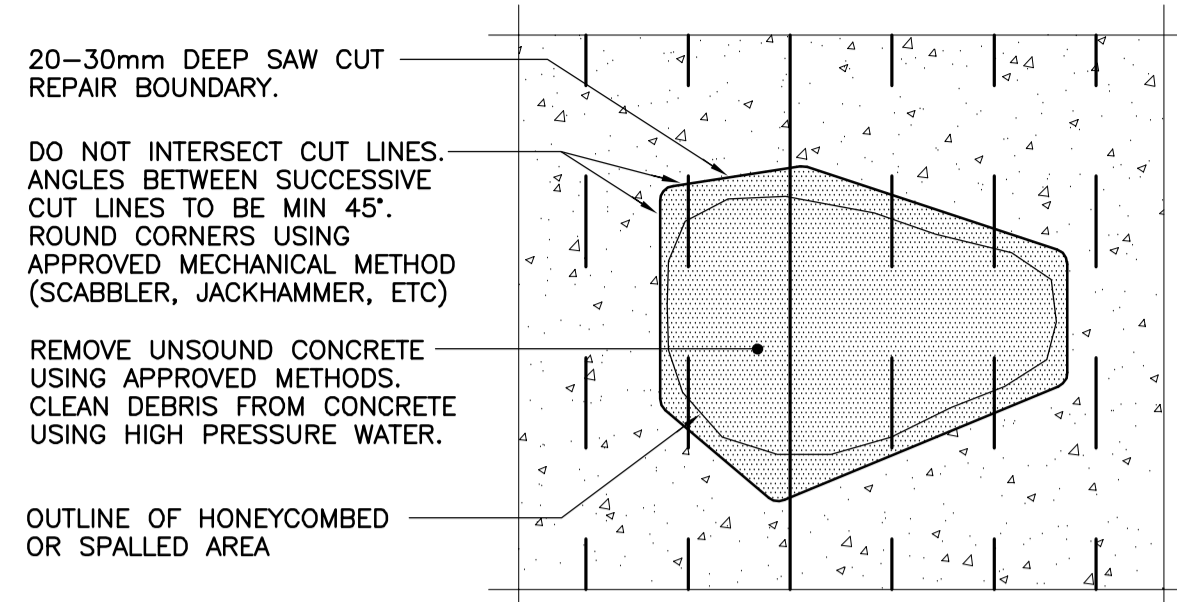


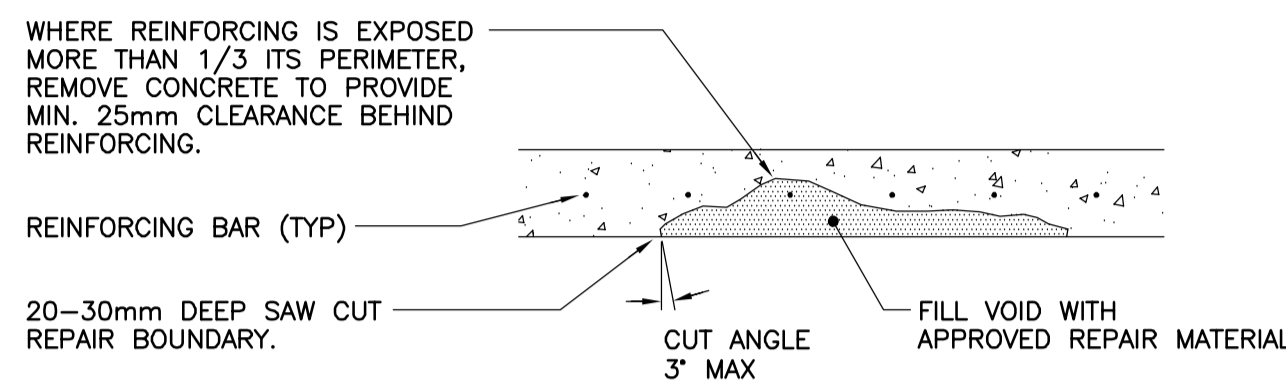
AUTOCAD RELEASE 14.0

