# CONSTRUCTION AND MAINTENANCE QUANTITIES FOR ALL PROPOSED ROAD LINKS (MAINTENANCE)

PROV : RIAU KAB : INDRAGIRI HULU

er og er <b>tiltjein</b> , gan bredgar	UNIT	( 1980 )	< 1989 >	< 1990 >	( 1991 )	< 1992 >	( TOTAL >
QUIFHENT 1							
Bulldozer/Ripper	hr	0.0	0.0	0.0	0.0	0.0	0.0
Swamp Bulldozer	hr	0.0	0.0	0.0	0.0	0.0	0.0
Motor Grader	hr	759.2	1518.5	1853.5	1653.5	1703.0	7287.7
Hand-guide Vib. Roller	hr	232.5	465.0	465.0	1035.0	1455.0	3652.5
Tire Roller	hr	759.2	1510.5	1653.5	1653.5	1703.0	7287.7
Vibratory Roller (D41)	hr	0.0	0.0	0.0	0.0	0.0	0.0
Nydraulic Excavator; Wheel	hr	0.0	0.0	0.0	0.0	0.0	0.0
Wheel Loader	hr	276.1	552.4	600.1	614.4	701.0	2774.0
Water Tank Truck	hr	0.0	0.0	0.0	0.0	0.0	0.0
Duep Truck	hr	2122.2	1244.6	4530.5	5935.5	7114.0	23946.8
Flat Bed Truck with Crane	hr	2134.5	4269.2	4269.2	1274.1	5596.8	20543.B
Flat Bed Truck	hr	2979.5	5959.2	6454.2	6910.2	7421.8	29724.9
Portable Crusher/Screening	hr	138.5	277.1	301.0	324.2	353.2	1394.0
Concrete Hixer	hr	1.1	2.3	2.3	2.3	2.6	10.6
Water Pump	hr	1.1	2.3	2.3	2.3	2.6	10.6
Concrete Vibrator	hr	1.1	2.3	2.3	2.3	2.6	10.6
Asphalt Sprayer	hr	0.0	0.0	0.0	0.0	0.0	0.0
ABOUR : Handur	nan day	1059.9	2120,2	2270.7	2621.7	2979.6	11052.1
Skilled Labourer	man day	664.9	1329.0	1329.8	1720.0	2337.4	7381.9
Carpenter	aan day	273.0	546.0	546.0	551.5	732.4	2648.9
Nason	man day	0.0	0.0	0.0	0.0	0.0	0.0
Labourer	man day	12023.5	24047.4	25835.9	30079.7	33980.3	125966.8
Oriver	man day	1303.3	2607.0	2737.1	3049.1	3611.3	13306.8
Operator	man day	315.4	691.0	751.9	767.2	802.9	3358.4
ATERIAL :							
Bitumen	1 1	2092.5	4185.0	4185.0	9315.0	13075.0	32872.5
Asphalt Oil	i	0.0	0.0	0.0	0.0	0.0	0.0
Kerosene	1.	232.5	465.0	465.0	1035.0	1155.0	3652.5
Sand	a3	39.8	79.8	79.B	174.8	245.1	619.3
Cement	bag	16.9	33.8	33.8	33.8	30. i	156.4
River Stone	<b>83</b>	0.0	0.0	0.0	0.0	0.0	0.0
Steel Houlds	set	0.0	0.0	0.0	0.0	0.0	0.0
lieber	я3	24.7	49.4	49.4	19.9	66.3	239.7
Paint	1	174.9	349.8	349.8	353.3	470.0	1697.8
Reinforcing Steel	kg	84.8	173.7	173.7	173.7	195.8	803.7
Tying Hire	kg	0.7	1.5	1.5	1.5	1.7	6.9
Equivalent Royalty	<b>a</b> 3	3913.8	7827.8	8502.8	9129.8	9929.0	39304.0

