

RAMCHANDI COAL BLOCK SUMMARY

PART A

Sr. No	Features	Details
1. Location		
	Coal Block	Ramchandi Block
	Latitude	20° 58' 25" to 21° 00' 05" (Provisional)
	Longitude	84° 56' 23" to 84° 59' 15" (Provisional)
	Topo Sheet No.	F45M16 and F45S13
	Coalfield	Talcher
	Villages	Simlisahi, Chakradharpur, Chandupa, Sendhapal, Kudapal Pasi, Kosala
	Tehsil/Taluka	Angul, Chhendipada
	District	Angul
	State	Odisha
2. Connectivity with Block		
	Nearest Rail Head	The nearest railhead is also Angul connected to Sambalpur-Talcher-Bhubaneswar railway line.
	Road	The block is connected by metaled road SH-63 to Angul then by NH 55 up to Manguli Chhak and thereafter through NH 16 via Cuttack to Bhubaneswar (152 km.). The block is connected via Angul to Sambalpur by NH 55 (180 km.)
	Airport	The Biju Pattanaik International Airport, located in the state capital Bhubaneswar, is the nearest airport from the Ramchandi block at a distance of about 200 km.
3. Area		
	Geological Block Area	12.4 sq.km. (As per shape file. Refer Note No. 3)
	Forest Area	Approx. 9% (As Per FSI map)
	Non-Forest Area	Approx. 91%
4. Climate and Topography		
	Average Annual Rainfall	71-186 cm
	Temperature (Min. — Max.)	6.2°C to 45.0°C
	Local Surface Drainage Channels	Predominantly soil covered with gentle slope. The main drainage is controlled by southerly flowing Brahmani river and fed by various seasonal nalas tikra jhor, singhada jhor, bangaru jhod, nandira jhod.
	Rivers	The main drainage is controlled by southerly flowing Brahmani river
5. Exploration		

	Status	Explored			
	Exploration Agency	GSI, CMPDI			
	Total Number of Boreholes with meterage	79 Boreholes; 31337.20m			
	Borehole Density	Approx. 6.4 bh/sq.km			
	General Dip of Seams	The dip is towards north varying around 5°-8°.			
	General Strike Direction	Strike is generally E-W with local variations.			
	Faults	The block is traversed by 6 no. of faults viz., F1-F1 to F6-F6 having varying throw from 0 to 20m.			
6.	Coal Seams & Reserve (Net Proved: 2094.233 MT, Gross Indicated: 1072.464 MT, Gross Inferred: 110.002 MT; Total: 3276.717 MT)				
	Coal Seams	Thickness Range (m)	Depth Range (m)	Geological Reserve (MT)	Grade
	XI TOP	8.17-8.65	257.04-281.50	4.135	G12-G15
	XI BOT	6.20-7.10	266.80-291.40	3.447	G12-G13
	XI COMB.	11.16-17.77	57.75-271.82	302.484	G12-G17
	X	2.63-8.25	76.28-281.32	53.464	G13-G16
	IX	22.52-28.19	101.99-290.25	203.466	G11-G16
	X + IX	32.15-40.88	110.62-317.20	398.286	G11-G15
	VIII	16.20-23.55	128.64-371.49	325.246	G10-UG
	VII TOP	3.40-14.44	152.00-389.72	111.656	G9-G15
	VIII + VII TOP	28.52-33.61	250.66-347.80	99.525	G13
	VII BOT	0.43-7.45	159.99-404.60	82.06	G10-UG
	VI	0.28-7.68	169.53-409.71	92.486	G9-UG
	V	3.62-14.86	176.49-405.33	208.682	G12-G17
	IV	3.49-11.94	191.18-405.57	136.843	G13-G16
	V + IV	17.39-23.56	296.15-418.24	41.13	G14-G16
	III TOP	22.34-32.00	199.50-422.90	157.46	G11-G14
	III BOT TOP	6.68-7.50	255.25-281.48	5.471	G9-G10
	IIITOP+IIIBOT T	32.38-37.47	210.07-274.70	34.358	G12-G13
	III BOT BOT	2.90-3.90	248.10-314.38	6.194	G11-G13
	III BOT COMB.	7.70-21.10	238.52-448.40	72.899	G7-G13
	IIITOP+IIIBOT	40.70-48.99	296.43-444.20	548.652	G10-G12
	II TOP	0.72-6.70	255.86-323.93	9.606	G13-G16
	II MID	0.22-6.17	259.70-326.72	4.336	G10-G17
	II TOP+MID	4.37-10.34	279.17-498.00	122.487	G9-G17
	II BOT	1.18-5.72	271.35-509.25	50.466	G7-G17
	LOCAL2	0.88-5.68	284.84-470.96	42.04	G10-G15
	II BOT+LOCAL2	5.15-11.88	385.12-513.00	28.508	G12-G15
	LOCAL1	0.22-2.76	299.93-522.49	15.633	G9-G16
	LOCAL2+LOCAL1	4.96-7.34	496.74-516.29	5.677	G12-G15
	I A (LOCAL1/ LOCAL2+LOCAL1 & I A)	0.45-0.59	506.20-559.64		
	I B	0.80-5.44	429.66-583.00	48.775	

	I C	0.63-1.30	438.63-599.64		
	I D	3.05-7.32	499.30-628.00	61.245	
	I E	1.01-2.73	579.89-637.45		
		Total		3276.717	
7.	Surface Constraints	Rivers on the eastern and southern boundaries. SH-63 passes through the block.			
8.	Grade of Coal	G13 (Provisional) based on weighted average grade as per grade-wise data in the GR.			
9.	Decision Support System (DSS) Analysis	Polygon touches wildlife habitat-Sloth Bear			
10.	Eco Sensitive Zone (ESZ) Analysis	Approx. 11 kms to the Simlipal-Satkosia Tiger Corridor from the SW block boundary, 28.1 kms to the Sambalpur Elephant Reserve and approx. 12 kms to the Mahanadi Elephant Reserve from the South-western block boundary.			

PART B

Sr. No.	Features	Details
1.	Previous Allocation	
	Name and Address of Allocatee	Jindal Steel & Power Limited
2.	Target Capacity as per Mining Plan	NA
	Tentatively estimated PRC	12 Mty
3.	Status of Clearances/Approvals	
	Mining Plan/ Mine Closure Plan	NA
	Forest Clearance	NA
	Environmental Clearance	NA
	Mining Lease	NA
	Land Acquisition	NA
	No. of PAFs as per Mining Plan/ Mine Closure Plan	NA

Note:

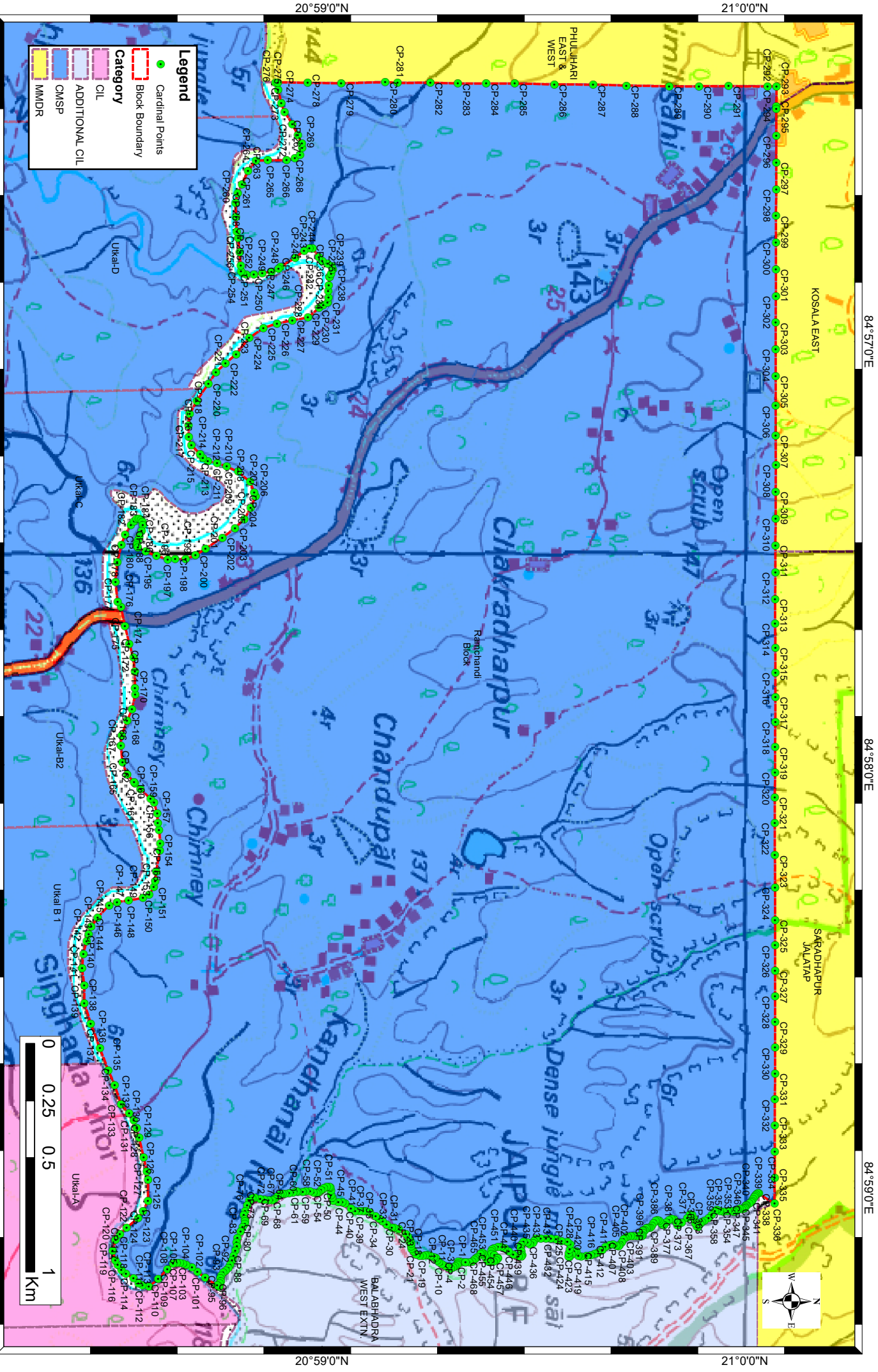
- The above data is compiled from Geological Report, Mining Plan and the data furnished by the prior allottee in Annexure-I/II, as available. For clarifications with regard to above data, please refer aforesaid source documents.
- The boundary of the block has been taken from GR after conversion to WGS84 system by feature matching. The block boundary is provisional and the cardinal points, bounding co-ordinates are approximate.
- There is a difference in area in the shape file and GR. Area in the shape file is based on feature mapped plan of the block as given in the GR. So, the area is tentative and field DGPS survey is required to ascertain the exact area.
- The summary is compiled from Geological Report on Coal Exploration, Ramchandi Block, Talcher Coalfield by CMPDI. March-2022.

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 update 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.

Ramchandri Block, Talcher Coalfield

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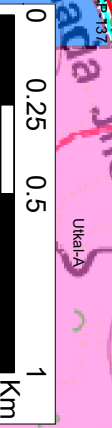


Legend

- Cardinal Points
- Block Boundary

Category

- CIL
- ADDITIONAL CIL
- CMSP
- MMDR



Note: Data is in WGS84 coordinate system.

