Appendix 5.9and12and13.xlsNewKandyTra.Pipe (FS2015)

Appendix 5.13 Hydraulic Calculation for Transmission Pipeline (2015Year)

Remark																						- Andrews - Andr										is yearly to make the feet from the major and the state of			, THE SALES				Proposition of the State of the	
Output	LW/Set)			410.1	1														4 (2)	# ~	93 €	2		~	91		10.8				:									
		21 20 d - Dy		2												- 800000			Sec. 21 200120		-	-	-				7		-											
Head	(日)日			102.8													-		-	6.	03.4	200					65.5													
Dynamic Pressure Pump	He(B) Type		102 847	m	109.951	93.655		97.448	86.299		59,932	5,000		93.655	697 66	30.400	97.448		17.098	VVV 60	8	5.000	0.000	027 6	6/4.7	65.458	<b>6</b>	115.294	5,000		115.294	11.124		59.992	200	68.776	4.591		68.776	17.381
GL 3			438 000		430,000	445.000		440.000	450 000		470.000	523.000		445,000	000 707	404.300	440.000		513.000	219 000	213.000	575.000	575.000	000	263.000	523.000		470.000	557.000		470.000	550.000		470,000	000	460.000	523.000		460.000	502.000
Dynamic Pressure	Hd( MSL)		540 A47		539.951	538,655		537.448	536 999	200	529.992	528.000		538.655	200 700	207.700	537.448		530.098	608 444	1000	580.000	575.000	707 000	507.4/8	588, 458		585.294	562,000		585.294	561.124		529.992	000	528.776	527.591		528.776	519.381
Loss	-			0.897	-	1.296	1.206		1.149	6.307	600 1	7000			35.887			7.351			26 444	****		7.521			3.164	700	73.734		000	24.170			1.216	1.185	3		9.394	
Hyd. Grd	1 %			1.281		1.440	1.297		0.919	2.362	1 811	10.1			47.849			6.125	_		0 010	0.010		2.549			2.433	000	8.028		200 27	17.265			1.930	0 912	1		8, 169	32.5
Velocity	v(m/sec)			0.993		0.970	0.917		0.771	0.747	0.642	250			2.036		0.000.000000000000000000000000000000000	1.053			0.077	1 6 0		0.526			0.639	001	0.708		, , ,	1.364			0.564	0.376	2		0.783	33
Length	L(m)			700		906	930		1,250	2,670	1 100	207 67			750			1,200			006 6	000,0		2,950			1,300	0	2, 700			1,400			630	1.300	200067		1.150	20161
Wixed Din Exist.	Om(mm)			781		009	009		612	295	026	007			97			198			140	040		140		000000000000000000000000000000000000000	198	¢	5).			123			198	108	2001		00	-
Dia. Dia.		2,015		600		0			0	250	c	_				-		0	-		$\perp$	140		140			0								0		_		46	$\perp$
		5 2,010		0 0		0	0	Н	009 8	0 8	<b>.</b>	027			97 0			8 0			-	0		0			0 198		67 0		Н	0 123			198 0	108	1		U	$\perp$
B/G Flow Rate Dia.	/d) D(#	2,005		100 600		23,700 600	22,400 600	.	19,600 198	4,400 198	- -	0000			1,300			2,800 198			. 000	1,300		700			1,700		300			1,400			1,500 19	$\perp$	$\downarrow$		200	200
G Flow	Q(113	-	.wa.la.	41,100			-	$\perp$										L	÷		_	+							_ _			(B) 1,				(8)			(a)	
B/			ota-Made	601 8		301 (B)	5001 (B)	H	5002 (B)	26' (B)	(4)	+	200000000000000000000000000000000000000	П	3 (B)			500 (B)	_		+	40		4			277	11	Z7 (B)		H	1) 82	3000000		25' (B)	1/ 36			) (I	-
Kode	Node-Node		Katugastota-Madawala	2 -	601	- 106	1-	5001	-	7000	26,	96	27	301	1	ادر	5001	╁	200	1	200	- 4.3	4.3	•	4	- 56	-		- 66	i	273	- 86	3	97	╢	25,	25	1	25	25N
	No			PG	H	601	301	╁	5001	5002	000	97			301			5001			i c	200		4.			83		27.			27,			26,	626	3		ju	3

Appendix 5.13 Hydraulic Calculation for Transmission Pipeline (2015Year)

Remark																																
Output kw/set)							63.9						23.9			15.4		25.9	2007		40.9						17.4		950 B	0.530%		
set Output Excluding (kw/set)							2						~-			2					2		300000000000000000000000000000000000000				2			4		
H(m)							106.2	<b>∔—</b> ∮-					47.4	11		61.0		6 02	1.1		75.3		000000000000000000000000000000000000000				59.7		1 1	0.040.0		
Dynamic Pressure Zump He(m) Type		109.951	7.406	0000	000	4.300	106.233	44.371	5.000	44.371	34.826		91.764	2.000	60.968	8 000	2000	55.172	5.000	75.300	<b>P</b>	121.829	5.000	121.829	3.660	50 747	PA	2.000	146.756	133.594	111,603	
GE Dy		430.000	520.000	000 003	200	514.000	520.000	570.000	590.000	570.000	570,000		570,000	650.000	850 000	4-1-	000.00	700.000	745.000	520 000	4-4	460.000	570.000	460.000	570,000	220 000	3(0.000	615.000	438.000	450.000	470.000	
Dynamic Pressure Hd(MSL)		539,951	527.406	000 000	000.020	518.950	626.233	614.371	595.000	614.371	864 826		661.764	655.000	710 968	000	703.000	755.172	750,000	505 300	000-000	581.829	575.000	581.829	573 BRO	2000	023.141	620.000	584.756	583.594	581.603	
Loss Dy			12.545		1.050		000	11.862	19.371		9.545			6. (04	-	5.968			5.172		13.471	000	6.829		8.169		9.747			1.161	1.991	
Hyd. Grd 1 (%)			1.976		0.750				4.967		95.453			1.988		1.989			1.989		3.691		3.104		8.169		2 592	222		1.659	1.659	
ocity /sec)			1.026		0.338			0.746	0.940		2.597			0.613		0.613			0.613		0.950		0.865		0.783		202 0			0.811	0.811	
L(m) v(m			6,350		1.400			6,150	3,900		100			3,400		3,000			2,600		3.650	200	2,200		1,000		0 720	001 (0		700	1,200	
Exist.			200	_	108	2		350	198		79			250		250			250		202	00	295		97		0.50	067		400	400	-
a. Nixed Dia	15		0 20		0			350 3	198 1		7.9	000000000000000000000000000000000000000		250 2		250 2			250 2		020	1	250		0			nez		0	0	
Dia. Dia. N	,010 2,0		0		c	5		0	0		0	2809 0200000		0		c	$\sqcup$		0		1	<b>3</b>	0		0		ŀ	8		400	400	
Dia.	2,005		200		90,	4-1		0	0		0			0		c			0			130	0 198		0 97			0		0	0	
B/G Flow Bate	(A) (B) (A)	tta	17,400		000	900		6,200	2,500		1,100			2,600		0 800	70067		2,600		1	2,600	5,100		200			3,000	818	8,800	8,800	-
3/6		са-Капам	(B)		H	10 6		11, B	12 (B)		(B)	T		11S 1B		م د ان	+-		11G IB		H	4	7 (B)		8 (B)			6	Katugastota Udirerala	5, B	1301 (B)	
Node	oge-voge	Katugastota-Kahawatta	109	9	9	1001	u	+	11	12	11,	11	:	+	118	115				116	9	- 12	- 1	<i>J</i>		8	7		Katugasi	2 1	2,	1301
	Ž		901			و		9	11,		Ê				12		3		116			စ	7.		û			-		PG	ති	

Appendix 5.9and12and13.xlsNewKandyTra.Pipe (FS2015)

Exist Pipe Ø180×2 Remark ø160 Pipe Exist 59.0 set Output Excluding (KW/Set) Stand-by 387.0 48.3 ю 4. 145.4 63.8 45.3 B 160.5 Head H(■) Oynamic Pressure Pump He(m) Type 41.875 117.864 5.000 10.350 5.000 5.448 145.415 160.526 74.526 45.344 5.000 14.666 48.259 36.639 5.000 117.864 48.259 17.985 48.312 5.000 63.821 111.603 628.000 586.875 545.000 597.864 480.000 520.000 520.000 589.000 560,000 438.000 438.000 555,000 565.000 510.000 532.000 510,000 532,000 569.000 564.000 438,000 533,000 578.000 438.000 480.000 589,000 510,000 35 594.526 597.864 580.312 594.000 443.000 596.821 583.000 598.526 565.350 546,639 583.415 634.344 633.000 Dynamic Fressure Hd(MSL) 574.666 549.985 594.526 570.000 581.603 558.259 558.259 443.448 538,000 Appendix 5.13 Hydraulic Calculation for Transmission Pipeline (2015Year) 10.989 3.338 29.176 1.344 11.619 0.526 8.274 0.448 45.415 0.662 6.938 4.666 23.344 11.31213.821 Loss h(m) 1.920 Length Velocity Hyd. Grd L(m) v(m/sec) I(%) 20.1212,175 .495 16.946 6.910 1.204 4.396 12.969 3.598 2.029 2.029 1.391 116,194 0.957 1.579 1.014 1.372 0.601 0.639 1.731 0.902 1.050 908.0 0.753 0.789 3.289 2.603 0.753 100 2,680 2,500 2,300 5,200 2,000 550 2,400 1,450 3,420 300 550 90 1,800 2,300 Q(m3/d) D(sm) D(mm) D(mm) Dm(mm)
Q(m3/d) D(sm) D(mm) D(mm) Dm(mm)
Q(m3/d) D,005 D,010 Z,015
Q,006 D,010 Z,015 400 300 350 140 850 009 198 78 18 18 700 300 198 55 198 300 198 182 140 8 6 9 198 198 6 300Katugastota-Kondadeniya, Kulugamana P6 6 0 350 400 300 0 700 700 900 15,900 6,700 14,900 49,700 3,900 3,900 34,900 19,000 4,200 009, 1,200 4,600 2,100 2,100 Katugastota-KFG,R2 PG 1702 (B) (B) (B) (B) (8) (B) (E) 17N 1302 177 582 5, 14 46, AG 7 15 13 91 52 Node-Node 1702 1302 177 AG . 3 305 , 9Y 52 1301 AG. 582 17 12 1301

Appendix 5.13 Hydraulic Calculation for Transmission Pipeline (2015Year)

Remark																									Exist Pipe \$200	Exist Pipe $\phi 250$		Exist Pipe Ø100	The property of the					Exist Pipe \$200	
Output (Kw/set)																				57.7					0 61										
set Output Reluding (kw/set)																									63										
Head H(m)					( ) ( ) ( ) ( ) ( ) ( )													- #		19.6					33.2	-				T					
Type			$\prod$							-		_			1		_			13		-			<b>~</b>	ļ				$\perp$			1	$\prod$	
Dynamic Pressure He(m)	89.100	13, 103	210 017	41.875	22.777	0.000	50 05	00.00	42.849	58.853	26 ANE		3.669	200	pp.402	23.669		14.405	105 862	700-001	28.169	5 000	000.0	33.232	53 509		31.596	5.000	53.509	3 930	****	28.169	80 430	200	58.865
79	480.000	540.000	000	545.000	562,000	540.000	470 000	*10.000	470.000	470.000	480 000	200.00	520,000	000	400.000	500.000		500.000	450 000	400.000	520.000	540 000	300.00	540.000	500 000		510.000	534,000	200.000	517,000	*****	520.000	480 000	200.00	470.000
Dynamic Pressure Rd(MSL)	569, 100	553 103	200 000	290.873	584.777	540.000	590 050	070.070	512.849	528.853	498 A05	200	523.669	107	604.026	523.669		514.405	555 862	700.000	548.169	545 000	040.000	573.232	553 509		541.596	539,000	553.509	520.939	2022.000	548.169	540 430	2011	538.865
Loss h(m)	17.775	15.997		2,098	000000000000000000000000000000000000000		11.147	16.004			2.449	2.735			204 6	001	9.264			7.692	0 100	3.103			19.723	11.912	902	2.596	077 66	36.000			7.739	1.565	
Hyd. Grd I (%)	11.850	11.850		20.976	2000000		2.592	80.022			1.224	0.912			0.019	0.014	9.264			1.538	002 0	3.522			6.574	5.541	000	12.982	620 26	600.69			1.517	3.130	
Velocity v(m/sec)	1.504	1.504		2.419			0.707	2.361			0.472	0.376			0 276	200	0.974	-		0.896	1 110	1.113			1.296	1.155	000	1.639	337 1	1.400			0.710	0.737	
Length	1,500	1,350		100	000000000000000000000000000000000000000		4,300	200			2,000	3,000			000	2,000	1,000	-		5,000	000	300			3,000	2,150		200	1 200	۵۵۰ ر⊥			5,100	200	
Mixed Die Exist. Om(mm)												-						-							259 Atten	250 Atten	- 1	Z10 Atten	100 t++	Wr rem			+	×	
Nixed Die	0 198	0 198		0 258			250	79			250	198			001		123			0 500		0cg								<u>.</u>			320	200	
Dia.				_			0 250	0 79			0 250	0 198	ļ.,		001		0 123	- 000		_				_		0 0		~		2				0 200	_
Dia.	198	0 198		3 198			0	_	000000		0	ļ.						- 1		200		DCC C			861	-		0 198		2		H	320		-
e Dia.	- 1			198	L			0				0	L			a	0	- 0		0		2			-	0				<b>&gt;</b>					
B/G Flow Rate Q(m3/d)	4,000	4,000		10.900			3,000	1,000			2,000	1.000			1	1,000	1,000		8216	15,200	Ш	9,300			2,900	4,900		4,900	1 000	7,000			5,900	2,000	
B/G	(8)	(B)		(B)			3	(9)			(9)	(9)	+-		(1)		(g)		Katugastota-kundasale	13	1	(18)	_		<b>a</b>	(B)		<b>e</b>	H	9			(81)	3 (IB)	
ge	18	18		1.5		1	1901	13	2000		13,	181	┼	Talathuoya	S	75	20		RSTOTA	K301	t - t	EEE			K702	K701	┝╌╂	KB.	Н	717		1 1	K601	K503	_
Node Node	1702 -	18,	OT	1702	17	18	18	1901 -	19	1061	1901	13,	191		12	2	- 50,	20	KATU	5002 -	K801	K801	VE	KBS	KR8	K702 -	×	K701 - KR7	34	K102	2	K801	K801 Y601	K601 -	K503

Appendix 5.9and12and13.xlsNewKandyTra.Pipe (FS2015)

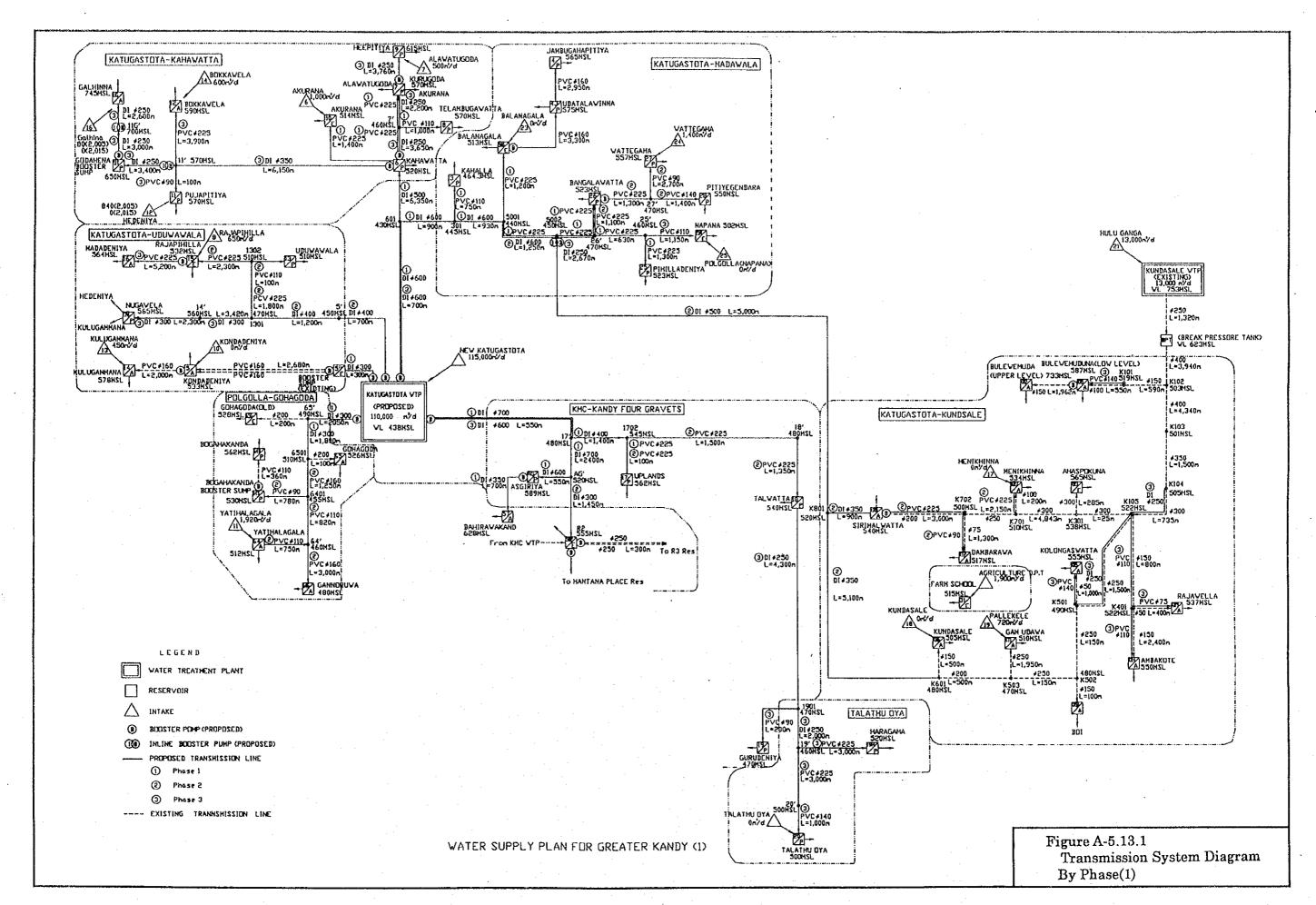
Appendix 5.13 Hydraulic Calculation for Transmission Pipeline (2015Year)

