PROPOSED FOREST LAND AREA CALCULATION SHEET AS PER P.W.D. APPROVED LAYOUT PLAN OF THE PROPOSED NEW RETAIL OUTLET AT VILLAGE-RAJPUR, TEHSIL-ETAH, DISTRICT.-ETAH (U.P.)

S.NO.	NAME OF THE LOCATION	APROACH ROAD FOR ENTRY/ EXIT/ MIDDLE		LENGTH (IN METER)	WIDTH (IN METER)	AREA (IN SQ. METER)	TOTAL AREA (IN SQ. METER)	NATURE OF THE LAND
1	2	3		4	5	6	7	8	9
A	ETAH-ALIGANJ ROAD (M.D.R.-98) VILLAGR-RAJPUR, TEHSIL-ETAH, DISTRICT-ETAH	ENTRY ROAD	PART-A	11.500	15.540	178.710	214.77	ROAD SIDE PROTECTED FOREST LAND
B			PART-B	84.50-48.44		36.06		
C		EXIT ROAD	PART-A	11.500	15.540	178.710	214.77	
D			PART-B	84.5-48.44		36.06		
E		MIDDLE LAND BETWEEN ENTRY & EXIT ROAD	PART-C	12.000	15.540	186.48	186.48	

TOTAL AREA: - 616.02 SQM OR 0.0616 HECTARE

PART A = AREA OF REACTANGLE

=11.50 X 15.540

=178.71 SQM

PART B = AREA OF SEGMENT

= AREA OF TRIANGLE- AREA OF CURVE

=$\{1/2 \times b \times h\} - \{R^2[COS^{-1}(R-H)/R]-(R-H)\sqrt{(2XRXH-H^2)}\}$

WHERE, b= BASE OF TRIANGLE

h= HEIGHT OF TRIANGLE

R= RADIUS OF CURVE

H = HEIGHT OF SEGMENT

=$\{1/2 \times 13 \times 13\} - \{13^2[COS^{-1}(13-3.819)/13]-(13-3.819)\sqrt{(2X13X3.819-3.819^2)}\}$

= {84.50} - {132.94-84.50}

=84.50-48.44

=36.06SQM

TOTAL AREA OF ENTRY ROAD = PART A + PART B

= 178.71 + 36.06

= 214.77 SQM

TOTAL AREA OF EXIT ROAD = PART A + PART B

= 178.71 + 36.06

= 214.77 SQM

AREA OF THE MIDDLE LAND BETWEEN ENTRY AND EXIT ROAD = (12.00 X 15.540) = 186.48 SQM

TOTAL AREA = ENTRY ROAD + EXIT ROAD + MIDDLE LAND = 214.77 + 214.77 + 186.48 = **616.02 SQM   Say 616.0 sqm**

OR 0.0616 HECTARE