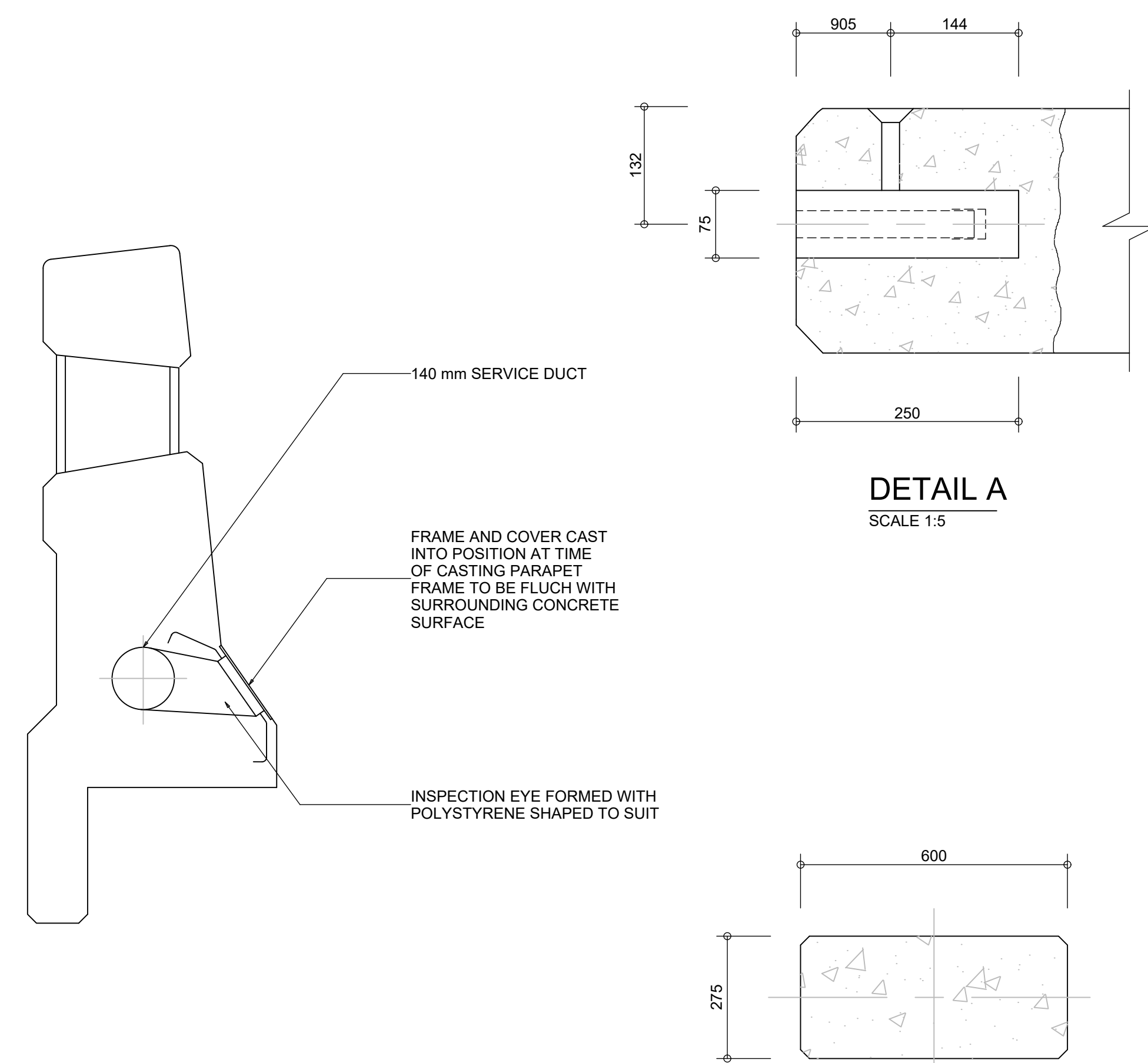


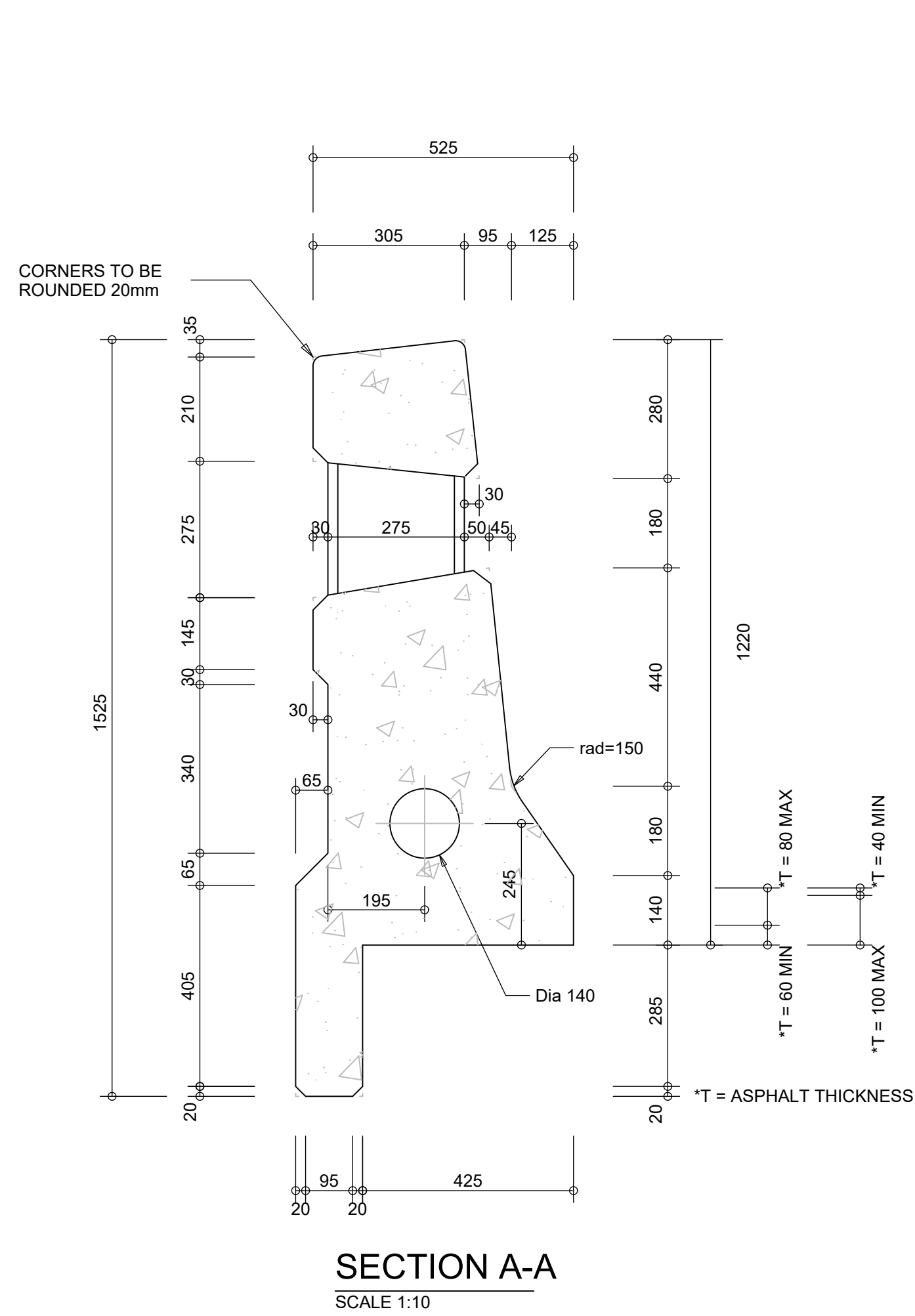
SECTION Y-Y
SCALE 1:10

ELEVATION OF PRECAST UNIT WITH INSPECTION EYE
SCALE 1:10

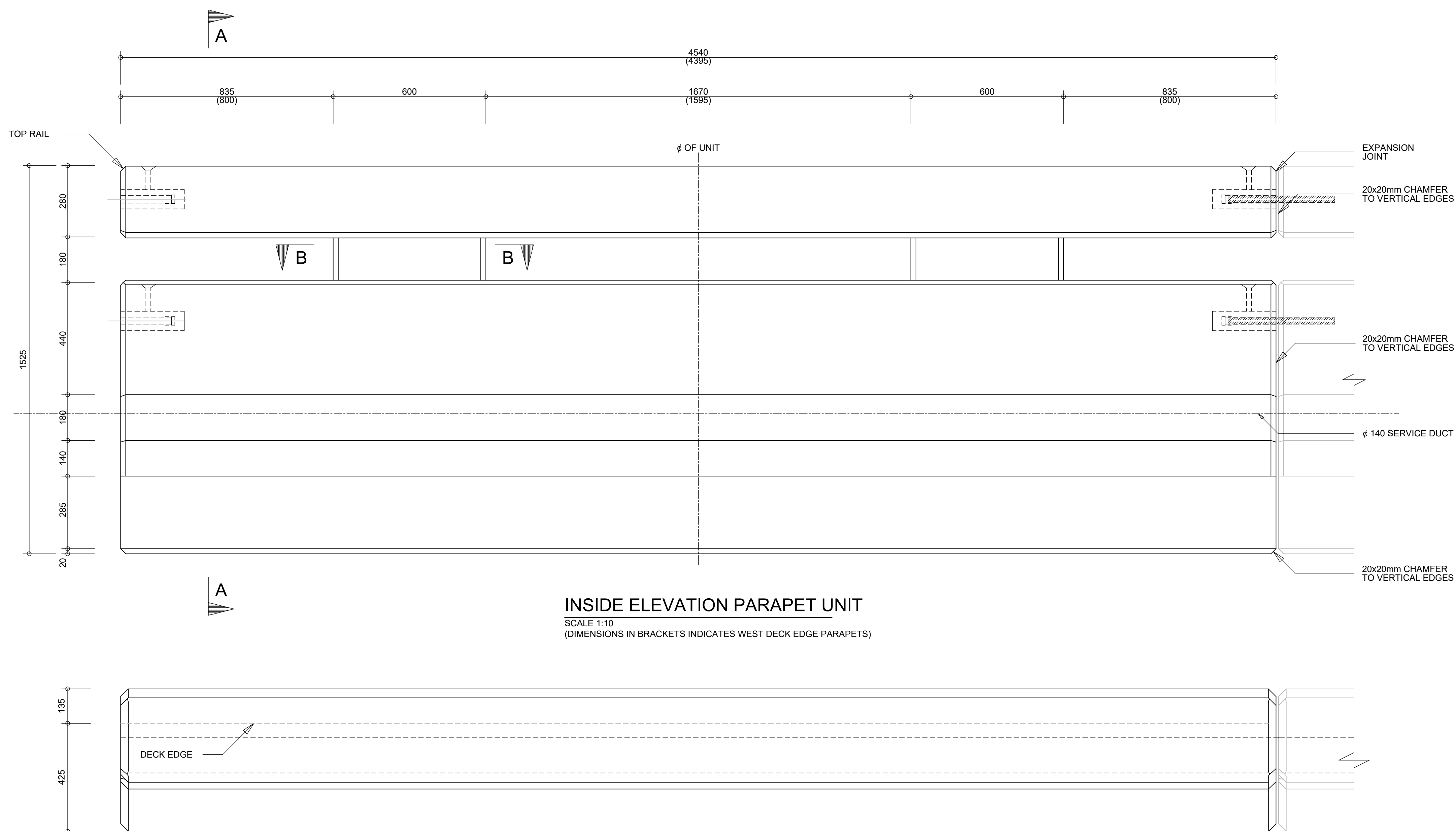


DETAIL OF INSPECTION EYE
SCALE 1:10

SECTION B-B
SCALE 1:10



SECTION A-A
SCALE 1:10



INSIDE ELEVATION PARAPET UNIT
SCALE 1:10
(DIMENSIONS IN BRACKETS INDICATES WEST DECK EDGE PARAPETS)

NOTES

- ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT CLAUSES OF SECTION C13 AND C20 OF THE STANDARD SPECIFICATIONS, THE PROJECT SPECIFICATION, AND SHALL INCLUDE THE FOLLOWING:
- THE REINFORCEMENT DETAILS SHOWN ON THIS DRAWING ARE FOR CONVENTIONAL REINFORCING STEEL BARS.
 - CONCRETE CLASS : D32/40-21
 - MINIMUM CONCRETE COVER TO REINFORCEMENT : 40mm SPECIAL ATTENTION SHALL BE GIVEN TO THE NUMBER AND POSITIONING OF THE COVER BLOCKS TO ENSURE THAT THE CONCRETE COVER IS MAINTAINED DURING CONCRETING.
 - FOR PARAPET UNITS WITH INSPECTION EYES THE LONGITUDINAL REINFORCEMENT INTERRUPTED BY THE OPENINGS MAY BE CUT TO SUIT. VERTICAL BARS FOWLING INSPECTION EYES TO BE MOVED. THE 40mm CONCRETE COVER SHALL BE MAINTAINED.
 - LAP LENGTH : 45 DIA.
 - ABBREVIATIONS:
EF = EACH FACE
FF = FAR FACE
NF = NEAR FACE
AS = AS SHOWN

GENERAL

- 1.0 DESIGN LOADING
- 1.1 BRIDGE. PARAPETS SHALL BE DESIGNED IN ACCORDANCE WITH THE CODE OF PROCEDURE FOR PLANNING AND DESIGN OF HIGHWAY AND ROAD STRUCTURES IN SOUTH AFRICA, FEBRUARY 2002, CLAUSE 11.20.3 AND TM7 PART 1 AND 2, 1981, AS REVISED 1988, CLAUSE 3.5.1.2.
- 2.0 THE PARAPET
- 2.1 SHALL NOT BE DESIGNED AS AN INTEGRAL PART OF THE DECK WITHOUT APPROVAL. I.E. IT SHALL BE POSSIBLE TO REMOVE THE BALUSTRADE SHOULD THE BRIDGE REQUIRE WIDENING. THE BALUSTRADE SHALL BE CAST AFTER THE DECK IS SELF-SUPPORTING.
- 2.2 ALL WORK MUST BE EXECUTED IN ACCORDANCE WITH THE ' STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE WORKS' (COLTO)
- 3.0 MATERIAL AND FINISHES
- THE MATERIAL AND WORK SHALL COMPLY WITH THE RELEVANT CLAUSES OF SERIES 6000 AND 8000 OF THE STANDARD SPECIFICATIONS, THE PROJECT SPECIFICATIONS AND SHALL INCLUDE THE FOLLOWING:
- 3.1 CONCRETE CLASS (MPa/mm) : D32/40-20
- 3.2 STEEL REINFORCING BARS SHALL COMPLY WITH SANS 920:1985
HIGH YIELD BARS : MIN YIELD STRESS 450 MPa.
MILD STEEL BARS : MIN YIELD STRESS 250 MPa.
- 3.3 MINIMUM CONCRETE COVER TO REINFORCEMENT : 40 mm
- 3.4 SURFACE FINISHES - (EXPOSED FACES)
- CLASS F3 - STEEL SHUTTER FINISH
- CLASS U3 - STEEL TROWEL FINISH
- 3.5 THE DRAW WIRE PROVIDED IN THE SERVICE DUCTS SHALL BE IN ONE CONTINUOUS LENGTH, EXTENDING NOT LESS THAN 3m BEYOND THE END FACE OF THE ABUTMENT END BLOCKS. THE DRAW WIRE SHALL BE NON-CORRODIBLE NYLON ROPE OR PVC COATED STEEL WIRE OF NOT LESS THAN 5000N TENSILE STRENGTH.
- 3.6 SERVICE DUCTS : 110 AND 150 uPVC NORMAL DUTY (SDR 51) PIPES TO SANS 791:2004

FOR TENDER
PURPOSES ONLY

CONSTRUCTION RECORD (AS-BUILT)			DESIGNED BY		CONSULTANT APPROVAL		HEAD OFFICE		EASTERN REGION		ACCEPTANCE		REHABILITATION OF NATIONAL ROUTE N11 SECTION 13 FROM		PROJECT NUMBER		NRA N.011-130-2010/1	
WORKS CONTRACT ENGINEER			NAME		Name		58 van Eck Place		58 van Eck Place		THIS ACCEPTANCE IS FOR PROCEDURAL AND ADMINISTRATIVE REVIEW PURPOSES ONLY AND DOES NOT ATTRACT LEGAL LIABILITY OR LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING		R518 INTERSECTION(km 8.340) TO GROOTSANDSLOOT RIVER(km 24.280)		DRAWING LOCATION DATA			
Name			Prof. Reg. No.		Date		Pietermaritzburg		Pietermaritzburg		Date				ROUTE		N11	
Date			CHECKED BY		Date		0184		3201		11/03/2021				SECTION		13	
SANRAL PROJECT MANAGER			NAME		Name		PO Box 415		PO Box 415				DITHOKENG RIVER BRIDGE B0270 AT km 15.606		DRAWING km DISTANCE		15.58	
Name			Prof. Reg. No.		Date		Pretoria 0001		Scottsville				PARAPET CONCRETE AND REBAR DETAIL		BRIDGE/STRUCTURE No.		B0270	
Date			DRAWN BY		Date		South Africa		3209						CONSULTANT DRAWING No.		BCD/B0270/16	
All dimensions to be checked on site before any work is put in hand. Refer any discrepancies to the engineer.			NAME		Date		Tel: (012) 844 8000		Tel: (033) 392 8100		for the SA NATIONAL ROADS AGENCY SOC LTD.		SCALE : AS SHOWN		SHEET 16 OF 22		SANRAL DOCUMENT #	
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