



**SCHEME FOR
RAISING OF
COMPENSATORY AFFORESTATION OVER
606 Ha. OF DEGRADED REVENUE FOREST LAND
IDENTIFIED IN RADHANAGAR, KHAJURIPADA,
BALAKIRA, BRAHMANIPALI, BIJAPADAR,
AMBAKANA, PALSADADAR, BANKI, DIDINGAPADAR,
TARVA, BARAPADAR & GHOSHANGI OF BOUDH,
HARABHANGA & KANTAMAL TAHASIL
UNDER BOUDH & KANTAMAL RANGE,
UNDER BOUDH FOREST DIVISION
OF BOUDH DISTRICT
IN LIEU OF
DIVERSION OF 302.329 Ha. OF FOREST LAND FOR
CONSTRUCTION
OF KHURDA ROAD – BOLANGIR NEW B.G. RAIL
LINK PROJECT FROM Km. 143.33 - 180
OF
EAST COAST RAILWAY, BHUBANESWAR
(GOVT. OF INDIA)**

Land Suitability Certificate

An area of 302.329 Ha. of forest kissam land is to be diverted for construction of Khurda Road - Bolangir New BG Rail Link Project from KM. 143.33-180. In lieu of this, User Agency has submitted 696.389 Ha. of DGPS survey map and the same has been authenticated by ORSAC, Bhubaneswar vide his letter no. 2400 dt. 23.06.2021. Out of 696.389Ha., MDF is 0.28 Sq.Km. or 28 Ha., NF is 2.39 Sq.KM. or 239 Ha., OF is 3.99 Sq.Km. or 399 Ha. & Shurb is 0.31 Sq.Km. or 31Ha. as per DSS developed by FSI. Hence, 668.389 Ha. of effective CA land is available for raising of CA against the statutory requirement of 606Ha. of degraded forest land. Accordingly, over an area of 606 Ha. of degraded forest kissam land have been found suitable for raising of Compensatory Afforestation for diversion of 302.329 Ha. of forest land for construction of Khurda Road-Bolangir New BG Rail Link Project from Km. 143.33 to 180 as follows.

This is to certify that 606 Ha. of degraded Revenue Forest kissam land in the following 12 nos. of Villages in Boudh & Kantamal Range of Boudh Forest Division are identified for raising of Compensatory Afforestation in lieu of diversion of 302.329 Ha. of forest land for construction of Khurda Road-Bolangir New BG Rail Link Project from Km. 143.33 to 180 and found suitable for plantation from management point of view. No plantation has been taken up in the said areas previously.

Sl. No.	Village	R I Circle	Tahasil	Sl. No.	Village	R I Circle	Tahasil
01	Radhanagar	B.N.Pur	Harabhanga	07	Brahmanipali	Baghiapada	Boudh
02	Khajuripada	Baghiapada	Boudh	08	Bijapadar	Baghiapada	Boudh
03	Banki	Gundulia	Boudh	09	Ambakana	Mundapada	Boudh
04	Didingapadar	Gundulia	Boudh	10	Palsadadar	Baghiapada	Boudh
05	Tarva	Gundulia	Boudh	11	Barpadar	Ghantapada	Kantamal
06	Balakira	Mundapada	Boudh	12	Ghochangi	Bargaon	Kantamal


Divisional Forest Officer
Boudh Division

EXECUTIVE SUMMARY

The Scheme of Compensatory Afforestation over an area of 606 Ha. has been prepared in lieu of diversion of forest land over an extent of 302.329 Ha. for construction of Khurdha Road – Bolangir New BG Rail Link Project. The Proposed Compensatory Afforestation area has been identified in 12 Nos. of village under Boudh and Kantamal Range of Boudh Forest Division and adopted two separate schemes to accommodate 4,09,500 nos. of seedlings as per Suitability of site specific land.

Further, it is mentioned here that Plot No.- 216, 219 and 220 of Khata No. 18, over an area 33 Ha. of degraded revenue forest kissam land of Village Banki, despite being authenticated by ORSAC vide his letter no. 2400 dt. 23.06.2021 ,has been excluded in the Compensatory Afforestation Scheme as the concept of compensation for Loss of “Land by Land” & Loss of “Tree by Tree” is fulfilled.

Details of Compensatory Afforestation Scheme:

23 nos. of patches have been identified in 12 sites for raising of different modes of Compensatory Afforestation like AR plantation @ 1000 plants/ Ha. & ANR with Gap @ 500 plants/ Ha. are prepared according to **One Time Cost Norm for Compensatory Afforestation as approved by PCCF, Odisha Bhubaneswar vide his O.O No. 1109 dt. 08.11.2021** as follows:

AR Plantation @ 1000 plants/Ha.

Tahasil	R.I Circle	Mouza	Khata No.	Plot no.	Area found suitable for plantation (In Ha.)	Total Number of Seedlings to be planted
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
Harabhanga	B.N.Pur	Radhanagar	123	554, 562, 566	25	25000
			120	576		
Boudh	Baghiapada	Khajuripada	56	116	16	16000
Boudh	Mundapada	Balakira	287	1373, 1380	14	14000

Tahasil	R.I Circle	Mouza	Khata No.	Plot no.	Area found suitable for plantation (In Ha.)	Total Number of Seedlings to be planted
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
Boudh	Baghiapada	Brahamanipali	67	571	7	7000
Boudh	Baghiapada	Bijapadar	72	652	7	7000
Boudh	Mundapada	Ambakana	8	214, 233, 234, 235, 236, 251, 252, 253, 255, 256, 257	114	114000
Boudh	Baghiapada	Palsadadar	6	85	10	10000
Kantamal	Ghantapada	Barapadar	103	433, 534, 535, 536, 532	20	20000
Total					213	213000

ANR with Gap Plantation @ 500 plants/ Ha.

Tahasil	R.I Circle	Mouza	Khata No.	Plot no.	Area found suitable for plantation (In Ha.)	Total Number of Seedlings to be planted
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
Boudh	Gundulia	Tarva	69	802, 828, 829, 830, 841, 851, 852, 853, 854, 855, 856, 858, 861, 910, 911, 912, 913, 914, 915	222	111000

Tahasil	R.I Circle	Mouza	Khata No.	Plot no.	Area found suitable for plantation (In Ha.)	Total Number of Seedlings to be planted
1	2	3	4	5	6	7
Kantamal	Kantamal	Ghochangi	101	172, 180	22	11000
Boudh	Gundulia	Banki	20	70, 71, 105, 193, 210, 213	69	34500
Boudh	Gundulia	Didingapadar	3	2, 3, 8, 9, 53, 55	80	40000
Total					393	196500

SUMMARY OF THE COMPENSATORY AFFORESTATION SCHEME

Sl. No.	Mode of Plantation	Area in Ha.	No. of seedlings to be planted
1.	AR Plantation @ 1000 plants/ Ha.	213.00	213000
2.	ANR with Gap Plantation @ 500 plants/ Ha.	393.00	196500
		606.00	409500


Divisional Forest Officer
Boudh Division

**COMPENSATORY AFFORESTATION SCHEME OVER 606.00 HA OF DEGRADED
REVENUE FOREST LAND IN BOUDH DISTRICT IN LIEU OF DIVERSION
PROPOSAL OVER 302.329 Ha. FOR CONSTRUCTION OF KHURDA ROAD –
BOLANGIR NEW B.G. RAIL LINK PROJECT (143.33 KM TO 180 KM) OF EAST
COAST RAILWAY, BHUBANESWAR.**

INTRODUCTION

The Indian Railways have taken up a project of construction of a new B. G. line having an approximate length of 289 km. connecting Khurda Road station on Howrah-Chennai main line to Bolangir situated on Titlagarh-Sambalpur-Jharsuguda branch line.

The line falls entirely in Odisha state and will traverse through six districts of Odisha viz., Puri, Khurda, Nayagarh, Boudh, Sonapur and Bolangir. It will connect the coastal Odisha with Western Odisha leading to emotional and cultural integration of both the parts. Moreover, it will reduce the distance to New Delhi, Mumbai and Western India by 140 Km. from Bhubaneswar and Puri, the state capital and cultural capital of Odisha respectively.

The Industrial and economic growth of the area under which this line falls has not progressed due to poor transport facilities. The concerned area is mainly inhabited by poor and underprivileged population of the society who spend their lives on the edge of modernization. No major industries are to be observed and the region is not at all urbanized. However, there are a number of medium and small scale as well as cottage industries which could prosper with the commissioning of the line. Granite, Graphite, Quartz, Limestone etc. are available in large quantities in the region and the industry seems to be putting efforts to exploit the mineral resources in a productive manner. The line on being commissioned could give further impetus for growth and modernization of the alluded zone.

LAND INVOLVED

This project extends over an area of 302.329Ha. Forest land for construction of new BG Rail line from 143.33 Km. to 180 Km. of Khurda Road-Bolangir Rail link Project. Hence, this 302.329 Ha. of forest land has been proposed for Diversion under Forest (Conservation) Act, 1980 in lieu of which the Compensatory Afforestation will be raised over the double extent of forest kissam land i.e. 606 Ha. in Boudh Forest Division.

DETAILS OF SELECTION OF SITE

District : Boudh.

Tahasil : Harabhanga, Boudh & Kantamal

RI Circle : Mundapada, B.N.Pur, Baghiapada, Gundulia, Ghantapada and Bargaon

The area for raising Compensatory Afforestation has been identified in Boudh District. The sites are located on Survey of India Open Series Topo sheet No. **F45 S/1, F45 S/2, F45 S/6, F44 X/11 & F44 X/14** confined within LATITUDE: 20°34'35" & 20°29'37", LONGITUDE: 83°46'00" & 83°35'03" for UTM **Zone - 44** and confined within LATITUDE: 20°41'59" & 20°47'17", LONGITUDE: 84°07'59" & 84°19'30" for UTM **Zone - 45** and indicated on the map enclosed as **Annexure-I**. The proposed areas are free from encroachment, other encumbrances and found suitable for plantation.

Description of Area: The identified area for raising Compensatory Afforestation comes under Degraded Forest Land (DFL).

Soil type: Laterite with Black Cotton soil (BCS). Some patches support swallow soil, mixed sand and exposed rock within the site.

Topography: -

Hilly/Undulating/Plain: The topographical configuration of the identified site is undulating.

Slope: The site selected for Compensatory Afforestation have medium to gentle slope.

Whether the area is bearing any root stock of vegetation: The site selected for Compensatory Afforestation has root stock and the existing vegetations are in degraded form.

Temperature: The area experiences cold weather between November – January when the temperature drops to less than 13° C. the temperature rises steadily from January onwards reaching 32° C to 45° C in summer (May). So, it is under tropical condition with limited rainy days.

Climate & Rainfall: The area has tropical climate with monsoon rains from June to September and occasional rains during the autumn. This area also experiences occasional gusty wind to heavy thunderstorms during summer season (April to June). Monsoon breaks out in early to middle of June and continues up to September. The average annual rainfall is about 1600 mm under the influence of south west monsoon. On average, there are about 100 rainy days. The humidity is maximum in the month of July to August (90%) and minimum in February (36%). The wind velocity varies between 40 KMPH and 80 KMPH, although occasional higher values have also been reported. Lightening incidents are rarely reported in this area.

Plantation Model : According to the site specificity and the edaphic, climatic and existing vegetation types in the proposed 606 Ha. of DFL two models of plantation are to be taken up i.e. 1000 Plants / Ha. and 500 Plants / Ha.

Special Objects of Compensatory Afforestation Scheme are as follows:

- To restrict the degradation by reducing the biotic interference to barest minimum and hasten the resilience process
- To facilitate natural regeneration and ensure their establishment.
- To enhance the soil and moisture regime of the area by adopting appropriate soil moisture conservation (SMC) measures.
- To improve the bio-diversity of these blocks.
- To cater the basic needs of the local villagers with respect to food, fodder, fuel wood and small timber as obtained from different silvicultural operation in timeline.

Item of works to be taken up:

To achieve the above objectives, the following items of works are mainly prescribed to be taken up

- Survey & Demarcation of Boundary.
- Fencing.
- Site Clearance & Planting in gaps
- Soil & Moisture Conservation Measures.
- Protection of Plantation
- Peoples' Participation
- Monitoring & Evaluation Mechanism

Survey & Demarcation of Boundary: The identified area has been surveyed by DGPS and also map has been prepared. The area will be demarcated with RCC pillars of size 1.0 m x 10 cm x 10 cm for clear demarcation of the area.

Fencing: To protect the plantation from grazing and other biotic interference, it will be provided with Iron Mesh & Chain Link Wire along the **58.558 Km.** periphery over an area of 696.389 Ha..

Site Clearance & Planting: Plantation over 606 Ha. shall be taken up with planting model of AR 1000 plants/Ha. & ANR with gap 500 plants/Ha . Site clearance and cleaning to be done in the treatment area to create gap for plantation. Silvicultural cleaning by cutting of high stumps, removal of weeds, singling of multiple shoots, removal of plants in congested areas will be done, so that the plants get optimum space for growth. All post planting measures like casualty replacement, soil working, manuring, watering, fire protection etc. will be undertaken.

Species: Indigenous species are to be preferred to be planted. For success of plantation in interior tribal areas, plantation of food, fodder and NTFP species may be preferred to ameliorate the socioeconomic conditions of the fringe villages. Considering the topography and edaphic factors the following species are preferred to be planted;

Name of species	Common name	Name of species	Common name
<i>Acacia catechu</i>	Khaira	<i>Garuga pinnata</i>	Mai/ Kekadogatcho
<i>Aegle marmelos</i>	Bela	<i>Gmelina arborea</i>	Gambhari
<i>Alangium salviifolium</i>	Ankula	<i>Grewia rothii</i>	Miri chara
<i>Albizia lebbek</i>	Sirisa	<i>Grewia tiliifolia</i>	Dhamana
<i>Annona reticulata</i>	Sitaphala	<i>Ixora arborea</i>	Tel kuruma
<i>Annona squamosa</i>	Atta	<i>Lannea Coromandelica</i>	Raj Mai
<i>Antidesma acidum</i>	Kundui/ Marmuri	<i>Limonia Acidissima</i>	Kaitha
<i>Antidesma ghaesembilla</i>	Khath marmuri	<i>Litsea Glutinosa</i>	Medha
<i>Artocarpus heterophyllous</i>	Panasa	<i>Madhuca indica</i>	Mahul

Name of species	Common name	Name of species	Common name
<i>Artocarpus lacucha</i>	Jautha	<i>Mangifera Indica</i>	Mango
<i>Averrhoa carambola</i>	Karamanga	<i>Milliusa Tomentosa</i>	Gandhapalsa
<i>Azadirachta indica</i>	Neem	<i>Mimusops elengi</i>	Baula
<i>Bauhinia Vahlia</i>	Siali	<i>Morinda pubescens</i>	Achha
<i>Borassus flabellifer</i>	Tal	<i>Muraya koenigii</i>	Bhrusunga
<i>Bridelia retusa</i>	Asana/ Garo Khasi	<i>Nyctanthes arbortristis</i>	Gangasiuli
<i>Buchanania lanzan</i>	Chara	<i>Olax psittacorum</i>	Bhadabadalia
<i>Calamus guruba</i>	Kanta Beta	<i>Phyllanthus acidus</i>	Narakoli
<i>Careya arborea</i>	Kumbhi	<i>Phyllanthus emblica</i>	Amla
<i>Cordia dichotoma</i>	Bahala	<i>Pithecellobium dulce</i>	Sima Tentuli
<i>Dalbergia sissoo</i>	Sissoo	<i>Pterocarpus marsupium</i>	` Bija sala
<i>Dalbergia latifolia</i>	Rosewood	<i>Pterocarpus santalinus</i>	Rakta chandan
<i>Dendrocalamus strictus</i>	Salia Bamboo	<i>Pongamia pinata</i>	Karanja
<i>Dillenia aurea</i>	Rai	<i>Psidium guajava</i>	Guava
<i>Dillenia indica</i>	Oau	<i>Schleichera oleosa</i>	Kusuma
<i>Dillenia pentagyna</i>	Aggai	<i>Shorea robusta</i>	Sala
<i>Diospyros Malabarica</i>	Mankeda Kendu	<i>Semecarpus anacardium</i>	Bhalia
<i>Diospyros melanoxylon</i>	Kendu	<i>Spondias pinnata</i>	Ambada
<i>Emblica officinalis</i>	Amla	<i>Syzygium cumini</i>	Jamu
<i>Ficus Auriculata</i>	Dimiri	<i>Tamarindus indica</i>	Tentuli
<i>Ficus benghalensis</i>	Bara	<i>Terminalia arjuna</i>	Arjun
<i>Ficus benghalensis</i>	Bara	<i>Terminalia belerica</i>	Bahada
<i>Ficus hispida</i>	Bai Dimiri	<i>Terminalia tomentosa</i>	Asana
<i>Ficus racemosa</i>	Bada Dimiri	<i>Terminalia chebula</i>	Harida
<i>Ficus religiosa</i>	Pipal	<i>Ziziphus marutiana</i>	Barakoli
<i>Gardenia gummifera</i>	Kurudu		

Soil and Moisture Conservation Works: - Since most of the areas are hilly and undulating, half-moon trenches on down-hill side of plants should be constructed. In the slopes, staggered trenches of 2m x 50Cm x 50Cm should be dug in between the planting line along the contours, and the excavated earth be piled on the downhill side to form a bond. The staggered contour trenches will act as place of deposit of eroded soil and check soil erosion. In Nallahs, LBCD structures are to be constructed from top to bottom as

per the specific site condition, which will retard the velocity of run-off and be helpful in feeding ground water to the plants planted below it.

Protection of the plantation: - Iron Mesh & Chain Link Wire along the periphery of the plantation will be provided. Few watchers will also be engaged for protection of the plantation. Assistance of V.S.S is necessary for better protection of plantation.

Peoples Participation: In the recent times, no scheme shall be effective if the local villagers are not involved in the implementation of the scheme itself. The villagers who are having a right on the NTFP items in the adjoining forest area are to be associated with the implementation of the scheme at all different levels. For that, Van Surakhya Samiti (VSS) is proposed to be constituted / reconstituted in all the villages around the Compensatory Afforestation site. The villagers are to be motivated, inspired and above all, explained the benefits they will be getting, if plantation is protected by them.

Monitoring & Evaluation Mechanism: - The scheme shall be executed by the Divisional Forest Officer, Boudh Division with his staff and all prescribed records are to be maintained. In addition to internal monitoring by Forest Officers of State Government, a Monitoring Committee under item no. 3.4 (iii) of consolidated guidelines under F.C Act 1980 issued by MoEF, shall be established with a nominee of the Central Government to oversee that the stipulations, including those pertaining to Compensatory Afforestation are carried out.


Divisional Forest Officer
Boudh Division

Financial Outlay for raising of **Compensatory Afforestation Scheme** over an area of **213 Ha. in AR Plantation mode @ 1000 plants/ Ha. & 393 Ha. in ANR with Gap Plantation Mode @ 500 plants/Ha.** of degraded revenue forest kissam land in **Boudh Forest Division** to accommodate **4,09,500 nos. of plants.** The said scheme has been prepared as per **One Time Cost Norm for Compensatory Afforestation as approved by PCCF, Odisha Bhubaneswar vide his O.O No. 1109 dt. 08.11.2021 with commencement of plantation from 2022-23.**

Sl. No.	Description	Amount (Rs.)
1.	Cost of Plantations	
A	AR (Block) Plantation @ 1000 plants per Ha. over 213Ha. without fencing @ Rs. 2,46,454 per Ha. with provision of 10 years maintenance	5,24,94,702.00
B	ANR with Gap Plantation @ 500 plants per Ha. over 393Ha. without fencing @ Rs. 1,42,904 per Ha. with provision of 10 years maintenance	5,61,61,272.00
2.	SMC Activities like Staggered Trench, Percolation pit, Contour trench, Graded earthen bund, LBCD, Wire mesh LBCD, Sub surface Dyke & WHS as per the slope & site requirement @ Rs. 37,415/- per Ha. over 606Ha.	2,26,73,490.00
3.	Watering Provision with Diesel pump set with Bore Well (1 pump set + Bore well) @ Rs. 5,02,209/- per 1000 nos. seedlings over 606Ha. (409500 nos. seedling) with 5 years maintenance	20,56,54,585.50
4.	Cost of Fencing with Angel Iron & Chain Link Wire Mesh over 697 Ha.. @ Rs. 4,40,299 per Ha. with 10 years maintenance	30,68,88,403.00
	Sub-Total	64,38,72,452.50
5.	15% of the total plantation cost towards EPA/Incentive to VSS & Monitoring, Evaluation	9,65,80,867.88
	Grand Total	74,04,53,320.38 Or say 74,04,53,320.00


Divisional Forest Officer
Boudh Division

All CA will be raised outside forest area where heavy biotic pressure is experienced and the identified CA areas are arid in nature. So as to raise successful CA, provision of watering & fencing is a *sine qua non* for which watering & fencing provision is adopted.

Countersigned

Regional Chief Conservator of Forests
Berhampur Circle
Regional Chief Conservator of Forests,
Brahmapur Circle, BrahmapurPage 11 of 67

ANNEXURE-4

**BASE COST NORM FOR COMPENSATORY AFFORESTATION (BLOCK PLANTATION)
@ 1000 PLANTS PER HECTARE (18 months old seedling)**

WAGE RATE Rs- 311/- PER MANDAY

Sl. No	Items of work	Preferable Period of Execution	No of Mandays	Labour Cost (In Rs.)	Material Cost (In Rs.)	Total cost (In Rs.)
1	2	3	4	5	6	7
0th Year (Advance work) Pre-Planting Operation						
1	Survey, Demarcation and Pillar posting	Nov/Dec	2	622	0	622
2	Preparation of Treatment Map (Digital Map)	Nov/Dec	1	311	100	411
3	Site preparation (Cleaning & removal of debris)	Nov/Dec	12	3732	0	3732
4	Creation of 4.00 mt wide Inspection Path	Feb/Mar	1	311	0	311
5	Alignment and stacking of pits	Feb/Mar	1	311	0	311
6	Digging of pits (45 cm x 45 cm X 45 cm) in hard and gravelly soil	Feb/Mar	40	12440	0	12440
7	Construction of Temporary Labour Shed, Drinking water facility and First-Aid etc.	Jan/Mar	0	0	3500	3500
Total			57	17727	3600	21327
1st Year/Planting Year						
1	Refilling of pits by altering the dugout soil of the pits, application of organic compounds/ CDM/ FYM & mixing the same properly.	Jun/Jul	7.5	2332.50	5000	7332.50
2	Transportation of 18 months old polythene bag seedlings in hired truck /tractor from the Permanent/Mega nursery to planting site including loading & unloading. (Average lead of 10 Rkm) & stacking the seedling @ Rs.6/- per Seedling. (1100 nos.)	Jul/Aug	0	0	6600	6600
3	Watering polypot seedlings at planting site	Jul/Aug	2	622	0	622
4	Conveyance of polypot seedlings on head load from the stacking site to individual dugout pits within the planting site, applying insecticide, fertilizers & planting after scooping the soil with other applied materials & pressing the soil perfectly around the planted seedlings.	Jul/Aug	22.5	6997.50	0	6997.50
5	<u>Cost of Fertilizer & Insecticide</u> (a)NPK/Bio-fertilizer @ 50 gms/plant as basal dose = 50kg @ Rs.30/- per kg = Rs. 1500.00 (b) Urea/Vermicompost/Mo Khata/any other fertilizer in two subsequent doses @ Rs. 750.00 (c) Insecticide/ Bio-pesticide @ 5 gms/plant=5 kg @ Rs.150/- per kg = Rs. 750.00	Jul/Aug	0	0	3000	3000
6	Casualty Replacement @ 10% (100 nos.)	Jul/Aug	2.5	777.5	0	777.5
7	1st weeding & Manuring	Aug/Sept	12	3732	0	3732
8	2nd Weeding, Soil working (1mt. diameter around the plants) & Manuring	Oct/Nov	15	4665	0	4665
9	Fire line tracing (2 m. wide fire line over 400 m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
10	Watch & Ward including watering as per requirement	Aug-Mar	12	3732	0	3732
Total			76.50	23791.50	14600.00	38391.50
2nd Year Maintenance						
1	Transportation of 100 seedlings from Nursery to plantation site including loading, unloading & conveyance by Tractor @ Rs.6/- per seedling	Jul	0	0	600	600
2	Casualty replacement- 10%	Jul	2.5	777.5	0	777.5
3	<u>Cost of Fertilizer & Insecticide-</u> A) Cost of Insecticide/ Bio-pesticide @ 5 gms/plant = 0.5 Kg @ Rs.150/- per kg = Rs.75/- B)Urea/NPK/Bio-fertilizer/Vermicompost/Mo Khata/any other fertilizer @Rs. 2800/-	July/Aug	0	0	2875	2875
4	Weeding (Complete weeding), Manuring & Soil working, (1mt. diameter around the plants)	Sep/Oct	15	4665	0	4665
5	Fire line tracing (2 m. wide fire line over 400 m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
6	Watch & Ward including watering as per requirement	Apr-Mar	18	5598	0	5598
7	Maintenance of Temporary Labour Shed, Drinking water facility and First Aid etc.	Apr-Mar		0	1000	1000
Total			38.5	11973.5	4475	16448.5

Sl. No	Items of work	Preferable Period of Execution	No of Mandays	Labour Cost (In Rs.)	Material Cost (In Rs.)	Total cost (In Rs.)
1	2	3	4	5	6	7
3rd Year Maintenance						
1	Cost of Fertilizer(Urea/NPK/Bio-fertilizer/Vermicompost/Mo Khata/any other fertilizer)	July/Aug	0	0	2800	2800
2	Weeding (Complete weeding), Manuring & Soil working, (1mt. diametre around the plants)	Sep/Oct	15	4665	0	4665
3	Fire line tracing (2 m. wide fire line over 400 m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
4	Watch & Ward including watering as per requirement	Apr/Mar	18	5598	0	5598
5	Maintenance of Temporary Labour Shed, Drinking water facility and First Aid etc.	Apr/Mar	0	0	1000	1000
	Total		36.0	11196	3800	14996
4th Year Maintenance						
1	Fire line tracing (2 m. wide fire line over 400 m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
2	Watch & Ward including maintenance of vegetative fencing	Apr-Mar	18	5598	0	5598
	Total		21	6531	0	6531
5th Year Maintenance						
1	Fire line tracing (2 m. wide fire line over 400 m length)	Feb/Mar	3	933.00	0	933
2	Watch & Ward	Apr/Mar	18	5598.00	0	5598
	Total		21	6531	0	6531
6th Year Maintenance						
1	Fire line tracing (2 m. wide fire line over 400 m length)	Feb/Mar	3	933.00	0	933.0
2	Pruning of branches, Singling out of multiple shoots	Jan/Mar	3	933.00	0	933.0
3	Watch & Ward	Apr/Mar	18	5598.00	0	5598.0
	Total		24	7464	0	7464.0
7th Year Maintenance						
1	Fire line tracing (2 m. wide fire line over 400 m length)	Feb/Mar	3	933.00	0	933
2	Watch & Ward	Apr/Mar	18	5598.00	0	5598
	Total		21	6531	0	6531
8th Year Maintenance						
1	Fire line tracing (2 m. wide fire line over 400 m length)	Feb/Mar	3	933.00	0	933
2	Watch & Ward	Apr/Mar	18	5598.00	0	5598
	Total		21	6531	0	6531
9th Year Maintenance						
1	Fire line tracing (2 m. wide fire line over 400 m length)	Feb/Mar	3	933.00	0	933
2	Watch & Ward	Apr/Mar	18	5598.00	0	5598
	Total		21	6531	0	6531
10th Year Maintenance						
1	Fire line tracing (2 m. wide fire line over 400 m length)	Feb/Mar	3	933	0	933
3	Watch & Ward	Apr/Mar	18	5598.00	0	5598
	Total		21	6531	0	6531
Year wise Abstract of Cost Norm (showing seedling cost separately)						

CUZ

Sl. No	Items of work	Preferable Period of Execution	No of Mandays	Labour Cost (In Rs.)	Matrrial Cost (In Rs.)	Total cost (In Rs.)	
1	2	3	4	5	6	7	
Sl. No	Year	No. of Mandays	Labour cost (In Rs)	Material Cost(In Rs.)	Monitoring, Evaluation, Learning, Documentation and Other Contingency (5%) of (4+5)	Cost of Seedlings @Rs.50.31 per seedlings	TOTAL COST(In Rs)
1	2	3	4	5	6	7	8
1	0th year	57.0	17727.0	3600.0	973.00	0.00	22300.00
2	1st year	76.5	23791.5	14600.0	1918.50	55341.00	95651.00
3	2nd year	38.5	11973.5	4475.0	821.50	5031.00	22301.00
4	3rd year	36.0	11196.0	3800.0	749.00	0.00	15745.00
5	4th year	21.0	6531.0	0.0	326.00	0.00	6857.00
6	5th year	21.0	6531.0	0.0	326.00	0.00	6857.00
7	6th year	24.0	7464.0	0.0	373.00	0.00	7837.00
8	7th year	21.0	6531.0	0.0	326.00	0.00	6857.00
9	8th year	21.0	6531.0	0.0	326.00	0.00	6857.00
10	9th year	21.0	6531.0	0.0	326.00	0.00	6857.00
11	10th year	21.0	6531.0	0.0	326.00	0.00	6857.00
	Total:	358.0	111338.0	26475.0	6791.0	60372.0	204976.0

Note:

- 1 Priority must be given to the indigenous local species available nearby to the site of plantation.
- 2 10 % indigenous fruit bearing trees must be preferred to Plantation.
- 3 Site specific Soil conservation work like LBCD, Gully Plugging, Staggered Trench, Contour Trench, Graded Bund, etc. may be taken up
- 4 Chain link fencing can be adopted in the CA plantation taken up outside the forest area and Bamboo twigs fencing may be preferred
- 5 Watering facilities for procurement of water & watering may be adopted as per the availability of water.
- 6 The Cost Norm of various items can be changed with the approval of the concerned RCCFs keeping the overall cost norm fixed for each Financial Year


 APCCF (Forest Diversion & NO, FC Act)

In Rupees

Sl. NO.	Comment ement Year	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX	XXI	Total Cost (10 Years)
Base Norm		22300	95651	22301	15745	6857	6857	7837	6857	6857	6857	6857											
1	2021-22	22300	100434	24585	18226	8335	8751	10502	9648	10131	10637	11169											234718
2	2022-23		23415	105456	25814	19137	8752	9189	11027	10130	10638	11169	11727										246454
3	2023-24			24586	110729	27105	20094	9180	9648	11578	10637	11170	11727	12313									258777
4	2024-25				25815	116265	28460	21099	9650	10130	12157	11169	11729	12313	12929								271716
5	2025-26					27106	122078	29883	22154	10133	10637	12765	11727	12315	12929	13575							285302
6	2026-27						28461	128182	31377	23262	10640	11169	13403	12313	12931	13575	14254						299567
7	2027-28							29884	134591	32946	24425	11172	11727	14073	12929	13578	14254	14967					314546
8	2028-29								31378	141321	34593	25646	11731	12313	14777	13575	14257	14967	15715				330273
9	2029-30									32947	148387	36323	26928	12318	12929	15516	14254	14970	15715	16501			346788
10	2030-31										34594	155806	38139	28274	12934	13575	16292	14967	15719	16501	17326		364127

APCCF (Forest Diversion & NO, FC Act)

Base Cost Norms for Compensatory Afforestation through Aided Natural Regeneration (ANR) @ 500 Seedlings/Ha.

WAGE RATE Rs- 311/- PER MANDAY						
Sl. No	Items of work	Preferable Period of Execution	No of Mandays	Labour Cost (In Rs.)	Material Cost (In Rs.)	Total cost (In Rs.)
0th Year (Advance work) Pre-Planting Operation						
1	Survey, Demarcation and Pillar posting	Nov/Dec	2	622	0	622
2	Preparation of Treatment Map (Digital Map)	Nov/Dec	1	311	100	411
3	Site preparation	Nov/Dec	2	622	0	622
4	Silvicultural operations including clearance of weed, cutting of climber, High stump cutting, singling of shoots & removal of cut out after drying from the field to blank space.	Jan/Feb	15	4665	0	4665
5	Alignment and stacking for digging of pits	Feb/Mar	1	311	0	311
6	Digging of pits (45 cm x 45 cm X 45 cm) in hard and gravelly soil	Feb/Mar	20	6220	0	6220
	Total		41	12751	100	12851
1st Year/Planting Year						
1	Refilling of pits by altering the dugout soil of the pits, application of organic compounds/ CDM/ FYM & mixing the same perfectly.	June/Jul	4	1244	2500	3744
2	Transportation of 18 months old polythene bag seedlings in hired truck /tractor from the permanent/Mega nursery to planting site including Loading & unloading. (Average lead of 10 Rkm) & Stacking the seedling @ Rs.6/- Seedling. (550 nos.)	Jul/Aug	0	0	3300	3300
3	Watering polythene bag seedlings at stacking site of plantation	Jul/Aug	1	311	0	311
4	Conveyance of polythene bag seedlings on head load from the stacking site to individual dugout pits within the planting site, applying insecticide, fertilizer & planting after scooping the soil with other applied materials and pressing the soil perfectly around the planted seedling.	Jul/Aug	11	3421	0	3421
5	Cost of Fertilizer & Insecticide (a)NPK/ Bio-fertilizer @ 50 gms/plant as basal dose = 25kg @ Rs.30/- per kg = Rs. 750.0 (b) Urea/Vermicompost/Mo Khata/any other fertilizer @ Rs. 375.00 (c) Insecticide/ Bio-pesticide @ 5 gms/plant= 2.5 kg @ Rs.150/- per kg = Rs. 375/-	Jul/Aug	0	0	1500	1500
6	Casualty Replacement @ 10% (50 nos.)	Jul/Aug	1.5	466.5	0.0	466.5
7	1st weeding & Manuring	Aug/Sept	5	1555	0	1555

Sl. No	Items of work	Preferable Period of Execution	No of Mandays	Labour Cost (In Rs.)	Matrrial Cost (In Rs.)	Total cost (In Rs.)
8	2nd Weeding, Soil working (1mt. diametre around the plants) & Manuring	Oct/Nov	8	2488	0	2488
9	Fire line tracing & Inspection path	Feb/Mar	3	933	0	933
10	Watch & Ward including watering as per requirement	Aug-Mar	8	2488	0	2488
	Total		41.5	12906.5	7300.0	20206.5
2nd Year Maintenance						
1	Transportation of 50 seedlings from Nursery to plantation site including loading, unloading & conveyance by Tractor @ Rs.6/- per seedlings	Jul	0.0	0.0	300.0	300.0
2	Casualty replacement	Jul	1.5	466.5	0.0	466.5
3	Cost of Fertilizer & Insecticide- A) Cost of Insecticide/ Bio- pesticide(Themet/ Forate) @ 5 gms/plant = .25 Kg @ Rs.150/- per kg = Rs.37.50 B) Urea/NPK/Bio-fertilizer/Vermicompost/Mo Khata/any other fertilizer= Rs. 1400/-	July/Aug	0	0	1437.5	1437.5
4	Weeding (Complete weeding), Manuring & Soil working, (1mt. diametre around the plants)	Sep/Oct	8	2488	0	2488
5	Fire line tracing (2 m. wide fire line) & Inspection path	Feb/Mar	3	933	0	933
6	Watch & Ward including watering as per requirement	Apr/Mar	12	3732	0	3732
	Total		24.5	7619.5	1737.5	9357
3rd Year Maintenance						
3	Cost of Fertilizer Urea/NPK/Bio-fertilizer/Vermicompost/Mo Khata/any other fertilizer= Rs. 1400/-	July/Aug	0	0	1400.0	1400.0
4	Weeding (Complete weeding), Manuring & Soil working, (1mt. diametre around the plants)	Sep/Oct	8	2488	0	2488
5	Fire line tracing (2 m. wide fire line) & Inspection path	Feb/Mar	3	933	0	933
6	Watch & Ward including watering as per requirement	Apr/Mar	12	3732		3732
	Total		23.0	7153.0	1400.0	8553.0
4th Year Maintenance						
1	Fire line tracing (2 m. wide fire line) & Inspection path	Feb/Mar	3	933	0	933
2	Watch & Ward including watering as per requirement	Apr/Mar	12	3732	0	3732
	Total		15	4665	0	4665
5th Year Maintenance						
1	Fire line tracing (2 m. wide fire line over 400 m length)	Feb/Mar	3.0	933.00	0	933
2	Watch & Ward including watering as per requirement	Apr/Mar	12	3732.00	0	3732
	Total		15.0	4665.0	0	4665
6th Year Maintenance						
1	Fire line tracing (2 m. wide fire line over 400 m length)	Feb/Mar	3	933.00	0	933
2	Watch & Ward including watering as per requirement	Apr/Mar	12	3732.00	0	3732
	Total		15.0	4665.0	0.0	4665.0
7th Year Maintenance						
1	Fire line tracing (2 m. wide fire line over 400 m length)	Feb/Mar	3	933.00	0	933
2	Watch & Ward including watering as per requirement	Apr/Mar	12	3732.00	0	3732
	Total		15.0	4665.0	0.0	4665.0
8th Year Maintenance						
1	Fire line tracing (2 m. wide fire line over 400 m length) & cultural operation	Feb/Mar	3	933.00	0	933
2	Watch & Ward including watering as per requirement	Apr/Mar	12	3732.00	0	3732
	Total		15.0	4665.0	0.0	4665.0
9th Year Maintenance						
1	Fire line tracing (2 m. wide fire line over 400 m length)	Feb/Mar	3	933.00	0	933
2	Watch & Ward including watering as per requirement	Apr/Mar	12	3732.00	0	3732
	Total		15.0	4665.0	0.0	4665.0
10th Year Maintenance						
1	Fire line tracing (2 m. wide fire line over 400 m length)	Feb/Mar	3	933.00	0	933
2	Watch & Ward including watering as per requirement	Apr/Mar	12	3732.00	0	3732
	Total		15.0	4665.0	0.0	4665.0
Year wise Abstract of Cost Norm (showing seedling cost separately)						

Sl. No	Items of work	Preferable Period of Execution	No of Mandays	Labour Cost (In Rs.)	Material Cost (In Rs.)	Total cost (In Rs.)	
Sl. No	Year	No. person days	Labour cost @ Rs. 311/-per day (Rs)	Material Cost	Monitoring Evaluation, Learning, Documentation and Other Contingency (5%) of (4+5)	Cost of Seedlings @Rs.50.31 per seedlings	TOTAL COST
1	2	3	4	5	6	7	8
1	0th year	41	12751.0	100.0	549.00	0.00	13400.00
2	1st year	41.5	12906.5	7300.0	993.50	27671.00	48871.00
3	2nd year	24.5	7619.5	1737.5	443.00	2516.00	12316.00
4	3rd year	23.0	7153.0	1400.0	347.00	0.00	8900.00
5	4th year	15	4665.0	0.0	135.00	0.00	4800.00
6	5th year	15	4665.0	0.0	135.00	0.00	4800.00
7	6th year	15	4665.0	0.0	135.00	0.00	4800.00
8	7th year	15	4665.0	0.0	135.00	0.00	4800.00
9	8th year	15	4665.0	0.0	135.00	0.00	4800.00
10	9th year	15	4665.0	0.0	135.00	0.00	4800.00
11	10th year	15	4665.0	0.0	135.00	0.00	4800.00
Total:		235.0	73085.0	10537.5	3277.5	30187	117087.00

Note:

- 1 Priority must be given to the indigenous local species available nearby to the site of plantation.
- 2 10 % indigenous fruit bearing trees must be preferred to Plantation.
- 3 Site specific Soil conservation work like LBCD, Gully Plugging, Staggered Trench, Contour Trench, Graded Bund, etc. may be taken up
- 4 Chain link fencing can be adopted in the CA plantation taken up outside the forest area and Bamboo twigs fencing may be preferred to CA plantations
- 5 Watering facilities for procurement of water & watering may be adopted as per the availability of water.
- 6 The Cost Norm of various items can be changed with the approval of the concerned RCCFs keeping the overall cost norm fixed for each Financial Year



APCCF (Forest Diversion & NO, FC Act)

Matrix for Model-II A (ANR-500 Plants/ Ha)

Sl. NO.	Commence ment Year	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX	XXI	Total Cost
	Base Norm	13400	48871	12316	8900	4800	4800	4800	4800	4800	4800	4800											
1	2021-22	13400	51315	13577	10303	5834	6126	6432	6754	7092	7446	7819											136098
2	2022-23		14070	53881	14256	10818	6126	6432	6754	7092	7447	7818	8210										142904
3	2023-24			14774	56575	14969	11359	6432	6754	7092	7447	7819	8209	8621									150051
4	2024-25				15513	59404	15717	11927	6754	7092	7447	7819	8210	8619	9052								157554
5	2025-26					16289	62374	16503	12523	7092	7447	7819	8210	8621	9050	9505							165433
6	2026-27						17103	65493	17328	13149	7447	7819	8210	8621	9052	9503	9980						173705
7	2027-28							17958	68768	18194	13806	7819	8210	8621	9052	9505	9978	10479					182390
8	2028-29								18856	72206	19104	14496	8210	8621	9052	9505	9980	10477	11003				191510
9	2029-30									19799	75816	20059	15221	8621	9052	9505	9980	10479	11001	11553			201086
10	2030-31										20789	79607	21062	15982	9052	9505	9980	10479	11003	11551	12131		211141

In Rupees

APCCF (Forest Diversion & NO, FC Act)

SMC Works Model-C			
Cost Norms for creation of Compensatory Afforestation with Stabilization of Soil & Conservation of Moisture (1000 Plants/ Ha.)			
WAGE RATE Rs- 311/- PER DAY			
Sl.No	Item of Works	Preferable Period of Execution	Total Cost
0th Year (Pre-Planting Operation)			
1	Nil		0
1st Year			
2	Soil Conservation measure structures like Staggered Trench, Percolation pit, Contour trench, Graded earthen bund, LBCD, Wire mesh LBCD, Sub surface Dyke & WHS as per the slope & site requirement on LS	Apr/Sept.	20,215
2nd Year			
3	Maintenance of SMC structures @ 15 % of initial year cost	Apr/jul	3,032
3rd Year			
4	Maintenance of SMC structures @ 15 % of initial year cost	Apr/jul	3,032
4th Year			
5	Maintenance of SMC structures @ 15 % of initial year cost	Apr/jul	3,032
4th Year			
5	Maintenance of SMC structures @ 15 % of initial year cost	Apr/jul	3,032
Total			32,343.0

Abstract					
Sl. No	Year	No. person days	Labour cost @ Rs. 311/-per day	Material Cost	Total cost (Rs.)
		0.0	0.0	0.0	0.0
1	0th year	0.0	0.0	20,215.0	20,215.00
2	1st year	0.0	0.0	3,032.00	3,032.00
3	2nd year	0.0	0.0	3,032.00	3,032.00
4	3rd year	0.0	0.0	3,032.00	3,032.00
5	4th year	0.0	0.0	3,032.00	3,032.00
6	5th year	0.0	0.0	3,032.00	3,032.00
Total		0.00	0.00	32,343.0	32,343.0

Different types of SMC structures may be taken up as per the scope & requirements of the plantation site out of the design & specification of different structures annexed along this document.


APCCF (Forest Diversion & NO, FC Act)

Matrix for (SMC)

In Rupees

Sl. NO.	Commence ment Year	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	Total Cost
Base Norm		0	20215	3032	3032	3032	3032											
1	2021-22	0	21226	3342	3510	3685	3870											35633
2	2022-23		0	22287	3509	3686	3869	4064										37415
3	2023-24			0	23401	3684	3870	4062	4267									39284
4	2024-25				0	24571	3868	4064	4265	4480								41248
5	2025-26					0	25800	4061	4267	4478	4704							43310
6	2026-27						0	27090	4264	4480	4702	4939						45475
7	2027-28							0	28445	4477	4704	4937	5186					47749
8	2028-29								0	29867	4701	4939	5184	5445				50136
9	2029-30									0	31360	4936	5186	5443	5717			52642
10	2030-31										0	32928	5183	5445	5715	6003		55274

APCCF (Forest Diversion & NO, FC Act)



Fencing Model-F-II						
Fencing for Compensatory Plantation raised outside the Forest Areas using Angle Iron & Chain Link wire mesh (250 Rmt/ Ha.)						
WAGE RATE Rs- 311/- PER DAY						
Sl. No	Items of work	Preferable Period of Execution	Man days	Wages	Material cost (Rs)	Total Cost (Rs. per Ha.)
0th Year (PPO)						
1	Earth work (Excavation of hole) in Hard soil at a distance 3 mt. 0.40m x 0.40m x 0.40m = 0.064 x 84 = 5.376 cum @ Rs. 140/ cum = Rs. 753.		2.42	752.62	0.0	752.6
2	Cement concrete (1: 4: 8) using 40 mm BHG metal 84 X 0.40m X 0.40m X 0.10m = 1.344 @ 3755.94/cum		0	0	5,047.4	5,047.4
3	Angle Iron pole of size 50 mm X 50 mm X 6 mm of height 2.40 mt. 84 x 2.40 = 201.60 Sqmt. @ 4.50/kg/ Sqmt. = 907.20 kg @ 69.50 per kg				63,050.0	63,050.0
4	Cement concrete (1: 2: 4) for fixing the iron angel pole using 12mm BHG Chips 84 X 0.40m X 0.40m X 0.30m = 4.032 cum @ 5486.77/cum				22,123.0	22,123.0
5	Cost of Chain link mess using 4 mm Dia GI wire having gap size 50 mm X 50 mm 250 Rmt X 2.10 mt. = 525 Sq.mt @ 331/Sqmt = Rs. 1,73,775				1,73,775.0	1,73,775.0
6	Double cost painting of iron angel pole over a coat of primer using good quality enamale paint 84 x 2.10 x 0.20 = 35.28 sqmt. @ Rs.108.80/Sqmt				3,838.0	3,838.0
7	Painting of GI chain link mess 250 x 2.10 x 2 = 1050/10 = 105 Sqmt. @ Rs. 108.80 Sqmt.				11,424.0	11,424.0
8	Transposition of Chain link mess, Iron angle, Straighening & tying of chain link mess etc. @ 2% of the total cost.				5,600.0	5,600.0
TOTAL			2.42	752.62	2,84,857.4	2,85,610.0
Rate per running mt. 2,85,610/ 250= Rs. 1142/Rmt						
1st Year Maintenance						
1	No Maintenance is required.	Sept./Oct	0	0	0	0
2nd Year Maintenance						
1	Maintenance of wire mess fence @ 1% per running mt. cost of installation in 1st yr. 1142x 1% = 11.42 say Rs. 11	Sept./Oct	0	0	11000	11000
3rd Year Maintenance						
1	Maintenance of wire mess fence @ 1% per running mt. cost of installation in 1st yr. 1142x 1% = 11.42 say Rs. 11	Sept./Oct	0	0	11000	11000
4th Year Maintenance						
1	Maintenance of wire mess fence @ 1% per running mt. cost of installation in 1st yr. 1142x 1% = 11.42 say Rs. 11	Sept./Oct	0	0	11000	11000
5th Year Maintenance						
1	Maintenance of wire mess fence @ 1% per running mt. cost of installation in 1st yr. 1142x 1% = 11.42 say Rs. 11	Sept./Oct	0	0	11000	11000
6th Year Maintenance						
1	Maintenance of wire mess fence @ 1% per running mt. cost of installation in 1st yr. 1142x 1% = 11.42 say Rs. 11	Sept./Oct	0	0	11000	11000
7th Year Maintenance						
1	Maintenance of wire mess fence @ 1% per running mt. cost of installation in 1st yr. 1142x 1% = 11.42 say Rs. 11	Sept./Oct	0	0	11000	11000
8th Year Maintenance						
1	Maintenance of wire mess fence @ 1% per running mt. cost of installation in 1st yr. 1142x 1% = 11.42 say Rs. 11	Sept./Oct	0	0	11000	11000
9th Year Maintenance						
1	Maintenance of wire mess fence @ 1% per running mt. cost of installation in 1st yr. 1142x 1% = 11.42 say Rs. 11	Sept./Oct	0	0	11000	11000
10th Year Maintenance						

Sl. No	Items of work	Preferable Period of Execution	Man days	Wages	Material cost (Rs)	Total Cost (Rs. per Ha.)
1	Maintenance of wire mess fence @ 1% per running mt. cost of installation in 1st yr. 1142x 1% = 11.42 say Rs. 11	Sept./Oct	0	0	11000	11000

Abstract					
Sl. No	Year	No. person days	Labour cost @ Rs. 311/- per day	Material Cost	Total cost (Rs.)
1	0th year	2.42	752.6	284857.4	285610.0
2	1st year	0.0	0.0	0.0	0.0
3	2nd year	0.0	0.0	11000.0	11000.0
4	3rd year	0.0	0.0	11000.0	11000.0
5	4th year	0.0	0.0	11000.0	11000.0
6	5th year	0.0	0.0	11000.0	11000.0
7	6th year	0.0	0.0	11000.0	11000.0
8	7th year	0.0	0.0	11000.0	11000.0
9	8th year	0.0	0.0	11000.0	11000.0
10	9th year	0.0	0.0	11000.0	11000.0
11	10th year	0.0	0.0	11000.0	11000.0
Total:		2.42	752.62	383857.4	3,84,610.0


 APCCF (Forest Diversion & NO, FC Act)

Matrix for Fencing Model-F- II (Iron angle with Chainlink wire mesh)

Sl. No.	Comment Year	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX	XXI	Total Cost
Base Norm		285610	0	11000	11000	11000	11000	11000	11000	11000	11000	11000											
1	2021-22	285610	0	12126	12734	13370	14039	14740	15478	16252	17064	17918											419331
2	2022-23		299891	0	12732	13371	14039	14741	15477	16252	17065	17917	18814										440299
3	2023-24			314886	0	13369	14040	14741	15478	16251	17065	17918	18813	19755									462316
4	2024-25				330630	0	14037	14742	15478	16252	17064	17918	18814	19754	20743								485432
5	2025-26					347162	0	14739	15479	16252	17065	17917	18814	19755	20742	21780							509705
6	2026-27						364520	0	15476	16253	17065	17918	18813	19755	20743	21779	22869						535191
7	2027-28							382746	0	16250	17066	17918	18814	19754	20743	21780	22868	24012					561951
8	2028-29								401883	0	17063	17919	18814	19755	20742	21780	22869	24011	25213				590049
9	2029-30									421977	0	17916	18815	19755	20743	21779	22869	24012	25212	26474			619552
10	2030-31										443076	0	18812	19756	20743	21780	22868	24012	25213	26473	27798		650531

In Rupees

APCCF (Forest Diversion & NO, FC Act)

Watering Model-W-II			
Watering provision to CA Plantation			
Diesel pump set with Bore well (1 pump set + Bore well for 5 Ha Plantation), Wage rate @ Rs.311/-			
Year of Installation (0th Year)			
1	Cost of Borewell	1,50,000	
2	Cost of Diesel pump set 5HP	60,000	
3	Diesel pump set & accessories like commander, Pipes, etc.	30,000	
4	Water Storage Tanks/ Flexible pipes	15,000	
		2,55,000	
Cost of Water per Plant (2,55,000/ 5000)= Rs. 51/-			51,000
Cost of Water per Ha. = Rs. 51,000/-			
1st Year Watering			
1	Recurring expenditure i.e Diesel, Mobil, Engine Oil, etc. for pumping Water -21 x 1000=		21,000
2	Watering 1000 Plants (Nov-Mar.) @ 200 plants/MD with 7 days rotation 20 MD x 5 months = 100 MD x 311 =		31,100
		Total	52,100
2nd Year Watering			
1	Recurring expenditure i.e Diesel, Mobil, Engine Oil, etc. for pumping Water -21 x 1000=		21,000
	Maintenance Diesel pump set etc. @ 15 % of the installation cost.		7,650
2	Watering 1000 Plants (April- June & Nov-Mar.- 8 months) @ 200 plants/MD with 7 days rotation 20 MD x 8 months = 160 MD x 311 =		49,760
		Total	78,410
3rd Year Watering			
1	Recurring expenditure i.e Diesel, Mobil, Engine Oil, etc. for pumping Water -21 x 1000=		21,000
	Maintenance Diesel pump set etc. @ 15 % of the installation cost.		7,650
2	Watering 1000 Plants (April- June & Nov-Mar.- 8 months) @ 200 plants/MD with 7 days rotation 20 MD x 8 months = 160 MD x 311 =		49,760
		Total	78,410
4th Year Watering			
1	Recurring expenditure i.e Diesel, Mobil, Engine Oil, etc. for pumping Water -21 x 1000=		21,000
	Maintenance Diesel pump set etc. @ 15 % of the installation cost.		7,650
2	Watering 1000 Plants (April- June & Nov-Mar.- 8 months) @ 200 plants/MD with 7 days rotation 20 MD x 8 months = 160 MD x 311 =		49,760
		Total	78,410
5th Year Watering			
1	Recurring expenditure i.e Diesel, Mobil, Engine Oil, etc. for pumping Water -21 x 1000=		21,000
	Maintenance Diesel pump set etc. @ 15 % of the installation cost.		7,650
2	Watering 1000 Plants (April- June & Nov-Mar.- 8 months) @ 200 plants/MD with 7 days rotation 20 MD x 8 months = 160 MD x 311 =		49,760
		Total	78,410

Abstract					
Sl. No	Year	No. person days	Labour cost @ Rs. 311/-per day	Material Cost	Total cost (Rs.)
1	0th year	0	0.0	51000.0	51000.0
2	1st year	100.0	31100.0	21000.0	52100.0
3	2nd year	160	49760.0	28650.0	78410.0
4	3rd year	160	49760.0	28650.0	78410.0
5	4th year	160	49760.0	28650.0	78410.0
6	5th year	160	49760.0	28650.0	78410.0
	Total:	740	230140	186600	4,16,740


 APCCF/(Forest Diversion & NO, FC Act)

Matrix for Watering Model-W-II (Diesel Pumpset Fitted with Borewell) per Ha

In Rupees																		
Sl. NO.	Commence ment Year	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	Total Cost
		Base Norm	5100	52100	78410	78410	78410	78410										
1	2021-22	51000	54705	86439	90771	95307	100072											478294
2	2022-23		53550	57440	90761	95310	100072	105076										502209
3	2023-24			56228	60312	95299	100076	105076	110330									527321
4	2024-25				59039	63328	100064	105080	110330	115847								553688
5	2025-26					61991	66494	105067	110334	115847	121639							581372
6	2026-27						65091	69819	110320	115851	121639	127721						610441
7	2027-28							68346	73310	115836	121644	127721	134107					640964
8	2028-29								71763	76976	121628	127726	134107	140812				673012
9	2029-30									75351	80825	127709	134112	140812	147853			706662
10	2030-31										79119	84866	134094	140818	147853	155246		741996

ARCCF (Forest Diversion & NO, FC Act)

**Abstract of DGPS Co-Ordinates with Pillar-to-Pillar distances of each boundary
Pillar posted around the CA land**

Tahasil	R.I Circle	Mouza	Patch	Periphery in Mtr.
Harabhanga	B.N.Pur	Radhanagar	Patch-1	1459.755
			Patch-2	1029.826
			Patch-3	872.667
			Patch-4	1740.512
Boudh	Baghiapada	Khajuripada	Patch-5	2480.740
Boudh	Mundapada	Balakira	Patch-6	1442.080
			Patch-7	1042.397
Boudh	Baghiapada	Brahamanipali	Patch-8	1279.262
Boudh	Baghiapada	Bijapadar	Patch-9	1192.816
Boudh	Mundapada	Ambakana	Patch-10	2501.004
			Patch-11	4303.231
Boudh	Baghiapada	Palsadadar	Patch-12	1458.763
Kantamal	Ghantapada	Barapadar	Patch-13	2776.951
			Patch-14	2110.804
Boudh	Gundulia	Banki	Patch-15	4026.644
Boudh	Gundulia	Didingapadar	Patch-16	3775.377
			Patch-17	5066.836
Boudh	Gundulia	Tarva	Patch-18	3677.978
			Patch-19	1904.417
			Patch-20	3622.735
			Patch-21	4012.215
			Patch-22	2895.208
Kantamal	Kantamal	Ghochangi	Patch-23	3885.551
Total	58557.769 or Say 58558 mtr. or 58.558 Km.			


