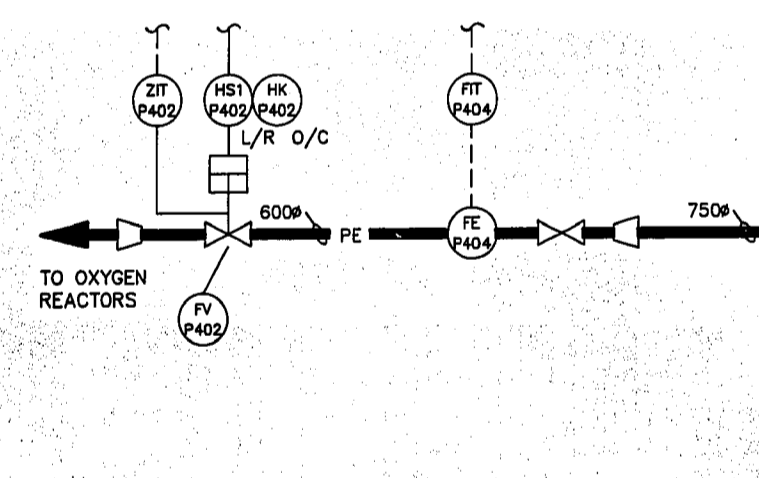


PRIMARY EFFLUENT MAGMETERS (P403/P404-FE)

