



ITALIAN-THAI DEVELOPMENT PUBLIC CO.,LTD.

**TEST REPORT
FOR
COMPACTED DENSITY OF MIX AGGREGATE ASTM D-1559**

PROJECT : _____ LAB TEST NO. : _____
OWNER : _____ SAMPLING DATE : _____
ENGINEER : _____ TESTING DATE : _____
CONTRACTOR : _____ FINISHED DATE : _____
CONTRACT NO. : _____ TESTED TIME : _____

SPECIMEN NO.	% AC BY WT. OF MIX A	BULK DENSITY OF SPECIMEN B	COMPACTED DENSITY OF MIX AGG. $B \times (100-A)/100$	AVERAGE COMPACTED DENSITY OF MIX g/cc.

REMARK : _____

ITALIAN-THAI

NAME : _____ NAME : _____
DATE : _____ DATE : _____



ITALIAN-THAI DEVELOPMENT PUBLIC CO.,LTD.

**LABORATORY REPORT
FOR
ASPHALTIC CONCRETE AGGREGATE COMBINATION ASTM D-448,D-1073**

PROJECT : _____
OWNER : _____
ENGINEER : _____
CONTRACTOR : _____
CONTRACT NO. : _____

REPORT NO. : _____
DATE : _____
COMBINED BY : _____

HOT BINS

COLD BINS

SIEVE SIZE	BIN 1		BIN 2		BIN 3		BIN 4		BLENDED	JMF	JMR	SPEC LIMIT
	GRADE	% USED	GRADE	% USED	GRADE	% USED	GRADE	% USED				
37.50 MM.												
25.00 MM.												
19.00 MM.												
9.50 MM.												
4.75 MM.												
2.38 MM.												
1.18 MM.												
600 MICRON												
300 MICRON												
150 MICRON												
75 MICRON												

REMARK :

ITALIAN-THAI

NAME : _____

NAME : _____

DATE : _____

DATE : _____



ITALIAN-THAI DEVELOPMENT PUBLIC CO.,LTD.

LABORATORY FOR ASPHALT

THEORETICAL MAXIMUM SPECIFIC GRAVITY AASHTO T-209

PROJECT : _____ LAB TEST NO. : _____
OWNER : _____ SAMPLING DATE : _____
ENGINEER : _____ TESTING DATE : _____
CONTRACTOR : _____ TESTED BY : _____
CONTRACT NO. : _____

DETERMINATION NO.	1	2	3	4
A. % AC. BY WT. OF TOTAL MAX %				
B. WT. OF CONTAINER + DRY SAMPLE IN AIR gm.				
C. WT. OF CONTAINER gm.				
D. WT. OF DRY SAMPLE (B-C) IN AIR gm.				
E. WT. OF BOWL + SAMPLE IN WATER AFTER EVACUATION gm.				
F. WT. OF BOWL IN WATER gm.				
G. WT. OF SAMPLE (E-F) IN WATER gm.				
H. THEOR. MAX. Sp. Gr., Gm. $\frac{D}{D-G}$				
I. VIRTUAL Sp. Gr., Gv. $\frac{100-A}{\frac{100-A}{Gm} + \frac{A}{Gac}}$				
J. BULK Sp. Gr. OF MIX Agg., Gagg				
K. ASPHALT LOST BY ABSORPTION $100\% \frac{GV - Gagg}{GV} \times Gac$				

REMARKS :

ITALIAN-THAI

NAME :

NAME :

DATE

DATE



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**TEST REPORT
FOR
QUANTITATIVE EXTRACTION OF BITUMEN
FROM BITUMINOUS PAVING MIXTURE ASTM D2172**

PROJECT : _____ LAB TEST NO. : _____
OWNER : _____ TESTING DATE : _____
ENGINEER : _____ TESTED BY : _____
CONTRACTOR : _____
CONTRACT NO. : _____

DETERMINATION NO.	1	2
WT. OF BOWL + ASPHALTIC CONCRETE -gm. A		
WT. OF BOWL -gm. B		
WT. OF ASPHALTIC CONCRETE -gm. A-B C		
WT. OF BOWL + EXTRACTED AGG. -gm. D		
WT. OF BOWL -gm. E		
WT. OF EXTRACTED AGG. -gm. D-E F		
WT. FILTER AFTER EXTRACTED -gm. G		
WT. FILTER BEFORE EXTRACTED -gm. H		
WT. OF FILLER FILTER -gm. G-H I		
VOL OF BITUMEN SOLUTION -ml. J		
VOL OF SAMPLE FOR IGNITION -ml. K		
WT. OF DISH + ASH -gm. L		
WT. OF DISH -gm. M		
WT. OF ASH IN (K) -gm. L-M N		
WT. OF ASH IN (J) -gm. NxJ/K O		
BITUMEN CONTENT -% C-F-I-O/C		
AVERAGE BITUMEN CONTENT -%		

NOTE : ALL SPECIMEN ARE ACCEPTABLE AND CONFORMED TO ASTM. D2172

REMARKS

ITALIAN-THAI

NAME : _____

NAME : _____

DATE : _____

DATE



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**PRODUCTION CONTROL
FOR
ASPHALTIC CONCRETE LABORATORY REPORT**

Project : _____ Sample No. : _____
 Owner : _____ Testing Date : _____
 Engineer : _____ Sampling Time : _____
 Contractor : _____ Asphaltic Concrete Type : _____
 Contract No. : _____ Temp. of Asphalt Cement : _____
 Temp. of Aggregate : _____

Test Result Daily		Mix Proportion		
Marshall Stability	kg.	Material	% Used	Kg.
Flow	mm.	Hot Bin 1		
Air Voids	%	Hot Bin 2		
Voids Filled with Asphalt	%	Hot Bin 3		
Voids in Mineral Aggregate	%	Hot Bin 4		
Bitumen Content	%	Total Agg.		
		Asphalt		
		Mix Total		

Sieve Analysis		
Sieve Size mm. (inch)	% Passing	Specification Limit
25 (1")		
20 (3/4")		
12.7 (1/2")		
9.5 (3/8")		
4.75 (#4)		
2.38 (#8)		
1.18 (#16)		
600 micron (#30)		
300 micron (#50)		
150 micron (#100)		
75 micron (#200)		

ITALIAN-THAI

NAME : _____

NAME : _____

DATE : _____



ITALIAN-THAI DEVELOPMENT PUBLIC CO.,LTD.

**TEST REPORT
FOR
DETERMINATION OF OPTIMUM ASPHALT CONTENT**

Project : _____	Lab Test No. : _____
Owner : _____	Sampling Date : _____
Engineer : _____	Testing Date : _____
Contractor : _____	Finished Date : _____
Contract No. : _____	Tested Time : _____

<u>TEST PROPERTY</u>	<u>CRITERIA</u>	<u>% AC.</u>	<u>PROPERTY VALUE</u>
Density g/cc	_____	_____	_____
Stability lbs.	_____	_____	_____
Flow 0.01 inch	_____	_____	_____
Ratio Marshall Stability / Flow	_____	_____	_____
_____ % Air Voids	_____	_____	_____
_____ % VFA	_____	_____	_____
_____ % VFB	_____	_____	_____
Strength Index	_____	_____	_____
Optimum Asphalt Content	_____	_____	_____

Remarks : _____

Italian-Thai

Name : _____

Date : _____

Name : _____

Date : _____



SIEVE ANALYSIS FINENESS MODULUS AND SAND EQUIVALENT

File No. : _____
Sample No. : _____
Location : _____
Description : _____
Material To be Used for : _____

Lar Test No. : _____
Report No. : _____
Semple by : _____
Date Test : _____
Tested by : _____

Sand Equivalent

Sand reading : _____ Wt. Dry Sample : _____ g Befor washing.
May reading : _____ Wt. Dry Sample : _____ g After washing.
S.E.% : _____ Loss by washing : _____ g _____ %
Loss by aieving : _____ g _____ %
Total Loss : _____ g _____ %

Grain Size Analysis

Sieve mm.	Size Inch	Wt. Retained g	Wt. Cumulative Retained (g)	Percent Retained (g)	Precent Passing %	Spec.
75	3					
63	2 1/2					
50	2					
37.5	1 1/2					
25	1					
19	3/4					
12.5	1/2					
9.5	3/8					
4.75	No. 4					
2.36	No. 8					
2	No. 10					
1.18	No. 16					
0.600	No. 30					
0.425	No. 40					
0.300	No. 50					
0.150	No. 100					
0.075	No. 200					
PAN						
TOTAL						

Signature
Italian - Thai

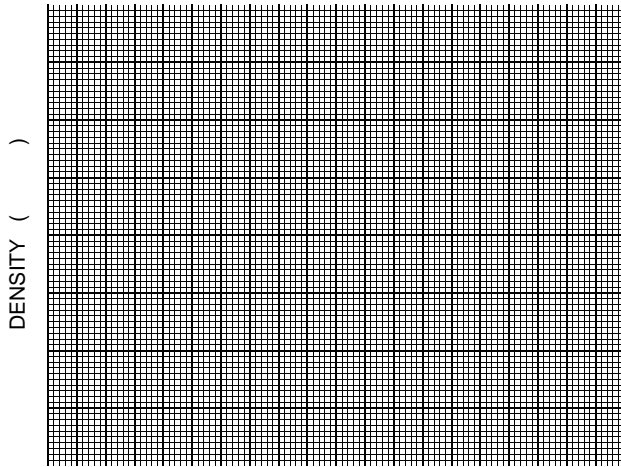
Name _____
Date _____

Signature
Engineer

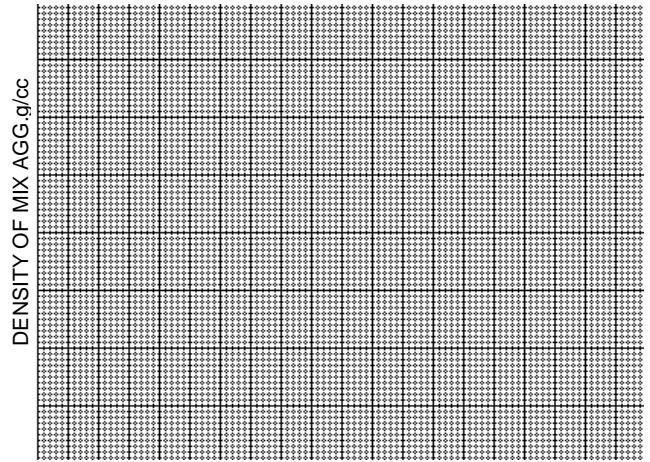
Name _____
Date _____

TEST PROPERTY CURVE FOR HOT-MIX DESIGN

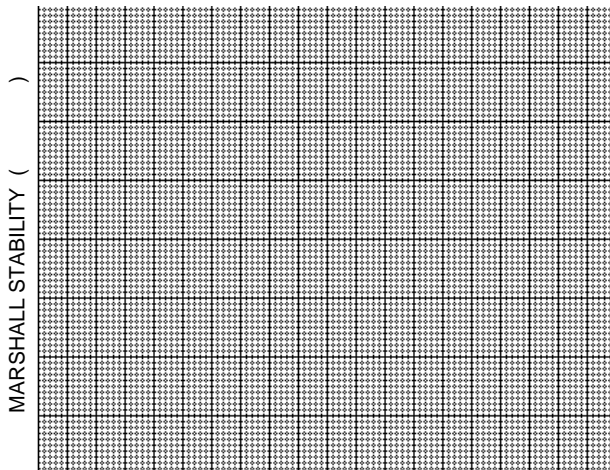
MARSHALL METHOD



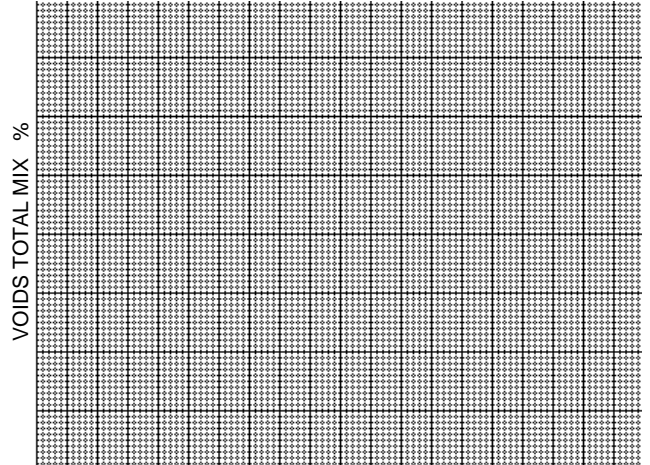
% AC. BY WT. OF MIX.



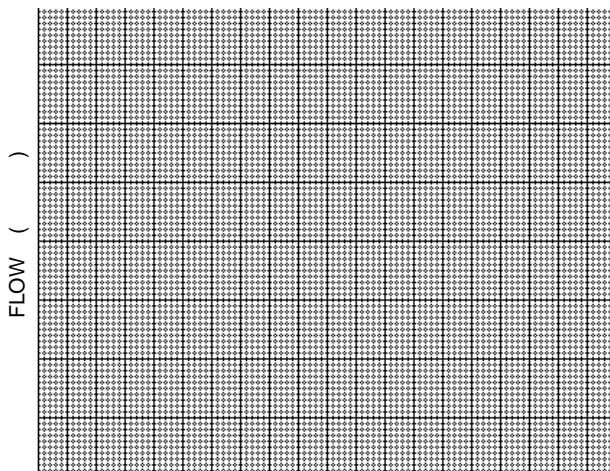
% AC. BY WT. OF MIX.



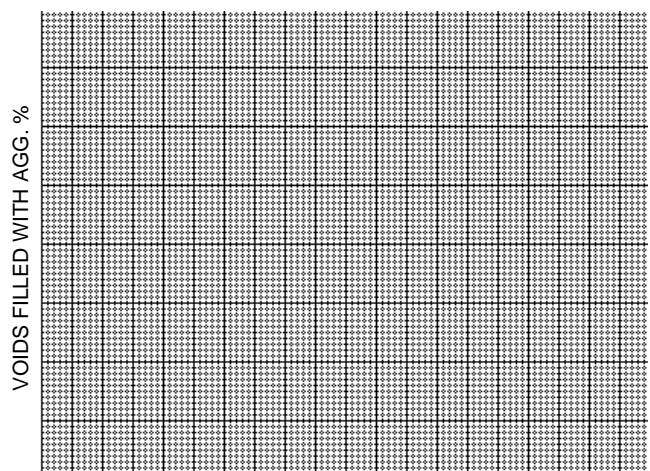
% AC. BY WT. OF MIX.



% AC. BY WT. OF MIX.



% AC. BY WT. OF MIX.



% AC. BY WT. OF MIX.



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GRAIN SIZE ANALYSIS BY SIEVING. (BS 1377, ASTM D422)

File No. :

Report No. :

Sample :

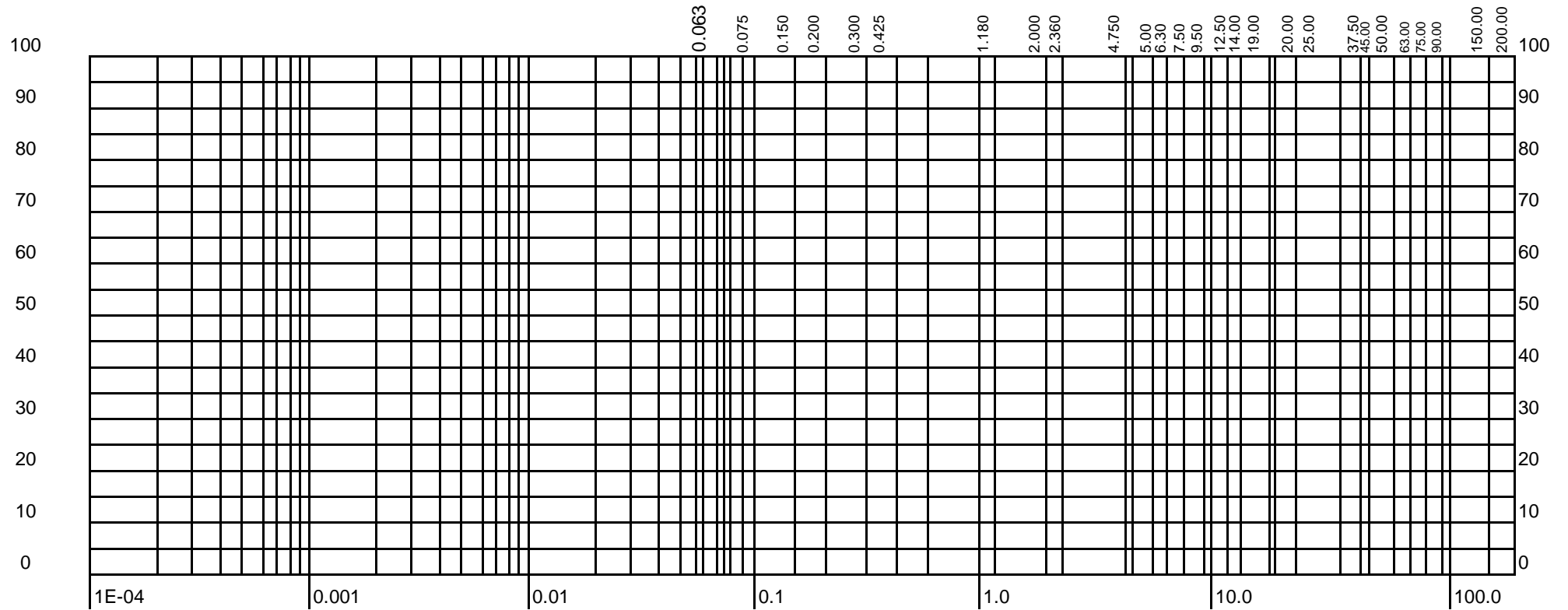
Description

Location :

Materials to be Used Date :

Date :

Tested By :



CLAY	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	COBBLES
	SILT			SAND			GRAVEL			

RESULT : GRADE.....FM.....CLAY,SILT AND DUST CONTENT.....

Flaidness Index.....Elongation.....Shall Content.....