## CONSTRUCTION AND MAINTENANCE QUANTITIES FOR ALL PROPOSED ROAD LINKS (TOTAL)

PROV RIAU KAB .... INDRAGIRI HULU ( 1990 ) UNIT < 1988 > < 1989 > < 1991 > < 1992 > · EQUIPMENT : Bulldozer/Ripper 1256.2 1033.5 1293.0 1164.2 670.1 5437.0 hr Swamp Bulldozer 24.8 124.0 24.0 24.8 24.0 24.8 Motor Grader hr 2086.0 4312.0 4031.7 4816.9 4234.6 19481.2 Hand-guide Vib. Roller 550.3 895.5 864.1 1437.2 1879.3 5626.4 hr Tire Roller hr 1429.2 2895.3 3652.5 3935.7 3582.9 15495.6 Vibratory Roller (D&T) 1089.0 2262.0 1917.3 2537.3 2009.0 9914.6 hr Hydraulic Excavator: Wheel 180.0 185.5 185.5 184.6 185.7 921.3 hr Nieel Loader 2205.4 4361.0 1096.9 5318.7 4536.4 20519.2 hŕ Nater Tank Truck 725.5 1505.3 1320.6 1804.2 1398.3 6753.9 hr Dump Truck 16991.7 33505.5 31436.3 40994.0 36402.5 159320.0 hr Flat Bed Truck with Crane 2374.8 4645.3 4628.0 4661.7 6019.2 22329.0 hr: Flat Bed Truck 3070.5 7762.1 8993.3 9791.6 9829.5 40267.0 hr Portable Crusher/Screening 487.3 793.9 1090.6 1372.5 1220.5 5184.0 hr. Concrete Nixer hr 89.6 170.1 170.1 187.7 209.6 927.1 Water Pump hr 72.8 303.2 303.2 349.9 411.5 1440.6 Concrete Vibrator hr 39.3 59.7 59.7 65.9 71.8 296.4 1999.0 1879.9 Asphalt Sprayer hr 670.0 1376.0 2282.2 8207.9 LABOUR : 4755.2 5568.6 5657.6 23064.5 Handur man day 2437.6 4445.5 2966.6 3408.8 4063.1 14698.2 Skilled Labourer gan day 1310.9 2748.8 671.6 919.7 754.5 708.5 3388.0 Carpenter san day 333.7 159.6 174.9 195.0 772.9 Hason: man day 93.8 159.6 52797.7 60748.8 63179.2 254171.7 Labourer man day 26767.8 50678.2 8402.7 9673.2 Driver man day 4272.6 8477.2 10290.4 41116.1 3678 1 3586.6 4381.0 3813.7 Operator man day 1898.2 17357.6 MATERIAL : Bi Lunen 165404.9 329643.2 481309.B 565606.6 471344.9 2013309.4 Asphalt Uil 22110.0 47539.1 60072.5 75313.3 62040.0 275074.9 1 32392.4 Kerosene 66920.7 96687.3 110581.6 91694.9 398176.9 1 Sand 555.3 1013.2 1293.2 1494.1 1400.9 5756.7 43 Cement 606.7 939.8 939.B 1035.3 1131.1 4652.7 bao River Stone 83.8 174.2 174.2 191.9 215.8 839.9 s3 Steel Houlds 223.2 244.2 244.2 253.8 260.6 1226.0 set limber 29.3 66.1 58.6 61.6 80.3 295.9 .3 Paint-- 1 204.4 409.7 349.0 353.3 470.0 1787.2 Reinforcing Steel kq 7206.8 12652.0 12652.0 14400.5 16001.9 62913.2 130.B 571.3 Tying Wire kg 65.4 114.9 114.9 145.3 8.10204 80133.1 65415.4 300677.7 Equivalent Royalty 31106.9 63720.5

Appendix A-5:

#### CONSTRUCTION AND MAINTENANCE COSTS FOR ALL PROPOSED ROAD LINKS (CONSTRUCTION)

PROV : RIAU KAB : INDRAGIRI HULU ( 1000 Rp ) TINU ( 1988 ) (1989 ) (1990 ) ( 1991 ) (1992) (TOTAL) EQUIPMENT : 388,078 1,786,905 191,675 379,424 361,253 467,475 Bulldozer/Ripper 16527 11,405 20,761 17,080 21,369 19,240 89,855 Swamp Buildozer 12115 300 300 300 300 300 1,500 Hotor Grader 14037 18,624 39,212 33,382 44,404 35,536 171,158 Hand-guide Vib. Roller 1571 490 626 631 666 3,078 676 Tire Roller 11544 7,734 15,993 23,076 26,345 21,701 94,749 7,602 15,791 Vibratory Roller (D&I) 6981 13,384 17,712 14,024 68,513 2,401 2,474 Hydraulic Excavator; Wheel 13339 2,474 2,462 - 2,477 12,280 Wheel Loader 17168 33,122 65,399 60,033 80,248 65,846 304,648 Water Tank Truck 1225 3,065 7,622 5,907 28,532 6,359 5,579 Dump Truck 5679 84,397 152,798 199,097 166,329 760,703 166,172 Flat Bed Truck with Crane 5324 1,279 1,710 2,063 2,248 9,502 2,002 B,744 38,297 Flat Bed Truck 3632 3,308 6,540 9,222 10,465 171,660 48,376 39,274 Portable Crusher/Screening 45284 15,795 32,459 35,756 6,969 1,767 Concrete Nixer 8539 755 1,432 1,432 1,583 708 172 203 Water Pupp 497 35 149 149 21 23 Concrete Vibrator 335 12 19 19 3,793 16,561 4,605 Asphalt Sprayer 2018 1,352 2,778 4,033 604,963 126,016 149,772 136,018 LABOUR : 67,711 126,446 10,931 12,966 11,783 52,852 Kandur 4400 6,061 11,111 5,401 2,131 4,692 6,233 5,694 24,141 Skilled Labourer 3300 3,250 267 917 552 690 824 Carpenter 4400 858 3,399 702 769 4400 368 702 Hason 84,340 80,296 352,560 2750 40,546 73,234 74,144 Labourer 91,768 18,696 23,899 20,004 9,798 19,371 Driver. 3300 76,993 15,590 19,875 16,559 5500 8,540 16,429 Operator 337,995 1,472,860 253,242 351,485 404,534 125,604 HATERIAL : 190,849 222,516 183,299 792,171 130,183 400 65,324 Bitunen 412,610 71,308 102,108 112,969 93,060 33,165 1500 Asphalt Oil 98,627 8,039 16,588 24,055 27,386 22,559 250 Kerosene 20,548 3,733 4,853 5,277 4,623 2,062 4000 Sand 4,918 20,232 4,077 4,077 1,506 2,654 4500 Cenent 16,798 3,484 3,484 3,838 4,316 1,676 River Stone 20000 2,030 2.084 9.805 1,953 1,953 B000 1,785 Steel Houlds 994 1,190 4,776 B5000 391 1,419 782 Timber 73 149 222 2500 Paint 3,560 6,239 7,113 7,903 31,054 6,239 500 Reinforcing Steel 136 155 172 676 1200 77 136 Tying Hire 65,341 6,798 13,973 12,749 17,750 13,871 Equivalent Royalty

#### CONSTRUCTION AND MAINTENANCE COSTS FOR ALL PROPOSED ROAD LINKS (MAINTENANCE)

FROV RIAU KAB : INDRAGIRI HULU ( 1000 Rp ) UNIT ( 1989 > ( 1989 ) < 1990 > ( 1991 ) ( 1992 ) ( TOTAL ) EQUIPHENT : 65,041 130,102 138,878 151,246 171,052 656,319 0. Bulldozer/Ripper 0 Ð 0 16527 0.4 0 Swamp Bulldozer 12115 ٥ 0 0 23,905 102,298 Hotor Grader 21,315 23,210 23,210 14037 10,656 1,625 2,285 5,735 Hand-guide Vib. Roller 365 730 730 1571 84,128 17,529 19,089 19,088 19,659 Tire Roller 8,764 11544 0 0 Vibratory Roller (D&T) 6981 Λ 0 Hydraulic Excavator; Hheel 0 13339 0 - 0 47,622 4,740 9,483 10,302 12,034 Wheel Loader 17168 11,063 Water Tank Truck . 0 1225 ...0 0 25,728 135,991 Dump Truck 5679 12,051 24,105 40,400 33,707 109,374 22,729 22,755 29,797 Flat Bed Truck with Crane 5324 11,364 22,729 26,955 107,957 23,441 25,097 Flat Bed Truck 3632 10,821 21,643 63,124 Portable Crusher/Screening 45284 6,271 12,548 13,630 14,681 15,994 89 19 19 19 22 Concrete Nixer 8539 9 1 l Water Pump 497 . 0 ٠, 335 0 Ó - 0 Concrete Vibrator 2018 0 Asphalt Sprayer LABOUR : 47,321 100,996 133,822 493,423 94,651 116,633 4400 9,328 9,991 11,535 13,110 48,627 Handur 4,663 Skilled Labourer 3300 2,194 4,388 4,308 5,676 7,713 24,359 2,402 Carpenter 1400 1,201 2,402 2,426 3,222 11,653 . 0 Mason 4400 0 0 0 0 Labourer 2750 33,064 66,130 71,048 82,719 93,445 346,406 Driver 3300 4,300 8,603 9,032 10,058 11,917 43,910 Operator 5500 1,899 3,800 4,135 4,219 4,415 18,468 HATERIAL : 9,377 9,546 4,687 12,328 16,143 180,52 1,674 Bitumen 400 837 1,674 3,726 5,238 13,149 Asphalt Oil 1500 0 . 0 0 258 911 Kerosene 250 ` 58 116 116 363 699 2,476 Sand: 4000 159 319 319 980 152 171 703 Ceaent 4500 . 76 152 152 20000 . 0 . 0 River Stone 0 - 0 Ò Steel Houlds 8000 0 0 - 0 0 85000 4,199 4,241 5,635 20,373 Timber 2,099 4,199 1,175 Paint: 2500 874 983 4,243 437 974 Reinforcing Steel 500 13 . Dá 86 BP 97 398 Tying Kire 1200 5 0 . ! · • Equivalent Royalty 250 1,956 2,125 2,282 9,823 978 2,482

