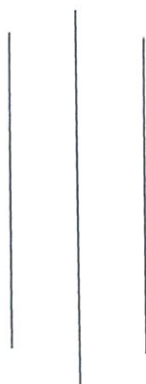


GALCHHI- TRISHULI- MAILUNG- SAFRUBESI- RASUWAGADHI SADAK YOJANA

**REPORT ON LABORATORY TEST RESULTS OF CEMENT CONCRETE MIX
DESIGN M25/20, M30/20 AND M35/20 ON PROVIDED SAMPLE OF
CEMENT,SAND AND AGGREGATES**



Client: Road Department, Bidur,Nuwakot

Contractor:Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

Submitted by :

VISWA CONSULT PVT.LTD.

P.O.Box 4316, Dillibazar, Kathmandu

Tel: 4433156 Fax : 977-01-4433156

Email : viswaconsultlab@gmail.com Web site: www.viswaconsult.com



M25/20 AND M35/20
CONCRETE MIX DESIGN TEST PARAMETERS
(SARBOTTAM OPC)

VISWA CONSULT Pvt. Ltd.

P.O.Box: 4316, Dillibazar, Kathmandu

Tel:4433156 Email:viswaconsultlab@gmail.com

Date : 2077.09.08

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

CEMENT CONCRETE MIX DESIGN TEST RESULTS FOR M25/20

Source of Sand : Santibazar Crusher

Source of Aggregate : Thulo Khola

Time of Mixing : 15:00 PM

Type of Aggregate : Crushed

Cement Brand : Sarbottam OPC

Weather : mostly Sunny

Water used : Tap water

Air Temperature : 17.0 °C Humidity = 34%

1. Sieve analysis Test Results

Sieve size mm	% passing	
	Aggregate	Sand
80	100	100
40	100	100
20	95.47	100
10	7.51	100
4.75	0.20	96.4
2.36	0.17	85.50
1.18	0.17	60.60
0.6	0.15	37.00
0.3	0.14	11.90
0.15	0.13	3.50

Coarse Aggregate and Fine aggregate all in air dry condition

2. Proportion of fine to mixed aggregate =	37.349	%
3. cement =	400.00	kg/M ³
4. Total absolute volume of aggregate =	0.733	M ³
5. Absolute volume of fine aggregate =	0.27	M ³
6. Absolute volume of coarse aggregate =	0.46	M ³
7. Water =	140	lit.
8. Water Cement Ratio =	0.350	
9. Slump =	12	MM

10. Mix Proportion :

	Cement	Sand	Aggregate
a. Mix proportion by volume :	1.000	2.081	3.490
b. Mix Proportion by Mass :	1.000	1.792	2.995

Samples were provided by Contractor. If it is found that the design is manipulated for whatever reasons, we shall not be responsible.



VISWA CONSULT Pvt. Ltd.

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Date : 2077.09.08

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

CEMENT CONCRETE MIX DESIGN TEST RESULTS FOR M25/20

11. Fineness Modulus of aggregate and sand

a. Fineness Modulus of 20 mm aggregate =	6.960
b. Fineness Modulus of sand =	3.050

12. Specific Gravity of aggregate and sand

a. Specific gravity of coarse aggregate (Mixed Aggregates) =	2.609
b. Specific gravity of fine aggregate (sand) =	2.618

13. Admixture Used: Cretoplast 1303(0.7% by wt. of cement)

14. Compressive Strength Test Results: (attached herewith)

A. 7 Days

a. Cube No.		1	2	3
b. Date of Casting		2077.09.01	2077.09.01	2077.09.01
c. Date of Crushing		2077.09.08	2077.09.08	2077.09.08
d. Weight of Cube	gm	8192	8214	8272
e. Density of Concrete	gm/cm ³	2.427	2.434	2.451
f. Area of Cube	cm ²	225	225	225
g. Age of Cube	days	7	7	7
h. Compressive Load KN	KN	660	760	730
i. Compressive Strength Test of cubes	Kg/cm ²	299.1	344.4	330.8

Note:

Concrete mix design results has been provided based on provided size and proportion of aggregate, sand and cement depending upon specific gravity, water cement ratio, slump and moisture content of the aggregate and sand as well as on curing of concrete. So therefore it is proposed to follow the mix design criteria to achieve the provided strength results.

Samples were provided by Contractor. If it is found that the design is manipulated for whatever reasons, we shall not be responsible.



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Date : 2077.09.08

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

CEMENT CONCRETE MIX DESIGN TEST RESULTS FOR M35/20

Source of Sand : Santibazar Crusher

Source of Aggregate : Thulo Khola

Time of Mixing : 16:00 PM

Type of Aggregate : Crushed

Cement Brand : Sarbottam OPC

Weather : mostly Sunny

Water used : Tap water

Air Temperature : 17.0 °C Humidity = 48%

1. Sieve analysis Test Results

Sieve size mm	% passing	
	Aggregate	Sand
80	100	100
40	100	100
20	95.47	100
10	7.51	100
4.75	0.20	96.4
2.36	0.17	85.50
1.18	0.17	60.60
0.6	0.15	37.00
0.3	0.14	11.90
0.15	0.13	3.50

Coarse Aggregate and Fine aggregate all in air dry condition

2. Proportion of fine to mixed aggregate =	36.071	%
3. cement =	475.00	kg/M ³
4. Total absolute volume of aggregate =	0.684	M ³
5. Absolute volume of fine aggregate =	0.25	M ³
6. Absolute volume of coarse aggregate =	0.44	M ³
7. Water =	188	lit.
8. Water Cement Ratio =	0.395	
9. Slump =	12	MM

10. Mix Proportion :

	Cement	Sand	Aggregate
a. Mix proportion by volume :	1.000	1.580	2.799
b. Mix Proportion by Mass :	1.000	1.360	2.403

Samples were provided by Contractor. If it is found that the design is manipulated for whatever reasons, we shall not be responsible.



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Date : 2077.09.08

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

CEMENT CONCRETE MIX DESIGN TEST RESULTS FOR M35/20

11. Fineness Modulus of aggregate and sand

a. Fineness Modulus of 20 mm aggregate =	6.960
b. Fineness Modulus of sand =	3.050

12. Specific Gravity of aggregate and sand

a. Specific gravity of coarse aggregate (Mixed Aggregates) =	2.609
b. Specific gravity of fine aggregate (sand) =	2.618

13. Admixture Used: Cretoplast 1404 (0.5% by wt. of cement)

Microsilica (4% by wt. of cement)

14. Compressive Strength Test Results: (attached herewith)

A. 7 Days

a. Cube No.		1	2	3
b. Date of Casting		2077.09.02	2077.09.02	2077.09.02
c. Date of Crushing		2077.09.09	2077.09.09	2077.09.09
d. Weight of Cube	gm	8448	8298	8382
e. Density of Concrete	gm/cm ³	2.503	2.459	2.484
f. Area of Cube	cm ²	225	225	225
g. Age of Cube	days	7	7	7
h. Compressive Load KN	KN	970	900	1140
i. Compressive Strength Test of cubes	Kg/cm ²	439.6	407.9	516.7

Note:

Concrete mix design results has been provided based on provided size and proportion of aggregate, sand and cement depending upon specific gravity, water cement ratio, slump and moisture content of the aggregate and sand as well as on curing of concrete. So therefore it is proposed to follow the mix design criteria to achieve the provided strength results.

Samples were provided by Contractor. If it is found that the design is manipulated for whatever reasons, we shall not be responsible.



COMPRESSIVE STRENGTH TEST RESULTS
(M25/20 AND M35/20, SARBOTTAM OPC)

VISWA CONSULT (P) LTD.

Dillibazar, Kathmandu

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Email : viswaconsultlab@gmail.com

LAB UNIT

COMPRESSIVE STRENGTH TEST OF CONCRETE CUBES

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Temperature: 17°C

Contract No: GTMSRRP/337011094/076/77-

002,003,004,005,006

Humidity: 34%

Aggregate Source: Thulo Khola

Weather: mostly Sunny

Sand Source: Santibazar Crusher

Time of Mix: 15:00 PM

Cement: Sarbottam OPC

Admixture Used: Cretoplast 1303 (0.7% by wt. of cement)

Grade: M25/20

Mortar Cube No.		1	2	3
Date of Casting		2077.09.01		
Date of Testing		2077.09.29		
Age of Cubes	days	28		
Length of Cube	cm	15.0	15.0	15.0
Breadth of Cube	cm	15.0	15.0	15.0
Height of Cube	cm	15.0	15.0	15.0
Weight of Cubes	gm	8208.00	8220.00	8388.00
Volume of Cubes	cm ³	3375.00	3375.00	3375.00
Density	gm/cm ³	2.43	2.44	2.49
Slump	cm	12.00		
Compressive Load	KN	890.00	730.00	880.00
	kg	90816.33	74489.80	89795.92
Area of Cubes	cm ²	225.00	225.00	225.00
Compressive Strength	kg/cm ²	403.63	331.07	399.09
	N/mm ²	39.56	32.44	39.11
Average	kg/cm ²	377.93		
	N/mm ²	37.0		

Remarks:

Tested by:

Checked by:



VISWA CONSULT (P) LTD.

