



JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)



MINISTRY OF PUBLIC WORKS  
REPUBLIC OF INDONESIA

**DETAILED DESIGN STUDY  
OF  
NORTH JAVA CORRIDOR FLYOVER PROJECT  
IN THE REPUBLIC OF INDONESIA**

**FINAL REPORT  
DETAILED UNIT PRICE ANALYSIS  
(NAGREG FLYOVER)**

**DECEMBER 2006**



**KATAHIRA & ENGINEERS INTERNATIONAL**

<b>SD</b>
<b>CR(5)</b>
<b>06-090</b>

**THE NORTH JAVA CORRIDOR FLYOVER PROJECT  
UNIT COST ANALYSIS AND BILL OF QUANTITIES  
NAGREG FLYOVER**

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**THE NORTH JAVA CORRIDOR FLY OVER  
SIX FLY OVER CONSTRUCTION PROJECT basic- Detailed Engineering Design  
SUMMARY BILL OF QUANTITY**

Package No. : 2  
 Package Name : NAGREG FLY OVER  
 Province : WEST JAVA  
 Contractor :

DIVISION NO.	DESCRIPTION	TOTAL COST ( EXCLUDED VAT )		TOTAL COST
		FOREIGN	LOCAL	(EXCLUDED VAT)
		RUPIAH	RUPIAH	RUPIAH
1	GENERAL	-	2,906,710,812.65	2,906,710,812.65
2	DRAINAGE	1,340,093,485.96	1,445,762,454.09	2,785,855,940.05
3	EARTHWORKS	4,477,627,194.75	3,310,399,854.17	7,788,027,048.92
4	PAVEMENT WIDENING AND SHOULDERS	-	22,502,803.22	22,502,803.22
5	GRANULAR PAVEMENT	-	2,211,930,629.84	2,211,930,629.84
6	ASPHALT PAVEMENT	-	6,357,986,354.65	6,357,986,354.65
7	STRUCTURES	12,493,966,605.65	16,182,464,429.75	28,676,431,035.40
8	MISCELLANEOUS	463,672,258.40	1,141,366,021.12	1,605,038,279.52
9	FACILITIES	-	1,283,857,867.84	1,283,857,867.84
<b>DIRECT COST</b>		<b>18,775,359,544.76</b>	<b>34,862,981,227.33</b>	<b>53,638,340,772.09</b>
<b>VAT ( 10 % )</b>				<b>5,363,834,077.21</b>
<b>TOTAL CONSTRUCTION COST</b>				<b>59,002,174,849.30</b>
<b>PORTION PERCENTAGE</b>		<b>35.00</b>	<b>65.00</b>	<b>100.00</b>

**THE NORTH JAVA CORRIDOR FLYOVER PROJECT  
BILL OF QUANTITIES**

Package No. : 2  
 Package Name : NAGREG FLY OVER  
 Province : WEST JAVA  
 Contractor :

NAGREG FO

NO. PAY ITEMS	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST ( VAT EXCLUDED )		TOTAL COST ( EXCLUDED VAT )		TOTAL COST (EXCLUDED VAT) RUPIAH	REMARKS	
				FOREIGN	LOCAL	FOREIGN	LOCAL			
				RUPIAH	RUPIAH	RUPIAH	RUPIAH			
a	b	c	d	e	f	g = d x e	h = d x f	k		
<b>DIVISION 1 - GENERAL</b>										
1.2	Mobilization and Demobilization	LS	1.00	-	2,140,806,610.25	-	2,140,806,610.25	2,140,806,610.25		
1.2 (1)b	Engineer Facilities	LS	1.00	-	181,885,000.00	-	181,885,000.00	181,885,000.00		
1.8	Maintenance and Protection of Traffic	LS	1.00	-	584,019,202.40	-	584,019,202.40	584,019,202.40		
<b>SUB TOTAL FOR DIVISION 1</b>							<b>2,906,710,812.65</b>	<b>2,906,710,812.65</b>		
<b>DIV. 2 - DRAINAGE</b>										
2.1.(1)	Common Excavation for drainage ditches and waterways	Cu.M	150.00	-	26,761.03	-	4,014,154.50	4,014,154.50		
2.2.(1)	Mortared Stonework for drainage channel	Cu.M	60.67	-	342,433.73	-	20,775,454.40	20,775,454.40		
2.3 (1)	Reinforced Concrete Pipe Culvert Dia 400 mm, Type A	Ln.M	-	152,440.00	403,722.96	-	-	-		
2.3 (2)	Reinforced Concrete Pipe Culvert Dia 400 mm, Type B	Ln.M	-	152,440.00	1,413,270.65	-	-	-		
2.3 (3)	Reinforced Concrete Pipe Culvert Dia 600 mm, Type A	Ln.M	-	269,600.00	549,239.22	-	-	-		
2.3 (4)	Reinforced Concrete Pipe Culvert Dia 600 mm, Type B	Ln.M	38.90	269,600.00	1,788,637.18	10,487,440.00	69,577,986.30	80,065,426.30		
2.3 (5)	Reinforced Concrete Pipe Culvert Dia 800 mm, Type A	Ln.M	93.00	428,960.00	890,436.65	39,893,280.00	82,810,608.45	122,703,888.45		
2.3 (6)	Reinforced Concrete Pipe Culvert Dia 800 mm, Type B	Ln.M	68.20	428,960.00	2,254,902.34	29,255,072.00	153,784,339.59	183,039,411.59		
2.3 (7)	Reinforced Concrete Pipe Culvert Dia 1000 mm, Type A	Ln.M	-	697,760.00	1,067,519.99	-	-	-		
2.3 (8)	Reinforced Concrete Pipe Culvert Dia.1000 mm, Type B	Ln.M	-	697,760.00	2,715,157.29	-	-	-		
2.3 (9a)	Manhole Type I	Each	68.00	-	2,306,357.20	-	156,832,289.60	156,832,289.60		
2.3 (9b)	Manhole Type II	Each	-	-	2,258,998.94	-	-	-		
2.3 (9c)	Manhole Type III	Each	8.00	-	4,306,649.36	-	34,453,194.88	34,453,194.88		
2.3 (9d)	Manhole Type IV	Each	2.00	-	4,068,307.65	-	8,136,615.30	8,136,615.30		
2.3 (9e)	Manhole Type V	Each	11.00	-	3,766,606.15	-	41,432,667.65	41,432,667.65		
2.3 (9f)	Manhole Type VI	Each	1.00	-	3,996,023.32	-	3,996,023.32	3,996,023.32		
2.3 (9g)	Manhole Type VII	Each	13.00	-	1,378,384.67	-	17,919,000.71	17,919,000.71		
2.3 (9h)	Manhole Type VIII	Each	2.00	-	4,991,755.58	-	9,983,511.16	9,983,511.16		
2.3 (9i)	Manhole Type IX	Each	-	-	4,801,011.60	-	-	-		
2.3 (9j)	Manhole Type X	Each	-	-	6,261,037.64	-	-	-		
2.3 (10)	Catch Basin Type I	Each	7.00	-	615,588.52	-	4,309,119.64	4,309,119.64		
2.3 (12)a	U - Ditch, DS - 1	Ln.M	92.30	415,570.22	157,596.31	38,357,131.31	14,546,139.41	52,903,270.72		
2.3 (12)b	U - Ditch, DS - 2	Ln.M	-	631,201.13	192,183.84	-	-	-		
2.3 (12)c	U - Ditch, DS - 3	Ln.M	1,616.90	641,098.14	263,767.03	1,036,591,582.57	426,484,910.81	1,463,076,493.38		
2.3 (12)d	U - Ditch, DS - 3 A	Ln.M	12.50	484,912.06	248,148.42	6,061,400.75	3,101,855.25	9,163,256.00		
2.3 (12)e	U - Ditch, DS - 4	Ln.M	-	699,095.13	223,186.75	-	-	-		
2.3 (12)f	U - Ditch, DS - 4 A	Ln.M	-	517,946.08	211,584.06	-	-	-		
2.3 (12g)	U - Ditch, DS - 5	Ln.M	560.00	317,102.14	141,237.27	177,577,198.40	79,092,871.20	256,670,069.60		
2.3 (13)	Drain Pipe Dia 150 mm	Ln.M	-	-	164,886.91	-	-	-		
2.3 (14)	Drain Pipe Dia 200 mm	Ln.M	173.54	-	271,837.93	-	47,174,754.37	47,174,754.37		
2.3 (15)	Drain Pipe Dia 250 mm	Ln.M	210.20	-	409,015.87	-	85,975,135.87	85,975,135.87		
2.3 (16)	Deck Drain Type I	Each	-	-	871,351.86	-	-	-		
2.3 (17)	Deck Drain Type II	Each	41.00	-	2,433,351.86	-	99,767,426.26	99,767,426.26		
2.3 (18)	Steel Gutter Drain Screen	Ln.M	-	6,694,725.00	731,498.42	-	-	-		
2.3 (19)	Outer Ditch for Viaduct	Ln.M	-	-	442,854.81	-	-	-		
2.3 (21)	Extension of Existing Box Culvert	Ln.M	5.80	322,479.47	14,067,999.21	1,870,380.93	81,594,395.42	83,464,776.35		
<b>SUB TOTAL FOR DIVISION 2</b>							<b>1,340,093,485.96</b>	<b>1,445,762,454.09</b>	<b>2,785,855,940.05</b>	

**THE NORTH JAVA CORRIDOR FLYOVER PROJECT  
BILL OF QUANTITIES**

NAGREG FO

NO. PAY ITEMS	DESCRIPTION	UNIT	ESTIMATE QUANTITY	UNIT COST ( EXCLUDED VAT )		TOTAL COST ( EXCLUDED VAT )		TOTAL COST (EXCLUDED VAT) RUPIAH	REMARKS
				FOREIGN	LOCAL	FOREIGN	LOCAL		
				RUPIAH	RUPIAH	RUPIAH	RUPIAH		
a	b	c	d	e	f	g = d x e	h = d x f	k	
<b>DIV. 3 - EARTHWORKS</b>									
3.1 (1)	Clearing and Grubbing	Sq.M	8,203.85	-	3,039.75	-	24,937,653.04	24,937,653.04	
3.1 (2)	Selected Tree Removal Diameter ≥ 200 mm ≤ 300 mm	Each	28.00	-	148,008.27	-	4,144,231.56	4,144,231.56	
3.1 (3)	Selected Tree Removal Diameter > 300 mm	Each	11.00	-	266,937.21	-	2,936,309.31	2,936,309.31	
3.2 (1)	Common Excavation	Cu. M	6,507.07	-	17,502.11	-	113,887,454.92	113,887,454.92	
3.2 (2)	Excavation of Existing Pavement	Cu. M	115.14	-	56,303.48	-	6,482,782.69	6,482,782.69	
3.2 (3)	Structure Excavation to a depth not exceeding 2 m	Cu. M	1,485.55	-	28,306.47	-	42,050,676.51	42,050,676.51	
3.2 (4)	Structure Excavation to a depth greater than 2 m but not exceeding 4 m	Cu. M	89.23	-	33,501.25	-	2,989,316.54	2,989,316.54	
3.2 (5)	Structure Excavation to a depth greater than 4 m	Cu. M	-	-	44,316.79	-	-	-	
3.2 (7)	Rock Excavation	Cu. M	-	-	91,469.65	-	-	-	
3.3 (1)	Borrow materials and common backfill	Cu. M	15,044.02	-	104,604.23	-	1,573,668,128.20	1,573,668,128.20	
3.3 (2)	Structural Backfill	Cu. M	353.23	-	121,587.16	-	42,948,232.53	42,948,232.53	
3.3 (3)	Permeable Backfill	Cu. M	71.74	-	109,467.12	-	7,853,171.19	7,853,171.19	
SS 3.3	Soil Cement Improvement	Cu. M	-	-	539,015.98	-	-	-	
3.3 (4)	Lighweight Embankment	Cu. M	-	-	468,930.53	-	-	-	
3.3 (6)	Intermediate Concrete Slab	Sq.M	-	-	157,042.44	-	-	-	
3.4 (1)	Sub Grade Preparation	Sq. M	16,358.37	-	5,224.43	-	85,463,158.98	85,463,158.98	
SS 3.5 (1)	Mechanical Stabilized Earthwall	Sq. M	3,650.81	1,226,475.00	384,308.89	4,477,627,194.75	1,403,038,738.70	5,880,665,933.45	
SS 3.5 (2)	Retaining Wall for Lighweight Embankment	Sq. M	-	-	1,183,261.55	-	-	-	
<b>SUB TOTAL FOR DIVISION 3</b>							<b>4,477,627,194.75</b>	<b>3,310,399,854.17</b>	<b>7,788,027,048.92</b>

NAGREG FO

NO. PAY ITEMS	DESCRIPTION	UNIT	ESTIMATE QUANTITY	UNIT COST ( EXCLUDED VAT )		TOTAL COST ( EXCLUDED VAT )		TOTAL COST (EXCLUDED VAT) RUPIAH	REMARKS
				FOREIGN	LOCAL	FOREIGN	LOCAL		
				RUPIAH	RUPIAH	RUPIAH	RUPIAH		
a	b	c	d	e	f	g = d x e	h = d x f	k	
<b>DIVISION 4 PAVEMENT WIDENING AND SHOULDERS</b>									
4.2 (2)	Aggregate Sub Base Class B	Cu. M	126.38	-	178,056.68	-	22,502,803.22	22,502,803.22	
<b>SUB TOTAL FOR DIVISION 4</b>								<b>22,502,803.22</b>	<b>22,502,803.22</b>
<b>DIVISION 5 GRANULAR PAVEMENT</b>									
5.1 (1)	Aggregate Sub Base Class A	Cu. M	4,674.95	-	224,647.09	-	1,050,213,913.40	1,050,213,913.40	
5.1 (2)	Aggregate Sub Base Class B	Cu. M	6,196.07	-	187,492.51	-	1,161,716,716.44	1,161,716,716.44	
<b>SUB TOTAL FOR DIVISION 5</b>								<b>2,211,930,629.84</b>	<b>2,211,930,629.84</b>
<b>DIVISION 6 ASPHALT PAVEMENT</b>									
6.1 (1)	Prime Coat	Litre	15,535.59	-	8,172.38	-	126,962,745.00	126,962,745.00	
6.1 (2)	Tack Coat	Litre	20,416.35	-	9,127.24	-	186,344,926.37	186,344,926.37	
6.3 (1)	Asphalt Concrete Wearing Course (AC-WC)	Ton	2,130.88	-	806,307.83	-	1,718,145,228.79	1,718,145,228.79	
6.3 (2)	Asphalt Concrete Binder Course (AC-BC)	Ton	2,380.10	-	775,277.23	-	1,845,237,335.12	1,845,237,335.12	
6.3 (3)	Asphalt Concrete Base (AC-Base)	Ton	3,530.88	-	702,741.56	-	2,481,296,119.37	2,481,296,119.37	
<b>SUB TOTAL FOR DIVISION 6</b>								<b>6,357,986,354.65</b>	<b>6,357,986,354.65</b>

**THE NORTH JAVA CORRIDOR FLYOVER PROJECT  
BILL OF QUANTITIES**

NAGREG FO

NO. PAY ITEMS	DESCRIPTION	UNIT	ESTIMATE QUANTITY	UNIT COST ( EXCLUDED VAT )		TOTAL COST ( EXCLUDED VAT )		TOTAL COST (EXCLUDED VAT) RUPIAH	REMARKS
				FOREIGN	LOCAL	FOREIGN	LOCAL		
				RUPIAH	RUPIAH	RUPIAH	RUPIAH		
a	b	c	d	e	f	g = d x e	h = d x f	k	
	<b>DIVISION 7 STRUCTURES</b>								
7.1.(1)a	Structure Concrete, Class A - (Fc' = 35 Mpa) for Post Tension Double Girder	Cu m	800.03	200,000.00	1,435,174.92	160,006,000.00	1,148,182,991.25	1,308,188,991.25	
7.1.(1)b	Structure Concrete, Class A - (Fc' = 35 Mpa) for Steel Girder	Cu m	471.85	200,000.00	2,605,507.61	94,370,000.00	1,229,408,765.78	1,323,778,765.78	
7.1.(2)a	Structure Concrete, Class B - (Fc' = 30 Mpa) for Pier Head	Cu m	104.54	200,000.00	1,128,368.26	20,908,000.00	117,959,617.90	138,867,617.90	
7.1.(2)b	Structure Concrete, Class B - (Fc' = 30 Mpa) for Couolumn	Cu m	53.75	-	1,032,248.26	-	55,483,343.98	55,483,343.98	
7.1.(2)c	Structure Concrete, Class B - (Fc' = 30 Mpa) for Composite Couolumn	Cu m	102.41	4,726,901.81	1,840,177.03	484,082,014.36	188,452,529.64	672,534,544.00	
7.1.(2)d	Structure Concrete, Class B - (Fc' = 30 Mpa) for Abutment	Cu m	194.10	-	891,998.26	-	173,136,862.27	173,136,862.27	
7.1.(3)a	Structure Concrete, Class B-1 (Fc' = 28 Mpa) for Barrier, Median	Cu m	-	-	848,919.46	-	-	-	
7.1.(3)b	Structure Concrete, Class B-1 (Fc' = 28 Mpa) for Parapet, Wall	Cu m	910.36	-	802,169.46	-	730,262,989.61	730,262,989.61	
7.1.(5)	Structure Concrete, Class C (Fc'=24 Mpa) for Footing, Approach Slab, Retaining Wall	Cu m	829.10	-	777,204.03	-	644,379,861.27	644,379,861.27	
7.1.(6)	Structure Concrete, Class D (fc= 20Mpa)	Cu m	-	-	627,864.59	-	-	-	
7.1.(8)	Lean Concrete, Class E (fc= 17 Mpa)	Cu m	111.37	-	485,232.25	-	54,040,315.68	54,040,315.68	
SS 7.1.(9)	Waterproofing on Deck	SqM	2,576.00	-	38,717.54	-	99,736,383.04	99,736,383.04	
SS 7.1.(10)	Structure Casing for Bored Pile (Inner Ribbed Surface t = 13 mm)	Kg	28,825.20	13,500.00	2,319.52	389,140,200.00	66,860,627.90	456,000,827.90	
SS 7.1.(11)	Structure Casing for Bored Pile (Erected)	Kg	28,825.20	-	414.16	-	11,938,244.83	11,938,244.83	
7.2.(9)	PC Strand Size 12.7 mm	Kg	17,103.85	39,012.52	20,174.90	667,264,290.20	345,068,463.37	1,012,332,753.57	
7.2.(9)a	PC Strand Size 21.8 mm	Kg	11,263.35	44,535.21	58,582.16	501,615,657.55	659,831,371.84	1,161,447,029.39	
7.3.(3)	PC Bar	Kg	1,061.29	25,808.02	18,354.38	27,389,793.55	19,479,319.95	46,869,113.50	
7.3.(4)	Reinforcing Steel Bars Grade 40	Kg	395,194.55	-	9,596.16	-	3,792,350,132.93	3,792,350,132.93	
7.5.(1)	Furnish and Delivery of Steel Girder	Ton	220.83	19,146,981.00	2,654,158.00	4,228,227,814.23	586,117,711.14	4,814,345,525.37	
7.5.(1)a	Furnish and Delivery of Steel Coping and Portal	Ton	134.01	20,217,424.00	2,766,603.00	2,709,336,990.24	370,752,468.03	3,080,089,458.27	
7.5.(3)	Erection of Steel Girder	Ton	220.83	-	1,526,691.94	-	337,139,381.11	337,139,381.11	
7.5.(4)	Erection of Steel Coping and Portal	Ton	134.01	-	349,904.03	-	46,890,639.06	46,890,639.06	
7.6.(22)	Cast in Place Concrete Bored Pile, Dia 1500 mm	Ln. M	288.00	2,320,770.91	3,511,976.83	668,382,022.08	1,011,449,327.04	1,679,831,349.12	
7.6.(23)	Cast in Place Concrete Bored Pile, Dia 1800 mm	Ln. M	180.00	-	8,035,678.02	-	1,446,422,043.60	1,446,422,043.60	
7.6.(26)	Cast in Place Concrete Bored Pile, Dia 2500 mm	Ln. M	221.00	5,325,042.64	8,722,940.07	1,176,834,423.44	1,927,769,755.47	3,104,604,178.91	
7.6.(27)	Pile Integrity Test	Each	20.00	-	1,339,639.11	-	26,792,782.20	26,792,782.20	
SS7.6.(28)	Pile Dynamic Analysis (PDA) , Dia 1500 mm	Each	1.00	-	22,670,510.79	-	22,670,510.79	22,670,510.79	
SS7.6.(29)a	Pile Dynamic Analysis (PDA) , Dia 1800 mm	Each	1.00	-	25,420,510.79	-	25,420,510.79	25,420,510.79	
SS7.6.(29)b	Pile Dynamic Analysis (PDA) , Dia 2500 mm	Each	1.00	-	28,170,510.79	-	28,170,510.79	28,170,510.79	
7.9 (1)	Stone masonry	Cu. M	216.16	-	433,284.05	-	93,658,680.25	93,658,680.25	
7.9 (2)	Blinding Stone	Cu. M	-	-	141,877.26	-	-	-	
7.11 (2)	Expansion Joint ( Type A )	Ln. M	46.00	-	1,932,471.78	-	88,893,701.88	88,893,701.88	
SS7.11 (4)	Restrainer Type - A	Set	2.00	43,512,000.00	4,613,349.13	87,024,000.00	9,226,698.26	96,250,698.26	
SS7.11 (5)	Restrainer Type - B	Set	2.00	33,339,750.00	3,596,124.13	66,679,500.00	7,192,248.26	73,871,748.26	
SS7.11 (6)	Stopper for Steel Girder	Set	4.00	90,112,500.00	9,273,399.13	360,450,000.00	37,093,596.52	397,543,596.52	
7.12 (2)	Elastomeric Bearing Pad, Type - A1	Set	-	7,368,000.00	848,520.94	-	-	-	
7.12 (2)a	Elastomeric Bearing Pad, Type - A2	Set	-	9,247,500.00	1,037,570.94	-	-	-	
7.12 (2)b	Elastomeric Bearing Pad, Type - A3	Set	4.00	18,774,600.00	2,039,875.23	75,098,400.00	8,159,500.92	83,257,900.92	
7.12 (2)c	Elastomeric Bearing Pad, Type - A4	Set	-	14,568,000.00	1,614,265.23	-	-	-	
7.12 (7)a	Bridge Bearing for Steel Girder , Type - B1	Set	4.00	70,462,500.00	7,241,325.08	281,850,000.00	28,965,300.32	310,815,300.32	
7.12 (7)b	Bridge Bearing for Steel Girder , Type - B2	Set	-	52,140,000.00	5,409,075.08	-	-	-	
7.12 (7)c	Bridge Bearing for Steel Girder , Type - C1	Set	-	129,915,000.00	13,186,575.08	-	-	-	
7.12 (7)d	Bridge Bearing for Steel Girder , Type - C2	Set	1.00	184,147,500.00	18,609,825.08	184,147,500.00	18,609,825.08	202,757,325.08	
7.12 (7)e	Bridge Bearing for Steel Girder , Type - C3	Set	1.00	311,160,000.00	31,333,075.08	311,160,000.00	31,333,075.08	342,493,075.08	
7.12 (7)f	Bridge Bearing for Steel Girder , Type - C4	Set	-	26,422,500.00	2,859,325.08	-	-	-	
7.13	Steel Bridge Railings	Ln. M	1,468.80	-	451,440.73	-	663,076,144.22	663,076,144.22	
7.14	Bridge Name Plate	Each	2.00	-	1,256,082.45	-	2,512,164.90	2,512,164.90	
7.15 (1)	Demolition of Existing Structure Masonry	Cu m	188.88	-	90,212.44	-	17,039,235.45	17,039,235.45	
7.15 (2)	Demolition of Existing Structure Concrete	Cu m	41.57	-	129,812.86	-	5,396,320.59	5,396,320.59	
7.15 (10)	Demolition of Existing Rigid Pavement	Sq.M	-	-	39,110.10	-	-	-	
7.15 (11)	Demolition of Existing Hedge or Fence	Ln.M	167.78	-	30,638.38	-	5,140,476.76	5,140,476.76	
7.15 (12)	Demolition of Existing Concrete Side Walk	SqM	-	-	27,933.62	-	-	-	
7.15 (13)	Demolition of Existing Concrete Curb	Ln.M	-	-	15,858.23	-	-	-	
7.16 (2)	Rigid Pavement ( t = 270 mm )	SqM	-	-	247,184.01	-	-	-	
7.17 (1)	Lean Concrete for Rigid Pavement( t = 100 mm )	SqM	-	-	41,525.75	-	-	-	
<b>SUB TOTAL FOR DIVISION 7</b>						<b>12,493,966,605.65</b>	<b>16,182,464,429.75</b>	<b>28,676,431,035.40</b>	

**THE NORTH JAVA CORRIDOR FLYOVER PROJECT  
BILL OF QUANTITIES**

NAGREG FO

NO. PAY ITEMS	DESCRIPTION	UNIT	ESTIMATE QUANTITY	UNIT COST ( EXCLUDED VAT )		TOTAL COST ( EXCLUDED VAT )		TOTAL COST (EXCLUDED VAT)	REMARKS
				FOREIGN	LOCAL	FOREIGN	LOCAL		
				RUPIAH	RUPIAH	RUPIAH	RUPIAH		
a	b	c	d	e	f	g = d x e	h = d x f	k	
<b>DIVISION 8 - MISCELLANEOUS</b>									
8.1.(1)	Solid Sodding	Sq. M	5,885.44	-	11,654.54	-	68,592,072.59	68,592,072.59	
8.3.(1)	Vehicle Guardrail Type A	Ln M	-	-	414,676.15	-	-	-	
8.3.(13)	BRC Fence	Ln M	-	-	150,849.82	-	-	-	
8.3.(15)	Guard Fence over Railway	Ln.M	-	-	764,893.94	-	-	-	
8.4.(1)	Regulatory and Warning Sign, Type A	Each	51.00	-	597,985.70	-	30,497,270.70	30,497,270.70	
8.4.(2)	Regulatory and Warning Sign, Type B	Each	2.00	-	1,125,780.10	-	2,251,560.20	2,251,560.20	
8.5.(17)	Overhead Sign, Type A	Each	-	-	20,653,104.24	-	-	-	
8.5.(18)	Overhead Sign, Type B	Each	2.00	-	27,385,049.24	-	54,770,098.48	54,770,098.48	
8.5.(19)	Overhead Sign, Type C	Each	-	-	73,090,362.91	-	-	-	
8.6.(6)	Reflective Thermoplastic Pavement Marking	Sq. M	734.48	-	128,868.65	-	94,651,446.05	94,651,446.05	
8.8.(1)	Precast Concrete Curb, Type A	Ln M	1,679.52	43,399.78	45,741.09	72,890,798.51	76,823,075.48	149,713,873.99	
8.8.(2)	Precast Concrete Curb, Type B	Ln M	2,256.46	173,183.42	93,958.16	390,781,459.89	212,012,829.71	602,794,289.60	
8.9.(3)	Concrete Median, Type A	Ln M	-	-	214,004.78	-	-	-	
8.9.(4)	Concrete Median, Type B	Ln M	730.00	-	657,427.77	-	479,922,272.10	479,922,272.10	
8.9.(5)	Concrete Sidewalk	Sq.M	1,315.80	-	92,601.76	-	121,845,395.81	121,845,395.81	
<b>SUB TOTAL FOR DIVISION 8</b>							<b>463,672,258.40</b>	<b>1,141,366,021.12</b>	<b>1,605,038,279.52</b>

NAGREG FO

NO. PAY ITEMS	DESCRIPTION	UNIT	ESTIMATE QUANTITY	UNIT COST ( EXCLUDED VAT )		TOTAL COST ( EXCLUDED VAT )		TOTAL COST (EXCLUDED VAT)	REMARKS
				FOREIGN	LOCAL	FOREIGN	LOCAL		
				RUPIAH	RUPIAH	RUPIAH	RUPIAH		
a	b	c	d	e	f	g = d x e	h = d x f	k	
<b>DIVISION 9 - FACILITIES</b>									
9.1.(1)	Street Lighting Pole, Type A ( 11 m )	Each	82.00	-	9,472,916.01	-	776,779,112.82	776,779,112.82	
9.1.(10)	Street Lighting Ceiling, Type A - Sont 150 watt	Each	20.00	-	2,421,484.66	-	48,429,693.20	48,429,693.20	
9.1.(10)a	Street Lighting Ceiling, Type B - Sont 250 watt	Each	-	-	2,586,484.66	-	-	-	
9.1.(12)a	Panel Type LP-PJU FO	Each	1.00	-	6,548,914.98	-	6,548,914.98	6,548,914.98	
9.1.(12)b	Panel Type LP-PJU 1	Each	1.00	-	6,163,914.98	-	6,163,914.98	6,163,914.98	
9.1.(12)c	Panel Type LP-PJU 2	Each	1.00	-	2,124,164.98	-	2,124,164.98	2,124,164.98	
9.1.(12)d	Panel Type LP-PJU 3	Each	1.00	-	2,158,358.29	-	2,158,358.29	2,158,358.29	
9.1.(12)e	Panel Type LP-PJU 4	Each	1.00	-	5,121,664.98	-	5,121,664.98	5,121,664.98	
9.1.(12)f	Panel Type LP-PJU 5	Each	1.00	-	2,509,164.98	-	2,509,164.98	2,509,164.98	
9.1.(12)g	Panel Type LP-PJU 6	Each	-	-	2,141,774.54	-	-	-	
9.1.(13)	Traffic Signal Head, Type A	Each	-	-	3,907,458.43	-	-	-	
9.1.(14)	Traffic Signal Head, Type B	Each	-	-	2,757,958.43	-	-	-	
9.1.(17)	Traffic Signal Pole, Type I	Each	-	-	4,264,171.03	-	-	-	
9.1.(18)	Traffic Signal Pole, Type II	Each	-	-	6,247,603.93	-	-	-	
9.1.(23)	Cable Type - 1 ( NYFGBY 2C - 2.5 mm2 )	Ln M	1,253.00	-	15,701.84	-	19,674,405.52	19,674,405.52	
9.1.(25)	Cable Type - 3 ( NYFGBY 4C - 10 mm2 )	Ln M	3,864.00	-	54,078.09	-	208,957,739.76	208,957,739.76	
9.1.(27)	Cable Type - 5 ( NYFGBY 4C - 25 mm2 )	Ln M	1,615.00	-	104,678.09	-	169,055,115.35	169,055,115.35	
9.1.(29)	Cable Type - 7 ( NYFGBY 4C - 50 mm2 )	Ln M	200.00	-	181,678.09	-	36,335,618.00	36,335,618.00	
9.1.(40)	Removal of Ligting Pole to stockpile	Each	-	-	5,185,136.74	-	-	-	
9.1.(41)	Removal of Ligting Signal to stockpile	Each	-	-	1,924,318.39	-	-	-	
<b>SUB TOTAL FOR DIVISION 9</b>							<b>1,283,857,867.84</b>	<b>1,283,857,867.84</b>	
<b>DIRECT COST</b>						<b>18,775,359,544.76</b>	<b>34,862,981,227.33</b>	<b>53,638,340,772.09</b>	
<b>VAT ( 10% )</b>						<b>1,877,535,954.48</b>	<b>3,486,298,122.73</b>	<b>5,363,834,077.21</b>	
<b>CONSTRUCTION COST</b>						<b>20,652,895,499.24</b>	<b>38,349,279,350.06</b>	<b>59,002,174,849.30</b>	
<b>PORTION PERCENTAGE</b>						<b>35.00</b>	<b>65.00</b>	<b>100.00</b>	

**LABOUR  
RATES**



**THE NORTH JAVA CORRIDOR FLYOVER PROJECT  
NAGREG FLYOVER**

**COMPUTATION OF LABOUR RATES  
( Rupiah Per Hour )**

No.	Code	CATEGORY	Basic Salary / Day (Rp.)	BENEFITS ( DAILY )				Total Rate Per Day (Rp.)	TOTAL RATE (Rp. / Hour)
				Leaves (Rp.)	THR ( Bonus ) (Rp.)	JAMSOSTEK (Rp.)	Health Insurance (Rp.)		
			( 1 )	(2)=(1)x12/365	(3)=(1)/12	(4)=((1)+(3))*5.74%	(5)=((1)+(3))*8%	(6)=(1)+(2)+(3)+(4)+(5)	(7)=(6)/7
1	(L01)	Superintendent	60,000.00	1,972.60	5,000.00	3,731.00	3,900.00	74,603.60	10,657.66
2	(L02)	Common Labour	25,750.00	846.58	2,145.83	1,601.22	1,673.75	32,017.38	4,573.91
3	(L03)	Skilled Labour	29,000.00	933.42	2,416.67	1,803.32	1,885.00	36,038.41	5,151.20
4	(L04)	Foremen	37,500.00	1,232.88	3,125.00	2,331.88	2,437.50	46,627.25	6,661.04
5	(L05)	Mason	35,000.00	1,150.68	2,916.67	2,176.42	2,275.00	43,518.77	6,216.97
6	(L06)	Carpenter	35,000.00	1,150.68	2,916.67	2,176.42	2,275.00	43,518.77	6,216.97
7	(L07)	Painter	35,000.00	1,150.68	2,916.67	2,176.42	2,275.00	43,518.77	6,216.97
8	(L08)	Electrician	50,000.00	1,643.84	4,166.67	3,109.17	3,250.00	62,169.67	8,881.38
9	(L09)	Operator Heavy Equipment	50,000.00	1,643.84	4,166.67	3,109.17	3,250.00	62,169.67	8,881.38
10	(L10)	Operator Light Equipment	42,500.00	1,397.26	3,541.67	2,642.79	2,762.50	52,844.22	7,549.17
11	(L11)	Operator Assistant	42,500.00	1,397.26	3,541.67	2,642.79	2,762.50	52,844.22	7,549.17
12	(L12)	Mechanic	50,000.00	1,643.84	4,166.67	3,109.17	3,250.00	62,169.67	8,881.38
13	(L13)	Mechanic Assistant	42,500.00	1,397.26	3,541.67	2,642.79	2,762.50	52,844.22	7,549.17
14	(L14)	Driver	40,000.00	1,315.07	3,333.33	2,487.33	2,600.00	49,735.74	7,105.11

DAILY SALARY IS BASED ON 7 HOURS A DAY

- 1 12 month / Year → Basic Salary x 12 / 365
- 2 1 Month Salary / Year → Basic Salary / 12
- 3 7.74 % ( Accident Benefit 1.74 % + Death Benefits 0.3 % + old Age Benefit 3.7 % = 5.74 % by Employer old age benefits 2.00 % by Employee )
- 4 Basic Salary x 6.0 % ( with Family )

**CONSTRUCTION MATERIAL  
BASIC PRICES**

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**

60  
 20,271,924 2766  
 19,146,981 2654  
 158

**LIST OF MATERIAL BASIC RATE**

LOCATION : Nagreg West Java

No.	CODE	DESCRIPTION	UNIT	UNIT PRICE (Rp.)	FOREIGN PORTION (Rp.)	LOCAL PORTION (Rp.)
1	(M01)	Common embankment material	CuM	62,600.00	-	62,600.00
2	(M02)	Selected embankment material	CuM	65,600.00	-	65,600.00
3	(M03)	Geotextile	SqM	25,000.00	-	25,000.00
4	(M04)	Selected Material	CuM	77,600.00	-	77,600.00
5	(M05)	Sand for embankment	CuM	65,600.00	-	65,600.00
6	(M06)	Sand for concrete	CuM	120,600.00	-	120,600.00
7	(M07)	Boulder / River stone	CuM	100,600.00	-	100,600.00
8	(M08)	Coarse Aggregate	CuM	162,600.00	-	162,600.00
9	(M09)	Fine Aggregate	CuM	132,600.00	-	132,600.00
10	(M10)	Filler	kg	1,100.00	-	1,100.00
11	(M11)	Gravel	CuM	98,100.00	-	98,100.00
12	(M12)	Cement	kg	840.00	-	840.00
13	(M13)	Plain Reinforced Steel	kg	5,900.00	-	5,900.00
14	(M14)	Deformed Reinforced Steel	kg	5,900.00	-	5,900.00
15	(M15)	Fabricated Steel Portal	Ton	22,977,761.00	20,216,155.00	2,761,606.00
16	(M16)	Fabricated Steel Box Girder	Ton	21,751,014.00	19,100,930.00	2,650,084.00
17	(M17)	Bending wire	kg	9,000.00	-	9,000.00
18	(M18)	Gabions wire	kg	6,000.00	-	6,000.00
19	(M19)	Nail	kg	8,000.00	-	8,000.00
20	(M20)	Steel Galvanized pipe Dia 2.0"	LnM	70,000.00	-	70,000.00
21	(M21)	Steel Galvanized pipe Dia 2.5"	LnM	120,000.00	-	120,000.00
22	(M22)	Asphalt Cement	kg	6,200.00	-	6,200.00
23	(M23)	Emulsified Asphalt	kg	6,200.00	-	6,200.00
24	(M24)	Kerosene	litre	2,794.50	-	2,794.50
25	(M25)	Gasoline fuel	litre	4,780.00	-	4,780.00
26	(M26)	Diesel fuel	litre	4,950.00	-	4,950.00
27	(M27)	Lubricant Oil	litre	25,200.00	-	25,200.00
28	(M28)	Scaffolding/Formwork	CuM	1,700,000.00	-	1,700,000.00
29	(M29)	Phenofilm t = 18 mm	SqM	60,763.89	-	60,763.89
30	(M30)	Stereform t = 22 mm	SqM	184,500.00	-	184,500.00
31	(M31)	Tie bolt, dia. 13 mm	each	9,750.00	-	9,750.00
32	(M32)	Tie bolt, dia. 10 mm	each	9,750.00	-	9,750.00
33	(M33)	Form Oil	kg	22,500.00	-	22,500.00
34	(M34)	Bolt & Nut, dia. 12 mm x 30 mm	each	3,750.00	-	3,750.00
35	(M35)	PC Strand 12 T 12.7 mm	kg	12,619.30	12,537.30	82.00
36	(M36)	PC Strand 1 T 21.8 mm	kg	18,252.00	18,170.00	82.00
37	(M37)	PC Bar Dia 32.0 mm	kg	18,252.00	18,170.00	82.00
38	(M38)	Live Anchor Type 12 K 13	each	924,000.00	896,280.00	27,720.00
39	(M39)	Stopper For Steel	each	90,237,500.00	90,112,500.00	125,000.00
40	(M40)	Live Anchor Type 1K22	each	195,250.00	189,400.00	5,850.00
42	(M42)	Falling Prevention Device Type A	each	43,637,000.00	43,512,000.00	125,000.00
43	(M43)	Falling Prevention Device Type B	each	33,464,750.00	33,339,750.00	125,000.00
44	(M44)	Sheath Dia. 65 mm	LnM	39,600.00	38,400.00	1,200.00
45	(M45)	Sheath Dia. 55 mm	LnM	37,400.00	36,300.00	1,100.00
46	(M46)	Grouting paste, D >= 60 mm	LnM	12,650.00	-	12,650.00
47	(M47)	Grouting paste, D <= 60 mm	LnM	7,590.00	-	7,590.00
48	(M48)	Mechanical Bearing For Steel Girder Type A (Mov.), Dia.485x69.5 mm	set	70,500,000.00	70,462,500.00	37,500.00
49	(M49)	Mechanical Bearing For Steel Girder Type B (Mov.), Dia.400x65.5 mm	set	52,177,500.00	52,140,000.00	37,500.00
50	(M50)	Elastomeric Bearing Pad Type -1 (470x370x95 mm)	set	7,372,000.00	7,368,000.00	4,000.00
51	(M51)	Elastomeric Bearing Pad Type -2 (520x420x95 mm)	set	9,252,500.00	9,247,500.00	5,000.00
52	(M52)	Elastomeric Bearing Pad Type -3 (570x570x133 mm)	set	18,801,600.00	18,774,600.00	27,000.00
53	(M53)	Elastomeric Bearing Pad Type -4 (520x520x123 mm)	set	14,590,500.00	14,568,000.00	22,500.00
54	(M54)	Dead Anchorage for PC Bar	each	175,000.00	-	175,000.00
55	(M55)	Ducting, grouting	ln.m	195,250.00	189,400.00	5,850.00
56	(M56)	Coupler for 12 T 12.7	each	5,500,000.00	5,335,000.00	165,000.00
57	(M57)	RC Pipe, Dia. 1200 mm	LnM	926,280.00	926,280.00	-
58	(M58)	RC Pipe, Dia. 1000 mm	LnM	697,760.00	697,760.00	-
59	(M59)	RC Pipe, Dia. 800 mm	LnM	428,960.00	428,960.00	-
60	(M60)	RC Pipe, Dia. 600 mm	LnM	269,600.00	269,600.00	-
61	(M61)	PVC Dia. 6"	LnM	129,625.00	-	129,625.00
62	(M62)	PVC Dia. 8"	LnM	219,700.00	-	219,700.00
63	(M63)	Bend Dia. 6" /SOCH Dia. 6"	each	22,070.00	-	22,070.00

## LIST OF MATERIAL BASIC RATE

LOCATION : Nagreg West Java

No.	CODE	DESCRIPTION	UNIT	UNIT PRICE (Rp.)	FOREIGN PORTION (Rp.)	LOCAL PORTION (Rp.)
63	(M63)	Bend Dia. 6" /SOCH Dia. 6"	each	22,070.00	-	22,070.00
64	(M64)	Bend Dia. 8" /SOCH Dia. 8"	each	58,750.00	-	58,750.00
65	(M65)	Glass Beads	kg	43,750.00	-	43,750.00
66	(M66)	Sign Plate (High Intensity Grade)	each	1,578,000.00	-	1,578,000.00
67	(M67)	Guard Rail	LnM	295,500.00	-	295,500.00
68	(M68)	Terminal beam of guard rail	each	562,000.00	-	562,000.00
69	(M69)	Post of Guard Rail	each	673,500.00	-	673,500.00
70	(M70)	Rail Post	each	141,750.00	-	141,750.00
71	(M71)	Guide Sign Plate Type A	each	304,000.00	-	304,000.00
72	(M72)	Guide Sign Plate Type B	each	608,000.00	-	608,000.00
73	(M73)	Paving Block	SqM	72,500.00	-	72,500.00
74	(M74)	Road Paint (Thermoplastic)	kg	16,700.00	-	16,700.00
75	(M75)	Reflector	each	42,000.00	-	42,000.00
76	(M76)	Curing Compound	Kg	14,850.00	-	14,850.00
77	(M77)	MSE WALL and Accessories	Sq.M	1,320,225.00	1,226,475.00	93,750.00
78	(M78)	Steel Gutter Screen	each	6,736,288.00	6,694,725.00	41,563.00
79	(M79)	Marmer	each	1,000,000.00	-	1,000,000.00
80	(M80)	Epoxy mortar	kg	20,000.00	-	20,000.00
81	(M81)	Formwork & Scaffolding for PC Girder	CuM	679,653.83	-	679,653.83
82	(M82)	Formwork & Scaffolding for PC Slab of Steel Girder	CuM	1,747,666.46	-	1,747,666.46
83	(M83)	Inner Ribbed Steel Pipe dia 2500mm t = 13 mm	Ton	14,281,250.00	13,500,000.00	781,250.00
84	(M84)	Inner Ribbed Steel Pipe dia 1400mm t = 19 mm	Ton	11,252,273.00	11,025,000.00	227,273.00
86	(M86)	PVC Dia. 10"	LnM	309,625.00	-	309,625.00
87	(M87)	Bend Dia. 10" /SOCH Dia. 10"	each	93,750.00	-	93,750.00
88	(M88)	Solid Sodding (Rumput Manila, Zoysia Matrela, Tandur)	SqM	7,900.00	-	7,900.00
89	(M89)	Tee for Drain Pipe 6"	each	65,910.00	-	65,910.00
90	(M90)	Tee for Drain Pipe 8"	each	95,000.00	-	95,000.00
91	(M91)	Tee for Drain Pipe 10"	each	125,000.00	-	125,000.00
92	(M92)	Support for Drain Pipe	each	5,000.00	-	5,000.00
93	(M93)	Deformed Reinforced Bar D 51 SD 345	kg	7,088.00	6,900.00	188.00
94	(M94)	Thinner	litre	9,000.00	-	9,000.00
95	(M95)	Splicing for D51	Set	322,750.00	320,250.00	2,500.00
96	(M96)	Lighting pole ( 11 m )and accessories	Each	5,410,500.00	-	5,410,500.00
97	(M97)	Lighting pole ( 13 m )and accessories	Each	6,410,500.00	-	6,410,500.00
98	(M98)	Lamp Son 250 w and accessories for PJU	Each	1,400,000.00	-	1,400,000.00
99	(M99)	Foundation Type I for street lighting	Each	1,080,000.00	-	1,080,000.00
100	(M100)	Foundation Type II for panel	Each	750,000.00	-	750,000.00
101	(M101)	Anchor and Bolt ( Dia 22 )	Each	45,000.00	-	45,000.00
102	(M102)	PVC Pipe dia 1"	LnM	5,250.00	-	5,250.00
103	(M103)	PVC Conduit dia 2.5"	LnM	25,562.50	-	25,562.50
104	(M104)	Cable NYY 4 x 4 mm2	LnM	8,640.00	-	8,640.00
105	(M105)	Lamps and accessories Sont 150 w for ceiling	Each	1,800,000.00	-	1,800,000.00
106	(M106)	Indicator Lamp	Each	20,000.00	-	20,000.00
107	(M107)	MCB 16 A , 3 PC	Each	348,000.00	-	348,000.00
108	(M108)	MCB 10 A , 3 PC	Each	381,600.00	-	381,600.00
109	(M109)	Panel Box Type A ( 100 x 80 x 30 cm )	Each	250,000.00	-	250,000.00
110	(M110)	Cable G BCC 16 mm2	LnM	45,000.00	-	45,000.00
111	(M111)	Traffic Signal Head Type A ( 3 phase )	Each	3,145,000.00	-	3,145,000.00
112	(M112)	Traffic Signal Head Type B ( 2 phase )	Each	2,100,000.00	-	2,100,000.00
113	(M113)	Traffic Contol Signal and Accessories	Each	23,000,000.00	-	23,000,000.00
114	(M114)	Traffic Signal Pole Type I	Each	3,607,500.00	-	3,607,500.00
115	(M115)	Traffic Signal Pole Type II	Each	5,411,250.00	-	5,411,250.00
116	(M116)	Cable Type NYFGBY 2C X 2.5 mm	Ln.M	4,800.00	-	4,800.00
117	(M117)	Cable Type NYFGBY 4C X 10 mm	Ln.M	49,000.00	-	49,000.00
118	(M118)	Cable Type NYFGBY 4C X 25 mm	Ln.M	95,000.00	-	95,000.00
119	(M119)	Cable Type NYFGBY 4C X 50 mm	Ln.M	165,000.00	-	165,000.00
200	(M200)	KWH Meter	Each	900,000.00	-	900,000.00
201	(M201)	BRC Panel	Unit	154,075.00	-	154,075.00
202	(M202)	BRC Pole	Unit	64,500.00	-	64,500.00
203	(M203)	Beam ( 4 m )	each	639,100.00	-	639,100.00
204	(M204)	Post / Column ( 1.8 M )	each	337,700.00	-	337,700.00
205	(M205)	Blocking Piece	each	64,900.00	-	64,900.00
206	(M206)	Terminal End	each	346,500.00	-	346,500.00
207	(M207)	Deck Drain Type A	each	780,000.00	-	780,000.00
208	(M208)	Deck Drain Type B	each	2,200,000.00	-	2,200,000.00
209	(M209)	Admixture for Concrete Class A PC Girder	kg	10,050.00	10,000.00	50.00
210	(M210)	Frame & Accessories for Over sign Type A	unit	5,184,000.00	-	5,184,000.00
211	(M211)	H beam 300x300x10x15 for Over Head Sign	Ln.M	1,222,000.00	-	1,222,000.00
212	(M212)	H beam 350x350x12x19 for Over Head Sign	Ln.M	1,644,000.00	-	1,644,000.00