Divisional Forest Officer
Boudh Division

DGPS Co-Ordinates with Pillar-to-Pillar distances of each boundary Pillar posted around the CA land identified in Radhanagar Mouza of B.N.Pur R.I Circle of Harabhanga Tahasil bearing Khata No. 123 & Plot No. 554, 562 & 566 & Khata No. 120 & Plot No. 576

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	s
1	R-01	221008.9132	2296117.3600		0.000								
2	R-02	221108.9715	2296127.8568	R-01-R-02	100.607	84.011	84	0	40.272	264.011	264	0	40.272
3	R-03	221108.6525	2296136.8112	R-02-R-03	8.960	357.960	357	57	34.934	177.960	177	57	34.934
4	R-04	221120.8888	2296136.2422	R-03-R-04	12.250	272.662	272	39	44.612	92.662	92	39	44.612
5	R-5	221120.6910	2296084.0050	R-04-R-5	52.238	0.217	0	13	1.033	180.217	180	13	1.033
6	R-06	221114.1864	2296080.4089	R-5-R-06	7.432	61.064	61	3	49.583	241.064	241	3	49.583
7	R-07	221102.5703	2296076.6849	R-06-R-07	12.198	72.225	72	13	28.898	252.225	252	13	28.898
8	R-08	221073.7360	2296005.7634	R-07-R-08	76.559	22.125	22	7	30.028	202.125	202	7	30.028
9	R-09	221071.8003	2296005.2468	R-08-R-09	2.003	75.057	75	3	25.780	255.057	255	3	25.780
10	R-10	221069.5484	2295994.7956	R-09-R-10	10.691	12.160	12	9	34.242	192.160	192	9	34.242
11	R-11	221054.6566	2295963.3393	R-10-R-11	34.803	25.333	25	20	0.425	205.333	205	20	0.425
12	R-12	221080.5519	2295953.3686	R-11-R-12	27.749	291.059	291	3	31.143	111.059	111	3	31.143
13	R-13	221082.8771	2295947.1630	R-12-R-13	6.627	339.459	339	27	33.610	159.459	159	27	33.610
14	R-14	221104.9602	2295949.5846	R-13-R-14	22.215	83.742	83	44	31.322	263.742	263	44	31.322
15	R-15	221135.1579	2295947.9548	R-14-R-15	30.242	273.089	273	5	21.527	93.089	93	5	21.527
16	R-16	221150.7080	2295975.1065	R-15-R-16	31.289	29.800	29	48	1.000	209.800	209	48	1.000
17	R-17	221163.3180	2295997.1080	R-16-R-17	25.359	29.819	29	49	7.915	209.819	209	49	7.915
18	R-18	221156.8940	2296009.8090	R-17-R-18	14.233	333.170	333	10	13.113	153.170	153	10	13.113
19	R-19	221152.1310	2296010.4690	R-18-R-19	4.809	277.889	277	53	20.874	97.889	97	53	20.874
20	R-20	221131.5290	2296020.6210	R-19-R-20	22.967	296.233	296	13	57.319	116.233	116	13	57.319
21	R-21	221138.8120	2296048.0060	R-20-R-21	28.337	14.893	14	53	34.781	194.893	194	53	34.781
22	R-22	221142.3190	2296048.4670	R-21-R-22	3.537	82.511	82	30	40.777	262.511	262	30	40.777
23	R-23	221147.2130	2296072.1510	R-22-R-23	24.184	11.675	11	40	30.465	191.675	191	40	30.465
24	R-24	221169.0560	2296073.8256	R-23-R-24	21.907	85.616	85	36	57.521	265.616	265	36	57.521
25	R-25	221174.0128	2296085.4489	R-24-R-25	12.636	23.096	23	5	45.622	203.096	203	5	45.622
26	R-26	221184.5849	2296089.5357	R-25-R-26	11.335	68.865	68	51	54.939	248.865	248	51	54.939
27	R-27	221208.0744	2296089.1806	R-26-R-27	23.492	270.866	270	51	57.949	90.866	90	51	57.949
28	R-28	221218.8599	2296124.4268	R-27-R-28	36.859	17.014	17	0	51.670	197.014	197	0	51.670
29	R-29	221228.1077	2296126.9774	R-28-R-29	9.593	74.581	74	34	50.940	254.581	254	34	50.940
30	R-30	221231.0755	2296080.3640	R-29-R-30	46.708	356.357	356	21	25.154	176.357	176	21	25.154
31	R-31	221260.2681	2296071.4636	R-30-R-31	30.519	286.956	286	57	20.530	106.956	106	57	20.530
32	R-32	221239.1363	2296002.9560	R-31-R-32	71.693	17.143	17	8	34.297	197.143	197	8	34.297
33	R-33	221211.2680	2295931.8477	R-32-R-33	76.374	21.401	21	24	3.173	201.401	201	24	3.173
34	R-34	221166.3600	2295886.5240	R-33-R-34	63.804	44.736	44	44	9.739	224.736	224	44	9.739
35	R-35	221113.6638	2295836.1879	R-34-R-35	72.874	46.312	46	18	43.960	226.312	226	18	43.960
36	R-36	221045.2854	2295837.5529	R-35-R-36	68.392	271.144	271	8	37.003	91.144	91	8	37.003
37	R-37	220975.5688	2295838.9537	R-36-R-37	69.731	271.151	271	9	3.875	91.151	91	9	3.875
38	R-38	220977.2076	2295896.5128	R-37-R-38	57.582	1.631	1	37	51.104	181.631	181	37	51.104
39	R-39	220976.2658	2295960.9424	R-38-R-39	64.436	359.163	359	9	45.138	179.163	179	9	45.138
40	R-40	220978.3349	2295980.3079	R-39-R-40	19.476	6.099	6	5	54.999	186.099	186	5	54.999
41	R-41	220983.3101	2296006.5825	R-40-R-41	26.741	10.722	10	43	20.057	190.722	190	43	20.057

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	s
42	R-42	220986.9039	2296025.2172	R-41-R-42	18.978	10.916	10	54	56.803	190.916	190	54	56.803
43	R-43	221003.4275	2296070.8330	R-42-R-43	48.516	19.912	19	54	43.617	199.912	199	54	43.617
44	R-44	221000.5040	2296102.0153	R-43-R-44	31.319	354.644	354	38	37.985	174.644	174	38	37.985
45	R-01	221008.9132	2296117.3600	R-44-R-01	17.498	28.724	28	43	25.015	208.724	208	43	25.015
Total (Patch-1)					1459.755	Say -1460m. or 1.460Km.							

1	R-45	220856.6117	2295942.335		0.000								
2	R-46	220958.7771	2295940.356	R-45-R-46	102.185	271.110	271	6	35.165	91.110	91	6	35.165
3	R-47	220960.7265	2295912.426	R-46-R-47	27.997	356.007	356	0	26.560	176.007	176	0	26.560
4	R-48	220958.0322	2295848.746	R-47-R-48	63.737	2.423	2	25	21.832	182.423	182	25	21.832
5	R-49	220952.7928	2295778.735	R-48-R-49	70.206	4.280	4	16	47.567	184.280	184	16	47.567
6	R-50	220948.1458	2295738.575	R-49-R-50	40.428	6.600	6	36	1.670	186.600	186	36	1.670
7	R-51	220894.4475	2295740.539	R-50-R-51	53.734	272.094	272	5	38.030	92.094	92	5	38.030
8	R-52	220902.3496	2295770.224	R-51-R-52	30.719	14.906	14	54	22.575	194.906	194	54	22.575
9	R-53	220871.1993	2295779.897	R-52-R-53	32.618	287.252	287	15	5.887	107.252	107	15	5.887
10	R-54	220858.0737	2295740.826	R-53-R-54	41.217	18.569	18	34	9.753	198.569	198	34	9.753
11	R-55	220755.3301	2295743.674	R-54-R-55	102.783	271.588	271	35	15.088	91.588	91	35	15.088
12	R-56	220675.914	2295745.959	R-55-R-56	79.449	271.648	271	38	54.156	91.648	91	38	54.156
13	R-57	220607.3481	2295747.854	R-56-R-57	68.592	271.583	271	34	58.621	91.583	91	34	58.621
14	R-58	220614.7851	2295753.705	R-57-R-58	9.463	51.807	51	48	26.413	231.807	231	48	26.413
15	R-59	220685.6971	2295809.832	R-58-R-59	90.437	51.638	51	38	17.021	231.638	231	38	17.021
16	R-60	220797.313	2295896.674	R-59-R-60	141.420	52.116	52	6	56.288	232.116	232	6	56.288
17	R-45	220856.6117	2295942.335	R-60-R-45	74.841	52.403	52	24	11.893	232.403	232	24	11.893
Total (Patch-2)					1029.826	Say - 1030m. or 1.030Km							

1	R-61	220599.826	2295748.062		0.000								
2	R-62	220683.1935	2295813.724	R-61-R-62	106.121	51.775	51	46	30.573	231.775	231	46	30.573
3	R-63	220794.1793	2295900.08	R-62-R-63	140.625	52.114	52	6	50.565	232.114	232	6	50.565
4	R-64	220848.5111	2295942.605	R-63-R-64	68.995	51.950	51	57	0.380	231.950	231	57	0.380
5	R-65	220758.7252	2295944.527	R-64-R-65	89.806	271.226	271	13	33.581	91.226	91	13	33.581
6	R-66	220666.9475	2295946.521	R-65-R-66	91.799	271.245	271	14	40.914	91.245	91	14	40.914
7	R-67	220632.071	2295936.905	R-66-R-67	36.178	74.586	74	35	8.818	254.586	254	35	8.818
8	R-68	220619.1572	2295967.252	R-67-R-68	32.980	336.948	336	56	53.529	156.948	156	56	53.529
9	R-69	220610.879	2295978.566	R-68-R-69	14.019	323.809	323	48	31.057	143.809	143	48	31.057
10	R-70	220579.1352	2295851.223	R-69-R-70	131.240	13.997	13	59	50.391	193.997	193	59	50.391
11	R-71	220545.8644	2295749.612	R-70-R-71	106.919	18.130	18	7	48.506	198.130	198	7	48.506
12	R-72	220561.9433	2295749.153	R-71-R-72	16.085	271.637	271	38	11.714	91.637	91	38	11.714
13	R-61	220599.826	2295748.062	R-72-R-61	37.898	271.650	271	38	59.210	91.650	91	38	59.210
Total (Patch-3)					872.667	Say - 873m or 0.873 Km							

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	R-73	220516.484	2295677.315		0.000								
2	R-74	220582.107	2295624.665	R-73-R-74	84.133	308.740	308	44	25.535	128.740	128	44	25.535
3	R-75	220633.7084	2295587.887	R-74-R-75	63.367	305.479	305	28	44.154	125.479	125	28	44.154
4	R-76	220681.3293	2295558.42	R-75-R-76	56.000	301.748	301	44	53.400	121.748	121	44	53.400
5	R-77	220726.411	2295526.441	R-76-R-77	55.272	305.350	305	21	1.147	125.350	125	21	1.147
6	R-80	220814.3876	2295467.051	R-77-R-80	106.147	304.022	304	1	19.477	124.022	124	1	19.477
7	R-81	220881.295	2295419.536	R-80-R-81	82.063	305.381	305	22	50.720	125.381	125	22	50.720
8	R-82	220800.308	2295340.996	R-81-R-82	112.816	45.879	45	52	44.193	225.879	225	52	44.193
9	R-83	220482.659	2295348.991	R-82-R-83	317.750	271.442	271	26	30.248	91.442	91	26	30.248
10	R-84	220127.283	2295357.962	R-83-R-84	355.489	271.446	271	26	45.778	91.446	91	26	45.778
11	R-85	220207.9668	2295456.382	R-84-R-85	127.265	39.345	39	20	40.698	219.345	219	20	40.698
12	R-86	220217.2208	2295468.056	R-85-R-86	14.897	38.404	38	24	15.844	218.404	218	24	15.844
13	R-87	220300.8586	2295525.46	R-86-R-87	101.443	55.536	55	32	10.651	235.536	235	32	10.651
14	R-88	220397.9723	2295598.214	R-87-R-88	121.343	53.161	53	9	39.981	233.161	233	9	39.981
15	R-89	220420.9772	2295611.957	R-88-R-89	26.798	59.145	59	8	42.135	239.145	239	8	42.135
16	R-90	220460.1402	2295639.226	R-89-R-90	47.721	55.151	55	9	3.582	235.151	235	9	3.582
17	R-73	220516.484	2295677.315	R-90-R-73	68.010	55.941	55	56	26.716	235.941	235	56	26.716
Total (Patch – 4)					1740.512	Say - 1741m. or 1.741Km.							

Grand Total (Mouza- Radhanagar)

Patch-1	1459.755	
Patch-2	1029.826	
Patch-3	872.667	
Patch-4	1740.512	
Total	5102.76	Say - 5103m. or 5.103Km.

DGPS Co-Ordinates with Pillar-to-Pillar distances of each boundary Pillar posted around the CA land identified in Khajuripada Mouza of Baghiapada R.I Circle of Boudh Tahasil bearing Khata No. 56 & Plot No. 116

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	BK-01	202161.78840	2292322.75340		0.000								
2	K-01	202159.36660	2292292.69460	BK-01-K-01	30.156	4.606	4	36	22.679	184.606	184	36	22.679
3	K-02	202251.09990	2292258.95030	K-01-K-02	97.743	290.196	290	11	46.171	110.196	110	11	46.171
4	K-03	202259.80260	2292224.94880	K-02-K-03	35.098	345.643	345	38	35.976	165.643	165	38	35.976
5	K-04	202255.66030	2292216.72600	K-03-K-04	9.207	26.737	26	44	13.340	206.737	206	44	13.340
6	K-05	202258.62550	2292168.96760	K-04-K-05	47.850	356.447	356	26	49.950	176.447	176	26	49.950
7	K-06	202244.54980	2292166.81220	K-05-K-06	14.240	81.294	81	17	38.304	261.294	261	17	38.304
8	K-07	202243.42520	2292100.23840	K-06-K-07	66.583	0.968	0	58	4.003	180.968	180	58	4.003
9	K-08	202233.77940	2292077.83180	K-07-K-08	24.395	23.291	23	17	28.886	203.291	203	17	28.886
10	K-09	202281.68990	2292054.17080	K-08-K-09	53.435	296.283	296	16	58.250	116.283	116	16	58.250
11	K-10	202285.75000	2292034.08880	K-09-K-10	20.488	348.570	348	34	12.839	168.570	168	34	12.839
12	K-11	202224.37920	2292014.72930	K-10-K-11	64.352	72.492	72	29	31.384	252.492	252	29	31.384
13	K-12	202202.66930	2292000.34950	K-11-K-12	26.040	56.481	56	28	51.764	236.481	236	28	51.764
14	K-13	202134.38030	2291975.43720	K-12-K-13	72.691	69.958	69	57	27.649	249.958	249	57	27.649
15	K-14	202146.14500	2291939.80300	K-13-K-14	37.526	341.729	341	43	45.337	161.729	161	43	45.337
16	K-15	202136.93500	2291937.78100	K-14-K-15	9.429	77.618	77	37	3.022	257.618	257	37	3.022
17	K-16	202113.02500	2292011.65500	K-15-K-16	77.647	342.065	342	3	55.255	162.065	162	3	55.255
18	K-17	202106.36100	2292008.96100	K-16-K-17	7.188	67.988	67	59	18.248	247.988	247	59	18.248
19	K-18	202094.24000	2292016.32100	K-17-K-18	14.181	301.267	301	15	59.647	121.267	121	15	59.647
20	K-19	202092.39100	2292021.56000	K-18-K-19	5.556	340.561	340	33	37.934	160.561	160	33	37.934
21	K-20	202081.31380	2292008.32030	K-19-K-20	17.263	39.918	39	55	5.015	219.918	219	55	5.015
22	K-21	202062.32980	2292007.11020	K-20-K-21	19.023	86.353	86	21	9.795	266.353	266	21	9.795
23	K-22	202043.49250	2292007.75320	K-21-K-22	18.848	271.955	271	57	17.994	91.955	91	57	17.994
24	K-23	202042.53500	2291996.00220	K-22-K-23	11.790	4.658	4	39	29.909	184.658	184	39	29.909
25	K-24	202018.21700	2291995.37700	K-23-K-24	24.326	88.527	88	31	38.234	268.527	268	31	38.234
26	K-25	202017.15060	2291984.34140	K-24-K-25	11.087	5.520	5	31	10.233	185.520	185	31	10.233
27	K-26	202019.35210	2291951.51410	K-25-K-26	32.901	356.163	356	9	47.927	176.163	176	9	47.927
28	K-27	202018.94420	2291928.35730	K-26-K-27	23.160	1.009	1	0	32.916	181.009	181	0	32.916
29	K-28	202023.14170	2291906.66260	K-27-K-28	22.097	349.050	349	2	58.885	169.050	169	2	58.885
30	K-29	201993.40640	2291905.39510	K-28-K-29	29.762	87.559	87	33	33.054	267.559	267	33	33.054
31	K-30	201954.26580	2291908.37550	K-29-K-30	39.254	274.354	274	21	15.988	94.354	94	21	15.988
32	K-31	201956.29000	2291886.24840	K-30-K-31	22.219	354.773	354	46	23.150	174.773	174	46	23.150
33	K-32	201955.73470	2291872.14910	K-31-K-32	14.110	2.255	2	15	19.529	182.255	182	15	19.529
34	K-33	201957.14990	2291833.41430	K-32-K-33	38.761	357.908	357	54	27.338	177.908	177	54	27.338
35	K-34	201954.82250	2291814.05620	K-33-K-34	19.498	6.856	6	51	20.495	186.856	186	51	20.495
36	K-35	201954.78560	2291788.98620	K-34-K-35	25.070	0.084	0	5	3.597	180.084	180	5	3.597
37	K-36	201990.59200	2291791.16370	K-35-K-36	35.873	86.520	86	31	11.816	266.520	266	31	11.816
38	K-37	202021.57040	2291782.62190	K-36-K-37	32.134	285.415	285	24	55.243	105.415	105	24	55.243
39	K-38	202020.39520	2291763.37480	K-37-K-38	19.283	3.494	3	29	38.614	183.494	183	29	38.614
40	K-39	202016.62470	2291744.11900	K-38-K-39	19.621	11.079	11	4	44.307	191.079	191	4	44.307

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
41	K-40	202140.66790	2291738.41980	K-39-K-40	124.174	272.631	272	37	50.235	92.631	92	37	50.235
42	K-41	202311.66550	2291734.30430	K-40-K-41	171.047	271.379	271	22	43.338	91.379	91	22	43.338
43	K-43	202484.37060	2291820.93580	K-41-K-43	193.215	63.361	63	21	39.464	243.361	243	21	39.464
44	K-44	202506.60660	2291830.57990	K-43-K-44	24.237	66.553	66	33	10.333	246.553	246	33	10.333
45	K-45	202574.13040	2291873.23520	K-44-K-45	79.868	57.719	57	43	8.707	237.719	237	43	8.707
46	K-46	202612.91710	2291885.52070	K-45-K-46	40.686	72.425	72	25	28.751	252.425	252	25	28.751
47	DP-01	202603.80647	2291915.70432	K-46-DP-01	31.529	343.204	343	12	14.699	163.204	163	12	14.699
48	DP-02	202543.28292	2291937.86322	DP-01-DP-02	64.452	290.109	290	6	31.320	110.109	110	6	31.320
49	DP-03	202492.35052	2291979.53518	DP-02-DP-03	65.808	309.289	309	17	21.865	129.289	129	17	21.865
50	DP-04	202451.67075	2292028.48319	DP-03-DP-04	63.646	320.271	320	16	14.415	140.271	140	16	14.415
51	DP-05	202425.21237	2292057.58742	DP-04-DP-05	39.333	317.726	317	43	34.720	137.726	137	43	34.720
52	DP-06	202380.23311	2292116.45733	DP-05-DP-06	74.086	322.619	322	37	6.767	142.619	142	37	6.767
53	DP-07	202377.58727	2292168.05118	DP-06-DP-07	51.662	357.064	357	3	51.576	177.064	177	3	51.576
54	DP-08	202324.45352	2292218.56183	DP-07-DP-08	73.311	313.550	313	33	0.814	133.550	133	33	0.814
55	DP-09	202306.25260	2292235.86420	DP-08-DP-09	25.113	313.550	313	33	0.814	133.550	133	33	0.814
56	DP-10	202236.27309	2292274.67539	DP-09-DP-10	80.021	299.013	299	0	47.157	119.013	119	0	47.157
57	DP-11	202231.73542	2292277.19202	DP-10-DP-11	5.189	299.013	299	0	47.157	119.013	119	0	47.157
58	BK-01	202161.78840	2292322.75340	DP-11-BK-01	83.477	303.079	303	4	44.428	123.079	123	4	44.428
Total (Patch-5)					2480.740	Say - 2481m. Or 2.481Km.							