#### CONSTRUCTION AND MAINTENANCE COSTS FOR ALL PROPOSED ROAD LINKS (TOTAL)

PROV : RIAU KAB : INDRAGIRI HULU. ( 1000 Rp ) ITEH UNIT <: 1988 > ( 1989 ) ( 1990 ) (1991) (1992) (TOTAL) EQUIPMENT : 256,716 509,526 500,131 618,721 559,130 2,443,224 Buildozer/Ripper 17,080 16527 11,405 20,761 21,369 19,240 89,855 Swamp Bulldozer 12115 300 300 300 300 300 1,500 Hotor Grader 14037 29,280 60,527 56,592 67,614 59,441 273,454 Kand-quide Vib. Roller 1,406 1571 864 1,358 2,256 2,951 8,833 Tire Roller 42,164 11544 16,498: 33,422 45,433 41,360 178,877 Vibratory Roller (D&T) 13,384 6981 7,602 15,791 17,712 14,024 68,513 2,474 Hydraulic Excavator; Wheel 2,462 13339 2,401 2,474 2,477 12,288 Wheel Loader 91,311 17168 37,962 74,882 70,335 77,880 352,270 Water Tank Truck 4725 3,065 6,359 5,579 7,622 5,907 28,532 Dump Truck 5679 96,438 190,277 178,526 232,804 206,729 904,774 24,818 21,731 118,876 Flat Bed Truck with Crane 5324 24,639 12,643 32,045 Flat Bed Truck 3632 14,129 28,191 32,663 35,562 35,699 146,244 55,260 Portable Crusher/Screening 45294 22,066 45,007 49,386 63,057 234,784 Concrete Mixer 8539 764 1,451 1,451 1,602 1,789 7,057 712 Hater Pump 497 35 150 150 173 204 Concrete Vibrator 335 12 21 23 19 19 74 Asphalt Sprayer 2018 1,352 2,778 4,033 1,605 3,793 16,561 221,097 227,012 265,405 269,840 1,098,386 LABOUR : 115,032 4400 ... 10,724 20,439 20,922 24,501 24,893 101,479 Handur 9,789 48,500 Skilled Labourer 3300 4,325 9,070 11,909 13,407 3,116 14,703 Carpenter 4400 1,468 3,319 2,754 4,046 769 958 3,399 Hason 4400 368 702 702 167,059 139,364 145,192 173,741 447,894 Labourer 2750 73,610 27,974 27,728 33,957 31,921 135,678 Driver 3300 14,078 20,229 19,725 24,094 20,974 95,461 Operator 5500 10,439 361,031 416,862 354,138 1,524,941 130,291 262,619 MATERIAL : 131,857 192,523 226,242 188,537 805,320 400 Bitumen 161,66 71,308 102,108 112,969 93,060 412,610 33,165 Asphalt Oil 1500 99,538 16,704 24,171 27,644 22,922 250 8,097 Kerosene 5,976 5,603 23,024 4,052 5,172 2,221 Sand 4000 4,658 20,935 4,229 1,229 5,089 2,730 Ceaent 4500 3,838 3,484 16,798 3,484 4,316 River Stone 20000 1,676 1,953 1,953 2,030 2.094 9,805 B000 1,785 Steel Houlds 2,490 5,618 4,981 5,235 6,825 25,149 85000 Timber 1,023 874 883 1,175 4,465 2500 510 Paint: 3,603 6,325 7,199 8,000 31,452 6,325 500 Reinforcing Steel - 137 156 174 188 1200 77 ... 137 Tying Mire 20,032 250 15,929 15,074 16,353 75,164 **Equivalent Royalty** 

Appendix A-6 QUANTITIES OF BRIDGE ON PROPOSED ROAD LINKS

NO NK	BRIDGE NAME	Ke		(( ) rf (EXIST)				LENSTH (m)		SPAN LENGTH (m)		ARÈA (EXIST) (m2)	(nek) (nek)		1,600	ROAD Class
21	BONDAR	 5	` X	KK				15.10	\$	3.02	4.00	60.40		4	2	Illa
٠.	KECUNDUNG	12	LBJB	KK			· .	27.00	7	3.86	e from the least	108.00		6	2	
i agi	BATANG ANTAN 2	13	LBJP	KK				16.70	. 4	4.19	4.00	66.80	Asil 4	- 3	2	
	TERATAK TINGGI	14	LBJB	KK	- <u> </u>		1.44	13.80	4	3.45	4.00	55.20		. 3	2	네 설
٠.,	NANTI	15	LOJO	KK			1.2	15.80	- 1	3.95	1.00	63.20	#	3	2	andra Garage
	DODOK	l5	LOJB	KK				12.00	3	4.00	4.00	48,00		2	2	
	TANJUNG PUTUS	16	LB18	KK	- 1 - 1			18.00	5	3.60	4.00	72.00			2	
5 4.5	ANDACANG	.17	[B]B	: KK	100			7,60	2	3.80	4.00	30.40			2	
	BULUH	17	L818	KK	V		1000	17,00	- 5	3.40	4.00	68.00		•		35.7
1. 3	BATANG ANTAN	- 18	LBJ8	KK	ji k		\$4.5°	22.40	- 5	4.48	4.00	87.60			, ,	
: 1	BOTUANG	- 18	FB18	KK	18.7	- 11		15.80	•	3.95	4.00	63.20		3	. 2	4.17
	KELAPA KOTO	19	TB18	KK	gg Ass		4. 4	22.10	4	5.53	4.00			3	2	7 5 T
1.1	SANGAU	1	LBJ8	LL.		1 Jan 2	3.5	30.00	1	7.50	5.00	150.00			2	
	SALO	- 2	LBJD	· LL				30.00	5	8.00		150.00		4	2	
	CENGAR	5	L8J9	KK				8.60		2.00	4.00	32,00		3	2	
23	SEKONDA	10	MRL8	+-	TN	101	(B)	4.00	1	4.00	4.00	0.00	16.00	0	2	IIIB
 37	ANAK S.RAYA	0	y	KK	*****			5.00	1	5.00	4.00	20.00		0.	2	ELLIB
	RAYA	3	TLJJ	KK	4 - ( )	1.0		10.50	•	10.50	4.00	42.00		0	2	
	LOPAK	5	TLJJ	KK	dia.			8.60	1	8.60	4.00	34.40	11.7%	0	2	
٠	TOLANG	6	ILJJ	KK			. (F.	8.40	. 1	8,40	1,00	33.60		0	2	3
41	DANAU 3	2	DNT6		RC	BH50	(E)	15.00	1	15.00	4.50	0.00	67.50	0	2	1114
47	N. 1	0	<b>##</b>		RC	9H50	(E)	22.00	2	11.00	4.50	0.00	99.00	i	2	IIIA
ean.	N. I		<u>, , , , , , , , , , , , , , , , , , , </u>	KB				20.00		20.00	4 00	80.00		0	7	1118

