

APPENDIX B

RECORD DRAWING INFORMATION



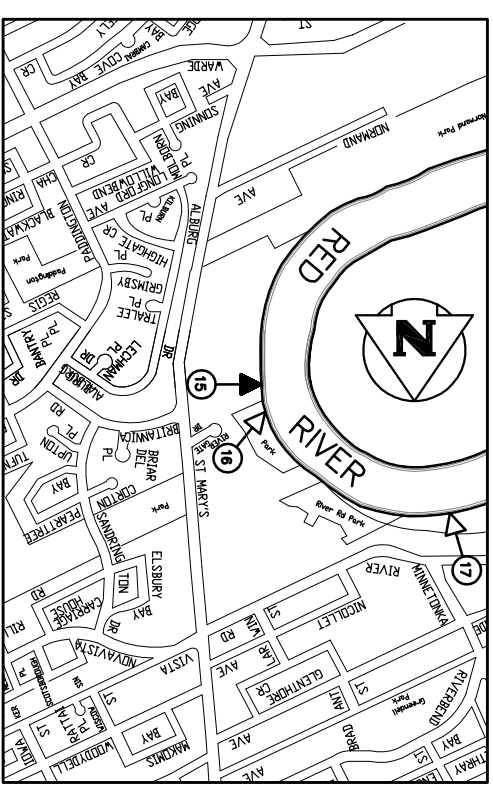
THE CITY OF WINNIPEG

WATER AND WASTE DEPARTMENT

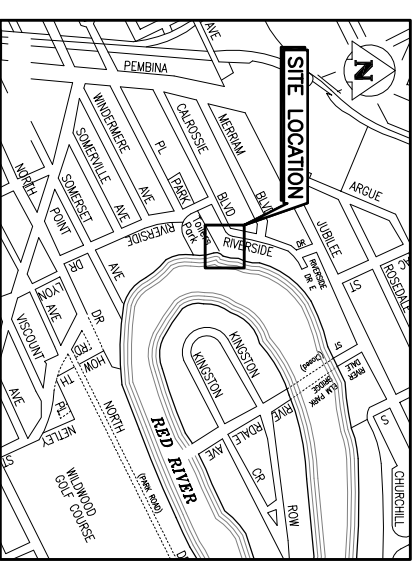
TENDER NO. 866-2002

St. Mary's Road Overflow & Calrossie Boulevard Bank Remediation Works

DRAWING NO.	TITLE
LD-2748	COVER SHEET
LD-2749	PLAN AND SECTION
LD-2750	UPGRADING DETAILS
LD-2751	EXISTING SITE PLAN AND LIMITS OF WORKS AT ST MARY'S ROAD
LD-2752	SECTIONS
LD-2753	GENERAL SITE PLAN AT CALROSSIE BOULEVARD
LD-2754	DETAILED SITE PLAN AND LIMITS OF WORKS AT CALROSSIE BOULEVARD
LD-2755	SECTIONS AND LIMITS OF WORKS AT CALROSSIE BOULEVARD
LD-2756	DETAILED SITE PLAN AT #48 & #50 RIVERSIDE DRIVE SECTION D AT #48 & #50 RIVERSIDE DRIVE



- LEGEND:
- 33 → LAND DRAINAGE (LDS)
 - 58 → COMBINED SEWER OVERFLOW (CS)
 - 34 → WASTEWATER OVERFLOW (WWS)



CALROSSIE OUTFALL

AS-CONSTRUCTED
WATER & WASTE DEPARTMENT
PROJECT COMPLETION DATE: 24 MARCH 2003

150.0MM	WATERMAIN	150.0MM	HYDRO
300.0MM	VALVE	300.0MM	M.T.S.
300.0MM	LAND DRAINAGE SEWER	300.0MM	PROPERTY LINE
250.0MM	WASTE WATER SEWER	250.0MM	SURVEY BAR
	MANHOLE		LIGHT STANDARD
	CATCH BASIN		HYDRO POLE
	CURB INLET		GUY WIRE
	JUNCTIONS		SIGN
	CULVERT		BUSH LINE
	GAS		FENCE
EXISTING	LEGEND-PLAN	PROPOSED	LEGEND-PLAN
		EXISTING	LEGEND-PROFILE
		PROPOSED	LEGEND-PROFILE

LOCATION APPROVED UNDERGROUND STRUCTURES
 SUPV. U/G STRUCTURES COMMITTEE DATE

NO.	REVISIONS	DATE	BY
1	AS-BUILT	07/04/03	R.J.H.
2	LEGAL SURVEY	20/01/03	R.J.H.
3	ISSUED FOR TENDER	06/12/02	R.J.H.
4	ISSUED FOR REVIEW	02/12/02	R.J.H.

KGS CONSULTING ENGINEERS & PROJECT MANAGERS
 WINNIPEG (204) 896-1299
 THUNDER BAY (807) 343-2233

DESIGNED BY R.J.H.
 DRAWN BY D.W.
 CHECKED BY R.J.H.
 APPROVED BY R.J.H.

ORIGINAL SIGNED BY R.J. HOUSTON
 12 JUNE 06

RELEASED FOR CONSTRUCTION:
 DATE

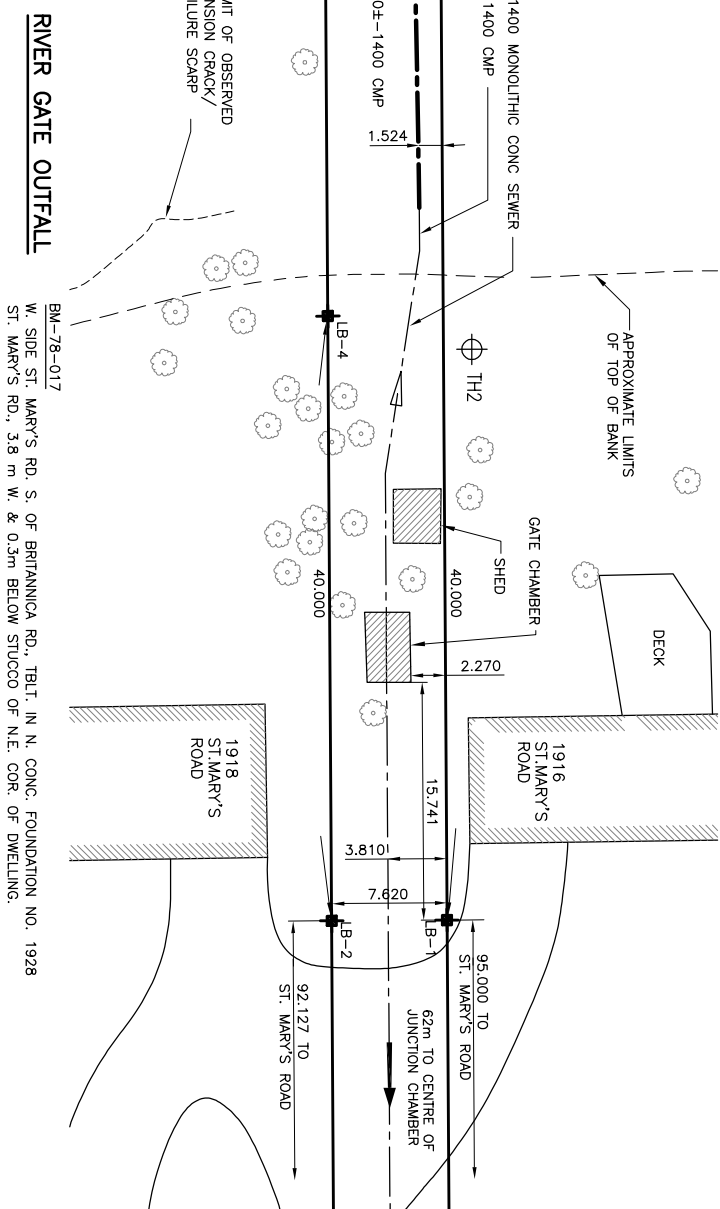
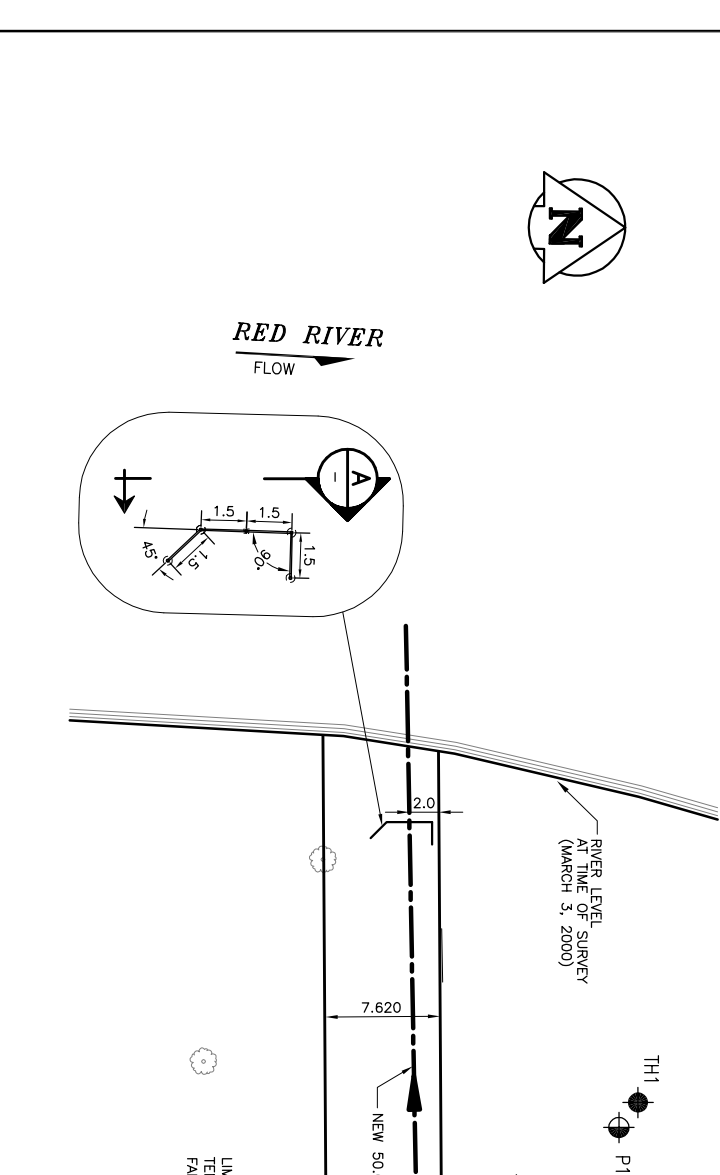
THE CITY OF WINNIPEG
 WATER & WASTE DEPARTMENT

OUTFALL REPAIRS

ST. MARY'S ROAD OVERFLOW (RR-15)

PLAN AND SECTION

SHEET 01 OF 09
 OLD FILE DRAWING NUMBER 02-107-04-RG1-Rw2
 CITY DRAWING NUMBER LD-2748



METRIC
 WHOLE NUMBERS INDICATE MILLIMETRES
 DECIMALIZED NUMBERS INDICATE METRES

NOTE:
 1. TOPOGRAPHIC MAP BASED ON KGS SURVEY PERFORMED MARCH 3, 2000.
 2. NORTH DIRECTION IS APPROXIMATE.
 3. RIVER BOTTOM SOUNDINGS BY KGS GROUP MAY 11, 2000.

