U.S. Department of Transportation
Federal Highway Administration
Federal Lands Highway Office

WORKSHEET FOR A HVEEM ASPHALT CONCRETE MIX DESIGN AASHTO T 246

Project: _____ Date: _____

Contractor: _____ Class of mixture: _____

Asphalt supplier: _____ Grade of asphalt: _____

Sources for : Aggregates: _____ , Mineral filler: _____

Admixtures: _____ , _____

Testing laboratory name: _____ Phone: _____

Testing performed by: _____

Testing reported by: _____

SUMMARY OF THE PROPOSED JOB-MIX-FORMULA

1. Percent asphalt by mass of total mix[1] _____
2. Percent asphalt by mass of aggregate _____
3. Air voids _____
4. Voids in mineral aggregate (VMA) _____
5. Maximum specific gravity (AASHTO T 209) _____
6. Recommended plant mixing temperature, ºC _____
7. Effective specific gravity of aggregate _____
8. Stabilometer value (AASHTO T 246) _____
9. Specific gravity of asphalt _____
10. Specific gravity of mineral filler _____
11. Dust/asphalt ratio _____
12. Immersion compression test results:
    a. Dry strength, kPa _____
    b. Wet strength, kPa _____
    c. Index of retained strength, % _____

GRADATION TARGET VALUES AND ALLOWABLE DEVIATIONS			SPECIFIC GRAVITY AND ABSORPTION			CKE
Sieve Sizes	Target Value[2] % by Mass Passing	Allowable Deviation[3] %		Fine Aggregate (AASHTO T 84)	Coarse Aggregate (AASHTO T 85)	Centrifuge Kerosene Equivalent (AASHTO T 270)
_____	_____		Bulk SG	_____	_____	Surface Area: _____ m²/kg
_____	_____					
_____	_____	_____	Bulk SSD SG	_____	_____	
_____	_____	_____				
_____	_____	_____	Apparent SG	_____	_____	Asphalt % by CKE: _____ %
_____	_____	_____				
_____	_____	_____	Absorption	_____%	_____%	
_____	_____	_____				
_____	_____	_____				

[1] Asphalt cement content (percent by mass of mix) shall be established to the nearest 0.01 percent.
[2] Target values to be established by the contractor as part of the JMF. Target value shall be established to the nearest 0.1 percent.
[3] Allowable deviations plus or minus from established target values.

WORKSHEET FOR A HVEEM ASPHALT CONCRETE MIX DESIGN (Continued)

	Stockpile Description	Quantity Represented	Blend Ratio
Stockpile A	_____	_____	_____ %
Stockpile B	_____	_____	_____ %
Stockpile C	_____	_____	_____ %
Stockpile D	_____	_____	_____ %
Stockpile E	_____	_____	_____ %

Stockpile Gradation

Sieve Size	Stockpile A _____ %	Stockpile B _____ %	Stockpile C _____ %	Stockpile D _____ %	Stockpile E _____ %	Blended Stockpile Gradation	Target Values	Specification Limits
_____								100.0
_____								97.0 - 100.0
_____								
_____								
_____								
_____								
_____								
_____								
_____								

Remarks: _____

WORKSHEET FOR A HVEEM ASPHALT CONCRETE MIX DESIGN (Continued)

Trial Number[1]	1			2			3		
% Asphalt by mass of total mix									
% Asphalt by mass of aggregate									
Specimen height in millimeters									
Stabilometer value									
Bulk specific gravity									
Bulk unit mass (kg/m³)									
Max. specific gr. (AASHTO T 209)									
Max. unit mass (AASHTO T 209)									
Dust/asphalt ratio									
% Air voids									
Voids in mineral aggregate (VMA)									

Trial Number[1]	4			5			6		
% Asphalt by mass of total mix									
% Asphalt by mass of aggregate									
Specimen height in millimeters									
Stabilometer value									
Bulk specific gravity									
Bulk unit mass (kg/m³)									
Max. specific gr. (AASHTO T 209)									
Max. unit mass (AASHTO T 209)									
Dust/asphalt ratio									
% Air voids									
Voids in mineral aggregate (VMA)									

[1] Three test trials are required for each asphalt content.

Test Results for Each of the Individual Immersion Compression Test Specimens

Percent asphalt cement: _____

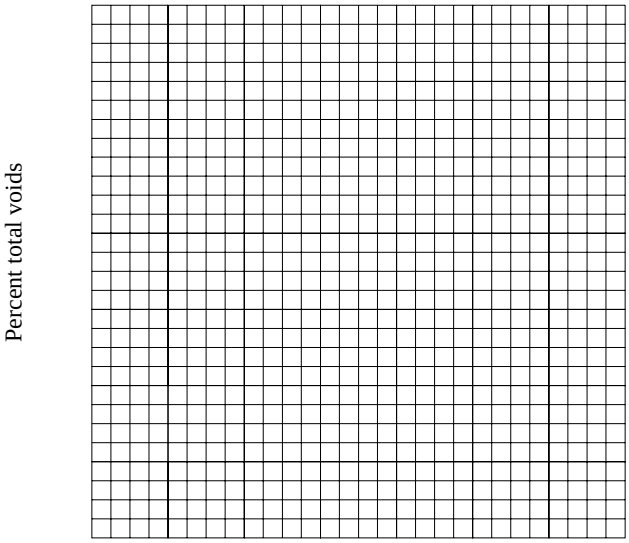
Specimen ID		Specimen Height (mm)		Bulk Specific Gravity		Air Voids (%)		Compressive Strength (kPa)	
Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet
			Averages						

Index of retained strength: _____ %

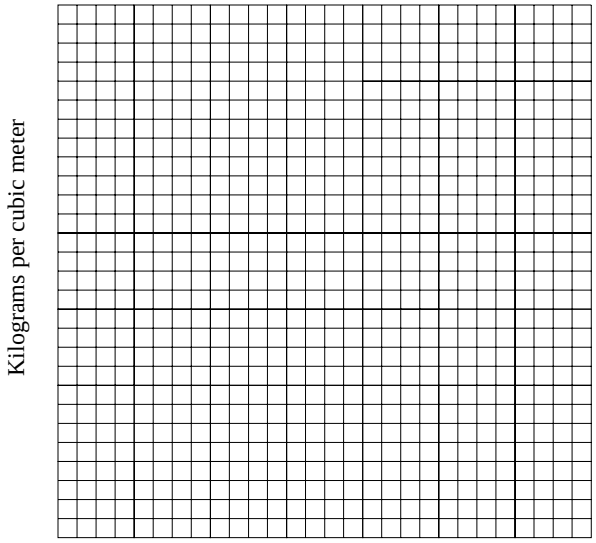
WORKSHEET FOR A HVEEM ASPHALT CONCRETE MIX DESIGN (Continued)

Design Curves for Proposed Job Mix Formula (JMF)

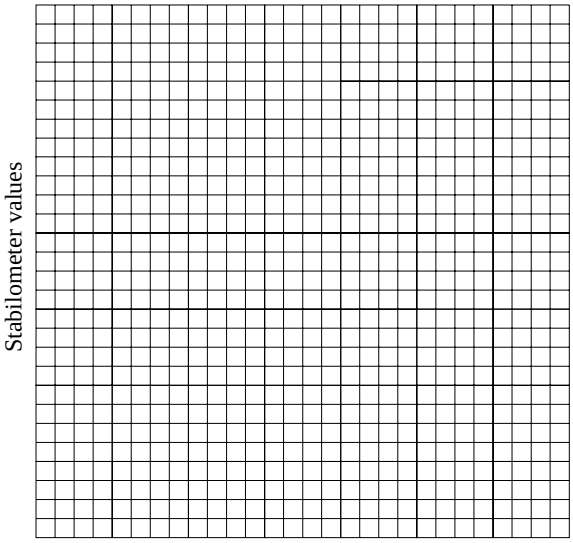
AIR VOIDS



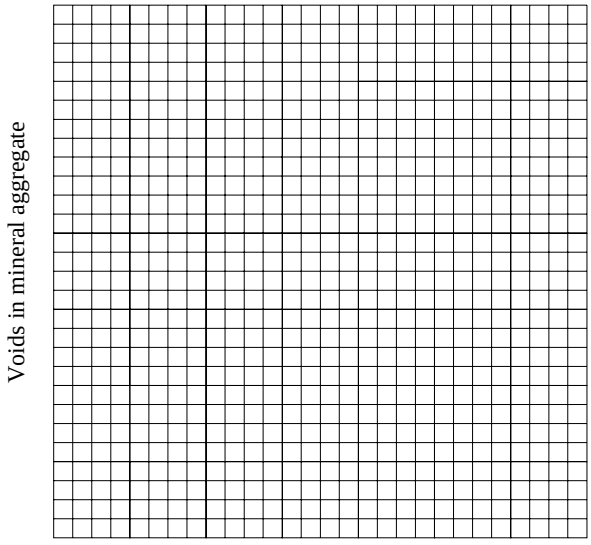
UNIT MASS



STABILOMETER



VMA



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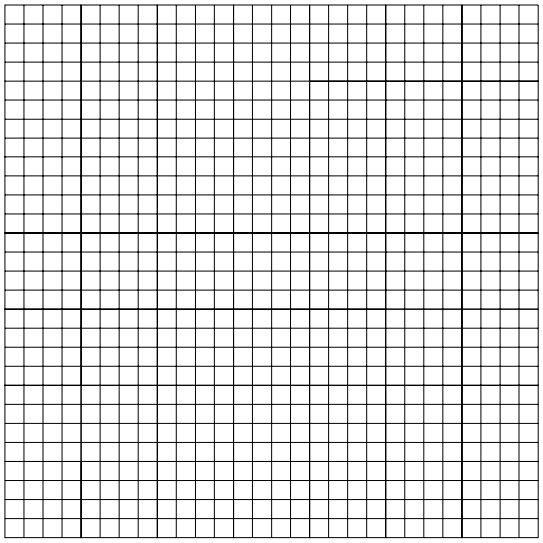
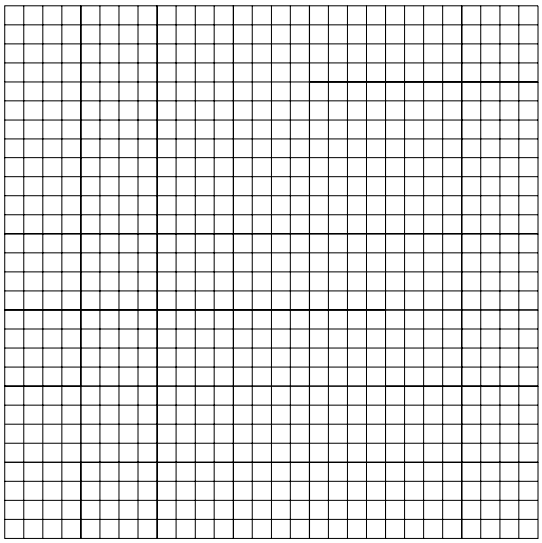
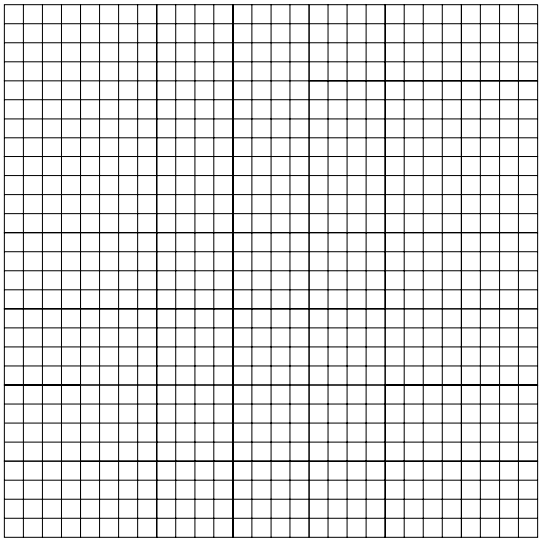


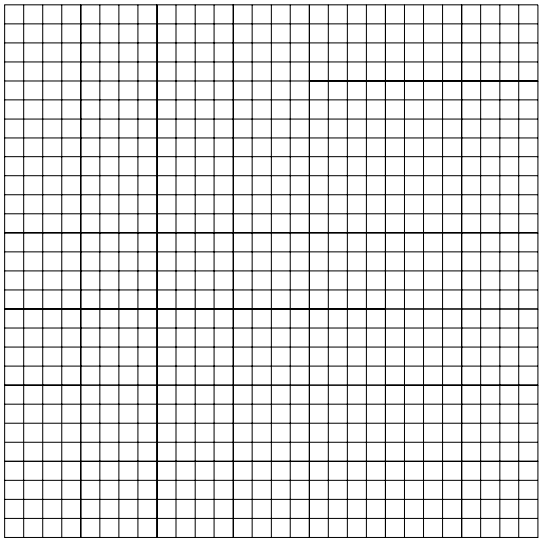
% Asphalt cement



% Asphalt cement



% Asphalt cement



% Asphalt cement