**CONSTRUCTION  
EQUIPMENT  
RENTAL RATES**

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

**LIST OF EQUIPMENT RENTAL COST A HOUR**

No.	DESCRIPTION	CODE	HP	CAPACITY		EQUIPMENT PRICE	EQUIP. RENTAL COST/HOUR (Exclude VAT)	EQUIPMENT PRICE		REMARKS
								FOREIGN (Rp)	LOCAL (Rp)	
1	ASPHALT MIXING PLANT	(E01)	120.0	30.0	T/Hour	3,150,000,000.00	2,079,829.14	-	2,079,829.14	New equipment
2	ASPHALT FINISHER	(E02)	53.9	30.0	Ton	1,042,687,500.00	267,217.23	-	267,217.23	New Equipment
3	ASPHALT SPRAYER	(E03)	3.5	800.0	Liter	60,000,000.00	35,883.12	-	35,883.12	New equipment
4	BULLDOZER 100-150 HP	(E04)	110.0	-	-	756,000,000.00	270,478.47	-	270,478.47	New equipment
5	COMPRESSOR 4000-6500 LM	(E05)	80.0	-	-	71,000,000.00	124,448.69	-	124,448.69	New Equipment
6	CONCRETE MIXER 0.3-0.6 M3	(E06)	15.0	500.0	Liter	72,000,000.00	60,891.11	-	60,891.11	New equipment
7	CONCRETE VIBRATOR	(E07)	10.0	0.0	0.00	5,940,000.00	31,785.00	-	31,785.00	New equipment
8	CONCRETE PUMP	(E08)	140.0	30.0	M3	936,000,000.00	335,234.64	-	335,234.64	New equipment
9	CONCRETE CUTTER	(E09)	35.0	200.0	Meter	21,700,000.00	70,806.82	-	70,806.82	New equipment
10	BATCHING PLANT	(E10)	21.0	50.0	M3	3,036,000,000.00	696,834.44	-	696,834.44	New equipment
11	MIXER TRUCK (AT)	(E11)	22.0	6.0	M3	618,000,000.00	147,999.57	-	147,999.57	New equipment
12	EXCAVATOR 80-140 HP	(E12)	150.0	0.9	M3	909,920,000.00	341,927.63	-	341,927.63	New equipment
13	GENERATOR SET 125 KVA	(E13)	159.0	125.0	KVA	193,200,000.00	244,699.29	-	244,699.29	New equipment
14	GENERATOR SET, 25 KVA	(E14)	31.0	25.0	KVA	82,726,250.00	72,679.49	-	72,679.49	New equipment
15	MOTOR GRADER >100 HP	(E15)	116.0	-	-	987,000,000.00	317,166.98	-	317,166.98	New equipment
16	WHEEL LOADER 1.0-1.6 M3	(E16)	105.0	1.5	M3	796,180,000.00	271,827.37	-	271,827.37	New equipment
17	TANDEM ROLLER 6-8 T.	(E17)	75.0	8.0	Ton	607,500,000.00	205,669.61	-	205,669.61	New equipment
18	TIRE ROLLER 8-10 T.	(E18)	60.0	10.0	Ton	800,000,000.00	222,066.76	-	222,066.76	New equipment
19	VIBRATORY ROLLER 5-8 T.	(E19)	121.0	8.0	Ton	517,000,000.00	241,455.42	-	241,455.42	New equipment
20	STONE CRUSHER	(E20)	95.0	30.0	T/hour	1,446,000,000.00	373,045.46	-	373,045.46	New equipment
21	WATER PUMP 70-100 mm	(E21)	6.0	-	-	2,800,000.00	26,109.62	-	26,109.62	New equipment
22	WATER-TANKER 3000-4500 L.	(E22)	120.0	3,800.0	Liter	298,200,000.00	228,078.72	-	228,078.72	New equipment
23	TAMPER	(E23)	4.1	0.1	Ton	10,660,000.00	26,196.60	-	26,196.60	New equipment
24	JACK HAMMER	(E24)	3.0	-	-	3,420,000.00	22,181.13	-	22,181.13	New equipment
25	PRESTRESSED JACK	(E25)	50.0	250.0	Amp	51,720,000.00	85,843.12	-	85,843.12	New equipment
26	GROUTING PUMP WITH MIXER	(E26)	3.7	200.0	Meter	37,620,000.00	30,314.22	-	30,314.22	New equipment
27	SAW MACHINE	(E27)	3.0	200.0	Meter	9,300,000.00	26,288.66	-	26,288.66	New equipment
28	WELDING MACHINE	(E28)	15.0	200.0	Amp	12,700,000.00	36,626.41	-	36,626.41	New equipment
29	HIDRAULIC TRUCK CRANE 35 T	(E29)	125.0	35.0	Ton	4,841,000,000.00	994,017.57	-	994,017.57	New equipment
30	ROUGH TERRAIN CRANE 90 TON	(E30)	200.0	100.0	Ton	7,990,000,000.00	1,622,852.67	-	1,622,852.67	New equipment
31	FLAT BED TRUCK WITH CRANE 5 T	(E31)	203.0	5.0	Ton	266,400,000.00	289,980.98	-	289,980.98	New equipment
32	TRAILER TRUCK 20 T	(E32)	320.0	20.0	Ton	846,000,000.00	621,354.06	-	621,354.06	New equipment
33	LINE MARKER TRUCK	(E33)	150.0	14.0	M3	308,400,000.00	264,333.96	-	264,333.96	New equipment
34	SAND PUMP	(E34)	15.0	150.0	mm	31,320,000.00	55,116.97	-	55,116.97	New equipment
35	BORE PILE MACHINE DIA 1500	(E35)	110.0	1.5	M	3,264,000,000.00	704,378.80	-	704,378.80	New equipment
36	BORE PILE MACHINE DIA 2500	(E36)	110.0	2.5	M	4,470,000,000.00	913,024.66	-	913,024.66	New equipment
37	DUMP TRUCK 6 T	(E37)	100.0	6.0	Ton	273,600,000.00	199,301.09	-	199,301.09	New equipment
38	DUMP TRUCK 10 T	(E38)	125.0	10.0	Ton	410,008,000.00	262,622.39	-	262,622.39	New equipment
39	TRUCK CRANE 16 TON	(E39)	170.0	16.0	Ton	994,000,000.00	377,163.96	-	377,163.96	New equipment
40	TRUCK CRANE 50 TON	(E40)	340.0	50.0	Ton	2,937,600,000.00	906,624.48	-	906,624.48	New equipment
41	TRUCK CRANE 100 TON	(E41)	345.0	100.0	Ton	5,280,000,000.00	1,316,477.43	-	1,316,477.43	New equipment
42	TRUCK CRANE 30 TON	(E42)	224.0	30.0	Ton	2,114,820,000.00	633,300.18	-	633,300.18	New equipment
43	BENTONITE MIXER	(E43)	2.2	0.2	M3	32,640,000.00	31,431.70	-	31,431.70	New equipment
44	SLUSH TANK	(E44)	5.0	10.0	M3	31,620,000.00	34,177.36	-	34,177.36	New equipment
45	PORTABLE LIGHTING TOWERS	(E45)	5.0	0.0	0.00	108,100,000.00	97,647.47	-	97,647.47	New equipment
46	CRAWLER CRANE 50 T	(E46)	140.0	50.0	Ton	2,940,000,000.00	681,939.69	-	681,939.69	New equipment
47	CRAWLER CRANE 100 T	(E47)	160.0	100.0	Ton	6,757,500,000.00	1,364,802.05	-	1,364,802.05	New equipment
48	CRAWLER CRANE 150 T	(E48)	170.0	150.0	Ton	9,825,000,000.00	1,906,704.52	-	1,906,704.52	New equipment
49	CRAWLER CRANE 300 T	(E49)	190.0	200.0	Ton	25,275,000,000.00	4,602,066.11	-	4,602,066.11	New equipment
50	JET GROUT MACHINE	(E50)	112.0	62.5	M3	2,043,750,000.00	495,608.61	-	495,608.61	New equipment
51	TRUCK TRAILER 40 T	(E51)	390.0	40.0	M4	1,350,000,000.00	686,984.34	-	686,984.34	New equipment

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**DETAILED  
UNIT PRICE  
ANALYSIS**



**DIVISION 1.**  
**GENERAL**

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FO**

PROJECT

PACKAGE CONTRACT No.

PACKAGE NAME : NAGREG FO

PROV. / KAB /CITY

NO. PAY ITEM : 1.2

DESCRIPTION OF WORK : MOBILIZATION AND DEMOBILIZATION

UNIT OF MEASUREMENT : LS

No.	DESCRIPTION	TOTAL PRICE		REMARKS
		FOREIGN (Rp.)	LOCAL (Rp.)	
A.	Land Rent for Barrack, Workshop Base Camp and Laboratory	-	227,000,000.00	Table 1.2.1
B.	EQUIPMENT Mobilization of Heavy Equipment	-	571,175,000.00	Table 1.2.2
C.	CONTRACTOR FACILITIES	-	231,900,000.00	Table 1.2.3 to Table 1.2.4
D.	LABORATORY FACILITIES	-	53,240,321.40	Table 1.2.6 to Table 1.2.10
E.	EQUIPMENT Demobilization of Heavy Equipment	-	571,175,000.00	Table 1.2.11
F.	OTHERS MOBILIZATION	-	486,316,288.85	Table 1.2.12
	TOTAL COST OF MOBILIZATION AND DEMOLIZATION	-	2,140,806,610.25	

PROJECT :  
 PACKAGE CONTRACT No. :  
 PACKAGE NAME : NAGREG FO  
 PROV. / KAB /CITY :  
 NO. PAY ITEM :  
 DESCRIPTION OF WORK : Land Rent , Base Camp , Office , Workshop and Laboratory  
 UNIT OF MEASUREMENT : LS

Table 1.2-1

NO.	DESCRIPTION	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
1.	Contractor Office	SqM	200.00	-	200,000.00	-	40,000,000.00
2.	Land ( Rental )	SqM	2,000.00	-	35,000.00	-	70,000,000.00
3.	Workshop	SqM	400.00	-	180,000.00	-	72,000,000.00
4.	Laboratory	SqM	200.00	-	225,000.00	-	45,000,000.00
<b>D. TOTAL PRICE</b>						-	<b>227,000,000.00</b>

PROJECT  
PACKAGE CONTRACT No.  
PACKAGE NAME : NAGREG FO  
PROV. / KAB /CITY  
NO. PAY ITEM  
DESCRIPTION OF WORK : MOBILIZATION OF HEAVY EQUIPMENT  
UNIT OF MEASUREMENT : LS

Table 1.2-2

No.	KIND OF EQUIPMENT	EQUIP. CODE	UNIT	QUANTITY	UNIT PRICE		TOTAL PRICE	
					FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>B.</b>	<b>EQUIPMENT</b>							
1	ASPHALT MIXING PLANT	(E01)	Unit	-	-	-	-	-
2	ASPHALT FINISHER	(E02)	Unit	1.00	-	1,500,000.00	-	1,500,000.00
3	ASPHALT SPRAYER	(E03)	Unit	1.00	-	150,000.00	-	150,000.00
4	BULLDOZER 100-150 HP	(E04)	Unit	1.00	-	1,200,000.00	-	1,200,000.00
5	COMPRESSOR 4000-6500 LM	(E05)	Unit	1.00	-	150,000.00	-	150,000.00
6	CONCRETE MIXER 0.3-0.6 M3	(E06)	Unit	2.00	-	150,000.00	-	300,000.00
7	CONCRETE VIBRATOR	(E07)	Unit	4.00	-	75,000.00	-	300,000.00
8	CONCRETE PUMP	(E08)	Unit	1.00	-	75,000.00	-	75,000.00
9	CONCRETE CUTTER	(E09)	Unit	1.00	-	50,000.00	-	50,000.00
10	BATCHING PLANT	(E10)	Unit	-	-	-	-	-
11	MIXER TRUCK (AT)	(E11)	Unit	8.00	-	250,000.00	-	2,000,000.00
12	EXCAVATOR 80-140 HP	(E12)	Unit	2.00	-	1,500,000.00	-	3,000,000.00
13	GENERATOR SET 125 KVA	(E13)	Unit	1.00	-	150,000.00	-	150,000.00
14	GENERATOR SET, 25 KVA	(E14)	Unit	1.00	-	150,000.00	-	150,000.00
15	MOTOR GRADER >100 HP	(E15)	Unit	1.00	-	1,500,000.00	-	1,500,000.00
16	WHEEL LOADER 1.0-1.6 M3	(E16)	Unit	2.00	-	1,500,000.00	-	3,000,000.00
17	TANDEM ROLLER 6-8 T.	(E17)	Unit	1.00	-	500,000.00	-	500,000.00
18	TIRE ROLLER 8-10 T.	(E18)	Unit	1.00	-	500,000.00	-	500,000.00
19	VIBRATORY ROLLER 5-8 T.	(E19)	Unit	1.00	-	750,000.00	-	750,000.00
20	STONE CRUSHER	(E20)	Unit	-	-	-	-	-
21	WATER PUMP 70-100 mm	(E21)	Unit	2.00	-	75,000.00	-	150,000.00
22	WATER TANKER 3000-4500 L.	(E22)	Unit	1.00	-	150,000.00	-	150,000.00
23	TAMPER	(E23)	Unit	4.00	-	50,000.00	-	200,000.00
24	JACK HAMMER	(E24)	Unit	1.00	-	500,000.00	-	500,000.00
25	PRESTRESSED JACK	(E25)	Unit	1.00	-	500,000.00	-	500,000.00
26	GROUTING PUMP WITH MIXER	(E26)	Unit	1.00	-	500,000.00	-	500,000.00
27	SAW MACHINE	(E27)	Unit	1.00	-	750,000.00	-	750,000.00
28	WELDING MACHINE	(E28)	Unit	1.00	-	150,000.00	-	150,000.00
29	CRAWLER CRANE 35 Ton	(E29)	Unit	-	-	-	-	-
30	ROUGH TERRAIN CRANE 90 TON	(E30)	Unit	-	-	-	-	-
31	FLAT BED TRUCK WITH CRANE 5 T	(E31)	Unit	1.00	-	250,000.00	-	250,000.00
32	TRAILLER TRUCK 20 T	(E32)	Unit	-	-	-	-	-
33	LINE MARKER TRUCK	(E33)	Unit	1.00	-	250,000.00	-	250,000.00
36	BORE PILE MACHINE DIA 2500	(E36)	Unit	1.00	-	75,000,000.00	-	75,000,000.00
37	DUMP TRUCK 6 T	(E37)	Unit	5.00	-	250,000.00	-	1,250,000.00
38	DUMP TRUCK 10 T	(E38)	Unit	10.00	-	250,000.00	-	2,500,000.00
39	TRUCK CRANE 16 TON	(E39)	Unit	1.00	-	1,000,000.00	-	1,000,000.00
40	TRUCK CRANE 50 TON	(E40)	Unit	-	-	1,000,000.00	-	-
41	TRUCK CRANE 100 TON	(E41)	Unit	-	-	1,000,000.00	-	-
42	TRUCK CRANE 30 TON	(E42)	Unit	1.00	-	1,000,000.00	-	1,000,000.00
43	BENTONITE MIXER	(E43)	Unit	1.00	-	1,000,000.00	-	1,000,000.00
44	SLUSH TANK	(E44)	Unit	1.00	-	500,000.00	-	500,000.00
45	PORTABLE LIGHTING TOWERS	(E45)	Unit	1.00	-	250,000.00	-	250,000.00
46	CRAWLER CRANE 50 T	(E46)	Unit	1.00	-	15,000,000.00	-	15,000,000.00
47	CRAWLER CRANE 100 T	(E47)	Unit	2.00	-	25,000,000.00	-	50,000,000.00
48	CRAWLER CRANE 150 T	(E48)	Unit	-	-	25,000,000.00	-	-
49	CRAWLER CRANE 300 T	(E49)	Unit	-	-	25,000,000.00	-	-
50	JET GROUT MACHINE	(E50)	Unit	-	-	25,000,000.00	-	-
51	BORE PILE MACHINE DIA 2500(FOREIGN COUNTRY )	(E36)	Unit	1.00	-	405,000,000.00	-	405,000,000.00
	TOTAL COST FOR MOB. EQUIP.						-	571,175,000.00

PROJECT :  
 PACKAGE CONTRACT No. :  
 PACKAGE NAME :  
 PROV. / KAB /CITY :  
 NO. PAY ITEM :  
 DESCRIPTION OF WORK : Contractor Facilities (Offices )  
 UNIT OF MEASUREMENT : LS

Table 1.2.3

NO.	DESCRIPTION	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
1.	Office Building Maintenance	Month	12.00	-	450,000.00	-	5,400,000.00
2.	Desk, Cabinet, Chairs, etc.	Each	40.00	-	325,000.00	-	13,000,000.00
4.	Computer + Printer	Set	3.00	-	9,500,000.00	-	28,500,000.00
5.	Camera	Each	1.00	-	2,300,000.00	-	2,300,000.00
6.	Handycam	Each	1.00	-	4,500,000.00	-	4,500,000.00
7.	Facsimile	Each	12.00	-	150,000.00	-	1,800,000.00
8.	Telephone Installation	Each	1.00	-	750,000.00	-	750,000.00
9	Air Conditioned ( Rental )	Each	24.00	-	250,000.00	-	6,000,000.00
10	Photocopy Machine	Each	1.00	-	9,750,000.00	-	9,750,000.00
11	Radio communication	Each	2.00	-	450,000.00	-	900,000.00
12	Conference table ( 10 persons )	Set	1.00	-	1,950,000.00	-	1,950,000.00
13	Filling cabinet	Each	5.00	-	450,000.00	-	2,250,000.00
14	Open Filling Shelves	Each	3.00	-	325,000.00	-	975,000.00
15	White board 90 x 180 cm2	Each	2.00	-	500,000.00	-	1,000,000.00
16	Kitchenset with Accessories	Set	1.00	-	2,500,000.00	-	2,500,000.00
17	Vehicle Two Wheel drive Station ( Rental )	Month	24.00	-	5,500,000.00	-	132,000,000.00
18	Motorcycle 125 cc ( Rental )	Month	60.00	-	500,000.00	-	30,000,000.00
D.	TOTAL PRICE FOR LABOUR, MATERIALS & EQUIPMENT ( A + B + C )					-	77,100,000.00

PROJECT :  
 PACKAGE CONTRACT No. :  
 PACKAGE NAME : NAGREG FO  
 PROV. / KAB /CITY :  
 NO. PAY ITEM :  
 DESCRIPTION OF WORK : Contractor Facilities (Operational )  
 UNIT OF MEASUREMENT : LS

Table 1.2.4

NO.	DESCRIPTION	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
1	Electricity	Month	12.00	-	1,750,000.00	-	21,000,000.00
2	Water	Month	12.00	-	750,000.00	-	9,000,000.00
3	Other Communication (Post, E-mail, etc.)	Month	12.00	-	650,000.00	-	7,800,000.00
4	Telephone Charge (1 lines)	Month	12.00	-	2,500,000.00	-	30,000,000.00
5	Vehicle ( Operate and Maintain )	Month	24.00	-	2,500,000.00	-	60,000,000.00
6	Motorcycle ( Operate and Maintain )	Month	60.00	-	450,000.00	-	27,000,000.00
D.	TOTAL PRICE FOR LABOUR, MATERIALS & EQUIPMENT ( A + B + C )					-	154,800,000.00

PROJECT :  
 PACKAGE CONTRACT No. :  
 PACKAGE NAME : NAGREG FO  
 PROV. / KAB / CITY :  
 NO. PAY ITEM :  
 DESCRIPTION OF WORK : Mobilization for Laboratory Facilities  
 UNIT OF MEASUREMENT : LS

Table 1.2.6

NO.	DESCRIPTION	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b>LABORATORIES</b>						
<b>1</b>	<b>SOIL TESTING</b>						
	1.1. Compaction Test :						
-	Standard Proctor Mould	Unit	1.00	-	120,000.00	-	120,000.00
-	Standard Proctor Hammer	Unit	1.00	-	105,000.00	-	105,000.00
-	Modified Compaction Mould	Unit	1.00	-	165,000.00	-	165,000.00
-	Modified Compaction Hammer	Unit	1.00	-	135,000.00	-	135,000.00
-	Straight Edge	Unit	1.00	-	10,500.00	-	10,500.00
-	Sample Ejector	Unit	1.00	-	375,000.00	-	375,000.00
-	Mixing Spoon	Unit	1.00	-	15,000.00	-	15,000.00
-	Mixing Trowel	Unit	1.00	-	10,500.00	-	10,500.00
-	Spatula	Unit	1.00	-	10,500.00	-	10,500.00
-	Mixing Pan	Unit	1.00	-	105,000.00	-	105,000.00
-	Aluminium Pan 25 cm Dia.	Unit	1.00	-	22,500.00	-	22,500.00
-	Wash Bottle	Unit	1.00	-	7,500.00	-	7,500.00
-	Moisture Cans	Unit	20.00	-	5,700.00	-	114,000.00
	1.2. <b>Laboratory CBR :</b>						
-	Mechanical Loading Press 6000 Lbs Capacity	Unit	1.00	-	180,000.00	-	180,000.00
	Proving Ring						-
-	CBR Moulds	Unit	2.00	-	180,000.00	-	360,000.00
-	Spacer Dish	Unit	1.00	-	90,000.00	-	90,000.00
-	Swell Plate Surcharge Plate	Unit	2.00	-	52,500.00	-	105,000.00
-	Tripod Attachment	Unit	2.00	-	27,000.00	-	54,000.00
-	Swell Dial Indicator	Unit	2.00	-	150,000.00	-	300,000.00
-	Surcharge Weight	Unit	2.00	-	45,000.00	-	90,000.00
-	Slotted Surcharge weight	Unit	2.00	-	60,000.00	-	120,000.00
-	Steel Cutting Edge	Unit	1.00	-	28,500.00	-	28,500.00
	1.3. <b>Specific Gravity :</b>						
-	Picnometer Bottles of 100 cc Capacity	Unit	1.00	-	37,500.00	-	37,500.00
-	Porcelain Mortar and Pestle	Unit	1.00	-	22,500.00	-	22,500.00
-	Hot Plate, 1000 watts, 220 Volts/50 cycle	Unit	1.00	-	525,000.00	-	525,000.00
-							
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	3,108,000.00

PROJECT :  
 PACKAGE CONTRACT No. :  
 PACKAGE NAME : NAGREG FO  
 PROV. / KAB /CITY :  
 NO. PAY ITEM :  
 DESCRIPTION OF WORK : Mobilization for Laboratory Facilities  
 UNIT OF MEASUREMENT : LS

Table 1.2.7

NO.	DESCRIPTION	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>1.4.</b>	<b>Atterberg Limits :</b>						
-	Standard Liquid Limit Device	Unit	1.00	-	450,000.00	-	450,000.00
-	ASTM Grooving Tool	Unit	1.00	-	45,000.00	-	45,000.00
-	Evaporating Dish	Unit	2.00	-	15,000.00	-	30,000.00
-	Flexible Spatula	Unit	2.00	-	15,000.00	-	30,000.00
-	100 cm Dgraduate Cylinder	Unit	2.00	-	22,500.00	-	45,000.00
-	Cassagrande Grooving Tool	Unit	1.00	-	15,000.00	-	15,000.00
-	Plastic Limit Glass Plate	Unit	1.00	-	22,500.00	-	22,500.00
<b>1.5.</b>	<b>Grain Size Analysis :</b>						
-	Hydrometer Jars	Unit	2.00	-	105,000.00	-	210,000.00
-	Mechanical Stirrer, Electric Powered 220 V/50 Cycle	Unit	1.00	-	45,000.00	-	45,000.00
-	Dispersion Cups with Baffles	Unit	1.00	-	75,000.00	-	75,000.00
-	Hydrometer, Scale 0 - 60 gr	set	1.00	-	45,000.00	-	45,000.00
-	Set Brass Sieves, 8 Inches Dia. 75 mm, 50 , 38, 25, 19, 12.5	set	1.00	-	665,221.40	-	665,221.40
-	9.5, No. 4, 10, 30, 60, 100 Including cover and Pan						
-	No. 200 Brass Sieves	Unit	2.00	-	75,000.00	-	150,000.00
-	Wet Washing Sieves	Unit	1.00	-	75,000.00	-	75,000.00
-	50 ml Graduated Cylinder	Unit	1.00	-	22,500.00	-	22,500.00
-	Sieve Brushes for Fine Sieves	Unit	2.00	-	7,500.00	-	15,000.00
-	Sieve Brushes for Coarse Sieves	Unit	2.00	-	10,500.00	-	21,000.00
-	Sieve Shaker	Set	1.00	-	800,000.00	-	800,000.00
<b>1.6.</b>	<b><u>Field Density Test, Sand Cone Method :</u></b>						
-	Sand Cone	Set	1.00	-	90,000.00	-	90,000.00
-	Replacement Jug	Unit	1.00	-	27,000.00	-	27,000.00
-	Field Density Plate	Unit	1.00	-	67,500.00	-	67,500.00
-	Spoon	Unit	1.00	-	10,500.00	-	10,500.00
-	Steel Chisel, 1 inch	Unit	1.00	-	7,500.00	-	7,500.00
-	Rubber Mallet	Unit	1.00	-	7,500.00	-	7,500.00
-	Sand Scoop	Zak	1.00	-	18,000.00	-	18,000.00
-	Gallon Field Cans	Unit	6.00	-	6,600.00	-	39,600.00
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	3,028,821.40



PROJECT :  
 PACKAGE CONTRACT No. :  
 PACKAGE NAME : NAGREG FO  
 PROV. / KAB /CITY :  
 NO. PAY ITEM :  
 DESCRIPTION OF WORK : Mobilization for Laboratory Facilities  
 UNIT OF MEASUREMENT : LS

Table 1.2.8

NO.	DESCRIPTION	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
	<b>1.7. Moisture Content :</b>						
-	Speedy Moisture Tester 26 Grams Capacity	Unit	1.00	-	2,000,000.00	-	2,000,000.00
-	Cans Speedy Reagent	Unit	6.00	-	45,000.00	-	270,000.00
2	<b>BITUMINOUS TESTING</b>						
	2.1. Marshall Asphalt Test :						
-	Stability Compression machine Complete with 6000 Lbs Proving Ring, 220 Volts/50 Cycles	Set	1.00	-	1,800,000.00	-	1,800,000.00
-	Stability Compaction Moulds	Set	4.00	-	105,000.00	-	420,000.00
-	Stability Compaction Hammer	Set	1.00	-	360,000.00	-	360,000.00
-	Mould Holder	Set	1.00	-	45,000.00	-	45,000.00
-	Stability Mould	Set	1.00	-	300,000.00	-	300,000.00
-	Dial Flow Indicator	Set	1.00	-	400,000.00	-	400,000.00
-	Pedestal	Unit	1.00	-	240,000.00	-	240,000.00
-	Water Bath 220 V/50 Cycle	Set	1.00	-	900,000.00	-	900,000.00
-	Sample Extractor	Set	1.00	-	45,000.00	-	45,000.00
-	Stainless Steel Mixing Bowls	Unit	2.00	-	22,500.00	-	45,000.00
	2.2. Extarction Test Centrifuge Method :						
-	Centrifuge Extractor 1500 grams Capacity 220 V / 50 Cycle	Set	1.00	-	1,500,000.00	-	1,500,000.00
-	Boxes Filter Paper Rings (100 box)	Box	10.00	-	200,000.00	-	2,000,000.00
-	Extractor Bowl	Unit	1.00	-	-	-	-
-	Bowl Cover	Unit	1.00	-	-	-	-
-	Bowl Nut	Unit	1.00	-	-	-	-
	2.3. Extraction Test, Reflux Method :						
-	Reflux Extractor Set 1000 grams Capacity	Set	1.00	-	900,000.00	-	900,000.00
-	Boxes Filter Paper (50/Box)	Box	1.00	-	300,000.00	-	300,000.00
D.	TOTAL PRICE FOR LABOUR, MATERIALS & EQUIPMENT ( A + B + C )					-	11,525,000.00

PROJECT :  
 PACKAGE CONTRACT No. :  
 PACKAGE NAME : NAGREG FO  
 PROV. / KAB /CITY :  
 NO. PAY ITEM :  
 DESCRIPTION OF WORK : Mobilization for Laboratory Facilities  
 UNIT OF MEASUREMENT : LS

Table 1.2.9

NO.	DESCRIPTION	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>2.4.</b>	<b>Specific Gravity of Coarse Aggregates :</b>						
-	Density Basket	Unit	1.00	-	75,000.00	-	75,000.00
-	Sample Splitter 1"	Set	1.00	-	270,000.00	-	270,000.00
-	Sample Splitter 1/2"	Set	1.00	-	270,000.00	-	270,000.00
							-
<b>2.5.</b>	<b>Specific Gravity of Fine Aggregates :</b>						
-	Cone	Unit	1.00	-	75,000.00	-	75,000.00
-	Tamper	Unit	1.00	-	22,500.00	-	22,500.00
-	Picnoimeter	Unit	1.00	-	45,000.00	-	45,000.00
-	Thermometer (Glass), 0 - 150 deg. C	Unit	3.00	-	15,000.00	-	45,000.00
-	Desiccator	Unit	1.00	-	400,000.00	-	400,000.00
							-
<b>2.6.</b>	<b>Mix Air Voids Contetnt, (Accurate Method) :</b>						
-	Set of Cork Borers	Set	1.00	-	225,000.00	-	225,000.00
-	Conical Flash with Stoppers (Rubber)	Unit	2.00	-	75,000.00	-	150,000.00
-	Vaccum Pump (+ Special Oil)	Unit	1.00	-	1,200,000.00	-	1,200,000.00
-	Rubbing Tubing	Unit	1.00	-	45,000.00	-	45,000.00
-	Warm air Fan	Unit	1.00	-	60,000.00	-	60,000.00
							-
<b>2.7.</b>	<b>Core Drilling :</b>						
-	Core Drill Machine, 7 HP, 4 Cycle	Set	1.00	-	3,000,000.00	-	3,000,000.00
-	9" Extension Shaft	Unit	1.00	-	-	-	-
-	18" Strap Wrench	Unit	1.00	-	-	-	-
-	Diamond Bit 4" Diameter (Resettable)	Unit	2.00	-	1,200,000.00	-	2,400,000.00
-	Expanding Adaptor ( included )	Unit	1.00	-	-	-	-
							-
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						<b>8,282,500.00</b>

PROJECT  
 PACKAGE CONTRACT No.  
 PACKAGE NAME : NAGREG FO  
 PROV. / KAB /CITY :  
 NO. PAY ITEM :  
 DESCRIPTION OF WORK : Mobilization for Laboratory Facilities  
 UNIT OF MEASUREMENT : LS

Table 1.2.10

NO.	DESCRIPTION	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>2.8.</b>	<b>Metal Thermometer</b>						
-	0 - 100 deg. C Metal Thermometer	Unit	1.00	-	75,000.00	-	75,000.00
-	0 - 250 deg. C Metal Thermometer	Unit	1.00	-	105,000.00	-	105,000.00
2.9.	Accessories and Tools :						-
-	Heavy Duty Banlace Complete with Set of weight Scope and Counterweight	Set	1.00	-	1,900,000.00	-	1,900,000.00
-	Triple Beam Scale Complete with Set of weight	Set	1.00	-	700,000.00	-	700,000.00
-	Generator, 10 KVA	Set	1.00	-	7,000,000.00	-	7,000,000.00
-	Double Wall Oven, 1600 W 240 Volts/50 Cycle	Set	2.00	-	3,400,000.00	-	6,800,000.00
-	Plastic Funnels	Unit	3.00	-	4,500.00	-	13,500.00
-	Sodium Hexametaphosphate	Lb	1.00	-	22,500.00	-	22,500.00
-	Pairs Asbestos Gloves	Unit	2.00	-	45,000.00	-	90,000.00
-	laboratory Tongs	Unit	2.00	-	15,000.00	-	30,000.00
<b>3</b>	<b>CONCRETE TESTING</b>						
-	Slump Cone	Unit	1.00	-	300,000.00	-	300,000.00
-	Cube Moulds	Unit	12.00	-	105,000.00	-	1,260,000.00
-	Cube Crushing Machine (Provisional)	Unit	1.00	-	9,000,000.00	-	9,000,000.00
<b>D. TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	<b>27,296,000.00</b>

PROJECT  
 PACKAGE CONTRACT No.  
 PACKAGE NAME  
 PROV. / KAB /CITY  
 NO. PAY ITEM  
 DESCRIPTION OF WORK : DEMOBILIZATION OF HEAVY EQUIPMENT  
 UNIT OF MEASUREMENT : LS

Table 1.2.11

No.	KIND OF EQUIPMENT	EQUIP. CODE	UNIT	QUANTITY	UNIT PRICE		TOTAL PRICE	
					FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>B.</b>	<b>EQUIPMENT</b>							
1	ASPHALT MIXING PLANT	(E01)	Unit	-	-	-	-	-
2	ASPHALT FINISHER	(E02)	Unit	1.00	-	1,500,000.00	-	1,500,000.00
3	ASPHALT SPRAYER	(E03)	Unit	1.00	-	150,000.00	-	150,000.00
4	BULLDOZER 100-150 HP	(E04)	Unit	1.00	-	1,200,000.00	-	1,200,000.00
5	COMPRESSOR 4000-6500 L/M	(E05)	Unit	1.00	-	150,000.00	-	150,000.00
6	CONCRETE MIXER 0.3-0.6 M3	(E06)	Unit	2.00	-	150,000.00	-	300,000.00
7	CONCRETE VIBRATOR	(E07)	Unit	4.00	-	75,000.00	-	300,000.00
8	CONCRETE PUMP	(E08)	Unit	1.00	-	75,000.00	-	75,000.00
9	CONCRETE CUTTER	(E09)	Unit	1.00	-	50,000.00	-	50,000.00
10	BATCHING PLANT	(E10)	Unit	-	-	-	-	-
11	MIXER TRUCK (AT)	(E11)	Unit	8.00	-	250,000.00	-	2,000,000.00
12	EXCAVATOR 80-140 HP	(E12)	Unit	2.00	-	1,500,000.00	-	3,000,000.00
13	GENERATOR SET 125 KVA	(E13)	Unit	1.00	-	150,000.00	-	150,000.00
14	GENERATOR SET, 25 KVA	(E14)	Unit	1.00	-	150,000.00	-	150,000.00
15	MOTOR GRADER >100 HP	(E15)	Unit	1.00	-	1,500,000.00	-	1,500,000.00
16	WHEEL LOADER 1.0-1.6 M3	(E16)	Unit	2.00	-	1,500,000.00	-	3,000,000.00
17	TANDEM ROLLER 6-8 T.	(E17)	Unit	1.00	-	500,000.00	-	500,000.00
18	TIRE ROLLER 8-10 T.	(E18)	Unit	1.00	-	500,000.00	-	500,000.00
19	VIBRATORY ROLLER 5-8 T.	(E19)	Unit	1.00	-	750,000.00	-	750,000.00
20	STONE CRUSHER	(E20)	Unit	-	-	-	-	-
21	WATER PUMP 70-100 mm	(E21)	Unit	2.00	-	75,000.00	-	150,000.00
22	WATER TANKER 3000-4500 L.	(E22)	Unit	1.00	-	150,000.00	-	150,000.00
23	TAMPER	(E23)	Unit	4.00	-	50,000.00	-	200,000.00
24	JACK HAMMER	(E24)	Unit	1.00	-	500,000.00	-	500,000.00
25	PRESTRESSED JACK	(E25)	Unit	1.00	-	500,000.00	-	500,000.00
26	GROUTING PUMP WITH MIXER	(E26)	Unit	1.00	-	500,000.00	-	500,000.00
27	SAW MACHINE	(E27)	Unit	1.00	-	750,000.00	-	750,000.00
28	WELDING MACHINE	(E28)	Unit	1.00	-	150,000.00	-	150,000.00
29	CRAWLER CRANE 35 Ton	(E29)	Unit	-	-	-	-	-
30	ROUGH TERRAIN CRANE 90 TON	(E30)	Unit	-	-	-	-	-
31	FLAT BED TRUCK WITH CRANE 5 T	(E31)	Unit	1.00	-	250,000.00	-	250,000.00
32	TRAILLER TRUCK 20 T	(E32)	Unit	-	-	-	-	-
33	LINE MARKER TRUCK	(E33)	Unit	1.00	-	250,000.00	-	250,000.00
36	BORE PILE MACHINE DIA 2500	(E36)	Unit	1.00	-	75,000,000.00	-	75,000,000.00
37	DUMP TRUCK 6 T	(E37)	Unit	5.00	-	250,000.00	-	1,250,000.00
38	DUMP TRUCK 10 T	(E38)	Unit	10.00	-	250,000.00	-	2,500,000.00
39	TRUCK CRANE 16 TON	(E39)	Unit	1.00	-	1,000,000.00	-	1,000,000.00
40	TRUCK CRANE 50 TON	(E40)	Unit	-	-	1,000,000.00	-	-
41	TRUCK CRANE 100 TON	(E41)	Unit	-	-	1,000,000.00	-	-
42	TRUCK CRANE 30 TON	(E42)	Unit	1.00	-	1,000,000.00	-	1,000,000.00
43	BENTONITE MIXER	(E43)	Unit	1.00	-	1,000,000.00	-	1,000,000.00
44	SLUSH TANK	(E44)	Unit	1.00	-	500,000.00	-	500,000.00
45	PORTABLE LIGHTING TOWERS	(E45)	Unit	1.00	-	250,000.00	-	250,000.00
46	CRAWLER CRANE 50 T	(E46)	Unit	1.00	-	15,000,000.00	-	15,000,000.00
47	CRAWLER CRANE 100 T	(E47)	Unit	2.00	-	25,000,000.00	-	50,000,000.00
48	CRAWLER CRANE 150 T	(E48)	Unit	-	-	25,000,000.00	-	-
49	CRAWLER CRANE 300 T	(E49)	Unit	-	-	25,000,000.00	-	-
50	JET GROUT MACHINE	(E50)	Unit	-	-	25,000,000.00	-	-
51	BORE PILE MACHINE DIA 2500(FOREIGN COUNTRY)	(E36)	Unit	1.00	-	405,000,000.00	-	405,000,000.00
	TOTAL COST FOR MOB. EQUIP.						-	571,175,000.00

PROJECT  
 PACKAGE CONTRACT No.  
 PACKAGE NAME : NAGREG FO  
 PROV. / KAB /CITY :  
 NO. PAY ITEM :  
 DESCRIPTION OF WORK : OTHER MOBILITATION  
 UNIT OF MEASUREMENT : LS

Table 1.2.12

NO.	DESCRIPTION	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
1	Maintenance of Detour	LS	1.00	-	400,276,288.85	-	400,276,288.85
2	As Build Drawing	LS	1.00	-	4,500,000.00	-	4,500,000.00
3	Geo - Technical Survey	LS	1.00	-	81,540,000.00	-	81,540,000.00
D. TOTAL PRICE FOR LABOUR, MATERIALS & EQUIPMENT ( A + B + C )						-	486,316,288.85

PROJECT  
 PACKAGE CONTRACT No.  
 PACKAGE NAME : NAGREG FO  
 PROV. / KAB /CITY :  
 NO. PAY ITEM :  
 DESCRIPTION OF WORK : Mobilization for Geotechnical Survey  
 UNIT OF MEASUREMENT : LS

Table 1.2.13

NO.	DESCRIPTION	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
1	Mobilization/Demobilization of Equipment	Rig	1.00	-	3,750,000.00	-	3,750,000.00
2	Setting Rig	Sites	5.00	-	720,000.00	-	3,600,000.00
3	Drilling	Ln.M	200.00	-	270,000.00	-	54,000,000.00
4	Sampling :						
	- Disturbed	Each	20.00	-	45,000.00	-	900,000.00
	- Undisturbed	Each	5.00	-	270,000.00	-	1,350,000.00
5	Standard Penetration Test	Each	65.00	-	36,000.00	-	2,340,000.00
6	Laboratory Test :						
	- Water Content	Sample	25.00	-	18,000.00	-	450,000.00
	- Specific Gravity	Sample	25.00	-	27,000.00	-	675,000.00
	- Sieve Analysis	Sample	25.00	-	36,000.00	-	900,000.00
	- Unit Weight	Sample	25.00	-	18,000.00	-	450,000.00
	- Consistency	Sample	25.00	-	54,000.00	-	1,350,000.00
7	Consolidation Test	Sample	5.00	-	540,000.00	-	2,700,000.00
8	Direct Shear Test	Sample	5.00	-	180,000.00	-	900,000.00
9	Unconfined Compression Test	Sample	5.00	-	135,000.00	-	675,000.00
10	Geo - Technical Survey Report	Ls	1.00	-	7,500,000.00	-	7,500,000.00
D. TOTAL PRICE						-	81,540,000.00

PROJECT :  
 No. OF CONTRACT PACKAGE :  
 PACKAGE NAME : **NAGREG FO**  
 PROVINCE / REGENCY / MUNICIPALITY :  
 NO OF PAYMENT ITEM : 1.2.1(b)  
 DESCRIPTION OF WORK : **ENGINEERS FACILITIES ( Consultant Site Office and Facilities )**  
 UNIT OF MEASUREMENT : LS

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
1	Consultant Site Office included water supply, electricity, operational and maintenance ( min 100 Sq.M )	Month	12.00	-	3,750,000.00	-	45,000,000.00
2	Chair and Table	Set	5.00	-	450,000.00	-	2,250,000.00
3	Conference Table ( 8 persons )	Set	1.00	-	1,650,000.00	-	1,650,000.00
4	Filling cabinet	Each	3.00	-	450,000.00	-	1,350,000.00
5	Air Conditioner ( 1 HP )	Each	2.00	-	2,500,000.00	-	5,000,000.00
6	Computer ( P.IV2.0 GHz HD40Gb, Mem 256Mb, monitor 14 " included CD Rom and CD wtriter )	Each	1.00	-	6,000,000.00	-	6,000,000.00
7	Printer ( A3 paper size )	Each	1.00	-	3,400,000.00	-	3,400,000.00
8	Photocopy Machine ( rental )	Month	12.00	-	650,000.00	-	7,800,000.00
9	White board ( 1,2 x 2,4 M )	Each	1.00	-	500,000.00	-	500,000.00
10	Stationary	Month	12.00	-	450,000.00	-	5,400,000.00
11	Comunication	Month	12.00	-	750,000.00	-	9,000,000.00
12	Vehicle Two Wheel Drive	Month	12.00	-	6,500,000.00	-	78,000,000.00
<b>D. TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	165,350,000.00
<b>E. OVERHEAD &amp; PROFIT</b>						-	16,535,000.00
<b>F. WORKING UNIT PRICE ( D + E )</b>						-	181,885,000.00