DGPS Co-Ordinates with Pillar-to-Pillar distances of each boundary Pillar posted around the CA land identified in Balakira Mouza of Mundapada R.I Circle of Boudh Tahasil bearing Khata No. 287 & Plot No. 1373 7 1380

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	BL-01	202992.61850	2300530.68540		0.000								
2	BL-02	203011.15460	2300535.46200	BL-01- BL-02	19.142	75.550	75	32	59.036	255.550	255	32	59.036
3	BL-03	203027.43070	2300519.17630	BL-02- BL-03	23.025	315.017	315	1	0.812	135.017	135	1	0.812
4	BL-04	203031.33340	2300499.84260	BL-03- BL-04	19.724	348.588	348	35	15.486	168.588	168	35	15.486
5	BL-05	203063.75790	2300497.96750	BL-04- BL-05	32.479	273.310	273	18	34.967	93.310	93	18	34.967
6	BL-06	203085.84800	2300502.34880	BL-05- BL-06	22.520	78.782	78	46	54.031	258.782	258	46	54.031
7	BL-07	203101.92180	2300508.24680	BL-06- BL-07	17.122	69.850	69	51	0.974	249.850	249	51	0.974
8	BL-08	203099.05480	2300518.57540	BL-07- BL-08	10.719	344.486	344	29	11.312	164.486	164	29	11.312
9	BL-09	203110.02970	2300529.94510	BL-08- BL-09	15.802	43.988	43	59	15.949	223.988	223	59	15.949
10	BL-10	203119.86160	2300529.57730	BL-09- BL-10	9.839	272.142	272	8	32.531	92.142	92	8	32.531
11	BL-11	203126.52460	2300540.74310	BL-10- BL-11	13.003	30.826	30	49	33.301	210.826	210	49	33.301
12	BL-12	203143.38390	2300549.39030	BL-11- BL-12	18.948	62.847	62	50	47.535	242.847	242	50	47.535
13	BL-13	203150.83330	2300543.07710	BL-12- BL-13	9.765	310.281	310	16	49.911	130.281	130	16	49.911
14	BL-14	203164.03670	2300538.23000	BL-13- BL-14	14.065	290.159	290	9	31.285	110.159	110	9	31.285
15	BL-15	203168.79550	2300538.86220	BL-14- BL-15	4.801	82.433	82	25	57.524	262.433	262	25	57.524
16	BL-16	203166.36570	2300552.46550	BL-15- BL-16	13.819	349.873	349	52	21.788	169.873	169	52	21.788
17	BL-17	203210.02950	2300563.29780	BL-16- BL-17	44.987	76.067	76	4	1.603	256.067	256	4	1.603
18	BL-18	203217.14410	2300554.23850	BL-17- BL-18	11.519	321.856	321	51	22.158	141.856	141	51	22.158
19	BL-19	203252.16920	2300570.49850	BL-18- BL-19	38.615	65.097	65	5	50.844	245.097	245	5	50.844
20	BL-20	203246.00580	2300579.79160	BL-19- BL-20	11.151	326.447	326	26	48.254	146.447	146	26	48.254
21	BL-21	203312.77720	2300576.64360	BL-20- BL-21	66.846	272.699	272	41	57.351	92.699	92	41	57.351
22	BL-22	203268.36020	2300610.17790	BL-21- BL-22	55.654	307.052	307	3	8.514	127.052	127	3	8.514
23	BL-23	203232.12000	2300596.32230	BL-22- BL-23	38.799	69.077	69	4	36.497	249.077	249	4	36.497
24	BL-24	203184.43950	2300704.08610	BL-23- BL-24	117.841	336.133	336	7	58.169	156.133	156	7	58.169
25	BL-25	203130.01650	2300831.27270	BL-24- BL-25	138.341	336.834	336	50	2.305	156.834	156	50	2.305
26	BL-26	203144.81350	2300837.11320	BL-25- BL-26	15.908	68.460	68	27	37.565	248.460	248	27	37.565
27	BL-27	203093.79500	2300945.86560	BL-26- BL-27	120.125	334.868	334	52	3.141	154.868	154	52	3.141
28	BL-28	203077.19940	2300940.81880	BL-27- BL-28	17.346	73.085	73	5	6.853	253.085	253	5	6.853
29	BL-29	203063.75610	2300919.63320	BL-28- BL-29	25.091	32.397	32	23	49.654	212.397	212	23	49.654
30	BL-30	203094.13400	2300881.92200	BL-29- BL-30	48.425	321.147	321	8	49.732	141.147	141	8	49.732
31	BL-31	203106.87240	2300847.06570	BL-30- BL-31	37.111	339.925	339	55	29.747	159.925	159	55	29.747

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
32	BL-32	203093.55920	2300756.63550	BL-31-BL-32	91.405	8.375	8	22	29.878	188.375	188	22	29.878
33	BL-33	202992.34930	2300746.51550	BL-32-BL-33	101.715	84.290	84	17	23.862	264.290	264	17	23.862
34	BL-34	202988.09740	2300629.82490	BL-33-BL-34	116.768	2.087	2	5	12.426	182.087	182	5	12.426
35	BL-35	202994.90240	2300580.97790	BL-34-BL-35	49.319	352.069	352	4	8.487	172.069	172	4	8.487
36	BL-01	202992.61850	2300530.68540	BL-35-BL-01	50.344	2.600	2	36	0.536	182.600	182	36	0.536
Total (Patch-6)					1442.080	Say -1443 m or 1.443Km.							

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	BL-36	203117.34340	2300174.98770		0.000								
2	BL-37	203272.47680	2300174.68550	BL-36-BL-37	155.134	270.112	270	6	41.804	90.112	90	6	41.804
3	BL-38	203270.00880	2300100.04990	BL-37-BL-38	74.676	1.894	1	53	38.142	181.894	181	53	38.142
4	BL-39	203268.23310	2299972.34470	BL-38-BL-39	127.718	0.797	0	47	47.861	180.797	180	47	47.861
5	BL-40	203268.85290	2299907.06240	BL-39-BL-40	65.285	359.456	359	27	21.750	179.456	179	27	21.750
6	BL-41	203150.39730	2299897.87020	BL-40-BL-41	118.812	85.563	85	33	45.785	265.563	265	33	45.785
7	BL-42	203040.44740	2299888.55550	BL-41-BL-42	110.344	85.158	85	9	27.351	265.158	265	9	27.351
8	BL-44	202961.66010	2299919.65960	BL-42-BL-44	84.705	291.543	291	32	36.234	111.543	111	32	36.234
9	BL-43	202975.43570	2299920.06290	BL-44-BL-43	13.782	88.323	88	19	23.033	268.323	268	19	23.033
10	BL-45	203046.85980	2300058.92440	BL-43-BL-45	156.154	27.219	27	13	9.295	207.219	207	13	9.295
11	BL-36	203117.34340	2300174.98770	BL-45-BL-36	135.789	31.270	31	16	10.983	211.270	211	16	10.983
Total (Patch-7)					1042.397	Say - 1043m. Or 1.043Km.							

Grand Total (Mouza- Balakira)

Patch-6	1442.080	
Patch-7	1042.397	
Total	2484.477	Say - 2845m. or 2.845Km.

DGPS Co-Ordinates with Pillar-to-Pillar distances of each boundary Pillar posted around the CA land identified in Brahmanipali Mouza of Baghiapada R.I Circle of Boudh Tahasil bearing Khata No. 67 & Plot No. 571

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	BP-01	208472.8400	2296815.7100		0.000								
2	BP-02	208470.0850	2296699.7810	BP-01-BP-02	115.962	1.361	1	21	40.867	181.361	181	21	40.867
3	BP-03	208467.4081	2296588.6121	BP-02-BP-03	111.201	1.379	1	22	45.810	181.379	181	22	45.810
4	BP-04	208465.2689	2296497.3385	BP-03-BP-04	91.299	1.343	1	20	33.390	181.343	181	20	33.390
5	BP-05	208463.5170	2296425.2804	BP-04-BP-05	72.079	1.393	1	23	33.789	181.393	181	23	33.789
6	BP-06	208578.9878	2296424.1645	BP-05-BP-06	115.476	270.554	270	33	13.264	90.554	90	33	13.264
7	BP-07	208705.3839	2296422.9393	BP-06-BP-07	126.402	270.555	270	33	19.332	90.555	90	33	19.332
8	BP-08	208667.3866	2296518.3497	BP-07-BP-08	102.698	338.285	338	17	6.087	158.285	158	17	6.087
9	BP-09	208711.7830	2296612.2860	BP-08-BP-09	103.899	25.296	25	17	47.283	205.296	205	17	47.283
10	BP-10	208711.5627	2296649.4541	BP-09-BP-10	37.169	359.660	359	39	37.457	179.660	179	39	37.457
11	BP-11	208701.2510	2296743.1500	BP-10-BP-11	94.262	353.720	353	43	10.522	173.720	173	43	10.522
12	BP-12	208691.3925	2296832.1431	BP-11-BP-12	89.537	353.679	353	40	43.132	173.679	173	40	43.132
13	BP-13	208611.0719	2296827.4623	BP-12-BP-13	80.457	86.665	86	39	53.198	266.665	266	39	53.198
14	BP-14	208520.4400	2296822.1460	BP-13-BP-14	90.788	86.643	86	38	34.735	266.643	266	38	34.735
15	BP-01	208472.8400	2296815.7100	BP-14-BP-01	48.033	82.300	82	17	59.032	262.300	262	17	59.032
Total (Patch-8)					1279.262	Say - 1280m. Or 1.280Km.							

DGPS Co-Ordinates with Pillar-to-Pillar distances of each boundary Pillar posted around the CA land identified in Bijapadar Mouza of Baghiapada R.I Circle of Boudh Tahasil bearing Khata No. 72 & Plot No. 652

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	B-01	208277.10740	2293891.19640		0.000								
2	B-02	208316.42060	2293897.31690	B-01-B-02	39.787	81.151	81	9	3.274	261.151	261	9	3.274
3	B-03	208408.02590	2293931.96780	B-02-B-03	97.940	69.280	69	16	48.798	249.280	249	16	48.798
4	B-04	208467.06870	2293962.07890	B-03-B-04	66.278	62.979	62	58	44.325	242.979	242	58	44.325
5	B-05	208361.76300	2294095.86500	B-04-B-05	170.259	321.793	321	47	34.846	141.793	141	47	34.846
6	B-06	208295.68080	2294179.84730	B-05-B-06	106.864	321.802	321	48	8.120	141.802	141	48	8.120
7	B-07	208220.03800	2294275.90100	B-06-B-07	122.263	321.779	321	46	45.767	141.779	141	46	45.767
8	B-08	208113.33770	2294222.54140	B-07-B-08	119.299	63.431	63	25	51.202	243.431	243	25	51.202
9	B-09	208034.87940	2294183.18810	B-08-B-09	87.775	63.362	63	21	44.871	243.362	243	21	44.871
10	B-10	208034.90830	2294179.86710	B-09-B-10	3.321	359.501	359	30	5.088	179.501	179	30	5.088
11	B-11	208088.62070	2294121.99310	B-10-B-11	78.958	317.136	317	8	9.055	137.136	137	8	9.055
12	B-12	208099.46430	2294103.13070	B-11-B-12	21.757	330.106	330	6	22.692	150.106	150	6	22.692
13	B-13	208132.50720	2294065.69970	B-12-B-13	49.929	318.563	318	33	46.644	138.563	138	33	46.644
14	B-14	208172.89940	2294033.49890	B-13-B-14	51.657	308.562	308	33	43.100	128.562	128	33	43.100
15	B-15	208211.64770	2293989.47680	B-14-B-15	58.646	318.646	318	38	44.630	138.646	138	38	44.630
16	B-01	208277.10740	2293891.19640	B-15-B-01	118.085	326.334	326	20	3.784	146.334	146	20	3.784
Total (Patch-9)					1192.816	Say - 1193m. or 1.193Km.							

DGPS Co-Ordinates with Pillar-to-Pillar distances of each boundary Pillar posted around the CA land identified in Ambakana Mouza of Mundapada R.I Circle of Boudh Tahasil bearing Khata No. 8 & Plot No. 214, 233, 234, 235, 236, 251, 252, 253, 255, 256 & 257

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	AN-01	203485.66720	2298157.28210		0.000								
2	AN-02	203631.27400	2298196.04050	AN-01-AN-02	150.677	75.094	75	5	39.593	255.094	255	5	39.593
3	AN-03	203762.26660	2298302.42250	AN-02-AN-03	168.749	50.919	50	55	9.055	230.919	230	55	9.055
4	AN-04	203798.54250	2298324.17030	AN-03-AN-04	42.295	59.057	59	3	24.661	239.057	239	3	24.661
5	AN-05	203891.35700	2298376.50200	AN-04-AN-05	106.551	60.584	60	35	3.641	240.584	240	35	3.641
6	AN-06	203908.82700	2298396.34220	AN-05-AN-06	26.435	41.365	41	21	54.228	221.365	221	21	54.228
7	AN-07	203944.24870	2298427.30300	AN-06-AN-07	47.045	48.844	48	50	40.174	228.844	228	50	40.174
8	AN-08	203990.50810	2298494.53070	AN-07-AN-08	81.606	34.532	34	31	54.738	214.532	214	31	54.738
9	AN-09	204061.82130	2298452.60890	AN-08-AN-09	82.722	300.449	300	26	57.630	120.449	120	26	57.630
10	AN-10	204139.33120	2298353.35700	AN-09-AN-10	125.931	322.012	322	0	44.120	142.012	142	0	44.120
11	AN-11	204142.30830	2298236.52390	AN-10-AN-11	116.871	358.540	358	32	25.170	178.540	178	32	25.170
12	AN-12	204143.11530	2298168.34950	AN-11-AN-12	68.179	359.322	359	19	18.498	179.322	179	19	18.498
13	AN-13	204134.82410	2298131.00740	AN-12-AN-13	38.251	12.519	12	31	6.626	192.519	192	31	6.626
14	AN-14	204122.32900	2298070.84140	AN-13-AN-14	61.450	11.732	11	43	56.095	191.732	191	43	56.095
15	AN-15	204171.56730	2297813.96800	AN-14-AN-15	261.550	349.149	349	8	56.346	169.149	169	8	56.346
16	AN-16	204134.08020	2297808.26570	AN-15-AN-16	37.918	81.351	81	21	2.996	261.351	261	21	2.996
17	AN-17	204113.92600	2297810.46890	AN-16-AN-17	20.274	276.239	276	14	19.103	96.239	96	14	19.103
18	AN-18	204108.22920	2297816.97590	AN-17-AN-18	8.648	318.798	318	47	53.681	138.798	138	47	53.681
19	AN-19	204081.56580	2297828.70110	AN-18-AN-19	29.128	293.737	293	44	14.779	113.737	113	44	14.779
20	AN-20	204027.88720	2297836.36370	AN-19-AN-20	54.223	278.124	278	7	26.634	98.124	98	7	26.634
21	AN-21	203936.75520	2297828.23830	AN-20-AN-21	91.494	84.905	84	54	17.772	264.905	264	54	17.772
22	AN-22	203877.52310	2297801.59230	AN-21-AN-22	64.950	65.779	65	46	44.574	245.779	245	46	44.574
23	AN-23	203854.22650	2297788.39980	AN-22-AN-23	26.773	60.478	60	28	40.085	240.478	240	28	40.085
24	AN-24	203800.60040	2297796.06870	AN-23-AN-24	54.172	278.139	278	8	18.631	98.139	98	8	18.631
25	AN-25	203733.47460	2297804.03970	AN-24-AN-25	67.597	276.772	276	46	19.204	96.772	96	46	19.204
26	AN-26	203700.45940	2297803.20920	AN-25-AN-26	33.026	88.559	88	33	32.486	268.559	268	33	32.486
27	AN-27	203631.86120	2297806.10850	AN-26-AN-27	68.659	272.420	272	25	12.588	92.420	92	25	12.588
28	AN-28	203585.61280	2297814.38280	AN-27-AN-28	46.983	280.143	280	8	36.486	100.143	100	8	36.486
29	AN-29	203553.57260	2297815.79100	AN-28-AN-29	32.071	272.517	272	30	59.721	92.517	92	30	59.721
30	AN-30	203484.55330	2297760.83780	AN-29-AN-30	88.224	51.473	51	28	23.447	231.473	231	28	23.447
31	AN-31	203478.86510	2297870.66530	AN-30-AN-31	109.975	357.035	357	2	6.643	177.035	177	2	6.643

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
32	AN-32	203472.89800	2297890.04400	AN-31-AN-32	20.277	342.885	342	53	7.171	162.885	162	53	7.171
33	AN-33	203474.10770	2297970.16410	AN-32-AN-33	80.129	0.865	0	51	54.070	180.865	180	51	54.070
34	AN-34	203469.98130	2298015.00180	AN-33-AN-34	45.027	354.742	354	44	30.832	174.742	174	44	30.832
35	AN-35	203483.78960	2298140.52270	AN-34-AN-35	126.278	6.278	6	16	39.900	186.278	186	16	39.900
36	AN-01	203485.66720	2298157.28210	AN-35-AN-01	16.864	6.392	6	23	32.434	186.392	186	23	32.434
Total (Patch-10)					2501.004	Say - 2501m or 2.501Km.							

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	AN-36	203474.12840	2297762.52580		0.000								
2	AN-37	203471.01010	2297838.23050	AN-36-AN-37	75.769	357.641	357	38	28.689	177.641	177	38	28.689
3	AN-38	203469.68710	2297870.80980	AN-37-AN-38	32.606	357.675	357	40	28.473	177.675	177	40	28.473
4	AN-40	203464.94940	2297908.06810	AN-38-AN-40	37.558	352.753	352	45	11.737	172.753	172	45	11.737
5	AN-41	203466.66470	2297973.96450	AN-40-AN-41	65.919	1.491	1	29	27.913	181.491	181	29	27.913
6	AN-42	203463.34310	2298009.37740	AN-41-AN-42	35.568	354.642	354	38	29.557	174.642	174	38	29.557
7	AN-43	203463.01170	2298034.92630	AN-42-AN-43	25.551	359.257	359	15	24.647	179.257	179	15	24.647
8	AN-44	203466.50630	2298061.45030	AN-43-AN-44	26.753	7.506	7	30	20.250	187.506	187	30	20.250
9	AN-45	203468.08770	2298087.79620	AN-44-AN-45	26.393	3.435	3	26	6.109	183.435	183	26	6.109
10	AN-46	203474.96040	2298140.62680	AN-45-AN-46	53.276	7.412	7	24	43.013	187.412	187	24	43.013
11	AN-47	203478.46900	2298179.98640	AN-46-AN-47	39.516	5.094	5	5	38.420	185.094	185	5	38.420
12	AN-48	203492.97100	2298204.59650	AN-47-AN-48	28.565	30.510	30	30	34.488	210.510	210	30	34.488
13	AN-49	203503.64440	2298239.25160	AN-48-AN-49	36.262	17.118	17	7	5.781	197.118	197	7	5.781
14	AN-50	203528.57310	2298297.01230	AN-49-AN-50	62.911	23.344	23	20	39.637	203.344	203	20	39.637
15	AN-51	203534.94880	2298345.36300	AN-50-AN-51	48.769	7.512	7	30	42.811	187.512	187	30	42.811
16	AN-52	203546.84380	2298394.36010	AN-51-AN-52	50.420	13.646	13	38	44.432	193.646	193	38	44.432
17	AN-53	203575.40750	2298475.08840	AN-52-AN-53	85.633	19.485	19	29	6.210	199.485	199	29	6.210
18	AN-54	203577.14450	2298494.70680	AN-53-AN-54	19.695	5.060	5	3	35.050	185.060	185	3	35.050
19	AN-55	203565.22720	2298495.88510	AN-54-AN-55	11.975	275.647	275	38	47.965	95.647	95	38	47.965
20	AN-56	203552.78220	2298503.82960	AN-55-AN-56	14.765	302.553	302	33	10.410	122.553	122	33	10.410
21	AN-57	203540.21080	2298507.50430	AN-56-AN-57	13.097	286.294	286	17	38.315	106.294	106	17	38.315
22	AN-58	203532.82530	2298503.83240	AN-57-AN-58	8.248	63.564	63	33	52.186	243.564	243	33	52.186
23	AN-59	203507.94300	2298507.82100	AN-58-AN-59	25.200	279.107	279	6	25.065	99.107	99	6	25.065

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
24	AN-60	203489.17850	2298403.38850	AN-59-AN-60	106.105	10.186	10	11	10.499	190.186	190	11	10.499
25	AN-62	203487.07820	2298382.83460	AN-60-AN-62	20.661	5.835	5	50	4.262	185.835	185	50	4.262
26	AN-63	203464.12530	2298364.84600	AN-62-AN-63	29.162	51.914	51	54	48.828	231.914	231	54	48.828
27	AN-64	203457.43980	2298403.91080	AN-63-AN-64	39.633	350.289	350	17	18.799	170.289	170	17	18.799
28	AN-65	203398.07510	2298464.98060	AN-64-AN-65	85.169	315.811	315	48	40.082	135.811	135	48	40.082
29	AN-66	203400.94510	2298479.98800	AN-65-AN-66	15.279	10.826	10	49	35.281	190.826	190	49	35.281
30	AN-67	203317.46900	2298485.24400	AN-66-AN-67	83.641	273.603	273	36	10.162	93.603	93	36	10.162
31	AN-68	203273.55790	2298692.76530	AN-67-AN-68	212.116	348.053	348	3	9.200	168.053	168	3	9.200
32	AN-69	203281.46060	2298719.70230	AN-68-AN-69	28.072	16.350	16	21	1.737	196.350	196	21	1.737
33	AN-70	202934.87100	2298726.09100	AN-69-AN-70	346.648	271.056	271	3	21.657	91.056	91	3	21.657
34	AN-72	202894.07500	2298674.64900	AN-70-AN-72	65.655	38.416	38	24	58.039	218.416	218	24	58.039
35	AN-73	202816.87960	2298649.28690	AN-72-AN-73	81.255	71.812	71	48	44.507	251.812	251	48	44.507
36	AN-74	202765.61110	2298636.57290	AN-73-AN-74	52.821	76.072	76	4	20.198	256.072	256	4	20.198
37	AN-75	202726.54350	2298616.71150	AN-74-AN-75	43.826	63.052	63	3	6.761	243.052	243	3	6.761
38	AN-76	202725.14640	2298485.24960	AN-75-AN-76	131.469	0.609	0	36	31.979	180.609	180	36	31.979
39	AN-77	202692.25500	2298482.41500	AN-76-AN-77	33.013	85.074	85	4	27.792	265.074	265	4	27.792
40	AN-78	202662.38100	2298477.41500	AN-77-AN-78	30.290	80.498	80	29	54.581	260.498	260	29	54.581
41	AN-79	202628.09100	2298475.50100	AN-78-AN-79	34.343	86.805	86	48	18.641	266.805	266	48	18.641
42	AN-80	202618.04490	2298471.30920	AN-79-AN-80	10.886	67.351	67	21	4.853	247.351	247	21	4.853
43	AN-81	202525.00640	2298461.02030	AN-80-AN-81	93.606	83.689	83	41	21.991	263.689	263	41	21.991
44	AN-82	202508.21100	2298442.99100	AN-81-AN-82	24.640	42.971	42	58	14.733	222.971	222	58	14.733
45	AN-83	202502.59450	2298395.02960	AN-82-AN-83	48.289	6.679	6	40	45.041	186.679	186	40	45.041
46	AN-84	202495.93600	2298357.16100	AN-83-AN-84	38.450	9.972	9	58	20.911	189.972	189	58	20.911
47	AN-85	202453.24390	2298291.82970	AN-84-AN-85	78.044	33.163	33	9	48.404	213.163	213	9	48.404
48	AN-86	202445.05010	2298286.55180	AN-85-AN-86	9.747	57.213	57	12	47.029	237.213	237	12	47.029
49	AN-87	202461.63590	2298262.24480	AN-86-AN-87	29.427	325.692	325	41	32.849	145.692	145	41	32.849
50	AN-88	202476.07240	2298252.12360	AN-87-AN-88	17.631	305.034	305	2	1.265	125.034	125	2	1.265
51	AN-89	202510.68530	2298221.56420	AN-88-AN-89	46.173	311.441	311	26	27.520	131.441	131	26	27.520
52	AN-90	202509.26130	2298186.83880	AN-89-AN-90	34.755	2.348	2	20	53.657	182.348	182	20	53.657
53	AN-91	202485.21520	2298156.75620	AN-90-AN-91	38.512	38.637	38	38	11.749	218.637	218	38	11.749
54	AN-92	202458.84260	2298123.55720	AN-91-AN-92	42.399	38.463	38	27	46.453	218.463	218	27	46.453
55	AN-93	202516.29200	2298037.50100	AN-92-AN-93	103.470	326.274	326	16	25.386	146.274	146	16	25.386
56	AN-94	202514.38100	2298022.58540	AN-93-AN-94	15.038	7.301	7	18	3.640	187.301	187	18	3.640

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
57	AN-95	202504.54180	2298010.28830	AN-94-AN-95	15.749	38.664	38	39	50.855	218.664	218	39	50.855
58	AN-96	202490.23860	2297997.30420	AN-95-AN-96	19.318	47.768	47	46	3.326	227.768	227	46	3.326
59	AN-97	202488.35000	2297989.97160	AN-96-AN-97	7.572	14.443	14	26	35.891	194.443	194	26	35.891
60	AN-98	202505.56780	2297984.70770	AN-97-AN-98	18.004	287.000	286	59	58.798	107.000	106	59	58.798
61	AN-99	202541.44820	2297960.24560	AN-98-AN-99	43.426	304.285	304	17	5.657	124.285	124	17	5.657
62	AN-100	202546.07250	2297953.40270	AN-99-AN-100	8.259	325.950	325	56	59.748	145.950	145	56	59.748
63	AN-101	202643.10342	2297953.17128	AN-100-AN-101	97.031	270.137	270	8	11.939	90.137	90	8	11.939
64	AN-102	202641.68441	2297900.60757	AN-101-AN-102	52.583	1.546	1	32	46.986	181.546	181	32	46.986
65	AN-103	202640.35026	2297851.18754	AN-102-AN-103	49.438	1.546	1	32	46.986	181.546	181	32	46.986
66	AN-104	202611.48238	2297851.63784	AN-103-AN-104	28.871	270.894	270	53	37.159	90.894	90	53	37.159
67	AN-105	202612.50720	2297841.20890	AN-104-AN-105	10.479	354.388	354	23	15.807	174.388	174	23	15.807
68	AN-106	202609.78000	2297802.25200	AN-105-AN-106	39.052	4.004	4	0	16.166	184.004	184	0	16.166
69	AN-107	202628.76190	2297798.03890	AN-106-AN-107	19.444	282.514	282	30	50.894	102.514	102	30	50.894
70	AN-108	202658.76680	2297822.02940	AN-107-AN-108	38.417	51.356	51	21	20.955	231.356	231	21	20.955
71	AN-109	202699.25800	2297790.61150	AN-108-AN-109	51.251	307.809	307	48	30.865	127.809	127	48	30.865
72	AN-110	202741.16100	2297772.98900	AN-109-AN-110	45.458	292.809	292	48	33.885	112.809	112	48	33.885
73	AN-111	202771.78890	2297764.24750	AN-110-AN-111	31.851	285.929	285	55	45.338	105.929	105	55	45.338
74	AN-112	202823.74590	2297755.96710	AN-111-AN-112	52.613	279.055	279	3	18.331	99.055	99	3	18.331
75	AN-113	202889.15800	2297738.36720	AN-112-AN-113	67.738	285.059	285	3	34.067	105.059	105	3	34.067
76	AN-114	202891.95790	2297713.27150	AN-113-AN-114	25.251	353.634	353	38	2.037	173.634	173	38	2.037
77	AN-115	202887.93880	2297707.34460	AN-114-AN-115	7.161	34.142	34	8	29.952	214.142	214	8	29.952
78	AN-116	202907.35660	2297690.02560	AN-115-AN-116	26.019	311.730	311	43	48.738	131.730	131	43	48.738
79	AN-117	202916.61490	2297695.53270	AN-116-AN-117	10.772	59.255	59	15	16.615	239.255	239	15	16.615
80	AN-118	202951.33430	2297667.99990	AN-117-AN-118	44.311	308.415	308	24	53.052	128.415	128	24	53.052
81	AN-119	202969.30980	2297665.10890	AN-118-AN-119	18.206	279.137	279	8	11.905	99.137	99	8	11.905
82	AN-120	202999.25360	2297745.29990	AN-119-AN-120	85.599	20.476	20	28	33.360	200.476	200	28	33.360
83	AN-121	203021.67260	2297778.97350	AN-120-AN-121	40.454	33.655	33	39	16.688	213.655	213	39	16.688
84	AN-122	203076.76390	2297787.55250	AN-121-AN-122	55.755	81.149	81	8	55.683	261.149	261	8	55.683
85	AN-123	203151.36090	2297778.36460	AN-122-AN-123	75.161	277.022	277	1	17.739	97.022	97	1	17.739
86	AN-124	203321.89430	2297775.02360	AN-123-AN-124	170.566	271.122	271	7	20.514	91.122	91	7	20.514
87	AN-36	203474.12840	2297762.52580	AN-124-AN-36	152.746	274.693	274	41	35.612	94.693	94	41	35.612
Total (Patch-11)					4303.231	Say - 4304m. Or 4.304Km.							