84°57'0"E

84°58'0"E

84°59'0"E

20°59'0"N

21°0'0"N

20°59'0"N

21°0'0"N

Provisional Cardinal Points for Ramchandi Block		
Point ID	Longitude	Latitude
CP-1	84° 59' 10.555" E	20° 59' 20.369" N
CP-2	84° 59' 10.488" E	20° 59' 19.839" N
CP-3	84° 59' 10.411" E	20° 59' 19.584" N
CP-4	84° 59' 10.479" E	20° 59' 19.302" N
CP-5	84° 59' 10.746" E	20° 59' 19.223" N
CP-6	84° 59' 10.868" E	20° 59' 19.173" N
CP-7	84° 59' 11.054" E	20° 59' 18.889" N
CP-8	84° 59' 11.253" E	20° 59' 18.571" N
CP-9	84° 59' 11.389" E	20° 59' 18.276" N
CP-10	84° 59' 11.290" E	20° 59' 17.853" N
CP-11	84° 59' 11.079" E	20° 59' 17.489" N
CP-12	84° 59' 10.794" E	20° 59' 16.993" N
CP-13	84° 59' 10.509" E	20° 59' 16.584" N
CP-14	84° 59' 10.259" E	20° 59' 16.338" N
CP-15	84° 59' 9.939" E	20° 59' 16.104" N
CP-16	84° 59' 9.800" E	20° 59' 15.819" N
CP-17	84° 59' 9.649" E	20° 59' 15.355" N
CP-18	84° 59' 9.542" E	20° 59' 14.987" N
CP-19	84° 59' 9.560" E	20° 59' 14.644" N
CP-20	84° 59' 9.658" E	20° 59' 14.259" N
CP-21	84° 59' 9.613" E	20° 59' 13.807" N
CP-22	84° 59' 9.473" E	20° 59' 13.330" N
CP-23	84° 59' 9.037" E	20° 59' 12.958" N
CP-24	84° 59' 8.674" E	20° 59' 12.674" N
CP-25	84° 59' 8.256" E	20° 59' 12.639" N
CP-26	84° 59' 7.894" E	20° 59' 12.639" N
CP-27	84° 59' 7.504" E	20° 59' 12.470" N
CP-28	84° 59' 6.943" E	20° 59' 12.195" N
CP-29	84° 59' 6.534" E	20° 59' 11.893" N
CP-30	84° 59' 5.821" E	20° 59' 10.889" N
CP-31	84° 59' 5.602" E	20° 59' 10.232" N
CP-32	84° 59' 5.640" E	20° 59' 9.868" N
CP-33	84° 59' 5.202" E	20° 59' 9.139" N
CP-34	84° 59' 4.708" E	20° 59' 8.589" N
CP-35	84° 59' 4.346" E	20° 59' 8.091" N
CP-36	84° 59' 4.013" E	20° 59' 7.600" N
CP-37	84° 59' 3.449" E	20° 59' 6.773" N
CP-38	84° 59' 3.221" E	20° 59' 6.246" N
CP-39	84° 59' 3.301" E	20° 59' 5.782" N
CP-40	84° 59' 3.324" E	20° 59' 5.243" N
CP-41	84° 59' 3.338" E	20° 59' 4.692" N
CP-42	84° 59' 2.920" E	20° 59' 4.092" N
CP-43	84° 59' 2.166" E	20° 59' 3.276" N
CP-44	84° 59' 2.055" E	20° 59' 2.853" N
CP-45	84° 59' 1.995" E	20° 59' 2.290" N
CP-46	84° 59' 1.834" E	20° 59' 1.566" N
CP-47	84° 59' 1.366" E	20° 59' 1.424" N

Provisional Cardinal Points for Ramchandi Block		
Point ID	Longitude	Latitude
CP-48	84° 59' 0.989" E	20° 59' 1.280" N
CP-49	84° 59' 0.406" E	20° 59' 1.248" N
CP-50	84° 58' 59.960" E	20° 59' 1.189" N
CP-51	84° 58' 59.800" E	20° 59' 1.003" N
CP-52	84° 58' 59.817" E	20° 59' 0.656" N
CP-53	84° 59' 0.000" E	20° 59' 0.221" N
CP-54	84° 59' 0.338" E	20° 58' 59.821" N
CP-55	84° 59' 0.688" E	20° 58' 59.422" N
CP-56	84° 59' 0.719" E	20° 58' 59.161" N
CP-57	84° 59' 0.602" E	20° 58' 58.761" N
CP-58	84° 59' 0.494" E	20° 58' 58.260" N
CP-59	84° 59' 0.470" E	20° 58' 57.672" N
CP-60	84° 59' 0.533" E	20° 58' 57.244" N
CP-61	84° 59' 0.579" E	20° 58' 56.547" N
CP-62	84° 59' 0.486" E	20° 58' 56.387" N
CP-63	84° 59' 0.617" E	20° 58' 55.899" N
CP-64	84° 59' 0.755" E	20° 58' 55.303" N
CP-65	84° 59' 0.855" E	20° 58' 54.683" N
CP-66	84° 59' 0.880" E	20° 58' 54.367" N
CP-67	84° 59' 0.885" E	20° 58' 54.057" N
CP-68	84° 59' 1.243" E	20° 58' 53.684" N
CP-69	84° 59' 1.569" E	20° 58' 53.232" N
CP-70	84° 59' 1.769" E	20° 58' 52.927" N
CP-71	84° 59' 1.727" E	20° 58' 52.387" N
CP-72	84° 59' 1.622" E	20° 58' 51.797" N
CP-73	84° 59' 1.527" E	20° 58' 51.198" N
CP-74	84° 59' 1.370" E	20° 58' 50.421" N
CP-75	84° 59' 1.433" E	20° 58' 50.107" N
CP-76	84° 59' 1.792" E	20° 58' 49.641" N
CP-77	84° 59' 2.408" E	20° 58' 49.375" N
CP-78	84° 59' 3.243" E	20° 58' 49.092" N
CP-79	84° 59' 3.810" E	20° 58' 48.885" N
CP-80	84° 59' 4.420" E	20° 58' 49.041" N
CP-81	84° 59' 4.750" E	20° 58' 49.060" N
CP-82	84° 59' 5.078" E	20° 58' 49.016" N
CP-83	84° 59' 5.538" E	20° 58' 48.702" N
CP-84	84° 59' 6.186" E	20° 58' 48.409" N
CP-85	84° 59' 7.092" E	20° 58' 47.973" N
CP-86	84° 59' 7.761" E	20° 58' 47.856" N
CP-87	84° 59' 8.249" E	20° 58' 47.915" N
CP-88	84° 59' 8.849" E	20° 58' 47.700" N
CP-89	84° 59' 9.615" E	20° 58' 47.427" N
CP-90	84° 59' 10.305" E	20° 58' 47.212" N
CP-91	84° 59' 10.891" E	20° 58' 46.945" N
CP-92	84° 59' 11.321" E	20° 58' 46.699" N
CP-93	84° 59' 11.698" E	20° 58' 46.314" N
CP-94	84° 59' 12.016" E	20° 58' 45.954" N

