

GOVERNO DO ESTADO



CEARÁ

AVANÇANDO NAS MUDANÇAS

**GOVERNO DO ESTADO DO CEARÁ
SECRETARIA DOS RECURSOS HÍDRICOS**

**COMPANHIA DE GESTÃO DOS RECURSOS HÍDRICOS - COGERH
PROJETO DE DESENVOLVIMENTO, URBANO E GESTÃO DOS RECURSOS HÍDRICOS
PROURB CE**

PROJETO EXECUTIVO DA BARRAGEM DO ROSÁRIO

VOLUME II RELATÓRIO DE ESTUDOS BÁSICOS

TOMO 1 - ESTUDOS TOPOGRAFICOS

PARTE A - TEXTOS

ENGESOFT

**FORTALEZA- CE
JUNHO DE 1996**

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TOMO 1A - TEXTOS

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Projeto Nº 0087/02/01/A/PT-A
Volume 1
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Qtd. A0 _____ Outros _____



FORTALEZA
AGOSTO/97

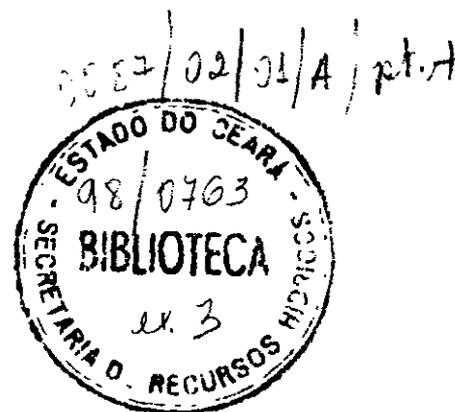


PROJETO EXECUTIVO DA BARRAGEM DO ROSÁRIO

VOLUME II – RELATÓRIO DE ESTUDOS BÁSICOS

Tomo 1 – Estudos Topográficos

Tomo 1A - Textos





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1 - APRESENTAÇÃO

1 - APRESENTAÇÃO

A Engesoft - Engenharia e Consultoria Ltda apresenta a seguir, o Projeto Executivo da Barragem do Rosário, objeto do contrato nº 022/96 - PROURB/COGERH, firmado com a COGERH

O referido projeto é composto dos seguintes volumes

Volume I - Relatório de Estudos Preliminares

Volume II - Relatório de Estudos Básicos

Tomo 1 - Estudos Topográficos

Tomo 2 - Estudos Geológico-Geotécnicos

Tomo 3 - Estudos Hidrológicos

Volume III - Relatório de Concepção

Volume IV - Minuta do Relatório Geral

Tomo 1 - Textos

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Volume V - Relatório Geral

Tomo 1 - Descrição Geral do Projeto - Textos

Tomo 2 - Memorial de Cálculo

Tomo 3 - Orçamento

Tomo 4 - Especificações Técnicas

Tomo 5 - Desenhos

Volume VI - Relatório Síntese

O presente relatório refere-se ao Volume II - Relatório de Estudos Básicos - Tomo 1 - Estudos Topográficos



O presente relatório tem por objetivos apresentar o levantamento Planialtimétrico do Eixo Barrável, Bacia Hidráulica, sangradouro e demais estudos topográficos complementares, de forma a fornecer dados para obtenção ao de plantas indispensáveis Ao andamento do projeto em questão, seguindo as especificações dos termos de Referência Este se divide em TOMO 1A –Textos e TOMO 1B - DESENHOS



2 - TRANSPORTE DE COTAS E COORDENADAS DE REFERÊNCIA

2. - TRANSFERÊNCIA DE COORDENADAS

2.1 - COTAS ALTIMÉTRICAS

O Levantamento Altimétrico da bacia hidráulica em questão, bem como dos demais locais de interesse para o projeto da barragem teve como dado de referência a cota altimétrica do marco do IBGE 492B localizado na Igreja Matriz da cidade de Quitaiús.

O marco em questão dista aproximadamente 2,00 Km do eixo da barragem e possui cota 287,7527 m.

2.2 - COORDENADAS

Para determinação dos Datuns planialtimétricos, foram utilizados rastreadores LEIKA com duas antenas, partindo-se do marco SB-24 1015 (Estação Poligonal) do IBGE localizado no Morro do Horto, em Juazeiro do Norte - CE, cuja localização se dá conforme a seguir

SB-241015:

Latitude: 07° 10' 22,436"

Longitude: 39° 10' 19,841"

Em UTM:

N - 9.207.122,489

E - 464.458,731.

O primeiro vértice auxiliar foi implantado na estaca 30, na ombreira direita do futuro eixo barrável.

O segundo vértice auxiliar, intervisível com o primeiro para determinação do azimute verdadeiro, foi implantado na estaca 48 situada na ombreira direita.

As coordenadas, em UTM das estacas 30 e 48 são respectivamente as seguintes:



Estaca 30·

X = 9 238.863,184

Y = 491.326,800

Estaca 48.

X = 9.239.180,735

Y = 491 493,013



DADOS DO MARCO ALTIMÉTRICO DO IBGE

2-0

DIRETORIA DE GEOCIÊNCIAS
DIGE02/NE3 - SEGUNDA DIVISÃO DE GEOCIÊNCIAS DO NORDESTE

RELAÇÃO DE ALTITUDES

KM	DESCRIÇÃO	ALTITUDE (m)	
		PRINCIPAL	SEGURANÇA
101..2	Estrada CE-385: LAVRAS DA MANGABEIRA-CARIRIACU	Nivelado: 1962 Visitado: .	
491 X	9 m da MD; 9 km além do entroncamento para localidade de Mangabeira. N = 9.244,9 km E = 493,6 km	296,1285	295,6849
491 Z	11 m da MD; 6,2 km aquém da igreja de Quitaiús. N = 9.244,0 km E = 491,5 km	304,6060	303,0591
492 A	9 m da MD; 60 m aquém do pontilhão sobre o córrego Irês Irmãos; 3,1 km aquém da igreja de Quitaiús. N = 9.241,9 km E = 490,6 km	270,2271	269,7477
492 B	Chapa cravada no 1º degrau da porta principal da igreja matriz de Quitaiús. N = 9.240,0 km E = 489,7 km	287,7527	-
IGREJA	Centro da soleira da porta principal da igreja da localidade de Quitaiús.	287,9757	-
492 C	6 m da MD; 2,9 km além da igreja matriz de Quitaiús. N = 9.238,0 km E = 488,5 km	314,1069	313,7379
492 D	9 m da MD; 5,9 km além da igreja matriz de Quitaiús. N = 9.237,7 km E = 486,2 km	338,9427	338,2420
492 E	8 m da MD; 1,6 km além da entrada para a fazenda Granjeiros; 8,9 km além da igreja matriz de Quitaiús. N = 9.236,0 km E = 485,6 km	339,5441	339,0919
492 F	12 m da MD; 370 m aquém da primeira ponte sobre o riacho do Rosário; 7,4 km aquém da capela da localidade de Freitas. N = 9.233,6 km E = 484,9 km	295,6562	295,0341
PONTE	Piso da 1ª. ponte sobre o riacho do Rosário.	294,7046	-
492 G	6 M da ME; 140 m além da casa do Sr. João Custódio Sobrinho; 4,4 km aquém da capela da localidade de Feitosa. N = 9.231,2 km E = 483,6 km	339,3639	338,8755
PONTE	Piso da 2ª. ponte sobre o riacho do Rosário.	313,9539	-

000013



DADOS GEODÉSICOS DA ESTAÇÃO DO IBGE

000014



ESTAÇÃO SB.24.1015	nº	cad.	foto	quadric.	projeto	ordem	estab.	reoc.
CE	Juazeiro do Norte	Sítio Bom Jesus			ITERCE	1ª	1986	
estado	município	lugar	torre	datum	feito	conf.		
CE	Juazeiro do Norte	Sítio Bom Jesus		SAD 69				
latitude	longitude	altitude	N (UTM)		E (UTM)			
79 10' 22,436"	399 19' 18,841"	*608,6460 m'	9.207.122,489		464.458,731			

PONTO VISADO	DIREÇÃO	AZIMUTE		DISTÂNCIA
		MAG.	VERDADEIRO	
EP SB-24.1014	009 00' 00"		1319 31' 12,45"	19.749,67 m
Ref. "B"	135 35 52'	1109'		9,60 m'
Ref. "A"	239 59 35'	2169'		17,89 m'
Marco de Azimute	276 43 56,7'	2509'	48 15 09,2	1,109 m'
EP SB-24.1016	143 13 26,91'		274 44 39,69	13.749,52 m

LOCALIZAÇÃO: Na parte mais alta de uma elevação conhecida por Morro do Horto, o mesmo onde existe uma estátua do Padre Cícero, nas imediações da cidade de Juazeiro do Norte.

DESCRIÇÃO: O Marco de Centro é uma chapa padrão do IBGE, incrustada em um marco quadrangular de concreto, medindo 24 cm de lado, e que se salienta 15 cm acima do nível do solo. Na chapa está estampado SB.24.1015 - ITERCE - 1986.

Os Marcos de Referência "A" e "B" são chapas estampadas, respectivamente, MR-A e MR-B, cravadas em pedras.

O Marco de Azimute é idêntico ao Marco de Centro, estampado M.AZIMUTE - 1986.

ITINERÁRIO: Parte-se com zero km da Estátua do Padre Cícero, no Morro do Horto, e toma-se a estrada asfaltada para a cidade de Juazeiro do Norte. Com 1,3 km chega-se ao local dos marcos da Estação, uns 60 m à direita da estrada e um pouco antes da casa do Sr. Vital da Silva.

OBS.: O Marco de Azimute está, aproximadamente, 50 m a sudeste da estátua do Padre Cícero.

* Altitude obtida por nivelamento geométrico, partindo da RN 2568 B



RELATÓRIO DE TRANSFERÊNCIA DE COORDENADAS

GE_PS PROJECT SETTINGS #
#####

Processing software Leica SKI / Data processing version 1 09
General header LEICA AG, CH-9435 Heerbrugg
Project name rosario
Coordinate system WGS84
Time All results in local time (GPS -3 00 hrs)

GE_PP PROCESSING PARAMETERS #
#####

Cut-off angle (deg) 15
Tropospheric model Hopfield
Ionospheric model Standard
Ephemeric Broadcast
Data used Use Code and Phase
Frequency L1
Limit to resolve ambiguities (km) 31
a priori rms (mm) 50
Sampling rate for static (sec) Use all
Receiver clock offset (microsec) 1
Clock synchronization (microsec) 1
Phase processing Automatic
Code processing L1
Cycle slip detection Loss lock flag only
No of epochs for initialization (epoch) 25
Update rate for static (epoch) 25
Update rate for kinematic (epoch) 1
Initialize SGS/KIS with known coord No
Minimum time to fix amb - AROF (sec) 200

GE_SS SATELLITE SELECTION #
#####

Manually disabled satellites None

GE_BO BASELINE OVERVIEW #
#####

Total no of baselines computed 2

BL id	CH id	Rover	Reference	First common cp	Amb	Frq	Obs
1	1	cst30	m-0017	27/07/96 11 15 00	Y	1	STS
2	2	cst48	m-0017	27/07/96 13.03 00	Y	1	STS

000017

```
#####
# GE_IC INITIAL COORDINATES #
#####
```

Reference

Point id m-0017

X 4919841 8834 m Y -3992565 5936 m Z -730628 6708 m
 Lat 6 37 18 62265 S Lon 39 03 36 46627 W h 173 1210 m

Rover

Point id cst30

X 4915885 2898 m Y -3992020 3703 m Z -759674 3268 m
 Lat 6 53 10 62667 S Lon 39 04 43 88438 W h 197 3577 m

Point id cst48

X 4916020.3617 m Y -3991915 7824 m Z -759359 0573 m
 Lat 6 53 0 28626 S Lon 39 04 38 46651 W h 198 2089 m

CH 1 ===== NEW STATIC CHAIN =====

```
#####
# BL.1 cst30 m-0017 27/07/96 11 15 00 #
#####
```

BL_SE 1 START / END (COMMON) EPOCHS

 27/07/96 11 15 00 to 27/07/96 12 45.15

BL_OI 1 OPERATION INFORMATION

	Rover	Reference
Point id	cst30	m-0017
Sensor/Controller id	095009/097063	----/091129
Operation mode	STS	STS
Observation rate (s)	15.0	15 0
Ht reading/Ant offset (m)	1 900 /0 039	1 204 /0 389
Eccentricity E/N/H (m)	0.000 /0.000 /0.000	0 000 /0 000 /0 000

BL_PI 1 PROCESSING INFORMATION

Number of observations rejected	0
Number of observations used	4294
Total number of parameters	727
Epoch independent parameters	3
Rms of weight unit	0055 m

BL_FS 1 FARA STATISTICS

Ambiguities to be resolved

SVid	Ref SVid	Carrier	Wavelength factor
2	18	1	1
29	18	1	1
19	18	1	1
14	18	1	1
27	18	1	1
31	18	1	1
7	18	1	1

----- FARA ----- Iteration 1 -----

NUMBER OF AMBIGUITY SETS= 279936
 RMS ACTUALLY COMPUTED = 2252

RMS RMS/RMS1 AMBIGUITIES

1	005	1 000	1	1	2	2	3	1	1
2	008	1 391	1	1	2	1	3	1	1
3	008	1 448	1	1	2	3	3	1	1
4	011	1 975	0	2	2	3	3	2	1
5	011	1 977	0	1	1	2	2	1	0
6	011	1 989	0	2	2	2	3	2	1
7	011	1 995	1	1	1	2	2	0	1
8	011	2 029	1	2	3	2	4	2	1
9	011	2 031	1	2	3	3	4	2	1
10	011	2 050	0	1	1	1	2	1	0

 * FARA Summary Iteration 1 *

rms a priori 50 0 [mm] rms float 3 3 [mm]
 Error prob. alpha 5 000 [%]
 Probability that (rms float < rms a priori) . 100 000 [%]

rms fix 1 5 5 [mm]
 Error prob alpha 5 000 [%]
 Probability that (rms fix 1 < rms a priori) 100 000 [%]

Error prob. alpha . .001 [%]
 Probability that (rms fix 1 < rms fix 2) 100.000 [%]

 * Ambiguity Resolution successful *

Number of epochs with GDOP =< 8 362
 Total number of common epochs 362

Observation time (GDOP =< 8) 5415 sec
 Recommendation --- sec

BL_FC 1 FINAL COORDINATES

Rov cst30 Ref m-0017 Amb Y 27/07/96 11 15 00

Cartesian
 X 4915885 2898 m Y -3992020 3703 m Z -759674 3268 m
 dX -3956 5936 m dY 545 2233 m dZ -29045 6560 m
 sX 0 0009 m sY 0 0007 m sZ 0 0005 m

Geodetic
 Lat 6 53 10 62667 S Lon 39 04 43 88438 W h 197 3577 m
 dLat 15 52 00402 dLon 1 7 41811 dh 24.2367 m
 sLat 0 0004 m sLon 0 0004 m sh 0 0011 m

Distance
 Slopc 29318.9705 m sSlopc 0 0004 m

CH 2 ===== NEW STATIC CHAIN =====

 # BL 2 cst48 m-0017 27/07/96 13 03 00 #
 #####

BL_SE 2 START / END (COMMON) EPOCHS

27/07/96 13.03 00 to 27/07/96 14 34 30

BL_OI 2 OPERATION INFORMATION

Point id	Rover	Reference	
	cst48	m-0017	
Sensor/Controller id	095009/097063		----/091129
Operation mode	STS	STS	
Observation rate (s)	15 0	15 0	
Ht reading/Ant offset (m)	1 900 /0 039		1 204 /0 389
Eccentricity E/N/H (m)	0 000 /0 000 /0 000		0 000 /0.000 /0.000

BL_PI 2 PROCESSING INFORMATION

Number of observations rejected 0
 Number of observations used 4326
 Total number of parameters 737
 Epoch independent parameters 3
 Rms of weight unit 0061 m

BL_FS 2 FARA STATISTICS

Ambiguities to be resolved

SVid	Ref SVid	Carrier	Wavelength factor
7	2	1	1
19	2	1	1
18	2	1	1
27	2	1	1
16	2	1	1
4	2	1	1

----- FARA ----- Iteration 1 -----

NUMBER OF AMBIGUITY SETS= 46656
 RMS ACTUALLY COMPUTED = 1082

RMS RMS/RMS1 AMBIGUITIES

1	006	1 000	5	1	2	1	5	9
2	008	1 224	5	1	2	1	5	8
3	009	1 477	5	1	2	1	6	9
4	010	1 668	5	1	2	1	6	10
5	010	1 692	5	1	2	1	5	10
6	011	1 856	4	1	1	1	5	8
7	012	1 951	5	1	2	1	4	8
8	012	1 985	5	1	2	1	6	8
9	012	2 039	4	1	1	1	5	7
10	013	2 088	5	1	2	1	5	7

 * FARA Summary Iteration 1 *

rms a priori 50 0 [mm] rms float 5 9 [mm]
 Error prob alpha 5 000 [%]
 Probability that (rms float < rms a priori) 100 000 [%]

rms fix 1 6 1 [mm]
 Error prob alpha 5 000 [%]
 Probability that (rms fix 1 < rms a priori) 100 000 [%]

Error prob alpha . 001 [%]
 Probability that (rms fix 1 < rms fix 2) 100 000 [%]

 * Ambiguity Resolution successful *

Number of epochs with GDOP =< 8 356
 Total number of common epochs : 367

000021

Observation time (GDOP =< 8) 5325 sec
Recommendation --- sec

BL_FC 2 FINAL COORDINATES

Rov est48 Ref m-0017 Amb Y 27/07/96 13 03 00

Cartesian

X 4916020 3617 m Y -3991915 7824 m Z -759359 0573 m
dX -3821 5217 m dY 649 8112 m dZ -28730 3865 m
sX 0 0011 m sY 0 0008 m sZ 0 0005 m

Geodetic

Lat 6 53 0 28626 S Lon 39 04 38 46651 W h 198 2089 m
dLat 15 41 66361 dLon 1 2 00024 dh 25 0879 m
sLat 0 0004 m sLon 0 0006 m sh 0 0012 m

Distance

Slope 28990 7122 m sSlope 0 0004 m

Unit: m
Coordinate type: Geodetic
Reference ellipsoid: South American 1969
Projection set: L1

est30 6 53 9.173085 S 39 4 42.621848 W

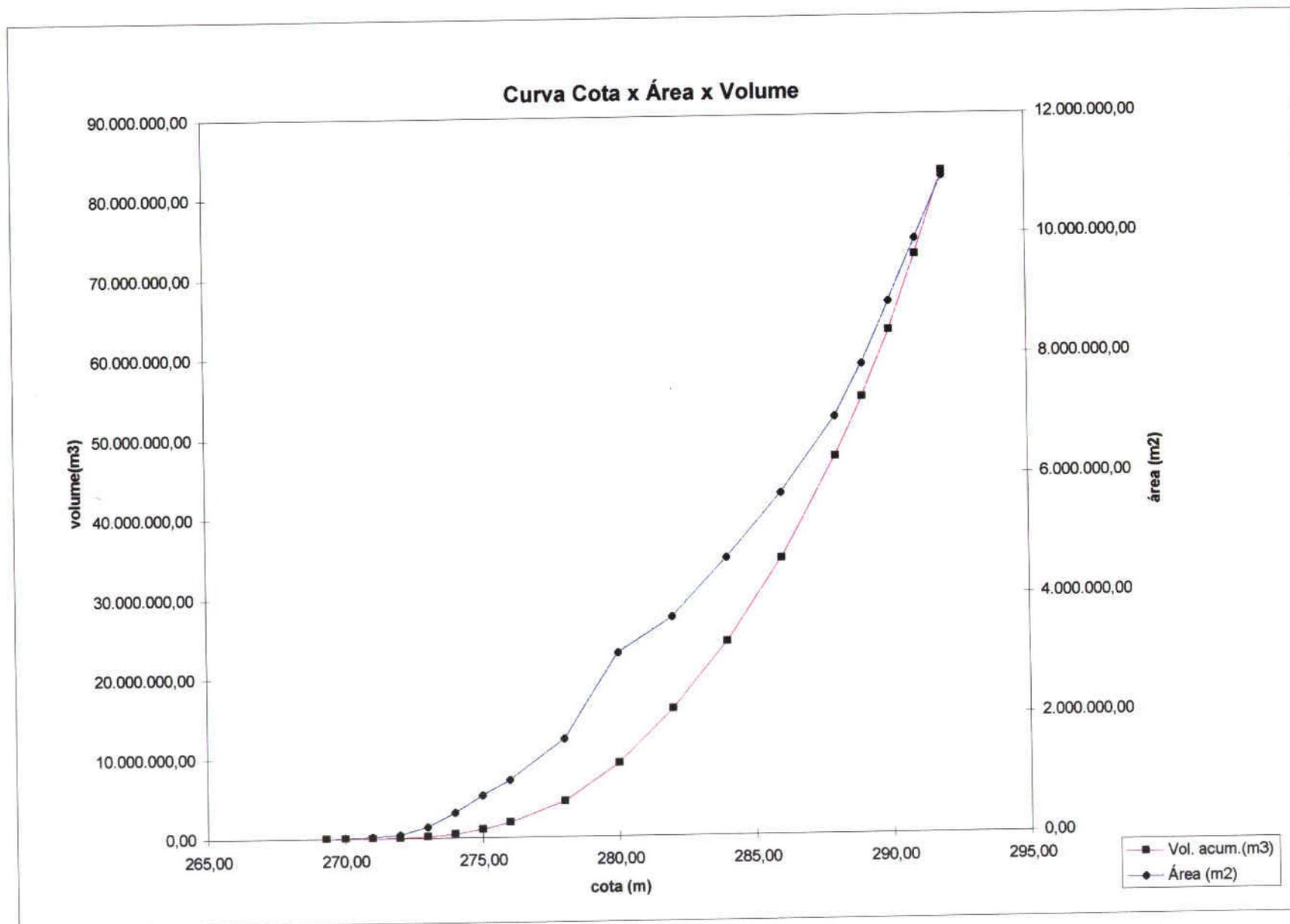
est48 6 52 58.832753 S 39 4 37.204037 W

m-0017 6 37 17.176298 S 39 3 35.205003 W

Unit: m
Coordinate type: Grid
Reference ellipsoid: South American 1969
Projection set: L1

est30	491326.8006	9238863.1840
est48	491493.0133	9239180.7354
m-0017	493392.1266	9268096.6178

3 - CURVA COTA X ÁREA X VOLUME



4 - CADERNETAS DE CAMPO

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado		Proprietario										Data 04/08/96			
IN	ALINHAMEN	AZIMUTE		DISTANCIA		LONG	PARC	LAT	PARC	COORD E (X)		COORD N (Y)		COORD (Z)	
DICE	EST P V	COMPENSADO	R U M O	QD	HORIZONTAL	X	(E+,W-)	Y	(N+,S-)	P V	TOT	COMPENS	TOT	COMPENS	DO PONTO
1	NM - E1	108 26'01"	71 33'59"	SE	0,000	0,000	0,000	E1	491 563,028	9 238 766,521	293,261				
2	E1 - E3	148 12'16"	31 47'44"	SE	1 133,726	597,349	-963,592	E3	492 160,377	9 237 802,929	309,687				
3	E1 - 1CED	137 21'26"	42 38'34"	SE	303,662	205,708	-223,371	1CED	491 768,736	9 238 543,150	272,559				
4	E1 - 2CED	56 58'21"	56 58'21"	NE	27,507	23,062	14,992	2CED	491 586,090	9 238 781,513	291,908				
5	E1 - 3CED	314 06'21"	45 53'39"	NW	156,907	-112,668	109,205	3CED	491 450,360	9 238 875,726	289,008				
6	E1 - 4	289 19'31"	70 40'29"	NW	117,113	-110,514	38,756	4	491 452,514	9 238 805,277	290,892				
7	E3 - CD	260 36'56"	80 36'56"	SW	54,178	-53,453	-8,834	CD	492 106,924	9 237 794,095	307,279				
8	E3 - 1	314 16'26"	45 43'34"	NW	786,343	-563,030	548,937	1	491 597,347	9 238 351,866	289,841				
9	E3 - 2	310 55'26"	49 04'34"	NW	787,069	-594,694	515,574	2	491 565,683	9 238 318,503	289,215				
10	E3 - 3	311 25'36"	48 34'24"	NW	732,483	-549,218	484,655	3	491 611,159	9 238 287,584	285,601				
11	E3 - 4	315 30'56"	44 29'04"	NW	735,630	-515,467	524,828	4	491 644,910	9 238 327,757	287,139				
12	E3 - 5CED	311 04'31"	48 55'29"	NW	653,680	-492,775	429,500	5CED	491 667,602	9 238 232,429	282,396				
13	E3 - 6	316 32'36"	43 27'24"	NW	643,427	-442,553	467,060	6	491 717,824	9 238 269,989	281,930				
14	E3 - 7	310 16'16"	49 43'44"	NW	521,715	-398,066	337,239	7	491 762,311	9 238 140,168	278,493				
15	E3 - 8	318 15'01"	41 44'59"	NW	542,960	-361,545	405,081	8	491 798,832	9 238 208,010	277,565				
16	E3 - 9	311 58'26"	48 01'34"	NW	431,433	-320,749	288,539	9	491 839,628	9 238 091,468	281,382				
17	E3 - 10	319 18'46"	40 41'14"	NW	427,958	-278,998	324,512	10	491 881,379	9 238 127,441	281,264				
18	E3 - 11	309 57'31"	50 02'29"	NW	312,397	-239,455	200,632	11	491 920,922	9 238 003,561	285,260				
19	E3 - 12CD	323 34'51"	36 25'09"	NW	314,734	-186,854	253,265	12CD	491 973,523	9 238 056,194	285,844				
20	E3 - 13	314 03'26"	45 56'34"	NW	165,384	-118,852	115,004	13	492 041,525	9 237 917,933	290,837				
21	E3 - 14	347 13'26"	12 46'34"	NW	171,761	-37,984	167,508	14	492 122,393	9 237 970,437	295,534				
22	E3 - 15	346 53'11"	13 06'49"	NW	64,852	-14,646	62,869	15	492 145,731	9 237 865,798	305,099				
23	E3 - 16CD	74 20'51"	74 20'51"	NE	158,733	152,847	42,827	16CD	492 313,224	9 237 845,756	314,720				
24	E3 - 17PA	139 31'11"	40 28'49"	SE	117,291	76,144	-89,215	17PA	492 236,521	9 237 713,714	299,881				
25	E3 - 18GR	111 25'36"	68 34'24"	SE	229,290	213,443	-83,762	18GR	492 373,820	9 237 719,167	298,509				
26	E3 - 19CD	136 05'21"	43 54'39"	SE	180,954	125,498	-130,363	19CD	492 285,875	9 237 672,566	301,978				
27	E3 - 20	101 58'11"	78 01'49"	SE	171,460	167,732	-35,560	20	492 328,109	9 237 767,369	309,936				
28	E3 - 21GR	98 24'56"	81 35'04"	SE	83,287	82,390	-12,189	21GR	492 242,767	9 237 790,740	303,944				
29	E3 - 22	127 56'01"	52 03'59"	SE	42,719	33,693	-26,261	22	492 194,070	9 237 776,668	306,077				

 Maior Coord (X) 492 373,820 Menor Coord (X) 491 450,360 Maior Coord (Y) 9 238 875,726 Menor Coord (Y) 9 237 672,566

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado Proprietario Data 17/07/96

IN DICK	ALINHAMENTOS		AZIMUTE		DISTANCIA		LONG	PARC	LAT	PARC	COORD E (X)		COORD N (Y)		COORD (Z)
	EST	P V	COMPENSADO	R U M O	QD	HORIZONTAL	X	(E+,W-)	Y	(N+,S-)	P V	TOT	COMPENS	TOT	COMPENS
1	NM	-	E28	165 43'06"	14 16'54"	SE	0,000	0,000	0,000	E28	488 094,582	9 235 716,991	304,292		
2	E28	-	E28B	170 52'06"	9 07'54"	SE	1 092,985	173,461	-1 079,133	E28B	488 268,043	9 234 637,858	303,061		
3	E28B	-	1	166 44'01"	13 15'59"	SE	46,294	10,623	-45,059	1	488 278,666	9 234 592,799	297,279		
4	E28B	-	2GR	137 46'11"	42 13'49"	SE	109,624	73,680	-81,171	2GR	488 341,723	9 234 556,687	285,030		
5	E28B	-	3	153 22'46"	26 37'14"	SE	136,823	61,308	-122,319	3	488 329,351	9 234 515,539	291,300		
6	E28B	-	4	128 48'16"	51 11'44"	SE	220,288	171,668	-138,047	4	488 439,711	9 234 499,811	290,921		
7	E28B	-	5	117 36'51"	62 23'09"	SE	225,262	199,602	-104,412	5	488 467,645	9 234 533,446	293,704		
8	E28B	-	6	100 52'11"	79 07'49"	SE	229,014	224,905	-43,187	6	488 492,948	9 234 594,671	296,157		
9	E28B	-	7R	359 28'36"	0 31'24"	NW	200,456	-1,831	200,448	7R	488 266,212	9 234 838,306	280,836		
10	E28B	-	8	96 06'36"	83 53'24"	SE	300,242	298,536	-31,957	8	488 566,579	9 234 605,901	294,713		
11	E28B	-	9	23 47'31"	23 47'31"	NE	133,562	53,881	122,211	9	488 321,924	9 234 760,069	290,966		
12	E28B	-	10R	81 44'21"	88 15'39"	SE	371,857	371,686	-11,286	10R	488 639,729	9 234 626,572	290,989		
13	E28B	-	11	46 15'06"	46 15'06"	NE	119,821	86,557	82,855	11	488 354,600	9 234 720,713	293,488		
14	E28B	-	12GR	61 53'11"	61 53'11"	NE	170,346	150,248	80,271	12GR	488 418,291	9 234 718,129	288,595		
15	E28B	-	13	93 51'46"	86 08'14"	SE	412,409	411,472	-27,783	13	488 679,515	9 234 610,075	298,063		
16	E28B	-	14	89 07'06"	89 07'06"	NE	293,374	293,339	4,514	14	488 561,382	9 234 642,372	293,612		
17	E28B	-	15R	91 25'46"	88 34'14"	SE	211,296	211,230	-5,271	15R	488 479,273	9 234 632,587	285,596		
18	E28B	-	16	84 27'31"	84 27'31"	NE	195,436	194,523	18,872	16	488 462,566	9 234 656,730	296,842		
19	E28B	-	17	81 46'51"	81 46'51"	NE	128,865	127,541	18,423	17	488 395,584	9 234 656,281	295,205		
20	E28B	-	18	94 57'36"	85 02'24"	SE	69,000	68,742	-5,966	18	488 336,785	9 234 631,892	282,571		

Maior Coord (X) 488 579,515 Menor Coord (X) 488 094,582 Maior Coord (Y) 9 235 716,991 Menor Coord (Y) 9 234 499,811

TopoEVN 3 0 - Sistema para processamento de Levantamentos Topograficos Arquivo BACIA10 25/10/96 14 53 45

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado		Proprietario										Data	
												17/07/96	
IN DICE	ALINHAMEN EST P V	AZIMUTE COMPENSADO		RUM O QD	DISTANCIA HORIZONTAL	LONG PARC X - (E+,W-)	LAT PARC Y (N+,-)	COORD E (X) TOT	COORD N (Y) COMPENS	COORD (Z) DO PONTO			
1	NM - E29	198	42'26"	18	42'26"	SW	0,000	0,000	0,000	E29	487 885,469	9 235 099,450	296,142
2	E29 - E31	309	04'11"	50	55'49"	NW	511,001	-396,731	322,066	E31	487 488,738	9 235 421,516	294,923
3	E31 - E32	238	47'16"	58	47'36"	SW	662,686	-566,798	-343,355	E32	486 921,940	9 235 078,161	296,053
4	E31 - 1CD	345	24'01"	14	35'59"	NW	86,777	-21,873	83,975	1CD	487 466,865	9 235 505,491	278,596
5	E31 - 2CD	320	00'01"	39	59'59"	NW	216,338	-139,059	165,725	2CD	487 349,679	9 235 587,241	279,889
6	E31 - 3Pç	8	22'26"	8	22'26"	NE	96,990	14,125	95,956	3Pç	487 502,863	9 235 517,472	279,221
7	E31 - 4CD	7	01'26"	7	01'26"	NE	188,000	22,989	186,589	4CD	487 511,727	9 235 608,105	280,222
8	E31 - 5CD	356	17'56"	3	42'04"	NW	214,624	-13,854	214,176	5CD	487 474,884	9 235 635,692	281,241
9	E31 - 6Pç	3	44'01"	3	44'01"	NE	260,315	16,951	259,763	6Pç	487 505,689	9 235 681,279	281,332
10	E31 - 7CD	7	13'26"	7	13'26"	NE	320,020	40,242	317,480	7CD	487 528,980	9 235 738,996	279,898
11	E31 - 8CD	13	12'26"	13	12'26"	NE	303,756	69,400	295,722	8CD	487 558,138	9 235 717,238	279,981
12	E31 - 9C	12	08'01"	12	08'01"	NE	331,039	69,582	323,644	9C	487 558,320	9 235 745,160	286,496
13	E31 - 10CD	7	27'26"	7	27'26"	NE	334,929	43,469	332,096	10CD	487 532,207	9 235 753,612	280,574
14	E31 - 11CD	14	34'51"	14	34'51"	NE	315,928	79,533	305,753	11CD	487 568,271	9 235 727,269	284,565
15	E31 - 12C	2	52'11"	2	52'11"	NE	367,007	18,374	366,547	12C	487 507,112	9 235 788,063	284,041
16	E31 - 13CD	16	03'01"	16	03'01"	NE	333,989	92,342	320,970	13CD	487 581,080	9 235 742,486	288,880
17	E31 - 14CD	4	26'06"	4	26'06"	NE	370,037	28,614	368,929	14CD	487 517,352	9 235 790,445	281,904
18	E31 - 15CD	5	37'21"	5	37'21"	NE	380,047	37,255	378,219	15CD	487 525,973	9 235 799,735	284,395
19	E31 - 16CD	17	11'06"	17	11'06"	NE	349,126	103,152	333,540	16CD	487 591,890	9 235 755,056	292,006
20	E31 - 18C	9	43'06"	9	43'06"	NE	402,878	68,008	397,097	18C	487 556,746	9 235 818,613	286,167
21	E31 - 19C	10	44'21"	10	44'21"	NE	426,207	79,419	418,742	19C	487 568,157	9 235 840,258	285,638
22	E31 - 20CD	11	54'36"	11	54'36"	NE	447,132	92,277	437,507	20CD	487 581,015	9 235 859,023	285,716
23	E31 - 21CD	12	22'56"	12	22'56"	NE	475,385	101,938	464,327	21CD	487 590,676	9 235 885,843	287,846
24	E31 - 22CD	5	25'16"	5	25'16"	NE	476,088	44,978	473,959	22CD	487 533,716	9 235 895,475	290,992
25	E31 - 23CD	5	50'36"	5	50'36"	NE	501,211	51,028	498,607	23CD	487 539,766	9 235 920,123	294,253
26	E31 - 24CD	14	25'16"	14	25'16"	NE	546,845	136,190	529,615	24CD	487 624,928	9 235 951,131	292,989
27	E31 - 25CD	8	20'46"	8	20'46"	NE	571,699	82,984	565,644	25CD	487 571,722	9 235 987,160	290,600
28	E31 - 26CD	1	18'41"	1	18'41"	NE	613,432	14,039	613,271	26CD	487 502,777	9 236 034,787	295,874
29	E31 - 27CD	357	18'11"	2	41'49"	NW	644,354	-30,319	643,640	27CD	487 458,419	9 236 065,156	302,901
30	E31 - 28CD	355	14'46"	4	45'14"	NW	570,015	-47,240	568,054	28CD	487 441,498	9 235 989,570	296,155
31	E31 - 29CD	352	51'06"	7	08'54"	NW	554,989	-69,062	550,675	29CD	487 419,676	9 235 972,191	295,822
32	E31 - 30CD	349	31'21"	10	28'39"	NW	475,934	-86,548	467,998	30CD	487 402,190	9 235 889,514	295,238
33	E31 - 31CD	348	23'21"	11	36'39"	NW	439,312	-88,417	430,322	31CD	487 400,321	9 235 851,838	292,288
34	E31 - 32C	350	13'26"	9	46'34"	NW	318,718	-54,118	314,090	32C	487 434,620	9 235 735,606	293,010
35	E31 - 33C	352	28'16"	7	31'44"	NW	322,232	-42,221	319,454	33C	487 446,517	9 235 740,970	292,669
36	E31 - 34C	341	34'56"	18	25'04"	NW	326,286	-103,088	309,573	34C	487 385,650	9 235 731,089	300,781
37	E31 - 35CD	333	09'31"	26	50'29"	NW	355,622	-160,571	317,307	35CD	487 328,167	9 235 738,823	299,869
38	E31 - 36CD	313	12'16"	46	47'44"	NW	394,730	-287,725	270,234	36CD	487 201,013	9 235 691,750	300,565
39	E31 - 37C	306	21'16"	53	38'44"	NW	420,192	-338,408	249,081	37C	487 150,330	9 235 670,597	300,674
40	E31 - 38PA	283	30'11"	76	29'49"	NW	321,629	-312,738	75,099	38PA	487 176,000	9 235 496,615	288,447
41	E31 - 39PA	295	05'21"	64	54'39"	NW	345,513	-312,913	146,507	39PA	487 175,825	9 235 568,023	287,914
42	E31 - 40CD	274	33'16"	85	26'44"	NW	202,869	-202,228	16,109	40CD	487 286,510	9 235 437,625	292,863
43	E31 - 41	290	36'01"	69	23'59"	NW	485,413	-454,375	170,791	41	487 034,363	9 235 592,307	290,622
44	E31 - 42R	250	17'21"	70	17'21"	SW	119,212	-112,227	-40,207	42R	487 376,511	9 235 381,309	279,155
45	E31 - 43CD	284	46'21"	75	13'39"	NW	505,234	-488,534	118,825	43CD	487 000,204	9 235 550,341	288,942
46	E31 - 44CD	191	59'41"	11	59'41"	SW	105,537	-21,933	-103,233	44CD	487 466,805	9 235 318,283	283,436
47	E31 - 45	284	58'26"	75	01'34"	NW	564,158	-545,001	145,766	45	486 943,737	9 235 567,282	301,638
48	E31 - 46CD	202	42'26"	22	42'26"	SW	414,044	-159,830	-381,951	46CD	487 328,908	9 235 039,565	303,139
49	E31 - 47CD	232	41'56"	52	41'56"	SW	412,531	-328,153	-249,995	47CD	487 160,585	9 235 171,521	281,298
50	E31 - 48R	232	49'36"	52	49'36"	SW	404,544	-322,345	-244,437	48R	487 166,393	9 235 177,079	278,928

Imovel BARRAGEM ROSARIO

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Interessado _____ Proprietario _____ Data 17/07/96

IN DICE	ALINHAMEN EST P V	AZIMUTE COMPENSADO	R U M O QD	DISTANCIA HORIZONTAL	LONG PARC (E+,W-)	LAT PARC (N+,S-)	COORD E (X) TOT	COORD N (Y) TOT	COORD (Z) DO PONTO
51	E31 - 49CD	235 24'11"	55 24'11" SW	509,451	-485,216	-334,690	49CD 487 003,522	9 235 086,826	292,027
52	E31 - 50	238 47'56"	58 47'56" SW	662,649	-566,800	-343,281	50 486 921,938	9 235 078,235	292,340
53	E31 - 51CD	220 05'21"	40 05'21" SW	560,862	-361,183	-429,084	51CD 487 127,555	9 234 992,432	290,900
54	E31 - 52	223 49'31"	43 49'31" SW	642,516	-444,918	-463,546	52 487 043,820	9 234 957,970	303,848
55	E31 - 53	214 36'21"	34 36'21" SW	714,921	-406,023	-588,436	53 487 082,715	9 234 833,080	309,529
56	E31 - 54	265 51'36"	85 51'36" SW	250,339	-249,686	-18,073	54 487 239,052	9 235 403,443	299,596
57	E31 - 55	259 47'46"	79 47'46" SW	198,447	-195,308	-35,155	55 487 293,430	9 235 386,361	282,744
58	E31 - 56	257 31'16"	77 31'16" SW	250,918	-244,990	-54,218	56 487 243,748	9 235 367,298	287,606
59	E31 - 57	263 17'21"	83 17'21" SW	299,368	-297,317	-34,984	57 487 191,421	9 235 386,532	303,405
60	E31 - 58	254 46'51"	74 46'51" SW	327,248	-315,771	-85,907	58 487 172,967	9 235 335,609	288,612
61	E31 - 59	261 29'16"	81 29'16" SW	341,322	-337,562	-50,523	59 487 151,176	9 235 370,993	302,850
62	E31 - 60	251 00'11"	71 00'11" SW	387,257	-366,165	-126,059	60 487 122,573	9 235 295,457	287,198
63	E31 - 61	258 56'01"	78 56'01" SW	391,819	-384,533	-75,208	61 487 104,205	9 235 346,308	301,910
64	E31 - 62	255 30'36"	75 30'36" SW	441,939	-427,882	-110,578	62 487 060,856	9 235 310,938	298,072
65	E31 - 63C	250 47'06"	70 47'06" SW	503,784	-475,718	-165,802	63C 487 013,020	9 235 255,714	289,152
66	E31 - 64CD	254 15'51"	74 15'51" SW	498,519	-479,836	-135,200	64CD 487 008,902	9 235 286,316	295,101
67	E32 - E33	270 32'56"	89 27'04" NW	1 129,724	-1 129,672	10,822	E33 485 792,268	9 235 088,983	303,553
68	E32 - 1CD	334 28'16"	25 31'44" NW	122,979	-53,000	110,972	1CD 486 868,940	9 235 189,133	279,618
69	E32 - 2CD	279 52'26"	80 07'34" NW	209,075	-205,978	35,852	2CD 486 715,962	9 235 114,013	280,390
70	E32 - 3CD	267 10'06"	87 10'06" SW	322,015	-321,622	-15,908	3CD 486 600,318	9 235 062,253	281,488
71	E32 - 4CD	266 51'31"	86 51'31" SW	370,217	-369,661	-20,288	4CD 486 552,279	9 235 057,873	281,929
72	E32 - 5PÇ	329 08'06"	30 51'54" NW	435,037	-223,181	373,426	5PÇ 486 698,759	9 235 451,587	282,532
73	E32 - 6CD	266 24'16"	86 24'16" SW	543,734	-542,664	-34,099	6CD 486 379,276	9 235 044,062	283,087
74	E32 - 7R	269 25'06"	89 25'06" SW	743,232	-743,194	-7,545	7R 486 178,746	9 235 070,616	283,074
75	E32 - 8R	269 25'41"	89 25'41" SW	1 002,422	-1 002,372	-10,006	8R 485 919,568	9 235 068,155	284,916
76	E32 - 9	271 32'21"	88 27'39" NW	959,796	-959,450	25,780	9 485 962,490	9 235 103,941	300,707
77	E32 - 10	271 52'16"	88 07'44" NW	922,369	-921,877	30,116	10 486 000,063	9 235 108,277	299,938
78	E32 - 11CD	255 45'21"	75 45'21" SW	122,833	-119,057	-30,224	11CD 486 802,883	9 235 047,937	288,289
79	E32 - 12	11 31'46"	11 31'46" NE	186,725	37,321	182,957	12 486 959,261	9 235 261,118	294,073
80	E32 - 13C	252 44'06"	72 44'06" SW	155,197	-148,204	-46,061	13C 486 773,736	9 235 032,100	294,375
81	E32 - 14	346 08'36"	13 51'24" NW	181,155	-43,386	175,883	14 486 878,554	9 235 254,044	290,451
82	E32 - 15CD	322 14'56"	37 45'04" NW	194,332	-118,976	153,654	15CD 486 802,964	9 235 231,815	292,585
83	E32 - 16	306 32'46"	53 27'14" NW	237,321	-190,658	141,317	16 486 731,282	9 235 219,478	293,232
84	E32 - 17	292 25'56"	67 34'04" NW	296,668	-274,220	113,206	17 486 647,720	9 235 191,367	292,351
85	E32 - 18CD	290 00'36"	69 59'24" NW	325,799	-306,131	111,483	18CD 486 615,809	9 235 189,644	295,565
86	E32 - 19CD	279 07'06"	80 52'54" NW	451,375	-445,671	71,531	19CD 486 476,269	9 235 149,692	288,368
87	E32 - 20CD	279 44'26"	80 15'34" NW	525,474	-517,899	88,903	20CD 486 404,041	9 235 167,064	299,181
88	E32 - 21CD	252 14'16"	72 14'16" SW	527,670	-502,516	-160,975	21CD 486 419,424	9 234 917,186	295,054
89	E32 - 22C	274 25'21"	85 34'39" NW	471,833	-469,631	36,322	22C 486 452,309	9 235 114,483	285,829
90	E32 - 23C	276 45'41"	83 14'19" NW	735,621	-730,505	86,608	23C 486 191,435	9 235 164,769	294,544
91	E32 - 24	259 19'01"	79 19'01" SW	578,415	-568,390	-107,224	24 486 353,550	9 234 970,937	287,897
92	E32 - 25	265 25'16"	85 25'16" SW	662,099	-659,986	-52,856	25 486 261,954	9 235 025,305	288,771
93	E32 - 26	266 53'31"	86 53'31" SW	689,580	-688,566	-37,388	26 486 233,374	9 235 040,773	290,649
94	E33 - E34	286 55'56"	26 55'56" SW	337,358	-152,802	-300,769	E34 485 639,466	9 234 788,214	305,532
95	E33 - 1	120 39'26"	59 20'34" SE	87,672	75,418	-44,704	1 485 867,686	9 235 044,279	288,829
96	E33 - 2C	131 29'21"	48 30'39" SE	118,086	88,456	-78,229	2C 485 880,724	9 235 010,754	289,603
97	E33 - 3C	126 20'56"	53 39'04" SE	129,284	104,128	-76,627	3C 485 896,396	9 235 012,356	290,322
98	E33 - 4	119 27'36"	60 32'24" SE	174,885	152,272	-86,011	4 485 944,540	9 235 002,972	292,141
99	E33 - 5	111 48'46"	68 11'14" SE	333,661	309,772	-123,980	5 486 102,040	9 234 965,003	296,304
100	E33 - 6	145 14'51"	34 45'09" SE	71,358	40,676	-58,629	6 485 832,944	9 235 030,354	284,227

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado _____ Proprietario _____ Data 17/07/96

IN DICE	ALINHAMEN		AZIMUTE		DISTANCIA		LONG	PARC	LAT	PARC	COORD E (X)		COORD N (Y)		COORD (Z)
	EST	P V	COMPENSADO	R U M O	QD	HORIZONTAL	X	(E+,W-)	Y	(N+,S-)	P V	TOT	COMPENS	TOT	COMPENS
101	E33	- 7	174 45'11"	5 14'49"	SE	151,844	13,886	-151,208	7	485 806,154	9 234 937,775	286,290			
102	E33	- 8EST	98 52'16"	81 07'44"	SE	372,886	368,425	-57,504	8EST	486 160,693	9 235 031,479	296,097			
103	E33	- 9	170 02'01"	9 57'59"	SE	165,058	28,567	-162,567	9	485 820,835	9 234 926,416	292,114			
104	E33	- 10R	101 52'21"	78 07'39"	SE	281,593	275,569	-57,933	10R	486 067,837	9 235 031,050	284,053			
105	E33	- 11R	196 40'51"	16 40'51"	SW	107,782	-30,938	-103,246	11R	485 761,330	9 234 985,737	285,312			
106	E33	- 12R	229 09'51"	49 09'51"	SW	202,541	-153,240	-132,440	12R	485 639,028	9 234 956,543	286,009			
107	E33	- 13ES	201 15'41"	21 15'41"	SW	197,264	-71,533	-183,837	13ES	485 720,735	9 234 905,146	291,137			
108	E33	- 14CD	225 14'01"	45 14'01"	SW	295,752	-209,979	-208,274	14CD	485 582,289	9 234 880,709	287,328			
109	E33	- 15ES	214 02'26"	34 02'26"	SW	307,564	-172,168	-254,860	15ES	485 620,100	9 234 834,123	290,029			
110	E33	- 16R	216 57'01"	36 57'01"	SW	434,041	-260,911	-346,867	16R	485 531,357	9 234 742,116	287,150			
111	E33	- 17C	214 22'41"	34 22'41"	SW	478,801	-270,355	-395,169	17C	485 521,913	9 234 693,814	291,470			
112	E33	- 18CD	217 24'26"	37 24'26"	SW	488,718	-296,884	-388,207	18CD	485 495,384	9 234 700,776	291,011			
113	E33	- 19RD	225 48'36"	45 48'36"	SW	476,801	-341,882	-332,349	19RD	485 450,386	9 234 756,634	288,358			
114	E33	- 20C	218 24'51"	38 24'51"	SW	519,688	-322,904	-407,196	20C	485 469,364	9 234 681,787	291,845			
115	E33	- 21C	223 15'56"	43 15'56"	SW	558,916	-383,070	-406,994	21C	485 409,198	9 234 681,989	292,297			
116	E33	- 22C	224 27'41"	44 27'41"	SW	547,670	-393,604	-390,804	22C	485 408,664	9 234 698,099	292,186			
117	E33	- 23C	231 16'31"	51 16'31"	SW	391,119	-305,846	-243,787	23C	485 486,422	9 234 845,196	291,373			
118	E33	- 24C	231 50'31"	51 50'31"	SW	367,647	-289,084	-227,144	24C	485 503,184	9 234 861,839	292,626			
119	E33	- 25PÇ	229 38'46"	49 38'46"	SW	373,486	-284,619	-241,835	25PÇ	485 507,649	9 234 847,148	290,790			
120	E33	- 26C	234 50'21"	54 50'21"	SW	337,066	-275,565	-194,107	26C	485 516,703	9 234 894,876	294,655			
121	E33	- 27PÇ	225 58'41"	45 58'41"	SW	370,227	-266,220	-257,283	27PÇ	485 526,048	9 234 831,700	288,619			
122	E33	- 28	238 20'01"	58 20'01"	SW	82,140	-69,911	-43,121	28	485 722,357	9 235 045,862	299,237			

 Maior Coord (X) 487 885,469 Menor Coord (X) 485 408,664 Maior Coord (Y) 9 236 065,156 Menor Coord (Y) 9 234 681,787

 TopoEVN 3 0 - Sistema para processamento de Levantamentos Topograficos Arquivo BACIA11 25/10/96 14 55 10

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado _____ Proprietario _____ Data 05/08/96

IN DICE	ALINHAMENTO		AZIMUTE		DISTANCIA		LONG	PARC	LAT	PARC	COORD E (X)		COORD N (Y)		COORD (Z)
	EST	P V	COMPENSADO	R U M O	QD	HORIZONTAL	X	(E+,W-)	Y	(N+,S-)	P V	TOT	COMPENS	TOT	COMPENS
1	NM	- E7	140 03'26"	39 56'34"	SE	0,000	0,000	0,000	E7	491 315,517	9 237 811,088	289,139			
2	E7	- E9	145 26'11"	34 33'49"	SE	344,755	195,587	-283,905	E9	491 511,104	9 237 527,183	294,549			
3	E9	- E12	119 25'26"	60 34'34"	SE	561,669	489,219	-275,929	E12	492 000,323	9 237 251,254	298 781			
4	E9	- 1	207 53'41"	27 53'41"	SW	37,767	-17,669	-33,379	1	491 493,435	9 237 493,804	293,495			
5	E9	- 2	141 51'51"	38 08'09"	SE	36,632	22,621	-28,813	2	491 533,725	9 237 498,370	287,672			
6	E9	- 3	213 30'31"	33 30'31"	SW	86,164	-47,568	-71,844	3	491 463,536	9 237 455,339	292,942			
7	E9	- 4	174 35'11"	5 24'49"	SE	66,385	6,263	-66,089	4	491 517,367	9 237 461,094	288,517			
8	E9	- 5	194 18'26"	14 18'26"	SW	172,207	-42,556	-166,866	5	491 468,548	9 237 360,317	293,563			
9	E9	- 6	191 10'41"	11 10'41"	SW	236,832	-45,912	-232,339	6	491 465,192	9 237 294,844	298,333			
10	E9	- 7GR	160 56'46"	19 03'14"	SE	116,911	38,166	-110,506	7GR	491 549,270	9 237 416,677	284,797			
11	E9	- 7	198 39'46"	18 39'46"	SW	315,926	-101,096	-299,314	7	491 410,008	9 237 227,869	301,355			
12	E9	- 8	177 14'46"	2 45'14"	SE	156,251	7,507	-156,071	8	491 518,611	9 237 371,112	286,747			
13	E9	- 9	208 04'06"	28 04'06"	SW	284,855	-134,031	-251,352	9	491 377,073	9 237 275,831	299,631			
14	E9	- 10	176 23'56"	3 36'04"	SE	191,467	12,026	-191,089	10	491 523,130	9 237 336,094	288,788			
15	E9	- 11	213 32'16"	33 32'16"	SW	384,296	-212,318	-320,319	11	491 298,786	9 237 206,864	305,311			
16	E9	- 12	176 09'41"	3 50'19"	SE	259,025	17,341	-258,444	12	491 528,445	9 237 268,739	296,560			
17	E9	- 13	140 24'16"	39 35'44"	SE	137,147	87,413	-105,680	13	491 598,517	9 237 421,503	288,387			
18	E9	- 14	162 45'56"	17 14'04"	SE	169,862	50,327	-162,235	14	491 561,431	9 237 364,948	293,738			
19	E9	- 15CD	149 08'36"	30 51'24"	SE	358,025	183,628	-307,348	15CD	491 694,732	9 237 219,835	292,724			
20	E9	- 16	143 59'26"	36 00'34"	SE	348,932	205,144	-282,258	16	491 716,248	9 237 244,925	290,193			
21	E9	- 17	180 12'41"	29 47'19"	SE	423,862	210,575	-367,855	17	491 721,679	9 237 159,328	297,881			
22	E9	- 18	145 13'41"	34 46'19"	SE	413,431	235,784	-339,604	18	491 746,888	9 237 187,579	294,197			
23	E9	- 19	141 52'16"	38 07'44"	SE	576,504	355,952	-453,492	19	491 867,056	9 237 073,691	296,715			
24	E9	- 20	180 29'46"	29 30'14"	SE	637,460	313,938	-554,796	20	491 825,042	9 236 972,387	300,265			
25	E9	- 21	143 59'21"	36 00'39"	SE	624,025	366,888	-504,777	21	491 877,992	9 237 022,406	295,894			
26	E9	- 22	137 59'21"	42 00'39"	SE	576,885	386,092	-428,636	22	491 897,196	9 237 098,547	296,160			
27	E9	- 23	130 17'31"	49 42'29"	SE	553,975	422,550	-358,246	23	491 933,654	9 237 168,937	300,603			
28	E9	- 24	133 55'36"	46 04'24"	SE	511,060	368,080	-354,541	24	491 879,184	9 237 172,642	296,337			
29	E9	- 25	129 33'51"	50 26'09"	SE	487,420	375,758	-310,458	25	491 886,862	9 237 216,725	296,484			
30	E9	- 26	129 03'11"	50 56'49"	SE	433,819	336,888	-273,323	26	491 847,992	9 237 253,860	291,159			
31	E9	- 27	133 26'31"	46 33'29"	SE	439,691	319,247	-302,340	27	491 830,351	9 237 224,843	291,149			
32	E9	- 28	125 00'01"	54 59'59"	SE	370,440	303,446	-212,477	28	491 814,550	9 237 314,706	284,356			
33	E9	- 29	131 56'01"	48 03'59"	SE	365,571	271,955	-244,300	29	491 783,059	9 237 282,883	282,600			
34	E9	- 30	127 12'41"	52 47'19"	SE	214,639	170,941	-129,805	30	491 682,045	9 237 397,378	282,234			
35	E9	- 31R	120 19'31"	59 40'29"	SE	210,053	181,312	-106,058	31R	491 692,416	9 237 421,125	275,011			
36	E9	- 32	107 42'21"	72 17'39"	SE	29,243	27,858	-8,894	32	491 538,962	9 237 518,289	319,307			
37	E9	- 33	117 16'31"	62 43'29"	SE	245,855	218,520	-112,667	33	491 729,624	9 237 414,516	283,193			
38	E9	- 34	111 31'21"	68 28'39"	SE	256,105	238,248	-93,956	34	491 749,352	9 237 433,227	286,926			
39	E9	- 35	104 52'11"	75 07'49"	SE	278,100	268,787	-71,367	35	491 779,891	9 237 455,816	293,065			
40	E9	- 36	121 45'01"	58 14'59"	SE	343,887	292,424	-180,960	36	491 803,528	9 237 346,223	280,356			
41	E9	- 37	121 55'21"	58 04'39"	SE	390,776	331,677	-206,631	37	491 842,781	9 237 320,552	286,350			
42	E9	- 38	121 59'06"	58 00'54"	SE	428,182	363,178	-226,807	38	491 874,282	9 237 300,376	289,789			
43	E9	- 39	120 50'56"	59 09'04"	SE	472,005	405,227	-242,033	39	491 916,331	9 237 285,150	292,548			
44	E9	- 40	117 27'16"	62 32'44"	SE	452,130	401,210	-208,451	40	491 912,314	9 237 318,732	287,884			
45	E9	- 41	119 24'51"	60 35'09"	SE	530,586	462,189	-260,581	41	491 973,293	9 237 266,602	296,309			
46	E9	- 42C	128 03'26"	51 56'34"	SE	543,373	427,849	-334,961	42C	491 938,953	9 237 192,222	300,485			
47	E12	- E13	127 34'31"	52 25'29"	SE	251,563	199,377	-153,404	E13	492 199,700	9 237 097,850	296,871			
48	E12	- 1	15 15'46"	15 15'46"	NE	67,860	17,864	65,466	1	492 018,187	9 237 316,720	288,821			
49	E12	- 2	39 17'36"	39 17'36"	NE	56,617	35,855	43,817	2	492 036,178	9 237 295,071	288,525			
50	E12	- 3R	48 32'26"	48 32'26"	NE	117,275	87,889	77,647	3R	492 088,212	9 237 328,901	276,721			

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Intressado		Proprietario										Data 05/08/96			
IN	ALINHAMEN	AZIMUTE		DISTANCIA		LONG	PARC	LAT	PARC	COORD E (X)		COORD N (Y)		COORD (Z)	
DICE	EST P V	COMPENSADO	R U M O	QD	HORIZONTAL	X	(E+,W-)	Y	(N+,S-)	P V	TOT	COMPENS	TOT	COMPENS	DO PONTO
51	E12 - 4	39 56'06"	39 56'06"	NE	161,591	103,720		123,904		4	492 104,051	9 237 375,158		276,877	
52	E12 - 5	25 15'01"	25 15'01"	NE	163,232	69,630		147,636		5	492 069,953	9 237 398,890		281,759	
53	E12 - 6	24 05'56"	24 05'56"	NE	197,103	80,480		179,924		6	492 080,803	9 237 431,178		293,140	
54	E12 - 7	22 55'31"	22 55'31"	NE	214,654	83,614		197,699		7	492 083,937	9 237 448,953		299,940	
55	E12 - 8	42 42'01"	42 42'01"	NE	223,283	151,422		164,093		8	492 151,745	9 237 415,347		286,731	
56	E12 - 9	354 58'31"	5 01'29"	NW	203,822	-17,852		203,039		9	491 982,471	9 237 454,293		297,220	
57	E12 - 10CD	336 28'36"	23 31'24"	NW	57,384	-22,903		52,615	10CD	491 977,420	9 237 303,869		290,953		
58	E12 - 11CD	42 57'36"	42 57'36"	NE	327,539	223,214		239,703	11CD	492 223,537	9 237 490,957		307,169		
59	E12 - 12CD	51 13'46"	51 13'46"	NE	345,412	269,304		216,298	12CD	492 269,627	9 237 467,552		302,498		
60	E12 - 13	55 10'01"	55 10'01"	NE	278,280	228,418		158,950	13	492 228,741	9 237 410,204		295,233		
61	E12 - 14	61 22'01"	61 22'01"	NE	375,147	329,269		179,770	14	492 329,592	9 237 431,024		301,292		
62	E12 - 15	63 03'36"	63 03'36"	NE	326,434	291,010		147,893	15	492 291,333	9 237 399,147		291,461		
63	E12 - 16	63 40'16"	63 40'16"	NE	260,030	233,055		115,329	16	492 233,378	9 237 366,583		287,678		
64	E12 - 17R	87 49'46"	87 49'46"	NE	126,334	126,243		4,785	17R	492 126,566	9 237 256,039		280,998		
65	E12 - 18	63 43'26"	63 43'26"	NE	177,094	158,795		78,399	18	492 159,118	9 237 329,653		288,003		
66	E12 - 19	65 08'51"	65 08'51"	NE	128,586	116,678		54,043	19	492 117,001	9 237 305,297		285,321		
67	E12 - 20	95 10'21"	84 49'39"	SE	195,806	195,009		-17,653	20	492 195,332	9 237 233,601		293,885		
68	E12 - 21	76 58'11"	76 58'11"	NE	177,558	172,986		40 033	21	492 173,309	9 237 291,287		291,070		
69	E12 - 22	77 22'41"	77 22'41"	NE	262,681	256,333		57,400	22	492 256,656	9 237 308,654		287,499		
70	E12 - 23PA	96 58'21"	83 01'39"	SE	375,259	372,484		-45,554	23PA	492 372,807	9 237 205,700		296,281		
71	E12 - 24	76 17'06"	76 17'06"	NE	340,746	331,030		80,788	24	492 331,353	9 237 332,042		295,320		
72	E12 - 25GR	85 14'46"	85 14'46"	NE	400,715	399,336		33,210	25GR	492 399,659	9 237 284,464		286,805		
73	E12 - 26	80 59'21"	80 59'21"	NE	451,100	445,533		70,652	26	492 445,856	9 237 321,906		297 217		
74	E12 - 27	77 22'56"	77 22'56"	NE	487,933	476,149		106,587	27	492 476,472	9 237 357,841		300,209		
75	E12 - 28	98 06'31"	81 53'29"	SE	463,250	458,619		-65,341	28	492 458,942	9 237 185,913		296,973		
76	E12 - 29	77 37'21"	77 37'21"	NE	611,842	597,621		131,149	29	492 597,944	9 237 382,403		304,089		
77	E12 - 30	92 05'26"	87 54'34"	SE	543,104	542,743		-19,812	30	492 543,066	9 237 231,442		294,534		
78	E12 - 31	82 44'46"	82 44'46"	NE	778,288	772,059		98,272	31	492 772,382	9 237 349,526		298,569		
79	E12 - 32	95 22'21"	84 37'39"	SE	666,429	663,501		-62,398	32	492 663,824	9 237 188,856		300,102		
80	E12 - 33	85 07'06"	85 07'06"	NE	893,770	890,528		76,058	33	492 890,851	9 237 327,312		294,236		
81	E12 - 34	89 09'01"	89 09'01"	NE	847,287	847,194		12,565	34	492 847,517	9 237 263,819		294,277		
82	E12 - 35	86 49'51"	86 49'51"	NE	1 018,082	1 016,525		56,284	35	493 016,848	9 237 307,538		295,440		
83	E12 - 36	86 55'41"	86 55'41"	NE	1 113,262	1 111,662		59,660	36	493 111,985	9 237 310,914		300,671		
84	E12 - 37R	85 45'26"	85 45'26"	NE	1 138,558	1 135,438		84,234	37R	493 135,761	9 237 335,488		296,696		
85	E12 - 38	89 53'41"	89 53'41"	NE	1 051,574	1 051,572		1,932	38	493 051,895	9 237 253,186		303,803		
86	E12 - 39	93 14'36"	86 45'24"	SE	981,914	980,341		-55,553	39	492 980,664	9 237 195,701		307,361		
87	E12 - 40	97 47'06"	82 12'54"	SE	756,092	749,123		-102,417	40	492 749,446	9 237 148,837		308,850		
88	E12 - 41	104 47'56"	75 12'04"	SE	571,995	553,021		-146,103	41	492 553,344	9 237 105,151		303,001		
89	E12 - 42	110 36'16"	69 23'44"	SE	476,493	446,013		-167,685	42	492 446,336	9 237 083,569		299,639		
90	E12 - 43	126 37'46"	53 22'14"	SE	367,723	295,102		-219,397	43	492 295,425	9 237 031,857		297,166		
91	E12 - 44	132 17'16"	47 42'44"	SE	257,945	190,821		-173,560	44	492 191,144	9 237 077,694		293,169		
92	E12 - 45	146 18'11"	33 41'49"	SE	57,902	32,124		-48,174	45	492 032,447	9 237 203,080		294,478		
93	E12 - 46	111 57'26"	68 02'34"	SE	101,185	93,845		-37,835	46	492 094,168	9 237 213,419		283,527		
94	E13 - E15	192 01'11"	12 01'11"	SW	369,576	-76,964		-361,473	E15	492 122,736	9 236 736,377		299,771		
95	E13 - 1BPM	307 15'51"	52 44'09"	NW	114,014	-90,738		69,034	1BPM	492 108,962	9 237 166,884		279,003		
96	E13 - 2	307 36'16"	52 23'44"	NW	112,823	-89,383		68,845	2	492 110,317	9 237 166,695		277,121		
97	E13 - 3R	241 25'26"	61 25'26"	SW	130,174	-114,317		-62,266	3R	492 085,383	9 237 035,584		280,277		
98	E13 - 4	290 37'36"	69 22'24"	NW	184,964	-173,107		65,159	4	492 026,593	9 237 163,009		294,868		
99	E13 - 5	270 54'36"	89 05'24"	NW	197,595	-197,570		3,138	5	492 002,130	9 237 100,988		296,125		
100	E13 - 6	250 36'41"	70 36'41"	SW	184,701	-174,226		-61,316	6	492 025,474	9 237 036,534		285,010		

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado _____ Proprietario _____ Data 05/08/96

IN	ALINHAMEN	AZIMUTE	DISTANCIA	LONG PARC	LAT PARC	COORD E (X)	COORD N (Y)	COORD (Z)	
DICE	EST P V	COMPENSADO R U M O QD	HORIZONTAL	X (E+,W-)	Y (N+,-)	TOT COMPENS	TOT COMPENS	DO PONTO	
101	E13 - 7	249 21'06"	69 21'06" SW	225,816	-211,310	-79,630	7 491 988,390	9 237 018,220	286,615
102	E13 - 8	258 19'16"	78 19'16" SW	261,067	-255,662	-52,847	8 491 944,038	9 237 045,003	293,291
103	E13 - 9	246 58'56"	66 58'56" SW	289,229	-266,202	-113,093	9 491 933,498	9 236 984,757	296,618
104	E13 - 10	241 37'06"	61 37'06" SW	292,883	-257,679	-139,220	10 491 942,021	9 236 958,630	288,950
105	E13 - 11	242 43'26"	62 43'26" SW	328,054	-291,577	-150,340	11 491 908,123	9 236 947,510	295,971
106	E13 - 12	237 49'01"	57 49'01" SW	352,813	-298,604	-187,917	12 491 901,096	9 236 909,933	298,102
107	E13 - 13	236 46'36"	56 46'36" SW	319,942	-267,645	-175,297	13 491 932,055	9 236 922,553	292,430
108	E13 - 14	229 37'11"	49 37'11" SW	407,497	-310,415	-264,000	14 491 889,285	9 236 833,850	294,804
109	E13 - 15	226 04'01"	46 04'01" SW	389,186	-280,273	-270,024	15 491 919,427	9 236 827,826	289,982
110	E13 - 16	223 10'06"	43 10'06" SW	464,493	-317,780	-338,777	16 491 881,920	9 236 759,073	303,493
111	E13 - 17	220 54'51"	40 54'51" SW	427,646	-280,077	-323,168	17 491 919,623	9 236 774,682	296,195
112	E13 - 18CD	222 47'51"	42 47'51" SW	490,908	-333,527	-360,208	18CD 491 866,173	9 236 737,642	303,430
113	E13 - 19	218 58'51"	38 58'51" SW	472,344	-297,133	-367,180	19 491 902,567	9 236 730,670	295,591
114	E13 - 20	219 17'01"	39 17'01" SW	544,969	-345,052	-421,818	20 491 854,648	9 236 676,032	296,515
115	E13 - 21	224 40'46"	44 40'46" SW	537,920	-378,233	-382,489	21 491 821,467	9 236 715,361	311,416
116	E13 - 22	215 12'41"	35 12'41" SW	848,498	-489,239	-693,249	22 491 710,461	9 236 404,601	292,938
117	E13 - 23	217 32'06"	37 32'06" SW	862,454	-525,447	-683,910	23 491 674,253	9 236 413,940	296,350
118	E13 - 24	225 02'51"	45 02'51" SW	170,157	-120,419	-120,219	24 492 079,281	9 236 977,631	282,032
119	E13 - 25	218 36'06"	38 36'06" SW	214,114	-133,586	-167,331	25 492 066,114	9 236 930,519	287,183
120	E13 - 26	220 29'11"	40 29'11" SW	270,650	-175,724	-205,846	26 492 023,976	9 236 892,004	285,282
121	E13 - E14	219 56'11"	39 56'11" SW	908,473	-583,182	-696,579	E14 491 616,518	9 236 401,271	306,307
122	E13 - 27	209 20'01"	29 20'01" SW	346,264	-169,633	-301,867	27 492 030,067	9 236 795,983	295,147
123	E13 - 28	199 48'56"	19 48'56" SW	364,316	-123,501	-342,744	28 492 076,199	9 236 755,106	303,554
124	E13 - 29	189 54'36"	9 54'36" SW	352,618	-60,686	-347,357	29 492 139,014	9 236 750,493	294,671
125	E13 - 30	193.19'21"	13 19'21" SW	148,228	-34,156	-144,239	30 492 165,544	9 236 953,611	291,873
126	E13 - 31	158 32'56"	21 27'04" SE	85,976	31,442	-80,020	31 492 231,142	9 237 017,830	291,145
127	E13 - 32GR	201 38'46"	21 38'46" SW	111,109	-40,985	-103,274	32GR 492 158,715	9 236 994,576	285,315
128	E13 - 33	153 14'11"	26 45'49" SE	203,828	91,786	-181,992	33 492 291,486	9 236 915,858	296,209
129	E15 - PF	134 10'01"	45 49'59" SE	109,519	78,559	-76,308	PF 492 201,295	9 236 660,069	288,047
130	E15 - 1	117 59'51"	62 00'09" SE	36,967	32,641	-17,354	1 492 155,377	9 236 719,023	292,464
131	E15 - 2	119 12'41"	60 47'19" SE	108,522	94,721	-52,962	2 492 217,457	9 236 683,415	288,911
132	E15 - 3R	119 50'36"	60 09'24" SE	59,616	51,710	-29,667	3R 492 174,446	9 236 706,710	287,991
133	E15 - 4	109 11'21"	70 48'39" SE	121,046	114,321	-39,786	4 492 237,057	9 236 696,591	296,109
134	E15 - 5	130 47'26"	49 12'34" SE	215,768	163,359	-140,960	5 492 286,095	9 236 595,417	296,972
135	E15 - 6	122 48'11"	57 11'49" SE	200,232	168,303	-108,476	6 492 291,039	9 236 627,901	298,819
136	E15 - 7	133 22'11"	46 37'49" SE	260,157	189,118	-178,651	7 492 311,854	9 236 557,726	297,974
137	E15 - 8	133 16'41"	46 43'19" SE	325,809	237,200	-223,355	8 492 359,936	9 236 513,022	298,968
138	E15 - 9PA	141 35'16"	38 24'44" SE	274,708	170,680	-215,250	9PA 492 293,416	9 236 521,127	294,404
139	E15 - 10PA	146 37'56"	33 22'04" SE	248,717	136,797	-207,718	10PA 492 259,533	9 236 528,659	294,251
140	E15 - 11	145 14'41"	34 45'19" SE	372,051	212,096	-305,675	11 492 334,832	9 236 430,702	292,692
141	E15 - 12	146 27'41"	33 32'19" SE	424,130	234,331	-353,518	12 492 357,067	9 236 382,859	295,246
142	E15 - 13	145 38'11"	34 21'49" SE	490,284	276,737	-404,716	13 492 399,473	9 236 331,661	297,890
143	E15 - 14R	153 37'46"	26 22'14" SE	585,843	260,217	-524,880	14R 492 382,953	9 236 211,497	299,828
144	E15 - 15	151 21'06"	28 38'54" SE	591,531	283,599	-519,115	15 492 406,335	9 236 217,262	305,979
145	E15 - 16	153 52'36"	26 07'24" SE	580,474	255,586	-521,178	16 492 378,322	9 236 215,199	298,326
146	E15 - 17	147 36'11"	32 23'49" SE	227,190	121,724	-191,829	17 492 244,460	9 236 544,548	295,403
147	E15 - 18	160 04'41"	19 55'19" SE	161,932	55,177	-152,242	18 492 177,913	9 236 584,135	300,402
148	E15 - 19	171 41'36"	8 18'24" SE	123,638	17,863	-122,341	19 492 140,598	9 236 614,036	300,835
149	E15 - 20	173 13'26"	6 46'34" SE	61,617	7,270	-61,187	20 492 130,006	9 236 675,190	297,656
150	E15 - 21	134 10'01"	45 49'59" SE	109,779	78,746	-76,489	21 492 201,482	9 236 659,888	303,163

TopoEVN 3 0 - Sistema para processamento de Levantamentos Topograficos Arquivo : BACIA3 25/10/96 14 59 53

Maior Coord (X) 493 135,761 Menor Coord (X) - 491 298,786 Maior Coord (Y) - 9 237 811,088 Menor Coord (Y) - 9 236 211,497

TopoEVN 3 0 - Sistema para processamento de Levantamentos Topograficos Arquivo BACIA3 25/10/96 14 59 53

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado		Proprietario							Data 04/08/96				
IN DICE	ALINHAMENTO EST P V	AZIMUTE		RUMOR QD	DISTANCIA HORIZONTAL	LONG PARC X (E+,W-)	LAT PARC Y (N+,S-)	COORD E (X)		COORD N (Y)		COORD (Z)	
		COMPENSADO						TOT	COMPENS	TOT	COMPENS		DO PONTO
51	E4 - 47	267	18'16"	87	18'16"	SW	182,101	-181,900	-8,564	47	490 748,641	9 238 530,311	288,095
52	E4 - 48	284	23'41"	75	36'19"	NW	240,112	-232,574	59,692	48	490 697,967	9 238 598,567	295,559
53	E4 - 49	284	04'21"	75	55'39"	NW	271,420	-263,274	65,996	49	490 667,267	9 238 604,871	299,160
54	E4 - E6	220	14'26"	40	14'26"	SW	595,089	-384,426	-454,255	E6	490 546,115	9 238 084,620	285,503
55	E4 - 50	337	09'36"	22	50'24"	NW	102,524	-39,404	93,555	50	490 891,137	9 238 632,430	279,777
56	E4 - 51	286	22'01"	73	37'89"	NW	176,521	-169,368	49,741	51	490 761,173	9 238 588,616	285,682
57	E4 - 52	262	56'36"	82	56'36"	SW	195,939	-194,514	-24,079	52	490 736,027	9 238 514,796	287,320
58	E4 - 53	249	27'26"	69	27'26"	SW	135,769	-127,136	-47,642	53	490 803,405	9 238 491,233	284,814
59	E4 - 54	256	53'41"	76	53'41"	SW	166,775	-162,431	-37,815	54	490 768,110	9 238 501,060	284,565
60	E4 - 55CD	228	13'31"	48	13'31"	SW	153,305	-114,330	-102,132	55CD	490 816,211	9 238 436,743	277,843
61	E4 - 56	227	19'46"	47	19'46"	SW	225,471	-165,780	-152,820	56	490 764,761	9 238 386,055	274,086
62	E4 - 57	206	07'46"	26	07'46"	SW	182,565	-80,402	-163,907	57	490 850,139	9 238 374,968	273,160
63	E4 - 58CD	228	23'16"	48	23'16"	SW	274,290	-205,075	-182,152	58CD	490 725,466	9 238 356,723	274,146
64	E4 - 59	204	45'46"	24	45'46"	SW	246,580	-103,283	-223,907	59	490 827,258	9 238 314,968	272,710
65	E4 - 60CD	212	36'06"	32	36'06"	SW	311,465	-167,816	-262,390	60CD	490 762,725	9 238 276,485	273,212
66	E4 - 61CD	211	04'41"	31	04'41"	SW	340,987	-176,019	-292,043	61CD	490 754,522	9 238 246,832	273,022
67	E4 - 62CD	224	08'31"	44	08'31"	SW	345,884	-240,887	-248,212	62CD	490 689,654	9 238 290,663	273,149
68	E4 - 63	206	50'31"	26	50'31"	SW	423,426	-191,190	-377,804	63	490 739,351	9 238 161,071	279,213
69	E4 - 64C	197	34'46"	17	34'46"	SW	408,008	-123,230	-388,954	64C	490 807,311	9 238 149,921	281,615
70	E4 - 64D	202	51'51"	22	51'51"	SW	488,891	-189,958	-450,478	64D	490 740,583	9 238 088,397	291,074
71	E4 - 65	219	22'11"	39	22'11"	SW	515,137	-326,763	-398,236	65	490 603,778	9 238 140,639	273,931
72	E4 - 66	208	15'36"	28	15'36"	SW	552,065	-261,388	-486,263	66	490 669,153	9 238 052,612	290,843
73	E4 - 67C	218	38'31"	38	38'31"	SW	604,245	-377,322	-471,954	67C	490 553,219	9 238 066,921	287,041
74	E4 - 68	207	50'26"	27	50'26"	SW	678,830	-317,022	-600,256	68	490 613,519	9 237 938,619	293,736
75	E4 - 69	212	33'31"	32	33'31"	SW	597,822	-321,725	-503,869	69	490 608,816	9 238 035,006	289,769
76	E4 - 70PA	193	40'26"	13	40'26"	SW	459,630	-108,654	-446,603	70PA	490 821,887	9 238 092,272	281,217
77	E4 - 71PA	185	30'36"	5	30'36"	SW	446,357	-42,859	-444,295	71PA	490 887,682	9 238 094,580	279,845
78	E4 - 72CD	181	40'31"	1	40'31"	SW	402,833	-11,777	-402,661	72CD	490 918,764	9 238 136,214	282,236
79	E4 - 73	193	59'46"	13	59'46"	SW	407,734	-98,613	-395,629	73	490 831,928	9 238 143,246	278,620
80	E4 - 74CD	180	05'26"	0	05'26"	SW	370,144	-0,585	-370,144	74CD	490 929,956	9 238 168,731	278,536
81	E4 - 75	195	45'31"	15	45'31"	SW	322,901	-87,695	-310,765	75	490 842,846	9 238 228,110	272,465
82	E5 - E7	140	03'26"	39	56'34"	SE	339,519	217,979	-260,304	E7	491 315,517	9 237 811,088	289,139
83	E5 - 1	244	19'56"	64	19'56"	SW	37,737	-34,013	-16,346	1	491 063,525	9 238 055,046	296,284
84	E5 - 2	77	46'21"	77	46'21"	NE	31,389	30,677	6,648	2	491 128,215	9 238 078,040	293,030
85	E7 - E8	212	43'46"	32	43'46"	SW	837,342	-452,728	-704,400	E8	490 862,789	9 237 106,688	301,248
86	E7 - 1	338	35'26"	21	24'34"	NW	148,889	-54,349	138,615	1	491 261,168	9 237 949,703	272,940
87	E7 - 2	4	45'26"	4	45'26"	NE	76,227	6,322	75,964	2	491 321,839	9 237 887,052	273,510
88	E7 - 3	349	54'26"	10	05'34"	NW	188,325	-33,003	185,411	3	491 282,514	9 237 996,499	272,937
89	E7 - 4	330	19'46"	29	40'14"	NW	241,875	-119,731	210,162	4	491 195,786	9 238 021,250	273,384
90	E7 - 5CD	353	59'36"	6	08'24"	NW	328,362	-34,361	326,559	5CD	491 281,156	9 238 137,647	273,959
91	E7 - 6R	341	25'01"	18	34'59"	NW	353,903	-112,781	335,451	6R	491 202,736	9 238 146,539	272,279
92	E7 - 7R	355	31'01"	4	28'59"	NW	432,312	-33,791	430,989	7R	491 281,726	9 238 242,077	270,992
93	E7 - 8	346	22'36"	13	37'24"	NW	524,938	-123,643	510,169	8	491 191,874	9 238 321,257	277,346
94	E7 - 9RCD	356	25'46"	3	34'14"	NW	532,116	-33,139	531,083	9RCD	491 282,378	9 238 342,171	271,073
95	E7 - 10	9	03'46"	9	03'46"	NE	438,051	69,000	432,583	10	491 384,517	9 238 243,671	284,998
96	E7 - 11	16	48'26"	16	48'26"	NE	426,302	123,266	408,092	11	491 438,783	9 238 219,180	290,598
97	E7 - 12	18	01'41"	18	01'41"	NE	346,253	107,159	329,254	12	491 422,676	9 238 140,342	289,572
98	E7 - 13	8	51'51"	8	51'51"	NE	342,725	52,811	338,632	13	491 368,328	9 238 149,720	283,718
99	E7 - 14	25	01'51"	25	01'51"	NE	254,839	107,824	230,905	14	491 423,341	9 238 041,993	286,463
100	E7 - 15	9	52'26"	9	52'26"	NE	210,535	36,103	207,416	15	491 351,620	9 238 018,504	281,980

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado		Proprietario										Data 04/08/96	
IN DICE	ALINHAMENTO EST P V	AZIMUTE COMPENSADO		R U M O QD	DISTANCIA HORIZONTAL	LONG PARC X (E+,W-)	LAT PARC Y (N+,S-)	P V	COORD E (X) TOT	COORD N (Y) COMPENS	COORD (Z) DO PONTO		
101	E7 - 16	34 18'51"	34 18'51"	NE	162,039	91,346	133,838	16	491 406,863	9 237 944,926	290,315		
102	E7 - 17	22 11'21"	22 11'21"	NE	142,132	53,678	131,606	17	491 369,195	9 237 942,694	285,827		
103	E7 - 18R	43 51'11"	43 51'11"	NE	124,596	86,322	89,849	18R	491 401,839	9 237 900,937	272,144		
104	E7 - 19	40 26'41"	40 26'41"	NE	60,906	39,511	46,351	19	491 355,028	9 237 857,439	274,438		
105	E7 - 20R	69 14'51"	69 14'51"	NE	85,985	80,406	30,467	20R	491 395,923	9 237 841,555	273,270		
106	E7 - 21R	51 08'21"	51 08'21"	NE	141,373	110,083	88,702	21R	491 425,600	9 237 899,790	273,012		
107	E7 - 22C	75 27'06"	75 27'06"	NE	179,764	174,000	45,156	22C	491 489,517	9 237 856,244	279,877		
108	E7 - 23C	83 09'41"	83 09'41"	NE	196,667	195,268	23,418	23C	491 510,785	9 237 834,506	282,344		
109	E7 - 24R	63 18'01"	63 18'01"	NE	279,936	250,087	125,779	24R	491 565,604	9 237 936,867	273,053		
110	E7 - 25CD	78 56'41"	78 56'41"	NE	354,452	347,874	67,968	25CD	491 663,391	9 237 879,056	282,911		
111	E7 - 26	77 22'21"	77 22'21"	NE	432,762	422,294	94,607	26	491 737,811	9 237 905,695	286,571		
112	E7 - 27CD	73 48'11"	73 48'11"	NE	555,972	533,905	155,083	27CD	491 849,422	9 237 966,171	285,656		
113	E7 - 28	63 25'56"	63 25'56"	NE	491,376	439,490	219,771	28	491 755,007	9 238 030,859	280,203		
114	E7 - 29	57 48'01"	57 48'01"	NE	475,169	402,086	253,204	29	491 717,603	9 238 064,292	280,002		
115	E7 - 30	83 43'11"	83 43'11"	NE	626,424	622,665	68,526	30	491 938,182	9 237 879,614	294,325		
116	E7 - 31	88 23'56"	88 23'56"	NE	592,088	591,857	16,544	31	491 907,374	9 237 827,632	295,836		
117	E7 - 32	89 44'41"	89 44'41"	NE	674,313	674,306	3,004	32	491 989,823	9 237 814,092	303,922		
118	E7 - 33CD	97 34'56"	92 25'04"	SE	557,955	553,077	-73,622	33CD	491 868,594	9 237 737,466	304,887		
119	E7 - 34	93 10'21"	86 49'39"	SE	485,861	485,116	-26,889	34	491 800,633	9 237 784,199	294,237		
120	E7 - 35	99 42'21"	80 17'39"	SE	457,076	450,534	-77,058	35	491 766,051	9 237 734,030	292,402		
121	E7 - 36	92 53'41"	87 06'19"	SE	415,735	415,205	-20,995	36	491 730,722	9 237 790,093	288,039		
122	E7 - 37	96 19'26"	83 40'34"	SE	261,727	260,134	-28,829	37	491 575,651	9 237 782,259	281,910		
123	E7 - 38	96 25'16"	83 34'44"	SE	192,369	191,162	-21,514	38	491 506,679	9 237 789,574	275,814		
124	E7 - 39R	89 35'56"	89 35'56"	NE	106,485	106,482	0,745	39R	491 421,999	9 237 811,833	272,990		
125	E7 - 40	87 38'16"	87 38'16"	NE	55,177	55,130	2,274	40	491 370,647	9 237 813,362	277,461		
126	E7 - 41	140 39'46"	39 20'14"	SE	65,054	41,237	-50,315	41	491 356,754	9 237 760,773	278,747		
127	E7 - 42	109 17'36"	70 42'24"	SE	109,392	103,248	-36,144	42	491 418,765	9 237 774,944	273,677		
128	E7 - 43CD	143 31'41"	36 28'19"	SE	147,549	87,707	-118,651	43CD	491 403,224	9 237 692,437	278,112		
129	E7 - 44	119 52'36"	60 07'24"	SE	164,192	142,371	-81,790	44	491 457,888	9 237 729,298	273,992		
130	E7 - 45	138 31'21"	41 28'39"	SE	190,171	125,955	-142,479	45	491 441,472	9 237 668,609	273,953		
131	E7 - 46	118 03'16"	61 56'44"	SE	193,616	170,866	-91,060	46	491 486,383	9 237 720,028	273,938		
132	E7 - 47CD	134 31'41"	45 28'19"	SE	273,388	194,900	-191,716	47CD	491 510,417	9 237 619,372	313,354		
133	E7 - 48R	113 49'21"	66 10'39"	SE	294,880	269,757	-119,103	48R	491 585,274	9 237 691,985	274,666		
134	E7 - 49	127 16'11"	52 43'49"	SE	279,801	222,664	-169,439	49	491 538,181	9 237 641,649	281,286		
135	E7 - 50	113 32'36"	66 27'24"	SE	348,917	319,873	-139,372	50	491 635,390	9 237 671,716	281,381		
136	E7 - 51	115 41'31"	64 18'29"	SE	416,678	375,484	-180,643	51	491 691,001	9 237 630,445	295,034		
137	E7 - 52	123 04'31"	56 55'29"	SE	409,835	343,423	-223,664	52	491 658,940	9 237 587,424	289,661		
138	E7 - 53	116 59'26"	63 00'34"	SE	475,001	423,265	-215,576	53	491 738,782	9 237 595,512	297,656		
139	E7 - 54	146 26'06"	33 33'54"	SE	336,479	186,033	-280,374	54	491 501,550	9 237 530,714	294,095		
140	E7 - 55	141 41'11"	38 18'49"	SE	272,349	168,847	-213,693	55	491 484,364	9 237 597,395	290,845		
141	E7 - 56	166 57'11"	13 02'49"	SE	282,042	63,671	-274,761	56	491 379,188	9 237 536,327	302,041		
142	E7 - 57	169 39'21"	10 20'39"	SE	192,013	34,478	-188,892	57	491 349,995	9 237 622,196	290,948		
143	E7 - 58	172 41'56"	7 18'04"	SE	139,474	17,725	-138,343	58	491 333,242	9 237 672,745	292,624		
144	E7 - 59	149 40'01"	30 19'59"	SE	275,035	138,900	-237,384	59	491 454,417	9 237 573,704	288,249		
145	E7 - 60	178 57'46"	1 02'14"	SE	62,674	1,135	-62,664	60	491 316,652	9 237 748,424	286,694		
146	E7 - 61	156 18'41"	23 41'19"	SE	209,371	84,118	-191,730	61	491 399,635	9 237 619,358	288,195		
147	E7 - 62CD	212 04'31"	32 04'31"	SW	47,075	-24,998	-39,889	62CD	491 290,519	9 237 771,199	281,956		
148	E7 - 63	185 37'26"	5 37'26"	SW	74,142	-7,266	-73,785	63	491 308,251	9 237 737,303	287,561		
149	E7 - 64	207 23'16"	27 23'16"	SW	101,877	-46,864	-90,458	64	491 268,653	9 237 720,630	283,383		
150	E7 - 65	185 22'06"	5 22'06"	SW	164,837	-15,422	-164,114	65	491 300,095	9 237 646,974	290,158		

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado		Proprietario							Data 04/08/96		
IN DICE	ALINHAMEN EST P V	AZIMUTE COMPENSADO		R U M O QD	DISTANCIA HORIZONTAL	LONG PARC X (E+,W-)	LAT PARC Y (N+,S-)	COORD E (X) TOT COMPENS	COORD N (Y) TOT COMPENS	COORD (Z) DO PONTO	
201	E10 - E11	149 36'26"	30 23'34" SE	98,949	50,061	-85,351	E11	490 936,298	9 236 984,832	304,712	
202	E11 - PF	91 50'41"	88 09'19" SE	38,048	38,028	-1,225	PF	490 974,326	9 236 983,607	299,704	
203	E11 - 1	153 14'01"	26 45'59" SE	20,898	9,411	-18,659	1	490 945,709	9 236 966,173	298,719	
204	E11 - 2	178 49'16"	1 10'44" SE	50,599	1,041	-50,588	2	490 937,339	9 236 934,244	295,955	
205	E11 - 3	159 48'41"	20 11'19" SE	88,423	30,516	-82,990	3	490 966,814	9 236 901,842	295,412	
206	E11 - 4	178 40'11"	1 19'49" SE	93,983	2,182	-93,958	4	490 938,480	9 236 890,874	303,134	
207	E11 - 5	157 16'56"	22 43'04" SE	192,721	74,427	-177,769	5	491 010,725	9 236 807,063	304,146	
208	E11 - 6	180 22'41"	0 22'41" SW	384,793	-2,539	-384,785	6	490 933,759	9 236 600,047	319,126	
209	E11 - 7	168 34'51"	11 25'09" SE	314,262	62,219	-308,041	7	490 998,517	9 236 676,791	309,424	
210	E11 - 8CD	167 08'31"	12 51'29" SE	291,514	64,872	-284,204	8CD	491 001,170	9 236 700,628	303,375	
211	E11 - 9	147 13'06"	32 46'54" SE	221,505	119,931	-186,228	9	491 056,229	9 236 798,604	305,970	
212	E11 - 10	132 16'56"	47 43'04" SE	180,337	133,421	-121,328	10	491 069,719	9 236 863,504	303,548	
213	E11 - 11	130 08'16"	49 51'44" SE	131,774	100,741	-84,945	11	491 037,039	9 236 899,887	299,323	
214	E11 - 12	149 25'46"	30 34'14" SE	140,641	71,530	-121,092	12	491 007,828	9 236 863,740	298,209	
215	E11 - 13GR	148 55'31"	31 04'29" SE	128,673	66,415	-110,208	13GR	491 002,713	9 236 874,624	295,325	
216	E11 - 14	127 33'16"	52 26'44" SE	238,533	189,103	-145,389	14	491 125,401	9 236 839,443	303,760	
217	E11 - 15GR	159 19'46"	20 40'14" SE	140,118	49,461	-131,098	15GR	490 985,759	9 236 853,734	293,056	
218	E11 - 16	114 52'56"	65 07'04" SE	300,185	272,320	-126,304	16	491 208,618	9 236 858,528	304,601	
219	E11 - 17	108 31'26"	71 28'34" SE	359,602	340,971	-114,246	17	491 277,269	9 236 870,586	301,931	
220	E11 - 18GR	109 16'06"	70 43'54" SE	378,647	357,437	-124,951	18GR	491 293,735	9 236 859,881	298,112	
221	E11 - 19GR	128 17'26"	51 42'34" SE	100,297	78,721	-62,149	19GR	491 015,019	9 236 922,683	290,768	
222	E11 - 20	102 36'11"	77 23'49" SE	293,071	286,009	-63,947	20	491 222,307	9 236 920,885	303,077	
223	E11 - 21	98 07'41"	81 52'19" SE	248,598	246,101	-35,148	21	491 182,399	9 236 949,684	301,454	
224	E11 - 22	100 35'16"	79 24'44" SE	188,495	185,286	-34,634	22	491 121,584	9 236 950,198	295,484	
225	E11 - 23GR	49 06'41"	49 06'41" NE	82,833	62,620	54,222	23GR	490 998,918	9 237 039,054	290,043	
226	E11 - 24	56 42'46"	56 42'46" NE	133,531	111,623	73,287	24	491 047,921	9 237 058,119	304,732	
227	E11 - 25	52 04'51"	52 04'51" NE	109,400	86,303	67,232	25	491 022,601	9 237 052,064	298,910	
228	E11 - 26CD	49 43'36"	49 43'36" NE	145,696	111,162	94,183	26CD	491 047,460	9 237 079,015	303,731	
229	E11 - 27	48 55'11"	48 55'11" NE	38,864	29,295	25,538	27	490 965,593	9 237 010,370	299,247	
Maior Coord (X)		491 989,823	Menor Coord (X)	490 546,115	Maior Coord (Y)		9 238 847,937	Menor Coord (Y)		9 236 600,047	

