

## KARDABAHAL-BRAHMANBIL COMBINED COAL BLOCK SUMMARY

### PART A

Sr. No.	Features	Details
<b>1.</b>	<b>Location</b>	
	Coal Block	Kardabahal-Brahmanbil
	Latitude	21°2'54" - 21°4'27"N (Provisional)
	Longitude	84°53'10" - 84°57'14"E (Provisional)
	Topo Sheet No.	F45M16 (Old 73C/16)
	Coalfield	Talcher
	Villages	Kardabahal, Brahmanibil, Guthasahi, Thaliposi, (As per Survey of India Toposheet)
	Tehsil/Taluka	Chhendipada
	District	Angul
	State	Odisha
<b>2.</b>	<b>Connectivity with Block</b>	
	Nearest Rail Head	Nearest railway station Angul, located on the NH-42 (Bhubaneswar-Cuttack-Sambalpur route) is at a distance of about 34 km from the block.
	Road	The approach to the block is through State Highway No. 63, from Angul to Deogarh via Chhendipada, runs along south-west boundary of the combined block. All weather road also exists within the block
	Airport	The Biju Pattanaik International Airport, located at state capital Bhubaneswar, is nearest airport at a distance of about 170 km from block.
<b>3.</b>	<b>Area</b>	
	Geological Block Area	9.87 sq.km. (As per shape file. Refer note below)
	Forest Area	7 % (Approximately)
	Non-Forest Area	93% (Approximately)
<b>4.</b>	<b>Climate and Topography</b>	
	Average Annual Rainfall	1317 mm (As per IMD from 1980-2003)
	Temperature (Min. — Max.)	6.7 – 38.1°C
	Local Surface Drainage Channels	Kudopasi nala flowing from south to north in north-western part of the block and Atandi nala flowing from south to north in east-central part of block mainly control the drainage and topographical pattern of the block. Ullani nala and its tributaries are traversing in central part of the block. Seasonal small nalas are also present in the block area and discharging in Gauduni nalla which then meets Tikra river in north. Tikra river finally meets Brahmani river in the east of the block. The surface topography is generally rugged and undulating with a general northerly slope.
	Rivers	Nearest river, Tikra flows from west to east in far north of the block.

<b>5.</b>	<b>Exploration</b>				
	Status	Explored			
	Exploration Agency	CMPDI			
	Total Number of Boreholes with meterage	89 Boreholes , 28798 m			
	Borehole Density	9.0 BHs/sq.km.			
	General Dip of Seams	5°-9° Northerly			
	General Strike Direction	E-W in general			
<b>6.</b>	<b>Coal Seams &amp; Reserve</b>				
	Coal Seams	Thickness Range (m)	Floor Depth Range (m)	Geological Reserve (MT)	Grade
	XVII	0.35-6.71	23.73-221.87	30.529	UG-G12
	XVI	0.12-5.97	42.11-244.07	23.376	UG-G13
	XV	0.15-4.16	44.9-257.72	10.302	G15-G13
	XIV	0.1-3.86	62-266.55	12.905	G17-G12
	XIII	0.17-3.52	77.42-279.09		
	XII	0.3-8.5	100.85-288	34.065	G17-G13
	XIT	0.12-3.47	11.37-300.55	3.09	UG-G15
	XIM	0.16-2.5	117.15-305		
	XIB	0.15-2.85	125-307.6		
	X	0.1-2.97	140-359.47	6.075	UG-G15
	IX	5.35-14.38	160.05-373.55	108.388	G16-G13
	VIII	1.4-9.52	69.4-391.75	19.897	G15-G10
	VII	0.55-16.57	75-407.76	23.357	G13-G9
	VII/VIII	12.21-20.23	259.22-330.81	23.404	G14-G12
	VI	1.38-9.68	48.8-414.43	19.753	G15-G10
	VI/VII/VIII	22.05-29.74	237.67-311	98.296	G12-G10
	IV/V	0.07-10.03	68-433.7	28.143	G14-G10
	III Top	9.6-21.94	95.7-455.5	178.246	G12-G9
	III Mid Top	1.25-5.92	104-404.5	24.019	G13-G9
	III Mid Bot	0.84-6.25	23-408.5	16.783	G15-G10
	III Mid	3.8-11.03	277.29-475.48	33.87	G13-G11
	III Bot Top	6.49-20	39.75-414.5	29.881	G14-G11
	III Bot Bot	0.8-6.9	46.2-419	4.339	G17-G13
	III Bot	2-21.8	15.5-500	134.47	G14-G12
	II Top	0.35-2.88	9.85-434.27	16.929	G15-G9
	II Bot	0.17-5.91	15.7-445.35	14.989	G12-G9
	I A	0.9-11.35	27-528.35	65.8	G13-G9
	I B	0.4-9.93	39.95-537.98	37.26	G8-G3
	I C	0.2-6.79	44.95-489.7	26.209	G13-G7
	I D	0.05-4.62	57.1-569.28	17.18	G10-G4
	I E	0.37-4	67.65-463.63	25.085	G12-G5

	I F	0.15-2.6	84.95-465.22		
	I G	0.28-1.35	96.84-474.25		
	I H	0.16-1.55	114.32-480.54		
	<b>Total</b>			<b>1066.64</b>	
<b>7.</b>	<b>Surface Constraints</b>	Presence of village, Chhendipada reserve forest and high tension power line.			
<b>8.</b>	<b>Grade of the block</b>	G12 (Provisional) based on weighted average grade as per grade-wise data available in GR.			
<b>9.</b>	<b>Decision Support System (DSS) Analysis</b>	Wildlife info: The polygon touches Wildlife Habitat(s)- Sloth Bear			
<b>10.</b>	<b>Eco Sensitive Zone (ESZ)</b>	Approx. 9.93 kms from Simplipal-Satkosia ESZ and 11.18 from Simplipal-Satkosia Corridor.			

### PART B

Sr.No.	Features	Details
1.	Tentative Peak Rated Mine Capacity	10 MTPA

**Note:**

1. The boundary of the block has been taken from GR after conversion to WGS84 system by feature matching. The block boundary is provisional and the cardinal points, bounding co-ordinates are approximate.
2. Two separate blocks namely Brahmanbil & Kardabahal are merged to create Brahmanbil-Kardabahal Coal Block.

**Disclaimer:**

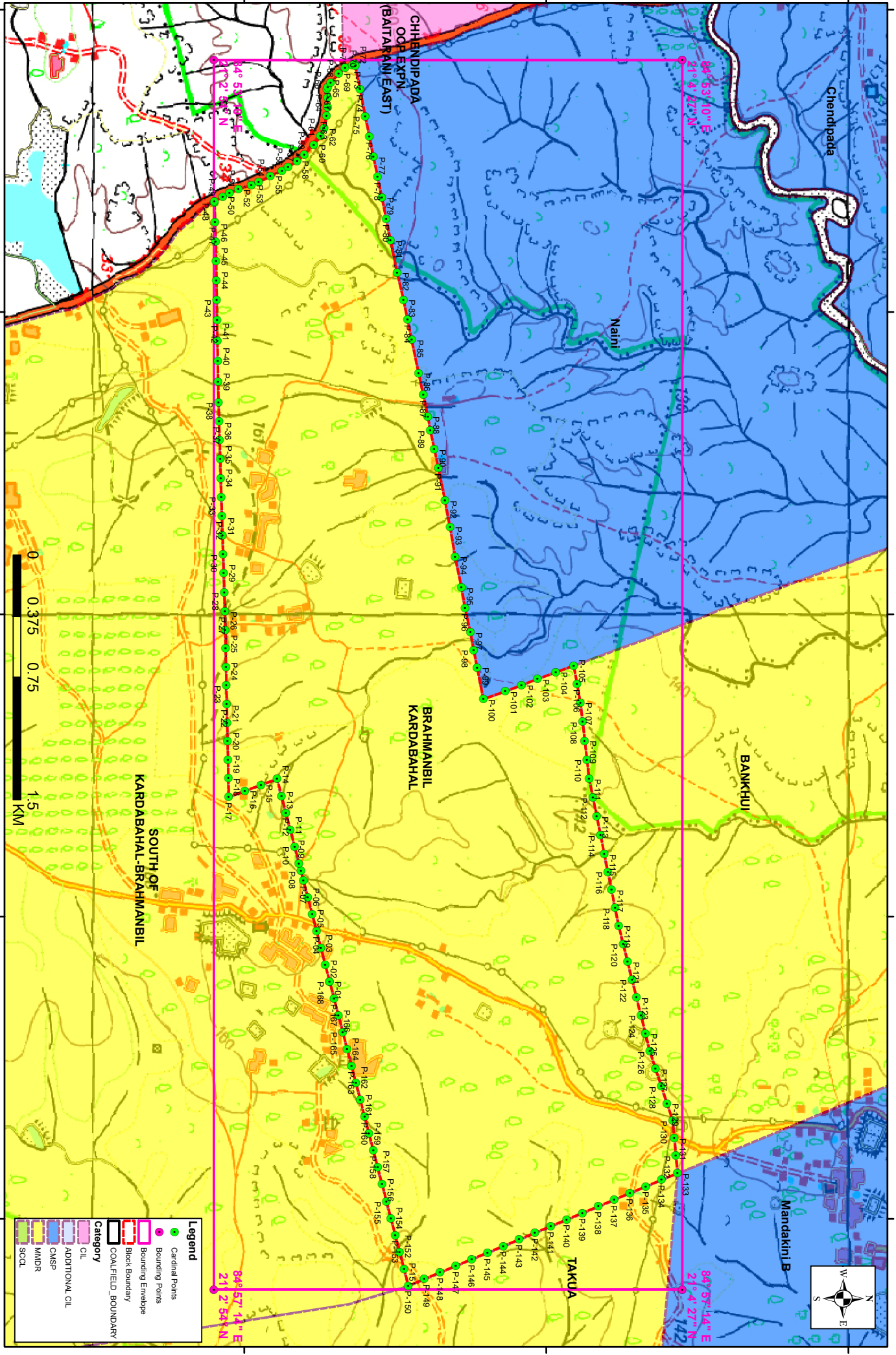
1. The analysis is done on Beta-version (Trial Version) of Decision Support System (DSS) of FSI / MOEF.
2. The Decision Rules for various parameters of this DSS System are controlled by FSI.
3. CMPDI only runs this DSS to obtain the status of any block based on these Decision Rules.
4. The database of the Decision Rules is updated by FSI from time to time.
5. CMPDI does not own any responsibility for variation in the results which are based on the Decision Rules of the FSI DSS in case of any updation of the database at FSI end.
6. ESZ analysis and tiger habitat/ corridor given here is based on the information available in public domain. Bidders are encouraged to verify this information and any other information additionally available.

84°53'0"E 84°54'0"E 84°55'0"E 84°56'0"E 84°57'0"E

21°3'0"N 21°4'0"N 21°5'0"N

# Brahmanbil Krdabahal Block, Talcher Coalfield

FOR INTERNAL/RESTRICTED USE ONLY



84°53'0"E 84°54'0"E

0 0.375 0.75 1.5 KM

84°56'0"E 84°57'0"E

Note: The map is prepared on WGS84 coordinate system.

**Provisional Cardinal Points for KARDABAHAL BRAHMANBIL Block**

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-1	84° 56' 12.903" E	21° 3' 16.980" N
P-2	84° 56' 9.551" E	21° 3' 16.112" N
P-3	84° 56' 6.199" E	21° 3' 15.243" N
P-4	84° 56' 2.846" E	21° 3' 14.375" N
P-5	84° 55' 59.494" E	21° 3' 13.506" N
P-6	84° 55' 56.142" E	21° 3' 12.638" N
P-7	84° 55' 52.789" E	21° 3' 11.769" N
P-8	84° 55' 50.935" E	21° 3' 11.289" N
P-9	84° 55' 49.437" E	21° 3' 10.901" N
P-10	84° 55' 46.085" E	21° 3' 10.032" N
P-11	84° 55' 42.733" E	21° 3' 9.164" N
P-12	84° 55' 39.380" E	21° 3' 8.295" N
P-13	84° 55' 36.028" E	21° 3' 7.426" N
P-14	84° 55' 32.676" E	21° 3' 6.558" N
P-15	84° 55' 33.863" E	21° 3' 3.350" N
P-16	84° 55' 35.050" E	21° 3' 0.142" N
P-17	84° 55' 36.237" E	21° 2' 56.935" N
P-18	84° 55' 32.554" E	21° 2' 56.858" N
P-19	84° 55' 28.871" E	21° 2' 56.780" N
P-20	84° 55' 25.189" E	21° 2' 56.703" N
P-21	84° 55' 21.506" E	21° 2' 56.626" N
P-22	84° 55' 17.824" E	21° 2' 56.549" N
P-23	84° 55' 14.141" E	21° 2' 56.472" N
P-24	84° 55' 10.459" E	21° 2' 56.394" N
P-25	84° 55' 6.776" E	21° 2' 56.317" N
P-26	84° 55' 3.093" E	21° 2' 56.240" N
P-27	84° 54' 59.411" E	21° 2' 56.162" N
P-28	84° 54' 55.636" E	21° 2' 56.048" N
P-29	84° 54' 51.860" E	21° 2' 55.935" N
P-30	84° 54' 48.085" E	21° 2' 55.821" N
P-31	84° 54' 44.310" E	21° 2' 55.707" N
P-32	84° 54' 40.534" E	21° 2' 55.593" N
P-33	84° 54' 36.759" E	21° 2' 55.479" N
P-34	84° 54' 32.984" E	21° 2' 55.365" N
P-35	84° 54' 29.209" E	21° 2' 55.251" N
P-36	84° 54' 25.433" E	21° 2' 55.137" N
P-37	84° 54' 21.658" E	21° 2' 55.023" N
P-38	84° 54' 17.883" E	21° 2' 54.909" N
P-39	84° 54' 13.817" E	21° 2' 54.837" N
P-40	84° 54' 9.751" E	21° 2' 54.766" N
P-41	84° 54' 5.685" E	21° 2' 54.694" N
P-42	84° 54' 1.619" E	21° 2' 54.623" N
P-43	84° 53' 57.553" E	21° 2' 54.551" N
P-44	84° 53' 53.722" E	21° 2' 54.484" N
P-45	84° 53' 49.891" E	21° 2' 54.418" N
P-46	84° 53' 46.060" E	21° 2' 54.351" N
P-47	84° 53' 42.119" E	21° 2' 54.225" N

