2 BRIDGE AND CULVERT

Summary of Work Quantities for Bridge and Road, Package 1 (1/2)

Item No.	Description	Unit	Total	Stage 1	Stage 2	Stage 3
4	BRIDGE AND ROAD					
4.1	Care of River					
/ 01	Coffering and care of water including dewatering	L.S.				
/ 02	Demolishing, hauling and disposing concrete structures	cu.m	313	11	104	198
/ 03	Demolishing, hauling and disposing asphalt/masonry structures	cu.m	843	21	196	626
4.2	Foundation and Substructure					
/ 01	Furnishing and driving test PC pile, 350 mm, A type, L= 10 m	nos.	1	0	0	1
/ 02	Furnishing and driving test PC pile, 350 mm, A type, L= 11 m	nos.	4	0	3	1
/ 03	Furnishing and driving test PC pile, 350 mm, A type, L= 12 m	nos.	8	1	2	5
/ 04	Furnishing and driving test PC pile, 350 mm, A type, L= 13 m	nos.	7	0	0	7
/ 05	Furnishing and driving test PC pile, 350 mm, A type, L= 14 m	nos.	1	0	1	0
/ 06	Furnishing and driving test PC pile, 350 mm, A type, L= 15 m	nos.	1	0	0	1
/ 07	Furnishing and driving test PC pile, 350 mm, A type, L= 18 m	nos.	2	0	0	2
/ 08	Furnishing and driving test PC pile, 350 mm, B type, L= 18 m	nos.	2	0	0	2
/ 09	Furnishing PC pile, 350 mm, A type, L= 10 m	nos.	7	0	0	7
/ 10	Driving PC piles, for Item No. 4.2/09	lin.m	50	0	0	50
/ 11	Furnishing PC pile, 350 mm, A type, L= 11 m	nos.	36	0	25	11
/ 12	Driving PC piles, for Item No. 4.2/11	lin.m	306	0	216	90
/ 13	Furnishing PC pile, 350 mm, A type, L= 12 m	nos.	78	7	18	53
/ 14	Driving PC piles, for Item No. 4.2/13	lin.m	771	70	180	521
/ 15	Furnishing PC pile, 350 mm, A type, L= 13 m	nos.	45	0	0	45
/ 16	Driving PC piles, for Item No. 4.2/15	lin.m	488	0	0	488
/ 17	Furnishing PC pile, 350 mm, A type, L= 14 m	nos.	15	0	15	0
/ 18	Driving PC piles, for Item No. 4.2/17	lin.m	180	0	180	0
/ 19	Furnishing PC pile, 350 mm, A type, L= 15 m	nos.	7	0	0	7
/ 20	Driving PC piles, for Item No. 4.2/19	lin.m	85	0	0	85
/ 21	Furnishing PC pile, 350 mm, A type, L= 18 m	nos.	24	0	0	24
/ 22	Driving PC piles, for Item No. 4.2/21	lin.m	369	0	0	369
/ 23	Furnishing PC pile, 350 mm, B type, L= 12 m	nos.	56	12	0	44
/ 24	Driving PC piles, for Item No. 4.2/23	lin.m	536	162	0	374
/ 25	Furnishing PC pile, 350 mm, B type, L= 13 m	nos.	26	0	0	26
/ 26	Driving PC piles, for Item No. 4.2/25	lin.m	247	0	0	247
/ 27	Furnishing PC pile, 350 mm, B type, L= 18 m	nos.	4	0	0	4
/ 28	Driving PC piles, for Item No. 4.2/27	lin.m	58	0	0	58
/ 29	Furnishing PC pile, 400 mm, B type, L= 11 m	nos.	8	0	8	0
/ 30	Driving PC piles, for Item No. 4.2/29	lin.m	60	0	60	0
/ 31	Furnishing PC pile, 400 mm, B type, L= 12 m	nos.	20	0	20	0
/ 32	Driving PC piles, for Item No. 4.2/31	lin.m	170	0	170	0
/ 33	Furnishing PC pile, 400 mm, B type, L= 14 m	nos.	24	0	24	0
/ 34	Driving PC piles, for Item No. 4.2/33	lin.m	252	0	252	0
/ 35	Concrete, type 2, for bridge slab, pier and abutment	cu.m	564	25	168	371
/ 36	Concrete, type 5, for leveling, t = 10 cm.	cu.m	31	1	8	22
/ 37	Form, type F1, for Item Nos. 4.2/35 and 4.2/36	sq.m	1,201	52	332	817
/ 38	Reinforcing bars, for Item No. 4.2/35	kg	54,812	2,661	17,210	34,941
4.3	Superstructure					
/ 01	Furnish and erection of PC girder, H=400mm, L=7.3m, BM-70	pc.	64	0	0	64
/ 02	Furnish and erection of PC girgder,H=450mm, L=8.4m, BM-70	pc.	120	0	0	120
/ 03	Furnish and erection of PC girgder,H=450mm, L=10.5m, BM-70	pc.	18	0	18	0
/ 04	Furnish and erection of PC girgder,H=450mm, L=11.9m, BM-70	pc.	72	0	0	72
/ 05	Furnish and erection of PC girgder,H=500mm, L=13.35m, BM-70	pc.	36	0	36	0
/ 06	Furnish and erection of PC girgder,H=500mm, L=14.15m, BM-70	pc.	48	0	48	0
/ 07	Furnish and erection of PC girgder,H=550mm, L=14.9m, BM-70	pc.	18	18	0	0
/ 08	Furnish and erection of PC girgder,H=500mm, L=12.9m, BM-100	pc.	18	0	18	0
/ 09	Furnish and erection of PC girgder,H=350mm, L=7.3m, Pedestrian	pc.	12	0	0	12
/ 10	Furnish and erection of PC girgder,H=350mm, L=8.4m, Pedestrian	pc.	6	0	0	6
/ 11	Furnish and erection of PC girgder,H=450mm, L=13.1m, Pedestrian	pc.	9	0	9	0
/ 12	PC tendon and ancillary materials	lin.m	5,235	347	2,180	2,708
/ 13	Concrete, type 2, for lateral girder, side wall and in-situ slab	cu.m	539	33	189	317
/ 14	Concrete, type 4, for side walk	cu.m	73	0	41	32
/ 15	Form, type F1, for Item Nos. 4.3/13 and 4.3/14	sq.m	2,781	170	889	1,722
/ 16	Reinforcing bars, for Item Nos. 4.3/13 and 4.3/14	kg	16,237	862	5,769	9,606

Summary of Work Quantities for Bridge and Road, Package 1 (2/2)

Item No.	Description	Unit	Total	Stage 1	Stage 2	Stage 3
/ 17	Curb stone	lin.m	332	0	188	144
/ 18	Rubber bearing pad, t=33mm, W=150mm	lin.m	628.7	27.4	192.3	409.0
/ 19	Non-shrink mortar with grid bars, for shoe base	lit.	7,860.0	330.0	2,290.0	5,240.0
/ 20	Anchoring in fixed bearing shoe	nos.	359	15	110	234
/ 21	Anchoring in movable bearing shoe	nos.	359	15	110	234
/ 22	Guard pipe for Road bridge, H=0.4m	lin.m	931.1	81.0	258.9	591.2
/ 23	Guard pipe for pedestrian bridge, H=1.0m	lin.m	310.7	0.0	218.7	92.0
/ 24	Drain pipe (D=100mm, L=84cm) with cap (300x150mm)	nos.	60	0	36	24
/ 25	Drain pipe, D=75mm, L=70cm	nos.	124	12	0	112
/ 26	Drain pipe, D=75mm, L=40cm	nos.	36	0	24	12
/ 27	Expansion joint, for road bridge	lin.m	419.7	18.4	104.8	296.5
/ 28	Expansion joint, for pedestrian and in-situ slab bridges	lin.m	52.5	0.0	30.0	22.5
/ 29	Asphalt pavement	cu.m	225	13	85	127
4.4	Approach Road					
/ 01	Removal of existing asphalt/base pavement	sq.m	15,745	717	3,591	11,437
/ 02	Excavation	cu.m	3,025	48	394	2,583
/ 03	Back filling	cu.m	2,254	44	352	1,858
/ 04	Wet rubble/cobble masonry for slope protection	cu.m	104	104	0	0
/ 05	Concrete, type 3, for approach step	cu.m	52	0	21	31
/ 06	Concrete, type 4, for side wall	cu.m	2,742	43	378	2,321
/ 07	Concrete, type 5, for foundation concrete	cu.m	1,006	15	120	871
/ 08	Form, type F1, for Item Nos. 4.4'05 and 4.4'06	sq.m	14,454	219	2,096	12,139
/ 09	Form, type F2, for Item Nos. 4.4'05 to 4.4'07	sq.m	2,531	30	249	2,252
/ 10	Reinforcing bars, for Item Nos. 4.4'05 and 4.4'06	kg	5,720	0	2,880	2,840
/ 11	Precast concrete drain block, type 5a	nos.	3,697	357	1,070	2,270
/ 12	Precast concrete side ditch, 300 x 300 mm	lin.m	6,989	214	903	5,872
/ 13	Embankment and sub-grade	cu.m	5,012	126	851	4,035
/ 14	Sub-base course	cu.m	2,709	109	613	1,987
/ 15	Base course	cu.m	2,035	82	461	1,492
/ 16	Asphalt pavement	cu.m	685	28	155	502
/ 17	Guardrail, concrete post	lin.m	158	0	60	98

Summary of Work Quantities for Bridge and Road, Package 2 (1/2)

Item No.	Description	Unit	Total	Tanjungan	PIK
4	BRIDGE AND ROAD				
4.1	Care of River				
/ 01	Coffering and care of water including dewatering	L.S.			
/ 02	Demolishing, hauling and disposing concrete structures	cu.m	78	77	1
/ 03	Demolishing, hauling and disposing asphalt/masonry structures	cu.m	270	248	22
4.2	Foundation and Substructure				
/ 01	Furnishing and driving test PC pile, 350 mm, A type, L= 11 m	nos.	1	1	0
/ 02	Furnishing and driving test PC pile, 350 mm, A type, L= 12 m	nos.	1	1	0
/ 03	Furnishing and driving test PC pile, 350 mm, A type, L= 13 m	nos.	1	1	0
/ 04	Furnishing and driving test PC pile, 350 mm, A type, L= 17 m	nos.	1	1	0
/ 05	Furnishing PC pile, 350 mm, A type, L= 11 m	nos.	9	9	0
/ 06	Driving PC piles, for Item No. 4.2/05	lin.m	86	86	0
/ 07	Furnishing PC pile, 350 mm, A type, L= 12 m	nos.	9	9	0
/ 08	Driving PC piles, for Item No. 4.2/07	lin.m	90	90	0
/ 09	Furnishing PC pile, 350 mm, A type, L= 13 m	nos.	15	15	0
/ 10	Driving PC piles, for Item No. 4.2/09	lin.m	176	176	0
/ 11	Furnishing PC pile, 350 mm, A type, L= 17 m	nos.	11	11	0
/ 12	Driving PC piles, for Item No. 4.2/11	lin.m	165	165	0
/ 13	Furnishing PC pile, 350 mm, B type, L= 11 m	nos.	8	8	0
/ 14	Driving PC piles, for Item No. 4.2/13	lin.m	60	60	0
/ 15	Furnishing PC pile, 350 mm, B type, L= 12 m	nos.	8	8	0
/ 16	Driving PC piles, for Item No. 4.2/15	lin.m	68	68	0
/ 17	Furnishing PC pile, 350 mm, B type, L= 13 m	nos.	8	8	0
/ 18	Driving PC piles, for Item No. 4.2/17	lin.m	76	76	0
/ 19	Furnishing PC pile, 350 mm, B type, L= 17 m	nos.	12	12	0
/ 20	Driving PC piles, for Item No. 4.2/19	lin.m	162	162	0
/ 21	Concrete, type 2, for bridge slab, pier and abutment	cu.m	231	156	75
/ 22	Concrete, type 5, for leveling, t = 10 cm.	cu.m	16	9	7
/ 23	Form, type F1, for Item Nos. 4.2/21 and 4.2/22	sq.m	631	319	312
/ 24	Reinforcing bars, for Item No. 4.2/21	kg	21,284	14,574	6,710
4.3	Superstructure				
/ 03	Furnish and erection of PC girgder,H=450mm, L=9.6m, BM-70	pc.	64	64	0
/ 11	Furnish and erection of PC girgder,H=550mm, L=14.1m, BM-70	pc.	24	24	0
/ 17	Furnish and erection of PC girgder,H=500mm, L=12.9m, BM-100	pc.	28	28	0
/ 30	Concrete, type 2, for lateral girder, side wall and in-situ slab	cu.m	1,574	1,561	13
/ 31	Concrete, type 4, for side walk	cu.m	139	139	0
/ 32	Form, type F1, for Item Nos. 4.3/30 and 4.3/31	sq.m	86	0	86
/ 33	Reinforcing bars, for Item Nos. 4.3/30 and 4.3/31	kg	1,918	596	1,322
/ 34	Curb stone	lin.m	3,618	3,618	0
/ 36	Non-shrink mortar with grid bars, for shoe base	lit.	172.3	172.3	0.0
/ 37	Anchoring in fixed bearing shoe	nos.	1,940	1,940	0
/ 38	Anchoring in movable bearing shoe	nos.	107	107	0
/ 39	Bearing shoe, fix	nos.	107	107	0
/ 41	Guard pipe for Road bridge, H=0.4m	lin.m	12.4	0.0	12.4
/ 42	Guard pipe for pedestrian bridge, H=1.0m	lin.m	205.4	205.4	0.0
/ 45	Drain pipe, D=75mm, L=40cm	nos.	36	36	0
/ 47	Expansion joint, for pedestrian and in-situ slab bridges	lin.m	147.1	134.7	12.4
/ 48	Asphalt pavement	cu.m	86	82	4
4.4	Approach Cushion Slab				
/ 01	Concrete, type 4, for slab	cu.m	19	19	0
/ 02	Form, type F1, for Item No. 4.4/01	sq.m	64	64	0
/ 03	Reinforcing bars, for Item No. 4.4/01	kg	2,165	2,165	0
4.5	Approach Road				
/ 01	Removal of existing concrete pavement	sq.m	4,661	4,661	0
/ 02	Removal of existing asphalt/base pavement	sq.m	1,075	1,075	0
/ 03	Excavation	cu.m	425	425	0
/ 04	Back filling	cu.m	288	288	0
/ 05	Wet rubble/cobble masonry for slope protection	cu.m	478	478	0

Summary of Work Quantities for Bridge and Road, Package 2 (2/2)

Item No.	Description	Unit	Total	Tanjungan	PIK
/ 06	Concrete, type 4, for side wall	cu.m	465	465	0
/ 07	Concrete, type 5, for foundation concrete	cu.m	147	147	0
/ 08	Form, type F1, for Item No. 4.5/06	sq.m	1,894	1,894	0
/ 09	Form, type F2, for Item Nos. 4.5/06 to 4.5/07	sq.m	277	277	0
/ 10	Precast concrete drain block, type 5a	nos.	1,440	1,440	0
/ 11	Precast concrete side ditch, 300 x 300 mm	lin.m	864	864	0
/ 12	Embankment and sub-grade	cu.m	2,732	2,732	0
/ 13	Sub-base course	cu.m	925	925	0
/ 14	Base course	cu.m	695	695	0
/ 15	Asphalt pavement	cu.m	234	234	0

Summary of Work Quantities for Bridge and Road, Package 3 (1/2)

Item No.	Description	Unit	Total	Gede/Bor	S.Cengk	Meruya
4	BRIDGE AND ROAD					
4.1	Care of River					
/ 01	Coffering and care of water including dewatering	L.S.				
/ 02	Demolishing, hauling and disposing concrete structures	cu.m	231	42	189	0
/ 03	Demolishing, hauling and disposing asphalt/masonry structures	cu.m	1,059	387	672	0
/ 04	Demolishing, hauling and disposing steel members	ton	10.7	4.0	6.7	0.0
4.2	Foundation and Substructure					
/ 01	Furnishing and driving test PC pile, 350 mm, A type, L= 7 m	nos.	2	0	2	0
/ 02	Furnishing and driving test PC pile, 350 mm, A type, L= 8 m	nos.	4	0	4	0
/ 03	Furnishing and driving test PC pile, 350 mm, A type, L= 9 m	nos.	5	1	4	0
/ 04	Furnishing and driving test PC pile, 350 mm, A type, L= 10 m	nos.	6	4	2	0
/ 05	Furnishing and driving test PC pile, 350 mm, A type, L= 11 m	nos.	6	5	1	0
/ 06	Furnishing PC pile, 350 mm, A type, L= 7 m	nos.	22	0	22	0
/ 07	Driving PC piles, for Item No. 4.2/06	lin.m	115	0	115	0
/ 08	Furnishing PC pile, 350 mm, A type, L= 8 m	nos.	12	0	12	0
/ 09	Driving PC piles, for Item No. 4.2/08	lin.m	113	0	113	0
/ 10	Furnishing PC pile, 350 mm, A type, L= 9 m	nos.	43	3	40	0
/ 11	Driving PC piles, for Item No. 4.2/10	lin.m	294	21	273	0
/ 12	Furnishing PC pile, 350 mm, A type, L= 10 m	nos.	70	44	26	0
/ 13	Driving PC piles, for Item No. 4.2/12	lin.m	560	352	208	0
/ 14	Furnishing PC pile, 350 mm, A type, L= 11 m	nos.	54	43	11	0
/ 15	Driving PC piles, for Item No. 4.2/14	lin.m	486	387	99	0
/ 16	Concrete, type 2, for bridge slab, pier and abutment	cu.m	854	182	239	433
/ 17	Concrete, type 5, for leveling, t = 10 cm.	cu.m	71	15	23	33
/ 18	Form, type F1, for Item Nos. 4.2/16 and 4.2/17	sq.m	2,621	443	580	1,598
/ 19	Reinforcing bars, for Item No. 4.2/16	kg	76,987	17,692	24,544	34,751
4.3	Superstructure					
/ 01	Furnish and erection of PC girgder,H=450mm, L=10.5m, BM-70	pc.	12	0	12	0
/ 02	Furnish and erection of PC girgder,H=450mm, L=11.3m, BM-70	pc.	10	0	10	0
/ 03	Furnish and erection of PC girgder,H=550mm, L=14.1m, BM-70	pc.	8	0	8	0
/ 04	Furnish and erection of PC girgder,H=550mm, L=14.9m, BM-70	pc.	8	0	8	0
/ 05	Furnish and erection of PC girgder,H=650mm, L=15.8m, BM-70	pc.	100	66	34	0
/ 06	Furnish and erection of PC girgder,H=700mm, L=15.8m, BM-70	pc.	4	4	0	0
/ 07	Furnish and erection of PC girgder,H=550mm, L=13.5m, BM-100	pc.	32	0	32	0
/ 08	Furnish and erection of PC girgder,H=450mm, L=12.6m, Pedestrian	pc.	9	0	9	0
/ 09	Furnish and erection of PC girgder,H=450mm, L=14.6m, Pedestrian	pc.	6	3	3	0
/ 10	PC tendon and ancillary materials	lin.m	2,799	1,393	1,406	0
/ 11	Concrete, type 2, for lateral girder, side wall and in-situ slab	cu.m	439	188	211	40
/ 12	Concrete, type 4, for side walk	cu.m	26	14	12	0
/ 13	Form, type F1, for Item Nos. 4.3/11 and 4.3/12	sq.m	1,991	818	880	293
/ 14	Reinforcing bars, for Item Nos. 4.3/11 and 4.3/12	kg	17,784	5,257	5,792	6,735
/ 15	Curb stone	lin.m	96.0	64.0	32.0	0.0
/ 16	Rubber bearing pad, t=33mm, W=150mm	lin.m	191.4	109.4	82.0	0.0
/ 17	Non-shrink mortar with grid bars, for shoe base	lit.	2,860	1,080	1,780	0
/ 18	Anchoring in fixed bearing shoe	nos.	158	63	95	0
/ 19	Anchoring in movable bearing shoe	nos.	158	63	95	0
/ 20	Guard pipe for Road bridge, H=0.4m	lin.m	545.6	284.4	255.6	5.6
/ 21	Guard pipe for pedestrian bridge, H=1.0m	lin.m	145.8	31.6	114.2	0.0
/ 22	Drain pipe (D=100mm, L=84cm) with cap (300x150mm)	nos.	12	8	4	0
/ 23	Drain pipe, D=75mm, L=70cm	nos.	60	28	32	0
/ 24	Drain pipe, D=75mm, L=40cm	nos.	20	4	16	0
/ 25	Expansion joint, for road bridge	lin.m	285.4	123.0	162.4	0.0
/ 26	Expansion joint, for pedestrian and in-situ slab bridges	lin.m	25.0	5.0	20.0	0.0
/ 27	Asphalt pavement	cu.m	168	63	93	12
4.4	Approach Cushion Slab					
/ 01	Concrete, type 4, for slab	cu.m	44	0	44	0
/ 02	Form, type F1, for Item No. 4.4/01	sq.m	146	0	146	0

Summary of Work Quantities for Bridge and Road, Package 3 (2/2)

Item No.	Description	Unit	Total	Gede/Bor	S.Cengk	Meruya
/ 03	Reinforcing bars, for Item No. 4.4/01	kg	5,280	0	5,280	0
4.5	Approach Road					
/ 01	Removal of existing concrete pavement	sq.m	9,597	2,956	6,641	0
/ 02	Removal of existing asphalt/base pavement	sq.m	8,675	5,669	3,006	0
/ 03	Excavation	cu.m	2,668	1,452	1,216	0
/ 04	Back filling	cu.m	1,996	1,029	967	0
/ 05	Wet rubble/cobble masonry for slope protection	cu.m	1,233	0	1,233	0
/ 06	Concrete, type 3, for approach step	cu.m	10	0	10	0
/ 07	Concrete, type 4, for side wall	cu.m	2,485	1,592	893	0
/ 08	Concrete, type 5, for foundation concrete	cu.m	831	450	381	0
/ 09	Form, type F1, for Item Nos. 4.5/06 and 4.5/07	sq.m	10,884	5,604	5,280	0
/ 10	Form, type F2, for Item Nos. 4.5/06 to 4.5/08	sq.m	1,597	828	769	0
/ 11	Reinforcing bars, for Item Nos. 4.5/06 and 4.5/07	kg	5,440	1,000	4,440	0
/ 12	Precast concrete drain block, type 5a	nos.	4,530	0	4,530	0
/ 13	Precast concrete side ditch, 300 x 300 mm	lin.m	5,296	2,578	2,718	0
/ 14	Embankment and sub-grade	cu.m	7,480	4,071	3,409	0
/ 15	Sub-base course	cu.m	2,843	1,369	1,474	0
/ 16	Base course	cu.m	2,135	1,028	1,107	0
/ 17	Asphalt pavement	cu.m	718	345	373	0
/ 18	Guardrail, concrete post	lin.m	173	32	141	0

QUANTITY ESTIMATE

PAY ITEM 4.1/02
DEMOLISHING, HAULING AND DISPOSING SUPERSTRUCTURE (CONCRETE)

LOCATION		QUANTITY(m3)	REMARKS
1. KAMAL DRAINAGE CHANNEL	STAGE- I	11	KM2
	STAGE- II	104	KM11-1,KM15,KM17-2,KM19,KM20,KM21-2
	STAGE-III	117	KM22-3,KM22-4,KM23-2
2. KAMAL BRANCH DRAINAGE CHANNEL		81	KE1-1,KE2,KE3-2,KE4,KE5,KE6,KE7,KE9, KE10-1,KE12,KE14,KE15-1,KE15-2,KE16, KE17-1,KE18,KE19,KE20-1,KE22
3. TANJUNGAN DRAINAGE CHANNEL		77	TM1,TM3-4,TM5,TM6
4. NEW DRAINAGE CHANNEL		1	NM11
5. SALURAN CHENGKARENG DRAINAGE CHANNEL		189	CM3,CM6,CM7,CM9,CM11,CM13,CM15,CM16, CM17-1,CM18-4,CM19-1,CM20,CM22
6. GEDE/BOR DRAINAGE CHANNEL		42	GM1-2,GM1-4,GM5,GM6,GM7,GM8-1,GM9, GM10-2,GM11-2,GM13-1,GA2,GA3-1
TOTAL		622	

PAY ITEM 4.1/03
DEMOLISHING, HAULING AND DISPOSING SUBSTRUCTURE (CONCRETE / MASONRY)

LOCATION		QUANTITY(m3)	REMARKS
1. KAMAL DRAINAGE CHANNEL	STAGE- I	21	KM2
	STAGE- II	196	KM11-1,KM15,KM17-2,KM19,KM20,KM21-2
	STAGE-III	158	KM22-3,KM22-4,KM23-2
2. KAMAL BRANCH DRAINAGE CHANNEL		468	KE1-1,KE2,KE3-2,KE4,KE5,KE6,KE7,KE9, KE10-1,KE12,KE14,KE15-1,KE15-2,KE16, KE17-1,KE18,KE19,KE20-1,KE22
3. TANJUNGAN DRAINAGE CHANNEL		248	TM1,TM3-4,TM5,TM6
4. NEW DRAINAGE CHANNEL		22	NM11
5. SALURAN CHENGKARENG DRAINAGE CHANNEL		672	CM3,CM6,CM7,CM9,CM11,CM13,CM15,CM16, CM17-1,CM18-4,CM19-1,CM20,CM22
6. GEDE/BOR DRAINAGE CHANNEL		387	GM1-2,GM1-4,GM5,GM6,GM7,GM8-1,GM9, GM10-2,GM11-2,GM13-1,GA2,GA3-1
TOTAL		2172	

PAY ITEM 4.1/04
REMOVAL OF STRUCTURAL STEEL MEMBERS

LOCATION	QUANTITY(t)	REMARKS
5. SALURAN CHENGKARENG DRA	6.7	CM3,CM15,CM16
6. GEDE/BOR DRAINAGE CHANNE	4.0	GM1-2
TOTAL	10.7	

PAY ITEM 4.1/02

DEMOLISHING, HAULING AND DISPOSING SUPERSTRUCTURE (CONCRETE)

1-1. KAMAL DRAINAGE CHANNEL (STAGE- I)

NO	L(m)	W(m)	T(m)	VOLUME(m3)	
KM 2	11.75	2.63		11	RC BEAM
TOTAL				11	

1-2. KAMAL DRAINAGE CHANNEL (STAGE- II)

NO	L(m)	W(m)	T(m)	VOLUME(m3)	
KM 11-1	13.70	7.40		33	RC BEAM
KM 15	5.93	2.69	0.37	6	SLAB
KM 17-2	13.90	7.95		40	RC BEAM
KM 19	10.35	1.96	0.65	13	SLAB
KM 20	7.07	1.94	0.45	6	SLAB
KM 21-2	5.70	3.15	0.36	6	SLAB
TOTAL				104	

1-3. KAMAL DRAINAGE CHANNEL (STAGE-III)

NO	L(m)	W(m)	T(m)	VOLUME(m3)	
KM 22-3	16.60	2.31		19	RC BEAM
KM 22-4	16.70	8.93		57	RC BEAM
KM 23-2	13.70	8.98		41	RC BEAM
TOTAL				117	

2. KAMAL BRANCH DRAINAGE CHANNEL

NO	L(m)	W(m)	T(m)	VOLUME(m3)	
KE 1-1	6.70	2.60	0.42	7	SLAB
KE 2	6.80	3.80		6	RC BEAM
KE 3-2	5.60	5.75	0.35	11	SLAB
KE 4	5.10	5.10	0.33	9	SLAB
KE 5	4.80	5.05	0.28	7	SLAB
KE 6	4.30	3.20	0.20	3	SLAB
KE 7	3.10	5.00	0.20	3	SLAB
KE 9	3.50	1.27	0.22	1	SLAB
KE 10-1	3.05	4.45	0.35	5	SLAB
KE 12	3.00	5.50	0.25	4	SLAB
KE 14	2.45	3.00	0.30	2	SLAB
KE 15-1	2.70	7.50	0.35	7	SLAB
KE 15-2	2.70	7.40	0.37	7	SLAB
KE 16	1.90	2.60	0.15	1	SLAB
KE 17-1	1.70	2.90	0.13	1	SLAB
KE 18	1.40	1.45	0.10	1	SLAB
KE 19	1.25	1.65	0.13	1	SLAB
KE 20-1	1.08	4.50	0.70	3	SLAB
KE 22	1.90	4.60	0.12	1	SLAB
KE 24-1	1.69	3.74	0.11	1	SLAB
TOTAL				81	

3. TANJUNGAN DRAINAGE CHANNEL

NO	L(m)	W(m)	T(m)	VOLUME(m3)	
TM 1	4.88	5.63	0.31	9	SLAB
TM 3-4	9.90	8.50	0.62	52	SLAB
TM 5	2.00	12.70	0.20	5	SLAB
TM 6	3.00	11.80	0.30	11	SLAB
TOTAL				77	

4. NEW DRAINAGE CHANNEL

NO	L(m)	W(m)	T(m)	VOLUME(m3)	
NM 11	1.70	4.00	0.15	1	SLAB
TOTAL				1	

5. SALURAN CHENGKARENG DRAINAGE CHANNEL

NO	L(m)	W(m)	T(m)	VOLUME(m3)	
CM 3	3.55	8.70	0.20	6	STEEL
CM 6	9.60	4.15		17	RC BEAM
CM 7	9.80	1.00	0.60	6	SLAB
CM 9	11.30	6.20		22	RC BEAM
CM 11	11.20	6.25		22	RC BEAM
CM 13	8.50	2.20	0.18	3	SLAB
CM 15	8.40	1.50		0	STEEL
CM 16	8.35	1.50		0	STEEL
CM 17-1	5.60	6.40		8	RC BEAM
CM 18-4	5.58	14.50		17	RC BEAM
CM 19-1	9.70	17.00		48	RC BEAM
CM 20	8.90	7.10		17	RC BEAM
CM 22	9.40	9.10		23	RC BEAM
TOTAL				189	

6. GEDE/BOR DRAINAGE CHANNEL

NO	L(m)	W(m)	T(m)	VOLUME(m3)	
GM 1-2	2.90	7.50	0.17	4	STEEL
GM 1-4	2.90	7.50	0.47	10	SLAB
GM 5	4.25	1.35	0.27	2	SLAB
GM 6	2.20	5.10	0.14	2	SLAB
GM 7	4.00	3.95		3	RC BEAM
GM 8-1	3.90	3.10	0.24	3	SLAB
GM 9	2.70	4.90	0.17	2	SLAB
GM 10-2	4.60	6.40		6	RC BEAM
GM 11-2	4.60	6.24		6	RC BEAM
GM 13-1	3.10	3.45	0.20	2	SLAB
GA 2	0.85	4.10	0.26	1	SLAB
GA 3-1	0.85	4.20	0.26	1	SLAB
TOTAL				42	

PAY ITEM 4.1/03

DEMOLISHING, HAULING AND DISPOSING SUBSTRUCTURE (CONCRETE / MASONRY)

1-1. KAMAL DRAINAGE CHANNEL (STAGE- I)

NO	W(m)	VOLUME(m3)	
KM 2	2.63	21	
TOTAL		21	

1-2. KAMAL DRAINAGE CHANNEL (STAGE- II)

NO	W(m)	VOLUME(m3)	
KM 11-1	7.40	58	
KM 15	2.69	21	
KM 17-2	7.95	62	
KM 19	1.96	15	
KM 20	1.94	15	
KM 21-2	3.15	25	
TOTAL		196	

1-3. KAMAL DRAINAGE CHANNEL (STAGE-III)

NO	W(m)	VOLUME(m3)	
KM 22-3	2.31	18	
KM 22-4	8.93	70	
KM 23-2	8.98	70	
TOTAL		158	

2. KAMAL BRANCH DRAINAGE CHANNEL

NO	W(m)	VOLUME(m3)	
KE 1-1	2.60	20	
KE 2	3.80	30	
KE 3-2	5.75	32	
KE 4	5.10	29	
KE 5	5.05	28	
KE 6	3.20	18	
KE 7	5.00	28	
KE 9	1.27	7	
KE 10-1	4.45	25	
KE 12	5.50	31	
KE 14	3.00	17	
KE 15-1	7.50	42	
KE 15-2	7.40	41	
KE 16	2.60	15	
KE 17-1	2.90	16	
KE 18	1.45	8	
KE 19	1.65	9	
KE 20-1	4.50	25	
KE 22	4.60	26	
KE 24-1	3.74	21	
TOTAL		468	

3. TANJUNGAN DRAINAGE CHANNEL

NO	W(m)	VOLUME(m3)	
TM 1	5.63	44	
TM 3-4	8.50	67	
TM 5	12.70	71	
TM 6	11.80	66	
TOTAL		248	

4. NEW DRAINAGE CHANNEL

NO	W(m)	VOLUME(m3)	
NM 11	4.00	22	
TOTAL		22	

5. SALURAN CHENGKARENG DRAINAGE CHANNEL

NO	W(m)	VOLUME(m3)	
CM 3	8.70	68	
CM 6	4.15	33	
CM 7	1.00	8	
CM 9	6.20	49	
CM 11	6.25	49	
CM 13	2.20	17	
CM 15	1.50	12	
CM 16	1.50	12	
CM 17-1	6.40	50	
CM 18-4	14.50	114	
CM 19-1	17.00	133	
CM 20	7.10	56	
CM 22	9.10	71	
TOTAL		672	

6. GEDE/BOR DRAINAGE CHANNEL

NO	W(m)	VOLUME(m3)	
GM 1-2	7.50	59	
GM 1-4	7.50	59	
GM 5	1.35	8	
GM 6	5.10	40	
GM 7	3.95	22	
GM 8-1	3.10	17	
GM 9	4.90	38	
GM 10-2	6.40	50	
GM 11-2	6.24	49	
GM 13-1	3.45	27	
GA 2	4.10	9	
GA 3-1	4.20	9	
TOTAL		387	

PAY ITEM 4.1/04

REMOVAL OF STRUCTURAL STEEL MEMBERS

5. SALURAN CHENGKARENG DRAINAGE CHANNEL

NO	WEIGHT(t)
CM3	4.7
CM15	1.0
CM16	1.0
TOTAL	6.7

6. GEDE/BOR DRAINAGE CHANNEL

NO	WEIGHT(t)
GM1-2	4.0
TOTAL	4.0

Table BILL OF QUANTITIES OF SUPERSTRUCTURE (2/9)

KAMAL (BRANCH) 1/2

STRUCTURE			SPEC	UNIT	BKE 1	BKE 2	BKE 3	BKE 4	BKE 5	BKE 6	BKE 7	BKE 8	BKE 9	BKE 10	SUB
1. MAIN GIRDER		NUMBER	Unit	no	8	12	16	16	16	12	16	6	12	16	130
		CONCRETE	50K class	m^3	19.3	28.90	38.6	38.6	38.6	28.90	38.6	11.30	28.90	19.80	291.5
		PC-TENDON	SWPR7BN	tf	0.832	1.248	1.664	1.664	1.664	1.248	1.664	0.273	1.248	1.447	12.952
		RE-BAR	D10	tf	0.444	0.665	0.887	0.887	0.887	0.665	0.887	0.361	0.665	0.771	7.119
		FORM	metal	m^2	115.4	173.10	230.80	230.80	230.80	173.10	230.80	74.90	173.10	188.90	1821.7
		SHEATH	metal	m	55.7	83.50	11.40	11.40	11.40	83.50	11.40	41.80	83.50	111.40	505
2. FORMING		CONCRETE	24K class	m^3	2.5	4.8	5.7	5.7	5.7	4.8	5.7	1.20	4.8	4.40	45.3
		FORM	left in place	m^2	4.2	9.0	9.7	9.7	9.7	9.0	9.7	2.70	9.0	8.70	81.4
3 CROSS GIRDER	PC-TENDON	NUMBER	unit	no	24	24	24	24	24	24	24	24	24	24	240
		LENGTH	unit length	m	2.830	4.440	5.830	5.830	5.830	4.440	5.830	2.080	4.440	5.830	47.38
		INTEG. L	SUM	m	67.920	105.560	139.920	139.920	######	105.560	139.920	49.920	105.560	139.920	1134.12
		INTEG. W	SUM	tf	0.112	0.716	0.231	0.231	0.231	0.716	0.231	0.082	0.716	0.231	3.497
	SHEATH	GIRDER SPACE	metal	m	14.4	26.60	33.6	33.6	33.6	26.60	33.6	9.60	26.60	33.60	271.8
	GROUT	THROUGH	>20 K	m	67.9	105.60	139.90	139.90	139.90	105.60	139.90	49.90	105.60	139.90	1134.1
4 MISCILL ANEOUS	ROADWAY	PAVEMENT	50 to 160 m/m	m^2	25	4.7	7.0	7.0	7.0	4.7	7.0	1.0	4.7	4.7	72.8
	SIDE WALK	PAVEMENT	30 m/m	m^3											
		SUB-CONCRETE	18K class	m^3											
		SIDE BLOCK	curb-stone	m											
		FILLING MOR	mortar	m^3											
	GUARD RAIL	CONCRETE	24K class	m^3	7.70	7.60	14.5	14.5	14.5	7.60	14.5	5.20	7.60	12.20	105.9
		FORM	wood/metal	m^2	150.50	63.10	86.70	86.70	86.70	63.10	86.70	39.20	63.10	74.300	800.1
		RE-BAR	D13	tf	0.361	0.358	0.684	0.684	0.684	0.358	0.684	0.245	0.358	0.573	4.989
		STEEL RAIL	2 dia.76.3	m	33.60	33.60	33.60	33.60	33.60	33.60	33.60		33.60	29.20	298
		STEEL RAIL	pedestrian	m								33.60			33.6
	DRAINAGE	NUMBER	shaped steel	no	8	8	8	8	8	8	8	4	8	8	76
	EXPANTION	STEEL TYPE	2-angles	m								7.50			7.5
		RUBBER TYPE	rubber joint	m	9.06	13.8	19.80	19.80	19.80	13.8	19.80		13.8	19.80	149.46
	BEARING	RUBBER TYPE	150*33	m	11.8	18.24	23.80	23.80	23.80	18.24	23.80	8.80	18.24	23.80	194.32
		ANCHOR BAR	number	no	12	20	28	28	28	20	28	8	20	28	220
		SEAT MORTAR	200*60	m^3	0.14	0.22	0.29	0.29	0.29	0.22	0.29	0.11	0.22	0.29	

Table BILL OF QUANTITIES OF SUPERSTRUCTURE (3/9)

KAMAL (BRANCH) 2/2

STRUCTURE			SPEC	UNIT	BKE 11	BKE 12	BKE 13	BKE 14	BKE 15	BKE 16	BKE 17	BKE 18	SUB		TOTAL
1. MAIN GIRDER		NUMBER	Unit	no	12	Cancel	20	6	6	6	6	12	68		198
		CONCRETE	50K class	m^3	28.90		37.20	11.3	11.3	9.80	9.80	22.30	130.6		422.1
		PC-TENDON	SWPR7BN	tf	1.248		1.898	0.273	0.273	0.237	0.237	1.085	5.251		18.203
		RE-BAR	D10	tf	0.665		0.964	0.361	0.361	0.313	0.313	0.578	3.555		10.674
		FORM	metal	m^2	173.10		235.10	74.90	74.90	64.60	64.60	141.70	828.9		2650.6
		SHEATH	metal	m	83.50		139.20	41.8	41.8	27.80	27.80	83.50	445.4		950.4
2. FORMING		CONCRETE	24K class	m^3	4.8		5.70	1.90	1.90	1.00	1.00	3.70	20		65.3
		FORM	left in place	m^2	9.0		11.20	3.70	3.70	2.50	2.50	8.00	40.6		122
3 CROSS GIRDER	PC-TENDON	NUMBER	unit	no	24		24	24	24	16	16	24	152		392
		LENGTH	unit length	m	4.440		7.330	2.830	2.830	2.080	2.080	4.440	26.03		73.41
		INTEG. L	SUM	m	105.560		175.920	67.920	67.920	33.280	33.280	106.560	590.44		1724.56
		INTEG. W	SUM	tf	0.716		0.291	0.112	0.112	0.055	0.055	0.176	1.517		5.014
	SHEATH	GIRDER SPACE	metal	m	26.60		43.20	14.40	14.40	6.40	6.40	26.60	138		409.8
	GROUT	THROUGH	>20 K	m	105.60		175.90	67.90	67.90	33.30	33.30	106.60	590.5		1724.6
4 MISCILL ANEOUS	ROADWAY	PAVEMENT	50 to 160 m/m	m^3	4.7		8.7	2.2	2.2	1.4	1.4	4.1	24.7		97.5
	SIDE WALK	PAVEMENT	30 m/m	m^2											
		SUB-CONCRETE	18K class	m^3											
		SIDE BLOCK	curb-stone	m											
		FILLING MOR	mortar	m^3											
	GUARD RAIL	CONCRETE	24K class	m^3	7.60		12.60	6.60	6.60	4.50	4.50	6.60	49		154.9
		FORM	wood/metal	m^2	63.10		75.90	55.20	55.20	34.20	34.20	55.10	372.9		1173
		RE-BAR	D13	tf	0.358		0.596	0.313	0.313	0.213	0.213	0.311	2.317		7.306
		STEEL RAIL	2 dia.76.3	m	33.60		29.20	29.20	29.20			29.20	150.4		448.4
		STEEL RAIL	pedestrian	m						29.20	29.20		58.4		92
	DRAINAGE	NUMBER	shaped steel	no	8		8	8	8	4	4	8	48		124
	EXPANTION	STEEL TYPE	2-angles	m						7.50	7.50		15		22.5
		RUBBER TYPE	rubber joint	m	13.80		24.60	9.0	9.0			13.80	70.2		219.66
	BEARING	RUBBER TYPE	150*33	m	18.24		29.80	11.80	11.80	8.80	8.80	18.24	107.48		301.8
		ANCHOR BAR	number	no	20		36	12	12	8	8	20	116		336
		SEAT MORTAR	200*60	m^3	0.22		0.36	0.14	0.14	0.11	0.11	0.22	1.3		1.3

Table BILL OF QUANTITIES OF SUPERSTRUCTURE (4/9)

TANJUNGAN

STRUCTURE			SPEC	UNIT	BTM 1	BTM 3	BTM 4	BTM 5							TOTAL
1. MAIN GIRDER		NUMBER	Unit	no	24	28	32	32							116
		CONCRETE	50K class	m^3	87.03	84.80	88.40	88.40							348.63
		PC-TENDON	SWPR7BN	tf	5.350	5.503	4.518	4.518							19.889
		RE-BAR	D10	tf	4.090	4.662	2.028	2.028							12.808
		FORM	metal	m^2	938.1	900.10	524.00	524.00							2886.2
		SHEATH	metal	m	362.0	422.20	221.70	221.70							1227.6
2. FORMING		CONCRETE	24K class	m^3	16.50	16.30	13.70	13.70							60.2
		FORM	left in place	m^2	20.55	23.00	22.60	22.60							88.75
3 CROSS GIRDER	PC-TENDON	NUMBER	unit	no	78	52	24	24							178
		LENGTH	unit length	m	8.750	10.330	11.830	11.830							42.74
		INTEG. L	SUM	m	454.7	537.1	283.9	283.9							1559.6
		INTEG. W	SUM	tf	0.750	0.887	0.469	0.469							2.575
	SHEATH	GIRDER SPACE	metal	m	109.20	135.20	72.00	72.00							388.4
	GROUT	THROUGH	>20 K	m	454.8	537.2	283.90	283.90							1559.8
4 MISCILL ANEOUS	ROADWAY	PAVEMENT	50 to 160 m/m	m^3	16.80	18.1	22.2	22.2							79.3
	SIDE WALK	PAVEMENT	30 m/m	m^3											0
		SUB-CONCRETE	18K class	m^3											0
		SIDE BLOCK	curb-stone	m											0
		FILLING MOR	mortar	m^3											0
	GUARD RAIL	CONCRETE	24K class	m^3	37.50	11.90	13.70	13.70							76.8
		FORM	wood/metal	m^2	214.50	110.50	90.40	90.40							505.8
		RE-BAR	D13	tf	1.770	0.560	0.644	0.644							3.618
		STEEL RAIL	2 dia.76.3	m	81.00	47.60	38.40	38.40							205.4
		STEEL RAIL	pedestrian	m											0
	DRAINAGE	NUMBER	shaped steel	no	12	8	8	8							36
	EXPANTION	STEEL TYPE	2-angles	m											0
		RUBBER TYPE	rubber joint	m	29.70	31.80	36.60	36.60							134.7
	BEARING	RUBBER TYPE	150*33	m	35.70	41.80	47.80	47.80							173.1
		ANCHOR BAR	number	no	42.0	52	60	60							214
		SEAT MORTAR	200*60	m^3	0.44	0.50	0.50	0.50							1.94

Table BILL OF QUANTITIES OF SUPERSTRUCTURE (5/9)

PIK JUNCTION

STRUCTURE			SPEC	UNIT	BNM 1	BNM 2	BNM 3	BNM 4							TOTAL
1. MAIN GIRDER		NUMBER	Unit	no	Change	Change	Change	Change							0
		CONCRETE	50K class	m^3											0
		PC-TENDON	SWPR7BN	tf											0
		RE-BAR	D10	tf											0
		FORM	metal	m^2											0
		SHEATH	metal	m											0
2. FORMING		CONCRETE	24K class	m^3											0
		FORM	left in place	m^2											0
3 CROSS GIRDER	PC-TENDON	NUMBER	unit	no											0
		LENGTH	unit length	m											0
		INTEG. L	SUM	m											0
		INTEG. W	SUM	tf											0
	SHEATH	GIRDER SPACE	metal	m											0
	GROUT	THROUGH	>20 K	m											0
4 MISCILL ANEOUS	ROADWAY	PAVEMENT	50 to 160 m/m	m^3											0
	SIDE WALK	PAVEMENT	30 m/m	m^3											
		SUB-CONCRETE	18K class	m^3											
		SIDE BLOCK	curb-stone	m											
		FILLING MOR	mortar	m^3											
	GUARD RAIL	CONCRETE	24K class	m^3											0
		FORM	wood/metal	m^2											0
		RE-BAR	D13	tf											0
		STEEL RAIL	2 dia.76.3	m											0
		STEEL RAIL	pedestrian	m											
	DRAINAGE	NUMBER	shaped steel	no											0
	EXPANTION	STEEL TYPE	2-angles	m											0
		RUBBER TYPE	rubber joint	m											
	BEARING	RUBBER TYPE	150*33	m											0
		ANCHOR BAR	number	no											0
		SEAT MORTAR	200*60	m^3											0

Table BILL OF QUANTITIES OF SUPERSTRUCTURE (6/9)

CENGKARENG 1/2

STRUCTURE			SPEC	UNIT	BCM 1	BCM 2	BCM 3	BCM 4	BCM 5	BCM 6	BCM 7	BCM 8	BCM 9	BCM 10	SUB
1. MAIN GIRDER		NUMBER	Unit	no	Cancel	12	6	3	8	8	6	3	3	8	57
		CONCRETE	50K class	m^3		56.20	28.10	10.4	37.50	30.29	28.10	10.90	10.90	32.01	244.4
		PC-TENDON	SWPR7BN	tf		3.340	1.670	0.627	2.227	1.86	1.670	0.556	0.556	1.970	14.476
		RE-BAR	D10	tf		2.395	1.197	0.504	1.596	1.426	1.197	0.250	0.250	2.970	11.785
		FORM	metal	m^2		627.40	313.70	110.8	418.2	326.60	313.70	63.70	63.70	345.13	2582.93
		SHEATH	metal	m		181.00	90.50	45.2	120.6	126.00	90.50	0.90	0.90	133.11	788.71
2. FORMING		CONCRETE	24K class	m^3		12.1	6.50	1.30	5.50	5.70	6.50	1.20	1.20	6.07	46.07
		FORM	left in place	m^2		12.6	7.60	2.0	6.90	7.20	7.60	1.80	1.80	7.62	55.12
3 CROSS GIRDER	PC-TENDON	NUMBER	unit	no		26	26	26	26	26	26	12	12	26	206
		LENGTH	unit length	m		8.830	4.440	2.080	5.830	5.830	4.440	2.080	2.080	5.830	41.44
		INTEG. L	SUM	m		229.580	115.440	54.080	######	151.580	115.440	24.960	24.960	151.580	1019.2
		INTEG. W	SUM	tf		0.379	0.191	0.089	0.250	0.250	0.191	0.041	0.041	0.250	1.682
	SHEATH	GIRDER SPACE	metal	m		57.20	28.90	10.40	36.40	36.40	28.90	4.80	4.80	36.40	244.2
	GROUT	THROUGH	>20 K	m		229.60	115.40	54.1	151.60	151.60	115.40	25.00	25.00	151.60	1019.3
4 MISCILL ANEOUS	ROADWAY	PAVEMENT	50 to 160 m/m	m^3		9.4	4.4	1.4	5.6	5.85	4.4	1.2	1.2	6.2	39.65
	SIDE WALK	PAVEMENT	30 m/m	m^3		0.75									0.75
		SUB-CONCRETE	18K class	m^3		6.7									13.4
		SIDE BLOCK	curb-stone	m		31.6									63.2
		FILLING MOR	mortar	m^3		0.322									0.64
	GUARD RAIL	CONCRETE	24K class	m^3		12.70	7.10	5.1	15.60	13.10	7.10	4.40	4.40	13.80	83.3
		FORM	wood/metal	m^2		86.30	58.50	36.6	86.60	74.70	58.50	31.70	31.70	78.91	543.51
		RE-BAR	D13	tf		0.600	0.336	0.238	0.734	0.61	0.336	0.205	0.205	0.650	3.914
		STEEL RAIL	2 dia.76.3	m		31.60	31.60		31.60	28.20	31.60			29.80	184.4
		STEEL RAIL	pedestrian	m				29.20				25.20	25.20		79.6
	DRAINAGE	NUMBER	shaped steel	no		4	4	4	4	4	4	4	4	4	36
	EXPANTION	STEEL TYPE	2-angles	m				5.00				5.00	5.00		15
		RUBBER TYPE	rubber joint	m		19.20	9.20		13.20	13.20	9.20			13.20	77.2
	BEARING	RUBBER TYPE	150*33	m		17.90	9.12	4.40	11.90	11.90	9.12	4.40	4.40	11.90	85.04
		ANCHOR BAR	number	no		22	10	4	14	14	10	4	4	14	96
		SEAT MORTAR	200*60	m^3		0.21	0.11	0.05	0.14	0.14	0.11	0.05	0.05	0.14	1

Table BILL OF QUANTITIES OF SUPERSTRUCTURE (7/9)
CENGKARENG 2/2

STRUCTURE			SPEC	UNIT	BCM 11	BCM 12	BCM 13	BCM 14	SUB						TOTAL
1. MAIN GIRDER		NUMBER	Unit	no	16	16	10	12	54						111
		CONCRETE	50K class	m^3	64.87	64.87	23.39	36.20	189.3						433.73
		PC-TENDON	SWPR7BN	tf	3.990	3.990	1.84	2.048	11.87						26.344
		RE-BAR	D10	tf	3.380	3.380	0.75	0.832	8.342						20.127
		FORM	metal	m^2	704.330	704.330	194.14	216.50	1819						4402.23
		SHEATH	metal	m	269.90	269.90	99.87	111.4	751.1						1539.78
2. FORMING		CONCRETE	24K class	m^3	13.20	13.20	4.74	5.6	36.74						82.81
		FORM	left in place	m^2	16.44	16.44	7.75	8.80	49.43						104.55
3 CROSS GIRDER	PC-TENDON	NUMBER	unit	no	26	26	12	16	80						286
		LENGTH	unit length	m	11.830	11.830	7.330	8.830	39.82						81.26
		INTEG. L	SUM	m	307.580	307.580	87.960	142.800	845.9						1865.12
		INTEG. W	SUM	tf	0.508	0.508	0.145	0.233	1.394						3.076
	SHEATH	GIRDER SPACE	metal	m	78.00	78.00	21.60	35.20	212.8						457
	GROUT	THROUGH	>20 K	m	307.6	307.6	88.0	141.30	844.5						1863.8
4 MISCILL ANEOUS	ROADWAY	PAVEMENT	50 to 160 m/m	m^3	17.5	17.5	6.8	6.3	48.1						87.75
	SIDE WALK	PAVEMENT	30 m/m	m^2				0.50	0.5						1
		SUB-CONCRETE	18K class	m^2				4.5							4.5
		SIDE BLOCK	curb-stone	m				21							21
		FILLING MOR	mortar	m^3				0.22							0.22
	GUARD RAIL	CONCRETE	24K class	m^3	11.07	11.07	10.22	7.20	39.56						122.86
		FORM	wood/metal	m^2	73.49	73.49	59.08	53.40	259.5						802.97
		RE-BAR	D13	tf	0.52	0.52	0.50	0.338	1.878						5.792
		STEEL RAIL	2 dia.76.3	m	30.20	30.20	22.60	21.00	104						288.4
		STEEL RAIL	pedestrian	m											
	DRAINAGE	NUMBER	shaped steel	no	4	4	4	4	16						52
	EXPANTION	STEEL TYPE	2-angles	m											0
		RUBBER TYPE	rubber joint	m	24.40	24.40	16.40	19.20	84.4						171.6
	BEARING	RUBBER TYPE	150*33	m	23.90	23.90	14.90	17.90	80.6						165.64
		ANCHOR BAR	number	no	30	30	18	22	100						196
		SEAT MORTAR	200*60	m^3	0.29	0.29	0.05	0.21	0.84						1.84

Table BILL OF QUANTITIES OF SUPERSTRUCTURE (8/9)

GEDE/BOR

STRUCTURE			SPEC	UNIT	BGM 1	BGM 2	BGM 3	BGM 4	BGM 5	BGM 6	BGM 7	BGM 8	BGM 9	BGM 10	TOTAL
1. MAIN GIRDER		NUMBER	Unit	no	12	12	3	8	6	6	6	8	8	4	73
		CONCRETE	50K class	m^3	28.10	28.10	11.90	37.50	28.10	28.10	28.10	37.50	37.50	19.70	284.6
		PC-TENDON	SWPR7BN	tf	1.670	1.670	0.678	2.227	1.670	1.670	1.670	2.227	2.227	1.113	16.822
		RE-BAR	D10	tf	1.197	1.197	0.599	1.596	1.197	1.197	1.197	1.596	1.596	0.798	12.17
		FORM	metal	m^2	313.700	313.700	129.70	418.20	313.70	313.70	313.70	418.20	418.20	221.50	3174.3
		SHEATH	metal	m	90.50	90.50	45.20	120.0	90.50	90.50	90.50	120.0	120.0	60.30	918
2. FORMING		CONCRETE	24K class	m^3	12.10	12.10	1.60	7.70	6.50	6.50	6.50	7.70	7.70	3.60	72
		FORM	left in place	m^2	12.60	12.60	2.20	8.00	7.60	7.60	7.60	8.00	8.00	3.50	77.7
3 CROSS GIRDER	PC-TENDON	NUMBER	unit	no	26	26	26	26	26	26	26	26	26	26	260
		LENGTH	unit length	m	8.830	8.830	2.080	5.830	4.44	4.44	4.44	5.830	5.830	2.830	53.38
		INTEG. L	SUM	m	229.580	229.580	54.080	151.580	######	114.440	114.440	151.580	151.580	73.580	1384.88
		INTEG. W	SUM	tf	0.38	0.38	0.089	0.25	0.191	0.191	0.191	0.25	0.25	0.122	2.294
	SHEATH	GIRDER SPACE	metal	m	57.200	57.200	10.4	36.40	28.90	28.90	28.90	36.40	36.40	15.60	336.3
	GROUT	THROUGH	>20 K	m	2299.6	2299.6	54.10	151.60	115.40	115.40	115.40	151.60	151.60	73.60	5527.9
4 MISCILL ANEOUS	ROADWAY	PAVEMENT	50 to 160 m/m	m^3	9.4	9.4	1.5	6.6	4.4	4.4	4.4	6.7	6.7	3.0	56.5
	SIDE WALK	PAVEMENT	30 m/m	m^3	0.8	0.8									1.6
		SUB-CONCRETE	18K class	m^3	6.70	6.70									13.4
		SIDE BLOCK	curb-stone	m	31.60	31.60									63.2
		FILLING MOR	mortar	m^3	0.332	0.332									0.664
	GUARD RAIL	CONCRETE	24K class	m^3	12.7	12.7	5.70	15.60	7.10	7.10	7.10	15.60	15.60	12.20	111.4
		FORM	wood/metal	m^2	86.3	86.3	41.20	86.60	58.50	58.50	58.50	86.60	86.60	86.20	735.3
		RE-BAR	D13	tf	0.600	0.600	0.271	0.734	0.336	0.336	0.336	0.734	0.734	0.5760	5.257
		STEEL RAIL	2 dia.76.3	m	31.6	31.6		31.6	31.60	31.60	31.60	31.6	31.6	31.60	284.4
		STEEL RAIL	pedestrian	m			31.6								31.6
	DRAINAGE	NUMBER	shaped steel	no	4	4	2	4	4	4	4	4	4	4	38
	EXPANTION	STEEL TYPE	2-angles	m			5								5
		RUBBER TYPE	rubber joint	m	19.20	19.20		13.20	9.20	9.20	9.20	13.20	13.20	7.0	112.6
	BEARING	RUBBER TYPE	150*33	m	17.90	17.90	4.40	11.90	9.12	9.12	9.12	11.90	11.90	5.90	109.16
		ANCHOR BAR	number	no	22	22	4	14	10	10	10	14	14	6	126
		SEAT MORTAR	200*60	m^3	0.21	0.21	0.05	0.14	0.11	0.11	0.11	0.14	0.14	0.07	1.29

Table BILL OF QUANTITIES OF SUPERSTRUCTURE (9/9)

GROUND TOTAL OF SUPER STRUCTURE

STRUCTURE			SPEC	UNIT	BKM 1-11	BKE 1-18	BTM 1-5	BNM 1-4	BCM 1-14	BGM 1-10	TOTAL
1. MAIN GIRDER		NUMBER	Unit	no	219	198	116	0	111	73	717
		CONCRETE	50K class	m^3	686.8	422.1	348.63	0	433.73	284.6	2175.86
		PC-TENDON	SWPR7BN	tf	32.601	18.203	19.889	0	26.344	16.822	113.859
		RE-BAR	D10	tf	24.7	10.674	12.808	0.000	20.127	12.170	80.479
		FORM	metal	m^2	5550.9	2650.6	2886.2	0	4402.23	3174.3	18664.23
		SHEATH	metal	m	2502.4	950.4	1227.6	0	1539.78	918	7138.18
2. FORMING		CONCRETE	24K class	m^3	116.39	65.3	60.2	0	82.81	72	396.7
		FORM	left in place	m^2	186.8	122	88.75	0	104.55	77.7	579.8
3 CROSS GIRDER	PC-TENDON	NUMBER	unit	no	602	392	178	0	286	260	1718
		LENGTH	unit length	m	53.41	73.41	42.740	0	81.260	53.380	304.2
		INTEG. L	SUM	m	3901.64	1724.56	1559.6	0	1865.12	1384.88	10435.8
		INTEG. W	SUM	tf	6.45	5.014	2.575	0.000	3.076	2.294	19.409
	SHEATH	GIRDER SPACE	metal	m	910	409.8	388.4	0	457	336.3	2501.5
	GROUT	THROUGH	>20 K	m	3900.7	1724.6	1559.8	0	1863.8	5527.9	14576.8
4 MISCILL-ANEOUS	ROADWAY	PAVEMENT	50 to 160 m/m	m^3	134.11	97.5	79.3	0	87.75	56.5	455.16
	SIDE WALK	PAVEMENT	30 m/m	m^3	7.95		0		1	1.6	10.55
		SUB-CONCRETE	18K class	m^3	70.37		0		4.5	13.4	88.27
		SIDE BLOCK	curb-stone	m	330.3		0		21	63.2	414.5
		FILLING MOR	mortar	m^3	3.468		0		0.22	0.664	4.352
	GUARD RAIL	CONCRETE	24K class	m^3	189.19	154.9	76.8	0	122.86	111.4	655.15
		FORM	wood/metal	m^2	1290.4	1173	505.8	0	802.97	735.3	4507.47
		RE-BAR	D13	tf	8.931	7.306	3.618	0.000	5.792	5.257	30.904
		STEEL RAIL	2 dia.76.3	m	488.7	448.4	205.4	0	288.4	284.4	1715.3
		STEEL RAIL	pedestrian	m	218.7	92	0			31.6	342.3
	DRAINAGE	NUMBER	shaped steel	no	96	124	36	0	52	38	346
	EXPANTION	STEEL TYPE	2-angles	m	30	22.5	0.0	0	0.0	5.0	57.5
		RUBBER TYPE	rubber joint	m	200	219.66	134.7		171.6	112.6	838.56
	BEARING	RUBBER TYPE	150*33	m	327.02	301.80	173.1	0.00	165.64	109.16	1076.72
		ANCHOR BAR	number	no	382	336	214	0.0	196	126	1254
		SEAT MORTAR	200*60	m^3	4.2	1.3	1.94	0	1.84	1.29	10.57

Bill of Quantity of Substructure(1/9)

A. Pre-Ten Girder Bridge

KAMAL (MAIN)

				BKM 1	BKM3	BKM 4	BKM 5	BKM 6	BKM 7	BKM 8	BKM 9	BKM 10	BKM 11	TOTAL
											Cancel			
1. HAMMER HEAD		SPEC	UNIT											
	CONCRETE	24 K class	m^3	25.1	50.5	9.5	61.8	9.5	9.5	24.6		50.0	51.7	292.2
	RE-BAR	D-10,12	tf	0.863	1.393	0.35	2.078	0.35	0.35	0.863		1.393	1.393	9.033
		D-25	tf	1.798	3.569	0.671	4.446	0.671	0.671	1.798		3.569	3.569	20.762
	FORM		m^2	50.3	86.3	28.3	101.2	28.3	28.3	47.6		84	93.3	547.6
2. PILE		SPEC	UNIT											
	ϕ 350-A	Number	no	8	16	4	16	4	4	20		16	16	104
		Unit Length	m	11.5	11.5	11.50	13.50	10.50	10.50	10.50		11.50	11.50	102.5
		Σ Length	m	184.0	184.0	46.00	216.0	42.0	42.0	210.0		184.0	184.0	1292.0
	ϕ 350-B	Number	no	12								16	16	44
		Unit Length	m	16.5								11.50	11.50	39.50
		Σ Length	m	198.0								184.0	184.0	566.0
	ϕ 400-B	Number	no		16	4	24	4	4					52
		Unit Length	m		11.50	11.50	13.50	10.50	10.50					57.50
		Σ Length	m		184.0	46.00	234.0	42.0	42.0					548.0
3. CUSHION SLAB		SPEC	UNIT											
	CONCRETE	24 K class	m^3											...
	RE-BAR	D≦15	tf											.
		D > 15	tf											
	FORM		m^2											

Bill of Quantity of Substructure(2/9)

A. Pre-Ten Girder Bridge

KAMAL (BRANCH) 1/2

				BKE 1	BKE 2	BKE 3	BKE 4	BKE 5	BKE 6	BKE 7	BKE 8	BKE 9	BKE 10	SUB TOTAL
1. HAMMER HEAD		SPEC	UNIT											
	CONCRETE	24 K class	m^3	9.9	14.8	20.9	20.9	20.9	14.8	20.9	7.3	14.8	20.7	165.9
	RE-BAR	D-10,12	tf	0.363	0.549	0.768	0.768	0.768	0.549	0.768	0.287	0.549	0.768	6.137
		D-25	tf	0.697	1.017	1.009	1.009	1.009	1.017	1.009	0.523	1.017	1.009	9.316
	FORM		m^2	27.1	36.6	48.6	48.6	48.6	36.6	48.6	21.9	36.6	47.0	400.2
2. PILE		SPEC	UNIT											
	Φ 350-A	Number	no	8	12	6	6	6	12	6	4	6	12	78
		Unit Length	m	9.5	10.5	11.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	119.0
		Σ Length	m	76	126	69.0	75.0	75.0	150.0	75.0	50.0	75.0	150.0	921.0
	Φ 350-B	Number	no			6	6	6		6	2	6		32
		Unit Length	m			11.5	12.50	12.50		12.50	12.50	12.50		74.00
		Σ Length	m			69.0	75.0	75.0		75.0	25.0	75.0		394.0
	Φ 400-B	Number	no											
		Unit Length	m											
		Σ Length	m											
3. CUSHION SLAB		SPEC	UNIT											
	CONCRETE	24 K class	m^3											
	RE-BAR	D≦15	tf											
		D > 15	tf											
	FORM		m^2											

Bill of Quantity of Substructure(3/9)

A. Pre-Ten Girder Bridge

KAMAL (BRANCH) 2/2

				BKE 11	BKE 12	BKE 13	BKE 14	BKE 15	BKE 16	BKE 17	BKE 18	SUB TOTAL		TOTAL
					Cancel									
1. HAMMER HEAD		SPEC	UNIT											
	CONCRETE	24 K class	m^3	14.6		35.1	9.8	9.8	7.3	7.3	14.6	83.9		249.8
	RE-BAR	D-10,12	tf	0.549		0.954	0.363	0.363	0.287	0.287	0.549	2.803		8.94
		D-25	tf	1.017		1.738	0.697	0.697	0.523	0.523	1.017	5.195		14.511
	FORM		m^2	35.4		56.2	26.2	26.2	21.9	21.9	35.4	187.8		588
2. PILE		SPEC	UNIT											
	ϕ 350-A	Number	no	12		8	8	8	4	4	12	44		122
		Unit Length	m	11.50		11.50	14.50	17.50	17.50	17.50	17.50	96		215.00
		Σ Length	m	138.0		92.0	116.0	140.0	70.0	70.0	210.0	698.0		1619.0
	ϕ 350-B	Number	no			6			2	2		10		42
		Unit Length	m			11.50			17.50	17.50		46.50		120.50
		Σ Length	m			69.0			35.0	35.0		139.0		533.0
	ϕ 400-B	Number	no											
		Unit Length	m											
		Σ Length	m											
3. CUSHION SLAB		SPEC	UNIT											
	CONCRETE	24 K class	m^3											
	RE-BAR	D≦15	tf											
		D > 15	tf											
	FORM		m^2											

Bill of Quantity of Substructure(4/9)

