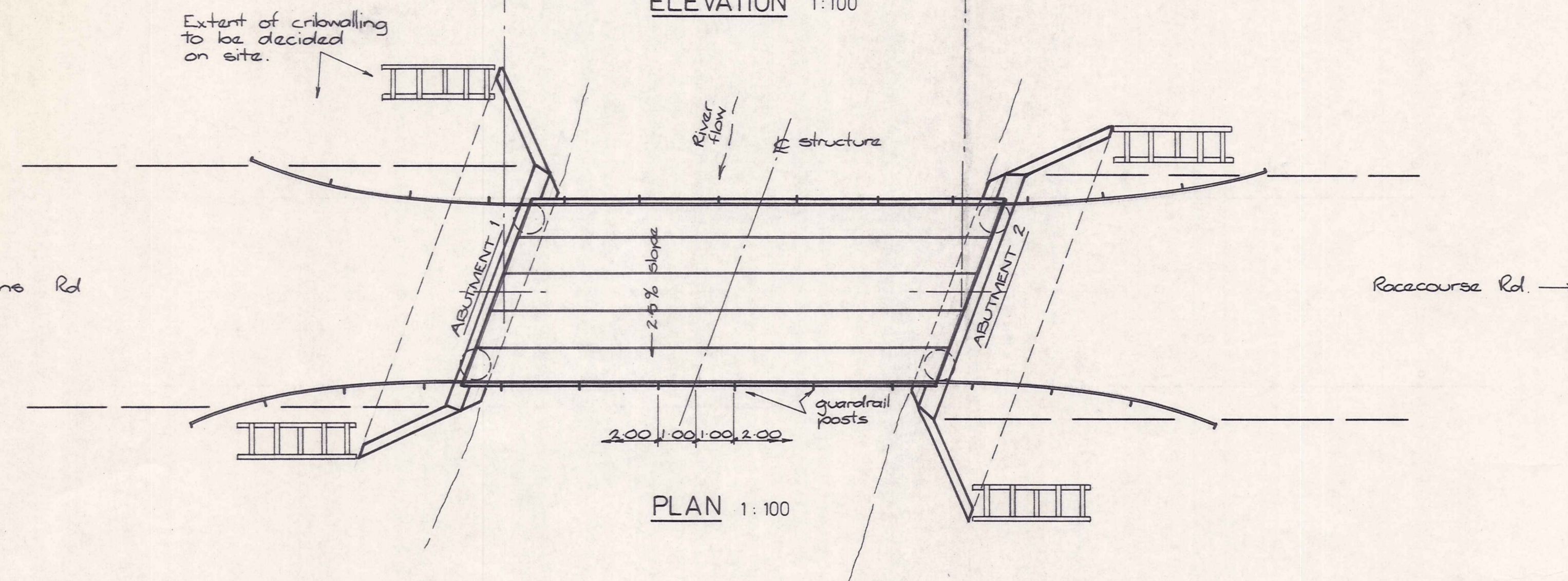
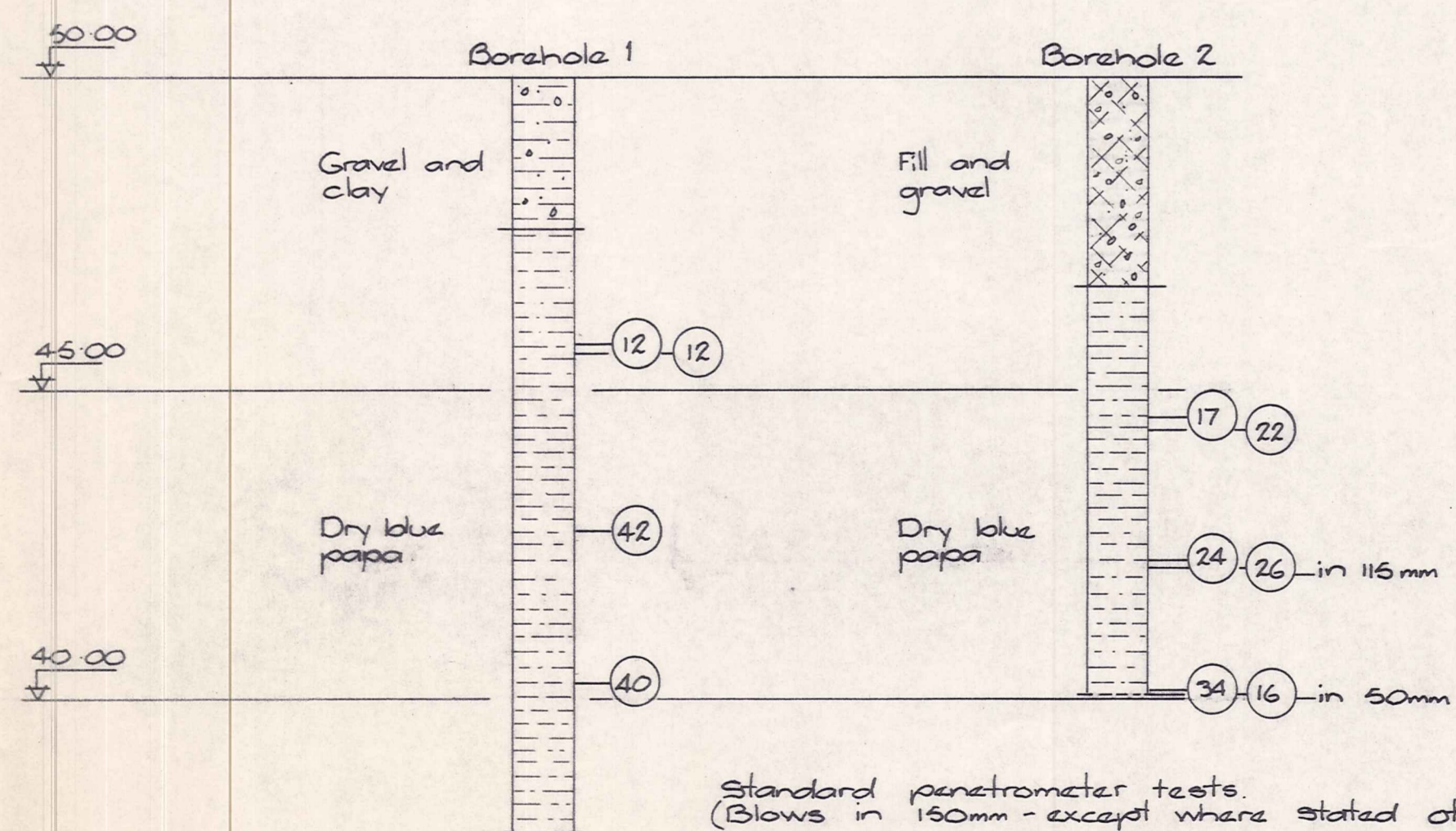


ELEVATION 1:100

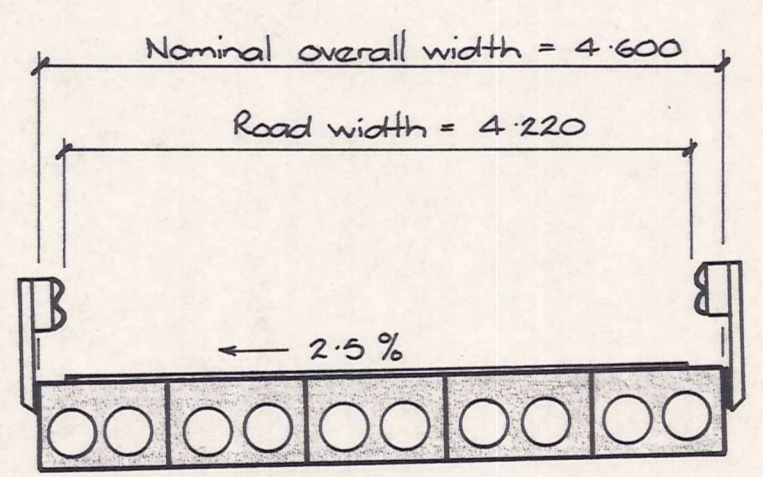


PLAN 1:100



BOREHOLE DATA 1:100

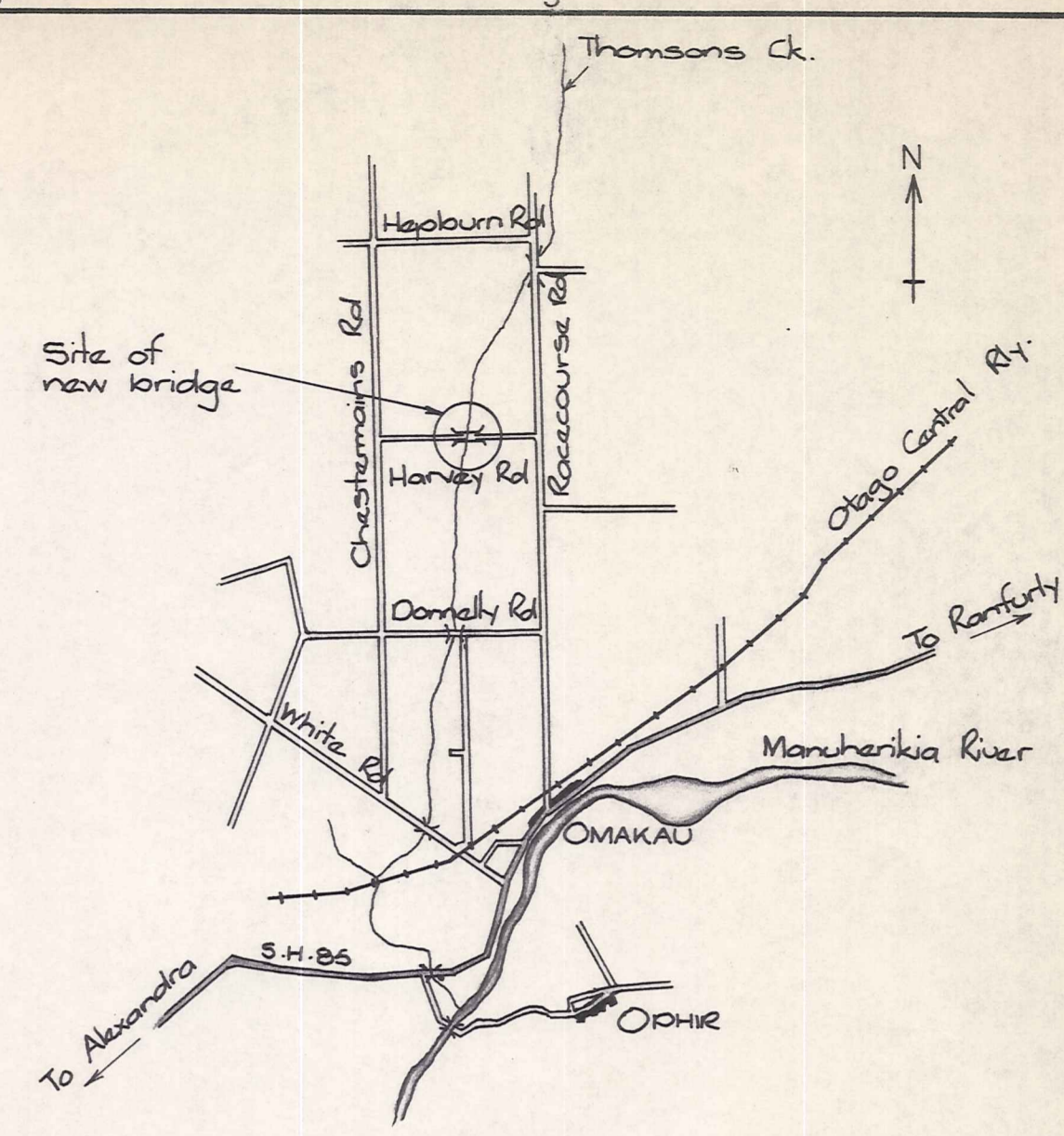
Standard penetrometer tests.  
(Blows in 150mm - except where stated otherwise.)



