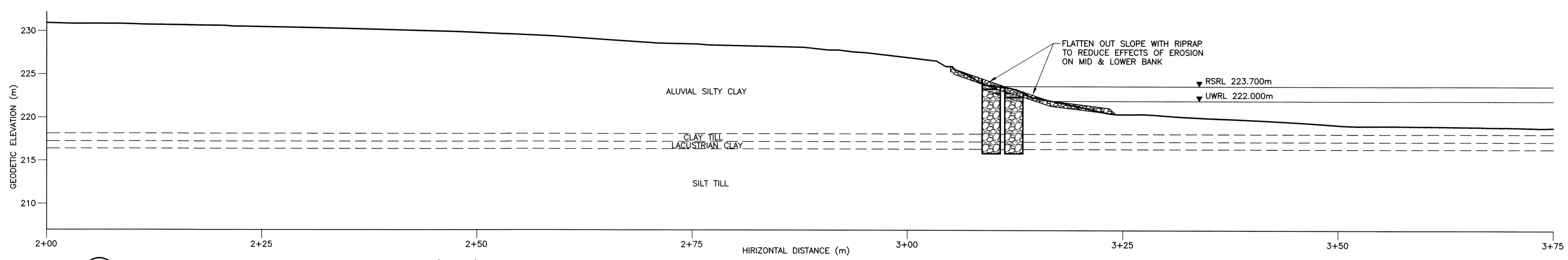
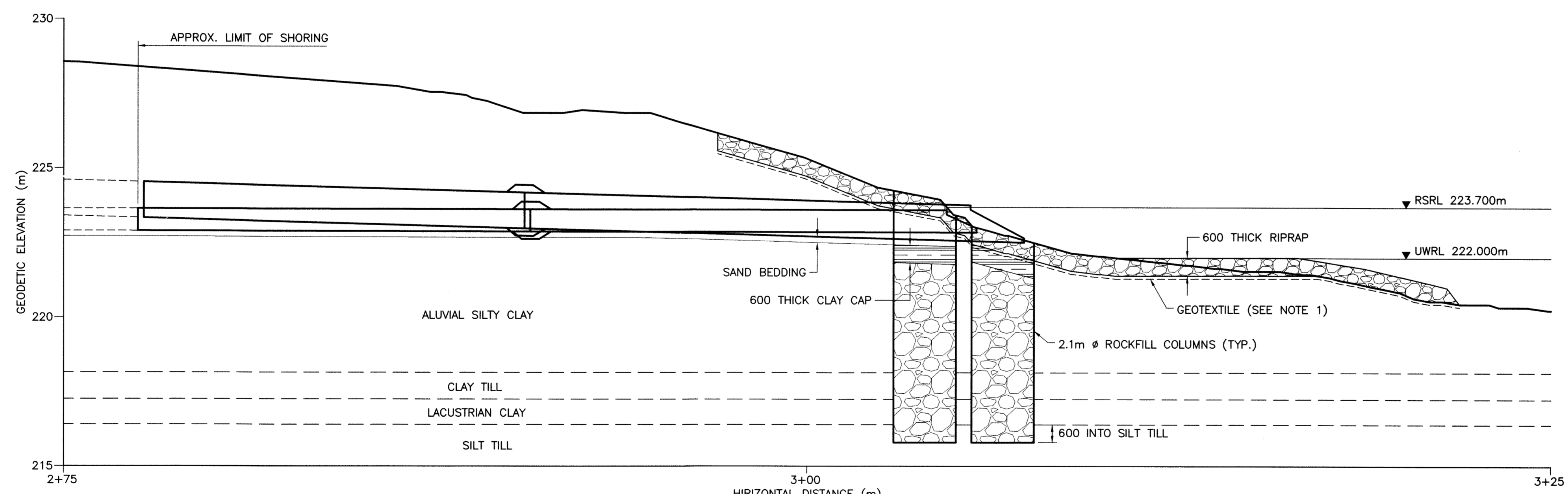