A. Pre-Ten Girder Bridge

TANJUNGAN 1/1

				BTM 1	BTM 3	BTM 4	BTM 5	BTM6 New	TOTAL
1. HAMMER HEAD		SPEC	UNIT						
	CONCRETE	24 K class	m^3	35.5	43.3	37.9	37.9	14.8	169.4
	RE-BAR	D-10,12	tf	0.768	1.545	1.406	1.406	0.549	5.674
		D-25	tf	1.418	2.953	2.539	2.539	1.017	10.466
	FORM		m^2	65.6	77.7	82.1	82.1	36.6	344.1
2. PILE		SPEC	UNIT						
	⌀ 350-A	Number	no	12	16	10	10	6	54
		Unit Length	m	16.50	12.50	11.50	10.50	12.50	63.50
		Σ Length	m	198.0	200.0	115.0	105.0	75.0	693.0
	⌀ 350-B	Number	no	12	8	8	8	6	42
		Unit Length	m	16.50	12.50	11.50	10.50	12.50	63.50
		Σ Length	m	198.0	100.0	92.0	84.0	75.0	549.0
	⌀ 400-B	Number	no						
		Unit Length	m						
		Σ Length	m						
3. CUSHION SLAB		SPEC	UNIT						
	CONCRETE	24 K class	m^3		18.6				18.6
	RE-BAR	D≦15	tf		0.741				0.741
		D > 15	tf		1.424				1.424
	FORM		m^2		63.9				63.9

Bill of Quantity of Substructure(5/9)

A. Pre-Ten Girder Bridge

PIK JUNCTION (BNM)

				BNM 1	BNM 2	BNM 3	BNM 4	TOTAL
				Change	Change	Change	Change	
1. HAMMER HEAD		SPEC	UNIT					
	CONCRETE	24 K class	m^3					0.0
	RE-BAR	D-10,12	tf					0
		D-25	tf					0
	FORM		m^2					0
2. PILE		SPEC	UNIT					
	Φ 350-A	Number	no					0
		Unit Length	m					0.0
		Σ Length	m					0.0
	Φ 350-B	Number	no					
		Unit Length	m					
		Σ Length	m					
	Φ 400-B	Number	no					
		Unit Length	m					
		Σ Length	m					
3. CUSHION SLAB		SPEC	UNIT					
	CONCRETE	24 K class	m^3					0
	RE-BAR	D≦15	tf					0
		D > 15	tf					0
	FORM		m^2					0.0

Bill of Quantity of Substructure(6/9)

A. Pre-Ten Girder Bridge

CENGKARENG 1/2

				BCM 1	BCM 2	BCM 3	BCM 4	BCM 5	BCM 6	BCM 7	BCM 8	BCM 9	BCM 10	SUB
				Cancel										TOTAL
1. HAMMER HEAD		SPEC	UNIT											
	CONCRETE	24 K class	m^3		29.4	14.8	5.6	20.6	20.6	5.6	5.6	5.6	20.0	127.8
	RE-BAR	D-10,12	tf		1.05	0.532	0.225	0.724	0.724	0.225	0.225	0.225	0.724	4.654
		D-25	tf		1.813	0.966	0.375	1.305	1.305	0.375	0.375	0.375	1.305	8.194
	FORM		m^2		63.6	36.2	18.7	47.2	43.8	18.7	18.7	18.7	43.8	309.4
2. PILE		SPEC	UNIT											
	Φ 350-A	Number	no		16	8	4	12	12	4	4	4	4	68
		Unit Length	m		6.50	6.50	7.50	8.5	10.5	7.50	7.50	7.50	9.5	71.5
		Σ Length	m		104.0	52.0	30.0	102.0	126.0	30.0	30.0	30.0	114.0	618.0
	Φ 350-B	Number	no											
		Unit Length	m											
		Σ Length	m											
	Φ 400-B	Number	no											
		Unit Length	m											
		Σ Length	m											
3. CUSHION SLAB		SPEC	UNIT											
	CONCRETE	24 K class	m^3											
	RE-BAR	D≦15	tf											
		D > 15	tf											
	FORM		m^2											

Bill of Quantity of Substructure(7/9)

A. Pre-Ten Girder Bridge

CENGKARENG 2/2

				BCM 11	BCM 12	BCM 13	BCM 14	SUB TOTAL						TOTAL
1. HAMMER HEAD		SPEC	UNIT											
	CONCRETE	24 K class	m^3	35.9	35.9	16.2	18.9	106.9						234.7
	RE-BAR	D-10,12	tf	1.33	1.33	0.660	1.050	4.37						9.024
		D-25	tf	2.253	2.253	0.990	1.83	7.326						15.52
	FORM		m^2	72.2	72.2	45.1	54.4	243.9						553.3
2. PILE		SPEC	UNIT											
	Φ 350-A	Number	no	16	16	8	12	52						120
		Unit Length	m	9.50	8.50	7.50	8.5	34.0						105.5
		Σ Length	m	152.0	136.0	60.0	102.0	450.0						1068
	Φ 350-B	Number	no											
		Unit Length	m											
		Σ Length	m											
	Φ 400-B	Number	no											
		Unit Length	m											
		Σ Length	m											
3. CUSHION SLAB		SPEC	UNIT											
	CONCRETE	24 K class	m^3	21.4	21.4			42.8						42.8
	RE-BAR	D≦15	tf	0.0854	0.0854			0.1708						0.1708
		D > 15	tf	2.558	2.558			5.116						5.116
	FORM		m^2	73.0	73.0			146						146

Bill of Quantity of Substructure(8/9)

A. Pre-Ten Girder Bridge

GEDE/BOR 1/1

				BGM 1	BGM 2	BGM 3	BGM 4	BGM 5	BGM 6	BGM 7	BGM 8	BGM 9	BGM 10	TOTAL
1. HAMMER HEAD		SPEC	UNIT											
	CONCRETE	24 K class	m^3	29.4	29.4	5.7	20.6	14.8	14.8	14.8	20.6	20.6	7.9	178.6
	RE-BAR	D-10,12	tf	10.50	10.50	0.225	0.724	0.532	0.532	0.532	0.724	0.724	0.302	25.295
		D-25	tf	1.813	1.813	0.375	1.305	0.966	0.966	0.966	1.305	1.305	0.483	11.297
	FORM		m^2	63.6	63.6	19.4	47.2	36.2	36.2	36.2	47.2	47.2	27.1	423.9
2. PILE		SPEC	UNIT											
	Φ 350-A	Number	no	16	16	4	12	8	8	8	12	12	4	100
		Unit Length	m	9.5	9.5	9.5	9.5	10.5	10.5	10.5	10.5	10.5	8.5	382.5
		Σ Length	m	152.0	152.0	38.0	114.0	84.0	84.0	84.0	126.0	126.0	34.0	994.0
	Φ 350-B	Number	no											
		Unit Length	m											
		Σ Length	m											
	Φ 400-B	Number	no											
		Unit Length	m											
		Σ Length	m											
3. CUSHION SLAB		SPEC	UNIT											
	CONCRETE	24 K class	m^3											
	RE-BAR	D≦15	tf											
		D > 15	tf											
	FORM		m^2											

Bill of Quantity of Substructure(9/9)
Pre-Ten Girder Bridge

GROUND TOTAL

				BKM 1 to 11	BKE 1 to 18	BTM 1 to 5	BNM 1 to 4	BCM 1 to14	BGM 1 to 10		GRAND TOTAL
1 HAMMER HEAD		SPEC	UNIT								
	CONCRETE	24 K class	m^3	292.2	249.8	169.4		234.7	178.6		1124.7
	RE-BAR	D-10, 12	tf	9.033	8.94	5.674		9.024	25.295		57.966
		D-25	tf	20.762	14.511	10.466		15.52	11.297		72.556
	FORM		m^2	547.6	588	344.1		553.3	423.9		2456.9
2 PILE		SPEC	UNIT								
	Φ 350-A	Number	no	104	122	54		120	100		500
		Unit Length	m	102.5	215	63.5		105.5	382.5		869
		ΣLength	m	1292	1619	693		1068	994		5666
	Φ 350-B	Number	no	44	42	42					128
		Unit Length	m	39.5	120.5	63.5					223.5
		ΣLength	m	566	533	549					1648
	Φ 400-B	Number	no	52							52
		Unit Length	m	57.5							57.5
		ΣLength	m	548							548
3. CUSHION SLAB		SPEC	UNIT								
	CONCRETE	24 K class	m^3			18.6		42.8			61.4
	RE-BAR	D≦15	tf			0.741		0.1708			0.9118
		D > 15	tf			1.424		5.116			6.54
	FORM		m^2			63.9		146			209.9

APPROACH ROAD

COMMON ITEM (1/14)

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,06)

KAMAL(MAIN)

No of :	1	2		3		4			5								
Bridge	FC	Width		Gap G	Gap 0.5*G	Road Main L-1	Road Branch L-2	SUM L	B/Q Item No03 A1	No03 A1*L	No04 A2	No04 A2*L	No05 H1	No05 H1*L	No06 A3	No06 A3*L	Remarks
BKM 1	B	4.60	IV -1	1.373	0.687	73.03	30.51	103.54	4.66	482.50	11.87	1229.02		0.00	0.58	60.05	
BKM 2	B	-															
BKM 3	B	(7.0) 9.60	II/III -2	1.797	0.899	60.51	139.53	200.04	4.86	972.19	13.87	2774.55		0.00	0.90	180.04	
BKM 4	P	2.50		2.13	1.065		9.00	9.00	5.31	47.79	18.67	168.03		0.00	0.54	4.89	
BKM 5	(SK) B	(7.0) 9.60	II/III -2	1.159	0.580	135.60		135.60	4.57	619.69	10.67	1446.85		0.00	0.46	62.38	
BKM 6	P	2.50		1.569	0.785		6.40	6.40	4.86	31.10	13.33	85.31		0.00	4.69	30.02	
BKM 7	P	2.50		2.087	1.044		8.40	8.40	5.14	43.18	17.33	145.57		0.00	5.14	43.18	
BKM 8	B	4.60	IV -1	2.106	1.053	86.80		86.80	5.14	446.15	17.30	1501.64		0.00	1.20	104.16	
BKM 9	P	2.50		1.575	0.788			0.00	5.03	0.00	13.33	0.00		0.00	4.57	0.00	
BKM 10	B	(7.0) 9.60	II/III -2	1.832	0.916	263.50		263.50	4.86	1280.61	14.00	3689.00		0.00	1.00	263.50	
BKM 11	B	(7.0) 9.60	II/III -2	1.427	0.714	321.10		321.10	4.69	1505.96	12.00	3853.20		0.00	0.67	215.14	

APPROACH ROAD

COMMON ITEM (2/14)

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,06)

KAMAL(BRANCH)

No of :	1	2		3		4			5								
Bridge	FC	Width		Gap		Road			B/Q Item								Rema-rks
				G	0.5*G	Main	Branch		No03		No04		No05		No06		
						L-1	L-2	SUM L	A1	A1*L	A2	A2*L	H1	H1*L	A3	A3*L	
BKE 1	B	3.00	IV -S	1.742	0.871	77.42		77.42	4.86	376.26	14.40	1114.85		0.00	0.87	67.36	
BKE 2	B	4.60	IV -1	1.530	0.765	76.00	188.65	264.65	4.80	1270.32	12.53	3316.06		0.00	0.70	185.26	
BKE 3	(SK) B	6.60	III/IV -3	1.393	0.697	86.51		86.51	4.77	412.65	12.00	1038.12		0.00	0.60	51.91	
BKE 4	B	6.60	III/IV -3	1.829	0.915	108.31		108.31	4.86	526.39	14.67	1588.91		0.00	0.92	99.65	
BKE 5	B	6.60	III/IV -3	1.849	0.925	103.14	50.29	153.43	4.86	745.67	14.67	2250.82		0.00	0.94	144.22	
BKE 6	B	4.60	IV -1	1.852	0.926	92.98	85.86	178.84	4.86	869.16	14.67	2623.58		0.00	0.94	168.11	
BKE 7	B	6.60	III/IV -3	2.011	1.006	189.21	100.28	289.49	5.14	1487.98	15.74	4556.57		0.00	0.07	20.26	
BKE 8	B	2.50		1.854	0.927		7.40	7.40	4.86	35.96	14.68	108.63		0.00	0.49	3.60	
BKE 9	B	4.60	IV -1	1.543	0.772	77.58	34.29	111.87	4.80	536.98	13.07	1462.14		0.00	0.71	79.43	
BKE 10	B	6.60	III/IV -3	1.832	0.916	171.68	100.28	271.96	4.86	1321.73	14.67	3989.65		0.00	0.92	250.20	
BKE 11	B	4.60	IV -1	1.427	0.714	94.11	67.42	161.53	4.71	760.81	12.00	1938.36		0.00	0.62	100.15	

APPROACH ROAD

COMMON ITEM (3/14)

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,06)

No of :	1	2		3		4			5								
Bridge	FC	Width		Gap G	0.5*G	Road Main L-1	Branch L-2	SUM L	B/Q Item No03 A1	A1*L	No04 A2	A2*L	No05 H1	H1*L	No06 A3	A3*L	Remarks
BKE 12	B	8.20	III/IV -1	1.496	0.748			0.00		0.00		0.00		0.00		0.00	
BKE 13	B	8.20	III/IV -1	1.248	0.624	62.40		62.40	4.57	285.17	11.46	715.10		0.00	0.50	31.20	
BKE 14	B	3.00	IV -S	2.204	1.102	93.80	79.70	173.50	5.14	891.79	18.67	3239.25		0.00	1.37	237.70	
BKE 15	B	3.00	IV -S	2.131	1.066	87.36		87.36	5.09	444.66	17.33	1513.95		0.00	1.23	107.45	
BKE 16	P	2.50		2.164	1.082		4.30	4.30	5.09	21.89	17.87	76.84		0.00	5.43	23.35	
BKE 17	P	2.50		1.900	0.950		3.80	3.80	4.86	18.47	14.80	56.24		0.00	4.86	18.47	
BKE 18	B	4.60	IV -1	2.148	1.074	87.73		87.73	5.14	450.93	18.13	1590.54		0.00	1.23	107.91	
BKE 19	(SL) B	4.60	IV -1	-													
BKE 20	(SL) B	4.60	IV -1	-													

APPROACH ROAD

COMMON ITEM (4/14)

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,06)

TANJUNGAN

No of :	1	2		3		4			5								
Bridge	FC	Width		Gap G	Gap 0.5*G	Road Main L-1	Road Branch L-2	SUM L	B/Q Item No03 A1	No03 A1*L	No04 A2	No04 A2*L	No05 H1	No05 H1*L	No06 A3	No06 A3*L	Rema-rks
BTM 1	B	6.60	III/IV -3	1.968	0.984			0.00	4.86	0.00	15.20	0.00		0.00	1.07	0.00	
BTM 2	N/A	-						0.00		0.00		0.00		0.00		0.00	
BTM 3	B	(8.00) 10.60	I -2	1.945	0.973	166.93	46.25	213.18	4.86	1036.05	15.20	3240.34		0.00	1.00	213.18	
BTM 4	B	12.20	II -3	2.065	1.033	68.93		68.93	5.14	354.30	15.86	1093.23		0.00	1.20	82.72	
BTM 5	(SK) B	12.20	II -3	2.023	1.012	67.43		67.43	5.00	337.15	15.60	1051.91		0.00	1.13	76.20	

PIK JUNCTION

No of :	1	2		3		4			5								
Bridge	FC	Width		Gap G	Gap 0.5*G	Road Main L-1	Road Branch L-2	SUM L	B/Q Item No03 A1	No03 A1*L	No04 A2	No04 A2*L	No05 H1	No05 H1*L	No06 A3	No06 A3*L	Rema-rks
BNM 1	B	8.20	II/III -1	1.762	0.881												
BNM 2	B	4.60	IV -1	1.483	0.742												
BNM 3	B	4.60	IV -1	2.426	1.213												
BNM 4	B	12.20	I -1	1.802	0.901												

APPROACH ROAD

COMMON ITEM (5/14)

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,06)

SALURAN CENGKARENG

No of :	1	2		3		4			5								
Bridge	FC	Width		Gap		Road			B/Q Item								Rema-rks
				G	0.5*G	Main	Branch		No03		No04		No05		No06		
						L-1	L-2	SUM L	A1	A1*L	A2	A2*L	H1	H1*L	A3	A3*L	
BCM 1	B	-7 9.60	II/III -2	1.04	0.52	114.60		114.60	4.57	523.72	9.60	1100.16		0.00	0.33	37.82	
BCM 2	B	(7.00) 9.60	II/III -3	1.941	0.971	181.58	97.05	278.63	4.97	1384.79	14.93	4159.95		0.00	1.00	278.63	
BCM 3	B	4.60	IV -1	1.544	0.772	77.20		77.20	4.86	375.19	12.80	988.16		0.00	0.77	59.44	
BCM 4	P	2.50		1.376	0.688		5.60	5.60	4.80	26.88	12.00	67.20		0.00	4.49	25.14	
BCM 5	B	6.60	III/IV -3	1.412	0.706	63.30	150.38	213.68	4.80	1025.66	12.00	2564.16		0.00	0.57	121.80	
BCM 6	B	6.60	III/IV -3	1.801	0.901	90.05	45.03	135.08	5.00	675.40	14.67	1981.62		0.00	0.93	125.62	
BCM 7	P	2.50		2.564	1.282		10.40	10.40	5.66	58.86	24.00	249.60		0.00	6.28	65.31	
BCM 8	P	2.50		2.103	1.052		8.40	8.40	5.14	43.18	16.00	134.40		0.00	5.09	42.76	
BCM 9	P	2.50		2.596	1.298		10.40	10.40	5.71	59.38	25.33	263.43		0.00	6.43	66.87	
BCM 10	B	6.60	III/IV -3	2.307	1.154	107.67	53.83	161.50	5.37	867.26	20.27	3273.61		0.00	1.47	237.41	
BCM 11	B	12.20	I -3	0.973	0.487	77.84	38.92	116.76	4.51	526.59	9.33	1089.37		0.00	0.30	35.03	
BCM 12	B	12.20	I -3	2.351	1.176	77.84		77.84	5.37	418.00	20.00	1556.80		0.00	1.52	118.32	
BCM 13	B	8.20	II/III -1	0.846	0.423	56.40		56.40	4.50	253.80	9.07	511.55		0.00	0.30	16.92	
BCM 14	B	(7.00) 9.60	II/III -3	0.828	0.414	55.20	27.60	82.80	4.50	372.60	9.07	751.00		0.00	0.30	24.84	

APPROACH ROAD

COMMON ITEM (6/14)

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,06)

GEDE/BOR

No of :	1	2		3		4			5								
Bridge	FC	Width		Gap G	0.5*G	Road Main L-1	Road Branch L-2	SUM L	B/Q Item No03 A1	No03 A1*L	No04 A2	No04 A2*L	No05 H1	No05 H1*L	No06 A3	No06 A3*L	Rema-rks
BGM 1	B	(7.00) 9.60	II/III -2	0.50	0.25	114.60		114.60	4.28	490.49	8.00	916.80		0.00	0.20	22.92	
BGM 2	B	(7.00) 9.60	II/III -2	1.01	0.51	114.60	57.30	171.90	4.57	785.58	10.40	1787.76		0.00	0.33	56.73	
BGM 3	P	2.50		1.91	0.96	64.50	3.80	68.30	4.86	331.94	15.73	1074.36		0.00	4.86	331.94	
BGM 4	B	6.60	III/IV -3	2.89	1.44	58.13	52.13	110.26	5.83	642.82	29.60	3263.70		0.00	2.13	234.85	
BGM 5	B	4.60	IV -1	2.88	1.44	88.00	51.94	139.94	5.71	799.06	29.33	4104.44		0.00	2.13	298.07	
BGM 6	B	4.60	IV -1	2.23	1.12	3.00	72.80	75.80	5.26	398.71	18.67	1415.19		0.00	1.39	105.36	
BGM 7	B	4.60	IV -1	2.32	1.16	38.50	45.80	84.30	5.29	445.95	20.27	1708.76		0.00	1.25	105.38	
BGM 8	B	6.60	III/IV -3	1.75	0.88	86.00	87.70	173.70	5.06	878.92	13.33	2315.42		0.00	0.92	159.80	
BGM 9	B	6.60	III/IV -3	2.15	1.07	111.63	103.73	215.36	5.14	1106.95	17.07	3676.20		0.00	1.29	277.81	
BGM 10	B	3.50	IV -S	2.20	1.10	99.82	44.41	144.23	5.31	765.86	18.00	2596.14		0.00	1.32	190.38	
BGM 11	B	4.60	IV -1														
BGM 12	B	8.20	II/III -1														

APPROACH ROAD

COMMON ITEM (7/14)

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,06)

GEDE/BOR(BRANCH)

No of :	1	2		3		4			5								
Bridge	FC	Width		Gap		Road			B/Q Item								Rema-rks
				G	0.5*G	Main	Branch		No03		No04		No05		No06		
						L-1	L-2	SUM L	A1	A1*L	A2	A2*L	H1	H1*L	A3	A3*L	
BGA - 1	N/A																
BGA - 2	N/A																

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,06)

MERUYA

No of :	1	2		3		4			5								
Bridge	FC	Width		Gap		Road			B/Q Item								Rema-rks
				G	0.5*G	Main	Branch		No03		No04		No05		No06		
						L-1	L-2	SUM L	A1	A1*L	A2	A2*L	H1	H1*L	A3	A3*L	
BMM 1	NO	-															
BMM 2	(SL) B	9	úKO^úL	-													
BMM 3	(SL) B	9.6	úM	-													
BMM 4	(SL) B	9	úM	-													
BMM 5	(SL) B	7.5	úM	-													
BMM 6	(SL) B	7.5	úM	-													
BMM 7	C	7.5	úM	-													
BMM 8	C	7.5	úM	-													
BMM 9	C	7.5	úM	-													

APPROACH ROAD

COMMON ITEM(8/14)

Table BILL OF QUANTITY (ITEM NO 4.3 ,07,08,09,10,11)

KAMAL(MAIN)

