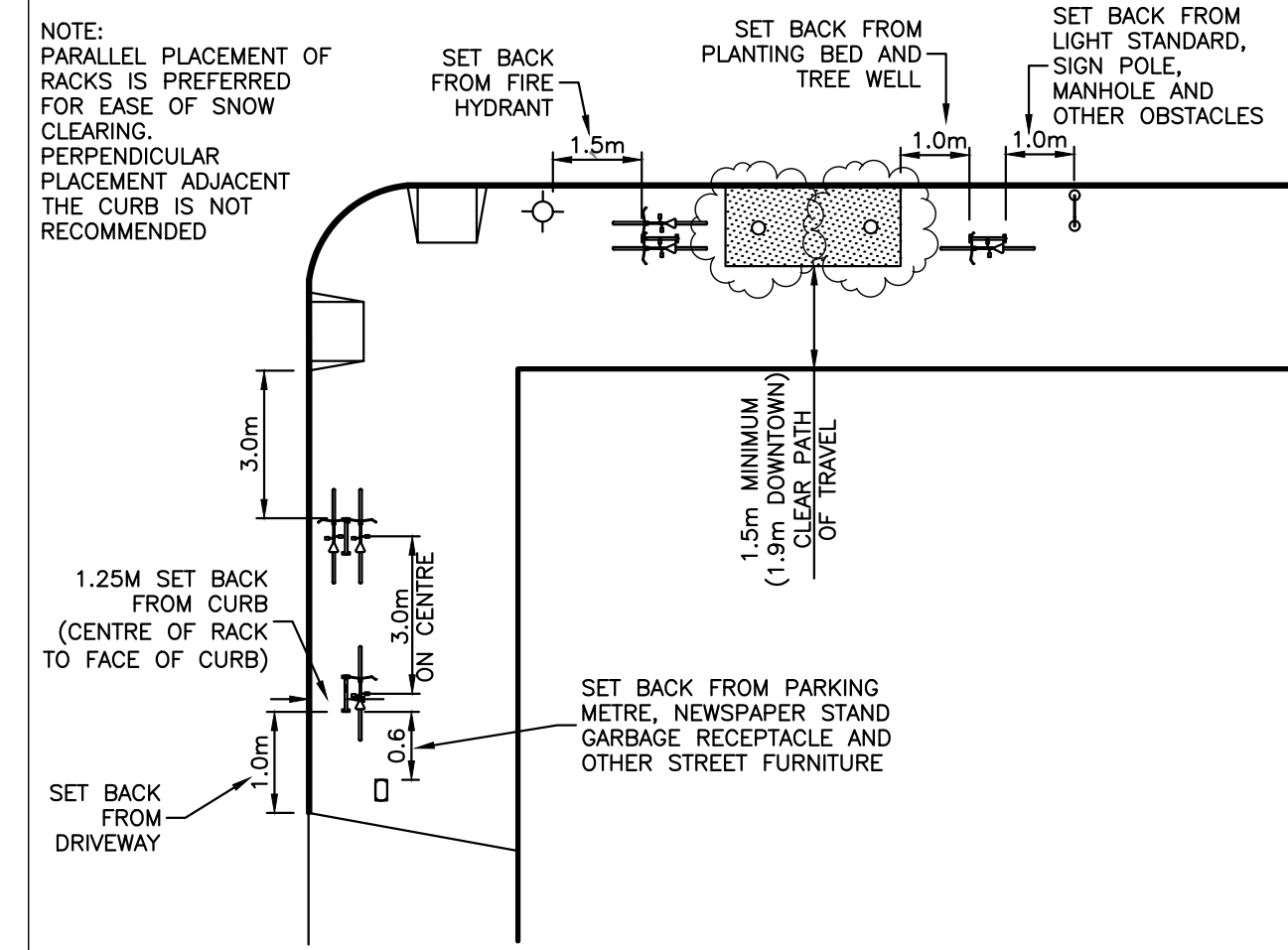
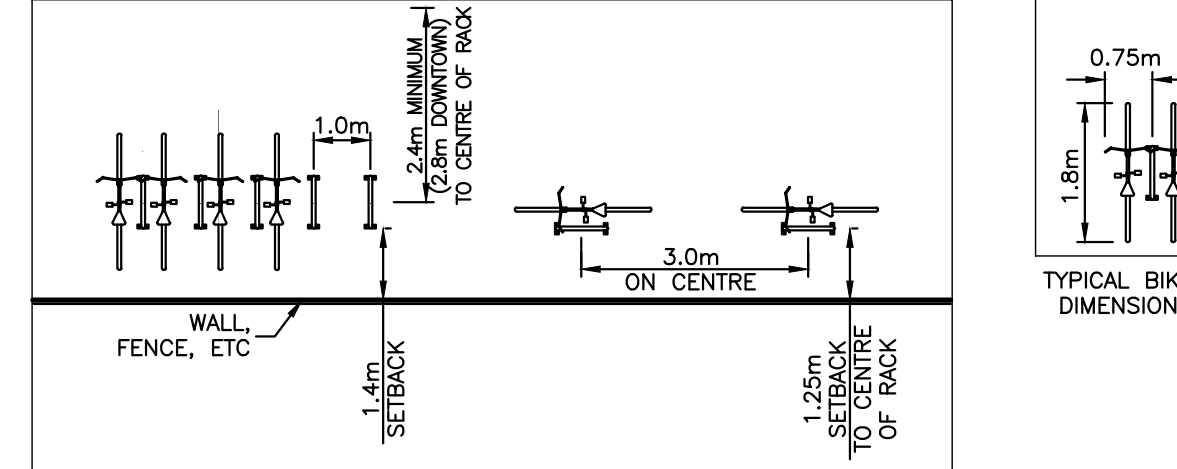


