

LAMPIRAN

Lampiran. 1 Variabel Reduksi Gauss (Soewarno, 1995)

Nilai Variabel Reduksi Gauss		
Periode Ulang	Peluang	k
T (tahun)		
1,001	0,999	-3,05
1,005	0,995	-2,58
1,010	0,990	-2,33
1,050	0,950	-1,64
1,110	0,900	-1,28
1,250	0,800	-0,84
1,330	0,750	-0,67
1,430	0,700	-0,52
1,670	0,600	-0,25
2,000	0,500	0
2,500	0,400	0,25
3,330	0,300	0,52
4,000	0,250	0,67
5,000	0,200	0,84
10,000	0,100	1,28
20,000	0,050	1,64
50,000	0,020	2,05
100,000	0,100	2,33
200,000	0,050	2,58
500,000	0,020	2,88
1000,000	0,001	3,09

Lampiran. 2 Nilai K untuk Distribusi Log Person III (Soemarto, 1999)

Kemencengan (Cs)	Periode Ulang Tahun							
	2	5	10	25	50	100	200	1000
	Peluang (%)							
	50	20	10	4	2	1	0,5	0,1
3	-0,396	0,42	1,18	2,27	3,152	4,05	4,97	7,25
2,5	-0,36	0,51	1,25	2,26	3,048	3,84	4,652	6,6
2,2	-0,33	0,57	1,284	2,24	2,97	3,70	4,444	6,2
2	-0,307	0,60	1,302	2,21	2,912	3,60	4,298	5,91
1,8	-0,282	0,64	1,318	2,19	2,848	3,49	4,147	5,66
1,6	-0,254	0,67	1,329	2,16	2,78	3,38	3,99	5,39
1,4	-0,225	0,70	1,337	2,12	2,706	3,27	3,828	5,11
1,2	-0,195	0,73	1,34	2,08	2,626	3,14	3,661	4,82
1	-0,164	0,75	1,34	2,04	2,542	3,02	3,489	4,54
0,9	-0,148	0,76	1,339	2,01	2,498	2,95	3,401	4,395
0,8	-0,132	0,78	1,336	2,99	2,453	2,89	3,312	4,25
0,7	-0,116	0,79	1,333	2,96	2,407	2,82	3,223	4,105
0,6	-0,099	0,8	1,328	2,93	2,359	2,75	3,132	3,96
0,5	-0,083	0,80	1,323	2,91	2,311	2,68	3,041	3,815
0,4	-0,066	0,81	1,317	2,88	2,261	2,61	2,949	3,67
0,3	-0,05	0,82	1,309	2,84	2,211	2,54	2,856	3,595
0,2	-0,033	0,83	1,301	2,81	2,159	2,47	2,763	3,58
0,1	-0,017	0,83	1,292	2,78	2,107	2,4	2,67	3,501
0	0	0,84	1,282	2,75	2,054	2,32	2,576	3,09
-0,1	0,017	0,83	1,27	2,76	2	2,25	2,482	3,95
-0,2	0,033	0,85	1,258	1,68	1,945	2,17	2,388	2,81
-0,3	0,05	0,85	1,245	1,64	1,89	2,10	2,294	2,675
-0,4	0,066	0,85	1,231	1,60	1,834	2,02	2,201	2,54
-0,5	0,083	0,85	1,216	1,56	1,777	1,95	2,108	2,4
-0,6	0,099	0,85	1,2	1,52	1,72	1,	2,016	2,275
-0,7	0,116	0,85	1,183	1,48	1,663	1,80	1,926	2,15
-0,8	0,132	0,85	1,166	1,48	1,606	1,73	1,837	2,035
-0,9	0,148	0,85	1,147	1,40	1,549	1,66	1,749	1,91
-1	0,164	0,85	1,128	1,36	1,492	1,58	1,664	1,8
-1,2	0,195	0,84	1,086	1,28	1,379	1,44	1,501	1,625
-1,4	0,225	0,83	1,041	1,19	1,27	1,31	1,351	1,465
-1,6	0,254	0,81	0,994	1,11	1,166	1,2	1,216	1,28
-1,8	0,282	0,79	0,945	0,03	1,069	1,08	1,097	1,13
-2	0,307	0,77	0,895	0,95	0,98	0,99	1,995	1
-2,2	0,33	0,75	0,844	0,88	0,9	0,90	0,907	0,91
-2,5	0,36	0,71	0,771	0,79	0,798	0,79	0,8	0,802
-3	0,396	0,63	0,66	0,66	0,666	0,66	0,667	0,668

Lampiran. 3 *Reduced Mean Yn* (Suripin, 2004)

TABEL REDUCED MEAN (Yn)										
N	0	1	2	3	4	5	6	7	8	9
10	0,495	0,166	0,590	0,507	0,510	0,513	0,516	0,518	0,520	0,522
20	0,524	0,525	0,527	0,528	0,530	0,531	0,532	0,533	0,534	0,535
30	0,536	0,537	0,538	0,539	0,840	0,540	0,541	0,542	0,542	0,544
40	0,554	0,544	0,545	0,545	0,546	0,546	0,547	0,547	0,548	0,548
50	0,555	0,549	0,549	0,550	0,550	0,550	0,551	0,551	0,552	0,552
60	0,552	0,552	0,553	0,553	0,553	0,554	0,554	0,554	0,554	0,555
70	0,555	0,555	0,555	0,556	0,556	0,556	0,556	0,556	0,557	0,557
80	0,557	0,557	0,557	0,557	0,558	0,558	0,558	0,558	0,558	0,559
90	0,559	0,559	0,559	0,559	0,559	0,559	0,560	0,560	0,560	0,560
100	0,560	0,560	0,560	0,560	0,561	0,561	0,561	0,561	0,561	0,561

Lampiran. 4 *Reduced Standard Deviation, Sn* (suripin, 2004)

TABEL REDUCED MEAN (Sn)										
N	0	1	2	3	4	5	6	7	8	9
10	0,950	0,968	0,983	0,997	1,010	1,021	1,032	1,041	1,049	1,057
20	1,063	1,070	1,075	1,081	1,086	1,092	1,096	1,110	1,105	1,108
30	1,112	1,116	1,119	1,226	1,126	1,129	1,131	1,134	1,136	1,139
40	1,141	1,144	0,148	1,148	1,150	1,152	1,154	1,156	1,116	1,159
50	1,161	1,162	1,164	1,166	1,167	1,168	1,117	1,171	1,173	1,173
60	1,175	1,176	1,177	1,178	1,179	1,180	1,181	1,182	1,183	1,184
70	1,185	1,186	1,187	1,188	1,189	1,190	1,191	1,192	1,192	1,193
80	1,194	1,195	1,195	1,196	1,197	1,197	1,198	1,199	1,199	1,200
90	1,201	1,201	1,202	1,203	1,203	1,204	1,204	1,205	1,206	1,206
100	1,207	1,207	1,207	1,208	1,208	1,208	1,209	1,209	1,209	1,210

Lampiran. 5 *Reduced Variate, Ytr, Fungsi Periode Ulang* (Suripin, 2004)

TABEL REDUCED VARIATE Ytr			
RT	YR	RT	YR
2	0,3668	100	4,6012
5	1,5004	200	5,2969
10	2,251	250	5,5206
20	2,9709	500	6,2149
25	3,1993	1000	6,9087
50	3,9028	5000	8,5188
75	4,3117	10000	9,2121

Lampiran. 6 Nilai Distribusi *Chi Square*

		Derajat Kepercayaan				
α		0,1	0,05	0,025	0,01	0,005
dk	1	2,706	3,841	5,024	6,635	7,879
	2	4,605	5,991	7,378	9,210	10,597
	3	6,251	7,815	9,348	11,345	12,838
	4	7,779	9,488	11,143	13,277	14,860
	5	9,236	11,070	12,832	15,086	16,750
	6	10,645	12,592	14,449	16,812	18,548
	7	12,017	14,067	16,013	18,475	20,278
	8	13,362	15,507	17,535	20,090	21,955
	9	14,684	16,919	19,023	21,666	23,589
	10	15,987	18,307	20,483	23,209	25,188
	11	17,275	19,675	21,920	24,725	26,757
	12	18,549	21,026	23,337	26,217	28,300
	13	19,812	22,362	24,736	27,688	29,819
	14	21,064	23,685	26,119	29,141	31,319
	15	22,307	24,996	27,488	30,578	32,801
	16	23,542	26,296	28,845	32,000	34,267
	17	24,769	27,587	30,191	33,409	35,718
	18	25,989	28,869	31,526	34,805	37,156
	19	27,204	30,144	32,852	36,191	38,582
	20	28,412	31,410	34,170	37,566	39,997
	21	29,615	32,671	35,479	38,932	41,401
	22	30,813	33,924	36,781	40,289	42,796
	23	32,007	35,172	38,076	41,638	44,181
	24	33,196	36,415	39,364	42,980	45,558
	25	34,382	37,652	40,647	44,314	46,928
	26	35,563	38,885	41,923	45,642	48,290
	27	36,741	40,113	43,195	46,963	49,645
	28	37,916	41,337	44,461	48,278	50,994
	29	39,087	42,557	45,722	49,588	52,336
	30	40,256	43,773	46,979	50,892	53,672

Lampiran. 7 Nilai Kepercayaan *Smirnov Kolmogorof*

Jumlah Data (n)	Derajat Kepercayaan			
	0,2	0,1	0,05	0,01
5	0,45	0,51	0,56	0,67
10	0,32	0,37	0,41	0,49
15	0,27	0,3	0,34	0,4
20	0,23	0,26	0,29	0,36
25	0,21	0,24	0,27	0,32
30	0,19	0,22	0,24	0,29
35	0,18	0,2	0,23	0,27
40	0,17	0,19	0,21	0,25
45	0,16	0,18	0,2	0,24
50	0,15	0,17	0,19	0,23
n>50	1,07/n	1,22/n	1,36/n	1,63/n

Lampiran. 8 Koefisien Pengaliran (Soemarto, 1999)

Tipe daerah aliran		Harga C
Perumputan	Tanah pasir, datar, 2%	0,05-0,10
	Tanah pasir, rata-rata 2-7 %	0,10-0,15
	Tanah pasir, curah & %	0,15-0,20
	Tanah gemuk, datar 2%	0,13-0,17
	Tanah gemuk rata-rata 2-7%	0,18-0,22
	Tanah gemuk, curam & %	0,25-0,35
Perdagangan	Daerah Kota lama	0,75-0,95
	Daerah pinggiran	0,50-0,70
perumahan	Daerah single family	0,3,-0,50
	Multi unit terpisah	0,40-0,60
	Multi unit tertutup	0,60-0,75
	Suburban	0,25-0,40
	daerah apartmen	0,50-0,70
industri	daerah ringan	0,50-0,80
	daerah berat	0,60-0,90
Pertamanan		0,10-0,25
Tempat bermain		0,20-0,35
Halaman Kerata api		0,20-0,40
Daerah tidak dikerjakan		0,10-0,30
Jalan	Beraspal	0,70-0,95
	Beton	0,80-0,95
	Batu	0,70-0,85
Atap		0,75-0,95

