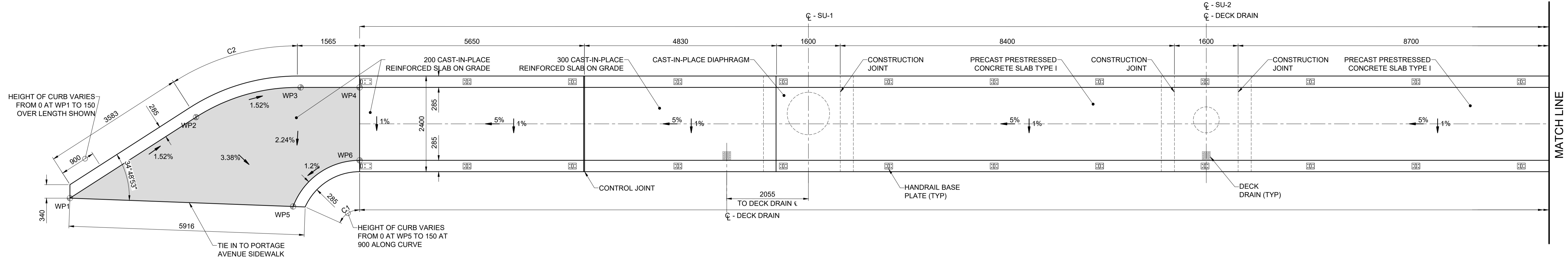
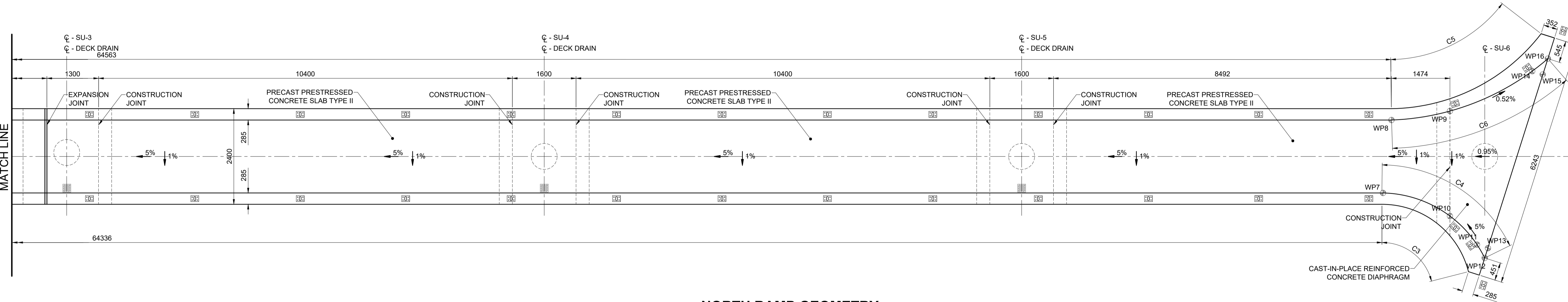


ISO A1 - 594mm x 841mm



**LEGEND**  
 CONSTANT 200 THICK SLAB, GRADE BASE MATERIAL TO ACHIEVE DESIRED TOP OF SLAB GRADES

**NORTH RAMP GEOMETRY**  
 SCALE 1:50



**NORTH RAMP GEOMETRY**  
 SCALE 1:50

Curve Table							
Curve #	Length	Radius	Delta	BC Northing	BC Easting	EC Northing	EC Easting
C1	1.723	1.500	065°48'07"	9012.876	10741.637	9011.647	10740.567
C2	2.852	5.000	032°40'46"	9014.750	10739.469	9013.243	10737.094
C3	2.966	2.243	075°44'37"	9029.637	10806.024	9030.660	10803.467
C4	3.216	2.921	063°04'49"	9030.080	10806.321	9030.933	10803.386
C5	4.354	4.832	051°37'50"	9033.031	10803.030	9035.879	10806.128
C6	4.303	6.355	038°47'45"	9032.759	10803.113	9035.325	10806.465

NORTH RAMP ELEVATIONS			
Location	Elevation	Northing	Easting
WP1	233.328	9010.2250	10734.8239
WP2	233.271	9013.0549	10737.3078
WP3	233.230	9014.4990	10739.6284
WP4	233.207	9014.9086	10741.0526
WP5	233.163	9011.5744	10740.2720
WP6	233.189	9013.1498	10741.5581
WP7	236.407	9030.9332	10803.3863
WP8	236.436	9032.7589	10803.1134
WP9	236.511	9033.3810	10804.4626
WP10	236.485	9030.8487	10805.1910

NORTH RAMP ELEVATIONS			
Location	Elevation	Northing	Easting
WP11	236.535	9030.3478	10806.0435
WP12	236.537	9030.0799	10806.3212
WP13	236.535	9030.3400	10806.3284
WP14	236.499	9034.9087	10806.1685
WP15	236.499	9034.9009	10806.4534
WP16	236.495	9035.3248	10806.4650



**METRIC**  
 WHOLE NUMBERS INDICATE MILLIMETRES  
 DECIMALIZED NUMBERS INDICATE METRES

**LOCATION APPROVED**  
 UNDERGROUND STRUCTURES

DATE: \_\_\_\_\_

**NOTE:**  
 LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

NO.	REVISIONS	DATE	BY

**MORRISON HERSHFIELD**

DESIGNED BY: YM      CHECKED BY: AF  
 DRAWN BY: ALP/TN      APPROVED BY: BAP

HOR SCALE: AS SHOWN  
 VERT SCALE: AS SHOWN

RELEASED FOR CONSTRUCTION: N/A



**THE CITY OF WINNIPEG**  
 PUBLIC WORKS DEPARTMENT  
 ENGINEERING DIVISION

**EMPRESS STREET PROJECT**  
 PEDESTRIAN ACCESSIBILITY RAMPS  
 NORTH RAMP  
 GEOMETRY

CITY DRAWING NUMBER: P-3494-139  
 SHEET OF: 139 OF 168  
 DRAWING NO.: 139      REV: C

BID OPPORTUNITY No. 602-2018

O:\Winnipeg\Proj\1600304\Design\1\Drawings\06 Sheets\Detailed Design\Structural\Pedestrian Ramps\1600304 - DD\_NR.dwg    Last Saved: 06/20/18 7:12 PM    by: Y.Moravsky    Plotted: 06/20/18 8:33 PM    by: Alex Haggner