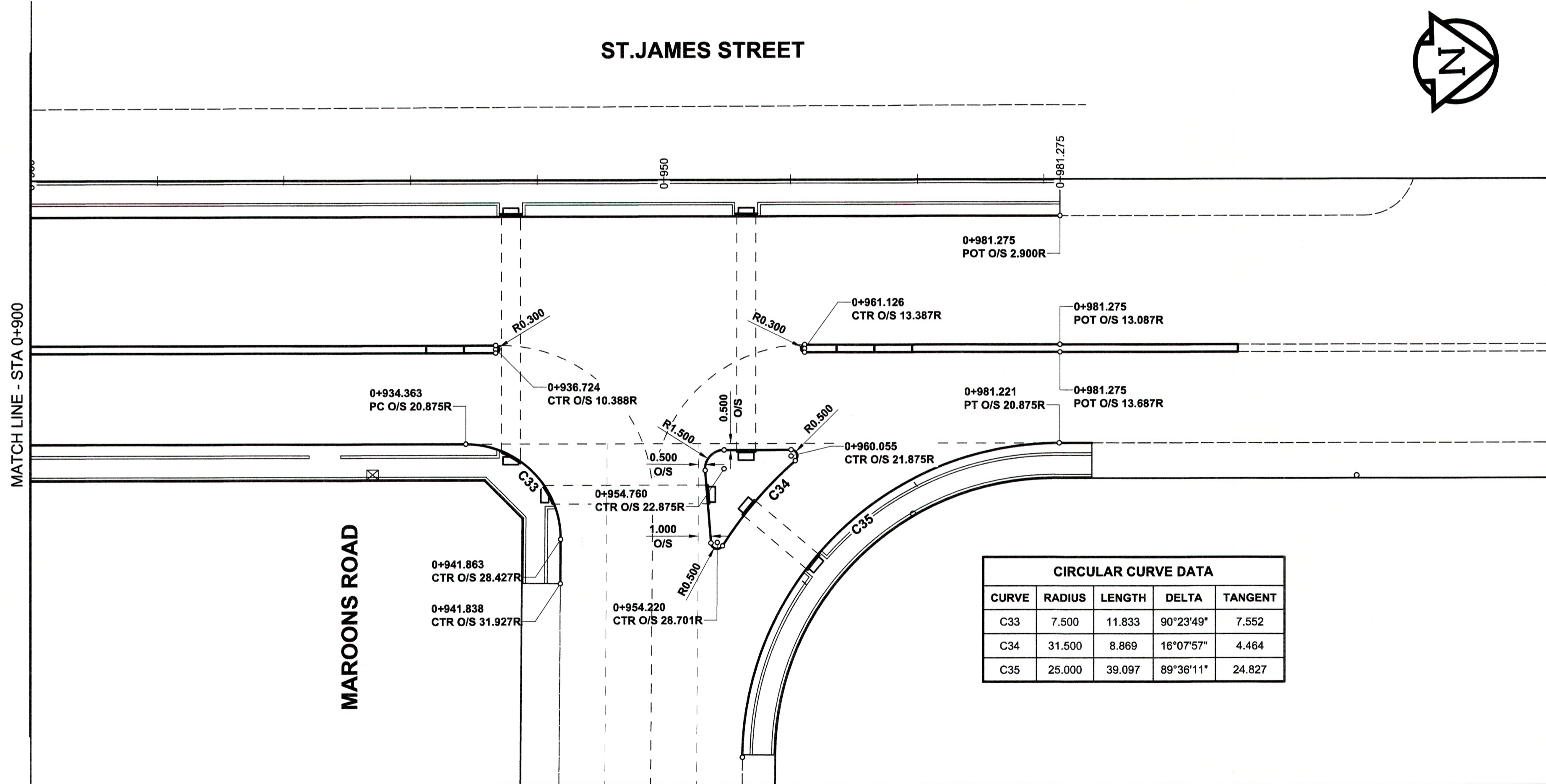


CIRCULAR CURVE DATA				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C31	19.750	29.820	86°30'32"	18.582
C32	35.800	17.047	27°17'00"	8.689



CIRCULAR CURVE DATA				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C33	7.500	11.833	90°23'49"	7.552
C34	31.500	8.869	16°07'57"	4.464
C35	25.000	39.097	89°38'11"	24.827

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

EXISTING	LEGEND - PLAN	NEW	EXISTING	LEGEND - PLAN	NEW	EXISTING	LEGEND - PLAN	NEW	
	GAS		MANHOLE		CONCRETE PAVEMENT		LOCATION APPROVED		BM 38-032 ELEV 234.325 m
	MTS / PEDESTAL		CATCH BASIN / CATCH PIT		CONC SIDEWALK / MEDIAN		SUPR. UG STRUCTURES COMMITTEE		
	HYDRO / CABINET		CURB INLET WITH BOX		ASPHALT PAVEMENT		DATE		
	CATV / FIBRE OPTIC		TREE		PAVING STONE		NOTE:		
	TRAFFIC SIGNALS / PIT		TEST HOLE		GRAVEL		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.		
	LAND DRAINAGE SEWER		PROPERTY LINE		RAMP CURB				
	SANITARY/COMBINED SEWER		SURVEY BAR		PLANING / REMOVAL				
	CB LEAD / SSP / DCP		FENCE						
	WATER MAIN		BOC / EDGE OF PAVEMENT						
	SUBDRAIN		ELEVATION (33.333)						
	DITCH		TRAFFIC SIGN						

**LOCATION APPROVED**  
UNDERGROUND STRUCTURES

SUPR. UG 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.

DESIGNED BY	WRJ	CHECKED BY	RPB
DRAWN BY	DID	APPROVED BY	BWB
HOR SCALE	1:250	RELEASED FOR CONSTRUCTION	
VERT SCALE	1:10	DATE	Nov 2/16
ISSUED FOR CONSTRUCTION	16/11/02	BY	RPB
REVISIONS	YYMMDD	DATE	16/11/02

**MORRISON HERSHFELD**

DESIGNED BY: WRJ  
DRAWN BY: DID  
CHECKED BY: RPB  
APPROVED BY: BWB  
RELEASED FOR CONSTRUCTION:   
DATE: 16/11/02

PROFESSIONAL'S SEAL

PROVINCE OF MANITOBA  
R.P. BRUCE  
REGISTERED PROFESSIONAL ENGINEER

CONSULTANT FILE NAME  
W150022 StJames-HG-04.dwg

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

2016 REGIONAL STREET RENEWAL PROGRAM

**ST. JAMES STREET RECONSTRUCTION**  
PORTAGE AVENUE TO MAROONS ROAD  
HORIZONTAL GEOMETRY  
STA 0+780 TO STA 1+020

CITY DRAWING NUMBER: P-3475-4  
SHEET 4 OF 13  
DRAWING No. REV 4 0

BID OPPORTUNITY No. 19-2016