Pradhan Mantri Gram Sadak Yojana

Quality Control Register Part 1

Record of Tests

State:
District:
Programme Implementation Unit:

Package Number:
Name of Work:
Register From km. …… to km. …….
Total Volumes of this Register:
This Volume Number:

Prescribed By:

National Rural Roads Development Agency
(An Agency of the Ministry of Rural Development**)**
Government of India, New Delhi

National Rural Roads Development Agency
(*An Agency of the Ministry of Rural Development***)**
Government of India, New Delhi

Quality Control Register Part 1

Record of Tests

Contents

Quality Control Register Part 1

Record of Tests

Fly Sheet

State:

District:

Block:

Package Number:

Name of Road	:	
Length (km)	:	
Contract Amount (Rs.)	:	
Construction Contractor (Name & Address)	:	
Date of Commencement of Work	:	
Stipulated Date of Completion		
(a) As per Agreement	:	
(b) As Revised & Agreed	:	
Project Implementation Unit (Address)	:	
Laboratory Incharge (Name)	:	
This Register	:	From km._____ to km. _____

Instructions for
Maintaining Quality Control Registers

Rural Roads Manual, Special Publication 20, Indian Roads Congress, New Delhi 2002 Para 10.11 provides for recording of the Data in the prescribed forms; therefore, this Register will be maintained for each Road. The guidelines for maintenance of this Register are as follows:

1. The Quality Control Register will be maintained in **two Parts**. The **first Part** will be **Quality Control Register Record of Tests** and the **Second Part** will be the **Record of Abstract of Quality Control Tests and Non Conformance Report Register**.

a. The first Part of the Register is the Register of all Quality Control Tests conducted by the person who is responsible for the basic Quality Control Testing; therefore, the first Part of the Register will be maintained by the person who is responsible for the basic Quality Control tests. If there is a provision of Quality Control by contractor in the Tender Document, the Quality Control Register will be issued to the contractor for every Road Work but if the responsibility of the basic Quality Control Tests is with the Department, the Register will be issued to the in charge officer of the basic Quality Control Testing of work not below the rank of Junior Engineer/sub Engineer.

This Register will always be available at the work site. If some tests are required to be conducted in the laboratory which is situated away from the work, the prescribed format of the test conducted will be duly fill up on a separate sheet and this sheet will be pasted on the space prescribed for that test but the register will not be taken away from the site in any case.

This Register contains forms for tests sufficient to accommodate quantities given in Appendix 12.2 of the Rural Roads Manual for a length of Road up to 3 km. If the quantities (ies) or the item(s) in the work are more, additional forms required as per the prescribed frequency may be added at the end of the Register and the corresponding entries should be done in the abstract. In case the quantities (ies) or the item(s) in the work are less, the forms may be left blank and the corresponding note may be recorded in the abstract. If the length of the Road is more then 3 km, additional Register(s) should be maintained. The first part of the Register will has following three Sections:

Section 1: Earthwork

Section 2: Granular construction

Section 3: Bituminous construction

b. The Second Part of the Register is the Record of abstract of the Tests conducted and Non conformance reports; therefore, will be maintained by the site in charge officer not below the rank of Assistant Engineer.

If the test results do not confirm to the prescribed limits, a Nonconformance Report (NCR) in the Format Prescribed in this Register will be issued to the Contractor.

2. The Quality Control (QC) Register will be issued in the same manner as the Measurement Book is issued to the work. Every register should be page numbered and no page should be removed. The Register of issue of the Quality Control Register will be maintained by the Head of the PIU.

3. In case of Hill Roads, where the work of formation cutting may be executed, all the tests shown in the Earthwork Section may not be required but the tests for CBR and Compaction will be required in such cases also, the formats will be left blank in such cases.

4. How to Fill up Register Part 1:

a. Filling up the Test Format- Take sample as per specifications and complete the basic entries of the Register like Sample Number, Reference of Road/Section from where the sample has been taken etc. Subject the sample for testing and enter the Date of Testing and other relevant details at the prescribed places.

i. Enter the test Results at specified places and compare with the results with the prescribed limits. If the test results conform to the prescribed limits, the corresponding entry should be done and the work should be allowed to continue but if the results of the tests don't conform to the prescribed limits, the work should not be allowed to be continued and a Non Conformance Report (NCR) should be issued by the officer in-charge of the work.

ii. The compliance of the instructions given in the NCR should be ensured and again the test should be repeated. The work should be allowed to continue only after the Test results confirm to the prescribed limits.

b. Filling up the Format of the Abstract of Tests Conducted –

i. Columns 1 to 5 are self explanatory.

ii. The reference of the page number of the Part two of the Register on which the office copy of the Non Conformance Report (NCR) is preserved should be entered along with the Date of issue of the NCR in the column number 6 of the abstract.

iii. The Date of compliance reported by the contractor should be entered in this column.

iv. The reference of the page number on which the repeat test (which qualifies) record is maintained should be given in this column.

v. The basic abstract of the Tests conducted will be maintained in the Part one of the Register but the copy of the abstract will also be maintained in Part two of the Register.

5. How to Fill up Register Part 2 Record of abstract of tests and Non Conformance Reports:

a. Filling up the Abstract of Tests Format- Basic abstracts of the tests conducted will be maintained in the First Part of the register but the same abstract will also be maintained in Part two and it will be the Responsibility of officer incharge to update this abstract once in every week (Generally on every Saturday of the Week).

b. Issuance of Non Conformance Reports- The Register contains one perforated copy of the NCR and one office copy, as soon as the incidence of non conformance of any test occurs, it will be the responsibility of the person responsible for the basic Quality Control Testing to inform to the officer in charge of the work. The officer in charge of the work will immediately issue a Non Conformance Report to the contractor and the office copy will be retained in this Register.

Thereafter, the Contractor needs to rectify the deficiencies and return the NCR after due compliance for approval/acceptance of the PIU.

Pradhan Mantri Gram Sadak Yojana

Quality Control Register Part 1

Record of Tests

Section -1 Earth Work

Quality Control Register Part 1
Record of Tests :Section-1 Earthwork
Abstract of tests Conducted

Test No.	Name of Test	Test No.	Date of Test	Result, Qualified (Yes/No)	If No , Page No and Date of NCR	Page No & Date on which Test Qualified
1	2	3	4	5	6	8
EW-1	Soil gradation	Test 1				
		Test 2				
		Test 3				
		Test 4				
		Test 5				
		Test 6				
		Test 7				
		Test 8				
		Test 9				
EW-2	Atterberg limits	Test 1				
		Test 2				
		Test 3				
		Test 4				
		Test 5				
		Test 6				
		Test 7				
		Test 8				
		Test 9				
EW-3	Natural moisture content	**Test Table**				
EW-4	Proctor density	Test 1				
		Test 2				
		Test 3				
		Test 4				
		Test 5				
		Test 6				
		Test 7				
		Test 8				
		Test 9				
EW-5	CBR	Test 1				
		Test 2				
EW-(A)	Swelling Index	Test 1				
EW-6	Moisture Content at the time of Compaction	**Test Table**				
EW-7	Thickness	**Test Table**				
EW-8	Field density	Test 1				

Test No.	Name of Test	Test No.	Date of Test	Result, Qualified (Yes/No)	If No , Page No and Date of NCR	Page No & Date on which Test Qualified
1	**2**	**3**	**4**	**5**	**6**	**7**
		Test 2				
		Test 3				
		Test 4				
		Test 5				
		Test 6				
		Test 7				
		Test 8				
ALS-1	Horizontal alignment (Tests as Required)	**Test Table**				
ALS-2	Surface level(Tests as Required)	**Test Table**				
ALS-3	Surface regularity(Tests as Required)	**Test Table**				

Form No. EW-1

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 1

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limits (Percentage of Wt. Passing/ Retained)
40 mm					
25 mm					
20 mm					
10 mm					
4.75 mm					

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)
2.36 mm				
1.18 mm				
600 µ				
425 µ				
75 µ				

Summary of Results

Clay / silt (-75 micron) percent	
Sand (-4.75 mm + 75 micron) percent	
Gravel (-40 mm + 4.75 mm) percent	

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Form No. EW-1

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 2

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limits (Percentage of Wt. Passing/ Retained)
40 mm					
25 mm					
20 mm					
10 mm					
4.75 mm					

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)
2.36 mm				
1.18 mm				
600 µ				
425 µ				
75 µ				

Summary of Results

Clay / silt (-75 micron) percent	
Sand (-4.75 mm + 75 micron) percent	
Gravel (-40 mm + 4.75 mm) percent	

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

m No. EW-1

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 3

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limits (Percentage of Wt. Passing/ Retained)
40 mm					
25 mm					
20 mm					
10 mm					
4.75 mm					

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)
2.36 mm				
1.18 mm				
600 µ				
425 µ				
75 µ				

Summary of Results

Clay / silt (-75 micron) percent	
Sand (-4.75 mm + 75 micron) percent	
Gravel (-40 mm + 4.75 mm) percent	

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Form No. EW-1

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 4

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limits (Percentage of Wt. Passing/ Retained)
40 mm					
25 mm					
20 mm					
10 mm					
4.75 mm					

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)
2.36 mm				
1.18 mm				
600 µ				
425 µ				
75 µ				

Summary of Results

Clay / silt (-75 micron) percent	
Sand (-4.75 mm + 75 micron) percent	
Gravel (-40 mm + 4.75 mm) percent	

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Form No. EW-1

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 5

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limits (Percentage of Wt. Passing/ Retained)
40 mm					
25 mm					
20 mm					
10 mm					
4.75 mm					

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)
2.36 mm				
1.18 mm				
600 µ				
425 µ				
75 µ				

Summary of Results

Clay / silt (-75 micron) percent	
Sand (-4.75 mm + 75 micron) percent	
Gravel (-40 mm + 4.75 mm) percent	

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Form No. EW-1

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 6

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limits (Percentage of Wt. Passing/ Retained)
40 mm					
25 mm					
20 mm					
10 mm					
4.75 mm					

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)
2.36 mm				
1.18 mm				
600 µ				
425 µ				
75 µ				

Summary of Results

Clay / silt (-75 micron) percent	
Sand (-4.75 mm + 75 micron) percent	
Gravel (-40 mm + 4.75 mm) percent	

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 7

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limits (Percentage of Wt. Passing/ Retained)
40 mm					
25 mm					
20 mm					
10 mm					
4.75 mm					

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)
2.36 mm				
1.18 mm				
600 µ				
425 µ				
75 µ				

Summary of Results

Clay / silt (-75 micron) percent	
Sand (-4.75 mm + 75 micron) percent	
Gravel (-40 mm + 4.75 mm) percent	

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 8

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limits (Percentage of Wt. Passing/ Retained)
40 mm					
25 mm					
20 mm					
10 mm					
4.75 mm					

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)
2.36 mm				
1.18 mm				
600 µ				
425 µ				
75 µ				

Summary of Results

Clay / silt (-75 micron) percent	
Sand (-4.75 mm + 75 micron) percent	
Gravel (-40 mm + 4.75 mm) percent	

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Form No. EW-1

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 9

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limits (Percentage of Wt. Passing/ Retained)
40 mm					
25 mm					
20 mm					
10 mm					
4.75 mm					

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)
2.36 mm				
1.18 mm				
600 µ				
425 µ				
75 µ				

Summary of Results

Clay / silt (-75 micron) percent	
Sand (-4.75 mm + 75 micron) percent	
Gravel (-40 mm + 4.75 mm) percent	

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Form No. EW-2

Atterberg Limits Test

Test 1

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Value
		Less than 70 per cent

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. EW-2

Atterberg Limits Test

Test 2

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Value
		Less than 70 per cent

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. EW-2

Atterberg Limits Test

Test 3

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Value
		Less than 70 per cent

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. EW-2

Atterberg Limits Test

Test 4

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Value
		Less than 70 per cent

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. EW-2

Atterberg Limits Test

Test 5

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	**2**	**3**	**4**	**5**	**6**	**Remarks**
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	**Value**	**Permissible Value**
		Less than 70 per cent

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	**Value**	**Permissible Limit**	**Whether Confirms to the Prescribed Limits (Yes/No)**
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. EW-2

Atterberg Limits Test

Test 6

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Value
		Less than 70 per cent

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. EW-2

Atterberg Limits Test

Test 7

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Value
		Less than 70 per cent

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. EW-2

Atterberg Limits Test

Test 8

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Value
		Less than 70 per cent

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. EW-2

Atterberg Limits Test

Test 9

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Value
		Less than 70 per cent

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. EW-4

Data Sheet for Compaction Test of Soil (IS:2720 (Part 7) -1983)

Test 1

Road / Section Details: Date of Testing :

Sample No. : Weight of Dry Soil:

Description of sample	
Type of test	Standard Proctor
Weight of mould W_1 (gm)	
Volume of mould V_m (cc)	
Per cent retained on 20 mm IS sieve	

S. No.	Weight of mould + compacted soil (gms) W_2	Weight of wet soil (gms) $W_2 - W_1$	Wet density (gm/cc)	Moisture content determination							Dry density (gm/cc)
				Container No.	Weight of container (gms)	Weight of container + wet soil (gms)	Weight of container + dry soil (gms)	Weight of water (Ww) (gms)	Weight of Dry soil (Ws) (gms)	Moisture content (%) (W)	
1.											
2.											
3.											
4.											
5.											
6.											