**Provisional Cardinal Points for KARDABAHAL BRAHMANBIL Block**

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-48	84° 53' 38.312" E	21° 2' 54.116" N
P-49	84° 53' 38.081" E	21° 2' 54.103" N
P-50	84° 53' 37.097" E	21° 2' 55.766" N
P-51	84° 53' 36.428" E	21° 2' 57.095" N
P-52	84° 53' 35.651" E	21° 2' 58.855" N
P-53	84° 53' 34.825" E	21° 3' 1.458" N
P-54	84° 53' 34.206" E	21° 3' 2.911" N
P-55	84° 53' 33.007" E	21° 3' 5.198" N
P-56	84° 53' 31.991" E	21° 3' 7.505" N
P-57	84° 53' 31.242" E	21° 3' 8.735" N
P-58	84° 53' 30.017" E	21° 3' 10.506" N
P-59	84° 53' 28.816" E	21° 3' 11.937" N
P-60	84° 53' 26.821" E	21° 3' 13.832" N
P-61	84° 53' 25.097" E	21° 3' 15.132" N
P-62	84° 53' 23.508" E	21° 3' 15.890" N
P-63	84° 53' 21.091" E	21° 3' 16.368" N
P-64	84° 53' 19.360" E	21° 3' 16.585" N
P-65	84° 53' 17.463" E	21° 3' 16.595" N
P-66	84° 53' 15.758" E	21° 3' 16.450" N
P-67	84° 53' 15.319" E	21° 3' 16.608" N
P-68	84° 53' 14.525" E	21° 3' 17.180" N
P-69	84° 53' 12.666" E	21° 3' 18.791" N
P-70	84° 53' 11.514" E	21° 3' 20.049" N
P-71	84° 53' 11.019" E	21° 3' 21.450" N
P-72	84° 53' 10.757" E	21° 3' 21.951" N
P-73	84° 53' 11.103" E	21° 3' 22.045" N
P-74	84° 53' 15.733" E	21° 3' 22.997" N
P-75	84° 53' 21.154" E	21° 3' 24.070" N
P-76	84° 53' 25.156" E	21° 3' 24.875" N
P-77	84° 53' 29.157" E	21° 3' 25.681" N
P-78	84° 53' 33.191" E	21° 3' 26.516" N
P-79	84° 53' 37.225" E	21° 3' 27.351" N
P-80	84° 53' 41.517" E	21° 3' 28.216" N
P-81	84° 53' 45.809" E	21° 3' 29.081" N
P-82	84° 53' 52.198" E	21° 3' 30.393" N
P-83	84° 53' 57.556" E	21° 3' 31.648" N
P-84	84° 54' 1.525" E	21° 3' 32.454" N
P-85	84° 54' 5.494" E	21° 3' 33.259" N
P-86	84° 54' 12.142" E	21° 3' 34.631" N
P-87	84° 54' 16.435" E	21° 3' 35.556" N
P-88	84° 54' 20.727" E	21° 3' 36.481" N
P-89	84° 54' 23.502" E	21° 3' 36.956" N
P-90	84° 54' 27.246" E	21° 3' 37.762" N
P-91	84° 54' 30.989" E	21° 3' 38.568" N
P-92	84° 54' 37.444" E	21° 3' 39.879" N
P-93	84° 54' 42.672" E	21° 3' 40.892" N
P-94	84° 54' 48.544" E	21° 3' 41.903" N