Provisional Cardinal Points for Ramchandi Block		
Point ID	Longitude	Latitude
CP-95	84° 59' 12.445" E	20° 58' 45.674" N
CP-96	84° 59' 12.813" E	20° 58' 45.537" N
CP-97	84° 59' 13.199" E	20° 58' 45.628" N
CP-98	84° 59' 13.560" E	20° 58' 45.486" N
CP-99	84° 59' 13.990" E	20° 58' 45.382" N
CP-100	84° 59' 13.803" E	20° 58' 45.092" N
CP-101	84° 59' 12.697" E	20° 58' 43.395" N
CP-102	84° 59' 11.920" E	20° 58' 42.289" N
CP-103	84° 59' 11.269" E	20° 58' 41.515" N
CP-104	84° 59' 10.897" E	20° 58' 40.717" N
CP-105	84° 59' 10.759" E	20° 58' 40.262" N
CP-106	84° 59' 10.664" E	20° 58' 39.810" N
CP-107	84° 59' 10.620" E	20° 58' 39.341" N
CP-108	84° 59' 10.736" E	20° 58' 38.862" N
CP-109	84° 59' 11.481" E	20° 58' 38.052" N
CP-110	84° 59' 12.937" E	20° 58' 36.735" N
CP-111	84° 59' 13.944" E	20° 58' 35.415" N
CP-112	84° 59' 13.829" E	20° 58' 34.502" N
CP-113	84° 59' 13.563" E	20° 58' 33.954" N
CP-114	84° 59' 12.800" E	20° 58' 33.227" N
CP-115	84° 59' 12.143" E	20° 58' 32.155" N
CP-116	84° 59' 11.634" E	20° 58' 31.502" N
CP-117	84° 59' 10.871" E	20° 58' 30.998" N
CP-118	84° 59' 10.240" E	20° 58' 30.636" N
CP-119	84° 59' 8.929" E	20° 58' 30.287" N
CP-120	84° 59' 7.382" E	20° 58' 30.692" N
CP-121	84° 59' 6.581" E	20° 58' 31.317" N
CP-122	84° 59' 5.635" E	20° 58' 32.252" N
CP-123	84° 59' 4.291" E	20° 58' 33.878" N
CP-124	84° 59' 3.270" E	20° 58' 34.607" N
CP-125	84° 59' 1.809" E	20° 58' 35.304" N
CP-126	84° 58' 58.800" E	20° 58' 35.286" N
CP-127	84° 58' 57.694" E	20° 58' 35.140" N
CP-128	84° 58' 55.703" E	20° 58' 34.690" N
CP-129	84° 58' 52.895" E	20° 58' 34.043" N
CP-130	84° 58' 51.461" E	20° 58' 33.690" N
CP-131	84° 58' 50.422" E	20° 58' 33.261" N
CP-132	84° 58' 49.409" E	20° 58' 32.616" N
CP-133	84° 58' 48.160" E	20° 58' 31.473" N
CP-134	84° 58' 45.375" E	20° 58' 30.563" N
CP-135	84° 58' 43.330" E	20° 58' 29.665" N
CP-136	84° 58' 40.189" E	20° 58' 28.472" N
CP-137	84° 58' 36.690" E	20° 58' 27.177" N
CP-138	84° 58' 33.771" E	20° 58' 26.266" N
CP-139	84° 58' 31.262" E	20° 58' 26.260" N
CP-140	84° 58' 28.804" E	20° 58' 25.945" N
CP-141	84° 58' 26.790" E	20° 58' 26.129" N