PROJECT :  
 No. OF CONTRACT PACKAGE :  
 PACKAGE NAME : **NAGREG FO**  
 PROVINCE / REGENCY / MUNICIPALITY :  
 NO OF PAYMENT ITEM : 1.8  
 DESCRIPTION OF WORK : **Maintenance of Traffic Flow**  
 UNIT OF MEASUREMENT : LS

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	Hour	5,040.00		4,573.91	-	23,052,506.40
2.	Skilled Labour (L03)	Hour	756.00		5,151.20	-	3,894,307.20
3.	Foreman (L04)	Hour	2,520.00		6,661.04	-	16,785,820.80
4.	Driver (L14)	Hour	2,520.00		7,105.11	-	17,904,877.20
5.	Flagman (L02)	Hour	25,920.00		4,573.91	-	118,555,747.20
<b>SUB TOTAL FOR LABOUR</b>						0.00	180,193,258.80
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Site Fence (Zinc plate with timber pole)	LnM	750.00		125,000.00	-	93,750,000.00
2.	Traffic Cone	each	50.00		245,000.00	-	12,250,000.00
3.	Traffic Sign	each	41.00		100,000.00	-	4,100,000.00
4.	Lamp inc. Fitting	each	20.00		10,000.00	-	200,000.00
5.	Cable 2 x 2.5 mm	LM	2,000.00		4,800.00	-	9,600,000.00
6.	Flushing Light	each	2.00		850,000.00	-	1,700,000.00
7.	Big Banner	each	2.00		750,000.00	-	1,500,000.00
8.	Christmast Lamp with Controller Outdoor 2.5V3	Set	10.00		108,700.00	-	1,087,000.00
9.	Radio Communication Two Direction	each	2.00		450,000.00	-	900,000.00
10.	Safety Net	Sq. M	1,200.00		12,500.00	-	15,000,000.00
11.	Reflective Jacket	each	15.00		150,000.00	-	2,250,000.00
12.	Hand light	each	8.00		85,000.00	-	680,000.00
13.	Moveable Barrier	each	120.00		95,000.00	-	11,400,000.00
14.	Information brochure	sheet	1,000.00		500.00	-	500,000.00
<b>SUB TOTAL FOR MATERIALS</b>						0.00	154,917,000.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat Bed Truck with Crane 5 t (E31)	hour	458.00	-	289,980.98	-	132,811,288.84
2.	Rental car Pick-up 1500 CC - 1 unit	month	12.00		5,250,000.00	-	63,000,000.00
3.	Tools	Ls	1.00		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						0.00	195,816,288.84
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					0.00	530,926,547.64
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	53,092,654.76
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					0.00	584,019,202.40



**DIVISION 2.  
DRAINAGE**

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

EI-211 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:			
No. OF CONTRACT PACKAGE	:			
PACKAGE NAME	:			
PROVINCE / REGENCY / MUNICIPALITY	:			
NO OF PAYMENT ITEM	:	2.1(1)	ESTIMATE QUNTIY OF	
DESCRIPTION OF WORK	:	Common Excavation for drainage ditches & waterway	WORKING	:
UNIT OF MEASUREMENT	:	Cu. M	TOTAL PRICE (Rp.)	:
			% TO PROJECT COST	:

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	0.1190		4,573.91	-	544.27
2.	Foreman (L04)	hour	0.0297		6,661.04	-	198.16
<b>SUB TOTAL FOR LABOUR</b>						-	742.43
<b>B.</b>	<b><u>MATERIALS</u></b>						
<b>SUB TOTAL FOR MATERIALS</b>						-	-
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Excavator (E12)	hour	0.0297	-	341,927.63	-	10,171.88
2.	Dump Truck 6 T (E37)	hour	0.0623	-	199,301.09	-	12,413.90
3.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	23,585.78
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	24,328.21
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	2,432.82
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	26,761.03

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

El-221 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:			ESTIMATE QUANTITY OF
No. OF CONTRACT PACKAGE	:			WORKING
PACKAGE NAME	:			TOTAL PRICE (Rp.)
PROVINCE / REGENCY / MUNICIPALITY	:			% TO PROJECT COST
NO OF PAYMENT ITEM	:	2.2.(1)		
DESCRIPTION OF WORK	:	Mortared Stonework for drainage channel		
UNIT OF MEASUREMENT	:	Cu. M		

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	4.4980		4,573.91	-	20,573.41	
2.	Masonry (L03)	hour	1.1245		5,151.20	-	5,792.51	
3.	Foreman (L04)	hour	0.5622		6,661.04	-	3,745.16	
<b>SUB TOTAL FOR LABOUR</b>						-	30,111.08	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Boulder stone split (M07)	M3	1.1000	-	100,600.00	-	110,660.00	
2.	Cement (PC) (M12)	Kg	121.0000	-	840.00	-	101,640.00	
3.	Sand (M05)	M3	0.5131	-	65,600.00	-	33,656.34	
<b>SUB TOTAL FOR MATERIALS</b>						-	245,956.34	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Conc. Mixer (E06)	hour	0.5622	-	60,891.11	-	34,235.97	
2.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	35,235.97	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	311,303.39
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	31,130.34
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	342,433.73

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

EI-231 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:			ESTIMATE QUANTITY OF	
No. OF CONTRACT PACKAGE	:			WORKING	:
PACKAGE NAME	:			TOTAL PRICE (Rp.)	:
PROVINCE / REGENCY / MUNICIPALITY	:			% TO PROJECT COST	:
NO OF PAYMENT ITEM	:	2.3 (1)			
DESCRIPTION OF WORK	:	RCP Culvert Ø 400 mm Type A			
UNIT OF MEASUREMENT	:	Ln.M			

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	3.5000		4,573.91	-	16,008.69
2.	Skilled Labour (L03)	hour	1.4000		5,151.20	-	7,211.68
3.	Foreman (L04)	hour	0.7000		6,661.04	-	4,662.73
<b>SUB TOTAL FOR LABOUR</b>						-	27,883.10
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	RCP Culvert Ø 40 cm (M234)	Ln.M	1.0000	152,440.00	-	152,440.00	-
2	Concrete K-300 ( Class-C) (E1715)	Cu.M	0.2992	-	706,549.12	-	211,371.23
3	Concrete K-125 ( Class-E) (E1718)	Cu.M	0.1410	-	441,120.23	-	62,197.95
4	Boulder / River stone (M07)	Cu.M	0.2115	-	100,600.00	-	21,276.90
<b>SUB TOTAL FOR MATERIALS</b>						152,440.00	294,846.08
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Dump Truck 6 T (E37)	hour	0.0586	-	199,301.09	-	11,672.59
3.	Excavator (E12)	hour	0.0297	-	341,927.63	-	10,171.88
4	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	30,433.51
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					152,440.00	353,162.69
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>					-	50,560.27
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					152,440.00	403,722.96

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

El-232 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		ESTIMATE QUANTITY OF
NO OF PAYMENT ITEM	:	2.3 (2)	WORKING
DESCRIPTION OF WORK	:	RCP Culvert Ø 400 mm Type B	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Ln.M	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	9.8000		4,573.91	-	44,824.32
2.	Skill Labour (L03)	hour	2.8000		5,151.20	-	14,423.36
3.	Foreman (L04)	hour	1.4000		6,661.04	-	9,325.46
<b>SUB TOTAL FOR LABOUR</b>						-	68,573.14
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	RCP Culvert Ø 40 cm (M234)	Ln.M	1.0000	152,440.00	-	152,440.00	-
2	Concrete K-300 ( Class-C) (E1715)	Cu.M	0.8967	-	706,549.12	-	633,587.83
3	Concrete K-125 ( Class-E) (E1718)	Cu.M	0.1410	-	441,120.23	-	62,197.95
4	Boulder / River stone (M07)	Cu.M	0.2115	-	100,600.00	-	21,276.90
5.	Reinf. Steel - Grade 40 (E1734)	Kg	51.9516	-	8,723.78	-	453,214.45
<b>SUB TOTAL FOR MATERIALS</b>						152,440.00	1,170,277.13
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Dump Truck 6 T (E37)	hour	0.0668	-	199,301.09	-	13,322.13
3.	Excavator (E12)	hour	0.0297	-	341,927.63	-	10,171.88
4	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	32,083.05
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					152,440.00	1,270,933.32
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	142,337.33
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					152,440.00	1,413,270.65

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

El-233 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		ESTIMATE QUANTITY OF
NO OF PAYMENT ITEM	:	2.3 (3)	WORKING
DESCRIPTION OF WORK	:	RCP Culvert Ø 600 mm Type A	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Ln.M	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	3.5000		4,573.91	-	16,008.69
2.	Skilled Labour (L03)	hour	1.4000		5,151.20	-	7,211.68
3.	Foreman (L04)	hour	0.7000		6,661.04	-	4,662.73
<b>SUB TOTAL FOR LABOUR</b>						-	27,883.10
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	RCP Culvert Ø 60 cm (M60)	Ln.M	1.0000	269,600.00	-	269,600.00	-
2	Concrete K-300 ( Class-C) (E1715)	Cu.M	0.4487	-	706,549.12	-	317,056.85
3	Concrete K-125 ( Class-E) (E1718)	Cu.M	0.1640	-	441,120.23	-	72,343.72
4	Boulder / River stone (M07)	Cu.M	0.2460	-	100,600.00	-	24,747.60
<b>SUB TOTAL FOR MATERIALS</b>						269,600.00	414,148.17
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Dump Truck 6 T (E37)	hour	0.0703	-	199,301.09	-	14,007.10
3.	Excavator (E12)	hour	0.0297	-	341,927.63	-	10,171.88
4	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	32,768.02
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					269,600.00	474,799.29
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	74,439.93
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					269,600.00	549,239.22

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-234 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		ESTIMATE QUANTITY OF
NO OF PAYMENT ITEM	:	2.3 (4)	WORKING
DESCRIPTION OF WORK	:	RCP Culvert Ø 600 mm Type B	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Ln.M	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. <u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	9.8000		4,573.91	-	44,824.32
2.	Skill Labour (L03)	hour	2.8000		5,151.20	-	14,423.36
3.	Foreman (L04)	hour	1.4000		6,661.04	-	9,325.46
<b>SUB TOTAL FOR LABOUR</b>						-	68,573.14
<b>B. <u>MATERIALS</u></b>							
1	RCP Culvert Ø 60 cm (M60)	Ln.M	1.0000	269,600.00	-	269,600.00	-
2	Concrete K-300 ( Class-C) (E1715)	Cu.M	1.2113	-	706,549.12	-	855,873.23
3	Concrete K-125 ( Class-E) (E1718)	Cu.M	0.1640	-	441,120.23	-	72,343.72
4	Boulder / River stone (M07)	Cu.M	0.2460	-	100,600.00	-	24,747.60
5.	Reinf. Steel - Grade 40 (E1734)	Kg	62.5004	-	8,723.78	-	545,239.54
<b>SUB TOTAL FOR MATERIALS</b>						269,600.00	1,498,204.09
<b>C. <u>EQUIPMENT</u></b>							
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Dump Truck 6 T (E37)	hour	0.0802	-	199,301.09	-	15,986.56
3.	Excavator (E12)	hour	0.0297	-	341,927.63	-	10,171.88
4	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	34,747.48
<b>D. TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						269,600.00	1,601,524.71
<b>E. OVERHEAD &amp; PROFIT</b>						-	187,112.47
<b>F. WORKING UNIT PRICE ( D + E )</b>						269,600.00	1,788,637.18

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

EI-235 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		ESTIMATE QUANTITY OF
NO OF PAYMENT ITEM	:	2.3 (5)	WORKING
DESCRIPTION OF WORK	:	RCP Culvert Ø 800 mm Type A	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Ln.M	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	4.3750		4,573.91	-	20,010.86
2.	Skill Labour (L03)	hour	1.7500		5,151.20	-	9,014.60
3.	Foreman (L04)	hour	0.8750		6,661.04	-	5,828.41
<b>SUB TOTAL FOR LABOUR</b>						-	34,853.87
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	RCP Culvert Ø 80 cm (M59)	Ln.M	1.0000	428,960.00	-	428,960.00	-
2	Concrete K-300 ( Class-C) (EI715)	Cu.M	0.8087	-	706,549.12	-	571,377.79
3	Concrete K-125 ( Class-E) (EI718)	Cu.M	0.1888	-	441,120.23	-	83,283.50
4	Boulder / River stone (M07)	Cu.M	0.2832	-	100,600.00	-	28,489.92
<b>SUB TOTAL FOR MATERIALS</b>						428,960.00	683,151.21
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Dump Truck 6 T (E37)	hour	0.1054	-	199,301.09	-	21,010.66
3.	Excavator (E12)	hour	0.0669	-	341,927.63	-	22,886.72
4	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	52,486.42
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					428,960.00	770,491.50
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	119,945.15
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					428,960.00	890,436.65



**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

El-236 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:	ESTIMATE QUANTITY OF	
No. OF CONTRACT PACKAGE	:	WORKING	:
PACKAGE NAME	:	TOTAL PRICE (Rp.)	:
PROVINCE / REGENCY / MUNICIPALITY	:	% TO PROJECT COST	:
NO OF PAYMENT ITEM	: 2.3 (6)		
DESCRIPTION OF WORK	: RCP Culvert Ø 800 mm Type B		
UNIT OF MEASUREMENT	: Ln.M		

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	12.2500		4,573.91	-	56,030.40
2.	Skill Labour (L03)	hour	3.5000		5,151.20	-	18,029.20
3.	Foreman (L04)	hour	1.7500		6,661.04	-	11,656.82
<b>SUB TOTAL FOR LABOUR</b>						-	85,716.42
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	RCP Culvert Ø 80 cm (M59)	Ln.M	1.0000	428,960.00	-	428,960.00	-
2	Concrete K-300 ( Class-C) (E1715)	Cu.M	1.5760	-	706,549.12	-	1,113,502.84
3	Concrete K-125 ( Class-E) (E1718)	Cu.M	0.1888	-	441,120.23	-	83,283.50
4	Boulder / River stone (M07)	Cu.M	0.2832	-	100,600.00	-	28,489.92
5.	Reinf. Steel - Grade 40 (E1734)	Kg	73.8747	-	8,723.78	-	644,466.58
<b>SUB TOTAL FOR MATERIALS</b>						428,960.00	1,869,742.84
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Dump Truck 6 T (E37)	hour	0.1203	-	199,301.09	-	23,979.83
3.	Excavator (E12)	hour	0.0669	-	341,927.63	-	22,886.72
4	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	55,455.59
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					428,960.00	2,010,914.85
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	243,987.49
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					428,960.00	2,254,902.34

**THE NORTH JAVA CORRIDOR FLYOVER  
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(ENGINEER ESTIMATE)**

EI-237 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		ESTIMATE QUANTITY OF
NO OF PAYMENT ITEM	:	2.3 (7)	WORKING
DESCRIPTION OF WORK	:	RCP Culvert Ø 1000 mm Type A	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Ln.M	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	4.3750		4,573.91	-	20,010.86
2.	Skill Labour (L03)	hour	1.7500		5,151.20	-	9,014.60
3.	Foreman (L04)	hour	0.8750		6,661.04	-	5,828.41
<b>SUB TOTAL FOR LABOUR</b>						-	34,853.87
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	RCP Culvert Ø 100 cm (M58)	Ln.M	1.0000	697,760.00	-	697,760.00	-
2	Concrete K-300 ( Class-C) (E1715)	Cu.M	0.9379	-	706,549.12	-	662,662.53
3	Concrete K-125 ( Class-E) (E1718)	Cu.M	0.2116	-	441,120.23	-	93,341.04
4	Boulder / River stone (M07)	Cu.M	0.3174	-	78,000.00	-	24,757.20
<b>SUB TOTAL FOR MATERIALS</b>						697,760.00	780,760.77
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Dump Truck 6 T (E37)	hour	0.3008	-	199,301.09	-	59,949.59
3.	Excavator (E12)	hour	0.0669	-	341,927.63	-	22,886.72
4	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	91,425.35
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					697,760.00	907,039.99
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	160,480.00
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					697,760.00	1,067,519.99

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El-238 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		ESTIMATE QUANTITY OF
NO OF PAYMENT ITEM	:	2.3 (8)	WORKING
DESCRIPTION OF WORK	:	RCP Culvert Ø 1000 mm Type B	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Ln.M	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. <u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	12.2500		4,573.91	-	56,030.40
2.	Skill Labour (L03)	hour	3.5000		5,151.20	-	18,029.20
3.	Foreman (L04)	hour	1.7500		6,661.04	-	11,656.82
<b>SUB TOTAL FOR LABOUR</b>						-	85,716.42
<b>B. <u>MATERIALS</u></b>							
1	RCP Culvert Ø 100 cm (M58)	Ln.M	1.0000	697,760.00	-	697,760.00	-
2	Concrete K-300 ( Class-C) (E1715)	Cu.M	1.9345	-	706,549.12	-	1,366,787.38
3	Concrete K-125 ( Class-E) (E1718)	Cu.M	0.2116	-	441,120.23	-	93,341.04
4	Boulder / River stone (M07)	Cu.M	0.3174	-	100,600.00	-	31,930.44
5.	Reinf. Steel - Grade 40 (E1734)	Kg	84.3317	-	8,723.78	-	735,691.45
<b>SUB TOTAL FOR MATERIALS</b>						697,760.00	2,227,750.31
<b>C. <u>EQUIPMENT</u></b>							
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Dump Truck 6 T (E37)	hour	0.3008	-	199,301.09	-	59,949.59
3.	Excavator (E12)	hour	0.0669	-	341,927.63	-	22,886.72
4	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	91,425.35
<b>D. TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						697,760.00	2,404,892.08
<b>E. OVERHEAD &amp; PROFIT</b> 10.00 % x D						-	310,265.21
<b>F. WORKING UNIT PRICE ( D + E )</b>						697,760.00	2,715,157.29

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EI-239a Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		ESTIMATE QUANTITY OF
NO OF PAYMENT ITEM	:	2.3 (9) a	WORKING
DESCRIPTION OF WORK	:	Manhole Type I ( 2 x U-Ditch 600 mm )	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Each	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	8.7500		4,573.91	-	40,021.71
2.	Skilled Labour (L03)	hour	1.7500		5,151.20	-	9,014.60
3.	Foreman (L04)	hour	1.7500		6,661.04	-	11,656.82
<b>SUB TOTAL FOR LABOUR</b>						-	60,693.13
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	Concrete Class C (EI715)	CuM	1.2078	-	706,549.12	-	853,348.97
2	Concrete Class E (EI718)	CuM	0.2638	-	441,120.23	-	116,349.87
3	Boulder / River Stone (M07)	CuM	0.3956	-	100,600.00	-	39,801.38
4	Reinf. Steel - Grade 40 (EI734)	Kg	105.2162	-	8,723.78	-	917,882.59
<b>SUB TOTAL FOR MATERIALS</b>						-	1,927,382.81
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.2259	-	289,980.98	-	65,507.75
3.	Excavator (E12)	hour	0.0892	-	341,927.63	-	30,515.63
4	Tools	Ls	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	108,612.42
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	2,096,688.36
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	209,668.84
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	2,306,357.20

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EI-239b Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:	ESTIMATE QUANTITY OF	
No. OF CONTRACT PACKAGE	:	WORKING	:
PACKAGE NAME	:	TOTAL PRICE (Rp.)	:
PROVINCE / REGENCY / MUNICIPALITY	:	% TO PROJECT COST	:
NO OF PAYMENT ITEM	:		
DESCRIPTION OF WORK	:		
UNIT OF MEASUREMENT	:		

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. <u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	8.7500		4,573.91	-	40,021.71
2.	Skilled Labour (L03)	hour	1.7500		5,151.20	-	9,014.60
3.	Foreman (L04)	hour	1.7500		6,661.04	-	11,656.82
<b>SUB TOTAL FOR LABOUR</b>						-	60,693.13
<b>B. <u>MATERIALS</u></b>							
1	Concrete Class C (EI715)	CuM	1.1771	-	706,549.12	-	831,689.96
2	Concrete Class E (EI718)	CuM	0.2638	-	441,120.23	-	116,349.87
3	Boulder / River Stone (M07)	CuM	0.3956	-	100,600.00	-	39,801.38
4	Reinf. Steel - Grade 40 (EI734)	Kg	102.7638	-	8,723.78	-	896,488.64
<b>SUB TOTAL FOR MATERIALS</b>						-	1,884,329.85
<b>C. <u>EQUIPMENT</u></b>							
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.2259	-	289,980.98	-	65,507.75
3.	Excavator (E12)	hour	0.0892	-	341,927.63	-	30,515.63
4	Tools	Ls	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	108,612.42
<b>D. TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	2,053,635.40
<b>E. OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	205,363.54
<b>F. WORKING UNIT PRICE ( D + E )</b>						-	2,258,998.94

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EI-239c Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		ESTIMATE QUANTITY OF
NO OF PAYMENT ITEM	:	2.3 (9) c	WORKING
DESCRIPTION OF WORK	:	Manhole Type III ( 2 x RCP dia 800 mm )	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Each	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. <u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	8.7500		4,573.91	-	40,021.71
2.	Skilled Labour (L03)	hour	1.7500		5,151.20	-	9,014.60
3.	Foreman (L04)	hour	1.7500		6,661.04	-	11,656.82
<b>SUB TOTAL FOR LABOUR</b>						-	60,693.13
<b>B. <u>MATERIALS</u></b>							
1	Concrete Class C (EI715)	CuM	2.3323	-	706,549.12	-	1,647,864.89
2	Concrete Class E (EI718)	CuM	0.3278	-	441,120.23	-	144,606.27
3	Boulder / River Stone (M07)	CuM	0.4917	-	100,600.00	-	49,467.43
4	Reinf. Steel - Grade 40 (EI734)	Kg	206.2291	-	8,723.78	-	1,799,097.45
<b>SUB TOTAL FOR MATERIALS</b>						-	3,641,036.04
<b>C. <u>EQUIPMENT</u></b>							
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.5522	-	289,980.98	-	160,130.06
3.	Excavator (E12)	hour	0.1190	-	341,927.63	-	40,687.51
4	Tools	Ls	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	213,406.61
<b>D. TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	3,915,135.78
<b>E. OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	391,513.58
<b>F. WORKING UNIT PRICE ( D + E )</b>						-	4,306,649.36

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EI-239d Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:	ESTIMATE QUANTITY OF	
No. OF CONTRACT PACKAGE	:	WORKING	:
PACKAGE NAME	:	TOTAL PRICE (Rp.)	:
PROVINCE / REGENCY / MUNICIPALITY	:	% TO PROJECT COST	:
NO OF PAYMENT ITEM	: 2.3 (9) d		
DESCRIPTION OF WORK	: Manhole Type IV ( 2 x RCP dia 800 mm + RCP dia 800		
UNIT OF MEASUREMENT	: Each		

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. <u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	8.7500		4,573.91	-	40,021.71
2.	Skilled Labour (L03)	hour	1.7500		5,151.20	-	9,014.60
3.	Foreman (L04)	hour	1.7500		6,661.04	-	11,656.82
<b>SUB TOTAL FOR LABOUR</b>						-	60,693.13
<b>B. <u>MATERIALS</u></b>							
1	Concrete Class C (EI715)	CuM	2.2172	-	706,549.12	-	1,566,579.57
2	Concrete Class E (EI718)	CuM	0.3278	-	441,120.23	-	144,606.27
3	Boulder / River Stone (M07)	CuM	0.4917	-	100,600.00	-	49,467.43
4	Reinf. Steel - Grade 40 (EI734)	Kg	190.7096	-	8,723.78	-	1,663,708.49
<b>SUB TOTAL FOR MATERIALS</b>						-	3,424,361.76
<b>C. <u>EQUIPMENT</u></b>							
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.5522	-	289,980.98	-	160,130.06
3.	Excavator (E12)	hour	0.1190	-	341,927.63	-	40,687.51
4	Tools	Ls	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	213,406.61
<b>D. TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	3,698,461.50
<b>E. OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	369,846.15
<b>F. WORKING UNIT PRICE ( D + E )</b>						-	4,068,307.65

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EI-239e Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:			ESTIMATE QUANTITY OF
No. OF CONTRACT PACKAGE	:			WORKING
PACKAGE NAME	:			TOTAL PRICE (Rp.)
PROVINCE / REGENCY / MUNICIPALITY	:			% TO PROJECT COST
NO OF PAYMENT ITEM	:	2.3 (9) e		
DESCRIPTION OF WORK	:	Manhole Type V ( 2 x U-Ditch 600 mm + RCP dia 800 mm)		
UNIT OF MEASUREMENT	:	Each		

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. <u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	8.7500		4,573.91	-	40,021.71
2.	Skilled Labour (L03)	hour	1.7500		5,151.20	-	9,014.60
3.	Foreman (L04)	hour	1.7500		6,661.04	-	11,656.82
<b>SUB TOTAL FOR LABOUR</b>						-	60,693.13
<b>B. <u>MATERIALS</u></b>							
1	Concrete Class C (EI715)	CuM	2.0278	-	706,549.12	-	1,432,713.07
2	Concrete Class E (EI718)	CuM	0.3140	-	441,120.23	-	138,511.75
3	Boulder / River Stone (M07)	CuM	0.4710	-	100,600.00	-	47,382.60
4	Reinf. Steel - Grade 40 (EI734)	Kg	175.5524	-	8,723.78	-	1,531,480.25
<b>SUB TOTAL FOR MATERIALS</b>						-	3,150,087.67
<b>C. <u>EQUIPMENT</u></b>							
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.5522	-	289,980.98	-	160,130.06
3.	Excavator (E12)	hour	0.1190	-	341,927.63	-	40,687.51
4	Tools	Ls	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	213,406.61
<b>D. TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	3,424,187.41
<b>E. OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	342,418.74
<b>F. WORKING UNIT PRICE ( D + E )</b>						-	3,766,606.15



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EI-239f Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:	ESTIMATE QUANTITY OF	
No. OF CONTRACT PACKAGE	:	WORKING	:
PACKAGE NAME	:	TOTAL PRICE (Rp.)	:
PROVINCE / REGENCY / MUNICIPALITY	:	% TO PROJECT COST	:
NO OF PAYMENT ITEM	: 2.3 (9) f		
DESCRIPTION OF WORK	: Manhole Type VI ( U-Ditch 600 mm, RCP dia 800 mm )		
UNIT OF MEASUREMENT	: Each		

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. <u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	8.7500		4,573.91	-	40,021.71
2.	Skilled Labour (L03)	hour	1.7500		5,151.20	-	9,014.60
3.	Foreman (L04)	hour	1.7500		6,661.04	-	11,656.82
<b>SUB TOTAL FOR LABOUR</b>						-	60,693.13
<b>B. <u>MATERIALS</u></b>							
1	Concrete Class C (EI715)	CuM	2.1763	-	706,549.12	-	1,537,635.62
2	Concrete Class E (EI718)	CuM	0.3140	-	441,120.23	-	138,511.75
3	Boulder / River Stone (M07)	CuM	0.4710	-	100,600.00	-	47,382.60
4	Reinf. Steel - Grade 40 (EI734)	Kg	187.4324	-	8,723.78	-	1,635,118.76
<b>SUB TOTAL FOR MATERIALS</b>						-	3,358,648.73
<b>C. <u>EQUIPMENT</u></b>							
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.5522	-	289,980.98	-	160,130.06
3.	Excavator (E12)	hour	0.1190	-	341,927.63	-	40,687.51
4	Tools	Ls	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	213,406.61
<b>D. TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	3,632,748.47
<b>E. OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	363,274.85
<b>F. WORKING UNIT PRICE ( D + E )</b>						-	3,996,023.32

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EI-239g Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		ESTIMATE QUANTITY OF
NO OF PAYMENT ITEM	:	2.3 (9) g	WORKING
DESCRIPTION OF WORK	:	MANHOLE TYPE VII	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Each	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. <u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	11.6667		4,573.91	-	53,362.28
2.	Skilled Labour (L03)	hour	2.3333		5,151.20	-	12,019.47
3.	Foreman (L04)	hour	2.3333		6,661.04	-	15,542.43
<b>SUB TOTAL FOR LABOUR</b>						-	80,924.18
<b>B. <u>MATERIALS</u></b>							
1	Concrete Class C (EI715)	CuM	0.7000	-	706,549.12	-	494,565.96
2	Concrete Class E (EI718)	CuM	0.1210	-	441,120.23	-	53,375.55
3	Boulder / River Stone (M07)	CuM	0.1815	-	100,600.00	-	18,258.90
4	Reinf. Steel - Grade 40 (EI734)	Kg	62.9572	-	8,723.78	-	549,224.48
<b>SUB TOTAL FOR MATERIALS</b>						-	1,115,424.89
<b>C. <u>EQUIPMENT</u></b>							
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.1171	-	289,980.98	-	33,966.98
3.	Excavator (E12)	hour	0.0297	-	341,927.63	-	10,171.88
4	Tools	Ls	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	56,727.90
<b>D. TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	1,253,076.97
<b>E. OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	125,307.70
<b>F. WORKING UNIT PRICE ( D + E )</b>						-	1,378,384.67

**THE NORTH JAVA CORRIDOR FLYOVER**  
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EI-239h Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		ESTIMATE QUANTITY OF
NO OF PAYMENT ITEM	:	2.3 (9) h	WORKING
DESCRIPTION OF WORK	:	Manhole Type VIII	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Each	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	8.7500		4,573.91	-	40,021.71	
2.	Skilled Labour (L03)	hour	1.7500		5,151.20	-	9,014.60	
3.	Foreman (L04)	hour	1.7500		6,661.04	-	11,656.82	
<b>SUB TOTAL FOR LABOUR</b>						-	60,693.13	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1	Concrete Class C (EI715)	CuM	1.9043	-	706,549.12	-	1,345,461.81	
2	Concrete Class E (EI718)	CuM	0.2550	-	441,120.23	-	112,485.66	
3	Boulder / River Stone (M07)	CuM	0.3825	-	100,600.00	-	38,479.50	
4	Reinf. Steel - Grade 40 (EI734)	Kg	328.4068	-	8,723.78	-	2,864,948.46	
<b>SUB TOTAL FOR MATERIALS</b>						-	4,361,375.43	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04	
2.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.2510	-	289,980.98	-	72,786.39	
3.	Excavator (E12)	hour	0.0892	-	341,927.63	-	30,515.63	
4	Tools	Ls	1.0000		5,000.00	-	5,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	115,891.06	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	4,537,959.62
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	453,795.96
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	4,991,755.58

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Ei-239i Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		ESTIMATE QUANTITY OF
NO OF PAYMENT ITEM	:	2.3 (9) i	WORKING
DESCRIPTION OF WORK	:	Manhole Type IX	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Each	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. <u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	8.7500		4,573.91	-	40,021.71
2.	Skilled Labour (L03)	hour	1.7500		5,151.20	-	9,014.60
3.	Foreman (L04)	hour	1.7500		6,661.04	-	11,656.82
<b>SUB TOTAL FOR LABOUR</b>						-	60,693.13
<b>B. <u>MATERIALS</u></b>							
1	Concrete Class C (E1715)	CuM	1.8182	-	706,549.12	-	1,284,662.25
2	Concrete Class E (E1718)	CuM	0.2550	-	441,120.23	-	112,485.66
3	Boulder / River Stone (M07)	CuM	0.3825	-	100,600.00	-	38,479.50
4	Reinf. Steel - Grade 40 (E1734)	Kg	315.4991	-	8,723.78	-	2,752,344.40
<b>SUB TOTAL FOR MATERIALS</b>						-	4,187,971.81
<b>C. <u>EQUIPMENT</u></b>							
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.2510	-	289,980.98	-	72,786.39
3.	Excavator (E12)	hour	0.0892	-	341,927.63	-	30,515.63
4	Tools	Ls	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	115,891.06
<b>D. TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	4,364,556.00
<b>E. OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	436,455.60
<b>F. WORKING UNIT PRICE ( D + E )</b>						-	4,801,011.60

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EI-2310 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		ESTIMATE QUANTITY OF
NO OF PAYMENT ITEM	:	2.3 (10)	WORKING
DESCRIPTION OF WORK	:	Catch Basin Type I	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Each	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	5.0000		4,573.91	-	22,869.55	
2.	Skilled Labour (L03)	hour	1.0000		5,151.20	-	5,151.20	
3.	Foreman (L04)	hour	1.0000		6,661.04	-	6,661.04	
<b>SUB TOTAL FOR LABOUR</b>						-	34,681.79	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1	Concrete Class C (EI715)	CuM	0.2769	-	706,549.12	-	195,657.33	
2	Concrete Class E (EI718)	CuM	0.0810	-	441,120.23	-	35,730.74	
3	Boulder / River Stone (M07)	CuM	0.1215	-	100,600.00	-	12,222.90	
4	Reinf. Steel - Grade 40 (EI734)	Kg	28.4480	-	8,723.78	-	248,174.19	
<b>SUB TOTAL FOR MATERIALS</b>						-	491,785.16	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04	
2.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.0359	-	289,980.98	-	10,398.06	
3.	Excavator (E12)	hour	0.0297	-	341,927.63	-	10,171.88	
4	Tools	Ls	1.0000		5,000.00	-	5,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	33,158.98	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	559,625.93
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	55,962.59
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	615,588.52

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EI-2312a Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:			ESTIMATE QUANTITY OF	
No. OF CONTRACT PACKAGE	:			WORKING	:
PACKAGE NAME	:			TOTAL PRICE (Rp.)	:
PROVINCE / REGENCY / MUNICIPALITY	:			% TO PROJECT COST	:
NO OF PAYMENT ITEM	:	2.3 (12) a			
DESCRIPTION OF WORK	:	U-Ditch, DS - 1 ( 300 mm with cover )			
UNIT OF MEASUREMENT	:	Ln.M.			

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	3.5000		4,573.91	-	16,008.69
2.	Skilled Labour (L03)	hour	0.7000		5,151.20	-	3,605.84
3.	Foreman (L04)	hour	0.7000		6,661.04	-	4,662.73
<b>SUB TOTAL FOR LABOUR</b>						-	24,277.26
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Concrete Class C (E1715)	CuM	0.3396	706,549.12	-	239,944.08	-
2.	Concrete Class E (E1718)	CuM	0.0700	-	441,120.23	-	30,878.42
3.	Boulder / River Stone (M07)	CuM	0.1050	-	100,600.00	-	10,563.00
4.	Reinf. Steel - Grade 40 (E1734)	kg	20.1319	8,723.78	-	175,626.14	-
<b>SUB TOTAL FOR MATERIALS</b>						415,570.22	41,441.42
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Dump Truck 6 T (E37)	hour	0.1054	-	199,301.09	-	21,010.66
3.	Excavator (E12)	hour	0.0297	-	341,927.63	-	10,171.88
4.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	39,771.58
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					415,570.22	105,490.26
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	52,106.05
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					415,570.22	157,596.31

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EI-2312b Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:			ESTIMATE QUANTITY OF	
No. OF CONTRACT PACKAGE	:			WORKING	:
PACKAGE NAME	:			TOTAL PRICE (Rp.)	:
PROVINCE / REGENCY / MUNICIPALITY	:			% TO PROJECT COST	:
NO OF PAYMENT ITEM	:	2.3 (12) b			
DESCRIPTION OF WORK	:	U-Ditch, DS - 2 ( 500 mm with cover )			
UNIT OF MEASUREMENT	:	Ln.M.			

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	3.5000		4,573.91	-	16,008.69
2.	Skilled Labour (L03)	hour	0.7000		5,151.20	-	3,605.84
3.	Foreman (L04)	hour	0.7000		6,661.04	-	4,662.73
<b>SUB TOTAL FOR LABOUR</b>						-	24,277.26
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Concrete Class C (E1715)	CuM	0.5400	706,549.12	-	381,536.52	-
2.	Concrete Class E (E1718)	CuM	0.0900	-	441,120.23	-	39,700.82
3.	Boulder / River Stone (M07)	CuM	0.1350	-	100,600.00	-	13,581.00
4.	Reinf. Steel - Grade 40 (E1734)	kg	28.6189	8,723.78	-	249,664.61	-
<b>SUB TOTAL FOR MATERIALS</b>						631,201.13	53,281.82
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Dump Truck 6 T (E37)	hour	0.1054	-	199,301.09	-	21,010.66
3.	Excavator (E12)	hour	0.0297	-	341,927.63	-	10,171.88
4.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	39,771.58
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					631,201.13	117,330.66
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	74,853.18
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					631,201.13	192,183.84

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EI-2312c Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:			ESTIMATE QUANTITY OF	
No. OF CONTRACT PACKAGE	:			WORKING	:
PACKAGE NAME	:			TOTAL PRICE (Rp.)	:
PROVINCE / REGENCY / MUNICIPALITY	:			% TO PROJECT COST	:
NO OF PAYMENT ITEM	:	2.3 (12) c			
DESCRIPTION OF WORK	:	U-Ditch, DS - 3 ( 600 mm with cover )			
UNIT OF MEASUREMENT	:	Ln.M.			

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	5.8333		4,573.91	-	26,681.14
2.	Skilled Labour (L03)	hour	1.1667		5,151.20	-	6,009.73
3.	Foreman (L04)	hour	1.1667		6,661.04	-	7,771.21
<b>SUB TOTAL FOR LABOUR</b>						-	40,462.08
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Concrete Class C (E1715)	CuM	0.5700	706,549.12	-	402,733.00	-
2.	Concrete Class E (E1718)	CuM	0.1000	-	441,120.23	-	44,112.02
3.	Boulder / River Stone (M07)	CuM	0.1500	-	100,600.00	-	15,090.00
4.	Reinf. Steel - Grade 40 (E1734)	kg	27.3236	8,723.78	-	238,365.14	-
<b>SUB TOTAL FOR MATERIALS</b>						641,098.14	59,202.02
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.2175	-	289,980.98	-	63,081.54
3.	Excavator (E12)	hour	0.0297	-	341,927.63	-	10,171.88
4.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	81,842.46
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					641,098.14	181,506.56
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	82,260.47
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					641,098.14	263,767.03



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EI-2312d Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:			ESTIMATE QUANTITY OF	
No. OF CONTRACT PACKAGE	:			WORKING	:
PACKAGE NAME	:			TOTAL PRICE (Rp.)	:
PROVINCE / REGENCY / MUNICIPALITY	:			% TO PROJECT COST	:
NO OF PAYMENT ITEM	:	2.3 (12) d			
DESCRIPTION OF WORK	:	U-Ditch, DS - 3A ( 600 mm )			
UNIT OF MEASUREMENT	:	Ln.M.			

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	5.8333		4,573.91	-	26,681.14
2.	Skilled Labour (L03)	hour	1.1667		5,151.20	-	6,009.73
3.	Foreman (L04)	hour	1.1667		6,661.04	-	7,771.21
<b>SUB TOTAL FOR LABOUR</b>						-	40,462.08
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Concrete Class C (E1715)	CuM	0.4350	706,549.12	-	307,348.87	-
2.	Concrete Class E (E1718)	CuM	0.1000	-	441,120.23	-	44,112.02
3.	Boulder / River Stone (M07)	CuM	0.1500	-	100,600.00	-	15,090.00
4.	Reinf. Steel - Grade 40 (E1734)	kg	20.3539	8,723.78	-	177,563.19	-
<b>SUB TOTAL FOR MATERIALS</b>						484,912.06	59,202.02
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.2175	-	289,980.98	-	63,081.54
3.	Excavator (E12)	hour	0.0297	-	341,927.63	-	10,171.88
4.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	81,842.46
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					484,912.06	181,506.56
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	66,641.86
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					484,912.06	248,148.42

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EI-2312e Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		ESTIMATE QUANTITY OF	
No. OF CONTRACT PACKAGE	:		WORKING	:
PACKAGE NAME	:		TOTAL PRICE (Rp.)	:
PROVINCE / REGENCY / MUNICIPALITY	:		% TO PROJECT COST	:
NO OF PAYMENT ITEM	:	2.3 (12) e		
DESCRIPTION OF WORK	:	U-Ditch, DS - 4 ( 800 mm with cover )		
UNIT OF MEASUREMENT	:	Ln.M.		

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. LABOUR</b>							
1.	Common Labour (L02)	hour	3.5000		4,573.91	-	16,008.69
2.	Skilled Labour (L03)	hour	0.7000		5,151.20	-	3,605.84
3.	Foreman (L04)	hour	0.7000		6,661.04	-	4,662.73
<b>SUB TOTAL FOR LABOUR</b>						-	24,277.26
<b>B. MATERIALS</b>							
1.	Concrete Class C (E1715)	CuM	0.6300	706,549.12	-	445,125.95	-
2.	Concrete Class E (E1718)	CuM	0.1100	-	441,120.23	-	48,523.23
3.	Boulder / River Stone (M07)	CuM	0.1650	-	100,600.00	-	16,599.00
4.	Reinf. Steel - Grade 40 (E1734)	kg	29.1123	8,723.78	-	253,969.18	-
<b>SUB TOTAL FOR MATERIALS</b>						699,095.13	65,122.23
<b>C. EQUIPMENT</b>							
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Dump Truck 6 T (E37)	hour	0.1054	-	199,301.09	-	21,010.66
3.	Excavator (E12)	hour	0.0595	-	341,927.63	-	20,343.75
4.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	49,943.45
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					699,095.13	139,342.94
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	83,843.81
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					699,095.13	223,186.75

**THE NORTH JAVA CORRIDOR FLYOVER**  
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**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

EI-2312f Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:			ESTIMATE QUANTITY OF	
No. OF CONTRACT PACKAGE	:			WORKING	:
PACKAGE NAME	:			TOTAL PRICE (Rp.)	:
PROVINCE / REGENCY / MUNICIPALITY	:			% TO PROJECT COST	:
NO OF PAYMENT ITEM	:	2.3 (12) f			
DESCRIPTION OF WORK	:	U-Ditch, DS - 4 A ( 800 mm )			
UNIT OF MEASUREMENT	:	Ln.M.			