**Provisional Cardinal Points for KARDABAHAL BRAHMANBIL Block**

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-95	84° 54' 54.676" E	21° 3' 43.155" N
P-96	84° 54' 58.742" E	21° 3' 43.868" N
P-97	84° 55' 3.583" E	21° 3' 44.943" N
P-98	84° 55' 7.069" E	21° 3' 45.597" N
P-99	84° 55' 10.554" E	21° 3' 46.252" N
P-100	84° 55' 16.815" E	21° 3' 47.504" N
P-101	84° 55' 15.283" E	21° 3' 51.868" N
P-102	84° 55' 14.069" E	21° 3' 55.050" N
P-103	84° 55' 12.855" E	21° 3' 58.232" N
P-104	84° 55' 11.514" E	21° 4' 1.869" N
P-105	84° 55' 10.179" E	21° 4' 5.439" N
P-106	84° 55' 13.860" E	21° 4' 6.102" N
P-107	84° 55' 17.542" E	21° 4' 6.765" N
P-108	84° 55' 21.313" E	21° 4' 7.200" N
P-109	84° 55' 25.084" E	21° 4' 7.635" N
P-110	84° 55' 28.855" E	21° 4' 8.070" N
P-111	84° 55' 32.626" E	21° 4' 8.505" N
P-112	84° 55' 36.364" E	21° 4' 9.258" N
P-113	84° 55' 40.103" E	21° 4' 10.011" N
P-114	84° 55' 43.841" E	21° 4' 10.764" N
P-115	84° 55' 47.580" E	21° 4' 11.517" N
P-116	84° 55' 51.139" E	21° 4' 12.235" N
P-117	84° 55' 54.699" E	21° 4' 12.954" N
P-118	84° 55' 58.258" E	21° 4' 13.672" N
P-119	84° 56' 1.818" E	21° 4' 14.391" N
P-120	84° 56' 5.378" E	21° 4' 15.273" N
P-121	84° 56' 8.938" E	21° 4' 16.155" N
P-122	84° 56' 12.498" E	21° 4' 17.038" N
P-123	84° 56' 16.058" E	21° 4' 17.920" N
P-124	84° 56' 19.618" E	21° 4' 18.802" N
P-125	84° 56' 23.178" E	21° 4' 19.684" N
P-126	84° 56' 26.738" E	21° 4' 20.567" N
P-127	84° 56' 30.188" E	21° 4' 21.702" N
P-128	84° 56' 33.638" E	21° 4' 22.838" N
P-129	84° 56' 37.088" E	21° 4' 23.974" N
P-130	84° 56' 40.538" E	21° 4' 25.110" N
P-131	84° 56' 44.006" E	21° 4' 25.419" N
P-132	84° 56' 47.473" E	21° 4' 25.728" N
P-133	84° 56' 50.941" E	21° 4' 26.037" N
P-134	84° 56' 52.253" E	21° 4' 22.894" N
P-135	84° 56' 53.565" E	21° 4' 19.751" N
P-136	84° 56' 54.878" E	21° 4' 16.609" N
P-137	84° 56' 56.190" E	21° 4' 13.466" N
P-138	84° 56' 57.502" E	21° 4' 10.323" N
P-139	84° 56' 58.814" E	21° 4' 7.180" N
P-140	84° 57' 0.126" E	21° 4' 4.037" N
P-141	84° 57' 1.439" E	21° 4' 0.894" N

**Provisional Cardinal Points for KARDABAHAL BRAHMANBIL Block**

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-142	84° 57' 2.751" E	21° 3' 57.752" N
P-143	84° 57' 4.063" E	21° 3' 54.609" N
P-144	84° 57' 5.375" E	21° 3' 51.466" N
P-145	84° 57' 6.687" E	21° 3' 48.323" N
P-146	84° 57' 7.999" E	21° 3' 45.180" N
P-147	84° 57' 9.312" E	21° 3' 42.037" N
P-148	84° 57' 10.624" E	21° 3' 38.894" N
P-149	84° 57' 11.936" E	21° 3' 35.752" N
P-150	84° 57' 13.248" E	21° 3' 32.609" N
P-151	84° 57' 9.895" E	21° 3' 31.741" N
P-152	84° 57' 6.543" E	21° 3' 30.873" N
P-153	84° 57' 3.190" E	21° 3' 30.004" N
P-154	84° 56' 59.838" E	21° 3' 29.136" N
P-155	84° 56' 56.485" E	21° 3' 28.268" N
P-156	84° 56' 53.132" E	21° 3' 27.400" N
P-157	84° 56' 49.780" E	21° 3' 26.532" N
P-158	84° 56' 46.428" E	21° 3' 25.664" N
P-159	84° 56' 43.075" E	21° 3' 24.795" N
P-160	84° 56' 39.723" E	21° 3' 23.927" N
P-161	84° 56' 36.370" E	21° 3' 23.059" N
P-162	84° 56' 33.018" E	21° 3' 22.191" N
P-163	84° 56' 29.665" E	21° 3' 21.322" N
P-164	84° 56' 26.313" E	21° 3' 20.454" N
P-165	84° 56' 22.960" E	21° 3' 19.586" N
P-166	84° 56' 19.608" E	21° 3' 18.717" N
P-167	84° 56' 16.256" E	21° 3' 17.849" N
P-168	84° 56' 12.903" E	21° 3' 16.980" N