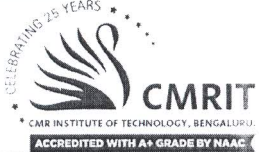


USN						1 C R		C V				
Internal Assessment Test 1 – Mar. 2018												
Sub:	Design and drawing of steel structure					Sub Code:	10CV82	Branch:	Civil			
Date:	12/03/18	Duration:	90 min's	Max Marks:	50	Sem / Sec:	VIII A & B			OBE		
<u>Answer any All questions</u>										MARKS	CO	RBT
1	<p>Two cross beams ISLB 300 and ISMB 500 are connected to main beam ISMB 600 by using a frame angle of 2 ISA (90 × 90 × 8)mm. 10 mm clearance is given and flanges are at same level. Connection details are as follows</p> <p>I. Web of the beam ISLB 300 is connected to web of ISMB 600 by using 3 bolts of 20 mm diameter.</p> <p>II. Web of the beam ISMB 500 is connected to web of beam ISMB 600 by using 4 bolts of 20 mm diameter.</p> <p>III. Use suitable pitch and edge distance.</p> <p>Draw to a suitable scale</p> <p>I. Front view</p> <p>II. Side view from ISLB 300</p> <p>III. Sectional plan showing all details</p>					[25]	CO1	L3				
2	<p>Draw the front elevation and side elevation of a column splicing arrangement for the following data.</p> <p>Column of ISHB 300 @ 58.8 kg/M, cover plates of (420 × 250 × 6)mm, 20mm diameter bolts at 70mm C/C and thickness of web splice plate is 12mm. Draw to a suitable scale front view and side view with all details</p>					25	CO1	L3				

CI

CCI

HoD Civil

450

ISHB450 @ 872 N/m

CLEET ANGLE
ISA (90x90x8)

2#20φ

ISMB400 @ 661 N/m

16.0

13.7

400

ISA (100x100x8)