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	3.5000		4,573.91	-	16,008.69
2.	Skilled Labour (L03)	hour	0.7000		5,151.20	-	3,605.84
3.	Foreman (L04)	hour	0.7000		6,661.04	-	4,662.73
<b>SUB TOTAL FOR LABOUR</b>						-	24,277.26
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Concrete Class C (E1715)	CuM	0.4650	706,549.12	-	328,545.34	-
2.	Concrete Class E (E1718)	CuM	0.1200	-	441,120.23	-	52,934.43
3.	Boulder / River Stone (M07)	CuM	0.1800	-	100,600.00	-	18,108.00
4.	Reinf. Steel - Grade 40 (E1734)	kg	21.7109	8,723.78	-	189,400.74	-
<b>SUB TOTAL FOR MATERIALS</b>						517,946.08	71,042.43
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Dump Truck 6 T (E37)	hour	0.1054	-	199,301.09	-	21,010.66
3.	Excavator (E12)	hour	0.0595	-	341,927.63	-	20,343.75
4.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	49,943.45
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					517,946.08	145,263.14
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	66,320.92
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					517,946.08	211,584.06

**THE NORTH JAVA CORRIDOR FLYOVER  
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(ENGINEER ESTIMATE)**

EI-2312g Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		ESTIMATE QUANTITY OF
NO OF PAYMENT ITEM	:	2.3 (12) g	WORKING
DESCRIPTION OF WORK	:	U-Ditch, DS - 5 ( 300 mm with cover )	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Ln.M.	% TO PROJECT
			COST
			0.00
			0.00

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	3.5000		4,573.91	-	16,008.69
2.	Skilled Labour (L03)	hour	0.7000		5,151.20	-	3,605.84
3.	Foreman (L04)	hour	0.7000		6,661.04	-	4,662.73
<b>SUB TOTAL FOR LABOUR</b>						-	24,277.26
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Concrete Class C (E1715)	CuM	0.1900	706,549.12	-	134,244.33	-
2.	Concrete Class E (E1718)	CuM	0.0600	-	441,120.23	-	26,467.21
3.	Boulder / River Stone (M07)	CuM	0.0900	-	100,600.00	-	9,054.00
4.	Reinf. Steel - Grade 40 (E1734)	kg	20.9608	8,723.78	-	182,857.81	-
<b>SUB TOTAL FOR MATERIALS</b>						317,102.14	35,521.21
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tamper (E23)	hour	0.3012	-	25,195.60	-	7,589.04
2.	Dump Truck 6 T (E37)	hour	0.1054	-	199,301.09	-	21,010.66
3.	Excavator (E12)	hour	0.0297	-	341,927.63	-	10,171.88
4.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	39,771.58
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					317,102.14	99,570.05
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>					-	41,667.22
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					317,102.14	141,237.27

**THE NORTH JAVA CORRIDOR FLYOVER**  
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**(ENGINEER ESTIMATE)**

El-2313 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		ESTIMATE QUANTITY OF	
No. OF CONTRACT PACKAGE	:		WORKING	:
PACKAGE NAME	:		TOTAL PRICE (Rp.)	:
PROVINCE / REGENCY / MUNICIPALITY	:		% TO PROJECT COST	:
NO OF PAYMENT ITEM	:	2.3 (13)		
DESCRIPTION OF WORK	:	Drain Pipe Dia 150 mm		
UNIT OF MEASUREMENT	:	Ln.M		

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	8.4000		4,573.91	-	38,420.84	
2.	Skilled Labour (L03)	hour	2.8000		5,151.20	-	14,423.36	
3.	Foreman (L04)	hour	1.4000		6,661.04	-	9,325.46	
<b>SUB TOTAL FOR LABOUR</b>						-	62,169.66	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	PVC Dia. 6" (M61)	Ln.M	10.0000	-	129,625.00	-	1,296,250.00	
2.	Bend Dia. 6" / Socket Dia. 6" (M63)	Each	2.0000	-	22,070.00	-	44,140.00	
3.	Tee for Drain Pipe 6" (M89)	Each	1.0000	-	65,910.00	-	65,910.00	
4.	Support (M92)	Each	5.0000	-	5,000.00	-	25,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	1,431,300.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Dump Truck 6 T (E37)	hour	0.0226	-	199,301.09	-	4,502.28	
2.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	5,502.28	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	1,498,971.94
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	149,897.19
<b>F.</b>	<b>TOTAL UNIT PRICE ( D + E )</b>						-	1,648,869.13
<b>G.</b>	<b>WORKING UNIT PRICE ( F/10 )</b>						-	164,886.91

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
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EI-2314 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		ESTIMATE QUANTITY OF
NO OF PAYMENT ITEM	:	2.3 (14)	WORKING
DESCRIPTION OF WORK	:	Drain Pipe Dia 200 mm	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Ln.M	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	4.2000		4,573.91	-	19,210.42	
2.	Skilled Labour (L03)	hour	1.4000		5,151.20	-	7,211.68	
3.	Foreman (L04)	hour	0.7000		6,661.04	-	4,662.73	
<b>SUB TOTAL FOR LABOUR</b>						-	31,084.83	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	PVC Dia. 8" (M62)	Ln.M	10.0000	-	219,700.00	-	2,197,000.00	
2.	Bend Dia. 8" / Socket Dia. 8" (M64)	Each	2.0000	-	58,750.00	-	117,500.00	
3.	Tee for Drain Pipe 8" (M90)	Each	1.0000	-	95,000.00	-	95,000.00	
4.	Support (M92)	Each	5.0000	-	5,000.00	-	25,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	2,434,500.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Dump Truck 6 T (E37)	hour	0.0234	-	199,301.09	-	4,669.03	
2.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	5,669.03	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	2,471,253.86
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	247,125.39
<b>F.</b>	<b>TOTAL UNIT PRICE ( D + E )</b>						-	2,718,379.25
<b>G.</b>	<b>WORKING UNIT PRICE ( F/10 )</b>						-	271,837.93

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
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EI-2315 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		ESTIMATE QUANTITY OF
NO OF PAYMENT ITEM	:	2.3 (15)	WORKING
DESCRIPTION OF WORK	:	Drain Pipe Dia 250 mm	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Ln.M	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	4.2000		4,573.91	-	19,210.42
2.	Skilled Labour (L03)	hour	1.4000		5,151.20	-	7,211.68
3.	Foreman (L04)	hour	0.7000		6,661.04	-	4,662.73
<b>SUB TOTAL FOR LABOUR</b>						-	31,084.83
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	PVC Dia. 10" (M86)	Ln.M	10.0000	-	309,625.00	-	3,096,250.00
2.	Bend Dia. 10" / Socket Dia. 10" (M87)	Each	2.0000	-	93,750.00	-	187,500.00
3.	Tee for Drain Pipe 10" (M91)	Each	3.0000	-	125,000.00	-	375,000.00
4.	Support (M92)	Each	5.0000	-	5,000.00	-	25,000.00
<b>SUB TOTAL FOR MATERIALS</b>						-	3,683,750.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Dump Truck 6 T (E37)	hour	0.0125	-	199,301.09	-	2,491.26
2.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	3,491.26
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	3,718,326.09
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	371,832.61
<b>F.</b>	<b>TOTAL UNIT PRICE ( D + E )</b>					-	4,090,158.70
<b>G.</b>	<b>WORKING UNIT PRICE ( F/10 )</b>					-	409,015.87

THE NORTH JAVA CORRIDOR FLYOVER  
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EI-2316 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:	
No. OF CONTRACT PACKAGE	:	
PACKAGE NAME	:	
PROVINCE / REGENCY / MUNICIPALITY	:	
NO OF PAYMENT ITEM	:	2.3 (16)
DESCRIPTION OF WORK	:	Deck Drain Type I
UNIT OF MEASUREMENT	:	Each
		ESTIMATE QUANTITY OF WORKING :
		TOTAL PRICE (Rp.) :
		% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	1.4000		4,573.91	-	6,403.47	
2.	Skilled Labour (L03)	hour	0.3500		5,151.20	-	1,802.92	
3.	Foreman (L04)	hour	0.3500		6,661.04	-	2,331.36	
<b>SUB TOTAL FOR LABOUR</b>						-	10,537.75	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Deck drain (M207)	each	1.0000	-	780,000.00	-	780,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	780,000.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Dump Truck 6 T (E37)	hour	0.0030	-	199,301.09	-	600.30	
2.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	1,600.30	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	792,138.05
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	79,213.81
<b>F.</b>	<b>TOTAL UNIT PRICE ( D + E )</b>						-	871,351.86



THE NORTH JAVA CORRIDOR FLYOVER  
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EI-2317 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:	
No. OF CONTRACT PACKAGE	:	
PACKAGE NAME	:	
PROVINCE / REGENCY / MUNICIPALITY	:	
NO OF PAYMENT ITEM	:	2.3 (17)
DESCRIPTION OF WORK	:	Deck Drain Type II
UNIT OF MEASUREMENT	:	Each
		ESTIMATE QUANTITY OF WORKING :
		TOTAL PRICE (Rp.) :
		% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	1.4000		4,573.91	-	6,403.47	
2.	Skilled Labour (L03)	hour	0.3500		5,151.20	-	1,802.92	
3.	Foreman (L04)	hour	0.3500		6,661.04	-	2,331.36	
<b>SUB TOTAL FOR LABOUR</b>						-	10,537.75	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Deck drain (M208)	each	1.0000	-	2,200,000.00	-	2,200,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	2,200,000.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Dump Truck 6 T (E37)	hour	0.0030	-	199,301.09	-	600.30	
2.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	1,600.30	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	2,212,138.05
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	221,213.81
<b>F.</b>	<b>TOTAL UNIT PRICE ( D + E )</b>						-	2,433,351.86

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-2318 Analysis

**UNIT PRICE ANALYSIS**

PROJECT		
No. OF CONTRACT PACKAGE	:	
PACKAGE NAME	:	
PROVINCE / REGENCY / MUNICIPALITY	:	
NO OF PAYMENT ITEM	:	2.3 (18)
DESCRIPTION OF WORK	:	Steel Gutter Drain Screen
UNIT OF MEASUREMENT	:	Ln.m
		ESTIMATE QUANTITY OF WORKING :
		TOTAL PRICE (Rp.) :
		% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	1.4000		4,573.91	-	6,403.47
2.	Skilled Labour (L03)	hour	0.3500		5,151.20	-	1,802.92
3.	Foreman (L04)	hour	0.3500		6,661.04	-	2,331.36
<b>SUB TOTAL FOR LABOUR</b>						-	10,537.75
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Steel Gutter Screen (M78)	each	1.0000	6,694,725.00	41,563.00	6,694,725.00	41,563.00
<b>SUB TOTAL FOR MATERIALS</b>						6,694,725.00	41,563.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat Bed Truck with crane 5 Ton (E31)	hour	0.0113	-	289,980.98	-	3,286.45
2.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	4,286.45
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					6,694,725.00	56,387.20
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	675,111.22
<b>F.</b>	<b>TOTAL UNIT PRICE ( D + E )</b>					6,694,725.00	731,498.42

**THE NORTH JAVA CORRIDOR FLYOVER  
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BILL OF QUANTITY - NAGREG FLYOVER  
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EI-2319 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		
NO OF PAYMENT ITEM	:	2.3 (19)	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORK	:	Outer Ditch for Viaduct	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Ln.M.	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	4.0000		4,573.91	-	18,295.64
2.	Skilled Labour (L03)	hour	2.0000		5,151.20	-	10,302.40
3.	Foreman (L04)	hour	1.0000		6,661.04	-	6,661.04
<b>SUB TOTAL FOR LABOUR</b>						-	<b>35,259.08</b>
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Concrete Class B (E12312e)	CuM	1.0034	-	598,407.51	-	600,442.10
2.	Reinf. Steel - Grade 40 (E1734)	Kg	115.3910	-	8,723.78	-	1,006,645.70
3.	Formwork / scaffolding	LS	1.0000	-	679,653.83	-	679,653.83
<b>SUB TOTAL FOR MATERIALS</b>						-	<b>2,286,741.63</b>
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1	Tools	Ls	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	<b>5,000.00</b>
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	<b>2,327,000.71</b>
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.0 % x D		-	<b>232,700.07</b>
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>					-	<b>2,559,700.78</b>
<b>G.</b>	<b>WORKING UNIT PRICE ( F ) / 5.78</b>					-	<b>442,854.81</b>

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
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EI-2321 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		ESTIMATE QUANTITY OF
NO OF PAYMENT ITEM	:	2.3 (21)	WORKING
DESCRIPTION OF WORK	:	Extension of Existing Box Culvert	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Ln.M.	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	210.0000		4,573.91	-	960,521.10
2.	Skilled Labour (L03)	hour	42.0000		5,151.20	-	216,350.40
3.	Foreman (L04)	hour	21.0000		6,661.04	-	139,881.84
<b>SUB TOTAL FOR LABOUR</b>						-	<b>1,316,753.34</b>
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	Structure excavation (EI323)	Cu.M	15.0000	-	25,733.15	-	385,997.25
2	Stone masonry (EI791)	Cu.M	2.9200	-	393,894.59	-	1,150,172.20
3	Common Embankment (EI331)	Cu.M	184.2800	-	95,094.75	-	17,524,060.53
4	Structure concrete class C ( for bo (EI715)	Cu.M	28.4600	-	706,549.12	-	20,108,387.96
5	Structure concrete class D ( for sic (EI716)	Cu.M	3.5100	-	570,785.99	-	2,003,458.82
6	Lean concrete class E (EI718)	Cu.M	2.0900	-	441,120.23	-	921,941.28
7	Reinforcing steel bar (EI734)	Kg	3,415.2000	-	8,723.78	-	29,793,453.46
8	Concrete curb type B (EI882)	Ln.M	10.8000	173,183.42	69,672.56	1,870,380.94	752,463.65
<b>SUB TOTAL FOR MATERIALS</b>						1,870,380.94	<b>72,639,935.15</b>
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1	Tools	Ls	1.0000		5,000.00	-	50,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	50,000.00
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					1,870,380.94	74,006,688.49
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>					-	7,587,706.94
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>					1,870,380.94	81,594,395.43
<b>G.</b>	<b>WORKING UNIT PRICE ( F ) / 5.8</b>					322,479.47	14,067,999.21

**DIVISION 3.  
EARTHWORKS**

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

Ei-311 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	3.1(1)	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORK	:	Clearing and Grubbing	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Sq.m	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	0.0301		4,573.91	-	137.77	
2.	Foreman (L04)	hour	0.0050		6,661.04	-	33.44	
<b>SUB TOTAL FOR LABOUR</b>						-	171.21	
<b>B.</b>	<b><u>MATERIALS</u></b>							
<b>SUB TOTAL FOR MATERIALS</b>						-	-	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Motor Grader (E15)	hour	0.0050	-	317,165.98	-	1,592.20	
2.	Tools	LS	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	2,592.20	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	2,763.41
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	276.34
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	3,039.75

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

EI-312 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:			ESTIMATE QUNTIY OF	
PACKAGE CONTRACT No.	:			WORKING	:
PACKAGE NAME	:			TOTAL PRICE (Rp.)	:
PROV. / KAB /CITY	:			% TO PROJECT COST	:
NO. PAY ITEM	:	3.1(2)			
DESCRIPTION OF WORK	:	Selected Tree Removal Diameter ≥ 200 mm ≤ 30 mm			
UNIT OF MEASUREMENT	:	Each			

NO.	COMPONENT	UNIT	ESTIMATE QUANTITY	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	Hour	6.8158		4,573.91	-	31,175.01
2.	Skilled Labour (L03)	Hour	1.1360		5,151.20	-	5,851.62
3	Foreman (L04)	Hour	1.1360		6,661.04	-	7,566.76
<b>SUB TOTAL FOR LABOUR</b>							44,593.39
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.							
<b>SUB TOTAL FOR MATERIALS</b>							-
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Saw Machine (E27)	hour	1.1360	-	26,288.66	-	29,863.19
2.	Flat bed truck crane 5 t (E31)	hour	0.1900	-	289,980.98	-	55,096.39
3.	Tools	Ls	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	89,959.58
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	134,552.97
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>					-	13,455.30
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	148,008.27

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-313 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	3.1(3)	ESTIMATE QUANTITY OF WORKING :
DESCRIPTION OF WORK	:	Selected Tree Removal Diameter > 30 cm	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Each	% TO PROJECT COST :

NO.	COMPONENT	UNIT	ESTIMATE QUANTITY	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	Hour	11.3597		4,573.91	-	51,958.36	
2.	Skilled Labour (L03)	Hour	1.8933		5,151.20	-	9,752.70	
3	Foreman (L04)	Hour	1.8933		6,661.04	-	12,611.26	
<b>SUB TOTAL FOR LABOUR</b>							74,322.32	
<b>B.</b>	<b><u>MATERIALS</u></b>							
<b>SUB TOTAL FOR MATERIALS</b>							-	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Saw Machine (E27)	hour	1.8933	-	26,288.66	-	49,771.99	
2.	Flat bed truck crane 5 t (E31)	hour	0.3917	-	289,980.98	-	113,575.88	
3.	Tools	Ls	1.0000		5,000.00	-	5,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	168,347.87	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	242,670.19
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>						-	24,267.02
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	266,937.21



**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-321 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	3.2(1)	ESTIMATE QUNTIY OF WORKING :
DESCRIPTION OF WORK	:	Common Excavation	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Cu. M	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	0.0595		4,573.91	-	272.14	
2.	Foreman (L04)	hour	0.0297		6,661.04	-	198.16	
<b>SUB TOTAL FOR LABOUR</b>						-	470.30	
<b>B.</b>	<b><u>MATERIALS</u></b>							
<b>SUB TOTAL FOR MATERIALS</b>						-	-	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Excavator (E12)	hour	0.0297	-	341,927.63	-	10,171.88	
2.	Dump Truck 6 T (E37)	hour	0.0214	-	199,301.09	-	4,268.83	
3.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	15,440.71	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	15,911.01
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	1,591.10
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	17,502.11

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

El-322 Analysis

**UNIT PRICE ANALYSIS**

PROJECT			
PACKAGE CONTRACT No.		ESTIMATE QUANTITY OF	
PACKAGE NAME		WORKING	:
PROV. / KAB /CITY		TOTAL PRICE (Rp.)	:
NO. PAY ITEM	: 3.2(2)	% TO PROJECT COST	:
DESCRIPTION OF WORK	: Excavation of Existing Pavement		
UNIT OF MEASUREMENT	: Cu.M		

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common labour (L02)	hour	1.0000		4,573.91	-	4,573.91	
2.	Foreman (L04)	hour	0.1000		6,661.04	-	666.10	
<b>SUB TOTAL FOR LABOUR</b>						-	5,240.01	
<b>B.</b>	<b><u>BAHAN</u></b>							
<b>SUB TOTAL FOR MATERIALS</b>						-	-	
<b>C.</b>	<b><u>PERALATAN</u></b>							
1.	Compressor (E05)	hour	0.1000	-	124,448.69	-	12,444.87	
2.	Jack Hammer (E24)	hour	0.1000	-	22,181.13	-	2,218.11	
3.	Wheel Loader (E19)	hour	0.1000	-	241,455.42	-	24,145.54	
4.	Dump Truck 6 T (E37)	hour	0.0308	-	199,301.09	-	6,136.45	
5.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	45,944.97	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	51,184.98
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	5,118.50
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	56,303.48

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

El-323 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB / CITY	:		
NO. PAY ITEM	:	3.2(3)	ESTIMATE QUNTITY OF WORKING
DESCRIPTION OF WORK	:	Structure Excavation to a depth not exceeding 2 m	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	M3	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	0.2231		4,573.91	-	1,020.51
2.	Foreman (L04)	hour	0.0558		6,661.04	-	371.54
<b>SUB TOTAL FOR LABOUR</b>						-	1,392.05
<b>B.</b>	<b><u>MATERIALS</u></b>						
<b>SUB TOTAL FOR MATERIALS</b>						-	-
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Excavator (E12)	hour	0.0558	-	341,927.63	-	19,072.27
2.	Dump Truck 6 T (E37)	hour	0.0214	-	199,301.09	-	4,268.83
3.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	24,341.10
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	25,733.15
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	2,573.32
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	28,306.47

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

El-324 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB / CITY	:		
NO. PAY ITEM	:	3.2(4)	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORK	:	Struc. Exc. to a depth greater than 2 m but not exceeding	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	M3	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	0.2746		4,573.91	-	1,256.01
2.	Foreman (L04)	hour	0.0687		6,661.04	-	457.28
<b>SUB TOTAL FOR LABOUR</b>						-	1,713.29
<b>B.</b>	<b><u>MATERIALS</u></b>						
<b>SUB TOTAL FOR MATERIALS</b>						-	-
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Excavator (E12)	hour	0.0687	-	341,927.63	-	23,473.56
2.	Dump Truck 6 T (E37)	hour	0.0214	-	199,301.09	-	4,268.83
3.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	28,742.39
<b>D.</b>	TOTAL PRICE FOR LABOUR, MATERIALS & EQUIPMENT ( A + B + C )					-	30,455.68
<b>E.</b>	OVERHEAD & PROFIT		10.00 % x D			-	3,045.57
<b>F.</b>	WORKING UNIT PRICE ( D + E )					-	33,501.25

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-325 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:	ESTIMATE QUANTITY OF	:
PACKAGE CONTRACT No.	:	WORKING	:
PACKAGE NAME	:	TOTAL PRICE (Rp.)	:
PROV. / KAB /CITY	:	% TO PROJECT COST	:
NO. PAY ITEM	: 3.2(5)		
DESCRIPTION OF WORK	: Structure Excavation to a depth greater than 4 m		
UNIT OF MEASUREMENT	: M3		

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	0.3818		4,573.91	-	1,746.32	
2.	Foreman (L04)	hour	0.0955		6,661.04	-	635.80	
<b>SUB TOTAL FOR LABOUR</b>						-	2,382.12	
<b>B.</b>	<b><u>MATERIALS</u></b>							
<b>SUB TOTAL FOR MATERIALS</b>						-	-	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Excavator (E12)	hour	0.0955	-	341,927.63	-	32,637.04	
2.	Dump Truck 6 T (E37)	hour	0.0214	-	199,301.09	-	4,268.83	
3.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	37,905.87	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	40,287.99
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	4,028.80
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	44,316.79

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-327 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:			ESTIMATE QUANTITY OF
PACKAGE CONTRACT No.	:			WORKING
PACKAGE NAME	:			TOTAL PRICE (Rp.)
PROV. / KAB /CITY	:			% TO PROJECT COST
NO. PAY ITEM	:	3.2 (7)		
DESCRIPTION OF WORK	:	Rock Excavation		
UNIT OF MEASUREMENT	:	Cu. M		

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	1.3333		4,573.91	-	6,098.55	
2.	Foreman (L04)	hour	0.1667		6,661.04	-	1,110.17	
<b>SUB TOTAL FOR LABOUR</b>								7,208.72
<b>B.</b>	<b><u>MATERIALS</u></b>							
<b>SUB TOTAL FOR MATERIALS</b>								-
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Compressor (E05)	hour	0.1667	-	124,448.69	-	20,741.45	
2.	Jack Hammer (E24)	hour	0.1667	-	22,181.13	-	3,696.86	
3.	Wheel Loader (E19)	hour	0.1667	-	271,827.37	-	45,304.56	
4.	Dump Truck (E37)	hour	0.0261	-	199,301.09	-	5,202.64	
5.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>								75,945.51
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>							83,154.23
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>							8,315.42
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>							91,469.65

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-331 Analysis

**UNIT PRICE ANALYSIS**

PROJECT  
PACKAGE CONTRACT No.  
PACKAGE NAME  
PROV. / KAB /CITY  
NO. PAY ITEM : 3.3 (1)  
DESCRIPTION OF WORK : Embankment with Material from Borrow  
UNIT OF MEASUREMENT : Cu. M

ESTIMATE QUANTITY OF WORKING :  
TOTAL PRICE (Rp.) :  
% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. LABOUR</b>							
1.	Labour (L02)	hour	0.0446		4,573.91	-	204.10
2.	Foremen (L04)	hour	0.0223		6,661.04	-	148.62
<b>SUB TOTAL FOR LABOUR</b>						-	352.72
<b>B. MATERIAL</b>							
1.	Common embankment material (M01)	M3	1.2000	-	62,600.00	-	75,120.00
<b>SUB TOTAL FOR MATERIALS</b>						-	75,120.00
<b>C. EQUIPMENT</b>							
1.	Excavator (E12)	hour	0.0223	-	341,927.63	-	7,628.91
2.	Dump Truck (E37)	hour	0.0211	-	199,301.09	-	4,202.13
3.	Motor Grader (E15)	hour	0.0076	-	317,165.98	-	2,405.99
4.	Vibro Roller (E19)	hour	0.0161	-	241,455.42	-	3,878.80
5.	Water Tanker (E22)	hour	0.0022	-	228,078.72	-	506.20
6.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	19,622.03
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	<b>95,094.75</b>
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	<b>9,509.48</b>
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	<b>104,604.23</b>

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-332 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	3.3(2)	ESTIMATE QUNTITY OF WORKING :
DESCRIPTION OF WORK	:	Structural Backfill	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Cu. M	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	0.0357		4,573.91	-	163.28	
2.	Foreman (L04)	hour	0.0178		6,661.04	-	118.89	
<b>SUB TOTAL FOR LABOUR</b>						-	282.17	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Selected Material (M04)	M3	1.2000	-	77,600.00	-	93,120.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	93,120.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Whell Loader (E16)	hour	0.0178	-	271,827.37	-	4,851.89	
2.	Dump Truck 6 T (E37)	hour	0.0321	-	199,301.09	-	6,403.25	
3.	Motor Grader (E15)	hour	0.0061	-	317,165.98	-	1,946.02	
4.	Vibro Roller (E19)	hour	0.0100	-	241,455.42	-	2,424.25	
5.	Water Tanker (E22)	hour	0.0022	-	228,078.72	-	506.20	
6.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	17,131.61	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	110,533.78
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	11,053.38
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	121,587.16



**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

**UNIT PRICE ANALYSIS**

El-333 Analysis

PROJECT	:			ESTIMATE QUANTITY OF	
PACKAGE CONTRACT No.	:			WORKING	:
PACKAGE NAME	:			TOTAL PRICE (Rp.)	:
PROV. / KAB /CITY	:			% TO PROJECT COST	:
NO. PAY ITEM	:	3.3(3)			
DESCRIPTION OF WORK	:	Permeable Backfill			
UNIT OF MEASUREMENT	:	Cu. M			

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	0.0714		4,573.91	-	326.56
2.	Foreman (L04)	hour	0.0178		6,661.04	-	118.89
<b>SUB TOTAL FOR LABOUR</b>						-	445.45
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Sand for Embankment (M05)	M3	1.2000	-	65,600.00	-	78,720.00
<b>SUB TOTAL FOR MATERIALS</b>						-	78,720.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Whell Loader (E16)	hour	0.0178	-	271,827.37	-	4,851.89
2.	Dump Truck (E37)	hour	0.0321	-	199,301.09	-	6,403.25
3.	Tamper (E23)	hour	0.3213	-	25,195.60	-	8,094.97
4.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	20,350.11
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	99,515.56
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>		10.00 % x D			-	9,951.56
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	109,467.12

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-SS33 Analysis

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	SS 3.3	ESTIMATE QUNTITY OF WORKING :
DESCRIPTION OF WORK	:	Soil Improvement	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Cu. M	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	481.5625		4,573.91	-	2,202,623.53	
2.	Skilled Labour (L03)	hour	96.3125		5,151.20	-	496,124.95	
3.	Foreman (L04)	hour	48.1563		6,661.04	-	320,770.71	
<b>SUB TOTAL OF LABOUR</b>						-	3,019,519.19	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Cement (M12)	Kg	66,234.3750	-	840.00	-	55,636,875.00	
2.	Additive (M236)	Kg	4,415.6250		12,000.00	-	52,987,500.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	108,624,375.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Jet Grout Machine (E50)	hour	48.1563	-	495,508.61	-	23,861,836.50	
2.	Dump Truck (E38)	hour	3.6575	-	262,622.39	-	960,546.83	
3.	Water tank Truck (E22)	hour	52.5003	-	228,078.72	-	11,974,200.59	
4.	Crane cap 100 Ton (E47)	hour	48.1563	-	1,364,802.05	-	65,723,748.72	
5.	Tools	Ls	1.0000		2,207,812.50	-	2,207,812.50	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	104,728,145.14	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	216,372,039.33
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>						-	21,637,203.93
<b>F.</b>	<b>UNIT PRICE ( D+E )</b>						-	238,009,243.26
<b>G.</b>	<b>WORKING UNIT PRICE ( F/Vsi )</b>						-	539,015.98

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

El-334 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	3.3.(4)	ESTIMATE QUNTITY OF WORKING :
DESCRIPTION OF WORK	:	Lighweight Embankment	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Cu.M	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	1.4000		4,573.91	-	6,403.47
2.	Skilled Labour (L03)	hour	0.3500		5,151.20	-	1,802.92
3	Foreman (L04)	hour	0.1750		6,661.04	-	1,165.68
<b>SUB TOTAL FOR LABOUR</b>						-	9,372.07
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	Foam Polystrene 6000x1030x630 mm (M231)	M3	3.8934	-	419,183.00	-	1,632,047.09
<b>SUB TOTAL FOR MATERIALS</b>						-	1,632,047.09
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat bed truck crane 5 t (E31)	hour	0.0460	-	289,980.98	-	13,339.13
2	Tools	Ls.	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	18,339.13
<b>D.</b>	TOTAL PRICE FOR LABOUR, MATERIALS & EQUIPMENT ( A + B + C )					-	1,659,758.29
<b>E.</b>	OVERHEAD & PROFIT 10.00 % x D					-	165,975.83
<b>F.</b>	UNIT PRICE ( D + E )					-	1,825,734.12
<b>G.</b>	WORKING UNIT PRICE ( F/M231 )					-	468,930.53

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-335 Analysis

PROJECT  
PACKAGE CONTRACT No.  
PACKAGE NAME  
PROV. / KAB / CITY  
NO. PAY ITEM : 3.3.5  
DESCRIPTION OF WORK : Intermediate Concrete Slab and Accessories  
UNIT OF MEASUREMENT : Sq. M

ESTIMATE QUANTITY OF WORKING  
TOTAL PRICE (Rp.) :  
% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A. LABOUR</b>								
1.	Common Labour (L02)	hour	28.0000		4,573.91	-	128,069.48	
2.	Skilled Labour (L03)	hour	14.0000		5,151.20	-	72,116.80	
3.	Foremen (L04)	hour	7.0000		6,661.04	-	46,627.28	
<b>SUB TOTAL FOR LABOUR</b>						-	246,813.56	
<b>B. MATERIAL</b>								
1	Curing Compound (M76)	Kg	20.0000	-	14,850.00	-	297,000.00	
2	Concrete Class C (EI-715)	M3	15.0000	-	706,549.12	-	10,598,236.80	
3	Wiremass (M232)	M3	100.0000	-	31,240.00	-	3,124,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	14,019,236.80	
<b>C. EQUIPMENT</b>								
1	Con. Vibrator (E07)	hour	0.3000	-	31,785.00	-	9,535.50	
2	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	10,535.50	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	14,276,585.86
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	1,427,658.59
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>						-	15,704,244.45
<b>G.</b>	<b>WORKING UNIT PRICE F / 100</b>						-	157,042.44

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

EI-341 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB / CITY	:		
NO. PAY ITEM	:	3.4(1)	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORK	:	Sub Grade Preparation	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Sq. M	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	0.0241		4,573.91	-	110.21
2.	Foreman (L04)	hour	0.0040		6,661.04	-	26.75
<b>SUB TOTAL FOR LABOUR</b>						-	136.96
<b>B.</b>	<b><u>MATERIALS</u></b>						
<b>SUB TOTAL FOR MATERIALS</b>						-	-
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Motor Grader (E15)	hour	0.0050	-	317,165.98	-	1,592.20
2.	Vibro Roller (E19)	hour	0.0040	-	241,455.42	-	969.70
3.	Water Tanker (E22)	hour	0.0002	-	228,078.72	-	50.62
4.	Appliance assister	Ls	1.0000		2,000.00	-	2,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	4,612.52
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	4,749.48
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	474.95
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	5,224.43

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-SS351 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	SS 3.5 (1)	ESTIMATE QUNTIY OF WORKING :
DESCRIPTION OF WORK	:	Mechanical Stabilized Earthwall	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Sq.M	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	3.8000		4,573.91	-	17,380.86
2.	Skilled Labour (L03)	hour	1.2667		5,151.20	-	6,524.85
3.	Foreman (L04)	hour	0.6333		6,661.04	-	4,218.66
<b>SUB TOTAL FOR LABOUR</b>						-	28,124.37
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	MSE WALL and Accessories (M77)	Sq.M	2.2500	1,226,475.00	93,750.00	2,759,568.75	210,937.50
<b>SUB TOTAL FOR MATERIALS</b>						2,759,568.75	210,937.50
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat bed truck crane 5 t (E31)	hour	0.6333	-	289,980.98	-	183,654.62
2.	Tools	Ls.	1.0000		112,500.00	-	112,500.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	296,154.62
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					2,759,568.75	535,216.49
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	329,478.52
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>					2,759,568.75	864,695.01
<b>G.</b>	<b>WORKING UNIT PRICE ( F/2.25 )</b>					1,226,475.00	384,308.89

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-SS352 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	SS 3.5 (2)	ESTIMATE QUANTITY OF WORKING :
DESCRIPTION OF WORK	:	Retaining Wall for Lighthouse Embankment	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Sq.M	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	42.0000		4,573.91	-	192,104.22	
2.	Skilled Labour (L03)	hour	14.0000		5,151.20	-	72,116.80	
3.	Foreman (L04)	hour	7.0000		6,661.04	-	46,627.28	
<b>SUB TOTAL FOR LABOUR</b>						-	310,848.30	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1	Boulder / River Stone (M07)	M3	0.0810	-	100,600.00	-	8,148.60	
2	Concrete Class E (E1-718)	M3	0.1215	-	441,120.23	-	53,596.11	
3	Concrete Class C (E1-715)	M3	3.5375	-	706,549.12	-	2,499,417.51	
4	Reinf. Steel - Grade 40 (E1734)	Kg	265.3125	-	8,723.78	-	2,314,527.88	
5	H Couolumn (M244)	Kg	406.8000	-	13,000.00	-	5,288,400.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	10,164,090.10	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Flat bed truck crane 5 t (E31)	hour	0.8000	-	289,980.98	-	231,984.78	
2	Tools	Ls.	1.0000		50,000.00	-	50,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	281,984.78	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	10,756,923.18
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	1,075,692.32
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>						-	11,832,615.50
<b>G.</b>	<b>WORKING UNIT PRICE ( F/10 )</b>						-	1,183,261.55

**DIVISION 4.  
PAVEMENT WIDENING AND  
SHOULDERS**



**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

Analisa EI-422

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	4.2.(2)	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORKING	:	Aggr. Base Class B, CBR Min 30%	TOTAL PRICE (Rp.)
UNIT MEASUREMENT	:	Cu.M	% TO PROJECT COST

NO.	COMPONENT	UNIT	ESTIMATE QUANTITY	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	0.1428		4,573.91	-	653.12	
2.	Foreman (L04)	hour	0.0357		6,661.04	-	237.79	
<b>SUB TOTAL FOR LABOUR</b>							890.91	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Coarse Aggregate (M08)	M3	0.3600	-	162,600.00	-	58,536.00	
2.	Fine Aggregate (M09)	M3	0.2400	-	132,600.00	-	31,824.00	
3.	Selected Material (M04)	M3	0.6000	-	77,600.00	-	46,560.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	136,920.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1	Wheel Loader (E16)	hour	0.0357	-	271,827.37	-	9,703.79	
2	Dump Truck 6 T (E37)	hour	0.0343	-	199,301.09	-	6,830.13	
3	Motor Grader (E15)	hour	0.0088	-	317,165.98	-	2,786.35	
4	Vibratory Roller (E19)	hour	0.0134	-	241,455.42	-	3,232.33	
5	Water Tanker (E22)	hour	0.0022	-	228,078.72	-	506.20	
6	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	24,058.80	
<b>D.</b>	<b>TOTAL AMOUNT OF LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	161,869.71
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00 % x D			16,186.97	
<b>F.</b>	<b>UNIT PRICE OF WORKING ( D + E )</b>						-	178,056.68

**DIVISION 5.  
GRANULAR PAVEMENT**

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-511 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:	ESTIMATE QUANTITY OF
PACKAGE CONTRACT No.	:	WORKING
PACKAGE NAME	:	TOTAL PRICE (Rp.)
PROV. / KAB / CITY	:	% TO PROJECT COST
NO. PAY ITEM	: 5.1 (1)	
DESCRIPTION OF WORKING	: Agg.Class A for Base, CBR Min 80%	
UNIT MEASUREMENT	: Cu. M	

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common labour (L02)	hour	0.2499		4,573.91	-	1,142.97	
2.	Foreman (L04)	hour	0.0357		6,661.04	-	237.79	
<b>SUB TOTAL FOR LABOUR</b>						-	1,380.76	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Coarse Aggregate (M08)	M3	0.6600	-	162,600.00	-	107,316.00	
2.	Fine Aggregate (M09)	M3	0.5400	-	132,600.00	-	71,604.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	178,920.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Wheel Loader (E16)	hour	0.0357	-	271,827.37	-	9,703.79	
2.	Dump Truck 6 T (E37)	hour	0.0278	-	199,301.09	-	5,549.48	
3.	Motor Grader (E15)	hour	0.0117	-	317,165.98	-	3,715.13	
4.	Vibratory Roller (E19)	hour	0.0134	-	241,455.42	-	3,232.33	
5.	Water Tanker (E22)	hour	0.0032	-	228,078.72	-	723.14	
6.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	23,923.87	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	204,224.63
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00 % x D		-	20,422.46	
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	224,647.09

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

Analisa EI-512

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB / CITY	:		
NO. PAY ITEM	:	5.1.(2)	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORKING	:	Aggr. Base Class B, CBR Min 35%	TOTAL PRICE (Rp.)
UNIT MEASUREMENT	:	Cu. M	% TO PROJECT COST

NO.	COMPONENT	UNIT	ESTIMATE QUANTITY	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. LABOUR</b>							
1.	Common Labour (L02)	hour	0.2499		4,573.91	-	1,142.97
2.	Foreman (L04)	hour	0.0357		6,661.04	-	237.79
<b>SUB TOTAL FOR LABOUR</b>						-	1,380.76
<b>B. MATERIALS</b>							
1.	Coarse Aggregate (M08)	M <sup>3</sup>	0.4200	-	162,600.00	-	68,292.00
2.	Fine Aggregate (M09)	M <sup>3</sup>	0.2400	-	132,600.00	-	31,824.00
3.	Selected Material (M04)	M <sup>3</sup>	0.5400	-	77,600.00	-	41,904.00
<b>SUB TOTAL FOR MATERIALS</b>						-	142,020.00
<b>C. EQUIPMENT</b>							
1	Wheel Loader (E16)	hour	0.0357	-	271,827.37	-	9,703.79
2	Dump Truck 6 T (E37)	hour	0.0493	-	199,301.09	-	9,818.31
3	Motor Grader (E15)	hour	0.0088	-	317,165.98	-	2,786.35
4	Vibratory Roller (E19)	hour	0.0134	-	241,455.42	-	3,232.33
5	Water Tanker (E22)	hour	0.0022	-	228,078.72	-	506.20
6	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	27,046.98
<b>D.</b>	<b>TOTAL AMOUNT OF LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	170,447.74
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.0 % x D		-	17,044.77
<b>F.</b>	<b>UNIT PRICE OF WORKING ( D + E )</b>					-	187,492.51

**DIVISION 6.  
ASPHALT PAVEMENT**

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

E1-611Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		ESTIMATE QUANTITY OF
NO OF PAYMENT ITEM	:	6.1 (1)	WORKING
DESCRIPTION OF WORK	:	Prime Coat	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Litre	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	0.0226		4,573.91	-	103.33	
2.	Foreman (L04)	hour	0.0045		6,661.04	-	30.10	
<b>SUB TOTAL FOR LABOUR</b>						-	133.43	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Asphalt (M22)	Kg	0.6417	-	6,200.00	-	3,978.33	
2.	Kerosene (M24)	litre	0.4889	-	2,794.50	-	1,366.20	
<b>SUB TOTAL FOR MATERIALS</b>						-	5,344.53	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Asp. Sprayer (E03)	hpur	0.0045	-	35,883.12	-	162.12	
2.	Compressor (E05)	hour	0.0031	-	124,448.69	-	388.90	
3.	Dump Truck 6 T (E37)	hour	0.0045	-	199,301.09	-	900.46	
4.	Tools	Ls	1.0000		500.00	-	500.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	1,951.48	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	7,429.44
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	742.94
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	8,172.38

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

EI-612 Analysis

**UNIT PRICE ANALYSIS**

PROJECT :	ESTIMATE QUANTITY OF WORKING :
No. OF CONTRACT PACKAGE :	TOTAL PRICE (Rp.) :
PACKAGE NAME :	% TO PROJECT COST :
PROVINCE / REGENCY / MUNICIPAL :	
NO OF PAYMENT ITEM : 6.1 (2)	
DESCRIPTION OF WORK : Tack Coat	
UNIT OF MEASUREMENT : Litre	

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	0.0226		4,573.91	-	103.33	
2.	Foreman (L04)	hour	0.0045		6,661.04	-	30.10	
<b>SUB TOTAL FOR LABOUR</b>						-	133.43	
<b>B.</b>	<b><u>MATERIAL</u></b>							
1.	Asphalt (M22)	Kg	0.8880	-	6,200.00	-	5,505.57	
2.	Kerosene (M24)	litre	0.2530	-	2,794.50	-	707.01	
<b>SUB TOTAL FOR MATERIALS</b>						-	6,212.58	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Asp. Sprayer (E03)	hour	0.0045	-	35,883.12	-	162.12	
2.	Compressor (E05)	hour	0.0031	-	124,448.69	-	388.90	
3.	Dump Truck 6 T (E37)	hour	0.0045	-	199,301.09	-	900.46	
4.	Tools	Ls	1.0000		500.00	-	500.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	1,951.48	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	8,297.49
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	829.75
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	9,127.24

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-631 Analysis

**UNIT PRICE ANALYSIS**

PROJECT  
No. OF CONTRACT PACKAGE  
PACKAGE NAME  
PROVINCE / REGENCY / MUNICIPALITY : ESTIMATE QUANTITY OF  
NO OF PAYMENT ITEM : 6.3 (1) WORKING :  
DESCRIPTION OF WORK : Asphalt Concrete Wearing Course (AC-WC) TOTAL PRICE (Rp.) :  
UNIT OF MEASUREMENT : Ton % TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	0.0078		4,573.91	-	35.75
2.	Foreman (L04)	hour	0.0010		6,661.04	-	6.51
<b>SUB TOTAL FOR LABOUR</b>						-	42.26
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Coarse Aggregate (M08)	M3	0.0087	-	162,600.00	-	1,419.13
2.	Fine Aggregate (M09)	M3	0.0051	-	132,600.00	-	670.32
3.	Filler (M10)	Kg	0.5353	-	1,100.00	-	588.79
4.	Asphalt (M22)	Kg	1.3540	-	6,200.00	-	8,394.58
<b>SUB TOTAL FOR MATERIALS</b>						-	11,072.82
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Wheel Loader (E16)	hour	0.0004	-	271,827.37	-	109.30
2.	AMP (E01)	hour	0.0010	-	2,079,829.14	-	2,032.22
3.	Genset 125 KVA (E13)	hour	0.0010	-	244,599.29	-	239.00
4.	Dump Truck 10 T (E38)	hour	0.0055	-	262,622.39	-	1,442.15
5.	Asp. Finisher (E02)	hour	0.0010	-	257,217.23	-	251.33
6.	Tandem Roller (E17)	hour	0.0032	-	205,569.51	-	660.46
7.	Tire Roller (E18)	hour	0.0023	-	222,065.76	-	509.62
8.	Tools (E18)	Ls	1.0000	-	500.00	-	500.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	5,744.08
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	16,859.16
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>		10.00 % x D			-	1,685.92
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E ) in SqM</b>					-	18,545.08
<b>G.</b>	<b>WORKING UNIT PRICE in CuM</b>					-	1,854,508.00
<b>H.</b>	<b>WORKING UNIT PRICE in TONNAGE</b>					-	806,307.83



**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

EI-632 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
No. OF CONTRACT PACKAGE	:		
PACKAGE NAME	:		
PROVINCE / REGENCY / MUNICIPALITY	:		
NO OF PAYMENT ITEM	:	6.3 (2)	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORK	:	Asphalt Concrete - Binder Course (AC-BC)	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Ton	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. LABOUR</b>							
1.	Common Labour (L02)	hour	0.7852		4,573.91	-	3,591.53
2.	Foreman (L04)	hour	0.0982		6,661.04	-	653.80
SUB TOTAL FOR LABOUR						-	4,245.33
<b>B. MATERIAL</b>							
1.	Coarse Aggregate (M08)	M3	0.8558	-	162,600.00	-	139,154.27
2.	Fine Aggregate (M09)	M3	0.5377	-	132,600.00	-	71,296.37
3.	Filler (M10)	Kg	26.8840	-	1,100.00	-	29,572.40
4.	Asphalt (M22)	Kg	146.2734	-	6,200.00	-	906,895.08
SUB TOTAL FOR MATERIALS						-	1,146,918.12
<b>C. EQUIPMENT</b>							
1.	Wheel Loader (E16)	hour	0.0404	-	271,827.37	-	10,979.66
2.	AMP (E01)	hour	0.0982	-	2,079,829.14	-	204,140.66
3.	Genset 125 KVA (E13)	hour	0.0982	-	244,599.29	-	24,008.06
4.	Dump Truck 10 T (E38)	hour	0.5516	-	262,622.39	-	144,867.15
5.	Asphalt Finisher (E02)	hour	0.0815	-	257,217.23	-	20,954.63
6.	Tandem Roller (E17)	hour	0.1721	-	205,569.51	-	35,382.02
7.	Tire Roller (E18)	hour	0.1285	-	222,065.76	-	28,538.57
8.	Tools	Ls	1.0000		1,000.00	-	1,000.00
SUB TOTAL FOR EQUIPMENT						-	469,870.75
D. TOTAL PRICE FOR LABOUR, MATERIALS & EQUIPMENT ( A + B + C )						-	1,621,034.20
E. OVERHEAD & PROFIT 10.00 % x D						-	162,103.42
F. TOTAL WORKING UNIT PRICE ( D + E ) in Cu.M						-	1,783,137.62
G. WORKING UNIT PRICE ( D + E ) in Ton						-	775,277.23

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-633 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:			ESTIMATE QUANTITY OF
No. OF CONTRACT PACKAGE	:			WORKING
PACKAGE NAME	:			TOTAL PRICE (Rp.)
PROVINCE / REGENCY / MUNICIPALITY	:			% TO PROJECT
NO OF PAYMENT ITEM	:	6.3 (3)		COST
DESCRIPTION OF WORK	:	AC-Base Course		
UNIT OF MEASUREMENT	:	Ton		

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	Hour	0.6466		4,573.91	-	2,957.43
2.	Mandor (L04)	Hour	0.0924		6,661.04	-	615.28
<b>SUB TOTAL FOR LABOUR</b>						-	3,572.71
<b>B.</b>	<b><u>MATERIAL</u></b>						
1.	Course Aggregate (M08)	Cu.M	0.9132	-	162,600.00	-	148,481.75
2.	Fine Aggregate (M09)	Cu.M	0.5026	-	132,600.00	-	66,647.66
3.	Filler (M10)	Kg	12.0750	-	1,100.00	-	13,282.50
4.	Asphalt (M22)	Kg	133.7220	-	6,200.00	-	829,076.40
<b>SUB TOTAL FOR MATERIALS</b>						-	1,057,488.31
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Wheel Loader (E16)	Hour	0.0444	-	271,827.37	-	12,060.24
2.	AMP (E01)	Hour	0.0924	-	2,079,829.14	-	192,112.73
3.	Genset 125 KVA (E13)	hour	0.0924	-	244,599.29	-	22,593.51
4.	Dump Truck (E37)	Hour	0.5175	-	199,301.09	-	103,138.31
5.	Asphalt Finisher (E02)	Hour	0.0719	-	257,217.23	-	18,487.49
6.	Tandem Roller (E17)	Hour	0.1786	-	205,569.51	-	36,708.84
7.	Tire Roller (E18)	Hour	0.1000	-	222,065.76	-	22,206.58
8.	Tools	Ls	1.0000	-	1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	408,307.70
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	1,469,368.72
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>		10.00 % x D			-	146,936.87
<b>F.</b>	<b>WORKING UNIT PRICE in Cu.M</b>					-	1,616,305.59
<b>H.</b>	<b>WORKING UNIT PRICE Ton</b>					-	702,741.56

