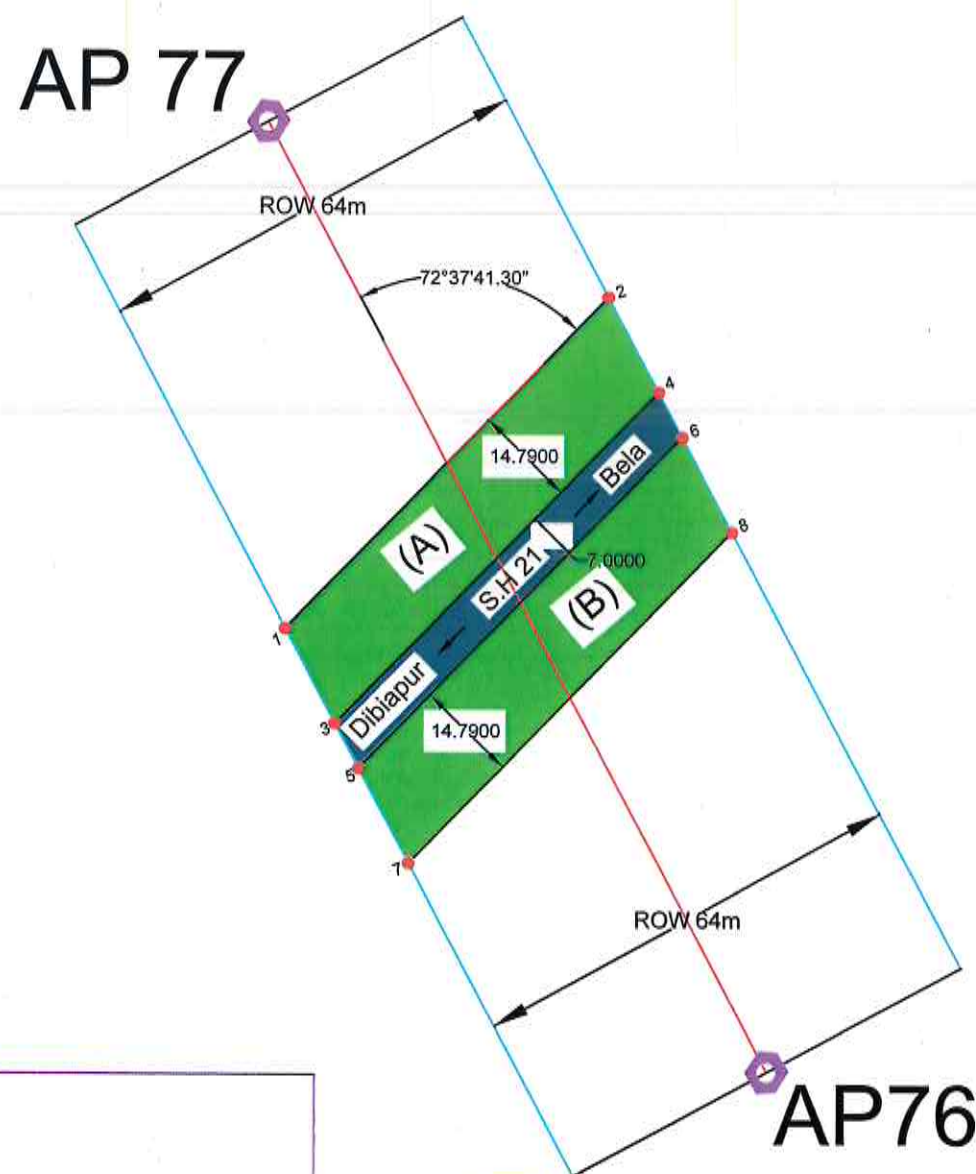


GEO-REFERENCED MAP OF FOREST LAND PROPOSED FOR DIVERSION IN SH 21 DIBIAPUR - BELA ROAD NEAR BARRU PHAPHOOND VILLAGE.



FOREST AREA DGPS Coordinate's			
Area	SL NO.	Latitude(N)	Longitude(E)
	1	26°40'25.67"	79°33'53.77"
	2	26°40'27.79"	79°33'54.32"
	3	26°40'25.42"	79°33'54.26"
	4	26°40'27.54"	79°33'54.8"
	5	26°40'25.3"	79°33'54.49"
	6	26°40'27.42"	79°33'55.03"
	7	26°40'25.04"	79°33'54.97"
	8	26°40'27.16"	79°33'55.52"

Area Proposal of Forest

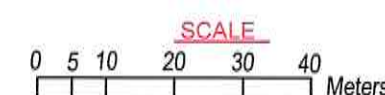
Forest Length(m)	R.O.W. Corridor (m)	Forest Area (m²)	Forest Area (ha.)
(14.79+14.79)=29.58 m	64.0m	1983.5976	0.1984

Area Calculation For A & B

$$(A) \frac{64m}{\sin(72^\circ 37' 41.30'')} \times 14.79 = \frac{64m}{0.954387077} \times 14.79 = 991.7988 \text{ m}^2 = 0.09917988 \text{ Hectares}$$

$$(B) \frac{64m}{\sin(72^\circ 37' 41.30'')} \times 14.79 = \frac{64m}{0.954387077} \times 14.79 = 991.7988 \text{ m}^2 = 0.09917988 \text{ Hectares}$$

Total Forest area = 1983.5976²m
0.19835976 Hectares



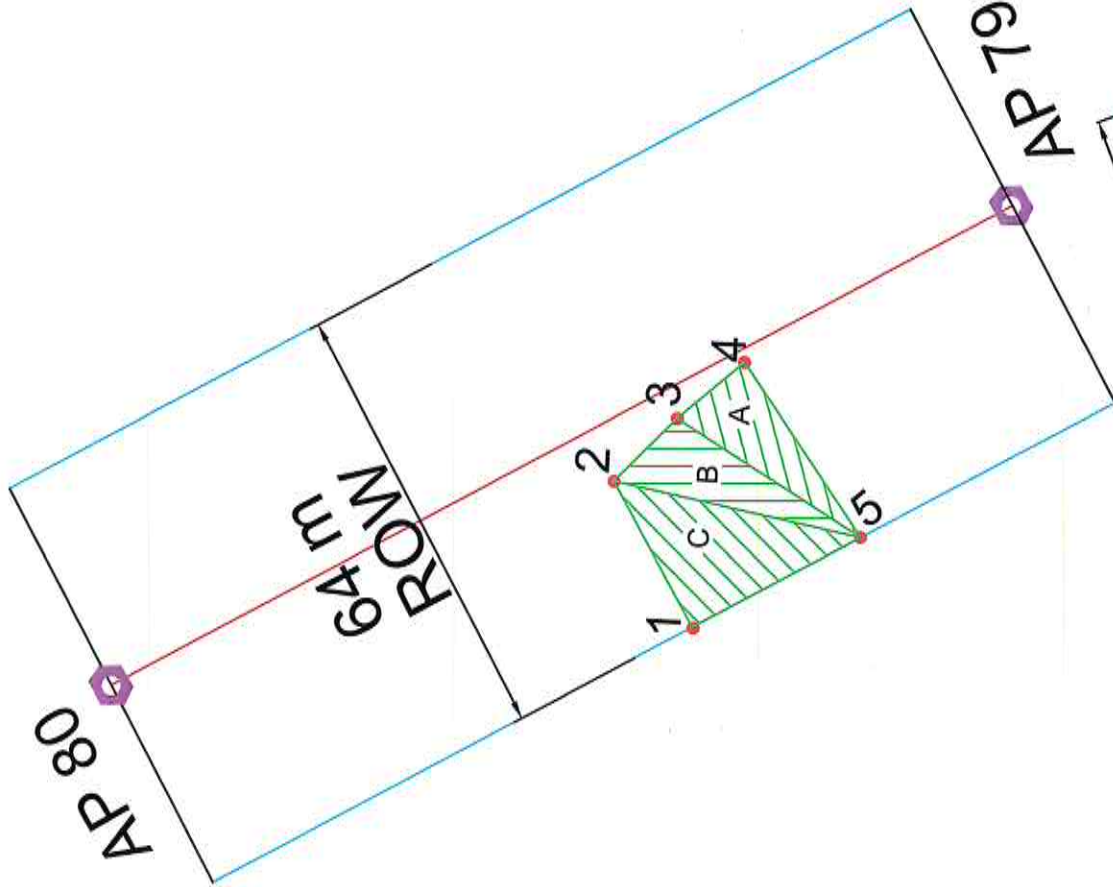
Legend

- Tower location
- Forest Area DGPS Coordinates
- Road
- Transmission Line Corridor in Forest Area
- Transmission line Corridor in Non Forest Area

Ghatampur Transmission
Kanpur
20.12.2019
NAVNEET CHADDA
KANPUR

PROJECT:-	765 KV S/C GHATAMPUR- HAPUR TRANSMISSION LINE
User Agency:-	GHATAMPUR TRANSMISSION LIMITED
Dwg. Title:-	765 KV S/C GHATAMPUR - HAPUR PROPOSED TRANSMISSION LINE ROUTE (IN AURIAYA FOREST DIV.)
DATE - 06/9/2019	DRAWING No - GTL/G-H/27

GEO - REFERENCED MAP OF FOREST LAND PROPOSED FOR DIVERSION IN VILLAGE SHAHPUR
RANGE- ACHHALDA
BEAT- ACHHALDA (BLOCK No.- 2)
DISTRICT - AURAIYA (UTTAR PRADESH)



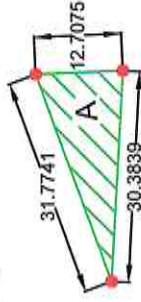
Forest Area DGPS Coordinate

FOREST AREA DGPS Coordinate's			
Area	SL NO.	Latitude (N)	Longitude (E)
(A)	1	26°44'3.83"	79°29'51.34"
	2	26°44'4.24"	79°29'52.08"
	3	26°44'3.96"	79°29'52.43"
	4	26°44'3.66"	79°29'52.74"
	5	26°44'3.06"	79°29'51.86"

Formula of Area Calculation

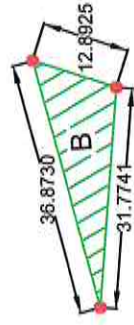
$$\text{Area} = \sqrt{p(p-a)(p-b)(p-c)}$$

Where p is half of the Perimeter. or $a+b+c/2$



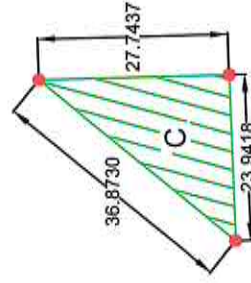
$$p = 31.7741 + 12.7075 + 30.3839 / 2 = 37.43275$$

$$\text{Area} = \sqrt{37.43275 * 5.6587 * 24.7253 * 7.0489} = 192.1373$$



$$p = 36.8730 + 12.8925 + 31.7741 / 2 = 40.7698$$

$$\text{Area} = \sqrt{40.7698 * 3.8968 * 27.8773 * 8.9957} = 199.6026$$



$$p = 36.8730 + 27.7437 + 23.9418 / 2 = 44.27925$$

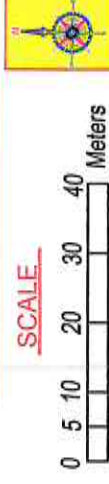
$$\text{Area} = \sqrt{44.27925 * 7.4063 * 16.5356 * 20.3375} = 332.0908$$

$$\text{Total Area} = 192.1373 + 199.6026 + 332.0908 = 723.8308 \text{ m}^2$$

$$\text{Area} = 0.0724 \text{ hectares}$$



Area Proposal of Forest			
Forest Length (m)	C.O.W. Corridor (m)	Forest Area (m ²)	Forest Area (ha.)
11.3098	64.0	723.8308	0.0724



Legend

- Tower location
- Forest Area DGPS Coordinates
- Transmission Line Corridor in Forest Area
- Transmission line Corridor in Non Forest Area

PROJECT:- GHATAMPUR- HAPUR 765 KV S/C TRANSMISSION LINE

User Agency:-

GHATAMPUR TRANSMISSION LIMITED

Dwg. Title:-

GHATAMPUR - HAPUR 765 KV S/C PROPOSED TRANSMISSION LINE ROUTE (IN AURAIYA FOREST DIV.)

DATE - 06/9/2019

DRAWING No - GTL/G-H/28

GEO - REFERENCED MAP OF FOREST LAND PROPOSED FOR DIVERSION IN VILLAGE SHAHPUR

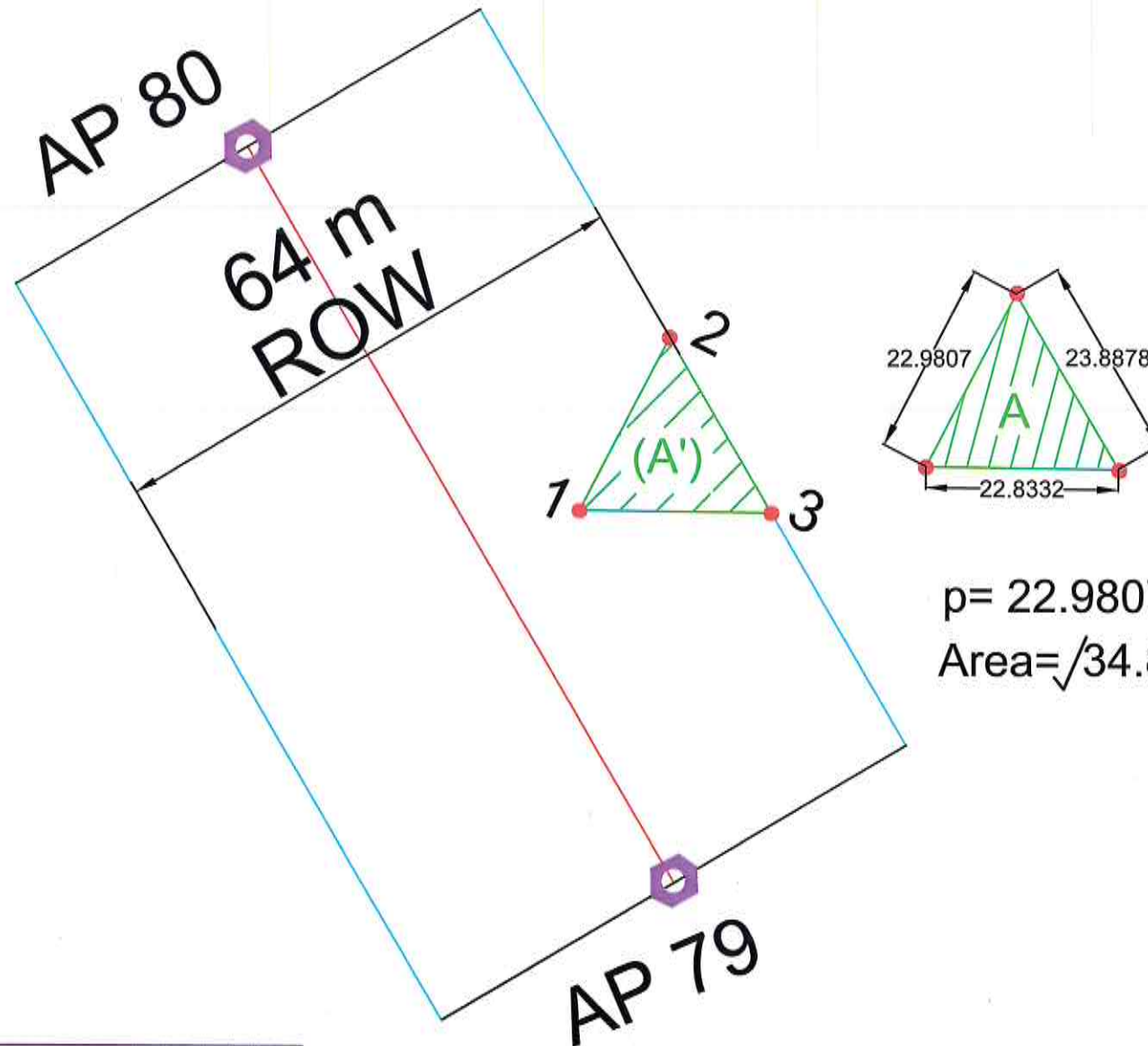
RANGE- ACHHALDA

BEAT- ACHHALDA (BLOCK No.- 2)

DISTRICT - AURAIYA (UTTAR PRADESH)

Forest Area DGPS Coordinate

FOREST AREA DGPS Coordinate's			
Area	SL NO.	Latitude(N)	Longitude(E)
(A')	1	26°44'5.59"	79°29'52.04"
	2	26°44'6.25"	79°29'52.42"
	3	26°44'5.59"	79°29'52.87"

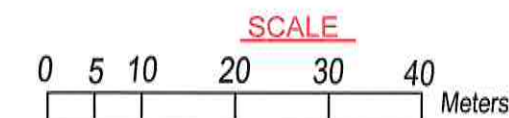


$$p = 22.9807 + 23.8878 + 22.8332 / 2 = 34.85085$$

$$\text{Area} = \sqrt{34.85085 * 11.8702 * 10.9631 * 12.0177} = 233.4588$$

$$\text{Area} = 0.0233 \text{ hectares}$$

Area Proposal of Forest			
Forest Length(m)	R.O.W. Corridor (m)	Forest Area (m ²)	Forest Area (ha.)
3.6478	64.0	233.4588	0.0233



Legend

- Tower location
- Forest Area DGPS Coordinates
- Transmission Line Corridor in Forest Area
- Transmission line Corridor in Non Forest Area



PROJECT:-	GHATAMPUR- HAPUR 765 KV S/C TRANSMISSION LINE
User Agency:-	GHATAMPUR TRANSMISSION LIMITED
Dwg. Title:-	GHATAMPUR - HAPUR 765 KV S/C PROPOSED TRANSMISSION LINE ROUTE (IN AURAIYA FOREST DIV.)
DATE - 06/9/2019	DRAWING No - GTL/G-H/29

GEO - REFERENCED MAP OF FOREST LAND AND PROPOSED FOR DIVERSION IN VILLAGE SHAHPUR

RANGE- ACHHALDA
BEAT- ACHHALDA (BLOCK No.- 27)
DISTRICT - AURAIYA (UTTAR PRADESH)

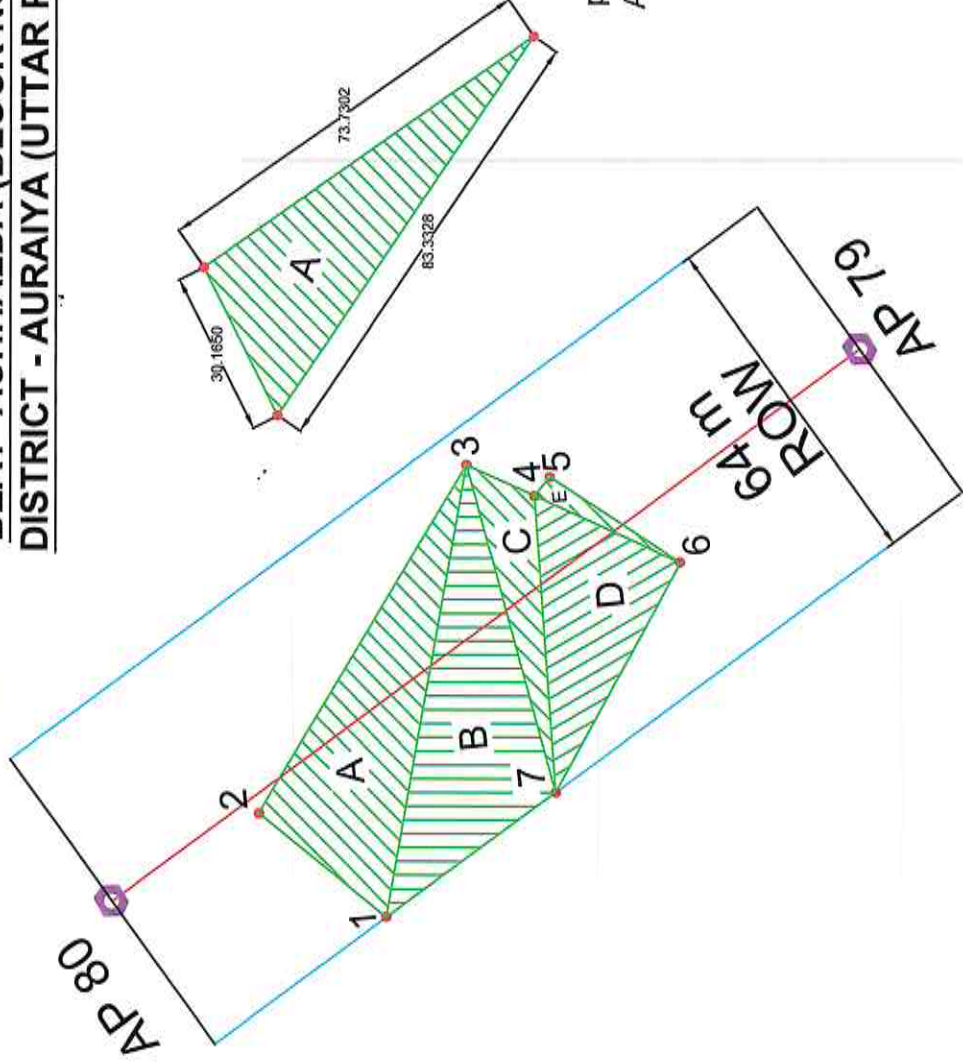
Forest Area DGPS Coordinate

FOREST AREA DGPS Coordinate's			
Area	SL NO.	Latitude(N)	Longitude(E)
(B)	1	26°44'28.73"	79°29'34.56"
	2	26°44'29.44"	79°29'35.31"
	3	26°44'28.03"	79°29'37.47"
	4	26°44'27.64"	79°29'37.23"
	5	26°44'27.54"	79°29'37.35"
	6	26°44'26.8"	79°29'36.71"
	7	26°44'27.66"	79°29'35.28"

Formula of Area Calculation

Area= $\sqrt{p(p-a)(p-b)(p-c)}$

Where p is half of the Perimeter.or a+b+c/2



p= 30.1650 +73.7302 +83.3328 /2 = 93.614
Area= $\sqrt{93.614 *63.4490 *19.8838 *10.2812} = 1101.9310$

p= 83.3328 +61.5952 +38.4700 /2 = 91.699
Area= $\sqrt{91.699 *8.3662 *30.1038 *53.2290} = 1108.7439$

p= 61.5952 + 13.6788 +53.9907 /2 = 64.63235
Area= $\sqrt{64.63235 *3.0372 *50.9536 *10.6417} = 326.2495$

p= 53.9907 +29.4773 +47.5291 /2 = 65.49855
Area= $\sqrt{65.49855 *11.5079 *36.0213 *17.9695} = 698.4892$

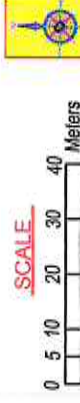
p= 29.4773+4.4895+28.6376 /2 = 31.3022
Area= $\sqrt{31.3022 *1.8249 *26.8127 *2.6646} = 63.8842$

Total Area =1101.9310 + 1108.7439 + 326.2495 + 698.4892 + 63.8842 = 3299.2978m²
Area= 0.3299 hectares



NAVNEET CHADDA
KANPUR

Area Proposal of Forest		
Forest Length in m (O/W Corridor in m)	Forest Area (m ²)	Forest Area (ha.)
51.4535	6416	0.3299



Legend

- Tower location
- Forest Area DGPS Coordinates
- Transmission Line Corridor in Forest Area
- Transmission line Corridor in Non Forest Area

PROJECT:- GHATAMPUR- HAPUR 765 KV S/C TRANSMISSION LINE

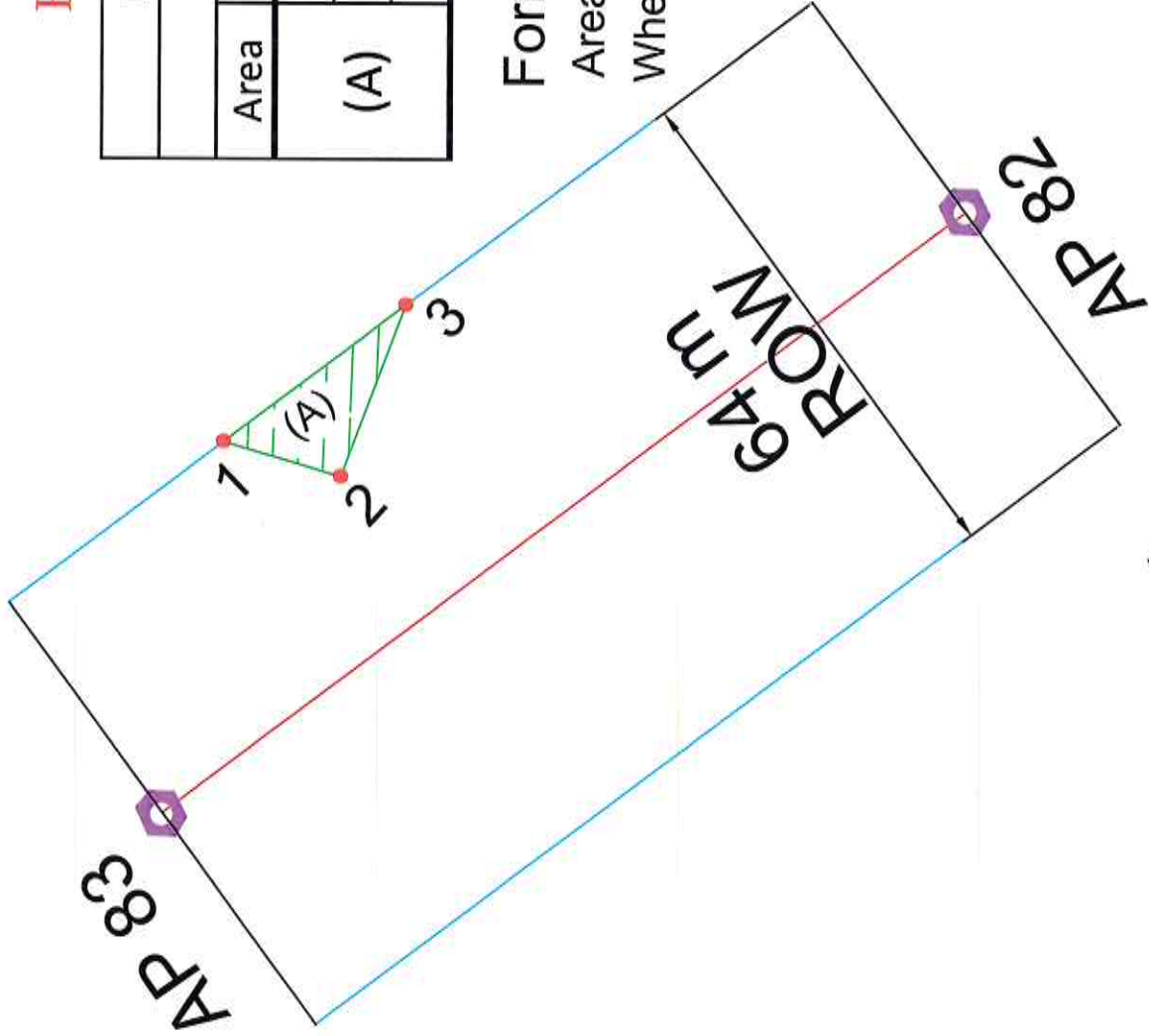
User Agency:- GHATAMPUR TRANSMISSION LIMITED

Dwg. Title:- GHATAMPUR - HAPUR 765 KV S/C PROPOSED TRANSMISSION LINE ROUTE (IN AURAIYA FOREST DIV.)