**RECOMMENDED SETBACKS FOR BICYCLE PARKING AMENITIES**

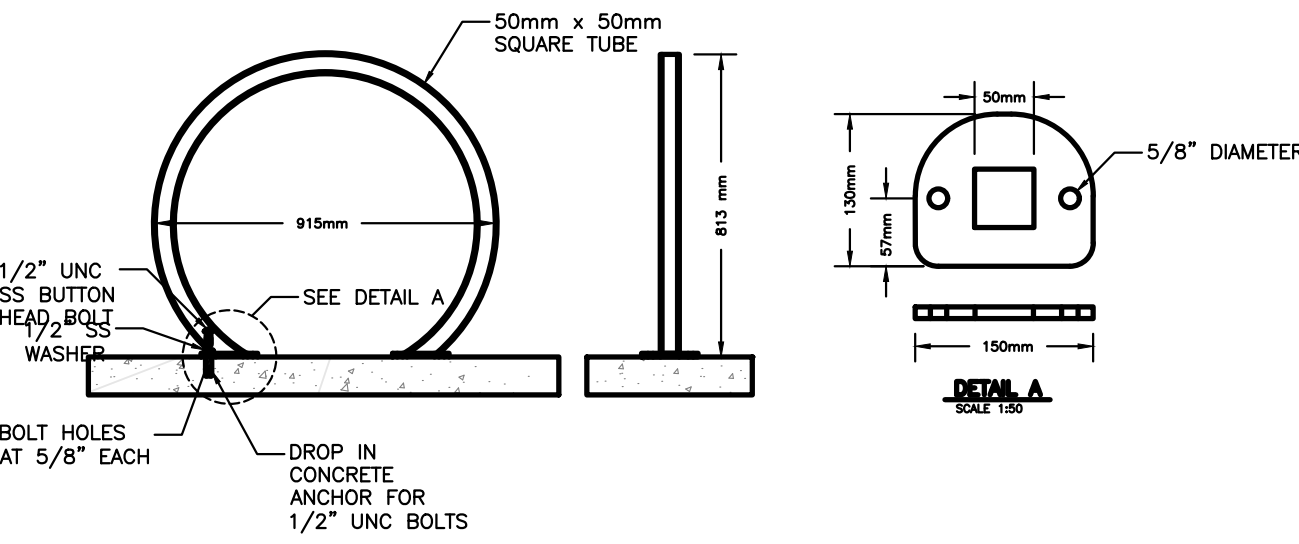


**RECOMMENDED BICYCLE PARKING ADJACENT TO WALLS**



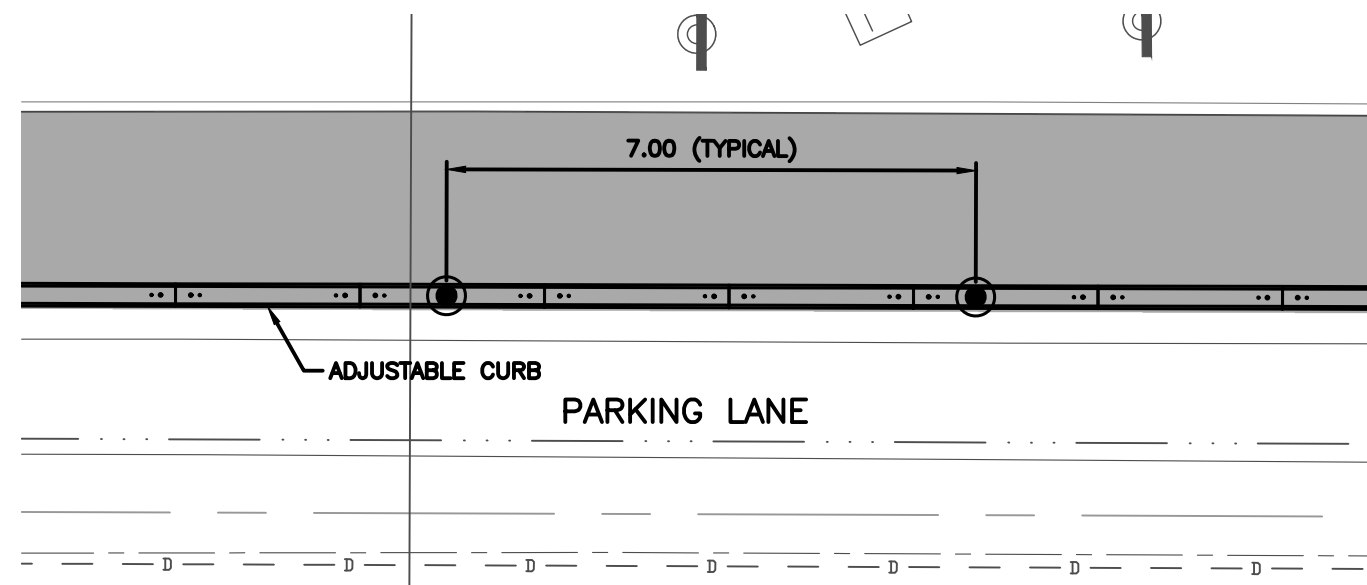
**BICYCLE PARKING DESIGN GUIDE AND DETAILS**