Grand Total (Mouza- Ambakana)

Patch-10	2501.004	
Patch-11	4303.231	
Total	6804.235	Say - 6805m. or 6.805Km.

DGPS Co-Ordinates with Pillar-to-Pillar distances of each boundary Pillar posted around the CA land identified in Palsadadar Mouza of Baghiapada R.I Circle of Boudh Tahasil bearing Khata No. 6 & Plot No. 85

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	P-01	215514.2803	2295922.2224		0.000								
2	P-02	215491.3781	2295828.5610	P-01-P-02	96.421	13.740	13	44	25.509	193.740	193	44	25.509
3	P-03	215461.8598	2295720.5134	P-02-P-03	112.007	15.280	15	16	48.632	195.280	195	16	48.632
4	P-04	215621.9615	2295714.4284	P-03-P-04	160.217	272.177	272	10	35.754	92.177	92	10	35.754
5	P-05	215769.0718	2295710.9420	P-04-P-05	147.152	271.358	271	21	27.401	91.358	91	21	27.401
6	P-06	215895.9859	2295707.7331	P-05-P-06	126.955	271.448	271	26	54.095	91.448	91	26	54.095
7	P-07	216010.2291	2295704.8866	P-06-P-07	114.279	271.427	271	25	38.260	91.427	91	25	38.260
8	P-08	216012.2747	2295807.9814	P-07-P-08	103.115	1.137	1	8	12.155	181.137	181	8	12.155
9	P-09	216014.2782	2295906.3280	P-08-P-09	98.367	1.167	1	10	1.410	181.167	181	10	1.410
10	P-10	215900.7565	2295910.0003	P-09-P-10	113.581	271.853	271	51	10.110	91.853	91	51	10.110
11	P-11	215774.0486	2295914.0001	P-10-P-11	126.771	271.808	271	48	29.019	91.808	91	48	29.019
12	P-12	215635.8039	2295918.3650	P-11-P-12	138.314	271.808	271	48	30.385	91.808	91	48	30.385
13	P-01	215514.2803	2295922.2224	P-12-P-01	121.585	271.818	271	49	5.056	91.818	91	49	5.056
Total (Patch-12)					1458.763	Say - 1459m. Or 1.459Km							

DGPS Co-Ordinates with Pillar-to-Pillar distances of each boundary Pillar posted around the CA land identified in Barapadar Mouza of Ghantapada R.I Circle of Kantamal Tahasil bearing Khata No. 103 & Plot No. 534, 535, 536, 433, & 532

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	BP-01	770776.21460	2269230.51850		0.000								
2	BP-02	770805.10250	2269224.39440	BP-01-BP-02	29.530	281.969	281	58	9.230	101.969	101	58	9.230
3	BP-03	770889.35470	2269194.24000	BP-02-BP-03	89.486	289.693	289	41	33.406	109.693	109	41	33.406
4	BP-04	770912.78770	2269246.48740	BP-03-BP-04	57.262	24.156	24	9	22.579	204.156	204	9	22.579
5	BP-05	771017.00270	2269284.53240	BP-04-BP-05	110.942	69.945	69	56	41.108	249.945	249	56	41.108
6	BP-06	771090.36700	2269188.92680	BP-05-BP-06	120.510	322.499	322	29	55.189	142.499	142	29	55.189
7	BP-07	771138.25240	2269015.14080	BP-06-BP-07	180.263	344.595	344	35	41.511	164.595	164	35	41.511
8	BP-08	771139.85140	2268930.86170	BP-07-BP-08	84.294	358.913	358	54	47.074	178.913	178	54	47.074
9	BP-09	771145.60240	2268807.19610	BP-08-BP-09	123.799	357.337	357	20	14.676	177.337	177	20	14.676
10	BP-10	771094.04820	2268769.47010	BP-09-BP-10	63.883	53.804	53	48	15.556	233.804	233	48	15.556
11	BP-11	771054.76270	2268735.36040	BP-10-BP-11	52.027	49.034	49	2	1.671	229.034	229	2	1.671
12	BP-12	770995.09030	2268694.62500	BP-11-BP-12	72.251	55.681	55	40	50.077	235.681	235	40	50.077
13	BP-13	770963.34210	2268679.91860	BP-12-BP-13	34.989	65.145	65	8	43.750	245.145	245	8	43.750
14	BP-14	770957.44970	2268678.15390	BP-13-BP-14	6.151	73.328	73	19	39.721	253.328	253	19	39.721
15	BP-15	770938.59970	2268672.51540	BP-14-BP-15	19.675	73.347	73	20	48.403	253.347	253	20	48.403
16	BP-16	770912.68120	2268662.31000	BP-15-BP-16	27.855	68.508	68	30	28.720	248.508	248	30	28.720
17	BP-17	770842.43070	2268641.54650	BP-16-BP-17	73.255	73.534	73	32	3.234	253.534	253	32	3.234
18	BP-18	770831.80020	2268639.72890	BP-17-BP-18	10.785	80.297	80	17	50.661	260.297	260	17	50.661
19	BP-19	770728.37130	2268607.55950	BP-18-BP-19	108.316	72.723	72	43	22.025	252.723	252	43	22.025
20	BP-20	770720.34650	2268646.99680	BP-19-BP-20	40.245	348.498	348	29	54.020	168.498	168	29	54.020
21	BP-21	770715.04210	2268678.74620	BP-20-BP-21	32.189	350.515	350	30	54.525	170.515	170	30	54.525
22	BP-22	770783.43130	2268680.07070	BP-21-BP-22	68.402	88.890	88	53	25.750	268.890	268	53	25.750
23	BP-23	770781.98440	2268715.12520	BP-22-BP-23	35.084	357.636	357	38	11.100	177.636	177	38	11.100
24	BP-24	770778.55310	2268747.00810	BP-23-BP-24	32.067	353.857	353	51	26.493	173.857	173	51	26.493
25	BP-25	770734.88450	2268746.59780	BP-24-BP-25	43.671	89.462	89	27	42.041	269.462	269	27	42.041
26	BP-26	770686.25240	2268743.48530	BP-25-BP-26	48.732	86.338	86	20	16.839	266.338	266	20	16.839
27	BP-27	770690.41020	2268797.91160	BP-26-BP-27	54.585	4.369	4	22	6.686	184.369	184	22	6.686
28	BP-28	770592.03360	2268804.04090	BP-27-BP-28	98.567	273.565	273	33	54.625	93.565	93	33	54.625
29	BP-29	770596.80750	2268852.73950	BP-28-BP-29	48.932	5.599	5	35	55.639	185.599	185	35	55.639
30	BP-30	770704.66570	2268879.19550	BP-29-BP-30	111.055	76.218	76	13	5.862	256.218	256	13	5.862
31	BP-31	770757.16410	2268887.05230	BP-30-BP-31	53.083	81.488	81	29	18.259	261.488	261	29	18.259

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
32	BP-32	770755.91920	2268880.91780	BP-31-BP-32	6.260	11.471	11	28	17.376	191.471	191	28	17.376
33	BP-33	770865.55770	2268866.91350	BP-32-BP-33	110.529	277.279	277	16	44.634	97.279	97	16	44.634
34	BP-34	770955.21310	2268872.71930	BP-33-BP-34	89.843	86.295	86	17	41.568	266.295	266	17	41.568
35	BP-35	770966.32020	2268874.25860	BP-34-BP-35	11.213	82.110	82	6	35.301	262.110	262	6	35.301
36	BP-36	770960.58460	2268932.97840	BP-35-BP-36	58.999	354.421	354	25	16.291	174.421	174	25	16.291
37	BP-37	770950.78750	2268998.46080	BP-36-BP-37	66.211	351.491	351	29	27.065	171.491	171	29	27.065
38	BP-38	770947.73890	2269000.05040	BP-37-BP-38	3.438	297.538	297	32	18.320	117.538	117	32	18.320
39	BP-39	770930.80440	2268996.59710	BP-38-BP-39	17.283	78.474	78	28	27.177	258.474	258	28	27.177
40	BP-40	770881.86580	2268976.24130	BP-39-BP-40	53.003	67.415	67	24	55.231	247.415	247	24	55.231
41	BP-41	770862.16970	2269074.26190	BP-40-BP-41	99.980	348.638	348	38	18.168	168.638	168	38	18.168
42	BP-42	770856.84030	2269101.24250	BP-41-BP-42	27.502	348.826	348	49	34.927	168.826	168	49	34.927
43	BP-43	770738.31510	2269099.81590	BP-42-BP-43	118.534	89.310	89	18	37.463	269.310	269	18	37.463
44	BP-44	770706.70970	2269101.88010	BP-43-BP-44	31.673	273.737	273	44	12.384	93.737	93	44	12.384
45	BP-45	770726.07940	2269136.70860	BP-44-BP-45	39.852	29.080	29	4	49.476	209.080	209	4	49.476
46	BP-46	770733.51050	2269137.10260	BP-45-BP-46	7.442	86.965	86	57	53.985	266.965	266	57	53.985
47	BP-47	770753.30080	2269168.39380	BP-46-BP-47	37.024	32.312	32	18	41.555	212.312	212	18	41.555
48	BP-48	770759.20040	2269181.83230	BP-47-BP-48	14.676	23.702	23	42	6.575	203.702	203	42	6.575
49	BP-49	770765.58470	2269202.61280	BP-48-BP-49	21.739	17.078	17	4	41.859	197.078	197	4	41.859
50	BP-01	770776.21460	2269230.51850	BP-49-BP-01	29.862	20.853	20	51	10.608	200.853	200	51	10.608
Total (Patch-13)					2776.951	Say - 2777m. Or 2.777Km.							

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	BP-50	770729.46090	2268598.65370		0.000								
2	BP-51	770743.37400	2268603.11400	BP-50-BP-51	14.611	72.225	72	13	30.163	252.225	252	13	30.163
3	BP-52	770760.70800	2268610.52100	BP-51-BP-52	18.850	66.862	66	51	44.904	246.862	246	51	44.904
4	BP-53	770787.42930	2268618.74050	BP-52-BP-53	27.957	72.902	72	54	7.371	252.902	252	54	7.371
5	BP-54	770806.86310	2268623.37470	BP-53-BP-54	19.979	76.588	76	35	15.652	256.588	256	35	15.652
6	BP-55	770900.63420	2268653.29150	BP-54-BP-55	98.428	72.305	72	18	18.717	252.305	252	18	18.717
7	BP-56	770941.67960	2268665.89280	BP-55-BP-56	42.936	72.933	72	55	58.986	252.933	252	55	58.986
8	BP-57	770996.29530	2268685.31140	BP-56-BP-57	57.965	70.427	70	25	37.805	250.427	250	25	37.805
9	BP-58	771016.95100	2268702.45100	BP-57-BP-58	26.841	50.315	50	18	53.761	230.315	230	18	53.761

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
10	BP-59	771042.17790	2268718.60630	BP-58-BP-59	29.956	57.365	57	21	52.243	237.365	237	21	52.243
11	BP-60	771060.61400	2268732.90460	BP-59-BP-60	23.331	52.204	52	12	15.404	232.204	232	12	15.404
12	BP-61	771084.56510	2268749.24780	BP-60-BP-61	28.996	55.692	55	41	31.397	235.692	235	41	31.397
13	BP-62	771104.80310	2268766.20260	BP-61-BP-62	26.402	50.045	50	2	40.981	230.045	230	2	40.981
14	BP-63	771145.55280	2268796.80810	BP-62-BP-63	50.963	53.091	53	5	28.411	233.091	233	5	28.411
15	BP-64	771146.87240	2268795.01740	BP-63-BP-64	2.224	323.613	323	36	46.118	143.613	143	36	46.118
16	BP-65	771148.69110	2268750.06510	BP-64-BP-65	44.989	357.683	357	40	59.396	177.683	177	40	59.396
17	BP-66	771215.54430	2268741.70410	BP-65-BP-66	67.374	277.129	277	7	43.273	97.129	97	7	43.273
18	BP-67	771180.21500	2268606.11400	BP-66-BP-67	140.117	14.604	14	36	15.277	194.604	194	36	15.277
19	BP-68	771107.98100	2268541.65100	BP-67-BP-68	96.815	48.254	48	15	13.208	228.254	228	15	13.208
20	BP-69	771097.80710	2268536.75550	BP-68-BP-69	11.290	64.304	64	18	14.279	244.304	244	18	14.279
21	BP-70	771044.33570	2268461.92350	BP-69-BP-70	91.973	35.548	35	32	52.087	215.548	215	32	52.087
22	BP-71	771039.87640	2268456.10470	BP-70-BP-71	7.331	37.465	37	27	54.501	217.465	217	27	54.501
23	BP-72	770993.50980	2268331.21920	BP-71-BP-72	133.215	20.369	20	22	6.946	200.369	200	22	6.946
24	BP-73	770988.91200	2268277.54100	BP-72-BP-73	53.875	4.896	4	53	44.570	184.896	184	53	44.570
25	BP-74	770953.77400	2268276.86100	BP-73-BP-74	35.145	88.891	88	53	28.806	268.891	268	53	28.806
26	BP-75	770758.02490	2268273.13790	BP-74-BP-75	195.785	88.910	88	54	37.367	268.910	268	54	37.367
27	BP-76	770549.46710	2268268.79260	BP-75-BP-76	208.603	88.806	88	48	23.096	268.806	268	48	23.096
28	BP-77	770548.25880	2268280.06590	BP-76-BP-77	11.338	353.882	353	52	56.112	173.882	173	52	56.112
29	BP-78	770549.70200	2268293.84100	BP-77-BP-78	13.850	5.981	5	58	51.555	185.981	185	58	51.555
30	BP-79	770553.83200	2268311.62100	BP-78-BP-79	18.253	13.077	13	4	37.063	193.077	193	4	37.063
31	BP-80	770556.33100	2268340.38500	BP-79-BP-80	28.872	4.965	4	57	55.285	184.965	184	57	55.285
32	BP-81	770666.08760	2268359.15900	BP-80-BP-81	111.351	80.293	80	17	36.335	260.293	260	17	36.335
33	BP-82	770668.59500	2268402.30540	BP-81-BP-82	43.219	3.326	3	19	33.359	183.326	183	19	33.359
34	BP-83	770753.20750	2268365.97650	BP-82-BP-83	92.082	293.237	293	14	11.637	113.237	113	14	11.637
35	BP-84	770751.46530	2268457.83670	BP-83-BP-84	91.877	358.913	358	54	48.497	178.913	178	54	48.497
36	BP-85	770751.42790	2268524.70410	BP-84-BP-85	66.867	359.968	359	58	4.633	179.968	179	58	4.633
37	BP-50	770729.46090	2268598.65370	BP-85-BP-50	77.143	343.456	343	27	20.717	163.456	163	27	20.717
Total (Patch-14)					2110.804	Say - 2111m. Or 2.111Km.							

Grand Total (Mouza- Barapadar)

Patch-13	2776.951	
Patch-14	2110.804	
Total	4887.755	Say - 4888m. or 4.888Km.

DGPS Co-Ordinates with Pillar-to-Pillar distances of each boundary Pillar posted around the CA land identified in Banki Mouza of Gundulia R.I Circle of Boudh Tahasil bearing Khata No. 20 & Plot No. 70, 71, 105, 193, 210 & 213

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	BK-38	202422.24980	2292621.41050		0.000								
2	BK-39	202418.75690	2292621.48640	BK-38-BK-39	3.494	271.245	271	14	41.387	91.245	91	14	41.387
3	BK-40	202417.26760	2292636.84270	BK-39-BK-40	15.428	354.461	354	27	38.187	174.461	174	27	38.187
4	BK-41	202408.77400	2292643.84300	BK-40-BK-41	11.007	309.495	309	29	41.440	129.495	129	29	41.440
5	BK-42	202425.08950	2292672.13820	BK-41-BK-42	32.662	29.968	29	58	6.565	209.968	209	58	6.565
6	BK-43	202416.31250	2292688.13640	BK-42-BK-43	18.248	331.250	331	14	59.139	151.250	151	14	59.139
7	BK-44	202426.10700	2292718.19000	BK-43-BK-44	31.609	18.051	18	3	3.038	198.051	198	3	3.038
8	BK-45	202430.59040	2292750.84920	BK-44-BK-45	32.966	7.817	7	48	59.797	187.817	187	48	59.797
9	BK-46	202445.42000	2292770.57700	BK-45-BK-46	24.680	36.933	36	55	57.286	216.933	216	55	57.286
10	BK-47	202449.92470	2292761.41140	BK-46-BK-47	10.213	333.827	333	49	36.667	153.827	153	49	36.667
11	BK-48	202458.76540	2292763.66810	BK-47-BK-48	9.124	75.680	75	40	49.160	255.680	255	40	49.160
12	BK-49	202464.34000	2292796.90100	BK-48-BK-49	33.697	9.522	9	31	20.414	189.522	189	31	20.414
13	BK-50	202447.67100	2292803.51800	BK-49-BK-50	17.934	291.651	291	39	4.741	111.651	111	39	4.741
14	BK-51	202458.12100	2292806.03100	BK-50-BK-51	10.748	76.478	76	28	42.054	256.478	256	28	42.054
15	BK-52	202481.53700	2292808.02500	BK-51-BK-52	23.501	85.133	85	7	57.700	265.133	265	7	57.700
16	BK-53	202491.29690	2292821.90180	BK-52-BK-53	16.965	35.120	35	7	10.839	215.120	215	7	10.839
17	BK-54	202487.85660	2292834.06430	BK-53-BK-54	12.640	344.206	344	12	21.050	164.206	164	12	21.050
18	BK-55	202477.46530	2292845.89480	BK-54-BK-55	15.746	318.706	318	42	20.157	138.706	138	42	20.157
19	BK-56	202484.68130	2292854.60170	BK-55-BK-56	11.308	39.651	39	39	3.067	219.651	219	39	3.067
20	BK-57	202517.37500	2292840.13810	BK-56-BK-57	35.750	293.864	293	51	52.065	113.864	113	51	52.065
21	BK-58	202526.88610	2292857.59520	BK-57-BK-58	19.880	28.583	28	34	57.874	208.583	208	34	57.874
22	BK-59	202490.39040	2292874.16720	BK-58-BK-59	40.082	294.422	294	25	18.808	114.422	114	25	18.808
23	BK-60	202490.78940	2292899.43500	BK-59-BK-60	25.271	0.905	0	54	16.826	180.905	180	54	16.826
24	BK-61	202488.14170	2292915.94090	BK-60-BK-61	16.717	350.887	350	53	12.690	170.887	170	53	12.690
25	BK-62	202507.99030	2292930.17550	BK-61-BK-62	24.425	54.353	54	21	12.472	234.353	234	21	12.472
26	BK-63	202530.69310	2292926.38260	BK-62-BK-63	23.017	279.485	279	29	4.798	99.485	99	29	4.798
27	BK-64	202585.47070	2292923.44410	BK-63-BK-64	54.856	273.071	273	4	14.313	93.071	93	4	14.313
28	BK-65	202592.68300	2292953.43960	BK-64-BK-65	30.850	13.520	13	31	11.628	193.520	193	31	11.628
29	BK-66	202596.09470	2292967.81010	BK-65-BK-66	14.770	13.355	13	21	19.208	193.355	193	21	19.208
30	BK-67	202611.67450	2292982.66500	BK-66-BK-67	21.527	46.364	46	21	51.929	226.364	226	21	51.929
31	BK-68	202600.76760	2293020.47470	BK-67-BK-68	39.351	343.909	343	54	31.773	163.909	163	54	31.773

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
32	BK-69	202586.49100	2293073.67800	BK-68-BK-69	55.086	344.979	344	58	44.702	164.979	164	58	44.702
33	BK-70	202557.92030	2293095.89250	BK-69-BK-70	36.191	307.866	307	51	57.750	127.866	127	51	57.750
34	BK-71	202560.14990	2293107.37590	BK-70-BK-71	11.698	10.988	10	59	15.917	190.988	190	59	15.917
35	BK-72	202530.25410	2293109.77230	BK-71-BK-72	29.992	274.583	274	34	58.584	94.583	94	34	58.584
36	BK-73	202528.40550	2293129.34280	BK-72-BK-73	19.658	354.604	354	36	14.175	174.604	174	36	14.175
37	BK-74	202491.49580	2293124.58070	BK-73-BK-74	37.216	82.648	82	38	53.864	262.648	262	38	53.864
38	BK-75	202453.89930	2293120.74500	BK-74-BK-75	37.792	84.175	84	10	28.848	264.175	264	10	28.848
39	BK-76	202466.59120	2293198.39500	BK-75-BK-76	78.680	9.283	9	16	58.491	189.283	189	16	58.491
40	BK-77	202473.48410	2293225.40350	BK-76-BK-77	27.874	14.317	14	19	1.091	194.317	194	19	1.091
41	BK-78	202476.67530	2293241.93830	BK-77-BK-78	16.840	10.924	10	55	25.388	190.924	190	55	25.388
42	BK-79	202476.79150	2293250.15000	BK-78-BK-79	8.213	0.811	0	48	38.564	180.811	180	48	38.564
43	BK-80	202461.83510	2293249.61430	BK-79-BK-80	14.966	87.949	87	56	55.279	267.949	267	56	55.279
44	BK-81	202456.15460	2293275.01080	BK-80-BK-81	26.024	347.392	347	23	31.305	167.392	167	23	31.305
45	BK-82	202446.48930	2293277.24820	BK-81-BK-82	9.921	283.034	283	2	1.339	103.034	103	2	1.339
46	BK-83	202444.22980	2293263.88900	BK-82-BK-83	13.549	9.600	9	35	59.406	189.600	189	35	59.406
47	BK-84	202438.32100	2293247.91100	BK-83-BK-84	17.036	20.295	20	17	41.357	200.295	200	17	41.357
48	BK-85	202435.94200	2293247.38100	BK-84-BK-85	2.437	77.441	77	26	26.142	257.441	257	26	26.142
49	BK-86	202416.48570	2293262.15400	BK-85-BK-86	24.429	307.209	307	12	32.716	127.209	127	12	32.716
50	bk-87	202418.42990	2293428.03970	BK-86-bk-87	165.897	0.671	0	40	17.337	180.671	180	40	17.337
51	BK-88	202422.75500	2293660.12590	bk-87-BK-88	232.126	1.068	1	4	3.454	181.068	181	4	3.454
52	BK-89	202579.08400	2293683.79100	BK-88-BK-89	158.110	81.392	81	23	30.898	261.392	261	23	30.898
53	BK-90	202809.20600	2293675.83470	BK-89-BK-90	230.260	271.980	271	58	48.615	91.980	91	58	48.615
54	BK-91	202913.19900	2293672.84300	BK-90-BK-91	104.036	271.648	271	38	52.248	91.648	91	38	52.248
55	BK-92	202941.12750	2293672.11860	BK-91-BK-92	27.938	271.486	271	29	8.828	91.486	91	29	8.828
56	BK-93	202956.38630	2293676.01340	BK-92-BK-93	15.748	75.681	75	40	51.709	255.681	255	40	51.709
57	BK-94	202982.09040	2293707.75350	BK-93-BK-94	40.843	39.002	39	0	5.784	219.002	219	0	5.784
58	BK-95	203004.95100	2293696.01200	BK-94-BK-95	25.700	297.186	297	11	8.228	117.186	117	11	8.228
59	BK-96	203031.61280	2293689.13380	BK-95-BK-96	27.535	284.466	284	27	56.633	104.466	104	27	56.633
60	BK-97	203061.13590	2293628.52270	BK-96-BK-97	67.419	334.030	334	1	46.992	154.030	154	1	46.992
61	BK-98	203067.79350	2293605.33660	BK-97-BK-98	24.123	343.979	343	58	45.263	163.979	163	58	45.263
62	BK-99	203089.66010	2293546.55050	BK-98-BK-99	62.721	339.596	339	35	46.914	159.596	159	35	46.914
63	BK-100	203085.19070	2293514.73660	BK-99-BK-100	32.126	7.997	7	59	48.860	187.997	187	59	48.860
64	BK-101	203106.95270	2293458.53390	BK-100-BK-101	60.269	338.833	338	49	59.944	158.833	158	49	59.944

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
65	BK-102	203131.84500	2293412.82100	BK-101-BK-102	52.051	331.430	331	25	48.490	151.430	151	25	48.490
66	BK-103	203163.32100	2293359.33100	BK-102-BK-103	62.064	329.525	329	31	31.685	149.525	149	31	31.685
67	DP-49	203119.01740	2293323.54403	BK-103-DP-49	56.952	51.070	51	4	11.556	231.070	231	4	11.556
68	DP-48	203072.50356	2293291.47646	DP-49-DP-48	56.497	55.417	55	25	0.666	235.417	235	25	0.666
69	DP-47	203070.43980	2293269.09267	DP-48-DP-47	22.479	5.268	5	16	3.710	185.268	185	16	3.710
70	DP-46	203087.58484	2293256.71014	DP-47-DP-46	21.149	305.838	305	50	15.551	125.838	125	50	15.551
71	DP-45	203126.21408	2293249.77805	DP-46-DP-45	39.246	280.174	280	10	24.820	100.174	100	10	24.820
72	DP-44	203127.80159	2293223.53133	DP-45-DP-44	26.295	356.539	356	32	19.486	176.539	176	32	19.486
73	DP-43	203130.62263	2293212.42798	DP-44-DP-43	11.456	345.744	345	44	39.846	165.744	165	44	39.846
74	DP-42	203136.05660	2293191.04043	DP-43-DP-42	22.067	345.744	345	44	39.846	165.744	165	44	39.846
75	DP-41	203124.62658	2293150.18868	DP-42-DP-41	42.421	15.631	15	37	52.444	195.631	195	37	52.444
76	DP-40	203119.75824	2293119.60279	DP-41-DP-40	30.971	9.044	9	2	37.958	189.044	189	2	37.958
77	DP-39	203187.17420	2293047.63598	DP-40-DP-39	98.611	316.870	316	52	12.147	136.870	136	52	12.147
78	DP-38	203197.86339	2293028.48010	DP-39-DP-38	21.936	330.838	330	50	16.800	150.838	150	50	16.800
79	DP-37	203184.56640	2293009.25830	DP-38-DP-37	23.373	34.674	34	40	27.013	214.674	214	40	27.013
80	DP-36	203175.74418	2293000.54005	DP-37-DP-36	12.403	45.340	45	20	22.576	225.340	225	20	22.576
81	DP-35	203161.66832	2292963.07497	DP-36-DP-35	40.022	20.592	20	35	29.441	200.592	200	35	29.441
82	DP-34	203141.45411	2292916.82571	DP-35-DP-34	50.474	23.609	23	36	31.466	203.609	203	36	31.466
83	DP-33	203125.15575	2292914.60321	DP-34-DP-33	16.449	82.235	82	14	5.402	262.235	262	14	5.402
84	DP-32	203097.21569	2292871.95229	DP-33-DP-32	50.988	33.228	33	13	41.811	213.228	213	13	41.811
85	DP-31	203085.46817	2292870.68229	DP-32-DP-31	11.816	83.830	83	49	47.370	263.830	263	49	47.370
86	DP-30	203073.08564	2292851.52642	DP-31-DP-30	22.810	32.879	32	52	44.344	212.879	212	52	44.344
87	DP-29	203057.42228	2292818.92969	DP-30-DP-29	36.165	25.665	25	39	54.689	205.665	205	39	54.689
88	DP-28	203058.69228	2292773.73876	DP-29-DP-28	45.209	358.390	358	23	24.856	178.390	178	23	24.856
89	DP-27	203023.76721	2292738.91953	DP-28-DP-27	49.317	45.087	45	5	12.996	225.087	225	5	12.996
90	DP-26	202978.47045	2292665.25938	DP-27-DP-26	86.473	31.589	31	35	20.855	211.589	211	35	20.855
91	DP-25	202961.76560	2292611.36371	DP-26-DP-25	56.425	17.221	17	13	14.595	197.221	197	13	14.595
92	BK-38	202422.24980	2292621.41050	DP-25-BK-38	539.609	271.067	271	4	0.592	91.067	91	4	0.592
Total (Patch-15)					4026.644	Say - 4027m. Or 4.027Km.							

