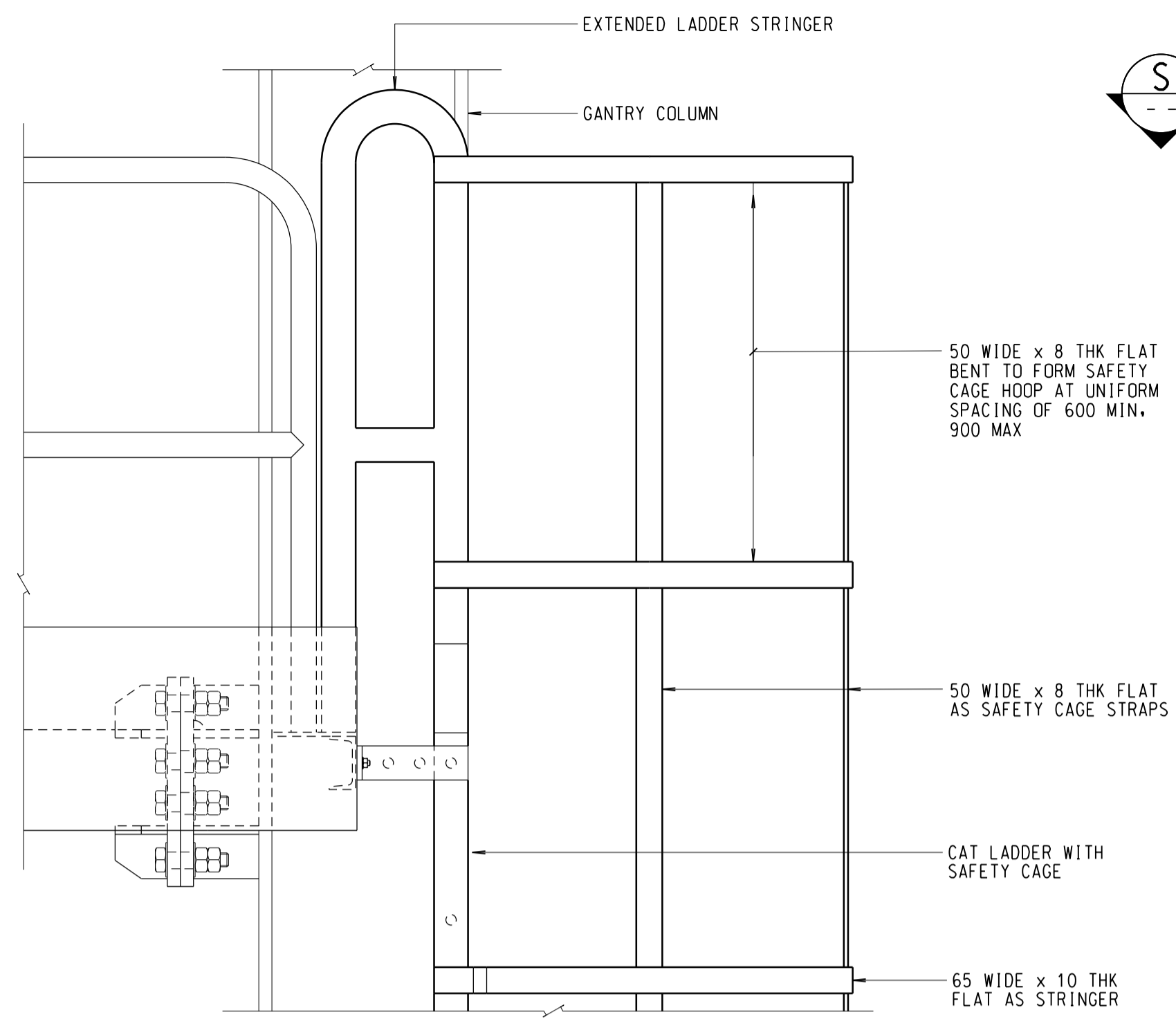
