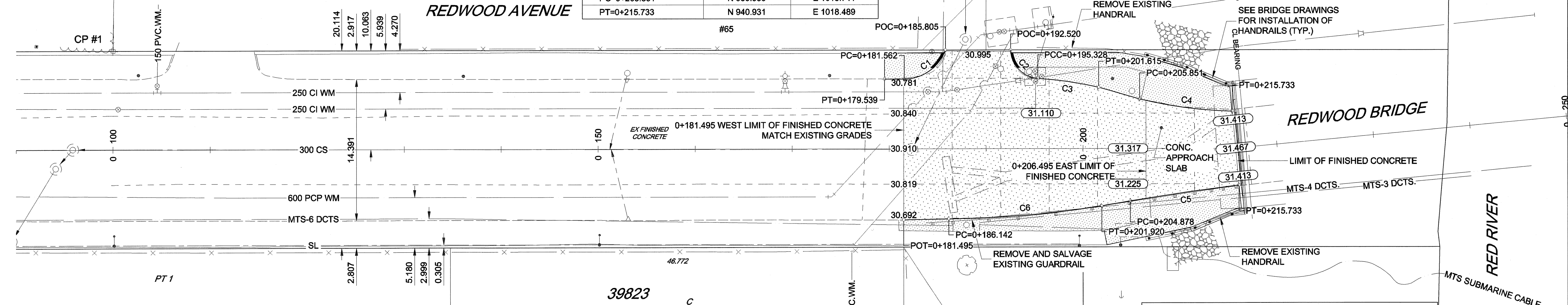


SURVEY BAR CONTROL POINTS-PROJECT COORDINATES				NAD83 DATUM		
CONTROL POINT	LOCATION	NORTHING	EASTING	NORTHING	EASTING	ELEVATION
#1	0+100.000 N. PL.	1056.331	1012.603	5531068.736	634298.816	230.631
#2	0+472.252 S. PL.	686.728	1054.414	5530913.198	634636.903	229.865

COORDINATE LAYOUT-WEST APPROACH		
NORTH EDGE PAVEMENT		
PT=0+179.539	N 976.922	E 1018.033
PC=0+181.562	N 974.909	E 1018.238
POC=0+185.805	N 970.990	E 1021.522
POC=0+192.520	N 964.323	E 1022.329
PCC=0+195.328	N 961.225	E 1019.737
PT=0+201.615	N 954.878	E 1019.496
PC=0+205.851	N 950.539	E 1018.741
PT=0+215.733	N 940.931	E 1018.489



CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	TANGENT
C1	5.508	4.500	70°07'54"	3.159
C2	4.431	3.000	84°37'38"	2.731
C3	6.359	40.000	9°06'29"	3.186
C4	9.628	48.000	11°29'32"	4.830
C5	11.324	260.000	2°29'44"	5.663
C6	15.846	105.000	8°38'48"	7.938

COORDINATE LAYOUT-WEST APPROACH		
SOUTH EDGE PAVEMENT		
POT=0+181.495	N 973.467	E 1003.958
PC=0+186.142	N 968.857	E 1004.552
PT=0+201.920	N 953.302	E 1007.494
PC=0+204.878	N 950.414	E 1008.313
PT=0+215.733	N 939.441	E 1011.105

- NOTES
- ADJUST MH. AND CB RIMS TO NEW GRADES
  - LAMP STANDARDS, HYDRO POLES AND ANCHORS MAY REQUIRE TEMPORARY SUPPORT/REMOVAL OR REPLACEMENT AT THE CONTRACTOR'S EXPENSE
  - CONTRACTOR SHALL TAKE PRECAUTIONARY STEPS TO AVOID DAMAGE TO EXISTING BOULEVARD TREES FROM CONSTRUCTION ACTIVITIES WITHIN THE LIMITS OF CONSTRUCTION AS OUTLINED IN THE SPECIFICATIONS.
  - MINIMUM 1.98m CLEAR LATERAL DISTANCE BETWEEN BACK OF PROPOSED SIDEWALKS AND ABBR POSTS/LS's.
  - ADD 200.000m TO ABBREVIATED ELEVATIONS FOR GEODETIC ELEVATIONS.
  - SEE DRAWING NO. 72 FOR INSTALLATION OF ALUMINUM BALANCED BARRIER RAIL AND POSTS.
  - SEE DRAWING NO. 49 FOR DETAILS OF WEST CONCRETE APPROACH SLAB.

Bid Opportunity No. 257-2005

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

**APCA**  
Certificate of Authorization  
UMA Engineering Ltd.  
No. 256 Expiry: April 30, 2006

PLOT SCALE = 1:0.25  
AutoCAD 15.05 P:\0266\355-03\ALD\Redwood Bridge.dwg Redwood Bridge\_Site.dwg 2003.08.25 1:26pm DID

EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PLAN	PROPOSED
---	GAS	○	○	MANHOLE	●	---	CONCRETE	---
---	MTS	□	□	CATCH BASIN/CATCH PIT	■	---	ASPHALT	---
---	HYDRO	△	△	C & G INLET W/BOX	▲	---	MONOLITHIC BULLNOSE	---
---	VIDEON	◇	◇	TREE	○	---	CONCRETE SIDEWALK	---
---	TRAFFIC SIGNALS	TH-12	TH-12	TEST HOLE	○	---	PAVING STONE	---
---	LAND DRAINAGE SEWER	---	---	PROPERTY LINE	---	---	TOPSOIL & SOD	---
---	SANITARY/COMBINED SEWER	---	---	SURVEY BAR	---	---	GRAVEL	---
---	CATCHBASIN LEAD	---	---	FENCE	---	---	RAMP CURB	---
---	WATERMAIN	---	---	BACK OF CURB	---	---	REMOVAL	---
---	SUBDRAIN	---	---	ELEVATION	---	---		---
---	DITCH	---	---		---	---		---

**LOCATION APPROVED UNDERGROUND STRUCTURES**

SUPR. 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.	ISSUED FOR CONSTRUCTION	DATE	BY
0	ISSUED FOR CONSTRUCTION	05/07/05	MP

**UMA Engineering Ltd.**  
Consulting • Engineering • Construction • Management Services

DESIGNED BY: JGK  
CHECKED BY: RPB  
DRAWN BY: DID  
APPROVED BY: [Signature]  
HOR. SCALE: 1:250  
VERTICAL: 1:10  
ACCEPTED BY: [Signature]  
DATE: 2005 07 07

ENGINEER'S SEAL  
PROVINCE OF MANITOBA  
**BRUCE W. BIGLOW**  
REGISTERED PROFESSIONAL ENGINEER  
05-07-06  
CONSULTANT DRAWING NO. 41-09-0265-376-00

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

REDWOOD BRIDGE  
REHABILITATIVE MAINTENANCE AND RELATED WORKS

CITY DRAWING NUMBER B113-05-70  
SHEET 70 OF 74  
REV 0

WEST APPROACH PAVEMENT RECONSTRUCTION  
REMOVALS, HORIZONTAL & VERTICAL ALIGNMENT  
0+100 TO WEST EXPANSION JOINT