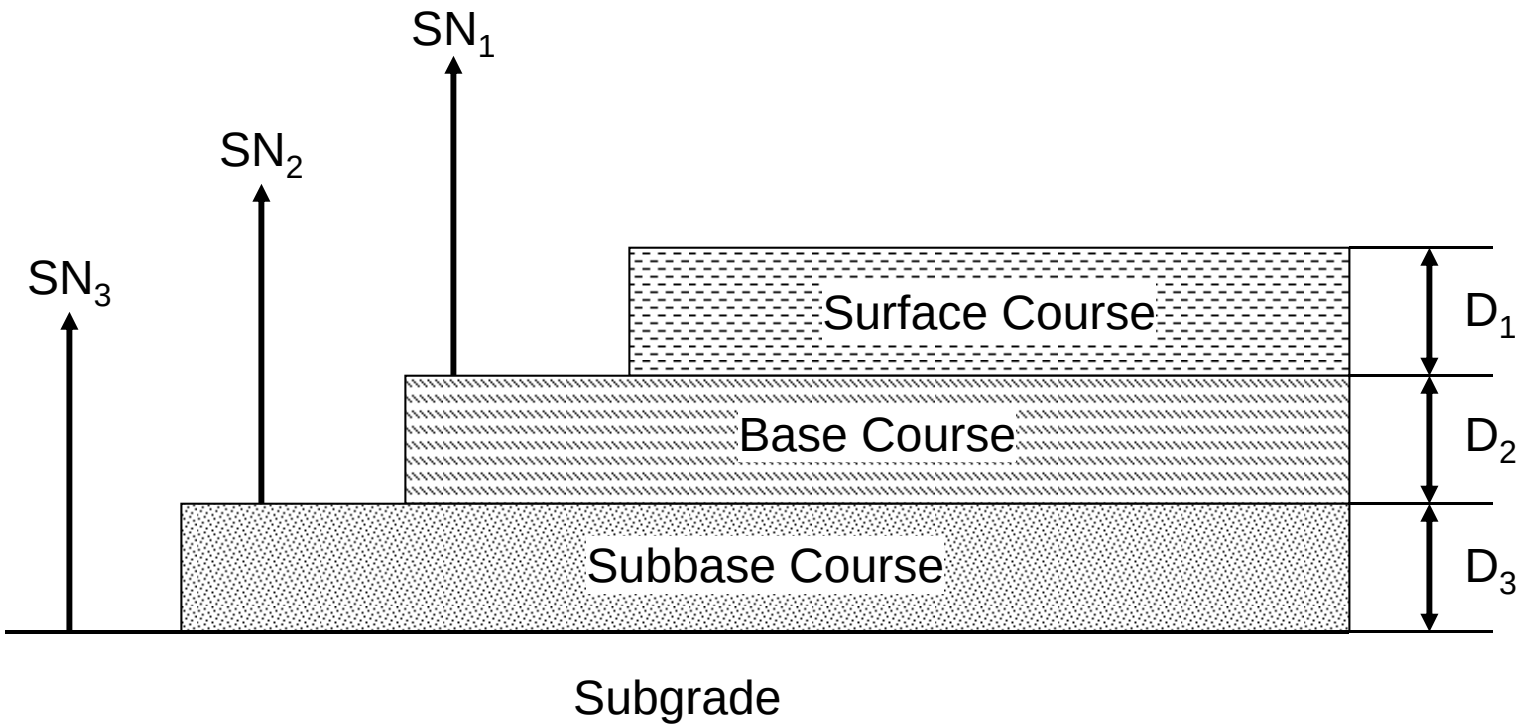
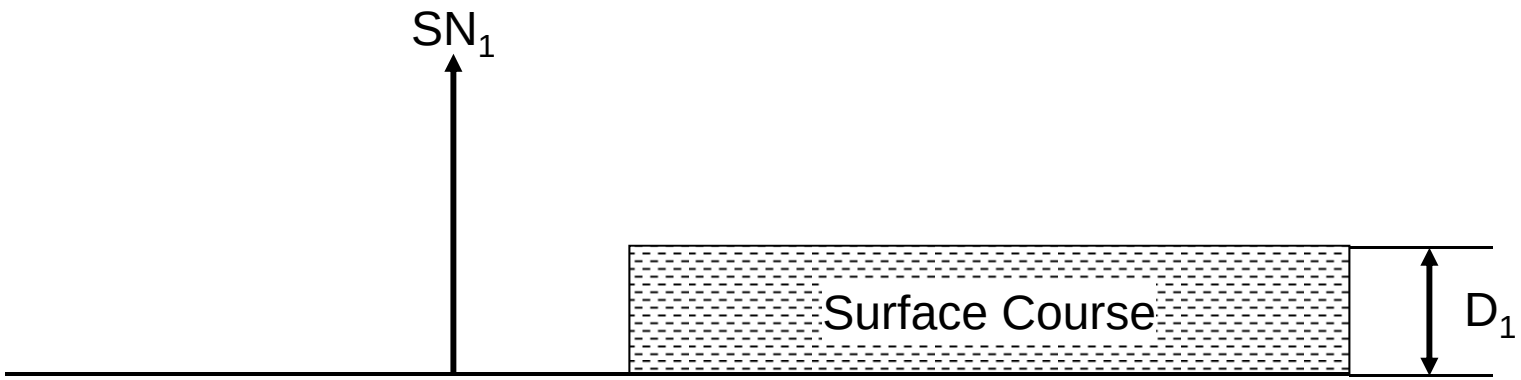
Structural Design