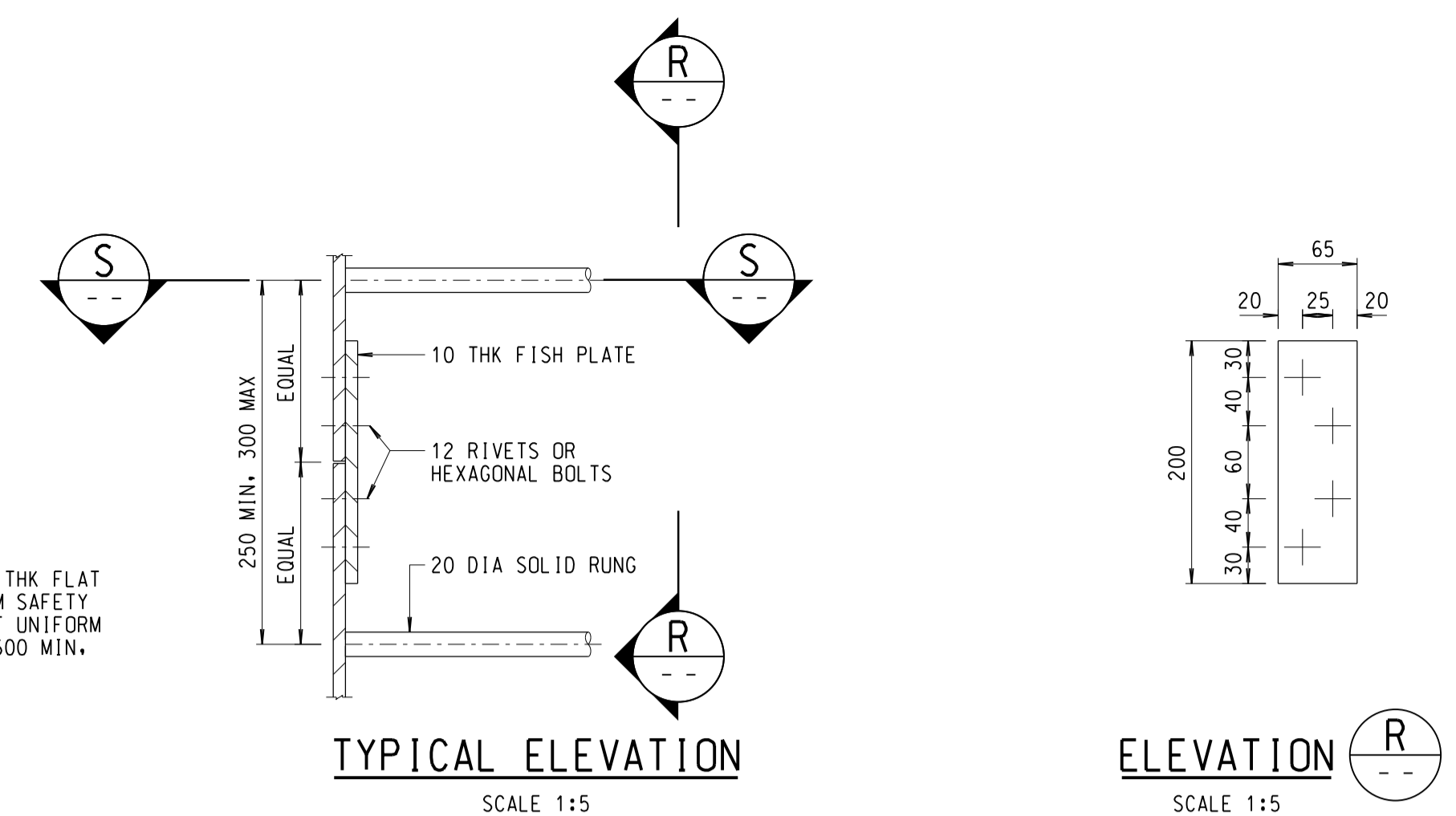