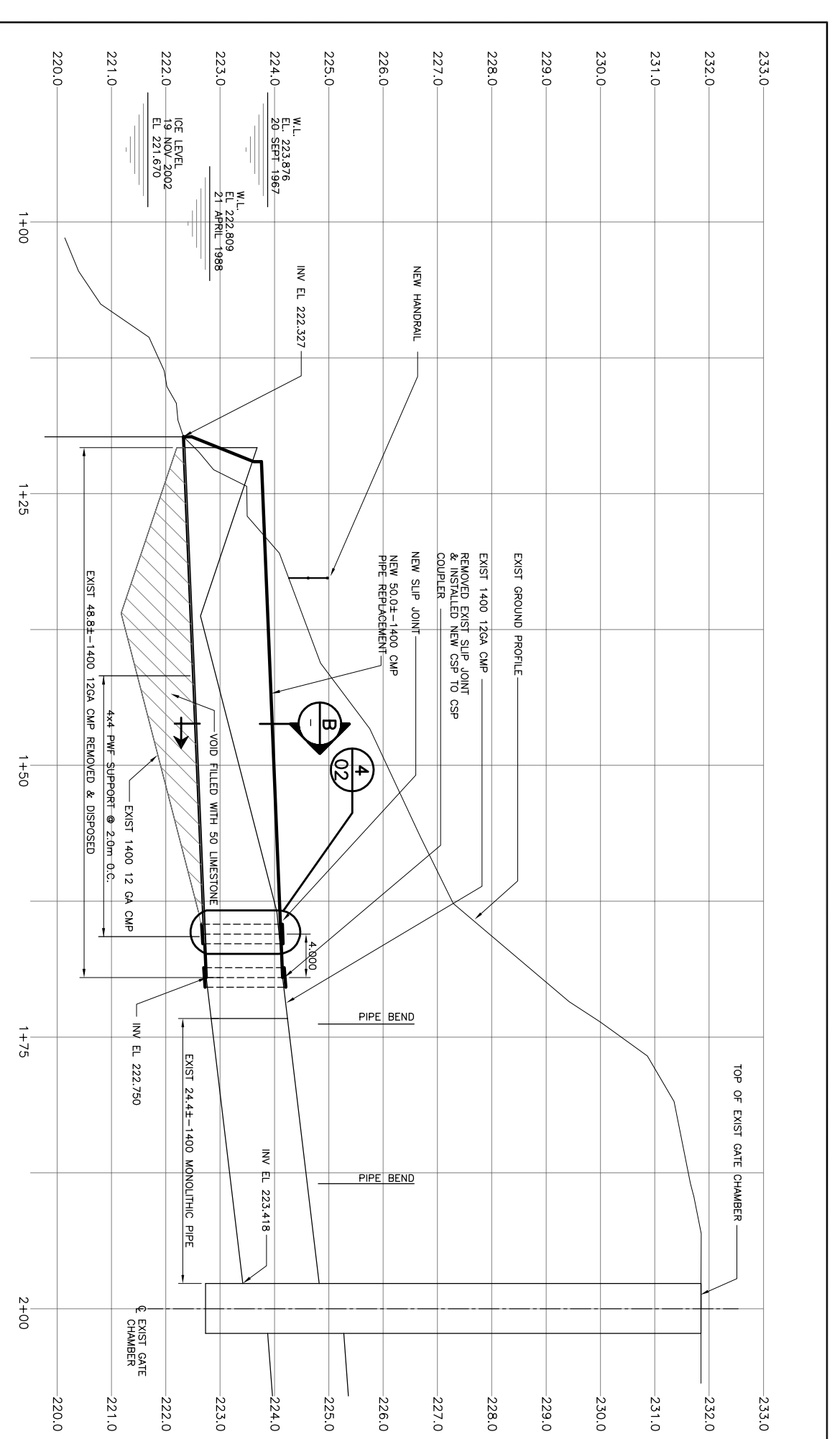
LEGEND
 TREE
 TH1 KGS GROUP TEST HOLE WITH INCLINOMETER
 TH2 KGS GROUP TEST HOLE (FEBRUARY 2000)
 P1 KGS GROUP PIEZOMETER (FEBRUARY 2000)
 P2 KGS GROUP PIEZOMETER (FEBRUARY 2000)
 LB-1 LEGAL BARS
 LB-2 LEGAL BARS