No of :	1	2		3		4			5									
Bridge	FC	Width		Gap G	Gap 0.5*G	Road Main L-1	Road Branch L-2	SUM L	B/Q Item No07 A4	No07 A4*L	No08 H2	No08 H2*L	No09 H3	No09 H3*L	No10 K	No10 K*L	No11 2*L	Remarks
BKM 1	B	4.60	IV -1	1.373	0.687	73.03	30.51	103.54	0.21	21.74	3.00	310.62	0.41	42.45	0.39	40.38	207.08	
BKM 2	B	-																
BKM 3	B	(7.0) 9.60	II/III -2	1.797	0.899	60.51	139.53	200.04	0.29	58.01	4.00	800.16	0.59	118.02	0.45	90.02	400.08	
BKM 4	P	2.50		2.13	1.065		9.00	9.00	0.37	3.33	37.14	334.26	0.67	6.03	0.53	4.77	18.00	
BKM 5	(SK) B	(7.0) 9.60	II/III -2	1.159	0.580	135.60		135.60	0.16	21.70	4.70	637.32	0.43	58.31	0.38	51.53	271.20	
BKM 6	P	2.50		1.569	0.785		6.40	6.40	0.25	1.60	26.86	171.90	0.53	3.39	0.38	2.43	12.80	
BKM 7	P	2.50		2.087	1.044		8.40	8.40	0.35	2.94	34.29	288.04	0.67	5.63	0.53	4.45	16.80	
BKM 8	B	4.60	IV -1	2.106	1.053	86.80		86.80	0.37	32.12	4.60	399.28	0.67	58.16	0.53	46.00	173.60	
BKM 9	P	2.50		1.575	0.788			0.00	0.24	0.00	25.71	0.00	0.53	0.00	0.43	0.00	0.00	
BKM 10	B	(7.0) 9.60	II/III -2	1.832	0.916	263.50		263.50	0.31	81.69	4.00	1054.00	0.63	166.01	0.47	123.85	527.00	
BKM 11	B	(7.0) 9.60	II/III -2	1.427	0.714	321.10		321.10	0.21	67.43	5.10	1637.61	0.49	157.34	0.38	122.02	642.20	

APPROACH ROAD

COMMON ITEM(9/14)

Table BILL OF QUANTITY (ITEM NO 4.3 ,07,08,09,10,11)

KAMAL(BRANCH)

No of :	1	2		3		4			5									
Bridge	FC	Width		Gap		Road			B/Q Item									Rema-rks
				G	0.5*G	Main	Branch		No07		No08		No09		No10		No11	
						L-1	L-2	SUM L	A4	A4*L	H2	H2*L	H3	H3*L	K	K*L	2*L	
BKE 1	B	3.00	IV -S	1.742	0.871	77.42		77.42	0.27	20.90	3.80	294.20	0.57	44.13	0.44	34.06	154.84	
BKE 2	B	4.60	IV -1	1.530	0.765	76.00	188.65	264.65	0.25	66.16	3.30	873.35	5.30	1402.65	0.43	113.80	529.30	
BKE 3	(SK) B	6.60	III/IV -3	1.393	0.697	86.51		86.51	0.21	18.17	2.60	224.93	0.48	41.52	0.38	32.87	173.02	
BKE 4	B	6.60	III/IV -3	1.829	0.915	108.31		108.31	0.32	34.66	4.00	433.24	0.59	63.90	0.44	47.66	216.62	
BKE 5	B	6.60	III/IV -3	1.849	0.925	103.14	50.29	153.43	0.32	49.10	4.03	618.32	0.60	92.06	0.44	67.51	306.86	
BKE 6	B	4.60	IV -1	1.852	0.926	92.98	85.86	178.84	0.32	57.23	4.04	722.51	0.60	107.30	0.44	78.69	357.68	
BKE 7	B	6.60	III/IV -3	2.011	1.006	189.21	100.28	289.49	0.35	101.32	4.40	1273.76	0.64	185.27	0.49	141.85	578.98	
BKE 8	B	2.50		1.854	0.927		7.40	7.40	0.32	2.37	30.86	228.36	0.60	4.44	0.44	3.26	14.80	
BKE 9	B	4.60	IV -1	1.543	0.772	77.58	34.29	111.87	0.25	27.97	3.40	380.36	0.53	59.29	0.43	48.10	223.74	
BKE 10	B	6.60	III/IV -3	1.832	0.916	171.68	100.28	271.96	0.32	87.03	4.00	1087.84	0.59	160.46	0.44	119.66	543.92	
BKE 11	B	4.60	IV -1	1.427	0.714	94.11	67.42	161.53	0.230		3.100		0.510		0.410			

APPROACH ROAD

COMMON ITEM(10/14)

Table BILL OF QUANTITY (ITEM NO 4.3 ,07,08,09,10,11)

No of :	1	2		3		4			5									
Bridge	FC	Width		Gap		Road			B/Q Item									Rema-rks
				G	0.5*G	Main	Branch		No07		No08		No09		No10		No11	
						L-1	L-2	SUM L	A4	A4*L	H2	H2*L	H3	H3*L	K	K*L	2*L	
BKE 12	B	8.20	III/IV -1	1.496	0.748													
BKE 13	B	8.20	III/IV -1	1.248	0.624	62.40		62.40	0.19	11.86	2.73	170.35	0.48	29.95	0.38	23.71	124.80	
BKE 14	B	3.00	IV -S	2.204	1.102	93.80	79.70	173.50	0.37	64.20	4.80	832.80	0.71	123.19	0.55	95.43	347.00	
BKE 15	B	3.00	IV -S	2.131	1.066	87.36		87.36	0.37	32.32	4.65	406.22	0.67	58.53	0.53	46.30	174.72	
BKE 16	P	2.50		2.164	1.082		4.30	4.30	0.37	1.59	36.57	157.25	0.69	2.97	0.53	2.28	8.60	
BKE 17	P	2.50		1.900	0.950		3.80	3.80	0.33	1.25	30.29	115.10	0.63	2.39	0.45	1.71	7.60	
BKE 18	B	4.60	IV -1	2.148	1.074	87.73		87.73	0.37	32.46	4.68	410.58	0.67	58.78	0.54	47.37	175.46	
BKE 19	(SL) B	4.60	IV -1	-														
BKE 20	(SL) B	4.60	IV -1	-														

APPROACH ROAD

COMMON ITEM(11/14)

Table BILL OF QUANTITY (ITEM NO 4.3 ,07,08,09,10,11)

TANJUNGAN

No of :	1	2		3		4			5									
Bridge	FC	Width		Gap G	0.5*G	Road Main L-1	Branch L-2	SUM L	B/Q Item No07 A4	No07 A4*L	No08 H2	No08 H2*L	No09 H3	No09 H3*L	No10 K	No10 K*L	No11 2*L	Remarks
BTM 1	B	6.60	III/IV -3	1.968	0.984			0.00	0.35	0.00	4.36	0.00	0.64	0.00	0.64	0.00	0.00	
BTM 2	N/A	-						0.00		0.00		0.00		0.00		0.00	0.00	
BTM 3	B	(8.00) 10.60	I -2	1.945	0.973	166.93	46.25	213.18	0.33	70.35	4.27	910.28	0.63	134.30	0.64	136.44	426.36	
BTM 4	B	12.20	II -3	2.065	1.033	68.93		68.93	0.35	24.13	4.60	317.08	0.66	45.49	0.49	33.78	137.86	
BTM 5	(SK) B	12.20	II -3	2.023	1.012	67.43		67.43	0.34	22.93	4.47	301.41	0.64	43.16	0.47	31.69	134.86	

PIK JUNCTION

No of :	1	2		3		4			5									
Bridge	FC	Width		Gap G	0.5*G	Road Main L-1	Branch L-2	SUM L	B/Q Item No07 A4	No07 A4*L	No08 H2	No08 H2*L	No09 H3	No09 H3*L	No10 K	No10 K*L	No11 2*L	Remarks
BNM 1	B	8.20	II/III -1	1.762	0.881													
BNM 2	B	4.60	IV -1	1.483	0.742													
BNM 3	B	4.60	IV -1	2.426	1.213													
BNM 4	B	12.20	I -1	1.802	0.901													

APPROACH ROAD

COMMON ITEM(12/14)

Table BILL OF QUANTITY (ITEM NO 4.3 ,07,08,09,10,11)

SALURAN CENGKARENG

No of :	1	2		3		4			5									
Bridge	FC	Width		Gap G	Gap 0.5*G	Road Main L-1	Road Branch L-2	SUM L	B/Q Item No07 A4	No07 A4*L	No08 H2	No08 H2*L	No09 H3	No09 H3*L	No10 K	No10 K*L	No11 2*L	Remarks
BCM 1	B	-7 9.60	II/III -2	1.04	0.52	114.60		114.60	0.14	16.04	2.40	275.04	0.41	46.99	0.36	41.26	229.20	
BCM 2	B	(7.00) 9.60	II/III -3	1.941	0.971	181.58	97.05	278.63	0.32	89.16	4.13	1150.74	0.62	172.75	0.45	125.38	557.26	
BCM 3	B	4.60	IV -1	1.544	0.772	77.20		77.20	0.25	19.30	3.33	257.08	0.53	40.92	0.43	33.20	154.40	
BCM 4	P	2.50		1.376	0.688		5.60	5.60	0.21	1.18	24.57	137.59	0.49	2.74	0.39	2.18	11.20	
BCM 5	B	6.60	III/IV -3	1.412	0.706	63.30	150.38	213.68	0.22	47.01	3.00	641.04	0.50	106.84	0.39	83.34	427.36	
BCM 6	B	6.60	III/IV -3	1.801	0.901	90.05	45.03	135.08	0.31	41.87	4.00	540.32	0.60	81.05	0.44	59.44	270.16	
BCM 7	P	2.50		2.564	1.282		10.40	10.40	0.45	4.68	48.00	499.20	0.77	8.01	0.69	7.18	20.80	
BCM 8	P	2.50		2.103	1.052		8.40	8.40	0.37	3.11	33.14	278.38	0.53	4.45	0.45	3.78	16.80	
BCM 9	P	2.50		2.596	1.298		10.40	10.40	0.48	4.99	48.00	499.20	0.77	8.01	0.69	7.18	20.80	
BCM 10	B	6.60	III/IV -3	2.307	1.154	107.67	53.83	161.50	0.40	64.60	4.96	801.04	0.71	114.67	0.61	98.52	323.00	
BCM 11	B	12.20	I -3	0.973	0.487	77.84	38.92	116.76	0.13	15.18	2.07	241.69	0.40	46.70	0.35	40.87	233.52	
BCM 12	B	12.20	I -3	2.351	1.176	77.84		77.84	0.40	31.14	5.17	402.43	0.71	55.27	0.63	49.04	155.68	
BCM 13	B	8.20	II/III -1	0.846	0.423	56.40		56.40	0.13	7.33	1.97	111.11	0.37	20.87	0.31	17.48	112.80	
BCM 14	B	(7.00) 9.60	II/III -3	0.828	0.414	55.20	27.60	82.80	0.13	10.76	1.97	163.12	0.37	30.64	0.31	25.67	165.60	

APPROACH ROAD

COMMON ITEM(13/14)

Table BILL OF QUANTITY (ITEM NO 4.3 ,07,08,09,10,11)

GEDE/BOR

No of :	1	2		3		4			5									
Bridge	FC	Width		Gap G	0.5*G	Road Main L-1	Road Branch L-2	SUM L	B/Q Item No07 A4	No07 A4*L	No08 H2	No08 H2*L	No09 H3	No09 H3*L	No10 K	No10 K*L	No11 2*L	Remarks
BGM 1	B	(7.00) 9.60	II/III -2	0.500	0.250	114.60		114.60	0.08	9.17	0.70	80.22	0.29	33.23	0.30	34.38	229.20	
BGM 2	B	(7.00) 9.60	II/III -2	1.014	0.507	114.60	57.30	171.90	0.13	22.35	2.20	378.18	0.40	68.76	0.37	63.60	343.80	
BGM 3	P	2.50		1.912	0.956	64.50	3.80	68.30		0.00	31.14	2126.86		0.00	0.50	34.15	136.60	
BGM 4	B	6.60	III/IV -3	2.885	1.443	58.13	52.13	110.26	0.53	58.44	6.20	683.61	0.85	93.72	0.74	81.59	220.52	
BGM 5	B	4.60	IV -1	2.875	1.438	88.00	51.94	139.94	0.53	74.17	6.20	867.63	0.85	118.95	0.74	103.56	279.88	
BGM 6	B	4.60	IV -1	2.232	1.116	3.00	72.80	75.80	0.39	29.56	4.91	372.18	0.69	52.30	0.59	44.72	151.60	
BGM 7	B	4.60	IV -1	2.322	1.161	38.50	45.80	84.30	0.40	33.72	4.96	418.13	0.72	60.70	0.62	52.27	168.60	
BGM 8	B	6.60	III/IV -3	1.754	0.877	86.00	87.70	173.70	0.29	50.37	3.76	653.11	0.47	81.64	0.44	76.43	347.40	
BGM 9	B	6.60	III/IV -3	2.149	1.075	111.63	103.73	215.36	0.37	79.68	4.67	1005.73	0.67	144.29	0.54	116.29	430.72	
BGM 10	B	3.50	IV -S	2.197	1.099	99.82	44.41	144.23	0.38	54.81	4.80	692.30	0.69	99.52	0.56	80.77	288.46	
BGM 11	B	4.60	IV -1															
BGM 12	B	8.20	II/III -1															

APPROACH ROAD

COMMON ITEM(14/14)

Table BILL OF QUANTITY (ITEM NO 4.3 ,07,08,09,10,11)

GEDE/BOR(BRANCH)

No of :	1	2	3		4			5									
Bridge	FC	Width	Gap		Road			B/Q Item									Rema-rks
			G	0.5*G	Main	Branch	SUM L	No07		No08		No09		No10		No11	
					L-1	L-2		A4	A4*L	H2	H2*L	H3	H3*L	K	K*L	2*L	
BGA - 1	N/A																
BGA - 2	N/A																

Table BILL OF QUANTITY (ITEM NO 4.3 ,07,08,09,10,11)

MERUYA

No of :	1	2	3		4			5									
Bridge	FC	Width	Gap		Road			B/Q Item									Rema-rks
			G	0.5*G	Main	Branch	SUM L	No07		No08		No09		No10		No11	
					L-1	L-2		A4	A4*L	H2	H2*L	H3	H3*L	K	K*L	2*L	
BMM 1	NO	-															
BMM 2	(SL) B	9 úKO^úL	-														
BMM 3	(SL) B	9.6 úM	-														
BMM 4	(SL) B	9 úM	-														
BMM 5	(SL) B	7.5 úM	-														
BMM 6	(SL) B	7.5 úM	-														
BMM 7	C	7.5 úM	-														
BMM 8	C	7.5 úM	-														
BMM 9	C	7.5 úM	-														

[8] SLOPE PLOTECTION TYPE (1/7)

Table BILL OF QUANTITY (ITEM NO.01,02,15,16,17,18) for Slope Protection Type

KAMAL (MAIN)

No of :	1	2		3								4											5
		Gap		Road								B/Q Item											
Bridge	FC	G	0.5*G	Main			Branch					No18	No17	No16	SUM	No.15[1]				No. 01/02			Rem-arks
				W-1	L-1	W*L	W-2	L-2	W*L	SUM:L	SUM:A	0.05*A	0.15*A	0.2*A	0.4*A	[2]	[3]	[4]	SUM	1.15A	2G*L	SUM	
BKM1(S)	B	1.373	0.687				4.00	33.51	134.04	33.51	134.04	6.70	20.11	26.81	53.62	92.02	31.59	53.62	69.988	154.15	92.02	246.16	SP
BKM 2	B																						
[illegible]	[illegible]	[illegible]	[illegible]	8.00	144.02	1152.16	6.75	102.51	691.91	246.53	1844.10	92.21	276.62	368.82	737.64	1656.93	398.05	737.64	1317.33	2120.72	886.03	3006.75	
[illegible]	[illegible]	[illegible]	[illegible]	0.00	0.00	0.00	2.50	9.0	22.50	9.00	22.50	1.13	3.38	4.50	9.00	23.96	20.42	9.00	35.38	25.88	38.34	64.22	
[illegible]	[illegible]	[illegible]	[illegible]	7.00	121.30	849.10	0.00	0.00	0.00	121.30	849.10	42.46	127.37	169.82	339.64	492.05	81.47	339.64	233.88	976.47	281.17	1257.64	
[illegible]	[illegible]	[illegible]	[illegible]	0.00	0.00	0.00	2.50	6.40	16.00	6.40	16.00	0.80	2.40	3.20	6.40	12.55	7.88	6.40	14.03	18.40	20.08	38.48	
[illegible]	[illegible]	[illegible]	[illegible]	0.00	0.00	0.00	2.50	8.40	21.00	8.40	21.00	1.05	3.15	4.20	8.40	21.91	18.29	8.40	31.81	24.15	35.06	59.21	
[illegible]	[illegible]	[illegible]	[illegible]	5.00	73.71	368.55	0.00	0.00	0.00	73.71	368.55	18.43	55.28	73.71	147.42	388.08	163.46	147.42	404.12	423.83	310.47	734.30	
[illegible]	[illegible]	[illegible]	[illegible]	0.00	0.00	0.00	2.50	6.40	16.00	6.40	16.00	0.80	2.40	3.20	6.40	12.60	7.94	6.40	14.14	18.40	20.16	38.56	
[illegible]	[illegible]	[illegible]	[illegible]	8.40	133.60	1122.24	5.00	189.90	0.00	323.50	1122.24	56.11	168.34	224.45	448.90	1027.97	542.87	448.90	1121.95	1290.38	1185.30	2475.88	
BKM 11	B	1.427	0.714	7.25	90.00	652.5	5.00	267.20	0.00	357.20	652.50	32.63	97.88	130.50	261.00	465.56	363.69	261.00	568.25	750.38	1019.45	1769.82	

Remarks[1]: [2]: 0.5G*A [4]: 0.4A

[3]: 0.5G*G*L SUM: 0.5G*1+0.5G*G*L-0.4A

[B] SLOPE PLOTECTION TYPE (2/7)

Table BILL OF QUANTITY (ITEM NO 01,02,15,16,17,18)

KAMAL(BRANCH)

No of	1	2		3								4											5
		Gap		Road								B/Q Item											
Bridge	PC	G	0.5*G	Main			Branch			SUM:L	SUM:A	No18	No17	No16	SUM	No.15[1]				No. 01/02			Remarks
				W-1	L-1	W*L	W-2	L-2	W*L			0.05*A	0.15*A	0.2*A	0.4*A	[2]	[3]	[4]	SUM	1.15A	2G*L	SUM	
[illegible]	in	1.7[illegible]	0.[illegible]21	2.50	79.92	199.8			0.00	79.92	199.80	9.99	29.97	39.96	79.92	174.03	121.26	99.92	215.37	229.77	278.44	508.21	
[illegible]	in	1.[illegible]	0.[illegible]	4.85	72.00	349.2	4.00	40.00	160.00	112.00	509.20	25.46	76.38	101.84	203.68	389.34	131.09	203.68	316.05	585.58	342.72	928.30	
[illegible]	in	1.[illegible]	0.[illegible]	4.85	70.65	342.65	2.00	37.53	75.06	108.18	417.71	20.89	62.66	83.54	167.09	290.94	104.96	167.09	228.81	480.37	301.39	781.76	
[illegible]	in	1.[illegible]	0.[illegible]	5.00	92.43	462.15	2.00	93.45	186.90	185.90	649.15	32.46	97.37	129.83	259.66	593.65	310.94	259.66	644.93	746.52	680.02	1426.54	
[illegible]	in	1.[illegible]	0.925	1.70	102.21	460.98	2.35	147.15	346.31	249.68	826.99	41.35	124.05	165.40	330.80	764.55	426.80	330.80	860.56	951.04	923.32	1874.35	
[illegible]	in	1.[illegible]	0.925	4.00	87.16	348.64	2.25	85.86	193.19	173.02	541.83	27.09	81.27	108.37	216.73	501.73	296.72	216.73	581.72	623.10	640.87	1263.96	
[illegible]	in	2.[illegible]	1.000	5.00	221.81	1121.05	2.50	105.68	264.20	330.49	1388.25	69.41	208.24	277.65	555.30	1395.89	668.27	555.30	1508.86	1596.49	1329.23	2925.72	
[illegible]	in	1.[illegible]	0.927			0.00	2.50	7.40	18.50	7.40	18.50	0.93	2.78	3.70	7.40	17.15	12.72	7.40	22.47	21.28	27.44	48.71	
[illegible]	in	1.[illegible]	0.775	4.50	108.80	489.87	2.00	72.58	145.16	181.44	635.03	31.75	95.25	127.01	254.01	489.93	215.99	254.01	451.90	730.28	559.92	1290.21	
[illegible]	in	1.[illegible]	0.916	5.10	154.81	789.48	2.00	97.00	194.00	251.80	983.48	49.17	147.52	196.70	393.39	900.87	422.55	393.39	930.02	1131.00	922.60	2053.60	
[illegible]	in	1.42[illegible]	0.714	3.50	94.6[illegible]	331.1[illegible]	3.20	67.42	215.74	162.02	546.84	27.34	82.03	109.37	218.74	390.17	164.56	218.74	336.40	628.87	462.41	1091.28	

(B) SLOPE PLOTECTION TYPE (3/7)

Table BILL OF QUANTITY (ITEM NO 01,02,15,16,17,18)

No of :	1	2		3								4											5
Bridge	PC	Gap		Road								B/Q Item											Rem-arks
		G	0.5*G	Main			Branch					No18	No17	No16	SUM1	No.15[1]				No. 01/02			
				W-1	L-1	W*L	W-2	L-2	W*L	SUM:L	SUM:A	0.05*A	0.15*A	0.2*A	0.4*A	(2)	(3)	(4)	SUM	1.15A	2G*L	SUM	
[illegible]	[illegible]	[illegible]	[illegible]																				
[illegible]	[illegible]	[illegible]	[illegible]	6.50m	70.40	457.60			0.00	70.40	457.60	22.88	68.64	91.52	183.04	285.54	54.82	183.04	157.33	526.24	175.72	701.96	
[illegible]	[illegible]	[illegible]	[illegible]	2.50m	65.60	338.80	2.00	91.40	182.80	156.40	338.80	16.94	50.82	67.76	135.52	373.36	379.87	135.52	617.70	389.62	689.41	1079.03	
[illegible]	[illegible]	[illegible]	[illegible]	2.50m	93.36	233.64			0.00	93.36	233.64	11.68	35.01	46.73	93.45	248.93	216.52	93.45	372.00	268.68	406.42	675.10	
[illegible]	[illegible]	[illegible]	[illegible]			0.00	2.50	8.60	21.50	8.60	21.50	1.08	3.23	4.30	8.60	23.26	20.14	8.60	34.80	24.73	37.22	61.95	
[illegible]	[illegible]	[illegible]	[illegible]			0.00	2.50	7.60	19.00	7.60	19.00	0.95	2.85	3.80	7.60	18.05	13.72	7.60	24.17	21.85	28.88	50.73	
[illegible]	[illegible]	[illegible]	[illegible]	4.00m	95.73	382.92			0.00	95.73	382.92	19.15	57.41	76.58	153.17	411.26	220.84	153.17	478.93	440.36	411.26	851.61	
[illegible]	[illegible]	[illegible]																					
[illegible]	[illegible]	[illegible]	[illegible]																				

