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APÊNDICE A

Informações sobre o Projeto Realizado

Tabela A.1 – Especificações das estações base

wimax_18setor9sul.net					NETDIMENSION PLANNING				
Date/Time: 4/4/2006 23:25:50					DSC Tecnologia Ltda.				
					Copyright (C) 1999,2000				
Executed by:		Subscriber Unit:			Rx:				
		Antenna: SR2-275ASE			Noise Figure: 6,00 dB				
		Height: 20,0 m							
		Gain: 31,00 dB			Availability: 99,99 %				
Kmed:	1,33	Pressure:	1013,0 hPa	Vapor Density:	7,00 g/m3				
Kmin:	0,67	Temperature:	15,0°C	pL:	10,00 %				
Name	Longitude	Latitude	Altitude	Antenna	Frequency	Power	Azimuth	DownTilt	Height
<u>24 de maio</u>	-46°38'43.59"	-23°33'47.56"	905 m	PD10200	28,0 GHz	24,0 dBm	0,0 deg	0,0 deg	20 m
<u>24 de maio</u> .	-46°38'43.59"	-23°33'47.56"	905 m	PD10200	28,0 GHz	24,0 dBm	90,0 deg	0,0 deg	20 m
<u>24 de maio</u> >	-46°38'43.59"	-23°33'47.56"	905 m	PD10200	28,0 GHz	24,0 dBm	180,0 deg	0,0 deg	20 m
<u>24 de maio</u> >>	-46°38'43.59"	-23°33'47.56"	905 m	PD10200	28,0 GHz	24,0 dBm	270,0 deg	0,0 deg	20 m
<u>Água Branca</u>	-46°40'18.16"	-23°32'18.33"	841 m	PD10200	28,0 GHz	24,0 dBm	0,0 deg	0,0 deg	20 m
<u>Água Branca</u> .	-46°40'18.16"	-23°32'18.33"	841 m	PD10200	28,0 GHz	24,0 dBm	90,0 deg	0,0 deg	20 m
<u>Água Branca</u> >	-46°40'18.16"	-23°32'18.33"	841 m	PD10200	28,0 GHz	24,0 dBm	180,0 deg	0,0 deg	20 m
<u>Água Branca</u> >>	-46°40'18.16"	-23°32'18.33"	841 m	PD10200	28,0 GHz	24,0 dBm	270,0 deg	0,0 deg	20 m
<u>Arménia</u>	-46°37'48.80"	-23°34'39.24"	763 m	PD10200	28,0 GHz	24,0 dBm	0,0 deg	0,0 deg	20 m
<u>Arménia</u> .	-46°37'48.80"	-23°34'39.24"	763 m	PD10200	28,0 GHz	24,0 dBm	90,0 deg	0,0 deg	20 m
<u>Arménia</u> >	-46°37'48.80"	-23°34'39.24"	763 m	PD10200	28,0 GHz	24,0 dBm	180,0 deg	0,0 deg	20 m
<u>Arménia</u> >>	-46°37'48.80"	-23°34'39.24"	763 m	PD10200	28,0 GHz	24,0 dBm	270,0 deg	0,0 deg	20 m
<u>Augusta</u>	-46°39'37.40"	-23°32'56.80"	912 m	PD10200	28,0 GHz	24,0 dBm	0,0 deg	0,0 deg	20 m
<u>Augusta</u> .	-46°39'37.40"	-23°32'56.80"	912 m	PD10200	28,0 GHz	24,0 dBm	90,0 deg	0,0 deg	20 m
<u>Augusta</u> >	-46°39'37.40"	-23°32'56.80"	912 m	PD10200	28,0 GHz	24,0 dBm	180,0 deg	0,0 deg	20 m
<u>Augusta</u> >>	-46°39'37.40"	-23°32'56.80"	912 m	PD10200	28,0 GHz	24,0 dBm	270,0 deg	0,0 deg	20 m
<u>Av. Paulista</u>	-46°39'15.51"	-23°33'17.45"	909 m	PD10200	28,0 GHz	24,0 dBm	0,0 deg	0,0 deg	20 m
<u>Av. Paulista</u> .	-46°39'15.51"	-23°33'17.45"	909 m	PD10200	28,0 GHz	24,0 dBm	90,0 deg	0,0 deg	20 m
<u>Av. Paulista</u> >	-46°39'15.51"	-23°33'17.45"	909 m	PD10200	28,0 GHz	24,0 dBm	180,0 deg	0,0 deg	20 m
<u>Av. Paulista</u> >>	-46°39'15.51"	-23°33'17.45"	909 m	PD10200	28,0 GHz	24,0 dBm	270,0 deg	0,0 deg	20 m
<u>Barra Funda</u>	-46°39'9.59"	-23°33'23.04"	789 m	PD10200	28,0 GHz	24,0 dBm	0,0 deg	0,0 deg	20 m
<u>Barra Funda</u> .	-46°39'9.59"	-23°33'23.04"	789 m	PD10200	28,0 GHz	24,0 dBm	90,0 deg	0,0 deg	20 m
<u>Barra Funda</u> >	-46°39'9.59"	-23°33'23.04"	789 m	PD10200	28,0 GHz	24,0 dBm	180,0 deg	0,0 deg	20 m
<u>Barra Funda</u> >>	-46°39'9.59"	-23°33'23.04"	789 m	PD10200	28,0 GHz	24,0 dBm	270,0 deg	0,0 deg	20 m
<u>Bela Vista</u>	-46°38'45.89"	-23°33'45.39"	875 m	PD10200	28,0 GHz	24,0 dBm	0,0 deg	0,0 deg	20 m
<u>Bela Vista</u> .	-46°38'45.89"	-23°33'45.39"	875 m	PD10200	28,0 GHz	24,0 dBm	90,0 deg	0,0 deg	20 m

Name	Longitude	Latitude	Altitude	Antenna	Frequency	Power	Azimuth	DownTilt	Height
<u>Bela Vista ></u>	-46°38'45.89"	-23°33'45.39"	875 m	PD10200	28,0 GHz	24,0 dBm	180,0 deg	0,0 deg	20 m
<u>Bela Vista >></u>	-46°38'45.89"	-23°33'45.39"	875 m	PD10200	28,0 GHz	24,0 dBm	270,0 deg	0,0 deg	20 m
<u>Brás</u>	-46°38'9.78"	-23°34'19.46"	865 m	PD10200	28,0 GHz	24,0 dBm	0,0 deg	0,0 deg	20 m
<u>Brás .</u>	-46°38'9.78"	-23°34'19.46"	865 m	PD10200	28,0 GHz	24,0 dBm	90,0 deg	0,0 deg	20 m
<u>Brás ></u>	-46°38'9.78"	-23°34'19.46"	865 m	PD10200	28,0 GHz	24,0 dBm	180,0 deg	0,0 deg	20 m
<u>Brás >></u>	-46°38'9.78"	-23°34'19.46"	865 m	PD10200	28,0 GHz	24,0 dBm	270,0 deg	0,0 deg	20 m
<u>Centro</u>	-46°39'11.97"	-23°33'20.80"	894 m	PD10200	28,0 GHz	24,0 dBm	0,0 deg	0,0 deg	20 m
<u>Centro .</u>	-46°39'11.97"	-23°33'20.80"	894 m	PD10200	28,0 GHz	24,0 dBm	90,0 deg	0,0 deg	20 m
<u>Centro ></u>	-46°39'11.97"	-23°33'20.80"	894 m	PD10200	28,0 GHz	24,0 dBm	180,0 deg	0,0 deg	20 m
<u>Centro >></u>	-46°39'11.97"	-23°33'20.80"	894 m	PD10200	28,0 GHz	24,0 dBm	270,0 deg	0,0 deg	20 m
<u>Jardim Paulista</u>	-46°39'54.26"	-23°32'40.89"	820 m	PD10200	28,0 GHz	24,0 dBm	0,0 deg	0,0 deg	20 m
<u>Jardim Paulista .</u>	-46°39'54.26"	-23°32'40.89"	820 m	PD10200	28,0 GHz	24,0 dBm	90,0 deg	0,0 deg	20 m
<u>Jardim Paulista ></u>	-46°39'54.26"	-23°32'40.89"	820 m	PD10200	28,0 GHz	24,0 dBm	180,0 deg	0,0 deg	20 m
<u>Jardim Paulista >></u>	-46°39'54.26"	-23°32'40.89"	820 m	PD10200	28,0 GHz	24,0 dBm	270,0 deg	0,0 deg	20 m
<u>Liberdade</u>	-46°37'51.93"	-23°34'36.29"	816 m	PD10200	28,0 GHz	24,0 dBm	0,0 deg	0,0 deg	20 m
<u>Liberdade .</u>	-46°37'51.93"	-23°34'36.29"	816 m	PD10200	28,0 GHz	24,0 dBm	90,0 deg	0,0 deg	20 m
<u>Liberdade ></u>	-46°37'51.93"	-23°34'36.29"	816 m	PD10200	28,0 GHz	24,0 dBm	180,0 deg	0,0 deg	20 m
<u>Liberdade >></u>	-46°37'51.93"	-23°34'36.29"	816 m	PD10200	28,0 GHz	24,0 dBm	270,0 deg	0,0 deg	20 m
<u>Pacaembu</u>	-46°39'52.11"	-23°32'42.93"	823 m	PD10200	28,0 GHz	24,0 dBm	0,0 deg	0,0 deg	20 m
<u>Pacaembu .</u>	-46°39'52.11"	-23°32'42.93"	823 m	PD10200	28,0 GHz	24,0 dBm	90,0 deg	0,0 deg	20 m
<u>Pacaembu ></u>	-46°39'52.11"	-23°32'42.93"	823 m	PD10200	28,0 GHz	24,0 dBm	180,0 deg	0,0 deg	20 m
<u>Pacaembu >></u>	-46°39'52.11"	-23°32'42.93"	823 m	PD10200	28,0 GHz	24,0 dBm	270,0 deg	0,0 deg	20 m
<u>Paraíso</u>	-46°39'19.14"	-23°33'14.03"	823 m	PD10200	28,0 GHz	24,0 dBm	0,0 deg	0,0 deg	20 m
<u>Paraíso .</u>	-46°39'19.14"	-23°33'14.03"	823 m	PD10200	28,0 GHz	24,0 dBm	90,0 deg	0,0 deg	20 m
<u>Paraíso ></u>	-46°39'19.14"	-23°33'14.03"	823 m	PD10200	28,0 GHz	24,0 dBm	180,0 deg	0,0 deg	20 m
<u>Paraíso >></u>	-46°39'19.14"	-23°33'14.03"	823 m	PD10200	28,0 GHz	24,0 dBm	270,0 deg	0,0 deg	20 m
<u>Rebouças</u>	-46°40'4.08"	-23°32'31.62"	921 m	PD10200	28,0 GHz	24,0 dBm	0,0 deg	0,0 deg	20 m
<u>Rebouças .</u>	-46°40'4.08"	-23°32'31.62"	921 m	PD10200	28,0 GHz	24,0 dBm	90,0 deg	0,0 deg	20 m
<u>Rebouças ></u>	-46°40'4.08"	-23°32'31.62"	921 m	PD10200	28,0 GHz	24,0 dBm	180,0 deg	0,0 deg	20 m
<u>Rebouças >></u>	-46°40'4.08"	-23°32'31.62"	921 m	PD10200	28,0 GHz	24,0 dBm	270,0 deg	0,0 deg	20 m
<u>República</u>	-46°39'6.67"	-23°33'25.80"	925 m	PD10200	28,0 GHz	24,0 dBm	0,0 deg	0,0 deg	20 m
<u>República .</u>	-46°39'6.67"	-23°33'25.80"	925 m	PD10200	28,0 GHz	24,0 dBm	90,0 deg	0,0 deg	20 m
<u>República ></u>	-46°39'6.67"	-23°33'25.80"	925 m	PD10200	28,0 GHz	24,0 dBm	180,0 deg	0,0 deg	20 m
<u>República >></u>	-46°39'6.67"	-23°33'25.80"	925 m	PD10200	28,0 GHz	24,0 dBm	270,0 deg	0,0 deg	20 m
<u>Santa Cecília</u>	-46°39'31.48"	-23°33'2.39"	840 m	PD10200	28,0 GHz	24,0 dBm	0,0 deg	0,0 deg	20 m
<u>Santa Cecília .</u>	-46°39'31.48"	-23°33'2.39"	840 m	PD10200	28,0 GHz	24,0 dBm	90,0 deg	0,0 deg	20 m

Name	Longitude	Latitude	Altitude	Antenna	Frequency	Power	Azimuth	DownTilt	Height
<u>Santa Cecília ></u>	-46°39'31.48"	-23°33'2.39"	840 m	PD10200	28,0 GHz	24,0 dBm	180,0 deg	0,0 deg	20 m
<u>Santa Cecília >></u>	-46°39'31.48"	-23°33'2.39"	840 m	PD10200	28,0 GHz	24,0 dBm	270,0 deg	0,0 deg	20 m
<u>São Bento</u>	-46°38'12.85"	-23°34'16.56"	816 m	PD10200	28,0 GHz	24,0 dBm	0,0 deg	0,0 deg	20 m
<u>São Bento</u>	-46°38'12.85"	-23°34'16.56"	816 m	PD10200	28,0 GHz	24,0 dBm	90,0 deg	0,0 deg	20 m
<u>São Bento ></u>	-46°38'12.85"	-23°34'16.56"	816 m	PD10200	28,0 GHz	24,0 dBm	180,0 deg	0,0 deg	20 m
<u>São Bento >></u>	-46°38'12.85"	-23°34'16.56"	816 m	PD10200	28,0 GHz	24,0 dBm	270,0 deg	0,0 deg	20 m
<u>V. Mariana</u>	-46°37'48.37"	-23°34'39.64"	806 m	PD10200	28,0 GHz	24,0 dBm	0,0 deg	0,0 deg	20 m
<u>V. Mariana</u>	-46°37'48.37"	-23°34'39.64"	806 m	PD10200	28,0 GHz	24,0 dBm	90,0 deg	0,0 deg	20 m
<u>V. Mariana ></u>	-46°37'48.37"	-23°34'39.64"	806 m	PD10200	28,0 GHz	24,0 dBm	180,0 deg	0,0 deg	20 m
<u>V. Mariana >></u>	-46°37'48.37"	-23°34'39.64"	806 m	PD10200	28,0 GHz	24,0 dBm	270,0 deg	0,0 deg	20 m

Tabela A.2 – Planejamento de frequências

Frequency Planning			
Cell	Channels	Cell	Channels
24 de maio	4	Jardim Paulista	5
24 de maio .	5	Jardim Paulista .	4
24 de maio >	4	Jardim Paulista >	5
24 de maio >>	5	Jardim Paulista >>	4
Água Branca	1	Liberdade	1
Água Branca .	5	Liberdade .	8
Água Branca >	1	Liberdade >	1
Água Branca >>	5	Liberdade >>	8
Amênia	1	Pacaembu	8
Amênia .	5	Pacaembu .	1
Amênia >	1	Pacaembu >	8
Amênia >>	5	Pacaembu >>	1
Augusta	3	Paraíso	1
Augusta .	7	Paraíso .	5
Augusta >	3	Paraíso >	1
Augusta >>	7	Paraíso >>	5
Av. Paulista	8	Rebouças	1
Av. Paulista .	1	Rebouças .	8
Av. Paulista >	8	Rebouças >	1
Av. Paulista >>	1	Rebouças >>	8
Barra Funda	7	República	5
Barra Funda .	3	República .	4
Barra Funda >	7	República >	5
Barra Funda >>	3	República >>	4
Bela Vista	7	Santa Cecília	6
Bela Vista .	3	Santa Cecília .	2
Bela Vista >	7	Santa Cecília >	6
Bela Vista >>	3	Santa Cecília >>	2
Brás	3	São Bento	7
Brás .	6	São Bento .	2
Brás >	3	São Bento >	7
Brás >>	6	São Bento >>	2
Centro	4	V. Mariana	5
Centro .	8	V. Mariana .	1
Centro >	4	V. Mariana >	5
Centro >>	8	V. Mariana >>	1

NETDimension