SCALE:
 0 5 10 15 20 25m
 SCALE: 1:250 METRIC A1
 SCALE: 1:500 METRIC A3

LEGAL BAR LOCATION

BAR NO.	NORTHING	EASTING
LB-1	4913576.7738	833525.0571
LB-2	4913571.1539	833525.1059
LB-4	4913570.8977	833485.1067

AS-CONSTRUCTED
 WATER & WASTE DEPARTMENT
 PROJECT COMPLETION DATE: 24 MARCH 2003



SECTION A-A
 SCALE: 1:50

SECTION B
 SCALE: 1:50

LEGAL BAR LOCATION

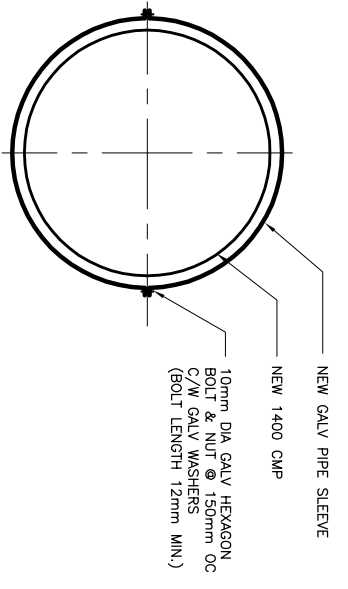
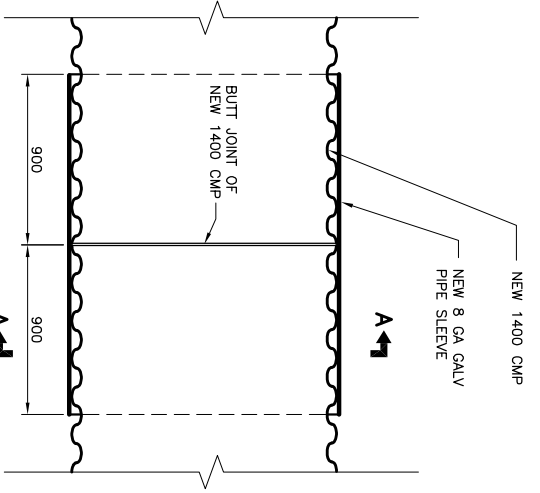
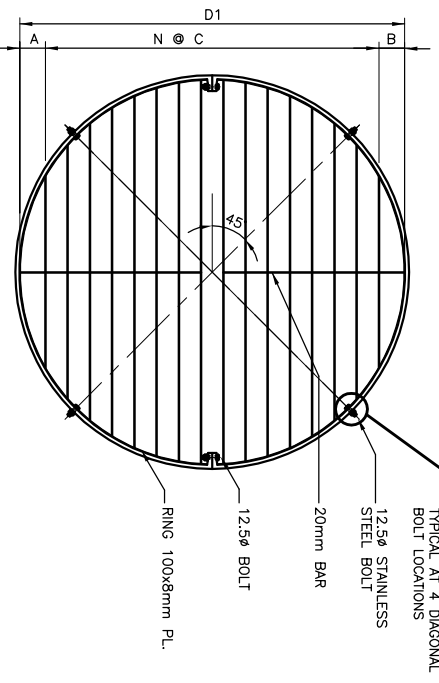
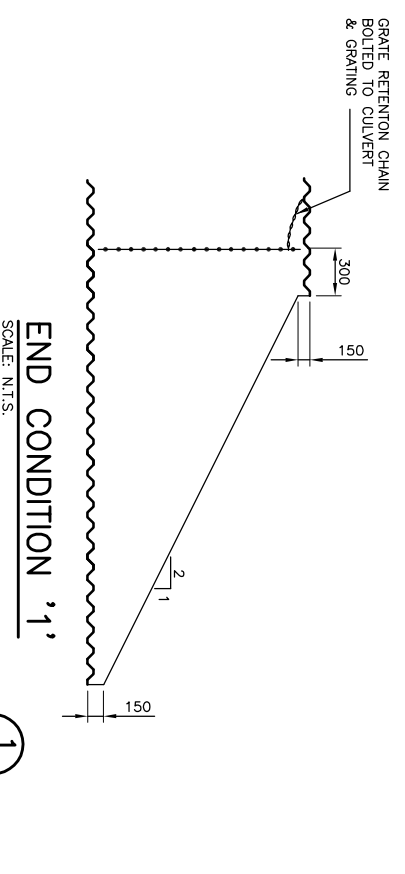
BAR NO.	NORTHING	EASTING
LB-1	4913576.7738	833525.0571
LB-2	4913571.1539	833525.1059
LB-4	4913570.8977	833485.1067

NOTE:
 1. TOPOGRAPHIC MAP BASED ON KGS SURVEY PERFORMED MARCH 3, 2000.
 2. NORTH DIRECTION IS APPROXIMATE.
 3. RIVER BOTTOM SOUNDINGS BY KGS GROUP MAY 11, 2000.

LEGEND
 TREE
 TH1 KGS GROUP TEST HOLE WITH INCLINOMETER
 TH2 KGS GROUP TEST HOLE (FEBRUARY 2000)
 P1 KGS GROUP PIEZOMETER (FEBRUARY 2000)
 P2 KGS GROUP PIEZOMETER (FEBRUARY 2000)
 LB-1 LEGAL BARS
 LB-2 LEGAL BARS