[B] SLOPE PLOTECTION TYPE (4/7)

Table BILL OF QUANTITY (ITEM NO 01,02,15,16,17,18)

TANJUNGAN

No of :	1	2		3								4											5
		Gap		Road								B/Q Item											Rem-
Bridge	FC	G	0.5*G	Main			Branch			SUM:L	SUM:A	No18	No17	No16	SUM	No.15(1)				No. 01/02			arks
				W-1	L-1	W*L	W-2	L-2	W*L			0.05*A	0.15*A	0.2*A	0.4*A	[2]	[3]	[4]	SUM	1.15A	2G*L	SUM	
BTM 1	B	1.908	0.954	5.20	108.40	563.68	0.0	0.0	0.0	108.4	563.7	28.18	84.6	112.7	225.5	554.7	209.9	225.5	539.1	648.2	426.7	1074.9	
BTM 2	[illegible]																						SP
BTM 3	B	1.943	0.973	8.50	178.97	1521.25	11.00	43.70	480.7	222.7	2001.9	100.10	300.3	400.4	800.8	1946.9	421.2	800.8	1567.3	2302.2	866.2	3168.4	
BTM 4	B	2.065	1.033	10.50	68.83	722.72			0.0	68.8	722.7	36.14	108.4	144.5	289.1	746.2	146.8	289.1	603.9	831.1	284.3	1115.4	
BTM 5	(SN) B	2.023	1.012	9.50	139.87	1328.77			0.0	139.9	1328.8	66.44	199.3	265.8	531.5	1344.0	286.2	531.5	1098.8	1528.1	565.9	2094.0	

PIN JUNCTION

No of :	1	2		3								4											5
		Gap		Road								B/Q Item											Rem-
Bridge	FC	G	0.5*G	Main			Branch			SUM:L	SUM:A	No18	No17	No16	SUM	No.15(1)				No. 01/02			arks
				W-1	L-1	W*L	W-2	L-2	W*L			0.05*A	0.15*A	0.2*A	0.4*A	[2]	[3]	[4]	SUM	1.15A	2G*L	SUM	
PJM 1	B	1.762	0.881	7.10	113.33	804.64	7.50	136.00	1020.00	249.33	1824.64	91.23	273.70	364.93	729.86	1607.51	387.04	729.86	1264.69	2098.34	878.64	2976.98	SP
PJM 2	B	1.434	0.717	8.30	111.05	932.82	5.75	105.00	603.75	216.05	1536.57	76.84	230.49	307.31	614.63	1139.37	237.58	614.63	762.32	1767.06	640.80	2407.86	
PJM 3	B	2.426	1.213	6.50	105.05	682.83	4.00	56.53	226.12	161.58	908.95	45.45	136.34	181.79	363.58	102.55	475.49	363.58	1214.46	1045.29	783.99	1829.27	
PJM 4	B	1.802	0.901	5.00	115.41	577.05	4.00	80.61	322.44	196.02	899.49	44.97	134.92	179.90	359.80	810.44	318.26	359.80	768.90	1034.41	706.46	1740.87	SP

[B] SLOPE PLOTECTION TYPE (5/7)

Table BILL OF QUANTITY (ITEM NO 01,02,15,16,17,18)

SALURAN CENGKARENG

No of	1	2		3								4											5
		Gap		Road								B/Q Item											Rem-
Bridge	KC	G	0.5*G	Main			Branch			SUM:L	SUM:A	No18	No17	No16	SUM	No.1511				No. 01/02			arks
				W-1	L-1	W*L	W-2	L-2	W*L			0.05*A	0.15*A	0.2*A	0.4*A	[2]	[3]	[4]	SUM	1.15A	2G*L	SUM	
	15	1.00	0.50	4.00	127.80	511.20			0.00	127.80	511.20	25.56	76.68	102.24	204.48	265.82	69.11	204.48	130.46	587.88	265.82	853.70	
	15	1.941	0.971	4.50	179.08	805.80	3.75	101.05	378.91	280.13	1184.80	59.24	177.72	236.96	473.92	1149.85	527.69	473.92	1203.62	1302.52	1087.46	2389.98	
	15	1.944	0.972	3.75	77.20	289.50			0.00	77.20	289.50	14.48	43.43	57.90	115.80	223.99	92.02	115.80	199.71	332.93	238.39	571.32	
	15	1.500	0.750			0.00	2.50	5.60	14.00	5.60	14.00	0.70	2.10	2.80	5.60	9.63	5.30	5.60	9.33	16.10	15.41	31.51	
	15	1.41	0.705	5.00	101.60	508.00	3.75	77.20	289.50	178.80	858.46	42.92	128.77	171.69	343.38	606.07	178.24	343.38	440.93	987.23	504.93	1492.16	
	15	1.801	0.901	4.50	97.05	436.74	2.10	47.74	100.25	144.78	536.96	26.85	80.54	107.39	214.78	483.53	234.80	214.78	503.55	617.50	521.50	1139.00	
	15	2.200	1.100			0.00	2.50	10.40	26.00	10.40	26.00	1.30	3.90	5.20	10.40	33.33	34.19	10.40	57.12	29.90	53.33	83.23	
	15	2.100	1.050			0.00	2.50	8.40	21.00	8.40	21.00	1.05	3.15	4.20	8.40	22.08	18.57	8.40	32.26	24.15	35.33	59.48	
	15	2.200	1.100			0.00	2.50	10.40	26.00	10.40	26.00	1.30	3.90	5.20	10.40	33.75	35.04	10.40	58.39	29.90	54.00	83.90	
	15	2.307	1.154	4.70	118.07	557.75	5.00	56.53	282.65	175.20	840.40	42.02	126.06	168.08	336.16	969.40	466.23	336.16	1099.47	966.46	808.37	1774.83	
	15	0.975	0.487	9.00	85.84	772.56	2.00	53.83	107.66	139.67	880.22	44.01	132.03	176.04	352.09	428.23	66.11	352.09	842.55	1012.25	271.80	1284.05	SP
	15	2.421	1.176	10.00	176.08	1760.80			0.00	176.08	1760.80	88.04	264.12	352.16	704.32	2069.82	486.61	704.32	1852.12	2024.92	827.93	2852.85	SP
	15	0.956	0.425	6.00	64.40	386.40			0.00	64.40	386.40	19.32	57.96	77.28	154.56	163.45	23.05	154.56	31.93	444.36	108.96	553.32	
	15	0.828	0.414	7.00	60.20	421.40	3.00	62.20	186.60	122.40	608.00	30.40	91.20	121.60	243.20	251.71	51.96	243.20	50.47	699.20	202.69	901.89	

[B] SLOPE PLOTECTION TYPE (6/7)

Table BILL OF QUANTITY (ITEM NO 01,02,15,16,17,18)

GEDE/BOR

No of :	1	2		3								4											5
		Gap		Road								IVO Item											Rem-arks
Bridge	FC	G	0.5*G	Main			Branch			SUM:L	SUM:A	No18	No17	No16	SUM	No.15[1]				No. 01/02			
				W-1	L-1	W*L	W-2	L-2	W*L			0.05*A	0.15*A	0.2*A	0.4*A	[2]	[3]	[4]	SUM	1.15A	2G*L	SUM	
[illegible]	[illegible]	[illegible]	0.250	8.50	114.60	974.10		0.00	0.00	114.60	974.10	48.71	146.12	194.82	389.64	243.53	14.33	389.64	131.29	1120.22	114.60	1234.82	
[illegible]	[illegible]	[illegible]	[illegible]	8.50	120.00	1025.10	8.75	65.30	571.38	185.90	1596.48	79.82	239.47	319.30	638.59	809.41	95.57	638.59	266.39	1833.95	377.01	2212.95	
[illegible]	[illegible]	[illegible]	0.956	0.00	0.00	0.00	2.50	3.80	9.50	3.80	9.50	0.48	1.43	1.90	3.80	9.08	6.95	3.80	12.23	10.93	14.53	25.46	
[illegible]	[illegible]	[illegible]	[illegible]	6.50	58.11	377.85	4.70	59.13	277.91	117.26	655.76	32.79	98.36	131.15	262.30	945.93	487.99	262.30	1171.62	754.12	676.59	1430.71	
[illegible]	[illegible]	[illegible]	[illegible]	6.70	86.00	576.20	4.00	117.89	471.56	203.89	1047.76	52.39	157.16	209.55	419.10	1506.16	842.64	419.10	1929.69	1204.92	1172.37	2377.29	
[illegible]	[illegible]	[illegible]	[illegible]	4.00	3.00	12.00	4.00	72.80	291.20	75.80	303.20	15.16	45.48	60.64	121.28	338.37	188.81	121.28	405.90	348.68	338.37	687.05	
[illegible]	[illegible]	[illegible]	1.161	6.50	38.50	250.25	4.50	45.80	206.10	84.30	456.35	22.82	68.45	91.27	182.54	529.82	227.26	182.54	574.54	524.80	391.49	916.29	
[illegible]	[illegible]	1.754	0.877	5.00	86.00	430.00	5.00	43.85	219.25	129.85	649.25	32.46	97.39	129.85	259.70	569.39	199.74	259.70	509.44	746.64	455.51	1202.15	
[illegible]	[illegible]	[illegible]	[illegible]	5.00	115.93	579.65	6.40	86.26	552.06	202.19	1131.71	56.59	169.76	226.34	452.69	1216.03	466.88	452.69	1230.22	1301.47	869.01	2170.48	
[illegible]	[illegible]	[illegible]	[illegible]	4.50	97.77	439.97	3.00	75.41	226.23	173.18	666.20	33.31	99.93	133.24	266.48	731.82	417.95	266.48	883.29	766.12	760.95	1527.08	
[illegible]	[illegible]																						
[illegible]	[illegible]																						

[B] SLOPE PLOTECTION TYPE (7/7)

Table BILL OF QUANTITY (ITEM NO 01,02,15,16,17,18)

GEDE/BOR(BRANCH)

No of:	1	2		3								4										5
		Gap		Road								B/Q Item										Rem-arks
				Main			Branch					No18	No17	No16	SUM	No.15[1]				No. 01/02		
Bridge	FC	G	0.5*G	W-1	L-1	W*L	W-2	L-2	W*L	SUM:L	SUM:A	0.05*A	0.15*A	0.2*A	0.4*A	[2]	[3]	[4]	SUM	1.15A	2G*L	SUM	
BGA-1	N/A																					
BGA-2	N/A																					

Table BILL OF QUANTITY (ITEM NO 01,02,15,16,17,18)

MERUYA

No of:	1	2		3								4										5
		Gap		Road								B/Q Item										Rem-arks
				Main			Branch					No18	No17	No16	SUM	No.15[1]				No. 01/02		
Bridge	FC	G	0.5*G	W-1	L-1	W*L	W-2	L-2	W*L	SUM:L	SUM:A	0.05*A	0.15*A	0.2*A	0.4*A	[2]	[3]	[4]	SUM	1.15A	2G*L	SUM	

[A] RETAINING WALL TYPE

Table BILL OF QUANTITY (ITEM NO 4.3 ,01,02,15,16,17,18)

KAMAL(MAIN)

No of Bridge	FC	Width	Gap G	Gap 0.5*G	Road Main W-1	Main L-1	Main W*L	Branch W-2	Branch L-2	Branch W*L	SUM:A	BQ Item No18 0.05*A	No17 0.15*A	No16 0.2*A	SUM 0.4*A	No. 15/[1] [2]	A3*L	SUM	No01/02 1.15*A	Remarks
BKM 1	B	4.60 IV-1	1.374	0.687	5.60	73.03	408.97				408.97	20.45	61.35	81.79	163.59	117.17	61.79	55.377	470.32	RT
BKM 2	B	-	1.373	0.687				4.00	33.51	134.04	134.04	6.70	20.11	26.81	53.62					SP
BKM 3	B	(7.0) 9.60 II/III-2	1.797	0.899	8.00	344.02	1152.2	6.75	102.51	691.94	1844.10	92.21	276.62	368.82	737.64	919.29	221.88	697.41	2120.72	
BKM 4	P	2.50	2.13	1.065	0.00	0.00	0.00	2.50	9.0	22.50	22.50	1.13	3.38	4.50	9.00	14.96	10.86	4.10	25.88	
BKM 5	(SK) B	(7.0) 9.60 II/III-2	1.159	0.580	7.00	121.30	849.10	0.00	0.00	0.00	849.10	42.46	127.37	169.82	339.64	152.41	55.80	96.62	976.47	
BKM 6	P	2.50	1.569	0.785	0.00	0.00	0.00	2.50	6.40	16.00	16.00	0.80	2.40	3.20	6.40	6.15	9.38	-3.23	18.40	
BKM 7	P	2.50	2.087	1.044	0.00	0.00	0.00	2.50	8.40	21.00	21.00	1.05	3.15	4.20	8.40	13.51	10.28	-3.23	24.15	
BKM 8	B	4.60 IV-1	2.106	1.053	5.00	73.71	368.55	0.00	0.00	0.00	368.55	18.43	55.28	73.71	147.42	240.66	88.45	152.21	423.83	
BKM 9	P	2.50	1.575	0.788	0.00	0.00	0.00	2.50	6.40	16.00	16.00	0.80	2.40	3.20	6.40	6.20	9.14	-2.94	18.40	
BKM 10	B	(7.0) 9.60 II/III-2	1.832	0.916	8.40	133.60	1122.2	5.00	189.90	0.00	1122.24	56.11	168.34	224.45	448.90	579.08	323.50	255.58	1290.58	
BKM 11	B	(7.0) 9.60 II/III-2	1.427	0.714	7.25	90.00	652.5	5.00	267.20	0.00	652.50	32.63	97.88	130.50	261.00	204.56	239.32	-34.77	750.38	

Note: W-1; Width of Main Road (m)
L-1:Length of Main Road (m)
W-2:Width of Branch Road (m)
L-2:Length of Branch Road (m)

SUM:A ; W*L(Main+Branch)
0.05:Depth of Surface Course(m)
0.15: Depth of Base Course (m)
0.20:Sub-Base Course (m)

[1] ; 0.5G*A-0.4A-A3*L
[2] ; 0.5 G*A-0.4A

A3:Concrete Volume of Retaining Wall(cu.m/m)

Table BILL OF QUANTITY (ITEM NO 4.3 ,01,02,15,16,17,18)
KAMAL(BRANCH)

No of	1	2		3		4							5								6
				Gap		Road							B/Q Item								
Bridge	FC	Width		G	0.5*G	Main			Branch			SUM:A	No18	No17	No16	SUM	No. 15/[1]			No01/02	Rem-arks
						W-1	L-1	W*L	W-2	L-2	W*L		0.05*A	0.15*A	0.2*A	0.4*A	[2]	A3*L	SUM	1.15*A	
BKE 1	B	3.00	IV -S	1.742	0.871	2.50	79.92	199.80			0.00	199.80	9.99	29.97	39.96	79.92	94.11	69.53	94.11	229.77	
BKE 2	B	4.60	IV -1	1.530	0.765	4.85	72.00	349.20	4.00	40.00	160.00	509.20	25.46	76.38	101.84	203.68	185.86	78.40	185.86	585.58	
BKE 3	(SK) B	6.60	III/IV, -3	1.393	0.697	4.85	70.65	342.65	2.00	37.53	75.06	417.71	20.89	62.66	83.54	167.09	123.85	64.91	123.85	480.37	
BKE 4	B	6.60	III/IV -3	1.829	0.915	5.00	92.45	462.25	2.00	93.45	186.90	649.15	32.46	97.37	129.83	259.66	333.99	171.03	333.99	746.52	
BKE 5	B	6.60	III/IV -3	1.849	0.925	4.70	102.23	480.48	2.35	147.45	346.51	826.99	41.35	124.05	165.40	330.80	433.76	234.70	433.76	951.04	
BKE 6	B	4.60	IV -1	1.852	0.926	4.00	87.16	348.64	2.25	85.86	193.19	541.83	27.09	81.27	108.37	216.73	285.00	162.64	285.00	623.10	
BKE 7	B	6.60	III/IV -3	2.011	1.006	5.00	224.81	1124.1	2.50	105.68	264.20	1388.25	69.41	208.24	277.65	555.30	840.59	23.13	840.59	1596.49	
BKE 8	P	2.50		1.854	0.927			0.00	2.50	7.40	18.50	18.50	0.93	2.78	3.70	7.40	9.75	0.72	9.75	21.28	
BKE 9	B	4.60	IV -1	1.543	0.772	4.50	108.86	489.87	2.00	72.58	145.16	635.03	31.75	95.25	127.01	254.01	235.91	128.82	235.91	730.28	
BKE 10	B	6.60	III/IV -3	1.832	0.916	5.10	154.80	789.48	2.00	97.00	194.00	983.48	49.17	147.52	196.70	393.39	507.48	231.66	507.48	1131.00	
BKE 11	B	4.60	IV -1	1.427	0.714	3.50	94.60	331.10	3.20	67.42	215.74	546.84	27.34	82.03	109.37	218.74	171.44	100.45	171.44	628.87	

Table BILL OF QUANTITY (ITEM NO 4.3 ,01,02,15,16,17,18)

No of	1	2	3		4							5								6
			Gap		Road							B/Q Item								
Bridge	FC	Width	G	0.5*G	Main			Branch			SUM:A	No18	No17	No16	SUM	No. 15/[1]			No01/02	Rem-arks
					W-1	L-1	W*L	W-2	L-2	W*L		0.05*A	0.15*A	0.2*A	0.4*A	[2]	A3*L	SUM	1.15*A	
BKE 12	B	8.20 III/IV -1	1.496	0.748																
BKE 13	B	8.20 III/IV -1	1.248	0.624	6.500	70.40	457.60			0.00	457.60	22.88	68.64	91.52	183.04	102.50	264.00	183.04	526.24	
BKE 14	B	3.00 IV -S	2.204	1.102	2.400	65.00	156.00	2.00	91.40	182.80	338.80	16.94	50.82	67.76	135.52	237.84	302.77	135.52	389.62	
BKE 15	B	3.00 IV -S	2.131	1.066	2.450	95.36	233.63			0.00	233.63	11.68	35.04	46.73	93.45	155.48	404.66	93.45	268.68	
BKE 16	P	2.50	2.164	1.082			0.00	2.50	8.60	21.50	21.50	1.08	3.23	4.30	8.60	14.66	10.86	8.60	24.73	
BKE 17	P	2.50	1.900	0.950			0.00	2.50	7.60	19.00	19.00	0.95	2.85	3.80	7.60	10.45	9.72	7.60	21.85	
BKE 18	B	4.60 IV -1	2.148	1.074	4.000	95.73	382.92			0.00	382.92	19.15	57.44	76.58	153.17	258.09	588.74	153.17	440.36	
BKE 19	(NU) B	4.60 IV -1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
BKE 20	(NU) B	4.60 IV -1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table BILL OF QUANTITY (ITEM NO 4.3 ,01,02,15,16,17,18)

TANJUNGAN

No of	1	2		3		4							5								6
				Gap		Road							B/Q Item								
Bridge	FC	Width		G	0.5*G	Main			Branch			SUM:A	No18	No17	No16	SUM	No. 15/11			No01/02	Remarks
						W-1	L-1	W*L	W-2	L-2	W*L		0.05*A	0.15*A	0.2*A	0.4*A	[2]	A3*L	SUM	1.15*A	
BTM 1	B	6.60	III/IV -3	1.968	0.984	5.20	108.40	563.68	0.00	0.00	0.00	563.68	28.18	84.55	112.74	225.47	329.19	115.99	213.20	648.23	SP
BTM 2	N/A	-	-																		
BTM 3	B	(8.00) 10.60	I -2	1.945	0.973	8.50	178.97	1521.25	11.00	43.70	480.70	2001.95	100.10	300.29	400.39	800.78	1146.11	222.67	923.44	2302.24	
BTM 4	B	12.20	II -3	2.065	1.033	10.50	68.83	722.72			0.00	722.72	36.14	108.41	144.54	289.09	457.12	82.60	457.12	831.12	
BTM 5	(SK) B	12.20	II -3	2.023	1.012	9.50	139.87	1328.77			0.00	1328.77	66.44	199.31	265.75	531.51	812.54	158.05	812.54	1528.08	

PIK JUNCTION

No of	1	2		3		4							5								6
				Gap		Road							B/Q Item								
Bridge	FC	Width		G	0.5*G	Main			Branch			SUM:A	No18	No17	No16	SUM	No. 15/11			No01/02	Remarks
						W-1	L-1	W*L	W-2	L-2	W*L		0.05*A	0.15*A	0.2*A	0.4*A	[2]	A3*L	SUM	1.15*A	
BNM 1	B	8.20	III/III -1	1.762	0.881	7.10	113.33	804.64	7.50	136.00	1020.00	1824.64	91.23	273.70	364.93	729.86	877.65	231.88	877.65	2098.34	SP
BNM 2	B	4.60	IV -1	1.483	0.742	8.40	111.05	932.82	5.75	105.00	603.75	1536.57	76.83	230.49	307.31	614.63	524.74	155.56	524.74	1767.06	
BNM 3	B	4.60	IV -1	2.426	1.213	6.50	105.05	682.83	4.00	56.53	226.12	908.95	45.45	136.34	181.79	363.58	738.97	260.14	738.97	1045.29	
BNM 4	B	12.20	I -1	1.802	0.901	5.00	115.41	577.05	4.00	80.61	322.44	899.49	44.97	134.92	179.90	359.80	450.64	182.30	450.64	1034.41	SP