NTS



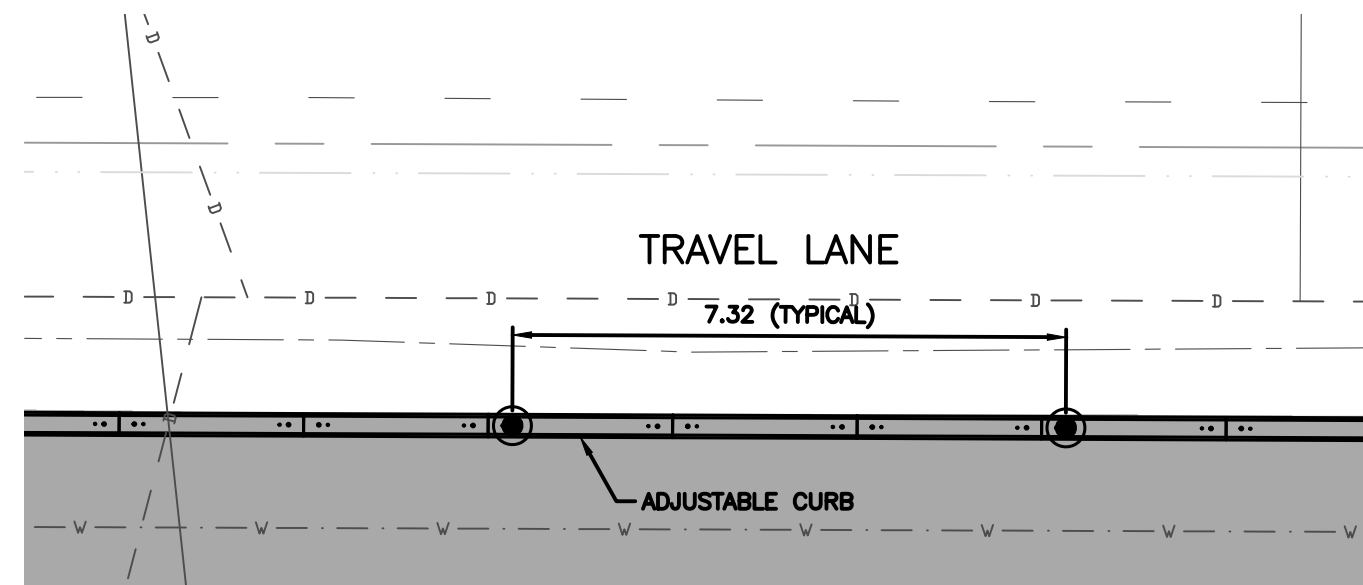
**U-STYLE BIKE RACKS**

SCALE 1:50



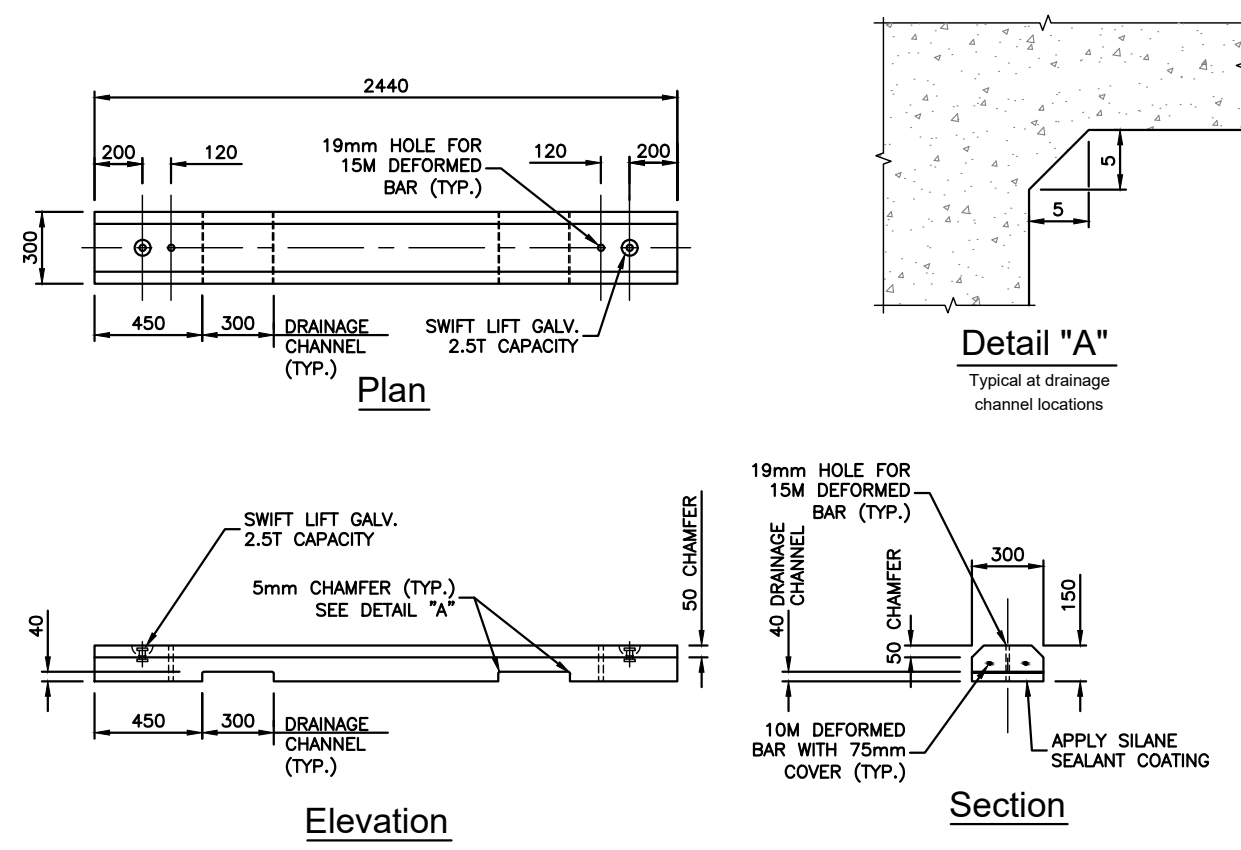
**BOLLARD SPACING ADJACENT TO PARKING**

NTS



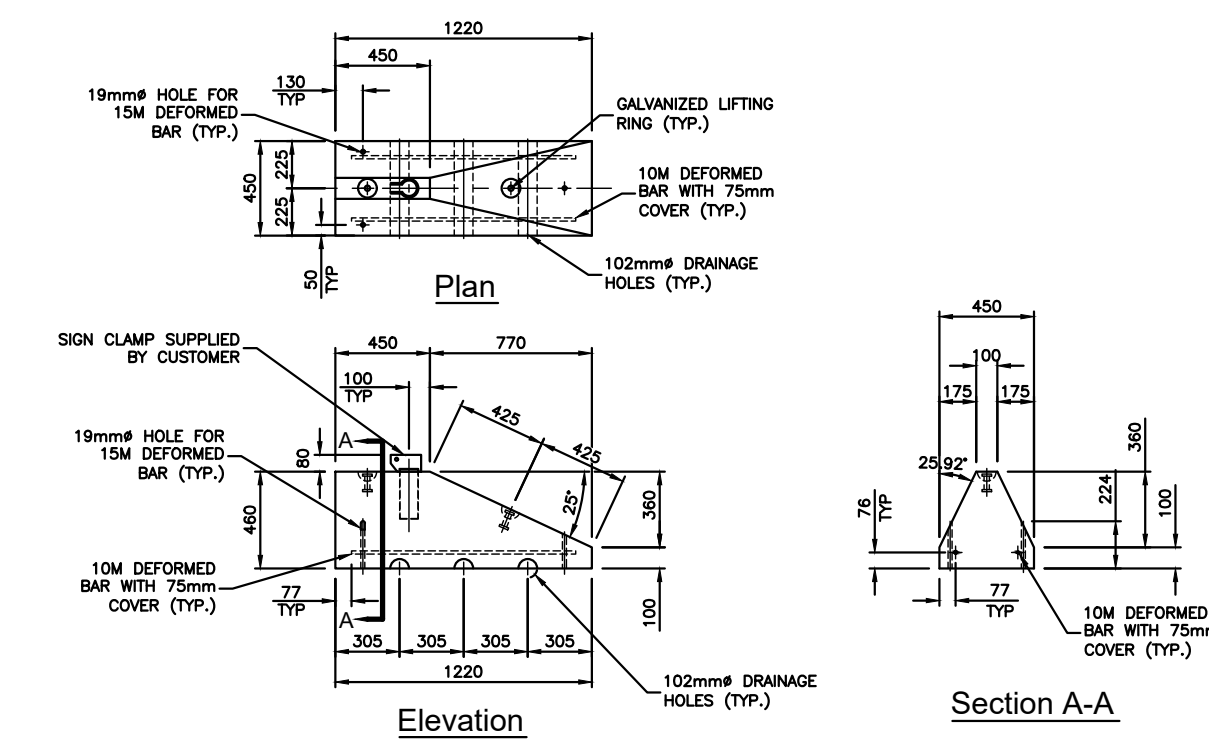
**BOLLARD SPACING WITHOUT PARKING**

NTS



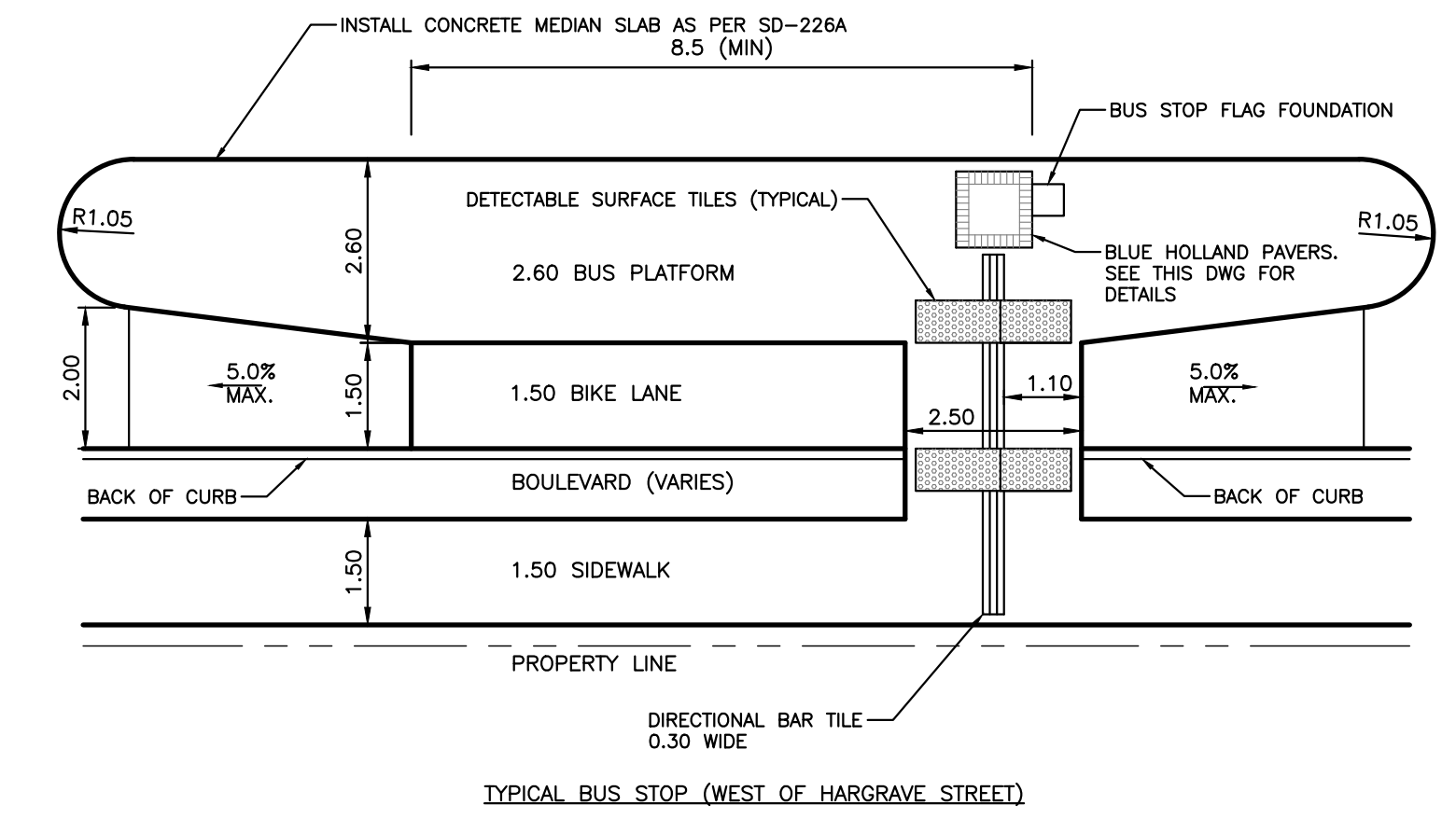
**ADJUSTABLE CURB WITH DRAINAGE CHANNEL**

NTS

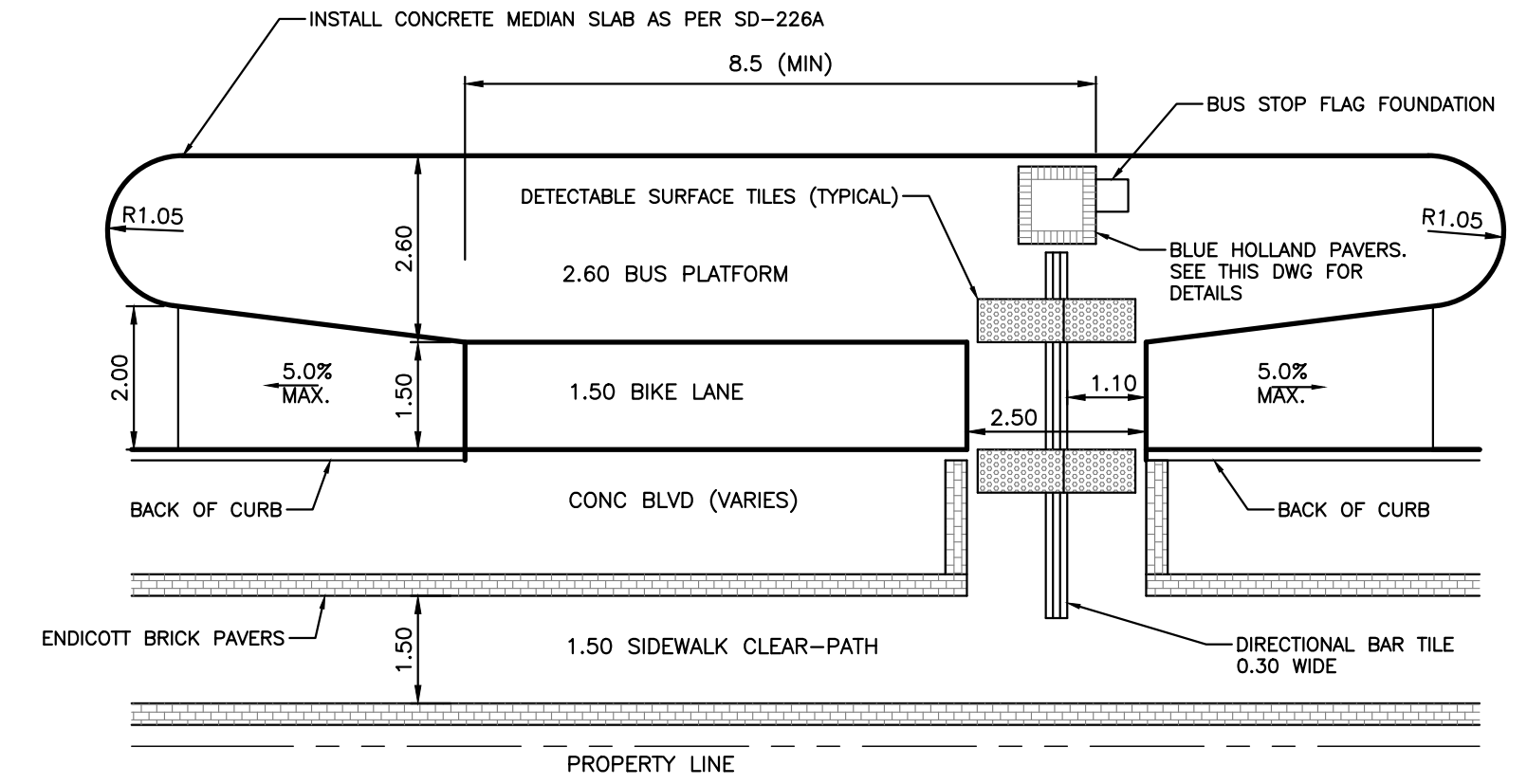


**PRE-CAST CONCRETE ADJUSTABLE BIKE LANE CURB - END UNIT**

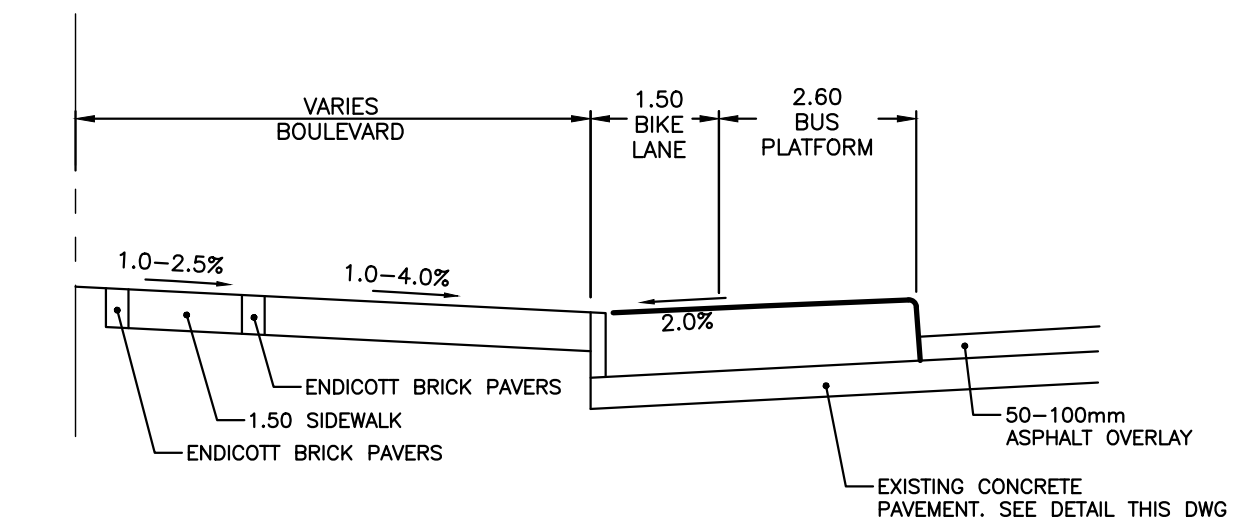
NTS



TYPICAL BUS STOP (WEST OF HARGRAVE STREET)



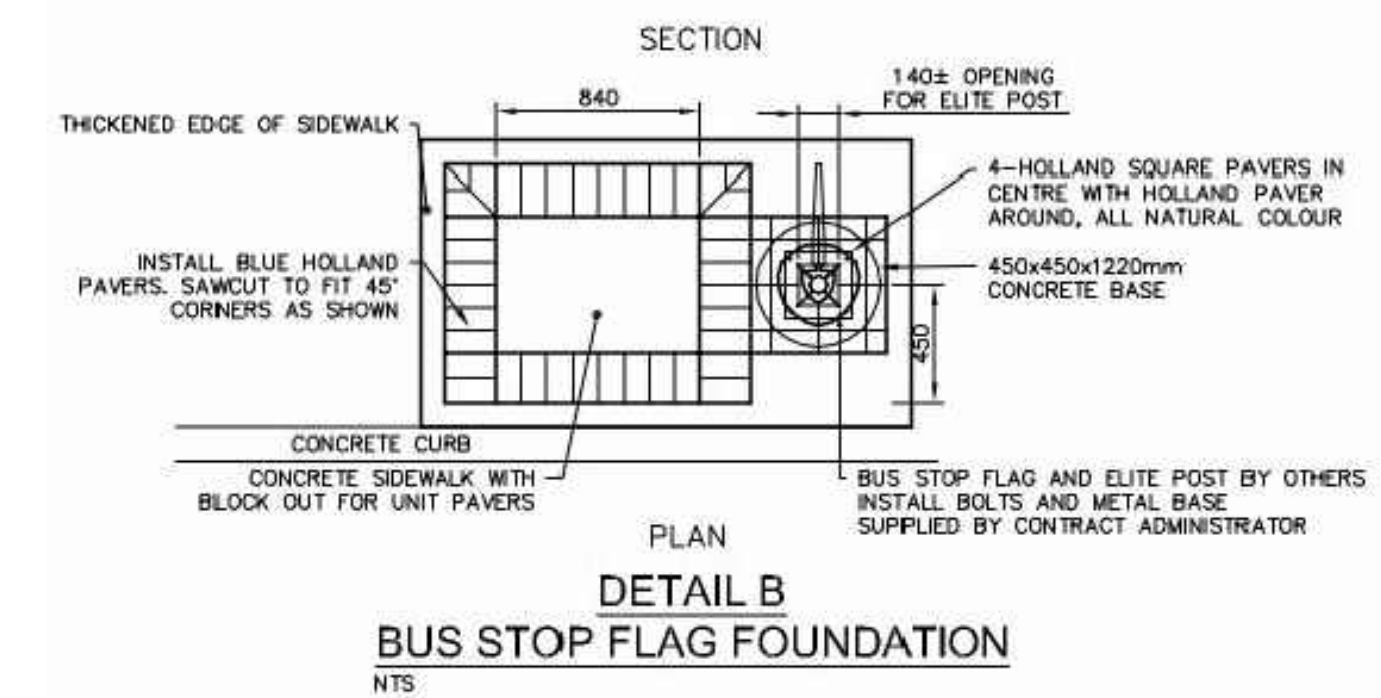
TYPICAL BUS STOP (EAST OF HARGRAVE STREET)



BUS PLATFORM - TYPICAL CROSS-SECTION

**STANDARD BUS STOP DETAIL**

SCALE 1:100



DETAIL B  
BUS STOP FLAG FOUNDATION

NTS

**ENGINEERS  
GEO-SCIENTISTS  
MANITOBA**  
Certificate of Authorization  
Urban Systems Ltd.  
No. 5053

U:\Projects\_VAN\3354001101\1D-Design\CAD\PROD\SET 1\C23-3354001101-DET.dwg, C22, 2018-03-28 10:16 am mmikolich

150 mm W.M.	WATERMAIN	150 mm W.M.	HYDRO	ADJUSTABLE CURB	LOCATION APPROVED UNDERGROUND STRUCTURES	B.M. ELEV.
300mm L.D.S.	LAND DRAINAGE SEWER	300mm L.D.S.	M.T.S.	ADJUSTABLE END UNIT		A 90% DETAIL DESIGN 2018-03-08 GS
250mm W.W.S.	WASTEWATER SEWER	250mm W.W.S.	CONCRETE	DECORATIVE LIGHT		B ISSUED FOR TENDER 2018-03-28 GS
	MANHOLE		ASPHALT	BOLLARD		
	CATCH BASIN	235.750	PROPERTY LINE			
	CURB INLET	500	SURVEY BAR			
	JUNCTIONS		ELEVATION (35.750)			
	CULVERT		TREE			
	GAS		SIDEWALK DETECTABLE			
EXISTING	LEGEND - PLAN	PROPOSED	CONCRETE SIDEWALK			
			FENCE			
			LEGEND - PLAN			
			PROPOSED			
			EXISTING			
			LEGEND - PROFILE			
			PROPOSED			
			EXISTING			

**LOCATION APPROVED UNDERGROUND STRUCTURES**

SUPV. U/G STRUCTURES COMMITTEE 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

**URBAN systems**

DESIGNED BY: M. Nikolich  
CHECKED BY: G. Smith  
DRAWN BY: D. Barry  
APPROVED BY: G. Propp  
HOR. SCALE: As Shown  
RELEASED FOR CONSTRUCTION BY:  
VERTICAL:

DATE: MARCH 28, 2018

ENGINEER'S SEAL

NOT FOR CONSTRUCTION

CONSULTANT DRAWING NO. 3354.0011.01  
C22

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

McDermot Bannatyne Adjustable Bike Lanes  
Concrete, Bus-stop and Bike Facility Details

SHEET 22 OF 36  
CAD FILE DRAWING NUMBER C23-3354001101-DET.DWG  
CITY DRAWING NUMBER P-3496-22