DGPS Co-Ordinates with Pillar-to-Pillar distances of each boundary Pillar posted around the CA land identified in Didingapadar Mouza of Gundulia R.I Circle of Boudh Tahasil bearing Khata No. 3 & Plot No. 2, 3, 8, 9, 53 & 55

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	DP-12	202799.96670	2291969.32630		0.000								
2	DP-13	202761.06189	2292057.83877	DP-12- DP-13	96.685	336.273	336	16	21.257	156.273	156	16	21.257
3	DP-14	202806.83490	2292200.18489	DP-13- DP-14	149.525	17.826	17	49	32.820	197.826	197	49	32.820
4	DP-15	202809.79493	2292210.97852	DP-14- DP-15	11.192	15.336	15	20	8.396	195.336	195	20	8.396
5	DP-16	202833.02870	2292295.69966	DP-15- DP-16	87.849	15.336	15	20	8.396	195.336	195	20	8.396
6	DP-17	202853.13708	2292343.85393	DP-16- DP-17	52.184	22.665	22	39	52.407	202.665	202	39	52.407
7	DP-18	202882.11119	2292409.15379	DP-17- DP-18	71.439	23.927	23	55	38.184	203.927	203	55	38.184
8	DP-19	202893.84000	2292436.56505	DP-18- DP-19	29.815	23.165	23	9	54.939	203.165	203	9	54.939
9	DP-50	202913.17116	2292406.70803	DP-19- DP-50	35.569	327.079	327	4	43.153	147.079	147	4	43.153
10	DP-51	202918.56867	2292407.76636	DP-50- DP-51	5.500	78.906	78	54	22.597	258.906	258	54	22.597
11	DP-52	202897.87300	2292443.42598	DP-51- DP-52	41.230	329.871	329	52	13.906	149.871	149	52	13.906
12	DP-53	202874.43608	2292472.53649	DP-52- DP-53	37.373	321.162	321	9	44.659	141.162	141	9	44.659
13	DP-54	202881.76414	2292487.70387	DP-53- DP-54	16.845	25.787	25	47	14.381	205.787	205	47	14.381
14	DP-55	202899.94196	2292521.96076	DP-54- DP-55	38.781	27.952	27	57	6.783	207.952	207	57	6.783
15	DP-56	202917.29866	2292548.94831	DP-55- DP-56	32.087	32.747	32	44	47.691	212.747	212	44	47.691
16	DP-57	202932.75036	2292569.48002	DP-56- DP-57	25.696	36.964	36	57	51.441	216.964	216	57	51.441
17	DP-58	202935.60787	2292587.26006	DP-57- DP-58	18.008	9.130	9	7	48.635	189.130	189	7	48.635
18	DP-59	202969.89794	2292609.16760	DP-58- DP-59	40.691	57.426	57	25	33.394	237.426	237	25	33.394
19	DP-60	202976.24795	2292629.91097	DP-59- DP-60	21.694	17.021	17	1	13.892	197.021	197	1	13.892
20	DP-61	202989.58298	2292661.44937	DP-60- DP-61	34.242	22.920	22	55	10.397	202.920	202	55	10.397
21	DP-62	203028.63555	2292734.68618	DP-61- DP-62	82.998	28.068	28	4	5.482	208.068	208	4	5.482
22	DP-63	203066.94730	2292770.66959	DP-62- DP-63	52.560	46.795	46	47	42.024	226.795	226	47	42.024
23	DP-64	203064.30146	2292816.49551	DP-63- DP-64	45.902	356.696	356	41	44.153	176.696	176	41	44.153
24	DP-65	203087.37317	2292861.15727	DP-64- DP-65	50.269	27.320	27	19	13.148	207.320	207	19	13.148
25	DP-66	203109.70405	2292865.91978	DP-65- DP-66	22.833	77.961	77	57	39.196	257.961	257	57	39.196
26	DP-67	203129.60076	2292903.27902	DP-66- DP-67	42.327	28.039	28	2	19.603	208.039	208	2	19.603
27	DP-68	203132.77576	2292906.66569	DP-67- DP-68	4.642	43.152	43	9	8.603	223.152	223	9	8.603
28	DP-69	203148.65079	2292907.82986	DP-68- DP-69	15.918	85.806	85	48	20.942	265.806	265	48	20.942
29	DP-70	203176.27335	2292963.49831	DP-69- DP-70	62.145	26.391	26	23	25.809	206.391	206	23	25.809
30	DP-71	203184.95170	2292998.31754	DP-70- DP-71	35.884	13.995	13	59	42.934	193.995	193	59	42.934
31	DP-72	203209.71675	2293027.95094	DP-71- DP-72	38.619	39.886	39	53	9.550	219.886	219	53	9.550
32	DP-87	203265.17353	2292998.21171	DP-72- DP-87	62.928	298.203	298	12	10.292	118.203	118	12	10.292

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
33	DP-88	203300.09860	2292964.13331	DP-87-DP-88	48.796	314.297	314	17	49.270	134.297	134	17	49.270
34	DP-89	203327.50948	2292928.36157	DP-88-DP-89	45.066	322.538	322	32	17.009	142.538	142	32	17.009
35	D-103	203341.76000	2292866.41800	DP-89-D-103	63.562	347.044	347	2	38.998	167.044	167	2	38.998
36	D-104	203323.87340	2292873.40160	D-103-D-104	19.202	291.328	291	19	39.143	111.328	111	19	39.143
37	D-105	203273.25810	2292870.34680	D-104-D-105	50.707	86.546	86	32	46.322	266.546	266	32	46.322
38	D-106	203256.21340	2292858.67960	D-105-D-106	20.655	55.608	55	36	29.248	235.608	235	36	29.248
39	D-107	203243.08720	2292860.91790	D-106-D-107	13.316	279.677	279	40	37.510	99.677	99	40	37.510
40	D-108	203230.68570	2292874.95440	D-107-D-108	18.730	318.539	318	32	19.769	138.539	138	32	19.769
41	D-109	203230.17150	2292879.40470	D-108-D-109	4.480	353.409	353	24	32.806	173.409	173	24	32.806
42	D-110	203210.16140	2292886.05590	D-109-D-110	21.087	288.386	288	23	11.045	108.386	108	23	11.045
43	D-111	203189.50420	2292885.51770	D-110-D-111	20.664	88.508	88	30	27.219	268.508	268	30	27.219
44	D-112	203189.22570	2292874.78410	D-111-D-112	10.737	1.486	1	29	10.662	181.486	181	29	10.662
45	D-113	203183.85280	2292870.04140	D-112-D-113	7.167	48.565	48	33	53.673	228.565	228	33	53.673
46	D-114	203182.14710	2292827.46420	D-113-D-114	42.611	2.294	2	17	38.830	182.294	182	17	38.830
47	D-115	203179.97700	2292797.16740	D-114-D-115	30.374	4.097	4	5	49.152	184.097	184	5	49.152
48	D-116	203152.78690	2292791.16620	D-115-D-116	27.844	77.554	77	33	13.099	257.554	257	33	13.099
49	D-117	203146.64800	2292773.36480	D-116-D-117	18.830	19.027	19	1	37.217	199.027	199	1	37.217
50	D-118	203129.48650	2292779.93890	D-117-D-118	18.378	290.960	290	57	37.678	110.960	110	57	37.678
51	D-119	203121.61670	2292720.93230	D-118-D-119	59.529	7.597	7	35	48.455	187.597	187	35	48.455
52	D-120	203083.55840	2292711.21860	D-119-D-120	39.278	75.682	75	40	55.064	255.682	255	40	55.064
53	D-121	203089.94800	2292646.75100	D-120-D-121	64.783	354.340	354	20	22.954	174.340	174	20	22.954
54	D-122	203082.40900	2292615.39700	D-121-D-122	32.248	13.520	13	31	11.964	193.520	193	31	11.964
55	D-123	203090.21100	2292602.44600	D-122-D-123	15.120	328.934	328	56	3.154	148.934	148	56	3.154
56	D-124	203091.73680	2292577.79050	D-123-D-124	24.703	356.459	356	27	31.607	176.459	176	27	31.607
57	D-125	203107.48530	2292558.49310	D-124-D-125	24.908	320.782	320	46	56.310	140.782	140	46	56.310
58	D-126	203170.79170	2292557.57460	D-125-D-126	63.313	270.831	270	49	52.445	90.831	90	49	52.445
59	D-127	203209.51030	2292552.13740	D-126-D-127	39.099	277.994	277	59	37.304	97.994	97	59	37.304
60	D-128	203257.01860	2292553.75570	D-127-D-128	47.536	88.049	88	2	56.610	268.049	268	2	56.610
61	D-129	203295.25100	2292546.82410	D-128-D-129	38.856	280.276	280	16	34.320	100.276	100	16	34.320
62	D-130	203294.83820	2292521.70620	D-129-D-130	25.121	0.942	0	56	29.553	180.942	180	56	29.553
63	D-131	203308.47690	2292512.59780	D-130-D-131	16.401	303.736	303	44	10.977	123.736	123	44	10.977
64	D-132	203338.50340	2292506.06320	D-131-D-132	30.729	282.278	282	16	39.755	102.278	102	16	39.755
65	D-133	203349.87590	2292502.83210	D-132-D-133	11.823	285.861	285	51	38.353	105.861	105	51	38.353

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
66	D-134	203360.22630	2292506.00230	D-133-D-134	10.825	72.971	72	58	14.948	252.971	252	58	14.948
67	D-135	203388.88330	2292505.42000	D-134-D-135	28.663	271.164	271	9	50.650	91.164	91	9	50.650
68	D-136	203421.07020	2292514.45650	D-135-D-136	33.431	74.318	74	19	4.323	254.318	254	19	4.323
69	D-137	203420.98440	2292529.57610	D-136-D-137	15.120	359.675	359	40	29.511	179.675	179	40	29.511
70	D-138	203437.51000	2292530.06100	D-137-D-138	16.533	88.319	88	19	9.441	268.319	268	19	9.441
71	D-139	203476.99620	2292523.95340	D-138-D-139	39.956	278.793	278	47	33.540	98.793	98	47	33.540
72	D-140	203465.12700	2292486.41600	D-139-D-140	39.369	17.547	17	32	48.407	197.547	197	32	48.407
73	D-141	203450.97100	2292453.23100	D-140-D-141	36.078	23.102	23	6	7.352	203.102	203	6	7.352
74	D-142	203430.33700	2292481.94100	D-141-D-142	35.356	324.295	324	17	42.129	144.295	144	17	42.129
75	D-143	203402.15500	2292477.96800	D-142-D-143	28.461	81.976	81	58	31.881	261.976	261	58	31.881
76	D-144	203401.62680	2292465.47680	D-143-D-144	12.502	2.421	2	25	16.873	182.421	182	25	16.873
77	D-145	203395.70700	2292437.51300	D-144-D-145	28.584	11.953	11	57	9.966	191.953	191	57	9.966
78	D-146	203408.90550	2292391.94900	D-145-D-146	47.437	343.845	343	50	43.120	163.845	163	50	43.120
79	D-147	203408.83930	2292377.89090	D-146-D-147	14.058	0.270	0	16	11.300	180.270	180	16	11.300
80	D-148	203102.57930	2292383.14430	D-147-D-148	306.305	270.983	270	58	57.796	90.983	90	58	57.796
81	D-149	203097.32570	2292079.00210	D-148-D-149	304.188	0.990	0	59	22.561	180.990	180	59	22.561
82	D-150	202996.28820	2292080.64880	D-149-D-150	101.051	270.934	270	56	1.387	90.934	90	56	1.387
83	D-151	202994.28870	2291968.61160	D-150-D-151	112.055	1.022	1	1	20.766	181.022	181	1	20.766
84	D-152	202926.74500	2291941.66150	D-151-D-152	72.722	68.248	68	14	52.370	248.248	248	14	52.370
85	D-153	202895.49900	2291920.55510	D-152-D-153	37.707	55.961	55	57	40.743	235.961	235	57	40.743
86	D-154	202820.49410	2291908.97590	D-153-D-154	75.893	81.224	81	13	26.408	261.224	261	13	26.408
Total (Patch-16)					3775.377	Say - 3776m. Or 3.776Km.							

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	D-01	203172.39500	2293373.60100		0.000								
2	D-02	203208.60620	2293367.11270	D-01-D-02	36.788	280.158	280	9	30.327	100.158	100	9	30.327
3	D-03	203364.39750	2293350.42640	D-02-D-03	156.682	276.113	276	6	48.450	96.113	96	6	48.450
4	D-04	203522.38960	2293345.75150	D-03-D-04	158.061	271.695	271	41	41.483	91.695	91	41	41.483
5	DP-05	203629.84950	2293357.96183	D-04-DP-05	108.151	83.517	83	31	2.875	263.517	263	31	2.875
6	D-06	203741.16400	2293471.67630	DP-05-D-06	159.129	44.389	44	23	20.235	224.389	224	23	20.235
7	D-07	203825.83980	2293484.94140	D-06-D-07	85.709	81.097	81	5	47.580	261.097	261	5	47.580
8	D-08	203979.07750	2293504.92920	D-07-D-08	154.536	82.568	82	34	6.569	262.568	262	34	6.569
9	D-09	204127.41900	2293506.99600	D-08-D-09	148.356	89.202	89	12	6.357	269.202	269	12	6.357
10	D-10	204190.77300	2293517.42100	D-09-D-10	64.206	80.656	80	39	20.265	260.656	260	39	20.265
11	D-11	204412.02100	2293526.23500	D-10-D-11	221.423	87.719	87	43	7.238	267.719	267	43	7.238
12	D-12	204503.73200	2293471.07400	D-11-D-12	107.022	301.025	301	1	31.641	121.025	121	1	31.641
13	D-14	204600.24300	2293426.08500	D-12-D-14	106.482	294.993	294	59	33.985	114.993	114	59	33.985
14	D-15	204661.16300	2293400.81400	D-14-D-15	65.954	292.530	292	31	47.224	112.530	112	31	47.224
15	D-16	204629.50200	2293369.84100	D-15-D-16	44.292	45.629	45	37	45.614	225.629	225	37	45.614
16	D-17	204578.78130	2293175.33430	D-16-D-17	201.011	14.615	14	36	55.111	194.615	194	36	55.111
17	D-18	204568.45460	2293167.04540	D-17-D-18	13.242	51.247	51	14	49.710	231.247	231	14	49.710
18	D-19	204121.78100	2293177.57400	D-18-D-19	446.798	271.350	271	21	0.994	91.350	91	21	0.994
19	D-20	204116.12900	2292869.47800	D-19-D-20	308.148	1.051	1	3	3.489	181.051	181	3	3.489
20	D-21	203977.07900	2292874.57100	D-20-D-21	139.143	272.098	272	5	51.509	92.098	92	5	51.509
21	D-22	203989.88000	2292880.29500	D-21-D-22	14.022	65.908	65	54	29.057	245.908	245	54	29.057
22	D-23	203985.06100	2292891.82100	D-22-D-23	12.493	337.310	337	18	37.017	157.310	157	18	37.017
23	D-24	203977.20500	2292904.09700	D-23-D-24	14.575	327.383	327	22	58.354	147.383	147	22	58.354
24	D-25	203977.44160	2292923.39200	D-24-D-25	19.296	0.703	0	42	9.143	180.703	180	42	9.143
25	D-26	203980.75770	2292947.72280	D-25-D-26	24.556	7.761	7	45	40.146	187.761	187	45	40.146
26	D-27	203975.02540	2292948.28140	D-26-D-27	5.759	275.566	275	33	56.787	95.566	95	33	56.787
27	D-28	203963.42170	2292951.74720	D-27-D-28	12.110	286.630	286	37	47.512	106.630	106	37	47.512
28	D-29	203957.32740	2292952.33530	D-28-D-29	6.123	275.512	275	30	43.113	95.512	95	30	43.113
29	D-30	203935.01710	2292961.57480	D-29-D-30	24.148	292.496	292	29	46.357	112.496	112	29	46.357
30	D-31	203922.04580	2292966.33620	D-30-D-31	13.818	290.157	290	9	24.366	110.157	110	9	24.366
31	D-32	203907.77240	2292968.69000	D-31-D-32	14.466	279.364	279	21	51.343	99.364	99	21	51.343
32	D-33	203908.97310	2292958.10650	D-32-D-33	10.651	353.527	353	31	38.849	173.527	173	31	38.849
33	D-34	203900.75330	2292940.48980	D-33-D-34	19.440	25.013	25	0	48.061	205.013	205	0	48.061
34	D-35	203877.59510	2292934.54010	D-34-D-35	23.910	75.591	75	35	29.211	255.591	255	35	29.211

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
35	D-36	203873.28500	2292949.48100	D-35-D-36	15.550	343.908	343	54	30.194	163.908	163	54	30.194
36	D-37	203815.77870	2292935.48750	D-36-D-37	59.184	76.324	76	19	24.733	256.324	256	19	24.733
37	D-38	203806.52800	2292933.22440	D-37-D-38	9.524	76.253	76	15	11.190	256.253	256	15	11.190
38	D-39	203800.36770	2292951.93490	D-38-D-39	19.699	341.776	341	46	34.448	161.776	161	46	34.448
39	D-40	203791.23090	2292950.96070	D-39-D-40	9.189	83.914	83	54	50.048	263.914	263	54	50.048
40	D-41	203789.02870	2293018.78590	D-40-D-41	67.861	358.140	358	8	25.190	178.140	178	8	25.190
41	D-42	203803.83210	2293043.45340	D-41-D-42	28.768	30.969	30	58	7.353	210.969	210	58	7.353
42	D-43	203790.04950	2293071.33270	D-42-D-43	31.100	333.694	333	41	37.455	153.694	153	41	37.455
43	D-44	203765.06580	2293070.71800	D-43-D-44	24.991	88.591	88	35	26.076	268.591	268	35	26.076
44	D-45	203731.74300	2293078.86630	D-44-D-45	34.305	283.741	283	44	26.492	103.741	103	44	26.492
45	D-46	203680.29950	2293079.36730	D-45-D-46	51.446	270.558	270	33	28.716	90.558	90	33	28.716
46	D-47	203646.62230	2293075.65870	D-46-D-47	33.881	83.716	83	42	56.866	263.716	263	42	56.866
47	D-48	203673.80280	2292988.94640	D-47-D-48	90.872	342.596	342	35	45.894	162.596	162	35	45.894
48	D-49	203688.03870	2292958.61830	D-48-D-49	33.503	334.855	334	51	17.316	154.855	154	51	17.316
49	D-50	203700.98270	2292958.61030	D-49-D-50	12.944	270.035	270	2	7.481	90.035	90	2	7.481
50	D-51	203721.58310	2292949.60680	D-50-D-51	22.482	293.608	293	36	28.640	113.608	113	36	28.640
51	D-52	203722.33430	2292932.38170	D-51-D-52	17.241	357.503	357	30	10.328	177.503	177	30	10.328
52	D-53	203731.13450	2292930.05410	D-52-D-53	9.103	284.815	284	48	54.481	104.815	104	48	54.481
53	D-54	203733.98300	2292921.36750	D-53-D-54	9.142	341.845	341	50	40.945	161.845	161	50	40.945
54	D-55	203744.66550	2292921.48250	D-54-D-55	10.683	89.383	89	22	59.589	269.383	269	22	59.589
55	D-56	203752.31530	2292928.55170	D-55-D-56	10.416	47.259	47	15	32.026	227.259	227	15	32.026
56	D-57	203752.42620	2292920.67290	D-56-D-57	7.880	359.194	359	11	36.860	179.194	179	11	36.860
57	D-58	203757.24030	2292914.73280	D-57-D-58	7.646	320.977	320	58	38.197	140.977	140	58	38.197
58	D-59	203737.54980	2292913.31510	D-58-D-59	19.741	85.882	85	52	54.684	265.882	265	52	54.684
59	D-60	203712.59260	2292907.41730	D-59-D-60	25.645	76.704	76	42	14.341	256.704	256	42	14.341
60	D-61	203707.09540	2292895.98700	D-60-D-61	12.683	25.684	25	41	3.848	205.684	205	41	3.848
61	D-62	203675.85120	2292883.06340	D-61-D-62	33.812	67.528	67	31	42.415	247.528	247	31	42.415
62	D-63	203654.67500	2292880.71500	D-62-D-63	21.306	83.672	83	40	18.715	263.672	263	40	18.715
63	D-64	203653.98090	2292887.95220	D-63-D-64	7.270	354.522	354	31	18.030	174.522	174	31	18.030
64	D-65	203630.56200	2292892.67670	D-64-D-65	23.891	281.406	281	24	20.494	101.406	101	24	20.494
65	D-66	203608.31290	2292892.44890	D-65-D-66	22.250	89.413	89	24	48.208	269.413	269	24	48.208
66	D-67	203606.03270	2292872.86710	D-66-D-67	19.714	6.642	6	38	30.793	186.642	186	38	30.793
67	D-68	203605.61000	2292844.62890	D-67-D-68	28.241	0.858	0	51	27.365	180.858	180	51	27.365

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
68	D-69	203616.07620	2292836.27620	D-68-D-69	13.391	308.592	308	35	31.617	128.592	128	35	31.617
69	D-70	203615.58700	2292814.93200	D-69-D-70	21.350	1.313	1	18	46.674	181.313	181	18	46.674
70	D-71	203602.24500	2292810.47700	D-70-D-71	14.066	71.535	71	32	7.530	251.535	251	32	7.530
71	D-72	203596.81340	2292805.25540	D-71-D-72	7.534	46.129	46	7	45.445	226.129	226	7	45.445
72	D-73	203576.74900	2292810.53960	D-72-D-73	20.749	284.754	284	45	16.192	104.754	104	45	16.192
73	D-74	203571.08050	2292793.60040	D-73-D-74	17.862	18.502	18	30	7.917	198.502	198	30	7.917
74	D-75	203578.66560	2292779.00550	D-74-D-75	16.448	332.539	332	32	19.309	152.539	152	32	19.309
75	D-76	203577.62000	2292761.83600	D-75-D-76	17.201	3.485	3	29	5.762	183.485	183	29	5.762
76	D-77	203537.21270	2292768.23250	D-76-D-77	40.910	278.995	278	59	43.130	98.995	98	59	43.130
77	D-78	203531.73260	2292772.34110	D-77-D-78	6.849	306.860	306	51	36.096	126.860	126	51	36.096
78	D-79	203543.60880	2292793.41220	D-78-D-79	24.188	29.407	29	24	24.111	209.407	209	24	24.111
79	D-80	203542.43310	2292812.12380	D-79-D-80	18.748	356.405	356	24	16.844	176.405	176	24	16.844
80	D-81	203532.13730	2292811.81760	D-80-D-81	10.300	88.297	88	17	47.434	268.297	268	17	47.434
81	D-82	203531.11900	2292780.63000	D-81-D-82	31.204	1.870	1	52	12.319	181.870	181	52	12.319
82	D-83	203517.58900	2292786.98000	D-82-D-83	14.946	295.142	295	8	31.030	115.142	115	8	31.030
83	D-85	203496.17360	2292784.65380	D-83-D-85	21.541	83.801	83	48	2.446	263.801	263	48	2.446
84	D-86	203492.45820	2292801.22220	D-85-D-86	16.980	347.361	347	21	38.642	167.361	167	21	38.642
85	D-87	203481.49160	2292805.59510	D-86-D-87	11.806	291.739	291	44	22.195	111.739	111	44	22.195
86	D-88	203474.89560	2292794.29130	D-87-D-88	13.088	30.264	30	15	51.989	210.264	210	15	51.989
87	D-89	203470.48100	2292794.28400	D-88-D-89	4.415	89.905	89	54	18.920	269.905	269	54	18.920
88	D-90	203464.09920	2292790.03200	D-89-D-90	7.669	56.326	56	19	32.453	236.326	236	19	32.453
89	D-91	203441.82880	2292783.88560	D-90-D-91	23.103	74.571	74	34	15.765	254.571	254	34	15.765
90	D-92	203433.60290	2292795.65130	D-91-D-92	14.356	325.041	325	2	27.492	145.041	145	2	27.492
91	D-93	203437.51240	2292818.96870	D-92-D-93	23.643	9.518	9	31	4.581	189.518	189	31	4.581
92	D-94	203455.75300	2292821.65640	D-93-D-94	18.438	81.618	81	37	4.604	261.618	261	37	4.604
93	D-95	203456.53390	2292833.71990	D-94-D-95	12.089	3.704	3	42	13.425	183.704	183	42	13.425
94	D-96	203466.19480	2292840.73710	D-95-D-96	11.940	54.007	54	0	25.920	234.007	234	0	25.920
95	D-97	203467.46570	2292848.02890	D-96-D-97	7.402	9.887	9	53	12.705	189.887	189	53	12.705
96	D-98	203454.08800	2292853.70710	D-97-D-98	14.533	292.999	292	59	56.123	112.999	112	59	56.123
97	D-99	203451.89320	2292874.47240	D-98-D-99	20.881	353.966	353	57	59.371	173.966	173	57	59.371
98	D-100	203416.23180	2292871.29060	D-99-D-100	35.803	84.901	84	54	5.137	264.901	264	54	5.137
99	D-101	203374.33600	2292870.78220	D-100-D-101	41.899	89.305	89	18	17.127	269.305	269	18	17.127
100	D-102	203355.68760	2292866.93390	D-101-D-102	19.041	78.340	78	20	24.239	258.340	258	20	24.239

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
101	DP-96	203354.28537	2292890.79066	D-102-DP-96	23.898	356.636	356	38	10.311	176.636	176	38	10.311
102	DP-95	203338.88659	2292928.89074	DP-96-DP-95	41.094	337.993	337	59	35.098	157.993	157	59	35.098
103	DP-94	203306.66028	2292965.24456	DP-95-DP-94	48.581	318.444	318	26	39.129	138.444	138	26	39.129
104	DP-93	203279.19647	2292994.45462	DP-94-DP-93	40.093	316.765	316	45	53.488	136.765	136	45	53.488
105	DP-91	203235.54013	2293022.55343	DP-93-DP-91	51.917	302.767	302	46	0.501	122.767	122	46	0.501
106	DP-90	203213.15634	2293035.41220	DP-91-DP-90	25.814	299.876	299	52	33.574	119.876	119	52	33.574
107	DP-73	203203.94882	2293039.53971	DP-90-DP-73	10.090	294.146	294	8	43.951	114.146	114	8	43.951
108	DP-74	203181.56503	2293065.73351	DP-73-DP-74	34.455	319.485	319	29	4.582	139.485	139	29	4.582
109	DP-75	203147.86913	2293107.55265	DP-74-DP-75	53.705	321.140	321	8	23.148	141.140	141	8	23.148
110	DP-76	203135.20993	2293124.15363	DP-75-DP-76	20.877	322.672	322	40	20.682	142.672	142	40	20.682
111	DP-77	203135.84493	2293140.82241	DP-76-DP-77	16.681	2.182	2	10	53.909	182.182	182	10	53.909
112	DP-78	203151.08497	2293161.45995	DP-77-DP-78	25.655	36.444	36	26	39.990	216.444	216	26	39.990
113	DP-79	203139.29480	2293229.52587	DP-78-DP-79	69.079	350.173	350	10	22.500	170.173	170	10	22.500
114	DP-80	203134.57493	2293262.90141	DP-79-DP-80	33.708	351.951	351	57	2.785	171.951	171	57	2.785
115	DP-81	203116.47740	2293266.87016	DP-80-DP-81	18.528	282.369	282	22	8.621	102.369	102	22	8.621
116	DP-82	203100.76111	2293263.53641	DP-81-DP-82	16.066	78.024	78	1	25.923	258.024	258	1	25.923
117	DP-83	203083.93358	2293271.79142	DP-82-DP-83	18.743	296.131	296	7	51.602	116.131	116	7	51.602
118	DP-84	203088.37859	2293296.23897	DP-83-DP-84	24.848	10.305	10	18	17.447	190.305	190	18	17.447
119	DP-85	203127.58992	2293305.28774	DP-84-DP-85	40.242	77.005	77	0	19.380	257.005	257	0	19.380
120	DP-86	203175.53251	2293363.86661	DP-85-DP-86	75.697	39.298	39	17	52.301	219.298	219	17	52.301
121	D-01	203172.39500	2293373.60100	DP-86-D-01	10.228	342.135	342	8	6.828	162.135	162	8	6.828
Total (Patch-17)					5066.836	Say - 5067m. Or 5.067Km.							

Grand Total (Mouza- Didingapadar)

Patch-16	3775.377	
Patch-17	5066.836	
Total	8842.213	Say - 8843m. or 8.843Km.

DGPS Co-Ordinates with Pillar-to-Pillar distances of each boundary Pillar posted around the CA land identified in Tarva Mouza of Gundulia R.I Circle of Boudh Tahasil bearing Khata No. 69 & Plot No. 802, 828, 829, 851, 852, 853, 855, 856, 858, 861, 912, 913, 830, 841, 854, 910, 911, 914, 915

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	TV-33A	202979.44640	2294336.40140		0.000								
2	TV-34	202977.54230	2294352.22620	TV-33A-TV-34	15.939	353.139	353	8	20.179	173.139	173	8	20.179
3	TV-35	203025.85910	2294347.76140	TV-34-TV-35	48.523	275.280	275	16	46.291	95.280	95	16	46.291
4	TV-36	203131.67100	2294394.89400	TV-35-TV-36	115.835	65.990	65	59	24.038	245.990	245	59	24.038
5	TV-37	203169.58130	2294449.60410	TV-36-TV-37	66.561	34.719	34	43	9.376	214.719	214	43	9.376
6	TV-38	203158.81110	2294475.68310	TV-37-TV-38	28.215	337.560	337	33	36.634	157.560	157	33	36.634
7	TV-39	203138.30940	2294480.77520	TV-38-TV-39	21.125	283.949	283	56	54.800	103.949	103	56	54.800
8	TV-40	203139.24070	2294538.32840	TV-39-TV-40	57.561	0.927	0	55	37.393	180.927	180	55	37.393
9	TV-41	203085.30700	2294539.24650	TV-40-TV-41	53.942	270.975	270	58	30.856	90.975	90	58	30.856
10	TV-42	203115.77620	2294549.24540	TV-41-TV-42	32.068	71.832	71	49	55.261	251.832	251	49	55.261
11	TV-43	203129.42310	2294577.97980	TV-42-TV-43	31.810	25.405	25	24	16.423	205.405	205	24	16.423
12	TV-44	203175.93690	2294572.81200	TV-43-TV-44	46.800	276.340	276	20	22.938	96.340	96	20	22.938
13	TV-45	203171.34100	2294619.53500	TV-44-TV-45	46.948	354.382	354	22	55.857	174.382	174	22	55.857
14	TV-46	203198.18400	2294627.81900	TV-45-TV-46	28.092	72.849	72	50	57.431	252.849	252	50	57.431
15	TV-47	203199.77100	2294645.28300	TV-46-TV-47	17.536	5.192	5	11	32.490	185.192	185	11	32.490
16	TV-48	203131.36160	2294763.22410	TV-47-TV-48	136.345	329.885	329	53	5.899	149.885	149	53	5.899
17	TV-49	203151.88100	2294787.90000	TV-48-TV-49	32.093	39.745	39	44	43.548	219.745	219	44	43.548
18	TV-50	203155.15510	2294872.86190	TV-49-TV-50	85.025	2.207	2	12	24.709	182.207	182	12	24.709
19	TV-51	203193.55220	2294898.63880	TV-50-TV-51	46.247	56.126	56	7	32.105	236.126	236	7	32.105
20	TV-52	203193.42050	2294892.83530	TV-51-TV-52	5.805	1.300	1	18	0.006	181.300	181	18	0.006
21	TV-53	203221.06100	2294901.43600	TV-52-TV-53	28.948	72.716	72	42	56.854	252.716	252	42	56.854
22	TV-54	203236.26310	2294884.77600	TV-53-TV-54	22.553	317.620	317	37	11.389	137.620	137	37	11.389
23	TV-55	203300.83550	2294932.50930	TV-54-TV-55	80.300	53.527	53	31	38.623	233.527	233	31	38.623
24	TV-56	203372.24330	2294964.12970	TV-55-TV-56	78.096	66.116	66	6	55.976	246.116	246	6	55.976
25	TV-57	203449.98810	2294971.92150	TV-56-TV-57	78.134	84.277	84	16	36.369	264.277	264	16	36.369
26	TV-58	203478.28810	2294977.85800	TV-57-TV-58	28.916	78.153	78	9	10.172	258.153	258	9	10.172
27	TV-59	203565.62530	2294958.24350	TV-58-TV-59	89.513	282.658	282	39	27.617	102.658	102	39	27.617
28	TV-60	203638.07570	2294907.69340	TV-59-TV-60	88.342	304.904	304	54	15.321	124.904	124	54	15.321
29	TV-61	203638.47360	2294919.29290	TV-60-TV-61	11.606	1.965	1	57	52.770	181.965	181	57	52.770
30	TV-62	203770.88460	2294900.08120	TV-61-TV-62	133.797	278.256	278	15	19.862	98.256	98	15	19.862
31	TV-63	203780.41720	2294901.57850	TV-62-TV-63	9.649	81.073	81	4	24.235	261.073	261	4	24.235

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
32	TV-64	203810.95680	2294876.19150	TV-63-TV-64	39.714	309.736	309	44	10.016	129.736	129	44	10.016
33	TV-65	203914.80730	2294962.57660	TV-64-TV-65	135.083	50.246	50	14	44.091	230.246	230	14	44.091
34	TV-140	203931.42220	2294885.20420	TV-65-TV-140	79.136	347.880	347	52	49.419	167.880	167	52	49.419
35	TV-141	203940.53850	2294806.67310	TV-140-TV-141	79.058	353.378	353	22	42.399	173.378	173	22	42.399
36	TV-142	203933.12800	2294788.05770	TV-141-TV-142	20.036	21.707	21	42	24.225	201.707	201	42	24.225
37	TV-143	203941.86500	2294669.19100	TV-142-TV-143	119.187	355.796	355	47	46.235	175.796	175	47	46.235
38	TV-144	203973.79650	2294644.68430	TV-143-TV-144	40.252	307.505	307	30	19.507	127.505	127	30	19.507
39	TV-145	203973.72200	2294623.20200	TV-144-TV-145	21.482	0.199	0	11	55.318	180.199	180	11	55.318
40	TV-146	203645.28110	2294630.84360	TV-145-TV-146	328.530	271.333	271	19	58.150	91.333	91	19	58.150
41	TV-147	203544.57400	2294632.57900	TV-146-TV-147	100.722	270.987	270	59	14.035	90.987	90	59	14.035
42	TV-148	203542.99110	2294531.37750	TV-147-TV-148	101.214	0.896	0	53	45.940	180.896	180	53	45.940
43	TV-149	203541.61750	2294427.90850	TV-148-TV-149	103.478	0.761	0	45	38.102	180.761	180	45	38.102
44	TV-150	203465.00030	2294434.41260	TV-149-TV-150	76.893	274.852	274	51	8.116	94.852	94	51	8.116
45	TV-151	203404.23990	2294416.05270	TV-150-TV-151	63.474	73.187	73	11	12.547	253.187	253	11	12.547
46	TV-152	203357.93780	2294432.32850	TV-151-TV-152	49.079	289.367	289	22	2.096	109.367	109	22	2.096
47	TV-153	203353.41460	2294377.61130	TV-152-TV-153	54.904	4.726	4	43	32.210	184.726	184	43	32.210
48	TV-154	203353.78250	2294348.45180	TV-153-TV-154	29.162	359.277	359	16	37.733	179.277	179	16	37.733
49	TV-155	203387.74590	2294351.09530	TV-154-TV-155	34.066	85.549	85	32	57.932	265.549	265	32	57.932
50	TV-156	203385.26560	2294373.33830	TV-155-TV-156	22.381	353.637	353	38	14.195	173.637	173	38	14.195
51	TV-157	203431.44030	2294371.07140	TV-156-TV-157	46.230	272.811	272	48	38.237	92.811	92	48	38.237
52	TV-158	203470.96560	2294359.68300	TV-157-TV-158	41.133	286.073	286	4	23.683	106.073	106	4	23.683
53	TV-159	203474.53600	2294328.59960	TV-158-TV-159	31.288	353.447	353	26	50.741	173.447	173	26	50.741
54	TV-33A	202979.44640	2294336.40140	TV-159-TV-33A	495.151	270.903	270	54	10.126	90.903	90	54	10.126
Total (Patch-18)					3677.978	Say - 3678m. Or 3.678Km.							

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	TV-183	203062.97500	2295342.57880		0.000								
2	TV-184	203521.30260	2295335.96760	TV-183-TV-184	458.375	270.826	270	49	35.084	90.826	90	49	35.084
3	TV-185	203523.92020	2295307.61700	TV-184-TV-185	28.471	354.725	354	43	29.491	174.725	174	43	29.491
4	TV-186	203446.17100	2295304.11500	TV-185-TV-186	77.828	87.421	87	25	15.641	267.421	267	25	15.641
5	TV-187	203457.62870	2295239.66580	TV-186-TV-187	65.460	349.919	349	55	9.647	169.919	169	55	9.647
6	TV-188	203409.01560	2295221.99750	TV-187-TV-188	51.724	70.026	70	1	35.261	250.026	250	1	35.261
7	TV-189	203413.72100	2295185.31200	TV-188-TV-189	36.986	352.691	352	41	27.479	172.691	172	41	27.479
8	TV-190	203405.35170	2295179.57190	TV-189-TV-190	10.149	55.556	55	33	20.338	235.556	235	33	20.338
9	TV-191	203408.54270	2295129.12750	TV-190-TV-191	50.545	356.380	356	22	49.512	176.380	176	22	49.512
10	TV-192	203504.48520	2295131.68500	TV-191-TV-192	95.977	88.473	88	28	22.985	268.473	268	28	22.985
11	TV-193	203522.80240	2295144.35540	TV-192-TV-193	22.272	55.328	55	19	39.214	235.328	235	19	39.214
12	TV-194	203527.78120	2295129.51630	TV-193-TV-194	15.652	341.452	341	27	8.707	161.452	161	27	8.707
13	TV-195	203537.31900	2295109.38100	TV-194-TV-195	22.280	334.654	334	39	13.546	154.654	154	39	13.546
14	TV-196	203492.07830	2295093.07280	TV-195-TV-196	48.090	70.177	70	10	37.087	250.177	250	10	37.087
15	TV-197	203498.02820	2295035.75420	TV-196-TV-197	57.627	354.074	354	4	25.298	174.074	174	4	25.298
16	TV-198	203450.82470	2295037.24190	TV-197-TV-198	47.227	271.805	271	48	18.641	91.805	91	48	18.641
17	TV-199	203437.69330	2295009.84600	TV-198-TV-199	30.380	25.609	25	36	33.578	205.609	205	36	33.578
18	TV-200	203377.91320	2294970.57270	TV-199-TV-200	71.527	56.697	56	41	47.674	236.697	236	41	47.674
19	TV-201	203351.06140	2294991.31300	TV-200-TV-201	33.929	307.682	307	40	56.846	127.682	127	40	56.846
20	TV-202	203299.86730	2294953.83730	TV-201-TV-202	63.445	53.795	53	47	40.894	233.795	233	47	40.894
21	TV-203	203280.93880	2294946.97160	TV-202-TV-203	20.135	70.063	70	3	48.243	250.063	250	3	48.243
22	TV-204	203258.48560	2294934.87620	TV-203-TV-204	25.504	61.689	61	41	20.141	241.689	241	41	20.141
23	TV-205	203216.59980	2294933.15550	TV-204-TV-205	41.921	87.648	87	38	51.249	267.648	267	38	51.249
24	TV-206	203214.68160	2294927.81320	TV-205-TV-206	5.676	19.751	19	45	4.046	199.751	199	45	4.046
25	TV-207	203204.14090	2294927.82910	TV-206-TV-207	10.541	270.086	270	5	11.138	90.086	90	5	11.138
26	TV-208	203144.86200	2294945.40970	TV-207-TV-208	61.831	286.519	286	31	8.417	106.519	106	31	8.417
27	TV-209	203134.52000	2294977.19100	TV-208-TV-209	33.422	341.975	341	58	28.261	161.975	161	58	28.261
28	TV-210	203101.35460	2295001.73900	TV-209-TV-210	41.262	306.508	306	30	27.707	126.508	126	30	27.707
29	TV-211	203091.22100	2295013.13700	TV-210-TV-211	15.251	318.361	318	21	38.593	138.361	138	21	38.593
30	TV-212	203058.97810	2295065.98820	TV-211-TV-212	61.910	328.614	328	36	50.079	148.614	148	36	50.079
31	TV-213	203032.81800	2295119.10410	TV-212-TV-213	59.209	333.779	333	46	45.491	153.779	153	46	45.491
32	TV-214	203016.63650	2295164.82220	TV-213-TV-214	48.497	340.509	340	30	32.588	160.509	160	30	32.588
33	TV-215	203042.18480	2295194.35600	TV-214-TV-215	39.051	40.862	40	51	41.543	220.862	220	51	41.543
34	TV-216	203061.57980	2295279.14710	TV-215-TV-216	86.981	12.884	12	53	2.780	192.884	192	53	2.780

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
35	TV-217	203059.64390	2295299.60830	TV-216-TV-217	20.553	354.595	354	35	42.544	174.595	174	35	42.544
36	TV-218	203055.70360	2295306.61800	TV-217-TV-218	8.041	330.659	330	39	31.472	150.659	150	39	31.472
37	TV-183	203062.97500	2295342.57880	TV-218-TV-183	36.689	11.431	11	25	52.597	191.431	191	25	52.597
Total (Patch-19)					1904.417	Say - 1905m. Or 1.905Km.							

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	TV-66	203921.99930	2294967.37650		0.000								
2	TV-67	203914.70900	2295000.33020	TV-66-TV-67	33.750	347.525	347	31	31.643	167.525	167	31	31.643
3	TV-68	203914.07360	2295037.96870	TV-67-TV-68	37.644	359.033	359	1	58.240	179.033	179	1	58.240
4	TV-69	203928.44570	2295128.13660	TV-68-TV-69	91.306	9.056	9	3	22.836	189.056	189	3	22.836
5	TV-70	203936.18770	2295170.12740	TV-69-TV-70	42.699	10.447	10	26	47.467	190.447	190	26	47.467
6	TV-71	203935.78690	2295212.54670	TV-70-TV-71	42.421	359.459	359	27	31.159	179.459	179	27	31.159
7	TV-72	203950.46250	2295247.51270	TV-71-TV-72	37.921	22.768	22	46	5.909	202.768	202	46	5.909
8	TV-73	203968.15930	2295268.52630	TV-72-TV-73	27.473	40.103	40	6	9.796	220.103	220	6	9.796
9	TV-74	204011.68020	2295288.06220	TV-73-TV-74	47.705	65.825	65	49	31.371	245.825	245	49	31.371
10	TV-75	204033.48560	2295302.51420	TV-74-TV-75	26.160	56.465	56	27	52.967	236.465	236	27	52.967
11	TV-76	204117.81880	2295333.44820	TV-75-TV-76	89.828	69.857	69	51	23.811	249.857	249	51	23.811
12	TV-77	204181.37180	2295361.89660	TV-76-TV-77	69.630	65.885	65	53	6.542	245.885	245	53	6.542
13	TV-78	204341.92870	2295372.63340	TV-77-TV-78	160.915	86.174	86	10	27.116	266.174	266	10	27.116
14	TV-79	204343.49510	2295367.27880	TV-78-TV-79	5.579	343.694	343	41	38.518	163.694	163	41	38.518
15	TV-80	204456.84690	2295355.61440	TV-79-TV-80	113.950	275.875	275	52	31.109	95.875	95	52	31.109
16	TV-81	204472.02900	2295358.51010	TV-80-TV-81	15.456	79.202	79	12	5.774	259.202	259	12	5.774
17	TV-82	204576.75440	2295350.76940	TV-81-TV-82	105.011	274.227	274	13	38.236	94.227	94	13	38.236
18	TV-83	204620.07410	2295323.38170	TV-82-TV-83	51.251	302.302	302	18	7.220	122.302	122	18	7.220
19	TV-84	204587.58980	2295117.96630	TV-83-TV-84	207.968	8.986	8	59	10.723	188.986	188	59	10.723
20	TV-85	204541.05100	2295038.84100	TV-84-TV-85	91.797	30.463	30	27	45.321	210.463	210	27	45.321
21	TV-86	204534.75200	2294916.81400	TV-85-TV-86	122.189	2.955	2	57	17.890	182.955	182	57	17.890
22	TV-87	204517.99920	2294714.76690	TV-86-TV-87	202.740	4.740	4	44	23.480	184.740	184	44	23.480
23	TV-88	204501.70100	2294522.18680	TV-87-TV-88	193.269	4.837	4	50	14.849	184.837	184	50	14.849
24	TV-89	204508.58000	2294492.19370	TV-88-TV-89	30.772	347.082	347	4	56.863	167.082	167	4	56.863
25	TV-90	204508.26470	2294470.91390	TV-89-TV-90	21.282	0.849	0	50	55.975	180.849	180	50	55.975

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
26	TV-91	204483.30310	2294353.42150	TV-90-TV-91	120.115	11.994	11	59	39.540	191.994	191	59	39.540
27	TV-92	204658.88380	2294322.29070	TV-91-TV-92	178.319	280.054	280	3	15.005	100.054	100	3	15.005
28	TV-93	204732.83840	2294308.43310	TV-92-TV-93	75.242	280.613	280	36	46.812	100.613	100	36	46.812
29	TV-123	204033.94050	2294318.57130	TV-93-TV-123	698.971	270.831	270	49	51.864	90.831	90	49	51.864
30	TV-124	204035.00900	2294318.55690	TV-123-TV-124	1.069	270.772	270	46	19.629	90.772	90	46	19.629
31	TV-125	204024.73050	2294359.41730	TV-124-TV-125	42.133	345.880	345	52	48.414	165.880	165	52	48.414
32	TV-126	204024.21170	2294374.33130	TV-125-TV-126	14.923	358.008	358	0	27.742	178.008	178	0	27.742
33	TV-127	204036.05550	2294439.08380	TV-126-TV-127	65.827	10.365	10	21	55.157	190.365	190	21	55.157
34	TV-128	204031.31200	2294489.58100	TV-127-TV-128	50.720	354.634	354	38	1.020	174.634	174	38	1.020
35	TV-129	204017.86200	2294521.75400	TV-128-TV-129	34.871	337.313	337	18	45.060	157.313	157	18	45.060
36	TV-130	204000.18920	2294581.95340	TV-129-TV-130	62.740	343.639	343	38	21.441	163.639	163	38	21.441
37	TV-131	203981.35800	2294624.72210	TV-130-TV-131	46.731	336.236	336	14	9.412	156.236	156	14	9.412
38	TV-132	203980.50010	2294650.75260	TV-131-TV-132	26.045	358.112	358	6	44.489	178.112	178	6	44.489
39	TV-133	203949.18400	2294675.94100	TV-132-TV-133	40.189	308.811	308	48	38.435	128.811	128	48	38.435
40	TV-134	203948.39970	2294726.60020	TV-133-TV-134	50.665	359.113	359	6	46.887	179.113	179	6	46.887
41	TV-135	203947.72050	2294777.11330	TV-134-TV-135	50.518	359.230	359	13	46.727	179.230	179	13	46.727
42	TV-136	203942.33360	2294783.01060	TV-135-TV-136	7.987	317.590	317	35	23.288	137.590	137	35	23.288
43	TV-137	203946.94600	2294835.09110	TV-136-TV-137	52.284	5.061	5	3	39.873	185.061	185	3	39.873
44	TV-138	203935.19200	2294907.62770	TV-137-TV-138	73.483	350.796	350	47	44.388	170.796	170	47	44.388
45	TV-139	203930.99260	2294926.60360	TV-138-TV-139	19.435	347.521	347	31	17.253	167.521	167	31	17.253
46	TV-66	203921.99930	2294967.37650	TV-139-TV-66	41.753	347.561	347	33	41.060	167.561	167	33	41.060
Total (Patch-20)					3622.735	Say - 3623m. Or 3.623Km.							

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	TV-01	204093.43900	2293506.51060		0.000								
2	TV-02	204103.50230	2293527.01570	TV-01-TV-02	22.841	26.140	26	8	25.607	206.140	206	8	25.607
3	TV-03	204152.76260	2293544.03740	TV-02-TV-03	52.118	70.938	70	56	15.410	250.938	250	56	15.410
4	TV-04	204082.52110	2293687.03990	TV-03-TV-04	159.322	333.840	333	50	24.568	153.840	153	50	24.568
5	TV-05	204064.18220	2293729.33890	TV-04-TV-05	46.103	336.561	336	33	38.392	156.561	156	33	38.392
6	TV-06	204049.58090	2293748.89010	TV-05-TV-06	24.402	323.247	323	14	48.307	143.247	143	14	48.307
7	TV-07	204021.81790	2293778.72060	TV-06-TV-07	40.751	317.056	317	3	21.346	137.056	137	3	21.346
8	TV-08	204013.61510	2293807.64650	TV-07-TV-08	30.066	344.168	344	10	3.851	164.168	164	10	3.851
9	TV-09	204010.37090	2293829.51880	TV-08-TV-09	22.112	351.563	351	33	47.300	171.563	171	33	47.300
10	TV-10	204012.28960	2293908.06060	TV-09-TV-10	78.565	1.399	1	23	57.847	181.399	181	23	57.847
11	TV-11	204016.48700	2293951.74660	TV-10-TV-11	43.887	5.488	5	29	17.506	185.488	185	29	17.506
12	TV-12	204027.11560	2293970.25610	TV-11-TV-12	21.344	29.865	29	51	55.723	209.865	209	51	55.723
13	TV-13	204033.97870	2294004.62150	TV-12-TV-13	35.044	11.294	11	17	38.157	191.294	191	17	38.157
14	TV-14	204050.63530	2294014.17260	TV-13-TV-14	19.201	60.170	60	10	10.231	240.170	240	10	10.231
15	TV-113	204063.10960	2294025.34710	TV-14-TV-113	16.747	48.146	48	8	45.459	228.146	228	8	45.459
16	TV-114	204070.64990	2294043.78210	TV-113-TV-114	19.917	22.246	22	14	44.112	202.246	202	14	44.112
17	TV-115	204071.39380	2294055.74070	TV-114-TV-115	11.982	3.560	3	33	34.454	183.560	183	33	34.454
18	TV-116	204068.87200	2294076.66750	TV-115-TV-116	21.078	353.129	353	7	43.182	173.129	173	7	43.182
19	TV-117	204061.43700	2294107.48220	TV-116-TV-117	31.699	346.435	346	26	5.608	166.435	166	26	5.608
20	TV-118	204049.56460	2294187.07670	TV-117-TV-118	80.475	351.516	351	30	58.501	171.516	171	30	58.501
21	TV-119	204035.07640	2294215.66660	TV-118-TV-119	32.051	333.126	333	7	33.456	153.126	153	7	33.456
22	TV-120	204035.91800	2294254.74060	TV-119-TV-120	39.083	1.234	1	14	1.972	181.234	181	14	1.972
23	TV-121	204039.34750	2294290.19550	TV-120-TV-121	35.620	5.525	5	31	29.811	185.525	185	31	29.811
24	TV-122	204035.97500	2294299.12130	TV-121-TV-122	9.542	339.302	339	18	5.637	159.302	159	18	5.637
25	TV-123	204033.94050	2294318.57130	TV-122-TV-123	19.556	354.028	354	1	42.560	174.028	174	1	42.560
26	TV-124	204035.00900	2294318.55690	TV-123-TV-124	1.069	270.772	270	46	19.629	90.772	90	46	19.629
27	TV-92A	204724.32946	2294310.02750	TV-124-TV-92A	689.373	270.709	270	42	32.114	90.709	90	42	32.114
28	TV-93	204732.83840	2294308.43310	TV-92A-TV-93	8.657	280.613	280	36	46.813	100.613	100	36	46.813
29	TV-94	204770.76210	2294299.66690	TV-93-TV-94	38.924	283.016	283	0	55.888	103.016	103	0	55.888
30	TV-95	204883.37450	2294293.10390	TV-94-TV-95	112.803	273.335	273	20	7.438	93.335	93	20	7.438
31	TV-96	204919.96400	2294266.66150	TV-95-TV-96	45.144	305.855	305	51	17.223	125.855	125	51	17.223
32	TV-97	204945.81030	2294259.93390	TV-96-TV-97	26.708	284.590	284	35	23.701	104.590	104	35	23.701
33	TV-98	205061.62660	2294235.35320	TV-97-TV-98	118.396	281.983	281	58	57.265	101.983	101	58	57.265
34	TV-99	205098.50170	2294236.28450	TV-98-TV-99	36.887	88.553	88	33	11.781	268.553	268	33	11.781

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
35	TV-100	205207.66210	2294138.92420	TV-99-TV-100	146.270	311.730	311	43	47.321	131.730	131	43	47.321
36	TV-101	205252.54000	2294118.71800	TV-100-TV-101	49.217	294.240	294	14	22.477	114.240	114	14	22.477
37	TV-102	205255.92500	2294010.44200	TV-101-TV-102	108.329	358.209	358	12	33.705	178.209	178	12	33.705
38	TV-103	205255.34700	2293948.64800	TV-102-TV-103	61.797	0.536	0	32	9.274	180.536	180	32	9.274
39	TV-104	205250.45640	2293865.25620	TV-103-TV-104	83.535	3.356	3	21	22.777	183.356	183	21	22.777
40	TV-105	205239.06190	2293801.61060	TV-104-TV-105	64.658	10.150	10	9	0.564	190.150	190	9	0.564
41	TV-106	205225.96100	2293727.02800	TV-105-TV-106	75.724	9.963	9	57	45.809	189.963	189	57	45.809
42	TV-107	205227.58630	2293654.00740	TV-106-TV-107	73.039	358.725	358	43	29.695	178.725	178	43	29.695
43	TV-108	205206.91400	2293544.76100	TV-107-TV-108	111.185	10.715	10	42	54.647	190.715	190	42	54.647
44	TV-109	205198.30480	2293447.14420	TV-108-TV-109	97.996	5.040	5	2	24.338	185.040	185	2	24.338
45	TV-110	205068.34170	2293465.98430	TV-109-TV-110	131.322	278.248	278	14	54.322	98.248	98	14	54.322
46	TV-111	204932.89870	2293425.79450	TV-110-TV-111	141.280	73.473	73	28	22.353	253.473	253	28	22.353
47	TV-112	204863.95120	2293402.44190	TV-111-TV-112	72.795	71.289	71	17	19.315	251.289	251	17	19.315
48	D-15	204661.16300	2293400.81400	TV-112-D-15	202.795	89.540	89	32	24.227	269.540	269	32	24.227
49	D-14	204600.24300	2293426.08500	D-15-D-14	65.954	292.530	292	31	47.224	112.530	112	31	47.224
50	D-13	204551.81655	2293458.91931	D-14-D-13	58.508	304.138	304	8	17.625	124.138	124	8	17.625
51	D-12	204503.73200	2293471.07400	D-13-D-12	49.597	284.186	284	11	9.297	104.186	104	11	9.297
52	D-11	204412.02100	2293526.23500	D-12-D-11	107.022	301.025	301	1	31.641	121.025	121	1	31.641
53	D-10A	204330.33696	2293522.98090	D-11-D-10A	81.749	87.719	87	43	7.238	267.719	267	43	7.238
54	D-10	204190.77300	2293517.42100	D-10A-D-10	139.675	87.719	87	43	7.238	267.719	267	43	7.238
55	D-09	204127.41900	2293506.99600	D-10-D-09	64.206	80.656	80	39	20.265	260.656	260	39	20.265
56	D-8A	204110.57470	2293505.38130	D-09-D-8A	16.922	84.524	84	31	27.623	264.524	264	31	27.623
57	TV-01	204093.43900	2293506.51060	D-8A-TV-01	17.173	273.771	273	46	13.912	93.771	93	46	13.912
Total (Patch-21)					4012.215	Say - 4013m. Or 4.013Km.							

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	TV-15	204041.22470	2294018.16590		0.000								
2	TV-16	203567.53880	2294027.04690	TV-15-TV-16	473.769	271.074	271	4	26.746	91.074	91	4	26.746
3	TV-17	203566.80530	2294065.40840	TV-16-TV-17	38.369	358.905	358	54	16.546	178.905	178	54	16.546
4	TV-18	203548.47810	2294080.68200	TV-17-TV-18	23.857	309.807	309	48	26.255	129.807	129	48	26.255
5	TV-19	203526.62430	2294085.62410	TV-18-TV-19	22.406	282.743	282	44	33.871	102.743	102	44	33.871
6	TV-20	203490.04410	2294077.56830	TV-19-TV-20	37.457	77.580	77	34	49.429	257.580	257	34	49.429
7	TV-21	203471.77120	2294064.25930	TV-20-TV-21	22.606	53.932	53	55	56.689	233.932	233	55	56.689
8	TV-22	203447.25430	2294052.18750	TV-21-TV-22	27.328	63.785	63	47	5.892	243.785	243	47	5.892
9	TV-23	203421.43910	2294033.98570	TV-22-TV-23	31.587	54.813	54	48	47.066	234.813	234	48	47.066
10	TV-24	203421.82700	2294031.01670	TV-23-TV-24	2.994	352.556	352	33	23.273	172.556	172	33	23.273
11	TV-25	203188.80070	2294033.86360	TV-24-TV-25	233.044	270.700	270	41	59.827	90.700	90	41	59.827
12	TV-154	202958.70580	2294044.49470	TV-25-TV-154	230.340	272.645	272	38	43.303	92.645	92	38	43.303
13	TV-26	202958.35010	2294036.62980	TV-154-TV-26	7.873	2.590	2	35	22.233	182.590	182	35	22.233
14	TV-28	202975.44320	2294051.68850	TV-26-TV-28	22.780	48.621	48	37	13.996	228.621	228	37	13.996
15	TV-29	202982.76490	2294110.55140	TV-28-TV-29	59.317	7.090	7	5	25.280	187.090	187	5	25.280
16	TV-30	202975.64610	2294172.85520	TV-29-TV-30	62.709	353.482	353	28	54.054	173.482	173	28	54.054
17	TV-31	202977.28100	2294234.78000	TV-30-TV-31	61.946	1.512	1	30	44.410	181.512	181	30	44.410
18	TV-32	202984.97076	2294306.03085	TV-31-TV-32	71.665	6.160	6	9	35.341	186.160	186	9	35.341
19	TV-33	202981.97540	2294318.13920	TV-32-TV-33	12.473	346.105	346	6	18.458	166.105	166	6	18.458
20	TV-33A	202979.44640	2294336.40140	TV-33-TV-33A	18.436	352.116	352	6	56.402	172.116	172	6	56.402
21	TV-159	203474.53600	2294328.59960	TV-33A-TV-159	495.151	270.903	270	54	10.126	90.903	90	54	10.126
22	TV-160	203475.04010	2294324.59670	TV-159-TV-160	4.035	352.822	352	49	20.337	172.822	172	49	20.337
23	TV-161	203508.51750	2294321.57470	TV-160-TV-161	33.614	275.158	275	9	29.165	95.158	95	9	29.165
24	TV-162	203508.51200	2294326.99100	TV-161-TV-162	5.416	359.942	359	56	30.548	179.942	179	56	30.548
25	TV-163	203535.65080	2294326.98440	TV-162-TV-163	27.139	270.014	270	0	50.162	90.014	90	0	50.162
26	TV-164	203537.21250	2294310.59300	TV-163-TV-164	16.466	354.558	354	33	27.144	174.558	174	33	27.144
27	TV-165	203577.08100	2294299.09100	TV-164-TV-165	41.494	286.093	286	5	33.965	106.093	106	5	33.965
28	TV-166	203603.19920	2294280.70220	TV-165-TV-166	31.942	305.148	305	8	52.345	125.148	125	8	52.345
29	TV-154	203623.07700	2294273.95330	TV-166-TV-154	20.992	288.753	288	45	12.060	108.753	108	45	12.060
30	TV-168	203628.16300	2294294.54470	TV-154-TV-168	21.210	13.874	13	52	26.956	193.874	193	52	26.956
31	TV-169	203642.86490	2294294.31120	TV-168-TV-169	14.704	270.910	270	54	35.684	90.910	90	54	35.684
32	TV-170	203638.62970	2294313.63220	TV-169-TV-170	19.780	347.636	347	38	10.339	167.636	167	38	10.339
33	TV-171	203641.30800	2294317.61160	TV-170-TV-171	4.797	33.942	33	56	31.837	213.942	213	56	31.837
34	TV-172	203674.20290	2294324.69790	TV-171-TV-172	33.650	77.843	77	50	34.752	257.843	257	50	34.752

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
35	TV-173	204023.27310	2294317.98310	TV-172-TV-173	349.135	271.102	271	6	7.271	91.102	91	6	7.271
36	TV-174	204025.71600	2294303.35880	TV-173-TV-174	14.827	350.517	350	30	59.939	170.517	170	30	59.939
37	TV-175	204032.05140	2294286.93560	TV-174-TV-175	17.603	338.905	338	54	19.519	158.905	158	54	19.519
38	TV-176	204033.22310	2294261.99360	TV-175-TV-176	24.970	357.310	357	18	37.419	177.310	177	18	37.419
39	TV-177	204025.71520	2294239.82440	TV-176-TV-177	23.406	18.709	18	42	33.721	198.709	198	42	33.721
40	TV-178	204039.34400	2294182.81530	TV-177-TV-178	58.616	346.555	346	33	18.028	166.555	166	33	18.028
41	TV-179	204048.33570	2294135.30130	TV-178-TV-179	48.357	349.284	349	17	2.008	169.284	169	17	2.008
42	TV-180	204060.28400	2294084.87850	TV-179-TV-180	51.819	346.669	346	40	8.223	166.669	166	40	8.223
43	TV-181	204063.73950	2294051.56470	TV-180-TV-181	33.493	354.078	354	4	41.260	174.078	174	4	41.260
44	TV-182	204059.13360	2294035.48740	TV-181-TV-182	16.724	15.986	15	59	10.306	195.986	195	59	10.306
45	TV-15	204041.22470	2294018.16590	TV-182-TV-15	24.915	45.955	45	57	18.755	225.955	225	57	18.755
Total (Patch-22)					2895.208	Say - 2896m. Or 2.896Km.							

Grand Total (Mouza- Tarva)

Patch-18	3677.978	
Patch-19	1904.417	
Patch-20	3622.735	
Patch-21	4012.215	
Patch-22	2895.208	
Total	16112.553	Say - 16113m. or 16.113Km.

DGPS Co-Ordinates with Pillar-to-Pillar distances of each boundary Pillar posted around the CA land identified in Ghochangi Mouza of Kantamal R.I Circle of Kantamal Tahasil bearing Khata No. 101 & Plot No. 172 & 180

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
1	G-01	787645.68880	2277715.52490		0.000								
2	G-02	787699.79340	2277699.63250	G-01-G-02	56.390	286.369	286	22	9.644	106.369	106	22	9.644
3	G-03	787731.00650	2277669.42940	G-02-G-03	43.434	314.058	314	3	28.245	134.058	134	3	28.245
4	G-04	787757.84000	2277630.14500	G-03-G-04	47.574	325.665	325	39	52.853	145.665	145	39	52.853
5	G-05	787770.89520	2277581.25350	G-04-G-05	50.605	345.049	345	2	58.108	165.049	165	2	58.108
6	G-06	787824.03660	2277582.73180	G-05-G-06	53.162	88.407	88	24	23.556	268.407	268	24	23.556
7	G-07	787891.19010	2277596.09430	G-06-G-07	68.470	78.746	78	44	45.705	258.746	258	44	45.705
8	G-08	787918.35870	2277599.42340	G-07-G-08	27.372	83.014	83	0	50.746	263.014	263	0	50.746
9	G-09	787943.41830	2277588.16910	G-08-G-09	27.471	294.185	294	11	5.685	114.185	114	11	5.685
10	G-10	787952.76600	2277597.50050	G-09-G-10	13.208	45.050	45	2	59.993	225.050	225	2	59.993
11	G-11	787959.60710	2277610.86260	G-10-G-11	15.012	27.111	27	6	41.197	207.111	207	6	41.197
12	G-12	787956.91790	2277620.85350	G-11-G-12	10.346	344.935	344	56	6.103	164.935	164	56	6.103
13	G-13	787952.48870	2277630.39550	G-12-G-13	10.520	335.100	335	6	0.870	155.100	155	6	0.870
14	G-14	788044.71080	2277632.14060	G-13-G-14	92.239	88.916	88	54	57.359	268.916	268	54	57.359
15	G-15	788028.77970	2277479.57180	G-14-G-15	153.398	5.961	5	57	40.219	185.961	185	57	40.219
16	G-16	788110.62890	2277473.73170	G-15-G-16	82.057	274.081	274	4	52.496	94.081	94	4	52.496
17	G-17	788103.02500	2277449.43100	G-16-G-17	25.463	17.375	17	22	31.277	197.375	197	22	31.277
18	G-18	788091.82330	2277423.59500	G-17-G-18	28.160	23.440	23	26	24.292	203.440	203	26	24.292
19	G-19	788067.77630	2277392.40120	G-18-G-19	39.387	37.628	37	37	41.821	217.628	217	37	41.821
20	G-20	788057.21780	2277324.47470	G-19-G-20	68.742	8.835	8	50	7.274	188.835	188	50	7.274
21	G-21	788075.26640	2277325.46870	G-20-G-21	18.076	86.848	86	50	51.734	266.848	266	50	51.734
22	G-22	788109.38080	2277331.48070	G-21-G-22	34.640	80.005	80	0	19.288	260.005	260	0	19.288
23	G-23	788114.80270	2277253.48900	G-22-G-23	78.180	356.023	356	1	23.723	176.023	176	1	23.723
24	G-24	788117.95580	2277241.44730	G-23-G-24	12.448	345.327	345	19	35.862	165.327	165	19	35.862
25	G-25	788125.78600	2277222.94850	G-24-G-25	20.088	337.058	337	3	28.649	157.058	157	3	28.649
26	G-26	788130.04150	2277203.97060	G-25-G-26	19.449	347.361	347	21	40.931	167.361	167	21	40.931
27	G-27	788137.82960	2277127.96160	G-26-G-27	76.407	354.150	354	8	59.015	174.150	174	8	59.015
28	G-28	788140.78240	2277116.41700	G-27-G-28	11.916	345.653	345	39	10.282	165.653	165	39	10.282
29	G-29	788130.20650	2277113.14410	G-28-G-29	11.071	72.804	72	48	15.804	252.804	252	48	15.804
30	G-30	788122.99590	2277131.68740	G-29-G-30	19.896	338.751	338	45	4.783	158.751	158	45	4.783
31	G-31	788105.54120	2277142.67460	G-30-G-31	20.625	302.189	302	11	20.977	122.189	122	11	20.977

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
32	G-32	788097.01650	2277137.39490	G-31-G-32	10.027	58.228	58	13	42.063	238.228	238	13	42.063
33	G-33	788082.90170	2277156.68010	G-32-G-33	23.899	323.800	323	47	58.835	143.800	143	47	58.835
34	G-34	788072.75930	2277152.76080	G-33-G-34	10.873	68.872	68	52	19.590	248.872	248	52	19.590
35	G-35	788058.47700	2277193.92520	G-34-G-35	43.572	340.865	340	51	55.425	160.865	160	51	55.425
36	G-36	787971.57640	2277161.10430	G-35-G-36	92.892	69.309	69	18	33.443	249.309	249	18	33.443
37	G-37	787982.82130	2277128.95140	G-36-G-37	34.063	340.724	340	43	25.073	160.724	160	43	25.073
38	G-38	788012.15840	2277044.96550	G-37-G-38	88.962	340.745	340	44	42.684	160.745	160	44	42.684
39	G-39	788048.35520	2277067.96180	G-38-G-39	42.884	57.572	57	34	18.017	237.572	237	34	18.017
40	G-40	788063.28460	2277037.04810	G-39-G-40	34.330	334.222	334	13	20.419	154.222	154	13	20.419
41	G-41	788078.21000	2277019.77810	G-40-G-41	22.826	319.165	319	9	54.573	139.165	139	9	54.573
42	G-42	788085.31460	2277016.85050	G-41-G-42	7.684	292.395	292	23	42.508	112.395	112	23	42.508
43	G-43	788099.71640	2277015.34760	G-42-G-43	14.480	275.958	275	57	27.138	95.958	95	57	27.138
44	G-44	788108.88170	2277017.48690	G-43-G-44	9.412	76.862	76	51	41.940	256.862	256	51	41.940
45	G-45	788125.30390	2277024.57260	G-44-G-45	17.886	66.661	66	39	40.363	246.661	246	39	40.363
46	G-46	788121.67160	2277006.96360	G-45-G-46	17.980	11.655	11	39	18.812	191.655	191	39	18.812
47	G-47	788140.52940	2277003.90110	G-46-G-47	19.105	279.224	279	13	27.423	99.224	99	13	27.423
48	G-48	788156.41900	2277003.28220	G-47-G-48	15.902	272.231	272	13	49.956	92.231	92	13	49.956
49	G-49	788130.17690	2276957.15210	G-48-G-49	53.072	29.634	29	38	3.534	209.634	209	38	3.534
50	G-50	788125.32070	2276950.79440	G-49-G-50	8.000	37.374	37	22	25.195	217.374	217	22	25.195
51	G-51	788119.18710	2276930.63660	G-50-G-51	21.070	16.924	16	55	26.099	196.924	196	55	26.099
52	G-52	788048.48700	2276875.86330	G-51-G-52	89.435	52.234	52	14	2.678	232.234	232	14	2.678
53	G-53	787933.74970	2276848.14540	G-52-G-53	118.038	76.419	76	25	7.894	256.419	256	25	7.894
54	G-54	787858.19980	2276834.27290	G-53-G-54	76.813	79.595	79	35	42.836	259.595	259	35	42.836
55	G-55	787859.38750	2276864.68970	G-54-G-55	30.440	2.236	2	14	10.035	182.236	182	14	10.035
56	G-56	787891.00020	2276889.31680	G-55-G-56	40.073	52.080	52	4	49.798	232.080	232	4	49.798
57	G-57	787898.02200	2276909.42350	G-56-G-57	21.298	19.251	19	15	2.067	199.251	199	15	2.067
58	G-58	787901.99460	2276926.09870	G-57-G-58	17.142	13.400	13	24	0.082	193.400	193	24	0.082
59	G-59	787900.15060	2276948.57690	G-58-G-59	22.554	355.310	355	18	36.864	175.310	175	18	36.864
60	G-60	787866.53400	2276976.09440	G-59-G-60	43.443	309.303	309	18	9.669	129.303	129	18	9.669
61	G-61	787855.02170	2276983.22930	G-60-G-61	13.544	301.789	301	47	20.803	121.789	121	47	20.803
62	G-62	787840.87480	2277005.32350	G-61-G-62	26.235	327.369	327	22	6.940	147.369	147	22	6.940
63	G-63	787806.46930	2277027.55190	G-62-G-63	40.961	302.865	302	51	55.206	122.865	122	51	55.206
64	G-64	787785.53520	2277030.55980	G-63-G-64	21.149	278.177	278	10	35.536	98.177	98	10	35.536

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
65	G-65	787760.29340	2277036.89790	G-64-G-65	26.025	284.095	284	5	43.074	104.095	104	5	43.074
66	G-66	787746.69470	2277040.29390	G-65-G-66	14.016	284.022	284	1	18.010	104.022	104	1	18.010
67	G-67	787749.34230	2277074.27390	G-66-G-67	34.083	4.455	4	27	19.011	184.455	184	27	19.011
68	G-68	787708.50540	2277065.16060	G-67-G-68	41.841	77.420	77	25	11.340	257.420	257	25	11.340
69	G-69	787628.16730	2277058.88010	G-68-G-69	80.583	85.530	85	31	47.801	265.530	265	31	47.801
70	G-70	787610.51160	2277059.75530	G-69-G-70	17.677	272.838	272	50	16.265	92.838	92	50	16.265
71	G-71	787609.33620	2277044.45420	G-70-G-71	15.346	4.393	4	23	33.794	184.393	184	23	33.794
72	G-72	787604.58810	2277019.84750	G-71-G-72	25.061	10.922	10	55	17.560	190.922	190	55	17.560
73	G-73	787592.01430	2276885.30630	G-72-G-73	135.127	5.339	5	20	21.034	185.339	185	20	21.034
74	G-74	787566.50300	2276884.51250	G-73-G-74	25.524	88.218	88	13	4.012	268.218	268	13	4.012
75	G-75	787553.34210	2276871.79050	G-74-G-75	18.305	45.971	45	58	17.326	225.971	225	58	17.326
76	G-76	787530.49550	2276876.55530	G-75-G-76	23.338	281.781	281	46	49.895	101.781	101	46	49.895
77	G-77	787509.74910	2276877.60500	G-76-G-77	20.773	272.897	272	53	47.433	92.897	92	53	47.433
78	G-78	787487.83710	2276897.81230	G-77-G-78	29.807	312.682	312	40	56.371	132.682	132	40	56.371
79	G-79	787467.51960	2276911.37150	G-78-G-79	24.426	303.718	303	43	4.014	123.718	123	43	4.014
80	G-80	787434.59140	2276922.80220	G-79-G-80	34.856	289.144	289	8	38.186	109.144	109	8	38.186
81	G-81	787399.06600	2276942.89100	G-80-G-81	40.812	299.487	299	29	13.794	119.487	119	29	13.794
82	G-82	787354.58790	2276993.71160	G-81-G-82	67.535	318.808	318	48	27.512	138.808	138	48	27.512
83	G-83	787361.26390	2277013.17940	G-82-G-83	20.581	18.928	18	55	41.288	198.928	198	55	41.288
84	G-84	787340.21750	2277054.77990	G-83-G-84	46.621	333.164	333	9	51.754	153.164	153	9	51.754
85	G-85	787359.67050	2277108.15410	G-84-G-85	56.809	20.025	20	1	30.006	200.025	200	1	30.006
86	G-86	787364.90500	2277128.07020	G-85-G-86	20.592	14.726	14	43	33.098	194.726	194	43	33.098
87	G-87	787382.48320	2277162.98200	G-86-G-87	39.087	26.725	26	43	31.429	206.725	206	43	31.429
88	G-88	787410.01740	2277203.14080	G-87-G-88	48.691	34.436	34	26	8.962	214.436	214	26	8.962
89	G-89	787445.48110	2277260.32260	G-88-G-89	67.286	31.807	31	48	24.703	211.807	211	48	24.703
90	G-90	787454.69800	2277278.47100	G-89-G-90	20.355	26.924	26	55	27.580	206.924	206	55	27.580
91	G-91	787502.01160	2277325.15880	G-90-G-91	66.471	45.381	45	22	53.156	225.381	225	22	53.156
92	G-92	787521.41300	2277349.38700	G-91-G-92	31.039	38.687	38	41	13.073	218.687	218	41	13.073
93	G-93	787548.97240	2277391.20500	G-92-G-93	50.083	33.386	33	23	10.177	213.386	213	23	10.177
94	G-94	787626.13920	2277521.55130	G-93-G-94	151.476	30.626	30	37	34.016	210.626	210	37	34.016
95	G-95	787654.09570	2277570.14310	G-94-G-95	56.060	29.913	29	54	47.767	209.913	209	54	47.767
96	G-96	787646.16770	2277577.00320	G-95-G-96	10.484	310.870	310	52	10.714	130.870	130	52	10.714
97	G-97	787644.19760	2277702.80220	G-96-G-97	125.814	359.103	359	6	10.013	179.103	179	6	10.013

Sl. No.	PILLAR No.	Co-ordinates		Distance Between	Distance in Meter	Fore Bearing				Back Bearing			
		X (Easting)	Y (Northing)			Deg.	d	m	s	Deg	d	m	S
98	G-98	787643.34650	2277706.32200	G-97-G-98	3.621	346.407	346	24	23.764	166.407	166	24	23.764
99	G-01	787645.68880	2277715.52490	G-98-G-01	9.496	14.280	14	16	46.548	194.280	194	16	46.548
Total (Patch-23)					3885.551	Say - 3886m. Or 3.886Km.							