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Wet density of compacted soil $Y_m = \frac{W_2 - W_1}{V_m}$ gm/cc

Where: W_2 – Weight of mould + soil (gm), W_1 – Weight of mould (gm), V_m – Volume of mould (cc)

Dry density of compacted soil $Y_d = \frac{100}{100 + W} \times Y_m$

Where W = moisture content

Form No. EW-4

Data Sheet for Compaction Test of Soil (IS:2720 (Part 7) -1983)

Test 2

Road / Section Details: Date of Testing :

Sample No. : Weight of Dry Soil:

Description of sample	
Type of test	Standard Proctor
Weight of mould W_1 (gm)	
Volume of mould V_m (cc)	
Per cent retained on 20 mm IS sieve	

S. No.	Weight of mould + compacted soil (gms) W_2	Weight of wet soil (gms) $W_2 - W_1$	Wet density (gm/cc)	Moisture content determination							Dry density (gm/cc)
				Container No.	Weight of container (gms)	Weight of container + wet soil (gms)	Weight of container + dry soil (gms)	Weight of water (Ww) (gms)	Weight of Dry soil (Ws) (gms)	Moisture content (%) (W)	
1.											
2.											
3.											
4.											
5.											
6.											

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Wet density of compacted soil $Y_m = \frac{W_2 - W_1}{V_m}$ gm/cc

Where: W_2 – Weight of mould + soil (gm), W_1 – Weight of mould (gm), V_m – Volume of mould (cc)

Dry density of compacted soil $Y_d = \frac{100}{100 + W} \times Y_m$

Where W = moisture content

Form No. EW-4

Data Sheet for Compaction Test of Soil (IS:2720 (Part 7) -1983)

Test 3

Road / Section Details: Date of Testing :

Sample No. : Weight of Dry Soil:

Description of sample	
Type of test	Standard Proctor
Weight of mould W_1 (gm)	
Volume of mould V_m (cc)	
Per cent retained on 20 mm IS sieve	

S. No.	Weight of mould + compacted soil (gms) W_2	Weight of wet soil (gms) $W_2 - W_1$	Wet density (gm/cc)	Moisture content determination							Dry density (gm/cc)
				Container No.	Weight of container (gms)	Weight of container + wet soil (gms)	Weight of container + dry soil (gms)	Weight of water (Ww) (gms)	Weight of Dry soil (Ws) (gms)	Moisture content (%) (W)	
1.											
2.											
3.											
4.											
5.											
6.											

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Wet density of compacted soil $Y_m = \frac{W_2 - W_1}{V_m}$ gm/cc

Where: W_2 – Weight of mould + soil (gm), W_1 – Weight of mould (gm), V_m – Volume of mould (cc)

Dry density of compacted soil $Y_d = \frac{100}{100 + W} \times Y_m$

Where W = moisture content

Form No. EW-4

Data Sheet for Compaction Test of Soil (IS:2720 (Part 7) -1983)

Test 4

Road / Section Details: Date of Testing :

Sample No. : Weight of Dry Soil:

Description of sample	
Type of test	Standard Proctor
Weight of mould W_1 (gm)	
Volume of mould V_m (cc)	
Per cent retained on 20 mm IS sieve	

S. No.	Weight of mould + compacted soil (gms) W_2	Weight of wet soil (gms) $W_2 - W_1$	Wet density (gm/cc)	Moisture content determination							Dry density (gm/cc)
				Container No.	Weight of container (gms)	Weight of container + wet soil (gms)	Weight of container + dry soil (gms)	Weight of water (Ww) (gms)	Weight of Dry soil (Ws) (gms)	Moisture content (%) (W)	
1.											
2.											
3.											
4.											
5.											
6.											

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Wet density of compacted soil $Y_m = \frac{W_2 - W_1}{V_m}$ gm/cc

Where: W_2 – Weight of mould + soil (gm), W_1 – Weight of mould (gm), V_m – Volume of mould (cc)

Dry density of compacted soil $Y_d = \frac{100}{100 + W} \times Y_m$

Where W = moisture content

Form No. EW-4

Data Sheet for Compaction Test of Soil (IS:2720 (Part 7) -1983)

Test 5

Road / Section Details: Date of Testing :

Sample No. : Weight of Dry Soil:

Description of sample	
Type of test	Standard Proctor
Weight of mould W_1 (gm)	
Volume of mould V_m (cc)	
Per cent retained on 20 mm IS sieve	

S. No.	Weight of mould + compacted soil (gms) W_2	Weight of wet soil (gms) $W_2 - W_1$	Wet density (gm/cc)	Moisture content determination							Dry density (gm/cc)
				Container No.	Weight of container (gms)	Weight of container + wet soil (gms)	Weight of container + dry soil (gms)	Weight of water (Ww) (gms)	Weight of Dry soil (Ws) (gms)	Moisture content (%) (W)	
1.											
2.											
3.											
4.											
5.											
6.											

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Wet density of compacted soil $Y_m = \frac{W_2 - W_1}{V_m}$ gm/cc

Where: W_2 – Weight of mould + soil (gm), W_1 – Weight of mould (gm), V_m – Volume of mould (cc)

Dry density of compacted soil $Y_d = \frac{100}{100 + W} \times Y_m$

Where W = moisture content

Form No. EW-4

Data Sheet for Compaction Test of Soil (IS:2720 (Part 7) -1983)

Test 6

Road / Section Details: Date of Testing :

Sample No. : Weight of Dry Soil:

Description of sample	
Type of test	Standard Proctor
Weight of mould W_1 (gm)	
Volume of mould V_m (cc)	
Per cent retained on 20 mm IS sieve	

S. No.	Weight of mould + compacted soil (gms) W_2	Weight of wet soil (gms) $W_2 - W_1$	Wet density (gm/cc)	Moisture content determination							Dry density (gm/cc)
				Container No.	Weight of container (gms)	Weight of container + wet soil (gms)	Weight of container + dry soil (gms)	Weight of water (Ww) (gms)	Weight of Dry soil (Ws) (gms)	Moisture content (%) (W)	
1.											
2.											
3.											
4.											
5.											
6.											

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Wet density of compacted soil $Y_m = \frac{W_2 - W_1}{V_m}$ gm/cc

Where: W_2 – Weight of mould + soil (gm), W_1 – Weight of mould (gm), V_m – Volume of mould (cc)

Dry density of compacted soil $Y_d = \frac{100}{100 + W} \times Y_m$

Where W = moisture content

Form No. EW-4

Data Sheet for Compaction Test of Soil (IS:2720 (Part 7) -1983)

Test 7

Road / Section Details: Date of Testing :

Sample No. : Weight of Dry Soil:

Description of sample	
Type of test	Standard Proctor
Weight of mould W_1 (gm)	
Volume of mould V_m (cc)	
Per cent retained on 20 mm IS sieve	

S. No.	Weight of mould + compacted soil (gms) W_2	Weight of wet soil (gms) $W_2 - W_1$	Wet density (gm/cc)	Moisture content determination							Dry density (gm/cc)
				Container No.	Weight of container (gms)	Weight of container + wet soil (gms)	Weight of container + dry soil (gms)	Weight of water (Ww) (gms)	Weight of Dry soil (Ws) (gms)	Moisture content (%) (W)	
1.											
2.											
3.											
4.											
5.											
6.											

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Wet density of compacted soil $Y_m = \frac{W_2 - W_1}{V_m}$ gm/cc

Where: W_2 – Weight of mould + soil (gm), W_1 – Weight of mould (gm), V_m – Volume of mould (cc)

Dry density of compacted soil $Y_d = \frac{100}{100 + W} \times Y_m$

Where W = moisture content

Form No. EW-4

Data Sheet for Compaction Test of Soil (IS:2720 (Part 7) -1983)

Test 8

Road / Section Details: Date of Testing :

Sample No. : Weight of Dry Soil:

Description of sample	
Type of test	Standard Proctor
Weight of mould W_1 (gm)	
Volume of mould V_m (cc)	
Per cent retained on 20 mm IS sieve	

S. No.	Weight of mould + compacted soil (gms) W_2	Weight of wet soil (gms) $W_2 - W_1$	Wet density (gm/cc)	Moisture content determination							Dry density (gm/cc)
				Container No.	Weight of container (gms)	Weight of container + wet soil (gms)	Weight of container + dry soil (gms)	Weight of water (Ww) (gms)	Weight of Dry soil (Ws) (gms)	Moisture content (%) (W)	
1.											
2.											
3.											
4.											
5.											
6.											

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Wet density of compacted soil $Y_m = \frac{W_2 - W_1}{V_m}$ gm/cc

Where: W_2 – Weight of mould + soil (gm), W_1 – Weight of mould (gm), V_m – Volume of mould (cc)

Dry density of compacted soil $Y_d = \frac{100}{100 + W} \times Y_m$

Where W = moisture content

Form No. EW-4

Data Sheet for Compaction Test of Soil (IS:2720 (Part 7) -1983)

Test 9

Road / Section Details: Date of Testing :

Sample No. : Weight of Dry Soil:

Description of sample	
Type of test	Standard Proctor
Weight of mould W_1 (gm)	
Volume of mould V_m (cc)	
Per cent retained on 20 mm IS sieve	

S. No.	Weight of mould + compacted soil (gms) W_2	Weight of wet soil (gms) $W_2 - W_1$	Wet density (gm/cc)	Moisture content determination							Dry density (gm/cc)
				Container No.	Weight of container (gms)	Weight of container + wet soil (gms)	Weight of container + dry soil (gms)	Weight of water (Ww) (gms)	Weight of Dry soil (Ws) (gms)	Moisture content (%) (W)	
1.											
2.											
3.											
4.											
5.											
6.											

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Wet density of compacted soil $Y_m = \frac{W_2 - W_1}{V_m}$ gm/cc

Where: W_2 – Weight of mould + soil (gm), W_1 – Weight of mould (gm), V_m – Volume of mould (cc)

Dry density of compacted soil $Y_d = \frac{100}{100 + W} \times Y_m$

Where W = moisture content

Form No. EW-5

C. B. R. Test of Soil (For Sub Grade Soil Only) [IS: 2720 (Part-16)]
Test 1

Sample No.: Date of Testing:

Sample Details: Capacity of Proving Ring:

Date of Casting of Mould: Value of one divn. in: kg.

Time of Penetration @1.25 mm/Min.	**Pene-tration**	**Proving Ring Reading**			**Load Intensity (kg/cm^2) (A) x One divn. Value area of Plunger**			**Corrected Load Intensity (kg/cm^2)**			**Standard Load Intensity (kg/cm^2)**	**Unsoaked/ Soaked C.B.R. (%) $\frac{C \times 10(}{D}$**			**Average C.B.R. (%)**
		(A)			(B)			(C)			(D)	(E)			
Min. Sec.	(mm)	i	ii	iii	i	ii	iii	i	ii	iii	Std.	i	ii	iii	
0 – 0	0.0														
0 – 24	0.5														
0 – 48	1.0														
1 – 12	1.5														
1 – 36	2.0														
2 – 0	2.5										70				
2 – 24	3.0														
3 – 12	4.0														
4 – 0	5.0										105				
6 – 0	7.5										134				
8 – 0	10.0										162				
10 – 0	12.5										183				

Av. C.B.R. at 2.5 mm penetration: (%)
Av. C.B.R. at 5.0 mm penetration: (%)
Av. Saturation Moisture Content: (%)
Av. Swelling: (%)

Layer	**Value**	**Permissible Limit**	**Whether Confirms to the Prescribed Limits (Yes/No)**

If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved.
Page No…….. Date of issue…….

Checked by: Tested by:

Form No. EW-5(A)

Swelling Test of Soil
Test 1

Sample No.: Date of casting specimen:

Sample Details: Date of Testing:

Mould Nos.	Height of specimen	Dial gauge reading		L. C. of dial gauge	Total Swelling (C-B)xD	Swelling Index $\frac{Ex100}{A}$
	(mm)	Initial	Final	(mm)	(mm)	(Percent)
	(A)	(B)	(C)	(D)	(E)	
i.						
ii.						
iii.						

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)

If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved.
Page No…….. Date of issue…….

Checked by: Tested by:

Form No. EW-8

Field Density of Soil
(Sand replacement method)

Test 1

Road/Section Details: Date of Testing :

Location of test point.: Thickness of layer : mm

Observation Tables

(a)	*Calibration* (i) Mean weight of sand in cone (of pouring cylinder) (W_2) in gm. (ii) Volume of calibrating cylinder (V) in cc. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Mean weight of sand (+cylinder) after pouring (W_3) in gm. (v) Weight of sand to fill calibrating cylinder. ($W_a = W_1 – W_2 – W_3$) in gm. (vi) Bulk density of sand $Y_s = (W_a/V)$ gm/cc
(b)	*Determination of soil density* (i) Determination number (ii) Weight of wet soil from hole (W_w) in gm. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Weight of sand (+ cylinder) after pouring (W_4) in gm. (v) Weight of sand in hole, in gm. $W_b = (W_1 – W_4 – W_2)$ (vi) Bulk density $Y_b = (W_w/ W_b) \times Y_s$ gm/cc (vii) Moisture content container number (viii) Moisture content (W) percent (ix) Weight of dry soil from the hole in gm. (W_d) (x) Dry density $Y_d = (W_d/ W_b) \times Y_s$ gm/cc

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

* *Field density as per cent of Maximum Dry Density at OMC.*

Checked by: Tested by:

Form No. EW-8

Field Density of Soil
(Sand replacement method)

Test 2

Road/Section Details: Date of Testing :

Location of test point.: Thickness of layer : mm

Observation Tables

(a)	*Calibration* (i) Mean weight of sand in cone (of pouring cylinder) (W_2) in gm. (ii) Volume of calibrating cylinder (V) in cc. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Mean weight of sand (+cylinder) after pouring (W_3) in gm. (v) Weight of sand to fill calibrating cylinder. ($W_a = W_1 – W_2 – W_3$) in gm. (vi) Bulk density of sand $Y_s = (W_a/V)$ gm/cc
(b)	*Determination of soil density* (i) Determination number (ii) Weight of wet soil from hole (W_w) in gm. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Weight of sand (+ cylinder) after pouring (W_4) in gm. (v) Weight of sand in hole, in gm. $W_b = (W_1 – W_4 – W_2)$ (vi) Bulk density $Y_b = (W_w/ W_b) \times Y_s$ gm/cc (vii) Moisture content container number (viii) Moisture content (W) percent (ix) Weight of dry soil from the hole in gm. (W_d) (x) Dry density $Y_d = (W_d/ W_b) \times Y_s$ gm/cc

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

* *Field density as per cent of Maximum Dry Density at OMC.*

Checked by: Tested by:

Form No. EW-8

Field Density of Soil
(Sand replacement method)

Test 3

Road/Section Details: Date of Testing :

Location of test point.: Thickness of layer : mm

Observation Tables

(a)	*Calibration* (i) Mean weight of sand in cone (of pouring cylinder) (W_2) in gm. (ii) Volume of calibrating cylinder (V) in cc. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Mean weight of sand (+cylinder) after pouring (W_3) in gm. (v) Weight of sand to fill calibrating cylinder. ($W_a = W_1 – W_2 – W_3$) in gm. (vi) Bulk density of sand $Y_s = (W_a/V)$ gm/cc
(b)	*Determination of soil density* (i) Determination number (ii) Weight of wet soil from hole (W_w) in gm. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Weight of sand (+ cylinder) after pouring (W_4) in gm. (v) Weight of sand in hole, in gm. $W_b = (W_1 – W_4 – W_2)$ (vi) Bulk density $Y_b = (W_w/ W_b) \times Y_s$ gm/cc (vii) Moisture content container number (viii) Moisture content (W) percent (ix) Weight of dry soil from the hole in gm. (W_d) (x) Dry density $Y_d = (W_d/ W_b) \times Y_s$ gm/cc

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

* *Field density as per cent of Maximum Dry Density at OMC.*

Checked by: Tested by:

Form No. EW-8

Field Density of Soil
(Sand replacement method)

Test 4

Road/Section Details: Date of Testing :

Location of test point.: Thickness of layer : mm

Observation Tables

(a)	*Calibration* (i) Mean weight of sand in cone (of pouring cylinder) (W_2) in gm. (ii) Volume of calibrating cylinder (V) in cc. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Mean weight of sand (+cylinder) after pouring (W_3) in gm. (v) Weight of sand to fill calibrating cylinder. ($W_a = W_1 – W_2 – W_3$) in gm. (vi) Bulk density of sand $Y_s = (W_a/V)$ gm/cc
(b)	*Determination of soil density* (i) Determination number (ii) Weight of wet soil from hole (W_w) in gm. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Weight of sand (+ cylinder) after pouring (W_4) in gm. (v) Weight of sand in hole, in gm. $W_b = (W_1 – W_4 – W_2)$ (vi) Bulk density $Y_b = (W_w/ W_b) \times Y_s$ gm/cc (vii) Moisture content container number (viii) Moisture content (W) percent (ix) Weight of dry soil from the hole in gm. (W_d) (x) Dry density $Y_d = (W_d/ W_b) \times Y_s$ gm/cc

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

* *Field density as per cent of Maximum Dry Density at OMC.*

Checked by: Tested by:

Form No. EW-8

Field Density of Soil
(Sand replacement method)

Test 5

Road/Section Details: Date of Testing :

Location of test point.: Thickness of layer : mm

Observation Tables

(a)	*Calibration* (i) Mean weight of sand in cone (of pouring cylinder) (W_2) in gm. (ii) Volume of calibrating cylinder (V) in cc. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Mean weight of sand (+cylinder) after pouring (W_3) in gm. (v) Weight of sand to fill calibrating cylinder. ($W_a = W_1 – W_2 – W_3$) in gm. (vi) Bulk density of sand $Y_s = (W_a/V)$ gm/cc
(b)	*Determination of soil density* (i) Determination number (ii) Weight of wet soil from hole (W_w) in gm. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Weight of sand (+ cylinder) after pouring (W_4) in gm. (v) Weight of sand in hole, in gm. $W_b = (W_1 – W_4 – W_2)$ (vi) Bulk density $Y_b = (W_w/ W_b) \times Y_s$ gm/cc (vii) Moisture content container number (viii) Moisture content (W) percent (ix) Weight of dry soil from the hole in gm. (W_d) (x) Dry density $Y_d = (W_d/ W_b) \times Y_s$ gm/cc

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

* *Field density as per cent of Maximum Dry Density at OMC.*

Checked by: Tested by:

Form No. EW-8

Field Density of Soil
(Sand replacement method)

Test 6

Road/Section Details: Date of Testing :

Location of test point.: Thickness of layer : mm

Observation Tables

(a)	*Calibration* (i) Mean weight of sand in cone (of pouring cylinder) (W_2) in gm. (ii) Volume of calibrating cylinder (V) in cc. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Mean weight of sand (+cylinder) after pouring (W_3) in gm. (v) Weight of sand to fill calibrating cylinder. ($W_a = W_1 – W_2 – W_3$) in gm. (vi) Bulk density of sand $Y_s = (W_a/V)$ gm/cc
(b)	*Determination of soil density* (i) Determination number (ii) Weight of wet soil from hole (W_w) in gm. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Weight of sand (+ cylinder) after pouring (W_4) in gm. (v) Weight of sand in hole, in gm. $W_b = (W_1 – W_4 – W_2)$ (vi) Bulk density $Y_b = (W_w/ W_b) \times Y_s$ gm/cc (vii) Moisture content container number (viii) Moisture content (W) percent (ix) Weight of dry soil from the hole in gm. (W_d) (x) Dry density $Y_d = (W_d/ W_b) \times Y_s$ gm/cc

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

* *Field density as per cent of Maximum Dry Density at OMC.*

Checked by: Tested by:

Form No. EW-8

Field Density of Soil
(Sand replacement method)

Test 7

Road/Section Details: Date of Testing :

Location of test point.: Thickness of layer : mm

Observation Tables

(a)	*Calibration* (i) Mean weight of sand in cone (of pouring cylinder) (W_2) in gm. (ii) Volume of calibrating cylinder (V) in cc. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Mean weight of sand (+cylinder) after pouring (W_3) in gm. (v) Weight of sand to fill calibrating cylinder. ($W_a = W_1 – W_2 – W_3$) in gm. (vi) Bulk density of sand $Y_s = (W_a/V)$ gm/cc
(b)	*Determination of soil density* (i) Determination number (ii) Weight of wet soil from hole (W_w) in gm. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Weight of sand (+ cylinder) after pouring (W_4) in gm. (v) Weight of sand in hole, in gm. $W_b = (W_1 – W_4 – W_2)$ (vi) Bulk density $Y_b = (W_w/ W_b) \times Y_s$ gm/cc (vii) Moisture content container number (viii) Moisture content (W) percent (ix) Weight of dry soil from the hole in gm. (W_d) (x) Dry density $Y_d = (W_d/ W_b) \times Y_s$ gm/cc

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

* *Field density as per cent of Maximum Dry Density at OMC.*

Checked by: Tested by:

Form No. EW-8

Field Density of Soil
(Sand replacement method)

Test 8

Road/Section Details: Date of Testing :

Location of test point.: Thickness of layer : mm

Observation Tables

(a)	*Calibration* (i) Mean weight of sand in cone (of pouring cylinder) (W_2) in gm. (ii) Volume of calibrating cylinder (V) in cc. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Mean weight of sand (+cylinder) after pouring (W_3) in gm. (v) Weight of sand to fill calibrating cylinder. ($W_a = W_1 – W_2 – W_3$) in gm. (vi) Bulk density of sand $Y_s = (W_a/V)$ gm/cc
(b)	*Determination of soil density* (i) Determination number (ii) Weight of wet soil from hole (W_w) in gm. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Weight of sand (+ cylinder) after pouring (W_4) in gm. (v) Weight of sand in hole, in gm. $W_b = (W_1 – W_4 – W_2)$ (vi) Bulk density $Y_b = (W_w/ W_b) \times Y_s$ gm/cc (vii) Moisture content container number (viii) Moisture content (W) percent (ix) Weight of dry soil from the hole in gm. (W_d) (x) Dry density $Y_d = (W_d/ W_b) \times Y_s$ gm/cc

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

* *Field density as per cent of Maximum Dry Density at OMC.*

Checked by: Tested by:

Form No. EW-8

Field Density of Soil
(Sand replacement method)

Test 9

Road/Section Details: Date of Testing :

Location of test point.: Thickness of layer : mm

Observation Tables

(a)	*Calibration* (i) Mean weight of sand in cone (of pouring cylinder) (W_2) in gm. (ii) Volume of calibrating cylinder (V) in cc. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Mean weight of sand (+cylinder) after pouring (W_3) in gm. (v) Weight of sand to fill calibrating cylinder. ($W_a = W_1 – W_2 – W_3$) in gm. (vi) Bulk density of sand $Y_s = (W_a/V)$ gm/cc
(b)	*Determination of soil density* (i) Determination number (ii) Weight of wet soil from hole (W_w) in gm. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Weight of sand (+ cylinder) after pouring (W_4) in gm. (v) Weight of sand in hole, in gm. $W_b = (W_1 – W_4 – W_2)$ (vi) Bulk density $Y_b = (W_w/ W_b) \times Y_s$ gm/cc (vii) Moisture content container number (viii) Moisture content (W) percent (ix) Weight of dry soil from the hole in gm. (W_d) (x) Dry density $Y_d = (W_d/ W_b) \times Y_s$ gm/cc

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

* *Field density as per cent of Maximum Dry Density at OMC.*

Checked by: Tested by:

Form No. EW-8

Field Density of Soil
(Sand replacement method)

Test 10

Road/Section Details: Date of Testing :

Location of test point.: Thickness of layer : mm

Observation Tables

(a)	*Calibration* (i) Mean weight of sand in cone (of pouring cylinder) (W_2) in gm. (ii) Volume of calibrating cylinder (V) in cc. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Mean weight of sand (+cylinder) after pouring (W_3) in gm. (v) Weight of sand to fill calibrating cylinder. ($W_a = W_1 – W_2 – W_3$) in gm. (vi) Bulk density of sand $Y_s = (W_a/V)$ gm/cc
(b)	*Determination of soil density* (i) Determination number (ii) Weight of wet soil from hole (W_w) in gm. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Weight of sand (+ cylinder) after pouring (W_4) in gm. (v) Weight of sand in hole, in gm. $W_b = (W_1 – W_4 – W_2)$ (vi) Bulk density $Y_b = (W_w/ W_b) \times Y_s$ gm/cc (vii) Moisture content container number (viii) Moisture content (W) percent (ix) Weight of dry soil from the hole in gm. (W_d) (x) Dry density $Y_d = (W_d/ W_b) \times Y_s$ gm/cc

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

* *Field density as per cent of Maximum Dry Density at OMC.*

Checked by: Tested by:

Form No. EW-8

Field Density of Soil
(Sand replacement method)

Test 11

Road/Section Details: Date of Testing :

Location of test point.: Thickness of layer : mm

Observation Tables

(a)	*Calibration* (i) Mean weight of sand in cone (of pouring cylinder) (W_2) in gm. (ii) Volume of calibrating cylinder (V) in cc. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Mean weight of sand (+cylinder) after pouring (W_3) in gm. (v) Weight of sand to fill calibrating cylinder. ($W_a = W_1 – W_2 – W_3$) in gm. (vi) Bulk density of sand $Y_s = (W_a/V)$ gm/cc
(b)	*Determination of soil density* (i) Determination number (ii) Weight of wet soil from hole (W_w) in gm. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Weight of sand (+ cylinder) after pouring (W_4) in gm. (v) Weight of sand in hole, in gm. $W_b = (W_1 – W_4 – W_2)$ (vi) Bulk density $Y_b = (W_w/ W_b) \times Y_s$ gm/cc (vii) Moisture content container number (viii) Moisture content (W) percent (ix) Weight of dry soil from the hole in gm. (W_d) (x) Dry density $Y_d = (W_d/ W_b) \times Y_s$ gm/cc

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue……..			

* *Field density as per cent of Maximum Dry Density at OMC.*

Checked by: Tested by:

Form No. EW-8

Field Density of Soil
(Sand replacement method)

Test 12

Road/Section Details: Date of Testing :

Location of test point.: Thickness of layer : mm

Observation Tables

(a)	*Calibration* (i) Mean weight of sand in cone (of pouring cylinder) (W_2) in gm. (ii) Volume of calibrating cylinder (V) in cc. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Mean weight of sand (+cylinder) after pouring (W_3) in gm. (v) Weight of sand to fill calibrating cylinder. ($W_a = W_1 – W_2 – W_3$) in gm. (vi) Bulk density of sand $Y_s = (W_a/V)$ gm/cc
(b)	*Determination of soil density* (i) Determination number (ii) Weight of wet soil from hole (W_w) in gm. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Weight of sand (+ cylinder) after pouring (W_4) in gm. (v) Weight of sand in hole, in gm. $W_b = (W_1 – W_4 – W_2)$ (vi) Bulk density $Y_b = (W_w/ W_b) \times Y_s$ gm/cc (vii) Moisture content container number (viii) Moisture content (W) percent (ix) Weight of dry soil from the hole in gm. (W_d) (x) Dry density $Y_d = (W_d/ W_b) \times Y_s$ gm/cc

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

* *Field density as per cent of Maximum Dry Density at OMC.*

Checked by: Tested by:

Form No. EW-8

Field Density of Soil
(Sand replacement method)

Test 13

Road/Section Details: Date of Testing :

Location of test point.: Thickness of layer : mm

Observation Tables

(a)	*Calibration* (i) Mean weight of sand in cone (of pouring cylinder) (W_2) in gm. (ii) Volume of calibrating cylinder (V) in cc. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Mean weight of sand (+cylinder) after pouring (W_3) in gm. (v) Weight of sand to fill calibrating cylinder. ($W_a = W_1 – W_2 – W_3$) in gm. (vi) Bulk density of sand $Y_s = (W_a/V)$ gm/cc
(b)	*Determination of soil density* (i) Determination number (ii) Weight of wet soil from hole (W_w) in gm. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Weight of sand (+ cylinder) after pouring (W_4) in gm. (v) Weight of sand in hole, in gm. $W_b = (W_1 – W_4 – W_2)$ (vi) Bulk density $Y_b = (W_w/ W_b) \times Y_s$ gm/cc (vii) Moisture content container number (viii) Moisture content (W) percent (ix) Weight of dry soil from the hole in gm. (W_d) (x) Dry density $Y_d = (W_d/ W_b) \times Y_s$ gm/cc

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

* *Field density as per cent of Maximum Dry Density at OMC.*

Checked by: Tested by:

Form No. EW-8

Field Density of Soil
(Sand replacement method)

Test 14

Road/Section Details: Date of Testing :

Location of test point.: Thickness of layer : mm

Observation Tables

(a)	*Calibration* (i) Mean weight of sand in cone (of pouring cylinder) (W_2) in gm. (ii) Volume of calibrating cylinder (V) in cc. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Mean weight of sand (+cylinder) after pouring (W_3) in gm. (v) Weight of sand to fill calibrating cylinder. ($W_a = W_1 – W_2 – W_3$) in gm. (vi) Bulk density of sand $Y_s = (W_a/V)$ gm/cc
(b)	*Determination of soil density* (i) Determination number (ii) Weight of wet soil from hole (W_w) in gm. (iii) Weight of sand (+ cylinder) before pouring (W_1) in gm. (iv) Weight of sand (+ cylinder) after pouring (W_4) in gm. (v) Weight of sand in hole, in gm. $W_b = (W_1 – W_4 – W_2)$ (vi) Bulk density $Y_b = (W_w/ W_b) \times Y_s$ gm/cc (vii) Moisture content container number (viii) Moisture content (W) percent (ix) Weight of dry soil from the hole in gm. (W_d) (x) Dry density $Y_d = (W_d/ W_b) \times Y_s$ gm/cc

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

* *Field density as per cent of Maximum Dry Density at OMC.*

Checked by: Tested by:

Form No. ASL-1

Horizontal Alignment Test

Form No. ASL-2

Surface Level Test

Form No. ASL-3

Surface Regularity Test

Pradhan Mantri Gram Sadak Yojana

Quality Control Register Part 1

Record of Tests

Section-2 Granular Construction

Quality Control Register Part 1
Record of Tests Section 2 Granular Construction
Abstract of tests Conducted

Test No.	Name of Test	Test No.	Date of Test	Result Qualified/ Not Qualified	If No , Page No and Date of NCR	Page No & Date on which Test Qualified
1	2	3	4	5	6	7
Drainage Layer						
SB-1	Gradation Drainage Layer	Test 1				
		Test 2				
		Test 3				
		Test 4				
		Test 5				
		Test 6				
		Test 7				
		Test 8				
		Test 9				
		Test 10				
		Test 11				
		Test 12				
Granular Sub Base						
SB-1	Gradation G S B	Test 1				
		Test 2				
		Test 3				
		Test 4				
		Test 5				
		Test 6				
		Test 7				
		Test 8				
		Test 7				
		Test 8				
		Test 9				
		Test 10				
		Test 11				
		Test 12				
		Test 13				
		Test 14				
		Test 15				
		Test 16				
SB-2	Atterberg limits G S B	Test 1				
		Test 2				
		Test 3				

Test No.	Name of Test	Test No.	Date of Test	Result Qualified/ Not Qualified	If No , Page No and Date of NCR	Page No & Date on which Test Qualified
1	**2**	**3**	**4**	**5**	**6**	**8**
		Test 4				
		Test 5				
		Test 6				
		Test 7				
		Test 8				
		Test 9				
		Test 10				
		Test 11				
		Test 12				
		Test 13				
		Test 14				
		Test 15				
		Test 16				
SB-3	Moisture content	**Test Table**				
SB-4	Density of Compacted Layer					
SB-8	CBR Test G S B					
		Test 2				
SB-5	Thickness of Layer G S B					
Base Course Water Bond Macadam						
GB-1	Aggregate Impact Value Grading-2	Test 1				
		Test 2				
		Test 3				
		Test 4				
		Test 5				
		Test 6				
		Test 7				
GB-2	Gradation WBM Grading-2	Test 1				
		Test 2				
		Test 3				
		Test 4				

Test No.	Name of Test	Test No.	Date of Test	Result Qualified/ Not Qualified	If No , Page No and Date of NCR	Page No & Date on which Test Qualified
1	**2**	**3**	**4**	**5**	**6**	**8**
		Test 5				
		Test 6				
		Test 7				
		Test 8				
		Test 9				
		Test 10				
		Test 11				
		Test 12				
		Test 13				
		Test 14				
GB 3	Flakiness Index WBM Grading-2	Test 1				
		Test 2				
		Test 3				
		Test 4				
		Test 5				
		Test 6				
		Test 7				
GB-4	Atterberg Limits Binding Material Grading 2	Test 1				
GB-6	Thickness of Layer	**Test Table**				
GB-1	Aggregate Impact Value Grading-3	Test 1				
		Test 2				
		Test 3				
		Test 4				
GB-2	Gradation WBM Grading-3	Test 1				
		Test 2				
		Test 3				
		Test 4				
		Test 5				
		Test 6				
		Test 7				
		Test 8				
GB 3	Flakiness Index WBM Grading-3	Test 1				
		Test 2				
		Test 3				
		Test 4				

Test No.	Name of Test	Conducted Test No.	Date of Test	Result Qualified/ Not Qualified	If No , Page No and Date of NCR	Page No & Date on which Test Qualified
1	**2**	**3**	**4**	**5**	**6**	**8**
GB-4	Atterberg Limits Binding Material Grading 3	Test 1				
GB-5	Water Absorption of Aggregate Grading 1 & 2	Test 1				
GB-6	Thickness of Layer	**Test Table**				

Form No. SB- 1

Tests for Drainage Layer

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 1

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB-1

Tests for Drainage Layer

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 2

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB- 1

Tests for Drainage Layer

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 3

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB -!

Tests for Drainage Layer

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 4

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB- 1

Tests for Drainage Layer

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 5

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB-1

Tests for Drainage Layer

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 6

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB- 1

Tests for Drainage Layer

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 7

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB -!

Tests for Drainage Layer

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 8

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No.SB-1

Tests for Drainage Layer

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 9

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB-1

Tests for Drainage Layer

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 10

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB- 1

Tests for Drainage Layer

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 11

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB -!

Tests for Drainage Layer

Sieve Analysis of Soil (IS:2720 (Part 4) -1985)

Test 12

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB- 1

Tests for Granular Sub Base

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 1

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB-1

Tests for Granular Sub Base

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 2

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB-1

Tests for Granular Sub Base

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 3

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB1

Tests for Granular Sub Base

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 4

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB-1

Tests for Granular Sub Base

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 5

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB-1

Tests for Granular Sub Base

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 6

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB-1

Tests for Granular Sub Base

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 7

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB-1

Tests for Granular Sub Base

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 8

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB-1

Tests for Granular Sub Base

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 9

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB-1

Tests for Granular Sub Base

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 10

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB-1

Tests for Granular Sub Base

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 11

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB-1

Tests for Granular Sub Base

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 12

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB-1

Tests for Granular Sub Base

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 13

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB-1

Tests for Granular Sub Base

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 14

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB-1

Tests for Granular Sub Base

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 15

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB-1

Tests for Granular Sub Base

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 16

Road / Section Details Date of Testing :

Sample No. Weight of soil sample taken: (gm)

Dry Sieving

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing	Prescribed Limit % Wt. Passing/ Retained

Wet Sieving Weight of Soil Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Prescribed Limit % Wt. Passing/ Retained

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. SB-2

Test for Granular Sub Base

Atterberg Limits Test

Test 1

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. SB-2

Test for Granular Sub Base

Atterberg Limits Test

Test 2

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. SB-2

Test for Granular Sub Base

Atterberg Limits Test

Test 3

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. SB-2

Test for Granular Sub Base

Atterberg Limits Test

Test 4

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. SB- 2

Test for Granular Sub Base

Atterberg Limits Test

Test 5

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. SB-2

Test for Granular Sub Base

Atterberg Limits Test

Test 6

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. SB-2

Test for Granular Sub Base

Atterberg Limits Test

Test 7

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. SB-2

Test for Granular Sub Base

Atterberg Limits Test

Test 8

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. SB-2

Test for Granular Sub Base

Atterberg Limits Test

Test 9

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. SB-2

Test for Granular Sub Base

Atterberg Limits Test

Test 10

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. SB-2

Test for Granular Sub Base

Atterberg Limits Test

Test 11

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Value
		Less than 70 per cent

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Value
		Less than 40 per cent

Checked by: Tested by:

Form No. SB-2

Test for Granular Sub Base

Atterberg Limits Test

Test 12

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} ? \frac{mc_1 ? mc_2 ? mc_3}{3} ? \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. SB-2

Test for Granular Sub Base

Atterberg Limits Test

Test 13

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. SB-2

Test for Granular Sub Base

Atterberg Limits Test

Test 14

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} ? \frac{mc_1 ? mc_2 ? mc_3}{3} ? \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. SB-2

Test for Granular Sub Base

Atterberg Limits Test

Test 15

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. SB-2

Test for Granular Sub Base

Atterberg Limits Test

Test 16

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. SB-4

Test for Granular Sub Base

Data Sheet for Compaction Test of Soil (IS:2720 (Part 7) -1983)

Test 1

Road / Section Details: Date of Testing :

Sample No. : Weight of Dry Soil:

Description of sample	
Type of test	Standard Proctor
Weight of mould W_1 (gm)	
Volume of mould V_m (cc)	
Per cent retained on 20 mm IS sieve	

S. No.	Weight of mould + compacted soil (gms) W_2	Weight of wet soil (gms) $W_2 - W_1$	Wet density (gm/cc)	Moisture content determination							Dry density (gm/cc)
				Container No.	Weight of container (gms)	Weight of container + wet soil (gms)	Weight of container + dry soil (gms)	Weight of water (Ww) (gms)	Weight of Dry soil (Ws) (gms)	Moisture content (%) (W)	
1.											
2.											
3.											
4.											
5.											
6.											

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)

If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved.
Page No…….. Date of issue…….

Checked by: Tested by:

Wet density of compacted soil $Y_m = \frac{W_2 - W_1}{V_m}$ gm/cc

Where
W_2 – Weight of mould + soil (gm)
W_1 – Weight of mould (gm)
V_m – Volume of mould (cc)

Dry density of compacted soil $Y_d = \frac{100}{100 + W} \times Y_m$

Where W = moisture content

Form No. SB-4

Test for Granular Sub Base

Data Sheet for Compaction Test of Soil (IS:2720 (Part 7) -1983)

Test 2

Road / Section Details: Date of Testing :

Sample No. : Weight of Dry Soil:

Description of sample	
Type of test	Standard Proctor
Weight of mould W_1 (gm)	
Volume of mould V_m (cc)	
Per cent retained on 20 mm IS sieve	

S. No.	Weight of mould + compacted soil (gms) W_2	Weight of wet soil (gms) $W_2 - W_1$	Wet density (gm/cc)	Moisture content determination							Dry density (gm/cc)
				Container No.	Weight of container (gms)	Weight of container + wet soil (gms)	Weight of container + dry soil (gms)	Weight of water (Ww) (gms)	Weight of Dry soil (Ws) (gms)	Moisture content (%) (W)	
1.											
2.											
3.											
4.											
5.											
6.											

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)

If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved.
Page No…….. Date of issue…….

Checked by: Tested by:

Wet density of compacted soil $\gamma_m = \frac{W_2 - W_1}{V_m}$ gm/cc

Where
W_2 – Weight of mould + soil (gm)
W_1 – Weight of mould (gm)
V_m – Volume of mould (cc)

Dry density of compacted soil $\gamma_d = \frac{100}{100 + W} \times \gamma_m$

Where W = moisture content

Form No. SB-4

Test for Granular Sub Base

Data Sheet for Compaction Test of Soil (IS:2720 (Part 7) -1983)

Test 3

Road / Section Details: Date of Testing :

Sample No. : Weight of Dry Soil:

Description of sample	
Type of test	Standard Proctor
Weight of mould W_1 (gm)	
Volume of mould V_m (cc)	
Per cent retained on 20 mm IS sieve	

S. No.	Weight of mould + compacted soil (gms) W_2	Weight of wet soil (gms) $W_2 - W_1$	Wet density (gm/cc)	Moisture content determination							Dry density (gm/cc)
				Container No.	Weight of container (gms)	Weight of container + wet soil (gms)	Weight of container + dry soil (gms)	Weight of water (Ww) (gms)	Weight of Dry soil (Ws) (gms)	Moisture content (%) (W)	
1.											
2.											
3.											
4.											
5.											
6.											

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)

If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved.
Page No…….. Date of issue…….

Checked by: Tested by:

Wet density of compacted soil $\gamma_m = \frac{W_2 - W_1}{V_m}$ gm/cc

Where
W_2 – Weight of mould + soil (gm)
W_1 – Weight of mould (gm)
V_m – Volume of mould (cc)

Dry density of compacted soil $\gamma_d = \frac{100}{100 + W} \times \gamma_m$

Where W = moisture content

Form No. SB-4

Test for Granular Sub Base

Data Sheet for Compaction Test of Soil (IS:2720 (Part 7) -1983)

Test 4

Road / Section Details: Date of Testing :

Sample No. : Weight of Dry Soil:

Description of sample	
Type of test	Standard Proctor
Weight of mould W_1 (gm)	
Volume of mould V_m (cc)	
Per cent retained on 20 mm IS sieve	

S. No.	Weight of mould + compacted soil (gms) W_2	Weight of wet soil (gms) $W_2 - W_1$	Wet density (gm/cc)	Moisture content determination							Dry density (gm/cc)
				Container No.	Weight of container (gms)	Weight of container + wet soil (gms)	Weight of container + dry soil (gms)	Weight of water (Ww) (gms)	Weight of Dry soil (Ws) (gms)	Moisture content (%) (W)	
1.											
2.											
3.											
4.											
5.											
6.											

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)

If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved.
Page No…….. Date of issue…….

Checked by: Tested by:

Wet density of compacted soil $\gamma_m = \frac{W_2 - W_1}{V_m}$ gm/cc

Where
W_2 – Weight of mould + soil (gm)
W_1 – Weight of mould (gm)
V_m – Volume of mould (cc)

Dry density of compacted soil $\gamma_d = \frac{100}{100 + W} \times \gamma_m$

Where W = moisture content

Form No. SB-4

Test for Granular Sub Base

Data Sheet for Compaction Test of Soil (IS:2720 (Part 7) -1983)
Test 5

Road / Section Details: Date of Testing :

Sample No. : Weight of Dry Soil:

Description of sample	
Type of test	Standard Proctor
Weight of mould W_1 (gm)	
Volume of mould V_m (cc)	
Per cent retained on 20 mm IS sieve	

S. No.	Weight of mould + compacted soil (gms) W_2	Weight of wet soil (gms) W_2 - W_1	Wet density (gm/cc)	Moisture content determination							Dry density (gm/cc)
				Container No.	Weight of container (gms)	Weight of container + wet soil (gms)	Weight of container + dry soil (gms)	Weight of water (Ww) (gms)	Weight of Dry soil (Ws) (gms)	Moisture content (%) (W)	
1.											
2.											
3.											
4.											
5.											
6.											

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)

If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved.
Page No…….. Date of issue…….

Checked by: Tested by:

Wet density of compacted soil $Y_m = \frac{W_2 - W_1}{V_m}$ gm/cc

Where
W_2 – Weight of mould + soil (gm)
W_1 – Weight of mould (gm)
V_m – Volume of mould (cc)

Dry density of compacted soil $Y_d = \frac{100}{100 + W} \times Y_m$

Where W = moisture content

Form No. SB-4

Test for Granular Sub Base

Data Sheet for Compaction Test of Soil (IS:2720 (Part 7) -1983)

Test 6

Road / Section Details: Date of Testing :

Sample No. : Weight of Dry Soil:

Description of sample	
Type of test	Standard Proctor
Weight of mould W_1 (gm)	
Volume of mould V_m (cc)	
Per cent retained on 20 mm IS sieve	

S. No.	Weight of mould + compacted soil (gms) W_2	Weight of wet soil (gms) $W_2 - W_1$	Wet density (gm/cc)	Moisture content determination							Dry density (gm/cc)
				Container No.	Weight of container (gms)	Weight of container + wet soil (gms)	Weight of container + dry soil (gms)	Weight of water (Ww) (gms)	Weight of Dry soil (Ws) (gms)	Moisture content (%) (W)	
1.											
2.											
3.											
4.											
5.											
6.											

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)

If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved.
Page No…….. Date of issue…….

Checked by: Tested by:

Wet density of compacted soil $\gamma_m = \frac{W_2 - W_1}{V_m}$ gm/cc

Where
W_2 – Weight of mould + soil (gm)
W_1 – Weight of mould (gm)
V_m – Volume of mould (cc)

Dry density of compacted soil $\gamma_d = \frac{100}{100 + W} \times \gamma_m$

Where W = moisture content

Form No. SB-8/9

Test for Granular Sub Base

C. B. R. Test of Soil [IS: 2720 (Part-16)]

Test 1

Sample No.: Date of Testing:

Sample Details: Capacity of Proving Ring:

Date of Casting of Mould: Value of one divn. in: kg.

Time of Penetration @1.25 mm/Min.	**Pene-tration**	**Proving Ring Reading**			**Load Intensity (kg/cm^2) (A) x One divn. Value area of Plunger**			**Corrected Load Intensity (kg/cm^2)**			**Standard Load Intensity (kg/cm^2)**	**Unsoaked/ Soaked C.B.R. (%) $\frac{Cx10(}{D}$**			**Average C.B.R. (%)**
		(A)			(B)			(C)			(D)	(E)			
Min. Sec.	(mm)	i	ii	iii	i	ii	iii	i	ii	iii	Std.	i	ii	ii i	
0 – 0	0.0														
0 – 24	0.5														
0 – 48	1.0														
1 – 12	1.5														
1 – 36	2.0														
2 – 0	2.5										70				
2 – 24	3.0														
3 – 12	4.0														
4 – 0	5.0										105				
6 – 0	7.5										134				
8 – 0	10.0										162				
10 – 0	12.5										183				

Av. C.B.R. at 2.5 mm penetration: (%)
Av. C.B.R. at 5.0 mm penetration: (%)
Av. Saturation Moisture Content: (%)
Av. Swelling: (%)

Layer	**Value**	**Permissible Limit**	**Whether Confirms to the Prescribed Limits (Yes/No)**
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Test for Water Bond Macadam Base

Form No. GB-1

Aggregate Impact Value of Aggregate (IS: 2386 – Part 4)

WBM Grade 2 Test 1

Sample No.: Date of Testing:

Name of Quarry / Location: Weight of Sample taken:

Observations	Test Nos.			Average
	1	2	3	
Weight of aggregate sample filling in the cylinder = W_1 (gm)				
Weight of aggregate passing 2.36 mm sieve after the test = W_2 (gm)				
A.I.V = (W_2/ W_1) x 100				

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Test for Water Bond Macadam Base

Form No. GB-1

Aggregate Impact Value of Aggregate (IS: 2386 – Part 4)

WBM Grade 2 Test 2

Sample No.: Date of Testing:

Name of Quarry / Location: Weight of Sample taken:

Observations	Test Nos.			Average
	1	2	3	
Weight of aggregate sample filling in the cylinder = W_1 (gm)				
Weight of aggregate passing 2.36 mm sieve after the test = W_2 (gm)				
A.I.V = (W_2/ W_1) x 100				

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Test for Water Bond Macadam Base

Form No. GB-1

Aggregate Impact Value of Aggregate (IS: 2386 – Part 4)

WBM Grade 2 Test 3

Sample No.: Date of Testing:

Name of Quarry / Location: Weight of Sample taken:

Observations	Test Nos.			Average
	1	2	3	
Weight of aggregate sample filling in the cylinder = W_1 (gm)				
Weight of aggregate passing 2.36 mm sieve after the test = W_2 (gm)				
A.I.V = (W_2/ W_1) x 100				

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Test for Water Bond Macadam Base

Form No. GB-1

Aggregate Impact Value of Aggregate (IS: 2386 – Part 4)

WBM Grade 2 Test 4

Sample No.: Date of Testing:

Name of Quarry / Location: Weight of Sample taken:

Observations	Test Nos.			Average
	1	2	3	
Weight of aggregate sample filling in the cylinder = W_1 (gm)				
Weight of aggregate passing 2.36 mm sieve after the test = W_2 (gm)				
A.I.V = (W_2/ W_1) x 100				

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Test for Water Bond Macadam Base

Form No. GB-1

Aggregate Impact Value of Aggregate (IS: 2386 – Part 4)

WBM Grade 2 Test 7

Sample No.: Date of Testing:

Name of Quarry / Location: Weight of Sample taken:

Observations	**Test Nos.**			**Average**
	1	**2**	**3**	
Weight of aggregate sample filling in the cylinder = W_1 (gm)				
Weight of aggregate passing 2.36 mm sieve after the test = W_2 (gm)				
A.I.V = (W_2/ W_1) x 100				

Layer	**Value**	**Permissible Limit**	**Whether Confirms to the Prescribed Limits (Yes/No)**
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. GB-2

Test for Water Bond Macadam Base

Sieve Analysis of Aggregate (IS: 2386 Part-1)

WBM Grade 2 Test 1

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. GB-2

Test for Water Bond Macadam Base

Sieve Analysis of Aggregate (IS: 2386 Part-1)

WBM Grade 2 Test 2

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. GB-2

Test for Water Bond Macadam Base

Sieve Analysis of Aggregate (IS: 2386 Part-1)

WBM Grade 2 Test 3

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. GB-2

Test for Water Bond Macadam Base

Sieve Analysis of Aggregate (IS: 2386 Part-1)

WBM Grade 2 Test 4

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. GB-2

Test for Water Bond Macadam Base

Sieve Analysis of Aggregate (IS: 2386 Part-1)

WBM Grade 2 Test 5

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. GB-2

Test for Water Bond Macadam Base

Sieve Analysis of Aggregate (IS: 2386 Part-1)

WBM Grade 2 Test 6

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. GB-2

Test for Water Bond Macadam Base

Sieve Analysis of Aggregate (IS: 2386 Part-1)

WBM Grade 2 Test 7

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. GB-2

Test for Water Bond Macadam Base

Sieve Analysis of Aggregate (IS: 2386 Part-1)

WBM Grade 2 Test 8

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. GB-2

Test for Water Bond Macadam Base

Sieve Analysis of Aggregate (IS: 2386 Part-1)

WBM Grade 2 Test 9

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. GB-2

Test for Water Bond Macadam Base

Sieve Analysis of Aggregate (IS: 2386 Part-1)

WBM Grade 2 Test 10

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. GB-2

Test for Water Bond Macadam Base

Sieve Analysis of Aggregate (IS: 2386 Part-1)

WBM Grade 2 Test 11

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. GB-2

Test for Water Bond Macadam Base

Sieve Analysis of Aggregate (IS: 2386 Part-1)

WBM Grade 2 Test 12

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. GB-2

Test for Water Bond Macadam Base

Sieve Analysis of Aggregate (IS: 2386 Part-1)
WBM Grade 2 Test 13

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. GB-2

Test for Water Bond Macadam Base

Sieve Analysis of Aggregate (IS: 2386 Part-1)

WBM Grade 2 Test 14

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. GB-2

Test for Water Bond Macadam Base

Flakiness Index of Aggregate
WBM Grade 2 Test 1

Sample No: Date of Sampling:
Name of Quarry / Location: Date of Testing:

Size of aggregate		Wt. of the fraction consisting of at least 200 pieces (gm)	Thickness gauge size, (0.6 times the mean sieve) (mm)	Weight of aggregate in each fraction passing thickness gauge, (gm)
Passing through I.S. Sieve, (mm)	Retained on I.S. Sieve (mm)			
63	50	W_1 =	23.90	w_1 =
50	40	W_2 =	27.00	w_2 =
40	31.5	W_3 =	19.50	w_3 =
31.5	25	W_4 =	16.95	w_4 =
25	20	W_5 =	13.50	w_5 =
20	16	W_6 =	10.80	w_6 =
16	12.5	W_7 =	8.55	w_7 =
12.5	10	W_8 =	6.75	w_8 =
10	6.3	W_9 =	4.89	w_9 =
Total		W =		w =

$$\text{Flakiness Index (F.I.)} = \frac{w}{W} \times 100 \ (\%)$$

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Date: _____ Date: _____

Form No. GB-3

Test for Water Bond Macadam Base

Flakiness Index of Aggregate
WBM Grade 2Test 2

Sample No: Date of Sampling:
Name of Quarry / Location: Date of Testing:

Size of aggregate		Wt. of the fraction consisting of at least 200 pieces (gm)	Thickness gauge size, (0.6 times the mean sieve) (mm)	Weight of aggregate in each fraction passing thickness gauge, (gm)
Passing through I.S. Sieve, (mm)	Retained on I.S. Sieve (mm)			
63	50	W_1 =	23.90	w_1 =
50	40	W_2 =	27.00	w_2 =
40	31.5	W_3 =	19.50	w_3 =
31.5	25	W_4 =	16.95	w_4 =
25	20	W_5 =	13.50	w_5 =
20	16	W_6 =	10.80	w_6 =
16	12.5	W_7 =	8.55	w_7 =
12.5	10	W_8 =	6.75	w_8 =
10	6.3	W_9 =	4.89	w_9 =
Total		W =		w =

$$\text{Flakiness Index (F.I.)} = \frac{w}{W} \times 100 \ (\%)$$

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. GB-3

Test for Water Bond Macadam Base

Flakiness Index of Aggregate
WBM Grade 2 Test 3

Sample No: Date of Sampling:
Name of Quarry / Location: Date of Testing:

Size of aggregate		Wt. of the fraction consisting of at least 200 pieces (gm)	Thickness gauge size, (0.6 times the mean sieve) (mm)	Weight of aggregate in each fraction passing thickness gauge, (gm)
Passing through I.S. Sieve, (mm)	Retained on I.S. Sieve (mm)			
63	50	W_1 =	23.90	w_1 =
50	40	W_2 =	27.00	w_2 =
40	31.5	W_3 =	19.50	w_3 =
31.5	25	W_4 =	16.95	w_4 =
25	20	W_5 =	13.50	w_5 =
20	16	W_6 =	10.80	w_6 =
16	12.5	W_7 =	8.55	w_7 =
12.5	10	W_8 =	6.75	w_8 =
10	6.3	W_9 =	4.89	w_9 =
Total		W =		w =

$$\text{Flakiness Index (F.I.)} = \frac{w}{W} \times 100 \ (\%)$$

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. GB-3

Test for Water Bond Macadam Base

Flakiness Index of Aggregate
WBM Grade 2 Test 4

Sample No: Date of Sampling:
Name of Quarry / Location: Date of Testing:

Size of aggregate		Wt. of the fraction consisting of at least 200 pieces (gm)	Thickness gauge size, (0.6 times the mean sieve) (mm)	Weight of aggregate in each fraction passing thickness gauge, (gm)
Passing through I.S. Sieve, (mm)	Retained on I.S. Sieve (mm)			
63	50	W_1 =	23.90	w_1 =
50	40	W_2 =	27.00	w_2 =
40	31.5	W_3 =	19.50	w_3 =
31.5	25	W_4 =	16.95	w_4 =
25	20	W_5 =	13.50	w_5 =
20	16	W_6 =	10.80	w_6 =
16	12.5	W_7 =	8.55	w_7 =
12.5	10	W_8 =	6.75	w_8 =
10	6.3	W_9 =	4.89	w_9 =
Total		W =		w =

$$\text{Flakiness Index (F.I.)} ? \frac{w}{W} x100 ? (\%)$$

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)

If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved.
Page No…….. Date of issue…….

Checked by: Tested by:

Form No. GB-4

Test for Water Bond Macadam Base

Flakiness Index of Aggregate
WBM Grade 2 Test 5

Sample No: Date of Sampling:
Name of Quarry / Location: Date of Testing:

Size of aggregate		Wt. of the fraction consisting of at least 200 pieces (gm)	Thickness gauge size, (0.6 times the mean sieve) (mm)	Weight of aggregate in each fraction passing thickness gauge, (gm)
Passing through I.S. Sieve, (mm)	Retained on I.S. Sieve (mm)			
63	50	W_1 =	23.90	w_1 =
50	40	W_2 =	27.00	w_2 =
40	31.5	W_3 =	19.50	w_3 =
31.5	25	W_4 =	16.95	w_4 =
25	20	W_5 =	13.50	w_5 =
20	16	W_6 =	10.80	w_6 =
16	12.5	W_7 =	8.55	w_7 =
12.5	10	W_8 =	6.75	w_8 =
10	6.3	W_9 =	4.89	w_9 =
Total		W =		w =

$$\text{Flakiness Index (F.I.)} = \frac{w}{W} \times 100 \ (\%)$$

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. GB-3

Test for Water Bond Macadam Base

Flakiness Index of Aggregate
WBM Grade 2 Test 6

Sample No: Date of Sampling:
Name of Quarry / Location: Date of Testing:

Size of aggregate		Wt. of the fraction consisting of at least 200 pieces (gm)	Thickness gauge size, (0.6 times the mean sieve) (mm)	Weight of aggregate in each fraction passing thickness gauge, (gm)
Passing through I.S. Sieve, (mm)	Retained on I.S. Sieve (mm)			
63	50	W_1 =	23.90	w_1 =
50	40	W_2 =	27.00	w_2 =
40	31.5	W_3 =	19.50	w_3 =
31.5	25	W_4 =	16.95	w_4 =
25	20	W_5 =	13.50	w_5 =
20	16	W_6 =	10.80	w_6 =
16	12.5	W_7 =	8.55	w_7 =
12.5	10	W_8 =	6.75	w_8 =
10	6.3	W_9 =	4.89	w_9 =
Total		W =		w =

$$\text{Flakiness Index (F.I.)} ? \frac{w}{W} x100 ? (\%)$$

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)

If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved.
Page No…….. Date of issue…….

Checked by: Tested by:

Form No. GB-3

Test for Water Bond Macadam Base

Flakiness Index of Aggregate
WBM Grade 2 Test 7

Sample No: Date of Sampling:
Name of Quarry / Location: Date of Testing:

Size of aggregate		Wt. of the fraction consisting of at least 200 pieces (gm)	Thickness gauge size, (0.6 times the mean sieve) (mm)	Weight of aggregate in each fraction passing thickness gauge, (gm)
Passing through I.S. Sieve, (mm)	Retained on I.S. Sieve (mm)			
63	50	W_1 =	23.90	w_1 =
50	40	W_2 =	27.00	w_2 =
40	31.5	W_3 =	19.50	w_3 =
31.5	25	W_4 =	16.95	w_4 =
25	20	W_5 =	13.50	w_5 =
20	16	W_6 =	10.80	w_6 =
16	12.5	W_7 =	8.55	w_7 =
12.5	10	W_8 =	6.75	w_8 =
10	6.3	W_9 =	4.89	w_9 =
Total		W =		w =

$$\text{Flakiness Index (F.I.)} = \frac{w}{W} \times 100 \ (\%)$$

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. GB-4

Test for Water Bond Macadam

Atterberg Limits Test for Binding Material

WBM Grade 2 Test 1

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. GB-5

Test for Water Bond Macadam Base

Water Absorption of Aggregate

WBM Grade 2 Test 1

IS: 2386 (Part 3)

Sample No: Date of sampling:
Name of Quarry / Location Date of Testing:
Size of aggregate: Type of aggregate:

Observations	Test Nos.		
	1	2	Mean value
Wt. of saturated aggregate and basket in water (W_1) gm			
Wt. of basket in water (W_2) gm			
Wt. of saturated surface dry aggregate in air (W_3) gm			
Wt. of oven dried aggregate in air (W_4) gm			
Specific gravity = $W_4/W_3 - (W_1 – W_2)$			
Apparent Specific gravity = $W_4 / W_4 – (W_1 – W_2)$			
Water absorption = $(W_3 - W_4) \times 100 / W_4$ (%)			
Mean value of Specific gravity =			
Mean value of apparent specific gravity =			
Mean value of Water absorption =			

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)

If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved.
Page No…….. Date of issue…….

Checked by: Tested by:

Test for Water Bond Macadam Base

Form No. GB-1

Aggregate Impact Value of Aggregate (IS: 2386 – Part 4)

WBM Grade 3 Test 1

Sample No.: Date of Testing:

Name of Quarry / Location: Weight of Sample taken:

Observations	**Test Nos.**			**Average**
	1	**2**	**3**	
Weight of aggregate sample filling in the cylinder = W_1 (gm)				
Weight of aggregate passing 2.36 mm sieve after the test = W_2 (gm)				
A.I.V = (W_2/ W_1) x 100				

Layer	**Value**	**Permissible Limit**	**Whether Confirms to the Prescribed Limits (Yes/No)**
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Test for Water Bond Macadam Base

Form No. GB-1

Aggregate Impact Value of Aggregate (IS: 2386 – Part 4)

WBM Grade 3 Test 2

Sample No.: Date of Testing:

Name of Quarry / Location: Weight of Sample taken:

Observations	**Test Nos.**			**Average**
	1	**2**	**3**	
Weight of aggregate sample filling in the cylinder = W_1 (gm)				
Weight of aggregate passing 2.36 mm sieve after the test = W_2 (gm)				
A.I.V = (W_2/ W_1) x 100				

Layer	**Value**	**Permissible Limit**	**Whether Confirms to the Prescribed Limits (Yes/No)**
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. GB-2

Test for Water Bond Macadam Base

Sieve Analysis of Aggregate (IS: 2386 Part-1)

WBM Grade 3 Test 1

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. GB-2

Test for Water Bond Macadam Base

Sieve Analysis of Aggregate (IS: 2386 Part-1)

WBM Grade 3 Test 2

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. GB-2

Test for Water Bond Macadam Base

Sieve Analysis of Aggregate (IS: 2386 Part-1)

WBM Grade 3 Test 3

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. GB-2

Test for Water Bond Macadam Base

Sieve Analysis of Aggregate (IS: 2386 Part-1)

WBM Grade 3 Test 4

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form GB-3

Test for Water Bond Macadam Base

Flakiness Index of Aggregate
WBM Grade 3 Test 1

Sample No: Date of Sampling:
Name of Quarry / Location: Date of Testing:

Size of aggregate		Wt. of the fraction consisting of at least 200 pieces (gm)	Thickness gauge size, (0.6 times the mean sieve) (mm)	Weight of aggregate in each fraction passing thickness gauge, (gm)
Passing through I.S. Sieve, (mm)	Retained on I.S. Sieve (mm)			
63	50	W_1 =	23.90	w_1 =
50	40	W_2 =	27.00	w_2 =
40	31.5	W_3 =	19.50	w_3 =
31.5	25	W_4 =	16.95	w_4 =
25	20	W_5 =	13.50	w_5 =
20	16	W_6 =	10.80	w_6 =
16	12.5	W_7 =	8.55	w_7 =
12.5	10	W_8 =	6.75	w_8 =
10	6.3	W_9 =	4.89	w_9 =
Total		W =		w =

$$\text{Flakiness Index (F.I.)} = \frac{w}{W} \times 100 \ (\%)$$

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Date: _____ Date: _____

Form No. GB-3

Test for Water Bond Macadam Base

Flakiness Index of Aggregate
WBM Grade 3Test 2

Sample No: Date of Sampling:
Name of Quarry / Location: Date of Testing:

Size of aggregate		Wt. of the fraction consisting of at least 200 pieces (gm)	Thickness gauge size, (0.6 times the mean sieve) (mm)	Weight of aggregate in each fraction passing thickness gauge, (gm)
Passing through I.S. Sieve, (mm)	Retained on I.S. Sieve (mm)			
63	50	W_1 =	23.90	w_1 =
50	40	W_2 =	27.00	w_2 =
40	31.5	W_3 =	19.50	w_3 =
31.5	25	W_4 =	16.95	w_4 =
25	20	W_5 =	13.50	w_5 =
20	16	W_6 =	10.80	w_6 =
16	12.5	W_7 =	8.55	w_7 =
12.5	10	W_8 =	6.75	w_8 =
10	6.3	W_9 =	4.89	w_9 =
Total		W =		w =

$$\text{Flakiness Index (F.I.)} = \frac{w}{W} \times 100 \ (\%)$$

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Form No. GB-4

Test for Water Bond Macadam

Atterberg Limits Test for Binding Material
WBM Grade 3 Test 1

Road/Section Details: Date of Testing :

Sample No.: Type of soil :

Sample Details :

Determination of Liquid Limit (LL)

	1	2	3	4	5	6	Remarks
Container Number							
Weight of container + wet soil							
Weight of container + dry soil							
Loss of Moisture							
Wt. of container							
Wt. of dry soil							
Moisture content %							
Number of blows							

Liquid Limit (LL) = ---------- per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)

If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved.
Page No…….. Date of issue…….

Determination of Plastic Limit (PL)

	1	2	3	Remarks
Container Number				
Weight of container + wet soil				
Weight of container + dry soil				
Loss of Moisture				
Weight of container				
Weight of dry soil				
Moisture content %	(mc_1)	(mc_2)	(mc_3)	

$$\text{Plastic Limit (PL)} = \frac{mc_1 + mc_2 + mc_3}{3} = \_\_\_\_\_ \text{ per cent}$$

Plasticity Index (PI) = LL – PL = _____ per cent

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)

If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved.
Page No…….. Date of issue…….

Checked by: Tested by:

Form No. GB-5

Test for Water Bond Macadam Base

Water Absorption of Aggregate

WBM Grade 3 Test 1

IS: 2386 (Part 3)

Sample No: Date of sampling:
Name of Quarry / Location Date of Testing:
Size of aggregate: Type of aggregate:

Observations	Test Nos.		
	1	2	Mean value
Wt. of saturated aggregate and basket in water (W_1) gm			
Wt. of basket in water (W_2) gm			
Wt. of saturated surface dry aggregate in air (W_3) gm			
Wt. of oven dried aggregate in air (W_4) gm			
Specific gravity = $W_4/W_3 - (W_1 – W_2)$			
Apparent Specific gravity = $W_4 / W_4 – (W_1 – W_2)$			
Water absorption = $(W_3 - W_4) \times 100 / W_4$ (%)			
Mean value of Specific gravity =			
Mean value of apparent specific gravity =			
Mean value of Water absorption =			

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)

If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved.
Page No…….. Date of issue…….

Checked by: Tested by:

Pradhan Mantri Gram Sadak Yojana

Quality Control Register Part 1

Record of Tests

Section 3 Bituminous Construction

Quality Control Register Part 1
Record of Tests Section 3 Bituminous Construction
Abstract of tests Conducted

Test No.	Name of Test	Conducted Test No.	Date of Test	Result, Qualified (Yes/No)	If No , Page No and Date of NCR	Page No & Date on which Test Qualified
1	2	3	4	5	6	7
BL-1	Quality of bitumen	Test 1				
BL-1 (J)	Sieve Test for Bitumen Emulsions	Test 1				
BL-1 (K)	Stability to Mixing with Course Aggregates on Bitumen Emulsions	Test 1				
BL-1 (L)	Viscosity of Bitumen Emulsions by Standard Saybolt-Furol Viscometer	Test 1				
BL-1 (M)	Storage Stability Test on Bitumen Emulsions	Test 1				
BL-1 (N)	Particle Charge of Bitumen Emulsions	Test 1				
BL-1 (O)	Miscibility of Bitumen Emulsions with Water	Test 1				
BL-1 (P)	Stability of Bitumen Emulsions with Cement	Test 1				
BL-3	Rate of spread of binder	Test 1				
BL-1	Quality of bitumen	Test 1				
		Test 2				
		Test 3				
BL-1(A)	Penetration	Test 1				
		Test 2				
		Test 3				
BL-1(B)	Ductility	Test 1				
		Test 2				
		Test 3				
BL-1(C)	Softening point	Test 1				
		Test 2				
		Test 3				
BL-1(D)	Specific gravity	Test 1				
		Test 2				
		Test 3				
BL-1(E)	Water content	Test 1				
		Test 2				
		Test 3				
BL-1(F)	Flash point	Test 1				
Test No.	**Name of Test**	**Conducted Test No.**	**Date of Test**	**Result, Qualified (Yes/No)**	**If No , Page No and Date of NCR**	**Page No & Date on which Test Qualified**

1	2	3	4	5	6	8
		Test 2				
		Test 3				
BL-1(G)	Viscosity	Test 1				
		Test 2				
		Test 3				
BL-1(H)	Loss on heating	Test 1				
		Test 2				
		Test 3				
BL-1(I)	Solubility (Trichloroethylene)	Test 1				
		Test 2				
		Test 3				
BL-1(Q)	Wax content	Test 1				
		Test 2				
		Test 3				
BL-2	Temperature of binder	Test 1				
		Test 2				
		Test 3				
BL-4	Aggregate Impact Value	Test 1				
		Test 2				
		Test 3				
BL-5	Flakiness Index	Test 1				
		Test 2				
BL-6	Stripping of Aggregate	Test 1				
BL-7	Water Absorption	Test 1				
BL-8	Grading of Aggregate	Test 1				
		Test 2				
		Test 3				
		Test 4				
		Test 5				
		Test 6				
		Test 7				
		Test 8				
BL-10	Thickness	**Test Table.**				
BL-13	Soundness	Test 1				
BL-14	Binder Content	Test 1				
Test No.	**Name of Test**	**Conducted Test No.**	**Date of Test**	**Result, Qualified (Yes/No)**	**If No , Page No and Date of NCR**	**Page No & Date on which Test Qualified**
1	**2**	**3**	**4**	**5**	**6**	**8**

BL-3	Rate of Spread of Binder	**Test Table**				
BL-12	Rate of Spread of Aggregate	**Test Table**				

Tests of Bitumen Emulsions for Prime Coat and other Surfaces

Form No. BL-1(J)

Sieve Test for Bitumen Emulsions
Test1

Sample Ref. :
Date:
Tanker No. :
Type of Emulsion :

Sample No.	Wt. of sieve (w1)	Wt. of sieve + sample (w2)	Wt. of sieve + sample after heating (w3)	Sample wt. retained after heating (w3-w1)	Percentage {(w3-w1)/ (w2-w1)} 100	Acceptable Limit
						As per IS:8887-1995

Layer	Value	Permissible Limit
		Max. 0.05%

Checked By: Tested By:

Form No.BL-1(K)

Stability to Mixing with Coarse Aggregate on Bitumen Emulsion

Test1

Sample Ref. :
Date:
Tanker No. :
Aggregate :Wet/dry

Sample No.	Coating of the total aggregate surface area by the emulsion	
	Good/Fair/Poor	

Good =Fully Coated
Fair =Coating applies to the condition of an excess of coated area over on coated area,
Poor =Applies to the condition of an excess of uncoated area over coated area.

Layer	Value	Permissible Limit
		As per specification

Checked By: Tested By:

Form No. BL-1(L)

Viscosity of Bitumen by Standard Saybolt – Furol Viscometer

Test1

Sample Ref. :
Date:
Tanker No. :
Type of Emulsion :

Sample No.	Test Temperature	Viscosity (Sec.)	Acceptable Limit
	25 ^{o} C		As per IS: 8887-1995

Layer	**Value**	**Permissible Limit**
		50-400 seconds at 50^{o} As per IS 8887-1995

Checked By: Tested By:

Form No.BL-1(M)

Storage Stability Test on Bitumen Emulsion

Test1

Sample Ref. :
Date:
Tanker No. :

Sample No.	% of residue from top sample (A)	% of residue from bottom sample (B)	Settlement (B-A)	Acceptable Limit
				As per IS: 8887-1995

Layer	Value	Permissible Limit
		50-400 seconds at 50^{o} As per IS 8887-1995

Checked By: Tested By:

Form No. BL-1(N)

Particle Change of Emulsion

Test1

Sample Ref. :
Date:
Tanker No. :
Type of Emulsion :

Sample No.	Wt. of Sample	Wt. of Emulsion on Cathode	%of cationic emulsion	Acceptable Limit
				As per IS: 8887-1995

Layer	Value	Permissible Limit
		+ve

Checked By: Tested By:

Form No. BL-1(O)

Miscibility of Bitumen Emulson with Water
Test1

Sample Ref. :
Date:
Tanker No. :
Type of Emulsion :

Sample No.	Total Volume (Distilled water + emulsion)(v)	% appreciable coagulation of asphalt content	Acceptable Limit
			As per IS: 8887-1995

Layer	Value	Permissible Limit
		Nil

Checked By: Tested By:

Form No. BL-1(P)

Stability of Bitumen Emulsion with Cement
Test1

Sample Ref. :
Date:
Tanker No. :
Type of Emulsion :

Sample No.	Wt. of sieve (w1)	Wt. of sieve + Wt. of sample mixed with emulsion (w2)	Wt. of sieve + Wt. of sample after washing (w3)	Stability % with cement {(w3-w1)/ (w2-w1)} 100	Acceptable Limit
					As per IS:8887-1995

Layer	**Value**	**Permissible Limit**
		Max. 2% (SS)

Checked By: Tested By:

F0rm No. BL-1(A)

Bitumen for Premix Carpet/ Surface Dressing

Penetration of Bitumen
Test 1

Sample No.: Date of Testing:
Tanker No. :

1.	Pouring Temperature, °C	
2.	Period of cooling in atmosphere, minutes	
3.	Room temperature, °C	
4.	Period of cooling in water bath, minutes	
5.	Actual test temperature, °C	

Penetrometer dial reading	Sample No.				Sample No.			
	Test 1	Test 2	Test 3	Mean value	Test 1	Test 2	Test 3	Mean value
Initial								
Final								
Penetration value								
Mean Penetration value								

Layer	Value	Permissible Limit
		Depending upon grade specified

Checked by: Tested by:

Form No. BL-1(B)

Bitumen for Premix Carpet/ Surface Dressing

Ductility of Bitumen
Test 1

Sample No.: Date of sampling:

Tanker No.: Date of Testing:

1.	Grade of bitumen	
2.	Pouring temperature, °C	
3.	Test temperature, °C	
4.	Period of cooling, (minutes)	
4.1	In Air	
4.2	In water bath before trimming	
4.3	In water bath after trimming	

Test property	Briquette number			Mean value
	(a)	(b)	(c)	
Ductility value (cm)				

Layer	Value	Permissible Limit
		More than 75 unit

Checked by: Tested by:

Bitumen for Premix Carpet/ Surface Dressing

Form No. BL-1(C)

Softening Point of Bitumen
Test 1

Sample No.: Date of sampling:

Tanker No.: Date of Testing:

1.	Grade of bitumen	
2.	Approximate softening point	
3.	Liquid used in water bath (water / Glycerin)	
4.	Period of air cooling (minutes)	
5	Period of cooling in water bath (minutes)	

Test property	Sample No. 1		Sample No. 2	
	Ball No.		Ball No.	
Temp. at which sample touch bottom plate (°C)	1	2	1	2
Mean Value, softening point				

Layer	Value	Permissible Limit
		More than 40ºC

Checked by: Tested by:

Form No. BL-1(D)

Bitumen for Premix Carpet/ Surface Dressing

Specific Gravity of Bitumen
Test 1

Sample No.: Date of Sampling:

Bitumen grade: Date of Testing:

Sample No.	Wt. of Bottle (gm)	Wt. of Bottle + distilled water (gm)	Wt. of Bottle + half filled material (gm)	Wt. of Bottle + half filled material + distilled water (gm)	Specific gravity (gm/cc)
	W_1	W_2	W_3	W_4	
1.					
2.					
3.					
Average					

Layer	Value	Permissible Limit
		Not less than 0.99 gm/cc

Checked by: Tested by:

Form No. BL-1(E)

Bitumen for Premix Carpet/ Surface Dressing

Water Content of Bitumen
IS 73 – 1992
Test 1

Sample Ref.: Date of Testing :

Tanker No. :

Bitumen grade:

Sample No.	Wt. of sample before heating (w_1)	Wt. of sample after heating (w_2)	Water loss ($w_1 - w_2$)	Percentage Water content

Layer	Value	Permissible Limit
		Max. 0.2%

Checked by: Tested by:

Form No. BL-1(F)

Bitumen for Premix Carpet/ Surface Dressing

Flash Point of Bitumen
Test 1

Sample Ref.: Date of Testing :

Tanker No.:

Barometric pressure: mm

Bitumen grade:

Sample No.	Flash point ºC	Corrected flash point

Layer	Value	Permissible Limit
		Min. 220ºC

Checked by: Tested by:

Bitumen for Premix Carpet/ Surface Dressing

Form No. BL-1(G)

Viscosity of Bitumen
Test 1

Sample Ref.: Date of Testing :

Tanker No.:

Bitumen grade:

Sample No.	Flash time	Atmospheric Pressure	Viscosity

Layer	Value	Permissible Limit
		As per specifications

Checked by: Tested by:

Form No. BL-1(H)

Bitumen for Premix Carpet/ Surface Dressing

Loss on Heat of Bitumen
Test 1

Sample Ref.: Date of Testing :
Tanker No.:
Bitumen grade:

(a) Per cent loss on heat

Sample No.	Wt. of bitumen before heating (w_1)	Wt. of bitumen after heating (w_2)	Percentage loss in wt. $\frac{w_1 ? w_2}{w_1} x100$

(b) Retained penetration percentage

Sample No.	Penetration before heating (l_1)	Penetration after heating (l_2)	Retained penetration percentage $\frac{l_1}{l_2} x100$

Layer	Value	Permissible Limit
		As per specifications

Checked by: Tested by:

Bitumen for Premix Carpet/ Surface Dressing

Form No. BL-1(I)

Solubility of Bitumen in Trichloroethylene
Test 1

Sample Ref.: Date of Testing :

Tanker No.:

Bitumen grade:

Sample No.	Wt. of Sample (w_1)	Wt. of insoluble material (w_2)	Percentage of solube material $\frac{w_1 - w_2}{w_1} \times 100$

Layer	Value	Permissible Limit
		Min. 99%

Checked by: Tested by:

Form No. BL-1(Q)

Bitumen for Premix Carpet/ Surface Dressing

Wax Content of Bituminous Material
Test 1

Sample Ref.: Date of Testing :
Tanker No.:
Bitumen grade:

Sample No.	Mass of weighing flask in gm (w_1)	Mass of weighing flask plus wax gm (w_2)	Mass of sample in gm (s)	Wax % $\frac{w_2 - w_1}{s} \times 100$

Layer	Value	Permissible Limit
		Min. 4.5%

Checked by: Tested by:

Form No. BL-1(A)

Bitumen for Premix Carpet/ Surface Dressing

Penetration of Bitumen
Test 2

Sample No.: Date of Testing:
Tanker No. :

1.	Pouring Temperature, °C	
2.	Period of cooling in atmosphere, minutes	
3.	Room temperature, °C	
4.	Period of cooling in water bath, minutes	
5.	Actual test temperature, °C	

Penetrometer dial reading	Sample No.				Sample No.			
	Test 1	Test 2	Test 3	Mean value	Test 1	Test 2	Test 3	Mean value
Initial								
Final								
Penetration value								
Mean Penetration value								

Layer	Value	Permissible Limit
		Depending upon grade specified

Checked by: Tested by:

Form No. BL-1(B)

Bitumen for Premix Carpet/ Surface Dressing

Ductility of Bitumen
Test 2

Sample No.: Date of sampling:

Tanker No.: Date of Testing:

1.	Grade of bitumen	
2.	Pouring temperature, °C	
3.	Test temperature, °C	
4.	Period of cooling, (minutes)	
4.1	In Air	
4.2	In water bath before trimming	
4.3	In water bath after trimming	

Test property	Briquette number			Mean value
	(a)	(b)	(c)	
Ductility value (cm)				

Layer	Value	Permissible Limit
		More than 75 unit

Checked by: Tested by:

Bitumen for Premix Carpet/ Surface Dressing

Form No. BL-1(C)

Softening Point of Bitumen
Test 2

Sample No.: Date of sampling:

Tanker No.: Date of Testing:

1.	Grade of bitumen	
2.	Approximate softening point	
3.	Liquid used in water bath (water / Glycerin)	
4.	Period of air cooling (minutes)	
5	Period of cooling in water bath (minutes)	

Test property	Sample No. 1		Sample No. 2	
	Ball No.		Ball No.	
Temp. at which sample touch bottom plate (°C)	1	2	1	2
Mean Value, softening point				

Layer	Value	Permissible Limit
		More than 40ºC

Checked by: Tested by:

Form No. BL-1(D)

Bitumen for Premix Carpet/ Surface Dressing

Specific Gravity of Bitumen
Test 2

Sample No.: Date of Sampling:

Bitumen grade: Date of Testing:

Sample No.	Wt. of Bottle (gm)	Wt. of Bottle + distilled water (gm)	Wt. of Bottle + half filled material (gm)	Wt. of Bottle + half filled material + distilled water (gm)	Specific gravity (gm/cc)
	W_1	W_2	W_3	W_4	
1.					
2.					
3.					
Average					

Layer	Value	Permissible Limit
		Not less than 0.99 gm/cc

Checked by: Tested by:

Form No. BL-1(E)

Bitumen for Premix Carpet/ Surface Dressing

Water Content of Bitumen
IS 73 – 1992
Test 2

Sample Ref.: Date of Testing :

Tanker No. :

Bitumen grade:

Sample No.	Wt. of sample before heating (w_1)	Wt. of sample after heating (w_2)	Water loss ($w_1 - w_2$)	Percentage Water content

Layer	Value	Permissible Limit
		Max. 0.2%

Checked by: Tested by:

Form No. BL-1(F)

Bitumen for Premix Carpet/ Surface Dressing

Flash Point of Bitumen
Test 2

Sample Ref.: Date of Testing :

Tanker No.:

Barometric pressure: mm

Bitumen grade:

Sample No.	Flash point ºC	Corrected flash point

Layer	Value	Permissible Limit
		Min. 220ºC

Checked by: Tested by:

Bitumen for Premix Carpet/ Surface Dressing

Form No. BL-1(G)

Viscosity of Bitumen
Test 2

Sample Ref.: Date of Testing :

Tanker No.:

Bitumen grade:

Sample No.	Flash time	Atmospheric Pressure	Viscosity

Layer	Value	Permissible Limit
		As per specifications

Checked by: Tested by:

Form No. BL-1(H)

Bitumen for Premix Carpet/ Surface Dressing

Loss on Heat of Bitumen
Test 2

Sample Ref.: Date of Testing :
Tanker No.:
Bitumen grade:

(a) Per cent loss on heat

Sample No.	Wt. of bitumen before heating (w_1)	Wt. of bitumen after heating (w_2)	Percentage loss in wt. $\frac{w_1 - w_2}{w_1} \times 100$

(b) Retained penetration percentage

Sample No.	Penetration before heating (l_1)	Penetration after heating (l_2)	Retained penetration percentage $\frac{l_1}{l_2} \times 100$

Layer	Value	Permissible Limit
		As per specifications

Checked by: Tested by:

Bitumen for Premix Carpet/ Surface Dressing

Form No. BL-1(I)

Solubility of Bitumen in Trichloroethylene
Test 2

Sample Ref.: Date of Testing :

Tanker No.:

Bitumen grade:

Sample No.	Wt. of Sample (w_1)	Wt. of insoluble material (w_2)	Percentage of solube material $\frac{w_1 ? w_2}{w_1} x100$

Layer	Value	Permissible Limit
		Min. 99%

Checked by: Tested by:

Form No. BL-1(Q)

Bitumen for Premix Carpet/ Surface Dressing

Wax Content of Bituminous Material
Test 2

Sample Ref.: Date of Testing :
Tanker No.:
Bitumen grade:

Sample No.	Mass of weighing flask in gm (w_1)	Mass of weighing flask plus wax gm (w_2)	Mass of sample in gm (s)	Wax % $\frac{w_2 ? w_1}{s} x100$

Layer	Value	Permissible Limit
		Min. 4.5%

Checked by: Tested by:

Form No. BL-1(A)

Bitumen for Premix Carpet/ Surface Dressing/ Bituminous Macadam

Penetration of Bitumen
Test 3

Sample No.: Date of Testing:
Tanker No. :

1.	Pouring Temperature, °C	
2.	Period of cooling in atmosphere, minutes	
3.	Room temperature, °C	
4.	Period of cooling in water bath, minutes	
5.	Actual test temperature, °C	

Penetrometer dial reading	Sample No.				Sample No.			
	Test 1	Test 2	Test 3	Mean value	Test 1	Test 2	Test 3	Mean value
Initial								
Final								
Penetration value								
Mean Penetration value								

Layer	Value	Permissible Limit
		Depending upon grade specified

Checked by: Tested by:

Form No. BL-1(B)

Bitumen for Premix Carpet/ Surface Dressing

Ductility of Bitumen
Test 3

Sample No.: Date of sampling:

Tanker No.: Date of Testing:

1.	Grade of bitumen	
2.	Pouring temperature, °C	
3.	Test temperature, °C	
4.	Period of cooling, (minutes)	
4.1	In Air	
4.2	In water bath before trimming	
4.3	In water bath after trimming	

Test property	Briquette number			Mean value
	(a)	(b)	(c)	
Ductility value (cm)				

Layer	Value	Permissible Limit
		More than 75 unit

Checked by: Tested by:

Bitumen for Premix Carpet/ Surface Dressing

Form No. BL-1(C)

Softening Point of Bitumen
Test 3

Sample No.: Date of sampling:

Tanker No.: Date of Testing:

1.	Grade of bitumen	
2.	Approximate softening point	
3.	Liquid used in water bath (water / Glycerin)	
4.	Period of air cooling (minutes)	
5	Period of cooling in water bath (minutes)	

Test property	Sample No. 1		Sample No. 2	
	Ball No.		Ball No.	
Temp. at which sample touch bottom plate (°C)	1	2	1	2
Mean Value, softening point				

Layer	Value	Permissible Limit
		More than 40ºC

Checked by: Tested by:

Form No. BL-1(D)

Bitumen for Premix Carpet/ Surface Dressing

Specific Gravity of Bitumen
Test 3

Sample No.: Date of Sampling:

Bitumen grade: Date of Testing:

Sample No.	Wt. of Bottle (gm)	Wt. of Bottle + distilled water (gm)	Wt. of Bottle + half filled material (gm)	Wt. of Bottle + half filled material + distilled water (gm)	Specific gravity (gm/cc)
	W_1	W_2	W_3	W_4	
1.					
2.					
3.					
Average					

Layer	Value	Permissible Limit
		Not less than 0.99 gm/cc

Checked by: Tested by:

Form No. BL-1(E)

Bitumen for Premix Carpet/ Surface Dressing

Water Content of Bitumen
IS 73 – 1992
Test 3

Sample Ref.: Date of Testing :

Tanker No. :

Bitumen grade:

Sample No.	Wt. of sample before heating (w_1)	Wt. of sample after heating (w_2)	Water loss ($w_1 - w_2$)	Percentage Water content

Layer	Value	Permissible Limit
		Max. 0.2%

Checked by: Tested by:

Form No. BL-1(F)

Bitumen for Premix Carpet/ Surface Dressing

Flash Point of Bitumen
Test 3

Sample Ref.: Date of Testing :

Tanker No.:

Barometric pressure: mm

Bitumen grade:

Sample No.	Flash point ºC	Corrected flash point

Layer	Value	Permissible Limit
		Min. 220ºC

Checked by: Tested by:

Bitumen for Premix Carpet/ Surface Dressing

Form No. BL-1(G)

Viscosity of Bitumen
Test 3

Sample Ref.: Date of Testing :

Tanker No.:

Bitumen grade:

Sample No.	Flash time	Atmospheric Pressure	Viscosity

Layer	Value	Permissible Limit
		As per specifications

Checked by: Tested by:

Form No. BL-1(H)

Bitumen for Premix Carpet/ Surface Dressing

Loss on Heat of Bitumen
Test 3

Sample Ref.: Date of Testing :
Tanker No.:
Bitumen grade:

(a) Per cent loss on heat

Sample No.	Wt. of bitumen before heating (w_1)	Wt. of bitumen after heating (w_2)	Percentage loss in wt. $\frac{w_1 ? w_2}{w_1} x100$

(b) Retained penetration percentage

Sample No.	Penetration before heating (l_1)	Penetration after heating (l_2)	Retained penetration percentage $\frac{l_1}{l_2} x100$

Layer	Value	Permissible Limit
		As per specifications

Checked by: Tested by:

Bitumen for Premix Carpet/ Surface Dressing *Form No. BL-1(l)*

Solubility of Bitumen in Trichloroethylene
Test 3

Sample Ref.: Date of Testing :

Tanker No.:

Bitumen grade:

Sample No.	Wt. of Sample (w_1)	Wt. of insoluble material (w_2)	Percentage of solube material $\frac{w_1 - w_2}{w_1} \times 100$

Layer	Value	Permissible Limit
		Min. 99%

Checked by: Tested by:

Form No. BL-1(Q)

Bitumen for Premix Carpet/ Surface Dressing

Wax Content of Bituminous Material
Test 3

Sample Ref.: Date of Testing :
Tanker No.:
Bitumen grade:

Sample No.	Mass of weighing flask in gm (w_1)	Mass of weighing flask plus wax gm (w_2)	Mass of sample in gm (s)	Wax % $\frac{w_2 - w_1}{s} \times 100$

Layer	Value	Permissible Limit
		Min. 4.5%

Checked by: Tested by:

Form BL-4

Aggregate for Premix Carpet/ Surface Dressing/ Bituminous Macadam

Aggregate Impact Value of Aggregate (IS: 2386 – Part 4)

Test 1

Sample No.: Date of Testing:

Name of Quarry / Location: Weight of Sample taken:

Observations	Test Nos.			Average
	1	2	3	
Weight of aggregate sample filling in the cylinder = W_1 (gm)				
Weight of aggregate passing 2.36 mm sieve after the test = W_2 (gm)				
A.I.V = (W_2/ W_1) x 100				

Layer	Value	Permissible Limit
Sub-base course		Not more than 50
Base course		Not more than 40
Wearing course		Not more than 30

Checked by: Tested by:

Form BL-4

Aggregate for Premix Carpet/ Surface Dressing/ Bituminous Macadam

Aggregate Impact Value of Aggregate (IS: 2386 – Part 4)
Test 2

Sample No.: Date of Testing:

Name of Quarry / Location: Weight of Sample taken:

Observations	Test Nos.			Average
	1	2	3	
Weight of aggregate sample filling in the cylinder = W_1 (gm)				
Weight of aggregate passing 2.36 mm sieve after the test = W_2 (gm)				
A.I.V = (W_2/ W_1) x 100				

Layer	Value	Permissible Limit
Sub-base course		Not more than 50
Base course		Not more than 40
Wearing course		Not more than 30

Checked by: Tested by:

Form BL-4

Aggregate for Premix Carpet/ Surface Dressing/ Bituminous Macadam

Aggregate Impact Value of Aggregate (IS: 2386 – Part 4)
Test 3

Sample No.: Date of Testing:

Name of Quarry / Location: Weight of Sample taken:

Observations	Test Nos.			Average
	1	2	3	
Weight of aggregate sample filling in the cylinder = W_1 (gm)				
Weight of aggregate passing 2.36 mm sieve after the test = W_2 (gm)				
A.I.V = (W_2/ W_1) x 100				

Layer	Value	Permissible Limit
Sub-base course		Not more than 50
Base course		Not more than 40
Wearing course		Not more than 30

Checked by: Tested by:

Form BL-5

Test for Aggregate for Bituminous construction

Flakiness Index of Aggregate
WBM Grade 3 Test 1

Sample No: Date of Sampling:
Name of Quarry / Location: Date of Testing:

Size of aggregate		Wt. of the fraction consisting of at least 200 pieces (gm)	Thickness gauge size, (0.6 times the mean sieve) (mm)	Weight of aggregate in each fraction passing thickness gauge, (gm)
Passing through I.S. Sieve, (mm)	Retained on I.S. Sieve (mm)			
63	50	W_1 =	23.90	w_1 =
50	40	W_2 =	27.00	w_2 =
40	31.5	W_3 =	19.50	w_3 =
31.5	25	W_4 =	16.95	w_4 =
25	20	W_5 =	13.50	w_5 =
20	16	W_6 =	10.80	w_6 =
16	12.5	W_7 =	8.55	w_7 =
12.5	10	W_8 =	6.75	w_8 =
10	6.3	W_9 =	4.89	w_9 =
Total		W =		w =

$$\text{Flakiness Index (F.I.)} = \frac{w}{W} \times 100 \ (\%)$$

Layer	Value	Permissible Limit	Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….			

Checked by: Tested by:

Date: _____ Date: _____

Form No. BL-6

Aggregate for Premix Carpet/ Surface Dressing/ Bituminous Macadam

Stripping Value of Aggregate
Test 1

Sample No: Date of Sampling:
Name of Quarry / Location Date of Testing:

Type of aggregate:	
Type of Binder	
Percentage of binder used:	
Total weight of aggregate:	
Total weight of binder:	
Temperature of water bath:	

Number of observations	Stripping (%)
1	
2	
3	
Average value	

Layer	Value	Permissible Limit
		Not more than 15 per cent

Checked by: Tested by:

Form No. GB-7

Aggregate for Premix Carpet/ Surface Dressing/ Bituminous

Water Absorption of Aggregate
IS: 2386 (Part 3)
Test 1

Sample No: Date of sampling:
Name of Quarry / Location Date of Testing:
Size of aggregate: Type of aggregate:

Observations	Test Nos.		
	1	2	Mean value
Wt. of saturated aggregate and basket in water (W_1) gm			
Wt. of basket in water (W_2) gm			
Wt. of saturated surface dry aggregate in air (W_3) gm			
Wt. of oven dried aggregate in air (W_4) gm			
Specific gravity = $W_4/W_3 - (W_1 – W_2)$			
Apparent Specific gravity = $W_4 / W_4 – (W_1 – W_2)$			
Water absorption = $(W_3 - W_4) \times 100 / W_4$ (%)			

Mean value of Specific gravity =	
Mean value of apparent specific gravity =	
Mean value of Water absorption =	

Layer	Value	Permissible Limit
		Not more than 2 per cent

Checked by: Tested by:

Form BL-8

Aggregate for Premix Carpet/ Surface Dressing

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 1

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue……..

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form BL-8

Aggregate for Premix Carpet/ Surface Dressing

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 2

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form BL-8

Aggregate for Premix Carpet/ Surface Dressing

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 3

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form BL-8

Aggregate for Premix Carpet/ Surface Dressing

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 4

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form BL-8

Aggregate for Premix Carpet/ Surface Dressing

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 5

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form BL-8

Aggregate for Premix Carpet/ Surface Dressing

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 6

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form BL-8

Aggregate for Premix Carpet/ Surface Dressing

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 7

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form BL-8

Aggregate for Premix Carpet/ Surface Dressing

Sieve Analysis (IS:2720 (Part 4) -1985)

Test 8

Road / Section Details: Date of Testing :

Sample No. : Weight of Sample taken: (gm)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value

Whether Confirms to the Prescribed Limits (Yes/No)
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved. Page No…….. Date of issue…….

Checked by: Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Form No. BL-13

Aggregate for Premix Carpet

Test 1

Soundness of Aggregate

Sample No: Date of Sampling:

Name of Quarry / Location: Date of Testing:

Type of reagent used: Number of cycles:

Type of coarse aggregate sample:

Sieve size, mm		Grading of original sample (%)	Wt. of each fraction before test (gm)	Percentage passing finer sieve after test (actual percent loss)	Weighted average (corrected percentage loss)
Passing	Retained				
1	2	3	4	5	6
60	40				
40	20				
20	10				
10	4.75				
Number of particles coarser than 20mm before test			Number of particles affected, classified as to the number disintegrating, splitting, crumbing, cracking or flanking		
Passing	Retained	Number before test			
40 mm	20 mm				
60 mm	40 mm				

Layer	Value	Permissible Limit
		Maximum 12 per cent (Sodium Sulphate Solution)
		Maximum 18 per cent (Magnesium Sulphate Solution)

Checked by: Tested by: