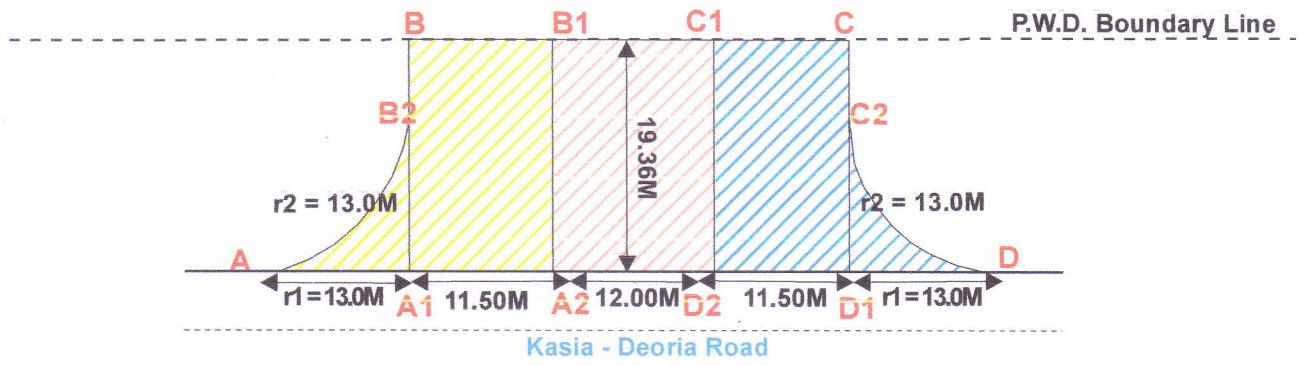


## Area Calculation Sheet as per Approved Layout Plan

**PROPOSED PROTECTED FOREST LAND TO BE DIVERTED FOR ENTRY/EXIT APPROACH TO HINDUSTAN PETROLEUM CORPORATION LIMITED RETAIL OUTLET ON DEORIA – KASIA - PADRAUNA ROAD (SH-79) IN KM. NO. 15.0 (CH. NO. 14.03, RHS) AT GATA NO.– 908, VILLAGE:- KONHWALIYA T. BHAIKADAB, TEHSIL:- DEORIA, DISTRICT:- DEORIA (U.P.)**



### **Area of Entry approach to retail outlet**

$$= \text{Area of Curve Polygon}(A B_2 A_1) + \text{Area of rectangle } (B B_1 A_2 A_1)$$

Area of Curve Polygon(A B<sub>2</sub> A<sub>1</sub>)

$$\begin{aligned} &= \{(r_1 \times r_2) - (\pi \times r_1 \times r_2)/4\} \\ &= \{(13.0m \times 13.0m) - (3.14 \times 13.0 \times 13.0/4)\} \\ &= (169.0 - 132.665) \text{ SqM} \\ &= 36.34 \text{ SqM} \end{aligned}$$

Area of rectangle (B B<sub>1</sub> A<sub>2</sub> A<sub>1</sub>)

$$\begin{aligned} &= \{ \text{Length(m)} \times \text{width(m)} \} \\ &= (11.50m \times 19.36m) \\ &= 222.64 \text{ SqM} \end{aligned}$$

So, Area of Entry approach to retail outlet = (36.34 + 222.64) SqM = 258.98 SqM

### **Area of Separator = Area of rectangle (B<sub>1</sub> C<sub>1</sub> D<sub>2</sub> A<sub>2</sub>)**

Area of rectangle (B<sub>1</sub> C<sub>1</sub> D<sub>2</sub> A<sub>2</sub>)

$$\begin{aligned} &= \{ \text{Length(m)} \times \text{width(m)} \} \\ &= (12.00m \times 19.36m) \text{ SqM} \\ &= 232.32 \text{ SqM} \end{aligned}$$

### **Area of Exit approach from retail outlet**

$$= \text{Area of Curve Polygon}(C_2 D D_1) + \text{Area of rectangle } (C C_1 D_2 D_1)$$

Area of Curve Polygon(C<sub>2</sub> D D<sub>1</sub>)

$$\begin{aligned} &= \{(r_1 \times r_2) - (\pi \times r_1 \times r_2)/4\} \\ &= \{(13.0m \times 13.0m) - (3.14 \times 13.0 \times 13.0/4)\} \\ &= (169.0 - 132.665) \text{ SqM} \\ &= 36.34 \text{ SqM} \end{aligned}$$

Area of rectangle (C C<sub>1</sub> D<sub>2</sub> D<sub>1</sub>)

$$\begin{aligned} &= \{ \text{Length(m)} \times \text{width(m)} \} \\ &= (11.50m \times 19.36m) \\ &= 222.64 \text{ SqM} \end{aligned}$$

So, Area of Exit approach from retail outlet = (36.34 + 222.64) SqM = 258.98 SqM

### **Total Proposed Protected Forest Area for Diversion**

$$= 258.98 \text{ SqM (Entry)} + 232.32 \text{ SqM (Forest Area B/W Entry & Exit)} + 258.98 \text{ SqM (Exit)}$$

$$= 750.28 \text{ Sqm}$$

$$= 0.075028 \text{ Ha.}$$

### **Non-Forest Land/Private Land Area as per Layout Plan**

= Retail outlet Private Land area = area of parallelogram = {base(m) x height(m)}

$$= (35.0m \times 35.0m) = 1225.0 \text{ SqM}$$

$$= 0.1225 \text{ Ha.}$$

*3/8/21*  
*Ashish Kumar Sharma*  
(Authorized Signatory)