### Appendix A-7 CONSTRUCTION AND MAINTENANCE COST OF BRIDGES ON PROPOSAL ROAD LINKS

PROV : RIAU KAD : INDRAGIRI HULU LINK NO : 21 (IIIA) LENGTH : 28 Km

( Rp ) ITEN ((( UNIT COST >>> COST **>>>>>>** UNIT QUANTITY FOREIGH LOCAL **FOREIGN** LOCAL TOTAL Superstructure (limber:Span Ja:101) 0.00 47,841 Superstructure (limber; Span 5m; 101) **n**2 0.00 52,990 3,909 Superstructure (Fieber; Span 8e; 101) 0.00 70,185 5,136 Ô Superstructure (limber; Span 3m; BMSO) **2**2 0.00 59,320 4,377. ... Superstructure (limber; Span Sm; BMSO) **a**2 0.00 64,758 4,744 Superstructure (Timber; Span 8m; BH50) B2,130 6,005 Superstructure (Concrete; Span 3m; BMSO) 42 0,00 56,851 84,668 Superstructure (Concrete; Span 5m; 8H50) a2 0.00 59,566 71,958 Superstructure (Concrete; Span 80; 8850) •2 0.00 60,465 78,193 Superstructure (Concrete; Span10a; PH50) **B**2 88,519 0.00 66,307 Superstructure (Concrete; Span15a; BM50) 103,897 0.00 71.757 Substructure (Pier; for Timber; 101) ND 0.00 416,957 32,854 Substructure (Abut; for Timber; 101) 0.00 NO 154,289 1,184,284 Substructure (Pier; for Timber; RH50) HO 0.00 48,620 613,092 Substructure (Abut; for Timber; 8H50) NO 0.00 171,456 1,332,636 Substructure (Pier; for Concrete; BHSO) NO 0.00 2,643,323 466,720 Substructure (Abut; for Concrete; 8H50) NO 0.00 5,287,354 981,821 Desolition of Bridge (Timber-) Timber) a2 0.00 13,511 1,372 Demolition of Bridge (Timber->Concrete) 0.00 13,511 1,372 Demolition of Bridge (Concrete) 0.00 113,679 54,439 Maintenance of Timber Bridge (New) 0,00 8,755 1,121 2,099 Maintenance of Concrete Bridge (New) 0.00 2,312 Maintenance of limber Bridge (Exist) 1145.20 9,518 2,403 9,754,813 2,751,915 97 Maintenance of Concrete Bridge (Exist) 0.00 1,560 2,305 ( Without Overhead ) TOTAL COST (Timber Bridge) (Concrete Bridge) TOTAL COST (mithout Haintenance) TOTAL COST (Timber Bridge) ( Overhead : 15% ) (Concrete Bridge) TOTAL COST (without Maintenance)

PROV : RIAU KAB : INDRAGIRI HULU

LINK NO : 23 (1118-2)

LENGTH : 30 Km

		andra (1998) Prajecja se s					( Rp )
17 E H	TIKU	QUANTITY	<<< UNIT Local	COST >>> FOREIGN	\\\\\\ Local	COST FOREIGN	>>>>> Total
Superstructure (Timber;Span 3m;[0])	<b>a2</b>	0.00	47,841	3,540		O.	0
Superstructure (limber: Span 5m; 101)	P.S	16.00	52,990	3,709	B47,840	62,544	910,384
Superstructure (Ilaber: Span 8m; 101)	<b>a</b> 2	0.00	70,185	5,136	0	0	0
Superstructure (Timber; Span 3m; BH50)	p2	0.00	59.320	4,377	Ò	0	0
Superstructure (limber; Span Sm; 8M50)	a2	140 000 000	64,759	4,744	0	0.0	0
Superstructure (limber; Span 8m; DK50)	62	100	B2,130	6,005	0	0	0
Superstructure (Concrete; Span 3a; BH50)	*2	0.00	54,851	64,668	0	0	0
Superstructure (Concrete; Span 5m; 8H50)	57	and the second	58,566	71,958	0	0	0
Superstructure (Concrete; Span 80; 8M50)	■2	0.00	60,465	78,193	0	0	0
Superstructure (Concrete; Spanion; DASO)	<b>e</b> 2	0.00	66,307	88,519	0	0	
Superstructure (Concrete; Spant5e; BMSO)	#2	0.00	71,757	103,897	0	0	0
Substructure (Piersfor Timber; 107)	NO	0.00	416,857	32,854	0	0	0
Substructure (Abut; for Timber; 101)	HO	2.00	1,184,284	154,288	2,368,568	308,576	2,677,144
Substructure (Pier; for limber; BM50)	ая	0.00	613,092	48,620	0	0	ora est estado
Substructure (Abut; for Timber; BH50)	KO	0.00	1,332,636	171,456	0	0	0
Substructure (Pier; for Concrete; BH50)	NO	0.00	2,643,323	466,720	0	0	0
Substructure (Abut; for Concrete; 8H50)	NO	7.7	5,287,354	981,821	0	0	0
Desolition of Bridge (Timber-)Timber)	₩2		13,511	1,372	0	0	0
Demolition of Bridge (Timber-)Concrete)	#2	and the second	13,511	1,372	0	0	0
Deanlition of Bridge (Concrete)	a2	0.00	113,679	54,439	0	0	0
	18.0	d distance					
Maintenance of Timber Bridge (Hex)	e5		8,755	1,121	140,080	17,936	158,016
Haintenance of Concrete Bridge (New)	92	0.00	2,099	2,312	0	0	0
Haintenance of Timber Bridge (Exist)	<b>2</b> 2	0.00	8,518	2,403	U	Ü	U
Haintenance of Concrete Bridge (Exist)	92	0.00	1,560	2,305	0	Đ	
( Without Overhead )		INIAI PACI	(Timber Brid		3,216,408	371,120	3,587,528
( without cashings )		IRINE EDSI	(Concrete Br		012101100	3111110	012011210
	4 4 .	INTAL COST	(without Main		3,216,408	371,120	3,597,529
		IUINL CUUI	INTERIOR HOLL	iicettance,	eletativo.	0111150	010011220
( Overhead : 15% )		ENTAL PROT	(limber Brid	na l	3,698,869	426,788	4,125,657
r nactured 1 17r 1	1200	IGINE PASI	(Concrete Br		0,010,001	110,100	1,123,031
		INTAL COST	(without Main		3,698,869	426,788	1,125,657
	:	WINE DOOL	- AS ENGINE DESI		Maintant	1201100	1.20,000

