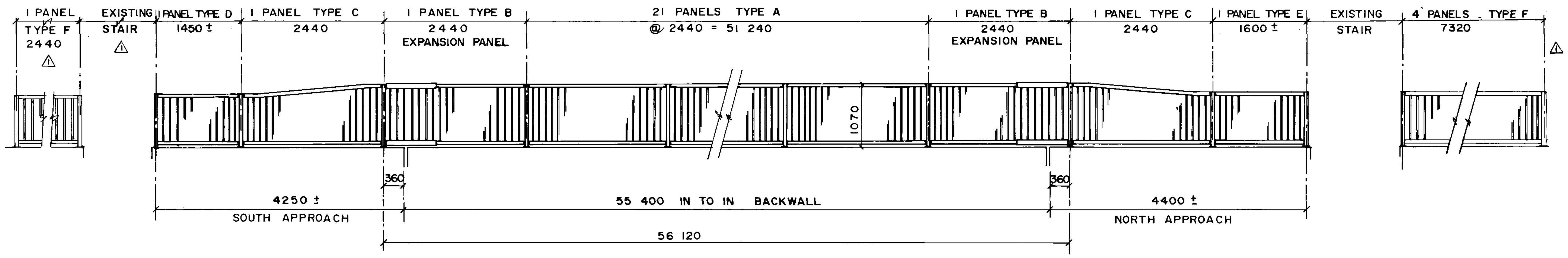
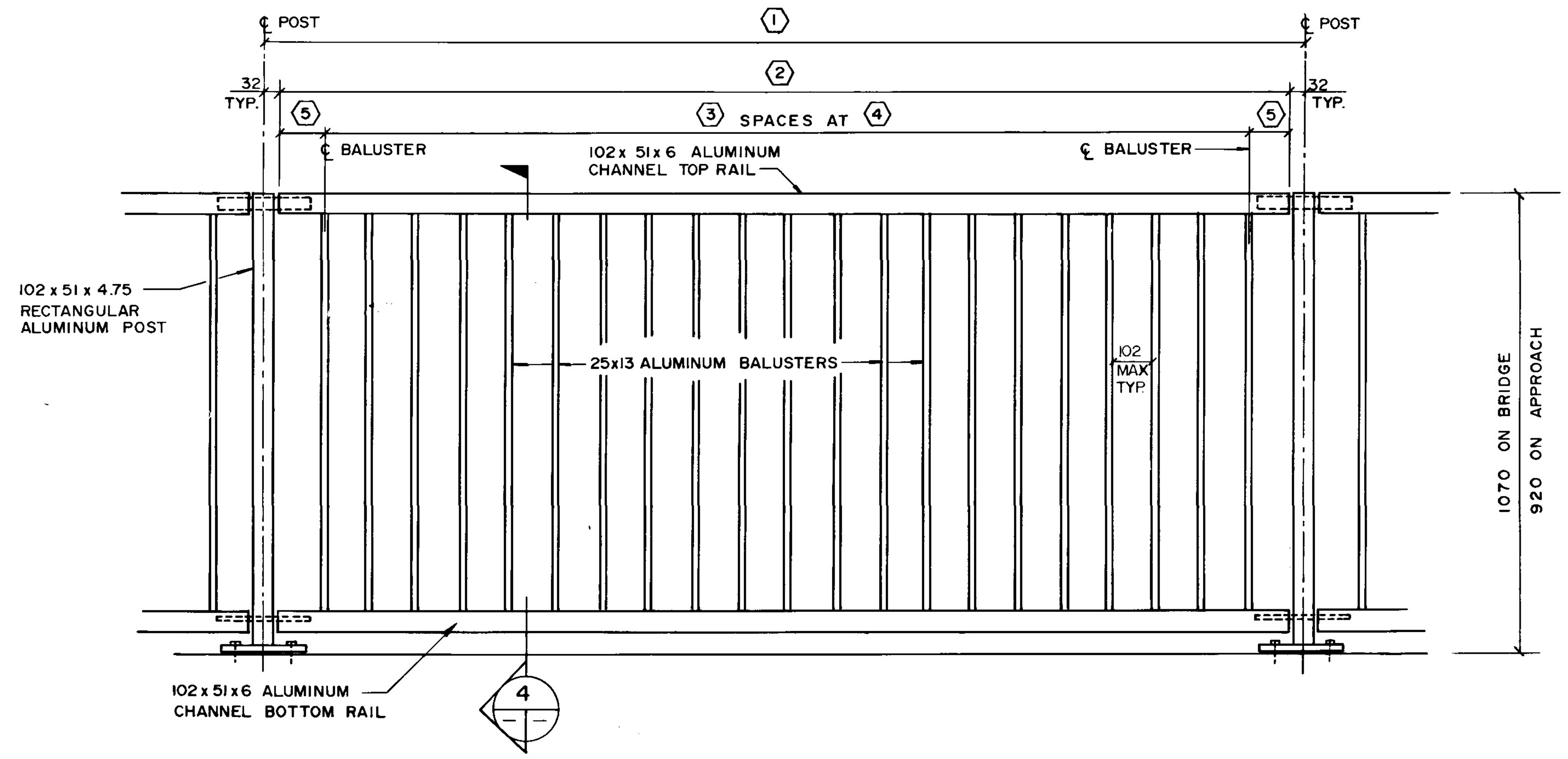
WO 101-84

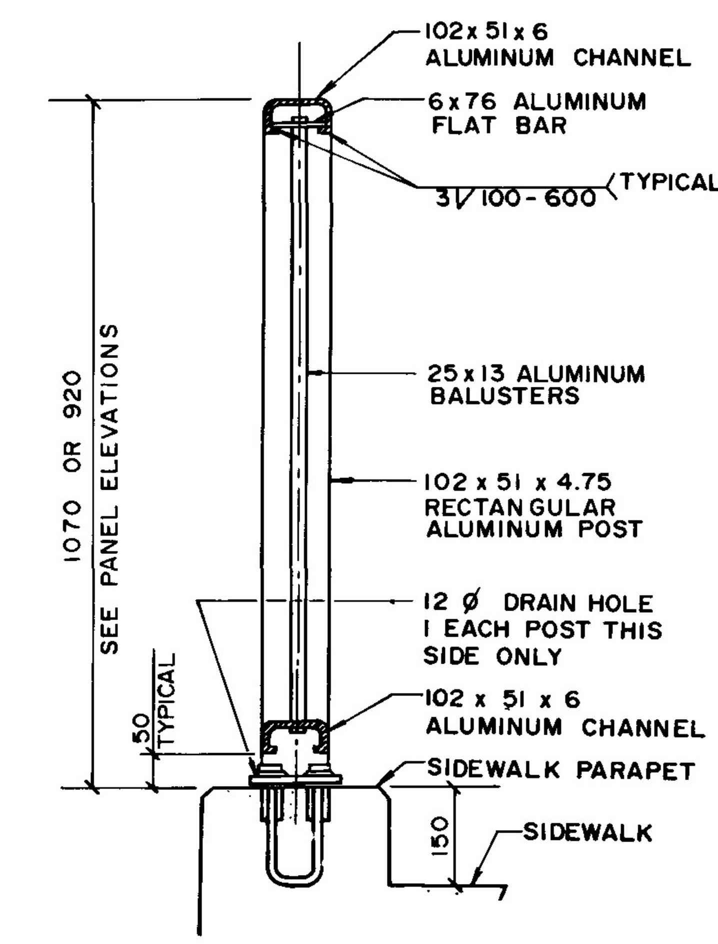



1 PEDESTRIAN HANDRAIL LAYOUT
1:50

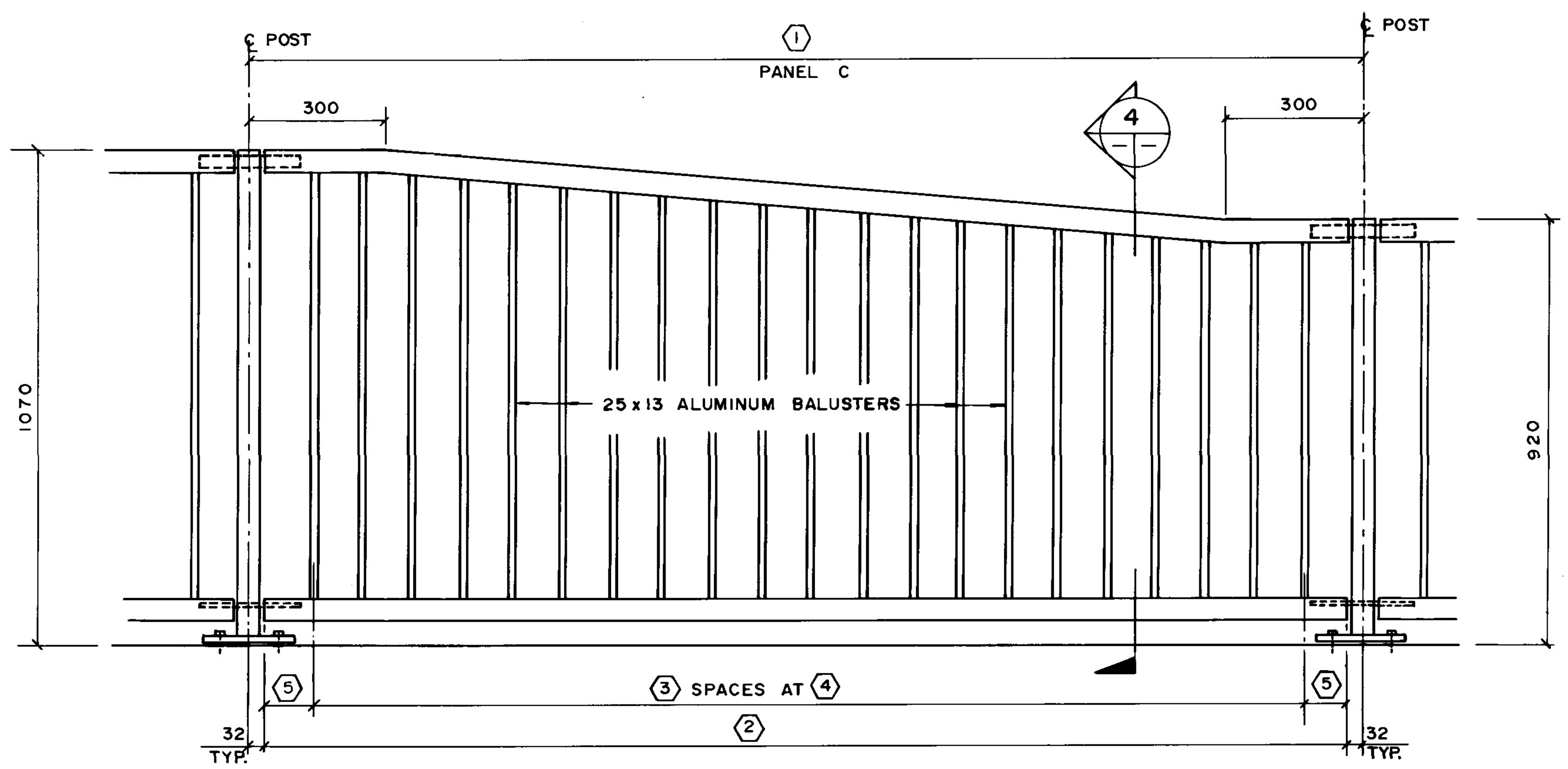
| PEDESTRIAN HANDRAIL PANEL DATA | | | | | | | |
|---|---|---|---|---|---|---|---|
| PANEL | NO. REQ'D. | HEIGHT | 1 | 2 | 3 | 4 | 5 |
| A | 21 △ | 1070 | 2440 | 2376 | 20 | 108 | 108 |
| B | 2 △ | 1070 | 2440 | 2376 | 20 | 108 | 108 |
| C | 2 △ | VARIES | 2440 | 2376 | 20 | 108 | 108 |
| D | 1 △ | 920 | 1450 ± | 1386 | 11 | 108 | 99 |
| E | 1 △ | 920 | 1600 ± | 1536 | 13 | 104 | 92 |
| F | 5 △ | 920 | 2440 | 2376 | 20 | 108 | 108 |
| | | | | | | | |




2 TYPICAL PANEL ELEVATION
1:10




4 SECTION
1:10




3 PANEL ELEVATION TYPE 'C'
1:10

**NOTES:**

1. Aluminum extrusions shall conform to ASTM B221. Alloy 6351-T6. Aluminum plates shall conform to ASTM B221 Alloy 5083.
2. The M.I.G. process of welding shall be used.
3. S/S denotes stainless steel.
4. Rail posts shall be set vertical.
5. Place minimum of one 3mm aluminum shim under each post. Additional shims may be required for vertical alignment. The surface of shims in contact with concrete shall be painted with 2 coats of alkali resistant bituminous paint meeting the requirements of CGSB 31-GP-3M.
6. Handrail anchor inserts shall be Acrow-Richmond type DCR-1.

| STAND BY MATERIALS TO BE SUPPLIED TO THE CITY | | |
|---|---|---|
| ITEM | QUANTITY | DESCRIPTION |
| 1 | 2 SETS | ALL COMPONENTS ASSEMBLED FOR 2 COMPLETE HANDRAIL SECTIONS (2440 x 1070) INCLUDING 4 POSTS |
| 2 | 4 SETS | ALL COMPONENTS ASSEMBLED FOR 4 COMPLETE HANDRAIL SECTIONS (2440 x 920) INCLUDING 8 POSTS. |

B-5903-19

AS-BUILT
DATE 91.02.26 BY
CHECKED BY

B.M. ELEV

| NO | REVISIONS | DATE | BY |
|---|---|---|---|
| 2 | REVISED AS CONSTRUCTED | 90-12-14 | FPC |
| △ | ADDENDUM | 90-03-14 | FC |

WARDROP ENGINEERING INC.

DESIGNED BY JC & FPC
DRAWN BY LG & GI
HOR. SCALE / VERTICAL AS NOTED
DATE JAN. 15, 1990
CHECKED BY
APPROVED BY
AUTHORIZED BY — W. MALABAG/STREETS & BRIDGE ENGINEER — DATE 91 02 23
ACCEPTED BY — G.R. SMITH/BRIDGE ENGINEER — DATE 91 02 23

ENGINEER'S SEAL: PROVINCE OF MANITOBA C. D. STEWART REGISTERED ENGINEER 90/12/20

CONSULTANT DRAWING NO. 890007-02-00

THE CITY OF WINNIPEG
WORKS AND OPERATIONS DIVISION
STREETS AND TRANSPORTATION DEPARTMENT

EMPRESS STREET OVERPASS
STRUCTURE REHABILITATION, STRENGTHENING AND RELATED WORKS

ALUMINUM PEDESTRIAN HANDRAIL DETAILS 1

CITY DRAWING NUMBER
B100-90-16(R1)