SEAT ANGLE

4#20φ

2 ISA (90x90x8)

60

60

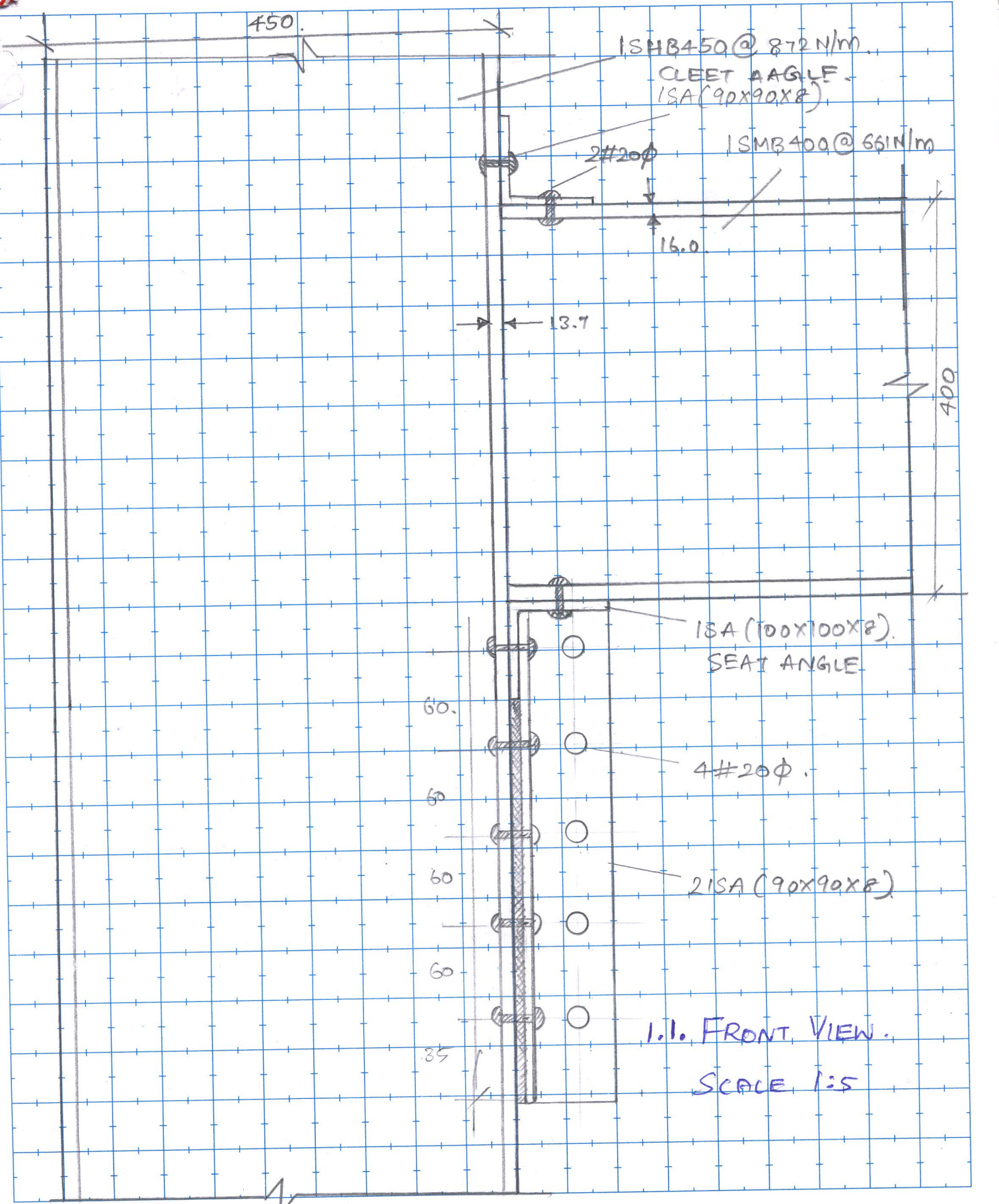
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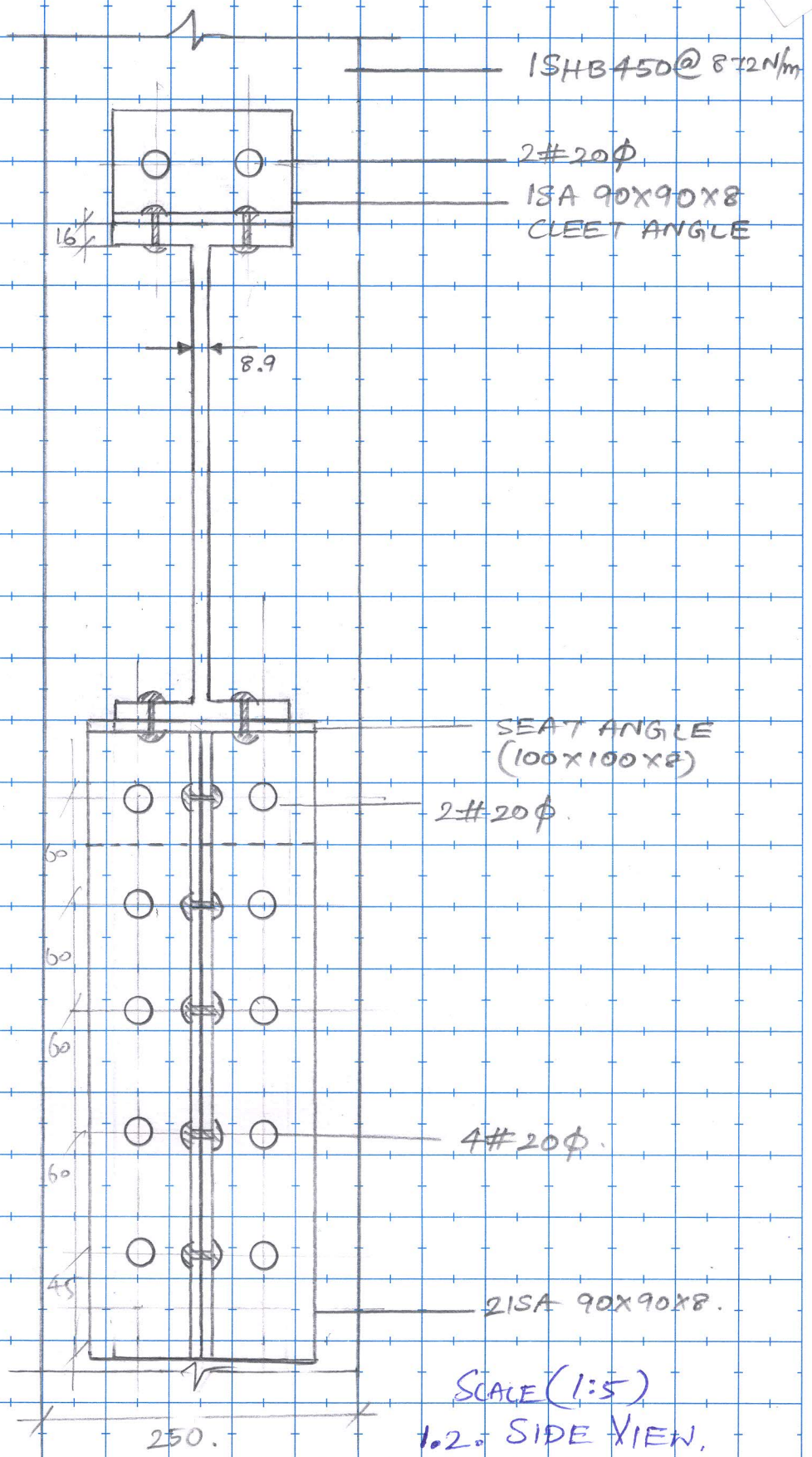
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85