FROV : RIAU KAB : INDRABIRI HULU

							( Rp )
( î. ë. ii	TINU	QUANTITY	((( UNIT LOCAL	COST >>> FOREIGN	CCCAL LOCAL	COST FOREIGN	>>>>> TOTAL
Superstructure (Timber;Span 3m;10T)	a2	0.00	47,841	3,540	^	<b>.</b>	
Superstructure (Timber; Span 5m; 10T)	62	the second second	52,990	3,707	0	Δ	
Superstructure (TimberjSpan Boj101)	•2	****	70,185	5,136	0	,	
Superstructure (Tieber; Span Je; BM50)	*2		59,320	4,377	Ó	۸	$\sqrt{2} \left( \frac{1}{2} + \frac{1}{2} + \frac{1}{2} \right)$
Superstructure (fimber;Span Sm;8H50)	<b>*2</b>		61,759	1,744	Å	ň	
Superstructure (limber; Span Bm; RH50)	*2		82,130	8,005	Ŏ	Ň	
Superstructure (Concrete;Span 3m;BH50)	n2		56,851	61,669	Ŏ	n n	
Superstructure (Concrete; Span 5m; BH50)	n2		58,566	71,958	ŏ	ň	
Superstructure (Concrete;Span 8m;BM50)	92		60,465	78,193	0	'n	
Superstructure (Concrete; Spanlog; BM50)	<b>B2</b>		66 307	88,519	Ŏ	ň	
Superstructure (Concrete; Spanism; BM50)	<b>a</b> 2	7	71,757	103,897	Ŏ.	ň	
Substructure (Pier; for Timber; 107)	NO	0.00	416,857	32,854	Ō	6	
Substructure (Abut; for Timber; 101)	NO	4 5 5	1,101,281	154,288	0	Ó	
ubstructure (Pieryfor Timber:8H50)	NO	0.00	613,072	48,620	0	Ō	ta de la
Substructure (Abut; for Timber; BM50)	KO	0.00	1,332,636	171,456	Ó	0	
Substructure (Pierifor Concrete; BN50)	NO	0.00	2,643,323	466,720	Ŏ	Ò	
Substructure (Abutifor Concrete; BMSO)	HO	0.00	5,287,354	981,821	0	0	
Demolition of Bridge (limber-) limber)	67		13,511	1,372	0	ò	
Demolition of Bridge (Himber->Concrete)	e2		13,511	1,372	0	0	
Demolition of Bridge (Concrete)	<b>n</b> 2		113,679	. 54,439	Ò	0	
Maintenance of Timber Bridge (New)	n2	0.00	8,755	1,121		0	
laintenance of Concrete Bridge (New)	m2	0.00	2,099	2,312	0	0	
faintenance of limber Bridge (Exist)	a2	130.00	8,518	2,103	1,107,340	312,390	1,419,73
faintenance of Concrete Bridge (Exist)	<b>n</b> ?	0.00	4,560	2,305	0	0	
( Without Overhead )	1	OTAL COST	(Timber Brid	ne)	0	0	
			(Concrete Br		Ó	. 0	
	1	IOTAL CUST	(without Hai		0	0	
( Byerhead : 15% )		T203 JATO	(Timber Brid	de)	0	0	
t orthogot 10%		,	(Concrete Br		0	Ô	
	1	IOTAL COST	fuithout Main		Ŏ	Ó	
							100