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado			Proprietario							Data 04/08/96							
IN	ALINHAMEN	AZIMUTE	DISTANCIA		LONG	PARC	LAT	PARC	COORD E (X)	COORD N (Y)	COORD (Z)						
DICE	EST P V	COMPENSADO	R	U	M	QD	HORIZONTAL	X	(R+,W-)	Y	(N+,S-)	P V	TOT	COMPENS	TOT	COMPENS	DO PONTO
1	NM - E4	231 28'36"	51	28'36"	SW		0,000	0,000	0,000	E4	490 930,541	9 238 538,875	284,703				
2	E4 - E6	220 14'26"	40	14'26"	SW		595,089	-384,426	-454,255	E6	490 546,115	9 238 084,620	285,547				
3	E6 - E17	225 06'26"	45	06'26"	SW		371,722	-263,339	-262,355	E17	490 282,776	9 237 822,265	291,192				
4	E6 - 1	39 10'41"	39	10'41"	NE		67,104	42,392	52,018	1	490 588,507	9 238 136,638	274,430				
5	E6 - 2R	17 15'16"	17	15'16"	NE		99,771	29,594	95,281	2R	490 575,709	9 238 179,901	270,271				
6	E6 - 3R	32 32'56"	32	32'56"	NE		188,137	101,221	158,587	3R	490 647,336	9 238 243,207	273,470				
7	E6 - 4	0 27'31"	0	27'31"	NE		145,022	1,161	145,017	4	490 547,276	9 238 229,637	272,938				
8	E6 - 5	8 38'21"	8	38'21"	NE		274,435	41,223	271,321	5	490 587,338	9 238 355,941	273,200				
9	E6 - 6	16 15'56"	16	15'56"	NE		292,519	81,932	280,811	6	490 628,047	9 238 365,431	278,985				
10	E6 - 7CCD	26 30'26"	26	30'26"	NE		326,064	146,526	291,788	7CCD	490 691,641	9 238 376,408	276,249				
11	E6 - 8C	23 54'01"	23	54'01"	NE		383,848	155,514	350,934	8C	490 701,629	9 238 435,554	282,244				
12	E6 - 9CD	17 36'26"	17	36'26"	NE		451,547	136,588	430,393	9CD	490 682,703	9 238 515,013	291,962				
13	E6 - 10	14 46'36"	14	46'36"	NE		382,395	97,531	369,748	10	490 643,646	9 238 454,368	293,108				
14	E6 - 11CD	6 44'46"	6	44'46"	NE		478,988	56,267	475,672	11CD	490 602,382	9 238 560,292	300,175				
15	E6 - 12	0 43'21"	0	43'21"	NE		452,324	5,704	452,288	12	490 551,819	9 238 536,908	297,929				
16	E6 - 13CD	6 59'06"	6	59'06"	NE		359,317	43 696	356,650	13CD	490 589,811	9 238 441,270	282,961				
17	E6 - 14	2 51'06"	2	51'06"	NE		438,235	21,802	437,692	14	490 567,917	9 238 522,312	294,498				
18	E6 - 15	354 50'01"	5	09'59"	NW		525,001	-47,275	522,868	15	490 498,840	9 238 607,488	302,903				
19	E6 - 16	343 32'01"	16	27'59"	NW		552,616	-156,641	529,951	16	490 389,474	9 238 614,571	305,473				
20	E6 - 17CD	339 50'21"	20	09'39"	NW		528,544	-182,166	496,159	17CD	490 363,949	9 238 580,779	302,997				
21	E6 - 18	352 27'16"	7	32'44"	NW		460,794	-60,509	456,804	18	490 485,606	9 238 541,424	288,437				
22	E6 - 19	340 02'21"	19	57'39"	NW		439,549	-150,052	413,144	19	490 396,063	9 238 497,764	282,472				
23	E6 - 20C	342 45'46"	17	14'14"	NW		348,773	-103,351	333,108	20C	490 442,764	9 238 417,728	290,034				
24	E6 - 21C	350 52'26"	9	07'34"	NW		288,658	-45,308	282,042	21C	490 500,807	9 238 366,662	281,872				
25	E6 - 22	346 09'06"	13	50'54"	NW		246,082	-58,900	238,929	22	490 487,215	9 238 323,549	273,270				
26	E6 - 23	333 14'11"	26	45'49"	NW		254,425	-114,570	227,169	23	490 431,545	9 238 311,789	273,108				
27	E6 - 24CD	310 49'16"	49	10'44"	NW		148,717	-112,542	97,216	24CD	490 433,573	9 238 181,836	273,856				
28	E6 - 25	336 30'06"	23	29'54"	NW		296,349	-118,161	271,773	25	490 427,954	9 238 356,393	274,629				
29	E6 - 26	318 14'51"	41	45'09"	NW		268,939	-179,090	200,636	26	490 367,025	9 238 285,256	273,174				
30	E6 - 27	331 09'46"	28	50'14"	NW		370,971	-178,928	324,968	27	490 367,187	9 238 409,588	282,141				
31	E6 - 28	316 13'06"	43	46'54"	NW		324,363	-224,431	234,184	28	490 321,684	9 238 318,804	289,173				
32	E6 - 29	327 09'06"	32	50'54"	NW		444,899	-241,321	373,764	29	490 304,794	9 238 458,384	284,071				
33	E6 - 30	312 15'06"	47	44'54"	NW		384,689	-284,746	258,660	30	490 261,369	9 238 343,280	289,390				
34	E6 - 31	328 57'16"	31	02'44"	NW		591,314	-304,952	506,613	31	490 241,163	9 238 591,233	300,231				
35	E6 - 32	319 00'46"	40	59'14"	NW		380,937	-249,853	287,553	32	490 296,262	9 238 372,173	293,433				
36	E6 - 33CD	318 30'06"	41	29'54"	NW		560,704	-371,521	419,953	33CD	490 174,594	9 238 504,573	305,554				
37	E6 - 34	319 34'46"	40	25'14"	NW		50,423	-32,694	38,387	34	490 513,421	9 238 123,007	274,120				
38	E6 - 35	313 52'11"	46	07'49"	NW		445,776	-321,368	308,932	35	490 224,747	9 238 393,552	297,245				
39	E6 - 36R	304 26'16"	55	33'44"	NW		114,652	-94,558	64,837	36R	490 451,557	9 238 149,457	272,091				
40	E6 - 37	310 48'36"	49	11'24"	NW		406,871	-307,953	265,912	37	490 238,162	9 238 350,532	290,151				
41	E6 - 38	301 13'56"	58	46'04"	NW		352,521	-301,431	182,785	38	490 244,684	9 238 267,405	274,726				
42	E6 - 39	306 04'41"	53	55'19"	NW		329,181	-266,049	193,850	39	490 280,066	9 238 278,470	276,017				
43	E6 - 40	1 40'06"	1	40'06"	NE		56,857	1,655	56,833	40	490 547,770	9 238 141,453	273,315				
44	E17 - E18	271 00'21"	88	59'39"	NW		358,916	-358,861	6,300	E18	489 923,915	9 237 828,565	287,516				
45	E17 - 1	223 58'21"	43	58'21"	SW		8,321	-5,777	-5,988	1	490 276,999	9 237 816,277	291,383				
46	E17 - 2	322 12'46"	37	47'14"	NW		55,755	-34,163	44,063	2	490 248,613	9 237 866,328	283,673				
47	E17 - 3	295 06'01"	64	53'59"	NW		122,189	-110,650	51,833	3	490 172,126	9 237 874,098	280,452				
48	E17 - 4	317 00'26"	42	59'34"	NW		121,049	-82,544	88,540	4	490 200,232	9 237 910,805	278,772				
49	E17 - 5	303 06'46"	56	53'14"	NW		262,812	-220,131	143,571	5	490 062,645	9 237 965,836	273,286				
50	E17 - 6	321 01'56"	38	58'04"	NW		238,803	-150,179	185,669	6	490 132,597	9 238 007,934	273,255				

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado		Proprietario										Data 04/08/96			
IN	ALINHAMEN	AZIMUTE		DISTANCIA		LONG	PARC	LAT	PARC	COORD E (X)		COORD N (Y)		COORD (Z)	
DICE	EST P V	COMPENSADO	R U M O	QD	HORIZONTAL	X	(E+,W-)	Y	(N+,S-)	P V	TOT	COMPENS	TOT	COMPENS	DO PONTO
101	E17 - 57	156 15'36"	23 44'24"	SE	297,656	119,832	-272,469	57	490 402,608	9 237 549,796	293,815				
102	E17 - 58PA	141 43'11"	38 16'49"	SE	312,117	193,359	-245,009	58PA	490 476,135	9 237 577,256	284,847				
103	E17 - 59PA	130 58'56"	49 01'04"	SE	327,211	247,016	-214,593	59PA	490 529,792	9 237 607,672	283,109				
104	E17 - 60	134 01'51"	45 58'09"	SE	420,060	302,009	-291,961	60	490 584,785	9 237 530,304	280,563				
105	E17 - 61	146 45'46"	33 14'14"	SE	404,674	221,805	-338,473	61	490 504,581	9 237 483,792	289,254				
106	E17 - 62CD	132 47'01"	47 12'59"	SE	513,573	376,924	-348,835	62CD	490 659,700	9 237 473,430	294,782				
107	E17 - 63	143 13'01"	36 46'59"	SE	474,752	284,275	-380,233	63	490 567,051	9 237 442,032	293,744				
108	E17 - 64	138 30'46"	41 29'14"	SE	573,222	379,733	-429,403	64	490 662,509	9 237 392,862	293,325				
109	E17 - 65CD	138 26'31"	41 33'29"	SE	638,603	423,636	-477,856	65CD	490 706,412	9 237 344,409	307,181				
110	E17 - 66	135 10'56"	44 49'04"	SE	614,593	433,199	-435,963	66	490 715,975	9 237 386,302	299,907				
111	E17 - 67	136 05'16"	43 54'44"	SE	666,479	462,240	-480,134	67	490 745,016	9 237 342,131	309,195				
112	E17 - 68	144 10'21"	35 49'39"	SE	668,088	391,063	-541,674	68	490 673,839	9 237 280,591	312,378				
113	E17 - 69	145 29'21"	34 30'39"	SE	642,618	364,083	-529,529	69	490 646,859	9 237 292,736	306,123				
114	E17 - 70	149 49'26"	30 10'34"	SE	599,648	301,419	-518,386	70	490 584,195	9 237 303,879	305,280				
115	E17 - 71	148 29'01"	31 30'59"	SE	498,972	260,834	-425,369	71	490 543,610	9 237 396,896	302,221				
116	E17 - 72	155 08'06"	24 51'54"	SE	463,328	194,821	-420,378	72	490 477,597	9 237 401,887	300,099				
117	E17 - 73	156 11'11"	23 48'49"	SE	521,484	210,556	-477,087	73	490 493,332	9 237 345,178	302,326				
118	E17 - 74	161 41'56"	18 18'04"	SE	370,615	116,377	-351,869	74	490 399,153	9 237 470,396	297,008				
119	E17 - 75	159 03'31"	20 56'29"	SE	316,762	113,215	-295,839	75	490 395,991	9 237 526,426	295,391				
120	E17 - 76	167 51'21"	12 08'39"	SE	329,848	69,223	-321,684	76	490 351,999	9 237 500,581	295,996				
121	E17 - 77	168 25'36"	11 34'24"	SE	263,417	52,847	-258,061	77	490 335,623	9 237 564,204	289,313				
122	E18 - E19	258 50'31"	78 50'31"	SW	729,751	-715,957	-141,219	E19	489 207,958	9 237 687,346	298,355				
123	E18 - 1CD	70 22'06"	70 22'06"	NE	66,009	62,172	22,177	1CD	489 986,087	9 237 850,742	277,496				
124	E18 - 2	130 46'36"	49 13'24"	SE	58,994	44,674	-38,530	2	489 968,589	9 237 790,035	274,738				
125	E18 - 3	132 20'16"	47 39'44"	SE	129,569	95,776	-87,265	3	490 019,691	9 237 741,300	274,945				
126	E18 - 4	108 38'26"	71 21'34"	SE	143,553	136,023	-45,884	4	490 059,938	9 237 782,681	274,794				
127	E18 - 5	125 09'06"	54 50'54"	SE	204,397	167,121	-117,680	5	490 091,036	9 237 710,885	286,533				
128	E18 - 6	108 09'11"	71 50'49"	SE	206,712	196,423	-64,402	6	490 120,338	9 237 764,163	283,988				
129	E18 - 7	125 02'26"	54 57'34"	SE	243,540	199,397	-139,830	7	490 123,312	9 237 688,735	289,207				
130	E18 - 8	108 56'31"	71 03'29"	SE	289,604	273,921	-94,008	8	490 197,836	9 237 734,557	292,881				
131	E18 - 9	134 44'01"	45 15'59"	SE	216,083	153,502	-152,082	9	490 077,417	9 237 676,483	286,304				
132	E18 - 10	138 23'46"	41 36'14"	SE	172,115	114,280	-128,700	10	490 038,195	9 237 699,865	283,047				
133	E18 - 11	141 50'01"	38 09'59"	SE	136,128	84,120	-107,026	11	490 008,035	9 237 721,539	275,271				
134	E18 - 12	156 50'11"	23 09'49"	SE	87,896	34,575	-80,810	12	489 958,490	9 237 747,755	275,112				
135	E18 - 13C	205 54'41"	25 54'41"	SW	58,790	-25,690	-52,880	13C	489 898,225	9 237 775,685	285,077				
136	E18 - 14CD	197 24'26"	17 24'26"	SW	89,621	-26,811	-85,517	14CD	489 897,104	9 237 743,048	284,931				
137	E18 - 15PC	100 12'06"	79 47'54"	SE	151,087	148,698	-26,760	15PC	490 072,613	9 237 801,805	274,326				
138	E18 - 16PC	158 12'01"	21 47'59"	SE	148,357	55,094	-137,748	16PC	489 979,009	9 237 690,817	275,296				
139	E18 - 17	148 40'26"	31 19'34"	SE	196,033	101,919	-167,456	17	490 025,834	9 237 661,109	278,744				
140	E18 - 18	157 37'41"	22 22'19"	SE	258,160	98,260	-238,729	18	490 022,175	9 237 589,836	275,859				
141	E18 - 19	143 12'06"	36 47'54"	SE	290,846	174,217	-232,895	19	490 098,132	9 237 595,670	284,049				
142	E18 - 20	154 41'21"	25 18'39"	SE	332,667	142,225	-300,732	20	490 066,140	9 237 527,833	280,117				
143	E18 - 21	152 39'26"	27 20'34"	SE	412,754	189,583	-366,639	21	490 113,498	9 237 461,926	290,016				
144	E18 - 22	143 12'26"	36 47'34"	SE	398,886	238,902	-319,431	22	490 162,817	9 237 509,134	286,628				
145	E18 - 23	152 54'46"	27 05'14"	SE	473,625	215,663	-421,675	23	490 139,578	9 237 406,890	292,878				
146	E18 - 24	149 08'31"	30 51'29"	SE	560,781	287,632	-481,397	24	490 211,547	9 237 347,168	294,301				
147	E18 - 25	156 17'36"	23 42'24"	SE	582,129	234,047	-533,007	25	490 157,962	9 237 295,558	295,086				
148	E18 - 26	156 42'56"	23 17'04"	SE	737,136	291,387	-677,099	26	490 215,302	9 237 151,466	304,196				
149	E18 - 27	150 54'11"	29 05'49"	SE	688,674	334,894	-601,762	27	490 258,809	9 237 226,803	299,030				
150	E18 - 28CD	165 00'46"	14 59'14"	SE	723,668	187,143	-699,051	28CD	490 111,058	9 237 129,514	301,322				

Imovel - BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado		Proprietario										Data 04/08/96			
IN	ALINHAMEN	AZIMUTE		DISTANCIA		LONG	PARC	LAT	PARC	COORD E (X)		COORD N (Y)		COORD (Z)	
DICE	EST P V	COMPENSADO	R U M O	QD	HORIZONTAL	X	(E+,W-)	Y	(N+,S-)	P V	TOT	COMPENS	TOT	COMPENS	DO PONTO
151	E10 - 29	160 44'01"	19 15'59"	SE	742,160	244,884	-700,595	29	490 168,799	9 237	127,970	307,904			
152	E10 - 30	167 48'41"	12 11'19"	SE	654,961	138,282	-640,197	30	490 062,197	9 237	188,368	293,210			
153	E10 - 31	163 00'41"	16 59'19"	SE	678,090	198,125	-648,500	31	490 122,040	9 237	180,065	296,341			
154	E10 - 32CD	172 14'31"	7 45'29"	SE	588,184	79,399	-582,800	32CD	490 003,314	9 237	245,765	287,309			
155	E10 - 33	169 32'06"	10 27'54"	SE	537,057	97,548	-528,124	33	490 021,463	9 237	300,441	289,720			
156	E10 - 34CD	170 40'16"	9 19'44"	SE	467,435	75,772	-461,253	34CD	489 999,687	9 237	367,312	283,914			
157	E10 - 35	164 05'41"	15 54'19"	SE	268,525	73,589	-258,245	35	489 997,504	9 237	570,320	276,804			
158	E10 - 36	189 22'21"	9 22'21"	SW	222,834	-36,289	-219,859	36	489 887,626	9 237	608,706	288,083			
159	E10 - 37	198 30'26"	10 30'26"	SW	161,464	-51,253	-153,114	37	489 872,662	9 237	675,451	288,360			
160	E10 - 38	324 06'36"	35 53'24"	NW	33,744	-18,782	-27,337	38	489 904,133	9 237	855,902	274,346			
161	E10 - 39	59 55'36"	59 55'36"	NE	63,162	54,659	31,651	39	489 978,574	9 237	860,216	283,043			
162	E10 - 40CD	322 19'41"	37 40'19"	NW	121,655	-74,348	96,293	40CD	489 849,567	9 237	924,858	274,641			
163	E10 - 41R	321 48'41"	38 11'19"	NW	141,272	-87,342	111,037	41R	489 836,573	9 237	939,602	271,477			
164	E10 - 42	23 24'16"	23 24'16"	NE	135,954	54,004	124,768	42	489 977,919	9 237	953,333	276,217			
165	E10 - 43	354 42'06"	5 17'54"	NW	196,194	-18,117	195,356	43	489 905,798	9 238	023,921	274,445			
166	E10 - 44	382 08'46"	57 51'14"	NW	230,941	-195,516	122,879	44	489 728,379	9 237	951,444	275,764			
167	E10 - 45CD	353 23'56"	6 36'04"	NW	227,409	-26,142	225,901	45CD	489 897,773	9 238	054,466	274,632			
168	E10 - 46CD	335 26'41"	24 33'19"	NW	350,742	-145,758	319,021	46CD	489 778,157	9 238	147,586	274,407			
169	E10 - 47C	331 53'46"	28 06'14"	NW	351,699	-165,675	310,232	47C	489 758,240	9 238	138,797	275,594			
170	E10 - 48CD	329 09'06"	30 50'54"	NW	261,403	-134,039	224,422	48CD	489 789,876	9 238	052,987	274,110			
171	E10 - 49CD	330 10'36"	29 49'24"	NW	416,932	-207,352	361,715	49CD	489 716,563	9 238	190,280	289,457			
172	E10 - 50CD	321 06'11"	38 53'49"	NW	385,436	-242,024	299,976	50CD	489 681,891	9 238	128,541	279,331			
173	E10 - 51CD	330 08'41"	29 51'19"	NW	417,537	-207,854	362,124	51CD	489 716,061	9 238	190,689	289,497			
174	E10 - 52	318 48'01"	41 11'59"	NW	450,626	-296,821	339,059	52	489 627,094	9 238	167,624	291,659			
175	E10 - 53	324 59'01"	35 00'59"	NW	510,163	-292,737	417,817	53	489 631,178	9 238	246,382	302,182			
176	E10 - 54	318 36'01"	41 23'59"	NW	508,529	-336,294	381,455	54	489 587,621	9 238	210,020	300,196			
177	E10 - 55	308 20'41"	51 39'19"	NW	654,691	-513,469	406,165	55	489 410,446	9 238	234,730	302,892			
178	E10 - 56	314 48'31"	45 11'29"	NW	718,694	-509,888	506,493	56	489 414,027	9 238	335,058	305,208			
179	E10 - 57CD	298 42'21"	61 17'39"	NW	561,641	-492,614	269,763	57CD	489 431,301	9 238	098,328	302,656			
180	E10 - 58	314 50'01"	45 09'59"	NW	629,910	-446,705	444,118	58	489 477,210	9 238	272,683	296,283			
181	E10 - 59	301 36'01"	58 23'59"	NW	503,384	-428,744	263,768	59	489 495,171	9 238	092,333	297,705			
182	E10 - 60	311 25'06"	48 34'54"	NW	483,519	-362,591	319,873	60	489 561,324	9 238	148,438	281,087			
183	E10 - 61	299 26'56"	60 33'04"	NW	459,807	-400,397	226,063	61	489 523,518	9 238	054,628	288,385			
184	E10 - 62CD	296 36'36"	63 23'24"	NW	428,509	-383,120	191,936	62CD	489 540,795	9 238	020,501	282,388			
185	E10 - 63C	302 34'06"	57 25'54"	NW	369,607	-311,486	198,961	63C	489 612,429	9 238	027,526	276,582			
186	E10 - 64C	298 52'21"	61 07'39"	NW	378,445	-331,403	182,737	64C	489 592,512	9 238	011,302	276,540			
187	E10 - 65PÇ	297 18'41"	62 41'19"	NW	364,374	-323,756	167,184	65PÇ	489 600,159	9 237	995,749	276,465			
188	E10 - 66CB	293 47'31"	66 12'29"	NW	402,289	-368,101	162,290	66CB	489 555,814	9 237	990,855	280,562			
189	E10 - 67D	279 58'26"	80 01'34"	NW	376,819	-371,124	65,265	67D	489 552,791	9 237	893,830	275,984			
190	E10 - 68C	280 01'46"	79 58'14"	NW	412,741	-406,434	71,881	68C	489 517,481	9 237	900,446	278,599			
191	E10 - 69C	273 35'16"	86 24'44"	NW	480,514	-479,572	30,069	69C	489 444,343	9 237	858,634	285,492			
192	E10 - 70	258 48'26"	78 48'26"	SW	210,183	-206,185	-40,799	70	489 717,730	9 237	787,766	275,034			
193	E10 - 71D	258 30'11"	78 30'11"	SW	194,654	-190,748	-38,798	71D	489 733,167	9 237	789,767	275,011			
194	E10 - 72R	262 53'36"	82 53'36"	SW	111,294	-110,439	-13,769	72R	489 813,476	9 237	814,796	271,252			
195	E19 - E21	171 37'36"	8 22'24"	SE	813,779	118,505	-805,104	E21	489 326,463	9 236	882,242	298,652			
196	E19 - 1PÇ	62 14'36"	62 14'36"	NE	532,308	471,057	247,905	1PÇ	489 679,015	9 237	935,251	275,124			
197	E19 - 2CD	62 23'41"	62 23'41"	NE	524,584	464,866	243,081	2CD	489 672,824	9 237	930,427	275,197			
198	E19 - 3CD	67 59'06"	67 59'06"	NE	440,975	408,822	165,299	3CD	489 616,780	9 237	852,645	274,766			
199	E19 - 4CD	70 50'51"	70 50'51"	NE	399,515	377,401	131,074	4CD	489 585,359	9 237	818,420	274,729			
200	E19 - 5CD	60 15'16"	60 15'16"	NE	354,877	308,117	176,072	5CD	489 516,075	9 237	863,418	278,171			

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado

Proprietario

Data 04/08/96

IN DICE	ALINHAMENTOS		AZIMUTE		DISTANCIA HORIZONTAL	LONG PARC X (E+,W-)	LAT PARC Y (N+,S-)	COORD E (X)		COORD N (Y)		COORD (Z) DO PONTO
	EST	P V	COMPENSADO	R U M O QD				TOT	COMPENS	TOT	COMPENS	
451	E23	- 9	143 47'21"	36 12'39" SE	268,400	158,560	-216,558	9	488 747,101	9 236 474,370	295,200	
452	E23	- 10CD	165 56'16"	14 03'44" SE	178,873	43,462	-173,513	10CD	488 632,003	9 236 517,415	281,331	
453	E23	- 11CD	167 42'36"	12 17'24" SE	218,179	46,442	-213,179	11CD	488 634,983	9 236 477,749	280,757	
454	E23	- 12	147 35'46"	32 24'14" SE	469,331	251,507	-396,252	12	488 840,048	9 236 294,676	301,019	
455	E23	- 13CD	177 09'11"	2 50'49" SE	223,603	11,106	-223,327	13CD	488 599,647	9 236 467,601	285,951	
456	E23	- 14	149 47'51"	30 12'09" SE	562,045	282,741	-485,749	14	488 871,282	9 236 205,179	307,925	
457	E23	- 15	172 27'01"	7 32'59" SE	339,895	44,658	-336,949	15	488 633,199	9 236 353,979	290,376	
458	E23	- 16	156 50'16"	23 09'44" SE	598,640	235,467	-550,387	16	488 824,008	9 236 140,541	309,165	
459	E23	- 17CD	169 28'16"	10 31'44" SE	414,782	75,794	-407,798	17CD	488 664,335	9 236 283,130	300,217	
460	E23	- 18	164 23'51"	15 36'09" SE	605,693	162,908	-583,374	18	488 751,449	9 236 107,554	309,994	
461	E23	- 19	162 26'51"	17 33'09" SE	527,378	159,046	-502,824	19	488 747,587	9 236 188,104	302,930	
462	E23	- 20	157 27'41"	22 32'19" SE	545,911	209,251	-504,215	20	488 797,792	9 236 186,713	298,704	
463	E23	- 21	167 09'11"	12 50'49" SE	439,820	97,793	-428,810	21	488 686,334	9 236 262,118	301,153	
464	E23	- 22	160 14'01"	19 45'59" SE	454,461	153,692	-427,684	22	488 742,233	9 236 263,244	295,004	
465	E23	- 23	161 19'26"	18 40'34" SE	387,345	124,035	-366,949	23	488 712,576	9 236 323,979	292,201	
466	E23	- 24	162 41'46"	17 18'14" SE	325,022	96,674	-310,312	24	488 685,215	9 236 380,616	283,539	
467	E23	- 25	184 23'41"	4 23'41" SW	246,457	-18,885	-245,732	25	488 569,656	9 236 445,196	292,051	
468	E23	- 26	189 00'16"	9 00'16" SW	211,936	-33,170	-209,324	26	488 555,371	9 236 481,604	284,333	
469	E23	- 27	181 23'41"	1 23'41" SW	140,108	-3,410	-140,066	27	488 585,131	9 236 550,862	279,537	
470	E23	- 28	175 52'26"	4 07'34" SE	64,622	4,650	-64,455	28	488 593,191	9 236 626,473	281,504	
471	E23	- 29C	223 14'21"	43 14'21" SW	33,890	-23,216	-24,689	29C	488 565,325	9 236 666,239	289,644	
472	E23	- 30CD	329 50'46"	30 09'14" NW	54,107	-27,179	46,785	30CD	488 561,362	9 236 737,713	278,434	
473	E23	- 31	347 53'56"	12 06'04" NW	110,505	-23,166	108,049	31	488 565,375	9 236 798,977	276,753	
474	E23	- 32CD	357 40'26"	2 19'34" NW	173,034	-7,023	172,891	32CD	488 581,518	9 236 863,819	276,824	
475	E23	- 33CD	350 14'31"	9 45'29" NW	145,575	-24,673	143,469	33CD	488 563,868	9 236 834,397	276,843	
476	E23	- 34CD	4 50'01"	4 50'01" NE	237,279	19,994	236,435	34CD	488 608,535	9 236 927,363	277,330	
477	E23	- 35R	356 38'11"	3 21'49" NW	240,762	-14,126	240,347	35R	488 574,415	9 236 931,275	274,137	
478	E23	- 36	3 46'11"	3 46'11" NE	294,200	19,343	293,563	36	488 607,884	9 236 984,491	277,794	
479	E23	- 37	353 55'51"	6 04'09" NW	312,366	-33,026	310,615	37	488 555,515	9 237 001,543	276,677	
480	E23	- 38	5 25'21"	5 25'21" NE	370,226	34,986	368,569	38	488 623,527	9 237 059,497	277,505	
481	E23	- 39	355 32'51"	4 27'09" NW	412,951	-32,058	411,705	39	488 556,483	9 237 102,633	276,718	
482	E23	- 40	5 22'51"	5 22'51" NE	406,243	38,096	404,453	40	488 626,637	9 237 095,381	277,199	
483	E23	- 41	5 28'21"	5 28'21" NE	479,989	45,776	477,801	41	488 634,317	9 237 168,729	281,295	
484	E23	- 42	357 57'01"	2 02'59" NW	548,857	-19,631	548,506	42	488 568,910	9 237 239,434	283,487	
485	E23	- 43	6 22'36"	6 22'36" NE	569,978	63,304	566,452	43	488 651,845	9 237 257,380	290,019	
486	E23	- 44CD	4 18'31"	4 18'31" NE	646,324	48,557	644,497	44CD	488 637,098	9 237 335,425	295,460	
487	E23	- 45CD	7 35'46"	7 35'46" NE	626,430	82,887	620,933	45CD	488 671,348	9 237 311,861	296,370	
488	E23	- 46CD	1 59'46"	1 59'46" NE	590,898	20,585	590,639	46CD	488 609,126	9 237 281,567	288,363	
489	E23	- 47EL	4 58'51"	4 58'51" NE	814,345	70,703	811,270	47EL	488 659,244	9 237 502,198	300,522	
490	E23	- 48GR	4 49'11"	4 49'11" NE	743,516	62,471	740,887	48GR	488 651,012	9 237 431,815	294,525	
491	E23	- 49	0 25'31"	0 25'31" NE	791,964	5,878	791,942	49	488 594,419	9 237 482,870	300,031	
492	E23	- 50GR	2 46'26"	2 46'26" NE	822,823	39,820	821,859	50GR	488 628,361	9 237 512,787	299,680	
493	E23	- 51	358 16'16"	1 43'44" NW	794,777	-23,979	794,415	51	488 564,562	9 237 485,343	300,229	
494	E23	- 52	358 57'46"	1 02'14" NW	735,490	-13,314	735,369	52	488 575,227	9 237 426,297	296,482	
495	E23	- 53	355 24'41"	4 35'19" NW	820,293	-65,624	817,664	53	488 522,917	9 237 508,592	302,347	
496	E23	- 54	354 11'11"	5 48'49" NW	773,679	-78,368	769,700	54	488 510,173	9 237 460,628	298,767	
497	E23	- 55CD	358 26'11"	1 33'49" NW	694,382	-18,947	694,123	55CD	488 569,594	9 237 385,051	291,168	
498	E23	- 56CD	355 52'41"	4 07'19" NW	718,015	-51,611	716,158	56CD	488 536,930	9 237 407,086	292,266	
499	E23	- 57	357 32'31"	2 27'29" NW	590,272	-25,316	589,729	57	488 563,225	9 237 280,657	284,999	
500	E23	- 58PA	356 09'26"	3 50'34" NW	566,267	-37,961	564,994	58PA	488 550,590	9 237 255,922	283,235	

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado		Proprietario										Data 04/08/96			
IN	ALINHAMENTO	AZIMUTE		DISTANCIA		LONG	PARC	LAT	PARC	COORD E (X)		COORD N (Y)		COORD (Z)	
DICE	EST P V	COMPENSADO	R U M O	QD	HORIZONTAL	X	(E+,W-)	Y	(N+,S-)	P V	TOT	COMPENS	TOT	COMPENS	DO PONTO
701	E26 - 60	118 07'16"	61 52'44"	SE	752,079	663,299	-354,483	60	488 569,618	9 236 102,081	300,463				
702	E26 - 61	114 43'21"	65 16'39"	SE	771,807	701,066	-322,788	61	488 607,385	9 236 133,776	300,900				
703	E26 - 62	115 49'51"	64 10'09"	SE	670,973	603,932	-292,353	62	488 510,251	9 236 164,211	294,952				
704	E26 - 63	112 03'41"	67 56'19"	SE	683,255	633,228	-256,630	63	488 539,547	9 236 199,934	286,768				
705	E26 - 64CD	115 53'06"	64 06'54"	SE	598,161	529,152	-256,771	64CD	488 435,471	9 236 199,793	281,371				
706	E26 - 65C	11 07'56"	11 07'56"	NE	580,294	112,040	569,375	65C	488 018,359	9 237 025,939	290,038				
707	E26 - 66CD	115 14'36"	64 45'24"	SE	506,625	458,245	-216,057	66CD	488 364,564	9 236 240,507	279,037				
708	E26 - 67	107 38'51"	72 21'09"	SE	526,013	501,259	-159,466	67	488 407,578	9 236 297,098	286,228				
709	E26 - 68	95 42'56"	84 17'04"	SE	517,851	515,277	-51,573	68	488 421,596	9 236 404,991	287,921				
710	E26 - 69	106 17'01"	73 42'59"	SE	645,300	619,414	-180,937	69	488 525,733	9 236 275,627	282,334				
711	E26 - 70	98 21'26"	81 38'34"	SE	612,761	606,254	-89,061	70	488 512,573	9 236 367,503	288,686				
712	E26 - 71	105 45'01"	74 14'59"	SE	732,103	704,615	-198,726	71	488 610,934	9 236 257,838	293,894				
713	E26 - 72	107 32'21"	72 27'39"	SE	817,506	779,501	-246,362	72	488 685,820	9 236 210,202	301,209				
714	E26 - 73	102 55'51"	77 04'09"	SE	778,086	758,354	-174,116	73	488 664,673	9 236 282,448	300,166				
715	E26 - 74	110 51'36"	69 08'24"	SE	834,644	779,936	-297,205	74	488 686,255	9 236 159,359	296,274				
716	E26 - 75C	85 14'16"	85 14'16"	NE	599,611	597,541	49,780	75C	488 503,860	9 236 506,344	285,518				
717	E26 - 76C	92 07'51"	87 52'09"	SE	538,669	538,297	-20,029	76C	488 444,616	9 236 436,535	288,489				
718	E26 - 77C	81 40'31"	81 40'31"	NE	598,676	592,368	86,678	77C	488 498,687	9 236 543,242	279,414				
719	E26 - 78C	128 10'16"	51 49'44"	SE	599,449	471,268	-370,467	78C	488 377,587	9 236 086,097	280,780				
720	E26 - 79CD	128 15'11"	51 44'49"	SE	567,120	445,350	-351,124	79CD	488 351,669	9 236 105,440	279,269				
721	E26 - 80	130 38'11"	49 21'49"	SE	574,940	436,298	-374,433	80	488 342,617	9 236 082,131	279,709				
722	E26 - 81CD	129 40'41"	50 19'19"	SE	450,175	346,475	-287,425	81CD	488 252,794	9 236 169,139	278,518				
723	E26 - 82	133 30'41"	46 29'19"	SE	496,045	359,750	-341,526	82	488 266,069	9 236 115,038	278,526				
724	E26 - 83	136 45'11"	43 14'49"	SE	408,768	280,065	-297,750	83	488 186,384	9 236 158,814	278,787				
725	E26 - 84R	134 07'36"	45 52'24"	SE	281,238	201,873	-195,811	84R	488 108,192	9 236 260,753	275,793				
726	E26 - 85R	140 11'46"	39 48'14"	SE	352,341	225,555	-270,682	85R	488 131,874	9 236 185,882	275,168				
727	E26 - 86	143 33'16"	36 26'44"	SE	336,282	199,771	-270,513	86	488 106,090	9 236 186,051	278,824				
728	E26 - 87	146 46'46"	33 13'14"	SE	215,650	118,147	-180,406	87	488 024,466	9 236 276,158	288,823				
729	E26 - 88	151 08'11"	28 51'49"	SE	207,480	100,156	-181,705	88	488 006,475	9 236 274,859	291,127				
730	E26 - 89R	142 45'51"	37 14'09"	SE	343,217	207,680	-273,253	89R	488 113,999	9 236 183,311	278,904				
731	E26 - 90	147 54'51"	32 05'09"	SE	363,733	193,211	-308,174	90	488 099,530	9 236 148,390	279,011				
732	E26 - 91	145 45'06"	34 14'54"	SE	440,704	248,020	-364,289	91	488 154,339	9 236 092,275	279,391				
733	E26 - 92CD	151 54'06"	28 05'54"	SE	502,880	236,850	-443,611	92CD	488 143,169	9 236 012,953	279,438				
734	E26 - 93	141 39'56"	38 20'04"	SE	524,537	325,344	-411,449	93	488 231,663	9 236 045,115	278,803				
735	E26 - 94	137 55'41"	42 04'19"	SE	595,126	398,772	-441,764	94	488 305,091	9 236 014,800	279,253				
736	E26 - 95	142 57'01"	37 02'59"	SE	621,805	374,642	-496,271	95	488 280,961	9 235 960,293	279,273				
737	E26 - 96C	136 42'11"	43 17'49"	SE	683,094	468,452	-497,162	96C	488 374,771	9 235 959,402	292,407				
738	E26 - 97C	140 08'51"	39 51'09"	SE	663,692	425,303	-509,514	97C	488 331,622	9 235 947,050	284,565				
739	E26 - 98MR	136 48'06"	43 11'54"	SE	677,902	464,041	-494,183	98MR	488 370,360	9 235 962,381	291,304				
740	E26 - 99	130 39'31"	49 20'29"	SE	662,223	502,366	-431,472	99	488 408,685	9 236 025,092	287,465				
741	E26 - 100	131 25'21"	48 34'39"	SE	723,270	542,345	-478,520	100	488 448,664	9 235 978,044	305,387				
742	E26 - 101	126 39'41"	53 20'19"	SE	666,029	534,274	-397,676	101	488 440,593	9 236 058,888	291,623				
743	E26 - 102	129 04'26"	50 55'34"	SE	715,850	555,739	-451,216	102	488 462,058	9 236 005,348	302,257				
744	E26 - 103	129 12'31"	50 47'29"	SE	746,149	578,153	-471,675	103	488 484,472	9 235 984,889	308,065				
745	E26 - 104	133 01'21"	46 58'39"	SE	742,230	542,634	-506,413	104	488 448,953	9 235 950,151	304,081				
746	E26 - 105	136 45'11"	43 14'49"	SE	730,376	500,413	-532,011	105	488 406,732	9 235 924,553	297,000				
747	E26 - E28	165 43'06"	14 16'54"	SE	763,163	188,264	-739,577	E28	488 094,583	9 235 716,987	306,456				
748	E27 - E27A	322 51'21"	37 08'39"	NW	1 069,848	-645,998	852,796	E27A	486 912,846	9 237 070,053	315,463				
749	E27 - 1CD	122 14'21"	57 45'39"	SE	56,458	47,754	-30,118	1CD	487 606,598	9 236 187,139	300,544				
750	E27 - 2CD	122 50'31"	57 09'29"	SE	126,911	106,627	-68,827	2CD	487 665,471	9 236 148,430	299,513				

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado

Proprietario

Data 04/08/96

IN DICE	ALINHAMEN EST P V		AZIMUTE COMPENSADO R U M O QD		DISTANCIA LONG PARC LAT PARC		COORD E (X) COORD N (Y) COORD (Z)	
					HORIZONTAL X (E+,W-)	Y (N+,S-)	P V TOT COMPENS	TOT COMPENS DO PONTO
751	E27	- 3C	110 33'36"	69 26'24" SE	209,727	196,368	-73,654	3C 487 755,212 9 236 143,603 290,385
752	E27	- 4C	105 28'26"	74 31'34" SE	250,848	241,755	-66,926	4C 487 800,599 9 236 150,331 287,797
753	E27	- 5C	98 14'51"	81 45'09" SE	311,374	308,154	-44,666	5C 487 866,998 9 236 172,591 283,427
754	E27	- 6CD	98 27'41"	81 32'19" SE	226,124	223,663	-33,273	6CD 487 782,507 9 236 183,984 282,310
755	E27	- 7GR	93 10'41"	86 49'19" SE	286,350	285,910	-15,875	7GR 487 844,754 9 236 201,382 277,174
756	E27	- 8ÇD	93 24'06"	86 35'54" SE	320,563	319,998	-19,021	8ÇD 487 878,842 9 236 198,236 278,425
757	E27	- 9CD	91 24'31"	88 35'29" SE	331,263	331,163	-8 143	9CD 487 890,007 9 236 209,114 278,224
758	E27	- 10GD	59 22'11"	59 22'11" NE	112,782	97,046	57,462	10GD 487 655,890 9 236 274,719 278,613
759	E27	- 11CD	41 52'01"	41 52'01" NE	168,936	112,748	125,806	11CD 487 671,592 9 236 343,063 283,817
760	E27	- 12CD	93 06'26"	86 53'34" SE	408,306	407,706	-22,132	12CD 487 966,550 9 236 195,125 280,588
761	E27	- 13CD	38 08'06"	38 08'06" NE	181,681	112,191	142,903	13CD 487 671,035 9 236 360,160 285,418
762	E27	- 14	84 26'01"	84 26'01" NE	397,799	395,923	38,586	14 487 954,767 9 236 255,843 277,878
763	E27	- 15CD	8 43'41"	8 43'41" NE	201,114	30,518	198,785	15CD 487 589,362 9 236 416,042 291,225
764	E27	- 16CD	5 04'51"	5 04'51" NE	193,486	17,135	192,726	16CD 487 575,979 9 236 409,983 290,017
765	E27	- 17GD	356 10'01"	3 49'59" NW	132,016	-8,825	131,721	17GD 487 550,019 9 236 348,978 279,869
766	E27	- 18CD	305 56'41"	54 03'19" NW	57,900	-46,875	33,988	18CD 487 511,969 9 236 251,245 299,924
767	E27	- 19C	68 40'06"	68 40'06" NE	288,072	268,336	104,791	19C 487 827,180 9 236 322,048 295,639
768	E27	- 20C	74 36'26"	74 36'26" NE	261,803	252,412	69,492	20C 487 811,256 9 236 286,749 292,265
769	E27	- 21CD	76 06'41"	76 06'41" NE	242,737	235,640	58,265	21CD 487 794,484 9 236 275,522 291,979
770	E27	- 22C	75 46'41"	75 46'41" NE	236,554	229,304	58,116	22C 487 788,148 9 236 275,373 291,256
771	E27	- 23CD	75 03'41"	75 03'41" NE	218,618	211,229	56,356	23CD 487 770,073 9 236 273,613 290,067
772	E27	- 24GR	68 07'56"	68 07'56" NE	171,666	159,314	63,940	24GR 487 718,158 9 236 281,197 278,365
773	E27	- 25CD	56 19'56"	56 19'56" NE	231,126	192,358	128,131	25CD 487 751,202 9 236 345,388 282,107
774	E27	- 26	55 02'06"	55 02'06" NE	272,619	223,412	156,231	26 487 782,256 9 236 373,488 291,239
775	E27	- 27	50 26'26"	50 26'26" NE	330,913	255,122	210,751	27 487 813,966 9 236 428,008 294,007
776	E27	- 28	50 31'01"	50 31'01" NE	390,698	301,546	248,425	28 487 860,390 9 236 465,682 304,409
777	E27	- 29CD	40 00'51"	40 00'51" NE	403,270	259,293	308,859	29CD 487 818,137 9 236 526,116 291,813
778	E27	- 30CD	307 57'51"	52 02'09" NW	135,471	-106,805	83,337	30CD 487 452,039 9 236 300,594 295,630
779	E27	- 31	36 22'16"	36 22'16" NE	452,632	268,417	364,456	31 487 827,261 9 236 581,713 297,295
780	E27	- 32GR	325 53'46"	34 06'14" NW	228,650	-128,203	189,327	32GR 487 430,641 9 236 406,584 281,843
781	E27	- 33	337 13'06"	22 46'54" NW	295,517	-114,430	272,463	33 487 444,414 9 236 489,720 290,984
782	E27	- 34	28 25'26"	28 25'26" NE	401,206	190,970	352,841	34 487 749,814 9 236 570,098 285,050
783	E27	- 35	345 48'51"	14 11'09" NW	395,752	-96,986	383,684	35 487 461,858 9 236 600,941 291,614
784	E27	- 36PA	23 00'56"	23 00'56" NE	356,250	139,287	327,892	36PA 487 698,131 9 236 545,149 287,646
785	E27	- 37PA	352 51'56"	7 08'04" NW	444,901	-55,256	441,456	37PA 487 503,588 9 236 658,713 302,868
786	E27	- 38GR	42 26'16"	42 26'16" NE	217,137	146,522	160,249	38GR 487 705,366 9 236 377,506 280,716
787	E27	- 39CD	13 41'56"	13 41'56" NE	230,577	54,605	224,018	39CD 487 613,449 9 236 441,275 291,822
788	E27	- 40	4 59'41"	4 59'41" NE	382,620	33,312	381,167	40 487 592,156 9 236 598,424 289,717
789	E27	- 41	11 47'11"	11 47'11" NE	380,685	77,760	372,659	41 487 636,604 9 236 589,916 289,112
790	E27	- 42	5 52'21"	5 52'21" NE	411,951	42,149	409,789	42 487 600,993 9 236 627,046 300,626
791	E27	- 43	12 46'06"	12 46'06" NE	417,924	92,365	407,589	43 487 651,209 9 236 624,846 301,581
792	E27	- 44	4 29'46"	4 29'46" NE	459,981	36,059	458,565	44 487 594,903 9 236 675,822 302,728
793	E27	- 45	359 49'16"	0 10'44" NW	511,702	-1,598	511,700	45 487 557,246 9 236 728,957 302,161
794	E27	- 46	0 35'51"	0 35'51" NE	417,374	4,352	417,351	46 487 563,196 9 236 634,608 293,505
795	E27	- 47	3 04'21"	3 04'21" NE	403,392	21,622	402,812	47 487 580,466 9 236 620,069 294,926
796	E27	- 48	359 49'46"	0 10'14" NW	416,750	-1,241	416,748	48 487 557,603 9 236 634,005 286,267
797	E27	- 49	0 56'11"	0 56'11" NE	385,102	6,293	385,051	49 487 565,137 9 236 602,308 287,765
798	E27	- 50GR	357 43'16"	2 16'44" NW	376,126	-14,956	375,829	50GR 487 543,888 9 236 593,086 286,304
799	E27	- 51GR	351 40'21"	8 19'39" NW	366,069	-53,018	362,209	51GR 487 505,826 9 236 579,466 286,774
800	E27	- 52	344 00'51"	15 59'09" NW	389,711	-107,326	374,641	52 487 451,518 9 236 591,898 288,151

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado		Proprietario										Data 09/08/96	
IN DICE	ALINHAMEN EST P V	AZIMUTE COMPENSADO	R U M O	DISTANCIA QD HORIZONTAL	LONG PARC X	LAT PARC Y	COORD E (X)	COORD N (Y)	COORD (Z)	DO PONTO			
101	E28 - 97	179 03'21"	0 56'39" SE	336,293	5,541	-336,247	97 488 100,123	9 235 380,744	279,744				
102	E28 - 98CD	173 36'11"	6 23'49" SE	237,986	26,515	-236,504	98CD 488 121,097	9 235 480,487	279,039				
103	E28 - 99C	190 34'06"	10 34'06" SW	182,349	-33,444	-179,256	99C 488 061,138	9 235 537,735	291,526				
104	E28 - 100C	191 46'56"	11 46'56" SW	286,142	-58,428	-280,113	100C 488 036,154	9 235 436,878	287,810				
105	E28 - COLE	203 53'21"	23 53'21" SW	315,510	-127,772	-288,480	COLE 487 966,810	9 235 428,511	280,872				
106	E28 - 101	210 50'46"	30 50'46" SW	269,756	-138,313	-231,598	101 487 956,269	9 235 485,393	279,715				
107	E28 - 102C	204 23'51"	24 23'51" SW	330,893	-136,680	-301,345	102C 487 957,902	9 235 415,646	281,302				
108	E28 - 103	208 41'51"	28 41'51" SW	184,592	-88,638	-161,918	103 488 005,944	9 235 555,073	279,664				
109	E28 - 104C	200 23'16"	20 23'16" SW	332,948	-115,990	-312,091	104C 487 978,592	9 235 404,900	282,966				
110	E28 - 105C	202 06'31"	22 06'31" SW	360,666	-135,742	-334,147	105C 487 958,840	9 235 382,844	282,477				
111	E28 - 106C	203 22'06"	23 22'06" SW	383,560	-152,135	-352,098	106C 487 942,447	9 235 364,893	282,317				
112	E28 - 107C	202 51'51"	22 51'51" SW	419,687	-163,068	-386,712	107C 487 931,514	9 235 330,279	283,168				
113	E28 - 108C	201 27'56"	21 27'56" SW	501,066	-183,361	-466,311	108C 487 911,221	9 235 250,680	282,582				
114	E28 - 109C	202 13'46"	22 13'46" SW	534,415	-202,178	-494,695	109C 487 892,404	9 235 222,296	282,867				
115	E28 - 110	192 04'56"	12 04'56" SW	381,567	-79,868	-373,115	110 488 014,714	9 235 343,876	293,881				
116	E28 - 111D	179 27'46"	0 32'14" SE	388,752	3,645	-388,735	111D 488 098,227	9 235 328,256	283,634				
117	E28 - 112R	167 39'06"	12 20'54" SE	468,638	100,220	-457,796	112R 488 194,802	9 235 259,195	279,871				
118	E28 - 113D	163 13'41"	16 46'19" SE	507,895	146,560	-486,290	113D 488 241,142	9 235 230,701	297,272				
119	E28 - 114	175 12'31"	4 47'29" SE	494,061	41,268	-492,334	114 488 135,850	9 235 224,657	289,791				
120	E28 - 115	165 56'01"	14 03'59" SE	546,911	132,925	-530,512	115 488 227,507	9 235 186,479	293,155				
121	E28 - 116D	177 47'41"	2 12'19" SE	557,066	21,436	-556,653	116D 488 116,018	9 235 160,338	297,078				
122	E28 - 117	176 40'56"	3 19'04" SE	646,181	37,397	-645,098	117 488 131,979	9 235 071,893	299,709				
123	E28 - 118	173 03'36"	6 56'24" SE	776,819	93,766	-770,333	118 488 188,348	9 234 946,658	292,328				
124	E28 - 119D	168 05'16"	11 54'44" SE	643,499	132,827	-629,641	119D 488 227,409	9 235 087,350	284,561				
125	E28 - 120D	174 29'36"	5 30'24" SE	853,436	81,897	-849,497	120D 488 176,479	9 234 867,494	297,551				
126	E28 - 121	171 36'51"	8 23'09" SE	987,560	144,024	-977,001	121 488 238,606	9 234 739,990	287,859				
127	E28 - 122	170 43'46"	9 16'14" SE	1 064,698	171,519	-1 050,792	122 488 266,101	9 234 666,199	298,697				
128	E28 - E20B	170 52'06"	9 07'54" SE	1 092,985	173,461	-1 079,133	E20B 488 268,043	9 234 637,858	299,321				
129	E29 - E30	236 07'26"	56 07'26" SW	364,001	-302,210	-202,894	E30 487 583,259	9 234 896,556	302,397				
130	E29 - 1	140 37'36"	39 22'24" SE	28,066	17,804	-21,696	1 487 903,273	9 235 077,754	300,268				
131	E29 - 2	55 40'56"	55 40'56" NE	39,676	32,769	22,369	2 487 918,238	9 235 121,819	295,246				
132	E29 - 3	75 45'41"	75 45'41" NE	71,812	69,606	17,663	3 487 955,075	9 235 117,113	298,464				
133	E29 - 4	63 49'11"	63 49'11" NE	162,263	145,616	71,590	4 488 031,085	9 235 171,040	299,214				
134	E29 - 5	39 10'56"	39 10'56" NE	100,351	63,401	77,786	5 487 948,870	9 235 177,236	289,297				
135	E29 - 5CD	53 52'16"	53 52'16" NE	189,136	152,764	111,515	5CD 488 038,233	9 235 210,965	296,639				
136	E29 - 6	34 56'31"	34 56'31" NE	175,844	100,714	144,145	6 487 986,183	9 235 243,595	291,720				
137	E29 - 7	41 05'36"	41 05'36" NE	220,416	144,877	166,114	7 488 030,346	9 235 265,564	298,552				
138	E29 - 8CD	28 18'26"	28 18'26" NE	236,252	112,031	208,000	8CD 487 997,500	9 235 307,450	293,202				
139	E29 - 9	39 49'11"	39 49'11" NE	245,463	157,188	188,531	9 488 042,657	9 235 287,981	297,293				
140	E29 - 10	27 13'26"	27 13'26" NE	286,537	131,082	254,796	10 488 016,551	9 235 354,246	292,258				
141	E29 - 11CD	8 40'51"	8 40'51" NE	258,809	39,062	255,844	11CD 487 924,531	9 235 355,294	281,706				
142	E29 - 12CD	353 24'31"	6 35'29" NW	227,127	-26,071	225,626	12CD 487 859,398	9 235 325,076	280,121				
143	E29 - 13CD	8 16'01"	8 16'01" NE	248,429	35,720	245,848	13CD 487 921,189	9 235 345,298	281,977				
144	E29 - 14CD	354 27'11"	5 32'49" NW	284,183	-27,469	282,852	14CD 487 858,000	9 235 382,302	279,545				
145	E29 - 15CD	354 20'31"	5 39'29" NW	302,321	-29,806	300,848	15CD 487 855,663	9 235 400,298	279,687				
146	E29 - 16CD	356 07'16"	3 52'44" NW	361,109	-24,428	360,282	16CD 487 861,041	9 235 459,732	280,024				
147	E29 - 17CD	4 45'46"	4 45'46" NE	327,474	27,190	326,343	17CD 487 912,659	9 235 425,793	279,734				
148	E29 - 18CD	356 43'46"	3 16'14" NW	328,046	-18,715	327,512	18CD 487 866,754	9 235 426,962	281,608				
149	E29 - 19CD	4 40'01"	4 40'01" NE	349,361	28,425	348,203	19CD 487 913,894	9 235 447,653	279,538				
150	E29 - 20	357 30'06"	2 29'54" NW	464,872	-20,264	464,430	20 487 865,205	9 235 563,880	279,831				

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado			Proprietario						Data 09/08/96		
IN DICE	ALINHAMEN EST P V	AZIMUTE COMPENSADO	R U M O QD	DISTANCIA HORIZONTAL	LONG PARC X (E+,W-)	LAT PARC Y	COORD E (X) TOT COMPENS	COORD N (Y) TOT COMPENS	COORD (Z) DO PONTO		
151	E29 - 21	12 36'41"	12 36'41" NE	424,252	92,630	414,016	21 487 978,099	9 235 513,466	279,642		
152	E29 - 22CD	2 21'06"	2 21'06" NE	519,403	21,313	518,966	22CD 487 906,782	9 235 618,416	279,332		
153	E29 - 23CD	13 04'21"	13 04'21" NE	475,776	107,613	463,446	23CD 487 993,082	9 235 562,896	279,639		
154	E29 - 24CD	3 17'41"	3 17'41" NE	532,279	30,591	531,399	24CD 487 916,060	9 235 630,849	279,252		
155	E29 - 25CD	13 13'06"	13 13'06" NE	491,421	112,369	478,401	25CD 487 997,838	9 235 577,851	279,831		
156	E29 - 26	4 02'41"	4 02'41" NE	561,993	39,640	560,593	26 487 925,109	9 235 660,043	279,471		
157	E29 - 27	13 54'46"	13 54'46" NE	521,331	125,351	506,037	27 488 010,820	9 235 605,487	278,513		
158	E29 - 28R	6 28'41"	6 28'41" NE	640,641	72,279	636,551	28R 487 957,748	9 235 736,001	276,019		
159	E29 - 29MR	11 53'11"	11 53'11" NE	568,226	117,038	556,042	29MR 488 002,507	9 235 655,492	280,656		
160	E29 - 30CD	3 53'26"	3 53'26" NE	756,539	51,232	754,796	30CD 487 936,801	9 235 854,246	279,692		
161	E29 - 31CD	7 47'26"	7 47'26" NE	727,358	98,595	720,645	31CD 487 984,064	9 235 820,095	279,317		
162	E29 - 32CD	1 42'21"	1 42'21" NE	816,630	24,309	816,268	32CD 487 909,778	9 235 915,718	279,294		
163	E29 - 33CD	6 30'16"	6 30'16" NE	832,361	94,290	827,003	33CD 487 979,759	9 235 926,453	279,172		
164	E29 - 34CD	1 06'46"	1 06'46" NE	882,092	17,131	881,926	34CD 487 902,600	9 235 981,376	278,838		
165	E29 - 35	0 28'16"	0 28'16" NE	946,415	7,782	946,383	35 487 893,251	9 236 045,833	277,975		
166	E29 - 36CD	0 48'26"	0 48'26" NE	1 003,740	14,141	1 003,640	36CD 487 899,610	9 236 103,090	278,347		
167	E29 - 37CD	356 08'06"	3 51'54" NW	940,164	-63,373	938,026	37CD 487 822,096	9 236 037,476	281,532		
168	E29 - 38C	352 01'51"	7 58'09" NW	940,342	-130,369	931,261	38C 487 755,100	9 236 030,711	287,320		
169	E29 - 39C	353 44'11"	6 15'49" NW	913,902	-99,709	908,446	39C 487 785,760	9 236 007,896	284,525		
170	E29 - 40C	351 12'11"	8 47'49" NW	924,433	-141,376	913,558	40C 487 744,093	9 236 013,008	288,474		
171	E29 - 41	352 26'41"	7 33'19" NW	900,315	-118,376	892,499	41 487 767,093	9 235 991,949	285,945		
172	E29 - 42Pç	356 34'46"	3 25'14" NW	873,887	-52,140	872,330	42Pç 487 833,329	9 235 971,780	279,383		
173	E29 - 43CD	353 19'36"	6 40'24" NW	863,029	-100,291	857,182	43CD 487 785,178	9 235 956,632	281,129		
174	E29 - 44CD	357 00'26"	2 59'34" NW	819,688	-42,796	818,570	44CD 487 842,673	9 235 918,020	278,651		
175	E29 - 45	353 09'11"	6 50'49" NW	792,938	-94,532	787,283	45 487 790,937	9 235 886,733	279,449		
176	E29 - 46	356 11'26"	3 48'34" NW	748,561	-49,733	746,907	46 487 835,736	9 235 846,357	279,167		
177	E29 - 47CD	352 03'46"	7 56'14" NW	751,671	-103,797	744,470	47CD 487 781,672	9 235 843,920	279,260		
178	E29 - 48CD	356 25'31"	3 34'29" NW	706,038	-44,022	704,664	48CD 487 841,447	9 235 804,114	279,139		
179	E29 - 49CD	351 47'41"	8 12'19" NW	740,052	-105,620	732,476	49CD 487 779,849	9 235 831,926	279,240		
180	E29 - 50CD	355 48'21"	4 11'39" NW	695,277	-50,850	693,415	50CD 487 834,619	9 235 792,865	279,333		
181	E29 - 51CD	351 30'56"	8 29'04" NW	657,812	-97,054	650,613	51CD 487 788,415	9 235 750,063	279,007		
182	E29 - 52CD	357 18'46"	2 41'14" NW	601,726	-28,211	601,064	52CD 487 857,258	9 235 700,514	278,999		
183	E29 - 53CD	355 26'46"	4 33'14" NW	581,204	-46,146	579,369	53CD 487 839,323	9 235 678,819	279,186		
184	E29 - 54CD	351 24'41"	8 35'19" NW	618,416	-92,354	611,481	54CD 487 793,115	9 235 710,931	279,811		
185	E29 - 55BR	351 35'36"	8 24'24" NW	546,191	-79,852	540,322	55BR 487 805,617	9 235 639,772	279,689		
186	E29 - 56	351 11'51"	8 48'09" NW	508,897	-77,876	502,903	56 487 807,593	9 235 602,353	280,327		
187	E29 - 57	355 26'26"	4 33'34" NW	478,495	-38,037	476,981	57 487 847,432	9 235 576,431	279,708		
188	E29 - 58CD	351 20'21"	8 39'39" NW	413,134	-62,212	408,423	58CD 487 823,257	9 235 507,873	280,044		
189	E29 - 59CD	351 10'11"	8 49'49" NW	388,666	-59,663	384,059	59CD 487 825,806	9 235 483,509	280,229		
190	E29 - 60CD	351 13'21"	8 46'39" NW	316,307	-48,268	312,603	60CD 487 837,201	9 235 412,053	280,165		
191	E29 - 61CD	347 11'46"	12 48'14" NW	249,888	-55,361	243,596	61CD 487 830,108	9 235 343,046	279,768		
192	E29 - 62	347 34'21"	12 25'39" NW	161,704	-34,799	157,915	62 487 850,670	9 235 257,365	280,858		
193	E29 - 63C	357 14'31"	2 45'29" NW	120,786	-5,812	120,646	63C 487 879,657	9 235 220,096	282,701		
194	E29 - 64	337 44'56"	22 15'04" NW	83,922	-31,778	77,673	64 487 853,691	9 235 177,123	281,445		
195	E29 - 65	359 50'36"	0 09'24" NW	58,191	-0,159	58,191	65 487 885,310	9 235 157,641	285,175		
196	E29 - 66C	311 50'31"	48 09'29" NW	45,663	-34,018	30,461	66C 487 851,451	9 235 129,911	287,321		
197	E29 - 67	336 18'46"	23 41'14" NW	152,650	-61,326	139,790	67 487 824,143	9 235 239,240	280,410		
198	E29 - 68CD	340 43'36"	19 16'24" NW	282,076	-93,106	266,267	68CD 487 792,363	9 235 365,717	280,486		
199	E29 - 69	339 46'31"	20 13'29" NW	354,272	-122,473	332,429	69 487 762,996	9 235 431,879	280,551		
200	E29 - 70CD	339 27'41"	20 32'19" NW	392,780	-137,882	367,813	70CD 487 747,667	9 235 467,263	280,401		

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Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado		Proprietario										Data 09/08/96	
IN DICE	ALINHAMENTO EST P V	AZIMUTE COMPENSADO		RUM QD	DISTANCIA HORIZONTAL	LONG X (E+,W-)	PARC Y (N+,-)	COORD E (X)	COORD N (Y)	COORD (Z)			
								TOT COMPENS	TOT COMPENS	DO PONTO			
501	E44 - 7C	6 52'36"	6 52'36"	NE	163,048	19,522	161,875	7C 486 253,457	9 232 593,484	281,814			
502	E44 - 8C	317 17'31"	42 42'29"	NW	190,374	-129,124	139,890	8C 486 104,811	9 232 571,499	283,445			
503	E44 - 9C	313 52'11"	46 07'49"	NW	206,344	-148,757	143,001	9C 486 085,178	9 232 574,610	283,521			
504	E44 - 10C	309 34'16"	50 28'44"	NW	164,965	-127,161	105,089	10C 486 106,774	9 232 536,698	282,425			
505	E44 - 11D	228 39'46"	48 39'46"	SW	408,619	-306,806	-269,089	11D 485 927,129	9 232 161,720	287,666			
506	E44 - 12D	296 47'56"	63 12'04"	NW	169,071	-150,912	76,227	12D 486 083,023	9 232 507,836	281,834			
507	E44 - 13D	227 11'01"	47 11'01"	SW	410,634	-301,215	-279,088	13D 485 932,720	9 232 152,521	290,566			
508	E44 - 14	287 23'41"	72 36'19"	NW	191,923	-183,146	57,376	14 486 050,789	9 232 488,985	281,293			
509	E44 - 15RD	212 05'31"	32 05'31"	SW	307,859	-163,559	-260,817	15RD 486 070,376	9 232 170,792	279,081			
510	E44 - 16D	205 23'11"	25 23'11"	SW	330,974	-141,895	-299,014	16D 486 092,040	9 232 132,595	284,631			
511	E44 - 17D	150 33'16"	29 26'44"	SE	366,938	180,336	-319,451	17D 486 414,271	9 232 112,158	292,237			
512	E44 - 18D	149 36'56"	30 23'04"	SE	397,661	201,137	-343,043	18D 486 435,072	9 232 088,566	299,424			
513	E44 - 19D	285 08'56"	74 51'04"	NW	177,308	-171,147	46,336	19D 486 062,788	9 232 477,945	281,209			
514	E44 - 20D	276 41'11"	83 18'49"	NW	193,176	-191,862	22,492	20D 486 042,073	9 232 454,101	280,848			
515	E44 - 21C	288 00'06"	71 59'54"	NW	224,342	-213,360	69,332	21C 486 020,575	9 232 500,941	281,406			
516	E44 - 22C	295 03'51"	64 56'09"	NW	183,086	-165,846	77,561	22C 486 068,089	9 232 509,170	281,683			
517	E45 - C	164 16'56"	15 43'04"	SE	23,937	6,485	-23,042	C 485 990,744	9 232 471,727	281,622			
518	E45 - 2C	186 45'11"	6 45'11"	SW	138,397	-16,274	-137,437	2C 485 967,985	9 232 357,332	280,453			
519	E45 - 3D	271 11'46"	88 48'14"	NW	197,844	-197,801	4,130	3D 485 786,458	9 232 498,899	280,621			
520	E45 - 4C	244 08'21"	64 08'21"	SW	155,244	-139,697	-67,715	4C 485 844,562	9 232 427,054	280,255			
521	E45 - 5D	268 16'41"	88 16'41"	SW	253,920	-253,805	-7,630	5D 485 730,454	9 232 487,139	280,662			
522	E45 - 6R	264 20'36"	84 20'36"	SW	326,169	-324,581	-32,150	6R 485 659,678	9 232 462,619	276,487			
523	E45 - 7D	250 23'46"	70 23'46"	SW	248,770	-234,350	-83,466	7D 485 749,909	9 232 411,303	280,568			
524	E45 - 8C	268 27'16"	88 27'16"	SW	415,024	-414,873	-11,194	8C 485 569,386	9 232 483,575	281,028			
525	E45 - 9D	249 27'26"	69 27'26"	SW	375,772	-351,877	-131,861	9D 485 632,382	9 232 362,908	288,324			
526	E45 - 10D	245 52'21"	65 52'21"	SW	382,132	-348,748	-156,204	10D 485 635,511	9 232 338,565	285,626			
527	E45 - 11D	218 11'01"	38 11'01"	SW	341,332	-211,006	-268,298	11D 485 773,253	9 232 226,471	283,733			
528	E45 - 12C	216 02'36"	36 02'36"	SW	324,490	-190,929	-262,374	12C 485 793,330	9 232 232,395	281,849			
529	E45 - 13D	221 35'16"	41 35'16"	SW	329,392	-218,639	-246,365	13D 485 765,620	9 232 248,404	282,419			
530	E45 - 14R	215 08'41"	35 08'41"	SW	294,221	-169,366	-240,585	14R 485 814,893	9 232 254,184	275,075			

 Maior Coord (X) 489 174,115 Menor Coord (X) 485 569,386 Maior Coord (Y) 9 236 456,564 Menor Coord (Y) 9 232 088,566

TopoEVN 3 0 - Sistema para processamento de Levantamentos Topograficos Arquivo BACIAS 25/10/96 15 09 49

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado Proprietario Data 03/08/96

Table with columns: IN DICE, ALINHAMENTOS (EST, P, V), AZIMUTE (COMPENSADO, R, U, M, O, QD), DISTANCIA HORIZONTAL, LONG PARC (X, Y), LAT PARC (E, S, N, W), COORD E (X), COORD N (Y), COORD (Z) DO PONTO. Rows 51-100.

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Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado

Proprietario

Data 03/08/96

IN DICE	ALINHAMENTO		AZIMUTE		RUMOR	DISTANCIA		LONG PARC X (E+,W-)	LAT PARC Y (N+,S-)	COORD E (X)		COORD N (Y)		COORD (Z) DO PONTO
	EST	P V	COMPENSADO	QU		HORIZONTAL	P V			TOT	COMPENS	TOT	COMPENS	
151	E2	- 49	307 23'11"	52 36'49"	NW	676,625	-537,618	410,838	49	491 926,797	9 238 349,370	281,603		
152	E2	- 50	307 37'36"	52 22'24"	NW	752,990	-596,372	459,711	50	491 868,043	9 238 398,243	280,634		
153	E2	- 51	307 33'01"	52 26'59"	NW	844,123	-669,237	514,457	51	491 795,178	9 238 452,989	277,457		
154	E2	- 52	308 06'36"	51 53'24"	NW	949,794	-747,324	586,187	52	491 717,091	9 238 524,719	279,849		
155	E2	- 53	305 41'01"	54 18'59"	NW	995,479	-808,578	580,672	53	491 655,837	9 238 519,204	282,498		
156	E2	- 54	305 28'36"	54 31'24"	NW	901,605	-734,224	523,266	54	491 730,191	9 238 461,798	282,444		
157	E2	- 55	301 46'46"	58 13'14"	NW	1 061,247	-902,147	558,907	55	491 562,268	9 238 497,439	286,354		
158	E2	- 56	298 54'21"	61 05'39"	NW	1 115,080	-976,158	538,998	56	491 488,257	9 238 477,530	287,810		
159	E2	- 57	296 45'01"	63 14'59"	NW	950,910	-849,141	428,007	57	491 615,274	9 238 366,539	289,661		
160	E2	- 58	299 58'41"	60 01'19"	NW	902,290	-781,579	450,846	58	491 682,836	9 238 389,378	287,587		
161	E2	- 59	299 05'16"	60 54'44"	NW	810,866	-708,596	394,202	59	491 755,819	9 238 332,734	282,290		
162	E2	- 60	296 02'36"	63 57'24"	NW	870,454	-782,070	382,174	60	491 682,345	9 238 320,706	285,335		
163	E2	- 61	292 40'46"	67 19'14"	NW	645,036	-595,160	248,710	61	491 869,255	9 238 187,242	279,972		
164	E2	- 62	295 47'51"	64 12'09"	NW	625,850	-563,476	272,365	62	491 900,939	9 238 210,897	279,407		
165	E2	- 63	290 09'41"	69 50'19"	NW	548,193	-514,603	188,943	63	491 949,812	9 238 127,475	281,387		
166	E2	- 64	294 42'31"	65 17'29"	NW	526,961	-478,715	220,272	64	491 985,700	9 238 158,804	280,182		
167	E2	- 65	287 56'36"	72 03'24"	NW	340,861	-324,282	105,011	65	492 140,133	9 238 043,543	294,092		
168	E2	- 66	290 46'11"	69 13'49"	NW	178,362	-166,771	63,249	66	492 297,644	9 238 001,781	301,432		

 Maior Coord (X) 493.135,158 Menor Coord (X) 490 742,904 Maior Coord (Y) 9 239 567,759 Menor Coord (Y) 9 237 938,532

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Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado		Proprietario										Data 05/08/96			
IN	ALINHAMENTO	AZIMUTE		DISTANCIA		LONG	PARC	LAT	PARC	COORD E (X)		COORD N (Y)		COORD (Z)	
DICE	EST P V	COMPENSADO	R U M O	QD	HORIZONTAL	X	(E+,W-)	Y	(N+,S-)	P V	TOT	COMPENS	TOT	COMPENS	DO PONTO
1	NM - E13	127 34'31"	52 25'29"	SE	0,000		0,000		0,000	E13	492 199,700	9 237 097,850		296,871	
2	E13 - E14	219 56'11"	39 56'11"	SW	906,472		-583,182		-696,578	E14	491 616,518	9 236 401,272		306,373	
3	E14 - E16	341 19'51"	18 40'09"	NW	244,819		-78,367		231,937	E16	491 538,151	9 236 633,209		316,631	
4	E16 - PF	164 25'41"	15 34'19"	SE	106,559		28,337		-101,684	PF	491 566,488	9 236 531,525		296,555	
5	E16 - 1R	218 16'46"	38 16'46"	SW	814,522		-504,594		-639,399	1R	491 033,557	9 235 993,810		294,791	
6	E16 - 2	218 04'16"	38 04'16"	SW	828,999		-511,193		-652,626	2	491 026,958	9 235 980,583		300,427	
7	E16 - 3	212 15'36"	32 15'36"	SW	999,018		-533,238		-844,804	3	491 004,913	9 235 788,405		303,961	
8	E16 - 4R	211 26'21"	31 26'21"	SW	973,475		-507,758		-830,563	4R	491 030,393	9 235 802,646		296,685	
9	E16 - 5	217 20'36"	37 20'36"	SW	829,957		-503,443		-659,828	5	491 034,708	9 235 973,381		301,520	
10	E16 - 6	212 03'01"	32 03'01"	SW	584,740		-310,300		-495,616	6	491 227,851	9 236 137,593		297,344	
11	E16 - 7R	210 25'41"	30 25'41"	SW	478,885		-242,524		-412,926	7R	491 295,617	9 236 220,283		294,995	
12	E16 - 8	216 33'41"	36 33'41"	SW	453,805		-270,324		-364,505	8	491 267,827	9 236 268,704		311,408	
13	E16 - 9	205 35'06"	25 35'06"	SW	471,501		-203,618		-425,268	9	491 334,533	9 236 207,941		298,697	
14	E16 - 10	211 45'31"	31 45'31"	SW	361,509		-190,277		-307,381	10	491 347,874	9 236 325,828		290,770	
15	E16 - 11	220 55'46"	40 55'46"	SW	331,818		-217,384		-250,694	11	491 320,767	9 236 382,515		297,031	
16	E16 - 12	225 50'46"	45 50'46"	SW	331,036		-237,509		-230,596	12	491 300,642	9 236 402,613		300,765	
17	E16 - 13	203 48'21"	23 48'21"	SW	371,310		-149,875		-339,718	13	491 388,276	9 236 293,491		297,987	
18	E16 - 14	201 49'56"	21 49'56"	SW	287,476		-106,909		-266,857	14	491 431,242	9 236 366,352		301,623	
19	E16 - 15R	210 53'51"	30 53'51"	SW	260,378		-133,705		-223,427	15R	491 404,446	9 236 409,782		288,999	
20	E16 - 16R	211 02'26"	31 02'26"	SW	261,022		-134,595		-223,644	16R	491 403,556	9 236 409,565		289,005	
21	E16 - 17	220 59'51"	40 59'51"	SW	245,907		-161,321		-185,595	17	491 376,830	9 236 447,614		291,992	
22	E16 - 18	206 48'41"	26 48'41"	SW	162,529		-73,310		-145,057	18	491 464,841	9 236 488,152		294,466	
23	E16 - 19	194 07'26"	14 07'26"	SW	150,929		-36,830		-146,366	19	491 501,321	9 236 486,843		302,130	
24	E16 - 20	178 14'16"	1 45'44"	SE	130,552		4,015		-130,490	20	491 542,166	9 236 502,719		300,748	
25	E16 - 21	180 56'31"	0 56'31"	SW	92,109		-1,514		-92,097	21	491 536,637	9 236 541,112		294,882	

 Maior Coord (X) 492 199,700 Menor Coord (X) 491 004,913 Maior Coord (Y) 9 237 097,850 Menor Coord (Y) 9 235 788,405

 TopoEVN 3 0 - Sistema para processamento de Levantamentos Topograficos Arquivo BACIAA 25/10/96 15 00 35