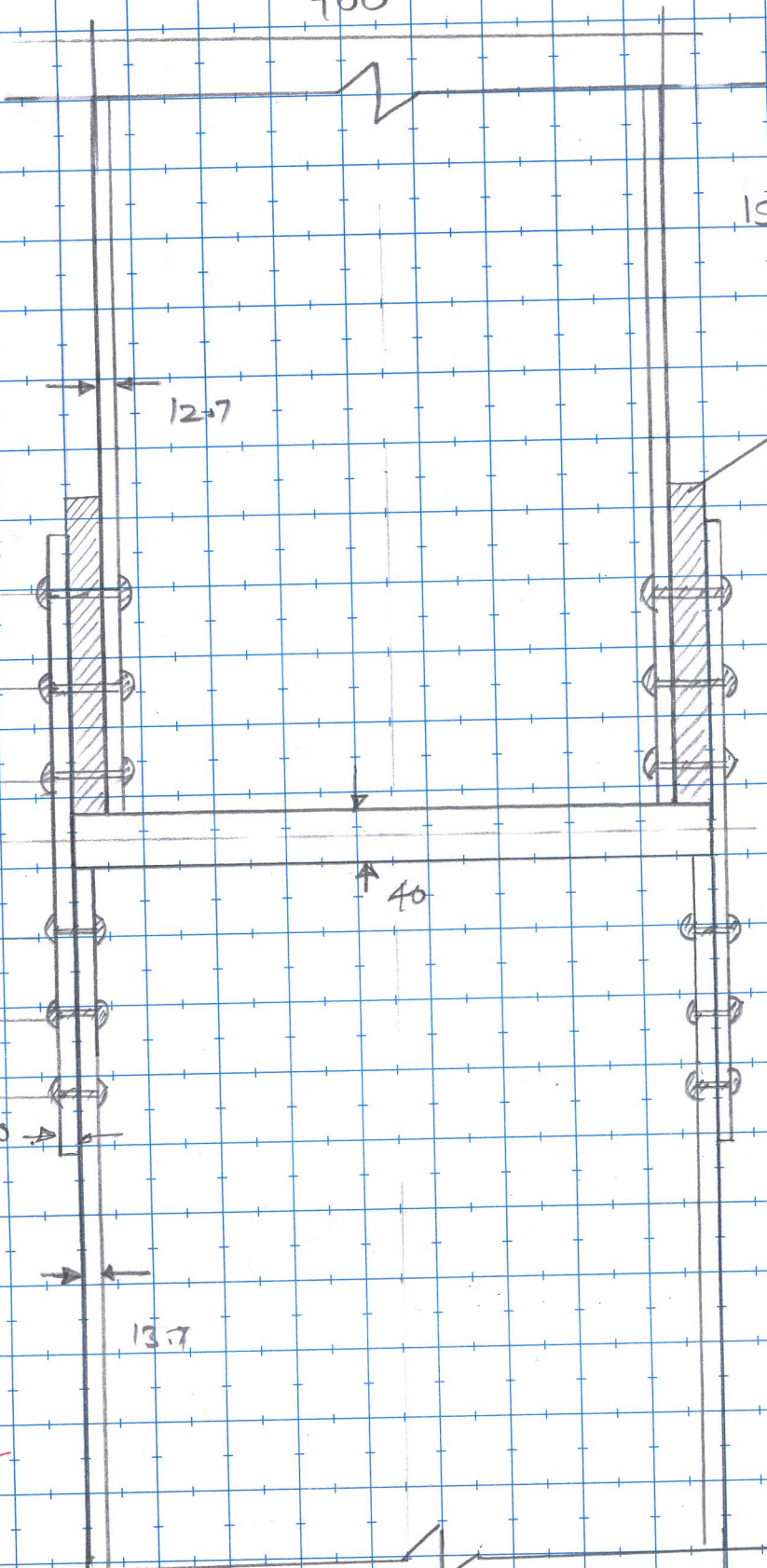
1.1. FRONT VIEW.