PROV : RIOU KAB : INDRAGIRI HULU

LINK NO : 41 (LIIA) LENGTH : 20 Km

							( Rp.)
	UNIT	DUANTITY	LOCAL	COST >>> FOREIGN	CCCCC LOCAL	COST. FOREIGN	///// Total
Superstructure (Timber;Span 3m;101)	n2	0.00	47,841	3,540	0	, de la companya de l	1,450
Superstructure (Timber;Span Sm;101)	• • 2	0.00	52,990	3,909	0	V	yr cy Thirpe
Superstructure (limber;Span 8m;101) Superstructure (limber;Span 3m;BM50)	s2 s2	0.00	70,185 59,320	5,136 4,377	V	,	
Superstructure (Timber;Span Sm;BNSO)	#2	0.00	64,759	4,744	V	Ų.	
Superstructure (Timber;Span Bm;9450)	a2	1.29	82,130	6,005	0	, ^	
Superstructure (Concrete;Span Sm;RHSO)	#2 #2	0.00	56,851	61,668	0	0	
Superstructure (Concrete;Span Sm;BMSO)	, and the second	1.00		The state of the s		, v	
Superstructure (Concrete;Span Sm;BH50)	AZ AZ	0.00	58,566 60,465	71,958 78,193			
Superstructure (Concrete;Spantom;DMSO)	#2 #2	0.00	66.307	00,175	V.		
	100	67.50		103,897	) 047 507	2 017 047	11.956,64
Superstructure (Concrete;SpantSa;BMSO) Substructure (Pier;for Timber;101)	e Z No	0.08	71,757 416,857		4,643,597	2,013,047	11101010.
Substructure (Abut; for limber; 101)	NO.	0.00	1,184,284	32,854 154,288	<b>,</b>	0	
Substructure (Pieritor limber:8850)	NO	0.00	613,092	49,620			
Substructure (Abutifor Haberi8H50)	NO CH	3.4.	1,332,636	171,456	,	V	
Substructure (Pierifor Concrete;BMSO)	10 110	1.7	2,613,323	466,720		, V,	
	4.117	and the second second			0 574 70B	V 710 1	12 570 7
Substructure (Abut; for Concrete; BN50)	NO	2.00	5,287,354	981,821	10,574,708	1,963,642	12,538,3
Descrition of Bridge (Timber->limber)	<b>2</b> 2	0.00	13,511	1,372		0	
Demolition of Bridge (Timber-)Concrete)	ь2	0.00	13,511	1,372	V	v	
Demodition of Bridge (Concrete)	m2	0.00	113,679	54,439	<b>0</b> :	V	
Haintenance of Timber Bridge (New)	<b>s</b> 2	0.00	9,755	1,121	0	0	
Haintenance of Concrete Bridge (New)	•2	67.50	2,099	2,312	141,692	156,060	297,7
Naintenance of Timber Bridge (Exist)	<b>a</b> 2	0.00	8,518	2,403	0	0	
Maintenance of Concrete Bridge (Exist)	<b>a</b> ?	0.00	4,560	2,305	0	·	
		OTAL CORV					
( Without Overhead )	,	UIAL LUSI	(Timber Bride		U	0 027 100	71 701 0
		TOTAL COOK	(Concrete Bri		15,419,305	8,976,689	21,394,9
		MIHL COST	(without Mair	renance:	15,418,305	8,976,689	24,394,9
( Overhead : 15% )	1	OTAL COST	(Timber Brid	ne)	0	0	
Confilleds 1 189 1		0001	(Concrete Bri		17,731,051	10,323,192	28,054,2
		ATAL COST	(without Hair		17,731,051	10,323,192	28,051,2

PROV : RIAU KAB : INDRAGIRI HULU

LINK NO : 47 (111A)