UMA REVIEW DRT CHK ADL

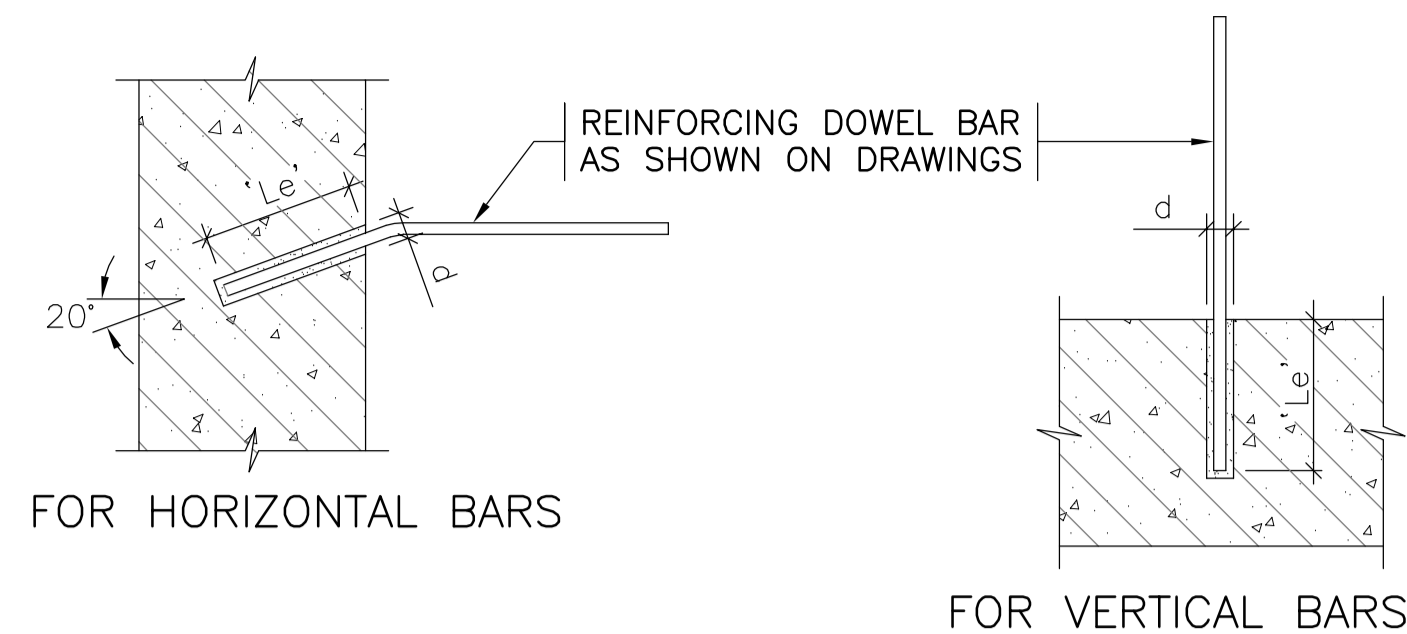
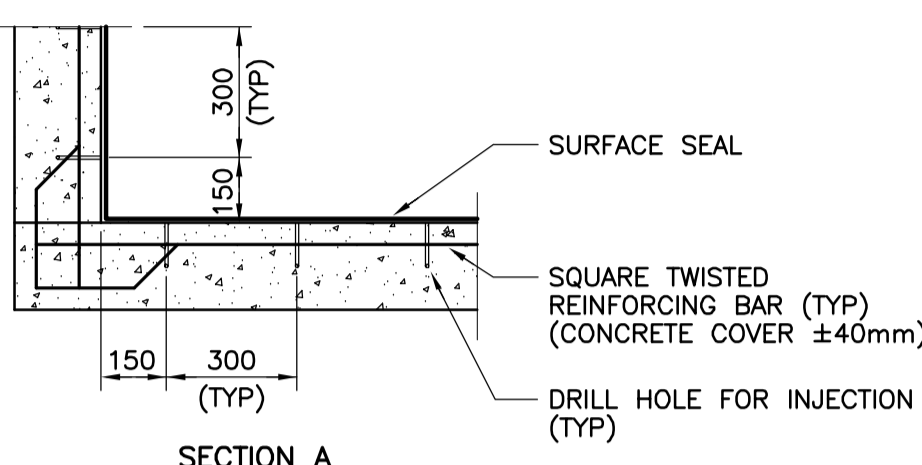
