

SECTION A
SCALE 1:25

SECTION F
SCALE 1:25

SECTION B
SCALE 1:25

SECTION D
SCALE 1:25

SECTION C
SCALE 1:25

SECTION E
SCALE 1:25

HYDRAULIC CEMENT GROUT	EXPOXY GROUT
d = BAR DIA. +20mm	d AND Le IN ACCORDANCE WITH MANUFACTURER'S PRINTED SPECIFICATIONS
Le: 10M - 150mm	
15M - 200mm	
20M - 250mm	
25M - 300mm	

d = REINFORCING BAR DIAMETER
Le = LENGTH OF REINFORCING BAR

BAR	LAP
10M	500
15M	700
20M	870

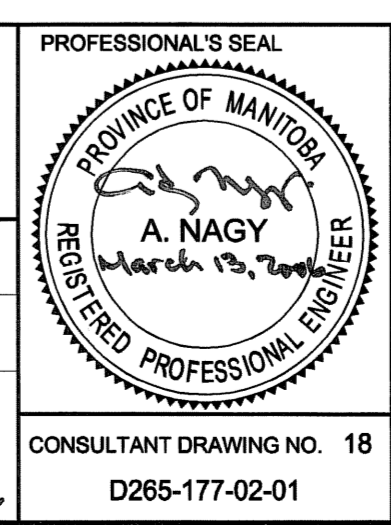
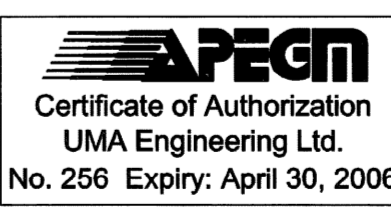
- NOTES:**
1. DRILL HOLE OF DIAMETER AND DEPTH AS REQUIRED.
 2. CLEAN HOLE OF DUST & DEBRIS.
 3. FILL HOLE WITH DOWELLING GROUT.
 4. INSTALL REINFORCING BAR & WIPE AWAY GROUT.
 5. SECURE DOWEL BAR FIRMLY IN POSITION & DO NOT DISTURB BAR FOR 3 HOURS AFTER INSTALLATION.

PLAN
SCALE 1:25

NOTE:
CLEAR COVER TO REINFORCING SHALL BE 50mm ± 12mm FOR CAST-IN-PLACE SLABS AND CAST-IN-PLACE BEAMS AND WALLS.

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 ALL EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.	
NO.	REVISIONS
0	ISSUED FOR CONSTRUCTION 06/03/08 ADL
	YYMMDD BY

UMA AECOM	
© 2005 UMA ENGINEERING LTD. ALL RIGHTS RESERVED.	
DESIGNED BY	GEB
CHECKED BY	[Signature]
DRAWN BY	ADL
APPROVED BY	[Signature]
HOR. SCALE	AS NOTED
VERT. SCALE	N/A
RELEASED FOR CONSTRUCTION	[Signature]
DATE	06/03/14
DATE	21 March 14/06



METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT

ALEXANDER/BANNATYNE COMBINED SEWER RELIEF CONTRACT 2A

MANHOLE 12 DETAILS

SHERBROOK STREET AT LOGAN AVENUE

SHEET 18 OF 21
CITY DRAWING NUMBER
REV LD-3312 0

BID OPPORTUNITY NO. 132-2006