SCALE:
 0 5 10 15 20 25m
 SCALE: 1:250 METRIC A1
 SCALE: 1:500 METRIC A3

AS-CONSTRUCTED
 WATER & WASTE DEPARTMENT
 PROJECT COMPLETION DATE: 24 MARCH 2003

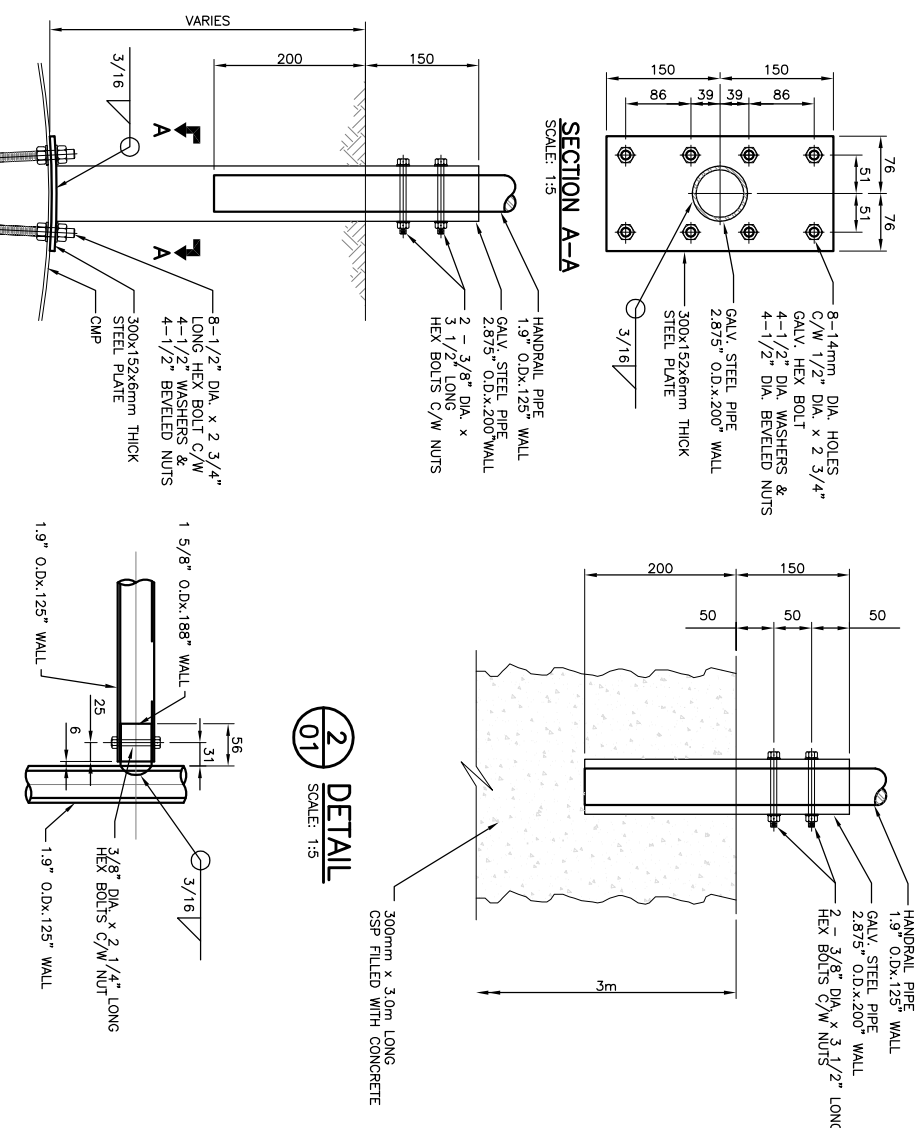
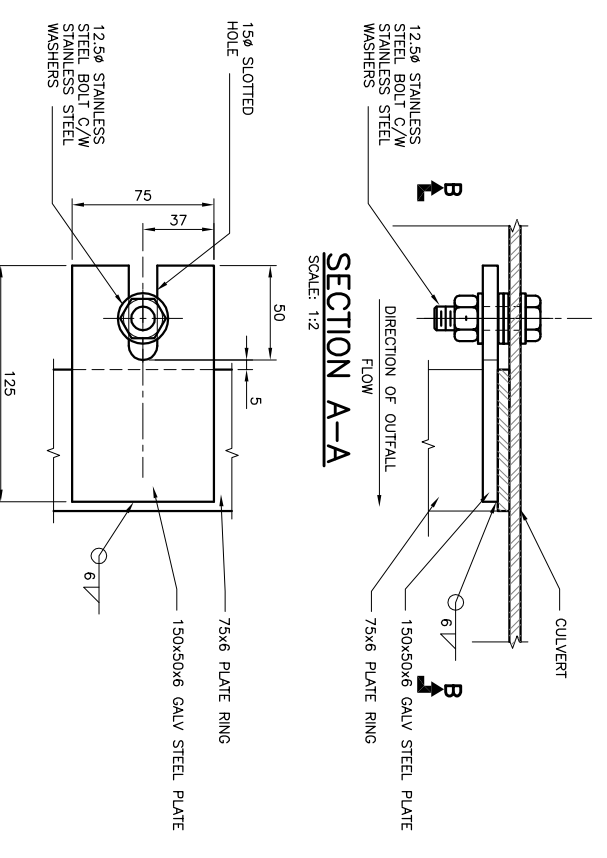
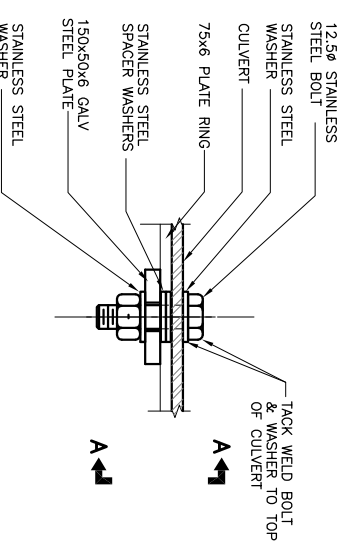


4 DETAIL
SCALE: 1:20

PIPE		END CONDITION	GRATING				WEIGHT (lbs)		
DIAMETER D	MATERIAL	1	TYPE	BAR DIA	A	B	C	N	
1400	CSP	1	Y	20	180	184	170	6	110

NOTE:
ALL PLATES AND BARS ARE CSA G40.21-300W.
ALL COMPONENTS ARE GALVANIZED.

1 DETAIL
SCALE: 1:2



1 DETAIL
SCALE: 1:5

3 DETAIL
SCALE: 1:5

BM-78-017
W. SIDE ST. MARY'S RD. S. OF BRITANNICA RD., TELT. IN N. CONC. FOUNDATION NO. 1928
ST. MARY'S RD., 3.8 m W. & 0.3m BELOW STUCCO OF N.E. COR. OF DWELLING.

AS-CONSTRUCTED
WATER & WASTE DEPARTMENT

PROJECT COMPLETION DATE: 24 MARCH 2003

LOCATION APPROVED UNDERGROUND STRUCTURES

BM-78-017
Elev: 232.416

KGS GROUP
CONSULTING ENGINEERS & PROJECT MANAGERS
WINNIPEG
THUNDER BAY (907) 565-2233

ENGINEER'S SEAL
ORIGINAL SIGNED BY
R.J. HOUSTON
12 JUNE 06

THE CITY OF WINNIPEG
WATER & WASTE DEPARTMENT
OUTFALL REPAIRS
ST. MARY'S ROAD OVERFLOW (RR-15)
UPGRADING DETAILS



Certificate of Authorization
KGS Group
No. 245 Expiry: April 30, 2007

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

NOTE:
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ON THIS DRAWING IS APPROXIMATE. THE LOCATION OF ALL SERVICES MUST BE DETERMINED BY FIELD SURVEY BEFORE PROCEEDING WITH CONSTRUCTION.

NO.	REVISIONS	DATE	BY	DATE
1	AS-BUILT	07/04/03	R.J.H.	
0	ISSUED FOR TENDER	06/12/02	R.J.H.	
A	ISSUED FOR REVIEW	02/12/02	R.J.H.	

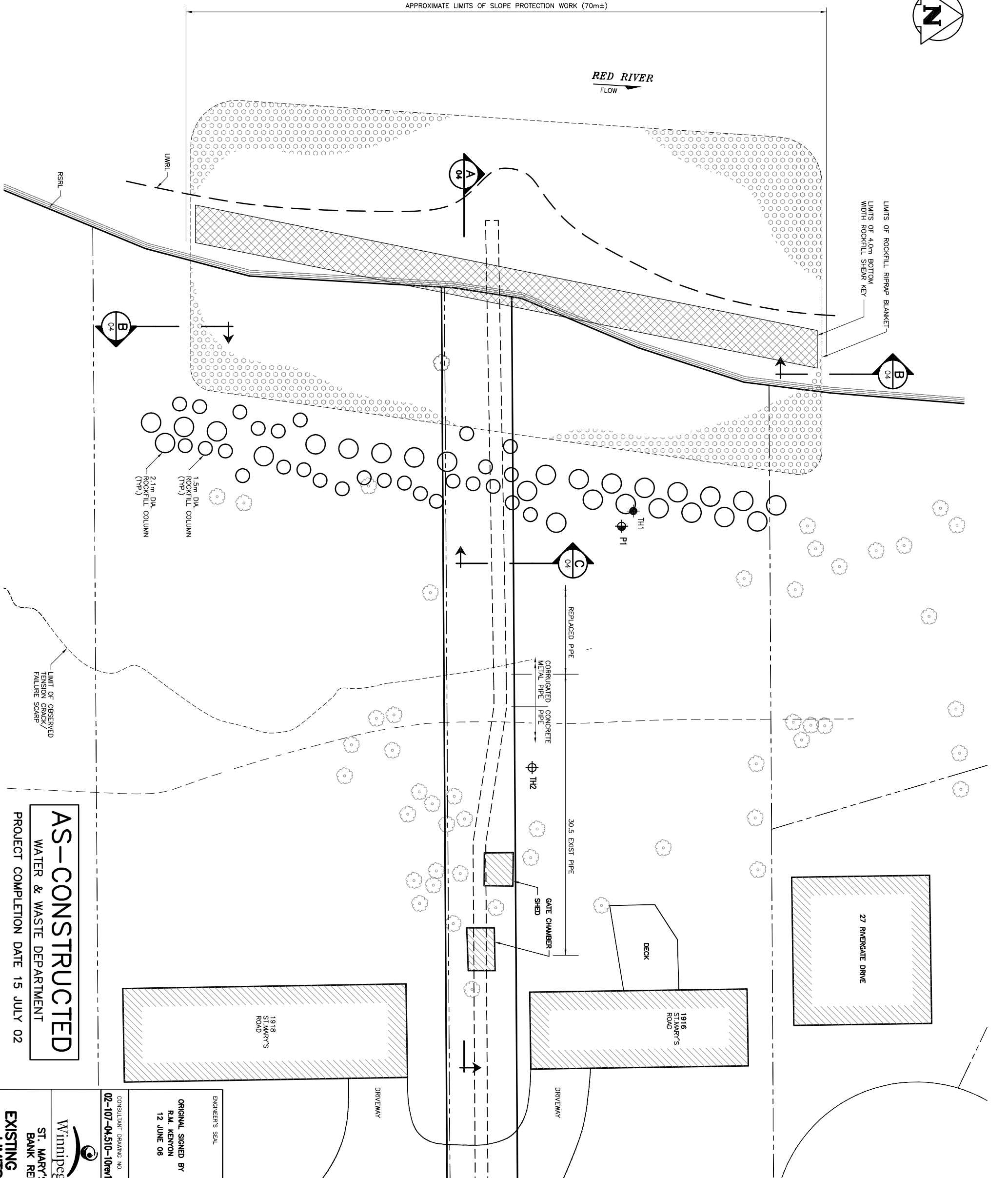
DESIGNED	D.G.G.	CHECKED	R.J.H.
DRAWN	D.W. <td>APPROVED</td> <td></td>	APPROVED	
HOR. SCALE: AS NOTED		RELEASED FOR CONSTRUCTION:	
DATE: NOV 25, 2002		DATE:	

SHEET	OF
02	09
CITY DRAWING NUMBER	
LD-2749	



APPROXIMATE LIMITS OF SLOPE PROTECTION WORK (70m±)

RED RIVER
FLOW



LIMITS OF 4.0m BOTTOM WIDTH ROCKFILL SHEAR KEY

2.1m DIA. ROCKFILL COLUMN (TYP.)
1.5m DIA. ROCKFILL COLUMN (TYP.)