SCALE 1:5





400



ISHB 400
@ 77.4 kg/m

PACKING/
FILLER
PLATE 25MM
THICK.

FLANGE
SPLICE
(440x250x10)

BEARING PLATE
(440x250x40)

ISHB 450
@ 87.2 kg/m

(Scale 1:5)

2-1. FRONT
VIEW

450

12.7

40

60

60

60

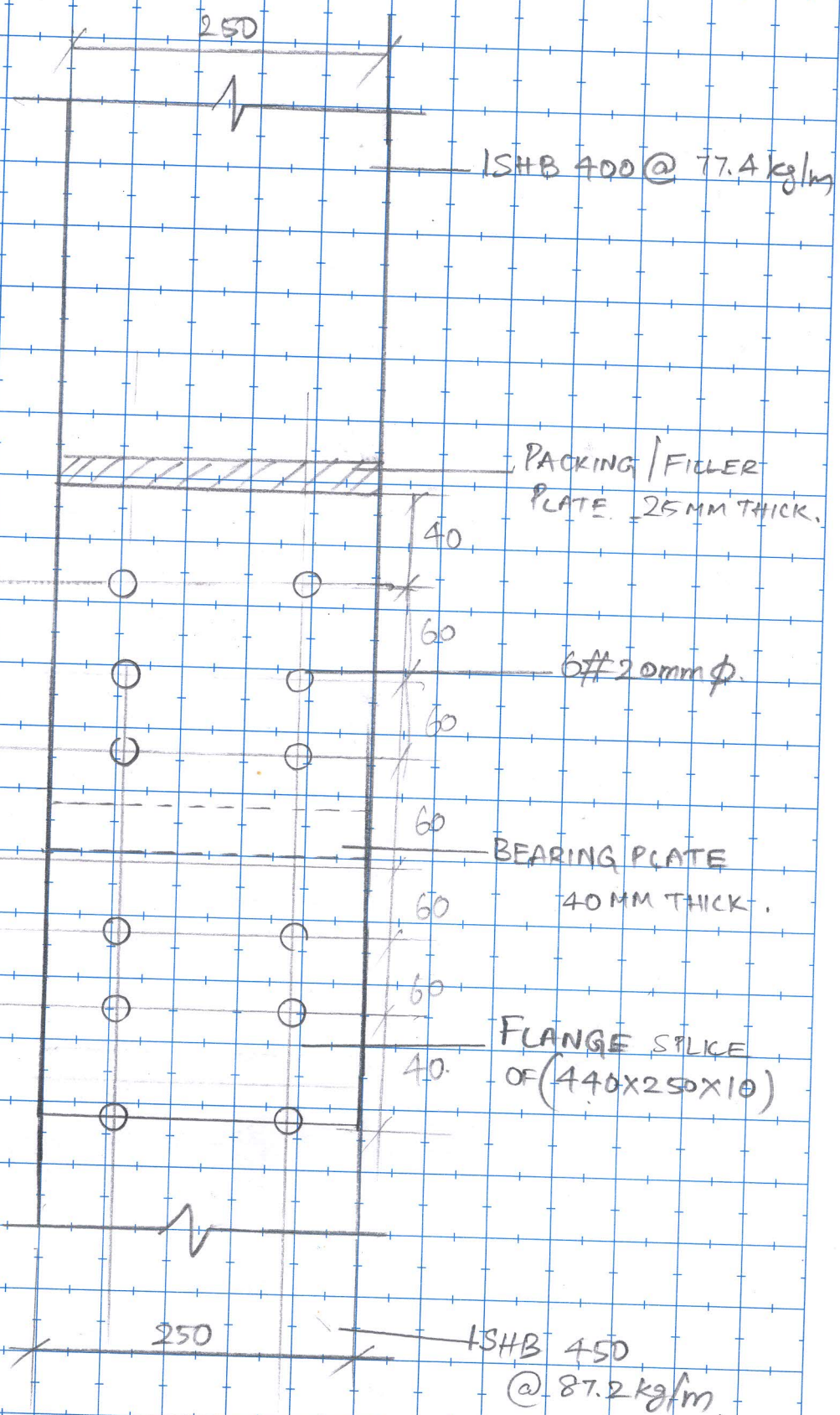
60

40

10

13.7

40



2.2. SIDE VIEW (SCALE 1:5)