Lampiran. 9 Curah Hujan Rerata Sta. Sapon

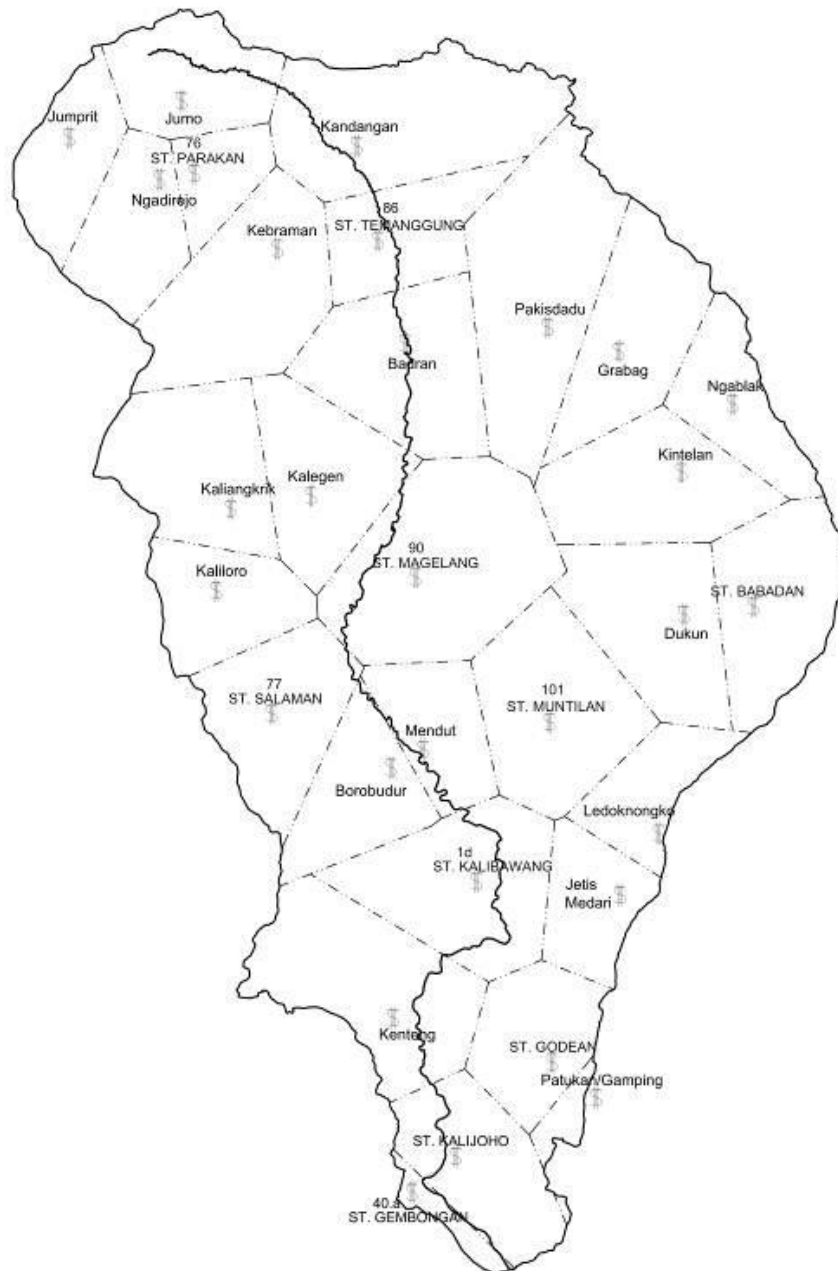
Tahun : 2002
Hujan dalam
Milimeter

Tan ggal	Bulan											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5,47	7,30	5,73	23,46	0,91	3,36	0,00	2,69	0,00	1,05	7,80	4,24
2	10,43	8,79	17,20	13,28	2,85	0,78	0,00	0,14	0,00	0,43	9,18	3,96
3	6,39	18,17	6,18	19,50	2,31	1,83	0,01	0,00	0,00	0,12	4,76	8,99
4	5,65	14,53	2,13	6,85	8,95	1,07	0,00	0,22	0,00	0,62	6,46	8,45
5	11,51	8,78	3,02	16,26	6,34	3,07	0,00	0,00	0,86	0,41	13,73	17,78
6	11,47	10,42	10,53	19,45	2,99	1,35	0,00	0,00	0,00	0,00	6,38	17,95
7	7,30	16,05	9,45	15,67	2,93	0,15	0,00	0,00	2,25	1,02	7,19	15,97
8	4,05	7,71	8,69	5,00	1,43	4,57	0,00	0,99	0,00	0,00	5,32	7,14
9	7,43	10,19	7,38	4,55	4,15	0,01	0,00	0,59	0,00	0,26	4,25	8,10
10	10,81	12,41	12,72	6,84	10,58	0,00	0,06	0,20	0,00	0,20	8,81	3,91
11	8,98	12,30	19,80	7,94	12,22	0,14	0,18	0,00	0,00	0,00	8,05	9,53
12	4,00	3,98	23,41	4,04	4,67	0,01	0,00	0,30	0,00	0,00	4,31	10,33
13	2,51	11,91	10,17	1,33	14,77	0,19	0,09	0,00	0,00	0,16	2,91	8,40
14	13,11	11,10	8,08	4,97	1,35	1,20	0,00	0,00	0,00	0,24	2,79	10,14
15	19,98	11,39	15,81	6,15	0,19	0,31	0,00	0,00	0,00	2,35	6,96	12,43
16	3,23	13,35	14,82	9,12	9,73	0,14	0,04	0,00	0,00	0,00	6,86	13,27
17	12,76	13,15	15,72	16,08	0,81	0,16	0,54	0,00	0,00	0,05	13,82	3,34
18	26,96	16,63	13,47	5,81	0,00	0,35	5,90	0,00	0,00	0,04	15,68	1,47
19	28,46	4,73	8,95	7,57	0,19	0,29	0,04	0,00	0,00	0,00	15,34	3,61
20	15,45	9,10	15,58	16,04	0,83	1,17	0,00	0,00	0,00	0,00	6,63	2,58
21	20,07	8,85	12,28	14,94	0,00	0,22	0,05	0,00	0,00	0,00	9,63	13,75
22	19,16	4,33	5,47	8,81	0,00	1,14	0,41	0,00	0,03	0,00	9,20	10,16
23	28,55	15,17	4,03	9,11	0,16	0,09	0,86	0,25	0,00	3,32	5,30	14,14
24	12,49	19,18	12,57	3,33	0,62	0,03	1,18	0,00	0,00	0,39	15,55	10,39
25	14,19	10,73	3,92	4,37	0,26	0,00	0,62	0,00	0,48	1,44	4,27	19,79
26	16,56	11,31	9,41	2,56	0,00	0,00	0,00	0,31	0,56	3,05	2,65	21,98
27	14,59	7,27	10,40	3,04	1,08	0,77	0,00	0,47	0,00	5,32	0,78	19,34
28	6,55	3,43	4,94	0,93	1,75	0,07	0,05	0,00	0,84	6,82	5,36	13,55
29	5,38	0,00	5,11	0,11	1,63	0,48	0,00	1,13	0,20	2,82	4,64	8,28
30	12,67	0,00	16,44	0,00	3,75	0,00	0,56	3,32	0,50	7,91	9,68	7,10
31	20,57	0,00	14,11	0,00	2,29	23,00	2,27	0,12	0,00	2,98	0,00	34,98
Juml ah	386,7 3	302,2 6	327,52 2	257,11	99,74 3	45,9 5	12,8 6	10,7 3	5,72	41	224,2 9	345,05
Mak simu m	28,55	19,18	23,41	23,46	14,77	23	5,9	3,32	2,25	7,91	15,68	34,98

Lampiran. 10 Rekapitulasi Curah Hujan Maksimum Sta. Sapon

No	Tanggal/ Bulan	Tahun	Max
1	31-Dec	2002	34,98
2	05-Feb	2003	46,97
3	30-Nov	2004	36,58
4	17-Dec	2005	33,61
5	26-Feb	2006	38,97
6	25-Dec	2007	40,11
7	19-Nov	2008	41,5
8	13-Jan	2009	56,33
9	09-Jun	2010	52,6
10	25-Feb	2011	35,73
11	01-Jan	2012	56,51
12	19-Dec	2013	49,78

Lampiran. 11 Poligon Thiessen DAS Kamijoro



Lampiran. 12 Data HEC-RAS Metode Rasional 100 Tahun

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m ³ /s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m ²)	(m)	
Kamijoro	29	PF 1	1308.37	24.5	27.02		27.55	0.00197	3.22	406.03	161	0.65
Kamijoro	28	PF 1	1308.37	22.1	27.29		27.41	0.000183	1.56	840.55	162	0.22
Kamijoro	27	PF 1	1308.37	22.72	27.25		27.41	0.000286	1.78	733.18	162	0.27
Kamijoro	26	PF 1	1308.37	23.43	27.16		27.4	0.000537	2.16	604.49	162	0.36
Kamijoro	25	PF 1	1308.37	23.55	27.14		27.4	0.00061	2.25	581.51	162	0.38
Kamijoro	24	PF 1	1308.37	23.5	27.14		27.4	0.000595	2.23	585.91	162	0.37
Kamijoro	23	PF 1	1308.37	23.55	27.14		27.4	0.000611	2.25	581.09	162	0.38
Kamijoro	22	PF 1	1308.37	23.77	27.09		27.39	0.000789	2.43	537.67	162	0.43
Kamijoro	21	PF 1	1308.37	24.01	27.02		27.38	0.001092	2.69	486.98	162	0.49
Kamijoro	20	PF 1	1308.37	24.21	26.92		27.38	0.001528	2.98	439.62	162	0.58
Kamijoro	19	PF 1	1308.37	24.34	26.83		27.37	0.002031	3.24	403.21	162	0.66
Kamijoro	18	PF 1	1308.37	24.43	26.72		27.35	0.002671	3.53	371.04	162	0.74
Kamijoro	17	PF 1	1308.37	24.49	26.58	26.36	27.34	0.003608	3.86	338.72	162	0.85
Kamijoro	16	PF 1	1308.37	24.5	26.38	26.38	27.32	0.005172	4.31	303.73	162	1
Kamijoro	15	PF 1	1308.37	24.49	26.36	26.36	27.31	0.005172	4.31	303.73	162	1
Kamijoro	14	PF 1	1308.37	24.43	26.3	26.3	27.25	0.005172	4.31	303.73	162	1
Kamijoro	13	PF 1	1308.37	24.34	26.21	26.21	27.16	0.005172	4.31	303.73	162	1
Kamijoro	12	PF 1	1308.37	24.21	26.08	26.08	27.03	0.005172	4.31	303.73	162	1
Kamijoro	11	PF 1	1308.37	24.01	25.88	25.88	26.83	0.005172	4.31	303.73	162	1
Kamijoro	10	PF 1	1308.37	23.77	25.65	25.65	26.59	0.00517	4.31	303.76	162	1
Kamijoro	9	PF 1	1308.37	23.29	25.52		26.19	0.00291	3.62	361.54	162	0.77
Kamijoro	8	PF 1	1308.37	22.79	25.72		26.11	0.001191	2.76	474.2	162	0.51
Kamijoro	7	PF 1	1308.37	22.31	25.8		26.07	0.000671	2.32	564.83	162	0.4
Kamijoro	6	PF 1	1308.37	21.39	25.87		26.04	0.000295	1.8	726.12	162	0.27
Kamijoro	5	PF 1	1308.37	20.74	25.9		26.03	0.000186	1.57	835.95	162	0.22
Kamijoro	4	PF 1	1308.37	20.37	25.91		26.02	0.000148	1.46	897.74	162	0.2
Kamijoro	3	PF 1	1308.37	20.12	25.92		26.02	0.000128	1.39	939.32	162	0.18
Kamijoro	2	PF 1	1308.37	21.1	25.88		26.01	0.000211	1.59	822.58	172.1	0.23
Kamijoro	1	PF 1	1308.37	21.85	25.82		26	0.000389	1.92	682.43	172.1	0.31
Kamijoro	0	PF 1	1308.37	22.47	25.04	25.04	25.91	0.005157	4.14	316.19	181.57	1

Lampiran. 13 Data HEC-RAS Rasional Mononobe 100 Tahun

Reach	River Sta	Profile	Q Total	Min Ch	W.S.	Crit	E.G. Elev	E.G.	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	Elev (m)	W.S. (m)	Elev (m)	Slope (m/m)	(m/s)	(m2)	(m)	
Kamijoro	29	PF 2	1217.95	24.5	26.89		27.4	0.002024	3.16	385.55	161	0.65
Kamijoro	28	PF 2	1217.95	22.72	27.12		27.27	0.000271	1.71	713.37	162	0.26
Kamijoro	27	PF 2	1217.95	23.44	27.04		27.26	0.000522	2.09	583.63	162	0.35
Kamijoro	26	PF 2	1217.95	23.56	27.02		27.26	0.000595	2.17	560.8	162	0.37
Kamijoro	25	PF 2	1217.95	23.56	27.02		27.26	0.000596	2.17	560.69	162	0.37
Kamijoro	24	PF 2	1217.95	23.56	27.02		27.26	0.000596	2.17	560.57	162	0.37
Kamijoro	23	PF 2	1217.95	23.77	26.98		27.26	0.000765	2.34	519.47	162	0.42
Kamijoro	22	PF 2	1217.95	24.01	26.91		27.25	0.001068	2.6	469.32	162	0.49
Kamijoro	21	PF 2	1217.95	24.21	26.82		27.24	0.001508	2.88	422.56	162	0.57
Kamijoro	20	PF 2	1217.95	24.34	26.73		27.23	0.00202	3.15	386.69	162	0.65
Kamijoro	19	PF 2	1217.95	24.43	26.62		27.22	0.002676	3.43	355.09	162	0.74
Kamijoro	18	PF 2	1217.95	24.49	26.49	26.28	27.21	0.003647	3.77	323.29	162	0.85
Kamijoro	17	PF 2	1217.95	24.5	26.29	26.29	27.19	0.005248	4.21	289.56	162	1
Kamijoro	16	PF 2	1217.95	24.49	26.28	26.28	27.18	0.005247	4.21	289.57	162	1
Kamijoro	15	PF 2	1217.95	24.43	26.22	26.22	27.12	0.005248	4.21	289.57	162	1
Kamijoro	14	PF 2	1217.95	24.34	26.13	26.13	27.03	0.005248	4.21	289.57	162	1
Kamijoro	13	PF 2	1217.95	24.21	26	26	26.9	0.005247	4.21	289.57	162	1
Kamijoro	12	PF 2	1217.95	24.01	25.8	25.8	26.7	0.005248	4.21	289.56	162	1
Kamijoro	11	PF 2	1217.95	23.77	25.56	25.56	26.46	0.005247	4.21	289.57	162	1
Kamijoro	10	PF 2	1217.95	23.53	25.32	25.32	26.22	0.005249	4.21	289.54	162	1
Kamijoro	9	PF 2	1217.95	23.29	25.44		26.06	0.002855	3.5	348.2	162	0.76
Kamijoro	8	PF 2	1217.95	22.79	25.62		25.98	0.001148	2.65	459.14	162	0.5
Kamijoro	7	PF 2	1217.95	22.31	25.7		25.95	0.000638	2.22	549.02	162	0.38
Kamijoro	6	PF 2	1217.95	21.39	25.77		25.92	0.000276	1.72	709.43	162	0.26
Kamijoro	5	PF 2	1217.95	20.74	25.8		25.91	0.000173	1.49	818.91	162	0.21
Kamijoro	4	PF 2	1217.95	20.37	25.81		25.9	0.000136	1.38	880.55	162	0.19
Kamijoro	3	PF 2	1217.95	20.1	25.81		25.9	0.000116	1.32	925.33	162	0.18
Kamijoro	2	PF 2	1217.95	21.1	25.78		25.89	0.000197	1.51	804.67	172.1	0.22
Kamijoro	1	PF 2	1217.95	21.85	25.72		25.89	0.000366	1.83	665.36	172.1	0.3
Kamijoro	0	PF 2	1217.95	22.47	24.96	24.96	25.79	0.005253	4.05	301.05	181.37	1