DATE - 06/9/2019

DRAWING No - GTL/G-H/30

GEO - REFERENCED MAP OF FOREST LAND PROPOSED FOR DIVERSION IN VILLAGE PASUA
RANGE- BIDHUNA
BEAT- BIDHUNA (BLOCK No.-18)
DISTRICT - AURAIYA (UTTAR PRADESH)



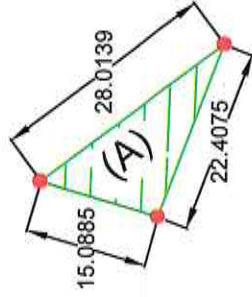
Forest Area DGPS Coordinate

FOREST AREA DGPS Coordinate's			
Area	SL NO.	Latitude(N)	Longitude(E)
(A)	1	26°46'53.39"	79°28'4.24"
	2	26°46'52.99"	79°28'3.93"
	3	26°46'52.52"	79°28'4.55"

Formula of Area Calculation

$$\text{Area} = \sqrt{p(p-a)(p-b)(p-c)}$$

Where p is half of the Perimeter. or $a+b+c/2$



$$p = 28.0139 + 22.4075 + 15.0885 / 2 = 32.75495$$

$$\text{Area} = \sqrt{32.75495 * 4.7411 * 10.3475 * 17.6665} = 168.4873$$

$$\text{Area} = 0.0168 \text{ hectares}$$



NAINDEET CHADDA
KANPUR



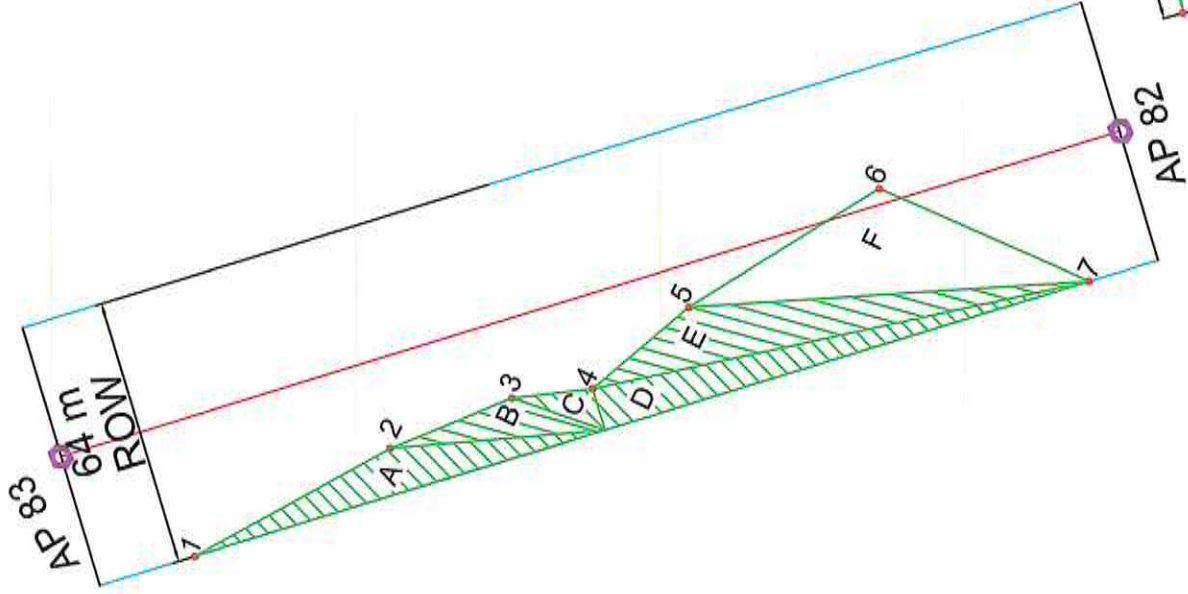
Area Proposal of Forest			
Forest Length (m)	D.W. Corridor (m)	Forest Area (m ²)	Forest Area (ha.)
26336	64.0	168.4871	0.0168

Legend

- Tower location
- Forest Area DGPS Coordinates
- Transmission Line Corridor in Forest Area
- Transmission line Corridor in Non Forest Area

PROJECT:-	GHATAMPUR- HAPUR 765 KV S/C TRANSMISSION LINE
User Agency:-	GHATAMPUR TRANSMISSION LIMITED
Dwg. Title:-	GHATAMPUR - HAPUR 765 KV S/C PROPOSED TRANSMISSION LINE ROUTE (IN AURAIYA FOREST DIV.)
DATE - 06/9/2019	DRAWING No - GTL/G-H/31

GEO - REFERENCED MAP OF FOREST LAND PROPOSED FOR DIVERSION IN VILLAGE KUSHMARA
RANGE- BIDHUNA
BEAT- BIDHUNA (BLOCK No.- 2)
DISTRICT - AURAIYA (UTTAR PRADESH)



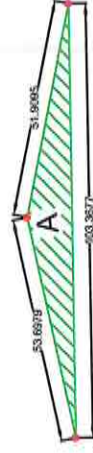
Forest Area DGPS Coordinate

FOREST AREA DGPS Coordinate's			
Area	SL NO.	Latitude(N)	Longitude(E)
(B)	1	26°46'57.12"	79°28'0.48"
	2	26°46'55.6"	79°28'1.43"
	3	26°46'54.66"	79°28'1.88"
	4	26°46'54.03"	79°28'1.97"
	5	26°46'53.29"	79°28'2.69"
	6	26°46'51.81"	79°28'3.73"
	7	26°46'50.15"	79°28'2.96"

Formula of Area Calculation

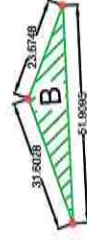
$$\text{Area} = \sqrt{p(p-a)(p-b)(p-c)}$$

Where p is half of the Perimeter or $a+b+c/2$



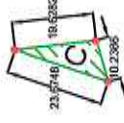
$$p = 51.9095 + 103.3677 + 53.6979 / 2 = 104.48755$$

$$\text{Area} = \sqrt{104.48755 * 52.5781 * 1.1199 * 50.7897} = 558.9874$$



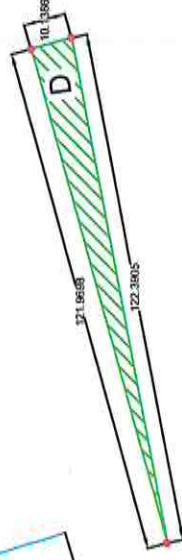
$$p = 23.6748 + 51.9095 + 31.6028 / 2 = 53.5936$$

$$\text{Area} = \sqrt{53.5936 * 29.9188 * 1.6841 * 21.9908} = 243.6831$$



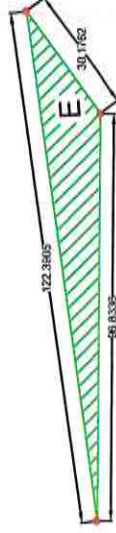
$$p = 19.6282 + 10.2386 + 23.6748 / 2 = 26.7708$$

$$\text{Area} = \sqrt{26.7708 * 7.1426 * 16.5322 * 3.0960} = 98.9292$$



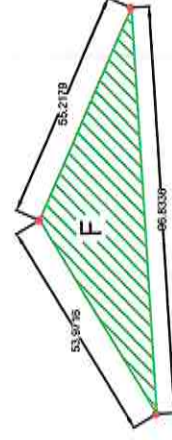
$$p = 121.9698 + 10.1386 + 122.3905 / 2 = 127.24945$$

$$\text{Area} = \sqrt{127.24945 * 5.2797 * 17.1109 * 4.8590} = 618.3015$$



$$p = 122.3905 + 30.1762 + 96.8336 / 2 = 124.70015$$

$$\text{Area} = \sqrt{124.70015 * 2.3097 * 94.5240 * 27.8666} = 871.0019$$



$$p = 55.2179 + 96.8336 + 53.9716 / 2 = 103.01155$$

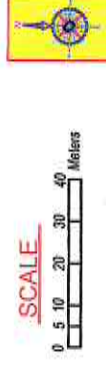
$$\text{Area} = \sqrt{103.01155 * 47.7937 * 6.1780 * 49.0400} = 1221.3082$$

$$\text{Total Area} = 558.9874 + 243.6831 + 98.9292 + 618.3015 + 871.0019 + 1221.3082 = 3612.2114 \text{ m}^2$$

$$\text{Area} = 0.3612 \text{ hectares}$$



Area Proposal of Forest			
Forest Length (m)	Forest Width (m)	Forest Area (ha)	Forest Area (ha)
56.4238	64.0	3612.2114	0.3612



Legend

- Tower location
- Forest Area DGPS Coordinates
- Transmission Line Corridor in Forest Area
- Transmission line Corridor in Non Forest Area

PROJECT:- GHATAMPUR- HAPUR 765 KV S/C TRANSMISSION LINE

User Agency:- GHATAMPUR TRANSMISSION LIMITED

Dwg. Title:- GHATAMPUR - HAPUR 765 KV S/C PROPOSED TRANSMISSION LINE ROUTE (IN AURAIYA FOREST DIV.)

DATE - 06/9/2019

DRAWING No - GTL/G-H/32

GEO - REFERENCED MAP OF FOREST LAND PROPOSED FOR DIVERSION IN VILLAGE KUSHMARA
RANGE- BIDHUNA
BEAT-BIDHUNA (BLOCK No.- 2)
DISTRICT - AURAIYA (UTTAR PRADESH)

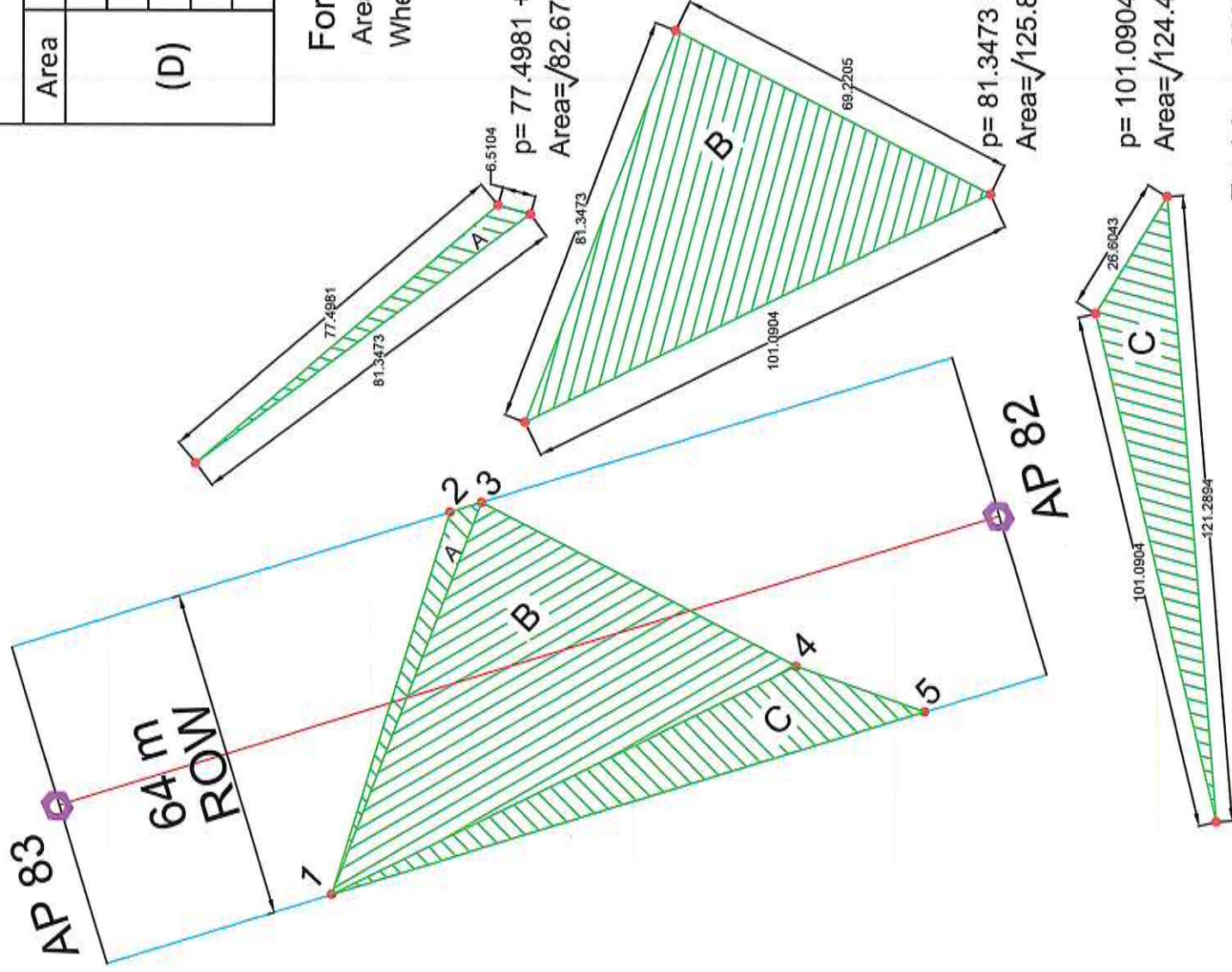
Forest Area DGPS Coordinate

FOREST AREA DGPS Coordinate's			
Area	SL NO.	Latitude(N)	Longitude(E)
(D)	1	26°47'3.72"	79°27'58.13"
	2	26°47'3"	79°28'0.82"
	3	26°47'2.8"	79°28'0.89"
	4	26°47'0.79"	79°27'59.77"
	5	26°46'59.97"	79°27'59.47"

Formula of Area Calculation

$$\text{Area} = \sqrt{p(p-a)(p-b)(p-c)}$$

Where p is half of the Perimeter. or $a+b+c/2$



$p = 77.4981 + 6.5104 + 81.3473 / 2 = 82.6779$
 $\text{Area} = \sqrt{82.6779 * 5.1798 * 76.1675 * 1.3306} = 208.3338$

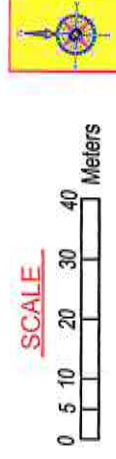
$p = 81.3473 + 69.2205 + 101.0904 / 2 = 125.8291$
 $\text{Area} = \sqrt{125.8291 * 44.4818 * 56.6086 * 24.7387} = 2799.6992$

$p = 101.0904 + 26.6043 + 121.2894 / 2 = 124.49205$
 $\text{Area} = \sqrt{124.49205 * 23.4017 * 97.8878 * 3.2027} = 955.6810$

Total Area = $208.3338 + 2799.6992 + 955.6810 = 3963.7140 \text{ m}^2$
 Area = 0.3964 hectares



Area Proposal of Forest			
Forest Length (m)	K.O.W. Corridor (m)	Forest Area (m ²)	Forest Area (ha.)
61.9329	64.0	3963.7102	0.3964



Legend

- Tower location
- Forest Area DGPS Coordinates
- Transmission Line Corridor in Forest Area
- Transmission line Corridor in Non Forest Area

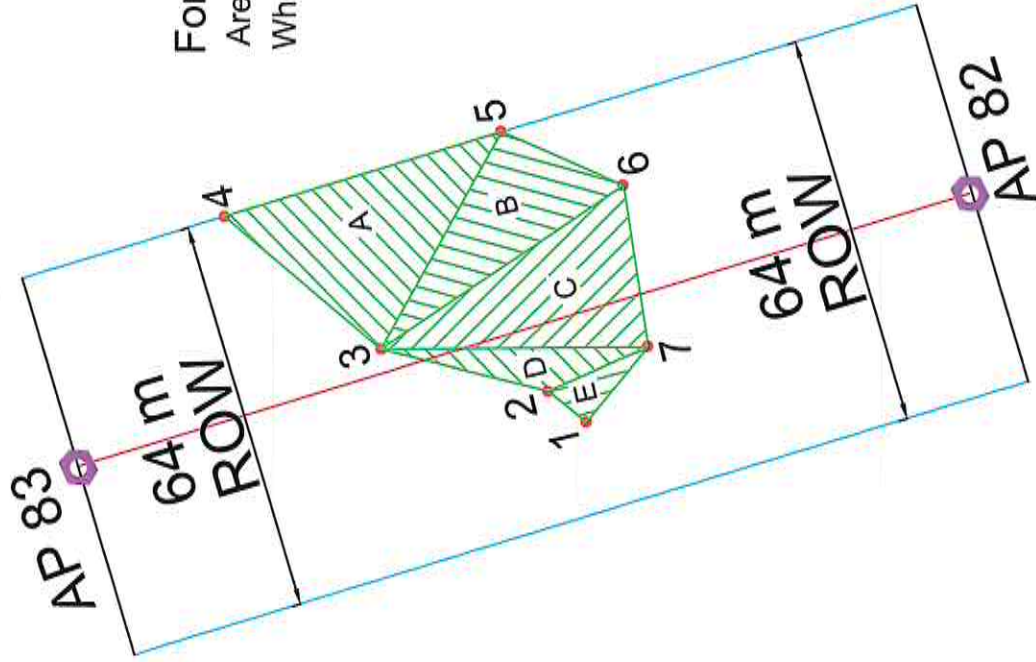
PROJECT:-	GHATAMPUR- HAPUR 765 KV S/C TRANSMISSION LINE
User Agency:-	GHATAMPUR TRANSMISSION LIMITED
Dwg. Title:-	GHATAMPUR - HAPUR 765 KV S/C PROPOSED TRANSMISSION LINE ROUTE (IN AURAIYA FOREST DIV.)
DATE - 06/9/2019	DRAWING No - GTL/G-H/33

GEO - REFERENCED MAP OF FOREST LAND AND PROPOSED FOR DIVERSION IN VILLAGE PASUA

RANGE- BIDHUNA

BEAT- BIDHUNA (BLOCK No.- 2)

DISTRICT - AURAIYA (UTTAR PRADESH)



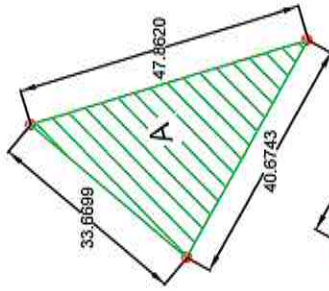
Forest Area DGPS Coordinate

FOREST AREA DGPS Coordinate's			
Area	SL.NO.	Latitude(N)	Longitude(E)
(D')	1	26°47'14.34"	79°27'54.9"
	2	26°47'14.55"	79°27'55.08"
	3	26°47'15.45"	79°27'55.31"
	4	26°47'16.3"	79°27'56.08"
	5	26°47'14.82"	79°27'56.61"
	6	26°47'14.17"	79°27'56.3"
	7	26°47'14.02"	79°27'55.35"

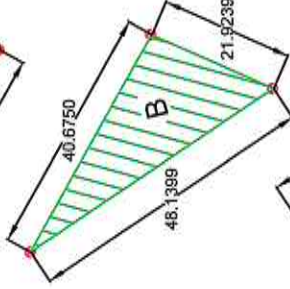
Formula of Area Calculation

$$\text{Area} = \sqrt{p(p-a)(p-b)(p-c)}$$

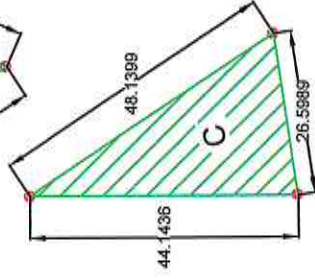
Where p is half of the Perimeter or $a+b+c/2$



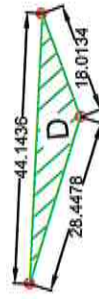
$$p = 33.6699 + 47.8620 + 40.6743 / 2 = 61.1031$$
$$\text{Area} = \sqrt{61.1031 * 27.4332 * 13.2411 * 20.4288} = 673.3693$$



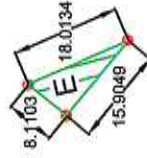
$$p = 40.6750 + 21.9239 + 48.1399 / 2 = 55.3694$$
$$\text{Area} = \sqrt{55.3694 * 14.6944 * 33.4455 * 7.2295} = 443.5410$$



$$p = 48.1399 + 26.5889 + 44.1436 / 2 = 59.4412$$
$$\text{Area} = \sqrt{59.4412 * 11.3013 * 32.8423 * 15.2976} = 580.9469$$



$$p = 44.1436 + 18.0134 + 28.4478 / 2 = 45.3024$$
$$\text{Area} = \sqrt{45.3024 * 1.1588 * 27.2890 * 16.8546} = 155.3881$$



$$p = 8.1103 + 18.0134 + 15.9049 / 2 = 21.0143$$
$$\text{Area} = \sqrt{21.0143 * 12.9040 * 3.0009 * 5.1094} = 64.4808$$

$$\text{Total Area} = 673.3693 + 443.5410 + 580.9469 + 155.3881 + 64.4808 = 1917.7262 \text{ m}^2$$

Area = 0.1918 hectares



Area Proposal of Forest			
Forest Length (km)	Forest Area (ha)	Forest Area (ha)	Forest Area (ha)
29.9647	64.0	1917.7262	0.1918



Legend

- Tower location
- Forest Area DGPS Coordinates
- Transmission Line Corridor in Forest Area
- Transmission line Corridor in Non Forest Area

PROJECT:- GHATAMPUR- HAPUR 765 KV S/C TRANSMISSION LINE

User Agency:- GHATAMPUR TRANSMISSION LIMITED

Dwg. Title:- GHATAMPUR - HAPUR 765 KV S/C PROPOSED TRANSMISSION LINE ROUTE (IN AURAIYA FOREST DIV.)

DATE - 06/9/2019

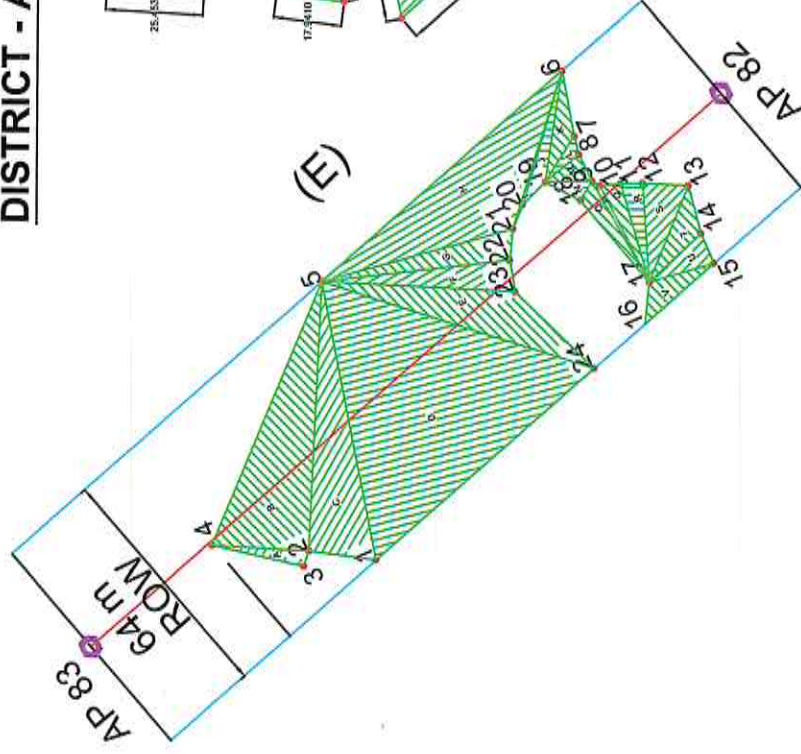
DRAWING No - GTL/G-H/33A

GEO - REFERENCED MAP OF FOREST LAND PROPOSED FOR DIVERSION IN VILLAGE PASUA

RANGE- BIDHUNA

BEAT- BIDHUNA (BLOCK No.- 71)

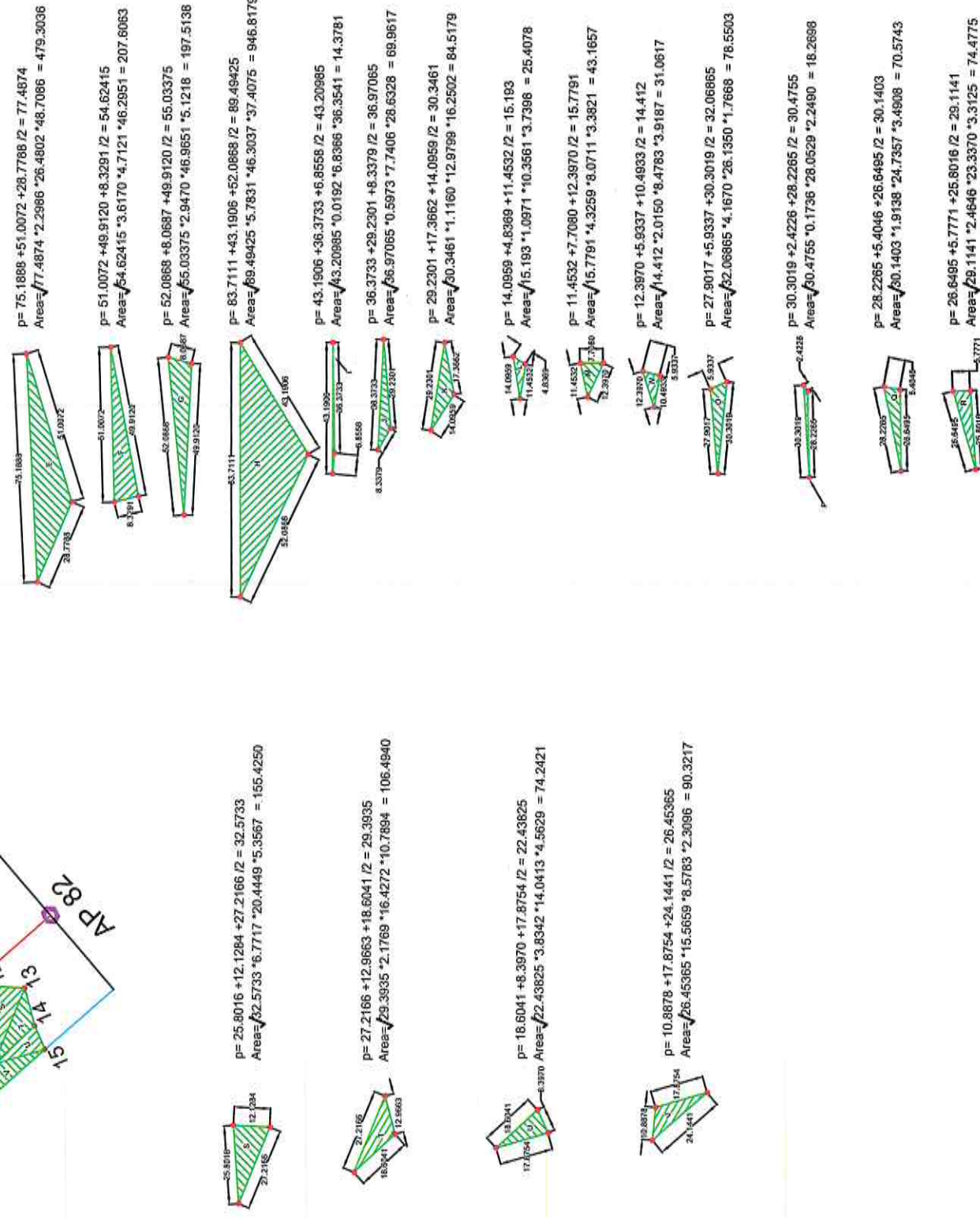
DISTRICT - AURAIYA (UTTAR PRADESH)

Forest Area DGPS Coordinate

FOREST AREA DGPS Coordinates			
Area	Sl. NO.	Latitude (N)	Longitude (E)
	1	26°47'23.26"	79°27'51.17"
	2	26°47'23.76"	79°27'51.51"
	3	26°47'23.85"	79°27'51.39"
	4	26°47'24.5"	79°27'51.91"
	5	26°47'22.77"	79°27'53.76"
	6	26°47'20.18"	79°27'54.7"
	7	26°47'20.37"	79°27'54.08"
	8	26°47'20.32"	79°27'53.91"
	9	26°47'20.31"	79°27'53.63"
	10	26°47'20.26"	79°27'53.56"
	11	26°47'20.09"	79°27'53.51"
	12	26°47'19.92"	79°27'53.43"
	13	26°47'19.73"	79°27'53.23"
	14	26°47'19.67"	79°27'53.77"
	15	26°47'19.63"	79°27'54.47"
	16	26°47'20.37"	79°27'53.72"
	17	26°47'20.2"	79°27'52.54"
	18	26°47'20.16"	79°27'53.51"
	19	26°47'20.65"	79°27'53.8"
	20	26°47'20.99"	79°27'53.68"
	21	26°47'21.09"	79°27'53.51"
	22	26°47'21.21"	79°27'53.26"
	23	26°47'21.26"	79°27'52.96"
	24	26°47'21.26"	79°27'52.00"

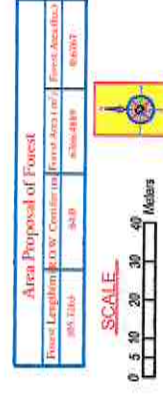
Formula of Area Calculation

Area = $\sqrt{p(p-a)(p-b)(p-c)}$
Where p is half of the Perimeter, or $a+b+c/2$



Total Area = 51.0721+890.8542 -625.8640 +2430.6023 +479.3036 +207.6083 +197.5138 +946.8179 +14.3781 +69.9617 +84.5178 +25.4078 +43.1657 +31.0617 +78.5503 +18.2698 +70.5743 -74.4775 +155.4250 +106.4940 +74.2421 +90.3217 - 6766.4820 m²
Area= 0.6767 hectares

Area= 0.6767 heclares



Legend

-  Tower location
-  Forest Area DGPS Coordinates
-  Transmission Line Corridor in Forest Area
-  Transmission line Corridor in Non Forest Area

PROJECT:-	GHATAMPUR- HAPUR 765 KV S/C TRANSMISSION LINE
User Agency:-	GHATAMPUR TRANSMISSION LIMITED
Dwg. Title:-	GHATAMPUR - HAPUR 765 KV S/C PROPOSED TRANSMISSION LINE ROUTE (IN AURAIYA FOREST DIV.)
DATE - 06/9/2019	
DRAWING No. - GTL/G-H/34	

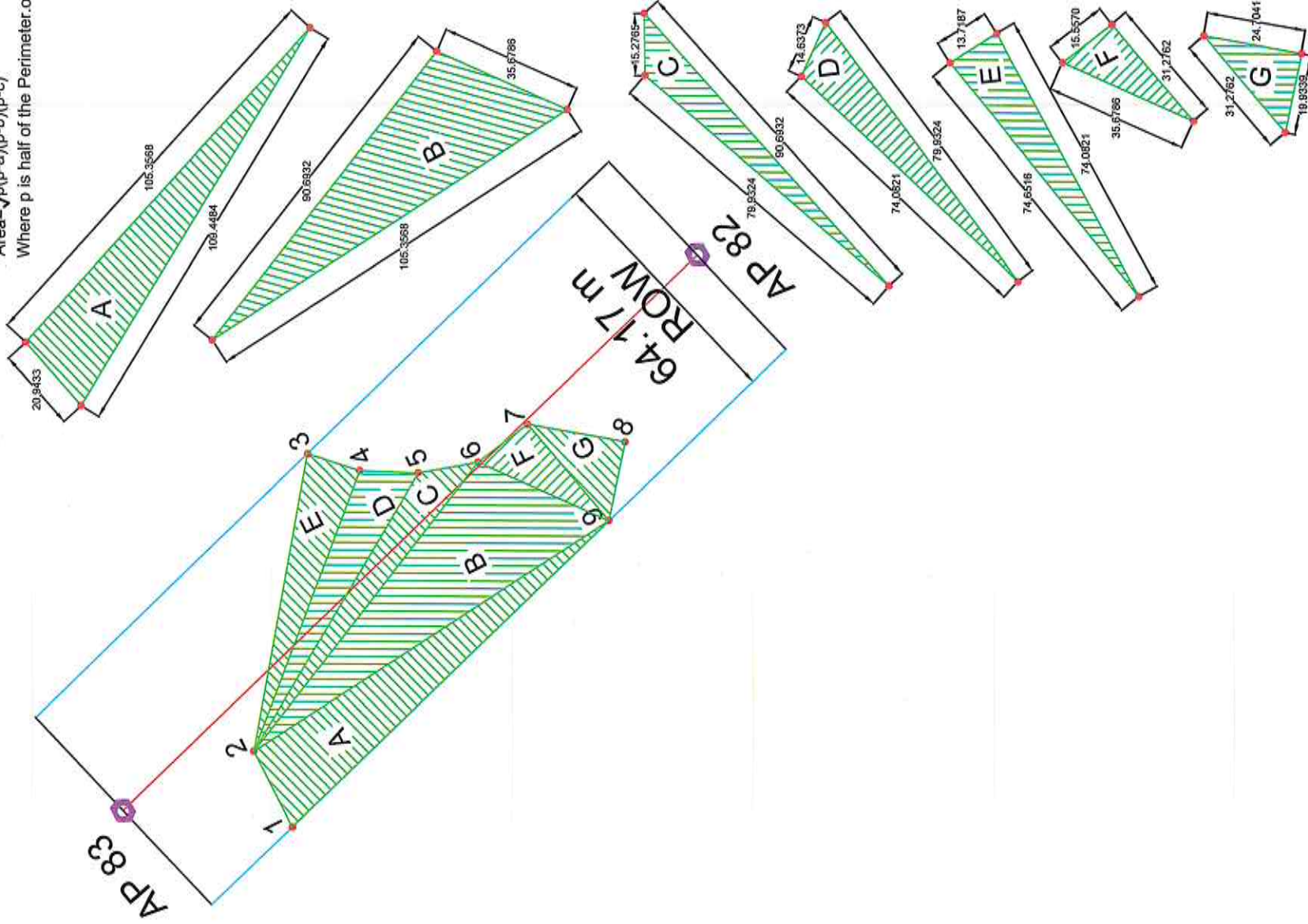
GEO - REFERENCED MAP OF FOREST LAND PROPOSED FOR DIVERSION IN VILLAGE PASUA

RANGE- BIDHUNA
BEAT- BIDHUNA (BLOCK No.- 71)
DISTRICT - AURAIYA (UTTAR PRADESH)

Forest Area DGPS Coordinate

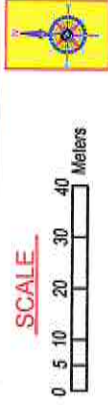
FOREST AREA DGPS Coordinate's		
Area	SL NO.	Latitude (N) Longitude (E)
(F)	1	26°47'27.64" 79°27'49.61"
	2	26°47'27.65" 79°27'50.37"
	3	26°47'26.22" 79°27'52.55"
	4	26°47'25.89" 79°27'52.2"
	5	26°47'25.48" 79°27'51.95"
	6	26°47'25" 79°27'51.8"
	7	26°47'24.5" 79°27'51.91"
	8	26°47'23.85" 79°27'51.39"
	9	26°47'24.25" 79°27'50.82"

Formula of Area Calculation
Area= $\sqrt{p(p-a)(p-b)(p-c)}$
Where p is half of the Perimeter or $a+b+c/2$



Total Area = 1097.7552+1567.5597+460.6775 +514.2771+507.4959 +242.9243 +246.1144 =4636.8042 m²
Area= 0.4637 hectares

Area Proposal of Forest		
Forest Length (R.O.W. Corridor (m)	Forest Area (m ²)	Forest Area (ha.)
72.4500	64.0	0.4637



Ghatampur Transmission Ltd.
Kanpur
NANDEET CHADDA
20/09/2019
KANPUR

Legend

- Tower location
- Forest Area DGPS Coordinates
- Transmission Line Corridor in Forest Area
- Transmission line Corridor in Non Forest Area