TYPICAL DECK SECTION 1:50

1. General arrangement.
2. Abutment details.
3. Column details.
4. Precast, pretensioned double core deck unit details.
5. Guardrail and cribwall details.

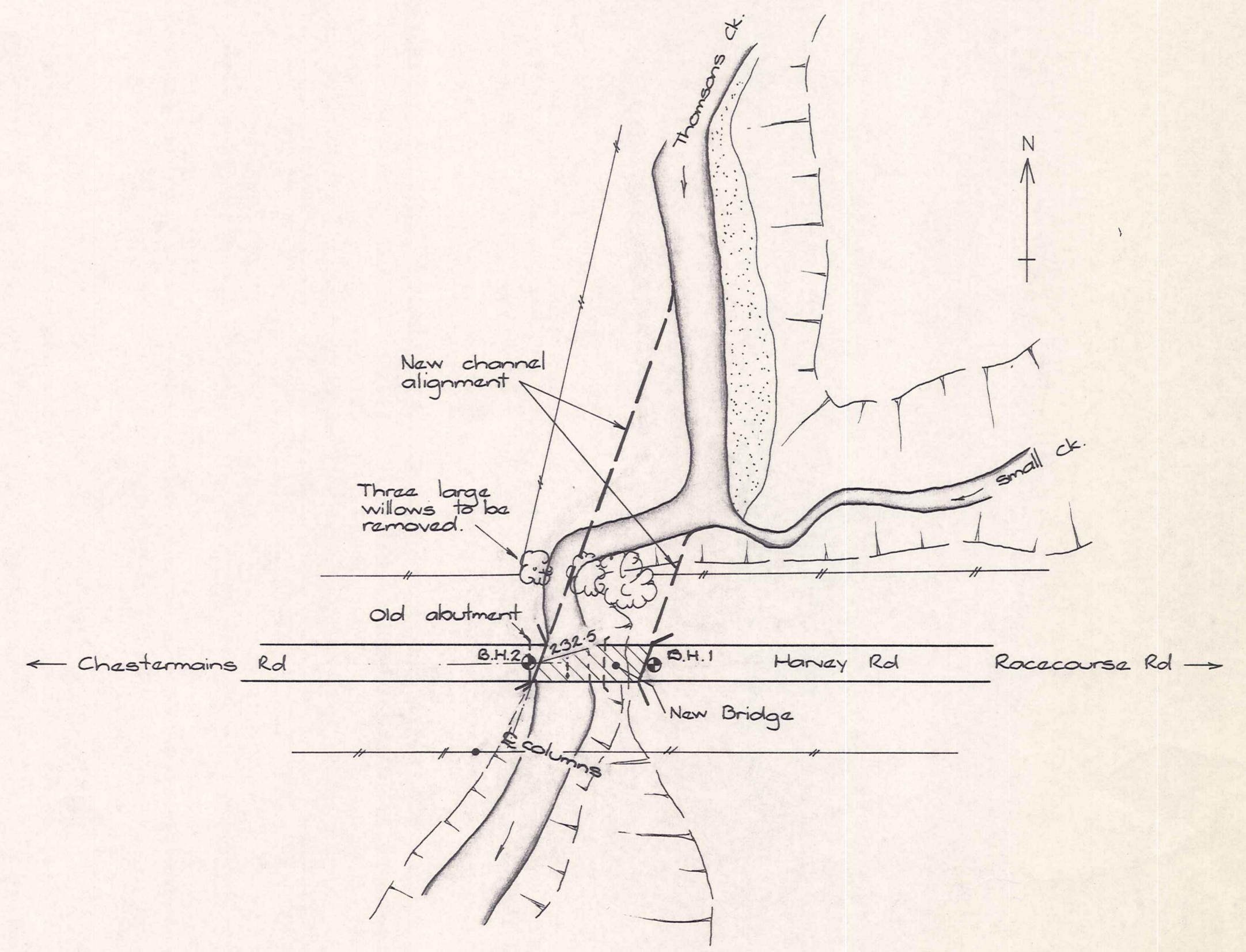
SHEET INDEX



SITE PLAN 1:63 360

1. Concrete:- The 28 day compressive strength and grading of concrete as defined in N.Z.S. 1900 ch. 9.3A shall be 25 MPa high grade except for precast deck units.
2. Surface finish:- Concrete surface finish as described in the specification shall be F1 on all surfaces exposed to view except for the following locations:  
Deck surface - U2  
concealed surfaces on abutments - F2.
3. Cover:- Clear cover to reinforcing shall be 50mm, unless otherwise stated.
4. Chamfers and fillets:- Unless otherwise stated all corners shall be chamfered 25mm and all reentrant angles shall be filleted 25mm.

GENERAL NOTES



SITE INFORMATION 1:500

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VINCENT  
COUNTY  
COUNCIL

HARVEY ROAD BRIDGE  
GENERAL ARRANGEMENT

AMENDMENTS			NAME		DATE	JOB NO.	Sheet No		
NO.	BY	DATE	Appvd.	Surveyed		7869	1		
				Drawn	K. Crawford			8/79	of 5 sheets
				Calculations	J. Beekhuis			7/79	
				Traced	K. Crawford			8/79	
				Checked					
				Approved					

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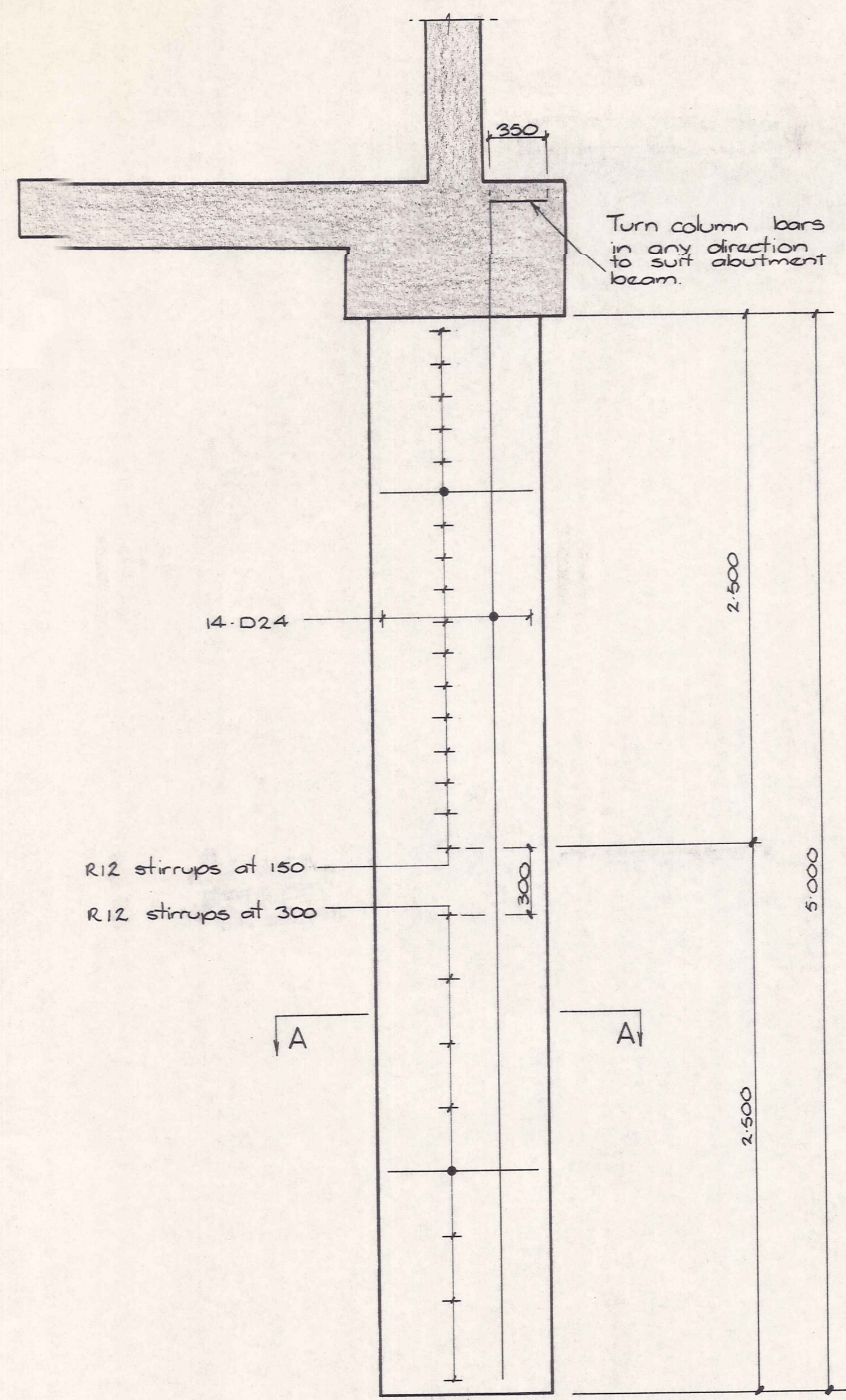


ORIGINAL SIZE INCHES

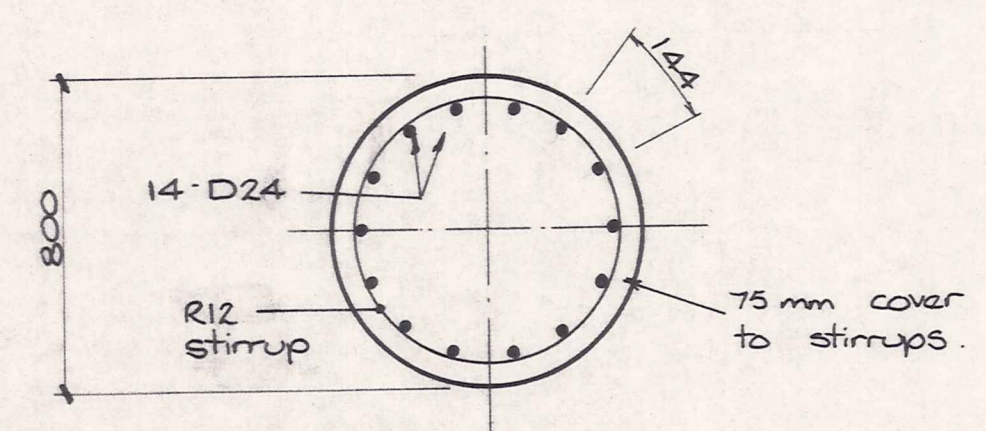
300  
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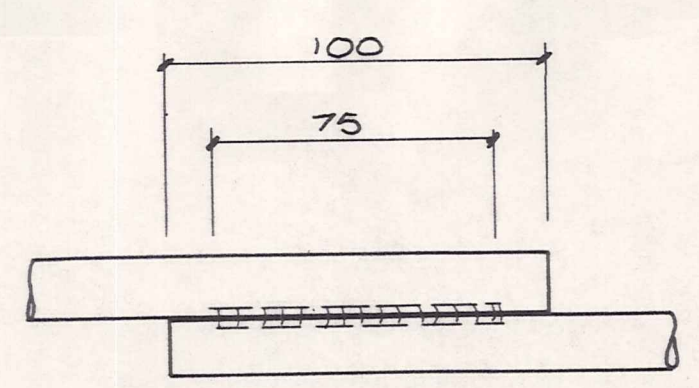
mm



COLUMN ELEVATION 1:20



A-A 1:20



TYPICAL LAP WELD DETAIL 1:2  
(for 12 mm dia. stirrups)

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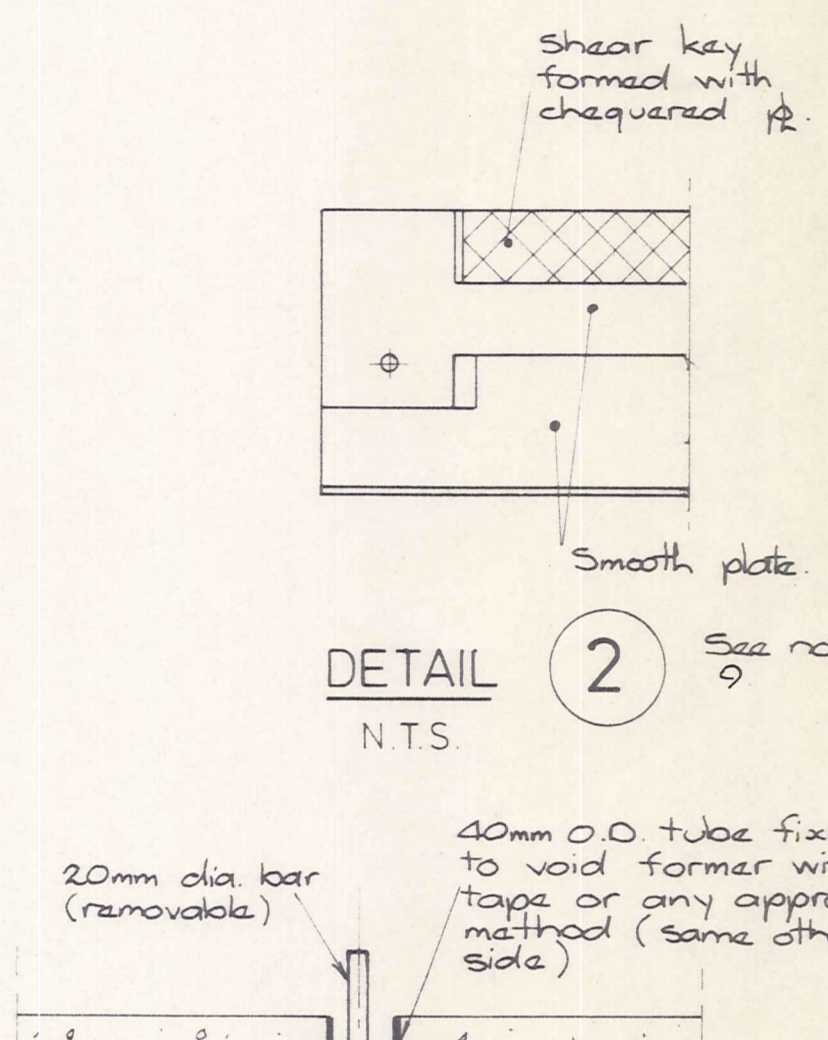
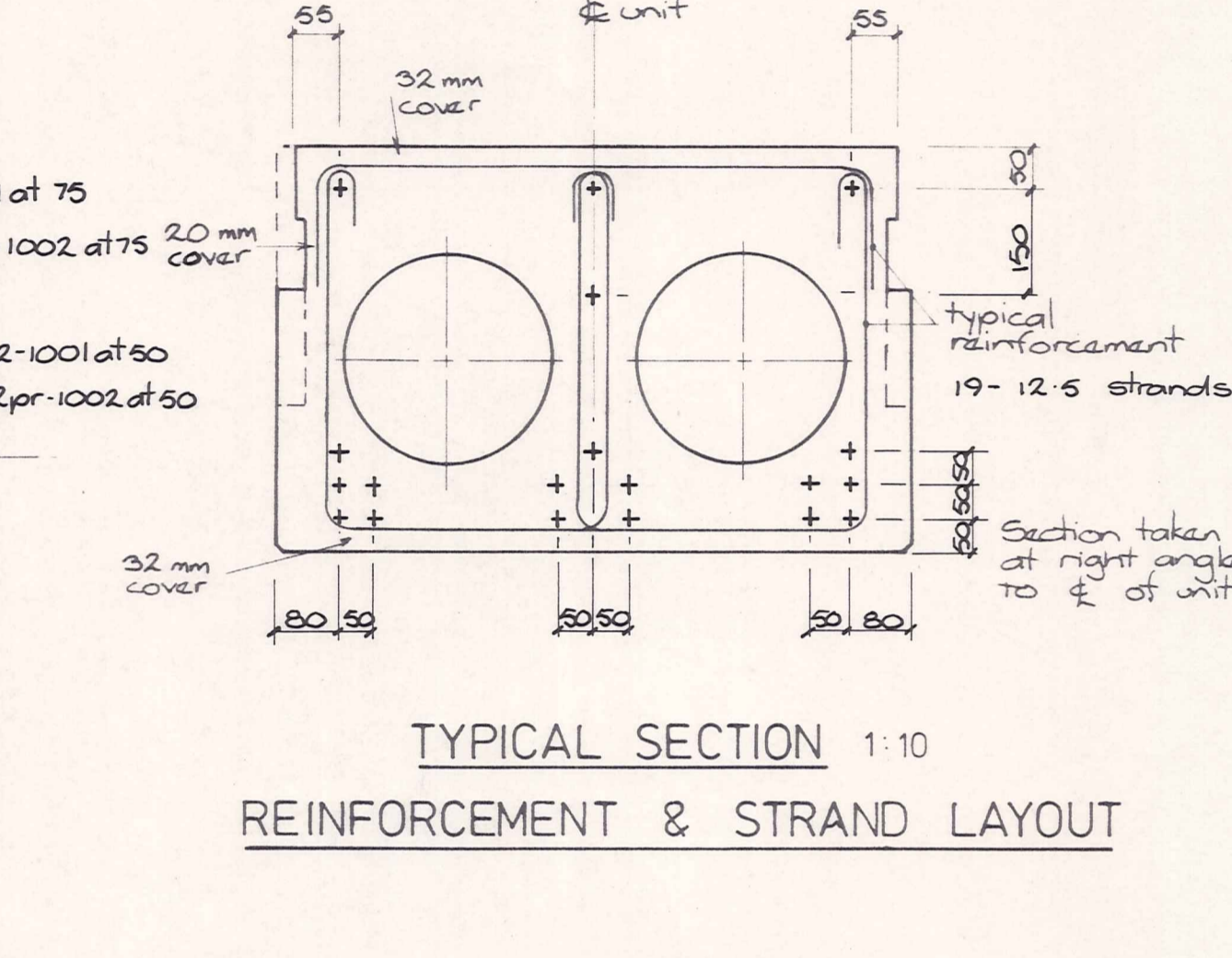
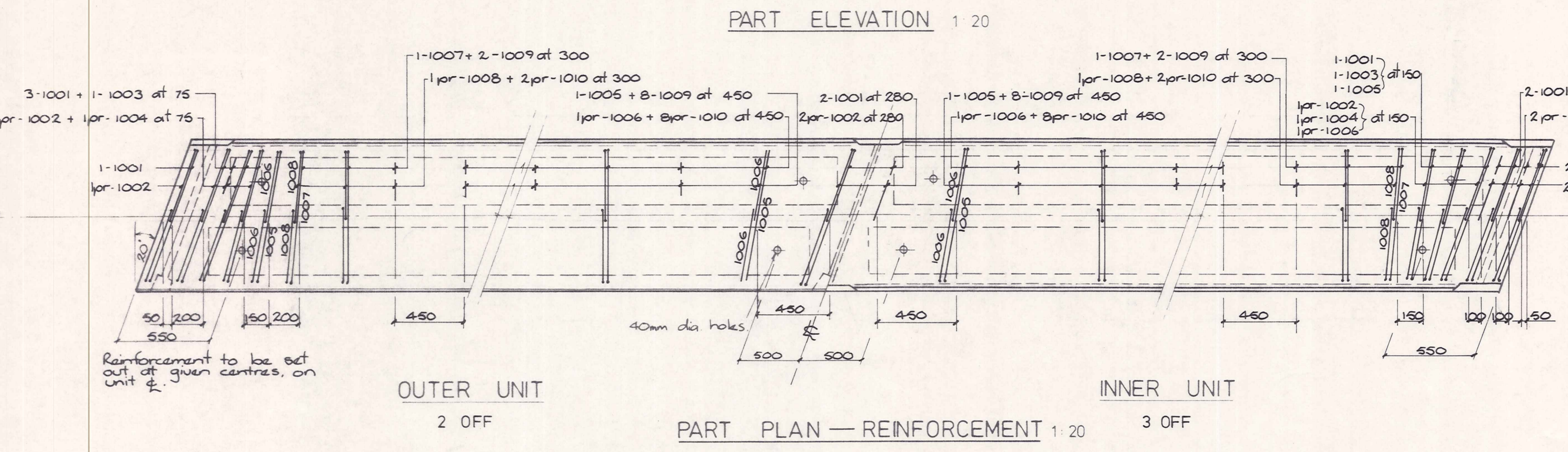
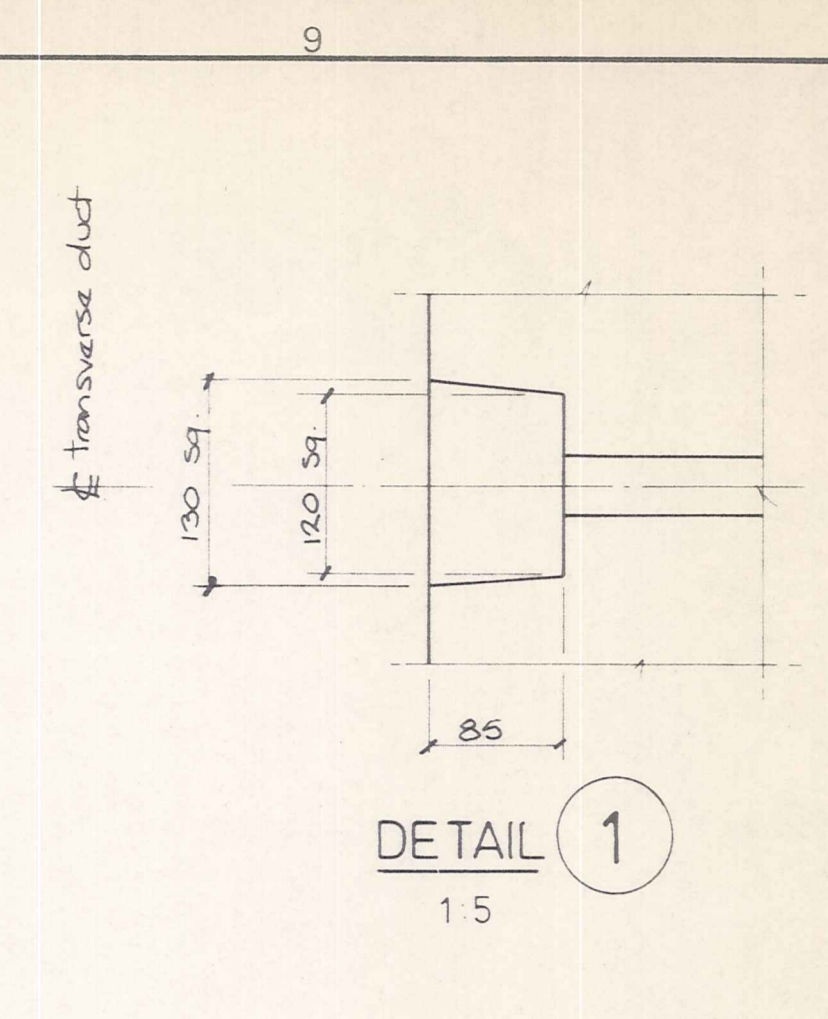
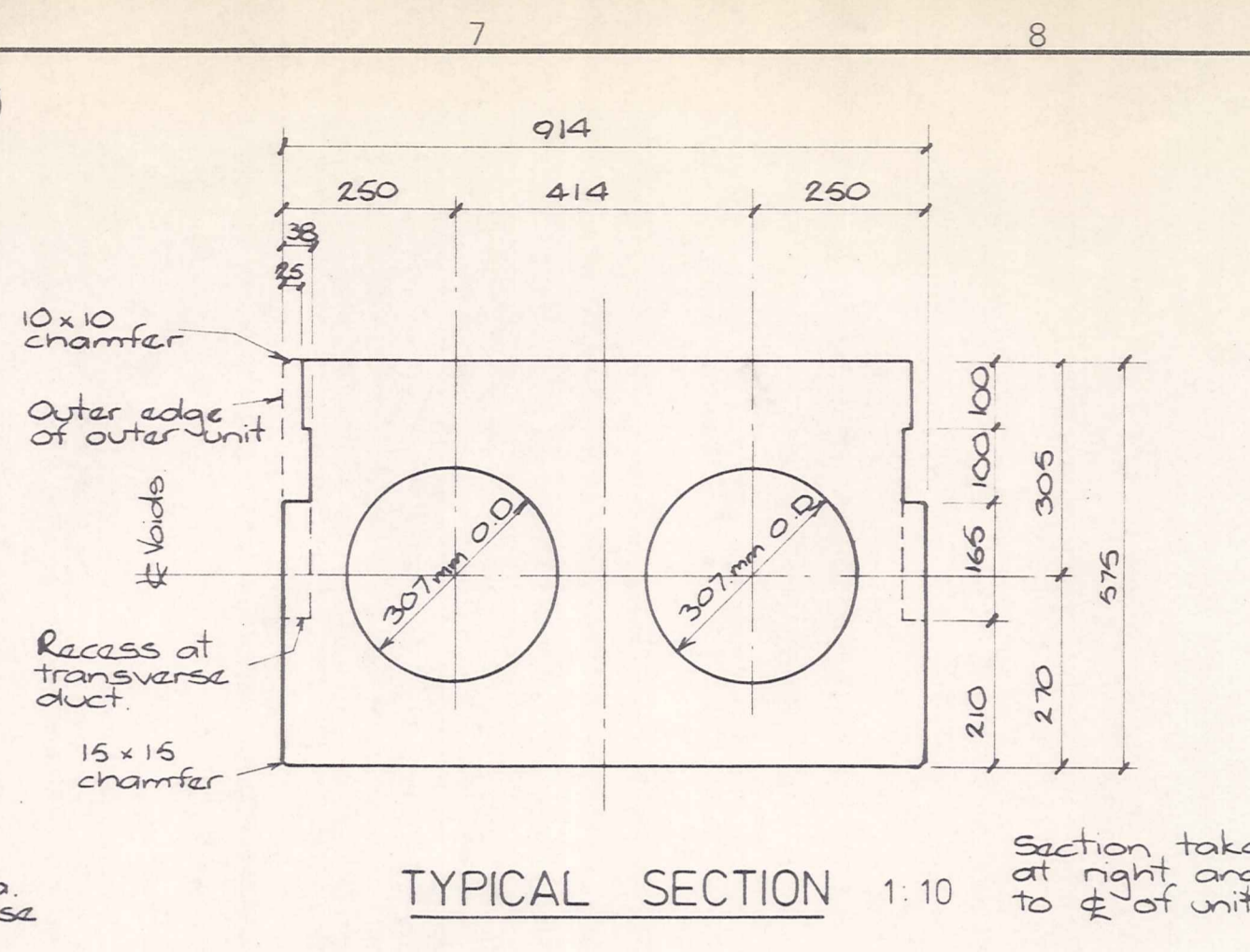
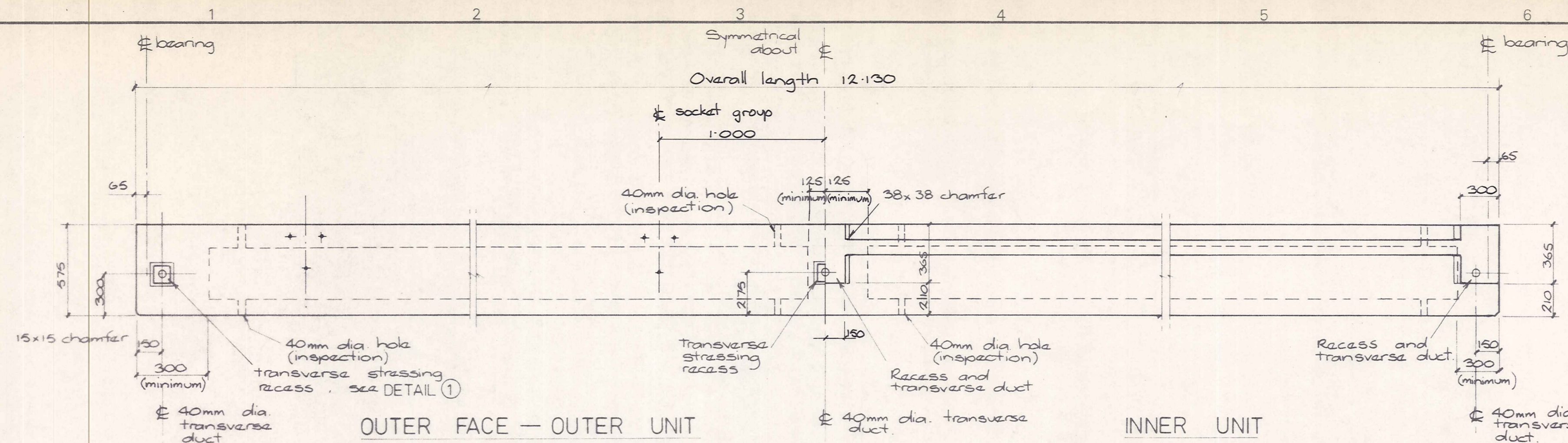
**VINCENT COUNTY COUNCIL**

**HARVEY ROAD BRIDGE**  
COLUMN DETAILS

AMENDMENTS				NAME		DATE	JOB NO.	Sheet No	
NO.	BY	DATE	Appvd.	Surveyed	Drawn		7869	3	
A	KJL	Nov 79			K.J. Dawford	8/79			
					Calculations	2. Baekhyis			
					Traced	K.J. Dawford			
					Checked				
					Approved		File	L.B.	F.B.

of 5 sheets





REINFORCEMENT SCHEDULE (for one unit)				
MARK	A	N° OFF	LENGTH	SHAPE (N.T.S.)
1001	849	11	1.181	
1003	826	2	1.158	
1005	810	4	1.142	
1007	801	2	1.133	
1009	798	20	1.130	
1002	446	22	1.622	
1004	434	4	1.610	
1006	426	8	1.602	
1008	421	4	1.597	
1010	419	40	1.595	

NOTES:

(a) Mark designation of bars i.e. 1001  
10 = diameter in mm  
01 = 1st bar mark in unit

(b) All bands shall comply with C.D.103

(c) All dimensions are from outside to outside unless shown otherwise

(d) All bars shall be plain round steel, grade 275.

UNIT DETAILS	
Unit depth (m)	0.575
Unit span (m)	12.00
Overall length (m)	12.13
12.5 strands	Number 19 Total length (m) 237.5
Reinforcement	Total weight (kg) 105
Concrete volume per unit	Inner unit (m³) 4.53 Outer unit (m³) 4.61
Handling mass	Inner unit (tonnes) 11.8 Outer unit (tonnes) 12.0

- NOTES
- Transverse stressing requirements:  
1 cable at midspan and 1 cable at each end.  
Each cable to consist of one 125mm strand stressed to 116 kN.
  - Recess for transverse stressing in outer unit shall be dimensioned to suit the prestressing suppliers recommendations for the system used.
  - Pretensioned strands shall be released slowly and after release shall be cut and ground off flush with the concrete at the end of the unit. A protective coating of coal tar epoxy shall be applied as specified before the unit leaves the casting yard.
  - Inspection holes shall extend to the void former only and shall be mortared up after final inspection of the units. Drainage holes shall extend through the void formers and into the void.
  - Concrete cover to all prestressing components = 40mm; cover to all reinforcing steel = 30mm or as shown; cover adjacent to cored holes = 10mm.
  - Design loading: HN-HO-72.
  - Specification: this design is based on materials and workmanship in accordance with the current M.W.D. specification C.D.201.
  - Handling:
 

Extremes of vertical lifting points or ground support shown hatched. Keep unit as horizontal as possible.
  - Surface finishes:  
(a) top surface - broom finish as specified in clause 6.6.6. of C.D.101.  
(b) Side and underside surface - smooth finish except shear key. see DETAIL 2

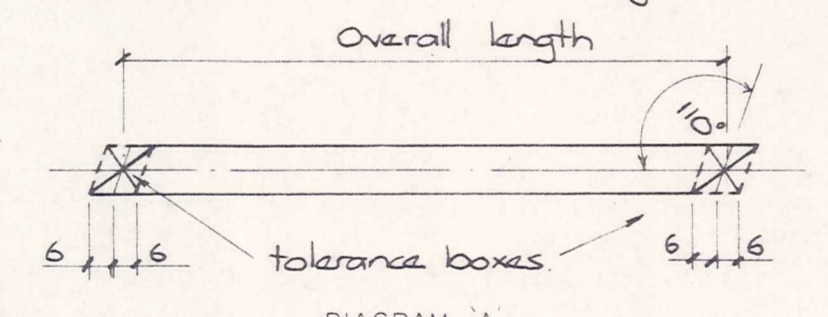
PRESTRESSING FORCES AT INITIAL TENSIONING

Unit span (m)	12.0
Total per unit (kN)	Longitudinal stressing 2320

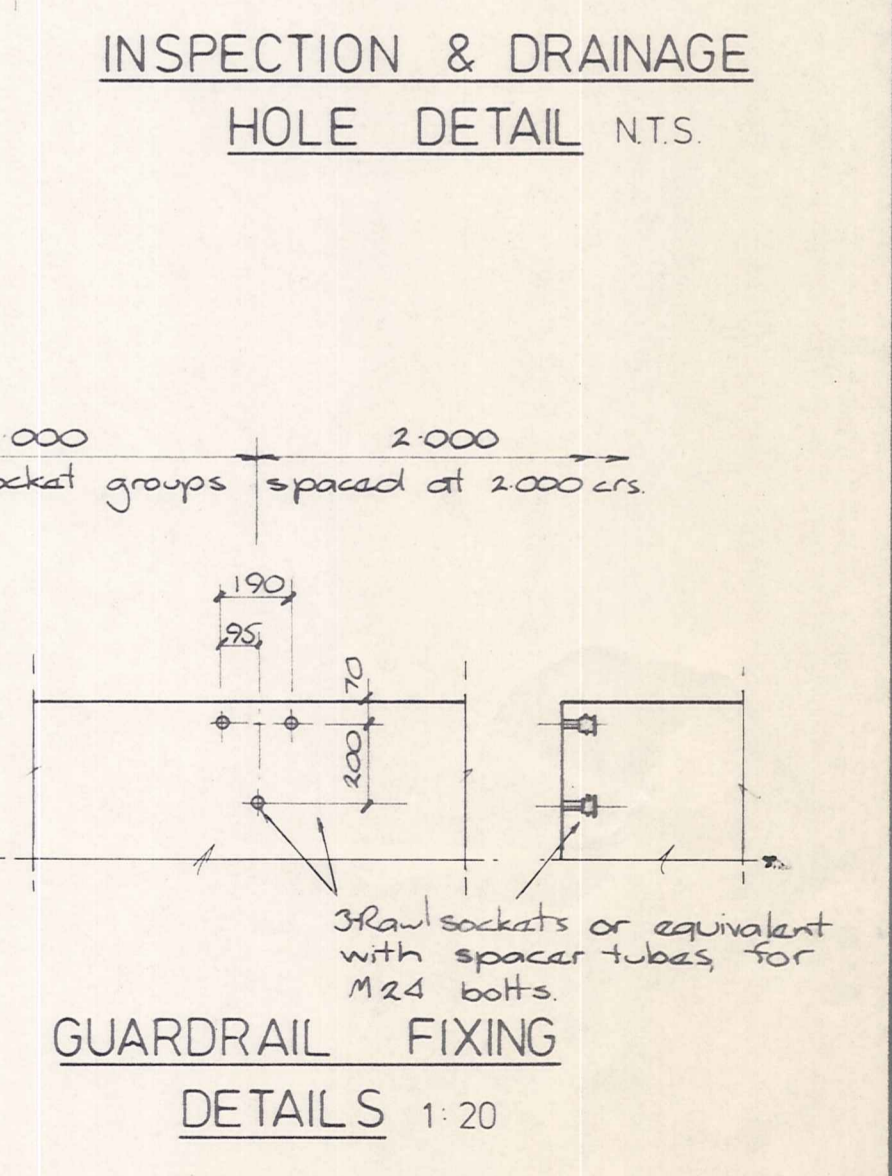
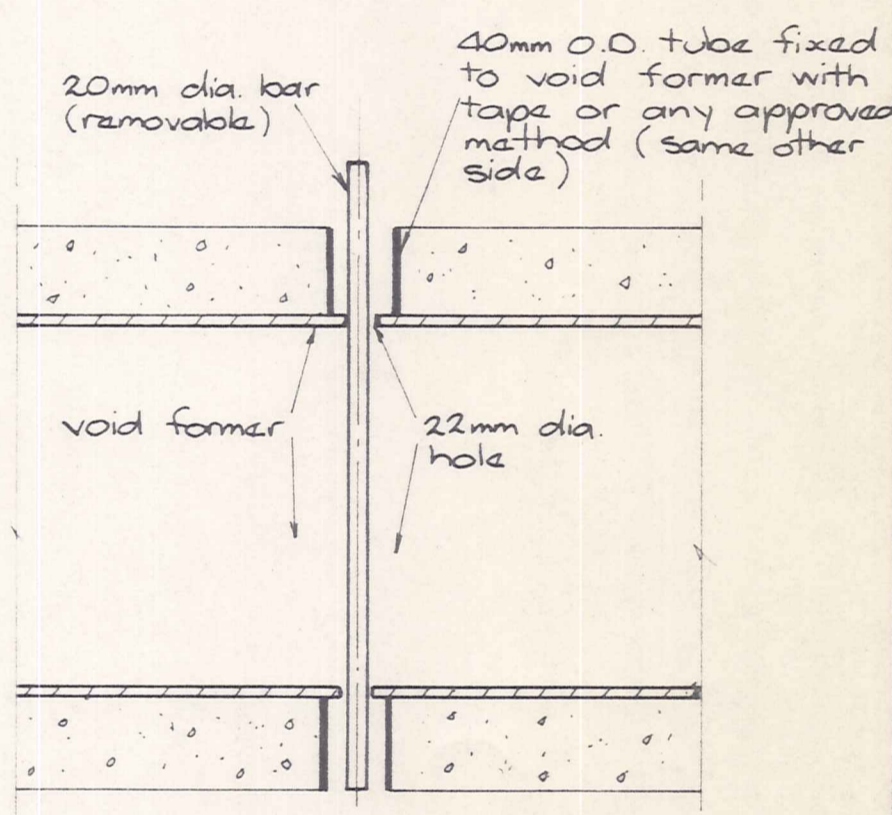
TOLERANCES

Dimensions at time of erection:

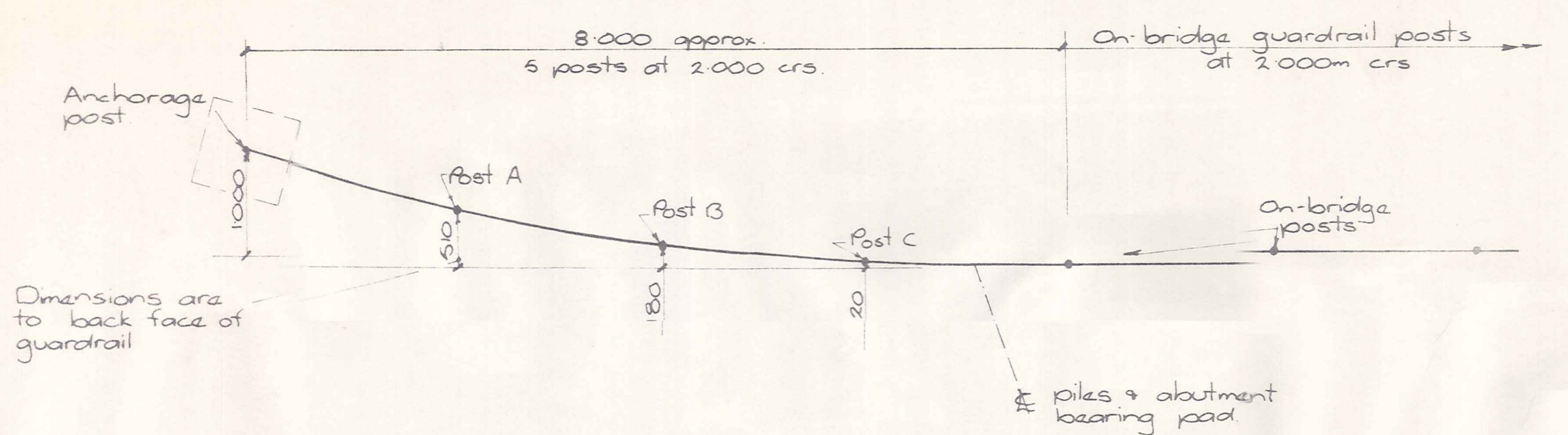
Actual overall length and squareness - the unit end surfaces shall lie within the tolerance boxes shown in Diagram A.



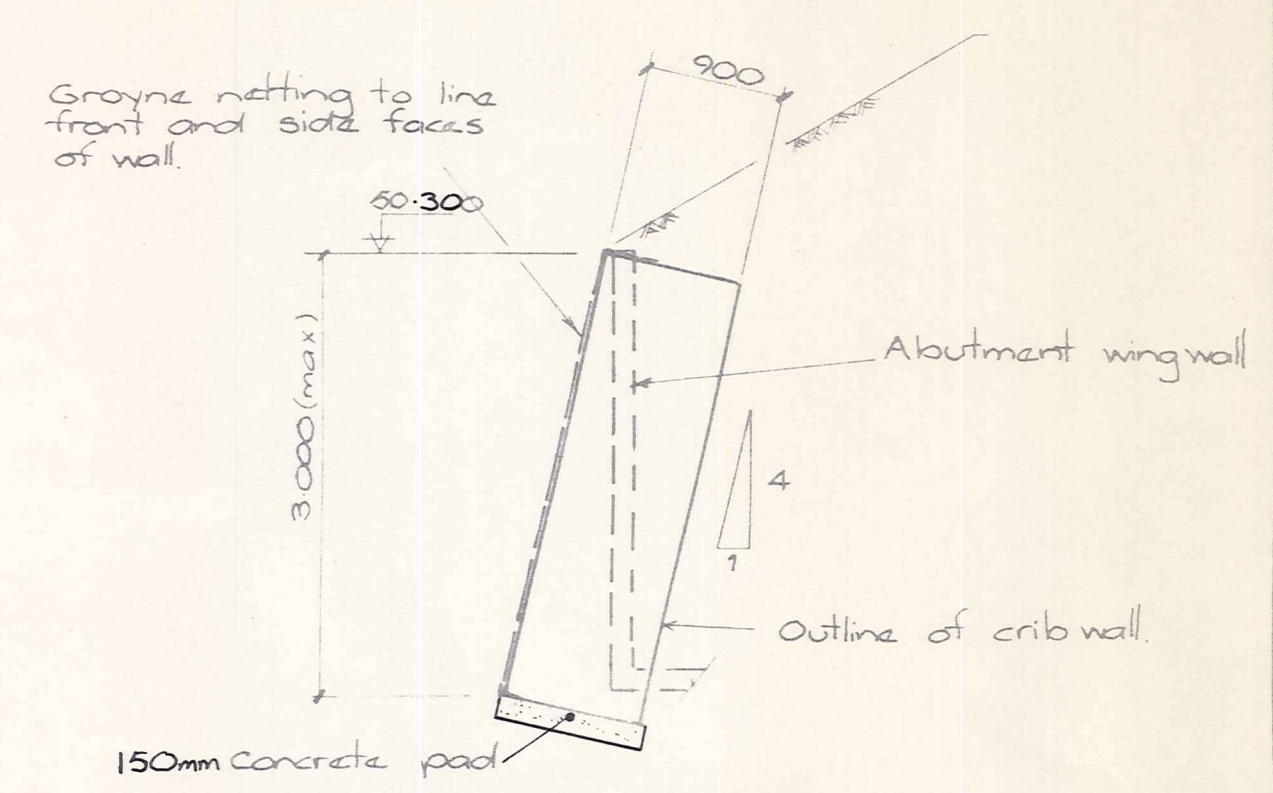
- Overall length --- ±12mm  
Plane surface - deviation from 1500m straight edge --- 6mm  
All cross sectional dimensions --- ±6mm  
Difference in level of top surface between adjacent units in place --- 12mm  
Horizontal deviation (see specification) --- 6mm  
Smallest web thickness --- +6mm -4mm  
Smallest flange thickness --- ±6mm  
Diaphragm thickness --- ±12mm  
Lagging variation (see specification) --- ±12mm
- Location of steel and cast-in system
- Prestressing strands in any direction  
Location of an item in relation to any other item within its group --- ±10mm  
Transverse duct position --- ±6mm







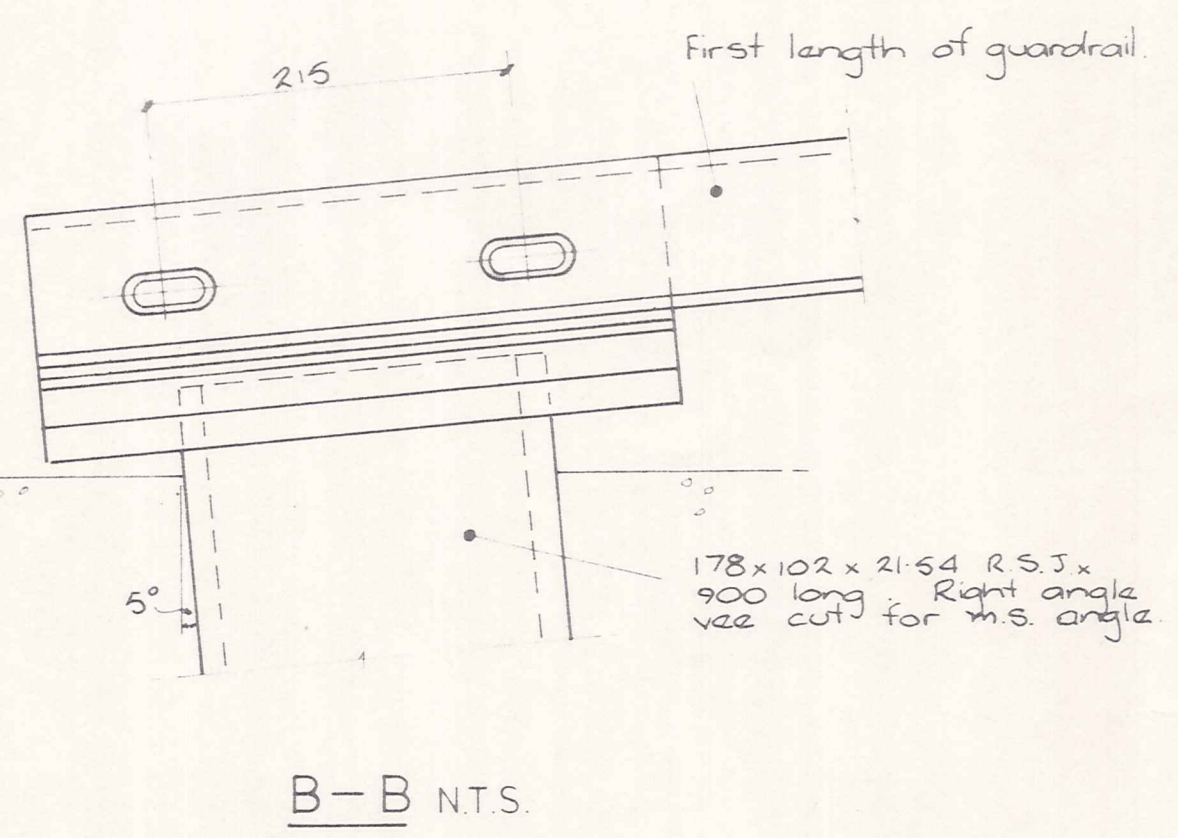
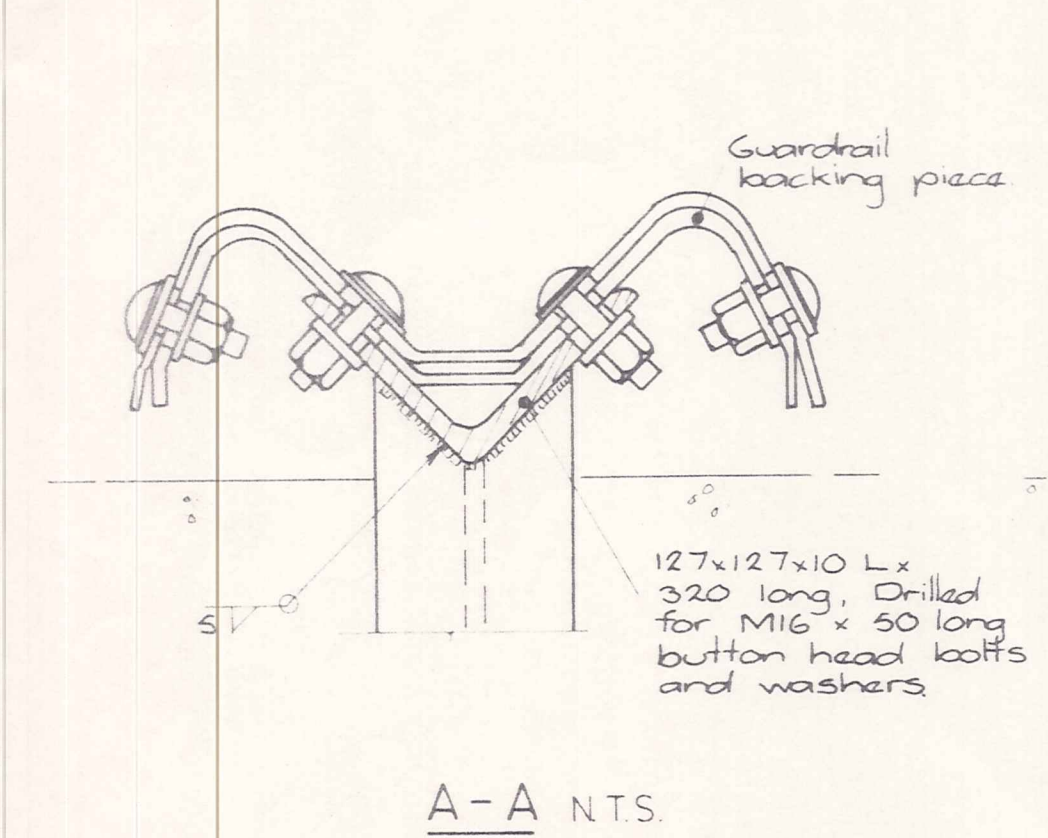
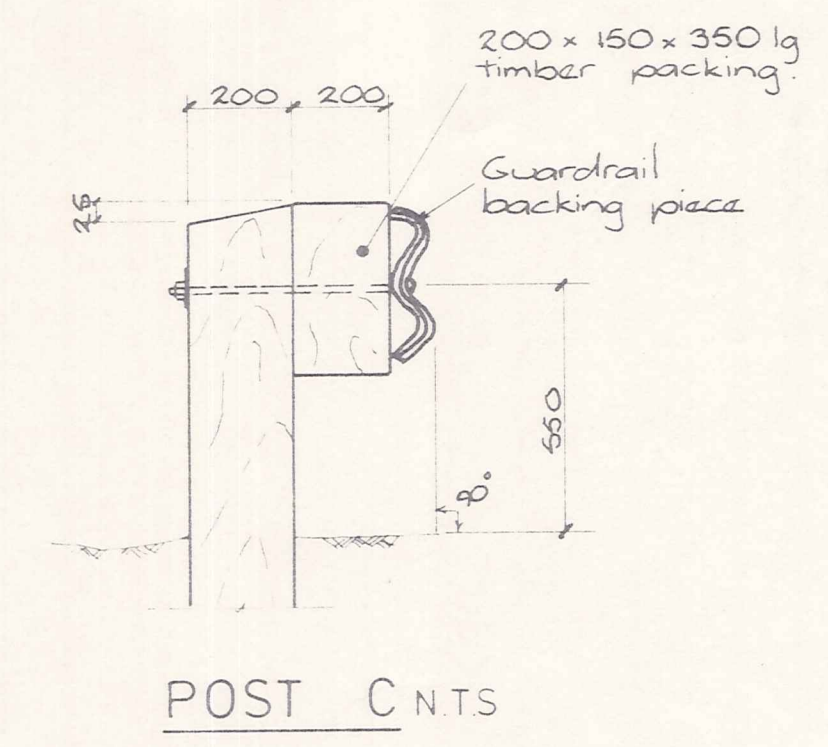
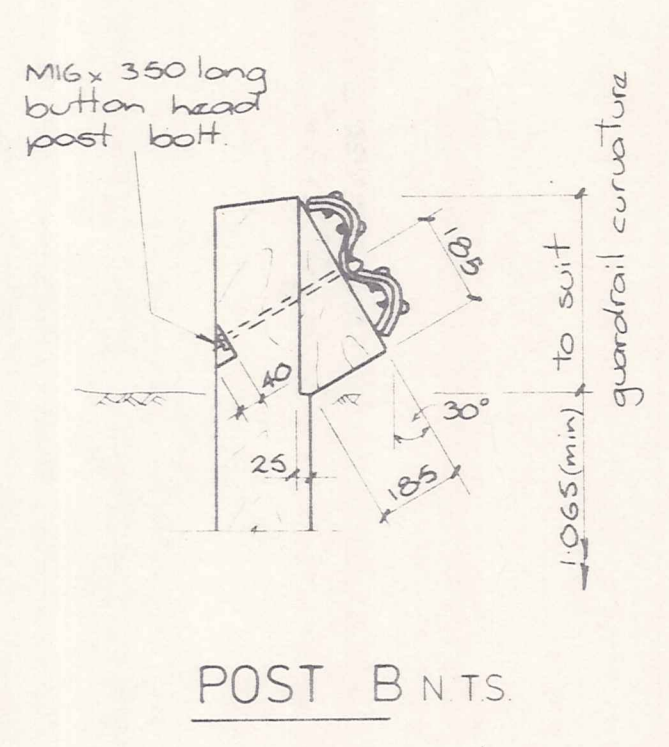
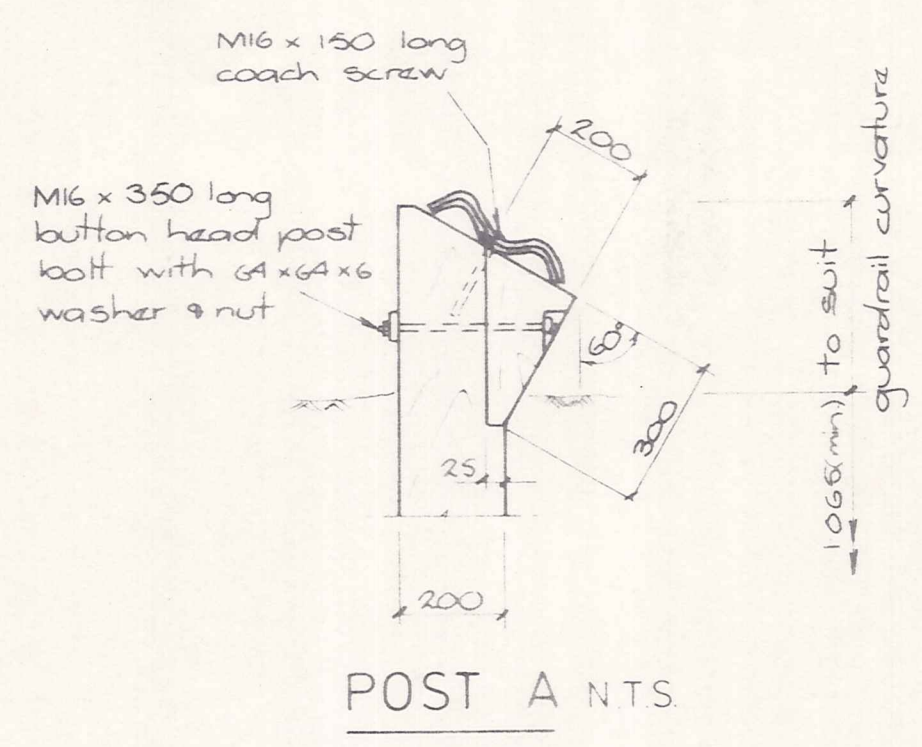
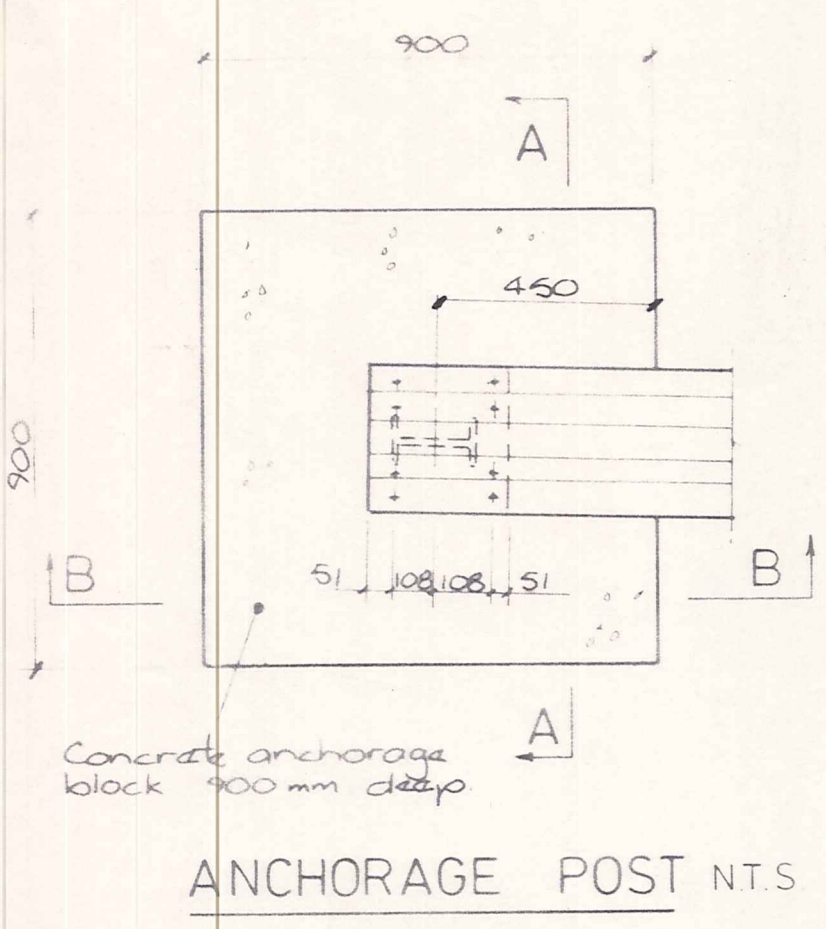
TYPICAL GUARDRAIL LAYOUT PLAN 1:50