Provisional Cardinal Points for Ramchandi Block		
Point ID	Longitude	Latitude
CP-142	84° 58' 24.980" E	20° 58' 26.605" N
CP-143	84° 58' 24.004" E	20° 58' 26.857" N
CP-144	84° 58' 22.942" E	20° 58' 27.249" N
CP-145	84° 58' 21.661" E	20° 58' 28.153" N
CP-146	84° 58' 19.887" E	20° 58' 29.777" N
CP-147	84° 58' 19.459" E	20° 58' 30.898" N
CP-148	84° 58' 19.219" E	20° 58' 32.556" N
CP-149	84° 58' 18.867" E	20° 58' 34.601" N
CP-150	84° 58' 18.415" E	20° 58' 35.443" N
CP-151	84° 58' 17.343" E	20° 58' 36.095" N
CP-152	84° 58' 16.445" E	20° 58' 36.330" N
CP-153	84° 58' 15.170" E	20° 58' 36.431" N
CP-154	84° 58' 12.151" E	20° 58' 36.987" N
CP-155	84° 58' 11.129" E	20° 58' 37.026" N
CP-156	84° 58' 9.242" E	20° 58' 36.861" N
CP-157	84° 58' 8.294" E	20° 58' 36.663" N
CP-158	84° 58' 6.938" E	20° 58' 36.581" N
CP-159	84° 58' 5.378" E	20° 58' 36.161" N
CP-160	84° 58' 4.802" E	20° 58' 35.669" N
CP-161	84° 58' 3.452" E	20° 58' 34.225" N
CP-162	84° 58' 2.597" E	20° 58' 33.452" N
CP-163	84° 58' 2.475" E	20° 58' 33.301" N
CP-164	84° 58' 1.363" E	20° 58' 32.331" N
CP-165	84° 57' 59.655" E	20° 58' 31.671" N
CP-166	84° 57' 57.293" E	20° 58' 31.447" N
CP-167	84° 57' 55.862" E	20° 58' 31.539" N
CP-168	84° 57' 53.779" E	20° 58' 32.327" N
CP-169	84° 57' 52.135" E	20° 58' 33.034" N
CP-170	84° 57' 50.048" E	20° 58' 33.493" N
CP-171	84° 57' 49.128" E	20° 58' 33.457" N
CP-172	84° 57' 46.777" E	20° 58' 33.439" N
CP-173	84° 57' 44.776" E	20° 58' 33.221" N
CP-174	84° 57' 42.877" E	20° 58' 32.640" N
CP-175	84° 57' 40.277" E	20° 58' 31.998" N
CP-176	84° 57' 37.614" E	20° 58' 31.465" N
CP-177	84° 57' 36.907" E	20° 58' 30.974" N
CP-178	84° 57' 34.112" E	20° 58' 30.682" N
CP-179	84° 57' 31.276" E	20° 58' 30.947" N
CP-180	84° 57' 28.751" E	20° 58' 31.519" N
CP-181	84° 57' 27.360" E	20° 58' 32.042" N
CP-182	84° 57' 25.979" E	20° 58' 32.857" N
CP-183	84° 57' 25.475" E	20° 58' 33.314" N
CP-184	84° 57' 25.125" E	20° 58' 33.688" N
CP-185	84° 57' 25.128" E	20° 58' 34.019" N
CP-186	84° 57' 25.262" E	20° 58' 34.307" N
CP-187	84° 57' 25.528" E	20° 58' 34.512" N
CP-188	84° 57' 25.990" E	20° 58' 34.551" N

Provisional Cardinal Points for Ramchandi		
Block		
Point ID	Longitude	Latitude
CP-189	84° 57' 26.826" E	20° 58' 34.401" N
CP-190	84° 57' 27.661" E	20° 58' 34.045" N
CP-191	84° 57' 28.166" E	20° 58' 33.835" N
CP-192	84° 57' 28.605" E	20° 58' 33.667" N
CP-193	84° 57' 28.891" E	20° 58' 33.665" N
CP-194	84° 57' 29.223" E	20° 58' 33.849" N
CP-195	84° 57' 29.759" E	20° 58' 34.941" N
CP-196	84° 57' 30.342" E	20° 58' 36.466" N
CP-197	84° 57' 30.838" E	20° 58' 38.075" N
CP-198	84° 57' 30.826" E	20° 58' 39.155" N
CP-199	84° 57' 30.801" E	20° 58' 40.609" N
CP-200	84° 57' 30.278" E	20° 58' 42.021" N
CP-201	84° 57' 29.335" E	20° 58' 43.472" N
CP-202	84° 57' 27.776" E	20° 58' 45.822" N
CP-203	84° 57' 26.433" E	20° 58' 47.654" N
CP-204	84° 57' 25.160" E	20° 58' 48.969" N
CP-205	84° 57' 23.554" E	20° 58' 49.874" N
CP-206	84° 57' 21.910" E	20° 58' 50.538" N
CP-207	84° 57' 21.322" E	20° 58' 50.335" N
CP-208	84° 57' 19.853" E	20° 58' 49.759" N
CP-209	84° 57' 18.411" E	20° 58' 48.074" N
CP-210	84° 57' 17.683" E	20° 58' 46.438" N
CP-211	84° 57' 17.215" E	20° 58' 45.117" N
CP-212	84° 57' 16.900" E	20° 58' 43.777" N
CP-213	84° 57' 16.444" E	20° 58' 43.068" N
CP-214	84° 57' 15.924" E	20° 58' 42.676" N
CP-215	84° 57' 14.647" E	20° 58' 41.446" N
CP-216	84° 57' 13.463" E	20° 58' 41.092" N
CP-217	84° 57' 11.841" E	20° 58' 41.050" N
CP-218	84° 57' 10.221" E	20° 58' 41.215" N
CP-219	84° 57' 8.414" E	20° 58' 42.206" N
CP-220	84° 57' 5.952" E	20° 58' 43.847" N
CP-221	84° 57' 4.311" E	20° 58' 44.933" N
CP-222	84° 57' 3.084" E	20° 58' 46.274" N
CP-223	84° 57' 1.766" E	20° 58' 47.787" N
CP-224	84° 56' 59.452" E	20° 58' 49.642" N
CP-225	84° 56' 58.064" E	20° 58' 51.664" N
CP-226	84° 56' 57.391" E	20° 58' 53.604" N
CP-227	84° 56' 56.966" E	20° 58' 55.749" N
CP-228	84° 56' 56.542" E	20° 58' 57.971" N
CP-229	84° 56' 55.188" E	20° 58' 59.573" N
CP-230	84° 56' 54.775" E	20° 59' 0.167" N
CP-231	84° 56' 54.413" E	20° 59' 0.793" N
CP-232	84° 56' 53.772" E	20° 59' 0.904" N
CP-233	84° 56' 52.855" E	20° 59' 0.852" N
CP-234	84° 56' 52.033" E	20° 59' 0.924" N
CP-235	84° 56' 50.858" E	20° 59' 1.064" N