**A RIVERBANK SECTION WITHIN R.O.W. (TYP.)**  
SCALE: 1:250



**B RIVERBANK SECTION BEYOND R.O.W. (TYP.)**  
SCALE: 1:250



**RIVERBANK SECTION THRU OUTFALLS**  
SCALE: 1:100

**LEGEND**

RSRL	REGULATED SUMMER RIVER LEVEL
UWRL	UNREGULATED WINTER RIVER LEVEL
---	ASSUMED STRATIGRAPHIC CONTACT

**NOTES:**

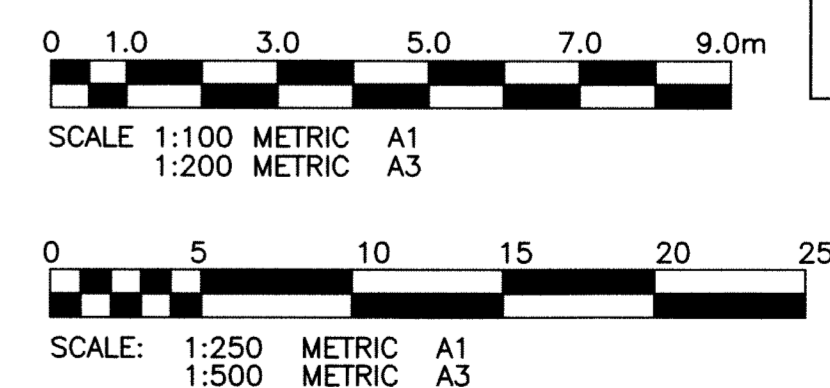
1. THE CONTRACTOR SHALL PLACE THE GEOTEXTILE SUCH THAT THE PIPE GRANULAR BACKFILL IS COMPLETELY COVERED AND THE FABRIC EXTENDS A MINIMUM OF 1.0m ONTO THE ADJACENT CLAY SOILS. THE FABRIC SHALL BE WRAPPED AROUND THE OUTFALL PIPE AND HELD IN PLACE WITH THE OVERLYING RIPRAP.
2. RIPRAP ABOVE THE UWRL WITHIN THE CITY R.O.W. TO BE SUBCUT INTO THE BANK AND PLACED FLUSH WITH ORIGINAL GROUND SURFACE. ALL EXCAVATED MATERIAL TO BE REMOVED OFF SITE.

**WARNING**

1. NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.
2. TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS.
3. SEE PROVINCIAL REGULATION 210/72 FOR DETAILS.

**METRIC**

WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES



**APEGN**  
Certificate of Authorization  
KGS Group  
No. 245 Date: Dec 9/29

150 WM	WATERMAIN	150 WM	HYDRO	150 WM	WATERMAIN	150 WM	WATERMAIN	150 WM
Hydrant	HYDRANT	Hydrant	M.T.S.	Hydrant	HYDRANT, VALVE	Hydrant	LAND DRAINAGE SEWER	Hydrant
Valve	VALVE	Valve	CONCRETE	300 LBS	WASTE WATER SEWER	300 LBS	WASTE WATER SEWER	300 LBS
300 LBS	LAND DRAINAGE SEWER	300 LBS	ASPHALT	250 WWS	WASTE WATER SEWER	250 WWS	WASTE WATER SEWER	250 WWS
250 WWS	WASTE WATER SEWER	250 WWS	SIDEWALK	Profile	Profile	Profile	Profile	Profile
Manhole	MANHOLE	Manhole	PLANNING	North/West Gutter	NORTH/WEST GUTTER	North/West Gutter	NORTH/WEST GUTTER	North/West Gutter
Catch Basin	CATCH BASIN	Catch Basin	PROPERTY LINE	South/East Gutter	SOUTH/EAST GUTTER	South/East Gutter	SOUTH/EAST GUTTER	South/East Gutter
Curb Inlet	CURB INLET	Curb Inlet	SURVEY BAR	N/W, S/E R'S	N/W, S/E TOP/CURB	N/W, S/E TOP/CURB	N/W, S/E TOP/CURB	N/W, S/E TOP/CURB
Junctions	JUNCTIONS	Junctions	DITCH	North/West Ditch	NORTH/WEST DITCH	North/West Ditch	NORTH/WEST DITCH	North/West Ditch
Culvert	CULVERT	Culvert	ELEVATION	South/East Ditch	SOUTH/EAST DITCH	South/East Ditch	SOUTH/EAST DITCH	South/East Ditch
Gas	GAS	Gas	231.334	Legend-Plan	LEGEND-PLAN	Legend-Profile	LEGEND-PROFILE	Legend-Profile
Existing	LEGEND-PLAN	Proposed	Existing	Legend-Plan	PROPOSED	Existing	Legend-Profile	Proposed

**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.

B.M. KGS BASE ELEV. --	DWGS BASED ON C.S.R.S. NAD 83 SYSTEM, UTM GRID
NO.	REVISIONS
DATE	BY
DATE	BY

**KGS GROUP CONSULTING ENGINEERS**

DESIGNED BY: RBO  
DRAWN BY: GEL  
SCALE: AS NOTED

CHECKED BY: Rk  
APPROVED BY:  
RELEASED FOR CONSTRUCTION: DATE

ENGINEER'S SEAL

PROVINCE OF MANITOBA  
R.M. KENYON  
REGISTERED PROFESSIONAL ENGINEER

**THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT**

PROJECT TITLE: 2009 OUTFALL MAINTENANCE PROGRAM RADCLIFFE ROAD

SHEET 04 OF 07

COMPUTER FILE NAME: 09-0107-14

CITY DRAWING NUMBER: LD-5472

CONSULTANT DRAWING NO.: 09-0107-14\_04

P:\Projects\2009\09-0107-14\Doc\Control\Issue\Source\dwgs\LD-5472-R0.dwg - Tab: 04 Plotted By: Dberneche 12/04/2009 [Fri 9:29am] C:\LEGEND