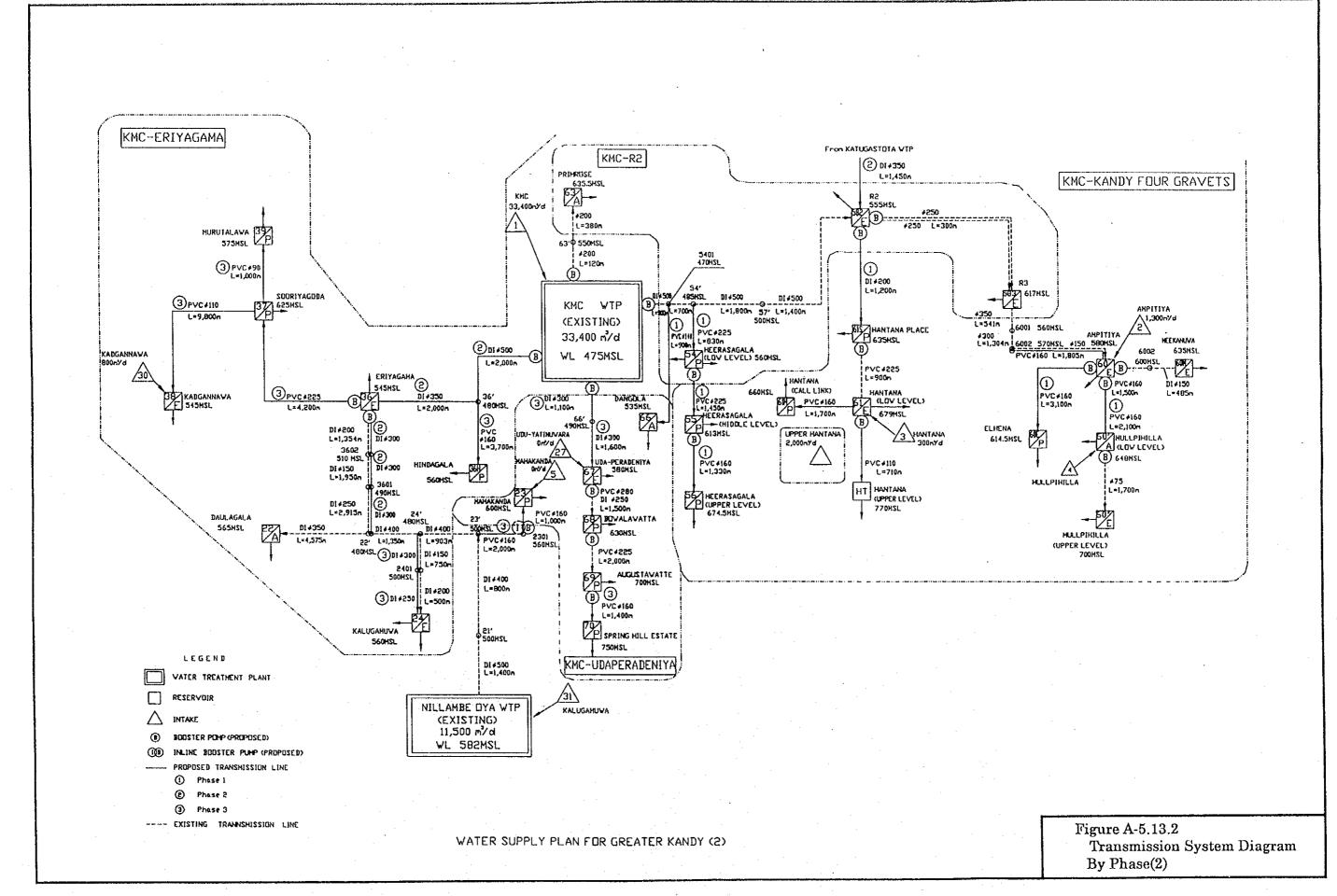
Output Remark	xw/set)	Exist Pipe Ø250		1 1	Exist Pipe Ø150			EXIST FIDE 6250		Estate Bing AAOO		Exist Pipe \$400	Exist Pipe Ø350		Exist Pipe Ø300	Prist Pipe Ø250		Exist Pipe Ø50		1 (	Exist Pipe Ø150	Exist Pipe Ø100	1 1		Exist Pipe Ø300		Exist Fipe @300		Swiet Pine 6150	1 1	Exist Pipe Ø150			Exist Pipe Ø50		Exist Pipe 6250		
set		Stand-by									-					+																						
Head	<b>├-</b> ┼-																-																					
essure Pump			58.805	60.430		13.5/0	68.865	90 499	7.75	0.000	104 396		93.778	81.422		60.867	86.101		6.475	104.396		80.900	5.027	200	29.09	44.791	977 71		60.867	52, 323		9.269	52.323	99 170	0 7 7	86.101	90.570	
Dynamic Pr	He(□)		58	99		77	9	06	1		101		9	8		٥	~			10		80			3	4						2000						
15			480.000	480 000		505 <b>.</b> 000	470.000	000	000.010	623.000	203 000	2000	501.000	505,000		522.000	490.000		555.000	503 000		519,000	587.000		522.000	538.000	285 000	000.000	522.000	599 000	000	550.000	522.000	000 000	000-166	490.000	480.030	
or its over	Hd(HSL)		538.805	540 430		518.576	538.865	100	538.461	623.000	207 208	200	594, 778	586.422		582.867	576.101		561.475	RN7 39R		239.900	592, 027		582.867	582.791	344 603	011.000	582.867	E64 765	0.74 0.40	559.269	574.323	020 100	071.600	576.101	570.570	
	h(m)	190	0.001		21.854			0.438			15.604	12.618		8.356	3.554		6.767	14.625			7.496	010	7.873		000	0.0	0.015			8.544	15.054	000000000000000000000000000000000000000		15.153		i c	5.531	
-	1(%)	100	0.405		43.708			0.225			3.960	2.907		5.571	4.836		4.511	14,625	1-1		12.706		14.315		1	3.057	0.054			10.680	6.273		-	37.882		100	36.871	
⊢	locity n	$\vdash$	0.259		2.554			0.189			1.197	1.013		1.323	1.249		1.127	1 274	K 17.1		1.310		1.376			0.868	0.098	200000000000000000000000000000000000000		1.274	0.956			1.536			2.971	
١.	Length ve.	11	061		200		-	1,950	_	_	3,940	4.340		1,500	735		1,500	1 000	1,000		290		220			25	285	- 1000		800	2.400			400			150	
ŀ		$\dashv$	×		×			K			×			Ж	360 Atten		325 Atten	1970			<b>1</b>		146 Atten			×	×			Atten	167 Atten			76 Atten		4	×	
	Nixed Dia Exist		250		150			250			400	400	2	350	360		325	101	777		7.00	001	146			300	300			167	167	307		7.6			250	
- 5	Dia.	2,015	250		150			250			400	700	-	350	250	╀	250	4	153		150	- -	0 123			0 300	0 300			0 97	0 07			0 65			0 250	
	Dia.	5 2,010				_		0			0 0	-	1	0		$\perp$	0	1	<b>)</b>		-	2	0			0	0	000000		0		-		0			0	
. 1	Rate Dia.	1			000	L		800			13,000	11 000	000	11,000	11 000	3	8,100	00,	1,400		000	2,000	2,000			5,300	009			2,400	000	1,000		009	100000000000000000000000000000000000000		12,600	l
	B/6 Flow Rate	n/cm/n	8) 1,100		(a1/						6 13,		(11)	(6) 11,	100	<u> </u>	(6) 8,		(9)		_ _	(11)	(6) 2,			(B) 5	(B)			(6) 2		(1)		(G		-	(6) 12	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			K502 (1B)		i) July	-1-		KT1 (TB)	1	Je	2	<b>├-</b> -	K103	X104 (	7105		K501 (	+	KR5			X101	KR1 (			K301 (	KB3 (	1-1		K401 (	<del>├</del>	KK4		KR9	11		K502	
	Node	Node-Node	1 22	70C¥	K601	VDE	NEW THE PERSON NAMED IN COLUMN 1	K503	KI	Kundasale		K102	7103	-	K104	¥305	+	K201	707		K102	Z - X101		KB1	K105	<del>Į</del> ∤	K301	KR3	V105	<del></del>	K401	11 - KR4		K401	KR9	K501	<del>     </del>	
			K503		1000	MOU		003/	3		T de		K102	K103	0.77	¥.154	K105		K501			K102	K101			X105	K301			K105		K401		K401			K501	

A-5.13.9

Appendix 5.13 Hydraulic Calculation for Transmission Pipeline (2015Year)

Remark				1	既設管無視 Ø160×2条	200 F 84.000 000 110	以成 医派先 9.443	既設置無視			Exist Pipe \$200		2,5	EXIST Fibe 6200			既設督無税 ゆ160				成数官無税 Ø160, Ø110		1	既設管無視 め225				בעופר נולה פרום									
Output (kw/set)			15 15 15												**************************************												-	1.0				1,188.0		2 162 1			
Set	3: 2nd-by		6	1										-1-														-1				30		79			
Head H(E)			113 1											İ	0.0000000000						1						3 46	6.76									
Pump			~					_				_	1	_	- 0					1	1	t					4	٩								1	_
Oynamic Pressure Pump He(m) Type			112.111	55.078		32.258	871 78	03.110	5.000		55.078	16.871	32.258	7 5	15.511	83.178		68.793	000	0.000	45 879	20.05	45.873		8.225	e le	31.340	5.000									
ar.				9	_	0	_	2	9	<u> </u>		9			 		-	0	<u> </u>		_		0	-	0:		2	ç		$ \cdot $					-	+	
3			438.000	490.000		510.000	455 000	400,00	530,000		490,000	528,000	510,000	000 303	250.UU	455,000		460.000		217.000	460 000	3	460.000		480.000		230.000	562,000									
Dynamic Pressure Hd(MSL)			550.111	545.078		542.258	529 178	030° 7 LO	535.000		545.078	544.871	542.258	C. & 1 C. 4	041.511	538,178		528.793	2.5	212.000	504 873	20.00	505,873		488.225	000	040.100	567,000									
	†***		55	3	19		OS.	82									98			1	3			67			9	2			_		-			+	_
P(m)			5 032		2.819	Š	4-080	3.178			0 207		-	0.747	-		9.386			ļ	0.17/			17.649				0.040									
1,92,670 1,0%)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		9 455	701	1.566	0	3.264	4.075			1 036		207	7.40/	0.0000000000000000000000000000000000000		11,446			9	8.108			5.883			1	1.300									
velocicy v(m/sec)			260 0	200	0.655		0.601	0.472			0.405			1.1.9	000000000000000000000000000000000000000		0.940			- 1	0.783			0.827			010	0.0									
Lengun			050 6	2006	1,800		1,250	780			200			700	000000000000000000000000000000000000000		820			3	∩c)			3,000	2.5		036	200									_
8x181.											×			×	0000000000							100000					4	4									
Mixed Dia Axist.			000	300	300	,	140	79	2		200	â	Š	007	000000000000000000000000000000000000000		26			į	5			140				ñ									
D(mm)					0	-	0		,		200	2		207			0				5	0.0000000000000000000000000000000000000		0			-	ה									_
D18.			c		0		140	.79	2		- -	-		7	200000000000000000000000000000000000000		97			-	5			140			,	3									_
D(mm) T		555.55	006		300		0	-	,			,	-	+	000000000		0			-	)			0				2									
Flow Rate	1		001	707 10	4,000		800	200	2		1 100	2011	300	3,200	:		009				900			1,100			000	200									-
B/G F		ohagod	a	 	(B)		(B)	(3)	-		(8)	}		(8)			(B)			-	.5			(B)			F	n								1	
۵		stota-6	0.03	3	6501		6401	64.5	250		25.6	1		65	200		64,				22	200000000000000000000000000000000000000		979				g g									
Node Node	700	Katugastota-Gohagoda	Đđ	65,		6501		1040	645		65,	656	6501	,	65	6401		. 79		7	. 77	\$	.79		646		S.	FAR.	3		-	Sub lota	1 1	Grand Tota			
			100	2	623		6501	6401	1		SE.	3		6501	-		6401				64			,79				943				<b>5</b> 3		GI.			







Appendix 5.14 Capacity Calculation for Distribution Service Reservoir

Table Projec	Projected Water Supply in Greater Kandy by Service Zone(2005-2015)	reater Kandy by Sea	vice Zone	(2005-2015)					2005			2010	_			2015	
Zone	Area	•	ž		Capacity of the consisting Reserver (cu m)	Required Capacity of Reserver (cu m)	Capacity of the proposed Reserver (cu m)	Demand (eu m/d)	Supply (cu m/d)	Capacity of Reserver (cum)	Demand (cw m/d)	Supply (cu m/d)		Capacity of Des Reserver (cu m)	Demand (cu m/d)	Supply (cu m/d)	Capacity of Reserver (cu m)
Katugastota-	WINDACALE	Mulewemuduna	1 1 1 1 1	VB Mulementum	2	147	47	405	0	0	443		0	0	06*	490	47
Pullingson	KUNDASALE	Mulewe (upper)	KR2	KR2 Mulewenudana	225	343	118	945	0	0	ř		0		1,144	1,144	118
	KUNDASALE	Abaspokuna	KR3	KR3 Ahaspokuna	650	147	0	405	3	0	L		0		+ 06#	490	0
	KUNDASALE	Viava Srigama	KR4	KR4 Vieva Srigama	225	441	216	1,215	0	0	1,330		0	0	1,471	1.471	* 216
	KUNDASALE	Kolongahawatte	KRSK	KR5 Kolongahawatte	100	343	243	945	0	0			0			1,144	* j 243
j	KUNDASALE	Kundasale	KR6 k	KR6 Kundasale	350	086	069	2,700	0	0	2,956	* 2,956	26 *	089	3,268	3,268	0
	KUNDASALE	Menikhinna	KR7 A	KR7 Menikhma	450	1,225	775	3,375	0	0	3,695	3,695	• 56	277	4,085	4,085	0
	KUNDASALE	Sirmalwatta	3,88	KR8 Sirimalwatta	650	858	208	2,362	0	O	2,586	* 2,586	* 98	208	2,859 *	2,859	0
	KUNDASALE	Ragwella	KROK	KR9 Rajawella Town	100	147	47	405	0	0			0	0		490	
	KUNDASALE	BOI	KR10		450	1,961	1,511	5,399	0	0	5		ó		6,536	6,536	* 1,511
	KUNDASALE	Gam Udawa	Oppo KT1 Camp	Opposite Army Camp	320	392	72	1,080	0	0	1,182	1,182	. 28	72	1,307	1,307	
			KIZ	KT2 Dambarawa	175	245	8	675			739	7		۶	817	817	0
Sebtotal 1. Katugastota -	_	_				7,230	3,938	016.63 			ÿ	11,159	) 	<u>.</u>		24,100	rf ∵ ∵
Madawala f	PATHA DUMBARA	Jambugahapitiya	4	4 Jambugahapitiya	0	167	167	477	0	0	529		0	0	558	258	167
44	PATHA DUMBARA	Uda Thalawinna	£ 8	Jambugahapitiya 4J Sump Booster	0	167	167	477	0	0	529		0			558	167
ė.	PATHA DUMBARA	Kahaila	3.1	3 Kahalla	0	323	323	919	919	• 323	1,018	_	18		_1	_	
<b>6</b> 44	PATHA DUMBARA	Balanagala	5001	500 Balanagala	450	372	0	1,061	7	٥	1,175	<del>, -</del> ₹	75	0	1,241	1,241	
4.4	PATHA DUMBARA	Madawala Area	7 97	26 Bangalawatta	0	298	398	848	8	298	940		940			_	0 (
<b>S</b>	PATHA DUMBARA	Wattegama	27	27 Wal Arambe	0 0	275	224	1.202	0 0		1,351	11351	1,331	3,60	1 100	8 8	
4	PATHA DUMBARA	Vanana	NSC NSC	2 KN Namana	250	124		354	0		392	L	L.		╀		
	PATHA DUMBARA	Pihilladeniva	25 P	25 Pihilladeniva	0	248	248	707	707	* 248		7	783	Q	827	827	0
Sebtotal f					009	2481	1,985	0,000	3,535	808		6,381	51		8,270	8,270	335
Katugastota -	HARISPATTUWA,	Bokkawela - Present	12	12 Rokkamela (Fw)	305	770	470	2.180	•0	-	2.238			0	2.598	2.598	67.5
	HARISPATTUWA.	Hedeniya (part)-													_		ļ
- 4U	PUIAPITIYA	Suburbs-Puienitiva	11 P	Purapitiva	0	278	278	779	0	0	799		0	0	• 826	928	278
	HARISPATTUWA.	Akurana (part)-														,	
	AKURANA &	Present WSS and	;	:		į			•	ì	0	0766					
P	PUJAPITIYA HADISBATTIWA	Albumbs (Appl.)	0	o Kanawatta	0	1,1,4	1,1,1		1	4/117	00000	ļ	9		717	2,712	
	AKURANA &	Present WSS and		-									-				
p	PUJAPITIYA	Suburbs	<b>건</b> 요	10 Akurana	009	474	ō	1,310 *	1,310	0	1,359	1,359	59	0	1,579	1.579	0
	HARISPATTUWA,	Akurana (part)-		:													
10	PUJAPITIYA	Suburbs	# 	T Kurugoda	0	103	103	285	282	103	295		295	0	343	343	0
	HARISPATTUWA.	Alawathugoda-															
	AKURANA &	Present WSS and	ŕ				253	* 901 +	701 1	450	1241	1.241			- 5		
D.	rejariiira.	Shourds	Total Control	service D.M.	,	1	2	-1	OCY.								