Lampiran. 14 Data HEC-RAS Haspers Kala Ulang 100 Tahun

Reach	River Sta	Profile	Q Total	Min Ch	W.S.	Crit	E.G. Elev	E.G.	Vel Chnl	Flow Area	Top Width	Froude #
			(m3/s)	El	Elev	W.S.	Slope	(m)				
Kamijoro	29	PF 3	1366.34	24.5	27.08		27.63	0.001997	3.29	415.16	161	0.65
Kamijoro	28	PF 3	1366.34	22.72	27.32		27.49	0.000296	1.83	745.28	162	0.27
Kamijoro	27	PF 3	1366.34	23.44	27.23		27.48	0.000556	2.22	614.19	162	0.36
Kamijoro	26	PF 3	1366.34	23.56	27.21		27.48	0.000631	2.31	591.05	162	0.39
Kamijoro	25	PF 3	1366.34	23.56	27.21		27.48	0.000631	2.31	590.93	162	0.39
Kamijoro	24	PF 3	1366.34	23.56	27.21		27.48	0.000631	2.31	590.81	162	0.39
Kamijoro	23	PF 3	1366.34	23.77	27.16		27.48	0.000803	2.49	549.1	162	0.43
Kamijoro	22	PF 3	1366.34	24.01	27.08		27.47	0.001106	2.74	498.08	162	0.5
Kamijoro	21	PF 3	1366.34	24.21	26.99		27.46	0.00154	3.03	450.34	162	0.58
Kamijoro	20	PF 3	1366.34	24.34	26.89		27.45	0.002037	3.3	413.59	162	0.66
Kamijoro	19	PF 3	1366.34	24.43	26.78		27.44	0.002668	3.59	381.09	162	0.75
Kamijoro	18	PF 3	1366.34	24.49	26.64	26.42	27.42	0.003583	3.92	348.47	162	0.85
Kamijoro	17	PF 3	1366.34	24.5	26.43	26.43	27.4	0.005127	4.37	312.64	162	1
Kamijoro	16	PF 3	1366.34	24.49	26.42	26.42	27.39	0.005127	4.37	312.64	162	1
Kamijoro	15	PF 3	1366.34	24.43	26.36	26.36	27.33	0.005127	4.37	312.64	162	1
Kamijoro	14	PF 3	1366.34	24.34	26.27	26.27	27.24	0.005127	4.37	312.64	162	1
Kamijoro	13	PF 3	1366.34	24.21	26.14	26.14	27.11	0.005127	4.37	312.64	162	1
Kamijoro	12	PF 3	1366.34	24.01	25.94	25.94	26.91	0.005126	4.37	312.65	162	1
Kamijoro	11	PF 3	1366.34	23.77	25.7	25.7	26.67	0.005129	4.37	312.6	162	1
Kamijoro	10	PF 3	1366.34	23.53	25.46	25.46	26.43	0.005117	4.37	312.81	162	1
Kamijoro	9	PF 3	1366.34	23.29	25.6		26.28	0.002822	3.65	374.66	162	0.77
Kamijoro	8	PF 3	1366.34	22.79	25.8		26.2	0.001191	2.81	486.91	162	0.52
Kamijoro	7	PF 3	1366.34	22.31	25.88		26.16	0.000679	2.36	577.74	162	0.4
Kamijoro	6	PF 3	1366.34	21.39	25.95		26.13	0.000303	1.85	739.33	162	0.28
Kamijoro	5	PF 3	1366.34	20.74	25.98		26.11	0.000193	1.61	849.33	162	0.22
Kamijoro	4	PF 3	1366.34	20.37	25.99		26.11	0.000154	1.5	911.21	162	0.2
Kamijoro	3	PF 3	1366.34	20.1	26		26.11	0.000131	1.43	956.13	162	0.19
Kamijoro	2	PF 3	1366.34	21.1	25.96		26.1	0.000218	1.63	836.65	172.1	0.24
Kamijoro	1	PF 3	1366.34	21.85	25.89		26.09	0.000397	1.96	696.12	172.1	0.31
Kamijoro	0	PF 3	1366.34	22.47	25.09	25.09	25.99	0.005134	4.2	325.07	181.68	1

Lampiran. 15 Data HEC-RAS Weduwen 100 Tahun

Reach	River Sta	Profile	Q Total	Min Ch	W.S.	Crit	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	Elev	W.S.						
Kamijoro	29	PF 4	621	24.5	26.05		26.36	0.002234	2.5	248.84	161	0.64
Kamijoro	28	PF 4	621	22.72	26.21		26.27	0.000151	1.1	565.26	162	0.19
Kamijoro	27	PF 4	621	23.44	26.17		26.27	0.000339	1.41	441.61	162	0.27
Kamijoro	26	PF 4	621	23.56	26.15		26.27	0.000399	1.48	420.22	162	0.29
Kamijoro	25	PF 4	621	23.56	26.15		26.27	0.0004	1.48	420.15	162	0.29
Kamijoro	24	PF 4	621	23.56	26.15		26.26	0.0004	1.48	420.07	162	0.29
Kamijoro	23	PF 4	621	23.77	26.13		26.26	0.000547	1.63	381.86	162	0.34
Kamijoro	22	PF 4	621	24.01	26.08		26.26	0.000835	1.85	335.96	162	0.41
Kamijoro	21	PF 4	621	24.21	26.02		26.25	0.001297	2.11	294.04	162	0.5
Kamijoro	20	PF 4	621	24.34	25.96		26.25	0.001885	2.37	262.57	162	0.59
Kamijoro	19	PF 4	621	24.43	25.88		26.24	0.002705	2.64	235.43	162	0.7
Kamijoro	18	PF 4	621	24.49	25.77	25.63	26.23	0.004114	2.99	207.43	162	0.84
Kamijoro	17	PF 4	621	24.5	25.64	25.64	26.22	0.006035	3.36	184.78	162	1
Kamijoro	16	PF 4	621	24.49	25.63	25.63	26.21	0.006035	3.36	184.78	162	1
Kamijoro	15	PF 4	621	24.43	25.57	25.57	26.15	0.006034	3.36	184.79	162	1
Kamijoro	14	PF 4	621	24.34	25.48	25.48	26.06	0.006036	3.36	184.77	162	1
Kamijoro	13	PF 4	621	24.21	25.35	25.35	25.93	0.006031	3.36	184.82	162	1
Kamijoro	12	PF 4	621	24.01	25.15	25.15	25.73	0.006039	3.36	184.74	162	1.01
Kamijoro	11	PF 4	621	23.77	24.91	24.91	25.49	0.006044	3.36	184.7	162	1.01
Kamijoro	10	PF 4	621	23.53	24.67	24.67	25.25	0.006042	3.36	184.71	162	1.01
Kamijoro	9	PF 4	621	23.29	24.68		25.07	0.003138	2.76	225.11	162	0.75
Kamijoro	8	PF 4	621	22.79	24.82		25	0.000891	1.88	329.47	162	0.42
Kamijoro	7	PF 4	621	22.31	24.87		24.98	0.000417	1.5	414.72	162	0.3
Kamijoro	6	PF 4	621	21.39	24.91		24.97	0.000147	1.09	569.85	162	0.19
Kamijoro	5	PF 4	621	20.74	24.92		24.96	0.000084	0.92	677.1	162	0.14
Kamijoro	4	PF 4	621	20.37	24.92		24.96	0.000063	0.84	737.8	162	0.13
Kamijoro	3	PF 4	621	20.1	24.93		24.96	0.000052	0.79	781.99	162	0.12
Kamijoro	2	PF 4	621	21.1	24.91		24.96	0.0001	0.95	655.66	172.1	0.15
Kamijoro	1	PF 4	621	21.85	24.88		24.95	0.000212	1.19	521.57	172.1	0.22
Kamijoro	0	PF 4	621	22.47	24.35	24.35	24.89	0.006096	3.25	191.33	179.95	1.01

Lampiran. 16 Data HEC-RAS Gama 1 100 Tahun

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Kamijoro	29	PF 5	1994.4	24.5	27.78		28.51	0.001934	3.78	527.65	161	0.67
Kamijoro	28	PF 5	1994.4	22.72	28.07		28.34	0.000386	2.3	866.47	162	0.32
Kamijoro	27	PF 5	1994.4	23.44	27.95		28.33	0.000673	2.73	730.15	162	0.41
Kamijoro	26	PF 5	1994.4	23.56	27.92		28.32	0.000752	2.83	705.82	162	0.43
Kamijoro	25	PF 5	1994.4	23.56	27.92		28.32	0.000753	2.83	705.67	162	0.43
Kamijoro	24	PF 5	1994.4	23.56	27.92		28.32	0.000753	2.83	705.52	162	0.43
Kamijoro	23	PF 5	1994.4	23.77	27.85		28.32	0.00093	3.02	661.47	162	0.48
Kamijoro	22	PF 5	1994.4	24.01	27.76		28.31	0.001231	3.29	607.09	162	0.54
Kamijoro	21	PF 5	1994.4	24.21	27.64		28.3	0.001646	3.59	555.55	162	0.62
Kamijoro	20	PF 5	1994.4	24.34	27.52		28.28	0.002108	3.87	515.22	162	0.69
Kamijoro	19	PF 5	1994.4	24.43	27.39		28.27	0.002667	4.16	479.6	162	0.77
Kamijoro	18	PF 5	1994.4	24.49	27.22	26.98	28.26	0.003474	4.51	442.57	162	0.87
Kamijoro	17	PF 5	1994.4	24.5	26.99	26.99	28.24	0.004717	4.95	403.28	162	1
Kamijoro	16	PF 5	1994.4	24.49	26.98	26.98	28.23	0.004717	4.95	403.28	162	1
Kamijoro	15	PF 5	1994.4	24.43	26.92	26.92	28.17	0.004717	4.95	403.29	162	1
Kamijoro	14	PF 5	1994.4	24.34	26.83	26.83	28.08	0.004717	4.95	403.3	162	1
Kamijoro	13	PF 5	1994.4	24.21	26.7	26.7	27.95	0.004716	4.94	403.32	162	1
Kamijoro	12	PF 5	1994.4	24.01	26.5	26.5	27.75	0.004715	4.94	403.35	162	1
Kamijoro	11	PF 5	1994.4	23.77	26.26	26.26	27.51	0.004713	4.94	403.39	162	1
Kamijoro	10	PF 5	1994.4	23.53	26.02	26.02	27.27	0.00471	4.94	403.46	162	1
Kamijoro	9	PF 5	1994.4	23.29	26.22		27.12	0.00275	4.2	475.18	162	0.78
Kamijoro	8	PF 5	1994.4	22.79	26.45		27.02	0.001334	3.37	592.37	162	0.56
Kamijoro	7	PF 5	1994.4	22.31	26.55		26.98	0.000822	2.9	686.77	162	0.45
Kamijoro	6	PF 5	1994.4	21.39	26.65		26.93	0.000406	2.34	852.89	162	0.33
Kamijoro	5	PF 5	1994.4	20.74	26.7		26.91	0.000272	2.07	965	162	0.27
Kamijoro	4	PF 5	1994.4	20.37	26.71		26.91	0.000222	1.94	1027.83	162	0.25
Kamijoro	3	PF 5	1994.4	20.1	26.73		26.9	0.000193	1.86	1073.35	162	0.23
Kamijoro	2	PF 5	1994.4	21.1	26.67		26.89	0.000298	2.08	958.33	172.1	0.28
Kamijoro	1	PF 5	1994.4	21.85	26.57		26.88	0.00051	2.45	812.93	172.1	0.36
Kamijoro	0	PF 5	1994.4	22.47	25.61	25.61	26.76	0.004734	4.75	419.5	182.89	1

Lampiran. 17 Data HEC-RAS Rasional 200 Tahun

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Kamijoro	29	PF 1	1404.83	24.5	27.13		27.69	0.00199	3.32	422.65	161	0.66
Kamijoro	28	PF 1	1404.83	22.72	27.37		27.55	0.000302	1.86	753.34	162	0.28
Kamijoro	27	PF 1	1404.83	23.44	27.28		27.54	0.000564	2.26	621.92	162	0.37
Kamijoro	26	PF 1	1404.83	23.56	27.26		27.54	0.000639	2.35	598.7	162	0.39
Kamijoro	25	PF 1	1404.83	23.56	27.26		27.54	0.00064	2.35	598.58	162	0.39
Kamijoro	24	PF 1	1404.83	23.56	27.25		27.54	0.00064	2.35	598.45	162	0.39
Kamijoro	23	PF 1	1404.83	23.77	27.21		27.53	0.000812	2.52	556.59	162	0.43
Kamijoro	22	PF 1	1404.83	24.01	27.13		27.52	0.001114	2.78	505.35	162	0.5
Kamijoro	21	PF 1	1404.83	24.21	27.03		27.51	0.001547	3.07	457.37	162	0.58
Kamijoro	20	PF 1	1404.83	24.34	26.94		27.5	0.002041	3.34	420.4	162	0.66
Kamijoro	19	PF 1	1404.83	24.43	26.82		27.49	0.002665	3.62	387.68	162	0.75
Kamijoro	18	PF 1	1404.83	24.49	26.68	26.46	27.48	0.003567	3.96	354.88	162	0.85
Kamijoro	17	PF 1	1404.83	24.5	26.47	26.47	27.46	0.005098	4.41	318.49	162	1
Kamijoro	16	PF 1	1404.83	24.49	26.46	26.46	27.45	0.005098	4.41	318.48	162	1
Kamijoro	15	PF 1	1404.83	24.43	26.4	26.4	27.39	0.005098	4.41	318.48	162	1
Kamijoro	14	PF 1	1404.83	24.34	26.31	26.31	27.3	0.005098	4.41	318.48	162	1
Kamijoro	13	PF 1	1404.83	24.21	26.18	26.18	27.17	0.005098	4.41	318.48	162	1
Kamijoro	12	PF 1	1404.83	24.01	25.98	25.98	26.97	0.005098	4.41	318.49	162	1
Kamijoro	11	PF 1	1404.83	23.77	25.74	25.74	26.73	0.005099	4.41	318.47	162	1
Kamijoro	10	PF 1	1404.83	23.53	25.5	25.5	26.49	0.005094	4.41	318.57	162	1
Kamijoro	9	PF 1	1404.83	23.29	25.64		26.34	0.002815	3.68	381.32	162	0.77
Kamijoro	8	PF 1	1404.83	22.79	25.84		26.25	0.001202	2.84	493.9	162	0.52
Kamijoro	7	PF 1	1404.83	22.31	25.92		26.22	0.00069	2.4	584.97	162	0.4
Kamijoro	6	PF 1	1404.83	21.39	26		26.18	0.00031	1.88	746.86	162	0.28
Kamijoro	5	PF 1	1404.83	20.74	26.03		26.17	0.000198	1.64	856.99	162	0.23
Kamijoro	4	PF 1	1404.83	20.37	26.04		26.16	0.000158	1.53	918.93	162	0.2
Kamijoro	3	PF 1	1404.83	20.1	26.05		26.16	0.000135	1.46	963.88	162	0.19
Kamijoro	2	PF 1	1404.83	21.1	26.01		26.15	0.000223	1.66	844.7	172.1	0.24
Kamijoro	1	PF 1	1404.83	21.85	25.94		26.14	0.000405	2	703.86	172.1	0.32
Kamijoro	0	PF 1	1404.83	22.47	25.12	25.12	26.04	0.005104	4.24	331.2	181.76	1

Lampiran. 18 Data HEC-RAS Rasional Mononobe 200 Tahun

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Kamijoro	29	PF 2	1307.75	24.5	27.01		27.54	0.002007	3.24	403.62	161	0.65
Kamijoro	28	PF 2	1307.75	22.72	27.24		27.41	0.000286	1.78	732.85	162	0.27
Kamijoro	27	PF 2	1307.75	23.44	27.16		27.4	0.000543	2.17	602.28	162	0.36
Kamijoro	26	PF 2	1307.75	23.56	27.14		27.4	0.000617	2.26	579.26	162	0.38
Kamijoro	25	PF 2	1307.75	23.56	27.14		27.4	0.000618	2.26	579.15	162	0.38
Kamijoro	24	PF 2	1307.75	23.56	27.13		27.39	0.000618	2.26	579.03	162	0.38
Kamijoro	23	PF 2	1307.75	23.77	27.09		27.39	0.000789	2.43	537.55	162	0.43
Kamijoro	22	PF 2	1307.75	24.01	27.02		27.38	0.001091	2.69	486.86	162	0.49
Kamijoro	21	PF 2	1307.75	24.21	26.92		27.37	0.001528	2.98	439.51	162	0.58
Kamijoro	20	PF 2	1307.75	24.34	26.83		27.36	0.002031	3.24	403.09	162	0.66
Kamijoro	19	PF 2	1307.75	24.43	26.72		27.35	0.002672	3.53	370.94	162	0.74
Kamijoro	18	PF 2	1307.75	24.49	26.58	26.36	27.34	0.003609	3.86	338.62	162	0.85
Kamijoro	17	PF 2	1307.75	24.5	26.37	26.37	27.32	0.005172	4.31	303.64	162	1
Kamijoro	16	PF 2	1307.75	24.49	26.36	26.36	27.31	0.005172	4.31	303.64	162	1
Kamijoro	15	PF 2	1307.75	24.43	26.3	26.3	27.25	0.005173	4.31	303.63	162	1
Kamijoro	14	PF 2	1307.75	24.34	26.21	26.21	27.16	0.005172	4.31	303.64	162	1
Kamijoro	13	PF 2	1307.75	24.21	26.08	26.08	27.03	0.005173	4.31	303.63	162	1
Kamijoro	12	PF 2	1307.75	24.01	25.88	25.88	26.83	0.005172	4.31	303.64	162	1
Kamijoro	11	PF 2	1307.75	23.77	25.64	25.64	26.59	0.005173	4.31	303.63	162	1
Kamijoro	10	PF 2	1307.75	23.53	25.4	25.4	26.35	0.00517	4.31	303.67	162	1
Kamijoro	9	PF 2	1307.75	23.29	25.54		26.2	0.002834	3.59	364.34	162	0.76
Kamijoro	8	PF 2	1307.75	22.79	25.73		26.11	0.001175	2.75	476.09	162	0.51
Kamijoro	7	PF 2	1307.75	22.31	25.81		26.08	0.000664	2.31	566.56	162	0.39
Kamijoro	6	PF 2	1307.75	21.39	25.88		26.05	0.000293	1.8	727.69	162	0.27
Kamijoro	5	PF 2	1307.75	20.74	25.91		26.03	0.000185	1.56	837.48	162	0.22
Kamijoro	4	PF 2	1307.75	20.37	25.92		26.03	0.000147	1.45	899.27	162	0.2
Kamijoro	3	PF 2	1307.75	20.1	25.93		26.03	0.000125	1.39	944.13	162	0.18
Kamijoro	2	PF 2	1307.75	21.1	25.89		26.02	0.00021	1.59	824.19	172.1	0.23
Kamijoro	1	PF 2	1307.75	21.85	25.83		26.01	0.000385	1.91	684.14	172.1	0.31
Kamijoro	0	PF 2	1307.75	22.47	25.04	25.04	25.91	0.005175	4.14	315.78	181.56	1

Lampiran. 19 Data HEC-RAS Haspers 200 Tahun

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Kamijoro	29	PF 3	1467.08	24.5	27.2		27.78	0.00198	3.38	434.62	161	0.66
Kamijoro	28	PF 3	1467.08	22.72	27.45		27.64	0.000311	1.91	766.21	162	0.28
Kamijoro	27	PF 3	1467.08	23.44	27.36		27.63	0.000577	2.31	634.24	162	0.37
Kamijoro	26	PF 3	1467.08	23.56	27.33		27.63	0.000653	2.4	610.9	162	0.39
Kamijoro	25	PF 3	1467.08	23.56	27.33		27.62	0.000653	2.4	610.78	162	0.4
Kamijoro	24	PF 3	1467.08	23.56	27.33		27.62	0.000653	2.4	610.65	162	0.4
Kamijoro	23	PF 3	1467.08	23.77	27.28		27.62	0.000826	2.58	568.54	162	0.44
Kamijoro	22	PF 3	1467.08	24.01	27.2		27.61	0.001128	2.84	516.96	162	0.51
Kamijoro	21	PF 3	1467.08	24.21	27.1		27.6	0.001558	3.13	468.6	162	0.59
Kamijoro	20	PF 3	1467.08	24.34	27		27.59	0.002046	3.4	431.29	162	0.67
Kamijoro	19	PF 3	1467.08	24.43	26.89		27.58	0.002661	3.68	398.23	162	0.75
Kamijoro	18	PF 3	1467.08	24.49	26.74	26.51	27.57	0.003541	4.02	365.16	162	0.85
Kamijoro	17	PF 3	1467.08	24.5	26.52	26.52	27.54	0.005054	4.48	327.83	162	1
Kamijoro	16	PF 3	1467.08	24.49	26.51	26.51	27.53	0.005054	4.48	327.82	162	1
Kamijoro	15	PF 3	1467.08	24.43	26.45	26.45	27.47	0.005054	4.48	327.83	162	1
Kamijoro	14	PF 3	1467.08	24.34	26.36	26.36	27.38	0.005054	4.48	327.83	162	1
Kamijoro	13	PF 3	1467.08	24.21	26.23	26.23	27.25	0.005054	4.48	327.83	162	1
Kamijoro	12	PF 3	1467.08	24.01	26.03	26.03	27.05	0.005054	4.48	327.82	162	1
Kamijoro	11	PF 3	1467.08	23.77	25.79	25.79	26.81	0.005053	4.48	327.83	162	1
Kamijoro	10	PF 3	1467.08	23.53	25.55	25.55	26.57	0.005055	4.48	327.81	162	1
Kamijoro	9	PF 3	1467.08	23.29	25.71		26.42	0.002807	3.74	391.83	162	0.77
Kamijoro	8	PF 3	1467.08	22.79	25.91		26.34	0.001218	2.91	504.96	162	0.53
Kamijoro	7	PF 3	1467.08	22.31	25.99		26.3	0.000706	2.46	596.42	162	0.41
Kamijoro	6	PF 3	1467.08	21.39	26.07		26.26	0.000321	1.93	758.79	162	0.29
Kamijoro	5	PF 3	1467.08	20.74	26.11		26.25	0.000207	1.69	869.14	162	0.23
Kamijoro	4	PF 3	1467.08	20.37	26.12		26.24	0.000165	1.58	931.17	162	0.21
Kamijoro	3	PF 3	1467.08	20.1	26.13		26.24	0.000142	1.5	976.19	162	0.2
Kamijoro	2	PF 3	1467.08	21.1	26.08		26.23	0.000232	1.71	857.47	172.1	0.24
Kamijoro	1	PF 3	1467.08	21.85	26.01		26.22	0.000417	2.05	716.12	172.1	0.32
Kamijoro	0	PF 3	1467.08	22.47	25.18	25.18	26.12	0.005029	4.29	341.6	181.89	1

Lampiran. 20 Data HEC-RAS Weduwen 200 Tahun

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Kamijoro	29	PF 4	666.79	24.5	26.12		26.46	0.002186	2.55	261.51	161	0.64
Kamijoro	28	PF 4	666.79	22.72	26.29		26.36	0.000161	1.15	578.79	162	0.19
Kamijoro	27	PF 4	666.79	23.44	26.25		26.36	0.000355	1.47	454.66	162	0.28
Kamijoro	26	PF 4	666.79	23.56	26.23		26.35	0.000417	1.54	433.15	162	0.3
Kamijoro	25	PF 4	666.79	23.56	26.23		26.35	0.000417	1.54	433.08	162	0.3
Kamijoro	24	PF 4	666.79	23.56	26.23		26.35	0.000417	1.54	433	162	0.3
Kamijoro	23	PF 4	666.79	23.77	26.21		26.35	0.000567	1.69	394.56	162	0.35
Kamijoro	22	PF 4	666.79	24.01	26.16		26.35	0.000855	1.91	348.32	162	0.42
Kamijoro	21	PF 4	666.79	24.21	26.1		26.34	0.00131	2.18	306.05	162	0.51
Kamijoro	20	PF 4	666.79	24.34	26.03		26.33	0.001881	2.43	274.33	162	0.6
Kamijoro	19	PF 4	666.79	24.43	25.96		26.33	0.002657	2.7	247.1	162	0.7
Kamijoro	18	PF 4	666.79	24.49	25.85	25.69	26.32	0.003904	3.03	219.98	162	0.83
Kamijoro	17	PF 4	666.79	24.5	25.7	25.7	26.3	0.005946	3.44	193.75	162	1
Kamijoro	16	PF 4	666.79	24.49	25.69	25.69	26.29	0.005945	3.44	193.76	162	1
Kamijoro	15	PF 4	666.79	24.43	25.63	25.63	26.23	0.005945	3.44	193.76	162	1
Kamijoro	14	PF 4	666.79	24.34	25.54	25.54	26.14	0.005945	3.44	193.76	162	1
Kamijoro	13	PF 4	666.79	24.21	25.41	25.41	26.01	0.005949	3.44	193.73	162	1.01
Kamijoro	12	PF 4	666.79	24.01	25.21	25.21	25.81	0.005928	3.44	193.93	162	1
Kamijoro	11	PF 4	666.79	23.77	24.97	24.97	25.57	0.005947	3.44	193.74	162	1
Kamijoro	10	PF 4	666.79	23.53	24.73	24.73	25.33	0.005884	3.43	194.36	162	1
Kamijoro	9	PF 4	666.79	23.29	24.75		25.15	0.003103	2.83	235.79	162	0.75
Kamijoro	8	PF 4	666.79	22.79	24.89		25.09	0.000919	1.96	340.78	162	0.43
Kamijoro	7	PF 4	666.79	22.31	24.94		25.07	0.000439	1.56	426.45	162	0.31
Kamijoro	6	PF 4	666.79	21.39	24.98		25.05	0.000158	1.15	582.03	162	0.19
Kamijoro	5	PF 4	666.79	20.74	25		25.04	0.000091	0.97	689.46	162	0.15
Kamijoro	4	PF 4	666.79	20.37	25		25.04	0.000069	0.89	750.23	162	0.13
Kamijoro	3	PF 4	666.79	20.1	25		25.04	0.000057	0.84	794.46	162	0.12
Kamijoro	2	PF 4	666.79	21.1	24.99		25.04	0.000108	1	668.65	172.1	0.16
Kamijoro	1	PF 4	666.79	21.85	24.95		25.03	0.000226	1.25	534.14	172.1	0.23
Kamijoro	0	PF 4	666.79	22.47	24.41	24.41	24.97	0.005955	3.31	201.16	180.08	1

Lampiran. 21 Data HEC-RAS Gama 1 200 Tahun

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Kamijoro	29	PF 5	2123.5	24.5	27.91		28.67	0.001924	3.87	549.15	161	0.67
Kamijoro	28	PF 5	2123.5	22.72	28.21		28.5	0.000401	2.39	889.51	162	0.33
Kamijoro	27	PF 5	2123.5	23.44	28.08		28.49	0.000693	2.82	752.21	162	0.42
Kamijoro	26	PF 5	2123.5	23.56	28.05		28.49	0.000772	2.92	727.67	162	0.44
Kamijoro	25	PF 5	2123.5	23.56	28.05		28.49	0.000772	2.92	727.52	162	0.44
Kamijoro	24	PF 5	2123.5	23.56	28.05		28.48	0.000773	2.92	727.36	162	0.44
Kamijoro	23	PF 5	2123.5	23.77	27.99		28.48	0.00095	3.11	682.89	162	0.48
Kamijoro	22	PF 5	2123.5	24.01	27.89		28.47	0.00125	3.38	627.9	162	0.55
Kamijoro	21	PF 5	2123.5	24.21	27.76		28.46	0.001661	3.69	575.69	162	0.62
Kamijoro	20	PF 5	2123.5	24.34	27.64		28.45	0.002115	3.97	534.74	162	0.7
Kamijoro	19	PF 5	2123.5	24.43	27.51		28.43	0.002663	4.26	498.52	162	0.78
Kamijoro	18	PF 5	2123.5	24.49	27.33	27.09	28.42	0.003448	4.61	460.81	162	0.87
Kamijoro	17	PF 5	2123.5	24.5	27.1	27.1	28.4	0.004661	5.05	420.46	162	1
Kamijoro	16	PF 5	2123.5	24.49	27.09	27.09	28.39	0.004661	5.05	420.47	162	1
Kamijoro	15	PF 5	2123.5	24.43	27.03	27.03	28.33	0.004661	5.05	420.48	162	1
Kamijoro	14	PF 5	2123.5	24.34	26.94	26.94	28.24	0.00466	5.05	420.49	162	1
Kamijoro	13	PF 5	2123.5	24.21	26.81	26.81	28.11	0.004659	5.05	420.52	162	1
Kamijoro	12	PF 5	2123.5	24.01	26.61	26.61	27.91	0.004658	5.05	420.56	162	1
Kamijoro	11	PF 5	2123.5	23.77	26.37	26.37	27.67	0.004656	5.05	420.61	162	1
Kamijoro	10	PF 5	2123.5	23.53	26.13	26.13	27.43	0.004652	5.05	420.7	162	1
Kamijoro	9	PF 5	2123.5	23.29	26.34		27.28	0.002741	4.3	494.12	162	0.79
Kamijoro	8	PF 5	2123.5	22.79	26.57		27.18	0.001357	3.47	612.22	162	0.57
Kamijoro	7	PF 5	2123.5	22.31	26.68		27.14	0.000847	3	707.28	162	0.46
Kamijoro	6	PF 5	2123.5	21.39	26.79		27.09	0.000425	2.43	874.26	162	0.33
Kamijoro	5	PF 5	2123.5	20.74	26.83		27.07	0.000287	2.15	986.78	162	0.28
Kamijoro	4	PF 5	2123.5	20.37	26.85		27.06	0.000235	2.02	1049.79	162	0.25
Kamijoro	3	PF 5	2123.5	20.1	26.86		27.05	0.000204	1.94	1095.44	162	0.24
Kamijoro	2	PF 5	2123.5	21.1	26.8		27.04	0.000313	2.16	981.27	172.1	0.29
Kamijoro	1	PF 5	2123.5	21.85	26.7		27.03	0.00053	2.54	834.92	172.1	0.37
Kamijoro	0	PF 5	2123.5	22.47	25.71	25.71	26.91	0.004685	4.86	437.25	183.12	1

Lampiran. 22 Data HEC-RAS Rasional 1000 Tahun

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Kamijoro	29	PF 1	1641	24.5	27.39		28.03	0.001971	3.52	465.9	161	0.66
Kamijoro	28	PF 1	1641	22.72	27.66		27.87	0.000338	2.05	800.17	162	0.29
Kamijoro	27	PF 1	1641	23.44	27.56		27.86	0.000613	2.46	666.66	162	0.39
Kamijoro	26	PF 1	1641	23.56	27.53		27.86	0.000691	2.55	642.97	162	0.41
Kamijoro	25	PF 1	1641	23.56	27.53		27.86	0.000691	2.55	642.84	162	0.41
Kamijoro	24	PF 1	1641	23.56	27.53		27.86	0.000691	2.55	642.7	162	0.41
Kamijoro	23	PF 1	1641	23.77	27.47		27.85	0.000866	2.74	599.89	162	0.45
Kamijoro	22	PF 1	1641	24.01	27.39		27.85	0.001171	3	547.28	162	0.52
Kamijoro	21	PF 1	1641	24.21	27.28		27.84	0.001599	3.3	497.71	162	0.6
Kamijoro	20	PF 1	1641	24.34	27.17		27.83	0.002083	3.57	459.19	162	0.68
Kamijoro	19	PF 1	1641	24.43	27.06		27.81	0.00268	3.86	425.34	162	0.76
Kamijoro	18	PF 1	1641	24.49	26.9	26.68	27.8	0.003559	4.21	390.25	162	0.87
Kamijoro	17	PF 1	1641	24.5	26.69	26.69	27.78	0.004898	4.63	354.21	162	1
Kamijoro	16	PF 1	1641	24.49	26.68	26.68	27.77	0.004898	4.63	354.21	162	1
Kamijoro	15	PF 1	1641	24.43	26.62	26.62	27.71	0.004898	4.63	354.21	162	1
Kamijoro	14	PF 1	1641	24.34	26.53	26.53	27.62	0.004898	4.63	354.21	162	1
Kamijoro	13	PF 1	1641	24.21	26.4	26.4	27.49	0.004898	4.63	354.21	162	1
Kamijoro	12	PF 1	1641	24.01	26.2	26.2	27.29	0.004898	4.63	354.22	162	1
Kamijoro	11	PF 1	1641	23.77	25.96	25.96	27.05	0.004897	4.63	354.22	162	1
Kamijoro	10	PF 1	1641	23.53	25.72	25.72	26.81	0.004897	4.63	354.23	162	1
Kamijoro	9	PF 1	1641	23.29	25.89		26.66	0.00278	3.9	420.63	162	0.77
Kamijoro	8	PF 1	1641	22.79	26.09		26.57	0.00126	3.07	535.14	162	0.54
Kamijoro	7	PF 1	1641	22.31	26.18		26.53	0.000747	2.61	627.62	162	0.42
Kamijoro	6	PF 1	1641	21.39	26.27		26.49	0.000351	2.07	791.26	162	0.3
Kamijoro	5	PF 1	1641	20.74	26.31		26.48	0.000229	1.82	902.21	162	0.25
Kamijoro	4	PF 1	1641	20.37	26.32		26.47	0.000184	1.7	964.51	162	0.22
Kamijoro	3	PF 1	1641	20.1	26.33		26.47	0.000159	1.63	1009.69	162	0.21
Kamijoro	2	PF 1	1641	21.1	26.28		26.46	0.000255	1.84	892.25	172.1	0.26
Kamijoro	1	PF 1	1641	21.85	26.21		26.45	0.00045	2.19	749.54	172.1	0.34
Kamijoro	0	PF 1	1641	22.47	25.32	25.32	26.34	0.00494	4.46	367.68	182.23	1

Lampiran. 23 Data HEC-RAS Rasional Mononobe 1000 Tahun

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Kamijoro	29	PF 2	1527.59	24.5	27.27		27.87	0.001974	3.43	445.84	161	0.66
Kamijoro	28	PF 2	1527.59	22.72	27.52		27.72	0.000321	1.96	778.34	162	0.29
Kamijoro	27	PF 2	1527.59	23.44	27.43		27.71	0.00059	2.37	645.84	162	0.38
Kamijoro	26	PF 2	1527.59	23.56	27.4		27.71	0.000666	2.45	622.38	162	0.4
Kamijoro	25	PF 2	1527.59	23.56	27.4		27.71	0.000666	2.45	622.25	162	0.4
Kamijoro	24	PF 2	1527.59	23.56	27.4		27.71	0.000667	2.46	622.12	162	0.4
Kamijoro	23	PF 2	1527.59	23.77	27.35		27.7	0.00084	2.63	579.78	162	0.44
Kamijoro	22	PF 2	1527.59	24.01	27.27		27.7	0.001142	2.89	527.84	162	0.51
Kamijoro	21	PF 2	1527.59	24.21	27.17		27.69	0.00157	3.19	479.09	162	0.59
Kamijoro	20	PF 2	1527.59	24.34	27.06		27.68	0.002056	3.46	441.4	162	0.67
Kamijoro	19	PF 2	1527.59	24.43	26.95		27.66	0.002665	3.74	407.9	162	0.75
Kamijoro	18	PF 2	1527.59	24.49	26.8	26.57	27.65	0.003541	4.08	374.22	162	0.86
Kamijoro	17	PF 2	1527.59	24.5	26.58	26.58	27.63	0.004967	4.52	337.72	162	1
Kamijoro	16	PF 2	1527.59	24.49	26.57	26.57	27.62	0.004967	4.52	337.72	162	1
Kamijoro	15	PF 2	1527.59	24.43	26.51	26.51	27.56	0.004968	4.52	337.71	162	1
Kamijoro	14	PF 2	1527.59	24.34	26.42	26.42	27.47	0.004969	4.52	337.69	162	1
Kamijoro	13	PF 2	1527.59	24.21	26.29	26.29	27.34	0.00497	4.52	337.67	162	1
Kamijoro	12	PF 2	1527.59	24.01	26.09	26.09	27.14	0.004972	4.52	337.63	162	1
Kamijoro	11	PF 2	1527.59	23.77	25.85	25.85	26.9	0.004975	4.53	337.56	162	1
Kamijoro	10	PF 2	1527.59	23.53	25.61	25.61	26.66	0.004979	4.53	337.47	162	1
Kamijoro	9	PF 2	1527.59	23.29	25.77		26.51	0.002795	3.8	402.07	162	0.77
Kamijoro	8	PF 2	1527.59	22.79	25.97		26.42	0.001233	2.96	515.67	162	0.53
Kamijoro	7	PF 2	1527.59	22.31	26.06		26.38	0.000721	2.51	607.49	162	0.41
Kamijoro	6	PF 2	1527.59	21.39	26.14		26.35	0.000332	1.98	770.3	162	0.29
Kamijoro	5	PF 2	1527.59	20.74	26.18		26.33	0.000214	1.73	880.86	162	0.24
Kamijoro	4	PF 2	1527.59	20.37	26.19		26.32	0.000172	1.62	942.99	162	0.21
Kamijoro	3	PF 2	1527.59	20.1	26.2		26.32	0.000148	1.55	988.06	162	0.2
Kamijoro	2	PF 2	1527.59	21.1	26.15		26.31	0.00024	1.76	869.8	172.1	0.25
Kamijoro	1	PF 2	1527.59	21.85	26.08		26.3	0.000429	2.1	727.97	172.1	0.33
Kamijoro	0	PF 2	1527.59	22.47	25.23	25.23	26.2	0.005014	4.36	350.41	182.01	1

Lampiran. 24 Data HEC-RAS Haspers 1000 Tahun

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Kamijoro	29	PF 3	1713.7	24.5	27.48		28.13	0.001962	3.58	478.99	161	0.66
Kamijoro	28	PF 3	1713.7	22.72	27.75		27.97	0.000348	2.1	814.23	162	0.3
Kamijoro	27	PF 3	1713.7	23.44	27.64		27.96	0.000627	2.52	680.13	162	0.39
Kamijoro	26	PF 3	1713.7	23.56	27.61		27.96	0.000704	2.61	656.3	162	0.41
Kamijoro	25	PF 3	1713.7	23.56	27.61		27.96	0.000705	2.61	656.17	162	0.41
Kamijoro	24	PF 3	1713.7	23.56	27.61		27.96	0.000705	2.61	656.03	162	0.41
Kamijoro	23	PF 3	1713.7	23.77	27.55		27.95	0.000881	2.8	612.95	162	0.46
Kamijoro	22	PF 3	1713.7	24.01	27.47		27.94	0.001184	3.06	559.96	162	0.53
Kamijoro	21	PF 3	1713.7	24.21	27.36		27.93	0.00161	3.36	509.97	162	0.6
Kamijoro	20	PF 3	1713.7	24.34	27.25		27.92	0.002089	3.64	471.06	162	0.68
Kamijoro	19	PF 3	1713.7	24.43	27.13		27.91	0.002677	3.92	436.83	162	0.76
Kamijoro	18	PF 3	1713.7	24.49	26.97	26.74	27.9	0.003539	4.27	401.32	162	0.87
Kamijoro	17	PF 3	1713.7	24.5	26.75	26.75	27.88	0.004857	4.7	364.57	162	1
Kamijoro	16	PF 3	1713.7	24.49	26.74	26.74	27.87	0.004857	4.7	364.57	162	1
Kamijoro	15	PF 3	1713.7	24.43	26.68	26.68	27.81	0.004857	4.7	364.57	162	1
Kamijoro	14	PF 3	1713.7	24.34	26.59	26.59	27.72	0.004857	4.7	364.57	162	1
Kamijoro	13	PF 3	1713.7	24.21	26.46	26.46	27.59	0.004857	4.7	364.58	162	1
Kamijoro	12	PF 3	1713.7	24.01	26.26	26.26	27.39	0.004856	4.7	364.59	162	1
Kamijoro	11	PF 3	1713.7	23.77	26.02	26.02	27.15	0.004856	4.7	364.6	162	1
Kamijoro	10	PF 3	1713.7	23.53	25.78	25.78	26.91	0.004855	4.7	364.62	162	1
Kamijoro	9	PF 3	1713.7	23.29	25.96		26.76	0.002772	3.96	432.23	162	0.78
Kamijoro	8	PF 3	1713.7	22.79	26.17		26.67	0.001276	3.13	547.31	162	0.54
Kamijoro	7	PF 3	1713.7	22.31	26.26		26.63	0.000764	2.68	640.2	162	0.43
Kamijoro	6	PF 3	1713.7	21.39	26.36		26.59	0.000363	2.13	804.37	162	0.31
Kamijoro	5	PF 3	1713.7	20.74	26.39		26.57	0.000238	1.87	915.56	162	0.25
Kamijoro	4	PF 3	1713.7	20.37	26.41		26.56	0.000192	1.75	977.97	162	0.23
Kamijoro	3	PF 3	1713.7	20.1	26.42		26.56	0.000166	1.67	1023.22	162	0.21
Kamijoro	2	PF 3	1713.7	21.1	26.37		26.55	0.000264	1.89	906.3	172.1	0.26
Kamijoro	1	PF 3	1713.7	21.85	26.28		26.54	0.000463	2.25	763.02	172.1	0.34
Kamijoro	0	PF 3	1713.7	22.47	25.39	25.39	26.43	0.004892	4.53	378.65	182.37	1

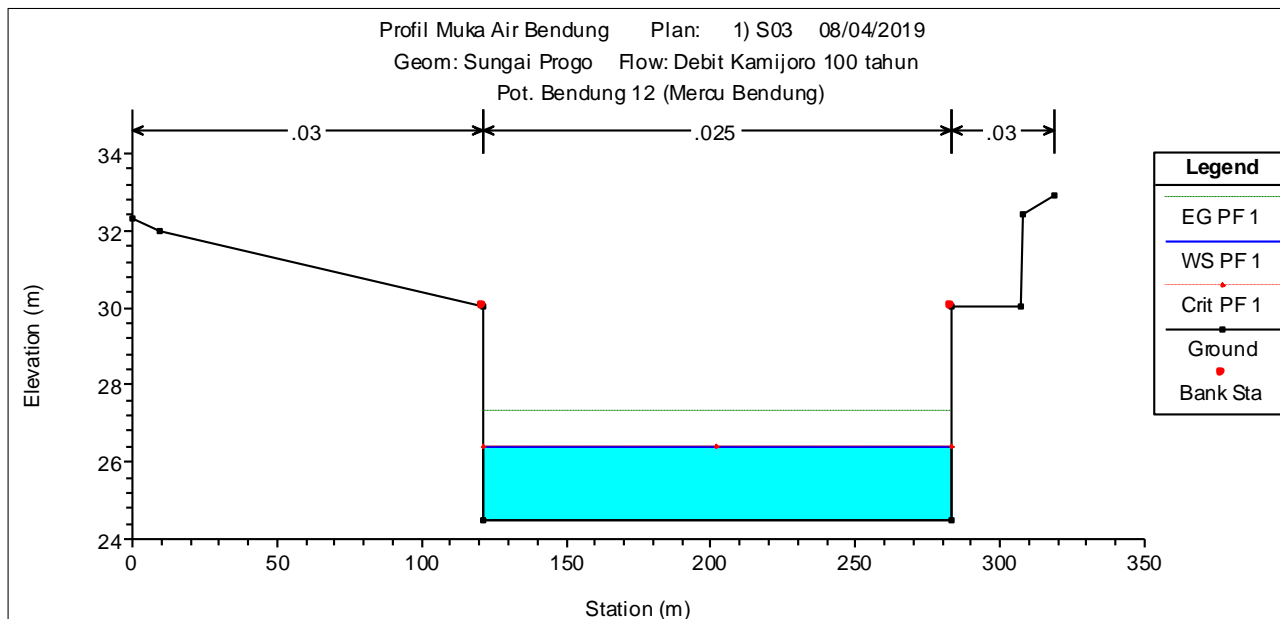
Lampiran. 25 Data HEC-RAS Weduwen 1000 Tahun

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Kamijoro	29	PF 4	778.88	24.5	26.29		26.67	0.002144	2.7	288.96	161	0.64
Kamijoro	28	PF 4	778.88	22.72	26.48		26.56	0.000186	1.28	608.77	162	0.21
Kamijoro	27	PF 4	778.88	23.44	26.42		26.56	0.000396	1.61	483.4	162	0.3
Kamijoro	26	PF 4	778.88	23.56	26.41		26.55	0.000461	1.69	461.59	162	0.32
Kamijoro	25	PF 4	778.88	23.56	26.41		26.55	0.000462	1.69	461.51	162	0.32
Kamijoro	24	PF 4	778.88	23.56	26.41		26.55	0.000462	1.69	461.43	162	0.32
Kamijoro	23	PF 4	778.88	23.77	26.38		26.55	0.000618	1.84	422.38	162	0.36
Kamijoro	22	PF 4	778.88	24.01	26.33		26.55	0.000912	2.08	375.23	162	0.44
Kamijoro	21	PF 4	778.88	24.21	26.26		26.54	0.001368	2.35	331.9	162	0.52
Kamijoro	20	PF 4	778.88	24.34	26.19		26.53	0.001927	2.6	299.17	162	0.61
Kamijoro	19	PF 4	778.88	24.43	26.1		26.52	0.002677	2.88	270.84	162	0.71
Kamijoro	18	PF 4	778.88	24.49	25.99	25.82	26.51	0.003865	3.21	242.37	162	0.84
Kamijoro	17	PF 4	778.88	24.5	25.83	25.83	26.5	0.005673	3.61	215.84	162	1
Kamijoro	16	PF 4	778.88	24.49	25.82	25.82	26.49	0.005674	3.61	215.84	162	1
Kamijoro	15	PF 4	778.88	24.43	25.76	25.76	26.43	0.005675	3.61	215.83	162	1
Kamijoro	14	PF 4	778.88	24.34	25.67	25.67	26.34	0.005676	3.61	215.81	162	1
Kamijoro	13	PF 4	778.88	24.21	25.54	25.54	26.21	0.005679	3.61	215.77	162	1
Kamijoro	12	PF 4	778.88	24.01	25.34	25.34	26.01	0.005683	3.61	215.73	162	1
Kamijoro	11	PF 4	778.88	23.77	25.1	25.1	25.77	0.00569	3.61	215.65	162	1
Kamijoro	10	PF 4	778.88	23.53	24.86	24.86	25.53	0.005701	3.61	215.53	162	1
Kamijoro	9	PF 4	778.88	23.29	24.9		25.36	0.003026	2.98	260.98	162	0.75
Kamijoro	8	PF 4	778.88	22.79	25.06		25.29	0.000978	2.12	367.39	162	0.45
Kamijoro	7	PF 4	778.88	22.31	25.11		25.26	0.000487	1.72	454.02	162	0.33
Kamijoro	6	PF 4	778.88	21.39	25.16		25.24	0.000184	1.28	610.65	162	0.21
Kamijoro	5	PF 4	778.88	20.74	25.18		25.24	0.000108	1.08	718.51	162	0.16
Kamijoro	4	PF 4	778.88	20.37	25.18		25.23	0.000083	1	779.46	162	0.15
Kamijoro	3	PF 4	778.88	20.1	25.19		25.23	0.000069	0.95	823.8	162	0.13
Kamijoro	2	PF 4	778.88	21.1	25.16		25.23	0.000127	1.11	699.18	172.1	0.18
Kamijoro	1	PF 4	778.88	21.85	25.13		25.22	0.000258	1.38	563.66	172.1	0.24
Kamijoro	0	PF 4	778.88	22.47	24.53	24.53	25.15	0.005769	3.49	223.13	180.37	1

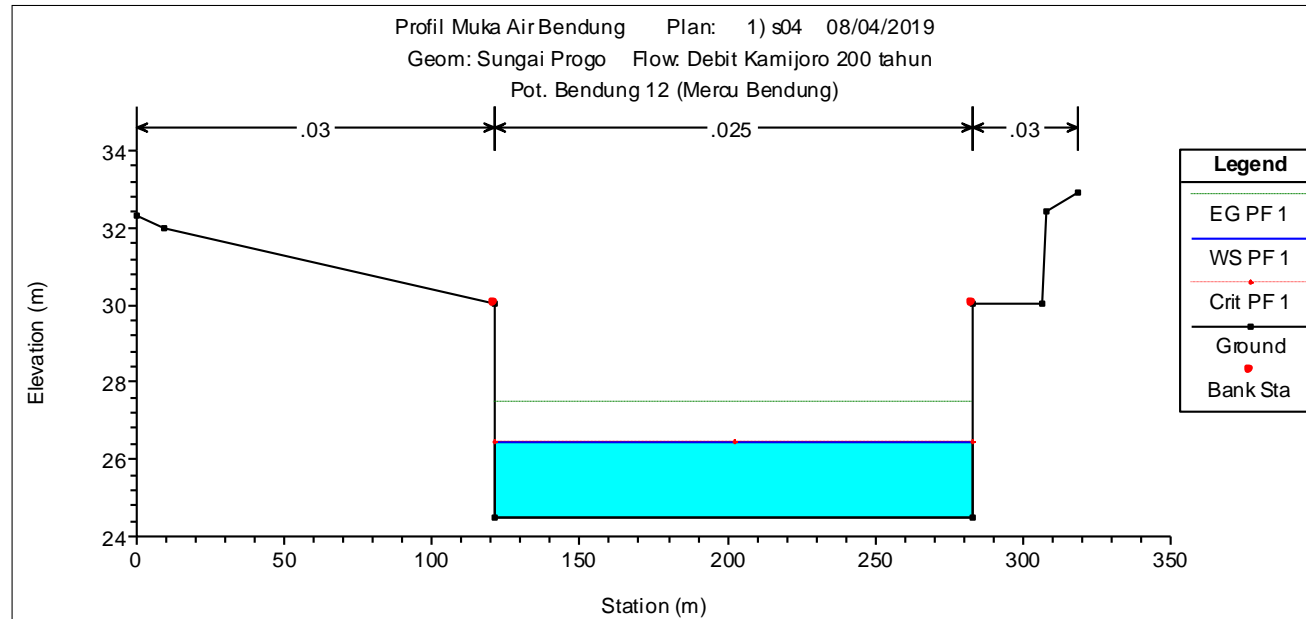
Lampiran. 26 Data HEC-RAS Gama 1 1000 Tahun

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Kamijoro	29	PF 4	778.88	24.5	26.29		26.67	0.002144	2.7	288.96	161	0.64
Kamijoro	28	PF 4	778.88	22.72	26.48		26.56	0.000186	1.28	608.77	162	0.21
Kamijoro	27	PF 4	778.88	23.44	26.42		26.56	0.000396	1.61	483.4	162	0.3
Kamijoro	26	PF 4	778.88	23.56	26.41		26.55	0.000461	1.69	461.59	162	0.32
Kamijoro	25	PF 4	778.88	23.56	26.41		26.55	0.000462	1.69	461.51	162	0.32
Kamijoro	24	PF 4	778.88	23.56	26.41		26.55	0.000462	1.69	461.43	162	0.32
Kamijoro	23	PF 4	778.88	23.77	26.38		26.55	0.000618	1.84	422.38	162	0.36
Kamijoro	22	PF 4	778.88	24.01	26.33		26.55	0.000912	2.08	375.23	162	0.44
Kamijoro	21	PF 4	778.88	24.21	26.26		26.54	0.001368	2.35	331.9	162	0.52
Kamijoro	20	PF 4	778.88	24.34	26.19		26.53	0.001927	2.6	299.17	162	0.61
Kamijoro	19	PF 4	778.88	24.43	26.1		26.52	0.002677	2.88	270.84	162	0.71
Kamijoro	18	PF 4	778.88	24.49	25.99	25.82	26.51	0.003865	3.21	242.37	162	0.84
Kamijoro	17	PF 4	778.88	24.5	25.83	25.83	26.5	0.005673	3.61	215.84	162	1
Kamijoro	16	PF 4	778.88	24.49	25.82	25.82	26.49	0.005674	3.61	215.84	162	1
Kamijoro	15	PF 4	778.88	24.43	25.76	25.76	26.43	0.005675	3.61	215.83	162	1
Kamijoro	14	PF 4	778.88	24.34	25.67	25.67	26.34	0.005676	3.61	215.81	162	1
Kamijoro	13	PF 4	778.88	24.21	25.54	25.54	26.21	0.005679	3.61	215.77	162	1
Kamijoro	12	PF 4	778.88	24.01	25.34	25.34	26.01	0.005683	3.61	215.73	162	1
Kamijoro	11	PF 4	778.88	23.77	25.1	25.1	25.77	0.00569	3.61	215.65	162	1
Kamijoro	10	PF 4	778.88	23.53	24.86	24.86	25.53	0.005701	3.61	215.53	162	1
Kamijoro	9	PF 4	778.88	23.29	24.9		25.36	0.003026	2.98	260.98	162	0.75
Kamijoro	8	PF 4	778.88	22.79	25.06		25.29	0.000978	2.12	367.39	162	0.45
Kamijoro	7	PF 4	778.88	22.31	25.11		25.26	0.000487	1.72	454.02	162	0.33
Kamijoro	6	PF 4	778.88	21.39	25.16		25.24	0.000184	1.28	610.65	162	0.21
Kamijoro	5	PF 4	778.88	20.74	25.18		25.24	0.000108	1.08	718.51	162	0.16
Kamijoro	4	PF 4	778.88	20.37	25.18		25.23	0.000083	1	779.46	162	0.15
Kamijoro	3	PF 4	778.88	20.1	25.19		25.23	0.000069	0.95	823.8	162	0.13
Kamijoro	2	PF 4	778.88	21.1	25.16		25.23	0.000127	1.11	699.18	172.1	0.18
Kamijoro	1	PF 4	778.88	21.85	25.13		25.22	0.000258	1.38	563.66	172.1	0.24
Kamijoro	0	PF 4	778.88	22.47	24.53	24.53	25.15	0.005769	3.49	223.13	180.37	1

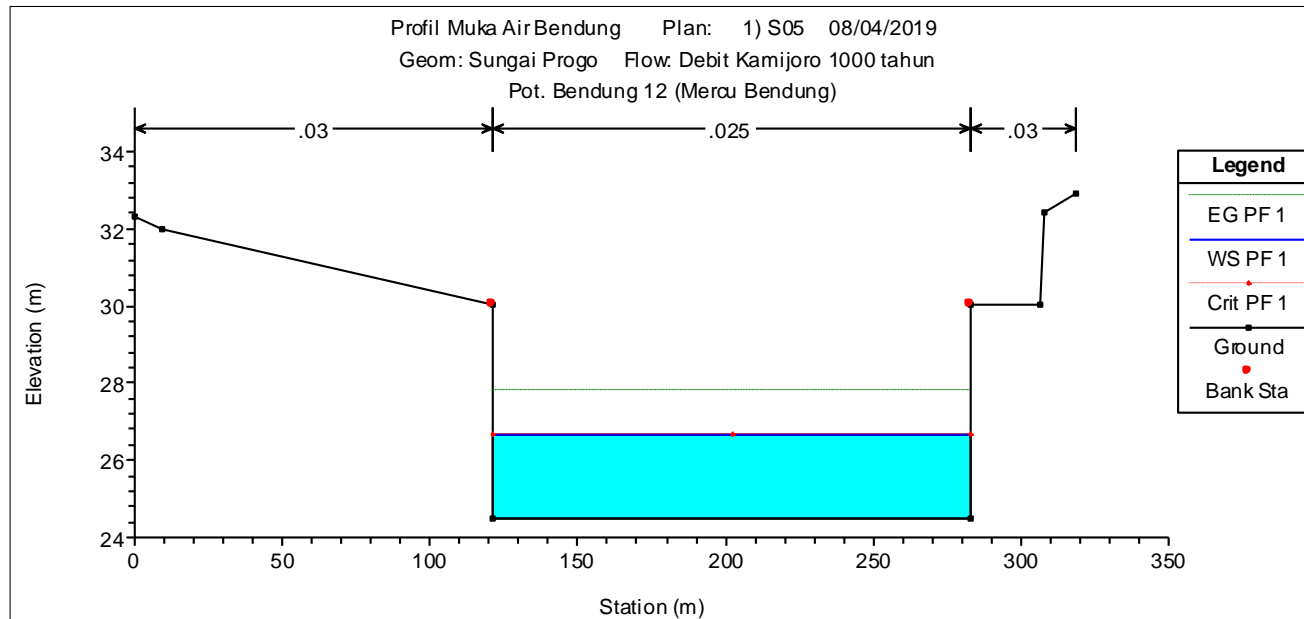
Lampiran. 27 Potongan Mercu Bendung dengan Debit Rasional 100 Tahun



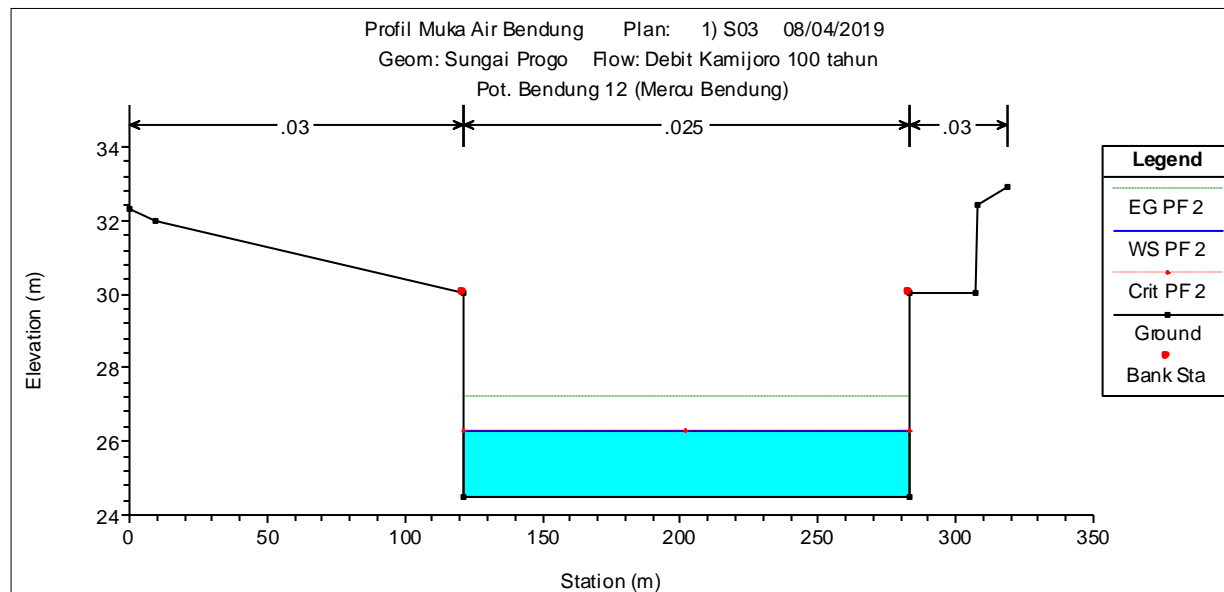
Lampiran. 28 Potongan Mercu Bendung dengan Debit Rasional 200 Tahun



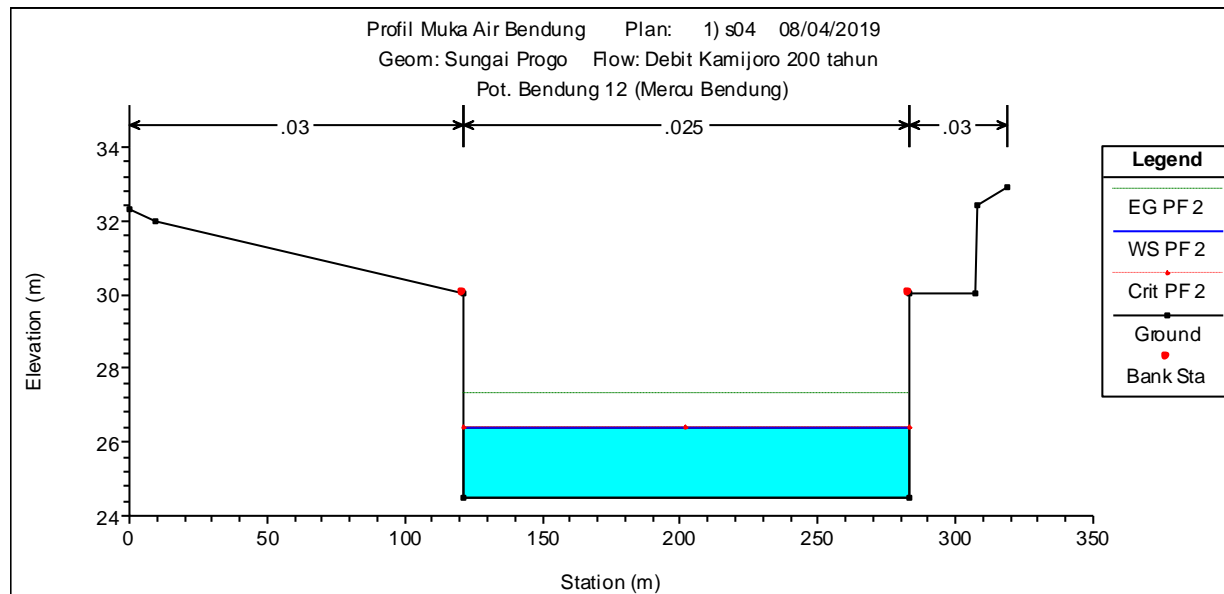
Lampiran. 29 Potongan Mercu Bendung Debit Rasional 1000 Tahun



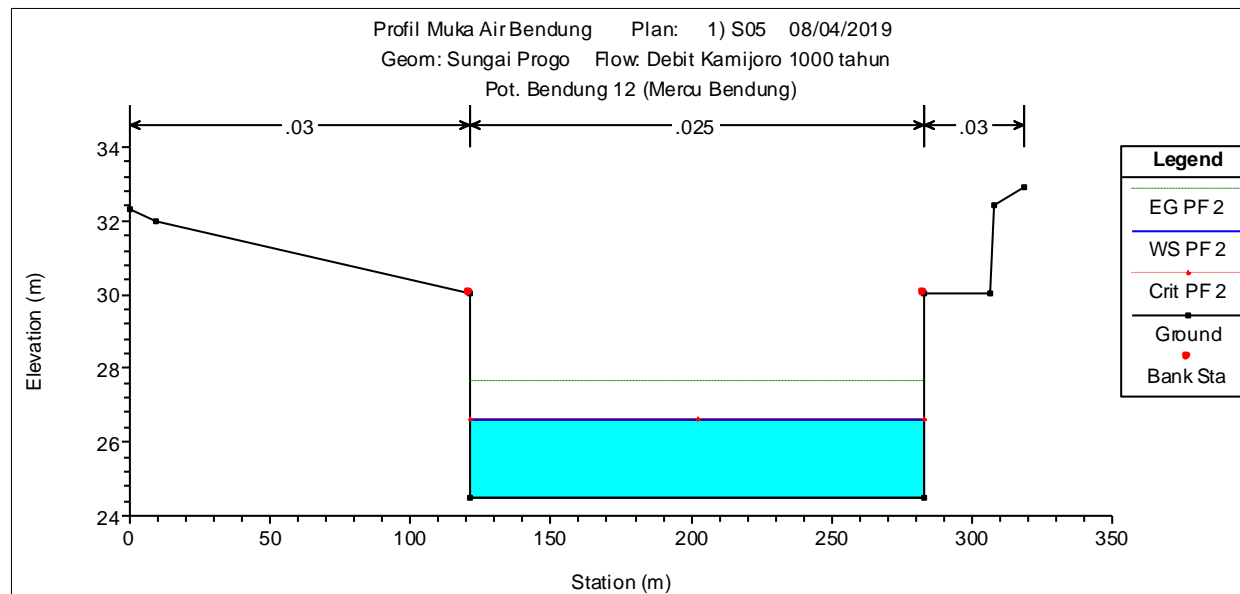
Lampiran. 30 Potongan Mercu Bendung Debit Rasional Mononobe 100 Tahun



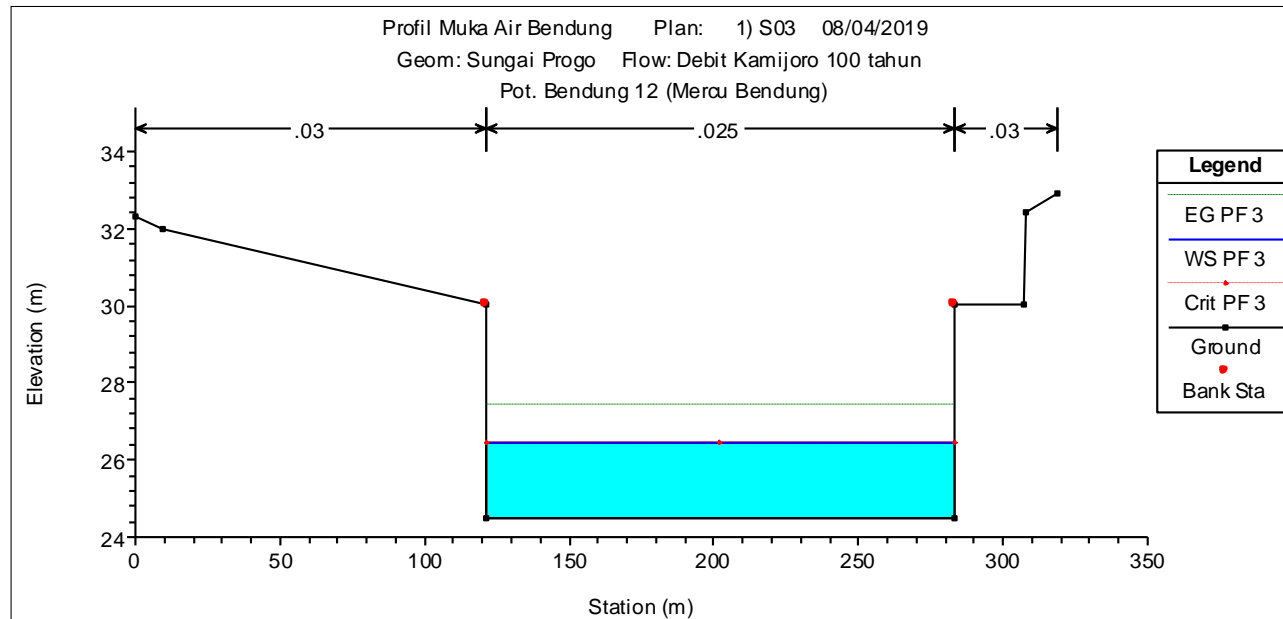
Lampiran. 31 Potongan Mercu Bendung Debit Rasional Mononobe 200 Tahun



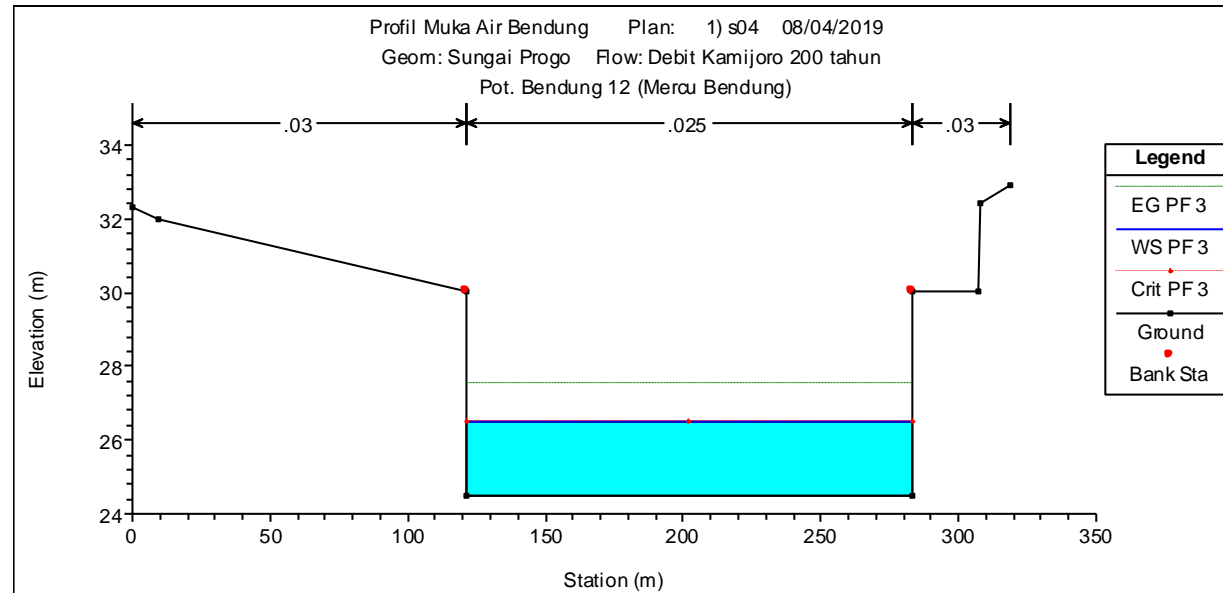
Lampiran. 32 Potongan Mercu Bendung Debit Rasional Mononobe 1000 Tahun



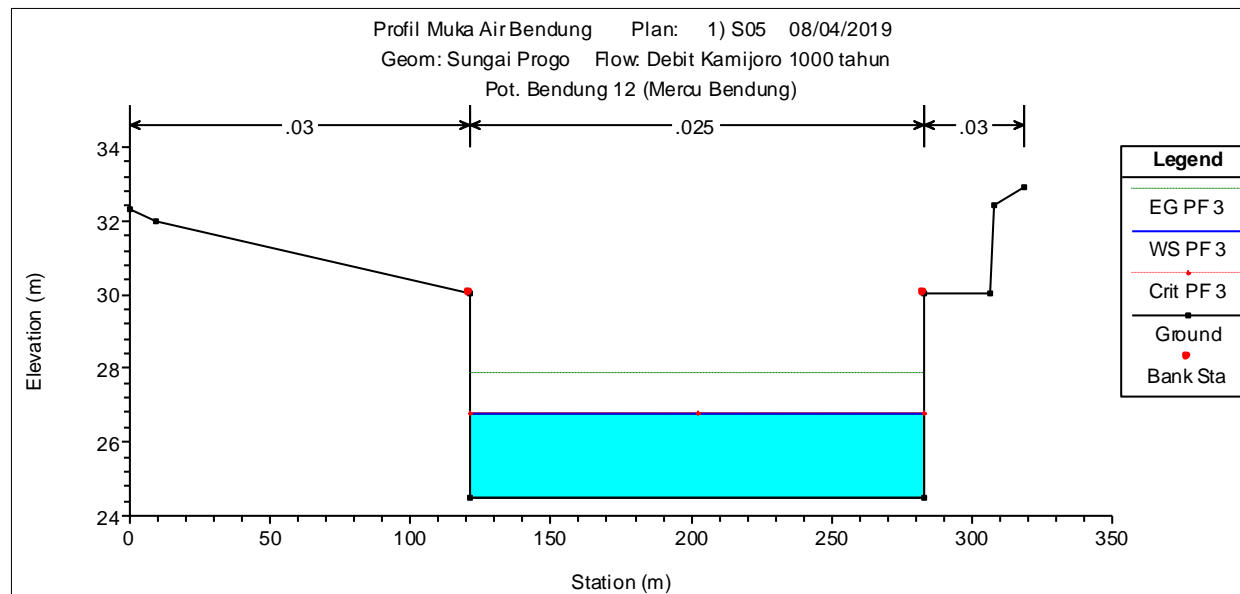
Lampiran. 33 Potongan Mercu Bendung Debit Haspers 100 Tahun