Provisional Cardinal Points for Ramchandi Block		
Point ID	Longitude	Latitude
CP-236	84° 56' 50.787" E	20° 59' 1.066" N
CP-237	84° 56' 50.408" E	20° 59' 1.247" N
CP-238	84° 56' 49.677" E	20° 59' 1.531" N
CP-239	84° 56' 49.287" E	20° 59' 1.361" N
CP-240	84° 56' 48.962" E	20° 59' 0.761" N
CP-241	84° 56' 48.545" E	20° 59' 0.054" N
CP-242	84° 56' 47.964" E	20° 58' 59.524" N
CP-243	84° 56' 46.749" E	20° 58' 58.654" N
CP-244	84° 56' 46.719" E	20° 58' 58.190" N
CP-245	84° 56' 47.126" E	20° 58' 57.464" N
CP-246	84° 56' 48.079" E	20° 58' 56.194" N
CP-247	84° 56' 49.411" E	20° 58' 54.070" N
CP-248	84° 56' 49.645" E	20° 58' 53.785" N
CP-249	84° 56' 50.043" E	20° 58' 52.810" N
CP-250	84° 56' 50.263" E	20° 58' 51.496" N
CP-251	84° 56' 50.415" E	20° 58' 50.291" N
CP-252	84° 56' 50.431" E	20° 58' 49.259" N
CP-253	84° 56' 50.279" E	20° 58' 48.722" N
CP-254	84° 56' 50.037" E	20° 58' 48.508" N
CP-255	84° 56' 49.189" E	20° 58' 48.449" N
CP-256	84° 56' 47.287" E	20° 58' 48.310" N
CP-257	84° 56' 45.307" E	20° 58' 48.089" N
CP-258	84° 56' 44.399" E	20° 58' 47.888" N
CP-259	84° 56' 42.255" E	20° 58' 47.772" N
CP-260	84° 56' 40.303" E	20° 58' 47.733" N
CP-261	84° 56' 38.931" E	20° 58' 48.025" N
CP-262	84° 56' 37.726" E	20° 58' 48.626" N
CP-263	84° 56' 35.763" E	20° 58' 49.507" N
CP-264	84° 56' 34.314" E	20° 58' 50.599" N
CP-265	84° 56' 34.270" E	20° 58' 52.277" N
CP-266	84° 56' 34.234" E	20° 58' 54.936" N
CP-267	84° 56' 33.967" E	20° 58' 56.125" N
CP-268	84° 56' 33.477" E	20° 58' 56.876" N
CP-269	84° 56' 32.518" E	20° 58' 57.166" N
CP-270	84° 56' 31.858" E	20° 58' 57.118" N
CP-271	84° 56' 30.645" E	20° 58' 56.532" N
CP-272	84° 56' 29.128" E	20° 58' 55.767" N
CP-273	84° 56' 27.417" E	20° 58' 54.667" N
CP-274	84° 56' 26.177" E	20° 58' 54.210" N
CP-275	84° 56' 24.250" E	20° 58' 53.757" N
CP-276	84° 56' 23.216" E	20° 58' 53.402" N
CP-277	84° 56' 23.213" E	20° 58' 53.709" N
CP-278	84° 56' 23.290" E	20° 58' 57.940" N
CP-279	84° 56' 23.343" E	20° 59' 2.724" N
CP-280	84° 56' 23.184" E	20° 59' 8.946" N
CP-281	84° 56' 23.301" E	20° 59' 10.707" N
CP-282	84° 56' 23.267" E	20° 59' 15.348" N

Provisional Cardinal Points for Ramchandi Block		
Block		
Point ID	Longitude	Latitude
CP-283	84° 56' 23.370" E	20° 59' 19.258" N
CP-284	84° 56' 23.376" E	20° 59' 23.284" N
CP-285	84° 56' 23.381" E	20° 59' 27.309" N
CP-286	84° 56' 23.508" E	20° 59' 32.934" N
CP-287	84° 56' 23.539" E	20° 59' 38.430" N
CP-288	84° 56' 23.675" E	20° 59' 43.165" N
CP-289	84° 56' 23.781" E	20° 59' 49.264" N
CP-290	84° 56' 23.776" E	20° 59' 53.454" N
CP-291	84° 56' 23.771" E	20° 59' 57.644" N
CP-292	84° 56' 23.792" E	21° 0' 3.205" N
CP-293	84° 56' 23.798" E	21° 0' 4.456" N
CP-294	84° 56' 26.631" E	21° 0' 4.448" N
CP-295	84° 56' 27.013" E	21° 0' 4.447" N
CP-296	84° 56' 30.798" E	21° 0' 4.436" N
CP-297	84° 56' 34.582" E	21° 0' 4.425" N
CP-298	84° 56' 38.367" E	21° 0' 4.414" N
CP-299	84° 56' 42.151" E	21° 0' 4.403" N
CP-300	84° 56' 45.935" E	21° 0' 4.392" N
CP-301	84° 56' 49.720" E	21° 0' 4.381" N
CP-302	84° 56' 53.504" E	21° 0' 4.370" N
CP-303	84° 56' 57.288" E	21° 0' 4.359" N
CP-304	84° 57' 1.073" E	21° 0' 4.348" N
CP-305	84° 57' 4.857" E	21° 0' 4.337" N
CP-306	84° 57' 9.067" E	21° 0' 4.348" N
CP-307	84° 57' 13.276" E	21° 0' 4.359" N
CP-308	84° 57' 17.485" E	21° 0' 4.370" N
CP-309	84° 57' 21.284" E	21° 0' 4.351" N
CP-310	84° 57' 25.082" E	21° 0' 4.333" N
CP-311	84° 57' 28.880" E	21° 0' 4.314" N
CP-312	84° 57' 32.678" E	21° 0' 4.296" N
CP-313	84° 57' 36.477" E	21° 0' 4.277" N
CP-314	84° 57' 39.950" E	21° 0' 4.284" N
CP-315	84° 57' 43.424" E	21° 0' 4.290" N
CP-316	84° 57' 46.897" E	21° 0' 4.297" N
CP-317	84° 57' 50.371" E	21° 0' 4.304" N
CP-318	84° 57' 53.939" E	21° 0' 4.287" N
CP-319	84° 57' 57.507" E	21° 0' 4.270" N
CP-320	84° 58' 1.075" E	21° 0' 4.254" N
CP-321	84° 58' 4.644" E	21° 0' 4.237" N
CP-322	84° 58' 8.212" E	21° 0' 4.220" N
CP-323	84° 58' 12.812" E	21° 0' 4.241" N
CP-324	84° 58' 17.412" E	21° 0' 4.262" N
CP-325	84° 58' 22.012" E	21° 0' 4.283" N
CP-326	84° 58' 25.614" E	21° 0' 4.277" N
CP-327	84° 58' 29.216" E	21° 0' 4.271" N
CP-328	84° 58' 32.818" E	21° 0' 4.265" N
CP-329	84° 58' 36.420" E	21° 0' 4.259" N