PROJECT:- GHATAMPUR- HAPUR 765 KV S/C TRANSMISSION LINE

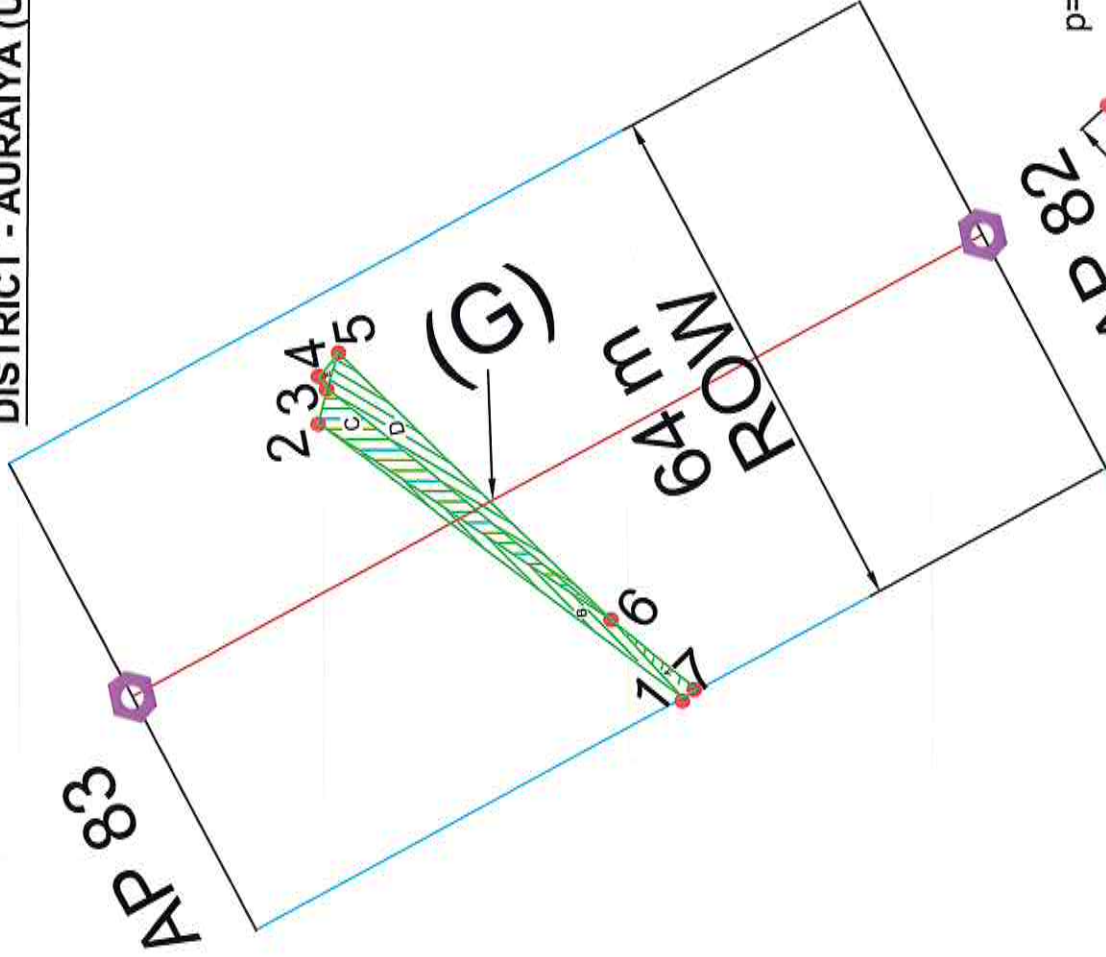
User Agency:- GHATAMPUR TRANSMISSION LIMITED

Dwg. Title:- GHATAMPUR - HAPUR 765 KV S/C PROPOSED TRANSMISSION LINE ROUTE (IN AURAIYA FOREST DIV.)

DATE - 06/9/2019

DRAWING No - GTL/G-H/35

GEO - REFERENCED MAP OF FOREST LAND PROPOSED FOR DIVERSION IN VILLAGE PASUA
RANGE- BIDHUNA
BEAT- BIDHUNA (BLOCK No.-72)
DISTRICT - AURAIYA (UTTAR PRADESH)



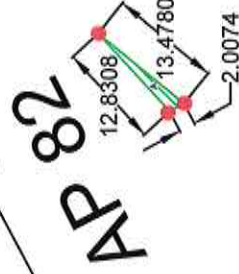
Forest Area DGPS Coordinate

FOREST AREA DGPS Coordinate's			
Area	SL NO.	Latitude (N)	Longitude (E)
(G)	1	26°47'30.32"	79°27'48.65"
	2	26°47'31.55"	79°27'50.13"
	3	26°47'31.49"	79°27'50.27"
	4	26°47'31.51"	79°27'50.33"
	5	26°47'31.42"	79°27'50.42"
	6	26°47'30.54"	79°27'49.05"
	7	26°47'30.26"	79°27'48.68"

Formula of Area Calculation

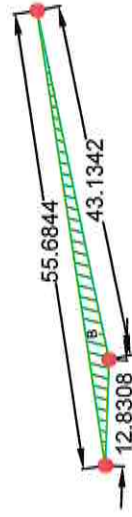
$$\text{Area} = \sqrt{p(p-a)(p-b)(p-c)}$$

Where p is half of the Perimeter or $a+b+c/2$



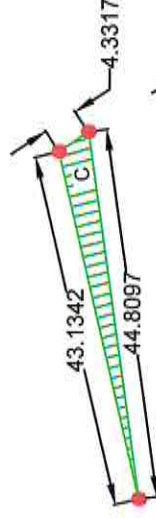
$$p = 12.8308 + 13.4780 + 2.0074 / 2 = 14.1581$$

$$\text{Area} = \sqrt{14.1581 * 1.3273 * 0.6801 * 12.1507} = 12.4616$$



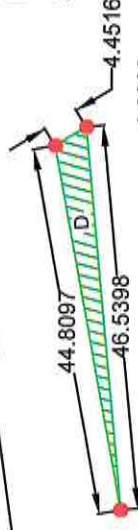
$$p = 55.6844 + 43.1342 + 4.3317 / 2 = 55.8247$$

$$\text{Area} = \sqrt{55.8247 * 0.1403 * 12.6905 * 42.9939} = 65.3710$$



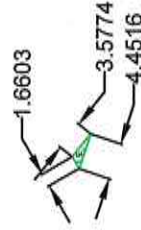
$$p = 43.1342 + 44.8097 + 4.4516 / 2 = 46.1378$$

$$\text{Area} = \sqrt{46.1378 * 3.0036 * 1.3281 * 41.8061} = 87.7172$$



$$p = 44.8097 + 4.4516 + 46.5398 / 2 = 47.90055$$

$$\text{Area} = \sqrt{47.90055 * 3.0909 * 43.4490 * 1.3608} = 93.5595$$



$$p = 1.6603 + 3.5774 + 4.4516 / 2 = 4.84465$$

$$\text{Area} = \sqrt{4.84465 * 3.1844 * 1.2673 * 0.3931} = 2.7720$$

$$\text{Total Area} = 12.4616 + 65.3710 + 87.7172 + 93.5595 + 2.7720 = 261.8813 \text{ m}^2$$

$$\text{Area} = 0.0262 \text{ hectares}$$

Area Proposal of Forest			
Forest Length (m)	C.O.W. Corridor (m)	Forest Area (m ²)	Forest Area (ha.)
4.0918	64.0	261.8781	0.0262



Legend

- Tower location
- Forest Area DGPS Coordinates
- Transmission Line Corridor in Forest Area
- Transmission line Corridor in Non Forest Area



PROJECT:-	GHATAMPUR- HAPUR 765 KV S/C TRANSMISSION LINE
User Agency:-	GHATAMPUR TRANSMISSION LIMITED
Dwg. Title:-	GHATAMPUR - HAPUR 765 KV S/C PROPOSED TRANSMISSION LINE ROUTE (IN AURAIYA FOREST DIV.)

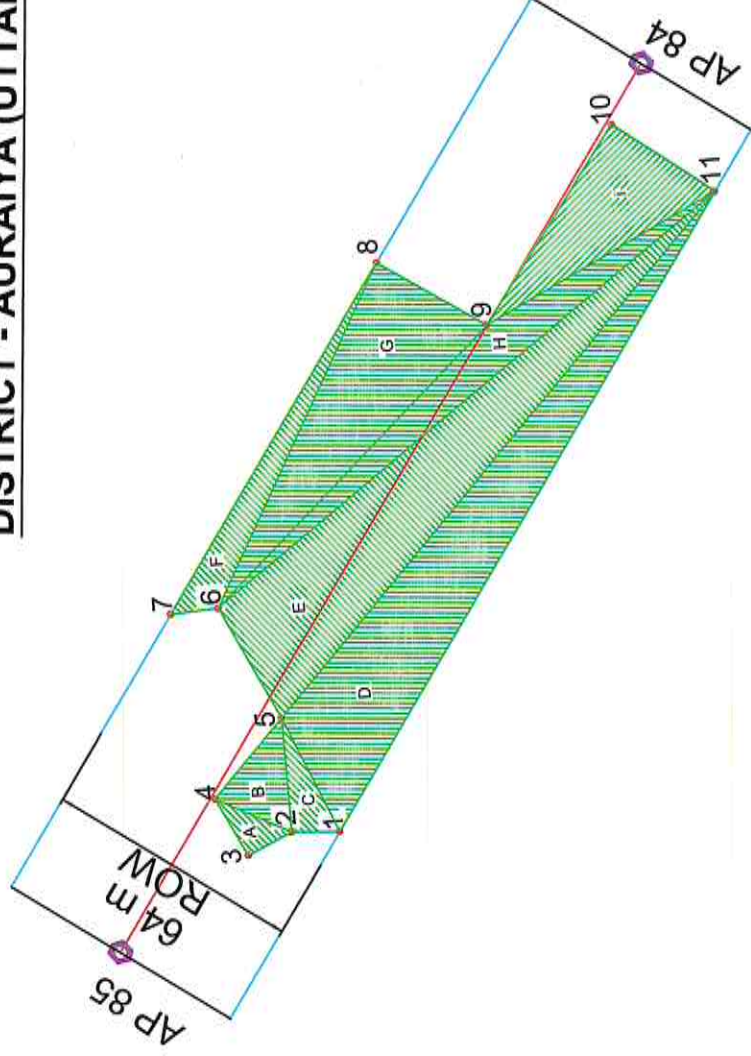
DATE - 06/9/2019 DRAWING No - GTL/G-H/36

GEO - REFERENCED MAP OF FOREST LAND PROPOSED FOR DIVERSION IN VILLAGE PASUA

RANGE- BIDHUNA

BEAT- BIDHUNA (BLOCK No.- 73)

DISTRICT - AURAIYA (UTTAR PRADESH)



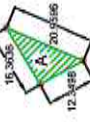
Forest Area DGPS Coordinate

FOREST AREA DGPS Coordinate's		
Area	SL NO.	Latitude(N) Longitude(E)
(H)	1	26°47'42.31" 79°27'36.42"
	2	26°47'42.7" 79°27'36.45"
	3	26°47'43.06" 79°27'36.26"
	4	26°47'43.3" 79°27'36.79"
	5	26°47'42.72" 79°27'37.47"
	6	26°47'43.17" 79°27'38.5"
	7	26°47'43.57" 79°27'38.47"
	8	26°47'41.7" 79°27'41.49"
	9	26°47'40.83" 79°27'40.86"
	10	26°47'39.71" 79°27'42.58"
	11	26°47'38.91" 79°27'41.92"

Formula of Area Calculation

Area= $\sqrt{p(p-a)(p-b)(p-c)}$

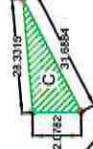
Where p is half of the Perimeter.or a+b+c/2



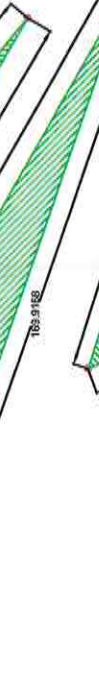
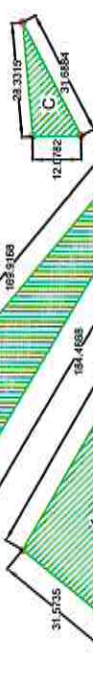
p= 16.3636 +20.9596 +12.3498 /2 = 24.8365
Area= $\sqrt{24.8365 * 8.4729 * 3.8769 * 12.4867}$ = 100.9317



p= 26.1075 +28.3315 +20.9596 /2 = 37.6993
Area= $\sqrt{37.6993 * 11.5918 * 9.3678 * 16.7397}$ = 261.7790

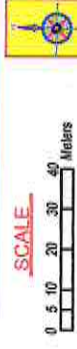


p= 28.3315 +31.6884 +12.0782 /2 = 36.04905
Area= $\sqrt{36.04905 * 7.7176 * 4.3607 * 23.9709}$ = 170.5312



Total Area = 100.9317+261.7790 +170.5312 + 2483.1817 +2519.6251 +481.4326 +1493.4309 +879.0053 +906.3659 = 9296.2634 m²
Area= 0.9296 heclares

Area Proposal of Forest		
Forest Length (m)	Forest Area (m ²)	Forest Area (ha)
145.2545	640	0.016



Legend

- Tower location
- Forest Area DGPS Coordinates
- Transmission Line Corridor in Forest Area
- Transmission Line Corridor in Non Forest Area

PROJECT:- GHATAMPUR- HAPUR 765 KV S/C TRANSMISSION LINE

User Agency:-

GHATAMPUR TRANSMISSION LIMITED

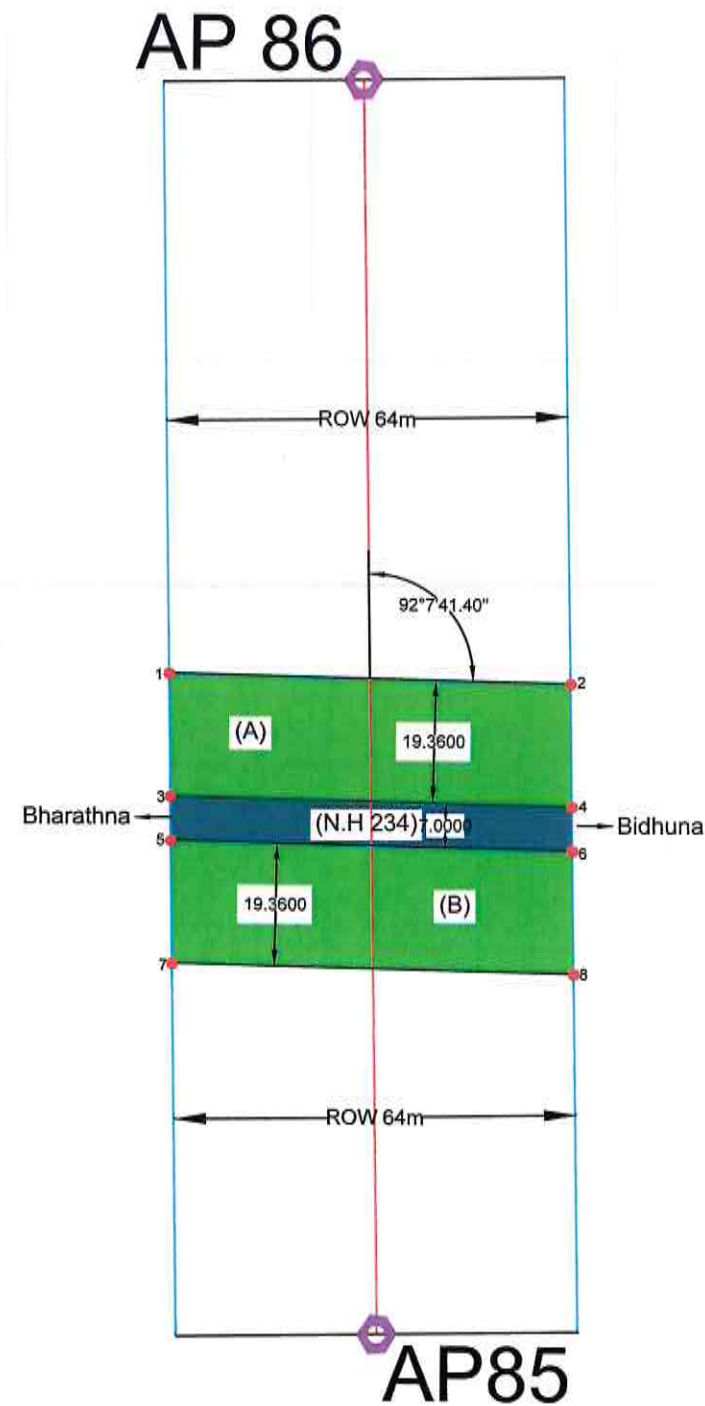
Dwg. Title:-

GHATAMPUR - HAPUR 765 KV S/C PROPOSED TRANSMISSION LINE ROUTE (IN AURAIYA FOREST DIV.)

DATE - 06/9/2019

DRAWING No - GTL/G-H/37

GEO-REFERENCED MAP OF FOREST LAND PROPOSED FOR DIVERSION IN NH 91A (New NH No. 234) NEAR SUKHATAL VILLAGE



Legend

- Tower location
- Forest Area DGPS Coordinates
- Road
- Transmission Line Corridor in Forest Area
- Transmission line Corridor in Non Forest Area

20.12.2019
NAVNEET CHADDA
KANPUR

FOREST AREA DGPS Coordinate's			
Area	SL NO.	Latitude(N)	Longitude(E)
	1	26°48'9.48"	79°26'59.5"
	2	26°48'9.46"	79°27'1.82"
	3	26°48'8.85"	79°26'59.52"
	4	26°48'8.83"	79°27'1.84"
	5	26°48'8.62"	79°26'59.53"
	6	26°48'8.6"	79°27'1.85"
	7	26°48'7.99"	79°26'59.55"
	8	26°48'7.98"	79°27'1.87"

Area Proposal of Forest

Forest Length(m)	R.O.W. Corridor (m)	Forest Area (m ²)	Forest Area (ha.)
(19.36+19.36)=38.72 m	64.0m	2479.7904	0.2480

Area Calculation For A & B

$$(A) \frac{64m}{\sin(92^{\circ}07'41.40'')} \times 19.36 = \frac{64m}{0.999310258} \times 19.36 = 1239.8952 \text{ m}^2 = 0.12398952 \text{ Hectares}$$

$$(B) \frac{64m}{\sin(92^{\circ}07'41.40'')} \times 19.36 = \frac{64m}{0.999310258} \times 19.36 = 1239.8952 \text{ m}^2 = 0.12398952 \text{ Hectares}$$

Total Forest area = 2479.7904 m²
0.24797904 Hectares

SCALE
0 5 10 20 30 40 Meters



PROJECT:-	765 KV S/C GHATAMPUR- HAPUR TRANSMISSION LINE
User Agency:-	GHATAMPUR TRANSMISSION LIMITED
Dwg. Title:-	765 KV S/C GHATAMPUR - HAPUR PROPOSED TRANSMISSION LINE ROUTE (IN AURIAYA FOREST DIV.)
DATE - 06/9/2019	DRAWING No - GTL/G-H/38

GEO - REFERENCED MAP OF FOREST LAND PROPOSED FOR DIVERSION IN VILLAGE NAGLA DAULAT

RANGE- BIDHUNA

BEAT- AIRWA KATRA (BLOCK No.-6)

DISTRICT - AURAIYA (UTTAR PRADESH)

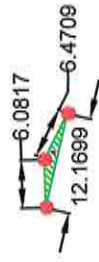
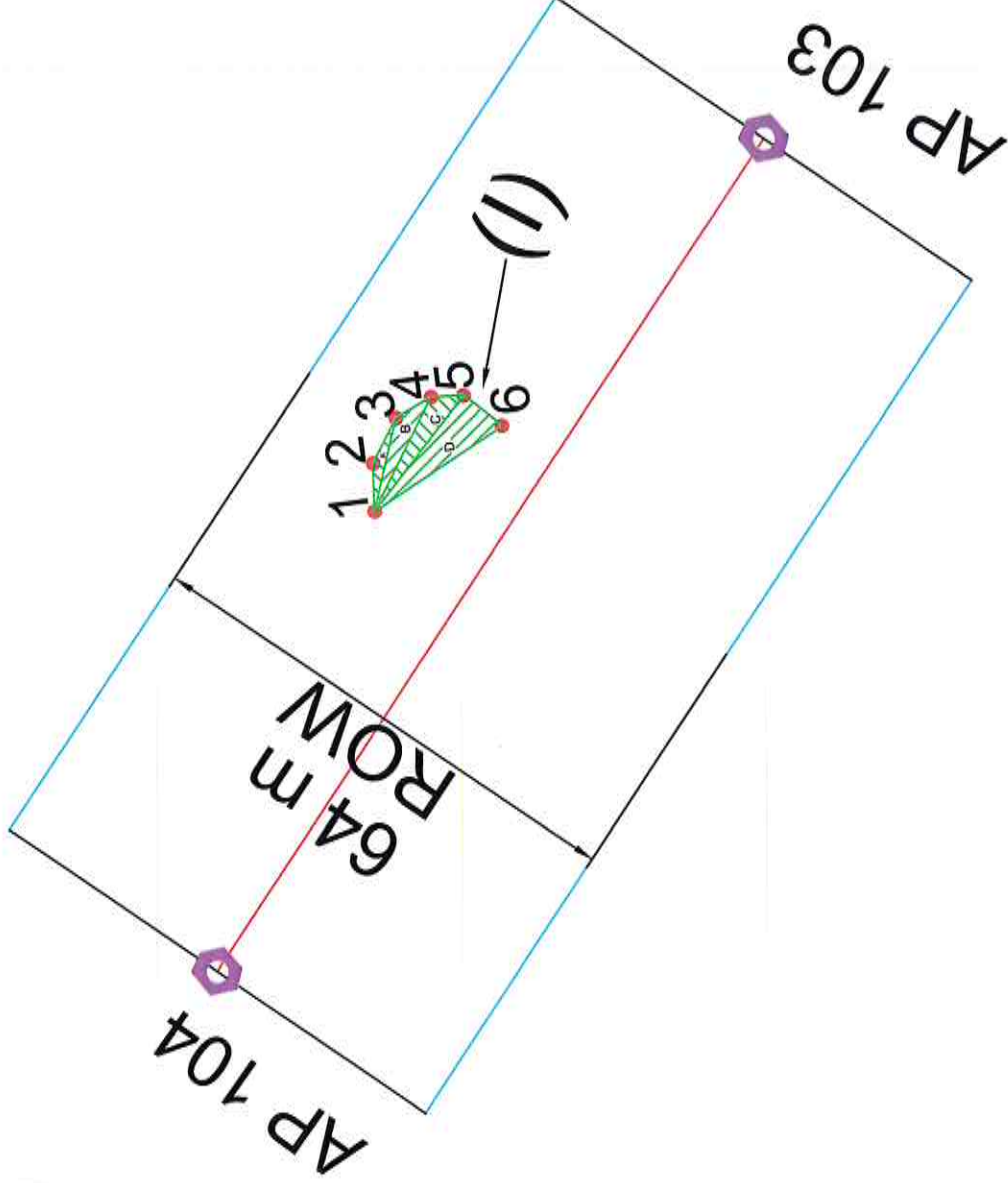
Forest Area DGPS Coordinate

FOREST AREA DGPS Coordinate's		
Area	SL NO.	Latitude(N) Longitude(E)
(I)	1	26°54'43.91" 79°21'18.2"
	2	26°54'43.89" 79°21'18.42"
	3	26°54'43.78" 79°21'18.61"
	4	26°54'43.62" 79°21'18.69"
	5	26°54'43.48" 79°21'18.68"
	6	26°54'43.34" 79°21'18.52"

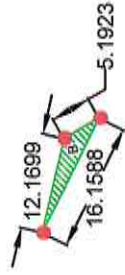
Formula of Area Calculation

Area= $\sqrt{p(p-a)(p-b)(p-c)}$

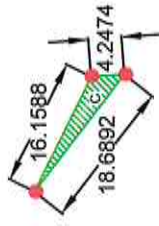
Where p is half of the Perimeter.or a+b+c/2



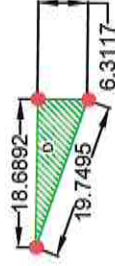
p= 16.3636 +20.9596 +12.3498 /2 = 24.8365
Area= $\sqrt{24.8365 * 8.4729 * 3.8769 * 12.4867} = 100.9317$



p= 16.3636 +20.9596 +12.3498 /2 = 24.8365
Area= $\sqrt{24.8365 * 8.4729 * 3.8769 * 12.4867} = 100.9317$



p= 16.3636 +20.9596 +12.3498 /2 = 24.8365
Area= $\sqrt{24.8365 * 8.4729 * 3.8769 * 12.4867} = 100.9317$



p= 16.3636 +20.9596 +12.3498 /2 = 24.8365
Area= $\sqrt{24.8365 * 8.4729 * 3.8769 * 12.4867} = 100.9317$

Total Area = 9.3536 +23.1420 +29.4983 +58.9799 = 120.9738 m²

Area= 0.0121 hectares



Area Proposal of Forest			
Forest Length (m)	8.0 W. Corridor (m)	Forest Area (m ²)	Forest Area (ha)
1.8902	64.0	120.9732	0.0121



Legend

- Tower location
- Forest Area DGPS Coordinates
- Transmission Line Corridor in Forest Area
- Transmission line Corridor in Non Forest Area

PROJECT:- GHATAMPUR- HAPUR 765 KV S/C TRANSMISSION LINE

User Agency:-

GHATAMPUR TRANSMISSION LIMITED

Dwg. Title:-

GHATAMPUR - HAPUR 765 KV S/C PROPOSED TRANSMISSION LINE ROUTE (IN AURAIYA FOREST DIV.)

DATE - 06/9/2019

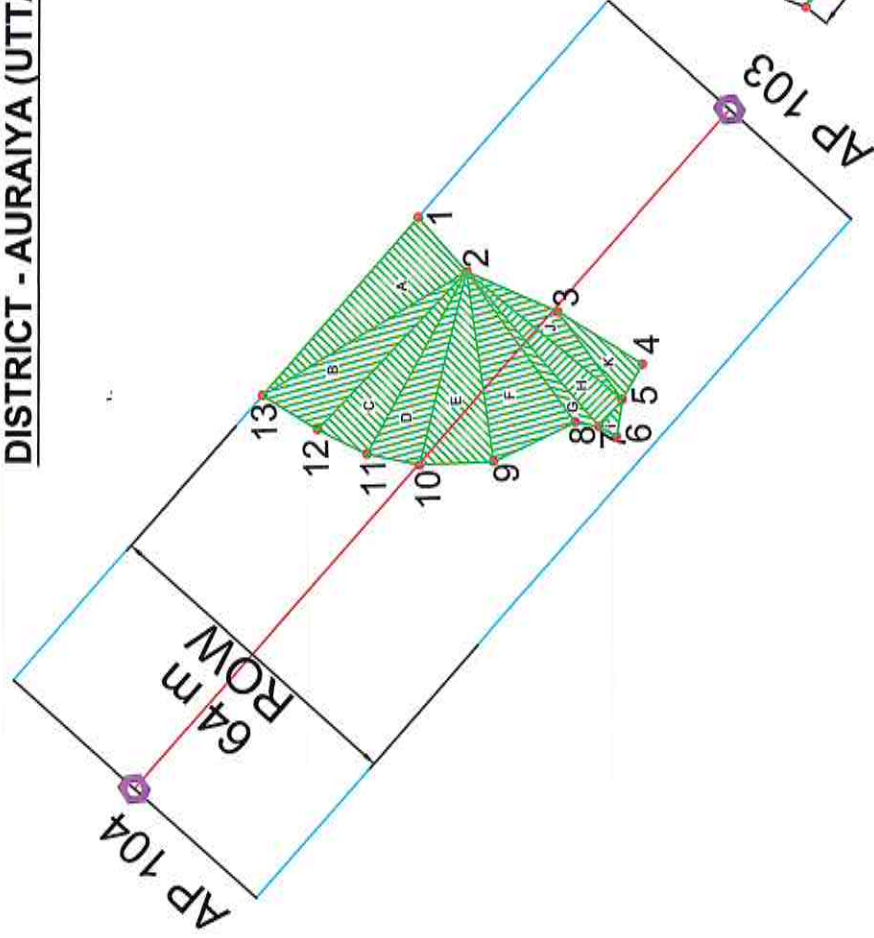
DRAWING No - GTL/G-H/39

GEO - REFERENCED MAP OF FOREST LAND PROPOSED FOR DIVERSION IN VILLAGENAGLA DAULAT

RANGE- BIDHUNA

BEAT- AIRWA KATRA (BLOCK No.- 2)

DISTRICT - AURAIYA (UTTAR PRADESH)



Forest Area DGPS Coordinate

FOREST AREA DGPS Coordinate's		
Area	SL NO.	Latitude(N) Longitude(E)
(J)	1	26°54'55.38" 79°21'4.27"
	2	26°54'55.07" 79°21'3.89"
	3	26°54'54.48" 79°21'3.62"
	4	26°54'53.93" 79°21'3.26"
	5	26°54'54.06" 79°21'3.01"
	6	26°54'54.09" 79°21'2.74"
	7	26°54'54.2" 79°21'2.81"
	8	26°54'54.36" 79°21'2.84"
	9	26°54'54.87" 79°21'2.55"
	10	26°54'55.35" 79°21'2.52"
	11	26°54'55.69" 79°21'2.59"
	12	26°54'56.01" 79°21'2.76"
	13	26°54'56.36" 79°21'2.99"

Formula of Area Calculation

Area= $\sqrt{p(p-a)(p-b)(p-c)}$

Where p is half of the Perimeter or $a+b+c/2$

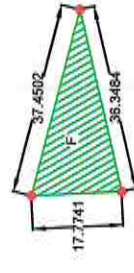
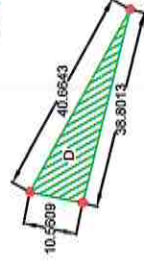
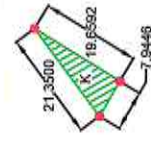
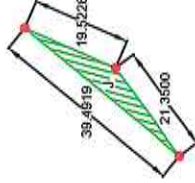
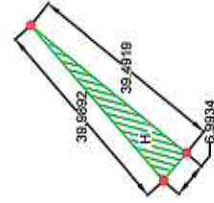
$p = 46.3050 + 14.2253 + 46.9645 / 2 = 53.7474$
Area= $\sqrt{53.7474 * 7.4424 * 39.5221 * 6.7829} = 327.4635$

$p = 39.9892 + 39.4919 + 6.9934 / 2 = 43.23725$
Area= $\sqrt{43.23725 * 3.2481 * 3.7453 * 36.2439} = 138.0714$

$p = 6.9934 + 7.4473 + 3.9532 / 2 = 9.19695$
Area= $\sqrt{9.19695 * 2.2036 * 1.7497 * 5.2438} = 13.6358$

$p = 39.4919 + 19.5226 + 21.3500 / 2 = 40.18225$
Area= $\sqrt{40.18225 * 0.6903 * 20.6597 * 18.8323} = 103.8878$

$p = 21.3500 + 19.6592 + 7.9446 / 2 = 24.4769$
Area= $\sqrt{24.4769 * 3.1269 * 4.8177 * 16.5323} = 78.0767$



Total Area = 327.4635 + 266.3850 + 220.1319 + 204.6849 + 273.6936 + 317.6608 + 61.5869 + 138.0714 + 13.6358 + 103.8878 + 78.0767 + 2005.2783 m²
Area= 0.2005 hectares

Area Proposal of Forest		
Forest Length (m)	Forest Area (m ²)	Forest Area (ha)
31.3335	694.0	0.2005



Legend

- Tower location
- Forest Area DGPS Coordinates
- Transmission Line Corridor in Forest Area
- Transmission line Corridor in Non Forest Area

PROJECT:- GHATAMPUR- HAPUR 765 KV S/C TRANSMISSION LINE

User Agency:-

GHATAMPUR TRANSMISSION LIMITED

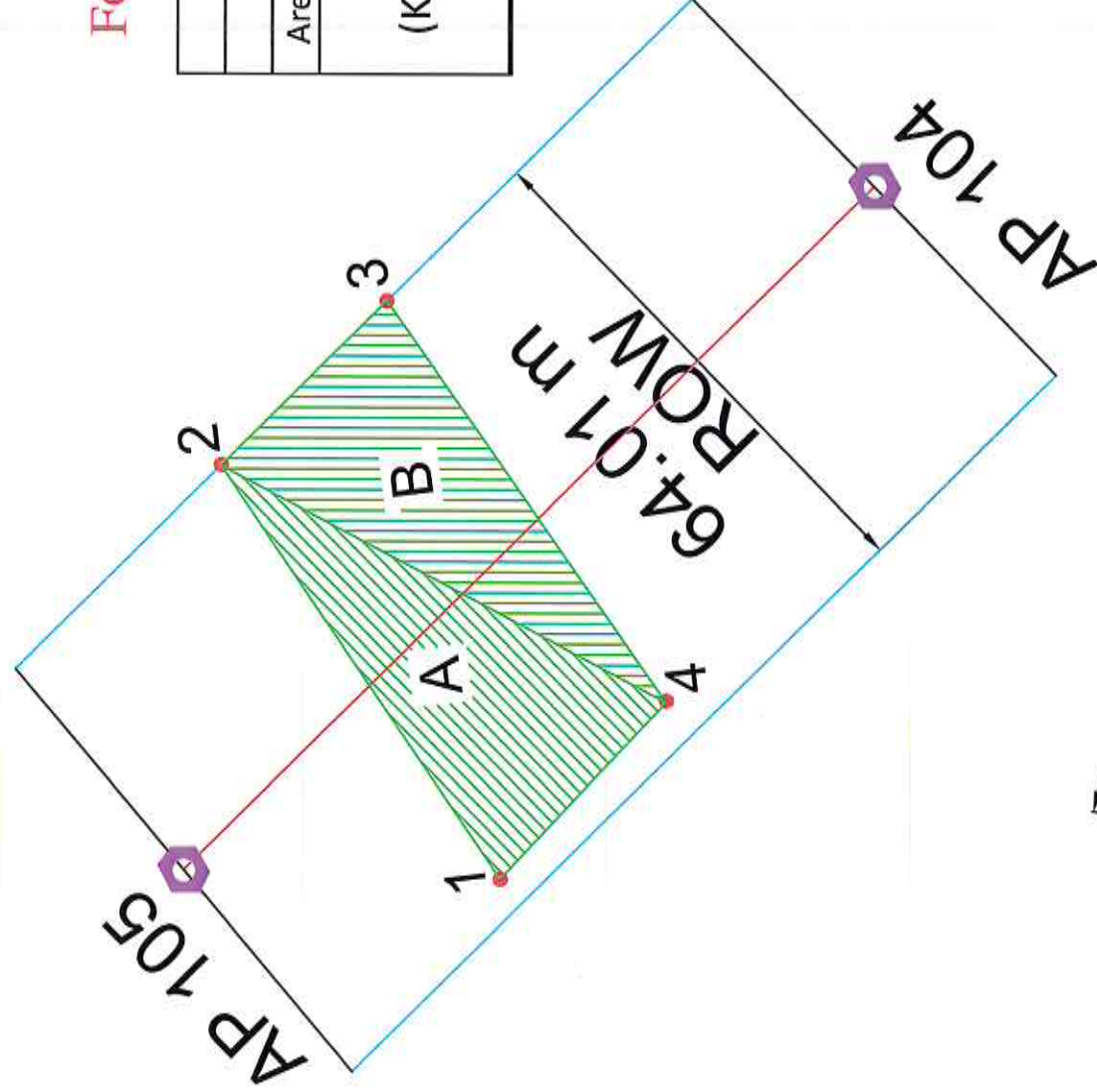
Dwg. Title:-

GHATAMPUR - HAPUR 765 KV S/C PROPOSED TRANSMISSION LINE ROUTE (IN AURAIYA FOREST DIV.)

DATE - 06/9/2019

DRAWING No - GTL/G-H/40

GEO - REFERENCED MAP OF FOREST LAND PROPOSED FOR DIVERSION IN VILLAGE NAGLA DAULAT
RANGE- BIDHUNA
BEAT- AIRWA KATRA (BLOCK No.-3)
DISTRICT - AURAIYA (UTTAR PRADESH)



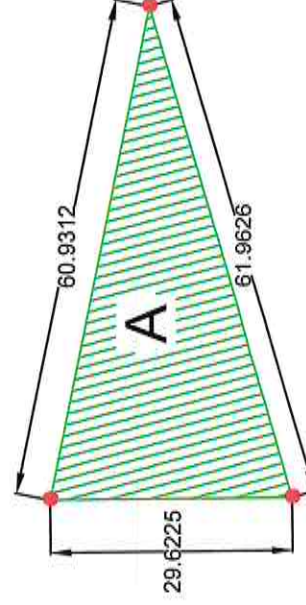
Forest Area DGPS Coordinate

FOREST AREA DGPS Coordinate's			
Area	SL NO.	Latitude(N)	Longitude(E)
(K)	1	26°55'2.23"	79°20'52.9"
	2	26°55'3.38"	79°20'54.7"
	3	26°55'2.72"	79°20'55.44"
	4	26°55'1.58"	79°20'53.69"

Formula of Area Calculation

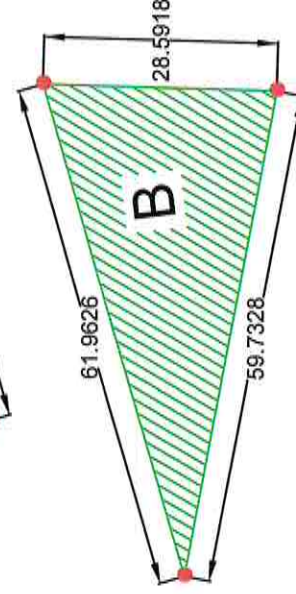
$$\text{Area} = \sqrt{p(p-a)(p-b)(p-c)}$$

Where p is half of the Perimeter. or $a+b+c/2$



$$p = 60.9312 + 61.9626 + 29.6225 / 2 = 76.25815$$

$$\text{Area} = \sqrt{76.25815 * 15.3270 * 14.2956 * 46.6357} = 882.7352$$



$$p = 61.9626 + 28.5918 + 59.7328 / 2 = 75.1436$$

$$\text{Area} = \sqrt{75.1436 * 13.1810 * 46.5518 * 15.4108} = 842.9484$$

$$\text{Total Area} = 882.7352 + 842.9484 = 1725.6837 \text{m}^2$$

$$\text{Area} = 0.1726 \text{ hectares}$$

Area Proposal of Forest			
Forest Length (m)	Forest Width (m)	Forest Area (m ²)	Forest Area (ha.)
26.9843	64.0	1725.6837	0.1726



Legend

- Tower location
- Forest Area DGPS Coordinates
- Transmission Line Corridor in Forest Area
- Transmission line Corridor in Non Forest Area



PROJECT:-	GHATAMPUR- HAPUR 765 KV S/C TRANSMISSION LINE
User Agency:-	GHATAMPUR TRANSMISSION LIMITED
Dwg. Title:-	GHATAMPUR - HAPUR 765 KV S/C PROPOSED TRANSMISSION LINE ROUTE (IN AURAIYA FOREST DIV.)
DATE - 06/9/2019	DRAWING No - GTL/G-H/41