Table BILL OF QUANTITY (ITEM NO 4.3 ,01,02,15,16,17,18)
SALURAN CENGKARENG

No of	1	2		3		4							5								6
				Gap		Road							B/Q Item								
Bridge	FC	Width		G	0.5*G	Main			Branch			SUM:A	No18	No17	No16	SUM	No. 15/11			No01/02	Remarks
						W-1	L-1	W*L	W-2	L-2	W*L		0.05*A	0.15*A	0.2*A	0.4*A	(2)	A3*L	SUM	1.15*A	
BCM 1	B	9.60	-7/II/III -2	1.04	0.52	4.0	127.80	511.20			0.00	511.20	25.56	76.68	102.24	204.48	61.34	42.17	61.34	587.88	
BCM 2	B	(7.00) 9.60	II/III -3	1.941	0.971	4.50	179.08	805.86	3.75	101.05	378.94	1184.80	59.24	177.72	236.96	473.92	675.93	280.13	675.93	1362.52	
BCM 3	B	4.60	IV -1	1.544	0.772	3.75	77.20	289.50			0.00	289.50	14.48	43.43	57.90	115.80	107.69	59.44	107.69	332.93	
BCM 4	B	2.50		1.376	0.688			0.00	2.50	5.60	14.00	14.00	0.70	2.10	2.80	5.60	4.03	8.98	4.03	16.10	
BCM 5	B	6.60	III/IV -3	1.412	0.706	5.60	101.60	568.96	3.75	77.20	289.50	858.46	42.92	128.77	171.69	343.38	262.69	101.92	262.69	987.23	
BCM 6	B	6.60	III/IV -3	1.801	0.901	4.50	97.05	436.73	2.10	47.73	100.23	536.96	26.85	80.54	107.39	214.78	268.75	134.65	268.75	617.50	
BCM 7	B	2.50		2.564	1.282			0.00	2.50	10.40	26.00	26.00	1.30	3.94	5.20	10.40	22.93	12.56	22.93	29.90	
BCM 8	B	2.50		2.103	1.052			0.00	2.50	8.40	21.00	21.00	1.05	3.64	4.20	8.40	13.68	10.18	13.68	24.15	
BCM 9	B	2.50		2.596	1.298			0.00	2.50	10.40	26.00	26.00	1.30	3.94	5.20	10.40	23.35	12.86	23.35	29.90	
BCM 10	B	6.60	III/IV -3	2.307	1.154	4.70	118.67	557.75	5.00	56.53	282.65	840.40	42.02	126.06	168.08	336.16	633.24	257.54	633.24	966.46	
BCM 11	B	12.20	I -3	0.973	0.487	9.00	85.84	772.56	2.00	53.83	107.66	880.22	44.01	132.03	176.04	352.09	76.14	41.90	76.14	1012.25	SP
BCM 12	B	12.20	I -3	2.351	1.176	10.00	176.08	1760.80			0.00	1760.80	88.04	264.12	352.16	704.32	1365.50	267.64	1365.50	2024.92	SP
BCM 13	B	8.20	II/III -1	0.846	0.423	6.00	64.40	386.40			0.00	386.40	19.32	57.96	77.28	154.56	8.89	19.32	8.89	444.36	
BCM 14	B	(7.00) 9.60	II/III -3	0.828	0.414	7.00	60.20	421.40	3.00	62.20	186.60	608.00	30.40	91.20	121.60	243.20	8.51	36.72	8.51	699.20	

Table BILL OF QUANTITY (ITEM NO 4.3 ,01,02,15,16,17,18)

GEDE/BOR

No of Bridge	1 FC	2 Width		3 Gap G	3 Gap 0.5*G	4 Road Main W-1	4 Road Main L-1	4 Road Main W*L	4 Branch W-2	4 Branch L-2	4 Branch W*L	4 SUM:A	5 B/Q Item No18 0.05*A	5 B/Q Item No17 0.15*A	5 B/Q Item No16 0.2*A	5 B/Q Item SUM 0.4*A	5 B/Q Item No 15/[1] [2]	5 B/Q Item No 15/[1] A3*L	5 B/Q Item No 15/[1] SUM	5 B/Q Item No01/02 1.15*A	6 Remarks
BGM 1	B	(7.00) 9.60	II/III -2	0.500	0.250	8.50	114.60	974.10	0.00	0.00	0.00	974.10	48.71	146.12	194.82	389.64	-146.12	22.92	22.92	1120.22	
BGM 2	B	(7.00) 9.60	II/III -2	1.014	0.507	8.50	120.60	1025.10	8.75	65.30	571.38	1596.48	79.82	239.47	319.30	638.59	170.82	61.35	170.82	1835.95	
BGM 3	P	2.50		1.912	0.956	0.00	0.00	0.00	2.50	7.60	19.00	19.00	0.95	2.85	3.80	7.60	10.56	9.72	10.56	21.85	
BGM 4	B	6.60	III/IV -3	2.885	1.443	6.50	58.13	377.85	4.70	59.13	277.91	655.76	32.79	98.36	131.15	262.30	683.63	249.76	683.63	754.12	
BGM 5	B	4.60	IV -1	2.875	1.438	6.70	86.0	576.20	4.00	117.89	471.56	1047.76	52.39	157.16	209.55	419.10	1087.05	434.29	1087.05	1204.92	
BGM 6	B	4.60	IV -1	2.232	1.116	4.00	3.00	12.00	4.00	72.80	291.20	303.20	15.16	45.48	60.64	121.28	217.09	105.36	217.09	348.68	
BGM 7	B	4.60	IV -1	2.322	1.161	6.50	38.50	250.25	4.50	45.80	206.10	456.35	22.82	68.45	91.27	182.54	347.28	105.38	347.28	524.80	
BGM 8	B	6.60	III/IV -3	1.754	0.877	5.00	86.0	430.00	5.00	43.85	219.25	649.25	32.46	97.39	129.85	259.70	309.69	119.46	309.69	746.64	
BGM 9	B	6.60	III/IV -3	2.149	1.075	5.00	115.93	579.65	6.40	86.26	552.06	1131.71	56.59	169.76	226.34	452.69	763.34	260.83	763.34	1301.47	
BGM 10	B	3.50	IV -S	2.197	1.099	4.50	97.77	439.97	3.00	75.41	226.23	666.20	33.31	99.93	133.24	266.48	465.34	228.60	465.34	766.12	
BGM 11	B	4.60	IV -1																		
BGM 12	B	8.20	II/III -1																		

Table BILL OF QUANTITY (ITEM NO 4.3 ,01,02,15,16,17,18)

GEDE/BOR(BRANCH)

No of :	1	2	3		4							5								6
												B/Q Item								
			Gap		Road															
Bridge	FC	Width	G	0.5*G	Main			Branch				No18	No17	No16	SUM	No. 15[1]			No01/02	Rem-arks
					W-1	L-1	W*L	W-2	L-2	W*L	SUM:A	0.05*A	0.15*A	0.2*A	0.4*A	[2]	A3*L	SUM	1.15*A	
BGA - 1	N/A																			
BGA - 2	N/A																			

Table BILL OF QUANTITY (ITEM NO 4.3 ,01,02,15,16,17,18)

MERUYA

No of :	1	2	3		4							5								6
												B/Q Item								
			Gap		Road															
Bridge	FC	Width	G	0.5*G	Main			Branch				No18	No17	No16	SUM	No. 15[1]			No01/02	Rem-arks
					W-1	L-1	W*L	W-2	L-2	W*L	SUM:A	0.05*A	0.15*A	0.2*A	0.4*A	[2]	A3*L	SUM	1.15*A	
[illegible]	[illegible]																			
[illegible]	[illegible]	[illegible]	-																	
[illegible]	[illegible]	[illegible]	-																	
[illegible]	[illegible]	[illegible]	-																	
[illegible]	[illegible]	7.5 uM	-																	
[illegible]	[illegible]	7.5 uM	-																	
[illegible]	C	7.5 uM	-																	
[illegible]	C	7.5 uM	-																	
[illegible]	C	7.5 uM	-																	

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,07)

KAMAL(MAIN)

No of :	1	2		3		4			5								6
Bridge	FC	Width		Gap G	0.5*G	Road Main L-1	Branch L-2	SUM L	B/Q Item No03 A1	No03 A1*L	No04 A2	No04 A2*L	No.05 2.24G	No.05 2.24G*L	No07/06 A3	No07/06 A3*L	Remarks
BKM 10	B	4.60	IV -1	1.373	0.687	73.03		73.03	0.65	47.47	0.60	43.82	3.08	224.61	0.58	42.36	RT
BKM 10	B						33.51	33.51					3.08	103.21			SP
BKM 3	B	(7.0) 9.60	II/III -2	1.797	0.899	144.02	102.51	246.53	0.87	214.48	0.60	147.92	4.03	992.35	0.90	221.88	
BKM 4	P	2.50		2.13	1.065	0.00	9.00	9.00	5.31	10.62	18.67	37.34	4.77	42.94	5.43	10.86	
BKM 5	(SK) B	(7.0) 9.60	II/III -2	1.159	0.580	121.30	0.00	121.30	0.54	65.50	0.41	49.73	2.60	314.91	0.46	55.80	
BKM 6	P	2.50		1.569	0.785	0.00	6.40	6.40	4.86	9.72	13.33	26.66	3.51	22.49	4.69	9.38	
BKM 7	P	2.50		2.087	1.044	0.00	8.40	8.40	5.14	10.28	17.33	34.66	4.67	39.27	5.14	10.28	
BKM 8	B	4.60	IV -1	2.106	1.053	73.71	0.00	73.71	1.09	80.34	0.73	53.81	4.72	347.72	1.20	88.45	
BKM 9	P	2.50		1.575	0.788	0.00	6.40	6.40	5.03	10.06	13.33	26.66	3.55	22.58	4.57	9.14	
BKM 10	B	(7.0) 9.60	II/III -2	1.832	0.916	133.60	189.90	323.50	0.90	291.15	0.61	197.34	4.10	327.54	1.00	323.50	
BKM 11	B	(7.0) 9.60	II/III -2	1.427	0.714	90.00	267.20	357.20	0.68	242.90	0.49	175.03	3.20	141.78	0.67	239.32	

Note: A1: Excavation(cu.m/m)
A2: Back filling (cu.m/m)
2.24G: Slope protection (sq.m/m)
A3:Concrete of retaining wall for No 07(cu.m)/Approach step for pedestrian bridge (cu.m/one side)

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,07)

KAMAL(MAIN)

No of Bridge	1 FC	2 Width		3 Gap G	3 Gap 0.5*G	4 Road Main L-1	4 Road Branch L-2	SUM L	5 B/Q Item No03 A1	No03 A1*L	No04 A2	No04 A2*L	No.05 2.24G	No.05 2.24G*L	No07/06 A3	No07/06 A3*L	6 Remarks
BKM 1(2)	B	4.60	IV -1	1.373	0.687	73.03		73.03	0.65	47.47	0.60	43.82	3.08	224.61	0.58	42.36	RT
BKM 1(2)	B						33.51	33.51					3.08	103.21			SP
BKM 3	B	(7.0) 9.60	II/III -2	1.797	0.899	144.02	102.51	246.53	0.87	214.48	0.60	147.92	4.03	992.35	0.90	221.88	
BKM 4	P	2.50		2.13	1.065	0.00	9.00	9.00	5.31	10.62	18.67	37.34	4.77	42.94	5.43	10.86	
BKM 5	(SK) B	(7.0) 9.60	II/III -2	1.159	0.580	121.30	0.00	121.30	0.54	65.50	0.41	49.73	12.60	314.91	0.46	55.80	
BKM 6	P	2.50		1.569	0.785	0.00	6.40	6.40	4.86	9.72	13.33	26.66	3.51	22.49	4.69	9.38	
BKM 7	P	2.50		2.087	1.044	0.00	8.40	8.40	5.14	10.28	17.33	34.66	4.67	39.27	5.14	10.28	
BKM 8	B	4.60	IV -1	2.106	1.053	73.71	0.00	73.71	1.09	80.34	0.73	53.81	4.72	347.72	1.20	88.45	
BKM 9	P	2.50		1.575	0.788	0.00	6.40	6.40	5.03	10.06	13.33	26.66	3.53	22.58	4.57	9.14	
BKM 10	B	(7.0) 9.60	II/III -2	1.832	0.916	133.60	189.90	323.50	0.90	291.15	0.61	197.34	4.10	1327.54	1.00	323.50	
BKM 11	B	(7.0) 9.60	II/III -2	1.427	0.714	90.00	267.20	357.20	0.68	242.90	0.49	175.03	3.20	1141.78	0.67	239.32	

Note: A1: Excavation(cu.m/m)
A2: Back filling (cu.m/m)
2.24G: Slope protection (sq.m/m)
A3:Concrete of retaining wall for No 07(cu.m)/Approach step for pedestrian bridge (cu.m/one side)

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,07)

KAMAL(BRANCH)

No of :	1	2	3		4			5								6
			Gap		Road			B/Q Item								
Bridge	FC	Width	G	0.5*G	Main	Branch		No03		No04		No.05		No07		Rem-arks
					L-1	L-2	SUM L	A1	A1*L	A2	A2*L	2.24G	2.24G*L	A3	A3*L	
BKE 1	B	3.00 IV-S	1.742	0.871	79.92		79.92	0.85	67.93	0.58	46.35	3.90	311.85	0.87	69.53	
BKE 2	B	4.60 IV-1	1.530	0.765	72.00	40.00	112.00	0.74	82.88	0.52	58.24	3.43	383.85	0.70	78.40	
BKE 3	(SK) B	6.60 III/IV-3	1.393	0.697	70.65	37.53	108.18	0.66	71.40	0.48	51.93	3.12	337.56	0.60	64.91	
BKE 4	B	6.60 III/IV-3	1.829	0.915	92.45	93.45	185.90	0.90	167.31	0.61	113.40	4.10	761.62	0.92	171.03	
BKE 5	B	6.60 III/IV-3	1.849	0.925	102.23	147.45	249.68	0.90	224.71	0.62	154.80	4.14	1034.11	0.94	234.70	
BKE 6	B	4.60 IV-1	1.852	0.926	87.16	85.86	173.02	0.90	155.72	0.62	107.27	4.15	717.77	0.94	162.64	
BKE 7	B	6.60 III/IV-3	2.011	1.006	224.81	105.68	330.49	0.99	327.19	0.67	221.43	4.50	1488.74	0.07	23.13	
BKE 8	P	2.50	1.854	0.927		7.40	7.40	4.86	9.72	14.68	29.36	4.15	30.73	4.86	9.72	
BKE 9	B	4.60 IV-1	1.543	0.772	108.86	72.58	181.44	0.74	134.27	0.52	94.35	3.46	627.11	0.71	128.82	
BKE 10	B	6.60 III/IV-3	1.832	0.916	154.80	97.00	251.80	0.90	226.62	0.61	153.60	4.10	1033.31	0.92	231.66	
BKE 11	B	4.60 IV-1	1.427	0.714	94.60	67.42	162.02	0.68	110.17	0.49	79.39	3.20	517.89	0.62	100.45	

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,07)

KAMAL(BRANCH)

No o!	1	2	3		4			5								6
Bridge	FC	Width	Gap G	0.5*G	Road Main L-1	Branch L-2	SUM L	B/Q Item No03 A1	No03 A1*L	No04 A2	No04 A2*L	No.05 2.24G	No.05 2.24G*L	No07 A3	No07 A3*L	Rem-arks
BKE 1	B	3.00 IV-S	1.742	0.871	79.92		79.92	0.85	67.93	0.58	46.35	3.90	311.85	0.87	69.53	
BKE 2	B	4.60 IV-1	1.530	0.765	72.00	40.00	112.00	0.74	82.88	0.52	58.24	3.43	383.85	0.70	78.40	
BKE 3	(SK) B	6.60 III/IV-3	1.393	0.697	70.65	37.53	108.18	0.66	71.40	0.48	51.93	3.12	337.56	0.60	64.91	
BKE 4	B	6.60 III/IV-3	1.829	0.915	92.45	93.45	185.90	0.90	167.31	0.61	113.40	4.10	761.62	0.92	171.03	
BKE 5	B	6.60 III/IV-3	1.849	0.925	102.23	147.45	249.68	0.90	224.71	0.62	154.80	4.14	1034.11	0.94	234.70	
BKE 6	B	4.60 IV-1	1.852	0.926	87.16	85.86	173.02	0.90	155.72	0.62	107.27	4.15	717.77	0.94	162.64	
BKE 7	B	6.60 III/IV-3	2.011	1.006	224.81	105.68	330.49	0.99	327.19	0.67	221.43	4.50	1488.74	0.07	23.13	
BKE 8	P	2.50	1.854	0.927		7.40	7.40	4.86	9.72	14.68	29.36	4.15	30.75	4.86	9.72	
BKE 9	B	4.60 IV-1	1.543	0.772	108.86	72.58	181.44	0.74	134.27	0.52	94.35	3.46	627.11	0.71	128.82	
BKE 10	B	6.60 III/IV-3	1.832	0.916	154.80	97.00	251.80	0.90	226.62	0.61	153.60	4.10	1033.31	0.92	231.66	
BKE 11	B	4.60 IV-1	1.427	0.714	94.60	67.42	162.02	0.68	110.17	0.49	79.39	3.20	517.89	0.62	100.45	

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,07)

No of :	1	2		3		4			5								6
Bridge	FC	Width		Gap G	0.5*G	Road Main L-1	Road Branch L-2	SUM L	B/Q Item No03 A1	No03 A1*L	No04 A2	No04 A2*L	No.05 2.24G	No.05 2.24G*L	No07 A3	No07 A3*L	Remarks
BKE 12	B	8.20	III/IV -1	1.496	0.748												
BKE 13	B	8.20	III/IV -1	1.248	0.624	70.40	0.00	70.40	0.59	41.54	0.43	30.27	2.80	196.80	0.50	35.20	
BKE 14	B	3.00	IV -S	2.204	1.102	65.00	91.40	156.40	1.19	186.12	0.80	125.12	4.94	772.14	1.37	214.27	
BKE 15	B	3.00	IV -S	2.131	1.066	95.36		95.36	1.11	105.85	0.75	71.52	4.77	455.20	1.23	117.29	
BKE 16	P	2.50		2.164	1.082		8.60	8.60	5.09	10.18	17.87	35.74	4.85	41.69	5.43	10.86	
BKE 17	P	2.50		1.900	0.950		7.60	7.60	4.86	9.72	14.80	29.60	4.26	32.35	4.86	9.72	
BKE 18	B	4.60	IV -1	2.148	1.074	95.73	0.00	95.73	1.13	108.17	0.76	72.75	4.81	460.61	1.23	117.75	
BKE 19	(SL) B	4.60	IV -1	-													
BKE 20	(SL) B	4.60	IV -1	-													

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,07)

No of :	1	2		3		4			5								6
Bridge	FC	Width		Gap		Road			B/Q Item								Rem-arks
				G	0.5*G	Main	Branch		No03		No04		No.05		No07		
						L-1	L-2	SUM L	A1	A1*L	A2	A2*L	2.24G	2.24G*L	A3	A3*L	
BKE 12	B	8.20	III/IV -1	1.496	0.748												
BKE 13	B	8.20	III/IV -1	1.248	0.624	70.40	0.00	70.40	0.59	41.54	0.43	30.27	2.80	196.80	0.50	35.20	
BKE 14	B	3.00	IV -S	2.204	1.102	65.00	91.40	156.40	1.19	186.12	0.80	125.12	4.94	772.14	1.37	214.27	
BKE 15	B	3.00	IV -S	2.131	1.066	95.36		95.36	1.11	105.85	0.75	71.52	4.77	455.20	1.23	117.29	
BKE 16	P	2.50		2.164	1.082		8.60	8.60	5.09	10.18	17.87	35.74	4.85	41.69	5.43	10.86	
BKE 17	P	2.50		1.900	0.950		7.60	7.60	4.86	9.72	14.80	29.60	4.26	32.35	4.86	9.72	
BKE 18	B	4.60	IV -1	2.148	1.074	95.73	0.00	95.73	1.13	108.17	0.76	72.75	4.81	460.61	1.23	117.75	
BKE 19	(SL) B	4.60	IV -1	-													
BKE 20	(SL) B	4.60	IV -1	-													

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,07)

TANJUNGAN

No of :	1	2		3		4			5								6
Bridge	FC	Width		Gap G	Gap 0.5*G	Road Main L-1	Road Branch L-2	SUM L	B/Q Item No03 A1	No03 A1*L	No04 A2	No04 A2*L	No.05 2.24G	No.05 2.24G*L	No07 A3	No07 A3*L	Rem-arks
BTM 1	B	6.60	III/IV -3	1.968	0.984	108.40		108.40	0.96	104.06	0.65	70.46	4.41	477.86	1.07	115.99	SP
BTM 2	N.A	-															
BTM 3	B	(8.00) 10.60	I -2	1.945	0.973	178.97	43.70	222.67	0.95	211.54	0.64	142.51	4.36	970.13	1.00	222.67	
BTM 4	B	12.20	II -3	2.065	1.033	68.83		68.83	1.05	72.27	0.70	48.18	4.63	318.38	1.20	82.60	
BTM 5	(SK) B	12.20	II -3	2.023	1.012	139.87		139.87	1.00	139.87	0.68	95.11	4.53	633.82	1.13	158.05	

PIK JUNCTION

No of :	1	2		3		4			5								6
Bridge	FC	Width		Gap G	Gap 0.5*G	Road Main L-1	Road Branch L-2	SUM L	B/Q Item No03 A1	No03 A1*L	No04 A2	No04 A2*L	No.05 2.24G	No.05 2.24G*L	No07 A3	No07 A3*L	Rem-arks
BNM 1	B	8.20	II/III -1	1.762	0.881	113.33	136.00	249.33	0.86	214.424	0.59	147.10	3.95	984.08	0.93	231.8769	SP
BNM 2	B	4.60	IV -1	1.483	0.742	111.05	105.00	216.05	0.71	153.3955	0.51	110.19	3.32	717.70	0.72	155.556	
BNM 3	B	4.60	IV -1	2.426	1.213	105.05	56.53	161.58	1.41	227.8278	0.95	153.50	5.43	878.06	1.61	260.1438	
BNM 4	B	12.20	II -1	1.802	0.901	115.41	80.61	196.02	0.88	172.4976	0.60	117.61	4.04	791.23	0.93	182.2986	SP

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,07)

TANJUNGAN

No of	1	2		3		4			5								6
Bridge	FC	Width		Gap G	Gap 0.5*G	Road Main L-1	Road Branch L-2	SUM L	B/Q Item No03 A1	No03 A1*L	No04 A2	No04 A2*L	No.05 2.24G	No.05 2.24G*L	No07 A3	No07 A3*L	Remarks
BTM 1	B	6.60	III/IV -3	1.968	0.984	108.40		108.40	0.96	104.06	0.65	70.46	4.41	477.86	1.07	115.99	SP
BTM 2	N.A																
BTM 3	B	(8.00) 10.60	I -2	1.945	0.973	178.97	43.70	222.67	0.95	211.54	0.64	142.51	4.36	970.13	1.00	222.67	
BTM 4	B	12.20	II -3	2.065	1.033	68.83		68.83	1.05	72.27	0.70	48.18	4.63	318.38	1.20	82.60	
BTM 5	(SK) B	12.20	II -3	2.023	1.012	139.87		139.87	1.00	139.87	0.68	95.11	4.53	633.82	1.13	158.05	

PIK JUNCTION

No of	1	2		3		4			5								6
Bridge	FC	Width		Gap G	Gap 0.5*G	Road Main L-1	Road Branch L-2	SUM L	B/Q Item No03 A1	No03 A1*L	No04 A2	No04 A2*L	No.05 2.24G	No.05 2.24G*L	No07 A3	No07 A3*L	Remarks
BNM 1	B	8.20	II/III -1	1.762	0.881	113.33	136.00	249.33	0.86	214.424	0.59	147.10	3.95	984.08	0.93	231.8769	SP
BNM 2	B	4.60	IV -1	1.483	0.742	111.05	105.00	216.05	0.71	153.3955	0.51	110.19	3.32	717.70	0.72	155.556	
BNM 3	B	4.60	IV -1	2.426	1.213	105.05	56.53	161.58	1.41	227.8278	0.95	153.50	5.43	878.06	1.61	260.1438	
BNM 4	B	12.20	II -1	1.802	0.901	115.41	80.61	196.02	0.88	172.4976	0.60	117.61	4.04	791.23	0.93	182.2986	SP

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,07)
SALURAN CENGKARENG

No of :	1	2		3		4			5								6
				Gap		Road			B/Q Item								
Bridge	FC	Width		G	0.5*G	Main	Branch	SUM L	No03		No04		No.05		No07		Rem-arks
						L-1	L-2		A1	A1*L	A2	A2*L	2.24G	2.24G*L	A3	A3*L	
BCM 1	B	-7 9.60	II/III -2	1.04	0.52	127.80		127.80	0.48	61.34	0.37	47.29	2.33	297.72	0.33	42.17	
BCM 2	B	(7.00) 9.60	II/III -3	1.941	0.971	179.08	101.05	280.13	0.95	266.12	0.64	179.28	4.35	1217.96	1.00	280.13	
BCM 3	B	4.60	IV -1	1.544	0.772	77.20		77.20	0.74	57.13	0.52	40.14	3.46	267.00	0.77	59.44	
BCM 4	P	2.50		1.376	0.688		5.60	5.60	4.80	9.60	12.00	24.00	3.08	17.26	4.49	8.98	
BCM 5	B	6.60	III/IV -3	1.412	0.706	101.60	77.20	178.80	0.67	119.80	0.48	85.82	3.16	565.52	0.57	101.92	
BCM 6	B	6.60	III/IV -3	1.801	0.901	97.05	47.73	144.78	0.88	127.41	0.60	86.87	4.03	584.08	0.93	134.65	
BCM 7	P	2.50		2.564	1.282		10.40	10.40	5.66	11.32	24.00	48.00	5.74	59.73	6.28	12.56	
BCM 8	P	2.50		2.103	1.052		8.40	8.40	5.14	10.28	16.00	32.00	4.71	39.57	5.09	10.18	
BCM 9	P	2.50		2.596	1.298		10.40	10.40	5.71	11.42	25.33	50.66	5.82	60.48	6.43	12.86	
BCM 10	B	6.60	III/IV -3	2.307	1.154	118.67	56.53	175.20	1.29	226.01	0.87	152.42	5.17	905.38	1.47	257.54	
BCM 11	B	12.20	I -3	0.973	0.487	85.84	53.83	139.67	0.45	62.85	0.35	48.88	2.18	304.41	0.30	41.90	SP
BCM 12	B	12.20	I -3	2.351	1.176	176.08		176.08	1.33	234.19	0.90	158.47	5.27	927.28	1.52	267.64	SP
BCM 13	B	8.20	II/III -1	0.846	0.423	64.40		64.40	0.40	25.76	0.30	19.32	1.90	122.04	0.30	19.32	
BCM 14	B	(7.00) 9.60	II/III -3	0.828	0.414	60.20	62.20	122.40	0.38	46.51	0.30	36.72	1.85	227.02	0.30	36.72	

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,07)

SALURAN CENGKARENG

No of :	1	2		3		4			5								6
Bridge	FC	Width		Gap		Road			B/Q Item								Rem-arks
				G	0.5*G	Main	Branch		No03		No04		No.05		No07		
						L-1	L-2	SUM L	A1	A1*L	A2	A2*L	2.24G	2.24G*L	A3	A3*L	
BCM 1	B	-7 9.60	II/III -2	1.04	0.52	127.80		127.80	0.48	61.34	0.37	47.29	2.33	297.72	0.33	42.17	
BCM 2	B	(7.00) 9.60	II/III -3	1.941	0.971	179.08	101.05	280.13	0.95	266.12	0.64	179.28	4.35	1217.96	1.00	280.13	
BCM 3	B	4.60	IV -1	1.544	0.772	77.20		77.20	0.74	57.13	0.52	40.14	3.46	267.00	0.77	59.44	
BCM 4	P	2.50		1.376	0.688		5.60	5.60	4.80	9.60	12.00	24.00	3.08	17.26	4.49	8.98	
BCM 5	B	6.60	III/IV -3	1.412	0.706	101.60	77.20	178.80	0.67	119.80	0.48	85.82	3.16	565.52	0.57	101.92	
BCM 6	B	6.60	III/IV -3	1.801	0.901	97.05	47.73	144.78	0.88	127.41	0.60	86.87	4.03	584.08	0.93	134.65	
BCM 7	P	2.50		2.564	1.282		10.40	10.40	5.66	11.32	24.00	48.00	5.74	59.73	6.28	12.56	
BCM 8	P	2.50		2.103	1.052		8.40	8.40	5.14	10.28	16.00	32.00	4.71	39.57	5.09	10.18	
BCM 9	P	2.50		2.596	1.298		10.40	10.40	5.71	11.42	25.33	50.66	5.82	60.48	6.43	12.86	
BCM 10	B	6.60	III/IV -3	2.307	1.154	118.67	56.53	175.20	1.29	226.01	0.87	152.42	5.17	905.38	1.47	257.54	
BCM 11	B	12.20	I -3	0.973	0.487	85.84	53.83	139.67	0.45	62.85	0.35	48.88	2.18	304.41	0.30	41.90	SP
BCM 12	B	12.20	I -3	2.351	1.176	176.08		176.08	1.33	234.19	0.90	158.47	5.27	927.28	1.52	267.64	SP
BCM 13	B	8.20	II/III -1	0.846	0.423	64.40		64.40	0.40	25.76	0.30	19.32	1.90	122.04	0.30	19.32	
BCM 14	B	(7.00) 9.60	II/III -3	0.828	0.414	60.20	62.20	122.40	0.38	46.51	0.30	36.72	1.85	227.02	0.30	36.72	

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,07)

GEDE/BOR

No of :	1	2		3		4			5								6
Bridge	FC	Width		Gap G	Gap 0.5*G	Road Main L-1	Road Branch L-2	SUM L	B/Q Item No03 A1	No03 A1*L	No04 A2	No04 A2*L	No.05 2.24G	No.05 2.24G*L	No07 A3	No07 A3*L	Remarks
BGM 1	B	(7.00) 9.60	II/III -2	0.50	0.25	114.60		114.60	0.12	13.75	0.09	10.31	57.12	128.35	0.20	22.92	
BGM 2	B	(7.00) 9.60	II/III -2	1.01	0.51	120.60	65.30	185.90	0.53	98.53	0.40	74.36	188.27	422.25	0.33	61.35	
BGM 3	P	2.50		1.91	0.96	0.00	7.60	7.60	4.86	9.72	15.73	31.46	14.28	32.55	4.86	9.72	
BGM 4	B	6.60	III/IV -3	2.89	1.44	58.13	59.13	117.26	1.88	220.45	1.26	147.75	336.46	757.28	2.13	249.76	
BGM 5	B	4.60	IV -1	2.88	1.44	86.00	117.89	203.89	1.87	381.27	1.26	256.90	586.44	1313.05	2.13	434.29	
BGM 6	B	4.60	IV -1	2.23	1.12	3.00	72.80	75.80	1.10	83.38	0.82	62.16	175.00	378.98	1.39	105.36	
BGM 7	B	4.60	IV -1	2.32	1.16	38.50	45.80	84.30	1.14	96.10	0.88	74.18	195.20	438.47	1.25	105.38	
BGM 8	B	6.60	III/IV -3	1.75	0.88	86.00	43.85	129.85	0.85	110.37	0.59	76.61	273.93	510.18	0.92	119.46	
BGM 9	B	6.60	III/IV -3	2.15	1.07	115.93	86.26	202.19	1.13	228.47	0.76	153.66	404.81	973.29	1.29	260.83	
BGM 10	B	3.50	IV -S	2.20	1.10	97.77	75.41	173.18	1.18	204.35	0.79	136.81	384.92	852.27	1.32	228.60	
BGM 11	B	4.60	IV -1														
BGM 12	B	8.20	II/III -1														

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,07)

GEDE/BOR

No of	1	2		3		4			5								6
				Gap		Road			B/Q Item								
Bridge	FC	Width		G	0.5*G	Main	Branch	SUM L	No03		No04		No.05		No07		Rem-arks
						L-1	L-2		A1	A1*L	A2	A2*L	2.24G	2.24G*L	A3	A3*L	
BGM 1	B	(7.00) 9.60	II/III -2	0.50	0.25	114.60		114.60	0.12	13.75	0.09	10.31	1.12	128.35	0.20	22.92	
BGM 2	B	(7.00) 9.60	II/III -2	1.01	0.51	120.60	65.30	185.90	0.53	98.53	0.40	74.36	2.27	422.25	0.33	61.35	
BGM 3	P	2.50		1.91	0.96	0.00	7.60	7.60	4.86	9.72	15.73	31.46	4.28	32.55	4.86	9.72	
BGM 4	B	6.60	III/IV -3	2.89	1.44	58.13	59.13	117.26	1.88	220.45	1.26	147.75	6.46	757.78	2.13	249.76	
BGM 5	B	4.60	IV -1	2.88	1.44	86.00	117.89	203.89	1.87	381.27	1.26	256.90	6.44	1313.05	2.13	434.29	
BGM 6	B	4.60	IV -1	2.23	1.12	3.00	72.80	75.80	1.10	83.38	0.82	62.16	5.00	378.98	1.39	105.36	
BGM 7	B	4.60	IV -1	2.32	1.16	38.50	45.80	84.30	1.14	96.10	0.88	74.18	5.20	438.47	1.25	105.38	
BGM 8	B	6.60	III/IV -3	1.75	0.88	86.00	43.85	129.85	0.85	110.37	0.59	76.61	3.93	510.18	0.92	119.46	
BGM 9	B	6.60	III/IV -3	2.15	1.07	115.93	86.26	202.19	1.13	228.47	0.76	153.66	4.81	973.29	1.29	260.83	
BGM 10	B	3.50	IV -S	2.20	1.10	97.77	75.41	173.18	1.18	204.35	0.79	136.81	4.92	852.27	1.32	228.60	
BGM 11	B	3.60	IV -1														
BGM 12	B	8.20	II-III -1														

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,07)

GEDE/BOR(BRANCH)

No of : 1	1	2	3		4			5								6
			Gap		Road			B/Q Item								
					Main	Branch		No03		No04		No.05		No07		
Bridge	FC	Width	G	0.5*G	L-1	L-2	SUM L	A1	A1*L	A2	A2*L	2.24G	2.24G*L	A3	A3*L	Remarks
BGA - 1	N/A															
BGA - 2	N/A															

Table BILL OF QUANTITY (ITEM NO 4.3 ,03,04,05,07)

MERUYA

No of : 1	1	2	3		4			5								6
			Gap		Road			B/Q Item								
					Main	Branch		No03		No04		No.05		No07		
Bridge	FC	Width	G	0.5*G	L-1	L-2	SUM L	A1	A1*L	A2	A2*L	2.24G	2.24G*L	A3	A3*L	Remarks
BMM 1	RO															
BMM 2	(SL) B	[illegible]	-													
BMM 3	(SL) B	[illegible]	-													
BMM 4	(SL) B	[illegible]	-													
BMM 5	(SL) B	7.5M	-													
BMM 6	(SL) B	7.5M	-													
BMM 7	C	7.5M	-													
BMM 8	C	7.5M	-													
BMM 9	C	7.5M	-													

Table BILL OF QUANTITY (ITEM NO 4.3 ,08,09,10,12, 14)

KAMAL(MAIN)

No of :	1	2		3		4			5									6
Bridge	FC	Width		Gap G	Gap 0.5*G	Road Main L-1	Road Branch L-2	SUM L	B/Q Item No08 A4	No08 A4*L	No09 H2	No09 H2*L	No10 H3	No10 H3*L	No12 K	No12 K*L	No14 2*L	Rem-arks
BKM 1(P)	B	4.60	IV -1	1.373	0.687	73.03		73.03	0.21	15.34	3.00	219.09	0.41	29.94	0.39	28.48	146.06	RT
BKM 2(P)	B	-	-	1.373	0.687		33.51	33.51									67.02	SP
BKM 3	B	(7.0) 9.60	II/III -2	1.797	0.899	144.02	102.51	246.53	0.29	71.49	4.00	986.12	0.59	145.45	0.45	110.94	493.06	
BKM 4	P	2.50		2.13	1.065	0.00	9.00	9.00	0.37	3.33	37.14	74.28	0.67	6.03	0.53	1.06	18.00	
BKM 5	(SK) B	(7.0) 9.60	II/III -2	1.159	0.580	121.30	0.00	121.30	0.16	19.41	4.70	570.11	0.43	52.16	0.38	46.09	242.60	
BKM 6	P	2.50		1.569	0.785	0.00	6.40	6.40	0.25	1.60	26.86	53.72	0.53	3.39	0.38	0.76	12.80	
BKM 7	P	2.50		2.087	1.044	0.00	8.40	8.40	0.05	2.94	34.29	68.58	0.67	5.63	0.53	1.06	16.80	
BKM 8	B	4.60	IV -1	2.106	1.053	73.71	0.00	73.71	0.37	27.27	4.60	339.07	0.67	49.39	0.53	39.07	147.42	
BKM 9	P	2.50		1.575	0.788	0.00	6.40	6.40	0.24	1.54	25.71	51.42	0.53	3.39	0.43	0.86	12.80	
BKM 10	B	(7.0) 9.60	II/III -2	1.832	0.916	133.60	189.90	323.50	0.31	100.29	4.00	1294.00	0.63	203.81	0.47	152.05	647.00	
BKM 11	B	(7.0) 9.60	II/III -2	1.427	0.714	90.00	267.20	357.20	0.21	75.01	5.10	1821.72	0.49	175.03	0.38	135.74	714.40	

Note:
G:Gap between bridge and ground elevation(m)
0.5G:Average of Gap (m)
A4:Concrete Volume of foundation (cu.m/m)
H2:Form of retaining wall (sq.m/m)

Table BILL OF QUANTITY (ITEM NO 4.3 ,08,09,10,12, 14)

KAMAL(MAIN)

No of	1	2	3		4			5									6
Bridge	FC	Width	Gap G	Gap 0.5*G	Road Main L-1	Road Branch L-2	SUM L	B/Q Item No08 A4	No08 A4*L	No09 H2	No09 H2*L	No10 H3	No10 H3*L	No12 K	No12 K*L	No14 2*L	Remarks
BKM 2	B	IV 4.60 -1	1.373	0.687	73.03		73.03	0.21	15.34	3.00	219.09	0.41	29.94	0.39	28.48	146.06	RT
BKM 2	B		1.373	0.687		33.51	33.51									67.02	SP
BKM 3	B	(7.0) II/III 9.60 -2	1.797	0.899	144.02	102.51	246.53	0.29	71.49	4.00	986.12	0.59	145.45	0.45	110.94	493.06	
BKM 4	P	2.50	2.13	1.065	0.00	9.00	9.00	0.37	3.33	37.14	74.28	0.67	6.03	0.53	1.06	18.00	
BKM 5	(SK) B	(7.0) II/III 9.60 -2	1.159	0.580	121.30	0.00	121.30	0.16	19.41	4.70	570.11	0.43	52.16	0.38	46.09	242.60	
BKM 6	P	2.50	1.569	0.785	0.00	6.40	6.40	0.25	1.60	26.86	53.72	0.53	3.39	0.38	0.76	12.80	
BKM 7	P	2.50	2.087	1.044	0.00	8.40	8.40	0.35	2.94	34.29	68.58	0.67	5.63	0.53	1.06	16.80	
BKM 8	B	IV 4.60 -1	2.106	1.053	73.71	0.00	73.71	0.37	27.27	4.60	339.07	0.67	49.39	0.53	39.07	147.42	
BKM 9	P	2.50	1.575	0.788	0.00	6.40	6.40	0.24	1.54	25.71	51.42	0.53	3.39	0.43	0.86	12.80	
BKM 10	B	(7.0) II/III 9.60 -2	1.832	0.916	133.60	189.90	323.50	0.31	100.29	4.00	1294.00	0.63	203.81	0.47	152.05	647.00	
BKM 11	B	(7.0) II/III 9.60 -2	1.427	0.714	90.00	267.20	357.20	0.21	75.01	5.10	1821.72	0.49	175.03	0.38	135.74	714.40	

Note: G:Gap between bridge and ground elevation(m)
0.5G:Average of Gap (m)
A4:Concrete Volume of foundation (cu.m/m)
H2:Form of retaining wall (sq.m/m)

Table BILL OF QUANTITY (ITEM NO 4.3 ,08,09,10,12,14)

KAMAL(BRANCH)

No of	1	2	3		4			5									6
			Gap		Road			B/Q Item									
Bridge	FC	Width	G	0.5*G	Main	Branch		No08		No09		No10		No12		No14	Rem-arks
					L-1	L-2	SUM L	A4	A4*L	H2	H2*L	H3	H3*L	K	K*L	2*L	
BKE 1	B	3.00 IV-S	1.742	0.871	79.92		79.92	0.27	21.58	3.80	303.70	0.57	45.55	0.44	35.16	159.84	
BKE 2	B	4.60 IV-1	1.530	0.765	72.00	40.00	112.00	0.25	28.00	3.30	369.60	5.30	593.60	0.43	48.16	224.00	
BKE 3	(SK) B	6.60 III/IV-3	1.393	0.697	70.65	37.53	108.18	0.21	22.72	2.60	281.27	0.48	51.93	0.38	41.11	216.36	
BKE 4	B	6.60 III/IV-3	1.829	0.915	92.45	93.45	185.90	0.32	59.49	4.00	743.60	0.59	109.68	0.44	81.80	371.80	
BKE 5	B	6.60 III/IV-3	1.849	0.925	102.23	147.45	249.68	0.32	79.90	4.03	1006.21	0.60	149.81	0.44	109.86	499.36	
BKE 6	B	4.60 IV-1	1.852	0.926	87.16	85.86	173.02	0.32	55.37	4.04	699.00	0.60	103.81	0.44	76.13	346.04	
BKE 7	B	6.60 III/IV-3	2.011	1.006	224.81	105.68	330.49	0.35	115.67	4.40	1454.16	0.64	211.51	0.49	161.94	660.98	
BKE 8	P	2.50	1.854	0.927		7.40	7.40	0.00	0.00	30.86	61.72	0.00	0.00	0.44	0.88	14.80	
BKE 9	B	4.60 IV-1	1.543	0.772	108.86	72.58	181.44	0.25	45.36	3.40	616.90	0.53	96.16	0.43	78.02	362.88	
BKE 10	B	6.60 III/IV-3	1.832	0.916	154.80	97.00	251.80	0.32	80.58	4.00	1007.20	0.59	148.56	0.44	110.79	503.60	
BKE 11	B	4.60 IV-1	1.427	0.714	94.60	67.42	162.02	0.23	37.26	3.10	502.26	0.51	82.63	0.41	66.43	324.04	

Table BILL OF QUANTITY (ITEM NO 4.3 ,08,09,10,12,14)

No of	1	2	3		4			5									6
Bridge	FC	Width	Gap		Road			B/Q Item									Rem-arks
			G	0.5*G	Main	Branch		No08		No09		No10		No12		No14	
					L-1	L-2	SUM L	A4	A4*L	H2	H2*L	H3	H3*L	K	K*L	2*L	
BKE 12	B	8.20 III/IV -1	1.496	0.748													
BKE 13	B	8.20 III/IV -1	1.248	0.624	70.40	0.00	70.40	0.19	13.38	2.73	192.19	0.48	33.79	0.38	26.75	140.80	
BKE 14	B	3.00 IV -S	2.204	1.102	65.00	91.40	156.40	0.37	57.87	4.80	750.72	0.71	111.04	0.55	86.02	312.80	
BKE 15	B	3.00 IV -S	2.131	1.066	95.36		95.36	0.37	35.28	4.65	443.42	0.67	63.89	0.53	50.54	190.72	
BKE 16	P	2.50	2.164	1.082		8.60	8.60	0.37	3.18	36.57	73.14	0.69	5.93	0.53	1.06	17.20	
BKE 17	P	2.50	1.900	0.950		7.60	7.60	0.33	2.51	30.29	60.58	0.63	4.79	0.45	0.90	15.20	
BKE 18	B	4.60 IV -1	2.148	1.074	95.73	0.00	95.73	0.37	35.42	4.68	448.02	0.67	64.14	0.54	51.69	191.46	
BKE 19	(SL) B	4.60 IV -1	-														
BKE 20	(SL) B	4.60 IV -1	-														