MINISTRY OF ROAD, TRANSPORT & HIGHWAYS
GOVERNMENT OF INDIA

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DETAILED PROJECT REPORT FOR WIDENING TO 2-LANE OF NH 510
(SINGTAM-TARKU-RABONGLA-LEGSHIP-GYALSHING)
IN THE STATE OF SIKKIM

BUILDING INFRASTRUCTURE - BUILDING THE NATION

DETAILED PROJECT REPORT

VOLUME – II: DESIGN & INVESTIGATION REPORT

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CM ENGINEERING & SOLUTION

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DETAILED PROJECT REPORT FOR WIDENING TO 2-LANE OF NH 510 (SINGTAM-TARKU-RABONGLA-LEGSHIP-GYALSHING) IN THE STATE OF SIKKIM

Name of Road :NH-510 within Sikkim (KM 00+00 TO KM- 32+50)

Length of road : 32.50 Km

VOLUME - II

DESIGN REPORT

SECTION – 1

DESIGN OF REPORT

GENERAL

Work Content

The main elements of this project under Engineering Design and Drawings are:

1.1 Road Alignment

1.2 Road Geometrics

1.3 Design of Road Formation

1.4 Design of Pavement

1.5 Design of Shoulders

1.6 Design of Junctions

1.7 Design of Culverts

1.8 Design of Drainage System

1.9 Design of Bridges

1.10 Design of Slope Protection Works

1.11 Road Signs, Marking & Furniture

1.12 Diversion of Existing Road during Construction

1.13 Maintenance of Existing Road

Design Standard and Specifications

Engineering and Design of these components is governed by the Design Standards and Specifications.

Design Approach

The total length of the Project Road passes through the East, West & South District. The project objective is to develop the proposed road to NH double lane standard and specifications

The project road has been designed as National Highway based on Hill Road Manual IRC: SP-48-1998 for specification.

IRC: 52-2001 has been followed for alignment and geometric design of hill road.

Design standards are stipulated in the scope of work.

Specifications-5th Rev. 2013 of MORT&H is applied.

Gradients have been eased and brought within Ruling Gradient for safe and convenient movement of traffic.

The longitudinal profile generally follows the contours and the ground profile.

The cross sections are designed to accommodate the main carriageway and drainage system.

Geometric design is important for safe and economical operation of vehicles. The geometric design standards have been adopted as per IRC: SP-48-1998 and IRC: 38-1988.

The traffic volume and land-use are considered in traffic volume assessment.

The pavement design method utilized in the study is derived from IRC: 37-2001 & IRC: 2012 for New Pavements. The major parameters influencing pavement design include Traffic volume, Design life in years and Sub grade strength in terms of CBR of soil.

The Pavement thickness shall be built up in layers taking into consideration the as per design crust composition and equivalency factors as per provisions of IRC: 37-2001.

Salient Features

Salient features based on design are as below:

- Length of Project Road Sector 32.50 Km
- The road has a ROW of 24.00 m at open area & 20.00 m at built up area
- The formation width is 12.0m
- The Highway is designed for 2-lane carriageway of 7.0 m width.
- The Highway is designed with flexible pavement
- Paved shoulders of 1.50 m are provided both sides.
- All structures are matching to 2 lane NH roadway standard.
- Route Alignment: The Project Corridor takes off from East District near SingtamTown at Km 62/800 of NH10 near Singtam Govt. Hospital then passes through the 16 Nos of villages & 2 Nos Towns and terminate at Km 32/500 at Rabangal within South District.
- Drains: Lined Drain.
- Landslide: 5 Nos. Major land slide locations.
- Sinking Portion: 13 Locations.
- Damaged road: 21 locations.
- Junctions – 10 Nos., Major Junctions – 3 & Minor Junctions – 7 Nos
- Bridges – 8 Nos. one Major bridge over Teesta River at Singtam and 4 over the Jhora & 3 Nos of Minor bridge
- Items for Road Safety, Roadside Amenities and Road Furniture are provided.

1.1 ROAD ALIGNMENT

The existing NH510 was constructed during the reign of Chogyal, the then King of Sikkim and has a total length of 76.60 Kms .The road alignment passes through frequently cultivated land, Forest plantation & habitation etc. The road was constructed to provide connectivity to South & West Districts of Sikkim. **The road was upgraded to the status of National Highway in the year Sept 2014.** No substantial improvement of the road other than routine normal repairing works have been carried out since the road was declared a National Highway.

The stretches of the road under this report is between 00/00 Km to 32/850 Km of NH 510 as per existing chainage required for up gradation & improvement to 2 lane standard

The initial stretch of existing / present NH-510 passes through heavily built-up areas which shall involve costly Land Acquisition and serious resettlement problems for improvement. The existing alignment also passes through steep terrains which are unstable and landslide prone area at many locations which could also pose serious problems in future. Due to these reasons, it was felt absolutely necessary to re-align the existing initial stretch of the NH 510 between km 0/00 – 3/500 by shifting the existing take-off point at km 64/60 to a proposed new take-off point at km 62/800 (i.e. located at out skirt of Singtam town toward Siliguri) on Sevok-Gangtok section of NH-10. The proposed alignment is realigned from the existing road from Km 33/60 to Km 35/70 to bypass the habitant and heavily built-up areas of Rabangla town. The proposed realignment take off points are very near due to which, it will not affect and deprive the connectivity with villages and hence, the villagers would be the beneficiaries with the proposed alignment. The proposed re-alignment does not pass through heavily built-up area and would involve much less L.A cost as well as resettlement problem as compared to the existing alignment. The re-alignment also passes through an area with a much better topographical as well as soil conditions.

The Project Corridor takes off from Km 62.80 on existing NH 10 at Singtam in East Sikkim and runs towards South Western direction passing through a number of towns like Singtam –Tarku - Rabongla- Legship- Gyalshing within South & West District.

The Yangyang road is branching from Km 5/400, which is going to serve Yangyang Town & the NH310 is branching from Km 16/470 of NH-510 at Tarku, Ranbangla-Namchi road branches of from Km 33/950, which is going to serve the South District Headquarter connectivity. Nayabazar-Legship road is also branching from Km 59/100, which is serving Jorathang & Darjeeling District in West Bangal and a number of villages which are located in the area adjoining to this road are also heavily dependent on this road for their social and economic development

Alignment Option Study

The objective of the alignment option study is to determine various alternative alignment options and to identify relative acceptability and preference of the alignment. With a view to appreciate the feasibility and relative strength, weakness of the alternative proposals marked on the toposheet, and site evaluation of the same have been carried out. This was manifested through identifying the problems, shortcomings along with probable route

Critical Factors in alignment selection

The critical factors to be considered in the selection of the alignment are as follows:

1) The alignment should meet the geometric standards, particularly the gradients and curvature.
2) It should avoid acquisition of commercial and residential establishments.
3) It should avoid costly land acquisition.
4) It has the least number of curves.
5) It should be as directional as possible, i.e. least distance.
6) It should facilitate smooth traffic dispersal.
7) It should have minimum provision of structures.
8) It maintains the configuration of the hill.
9) It does not have zigs or hair-pin curves.
10) It should be environment friendly.

11) Junction points (start points) of the new aligned portion are well defined points for maintenance of smooth flow of the traffic on the proposed route.
12) The route does not create any social and rehabilitation problem

Detailed Topographical Survey

Detailed topographical survey of the select route from Ch 0+00 to Ch 32+500 has been carried out. Important points are:

- Survey was carried out at 20 m interval
- Plan and profile is prepared for the levels at intervals of 20 m.

Analogous Sections

The terrain, soil classification, topography and all other features are more or less same throughout the road. Only one analogous section is considered. However, during the packaging for the procurement of Civil Works Contract, the road sector will be divided into Sectors.

1.2 ROAD GEOMETRICS

The geometric design of the corridor includes design of horizontal and vertical alignment. Digital data of Total Station topographic survey and reduced levels for the entire project corridor are basic input for geometric design. Geometric designs have been carried out as per IRC: SP-48-1998 and IRC: 38-1988/MORT&H recommendations. The alignment of the road has been examined to ensure its maximum possible safety for the vehicles and human beings with least negative impact on the environment.

Plan & Profile

The vertical and horizontal alignments of the proposed road can be summarized as shown in table below:

Project Road length	No. of Curves with Design Speed in km/h				No. of Curves with Radius (m)		
	<30	30-40	40-50	>50	<30	30-50	>50
32.50 km	80	259	67	28	21	135	277

Project road length	Length Distribution (km) and Gradient Class				
	<4%	4%-5%	5%-6%	6%-7%	7%-8%
32.50 km	4.4 Km	1.51 Km	7.28 Km	16.04 Km	2.85 Km

Contours

Contours have been derived from the topographical data and the design of Plan and Profile. These are super-imposed on the Plan and Profile.

Plan and Profile

The design of the road geometric has been detailed out by application of MX-Road Software. These are produced in the shape of Plan and Profile. These are placed in Volume containing the drawings.

Road Plan

The project road has been designed as a two-lane carriageway as per design standards. The longitudinal profile and the cross sections have been examined in detail and designed to accommodate carriageway, shoulders and drainage system. The ROW of 24m is considered. ROW doesn't affect the road cross-section elements. The geometric design is very important for safe and

economical operation of vehicles. The traffic volume, operating speeds, land use are other important factors which have been taken into considerations.

Road Profile

During the detailed topographical survey, the trace-cut has been marked on the ground and survey details have been obtained on the trace-cut. However, in hard rock and hazardous areas the trace-cut is serving as reference line only. Consequent to the design of road profile the final road (FRL) will be transferred for execution purposes (Refer IRC 52-2001).

1.3 DESIGN OF ROAD FORMATION

Design of Embankment / Hill Cutting

Road is designed with roadway width of 12.00m. The design side slope is as given in Chapter – 01: Design Standard and Specifications. In the case of hill road the hill cutting / filling as well as embankment building is dependent upon the physical features, particularly the terrain, soil classification and hill slope line. Typical cross-sections have been developed for hill cutting / embankment building presented in drawing V**olume: IV**

Compaction of disposal material at dumping location

Spreading & Compaction of Roadway cutting and excavation from drain and foundation of other structures surplus material at selected disposal location by Dozer at least four passes in layer wise not more than 300 mm thick.

1.4 PAVEMENT DESIGN

The road is designed for flexible pavement.

Based on the existing traffic volume counts and traffic projection two-lane width carriageway for proposed road has been considered.
Pavement design has been based on CBR Values of sub-grade soil, vehicle damage factor consequent to number of commercial vehicles on the road corridor. Design life of the project is considered as 15 years.
The design shall be based on CBR Method of IRC Specifications. Pavement design has been carried out as per IRC-37, 2001 for 15 years design traffic.

The intensity of repeated axle loading on a pavement over a given period of time is denoted by the cumulative number of million standard axles during this period. As per IRC-37: 2001, the number of million standard axles for the design year is computed by the equation:

$$N = \frac{365[(1+r)^n - 1]}{r} xAxDxF$$

Where:

- N = Cumulative number of standard axles to be catered for in the design in terms of msa.
- A = Initial traffic for the design lane in terms of specified type of commercial vehicles per day;
- D = Lane Distribution Factor
- r = Annual growth rate of the specified types of commercial vehicles;
- n = Design life in number of years;
- F = Vehicle Damage Factor of the type of Commercial vehicle.

The traffic in the year of completion is estimated using the following formula:

$$A = P(1+r)^x$$

Where

- P= Number of commercial vehicles as per last count.
- X= Number of years between the last count and the year of completion of construction.

Our analysis indicates that there are three typical cases for pavement design. The design of pavement for these typical cases is given below:

Type-I P : Proposed pavement on new formation.
Type-II P : Proposed pavement for junction/village link road

Traffic intensity is too low on this existing road due to steep gradient and sharp curve. Loaded vehicles are unable to ply.

In view of the low intensity of traffic at present scenario, the traffic intensity for commercial vehicle per day is considered 180 Nos. Traffic intensity CVD 180 has been considered for pavement design.

Design period is considered 15 years.

CBR for pavement design is considered as 5%.

Pavement Design for New Construction

Two lane single carriageway			
Lane distribution factor = **D**	=	0.75	
Vehicle damage factor (Based on axle load survey) = **F**	=	1.5	
Design life in year = **n**	=	15	Years
Annual growth rate of commercial vehicles = **r**	=	7.5	%
Number of commercial vehicles as per last count = **P**	=	180	per day
Number of years between the last count and the year of completion of construction = **x**	=	10	Years
Design CBR of subgrade soil	=	5	%

DESIGN CALCULATIONS

Initial traffic in the year of completion of construction in terms of the number of commercial per day **$A=P(1+r)^x$**

A=180x(1+0.075)^10	=	371	per day

The cumulative nimber of standard axles to be catered for in the design in terms of msa **N=365 X [(1+r)n-1] X A X D X F/r**

N=365x[(1+0.075)^15-1]x371x0.75x1.5/0.075	=	3978921	
	=	4	msa
Total thickness for CBR 5 % and Traffic 10 msa	=	600	mm
Pavement Compostion interpolated	=		
Bituminous surfacing			
Bituminous Concrete **(BC)**	=	40	mm

Dense Bituminous Macadam **(DBM)**	=	60	mm
Granular base **Wet Mix Macadam (WMM)**	=	250	mm
Granular sub-base **(GSB)**	=	250	mm

Pavement Composition Design:

Based on the design, the pavement composition is indicated as under :

Type – : Proposed pavement on new alignment

BC	:	40 mm
DBM	:	60 mm
WMM in 2-layers	:	250mm
GSB in 2-layers	:	250 mm
Total	:	600 mm

Widening of Pavement at Curves

It is proposed to widen the pavement width at the sharp curves for road safety as per

IRC SP:48 : 1998 provisions.

1.5 DESIGN OF SHOULDERS

The carriageway width of 7m and paved shoulder width of 1.5 m on each side shall have the same pavement as the carriageway. The remaining 1.0m on each side shall be used to accommodate side drain on hill side or parapet/soft shoulder on valley side. In the hill side, depending on the total width of side drain, there is a small width remaining between the wall of side drain and paved shoulder, therefore it is also paved to avoid erosion by surface water

1.6 DESIGN OF INTERSECTION/JUNCTIONS

Based on the survey there are four junctions/ intersections as mentioned below:-

Road Junctions.

Provisions have been made for the improvement of road junctions along the project road. Based on the survey there are 10 junctions/ intersections as mentioned below:-

Sr.No.	Design Chainage	Side	Remarks	Shape	Type
1	0.00		Junction with NH-10 at Take off point	Y	Major
2	3110.00	RHS	Merging with Existing Road	Y	Minor
3	3835.00	LHS	Junction with Bermoik Road	Y	Minor
4	6300.00	RHS	Junction with Yanyang Road	Y	Major
5	12955.00	LHS	Junction with Timi Road	Y	Minor
6	15160.00	LHS	Junction with NH-310	Y	Major
7	22175.00	RHS	Junction with Mangley Village Road	Y	Minor
8	22710.00	RHS	Junction with Nambrick Village Road	Y	Minor
9	23310.00	LHS	Junction with Damthang Road	Y	Minor
10	32590.00	LHS	Army Camp Approach road	Y	Minor

These Junctions needed major improvement as compared

1.0 Junction at Ch. 0+00

Location	:	Junction with NH-10 Take off
Shape	:	Y-Shape
Design	:	This junction is designed as a simple meeting point with open space for the traffic. Regulation by rotary or traffic island is considered suitable.

2.0 Junction at Ch. 3+835

Location	:	Junction with Bermoik Road
Shape	:	Y-Shape
Design	:	This junction is designed as a simple meeting point with open space for the traffic. Regulation by rotary or traffic island is not considered suitable.

3.0 Junction at Ch.6+300

Location	:	Junction with Yanyang Road
Shape	:	Y -Shape
Design	:	This junction is designed as a simple meeting point with open space for the traffic. Regulation by rotary or traffic island is not considered suitable.

4.0 Junction at Ch. 483+800

Location	:	Junction with NH-310
Shape	:	Y -Shape
Design	:	This junction is designed as a simple meeting point with open space for the traffic. Regulation by rotary or traffic island is considered suitable.

1.7 DESIGN OF CULVERTS

The project corridor passes through mostly Hilly/Rolling terrain and does not have well-defined streams in the stretches. There is requirement of providing culverts for discharge of run-off as well as to act as balancing structures. Based on the ground studies and drainage pattern of the region, the requirements of culverts have been identified and are listed in Table below

Design Considerations

- **Rainfall:** The proposed road is in high rainfall area.
- **Run Off:** The hill slope is quite steep. Consequently, the run-off is high.
- **General Hydrology:** All Culverts from Km 0+00 To Km 32+500 are for Drainage of the water to small river & Nullah.
- **Defined Major Streams:** The project corridor passes through hilly terrain. It has defined streams at eight locations where the bridges are proposed

- **Natural Drainage Lines :** Drainage locations are identified and surveyed for providing CD works for least interference with the natural drainage pattern
- **Natural Depressions on the hill slope:** Natural depressions are identified for providing culverts on the proposed road.
- **Cross-Drainage Facility:** CD facility is required for allowing free drainage.
- **Road Surface Drainage :** Culverts are provided at intervals so that the road is not damaged
- **Road Drainage at Curves:** The drainage line at curves are provided with CD works

Identification of Sites for Culverts

Based on the above studies and surveys, the requirements of the Culverts have been identified.
Span & Vent way
It is proposed to provide HP culvert & Box culvert of varies spans from Km 0+00 to Km32+500 on NH-510

Sr. No.	Chainage (m)	Curve /Straight	Radius	Type	Span X Depth	Remarks
1	422.00	S	-300	BOX-TYPE-1	2 X 2	Proposed
2	738.00	S	-319	BOX-TYPE-1	2 X 2	Proposed
3	1160.00	S	INFINITY	BOX-TYPE-4	6 X 4	Proposed
4	1990.00	S	INFINITY	BOX-TYPE-1	2 X 2	Proposed
5	2243.00	S	-600	BOX-TYPE-1	2 X 2	Proposed
6	2542.00	S	450	BOX-TYPE-1	2 X 2	Proposed
7	2758.00	S	INFINITY	BOX-TYPE-1	2 X 2	Proposed
8	3204.00	S	-75	BOX-TYPE-2	3 X 3	Re-construction
9	3235.00	S	INFINITY	BOX-TYPE-1	2 X 2	Re-construction
10	3355.00	C	125	BOX-TYPE-2	3 X 3	Proposed
11	3681.00	S	-70	BOX-TYPE-1	2 X 2	Proposed
12	3852.00	C	-56	BOX-TYPE-2	3 X 3	Proposed
13	4074.00	C	60	HPC-TYPE-2	1.2 X D NP4	Re-construction
14	4151.00	C	85	BOX-TYPE-2	3 X 3	Re-construction
15	4188.00	S	586	BOX-TYPE-2	3 X 3	Re-construction
16	4278.00	S	75	BOX-TYPE-2	3 X 3	Re-construction
17	4444.00	C	75	BOX-TYPE-3	4 X 4	Re-construction
18	4760.00	C	70	HPC-TYPE-2	1.2 X D NP4	Proposed
19	5078.00	S	-60	HPC-TYPE-1	1.2 X D NP4	Proposed
20	5460.00	C	77	BOX-TYPE-1	2 X 2	Proposed
21	5684.00	C	72	BOX-TYPE-1	2 X 2	Proposed
22	5855.00	C	60	BOX-TYPE-2	3 X 3	Re-construction
23	5987.00	C	-182	BOX-TYPE-2	3 X 3	Re-construction
24	6193.00	C	30	BOX-TYPE-1	2 X 2	Proposed
25	6432.00	S	INFINITY	BOX-TYPE-1	2 X 2	Proposed
26	6784.00	S	-75	BOX-TYPE-1	2 X 2	Proposed
27	7066.00	S	INFINITY	HPC-TYPE-1	1.2 X D NP4	Proposed
28	7351.00	S	105	HPC-TYPE-1	1.2 X D NP4	Proposed

Sr. No.	Chainage (m)	Curve /Straight	Radius	Type	Span X Depth	Remarks
29	7587.00	C	113	BOX-TYPE-1	2 X 2	Proposed
30	7802.00	C	-60	HPC-TYPE-2	1.2 X D NP4	Re-construction
31	7869.00	C	-45	BOX-TYPE-1	2 X 2	Proposed
32	8149.00	C	60	BOX-TYPE-1	2 X 2	Proposed
33	8462.00	S	310	HPC-TYPE-1	1.2 X D NP4	Re-construction
34	8631.00	C	100	BOX-TYPE-1	2 X 2	Proposed
35	8989.00	S	-150	HPC-TYPE-1	1.2 X D NP4	Re-construction
36	9264.00	C	55	BOX-TYPE-2	3 X 3	Re-construction
37	9446.00	C	55	HPC-TYPE-2	1.2 X D NP4	Re-construction
38	9600.00	S	75	HPC-TYPE-1	1.2 X D NP4	Re-construction
39	9757.00	C	-151	HPC-TYPE-2	1.2 X D NP4	Re-construction
40	9814.00	C	-275	HPC-TYPE-2	1.2 X D NP4	Re-construction
41	9925.00	S	45	HPC-TYPE-1	1.2 X D NP4	Proposed
42	10155.00	S	INFINITY	BOX-TYPE-1	2 X 2	Proposed
43	10486.00	C	-159	BOX-TYPE-1	2 X 2	Proposed
44	10707.00	C	67	BOX-TYPE-1	2 X 2	Proposed
45	11000.00	C	45	BOX-TYPE-1	2 X 2	Proposed
46	11187.00	S	INFINITY	HPC-TYPE-1	1.2 X D NP4	Re-construction
47	11513.00	C	-65	BOX-TYPE-3	4 X 4	Re-construction
48	11728.00	S	-300	HPC-TYPE-1	1.2 X D NP4	Re-construction
49	11746.00	S	-505	HPC-TYPE-1	1.2 X D NP4	Re-construction
50	11816.00	S	INFINITY	BOX-TYPE-1	2 X 2	Re-construction
51	11915.00	S	-400	BOX-TYPE-2	3 X 3	Re-construction
52	11998.00	S	INFINITY	HPC-TYPE-1	1.2 X D NP4	Re-construction
53	12140.00	C	-38	HPC-TYPE-2	1.2 X D NP4	Re-construction
54	12252.00	S	-1610	BOX-TYPE-2	3 X 3	Re-construction
55	12658.00	S	-300	HPC-TYPE-1	1.2 X D NP4	Re-construction
56	12875.00	S	INFINITY	HPC-TYPE-1	1.2 X D NP4	Re-construction
57	13043.00	C	-130	HPC-TYPE-2	1.2 X D NP4	Re-construction
58	13271.00	C	-117	HPC-TYPE-2	1.2 X D NP4	Re-construction
59	13452.00	S	INFINITY	HPC-TYPE-1	1.2 X D NP4	Re-construction
60	13589.00	C	45	HPC-TYPE-2	1.2 X D NP4	Proposed
61	13862.00	S	35	BOX-TYPE-1	2 X 2	Re-construction
62	14064.00	S	34	BOX-TYPE-3	4 X 4	Re-construction
63	14275.00	C	178	HPC-TYPE-2	1.2 X D NP4	Re-construction
64	14324.00	C	58	HPC-TYPE-2	1.2 X D NP4	Re-construction
65	14430.00	C	144	HPC-TYPE-2	1.2 X D NP4	Re-construction
66	14743.00	S	INFINITY	BOX-TYPE-1	2 X 2	Proposed
67	14983.00	S	INFINITY	BOX-TYPE-1	2 X 2	Proposed
68	15372.00	C	-77	BOX-TYPE-1	2 X 2	Proposed
69	15611.00	C	60	BOX-TYPE-1	2 X 2	Proposed
70	15914.00	S	INFINITY	BOX-TYPE-1	2 X 2	Proposed
71	16194.00	S	1000	BOX-TYPE-1	2 X 2	Proposed
72	16484.00	C	60	BOX-TYPE-2	3 X 3	Proposed
73	16733.00	C	144	BOX-TYPE-1	2 X 2	Re-construction

Sr. No.	Chainage (m)	Curve /Straight	Radius	Type	Span X Depth	Remarks
74	16785.00	S	INFINITY	HPC-TYPE-1	1.2 X D NP4	Re-construction
75	17014.00	S	65	HPC-TYPE-1	1.2 X D NP4	Re-construction
76	17044.00	S	INFINITY	HPC-TYPE-1	1.2 X D NP4	Re-construction
77	17277.00	S	30	HPC-TYPE-1	1.2 X D NP4	Re-construction
78	17384.00	C	80	BOX-TYPE-2	3 X 3	Re-construction
79	17630.00	C	60	BOX-TYPE-4	6 X 4	Re-construction
80	17881.00	C	66	BOX-TYPE-1	2 X 2	Re-construction
81	17910.00	C	64	BOX-TYPE-1	2 X 2	Re-construction
82	18087.00	C	70	BOX-TYPE-2	3 X 3	Re-construction
83	18189.00	S	45	HPC-TYPE-1	1.2 X D NP4	Re-construction
84	18525.00	S	30	BOX-TYPE-3	4 X 4	Re-construction
85	18900.00	S	272	BOX-TYPE-1	2 X 2	Proposed
86	19209.00	S	INFINITY	BOX-TYPE-1	2 X 2	Proposed
87	19718.00	S	-326	BOX-TYPE-1	2 X 2	Proposed
88	20197.00	S	36	BOX-TYPE-4	6 X 4	Re-construction
89	20288.00	C	-60	HPC-TYPE-2	1.2 X D NP4	Re-construction
90	20505.00	C	-45	HPC-TYPE-2	1.2 X D NP4	Re-construction
91	20623.00	S	45	BOX-TYPE-3	4 X 4	Re-construction
92	21081.00	S	INFINITY	BOX-TYPE-1	2 X 2	Re-construction
93	21391.00	C	40	HPC-TYPE-2	1.2 X D NP4	Re-construction
94	21447.00	S	-397	BOX-TYPE-3	4 X 4	Proposed
95	21739.00	C	-55	BOX-TYPE-1	2 X 2	Proposed
96	22147.00	C	-104	HPC-TYPE-2	1.2 X D NP4	Proposed
97	22434.00	C	70	HPC-TYPE-2	1.2 X D NP4	Re-construction
98	22581.00	S	76	HPC-TYPE-1	1.2 X D NP4	Re-construction
99	22927.00	S	INFINITY	BOX-TYPE-1	2 X 2	Proposed
100	23220.00	C	45	HPC-TYPE-2	1.2 X D NP4	Proposed
101	23327.00	C	58	BOX-TYPE-1	2 X 2	Proposed
102	23364.00	S	526	HPC-TYPE-1	1.2 X D NP4	Re-construction
103	23423.00	S	INFINITY	HPC-TYPE-1	1.2 X D NP4	Re-construction
104	23553.00	C	216	HPC-TYPE-2	1.2 X D NP4	Re-construction
105	23721.00	C	60	HPC-TYPE-2	1.2 X D NP4	Re-construction
106	23882.00	S	INFINITY	BOX-TYPE-2	3 X 3	Proposed
107	24131.00	S	2454	HPC-TYPE-1	1.2 X D NP4	Re-construction
108	24411.00	S	30	HPC-TYPE-1	1.2 X D NP4	Re-construction
109	24521.00	S	30	HPC-TYPE-1	1.2 X D NP4	Proposed
110	24627.00	S	63	HPC-TYPE-1	1.2 X D NP4	Re-construction
111	24682.00	S	30	HPC-TYPE-1	1.2 X D NP4	Re-construction
112	25071.00	C	45	BOX-TYPE-1	2 X 2	Proposed
113	25315.00	S	1205	HPC-TYPE-1	1.2 X D NP4	Proposed
114	25577.00	C	31	HPC-TYPE-2	1.2 X D NP4	Proposed
115	25921.00	C	45	HPC-TYPE-2	1.2 X D NP4	Proposed
116	26130.00	C	30	BOX-TYPE-3	4 X 4	Re-construction
117	26280.00	C	30	BOX-TYPE-2	3 X 3	Re-construction
118	26385.00	S	30	BOX-TYPE-2	3 X 3	Re-construction

Sr. No.	Chainage (m)	Curve /Straight	Radius	Type	Span X Depth	Remarks
119	26437.00	S	INFINITY	HPC-TYPE-1	1.2 X D NP4	Re-construction
120	26705.00	S	INFINITY	HPC-TYPE-1	1.2 X D NP4	Re-construction
121	26797.00	C	65	HPC-TYPE-2	1.2 X D NP4	Re-construction
122	27025.00	C	30	BOX-TYPE-3	4 X 4	Re-construction
123	27180.00	S	1542	HPC-TYPE-1	1.2 X D NP4	Proposed
124	27555.00	C	30	BOX-TYPE-2	3 X 3	Re-construction
125	27798.00	C	30	BOX-TYPE-3	4 X 4	Re-construction
126	27947.00	C	47	BOX-TYPE-1	2 X 2	Re-construction
127	28005.00	S	45	BOX-TYPE-2	3 X 3	Re-construction
128	28163.00	C	35	BOX-TYPE-3	4 X 4	Re-construction
129	28465.00	C	30	BOX-TYPE-2	3 X 3	Re-construction
130	28624.00	C	59	BOX-TYPE-2	3 X 3	Re-construction
131	28746.00	C	30	BOX-TYPE-2	3 X 3	Re-construction
132	28871.00	C	30	HPC-TYPE-2	1.2 X D NP4	Re-construction
133	29031.00	S	217	BOX-TYPE-1	2 X 2	Re-construction
134	29386.00	C	112	BOX-TYPE-1	2 X 2	Proposed
135	29678.00	C	50	BOX-TYPE-1	2 X 2	Proposed
136	29882.00	S	-60	BOX-TYPE-1	2 X 2	Proposed
137	30162.00	S	INFINITY	BOX-TYPE-1	2 X 2	Proposed
138	30298.00	S	INFINITY	HPC-TYPE-1	1.2 X D NP4	Re-construction
139	30518.00	S	211	HPC-TYPE-1	1.2 X D NP4	Re-construction
140	30714.00	S	340	HPC-TYPE-1	1.2 X D NP4	Re-construction
141	31056.00	S	INFINITY	BOX-TYPE-1	2 X 2	Proposed
142	31253.00	S	INFINITY	BOX-TYPE-1	2 X 2	Re-construction
143	31303.00	C	45	BOX-TYPE-1	2 X 2	Re-construction
144	31405.00	S	65	BOX-TYPE-1	2 X 2	Re-construction
145	31488.00	S	309	BOX-TYPE-1	2 X 2	Re-construction
146	31668.00	S	503	HPC-TYPE-1	1.2 X D NP4	Re-construction
147	31696.00	S	65	BOX-TYPE-1	2 X 2	Proposed
148	32046.00	C	60	HPC-TYPE-2	1.2 X D NP4	Re-construction
149	32091.00	S	INFINITY	HPC-TYPE-1	1.2 X D NP4	Re-construction
150	32212.00	C	93	HPC-TYPE-2	1.2 X D NP4	Re-construction
151	32311.00	S	INFINITY	BOX-TYPE-1	2 X 2	Re-construction
152	32669.00	S	75	HPC-TYPE-1	1.2 X D NP4	Re-construction
153	32911.00	S	126	HPC-TYPE-1	1.2 X D NP4	Proposed
Summary						
Total number of culvert						**153**
	Description					**Nos**
	Box Culvert	**Nos**	**88**	**SPAN in m**	**DEPTH in m**	
	Type -1			**2**	**2**	**53**
	Type -2			**3**	**3**	**22**
	Type -3			**4**	**4**	**10**
	Type -4			**6**	**4**	**3**
	Pipe Culvert	**Nos**	**65**	**Dia**	**Barrel Length**	

Sr. No.	Chainage (m)	Curve /Straight	Radius	Type	Span X Depth	Remarks
	Type -1			**1.2**	**12.5**	**38**
	Type -2				**15**	**27**

1.8 DESIGN OF DRAINAGE SYSTEM

Approach

A cardinal rule while planning drainage is the least interference with natural drainage. Minimum interference with natural drainage means stable earth face / surface with some kind of vegetative cover preventing erosion and allowing free drainage. While aligned towards the road surface the water may be diverted and guided to flow in a definite path and the flow on the valley side controlled so that stability may not be affected. It helps in protecting the road bed and pavement. A network of drains helps in confining and controlling flow of water run and check adverse effects on road structure. In the case of hill the road acts as an interceptor and its longitudinal cut on hill slope obstructs the natural drainage and the road ledge and therefore acts as a collection area of all water from hill side. As such adequate drains in the form of catch water drains collecting flow from hill side to bring it to side drain leading to cross drains and further discharge in into natural drainage channels through valley side drains / chutes, are essential for stability of road.

In view of the above, the drainage system should consist of the following:

- Pavement drainage
- Road side drains
- Chutes
- Catch water drains
- Cross Drainage
- Rain cut drain

Pavement Drainage

For quick dispersal of precipitation on road surface, it would be necessary that water travel the least distance. However, steep cross slope is objectionable from traffic comfort consideration. Thus, a judicious balance has to be kept between two conflicting requirements. A unidirectional camber of 2.5% away from the center of carriageway has been considered.

In the case of re-entrants it is necessarily to have cross drainage points, cross-fall is given towards the valley side. The surface run-off, which is mostly due to local rainfall on the roadway, is allowed to flow down quickly to the adjacent natural ground where appropriate cross fall is available.

Adequate care has to be taken in geometric to ensure channelized drainage to avoid damage to road shoulders. 3.5 % slopes have been considered for drainage for the shoulders.

Road Side Drains

Inadequate cross drainage on a hill road causes softening of the sub-grade and renders it too weak to take the load of the moving traffic. Road side drains are therefore necessary on a hill road. Semi Trapezoidal shaped & V shaped 600 mm has been designed and provided on hill side of the road. Road side drains should generally form sections throughout irrespective of the location of the road on the hill. It is for the convenience of the construction. The frequency of the flow is regulated to road catchment area requirement. The road side drains which have been designed are as under:

The roadside drains, which have been designed, are as under:

Sr.No.	Chainage in m		Length	Type	Remarks
	From	To			
1	0	750	750.0	Type-1	Soil Mixed Boulder
2	750	2400	1650.0	Type-2	Village portion
3	2400	3120	720.0	Type-1	Soil Mixed Boulder
4	3120	3850	730.0	Type-2	Village portion
5	3850	4475	625.0	Type-1	Soil Mixed Boulder
6	4475	5525	1050.0	Type-2	Village portion
7	5525	7335	1810.0	Type-1	Soil Mixed Boulder
8	7335	8740	1405.0	Type-2	Village portion
9	8740	9720	980.0	Type-1	Soil Mixed Boulder
10	9720	11630	1910.0	Type-2	Village portion
11	11630	11710	80.0	Type-2	Village portion
12	11710	12375	665.0	Type-1	Soil Mixed Boulder
13	12375	14050	1675.0	Type-2	Village portion
14	14050	14275	225.0	Type-1	Soil Mixed Boulder
15	14275	15225	950.0	Type-2	Village portion
16	15225	15895	670.0	Type-1	Soil Mixed Boulder
17	15895	16490	595.0	Type-2	Village portion
18	16490	17790	1300.0	Type-1	Soil Mixed Boulder
19	17790	19285	1495.0	Type-2	Village portion
20	19285	20280	995.0	Type-1	Soil Mixed Boulder
21	20280	20585	305.0	Type-2	Village portion
22	20585	21100	515.0	Type-1	Soil Mixed Boulder
23	21100	21195	95.0	Type-2	Village portion
24	21195	21840	645.0	Type-1	Soil Mixed Boulder
25	21840	22230	390.0	Type-2	Village portion
26	22230	22795	565.0	Type-1	Soil Mixed Boulder
27	22795	23195	400.0	Type-2	Village portion
28	23195	25190	1995.0	Type-1	Soil Mixed Boulder
29	25190	25835	645.0	Type-2	Village portion
30	25835	26470	635.0	Type-1	Soil Mixed Boulder
31	26470	28610	2140.0	Type-2	Village portion
32	28610	29295	685.0	Type-1	Soil Mixed Boulder
33	29295	30500	1205.0	Type-2	Village portion
34	30500	30800	300.0	Type-1	Soil Mixed Boulder
35	30800	31245	445.0	Type-2	Village portion
36	31245	32500	1255.0	Type-1	Soil Mixed Boulder
		Total	**32500.00**		
Summary					**Length of drain in m**
Length of drain on Hill side				=	32500.0
Length of drain on Valley side at Box Cutting portion				=	3800.0
Length of bridge				=	650.0
Catch water drain				=	2600.0
Culvert catchpit opening				=	924.0
Net length of line drain				**=**	**37326**

Chutes

Surface run off on a hill slope flows down in the form of natural gulleys / chutes. The water entrapped in the catch water drains is also brought down by connecting them with existing natural gulleys. It is therefore desired to provide lined chutes to lead the discharge to the catch pit of culvert or to a natural drainage channel. The chutes of the culverts form a part of the culvert structure and are given in the respective drawings of culverts.

Sr.No.	Chainage	Clear Width of Chute	Length of Chute	Remarks
1	422.00	1.85	20	Type-1
2	738.00	2.70	20	Type-2
3	1160.00	1.85	20	Type-1
4	2040.00	2.70	20	Type-2
5	2243.00	1.85	20	Type-1
6	2542.00	1.85	20	Type-1
7	2758.00	2.70	20	Type-2
8	3204.00	3.2	20	Type-3
9	3235.00	1.85	20	Type-1
10	4151.00	1.85	20	Type-1
11	4188.00	1.85	20	Type-1
12	4278.00	3.2	20	Type-3
13	4444.00	1.85	20	Type-1
14	5855.00	3.2	20	Type-3
15	5987.00	3.2	20	Type-3
16	9264.00	1.85	20	Type-1
17	11513.00	1.85	20	Type-1
18	11816.00	1.85	20	Type-1
19	11915.00	3.2	20	Type-3
20	12252.00	1.85	20	Type-1
21	13862.00	2.70	20	Type-2
22	14064.00	1.85	20	Type-1
23	17384.00	1.85	20	Type-1
24	17630.00	1.85	20	Type-1
25	17881.00	1.85	20	Type-1
26	17910.00	3.2	20	Type-3
27	18087.00	1.85	20	Type-1
28	18525.00	2.70	20	Type-2
29	20197.00	1.85	20	Type-1
30	20623.00	2.70	20	Type-2
31	21081.00	1.85	20	Type-1
32	26130.00	3.2	20	Type-3
33	26280.00	1.85	20	Type-1
34	26385.00	1.85	20	Type-1
35	27025.00	2.70	20	Type-2

Sr.No.	Chainage	Clear Width of Chute	Length of Chute	Remarks
36	27555.00	1.85	20	Type-1
37	27798.00	1.85	20	Type-1
38	27947.00	2.70	20	Type-2
39	28005.00	1.85	20	Type-1
40	28163.00	1.85	20	Type-1
41	28465.00	3.2	20	Type-3
42	28624.00	1.85	20	Type-1
43	28746.00	1.85	20	Type-1
44	29031.00	3.2	20	Type-3
45	31253.00	1.85	20	Type-1
46	31303.00	1.85	20	Type-1
47	31405.00	3.2	20	Type-3
48	31696.00	1.85	20	Type-1
49	32311.00	1.85	20	Type-1
Sr.No.	**Summary**			**Nos**
1	**Type -1**			**620**
2	**Type -2**			**160**
3	**Type -3**			**200**

Catch-water Drains and Intercepting Drains

We have not identified any such requirement. Normally it is found that such requirement is generated after sometime.

1.09 DESIGN OF BRIDGE WORKS

S/N	From	To	Super structure	Foundation	Remarks	Length in m	Remarks	
1	0.00	140.00	PSC	Pile	Teesta River	125	Proposed	Alignment
2	1520.00	1660.00	PSC	Pile	Nala	98	Proposed	Alignment
3	2830.00	2890.00	PSC	Open	Nala	40	Proposed	Alignment
4	2940.00	3010.00	PSC	Open	Nala	68	Proposed	Alignment
5	6060.00	6120.00	PSC	Open	Nala	48	Existing	Ex.Road
6	19530.00	19600.00	PSC	Open	Nala	70	Existing	Ex.Road
7	19940.00	19990.00	PSC	Open	Nala	55	Existing	Ex.Road
8	24940.00	25000.00	PSC	Open	Nala	98	Existing	Ex.Road

1.10 DESIGN OF SLOPE PROTECTION WORKS

The slope protection work includes the following:

Sr.No.	Description of Item	Unit	Package-1	Package-2
1	Retaining Wall 3.00m high	Rm	870	630
2	Retaining Wall 4.00m high	Rm	440	240

Sr.No.	Description of Item	Unit	Package-1	Package-2
3	Retaining Wall 5.00m high	Rm	240	160
4	Retaining Wall 6.00m high	Rm	155	80
5	Breast Wall 2.00m high	Rm	2235	565
6	Breast Wall 3.00m high	Rm	1380	435
7	Gabion Wall 2.00 m high	Rm	920	450
8	Gabion Wall 3.00 m high	Rm	755	445
9	Toe Wall 2.00 m high	Rm	850	1250
10	Toe Wall 3.00 m high	Rm	490	600
11	Reinforced Earth Retaining Wall (H=6m)	sqm	930	480
12	Reinforced Earth Retaining Wall (H=8m)	sqm	720	560
13	Reinforced Earth Retaining Wall (H=10m)	sqm	600	1000
14	Reinforced Earth Retaining Wall (H=12m)	sqm	960	600
15	Cut Slope Wall	Rm	6500	7500
16	Seeding and Mulching (Soil Cut Slope)	sqm	30000	40000
17	Vegetation Mat (Steep Slope)	sqm	1400	1600
18	Crib Work (F300)	sqm	900	800
19	Crib Work (F500)	sqm	1600	1910
20	Groundwater Drainage Work	metre	4500	5424
21	Anchor Work	Rm	1600	1472
22	Rock-bolt Work	Rm	800	700

Retaining Wall (RW)

It is proposed to provide minimum number of structures keeping in view the economy, cost as well as the essentiality of the requirement. The requirements of Retaining have been identified and are listed in Table below .It is identified to provide total length of the Retaining wall is 3500.00 m as under:

Sr.No.	Chainage		Length in m	Height in m	Remarks	Sr.No.	Chainage		Length in m	Height in m	Remarks
	From	To					From	To			
1	125.00	135.00	10	6	RHS	176	13965.00	13975.00	10	3	RHS
2	135.00	145.00	10	4	RHS	177	13975.00	13985.00	10	3	RHS
3	145.00	155.00	10	3	RHS	178	14515.00	14525.00	10	4	RHS
4	455.00	465.00	10	3	RHS	179	14525.00	14535.00	10	12	RHS
5	475.00	485.00	10	3	RHS	180	14535.00	14545.00	10	10	RHS
6	495.00	505.00	10	4	RHS	181	14575.00	14585.00	10	4	RHS
7	505.00	515.00	10	3	RHS	182	14585.00	14595.00	10	5	RHS
8	515.00	525.00	10	3	RHS	183	14595.00	14605.00	10	6	RHS

Sr.No.	Chainage		Length in m	Height in m	Remarks	Sr.No.	Chainage		Length in m	Height in m	Remarks
	From	To					From	To			
9	595.00	605.00	10	3	RHS	184	14605.00	14615.00	10	3	LHS
10	695.00	705.00	10	3	RHS	185	14605.00	14615.00	10	6	RHS
11	705.00	715.00	10	3	RHS	186	14615.00	14625.00	10	6	RHS
12	745.00	755.00	10	6	RHS	187	14625.00	14635.00	10	6	RHS
13	755.00	765.00	10	6	RHS	188	14635.00	14645.00	10	6	RHS
14	765.00	775.00	10	6	RHS	189	14645.00	14655.00	10	5	RHS
15	775.00	785.00	10	5	RHS	190	14655.00	14665.00	10	5	RHS
16	785.00	795.00	10	3	RHS	191	14665.00	14675.00	10	5	RHS
17	795.00	805.00	10	3	RHS	192	14675.00	14685.00	10	4	RHS
18	805.00	815.00	10	3	RHS	193	14685.00	14695.00	10	3	RHS
19	935.00	945.00	10	3	RHS	194	15005.00	15015.00	10	10	LHS
20	965.00	975.00	10	3	RHS	195	15175.00	15185.00	10	3	RHS
21	975.00	985.00	10	3	RHS	196	15185.00	15195.00	10	4	RHS
22	985.00	995.00	10	4	RHS	197	15195.00	15205.00	10	3	RHS
23	1015.00	1025.00	10	4	RHS	198	15435.00	15445.00	10	3	RHS
24	1025.00	1035.00	10	5	RHS	199	15505.00	15515.00	10	12	LHS
25	1035.00	1045.00	10	5	RHS	200	15695.00	15705.00	10	3	RHS
26	1045.00	1055.00	10	6	RHS	201	15705.00	15715.00	10	3	RHS
27	1055.00	1065.00	10	4	RHS	202	15715.00	15725.00	10	3	RHS
28	1065.00	1075.00	10	4	RHS	203	15725.00	15735.00	10	4	RHS
29	1075.00	1085.00	10	6	RHS	204	15735.00	15745.00	10	4	RHS
30	1085.00	1095.00	10	8	RHS	205	15745.00	15755.00	10	4	RHS
31	1095.00	1105.00	10	4	LHS	206	15755.00	15765.00	10	4	RHS
32	1095.00	1105.00	10	10	RHS	207	15765.00	15775.00	10	4	RHS
33	1105.00	1115.00	10	6	LHS	208	15775.00	15785.00	10	3	RHS
34	1105.00	1115.00	10	10	RHS	209	15785.00	15795.00	10	3	RHS
35	1115.00	1125.00	10	8	LHS	210	16245.00	16255.00	10	12	RHS
36	1115.00	1125.00	10	12	RHS	211	17885.00	17895.00	10	3	RHS
37	1125.00	1135.00	10	8	LHS	212	17895.00	17905.00	10	3	RHS
38	1125.00	1135.00	10	12	RHS	213	17975.00	17985.00	10	12	RHS
39	1135.00	1145.00	10	8	LHS	214	19745.00	19755.00	10	3	RHS
40	1135.00	1145.00	10	12	RHS	215	19755.00	19765.00	10	3	RHS
41	1145.00	1155.00	10	8	LHS	216	19765.00	19775.00	10	4	RHS
42	1145.00	1155.00	10	12	RHS	217	19775.00	19785.00	10	3	RHS
43	1155.00	1165.00	10	6	LHS	218	19785.00	19795.00	10	4	RHS
44	1155.00	1165.00	10	10	RHS	219	19795.00	19805.00	10	4	RHS
45	1165.00	1175.00	10	5	LHS	220	19805.00	19815.00	10	5	RHS
46	1165.00	1175.00	10	6	RHS	221	19815.00	19825.00	10	6	RHS
47	1175.00	1185.00	10	3	RHS	222	19825.00	19835.00	10	6	RHS
48	1185.00	1195.00	10	3	RHS	223	19835.00	19845.00	10	5	RHS
49	1195.00	1205.00	10	3	RHS	224	19845.00	19855.00	10	5	RHS
50	1205.00	1215.00	10	3	RHS	225	19855.00	19865.00	10	6	RHS
51	1215.00	1225.00	10	3	RHS	226	19865.00	19875.00	10	8	RHS
52	1225.00	1235.00	10	3	RHS	227	19875.00	19885.00	10	3	LHS
53	1235.00	1245.00	10	3	RHS	228	19875.00	19885.00	10	12	RHS
54	1725.00	1735.00	10	6	RHS	229	19885.00	19895.00	10	3	LHS
55	1825.00	1835.00	10	3	RHS	230	19885.00	19895.00	10	12	RHS
56	2025.00	2035.00	10	3	RHS	231	19895.00	19905.00	10	3	LHS
57	2075.00	2085.00	10	4	RHS	232	19895.00	19905.00	10	6	RHS

Sr.No.	Chainage		Length in m	Height in m	Remarks	Sr.No.	Chainage		Length in m	Height in m	Remarks
	From	To					From	To			
58	2085.00	2095.00	10	3	RHS	233	19905.00	19915.00	10	3	LHS
59	2095.00	2105.00	10	3	RHS	234	19905.00	19915.00	10	6	RHS
60	2105.00	2115.00	10	3	RHS	235	19915.00	19925.00	10	6	RHS
61	2115.00	2125.00	10	4	RHS	236	19925.00	19935.00	10	6	RHS
62	2125.00	2135.00	10	3	RHS	237	19995.00	20005.00	10	3	RHS
63	2135.00	2145.00	10	4	RHS	238	20505.00	20515.00	10	3	RHS
64	2145.00	2155.00	10	4	RHS	239	20505.00	20515.00	10	10	LHS
65	2155.00	2165.00	10	4	RHS	240	20515.00	20525.00	10	3	RHS
66	2165.00	2175.00	10	3	RHS	241	20615.00	20625.00	10	3	RHS
67	2175.00	2185.00	10	3	RHS	242	20625.00	20635.00	10	3	RHS
68	2185.00	2195.00	10	3	RHS	243	20935.00	20945.00	10	4	RHS
69	2195.00	2205.00	10	3	RHS	244	20945.00	20955.00	10	3	RHS
70	2225.00	2235.00	10	3	RHS	245	21645.00	21655.00	10	3	RHS
71	2235.00	2245.00	10	3	RHS	246	21655.00	21665.00	10	3	RHS
72	2245.00	2255.00	10	4	RHS	247	21665.00	21675.00	10	3	RHS
73	2255.00	2265.00	10	4	RHS	248	21675.00	21685.00	10	3	RHS
74	2265.00	2275.00	10	4	RHS	249	21705.00	21715.00	10	3	RHS
75	2275.00	2285.00	10	6	RHS	250	22675.00	22685.00	10	3	RHS
76	2285.00	2295.00	10	6	RHS	251	23155.00	23165.00	10	3	RHS
77	2295.00	2305.00	10	6	RHS	252	23165.00	23175.00	10	4	RHS
78	2305.00	2315.00	10	6	RHS	253	23215.00	23225.00	10	3	RHS
79	2315.00	2325.00	10	6	RHS	254	23225.00	23235.00	10	3	RHS
80	2325.00	2335.00	10	6	RHS	255	25125.00	25135.00	10	5	RHS
81	2335.00	2345.00	10	3	RHS	256	25135.00	25145.00	10	5	RHS
82	2375.00	2385.00	10	4	RHS	257	25185.00	25195.00	10	4	RHS
83	2385.00	2395.00	10	5	RHS	258	25195.00	25205.00	10	4	RHS
84	2395.00	2405.00	10	6	RHS	259	25255.00	25265.00	10	3	RHS
85	2925.00	2935.00	10	4	RHS	260	25265.00	25275.00	10	4	RHS
86	3705.00	3715.00	10	5	RHS	261	25355.00	25365.00	10	3	RHS
87	3715.00	3725.00	10	5	RHS	262	25365.00	25375.00	10	3	RHS
88	4175.00	4185.00	10	4	RHS	263	26025.00	26035.00	10	3	RHS
89	4355.00	4365.00	10	3	RHS	264	26115.00	26125.00	10	5	RHS
90	4365.00	4375.00	10	6	RHS	265	26125.00	26135.00	10	8	RHS
91	4415.00	4425.00	10	3	RHS	266	26135.00	26145.00	10	5	RHS
92	5195.00	5205.00	10	3	RHS	267	26365.00	26375.00	10	4	RHS
93	5255.00	5265.00	10	3	RHS	268	26375.00	26385.00	10	4	RHS
94	5265.00	5275.00	10	4	RHS	269	27515.00	27525.00	10	3	RHS
95	5275.00	5285.00	10	4	RHS	270	27545.00	27555.00	10	5	RHS
96	5345.00	5355.00	10	3	RHS	271	27555.00	27565.00	10	3	RHS
97	5355.00	5365.00	10	4	RHS	272	27755.00	27765.00	10	3	RHS
98	5365.00	5375.00	10	3	RHS	273	27765.00	27775.00	10	6	RHS
99	5375.00	5385.00	10	3	RHS	274	27775.00	27785.00	10	6	RHS
100	5535.00	5545.00	10	3	RHS	275	27785.00	27795.00	10	4	LHS
101	5855.00	5865.00	10	4	RHS	276	27785.00	27795.00	10	10	RHS
102	5945.00	5955.00	10	3	RHS	277	27795.00	27805.00	10	5	LHS
103	5955.00	5965.00	10	3	RHS	278	27795.00	27805.00	10	10	RHS
104	5965.00	5975.00	10	10	RHS	279	27805.00	27815.00	10	3	LHS
105	5975.00	5985.00	10	6	RHS	280	27805.00	27815.00	10	6	RHS
106	5985.00	5995.00	10	3	RHS	281	27815.00	27825.00	10	3	LHS

Sr.No.	Chainage		Length in m	Height in m	Remarks	Sr.No.	Chainage		Length in m	Height in m	Remarks
	From	To					From	To			
107	6265.00	6275.00	10	3	RHS	282	27815.00	27825.00	10	4	RHS
108	6275.00	6285.00	10	3	RHS	283	27825.00	27835.00	10	4	RHS
109	6285.00	6295.00	10	3	RHS	284	27835.00	27845.00	10	4	RHS
110	6385.00	6395.00	10	3	LHS	285	27845.00	27855.00	10	5	RHS
111	6565.00	6575.00	10	3	LHS	286	27855.00	27865.00	10	5	RHS
112	6575.00	6585.00	10	5	LHS	287	27865.00	27875.00	10	5	RHS
113	6915.00	6925.00	10	3	RHS	288	27875.00	27885.00	10	5	RHS
114	6925.00	6935.00	10	3	RHS	289	27885.00	27895.00	10	6	RHS
115	6975.00	6985.00	10	3	RHS	290	27895.00	27905.00	10	4	RHS
116	6985.00	6995.00	10	4	RHS	291	27905.00	27915.00	10	3	RHS
117	6995.00	7005.00	10	4	RHS	292	27925.00	27935.00	10	6	RHS
118	7005.00	7015.00	10	4	RHS	293	27935.00	27945.00	10	3	LHS
119	7015.00	7025.00	10	4	RHS	294	27935.00	27945.00	10	6	RHS
120	7025.00	7035.00	10	4	RHS	295	27945.00	27955.00	10	6	LHS
121	7035.00	7045.00	10	5	RHS	296	27945.00	27955.00	10	10	RHS
122	7045.00	7055.00	10	6	RHS	297	27955.00	27965.00	10	12	RHS
123	7055.00	7065.00	10	4	RHS	298	27965.00	27975.00	10	10	RHS
124	7065.00	7075.00	10	5	RHS	299	27975.00	27985.00	10	3	LHS
125	7075.00	7085.00	10	5	RHS	300	27975.00	27985.00	10	10	RHS
126	7085.00	7095.00	10	6	RHS	301	27985.00	27995.00	10	10	RHS
127	7095.00	7105.00	10	5	RHS	302	27995.00	28005.00	10	5	LHS
128	7105.00	7115.00	10	6	RHS	303	27995.00	28005.00	10	8	RHS
129	7115.00	7125.00	10	6	RHS	304	28005.00	28015.00	10	5	LHS
130	7125.00	7135.00	10	8	RHS	305	28005.00	28015.00	10	10	RHS
131	7135.00	7145.00	10	8	RHS	306	28015.00	28025.00	10	8	RHS
132	7145.00	7155.00	10	12	RHS	307	28025.00	28035.00	10	4	RHS
133	7155.00	7165.00	10	12	RHS	308	28035.00	28045.00	10	4	RHS
134	7165.00	7175.00	10	8	RHS	309	28045.00	28055.00	10	4	RHS
135	7175.00	7185.00	10	4	RHS	310	28055.00	28065.00	10	4	RHS
136	7185.00	7195.00	10	3	RHS	311	28065.00	28075.00	10	4	RHS
137	7295.00	7305.00	10	3	LHS	312	28075.00	28085.00	10	3	RHS
138	7305.00	7315.00	10	3	LHS	313	28085.00	28095.00	10	3	RHS
139	7355.00	7365.00	10	8	RHS	314	28095.00	28105.00	10	5	RHS
140	7425.00	7435.00	10	3	LHS	315	28105.00	28115.00	10	4	RHS
141	9855.00	9865.00	10	3	RHS	316	28115.00	28125.00	10	3	RHS
142	9865.00	9875.00	10	5	RHS	317	28125.00	28135.00	10	3	RHS
143	9995.00	10005.00	10	5	RHS	318	28135.00	28145.00	10	3	RHS
144	10005.00	10015.00	10	5	RHS	319	28145.00	28155.00	10	4	RHS
145	10015.00	10025.00	10	5	RHS	320	28155.00	28165.00	10	3	LHS
146	10025.00	10035.00	10	4	RHS	321	28155.00	28165.00	10	8	RHS
147	10035.00	10045.00	10	3	RHS	322	28165.00	28175.00	10	3	LHS
148	10045.00	10055.00	10	3	RHS	323	28165.00	28175.00	10	6	RHS
149	10055.00	10065.00	10	3	RHS	324	28455.00	28465.00	10	8	RHS
150	10065.00	10075.00	10	5	RHS	325	28465.00	28475.00	10	8	RHS
151	10075.00	10085.00	10	6	RHS	326	28725.00	28735.00	10	3	RHS
152	10085.00	10095.00	10	4	RHS	327	28735.00	28745.00	10	6	RHS
153	10095.00	10105.00	10	3	RHS	328	28745.00	28755.00	10	4	RHS
154	10505.00	10515.00	10	3	RHS	329	29375.00	29385.00	10	4	RHS
155	10515.00	10525.00	10	5	RHS	330	29395.00	29405.00	10	3	RHS

Sr.No.	Chainage		Length in m	Height in m	Remarks	Sr.No.	Chainage		Length in m	Height in m	Remarks
	From	To					From	To			
156	10525.00	10535.00	10	4	RHS	331	29425.00	29435.00	10	3	RHS
157	10535.00	10545.00	10	6	RHS	332	29435.00	29445.00	10	3	RHS
158	10545.00	10555.00	10	6	RHS	333	29765.00	29775.00	10	3	RHS
159	10555.00	10565.00	10	5	RHS	334	29775.00	29785.00	10	3	RHS
160	10865.00	10875.00	10	3	LHS	335	29885.00	29895.00	10	3	RHS
161	11505.00	11515.00	10	4	LHS	336	30055.00	30065.00	10	3	RHS
162	11515.00	11525.00	10	3	LHS	337	30285.00	30295.00	10	3	RHS
163	12145.00	12155.00	10	3	LHS	338	30295.00	30305.00	10	3	RHS
164	12155.00	12165.00	10	3	LHS	339	30305.00	30315.00	10	3	RHS
165	12165.00	12175.00	10	4	LHS	340	30315.00	30325.00	10	3	RHS
166	12295.00	12305.00	10	3	LHS	341	30355.00	30365.00	10	3	RHS
167	12375.00	12385.00	10	3	LHS	342	30365.00	30375.00	10	3	RHS
168	12505.00	12515.00	10	4	LHS	343	30385.00	30395.00	10	3	RHS
169	12555.00	12565.00	10	3	LHS	344	30395.00	30405.00	10	3	RHS
170	13315.00	13325.00	10	3	RHS	345	31625.00	31635.00	10	10	RHS
171	13325.00	13335.00	10	5	RHS	346	32045.00	32055.00	10	3	RHS
172	13335.00	13345.00	10	3	RHS	347	32315.00	32325.00	10	10	RHS
173	13345.00	13355.00	10	3	RHS	348	32325.00	32335.00	10	3	RHS
174	13395.00	13405.00	10	3	RHS	349	32505.00	32515.00	10	3	RHS
175	13415.00	13425.00	10	3	RHS	350	32515.00	32525.00	10	3	RHS
	SUMMARY										
	Total length of Retaining wall for 3.0 m Height							=	1500	m	
	Total length of Retaining wall for 4.0 m Height							=	680	m	
	Total length of Retaining wall for 5.0 m Height							=	400	m	
	Total length of Retaining wall for 6.0 m Height							=	470	m	
	Total length of Retaining wall for 8.0 m Height							=	160	m	
	Total length of Retaining wall for 10.0 m Height							=	160	m	
	Total length of Retaining wall for height more than 12 m							=	130	m	
								Total	3500	m	

Breast Wall:

The requirement of the breast walls is generated only when the road has been in use and problems of the slope line have been identified. These are proposed at locations having hill with steep slope, having soil matrix Soil Mixed with Boulders and sharp curve portion. It is also proposed where the rain water spills all around causing mud flow. These situations have been considered on the basic of visual investigations for a total length of 4615 m. The requirements of Breast wall have been identified and are listed in Table below

Sr.No.	Chainage		Length in m	Height in m	Side	Remarks
	From	To				
1	3090	3130	40.00	3.00	LHS	Merging with Existing Road
2	3290	3375	85.00	3.00	LHS	
3	3695	3720	25.00	2.00	LHS	
4	3815	3855	40.00	2.00	LHS	Junction with Bermick Road
5	4285	4315	30.00	2.00	LHS	
6	5775	5830	55.00	2.00	LHS	
7	6000	6055	55.00	2.00	LHS	

Sr.No.	Chainage		Length in m	Height in m	Side	Remarks
	From	To				
8	6125	6185	60.00	2.00	LHS	
9	6200	6260	60.00	2.00	LHS	
10	6280	6320	40.00	3.00	RHS	Junction with Yanyang Road
11	6320	6390	70.00	2.00	RHS	
12	7070	7135	65.00	2.00	LHS	
13	8040	8130	90.00	2.00	LHS	
14	8165	8260	95.00	2.00	LHS	
15	8455	8530	75.00	3.00	LHS	
16	9325	9555	230.00	3.00	LHS	
17	9615	9690	75.00	3.00	LHS	
18	9740	9790	50.00	3.00	LHS	
19	10070	10100	30.00	3.00	LHS	
20	10110	10200	90.00	3.00	LHS	
21	10360	10460	100.00	2.00	LHS	
22	10460	10540	80.00	2.00	LHS	
23	10865	10915	50.00	2.00	RHS	
24	11530	11555	25.00	2.00	RHS	
25	11555	11670	115.00	2.00	RHS	
26	11685	11725	40.00	2.00	RHS	
27	11765	11825	60.00	2.00	RHS	
28	11875	11910	35.00	2.00	RHS	
29	11920	11985	65.00	2.00	RHS	
30	12360	12430	70.00	2.00	RHS	
31	12450	12560	110.00	2.00	RHS	
32	12820	12895	75.00	2.00	RHS	
33	12935	12975	40.00	2.00	LHS	Junction with Timi Road
34	13070	13170	100.00	2.00	LHS	
35	13225	13505	280.00	2.00	LHS	
36	13595	13630	35.00	3.00	LHS	
37	13870	13935	65.00	2.00	LHS	
38	13955	14035	80.00	3.00	LHS	
39	14070	14170	100.00	3.00	LHS	
40	14250	14320	70.00	2.00	LHS	
41	14350	14405	55.00	3.00	LHS	
42	14450	14500	50.00	2.00	LHS	
43	14855	14890	35.00	3.00	LHS	
44	14975	15295	320.00	3.00	LHS	
45	15140	15180	40.00	3.00	LHS	Junction with NH-310
46	15360	15505	145.00	2.00	LHS	
47	15985	16050	65.00	2.00	LHS	
48	17205	17240	35.00	2.00	LHS	
49	18775	18880	105.00	2.00	LHS	
50	18995	19015	20.00	2.00	LHS	
51	19305	19345	40.00	3.00	LHS	
52	19450	19525	75.00	3.00	LHS	
53	19600	19680	80.00	2.00	LHS	
54	19730	19975	245.00	3.00	LHS	
55	20690	20730	40.00	2.00	LHS	
56	21105	21140	35.00	3.00	LHS	

Sr.No.	Chainage		Length in m	Height in m	Side	Remarks
	From	To				
57	21280	21330	50.00	2.00	LHS	
58	22155	22195	40.00	2.00	RHS	Junction with Mangley Village Road
59	22690	22730	40.00	2.00	RHS	Junction with Nambrick Village Road
60	23290	23330	40.00	2.00	LHS	Junction with Damthang Road
61	25585	25650	65.00	2.00	LHS	
62	32570	32610	40.00	3.00	LHS	Army Camp Approach road
			4615.00			
SUMMARY						
	Total length of Breast wall for 2.0 m Height				=	2800
	Total length of Breast wall for 3.0 m Height				=	1815

Toe Wall:

The requirement of the Toe walls is generated only when the road has been in use and problems of the slope line have been identified. These are proposed at locations having hill with steep slope & height of filling are more and retaining wall height more than 6.0 m along with valley side toe protection. These situations have been considered on the basic of visual investigations for a total length of 3190 m. The requirements of Breast wall have been identified and are listed in Table below

Sr.No.	Chainage		Length in m	Height in m	Remarks	Sr.No.	Chainage		Length in m	Height in m	Remarks
	From	To					From	To			
1	155.00	165.00	10	2	RHS	161	19925.00	19935.00	10	2	LHS
2	165.00	175.00	10	2	RHS	162	19995.00	20005.00	10	3	LHS
3	175.00	185.00	10	3	RHS	163	20005.00	20015.00	10	3	RHS
4	195.00	205.00	10	2	RHS	164	20495.00	20505.00	10	3	RHS
5	435.00	445.00	10	2	RHS	165	20575.00	20585.00	10	2	RHS
6	465.00	475.00	10	3	RHS	166	20975.00	20985.00	10	2	RHS
7	485.00	495.00	10	3	RHS	167	21145.00	21155.00	10	2	RHS
8	525.00	535.00	10	2	RHS	168	21255.00	21265.00	10	2	RHS
9	575.00	585.00	10	2	RHS	169	21625.00	21635.00	10	2	RHS
10	605.00	615.00	10	2	RHS	170	21635.00	21645.00	10	2	RHS
11	635.00	645.00	10	2	RHS	171	21685.00	21695.00	10	3	RHS
12	685.00	695.00	10	2	RHS	172	21695.00	21705.00	10	2	RHS
13	915.00	925.00	10	2	RHS	173	21715.00	21725.00	10	2	RHS
14	945.00	955.00	10	3	RHS	174	21725.00	21735.00	10	3	RHS
15	995.00	1005.00	10	2	RHS	175	21745.00	21755.00	10	2	RHS
16	1005.00	1015.00	10	2	RHS	176	21755.00	21765.00	10	2	RHS
17	1115.00	1125.00	10	3	RHS	177	21785.00	21795.00	10	2	RHS
18	1125.00	1135.00	10	3	RHS	178	21795.00	21805.00	10	2	RHS
19	1125.00	1135.00	10	2	RHS	179	21835.00	21845.00	10	2	RHS
20	1135.00	1145.00	10	3	RHS	180	21895.00	21905.00	10	2	RHS
21	1175.00	1185.00	10	3	LHS	181	22425.00	22435.00	10	2	RHS
22	1245.00	1255.00	10	3	RHS	182	22575.00	22585.00	10	3	RHS
23	1255.00	1265.00	10	2	RHS	183	22655.00	22665.00	10	2	RHS
24	1505.00	1515.00	10	2	RHS	184	22665.00	22675.00	10	2	RHS
25	1735.00	1745.00	10	2	RHS	185	22775.00	22785.00	10	3	RI
26	1815.00	1825.00	10	3	RHS	186	22785.00	22795.00	10	2	RI
27	2035.00	2045.00	10	2	RHS	187	22795.00	22805.00	10	2	RI
28	2205.00	2215.00	10	2	RHS	188	22805.00	22815.00	10	3	RHS

Sr.No.	Chainage		Length in m	Height in m	Remarks	Sr.No.	Chainage		Length in m	Height in m	Remarks
	From	To					From	To			
29	2215.00	2225.00	10	3	RHS	189	22885.00	22895.00	10	2	RHS
30	2285.00	2295.00	10	2	LHS	190	22945.00	22955.00	10	3	RHS
31	2295.00	2305.00	10	3	LHS	191	22955.00	22965.00	10	2	RHS
32	3205.00	3215.00	10	2	RHS	192	22965.00	22975.00	10	2	RHS
33	3325.00	3335.00	10	3	RHS	193	22975.00	22985.00	10	3	RHS
34	3335.00	3345.00	10	3	RHS	194	22985.00	22995.00	10	2	RHS
35	3345.00	3355.00	10	3	RHS	195	23145.00	23155.00	10	2	RHS
36	3355.00	3365.00	10	3	RHS	196	23175.00	23185.00	10	2	RHS
37	3725.00	3735.00	10	2	RHS	197	23185.00	23195.00	10	2	RHS
38	3995.00	4005.00	10	3	RHS	198	23195.00	23205.00	10	2	RHS
39	4185.00	4195.00	10	3	RHS	199	23205.00	23215.00	10	2	RHS
40	4435.00	4445.00	10	2	RHS	200	23235.00	23245.00	10	3	RHS
41	4495.00	4505.00	10	2	RHS	201	23255.00	23265.00	10	3	RHS
42	4575.00	4585.00	10	2	RHS	202	23265.00	23275.00	10	2	RHS
43	4635.00	4645.00	10	2	RHS	203	23275.00	23285.00	10	2	RHS
44	4875.00	4885.00	10	3	RHS	204	23285.00	23295.00	10	2	RHS
45	4925.00	4935.00	10	3	RHS	205	23295.00	23305.00	10	2	RHS
46	4935.00	4945.00	10	2	RHS	206	23305.00	23315.00	10	2	RHS
47	5085.00	5095.00	10	2	RHS	207	23315.00	23325.00	10	2	RHS
48	5245.00	5255.00	10	2	RHS	208	23325.00	23335.00	10	2	RHS
49	5545.00	5555.00	10	2	RHS	209	23345.00	23355.00	10	2	RHS
50	5845.00	5855.00	10	3	RHS	210	23355.00	23365.00	10	3	RHS
51	5865.00	5875.00	10	3	RHS	211	23365.00	23375.00	10	2	RHS
52	5925.00	5935.00	10	2	RHS	212	23515.00	23525.00	10	2	RHS
53	5935.00	5945.00	10	3	RHS	213	24925.00	24935.00	10	3	RHS
54	5995.00	6005.00	10	2	RHS	214	25005.00	25015.00	10	3	RHS
55	5995.00	6005.00	10	3	LHS	215	25015.00	25025.00	10	2	RHS
56	6255.00	6265.00	10	3	RHS	216	25025.00	25035.00	10	2	RHS
57	6585.00	6595.00	10	3	RHS	217	25055.00	25065.00	10	2	RHS
58	6835.00	6845.00	10	3	RHS	218	25065.00	25075.00	10	2	RHS
59	6905.00	6915.00	10	3	RHS	219	25075.00	25085.00	10	2	RHS
60	6935.00	6945.00	10	2	RHS	220	25145.00	25155.00	10	3	RHS
61	6945.00	6955.00	10	3	RHS	221	25175.00	25185.00	10	3	RHS
62	7155.00	7165.00	10	3	LHS	222	25205.00	25215.00	10	3	RHS
63	7165.00	7175.00	10	2	LHS	223	25215.00	25225.00	10	2	RHS
64	7205.00	7215.00	10	2	LHS	224	25225.00	25235.00	10	2	RHS
65	7285.00	7295.00	10	2	LHS	225	25235.00	25245.00	10	3	RHS
66	7315.00	7325.00	10	2	LHS	226	25245.00	25255.00	10	2	RHS
67	7355.00	7365.00	10	2	LHS	227	25345.00	25355.00	10	3	RHS
68	7385.00	7395.00	10	2	LHS	228	25375.00	25385.00	10	2	RHS
69	7865.00	7875.00	10	2	LHS	229	25385.00	25395.00	10	3	RHS
70	8085.00	8095.00	10	2	RHS	230	25395.00	25405.00	10	3	RHS
71	9665.00	9675.00	10	2	RHS	231	25405.00	25415.00	10	2	RHS
72	9675.00	9685.00	10	3	RHS	232	25465.00	25475.00	10	2	RHS
73	9685.00	9695.00	10	2	RHS	233	26085.00	26095.00	10	2	RHS
74	9845.00	9855.00	10	2	RHS	234	26095.00	26105.00	10	2	RH
75	9915.00	9925.00	10	3	RHS	235	26105.00	26115.00	10	2	RH
76	9925.00	9935.00	10	2	RHS	236	26145.00	26155.00	10	3	RH
77	9985.00	9995.00	10	2	RHS	237	26155.00	26165.00	10	2	RHS

Sr.No.	Chainage		Length in m	Height in m	Remarks	Sr.No.	Chainage		Length in m	Height in m	Remarks
	From	To					From	To			
78	10005.00	10015.00	10	2	LHS	238	26355.00	26365.00	10	2	RHS
79	10135.00	10145.00	10	2	RHS	239	26385.00	26395.00	10	2	RHS
80	10145.00	10155.00	10	3	RHS	240	27505.00	27515.00	10	3	RHS
81	10155.00	10165.00	10	2	RHS	241	27525.00	27535.00	10	2	RHS
82	10165.00	10175.00	10	2	RHS	242	27915.00	27925.00	10	2	RHS
83	10335.00	10345.00	10	2	RHS	243	27955.00	27965.00	10	3	RHS
84	10475.00	10485.00	10	2	RHS	244	27955.00	27965.00	10	2	RHS
85	10485.00	10495.00	10	2	RHS	245	27985.00	27995.00	10	2	LHS
86	10495.00	10505.00	10	2	RHS	246	28015.00	28025.00	10	2	LHS
87	10855.00	10865.00	10	2	LHS	247	28185.00	28195.00	10	2	RHS
88	10875.00	10885.00	10	2	LHS	248	28255.00	28265.00	10	2	RHS
89	11075.00	11085.00	10	3	LHS	249	28265.00	28275.00	10	3	RHS
90	11085.00	11095.00	10	3	LHS	250	28275.00	28285.00	10	3	RHS
91	11505.00	11515.00	10	2	RHS	251	28285.00	28295.00	10	3	RHS
92	12175.00	12185.00	10	2	LHS	252	28295.00	28305.00	10	3	RHS
93	12285.00	12295.00	10	2	LHS	253	28305.00	28315.00	10	2	RHS
94	12305.00	12315.00	10	2	LHS	254	28445.00	28455.00	10	2	RHS
95	12325.00	12335.00	10	2	LHS	255	28475.00	28485.00	10	3	RHS
96	12335.00	12345.00	10	2	LHS	256	28625.00	28635.00	10	3	RHS
97	12345.00	12355.00	10	2	LHS	257	28635.00	28645.00	10	2	RHS
98	12365.00	12375.00	10	2	LHS	258	29055.00	29065.00	10	3	RHS
99	12495.00	12505.00	10	2	LHS	259	29185.00	29195.00	10	3	RHS
100	12545.00	12555.00	10	2	LHS	260	29195.00	29205.00	10	3	RHS
101	12685.00	12695.00	10	2	LHS	261	29225.00	29235.00	10	2	RHS
102	12695.00	12705.00	10	2	LHS	262	29385.00	29395.00	10	2	RHS
103	12705.00	12715.00	10	2	LHS	263	29415.00	29425.00	10	2	RHS
104	12715.00	12725.00	10	2	LHS	264	29445.00	29455.00	10	3	RHS
105	12735.00	12745.00	10	2	LHS	265	29475.00	29485.00	10	2	RHS
106	12745.00	12755.00	10	2	LHS	266	29485.00	29495.00	10	2	RHS
107	13065.00	13075.00	10	2	RHS	267	29495.00	29505.00	10	3	RHS
108	13285.00	13295.00	10	2	RHS	268	29505.00	29515.00	10	2	RHS
109	13305.00	13315.00	10	2	RHS	269	29515.00	29525.00	10	2	RHS
110	13385.00	13395.00	10	3	RHS	270	29705.00	29715.00	10	2	RHS
111	13405.00	13415.00	10	2	RHS	271	29785.00	29795.00	10	2	RHS
112	13915.00	13925.00	10	3	RHS	272	29795.00	29805.00	10	2	RHS
113	13925.00	13935.00	10	3	RHS	273	29805.00	29815.00	10	2	RHS
114	13935.00	13945.00	10	3	RHS	274	29815.00	29825.00	10	3	RHS
115	13945.00	13955.00	10	2	RHS	275	29895.00	29905.00	10	3	RHS
116	13955.00	13965.00	10	3	RHS	276	29945.00	29955.00	10	3	RHS
117	14525.00	14535.00	10	3	RHS	277	29955.00	29965.00	10	3	RHS
118	14525.00	14535.00	10	2	RHS	278	29965.00	29975.00	10	2	RHS
119	14565.00	14575.00	10	3	RHS	279	29975.00	29985.00	10	2	RHS
120	14695.00	14705.00	10	3	RHS	280	29985.00	29995.00	10	3	RHS
121	14705.00	14715.00	10	2	RHS	281	30005.00	30015.00	10	2	RHS
122	14735.00	14745.00	10	2	RHS	282	30015.00	30025.00	10	3	RHS
123	14905.00	14915.00	10	3	RHS	283	30025.00	30035.00	10	2	RI
124	15205.00	15215.00	10	3	RHS	284	30035.00	30045.00	10	2	RI
125	15345.00	15355.00	10	2	RHS	285	30045.00	30055.00	10	3	RI
126	15355.00	15365.00	10	3	RHS	286	30065.00	30075.00	10	2	RHS

Sr.No.	Chainage		Length in m	Height in m	Remarks	Sr.No.	Chainage		Length in m	Height in m	Remarks
	From	To					From	To			
127	15405.00	15415.00	10	2	RHS	287	30075.00	30085.00	10	2	RHS
128	15415.00	15425.00	10	2	RHS	288	30085.00	30095.00	10	2	RHS
129	15505.00	15515.00	10	3	LHS	289	30135.00	30145.00	10	2	RHS
130	15505.00	15515.00	10	2	LHS	290	30145.00	30155.00	10	2	RHS
131	15795.00	15805.00	10	3	RHS	291	30155.00	30165.00	10	2	RHS
132	15855.00	15865.00	10	2	RHS	292	30165.00	30175.00	10	2	RHS
133	15875.00	15885.00	10	3	RHS	293	30175.00	30185.00	10	2	RHS
134	15915.00	15925.00	10	2	RHS	294	30185.00	30195.00	10	2	RHS
135	16245.00	16255.00	10	3	RHS	295	30195.00	30205.00	10	2	RHS
136	16245.00	16255.00	10	2	RHS	296	30205.00	30215.00	10	2	RHS
137	17395.00	17405.00	10	2	RHS	297	30225.00	30235.00	10	2	RHS
138	17405.00	17415.00	10	2	RHS	298	30235.00	30245.00	10	2	RHS
139	17415.00	17425.00	10	3	RHS	299	30245.00	30255.00	10	2	RHS
140	17425.00	17435.00	10	2	RHS	300	30255.00	30265.00	10	3	RHS
141	17435.00	17445.00	10	2	RHS	301	30275.00	30285.00	10	2	RHS
142	17695.00	17705.00	10	2	LHS	302	30325.00	30335.00	10	2	RHS
143	17795.00	17805.00	10	2	RHS	303	30335.00	30345.00	10	2	RHS
144	17805.00	17815.00	10	2	RHS	304	30345.00	30355.00	10	3	RHS
145	17875.00	17885.00	10	2	RHS	305	30375.00	30385.00	10	3	RHS
146	17905.00	17915.00	10	3	RHS	306	30405.00	30415.00	10	3	RHS
147	17965.00	17975.00	10	2	RHS	307	30425.00	30435.00	10	2	RHS
148	17975.00	17985.00	10	3	RHS	308	30465.00	30475.00	10	2	RHS
149	17975.00	17985.00	10	2	RHS	309	31445.00	31455.00	10	2	RHS
150	18005.00	18015.00	10	2	RHS	310	31695.00	31705.00	10	2	RHS
151	18085.00	18095.00	10	3	RHS	311	32485.00	32495.00	10	3	RHS
152	18985.00	18995.00	10	2	RHS	312	32495.00	32505.00	10	3	RHS
153	19265.00	19275.00	10	2	RHS	313	32615.00	32625.00	10	3	RHS
154	19395.00	19405.00	10	2	RHS	314	32785.00	32795.00	10	3	RHS
155	19455.00	19465.00	10	3	RHS	315	32825.00	32835.00	10	2	RHS
156	19725.00	19735.00	10	2	RHS	316	32835.00	32845.00	10	2	RHS
157	19735.00	19745.00	10	2	RHS	317	32845.00	32855.00	10	3	RHS
158	19875.00	19885.00	10	3	RHS	318	32855.00	32865.00	10	2	RHS
159	19885.00	19895.00	10	3	RHS	319	32885.00	32895.00	10	2	RHS
160	19885.00	19895.00	10	2	RHS						
		SUMMARY									
	Total length of Toe wall for 2.0 m Height						=	2100			
	Total length of Toe wall for 3.0 m Height						=	1090			

Gabion Wall:

The requirement of the Gabion wall is generated only where the road is aligned along a saddle portion, Near bus stand & river bank or a nallah (stream) slope failure and erosion of toe has also to be prevented and valley side slope made stable These are proposed at locations having hill with steep slope, having soil matrix Soil Mixed with Boulders and sharp curve portion. It is also proposed where the road side excavated spoils dumping area and embankment toe. These situations have been considered on the basic of visual investigations for a total length of 2570 m.

SR.NO	CHAINAGE		LENGTH in m	HEIGHT in m	REMARKS
	FROM	TO			
1	2320	2370	50	2	Sliding Portion
2	3100	3600	500	3	Disposal Yard on RHS
3	3195	3465	270	2	Sinking Portion
4	3540	3695	155	3	Sinking Portion
5	4085	4145	60	2	Sliding Portion
6	4285	4370	85	2	Sinking Portion
7	4390	4390	0	2	Sinking Portion
8	4520	4545	25	3	Sinking Portion
9	4660	4735	75	3	Sinking Portion
10	5200	5285	85	2	Sinking Portion
11	5455	5575	120	2	Sinking Portion
12	6905	6970	65	2	Sinking Portion
13	12060	12135	75	2	Truck Lay
14	14595	14705	110	2	Sinking Portion
15	20645	20980	335	3	Disposal Yard on RHS
16	22215	22325	110	3	Sinking Portion
17	32210	32660	450	2	Disposal Yard on RHS
			2570.000		
SUMMARY					
Total length of Gabion wall for 2.0 m Height				=	**1370**
Total length of Gabion wall for 3.0 m Height				=	**1200**

Design of Retaining Wall/Breast Wall

Following types of RW/BW have been designed.

- Random Rubble Masonry RW/TW
- Reinforced Earth Retaining Wall
- Random Rubble Masonry BW

However, the drawings are placed for application, if considered necessary.

Turfing with Sods

Furnishing and laying of the live sods of perennial turf forming grass on embankment slope, verges or other locations.

Land Slide Prone Area

13 No of major & 12 nos of minor land slide prone location noticed and subsequence measures are proposed.

Sr.No.	Landslide Location		Disaster Type	Soil/Rock Condition	Landslide Size	
	Start	End			Length	Width
1	2320	2370	Sliding Portion	Bed Rock	50	50
2	3195	3465	Sinking Portion	Very Soft	270	50

Sr.No.	Landslide Location		Disaster Type	Soil/Rock Condition	Landslide Size	
	Start	End			Length	Width
3	3540	3695	Sinking Portion	Soft	155	30
4	4085	4145	Sliding Portion	Soft	60	80
5	4285	4370	Sinking Portion	Soft	85	180
6	4390	4490	Sinking Portion	Bed Rock	100	
7	4520	4545	Sinking Portion	Bed Rock	25	30
8	4660	4735	Sinking Portion	Bed Rock	75	
9	5200	5285	Sinking Portion	Soft	85	60
10	5455	5575	Sinking Portion	Bed Rock	120	40
11	6905	6970	Sinking Portion	Soft	65	
12	14595	14705	Sinking Portion	Bed Rock	110	50
13	22215	22325	Sinking Portion	Bed Rock	110	60

1.11 ROAD SIGNS, MARKING & FURNITURE

General

Road signs, road marking and furniture are important components of the project corridor. The road signs are categorized as mandatory, cautionary and informatory. The road signs, marking and furniture serve the purpose of regulating the road users and provide psychological inputs for an organized user response. The drawings of signs, marking and furniture are enclosed in the drawing folder. The items of road signs, marking and furniture are briefly discussed in the subsequent paragraphs.

- **Road Signs**

The methodology to be followed in the use, sitting with respect to carriageway, orientation, materials, ports, mountings, colours, sizes, letters etc. shall be as per IRC: 67-2001. Road signs have been selected for particular application to this project. These are summarized in the following Table:

S/n	Description	Nos
A.	**MANDATORY / REGULATING SIGNS**	
1	STOP	16
2	GIVE WAY	14
3	SPEED LIMIT	20
4	ROUTE MARKER SIGN FOR NH	3
B	**CAUTIONARY / WARNING SIGNS**	
1	RIGHT-HAND CURVE	51
2	LEFT-HAND CURVE	49
3	HAIR-PIN BEND	-
4	REVERSE BEND (RIGHT)	10
5	REVERSE BEND (LEFT)	11
6	CROSS ROAD	-
7	SIDE ROAD (R & L)	-

8	T-INTERSECTION	-
9	Y-INTERSECTION	45
C	**INFORMATION SIGNS**	
1	DIRECTION OF PLACE IDENTIFICATION SIGNS	20
2	PLACE IDENTIFICATION SIGNS	20
3	FLOOD GAUGE	1

- **Route Marker Signs for National Highways**

The design, location, materials, definitions plate, route marker assembly at junctions with numbered routes, colour of back sign of port and inscription will be done as per IRC: 2-1968. Centre-line marking for a 2-Lane Road has been provided.

- **Type design for KM stone**

The design, materials, script and sequence of inscription; size, shape and spacing of letters / numerals, colour, background, inscription and placement of 200m, kilometer and 5 - kilometer stone will be done as per IRC: 8 – 1980.

Sr.No.	Category	Nos
1	Kilometer Stone	29
2	5-Km Stone	6
3	200 m Stone	130

- **Standard letters and numerals of different heights for use on highways signs:**

The shape, spacing in between and use of letters / numerals of different heights for use on highway signs shall be as per IRC: 30-1968.

- **Numbering of bridges and culverts:**

The materials method of numbering, manner of inscription and placing of numbering of culverts and bridges shall be as per IRC: 7-1971.

- **Road Marking:**

Road Markings perform important functions of guiding and controlling traffic on a highway. The markings serve as a psychological barrier and signify the delineation of traffic hazards for safe movement of traffic. Road markings channelize, ensure smooth and orderly flow of traffic.
The materials, colour, size etc of road marking shall be as per IRC: 35-1997.

- **Street Furniture**

A modern highway facility requires a number of items of street furniture. The provisions of these shall be made on the basis of recent Guidelines evolved under the Ministry of Road Transport & Highway's Research Project R-63: "Development of Aesthetic Design for Road side Furniture'. The provision of these considerations is based generally on:

1. The designs are aesthetically pleasing and blending with the surrounding environment
2. They are utilitarian.
3. They do not intrude into the overall appearance of the facility.
4. The materials and specifications adopted are of a high quality so that the IR maintenance is minimum.
5. They enhance the safety of travel.

Metal Beam Crash Barrier	6500 m	In between selected stretches .As these portion of stretches are steep & rocky portion.

- **Design of wayside amenity:**

General

The continuous long distance travel on highways at speed is liable to cause fatigue as also mental tension to the road users. Moreover, the monotony of driving over long sections in the rural areas with no likelihood of any cross traffic brings sense of complacency in many drivers. And such distractions could result in serious accidents. Further, the motor vehicles also need to be checked up or repaired to withstand continuous run and may also need refueling enroute. It is from these considerations that the provision of proper service and rest facilities along the high speed corridor, permitting direct entry/exit to and from it to facilitate a comfortable travel has assumed a great relevance. Such facilities will basically enable the drivers and passengers to rest and refresh themselves and at the same time all vehicles to be checked and refuel if necessary. The common wayside amenities provided along the highway are of three types namely, rest areas, service areas and lay-byes. An amenity centre provides facilities of fuel-cum-service station, restaurant, workshop etc. in addition to parking, a lay-bye on roadside beyond shoulders for road users in case of breakdown of vehicles for taking rest for short duration. The proposed locations of amenity centers, their demand estimation and proposed layouts and facilities to be adopted along with provisions of truck lay-byes and bus stops are described in following paragraphs:

Proposed Locations and Wayside Amenities

Sr.No.	Description	Nos.	Location
1	Public Toilet	2	Near Tarku
2	Bus Shed	2	
3	Bazar Shed	2	

1.12 DIVERSION OF EXISTING ROAD DURING CONSTRUCTION

For improvement of existing road some stretches localized, relocation and re-grading are proposed. Due to which traffic movement on existing road will be hamper .Therefore diversions are proposed in the following stretches during construction period:

Scope of Diversion of Existing Road during Construction:

1) Formation cutting for diversion of existing road (6.0 m wide).
2) Sub-base course level 150 mm thick GSB Gr-1
3) Base course level 150 mm thick WMM
4) Wear course 20 mm thick MSS
5) Earthen shoulder.

1.13 MAINTENANCE OF EXISTING ROAD:

The existing road is the main route to provide connectivity between district headquarters and International boarder of Indo Myanmar for international trading but also for Southern part o Mizoram. The minimum construction time provided for completion of the project is 4(four) years during which maintenance by the PIU will be no longer convenient as the site possession is resorted

to hand over to the contractor till completion of the project. Under this circumstance, it is inevitable to keep provision for yearly maintenance of the existing road during construction and hence a provision of Rs.78.60 lakhs per year is kept to make the road payable for all type of vehicles without serious interruption of the traffic flow throughout the year.

Scope of maintenance:

1) Maintenance of Earthen Shoulder (filling with fresh soil).
2) Filling Pot- holes and Patch Repairs with open - graded Premix surfacing, 20mm.
3) Hill Side Drain Clearance.
4) Land Slide Clearance in soil/ rock
5) Clearing Grass and Removal of Rubbish.
6) Maintenance/repair of culvert/Retaining wall.
7) Clearance of culvert before monsoon
8) Removal of land slide

SECTION - 2

HYDROLOGY AND DRAINAGE STUDY

2.1 GENERAL

Topography of hill generates numerous water courses. Uncontrolled water is the primary cause of problems and even failures of complete sections of roadway structures. A hill road is good if the degree of drainage achieved is good. A cardinal rule while planning drainage would be least interference with natural drainage. In addition to this the road acts as an interceptor and its longitudinal cut on hill slope obstructs the natural drainage and the road ledge therefore acts as a collection area of all water from hill side. As such adequate drainage system is essential for the stability of the road.

The river Tista is one of the main Himalayan Rivers, which originates in the glaciers of Sikkim at an elevation of over 8500m above mean sea level. River rises in mountainous terrain and is formed mainly by the union of two hill streams Lachen Chu and Lachung Chu at Chungthang in North Sikkim. After the confluence of Lachen Chu and Lachung chu at Chungthang, the river gradually increases in width and takes a wide flowing down to Singhik, dropping in elevation from 1550m to 750m. From Singhik, the rivers flow towards Dikchu in a very deepvalley and drops from 750mto 550m. From Dikchu the river flows in a big curve again down to the Singtam with a drop of about 200m. The Rongnichu, which drains the Changu lake area, joins Tista from left at Singtam and the river receives Rangpo Chu at Rangpo. After Rangpo, Tista start widening rapidly and is joined by the great Rangit at Melli bazar on Sikkim – West Bengal border From Singtam to Melli, Tista River also connected with some seasonal minor channels like Kale Khola (Near Adit-2, Tista HP-VI), Kanam/Kantm Khola, Seti Khola (Power House area, Tista stage VI) and Rabi Khola (near Melli).

2.2 HYDROLOGICAL STUDY OF RAIN

2.2.1 Rainfall

The amount of precipitation is expressed as the depth in centimeter. Proposed road alignment is in high rainfall area. The recorded rainfall is round 3200 mm.

2.2.2 Run-off

The run-off of catchment area in the proposed road alignment has been studied on the basis of the following:

- Shape and size of the catchment

The proposed road alignment is located in hilly terrain, wherein the water drains to River Tista The shape and size of the catchment with respect to major river Tista is defined on the ground. However, the shape and size of the catchment of other Khola like Khani Khola,Kali Khola,Seti Khola ,Kanam Khola,Tar Khola & Kalej Khola are moderately defined and remain within confines of the stream. The shape and size of the catchment of small streams and water lanes is not defined on the hill slope and therefore, the observations are only based on the contour mapping as well as the visual inspection at site. In some places, there are depressions caused by water lines which are marked in shape and size.

- Topography

The altitude of the project corridor varies from 425m to 1875 m height from mean sea level at the take off point at Singtam Town and end point Rabangal.The topography of the area is divided into four segment depended upto terrain condition of hill. The topography of this sub-sector is particularly very hazardous. However, the hills are sloping down towards River Tista along maximum stretch of proposed road alignment and that this aspect is taken as the cardinal point in the survey and investigations relating to drainage.

- Geological Characteristics

Geological characteristics of the sub-sector are varying from ordinary soil including hard soil, clayey soil, soft rock and hard rock. The run-off characteristics in this area vary in direct proportion to the geological characteristics of the area. The hard rock areas pose specific problems in determining the run-off characteristics because of high vertical cliff and / or deep gorge. We have surveyed and detailed out the geological characteristics. The hill soil classification is taken as a guide in determining the run-off catchments areas.

- Meteorological Characteristics

The rainfall is high in this Sub-sector. The duration of the rainfall is fairly spread over a longer period. The intensity of rainfall is also observed to be normal to high. The instances of cloud burst have not been recorded. Fog and Mist have been observed.

- Catchment Surfaces

There are high cliffs and deep gorges, which cut the contours abruptly. The mountainous area around the River Tista has got high cliffs and deep gorges of vertical hard rock. The flow of the rivers is very fast in these rivers.
Storage characteristics

Storage of run-off is very little as it is rapidly drained out.

2.3 Study Areas

In view of the above observations the drainage system has been studied for the following:

- Identification of the cross drainage works like culverts
- Identification of the bridges
- Identification of the drains

2.3.1 Identification of Bridges

There are 08 Bridges on the proposed Road.

S/N	From	To	Super structure	Foundation	Remarks	Length in m	Remarks	
1	0.00	140.00	PSC	Pile	Teesta River	125	Proposed	Alignment
2	1520.00	1660.00	PSC	Pile	Nala	98	Proposed	Alignment
3	2830.00	2890.00	PSC	Open	Nala	40	Proposed	Alignment
4	2940.00	3010.00	PSC	Open	Nala	68	Proposed	Alignment
5	6060.00	6120.00	PSC	Open	Nala	48	Existing	Ex.Road
6	19530.00	19600.00	PSC	Open	Nala	70	Existing	Ex.Road
7	19940.00	19990.00	PSC	Open	Nala	55	Existing	Ex.Road
8	24940.00	25000.00	PSC	Open	Nala	98	Existing	Ex.Road

2.4 Identification of Culverts

Survey has been conducted in order to identify location, shape and size of the culverts required for the drainage of the run-off. All culverts from Km 00.00 to Km 32.50 are for drainage of the water to small river and nallah.

2.5 Identification of the Drains

The proposed road more than 75 % stretches are new formation and hence there are drains to be surveyed. The requirement of drains has been identified.

2.6 Hydrological Survey and Assessment

General
This includes the general enquiry, visual inspection, analysis of available data, and historical background in order to make assessment of hydrological behavior and design parameters. It is to lead to the conclusion with respect to:

- Terrain
- Runoff
- Cloud Burst or such factor
- Gorge/ Cliff
- Discharge
- Velocity of Flow
- Scour Condition
- Bed slope
- Stream configuration
- Stability of Banks
- Factor with negative Impact

We have carried out our examination and evaluated the data made available by the client as well as data collected by local enquiry

We undertook desk study of available data on topography, topsoil characteristics, vegetation cover, siltation, etc., so as to assess the characteristics of the catchment area and hydraulic parameters for drainage provision. The finding of the desk study is further supplemented and augmented by a reconnaissance along the area.

It is carried out on the following terms

- Location study
- Stream Condition
- Peak Flood Condition
- Deck level/ adequacy
- Adequacy of span
- Road geometrics of the approaches
- Adequacy of design for smooth and comfort to the traffic
- Bridge/ Road width matching to the requirement (double lane) and future assessment.
- Protection work

Based on the above, the parameters have been identified for carrying out the hydraulic study fo aiming at the design parameter of the cross drainage structure.

Rainy Season

- Annual Rainfall : 320 cms average
- Rainy season is mostly May – October
- Flood is normally during July

CULVERTS

There are existing culverts along the project road. Some of the existing culverts are either silted or having inadequate waterway. Therefore, these are replaced by suitable Hume pipe / box culverts. In addition, new culverts are proposed. Under mentioned Table gives Design discharge for the varying catchment areas and discharging capacity for the various size of box culverts.

Table: Design Discharge for Different Values of Catchments Area

Catchment Area (ha)	Discharge By		Design Discharge (m^3/s)
	Dicken's Formula (m^3/s)	Rational Formula (m^3/s)	
10	2.31	1.16	2.31
20	3.89	2.29	3.89
30	5.27	3.41	5.27
40	6.54	4.52	6.54
50	7.73	5.61	7.73
60	8.86	6.70	8.86
70	9.95	7.78	9.95
80	11.00	8.85	11.00
90	12.01	9.92	12.01
100	13.00	10.98	13.00

Table: Discharge Carrying Capacity of the Box Culverts

Dimension		Depth of flow in m	Area in m2	Perimeter in m	R in m	V in m	Q in m3/s
a in m	b in m						
1.50	1.50	1.35	2.03	4.20	0.48	1.83	3.71
2.00	1.00	0.85	1.70	3.70	0.46	1.78	3.02
2.00	1.50	1.05	2.10	4.10	0.51	1.65	3.47
2.00	2.00	1.55	3.10	5.10	0.61	1.85	5.74
2.50	1.50	0.90	2.25	4.30	0.52	1.37	3.08
3.00	1.50	0.90	2.70	4.80	0.56	1.44	3.88
3.00	2.00	1.40	4.20	5.80	0.72	53.79	225.90
4.00	1.50	0.90	3.60	5.80	0.62	68.62	247.03
4.00	2.00	1.40	5.60	6.80	.82	101.47	568.22
6.00	2.00	1.40	8.40	8.80	0.95	129.28	1085.93
6.00	3.00	2.40	14.40	10.80	1.33	180.60	2600.71

SECTION – 3

SOIL, MATERIAL AND GEO-TECHNICAL INVESTIGATION

MATERIALS REPORT:

Introduction

This chapter covers the details of test and investigation carried out for evaluating the characteristics of the sub-grade along the project corridor to establish the basis for the design of various elements of the road including pavement and sub grade, embankment and structures.
The main task carried out for soil and material investigation includes:

- Collection and Review of available soil data from various division of Mizoram
- Soil classification along the proposed road
- Investigation of sub grade soil
- Investigation of construction material including identification and inspection of potential source of construction material and extraction sites; testing and evaluating of construction material for suitability for project road construction.
- Geo-technical investigation for bridges and other structures.
- Pit test for foundation of structures

Investigations

The detailed investigations include both field and laboratory testing. Field work covered field density test, sub-grade soil sampling by excavating test pits, identification of rock sources and soil borrow sources/ quarries within reasonable short haulage distances of the project road. Test pits were also excavated wherever necessary to obtain samples for testing.
Appropriate laboratory tests were carried out on the representative samples of the soil and material obtained during field investigations to determine relevant engineering properties.

Standard Test Procedures

The following standard test procedures were followed for field testing, soil sampling and laboratory testing:

Type of Test

S. No	Type of Test	Method
1	Field density using Sand Replacement method	IS:2720 Part 28
2	Water Content	IS: 2720 Part 2
3	Atterberg limits	IS: 2720 Part 5
4	Sieve Analysis	
(a)	Natural Soil	IS: 2720 Part 4
(b)	Rock aggregate	IS: 2386 Part 1
5	Heavy Compaction Test	IS: 2720 Part 8
6	CBR	IS: 2720 Part 16
7	Soundness by Sodium Sulphate (Na_2So_4)	IS: 2386 Part 5
8	Aggregate Impact Value	IS: 2386 Part 4
9	Specific Gravity and Water Absorption of Coarse Aggregate	IS: 2386 Part 3

Notations

CBR	:	California Bearing Ratio
LL	:	Liquid Limit
PL	:	Plastic Limit
PI	:	Plasticity Index
NP	:	Non – Plastic
MDD	:	Maximum Dry Density
OMC	:	Optimum Moisture Content
FMC	:	Field Moisture Content
FDD	:	Field Dry Density
DCP	:	Dynamic Cone Penetration

Soil Classification

In case of hill road, the soil classification of the hill face (hill/ valley side) plays an important part. Soil classifications consist of the following:

- Ordinary Soil
- Soft Rock
- Hard Rock

The classification is mostly done visually. The classification is tabulated as follows:

Sr.No.	Chainage		Classification of Soil in %			Remarks
	To	From	Ordinary soil	Ordinary rock	Hard rock	
1.0	0.00	1.00	40	45	15	Soil Mixed Boulder
2.0	1.00	2.00	39	45	16	Soil Mixed Boulder
3.0	2.00	3.00	36	47	17	Soil Mixed Boulder
4.0	3.00	4.00	37	45	18	Soil Mixed Boulder
5.0	4.00	5.00	36	46	18	Soil Mixed Boulder
6.0	5.00	6.00	38	42	20	Soil Mixed Boulder
7.0	6.00	7.00	36	43	21	Soil Mixed Boulder
8.0	7.00	8.00	35	45	20	Soil Mixed Boulder
9.0	8.00	9.00	36	45	19	Soil Mixed Boulder
10.0	9.00	10.00	38	42	20	Soil Mixed Boulder
11.0	10.00	11.00	35	44	21	Soil Mixed Boulder
12.0	11.00	12.00	37	43	20	Soil Mixed Boulder
13.0	12.00	13.00	36	44	20	Soil Mixed Boulder
14.0	13.00	14.00	36	43	21	Soil Mixed Boulder
15.0	14.00	15.00	39	41	20	Soil Mixed Boulder
16.0	15.00	16.00	37	43	20	Soil Mixed Boulder
17.0	16.00	17.00	41	40	19	Soil Mixed Boulder
18.0	17.00	18.00	37	46	17	Soil Mixed Boulder
19.0	18.00	19.00	37	45	18	Soil Mixed Boulder
20.0	19.00	20.00	35	47	18	Soil Mixed Boulder
21.0	20.00	21.00	43	40	17	Soil Mixed Boulder
22.0	21.00	22.00	41	42	17	Soil Mixed Boulder
23.0	22.00	23.00	42	40	18	Soil Mixed Boulder

Sr.No.	Chainage		Classification of Soil in %			Remarks
	To	From	Ordinary soil	Ordinary rock	Hard rock	
24.0	23.00	24.00	46	35	19	Soil Mixed Boulder
25.0	24.00	25.00	42	40	18	Soil Mixed Boulder
26.0	25.00	26.00	46	35	19	Soil Mixed Boulder
27.0	26.00	27.00	43	37	20	Soil Mixed Boulder
28.0	27.00	28.00	35	47	18	Soil Mixed Boulder
29.0	28.00	29.00	33	48	19	Soil Mixed Boulder
30.0	29.00	30.00	38	44	18	Soil Mixed Boulder
31.0	30.00	31.00	49	33	18	Soil Mixed Boulder
32.0	31.00	32.00	46	35	19	Soil Mixed Boulder
33.0	32.00	32.50	46	36	18	Soil Mixed Boulder

Investigation on Sub Grade

The following laboratory tests were conducted on samples of soils below the road level.

- Grain Size Analysis
- Liquid Limit
- Plastic Limit
- Maximum Dry Density
- CBR Test on 4 days soaked samples.

The results of the above field and laboratory investigations for various test pits are reported in the following:

NH 510		Result of Laboratory Test of Soil															
Chainage		Sieve Analysis, percent Passing									Atterberg Limit			Standard Proctor Test		04 Days Soaked CBR in (%)	04 Days Soaked CBR in (%)
From	To	100 mm	63 mm	22 mm	6.3 mm	4.75 mm	2.00 mm	600 micron	300 micron	75 micron	LL (%)	PL (%)	PI	OMC in %	MDD in gm/cc	2.5mm penetration	5mm penetration
0	1	100	95.97	89	67.74	43.36	27.11	17.99	11.98	9.83	31.25	21.36	9.89	11.15	1.84	8.34	7.24
1	2	100	97.02	82.83	66.74	52.21	37.13	25.98	17.96	11.66	31.3	21.59	9.71	10.85	1.84	7.14	6.38
2	3	100	98.44	82.7	66.66	47.51	33.34	23.11	15.64	10.05	31.98	21.52	10.46	11.5	1.84	9.97	8.29
3	4	100	95.79	82.79	68.69	53.78	35.01	23.98	15.22	9.6	31.1	21.73	9.37	11.7	1.81	7.7	6.51
4	5	100	95.98	80.19	63.97	46.88	35.15	24.33	14.26	8.57	30.2	21.64	8.56	11.5	1.83	8.41	7.31
5	6	100	96.1	87.11	66.62	52.39	40.2	24.82	16.42	11.55	31.05	21.51	9.54	13	1.79	7.67	6.27
6	7	100	98.62	82.28	63.17	45.32	35.1	24.69	16.96	10.9	31.1	20.22	10.88	11.7	1.83	9.4	8.19
7	8	100	95.42	87.87	66.59	44.33	29.09	19.63	13.04	7.81	30.05	20.52	9.53	11.2	1.88	8.93	7.76
8	9	100	95.98	80.19	63.97	46.88	35.15	24.33	14.26	8.57	30.2	21.64	8.56	11.5	1.83	8.41	7.31
9	10	100	96.1	87.11	66.62	52.39	40.2	24.82	16.42	11.55	31.05	21.51	9.54	13	1.79	7.67	6.27
10	11	100	98.62	82.28	63.17	45.32	35.1	24.69	16.96	10.9	31.1	20.22	10.88	11.7	1.83	9.4	8.19
11	12	100	98.17	79.32	64.67	49.17	30.36	17.91	9.92	5.29	33.78	20.47	13.31	12.02	1.87	7.43	6.46
12	13	100	95.16	79.89	58.73	47.66	33.52	18.97	11.84	7.32	33.55	19.76	13.79	11.7	1.8	6.21	5.57
13	14	100	95.97	80.16	66.84	50.19	36.25	23.98	12.49	7.09	32.92	20.76	12.16	11.79	1.82	7.7	7.03
14	15	100	98.53	80.12	63.8	51.41	32.19	22.2	14.3	8.93	31.43	19.46	11.97	13.35	1.87	8.27	7.74
15	16	100	93.84	82.35	75.26	62.48	42.84	23.6	12.12	7.58	32.05	19.25	12.8	13	1.83	9.26	8.74
16	17	100	96.57	79.51	62.04	50.26	34.5	22.42	11.36	7.26	33.02	20.59	12.43	11.3	1.83	9.4	8.19
17	18	100	95.77	88.89	69.38	46.02	29.48	19.19	11.22	6.64	34.5	20.56	13.94	11.5	1.86	5.56	5.37
18	19	100	98.08	83.29	68.09	53.32	37.22	23.27	13.32	7.16	33.4	18.18	15.22	11	1.84	6.26	5.7
19	20	100	97.89	80.71	57.34	44.68	35.62	22.65	13.24	8.46	33.6	19.48	14.12	13.2	1.81	6.34	5.47
20	21	100	97.52	80.94	55.29	38.06	28.75	17.28	9.78	5.64	34.1	20.48	13.62	11.4	1.88	7.97	6.65
21	22	100	97.07	84.11	66.53	51.48	38.52	27.02	17.96	13.14	32.3	19.42	12.88	12.5	1.78	7.49	7.03
22	23	100	96.39	81.57	61.23	48.07	37.9	25.26	17.32	12.51	33.05	19.78	13.27	12.2	1.76	6.7	6.51
23	24	100	98.3	84.47	70.22	51.12	38.06	25.93	17.8	14.73	32.3	20.22	12.08	11.7	1.76	5.91	5.61
24	25	100	97	80.23	62.76	50.23	34.1	22.65	12.62	8.14	32.38	19.55	12.83	10.68	1.87	8.56	7.93
25	26	100	96.73	85.44	54.73	41.48	31.92	18.82	10.38	6.13	32.78	20.26	12.52	12.4	1.74	6.7	6.04
26	27	100	98.55	79.34	53.68	43.96	32.82	19.41	9.91	5.89	31.65	18.73	12.92	12.15	1.77	7.63	7.5

NH 510		Result of Laboratory Test of Soil															
Chainage		Sieve Analysis, percent Passing									Atterberg Limit			Standard Proctor Test		04 Days Soaked CBR in (%)	04 Days Soaked CBR in (%)
From	To	100 mm	63 mm	22 mm	6.3 mm	4.75 mm	2.00 mm	600 micron	300 micron	75 micron	LL (%)	PL (%)	PI	OMC in %	MDD in gm/cc	2.5mm penetration	5mm penetration
27	28	100	93.71	80.04	63.13	50.74	38.3	20.77	9.14	4.29	33.02	19.29	13.73	10.9	1.86	8.86	8.17
28	29	100	95.3	78.7	65.71	48.27	35.16	23.19	12.06	6.4	32.75	20.85	11.9	13.5	1.83	7.63	6.42
29	30	100	98.13	89.82	59.88	53.58	43.09	22.65	12.25	7.32	33.15	20.45	12.7	13.4	1.78	5.84	5.61
30	31	100	94.6	77.45	63.65	49.19	32.61	21.95	12.47	7.43	32.35	18.59	13.76	12.6	1.82	6.77	6.47
31	32	100	97.67	86.03	77.48	65.73	44.76	25.82	14.15	8.52	32.58	20.83	11.75	12.5	1.8	7.54	6.9
32	33	100	98.09	80.9	57.6	39.65	29.51	18.1	9.87	5.82	31.78	19.52	12.26	13.25	1.79	5.7	5.56
33	34	100	96.48	85.18	61.76	52.95	40.55	24.58	14.33	6.63	34.25	19.49	14.76	12.15	1.79	6.34	5.75
34	35	100	96.16	81.28	61.11	52.22	39.79	22.92	13.09	6.61	35.68	20.37	15.31	12.65	1.75	5.7	5.47
35	36	100	100	79.67	52.87	42.98	31.61	17.83	8.78	4.24	34.2	19.6	14.6	12.3	1.79	6.91	5.57
36	37	100	95.46	82.24	67.27	53.88	40.93	23.35	12.34	7.81	33.6	20.5	13.1	11.6	1.84	7.99	6.89
37	38	100	96.73	85.44	54.73	41.48	31.92	18.82	10.38	6.13	32.56	20.04	12.52	10.98	1.88	8.27	6.84
38	39	100	98.55	79.34	53.68	43.96	32.82	19.41	9.91	5.89	34.97	20.39	14.58	12.72	1.77	6.84	6.55
39	40	100	93.71	80.04	63.13	50.74	38.3	20.77	9.14	4.29	33.68	20.64	13.04	11.47	1.82	7.86	6.84
40	41	100	98.17	87.68	72.24	56.45	44.02	29.25	19.35	16.3	35.85	20.62	15.23	12.85	1.76	5.91	5.56
41	42	100	97.95	82.23	67.22	58.14	45.91	30.97	19.57	14.59	33.65	20.61	13.04	12	1.8	7.49	6.18
42	43	100	97.99	85.46	63.35	53.98	41.65	27.47	16.56	13.32	32.95	20.67	12.28	11.58	1.86	8.13	7.14
43	44	100	95.53	81.38	68.09	55.85	42.79	28.11	17.91	14.78	33.55	19.98	13.57	11.45	1.82	7.77	6.7
44	45	100	97.96	83.72	62.67	53.08	42.43	29.38	19.85	14.84	33.5	20.35	13.15	11.2	1.84	8.7	7.98
45	46	100	97.24	83.33	64.25	54.94	43.61	29.04	19.35	15.17	34.62	20.38	14.24	12.62	1.8	7.49	6.42
46	47	100	96.45	83.2	68.39	54.25	43.03	27.64	16.68	13.43	32	19.53	12.47	11.35	1.86	9.34	8.12
47	48	100	95.58	83.94	65	51.56	41.06	27.13	17.96	14.72	33.15	19.9	13.25	12.45	1.77	6.77	6.04
48	49	100	100	79.67	52.87	42.98	31.61	17.83	8.78	4.24	31.75	19.35	12.4	11.35	1.86	9.41	8.17
49	50	100	95.46	82.24	67.27	53.88	40.93	23.35	12.34	7.81	31.32	19.64	11.68	10.8	1.88	8.49	7.22
50	51	100	96.73	85.44	54.73	41.48	31.92	18.82	10.38	6.13	32.78	20.26	12.52	12.4	1.74	6.7	6.04
51	52	100	98.55	79.34	53.68	43.96	32.82	19.41	9.91	5.89	31.65	18.73	12.92	12.15	1.77	7.63	7.5
52	53	100	95.3	78.7	65.71	48.27	35.16	23.19	12.06	6.4	32.75	20.85	11.9	13.5	1.83	7.63	6.42
53	54	100	98.13	89.82	59.88	53.58	43.09	22.65	12.25	7.32	33.15	20.45	12.7	13.4	1.78	5.84	5.61

NH 510		Result of Laboratory Test of Soil															
Chainage		Sieve Analysis, percent Passing									Atterberg Limit			Standard Proctor Test		04 Days Soaked CBR in (%)	04 Days Soaked CBR in (%)
From	To	100 mm	63 mm	22 mm	6.3 mm	4.75 mm	2.00 mm	600 micron	300 micron	75 micron	LL (%)	PL (%)	PI	OMC in %	MDD in gm/cc	2.5mm penetration	5mm penetration
54	55	100	94.6	77.45	63.65	49.19	32.61	21.95	12.47	7.43	32.35	18.59	13.76	12.6	1.82	6.77	6.47
55	56	100	97.67	86.03	77.48	65.73	44.76	25.82	14.15	8.52	32.58	20.83	11.75	12.5	1.8	7.54	6.9
56	57	100	96.15	88.11	70.74	51.21	36.77	26.1	18.34	13.81	36.05	20.56	15.49	14.1	1.79	6.77	5.85
57	58	100	98.71	84.45	69.59	53.46	39.3	27.9	18.76	14.52	35.78	20.83	14.95	11.7	1.81	7.34	6.19
58	59	100	95.53	81.58	66.02	51.89	38.9	27.67	18.73	13.73	36.67	21.51	15.16	12.5	1.78	6.2	5.51
59	60	100	98.68	84.05	64.49	51.47	41.44	28.89	20.2	15.55	35.75	21.6	14.15	11.7	1.81	7.34	6.42
60	61	100	98.18	87.76	64.38	54.35	42.35	26.06	18.3	10.98	31.25	19.44	11.81	12.75	1.83	6.2	5.8
61	62	100	98.32	81.32	66.26	55.18	41.49	30.82	19.32	13.51	32.65	20.52	12.13	12.58	1.8	7.07	6.1
62	63	100	97.48	84	69.41	56.14	44.32	29.56	18.32	12.89	31.92	19.42	12.5	13.45	1.83	9.13	8.17
63	64	100	96.51	84.19	69.43	53.31	38.51	24.99	11.4	7.5	32.18	20.3	11.88	9.4	1.94	9.13	8.79
64	65	100	97.11	81.1	64.3	51.32	36.19	25.17	13.09	6.26	32.38	19.55	12.83	10.68	1.86	9.64	9.12
65	66	100	94.66	81.72	67.55	51.97	35.16	25.2	12.01	7.31	33.78	20.3	13.48	10.7	1.87	7.99	7.22
66	67	100	95.46	82.24	67.27	53.88	40.93	23.35	12.34	7.81	33.6	20.5	13.1	11.6	1.84	7.99	6.89
67	68	100	96.73	85.44	54.73	41.48	31.92	18.82	10.38	6.13	32.56	20.04	12.52	10.98	1.88	8.27	6.84
68	69	100	98.55	79.34	53.68	43.96	32.82	19.41	9.91	5.89	34.97	20.39	14.58	12.72	1.77	6.84	6.55
69	70	100	93.71	80.04	63.13	50.74	38.3	20.77	9.14	4.29	33.68	20.64	13.04	11.47	1.82	7.86	6.84
70	71	100	98.17	87.68	72.24	56.45	44.02	29.25	19.35	16.3	35.85	20.62	15.23	12.85	1.76	5.91	5.56
71	72	100	97.95	82.23	67.22	58.14	45.91	30.97	19.57	14.59	33.65	20.61	13.04	12	1.8	7.49	6.18
72	73	100	97.99	85.46	63.35	53.98	41.65	27.47	16.56	13.32	32.95	20.67	12.28	11.58	1.86	8.13	7.14
73	74	100	95.53	81.38	68.09	55.85	42.79	28.11	17.91	14.78	33.55	19.98	13.57	11.45	1.82	7.77	6.7
74	75	100	97.96	83.72	62.67	53.08	42.43	29.38	19.85	14.84	33.5	20.35	13.15	11.2	1.84	8.7	7.98
75	76	100	95.68	88.3	64.82	57.39	42.75	35.6	25.34	14.84	33.5	21.22	12.28	10.98	1.82	8.92	7.85

Inspection of Quarry Material

The rock deposits are available along or the vicinity of the project road alignment. Besides, cobbles, pebbles and sand deposits are available in the rivers or streams crossing the main alignment. Construction materials for GSB, Cross drainage & Masonry R/Wall etc. works, will be available at local quarry within the project corridor and WMM, DBM & BC material from Teesta River & LANCO Tunnel excavated mug within the project corridor .Water Absorption and AIV of these quarries are within the limit of the Ministry's Specifications. Bitumen, steel and cement will have to be taken from Siliguri

Aggregate for sub base, base, surface courses have been collected from the identified rock quarries and rock metal from the crusher under operation in the existing / potential quarries. The location, estimated quantity and the approximate distance of each quarry from the nearest point on the Project Corridor are compiled below.