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado

Proprietario

Data 07/08/96

IN DICE	ALINHAMEN EST P V	AZIMUTE COMPENSADO	R U M O QD	DISTANCIA HORIZONTAL	LONG PARC X (E+,W-)	LAT PARC Y (N+,S-)	COORD E (X) TOT	COORD N (Y) COMPENS	COORD (Z) DO PONTO
51	E20 - 48	178 01'51"	1 58'09" SE	298,294	10,250	-298,118	48 489 779,642	9 236 658,537	295,336
52	E20 - 49	190 57'56"	10 57'56" SW	400,915	-76,262	-393,595	49 489 693,130	9 236 563,060	303,771
53	E20 - 50	189 15'36"	9 15'36" SW	312,551	-50,294	-308,478	50 489 719,098	9 236 648,177	297,008
54	E20 - 51	172 05'46"	7 54'14" SE	202,769	27,883	-200,843	51 489 797,275	9 236 755,812	293,637
55	E20 - 52	192 03'31"	12 03'31" SW	218,315	-45,609	-213,498	52 489 723,783	9 236 743,157	295,211
56	E20 - 53	201 06'46"	21 06'46" SW	134,379	-48,404	-125,359	53 489 720,988	9 236 831,296	299,728
57	E20 - 54	203 56'11"	23 56'11" SW	83,782	-33,992	-76,576	54 489 735,400	9 236 880,079	301,099
58	E20 - 55	176 27'36"	3 32'24" SE	91,119	5,626	-90,945	55 489 775,018	9 236 865,710	297,502

 Maior Coord (X) 490 287,153 Menor Coord (X) 489 207,958 Maior Coord (Y) 9 237 687,346 Menor Coord (Y) 9 236 371,431

 TopoEVN 3 0 - Sistema para processamento de Levantamentos Topograficos Arquivo BACIAS 25/10/96 15 01 54

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado

Proprietario

Data 07/08/96

IN	ALINHAMENTO		AZIMUTE		DISTANCIA		LONG	PARC	LAT	PARC	COORD E (X)		COORD N (Y)		COORD (Z)	
DICE	EST	P V	COMPENSADO	R U M O	QD	HORIZONTAL	X	(E+,W-)	Y	(N+,S-)	P V	TOT	COMPENS	TOT	COMPENS	DO PONTO
51	E27C	- 14	93 38'16"	86 21'44"	SE	726,327	724,864	-46,084	14	487 023,135	9 236 412,956	302,087				
52	E27C	- 15	89 12'41"	89 12'41"	NE	758,105	758,033	10,434	15	487 056,304	9 236 469,474	299,589				
53	E27C	- 16	80 07'01"	80 07'01"	NE	550,322	542,155	94,456	16	486 840,426	9 236 553,496	298,584				
54	E27C	- 17	77 59'46"	77 59'46"	NE	518,667	507,326	107,871	17	486 805,597	9 236 566,911	299,510				
55	E27C	- 18	81 01'21"	81 01'21"	NE	285,326	281,831	44,524	18	486 580,102	9 236 503,564	299,001				
56	E27C	- 19	82 04'01"	82 04'01"	NE	242,215	239,897	33,430	19	486 538,168	9 236 492,470	296,219				
57	E27C	- 20	77 48'16"	77 48'16"	NE	163,606	159,914	34,562	20	486 458,185	9 236 493,602	303,918				
58	E27C	- 21	65 54'41"	65 54'41"	NE	97,695	89,187	39,874	21	486 387,458	9 236 498,914	303,278				
59	E27C	- 22	45 43'06"	45 43'06"	NE	107,421	76,904	75,000	22	486 375,175	9 236 534,040	302,973				
60	E27C	- 23	99 13'56"	80 46'04"	SE	136,899	135,126	-21,964	23	486 433,397	9 236 437,076	294,218				
61	E27C	- 24	32 42'01"	32 42'01"	NE	129,695	70,067	109,139	24	486 368,338	9 236 568,179	301,829				
62	E27C	- 25	0 50'46"	0 50'46"	NE	94,731	1,399	94,721	25	486 299,670	9 236 553,761	309,090				
63	E27C	- 26GR	337 18'56"	22 41'04"	NW	85,326	-32,906	78,725	26GR	486 265,365	9 236 537,765	300,843				
64	E27C	- 27	327 59'36"	32 00'24"	NW	40,441	-21,434	34,293	27	486 276,837	9 236 493,333	304,547				
65	E27C	- 28	82 35'36"	82 35'36"	NE	42,599	42,244	5,491	28	486 340,515	9 236 464,531	305,156				
66	E27C	- 29	176 04'01"	3 55'59"	SE	34,210	2,346	-34,129	29	486 300,617	9 236 424,911	307,005				
67	E27D	- PF	201 18'51"	21 18'51"	SW	90,326	-32,832	-84,148	PF	486 303,919	9 236 279,243	303,658				
68	E27D	- 1PA	241 31'31"	61 31'31"	SW	38,299	-33,666	-18,260	1PA	486 303,085	9 236 345,131	300,517				
69	E27D	- 2PA	290 09'51"	69 50'09"	NW	66,466	-62,392	22,912	2PA	486 274,359	9 236 386,303	300,956				
70	E27D	- 3	279 30'26"	80 29'34"	NW	118,215	-116,591	19,526	3	486 220,160	9 236 382,917	307,843				
71	E27D	- 4	259 23'16"	79 23'16"	SW	136,402	-134,069	-25,120	4	486 202,682	9 236 338,271	298,545				
72	E27D	- 5	264 01'36"	84 01'36"	SW	148,348	-147,543	-15,438	5	486 189,208	9 236 347,953	303,673				
73	E27D	- 6	247 34'51"	67 34'51"	SW	239,027	-220,961	-91,160	6	486 115,790	9 236 272,231	298,042				
74	E27D	- 7	256 29'06"	76 29'06"	SW	190,085	-184,821	-44,423	7	486 151,930	9 236 318,968	304,282				
75	E27D	- 8EXR	245 36'01"	65 36'01"	SW	264,588	-240,956	-109,301	8EXR	486 095,795	9 236 254,090	298,904				
76	E27D	- 9	241 54'06"	61 54'06"	SW	280,347	-247,305	-132,040	9	486 089,446	9 236 231,351	298,550				
77	E27D	- 10	241 54'16"	61 54'16"	SW	181,882	-160,450	-85,656	10	486 176,301	9 236 277,735	298,851				
78	E27D	- 11	229 01'06"	49 01'06"	SW	156,135	-117,869	-102,396	11	486 218,882	9 236 260,995	304,815				
79	E27D	- 12	231 08'31"	51 08'31"	SW	91,768	-71,460	-57,575	12	486 265,291	9 236 305,816	298,450				

 Maior Coord (X) 487 558,844 Menor Coord (X) 486 089,446 Maior Coord (Y) 9 236 612,488 Menor Coord (Y) 9 236 144,042

TopoEVN 3 0 - Sistema para processamento de Levantamentos Topograficos Arquivo BACIA7 25/10/96 15 07 00

Imovel BARRAGEM ROSARIO

Local MUNICIPIO DE LAVRAS DA MANGABEIRA

Interessado		Proprietario										Data 17/07/96			
IN DICE	ALINHAMEN EST P V	AZIMUTE COMPENSADO		R U M O QD		DISTANCIA HORIZONTAL		LONG X	PARC (E+,W-)	LAT Y	PARC (N+,S-)	P V	COORD E (X) TOT	COORD N (Y) TOT	COORD (Z) COMPENS DO PONTO
1	NM - E28	165	43'06"	14	16'54"	SE	0,000	0,000	0,000	E28	488 094,582	9 235 716,991	304,292		
2	E28 - E28A	74	02'26"	74	02'26"	NE	1 120,607	1 077,415	308,119	E28A	489 171,997	9 236 025,110	308,994		
3	E28A - PF	238	57'51"	58	57'51"	SW	66,984	-57,395	-34,535	PF	489 114,602	9 235 990,575	300,659		
4	E28A - 1	200	56'01"	20	56'01"	SW	140,874	-50,332	-131,576	1	489 121,665	9 235 893,534	292,699		
5	E28A - 2	212	31'01"	32	31'01"	SW	177,881	-95,620	-149,995	2	489 076,377	9 235 875,115	292,993		
6	E28A - 3	178	41'21"	1	18'39"	SE	118,974	2,722	-118,943	3	489 174,719	9 235 906,167	294,008		
7	E28A - 4	142	14'26"	37	45'34"	SE	175,088	107,215	-138,423	4	489 279,212	9 235 886,687	305,652		
8	E28A - 5	123	16'26"	56	23'34"	SE	227,668	189,614	-126,013	5	489 361,611	9 235 899,097	303,704		
9	E28A - 6R	116	29'46"	63	30'14"	SE	296,578	265,427	-132,314	6R	489 437,424	9 235 892,796	292,288		
10	E28A - 7CR	114	10'06"	65	49'54"	SE	245,565	224,040	-100,539	7CR	489 396,037	9 235 924,571	293,576		
11	E28A - 8	114	53'41"	65	06'19"	SE	323,213	293,181	-136,057	8	489 465,178	9 235 889,053	298,187		
12	E28A - 9	105	54'06"	74	05'54"	SE	286,765	275,791	-78,570	9	489 447,788	9 235 946,540	299,145		
13	E28A - 10GR	106	55'31"	73	04'29"	SE	47,100	45,060	-13,712	10GR	489 217,057	9 236 011,398	300,420		
14	E28A - 11	111	34'01"	68	25'59"	SE	127,231	118,323	-46,769	11	489 290,320	9 235 978,341	299,267		
15	E28A - 12R	146	04'51"	33	55'09"	SE	100,133	55,876	-83,093	12R	489 227,873	9 235 942,017	290,605		
16	E28A - 13R	117	21'31"	62	38'29"	SE	143,530	127,476	-65,960	13R	489 299,473	9 235 959,150	291,408		
17	E28A - 14R	208	09'56"	28	09'56"	SW	70,906	-33,469	-62,510	14R	489 138,528	9 235 962,600	290,288		
18	E28A - 15R	220	35'16"	40	35'16"	SW	119,196	-77,550	-90,519	15R	489 094,447	9 235 934,591	289,579		
19	E28A - 16R	225	40'01"	45	40'01"	SW	143,729	-102,808	-100,442	16R	489 069,189	9 235 924,668	290,863		
20	E28A - 17	241	31'16"	61	31'16"	SW	148,456	-130,492	-70,789	17	489 041,505	9 235 954,321	295,422		

 Maior Coord (X) 489 465,178 Menor Coord (X) 488 094,582 Maior Coord (Y) 9 236 025,110 Menor Coord (Y) 9 235 716,991

 TopoEVN 3 0 - Sistema para processamento de Levantamentos Topograficos Arquivo BACIAS 25/10/96 15 10 30

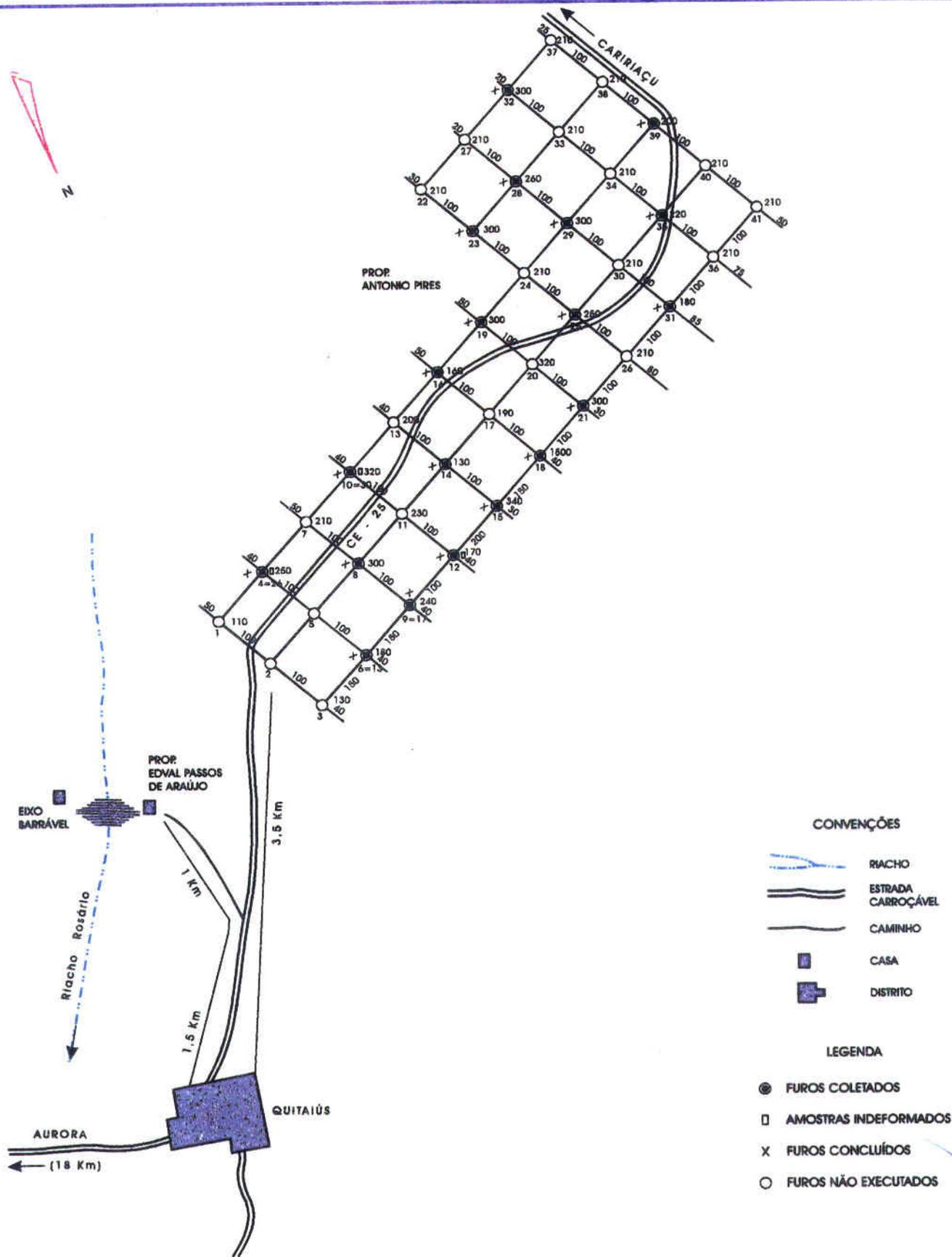


5- PLANTAS

Relação das plantas constantes no TOMO 1A -TEXTOS, os quais serão apresentados a seguir

PLANTAS

- D 1/3 Mapa da Jazida Terrosa – JT1
- D 2/3 : Mapa do Areal – JA1
- D 3/3 . Mapa da pedreira – JP1



CONVENÇÕES

- RIACHO
- ESTRADA CARROÇÁVEL
- CAMINHO
- CASA
- DISTRITO

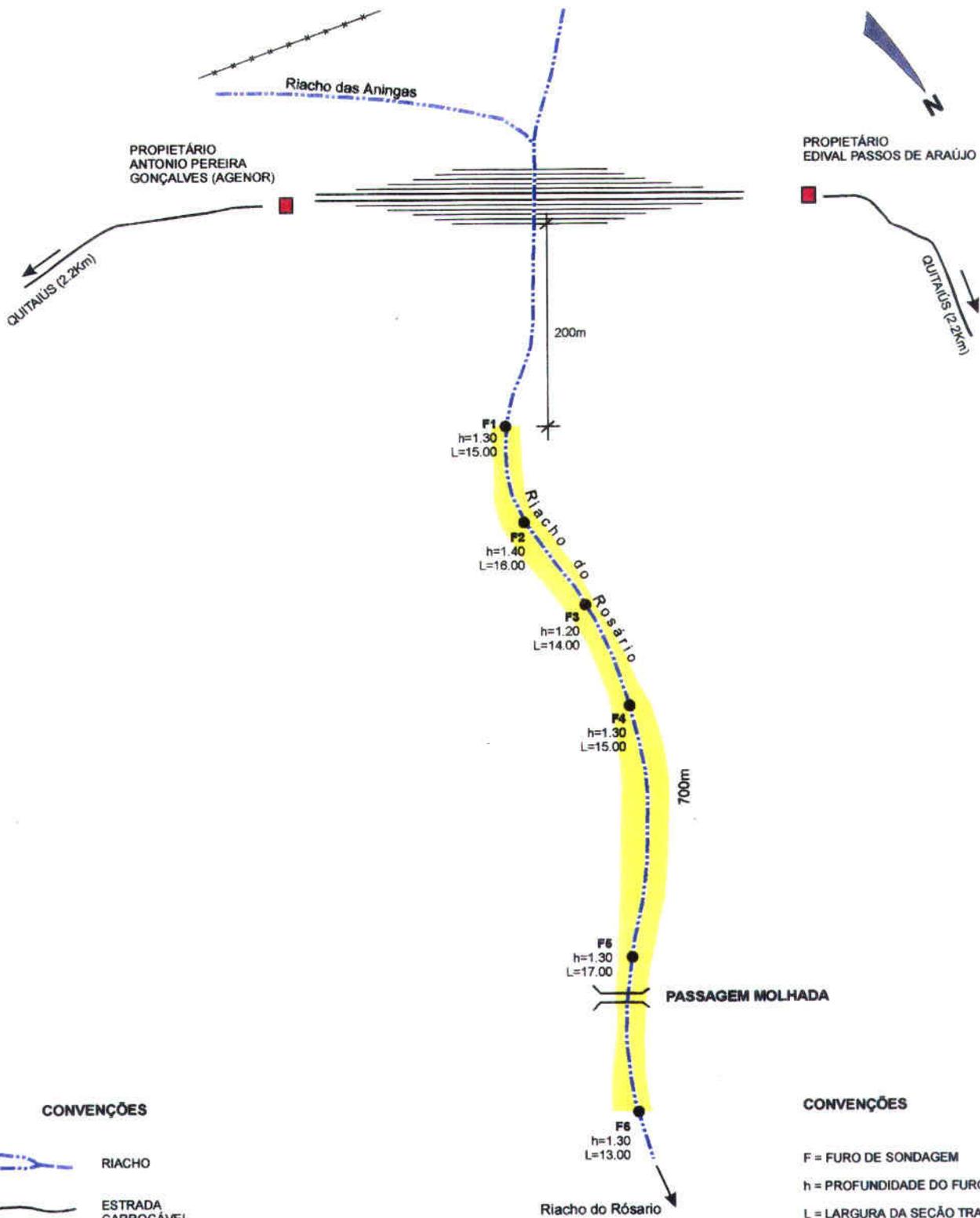
LEGENDA

- FUIROS COLETADOS
- AMOSTRAS INDEFORMADOS
- FUIROS CONCLUÍDOS
- FUIROS NÃO EXECUTADOS

ÁREA TOTAL	545.000m ²
NÚMERO DE FUIROS REALIZADOS	20
PROFUNDIDADE MÉDIA DOS FUIROS	2,42 m
VOLUME TOTAL DE MATERIAL	1.318.900 m ³
CAMADA MÉDIA DE EXPURGO	0,10 m
PROFUNDIDADE MÉDIA ÚTIL	2,32 m
VOLUME DE MATERIAL UTILIZÁVEL	1.264.400 m ³
DISTÂNCIA DA JAZIDA AO EIXO BARRÁVEL	4 Km

ENGESOF - Engenharia e consultoria Ltda.	
BARRAGEM ROSÁRIO MAPA DA JAZIDA TERROSA - JT 1	
DATA: OUTUBRO / 96	ESCALA: INDICADA
APROVO	Nº D 1/3

000080



CONVENÇÕES

- RIACHO
- ESTRADA CARROÇÁVEL
- CASA
- CERCA

CONVENÇÕES

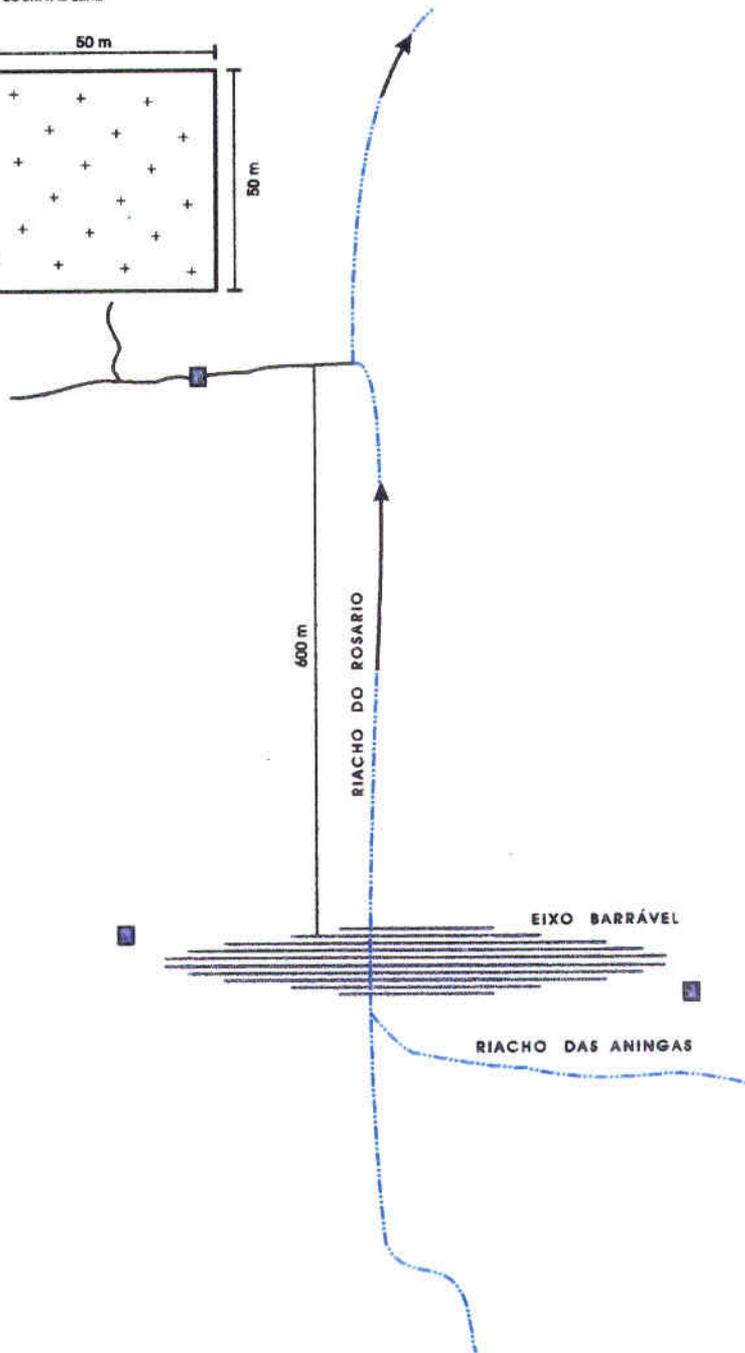
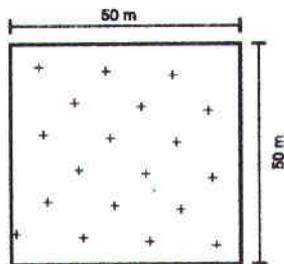
- F = FURO DE SONDAGEM
- h = PROFUNDIDADE DO FURO
- L = LARGURA DA SEÇÃO TRANSVERSAL

COMPRIMENTO DO TRECHO	700 m
NÚMERO DE SONDAGENS REALIZADAS	6
ESPESURA MÉDIA DA CAMADA	1.33 m
LARGURA MÉDIA DO TRECHO	15.0 m
VOLUME DO MATERIAL EXPLORÁVEL	18.620 m ³
DISTÂNCIA DO AREAL AO EIXO BARRÁVEL	0.4 Km

ENGESOFT - Engenharia e consultoria Ltda.	
BARRAGEM ROSÁRIO	
MAPA DO AREAL JA 1	
DATA:	OUTUBRO/97
ESCALA:	INDICADA
APROVO:	Nº D 2/3



PROP
LOURIVAL LEITE



CONVENÇÕES

-  RIACHO
-  CAMINHO
-  CASA
-  PEDREIRA

EXTENSÃO	50 m
LARGURA	50 m
PROFUNDIDADE A EXPLORAR	3 m
VOLUME EXPLORÁVEL	7.500 m ³
DISTÂNCIA PARA O EIXO	0,6 m
CLASSIFICAÇÃO	GNAISSE - XISTOSO

ENGESOFT - Engenharia e Consultoria Ltda.		
BARRAGEM ROSÁRIO MAPA DE PEDREIRA JP 1		
DES.	DATA: OUTUBRO / 96	ESCALA: INDICADA
VISTO.	APROVO	Nº D 3/3