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LAB UNIT

COMPRESSIVE STRENGTH TEST OF CONCRETE CUBES

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Temperature: 17°C

Contract No: GTMSRRP/337011094/076/77-

002,003,004,005,006

Humidity: 48%

Aggregate Source: Thulo Khola

Weather: mostly Sunny

Sand Source: Santibazar Crusher

Time of Mix: 16:00 PM

Cement: Sarbottam OPC

Admixture Used: Cretoplast 1404 (0.5% by wt. of cement)

Microsilica (4% by wt. of cement)

Grade: M35/20

Mortar Cube No.		1	2	3
Date of Casting		2077.09.02		
Date of Testing		2077.10.01		
Age of Cubes	days	28		
Length of Cube	cm	15.0	15.0	15.0
Breadth of Cube	cm	15.0	15.0	15.0
Height of Cube	cm	15.0	15.0	15.0
Weight of Cubes	gm	8350.00	8440.00	8382.00
Volume of Cubes	cm ³	3375.00	3375.00	8536.00
Density	gm/cm ³	2.47	2.50	0.98
Slump	cm	12.00		
Compressive Load	KN	1120.00	1020.00	980.00
	kg	114285.71	104081.63	100000.00
Area of Cubes	cm ²	225.00	225.00	225.00
Compressive Strength	kg/cm ²	507.94	462.59	444.44
	N/mm ²	49.78	45.33	43.56
Average	kg/cm ²	471.66		
	N/mm ²	46.2		

Remarks:

Tested by:

Checked by:

M25/20 AND M35/20
CONCRETE MIX DESIGN TEST PARAMETERS
(SHIVAMOPC)

VISWA CONSULT Pvt. Ltd.

P.O.Box: 4316, Dillibazar, Kathmandu

Tel:4433156 Email:viswaconsultlab@gmail.com

Date : 2077.09.08

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

CEMENT CONCRETE MIX DESIGN TEST RESULTS FOR M25/20

Source of Sand : Santibazar Crusher

Source of Aggregate : Thulo Khola

Time of Mixing : 12:42 PM

Type of Aggregate : Crushed

Cement Brand : Shivam OPC

Weather : mostly Sunny

Water used : Tap water

Air Temperature : 17.0 °C Humidity = 34%

1. Sieve analysis Test Results

Sieve size mm	% passing	
	Aggregate	Sand
80	100	100
40	100	100
20	95.47	100
10	7.51	100
4.75	0.20	96.4
2.36	0.17	85.50
1.18	0.17	60.60
0.6	0.15	37.00
0.3	0.14	11.90
0.15	0.13	3.50

Coarse Aggregate and Fine aggregate all in air dry condition

2. Proportion of fine to mixed aggregate =	38.628	%
3. cement =	395.00	kg/M ³
4. Total absolute volume of aggregate =	0.724	M ³
5. Absolute volume of fine aggregate =	0.28	M ³
6. Absolute volume of coarse aggregate =	0.44	M ³
7. Water =	150	lit.
8. Water Cement Ratio =	0.380	
9. Slump =	10	MM

10. Mix Proportion :

	Cement	Sand	Aggregate
a. Mix proportion by volume :	1.000	2.205	3.503
b. Mix Proportion by Mass :	1.000	1.855	2.937

Samples were provided by Contractor. If it is found that the design is manipulated for whatever reasons, we shall not be responsible.



VISWA CONSULT Pvt. Ltd.

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Tel:4433156 Email:viswaconsultlab@gmail.com

Date : 2077.09.08

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

CEMENT CONCRETE MIX DESIGN TEST RESULTS FOR M25/20

11. Fineness Modulus of aggregate and sand

a. Fineness Modulus of 20 mm aggregate =	6.960
b. Fineness Modulus of sand =	3.050

12. Specific Gravity of aggregate and sand

a. Specific gravity of coarse aggregate (Mixed Aggregates) =	2.609
b. Specific gravity of fine aggregate (sand) =	2.618

13. Admixture Used: Cretoplast 1303 (0.7% by wt. of cement)

14. Compressive Strength Test Results: (attached herewith)

A. 7 Days

a. Cube No.		1	2	3
b. Date of Casting		2077.09.01	2077.09.01	2077.09.01
c. Date of Crushing		2077.09.08	2077.09.08	2077.09.08
d. Weight of Cube	gm	8348	8250	8416
e. Density of Concrete	gm/cm ³	2.473	2.444	2.494
f. Area of Cube	cm ²	225	225	225
g. Age of Cube	days	7	7	7
h. Compressive Load KN	KN	890	850	930
i. Compressive Strength Test of cubes	Kg/cm ²	403.4	385.2	421.5

Note:

Concrete mix design results has been provided based on provided size and proportion of aggregate, sand and cement depending upon specific gravity, water cement ratio, slump and moisture content of the aggregate and sand as well as on curing of concrete. So therefore it is proposed to follow the mix design criteria to achieve the provided strength results.

Samples were provided by Contractor. If it is found that the design is manipulated for whatever reasons, we shall not be responsible.



VISWA CONSULT Pvt. Ltd.

P.O.Box: 4316, Dillibazar, Kathmandu

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Date : 2077.09.06

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

CEMENT CONCRETE MIX DESIGN TEST RESULTS FOR M35/20

Source of Sand : Santibazar Crusher

Source of Aggregate : Thulo Khola

Time of Mixing : 15:30 PM

Type of Aggregate : Crushed

Cement Brand : Shivam OPC

Weather : mostly Sunny

Water used : Tap water

Air Temperature : 17.0 °C Humidity = 42%

1. Sieve analysis Test Results

Sieve size mm	% passing	
	Aggregate	Sand
80	100	100
40	100	100
20	95.47	100
10	7.51	100
4.75	0.20	96.4
2.36	0.17	85.50
1.18	0.17	60.60
0.6	0.15	37.00
0.3	0.14	11.90
0.15	0.13	3.50

Coarse Aggregate and Fine aggregate all in air dry condition

2. Proportion of fine to mixed aggregate =	36.071	%
3. cement =	467.00	kg/M ³
4. Total absolute volume of aggregate =	0.687	M ³
5. Absolute volume of fine aggregate =	0.25	M ³
6. Absolute volume of coarse aggregate =	0.44	M ³
7. Water =	165	lit.
8. Water Cement Ratio =	0.353	
9. Slump =	12	MM

10. Mix Proportion :

	Cement	Sand	Aggregate
a. Mix proportion by volume :	1.000	1.651	2.926
b. Mix Proportion by Mass :	1.000	1.389	2.453

Samples were provided by Contractor. If it is found that the design is manipulated for whatever reasons, we shall not be responsible.



VISWA CONSULT Pvt. Ltd.

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Date : 2077.09.06

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

CEMENT CONCRETE MIX DESIGN TEST RESULTS FOR M35/20

11. Fineness Modulus of aggregate and sand

a. Fineness Modulus of 20 mm aggregate =	6.960
b. Fineness Modulus of sand =	3.050

12. Specific Gravity of aggregate and sand

a. Specific gravity of coarse aggregate (Mixed Aggregates) =	2.609
b. Specific gravity of fine aggregate (sand) =	2.618

13. Admixture Used: Cretoplast 1404(0.5% by wt. of cement)

Microsilica(4% by wt. of cement)

14. Compressive Strength Test Results: (attached herewith)

A. 7 Days

a. Cube No.		1	2	3
b. Date of Casting		2077.08.29	2077.08.29	2077.08.29
c. Date of Crushing		2077.09.06	2077.09.06	2077.09.06
d. Weight of Cube	gm	8104	7992	8324
e. Density of Concrete	gm/cm ³	2.401	2.368	2.466
f. Area of Cube	cm ²	225	225	225
g. Age of Cube	days	7	7	7
h. Compressive Load KN	KN	910	830	850
i. Compressive Strength Test of cubes	Kg/cm ²	412.4	376.2	385.2

Note:

Concrete mix design results has been provided based on provided size and proportion of aggregate, sand and cement depending upon specific gravity, water cement ratio, slump and moisture content of the aggregate and sand as well as on curing of concrete. So therefore it is proposed to follow the mix design criteria to achieve the provided strength results.

Samples were provided by Contractor. If it is found that the design is manipulated for whatever reasons, we shall not be responsible.



**COMPRESSIVE STRENGTH TEST RESULTS
(M25/20 AND M35/20, SHIVAM OPC)**

VISWA CONSULT (P) LTD.