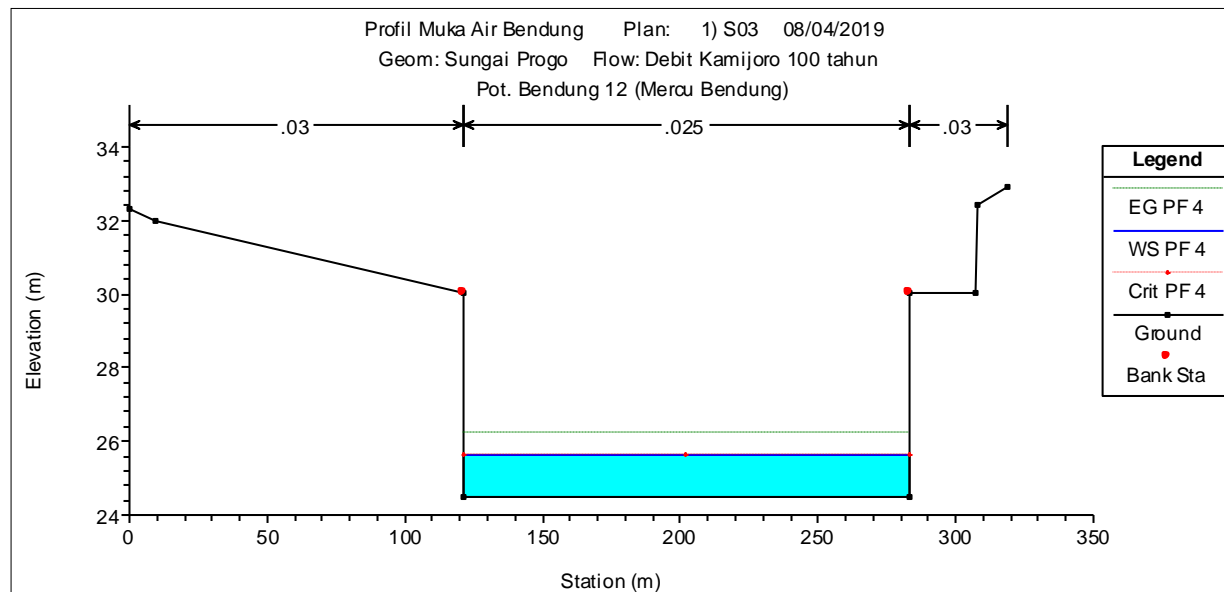
Lampiran. 34 Potongan Mercu Bendung Debit Haspers 200 Tahun



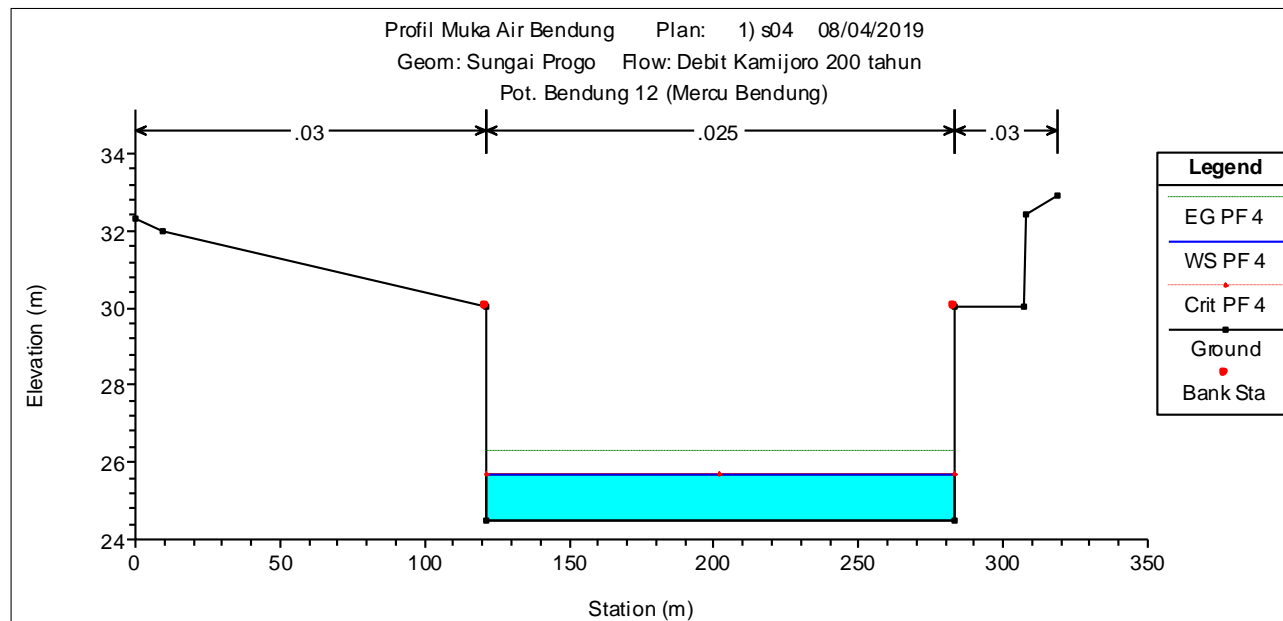
Lampiran. 35 Potongan Mercu Bendung Debit Haspers 1000 Tahun



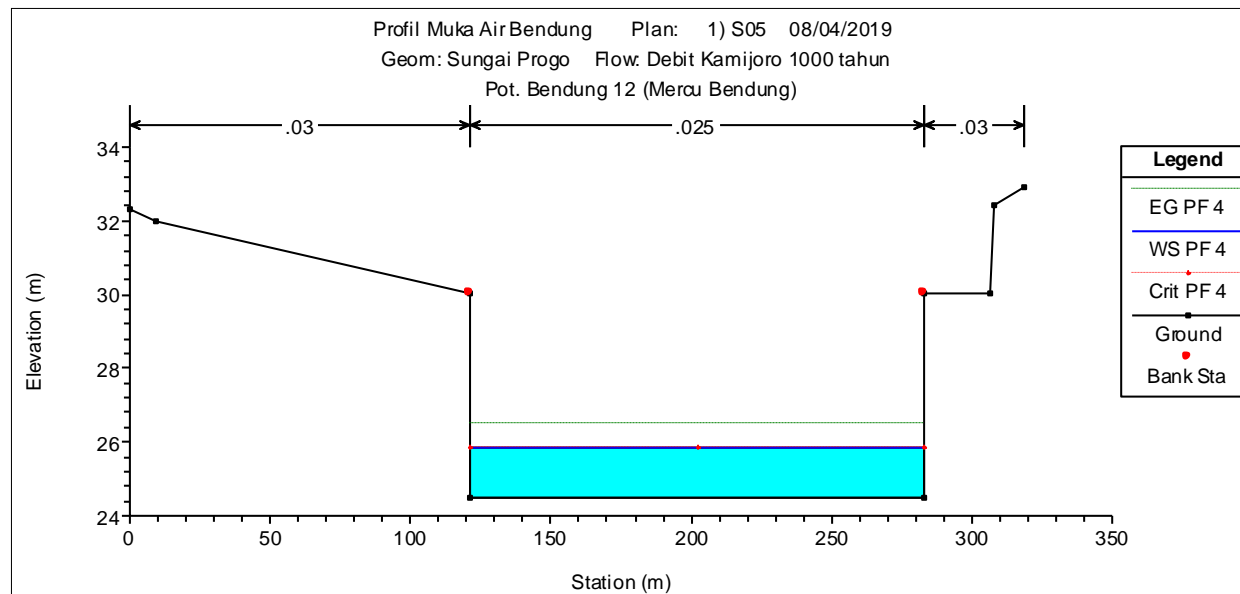
Lampiran. 36 Potongan Mercu Bendung Debit Weduwen 100 Tahun



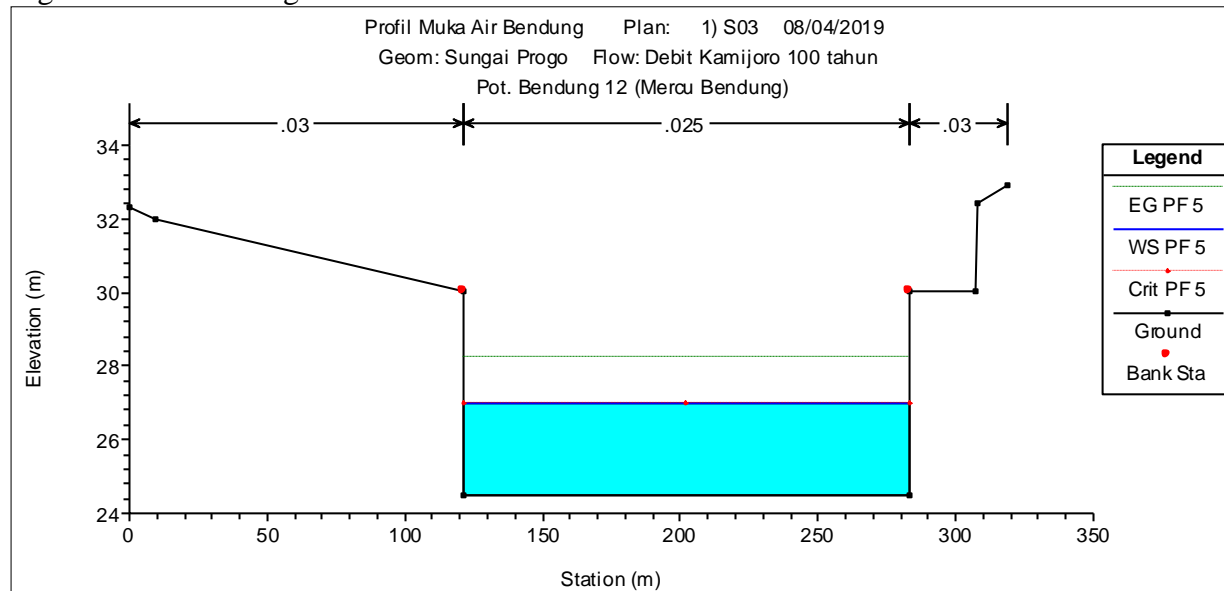
Lampiran. 37 Potongan Mercuri Bendung Debit Weduwen 200 Tahun



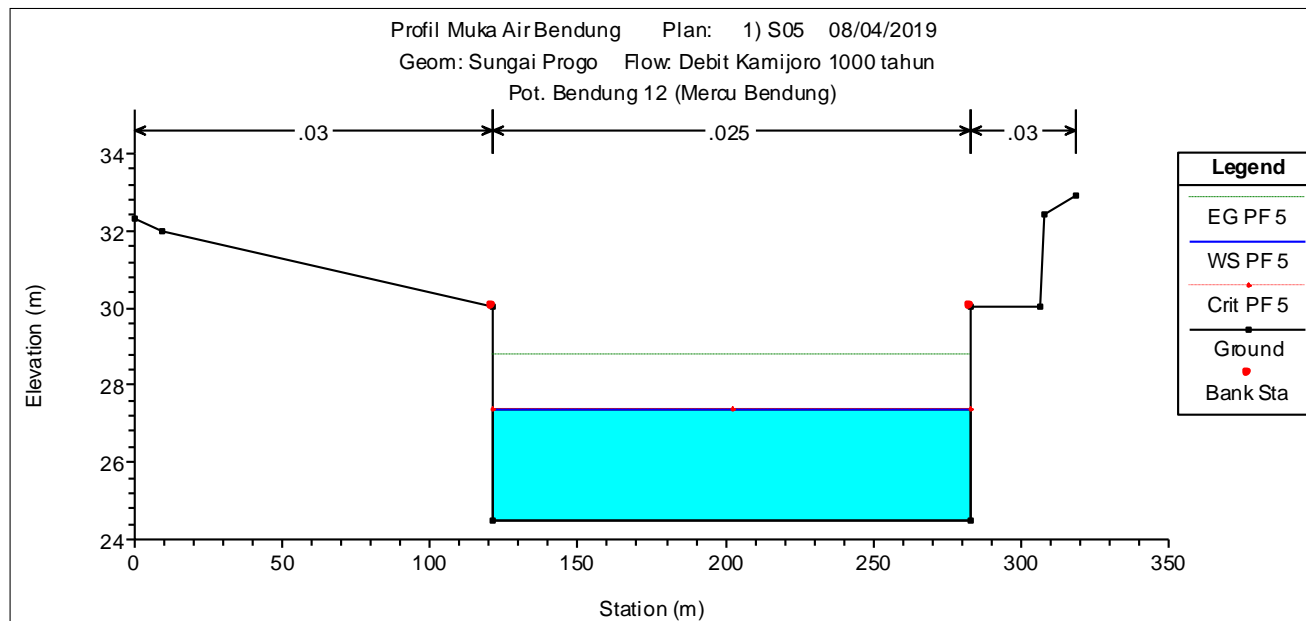
Lampiran. 38 Potongan Mercu Bendung Debit Weduwen 1000 Tahun



Lampiran. 39 Potongan Mercu Bendung Debit Gama 1 100 Tahun



Lampiran. 41 Potongan Mercu Bendung Debit Gama 1 1000 Tahun



Lampiran. 44 Gambar Potongan *Endshell* Bendung

