Freeman Logistics
48th Avenue East
T-8565
9/28/2023
HMA and CRB

ESAL=	50000
Reliability=	90
Z_R (see table for value)	-1.282
Std Deviation=	0.45
Resilient Modulus=	9000
Present Serviceability=	3.5
Terminal Serviceability=	2
Delta Servicability=	1.5
Structural Number (SN)=	**1.98**

Reliability x Std. Dev	-0.5769
Log of Delta Serviceability	-0.255272505
Log of Resilient Modulus	9.173842622
log of SN+1	0.474216264
.4+SN+1^5.19	4.182987545

Log of ESAL	4.70	4.70	This is an interative process. Continue adjusting SN until these two numbers are nearly equivalent.

Section Design

Layer Coefficient	Drainage Coeffecient	Layer Thickness	Section SN
0.5	1	3	1.5
0.3	1	0	0
0.13	1	4	0.52
0.2	1	0	0

SN =	2.02	OK

ESAL=	50000
Reliability=	90
Z_R (see table for value)	-1.282
Std Deviation=	0.45
Resilient Modulus=	9000
Present Serviceability=	3.5
Terminal Serviceability=	2
Delta Servicability=	1.5
Structural Number (SN)=	**1.98**

Reliability x Std. Dev	-0.5769
Log of Delta Serviceability	-0.255272505
Log of Resilient Modulus	9.173842622
log of SN+1	0.474216264
.4+SN+1^5.19	4.182987545

Log of ESAL	4.70	4.70

This is an interative process. Continue adjusting SN until these two numbers are nearly equivalent.

Section Design

Layer Coefficient	Drainage Coeffecient	Layer Thickness	Section SN
0.5	1	5	2.5
0.3	1	0	0
0.13	1	0	0
0.2	1	0	0

SN = 2.5 OK