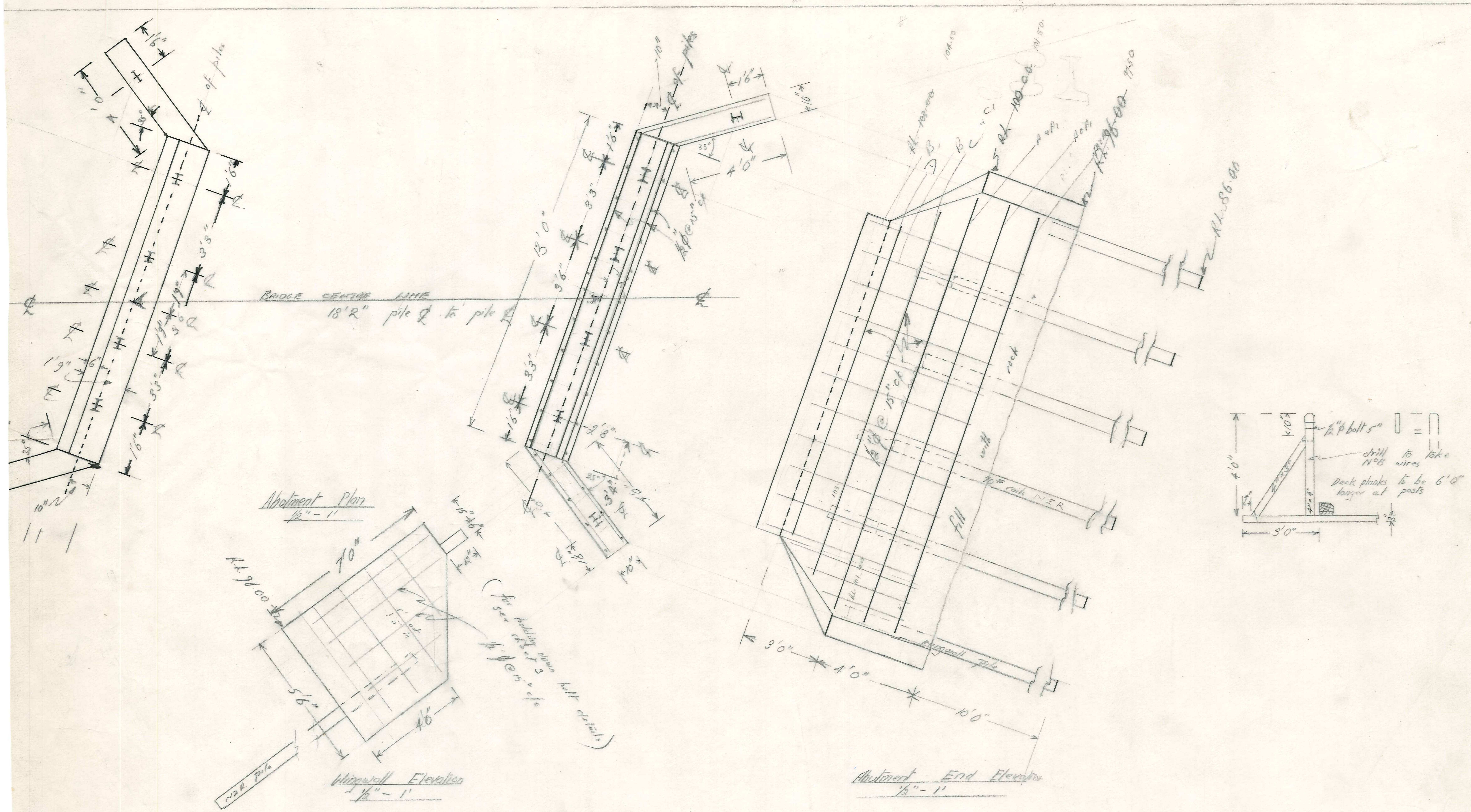
as built Feb 1959

VINCENT COUNTY COUNCIL

OMEO CREEK BRIDGE

Beck. 25/1/59
COUNTY ENGINEER

No. 210/6
Sheet 3 of 3

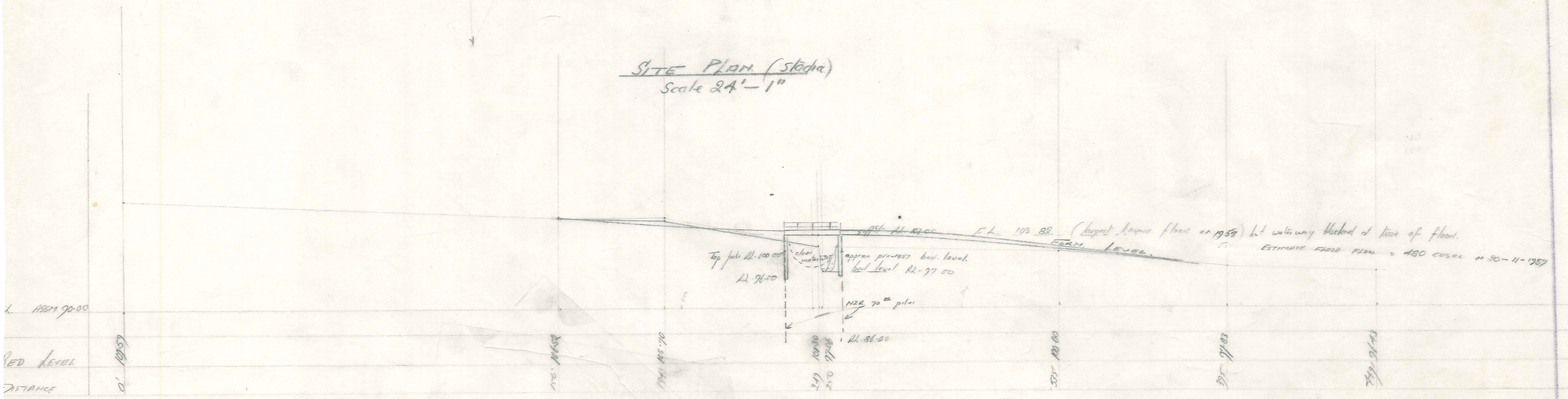


as built Feb 1959 (pile penetration from 3'-8' into solid rock.