The following tests have been conducted on rock aggregate from the quarry:

- Specific gravity
- Water Absorption
- Impact Value
- Los Angeles Abrasion Value

The results of the above field and laboratory investigations for various test pits are reported in the following:

The test sheet is as follows:

Inspection of Rock Quarry Areas

Construction materials for GSB, Cross drainage & Masonry R/Wall, WMM, DBM & BC material etc. works, will be available at local quarry & Teesta River near Army camp on NH 31A .Water Absorption and AIV of these quarries are within the limit of the Ministry's Specifications. Bitumen & cement will have to be taken from Siliguri .

Aggregate for sub base, base, surface courses have been collected from the identified rock quarries and rock metal from the crusher under operation in the existing / potential quarries. The location, estimated quantity and the approximate distance of each quarry from the nearest point on the Project Corridor are compiled below.

Quarry No	Quarry Area Name	Location	Nearest Chainage of the project corridor	Approx. distance from the project corridor	Quantity	No. of private crusher
Quarry – I	Teesta River	Near Army Camp on NH 31 A	-	Along the project Corridor	plenty	-

The following tests have been conducted on rock aggregate from the quarry:

- Specific gravity
- Impact Value
- Los Angeles Abrasion Value
- Water Absorption

The results of the above field and laboratory investigations for various test pits are reported in the following:

The test sheet is as follows:

SPECIFIC GRAVITY

Quarry No	Quarry Area Name	Location	Specimen No.	Specific Gravity (Apparent)
Quarry – I	Teesta River	Near Army Camp on NH 31 A	1	2.624
			2	2.683
			3	2.630

AGGREGATE IMPACT VALUE TEST

(AS PER IS 2386 Pt.IV)

Source : Teesta River

Location : Near Army Camp on NH 31A **Seriel No. : 1**

Date Tested :

Sample :- 12.5 mm passing & 10.0 mm retained

Particulars	TRIAL - I	TRIAL - II	AVERAGE
Total wt. of Sample (g) (12.5 mm - 10.0 mm) **A**	342	342	
Wt. of material passing on 2.36 mm after test (g) **B**	82.8	90.1	
Agg. Impact Value (%) A.I.V. = ***(B * 100) / A***	24.21	26.35	25.28%

Source : Teesta River

Location : Near Army Camp on NH 31A **Seriel No. : 2**

Date Tested :

Sample :- 12.5 mm passing & 10.0 mm retained

Particulars	TRIAL - I	TRIAL - II	AVERAGE
Total wt. of Sample (g) (12.5 mm - 10.0 mm) **A**	335	335	
Wt. of material passing on 2.36 mm after test (g) **B**	82.1	80.1	
Agg. Impact Value (%) A.I.V. = ***(B * 100) / A***	24.51	23.91	24.21%

Source : Teesta River

Location : Near Army Camp on NH 31A **Seriel No. : 3**

Date Tested :

Sample :- 12.5 mm passing & 10.0 mm retained

Particulars	TRIAL - I	TRIAL - II	AVERAGE
Total wt. of Sample (g) (12.5 mm - 10.0 mm) **A**	342	342	
Wt. of material passing on 2.36 mm after test (g) **B**	77.63	73.16	
Agg. Impact Value (%) A.I.V. = ***(B * 100) / A***	22.70	21.39	22.05%

LOSS ANGELES ABRASION TEST REPORT

(AS PER IS 2386 Pt.IV)

Source : Teesta River
Location : Near Army Camp on NH 31A

Seriel No. : 1

Sample :- 12.5 mm passing & 10.0 mm retained

Material : Boulder

Passing	Retained	Weight of Material
40.00	**25.00**	**1250**
25.00	**20.00**	**1250**
20.00	**12.50**	**1250**
12.50	**10.00**	**1250**

DESCRIPTION		TRIAL - I	TRIAL - II	AVERAGE
Total wt. of Sample (g) **A**		5000	5000	
Wt. of material passing on 1.70 mm after test (g) B		1520	1521	
Los Angeles Abrasion Value (%) L A A. = (B * 100) / A		30.40	30.42	30.41

LIMITS - 40%

Seriel No. : 2

Sample :- 12.5 mm passing & 10.0 mm retained

Material : Boulder

Passing	Retained	Weight of Material
40.00	**25.00**	**1250**
25.00	**20.00**	**1250**
20.00	**12.50**	**1250**
12.50	**10.00**	**1250**

DESCRIPTION		TRIAL - I	TRIAL - II	AVERAGE
Total wt. of Sample (g) **A**		5000	5000	
Wt. of material passing on 1.70 mm after test (g) B		1628	1650	
Los Angeles Abrasion Value (%) L A A. = (B * 100) / A		32.56	33.00	32.78

LIMITS - 40%

Seriel No. : 3

Sample :- 12.5 mm passing & 10.0 mm retained

Material : Boulder

Passing	Retained	Weight of Material
40.00	**25.00**	**1250**
25.00	**20.00**	**1250**
20.00	**12.50**	**1250**
12.50	**10.00**	**1250**

DESCRIPTION		TRIAL - I	TRIAL - II	AVERAGE
Total wt. of Sample (g) **A**		5000	5000	
Wt. of material passing on 1.70 mm after test (g) B		1938	1988	
Los Angeles Abrasion Value (%) L A A. = (B * 100) / A		38.76	39.76	39.26

LIMITS - 40%

WATER ABSOPTION TEST OF BOULDER

Source :- **Teesta River Quarry** **Sample No.:-** **1**

Location :- **Near Army Camp on NH 31A**

Material :- **Boulder** **Date of Test :-**

Sl. No.	Determination		TRIAL - I	TRIAL - II	Average
A	**Wt.of SSD Sample + Tray (g)**		1190	1460	
B	**Wt.of Dry Sample + Tray (g)**		1162	1426	
C	**Wt. of Tray (g)**				
D	**Wt. of Dry Sample (B-C) (g)**				
E	**Mass of water (A - B) (g)**		28	34	
F	**Water Absorption = (E*100/D) (%)**		2.410	2.384	2.397

Source :-	**Teesta River Quarry**		**Sample No.:-**	**2**
Location :-	**Near Army Camp on NH 31A**			
Material :-	**Boulder**		**Date of Test :-**	

Sl. No.	Determination	TRIAL - I	TRIAL - II	Average
A	Wt.of SSD Sample + Tray (g)	1152	1146	
B	Wt.of Dry Sample + Tray (g)	1128	1122	
C	Wt. of Tray (g)			
D	Wt. of Dry Sample (B-C) (g)			
E	Mass of water (A - B) (g)	24	24	
F	Water Absorption = (E*100/D) (%)	2.128	2.139	2.134

Source :-	**Teesta River Quarry**		**Sample No.:-**	**3**
Location :-	**Near Army Camp on NH 31A**			
Material :-	**Boulder**		**Date of Test :-**	

Sl. No.	Determination	TRIAL - I	TRIAL - II	Average
A	Wt.of SSD Sample + Tray (g)	1180	1175	
B	Wt.of Dry Sample + Tray (g)	1158	1152	
C	Wt. of Tray (g)			
D	Wt. of Dry Sample (B-C) (g)			
E	Mass of water (A - B) (g)	22	23	
F	Water Absorption = (E*100/D) (%)	1.900	1.997	1.949

Fine Aggregates:

Fine Aggregate for Structural work has been collected from Teesta Rivers.
The gradation tests have been conducted on fine aggregate from Teesta River Gradation test results are as follows:

SIEVE ANALYSIS FOR C.Agg./F.Agg./GSB/WMM

Source:- Teesta River **Sample No.:- 1**
Location :- 30.000 kms **Near Army Camp on NH 31A**
Material :- Sand **Date of Test :-**
Weight of Dry Material:- 1000 gms.

Sieve Size (mm)	Weight Retained (g)	% of Retained	Cumulative % of Retained	% of Passing	Spec. % of Passing as per MOST
10.00	nil	nil	nil	100	**100**
4.75	22	2.20	2.20	97.80	**90 - 100**
2.36	259	25.90	28.10	78.90	**75 - 100**
1.18	135	13.50	41.60	58.40	**55 - 90**
600 micron	187	18.70	60.30	39.70	**35 - 59**
300 micron	102	10.20	70.50	29.50	**08 - 30**
150 micron	75	7.50	78.00	8.70	**0 - 10**
			FM = 2.81		

Location :- 30.000 kms **Near Army Camp on NH 31A** **Sample No.:- 2**
Material :- Sand **Date of Test :-**
Weight of Dry Material:- 1000 gms.

Sieve Size (mm)	Weight Retained (g)	% of Retained	Cumulative % of Retained	% of Passing	Spec. % of Passing as per MOST
10.00	nil	nil	nil	100	**100**
4.75	4	0.40	0.40	99.60	**90 - 100**
2.36	145	14.50	14.90	85.10	**85- 100**
1.18	100	10.00	24.90	75.10	**75-100**
600 micron	135	13.50	38.40	61.60	**60 - 79**
300 micron	245	24.50	62.90	37.10	**12 - 40**
150 micron	289	28.90	91.80	8.20	**0- 10**
			FM = 2.33		

Location :- 30.000 kms **Near Army Camp on NH 31A** **Sample No.:- 3**
Material :- Sand **Date of Test :-**
Weight of Dry Material:- 1000 gms.

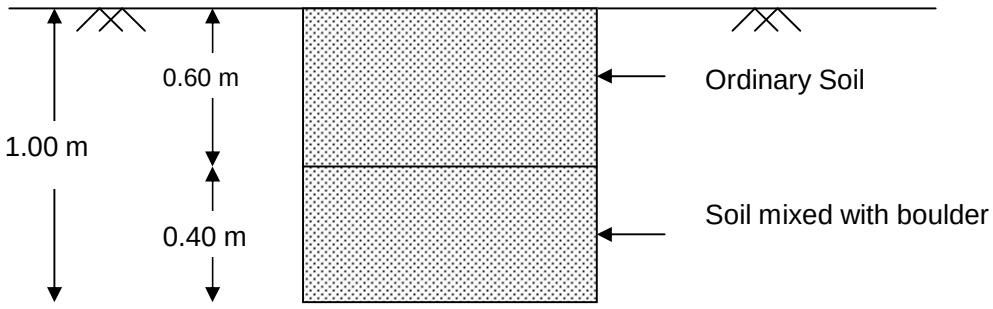
Sieve Size (mm)	Weight Retained (g)	% of Retained	Cumulative % of Retained	% of Passing	Spec. % of Passing as per MOST
10.00	nil	nil	nil	100	**100**
4.75	21	2.10	2.10	97.90	**90 - 100**
2.36	79	7.90	10.00	90.00	**85- 100**
1.18	109	10.90	20.90	79.10	**75-100**
600 micron	134	13.40	34.30	65.70	**60 - 79**
300 micron	305	30.50	64.80	35.20	**12 - 40**
150 micron	268	26.80	91.60	8.40	**0- 10**
			FM = 2.24		

Investigation of Water Tables

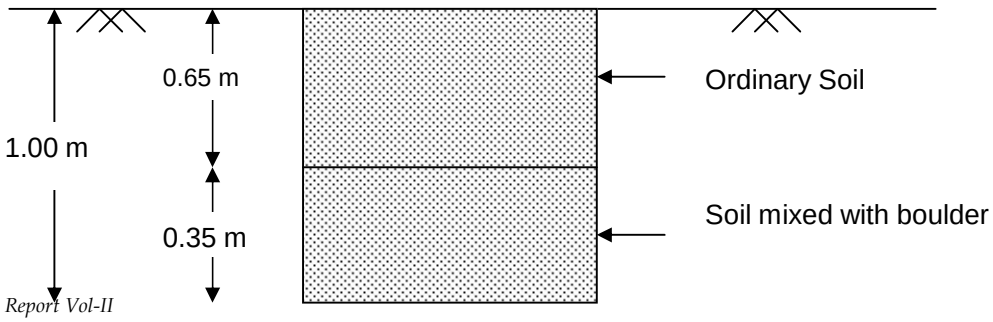
The water table depth along the road corridor has been measured at suitable locations. The water table depth is dependent upon the season and the precipitation. There is no location where the water is directly affecting the road bank.

Trial Pit Investigation
The trial pit is dug at every 1.00kms interval and at the end chainage.

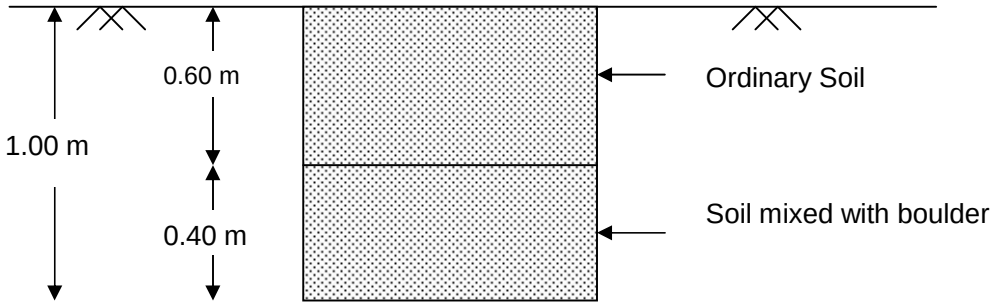
Chainage 0.000 : The soil is of ordinary soil upto a depth of about 60 cms, and then followed with a soil mixed with some boulder materials.



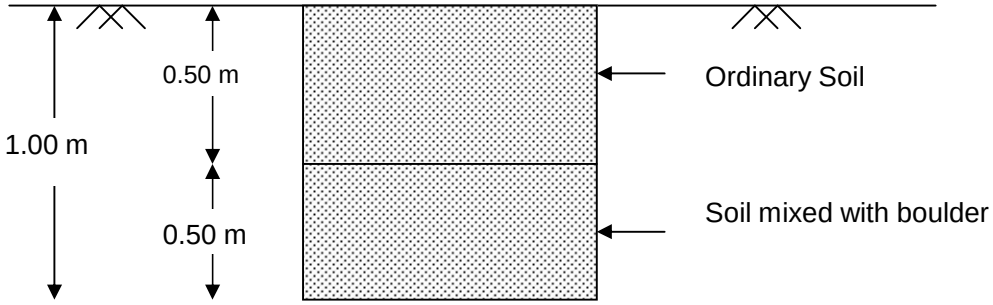
Chainage 1.000 : The soil is of ordinary soil upto a depth of about 65 cms, and then followed with a soil mixed with some boulder materials.



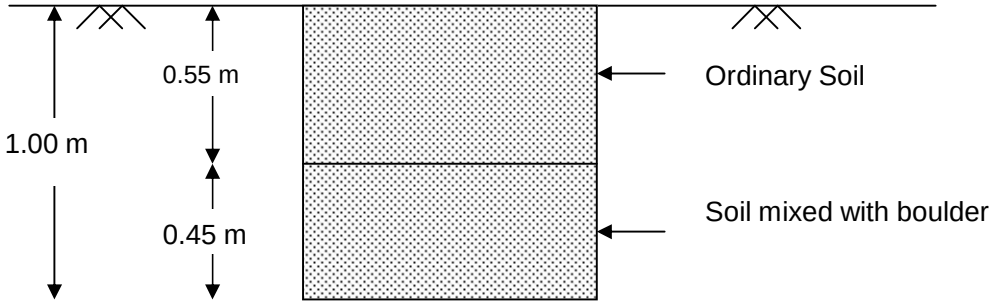
Chainage 2.000 : The soil is of ordinary soil upto a depth of about 60 cms, and then followed with a soil mixed with some boulder materials.



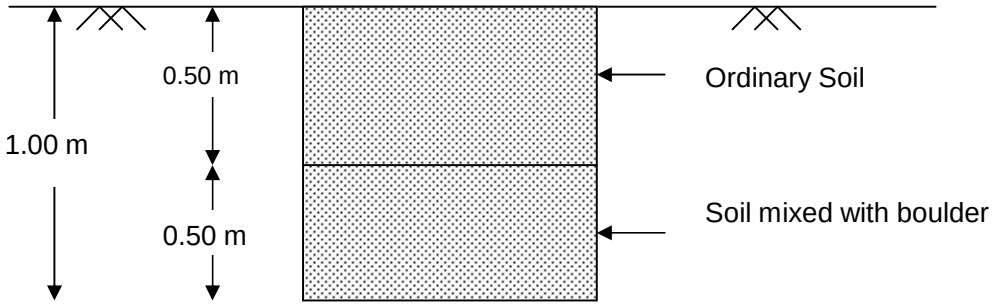
Chainage 3.000 : The soil is of ordinary soil upto a depth of about 50 cms, and then followed with a soil mixed with some boulder materials.



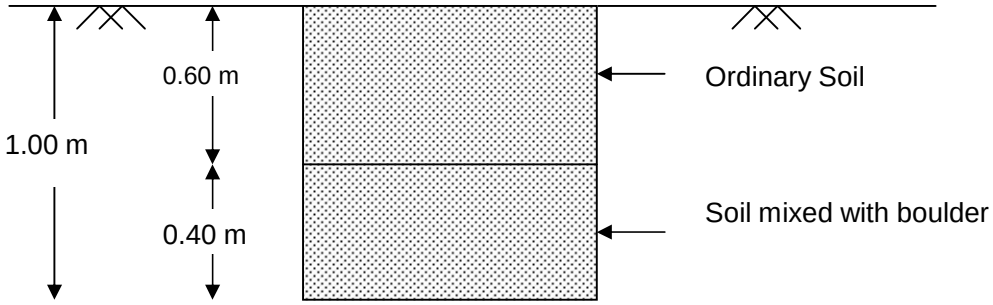
Chainage 4.000 : The soil is of ordinary soil upto a depth of about 55 cms, and then followed with a soil mixed with some boulder materials.



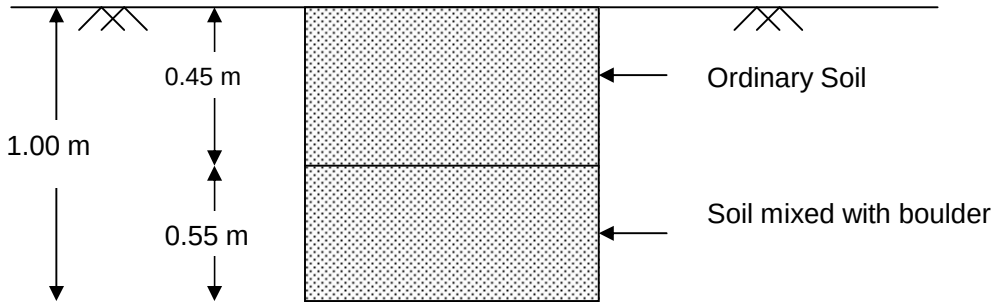
Chainage5.000 : The soil is of ordinary soil upto a depth of about 50 cms, and then followed with a soil mixed with some boulder materials.



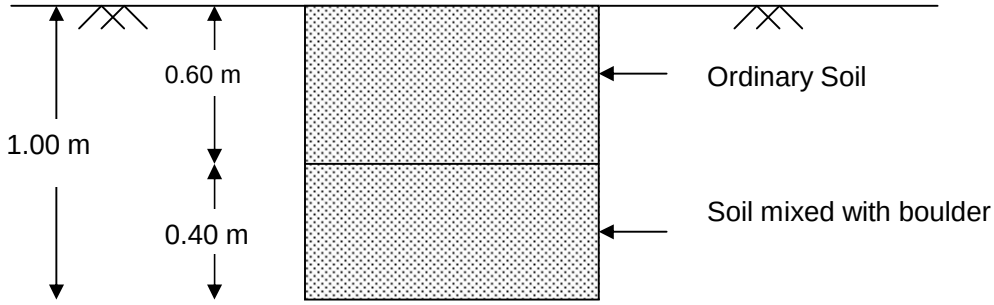
Chainage6.000 : The soil is of ordinary soil upto a depth of about 60 cms, and then followed with a soil mixed with some boulder materials.



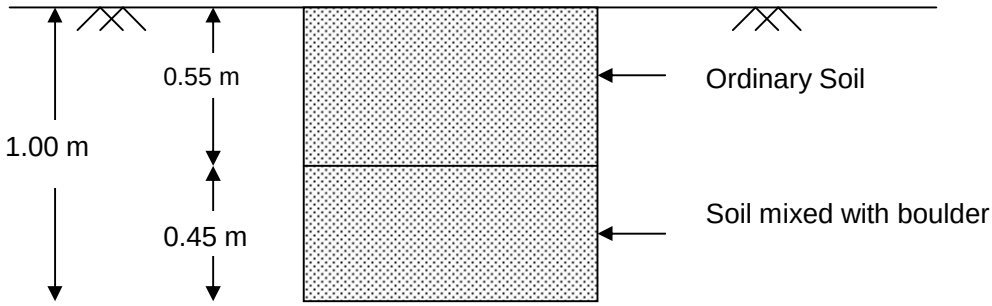
Chainage 7.000 : The soil is of ordinary soil upto a depth of about 45 cms, and then followed with a soil mixed with some boulder materials.



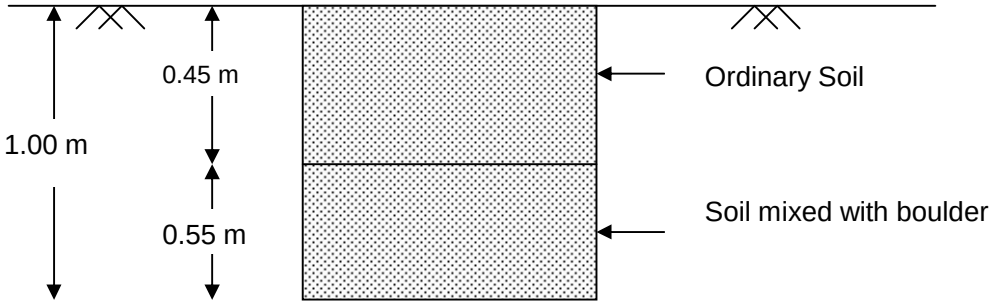
Chainage 8.000 : The soil is of ordinary soil upto a depth of about 60 cms, and then followed with a soil mixed with some boulder materials.



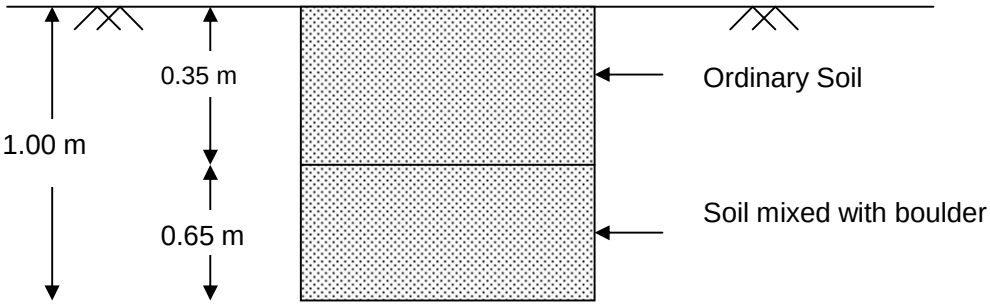
Chainage 9.000 : The soil is of ordinary soil upto a depth of about 55 cms, and then followed with a soil mixed with some boulder materials.



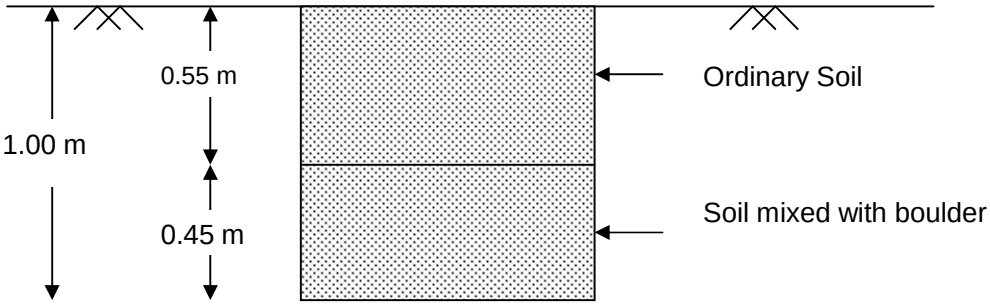
Chainage 10.000 : The soil is of ordinary soil upto a depth of about 45 cms, and then followed with a soil mixed with some boulder materials.



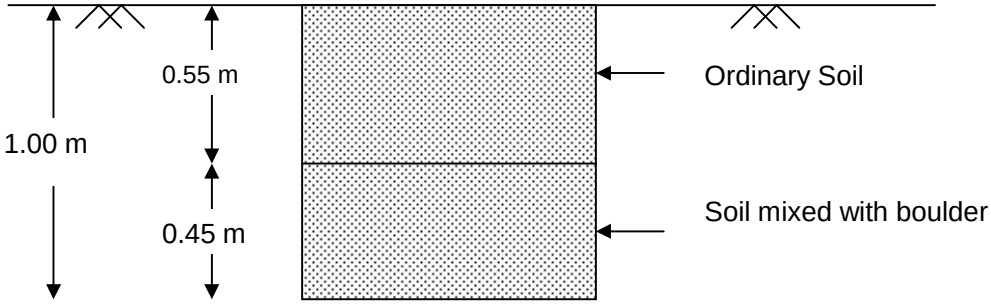
Chainage11.000 : The soil is of ordinary soil up to a depth of about 35 cms, and then followed with a soil mixed with some boulder materials



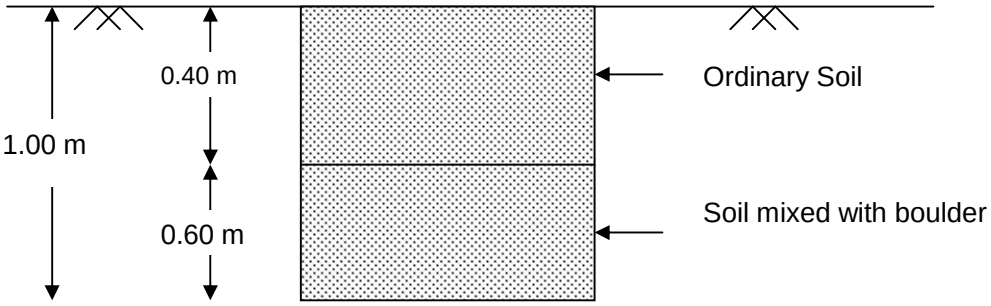
Chainage 12.000 : The soil is of ordinary soil up to a depth of about 55 cms, and then followed with a soil mixed with some boulder materials



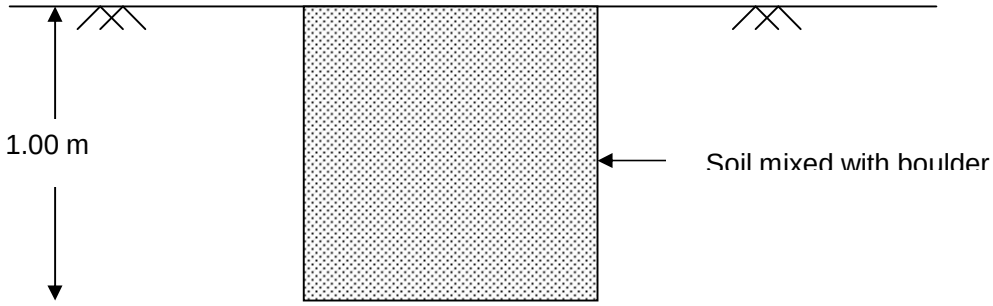
Chainage 13.000 : The soil is of ordinary soil up to a depth of about 55 cms, and then followed with a soil mixed with some boulder materials



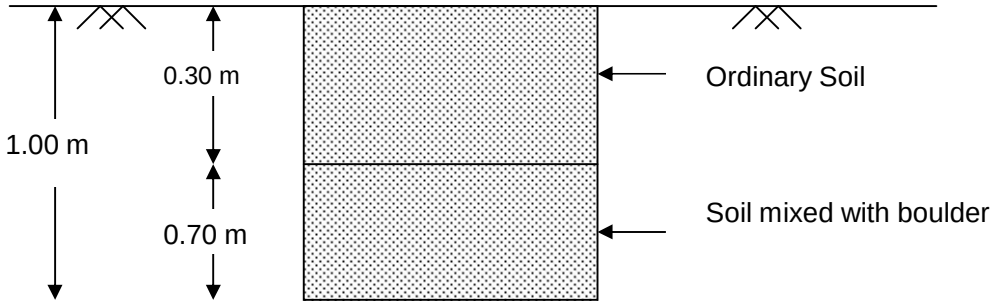
Chainage 14.000 : The soil is of ordinary soil up to a depth of about 40 cms, and then followed with a soil mixed with some boulder materials



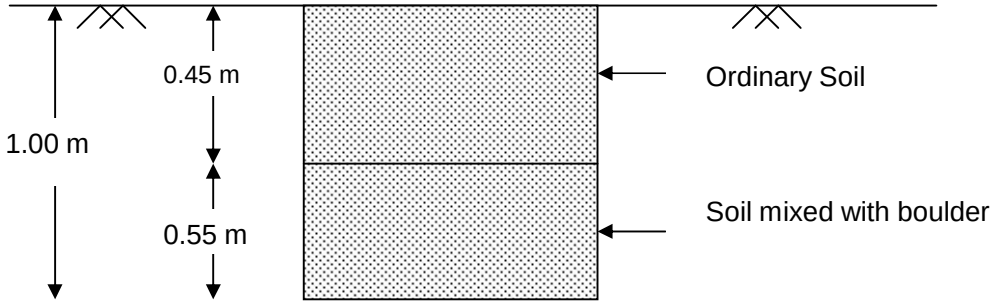
Chainage 15.000 : From the surface the soil is found mixed with boulders



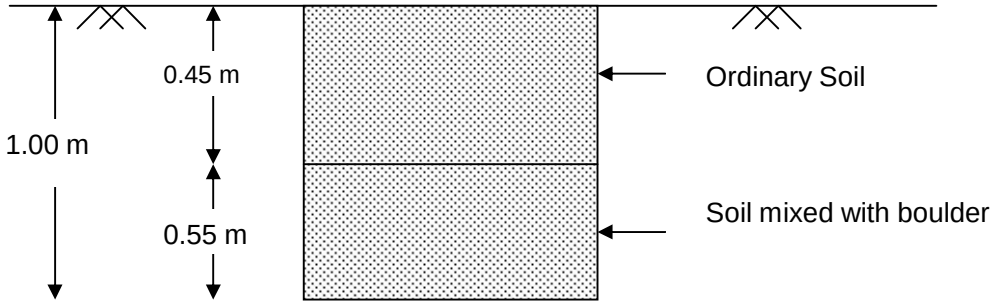
Chainage 16.000 : The soil is of ordinary soil up to a depth of about 30 cms, and then followed with a soil mixed with some boulder materials



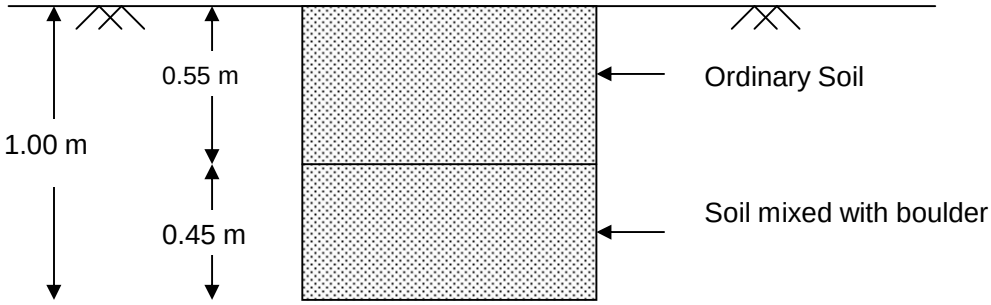
Chainage 17.000 : The soil is of ordinary soil up to a depth of about 45 cms, and then followed with a soil mixed with some boulder materials



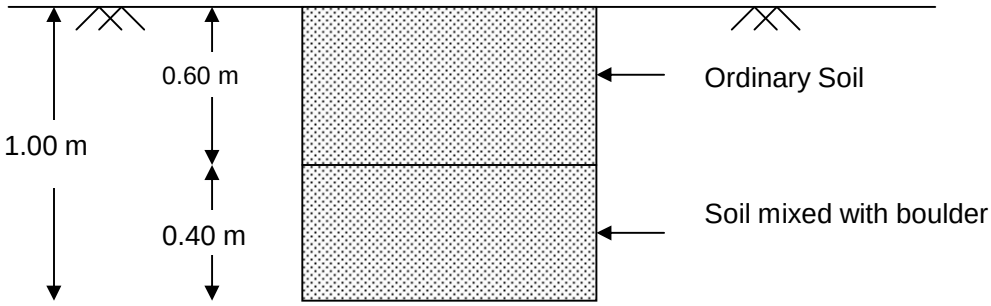
Chainage 18.000 : The soil is of ordinary soil up to a depth of about 45 cms, and then followed with a soil mixed with some boulder materials



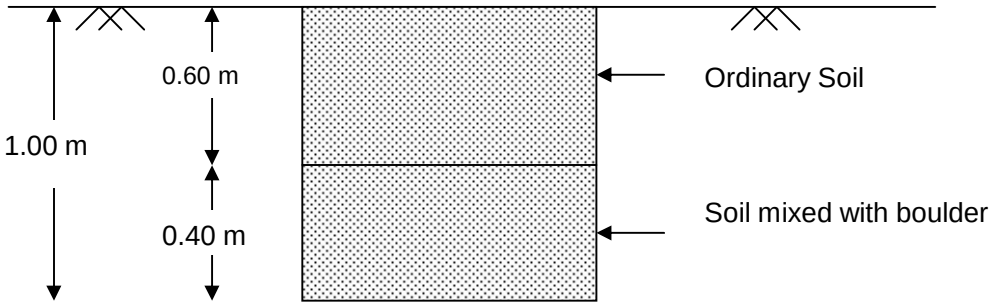
Chainage 19.000 : The soil is of ordinary soil up to a depth of about 55 cms, and then followed with a soil mixed with some boulder materials



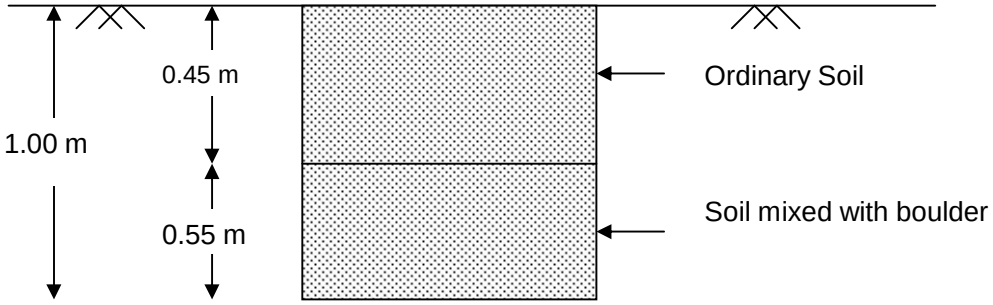
Chainage 20.000 : The soil is of ordinary soil up to a depth of about 60 cms, and then followed with a soil mixed with some boulder materials



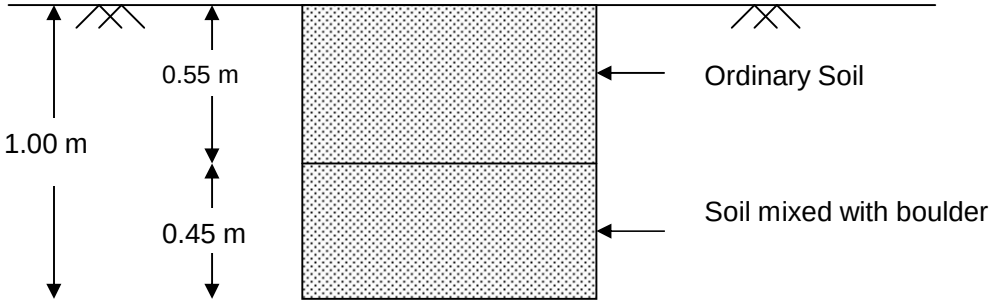
Chainage 21.000 : The soil is of ordinary soil up to a depth of about 60 cms, and then followed with a soil mixed with some boulder materials



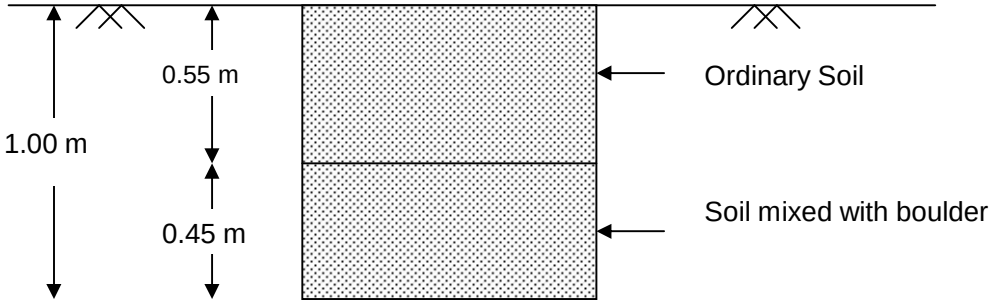
Chainage 22.000 : The soil is of ordinary soil up to a depth of about 45 cms, and then followed with a soil mixed with some boulder materials



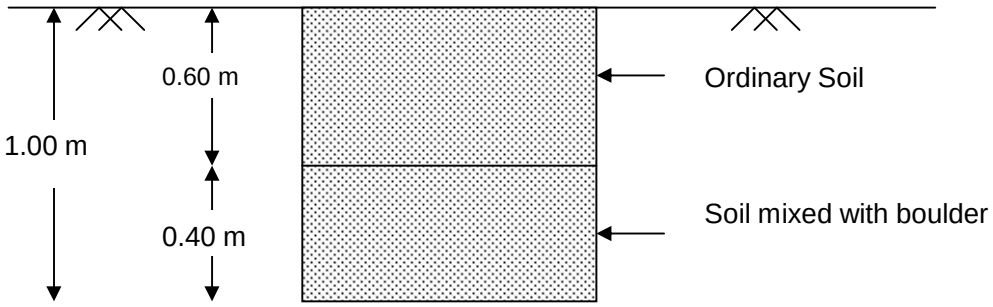
Chainage 23.000 : The soil is of ordinary soil up to a depth of about 55 cms, and then followed with a soil mixed with some boulder materials



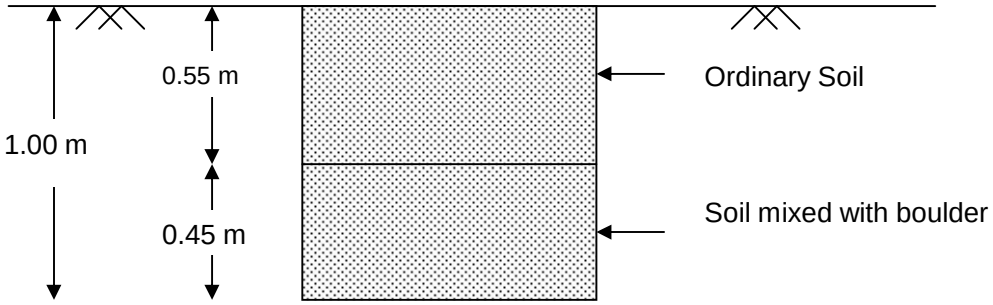
Chainage 24.000 : The soil is of ordinary soil up to a depth of about 55 cms, and then followed with a soil mixed with some boulder materials



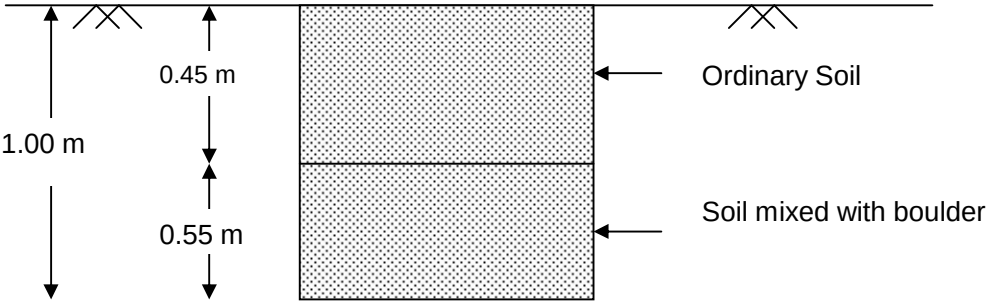
Chainage 25.000 : The soil is of ordinary soil up to a depth of about 60 cms, and then followed with a soil mixed with some boulder materials



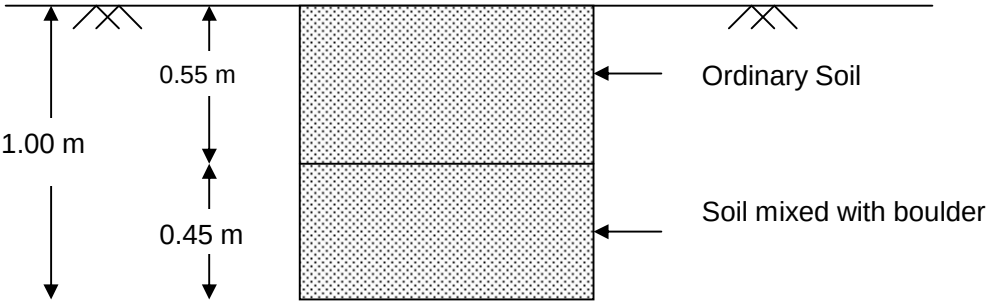
Chainage 26.000 : The soil is of ordinary soil up to a depth of about 55 cms, and then followed with a soil mixed with some boulder materials



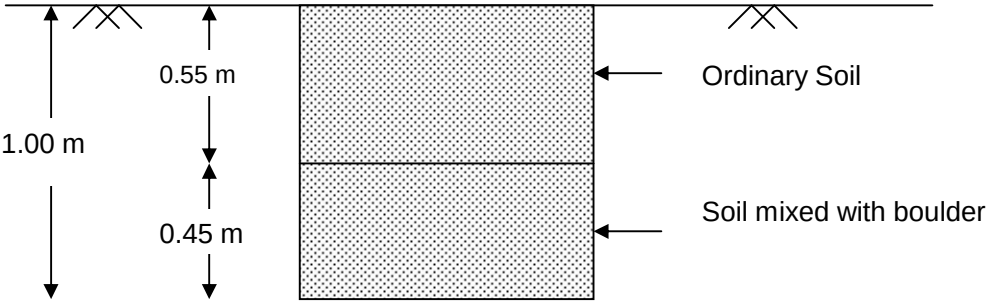
Chainage 27.000 : The soil is of ordinary soil up to a depth of about 45 cms, and then followed with a soil mixed with some boulder materials



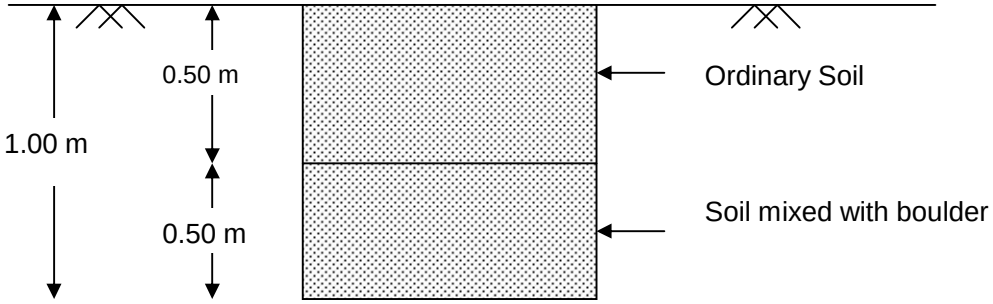
Chainage 28.000 : The soil is of ordinary soil up to a depth of about 55 cms, and then followed with a soil mixed with some boulder materials



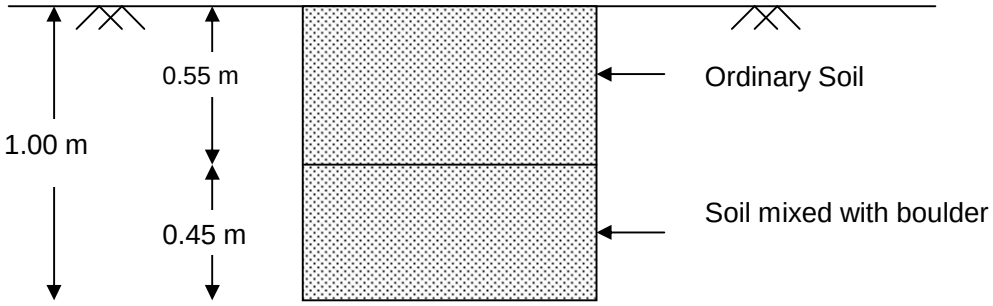
Chainage 29.000 : The soil is of ordinary soil up to a depth of about 55 cms, and then followed with a soil mixed with some boulder materials



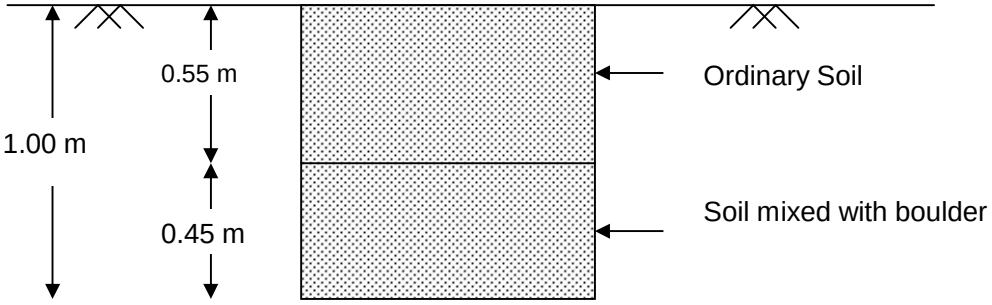
Chainage 30.000 : The soil is of ordinary soil up to a depth of about 50 cms, and then followed with a soil mixed with some boulder materials



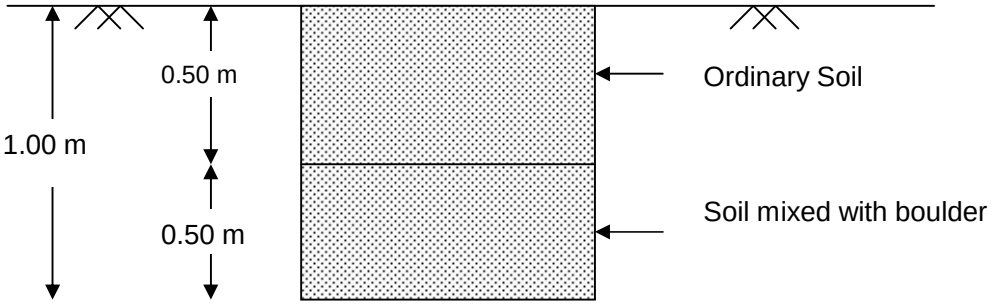
Chainage 31.000 : The soil is of ordinary soil up to a depth of about 55 cms, and then followed with a soil mixed with some boulder materials



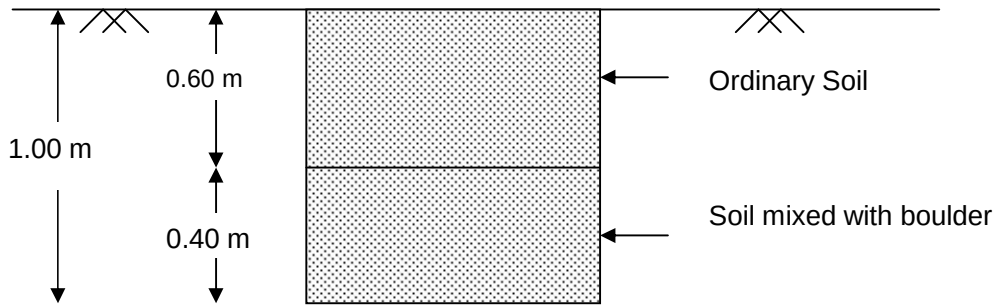
Chainage 32.000 : The soil is of ordinary soil up to a depth of about 55 cms, and then followed with a soil mixed with some boulder materials



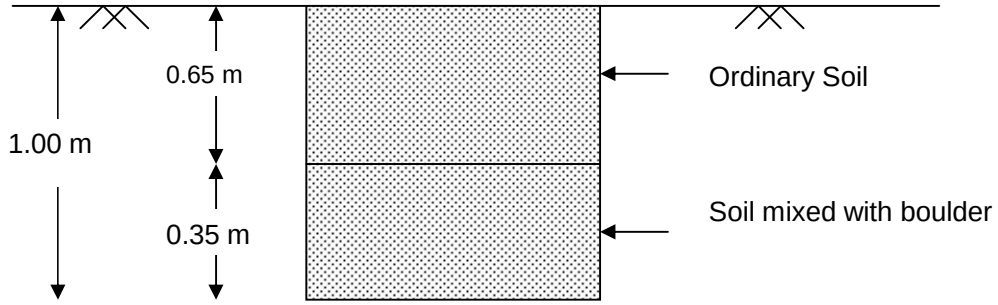
Chainage 33.000 : The soil is of ordinary soil up to a depth of about 50 cms, and then followed with a soil mixed with some boulder materials



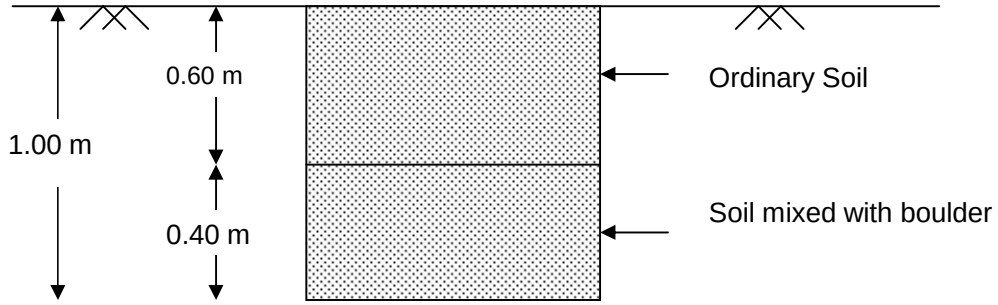
Chainage 34.000 : The soil is of ordinary soil upto a depth of about 60 cms, and then followed with a soil mixed with some boulder materials.



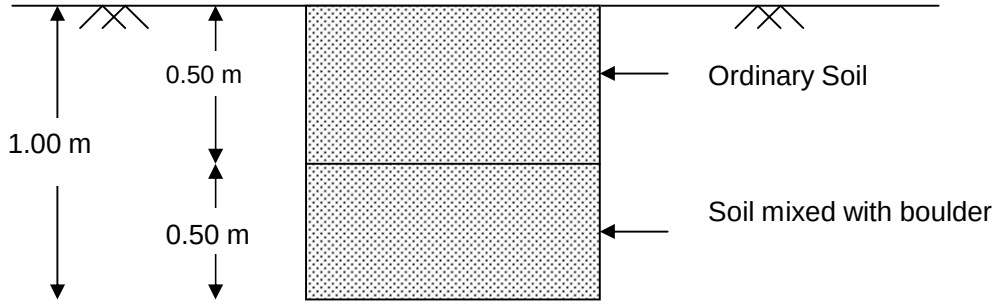
Chainage 35.000 : The soil is of ordinary soil upto a depth of about 65 cms, and then followed with a soil mixed with some boulder materials.



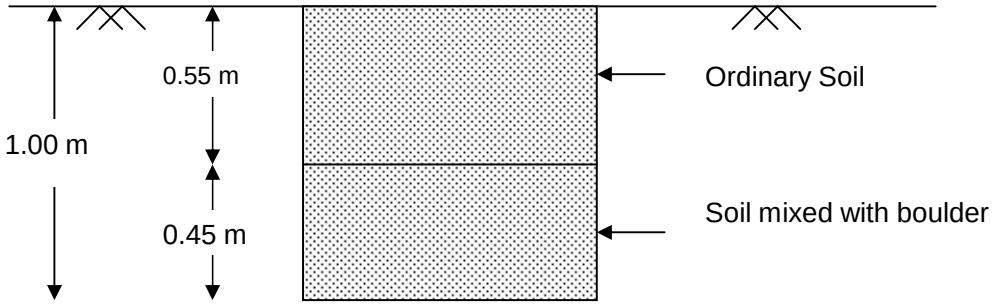
Chainage 36.000 : The soil is of ordinary soil upto a depth of about 60 cms, and then followed with a soil mixed with some boulder materials.



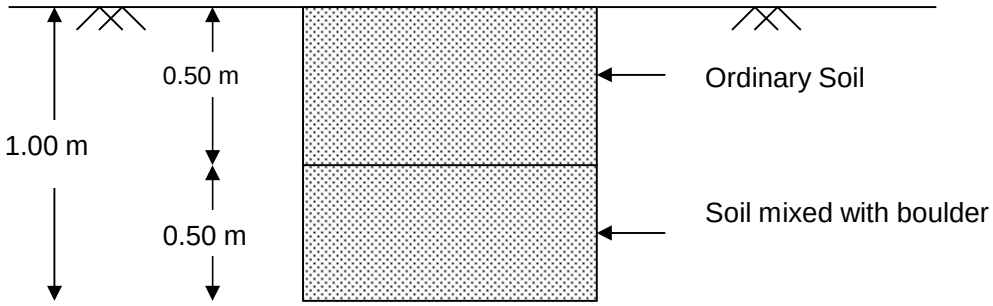
Chainage 37.000 : The soil is of ordinary soil upto a depth of about 50 cms, and then followed with a soil mixed with some boulder materials.



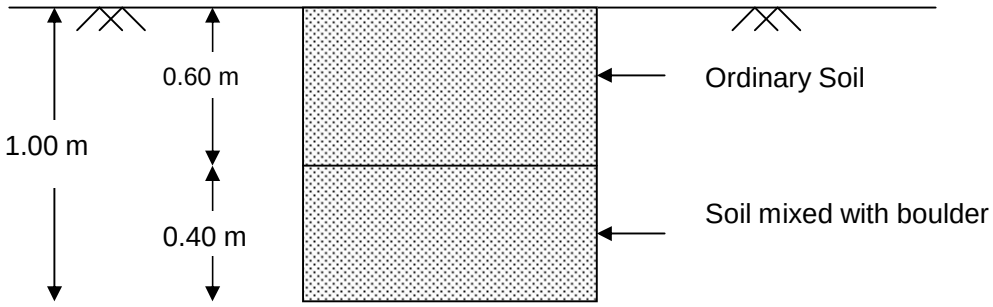
Chainage 38.000 : The soil is of ordinary soil upto a depth of about 55 cms, and then followed with a soil mixed with some boulder materials.



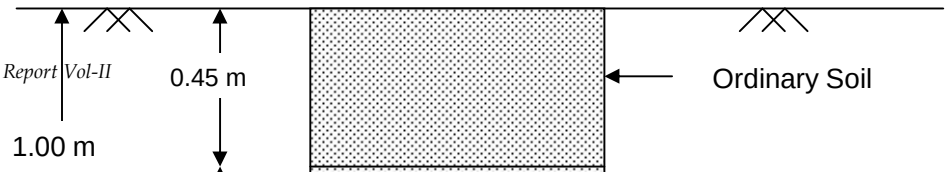
Chainage39.000 : The soil is of ordinary soil upto a depth of about 50 cms, and then followed with a soil mixed with some boulder materials.



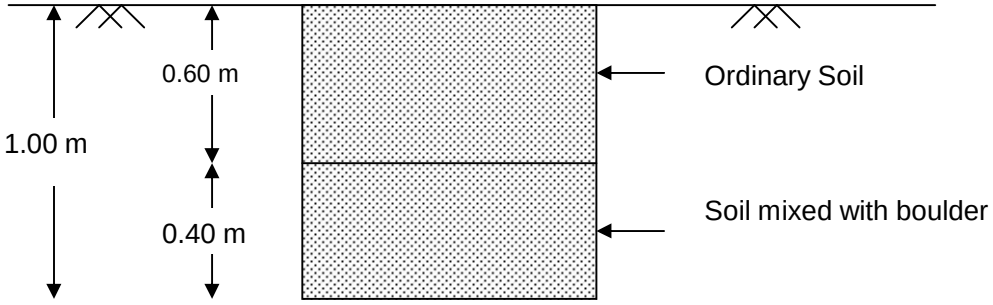
Chainage 40.000 : The soil is of ordinary soil upto a depth of about 60 cms, and then followed with a soil mixed with some boulder materials.



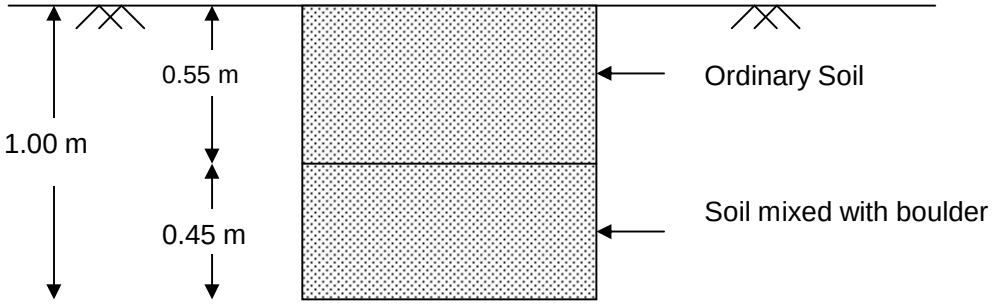
Chainage 41.000 : The soil is of ordinary soil upto a depth of about 45 cms, and then followed with a soil mixed with some boulder materials.