**DIVISION 7.  
STRUCTURES**

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

EI-711aAnalysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	7.1.(1)a	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORK	:	Structure Concrete Class A (fc'=35 Mpa) for Post Tension Double Girder	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Cu.M	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. LABOUR</b>							
1.	Common Labour (L02)	hour	0.4819		4,573.91	-	2,204.29
2.	Skilled Labour (L03)	hour	0.1606		5,151.20	-	827.50
3.	Foreman (L04)	hour	0.0402		6,661.04	-	267.51
<b>SUB TOTAL FOR LABOUR</b>						-	3,299.30
<b>B. MATERIALS</b>							
1.	Cement (M12)	Kg	464.0000	-	840.00	-	389,760.00
2.	Sand (M06)	M3	0.4044	-	120,600.00	-	48,770.64
3.	Coarse Aggregate (M08)	M3	0.4060	-	162,600.00	-	66,015.60
4.	Formwork for PC Girder (M81)	M3	1.0000	-	679,653.83	-	679,653.83
5.	Nail (M19)	Kg	1.5000	-	8,000.00	-	12,000.00
6.	Admixture (M209)	kg	20.0000	10,000.00	50.00	200,000.00	1,000.00
7.	Anchor (EI-7116)	each	0.0175	-	232,797.53	-	4,073.82
<b>SUB TOTAL FOR MATERIALS</b>						200,000.00	1,201,273.89
<b>C. EQUIPMENT</b>							
1.	Batching Plant (E10)	hour	0.0222	-	696,834.44	-	15,485.21
2.	Agitator Truck/Mixer truck (E11)	hour	0.3466	-	147,999.57	-	51,294.68
3.	Con. Vibrator (E07)	hour	0.0222	-	31,785.00	-	706.33
4.	Con, Pump (E08)	hour	0.0402	-	335,234.64	-	13,463.24
5.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	81,949.46
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					200,000.00	1,286,522.65
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	148,652.27
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					200,000.00	1,435,174.92

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

EI-711bAnalysis

**UNIT PRICE ANALYSIS**

PROJECT :	ESTIMATE QUANTITY OF
PACKAGE CONTRACT No. :	WORKING :
PACKAGE NAME :	TOTAL PRICE (Rp.) :
PROV. / KAB /CITY :	% TO PROJECT COST :
NO. PAY ITEM : 7.1.(1)b	
DESCRIPTION OF WORK : Structure Concrete Class A (fc'=35 Mpa) for Steel Girder	
UNIT OF MEASUREMENT : Cu. M	

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	0.4819		4,573.91	-	2,204.29
2.	Skilled Labour (L03)	hour	0.1606		5,151.20	-	827.50
3.	Foreman (L04)	hour	0.0402		6,661.04	-	267.51
<b>SUB TOTAL FOR LABOUR</b>						-	3,299.30
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Cement (M12)	Kg	464.0000	-	840.00	-	389,760.00
2.	Sand (M06)	M3	0.4044	-	120,600.00	-	48,770.64
3.	Coarse Aggregate (M08)	M3	0.4060	-	162,600.00	-	66,015.60
4.	Formwork for Steel Girder (M82)	M3	1.0000	-	1,747,666.46	-	1,747,666.46
5.	Nail (M19)	Kg	1.5000	-	8,000.00	-	12,000.00
6.	Admixture (M209)	kg	20.0000	10,000.00	50.00	200,000.00	1,000.00
<b>SUB TOTAL FOR MATERIALS</b>						200,000.00	2,265,212.70
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Batching Plant (E10)	hour	0.0222	-	696,834.44	-	15,485.21
2.	Agitator Truck/Mixer truck (E11)	hour	0.3466	-	147,999.57	-	51,294.68
3.	Con. Vibrator (E07)	hour	0.0222	-	31,785.00	-	706.33
4.	Con. Pump (E08)	hour	0.0402	-	335,234.64	-	13,463.24
5.	Tools	Ls	1.0000	-	1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	81,949.46
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					200,000.00	2,350,461.46
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00 % x D		-	255,046.15
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					200,000.00	2,605,507.61

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

El-712a Analysis

**UNIT PRICE ANALYSIS**

PROJECT :	
PACKAGE CONTRACT No. :	
PACKAGE NAME :	
PROV. / KAB /CITY :	
NO. PAY ITEM : 7.1.(2)a	ESTIMATE QUANTITY OF WORKING :
DESCRIPTION OF WORK : Structure Concrete Class B - (fc=30 Mpa) for Pier Head	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT : Cu.M	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. <u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	0.4819		4,573.91	-	2,204.29
2.	Skilled Labour (L03)	hour	0.1606		5,151.20	-	827.50
3.	Foreman (L04)	hour	0.0402		6,661.04	-	267.51
<b>SUB TOTAL OF LABOUR</b>						-	3,299.30
<b>B. <u>MATERIALS</u></b>							
1.	Cement (M12)	Kg	417.5907	-	840.00	-	350,776.23
2.	Sand (M06)	M3	0.5250	-	120,600.00	-	63,315.48
3.	Coarse Aggregate (M08)	M3	0.4374	-	162,600.00	-	71,115.07
4.	Formwork & Scaffolding (M28)	M3	0.2500	-	1,700,000.00	-	425,000.00
5.	Nail (M19)	Kg	1.5000	-	8,000.00	-	12,000.00
6.	Admixture (M209)	kg	20.0000	10,000.00	50.00	200,000.00	1,000.00
<b>SUB TOTAL FOR MATERIALS</b>						200,000.00	923,206.78
<b>C. <u>EQUIPMENT</u></b>							
1.	Batching Plant (E10)	hour	0.0222	-	696,834.44	-	15,485.21
2.	Agitator Truck/Mixer truck (E11)	hour	0.3409	-	147,999.57	-	50,446.65
3.	Con. Vibrator (E07)	hour	0.0222	-	31,785.00	-	706.33
4.	Con. Pump (E08)	hour	0.0402	-	335,234.64	-	13,463.24
5.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	81,101.43
<b>D. TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						200,000.00	1,007,607.51
<b>E. OVERHEAD &amp; PROFIT</b>			10.00 % x D			-	120,760.75
<b>F. WORKING UNIT PRICE ( D + E )</b>						200,000.00	1,128,368.26

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

EI-712b Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:	:	
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB / CITY	:		
NO. PAY ITEM	:	7.1.(2)b	ESTIMATE QUANTITY OF WORKING :
DESCRIPTION OF WORK	:	Structure Concrete Class B - (fc'=30 Mpa) for Coulum	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Cu.M	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	0.4819		4,573.91	-	2,204.29
2.	Skilled Labour (L03)	hour	0.1606		5,151.20	-	827.50
3.	Foreman (L04)	hour	0.0402		6,661.04	-	267.51
<b>SUB TOTAL OF LABOUR</b>						-	3,299.30
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Cement (M12)	Kg	437.5907	-	840.00	-	367,576.23
2.	Sand (M06)	M3	0.5250	-	120,600.00	-	63,315.48
3.	Coarse Aggregate (M08)	M3	0.4374	-	162,600.00	-	71,115.07
4.	Formwork & Scaffolding (M28)	M3	0.2000	-	1,700,000.00	-	340,000.00
5.	Nail (M18)	Kg	1.5000	-	8,000.00	-	12,000.00
<b>SUB TOTAL FOR MATERIALS</b>						-	854,006.78
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Batching Plant (E10)	hour	0.0222	-	696,834.44	-	15,485.21
2.	Agitator Truck/Mixer truck (E11)	hour	0.3409	-	147,999.57	-	50,446.65
3.	Con. Vibrator (E07)	hour	0.0222	-	31,785.00	-	706.33
4.	Con. Pump (E08)	hour	0.0402	-	335,234.64	-	13,463.24
5.	Tools	Ls	1.0000	-	1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	81,101.43
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	938,407.51
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	93,840.75
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	1,032,248.26

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - PETERONGAN FLYOVER**  
**(ENGINEER ESTIMATE)**

EI-712c Analysis

**UNIT PRICE ANALYSIS**

PROJECT :  
 No. OF CONTRACT PACKAGE :  
 PACKAGE NAME :  
 PROVINCE / REGENCY / MUN :  
 NO OF PAYMENT ITEM : 7.1.(2)c  
 DESCRIPTION OF WORK : Structure Conc. Class B - (fc'=30 Mpa) for Compo. Coulum  
 UNIT OF MEASUREMENT : Cu.M

ESTIMATE QUNTIY OF WORKING :  
 TOTAL PRICE (Rp.) :  
 % TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. LABOUR</b>							
1.	Common Labour (L02)	hour	7.4187		5,062.39	-	37,556.36
2.	Skilled Labour (L03)	hour	2.4729		6,216.97	-	15,373.95
3.	Foreman (L04)	hour	0.6182		7,105.11	-	4,392.56
<b>SUB TOTAL OF LABOUR</b>						-	57,322.87
<b>B. MATERIALS</b>							
1.	Cement (M12)	Kg	6,736.1862	-	860.00	-	5,793,120.14
2.	Sand (M06)	M3	8.0818	-	62,000.00	-	501,072.13
3.	Coarse Aggregate (M08)	M3	6.7327	-	144,000.00	-	969,503.81
4.	Structure Couolumn Casing (Inner Ribbed Steel Pipe dia 1400mm t=19mm) (SS7110a)	Ln.M	10.0000	7,276,500.00	721,865.89	72,765,000.00	7,218,658.90
5.	Structure Couolumn Casing (erected) (SS7111a)	Ln.M	10.0000	-	264,068.69	-	2,640,686.90
<b>SUB TOTAL FOR MATERIALS</b>						72,765,000.00	17,123,041.88
<b>C. EQUIPMENT</b>							
1.	Batching Plant (E10)	hour	0.3421	-	691,239.18	-	236,462.23
2.	Agitator Truck/Mixer truck (E11)	hour	5.2471	-	142,404.31	-	747,207.11
3.	Con. Vibrator (E07)	hour	0.3421	-	26,189.74	-	8,959.10
4.	Con, Pump (E08)	hour	0.6182	-	329,639.38	-	203,791.33
5.	Tools	Ls	1.0000		1,000,000.00	-	1,000,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	2,196,419.77
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					72,765,000.00	19,376,784.52
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	9,214,178.45
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>					72,765,000.00	28,590,962.97
<b>G.</b>	<b>WORKING UNIT PRICE ( D / Q )</b>					4,726,901.81	1,857,303.30



THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

El-712d Analysis

**UNIT PRICE ANALYSIS**

PROJECT :	ESTIMATE QUANTITY OF WORKING :
PACKAGE CONTRACT No. :	TOTAL PRICE (Rp.) :
PACKAGE NAME :	% TO PROJECT COST :
PROV. / KAB / CITY :	
NO. PAY ITEM : 7.1.(2)d	
DESCRIPTION OF WORK : Structure Concrete Class B - (fc'=30 Mpa) for Abutment	
UNIT OF MEASUREMENT : Cu.M	

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A. LABOUR</b>								
1.	Common Labour (L02)	hour	0.4819		4,573.91	-	2,204.29	
2.	Skilled Labour (L03)	hour	0.1606		5,151.20	-	827.50	
3.	Foreman (L04)	hour	0.0402		6,661.04	-	267.51	
<b>SUB TOTAL OF LABOUR</b>						-	3,299.30	
<b>B. MATERIALS</b>								
1.	Cement (M12)	Kg	437.5907	-	840.00	-	367,576.23	
2.	Sand (M06)	M3	0.5250	-	120,600.00	-	63,315.48	
3.	Coarse Aggregate (M08)	M3	0.4374	-	162,600.00	-	71,115.07	
4.	Formwork & Scaffolding (M28)	M3	0.1250	-	1,700,000.00	-	212,500.00	
5.	Nail (M19)	Kg	1.5000	-	8,000.00	-	12,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	726,506.78	
<b>C. EQUIPMENT</b>								
1.	Batching Plant (E10)	hour	0.0222	-	696,834.44	-	15,485.21	
2.	Agitator Truck/Mixer truck (E11)	hour	0.3409	-	147,999.57	-	50,446.65	
3.	Con. Vibrator (E07)	hour	0.0222	-	31,785.00	-	706.33	
4.	Con. Pump (E08)	hour	0.0402	-	335,234.64	-	13,463.24	
5.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	81,101.43	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	810,907.51
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00 % x D		-	81,090.75	
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	891,998.26

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-713a Analysis

**UNIT PRICE ANALYSIS**

PROJECT :	ESTIMATE QUANTITY OF WORKING :
PACKAGE CONTRACT No. :	TOTAL PRICE (Rp.) :
PACKAGE NAME :	% TO PROJECT COST :
PROV. / KAB / CITY :	
NO. PAY ITEM : 7.1.(3)a	
DESCRIPTION OF WORK : Structure Concrete Class B-1 (fc'=28 Mpa) for Barrier, Median	
UNIT OF MEASUREMENT : Cu.M	

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A. LABOUR</b>								
1.	Common Labour (L02)	hour	0.4819		4,573.91	-	2,204.29	
2.	Skilled Labour (L03)	hour	0.1606		5,151.20	-	827.50	
3.	Foreman (L04)	hour	0.0402		6,661.04	-	267.51	
<b>SUB TOTAL FOR LABOUR</b>						-	3,299.30	
<b>B. MATERIALS</b>								
1.	Cement (M12)	Kg	392.2085	-	840.00	-	329,455.13	
2.	Sand (M06)	M3	0.5367	-	120,600.00	-	64,729.41	
3.	Coarse Aggregate (M08)	M3	0.4471	-	162,600.00	-	72,703.17	
4.	Formwork & Scaffolding (M28)	M3	0.1250	-	1,700,000.00	-	212,500.00	
5.	Nail (M19)	Kg	1.0000	-	8,000.00	-	8,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	687,387.71	
<b>C. EQUIPMENT</b>								
1.	Batching Plant (E10)	hour	0.0222	-	696,834.44	-	15,485.21	
2.	Agitator Truck/Mixer truck (E11)	hour	0.3406	-	147,999.57	-	50,403.17	
3.	Con. Vibrator (E07)	hour	0.0222	-	31,785.00	-	706.33	
4.	Con. Pump (E08)	hour	0.0402	-	335,234.64	-	13,463.24	
5.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	81,057.95	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	771,744.96
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	77,174.50
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	848,919.46

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

EI-713b Analysis

**UNIT PRICE ANALYSIS**

PROJECT :	ESTIMATE QUANTITY OF
PACKAGE CONTRACT No. :	WORKING :
PACKAGE NAME :	TOTAL PRICE (Rp.) :
PROV. / KAB /CITY :	% TO PROJECT COST :
NO. PAY ITEM : 7.1.(3)b	
DESCRIPTION OF WORK : Structure Concrete Class B-1 (fc'=28 Mpa) for Parapet wall	
UNIT OF MEASUREMENT : Cu.M	

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	0.4819		4,573.91	-	2,204.29	
2.	Skilled Labour (L03)	hour	0.1606		5,151.20	-	827.50	
3.	Foreman (L04)	hour	0.0402		6,661.04	-	267.51	
<b>SUB TOTAL FOR LABOUR</b>						-	3,299.30	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Cement (M12)	Kg	392.2085	-	840.00	-	329,455.13	
2.	Sand (M06)	M3	0.5367	-	120,600.00	-	64,729.41	
3.	Coarse Aggregate (M08)	M3	0.4471	-	162,600.00	-	72,703.17	
4.	Formwork & Scaffolding (M28)	M3	0.1000	-	1,700,000.00	-	170,000.00	
5.	Nail (M19)	Kg	1.0000	-	8,000.00	-	8,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	644,887.71	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Batching Plant (E10)	hour	0.0222	-	696,834.44	-	15,485.21	
2.	Agitator Truck/Mixer truck (E11)	hour	0.3406	-	147,999.57	-	50,403.17	
3.	Con. Vibrator (E07)	hour	0.0222	-	31,785.00	-	706.33	
4.	Con, Pump (E08)	hour	0.0402	-	335,234.64	-	13,463.24	
5.	Tools	Ls	1.0000	-	1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	81,057.95	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	729,244.96
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00 % x D			-	72,924.50
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	802,169.46

THE NORTH JAVA CORRIDOR FLYOVER  
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BILL OF QUANTITY - NAGREG FLYOVER  
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EI-715 Analysis

**UNIT PRICE ANALYSIS**

PROJECT :		ESTIMATE QUANTITY OF WORKING :
PACKAGE CONTRACT No. :		TOTAL PRICE (Rp.) :
PACKAGE NAME :		% TO PROJECT COST :
PROV. / KAB /CITY :		
NO. PAY ITEM : 7.1 (5)		
DESCRIPTION OF WORK : Structure Concrete Class C - (fc'=24 Mpa) for Footing, Approach slab and Re		
UNIT OF MEASUREMENT : Cu.M		

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. <u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	0.2667		4,573.91	-	1,219.71
2.	Skilled Labour (L03)	hour	0.0889		5,151.20	-	457.88
3.	Foreman (L04)	hour	0.0222		6,661.04	-	148.02
<b>SUB TOTAL OF LABOUR</b>						-	1,825.61
<b>B. <u>MATERIALS</u></b>							
1.	Cement (M12)	Kg	381.8217	-	840.00	-	320,730.25
2.	Sand (M06)	M3	0.6050	-	120,600.00	-	72,966.14
3.	Coarse Aggregate (M08)	M3	0.4038	-	162,600.00	-	65,649.86
4.	Formwork & Scaffolding (M28)	M3	0.1000	-	1,700,000.00	-	170,000.00
5.	Nail (M19)	Kg	1.0000	-	8,000.00	-	8,000.00
<b>SUB TOTAL FOR MATERIALS</b>						-	637,346.25
<b>C. <u>EQUIPMENT</u></b>							
1.	Batching Plant (E10)	hour	0.0222	-	696,834.44	-	15,485.21
2.	Agitator Truck/Mixer truck (E11)	hour	0.3391	-	147,999.57	-	50,185.72
3.	Con. Vibrator (E07)	hour	0.0222	-	31,785.00	-	706.33
4.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	67,377.26
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	<b>706,549.12</b>
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	<b>70,654.91</b>
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	<b>777,204.03</b>

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

El-716 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	7.1 (6)	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORK	:	Structure Concrete Class D - (fc'=20 Mpa)	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Cu. M	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	0.2667		4,573.91	-	1,219.71	
2.	Skilled Labour (L03)	hour	0.0889		5,151.20	-	457.88	
3.	Foreman (L04)	hour	0.0222		6,661.04	-	148.02	
<b>SUB TOTAL OF LABOUR</b>						-	1,825.61	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Cement (M12)	Kg	326.0207	-	840.00	-	273,857.38	
2.	Sand (M06)	M3	0.4585	-	120,600.00	-	55,291.07	
3.	Coarse Aggregate (M08)	M3	0.5183	-	162,600.00	-	84,278.16	
4.	Formwork & Scaffolding (M28)	M3	0.0500	-	1,700,000.00	-	85,000.00	
5.	Nail (M19)	Kg	0.4000	-	8,000.00	-	3,200.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	501,626.61	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Batching Plant (E10)	hour	0.0222	-	696,834.44	-	15,485.21	
2.	Agitator Truck/Mixer truck (E11)	hour	0.3388	-	147,999.57	-	50,142.23	
3.	Con. Vibrator (E07)	hour	0.0222	-	31,785.00	-	706.33	
4.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	67,333.77	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	570,785.99
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	57,078.60
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	627,864.59

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

EI-718 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:	ESTIMATE QUANTITY OF
PACKAGE CONTRACT No.	:	WORKING
PACKAGE NAME	:	TOTAL PRICE (Rp.)
PROV. / KAB / CITY	:	% TO PROJECT COST
NO. PAY ITEM	: 7.1 (8)	
DESCRIPTION OF WORK	: Lean Concrete Class E (fc' = 17 Mpa)	
UNIT OF MEASUREMENT	: Cu.M	

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	0.2667		4,573.91	-	1,219.71
2.	Skilled labour (L03)	hour	0.0889		5,151.20	-	457.88
3.	Foreman (L04)	hour	0.0222		6,661.04	-	148.02
<b>SUB TOTAL OF LABOUR</b>						-	1,825.61
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Cement (M12)	Kg	139.6218	-	840.00	-	117,282.28
2.	Sand (M06)	M3	0.7082	-	120,600.00	-	85,403.45
3.	Coarse Aggregate (M08)	M3	0.4108	-	162,600.00	-	66,796.60
5.	Scaffolding (M28)	M3	0.0500	-	1,700,000.00	-	85,000.00
6.	Nail (M19)	Kg	0.4000	-	8,000.00	-	3,200.00
<b>SUB TOTAL FOR MATERIALS</b>						-	357,682.33
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Batching Plant (E10)	hour	0.02	-	696,834.44	-	15,485.21
2.	Agitator Truck/Mixer truck (E11)	hour	0.38	-	147,999.57	-	56,837.18
3.	Con. Vibrator (E20)	hour	0.02	-	373,045.46	-	8,289.90
4.	Tools	Ls	1.00		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	81,612.29
<b>D.</b>	TOTAL PRICE FOR LABOUR, MATERIALS & EQUIPMENT ( A + B + C )					-	441,120.23
<b>E.</b>	OVERHEAD & PROFIT			10.00 % x D		-	44,112.02
<b>F.</b>	WORKING UNIT PRICE ( D + E )					-	485,232.25

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

El-719 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB / CITY	:		
NO. PAY ITEM	:	SS7.1.(9)	ESTIMATE QUANTITY OF WORKING :
DESCRIPTION OF WORK	:	Waterproofing on Deck	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Sq.M	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	0.2800		4,573.91	-	1,280.69	
2.	Skilled Labour (L03)	hour	0.1400		5,151.20	-	721.17	
3.	Foreman (L04)	hour	0.1400		6,661.04	-	932.55	
<b>SUB TOTAL OF LABOUR</b>						-	2,934.41	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Waterproofing material (powder) (M217)	Kg	1.1200	-	18,000.00	-	20,160.00	
2.	Waterproofing material (liquid) (M217)	Kg	0.5600	-	18,000.00	-	10,080.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	30,240.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Dump Truck (E37)	hour	0.0001	-	199,301.09	-	23.35	
2.	Tools	Ls	1.0000		2,000.00	-	2,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	2,023.35	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	35,197.76
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00 % x D		-	3,519.78	
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	38,717.54

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-SS7110 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:	ESTIMATE QUANTITY OF
PACKAGE CONTRACT No.	:	WORKING
PACKAGE NAME	:	TOTAL PRICE (Rp.)
PROV. / KAB / CITY	:	% TO PROJECT COST
NO. PAY ITEM	: SS7.1 (10)	
DESCRIPTION OF WORK	: Structure Bore Pile Casing (Inner Ribbed Steel Pipe dia 250	
UNIT OF MEASUREMENT	: Kg	

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. LABOUR</b>							
1.	Common Labour (L02)	hour	9.6386		4,573.91	-	44,085.88
2.	Skilled Labour (L03)	hour	1.6064		5,151.20	-	8,275.02
3.	Foreman (L04)	hour	0.8032		6,661.04	-	5,350.23
<b>SUB TOTAL OF LABOUR</b>						-	57,711.13
<b>B. MATERIALS</b>							
1.	Inner Ribbed Steel Pipe dia 2500 mm, t = 13 mm (M83)	Ton	4.8000	13,500,000.00	781,250.00	64,800,000.00	3,750,000.00
<b>SUB TOTAL FOR MATERIALS</b>						64,800,000.00	3,750,000.00
<b>C. EQUIPMENT</b>							
1.	Crane cap 16 ton (E39)	hour	0.8032	-	377,153.96	-	302,934.91
2.	Tools	Ls	1.0000		120,000.00	-	120,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	422,934.91
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					64,800,000.00	4,230,646.04
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	6,903,064.60
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>					64,800,000.00	11,133,710.64
<b>G.</b>	<b>WORKING UNIT PRICE ( D/(6*800) )</b>					13,500.00	2,319.52



THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

EI-SS7111 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB / CITY	:		
NO. PAY ITEM	:	SS7.1 (11)	ESTIMATE QUANTITY OF WORKING :
DESCRIPTION OF WORK	:	Structure Bore Pile Casing dia 2500 mm (Erected)	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Kg	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	49.6988		4,573.91	-	227,317.82
2.	Skilled Labour (L03)	hour	13.2530		5,151.20	-	68,268.92
3.	Foreman (L04)	hour	3.3133		6,661.04	-	22,069.71
<b>SUB TOTAL OF LABOUR</b>						-	317,656.45
<b>B.</b>	<b><u>MATERIALS</u></b>						
<b>SUB TOTAL FOR MATERIALS</b>						-	-
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Crane cap 16 ton (E39)	hour	3.3133	-	377,153.96	-	1,249,606.49
2.	Tools	Ls	1.0000		240,000.00	-	240,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	1,489,606.49
<b>D.</b>	TOTAL PRICE FOR LABOUR, MATERIALS & EQUIPMENT ( A + B + C )					-	1,807,262.94
<b>E.</b>	OVERHEAD & PROFIT 10.00 % x D					-	180,726.29
<b>F.</b>	UNIT PRICE ( D + E )					-	1,987,989.23
<b>G.</b>	WORKING UNIT PRICE ( D/(6*800) )					-	414.16

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

EI-729 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	7.2.9	ESTIMATE QUANTITY OF WORKING :
DESCRIPTION OF WORK	:	PC Strand Size 12.7 MM & Accessories	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Kg	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	42.0000		4,573.91	-	192,104.22
2.	Skilled Labour (L03)	hour	14.0000		5,151.20	-	72,116.80
3.	Foreman (L04)	hour	7.0000		6,661.04	-	46,627.28
<b>SUB TOTAL OF LABOUR</b>						-	310,848.30
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	PC Strand Size 12.7 MM (M35)	Kg	557.8373	12,537.30	82.00	6,993,773.33	45,742.66
2.	Cable Instalation (L02) Spw	Ln.M	60.0600	-	72,539.28	-	4,356,709.16
3.	Live Anchored 12 K 13 (M38)	Each	2.0000	896,280.00	27,720.00	1,792,560.00	55,440.00
4.	Coupler (M56)	Each	2.0000	5,335,000.00	165,000.00	10,670,000.00	330,000.00
5.	Duct ( sheath ) dia 65 mm (M44)	Ln.M	60.0600	38,400.00	1,200.00	2,306,304.00	72,072.00
6.	Stressing (L03) Spw	Point	4.0000	-	522,500.00	-	2,090,000.00
7.	Grouting (M46)	Ln.M	60.0600	-	12,650.00	-	759,759.00
<b>SUB TOTAL FOR MATERIALS</b>						21,762,637.33	7,709,722.82
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Crane cap 16 ton (E39)	hour	0.6024	-	377,153.96	-	227,201.18
2.	Tools	Ls	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	232,201.18
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					21,762,637.33	8,252,772.30
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	3,001,540.96
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>					21,762,637.33	11,254,313.26
<b>G.</b>	<b>WORKING UNIT PRICE ( D/(M35) )</b>					39,012.52	20,174.90

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

EI-729a Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	7.2.(9)a	ESTIMATE QUANTITY OF WORKING :
DESCRIPTION OF WORK	:	PC Strand Size 21.8 MM & Accessories	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Kg	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	2.8800		4,573.91	-	13,172.86
2.	Skilled Labour (L03)	hour	0.4200		5,151.20	-	2,163.50
3.	Foreman (L04)	hour	0.4200		6,661.04	-	2,797.64
<b>SUB TOTAL OF LABOUR</b>						-	18,134.00
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	PC Strand Size 21.8 MM (M36)	Kg	32.2660	18,170.00	82.00	586,273.22	2,645.81
2.	Cable Instalation (L01) Spw	Ln.M	13.0000	-	42,314.58	-	550,089.54
3.	Live Anchored 1 T 22 (M40)	Each	2.0000	189,400.00	5,850.00	378,800.00	11,700.00
4.	Duct ( sheath ) dia 55 mm (M45)	M	13.0000	36,300.00	1,100.00	471,900.00	14,300.00
5.	Stressing (L04) Spw	Point	2.0000	-	330,000.00	-	660,000.00
6.	Grouting (M47)	Ln.M	13.0000	-	7,590.00	-	98,670.00
<b>SUB TOTAL FOR MATERIALS</b>						1,436,973.22	1,337,405.35
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Crane cap 16 ton (E39)	hour	0.6024	-	377,153.96	-	227,201.18
2.	Tools	Ls	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	232,201.18
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					1,436,973.22	1,587,740.53
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	302,471.38
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>					1,436,973.22	1,890,211.91
<b>G.</b>	<b>WORKING UNIT PRICE ( D/(M36) )</b>					44,535.21	58,582.16

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

EI-733 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	7.3.3	ESTIMATE QUANTITY OF WORKING :
DESCRIPTION OF WORK	:	PC Bar	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Kg	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	8.0000		4,573.91	-	36,591.28	
2.	Skilled Labour (L03)	hour	1.0000		5,151.20	-	5,151.20	
3.	Foreman (L04)	hour	1.0000		6,661.04	-	6,661.04	
<b>SUB TOTAL OF LABOUR</b>						-	48,403.52	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	PC Bar (M37)	Kg	86.5800	18,170.00	82.00	1,573,158.60	7,099.56	
2.	Live Anchored (M40)	Each	1.0000	189,400.00	5,850.00	189,400.00	5,850.00	
3.	Dead Anchored (M54)	Each	1.0000	-	175,000.00	-	175,000.00	
4.	Duct ( sheath ) dia 55 mm (M45)	M	13.0000	36,300.00	1,100.00	471,900.00	14,300.00	
5.	Stressing (L04) Spw (M47)	Point	2.0000	-	330,000.00	-	660,000.00	
6.	Grouting (M47)	Ln.M	13.0000	-	7,590.00	-	98,670.00	
<b>SUB TOTAL FOR MATERIALS</b>						2,234,458.60	960,919.56	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Crane cap 16 ton (E39)	hour	0.6024	-	377,153.96	-	227,201.18	
2.	Tools	Ls	1.0000		5,000.00	-	5,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	232,201.18	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						2,234,458.60	1,241,524.26
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	347,598.29
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>						2,234,458.60	1,589,122.55
<b>G.</b>	<b>WORKING UNIT PRICE ( D/(M37) )</b>						25,808.02	18,354.38

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

EI-734 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	7.3 (4)	ESTIMATE QUNTITY OF WORKING :
DESCRIPTION OF WORK	:	Reinforcement Steel Bars Grade 40	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Kg	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	0.1400		4,573.91	-	640.35
2.	Skilled Labour (L03)	hour	0.0350		5,151.20	-	180.29
3.	Foreman (L04)	hour	0.0350		6,661.04	-	233.14
<b>SUB TOTAL FOR LABOUR</b>						-	1,053.78
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Reinforced Steel Bars Grade 40 (M14)	Kg	1.1000	-	5,900.00	-	6,490.00
2.	Binding wire (M17)	Kg	0.0200	-	9,000.00	-	180.00
<b>SUB TOTAL FOR MATERIALS</b>						-	6,670.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	1,000.00
<b>D.</b>	TOTAL PRICE FOR LABOUR, MATERIALS & EQUIPMENT ( A + B + C )					-	8,723.78
<b>E.</b>	OVERHEAD & PROFIT 10.00 % x D					-	872.38
<b>F.</b>	WORKING UNIT PRICE ( D + E )					-	9,596.16

**FABRICATED STEEL BOX GIRDER COST (NAGREG)**

Nov. 6. 2006

Items	Unit	Quantity	Unit Cost			Cost			TOTAL	Remarks
			Foreign(1)	Foreigh(2)	Local	Foreign(1)	Foreign(2)	Local		
(A) Direct Cost										(Yen/ton)
(1) Material Cost	ton	213.928	9,746,632			2,085,077,484		0	2,085,077,484	129,955
(2) Fabrication Cost	ton	213.928	1,180,354	1,982,720		252,510,700	424,159,282	0	676,669,982	42,174
(3) Painting Cost	ton	213.928	3,102,948	675,228		663,807,375	144,450,150	0	808,257,525	50,376
(4) Transportation Cost	ton	213.928	0	0	672,237	0	0	143,810,258	143,810,258	8,963
Sub Total (A)						3,001,395,559	568,609,432	143,810,258	3,713,815,248	<b>(Yen/ton)</b>
										<b>231,468</b>
(B) Factory Operation Cost										
(5) Operation Cost - (1)		(2)x38%				95,954,066	161,180,527	0	257,134,593	
(6) Operation Cost - (2)		{(2)+(5)}x28.8%				100,357,852	168,577,865	0	268,935,717	<b>(Yen/ton)</b>
Sub Total (B)						196,311,918	329,758,392	0	526,070,310	<b>32,788</b>
TOTAL (A)+(B)						3,197,707,477	898,367,824	143,810,258	4,239,885,559	
OVERHEAD & PROFIT ( 10% )								423,988,556	423,988,556	
TOTAL						3,197,707,477	898,367,824	567,798,814	4,663,874,115	
<b>UNIT PRICE</b>	<b>Rp/ton</b>					14,947,587	4,199,393	2,654,158		<b>(Yen/ton)</b>
						<b>19,146,981</b>		<b>2,654,158</b>	<b>21,801,139</b>	<b>290,682</b>

(NOTE) COST ESTIMATION IS BASED ON STEEL BRIDGES COST ESTIMATION STANDARD OF JAPAN CONSTRUCTION COST INVESTIGATION ASSOCIATION  
MINISTRY OF LAND AND TRANSPORTATION OF JAPAN.

**FABRICATION COST (NAGREG)**

Nov. 6. 2006

Items	Unit	Quantity	Unit Cost		Cost		TOTAL	Remarks	
			Foreign	Local	Foreign	Local			
<b>FABRICATION COST</b>									
(1)	(Labour Cost)								
	JPN Supervisor	m.d	70	3,600,000		252,510,700	0	48,000Yenx75Rp/day	
	Foreman	m.d	140		66,310.17	0	9,302,237		
	Fabricator	m.d	3,366.4		58,613.56	0	197,319,288		
	Common Labour	m.d	701		43,220.35	0	30,315,558		
	Sub Total (1)					252,510,700	236,937,084	489,447,783	
(2)	(Machinery Cost)								
	Track Crane 100t	hour	94		1,315,694.10	0	123,046,977	Outside Factory	
	Trailer Truck 40t	hour	94		686,201.01	0	64,175,221	Outside Factory	
		Sub Total				0	187,222,198	187,222,198	(Other Equipments to be included in Factory Operation)
	Total					252,510,700	424,159,282	676,669,982	
								(Yen)	
								9,022,266	
								(Yen/ton)	
	<b>Unit Cost</b>	<b>(Rp/ton)</b>				<b>1,180,354</b>	<b>1,982,720</b>	<b>3,163,073</b>	<b>42,174</b>
<b>PAINTING COST</b>									
	Blasting	sq.m	1,481.54		37,500	0	55,557,750	55,557,750	
	Tar-Epoxy Painting	sq.m	1,481.54		60,000	0	88,892,400		
	Zn-Al Spray Painting	sq.m	1,149.45	577,500		663,807,375	0		
	Total					663,807,375	144,450,150	808,257,525	(Yen/ton)
	<b>Unit Cost</b>	<b>(Rp/ton)</b>				<b>3,102,948</b>	<b>675,228</b>	<b>3,778,175</b>	<b>50,376</b>
<b>TRANSPORTATION COST (Factory ~ Site)</b>									
	Trailer Truck 50t	trip	9		7,500,000	0	67,500,000		
	Track Crane 100t	hour	58		1,315,694.10	0	76310257.8	3 days x 8hour x 2nos	
	Total					0	143,810,258	143,810,258	1,917,470
								(Yen/ton)	
	<b>Unit Cost</b>	<b>(Rp/ton)</b>				<b>0</b>	<b>672,237</b>	<b>672,237</b>	<b>8,963</b>





### STEEL BOX GIRDER MATERIAL COST

**Tble-2 (NAGREG)**

(Unit: Yen)

Quality of Material	Classification Thickness	Used Thickness	Quantity (ton)	Unit Cost from Table-1	Cost (Yen)	Remarks
SMA490CW	50 < t □ 100			132,775	0	
SMA 490BW	38 < t □ 50			122,875	0	
	25 < t □ 38			118,475	0	
	6 < t 25			112,975	0	
SMA 490AW	6 < t 50			110,775	0	
SM 490YB	25 < t □ 38	38,36,30,28	13.899	104,725	1,455,573	
	t 25	24,22,21,20,18,17	91.645	99,225	9,093,475	
SM 490YA	t 25	9,10,11,12, 13,14,15,16	81.421	97,025	7,899,873	
SM490C	50 < t 100	58,56,54	0.531	117,925	62,618	
SMA 400BW	25 < t 38			111,325	0	
SMA 400AW	6 < t 28			105,825	0	
SM 400A	t 38	24,19,16,15,14,13 12,11,10,9,6,3,2	15.494	86,575	1,341,393	
SS 400		19,9,6,3,2,3,2	0.446	84,155	37,533	
SPA-H		3.2	0.081	110,775	8,973	
SS400	H-700x300x13x24		10.411	100,363	1,044,874	
TCB	BOLT	(pcs)	10,192	122.5	1,248,520	
Miscellaneous	5% of Above				1,109,642	(Yen/ton)
<b>Material Cost</b>			<b>213.928</b>		23,302,473	108,927
<b>Unit Cost (Rp/ton)</b>						<b>8,169,503</b>
<b>Freight(Japan~Jakarta)</b>			213.928	20,000	4,278,560	(Yen/ton)
Sub Total					27,581,033	128,927
<b>Transportation Cost(Port~Factory)</b>			(Trip)	(Rp)	(Rp)	
Trailler Truck 20t			11.0	1,500,000	16,500,000	
				(Yen)	(Yen)	
			11.0	20,000	220,000	
						(Yen/ton)
<b>Total</b>			<b>213.928</b>		<b>27,801,033</b>	<b>129,955</b>
						(Rp/ton)
<b>Unit Cost (Rp/ton)</b>						<b>9,746,632</b>

**STEEL BOX GIRDER MATERIAL COST**

Tble-1 (From Index Book Aug. 2006)

(Unit; Yen/ton)

Quality of Material	Classification Thickness	Used Thickness	Base Cost	Standard Extra	Dimension Extra	Special Extra	Sub Total	Ratio of Loss	Total	Scrap Unit Cost	Unit Cost of Steel
SMA 490CW-H	38 < t □ 50	44	75,000	40,500	5,000	2,000	122,500	10%	134,750	12,500	133,875
SMA 490CW	50 < t □ 100	58,56,54,52	75,000	40,500	6,000		121,500	10%	133,650	12,500	132,775
	38 < t □ 50	50,46,42	75,000	37,500	5,000		117,500	10%	129,250	12,500	128,375
SMA 490BW	38 < t □ 50	40	75,000	34,500	3,000		112,500	10%	123,750	12,500	122,875
	25 < t □ 38	38,36,32,31,30,28,27	75,000	31,500	2,000		108,500	10%	119,350	12,500	118,475
	6 < t 25	25,24,23,22,21,20,19,18,17	75,000	28,500	0		103,500	10%	113,850	12,500	112,975
SMA 490AW	6 < t 50	16,15,14,13,12,11,10,9	75,000	25,500	1,000		101,500	10%	111,650	12,500	110,775
SM 520C-H	38 < t □ 50	45	75,000	26,000	4,000	2,000	107,000	10%	117,700	12,500	116,825
SM 490YB	25 < t □ 38	40,38,36,32,31,30,29,28,27,26	75,000	19,000	2,000		96,000	10%	105,600	12,500	104,725
	t 25	25,24,23,22,21,20,19,18,17	75,000	16,000	0		91,000	10%	100,100	12,500	99,225
SM 490YA	t 25	16,15,14,13,12,11,10,9	75,000	13,000	1,000		89,000	10%	97,900	12,500	97,025
SM490A	t 50	16	75,000	12,000	0		87,000	10%	95,700	12,500	94,825
SM 490C	50 < t □ 100	58,56,54	75,000	27,000	6,000		108,000	10%	118,800	12,500	117,925
	38 < t □ 50	42	75,000	24,000	4,000		103,000	10%	113,300	12,500	112,425
SM490C-H	38 < t □ 50	44	75,000	24,000	4,000	2000	105,000	10%	115,500	12,500	114,625
SM490B	38 < t □ 50	40	75,000	21,000	3,000		99,000	10%	108,900	12,500	108,025
	25 < t □ 38	31,30	75,000	18,000	2,000		95,000	10%	104,500	12,500	103,625
SMA 400BW	25 < t 38		75,000	25,000	2,000		102,000	10%	112,200	12,500	111,325
SMA 400AW	6 t 28	24,22,19,16,15,14,13,12,11,10,9,8,6	75,000	21,000	1,000		97,000	10%	106,700	12,500	105,825
	t < 6	3.2	75,000	21,000	3,000		99,000	10%	108,900	12,500	108,025
SM 400A	t 38	24,22,19,16,15,14,13,12,11,10,9,8,6,3,2	75,000	3,500	1,000		79,500	10%	87,450	12,500	86,575
SS 400		19,17,16,15,13,12,11,10,9,8,6,3,2	75,000	1,300	1,000		77,300	10%	85,030	12,500	84,155
SPA-H	1.6 t 16	3.2	75,000	23,500	3,000		101,500	10%	111,650	12,500	110,775
SMA 400AW H	H-700x300x13x24		75,000	21,000			96,000	5%	100,800	12,500	100,363
SS 400	H-700x300x13x24		75,000	1,300			76,300	5%	80,115	12,500	79,678
	TCB M22									(pcs)	122.5

Sep. 4. 2006

**FABRICATED STEEL COPING & PORTAL COST (NAGREG)**

Nov. 7. 2006

Items	Unit	Quantity	Unit Cost			Cost			TOTAL	Remarks
			Foreign(1)	Foreigh(2)	Local	Foreign(1)	Foreign(2)	Local		
(A) Direct Cost										(Yen/ton)
(1) Material Cost	ton	134.01	9,746,632			1,306,146,150		0	1,306,146,150	129,955
(2) Fabrication Cost	ton	134.01	1,416,424	2,379,268		189,815,034	318,845,770	0	508,660,804	50,609
(3) Painting Cost	ton	134.01	3,102,948	675,228		415,826,008	90,487,288	0	506,313,297	50,376
(4) Transportation Cost	ton	134.01	0	0	672,237	0	0	90,086,443	90,086,443	8,963
Sub Total (A)						1,911,787,193	409,333,058	90,086,443	2,411,206,694	<b>(Yen/ton)</b>
										<b>239,903</b>
(B) Factory Operation Cost										
(5) Operation Cost - (1)		(2)x38%				72,129,713	121,161,392	0	193,291,105	
(6) Operation Cost - (2)		{(2)+(5)}x28.8%				75,440,087	126,722,063	0	202,162,150	<b>(Yen/ton)</b>
Sub Total (B)						147,569,800	247,883,455	0	395,453,255	<b>39,346</b>
TOTAL (A)+(B)						2,059,356,993	657,216,513	90,086,443	2,806,659,949	
OVERHEAD & PROFIT ( 10% )								280,665,995	280,665,995	
TOTAL						2,059,356,993	657,216,513	370,752,438	3,087,325,944	
<b>UNIT PRICE</b>	<b>Rp/ton</b>					15,367,189	4,904,235	2,766,603		<b>(Yen/ton)</b>
						<b>20,271,424</b>		<b>2,766,603</b>	<b>23,038,027</b>	<b>307,174</b>

(NOTE) COST ESTIMATION IS BASED ON STEEL BRIDGES COST ESTIMATION STANDARD OF JAPAN CONSTRUCTION COST INVESTIGATION ASSOCIATION  
MINISTRY OF LAND AND TRANSPORTATION OF JAPAN.

**MANDAY FOR FABRICATION OF STEEL COPING & PORTAL**

Nov. 7. 2006

	MARAK	BALARAJA	NAGREG	GEBANG	PETERONGAN	TANGGULANGIN
<b>APPLIED TOTAL MAN DAY Y'=Y*2.5 (ASIA INDEX=2.5)</b>						
<b>Y'</b>	<b>7,008.5</b>	<b>2,965.0</b>	<b>3,366.4</b>	<b>6,723.1</b>	<b>2,974.4</b>	<b>3,378.0</b>
<b>TOTAL MAN DAYS <math>Y=\{(Y1+Y2)*K+Y3+Y4\}*(1+\alpha)*(1+\beta)*(1+\gamma)*(1+\delta)+Y5</math></b>						
<b>Y (MAN DAYS)</b>	<b>2,803.4</b>	<b>1,186.0</b>	<b>1,346.6</b>	<b>2,689.3</b>	<b>1,189.7</b>	<b>1,351.2</b>
Y1	1675.4	690.2	769.7	1,531.4	692.8	779.2
Y2	94.4	48.0	66.3	139.3	47.3	62.8
K	1.0	1.0	1.0	1.0	1.0	1.0
Y3	126.2	64.0	74.7	148.2	64.6	71.8
Y4	0	0	0	0	0	0
Y5	0	0	0	0	0	0
$\alpha$	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04
$\beta$	0.25	0.25	0.25	0.25	0.25	0.25
$\gamma$	0.11	0.11	0.11	0.11	0.11	0.11
$\delta$	0.11	0.11	0.11	0.11	0.11	0.11
<b>MAN DAY FOR BOX GIRDER <math>Y1=A1*a1*K1+A2*a2*K2</math></b>						
<b>Y1</b>	<b>1,675.4</b>	<b>690.2</b>	<b>769.7</b>	<b>1,531.4</b>	<b>692.8</b>	<b>779.2</b>
<b>A1</b>	<b>189</b>	<b>147</b>	<b>176</b>	<b>395</b>	<b>147</b>	<b>162</b>
<b>A2</b>	<b>2,361</b>	<b>1,248</b>	<b>1,426</b>	<b>2,879</b>	<b>1,245</b>	<b>1,433</b>
<b>a1</b>	<b>2.25</b>	<b>2.25</b>	<b>2.25</b>	<b>2.25</b>	<b>2.25</b>	<b>2.25</b>
<b>a2</b>	<b>0.31</b>	<b>0.31</b>	<b>0.31</b>	<b>0.31</b>	<b>0.31</b>	<b>0.31</b>
<b>K1</b>	<b>1.20</b>	<b>0.84</b>	<b>0.84</b>	<b>0.77</b>	<b>0.86</b>	<b>0.85</b>
<b>K2</b>	<b>1.59</b>	<b>1.07</b>	<b>0.98</b>	<b>0.95</b>	<b>1.06</b>	<b>1.06</b>
<b>X1</b>	<b>1.30</b>	<b>0.76</b>	<b>0.77</b>	<b>0.66</b>	<b>0.78</b>	<b>0.77</b>
<b>X2</b>	<b>1.69</b>	<b>1.08</b>	<b>0.98</b>	<b>0.94</b>	<b>1.07</b>	<b>1.07</b>
<b>W1</b>	<b>302,789</b>	<b>138,071</b>	<b>167,015</b>	<b>321,404</b>	<b>142,447</b>	<b>155,054</b>
<b>W2</b>	<b>134,373</b>	<b>45,297</b>	<b>47,189</b>	<b>91,122</b>	<b>44,966</b>	<b>51,511</b>
<b>MAN DAY FOR WELDING <math>Y2=B1*b1/10+B2*b2/10</math></b>						
<b>Y2</b>	<b>94.4</b>	<b>48.0</b>	<b>66.3</b>	<b>139.3</b>	<b>47.3</b>	<b>62.8</b>
<b>B1</b>	<b>67.83</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.000</b>	<b>0.00</b>
<b>B2</b>	<b>2393.14</b>	<b>1,297.82</b>	<b>1,791.25</b>	<b>3,763.56</b>	<b>1,277.62</b>	<b>1,698.43</b>
<b>b1</b>	<b>0.87</b>	<b>0.87</b>	<b>0.87</b>	<b>0.87</b>	<b>0.87</b>	<b>0.87</b>
<b>b2</b>	<b>0.37</b>	<b>0.37</b>	<b>0.37</b>	<b>0.37</b>	<b>0.37</b>	<b>0.37</b>
<b>FACTOR for SMA570 <math>K=1+Wo*K3</math></b>						
<b>K</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>Wo</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>K3</b>	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>
<b>MAN DAY FOR ASSEMBLY IN FACTORY <math>Y3=C*c*K4*(1+\epsilon)</math></b>						
<b>Y3</b>	<b>126.2</b>	<b>64.0</b>	<b>74.7</b>	<b>148.2</b>	<b>64.6</b>	<b>71.8</b>
<b>C</b>	<b>49</b>	<b>53</b>	<b>62</b>	<b>132</b>	<b>52</b>	<b>59</b>
<b>c</b>	<b>3.09</b>	<b>3.09</b>	<b>3.09</b>	<b>3.09</b>	<b>3.09</b>	<b>3.09</b>
$K4=0.82*X+0.18$	<b>1.37</b>	<b>0.64</b>	<b>0.64</b>	<b>0.60</b>	<b>0.66</b>	<b>0.65</b>
$X=W/N/w$	<b>1.45</b>	<b>0.56</b>	<b>0.56</b>	<b>0.51</b>	<b>0.58</b>	<b>0.57</b>
<b>W</b>	<b>437,162</b>	<b>183,368</b>	<b>214,204</b>	<b>412,526</b>	<b>187,413</b>	<b>206,565</b>
<b>N</b>	<b>49</b>	<b>53</b>	<b>62</b>	<b>132</b>	<b>52</b>	<b>59</b>
$\epsilon$	<b>-0.39</b>	<b>-0.39</b>	<b>-0.39</b>	<b>-0.39</b>	<b>-0.39</b>	<b>-0.39</b>
<b>MAN DAY FOR DIAPHRAGM <math>Y4=(C1*c1*K5)+(C2*c2*K5)</math></b>						
<b>Y4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>C1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>c1</b>						
<b>C2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>c2</b>						
<b>K5</b>						
<b>MAN DAY FOR ACCESSORIES Y5</b>						
<b>Y5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

(Note) Steel Box Girder Quantities are used for Mandays Estimation

**STEEL COPING & PORTAL MATERIAL COST**

**Tble-2 (NAGREG)**

(Unit: Yen)

Quality of Material	Classification Thickness	Used Thickness	Quantity (ton)	Unit Cost from Table-1	Cost (Yen)	Remarks
SMA490CW	50 < t □ 100			132,775	0	
SMA 490BW	38 < t □ 50			122,875	0	
	25 < t □ 38			118,475	0	
	6 < t 25			112,975	0	
SMA 490AW	6 < t 50			110,775	0	
SM 490YB	25 < t □ 38	38,36,30,28	13.899	104,725	1,455,573	
	t 25	24,22,21,20,18,17	91.645	99,225	9,093,475	
SM 490YA	t 25	9,10,11,12, 13,14,15,16	81.421	97,025	7,899,873	
SM490C	50 < t 100	58,56,54	0.531	117,925	62,618	
SMA 400BW	25 < t 38			111,325	0	
SMA 400AW	6 < t 28			105,825	0	
SM 400A	t 38	24,19,16,15,14,13 12,11,10,9,6,3,2	15.494	86,575	1,341,393	
SS 400		19,9,6,3,23.2	0.446	84,155	37,533	
SPA-H		3.2	0.081	110,775	8,973	
SS400	H-700x300x13x24		10.411	100,363	1,044,874	
TCB	BOLT	(pcs)	10,192	122.5	1,248,520	
Miscellaneous	5% of Above				1,109,642	(Yen/ton)
<b>Material Cost</b>			<b>213.928</b>		23,302,473	108,927
<b>Unit Cost (Rp/ton)</b>						<b>8,169,503</b>
<b>Freight(Japan~Jakarta)</b>			213.928	20,000	4,278,560	(Yen/ton)
Sub Total					27,581,033	128,927
<b>Transportation Cost(Port~Factory)</b>			(Trip)	(Rp)	(Rp)	
Trailer Truck 20t			11.0	1,500,000	16,500,000	
				(Yen)	(Yen)	
			11.0	20,000	220,000	
<b>Total</b>			<b>213.928</b>		<b>27,801,033</b>	<b>129,955</b>
<b>Unit Cost (Rp/ton)</b>						<b>9,746,632</b>

(Note) Steel Box Girder Quantities are used for Steel Coping & Portal Material Cost Estimation

**STEEL COPING & PORTAL MATERIAL COST**

Tble-1 (From Index Book Aug. 2006)

(Unit; Yen/ton)

Quality of Material	Classification Thickness	Used Thickness	Base Cost	Standard Extra	Dimension Extra	Special Extra	Sub Total	Ratio of Loss	Total	Scrap Unit Cost	Unit Cost of Steel
SMA 490CW-H	38 < t □ 50	44	75,000	40,500	5,000	2,000	122,500	10%	134,750	12,500	133,875
SMA 490CW	50 < t □ 100	58,56,54,52	75,000	40,500	6,000		121,500	10%	133,650	12,500	132,775
	38 < t □ 50	50,46,42	75,000	37,500	5,000		117,500	10%	129,250	12,500	128,375
SMA 490BW	38 < t □ 50	40	75,000	34,500	3,000		112,500	10%	123,750	12,500	122,875
	25 < t □ 38	38,36,32,31,30,28,27	75,000	31,500	2,000		108,500	10%	119,350	12,500	118,475
	6 < t 25	25,24,23,22,21,20,19,18,17	75,000	28,500	0		103,500	10%	113,850	12,500	112,975
SMA 490AW	6 < t 50	16,15,14,13,12,11,10,9	75,000	25,500	1,000		101,500	10%	111,650	12,500	110,775
SM 520C-H	38 < t □ 50	45	75,000	26,000	4,000	2,000	107,000	10%	117,700	12,500	116,825
SM 490YB	25 < t □ 38	40,38,36,32,31,30,29,28,27,26	75,000	19,000	2,000		96,000	10%	105,600	12,500	104,725
	t 25	25,24,23,22,21,20,19,18,17	75,000	16,000	0		91,000	10%	100,100	12,500	99,225
SM 490YA	t 25	16,15,14,13,12,11,10,9	75,000	13,000	1,000		89,000	10%	97,900	12,500	97,025
SM490A	t 50	16	75,000	12,000	0		87,000	10%	95,700	12,500	94,825
SM 490C	50 < t □ 100	58,56,54	75,000	27,000	6,000		108,000	10%	118,800	12,500	117,925
	38 < t □ 50	42	75,000	24,000	4,000		103,000	10%	113,300	12,500	112,425
SM490C-H	38 < t □ 50	44	75,000	24,000	4,000	2000	105,000	10%	115,500	12,500	114,625
SM490B	38 < t □ 50	40	75,000	21,000	3,000		99,000	10%	108,900	12,500	108,025
	25 < t □ 38	31,30	75,000	18,000	2,000		95,000	10%	104,500	12,500	103,625
SMA 400BW	25 < t 38		75,000	25,000	2,000		102,000	10%	112,200	12,500	111,325
SMA 400AW	6 t 28	24,22,19,16,15,14,13,12,11,10,9,8,6	75,000	21,000	1,000		97,000	10%	106,700	12,500	105,825
	t < 6	3.2	75,000	21,000	3,000		99,000	10%	108,900	12,500	108,025
SM 400A	t 38	24,22,19,16,15,14,13,12,11,10,9,8,6,3,2	75,000	3,500	1,000		79,500	10%	87,450	12,500	86,575
SS 400		19,17,16,15,13,12,11,10,9,8,6,3,2	75,000	1,300	1,000		77,300	10%	85,030	12,500	84,155
SPA-H	1.6 t 16	3.2	75,000	23,500	3,000		101,500	10%	111,650	12,500	110,775
SMA 400AW H	H-700x300x13x24		75,000	21,000			96,000	5%	100,800	12,500	100,363
SS 400	H-700x300x13x24		75,000	1,300			76,300	5%	80,115	12,500	79,678
	TCB M22									(pcs)	122.5

Nov. 7. 2006

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-753 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		ESTIMATE QUANTITY OF
NO. PAY ITEM	:	7.5 (3)	WORKING :
DESCRIPTION OF WORK	:	Erection of Steel Girder	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Ton	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	81.3253		4,573.9100	-	371,974.61	
2.	Skilled Labour (L03)	hour	21.6867		5,151.2000	-	111,712.77	
3.	Foreman (L04)	hour	5.4217		6,661.0400	-	36,114.07	
4.	Japanese Supervisor	hour	5.4217	0.00	450,000.00	-	2,439,759.04	
<b>SUB TOTAL OF LABOUR</b>						-	2,959,560.49	
<b>B.</b>	<b><u>MATERIALS</u></b>							
<b>SUB TOTAL FOR MATERIALS</b>						-	-	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Crawler Crane 100 T (E47)	hour	5.4217	-	1,364,802.05	-	7,399,529.19	
2.	Trailer Truck & Bogie (E32)	hour	3.2667	-	521,354.06	-	1,703,089.93	
3.	Tools	Ls	1.0000		658,975.00	-	658,975.00	
3.	Temporary Support	Ls	1.00		23,862,548.00	-	23,862,548.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	33,624,142.12	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	36,583,702.61
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	3,658,370.26
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>						-	40,242,072.87
<b>G.</b>	<b>WORKING UNIT PRICE ( F/q1 )</b>						-	1,526,691.94

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

EI-754 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:			ESTIMATE QUANTITY OF
PACKAGE CONTRACT No.	:			WORKING
PACKAGE NAME	:			TOTAL PRICE (Rp.)
PROV. / KAB /CITY	:			% TO PROJECT COST
NO. PAY ITEM	:	7.5 (4)		
DESCRIPTION OF WORK	:	Erection of Steel Coping & Portal		
UNIT OF MEASUREMENT	:	Ton		

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	162.6506		4,573.91	-	743,949.22
2.	Skilled Labour (L03)	hour	43.3735		5,151.20	-	223,425.54
3.	Foreman (L04)	hour	10.8434		6,661.04	-	72,228.14
4.	Japanese Supervisor	hour	10.8434	0.00	450,000.00	-	4,879,518.07
<b>SUB TOTAL OF LABOUR</b>						-	5,919,120.97
<b>B.</b>	<b><u>MATERIALS</u></b>						
<b>SUB TOTAL FOR MATERIALS</b>						-	-
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Crawler Crane 100 T (E47)	hour	10.8434	-	1,364,802.05	-	14,799,058.37
2.	Trailer Truck & Bogie (E32)	hour	6.9167	-	521,354.06	-	3,606,032.25
3.	Tools	Ls	1.0000		2,074,775.00	-	2,074,775.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	20,479,865.62
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	26,398,986.59
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00 % x D		-	2,639,898.66
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>					-	29,038,885.25
<b>G.</b>	<b>WORKING UNIT PRICE ( F/q1 )</b>					-	349,904.03



**THE NORTH JAVA CORRIDOR FLYOVER**  
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EI-7622 Analysis |

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	7.6.(22)	ESTIMATE QUANTITY OF WORKING :
DESCRIPTION OF WORK	:	Concrete Bored Pile Dia 1500 mm	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Ln. M	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	286.7470		4,573.91	-	1,311,554.92
2.	Skilled Labour (L03)	hour	71.6867		5,151.20	-	369,272.77
3.	Foreman (L04)	hour	23.8956		6,661.04	-	159,169.43
<b>SUB TOTAL OF LABOUR</b>						-	1,839,997.12
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	Structure Concrete Class B (E17134)	M <sup>3</sup>	64.8896	-	568,644.97	-	36,899,142.52
2	Deformed Reinforced Steel SD40 (E1734)	Kg	2,103.5044	-	8,723.78	-	18,350,509.72
3	Deformed Reinforced Steel SD34 (E1736)	Kg	9,299.0396	7,590.00	2,440.58	70,579,710.88	22,695,050.17
4	Splicing (M95)	Set	26.0000	320,250.00	2,500.00	8,326,500.00	65,000.00
5	Temporary Casing					-	-
<b>SUB TOTAL FOR MATERIALS</b>						78,906,210.88	78,009,702.41
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1	Bore Pile Machine Dia 1500 (E35)	hour	23.8956	-	704,378.80	-	16,831,541.61
2	Concr. Pump (E08)	hour	3.9090	-	335,234.64	-	1,310,436.17
3	Crane cap 16 ton (E39)	hour	1.5000	-	377,153.96	-	565,730.94
4	Excavator (E12)	hour	3.1236	-	341,927.63	-	1,068,047.04
5	Dump Truck 6 T (E37)	hour	8.5462	-	199,301.09	-	1,703,263.93
6	Tools	Ls	1.0000		50,000.00	-	50,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	21,529,019.69
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					<b>78,906,210.88</b>	<b>101,378,719.22</b>
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>					<b>-</b>	<b>18,028,493.01</b>
<b>F.</b>	<b>UNIT PRICE (D+E)</b>					<b>78,906,210.88</b>	<b>119,407,212.23</b>
<b>G.</b>	<b>WORKING UNIT PRICE ( F/p )</b>					<b>2,320,770.91</b>	<b>3,511,976.83</b>

**THE NORTH JAVA CORRIDOR FLYOVER  
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El-7623 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:			
PACKAGE CONTRACT No.	:		ESTIMATE QUANTITY OF	
PACKAGE NAME	:		WORKING	:
PROV. / KAB /CITY	:		TOTAL PRICE (Rp.)	:
NO. PAY ITEM	:	7.6.(23)	% TO PROJECT COST	:
DESCRIPTION OF WORK	:	Concrete Bored Pile Dia 1800 mm		
UNIT OF MEASUREMENT	:	Ln. M		

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	349.3976		4,573.91	-	1,598,113.13	
2.	Skilled Labour (L03)	hour	87.3494		5,151.20	-	449,954.22	
3.	Foreman (L04)	hour	29.1165		6,661.04	-	193,945.94	
<b>SUB TOTAL OF LABOUR</b>						-	2,242,013.29	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1	Structure Concrete Class B (EI7134)	M <sup>3</sup>	82.4480	-	568,644.97	-	46,883,616.38	
2	Deformed Reinforced Steel SD40 (EI734)	Kg	15,732.0000	-	8,723.78	-	137,242,506.96	
<b>SUB TOTAL FOR MATERIALS</b>						-	184,126,123.34	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1	Bore Pile Machine Dia 1800 (E36)	hour	29.1165	-	913,024.65	-	26,584,051.05	
2	Concr. Pump (E08)	hour	4.9667	-	335,234.64	-	1,665,024.78	
3	Crane cap 50 ton (E40)	hour	1.5000	-	905,624.48	-	1,358,436.72	
4	Excavator (E12)	hour	3.5270	-	341,927.63	-	1,205,977.68	
5	Dump Truck 6 T (E37)	hour	9.6499	-	199,301.09	-	1,923,228.30	
6	Tools	Ls	1.0000		50,000.00	-	50,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	32,786,718.53	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	219,154,855.16
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>						-	21,915,485.52
<b>F.</b>	<b>UNIT PRICE (D+E)</b>						-	241,070,340.68
<b>G.</b>	<b>WORKING UNIT PRICE ( F/p )</b>						-	8,035,678.02

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
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(ENGINEER ESTIMATE)**

EI-7626 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	7.6.(26)	ESTIMATE QUANTITY OF
DESCRIPTION OF WORK	:	Concrete Bored Pile Dia 2500 mm	WORKING
UNIT OF MEASUREMENT	:	Ln. M	TOTAL PRICE (Rp.)
			% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	313.2530		4,573.91	-	1,432,791.08
2.	Skilled Labour (L03)	hour	78.3133		5,151.20	-	403,407.23
3.	Foreman (L04)	hour	26.1044		6,661.04	-	173,882.57
<b>SUB TOTAL OF LABOUR</b>						-	2,010,080.88
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	Structure Concrete Class B (EI7134)	M <sup>3</sup>	137.8374	-	568,644.97	-	78,380,531.49
2	Deformed Reinforced Steel SD40 (EI734)	Kg	4,784.7438	-	8,723.78	-	41,741,052.15
3	Deformed Reinforced Steel SD34t (EI736)	Kg	15,709.6322	7,590.00	2,440.58	119,236,108.69	38,340,614.25
4	Splicing (M95)	set	60.0000	320,250.00	2,500.00	19,215,000.00	150,000.00
<b>SUB TOTAL FOR MATERIALS</b>						138,451,108.69	158,612,197.89
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1	Bore Pile Machine Dia 2500 (E36)	hour	26.1044	-	913,024.65	-	23,833,976.81
2	Concr. Pump (E08)	hour	8.3035	-	335,234.64	-	2,783,606.25
3	Crane cap 50 ton (E40)	hour	2.5000	-	905,624.48	-	2,264,061.20
4	Excavator (E12)	hour	4.5515	-	341,927.63	-	1,556,297.11
5	Dump Truck 6 T (E37)	hour	12.4530	-	199,301.09	-	2,481,898.87
6	Tools	Ls	1.0000		50,000.00	-	50,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	32,969,840.24
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					138,451,108.69	193,592,119.01
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>					-	33,204,322.77
<b>F.</b>	<b>UNIT PRICE (D+E)</b>					138,451,108.69	226,796,441.78
<b>G.</b>	<b>WORKING UNIT PRICE ( F/p )</b>					5,325,042.64	8,722,940.07

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

**UNIT PRICE ANALYSIS**

EI-7627 Aanalysis

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	7.6 (27)	ESTIMATE QUANTITY OF
DESCRIPTION OF WORK	:	Pile Integrity Test	WORKING
UNIT OF MEASUREMENT	:	Each	TOTAL PRICE (Rp.)
			% TO PROJECT
			COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	10.0000		4,573.91	-	45,739.10
2.	Skilled Labour (L03)	hour	3.0000		5,151.20	-	15,453.60
3.	Foreman (L04)	hour	1.0000		6,661.04	-	6,661.04
<b>SUB TOTAL OF LABOUR</b>						-	67,853.74
<b>B.</b>	<b><u>MATERIALS</u></b>						
<b>SUB TOTAL FOR MATERIALS</b>						-	-
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Computer Test	hour	1.0000		1,100,000.00	-	1,100,000.00
2.	Tools	Ls	1.0000		50,000.00	-	50,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	1,150,000.00
<b>D.</b>	TOTAL PRICE FOR LABOUR, MATERIALS & EQUIPMENT ( A + B + C )					-	1,217,853.74
<b>E.</b>	OVERHEAD & PROFIT 10.00 % x D					-	121,785.37
<b>F.</b>	WORKING UNIT PRICE ( D + E )					-	1,339,639.11

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

**UNIT PRICE ANALYSIS**

EI-SS7628 Aanalysis

PROJECT	:	ESTIMATE QUNTYTY OF
PACKAGE CONTRACT No.	:	WORKING
PACKAGE NAME	:	TOTAL PRICE (Rp.)
PROV. / KAB /CITY	:	% TO PROJECT COST
NO. PAY ITEM	: SS7.6 (28)	
DESCRIPTION OF WORK	: Pile Dynamic Analysis dia 1500 mm, L = 40 m	
UNIT OF MEASUREMENT	: Each	

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	12.0000		4,573.91	-	54,886.92
2.	Skilled Labour (L03)	hour	3.0000		5,151.20	-	15,453.60
3	Foreman (L04)	hour	1.0000		6,661.04	-	6,661.04
<b>SUB TOTAL OF LABOUR</b>						-	77,001.56
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	Hammer Test	LS	1.0000	-	10,000,000.00	-	10,000,000.00
<b>SUB TOTAL FOR MATERIALS</b>						-	10,000,000.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Crane cap 100 ton (E41)	hour	2.4096	-	1,316,477.43	-	3,172,234.77
2.	Computer test	ls	1.0000	-	6,000,000.00	-	6,000,000.00
3	Trailer Truck 40 Ton (E51)	hour	1.8346	-	686,984.34	-	1,260,318.93
4	Tools	ls	1.0000		100,000.00	-	100,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	10,532,553.70
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	<b>20,609,555.26</b>
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	<b>2,060,955.53</b>
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	<b>22,670,510.79</b>

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

**UNIT PRICE ANALYSIS**

I-SS7629a Analays

PROJECT	:	ESTIMATE QUNTITY OF
PACKAGE CONTRACT No.	:	WORKING
PACKAGE NAME	:	TOTAL PRICE (Rp.)
PROV. / KAB /CITY	:	% TO PROJECT COST
NO. PAY ITEM	: SS7.6 (29)a	
DESCRIPTION OF WORK	: Pile Dynamic Analysis dia 1800 mm, L = 45 m	
UNIT OF MEASUREMENT	: Each	

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	12.0000		4,573.91	-	54,886.92
2.	Skilled Labour (L03)	hour	3.0000		5,151.20	-	15,453.60
3	Foreman (L04)	hour	1.0000		6,661.04	-	6,661.04
<b>SUB TOTAL OF LABOUR</b>						-	77,001.56
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	Hammer Test	LS	1.0000	-	12,500,000.00	-	12,500,000.00
<b>SUB TOTAL FOR MATERIALS</b>						-	12,500,000.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Crane cap 100 ton (E41)	hour	2.4096	-	1,316,477.43	-	3,172,234.77
2.	Computer test	ls	1.0000	-	6,000,000.00	-	6,000,000.00
3	Trailer Truck 40 Ton (E51)	hour	1.8346	-	686,984.34	-	1,260,318.93
4	Tools	ls	1.0000	-	100,000.00	-	100,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	10,532,553.70
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	<b>23,109,555.26</b>
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	<b>2,310,955.53</b>
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	<b>25,420,510.79</b>

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

**UNIT PRICE ANALYSIS**

I-SS7629b Analysis

PROJECT	:	ESTIMATE QUNTY OF
PACKAGE CONTRACT No.	:	WORKING
PACKAGE NAME	:	TOTAL PRICE (Rp.)
PROV. / KAB /CITY	:	% TO PROJECT COST
NO. PAY ITEM	: SS7.6 (29)b	
DESCRIPTION OF WORK	: Pile Dynamic Analysis dia 2500 mm, L = 50 m	
UNIT OF MEASUREMENT	: Each	

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	12.0000		4,573.91	-	54,886.92
2.	Skilled Labour (L03)	hour	3.0000		5,151.20	-	15,453.60
3	Foreman (L04)	hour	1.0000		6,661.04	-	6,661.04
<b>SUB TOTAL OF LABOUR</b>						-	77,001.56
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	Hammer Test	LS	1.0000	-	15,000,000.00	-	15,000,000.00
<b>SUB TOTAL FOR MATERIALS</b>						-	15,000,000.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Crane cap 100 ton (E41)	hour	2.4096	-	1,316,477.43	-	3,172,234.77
2.	Computer test	ls	1.0000	-	6,000,000.00	-	6,000,000.00
3	Trailer Truck 40 Ton (E51)	hour	1.8346	-	686,984.34	-	1,260,318.93
4	Tools	ls	1.0000		100,000.00	-	100,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	10,532,553.70
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	<b>25,609,555.26</b>
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	<b>2,560,955.53</b>
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	<b>28,170,510.79</b>

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

EI-791 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB / CITY	:		
NO. PAY ITEM	:	7.9.(1)	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORK	:	Stone Masonry (Mechanical)	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Cu.M	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	5.4618		4,573.91	-	24,982.00	
2.	Skilled Labour (L03)	hour	1.3655		5,151.20	-	7,033.77	
3.	Foreman (L04)	hour	0.6827		6,661.04	-	4,547.70	
<b>SUB TOTAL OF LABOUR</b>						0.00	36,563.47	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Boulder/River Stone (M07)	M3	1.1700	0.00	100,600.00	-	117,702.00	
2.	Cement (PC) (M12)	Kg	176.0000	0.00	840.00	-	147,840.00	
3.	Sand (M06)	M3	0.3961	0.00	120,600.00	-	47,770.60	
<b>SUB TOTAL FOR MATERIALS</b>						0.00	313,312.60	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Conc. Mixer (E06)	hour	0.6827	0.00	60,891.11	-	41,572.24	
2.	Water Tanker (E22)	hour	0.0063	0.00	228,078.72	-	1,446.28	
3.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						0.00	44,018.52	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						0.00	393,894.59
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>						-	39,389.46
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						0.00	433,284.05



**THE NORTH JAVA CORRIDOR FLYOVER  
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**UNIT PRICE ANALYSIS**

E1-792 Analysis

PROJECT  
PACKAGE CONTRACT No.  
PACKAGE NAME  
PROV. / KAB / CITY  
NO. PAY ITEM : 7.9(2)  
DESCRIPTION OF WORK : Blinding Stone  
UNIT OF MEASUREMENT : Cu.M

ESTIMATE QUANTITY OF WORKING  
TOTAL PRICE (Rp.)  
% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. LABOUR</b>							
1.	Common Labour (L02)	jam	2.8000		4,573.91	-	12,806.95
2.	Skilled Labour (L03)	jam	0.4667		5,151.20	-	2,403.89
3.	Foreman (L04)	jam	0.4667		6,661.04	-	3,108.49
<b>JUMLAH HARGA TENAGA</b>						-	18,319.33
<b>B. MATERIAL</b>							
1.	Boulder stone (M07)	M3	1.1000	-	100,600.00	-	110,660.00
<b>JUMLAH HARGA BAHAN</b>						-	110,660.00
<b>C. EQUIPMENT</b>							
1.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>JUMLAH HARGA PERALATAN</b>						-	1,000.00
<b>D. TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	128,979.33
<b>E. OVERHEAD &amp; PROFIT</b>			10.00 % x D			-	12,897.93
<b>F. WORKING UNIT PRICE ( D + E )</b>						-	141,877.26

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**UNIT PRICE ANALYSIS**

EI-7112 Analysis

PROJECT	:	
PACKAGE CONTRACT No.	:	
PACKAGE NAME	:	
PROV. / KAB /CITY	:	
NO. PAY ITEM	:	7.11 (2)
DESCRIPTION OF WORK	:	Expansion Joint Type A
UNIT OF MEASUREMENT	:	Ln.M

		ESTIMATE QUANTITY OF WORKING
		TOTAL PRICE (Rp.)
		% TO PROJECT

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	Hour	2.1538		4,573.91	-	9,851.50	
2.	Skilled Labour (L03)	Hour	1.0769		5,151.20	-	5,547.45	
3.	Foreman (L04)	Hour	0.5385		6,661.04	-	3,586.71	
<b>SUB TOTAL FOR LABOUR</b>						-	18,985.66	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Expansion Joint Type A (M216)	Ln.M	13.0000	-	1,750,000.00	-	22,750,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	22,750,000.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Cutter Machine (E09)	Hour	0.8500	-	70,806.82	-	60,185.80	
2.	Welding Machine (E28)	Hour	0.2500	-	36,525.41	-	9,131.35	
3.						-	-	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	69,317.15	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	22,838,302.81
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	2,283,830.28
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	1,932,471.78

THE NORTH JAVA CORRIDOR FLYOVER  
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**UNIT PRICE ANALYSIS**

EI-SS7114 Analysis

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	SS7.11 (4)	ESTIMATE QUNTYTY OF WORKING :
DESCRIPTION OF WORK	:	Restrainer Type A	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Set	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	3.1111		4,573.91	-	14,229.94
2.	Skilled Labour (L03)	hour	0.7778		5,151.20	-	4,006.49
3	Foreman (L04)	hour	0.7778		6,661.04	-	5,180.81
<b>SUB TOTAL OF LABOUR</b>						-	23,417.24
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	Falling Prevention Device Type A (M42)	each	1.0000	43,512,000.00	125,000.00	43,512,000.00	125,000.00
<b>SUB TOTAL FOR MATERIALS</b>						43,512,000.00	125,000.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.0105	-	289,980.98	-	3,057.03
2.	Hidroulic Jack (E25)	hour	1.0000	-	85,843.12	-	85,843.12
3	Tools	LS	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	89,900.15
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					43,512,000.00	238,317.39
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	4,375,031.74
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>					43,512,000.00	4,613,349.13

THE NORTH JAVA CORRIDOR FLYOVER  
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**UNIT PRICE ANALYSIS**

EI-SS7115 Analysis

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB / CITY	:		
NO. PAY ITEM	:	SS7.11 (5)	ESTIMATE QUNTITY OF WORKING :
DESCRIPTION OF WORK	:	Restrainer type B	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Set	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	3.1111		4,573.91	-	14,229.94
2.	Skilled Labour (L03)	hour	0.7778		5,151.20	-	4,006.49
3	Foreman (L04)	hour	0.7778		6,661.04	-	5,180.81
<b>SUB TOTAL OF LABOUR</b>						-	23,417.24
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	Falling Prevention Device Type B (M43)	each	1.0000	33,339,750.00	125,000.00	33,339,750.00	125,000.00
<b>SUB TOTAL FOR MATERIALS</b>						33,339,750.00	125,000.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.0105	-	289,980.98	-	3,057.03
2.	Hidroulic Jack (E25)	hour	1.0000	-	85,843.12	-	85,843.12
3	Tools	LS	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	89,900.15
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					33,339,750.00	238,317.39
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	3,357,806.74
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>					33,339,750.00	3,596,124.13

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

**UNIT PRICE ANALYSIS**

EI-SS7116 Analysis

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB / CITY	:		
NO. PAY ITEM	:	SS7.11 (6)	ESTIMATE QUANTITY OF
DESCRIPTION OF WORK	:	Stopper for Steel Girder	WORKING
UNIT OF MEASUREMENT	:	Set	TOTAL PRICE (Rp.)
			% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	3.1111		4,573.91	-	14,229.94
2.	Skilled Labour (L03)	hour	0.7778		5,151.20	-	4,006.49
3	Foreman (L04)	hour	0.7778		6,661.04	-	5,180.81
<b>SUB TOTAL OF LABOUR</b>						-	23,417.24
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	Falling Prevention Device Type C (M39)	each	1.0000	90,112,500.00	125,000.00	90,112,500.00	125,000.00
<b>SUB TOTAL FOR MATERIALS</b>						90,112,500.00	125,000.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.0105	-	289,980.98	-	3,057.03
2.	Hydraulic Jack (E25)	hour	1.0000	-	85,843.12	-	85,843.12
3	Tools	LS	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	89,900.15
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					90,112,500.00	238,317.39
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	9,035,081.74
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>					90,112,500.00	9,273,399.13

**THE NORTH JAVA CORRIDOR FLYOVER  
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**UNIT PRICE ANALYSIS**

EI-7122 Analysis

PROJECT	:	ESTIMATE QUANTITY OF
PACKAGE CONTRACT No.	:	WORKING
PACKAGE NAME	:	TOTAL PRICE (Rp.)
PROV. / KAB / CITY	:	% TO PROJECT COST
NO. PAY ITEM	: 7.12 (2)	:
DESCRIPTION OF WORK	: Elastomeric Bearing Pad Type -1 (470x370x95)	:
UNIT OF MEASUREMENT	: Each	:

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	1.4000		4,573.91	-	6,403.47
2.	Skilled Labour (L03)	hour	0.7000		5,151.20	-	3,605.84
3.	Foreman (L04)	hour	0.7000		6,661.04	-	4,662.73
<b>SUB TOTAL OF LABOUR</b>						-	14,672.04
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Elastomeric Bearing Pad Type -1 (470x370x95) mm (M50)	Each	1.0000	7,368,000.00	4,000.00	7,368,000.00	4,000.00
2.	Epoxy Mortar on Site (M80)	kg	4.0000	-	20,000.00	-	80,000.00
<b>SUB TOTAL FOR MATERIALS</b>						7,368,000.00	84,000.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.0065	-	289,980.98	-	1,892.45
2.	Tools	ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	2,892.45
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					7,368,000.00	101,564.49
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	746,956.45
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					7,368,000.00	848,520.94

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
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**UNIT PRICE ANALYSIS**

EI-7122a Analysis

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	7.12 (2)a	ESTIMATE QUNTYTY OF WORKING :
DESCRIPTION OF WORK	:	Elastomeric Bearing Pad Type - 2 (520x420x95)	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Each	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	1.4000		4,573.91	-	6,403.47
2.	Skilled Labour (L03)	hour	0.7000		5,151.20	-	3,605.84
3.	Foreman (L04)	hour	0.7000		6,661.04	-	4,662.73
<b>SUB TOTAL OF LABOUR</b>						-	14,672.04
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Elastomeric Bearing Pad Type -2 (520x420x95) mm (M51)	Each	1.0000	9,247,500.00	5,000.00	9,247,500.00	5,000.00
2.	Epoxy Mortar on Site (M80)	kg	4.0000	-	20,000.00	-	80,000.00
<b>SUB TOTAL FOR MATERIALS</b>						9,247,500.00	85,000.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.0065	-	289,980.98	-	1,892.45
2.	Tools	ls	1.0000		1,000.00	-	1,000.00
3.							
<b>SUB TOTAL FOR EQUIPMENT</b>						-	2,892.45
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					9,247,500.00	102,564.49
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	935,006.45
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					9,247,500.00	1,037,570.94

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**UNIT PRICE ANALYSIS**

EI-7122b Analysis

PROJECT	:	ESTIMATE QUANTITY OF
PACKAGE CONTRACT No.	:	WORKING
PACKAGE NAME	:	TOTAL PRICE (Rp.)
PROV. / KAB /CITY	:	% TO PROJECT COST
NO. PAY ITEM	: 7.12 (2)b	
DESCRIPTION OF WORK	: Elastomeric Bearing Pad Type -3 (570x570x133)	
UNIT OF MEASUREMENT	: Set	

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	1.7500		4,573.91	-	8,004.34
2.	Skilled Labour (L03)	hour	0.8750		5,151.20	-	4,507.30
3.	Foreman (L04)	hour	0.8750		6,661.04	-	5,828.41
<b>SUB TOTAL OF LABOUR</b>						-	18,340.05
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Elastomeric Bearing Pad Type -3 (570x570x133) (M52)	Each	1.0000	18,774,600.00	27,000.00	18,774,600.00	27,000.00
2.	Epoxy Mortar on Site (M80)	Kg	5.0000	-	20,000.00	-	100,000.00
<b>SUB TOTAL FOR MATERIALS</b>						18,774,600.00	127,000.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.0045	-	289,980.98	-	1,310.16
2.	Tools	ls	1.0000		1,000.00	-	1,000.00
3.							
<b>SUB TOTAL FOR EQUIPMENT</b>						-	2,310.16
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					18,774,600.00	147,650.21
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	1,892,225.02
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					18,774,600.00	2,039,875.23



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**UNIT PRICE ANALYSIS**

EI-7122c Analysis

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	7.12 (2)c	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORK	:	Elastomeric Bearing Pad Type -4 (570x570x133)	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Set	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	1.7500		4,573.91	-	8,004.34
2.	Skilled Labour (L03)	hour	0.8750		5,151.20	-	4,507.30
3	Foreman (L04)	hour	0.8750		6,661.04	-	5,828.41
<b>SUB TOTAL OF LABOUR</b>						-	18,340.05
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	Elastomeric Bearing Pad Type -4 (570x570x133) (M53)	Each	1.0000	14,568,000.00	22,500.00	14,568,000.00	22,500.00
2	Epoxy Mortar on Site (M80)	Kg	5.0000	-	20,000.00	-	100,000.00
<b>SUB TOTAL FOR MATERIALS</b>						14,568,000.00	122,500.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.0045	-	289,980.98	-	1,310.16
2.	Tools	ls	1.0000		1,000.00	-	1,000.00
3							
<b>SUB TOTAL FOR EQUIPMENT</b>						-	2,310.16
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					14,568,000.00	143,150.21
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	1,471,115.02
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					14,568,000.00	1,614,265.23

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**UNIT PRICE ANALYSIS**

EI-7127a Analysis

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	7.12 (7)a	ESTIMATE QUANTITY OF WORKING :
DESCRIPTION OF WORK	:	Mechanical Bearing For Steel Girder Type - A (Moved)	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Set	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	4.2000		4,573.91	-	19,210.42
2.	Skilled Labour (L03)	hour	1.4000		5,151.20	-	7,211.68
3	Foreman (L04)	hour	1.4000		6,661.04	-	9,325.46
<b>SUB TOTAL OF LABOUR</b>						-	35,747.56
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	Mechanical Bearing for Steel Girc Type - A ( Dia 485 x 69.5 ) (M48)	Each	1.0000	70,462,500.00	37,500.00	70,462,500.00	37,500.00
2	Epoxy Mortar on Site (M80)	Kg	5.0000	-	20,000.00	-	100,000.00
<b>SUB TOTAL FOR MATERIALS</b>						70,462,500.00	137,500.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.0107	-	289,980.98	-	3,093.42
2.	Tools	ls	1.0000		1,000.00	-	1,000.00
3							
<b>SUB TOTAL FOR EQUIPMENT</b>						-	4,093.42
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					70,462,500.00	177,340.98
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	7,063,984.10
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					70,462,500.00	7,241,325.08

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

**UNIT PRICE ANALYSIS**

EI-7127b Analysis

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	7.12 (7)b	ESTIMATE QUNTYTY OF WORKING :
DESCRIPTION OF WORK	:	Mechanical Bearing For Steel Girder Type - B (Moved)	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Set	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	4.2000		4,573.91	-	19,210.42
2.	Skilled Labour (L03)	hour	1.4000		5,151.20	-	7,211.68
3	Foreman (L04)	hour	1.4000		6,661.04	-	9,325.46
<b>SUB TOTAL OF LABOUR</b>						-	35,747.56
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	Mechanical Bearing for Steel Girder Type - B ( Dia 400 x 65.5 ) (M48)	Each	1.0000	52,140,000.00	37,500.00	52,140,000.00	37,500.00
2	Epoxy Mortar on Site (M80)	Kg	5.0000	-	20,000.00	-	100,000.00
<b>SUB TOTAL FOR MATERIALS</b>						52,140,000.00	137,500.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.0107	-	289,980.98	-	3,093.42
2.	Tools	ls	1.0000		1,000.00	-	1,000.00
3							
<b>SUB TOTAL FOR EQUIPMENT</b>						-	4,093.42
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					52,140,000.00	177,340.98
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	5,231,734.10
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					52,140,000.00	5,409,075.08

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

**UNIT PRICE ANALYSIS**

EI-7127c Analysis

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	7.12 (7)c	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORK	:	Mechanical Bearing For Steel Girder Type - C (Fixed)	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Set	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	4.2000		4,573.91	-	19,210.42
2.	Skilled Labour (L03)	hour	1.4000		5,151.20	-	7,211.68
3	Foreman (L04)	hour	1.4000		6,661.04	-	9,325.46
<b>SUB TOTAL OF LABOUR</b>						-	35,747.56
<b>B.</b>	<b><u>MATERIALS</u></b>						
1	Mechanical Bearing for Steel Girc (M227) Type - C ( Dia 680 x 88.0 )	Each	1.0000	129,915,000.00	37,500.00	129,915,000.00	37,500.00
2	Epoxy Mortar on Site (M80)	Kg	5.0000	-	20,000.00	-	100,000.00
<b>SUB TOTAL FOR MATERIALS</b>						129,915,000.00	137,500.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.0107	-	289,980.98	-	3,093.42
2.	Tools	ls	1.0000		1,000.00	-	1,000.00
3							
<b>SUB TOTAL FOR EQUIPMENT</b>						-	4,093.42
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					129,915,000.00	177,340.98
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	13,009,234.10
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					129,915,000.00	13,186,575.08

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

**UNIT PRICE ANALYSIS**

EI-7127d Analysis

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	7.12 (7)d	ESTIMATE QUANTITY OF WORKING :
DESCRIPTION OF WORK	:	Mechanical Bearing For Steel Girder Type - D (Fixed)	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Set	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	4.2000		4,573.91	-	19,210.42
2.	Skilled Labour (L03)	hour	1.4000		5,151.20	-	7,211.68
3.	Foreman (L04)	hour	1.4000		6,661.04	-	9,325.46
<b>SUB TOTAL OF LABOUR</b>						-	35,747.56
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Mechanical Bearing for Steel Girc (M228) Type - D ( Dia 490 x 69.0 )	Each	1.0000	184,147,500.00	37,500.00	184,147,500.00	37,500.00
2.	Epoxy Mortar on Site (M80)	Kg	5.0000	-	20,000.00	-	100,000.00
<b>SUB TOTAL FOR MATERIALS</b>						184,147,500.00	137,500.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.0107	-	289,980.98	-	3,093.42
2.	Tools	ls	1.0000		1,000.00	-	1,000.00
3.							
<b>SUB TOTAL FOR EQUIPMENT</b>						-	4,093.42
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					184,147,500.00	177,340.98
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	18,432,484.10
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					184,147,500.00	18,609,825.08

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

**UNIT PRICE ANALYSIS**

EI-7127e Analysis

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	7.12 (7)e	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORK	:	Mechanical Bearing For Steel Girder Type - E (Fixed)	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Set	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	4.2000		4,573.91	-	19,210.42
2.	Skilled Labour (L03)	hour	1.4000		5,151.20	-	7,211.68
3.	Foreman (L04)	hour	1.4000		6,661.04	-	9,325.46
<b>SUB TOTAL OF LABOUR</b>						-	35,747.56
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Mechanical Bearing for Steel Girc (M229) Type - E ( Dia 910 x 110.0 )	Each	1.0000	311,160,000.00	37,500.00	311,160,000.00	37,500.00
2.	Epoxy Mortar on Site (M80)	Kg	6.0000	-	20,000.00	-	120,000.00
<b>SUB TOTAL FOR MATERIALS</b>						311,160,000.00	157,500.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.0107	-	289,980.98	-	3,093.42
2.	Tools	ls	1.0000		1,000.00	-	1,000.00
3.							
<b>SUB TOTAL FOR EQUIPMENT</b>						-	4,093.42
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					311,160,000.00	197,340.98
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	31,135,734.10
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					311,160,000.00	31,333,075.08

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

**UNIT PRICE ANALYSIS**

EI-7127f Analysis

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	7.12 (7)f	ESTIMATE QUANTITY OF WORKING :
DESCRIPTION OF WORK	:	Mechanical Bearing For Steel Girder Type - F (Fixed)	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Set	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	4.2000		4,573.91	-	19,210.42
2.	Skilled Labour (L03)	hour	1.4000		5,151.20	-	7,211.68
3.	Foreman (L04)	hour	1.4000		6,661.04	-	9,325.46
<b>SUB TOTAL OF LABOUR</b>						-	35,747.56
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Mechanical Bearing for Steel Girc (M230) Type - F ( Dia 730 x 93.0 )	Each	1.0000	26,422,500.00	37,500.00	26,422,500.00	37,500.00
2.	Epoxy Mortar on Site (M80)	Kg	6.0000	-	20,000.00	-	120,000.00
<b>SUB TOTAL FOR MATERIALS</b>						26,422,500.00	157,500.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.0107	-	289,980.98	-	3,093.42
2.	Tools	ls	1.0000		1,000.00	-	1,000.00
3.							
<b>SUB TOTAL FOR EQUIPMENT</b>						-	4,093.42
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					26,422,500.00	197,340.98
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	2,661,984.10
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					26,422,500.00	2,859,325.08

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

**UNIT PRICE ANALYSIS**

EI-713 Analysis

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	7.13	ESTIMATE QUANTITY OF
DESCRIPTION OF WORK	:	Steel Bridge Railing	WORKING
UNIT OF MEASUREMENT	:	Ln.m	TOTAL PRICE (Rp.)
			% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	4.2000		4,573.91	-	19,210.42	
2.	Skilled Labour (L03)	hour	1.4000		5,151.20	-	7,211.68	
3.	Foreman (L04)	hour	1.4000		6,661.04	-	9,325.46	
<b>SUB TOTAL OF LABOUR</b>						-	35,747.56	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Fabricated Iron Steel Bridge Iron (M237)	Ls	1.0000	-	407,500.00	-	407,500.00	
2.	Anchor Dia 25 x 200 mm (M238)	Each	4.0000	-	25,000.00	-	100,000.00	
3.	Bolt (M239)	Each	8.0000	-	5,500.00	-	44,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	551,500.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.0107	-	289,980.98	-	3,093.42	
2.	Tools	ls	1.0000		15,000.00	-	15,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	18,093.42	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	605,340.98
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	60,534.10
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>						-	665,875.08
<b>G.</b>	<b>WORKING UNIT PRICE ( F/1.475)</b>						-	451,440.73



**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

El-714 Analysis

**UNIT PRICE ANALYSIS**

PROJECT		ESTIMATE QUANTITY OF	
PACKAGE CONTRACT No.		WORKING	:
PACKAGE NAME		TOTAL PRICE (Rp.)	:
PROV. / KAB / CITY		% TO PROJECT COST	:
NO. PAY ITEM	: 7.14		
DESCRIPTION OF WORK	: Bridge Name Plate		
UNIT OF MEASUREMENT	: Each		

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	hour	14.0000		4,573.91	-	64,034.74
2.	Skilled Labour (L03)	hour	7.0000		5,151.20	-	36,058.40
3.	Foreman (L04)	hour	7.0000		6,661.04		
<b>SUB TOTAL FOR LABOUR</b>						-	100,093.14
<b>B.</b>	<b><u>MATERIAL</u></b>						
1.	Marmer (M79)	Each	1.0000	-	1,000,000.00	-	1,000,000.00
2.	Cement (M12)	kg	20.0000	-	840.00	-	16,800.00
<b>SUB TOTAL FOR MATERIALS</b>						-	1,016,800.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tools	LS	1.0000		25,000.00	-	25,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	25,000.00
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	1,141,893.14
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	114,189.31
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	1,256,082.45

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

EI-71511 Analysis

**UNIT PRICE ANALYSIS**

PROJECT			
PACKAGE CONTRACT No.		ESTIMATE QUNTITY OF	
PACKAGE NAME		WORKING	:
PROV. / KAB /CITY		TOTAL PRICE (Rp.)	:
NO. PAY ITEM	: 7.15 (11)	% TO PROJECT COST	:
DESCRIPTION OF WORK	: Demolition of Existing Hedge or Fence		
UNIT OF MEASUREMENT	: Ln. M		

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common labour (L02)	hour	0.2000		4,573.91	-	914.78	
2.	Foreman (L04)	hour	0.0500		6,661.04	-	333.05	
<b>SUB TOTAL FOR LABOUR</b>						-	1,247.83	
<b>B.</b>	<b><u>MATERIALS</u></b>							
<b>SUB TOTAL FOR MATERIALS</b>						-	-	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Compressor (E05)	hour	0.0500	-	124,448.69	-	6,222.43	
2.	Jack Hammer (E24)	hour	0.0500	-	22,181.13	-	1,109.06	
3.	Wheel Loader (E16)	hour	0.0500	-	271,827.37	-	13,591.37	
4.	Dump Truck 6 T (E37)	hour	0.0235	-	199,301.09	-	4,682.38	
5.	Tools	ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	26,605.24	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	27,853.07
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00 % x D		-	2,785.31	
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	30,638.38

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

EI-71512 Analysis

**UNIT PRICE ANALYSIS**

PROJECT  
PACKAGE CONTRACT No.  
PACKAGE NAME  
PROV. / KAB / CITY  
NO. PAY ITEM  
DESCRIPTION OF WORK  
UNIT OF MEASUREMENT

: 7.15 (12)  
: Demolition of Concrete Side Walk  
: Sq. M

ESTIMATE QUNTIY OF  
WORKING :  
TOTAL PRICE (Rp.) :  
% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common labour (L02)	hour	0.0800		4,573.91	-	365.91
2.	Foreman (L04)	hour	0.0400		6,661.04	-	266.44
<b>SUB TOTAL FOR LABOUR</b>						-	632.35
<b>B.</b>	<b><u>MATERIALS</u></b>						
<b>SUB TOTAL FOR MATERIALS</b>						-	-
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Compressor (E05)	hour	0.0400	-	124,448.69	-	4,977.95
2.	Jack Hammer (E24)	hour	0.0400	-	22,181.13	-	887.25
3.	Wheel Loader (E16)	hour	0.0400	-	271,827.37	-	10,873.09
4.	Dump Truck 6 T (E37)	hour	0.0352	-	199,301.09	-	7,023.56
5.	Tools	ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	24,761.85
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	25,394.20
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00 % x D		-	2,539.42
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	27,933.62

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

EI-71510 Analysis

**UNIT PRICE ANALYSIS**

PROJECT  
 PACKAGE CONTRACT No.  
 PACKAGE NAME  
 PROV. / KAB /CITY  
 NO. PAY ITEM  
 DESCRIPTION OF WORK  
 UNIT OF MEASUREMENT

: 7.15 (10)  
 : Demolition of existing Rigid Pavement  
 : Sq.M

ESTIMATE QUANTITY OF  
 WORKING :  
 TOTAL PRICE (Rp.) :  
 % TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common labour (L02)	hour	0.6000		4,573.91	-	2,744.35	
2.	Foreman (L04)	hour	0.0600		6,661.04	-	399.66	
<b>SUB TOTAL FOR LABOUR</b>						-	3,144.01	
<b>B.</b>	<b><u>MATERIALS</u></b>							
<b>SUB TOTAL FOR MATERIALS</b>						-	-	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Compressor (E05)	hour	0.0600	-	124,448.69	-	7,466.92	
2.	Jack Hammer (E24)	hour	0.0600	-	22,181.13	-	1,330.87	
3.	Wheel Loader (E16)	hour	0.0600	-	271,827.37	-	16,309.64	
4.	Dump Truck 6 T (E37)	hour	0.0316	-	199,301.09	-	6,303.20	
5.	Tools	ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	32,410.63	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	35,554.64
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00 % x D			-	3,555.46
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	39,110.10

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

EI-71511 Analysis

**UNIT PRICE ANALYSIS**

PROJECT  
PACKAGE CONTRACT No.  
PACKAGE NAME  
PROV. / KAB / CITY  
NO. PAY ITEM  
DESCRIPTION OF WORK  
UNIT OF MEASUREMENT

: 7.15 (11)  
: Demolition of Existing Hedge or Fence  
: Ln. M

ESTIMATE QUNTIY OF  
WORKING :  
TOTAL PRICE (Rp.) :  
% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common labour (L02)	hour	0.2000		4,573.91	-	914.78	
2.	Foreman (L04)	hour	0.0500		6,661.04	-	333.05	
<b>SUB TOTAL FOR LABOUR</b>						-	1,247.83	
<b>B.</b>	<b><u>MATERIALS</u></b>							
<b>SUB TOTAL FOR MATERIALS</b>						-	-	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Compressor (E05)	hour	0.0500	-	124,448.69	-	6,222.43	
2.	Jack Hammer (E24)	hour	0.0500	-	22,181.13	-	1,109.06	
3.	Wheel Loader (E16)	hour	0.0500	-	271,827.37	-	13,591.37	
4.	Dump Truck 6 T (E37)	hour	0.0235	-	199,301.09	-	4,682.38	
5.	Tools	ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	26,605.24	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	27,853.07
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00 % x D		-	2,785.31	
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	30,638.38

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

EI-71512 Analysis

**UNIT PRICE ANALYSIS**

PROJECT  
PACKAGE CONTRACT No.  
PACKAGE NAME  
PROV. / KAB / CITY  
NO. PAY ITEM  
DESCRIPTION OF WORK  
UNIT OF MEASUREMENT

: 7.15 (12)  
: Demolition of Concrete Side Walk  
: Sq. M

ESTIMATE QUNTIY OF  
WORKING :  
TOTAL PRICE (Rp.) :  
% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common labour (L02)	hour	0.0800		4,573.91	-	365.91
2.	Foreman (L04)	hour	0.0400		6,661.04	-	266.44
<b>SUB TOTAL FOR LABOUR</b>						-	632.35
<b>B.</b>	<b><u>MATERIALS</u></b>						
<b>SUB TOTAL FOR MATERIALS</b>						-	-
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Compressor (E05)	hour	0.0400	-	124,448.69	-	4,977.95
2.	Jack Hammer (E24)	hour	0.0400	-	22,181.13	-	887.25
3.	Wheel Loader (E16)	hour	0.0400	-	271,827.37	-	10,873.09
4.	Dump Truck 6 T (E37)	hour	0.0352	-	199,301.09	-	7,023.56
5.	Tools	ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	24,761.85
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	25,394.20
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00 % x D		-	2,539.42
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	27,933.62

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

EI-71513 Analysis

**UNIT PRICE ANALYSIS**

PROJECT  
PACKAGE CONTRACT No.  
PACKAGE NAME  
PROV. / KAB / CITY  
NO. PAY ITEM  
DESCRIPTION OF WORK  
UNIT OF MEASUREMENT

: 7.15 (13)  
: Demolition of Concrete Curb  
: Ln. M

ESTIMATE QUNTIY OF  
WORKING :  
TOTAL PRICE (Rp.) :  
% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common labour (L02)	hour	0.1600		4,573.91	-	731.83	
2.	Foreman (L04)	hour	0.0200		6,661.04	-	133.22	
<b>SUB TOTAL FOR LABOUR</b>						-	865.05	
<b>B.</b>	<b><u>MATERIALS</u></b>							
<b>SUB TOTAL FOR MATERIALS</b>						-	-	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Compressor (E05)	hour	0.0200	-	124,448.69	-	2,488.97	
2.	Jack Hammer (E24)	hour	0.0200	-	22,181.13	-	443.62	
3.	Wheel Loader (E16)	hour	0.0200	-	271,827.37	-	5,436.55	
4.	Dump Truck 6 T (E37)	hour	0.0235	-	199,301.09	-	4,682.38	
5.	Tools	ls	1.0000		500.00	-	500.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	13,551.52	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	14,416.57
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00 % x D		-	1,441.66	
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	15,858.23

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

EI-7162 Analysis

**UNIT PRICE ANALYSIS**

PROJECT  
PACKAGE CONTRACT No.  
PACKAGE NAME  
PROV. / KAB / CITY  
NO. PAY ITEM : 7.16 (2)  
DESCRIPTION OF WORK : Concrete Pavement (t=270 mm)  
UNIT OF MEASUREMENT : Sq. M

ESTIMATE QUANTITY OF  
WORKING :  
TOTAL PRICE (Rp.) :  
% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. LABOUR</b>							
1.	Common Labour (L02)	hour	49.0000		4,573.91	-	224,121.59
2.	Skilled Labour (L03)	hour	14.0000		5,151.20	-	72,116.80
3.	Foremen (L04)	hour	7.0000		6,661.04	-	46,627.28
<b>SUB TOTAL FOR LABOUR</b>						-	342,865.67
<b>B. MATERIAL</b>							
1	Curing Compound (M76)	Kg	20.0000	-	14,850.00	-	297,000.00
2	Concrete Class B (EI-7134)	M3	27.0000	-	648,726.01	-	17,515,602.22
3	Reinforced (M14)	M3	650.0000	-	5,900.00	-	3,835,000.00
4	Joint Sealant (M240)	Ln.M	20.0000	-	3,500.00	-	70,000.00
<b>SUB TOTAL FOR MATERIALS</b>						-	21,717,602.22
<b>C. EQUIPMENT</b>							
1	Air Compressor (E05)	hour	1.5907	-	124,448.69	-	197,965.18
2	Con. Vibrator (E07)	hour	0.3000	-	31,785.00	-	9,535.50
3	Concrete Cutter (E09)	hour	2.8571	-	70,806.82	-	202,305.20
4	Tools	Ls	1.0000	-	1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	410,805.88
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	<b>22,471,273.77</b>
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	<b>2,247,127.38</b>
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>					-	<b>24,718,401.15</b>
<b>G.</b>	<b>WORKING UNIT PRICE ( F / 100 )</b>					-	<b>247,184.01</b>



THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
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EI-7171 Analysis

PROJECT  
PACKAGE CONTRACT No.  
PACKAGE NAME  
PROV. / KAB /CITY  
NO. PAY ITEM : 7.17(1)  
DESCRIPTION OF WORK : Lean Concrete for Rigid Pavement ( t = 100 mm )  
UNIT OF MEASUREMENT : Sq.M

ESTIMATE QUNTIY OF WORKING :  
TOTAL PRICE (Rp.) :  
% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	49.0000		4,573.91	-	224,121.59	
2.	Skilled Labour (L03)	hour	14.0000		5,151.20	-	72,116.80	
3.	Foreman (L04)	hour	7.0000		6,661.04	-	46,627.28	
<b>SUB TOTAL FOR LABOUR</b>						-	342,865.67	
<b>B.</b>	<b><u>BAHAN</u></b>							
1.	Concrete Class E (EI-718)	M3	10.0000	-	352,896.18	-	3,528,961.84	
2.	Curing Compound (M76)	Kg	10.0000	-	14,850.00	-	148,500.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	3,677,461.84	
<b>C.</b>	<b><u>PERALATAN</u></b>							
1.	Air Compressor (E05)	hour	0.4016	-	124,448.69	-	49,979.39	
2.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	50,979.39	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	3,775,068.51
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	377,506.85
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>						-	4,152,575.36
<b>G.</b>	<b>WORKING UNIT PRICE ( F / 100 )</b>						-	41,525.75

**DIVISION 8.  
MISCELLANEOUS**

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

EI-811Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB / CITY	:		
NO. PAY ITEM	:	8.1.(1)	ESTIMATE QUANTITY OF
DESCRIPTION OF WORK	:	Solid Sodding	WORKING
UNIT OF MEASUREMENT	:	Sq.M	TOTAL PRICE (Rp.)
			% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	jam	0.1867		4,573.91	-	853.80	
2.	Skilled Labour (L03)	jam	0.0467		5,151.20	-	240.39	
3.	Foreman (L04)	jam	0.0467		6,661.04	-	310.85	
<b>SUB TOTAL FOR LABOUR</b>								1,405.04
<b>B.</b>	<b><u>MATERIAL</u></b>							
1.	Solid Sodding (M88)	M2	1.1000	-	7,900.00	-	8,690.00	
<b>SUB TOTAL FOR MATERIALS</b>							-	8,690.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Tools	Ls	1.0000		500.00	-	500.00	
<b>SUB TOTAL FOR EQUIPMENT</b>							-	500.00
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	10,595.04
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>						-	1,059.50
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	11,654.54

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
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(ENGINEER ESTIMATE)

EI-831Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB / CITY	:		
NO. PAY ITEM	:	8.3.(1)	ESTIMATE QUANTITY OF WORKING :
DESCRIPTION OF WORK	:	Vehicle Guard Rail, Type A	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Ln.M	% TO PROJECT COST :

NO.	COMPONENT	UNIT	ESTIMATE QUANTITY	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	2.240		4,573.91	-	10,245.56	
2.	Skilled Labour (L03)	hour	0.280		5,151.20	-	1,442.34	
3.	Foreman (L04)	hour	0.280		6,661.04	-	1,865.09	
<b>SUB TOTAL FOR LABOUR</b>						-	13,552.99	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Beam ( 4 m ) (M203)	each	1.000	-	639,100.00	-	639,100.00	
2.	Post / Column ( 1.8 M ) (M204)	each	1.500	-	337,700.00	-	506,550.00	
3.	Blocking Piece (M205)	each	3.000	-	64,900.00	-	194,700.00	
4.	Terminal End (M206)	each	0.050	-	346,500.00	-	17,325.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	1,357,675.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Flat bed truck crane 5 t (E31)	Hour	0.056	-	289,980.98	-	16,190.60	
2.	Tools	Ls	1.000		5,000.00	-	5,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	21,190.60	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	1,382,253.85
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>						-	138,225.38
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>						-	1,520,479.23
<b>G.</b>	<b>WORKING UNIT PRICE ( F / 4 )</b>						-	414,676.15

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

EI-8313Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	8.3.(13)	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORK	:	BRC Fence	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Ln.M	% TO PROJECT COST

NO.	COMPONENT	UNIT	ESTIMATE QUANTITY	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	2.1000		4,573.91	-	9,605.21	
2.	Skilled Labour (L03)	hour	0.3500		5,151.20	-	1,802.92	
3.	Foreman (L04)	hour	0.3500		6,661.04	-	2,331.36	
<b>SUB TOTAL FOR LABOUR</b>						-	13,739.49	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	BRC panel (M201)	each	1.0000	-	154,075.00	-	154,075.00	
2.	BRC pole (M202)	each	2.0000	-	64,500.00	-	129,000.00	
3.	Concrete Class C (E1715)	Cu.M	0.0320	-	706,549.12	-	22,609.57	
<b>SUB TOTAL FOR MATERIALS</b>						-	305,684.57	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Dump Truck 6 T (E37)	hour	0.0437	-	199,301.09	-	8,702.81	
2.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	9,702.81	
<b>D.</b>	TOTAL PRICE FOR LABOUR, MATERIALS & EQUIPMENT ( A + B + C )						-	329,126.87
<b>E.</b>	OVERHEAD & PROFIT 10.0 % x D						-	32,912.69
<b>F.</b>	UNIT PRICE ( D + E )						-	362,039.56
<b>G.</b>	WORKING UNIT PRICE ( F/2.40 )						-	150,849.82

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-8315 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	8.3.(15)	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORK	:	Guard Fence Over Railway	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Ln.M	% TO PROJECT COST

NO.	COMPONENT	UNIT	ESTIMATE QUANTITY	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. LABOUR</b>							
1.	Common Labour (L02)	hour	4.2000		4,573.91	-	19,210.42
2.	Skilled Labour (L03)	hour	0.7000		5,151.20	-	3,605.84
3.	Foreman (L04)	hour	0.7000		6,661.04	-	4,662.73
<b>SUB TOTAL FOR LABOUR</b>						-	27,478.99
<b>B. MATERIALS</b>							
1.	Pipe dia 4 1/2 " (M241)	In.m	6.2000		176,125.00	-	1,091,975.00
2.	Wire Net (M242)	Sq.m	4.2000		17,500.00	-	73,500.00
3.	Wire (M243)	In.m	10.0000		1,100.00	-	11,000.00
4.	Others	ls	1.0000		175,000.00	-	175,000.00
<b>SUB TOTAL FOR MATERIALS</b>						-	1,351,475.00
<b>C. EQUIPMENT</b>							
1.	Dump Truck 6 T (E37)	hour	0.0540	-	199,301.09	-	10,762.26
2.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	11,762.26
<b>D. TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	1,390,716.25
<b>E. OVERHEAD &amp; PROFIT 10.0 % x D</b>						-	139,071.63
<b>F. UNIT PRICE ( D + E )</b>						-	1,529,787.88
<b>G. WORKING UNIT PRICE ( F/2.00 )</b>						-	764,893.94

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-841Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:	ESTIMATE QUNTY OF
PACKAGE CONTRACT No.	:	WORKING
PACKAGE NAME	:	TOTAL PRICE (Rp.)
PROV. / KAB /CITY	:	% TO PROJECT COST
NO. PAY ITEM	: 8.4.(1)	
DESCRIPTION OF WORK	: Regulatory and Warning Sign,Type A	
UNIT OF MEASUREMENT	: Each	

NO.	COMPONENT	UNIT	ESTIMATE QUANTITY	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	Hour	2.3333		4,573.91	-	10,672.46
2.	Skilled Labour (L03)	Hour	0.4667		5,151.20	-	2,403.89
3.	Foreman (L04)	Hour	0.4667		6,661.04	-	3,108.49
<b>SUB TOTAL FOR LABOUR</b>						-	16,184.84
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Sign Plate Type A (M71)	Each	1.0000	-	304,000.00	-	304,000.00
2.	Galvanized Pipe 2.5" (M20)	Each	1.0000	-	70,000.00	-	70,000.00
3.	Concrete Class C (EI715)	M3	0.2000	-	706,549.12	-	141,309.82
<b>SUB TOTAL FOR MATERIALS</b>						-	515,309.82
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat bed truck crane 5 t (E31)	Hour	0.0246	-	289,980.98	-	7,128.70
2.	Tools	Ls	1.0000	-	5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	12,128.70
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	543,623.36
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>					-	54,362.34
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	597,985.70

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-842Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB / CITY	:		
NO. PAY ITEM	:	8.4. (2)	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORK	:	Regulatory and Warning Sign, Type B	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Each	% TO PROJECT COST

NO.	COMPONENT	UNIT	ESTIMATE QUANTITY	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	Hour	2.3333		4,573.91	-	10,672.46
2.	Skilled Labour (L03)	Hour	0.4667		5,151.20	-	2,403.89
3.	Foreman (L04)	Hour	0.4667		6,661.04	-	3,108.49
<b>SUB TOTAL FOR LABOUR</b>						-	16,184.84
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Sign Plate Type B (M72)	Each	1.0000	-	608,000.00	-	608,000.00
2.	Galvanized Pipe 1.6" (M21)	Each	1.1000	-	120,000.00	-	132,000.00
3.	Concrete Class C (EI715)	M3	0.3600	-	706,549.12	-	254,357.68
<b>SUB TOTAL FOR MATERIALS</b>						-	994,357.68
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat bed truck crane 5 t (E31)	Hour	0.0272	0.00	289,980.98	-	7,893.93
2.	Tools	Ls	1.0000	0.00	5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	12,893.93
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	1,023,436.45
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>					-	102,343.65
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	1,125,780.10



**THE NORTH JAVA CORRIDOR FLYOVER  
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(ENGINEER ESTIMATE)**

Ei-8517Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB / CITY	:		
NO. PAY ITEM	:	8.5.(17)	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORK	:	Overhead Sign Type A	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Each	% TO PROJECT COST

NO.	COMPONENT	UNIT	ESTIMATE QUANTITY	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	Hour	42.0000		4,573.91	-	192,104.22
2.	Skilled Labour (L03)	Hour	14.0000		5,151.20	-	72,116.80
3.	Foreman (L04)	Hour	7.0000		6,661.04	-	46,627.28
<b>SUB TOTAL FOR LABOUR</b>						-	310,848.30
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Sign Plate (High Intensity Grade) (M66)	Sq. M	2.1250	-	1,578,000.00	-	3,353,250.00
2.	Frame & Accessories (M210)	Unit	1.0000	-	5,184,000.00	-	5,184,000.00
3.	Concrete Class C (E1715)	Cu.M	2.8800	-	706,549.12	-	2,034,861.47
4.	Painting, etc	Ls	1.0000	-	150,000.00	-	150,000.00
5.	H beam 300x300x10x15 (M211)	Ln.M	6.0000	-	1,222,000.00	-	7,332,000.00
6.	Concrete Class E (E1718)	Cu.M	0.1372	-	441,120.23	-	60,521.70
7.	Blinding stone (M07)	Cu.M	0.2940	-	100,600.00	-	29,576.40
<b>SUB TOTAL FOR MATERIALS</b>						-	18,144,209.57
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat bed truck crane 5 t (E31)	Hour	0.4500	-	289,980.98	-	130,491.44
2.	Tools	Ls	1.0000	-	10,000.00	-	10,000.00
3.	Driven H beam	Ln.M	6.0000	-	30,000.00	-	180,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	320,491.44
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	18,775,549.31
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>					-	1,877,554.93
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	20,653,104.24

**THE NORTH JAVA CORRIDOR FLYOVER  
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BILL OF QUANTITY - NAGREG FLYOVER  
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Ei-8518Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:	ESTIMATE QUANTITY OF	
PACKAGE CONTRACT No.	:	WORKING	:
PACKAGE NAME	:	TOTAL PRICE (Rp.)	:
PROV. / KAB / CITY	:	% TO PROJECT COST	:
NO. PAY ITEM	: 8.5.(18)		
DESCRIPTION OF WORK	: Overhead Sign Type B		
UNIT OF MEASUREMENT	: Each		

NO.	COMPONENT	UNIT	ESTIMATE QUANTITY	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. LABOUR</b>							
1.	Common Labour (L02)	Hour	42.0000		4,573.91	-	192,104.22
2.	Skilled Labour (L03)	Hour	14.0000		5,151.20	-	72,116.80
3.	Foreman (L04)	Hour	7.0000		6,661.04	-	46,627.28
<b>SUB TOTAL FOR LABOUR</b>						-	310,848.30
<b>B. MATERIALS</b>							
1	Sign Plate (High Intensity Grade) (M66)	Sq. M	3.4000	-	1,578,000.00	-	5,365,200.00
2	Frame & Accessories (M213)	Unit	1.0000	-	6,750,000.00	-	6,750,000.00
3	Concrete Class C (E1715)	Cu.M	2.8800	-	706,549.12	-	2,034,861.47
4	Painting, etc	Ls	1.0000	-	150,000.00	-	150,000.00
5	H beam 350x350x12x19 (M212)	Ln.M	6.0000	-	1,644,000.00	-	9,864,000.00
6	Concrete Class E (E1718)	Cu.M	0.1372	-	441,120.23	-	60,521.70
7	Blinding Stone (M07)	Cu.M	0.2940	-	100,600.00	-	29,576.40
<b>SUB TOTAL FOR MATERIALS</b>						-	24,254,159.57
<b>C. EQUIPMENT</b>							
1.	Flat bed truck crane 5 t (E31)	Hour	0.4500	-	289,980.98	-	130,491.44
2.	Tools	Ls	1.0000	-	20,000.00	-	20,000.00
3	Driven H beam	Ln.M	6.0000	-	30,000.00	-	180,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	330,491.44
<b>D. TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	24,895,499.31
<b>E. OVERHEAD &amp; PROFIT 10.0 % x D</b>						-	2,489,549.93
<b>F. WORKING UNIT PRICE ( D + E )</b>						-	27,385,049.24

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-8519Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		ESTIMATE QUANTITY OF
NO. PAY ITEM	:	8.5.(19)	WORKING :
DESCRIPTION OF WORK	:	Overhead Sign Type C	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Each	% TO PROJECT COST :

NO.	COMPONENT	UNIT	ESTIMATE QUANTITY	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Common Labour (L02)	Hour	112.0000		4,573.91	-	512,277.92
2.	Skilled Labour (L03)	Hour	28.0000		5,151.20	-	144,233.60
3.	Foreman (L04)	Hour	14.0000		6,661.04	-	93,254.56
<b>SUB TOTAL FOR LABOUR</b>						-	749,766.08
<b>B.</b>	<b><u>MATERIALS</u></b>						
	Sign Plate (High Intensity Grade) (M66)	Sq. M	5.0000	-	1,578,000.00	-	7,890,000.00
1.	Frame & Accessories (M214)	Unit	1.0000	-	40,492,928.57	-	40,492,928.57
2.	Concrete Class C (EI715)	Cu.M	2.4000	-	706,549.12	-	1,695,717.89
3.	Painting, etc	Ls	1.0000	-	150,000.00	-	150,000.00
4.	H beam 300x300x10x15 (M215)	Ln.M	12.0000	-	1,222,000.00	-	14,664,000.00
5.	Concrete Class E (EI718)	Cu.M	0.2016	-	441,120.23	-	88,929.84
6.	Blinding Stone (M07)	Cu.M	0.4320	-	100,600.00	-	43,459.20
<b>SUB TOTAL FOR MATERIALS</b>						-	65,025,035.50
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat bed truck crane 5 t (E31)	Hour	0.9000	-	289,980.98	-	260,982.88
2.	Tools	Ls	1.0000	-	50,000.00	-	50,000.00
3.	Driven H beam	Ln.M	12.0000	-	30,000.00	-	360,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	670,982.88
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	66,445,784.46
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>					-	6,644,578.45
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	73,090,362.91

THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

EI-866 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		ESTIMATE QUANTITY OF	
PACKAGE CONTRACT No.	:		WORKING	:
PACKAGE NAME	:		TOTAL PRICE (Rp.)	:
PROV. / KAB /CITY	:		% TO PROJECT COST	:
NO. PAY ITEM	:	8.6 (6)		
DESCRIPTION OF WORK	:	Reflective thermoplastic pavement marking		
UNIT OF MEASUREMENT	:	Sq.M		

NO.	COMPONENT	UNIT	ESTIMATE QUANTITY	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Common Labour (L02)	hour	0.9000		4,573.91	-	4,116.52	
2.	Skilled Labour (L03)	hour	0.1500		5,151.20	-	772.68	
3.	Foreman (L04)	hour	0.1500		6,661.04	-	999.16	
<b>SUB TOTAL FOR LABOUR</b>						-	5,888.36	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Thermoplastic Road Marking (M74)	Kg	1.9500	-	16,700.00	-	32,565.00	
2.	Thinner (M94)	Liter	1.0500	-	9,000.00	-	9,450.00	
3.	Glass Beads (M65)	Kg	0.4500	-	43,750.00	-	19,687.50	
<b>SUB TOTAL FOR MATERIALS</b>						-	61,702.50	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Compressor (E05)	hour	0.1500	-	124,448.69	-	18,667.30	
2.	Dump Truck 6 T (E37)	hour	0.1500	-	199,301.09	-	29,895.16	
3.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	49,562.46	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	117,153.32
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>						-	11,715.33
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	128,868.65

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-881 Analysis

**UNIT PRICE ANALYSIS**

PROJECT  
PACKAGE CONTRACT No.  
PACKAGE NAME  
PROV. / KAB /CITY  
NO. PAY ITEM : 8.8.(1)  
DESCRIPTION OF WORK : Precast Concrete Curb Type A  
UNIT OF MEASUREMENT : Ln.M

WORKING VOLUME ESTIMATIC:  
TOTAL PRICE (Rp.) :  
% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. <u>TENAGA</u></b>							
1	Common Labour (L02)	Hour	0.5185		4,573.91	-	2,371.66
2	Skilled Labour (L03)	Hour	0.1296		5,151.20	-	667.75
3	Foreman (L04)	Hour	0.1296		6,661.04	-	863.47
<b>SUB TOTAL FOR LABOUR</b>						-	3,902.88
<b>B. <u>MATERIAL</u></b>							
1.	Strc.Concrete Class C (EI-715)	Cu.M	0.0614	706,549.12	-	43,399.78	-
2	Strc.Concrete Class E (EI-718)	Cu.M	0.0263	-	441,120.23	-	11,579.41
3	Mortar	Cu.M	0.0066	-	383,827.63	-	2,539.02
<b>SUB TOTAL FOR MATERIALS</b>						43,399.78	14,118.43
<b>C. <u>EQUIPMENT</u></b>							
1.	Flat bed truck crane 5 t (E31)	hour	0.0642	-	289,980.98	-	18,616.06
2.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	19,616.06
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					43,399.78	37,637.37
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	8,103.72
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					43,399.78	45,741.09

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-882 Analysis

**UNIT PRICE ANALYSIS**

PROJECT  
PACKAGE CONTRACT No.  
PACKAGE NAME  
PROV. / KAB / CITY  
NO. PAY ITEM  
DESCRIPTION OF WORK  
UNIT OF MEASUREMENT

: 8.8.(2)  
: Precast Concrete Curb Type B  
: Ln.M

WORKING VOLUME ESTIMATIC:  
TOTAL PRICE (Rp.) :  
% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A. <u>TENAGA</u></b>							
1	Common Labour (L02)	Hour	1.1667		4,573.91	-	5,336.23
2	Skilled Labour (L03)	Hour	0.2333		5,151.20	-	1,201.95
3	Foreman (L04)	Hour	0.2333		6,661.04	-	1,554.24
<b>SUB TOTAL FOR LABOUR</b>						-	8,092.42
<b>B. <u>MATERIAL</u></b>							
1.	Strc.Concrete Class C (EI-715)	Cu.M	0.1046	706,549.12	-	73,909.45	-
2	Reinforced Steel Bar Grade 40 (EI-734)	Kg	11.3797	8,723.78	-	99,273.97	-
3	Strc.Concrete Class E (EI-718)	Cu.M	0.0756	-	441,120.23	-	33,348.69
4	Mortar	Cu.M	0.0214	-	383,827.63	-	8,221.59
<b>SUB TOTAL FOR MATERIALS</b>						173,183.42	41,570.28
<b>C. <u>EQUIPMENT</u></b>							
1.	Flat bed truck crane 5 t (E31)	hour	0.0656	-	289,980.98	-	19,009.86
2.	Tools	Ls	1.0000		1,000.00	-	1,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	20,009.86
<b>D. TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						173,183.42	69,672.56
<b>E. OVERHEAD &amp; PROFIT 10.0 % x D</b>						-	24,285.60
<b>F. WORKING UNIT PRICE ( D + E )</b>						173,183.42	93,958.16

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-893 Analysis

**UNIT PRICE ANALYSIS**

PROJECT  
PACKAGE CONTRACT No.  
PACKAGE NAME  
PROV. / KAB /CITY  
NO. PAY ITEM : 8.9.(3)  
DESCRIPTION OF WORK : Concrete Median, Type A  
UNIT OF MEASUREMENT : Ln.M

WORKING VOLUME ESTIMATIC:  
TOTAL PRICE (Rp.) :  
% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A. <u>TENAGA</u></b>								
1	Common Labour (L02)	Hour	2.5000		4,573.91	-	11,434.78	
2	Skilled Labour (L03)	Hour	0.5000		5,151.20	-	2,575.60	
3	Foreman (L04)	Hour	0.5000		6,661.04	-	3,330.52	
<b>SUB TOTAL FOR LABOUR</b>						-	17,340.90	
<b>B. <u>MATERIAL</u></b>								
1.	Strc.Concrete Class B-1 (EI-713a)	Cu.M	0.1229	-	771,744.96	-	94,808.87	
2	Strc.Concrete Class E (EI-718)	Cu.M	0.0525	-	441,120.23	-	23,158.81	
3	Mortar	Cu.M	0.0132	-	383,827.63	-	5,078.04	
<b>SUB TOTAL FOR MATERIALS</b>						-	123,045.72	
<b>C. <u>EQUIPMENT</u></b>								
1.	Flat bed truck crane 5 t (E31)	hour	0.1833	-	289,980.98	-	53,163.18	
2.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	54,163.18	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	194,549.80
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>						-	19,454.98
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	214,004.78

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

EI-894 Analysis

**UNIT PRICE ANALYSIS**

PROJECT  
PACKAGE CONTRACT No.  
PACKAGE NAME  
PROV. / KAB / CITY  
NO. PAY ITEM : 8.9.(4)  
DESCRIPTION OF WORK : Concrete Median, Type B  
UNIT OF MEASUREMENT : Ln.M

WORKING VOLUME ESTIMATIC:  
TOTAL PRICE (Rp.) :  
% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A. <u>TENAGA</u></b>								
1	Common Labour (L02)	Hour	7.0000		4,573.91	-	32,017.37	
2	Skilled Labour (L03)	Hour	1.4000		5,151.20	-	7,211.68	
3	Foreman (L04)	Hour	1.4000		6,661.04	-	9,325.46	
<b>SUB TOTAL FOR LABOUR</b>						-	48,554.51	
<b>B. <u>MATERIAL</u></b>								
1.	Strc.Concrete Class B-1 (EI-713a)	Cu.M	0.3006	-	771,744.96	-	231,957.59	
2	Reinforced Steel Bar Grade 40 (EI-734)	Kg	26.4940	-	8,723.78	-	231,128.09	
3	Strc.Concrete Class E (EI-718)	Cu.M	0.0525	-	441,120.23	-	23,158.81	
<b>SUB TOTAL FOR MATERIALS</b>						-	486,244.49	
<b>C. <u>EQUIPMENT</u></b>								
1.	Flat bed truck crane 5 t (E31)	hour	0.2133	-	289,980.98	-	61,862.61	
2.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	62,862.61	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	597,661.61
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>						-	59,766.16
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	657,427.77



THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)

EI-895 Analysis

**UNIT PRICE ANALYSIS**

PROJECT	:		ESTIMATE QUANTITY OF
PACKAGE CONTRACT No.	:		WORKING
PACKAGE NAME	:		TOTAL PRICE (Rp.)
PROV. / KAB /CITY	:		% TO PROJECT COST
NO. PAY ITEM	:	8.9.(5)	
DESCRIPTION OF WORK	:	Concrete Sidewalk	
UNIT OF MEASUREMENT	:	Sq.M	

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1	Common Labour (L02)	Hour	0.4200		4,573.91	-	1,921.04	
2	Skilled Labour (L03)	Hour	0.1400		5,151.20	-	721.17	
3	Foreman (L04)	Hour	0.0700		6,661.04	-	466.27	
<b>SUB TOTAL FOR LABOUR</b>						-	3,108.48	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Paving Block (M73)	Sq.M	1.0500	-	72,500.00	-	76,125.00	
2.	Sand for Embankment (M05)	Sq.M	0.0525	-	65,600.00	-	3,444.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	79,569.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Tamper (E23)	hour	0.0201	-	25,195.60	-	505.94	
2.	Tools	Ls	1.0000		1,000.00	-	1,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	1,505.94	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	84,183.42
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.0 % x D</b>						-	8,418.34
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	92,601.76

**DIVISION 9.  
FACILITIES**

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

Analisa 911

**UNIT PRICE ANALYSIS**

PROJECT	:	ESTIMATE QUANTITY OF
PACKAGE CONTRACT No.	:	WORKING
PACKAGE NAME	:	TOTAL PRICE (Rp.)
PROV. / KAB /CITY	:	% TO PROJECT COST
NO. PAY ITEM	: 9.1.(1)	:
DESCRIPTION OF WORK	: Street Lighting pole Type A ( 11 m )	:
UNIT OF MEASUREMENT	: Each	:

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Foremen (L04)	hour	1.4056		6,661.04	-	9,362.91
2.	Skill labour (L03)	hour	1.4056		5,151.20	-	7,240.64
3.	Electrician (L08)	hour	2.8112		8,881.38	-	24,967.73
4.	Common labour (L02)	hour	5.6225		4,573.91	-	25,716.76
<b>SUB TOTAL OF LABOUR</b>						-	67,288.04
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.a.	Lighting pole ( 11 m )and accesso (M96)	Each	1.00	-	5,410,500.00	-	5,410,500.00
1.b.	Lamps and accessories Son 250 v (M98)	Each	1.00	-	1,400,000.00	-	1,400,000.00
1.c.	Foundation Type I for street lightin (M99)	Each	1.00	-	1,080,000.00	-	1,080,000.00
1.d.	Anchor and Bolt ( Dia 22 ) (M101)	Each	4.00	-	45,000.00	-	180,000.00
1.e.	PVC Conduit dia 2.5 " (M103)	M	2.40	-	25,562.50	-	61,350.00
<b>SUB TOTAL FOR MATERIALS</b>						-	8,131,850.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	1.4056		289,980.98	-	407,603.79
2.	Tools	Ls	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	412,603.79
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	8,611,741.83
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	861,174.18
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	9,472,916.01

**THE NORTH JAVA CORRIDOR FLYOVER**  
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**(ENGINEER ESTIMATE)**

Analisa 9110

**UNIT PRICE ANALYSIS**

PROJECT	:	ESTIMATE QUANTITY OF
PACKAGE CONTRACT No.	:	WORKING
PACKAGE NAME	:	TOTAL PRICE (Rp.)
PROV. / KAB /CITY	:	% TO PROJECT COST
NO. PAY ITEM	: 9.1.(10)	
DESCRIPTION OF WORK	: Street Ligthing Ceiling, Type A (Sont 150 Watt)	
UNIT OF MEASUREMENT	: Each	

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A. LABOUR</b>								
1.	Foremen (L04)	hour	1.2048		6,661.04	-	8,025.35	
2.	Skill labour (L03)	hour	1.2048		5,151.20	-	6,206.27	
3.	Electrician (L08)	hour	1.2048		8,881.38	-	10,700.46	
4.	Common labour (L02)	hour	4.8193		4,573.91	-	22,042.94	
<b>SUB TOTAL OF LABOUR</b>						-	46,975.02	
<b>B. MATERIALS</b>								
1.a.	Lamps and accessories Sont 150 (M105)	Each	1.00	-	1,800,000.00	-	1,800,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	1,800,000.00	
<b>C. EQUIPMENT</b>								
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	1.2048		289,980.98	-	349,374.67	
2.	Tools	Ls	1.0000		5,000.00	-	5,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	354,374.67	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	2,201,349.69
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	220,134.97
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	2,421,484.66

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
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**(ENGINEER ESTIMATE)**

Analisa 9110a

**UNIT PRICE ANALYSIS**

PROJECT	:	
PACKAGE CONTRACT No.	:	
PACKAGE NAME	:	
PROV. / KAB /CITY	:	
NO. PAY ITEM	:	9.1.(10)a
DESCRIPTION OF WORK	:	Street Lighting Ceiling, Type B (Sont 250 Watt)
UNIT OF MEASUREMENT	:	Each

		ESTIMATE QUANTITY OF
		WORKING
		TOTAL PRICE (Rp.)
		% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A. LABOUR</b>								
1.	Foremen (L04)	hour	1.2048		6,661.04	-	8,025.35	
2.	Skill labour (L03)	hour	1.2048		5,151.20	-	6,206.27	
3.	Electrician (L08)	hour	1.2048		8,881.38	-	10,700.46	
4.	Common labour (L02)	hour	4.8193		4,573.91	-	22,042.94	
<b>SUB TOTAL OF LABOUR</b>						-	46,975.02	
<b>B. MATERIALS</b>								
1.a.	Lamps and accessories Sont 250 (M235)	Each	1.00	-	1,950,000.00	-	1,950,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	1,950,000.00	
<b>C. EQUIPMENT</b>								
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	1.2048		289,980.98	-	349,374.67	
2.	Tools	Ls	1.0000		5,000.00	-	5,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	354,374.67	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	2,351,349.69
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	235,134.97
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	2,586,484.66

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

Analisa 9112a

**UNIT PRICE ANALYSIS**

PROJECT	:	
PACKAGE CONTRACT No.	:	
PACKAGE NAME	:	
PROV. / KAB /CITY	:	
NO. PAY ITEM	:	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORK	:	9.1.(12)a
UNIT OF MEASUREMENT	:	Street Lighting Panel, LP-PJU Type A FO
	:	TOTAL PRICE (Rp.)
	:	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Foremen (L04)	hour	3.5000		6,661.04	-	23,313.64	
2.	Skill labour (L03)	hour	7.0000		5,151.20	-	36,058.40	
3.	Electrician (L08)	hour	7.0000		8,881.38	-	62,169.66	
4.	Common labour (L02)	hour	7.0000		4,573.91	-	32,017.37	
<b>SUB TOTAL OF LABOUR</b>						-	153,559.07	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	KWH Meter (M200)	Each	1.0000	-	900,000.00	-	900,000.00	
2.	Ampheremeter (M218)	Each	3.0000	-	75,000.00	-	225,000.00	
3.	Voltmeter (M219)	Each	1.0000	-	75,000.00	-	75,000.00	
4.	Indicator Lamp (M106)	Each	3.0000	-	20,000.00	-	60,000.00	
5.	Time Switch (M220)	Set	1.0000	-	250,000.00	-	250,000.00	
6.	MCB 3P 50 A (M221)	Each	7.0000	-	350,000.00	-	2,450,000.00	
7.	LBS 125 A (M222)	Each	1.0000	-	375,000.00	-	375,000.00	
8.	Contactora ( timer ) (M223)	Each	1.0000	-	200,000.00	-	200,000.00	
9.	Panel Box Type A ( 100 x 80 x 50 (M109)	Each	1.0000	-	250,000.00	-	250,000.00	
10.	Foundation Type II for panel (M100)	Each	1.0000	-	750,000.00	-	750,000.00	
11.	Cable G BCC 16 mm2 (M110)	Ln.M	3.0000	-	45,000.00	-	135,000.00	
12.	Grounding (M224)	Ls	1.0000	-	125,000.00	-	125,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	5,795,000.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Tools	Ls	1.0000		5,000.00	-	5,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	5,000.00	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	5,953,559.07	
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00	<b>% x D</b>		-	595,355.91
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	6,548,914.98	

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
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(ENGINEER ESTIMATE)**

Analisa 9112b

**UNIT PRICE ANALYSIS**

PROJECT	:	
PACKAGE CONTRACT No.	:	
PACKAGE NAME	:	
PROV. / KAB /CITY	:	
NO. PAY ITEM	:	ESTIMATE QUANTITY OF WORKING :
DESCRIPTION OF WORK	:	9.1.(12)b TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Panel Type LP-PJU.1 % TO PROJECT COST :
	:	Each

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Foremen (L04)	hour	3.5000		6,661.04	-	23,313.64	
2.	Skill labour (L03)	hour	7.0000		5,151.20	-	36,058.40	
3.	Electrician (L08)	hour	7.0000		8,881.38	-	62,169.66	
4.	Common labour (L02)	hour	7.0000		4,573.91	-	32,017.37	
<b>SUB TOTAL OF LABOUR</b>						-	153,559.07	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	KWH Meter (M200)	Each	1.00	-	900,000.00	-	900,000.00	
2.	Ampheremeter (M218)	Each	3.00	-	75,000.00	-	225,000.00	
3.	Voltmeter (M219)	Each	1.00	-	75,000.00	-	75,000.00	
4.	Indicator Lamp (M106)	Each	3.00	-	20,000.00	-	60,000.00	
5.	Time Switch (M220)	Set	1.00	-	250,000.00	-	250,000.00	
6.	MCB 3P 50 A (M221)	Each	6.00	-	350,000.00	-	2,100,000.00	
7.	LBS 125 A (M222)	Each	1.00	-	375,000.00	-	375,000.00	
8.	Contactora ( timer ) (M223)	Each	1.00	-	200,000.00	-	200,000.00	
9.	Panel Box Type A ( 100 x 80 x 50 (M109)	Each	1.00	-	250,000.00	-	250,000.00	
10.	Foundation Type II for panel (M100)	Each	1.00	-	750,000.00	-	750,000.00	
11.	Cable G BCC 16 mm2 (M110)	m	3.00	-	45,000.00	-	135,000.00	
12.	Grounding (M224)	Ls	1.00	-	125,000.00	-	125,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	5,445,000.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Tools	Ls	1.0000		5,000.00	-	5,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	5,000.00	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	5,603,559.07
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00	% x D		-	560,355.91
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	6,163,914.98

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
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**(ENGINEER ESTIMATE)**

Analisa 9112c

**UNIT PRICE ANALYSIS**

PROJECT	:	ESTIMATE QUANTITY OF
PACKAGE CONTRACT No.	:	WORKING
PACKAGE NAME	:	TOTAL PRICE (Rp.)
PROV. / KAB /CITY	:	% TO PROJECT COST
NO. PAY ITEM	: 9.1.(12)c	:
DESCRIPTION OF WORK	: Panel Type LP-PJU.2	:
UNIT OF MEASUREMENT	: Each	:

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Foremen (L04)	hour	3.5000		6,661.04	-	23,313.64	
2.	Skill labour (L03)	hour	7.0000		5,151.20	-	36,058.40	
3.	Electrician (L08)	hour	7.0000		8,881.38	-	62,169.66	
4.	Common labour (L02)	hour	7.0000		4,573.91	-	32,017.37	
<b>SUB TOTAL OF LABOUR</b>						-	153,559.07	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	KWH Meter (M200)	Each	-	-	900,000.00	-	-	
2.	Ampheremeter (M218)	Each	-	-	75,000.00	-	-	
3.	Voltmeter (M219)	Each	-	-	75,000.00	-	-	
4.	Indicator Lamp (M106)	Each	3.00	-	20,000.00	-	60,000.00	
5.	Time Switch (M220)	Set	-	-	250,000.00	-	-	
6.	MCB 3P 50 A (M221)	Each	2.00	-	350,000.00	-	700,000.00	
7.	LBS 125 A (M222)	Each	-	-	375,000.00	-	-	
8.	Contactora ( timer ) (M223)	Each	-	-	200,000.00	-	-	
9.	Panel Box Type B ( 70 x 60 x 30 c (M226)	Each	1.00	-	202,500.00	-	202,500.00	
10.	Foundation Type III for panel (M225)	Each	1.00	-	550,000.00	-	550,000.00	
11.	Cable G BCC 16 mm2 (M110)	m	3.00	-	45,000.00	-	135,000.00	
12.	Grounding (M224)	Ls	1.00	-	125,000.00	-	125,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	1,772,500.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Tools	Ls	1.0000		5,000.00	-	5,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	5,000.00	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	1,931,059.07	
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00	% x D		-	193,105.91
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	2,124,164.98	



**THE NORTH JAVA CORRIDOR FLYOVER**  
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**(ENGINEER ESTIMATE)**

Analisa 9112d

**UNIT PRICE ANALYSIS**

PROJECT	:	
PACKAGE CONTRACT No.	:	
PACKAGE NAME	:	
PROV. / KAB /CITY	:	
NO. PAY ITEM	:	9.1.(12)d
DESCRIPTION OF WORK	:	Panel Type LP-PJU.3
UNIT OF MEASUREMENT	:	Each

		ESTIMATE QUANTITY OF WORKING	:
		TOTAL PRICE (Rp.)	:
		% TO PROJECT COST	:

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Foremen (L04)	hour	3.5000		6,661.04	-	23,313.64
2.	Skill labour (L03)	hour	7.0000		5,151.20	-	36,058.40
3.	Electrician (L08)	hour	10.5000		8,881.38	-	93,254.49
4.	Common labour (L02)	hour	7.0000		4,573.91	-	32,017.37
<b>SUB TOTAL OF LABOUR</b>						-	184,643.90
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	KWH Meter (M200)	Each	-	-	900,000.00	-	-
2.	Ampheremeter (M218)	Each	-	-	75,000.00	-	-
3.	Voltmeter (M219)	Each	-	-	75,000.00	-	-
4.	Indicator Lamp (M106)	Each	3.00	-	20,000.00	-	60,000.00
5.	Time Switch (M220)	Set	-	-	250,000.00	-	-
6.	MCB 3P 50 A (M221)	Each	2.00	-	350,000.00	-	700,000.00
7.	LBS 125 A (M222)	Each	-	-	375,000.00	-	-
8.	Contactora ( timer ) (M223)	Each	-	-	200,000.00	-	-
9.	Panel Box Type B ( 70 x 60 x 30 c (M226)	Each	1.00	-	202,500.00	-	202,500.00
10.	Foundation Type III for panel (M225)	Each	1.00	-	550,000.00	-	550,000.00
11.	Cable G BCC 16 mm2 (M110)	m	3.00	-	45,000.00	-	135,000.00
12.	Grounding (M224)	Ls	1.00	-	125,000.00	-	125,000.00
<b>SUB TOTAL FOR MATERIALS</b>						-	1,772,500.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tools	Ls	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	5,000.00
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	1,962,143.90
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00	% x D	-	196,214.39
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	2,158,358.29

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

Analisa 9112e

**UNIT PRICE ANALYSIS**

PROJECT	:	
PACKAGE CONTRACT No.	:	
PACKAGE NAME	:	
PROV. / KAB /CITY	:	
NO. PAY ITEM	:	9.1.(12)e
DESCRIPTION OF WORK	:	Panel Type LP-PJU.4
UNIT OF MEASUREMENT	:	Each
		ESTIMATE QUANTITY OF WORKING
		TOTAL PRICE (Rp.)
		% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Foremen (L04)	hour	3.5000		6,661.04	-	23,313.64
2.	Skill labour (L03)	hour	7.0000		5,151.20	-	36,058.40
3.	Electrician (L08)	hour	7.0000		8,881.38	-	62,169.66
4.	Common labour (L02)	hour	7.0000		4,573.91	-	32,017.37
<b>SUB TOTAL OF LABOUR</b>						-	153,559.07
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	KWH Meter (M200)	Each	1.00	-	900,000.00	-	900,000.00
2.	Ampheremeter (M218)	Each	3.00	-	75,000.00	-	225,000.00
3.	Voltmeter (M219)	Each	1.00	-	75,000.00	-	75,000.00
4.	Indicator Lamp (M106)	Each	3.00	-	20,000.00	-	60,000.00
5.	Time Switch (M220)	Set	1.00	-	250,000.00	-	250,000.00
6.	MCB 3P 50 A (M221)	Each	4.00	-	350,000.00	-	1,400,000.00
7.	LBS 125 A (M222)	Each	1.00	-	375,000.00	-	375,000.00
8.	Contactora ( timer ) (M223)	Each	1.00	-	200,000.00	-	200,000.00
9.	Panel Box Type B ( 70 x 60 x 30 c (M226)	Each	1.00	-	202,500.00	-	202,500.00
10.	Foundation Type III for panel (M225)	Each	1.00	-	550,000.00	-	550,000.00
11.	Cable G BCC 16 mm2 (M110)	m	3.00	-	45,000.00	-	135,000.00
12.	Grounding (M224)	Ls	1.00	-	125,000.00	-	125,000.00
<b>SUB TOTAL FOR MATERIALS</b>						-	4,497,500.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tools	Ls	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	5,000.00
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	4,656,059.07
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00	% x D		465,605.91
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	5,121,664.98

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

Analisa 9112f

**UNIT PRICE ANALYSIS**

PROJECT	:	
PACKAGE CONTRACT No.	:	
PACKAGE NAME	:	
PROV. / KAB /CITY	:	
NO. PAY ITEM	:	ESTIMATE QUANTITY OF WORKING :
DESCRIPTION OF WORK	:	9.1.(12)f
UNIT OF MEASUREMENT	:	Panel Type LP-PJU.5
	:	TOTAL PRICE (Rp.) :
	:	Each
	:	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Foremen (L04)	hour	3.5000		6,661.04	-	23,313.64
2.	Skill labour (L03)	hour	7.0000		5,151.20	-	36,058.40
3.	Electrician (L08)	hour	7.0000		8,881.38	-	62,169.66
4.	Common labour (L02)	hour	7.0000		4,573.91	-	32,017.37
<b>SUB TOTAL OF LABOUR</b>						-	153,559.07
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	KWH Meter (M200)	Each	-	-	900,000.00	-	-
2.	Ampheremeter (M218)	Each	-	-	75,000.00	-	-
3.	Voltmeter (M219)	Each	-	-	75,000.00	-	-
4.	Indicator Lamp (M106)	Each	3.00	-	20,000.00	-	60,000.00
5.	Time Switch (M220)	Set	-	-	250,000.00	-	-
6.	MCB 3P 50 A (M221)	Each	3.00	-	350,000.00	-	1,050,000.00
7.	LBS 125 A (M222)	Each	-	-	375,000.00	-	-
8.	Contactora ( timer ) (M223)	Each	-	-	200,000.00	-	-
9.	Panel Box Type B ( 70 x 60 x 30 c (M226)	Each	1.00	-	202,500.00	-	202,500.00
10.	Foundation Type III for panel (M225)	Each	1.00	-	550,000.00	-	550,000.00
11.	Cable G BCC 16 mm2 (M110)	m	3.00	-	45,000.00	-	135,000.00
12.	Grounding (M224)	Ls	1.00	-	125,000.00	-	125,000.00
<b>SUB TOTAL FOR MATERIALS</b>						-	2,122,500.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tools	Ls	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	5,000.00
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	2,281,059.07
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00	<b>% x D</b>		228,105.91
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	2,509,164.98

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

Analisa 9112g

**UNIT PRICE ANALYSIS**

PROJECT	:	
PACKAGE CONTRACT No.	:	
PACKAGE NAME	:	
PROV. / KAB /CITY	:	
NO. PAY ITEM	:	9.1.(12)g
DESCRIPTION OF WORK	:	Panel Type LP-PJU.6
UNIT OF MEASUREMENT	:	Each

		ESTIMATE QUANTITY OF WORKING	:
		TOTAL PRICE (Rp.)	:
		% TO PROJECT COST	:

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Foremen (L04)	hour	3.5000		6,661.04	-	23,313.64
2.	Skill labour (L03)	hour	7.0000		5,151.20	-	36,058.40
3.	Electrician (L08)	hour	7.0000		8,881.38	-	62,169.66
4.	Common labour (L02)	hour	10.5000		4,573.91	-	48,026.06
<b>SUB TOTAL OF LABOUR</b>						-	169,567.76
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	KWH Meter (M200)	Each	-	-	900,000.00	-	-
2.	Ampheremeter (M218)	Each	-	-	75,000.00	-	-
3.	Voltmeter (M219)	Each	-	-	75,000.00	-	-
4.	Indicator Lamp (M106)	Each	3.00	-	20,000.00	-	60,000.00
5.	Time Switch (M220)	Set	-	-	250,000.00	-	-
6.	MCB 3P 50 A (M221)	Each	2.00	-	350,000.00	-	700,000.00
7.	LBS 125 A (M222)	Each	-	-	375,000.00	-	-
8.	Contactora ( timer ) (M223)	Each	-	-	200,000.00	-	-
9.	Panel Box Type B ( 70 x 60 x 30 c (M226)	Each	1.00	-	202,500.00	-	202,500.00
10.	Foundation Type III for panel (M225)	Each	1.00	-	550,000.00	-	550,000.00
11.	Cable G BCC 16 mm2 (M110)	m	3.00	-	45,000.00	-	135,000.00
12.	Grounding (M224)	Ls	1.00	-	125,000.00	-	125,000.00
<b>SUB TOTAL FOR MATERIALS</b>						-	1,772,500.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tools	Ls	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	5,000.00
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	1,947,067.76
<b>E.</b>	<b>OVERHEAD &amp; PROFIT</b>			10.00	% x D	-	194,706.78
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	2,141,774.54

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
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(ENGINEER ESTIMATE)**

Analisa 9113

**UNIT PRICE ANALYSIS**

PROJECT	:	
PACKAGE CONTRACT No.	:	
PACKAGE NAME	:	
PROV. / KAB / CITY	:	
NO. PAY ITEM	:	9.1.13
DESCRIPTION OF WORK	:	Traffic Signal Head, Type A
UNIT OF MEASUREMENT	:	Each

		ESTIMATE QUANTITY OF WORKING	:
		TOTAL PRICE (Rp.)	:
		% TO PROJECT COST	:

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Foremen (L04)	hour	1.2048		6,661.04	-	8,025.35	
2.	Skill labour (L03)	hour	2.4096		5,151.20	-	12,412.53	
3.	Electrician (L08)	hour	2.4096		8,881.38	-	21,400.92	
4.	Common labour (L02)	hour	2.4096		4,573.91	-	11,021.47	
<b>SUB TOTAL OF LABOUR</b>						-	52,860.27	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.a.	Traffic Signal Head Type A ( 3 phase (M111)	Each	1.00	-	3,145,000.00	-	3,145,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	3,145,000.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	1.2048		289,980.98	-	349,374.67	
2.	Tools	Ls	1.0000		5,000.00	-	5,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	354,374.67	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	3,552,234.94
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	355,223.49
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	3,907,458.43

**THE NORTH JAVA CORRIDOR FLYOVER  
SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design  
BILL OF QUANTITY - NAGREG FLYOVER  
(ENGINEER ESTIMATE)**

Analisa 9114

**UNIT PRICE ANALYSIS**

PROJECT	:	
PACKAGE CONTRACT No.	:	
PACKAGE NAME	:	
PROV. / KAB /CITY	:	
NO. PAY ITEM	:	9.1.(14)
DESCRIPTION OF WORK	:	Traffic Signal Head, Type B
UNIT OF MEASUREMENT	:	Each

		ESTIMATE QUANTITY OF WORKING	:
		TOTAL PRICE (Rp.)	:
		% TO PROJECT COST	:

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A. LABOUR</b>								
1.	Foremen (L04)	hour	1.2048		6,661.04	-	8,025.35	
2.	Skill labour (L03)	hour	2.4096		5,151.20	-	12,412.53	
3.	Electrician (L08)	hour	2.4096		8,881.38	-	21,400.92	
4.	Common labour (L02)	hour	2.4096		4,573.91	-	11,021.47	
<b>SUB TOTAL OF LABOUR</b>						-	52,860.27	
<b>B. MATERIALS</b>								
1.a.	Traffic Signal Head Type B ( 2 phase (M112)	Each	1.00	-	2,100,000.00	-	2,100,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	2,100,000.00	
<b>C. EQUIPMENT</b>								
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	1.2048		289,980.98	-	349,374.67	
2.	Tools	Ls	1.0000		5,000.00	-	5,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	354,374.67	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	<b>2,507,234.94</b>
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	<b>250,723.49</b>
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	<b>2,757,958.43</b>

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
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Analisa 9117

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	9.1.(17)	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORK	:	Traffic Signal Pole, Type I	TOTAL PRICE (Rp.)
UNIT OF MEASUREMENT	:	Each	% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Foremen (L04)	hour	0.8032		6,661.04	-	5,350.23	
2.	Skill labour (L03)	hour	0.8032		5,151.20	-	4,137.51	
3.	Electrician (L08)	hour	1.6064		8,881.38	-	14,267.28	
4.	Common labour (L02)	hour	1.6064		4,573.91	-	7,347.65	
<b>SUB TOTAL OF LABOUR</b>						-	31,102.67	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.a.	Traffic Signal Pole Type I (M114)	Each	1.00	-	3,607,500.00	-	3,607,500.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	3,607,500.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.8032		289,980.98	-	232,916.45	
2.	Tools	Ls	1.0000		5,000.00	-	5,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	237,916.45	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	3,876,519.12
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	387,651.91
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	4,264,171.03

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
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Analisa 9118

**UNIT PRICE ANALYSIS**

PROJECT	:	
PACKAGE CONTRACT No.	:	
PACKAGE NAME	:	
PROV. / KAB /CITY	:	
NO. PAY ITEM	:	9.1.18
DESCRIPTION OF WORK	:	Traffic Signal Pole, Type II
UNIT OF MEASUREMENT	:	Each

		ESTIMATE QUANTITY OF WORKING	:
		TOTAL PRICE (Rp.)	:
		% TO PROJECT COST	:

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Foremen (L04)	hour	0.8032		6,661.04	-	5,350.23
2.	Skill labour (L03)	hour	0.8032		5,151.20	-	4,137.51
3.	Electrician (L08)	hour	1.6064		8,881.38	-	14,267.28
4.	Common labour (L02)	hour	1.6064		4,573.91	-	7,347.65
<b>SUB TOTAL OF LABOUR</b>						-	31,102.67
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.a.	Traffic Signal Pole Type II (M115)	Each	1.00	-	5,411,250.00	-	5,411,250.00
<b>SUB TOTAL FOR MATERIALS</b>						-	5,411,250.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	0.8032		289,197.65	-	232,287.27
2.	Tools	Ls	1.0000		5,000.00	-	5,000.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	237,287.27
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	5,679,639.94
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	567,963.99
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>					-	6,247,603.93



**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
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Analisa 9123

**UNIT PRICE ANALYSIS**

PROJECT	:	
PACKAGE CONTRACT No.	:	
PACKAGE NAME	:	
PROV. / KAB /CITY	:	
NO. PAY ITEM	:	ESTIMATE QUANTITY OF WORKING
DESCRIPTION OF WORK	:	9.1.(23)
UNIT OF MEASUREMENT	:	Cable Type 1 ( NYFGBY 2C X 2.5 mm2 )
		TOTAL PRICE (Rp.)
		% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Foremen (L04)	hour	0.1750		6,661.04	-	1,165.68	
2.	Skill labour (L03)	hour	0.1750		5,151.20	-	901.46	
3.	Electrician (L08)	hour	0.3500		8,881.38	-	3,108.48	
4.	Common labour (L02)	hour	0.1750		4,573.91	-	800.43	
<b>SUB TOTAL OF LABOUR</b>						-	5,976.05	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Cable Type NYFGBY 2C X 2.5 mm	Each	40.00		14,000.00	-	560,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	560,000.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Tools	Ls	1.0000		5,000.00	-	5,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	5,000.00	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	570,976.05
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	57,097.61
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>						-	628,073.66
<b>G.</b>	<b>WORKING UNIT PRICE ( F/40 )</b>						-	15,701.84

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
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Analisa 9125

**UNIT PRICE ANALYSIS**

PROJECT	:	ESTIMATE QUANTITY OF
PACKAGE CONTRACT No.	:	WORKING
PACKAGE NAME	:	TOTAL PRICE (Rp.)
PROV. / KAB /CITY	:	% TO PROJECT COST
NO. PAY ITEM	: 9.1.(25)	
DESCRIPTION OF WORK	: Cable Type 3 ( NYFGBY 4C X 10 mm2 )	
UNIT OF MEASUREMENT	: Ln.M	

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Foremen (L04)	hour	0.1750		6,661.04	-	1,165.68
2.	Skill labour (L03)	hour	0.1750		5,151.20	-	901.46
3.	Electrician (L08)	hour	0.3500		8,881.38	-	3,108.48
4.	Common labour (L02)	hour	0.1750		4,573.91	-	800.43
<b>SUB TOTAL OF LABOUR</b>						-	5,976.05
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Cable Type NYFGBY 4C X 10 mrr (M117)	Each	40.00	-	49,000.00	-	1,960,000.00
<b>SUB TOTAL FOR MATERIALS</b>						-	1,960,000.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tools	Ls	1.0000		500.00	-	500.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	500.00
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	1,966,476.05
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	196,647.61
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>					-	2,163,123.66
<b>G.</b>	<b>WORKING UNIT PRICE ( F/40 )</b>					-	54,078.09

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
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Analisa 9127

**UNIT PRICE ANALYSIS**

PROJECT	:	ESTIMATE QUANTITY OF
PACKAGE CONTRACT No.	:	WORKING
PACKAGE NAME	:	TOTAL PRICE (Rp.)
PROV. / KAB /CITY	:	% TO PROJECT COST
NO. PAY ITEM	: 9.1.(27)	
DESCRIPTION OF WORK	: Cable Type 5 ( NYFGBY 4C X 25 mm2 )	
UNIT OF MEASUREMENT	: Ln.M	

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Foremen (L04)	hour	0.1750		6,661.04	-	1,165.68
2.	Skill labour (L03)	hour	0.1750		5,151.20	-	901.46
3.	Electrician (L08)	hour	0.3500		8,881.38	-	3,108.48
4.	Common labour (L02)	hour	0.1750		4,573.91	-	800.43
<b>SUB TOTAL OF LABOUR</b>						-	5,976.05
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Cable Type NYFGBY 4C X 25 mrr (M118)	Each	40.00		95,000.00	-	3,800,000.00
<b>SUB TOTAL FOR MATERIALS</b>						-	3,800,000.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tools	Ls	1.0000		500.00	-	500.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	500.00
<b>D.</b>	TOTAL PRICE FOR LABOUR, MATERIALS & EQUIPMENT ( A + B + C )					-	3,806,476.05
<b>E.</b>	OVERHEAD & PROFIT 10.00 % x D					-	380,647.61
<b>F.</b>	UNIT PRICE ( D + E )					-	4,187,123.66
<b>G.</b>	WORKING UNIT PRICE ( F/40 )					-	104,678.09

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

Analisa 9129

**UNIT PRICE ANALYSIS**

PROJECT	:	ESTIMATE QUANTITY OF
PACKAGE CONTRACT No.	:	WORKING
PACKAGE NAME	:	TOTAL PRICE (Rp.)
PROV. / KAB /CITY	:	% TO PROJECT COST
NO. PAY ITEM	: <b>9.1.(29)</b>	
DESCRIPTION OF WORK	: <b>Cable Type 7 ( NYFGBY 4C X 50 mm2 )</b>	
UNIT OF MEASUREMENT	: <b>Ln.M</b>	

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE	
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)
<b>A.</b>	<b><u>LABOUR</u></b>						
1.	Foremen (L04)	hour	0.1750		6,661.04	-	1,165.68
2.	Skill labour (L03)	hour	0.1750		5,151.20	-	901.46
3.	Electrician (L08)	hour	0.3500		8,881.38	-	3,108.48
4.	Common labour (L02)	hour	0.1750		4,573.91	-	800.43
<b>SUB TOTAL OF LABOUR</b>						-	5,976.05
<b>B.</b>	<b><u>MATERIALS</u></b>						
1.	Cable Type NYFGBY 4C X 50 mrr (M119)	Each	40.00		165,000.00	-	6,600,000.00
<b>SUB TOTAL FOR MATERIALS</b>						-	6,600,000.00
<b>C.</b>	<b><u>EQUIPMENT</u></b>						
1.	Tools	Ls	1.0000		500.00	-	500.00
<b>SUB TOTAL FOR EQUIPMENT</b>						-	500.00
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>					-	6,606,476.05
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>					-	660,647.61
<b>F.</b>	<b>UNIT PRICE ( D + E )</b>					-	7,267,123.66
<b>G.</b>	<b>WORKING UNIT PRICE ( F/40 )</b>					-	181,678.09

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

Analisa 9140

**UNIT PRICE ANALYSIS**

PROJECT	:	
PACKAGE CONTRACT No.	:	
PACKAGE NAME	:	
PROV. / KAB /CITY	:	
NO. PAY ITEM	:	9.1.(40)
DESCRIPTION OF WORK	:	Removal of Lighting Pole to Stockpile
UNIT OF MEASUREMENT	:	Each

		ESTIMATE QUANTITY OF
		WORKING
		TOTAL PRICE (Rp.)
		% TO PROJECT COST

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A.</b>	<b><u>LABOUR</u></b>							
1.	Foremen (L04)	hour	2.0080		6,661.04	-	13,375.58	
2.	Skill labour (L03)	hour	4.0161		5,151.20	-	20,687.55	
3.	Electrician (L08)	hour	4.0161		8,881.38	-	35,668.19	
4.	Common labour (L02)	hour	8.0321		4,573.91	-	36,738.23	
<b>SUB TOTAL OF LABOUR</b>						-	106,469.55	
<b>B.</b>	<b><u>MATERIALS</u></b>							
1.	Cable Type NYFGBY 4C X 16 mrr (M117)	Each	60.0000	-	49,000.00	-	2,940,000.00	
2.	Foundation (M99)	Each	1.0000	-	1,080,000.00	-	1,080,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	4,020,000.00	
<b>C.</b>	<b><u>EQUIPMENT</u></b>							
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	2.0080		289,980.98	-	582,291.12	
2.	Tools	Ls	1.0000		5,000.00	-	5,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	587,291.12	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	4,713,760.67
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	471,376.07
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	5,185,136.74

**THE NORTH JAVA CORRIDOR FLYOVER**  
**SIX FLYOVER CONSTRUCTION PROJECT - Basic - Detailed Engineering Design**  
**BILL OF QUANTITY - NAGREG FLYOVER**  
**(ENGINEER ESTIMATE)**

Analisa 9141

**UNIT PRICE ANALYSIS**

PROJECT	:		
PACKAGE CONTRACT No.	:		
PACKAGE NAME	:		
PROV. / KAB /CITY	:		
NO. PAY ITEM	:	9.1.(41)	ESTIMATE QUANTITY OF WORKING :
DESCRIPTION OF WORK	:	Removal of Lighting Signal to Stockpile	TOTAL PRICE (Rp.) :
UNIT OF MEASUREMENT	:	Each	% TO PROJECT COST :

NO.	COMPONENT	UNIT	QUANTITY ESTIMATE	UNIT PRICE		TOTAL PRICE		
				FOREIGN (Rp.)	LOCAL (Rp.)	FOREIGN (Rp.)	LOCAL (Rp.)	
<b>A. <u>LABOUR</u></b>								
1.	Foremen (L04)	hour	1.0040		6,661.04	-	6,687.79	
2.	Skill labour (L03)	hour	2.0080		5,151.20	-	10,343.78	
3.	Electrician (L08)	hour	2.0080		8,881.38	-	17,834.10	
4.	Common labour (L02)	hour	4.0161		4,573.91	-	18,369.12	
<b>SUB TOTAL OF LABOUR</b>						-	53,234.79	
<b>B. <u>MATERIALS</u></b>								
1	Cable	Ln.M	40.0000		35,000.00	-	1,400,000.00	
<b>SUB TOTAL FOR MATERIALS</b>						-	1,400,000.00	
<b>C. <u>EQUIPMENT</u></b>								
1.	Flat Bed Truck with Crane 5 Ton (E31)	hour	1.0040		289,980.98	-	291,145.56	
2	Tools	Ls	1.0000		5,000.00	-	5,000.00	
<b>SUB TOTAL FOR EQUIPMENT</b>						-	296,145.56	
<b>D.</b>	<b>TOTAL PRICE FOR LABOUR, MATERIALS &amp; EQUIPMENT ( A + B + C )</b>						-	1,749,380.35
<b>E.</b>	<b>OVERHEAD &amp; PROFIT 10.00 % x D</b>						-	174,938.04
<b>F.</b>	<b>WORKING UNIT PRICE ( D + E )</b>						-	1,924,318.39

**RELOCATION & PROTECTION  
OF EXISTING UTILITIES**

## COST ESTIMATE FOR UTILITY PROTECTION AND RELOCATION

### NAGREG FLYOVER

No.	Description	Unit	Estimate Quantity	Unit Price ( Rp. )	Amount ( Rp. )	Remarks
1	Mobilization and Demobilization ( Oil Pipe Construction Equipment ) <b>ABOVE GROUND</b>	Ls	1.00	75,000,000.00	75,000,000.00	
2	Relocation of Existing Electricity ( PLN ), Pole medium Voltage	Each	13.00	10,920,014.85	141,960,193.00	
3	Relocation of Existing Electricity ( PLN ), Pole Low Voltage	Each	30.00	10,325,416.70	309,762,501.05	
4	Electric Cable Above Ground	Ln.M	5070.00	250,459.77	1,269,831,008.80	1690 m x 3
5	Relocation of Existing Telephone Utility pole	Each	31.00	5,133,327.15	159,133,141.67	
6	Telephone Cable Above Ground	Ln.M	1860.00	120,224.97	223,618,441.80	930 m x 2
	<b>UNDER GROUND</b>					
7	Crossing Under Ground Duct with PVC dia 4"	Ln.M	30.00	1,113,334.52	33,400,035.70	
8	Oil Pipe Relocation dia 400 mm	Ln.M	570.00	821,861.59	468,461,105.80	
9	Cost for Conection	Ls	1.00	7,200,000,000.00	7,200,000,000.00	
10	Protection of Existing Oil Pipe Type A	Ln.M	215.00	1,397,553.20	300,473,937.32	
11	Protection of Existing Oil Pipe Type D	Ln.M	170.00	1,268,933.44	215,718,685.13	
12	Dig and deepen Optic Cable	Ln.M	340.00	117,010.42	39,783,543.74	
				<b>TOTAL COST</b>	<b>10,437,142,594.01</b>	



# NORTH JAVA CORIDOR PROJECT

## UNIT PRICE ANALYSIS

### Relocation of Existing Electricity ( PLN ), Pole medium Voltage

No. of Pay Item	:	Quantity Product/day :	1.00
Kind of work	:	Relocation of Existing pole ( PLN )	( EACH )
Unit	:	Each	

No.	Component	Unit	Estimate Quantity	Unit Price (Rp.)	Total price (Rp.)	Remarks
<b>A</b>	<b>LABOUR</b>					
	- Foremen	hour	7.00	6,661.04	46,627.28	
	- Skill labour	hour	14.00	5,151.20	72,116.80	
	- Common labour	hour	28.00	4,573.91	128,069.48	
	- Electrician	hour	7.00	8,881.38	62,169.66	
	<b>Sub Total</b>				<b>308,983.22</b>	
					-	
<b>B</b>	<b>MATERIALS</b>					
	- PLN Pole & Accessories ( med vol )	Each	1.00	3,900,360.00	3,900,360.00	
	- PLN Cable ( 3 x 120 mm2 )	Lin. M	12.00	290,000.00	3,480,000.00	
	<b>Sub Total</b>				<b>7,380,360.00</b>	
<b>C</b>	<b>EQUIPMENT</b>					
	- Flat Bed Truck & with Crane 5 T	hour	2.00	289,197.65	578,395.30	
	- Tools	ls	1.00	5,000.00	5,000.00	
	- Mobilization and O/P	ls	1.00	1,654,547.70	1,654,547.70	
	<b>Sub Total</b>				<b>2,237,943.00</b>	
	<b>Amount = (Q)</b>				<b>9,927,286.22</b>	
	Overhead & Profit 10% x (Q)				992,728.62	
	<b>TOTAL = (B)</b>				<b>10,920,014.85</b>	
	<b>UNIT PRICE</b>				<b>10,920,014.85</b>	

# NORTH JAVA CORIDOR PROJECT

## UNIT PRICE ANALYSIS

### Relocation of Existing electricity ( PLN ), Pole Low Voltage

No. of Pay Item	:	Quantity Product/day :	1.00
Kind of work	:	Relocation of Existing pole ( PLN ), low voltage	( EACH )
Unit	:	Each	

No.	Component	Unit	Estimate Quantity	Unit Price (Rp.)	Total price (Rp.)	Remarks
<b>A</b>	<b>LABOUR</b>					
	- Foremen	hour	7.00	6,661.04	46,627.28	
	- Skill labour	hour	7.00	5,151.20	36,058.40	
	- Common labour	hour	14.00	4,573.91	64,034.74	
	- Electrician	hour	7.00	8,881.38	62,169.66	
	<b>Sub Total</b>				<b>208,890.08</b>	
<b>B</b>	<b>MATERIALS</b>					
	- PLN Pole & Accessories ( low vol )	Each	1.00	3,550,000.00	3,550,000.00	
	- PLN Cable ( 3 x 120 mm2 )	Lin. M	12.00	290,000.00	3,480,000.00	
	<b>Sub Total</b>				<b>7,030,000.00</b>	
<b>C</b>	<b>EQUIPMENT</b>					
	- Flat Bed Truck & with Crane 5 T	hour	2.00	289,197.65	578,395.30	
	- Tools	ls	1.00	5,000.00	5,000.00	
	- Mobilization and O/P	ls	1.00	1,564,457.08	1,564,457.08	
	<b>Sub Total</b>				<b>2,147,852.38</b>	
	<b>Amount = (Q)</b>				<b>9,386,742.46</b>	
	Overhead & Profit 10% x (Q)				938,674.25	
	<b>TOTAL = (B)</b>				<b>10,325,416.70</b>	
	<b>UNIT PRICE</b>				<b>10,325,416.70</b>	

# NORTH JAVA CORIDOR PROJECT

## UNIT PRICE ANALYSIS Relocation of Existing Telkom Utility Pole

No. of Pay Item	:	Quantity Product/day :	1.00
Kind of work	:	Relocation of Existing Telkom Utility pole	( EACH )
Unit	:	Each	

No.	Component	Unit	Estimate Quantity	Unit Price (Rp.)	Total price (Rp.)	Remarks
<b>A</b>	<b>LABOUR</b>					
	- Foremen	hour	7.00	6,661.04	46,627.28	
	- Skill labour	hour	7.00	5,151.20	36,058.40	
	- Common labour	hour	14.00	4,573.91	64,034.74	
	- Electrician	hour	7.00	8,881.38	62,169.66	
	<b>Sub Total</b>				<b>208,890.08</b>	
					-	
<b>B</b>	<b>MATERIALS</b>					
	- STK Telkom pole & Accessories	Each	1.00	2,040,000.00	2,040,000.00	
	- Telkom Cable	Lin M	12.00	76,000.00	912,000.00	
	<b>Sub Total</b>				<b>2,952,000.00</b>	
<b>C</b>	<b>EQUIPMENT</b>					
	- Flat Bed Truck & with Crane 5 T	hour	2.50	289,197.65	722,994.13	
	- Tools	ls	1.00	5,000.00	5,000.00	
	- Mobilization and O/P	ls	1.00	777,776.84	777,776.84	
	<b>Sub Total</b>				<b>1,505,770.97</b>	
	<b>Amount = (Q)</b>				<b>4,666,661.05</b>	
	Overhead & Profit 10% x (Q)				466,666.10	
	<b>TOTAL = (B)</b>				<b>5,133,327.15</b>	
	<b>UNIT PRICE</b>				<b>5,133,327.15</b>	

## NORTH JAVA CORIDOR PROJECT

### UNIT PRICE ANALYSIS Electric Cable Upper Ground

No. of Pay Item	:	<b>Quantity Product/day :</b>	<b>40.00</b>
Kind of work	:	<b>Electric Cable upper Ground 3 x 70 mm2</b>	<b>( Ln.M )</b>
Unit	:	<b>Ln.M</b>	

No.	Component	Unit	Estimate Quantity	Unit Price (Rp.)	Total price (Rp.)	Remarks
<b>A</b>	<b>LABOUR</b>					
	- Foremen	hour	7.00	6,661.04	46,627.28	
	- Skill labour	hour	14.00	5,151.20	72,116.80	
	- Common labour	hour	28.00	4,573.91	128,069.48	
	- Electrician	hour	28.00	8,881.38	248,678.64	
	<b>Sub Total</b>				<b>495,492.20</b>	
					-	
<b>B</b>	<b>MATERIALS</b>					
	- Electric Cable 3x70 mm2 and Ascories	Lin.M	40.00	170,000.00	6,800,000.00	
	<b>Sub Total</b>				<b>6,800,000.00</b>	
<b>C</b>	<b>EQUIPMENT</b>					
	- Flat Bed Truck & with Crane 5 T	hour	1.00	289,197.65	289,197.65	
	- Tools	ls	1.00	5,000.00	5,000.00	
	- Mobilization and O/P	ls	1.00	1,517,937.97	1,517,937.97	
	<b>Sub Total</b>				<b>1,812,135.62</b>	
	<b>Amount = (Q)</b>				<b>9,107,627.82</b>	
	<b>Overhead &amp; Profit 10% x (Q)</b>				<b>910,762.78</b>	
	<b>TOTAL = (B)</b>				<b>10,018,390.60</b>	
	<b>UNIT PRICE</b>				<b>250,459.77</b>	



# NORTH JAVA CORIDOR PROJECT

## UNIT PRICE ANALYSIS Protection of Existing Oil Pipe Type A

No. of Pay Item	:	Quantity Product/day :	10.00
Kind of work	:	Protection of Existing Oil Pipe Type A	( Ln.M )
Unit	:	Ln.M	

No.	Component	Unit	Estimate Quantity	Unit Price (Rp.)	Total price (Rp.)	Remarks
<b>A</b>	<b>LABOUR</b>					
	- Foremen	hour	7.00	6,661.04	46,627.28	
	- Skill labour	hour	14.00	5,151.20	72,116.80	
	- Common labour	hour	28.00	4,573.91	128,069.48	
	<b>Sub Total</b>				<b>246,813.56</b>	
					-	
<b>B</b>	<b>MATERIALS</b>					
	- Concrete class E ( Lean concrete )	m <sup>3</sup>	1.50	352,920.23	529,380.35	
	- Concrete class B ( Ready Mix )	m <sup>3</sup>	11.30	568,644.97	6,425,688.16	
	- Reinforcing Steel	kg	734.50	5,900.00	4,333,550.00	
	- Timber formwork	Sq.M	11.60	60,763.89	704,861.12	
	<b>Sub Total</b>				<b>11,993,479.63</b>	
<b>C</b>	<b>EQUIPMENT</b>					
	- Excavator 18 - 140 HP	hour	1.00	341,144.30	341,144.30	
	- Tools	ls	1.00	5,000.00	5,000.00	
	- Mobilization and O/P	ls	1.00	118,591.57	118,591.57	
	<b>Sub Total</b>				<b>464,735.87</b>	
	<b>Amount = (Q)</b>				<b>12,705,029.06</b>	
	Overhead & Profit 10% x (Q)				1,270,502.91	
	<b>TOTAL = (B)</b>				<b>13,975,531.97</b>	
	<b>UNIT PRICE</b>				<b>1,397,553.20</b>	

NORTH JAVA CORIDOR PROJECT

**UNIT PRICE ANALYSIS**  
**Protection of Existing Oil Pipe Type D**

No. of Pay Item	:	Quantity Product/day :	10.00
Kind of work	:	Protection of Existing Oil Pipe Type D	( Ln.M )
Unit	:	Ln.M	

No.	Component	Unit	Estimate Quantity	Unit Price (Rp.)	Total price (Rp.)	Remarks
<b>A</b>	<b>LABOUR</b>					
	- Foremen	hour	7.00	6,661.04	46,627.28	
	- Skill labour	hour	14.00	5,151.20	72,116.80	
	- Common labour	hour	28.00	4,573.91	128,069.48	
	<b>Sub Total</b>				<b>246,813.56</b>	
					-	
<b>B</b>	<b>MATERIALS</b>					
	- Concrete class E ( Lean concrete )	m <sup>3</sup>	0.50	352,920.23	176,460.12	
	- Concrete class B ( Ready Mix )	m <sup>3</sup>	10.80	568,644.97	6,141,365.68	
	- Reinforcing Steel	kg	702.00	5,900.00	4,141,800.00	
	- Timber formwork	Sq.M	6.00	60,763.89	364,583.34	
	<b>Sub Total</b>				<b>10,824,209.13</b>	
<b>C</b>	<b>EQUIPMENT</b>					
	- Excavator 80 - 140 HP	hour	1.00	341,144.30	341,144.30	
	- Tools	ls	1.00	5,000.00	5,000.00	
	- Mobilization and O/P	ls	1.00	118,591.57	118,591.57	
	<b>Sub Total</b>				<b>464,735.87</b>	
	<b>Amount = (Q)</b>				<b>11,535,758.56</b>	
	Overhead & Profit 10% x (Q)				1,153,575.86	
	<b>TOTAL = (B)</b>				<b>12,689,334.42</b>	
	<b>UNIT PRICE</b>				<b>1,268,933.44</b>	

# NORTH JAVA CORIDOR PROJECT

## UNIT PRICE ANALYSIS Under Ground Duct with PVC dia 4"

No. of Pay Item	:	Quantity Product/day :	10.00
Kind of work	:	Under Ground Duct with PVC dia 4"	( Ln.M )
Unit	:	Ln.M	

No.	Component	Unit	Estimate Quantity	Unit Price (Rp.)	Total price (Rp.)	Remarks
<b>A</b>	<b>LABOUR</b>					
	- Foremen	hour	7.00	6,661.04	46,627.28	
	- Skill labour	hour	7.00	5,151.20	36,058.40	
	- Common labour	hour	28.00	4,573.91	128,069.48	
	- Electrician	hour	7.00	8,881.38	62,169.66	
	<b>Sub Total</b>				<b>272,924.82</b>	
					-	
<b>B</b>	<b>MATERIALS</b>					
	- PVC dia 4 "	m <sup>3</sup>	10.00	93,000.00	930,000.00	
	- Electric Cable(Twisted 3x70 +50 mm)	m	30.00	175,000.00	5,250,000.00	
	- Telephone Cable ( STEL-K-001)	m	20.00	81,225.00	1,624,500.00	
	<b>Sub Total</b>				<b>7,804,500.00</b>	
<b>C</b>	<b>EQUIPMENT</b>					
	- Excavator 80 - 140 HP	hour	1.00	341,927.63	341,927.63	
	- Tools	ls	1.00	15,000.00	15,000.00	
	- Mobilization and O/P	ls	1.00	1,686,870.49	1,686,870.49	
	<b>Sub Total</b>				<b>2,043,798.12</b>	
	<b>Amount = (Q)</b>				<b>10,121,222.94</b>	
	Overhead & Profit 10% x (Q)				1,012,122.29	
	<b>TOTAL = (B)</b>				<b>11,133,345.23</b>	
	<b>UNIT PRICE</b>				<b>1,113,334.52</b>	



NORTH JAVA CORIDOR PROJECT

**UNIT PRICE ANALYSIS**  
Relocation of Existing Oil Pipe dia 400 mm

No.of Pay Item	:	Quantity Product/day :	10.00
Kind of work	:	Relocation of Existing Oil Pipe dia 400 mm	( Ln M )
Unit	:	Ln M	

No.	Component	Unit	Estimate Quantity	Unit Price (Rp.)	Total price (Rp.)	Remarks
<b>A</b>	<b>LABOUR</b>					
	- Foremen	hour	7.00	6,661.04	46,627.28	
	- Skill labour	hour	35.00	5,151.20	180,292.00	
	- Common labour	hour	49.00	4,573.91	224,121.59	
				8,881.38		
		<b>Sub Total</b>			<b>451,040.87</b>	
					-	
<b>B</b>	<b>MATERIALS</b>					
	- Oil Pipe dia 400 mm	Lin M	10.00	467,670.00	4,676,700.00	
	And ascesories					
		<b>Sub Total</b>			<b>4,676,700.00</b>	
<b>C</b>	<b>EQUIPMENT</b>					
	- Flat Bed Truck & with Crane 5 T	hour	2.00	289,980.98	579,961.96	
	- Excavator 80 - 140 HP	hour	1.00	341,927.63	341,927.63	
	- Tools	ls	1.00	15,000.00	15,000.00	
	- Mobilization and O/P	ls	1.00	161,593.70	161,593.70	
		<b>Sub Total</b>			<b>1,098,483.29</b>	
	<b>Amount = (Q)</b>				<b>6,226,224.16</b>	
	Overhead & Profit 10% x (Q)				622,622.42	
	<b>TOTAL = (B)</b>				<b>6,848,846.58</b>	
	<b>UNIT PRICE</b>				<b>821,861.59</b>	

## NORTH JAVA CORIDOR PROJECT

### UNIT PRICE ANALYSIS Dig and Deepen Telephone

No. of Pay Item	:	Quantity Product/day :	10.00
Kind of work	:	Dig and Deepen Telephone	( Ln M )
Unit	:	Ln M	

No.	Component	Unit	Estimate Quantity	Unit Price (Rp.)	Total price (Rp.)	Remarks
<b>A</b>	<b>LABOUR</b>					
	- Foremen	hour	7.00	6,661.04	46,627.28	
	- Skill labour	hour	14.00	5,151.20	72,116.80	
	- Common labour	hour	42.00	4,573.91	192,104.22	
	<b>Sub Total</b>				<b>310,848.30</b>	
					-	
<b>B</b>	<b>MATERIALS</b>					
	- Sand	hour	4.00	65,600.00	262,400.00	
	<b>Sub Total</b>				<b>262,400.00</b>	
<b>C</b>	<b>EQUIPMENT</b>					
	- Excavator 80 - 140 HP	hour	1.00	341,927.63	341,927.63	
	- Tools	ls	1.00	15,000.00	15,000.00	
	- Mobilization and O/P	ls	1.00	133,555.19	133,555.19	
	<b>Sub Total</b>				<b>490,482.82</b>	
	<b>Amount = (Q)</b>				<b>1,063,731.12</b>	
	<b>Overhead &amp; Profit 10% x (Q)</b>				<b>106,373.11</b>	
	<b>TOTAL = (B)</b>				<b>1,170,104.23</b>	
	<b>UNIT PRICE</b>				<b>117,010.42</b>	