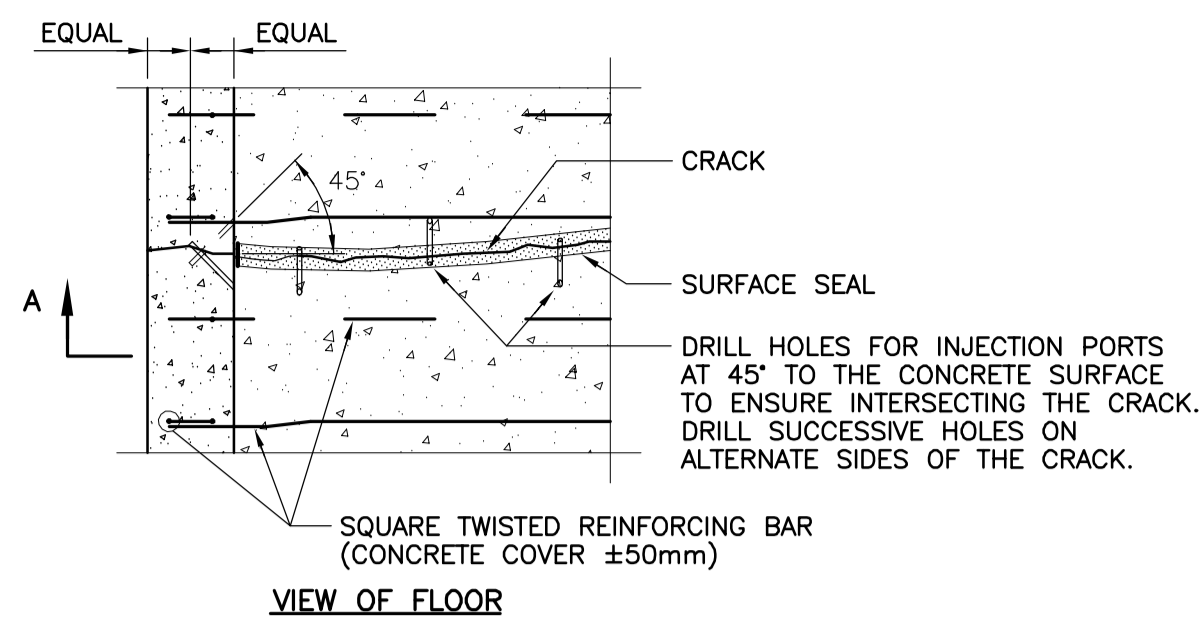
FILE: L:\265-241-00-SIP0201.DWG 2008-07-24 08:53:56m WJD



CONCRETE SURFACE REPAIR
Scale NTS



CRACK INJECTION REPAIR
Scale NTS



FOR HORIZONTAL BARS

FOR VERTICAL BARS

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

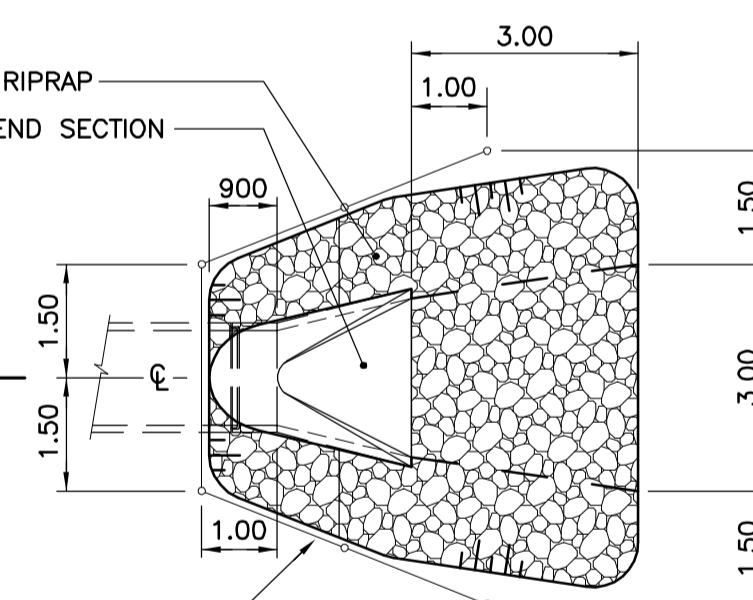
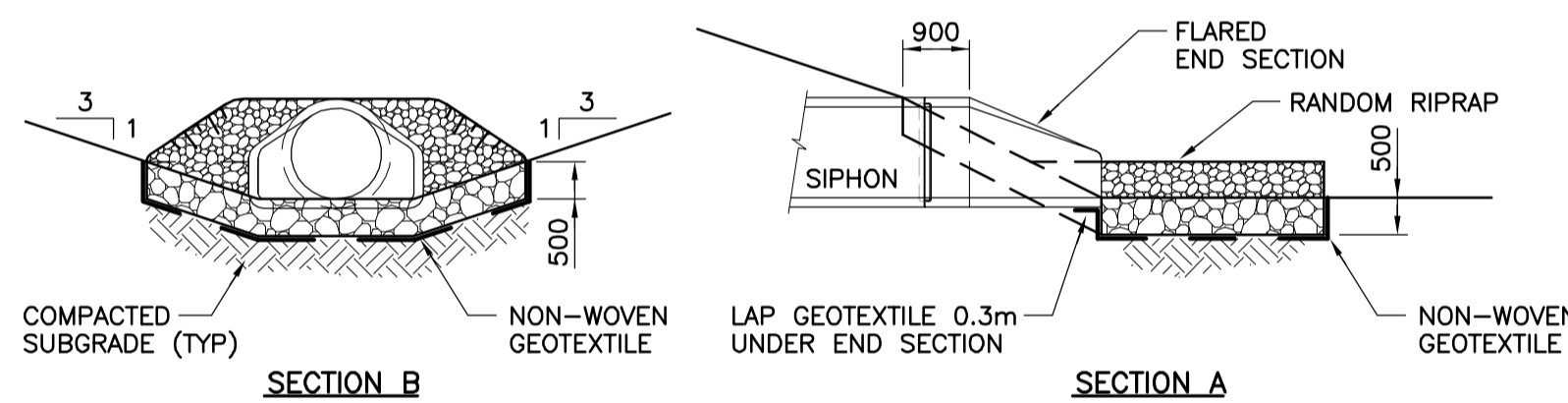
- NOTES:
1. DRILL HOLE OF DIAMETER AND DEPTH AS REQUIRED.
 2. CLEAN HOLE OF DUST AND DEBRIS.
 3. FILL HOLE WITH DOWELLING GROUT.
 4. INSTALL REINFORCING DOWEL BAR AND WIPE AWAY OVERFLOW.
 5. SECURE DOWEL BAR FIRMLY IN POSITION AND DO NOT DISTURB BAR FOR 3 HOURS AFTER INSTALLATION.

DOWELLING IN EXISTING CONCRETE

- NOTES:
1. CONCRETE COVER SHALL BE 50mm UNLESS OTHERWISE NOTED.
 2. MINIMUM LAP LENGTH FOR BARS:

10M - 380mm
15M - 550mm
20M - 670mm
25M - 860mm

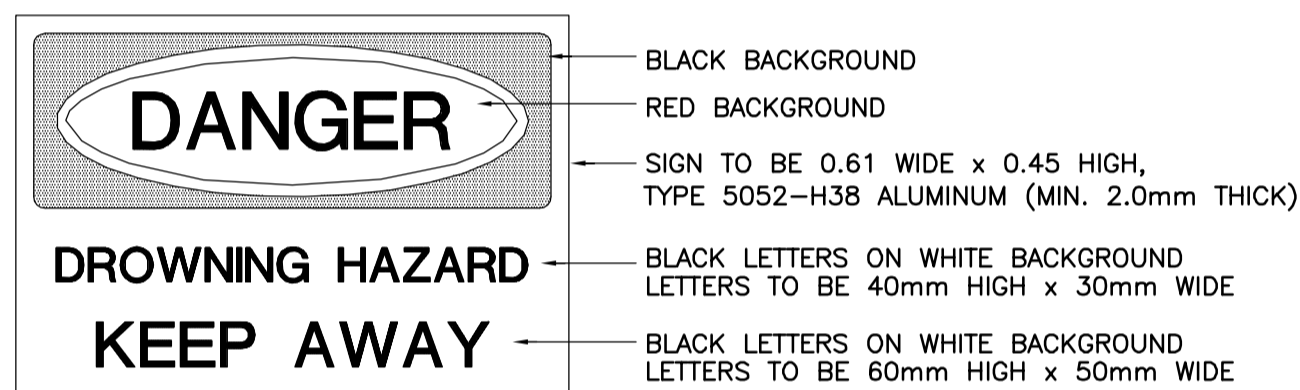
REINFORCING STEEL



RANDOM RIPRAP DETAIL
SCALE 1:100

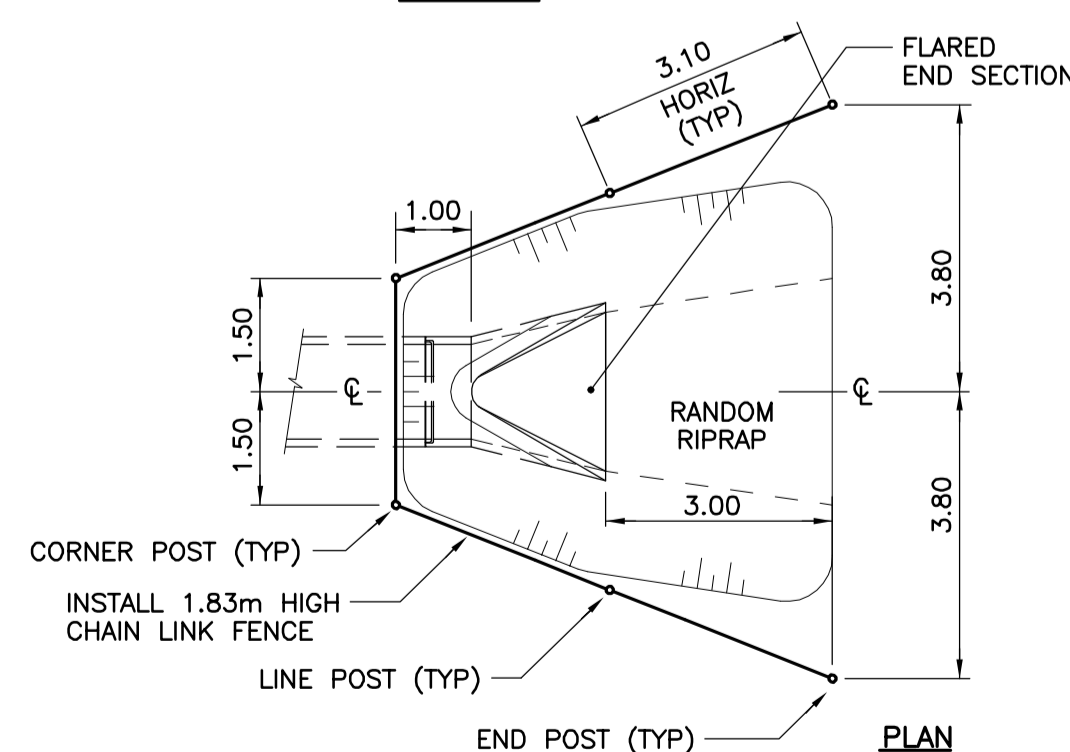
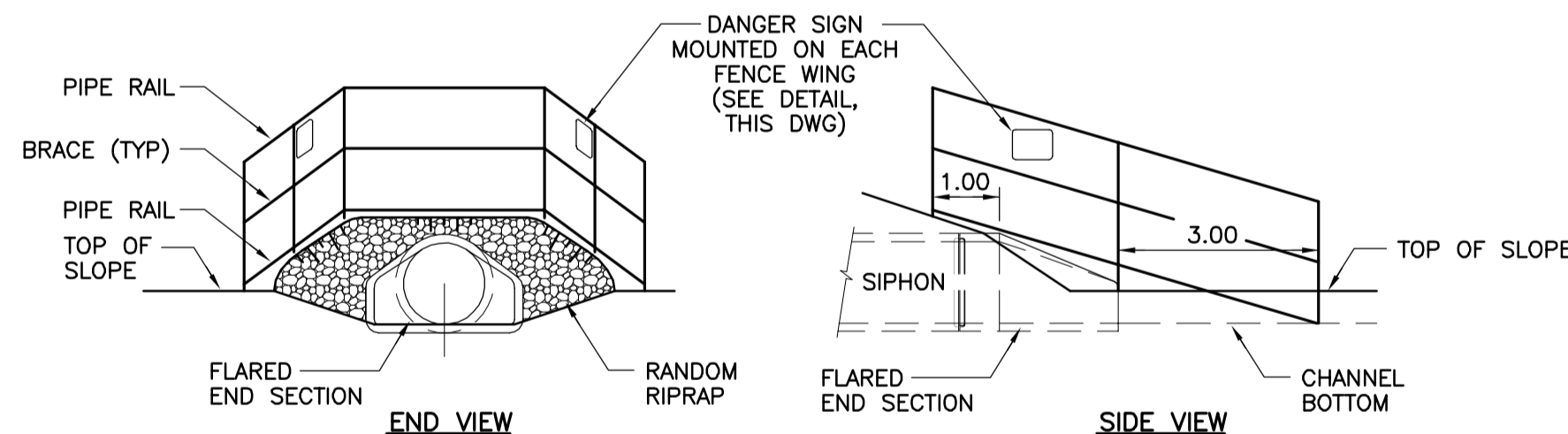
INSTALL 1.83m HIGH CHAIN LINK FENCE (SEE DETAILS, DWG D6960)