Provisional Cardinal Points for Ramchandi Block		
Block		
Point ID	Longitude	Latitude
CP-330	84° 58' 40.100" E	21° 0' 4.253" N
CP-331	84° 58' 43.780" E	21° 0' 4.247" N
CP-332	84° 58' 47.460" E	21° 0' 4.242" N
CP-333	84° 58' 51.140" E	21° 0' 4.236" N
CP-334	84° 58' 54.819" E	21° 0' 4.230" N
CP-335	84° 58' 58.509" E	21° 0' 4.207" N
CP-336	84° 59' 2.199" E	21° 0' 4.184" N
CP-337	84° 59' 0.798" E	21° 0' 1.979" N
CP-338	84° 59' 0.781" E	21° 0' 1.790" N
CP-339	84° 59' 0.899" E	21° 0' 1.579" N
CP-340	84° 59' 1.113" E	21° 0' 1.454" N
CP-341	84° 59' 1.310" E	21° 0' 1.307" N
CP-342	84° 59' 1.608" E	21° 0' 1.154" N
CP-343	84° 59' 1.816" E	21° 0' 0.975" N
CP-344	84° 59' 1.986" E	21° 0' 0.850" N
CP-345	84° 59' 2.217" E	21° 0' 0.594" N
CP-346	84° 59' 2.401" E	21° 0' 0.257" N
CP-347	84° 59' 2.476" E	21° 0' 0.123" N
CP-348	84° 59' 2.640" E	21° 0' 0.015" N
CP-349	84° 59' 2.839" E	21° 0' 0.000" N
CP-350	84° 59' 2.967" E	20° 59' 59.812" N
CP-351	84° 59' 2.983" E	20° 59' 59.534" N
CP-352	84° 59' 2.950" E	20° 59' 59.197" N
CP-353	84° 59' 3.060" E	20° 59' 58.916" N
CP-354	84° 59' 3.333" E	20° 59' 58.777" N
CP-355	84° 59' 3.389" E	20° 59' 58.455" N
CP-356	84° 59' 3.231" E	20° 59' 58.100" N
CP-357	84° 59' 3.270" E	20° 59' 57.566" N
CP-358	84° 59' 3.423" E	20° 59' 56.907" N
CP-359	84° 59' 3.325" E	20° 59' 56.431" N
CP-360	84° 59' 3.111" E	20° 59' 56.029" N
CP-361	84° 59' 3.287" E	20° 59' 55.709" N
CP-362	84° 59' 3.834" E	20° 59' 55.292" N
CP-363	84° 59' 4.256" E	20° 59' 54.815" N
CP-364	84° 59' 4.620" E	20° 59' 54.243" N
CP-365	84° 59' 4.806" E	20° 59' 53.873" N
CP-366	84° 59' 5.132" E	20° 59' 53.648" N
CP-367	84° 59' 5.537" E	20° 59' 53.355" N
CP-368	84° 59' 5.424" E	20° 59' 53.153" N
CP-369	84° 59' 4.957" E	20° 59' 52.944" N
CP-370	84° 59' 4.364" E	20° 59' 52.761" N
CP-371	84° 59' 3.835" E	20° 59' 52.490" N
CP-372	84° 59' 3.760" E	20° 59' 52.210" N
CP-373	84° 59' 4.281" E	20° 59' 51.775" N
CP-374	84° 59' 4.902" E	20° 59' 50.997" N
CP-375	84° 59' 5.281" E	20° 59' 50.526" N
CP-376	84° 59' 5.252" E	20° 59' 50.392" N