TOP END OF CAT LADDER WITH SAFETY CAGE ELEVATION
SCALE 1:10

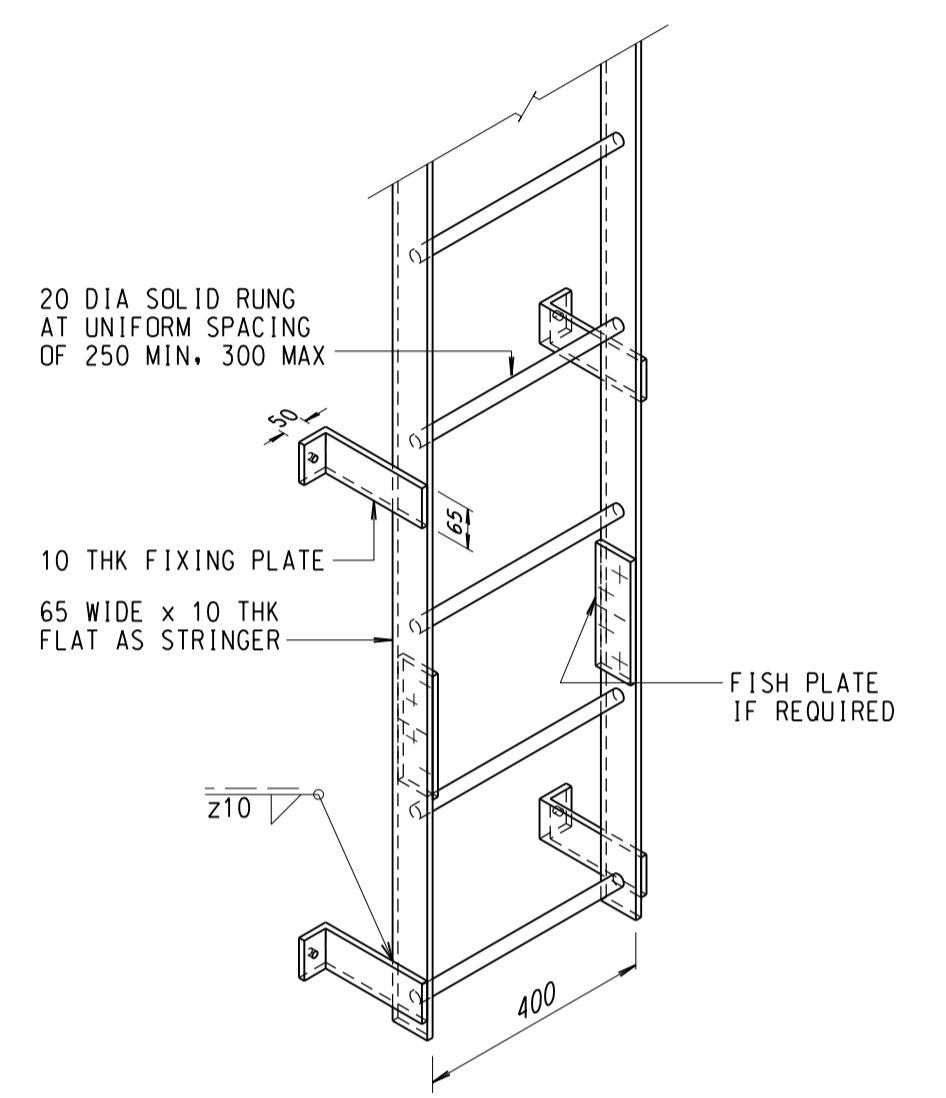


ELEVATION P
SCALE 1:10

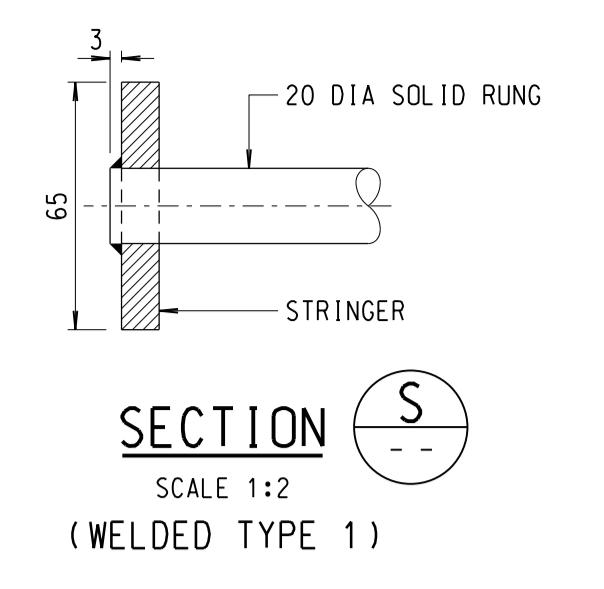


TYPICAL ELEVATION
SCALE 1:5

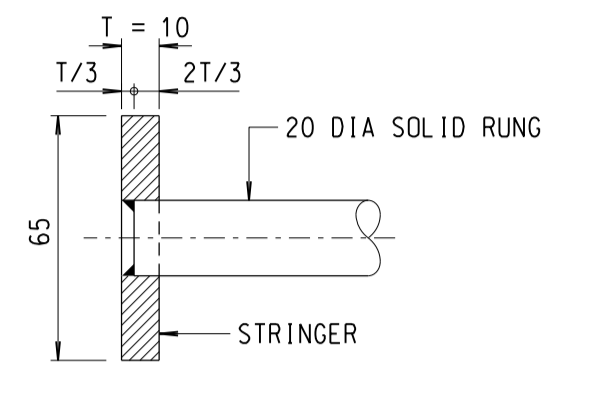
FISH PLATE CONNECTION DETAILS OF CAT LADDER
SCALE 1:5



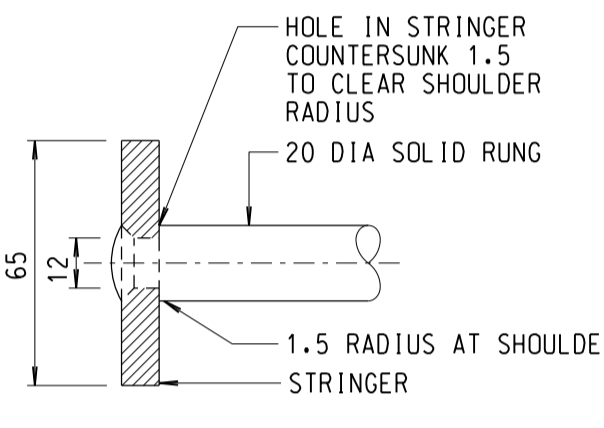
ISOMETRIC VIEW OF CAT LADDER
DIAGRAMMATIC



SECTION S-1
SCALE 1:2
(WELDED TYPE 1)