Table Proj	Projected Water Supply in Greater Kandy by Service Zone(2005-2015)	reater Kandy by Se	rvice Zon	e(2005-2015)					2005			2010			2105	
Zone	Area		No.		Capacity of the existing Reserver (cum)	Required Capacity of Reserver (cu m)	Capacity of the proposed Reserver (cu m)	Demand (cu m/d)	Supply (cu m/d)	Capacity of Reserver (cu m)	Demand (cu m/d)	Suppty (cu m/d)	Capacity of Of Reserver (cu m)	y Demand	Supply (eu n./d)	Capacity of Reserver (cu m)
P	HARISPATTUWA,  A AKURANA &	Thelambugahawatta	8	Thelambug 8 ahawatta	0	124	124	342	342	124	355	35	355	0 412	412	C
73		Alawathugoda- Present WSS and Suburbe		0 Homilian		378	,								'	
	HARISPATTUWA,					Coo	S	76647	2		7,482	-	0	7.883	2,883	\$65
9	HABISPATTITIONA	Galhinna	11G		150	040	490	1.791	0	0	1,838		0	0 2,134	2,134	065
v		Godahena	118	-	0			• • •								
Sebtotal					1,050	4,869	3,945	13,520	6,378	1,833	13,974	6,617		đ.	16,230	2,113
•		_	-		450	1,698	1248	05.24	0 0 1	e e .		( ) ( )		5,660	5,660	1,248
Katugastota -	HARISPATTUWA, AKURANA &	Hedeniya (part)- Fresent WSS and										···-				
Uchiwawala	PUJAPITIYA	Suburbs-Madadeniya		16 Madadeniya(Ex)	300	411	111	1,158	. 0	-	1.178		0	0 1.368	1368	
	HARISPATTUWA. AKURANA &	Hedeniya (part)- Present WSS and			<del></del>									ļ		
U	PUJAPITIYA	Suburbs	Ë	17N Nugawela	0	438	438	1,235	0	0	1,257	1,257	7 • 438	1,460	1,460	0
		Present WSS and								·						
	HABISPATTIWA	Suburbs	- L	L/N Nugawela	0	712	712	2006	0	0	2042	2,042	2 * 712	2,372	2,372	0
	AKURANA &	Present WSS and	,			,	• ;							-		
,	HARISPATTUWA	Raischilla (part)	#	14 Kulugamana	205	411		1,158	1,158	11	1,178	1,178		0 1.368	1,368	0
ن	AKURANA & PUJAPITIYA	Present WSS and Suburbs	15.E	15 Ramoihilla	Q.	27.4	c	77								
	HARISPATTUWA,	Rajapihilla (part)				1		7//	2		68/	C&/	0	912	912	0
U	PUJAPITIYA	Fresent WSS and Suburbs	13 U	13 Uduwawala	0	220	520	1,466	0		1.492	1.402		1 733	1 722	
-	AKURANA 4	Kondadeniva. Present												_		
o ·		WSS and Suburbs	X 5	5 Kondadeniya	300	684	384	1,929	}	384	1,963		0		2,281	0
agerna	KANDY FOUR GRAVETS Hindapala	§ Hindappla	36HH	36H Hindagala	20 <b>4.</b> 1	273	227 227	57.59 63.4	્રે કુક -	265	99 94 94	8,717	67 67 67 88 88 88	11,494	11,494	172
٠	UDUNUWARA,												-		44/	133
80	PALATHA (PART) WSS and Suburbs	WSS and Suburbs	22 D	22 Daulagala	1140	1.616	476	4631	C		83.53	S.				
	UDUNUWARA,		J	-						?	-	_	-Ĵ-	085.0	0,380	0
543	PALATHA (PART)	Kalugamuwa	24.75	24 Kalugamuwa	1.820	2.13.1	311	6100	c		707.3					
-	UDUNUWARA,		1					2014			0,197		2	21.7	7,104	331
·	PALATHA (PART)		24 K	24 Kalugamuwa	180	147	0	4	a	Ç	7					(
	UDUNUWARA, YATRUWARA AND UDA						-	-		)     				Q.	0,44	2
, q	PALATHA (PART)	Eriyagama	36 E	36 Eriyagama	. 860	762	0	2,044	0		2,368	2.368		2,545	675 6	· · · ·
							·									

This   Projected West's SIGN   Contact   Con	N		0 · 0 · 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 ·		3006 3015)					2003	_		2010		-	2015		
The control of the		ted Water Supply in Gre	ater Kandy by Serv	2007 33C	$\top$	╁	+	Capacity						Canaci				Capacity
VACTOR VALACA AND UNIVERSIGNATION   VALACIMA MACRO UNIVERSIAN   VACTOR VALACA AND VALA	Zonc	Į,		No.		5 20 6		of the proposed Reserver (cu m)	Demand (cu m/d)	Supply (cu m/d)	Capacir of Reserved (eu m)		Supply (cu m/d)				upply a m/d)	of Reserver (ew m)
VACINITY MACAN OF UNIVERSIAND PACES   PACES   VACINITY MACAN OF UNIVERSIAND PACES   VACINITY MACAN OF UNIV			Suriyagoda, Watersloumbura						-									,
VIDIO   VIDI		YATINUWARA AND UDA	Gragama, Danture,	37.8	uriyagoda	0	272	272	730	0						— <del> -</del>	* 806	272
NATION MACKED   Statement	d	UDUNUWARA YATINUWARA AND UDA	Muntalawa, Pelawa,	<del>-</del> 6	furntalawa	0	182	182	487	0								182
VALIDIVIANA   Company	<b>d</b>	UDUNUWARA	Kadugamawa	3	aondannama Ex									, <u> </u>			Š	
UDIOUWANA, WILLIAM   Consequence   Colored		PALATHA (PART)	Suburbs	38		260	272	0	730			े ः	7.52		 	-0.	18,686	886
CONVENTION NAME   Contents   Convention		)				095,4	, 5866 33	3 %	15,804	•	v : i	690	<b>!</b>				1	<b>F</b>
VATINIVARA AND UAX Guerrers   September    <b>9 8</b> 1					2,960	3.7.E 1.489.	\$ <del>\$</del>	10,740 3,990	3.7	4 1		5.15 2.36				12,490 4,962 490	911 454	
VACINAVAAA ANNUA (CRESCORMS)						180	147		<b>4</b> 6	** ** ***_		* *—	() 8 <u>.</u> 9 <u>.</u>	· .	-		; !	
MANDENTITION   Chapped Free   Colored   Colo		VATINUWARA,	Cannoruwa Lainting	75789	Sautonasi	0	272	272	730	0			84	•			806	0
Converted National Part   Converted Nation		HARISPATTUWA.	Gohagoda-Present	3					, F		·		*			12	912	0
ACTION CITY AND FOUN GRAVETS   Columbication   Columbication	3	AKURANA & HARISPATTUWA.	WSS and Suburbs	656	Johagoda	300	4/7		7//	_			•	7			2,691	0
AMERICAL WARD   Companies	v	AKURANA &	Gohagoda	65	-	89	807	207	2,276	$\perp$		ļ		<u> </u>				
HAMISPATTUMA   Vocibulagial-Present   150   150   150   150   1001   1001   1001   1001   1001   11186   11866   118		HARISPATTUWA,	Bogshakanda	648	Sogahakanda	0	41	41	116	0		_	-	-			15/	
Land		HARISPATTUWA, AKURANA &	Yatibalagala-Present WSS and Suburbs	64	Yatihalagala	150	356	206	1,003	0					 	345	5.834	•
KANDY MUNICIPAL   Babinavalanchi/kmi   Statementanchi/kmi   Statementa						1,050	1,478	8 %	4,007							52,8	4,926	
Activity MUNICIPAL   Babitrowalamedy/Municipal   Marine   Marine							202	272		**************************************	* -	8.56	<b>~</b> -	6 19— 19—	:- 	 3	9	: :
AMDY FOUR GRAVETS   Light   Council   Counci	, ca J	KANDY MUNICIPAL	Bahirawakanda/Anni watta	57	Babirawakanda	91	1,686	1,595	4.729	4,729	*		•	95	ν.		5,621	0
Activity Municipal.   Heteresagaia (lower)   Statement   Stateme		KANDY MUNICIPAL	Primose	63	Princose	181	496	315						55	ri		1,653	0
Activity MUNICIPAL   R.2 Reservoir Present   SS3 Wakarawatta   1,136   1,107   COUNCIL   Distribution Zone   SS3 Wakarawatta   1,136   1,107   COUNCIL   SS3 Wakarawatta   SS3 Wakarawatta	1 0	KANDY MUNICIPAL	Hecressagala (lower)		Heeressagala	0	66	66			•		•	66			331	
3   COUNCIL   R.S Reservoir Present   S.S. Wakmawatta   1.136   1.1107   0   3.105   0   3.451   0   3.451   0   3.451   0   3.451   0   3.691   0   3.451   0   3.451   0   3.691   0   3.22,870   22.	1	KANDY MUNICIPAL	R2 Reservoir Present	283	Wakarawatta	3.636	3,472	• 						12	_ .		11.573	0
Hecrossignal Sumpy   Hecrossignal Sumpy   Hecrossignal Sumpy   Signature   Hecrossignal Sumpy   Hecrossignal Sumpy   Hecrossignal Sumpy   Hecrossignal Sumpy   Hecrossignal Sumpy   Hecrossignal   Highladmiddle   O   248   704   704   248   766   766   0   827	en C	KANDY MUNICIPAL	R3 Reservoir Present Distribution Zone	583	Wakarawatta	1,136	1,107						•				3,691	•
Hortessagala Sumpy   Hortessagala Sumpy   Hortessagala Sumpy   S4 Highla(lower)   C   S4 Highla(lower)   C   S4 Highla(middle)   C   S4 Highla(middle)   C   S4 Highla(middle)   C   S4   S4   S4   S4   S4   S4   S4	333	100				- 50 <del>4</del>	6,861			24,964 	- - -	" <u> </u>	) (					·
KANDY FOUR GRAVETS (middle)         55   Hygla(middle)         0         248         704         704         766         766         766         0         827         827		KANDV ROTTE GRAVET	Heeressagala Sump/ meda Bowala 'S (Lower)	*	Hzala(lower)	0	66	66			*		•	160			331	
C. C. Libraria (Commany) 0 248 248 704 * 704 * 248 766 * 766 0 827 *	MC Coaperacenty a c	WANDY ROLLD GRAVET	Hecrossagala S (middle)	55	Hrzala(middle)	0	248				•		•	99			827	
	0	TO WOOD TO WOO	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )		Tiles (contraction of		248	· .			*			99			827	

		Supply of cum/d) Reserver (cum/d) Reserver		827		827 • 248	827 • 248		1.240 868 - 0.00	- 61 - 01 - 02	1,240	**************************************			25		827 0	495		785 0		9.093		02	ļ	827 0	827 0	413 0		77	90 87 248	
	2015	Demand Sur		827 =	827	827 •	827		368		1,240 6,140	°,—. °,—.	•	•	179		827 •	496		785		9,093 * 9,0		10.197	_	-	827 - 8	413	165		8,887 8,887	-
		Capacity of De Beserver (cu (cu m)		0	c	0	0					: }		5 6		o ·	0	0		236		6 0		0 10	89%		0	0	٥	33	484	
	2010	Supply (cu m/d)	,	0	0	0	0	031.	10	2,999	1,159		2,070	570	7,46	3		460		728		8,502		9,534	, July	-	766	383	153	24,744	6,707	
		Demand (cu m/d)	325		766	766	766	1150	808	6,870	5,710		612	1	166	392	8	* 094		. 07/		8,502		9,534	1992		99/	383	153	26,277 18 037	8,240	
		Capacity of Reserver (cum)			0	0	0	* 254	0	849	\$ <b>3</b> 8	c		0	248			0		2		2,728		3,059	0	3	*,	20	0	6,362	) 222	
2008	2002	Supply (cu m/d)	C		0	0	0	1.043	0	2,733	1,650	1 601	563	o	704	0			c	,		5.253	,	5,250	0	Ž	5	352	141	10.503	4366	
		Demand (cu m/d)	704		_	\$ g	704	1,043		62%) -	5,246	1 901	-	704	704	704		423	699	-		5.253	-	5,250	704	70,		352	141	10,503		
		d of the of the froposed f Reserver (cu m)	0			248	8 248			7 4	<b></b>	0			248	0		0	236		<u>.</u>	2,728		3,059	248	848		6/	0	5.87	(주 (주	
	ļ.,	Required Capacity of Reserver (cu m)	248		248	248	248	_			<b>₩</b>	670			248	248		149	336			2,728		3,059	248	248		124	8	5,787	2,566	
16		Capacity of the existing Reserver (cu m)	1,140	-	1		0	118	0	׆֟֟֝ ֭֓֞֞֞֞֞֞	1,140	900	225		°  - -	390	1 346	coerr	0			0		0	0	0	, ,	G.	7000		2,970	
Zone(2005-201	1	No. Reservoir	67 Prospect Hill		68 Bowalawatta	og vægskawatta	70 Spring Hill	66 Dangolla	23 Sarasavigama			60 Ampitiya	60M Meekkanuwa	19 Iluicmodara	olo Hantana Place	HT Hantana (upper)	61 Hantana Gowen	Company to the compan	Hantana (Call 61H Link)		17 Palende	T) Optables		AG Asgiriya	18 Talwatta	60E	60.	3	60"			
ter Kandy by Service			Uda Peradeniya (Lower)	Uda Peradeniya (Upper)/	owalawatta	Mount Pleasant	ousing Schemes	Dangolla	anakanda		Amnítica ketamala	wla				neme nousing	ntana Housing	Settlements near Call		lands, Aruppola,	mawiniani, Watapuuwa, Lady mcCullums Drose	Aruppola		ę.			Mollia (Low	philla (Upper	_			
Projected Water Supply in Greater Kandy by Service Zone(2005-2015)		Area	KANDY FOUR GRAVETS (Lower)	(Upper)/	KANDY FOUR GRAVETS Augustra	W	UNICIPAL	COUNCIL Dangolla	MANAL ROOM GRAVEIS IN		<u>*</u>	KANDY FOUR GRAVETS lewis	KANDY FOUR GRAVETS meekanuwa	KANDY FOLD CBAVETS U.	He Harris I was a series of the	KANDY FOUR GRAVETS scheme	KANDY FOUR GRAVETS Hantana Housing	Sei	Link Tower/Hantau: KANDY FOUR GRAVETS Housing Scheme	<u>a</u>	KANDY MUNICIPAL Wa COUNCIL med		UNICIPAL	COUNCIL	KANDY FOUR GRAVETS Temekumbura	KANDY FOUR GRAVETS Ethena	Multy KANDY FOUR GRAVETS Level)	Mul	MANDY FOUR GRAVETS [Level]			
Table Projec		Zone	٩					2 3	93	9	•		8 4	1	Ĺ	.0	[ q		Q		a		<b>, 23 (</b>	R	A .	P. P.	<b>X</b> q		Subfocal B.		Thalathu Oya -	

					-			2004			2010			2015	
Table Pro	Projected Water Supply in Greater Kandy by Service Zone(2005-2015)	Service Zon	e(2005-2015)				1	Const							;
			ſ		Required	Capacity of the	Demand	Supply	Capacity	Demand	Supply	Capacity	Demand	Supply	Capacity
Zone	Area	ž	Location	ing 1	Reserver (cu m)	Reserver (cs m)	(ca m/d)	(ca m/d)	Reserver (cu m)	(ea <b>11</b> /q)	(en <b>m</b> /q)	Reserver (cu m)	(p/m 12)	(cn m/q)	(cu m)
					210		SS	0		626	0		701	701	i c
Sebiotal	k PATHA HEWAHETA (Marassana(Ex)	WCZ.	ZUM Marassana		- 38;	. 495 78.78¢	177.000	58.614	12,624	2,100	94,609	5,685	2350 145,410	145,410	7,476
Grand Total				115,517	20,004	2	200					2002	143 667	172 882	7.176
Total Thotal	/ Fechiding Hantana(upper) and Marassana)			22,012	43.165	25,785	120,774	58,614	12,624	131.547	94,50%	C80,C	769'541	700,07	
101							+	+							
								-							7
				7			=Day Average								T
Remark	* KWC	1		T. CERTAIN.	- C D	1	1 2*Demand*6/24	1.6724							
	b KFG			Reguired	Required Capacity of Acad von	1	Parities a	Demined Canadia of Reservoir - Canadia of the Existing Reservoir	ir - Capacity	of the Exists	1g Reservoir				
	c Harispattuwa			Capacity of	Capacity of the proposed Reservoir	CSCIVOIL	2 mm	1		-					
	d Akurana														
	c Pujapitaya														
	f Pathadumbara						-			-		-			
	g Udanuwara					-	-								
	h Yatinuwara														
	i Udapalatha						-	<del> -</del>							
	Kundasale														1
	k Pathabewaheta							<del> </del>						-	

## Chapter 6

Appendix 6.1 Staged Pipeline Installation
Appendix 6.2 Construction Cost
Appendix 6.3 Capacity Calculation for Katugastota
W.T.P.
Appendix 6.4 Drawings

## **APPENDIX 6.1**

## **Staged Pipeline Installation**

There will be 4 cases of pipeline installation alternatives to meet the requirements of each stage.

Case	Contents of Works
Case 1	Single Pipeline  A pipeline with a capacity to meet the demand of 2015, to be constructed by 2005
Case 2	Double Pipeline - 1  First pipeline with a capacity to meet the demand of 2005, to be constructed by 2005  Second pipeline with a capacity to meet the demand of 2015, to be constructed by 2010
Case 3	Double Pipeline - 2  First pipeline with a capacity to meet the demand of 2010, to be constructed by 2005  Second pipeline with a capacity to meet the demand of 2015, to be constructed by 2015
Case 4	Triple Pipeline  First pipeline with a capacity to meet the demand of 2005, to be constructed by 2005  Second pipeline with a capacity to meet the demand of 2010, to be constructed by 2010  Third pipeline with a capacity to meet the demand of 2015, to be constructed by 2015

Net present value is applied to select the most economical alternative, and discount rate of 8%, 10% and 12% were applied.

The results of comparison are shown in the following table.

The following problems are considered for staged pipeline installation.

- a. Major roads in Greater Kandy have two lanes. In the shoulder of the roads, the existing water supply pipes, electricity cables, drains etc. were installed, new pipeline has to be installed below the paved carriage way.
- b. Breaking of pavement within several years is troublesome.
- c. It is quite difficult to install plural water supply pipelines in narrow single-lane road, in addition to one or two existing water supply pipeline.

Due to the above reasons, the following criteria are set to evaluate the cases in addition to economical aspects.

- a. Case with the lowest net present value is selected.
- b. If Case 1 is less than 10 % higher than the lowest Case, Case 1 is selected.

c. The difference of the diameters between the lowest case and Case1 is minimum, Case 1 is selected

Among 30 routes, selected case is

Case 1 23

Case 2 2

Case 3 5

Although some Case 3 were the lowest, it is not practical, due to the reasons mentioned in the above, and it was not selected.