NOTE: DIMENSIONS AS SHOWN UNLESS OTHERWISE INDICATED ON SITE DRAWINGS



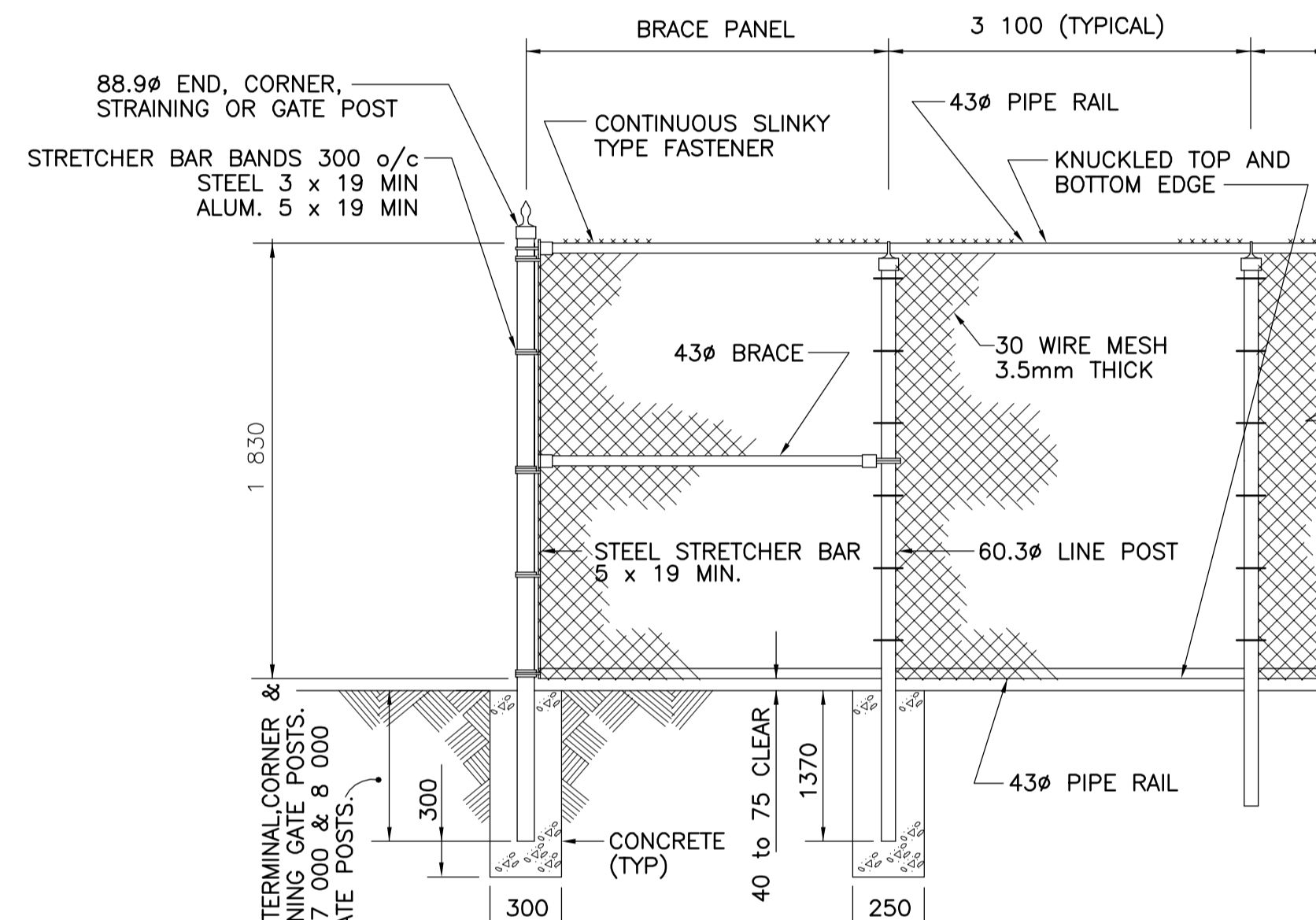
NOTE: WHITE BACKGROUND TO BE TYPE III RETROREFLECTIVE SHEETING.

SIPHON INLET WARNING SIGN



SEE STANDARD FENCE DETAIL FOR FENCING, POST AND PILE MATERIAL INFORMATION
SIPHON FENCING DETAIL
SCALE 1:100

NOTE: DIMENSIONS AS SHOWN UNLESS OTHERWISE INDICATED ON SITE DRAWINGS



STANDARD FENCE DETAIL
N.T.S.

AS ALTERNATE TO CONCRETE PILES, FENCE POSTS MAY BE INSTALLED BY DRIVING. LENGTH OF POST TO BE DETERMINED AS FOLLOWS:

- MINIMUM DRIVEN LENGTH 1.37m
- BURIED LENGTH TO BE MIN 600mm INTO UNDISTURBED GROUND
- WHERE POSTS ARE FOUNDED IN UNSUITABLE MATERIAL SUCH AS PEAT, MIN BURIED LENGTH TO BE 600mm INTO SOUND MATERIAL. UNSUITABLE MATERIAL TO BE REMOVED & REPLACED WITH COMPACTED GRANULAR MATERIAL TO MIN 600mm IN DIAMETER AROUND POST

APEGM
Certificate of Authorization
UMA Engineering Ltd. (MB)
No. 256 Date: 08/12/19

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

BID OPPORTUNITY No. 926-2008

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ELEV. -	-		
DESIGNED BY	MGM/MAG	CHECKED BY	Original Signed By: FMI
DRAWN BY	MAG/WJD	APPROVED BY	Original Signed By: Bryan Weber
HOR. SCALE:	AS NOTED	RELEASED FOR CONSTRUCTION	Original Signed By: Tim Shanks
VERTICAL:	AS NOTED	DATE	19 12 2008
NO. REVISIONS	DATE BY	CONSULTANT DRAWING NO. 07	D265-241-00

THE CITY OF WINNIPEG
Winnipeg WATER AND WASTE DEPARTMENT

SHOAL LAKE AQUEDUCT
DRAINAGE SIPHON REPAIRS
MILES 50.31, 53.75 & 55.23
MISCELLANEOUS DETAILS (2)

SHEET 7 OF 7
CITY DRAWING NUMBER
D-11548
REV