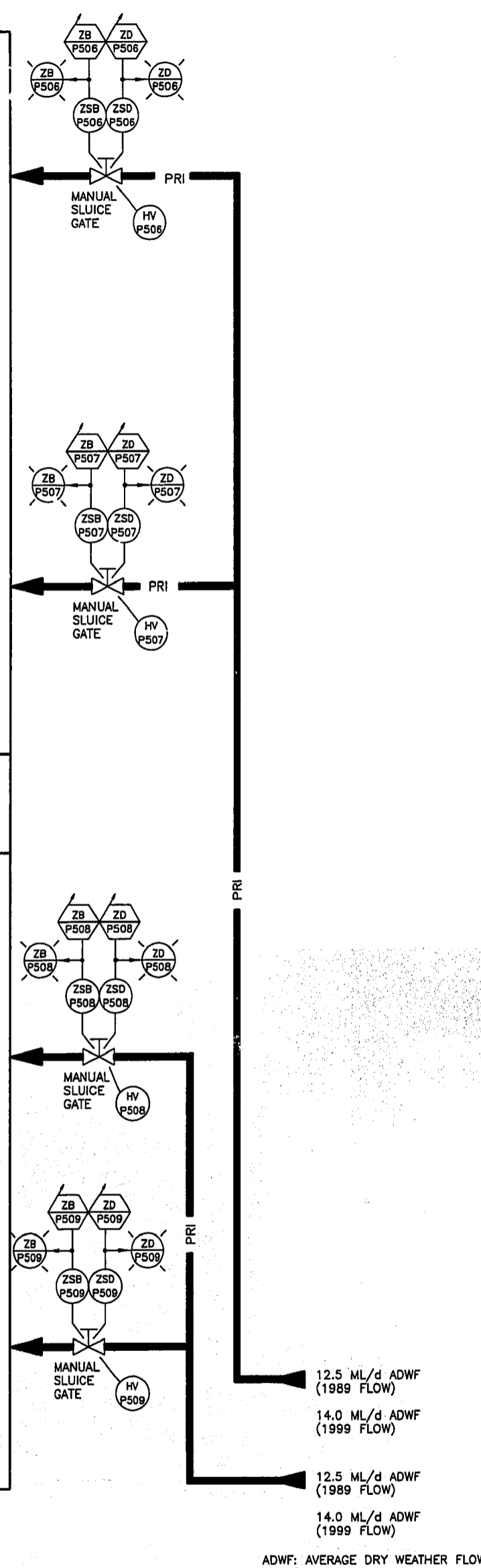
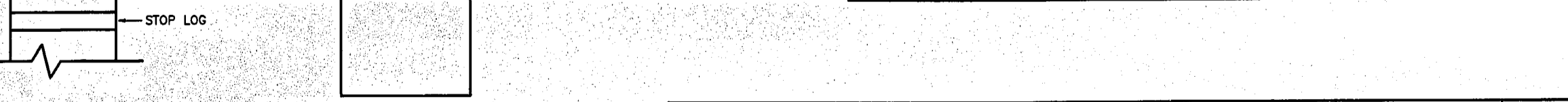
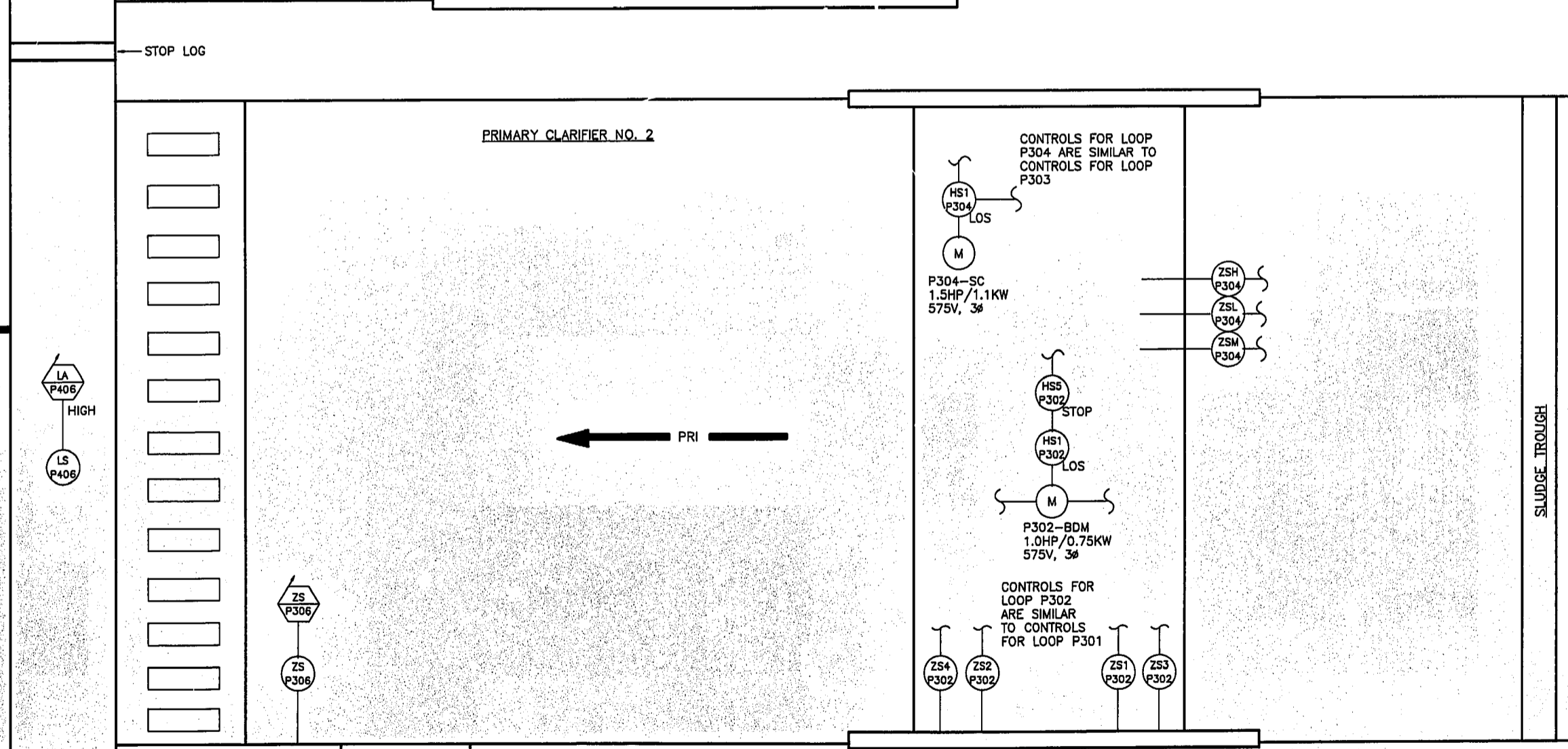
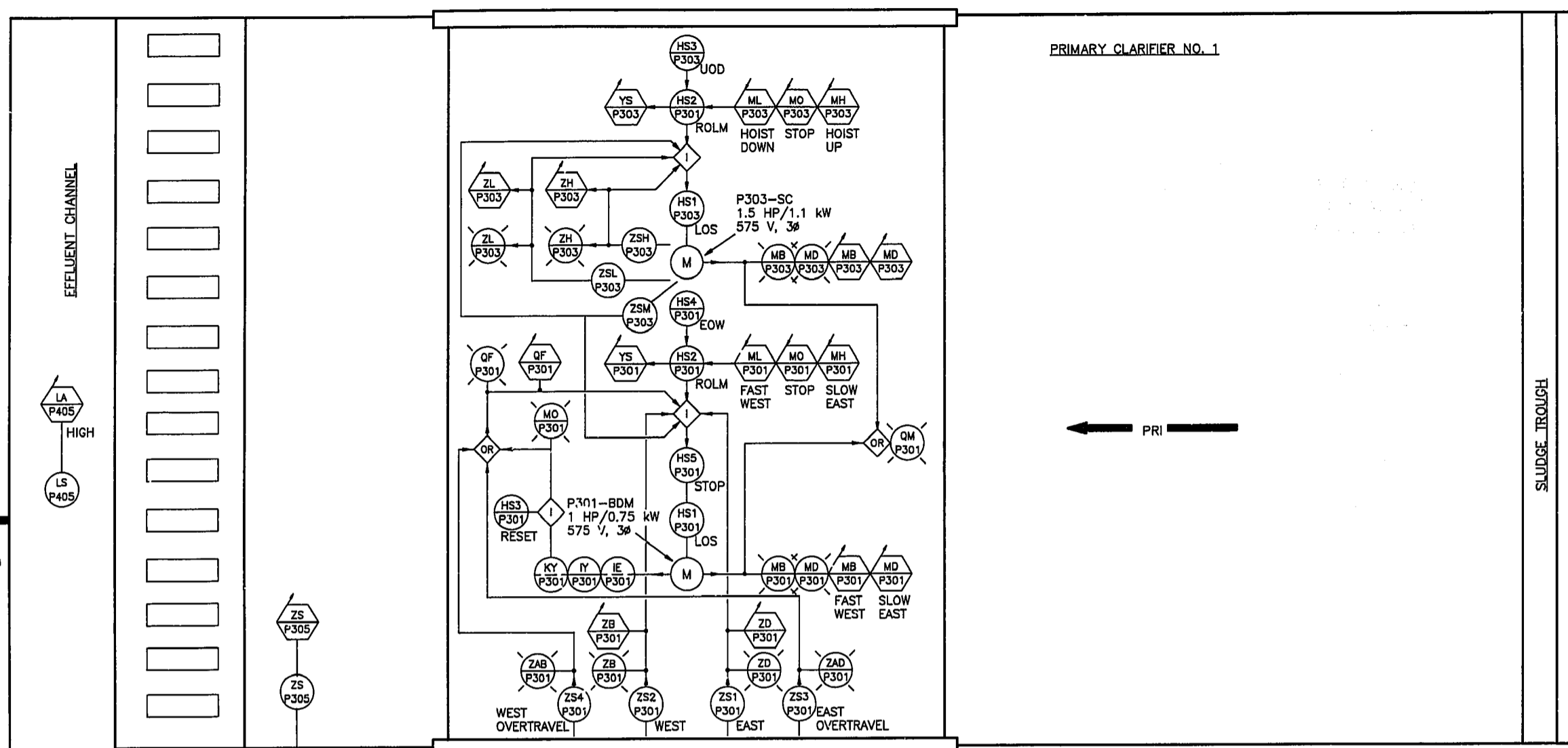
MAXIMUM FLOW: 30 ML/d
 AVERAGE FLOW: 12-15 ML/d
 MINIMUM FLOW: 5 ML/d



DESIGN PARAMETERS FOR THE PRIMARY SEDIMENTATION EXPANSION

CLARIFIER CHARACTERISTICS	EXISTING PRIMARY CLARIFIERS	
	NO. 1	NO. 2
LENGTH - m	51.9	51.9
WIDTH - m	9.1	9.1
SIDE WATER DEPTH - m	4.3	4.3
SURFACE AREA (m ²)	472	471
VOLUME (m ³)	2030	2030
WEIR LENGTH - m	38.4	38.4
1999 DESIGN FLOW DISTRIBUTION		
-ADWF (8BML/d)	14	14
-PWWF (264 ML/d)	42	42
-%	16	16
DETENTION TIME (h)		
-AVERAGE FLOW	3.5	3.5
-PEAK FLOW	1.2	1.2
SURFACE OVERFLOW RATE m³/(m².d)		
-AVERAGE FLOW	30	30
-PEAK FLOW	89	89
WEIR LOADING m³/(m².d)		
-AVERAGE FLOW	367	367
-PEAK FLOW	1100	1100

NOTE:
 ROL: REMOTE/OFF/LOCAL
 EOW: EAST/OFF/WEST
 UOD: UP/OFF/DOWN



AS CONSTRUCTED
 DATE 05/91 BY R.H.
 APPROVED BY K.J.

NO.	REVISIONS	DATE	BY
1	AS CONSTRUCTED	05/91	K.J.
0	ISSUED FOR TENDER	08/89	K.J.
-	ISSUED FOR APPROVAL	06/89	K.J.

MacLAREN ENGINEERS INC.
WARDROP ENGINEERING INC.
 ENGINEERING CONSULTANTS

DESIGNED BY: K.J.
 CHECKED BY: [Signature]
 DRAWN BY: N.C.
 APPROVED BY: [Signature]
 HOR. SCALE: N.T.S.
 VERTICAL: N.T.S.
 DATE: FEBRUARY 1989

PROVINCE OF MANITOBA
JOHNSON
 REGISTERED PROFESSIONAL ENGINEER
 CONSULTANT DRAWING NO. 870012-01-16-1101

THE CITY OF WINNIPEG
WORKS AND OPERATIONS DIVISION
 WATERWORKS, WASTE & DISPOSAL DEPARTMENT

SOUTH END WATER POLLUTION CONTROL CENTRE
 PRIMARY CLARIFIER EXPANSION -- ELECTRICAL
 BRIDGE CONTROL
 P & ID

CITY DRAWING NUMBER: SEP-320
 SHEET OF

ADWF: AVERAGE DRY WEATHER FLOW