REPLACED PIPE
CORRUGATED CONCRETE METAL PIPE

30.5 EXIST PIPE

GATE CHAMBER

SHED

DECK

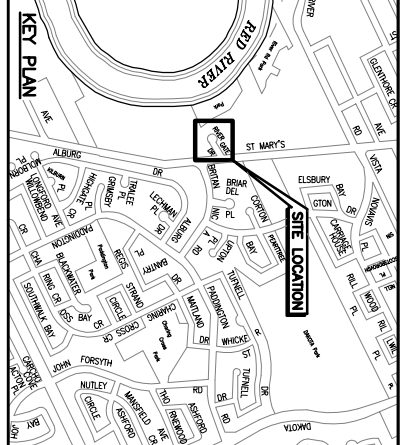
1916 ST. MARY'S ROAD

1918 ST. MARY'S ROAD

DRIVEWAY

DRIVEWAY

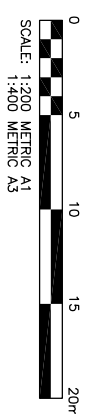
LIMITS OF OBSERVED TENSION CRACK/ROCKFILL SCARP



LEGEND

- CITY OF WINNIPEG EASEMENT
- UNDERGROUND 1.37m DIAMETER PIPE
- TREE
- KGS GROUP TEST HOLE WITH INCLINOMETER
- ⊕ TH1 KGS GROUP TEST HOLE (FEBRUARY 2000)
- ⊕ TH2 KGS GROUP PIEZOMETER (FEBRUARY 2000)
- ⊕ P1 KGS GROUP PIEZOMETER (FEBRUARY 2000)
- ⊕ RSRL REGULATED SUMMER RIVER LEVEL
- ⊕ UWRL UNREGULATED WINTER RIVER LEVEL

NOTE:
1. TOPOGRAPHIC MAP BASED ON KGS GROUP SURVEY PERFORMED MARCH 5, 2000.
2. NORTH DIRECTION IS APPROXIMATE.
3. RIVER BOTTOM SOUNDINGS BY KGS GROUP MAY 11, 2000.
4. CONSTRUCTION ACCESS TO BE DETERMINED BY CONTRACTOR AND SHALL BE SUBJECT TO THE APPROVAL OF THE CONTRACT ADMINISTRATOR.



B.M. 64-008
ELEV. 231.949
N.W. CORNER RIVERSIDE DR. AND B'YNG PL., 19mm DIA. x 6.1m I.B. IN VALVE BOX, 1.0m N. OF N.L. B'YNG PL. AND 1.0m W. OF W.L. RIVERSIDE DR.

APEN
Certificate of Authorization
KGS Group
No. 245 Expiry: April 30, 2007

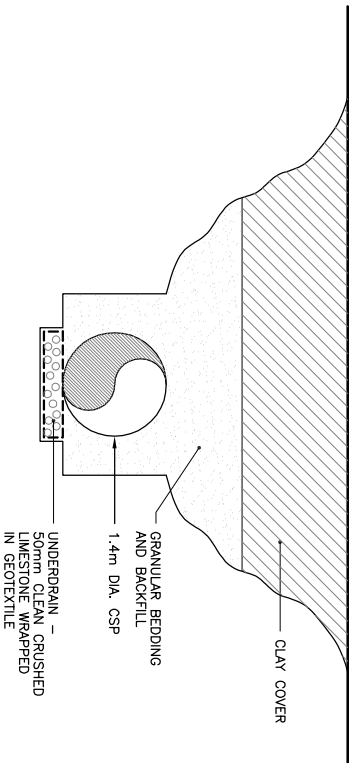
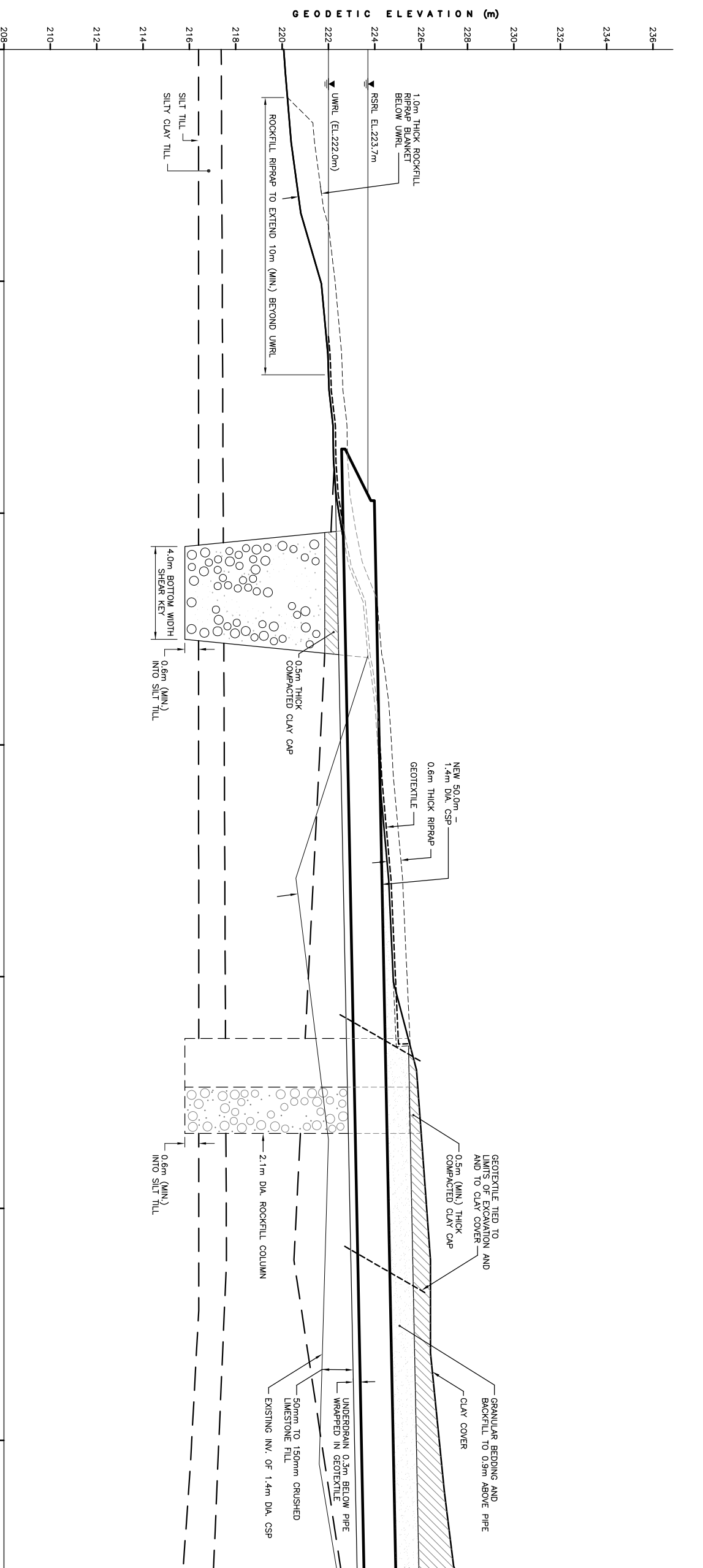
ENGINEER'S SEAL	
ORIGINAL SIGNED BY R.M. KENYON 12 JUNE 06	
DESIGNED BY T.C.	CHECKED BY
DRAWN BY A.M.	APPROVED BY
HOR. SCALE: 1:200	
VERTICAL: _____	
CONSULTANT DRAWING NO. 02-107-04.510-10rev1	DATE DECEMBER 06, 2002