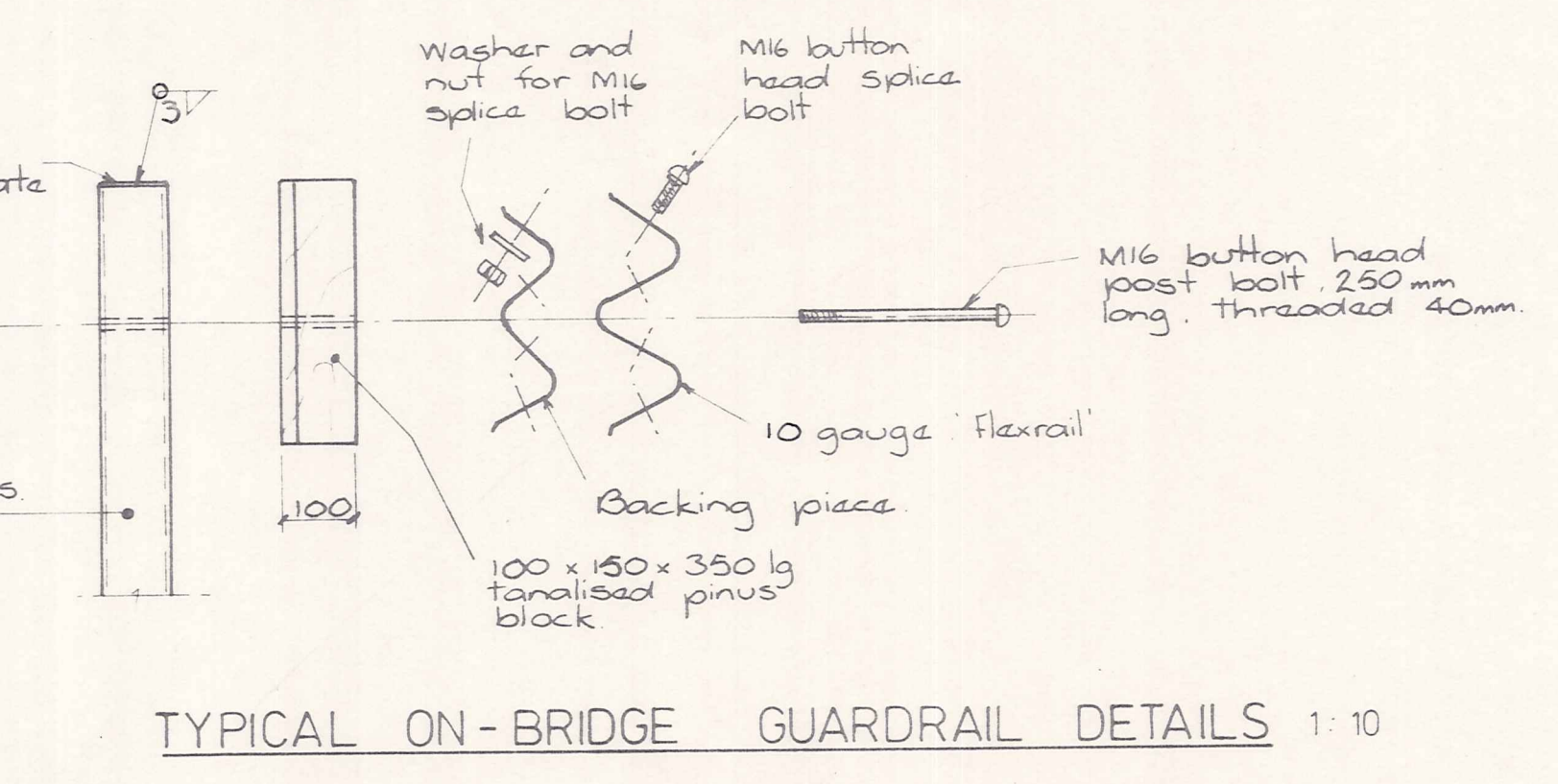
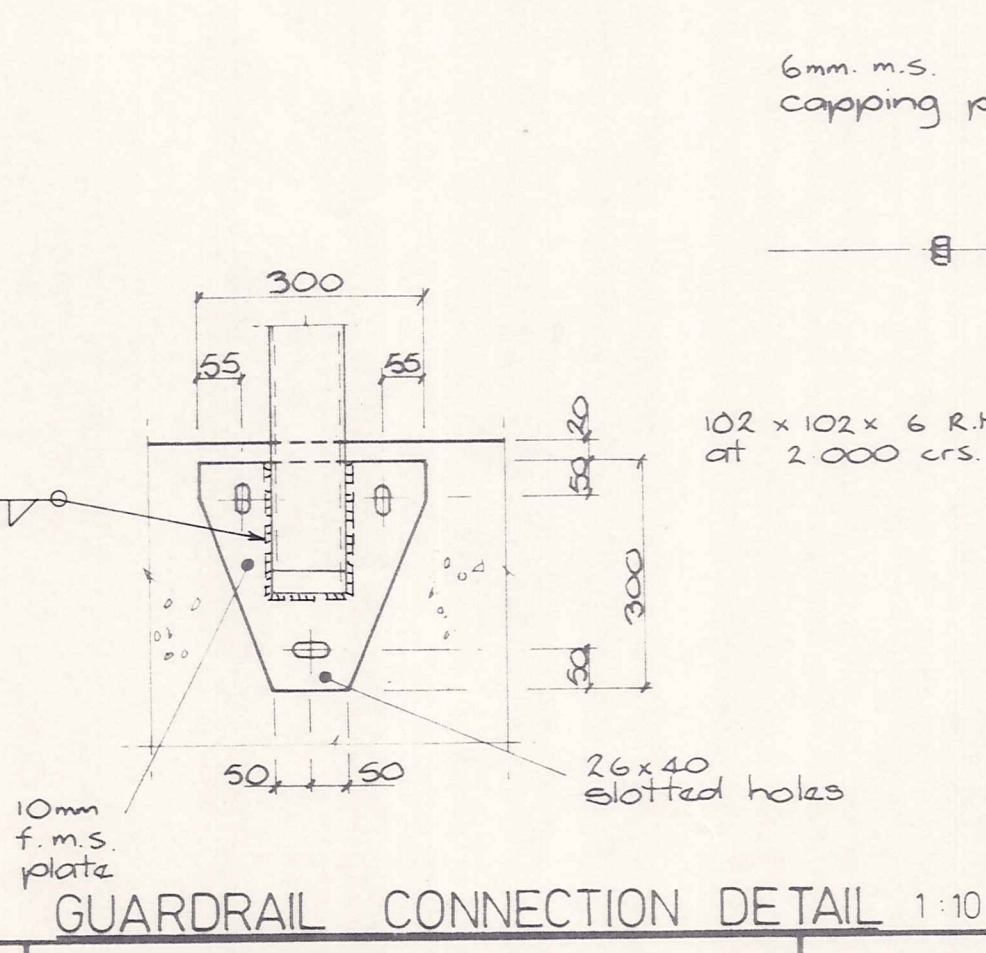
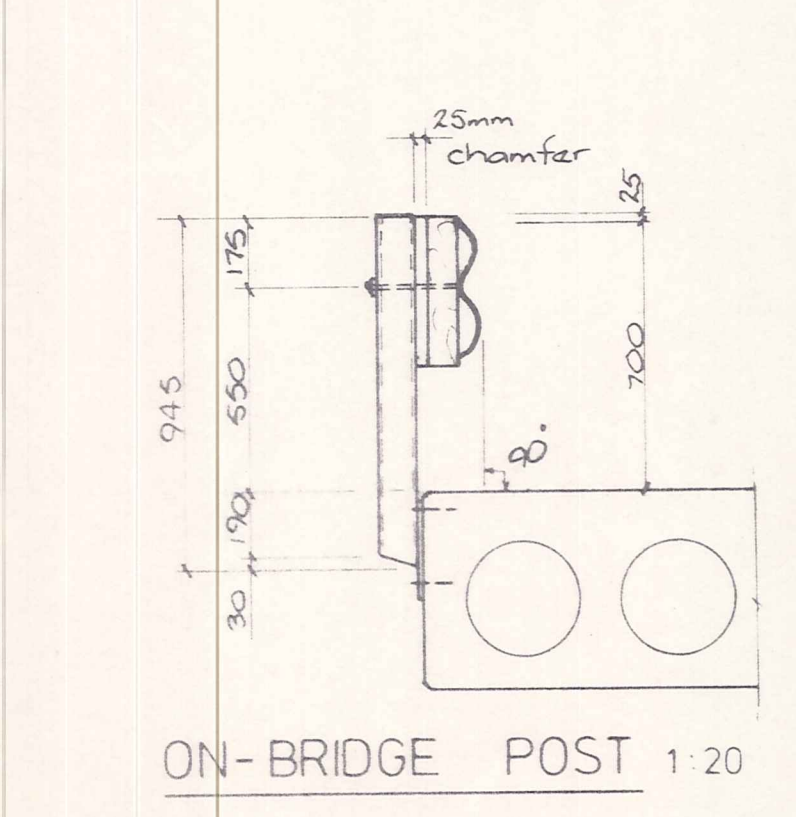
TYPICAL SECTION 1:50

CRIBWALL DETAILS

Note: Orientation in plan and extent of cribwall behind abutment to be determined on site. (See sheet 1 also)



- NOTES:
- All steelwork to be hot dipped galvanized after fabrication, including bolts, nuts and washers.
  - All timber posts and blocks to be pinus radiata merchantable grade, cut to size, drilled and then preservative treated to the Timber Preservation Authority Specification C3.



TYPICAL ON-BRIDGE GUARDRAIL DETAILS 1:10

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HARVEY ROAD BRIDGE  
GUARDRAIL AND CRIBWALL DETAILS

AMENDMENTS			NAME		DATE	JOB NO.	Sheet No.		
NO	BY	DATE	Appvd	Surveyed	Drawn	Calculations	Traced	Checked	Approved
				K. Crawford	8/79				
				J. Beckett	8/79				
				L. Crawford	8/79				

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