

OGFC MIX DESIGN REPORT

1.0 MATERIAL PROPERTIES

A. Proposed Aggregate Proportions (by weight)

B. Proposed Job-Mix Gradation (percent passing)

Aggregate Sources

<u>Sieve Size</u>	<u>Specification limit</u>	_____	_____	_____	<u>Job-Mix Formula</u>
1/2"	100	_____	_____	_____	_____
3/8"	95 - 100	_____	_____	_____	_____
#4	30 - 50	_____	_____	_____	_____
#8	5 - 15	_____	_____	_____	_____
#16		_____	_____	_____	_____
#200	2 - 5	_____	_____	_____	_____

C. Specific Gravity - Unit Weight

<u>COARSE AGGREGATE</u>	<u>Aggregate Sources</u>	<u>JMF</u>
(Retained No. 8 Sieve) Bulk Sp. Gr. (SG _b)	_____	_____
Bulk Solid Unit Weight (U _x) where U _x = 62.4(SG _b)	_____	_____ pcf
<u>FINE AGGREGATE</u>		
(Passing No. 8 Sieve) Bulk Sp. Gr. (SG _b)	_____	_____
Bulk Solid Unit Weight (U _x) where U _x = 62.4(SG _b)	_____	_____ pcf
<u>PREDOMINANT AGGREGATE</u>		
(Passing 3/8" - Retained No. 4 Apparent Sp. Gr. (Sg _a))	_____	_____
<u>ASPHALT BINDER</u>		
Specific Gravity @ 77.0° F.	_____	_____
Unit Weight (U _a)	_____	_____

2.0 ASPHALT CONTENT

Percent Oil Retained	POR	=	_____
Surface Capacity	K _c	=	_____
Asphalt Content	AC _{jmf}	=	___% wt aggr

3.0 VOID CAPACITY

A. Void Capacity of Coarse Aggregate

Vibrated Unit Weight X = _____ pcf

Voids Coarse Aggregate VCA = _____ %

B. Optimum Fine Aggregate Content

Where:

X = _____ pcf VCA = _____ %

U_r = _____ pcf V = 15 %

U_a = _____ pcf AC_{jmf} = _____ %

Specs. Limit 5 < Y < 15 Y = _____

4.0 OPTIMUM MIXING TEMPERATURE

<u>Asphalt Grade</u>	<u>Viscosity (cSt)</u>	<u>Temperature(°F)</u>	<u>Observed Drainage</u>
_____	600	_____	_____
_____	700	_____	_____
_____	800	_____	_____
_____	900	_____	_____
_____	1000	_____	_____
Target Mixing Temperature			_____ °F

5.0 RESISTANCE TO EFFECTS OF WATER

(AASHTO T 165 & T 167, 2000 psi)

Air Dry Strength = _____ psi

Wet Strength = _____ psi (4 Days @ 120° F)

Retained Strength = _____ % (50% Minimum)

6.0 DESIGN SUMMARY

Aggregate Proportions (by Weight)

JMF Gradation (percent passing)

<u>Sieve Size</u>	<u>JMF</u>
1/2"	_____
3/8"	_____
No. 4	_____
No. 8	_____
No. 16	_____
No. 200	_____

Asphalt Grade _____

Asphalt Additives _____

Asphalt Content = _____ % wt aggr

= _____ % wt mix

Mixing Temperature Range _____ to _____ °F

REMARKS:

Mix Design Recommendation

Accepted ___ Rejected ___