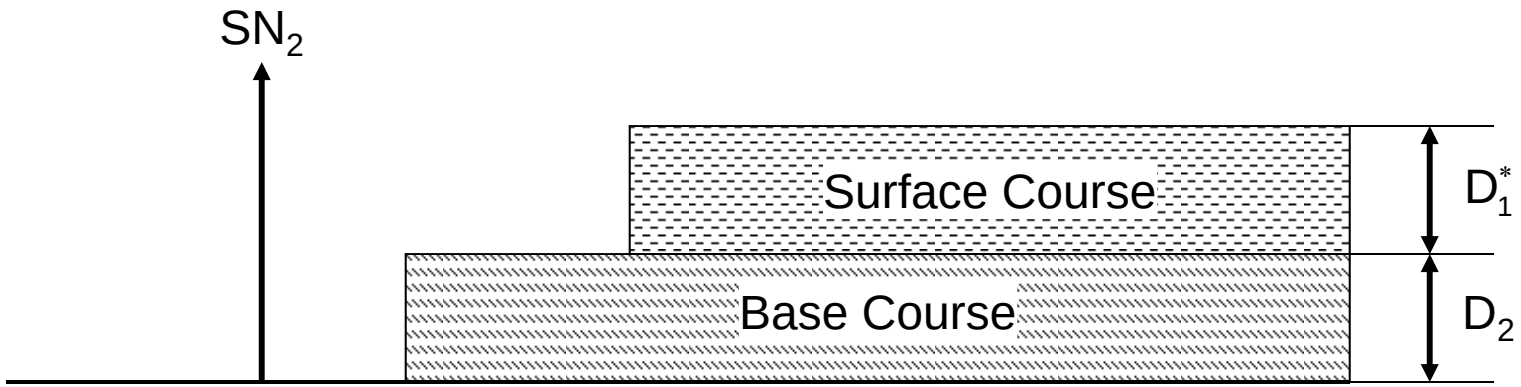
Structural Design



$$a_1 D_1^* \geq SN_1 \quad \Rightarrow \quad D_1^* \geq \frac{SN_1}{a_1}$$

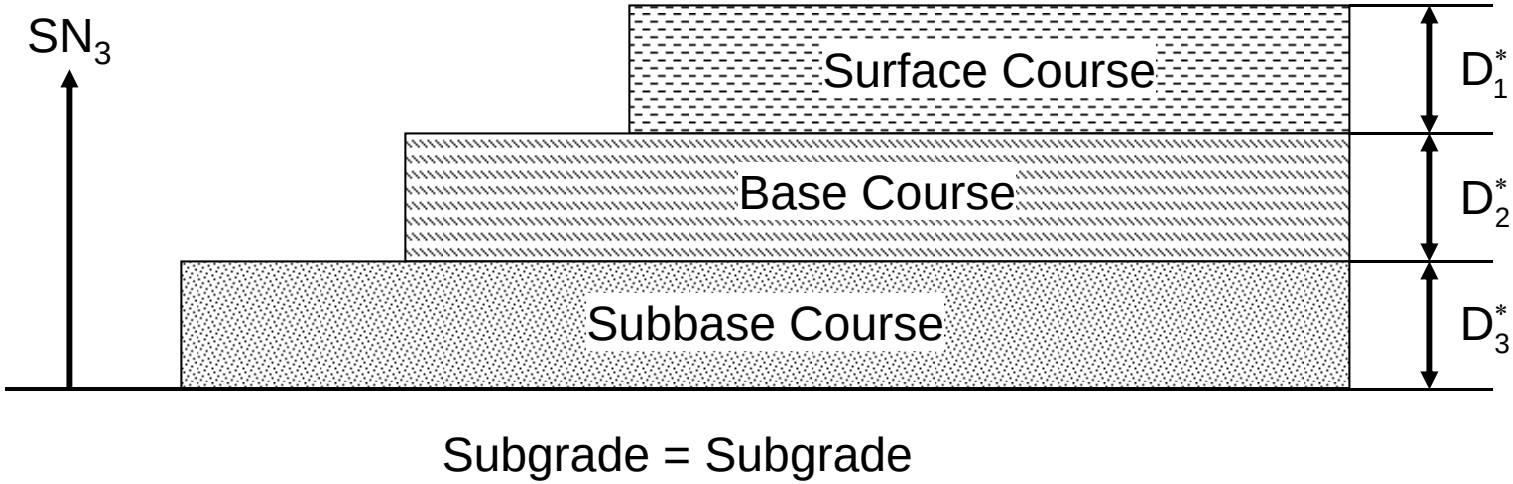
* Denotes actual value used, which is rounded to the nearest ½ inch in thickness

Structural Design



$$a_1 D_1^* + a_2 D_2^* \geq SN_2 \quad \Rightarrow \quad D_2^* \geq \frac{SN_2 - a_1 D_1^*}{a_2}$$

Structural Design



$$a_1 D_1^* + a_2 D_2^* + a_3 D_3^* \geq SN_3 \quad \Rightarrow \quad D_3^* \geq \frac{SN_3 - a_1 D_1^* - a_2 D_2^*}{a_3}$$

Minimum Thicknesses

ESALs	Asphalt Concrete	Aggregate Base
Less than 50,000	1.0	4
50,001 to 150,000	2.0	4
150,001 to 500,000	2.5	4
500,001 to 2,000,000	3.0	6
2,000,001 to 7,000,000	3.5	6
Greater than 7,000,000	4.0	6