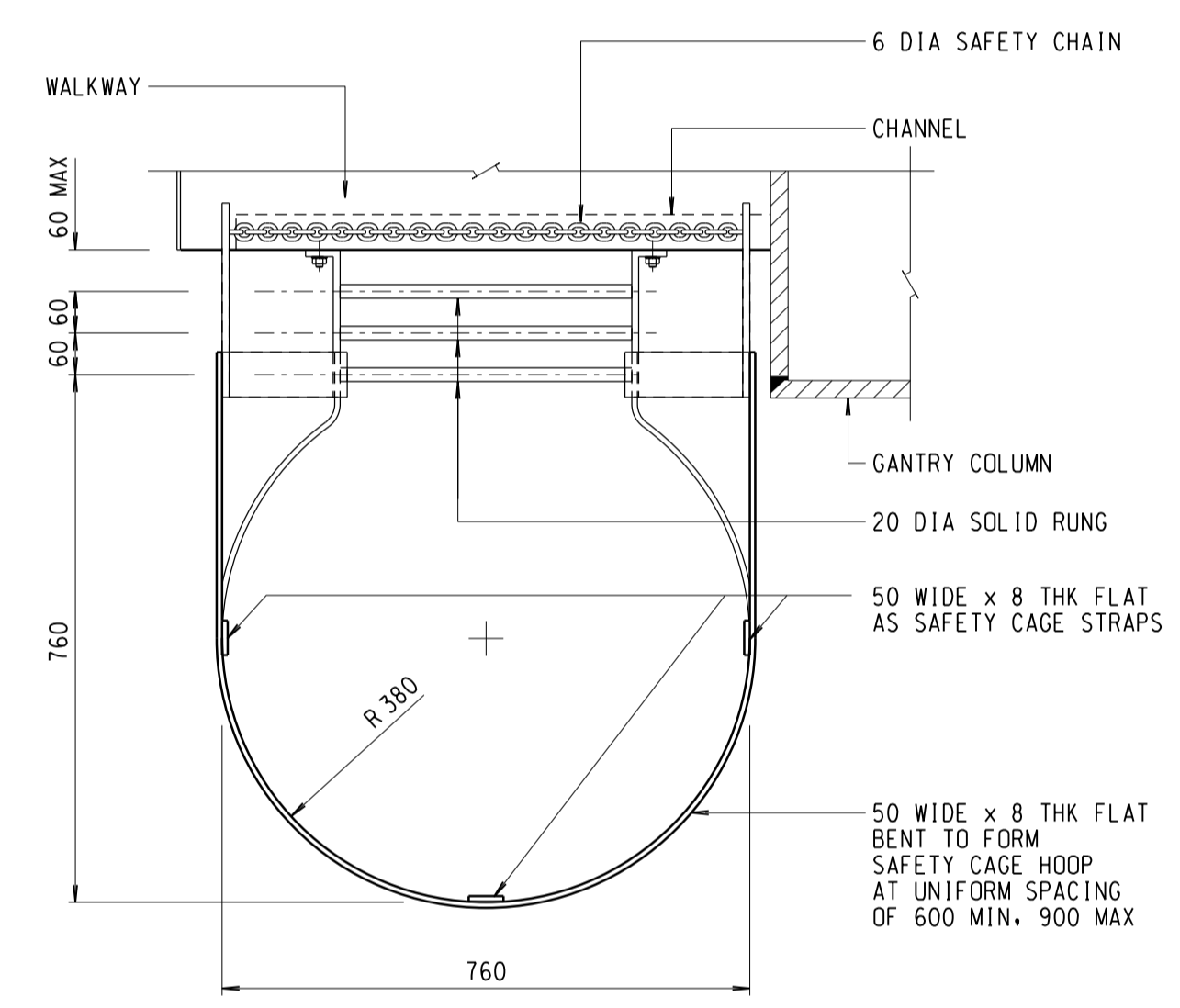


SECTION S-2
SCALE 1:2
(WELDED TYPE 2)

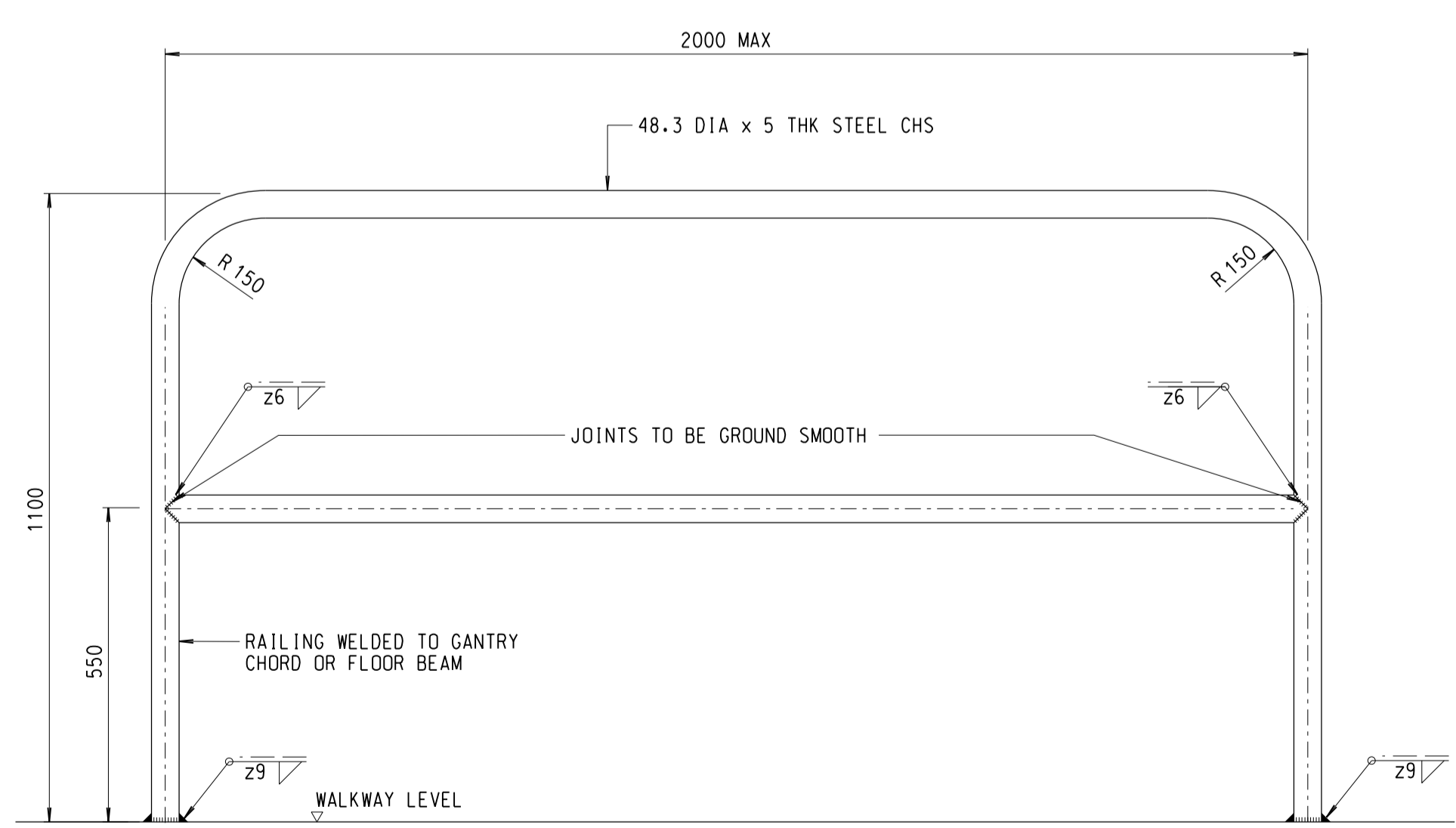


SECTION S-3
SCALE 1:2
(RIVETED)

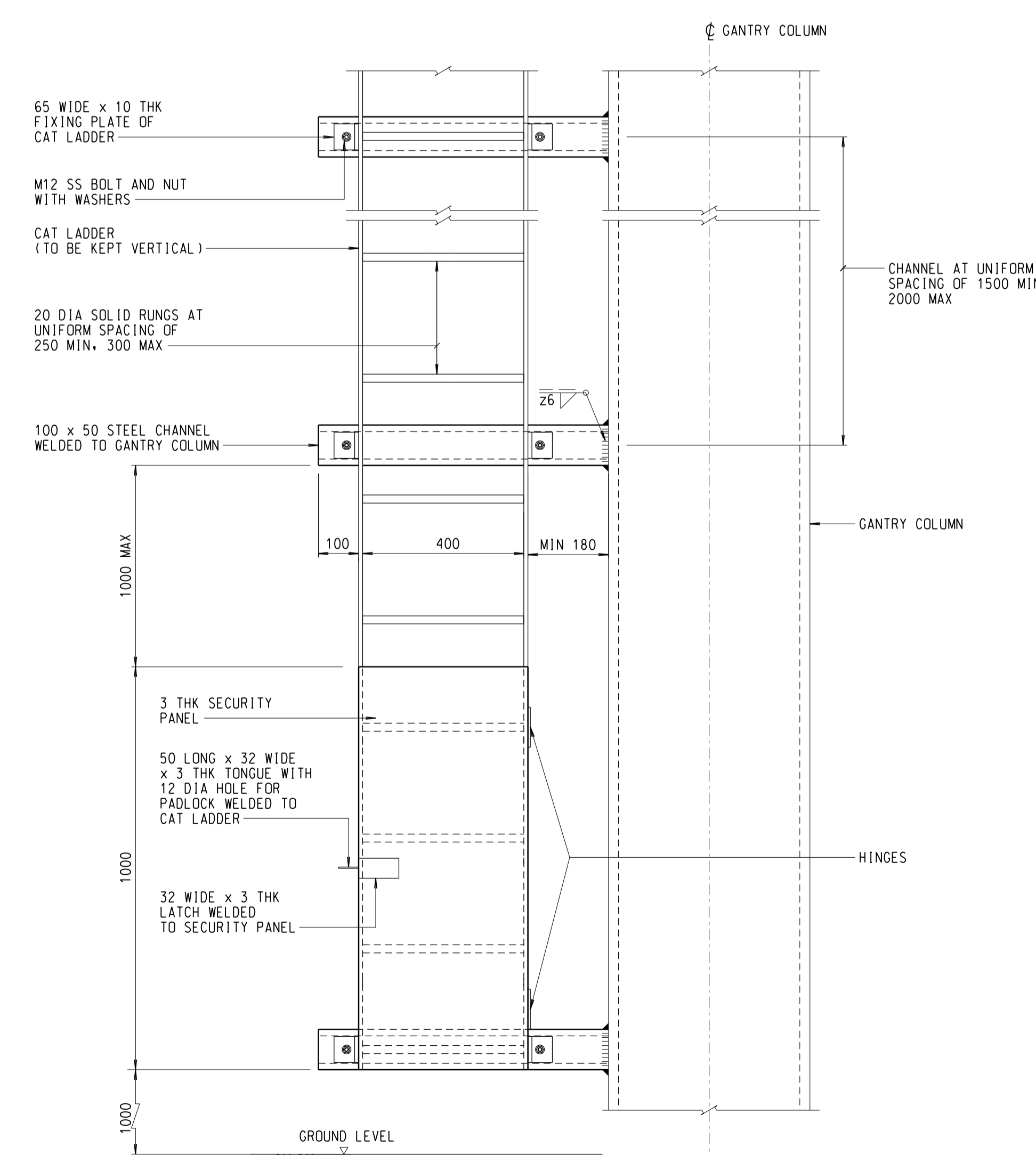
(NOTE: SOLID RUNGS SHALL BE EITHER WELDED OR RIVETED TO STRINGERS ACCORDING TO EITHER ONE OF THE ABOVE DETAILS)



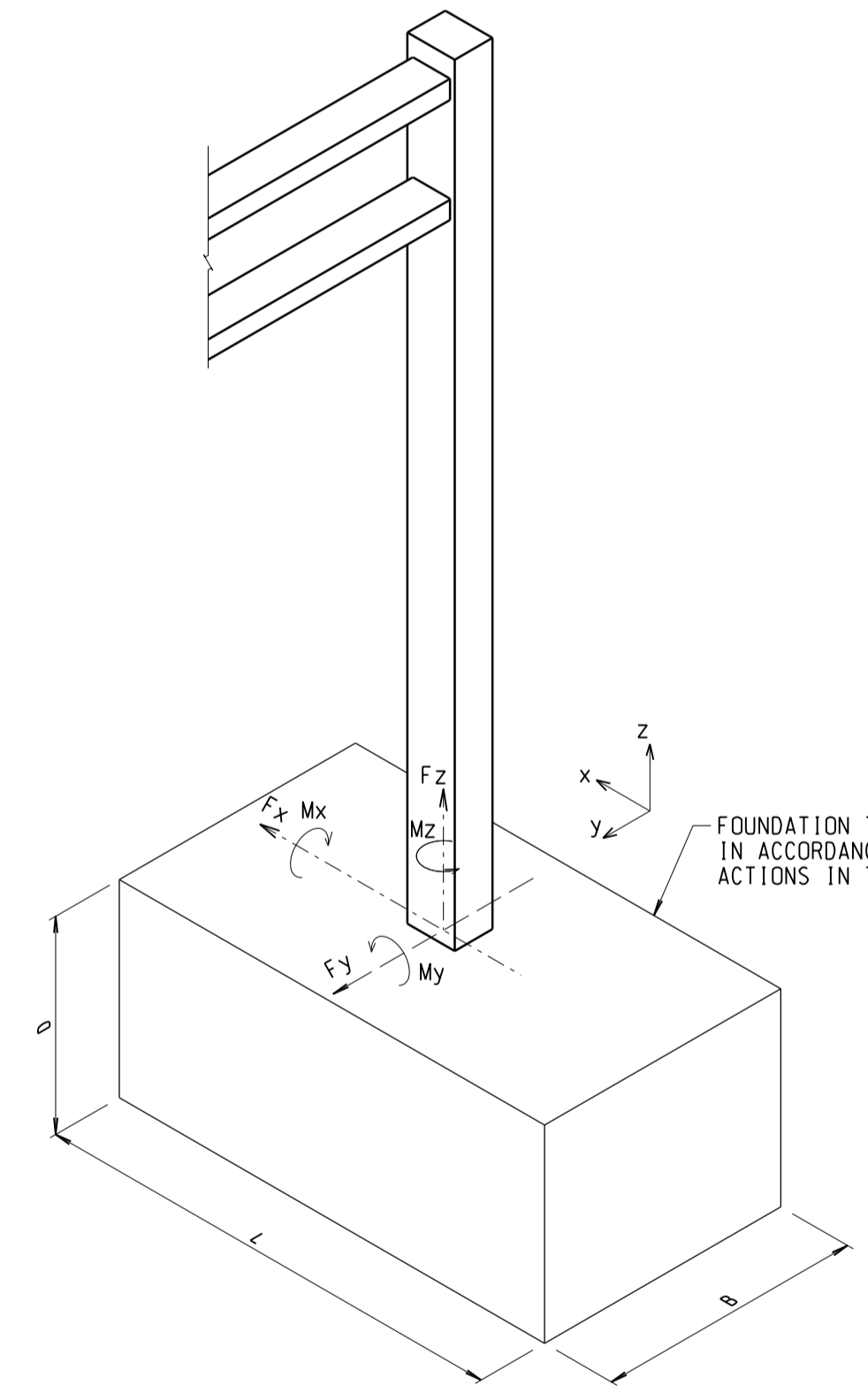
SECTION Q
SCALE 1:10
(RAILING NOT SHOWN FOR CLARITY)



TYPICAL RAILING DETAILS
SCALE 1:10



BOTTOM END OF CAT LADDER ELEVATION
SCALE 1:10
(SAFETY CAGE NOT SHOWN FOR CLARITY)



ISOMETRIC VIEW
DIAGRAMMATIC

TABLE IV- UNFACTORED DESIGN ACTIONS AT BASE OF GANTRY COLUMNS

GANTRY SPAN (S) (mm)	FORCE (kN)			MOMENT (kNm)			SUGGESTED FOOTING SIZES (mm)		
	Fx	Fy	Fz	Mx	My	Mz	L	B	D
S ≤ 13000	490	220	100	470	1440	70	6000	3000	2000
13000 < S ≤ 17000	500	220	130	480	1460	80	6000	3000	2000
17000 < S ≤ 22000	500	250	160	560	1460	160	6000	3000	2000

- NOTES:
- A WIND PRESSURE OF 3.3 kN/m² HAS BEEN ADOPTED IN THE DESIGN.
 - DEFINITION OF FORCES AND MOMENTS SEE ISOMETRIC VIEW.
 - SUGGESTED FOOTING SIZES ARE GIVEN FOR REFERENCE ONLY. SEPARATE DESIGN OF FOUNDATION SHALL BE PROVIDED TO SUIT SITE CONDITIONS.
 - DESIGN OF REINFORCED CONCRETE SHALL COMPLY WITH THE STRUCTURES DESIGN MANUAL FOR HIGHWAYS AND RAILWAYS (2013).

NOTES:
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING No. SSD156(1).

no	date	description	initial
A	11/16	GENERAL REVISION: TABLE IV REVISED	SIGNED C.P. WONG, E/P2-3
			SIGNED P.T. LEUNG, SE/P2

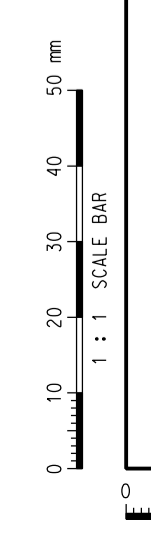
DESIGNED	NAME	SIGNATURE	DATE
	K. S. LAM	SIGNED	04/11
DRAWN	NAME	SIGNATURE	DATE
	W. K. WOO	SIGNED	04/11
CHECKED	NAME	SIGNATURE	DATE
	Y. W. CHIN	SIGNED	08/11
	K. S. LAM	SIGNED	08/11
	P. T. LEUNG	SIGNED	08/11

approved: P. K. LEE, Chief Highway Engineer, 05/08/2011

contract no. STR 5/40/18
file no. STR 5/40/18
project no.
contract

drawing title: TRAFFIC CONTROL AND SURVEILLANCE SYSTEM SIGN GANTRY TYPE A
FOR LANE CONTROL SIGNAL (WITH OPTIONAL VARIABLE SPEED LIMIT SIGN)
(SHEET 3 OF 3)

drawing no. SSD156(3)-A
scale AS SHOWN
office: BRIDGES AND STRUCTURES DIVISION
HONG KONG DEPARTMENT OF HIGHWAYS
結 構 橋 樑 部 及 路 政 署



1:1 SCALE BAR