AS-CONSTRUCTED
WATER & WASTE DEPARTMENT
PROJECT COMPLETION DATE 15 JULY 02

THE CITY OF WINNIPEG
WATER & WASTE DEPARTMENT

ST. MARY'S ROAD OVERFLOW
BANK REMEDIATION WORKS
EXISTING SITE PLAN AND
LIMITS OF WORKS

SHEET **03** OF **09**
CAD FILE DRAWING NUMBER
02-107-04.510-10rev1
CITY DRAWING NUMBER
LD-2750



B SECTION
SCALE: 1:50 METRIC A1

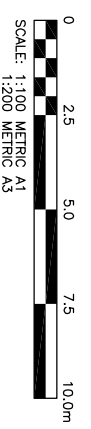
C SECTION
SCALE: 1:50 METRIC A1

LEGEND

RSRL REGULATED SUMMER RIVER LEVEL
 UWRL UNREGULATED WINTER RIVER LEVEL

NOTE:

- RSRL - REGULATED SUMMER RIVER LEVEL
- CSP - CORRUGATED METAL PIPE
- UWRL - UNREGULATED WINTER RIVER LEVEL
- SLOPE GEOMETRY BASED ON KGS GROUP SURVEY PERFORMED MARCH 3, 2000.
- RIVER BOTTOM GEOMETRY BASED ON KGS GROUP RIVER BOTTOM SOUNDINGS MAY 11, 2000.
- OUTFALL GEOMETRY BASED ON CITY OF WINNIPEG WATERWORKS AND WASTE DISPOSAL DIVISION DRAWING No. 607 DATED JULY 19, 1967.



B.M. 64-008
 ELEV. 231.949

B.M. 64-008
 N.W. CORNER RIVERSIDE DR. AND
 BYNG ST., 19mm DIA. x 6.1m I.B.
 IN VALVE BOX 1.0m N. OF N.L.
 BING FLEND 1.0m W. OF
 W.L. RIVERSIDE DR.

APEN
 Certificate of Authorization
 KGS Group
 No. 245 Expiry: April 30, 2007

1	AS-BUILT	14/04/03	RMK
0	ISSUED FOR TENDER	29/11/02	RMK
NO.	REVISIONS	DATE	BY

ENGINEER'S SEAL

ORIGINAL SIGNED BY
R.M. KENYON
 12 JUNE 06

DESIGNED BY T.C.
 DRAWN BY A.M.

CHECKED BY
 APPROVED BY

RELASED FOR CONSTRUCTION DATE

HOR. SCALE: 1:100
 VERTICAL: -

CONSULTANT DRAWING NO. **02-107-04.510-10rev1**
 DATE: DECEMBER 06, 2002

AS-CONSTRUCTED
 WATER & WASTE DEPARTMENT
 PROJECT COMPLETION DATE 15 JULY 02

THE CITY OF WINNIPEG
 WATER & WASTE DEPARTMENT

Winnipeg

ST. MARY'S ROAD OVERFLOW
 BANK REMEDIATION WORKS

SHEET **04** OF **09**

CAD FILE DRAWING NUMBER **02-107-04.510-10rev1**

CITY DRAWING NUMBER **LD-2751**