VINCENT COUNTY COUNCIL	OMEO CREEK BRIDGE	[signature] COUNTY ENGINEER 25/1/59	SURVEYED / DRAWN / DESIGNED / CALCULATED / CHECKED — NAME — DATE	No 210/6 sheet 2 of 3 sheets

SITE PLAN
SCALE 24' — 1"

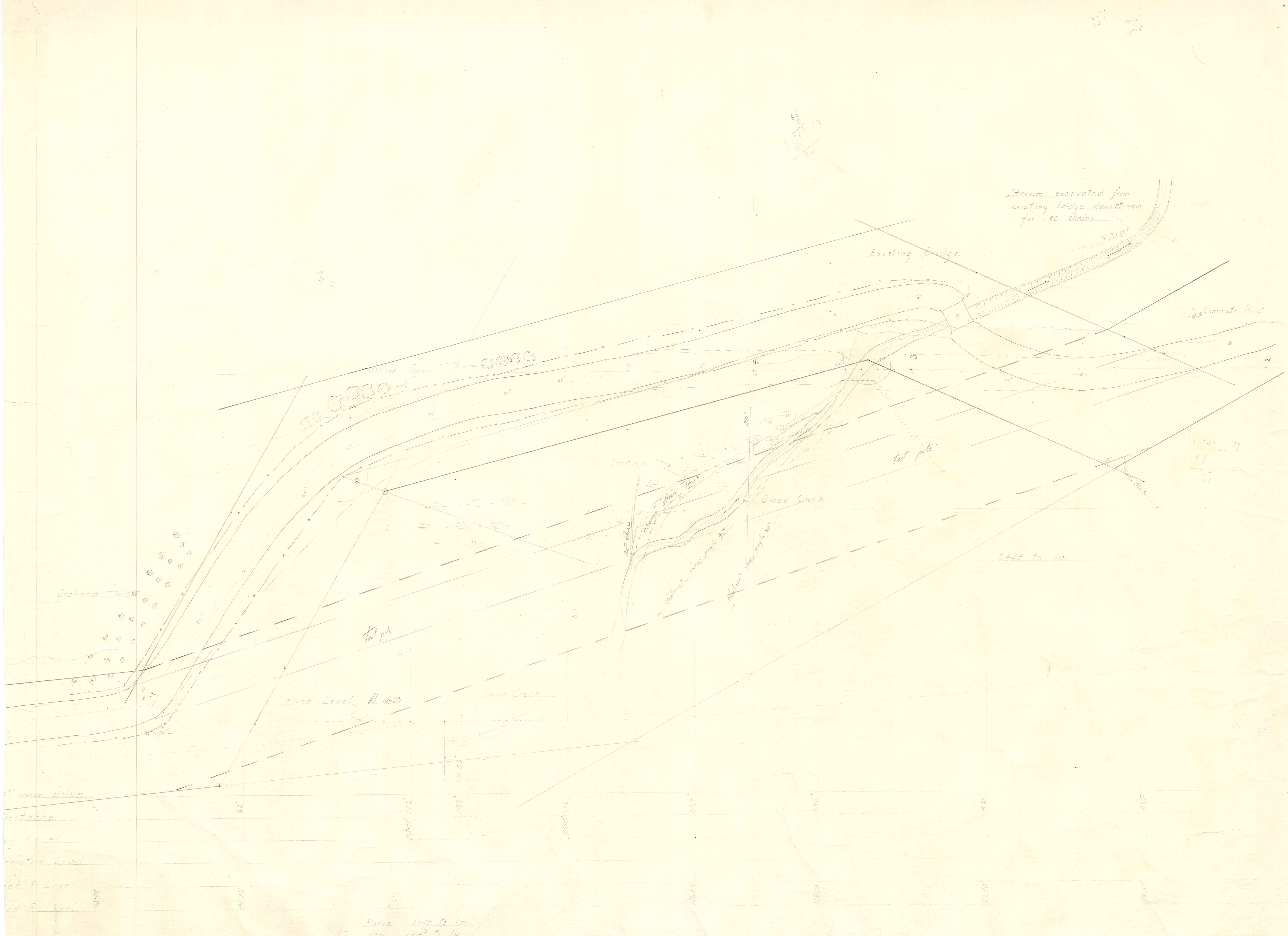
SITE PLAN (sketch)
Scale 24' — 1"



PROFILE
SCALE Horo 20'—1"
Vert 10 — 1"

V. C. C.	OMEO CREEK BRIDGE	19-1-57		N° 210/6

Sheet 1 of 3 sheets


Stream excavated from existing bridge downstream for .40 chains
Existing Bridge
Concrete Post
Willow Trees
Swamp
Omeo Creek
test pits
test pits
Orchard
Flood Level
Omeo Creek
24ft to 1in
above datum
Distance
Horiz: 24ft to 1in
Vert: 10ft to 1in

210/6