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LAB UNIT

COMPRESSIVE STRENGTH TEST OF CONCRETE CUBES

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Temperature: 17°C

Contract No: GTMSRRP/337011094/076/77-
002,003,004,005,006

Humidity: 34%

Aggregate Source: Thulo Khola

Weather: mostly Sunny

Sand Source: Santibazar Crusher

Time of Mix: 12:42 PM

Cement: Shivam OPC

Admixture Used: Cretoplast 1303 (0.7% by wt. of cement)

Grade: M25/20

Mortar Cube No.		1	2	3
Date of Casting		2077.09.01		
Date of Testing		2077.09.29		
Age of Cubes	days	28		
Length of Cube	cm	15.0	15.0	15.0
Breadth of Cube	cm	15.0	15.0	15.0
Height of Cube	cm	15.0	15.0	15.0
Weight of Cubes	gm	8425.00	8496.00	8389.00
Volume of Cubes	cm ³	3375.00	3375.00	3375.00
Density	gm/cm ³	2.50	2.52	2.49
Slump	cm	10.00		
Compressive Load	KN	975.00	1000.00	1055.00
	kg	99489.80	102040.82	107653.06
Area of Cubes	cm ²	225.00	225.00	225.00
Compressive Strength	kg/cm ²	442.18	453.51	478.46
	N/mm ²	43.33	44.44	46.89
Average	kg/cm ²	458.05		
	N/mm ²	44.9		

Remarks:

Tested by:

Checked by:



VISWA CONSULT (P) LTD.

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LAB UNIT

COMPRESSIVE STRENGTH TEST OF CONCRETE CUBES

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Temperature: 17°C

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Humidity: 42%

Aggregate Source: Thulo Khola

Weather: mostly Sunny

Sand Source: Santibazar Crusher

Time of Mix: 15:30 PM

Cement: Shivam OPC

Admixture Used: Cretoplast 1404 (0.5% by wt. of cement)

Microsilica (4% by wt. of cement)

Grade: M35/20

Mortar Cube No.		1	2	3
Date of Casting		2077.08.29		
Date of Testing		2077.09.27		
Age of Cubes	days	28		
Length of Cube	cm	15.0	15.0	15.0
Breadth of Cube	cm	15.0	15.0	15.0
Height of Cube	cm	15.0	15.0	15.0
Weight of Cubes	gm	8280.00	8374.00	8270.00
Volume of Cubes	cm ³	3375.00	3375.00	3375.00
Density	gm/cm ³	2.45	2.48	2.45
Slump	cm	12.00		
Compressive Load	KN	1010.00	1020.00	1025.00
	kg	103061.22	104081.63	104591.84
Area of Cubes	cm ²	225.00	225.00	225.00
Compressive Strength	kg/cm ²	458.05	462.59	464.85
	N/mm ²	44.89	45.33	45.56
Average	kg/cm ²	461.83		
	N/mm ²	45.3		

Remarks:

Tested by:

Checked by:



M25/20 AND M35/20
CONCRETE MIX DESIGN TEST PARAMETERS
(JAGDAMBA OPC)

VISWA CONSULT Pvt. Ltd.

P.O.Box: 4316, Dillibazar, Kathmandu

Tel: 4433156 Email: viswaconsultlab@gmail.com

Date : 2077.09.05

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

CEMENT CONCRETE MIX DESIGN TEST RESULTS FOR M25/20

Source of Sand : Santibazar Crusher

Source of Aggregate : Thulo Khola

Time of Mixing : 15:00 PM

Type of Aggregate : Crushed

Cement Brand : Jagdamba OPC

Weather : mostly Sunny

Water used : Tap water

Air Temperature : 17.0 °C Humidity = 51%

1. Sieve analysis Test Results

Sieve size mm	% passing	
	Aggregate	Sand
80	100	100
40	100	100
20	95.47	100
10	7.51	100
4.75	0.20	96.4
2.36	0.17	85.50
1.18	0.17	60.60
0.6	0.15	37.00
0.3	0.14	11.90
0.15	0.13	3.50

Coarse Aggregate and Fine aggregate all in air dry condition

2. Proportion of fine to mixed aggregate =	39.906	%
3. cement =	390.00	kg/M ³
4. Total absolute volume of aggregate =	0.726	M ³
5. Absolute volume of fine aggregate =	0.29	M ³
6. Absolute volume of coarse aggregate =	0.44	M ³
7. Water =	150	lit.
8. Water Cement Ratio =	0.385	
9. Slump =	10	MM

10. Mix Proportion :

	Cement	Sand	Aggregate
a. Mix proportion by volume :	1.000	2.312	3.482
b. Mix Proportion by Mass :	1.000	1.945	2.919

Samples were provided by Contractor. If it is found that the design is manipulated for whatever reasons, we shall not be responsible.



VISWA CONSULT Pvt. Ltd.

P.O.Box: 4316, Dillibazar, Kathmandu

Tel:4433156 Email:viswaconsultlab@gmail.com

Date : 2077.09.05

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

CEMENT CONCRETE MIX DESIGN TEST RESULTS FOR M25/20

11. Fineness Modulus of aggregate and sand

a. Fineness Modulus of 20 mm aggregate =	6.960
b. Fineness Modulus of sand =	3.050

12. Specific Gravity of aggregate and sand

a. Specific gravity of coarse aggregate (Mixed Aggregates) =	2.609
b. Specific gravity of fine aggregate (sand) =	2.618

13. Admixture Used: Cretoplast 1303 (0.7% by wt. of cement)

14. Compressive Strength Test Results: (attached herewith)

A. 7 Days

a. Cube No.		1	2	3
b. Date of Casting		2077.08.28	2077.08.28	2077.08.28
c. Date of Crushing		2077.09.05	2077.09.05	2077.09.05
d. Weight of Cube	gm	8449.5	8465.8	8495.6
e. Density of Concrete	gm/cm ³	2.504	2.508	2.517
f. Area of Cube	cm ²	225	225	225
g. Age of Cube	days	7	7	7
h. Compressive Load KN	KN	500	640	430
i. Compressive Strength Test of cubes	Kg/cm ²	226.6	290.1	194.9

Note:

Concrete mix design results has been provided based on provided size and proportion of aggregate, sand and cement depending upon specific gravity, water cement ratio, slump and moisture content of the aggregate and sand as well as on curing of concrete. So therefore it is proposed to follow the mix design criteria to achieve the provided strength results.

Samples were provided by Contractor. If it is found that the design is manipulated for whatever reasons, we shall not be responsible.



VISWA CONSULT Pvt. Ltd.

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Date : 2077.09.05

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

CEMENT CONCRETE MIX DESIGN TEST RESULTS FOR M35/20

Source of Sand : Santibazar Crusher

Source of Aggregate : Thulo Khola

Time of Mixing : 15:40 PM

Type of Aggregate : Crushed

Cement Brand : Jagdamba OPC

Weather : mostly Sunny

Water used : Tap water

Air Temperature : 17.0 °C Humidity = 51%

1. Sieve analysis Test Results

Sieve size mm	% passing	
	Aggregate	Sand
80	100	100
40	100	100
20	95.47	100
10	7.51	100
4.75	0.20	96.4
2.36	0.17	85.50
1.18	0.17	60.60
0.6	0.15	37.00
0.3	0.14	11.90
0.15	0.13	3.50

Coarse Aggregate and Fine aggregate all in air dry condition

2. Proportion of fine to mixed aggregate =	37.340	%
3. cement =	460.00	kg/M ³
4. Total absolute volume of aggregate =	0.688	M ³
5. Absolute volume of fine aggregate =	0.26	M ³
6. Absolute volume of coarse aggregate =	0.43	M ³
7. Water =	165	lit.
8. Water Cement Ratio =	0.359	
9. Slump =	12	MM

10. Mix Proportion :

	Cement	Sand	Aggregate
a. Mix proportion by volume :	1.000	1.741	2.920
b. Mix Proportion by Mass :	1.000	1.465	2.448

Samples were provided by Contractor. If it is found that the design is manipulated for whatever reasons, we shall not be responsible.



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Date : 2077.09.05

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

CEMENT CONCRETE MIX DESIGN TEST RESULTS FOR M35/20

11. Fineness Modulus of aggregate and sand

a. Fineness Modulus of 20 mm aggregate =	6.960
b. Fineness Modulus of sand =	3.050

12. Specific Gravity of aggregate and sand

a. Specific gravity of coarse aggregate (Mixed Aggregates) =	2.609
b. Specific gravity of fine aggregate (sand) =	2.618

13. Admixture Used: Cretoplast 1404(0.5% by wt. of cement)

Microsilica(4% by wt. of cement)

14. Compressive Strength Test Results: (attached herewith)

A. 7 Days

a. Cube No.		1	2	3
b. Date of Casting		2077.08.28	2077.08.28	2077.08.28
c. Date of Crushing		2077.09.05	2077.09.05	2077.09.05
d. Weight of Cube	gm	8537.1	8480.4	8504.5
e. Density of Concrete	gm/cm ³	2.530	2.513	2.520
f. Area of Cube	cm ²	225	225	225
g. Age of Cube	days	7	7	7
h. Compressive Load KN	KN	750	720	640
i. Compressive Strength Test of cubes	Kg/cm ²	339.9	326.3	290.1

Note:

Concrete mix design results has been provided based on provided size and proportion of aggregate, sand and cement depending upon specific gravity, water cement ratio, slump and moisture content of the aggregate and sand as well as on curing of concrete. So therefore it is proposed to follow the mix design criteria to achieve the provided strength results.

Samples were provided by Contractor. If it is found that the design is manipulated for whatever reasons, we shall not be responsible.



COMPRESSIVE STRENGTH TEST RESULTS (M25/20 AND M35/20, JAGDAMBA OPC)

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LAB UNIT

COMPRESSIVE STRENGTH TEST OF CONCRETE CUBES

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Temperature: 17°C

Contract No: GTMSRRP/337011094/076/77-
002,003,004,005,006

Humidity: 51%

Aggregate Source: Thulo Khola

Weather: mostly Sunny

Sand Source: Santibazar Crusher

Time of Mix: 15:00 PM

Cement: Jagdamba OPC

Admixture Used: Cretoplast 1303 (0.7% by wt. of cement)

Grade: M25/20

Mortar Cube No.		1	2	3
Date of Casting		2077.08.28		
Date of Testing		2077.09.26		
Age of Cubes	days	28		
Length of Cube	cm	15.0	15.0	15.0
Breadth of Cube	cm	15.0	15.0	15.0
Height of Cube	cm	15.0	15.0	15.0
Weight of Cubes	gm	8464.00	8370.00	8170.00
Volume of Cubes	cm ³	3375.00	3375.00	3375.00
Density	gm/cm ³	2.51	2.48	2.42
Slump	cm	11.00		
Compressive Load	KN	600.00	770.00	900.00
	kg	61224.49	78571.43	91836.73
Area of Cubes	cm ²	225.00	225.00	225.00
Compressive Strength	kg/cm ²	272.11	349.21	408.16
	N/mm ²	26.67	34.22	40.00
Average	kg/cm ²	343.16		
	N/mm ²	33.6		

Remarks:

Tested by:

Checked by:



VISWA CONSULT (P) LTD.

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LAB UNIT

COMPRESSIVE STRENGTH TEST OF CONCRETE CUBES

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Temperature: 17°C

Contract No: GTMSRRP/337011094/076/77-

002,003,004,005,006

Humidity: 51%

Aggregate Source: Thulo Khola

Weather: mostly Sunny

Sand Source: Santibazar Crusher

Time of Mix: 15:40 PM

Cement: Jagdamba OPC

Admixture Used: Cretoplast 1404 (0.5% by wt. of cement)

Microsilica (4% by wt. of cement)

Grade: M35/20

Mortar Cube No.		1	2	3
Date of Casting		2077.08.28		
Date of Testing		2077.09.26		
Age of Cubes	days	28		
Length of Cube	cm	15.0	15.0	15.0
Breadth of Cube	cm	15.0	15.0	15.0
Height of Cube	cm	15.0	15.0	15.0
Weight of Cubes	gm	8404.00	8410.00	8442.00
Volume of Cubes	cm ³	3375.00	3375.00	3375.00
Density	gm/cm ³	2.49	2.49	2.50
Slump	cm	12.00		
Compressive Load	KN	1040.00	985.00	945.00
	kg	106122.45	100510.20	96428.57
Area of Cubes	cm ²	225.00	225.00	225.00
Compressive Strength	kg/cm ²	471.66	446.71	428.57
	N/mm ²	46.22	43.78	42.00
Average	kg/cm ²	448.98		
	N/mm ²	44.0		

Remarks:

Tested by:

Checked by:



M30/20
CONCRETE MIX DESIGN TEST PARAMETERS
(JAGDAMBA OPC)

VISWA CONSULT Pvt. Ltd.

P.O.Box: 4316, Dillibazar, Kathmandu

Tel:4433156 Email:viswaconsultlab@gmail.com

Date : 2077.09.13

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

CEMENT CONCRETE MIX DESIGN TEST RESULTS FOR M30/20

Source of Sand : Santibazar Crusher

Source of Aggregate : Thulo Khola

Time of Mixing : 15:30 PM

Type of Aggregate : Crushed

Cement Brand : Jagdamba OPC

Weather : Haze

Water used : Tap water

Air Temperature : 17.0 °C Humidity = 39%

1. Sieve analysis Test Results

Sieve size mm	% passing	
	Aggregate	Sand
80	100	100
40	100	100
20	95.47	100
10	7.51	100
4.75	0.20	96.4
2.36	0.17	85.50
1.18	0.17	60.60
0.6	0.15	37.00
0.3	0.14	11.90
0.15	0.13	3.50

Coarse Aggregate and Fine aggregate all in air dry condition

2. Proportion of fine to mixed aggregate =	37.349	%
3. cement =	410.00	kg/M ³
4. Total absolute volume of aggregate =	0.720	M ³
5. Absolute volume of fine aggregate =	0.27	M ³
6. Absolute volume of coarse aggregate =	0.45	M ³
7. Water =	169	lit.
8. Water Cement Ratio =	0.412	
9. Slump =	13	MM

10. Mix Proportion :

	Cement	Sand	Aggregate
a. Mix proportion by volume :	1.000	2.041	3.423
b. Mix Proportion by Mass :	1.000	1.717	2.869

Samples were provided by Contractor. If it is found that the design is manipulated for whatever reasons, we shall not be responsible.



VISWA CONSULT Pvt. Ltd.

P.O.Box: 4316, Dillibazar, Kathmandu

Tel:4433156 Email:viswaconsultlab@gmail.com

Date : 2077.09.13

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

CEMENT CONCRETE MIX DESIGN TEST RESULTS FOR M30/20

11. Fineness Modulus of aggregate and sand

a. Fineness Modulus of 20 mm aggregate =	6.960
b. Fineness Modulus of sand =	3.050

12. Specific Gravity of aggregate and sand

a. Specific gravity of coarse aggregate (Mixed Aggregates) =	2.609
b. Specific gravity of fine aggregate (sand) =	2.618

13. Admixture Used: Cretoplast 1303(0.7% by wt. of cement)
Microsilica(3% by wt. of cement)

14. Compressive Strength Test Results: (attached herewith)

A. 7 Days

a. Cube No.		1	2	3
b. Date of Casting		2077.09.06	2077.09.06	2077.09.06
c. Date of Crushing		2077.09.13	2077.09.13	2077.09.13
d. Weight of Cube	gm	8376	8396	8384
e. Density of Concrete	gm/cm ³	2.482	2.488	2.484
f. Area of Cube	cm ²	225	225	225
g. Age of Cube	days	7	7	7
h. Compressive Load KN	KN	620	680	670
i. Compressive Strength Test of cubes	Kg/cm ²	281.0	308.2	303.6

Note:

Concrete mix design results has been provided based on provided size and proportion of aggregate, sand and cement depending upon specific gravity, water cement ratio, slump and moisture content of the aggregate and sand as well as on curing of concrete. So therefore it is proposed to follow the mix design criteria to achieve the provided strength results.

Samples were provided by Contractor. If it is found that the design is manipulated for whatever reasons, we shall not be responsible.



COMPRESSIVE STRENGTH TEST RESULTS
(M30/20, JAGDAMBA OPC)

VISWA CONSULT (P) LTD.

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LAB UNIT

COMPRESSIVE STRENGTH TEST OF CONCRETE CUBES

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Temperature: 17°C

Contract No: GTMSRRP/337011094/076/77-

002,003,004,005,006

Humidity: 39%

Aggregate Source: Thulo Khola

Weather: Haze

Sand Source: Santibazar Crusher

Time of Mix: 15:30 PM

Cement: Jagdamba OPC

Admixture Used: Cretoplast 1303 (0.7% by wt. of cement)

Microsilica (3% by wt. of cement)

Grade: M30/20

Mortar Cube No.		1	2	3
Date of Casting		2077.09.06		
Date of Testing		2077.10.05		
Age of Cubes	days	28		
Length of Cube	cm	15.0	15.0	15.0
Breadth of Cube	cm	15.0	15.0	15.0
Height of Cube	cm	15.0	15.0	15.0
Weight of Cubes	gm	8264.00	8336.00	8458.00
Volume of Cubes	cm ³	3375.00	3375.00	3375.00
Density	gm/cm ³	2.45	2.47	2.51
Slump	cm	13.00		
Compressive Load	KN	910.00	920.00	920.00
	kg	92857.14	93877.55	93877.55
Area of Cubes	cm ²	225.00	225.00	225.00
Compressive Strength	kg/cm ²	412.70	417.23	417.23
	N/mm ²	40.44	40.89	40.89
Average	kg/cm ²	415.72		
	N/mm ²	40.7		

Remarks:

Tested by:



Checked by:

M30/20
CONCRETE MIX DESIGN TEST PARAMETERS
(SHIVAM OPC)

VISWA CONSULT Pvt. Ltd.

P.O.Box: 4316, Dillibazar, Kathmandu

Tel:4433156 Email:viswaconsultlab@gmail.com

Date : 2077.09.15

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

CEMENT CONCRETE MIX DESIGN TEST RESULTS FOR M30/20

Source of Sand : Santibazar Crusher

Source of Aggregate : Thulo Khola

Time of Mixing : 16:00 PM

Type of Aggregate : Crushed

Cement Brand : Shivam OPC

Weather : Partly sunny

Water used : Tap water

Air Temperature : 17.0 °C Humidity = 45%

1. Sieve analysis Test Results

Sieve size mm	% passing	
	Aggregate	Sand
80	100	100
40	100	100
20	95.47	100
10	7.51	100
4.75	0.20	96.4
2.36	0.17	85.50
1.18	0.17	60.60
0.6	0.15	37.00
0.3	0.14	11.90
0.15	0.13	3.50

Coarse Aggregate and Fine aggregate all in air dry condition

2. Proportion of fine to mixed aggregate =	37.349	%
3. cement =	415.00	kg/M ³
4. Total absolute volume of aggregate =	0.718	M ³
5. Absolute volume of fine aggregate =	0.27	M ³
6. Absolute volume of coarse aggregate =	0.45	M ³
7. Water =	150	lit.
8. Water Cement Ratio =	0.361	
9. Slump =	12	MM

10. Mix Proportion :

	Cement	Sand	Aggregate
a. Mix proportion by volume :	1.000	1.969	3.302
b. Mix Proportion by Mass :	1.000	1.692	2.829

Samples were provided by Contractor. If it is found that the design is manipulated for whatever reasons, we shall not be responsible.



VISWA CONSULT Pvt. Ltd.

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Tel:4433156 Email:viswaconsultlab@gmail.com

Date : 2077.09.15

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

CEMENT CONCRETE MIX DESIGN TEST RESULTS FOR M30/20

11. Fineness Modulus of aggregate and sand

a. Fineness Modulus of 20 mm aggregate =	6.960
b. Fineness Modulus of sand =	3.050

12. Specific Gravity of aggregate and sand

a. Specific gravity of coarse aggregate (Mixed Aggregates) =	2.609
b. Specific gravity of fine aggregate (sand) =	2.618

13. Admixture Used: Cretoplast 1303 (0.7% by wt. of cement)
Microsilica (3% by wt. of cement)

14. Compressive Strength Test Results: (attached herewith)

A. 7 Days

a. Cube No.		1	2	3
b. Date of Casting		2077.09.08	2077.09.08	2077.09.08
c. Date of Crushing		2077.09.15	2077.09.15	2077.09.15
d. Weight of Cube	gm	8246	8478	8280
e. Density of Concrete	gm/cm ³	2.443	2.512	2.453
f. Area of Cube	cm ²	225	225	225
g. Age of Cube	days	7	7	7
h. Compressive Load KN	KN	690	760	830
i. Compressive Strength Test of cubes	Kg/cm ²	312.7	344.4	376.2

Note:

Concrete mix design results has been provided based on provided size and proportion of aggregate, sand and cement depending upon specific gravity, water cement ratio, slump and moisture content of the aggregate and sand as well as on curing of concrete. So therefore it is proposed to follow the mix design criteria to achieve the provided strength results.

Samples were provided by Contractor. If it is found that the design is manipulated for whatever reasons, we shall not be responsible.



COMPRESSIVE STRENGTH TEST RESULTS
(M30/20, SHIVAM OPC)

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LAB UNIT

COMPRESSIVE STRENGTH TEST OF CONCRETE CUBES

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Temperature: 15⁰C

Contract No: GTMSRRP/337011094/076/77-

002,003,004,005,006

Humidity: 45%

Aggregate Source: Thulo Khola

Weather: partly Sunny

Sand Source: Santibazar Crusher

Time of Mix: 16:00 PM

Cement: Shivam OPC

Admixture Used: Cretoplast 1303 (0.7% by wt. of cement)

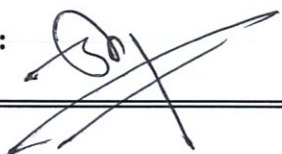
Microsilica (3% by wt. of cement)

Grade: M30/20

Mortar Cube No.		1	2	3
Date of Casting		2077.09.08		
Date of Testing		2077.10.07		
Age of Cubes	days	28		
Length of Cube	cm	15.0	15.0	15.0
Breadth of Cube	cm	15.0	15.0	15.0
Height of Cube	cm	15.0	15.0	15.0
Weight of Cubes	gm	8326.00	8374.00	8297.00
Volume of Cubes	cm ³	3375.00	3375.00	3375.00
Density	gm/cm ³	2.47	2.48	2.46
Slump	cm	12.00		
Compressive Load	KN	950.00	930.00	900.00
	kg	96938.78	94897.96	91836.73
Area of Cubes	cm ²	225.00	225.00	225.00
Compressive Strength	kg/cm ²	430.84	421.77	408.16
	N/mm ²	42.22	41.33	40.00
Average	kg/cm ²	420.26		
	N/mm ²	41.2		

Remarks:

Tested by:



Checked by:



VISWA CONSULT Pvt. Ltd.

P.O.Box: 4316, Dillibazar, Kathmandu

Tel:4433156 Email:viswaconsultlab@gmail.com

Date : 2077.09.20

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

CEMENT CONCRETE MIX DESIGN TEST RESULTS FOR M25/20

Source of Sand : Santibazar Crusher

Source of Aggregate : Thulo Khola

Time of Mixing : 16:35 PM

Type of Aggregate : Crushed

Cement Brand : United OPC

Weather : Haze

Water used : Tap water

Air Temperature : 16.0 °C Humidity = 32%

1. Sieve analysis Test Results

Sieve size mm	% passing	
	Aggregate	Sand
80	100	100
40	100	100
20	95.47	100
10	7.51	100
4.75	0.20	96.4
2.36	0.17	85.50
1.18	0.17	60.60
0.6	0.15	37.00
0.3	0.14	11.90
0.15	0.13	3.50

Coarse Aggregate and Fine aggregate all in air dry condition

2. Proportion of fine to mixed aggregate =	39.906	%
3. cement =	419.00	kg/M ³
4. Total absolute volume of aggregate =	0.717	M ³
5. Absolute volume of fine aggregate =	0.29	M ³
6. Absolute volume of coarse aggregate =	0.43	M ³
7. Water =	150	lit.
8. Water Cement Ratio =	0.358	
9. Slump =	12	MM

10. Mix Proportion :

	Cement	Sand	Aggregate
a. Mix proportion by volume :	1.000	2.124	3.198
b. Mix Proportion by Mass :	1.000	1.788	2.683

Samples were provided by Contractor. If it is found that the design is manipulated for whatever reasons, we shall not be responsible.



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Date : 2077.09.20

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/ RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Office Reg no: VC-D326

CEMENT CONCRETE MIX DESIGN TEST RESULTS FOR M25/20

11. Fineness Modulus of aggregate and sand

a. Fineness Modulus of 20 mm aggregate =	6.960
b. Fineness Modulus of sand =	3.050

12. Specific Gravity of aggregate and sand

a. Specific gravity of coarse aggregate (Mixed Aggregates) =	2.609
b. Specific gravity of fine aggregate (sand) =	2.618

13. Admixture Used: Cretoplast 1303(0.7% by wt. of cement)

14. Compressive Strength Test Results: (attached herewith)

A. 7 Days

a. Cube No.		1	2	3
b. Date of Casting		2077.09.13	2077.09.13	2077.09.13
c. Date of Crushing		2077.09.20	2077.09.20	2077.09.20
d. Weight of Cube	gm	8254	8297	8284
e. Density of Concrete	gm/cm ³	2.446	2.458	2.455
f. Area of Cube	cm ²	225	225	225
g. Age of Cube	days	7	7	7
h. Compressive Load KN	KN	820	840	835
i. Compressive Strength Test of cubes	Kg/cm ²	371.6	380.7	378.4

Note:

Concrete mix design results has been provided based on provided size and proportion of aggregate, sand and cement depending upon specific gravity, water cement ratio, slump and moisture content of the aggregate and sand as well as on curing of concrete. So therefore it is proposed to follow the mix design criteria to achieve the provided strength results.

Samples were provided by Contractor. If it is found that the design is manipulated for whatever reasons, we shall not be responsible.



COMPRESSIVE STRENGTH TEST RESULTS
(M25/20, UNITED OPC)

SIEVE ANALYSIS TEST RESULTS

VISWA CONSULT PVT. LTD.
SIEVE ANALYSIS

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Sample: Coarse Aggregates

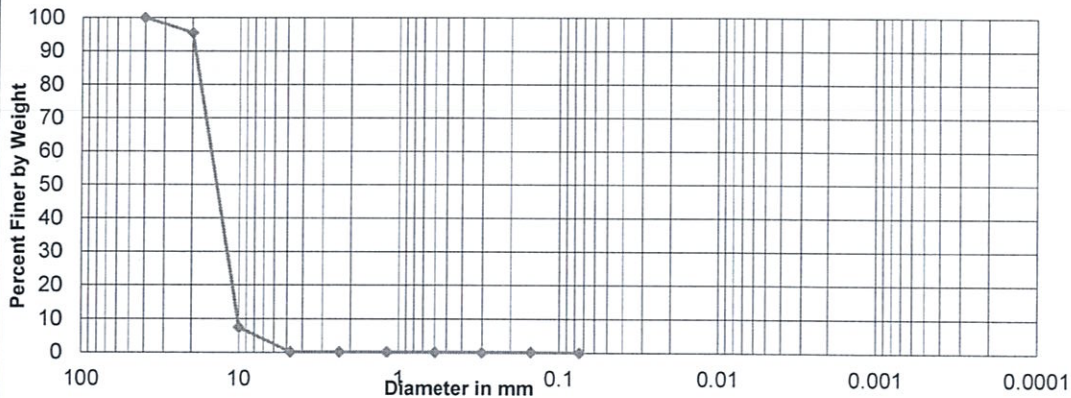
Aggregate Source: Thulo Khola

Date: 2077.08.26

Office Regn.No: VC-D326

Sieve Size mm	Wt. Retained gm	Wt. Passing gm	% Passing	Remarks
Total weight	3929.80			
40	0.00	3929.80	100.00	
20	177.90	3751.90	95.47	
10	3456.80	295.10	7.51	
4.75	287.20	7.90	0.20	
2.36	1.20	6.70	0.17	
1.18	0.10	6.60	0.17	
0.6	0.80	5.80	0.15	
0.3	0.30	5.50	0.14	
0.15	0.20	5.30	0.13	
0.075	3.20	2.10	0.05	
Pan	2.10			
TOTAL WT.	3929.80			

GRAIN SIZE DISTRIBUTION CURVE



Tested By :-



Checked By :-

VISWA CONSULT PVT. LTD.

SIEVE ANALYSIS

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Sample: Fine Aggregates

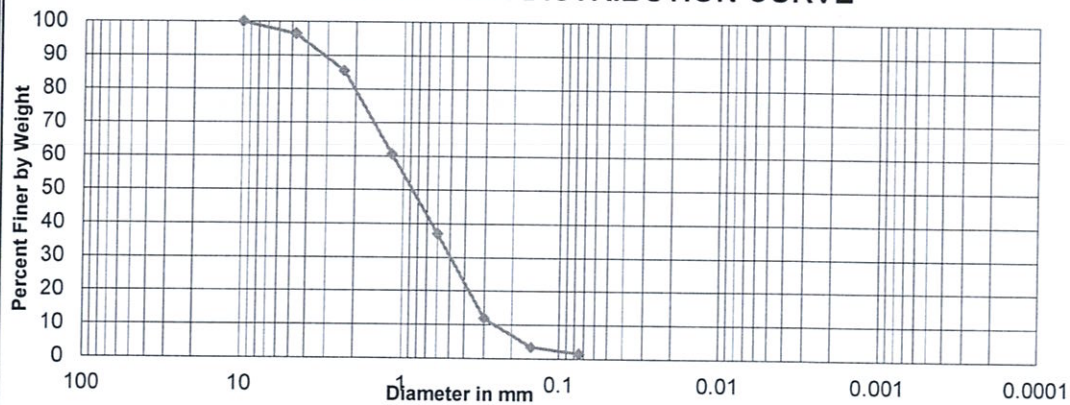
Aggregate Source: Santibazar Crusher

Date: 2077.08.26

Office Regn.No: VC-D326

Sieve Size mm	Wt. Retained gm	Wt. Passing gm	% Passing	Remarks
Total weight	500.00			
10	0.00	500.00	100.00	
4.75	17.80	482.20	96.44	
2.36	54.80	427.40	85.48	
1.18	124.20	303.20	60.64	
0.6	118.00	185.20	37.04	
0.3	125.70	59.50	11.90	
0.15	42.00	17.50	3.50	
0.075	9.50	8.00	1.60	
Wash	7.70			
Pan	0.30			
TOTAL WT.	500.00			

GRAIN SIZE DISTRIBUTION CURVE



Tested By :-

[Signature]



Checked By :-

[Signature]

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LAB UNIT

SPECIFIC GRAVITY OF AGGREGATES

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Aggregate Source: Thulo Khola

Date: 2077.08.26

	Determination No.	1	Units
A	Wt. Of Oven Dry Sample in Air	272.40	gms
B	Wt. Of SSD Sample in Air	273.60	gms
C	Wt. Of SSD Sample in Water	169.20	gms
A/(B-C)	Bulk Specific Gravity (Oven dry)	2.609	
B/(B-C)	Bulk Specific Gravity (SSD)	2.621	
A/(A-C)	Apparent Specific Gravity	2.640	
(B-A)/A*100	Water Absorption	0.441	

Remarks: Sample provided by the Contractor.

Tested By:



Checked By:

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LAB UNIT

SPECIFIC GRAVITY OF FINE AGGREGATES

Project: Galchhi- Trishuli- Mailung- Safrubesi- Rasuwagadhi Sadak Yojana

Client: Road Department, Bidur, Nuwakot

Contractor: Anjana/RD/ RS JV

Contract No: GTMSRRP/337011094/076/77-002,003,004,005,006

Aggregate Source: Santibazar Crusher

Date: 2077.08.26

	Determination No.	1	Units
A	Wt. Of Pyc+Water(Full)	368.50	gms
B	Wt. Of Pyc Empty and Dry	111.60	gms
C	Wt. Of Pyc+Oven Dry Sample	290.90	gms
E	Wt. Of Pyc+Sample+water(Full)	479.30	
D=(C-B)	Wt. of Oven Dry Sample	179.30	
D/(D+A-E)	Specific Gravity	2.618	

Remarks: Sample provided by the Contractor.

Tested By:



Checked By:

CEMENT TEST RESULT

JAGADAMBA ULTRA OPC

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LAB UNIT

NORMAL CONSISTENCY OF CEMENT

Project : Galchhi -Trisuli -Mailung -Syafubesi -Rasuwagadi Sadak Yojana

Client : Road Department, Bidur, Nuwakot

Contractor : Anjana -R.D. -R.S JV

Contract No: GTMSRRP/337011094/076/77-002, 003, 004, 005, 006

Ref. No: 649 -77/78

Cement: Jagdamba Ultra OPC

Office Regn. No : VC-D326

Date: 2077/08/30

	Determination No.	1	2	Units
	Temp. of the Laboratory	25	25	⁰ C
	Temp. of mixing water	25	25	⁰ C
A	Wt. of cement	250	250	gms
B	Wt. of water added	75	78	gms
C1	Initial reading of indicator	40	40	mm
C2	Final reading of indicator	15	6	mm
C	Penetration of plunger(C1-C2)	25	34	mm
	AVERAGE VALUE	25	34	mm

NORMAL CONSISTENCY OF CEMENT =	31.00	%
--------------------------------	-------	---

WATER / CEMENT RATIO (B/A)	=	0.310
----------------------------	---	-------

Tested By:



Checked By :



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LAB UNIT

SPECIFIC GRAVITY OF CEMENT

Project : Galchhi -Trisuli -Mailung -Syafrubesi -Rasuwigadi Sadak Yojana

Client : Road Department, Bidur, Nuwakot

Contractor : Anjana -R.D. -R.S JV

Contract No: GTMSRRRP/337011094/076/77-002, 003, 004, 005, 006

Ref. No: 649 -77/78

Cement: Jagdamba Ultra OPC

Office Regn. No : VC-D326

Date: 2077/08/30

Determination No.		A	B
A	Wt. of Pyc + Kerosene(Full)	158.22	156.61
B	Wt. of Pyc Empty and Dry	76.76	74.74
C	Wt. of Pyc. + Oven Dry Sample	106.370	105.600
D	Wt. of Pyc. + sample + Kerosene(Full)	180.060	179.500
E=(C-B)	Wt. of Oven Dry Sample	29.610	30.860
F	Specific Gravity of Kerosene	0.790	0.790
(E/(E+A-D))*F	Specific Gravity	3.011	3.059
Average Specific Gravity		3.035	

Remarks: Sample provided by the Contractor.

Tested By:



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LAB UNIT

CUBE TEST FOR CEMENT MORTAR

Project : Galchhi -Trisuli -Mailung -Syafrubesi -Rasuwagadi Sadak Yojana

Client : Road Department, Bidur, Nuwakot

Contractor : Anjana -R.D. -R.S JV

Contract No: GTMSRRP/337011094/076/77-002, 003, 004, 005, 006

Ref. No: 649 -77/78

Cement: Jagdamba Ultra OPC

Office Regn. No : VC-D326

Mix Ratio: 1:3 (Standard Sand)

Mortar Cube No.		1	2	3
Date of Casting		2077/08/30	2077/08/30	2077/08/30
Date of Testing		2077/09/03	2077/09/03	2077/09/03
Age of Cubes	days	3	3	3
Length of Cube	cm	7.07	7.07	7.07
Breadth of Cube	cm	7.07	7.07	7.07
Height of Cube	cm	7.07	7.07	7.07
Weight of Cubes	gm	810.1	803.1	811.70
Volume of Cubes	cm ³	353.39	353.39	353.39
Density	gm/cm ³	2.29	2.27	2.30
Compressive Load	KN	105.00	125.00	122.00
	kg	10703.36	12742.10	12436.29
Area of Cubes	cm ²	49.98	49.98	49.98
Compressive Strength	kg/cm ²	214.13	254.92	248.80
	N/mm ²	21.01	25.01	24.41
Average	kg/cm ²	239.28		
	N/mm ²	23.47		

Remarks:

Tested by:



Checked by:

Viswa Consult Pvt. Ltd.

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LAB UNIT

CUBE TEST FOR CEMENT MORTAR

Project : Galchhi -Trisuli -Mailung -Syafrubesi -Rasuwigadi Sadak Yojana

Client : Road Department, Bidur, Nuwakot

Contractor : Anjana -R.D. -R.S JV

Contract No: GTMSRRP/337011094/076/77-002, 003, 004, 005, 006

Ref. No: 649 -77/78

Cement: Jagdamba Ultra OPC

Office Regn. No : VC-D326

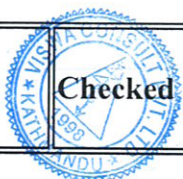
Mix Ratio: 1:3 (Standard Sand)

Mortar Cube No.		1	2	3
Date of Casting		2077/08/30	2077/08/30	2077/08/30
Date of Testing		'2077/09/07	'2077/09/07	'2077/09/07
Age of Cubes	days	7	7	7
Length of Cube	cm	7.07	7.07	7.07
Breadth of Cube	cm	7.07	7.07	7.07
Height of Cube	cm	7.07	7.07	7.07
Weight of Cubes	gm	822.10	820.80	818.87
Volume of Cubes	cm ³	353.39	353.39	353.39
Density	gm/cm ³	2.33	2.32	2.32
Compressive Load	KN	175.00	165.00	170.00
	kg	17838.94	16819.57	17329.26
Area of Cubes	cm ²	49.98	49.98	49.98
Compressive Strength	kg/cm ²	356.89	336.49	346.69
	N/mm ²	35.01	33.01	34.01
Average	kg/cm ²	346.69		
	N/mm ²	34.01		

Remarks:

Tested by:

Checked by:



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LAB UNIT

CUBE TEST FOR CEMENT MORTAR

Project : Galchhi -Trisuli -Mailung -Syafrubesi -Rasuwigadi Sadak Yojana

Client : Road Department, Bidur, Nuwakot

Contractor : Anjana -R.D. -R.S JV

Contract No: GTMSRRP/337011094/076/77-002, 003, 004, 005, 006

Ref. No: 649 -77/78

Cement: Jagdamba Ultra OPC

Office Regn. No : VC-D326

Mix Ratio: 1:3 (Standard Sand)

Mortar Cube No.		1	2	3
Date of Casting		2077/08/30	2077/08/30	2077/08/30
Date of Testing		2077/09/28	2077/09/28	2077/09/28
Age of Cubes	days	28	28	28
Length of Cube	cm	7.07	7.07	7.07
Breadth of Cube	cm	7.07	7.07	7.07
Height of Cube	cm	7.07	7.07	7.07
Weight of Cubes	gm	820.00	818.20	821.01
Volume of Cubes	cm ³	353.39	353.39	353.39
Density	gm/cm ³	2.32	2.32	2.32
Compressive Load	KN	215.00	200.00	208.00
	kg	21916.41	20387.36	21202.85
Area of Cubes	cm ²	49.98	49.98	49.98
Compressive Strength	kg/cm ²	438.46	407.87	424.19
	N/mm ²	43.01	40.01	41.61
Average	kg/cm ²	423.51		
	N/mm ²	41.55		

Remarks:

Tested by:



Checked by:

SARBOTTAM OPC

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LAB UNIT

NORMAL CONSISTENCY OF CEMENT

Project : Galchhi -Trisuli -Mailung -Syafubesi -Rasuwigadi Sadak Yojana

Client : Road Department, Bidur, Nuwakot

Contractor : Anjana -R.D. -R.S JV

Contract No: GTMSRRP/337011094/076/77-002, 003, 004, 005, 006

Ref. No: 649 -77/78

Cement: Sarbottam OPC

Office Regn. No : VC-D326

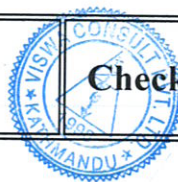
Date: 2077/09/01

	Determination No.	1	2	Units
	Temp. of the Laboratory	25	25	⁰ C
	Temp. of mixing water	25	25	⁰ C
A	Wt. of cement	250	250	gms
B	Wt. of water added	78	80	gms
C1	Initial reading of indicator	40	40	mm
C2	Final reading of indicator	15	7	mm
C	Penetration of plunger(C1-C2)	25	33	mm
	AVERAGE VALUE	25	33	mm

NORMAL CONSISTENCY OF CEMENT	32.00	%
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WATER / CEMENT RATIO (B/A)	0.320
----------------------------	-------

Tested By:



Checked By :

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LAB UNIT

SPECIFIC GRAVITY OF CEMENT

Project : Galchhi - Trisuli - Mailung - Syafrubesi - Rasuwagadi Sadak Yojana

Client : Road Department, Bidur, Nuwakot

Contractor : Anjana - R.D. - R.S JV

Contract No: GTMSRRRP/337011094/076/77-002, 003, 004, 005, 006

Ref. No: 649 -77/78

Cement: Sarbottam OPC

Office Regn. No : VC-D326

Date: 2077/09/01

Determination No.	A	B	
A	158.22	156.61	gms
B	76.76	74.74	gms
C	109.020	121.300	gms
D	182.030	191.720	gms
E=(C-B)	32.260	46.560	gms
F	0.790	0.790	
(E/(E+A-D))*F	3.016	3.212	
Average Specific Gravity	3.114		

Remarks: Sample provided by the Contractor.

Tested By:

Checked By:



Viswa Consult Pvt. Ltd.

P.O. Box 4316

Dillibazar, Kathmandu

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LAB UNIT

CUBE TEST FOR CEMENT MORTAR

Project : Galchhi -Trisuli -Mailung -Syafrubesi -Rasuwigadi Sadak Yojana

Client : Road Department, Bidur, Nuwakot

Contractor : Anjana -R.D. -R.S JV

Contract No: GTMSRRP/337011094/076/77-002, 003, 004, 005, 006

Ref. No: 649 -77/78

Cement: Sarbottam OPC

Office Regn. No : VC-D326

Mix Ratio: 1:3 (Standard Sand)

Mortar Cube No.		1	2	3
Date of Casting		2077/09/02	2077/09/02	2077/09/02
Date of Testing		2077/09/05	2077/09/05	2077/09/05
Age of Cubes	days	3	3	3
Length of Cube	cm	7.07	7.07	7.07
Breadth of Cube	cm	7.07	7.07	7.07
Height of Cube	cm	7.07	7.07	7.07
Weight of Cubes	gm	771.7	790.6	796.10
Volume of Cubes	cm ³	353.39	353.39	353.39
Density	gm/cm ³	2.18	2.24	2.25
Compressive Load	KN	100.00	105.00	110.00
	kg	10193.68	10703.36	11213.05
Area of Cubes	cm ²	49.98	49.98	49.98
Compressive Strength	kg/cm ²	203.94	214.13	224.33
	N/mm ²	20.01	21.01	22.01
Average	kg/cm ²	214.13		
	N/mm ²	21.01		

Remarks:

Tested by:



Checked by:

Viswa Consult Pvt. Ltd.

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Dillibazar, Kathmandu

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LAB UNIT

CUBE TEST FOR CEMENT MORTAR

Project : Galchhi -Trisuli -Mailung -Syafrubesi -Rasuwigadi Sadak Yojana

Client : Road Department, Bidur, Nuwakot

Contractor : Anjana -R.D. -R.S JV

Contract No: GTMSRRP/337011094/076/77-002, 003, 004, 005, 006

Ref. No: 649 -77/78

Cement: Sarbottam OPC

Office Regn. No : VC-D326

Mix Ratio: 1:3 (Standard Sand)

Mortar Cube No.		1	2	3
Date of Casting		2077/09/02	2077/09/02	2077/09/02
Date of Testing		'2077/09/09	'2077/09/09	'2077/09/09
Age of Cubes	days	7	7	7
Length of Cube	cm	7.07	7.07	7.07
Breadth of Cube	cm	7.07	7.07	7.07
Height of Cube	cm	7.07	7.07	7.07
Weight of Cubes	gm	784.80	793.80	795.60
Volume of Cubes	cm ³	353.39	353.39	353.39
Density	gm/cm ³	2.22	2.25	2.25
Compressive Load	KN	155.00	180.00	160.50
	kg	15800.20	18348.62	16360.86
Area of Cubes	cm ²	49.98	49.98	49.98
Compressive Strength	kg/cm ²	316.10	367.08	327.32
	N/mm ²	31.01	36.01	32.11
Average	kg/cm ²	336.83		
	N/mm ²	33.04		

Remarks:

Tested by:



Checked by:

Viswa Consult Pvt. Ltd.

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Dillibazar, Kathmandu

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LAB UNIT

CUBE TEST FOR CEMENT MORTAR

Project : Galchhi -Trisuli -Mailung -Syafrubesi -Rasuwigadi Sadak Yojana

Client : Road Department, Bidur, Nuwakot

Contractor : Anjana -R.D. -R.S JV

Contract No: GTMSRRP/337011094/076/77-002, 003, 004, 005, 006

Ref. No: 649 -77/78

Cement: Sarbottam OPC

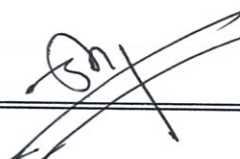
Office Regn. No : VC-D326

Mix Ratio: 1:3 (Standard Sand)

Mortar Cube No.		1	2	3
Date of Casting		2077/09/02	2077/09/02	2077/09/02
Date of Testing		2077/10/01	2077/10/01	2077/10/01
Age of Cubes	days	28	28	28
Length of Cube	cm	7.07	7.07	7.07
Breadth of Cube	cm	7.07	7.07	7.07
Height of Cube	cm	7.07	7.07	7.07
Weight of Cubes	gm	800.90	809.50	851.20
Volume of Cubes	cm ³	353.39	353.39	353.39
Density	gm/cm ³	2.27	2.29	2.41
Compressive Load	KN	205.00	195.00	225.00
	kg	20897.04	19877.68	22935.78
Area of Cubes	cm ²	49.98	49.98	49.98
Compressive Strength	kg/cm ²	418.07	397.67	458.85
	N/mm ²	41.01	39.01	45.01
Average	kg/cm ²	424.86		
	N/mm ²	41.68		

Remarks:

Tested by:



Checked by:



SHIVAM OPC CEMENT

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LAB UNIT

NORMAL CONSISTENCY OF CEMENT

Project : Galchhi -Trisuli -Mailung -Syafubesi -Rasuwigadi Sadak Yojana

Client : Road Department, Bidur, Nuwakot

Contractor : Anjana -R.D. -R.S JV

Contract No: GTMSRRP/337011094/076/77-002,003, 004, 005, 006

Ref. No: 649 -77/78

Cement: Shivam OPC Cement

Office Regn. No : VC-D326

Date: 2077/09/01

	Determination No.	1	Units
	Temp. of the Laboratory	25	⁰ C
	Temp. of mixing water	25	⁰ C
A	Wt. of cement	250	gms
B	Wt. of water added	78.00	gms
C1	Initial reading of indicator	40	mm
C2	Final reading of indicator	6	mm
C	Penetration of plunger(C1-C2)	34	mm
	AVERAGE VALUE	34	mm

NORMAL CONSISTENCY OF CEMENT =	31.20	%
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WATER / CEMENT RATIO (B/A)	=	0.312
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Tested By:



Checked By :

VISWA CONSULT PVT. LTD.

P.O. Box: 4316, Dillibazar, Kathmandu

Tel:- 4433156 Fax: 977-1-4433908

Email: viswaconsultlab@gmail.com

Website: www.viswaconsult.com

LAB UNIT

SPECIFIC GRAVITY OF CEMENT

Project : Galchhi -Trisuli -Mailung -Syafrubesi -Rasuwagadi Sadak Yojana

Client : Road Department, Bidur, Nuwakot

Contractor : Anjana -R.D. -R.S JV

Contract No: GTMSRRRP/337011094/076/77-002,003, 004, 005, 006

Ref. No: 649 -77/78

Cement: Shivam OPC Cement

Office Regn. No : VC-D326

Date: 2077/09/01

A	Wt. of Pyc + Kerosene(Full)	35.80	36.44	gms
B	Wt. of Pyc Empty and Dry	15.68	16.48	gms
C	Wt. of Pyc. + Oven Dry Sample	20.830	24.140	gms
D	Wt. of Pyc. + sample + Kerosene(Full)	39.670	42.020	gms
E=(C-B)	Wt. of Oven Dry Sample	5.150	7.660	gms
F	Specific Gravity of Kerosene	0.790	0.790	
(E/(E+A-D))*F	Specific Gravity	3.179	2.909	
	Average Specific Gravity		3.044	

Remarks: Sample provided by the Contractor.

Tested By:

Checked By :



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LAB UNIT

CUBE TEST FOR CEMENT MORTAR

Project : Galchhi -Trisuli -Mailung -Syafrubesi -Rasuwigadi Sadak Yojana

Client : Road Department, Bidur, Nuwakot

Contractor : Anjana -R.D. -R.S JV

Contract No: GTMSRRP/337011094/076/77-002, 003, 004, 005, 006

Ref. No: 649 -77/78

Cement: Shivam OPC Cement

Office Regn. No : VC-D326

Mix Ratio: 1:3 (Standard Sand)

Mortar Cube No.		1	2	3
Date of Casting		2077/09/01	2077/09/01	2077/09/01
Date of Testing		2077/09/04	2077/09/04	2077/09/04
Age of Cubes	days	3	3	3
Length of Cube	cm	7.07	7.07	7.07
Breadth of Cube	cm	7.07	7.07	7.07
Height of Cube	cm	7.07	7.07	7.07
Weight of Cubes	gm	802.2	815.0	810.00
Volume of Cubes	cm ³	353.39	353.39	353.39
Density	gm/cm ³	2.27	2.31	2.29
Compressive Load	KN	110.50	115.00	120.00
	kg	11264.02	11722.73	12232.42
Area of Cubes	cm ²	49.98	49.98	49.98
Compressive Strength	kg/cm ²	225.35	234.53	244.72
	N/mm ²	22.11	23.01	24.01
Average	kg/cm ²	234.87		
	N/mm ²	23.04		

Remarks:

Tested by:

Checked by:



Viswa Consult Pvt. Ltd.

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Dillibazar, Kathmandu

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Email: viswaconsultlab@gmail.com

LAB UNIT

CUBE TEST FOR CEMENT MORTAR

Project : Galchhi -Trisuli -Mailung -Syafrubesi -Rasuwigadi Sadak Yojana

Client : Road Department, Bidur, Nuwakot

Contractor : Anjana -R.D. -R.S JV

Contract No: GTMSRRP/337011094/076/77-002, 003, 004, 005, 006

Ref. No: 649 -77/78

Cement: Shivam OPC Cement

Office Regn. No : VC-D326

Mix Ratio: 1:3 (Standard Sand)

Mortar Cube No.			1	2	3
Date of Casting			2077/09/01	2077/09/01	2077/09/01
Date of Testing			'2077/09/8	'2077/09/8	'2077/09/8
Age of Cubes		days	7	7	7
Length of Cube		cm	7.07	7.07	7.07
Breadth of Cube		cm	7.07	7.07	7.07
Height of Cube		cm	7.07	7.07	7.07
Weight of Cubes		gm	814.00	800.00	786.00
Volume of Cubes		cm ³	353.39	353.39	353.39
Density		gm/cm ³	2.30	2.26	2.22
Compressive Load		KN	175.00	160.00	180.00
		kg	17838.94	16309.89	18348.62
Area of Cubes		cm ²	49.98	49.98	49.98
Compressive Strength		kg/cm ²	356.89	326.30	367.08
		N/mm ²	35.01	32.01	36.01
Average		kg/cm ²	350.09		
		N/mm ²	34.34		

Remarks:

Tested by:



Checked by:

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LAB UNIT

CUBE TEST FOR CEMENT MORTAR

Project : Galchhi -Trisuli -Mailung -Syafrubesi -Rasuwigadi Sadak Yojana

Client : Road Department, Bidur, Nuwakot

Contractor : Anjana -R.D. -R.S JV

Contract No: GTMSRRP/337011094/076/77-002, 003, 004, 005, 006

Ref. No: 649 -77/78

Cement: Shivam OPC Cement

Office Regn. No : VC-D326

Mix Ratio: 1:3 (Standard Sand)

Mortar Cube No.			1	2	3
Date of Casting			2077/09/01	2077/09/01	2077/09/01
Date of Testing			2077/09/29	2077/09/29	2077/09/29
Age of Cubes		days	28	28	28
Length of Cube		cm	7.07	7.07	7.07
Breadth of Cube		cm	7.07	7.07	7.07
Height of Cube		cm	7.07	7.07	7.07
Weight of Cubes		gm	800.90	809.50	821.20
Volume of Cubes		cm ³	353.39	353.39	353.39
Density		gm/cm ³	2.27	2.29	2.32
Compressive Load		KN	210.00	205.00	203.00
		kg	21406.73	20897.04	20693.17
Area of Cubes		cm ²	49.98	49.98	49.98
Compressive Strength		kg/cm ²	428.26	418.07	413.99
		N/mm ²	42.01	41.01	40.61
Average		kg/cm ²	420.11		
		N/mm ²	41.21		

Remarks:

Tested by:



Checked by: