



FOR SETTING OUT INFORMATION REFER TO DWG: 1126-SY-GA-000

CONT'D DRAWING 1126-SY-GA-101

CONT'D DRAWING 1126-SY-GA-101

SETTING OUT SEQUENCE:

1. BLOCK AND BOLLARD LAYOUT TO START FROM THE PLACEMENT OF 2275mm LONG BLOCK.
2. 2275mm LONG TO BE PLACED WITHIN THE EXISTING CURVED PAVEMENT BAND. FOR WEST-EAST LOCATION, 2275mm LONG BLOCK D MUST BE PLACED AS INDICATED AT 1120mm MIN DISTANCE AWAY FROM BLOCK C TO THE SOUTHWEST WHICH HAS BEEN ALIGNED WITH THE WEST EDGE OF THE EXISTING PAVEMENT BAND.
3. 2275mm LONG BLOCK MUST BE POSITIONED TO THE CLOSEST BOLLARD AT A 1200mm MAXIMUM DISTANCE.
4. THE BOLLARD BASE PLATE MUST BE LOCATED TO ENSURE THE CURVED PAVEMENT BAND IS NOT ENCLOSED ON DUE TO THE SLOPED GRADE.
5. BOLLARDS RUNNING NORTH-SOUTH. PLACEMENT TO BE APPROVED ON SITE PRIOR TO ON SITE INSTALLATION.
6. EXTREME NORTHWEST BOLLARD PLACEMENT IS IMPORTANT AND MUST BE APPROVED PRIOR TO ON SITE INSTALLATION.



IDENTIFIED HAZARDS

1. CARE TO BE TAKEN WHEN EXCAVATING & RE-GRADING OF GROUND LEVEL, DUE TO CLOSE PROXIMITY OF REINFORCEMENT
2. CARE TO BE TAKEN WHEN WORKING AROUND THE AREA OF THE EXISTING TRAFFIC LIGHT POLE. SERVICES TO BE INSPECTED PRIOR TO COMMENCING WORKS.
3. UTILITY POLE TO BE RELOCATED FROM HVM LINE FURTHER FORWARD TO KERB LINE, IF POSSIBLE. SERVICES TO BE INSPECTED PRIOR TO COMMENCING WORKS.
4. CARE TO BE TAKEN AROUND TRAFFIC LIGHT POLE. SERVICES TO BE INSPECTED PRIOR TO COMMENCING WORKS.
5. CARE TO BE TAKEN AROUND EXISTING FIRE HYDRANT. INSPECTION TO TAKE PLACE PRIOR TO WORKS COMMENCING, TO ENSURE SERVICES TO HYDRANT DON'T CLASH WITH HVM LINE.

BOLLARD LIST	
REF No.	BOLLARD ANGLE
1	90°
2	90°
3	90°
4	90°
5	90°
6	90°
7	90°
8	92°*
9	92°*
10	92°*

BOLLARD LIST	
REF No.	BOLLARD ANGLE
11	92°*
12	92°*
13	90°
14	90°
15	90°
16	90°
17	90°
18	90°
19	90°
20	90°
21	90°

BLOCK LIST	
REF No.	LENGTH
A	1490
B	1490
C	1490
D	2275
E	1490
F	1490
G	1490
H	1490
J	1490
K	1490

BLOCK LIST	
REF No.	LENGTH
L	1490
M	1490
N	1490
P	1490
Q	1490
R	1490
S	1490
T	1490

MATADOR LIST	
REF No.	BOLLARD QTY
M	6

NOTE:

* = ANGLES TO BE VALIDATED BY CONTRACTOR PRIOR TO FABRICATION.

TO BE READ IN CONJUNCTION WITH LEA DWG

No's:
UVHM-C2023-01
UVHM-C2023-02
UVHM-C2023-04
UVHM-C2023-06
UVHM-C2023-08

SUPPLY & INSTALLATION OF BOLLARDS NOT IN CONTRACT LAYOUT SHOWN FOR REFERENCE ONLY

NOTES

GENERAL

1. THIS DRAWING SHALL BE READ IN CONJUNCTION TO THE GENERAL NOTES IN DRAWING MP431-LCR-HVM-Z-NTS-0001.
2. DO NOT SCALE FROM THIS DRAWING.
3. ANY QUERIES ARE TO BE REFERRED BACK TO THE ENGINEER FOR CLARIFICATION.
4. ALL DIMENSIONS MARKED WITH ** SHALL BE CONFIRMED BY THE CONTRACTOR ON SITE.
5. ALL HVM LAYOUTS SHOULD BE CONFIRMED BY MAIN CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR CHECKING AND CLARIFICATION OF ANY DEVIATION FROM PLANNED DIMENSIONS.
6. TOLERANCE = +0, -10

BOLLARD - HEALD EM HT-3 MATADOR MANUALLY OPERATED

1. SHROUD STYLE TYPE A : Ø307mm O/D x 2mm x 1050mm TOP OF SHROUDS TO BE CONFIRMED.

BOLLARD - ATG SP 1000 SHALLOW MOUNT BOLLARDS

2. SHROUD STYLE TYPE B : Ø307mm O/D x 2mm x 1150mm TOP OF SHROUDS TO BE CONFIRMED.
3. FINISHES: BANDING REQUIREMENTS & BASE FINISHES TO BE CONFIRMED.

TO BE READ IN CONJUNCTION WITH DWG No:

1126-SY-GA-000
1126-SY-GA-101
1126-SY-GA-102
1126-SY-GA-200
1126-SY-GA-201
1126-SY-GA-202
1126-SY-GA-203
1126-SY-GA-204
1126-SY-GA-205
1126-SY-GA-206
1126-SY-GA-300
1126-SY-GA-301
1126-SY-GA-302
1126-SY-GA-303
1126-SY-GA-400
1126-SY-GA-401
1126-SY-GA-402
1126-SY-GA-403
1126-SY-GA-404

D	11.12.23	SCHEDULES REVISED	MJH		
C	07.12.23	WALL STRENGTHENING REFERENCE REMOVED	MJH	MJC	MJC
B	05.12.23	FOR TENDER	MJH	MJC	MJC
A	06.10.23	DESIGN FREEZE	MJH	MJC	MJC
P02	27.09.23	CT BLOCKS INCREASED IN LENGTH AND BOLLARDS MOVED DOWN TOWARDS CURVED PATVING.	MJH	MJC	MJC
P01	08.09.23	PRELIMINARY ISSUE	MJH	MJC	MJC
REV	DATE	DESCRIPTION	BY	CHKD	APVD

CONTRACT NAME:
UNION STATION TORONTO HVM - 23177804

CLIENT:
CITY OF TORONTO.

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DRAWN BY:	DATE:	CHECKED BY:	DATE:	APPROVED BY:	DATE:
MJH	08.09.23	MJC	08.09.23		
SIGNED:		SIGNED:		SIGNED:	

DRAWING TITLE:
UNION STATION TORONTO
YORK STREET AND FRONT STREET JUNCTION
HVM PLAN

SCALE:	DRAWING STATUS:	PROTECTIVE MARKING:
1:100 @ A1	FOR TENDER	
DRAWING NUMBER:		REV:
1126-SY-GA-100		D