LENGTH : 33 Km

perstructure (linber;Spån Ja;(01)		QUANTITY	LOCAL	COST >>> FOREIGN	(((() Local	COST FOREIGN	>>>>> TOTAL
narchruckura (LiskasiCosa 75, 101)							
het act ar cot a tit what langt and fall	•2	0.00	47,841	3,540	0	0	٥
perstructure (limber;Span 5m;(01)	02	and the second of	52,990	3,909	Ŏ	, ,	ň
perstructure (Timber;Span Gm;101)	#2	0.00	70,185	5,136	ň	Ň	ň
perstructure (limber;Span 3m;BM50)	<b>n2</b>	0.00	59,320	4,377	Û	ň	0
perstructure (Timber)Span Sm:8H50)	<b>a</b> 2	0.00	61,758	4,744	ň	0	ň
perstructure (Timber;Span 8m;8M50)	• 2	100	82,130	6,005	ň	^	arta e te
perstructure (Concrete; Span 3m; BHSQ)	- 2	0.00	56,851	64,668	Ň	Å	ď
perstructure (Concrete; Span 5m; BN50)	<b>a</b> 2	0.00	58,566	71,958	, v	0	۸
perstructure (Concrete; Span Ba; BHSO)	<b>*2</b>	0.00	60.465	78,193	0	Ň	, , , , , , , , , , , , , , , , , , ,
perstructure (Concrete; Span10m; BK50)	67	0.00	66,307	88,519	Ů	٨	۰ .
perstructure (Concrete; Span15m; BH50)	2	99.00	71,757	103,897	7,103,943	10,285,803	17,389,746
bstructure (Piersfor Timber; 101)	HO	0.00	416,857	32,854	, 11691149	1010001003	1149014140
bstructure (Abutifor Timber;101)	110	0.00	1,184,284	151,289	n	0	
bstructure (Pierifor Timber: BH50)	NO	0.00	613,092	4B,620	ň	Ò	
hstructure (Abut for Timber (DN50)	NO	0.00	1,332,636	171,456	Å	'n	
bstructure (Pieryfor Concrete; BMSO)	ND	1.00	2,643,323	166,720	2,643,323	466,720	3,110,043
bstructure (Abutifor Concrete; BH50)	NO	2.00	5,287,354	981,821	10,574,708	1,763,642	12,538,350
aulition of Bridge (Timber-)Timber)	<b>#2</b>	0.00	13,511	1,372	0	1,100,012	1210001000
molition of Bridge (Timber->Concrete)	•2	0.00	13,511	1,372	n	ń	
molition of Bridge (Concrete)	42	0.00	113,679	54,439	o de la companya de l	Ó	
intenance of Timber Bridge (New)	- 2.	0.00	8,755	1,121	0	0	
intenance of Concrete Bridge (New)	*2	99.00	2,099	2,312	207,801	220,000	436.68
intenance of limber Bridge (Exist)	e2	0.00	8,518	2,403	0	0	(
intenance of Concrete Bridge (Exist)	<b>a</b> ?	0.00	4,560	2,305	0	0	(
( Without Overhead )	ī	OTAL COST	(Timber Bridg	e)	0.	0	
			(Concrete Bri		20,321,974	12,716,165	33,038,137
	1	OTAL COST	(without Hain		20,321,974	12,716,165	33,038,139
	 	ATAL COOT	4				
( Overhead : 15% )	J	UIAL LUST	(Tieber Bridg		0 27 770 070	0	21 007 51
			(Concrete Bri (without Main		23,370,270 23,370,270	14,623,590 14,623,590	37,993,860 37,993,860

PROV : RIAU KAB : INDRABIRI HULU

LINK NO : 51 (1110-2) LENGTH : 18 Km

	7.77.73.7			museum ritualnus			
TTEH	URIT	QUANTITY	((( UNIT Local	COST >>> FOREIGN	LOCAL	COST FOREIGN	>>>>> total
uperstructure (Timber;Span Jm;10T)	<b>•</b> 2	0.00	47,841	3,540	0	0	
uperstructure (limber;Span 5m;10%)	n2		52,990	3,709	0	0	
uperstructure (limber;Span 8m;101)	<b>a</b> 2	0.00	70,185	5,136	0	0	
Superstructure (limber;Span 3m;BH50)	<b>n2</b>	0.00	59,370	4,377	0	0	
uperstructure (limber;Span 5m;BMSO)	<b>a</b> 2	0.00	64,758	4,744	0	0	
uperstructure (limber Span 8m;8H50)	#2	and the second of	82,130	6,005	0	0	
uperstructure (Concrete;Span 3m;BH50)	#2	(4) 内外型型等等等	56,851	64,669	0	0	er ara na nav Program
uperstructure (Concrete;Span 5m;BM50)	*2	0.00	58,566	71,958	0	0	
uperstructure (Concrete:Span 8m; 8H50)	<b>@2</b>	0.00	60,465	78,193	0	0	
uperstructure (Concrete; Spanfom; 8M50)	<b>a</b> 2	0.00	66,307	88,519	0	0	
uperstructure (Concrete;Spant5m;BH50)	#2		11,757	103,897	0	0	
ubstructure (Pler; for Timber; 101)	NO	0.00	116,857	32,854	0	0	
ubstructure (Abut;for Timber;101)	NO	0.00	1,184,284	154,288	0	0	
ubstructure (Pier; for Timber; 8H5O)	HO	0.00	613,092	18,620	0	0	
ubstructure (Abut;for Timber;RH50)	KO	0.00	1,332,636	171,456	0	0	
ubstructure (Pier; for Contrete; BM50)	NO	0.00	2,643,323	466,720	0	0	
ubstructure (Abut; for Concrete; 8H50)	OK	0.00	5,297,351	981,821	0	9	
emolition of Bridge (Timber->Timber)	a2	0.00	13,511	1,372	0	0	
emolition of Oridge (Timber-)Concrete)	m2	0.00	13,511	1,372	0	0	
emulition of Bridge (Concrete)	<b>p</b> 2		113,679	54,439	D	0	
aintenance of limber Bridge (New)	92	0.00	8,755	1,121	0	0	
aintenance of Concrete Bridge (New)	<b>B2</b>	0.00	2,099	2,312	0	0	i i i i i i i i i i i i i i i i i i i
aintenance of Timber Bridge (Exist)	m2	0.00	8,518	2,403	0	0	- 5 - 5 - 1
aintenance of Concrete Bridge (Exist)	<b>a</b> 2	B0.00	4,560	2,305	364,800	184,400	549,20
					_3****		
( Without Overhead )	1	IOTAL COST	(Timber Brid	ge)	0	0	
			(Concrete Br	idge)	0	0	
	1	IOTAL COST	(without Hai	ntenance)	0	0	
( Overhead ; 15% )		INTAL COST	(Timber Brid	ne)	a	0	
, orginide , ten /	·. :	rojjis vedi.	(Concrete Br		0	٥	4
	75 B	INTAL PORT	(without Mai		Å	ň	



