



TABLE III - GANTRY COLUMN AND ANCHORAGE DETAILS

GANTRY SPAN (S) (mm)	COLUMN WIDTH		BASE PLATE (mm)	HOLDING DOWN BOLTS						
	W1 (mm)	W2 (mm)		SIZE	No.	X			Y	
						X1 (mm)	X2 (mm)	X3 (mm)	Y1 (mm)	Y2 (mm)
S ≤ 13000	400	500	900 x 650 x 50 THK	M30	18	200	200	100	95	180
13000 < S ≤ 17000	400	500	900 x 650 x 55 THK	M36	18	200	200	100	95	180
17000 < S ≤ 22000	500	500	1050 x 800 x 60 THK	M36	18	200	225	150	150	200

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	350	210	410	840	2020	40	6000	2500	2000
13000 < S ≤ 17000	350	270	510	1040	2820	70	6500	3000	2000
17000 < S ≤ 22000	360	300	580	1230	3180	130	7000	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. SSD160(1).

no.	date	description	initial
A	11/16	DRAWING LAYOUT REARRANGED: COLUMN BASE CONNECTION DETAIL AND TABLE IV REVISED	SIGNED C.P. WONG, E/P2-3 SIGNED P.T. LEUNG, SE/P2

REVISION			
designed	name	signature	date
	K. S. LAM	SIGNED	04/11
drawn	W. K. WOO	SIGNED	04/11
senior technical officer	Y. W. CHIN	SIGNED	08/11
project engineer	K. S. LAM	SIGNED	08/11
senior engineer	P. T. LEUNG	SIGNED	08/11

approved _____ 05/08/2011
P. K. LEE
Chief Highway Engineer date

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

drawing title
TRAFFIC CONTROL AND SURVEILLANCE SYSTEM
SIGN GANTRY TYPE E
FOR FULLY VARIABLE MESSAGE SIGN WITH FIXED DIRECTIONAL SIGN
(SHEET 3 OF 4)

drawing no. SSD160(3)-A scale AS SHOWN

office BRIDGES AND STRUCTURES DIVISION 結構橋樑及

HIGHWAYS DEPARTMENT 路政署 香港