Provisional Cardinal Points for Ramchandi		
Block		
Point ID	Longitude	Latitude
CP-377	84° 59' 4.862" E	20° 59' 50.204" N
CP-378	84° 59' 4.455" E	20° 59' 49.956" N
CP-379	84° 59' 4.374" E	20° 59' 49.580" N
CP-380	84° 59' 4.538" E	20° 59' 49.188" N
CP-381	84° 59' 4.907" E	20° 59' 48.794" N
CP-382	84° 59' 5.279" E	20° 59' 48.511" N
CP-383	84° 59' 5.230" E	20° 59' 48.249" N
CP-384	84° 59' 4.915" E	20° 59' 47.996" N
CP-385	84° 59' 4.652" E	20° 59' 47.858" N
CP-386	84° 59' 4.500" E	20° 59' 47.582" N
CP-387	84° 59' 4.661" E	20° 59' 47.309" N
CP-388	84° 59' 4.996" E	20° 59' 46.999" N
CP-389	84° 59' 5.369" E	20° 59' 46.781" N
CP-390	84° 59' 5.623" E	20° 59' 46.569" N
CP-391	84° 59' 5.678" E	20° 59' 46.329" N
CP-392	84° 59' 5.642" E	20° 59' 46.105" N
CP-393	84° 59' 5.738" E	20° 59' 45.944" N
CP-394	84° 59' 5.976" E	20° 59' 45.804" N
CP-395	84° 59' 6.038" E	20° 59' 45.566" N
CP-396	84° 59' 6.123" E	20° 59' 45.512" N
CP-397	84° 59' 6.407" E	20° 59' 45.508" N
CP-398	84° 59' 6.715" E	20° 59' 45.476" N
CP-399	84° 59' 6.844" E	20° 59' 45.344" N
CP-400	84° 59' 6.848" E	20° 59' 45.042" N
CP-401	84° 59' 6.844" E	20° 59' 44.656" N
CP-402	84° 59' 6.842" E	20° 59' 44.172" N
CP-403	84° 59' 6.867" E	20° 59' 43.791" N
CP-404	84° 59' 6.884" E	20° 59' 43.339" N
CP-405	84° 59' 7.066" E	20° 59' 43.014" N
CP-406	84° 59' 7.324" E	20° 59' 42.759" N
CP-407	84° 59' 7.728" E	20° 59' 42.500" N
CP-408	84° 59' 8.071" E	20° 59' 42.225" N
CP-409	84° 59' 8.269" E	20° 59' 42.045" N
CP-410	84° 59' 8.165" E	20° 59' 41.717" N
CP-411	84° 59' 7.951" E	20° 59' 41.277" N
CP-412	84° 59' 8.120" E	20° 59' 40.779" N
CP-413	84° 59' 8.354" E	20° 59' 40.162" N
CP-414	84° 59' 8.791" E	20° 59' 39.715" N
CP-415	84° 59' 9.163" E	20° 59' 39.101" N
CP-416	84° 59' 9.338" E	20° 59' 38.612" N
CP-417	84° 59' 9.566" E	20° 59' 38.138" N
CP-418	84° 59' 9.619" E	20° 59' 37.500" N
CP-419	84° 59' 9.712" E	20° 59' 36.763" N
CP-420	84° 59' 9.592" E	20° 59' 36.368" N
CP-421	84° 59' 8.980" E	20° 59' 36.087" N
CP-422	84° 59' 8.985" E	20° 59' 35.761" N
CP-423	84° 59' 9.497" E	20° 59' 35.426" N

Provisional Cardinal Points for Ramchandi Block		
Point ID	Longitude	Latitude
CP-424	84° 59' 9.799" E	20° 59' 35.080" N
CP-425	84° 59' 9.671" E	20° 59' 34.950" N
CP-426	84° 59' 9.216" E	20° 59' 35.003" N
CP-427	84° 59' 8.713" E	20° 59' 35.134" N
CP-428	84° 59' 7.974" E	20° 59' 35.201" N
CP-429	84° 59' 7.686" E	20° 59' 34.805" N
CP-430	84° 59' 7.554" E	20° 59' 33.971" N
CP-431	84° 59' 7.322" E	20° 59' 33.198" N
CP-432	84° 59' 7.224" E	20° 59' 32.475" N
CP-433	84° 59' 7.124" E	20° 59' 31.756" N
CP-434	84° 59' 7.139" E	20° 59' 31.032" N
CP-435	84° 59' 7.200" E	20° 59' 30.323" N
CP-436	84° 59' 7.545" E	20° 59' 30.042" N
CP-437	84° 59' 7.792" E	20° 59' 29.896" N
CP-438	84° 59' 7.969" E	20° 59' 29.466" N
CP-439	84° 59' 7.715" E	20° 59' 29.124" N
CP-440	84° 59' 7.588" E	20° 59' 28.575" N
CP-441	84° 59' 8.026" E	20° 59' 28.185" N
CP-442	84° 59' 8.504" E	20° 59' 28.158" N
CP-443	84° 59' 9.014" E	20° 59' 28.284" N
CP-444	84° 59' 9.544" E	20° 59' 28.401" N
CP-445	84° 59' 9.746" E	20° 59' 28.284" N
CP-446	84° 59' 9.716" E	20° 59' 27.852" N
CP-447	84° 59' 9.435" E	20° 59' 27.122" N
CP-448	84° 59' 8.976" E	20° 59' 26.465" N
CP-449	84° 59' 8.560" E	20° 59' 25.878" N
CP-450	84° 59' 8.379" E	20° 59' 25.394" N
CP-451	84° 59' 8.372" E	20° 59' 24.940" N
CP-452	84° 59' 8.541" E	20° 59' 24.357" N
CP-453	84° 59' 8.715" E	20° 59' 24.072" N
CP-454	84° 59' 9.029" E	20° 59' 24.005" N
CP-455	84° 59' 9.384" E	20° 59' 24.044" N
CP-456	84° 59' 9.580" E	20° 59' 24.475" N
CP-457	84° 59' 9.883" E	20° 59' 24.915" N
CP-458	84° 59' 10.019" E	20° 59' 24.939" N
CP-459	84° 59' 10.286" E	20° 59' 24.708" N
CP-460	84° 59' 10.440" E	20° 59' 24.336" N
CP-461	84° 59' 10.539" E	20° 59' 23.873" N
CP-462	84° 59' 10.427" E	20° 59' 23.571" N
CP-463	84° 59' 10.111" E	20° 59' 23.364" N
CP-464	84° 59' 9.668" E	20° 59' 23.120" N
CP-465	84° 59' 9.285" E	20° 59' 22.893" N
CP-466	84° 59' 9.188" E	20° 59' 22.655" N
CP-467	84° 59' 9.342" E	20° 59' 22.431" N
CP-468	84° 59' 9.778" E	20° 59' 21.979" N
CP-469	84° 59' 9.972" E	20° 59' 21.775" N
CP-470	84° 59' 10.192" E	20° 59' 21.570" N

Provisional Cardinal Points for Ramchandi Block		
Point ID	Longitude	Latitude
CP-471	84° 59' 10.403" E	20° 59' 21.276" N
CP-472	84° 59' 10.551" E	20° 59' 20.872" N
CP-473	84° 59' 10.555" E	20° 59' 20.369" N

Note: The provisional cardinal points are in WGS84 coordinate system. These points are extracted through ArcGIS software after georeferencing of block boundary and onground DGPS survey is required to ascertain the exact location of the points.