Table6.1.1. Adopted Case

Auopica
Adopted
Case
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5 2
7 <u>1</u> 3 1
9 1
) 1

Case1			23
Case2			- 2
Case3			5
合計		•	. 30

\*In Case No.5, DIP 200mm was employed because of request of NWSDB.

Table6.1.2 N.P.V. of Cases

Transmission Route	Flow Rat	e (m3/d)	Cas	se 1	Cas	e 2	Cas	ie 3	Cas	c 4
1,01110	2005Year 1.30 2010Year 1.40	o (mora)	Investment	Diameter	Investment	Diameter	Investment	Diameter	Investment	Diameter
			Year	(mm)	Year	(mm)	Year	(mm)	Year	(mm)
1 5401 - 66	2005 Vane	1 300	2002Year		2002Year		2002Year	140	2002Year	140
113401 - 00	<u> </u>		LUOL I CUI		2007Year	0			2007Year	0
	2010 Геаг	1.500			2007 1041		2012Year	0	2012Year	0
	Year	1.500								
				0		0		0		0
	1999 2000			0		0	····	o		0
				0		0	<u> </u>	0		Ö
	2001		<u> </u>	3407		3407		3407	<u> </u>	3407
	2002	<del></del> _		3407		0		0		0
	2003			0		0		0		0
: [	2004					0		0	<del></del>	0
	2005		ļ	0		0		<del>  0</del>		0
	2006			0		0		1		0
<b>!</b> !	2007		ļ	0		1 0		0		0
]   .	2008		ļ	0				- 0		0
	2009		<u> </u>	0		0			<del></del>	0
	2010		<u> </u>	0		0				0
<b>}</b>	2011	<u> </u>	<u> </u>	0		0	<del></del>	9		0
	2012		<u> </u>	0		0		<u> </u>		
1 1	2013		<u> </u>	0		0		0	<del></del>	0
1 1	2014		l	(	<u> </u>	c		<u>c</u>		0
1 1	2015				) <u> </u>					0
1 1	Rate 8%			2.504		2.504		2.504		2.504
	Rate 10%			2.327		2.327		2.327		2.327
	Rate 12%			2.165		2.165		2.165		2.165
2 54' - 54	2005Year	2.400	2002Year	225	2002Year	225	2002Year	225	2002Year	225
	2010Year				2007Year	(			2007Year	1 0
]	2015Year						2012Year	(	2012Year	0
1	Year									
	1999	,			ol	1	)		ollo	0
1	2000		1		0		0		0	
	2001		· · · · · · · · · · · · · · · · · · ·		0	. (	0	1	0	
	2002		<del>- </del>	450	1	450	1	450	1	4501
	200		<del>                                     </del>		0		0	1	0	(
1	2004		<del> </del>	<b>-</b>	ol	· · · · ·	o		0	(
	200	<del></del>			o	·	0		0	
1	200				ōl		o l	T	0	
1 1	200				o		0		0	
	200				o		0		0 .	$\top$
	200	<del></del>	-		0		o		0	
	201				ő		o		0	
	201		<del></del>		ō	-	0	:	0	(
	201			<del>- </del>	ol		o o		0	
					0		ol		0	,
	201		<del></del>	+	0		0		o o	
1	201				ol		ol		0	+
	201		<del></del>	1 2 20		3.30	<del></del>	3.30		3,308
1 1	Rate 8%			3.30				3.07		3.074
	Rate 109			3.07		3.07		2.86		2.860
1 1	Rate 129	%		2.86	<u> </u>	2.86	<u> </u>	4.00	<u> </u>	2,000

T	ransmission	Ĭ	<del></del>	<del></del>	<del></del>		<del></del>		-		
	Route	Flow Rat	e (m3/d)	Cas			e 2	Cas		Cas	
				Investment	Diameter	Investment	Diameter	Investment	Diameter		Diameter
		<u> </u>		Year	(mm)	Year	(mm)	Year	(mm)	Year	(mm)
3 5	54 - 55	2005Year	1.700	2002Year	225	2002Year	225	2002Ycar	225	2002Year	225
		2010Year	1.800			2007Year	0			2007Year	0
		2015Year	2.000	,				2012Year	0	2012 Year	0
		Year									
		1999			0		0		0		0
		2000			0		0		0		0
	•	2001			0		0		0		0
		2002			4501	<u> </u>	4501		4501	·	4501
		2003		*******	0	<u> </u>	0		0		0
		2004			Ö		0	<b></b>	0	<del></del>	0
		2004			0		0		0		0
		2005			0		0	<del></del>	0		0
		2007			0		0		0	<del></del>	0
					0		0	<u></u>	0	<del></del>	0
		2008			<del></del>		0		0		0
ll		2009			. 0		<del></del>		0		0
		2010			0	<del></del>	0		<del></del>	<del></del>	0
	÷	2011		<u> </u>	0	<del></del>	0	<del></del>	0		<del></del>
		2012		ļ <u> </u>	0		0	4	0	<del> </del>	0
		2013			0		0	<del> </del>	0		0
		2014			0	<del></del>	0		0	<del> </del>	0
		2015		<u> </u>	0		0	ļ <u>.</u>	0	<b></b>	: 0
		Rate 8%			3.308		3.308		3.308	ļ	3.308
1		Rate 10%			3.074		3.074		3.074		3.074
Ш		Rate 12%			2,860		2.860		2.860		2,860
4	55 - 56	2005Year	800	2002Year	160	2002Year	140	2002Year	160	2002 Үеаг	140
		2010Year	900	<u> </u>		2007Year	75			2007Year	75
		2015Year	1.000					2012Year	. 0	2012Year	. 0
		Year								<u> </u>	
		1999			C		0		0	<u>                                     </u>	0
		2000					0		0	·L	0
		2001				i	0		0		0
1		2002			3502		3407	·I	3502		3407
ł	* *	2003		· ·		)	0		0		0
		2004	<u> </u>				C		O		. 0
		2005			(		C		C		0
		2006		<del> </del>			0		C		. 0
		2007	<del></del>	<u> </u>			2535		0		2535
		2008	<del>†</del>	1	(	<del></del>	(	+	C	)	. 0
		2009	<del> </del>	<b>†</b>		)	1		0	)	0
		2010		<u> </u>	· · · · · · · · · · · · · · · · · · ·	)	1		(		0
		2011		†					(		0
		2012		<del>                                     </del>	(		<u> </u>		1		
		2013							1		0 0
		2013		+		)	(		(		1 0
		2015	<b>*</b>	<del> </del>		)	<del>                                     </del>		1		C
		Rate 8%	<del> </del>	+	2.574		3.772		2.574		3.772
		Rate 10%	<del>                                     </del>	<del> </del>	2.392		3.402		2.392		3.402
	1	Rate 12%		<del> </del>	2.392		3.079		2.226		3.079
4 . 3	l :	RAIC 12%	1	1	4.440	' <b>I</b>	3.079	1	4.220	I	2.075

1	ransmission Route	Flow Rat	le (m3/d)		se 1		se 2		se 3	Cas	e 4
				investment Year			1		E	Investment	
۲	582 - 61S	2005Year	900	2002Year	(mm)	Year 2002Year	(mm)	Year	(mm)	Year	(mm)
	362 - 013	2003 Tear	2,000	ZUUZ I CAI	200			2002 Year	200	2002Year	14
		2010 Fear	2.200	<del> </del>		2007Year	160			2007Year	160
		Year	2,200	<b> </b>		<u> </u>		2012Year	U	2012Year	
-		1999			^					ļ	
		2000			0		0		0		
		2001			0		0		0	<del></del>	
		2002					0		. 0		
		2002			7414		3407		7414		340
		2003			0		0		0		
		2004			0		0	****	0	<del>•</del>	
			ļ	<del> </del>	0	****	0		0	<del></del>	
		2006		<b> </b>	0		0 0 0 0		0	<del></del>	
-		2007		ļ ————	0		3502		0		350
		2008			0		0		0	<del></del>	
		2009		ļ	0		0		.0	<del></del>	
		2010		ļ	0		0		0	<u> </u>	
Ì		2011	<del></del>		0		0		0	<del></del>	
		2012	<del></del>	ļ	0	<u> </u>	0	·	0		
		2013			0		- 0		0		
		2014		ļ	0	<del></del>	0		. 0	L	
		2015			0		0		0		
		Rate 8%			5,450		4.256		5.450		4.250
		Rate 10%		ļ	5.064		3.812		5.064		3.812
		Rate 12%			4.712		3.428	e e	4.712		3.428
6	60 - 60E	2005Year		2002Year	160	2002Year	140	2002Year	160	2002Year	14
		2010Year	900			2007Year	75			2007Year	7
	(Existing Pipe		1.000					2012Year	0	2012Year	
	150mm)	Year									
		1999			0		. 0		0		
		2000			0		0		0		
		2001			. 0		0		0		
		2002			3502		3407		3502		340
		2003			-0		0		. 0		1. 1.1
		2004	ļ	ļ	0		0		0	_	
-		2005		ļ	0	<del></del>	0		0		
		2006			0	<del></del>	0		0		
		2007			0	<del></del>	2535		0		253
ı		2008			. 0		0		0		· · · · · · · · · · · · · · · · · · ·
		2009			. 0	<del></del>	0		0		
		2010			0		0		0		
		2011		ļ	. 0		0		0		
	٠.	2012			0		0		. 0		
		2013	<u> </u>	ļ	0	<del></del>	0		0		
		2014		<u> </u>	0		0		0		
.		2015			0		0		0		
		Rate 8%			2.574		3.772		2.574	-	3.772
		Rate 10%		<u> </u>	2.392		3,402		2,392	1 10	3.402
		Rate 12%	l		2.226	1	3.079		2.226		3.079

Transmission			0	. 1	Cos	se 2	Cas	e 3	Cas	e 4
Route	Flow Rate	(m3/a)	Cas	Diameter	Investment	Diameter	Investment	Diameter		
	ĺ				Year	(mm)	Year	(mm)	Year	(mm)
			Year	(mm)	2002Year		2002Year		2002Year	110
7 60 -60'	2005 Year		2002Year	140		75	2002 1 041		2007Year	(
1	2010Year	600			2007Year		2012Year		2012Year	75
	2015Year	700		<del></del>			20121011		2012100	
<i>'</i>	Year	· · · · · · · · · · · · · · · · · · ·				0		0		(
	1999			0		0		0		
	2000		<u> </u>	0		0	ļ	0		
	2001			0	<u> </u>			2884	<del></del>	288
1	2002			3407	ļ <u> </u>	2884	<b> </b>	0	<del></del>	200
	2003			0		<u> </u>	<del></del>	0	+	
	2004			0		0		0	<del></del>	
	2005			0		0	<del></del>	<del>0</del>		
1	2006			0		0		0		
İ	2007			0		2535	·			
	2008		<u> </u>	<u> </u>		0		0	<del></del>	
	2009			C		0		0		<del> </del>
	2010		<u> </u>	<u> </u>	<del></del>	0		0	<del></del>	
	2011					0		0	<u></u>	<u> </u>
1 *	2012			(		<u> </u>		2535	<del></del>	253
	2013				)					<b></b>
-	2014			(	)					<u> </u>
	2015									0.00
	Rate 8%			2.504		3.388		2.983		2.98
	Rate 10%			2.327		3.045	<u> </u>	2.637		2.63
	Rate 12%			2.165		2.747		2.352		2.35
8 PG - 601	2005Year	9.900	2002Year	80	0 2002Year	450	2002Year	600	2002Year	4(
	2010Year	23,900			2007Year	700		<u> </u>	2007Year	4.5
	2015Year	41.100	)				2012Year	600	2012Year	50
	Year									<u> </u>
	1999				0		0	1	0	
	2000		<u> </u>		0		0		)	<del> </del>
	2001		<del> </del>		0		0		0	
· 1	2002		<del> </del>	4312	7	1593	5	2320	6	150
	2003				o		0		0	
	2004		_		0		0		0	<u> </u>
	2005				0		O .		0	<b>↓</b>
	2006		1		0		0		0	
	2007		1		0	3018	4		0	159
	2008		1		0		0		0	
	2009		1	1	0		0		0	
	2010				0		0		0	
	2011			1	ō		0		0	
	2012				0		0	2320		200
	2013				0		0		0	
l ·	2014		· ·		0		0		0	
	2015				0		0		0	
1	Rate 8%	<del>                                     </del>		31.70		26.81	2	24.95		25.8
	Rate 10%			29.45		23,68		21.96		22.3
	Rate 12%		<del></del>	27.40		21.01		19.49	6	19.40

T	ransmission Route	Flow Rate	e (m3/d)	Cas	ie 1	Cas	ie 2	Cas	ie 3	Cas	e 4
			- (,,	Investment	Diameter	Investment				Investment	Diameter
				Year	(mm)	: :	(mm)	Year	(mm)	Year	(mm)
910	601 - 301	2005Year	4.200	2002Year		2002Year	300	2002Year	500	2002Year	300
ı		2010Year	17.400			2007Year	500			2007Year	450
		2015Year	23.700				**************************************	2012Year	300	2012Year	300
- 1		Year									
		1999	<del>,</del>		0		0		0		0
١		2000			0		0		0		0
-		2001			0		0		0		0
- 1		2002			23206		10190	(	20044		10190
- 1		2003		<del> </del>	0		0		0	T	• (
- 1		2004			0		0		0		(
		2005	· · · · · · · · · · · · · · · · · · ·		0	<u> </u>	0		- 0		(
		2006			0		0		0		(
		2007			0		20044		0		15935
		2008			0	<del></del>	0		0		C
		2009			0	<del></del>	0		0		. (
		2010		·	0		0	-	. 0		C
ļ		2011			0	1	0		0		
-		2012		<del> </del>	ō		0		10190		10190
		2013			Ö		0		0		: (
ĺ		2014		<del> </del>	i o	<del></del>	0		0		(
- 1		2015		<del> </del>	0		0		0		(
		Rate 8%		<del>                                     </del>	17.057		17.517	. <del></del>	18.202		18,931
		Rate 10%			15.850	·····	15.461		16.374		16.401
		Rate 12%		├	14,748	<del></del>	13.704		14.823		14.307
10	301 - 5001	2005Year	3 100	2002Year		2002Year		2002Year		2002Year	250
10	301 - 3001	2010Year	16,100	·	<del>                                     </del>	2007Year	500	<del></del>	<u> </u>	2007Year	450
		2015 Усаг	22.400		<del>                                     </del>	20071001		2012Year	250	2012Year	300
		<b>Усат</b>	22.100	<del> </del>		<del>                                     </del>	<del>                                     </del>	1	<del>                                     </del>		
		1999		1		1	0		(	<u>,                                    </u>	(
. '		2000		<del>                                     </del>							- (
	i	2001	<u> </u>			<del></del>					(
	]	2002	<del> </del>	<b>-</b>	23200		8550		20044	1	8550
		2003		<del>                                     </del>	(		(		(	)	
		2004		<b>†</b>			(		(	)	
		2005	<del> </del>	<del>                                     </del>	1 7				. (	)	
		2006	<del></del>	1			0		(	)	
		2007		<b>T</b>			20044				1593
		2008		<del> </del>	1 (		<del></del>	jl			1
		2009	<del>•</del>	1				)	1		
		2010		1			<del></del>				1
		2011						)		0	
		2012				)			8550		1019
		2013		1				5	1		
		2014		1		o l		0		0	
		2015				0		0		0	
		Rate 8%	1	1	17.057		16.311		17.644		17.72
		Rate 10%			15.850		14.340		15.942		15.28
ŀ	1	Rate 12%		T	14.748		12.662		14.488		13.26

T	ransmission		( 4/1)	0	. 1	Car	se 2	Cas	se 3	Cas	e 4
	Route	Flow Rate	e (m3/a)	Cas	Diameter	Investment	Diameter	Investment	Diameter		
					(mm)	Year	(mm)	Year	(mm)	Year	(mm)
<del></del>		22227	1.000	Year		2002Year		2002Year		2002Year	250
11	5001 - 5002	2005Year		2002Year	/00	2007 Year	600	ZUOZICUI	550	2007Year	500
		2010 Year	14,700			200/1 cai	000	2012Year	225	2012Year	300
		2015Year	19.600	· · · · · · · · · · · · · · · · · · ·				20121011			
ļ		Year			0	···	0		0		0
- 1		1999					0		0		0
-		2000			0		0	<u> </u>	0		0
		2001			0		4501		23206		8550
j		2002	·		30184		4301		0		0
.		2003			0		0	<del></del>	0	ļ.,,	0
		2004		ļ	0		0		0	<del></del>	0
		2005			0			<del></del>	0		0
		2006			0		0				20044
		2007			0		23206	<del></del>	1 0		200-14
		2008		ļ	0		0		0		0
	į.	2009		ļ	0		0		0	4	1 0
		2010		<u> </u>	<u>C</u>					<del></del>	0
'	-	2011								-	10190
İ		2012	<u> </u>	<u> </u>	C		9		4501		10190
		2013		<u> </u>	(		<u> </u>				0
1		2014			(						+
		2015		<u> </u>	(		(		10.500		19.781
İ		Rate 8%			22.186		14.917		18.590		
		Rate 10%			20.616		12.916		17.035		17.024
1		Rate 12%			19.182		11.229		15.669		
12	5002 - 26'	2005Year	1.900	2002Year	30	2002Year		5 2002 Year	22:	5 2002 Year	225
		2010 Year	2.100			2007Year	22:			2007Year	0
		2015Year	4.400					2012Year	22:	5 2012 Year	225
1		Year	1	T		<u> </u>		<u> </u>			·
		1999				0		0		0	1 0
1		2000				0		0		0	<u> </u>
		2001		1		0		0		0	1501
	· ·	2002	2		1019	0	450	1	450		4501
		2003				0		0		0	
1		2004				0		0		0	4
		200				0		0		0	
		2000				0		0		0	
		200				0	450	1		0	<u> </u>
1		200				0		0		0	
Į		2009				0		0		0	
1		201				0		0		0	
1		201				0		0		0	450
1		201				0		0	450		450
Í		201				0		0		0	
1		201				0		0		0	
1		201				0		0		0	100
	$A_{-}$	Rate 8%			7.49	0	5,56		4.84		4.84
1		Rate 109		7 7 7	6.96		4.98	3	4.25		4.259
1	1	Rate 129	6		6.47		4.48	4	3.78	1	3.78

Transmission Route	Flow Rate	(m3/d)	Cas	e 1	Cas	e 2	Cas	se 3	Cas	e 4
3 26' - 25'	140M Kaic	(məta)	Investment	Diameter	Investment	Diameter	Investment	Diameter		
	]		Year	(mm)	Year	(mm)	Year	(mm)	Year	(mm)
12 261 251	2005Year	800	2002Year		2002Year		2002Year	160	2002Year	140
13 20 - 23	2010Year	900	ZOOZ FOR		2007Year	110			2007Year	75
	2015 Year	1.500			2007.20.		2012Year	75	2012Year	110
	Year	1.500								
	1999			0		0		0		0
	2000		<del></del>	0		0		- 0		0
	2001			0		0		0		0
	2002			4501		3407		3502		3407
	2002			0		0	\$ <del></del>	0		0
l i	2003		ļ	0		ō		0		0
	2004		<u> </u>	0		ō		1 0	<del></del>	0
			<b></b>	0		0		0		0
	2006			1 0	<del></del>	2884				2535
]	2007		<del> </del>	. 0		0		1 0		0
	2009			0		0		1 0		0
	2010		<del> </del>	1	<del></del>	0		1 0		0
1	2010		<del> </del>	C		1 0		<del>                                     </del>	1	0
1	2011		<del> </del>	1 0		0	<del></del>	2535		2884
1			<del> </del>			Ö		(	1	0
	2013		<del> </del>	<del> </del>				1 (		0
	2014		<del> </del>	<del>                                     </del>				1 (		0
	2015		<del> </del>	3.308		3.947		3.437		4.754
	Rate 8%		<del>                                     </del>	3.074		3.550		3.059		4.162
	Rate 10%		<del>                                     </del>	2.860		3.205		2.744		3.669
11051.05	2005Year	800	2002Year		5 2002 Year		2002 Year	22:	2002Year	225
14 25' - 25	2010Year	900		A Sec	2007Year	- (			2007Year	
	2015 Year	1.000		<del>                                     </del>	12007.134	†	2012Year		0 2012Year	
	Year	1.000	<del> </del>		<del> </del>	1				
	1999		<del> </del>	<del>                                     </del>	ol		ol	1	0	
1 1	2000		<del>                                     </del>		ol		0		0	
	2001				ol		0		0	T
1 1	2002		<del>                                     </del>	450		450	1	450	1	4501
1	2003		+		0		ol		0	
	2004		+	<del></del>	ol		0		0	
	2005				0		o		0 .	
	2006				0		0		0	
	2007			1	0		0		0	(
1 1	2008			1	ö		0		0	
	2009		1		0		o		0	
	2010	<del></del>			0		o		0	
	2011		1		0		0		0	
1	2012				0		0		0	
	2013				0		0		0	1.0
1	2014			1	0		0		0	
	2015	<del></del>			0		0		0	
	Rate 8%			3.30		3.30	8	3,30	8	3.308
	Rate 10%	T		3.07		3.07	4	3.07		3.07
	Rate 12%			2,86		2,86		2.86	0	2,860

T	ransmission Pouts	· Flow Rate	a (m214)	· Cas	. a 1	Con	se 2	Cas	e3	Cas	e 4
	Route	· Flow Rate	e (m3/a)	Variantesant	Diameter	Investment	Diameter	Investment	Diameter	Investment	
				Year	(mm)	Year	(mm)	Year	(mm)	Year	(mm)
	101 3	2005Year	1 100	2002Year		2002Year		2002Year		2002Year	110
15	301 - 3		1.200	ZUUZ I CAI	110	2007 Year	0	2002 1 041		2007Year	0
		2010Year	1.300			2007 I Car		2012Year		2012Year	0
-		2015Year	1,300					ZOI LICAI		20121041	
		Year			0		0		0		0
		1999		<del> </del>	0		0		0		0
		2000		<b></b>	0		0		0		. 0
		2001				·	2884		2884		2884
	•	2002			2884		2004		2004	<b></b>	0
ļ		2003		<del> </del>	0		0		0		0
		2004		<b></b>			0		0		0
		2005			0		0		0	<del> </del>	0
- [		2006		ļ	0	<del>}</del>	0		0		0
- 1		2007			0				0		0
	•	2008		<u> </u>	0		0	<del></del>	0	<b></b>	0
ı		2009		<b>_</b>	0	<del></del>	0	<del></del>	0	<del></del>	0
-		2010		ļ	0		0		<del></del>		0
·		2011		ļ	0		0		0		0
ļ		2012		· · · · · · · · · · · · · · · · · · ·	0		0		0	<del></del>	
		2013		<u> </u>	0	+	0		0		0
	·	2014					0		0	<u> </u>	0
		2015					0	<del></del>	0	<u> </u>	0 120
	e.	Rate 8%			2.120		2.120		2.120	<del></del>	2.120
		Rate 10%		<u> </u>	1.970		1.970		1.970		1.970
		Rate 12%	<u> </u>		1.833		1.833		1.833		1.833
16	5001 - 500	2005Year	1.300	2002Year	225	2002Year		2002Year	160	2002Year	160
	1	2010Year	1.400			2007Year	160		1	2007Year	0
		2015Year	2.800	<u>.</u>			<u> </u>	2012Year	160	2012Year	160
		Year						<u> </u>	<u> </u>	<del> </del>	ļ <u>.</u>
		1999				)	(		<u> </u>		<u> </u>
1		2000		1		<u> </u>	(		<u> </u>		
		2001				)				<del></del>	1 2 2 2 2
İ		2002		1	450:	<u> </u>	3502		3502	<del></del>	3502
		2003				0	(				(
		2004				0					
ŀ	1 -	2005			مصند استجالات	0					
		2006		· .		0			1 (	<del></del>	
	1	2007				0	3502	<del></del>	(		. (
	1	2008				0		)			- (
		2009			<u> </u>	0		)	.	<u> </u>	
		2010				0		<u> </u>			<del> </del>
١.		2011				0		)	(		( (
1		2012				0		<u> </u>	3502		3502
		2013				0		)		9	<u> </u>
1	1	2014				0		)		)	
1		2015				0				0	
		Rate 8%			3,308	3	4.326		3.766		3,766
1		Rate 10%			3.074		3.877		3.314		3,314
1	1	Rate 12%			2.860	)	3.488	i [	2.942	: ]	2.942

Transmission Route	Flow Rat	te (m3/d)	Cas	se 1	Cas	se 2	Cas	se 3	Cas	e 4
			Investment	Diameter			Investment	Diameter	Investment	Diameter
			Year	(mm)	Year	(mm)	Year	(mm)	Year	(mm)
17 601 - 6	2005Year	5.700	2002Year	500	2002Year	300	2002Year	350	2002Year	300
	2010Year	6.500			2007Year	450			2007Year	140
	2015 Year	17.400					2012Year	400	2012Year	400
	Year									,,,,
	1999			0		0	<del></del>	0		(
	2000			0	<u> </u>	0		0		
	2001			0		0		0	<del></del>	
	2002			20044	· · · · · · · · · · · · · · · · · · ·	10190		12138	<del></del>	1019
	2003			0	· · · · · · · · · · · · · · · · · · ·	0		0	·	1013
ļ	2004			0		0		0		
	2005			0		0		0		
	2006		<del></del>	0		0		0	<del></del>	
	2007			0		15935		0	····	340
	2008			0		13933			·	**********
	2009	<del></del>	<b></b>	0		0		0		
	2010		·	0				0		(
	2011		<b></b>	0		0	·/	0		(
						0		0		(
	2012		<b></b> _	0		0		15040		15040
1	2013	<del></del>		0	<u> </u>	0		0		(
	2014			0		0		0		(
	2015			0		0		0		(
	Rate 8%			14.733		15.461		14,042		14.315
	Rate 10%			13.690		13.718		12.251		12.365
	Rate 12%			12.738		12.222		10.791		10.782
18 6 - 7'	2005Year	1.800	2002Year	300	2002Year	225	2002Year	225	2002Year	225
	2010 Year	1.800			2007Year	250			2007Year	(
	2015Year	5.600					2012Year	250	2012Year	250
	Year									······································
	1999			. 0		. 0		0		(
	2000			0		0		0		
	2001			0		0		0	l	(
	2002			10190		4501		4501		4501
	2003			0		0		0		(
	2004			0		0		0	F	(
·	2005			0		. 0		0		(
	2006			0		0		0		(
	2007			0		8550		0		(
	2008			0		0		0		
	2009			0		0		0		
	2010			0		0		0		
	2011		]	. 0		Ö		0		
	2012			0		0		8550		.8550
	2013			0		0		0550		(0000
	2014		<u> </u>	0		0		0	<del> </del>	(
	2015		1	0		0	<del></del>	0		
			<del> </del>		<del></del>				<del>   </del>	
	IKate X% I		1	7 400						
	Rate 8% Rate 10%	•		7.490 6.960		7.585 6.700		6.219 5.326		6.219 5.326

Tr	ansmission							_	_		
	Route	Flow Rate	(m3/d)	Cas		Cas		Cas	e 3	Cas	
				Investment	Diameter	Investment	Diameter	Investment		Investment	
				Year	(mm)	Year	(mm)	Year	(mm)	Year	(mm)
19 7	r . 7	2005Year	1.800	2002 Year	300	2002Year	225	2002Year	225	2002Year	225
17]	- /	2010Year	1.800		·	2007Year	250			2007Year	0
		2015Year	5,100					2012Year	250	2012Year	250
		Year	3,100	<b></b>							
		1999		ļ	0		0		0		0
				<del> </del>	0		0		0		0
		2000			0		0		0		0
1		2001	····-	ļ	10190		4501	·	4501	<u> </u>	4501
H		2002		<del> </del>			4301		7302		0
		2003		<u> </u>	0	<del></del>	0		0		ō
		2004		<u> </u>	0				0		† <u>ŏ</u> l
	•	2005		ļ	0	<del> </del>	0		0	<del></del>	
		2006		<u> </u>	0		0	<u> </u>	1 0		
		2007		<u> </u>	0		8550		1		0
1	•	2008		<u> </u>	0		0		0		
		2009			0			<del></del>			0
!		2010		T	0	I	C				0
		2011		1	C			<u> </u>	(		0
		2012			C		(		8550	)	8550
		2013		<del> </del>			(		(	)	0
		2014		-	. (	<del></del>	(		(	)	0
		2015		<del> </del>	1		(		(	)	0
				<u> </u>	7.490		7.585	1	6.219		6.219
ΙI		Rate 8%		<del> </del>	6.960		6.700	<del></del>	5.326		5.326
		Rate 10%			6,476	<del></del>	5,944		4.610		4.610
Ш		Rate 12%	0.000	000037		2002Year		2002Year		2002Year	250
20	PG - 5"	2005Year		2002Year	300	2007 Year	7:			2007Year	0
		2010Year	3.300	·	<del> </del>	20071ca1	<del> </del>	2012Year	7	5 2012Year	75
1		2015Year	3,900	<u>'                                    </u>		+	· <del> </del>	201210	<del> </del>		-
		Year				<del>, </del>	-		<del></del>	0	0
		1999		<b></b>	<del> </del>	)		ol o		0	0
		2000				)		0		0	
1	·	2001				<u> </u>			855		8550
		2002			1019		855			0	1 0330
		2003	·			0		0			1 0
1		2004				0		0		0	1 0
1		2005				0		0		0	. 0
	1	2006				0		0		0	
1	1	2007				0	253			0	0
		2008				0		0		0	
1		2009				0		0		0	
1		2010				0		0		0	
		2011				0		0		0	(
		2012				Ö		0	253		2535
1	1	2013		<del>-  </del>		0		0		0	
	1	2014			1	0		0		0	(
1	1	2015		-	<del>                                     </del>	0		0		0	. (
	1		<del></del>	<del></del>	7.49		7.55		7.14	8	7.148
-1		Rate 8%			6.96		6.91		6.50		6.507
		Rate 10% Rate 12%			6.47		6.34		5.95		5.952

Transmission Route	Flow Da	te (m3/d)	Cas	. a 1		2				
-10410	Liow Ka	is (mo/a)				Se 2	Cas	e 3	Cas	6 4
			Year	(mm)	Investment Year	Diameter (mm)	Investment Year	Diameter (mm)	Investment Year	Diameter (mm)
21 PG - 17'	2005Year	18,300	2002Year	900	2002Year		2002Year		2002Year	600
	2010Year	33,000			2007Year	700		700	2007Year	500
i	2015Year	48.700		····			2012Year	600	2012Year	450
flow	Year	***************************************					20121001		ZOIZ I Cal	75
	1999			0		0		0	<del> </del>	(
1	2000	**************************************		0		0	<del></del>	0		(
•	2001			0		0		0		(
ļ	2002	<del></del>		50608		23206		30184	f	23200
i .	2003	· · · · · · · · · · · · · · · · · · ·		0		0		0	<del>                                     </del>	23200
,	2004		-	0		0		0	<del></del>	(
	2005	<del></del>		0	<del> </del>	0	_	-0		
	2006		<del> </del>	0		0				
	2007		<del> </del>	0		30184		$\frac{0}{0}$		3004
	2007		<b> </b>	0		30184		0	<del></del>	20044
· ·	2009		<del> </del>	0		0			<del></del>	
	2010		<del></del>	0		0		0	<del></del>	. (
	2011		<del> </del>	0				. 0	<del> </del>	(
	2011					. 0		0	<b></b>	(
1	2012		<del> </del>	0		0		23206		15935
	***************************************	<del></del>		0		0		0		
	2014	·		0		0		0	ļ	. (
	2015			. 0		0		0	ļ	
	Rate 8%		ļi	37.198		32.157		30.087	<u> </u>	32.509
	Rate 10% Rate 12%			34.566		28.651		26.727	- '-	28.547
22 17' - AG'		10.000	200071	32.162		25.632		23.931	2.5	25.237
22 17 - AG	2005Year		2002Year	700	2002Year		2002Үсаг		2002Year	450
	2010Year	21.900			2007Year	600			2007Year	400
İ	2015Year	33.900	ļ				2012Year	350	2012Year	400
-	Year									
	1999		ļ	0		0		0		(
	2000		ļ	. 0		0		. 0		
	2001	·		0		0	<del> </del>	. 0		C
	2002			30184		15935		23206		15935
	2003			0		0		0		
	2004			0		0		0		. 0
	2005			0		0		0		0
1	2006	ļ <u>.</u>		0		0		0		
- 1	2007	<del></del>	<del> </del>	0		23206		0		15040
	2008		<b></b>	0		0		0		C
	2009	·	<u> </u>	0	<del></del>	- 0		0		(
	2010			0		0		0		C
	2011		ļ:	0		0		0		C
	2012	ļ <u></u>		0		0		12138		15040
-	2013	<del></del>	<u> </u>	0		0		- 0		
	2014	<u> </u>	<b></b>	0		0		0		C
	2015		ļ	0	· · · · · · · · · · · · · · · · · · ·	0		0		0
	Rate 8%		ļ	22.186		23.321		21.190		24.357
	Rate 10%		<b></b>	20.616		20.725		19.046		21.223
	Rate 12%			19.182	<u> </u>	18.495		17.232	]	18.628

Transmission		1					<del></del>					
_	Route	Flow Rat	e (m3/d)	Cas	ie 1	Cas	ie 2	Cas	e 3	Case 4		
	******	11011 21	- (,,	Investment	Diameter	Investment	Diameter	Investment	Diameter	Investment	Diameter	
				Year	(mm)	Year	(mm)	Year	(mm)	Year	(mm)	
23	AG' - AG	2005Year	12.000	2002Year	600	2002Year	450	2002Year	500	2002Year	450	
		2010Year	17,700			2007Year	300			2007Year	300	
		2015Year	19.000			\$		2012Year	110	2012Year	0	
1	•	Year	17,000		,							
		1999			0		0		0		0	
		2000			0		0		0		0	
		2001			0		0		0		0	
.		2001		<del> </del>	23206	<u></u>	15935		20044		15935	
	•	2002	·		25200		0		0		0	
		2003			0		0	<b></b>	0		0	
		2004		<del> </del>	0		0	<del></del>	0		0	
				<del> </del>	0		0		.0	<del>}</del>	0	
		2006		<del> </del>	0	<del></del>	10190		0		10190	
		2007			0	<del></del>	10190	<del>}</del>	0	<del> </del>	0	
		2008		<del> </del>		<del></del>	1 0		0	<del></del>	0	
	·	2009			0		0		0		0	
		2010		ļ	1		0		0		0	
		2011			<u> </u>				2884		0	
		2012		<u> </u>	<u> </u>		0		. 0		0	
		2013		ļ	<u> </u>		0	<del></del>	<del></del>	<del></del>	0	
		2014		<u> </u>	(		<u> </u>		0	<u> </u>	0	
1		2015					0				16.810	
1		Rate 8%		ļ	17.057		16.810		15,715		15.205	
		Rate 10%	<u> </u>		15,850		15.205		14.450 13.328		13.802	
L		Rate 12%		<u> </u>	14.748		13.802			2002Year	300	
24	AG - 57	2005Year		2002Year	350	2002Year		2002Year		2007 Year	110	
	Ì	2010Year			<u>}</u>	2007Year	160			2007 Tear	90	
i		2015Year	6.700		<del></del>	ļ	<del> </del>	2012Year		Z0121 cai	30	
Į.		Year	ļ <u>.</u>	<b></b>	ļ		<del> </del>		-	<del> </del>	0	
1		1999	4			0		+	<u> </u>		0	
	!	2000				0			(		- 0	
	1 -	2001				0		<u> </u>			10190	
1		2002	<u> </u>	ļ	1213		10190		12138			
	1	2003		<b></b>		0	<u> </u>				0	
ŀ		2004				0		)	(		1	
1		2005				0		2			- 0	
		2006			<del></del>	0		2		)		
		2007	1	<u> </u>		0	350		<u></u>	)	2884	
		2008				0		0		)	. (	
1	<b>l</b> .	2009				<u> </u>		0		<u> </u>	<del></del>	
1		2010	<u> </u>	<u> </u>		0		0		<u> </u>		
		2011				0		0		0		
1		2012				0		0		0	2682	
1	1	2013	3			0		0 '		0		
	1	2014		<b></b>		0		0	<u></u>	0 .	(	
1	1.	201	5			0		0		0	0.846	
		Rate 8%			8.92		9.242		8.922		9.846	
		Rate 10%	,		8.29		8.445	1	8.290		8.889	
-	1	Rate 12%			7.71	4	7.739	)	7.714	H	8.065	

Transmission											
Route	Flow Rate	e (m3/d)	Cas			se 2	Cas		Case 4		
			1	•		ľ	Investment		,		
	·	·	Year	(mm)	Year	(mm)	Year	(mm)	Year	(mm)	
25 17' - 1702	2005Year		2002Year	400	2002Year		2002Year	400	2002Year	300	
	2010Year	11.100			2007Year	350			2007Усаг	300	
ŀ	2015Year	14.900					2012Year	0	2012Year	250	
	Year										
	1999		anne ann ann ann ann ann ann Ann ann Ann a	0		0		0		(	
	2000			0		0	<del></del>	0			
	2001			0		0		0	<del></del>		
ļ	2002			15040		10190	<b></b>	15040	<del></del>	10190	
	2003			0		0	<u></u>	0		(	
	2004			0		0	:	. 0		(	
	2005			0		- 0	<u> </u>	0			
	2006			0		0	<u> </u>	0	L	!	
	2007			0		12138		0		1019	
	2008			0		0		0			
	2009			0		0		0			
1	2010			0		0		0			
	2011			0		0		.0			
İ	2012			0		0		0		855	
	2013			0	<u> </u>	0		.0			
	2014		<del> </del>	0		0		0	l		
	2015			0		0		. 0			
.	Rate 8%			11.055		13.562		11.055		15.498	
	Rate 10%		<u> </u>	10.273	<del></del>	12,108	<del>                                     </del>	10.273		13.533	
	Rate 12%		<b> </b>	9.558		10.853		9.558		11.900	
26 1702 - 17	2005Year	6.300	2002Year		2002Year	225	2002Year	250	2002Year	22	
	2010Year	10.200			2007Year	225			2007Year	22	
	2015Year	10.900		1			2012Year	0	2012Year	1	
	Year	141,744	1	<del> </del>							
	1999		<b>†</b>	0		0	<u> </u>	0			
	2000		<del> </del>	0		1 0		1 0	<del></del>		
	2001		1	· · · · · · · · · · · · · · · · · ·	<del></del>	0	<del></del>	0	<del></del>		
	2002			8550		4501		8550		450	
	2003	<del> </del>	<del> </del>	0000		0		0	<del></del>		
	2004		† · · · · · · · · · · · · · · · · · · ·	C	<del></del>	0		0	<del> </del>		
	2005	<b></b>	<b>+</b>			0	<del> </del>		+		
	2006		<del> </del>	1 0		1 0	<del></del>	1 0			
	2007		1		<del> </del>	4501			<del></del>	450	
	2008	<del></del>	<del> </del>			1 0		<del> </del>	<del></del>	1	
	2009		† · · · · · · · · · · · · · · · · · · ·		<del></del>	1 0		<del>                                     </del>	<del></del>	1	
	2010		+	<del> </del>				1		<b>†</b>	
	2011		1	(		† - c					
1	2012		<del>                                     </del>	. (		1 6		<del>                                     </del>		<del> </del>	
	2012		+	1				1 7		<del> </del>	
1	2013		+	1		1 (		(		+	
	6014		<b></b>					1 (	<del>•                                      </del>	+	
	2015	į.	1	1 1							
	2015	<b></b> _	<del></del>	6 285		5 560		<u></u>			
	2015 Rate 8% Rate 10%			6.285 5.840		5.560 4.983		6.285 5.840		5.560 4.983	

Transmission Route	Flow Rat	e (m3/d)	Cas	:e 1	Car	se 2	Cas	e 3	Case 4		
222.00	1 100 100	o (mo <sub>i</sub> a)							Investment Diamet		
			Year	(mm)	Year	(mm)	Year	(mm)	Year	(mm)	
27 7' - 8	2005Year	410	2002Year		2002Year		2002Year		2002Year	110	
	2010Year	430			2007Year	0			2007Year	0	
	2015Year	490	<u> </u>				2012Year	0	2012Year	0	
	Year										
	1999	<del></del>	<del> </del>	0		0		0		0	
ŀ	2000			0		0		0		0	
	2001		<del> </del>	0	***********	0	***************************************	0		0	
	2002			2884		2884	~~~~	2884		2884	
	2003	······································	<del> </del>	0		0		0		2001	
	2004	····		0	<b></b>	0		0			
	2005			0		0		0			
	2006			0		0		0			
	2007			0		0		.0			
	2007		<del>                                     </del>	0		0		0		0	
	2008			. 0		0	<del></del>	0	<del></del>		
		****	<b> </b>		<del></del>	0		0		0	
	2010		<b></b>	0	<del></del>	0			<del> </del>	. (	
	2011		ļ	0		0		0			
	2012			0	<del></del>			0	<del> </del>		
	2013			. 0	<del></del>	0		0		(	
	2014			0	<del></del>	0		. 0			
·	2015			0	<b></b>	0	<del></del>	0		0.400	
	Rate 8%			2.120		2.120		2.120		2.120	
	Rate 10%			1.970		1.970		1.970	<b> </b>	1.970	
	Rate 12%		<del> </del>	1.833	1	1.833	<del> </del>	1.833		1.833	
28 6 - 10	2005Year		2002Year	225	2002Year	<del></del>	2002Year	225	2002Year	225	
	2010Year	1.630			2007Year	.0			2007Year	(	
	2015Year	1.890		<u> </u>			2012Year	0	2012Year		
	Year										
	1999			0	<del></del>	• 0		0	<del></del>	(	
·	2000			0	<del>}</del>	0		0		(	
	2001			0	·	0	<u> </u>	0	ļ		
	2002			4501		4501		4501	<u> </u>	4501	
,	2003		ļ	0		.0		0		(	
	2004	·		0		0	<del></del>	0	4	(	
	2005		<u> </u>	0		0		0		(	
	2006			0		0	<del> </del>	0		. (	
	2007			0	<del></del>	0		0		(	
	2008	,		. 0		0		.0		. (	
	2009			0		0		0		. (	
	2010			C		0		0		(	
	2011			0	<u> </u>	0		0	<del></del>	(	
	2012			0		0		0	<del></del>	(	
	2013			0		. 0		0		(	
	2014			0		0		0		(	
	2015			0		0		0		. (	
1	Rate 8%			3,308		3.308		3.308		3,308	
	Rate 10%			3.074		3.074		3.074		3.074	
<i>i</i> 1	Rate 12%		I	2.860	1	2,860	1	2.860	I	2.860	

PG - 65'   2005 Year   3.660   2002 Year   300   2002 Year   250   2002 Year   300   200	Year (mm) 2Year 250 7Year 0
PG - 65'   2005Year   3.600   2002Year   300   2002Year   250   2002Year   300   2002Year   250   2002Year   300   2002Year   2010Year   4.200   2015Year   2012Year   0   2011Year   2011Year   0   2011Year   2011Y	Year (mm) 2Year 250 7Year 0 2Year 160 0 0 0 0 8550 0 0 0 0 0 0 0 0 0 0 0 0 0
PG - 65'   2005Year   3.660   2002Year   300   2002Year   250   2002Year   300   2002Year   2010Year   4.200   2007Year   160   2012Year   0   2011Year   1999   0   0   0   0   0   0   0   0   0	2Year 250 7Year 0 2Year 160 0 0 0 8550 0 0 0 0 0 0 0 0 0 0 0 0 0 0
2010 Year   4.200   2007Year   160   200	7Year 0 2Year 160  0 0 0 8550 0 0 0 0 0 0 0 0 0 0 0 0 0
2015 Year   5.100   2012 Year   0   2011   Year   1999   0   0   0   0   0   0   0   0   0	2Year 160 0 0 0 8550 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Year	0 0 0 8550 0 0 0 0 0 0 0 0
1999	0 8550 0 0 0 0 0 0 0 0 0
Part	0 8550 0 0 0 0 0 0 0 0 0
	0 8550 0 0 0 0 0 0 0
2002   10190   8550   10190	8550 0 0 0 0 0 0 0 0
2003	0 0 0 0 0 0 0 0
2004   0   0   0   0   0   0   0   0   0	0 0 0 0 0 0 0
2005	0 0 0 0 0 0
2006	0 0 0 0
2007	0 0 0 0
2008	0 0
2009   0   0   0   0   0   0   0   0   0	0 0
2010   0   0   0   0   0   0   0   0   0	0
2011	. 0
2012   0   0   0   0   0	
2013	
2014   0   0   0   0   0	
2015   0   0   0   0       Rate 8%   7.490   8.036   7.490     Rate 10%   6.960   7.325   6.960     Rate 12%   6.476   6.697   6.476     30   65' - 6501   2005 Year   2.730   2002 Year   300   2002 Year   250   2002 Year   250   2002 Year     2010 Year   3.200   2007 Year   75   2002 Year     2015 Year   4.000   2012 Year   75   2002 Year     1999   0   0   0   0     2000   0   0   0     2000   0   0     2000   0   0     30   65' - 6501   2005 Year   2.730   2002 Year     4.000   2007 Year   75   2005 Year     5   7   7   7     6   7   7   7     7   7   7     7   7   7	0
Rate 8%   7.490   8.036   7.490   Rate 10%   6.960   7.325   6.960   Rate 12%   6.476   6.697   6.476       30   65' - 6501   2005 Year   2.730   2002 Year   300   2002 Year   250   2002 Year   250   2002 Year   2010 Year   4.000   2007 Year   75   2010 Year   1999   0   0   0   0     1999   0   0   0   0   0   0     2000   0   0   0   0   0	0
Rate 10%   6.960   7.325   6.960	0
Rate 12% 6.476 6.697 6.476	7.477
30   65' - 6501           2005Year	6.762 6.150
2010Year   3.200   2007Year   75   200   2015Year   4.000   2012Year   75   201   Year   1999   0   0   0   0   0   0   0   0   0	
2015Year   4.000   2012Year   75 201   Year   0   0   0   0   0   0   0   0   0	
Year 0 0 0 0 0 0 2000 0 0 0 0	
1999   0 0 0 0 0 2000   0 0 0 0 0 0 0 0 0 0	Z Tear 13
2000 0 0 0	
2000	
	0
2001	8550
	8330
2003 0 0 0	
2004	1 0
2007	
2000	
	<del></del>
	253:
	255.
Rate 10% 6.960 6.915 6.507 Rate 12% 6.476 6.348 5.952	7.148
	7.148 6.507
Routes of Vision	7.148
Minimum Ratio 17 9 23	7.148 6.507
Ratio         17         9         23           Ratio         57%         30%         77%	7.148 6.507

Appendix 6.2 **Construction Cost** 2005Year 36670 m3/d Unit Cost Quantity Price Unit Intake Facilities set 147.000.000 Intake Mouce, Grit Chamber, Pump House 71000000 2 142,000,000 38500 50 pes m3/d Transmission Pump 24.600,000 24600000 Electrical Pacilities set set 670.000 Power Supply Cost 43127 600 25.876.200 DCIP 4 800 Conveyer Pipe(P) п 50608 0 0 DCIP & 900 69,003.200 43127 1.600 m DCIP \$ 800 balancing Tank set 7780000 1 7,780.000 416,929,400 Total 2 Treatment Plant Pacilities 490 3,230 1.582.700 m3 Excavation 1.187.500 190 6.250 m3 Filling 430 755:510 m3 1.757 Filling 790 10,390 8.208.100 for Facilities m3 Excavation 430 2.015 866.450 m3 Filling for Facilities 1.639.160 9530 172 Receiving Well Concrete m3 1060 645.540 m2 609 Form Work 0,12 72970 21 1.506.101 ton Reinforcement 1.137.240 30% set Miscellaneous 9530 1.933 18.421.490 Sedimentation Basin Concrete m3 1060 4,633 4.910.980 Form Work m2 0,12 72970 232 16.926.121 ton Reinforcement 12.077.577 30% set Miscellaneous 9530 833 7.938.490 Rapid Sand Filter Concrete m3 2,467 2.615.020 1060 Form Work m2 0,12 72970 100 7.294.081 Reinforcement ton 35.695.182 200% set Miscellaneous 9530 1.300 12.389.000 Clear Water Reservoir Concrete m31.800 1,908,000 m2 1060 Form Work T=1.0hr 156 11.383.320 0,12 ton 72970 Reinforcement 30% set 7.704.096 Miscellaneous 9530 357 3,402,210 Backwash Return Pump Concrete m3 1060 921 976,260 Form Work m2 0,12 72970 43 3.126.035 ton Reinforcement 30% 2.251.351 Miscellaneous set 5.162 4.077.980 790 m3Sludge Lagoon Excavation 262 2.496.860 m3 9530 Concrete 2.294.177 0,12 72970 ton Reinforcement 1000 334 334,000 Granular m3 2.760.905 30% Miscellaneous set 15700 400 6,280,000 Office m2 20000 300 6.000.000 Pump House m2 400 8.000.000 20000 Chemical House m2 50 990.000 19800 Chlorination House  $m^2$ 4.000.000 200 20000 Store House m2 153 1.461.150 9550 Piling m Mechanical and Electrical Facilities 514.300.000 set 1.400,000 Power Supply Cost 19.100.000 set Implant Piping 37.000.000 5% set Miscellaneous Total 3 Chlorination Facilities of Distribution Reservoir 600000 **2**0 12.000.000 set Chlorination Facilities 10 m2 450000 9.000.000 set Chlorination House 21.000.000 Total 4 Transmission Pacilities Transmission Pipe Line 2535 0 n PVC # 75 m ш 2682 0 n PVC 490 2884 1.750 5.047.000 PVC # 110 m 3407 900 3.066.300 m PVC 4140 29.189.170 3502

PVC 4 160

							_		+			2005Year	36670	ma3/d Price
				ا ــــــــــــــــــــــــــــــــــــ					4		Unit	Unit Cost	Quantity	
7				PVC \$ 225					_		D)	4501	12.760	57.432.760
				DCIP					1		nı.	7414	1.200	8.896.800
				DCIP			_		4		m	8550	0	. 0
				DCIP							m	10190	4,150	42.288.500
				DCIP Ø 350					_		m	12138	700	8.496.60X
				DCIP			İ.				m	15040	2,500	37.600,000
				DCIP ø 450							m	15935	0	(
				DCIP Ø 500					Т		m	20044	6.350	127,279,400
				DCIP ¢ 600					7		m	23206	550	12,763,300
				DCIP \$ 700					-f		m	30184	2.950	89,042,800
				DCIP Ø 800			一		十		m	43127	0	
				DCIP \$ 900			-+		+		ומ	50608	0	
									+		scl	101000000	0	
		Aqueduct		φ 350-120 <sub>t</sub>		L	+		+		set	170000000	1	170,000,000
				( φ 600±600					┿			189000000		189.000.00
				(φ700±600					+		set			25.000.00
				\$ 110- \$ 60	10,20m		_+		+		set	5000000		25.000.00
					ļ	<u> </u>	_		_					205 400 64
			Pipe Total		<u></u>								42.145	805.102.63
	· · · · · · · · · · · · · · · · · · ·	Pump Facil	ties											
	·	(KMC W.T		Pump Equi	2000	m3/d	168 r	n	3	Pieces	set		3	3.298.00
		Primose I.B		Electrical I					1		set		0	
		1 muose 1.E	7	Pump Hous		<del></del>			7		set		o	
	<del></del>	ļ					01		H		set	<del></del>	0	
	ļ	J	L	Power Supp	ly Cos	╁╼╌┪	01)	W	${}$		set	<del> </del>	<del> </del>	3.298.00
			Sub Total		<b>_</b>	<b> </b>	$\dashv$		1		<u> </u>		<del> </del>	
	I	(Eriyagama	Re.	Ришр Едиі			52	m .	3	Pieces	set	ļ	<b> </b>	
		Daulagala l		Electrical l			$\Box I$		Ш		set		<b></b>	
	<b> </b>	1		Pump Hou					П		m2	<u></u>		
	<del>                                     </del>	<del>                                     </del>	<del> </del>	Power Sup			78	kw			set	l	0	
	<del> </del>	<del> </del>	Sub Total	TOWER SUP	1	i			H					
		\		D D /	0100	-974	100		2	Pieces	sot	<del> </del>	†	
	<u> </u>	(Eriyagama		Pump Equi			IÓ	ın	러	FIECOS		<del> </del>	<del>                                     </del>	
	<u> </u>	Sooriyagoo	la Re.)	Electrical		3	$\vdash$		Н		set		<del></del>	
	l	<u> </u>	L	Fump Hou			L		Ш		m2	ļ	ļ	
		T		Power Sup	ply Cos	t i	40	kw	Ц		set	1	0	
			Sub Total	T	Τ						<u> </u>	L	<b></b>	
	ļ	(I.B	1	Pump Equi	1000	m3/d	40	m	1	Pieces	set	T	1	
	<del> </del>	Mahakande	Rol	Electrical					П		set	1		
	<del> </del>	INTERNATION	10.7	Pump Hou		Ť	† †		H		m2	1	Τ	
	<del>                                     </del>	<del></del>	<del> </del>	Power Sup			۱.,	kw	Н		set	1	1 0	
	<del></del>	<b></b>		Lower 200	pry COS	1.	의	A.V.	Н		35.1	<del>                                     </del>	<del>                                      </del>	1
		4	Sub Total	<del> </del>		1.50	ابيا	<u> </u>	닞	DI		<del> </del>	+	<del> </del>
		(Udu-Pera		Ритр Еди			25	m	12	Pieces	+	<del> </del>	1	<del> </del>
	<u></u>	Bowalawat	ta Re.)	Electrical		88	لنبإ		₩		set	<del> </del>	+	<del> </del>
		1		Pump Hou		<u> L</u>	<u> </u>		₩		m2	<u> </u>	1	<del> </del>
			L	Power Sug	ply Co	st ·	33	kw	Ш		sel		+	<del> </del>
	1	1	Sub Total			[ ·			$\mathbf{I}^{-}$			<u> </u>	1	
	1	(Bowalawa		Ришр Еди	2000	m3/d	82	m	3	Piece	set		1	1
	+	Augustawa		Electrical					Ť		set	T		
	<del></del>	MUSUSUAWA	ica ne./			ĩ	t		┪		m2	1	1	1
	<del></del>	<del> </del>	<del> </del>	Pump Hou			1		+			<del> </del>	1 0	<del>                                     </del>
	4	<del> </del>	1	Power Sur	ply Co	st	32	kw_	+	·	set	+	<del>                                     </del>	+
			Sub Total	<del></del>		1	<del> </del>		<del> </del>	<u> </u>	<b>-</b>	+	+	<del> </del>
		Augustav	natta Re	Pump Equ	100	) m3/c	62	m	12	Piece	s set	<b></b>	0	
	1		Estate Re.		Faciliti	es		L	Γ	L	set	1	0	
-	<del>                                     </del>	1	T	Pump Ho			Π	I	T	Ţ.	m2		0	
			<del>                                     </del>	Power Su		st	12	kw	1		set		0	
	<del>- </del>	+	Sub Total		T ~	Ť	╅╧	<del> </del>	+	t –	† <del>***</del>		1	T
	<del> </del>	/17			2000	0 = 27	1 40	t	1,	Piece	s set	+	2	1,329.0
			ala Low Re.				1 03	<del> "1</del>	+3	riece	_			
	1	Heerasag	da Middle)	Electrical		es :	<del> </del>	<del>  </del>	+	<b> </b>	set		1	
				Pump Ho		ل	₩		1	1-	m2		1	
				Power Su	pply Co	st	24	kw	T	1	set		· · · i	
	1	T	Sub Total	F			Ţ	L	J	<u> </u>		1		3.902.0
		(Heerasas	ala Middle-		ui 100	0 m3/	d 73	m	12	Piece	s set	_L	2	1.663.0
	+		ala Upper)	Electrica			T		Т	1	set		1	
	+	110010366	Jppci/	Pump Ho			+	$T^-$	+	1	m2		1	
	-	<del></del>					+	t	+	+	Sel		1	
				Power Su	pply Co	St	1 28	kw_	+	+	<u>set</u>	<del></del>	<del> </del>	3.517.0
			Sub Total			+		<del> </del>	+	<del> </del>	+	+		3.311.
		(Hantana	Place Re	Pump Eq			<u>d  50</u>	m	4	Plece	_			
		Hantana	Low Re.)	Electrics	l Facilit	les			┸	1	set			
—	<del></del>		T.	Римр Но					Γ	<u> </u>	m2		1	1
	<del>                                     </del>	<del></del>	<del>                                     </del>	Power St		ost	12	kw	1	`	set			T. 200
			Sub Tota		T	Ť	+*	1	+	1	1	1		
	<del> </del>	- /4				N - 2 /	4 5	· -	١,	1121		. 1		1.551.
	1	(Ampitiy		Pump Eq			<u> 0  5:</u>	120	-13	2 Piec				
		Elhena R	e.)	Electrica		ies		-	4	+	se			
				Pump Ho	บรอ	1		1_	┸	1	m2			
			T	Power St		ost	1:	l kw	$\int$		set			75,
			Sub Tota		1	7	1	T	Т	T	T_			3.200.
	+	(Ampitiy		Pump Eq	ui 7	00 m3/	/d 2:	8 m	7	2 Piec	es se	t [		2 1.549.
_		TOTAL DILLY	. 116.	باند توسده ، و		- v (me u/								
_			a Low Re.)	Electrica	1 12111		-	<del>                                     </del>	+	1	se	+ Î	1	1 1.029.

	1					l		T		П			2005Year	36670 n	13/d
										1		Unit	Unit Cost	Quantity	Price
		<del></del>			ower Supp	ly Cost		11	kw	m		set		1	75,00
	<del> </del>			ub Total		ľ				П					3.193.00
	<del> </del>	(Ample	tiya Re		Pump Equip	800	ш3/d	66	n)	2	Pieces	set	769000	2	1.538.00
					Electrical F			-00		٦		set		i	1.009.00
	·	Mecka	inuwa F		Pump Hous					H		m2		1	540.00
	<b></b>							10	·	╁┼				<del></del>	75.00
					Power Supp	ly Cos		10	KW	₽		set			3,162.00
				ub Total		ļ									
		(Katus	estota		Pump Equi			103	m .	3	Pieces	sot	320000000	2	64,000,00
	T	Kahaw	vatta Re	9.)	Electrical I	acilitle	s			Ц		set		0	
	1				Рищр Нова	se .				Ш		m2		0	
	1				Power Supp	ly Cos	t	0	kw	П		sel		0	
	+		5	ub Total		T	Τ			П					64.000.00
		/Dalan	agara l		Pump Equi	1300	m3/4	93	TT1	2	Pieces	set			
	+		******		Flectrical I			<del>  ~  </del>	<del></del>	Ť		set			
		DORTA	lavinne				i i	┝╼┥		╁╌╏		m2			
			_		Pump Hous		<u> </u>			₽					
					Power Supp	ply Cos	<u>t</u>	24	kw	Н		set			
	1		8	Sub Total		<u> </u>	<u> </u>			Н				<u> </u>	
		(Bang	alewatt	a Re	Pump Equi	1700	m3/d	66	m	3	Pieces	set			
		Pitive	gendar	a Re.)	Electrical	Faciliti	25			Ш		set			
			т Т		Ришр Нои	se	T					m2	Γ''	ii.	
					Power Sup		:t	22	kw			set			
	<del> </del>		<del>-</del>	Sub Total	10402 009	10 000	<del>``</del>		=:	1					
	<del>                                     </del>				Pump Equi	conc	m2/-	106		12	Pieces	set	<b></b>	t	
	+		watta i					100	ļ	13	. seces	set	<del> </del>	+	
		Goda	hana B	ranch)	Electrical		es	-	<b> </b>	+		_	<del> </del>	<del>[</del>	
					Ришр Нои		<u> </u>	<b>ļ</b>	<b></b> -	+-	<u> </u>	m2	<del> </del>	<del> </del>	
					Power Sup	ply Co:	st	128	kw	1		set	<b></b>	<b> </b>	
	T			Sub Total			1	L		1			<u> </u>		
	1	(God)		ranch-	Pump Equ	2600	m3/d	47	m	1	Pieces	set	L	<u></u>	
			hana R		Electrical			1	<u> </u>	1		set			
		GUGA	ILESIA IV	6./			Ť	+	ļ	╈		m2	<del> </del>		
					Pump Hou		<del></del>	1	<del> </del>	╁	<b></b>	<del> </del>		<del> </del>	
					Power Sup	ply Co	st.	24	kw	╄		set	<del> </del>	<del> </del>	
			1	Sub Total		J	٠.,	↓	<u> </u>	╀	<u> </u>	ļ. —	<del> </del>	<del> </del>	
		(God	ahana I	₹e.−	Pump Equ	1 260	) m3/c	61	ומ	13	Pieces	set	<u> </u>		
		L.B.)			Electrical	Faciliti	es	1	i	1	i	set	<u> </u>	<b>I</b>	
****	<del> </del>			<del>, , ,</del>	Pump Hou	ise	7	1	Г	Т		m2	·		
					Power Sur		et	30	kw	1		set			
	<del></del>			Out Carl	1 OWEL DOS	17.5	1	+	1-11	+		1	1	1	
				Sub Total		1 000	1 27	1 -0	<del> </del>	+,	Discour	1	<del> </del>	<b></b>	
	<u> </u>	(I.B.			Pomp Equ			1 20	m	┵	Pieces			<del> </del>	
	_l	Galhi	inna Re	.)	Electrical	Faciliti	es	4	<b> </b>	4	<b>↓</b>	set	<del> </del>	<del> </del>	
					Pump Hot	150		1	L	1	L	m2	<u> </u>	<del> </del>	<del></del>
					Power Sup	oly Co	st	25	kw	1	<u> </u>	set	<u> </u>	<u> </u>	
	_			Sub Total		T	T	T		ı	ļ	<u>L_</u>	L		
		(Kab	awatta		Риво Еди	560	0 m3/	d 75	m	13	Pieces	s set	T	2	2.547.0
			goda R		Electrical			1	1	1		set		1	3,463.0
	<del></del> -	7,010	igo da i	16.7	Pump Hor		Ĩ	+	+-	+	1	nı2	1	1	660.0
			·				<del>-</del>	100		╅	<del> </del>	+	1	1	941.0
			<u> </u>		Power Su	oply Co	st	1 82	kw	+	-	set	4	<del> </del>	7.611.0
	1			Sub Total		_			- <del> </del>	+		+	<del></del>	<del>                                     </del>	7.0715
		(Kur	ugoda l	Re -	Pump Equ	ւմ 300	0 m3/	d 60	<u>m</u>		Piece	s set		<del> </del>	
-		Heet	pitiya F	(e.)	Electrical	Facilit	les	1	<u>L.</u>	L		set		ļ	
	1	1			Ривр Но		T		I	_[		m2			
	1-				Power Su		st	34	kw	T	1	sel			
	_			Sub Total	1	T	Ť	Ť	1	+	T	1	T		
					Pump Equ		n /	11.40	;†	+	Piece	s set	1		
				a W.T.P				114	11111	+	11.608			1	<del></del>
		Raja	pihiila	Ke.J	Electrical		163 ·	┿	+-	+	<del> </del> -	set.		- <del> </del>	<u> </u>
	Щ.			<b></b>	Ришр Но					+	+	m2	+	+	
					Power Su	pply Co	st	4	) kw	-1	↓	set	+	<del>- </del>	l
				Sub Total				4	1	⊥	L	<b>_</b>		<del></del>	
		(Rata	apihilla		Pump Eq	ul 160	0 m3/	d 48	B m	_[:	Piece	s set	4	<u> </u>	
				Re.)	Electrical			Т	T .	T		set		J	
		1,7240		T	Pump Ho		T	1	1	T	T	m2			
	+	<del></del>	-	<del>                                     </del>	Power Su		net .	10	6 kw	-†		set		1	
				Cut To		, p., c	1	+-"	<del>' ^"</del>	+	+	+~~	1		l
	<del>-   -</del>	نبلت		Sub Total	D D	+-	<del></del>	<del>,  </del>	-	+	1 02		1	2	1.331.
				ta W.T.P				9	<u> 5 m</u>	-4	2 Piece				1,331.
		kon	dadeniy	a Sump.)	Electrica		les	4	4-		<del> </del>	set		0	<del> </del>
				L	Pump Ho	use			4	$\perp$		m2	<del> </del>	0	<b></b>
		. 1	1		Power Su	ipply C	ost		0 kw	$_{ m I}$		set		0	
		—-t		Sub Total		7	Т	T-	T	T	T			1	1.331.
		/w	ا ان داده ان	iya Sump-	Pump Eq	11 20	10 m 2	/d 14	5	7	2 Piece	s set			4.725.
····	<del></del>							4.	-1"-	$\pm$	1	set			6.852
		kon	dadeni	va Re.)	Electrica		ues	-	+	-+	+			<del></del>	540
			* * *	1	Pump Ho			4	1	-	+-	m2		<del> </del>	
					Power St	ipply C	ost	111	0 kw	4	4	set	+	0	1.444
			4.5	Sub Total	200	1		1	1	_	1				13.561
				t. W.T.P		ui 487	00 m3	/d]16	0 m	_T	5 Piece	es se	4560000		136,800
<u>:</u>								$\neg$	Т-		1	set		0	1
	-		and Ro	<b>.)</b>	Hectrica	u pacili	ues			- 1		1 26	<u> </u>		
			and Re	) 1	Electrica Pump Ha		Hes	+	+-	1	+-			Ö	
			and Re	) 	Pump Ho	оиѕе		+	n L		#	m2		0	
			and Re	Sub Total	Pump Ho Power St	оиѕе			0 kw						136.800

	<u></u>	······				<del></del>			П	$\overline{}$		2005Year	36670	m3/d
											Unit	Unit Cost	Quantity	Price
		Baliitawakai	ıda Re.)	Electrical F	acilitle	s					set		1	3,843,00
				Pump Hous		L					m2		1	540.00
			0.1 (0.1)	Power Supp	ly Cos	<u></u>	59	kov	-		set		1	1.385.00
			Sub Total	Down Foods	16000	-0/3	20		Ļ	D2				8,852,00
		(Balanagala Sirimaruwat		Pump Equip Electrical F			20	m	1	Pieces	set sot			
	<u> </u>	Sirradi G Wat	10 116/	Pump Hous		ř			-		m2			
				Power Supp		L	58	kw	Н		5et			
			Sub Total			Ì		<u> </u>	-	·				
		(Sirlmaruwa		Pump Equip	5900	m3/d	33	m	3	Pieces	set			
		Dambarawa	Re.)	Electrical F	acilitie	s					set			
				Pump Hous		L					m2			
				Power Supp	ly Cos	t	38	kw	L		set			. (
		4.	Sub Total						ļ.,					
		(Katugasto)		Pump Equip			112	u;	3	Pieces	set		3	4.761.00
		Gohagoda I	(6.)	Electrical F Pump Hous		s			H		set m2		0	
	<del> </del>			Power Supp		<u></u>		kw	-		set	<b></b>	0	
	<del> </del>	-\	Sub Total	rower supp	17 003		<del>-</del>	P.44	H		361			4,761.00
		(Bogahakan		Pump Equip	200	m3/d	38	m	2	Pieces	set			4,701,00
	T	Bogahakan		Electrical F			-	1	Ť		set			
				Pump Hous	e						m2			
				Power Supp	ly Cos	i	2	kw	L		set			
	ļ		Sub Total				ļ		L					
	<u> </u>	ļ		L		ļ	ļ	ļ	ļ	ļ	<u></u>		ļ	
	<b> </b>	<u> </u>	Pump Facili	ities Total	<u> </u>	ļ .	<b> </b>	<b></b>	┡	<b></b>			<b> </b>	257,188,00
	<b>-</b>	-	<u> </u>		<u>.</u>	ļ	<u> </u>	ļ	Ļ.	<b></b>	ļ			. 000 100
	<del> </del>	Total	<del> </del>	<b> </b>	<u> </u>	-	├		╀		<b></b>	<b></b>	ļ	1.062.290.63
	Distribution	- Profitton		ļ		<del> </del>	-		┝	-	<del></del>	ļ		<del> </del>
3	Distributio	n racuiues	<del> </del>		<del></del>	<del> </del>		<del> </del>	┢╌			<del></del>		
<del></del>	<del> </del>	Reservoir	<del> </del>	<del> </del>	<u> </u>	<del>                                     </del>	┢╾	<del>                                     </del>	╁		<del> </del>		<del> </del>	
	<del> </del>		duna Low)	Concrete		<del>                                     </del>	<del>-</del>		t		m3	9530	0	
	<del> </del>		m3	Form Work		ļ		<b> </b>	T		m2	1060	Ö	
	1	<u> </u>		Reinforcem			T		T	0,12	ton	72970	0	
	1			Miscellaneo					T	100%				
		(Bulewemu	duna Upper)	Concrete			П	1.	Γ	-	m3	9530	0	
		118	m3	Form Work					Γ		m2	1060	0	
				Reinforcem	ent				L	0,12	ton	72970	0	
				Miscellaneo	บร		L	<u> </u>	L.	100%	set			
	<b>.</b>	(Ambakote		Concrete	L	ļ.:	ļ	ļ	╀		m3	9530		· · · · · · · · · · · · · · · · · · ·
	<del> </del>	216	m3	Form Work		<b> </b>	<b> </b>	ļ	╀		m2	1060	<del></del>	·
	<del> </del>	<del> </del>	<del> </del>	Reinforcem		-	<b>}</b>		╄	0,12	ton	72970	0	
-	<del>                                     </del>	(Kolongas)		Miscellane Concrete	Sus	┼	⊢	-	╀	100%	set m3	9530	0	
	<del></del>		m3	Form Work	<u></u>	+-	⊢	<del>                                     </del>	t		m2	1060		
	<del> </del>	1	146	Reinforcem		<del> </del>		┼	۲	0,12		72970	•	
	<del> </del>	<del>                                     </del>	<del>                                     </del>	Miscellane		1	1	<b>†</b> • • • • • • • • • • • • • • • • • • •	t	100%		125.0	,	
	1	(Kundasale	)	Concrete	T		1	<b>†</b>	T	1	m3	9530	0	
		630	m3	Porm Work					T		m2	1060		
				Reinforcem	ent				Γ	0,12	ton	72970	0	
			1	Miscellane			1		Γ	100%	set			
	4	(Menikhina		Concrete		$\vdash$	1	-	1	1	т3	9530		
	<del></del>	775	m3	Form Work		1	<u> </u>	<del> </del>	╀	1	m2	1060		ļ
	<del>- </del>	<del> </del>	<del> </del>	Reinforcem		+	₩	+	╀	0,12		72970	0	<del>                                     </del>
	<del></del>	(Sirimalwat	<u></u>	Miscellane Concrete	ous  -	+	+-	1	╀	100%		O.C.O.O.		<b></b>
	+		m3	Form Worl	<del>1</del>	+	+-	+	۲	1 -	m3 m2	9530 1060	•	<b>—</b>
	<del>                                     </del>	200	1	Reinforcem		<del> </del>	†	1	†	0,12		72970		
	1	t	1 : .	Miscellane		1	T	1	t	100%		1	1 ,	
		(Rajawella)		Concrete			T	1	Ť	L	m3	9530	0	
		47	m3	Form Worl					Γ		m2	1060		L
	4	<u> </u>	ļ	Reinforcen			1	1	Ţ	0,12		72970	0	
		ļ	1	Miscellane	~	1	1	1	1	100%		ļ	<b></b>	
	<del> </del>	(BOI)	<del> </del>	Concrete		+	1	<b> </b>	+	1	m3	9530		<b></b>
	1	1511	m3	Form Worl		+	╁	<del></del>	+	-	m2	1060		ļ
	+		1	Reinforcen		+	₩	+	+	0,12		72970	0	<u> </u>
	<b>†</b>	<del> </del>	1		estile:	1	1		L	100%	_	1	L	<u> </u>
		(Cum 113-	1	Miscellane		†····	Т.,	i		4.7	1	1		1 / /
		(Gum Uda		Concrete		1	L	╁	╀	-	m3	9530		7.1
			wa) 2 m3	Concrete Form World	<u> </u>			ļ. -	+	0.10	m2	1060	0	10 m
				Concrete Form Work Reinforces	k nent			ļ. ————————————————————————————————————	+	0,12	m2 ton		0	
		7.	2 m3	Concrete Form Work Reinforcen Miscellane	t nent ous				  -  -	0,12	m2 ton set	1060 72970	0	
		(Dambara)	2 m3	Concrete Form Work Reinforcen Miscellane Concrete	k nent ous				  -  -		m2 ton set m3	1060 72970 9530	0	
		(Dambara)	2 m3	Concrete Form Work Reinforcen Miscellane	k nent ous				  -  -	100%	m2 ton set m3 m2	1060 72970 9530 1060	0 0	
		(Dambara)	2 m3	Concrete Form Work Reinforcen Miscellane Concrete Form Work	k nent ous t						m2 ton set m3 m2 ton	1060 72970 9530	0 0	
		(Dambara)	2 m3	Concrete Form Work Reinforcen Miscellane Concrete Form Work Reinforcen	t nent ous					0,12	m2 ton set m3 m2 ton	1060 72970 9530 1060	0 0 0	



						<del></del>	т		- <del></del>			10020	36670	3/d
Selection   Sele							╁╴	-+	┼	+;;				
Miscellaneous   Miscellaneou				Polnformannant			┿		+	_				0
Ukdata/Mortinal   Control							+-					1,27,0		0
167 m3   From Work		() Idatalawinn					†-		1			9530	0	0
School   Constrate											m2	1060	0	0
				deinforcement					0,1	2 t	lon	72970	0	0
221 m3			h	Aiscellaneous			<u> </u>		100					0
Bentiferenant							1_							9.444.230
Pille		323 n			-		╁		<u> </u>					
Miscellanousy   100% ant   27234.0							-	-+	0,1					
Ganachestala							╀		1.00			9550	320	
200   m2   m2   m2   m2   m2   m3   m3   m3		(B1			-+-			-	1100		$\overline{}$	9530	315	3.001.950
Reliforcement   0,12   100   73970   38   2,758.2							┿							835.280
Marcellancours		290 15					+-		0.1	_				2.758.266
Nystegman						_	1-		_					6.595.496
422 a3   Form Work		(Wattegama)							Ī		m3	9530	0	0
Witiepeendara    Miscellaneous   1005   set   3   3   3   5   3   0				orm Work							m2			0
Pittyseendera   Control			[	Reinforcement			ᆚ				~~~	72970	0	0
							4		100					0.
Reinforcement							+							0
Chilileduniya   Concrete   Conc		360 1				+			10					0
Cybilledeniva   Concrete	<del></del>					+	十	-+				125 [1]	- 7	0
248 m3		(Dibiliadonia			+		+-	$\dashv$	+*^			9530	278	2.649.340
Reinforcement	<del></del>						-	. 1	1					737.760
Miscellaneous   100% est   5.821.3   (Gokkawela)   Concrete   m. m. m. m. m. s. p. p. p. p. p. p. p. p. p. p. p. p. p.	<del></del>	24011				_	1		0.1	_				2.434.279
	<del> </del>	_					$oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$							5,821.379
Reinforcement   0,12   10a   72970   0		(Bokkawela)			I	I		$\Box$						0
		479					1		1					0
Opujapitiya  Concrete							4					72970	0	<u> </u>
278 m3							+		100			0500		0
Reinforcement   0,12   10n   72270   0									+		_			0
Miscellaneous		278				┿	+			_				0
Richard   Concrete	<del></del>	<del></del>					╁	+				72.70	├── <u>~</u>	0
1174 m3		(Kabawatta)				_	╅		1:5	_		9530	857	8.167.210
Reinforcement     0,12   ton   72970   103   7.504.7						$\dashv$	1		1			1060	2.142	2.270.520
							Ι		0,	12	ton	72970	103	7.504.235
S35 m3				Miscellaneous			I		100	)%				17.941.965
Reinforcement   0,12 ton   72970   57   4.159.2     Miscellaneous   100% set   9.944.2     (Telambugawatta)   Concrete   m3   9330   179   1.7052     124 m3   Form Work   m2   1060   447   473.3     Reinforcement   0,12 ton   72970   21   1.559.2     Miscellaneous   100% set   3.747.6     (Heepitlya)   Concrete   m3   9530   0     8655 m3   Form Work   m2   1060   0     Reinforcement   0,12 ton   72970   0     Miscellaneous   100% set   3.749.6     Galhiana   Concrete   m3   9530   0     Miscellaneous   100% set   3.749.7     Miscellaneous   100% set   3.7		(Kurugoda)					4			_			<del></del>	4.526.750
Miscellaneous		535					-		+-					
Cleimbugawatta   Concrete   m3   9530   179   1.705.8							-+-					72970	37	
124 m3						+	+		110	170		9520	170	1.705.870
Reinforcement					$\dashv$		Ť	_	+					473.820
Miscellaneous   100% set   3.747.6   (Fieepitiya)   Concrete						$\dashv$	+		0.	12		<del></del>	+	1.567.396
Cheepityax   Concrete						_	1		_	_				3.747.086
Reinforcement		(Heepitiya)									m3	9530	0	0
Miscellaneous   100% set			m3	Form Work			I				m2	1060		0
Galhinna   Concrete				Reinforcement		$\perp$			-		ton	72970	0	0
Miscellaneous   Miscellaneou	-				1 1		4		10	0%			<u> </u>	0
Reinforcement   0,12 ton   72970   0     Miscellaneous   100% set       (Madadeniya)   Concrete                         (Madadeniya)   Concrete                       (Madadeniya)   Concrete                       (Madadeniya)   Concrete                       (Madadeniya)   Concrete                       (Madadeniya)   Concrete                       (Madadeniya)   Concrete                       (Madadeniya)   Concrete                       (Madadeniya)   Concrete                       (Madadeniya)   Concrete                       (Miscellaneous   1060   0               (Miscellaneous   100% set                 (Miscellaneous   100% set                 (Kulugammana)   Concrete                             (Kulugammana)   Concrete						-	+	-	┝┿┈	-+		<del></del>		0
Miscellaneous   100% set	ļ	490	m3			-	+		<del>    _</del>	12		<del></del>		
Madadeniya   Concrete   m3   9530   0						_	+					12910	1	0
111 m3	<del>                                     </del>	()4-3-4-3	5			-+	+		10	970		0530	n	
Reinforcement   0,12 toa   72970   0	<del> </del>				-+	-	十		$\vdash$	$\dashv$				0
Miscellaneous   100% set	<del>  </del>						1		0.	12				0
Nugawela   Concrete   m3   9530   0	<del></del>				_		⇉							, 0
1150 m3   Form Work   m2   1060   0     Reinforcement   0,12 ton   72970   0     Miscellaneous   100% set       (Kulugammana)   Concrete   m3   9530   167   1.591.     111 m3   Form Work   m2   1060   418   443.     Reinforcement   0,12 ton   72970   20   1.462.     Miscellaneous   100% set   3,496.     (Uduwawala)   Concrete   m3   9530   0     520 m3   Form Work   m2   1060   0     Reinforcement   0,12 ton   72970   0     Miscellaneous   100% set       (Kondadeniya)   Concrete   m3   9530   375   3.573.     384 m3   Form Work   m2   1060   938   994.     Reinforcement   0,12 ton   72970   45   3.283.     Miscellaneous   100% set   7.851.     (Hindagala)   Concrete   m3   9530   0		(Nugawela)					I			$\Box$			<del></del>	0
Reinforcement   0,12 ton   72970   0     Miscellaneous   100% set       (Kulugammana)   Concrete   m3   9530   167   1.591.     111 m3   Form Work   m2   1060   418   443.     Reinforcement   0,12 ton   72970   20   1.462.     Miscellaneous   100% set   3.496.     (Uduwawala)   Concrete   m3   9530   0     520 m3   Form Work   m2   1060   0     Reinforcement   0,12 ton   72970   0     Miscellaneous   100% set       (Kondadeniya)   Concrete   m3   9530   375   3.573.     384 m3   Form Work   m2   1060   938   994.     Reinforcement   0,12 ton   72970   45   3.283.     Miscellaneous   100% set   7.851.     (Hindagala)   Concrete   m3   9530   0			m3				I		Ш			<del></del>		0
(Kulugammans)   Concrete   m3   9530   167   1.591.							_					72970	0	0
Till m3   Form Work   m2   1060   418   443.			L				$\bot$		10	0%			1	1 501 510
Reinforcement   0,12 ton   72970   20   1.462     Miscellaneous   100% set   3.496     (Uduwawala)   Concrete   m3   9530   0     520 m3   Form Work   m2   1060   0     Reinforcement   0,12 ton   72970   0     Miscellaneous   100% set       (Kondadeniya)   Concrete   m3   9530   375   3.573.     384 m3   Form Work   m2   1060   938   994.     Reinforcement   0,12 ton   72970   45   3.283.     Miscellaneous   100% set   7.851.     (Hindagala)   Concrete   m3   9530   0	1				-	-+	4		H	+				1.591.510 443.080
Miscellaneous   100% set   3,496.   (Uduwawala)   Concrete   m3 9530 0     520 m3   Form Work   m2 1060 0     Reinforcement   0,12 ton 72970 0     Miscellaneous   100% set     (Kondadeniya)   Concrete   m3 9530 375 3.573.   384 m3   Form Work   m2 1060 938 994.   Reinforcement   0,12 ton 72970 45 3.283.   Miscellaneous   100% set   7.851.   (Hindagala)   Concrete   m3 9530 0	<b></b>	111	m3		-+	$\dashv$	- -	<u> </u>	<del>    _</del>	12				1.462.319
Concrete   m3 9530 0	<del> </del>		<del>                                     </del>			+	+					12911	1 20	3.496.909
S20 m3   Form Work   m2   1060   0	<del> </del>	(Halaman - 1	7		<del></del>	-+	$\dashv$	···	<del>    1</del> 2	~~		9536	0	
Reinforcement   0,12 ton   72970   0	<del></del>						-		$\sqcap$	-t				
Miscellaneous   100% set			460		-	一十	$\dashv$		:0.	12				
(Kondadeniya)   Concrete   m3   9530   375   3.573.														0
384 m3   Form Work   m2   1060   938   994     Reinforcement   0,12   ton   72970   45   3,283     Miscellaneous   100%   set   7,851     (Hindagala)   Concrete   m3   9530   0	<u> </u>	(Kondaden	iya)	<del></del>					$\prod$					
Reinforcement   0,12 ton 72970 45 3.283.		384	m3	<del></del>	$\Box$		$\perp$		<del></del>	-			<del></del>	
(Hindagala) Concrete m3 9530 0						_						-	1 45	
(/ 2010-04-04-04-04-04-04-04-04-04-04-04-04-04				<del></del>		_	-+		110	0%	_		1	7.851.680
1   { 2.23   m3     Form Work	<u></u>				_		+		<del>                                     </del>					
	<b> </b>	223	m3		- +	$\rightarrow$	+		++-	<del>,,</del>				

					$oxed{\Box}$	I	]	$\Box$		]	2005Year	36670	
										Unit	Unit Cost	Quantity	Price
				Miscellaneous	1_1	_		Ц	100%	set			
		(Daulagala)		Concrete	<b></b>					m3	9530	0	
		476	m3	Porm Work	ļ			-		m2	1060	0	
				Reinforcement	$\vdash$			Н	0,12	ton	72970	0	
		(17.)	L	Miscellaneous	<del>  </del>			Н	100%	set	0520		
	<b> </b>	(Kalugamuw 311		Concrete Porm Work	<del>   </del>			Н		m3 m2	9530 1060	0	
	<del> </del>	311	ш.э	Reinforcement	╂─╢	-		Н	0,12	ton	72970	0	
				Miscellaneous	<del>  </del>			H	100%	set	12510	<u>`</u>	
·		(Soorlyagod	L	Concrete	<del> </del>			H	100.0	m3	9530	0	
	<del> </del>	272		Form Work		$\dashv$		H		m2	1060	ő	
				Reinforcement	1				0,12	ton	72970	0	
				Miscellaneous				П	100%	set	, i		
	<del></del>	(Murutalawa	L	Concrete		$\neg$		П		m3	9530	0	
		182	m3	Form Work					•	m2	1060	0	
	<u> </u>			Reinforcement				Ц	0,12	ton	72970	0	
				Miscellaneous	<u> </u>			Ц	100%	set			
	<u> </u>	(Gannotuwa		Concrete	<b>↓</b>			Ц		m3	9530	0	
	<u> </u>	272	m3	Form Work	1	_		Ц		m2	1060	0	
			ļ 	Reinforcement	<b>  </b>			Ц	0,12	ton	72970	0	
			<u> </u>	Miscellaneous	<b>↓</b>	$\dashv$		Ц	100%	set			
	<u> </u>	(Gohagoda		Concrete				$\sqcup$		m3	9530	248	2.363.44
	<del> </del>	207	m3	Form Work	<b>├</b> ─┤			┧		m2	1060	620	657.20
	<b> </b>		<u> </u>	Reinforcement	+-1			Н	0,12	ton	72970	30	2.171.58
···	ļ	/:	<u> </u>	Miscellaneous	ļ			Н	100%	set	2500		5.192.22
	<b> </b>	(Bogahakan		Concrete	<del>  -  </del>			┟╌┨		m3	9530	0	
	<del> </del>	41	m3	Form Work	1			Н		m2	1060	0	
			<del> </del>	Reinforcement Miscellaneous				Н	0,12	ton	72970	0	
	ļ	07.11	<u> </u>		-			Н	100%	set	0500	<u> </u>	
	<del> </del>	(Yatihalagal		Concrete				Н		m3	9530	0	
	<del> </del>	206	m.3	Porm Work	-		-	Н	0.12	m2	1060 72970	0	
	<del> </del>		ļ	Reinforcement Miscellaneous	<del> </del>			Н	0,12 100%	ton set	12970		<del></del>
	<del> </del>	(Bahirawake	nds)	Concrete	+-			Н	10070	m3	9530	1.091	10.397.23
	<del> </del>	1595		Form Work	<del> </del>			Н		m2	1060	2.728	2.891.68
	┼──	1393	1113	Reinforcement	<del> </del>			Н	0,12	ton	72970	131	9.553.23
	<del> </del>	<del> </del>		Miscellaneous	<del> </del>	-		Н	100%	set	12510	131	22.842.14
<del></del>	<del> </del>	(Prharose)		Concrete	<del> </del>			-	100.0	m3	9530	327	3.116.31
	<del> </del>	315	m3	Form Work	<del>                                     </del>	-		H		m2	1060	818	867.0
	<del> </del>	315	1113	Reinforcement	+	-		Н	0,12	ton	72970	39	2.863.34
	1		<del> </del>	Miscellaneous	1	-		Н	100%	set	125.0		6.846.73
	<del> </del>	(Heerasaga	la Low)	Concrete	<del> </del>	-		Н	100.0	m3	9530	240	2.287.20
		198		Form Work	╅┈┈	┈		Н		m2	1060	601	637.00
·	<u> </u>		<del>                                     </del>	Reinforcement	1.	H		H	0,12	ton	72970		2.101.5
	<del>                                     </del>			Miscellaneous				H	100%	set			5.025.79
		(Heerasaga	la Middle)	Concrete	1	_		Г		m3	9530	278	2.649,3
·····	1	248		Porm Work	<b></b>	_		T		m2	1060	696	737.7
		<b> </b>		Reinforcement				Г	0,12	ton	72970	33	2.434.2
	1	1	<u> </u>	Miscellaneous	T			Π	100%	set		[m.:	5.821.3
		(Heerasaga	la Upper)	Concrete				Γ		m3	9530	278	2.649,3
		248	m3	Form Work	$\Box$			Γ		m2	1060	<del> </del>	737.7
			L	Reinforcement				Γ	0,12	ton	72970		2.434.2
				Miscellaneous				Г	100%	set			5,821.3
	<u></u>	(Bowalawat		Concrete		L		Ĺ		m3	9530	0	
		248	m3	Form Work	1	$\Box$		Ĺ		m2	1060	<del></del>	
	1	ļ	ļ	Reinforcement	1			1	0,12	ton	72970	0	
	<u> </u>	<u> </u>	<u> </u>	Miscellaneous	$\bot$	$oldsymbol{oldsymbol{oldsymbol{eta}}}$	ļ	L	100%	set			
	<u> </u>	Augustam		Concrete	<del> </del>	$oldsymbol{oldsymbol{oldsymbol{eta}}}$	ļ	L	<b></b>	m3	9530		
	-	248	m3	Form Work	+	<u> </u>	<b> </b>	<b>L</b> .	<u> </u>	m2	1060		
	<b></b>	<del> </del>	<del> </del>	Reinforcement	+-	<b>_</b>	<del> </del>	┞	0,12	ton	72970	0	<u> </u>
	<del> </del>	/0 /	1	Miscellaneous	-	<u> </u>	<u> </u>	1	100%	•	<del> </del>		
	<b></b>	(Spring Hil		Concrete	+-	-	<del> </del>	╀	<b> </b>	m3	9530		<u> </u>
	<b> </b>	248	m3	Form Work	+	├-	-	╂-		m2	1060		
	<del> </del>	<del> </del>	<del> </del>	Reinforcement	+	├	-	╀	10,12	ton	72970	0	
	+	(Dan1-)	<del> </del>	Miscellaneous	+	┼	-	╁	100%		0500	200	2 305 0
	<del> </del>	(Dangola)	+	Concrete	+-	-	<del> </del>	╀	<del> </del>	m3	9530		2.696.9
	<del> </del>	254	m3	Form Work Reinforcement	+	-	<del>                                     </del>	1	0.12	m2	1060		749.4
	+	+	+		+	-	<del> </del>	╁~	0,12	ton	72970	34	2.478.0
	1	(Makaban 4	7	Miscellaneous	+-	$\vdash$	-	╀	100%	•	0500		5.924.4
	<del> </del>	(Mahakand		Concrete	+-	₩	<del> </del>	╁	<del> </del>	m3	9530	***************************************	<del></del>
	<del>- </del>	200	) m3	Porm Work	+	+-	<del>                                     </del>	╁	0.12	m2	72070		<del> </del>
	+	<del> </del>	<del> </del>	Reinforcement Miscellaneous		<del> </del> -	<del> </del>	+-	100%	ton	72970	0	<del></del>
	<del> </del>	(Gurudeni)	<u> </u>	Concrete	<del> </del>	$\vdash$	<del></del>	╀	100%	-	9530		
	<del></del>		m3	Porta Work	+	1	<del>                                     </del>	+	<del> </del>	m3	1060		
			. بينها د	Training ages	ı		<b>-</b>	4		m2	1000		
	· <del> </del>	1	1	Reinforcement	T		1 :	1	0,12	ton	72970	0	