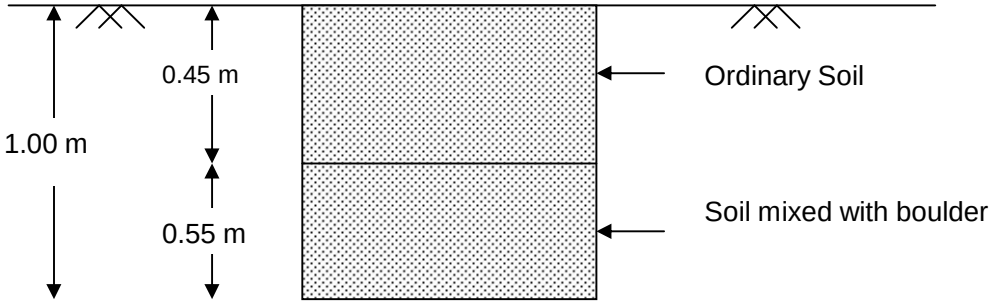
Chainage 42.000 : The soil is of ordinary soil upto a depth of about 60 cms, and then followed with a soil mixed with some boulder materials.



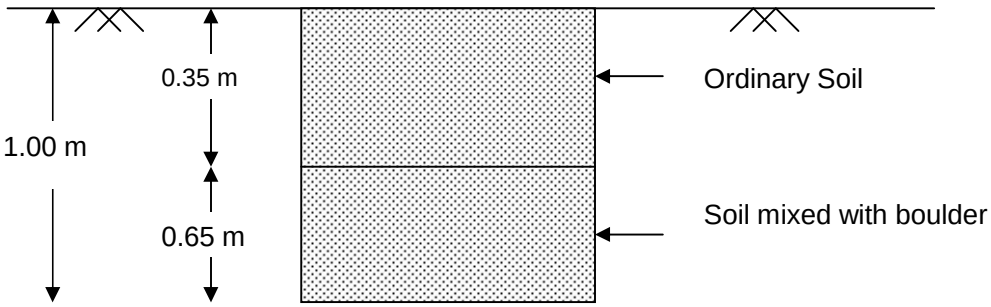
Chainage 43.000 : The soil is of ordinary soil upto a depth of about 55 cms, and then followed with a soil mixed with some boulder materials.



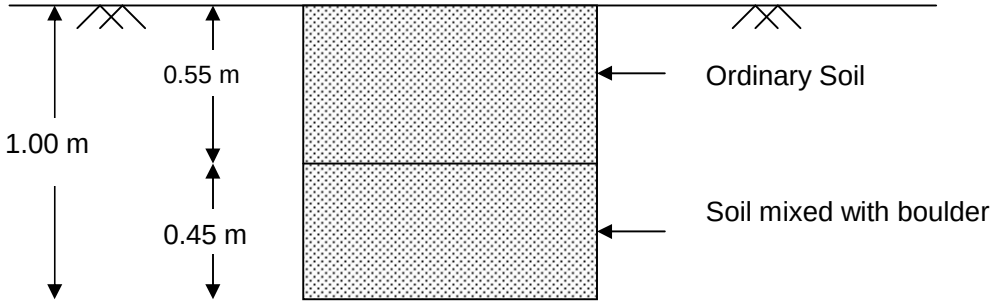
Chainage 44.000 : The soil is of ordinary soil upto a depth of about 45 cms, and then followed with a soil mixed with some boulder materials.



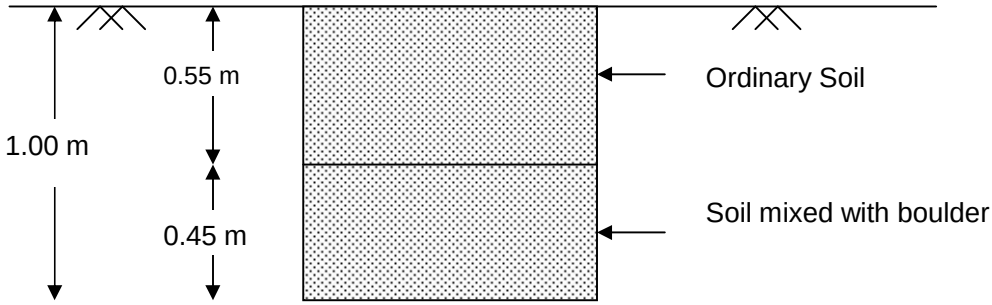
Chainage 45.000 : The soil is of ordinary soil upto a depth of about 35 cms, and then followed with a soil mixed with some boulder materials.



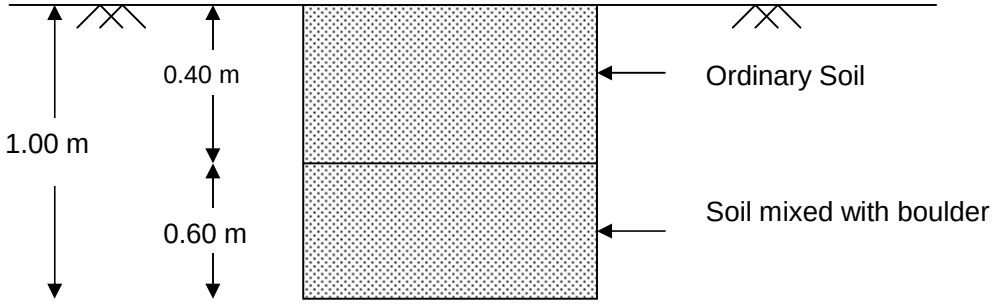
Chainage 46.000 : The soil is of ordinary soil upto a depth of about 55 cms, and then followed with a soil mixed with some boulder materials.



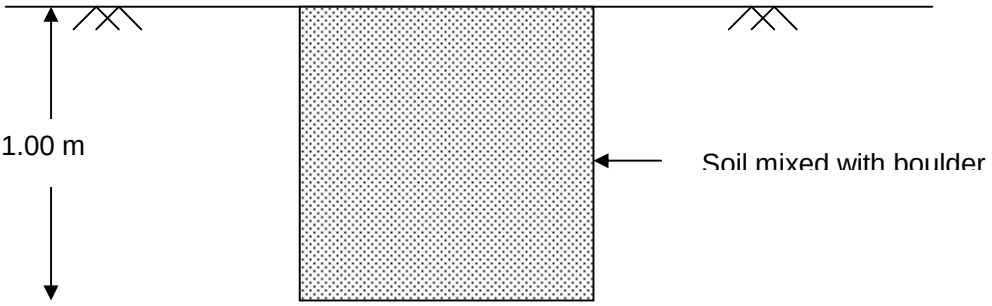
Chainage 47.000 : The soil is of ordinary soil upto a depth of about 55 cms, and then followed with a soil mixed with some boulder materials.



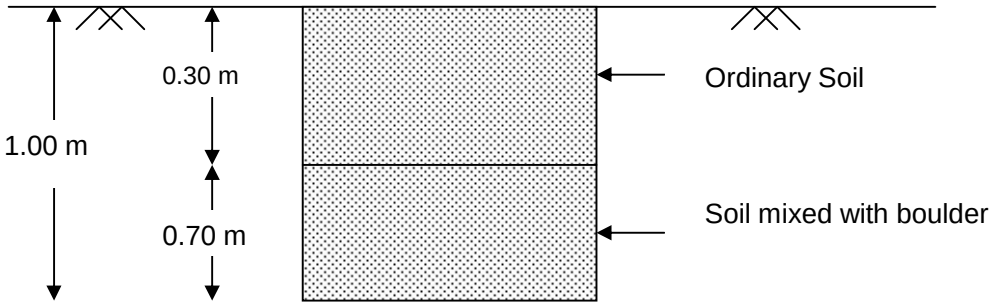
Chainage 48.000 : The soil is of ordinary soil upto a depth of about 40 cms, and then followed with a soil mixed with some boulder materials.



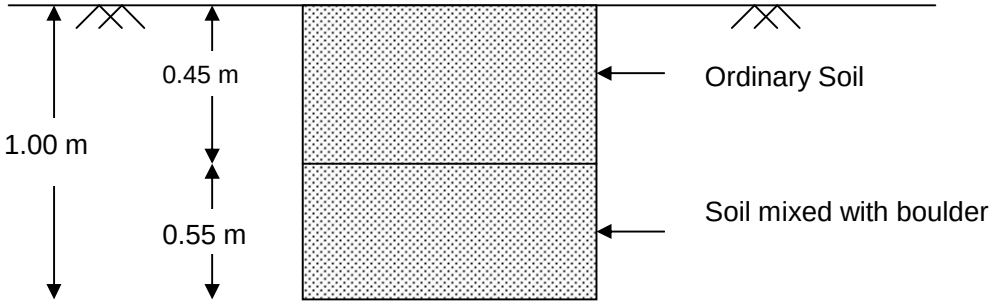
Chainage 49.000 : From the surface the soil is found mixed with boulders



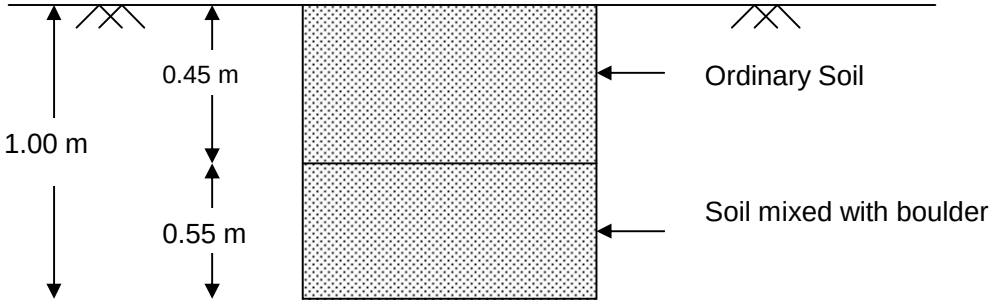
Chainage 50.000 : The soil is of ordinary soil upto a depth of about 30 cms, and then followed with a soil mixed with some boulder materials.



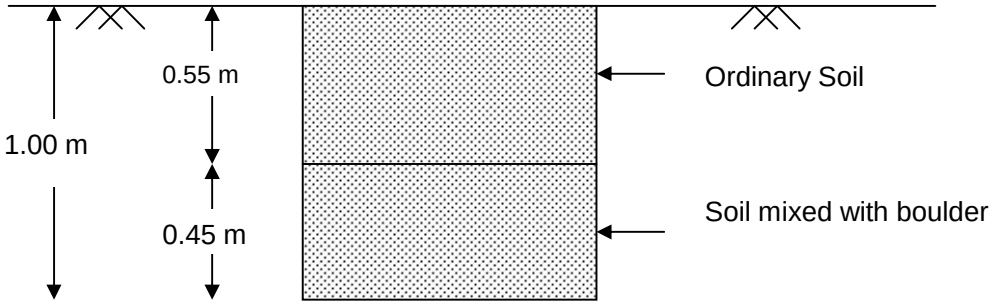
Chainage 51.000 : The soil is of ordinary soil upto a depth of about 45 cms, and then followed with a soil mixed with some boulder materials.



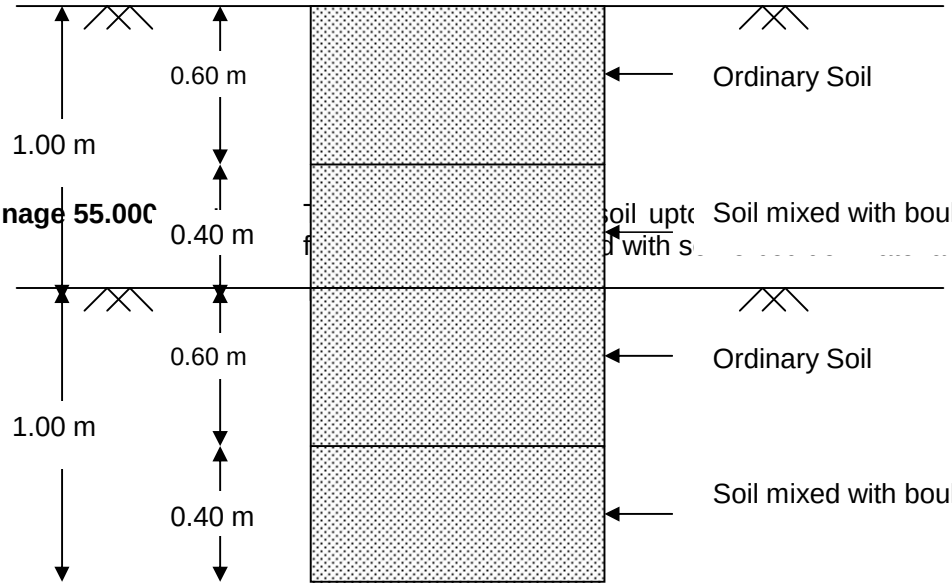
Chainage 52.000 : The soil is of ordinary soil upto a depth of about 45 cms, and then followed with a soil mixed with some boulder materials.



Chainage 53.000 : The soil is of ordinary soil upto a depth of about 55 cms, and then followed with a soil mixed with some boulder materials.

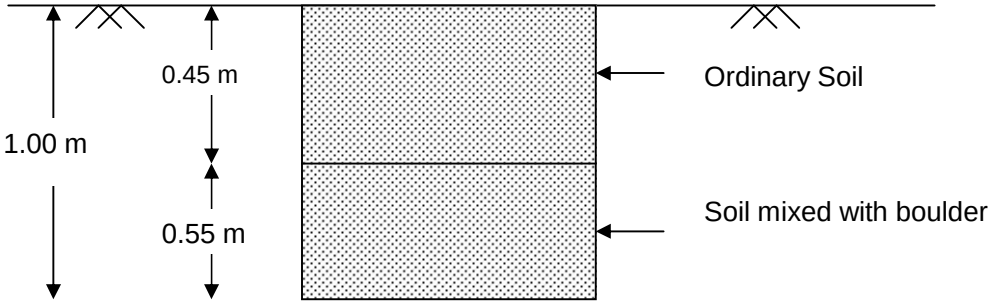


Chainage 54.000 : The soil is of ordinary soil upto a depth of about 60 cms, and then followed with a soil mixed with some boulder materials.

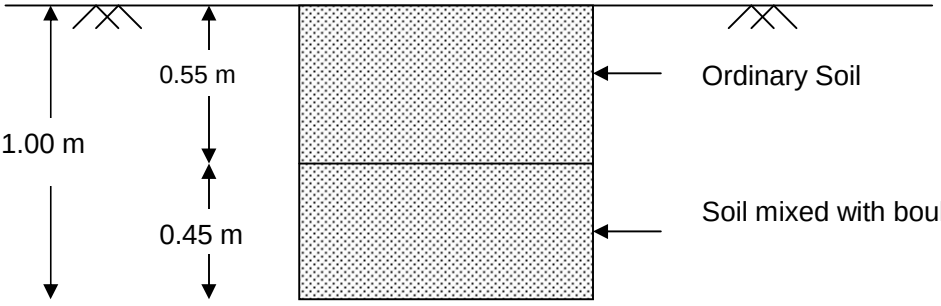


Chainage 55.000 : ...oil upto ... Soil mixed with boulder ... and then ... with s...

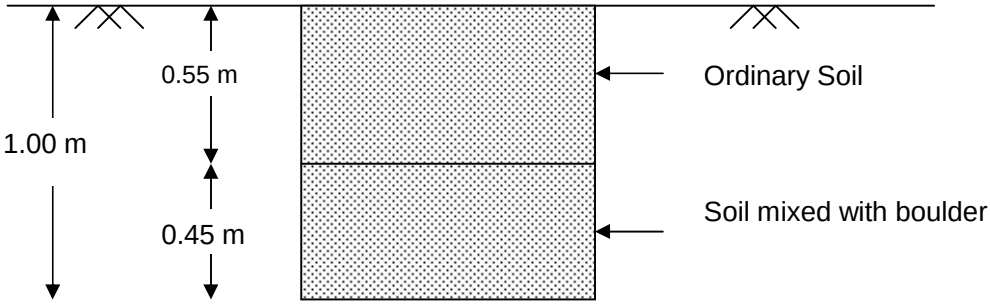
Chainage 56.000 : The soil is of ordinary soil upto a depth of about 45 cms, and then followed with a soil mixed with some boulder materials.



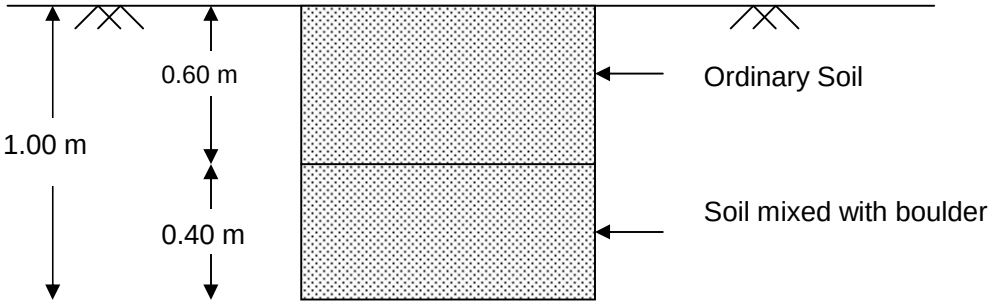
Chainage 57.000 : The soil is of ordinary soil upto a depth of about 55 cms, and then followed with a soil mixed with some boulder materials.



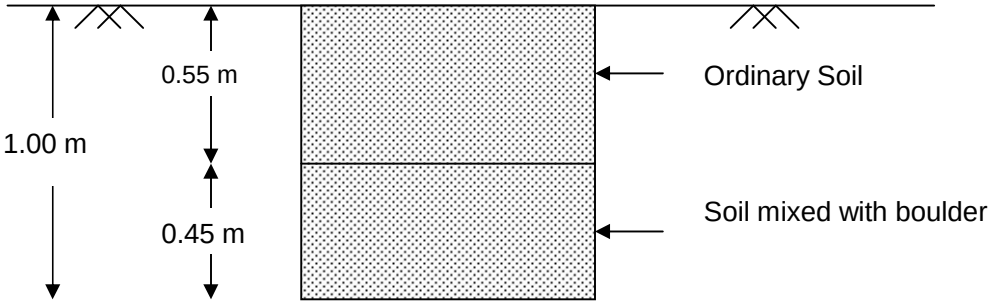
Chainage 58.000 : The soil is of ordinary soil upto a depth of about 55 cms, and then followed with a soil mixed with some boulder materials.



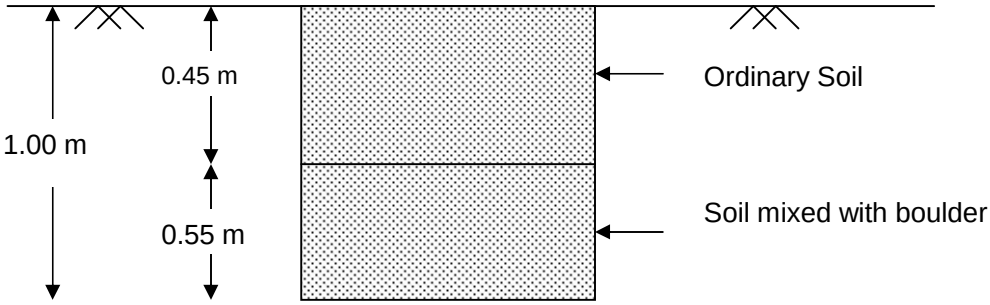
Chainage 59.000 : The soil is of ordinary soil upto a depth of about 60 cms, and then followed with a soil mixed with some boulder materials.



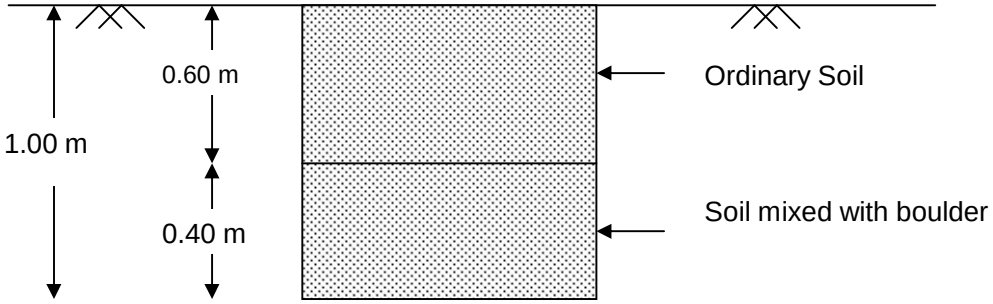
Chainage 60.000 : The soil is of ordinary soil upto a depth of about 55 cms, and then followed with a soil mixed with some boulder materials.



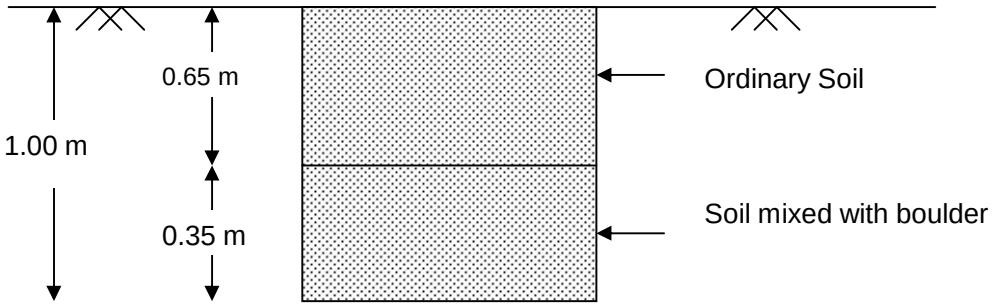
Chainage 61.000 : The soil is of ordinary soil upto a depth of about 45 cms, and then followed with a soil mixed with some boulder materials.



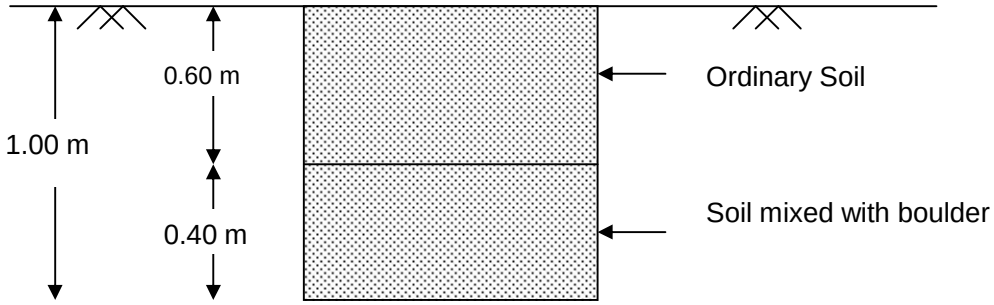
Chainage 62.000 : The soil is of ordinary soil upto a depth of about 60 cms, and then followed with a soil mixed with some boulder materials.



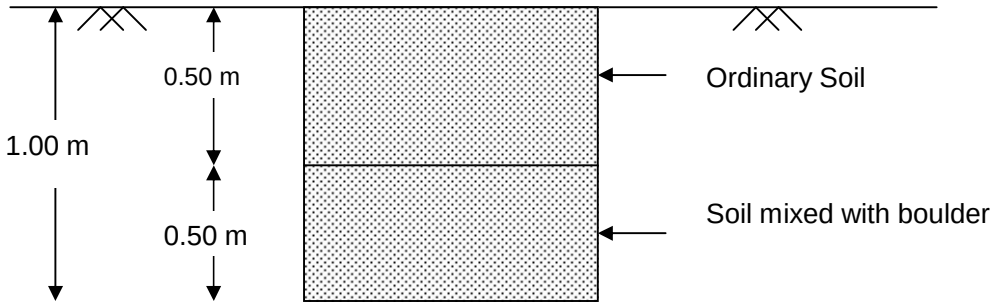
Chainage 63.000 : The soil is of ordinary soil upto a depth of about 65 cms, and then followed with a soil mixed with some boulder materials.



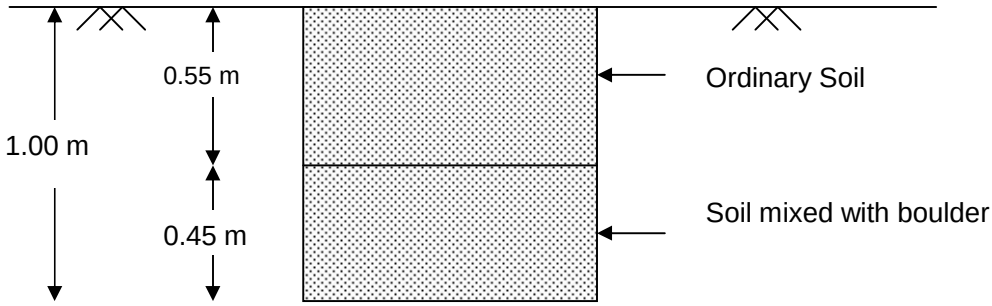
Chainage 64.000 : The soil is of ordinary soil upto a depth of about 60 cms, and then followed with a soil mixed with some boulder materials.



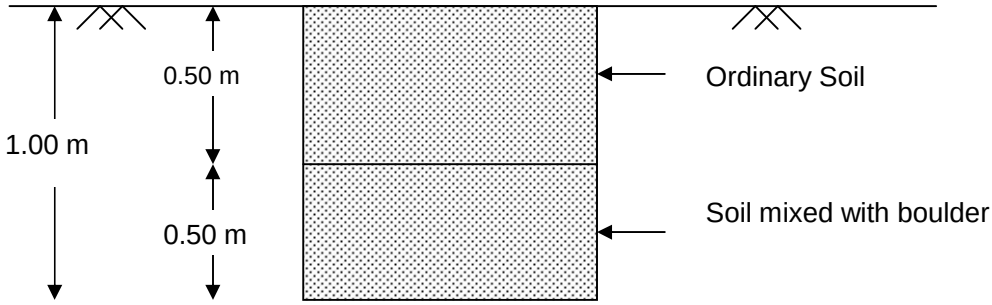
Chainage 65.000 : The soil is of ordinary soil upto a depth of about 50 cms, and then followed with a soil mixed with some boulder materials.



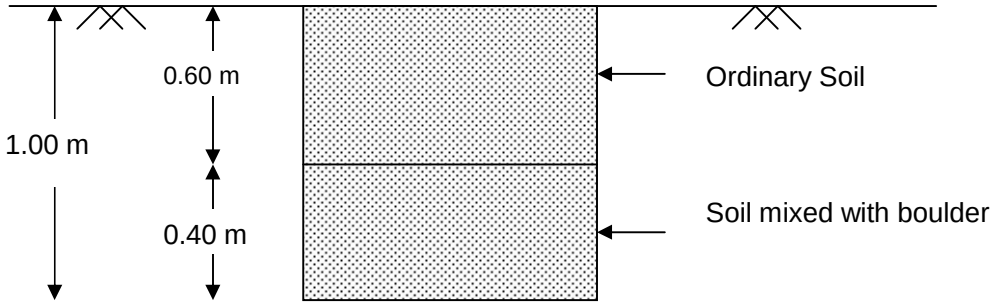
Chainage 66.000 : The soil is of ordinary soil upto a depth of about 55 cms, and then followed with a soil mixed with some boulder materials.



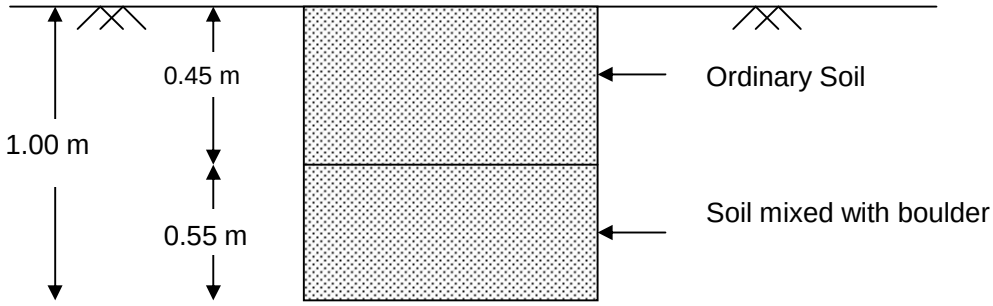
Chainage 67.000 : The soil is of ordinary soil upto a depth of about 50 cms, and then followed with a soil mixed with some boulder materials.



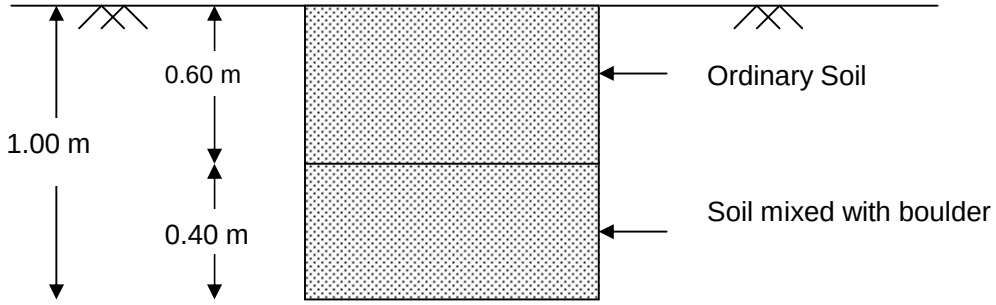
Chainage 68.000 : The soil is of ordinary soil upto a depth of about 60 cms, and then followed with a soil mixed with some boulder materials.



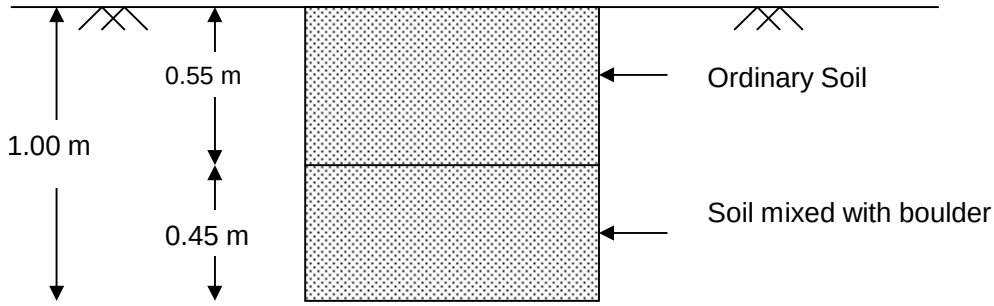
Chainage 69.000 : The soil is of ordinary soil upto a depth of about 45 cms, and then followed with a soil mixed with some boulder materials.



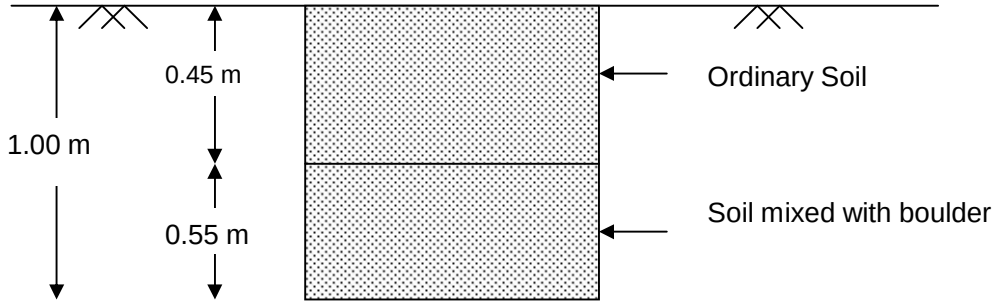
Chainage 70.000 : The soil is of ordinary soil upto a depth of about 60 cms, and then followed with a soil mixed with some boulder materials.



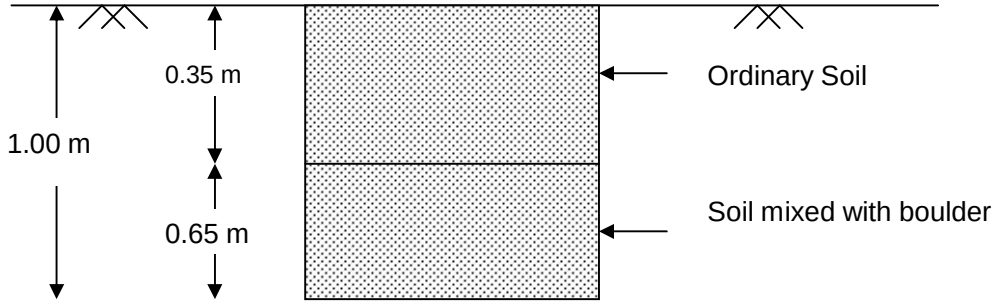
Chainage 71.000 : The soil is of ordinary soil upto a depth of about 55 cms, and then followed with a soil mixed with some boulder materials.



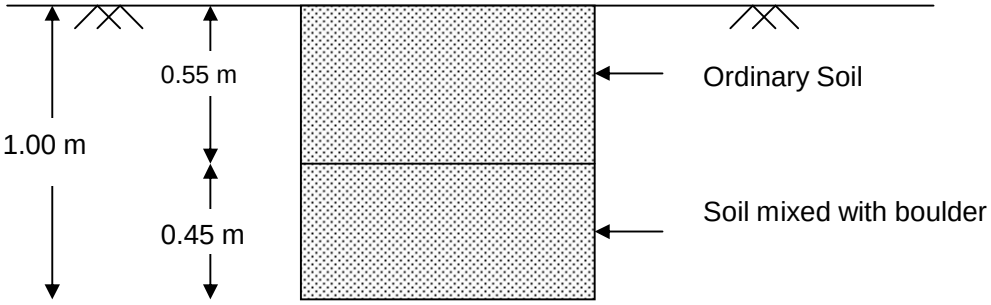
Chainage 72.000 : The soil is of ordinary soil upto a depth of about 45 cms, and then followed with a soil mixed with some boulder materials.



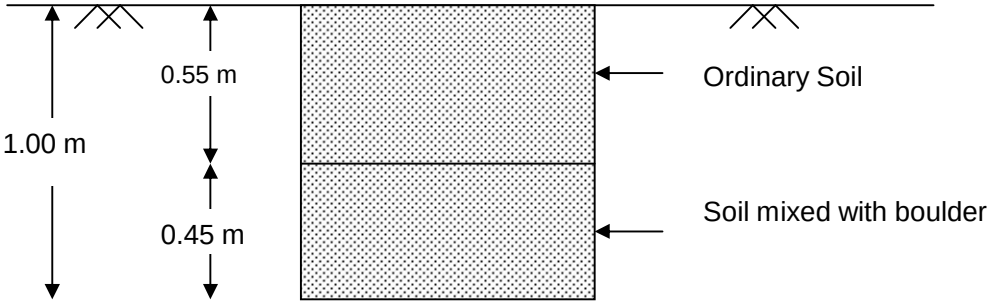
Chainage 73.000 : The soil is of ordinary soil upto a depth of about 35 cms, and then followed with a soil mixed with some boulder materials.



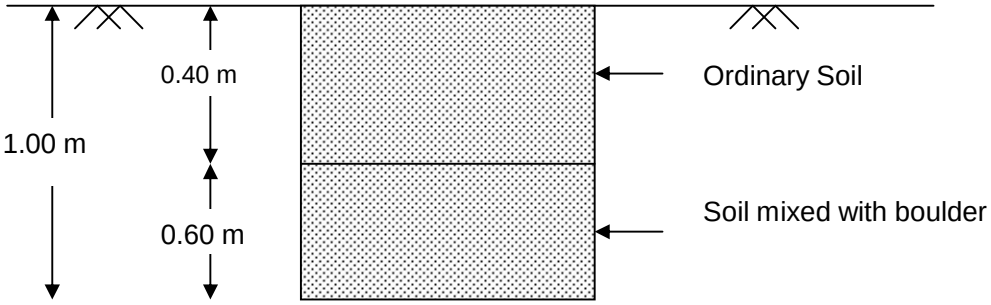
Chainage 74.000 : The soil is of ordinary soil upto a depth of about 55 cms, and then followed with a soil mixed with some boulder materials.



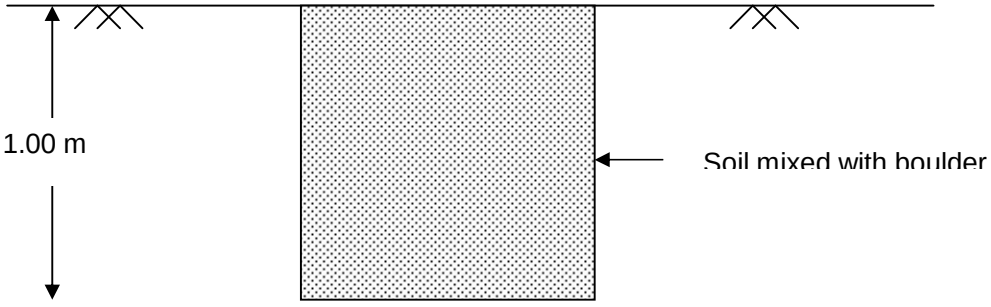
Chainage 75.000 : The soil is of ordinary soil upto a depth of about 55 cms, and then followed with a soil mixed with some boulder materials



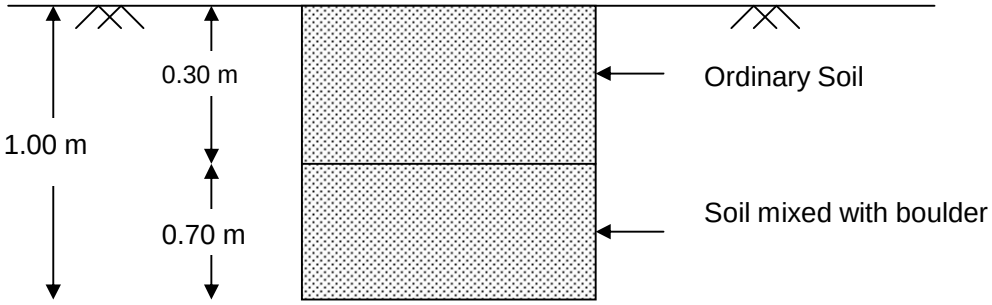
Chainage 76.000 : The soil is of ordinary soil upto a depth of about 40 cms, and then followed with a soil mixed with some boulder materials



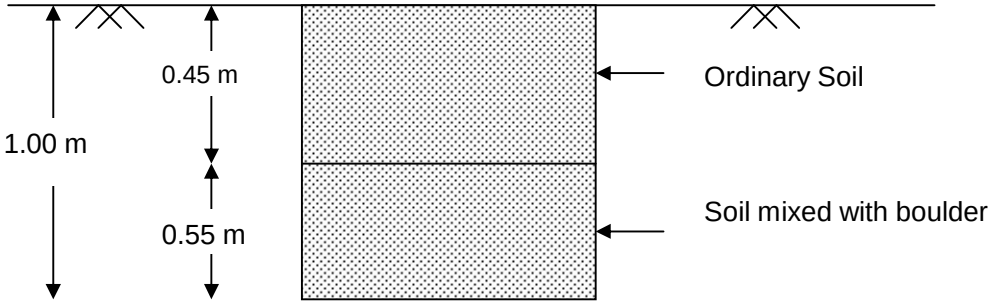
Chainage 77.000 : From the surface the soil is found mixed with boulders



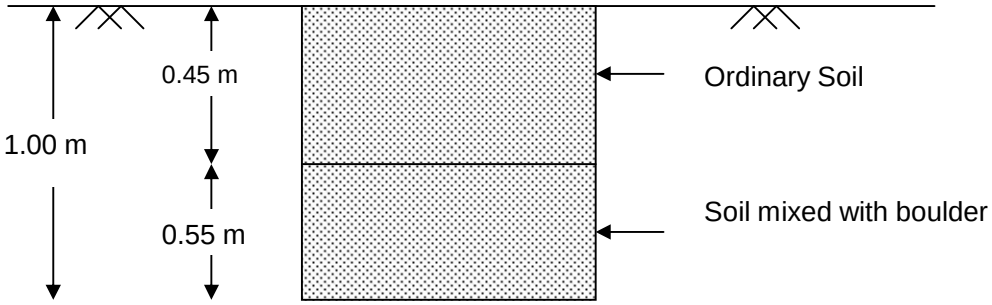
Chainage 78.000 : The soil is of ordinary soil upto a depth of about 30 cms, and then followed with a soil mixed with some boulder materials



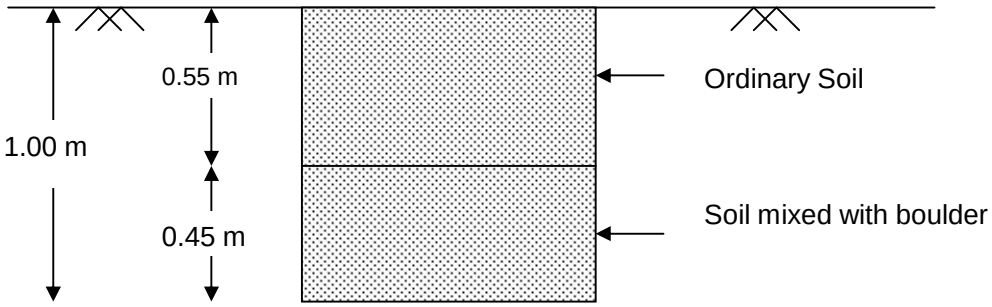
Chainage 79.000 : The soil is of ordinary soil upto a depth of about 45 cms, and then followed with a soil mixed with some boulder materials



Chainage 80.000 : The soil is of ordinary soil upto a depth of about 45 cms, and then followed with a soil mixed with some boulder materials



Chainage 81.000 : The soil is of ordinary soil upto a depth of about 55 cms, and then followed with a soil mixed with some boulder materials



SECTION – 4

TRAFFIC SURVEY, ANALYSIS & FORECAST

4.1 INTRODUCTION

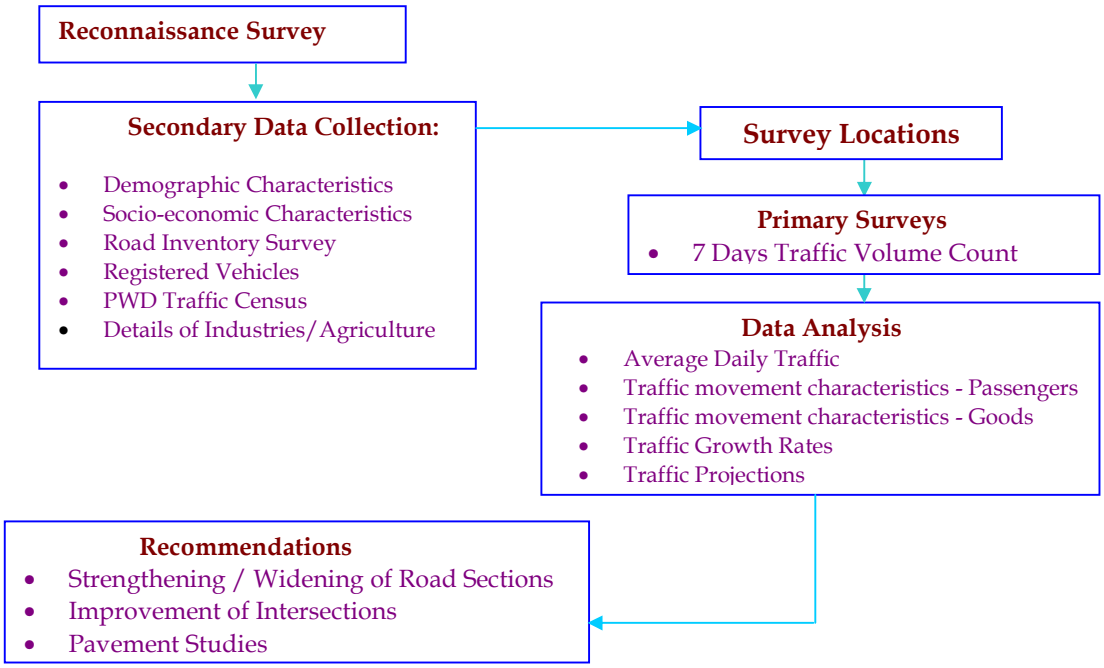
Traffic Survey, Analysis and Forecasting

This Chapter deals with various traffic studies carried out and the analysis of the data obtained from these studies. In planning and design of a highway, an appreciation of the existing traffic and traffic expected to use the highway is important. This is to assess the capacity requirements, pavement design, identify present and likely future traffic conditions and to have provisions for future improvements. As part of this study, a systematic methodology has been followed to assess the characteristics of the traffic on the project road.

Traffic count surveys carried out to establish the base year for traffic. The baseline traffic characteristics are very important for the assessment of future traffic and travel pattern.

4.2 TRAFFIC SURVEY AND STUDY METHODOLOGY

A comprehensive data has been collected from various departments/ organisations/ agencies/ institutions and other sources related to the Traffic census & socio-economic indicators. The Classified Traffic Volume Count surveys have been conducted for 24 hours for seven days. The Detailed Methodology is pictorially depicted in Figure.



Study Methodology Flow Chart for Traffic Survey

4.3 TRAFFIC SURVEYS

4.3.1 Site Reconnaissance

Immediately after the award of work a team headed by traffic engineer and supervisors visited the site and got acquainted with the road and the road influence area and studied the traffic survey points along the project section.

4.3.2 Data Collection

Secondary Data Collection

The Secondary data were collected regarding the traffic on the existing road. All other related demographic characteristics, socio economic characteristics, vehicle registration, PWD traffic census and other detailed industrial and agricultural data were collected from the concerned departments and compiled to extract the required results for the analysis of the project traffic scenario.

Primary Data Collection

Primary data collection was conducted using the manual method for classified traffic counts. The traffic counts were conducted at 60 minutes interval for 24 hours. The 60 minutes interval data were than complied as hourly. The traffic count was conducted as per IRC guidelines. The survey was conducted for both fast moving and slow moving vehicles plying on the project road. The following types of vehicles were counted.

1. **Fast moving**
    1. Cars, jeeps and vans
    2. Two-wheelers
    3. Three-wheelers
    4. Buses
    5. Trucks
        - Light Commercial vehicles
        - Two axle standard trucks
        - Multi-axle trucks
        - Truck trailers
2. **Slow moving**
    1. Cycles
    2. Cycle rickshaws
    3. Animal drawn carts
    4. Others

Enumerators specially trained for this purpose noted data on the number of vehicles of different categories moving along the road in both directions.

Traffic Studies Homogeneous Sections

Homogeneous sections are the sections of the project road having similar traffic and travel characteristics. Major intersections / settlements have been considered as nodes for identification for various homogeneous sections.

4.3.3 Analysis

The collected data were analysed to get total daily traffic for the number of days during which Classified Traffic Volume Survey at each count station. The data analyses were calculated in terms of hourly traffic volumes, total PCU's values, traffic composition, Average Daily Traffi (ADT) and mode wise distribution of traffic. The analysis is represented in the form of Ba Charts, Pie Charts and other various graphical forms.

4.3.4 Factors for Seasonal Variation

The seasonal variation in traffic occurs due to various reasons such as higher traffic during harvest and festival seasons, lower traffic during rainy season etc. Estimation of seasonal variation factors requires time series traffic count data on a monthly basis.

Seasonal variation factor, which is the ratio of the traffic for a particular month of the year to the average monthly traffic for that year, was not available. Seasonal correction factor, which is used to moderate the traffic observed in any month of the year to AADT by multiplying the observed traffic with the factor, is the inverse of the seasonal variation factor. In absence of time series data, it was decided to obtain data for the district. The data suggests the month of February as an average month. A seasonal correction factor of 1.0 is applied to arrive at AADT.

4.4 TRAFFIC SURVEYS

4.4.1 Classified Traffic Volume Count

In order to assess the variation of traffic levels and traffic composition over the week, traffic surveys were conducted continuously for one-week duration. The survey was carried out 24 hrs for one week using the standard proforma given in the SP: 19 - 2001.

The traffic was broadly grouped into Fast Moving Vehicles and Slow Moving Vehicles. Further the fast moving vehicles have been classified into Cars/Jeeps, Two wheelers, three wheelers, Buses (Mini & Full), Trucks and Agricultural Tractors. Slow Moving Vehicles are Cycles, Cycle Rickshaws and Animal Drawn Vehicles.

The surveys were conducted using well-trained enumerators, under the supervision of Traffic and transportation professionals. These surveys were normally conducted during dry weather conditions.

The primary objectives of the traffic count were to:

- Determine the motorised and non-motorised traffic volumes along the corridor.
- Determine Average Daily Traffic
- Determine the distribution of traffic during peak and non-peak hours.
- Establish the mode wise distribution.
- Determine the current traffic pattern on the project road

Traffic Volume counts were carried out for both directions separately. Two enumerators in seven shifts were deployed and an experienced supervisor was kept in charge of each location. Two locations were identified, one for each location as given in Table.

Traffic Survey Locations for Classified Volume Count

Station	Section	Location/Chainage	Remarks
1	Singtam to Tarku	Tarku	7 Days
2	Tarku to Legship	Legship	7 Days
3	Legship to Gyalshing	Gyalshing	7 Days

The traffic surveys were conducted in the month of Sept 2009

Different classes of vehicles which were obtained from the field surveys were converted into Passenger Car Units (PCU's) by using the PCU factors given in IRC: 64-1979 "Guidelines for Capacity of Roads in Rural Areas".

4.4.2 Recommended PCU values for different Types of Vehicles

Sr No.	Vehicle Type	Equivalency Factor
	Fast Vehicles	
1	Motor Cycle or Scooter	**0.50**
2	Car/Jeep, Van/Taxi or auto-rickshaw	**1.00**
3	Agricultural Tractor, LCV	**1.50**
4	Truck or Bus	**3.00**
5	Truck -Trailer, Agricultural Tractor-Trailer Unit	**4.50**
	Slow Vehicles	
6	Cycle	**0.50**
7	Cycle Rickshaw	**2.00**
8	Hand Cart	**3.00**
9	Horse -Drawn Cart	**4.00**
10	Bullock/Camel Cart	**8.00**

4.4.3 Data Tabulation and result interpretation

The data collected have been tabulated hourly. This gives the detailed traffic count for each day and each direction for the one count locations. The tabulations also give traffic in Passenger Car Units (PCU's) per day in addition to vehicles per day for the survey locations.

Location	Average daily traffic intensity (PCU)	Average daily traffic intensity (CVD)	peak Hour Traffic Nos/PCU	Peak Hour Traffic ratio in %	Time of Peak Traffic
Singtam to Tarku	852	176	444/547.5	9.41	08-09
Tarku to Legship	839	180	422/469	9.28	09-10
Legship to Gyalshing	794	161	416/534	9.42	09-10

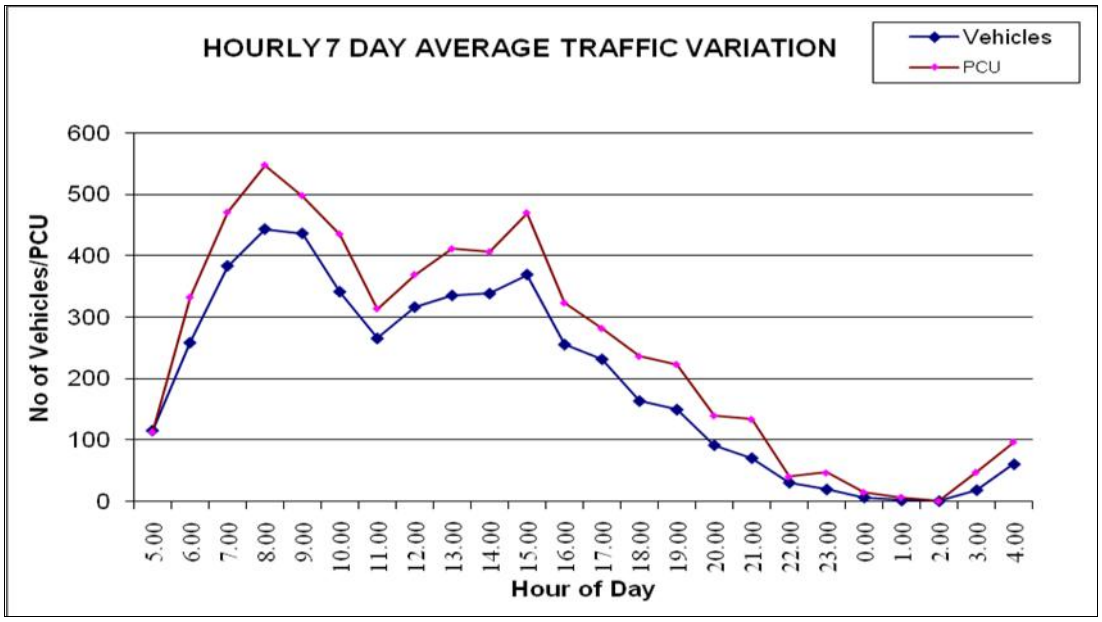
The traffic characteristics are as follows:

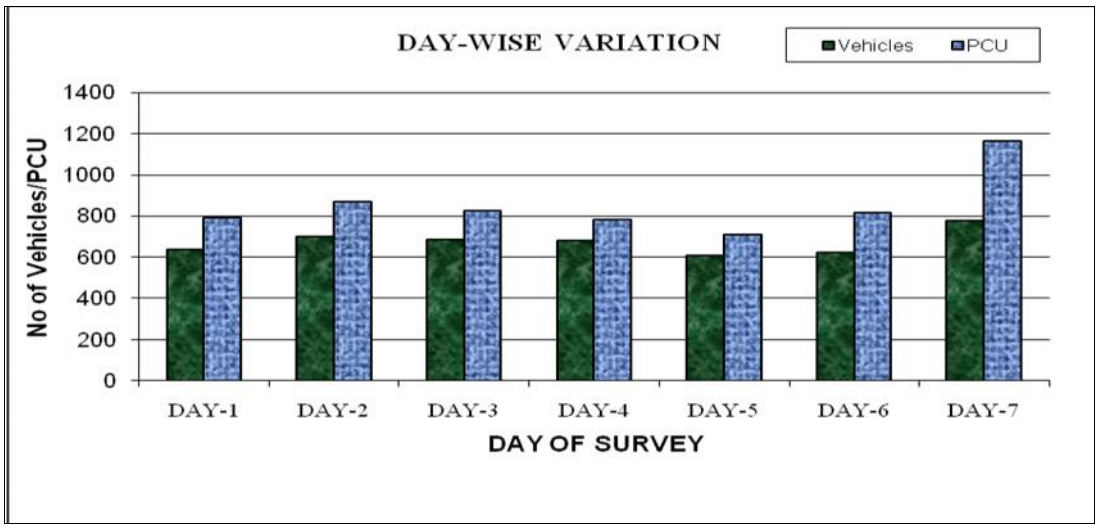
- The percentage of the Passenger vehicles is much higher than the commercial vehicles.
- Passenger cars and two wheelers form a major portion of the passenger vehicles.

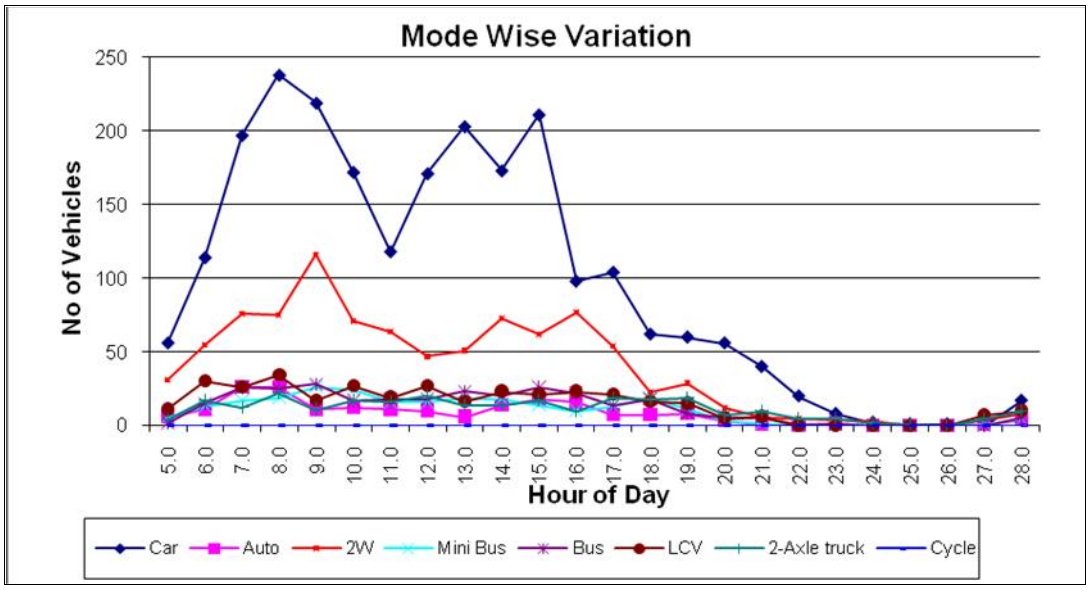
Daily Traffic Variation, Hourly traffic variations, hourly traffic distribution and day wise traffic variation are illustrated in various figures placed below.

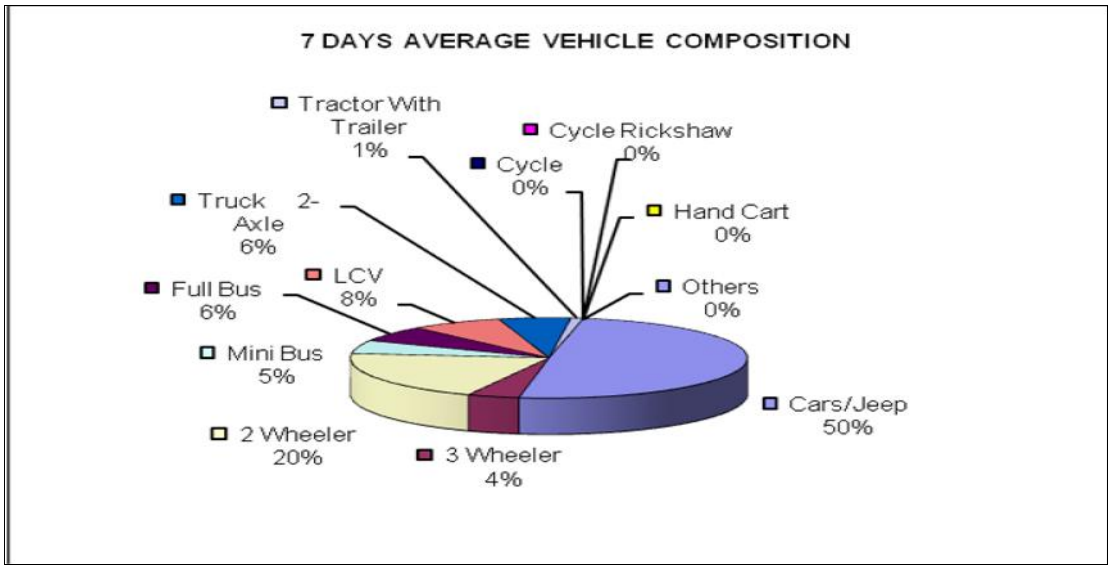
The weekly Traffic variations have presented in the figure given below:

Section -1

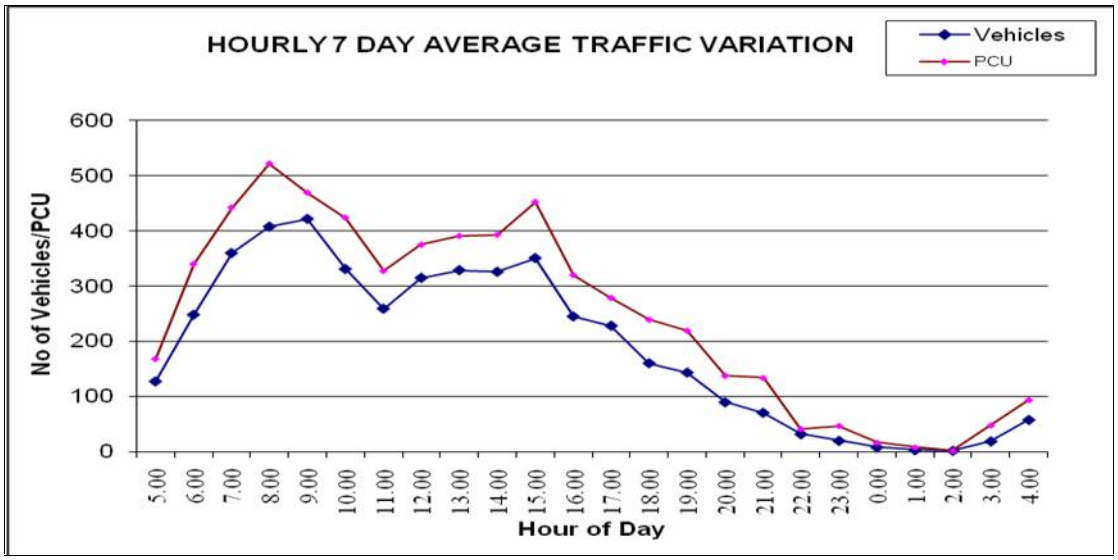

HOURLY 7 DAY AVERAGE TRAFFIC VARIATION
Vehicles
PCU
No of Vehicles/PCU
600
500
400
300
200
100
0
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
20.00
21.00
22.00
23.00
0.00
1.00
2.00
3.00
4.00
Hour of Day

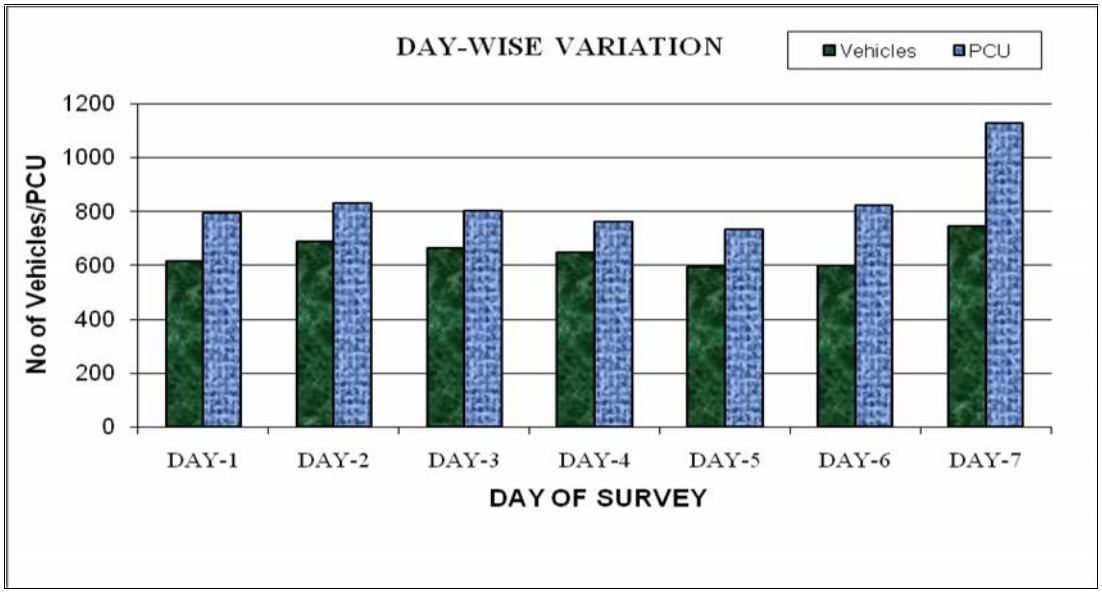

DAY-WISE VARIATION
Vehicles
PCU
No of Vehicles/PCU
1400
1200
1000
800
600
400
200
0
DAY-1
DAY-2
DAY-3
DAY-4
DAY-5
DAY-6
DAY-7
DAY OF SURVEY

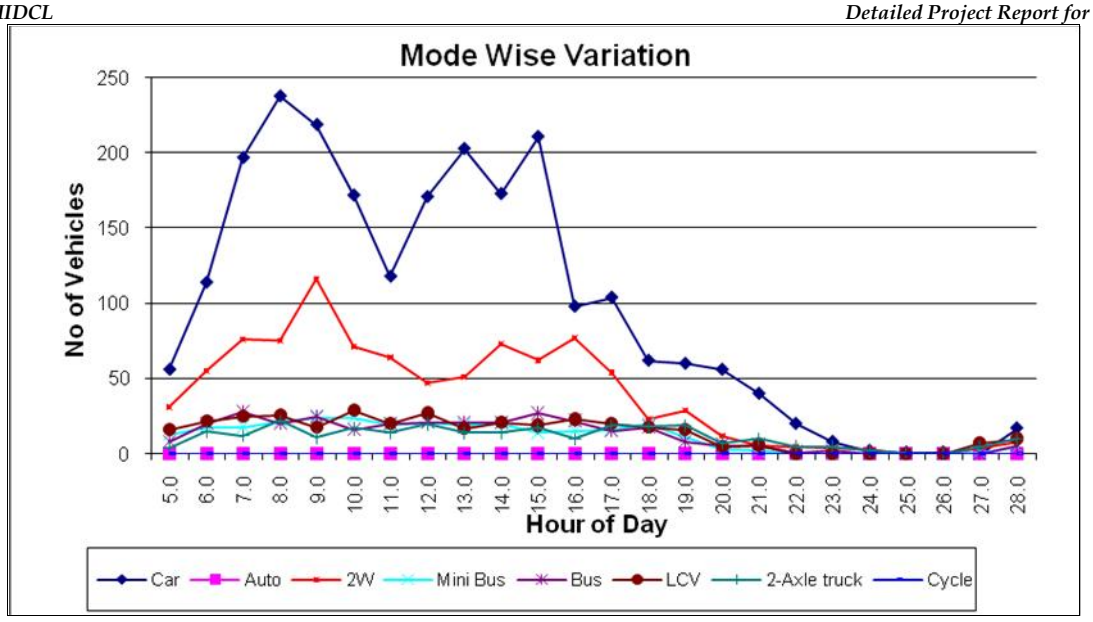

Mode Wise Variation
No of Vehicles
250
200
150
100
50
0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0
13.0
14.0
15.0
16.0
17.0
18.0
19.0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
Hour of Day
Car
Auto
2W
Mini Bus
Bus
LCV
2-Axle truck
Cycle

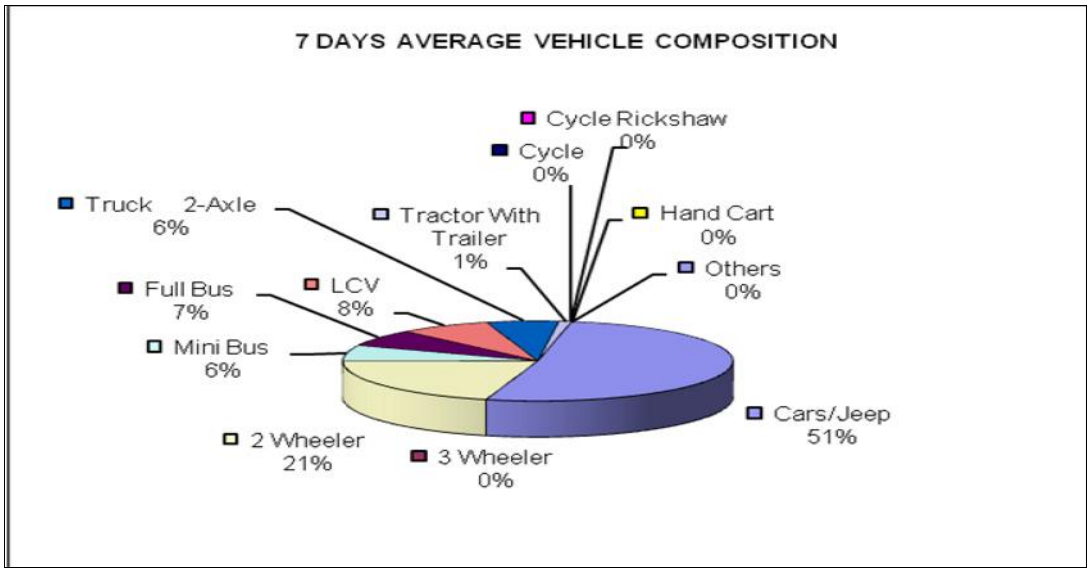

7 DAYS AVERAGE VEHICLE COMPOSITION
Tractor With Trailer 1%
Cycle Rickshaw 0%
Cycle 0%
Truck 2-Axle 6%
Hand Cart 0%
Full Bus 6%
LCV 8%
Others 0%
Mini Bus 5%
Cars/Jeep 50%
2 Wheeler 20%
3 Wheeler 4%

Section -2

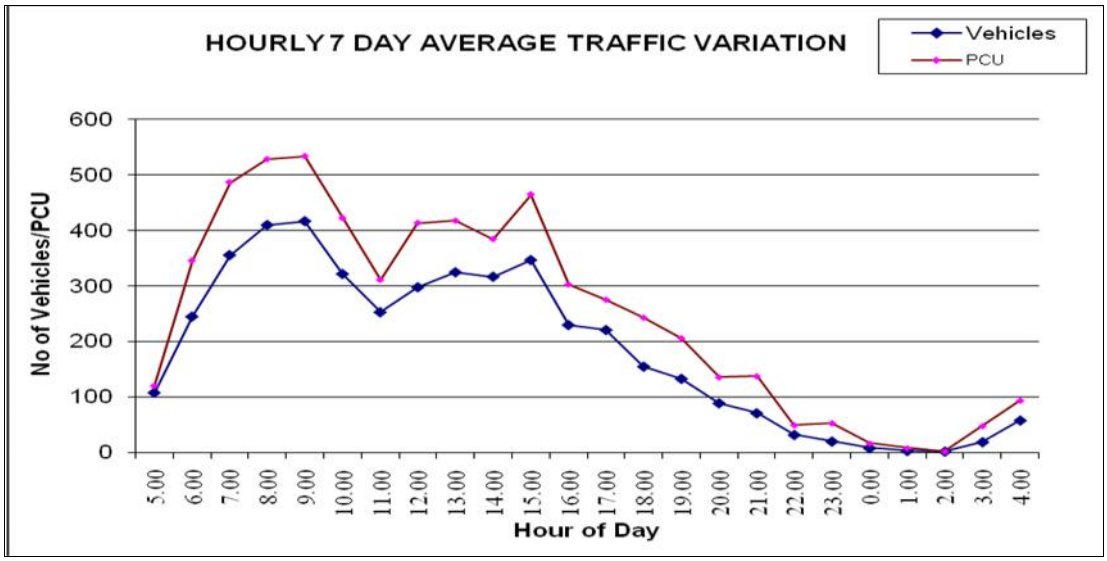

HOURLY 7 DAY AVERAGE TRAFFIC VARIATION
Vehicles
PCU
No of Vehicles/PCU
600
500
400
300
200
100
0
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
20.00
21.00
22.00
23.00
0.00
1.00
2.00
3.00
4.00
Hour of Day

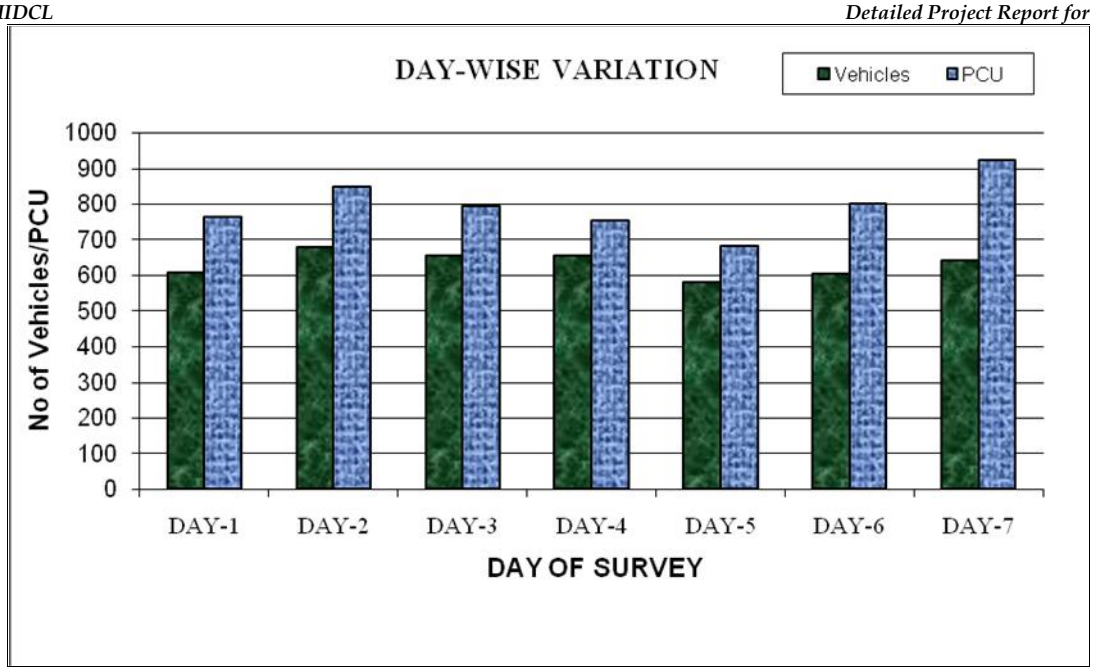

DAY-WISE VARIATION
Vehicles
PCU
No of Vehicles/PCU
1200
1000
800
600
400
200
0
DAY-1
DAY-2
DAY-3
DAY-4
DAY-5
DAY-6
DAY-7
DAY OF SURVEY

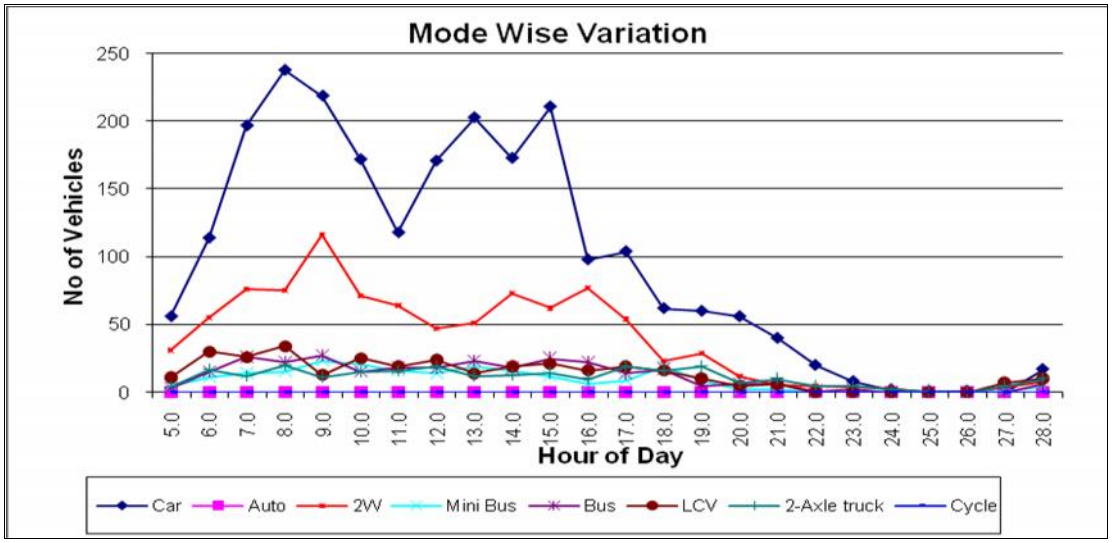

Mode Wise Variation
No of Vehicles
250
200
150
100
50
0
5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0 16.0 17.0 18.0 19.0 20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0
Hour of Day
Car
Auto
2W
Mini Bus
Bus
LCV
2-Axle truck
Cycle

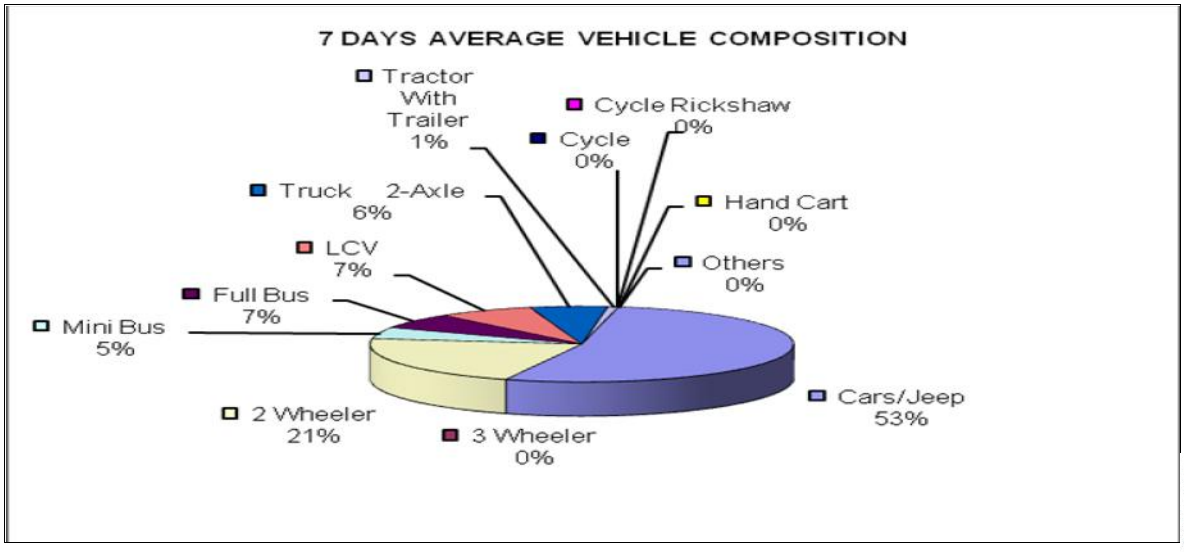

7 DAYS AVERAGE VEHICLE COMPOSITION
Cycle Rickshaw 0%
Cycle 0%
Truck 2-Axle 6%
Tractor With Trailer 1%
Hand Cart 0%
Others 0%
Full Bus 7%
LCV 8%
Mini Bus 6%
Cars/Jeep 51%
2 Wheeler 21%
3 Wheeler 0%

Secton-3


HOURLY 7 DAY AVERAGE TRAFFIC VARIATION
Vehicles
PCU
No of Vehicles/PCU
600
500
400
300
200
100
0
5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 15.00 16.00 17.00 18.00 19.00 20.00 21.00 22.00 23.00 0.00 1.00 2.00 3.00 4.00
Hour of Day


DAY-WISE VARIATION
Vehicles
PCU
No of Vehicles/PCU
1000
900
800
700
600
500
400
300
200
100
0
DAY-1
DAY-2
DAY-3
DAY-4
DAY-5
DAY-6
DAY-7
DAY OF SURVEY


Mode Wise Variation
No of Vehicles
250
200
150
100
50
0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0
13.0
14.0
15.0
16.0
17.0
18.0
19.0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
Hour of Day
Car
Auto
2W
Mini Bus
Bus
LCV
2-Axle truck
Cycle


7 DAYS AVERAGE VEHICLE COMPOSITION
Tractor With Trailer 1%
Cycle Rickshaw 0%
Cycle 0%
Truck 2-Axle 6%
Hand Cart 0%
LCV 7%
Others 0%
Full Bus 7%
Mini Bus 5%
Cars/Jeep 53%
2 Wheeler 21%
3 Wheeler 0%

4.5 TRAVEL PATTERN & COMPOSITION

4.5.1 Travel Pattern

An understanding of the travel pattern is key to transportation planners, researchers, engineers and policy analysts. The travel patterns relates to the changes in directionality, purpose, mode and time of the trip. Traffic counts, which directly measure volumes, are a more accurate measure of traffic pattern on specific facilities.
The traffic scenario at all the sections is influenced by the local traffic. Cars and 2-wheelers form an important means of traffic in this region. The hourly variation at the count location, traffic is more during the morning hours.

4.5.2 Traffic Composition

From traffic volume counts the following observations are made,

(i) There are large numbers of Cars, bus and Two wheelers using the road (85.00%).

(ii) Traffic is dominated by the passenger vehicles (cars and two wheelers).

(iii) The heavy vehicle traffic (15.0%) as compared to the passenger traffic (85.00%).

4.5.3 Traffic Forecast

It is very essential to accurately estimate the future traffic, as the development of the highway is totally dependent upon the future demand of the traffic.

- **Methods of Forecasting:**

Traffic forecasts are generally prepared using one or a combination of the following methods:

- Time series trend in traffic growth
- Temporal trends in vehicle registrations
- Socio-economic characteristics
- Transport Demand Elasticity Approach

Depending upon the character of the study area and the objectives of the study, a judicious selection of the forecast methodology would be adopted as each of the above methods has inherent advantages and disadvantages, which are briefly described below:

- **Time Series Trends:**

This is the most reliable tool available presently for long-term projections. It has been observed that the growth of traffic over a large time frame preferably over a period of about ten years in the past gives a reasonably accurate forecast for the horizon year, though in itself is a large time frame. The main shortcoming of this method is that it does not take into account the effect of induced developments, which have a pronounced effect over a shorter time frame.

Nevertheless this tool has been proven reliable for traffic forecasting on intercity corridors, where the effect of local development does not have much influence over the long-term traffic.

The time series data obtained from PWD counts are given in Table. The data available from the department is insufficient and shows an inconsistent growth of traffic along the road corridor. Hence this method cannot be relied upon to be used for forecasting the future traffic.

- **Growth in vehicle registrations:**

The growth of vehicle registration in the influence region is generally a good indicator in as much as it is found to correlate reasonably well with traffic growth. This holds true

especially in urban areas, and in those cases, it is possible to establish a definite trend and correlation between traffic growth and vehicle registration. However, when traffic corridors are considered, the correlation between vehicle registration growth and traffic growth rates has been found to be not valid, as traffic growth along an inter-urban is influenced by many other factors in addition to the number of vehicle registrations.

The growth of motor vehicles in the project area from the registration data for last five years has been collected. The growth of every type of vehicle has been calculated and presented in Table.

- **Socio-economic parameters:**

Socio-economic parameters including population, employment, vehicle ownership, per capita income and development proposals (with or without land use changes) have all been found to produce good correlation with the traffic growth. These above parameters have been described.

- **Transport Demand Elasticity Approach:**

Elasticity of traffic demand is defined as the rate at which traffic intensity varies due to changes in the corresponding economic variables selected. Therefore, to estimate the elasticity traffic demand, it is necessary to establish the relationship between the growth in the number of a given category of vehicle with any one of the economic variables considered, such as NSDP, per capita income and population growth. The econometric model and the form of equation for estimation of traffic demand elasticity as recommended in IRC-108 of 1996 is as follows:

Log_e (P) = $A_o + A_1 \log_e$ (EI) where
P = Number of vehicles of any particular category
EI = Economic indicator such as NSDP, Per Capita Income or population.
A_o = a constant
A_1 = a Co-efficient (Elasticity Value)

Due to non-availability of the required data in a definitive manner in the concerned departments, no relevant data could be collected so as to fulfill the requirement of traffic forecast. So this method could not be used in the current forecast.

- **Future Traffic Growth Rate:**

The traffic forecast is developed in three components:

i. Normal growth in traffic
ii. Diverted traffic
iii. Induced traffic.

The normal growth in traffic conceptually corresponds to the historical growth of traffic without taking any capital investment in the project road. For determining the normal growth in traffic, a study of past trends in traffic growth is undertaken. However, the traffic growth rate established for this study are based on elasticity approach, wherein a relationship is established between past traffic volume data and socio-economic indicators. In absence of time series data on classified traffic, vehicle registration data has been used for determining transport demand elasticity.

Normal Traffic

The normal traffic is the base traffic currently moving on the project road section and will continue to use the project road section, even if it is not improved. Its forecast requires an assessment of the current and projected rates of traffic growth in the absence of road improvement.

Induced Traffic

In addition to normal growth of traffic, the improvement of highway would tend to induce traffic generation. The induced traffic is a function of price elasticity. Freight and passenger vehicles are sensitive to reduction in journey costs. For passengers the lower costs encourage more trips for both business and personal reasons. Lower costs enlarge the market for both intermediate and finished goods.

The NH 54 was constructed to provide connectivity between two the Southern District of Mizoram and also serve International trade road between India & Myanmar via Multi Model transit route .The freight transport in the region will increase multifold and the socio-economic activities improve in the project road influence area.
Due to insufficient data and inconsistency of the available data the consultant has adopted the growth rate of **7.5%** as per the Indian Road Congress (IRC: SP: 48-1998).

Traffic Projections:

The projected traffic up to the year 2034 using the composite growth rates of vehicles are given in Table.

Projected Traffic upto the year 2034

Station No.	Base Year Traffic 2009	Traffic Forecast				
	(PCU)	2014.0	2019.0	2024.0	2029.0	2034.0
1	794	1141	1639	2353	3379	4851
2	839	1205	1730	2484	3567	5121
3	852	1224	1758	2524	3624	5203

4.6 DESIGN OF LANES:

Capacity analysis is fundamental to the planning, design and operation of roads and provides among other things the basis for determining the carriageway width to be provided at any point in a road network with respect to the volume and composition of traffic. It is also a valuable tool for evaluation of the investments needed for future road construction and improvements and for working out priorities between competing Projects. The NH road has been considered for two lanes.

- Therefore, No of commercial vehicles per day for design taking into consideration 7.5% per annum growth rate and a pavement life of 15 years
- After 15 years design life PCU per day : 5203
- Design road capacity (Service volume) for hill road for high curvature (above 200 degrees per Km) for two lane ,greater than 4500 PCU
- Hence existing road need to upgrade for two lane standard

4.7 CVD FOR DESIGN OF PAVEMENT

As per traffic count survey, average commercial vehicle per day (CVD) works out to 180. Traffic intensity is too low on this existing road due to bad gradient and road geometric. The existing road being developed to National Highway Double lane Standard On completion of this project road, the connectivity with two Southern District Headquarter, state capital Aizawl and along with Indo Myanmar via Multi Model transit route will improved .It will serve one of the major International trade routes between India and Myanmar for economically and culturally and traffic of all kinds will increase many fold. In view of the low intensity of traffic at present scenario, the traffic intensity of 180 numbers for commercial vehicles per day has been considered. Traffic intensity CVD 180 has been considered for pavement design.

State : Sikkim | **District : South**
Direction : Km 0 towards Km 16 DAILY TRAFFIC | **Road : Singtam to Tarku** | **Additional Information**
Section From: Km 0 to Km 16 | **Station no.: Tark** | **Weather: Fair**
Date :11.10.2009 | **Hour : 24 (7 Days)**

Time		FAST MOVING VEHICLES											NON MOTORISED TRAFFIC								
From	To	Cars/Jeep/Vans	3 Wheeler/Auto Rickshaw	Two Wheelers	Mini Bus	Full Bus	LCV	Truck 2-Axle	Multi Axle Truck	Tractor	Tractor with Trailor	Total MT	Cycle	Cycle Rickshaw	Hand Cart	Horse Cart	Bullock Cart	Others	TOTAL NMT	TOTAL VEHICLES	Total PCU
5.00	6.00	1	0	2	0	0	1	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**3.5**
6.00	7.00	4	0	5	0	0	2	3	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**18.5**
7.00	8.00	7	0	3	0	0	4	2	0	2	0	**18**	0	0	0	0	0	0	**0**	**18**	**26.5**
8.00	9.00	11	0	7	0	0	4	1	0	0	0	**23**	0	0	0	0	0	0	**0**	**23**	**23.5**
9.00	10.00	16	0	4	3	2	0	1	0	1	0	**27**	0	0	0	0	0	0	**0**	**27**	**34.5**
10.00	11.00	13	0	1	2	0	1	2	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**24**
11.00	12.00	5	0	3	1	0	0	2	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**14**
12.00	13.00	24	0	1	1	0	0	2	0	0	0	**28**	0	0	0	0	0	0	**0**	**28**	**32**
13.00	14.00	12	0	6	2	1	0	1	0	1	0	**23**	0	0	0	0	0	0	**0**	**23**	**27**
14.00	15.00	6	0	2	1	1	1	0	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**13**
15.00	16.00	9	0	1	0	1	2	2	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**21.5**
16.00	17.00	7	0	3	1	2	0	2	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**22**
17.00	18.00	9	0	1	0	1	2	1	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**18.5**
18.00	19.00	1	0	0	1	1	1	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**7**
19.00	20.00	2	0	5	1	0	3	5	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**25.5**
20.00	21.00	0	0	0	1	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1.5**
21.00	22.00	0	0	0	0	0	0	2	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**6**
22.00	23.00	0	0	0	0	0	0	2	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**6**
23.00	24.00	0	0	0	0	0	0	1	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**3**
0.00	1.00	0	0	0	0	0	0	2	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**6**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	1	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1.5**
4.00	5.00	1	0	0	0	1	1	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**5.5**
TOTAL		**128**	**0**	**44**	**14**	**10**	**23**	**31**	**0**	**4**	**0**	**254**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**254**	**340.5**

State	**: Sikkim**						**District**	**: South**													
Direction	**: Km 0 towards Km 16 DAILY TRAFFIC**						**Road**	**: Singtam to Tarku**				**Additional Information**									
Section From: Km 0 to Km 16							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:12.10.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Van**	**3 Wheeler/A**	**Two Wheeler**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	3	0	4	0	0	0	0	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**5**
6.00	7.00	9	0	7	1	2	1	2	0	1	0	**23**	0	0	0	0	0	0	**0**	**23**	**30.5**
7.00	8.00	14	0	16	2	4	2	0	0	0	0	**38**	0	0	0	0	0	0	**0**	**38**	**40**
8.00	9.00	16	0	12	0	3	1	0	0	0	0	**32**	0	0	0	0	0	0	**0**	**32**	**32.5**
9.00	10.00	23	0	4	3	5	1	3	0	2	0	**41**	0	0	0	0	0	0	**0**	**41**	**61**
10.00	11.00	15	0	8	2	2	2	0	0	0	0	**29**	0	0	0	0	0	0	**0**	**29**	**31**
11.00	12.00	11	0	13	1	0	2	0	0	0	0	**27**	0	0	0	0	0	0	**0**	**27**	**22**
12.00	13.00	7	0	4	1	0	1	1	0	1	0	**15**	0	0	0	0	0	0	**0**	**15**	**18**
13.00	14.00	25	0	1	1	1	0	0	0	0	0	**28**	0	0	0	0	0	0	**0**	**28**	**30**
14.00	15.00	7	0	6	1	2	2	2	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**26.5**
15.00	16.00	8	0	17	2	0	3	1	0	0	0	**31**	0	0	0	0	0	0	**0**	**31**	**27**
16.00	17.00	10	0	12	0	1	1	0	0	0	0	**24**	0	0	0	0	0	0	**0**	**24**	**20.5**
17.00	18.00	9	0	4	1	0	1	3	0	0	0	**18**	0	0	0	0	0	0	**0**	**18**	**23**
18.00	19.00	5	0	0	0	1	2	4	0	0	0	**12**	0	0	0	0	0	0	**0**	**12**	**23**
19.00	20.00	11	0	2	0	0	1	0	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**13.5**
20.00	21.00	3	0	0	0	0	0	4	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**15**
21.00	22.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
22.00	23.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
23.00	24.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	1	1	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**4.5**
4.00	5.00	0	0	0	0	1	0	1	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**6**
TOTAL		**177**	**0**	**110**	**15**	**22**	**21**	**22**	**0**	**4**	**0**	**371**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**371**	**430**

State	**: Sikkim**						**District**	**: South**													
Direction	**: Km 0 towards Km 16 DAILY TRAFFIC**						**Road**	**: Singtam to Tarku**				**Additional Information**									
Section From: Km 0 to Km 16							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:13.10.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Van**	**3 Wheeler/A**	**Two Wheeler**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	1	0	3	0	0	0	1	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**5.5**
6.00	7.00	9	0	6	0	2	2	2	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**27**
7.00	8.00	17	0	11	1	2	0	1	0	0	0	**32**	0	0	0	0	0	0	**0**	**32**	**33**
8.00	9.00	13	0	8	0	1	2	1	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**26**
9.00	10.00	9	0	6	1	0	1	0	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**15**
10.00	11.00	21	0	9	0	2	2	2	0	0	0	**36**	0	0	0	0	0	0	**0**	**36**	**40.5**
11.00	12.00	4	0	11	1	0	2	2	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**20**
12.00	13.00	11	0	3	0	2	2	3	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**30.5**
13.00	14.00	25	0	4	2	3	1	1	0	0	0	**36**	0	0	0	0	0	0	**0**	**36**	**43.5**
14.00	15.00	13	0	2	1	1	0	2	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**24.5**
15.00	16.00	11	0	1	0	3	0	1	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**23.5**
16.00	17.00	6	0	3	1	2	2	1	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**21**
17.00	18.00	5	0	4	0	0	0	1	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**10**
18.00	19.00	4	0	2	1	0	2	0	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**9.5**
19.00	20.00	2	0	0	0	1	0	2	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**11**
20.00	21.00	5	0	2	0	0	2	0	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**9**
21.00	22.00	9	0	1	0	0	0	1	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**12.5**
22.00	23.00	1	0	1	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**1.5**
23.00	24.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	3	0	0	1	1	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**6**
4.00	5.00	1	0	1	0	1	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**4.5**
TOTAL		**168**	**0**	**81**	**8**	**20**	**19**	**22**	**0**	**0**	**0**	**318**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**318**	**375**

State	**: Sikkim**							**District**	**: South**												
Direction	**: Km 0 towards Km 16 DAILY TRAFFIC**							**Road**	**: Singtam to Tarku**				**Additional Information**								
Section From: Km 0 to Km 16								**Station no.: 1**					**Weather:**	**Fair**							
Date	**:14.10.2009**							**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Vans**	**3 Wheeler/Auto Ricshaw**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailor**	**Total MT**	**Cycle**	**Cycle Rickshaw**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLES**	**Total PCU**
5.00	6.00	6	0	3	0	0	2	0	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**10.5**
6.00	7.00	9	0	4	0	1	0	0	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**14**
7.00	8.00	13	0	5	1	0	3	0	0	1	0	**23**	0	0	0	0	0	0	**0**	**23**	**24.5**
8.00	9.00	15	0	7	3	2	4	2	0	0	0	**33**	0	0	0	0	0	0	**0**	**33**	**41**
9.00	10.00	27	0	12	1	2	0	0	0	2	0	**44**	0	0	0	0	0	0	**0**	**44**	**46.5**
10.00	11.00	9	0	6	2	2	5	0	0	0	0	**24**	0	0	0	0	0	0	**0**	**24**	**28.5**
11.00	12.00	7	0	9	0	1	0	1	0	0	0	**18**	0	0	0	0	0	0	**0**	**18**	**17.5**
12.00	13.00	11	0	1	1	0	4	0	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**19**
13.00	14.00	12	0	8	0	2	3	0	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**26.5**
14.00	15.00	10	0	5	1	1	1	2	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**24.5**
15.00	16.00	9	0	2	1	3	2	3	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**32.5**
16.00	17.00	2	0	7	0	4	1	0	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**19**
17.00	18.00	13	0	3	2	1	0	1	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**23.5**
18.00	19.00	3	0	2	0	2	0	0	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**10**
19.00	20.00	7	0	0	0	0	1	2	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**14.5**
20.00	21.00	10	0	1	0	0	0	0	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**10.5**
21.00	22.00	3	0	0	0	0	1	3	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**13.5**
22.00	23.00	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**0.5**
23.00	24.00	0	0	0	0	0	0	3	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**9**
0.00	1.00	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**0.5**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	1	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1.5**
4.00	5.00	0	0	1	0	0	1	1	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**5**
TOTAL		**166**	**0**	**78**	**13**	**21**	**28**	**18**	**0**	**3**	**0**	**327**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**327**	**392.5**

State	**: Sikkim**						**District**	**: South**													
Direction	**: Km 0 towards Km 16 DAILY TRAFFIC**						**Road**	**: Singtam to Tarku**				**Additional Information**									
Section From: Km 0 to Km 16							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:15.10.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Van**	**3 Wheeler/A**	**Two Wheeler**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	3	0	4	1	0	0	0	0	0	0	**8**	0	0	0	0	0	0	**0**	**8**	**6.5**
6.00	7.00	11	0	5	2	2	2	1	0	0	0	**23**	0	0	0	0	0	0	**0**	**23**	**28.5**
7.00	8.00	12	0	6	1	2	0	0	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**22.5**
8.00	9.00	19	0	0	3	3	1	2	0	0	0	**28**	0	0	0	0	0	0	**0**	**28**	**40**
9.00	10.00	9	0	2	2	0	0	0	0	0	0	**13**	0	0	0	0	0	0	**0**	**13**	**13**
10.00	11.00	13	0	1	3	1	3	2	0	0	0	**23**	0	0	0	0	0	0	**0**	**23**	**31.5**
11.00	12.00	4	0	5	2	0	0	0	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**9.5**
12.00	13.00	16	0	7	0	2	1	1	0	0	0	**27**	0	0	0	0	0	0	**0**	**27**	**30**
13.00	14.00	6	0	3	2	1	0	2	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**19.5**
14.00	15.00	7	0	7	2	1	2	1	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**22.5**
15.00	16.00	12	0	1	1	0	1	2	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**21.5**
16.00	17.00	3	0	9	0	1	1	1	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**15**
17.00	18.00	9	0	4	0	0	2	0	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**14**
18.00	19.00	6	0	1	0	2	1	0	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**14**
19.00	20.00	3	0	0	0	0	0	3	0	0	0	**6**	0	0	0	0	0	0	**0**	**6**	**12**
20.00	21.00	7	0	2	1	1	1	0	0	0	0	**12**	0	0	0	0	0	0	**0**	**12**	**14**
21.00	22.00	3	0	0	0	1	0	2	0	0	0	**6**	0	0	0	0	0	0	**0**	**6**	**12**
22.00	23.00	2	0	1	0	0	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**2.5**
23.00	24.00	1	0	0	0	2	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**7**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
4.00	5.00	0	0	0	2	0	0	1	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**6**
TOTAL		**146**	**0**	**58**	**22**	**19**	**15**	**18**	**0**	**0**	**0**	**278**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**278**	**341.5**

State	**: Sikkim**							**District**	**: South**												
Direction	**: Km 0 towards Km 16 DAILY TRAFFIC**							**Road**	**: Singtam to Tarku**						**Additional Information**						
Section From: Km 0 to Km 16								**Station no.: 1**							**Weather:**	**Fair**					
Date	**:16.10.2009**							**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Van**	**3 Wheeler/Auto**	**Two Wheeler**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailer**	**Total MT**	**Cycle**	**Cycle Rickshaw**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLES**	**Total PCU**
5.00	6.00	3	0	2	0	0	2	0	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**7**
6.00	7.00	10	0	6	1	2	1	1	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**25**
7.00	8.00	15	0	3	2	2	1	2	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**33**
8.00	9.00	16	0	7	0	1	2	3	0	0	0	**29**	0	0	0	0	0	0	**0**	**29**	**34.5**
9.00	10.00	17	0	9	1	2	1	0	0	0	0	**30**	0	0	0	0	0	0	**0**	**30**	**30.5**
10.00	11.00	19	0	7	2	1	2	2	0	0	0	**33**	0	0	0	0	0	0	**0**	**33**	**37.5**
11.00	12.00	11	0	3	2	2	0	0	0	0	0	**18**	0	0	0	0	0	0	**0**	**18**	**21.5**
12.00	13.00	13	0	9	2	2	2	0	0	0	0	**28**	0	0	0	0	0	0	**0**	**28**	**29.5**
13.00	14.00	6	0	3	3	0	1	3	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**22.5**
14.00	15.00	4	0	2	1	2	1	1	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**17**
15.00	16.00	11	0	1	2	2	1	0	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**22**
16.00	17.00	3	0	7	0	2	1	0	0	0	0	**13**	0	0	0	0	0	0	**0**	**13**	**14**
17.00	18.00	4	0	6	2	2	2	0	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**19**
18.00	19.00	8	0	1	3	1	0	2	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**22**
19.00	20.00	1	0	4	4	0	0	1	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**12**
20.00	21.00	6	0	0	0	2	1	1	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**16.5**
21.00	22.00	4	0	1	1	3	0	2	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**21**
22.00	23.00	3	0	0	0	0	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**3**
23.00	24.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
0.00	1.00	2	0	0	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**2**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	0	2	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**6**
4.00	5.00	0	0	0	0	1	0	3	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**12**
TOTAL		**156**	**0**	**71**	**26**	**27**	**18**	**23**	**0**	**0**	**0**	**321**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**321**	**407.5**

State	**: Sikkim**						**District**	**: South**													
Direction	**: Km 0 towards Km 16 DAILY TRAFFIC**						**Road**	**: Singtam to Tarku**				**Additional Information**									
Section From: Km 0 to Km 16							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:17.10.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Van**	**3 Wheeler/A**	**Two Wheeler**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	6	0	0	2	0	0	1	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**12**
6.00	7.00	9	0	1	2	1	2	0	0	2	0	**17**	0	0	0	0	0	0	**0**	**17**	**24.5**
7.00	8.00	23	0	0	2	4	3	2	0	0	0	**34**	0	0	0	0	0	0	**0**	**34**	**48.5**
8.00	9.00	8	0	2	3	3	5	3	0	2	0	**26**	0	0	0	0	0	0	**0**	**26**	**45**
9.00	10.00	4	0	3	2	5	2	1	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**29.5**
10.00	11.00	12	0	0	2	2	4	2	0	0	0	**22**	0	0	0	0	0	0	**0**	**22**	**33**
11.00	12.00	6	0	1	2	3	6	2	0	3	0	**23**	0	0	0	0	0	0	**0**	**23**	**42.5**
12.00	13.00	18	0	4	3	1	1	1	0	2	0	**30**	0	0	0	0	0	0	**0**	**30**	**38**
13.00	14.00	12	0	5	2	3	2	1	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**32.5**
14.00	15.00	17	0	3	3	2	2	2	0	1	0	**30**	0	0	0	0	0	0	**0**	**30**	**41**
15.00	16.00	22	0	1	2	7	1	1	0	0	0	**34**	0	0	0	0	0	0	**0**	**34**	**51**
16.00	17.00	7	0	0	3	2	4	3	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**32.5**
17.00	18.00	11	0	3	3	2	3	3	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**36.5**
18.00	19.00	6	0	2	5	2	2	2	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**29.5**
19.00	20.00	4	0	0	1	1	2	2	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**17.5**
20.00	21.00	0	0	0	1	1	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**4.5**
21.00	22.00	2	0	1	0	0	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**2.5**
22.00	23.00	1	0	0	0	0	0	1	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**4**
23.00	24.00	0	0	2	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**1**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	1	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**3**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	1	0	0	1	0	**2**	0	0	0	0	0	0	**0**	**2**	**4.5**
4.00	5.00	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**0.5**
TOTAL		**168**	**0**	**29**	**38**	**39**	**40**	**28**	**0**	**11**	**0**	**353**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**353**	**533.5**

State : Sikkim | **District : South**
Direction : Km 16 towards Km 0 DAILY TRAFFIC | **Road : Singtam to Tarku** | **Additional Information**
Section From: Km 0 to Km 16 | **Station no.: Tark** | **Weather: Fair**
Date :11.10.2009 | **Hour : 24 (7 Days)**

Time		FAST MOVING VEHICLES											NON MOTORISED TRAFFIC								
From	To	Cars/Jeep/Vans	3 Wheeler/Auto Rickshaw	Two Wheelers	Mini Bus	Full Bus	LCV	Truck 2-Axle	Multi Axle Truck	Tractor	Tractor with Trailor	Total MT	Cycle	Cycle Rickshaw	Hand Cart	Horse Cart	Bullock Cart	Others	TOTAL NMT	TOTAL VEHICLES	Total PCU
5.00	6.00	3	0	1	0	0	0	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**5**
6.00	7.00	11	1	4	1	1	1	1	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**26**
7.00	8.00	14	2	7	0	3	2	1	0	0	0	**29**	0	0	0	0	0	0	**0**	**29**	**37.5**
8.00	9.00	22	2	5	2	1	1	0	0	0	0	**33**	0	0	0	0	0	0	**0**	**33**	**35.5**
9.00	10.00	26	6	11	2	2	2	2	0	1	0	**52**	0	0	0	0	0	0	**0**	**52**	**54**
10.00	11.00	18	4	5	0	0	0	0	0	0	0	**27**	0	0	0	0	0	0	**0**	**27**	**35**
11.00	12.00	9	1	4	0	2	1	0	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**19.5**
12.00	13.00	6	0	3	2	3	3	4	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**15**
13.00	14.00	22	0	4	2	1	2	1	0	0	0	**32**	0	0	0	0	0	0	**0**	**32**	**36**
14.00	15.00	24	1	9	1	2	2	0	0	0	0	**39**	0	0	0	0	0	0	**0**	**39**	**35.5**
15.00	16.00	11	3	7	1	2	1	2	0	0	0	**27**	0	0	0	0	0	0	**0**	**27**	**29.5**
16.00	17.00	6	6	5	1	1	2	1	0	0	0	**22**	0	0	0	0	0	0	**0**	**22**	**28**
17.00	18.00	4	1	12	1	2	1	2	0	0	0	**23**	0	0	0	0	0	0	**0**	**23**	**20**
18.00	19.00	1	1	4	0	1	1	1	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**10**
19.00	20.00	6	0	1	1	0	1	0	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**27.5**
20.00	21.00	1	1	1	0	0	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**4**
21.00	22.00	3	0	0	0	0	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**9**
22.00	23.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**7**
23.00	24.00	0	1	2	0	0	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**5**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**6**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	1	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1.5**
4.00	5.00	1	1	2	1	1	3	0	0	1	0	**10**	0	0	0	0	0	0	**0**	**10**	**7.5**
TOTAL		**189**	**31**	**87**	**15**	**22**	**24**	**15**	**0**	**2**	**0**	**385**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**385**	**454**

State	**: Sikkim**							**District**	**: South**												
Direction	**: Km 16 towards Km 0 DAILY TRAFFIC**							**Road**	**: Singtam to Tarku**					**Additional Information**							
Section From: Km 0 to Km 16								**Station no.: 1**						**Weather:**	**Fair**						
Date	**:12.10.2009**							**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	12	1	2	0	0	2	0	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**14**
6.00	7.00	3	0	5	0	0	4	0	0	0	0	**12**	0	0	0	0	0	0	**0**	**12**	**23.5**
7.00	8.00	16	3	4	1	1	1	0	0	0	0	**26**	0	0	0	0	0	0	**0**	**26**	**39**
8.00	9.00	13	4	7	2	2	3	1	0	0	0	**32**	0	0	0	0	0	0	**0**	**32**	**31**
9.00	10.00	12	0	11	1	2	2	1	0	0	0	**29**	0	0	0	0	0	0	**0**	**29**	**53.5**
10.00	11.00	8	1	4	2	0	1	0	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**23**
11.00	12.00	14	0	2	0	1	1	0	0	1	0	**19**	0	0	0	0	0	0	**0**	**19**	**19.5**
12.00	13.00	15	0	1	0	0	0	0	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**24.5**
13.00	14.00	12	2	2	0	0	0	1	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**19.5**
14.00	15.00	7	7	6	0	2	4	0	0	0	0	**26**	0	0	0	0	0	0	**0**	**26**	**33.5**
15.00	16.00	17	0	1	1	0	0	0	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**28**
16.00	17.00	11	0	10	1	1	0	0	0	0	0	**23**	0	0	0	0	0	0	**0**	**23**	**20.5**
17.00	18.00	6	0	6	0	0	1	0	0	0	0	**13**	0	0	0	0	0	0	**0**	**13**	**21**
18.00	19.00	3	0	1	0	0	0	1	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**21.5**
19.00	20.00	9	2	4	1	0	2	0	0	0	0	**18**	0	0	0	0	0	0	**0**	**18**	**14.5**
20.00	21.00	7	0	3	0	0	1	0	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**20.5**
21.00	22.00	6	0	2	0	1	0	0	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**7**
22.00	23.00	2	0	1	0	0	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**2.5**
23.00	24.00	4	0	0	0	0	0	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**4**
0.00	1.00	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**0.5**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
3.00	4.00	0	1	1	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**6**
4.00	5.00	3	2	1	1	0	3	0	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**11.5**
TOTAL		**181**	**23**	**75**	**10**	**10**	**25**	**4**	**0**	**1**	**0**	**329**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**329**	**439.5**

State	**: Sikkim**							**District**	**: South**												
Direction	**: Km 16 towards Km 0 DAILY TRAFFIC**							**Road**	**: Singtam to Tarku**				**Additional Information**								
Section From: Km 0 to Km 16								**Station no.: 1**					**Weather:**	**Fair**							
Date	**:13.10.2009**							**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	7	0	4	0	0	1	0	0	0	0	**12**	0	0	0	0	0	0	**0**	**12**	**12**
6.00	7.00	10	3	2	0	1	1	0	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**29**
7.00	8.00	17	5	3	1	0	2	1	0	0	0	**29**	0	0	0	0	0	0	**0**	**29**	**34**
8.00	9.00	29	1	1	2	2	3	1	0	2	0	**41**	0	0	0	0	0	0	**0**	**41**	**39.5**
9.00	10.00	17	2	12	0	0	2	0	0	0	0	**33**	0	0	0	0	0	0	**0**	**33**	**28**
10.00	11.00	9	0	6	1	1	0	0	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**27**
11.00	12.00	3	7	2	0	1	1	2	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**21.5**
12.00	13.00	7	1	1	0	1	2	0	0	0	0	**12**	0	0	0	0	0	0	**0**	**12**	**26.5**
13.00	14.00	16	0	3	0	0	1	1	0	1	0	**22**	0	0	0	0	0	0	**0**	**22**	**34**
14.00	15.00	23	3	7	0	0	3	0	0	0	0	**36**	0	0	0	0	0	0	**0**	**36**	**40**
15.00	16.00	31	2	11	1	0	1	0	0	0	0	**46**	0	0	0	0	0	0	**0**	**46**	**50.5**
16.00	17.00	17	3	5	0	0	2	0	0	0	0	**27**	0	0	0	0	0	0	**0**	**27**	**36**
17.00	18.00	8	0	2	1	1	0	1	0	0	0	**13**	0	0	0	0	0	0	**0**	**13**	**12**
18.00	19.00	6	5	1	1	0	1	2	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**16**
19.00	20.00	2	0	1	0	2	0	1	0	0	0	**6**	0	0	0	0	0	0	**0**	**6**	**11.5**
20.00	21.00	7	1	0	0	0	0	0	0	0	0	**8**	0	0	0	0	0	0	**0**	**8**	**11**
21.00	22.00	3	0	0	0	1	0	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**6**
22.00	23.00	1	0	1	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**1.5**
23.00	24.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
0.00	1.00	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**0.5**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	0	1	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**4.5**
4.00	5.00	7	1	1	0	0	0	1	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**11.5**
TOTAL		**221**	**34**	**64**	**7**	**10**	**20**	**11**	**0**	**3**	**0**	**370**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**370**	**453.5**

State : Sikkim **District : South**

Direction : Km 16 towards Km 0 DAILY TRAFFIC **Road : Singtam to Tarku** **Additional Information**

Section From: Km 0 to Km 16 **Station no.: 1** **Weather: Fair**

Date :14.10.2009 **Hour : 24 (7 Days)**

Time		FAST MOVING VEHICLES											NON MOTORISED TRAFFIC								
From	To	Cars/Jeep/Vans	3 Wheeler/Auto Rickshaw	Two Wheelers	Mini Bus	Full Bus	LCV	Truck 2-Axle	Multi Axle Truck	Tractor	Tractor with Trailor	Total MT	Cycle	Cycle Rickshaw	Hand Cart	Horse Cart	Bullock Cart	Others	TOTAL NMT	TOTAL VEHICLES	Total PCU
5.00	6.00	3	1	2	0	1	1	0	0	0	0	**8**	0	0	0	0	0	0	**0**	**8**	**8**
6.00	7.00	5	2	4	1	0	7	1	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**12**
7.00	8.00	8	3	9	2	2	4	2	0	0	0	**30**	0	0	0	0	0	0	**0**	**30**	**24.5**
8.00	9.00	11	7	7	1	1	3	3	0	1	0	**34**	0	0	0	0	0	0	**0**	**34**	**44**
9.00	10.00	21	1	12	3	3	2	1	0	0	0	**43**	0	0	0	0	0	0	**0**	**43**	**41.5**
10.00	11.00	6	2	5	1	1	1	2	0	0	0	**18**	0	0	0	0	0	0	**0**	**18**	**27**
11.00	12.00	7	1	4	3	3	3	1	0	0	0	**22**	0	0	0	0	0	0	**0**	**22**	**16**
12.00	13.00	18	3	3	1	3	2	3	0	1	0	**34**	0	0	0	0	0	0	**0**	**34**	**30**
13.00	14.00	14	1	2	2	2	1	0	0	0	0	**22**	0	0	0	0	0	0	**0**	**22**	**26.5**
14.00	15.00	12	0	11	2	2	1	2	0	0	0	**30**	0	0	0	0	0	0	**0**	**30**	**29.5**
15.00	16.00	9	1	8	1	3	3	1	0	0	0	**26**	0	0	0	0	0	0	**0**	**26**	**36.5**
16.00	17.00	5	4	3	1	1	2	1	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**24**
17.00	18.00	7	0	0	1	2	3	3	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**16**
18.00	19.00	3	0	2	3	3	2	3	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**10**
19.00	20.00	2	1	3	0	1	1	2	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**12**
20.00	21.00	1	0	0	0	0	0	1	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**1**
21.00	22.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**10.5**
22.00	23.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
23.00	24.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**10**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**1.5**
4.00	5.00	3	0	0	0	0	0	2	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**7.5**
TOTAL		**136**	**27**	**75**	**22**	**28**	**36**	**28**	**0**	**2**	**0**	**354**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**354**	**388**

State	**: Sikkim**							**District**	**: South**												
Direction	**: Km 16 towards Km 0 DAILY TRAFFIC**							**Road**	**: Singtam to Tarku**			**Additional Information**									
Section From: Km 0 to Km 16								**Station no.: 1**				**Weather:**	**Fair**								
Date	**:15.10.2009**							**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	1	2	1	0	0	1	1	0	0	0	**6**	0	0	0	0	0	0	**0**	**6**	**5**
6.00	7.00	7	3	3	1	2	4	0	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**26.5**
7.00	8.00	12	5	1	2	0	2	0	0	0	0	**22**	0	0	0	0	0	0	**0**	**22**	**25**
8.00	9.00	18	1	2	1	1	3	1	0	0	0	**27**	0	0	0	0	0	0	**0**	**27**	**41**
9.00	10.00	13	0	14	2	3	1	2	0	1	0	**36**	0	0	0	0	0	0	**0**	**36**	**23**
10.00	11.00	9	2	11	2	3	3	3	0	0	0	**33**	0	0	0	0	0	0	**0**	**33**	**34.5**
11.00	12.00	11	2	5	1	0	1	1	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**18.5**
12.00	13.00	5	0	2	2	2	3	3	0	1	0	**18**	0	0	0	0	0	0	**0**	**18**	**16.5**
13.00	14.00	7	1	1	2	3	2	1	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**20.5**
14.00	15.00	17	3	2	2	1	1	1	0	1	0	**28**	0	0	0	0	0	0	**0**	**28**	**33**
15.00	16.00	12	5	3	1	1	2	2	0	1	0	**27**	0	0	0	0	0	0	**0**	**27**	**27.5**
16.00	17.00	9	0	8	0	2	1	1	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**20.5**
17.00	18.00	3	2	1	0	0	3	2	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**8.5**
18.00	19.00	10	1	2	1	2	1	1	0	1	0	**19**	0	0	0	0	0	0	**0**	**19**	**19.5**
19.00	20.00	1	2	0	0	1	0	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**12**
20.00	21.00	1	0	1	0	2	0	1	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**7.5**
21.00	22.00	2	0	0	1	0	2	0	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**11**
22.00	23.00	6	0	0	0	1	0	0	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**6**
23.00	24.00	0	0	0	0	0	0	1	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**6**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	1	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**0**
4.00	5.00	0	0	0	0	1	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**6**
TOTAL		**144**	**29**	**57**	**18**	**25**	**31**	**21**	**0**	**5**	**0**	**330**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**330**	**368**

State : Sikkim | **District** : South

Direction : Km 16 towards Km 0 DAILY TRAFFIC | **Road** : Singtam to Tarku | **Additional Information**

Section From: Km 0 to Km 16 | **Station no.:** 1 | **Weather:** Fair

Date :16.10.2009 | **Hour** : 24 (7 Days)

Time		FAST MOVING VEHICLES											NON MOTORISED TRAFFIC								
From	To	Cars/Jeep/Vans	3 Wheeler/Auto Rickshaw	Two Wheelers	Mini Bus	Full Bus	LCV	Truck 2-Axle	Multi Axle Truck	Tractor	Tractor with Trailor	Total MT	Cycle	Cycle Rickshaw	Hand Cart	Horse Cart	Bullock Cart	Others	TOTAL NMT	TOTAL VEHICLES	Total PCU
5.00	6.00	5	0	3	1	0	0	0	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**9.5**
6.00	7.00	9	1	2	2	0	2	3	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**23**
7.00	8.00	12	5	4	0	3	0	0	0	1	0	**25**	0	0	0	0	0	0	**0**	**25**	**35.5**
8.00	9.00	21	3	7	0	4	0	2	0	0	0	**37**	0	0	0	0	0	0	**0**	**37**	**42.5**
9.00	10.00	9	1	9	2	0	1	0	0	0	0	**22**	0	0	0	0	0	0	**0**	**22**	**23.5**
10.00	11.00	6	2	5	3	1	0	1	0	1	0	**19**	0	0	0	0	0	0	**0**	**19**	**25.5**
11.00	12.00	4	0	1	2	3	0	3	0	0	0	**13**	0	0	0	0	0	0	**0**	**13**	**13.5**
12.00	13.00	16	1	6	1	0	3	2	0	1	0	**30**	0	0	0	0	0	0	**0**	**30**	**32**
13.00	14.00	13	1	3	0	4	1	0	0	0	0	**22**	0	0	0	0	0	0	**0**	**22**	**30.5**
14.00	15.00	9	0	9	1	2	0	1	0	2	0	**24**	0	0	0	0	0	0	**0**	**24**	**25.5**
15.00	16.00	17	0	7	0	2	1	0	0	0	0	**27**	0	0	0	0	0	0	**0**	**27**	**31**
16.00	17.00	3	2	2	0	1	2	0	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**13.5**
17.00	18.00	5	0	7	0	2	1	0	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**20.5**
18.00	19.00	1	0	3	2	1	1	0	0	0	0	**8**	0	0	0	0	0	0	**0**	**8**	**16**
19.00	20.00	3	1	1	1	0	0	0	0	0	0	**6**	0	0	0	0	0	0	**0**	**6**	**13.5**
20.00	21.00	5	0	0	0	0	0	0	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**15.5**
21.00	22.00	0	1	0	0	0	3	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**17.5**
22.00	23.00	2	0	0	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**2**
23.00	24.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**6**
4.00	5.00	0	0	0	1	0	0	1	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**12**
TOTAL		**141**	**18**	**69**	**16**	**23**	**15**	**13**	**0**	**5**	**0**	**300**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**300**	**409.5**

State	**: Sikkim**						**District**	**: South**												
Direction	**: Km 16 towards Km 0 DAILY TRAFFIC**						**Road**	**: Singtam to Tarku**				**Additional Information**								
Section From: Km 0 to Km 16							**Station no.: 1**					**Weather:**	**Fair**							
Date	**:17.10.2009**						**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**							
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	2	2	0	2	1	1	1	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**10**
6.00	7.00	8	1	1	2	1	1	3	0	1	0	**18**	0	0	0	0	0	0	**0**	**18**	**24.5**
7.00	8.00	17	3	4	2	3	2	1	0	0	0	**32**	0	0	0	0	0	0	**0**	**32**	**47.5**
8.00	9.00	26	8	3	2	1	2	2	0	0	0	**44**	0	0	0	0	0	0	**0**	**44**	**71.5**
9.00	10.00	16	1	7	3	2	2	0	0	2	0	**33**	0	0	0	0	0	0	**0**	**33**	**44.5**
10.00	11.00	14	1	3	2	1	3	1	0	1	0	**26**	0	0	0	0	0	0	**0**	**26**	**37.5**
11.00	12.00	22	0	1	1	2	2	2	0	0	0	**30**	0	0	0	0	0	0	**0**	**30**	**58.5**
12.00	13.00	4	5	2	2	2	3	0	0	2	0	**20**	0	0	0	0	0	0	**0**	**20**	**28**
13.00	14.00	21	1	6	1	2	2	2	0	2	0	**37**	0	0	0	0	0	0	**0**	**37**	**43**
14.00	15.00	17	0	2	2	1	3	0	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**40.5**
15.00	16.00	32	7	1	1	2	3	2	0	0	0	**48**	0	0	0	0	0	0	**0**	**48**	**68**
16.00	17.00	9	1	3	2	2	4	0	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**37**
17.00	18.00	11	4	1	2	1	2	2	0	0	0	**23**	0	0	0	0	0	0	**0**	**23**	**39.5**
18.00	19.00	5	0	2	2	2	2	2	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**28.5**
19.00	20.00	7	2	8	2	2	4	1	0	0	0	**26**	0	0	0	0	0	0	**0**	**26**	**26.5**
20.00	21.00	3	1	2	0	0	0	0	0	0	0	**6**	0	0	0	0	0	0	**0**	**6**	**9.5**
21.00	22.00	4	0	1	0	0	0	0	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**4.5**
22.00	23.00	1	0	0	0	0	0	2	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**4**
23.00	24.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**3**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	1	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**4.5**
4.00	5.00	1	0	1	0	0	2	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**1.5**
TOTAL		**220**	**37**	**48**	**28**	**25**	**39**	**21**	**0**	**8**	**0**	**426**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**426**	**632**

State : Sikkim | **District : South**
Direction : Daywise Traffic - Both Directions | **Road : Singtam to Tarku** | **Additional Information**
Section From: Km 0 to Km 16 | **Station no.: 1** | **Weather: Fair**
Date :11.10.2009 | **Hour : 24 (7 Days)**

Time		FAST MOVING VEHICLES											NON MOTORISED TRAFFIC								
From	To	Cars/Jeep/Vans	3 Wheeler/Auto	Two Wheelers	Mini Bus	Full Bus	LCV	Truck 2-Axle	Multi Axle Truck	Tractor	Tractor with Trailor	Total MT	Cycle	Cycle Rickshaw	Hand Cart	Horse Cart	Bullock Cart	Others	TOTAL NMT	TOTAL VEHICLES	Total PCU
5.00	6.00	4	0	3	0	0	1	0	0	0	0	8	0	0	0	0	0	0	0	8	8.5
6.00	7.00	15	1	9	1	1	3	4	0	0	0	34	0	0	0	0	0	0	0	34	44.5
7.00	8.00	21	2	10	0	3	6	3	0	2	0	47	0	0	0	0	0	0	0	47	64
8.00	9.00	33	2	12	2	1	5	1	0	0	0	56	0	0	0	0	0	0	0	56	59
9.00	10.00	42	6	15	5	4	2	3	0	2	0	79	0	0	0	0	0	0	0	79	88.5
10.00	11.00	31	4	6	2	0	1	2	0	0	0	46	0	0	0	0	0	0	0	46	59
11.00	12.00	14	1	7	1	2	1	2	0	0	0	28	0	0	0	0	0	0	0	28	33.5
12.00	13.00	30	0	4	3	3	3	6	0	0	0	49	0	0	0	0	0	0	0	49	47
13.00	14.00	34	0	10	4	2	2	2	0	1	0	55	0	0	0	0	0	0	0	55	63
14.00	15.00	30	1	11	2	3	3	0	0	0	0	50	0	0	0	0	0	0	0	50	48.5
15.00	16.00	20	3	8	1	3	3	4	0	0	0	42	0	0	0	0	0	0	0	42	51
16.00	17.00	13	6	8	2	3	2	3	0	0	0	37	0	0	0	0	0	0	0	37	50
17.00	18.00	13	1	13	1	3	3	3	0	0	0	37	0	0	0	0	0	0	0	37	38.5
18.00	19.00	2	1	4	1	2	2	1	0	0	0	13	0	0	0	0	0	0	0	13	17
19.00	20.00	8	0	6	2	0	4	5	0	0	0	25	0	0	0	0	0	0	0	25	53
20.00	21.00	1	1	1	1	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	5.5
21.00	22.00	3	0	0	0	0	0	2	0	0	0	5	0	0	0	0	0	0	0	5	15
22.00	23.00	1	0	0	0	0	0	2	0	0	0	3	0	0	0	0	0	0	0	3	13
23.00	24.00	0	1	2	0	0	0	1	0	0	0	4	0	0	0	0	0	0	0	4	8
0.00	1.00	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	2	12
1.00	2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.00	3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.00	4.00	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	2	3
4.00	5.00	2	1	2	1	2	4	0	0	1	0	13	0	0	0	0	0	0	0	13	13
TOTAL		317	31	131	29	32	47	46	0	6	0	639	0	0	0	0	0	0	0	639	794.5

State	**: Sikkim**						**Road**	**: Singtam to Tarku**													
Direction	**: Daywise Traffic - Both Directions**						**Road**	**: Singtam to Tarku**			**Additional Information**										
Section From: Km 0 to Km 16							**Station no.: 1**				**Weather: Fair**										
Date	**:12.10.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	15	1	6	0	0	2	0	0	0	0	24	0	0	0	0	0	0	0	24	19
6.00	7.00	12	0	12	1	2	5	2	0	1	0	35	0	0	0	0	0	0	0	35	54
7.00	8.00	30	3	20	3	5	3	0	0	0	0	64	0	0	0	0	0	0	0	64	79
8.00	9.00	29	4	19	2	5	4	1	0	0	0	64	0	0	0	0	0	0	0	64	63.5
9.00	10.00	35	0	15	4	7	3	4	0	2	0	70	0	0	0	0	0	0	0	70	114.5
10.00	11.00	23	1	12	4	2	3	0	0	0	0	45	0	0	0	0	0	0	0	45	54
11.00	12.00	25	0	15	1	1	3	0	0	1	0	46	0	0	0	0	0	0	0	46	41.5
12.00	13.00	22	0	5	1	0	1	1	0	1	0	31	0	0	0	0	0	0	0	31	42.5
13.00	14.00	37	2	3	1	1	0	1	0	0	0	45	0	0	0	0	0	0	0	45	49.5
14.00	15.00	14	7	12	1	4	6	2	0	0	0	46	0	0	0	0	0	0	0	46	60
15.00	16.00	25	0	18	3	0	3	1	0	0	0	50	0	0	0	0	0	0	0	50	55
16.00	17.00	21	0	22	1	2	1	0	0	0	0	47	0	0	0	0	0	0	0	47	41
17.00	18.00	15	0	10	1	0	2	3	0	0	0	31	0	0	0	0	0	0	0	31	44
18.00	19.00	8	0	1	0	1	2	5	0	0	0	17	0	0	0	0	0	0	0	17	44.5
19.00	20.00	20	2	6	1	0	3	0	0	0	0	32	0	0	0	0	0	0	0	32	28
20.00	21.00	10	0	3	0	0	1	4	0	0	0	18	0	0	0	0	0	0	0	18	35.5
21.00	22.00	7	0	2	0	1	0	0	0	0	0	10	0	0	0	0	0	0	0	10	8
22.00	23.00	2	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	2.5
23.00	24.00	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	4
0.00	1.00	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.5
1.00	2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.00	3.00	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
3.00	4.00	0	1	1	0	0	1	1	0	0	0	4	0	0	0	0	0	0	0	4	10.5
4.00	5.00	3	2	1	1	1	3	1	0	0	0	12	0	0	0	0	0	0	0	12	17.5
TOTAL		358	23	185	25	32	46	26	0	5	0	700	0	0	0	0	0	0	0	700	869.5

State	**: Sikkim**						**Road**	**: Singtam to Tarku**													
Direction	**: Daywise Traffic - Both Directions**						**Road**	**: Singtam to Tarku**				**Additional Information**									
Section From: Km 0 to Km 16							**Station no.: 1**					**Weather: Fair**									
Date	**:13.10.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	8	0	7	0	0	1	1	0	0	0	17	0	0	0	0	0	0	0	17	17.5
6.00	7.00	19	3	8	0	3	3	2	0	0	0	38	0	0	0	0	0	0	0	38	56
7.00	8.00	34	5	14	2	2	2	2	0	0	0	61	0	0	0	0	0	0	0	61	67
8.00	9.00	42	1	9	2	3	5	2	0	2	0	66	0	0	0	0	0	0	0	66	65.5
9.00	10.00	26	2	18	1	0	3	0	0	0	0	50	0	0	0	0	0	0	0	50	43
10.00	11.00	30	0	15	1	3	2	2	0	0	0	53	0	0	0	0	0	0	0	53	67.5
11.00	12.00	7	7	13	1	1	3	4	0	0	0	36	0	0	0	0	0	0	0	36	41.5
12.00	13.00	18	1	4	0	3	4	3	0	0	0	33	0	0	0	0	0	0	0	33	57
13.00	14.00	41	0	7	2	3	2	2	0	1	0	58	0	0	0	0	0	0	0	58	77.5
14.00	15.00	36	3	9	1	1	3	2	0	0	0	55	0	0	0	0	0	0	0	55	64.5
15.00	16.00	42	2	12	1	3	1	1	0	0	0	62	0	0	0	0	0	0	0	62	74
16.00	17.00	23	3	8	1	2	4	1	0	0	0	42	0	0	0	0	0	0	0	42	57
17.00	18.00	13	0	6	1	1	0	2	0	0	0	23	0	0	0	0	0	0	0	23	22
18.00	19.00	10	5	3	2	0	3	2	0	0	0	25	0	0	0	0	0	0	0	25	25.5
19.00	20.00	4	0	1	0	3	0	3	0	0	0	11	0	0	0	0	0	0	0	11	22.5
20.00	21.00	12	1	2	0	0	2	0	0	0	0	17	0	0	0	0	0	0	0	17	20
21.00	22.00	12	0	1	0	1	0	1	0	0	0	15	0	0	0	0	0	0	0	15	18.5
22.00	23.00	2	0	2	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	3
23.00	24.00	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
0.00	1.00	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.5
1.00	2.00	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
2.00	3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.00	4.00	0	0	3	0	0	1	2	0	0	0	6	0	0	0	0	0	0	0	6	10.5
4.00	5.00	8	1	2	0	1	0	1	0	0	0	13	0	0	0	0	0	0	0	13	16
TOTAL		389	34	145	15	30	39	33	0	3	0	688	0	0	0	0	0	0	0	688	828.5

State	**: Sikkim**						**Road**	**: Singtam to Tarku**													
Direction	**: Daywise Traffic - Both Directions**						**Road**	**: Singtam to Tarku**				**Additional Information**									
Section From: Km 0 to Km 16							**Station no.: 1**					**Weather: Fair**									
Date	**:14.10.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	9	1	5	0	1	3	0	0	0	0	19	0	0	0	0	0	0	0	19	18.5
6.00	7.00	14	2	8	1	1	7	1	0	0	0	34	0	0	0	0	0	0	0	34	26
7.00	8.00	21	3	14	3	2	7	2	0	1	0	53	0	0	0	0	0	0	0	53	49
8.00	9.00	26	7	14	4	3	7	5	0	1	0	67	0	0	0	0	0	0	0	67	85
9.00	10.00	48	1	24	4	5	2	1	0	2	0	87	0	0	0	0	0	0	0	87	88
10.00	11.00	15	2	11	3	3	6	2	0	0	0	42	0	0	0	0	0	0	0	42	55.5
11.00	12.00	14	1	13	3	4	3	2	0	0	0	40	0	0	0	0	0	0	0	40	33.5
12.00	13.00	29	3	4	2	3	6	3	0	1	0	51	0	0	0	0	0	0	0	51	49
13.00	14.00	26	1	10	2	4	4	0	0	0	0	47	0	0	0	0	0	0	0	47	53
14.00	15.00	22	0	16	3	3	2	4	0	0	0	50	0	0	0	0	0	0	0	50	54
15.00	16.00	18	1	10	2	6	5	4	0	0	0	46	0	0	0	0	0	0	0	46	69
16.00	17.00	7	4	10	1	5	3	1	0	0	0	31	0	0	0	0	0	0	0	31	43
17.00	18.00	20	0	3	3	3	3	4	0	0	0	36	0	0	0	0	0	0	0	36	39.5
18.00	19.00	6	0	4	3	5	2	3	0	0	0	23	0	0	0	0	0	0	0	23	20
19.00	20.00	9	1	3	0	1	2	4	0	0	0	20	0	0	0	0	0	0	0	20	26.5
20.00	21.00	11	0	1	0	0	0	1	0	0	0	13	0	0	0	0	0	0	0	13	11.5
21.00	22.00	3	0	0	0	0	1	3	0	0	0	7	0	0	0	0	0	0	0	7	24
22.00	23.00	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.5
23.00	24.00	1	0	0	0	0	0	3	0	0	0	4	0	0	0	0	0	0	0	4	19
0.00	1.00	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.5
1.00	2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.00	3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.00	4.00	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	3
4.00	5.00	3	0	1	0	0	1	3	0	0	0	8	0	0	0	0	0	0	0	8	12.5
TOTAL		302	27	153	35	49	64	46	0	5	0	681	0	0	0	0	0	0	0	681	780.5

State	**: Sikkim**						**Road**	**: Singtam to Tarku**													
Direction	**: Daywise Traffic - Both Directions**						**Road**	**: Singtam to Tarku**				**Additional Information**									
Section From: Km 0 to Km 16							**Station no.: 1**					**Weather: Fair**									
Date	**:15.10.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	4	2	5	1	0	1	1	0	0	0	14	0	0	0	0	0	0	0	14	11.5
6.00	7.00	18	3	8	3	4	6	1	0	0	0	43	0	0	0	0	0	0	0	43	55
7.00	8.00	24	5	7	3	2	2	0	0	0	0	43	0	0	0	0	0	0	0	43	47.5
8.00	9.00	37	1	2	4	4	4	3	0	0	0	55	0	0	0	0	0	0	0	55	81
9.00	10.00	22	0	16	4	3	1	2	0	1	0	49	0	0	0	0	0	0	0	49	36
10.00	11.00	22	2	12	5	4	6	5	0	0	0	56	0	0	0	0	0	0	0	56	66
11.00	12.00	15	2	10	3	0	1	1	0	0	0	32	0	0	0	0	0	0	0	32	28
12.00	13.00	21	0	9	2	4	4	4	0	1	0	45	0	0	0	0	0	0	0	45	46.5
13.00	14.00	13	1	4	4	4	2	3	0	0	0	31	0	0	0	0	0	0	0	31	40
14.00	15.00	24	3	9	4	2	3	2	0	1	0	48	0	0	0	0	0	0	0	48	55.5
15.00	16.00	24	5	4	2	1	3	4	0	1	0	44	0	0	0	0	0	0	0	44	49
16.00	17.00	12	0	17	0	3	2	2	0	0	0	36	0	0	0	0	0	0	0	36	35.5
17.00	18.00	12	2	5	0	0	5	2	0	0	0	26	0	0	0	0	0	0	0	26	22.5
18.00	19.00	16	1	3	1	4	2	1	0	1	0	29	0	0	0	0	0	0	0	29	33.5
19.00	20.00	4	2	0	0	1	0	3	0	0	0	10	0	0	0	0	0	0	0	10	24
20.00	21.00	8	0	3	1	3	1	1	0	0	0	17	0	0	0	0	0	0	0	17	21.5
21.00	22.00	5	0	0	1	1	2	2	0	0	0	11	0	0	0	0	0	0	0	11	23
22.00	23.00	8	0	1	0	1	0	0	0	0	0	10	0	0	0	0	0	0	0	10	8.5
23.00	24.00	1	0	0	0	2	0	1	0	0	0	4	0	0	0	0	0	0	0	4	13
0.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.00	2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.00	3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.00	4.00	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4.00	5.00	0	0	0	2	1	0	1	0	0	0	4	0	0	0	0	0	0	0	4	12
TOTAL		290	29	115	40	44	46	39	0	5	0	608	0	0	0	0	0	0	0	608	709.5

State	**: Sikkim**						**Road**	**: Singtam to Tarku**													
Direction	**: Daywise Traffic - Both Directions**						**Road**	**: Singtam to Tarku**				**Additional Information**									
Section From: Km 0 to Km 16							**Station no.: 1**					**Weather: Fair**									
Date	**:16.10.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	8	0	5	1	0	2	0	0	0	0	16	0	0	0	0	0	0	0	16	16.5
6.00	7.00	19	1	8	3	2	3	4	0	0	0	40	0	0	0	0	0	0	0	40	48
7.00	8.00	27	5	7	2	5	1	2	0	1	0	50	0	0	0	0	0	0	0	50	68.5
8.00	9.00	37	3	14	0	5	2	5	0	0	0	66	0	0	0	0	0	0	0	66	77
9.00	10.00	26	1	18	3	2	2	0	0	0	0	52	0	0	0	0	0	0	0	52	54
10.00	11.00	25	2	12	5	2	2	3	0	1	0	52	0	0	0	0	0	0	0	52	63
11.00	12.00	15	0	4	4	5	0	3	0	0	0	31	0	0	0	0	0	0	0	31	35
12.00	13.00	29	1	15	3	2	5	2	0	1	0	58	0	0	0	0	0	0	0	58	61.5
13.00	14.00	19	1	6	3	4	2	3	0	0	0	38	0	0	0	0	0	0	0	38	53
14.00	15.00	13	0	11	2	4	1	2	0	2	0	35	0	0	0	0	0	0	0	35	42.5
15.00	16.00	28	0	8	2	4	2	0	0	0	0	44	0	0	0	0	0	0	0	44	53
16.00	17.00	6	2	9	0	3	3	0	0	0	0	23	0	0	0	0	0	0	0	23	27.5
17.00	18.00	9	0	13	2	4	3	0	0	0	0	31	0	0	0	0	0	0	0	31	39.5
18.00	19.00	9	0	4	5	2	1	2	0	0	0	23	0	0	0	0	0	0	0	23	38
19.00	20.00	4	1	5	5	0	0	1	0	0	0	16	0	0	0	0	0	0	0	16	25.5
20.00	21.00	11	0	0	0	2	1	1	0	0	0	15	0	0	0	0	0	0	0	15	32
21.00	22.00	4	1	1	1	3	3	2	0	0	0	15	0	0	0	0	0	0	0	15	38.5
22.00	23.00	5	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	5
23.00	24.00	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
0.00	1.00	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2
1.00	2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.00	3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.00	4.00	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	2	12
4.00	5.00	0	0	0	1	1	0	4	0	0	0	6	0	0	0	0	0	0	0	6	24
TOTAL		297	18	140	42	50	33	36	0	5	0	621	0	0	0	0	0	0	0	621	817

State	**: Sikkim**							**Road**	**: Singtam to Tarku**												
Direction	**: Daywise Traffic - Both Directions**							**Road**	**: Singtam to Tarku**			**Additional Information**									
Section From: Km 0 to Km 16								**Station no.: 1**				**Weather: Fair**									
Date	**:17.10.2009**							**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	8	2	0	4	1	1	2	0	0	0	18	0	0	0	0	0	0	0	18	22
6.00	7.00	17	1	2	4	2	3	3	0	3	0	35	0	0	0	0	0	0	0	35	49
7.00	8.00	40	3	4	4	7	5	3	0	0	0	66	0	0	0	0	0	0	0	66	96
8.00	9.00	34	8	5	5	4	7	5	0	2	0	70	0	0	0	0	0	0	0	70	116.5
9.00	10.00	20	1	10	5	7	4	1	0	2	0	50	0	0	0	0	0	0	0	50	74
10.00	11.00	26	1	3	4	3	7	3	0	1	0	48	0	0	0	0	0	0	0	48	70.5
11.00	12.00	28	0	2	3	5	8	4	0	3	0	53	0	0	0	0	0	0	0	53	101
12.00	13.00	22	5	6	5	3	4	1	0	4	0	50	0	0	0	0	0	0	0	50	66
13.00	14.00	33	1	11	3	5	4	3	0	2	0	62	0	0	0	0	0	0	0	62	75.5
14.00	15.00	34	0	5	5	3	5	2	0	1	0	55	0	0	0	0	0	0	0	55	81.5
15.00	16.00	54	7	2	3	9	4	3	0	0	0	82	0	0	0	0	0	0	0	82	119
16.00	17.00	16	1	3	5	4	8	3	0	0	0	40	0	0	0	0	0	0	0	40	69.5
17.00	18.00	22	4	4	5	3	5	5	0	0	0	48	0	0	0	0	0	0	0	48	76
18.00	19.00	11	0	4	7	4	4	4	0	0	0	34	0	0	0	0	0	0	0	34	58
19.00	20.00	11	2	8	3	3	6	3	0	0	0	36	0	0	0	0	0	0	0	36	44
20.00	21.00	3	1	2	1	1	0	0	0	0	0	8	0	0	0	0	0	0	0	8	14
21.00	22.00	6	0	2	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8	7
22.00	23.00	2	0	0	0	0	0	3	0	0	0	5	0	0	0	0	0	0	0	5	8
23.00	24.00	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	1
0.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.00	2.00	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	6
2.00	3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.00	4.00	0	0	0	0	0	2	0	0	1	0	3	0	0	0	0	0	0	0	3	9
4.00	5.00	1	0	2	0	0	2	0	0	0	0	5	0	0	0	0	0	0	0	5	2
TOTAL		388	37	77	66	64	79	49	0	19	0	779	0	0	0	0	0	0	0	779	1165.5

State : Sikkim **District : South**
Direction : Hourly 7 days Average Both Direction **Road : Singtam to Tarku** **Additional Information**
Section From: Km 0 to Km 16 **Station no.: 1** **Weather: Fair**
Date :11.10.2009 TO 17.10.2009 **Hour : 24 (7 Days)**

Time		FAST MOVING VEHICLES											NON MOTORISED TRAFFIC								
From	To	Cars/Jeep/Vans	3 Wheeler/Auto Ricshaw	Two Wheelers	Mini Bus	Full Bus	LCV	Truck 2-Axle	Multi Axle Truck	Tractor	Tractor with Trailor	Total MT	Cycle	Cycle Rickshaw	Hand Cart	Horse Cart	Bullock Cart	Others	TOTAL NMT	TOTAL VEHICLES	Total PCU
5.00	6.00	56	6	31	6	2	11	4	0	0	0	**116**	0	0	0	0	0	0	**0**	**116**	**114**
6.00	7.00	114	11	55	13	15	30	17	0	4	0	**259**	0	0	0	0	0	0	**0**	**259**	**333**
7.00	8.00	197	26	76	17	26	26	12	0	4	0	**384**	0	0	0	0	0	0	**0**	**384**	**471**
8.00	9.00	238	26	75	19	25	34	22	0	5	0	**444**	0	0	0	0	0	0	**0**	**444**	**548**
9.00	10.00	219	11	116	26	28	17	11	0	9	0	**437**	0	0	0	0	0	0	**0**	**437**	**498**
10.00	11.00	172	12	71	24	17	27	17	0	2	0	**342**	0	0	0	0	0	0	**0**	**342**	**436**
11.00	12.00	118	11	64	16	18	19	16	0	4	0	**266**	0	0	0	0	0	0	**0**	**266**	**314**
12.00	13.00	171	10	47	16	18	27	20	0	8	0	**317**	0	0	0	0	0	0	**0**	**317**	**370**
13.00	14.00	203	6	51	19	23	16	14	0	4	0	**336**	0	0	0	0	0	0	**0**	**336**	**412**
14.00	15.00	173	14	73	18	20	23	14	0	4	0	**339**	0	0	0	0	0	0	**0**	**339**	**407**
15.00	16.00	211	18	62	14	26	21	17	0	1	0	**370**	0	0	0	0	0	0	**0**	**370**	**470**
16.00	17.00	98	16	77	10	22	23	10	0	0	0	**256**	0	0	0	0	0	0	**0**	**256**	**324**
17.00	18.00	104	7	54	13	14	21	19	0	0	0	**232**	0	0	0	0	0	0	**0**	**232**	**282**
18.00	19.00	62	7	23	19	18	16	18	0	1	0	**164**	0	0	0	0	0	0	**0**	**164**	**237**
19.00	20.00	60	8	29	11	8	15	19	0	0	0	**150**	0	0	0	0	0	0	**0**	**150**	**224**
20.00	21.00	56	3	12	3	6	5	7	0	0	0	**92**	0	0	0	0	0	0	**0**	**92**	**140**
21.00	22.00	40	1	6	2	6	6	10	0	0	0	**71**	0	0	0	0	0	0	**0**	**71**	**134**
22.00	23.00	20	0	5	0	1	0	5	0	0	0	**31**	0	0	0	0	0	0	**0**	**31**	**41**
23.00	24.00	8	1	4	0	2	0	5	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**47**
0.00	1.00	2	0	3	0	0	0	2	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**16**
1.00	2.00	1	0	0	0	0	0	1	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**7**
2.00	3.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
3.00	4.00	0	1	4	1	0	7	5	0	1	0	**19**	0	0	0	0	0	0	**0**	**19**	**48**
4.00	5.00	17	4	8	5	6	10	10	0	1	0	**61**	0	0	0	0	0	0	**0**	**61**	**97**
TOTAL		**2341**	**199**	**946**	**252**	**301**	**354**	**275**	**0**	**48**	**0**	**4716**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4716**	**5965**
Hourly Average		**334**	**28**	**135**	**36**	**43**	**51**	**39**	**0**	**7**	**0**	**674**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**674**	**8[illegible]**

State : Sikkim **District : South**
Direction : Daywise - Both Directions Summary **Road : Singtam to Tarku** **Additional Information**
Section From: Km 0 to Km 16 **Station no.: 1** **Weather: Fair**
Hour : 24 (7 Days)

DAY & DATE		FAST MOVING VEHICLES											NON MOTORISED TRAFFIC								
		Cars/Jeep/Vans	3 Wheeler/Auto Rickshaw	Two Wheelers	Mini Bus	Full Bus	LCV	Truck 2-Axle	Multi Axle Truck	Tractor	Tractor with Trailor	Total MT	Cycle	Cycle Rickshaw	Hand Cart	Horse Cart	Bullock Cart	Others	TOTAL NMT	TOTAL VEHICLES	Total PCU
DAY-1	UP	128	0	44	14	10	23	31	0	4	0	254	0	0	0	0	0	0	0	254	341
	DOWN	189	31	87	15	22	24	15	0	2	0	385	0	0	0	0	0	0	0	385	454
	TOTAL	317	31	131	29	32	47	46	0	6	0	639	0	0	0	0	0	0	0	639	795
DAY-2	UP	177	0	110	15	22	21	22	0	4	0	371	0	0	0	0	0	0	0	371	430
	DOWN	181	23	75	10	10	25	4	0	1	0	329	0	0	0	0	0	0	0	329	440
	TOTAL	358	23	185	25	32	46	26	0	5	0	700	0	0	0	0	0	0	0	700	870
DAY-3	UP	168	0	81	8	20	19	22	0	0	0	318	0	0	0	0	0	0	0	318	375
	DOWN	221	34	64	7	10	20	11	0	3	0	370	0	0	0	0	0	0	0	370	454
	TOTAL	389	34	145	15	30	39	33	0	3	0	688	0	0	0	0	0	0	0	688	829
DAY-4	UP	166	0	78	13	21	28	18	0	3	0	327	0	0	0	0	0	0	0	327	393
	DOWN	136	27	75	22	28	36	28	0	2	0	354	0	0	0	0	0	0	0	354	388
	TOTAL	302	27	153	35	49	64	46	0	5	0	681	0	0	0	0	0	0	0	681	781
DAY-5	UP	146	0	58	22	19	15	18	0	0	0	278	0	0	0	0	0	0	0	278	342
	DOWN	144	29	57	18	25	31	21	0	5	0	330	0	0	0	0	0	0	0	330	368
	TOTAL	290	29	115	40	44	46	39	0	5	0	608	0	0	0	0	0	0	0	608	710
DAY-6	UP	156	0	71	26	27	18	23	0	0	0	321	0	0	0	0	0	0	0	321	408
	DOWN	141	18	69	16	23	15	13	0	5	0	300	0	0	0	0	0	0	0	300	410
	TOTAL	297	18	140	42	50	33	36	0	5	0	621	0	0	0	0	0	0	0	621	817
DAY-7	UP	168	0	29	38	39	40	28	0	11	0	353	0	0	0	0	0	0	0	353	534
	DOWN	220	37	48	28	25	39	21	0	8	0	426	0	0	0	0	0	0	0	426	632
	TOTAL	388	37	77	66	64	79	49	0	19	0	779	0	0	0	0	0	0	0	779	1166
TOTAL WEEKLY TRAFFIC		**2341**	**199**	**946**	**252**	**301**	**354**	**275**	**0**	**48**	**0**	**4716**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4716**	**5965**
AVERAGE DAILY TRAFFIC		**334**	**28**	**135**	**36**	**43**	**51**	**39**	**0**	**7**	**0**	**674**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**674**	**852**

COMMERCIAL VEHICLE PER DAY (CVD)	**176**

State	**: Sikkim**						**District**	**: South**													
Direction	**: Km 16 towards Km 60 DAILY TRAFFIC**						**Road**	**: Tarku to Legship**				**Additional Information**									
Section From: Km 16 to Km 60							**Station no.: Rabangla**					**Weather:**	**Fair**								
Date	**:23.08.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Vans**	**3 Wheeler/Auto Rickshaw**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailor**	**Total MT**	**Cycle**	**Cycle Rickshaw**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLES**	**Total PCU**
5.00	6.00	1	0	2	1	1	1	0	0	0	0	**6**	0	0	0	0	0	0	**0**	**6**	**8**
6.00	7.00	4	0	5	1	1	2	3	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**23**
7.00	8.00	7	0	3	1	1	4	2	0	2	0	**20**	0	0	0	0	0	0	**0**	**20**	**31**
8.00	9.00	11	0	7	0	0	4	1	0	0	0	**23**	0	0	0	0	0	0	**0**	**23**	**23.5**
9.00	10.00	16	0	4	1	1	1	1	0	1	0	**25**	0	0	0	0	0	0	**0**	**25**	**30**
10.00	11.00	13	0	1	2	0	1	2	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**24**
11.00	12.00	5	0	3	1	1	0	2	0	0	0	**12**	0	0	0	0	0	0	**0**	**12**	**17**
12.00	13.00	24	0	1	1	1	0	2	0	0	0	**29**	0	0	0	0	0	0	**0**	**29**	**35**
13.00	14.00	12	0	6	2	1	0	1	0	1	0	**23**	0	0	0	0	0	0	**0**	**23**	**27**
14.00	15.00	6	0	2	1	1	1	0	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**13**
15.00	16.00	9	0	1	0	1	2	2	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**21.5**
16.00	17.00	7	0	3	1	2	0	2	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**22**
17.00	18.00	9	0	1	0	1	2	1	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**18.5**
18.00	19.00	1	0	0	1	1	1	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**7**
19.00	20.00	2	0	5	1	0	3	5	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**25.5**
20.00	21.00	0	0	0	1	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1.5**
21.00	22.00	0	0	0	0	0	0	2	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**6**
22.00	23.00	0	0	0	0	0	0	2	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**6**
23.00	24.00	0	0	0	0	0	0	1	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**3**
0.00	1.00	0	0	0	0	0	0	2	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**6**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	1	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1.5**
4.00	5.00	1	0	0	0	1	1	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**5.5**
TOTAL		**128**	**0**	**44**	**15**	**14**	**24**	**31**	**0**	**4**	**0**	**260**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**260**	**355.5**

State	**: Sikkim**						**District**	**: South**													
Direction	**: Km 16 towards Km 60 DAILY TRAFFIC**						**Road**	**: Tarku to Legship**				**Additional Information**									
Section From: Km 16 to Km 60							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:24.08.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Van**	**3 Wheeler/A**	**Two Wheeler**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	3	0	4	1	2	1	0	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**14**
6.00	7.00	9	0	7	1	2	1	2	0	1	0	**23**	0	0	0	0	0	0	**0**	**23**	**30.5**
7.00	8.00	14	0	16	2	2	2	0	0	0	0	**36**	0	0	0	0	0	0	**0**	**36**	**34**
8.00	9.00	16	0	12	2	1	1	0	0	0	0	**32**	0	0	0	0	0	0	**0**	**32**	**29.5**
9.00	10.00	23	0	4	2	3	1	3	0	2	0	**38**	0	0	0	0	0	0	**0**	**38**	**53.5**
10.00	11.00	15	0	8	2	2	2	0	0	0	0	**29**	0	0	0	0	0	0	**0**	**29**	**31**
11.00	12.00	11	0	13	1	0	2	0	0	0	0	**27**	0	0	0	0	0	0	**0**	**27**	**22**
12.00	13.00	7	0	4	1	0	1	1	0	1	0	**15**	0	0	0	0	0	0	**0**	**15**	**18**
13.00	14.00	25	0	1	1	1	0	0	0	0	0	**28**	0	0	0	0	0	0	**0**	**28**	**30**
14.00	15.00	7	0	6	1	2	2	2	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**26.5**
15.00	16.00	8	0	17	2	0	3	1	0	0	0	**31**	0	0	0	0	0	0	**0**	**31**	**27**
16.00	17.00	10	0	12	0	1	1	0	0	0	0	**24**	0	0	0	0	0	0	**0**	**24**	**20.5**
17.00	18.00	9	0	4	1	0	1	3	0	0	0	**18**	0	0	0	0	0	0	**0**	**18**	**23**
18.00	19.00	5	0	0	0	1	2	4	0	0	0	**12**	0	0	0	0	0	0	**0**	**12**	**23**
19.00	20.00	11	0	2	0	0	1	0	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**13.5**
20.00	21.00	3	0	0	0	0	0	4	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**15**
21.00	22.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
22.00	23.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
23.00	24.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	1	1	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**4.5**
4.00	5.00	0	0	0	0	1	0	1	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**6**
TOTAL		**177**	**0**	**110**	**17**	**18**	**22**	**22**	**0**	**4**	**0**	**370**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**370**	**422.5**

State	**: Sikkim**						**District**	**: South**													
Direction	**: Km 16 towards Km 60 DAILY TRAFFIC**						**Road**	**: Tarku to Legship**				**Additional Information**									
Section From: Km 16 to Km 60							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:26.08.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Van**	**3 Wheeler/A**	**Two Wheeler**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	1	0	3	1	1	2	1	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**13**
6.00	7.00	9	0	6	1	2	2	2	0	0	0	**22**	0	0	0	0	0	0	**0**	**22**	**28.5**
7.00	8.00	17	0	11	1	2	0	1	0	0	0	**32**	0	0	0	0	0	0	**0**	**32**	**33**
8.00	9.00	13	0	8	1	1	2	1	0	0	0	**26**	0	0	0	0	0	0	**0**	**26**	**27.5**
9.00	10.00	9	0	6	1	1	1	0	0	0	0	**18**	0	0	0	0	0	0	**0**	**18**	**18**
10.00	11.00	21	0	9	0	2	2	2	0	0	0	**36**	0	0	0	0	0	0	**0**	**36**	**40.5**
11.00	12.00	4	0	11	1	1	2	2	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**23**
12.00	13.00	11	0	3	1	2	2	3	0	0	0	**22**	0	0	0	0	0	0	**0**	**22**	**32**
13.00	14.00	25	0	4	1	1	1	1	0	0	0	**33**	0	0	0	0	0	0	**0**	**33**	**36**
14.00	15.00	13	0	2	1	1	0	2	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**24.5**
15.00	16.00	11	0	1	0	1	0	1	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**17.5**
16.00	17.00	6	0	3	1	2	2	1	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**21**
17.00	18.00	5	0	4	0	0	0	1	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**10**
18.00	19.00	4	0	2	1	0	2	0	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**9.5**
19.00	20.00	2	0	0	0	1	0	2	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**11**
20.00	21.00	5	0	2	0	0	2	0	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**9**
21.00	22.00	9	0	1	0	0	0	1	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**12.5**
22.00	23.00	1	0	1	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**1.5**
23.00	24.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	3	0	0	1	1	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**6**
4.00	5.00	1	0	1	0	1	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**4.5**
TOTAL		**168**	**0**	**81**	**11**	**19**	**21**	**22**	**0**	**0**	**0**	**322**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**322**	**379.5**

State	**: Sikkim**						**District**	**: South**													
Direction	**: Km 16 towards Km 60 DAILY TRAFFIC**						**Road**	**: Tarku to Legship**				**Additional Information**									
Section From: Km 16 to Km 60							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:27.08.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Vans**	**3 Wheeler/Auto Ricshaw**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailor**	**Total MT**	**Cycle**	**Cycle Rickshaw**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLES**	**Total PCU**
5.00	6.00	6	0	3	0	0	2	0	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**10.5**
6.00	7.00	9	0	4	2	1	0	0	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**17**
7.00	8.00	13	0	5	1	0	3	0	0	1	0	**23**	0	0	0	0	0	0	**0**	**23**	**24.5**
8.00	9.00	15	0	7	3	2	4	2	0	0	0	**33**	0	0	0	0	0	0	**0**	**33**	**41**
9.00	10.00	27	0	12	1	2	0	0	0	2	0	**44**	0	0	0	0	0	0	**0**	**44**	**46.5**
10.00	11.00	9	0	6	2	2	5	0	0	0	0	**24**	0	0	0	0	0	0	**0**	**24**	**28.5**
11.00	12.00	7	0	9	1	1	0	1	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**19**
12.00	13.00	11	0	1	1	0	4	0	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**19**
13.00	14.00	12	0	8	0	2	3	0	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**26.5**
14.00	15.00	10	0	5	1	1	1	2	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**24.5**
15.00	16.00	9	0	2	1	3	2	3	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**32.5**
16.00	17.00	2	0	7	0	4	1	0	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**19**
17.00	18.00	13	0	3	2	1	0	1	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**23.5**
18.00	19.00	3	0	2	0	2	0	0	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**10**
19.00	20.00	7	0	0	0	0	1	2	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**14.5**
20.00	21.00	10	0	1	0	0	0	0	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**10.5**
21.00	22.00	3	0	0	0	0	1	3	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**13.5**
22.00	23.00	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**0.5**
23.00	24.00	0	0	0	0	0	0	3	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**9**
0.00	1.00	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**0.5**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	1	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1.5**
4.00	5.00	0	0	1	0	0	1	1	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**5**
TOTAL		**166**	**0**	**78**	**16**	**21**	**28**	**18**	**0**	**3**	**0**	**330**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**330**	**397**

State	**: Sikkim**						**District**	**: South**													
Direction	**: Km 16 towards Km 60 DAILY TRAFFIC**						**Road**	**: Tarku to Legship**				**Additional Information**									
Section From: Km 16 to Km 60							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:28.08.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Van**	**3 Wheeler/A**	**Two Wheeler**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	3	0	4	1	2	0	0	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**12.5**
6.00	7.00	11	0	5	2	2	2	1	0	0	0	**23**	0	0	0	0	0	0	**0**	**23**	**28.5**
7.00	8.00	12	0	6	1	2	0	0	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**22.5**
8.00	9.00	19	0	0	3	3	1	2	0	0	0	**28**	0	0	0	0	0	0	**0**	**28**	**40**
9.00	10.00	9	0	2	2	0	0	0	0	0	0	**13**	0	0	0	0	0	0	**0**	**13**	**13**
10.00	11.00	13	0	1	3	1	3	2	0	0	0	**23**	0	0	0	0	0	0	**0**	**23**	**31.5**
11.00	12.00	4	0	5	2	1	0	0	0	0	0	**12**	0	0	0	0	0	0	**0**	**12**	**12.5**
12.00	13.00	16	0	7	2	2	1	1	0	0	0	**29**	0	0	0	0	0	0	**0**	**29**	**33**
13.00	14.00	6	0	3	2	1	0	2	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**19.5**
14.00	15.00	7	0	7	2	1	2	1	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**22.5**
15.00	16.00	12	0	1	1	2	1	2	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**27.5**
16.00	17.00	3	0	9	2	1	1	1	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**18**
17.00	18.00	9	0	4	2	0	2	0	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**17**
18.00	19.00	6	0	1	1	2	1	0	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**15.5**
19.00	20.00	3	0	0	0	0	0	3	0	0	0	**6**	0	0	0	0	0	0	**0**	**6**	**12**
20.00	21.00	7	0	2	1	1	1	0	0	0	0	**12**	0	0	0	0	0	0	**0**	**12**	**14**
21.00	22.00	3	0	0	0	1	0	2	0	0	0	**6**	0	0	0	0	0	0	**0**	**6**	**12**
22.00	23.00	2	0	1	0	0	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**2.5**
23.00	24.00	1	0	0	0	2	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**7**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
4.00	5.00	0	0	0	2	0	0	1	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**6**
TOTAL		**146**	**0**	**58**	**29**	**24**	**15**	**18**	**0**	**0**	**0**	**290**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**290**	**367**

State	**: Sikkim**							**District**	**: South**												
Direction	**: Km 16 towards Km 60 DAILY TRAFFIC**							**Road**	**: Tarku to Legship**			**Additional Information**									
Section From: Km 16 to Km 60								**Station no.: 1**				**Weather:**	**Fair**								
Date	**:29.08.2009**							**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Van**	**3 Wheeler/Auto**	**Two Wheeler**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailer**	**Total MT**	**Cycle**	**Cycle Rickshaw**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLES**	**Total PCU**
5.00	6.00	3	0	2	2	0	2	0	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**10**
6.00	7.00	10	0	6	1	2	1	1	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**25**
7.00	8.00	15	0	3	2	2	1	2	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**33**
8.00	9.00	16	0	7	1	1	2	3	0	0	0	**30**	0	0	0	0	0	0	**0**	**30**	**36**
9.00	10.00	17	0	9	1	2	1	0	0	0	0	**30**	0	0	0	0	0	0	**0**	**30**	**30.5**
10.00	11.00	19	0	7	2	1	2	2	0	0	0	**33**	0	0	0	0	0	0	**0**	**33**	**37.5**
11.00	12.00	11	0	3	2	2	1	0	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**23**
12.00	13.00	13	0	9	2	2	2	0	0	0	0	**28**	0	0	0	0	0	0	**0**	**28**	**29.5**
13.00	14.00	6	0	3	3	0	1	3	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**22.5**
14.00	15.00	4	0	2	1	2	1	1	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**17**
15.00	16.00	11	0	1	2	2	1	0	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**22**
16.00	17.00	3	0	7	2	2	1	0	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**17**
17.00	18.00	4	0	6	2	2	1	0	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**17.5**
18.00	19.00	8	0	1	3	1	2	2	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**25**
19.00	20.00	1	0	4	4	0	1	1	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**13.5**
20.00	21.00	6	0	0	0	2	1	1	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**16.5**
21.00	22.00	4	0	1	1	3	0	2	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**21**
22.00	23.00	3	0	0	0	0	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**3**
23.00	24.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
0.00	1.00	2	0	0	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**2**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	0	2	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**6**
4.00	5.00	0	0	0	0	1	0	3	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**12**
TOTAL		**156**	**0**	**71**	**31**	**27**	**21**	**23**	**0**	**0**	**0**	**329**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**329**	**419.5**

State	**: Sikkim**						**District**	**: South**													
Direction	**: Km 16 towards Km 60 DAILY TRAFFIC**						**Road**	**: Tarku to Legship**				**Additional Information**									
Section From: Km 16 to Km 60							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:30.08.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Van**	**3 Wheeler/A**	**Two Wheeler**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	6	0	0	2	0	0	1	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**12**
6.00	7.00	9	0	1	2	1	2	0	0	2	0	**17**	0	0	0	0	0	0	**0**	**17**	**24.5**
7.00	8.00	23	0	0	2	4	3	2	0	0	0	**34**	0	0	0	0	0	0	**0**	**34**	**48.5**
8.00	9.00	8	0	2	3	3	5	3	0	2	0	**26**	0	0	0	0	0	0	**0**	**26**	**45**
9.00	10.00	4	0	3	2	5	2	1	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**29.5**
10.00	11.00	12	0	0	2	2	4	2	0	0	0	**22**	0	0	0	0	0	0	**0**	**22**	**33**
11.00	12.00	6	0	1	2	3	6	2	0	3	0	**23**	0	0	0	0	0	0	**0**	**23**	**42.5**
12.00	13.00	18	0	4	3	1	1	1	0	2	0	**30**	0	0	0	0	0	0	**0**	**30**	**38**
13.00	14.00	12	0	5	2	3	2	1	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**32.5**
14.00	15.00	17	0	3	3	2	2	2	0	1	0	**30**	0	0	0	0	0	0	**0**	**30**	**41**
15.00	16.00	22	0	1	2	7	1	1	0	0	0	**34**	0	0	0	0	0	0	**0**	**34**	**51**
16.00	17.00	7	0	0	3	2	4	3	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**32.5**
17.00	18.00	11	0	3	3	2	3	3	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**36.5**
18.00	19.00	6	0	2	5	2	2	2	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**29.5**
19.00	20.00	4	0	0	1	1	2	2	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**17.5**
20.00	21.00	0	0	0	1	1	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**4.5**
21.00	22.00	2	0	1	0	0	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**2.5**
22.00	23.00	1	0	0	0	0	0	1	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**4**
23.00	24.00	0	0	2	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**1**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	1	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**3**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	1	0	0	1	0	**2**	0	0	0	0	0	0	**0**	**2**	**4.5**
4.00	5.00	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**0.5**
TOTAL		**168**	**0**	**29**	**38**	**39**	**40**	**28**	**0**	**11**	**0**	**353**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**353**	**533.5**

State	**: Sikkim**						**District**	**: South**													
Direction	**: Km 60 towards Km 16 DAILY TRAFFIC**						**Road**	**: Tarku to Legship**				**Additional Information**									
Section From: Km 60 to Km 16							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:23.08.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Vans**	**3 Wheeler/Auto Ricshaw**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailor**	**Total MT**	**Cycle**	**Cycle Ricksha w**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE S**	**Total PCU**
5.00	6.00	3	0	1	0	0	0	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**9.5**
6.00	7.00	11	0	4	1	1	1	1	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**29.5**
7.00	8.00	14	0	7	0	3	2	1	0	0	0	**27**	0	0	0	0	0	0	**0**	**27**	**40**
8.00	9.00	22	0	5	2	1	1	0	0	0	0	**31**	0	0	0	0	0	0	**0**	**31**	**33.5**
9.00	10.00	26	0	11	2	2	2	2	0	1	0	**46**	0	0	0	0	0	0	**0**	**46**	**43.5**
10.00	11.00	18	0	5	0	0	0	0	0	0	0	**23**	0	0	0	0	0	0	**0**	**23**	**31**
11.00	12.00	9	0	4	0	2	1	0	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**21.5**
12.00	13.00	6	0	3	2	3	3	4	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**18**
13.00	14.00	22	0	4	2	1	2	1	0	0	0	**32**	0	0	0	0	0	0	**0**	**32**	**36**
14.00	15.00	24	0	9	1	2	2	0	0	0	0	**38**	0	0	0	0	0	0	**0**	**38**	**34.5**
15.00	16.00	11	0	7	1	2	1	2	0	0	0	**24**	0	0	0	0	0	0	**0**	**24**	**26.5**
16.00	17.00	6	0	5	1	1	2	1	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**22**
17.00	18.00	4	0	12	1	2	1	2	0	0	0	**22**	0	0	0	0	0	0	**0**	**22**	**19**
18.00	19.00	1	0	4	0	1	1	1	0	0	0	**8**	0	0	0	0	0	0	**0**	**8**	**9**
19.00	20.00	6	0	1	1	0	1	0	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**27.5**
20.00	21.00	1	0	1	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**3**
21.00	22.00	3	0	0	0	0	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**9**
22.00	23.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**7**
23.00	24.00	0	0	2	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**4**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**6**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	1	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1.5**
4.00	5.00	1	0	2	1	1	3	0	0	1	0	**9**	0	0	0	0	0	0	**0**	**9**	**6.5**
TOTAL		**189**	**0**	**87**	**15**	**22**	**24**	**15**	**0**	**2**	**0**	**354**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**354**	**438**

State	**: Sikkim**						**District**	**: South**													
Direction	**: Km 60 towards Km 16 DAILY TRAFFIC**						**Road**	**: Tarku to Legship**				**Additional Information**									
Section From: Km 60 to Km 16							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:24.08.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	12	0	2	0	0	2	0	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**22**
6.00	7.00	3	0	5	1	1	3	0	0	0	0	**13**	0	0	0	0	0	0	**0**	**13**	**23.5**
7.00	8.00	16	0	4	1	1	2	0	0	0	0	**24**	0	0	0	0	0	0	**0**	**24**	**30**
8.00	9.00	13	0	7	1	2	1	1	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**24**
9.00	10.00	12	0	11	1	2	2	1	0	0	0	**29**	0	0	0	0	0	0	**0**	**29**	**46**
10.00	11.00	8	0	4	2	1	3	0	0	0	0	**18**	0	0	0	0	0	0	**0**	**18**	**22**
11.00	12.00	14	0	2	1	1	1	0	0	1	0	**20**	0	0	0	0	0	0	**0**	**20**	**19.5**
12.00	13.00	15	0	1	1	1	2	0	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**24.5**
13.00	14.00	12	0	2	0	2	1	1	0	0	0	**18**	0	0	0	0	0	0	**0**	**18**	**17.5**
14.00	15.00	7	0	6	1	2	4	0	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**26.5**
15.00	16.00	17	0	1	1	0	0	0	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**28**
16.00	17.00	11	0	10	1	1	0	0	0	0	0	**23**	0	0	0	0	0	0	**0**	**23**	**20.5**
17.00	18.00	6	0	6	0	0	1	0	0	0	0	**13**	0	0	0	0	0	0	**0**	**13**	**21**
18.00	19.00	3	0	1	0	0	0	1	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**21.5**
19.00	20.00	9	0	4	1	0	2	0	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**12.5**
20.00	21.00	7	0	3	0	0	1	0	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**20.5**
21.00	22.00	6	0	2	0	1	0	0	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**7**
22.00	23.00	2	0	1	0	0	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**2.5**
23.00	24.00	4	0	0	0	0	0	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**4**
0.00	1.00	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**0.5**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
3.00	4.00	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**5**
4.00	5.00	3	0	1	1	0	3	0	0	0	0	**8**	0	0	0	0	0	0	**0**	**8**	**9.5**
TOTAL		**181**	**0**	**75**	**13**	**15**	**28**	**4**	**0**	**1**	**0**	**317**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**317**	**409**

State	**: Sikkim**						**District**	**: South**													
Direction	**: Km 60 towards Km 16 DAILY TRAFFIC**						**Road**	**: Tarku to Legship**				**Additional Information**									
Section From: Km 60 to Km 16							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:26.08.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	7	0	4	0	0	1	0	0	0	0	**12**	0	0	0	0	0	0	**0**	**12**	**19.5**
6.00	7.00	10	0	2	0	1	1	0	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**27.5**
7.00	8.00	17	0	3	1	1	2	1	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**29**
8.00	9.00	29	0	1	1	1	1	1	0	2	0	**36**	0	0	0	0	0	0	**0**	**36**	**40**
9.00	10.00	17	0	12	1	0	2	0	0	0	0	**32**	0	0	0	0	0	0	**0**	**32**	**29**
10.00	11.00	9	0	6	1	1	0	0	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**27**
11.00	12.00	3	0	2	1	1	1	2	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**17.5**
12.00	13.00	7	0	1	1	1	2	0	0	0	0	**12**	0	0	0	0	0	0	**0**	**12**	**27**
13.00	14.00	16	0	3	1	1	1	1	0	1	0	**24**	0	0	0	0	0	0	**0**	**24**	**26.5**
14.00	15.00	23	0	7	1	1	1	0	0	0	0	**33**	0	0	0	0	0	0	**0**	**33**	**37**
15.00	16.00	31	0	11	1	2	1	0	0	0	0	**46**	0	0	0	0	0	0	**0**	**46**	**42.5**
16.00	17.00	17	0	5	0	0	2	0	0	0	0	**24**	0	0	0	0	0	0	**0**	**24**	**33**
17.00	18.00	8	0	2	1	1	0	1	0	0	0	**13**	0	0	0	0	0	0	**0**	**13**	**12**
18.00	19.00	6	0	1	1	0	1	2	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**11**
19.00	20.00	2	0	1	0	2	0	1	0	0	0	**6**	0	0	0	0	0	0	**0**	**6**	**11.5**
20.00	21.00	7	0	0	0	0	0	0	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**10**
21.00	22.00	3	0	0	0	1	0	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**6**
22.00	23.00	1	0	1	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**1.5**
23.00	24.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
0.00	1.00	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**0.5**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	0	1	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**4.5**
4.00	5.00	7	0	1	0	0	0	1	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**10.5**
TOTAL		**221**	**0**	**64**	**11**	**14**	**16**	**11**	**0**	**3**	**0**	**340**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**340**	**424**

State	**: Sikkim**						**District**	**: South**												
Direction	**: Km 60 towards Km 16 DAILY TRAFFIC**						**Road**	**: Tarku to Legship**				**Additional Information**								
Section From: Km 60 to Km 16							**Station no.: 1**					**Weather:**	**Fair**							
Date	**:27.08.2009**						**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**							
From	**To**	**Cars/Jeep/Vans**	**3 Wheeler/Auto Rickshaw**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailor**	**Total MT**	**Cycle**	**Cycle Rickshaw**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLES**	**Total PCU**
5.00	6.00	3	0	2	0	1	1	0	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**7**
6.00	7.00	5	0	4	1	2	2	1	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**13**
7.00	8.00	8	0	9	2	2	2	2	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**21.5**
8.00	9.00	11	0	7	1	1	1	3	0	1	0	**25**	0	0	0	0	0	0	**0**	**25**	**37**
9.00	10.00	21	0	12	3	3	2	1	0	0	0	**42**	0	0	0	0	0	0	**0**	**42**	**40.5**
10.00	11.00	6	0	5	1	1	1	2	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**25**
11.00	12.00	7	0	4	3	3	2	1	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**16.5**
12.00	13.00	18	0	3	1	3	2	3	0	1	0	**31**	0	0	0	0	0	0	**0**	**31**	**27**
13.00	14.00	14	0	2	2	2	1	0	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**25.5**
14.00	15.00	12	0	11	2	2	1	2	0	0	0	**30**	0	0	0	0	0	0	**0**	**30**	**29.5**
15.00	16.00	9	0	8	1	2	1	1	0	0	0	**22**	0	0	0	0	0	0	**0**	**22**	**35.5**
16.00	17.00	5	0	3	1	1	2	1	0	0	0	**13**	0	0	0	0	0	0	**0**	**13**	**20**
17.00	18.00	7	0	0	1	2	3	3	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**16**
18.00	19.00	3	0	2	3	3	2	3	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**10**
19.00	20.00	2	0	3	0	1	1	2	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**11**
20.00	21.00	1	0	0	0	0	0	1	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**1**
21.00	22.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**10.5**
22.00	23.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
23.00	24.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**10**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**1.5**
4.00	5.00	3	0	0	0	0	0	2	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**7.5**
TOTAL		**136**	**0**	**75**	**22**	**29**	**24**	**28**	**0**	**2**	**0**	**316**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**316**	**365.5**

State	**: Sikkim**		**District**	**: South**			
Direction	**: Km 60 towards Km 16 DAILY TRAFFIC**		**Road**	**: Tarku to Legship**	**Additional Information**		
Section From: Km 60 to Km 16			**Station no.: 1**		**Weather:**	**Fair**	
Date	**:28.08.2009**		**Hour**	**: 24 (7 Days)**			

Time		FAST MOVING VEHICLES											NON MOTORISED TRAFFIC								
From	To	Cars/Jeep/Va	3 Wheeler/A	Two Wheelers	Mini Bus	Full Bus	LCV	Truck 2-Axle	Multi Axle	Tractor	Tractor with	Total MT	Cycle	Cycle Ricksha	Hand Cart	Horse Cart	Bullock Cart	Others	TOTAL NMT	TOTAL VEHICLE	Total PCU
5.00	6.00	1	0	1	1	0	2	1	0	0	0	**6**	0	0	0	0	0	0	**0**	**6**	**9**
6.00	7.00	7	0	3	1	2	2	0	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**23.5**
7.00	8.00	12	0	1	2	2	2	0	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**20**
8.00	9.00	18	0	2	2	1	1	1	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**40**
9.00	10.00	13	0	14	2	2	1	2	0	1	0	**35**	0	0	0	0	0	0	**0**	**35**	**23**
10.00	11.00	9	0	11	2	1	3	3	0	0	0	**29**	0	0	0	0	0	0	**0**	**29**	**32.5**
11.00	12.00	11	0	5	1	1	1	1	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**19.5**
12.00	13.00	5	0	2	2	2	3	3	0	1	0	**18**	0	0	0	0	0	0	**0**	**18**	**19.5**
13.00	14.00	7	0	1	2	3	2	1	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**19.5**
14.00	15.00	17	0	2	2	1	1	1	0	1	0	**25**	0	0	0	0	0	0	**0**	**25**	**30**
15.00	16.00	12	0	3	1	1	2	2	0	1	0	**22**	0	0	0	0	0	0	**0**	**22**	**28.5**
16.00	17.00	9	0	8	1	2	1	1	0	0	0	**22**	0	0	0	0	0	0	**0**	**22**	**23.5**
17.00	18.00	3	0	1	1	1	3	2	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**9.5**
18.00	19.00	10	0	2	1	2	1	1	0	1	0	**18**	0	0	0	0	0	0	**0**	**18**	**20**
19.00	20.00	1	0	0	0	1	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**10**
20.00	21.00	1	0	1	0	2	0	1	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**7.5**
21.00	22.00	2	0	0	1	0	2	0	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**11**
22.00	23.00	6	0	0	0	1	0	0	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**6**
23.00	24.00	0	0	0	0	0	0	1	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**6**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	1	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**0**
4.00	5.00	0	0	0	0	1	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**6**
TOTAL		**144**	**0**	**57**	**22**	**26**	**28**	**21**	**0**	**5**	**0**	**303**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**303**	**364.5**

State	**: Sikkim**						**District**	**: South**												
Direction	**: Km 60 towards Km 16 DAILY TRAFFIC**						**Road**	**: Tarku to Legship**				**Additional Information**								
Section From: Km 60 to Km 16							**Station no.: 1**					**Weather:**	**Fair**							
Date	**:29.08.2009**						**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**							
From	**To**	**Cars/Jeep/Vans**	**3 Wheeler/Auto Rickshaw**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailor**	**Total MT**	**Cycle**	**Cycle Rickshaw**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLES**	**Total PCU**
5.00	6.00	5	0	3	1	0	0	0	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**12.5**
6.00	7.00	9	0	2	2	0	2	1	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**22**
7.00	8.00	12	0	4	0	3	0	0	0	1	0	**20**	0	0	0	0	0	0	**0**	**20**	**30.5**
8.00	9.00	21	0	7	0	2	0	2	0	0	0	**32**	0	0	0	0	0	0	**0**	**32**	**41**
9.00	10.00	9	0	9	2	0	1	0	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**22.5**
10.00	11.00	6	0	5	3	1	0	1	0	1	0	**17**	0	0	0	0	0	0	**0**	**17**	**23.5**
11.00	12.00	4	0	1	2	1	1	1	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**15**
12.00	13.00	16	0	6	1	1	1	2	0	1	0	**28**	0	0	0	0	0	0	**0**	**28**	**31**
13.00	14.00	13	0	3	0	1	1	0	0	0	0	**18**	0	0	0	0	0	0	**0**	**18**	**29.5**
14.00	15.00	9	0	9	1	2	0	1	0	2	0	**24**	0	0	0	0	0	0	**0**	**24**	**25.5**
15.00	16.00	17	0	7	0	2	1	0	0	0	0	**27**	0	0	0	0	0	0	**0**	**27**	**31**
16.00	17.00	3	0	2	0	1	2	0	0	0	0	**8**	0	0	0	0	0	0	**0**	**8**	**14.5**
17.00	18.00	5	0	7	0	2	1	0	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**19**
18.00	19.00	1	0	3	2	1	1	0	0	0	0	**8**	0	0	0	0	0	0	**0**	**8**	**19**
19.00	20.00	3	0	1	1	0	0	0	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**14**
20.00	21.00	5	0	0	0	0	0	0	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**15.5**
21.00	22.00	0	0	0	0	0	3	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**16.5**
22.00	23.00	2	0	0	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**2**
23.00	24.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**6**
4.00	5.00	0	0	0	1	0	0	1	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**12**
TOTAL		**141**	**0**	**69**	**16**	**17**	**14**	**9**	**0**	**5**	**0**	**271**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**271**	**403.5**

State	**: Sikkim**						**District**	**: South**													
Direction	**: Km 60 towards Km 16 DAILY TRAFFIC**						**Road**	**: Tarku to Legship**				**Additional Information**									
Section From: Km 60 to Km 16							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:30.08.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	2	0	0	2	1	2	1	0	0	0	**8**	0	0	0	0	0	0	**0**	**8**	**8**
6.00	7.00	8	0	1	2	2	1	3	0	1	0	**18**	0	0	0	0	0	0	**0**	**18**	**23.5**
7.00	8.00	17	0	4	2	3	2	1	0	0	0	**29**	0	0	0	0	0	0	**0**	**29**	**44.5**
8.00	9.00	26	0	3	2	1	2	2	0	0	0	**36**	0	0	0	0	0	0	**0**	**36**	**63.5**
9.00	10.00	16	0	7	3	2	2	0	0	2	0	**32**	0	0	0	0	0	0	**0**	**32**	**43.5**
10.00	11.00	14	0	3	2	1	3	1	0	1	0	**25**	0	0	0	0	0	0	**0**	**25**	**36.5**
11.00	12.00	22	0	1	1	2	2	2	0	0	0	**30**	0	0	0	0	0	0	**0**	**30**	**58.5**
12.00	13.00	4	0	2	2	2	3	0	0	2	0	**15**	0	0	0	0	0	0	**0**	**15**	**23**
13.00	14.00	21	0	6	1	2	2	2	0	2	0	**36**	0	0	0	0	0	0	**0**	**36**	**42**
14.00	15.00	17	0	2	2	1	3	0	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**40.5**
15.00	16.00	32	0	1	1	2	3	2	0	0	0	**41**	0	0	0	0	0	0	**0**	**41**	**61**
16.00	17.00	9	0	3	2	2	4	0	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**36**
17.00	18.00	11	0	1	2	1	2	2	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**35.5**
18.00	19.00	5	0	2	2	2	2	2	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**28.5**
19.00	20.00	7	0	8	2	2	4	1	0	0	0	**24**	0	0	0	0	0	0	**0**	**24**	**24.5**
20.00	21.00	3	0	2	0	0	0	0	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**8.5**
21.00	22.00	4	0	1	0	0	0	0	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**4.5**
22.00	23.00	1	0	0	0	0	0	2	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**4**
23.00	24.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**3**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	1	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**4.5**
4.00	5.00	1	0	1	0	0	2	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**1.5**
TOTAL		**220**	**0**	**48**	**28**	**26**	**40**	**21**	**0**	**8**	**0**	**391**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**391**	**595**

State	**: Sikkim**							**District**	**: South**												
Direction	**: Daywise Traffic - Both Directions**							**Road**	**: Tarku to Legship**			**Additional Information**									
Section From: Km 16 to Km 60								**Station no.: 1**				**Weather: Fair**									
Date	**:23.08.2009**							**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Vans**	**3 Wheeler/Auto Ricshaw**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailor**	**Total MT**	**Cycle**	**Cycle Rickshaw**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLES**	**Total PCU**
5.00	6.00	4	0	3	1	1	1	0	0	0	0	10	0	0	0	0	0	0	0	10	17.5
6.00	7.00	15	0	9	2	2	3	4	0	0	0	35	0	0	0	0	0	0	0	35	52.5
7.00	8.00	21	0	10	1	4	6	3	0	2	0	47	0	0	0	0	0	0	0	47	71
8.00	9.00	33	0	12	2	1	5	1	0	0	0	54	0	0	0	0	0	0	0	54	57
9.00	10.00	42	0	15	3	3	3	3	0	2	0	71	0	0	0	0	0	0	0	71	73.5
10.00	11.00	31	0	6	2	0	1	2	0	0	0	42	0	0	0	0	0	0	0	42	55
11.00	12.00	14	0	7	1	3	1	2	0	0	0	28	0	0	0	0	0	0	0	28	38.5
12.00	13.00	30	0	4	3	4	3	6	0	0	0	50	0	0	0	0	0	0	0	50	53
13.00	14.00	34	0	10	4	2	2	2	0	1	0	55	0	0	0	0	0	0	0	55	63
14.00	15.00	30	0	11	2	3	3	0	0	0	0	49	0	0	0	0	0	0	0	49	47.5
15.00	16.00	20	0	8	1	3	3	4	0	0	0	39	0	0	0	0	0	0	0	39	48
16.00	17.00	13	0	8	2	3	2	3	0	0	0	31	0	0	0	0	0	0	0	31	44
17.00	18.00	13	0	13	1	3	3	3	0	0	0	36	0	0	0	0	0	0	0	36	37.5
18.00	19.00	2	0	4	1	2	2	1	0	0	0	12	0	0	0	0	0	0	0	12	16
19.00	20.00	8	0	6	2	0	4	5	0	0	0	25	0	0	0	0	0	0	0	25	53
20.00	21.00	1	0	1	1	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	4.5
21.00	22.00	3	0	0	0	0	0	2	0	0	0	5	0	0	0	0	0	0	0	5	15
22.00	23.00	1	0	0	0	0	0	2	0	0	0	3	0	0	0	0	0	0	0	3	13
23.00	24.00	0	0	2	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0	3	7
0.00	1.00	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	2	12
1.00	2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.00	3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.00	4.00	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	2	3
4.00	5.00	2	0	2	1	2	4	0	0	1	0	12	0	0	0	0	0	0	0	12	12
TOTAL		317	0	131	30	36	48	46	0	6	0	614	0	0	0	0	0	0	0	614	793.5

State	**: Sikkim**						**Road**	**: Tarku to Legship**												
Direction	**: Daywise Traffic - Both Directions**						**Road**	**: Tarku to Legship**				**Additional Information**								
Section From: Km 16 to Km 60							**Station no.: 1**					**Weather: Fair**								
Date	**:24.08.2009**						**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**							
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	15	0	6	1	2	3	0	0	0	0	27	0	0	0	0	0	0	0	27	36
6.00	7.00	12	0	12	2	3	4	2	0	1	0	36	0	0	0	0	0	0	0	36	54
7.00	8.00	30	0	20	3	3	4	0	0	0	0	60	0	0	0	0	0	0	0	60	64
8.00	9.00	29	0	19	3	3	2	1	0	0	0	57	0	0	0	0	0	0	0	57	53.5
9.00	10.00	35	0	15	3	5	3	4	0	2	0	67	0	0	0	0	0	0	0	67	99.5
10.00	11.00	23	0	12	4	3	5	0	0	0	0	47	0	0	0	0	0	0	0	47	53
11.00	12.00	25	0	15	2	1	3	0	0	1	0	47	0	0	0	0	0	0	0	47	41.5
12.00	13.00	22	0	5	2	1	3	1	0	1	0	35	0	0	0	0	0	0	0	35	42.5
13.00	14.00	37	0	3	1	3	1	1	0	0	0	46	0	0	0	0	0	0	0	46	47.5
14.00	15.00	14	0	12	2	4	6	2	0	0	0	40	0	0	0	0	0	0	0	40	53
15.00	16.00	25	0	18	3	0	3	1	0	0	0	50	0	0	0	0	0	0	0	50	55
16.00	17.00	21	0	22	1	2	1	0	0	0	0	47	0	0	0	0	0	0	0	47	41
17.00	18.00	15	0	10	1	0	2	3	0	0	0	31	0	0	0	0	0	0	0	31	44
18.00	19.00	8	0	1	0	1	2	5	0	0	0	17	0	0	0	0	0	0	0	17	44.5
19.00	20.00	20	0	6	1	0	3	0	0	0	0	30	0	0	0	0	0	0	0	30	26
20.00	21.00	10	0	3	0	0	1	4	0	0	0	18	0	0	0	0	0	0	0	18	35.5
21.00	22.00	7	0	2	0	1	0	0	0	0	0	10	0	0	0	0	0	0	0	10	8
22.00	23.00	2	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	2.5
23.00	24.00	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	4
0.00	1.00	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.5
1.00	2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.00	3.00	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
3.00	4.00	0	0	1	0	0	1	1	0	0	0	3	0	0	0	0	0	0	0	3	9.5
4.00	5.00	3	0	1	1	1	3	1	0	0	0	10	0	0	0	0	0	0	0	10	15.5
TOTAL		358	0	185	30	33	50	26	0	5	0	687	0	0	0	0	0	0	0	687	831.5

State : Sikkim **Road : Tarku to Legship**

Direction : Daywise Traffic - Both Directions **Road : Tarku to Legship** **Additional Information**

Section From: Km 16 to Km 60 **Station no.: 1** **Weather: Fair**

Date :26.08.2009 **Hour : 24 (7 Days)**

Time		FAST MOVING VEHICLES											NON MOTORISED TRAFFIC								
From	To	Cars/Jeep/Va	3 Wheeler/A	Two Wheelers	Mini Bus	Full Bus	LCV	Truck 2-Axle	Multi Axle	Tractor	Tractor with	Total MT	Cycle	Cycle Ricksha	Hand Cart	Horse Cart	Bullock Cart	Others	TOTAL NMT	TOTAL VEHICLE	Total PCU
5.00	6.00	8	0	7	2	1	3	1	0	0	0	21	0	0	0	0	0	0	0	21	32.5
6.00	7.00	19	0	8	1	3	3	2	0	0	0	36	0	0	0	0	0	0	0	36	56
7.00	8.00	34	0	14	2	3	2	2	0	0	0	57	0	0	0	0	0	0	0	57	62
8.00	9.00	42	0	9	2	2	3	2	0	2	0	62	0	0	0	0	0	0	0	62	67.5
9.00	10.00	26	0	18	2	1	3	0	0	0	0	50	0	0	0	0	0	0	0	50	47
10.00	11.00	30	0	15	1	3	2	2	0	0	0	53	0	0	0	0	0	0	0	53	67.5
11.00	12.00	7	0	13	2	2	3	4	0	0	0	31	0	0	0	0	0	0	0	31	40.5
12.00	13.00	18	0	4	2	3	4	3	0	0	0	34	0	0	0	0	0	0	0	34	59
13.00	14.00	41	0	7	2	2	2	2	0	1	0	57	0	0	0	0	0	0	0	57	62.5
14.00	15.00	36	0	9	2	2	1	2	0	0	0	52	0	0	0	0	0	0	0	52	61.5
15.00	16.00	42	0	12	1	3	1	1	0	0	0	60	0	0	0	0	0	0	0	60	60
16.00	17.00	23	0	8	1	2	4	1	0	0	0	39	0	0	0	0	0	0	0	39	54
17.00	18.00	13	0	6	1	1	0	2	0	0	0	23	0	0	0	0	0	0	0	23	22
18.00	19.00	10	0	3	2	0	3	2	0	0	0	20	0	0	0	0	0	0	0	20	20.5
19.00	20.00	4	0	1	0	3	0	3	0	0	0	11	0	0	0	0	0	0	0	11	22.5
20.00	21.00	12	0	2	0	0	2	0	0	0	0	16	0	0	0	0	0	0	0	16	19
21.00	22.00	12	0	1	0	1	0	1	0	0	0	15	0	0	0	0	0	0	0	15	18.5
22.00	23.00	2	0	2	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	3
23.00	24.00	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
0.00	1.00	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.5
1.00	2.00	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
2.00	3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.00	4.00	0	0	3	0	0	1	2	0	0	0	6	0	0	0	0	0	0	0	6	10.5
4.00	5.00	8	0	2	0	1	0	1	0	0	0	12	0	0	0	0	0	0	0	12	15
TOTAL		389	0	145	22	33	37	33	0	3	0	662	0	0	0	0	0	0	0	662	803.5

State	**: Sikkim**						**Road**	**: Tarku to Legship**												
Direction	**: Daywise Traffic - Both Directions**						**Road**	**: Tarku to Legship**				**Additional Information**								
Section From: Km 16 to Km 60							**Station no.: 1**					**Weather: Fair**								
Date	**:27.08.2009**						**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**							
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	9	0	5	0	1	3	0	0	0	0	18	0	0	0	0	0	0	0	18	17.5
6.00	7.00	14	0	8	3	3	2	1	0	0	0	31	0	0	0	0	0	0	0	31	30
7.00	8.00	21	0	14	3	2	5	2	0	1	0	48	0	0	0	0	0	0	0	48	46
8.00	9.00	26	0	14	4	3	5	5	0	1	0	58	0	0	0	0	0	0	0	58	78
9.00	10.00	48	0	24	4	5	2	1	0	2	0	86	0	0	0	0	0	0	0	86	87
10.00	11.00	15	0	11	3	3	6	2	0	0	0	40	0	0	0	0	0	0	0	40	53.5
11.00	12.00	14	0	13	4	4	2	2	0	0	0	39	0	0	0	0	0	0	0	39	35.5
12.00	13.00	29	0	4	2	3	6	3	0	1	0	48	0	0	0	0	0	0	0	48	46
13.00	14.00	26	0	10	2	4	4	0	0	0	0	46	0	0	0	0	0	0	0	46	52
14.00	15.00	22	0	16	3	3	2	4	0	0	0	50	0	0	0	0	0	0	0	50	54
15.00	16.00	18	0	10	2	5	3	4	0	0	0	42	0	0	0	0	0	0	0	42	68
16.00	17.00	7	0	10	1	5	3	1	0	0	0	27	0	0	0	0	0	0	0	27	39
17.00	18.00	20	0	3	3	3	3	4	0	0	0	36	0	0	0	0	0	0	0	36	39.5
18.00	19.00	6	0	4	3	5	2	3	0	0	0	23	0	0	0	0	0	0	0	23	20
19.00	20.00	9	0	3	0	1	2	4	0	0	0	19	0	0	0	0	0	0	0	19	25.5
20.00	21.00	11	0	1	0	0	0	1	0	0	0	13	0	0	0	0	0	0	0	13	11.5
21.00	22.00	3	0	0	0	0	1	3	0	0	0	7	0	0	0	0	0	0	0	7	24
22.00	23.00	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.5
23.00	24.00	1	0	0	0	0	0	3	0	0	0	4	0	0	0	0	0	0	0	4	19
0.00	1.00	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.5
1.00	2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.00	3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.00	4.00	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	3
4.00	5.00	3	0	1	0	0	1	3	0	0	0	8	0	0	0	0	0	0	0	8	12.5
TOTAL		302	0	153	38	50	52	46	0	5	0	646	0	0	0	0	0	0	0	646	762.5

State	**: Sikkim**							**Road**	**: Tarku to Legship**												
Direction	**: Daywise Traffic - Both Directions**							**Road**	**: Tarku to Legship**			**Additional Information**									
Section From: Km 16 to Km 60								**Station no.: 1**				**Weather: Fair**									
Date	**:28.08.2009**							**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	4	0	5	2	2	2	1	0	0	0	16	0	0	0	0	0	0	0	16	21.5
6.00	7.00	18	0	8	3	4	4	1	0	0	0	38	0	0	0	0	0	0	0	38	52
7.00	8.00	24	0	7	3	4	2	0	0	0	0	40	0	0	0	0	0	0	0	40	42.5
8.00	9.00	37	0	2	5	4	2	3	0	0	0	53	0	0	0	0	0	0	0	53	80
9.00	10.00	22	0	16	4	2	1	2	0	1	0	48	0	0	0	0	0	0	0	48	36
10.00	11.00	22	0	12	5	2	6	5	0	0	0	52	0	0	0	0	0	0	0	52	64
11.00	12.00	15	0	10	3	2	1	1	0	0	0	32	0	0	0	0	0	0	0	32	32
12.00	13.00	21	0	9	4	4	4	4	0	1	0	47	0	0	0	0	0	0	0	47	52.5
13.00	14.00	13	0	4	4	4	2	3	0	0	0	30	0	0	0	0	0	0	0	30	39
14.00	15.00	24	0	9	4	2	3	2	0	1	0	45	0	0	0	0	0	0	0	45	52.5
15.00	16.00	24	0	4	2	3	3	4	0	1	0	41	0	0	0	0	0	0	0	41	56
16.00	17.00	12	0	17	3	3	2	2	0	0	0	39	0	0	0	0	0	0	0	39	41.5
17.00	18.00	12	0	5	3	1	5	2	0	0	0	28	0	0	0	0	0	0	0	28	26.5
18.00	19.00	16	0	3	2	4	2	1	0	1	0	29	0	0	0	0	0	0	0	29	35.5
19.00	20.00	4	0	0	0	1	0	3	0	0	0	8	0	0	0	0	0	0	0	8	22
20.00	21.00	8	0	3	1	3	1	1	0	0	0	17	0	0	0	0	0	0	0	17	21.5
21.00	22.00	5	0	0	1	1	2	2	0	0	0	11	0	0	0	0	0	0	0	11	23
22.00	23.00	8	0	1	0	1	0	0	0	0	0	10	0	0	0	0	0	0	0	10	8.5
23.00	24.00	1	0	0	0	2	0	1	0	0	0	4	0	0	0	0	0	0	0	4	13
0.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.00	2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.00	3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.00	4.00	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4.00	5.00	0	0	0	2	1	0	1	0	0	0	4	0	0	0	0	0	0	0	4	12
TOTAL		290	0	115	51	50	43	39	0	5	0	593	0	0	0	0	0	0	0	593	731.5

State	**: Sikkim**						**Road**	**: Tarku to Legship**												
Direction	**: Daywise Traffic - Both Directions**						**Road**	**: Tarku to Legship**				**Additional Information**								
Section From: Km 16 to Km 60							**Station no.: 1**					**Weather: Fair**								
Date	**:29.08.2009**						**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**							
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	8	0	5	3	0	2	0	0	0	0	18	0	0	0	0	0	0	0	18	22.5
6.00	7.00	19	0	8	3	2	3	2	0	0	0	37	0	0	0	0	0	0	0	37	47
7.00	8.00	27	0	7	2	5	1	2	0	1	0	45	0	0	0	0	0	0	0	45	63.5
8.00	9.00	37	0	14	1	3	2	5	0	0	0	62	0	0	0	0	0	0	0	62	77
9.00	10.00	26	0	18	3	2	2	0	0	0	0	51	0	0	0	0	0	0	0	51	53
10.00	11.00	25	0	12	5	2	2	3	0	1	0	50	0	0	0	0	0	0	0	50	61
11.00	12.00	15	0	4	4	3	2	1	0	0	0	29	0	0	0	0	0	0	0	29	38
12.00	13.00	29	0	15	3	3	3	2	0	1	0	56	0	0	0	0	0	0	0	56	60.5
13.00	14.00	19	0	6	3	1	2	3	0	0	0	34	0	0	0	0	0	0	0	34	52
14.00	15.00	13	0	11	2	4	1	2	0	2	0	35	0	0	0	0	0	0	0	35	42.5
15.00	16.00	28	0	8	2	4	2	0	0	0	0	44	0	0	0	0	0	0	0	44	53
16.00	17.00	6	0	9	2	3	3	0	0	0	0	23	0	0	0	0	0	0	0	23	31.5
17.00	18.00	9	0	13	2	4	2	0	0	0	0	30	0	0	0	0	0	0	0	30	36.5
18.00	19.00	9	0	4	5	2	3	2	0	0	0	25	0	0	0	0	0	0	0	25	44
19.00	20.00	4	0	5	5	0	1	1	0	0	0	16	0	0	0	0	0	0	0	16	27.5
20.00	21.00	11	0	0	0	2	1	1	0	0	0	15	0	0	0	0	0	0	0	15	32
21.00	22.00	4	0	1	1	3	3	2	0	0	0	14	0	0	0	0	0	0	0	14	37.5
22.00	23.00	5	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	5
23.00	24.00	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
0.00	1.00	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2
1.00	2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.00	3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.00	4.00	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	2	12
4.00	5.00	0	0	0	1	1	0	4	0	0	0	6	0	0	0	0	0	0	0	6	24
TOTAL		297	0	140	47	44	35	32	0	5	0	600	0	0	0	0	0	0	0	600	823

State	**: Sikkim**						**Road**	**: Tarku to Legship**												
Direction	**: Daywise Traffic - Both Directions**						**Road**	**: Tarku to Legship**				**Additional Information**								
Section From: Km 16 to Km 60							**Station no.: 1**					**Weather: Fair**								
Date	**:30.08.2009**						**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**							
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	8	0	0	4	1	2	2	0	0	0	17	0	0	0	0	0	0	0	17	20
6.00	7.00	17	0	2	4	3	3	3	0	3	0	35	0	0	0	0	0	0	0	35	48
7.00	8.00	40	0	4	4	7	5	3	0	0	0	63	0	0	0	0	0	0	0	63	93
8.00	9.00	34	0	5	5	4	7	5	0	2	0	62	0	0	0	0	0	0	0	62	108.5
9.00	10.00	20	0	10	5	7	4	1	0	2	0	49	0	0	0	0	0	0	0	49	73
10.00	11.00	26	0	3	4	3	7	3	0	1	0	47	0	0	0	0	0	0	0	47	69.5
11.00	12.00	28	0	2	3	5	8	4	0	3	0	53	0	0	0	0	0	0	0	53	101
12.00	13.00	22	0	6	5	3	4	1	0	4	0	45	0	0	0	0	0	0	0	45	61
13.00	14.00	33	0	11	3	5	4	3	0	2	0	61	0	0	0	0	0	0	0	61	74.5
14.00	15.00	34	0	5	5	3	5	2	0	1	0	55	0	0	0	0	0	0	0	55	81.5
15.00	16.00	54	0	2	3	9	4	3	0	0	0	75	0	0	0	0	0	0	0	75	112
16.00	17.00	16	0	3	5	4	8	3	0	0	0	39	0	0	0	0	0	0	0	39	68.5
17.00	18.00	22	0	4	5	3	5	5	0	0	0	44	0	0	0	0	0	0	0	44	72
18.00	19.00	11	0	4	7	4	4	4	0	0	0	34	0	0	0	0	0	0	0	34	58
19.00	20.00	11	0	8	3	3	6	3	0	0	0	34	0	0	0	0	0	0	0	34	42
20.00	21.00	3	0	2	1	1	0	0	0	0	0	7	0	0	0	0	0	0	0	7	13
21.00	22.00	6	0	2	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8	7
22.00	23.00	2	0	0	0	0	0	3	0	0	0	5	0	0	0	0	0	0	0	5	8
23.00	24.00	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	1
0.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.00	2.00	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	6
2.00	3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.00	4.00	0	0	0	0	0	2	0	0	1	0	3	0	0	0	0	0	0	0	3	9
4.00	5.00	1	0	2	0	0	2	0	0	0	0	5	0	0	0	0	0	0	0	5	2
TOTAL		388	0	77	66	65	80	49	0	19	0	744	0	0	0	0	0	0	0	744	1128.5

State	**: Sikkim**							**District**	**: South**												
Direction	**: Hourly 7 days Average Both Direction**							**Road**	**: Tarku to Legship**			**Additional Information**									
Section From: Km 16 to Km 60								**Station no.: 1**				**Weather: Fair**									
Date	**:23.08.2009 TO 30.08.2009**							**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/ Vans**	**3 Wheeler/Auto Ricshaw**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailor**	**Total MT**	**Cycle**	**Cycle Rickshaw**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLES**	**Total PCU**
5.00	6.00	56	0	31	13	8	16	4	0	0	0	**127**	0	0	0	0	0	0	**0**	**127**	**168**
6.00	7.00	114	0	55	18	20	22	15	0	4	0	**248**	0	0	0	0	0	0	**0**	**248**	**340**
7.00	8.00	197	0	76	18	28	25	12	0	4	0	**360**	0	0	0	0	0	0	**0**	**360**	**442**
8.00	9.00	238	0	75	22	20	26	22	0	5	0	**408**	0	0	0	0	0	0	**0**	**408**	**522**
9.00	10.00	219	0	116	24	25	18	11	0	9	0	**422**	0	0	0	0	0	0	**0**	**422**	**469**
10.00	11.00	172	0	71	24	16	29	17	0	2	0	**331**	0	0	0	0	0	0	**0**	**331**	**424**
11.00	12.00	118	0	64	19	20	20	14	0	4	0	**259**	0	0	0	0	0	0	**0**	**259**	**327**
12.00	13.00	171	0	47	21	21	27	20	0	8	0	**315**	0	0	0	0	0	0	**0**	**315**	**375**
13.00	14.00	203	0	51	19	21	17	14	0	4	0	**329**	0	0	0	0	0	0	**0**	**329**	**391**
14.00	15.00	173	0	73	20	21	21	14	0	4	0	**326**	0	0	0	0	0	0	**0**	**326**	**393**
15.00	16.00	211	0	62	14	27	19	17	0	1	0	**351**	0	0	0	0	0	0	**0**	**351**	**452**
16.00	17.00	98	0	77	15	22	23	10	0	0	0	**245**	0	0	0	0	0	0	**0**	**245**	**320**
17.00	18.00	104	0	54	16	15	20	19	0	0	0	**228**	0	0	0	0	0	0	**0**	**228**	**278**
18.00	19.00	62	0	23	20	18	18	18	0	1	0	**160**	0	0	0	0	0	0	**0**	**160**	**239**
19.00	20.00	60	0	29	11	8	16	19	0	0	0	**143**	0	0	0	0	0	0	**0**	**143**	**219**
20.00	21.00	56	0	12	3	6	5	7	0	0	0	**89**	0	0	0	0	0	0	**0**	**89**	**137**
21.00	22.00	40	0	6	2	6	6	10	0	0	0	**70**	0	0	0	0	0	0	**0**	**70**	**133**
22.00	23.00	20	0	5	0	1	0	5	0	0	0	**31**	0	0	0	0	0	0	**0**	**31**	**41**
23.00	24.00	8	0	4	0	2	0	5	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**46**
0.00	1.00	2	0	3	0	0	0	2	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**16**
1.00	2.00	1	0	0	0	0	0	1	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**7**
2.00	3.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
3.00	4.00	0	0	4	1	0	7	5	0	1	0	**18**	0	0	0	0	0	0	**0**	**18**	**47**
4.00	5.00	17	0	8	5	6	10	10	0	1	0	**57**	0	0	0	0	0	0	**0**	**57**	**93**
TOTAL		**2341**	**0**	**946**	**285**	**311**	**345**	**271**	**0**	**48**	**0**	**4546**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4546**	**5874**
Hourly Average		**334**	**0**	**135**	**41**	**44**	**49**	**39**	**0**	**7**	**0**	**649**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**649**	**839**

State : Sikkim | **District : South**
Direction : Daywise - Both Directions Summary | **Road : Tarku to Legship** | **Additional Information**
Section From: Km 16 to Km 60 | **Station no.: 1** | **Weather: Fair**
Hour : 24 (7 Days)

DAY & DATE		FAST MOVING VEHICLES											NON MOTORISED TRAFFIC								
		Cars/Jeep/Vans	3 Wheeler/Auto Ricshaw	Two Wheelers	Mini Bus	Full Bus	LCV	Truck 2-Axle	Multi Axle Truck	Tractor	Tractor with Trailor	Total MT	Cycle	Cycle Rickshaw	Hand Cart	Horse Cart	Bullock Cart	Others	TOTAL NMT	TOTAL VEHICLES	Total PCU
DAY-1	UP	128	0	44	15	14	24	31	0	4	0	260	0	0	0	0	0	0	0	260	356
	DOWN	189	0	87	15	22	24	15	0	2	0	354	0	0	0	0	0	0	0	354	438
TOTAL		317	0	131	30	36	48	46	0	6	0	614	0	0	0	0	0	0	0	614	794
DAY-2	UP	177	0	110	17	18	22	22	0	4	0	370	0	0	0	0	0	0	0	370	423
	DOWN	181	0	75	13	15	28	4	0	1	0	317	0	0	0	0	0	0	0	317	409
TOTAL		358	0	185	30	33	50	26	0	5	0	687	0	0	0	0	0	0	0	687	832
DAY-3	UP	168	0	81	11	19	21	22	0	0	0	322	0	0	0	0	0	0	0	322	380
	DOWN	221	0	64	11	14	16	11	0	3	0	340	0	0	0	0	0	0	0	340	424
TOTAL		389	0	145	22	33	37	33	0	3	0	662	0	0	0	0	0	0	0	662	804
DAY-4	UP	166	0	78	16	21	28	18	0	3	0	330	0	0	0	0	0	0	0	330	397
	DOWN	136	0	75	22	29	24	28	0	2	0	316	0	0	0	0	0	0	0	316	366
TOTAL		302	0	153	38	50	52	46	0	5	0	646	0	0	0	0	0	0	0	646	763
DAY-5	UP	146	0	58	29	24	15	18	0	0	0	290	0	0	0	0	0	0	0	290	367
	DOWN	144	0	57	22	26	28	21	0	5	0	303	0	0	0	0	0	0	0	303	365
TOTAL		290	0	115	51	50	43	39	0	5	0	593	0	0	0	0	0	0	0	593	732
DAY-6	UP	156	0	71	31	27	21	23	0	0	0	329	0	0	0	0	0	0	0	329	420
	DOWN	141	0	69	16	17	14	9	0	5	0	271	0	0	0	0	0	0	0	271	404
TOTAL		297	0	140	47	44	35	32	0	5	0	600	0	0	0	0	0	0	0	600	823
DAY-7	UP	168	0	29	38	39	40	28	0	11	0	353	0	0	0	0	0	0	0	353	534
	DOWN	220	0	48	28	26	40	21	0	8	0	391	0	0	0	0	0	0	0	391	595
TOTAL		388	0	77	66	65	80	49	0	19	0	744	0	0	0	0	0	0	0	744	1129
TOTAL WEEKLY TRAFFIC		**2341**	**0**	**946**	**284**	**311**	**345**	**271**	**0**	**48**	**0**	**4546**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4546**	**5874**
AVERAGE DAILY TRAFFIC		**334**	**0**	**135**	**41**	**44**	**49**	**39**	**0**	**7**	**0**	**649**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**649**	**839**

COMMERCIAL VEHICLE PER DAY (CVD)	**180**

State	**: Sikkim**						**District**	**: West**													
Direction	**: Km 58 towards Km 81 DAILY TRAFFIC**						**Road**	**: Legship to Gyalshing**				**Additional Information**									
Section From: Km 58 to Km 81							**Station no.: Legs**					**Weather:**	**Fair**								
Date	**:13.09.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Vans**	**3 Wheeler/Auto Ricshaw**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailor**	**Total MT**	**Cycle**	**Cycle Rickshaw**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLES**	**Total PCU**
5.00	6.00	1	0	2	0	0	1	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**4**
6.00	7.00	4	0	5	0	0	2	3	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**19.5**
7.00	8.00	7	0	3	0	0	4	2	0	2	0	**18**	0	0	0	0	0	0	**0**	**18**	**34.5**
8.00	9.00	11	0	7	0	0	4	1	0	0	0	**23**	0	0	0	0	0	0	**0**	**23**	**29.5**
9.00	10.00	16	0	4	3	2	0	1	0	1	0	**27**	0	0	0	0	0	0	**0**	**27**	**35.5**
10.00	11.00	13	0	1	2	0	1	2	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**25**
11.00	12.00	5	0	3	1	0	0	2	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**17.5**
12.00	13.00	24	0	1	1	0	0	2	0	0	0	**28**	0	0	0	0	0	0	**0**	**28**	**38.5**
13.00	14.00	12	0	6	2	1	0	1	0	1	0	**23**	0	0	0	0	0	0	**0**	**23**	**28**
14.00	15.00	6	0	2	1	1	1	0	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**13.5**
15.00	16.00	9	0	1	0	1	2	2	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**23.5**
16.00	17.00	7	0	3	1	2	0	2	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**22.5**
17.00	18.00	9	0	1	0	1	2	1	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**18.5**
18.00	19.00	1	0	0	1	1	1	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**7**
19.00	20.00	2	0	5	1	0	3	5	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**25.5**
20.00	21.00	0	0	0	1	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1.5**
21.00	22.00	0	0	0	0	0	0	2	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**6**
22.00	23.00	0	0	0	0	0	0	2	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**6**
23.00	24.00	0	0	0	0	0	0	1	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**3**
0.00	1.00	0	0	0	0	0	0	2	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**6**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	1	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1.5**
4.00	5.00	1	0	0	0	1	1	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**5.5**
TOTAL		**128**	**0**	**44**	**14**	**10**	**23**	**31**	**0**	**4**	**0**	**254**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**254**	**340.5**

State	**: Sikkim**						**District**	**: West**													
Direction	**: Km 58 towards Km 81 DAILY TRAFFIC**						**Road**	**: Legship to Gyalshing**				**Additional Information**									
Section From: Km 58 to Km 81							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:14.09.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Van**	**3 Wheeler/A**	**Two Wheeler**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	3	0	4	0	0	0	0	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**6**
6.00	7.00	9	0	7	1	2	1	2	0	1	0	**23**	0	0	0	0	0	0	**0**	**23**	**35.5**
7.00	8.00	14	0	16	2	4	2	0	0	0	0	**38**	0	0	0	0	0	0	**0**	**38**	**44**
8.00	9.00	16	0	12	0	3	1	0	0	0	0	**32**	0	0	0	0	0	0	**0**	**32**	**40**
9.00	10.00	23	0	4	3	5	1	3	0	2	0	**41**	0	0	0	0	0	0	**0**	**41**	**68**
10.00	11.00	15	0	8	2	2	2	0	0	0	0	**29**	0	0	0	0	0	0	**0**	**29**	**31.5**
11.00	12.00	11	0	13	1	0	2	0	0	0	0	**27**	0	0	0	0	0	0	**0**	**27**	**26**
12.00	13.00	7	0	4	1	0	1	1	0	1	0	**15**	0	0	0	0	0	0	**0**	**15**	**24**
13.00	14.00	25	0	1	1	1	0	0	0	0	0	**28**	0	0	0	0	0	0	**0**	**28**	**30**
14.00	15.00	7	0	6	1	2	2	2	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**26.5**
15.00	16.00	8	0	17	2	0	3	1	0	0	0	**31**	0	0	0	0	0	0	**0**	**31**	**28**
16.00	17.00	10	0	12	0	1	1	0	0	0	0	**24**	0	0	0	0	0	0	**0**	**24**	**22**
17.00	18.00	9	0	4	1	0	1	3	0	0	0	**18**	0	0	0	0	0	0	**0**	**18**	**23.5**
18.00	19.00	5	0	0	0	1	2	4	0	0	0	**12**	0	0	0	0	0	0	**0**	**12**	**23**
19.00	20.00	11	0	2	0	0	1	0	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**14**
20.00	21.00	3	0	0	0	0	0	4	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**15**
21.00	22.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
22.00	23.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**3**
23.00	24.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	1	1	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**4.5**
4.00	5.00	0	0	0	0	1	0	1	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**6**
TOTAL		**177**	**0**	**110**	**15**	**22**	**21**	**22**	**0**	**4**	**0**	**371**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**371**	**430**

State	**: Sikkim**						**District**	**: West**													
Direction	**: Km 58 towards Km 81 DAILY TRAFFIC**						**Road**	**: Legship to Gyalshing**				**Additional Information**									
Section From: Km 58 to Km 81							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:15.09.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Van**	**3 Wheeler/A**	**Two Wheeler**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	1	0	3	0	0	0	1	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**6**
6.00	7.00	9	0	6	0	2	2	2	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**32**
7.00	8.00	17	0	11	1	2	0	1	0	0	0	**32**	0	0	0	0	0	0	**0**	**32**	**37**
8.00	9.00	13	0	8	0	1	2	1	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**26.5**
9.00	10.00	9	0	6	1	0	1	0	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**19.5**
10.00	11.00	21	0	9	0	2	2	2	0	0	0	**36**	0	0	0	0	0	0	**0**	**36**	**43.5**
11.00	12.00	4	0	11	1	0	2	2	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**21.5**
12.00	13.00	11	0	3	0	2	2	3	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**34**
13.00	14.00	25	0	4	2	3	1	1	0	0	0	**36**	0	0	0	0	0	0	**0**	**36**	**44**
14.00	15.00	13	0	2	1	1	0	2	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**26.5**
15.00	16.00	11	0	1	0	3	0	1	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**24**
16.00	17.00	6	0	3	1	2	2	1	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**21**
17.00	18.00	5	0	4	0	0	0	1	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**10**
18.00	19.00	4	0	2	1	0	2	0	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**9.5**
19.00	20.00	2	0	0	0	1	0	2	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**11**
20.00	21.00	5	0	2	0	0	2	0	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**9**
21.00	22.00	9	0	1	0	0	0	1	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**12.5**
22.00	23.00	1	0	1	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**1.5**
23.00	24.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	3	0	0	1	1	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**6**
4.00	5.00	1	0	1	0	1	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**4.5**
TOTAL		**168**	**0**	**81**	**8**	**20**	**19**	**22**	**0**	**0**	**0**	**318**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**318**	**375**

State	**: Sikkim**						**District**	**: West**													
Direction	**: Km 58 towards Km 81 DAILY TRAFFIC**						**Road**	**: Legship to Gyalshing**				**Additional Information**									
Section From: Km 58 to Km 81							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:16.09.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Vans**	**3 Wheeler/Auto Ricshaw**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailor**	**Total MT**	**Cycle**	**Cycle Rickshaw**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLES**	**Total PCU**
5.00	6.00	6	0	3	0	0	2	0	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**11.5**
6.00	7.00	9	0	4	0	1	0	0	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**17**
7.00	8.00	13	0	5	1	0	3	0	0	1	0	**23**	0	0	0	0	0	0	**0**	**23**	**29**
8.00	9.00	15	0	7	3	2	4	2	0	0	0	**33**	0	0	0	0	0	0	**0**	**33**	**41.5**
9.00	10.00	27	0	12	1	2	0	0	0	2	0	**44**	0	0	0	0	0	0	**0**	**44**	**55.5**
10.00	11.00	9	0	6	2	2	5	0	0	0	0	**24**	0	0	0	0	0	0	**0**	**24**	**29.5**
11.00	12.00	7	0	9	0	1	0	1	0	0	0	**18**	0	0	0	0	0	0	**0**	**18**	**20.5**
12.00	13.00	11	0	1	1	0	4	0	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**26.5**
13.00	14.00	12	0	8	0	2	3	0	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**30**
14.00	15.00	10	0	5	1	1	1	2	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**28.5**
15.00	16.00	9	0	2	1	3	2	3	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**32.5**
16.00	17.00	2	0	7	0	4	1	0	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**19**
17.00	18.00	13	0	3	2	1	0	1	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**24**
18.00	19.00	3	0	2	0	2	0	0	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**10**
19.00	20.00	7	0	0	0	0	1	2	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**15.5**
20.00	21.00	10	0	1	0	0	0	0	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**10.5**
21.00	22.00	3	0	0	0	0	1	3	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**15**
22.00	23.00	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
23.00	24.00	0	0	0	0	0	0	3	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**9**
0.00	1.00	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**0.5**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	1	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1.5**
4.00	5.00	0	0	1	0	0	1	1	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**5**
TOTAL		**166**	**0**	**78**	**13**	**21**	**28**	**18**	**0**	**3**	**0**	**327**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**327**	**392.5**

State	**: Sikkim**						**District**	**: West**													
Direction	**: Km 58 towards Km 81 DAILY TRAFFIC**						**Road**	**: Legship to Gyalshing**				**Additional Information**									
Section From: Km 58 to Km 81							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:17.09.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Van**	**3 Wheeler/A**	**Two Wheeler**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	3	0	4	1	0	0	0	0	0	0	**8**	0	0	0	0	0	0	**0**	**8**	**7.5**
6.00	7.00	11	0	5	2	2	2	1	0	0	0	**23**	0	0	0	0	0	0	**0**	**23**	**28.5**
7.00	8.00	12	0	6	1	2	0	0	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**26**
8.00	9.00	19	0	0	3	3	1	2	0	0	0	**28**	0	0	0	0	0	0	**0**	**28**	**41**
9.00	10.00	9	0	2	2	0	0	0	0	0	0	**13**	0	0	0	0	0	0	**0**	**13**	**14.5**
10.00	11.00	13	0	1	3	1	3	2	0	0	0	**23**	0	0	0	0	0	0	**0**	**23**	**32**
11.00	12.00	4	0	5	2	0	0	0	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**10.5**
12.00	13.00	16	0	7	0	2	1	1	0	0	0	**27**	0	0	0	0	0	0	**0**	**27**	**30.5**
13.00	14.00	6	0	3	2	1	0	2	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**19.5**
14.00	15.00	7	0	7	2	1	2	1	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**23.5**
15.00	16.00	12	0	1	1	0	1	2	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**22.5**
16.00	17.00	3	0	9	0	1	1	1	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**15**
17.00	18.00	9	0	4	0	0	2	0	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**17.5**
18.00	19.00	6	0	1	0	2	1	0	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**16.5**
19.00	20.00	3	0	0	0	0	0	3	0	0	0	**6**	0	0	0	0	0	0	**0**	**6**	**12.5**
20.00	21.00	7	0	2	1	1	1	0	0	0	0	**12**	0	0	0	0	0	0	**0**	**12**	**14**
21.00	22.00	3	0	0	0	1	0	2	0	0	0	**6**	0	0	0	0	0	0	**0**	**6**	**12**
22.00	23.00	2	0	1	0	0	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**2.5**
23.00	24.00	1	0	0	0	2	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**7**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
4.00	5.00	0	0	0	2	0	0	1	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**6**
TOTAL		**146**	**0**	**58**	**22**	**19**	**15**	**18**	**0**	**0**	**0**	**278**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**278**	**341.5**

State	**: Sikkim**						**District**	**: West**												
Direction	**: Km 58 towards Km 81 DAILY TRAFFIC**						**Road**	**: Legship to Gyalshing**				**Additional Information**								
Section From: Km 58 to Km 81							**Station no.: 1**					**Weather:**	**Fair**							
Date	**:18.09.2009**						**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Van**	**3 Wheeler/Auto**	**Two Wheeler**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailor**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	3	0	2	0	0	2	0	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**7**
6.00	7.00	10	0	6	1	2	1	1	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**29**
7.00	8.00	15	0	3	2	2	1	2	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**33**
8.00	9.00	16	0	7	0	1	2	3	0	0	0	**29**	0	0	0	0	0	0	**0**	**29**	**34.5**
9.00	10.00	17	0	9	1	2	1	0	0	0	0	**30**	0	0	0	0	0	0	**0**	**30**	**34**
10.00	11.00	19	0	7	2	1	2	2	0	0	0	**33**	0	0	0	0	0	0	**0**	**33**	**43.5**
11.00	12.00	11	0	3	2	2	0	0	0	0	0	**18**	0	0	0	0	0	0	**0**	**18**	**21.5**
12.00	13.00	13	0	9	2	2	2	0	0	0	0	**28**	0	0	0	0	0	0	**0**	**28**	**40**
13.00	14.00	6	0	3	3	0	1	3	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**22.5**
14.00	15.00	4	0	2	1	2	1	1	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**18**
15.00	16.00	11	0	1	2	2	1	0	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**28**
16.00	17.00	3	0	7	0	2	1	0	0	0	0	**13**	0	0	0	0	0	0	**0**	**13**	**14.5**
17.00	18.00	4	0	6	2	2	2	0	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**19**
18.00	19.00	8	0	1	3	1	0	2	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**22**
19.00	20.00	1	0	4	4	0	0	1	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**12**
20.00	21.00	6	0	0	0	2	1	1	0	0	0	**10**	0	0	0	0	0	0	**0**	**10**	**17**
21.00	22.00	4	0	1	1	3	0	2	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**21**
22.00	23.00	3	0	0	0	0	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**3**
23.00	24.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
0.00	1.00	2	0	0	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**2**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	0	2	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**6**
4.00	5.00	0	0	0	0	1	0	3	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**12**
TOTAL		**156**	**0**	**71**	**26**	**27**	**18**	**23**	**0**	**0**	**0**	**321**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**321**	**407.5**

State	**: Sikkim**						**District**	**: West**													
Direction	**: Km 58 towards Km 81 DAILY TRAFFIC**						**Road**	**: Legship to Gyalshing**				**Additional Information**									
Section From: Km 58 to Km 81							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:19.09.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Vans**	**3 Wheeler/Auto Ricshaw**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailor**	**Total MT**	**Cycle**	**Cycle Rickshaw**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLES**	**Total PCU**
5.00	6.00	6	0	0	1	0	0	1	0	0	0	**8**	0	0	0	0	0	0	**0**	**8**	**14**
6.00	7.00	9	0	1	2	1	2	0	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**18.5**
7.00	8.00	23	0	0	0	4	3	2	0	0	0	**32**	0	0	0	0	0	0	**0**	**32**	**45.5**
8.00	9.00	8	0	2	0	0	5	3	0	2	0	**20**	0	0	0	0	0	0	**0**	**20**	**33**
9.00	10.00	4	0	3	2	5	0	1	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**26.5**
10.00	11.00	12	0	0	1	0	4	0	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**20.5**
11.00	12.00	6	0	1	2	3	6	2	0	0	0	**20**	0	0	0	0	0	0	**0**	**20**	**33.5**
12.00	13.00	18	0	4	3	1	1	0	0	0	0	**27**	0	0	0	0	0	0	**0**	**27**	**30.5**
13.00	14.00	12	0	5	2	3	2	1	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**33.5**
14.00	15.00	17	0	3	1	0	0	1	0	1	0	**23**	0	0	0	0	0	0	**0**	**23**	**28.5**
15.00	16.00	22	0	1	0	7	1	0	0	0	0	**31**	0	0	0	0	0	0	**0**	**31**	**47**
16.00	17.00	7	0	0	1	2	0	3	0	0	0	**13**	0	0	0	0	0	0	**0**	**13**	**27.5**
17.00	18.00	11	0	3	1	2	1	3	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**32**
18.00	19.00	6	0	2	5	2	2	2	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**33.5**
19.00	20.00	4	0	0	0	0	0	2	0	0	0	**6**	0	0	0	0	0	0	**0**	**6**	**10.5**
20.00	21.00	0	0	0	0	1	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**3**
21.00	22.00	2	0	1	0	0	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**3**
22.00	23.00	1	0	0	0	0	0	1	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**4.5**
23.00	24.00	0	0	2	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**4**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	1	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**3**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	1	0	0	1	0	**2**	0	0	0	0	0	0	**0**	**2**	**4.5**
4.00	5.00	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**0.5**
TOTAL		**168**	**0**	**29**	**21**	**31**	**28**	**23**	**0**	**4**	**0**	**304**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**304**	**430**

State	**: Sikkim**							**District**	**: West**												
Direction	**: Km 58 towards Km 81 DAILY TRAFFIC**							**Road**	**: Legship to Gyalshing**			**Additional Information**									
Section From: Km 58 to Km 81								**Station no.: 1**				**Weather:**	**Fair**								
Date	**:13.09.2009**							**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Vans**	**3 Wheeler/Auto Rickshaw**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailor**	**Total MT**	**Cycle**	**Cycle Rickshaw**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLES**	**Total PCU**
5.00	6.00	3	0	1	0	0	0	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**5.5**
6.00	7.00	11	0	4	1	1	1	1	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**26**
7.00	8.00	14	0	7	0	3	2	1	0	0	0	**27**	0	0	0	0	0	0	**0**	**27**	**43.5**
8.00	9.00	22	0	5	2	1	1	0	0	0	0	**31**	0	0	0	0	0	0	**0**	**31**	**39.5**
9.00	10.00	26	0	11	2	2	2	2	0	1	0	**46**	0	0	0	0	0	0	**0**	**46**	**49**
10.00	11.00	18	0	5	0	0	0	0	0	0	0	**23**	0	0	0	0	0	0	**0**	**23**	**32**
11.00	12.00	9	0	4	0	2	1	0	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**22**
12.00	13.00	6	0	3	2	3	3	4	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**21.5**
13.00	14.00	22	0	4	2	1	2	1	0	0	0	**32**	0	0	0	0	0	0	**0**	**32**	**37**
14.00	15.00	24	0	9	1	2	2	0	0	0	0	**38**	0	0	0	0	0	0	**0**	**38**	**35**
15.00	16.00	11	0	7	1	2	1	2	0	0	0	**24**	0	0	0	0	0	0	**0**	**24**	**28.5**
16.00	17.00	6	0	5	1	1	2	1	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**22.5**
17.00	18.00	4	0	12	1	2	1	2	0	0	0	**22**	0	0	0	0	0	0	**0**	**22**	**19**
18.00	19.00	1	0	4	0	1	1	1	0	0	0	**8**	0	0	0	0	0	0	**0**	**8**	**9**
19.00	20.00	6	0	1	1	0	1	0	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**27.5**
20.00	21.00	1	0	1	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**3**
21.00	22.00	3	0	0	0	0	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**9**
22.00	23.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**7**
23.00	24.00	0	0	2	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**4**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**6**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	1	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1.5**
4.00	5.00	1	0	2	1	1	3	0	0	1	0	**9**	0	0	0	0	0	0	**0**	**9**	**6.5**
TOTAL		**189**	**0**	**87**	**15**	**22**	**24**	**15**	**0**	**2**	**0**	**354**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**354**	**423**

State	**: Sikkim**						**District**	**: West**													
Direction	**: Km 58 towards Km 81 DAILY TRAFFIC**						**Road**	**: Legship to Gyalshing**				**Additional Information**									
Section From: Km 58 to Km 81							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:14.09.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	12	0	2	0	0	2	0	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**14**
6.00	7.00	3	0	5	0	0	4	0	0	0	0	**12**	0	0	0	0	0	0	**0**	**12**	**28.5**
7.00	8.00	16	0	4	1	1	1	0	0	0	0	**23**	0	0	0	0	0	0	**0**	**23**	**40**
8.00	9.00	13	0	7	2	2	3	1	0	0	0	**28**	0	0	0	0	0	0	**0**	**28**	**34.5**
9.00	10.00	12	0	11	1	2	2	1	0	0	0	**29**	0	0	0	0	0	0	**0**	**29**	**60.5**
10.00	11.00	8	0	4	2	0	1	0	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**22.5**
11.00	12.00	14	0	2	0	1	1	0	0	1	0	**19**	0	0	0	0	0	0	**0**	**19**	**23.5**
12.00	13.00	15	0	1	0	0	0	0	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**30.5**
13.00	14.00	12	0	2	0	0	0	1	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**17.5**
14.00	15.00	7	0	6	0	2	4	0	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**26.5**
15.00	16.00	17	0	1	1	0	0	0	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**29**
16.00	17.00	11	0	10	1	1	0	0	0	0	0	**23**	0	0	0	0	0	0	**0**	**23**	**22**
17.00	18.00	6	0	6	0	0	1	0	0	0	0	**13**	0	0	0	0	0	0	**0**	**13**	**21.5**
18.00	19.00	3	0	1	0	0	0	1	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**21.5**
19.00	20.00	9	0	4	1	0	2	0	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**13**
20.00	21.00	7	0	3	0	0	1	0	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**20.5**
21.00	22.00	6	0	2	0	1	0	0	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**7**
22.00	23.00	2	0	1	0	0	0	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**5.5**
23.00	24.00	4	0	0	0	0	0	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**4**
0.00	1.00	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**0.5**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
3.00	4.00	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**5**
4.00	5.00	3	0	1	1	0	3	0	0	0	0	**8**	0	0	0	0	0	0	**0**	**8**	**9.5**
TOTAL		**181**	**0**	**75**	**10**	**10**	**25**	**4**	**0**	**1**	**0**	**306**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**306**	**416.5**

State	**: Sikkim**						**District**	**: West**													
Direction	**: Km 58 towards Km 81 DAILY TRAFFIC**						**Road**	**: Legship to Gyalshing**				**Additional Information**									
Section From: Km 58 to Km 81							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:15.09.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	7	0	4	0	0	1	0	0	0	0	**12**	0	0	0	0	0	0	**0**	**12**	**12.5**
6.00	7.00	10	0	2	0	1	1	0	0	0	0	**14**	0	0	0	0	0	0	**0**	**14**	**31**
7.00	8.00	17	0	3	1	0	2	1	0	0	0	**24**	0	0	0	0	0	0	**0**	**24**	**33**
8.00	9.00	29	0	1	2	2	3	1	0	2	0	**40**	0	0	0	0	0	0	**0**	**40**	**39**
9.00	10.00	17	0	12	0	0	2	0	0	0	0	**31**	0	0	0	0	0	0	**0**	**31**	**30.5**
10.00	11.00	9	0	6	1	1	0	0	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**30**
11.00	12.00	3	0	2	0	1	1	2	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**16**
12.00	13.00	7	0	1	0	1	2	0	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**29**
13.00	14.00	16	0	3	0	0	1	1	0	1	0	**22**	0	0	0	0	0	0	**0**	**22**	**34.5**
14.00	15.00	23	0	7	0	0	3	0	0	0	0	**33**	0	0	0	0	0	0	**0**	**33**	**39**
15.00	16.00	31	0	11	1	0	1	0	0	0	0	**44**	0	0	0	0	0	0	**0**	**44**	**49**
16.00	17.00	17	0	5	0	0	2	0	0	0	0	**24**	0	0	0	0	0	0	**0**	**24**	**33**
17.00	18.00	8	0	2	1	1	0	1	0	0	0	**13**	0	0	0	0	0	0	**0**	**13**	**12**
18.00	19.00	6	0	1	1	0	1	2	0	0	0	**11**	0	0	0	0	0	0	**0**	**11**	**11**
19.00	20.00	2	0	1	0	2	0	1	0	0	0	**6**	0	0	0	0	0	0	**0**	**6**	**11.5**
20.00	21.00	7	0	0	0	0	0	0	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**10**
21.00	22.00	3	0	0	0	1	0	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**6**
22.00	23.00	1	0	1	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**1.5**
23.00	24.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
0.00	1.00	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**0.5**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	0	1	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**4.5**
4.00	5.00	7	0	1	0	0	0	1	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**10.5**
TOTAL		**221**	**0**	**64**	**7**	**10**	**20**	**11**	**0**	**3**	**0**	**336**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**336**	**419.5**

