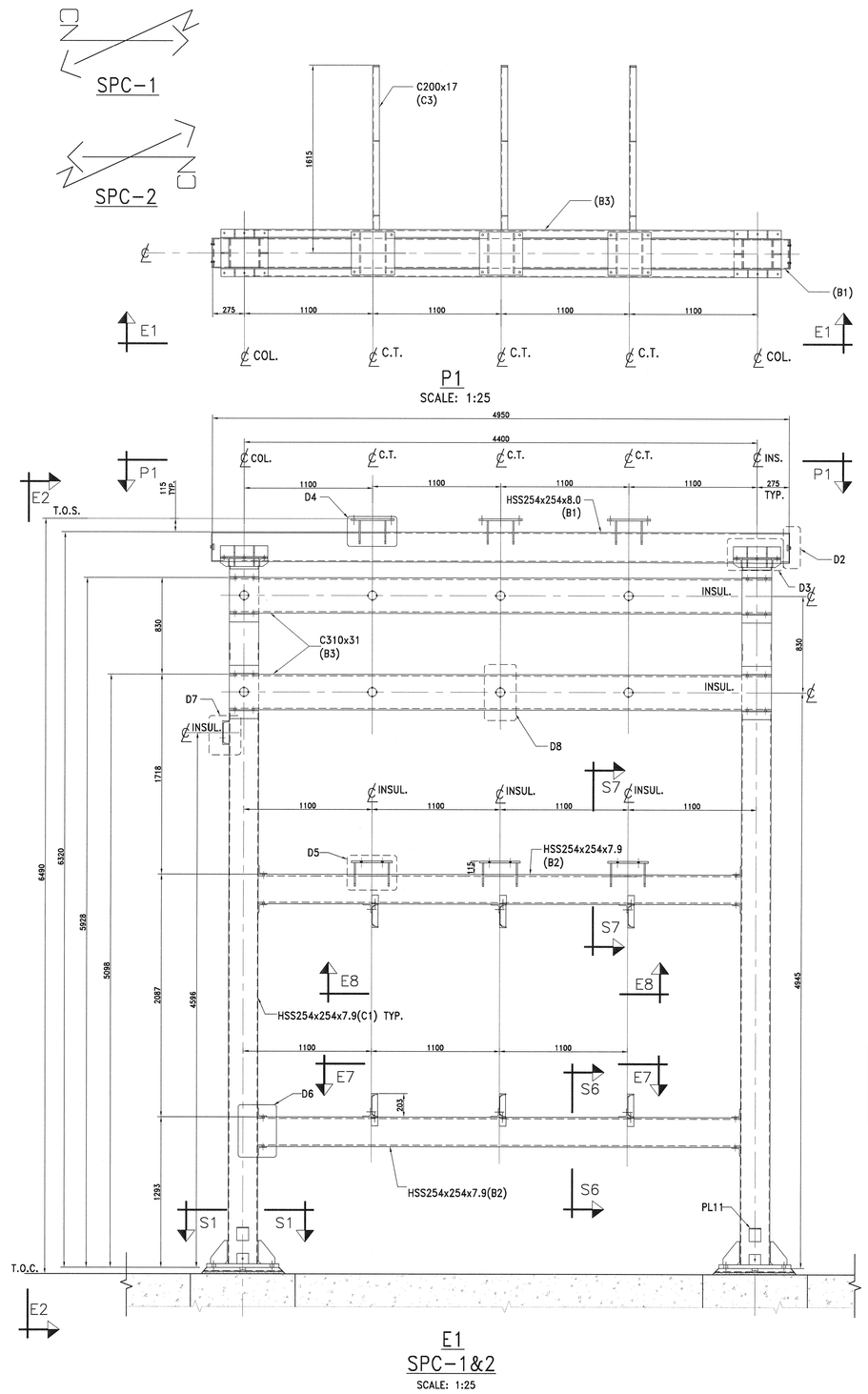


BILL OF MATERIAL FOR ONE STEEL INSULATOR & POWER CABLE SUPPORT

MARK	QUANT.	DESCRIPTION	MATERIAL	LENGTH (mm)	WEIGHT (kg)	REMARK
B1	1	HSS254x254x7.9	G40.20-350W	4950	297.5	HOT DIP GALV.
B2	2	HSS254x254x7.9	G40.20-350W	4145	498.2	HOT DIP GALV.
B3	4	C310x31	G40.21-300W	4145	527.5	HOT DIP GALV.
C1	2	HSS254x254x7.9	G40.20-350W	4950	595.0	HOT DIP GALV.
C2	3	C200x21	G40.21-300W	1869	117.7	HOT DIP GALV.
C3	3	C200x21	G40.21-300W	1869	117.7	HOT DIP GALV.
C4	1	C200x21	G40.21-300W	254	5.3	HOT DIP GALV.
L1	2	L44x44x3.2	G40.21-300W	630	2.7	HOT DIP GALV.
L2	8	L152x152x9.5	G40.21-300W	200	35.5	HOT DIP GALV.
L3	4	L89x64x6.4	G40.21-300W	100	2.9	HOT DIP GALV.
L4	24	L76x76x7.9	G40.21-300W	254	54.9	HOT DIP GALV.
L5	4	L102x76x7.9	G40.21-300W	406	17.2	HOT DIP GALV.
L6	4	L76x76x7.9	G40.21-300W	254	9.2	HOT DIP GALV.
L7	4	L76x76x7.9	G40.21-300W	406	14.6	HOT DIP GALV.
L8	6	L76x76x7.9	G40.21-300W	220	11.9	HOT DIP GALV.
L9	6	L127x76x7.9	G40.21-300W	60	4.4	HOT DIP GALV.
L10	6	L76x76x7.9	G40.21-300W	60	3.3	HOT DIP GALV.
PL1	2	PL630x32	G40.21-300W	630	199.4	HOT DIP GALV.
PL2	4	PL50x6	G40.21-300W	20	0.2	HOT DIP GALV.
PL3	2	PL254x5	G40.21-300W	254	5.1	HOT DIP GALV.
PL4	8	PL68x8	G40.21-300W	94	3.2	HOT DIP GALV.
PL5	12	PL68x8	G40.21-300W	68	3.5	HOT DIP GALV.
PL6	3	PL370x15	G40.21-300W	370	48.4	HOT DIP GALV.
PL7	6	PL200x10	G40.21-300W	344	25.9	HOT DIP GALV.
PL8	3	PL350x15	G40.21-300W	350	43.3	HOT DIP GALV.
PL9	6	PL160x10	G40.21-300W	324	24.4	HOT DIP GALV.
PL10	24	PL50x6	G40.21-300W	183	10.3	HOT DIP GALV.
PL11	4	PL102x6	G40.21-300W	228	4.4	HOT DIP GALV.
TOTAL WEIGHT (INCLUDING 3.5 % FOR GALVANIZATION)					2778.3	

BILL OF MATERIAL FOR BOLTS

MARK	QUANT.	DESCRIPTION	MATERIAL	LENGTH (mm)	WEIGHT (kg)	REMARK
b1	62	16mmø (⅝") BOLTS, WASHERS AND NUTS	A325	58mm	–	GALV.
b2	4	12.7mmø (½") BOLTS , WASHERS	A325	48mm	–	GALV.
b3	16	16mmø (⅝") THRU BOLTS	A325	305mm (12")	–	GALV.
b4	16	16mmø (⅝") BOLTS, WASHERS AND NUTS	A325	48mm	–	GALV.

2 POWER CABLE & PT/CT SUPP. ON THE PITS 'T1&T2' REQUIRED. (SPC-1&2) BOM FOR REFERENCE ONLY

GENERAL NOTES:

REFER TO DWG. F1731664-200-S005

REFERENCE DRAWINGS:

1. 115/13.8kV STATION
   STEEL KEY PLAN & LIST
   STRUCTURE F1731664-200-S001
2. 115kV AREA
   CONTAINM. PITS FOR TRANSF. 'T1'
   CONC. & REINF. DETAILS
   FOUNDATION F1731664-100-F003
3. 115kV AREA
   CONTAINMENT PIT FOR TRANSF. 'T2'
   CONC. & REINF. DETAILS
   FOUNDATION F1731664-100-F004
4. 115/13.8kV STATION
   BASIC LAYOUT
   ELECTRICAL ARRANGEMENT F1731664-300-EA001
5. 115/13.8kV STATION
   ELEVATIONS
   ELECTRICAL ARRANGEMENT F1731664-300-EA009
6. 115/13.8kV STATION
   MAIN GROUNDING GRID
   PLAN & DETAILS
   ELECTRICAL ARRANGEMENT F1731664-300-EA014

LEGEND:

T.O.C.: TOP OF CONCRETE
T.O.S.: TOP OF STEEL
L.L.V.: LONG LEG VERTICAL
INSUL.: INSULATOR
B.C.: BOLT CIRCLE
S.Q.: SQUARE

PROFESSIONALS:

N°	DATE	TRANSMISSION	BY
00	2018/09/27	RELEASED FOR CONSTRUCTION	SYM

SMi THE S.M. GROUP INTERNATIONAL INC.
62068 Airport rd, Suite 205, Mississauga (Ontario) L4V 1E3
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STAMP:

LICENSED PROFESSIONAL ENGINEER
S.Y. WANG
100139367
PROVINCE OF ONTARIO

CLIENT:

PROJECT:

MCMASTER UNIVERSITY-NF91

TITLE:

115/13.8kV STATION
POWER CABLE & PT/CT SUPPORTS
"SPC-1 & 2" IN THE PITS
STEEL DETAILS, STRUCTURE

PREPARED BY: Z. WANG	DATE: 2018-09-27
DRAWN BY: D. LECONTE CHEVALIER	SCALE: AS SHOWN
VERIFIED BY: S.Y. WANG	DISCIPLINE: STRUCTURE
APPROVED BY: S.Y. WANG	CAD FILE NAME: F1731664-200-S002.dwg
PROJECT No: F1731664	LOC: 200 / DWG #: S002 / REV: 00 / PAGE: