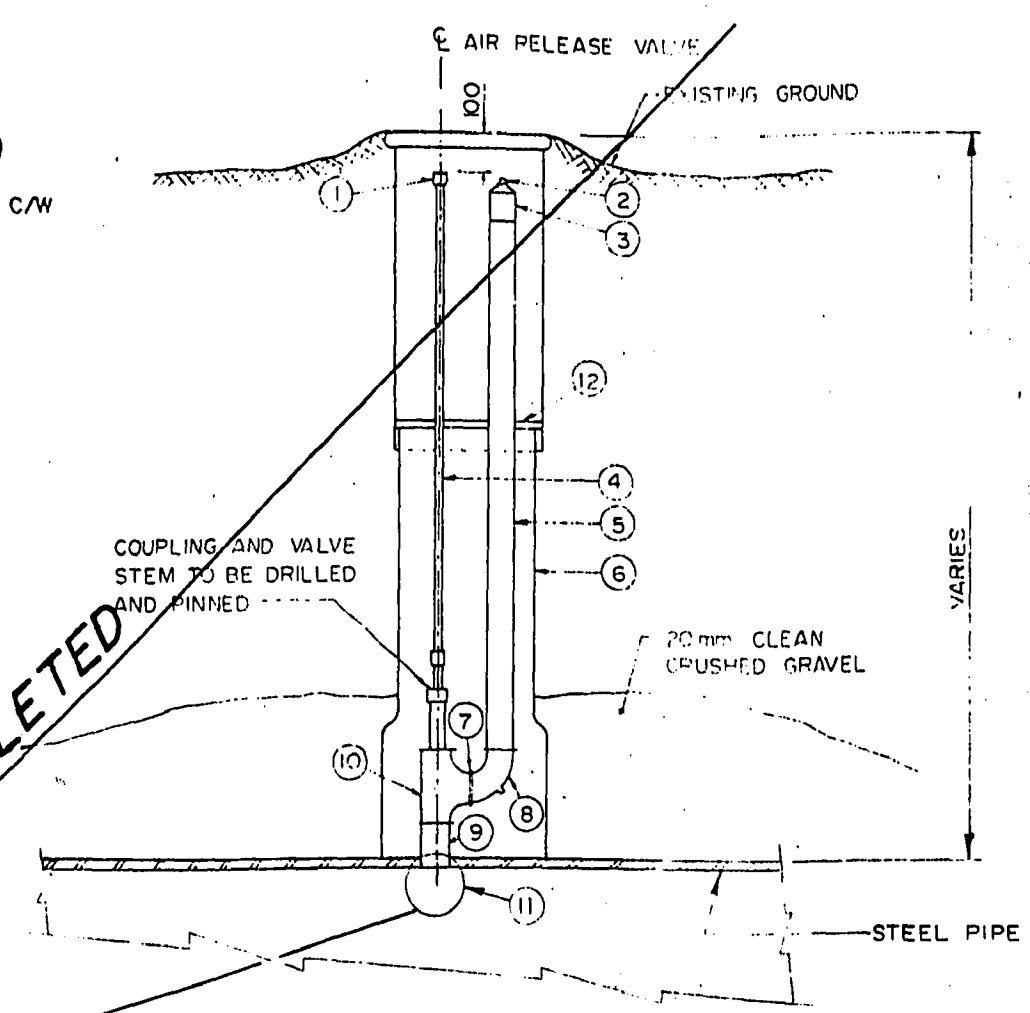
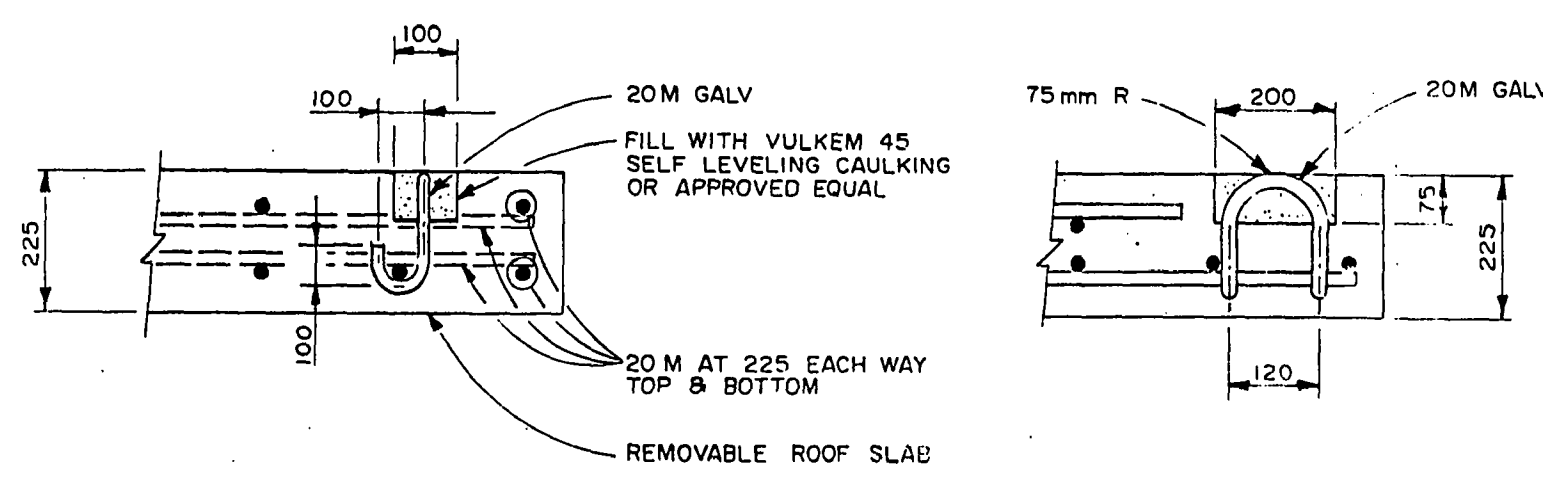
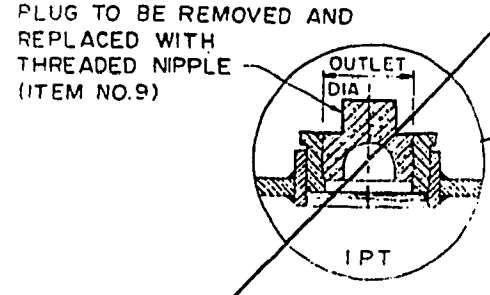


- ① 25 OPERATING NUT
- ② 32 CAST BRONZE OR BRASS PLUG (FINGER TIGHT)
- ③ 32 CAST BRONZE OR BRASS COUPLING (THREADED ENDS)
- ④ 19 TYPE 316 STAINLESS STEEL VALVE OPERATING STEM C/W THREADED COUPLING SIZED FOR ITEM ④ VALVE STEM
- ⑤ 32 COPPER PIPE (FIELD MEASURED)
- ⑥ STANDARD CITY OF WINNIPEG ADJUSTABLE VALVE BOX
- ⑦ 32 CLOSE BRONZE OR BRASS NIPPLE
- ⑧ 32 90° CAST BRONZE OR BRASS STREET ELBOW WITH 5 DRAINING HOLE
- ⑨ 32 CAST BRONZE OR BRASS NIPPLE 75 LONG (THREADED)
- ⑩ 32 CLASS 150 BRONZE, ANGLE GLOBE VALVE (CRANE FIG. 17 OR APPROVED EQUAL)
- ⑪ 32 THREADED OUTLET (IRON PIPE THREADS)
- ⑫ SUPPORT WASHER

DELETED



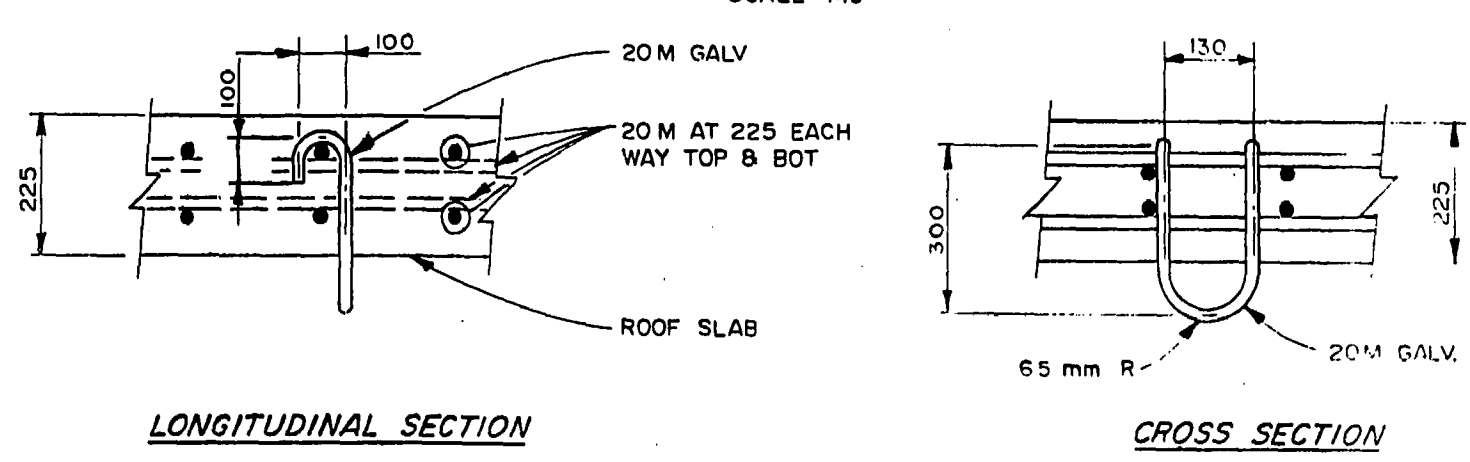
STANDARD AIR RELEASE VALVE DETAIL
N.T.S.



LONGITUDINAL SECTION

CROSS SECTION

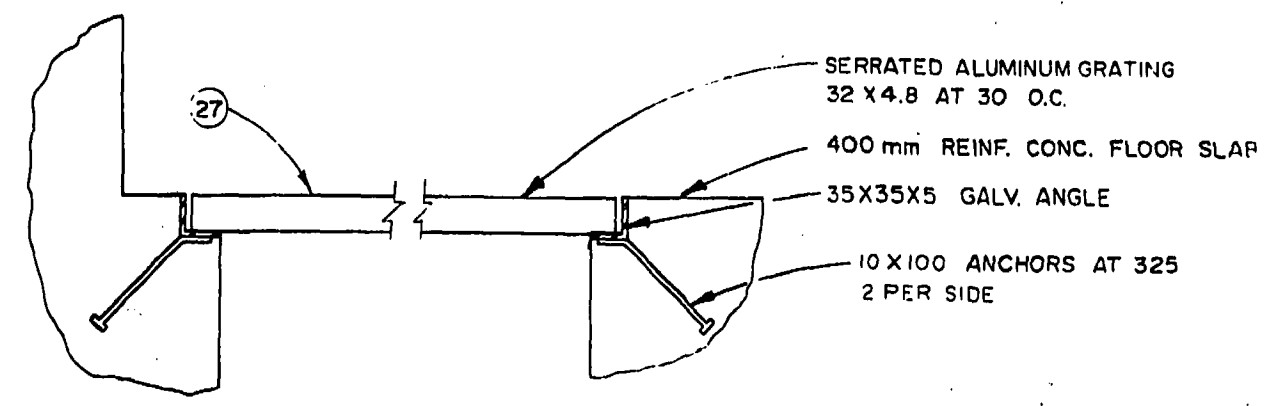
LIFTING LUG FOR 225 mm THICK ROOF SLAB
DETAIL
SCALE 1:10



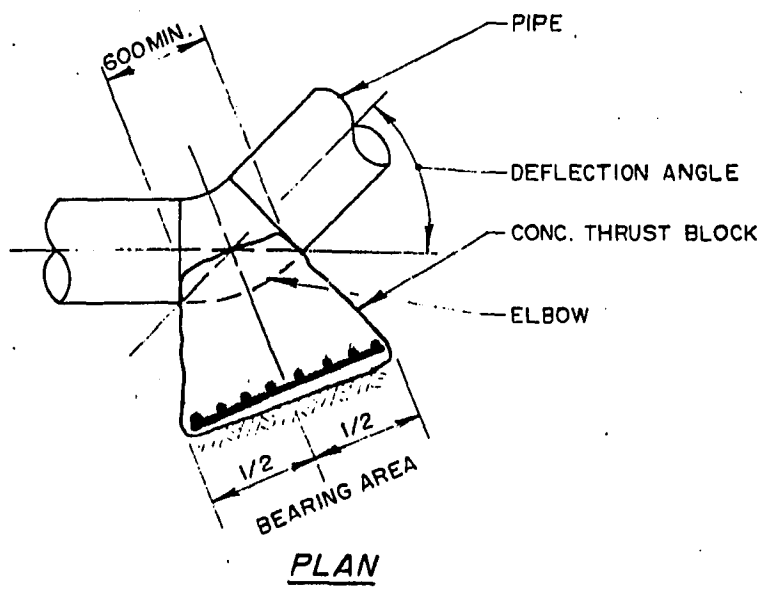
LONGITUDINAL SECTION

CROSS SECTION

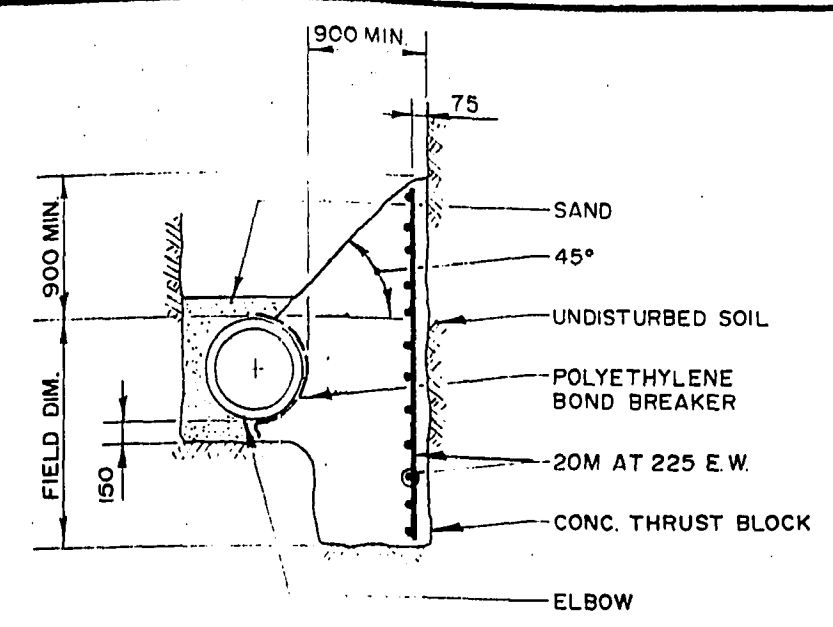
STANDARD U-BOLT HOOK
DETAIL
SCALE 1:10



SECTION 4
SCALE: 1:5

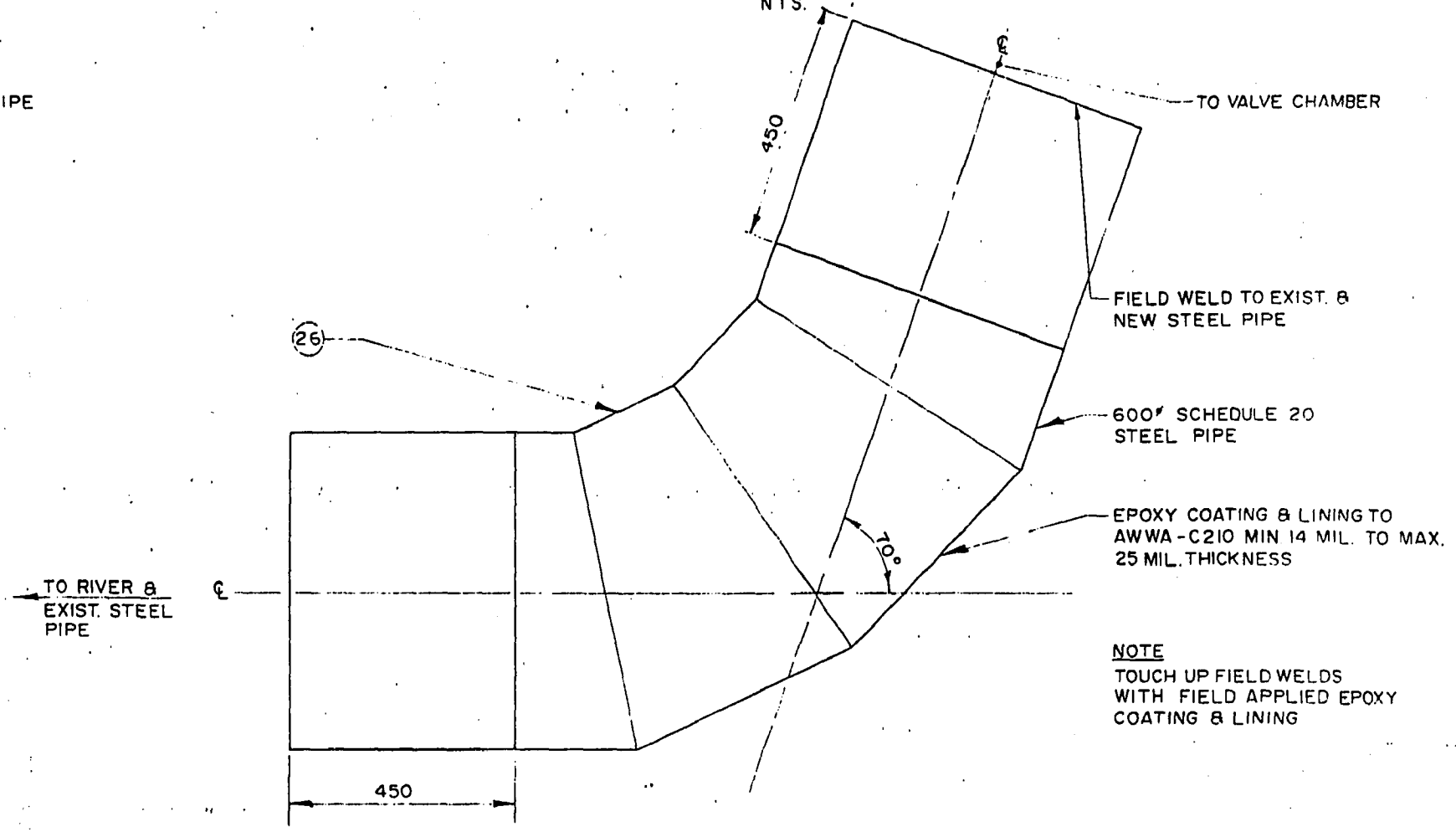


PLAN

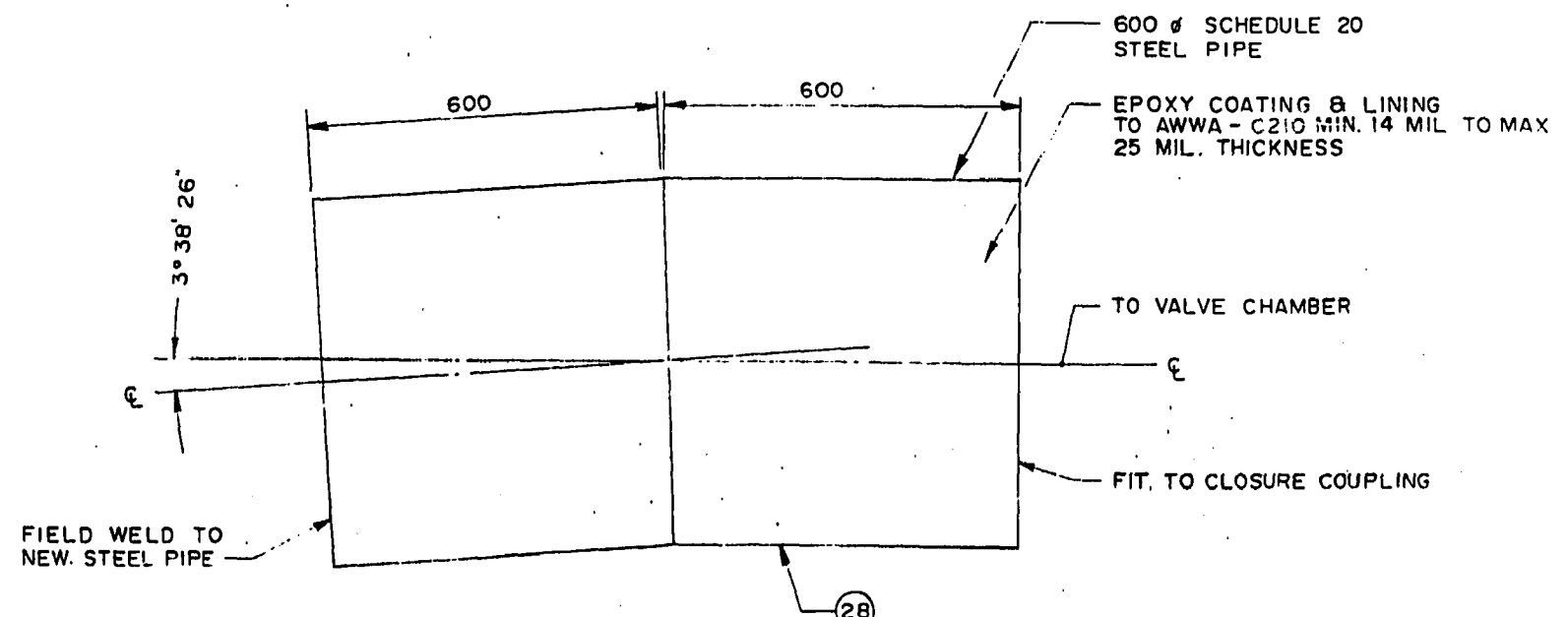


CROSS SECTION

THRUST BLOCK DETAIL TYPICAL
N.T.S.



FOUR SECTION MITRED STEEL BEND
SCALE: 1:100



TWO SECTION MITRED VERTICAL STEEL BEND
SCALE 1:100

RECORD DRAWING
[Signature] 15/12/89
OFFICE FILE COPY
DO NOT REMOVE FROM OFFICE AREA

LIST OF THRUST BLOCKS

LOCATION (APPROX.)	PIPE DIAMETER	ANGLE	BEARING AREA
1 + 00	600 Ø	70°	8.10 m ²
1 + 35.8	600 Ø	27° 31' 09"	3.90 m ²
1 + 58.3	600 Ø	27° 31' 09"	3.90 m ²
2 + 74.3	600 Ø	14° 15' 00"	2.42 m ²

LOCATION APPROVED UNDERGROUND STRUCTURES
DATE: 8/23/89
SUPV. U/G STRUCTURES COMMITTEE

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.	REVISIONS	DATE	BY	DATE
1	VERT. STL BEND ADDED	07.11.88	S.K.B.	
2	AIR RELEASE VALVE	07.11.88	S.K.B.	
3	DELETED	07.11.88	S.K.B.	
4	PREVIOUSLY DWG. NO. FM3	16.9.88	R.M.A.	

DILLON
Consulting Engineers - Planners
Environmental Scientists

DESIGNED BY: A.G. CHECKED BY: D.P.K.
DRAWN BY: D.M.W. APPROVED BY: *[Signature]*

HOR SCALE: AS SHOWN
VERTICAL: VERTICAL

DATE: JULY, 1988

ENGINEER'S SEAL
25/12/89
CONSULTANT DRAWING NO. M-88-H-3

THE CITY OF WINNIPEG
WORKS AND OPERATIONS DIVISION
STREETS AND TRANSPORTATION DEPARTMENT

KILDONAN CORRIDOR
M.K. FEEDERMAIN RELOCATION

CITY DRAWING NUMBER: B216-88-FM4
SHEET: 4 OF 4

MISCELLANEOUS DETAILS
D-1258C