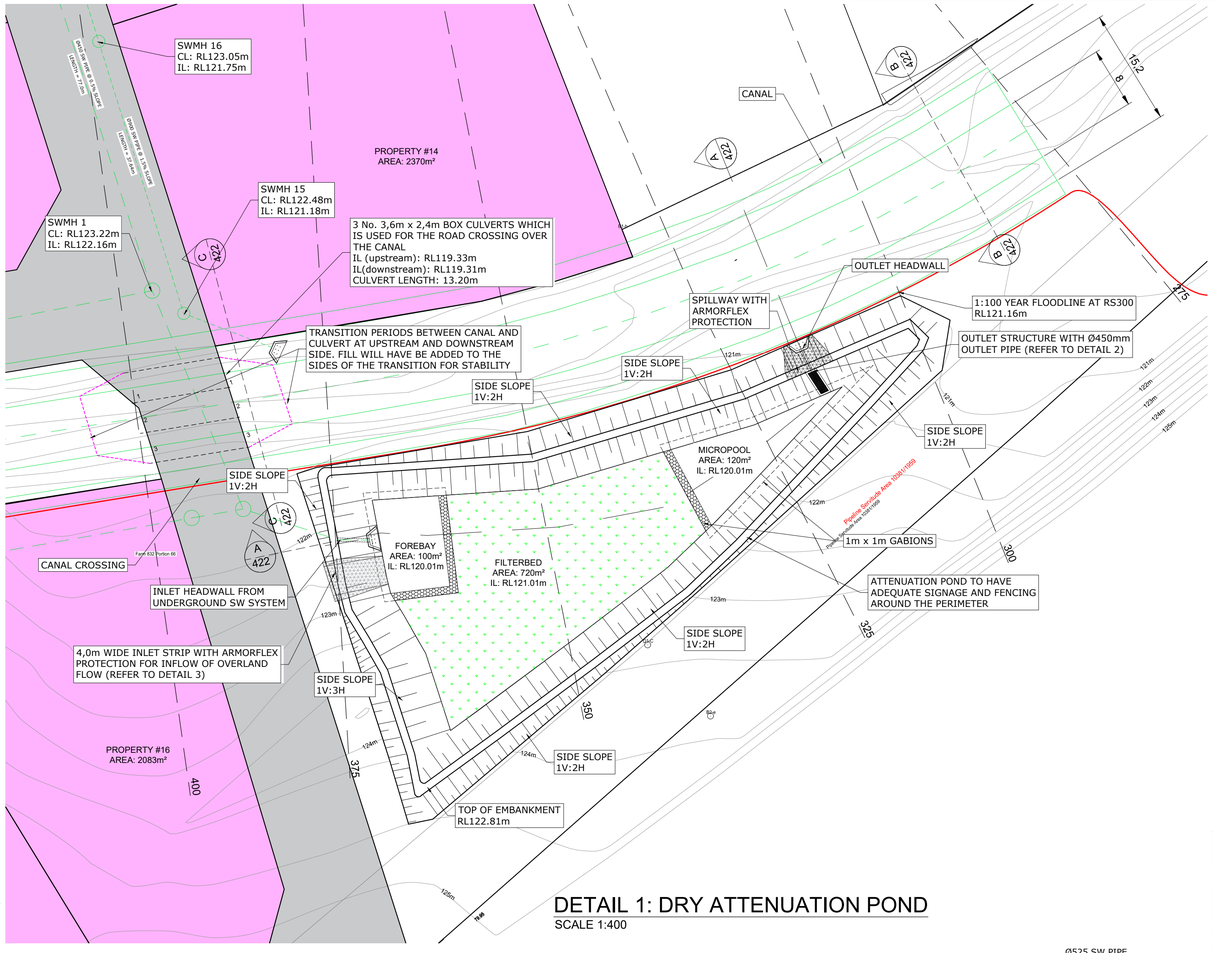
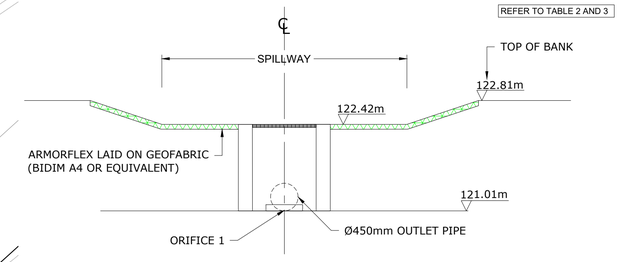
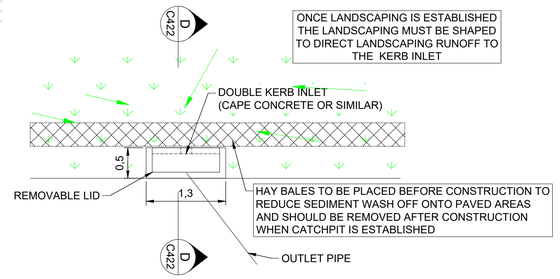


DETAIL 1: DRY ATTENUATION POND
SCALE 1:400



DETAIL 2: ATTENUATION POND OUTLET STRUCTURE
SCALE: 1:50



DETAIL 4: TYPICAL DOUBLE KERB INLET
1:50

TABLE 1: DRY ATTENUATION POND INFORMATION

FOREBAY		FILTERBED		MICROPOOL	
IL (RLm)	AREA (m²)	IL (RLm)	AREA (m²)	IL (RLm)	AREA (m²)
120.01	100.00	121.01	720.00	120.01	120.00

TABLE 2: POND OUTLET STRUCTURE SUMMARY

ORIFICE 1	SPILLWAY
W X H @ IL	LENGTH @ IL
0.60(W)x0.10(H) @ RL121.01m	LENGTH 4.00m @ RL122.42m

TABLE 3: EMERGENCY OVERLAND ESCAPE/ INFLOW STRIP SUMMARY

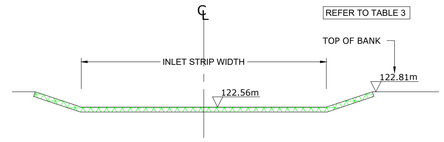
	WIDTH (m)	DEPTH (m)	CROSS FALL (%)	STRIP FLOW CAPACITY (l/s)	PEAK 1:100YR FLOW (l/s)
INFLOW STRIP	4.00	0.25	1.00%	1163	872
EOE (SPILLWAY)	4.00	0.39	1.00%	3311	476

TABLE 4: ATTENUATION POND PERFORMANCE SUMMARY

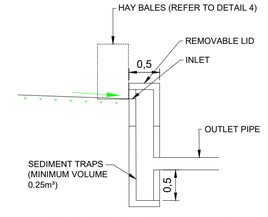
PARAMETER	RECURRANCE INTERVAL YEARS (RI)							
	1:0.5	1:1	1:2	1:5	1:10	1:20	1:50	1:100
BASE ELEVATION (m)	121.01							
PEAK INFLOW (l/s)	106.8	193.5	282.4	419.3	520.2	620.3	758.5	872.1
PEAK WATER LEVEL (RLm)	121.25	121.46	121.67	121.99	122.20	122.42	122.50	122.53
PEAK AREA (m²)	1066.6	1147.2	1230.7	1363.8	1454.8	1552.3	1588.3	1601.9
PEAK STORAGE (m³)	245.7	478.2	727.8	1142.6	1438.3	1769.1	1894.7	1942.7
PEAK RUNOFF FROM POND AFTER ATTENUATION (l/s)	69.6	100.7	124.5	163.5	170.6	185.7	358.9	476.3

TABLE 5: FLOODLINE ELEVATIONS (RLm)

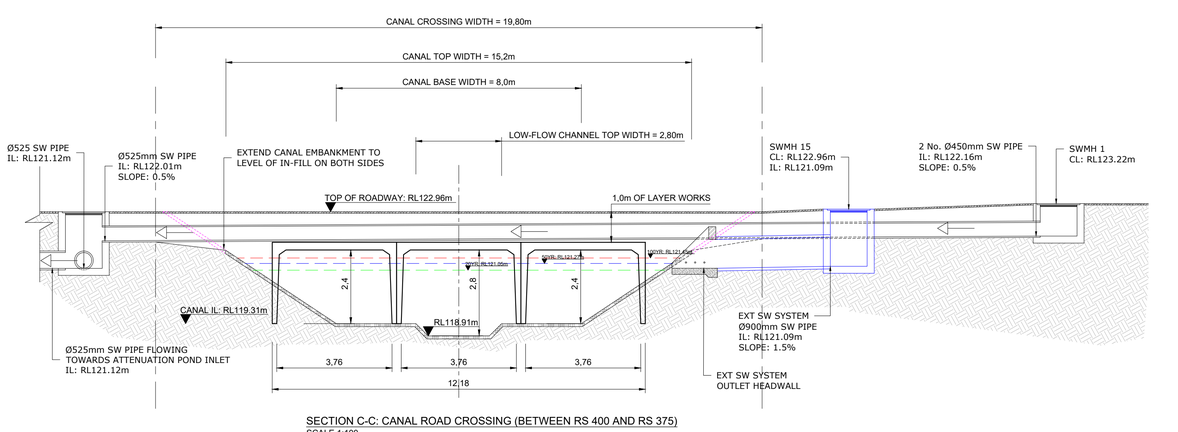
RS	RECURRENCE INTERVAL (YRS)			
	100	50	20	
400	121.48	121.29	121.07	
375	121.39	121.22	121.01	
350	121.31	121.15	120.96	
325	121.21	121.08	120.91	
300	121.16	121.01	120.84	
275	121.11	120.97	120.80	



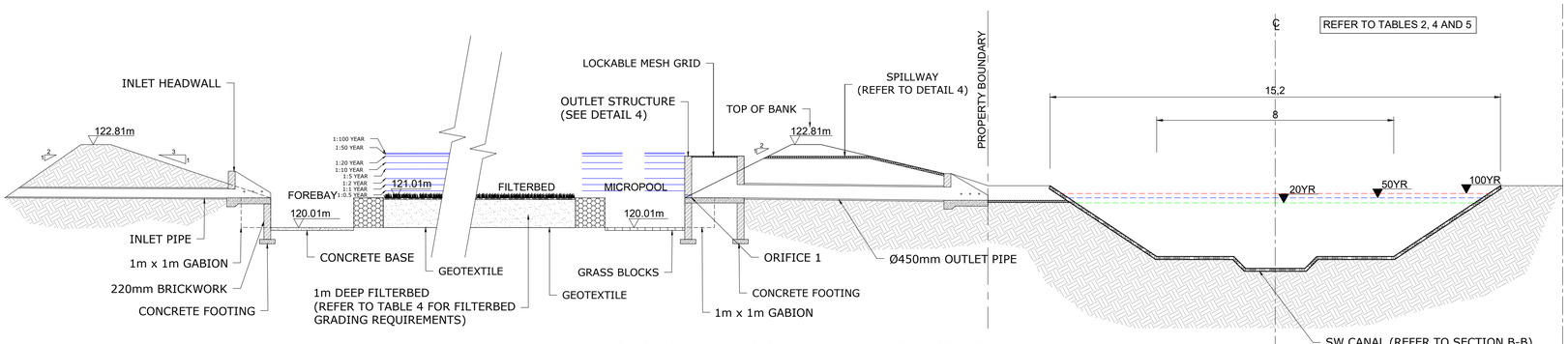
DETAIL 3:ATTENUATION POND INLET STRIP
SCALE: 1:50



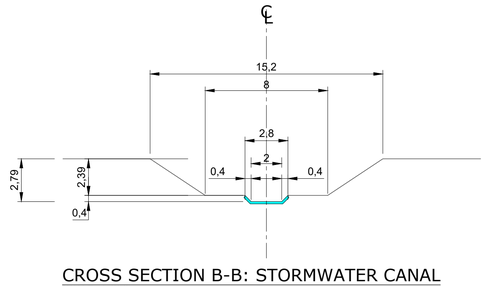
SECTION D-D: UPGRADE OF EXISTING CATCHPIT
1:50



SECTION C-C: CANAL ROAD CROSSING (BETWEEN RS 400 AND RS 375)
SCALE 1:100



SECTION A-A: DRY ATTENUATION POND
SCALE 1:100



CROSS SECTION B-B: STORMWATER CANAL
SCALE: 1:200

REVISION:

No.	DATE	DESCRIPTION
B	2018-10-12	DETAIL 1 HAS BEEN UPDATED WITH NEW SDP LAYOUT

NOTES:

1. LOCAL GRID CO-ORDINATE SYSTEM WAS USED.
2. THE FLOOD FLOWS FOR THE VAN WYK'S RIVER WERE CALCULATED TO BE AS FOLLOWS:
   1:50 YEAR: 55.8m³/s
   1:100 YEAR: 68.41m³/s
3. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE STORMWATER MANAGEMENT REPORT.
4. FLOODLINES ARE TO BE LOCATED ON THIS SITE ACCORDING TO THE GROUND LEVEL ELEVATIONS WHICH CORRESPOND TO THE ENERGY GRADE ELEVATIONS.
5. THE FLOODLINE ELEVATIONS FOR THE 1:20 YEAR RECURRENCE INTERVAL WAS INTERPOLATED USING THE 1:100 YEAR AND THE 1:50 YEAR FLOODLINE ELEVATIONS.
6. SURVEY OF PORTIONS 67, 66 AND 65 OF FARM 832 AND RIVER WAS DONE BY JOUBERT AND BRINK LAND SURVEYORS, DRAWING FILE 17441_BlouHuisOntwikkelingV01.DRW, DATED 01 DECEMBER 2017.
7. PROPOSED STORMWATER NETWORK INVERT LEVELS WERE CHECKED AND IN PRINCIPLE WILL FUNCTION. FINAL STORMWATER POSITIONING AND DESIGN TO BE DONE IN THE DETAIL DESIGN PHASE.

SPECIFICATIONS:

PROJECT:

STORMWATER MANAGEMENT PLAN: INDUSTRIAL DEVELOPMENT OF PORTIONS 65, 66 AND 67 OF FARM 832, BLOU HUIS, PAARL

DRAWING TITLE

STORMWATER COMPONENTS

CLIENT

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DRAWN BY	DESIGNED BY
DL FEBRUARY	GA McGILL Pr Eng No. 780269
DATE	2018-09-28
SCALE	AS SHOWN (A1)
DRAWING NO	MC218-C422
REVISION	B