State	**: Sikkim**						**District**	**: West**												
Direction	**: Km 58 towards Km 81 DAILY TRAFFIC**						**Road**	**: Legship to Gyalshing**				**Additional Information**								
Section From: Km 58 to Km 81							**Station no.: 1**					**Weather:**	**Fair**							
Date	**:16.09.2009**						**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**							
From	**To**	**Cars/Jeep/Vans**	**3 Wheeler/Auto Ricshaw**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailor**	**Total MT**	**Cycle**	**Cycle Rickshaw**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLES**	**Total PCU**
5.00	6.00	3	0	2	0	1	1	0	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**8**
6.00	7.00	5	0	4	1	0	7	1	0	0	0	**18**	0	0	0	0	0	0	**0**	**18**	**13**
7.00	8.00	8	0	9	2	2	4	2	0	0	0	**27**	0	0	0	0	0	0	**0**	**27**	**26**
8.00	9.00	11	0	7	1	1	3	3	0	1	0	**27**	0	0	0	0	0	0	**0**	**27**	**37.5**
9.00	10.00	21	0	12	3	3	2	1	0	0	0	**42**	0	0	0	0	0	0	**0**	**42**	**49.5**
10.00	11.00	6	0	5	1	1	1	2	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**26**
11.00	12.00	7	0	4	3	3	3	1	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**18**
12.00	13.00	18	0	3	1	3	2	3	0	1	0	**31**	0	0	0	0	0	0	**0**	**31**	**34.5**
13.00	14.00	14	0	2	2	2	1	0	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**29**
14.00	15.00	12	0	11	2	2	1	2	0	0	0	**30**	0	0	0	0	0	0	**0**	**30**	**33.5**
15.00	16.00	9	0	8	1	3	3	1	0	0	0	**25**	0	0	0	0	0	0	**0**	**25**	**35.5**
16.00	17.00	5	0	3	1	1	2	1	0	0	0	**13**	0	0	0	0	0	0	**0**	**13**	**20**
17.00	18.00	7	0	0	1	2	3	3	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**16.5**
18.00	19.00	3	0	2	3	3	2	3	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**10**
19.00	20.00	2	0	3	0	1	1	2	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**12**
20.00	21.00	1	0	0	0	0	0	1	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**1**
21.00	22.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**12**
22.00	23.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0.5**
23.00	24.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**10**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**1.5**
4.00	5.00	3	0	0	0	0	0	2	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**7.5**
TOTAL		**136**	**0**	**75**	**22**	**28**	**36**	**28**	**0**	**2**	**0**	**327**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**327**	**361**

State	**: Sikkim**						**District**	**: West**													
Direction	**: Km 58 towards Km 81 DAILY TRAFFIC**						**Road**	**: Legship to Gyalshing**				**Additional Information**									
Section From: Km 58 to Km 81							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:17.09.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	1	0	1	0	0	1	1	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**4**
6.00	7.00	7	0	3	1	2	4	0	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**23.5**
7.00	8.00	12	0	1	2	0	2	0	0	0	0	**17**	0	0	0	0	0	0	**0**	**17**	**23.5**
8.00	9.00	18	0	2	1	1	3	1	0	0	0	**26**	0	0	0	0	0	0	**0**	**26**	**41**
9.00	10.00	13	0	14	2	3	1	2	0	1	0	**36**	0	0	0	0	0	0	**0**	**36**	**24.5**
10.00	11.00	9	0	11	2	3	3	3	0	0	0	**31**	0	0	0	0	0	0	**0**	**31**	**33**
11.00	12.00	11	0	5	1	0	1	1	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**17.5**
12.00	13.00	5	0	2	2	2	3	3	0	1	0	**18**	0	0	0	0	0	0	**0**	**18**	**17**
13.00	14.00	7	0	1	2	3	2	1	0	0	0	**16**	0	0	0	0	0	0	**0**	**16**	**19.5**
14.00	15.00	17	0	2	2	1	1	1	0	1	0	**25**	0	0	0	0	0	0	**0**	**25**	**31**
15.00	16.00	12	0	3	1	1	2	2	0	1	0	**22**	0	0	0	0	0	0	**0**	**22**	**23.5**
16.00	17.00	9	0	8	0	2	1	1	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**20.5**
17.00	18.00	3	0	1	0	0	3	2	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**10**
18.00	19.00	10	0	2	1	2	1	1	0	1	0	**18**	0	0	0	0	0	0	**0**	**18**	**21**
19.00	20.00	1	0	0	0	1	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**10.5**
20.00	21.00	1	0	1	0	2	0	1	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**7.5**
21.00	22.00	2	0	0	1	0	2	0	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**11**
22.00	23.00	6	0	0	0	1	0	0	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**6**
23.00	24.00	0	0	0	0	0	0	1	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**6**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	1	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**0**
4.00	5.00	0	0	0	0	1	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**6**
TOTAL		**144**	**0**	**57**	**18**	**25**	**31**	**21**	**0**	**5**	**0**	**301**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**301**	**339**

State	**: Sikkim**						**District**	**: West**												
Direction	**: Km 58 towards Km 81 DAILY TRAFFIC**						**Road**	**: Legship to Gyalshing**				**Additional Information**								
Section From: Km 58 to Km 81							**Station no.: 1**					**Weather:**	**Fair**							
Date	**:18.09.2009**						**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**							
From	**To**	**Cars/Jeep/Vans**	**3 Wheeler/Auto Rickshaw**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailor**	**Total MT**	**Cycle**	**Cycle Rickshaw**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLES**	**Total PCU**
5.00	6.00	5	0	3	1	0	0	0	0	0	0	**9**	0	0	0	0	0	0	**0**	**9**	**9.5**
6.00	7.00	9	0	2	2	0	2	3	0	0	0	**18**	0	0	0	0	0	0	**0**	**18**	**26**
7.00	8.00	12	0	4	0	3	0	0	0	1	0	**20**	0	0	0	0	0	0	**0**	**20**	**30.5**
8.00	9.00	21	0	7	0	4	0	2	0	0	0	**34**	0	0	0	0	0	0	**0**	**34**	**39.5**
9.00	10.00	9	0	9	2	0	1	0	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**26**
10.00	11.00	6	0	5	3	1	0	1	0	1	0	**17**	0	0	0	0	0	0	**0**	**17**	**29.5**
11.00	12.00	4	0	1	2	3	0	3	0	0	0	**13**	0	0	0	0	0	0	**0**	**13**	**13.5**
12.00	13.00	16	0	6	1	0	3	2	0	1	0	**29**	0	0	0	0	0	0	**0**	**29**	**41.5**
13.00	14.00	13	0	3	0	4	1	0	0	0	0	**21**	0	0	0	0	0	0	**0**	**21**	**29.5**
14.00	15.00	9	0	9	1	2	0	1	0	2	0	**24**	0	0	0	0	0	0	**0**	**24**	**26.5**
15.00	16.00	17	0	7	0	2	1	0	0	0	0	**27**	0	0	0	0	0	0	**0**	**27**	**37**
16.00	17.00	3	0	2	0	1	2	0	0	0	0	**8**	0	0	0	0	0	0	**0**	**8**	**12**
17.00	18.00	5	0	7	0	2	1	0	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**20.5**
18.00	19.00	1	0	3	2	1	1	0	0	0	0	**8**	0	0	0	0	0	0	**0**	**8**	**16**
19.00	20.00	3	0	1	1	0	0	0	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**12.5**
20.00	21.00	5	0	0	0	0	0	0	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**16**
21.00	22.00	0	0	0	0	0	3	0	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**16.5**
22.00	23.00	2	0	0	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**2**
23.00	24.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**6**
4.00	5.00	0	0	0	1	0	0	1	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**12**
TOTAL		**141**	**0**	**69**	**16**	**23**	**15**	**13**	**0**	**5**	**0**	**282**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**282**	**391.5**

State	**: Sikkim**						**District**	**: West**													
Direction	**: Km 58 towards Km 81 DAILY TRAFFIC**						**Road**	**: Legship to Gyalshing**				**Additional Information**									
Section From: Km 58 to Km 81							**Station no.: 1**					**Weather:**	**Fair**								
Date	**:19.09.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	2	0	0	0	1	1	1	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**10**
6.00	7.00	8	0	1	0	1	1	3	0	1	0	**15**	0	0	0	0	0	0	**0**	**15**	**17.5**
7.00	8.00	17	0	4	1	3	2	1	0	0	0	**28**	0	0	0	0	0	0	**0**	**28**	**41.5**
8.00	9.00	26	0	3	1	1	2	0	0	0	0	**33**	0	0	0	0	0	0	**0**	**33**	**51.5**
9.00	10.00	16	0	7	0	1	0	0	0	0	0	**24**	0	0	0	0	0	0	**0**	**24**	**40.5**
10.00	11.00	14	0	3	0	1	1	1	0	1	0	**21**	0	0	0	0	0	0	**0**	**21**	**24**
11.00	12.00	22	0	1	1	2	2	2	0	0	0	**30**	0	0	0	0	0	0	**0**	**30**	**49.5**
12.00	13.00	4	0	2	0	2	0	0	0	0	0	**8**	0	0	0	0	0	0	**0**	**8**	**15.5**
13.00	14.00	21	0	6	1	2	0	0	0	0	0	**30**	0	0	0	0	0	0	**0**	**30**	**43**
14.00	15.00	17	0	2	2	1	1	0	0	0	0	**23**	0	0	0	0	0	0	**0**	**23**	**28**
15.00	16.00	32	0	1	1	1	3	0	0	0	0	**38**	0	0	0	0	0	0	**0**	**38**	**57**
16.00	17.00	9	0	3	0	2	1	0	0	0	0	**15**	0	0	0	0	0	0	**0**	**15**	**31**
17.00	18.00	11	0	1	0	1	2	2	1	0	0	**18**	0	0	0	0	0	0	**0**	**18**	**31**
18.00	19.00	5	0	2	2	1	2	0	0	0	0	**12**	0	0	0	0	0	0	**0**	**12**	**32.5**
19.00	20.00	7	0	8	1	0	1	1	0	0	0	**18**	0	0	0	0	0	0	**0**	**18**	**17.5**
20.00	21.00	3	0	2	0	0	0	0	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**7**
21.00	22.00	4	0	1	0	0	0	0	0	0	0	**5**	0	0	0	0	0	0	**0**	**5**	**5**
22.00	23.00	1	0	0	0	0	0	2	0	0	0	**3**	0	0	0	0	0	0	**0**	**3**	**4.5**
23.00	24.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**3**
0.00	1.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
1.00	2.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**3**
2.00	3.00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	**0**	**0**
3.00	4.00	0	0	0	0	0	1	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**4.5**
4.00	5.00	1	0	1	0	0	2	0	0	0	0	**4**	0	0	0	0	0	0	**0**	**4**	**1.5**
TOTAL		**220**	**0**	**48**	**10**	**20**	**22**	**13**	**1**	**2**	**0**	**336**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**336**	**491.5**

State	**: Sikkim**						**District**	**: West**													
Direction	**: Daywise Traffic - Both Directions**						**Road**	**: Legship to Gyalshing**				**Additional Information**									
Section From: Km 58 to Km 81							**Station no.: 1**					**Weather: Fair**									
Date	**:13.09.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Vans**	**3 Wheeler/Auto Rickshaw**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailor**	**Total MT**	**Cycle**	**Cycle Rickshaw**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLES**	**Total PCU**
5.00	6.00	4	0	3	0	0	1	0	0	0	0	8	0	0	0	0	0	0	0	8	9.5
6.00	7.00	15	0	9	1	1	3	4	0	0	0	33	0	0	0	0	0	0	0	33	45.5
7.00	8.00	21	0	10	0	3	6	3	0	2	0	45	0	0	0	0	0	0	0	45	78
8.00	9.00	33	0	12	2	1	5	1	0	0	0	54	0	0	0	0	0	0	0	54	69
9.00	10.00	42	0	15	5	4	2	3	0	2	0	73	0	0	0	0	0	0	0	73	84.5
10.00	11.00	31	0	6	2	0	1	2	0	0	0	42	0	0	0	0	0	0	0	42	57
11.00	12.00	14	0	7	1	2	1	2	0	0	0	27	0	0	0	0	0	0	0	27	39.5
12.00	13.00	30	0	4	3	3	3	6	0	0	0	49	0	0	0	0	0	0	0	49	60
13.00	14.00	34	0	10	4	2	2	2	0	1	0	55	0	0	0	0	0	0	0	55	65
14.00	15.00	30	0	11	2	3	3	0	0	0	0	49	0	0	0	0	0	0	0	49	48.5
15.00	16.00	20	0	8	1	3	3	4	0	0	0	39	0	0	0	0	0	0	0	39	52
16.00	17.00	13	0	8	2	3	2	3	0	0	0	31	0	0	0	0	0	0	0	31	45
17.00	18.00	13	0	13	1	3	3	3	0	0	0	36	0	0	0	0	0	0	0	36	37.5
18.00	19.00	2	0	4	1	2	2	1	0	0	0	12	0	0	0	0	0	0	0	12	16
19.00	20.00	8	0	6	2	0	4	5	0	0	0	25	0	0	0	0	0	0	0	25	53
20.00	21.00	1	0	1	1	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	4.5
21.00	22.00	3	0	0	0	0	0	2	0	0	0	5	0	0	0	0	0	0	0	5	15
22.00	23.00	1	0	0	0	0	0	2	0	0	0	3	0	0	0	0	0	0	0	3	13
23.00	24.00	0	0	2	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0	3	7
0.00	1.00	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	2	12
1.00	2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.00	3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.00	4.00	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	2	3
4.00	5.00	2	0	2	1	2	4	0	0	1	0	12	0	0	0	0	0	0	0	12	12
TOTAL		317	0	131	29	32	47	46	0	6	0	608	0	0	0	0	0	0	0	608	763.5

State	**: Sikkim**								**Road**	**: Legship to Gyalshing**											
Direction	**: Daywise Traffic - Both Directions**								**Road**	**: Legship to Gyalshing**		**Additional Information**									
Section From: Km 58 to Km 81									**Station no.: 1**			**Weather: Fair**									
Date	**:14.09.2009**								**Hour**	**: 24 (7 Days)**											
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	15	0	6	0	0	2	0	0	0	0	23	0	0	0	0	0	0	0	23	20
6.00	7.00	12	0	12	1	2	5	2	0	1	0	35	0	0	0	0	0	0	0	35	64
7.00	8.00	30	0	20	3	5	3	0	0	0	0	61	0	0	0	0	0	0	0	61	84
8.00	9.00	29	0	19	2	5	4	1	0	0	0	60	0	0	0	0	0	0	0	60	74.5
9.00	10.00	35	0	15	4	7	3	4	0	2	0	70	0	0	0	0	0	0	0	70	128.5
10.00	11.00	23	0	12	4	2	3	0	0	0	0	44	0	0	0	0	0	0	0	44	54
11.00	12.00	25	0	15	1	1	3	0	0	1	0	46	0	0	0	0	0	0	0	46	49.5
12.00	13.00	22	0	5	1	0	1	1	0	1	0	31	0	0	0	0	0	0	0	31	54.5
13.00	14.00	37	0	3	1	1	0	1	0	0	0	43	0	0	0	0	0	0	0	43	47.5
14.00	15.00	14	0	12	1	4	6	2	0	0	0	39	0	0	0	0	0	0	0	39	53
15.00	16.00	25	0	18	3	0	3	1	0	0	0	50	0	0	0	0	0	0	0	50	57
16.00	17.00	21	0	22	1	2	1	0	0	0	0	47	0	0	0	0	0	0	0	47	44
17.00	18.00	15	0	10	1	0	2	3	0	0	0	31	0	0	0	0	0	0	0	31	45
18.00	19.00	8	0	1	0	1	2	5	0	0	0	17	0	0	0	0	0	0	0	17	44.5
19.00	20.00	20	0	6	1	0	3	0	0	0	0	30	0	0	0	0	0	0	0	30	27
20.00	21.00	10	0	3	0	0	1	4	0	0	0	18	0	0	0	0	0	0	0	18	35.5
21.00	22.00	7	0	2	0	1	0	0	0	0	0	10	0	0	0	0	0	0	0	10	8
22.00	23.00	2	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	8.5
23.00	24.00	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	4
0.00	1.00	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.5
1.00	2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.00	3.00	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
3.00	4.00	0	0	1	0	0	1	1	0	0	0	3	0	0	0	0	0	0	0	3	9.5
4.00	5.00	3	0	1	1	1	3	1	0	0	0	10	0	0	0	0	0	0	0	10	15.5
TOTAL		358	0	185	25	32	46	26	0	5	0	677	0	0	0	0	0	0	0	677	846.5

State	**: Sikkim**						**Road**	**: Legship to Gyalshing**												
Direction	**: Daywise Traffic - Both Directions**						**Road**	**: Legship to Gyalshing**			**Additional Information**									
Section From: Km 58 to Km 81							**Station no.: 1**				**Weather: Fair**									
Date	**:15.09.2009**						**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**							
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	8	0	7	2	1	1	1	0	0	0	17	0	0	0	0	0	0	0	17	18.5
6.00	7.00	19	0	8	0	3	3	2	0	0	0	35	0	0	0	0	0	0	0	35	63
7.00	8.00	34	0	14	2	2	2	2	0	0	0	56	0	0	0	0	0	0	0	56	70
8.00	9.00	42	0	9	2	3	5	2	0	2	0	65	0	0	0	0	0	0	0	65	65.5
9.00	10.00	26	0	18	1	0	3	0	0	0	0	48	0	0	0	0	0	0	0	48	50
10.00	11.00	30	0	15	1	3	2	2	0	0	0	53	0	0	0	0	0	0	0	53	73.5
11.00	12.00	7	0	13	1	1	3	4	0	0	0	29	0	0	0	0	0	0	0	29	37.5
12.00	13.00	18	0	4	0	3	4	3	0	0	0	32	0	0	0	0	0	0	0	32	63
13.00	14.00	41	0	7	2	3	2	2	0	1	0	58	0	0	0	0	0	0	0	58	78.5
14.00	15.00	36	0	9	1	1	3	2	0	0	0	52	0	0	0	0	0	0	0	52	65.5
15.00	16.00	42	0	12	1	3	1	1	0	0	0	60	0	0	0	0	0	0	0	60	73
16.00	17.00	23	0	8	1	2	4	1	0	0	0	39	0	0	0	0	0	0	0	39	54
17.00	18.00	13	0	6	1	1	0	2	0	0	0	23	0	0	0	0	0	0	0	23	22
18.00	19.00	10	0	3	2	0	3	2	0	0	0	20	0	0	0	0	0	0	0	20	20.5
19.00	20.00	4	0	1	0	3	0	3	0	0	0	11	0	0	0	0	0	0	0	11	22.5
20.00	21.00	12	0	2	0	0	2	0	0	0	0	16	0	0	0	0	0	0	0	16	19
21.00	22.00	12	0	1	0	1	0	1	0	0	0	15	0	0	0	0	0	0	0	15	18.5
22.00	23.00	2	0	2	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	3
23.00	24.00	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
0.00	1.00	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.5
1.00	2.00	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
2.00	3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.00	4.00	0	0	3	0	0	1	2	0	0	0	6	0	0	0	0	0	0	0	6	10.5
4.00	5.00	8	0	2	0	1	0	1	0	0	0	12	0	0	0	0	0	0	0	12	15
TOTAL		389	0	145	15	30	39	33	0	3	0	654	0	0	0	0	0	0	0	654	794.5

State : Sikkim | **Road : Legship to Gyalshing**

Direction : Daywise Traffic - Both Directions | **Road : Legship to Gyalshing** | **Additional Information**

Section From: Km 58 to Km 81 | **Station no.: 1** | **Weather: Fair**

Date :16.09.2009 | **Hour : 24 (7 Days)**

Time		FAST MOVING VEHICLES											NON MOTORISED TRAFFIC								
From	To	Cars/Jeep/Va	3 Wheeler/A	Two Wheelers	Mini Bus	Full Bus	LCV	Truck 2-Axle	Multi Axle	Tractor	Tractor with	Total MT	Cycle	Cycle Ricksha	Hand Cart	Horse Cart	Bullock Cart	Others	TOTAL NMT	TOTAL VEHICLE	Total PCU
5.00	6.00	9	0	5	0	1	3	0	0	0	0	18	0	0	0	0	0	0	0	18	19.5
6.00	7.00	14	0	8	1	1	7	1	0	0	0	32	0	0	0	0	0	0	0	32	30
7.00	8.00	21	0	14	3	2	7	2	0	1	0	50	0	0	0	0	0	0	0	50	55
8.00	9.00	26	0	14	4	3	7	5	0	1	0	60	0	0	0	0	0	0	0	60	79
9.00	10.00	48	0	24	4	5	2	1	0	2	0	86	0	0	0	0	0	0	0	86	105
10.00	11.00	15	0	11	3	3	6	2	0	0	0	40	0	0	0	0	0	0	0	40	55.5
11.00	12.00	14	0	13	3	4	3	2	0	0	0	39	0	0	0	0	0	0	0	39	38.5
12.00	13.00	29	0	4	2	3	6	3	0	1	0	48	0	0	0	0	0	0	0	48	61
13.00	14.00	26	0	10	2	4	4	0	0	0	0	46	0	0	0	0	0	0	0	46	59
14.00	15.00	22	0	16	3	3	2	4	0	0	0	50	0	0	0	0	0	0	0	50	62
15.00	16.00	18	0	10	2	6	5	4	0	0	0	45	0	0	0	0	0	0	0	45	68
16.00	17.00	7	0	10	1	5	3	1	0	0	0	27	0	0	0	0	0	0	0	27	39
17.00	18.00	20	0	3	3	3	3	4	0	0	0	36	0	0	0	0	0	0	0	36	40.5
18.00	19.00	6	0	4	3	5	2	3	0	0	0	23	0	0	0	0	0	0	0	23	20
19.00	20.00	9	0	3	0	1	2	4	0	0	0	19	0	0	0	0	0	0	0	19	27.5
20.00	21.00	11	0	1	0	0	0	1	0	0	0	13	0	0	0	0	0	0	0	13	11.5
21.00	22.00	3	0	0	0	0	1	3	0	0	0	7	0	0	0	0	0	0	0	7	27
22.00	23.00	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1.5
23.00	24.00	1	0	0	0	0	0	3	0	0	0	4	0	0	0	0	0	0	0	4	19
0.00	1.00	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.5
1.00	2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.00	3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.00	4.00	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	3
4.00	5.00	3	0	1	0	0	1	3	0	0	0	8	0	0	0	0	0	0	0	8	12.5
TOTAL		302	0	153	35	49	64	46	0	5	0	654	0	0	0	0	0	0	0	654	753.5

State : Sikkim | **Road : Legship to Gyalshing**

Direction : Daywise Traffic - Both Directions | **Road : Legship to Gyalshing** | **Additional Information**

Section From: Km 58 to Km 81 | **Station no.: 1** | **Weather: Fair**

Date :17.09.2009 | **Hour : 24 (7 Days)**

Time		FAST MOVING VEHICLES											NON MOTORISED TRAFFIC								
From	To	Cars/Jeep/Va	3 Wheeler/A	Two Wheelers	Mini Bus	Full Bus	LCV	Truck 2-Axle	Multi Axle	Tractor	Tractor with	Total MT	Cycle	Cycle Ricksha	Hand Cart	Horse Cart	Bullock Cart	Others	TOTAL NMT	TOTAL VEHICLE	Total PCU
5.00	6.00	4	0	5	1	0	1	1	0	0	0	12	0	0	0	0	0	0	0	12	11.5
6.00	7.00	18	0	8	3	4	6	1	0	0	0	40	0	0	0	0	0	0	0	40	52
7.00	8.00	24	0	7	3	2	2	0	0	0	0	38	0	0	0	0	0	0	0	38	49.5
8.00	9.00	37	0	2	4	4	4	3	0	0	0	54	0	0	0	0	0	0	0	54	82
9.00	10.00	22	0	16	4	3	1	2	0	1	0	49	0	0	0	0	0	0	0	49	39
10.00	11.00	22	0	12	5	4	6	5	0	0	0	54	0	0	0	0	0	0	0	54	65
11.00	12.00	15	0	10	3	0	1	1	0	0	0	30	0	0	0	0	0	0	0	30	28
12.00	13.00	21	0	9	2	4	4	4	0	1	0	45	0	0	0	0	0	0	0	45	47.5
13.00	14.00	13	0	4	4	4	2	3	0	0	0	30	0	0	0	0	0	0	0	30	39
14.00	15.00	24	0	9	4	2	3	2	0	1	0	45	0	0	0	0	0	0	0	45	54.5
15.00	16.00	24	0	4	2	1	3	4	0	1	0	39	0	0	0	0	0	0	0	39	46
16.00	17.00	12	0	17	0	3	2	2	0	0	0	36	0	0	0	0	0	0	0	36	35.5
17.00	18.00	12	0	5	0	0	5	2	0	0	0	24	0	0	0	0	0	0	0	24	27.5
18.00	19.00	16	0	3	1	4	2	1	0	1	0	28	0	0	0	0	0	0	0	28	37.5
19.00	20.00	4	0	0	0	1	0	3	0	0	0	8	0	0	0	0	0	0	0	8	23
20.00	21.00	8	0	3	1	3	1	1	0	0	0	17	0	0	0	0	0	0	0	17	21.5
21.00	22.00	5	0	0	1	1	2	2	0	0	0	11	0	0	0	0	0	0	0	11	23
22.00	23.00	8	0	1	0	1	0	0	0	0	0	10	0	0	0	0	0	0	0	10	8.5
23.00	24.00	1	0	0	0	2	0	1	0	0	0	4	0	0	0	0	0	0	0	4	13
0.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.00	2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.00	3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.00	4.00	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4.00	5.00	0	0	0	2	1	0	1	0	0	0	4	0	0	0	0	0	0	0	4	12
TOTAL		290	0	115	40	44	46	39	0	5	0	579	0	0	0	0	0	0	0	579	680.5

State	**: Sikkim**						**Road**	**: Legship to Gyalshing**												
Direction	**: Daywise Traffic - Both Directions**						**Road**	**: Legship to Gyalshing**				**Additional Information**								
Section From: Km 58 to Km 81							**Station no.: 1**					**Weather: Fair**								
Date	**:18.09.2009**						**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**							
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	8	0	5	1	0	2	0	0	0	0	16	0	0	0	0	0	0	0	16	16.5
6.00	7.00	19	0	8	3	2	3	4	0	0	0	39	0	0	0	0	0	0	0	39	55
7.00	8.00	27	0	7	2	5	1	2	0	1	0	45	0	0	0	0	0	0	0	45	63.5
8.00	9.00	37	0	14	0	5	2	5	0	0	0	63	0	0	0	0	0	0	0	63	74
9.00	10.00	26	0	18	3	2	2	0	0	0	0	51	0	0	0	0	0	0	0	51	60
10.00	11.00	25	0	12	5	2	2	3	0	1	0	50	0	0	0	0	0	0	0	50	73
11.00	12.00	15	0	4	4	5	0	3	0	0	0	31	0	0	0	0	0	0	0	31	35
12.00	13.00	29	0	15	3	2	5	2	0	1	0	57	0	0	0	0	0	0	0	57	81.5
13.00	14.00	19	0	6	3	4	2	3	0	0	0	37	0	0	0	0	0	0	0	37	52
14.00	15.00	13	0	11	2	4	1	2	0	2	0	35	0	0	0	0	0	0	0	35	44.5
15.00	16.00	28	0	8	2	4	2	0	0	0	0	44	0	0	0	0	0	0	0	44	65
16.00	17.00	6	0	9	0	3	3	0	0	0	0	21	0	0	0	0	0	0	0	21	26.5
17.00	18.00	9	0	13	2	4	3	0	0	0	0	31	0	0	0	0	0	0	0	31	39.5
18.00	19.00	9	0	4	5	2	1	2	0	0	0	23	0	0	0	0	0	0	0	23	38
19.00	20.00	4	0	5	5	0	0	1	0	0	0	15	0	0	0	0	0	0	0	15	24.5
20.00	21.00	11	0	0	0	2	1	1	0	0	0	15	0	0	0	0	0	0	0	15	33
21.00	22.00	4	0	1	1	3	3	2	0	0	0	14	0	0	0	0	0	0	0	14	37.5
22.00	23.00	5	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	5
23.00	24.00	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
0.00	1.00	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2
1.00	2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.00	3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.00	4.00	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	2	12
4.00	5.00	0	0	0	1	1	0	4	0	0	0	6	0	0	0	0	0	0	0	6	24
TOTAL		297	0	140	42	50	33	36	0	5	0	603	0	0	0	0	0	0	0	603	799

State	**: Sikkim**						**Road**	**: Legship to Gyalshing**												
Direction	**: Daywise Traffic - Both Directions**						**Road**	**: Legship to Gyalshing**			**Additional Information**									
Section From: Km 58 to Km 81							**Station no.: 1**				**Weather: Fair**									
Date	**:19.09.2009**						**Hour**	**: 24 (7 Days)**												
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**							
From	**To**	**Cars/Jeep/Va**	**3 Wheeler/A**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle**	**Tractor**	**Tractor with**	**Total MT**	**Cycle**	**Cycle Ricksha**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLE**	**Total PCU**
5.00	6.00	8	0	0	1	1	1	2	0	0	0	13	0	0	0	0	0	0	0	13	24
6.00	7.00	17	0	2	2	2	3	3	0	1	0	30	0	0	0	0	0	0	0	30	36
7.00	8.00	40	0	4	1	7	5	3	0	0	0	60	0	0	0	0	0	0	0	60	87
8.00	9.00	34	0	5	1	1	7	3	0	2	0	53	0	0	0	0	0	0	0	53	84.5
9.00	10.00	20	0	10	2	6	0	1	0	0	0	39	0	0	0	0	0	0	0	39	67
10.00	11.00	26	0	3	1	1	5	1	0	1	0	38	0	0	0	0	0	0	0	38	44.5
11.00	12.00	28	0	2	3	5	8	4	0	0	0	50	0	0	0	0	0	0	0	50	83
12.00	13.00	22	0	6	3	3	1	0	0	0	0	35	0	0	0	0	0	0	0	35	46
13.00	14.00	33	0	11	3	5	2	1	0	0	0	55	0	0	0	0	0	0	0	55	76.5
14.00	15.00	34	0	5	3	1	1	1	0	1	0	46	0	0	0	0	0	0	0	46	56.5
15.00	16.00	54	0	2	1	8	4	0	0	0	0	69	0	0	0	0	0	0	0	69	104
16.00	17.00	16	0	3	1	4	1	3	0	0	0	28	0	0	0	0	0	0	0	28	58.5
17.00	18.00	22	0	4	1	3	3	5	1	0	0	39	0	0	0	0	0	0	0	39	63
18.00	19.00	11	0	4	7	3	4	2	0	0	0	31	0	0	0	0	0	0	0	31	66
19.00	20.00	11	0	8	1	0	1	3	0	0	0	24	0	0	0	0	0	0	0	24	28
20.00	21.00	3	0	2	0	1	0	0	0	0	0	6	0	0	0	0	0	0	0	6	10
21.00	22.00	6	0	2	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8	8
22.00	23.00	2	0	0	0	0	0	3	0	0	0	5	0	0	0	0	0	0	0	5	9
23.00	24.00	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	7
0.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.00	2.00	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	6
2.00	3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.00	4.00	0	0	0	0	0	2	0	0	1	0	3	0	0	0	0	0	0	0	3	9
4.00	5.00	1	0	2	0	0	2	0	0	0	0	5	0	0	0	0	0	0	0	5	2
TOTAL		388	0	77	31	51	50	36	1	6	0	640	0	0	0	0	0	0	0	640	921.5

State	**: Sikkim**						**District**	**: West**													
Direction	**: Hourly 7 days Average Both Direction**						**Road**	**: Legship to Gyalshing**				**Additional Information**									
Section From: Km 58 to Km 81							**Station no.: 1**					**Weather: Fair**									
Date	**:13.09.2009 TO 19.09.2009**						**Hour**	**: 24 (7 Days)**													
Time		**FAST MOVING VEHICLES**											**NON MOTORISED TRAFFIC**								
From	**To**	**Cars/Jeep/ Vans**	**3 Wheeler/Auto Rickshaw**	**Two Wheelers**	**Mini Bus**	**Full Bus**	**LCV**	**Truck 2-Axle**	**Multi Axle Truck**	**Tractor**	**Tractor with Trailor**	**Total MT**	**Cycle**	**Cycle Rickshaw**	**Hand Cart**	**Horse Cart**	**Bullock Cart**	**Others**	**TOTAL NMT**	**TOTAL VEHICLES**	**Total PCU**
5.00	6.00	56	0	31	5	3	11	4	0	0	0	**107**	0	0	0	0	0	0	**0**	**107**	**120**
6.00	7.00	114	0	55	11	15	30	17	0	2	0	**244**	0	0	0	0	0	0	**0**	**244**	**346**
7.00	8.00	197	0	76	14	26	26	12	0	4	0	**355**	0	0	0	0	0	0	**0**	**355**	**487**
8.00	9.00	238	0	75	15	22	34	20	0	5	0	**409**	0	0	0	0	0	0	**0**	**409**	**529**
9.00	10.00	219	0	116	23	27	13	11	0	7	0	**416**	0	0	0	0	0	0	**0**	**416**	**534**
10.00	11.00	172	0	71	21	15	25	15	0	2	0	**321**	0	0	0	0	0	0	**0**	**321**	**423**
11.00	12.00	118	0	64	16	18	19	16	0	1	0	**252**	0	0	0	0	0	0	**0**	**252**	**311**
12.00	13.00	171	0	47	14	18	24	19	0	4	0	**297**	0	0	0	0	0	0	**0**	**297**	**414**
13.00	14.00	203	0	51	19	23	14	12	0	2	0	**324**	0	0	0	0	0	0	**0**	**324**	**418**
14.00	15.00	173	0	73	16	18	19	13	0	4	0	**316**	0	0	0	0	0	0	**0**	**316**	**385**
15.00	16.00	211	0	62	12	25	21	14	0	1	0	**346**	0	0	0	0	0	0	**0**	**346**	**465**
16.00	17.00	98	0	77	6	22	16	10	0	0	0	**229**	0	0	0	0	0	0	**0**	**229**	**303**
17.00	18.00	104	0	54	9	14	19	19	1	0	0	**220**	0	0	0	0	0	0	**0**	**220**	**275**
18.00	19.00	62	0	23	19	17	16	16	0	1	0	**154**	0	0	0	0	0	0	**0**	**154**	**243**
19.00	20.00	60	0	29	9	5	10	19	0	0	0	**132**	0	0	0	0	0	0	**0**	**132**	**206**
20.00	21.00	56	0	12	2	6	5	7	0	0	0	**88**	0	0	0	0	0	0	**0**	**88**	**135**
21.00	22.00	40	0	6	2	6	6	10	0	0	0	**70**	0	0	0	0	0	0	**0**	**70**	**137**
22.00	23.00	20	0	5	0	1	0	5	0	0	0	**31**	0	0	0	0	0	0	**0**	**31**	**49**
23.00	24.00	8	0	4	0	2	0	5	0	0	0	**19**	0	0	0	0	0	0	**0**	**19**	**52**
0.00	1.00	2	0	3	0	0	0	2	0	0	0	**7**	0	0	0	0	0	0	**0**	**7**	**16**
1.00	2.00	1	0	0	0	0	0	1	0	0	0	**2**	0	0	0	0	0	0	**0**	**2**	**7**
2.00	3.00	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**	**1**	**1**
3.00	4.00	0	0	4	1	0	7	5	0	1	0	**18**	0	0	0	0	0	0	**0**	**18**	**47**
4.00	5.00	17	0	8	5	6	10	10	0	1	0	**57**	0	0	0	0	0	0	**0**	**57**	**93**
TOTAL		**2341**	**0**	**946**	**219**	**289**	**325**	**262**	**1**	**35**	**0**	**4415**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4415**	**5990**
Hourly Average		**334**	**0**	**135**	**31**	**41**	**46**	**37**	**0**	**5**	**0**	**631**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**631**	**856**

State : Sikkim **District : West**
Direction : Daywise - Both Directions Summary **Road : Legship to Gyalshing** **Additional Information**
Section From: Km 58 to Km 81 **Station no.: 1** **Weather: Fair**
Hour : 24 (7 Days)

DAY & DATE		FAST MOVING VEHICLES											NON MOTORISED TRAFFIC								
		Cars/Jeep/Vans	3 Wheeler/Auto Ricshaw	Two Wheelers	Mini Bus	Full Bus	LCV	Truck 2-Axle	Multi Axle Truck	Tractor	Tractor with Trailor	Total MT	Cycle	Cycle Rickshaw	Hand Cart	Horse Cart	Bullock Cart	Others	TOTAL NMT	TOTAL VEHICLES	Total PCU
DAY-1	UP	128	0	44	14	10	23	31	0	4	0	254	0	0	0	0	0	0	0	254	341
	DOWN	189	0	87	15	22	24	15	0	2	0	354	0	0	0	0	0	0	0	354	423
	TOTAL	317	0	131	29	32	47	46	0	6	0	608	0	0	0	0	0	0	0	608	764
DAY-2	UP	177	0	110	15	22	21	22	0	4	0	371	0	0	0	0	0	0	0	371	430
	DOWN	181	0	75	10	10	25	4	0	1	0	306	0	0	0	0	0	0	0	306	417
	TOTAL	358	0	185	25	32	46	26	0	5	0	677	0	0	0	0	0	0	0	677	847
DAY-3	UP	168	0	81	8	20	19	22	0	0	0	318	0	0	0	0	0	0	0	318	375
	DOWN	221	0	64	7	10	20	11	0	3	0	336	0	0	0	0	0	0	0	336	420
	TOTAL	389	0	145	15	30	39	33	0	3	0	654	0	0	0	0	0	0	0	654	795
DAY-4	UP	166	0	78	13	21	28	18	0	3	0	327	0	0	0	0	0	0	0	327	393
	DOWN	136	0	75	22	28	36	28	0	2	0	327	0	0	0	0	0	0	0	327	361
	TOTAL	302	0	153	35	49	64	46	0	5	0	654	0	0	0	0	0	0	0	654	754
DAY-5	UP	146	0	58	22	19	15	18	0	0	0	278	0	0	0	0	0	0	0	278	342
	DOWN	144	0	57	18	25	31	21	0	5	0	301	0	0	0	0	0	0	0	301	339
	TOTAL	290	0	115	40	44	46	39	0	5	0	579	0	0	0	0	0	0	0	579	681
DAY-6	UP	156	0	71	26	27	18	23	0	0	0	321	0	0	0	0	0	0	0	321	408
	DOWN	141	0	69	16	23	15	13	0	5	0	282	0	0	0	0	0	0	0	282	392
	TOTAL	297	0	140	42	50	33	36	0	5	0	603	0	0	0	0	0	0	0	603	799
DAY-7	UP	168	0	29	21	31	28	23	0	4	0	304	0	0	0	0	0	0	0	304	430
	DOWN	220	0	48	10	20	22	13	1	2	0	336	0	0	0	0	0	0	0	336	492
	TOTAL	388	0	77	31	51	50	36	1	6	0	640	0	0	0	0	0	0	0	640	922
TOTAL WEEKLY TRAFFIC		**2341**	**0**	**946**	**217**	**288**	**325**	**262**	**1**	**35**	**0**	**4415**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4415**	**5559**
AVERAGE DAILY TRAFFIC		**334**	**0**	**135**	**31**	**41**	**46**	**37**	**0**	**5**	**0**	**631**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**631**	**79**

COMMERCIAL VEHICLE PER DAY (CVD)	**161**

SECTION – 5

INVENTORY CUM CONDITION SURVEY

5.1 General

The proposed road consists of:

(i) Regrading portions; where existing route is utilized.

(ii) Realignment portions, which are new route stretches.

(iii) Inventory and Condition Survey of Existing Culverts.

(iv) Inventory and Condition Survey of Existing Bridges.

Inventorisation and Condition Survey relates to the existing road portions.

5.2 Road Inventory and Condition Survey

This section deals detailed data collection and survey of the project road to study and understand the existing road condition. Road inventorization has been done with respect to the project road sections. The data collected has been formatted at every 100 m for each km of the road. The survey and investigations have been carried out in the months of August & Sept 2009. Major activities with respect to this have been as under.

- Road Inventory Survey
- Pavement Condition Survey
- Existing Culvert
- Existing Retaining Wall
- Existing Breast Wall
- Existing Bridge

5.2.1 Road Inventory Survey

The inventory survey was undertaken by actual measurement, study, investigation and/or visual assessment of various elements and features particularly with respect to roadway, carriageway (type and width), shoulders (type and width), height of embankment, drainage pattern, drainage structure, retaining structures, etc. The land environment features such as topography, terrain, land use, soil, air environment, water bodies, agriculture, etc. are based on actual survey, map studies and/or visual assessment.

Road Inventory Data Sheets are placed as Annexure-IIA.
The salient features of the Project Corridor are summarized as under.

Road Length

The Project Corridor takes off from Km 62.80 on existing NH 10 at Singtam in East Sikkim and runs towards South Western direction passing through a number of towns like Singtam –Tarku - Rabongla- Legship- Gyalshing within South & West District.

Altitude

The altitude of the project corridor is 425 m. – 1875 m from MSL a height from mean sea level at the take off point at Singtam Town and end point Rabangal Town.

Terrain

The project road is located in Sikkim, one of the most variegated hilly terrains in eastern part of India. The hills are undulating and are separated by rivers, which flow either to the north or south creating deep gorges between the hill ranges.

The classification of the terrain is normally done by means of cross slope to the country viz. slope approximately perpendicular to the center line of the highway location.

Terrain Classification as per IRC: SP-48-1998

Sl no	Terrain Classification	% Cross slope of country
1	Plain	0 to 10
2	Rolling	Greater than 10 upto 25
3	Mountainous	Greater than 25 upto 60
4	Steep	Greater than 60

The road mostly is in the Mountainous to steep terrain.

Gradient

The existing gradients of the road between km 431+00 to km 562+000 are steep at many stretches. As a result, the heavily loaded trucks and large sized vehicles find it difficult to pass through these stretches safely and smoothly, especially during rainy season.

Towns and villages:

The project road passes through few scattered populations in the South , West & East District. The list of the habitats along the project road is as follows:

Existing Chainage			Village Name	Design Chainage		District
Sr.No.	From	To		From	To	
1	Diversion	Diversion	Manpari	750	2400	East
2	800	2820	Lower Dalep	3120	3850	South
3	3450	4550	Amalay Dara	4475	5525	South
4	6400	7900	Lower Tanak	7335	8740	South
5	8900	10840	Nepal Gaon	9720	11630	South
6	10840	10920	Upper Tanak	11630	11710	South
7	11600	13350	Khadi	12375	14050	South
8	13550	14520	Tarku	14275	15225	South
9	15200	15800	Dentam	15895	16490	South
10	17120	18650	Simkharka	17790	19285	South
11	19850	20160	Dodung	20280	20585	South
12	20700	20900	Bensimkharka	21100	21195	South
13	21450	21810	Ben Tthalabari	21840	22230	South
14	22420	22830	Ben Thaka	22795	23195	South
15	24950	25650	Cheerakh	25190	25835	South
16	26340	28700	Rankey	26470	28610	South
17	29400	30650	Ningaon	29295	30500	South
18	30950	31400	BhsiFatak	30800	31245	South
19	33600	35250	Rabongla Town			South
20	37100	37770	14th mile Village			South

Existing Chainage			Village Name	Design Chainage		District
Sr.No.	From	To		From	To	
21	38800	43350	Kewxing Bakhim			South
22	44200	46000	Changela Village			South
23	46000	47100	Mamring Village			South
24	47500	48200	Upper Dargaon 8th mile			South
25	48200	50000	Lower Dargaon 7th mile			South
26	51110	53200	Hingdam Village			South
27	54650	57350	Nardang Village			South
28	58970	60500	Legship			West
29	64450	65300	Omching Village			West
30	65600	68370	Middle Gayzing 6th mile			West
31	68700	70100	Kyongsha village			West
32	70300	72200	Lower Geyzing			West
33	72300	75400	Geyzing Town			West
34	75600	77200	Naya bosti			West
35	77300	79000	Tikjuk			West
36	79600	80980	Pemayangtes Gompa			West
37	81440	81630	Pelling			West

Land-use:

The regional land use plays an important role in the decision making process of any project. The land use analysis is very essential requirement for the expansion/widening and realignment of the road projects. The region is yet to be fully linked and connected with wide network of roads. Hence the economic activities are also very less and the people in the region still depend on primitive ways of livelihood. The region is scarcely populated and the natural physical landscape beauty still enthrills the onlookers. The settlements are all along the road. The forest have been cleared to give way for the cultivation of crops but the percentage of land cover used for the agricultural purposes is still very small. The clearing of the jungle and vegetation covers for settlements, agriculture, transport and communication lines and consequent disappearance of the wild life have yet to take its toll in the region.

Percentage Distribution of Land use

Sl No	Land Use	Percentage
1	Settlements	24.35 %
2	Agriculture	54.15 %
3	Forest	11.50%
4	Others	10.00 %

Thus we see that the Settlements and agriculture land covers the major area of the project sector.

- **Right Of-Way (ROW)**

Existing ROW varies from 16.5m to 8.0 m due to various temporary encroachments at built up sections.

- **Formation**

Cutting of the hill slopes mostly forms the road formations. The width of the formation cutting is varying from 5.5m to 6.5 m.

- **Carriageway**

The carriageway width varies from 3 m to 4.2 m.

- **Shoulders**

Shoulders are more or less non-existent, and / or inadequate in width, depressed and non-functional.

- **Pavement Condition Survey**

The pavement condition of road sector from km 0+00 to km 83+00 has been carried out. The pavement condition of the existing project road with respect to thickness, cracking, potholes, rutting etc have been surveyed in detailed to access the condition. The reconnaissance survey of the pavement reflects the following,

- Thickness of the existing pavement is inadequate.
- Sub grade has failed at some locations
- Pavement failure at many place is due to improper drainage system
- Cracking, raveling, potholes, ruts, etc. are of very high order.

The pavement condition survey of the project road was simultaneously carried out along with the road inventory to assess existing pavement condition. Condition survey was undertaken by visual assessment of pavement surface distress, potholes, cracks, patches, raveling, condition of shoulders, etc.

The Pavement Condition Survey Data for the project road are presented in Annexure- II B

General condition of the road pavement is poor, especially in the portion, which has not been reconstructed/rehabilitated in the past. The road has been resurfaced in some portion but the surface has shown distress. The road requires regrading, widening and strengthening for capacity augmentation as well as for improvement of the riding surface.

Pavement Visual Condition Survey was carried out over the road corridor by a team of experienced highway engineers to assess different modes, regarding the following features:

- Type of Surface
- % cracked area
- % Area covered by pot holes, raveling and patching
- Rutting
- Shoulder condition
- Embankment

The finding of the visual pavement condition survey has been tabulated and attached in Annexure-II. Based on the visual survey findings, the percentage Cracks, Potholes, Patching, Raveling and Edge drop over the entire road corridor are indicated in the pavement condition survey sheets. The road surface is poor. Cracks, potholes, patching, raveling and edge drops are very predominantly visible.

Analysis:

Analysis of data obtained consequent to the Condition Survey has revealed that the pavemen condition of the existing road is poor. The road has no well-defined camber, super elevation an curve widening.

5.2.2 Culvert Inventory and Condition Survey

The inventory survey was undertaken by actual survey, measurements and visual inspection of various elements forming the Cross-Drainage structures viz. chainage, the span arrangement, length, width, vertical clearance, details of superstructure, sub-structure / foundation and protection works, etc.

The survey has been conducted using the format given in Annexure – II C.
It has two parts:

- Culvert Inventory Data
- Condition Survey

The inventory survey was undertaken by actual study, site visit, measurements and visual inspections. It was supplemented by survey and detailed investigations by the team. Special attention was paid to the Condition Survey of various features of culverts / bridges and adequacy or otherwise.

The condition of existing culverts is rated poor and recommended for replacement.

5.2.3 Slope protection Inventory and Condition Survey

The inventory survey was undertaken by actual survey, measurements and visual inspection of various elements forming the Retaining wall & Breast wall structures viz. chainage, length, width & height etc.
The survey has been conducted using the format given in Annexure – II D & II E.

5.2.4 Inventory of Bridges

General

Inventory of all the Bridges falling on the project road has been prepared in terms of guidelines provided in IRC: SP-35, 1990 so as to determine the number, category of structures and also to attempt a scientific approach for their retention / repairs / rehabilitation based on technical grounds. This inventory data for each structure consists of location, construction data (wherever available), type of foundation, sub-structure and super structure, overall length, details of spans, waterway, carriageway width, provision of footpaths along with the past behavior of the structure from functional, hydraulic and structural considerations.

The inventory survey was undertaken by actual measurement, study, investigation and visual assessment of various elements and features particularly with respect to location, span arrangement, structural details, roadway width, and condition of structures.

List of Existing Steel Bridges on the project road are tabulated below:

SL. No	CHAINAGE IN M		CARRIAGE WIDTH IN M	BRIDGE WIDTH IN M	Type of Bridges	REMARKS
	FROM	TO				
1	5078.300	5129.200	4	4.2	Steel	Poor Condition
2	19295.000	19321.500	4.4	5.6	Steel	Poor Condition
3	24563.200	24589.400	3.65	4.4	Steel	Poor Condition
4	37051.300	37059.700	3.7	4.7	Steel	Poor Condition
5	37605.800	37616.000	3.7	4.7	Steel	Poor Condition
6	58874.800	58983.000	8.6	14	Steel	Poor Condition
7	59308.000	59318.000	4.7	5.6	Steel	Poor Condition
8	64250.000	64261.000	4.7	5.6	Steel	Poor Condition
9	64460.900	64469.300	4	4.9	Steel	Poor Condition
10	65611.400	65621.000	4.6	5.5	Steel	Poor Condition
11	75207.600	75215.600	4.3	5.4	Steel	Poor Condition

5.2.5 Utility Survey

The Utility survey was undertaken by actual survey, measurements and visual inspection of various elements such Electric pole ,Telephone post , Cable Post & Water supply Pipe line .

The survey has been conducted using the format given in Annexure – II H-1, H-2, H-3 & H-4

INVENTORY & CONDITION SURVEY FOR CULVERTS																				Appendix-II C
Road Name : SINGTAM TO GAISING																			Sheet No. :	
Section :																			Date of Survey :	
Sl. No.	Location (km.)	Length (m)	Type of Structures (Pipe, Slab, Box, Arch)	FL	Span Arrangement and Total Ventway [No.x Length(m)]	Carriageway Width (m)	Width of Culvert (m)	Details of Protection Works				Condition of various features of Culvert					HFL	Presence of Sour	Adequacy of Water-way	Remarks
								Catch Pit	Apron	Type	Condition	Slab/ Pipe/ Box/ Arch	Head Wall	Wing Wall	Return Wall	Parapet/ Handrail				
1	135.5m	3.4m	SLAB		2.7m	6.3m	7.7m				GOOD	SLAB				X				DAMAGED
2	263m	3.5m	SLAB		2.8m	6m	7.5m				GOOD	SLAB				X				DAMAGED
3	373m		PIPE		two pipe dia 90 cm	6.5m	6.8m				DAMAGED	PIPE				X				DAMAGED
4	491m	1.8m	SLAB		1.2m	4.1m	6.15m				DAMAGED	SLAB				OK				BAD AND DAMAGED
5	678m	2m	SLAB		1m	4.7m	6.2m				GOOD	SLAB				OK				GOOD CONDITION
6	904.5m	1.4m	SLAB		60cm	3.9m	5.4m				POOR	SLAB				OK				DAMAGED
7	965m	1.3m	SLAB		60cm	4.2m	6.4m				GOOD	SLAB				OK				GOOD CONDITION
8	1776.1m	1.2m	SLAB		50cm	4.3m	5.55m				GOOD	SLAB				OK				PARTIALLY DAMAGED
9	1908m	2.5m	SLAB		1.3m	3.9m	5m				BAD	SLAB				X				DAMAGED
10	2124m	1.8m	SLAB		1m	4.8m	6.2m				GOOD	SLAB				OK				GOOD CONDITION
11	3845.7m	1.8m	SLAB		60cm	4.1m	7.3m				GOOD	SLAB				OK				GOOD CONDITION
12	4278.5m					54m	7m									OK				TOTALLY DAMAGED
13	4992m	1.4m	SLAB		60cm	4.5m	5.2m				GOOD	SLAB				OK				PARTIALLY DAMAGED
14	6794.00	1.800	SLAB		1.200	4.500	6.0				GOOD	SLAB				OK				PARTIALLY DAMAGED
15	7466.00	1.200	SLAB		0.600	4.200	5.9				GOOD	SLAB				OK				GOOD CONDITION
16	8338.00	1.800	SLAB		1.300	4.200	5.5				GOOD	SLAB				OK				GOOD CONDITION
17	8355.00	1.900	SLAB		1.500	3.900	5.6				FAIR	SLAB				OK				SOME DAMAGED
18	8451.00	1.200	SLAB		0.600	4.400	6.0				GOOD	SLAB				OK				GOOD CONDITION
19	8489.00				X	X	X				X	X				X				DAMAGED
20	8518.00				X	X	X				X	X				OK				DAMAGED
21	8596.00				X	X	X				X	X				OK				DAMAGED
22	8670.00				X	X	X				X	X				X				CLOSED CULVERT
23	8682.00	1.800	SLAB		1.300	4.4	5.5				GOOD	SLAB				OK				VALLEY SIDE PAKKA NALA
24	8751.00				X	X	X				X	X				X				CLOSED CULVERT
25	8846.00				X	X	X				X	X				X				CLOSED CULVERT
26	8901.00				X	X	X				X	X				X				CLOSED AND DAMAGED
27	8944.00				X	X	X				X	X				X				CLOSED CULVERT
28	9038.00		X		X	4.300	6.0				POOR	X				X				CLOSED CULVERT
29	10194.00	2.800	SLAB		1.600	4.300	5.6				FAIR	SLAB				OK				SOME DAMAGED
30	10232.50	1.400	SLAB		0.600	4.000	6.3				FAIR	SLAB				OK				OK CONDITION
31	10318.00	1.200	SLAB		0.600	4.100	5.5				POOR	SLAB				OK				CLOSED IN HILL SIDE
32	10535.00	1.200	SLAB		0.500	4.800	6.4				POOR	SLAB				OK				NO METAL USED C
33	10600.00	2.800	SLAB		1.700	4.800	6.4				GOOD	SLAB				OK				PAKKA NALA IN V SIDE

INVENTORY & CONDITION SURVEY FOR CULVERTS																				Appendix-II C
Road Name : SINGTAM TO GAISING																			Sheet No. :	
Section :																			Date of Survey :	
Sl. No.	Location (km.)	Length (m)	Type of Structures (Pipe, Slab, Box, Arch)	FL	Span Arrangement and Total Ventway [No.x Length(m)]	Carriageway Width (m)	Width of Culvert (m)	Details of Protection Works				Condition of various features of Culvert					HFL	Presence of Sour	Adequacy of Water-way	Remarks
								Catch Pit	Apron	Type	Condition	Slab/ Pipe/ Box/ Arch	Head Wall	Wing Wall	Return Wall	Parapet/ Handrail				
34	10820.00	1.200	SLAB		0.600	4.6	6.0				FAIR	SLAB				OK				SOME DAMAGED
35	11007.00	1.800	SLAB		1.200	4.3	5.4				POOR	SLAB				DAMAGED				DAMAGED IN BOTH SIDE
36	11087.00	1.200	SLAB		0.500	5.6	6.8				POOR	SLAB				OK				TOTALLY DAMAGED IN VALLEY SIDE
37	11235.00	1.200	SLAB		0.700	5.7	6.8				FAIR	SLAB				OK				SOME DAMAGED
38	11350.00	1.200	SLAB		0.700	4.4	5.6				GOOD	SLAB				OK				GOOD CONDITION
39	11767.00	1.200	SLAB		0.700	4.3	5.8				GOOD	SLAB				OK				GOOD CONDITION
40	11984.00	1.70	SLAB		0.700	4.000	6.3				POOR	SLAB				OK				UP SIDE TOTALLY DAMAGED
41	12512.50	1.80	SLAB		0.800	3.700	6.4				FAIR	SLAB				OK				GOOD CONDITION
42	13200.00	1.80	SLAB		1.200	4.800	5.5				GOOD	SLAB				OK				GOOD CONDITION
43	13413.00	1.85	SLAB		1.200	4.450	5.7				GOOD	SLAB				OK				GOOD CONDITION
44	13460.00	2.20	SLAB		1.200	4.500	5.5				POOR	SLAB				OK				TOTALLY DAMAGED
45	13547.00		PIPE		0.500	4.000	5.0				POOR	PIPE				OK				TOTALLY DAMAGED
46	13580.40	4.70	SLAB		3.000	5.500	6.0				GOOD	SLAB				OK				GOOD CONDITION
47	15951.50	1.50	SLAB		0.300	4.100	5.1				FAIR	SLAB				X				NO METAL ON SLAB
48	16181.00	1.85	SLAB		0.600	4.600	5.1				POOR	SLAB				X				POOR CONDITION
49	16209.50	1.90	SLAB		0.700	5.100	5.4				POOR	SLAB				OK				SLAB IS CRACKED
50	16441.00		SLAB								POOR	SLAB				X				TOTALLY DAMAGED
51	17056.00	1.50	SLAB		0.700	5.700	6.0				POOR	SLAB				DAMAGED				POOR CONDITION
52	17092.00	1.50	SLAB		0.600	5.600	6.4				POOR	SLAB				X				POOR CONDITION
53	17383.00	1.50	SLAB		0.600	5.600	6.6				POOR	SLAB				X				DAMAGED
54	19578.50	3.65	SLAB		2.800	6.7	7.5				GOOD	SLAB				OK				GOOD CONDITION
55	19691.00	1.50	SLAB		0.600	5.2	5.5				FAIR	SLAB				OK				OK
56	19925.00	1.60	SLAB		0.700	4.9	5.0				POOR	SLAB				OK				DAMAGED
57	20036.00	3.70	SLAB		3.000	6.7	7.5				GOOD	SLAB				OK				GOOD CONDITION
58	20832.00	1.50	SLAB		0.600	7.5	8.5				POOR	SLAB				X				DAMAGED
59	21602.00		SLAB								POOR	SLAB				ONE SIDE OK				BLOCK CULVERT & DAMAGED
60	21894.00	1.9	SLAB		0.6	4.2	4.8				POOR	SLAB				ONE SIDE OK				THERE ARE NO PARAPET ON VALLEY SIDE
61	22043.50		SLAB									SLAB				DAMAGED				WORK IN PROGRES 13.10.2009
62	22700.00	1.5	SLAB		0.6	4.2	5.5				POOR	SLAB				X				DAMAGED
63	22930.00	1.5	SLAB		0.7	3.8	4.5				POOR	SLAB				X				DAMAGED

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								Catch Pit	Apron	Type	Condition	Slab/ Pipe/ Box/ Arch	Head Wall	Wing Wall	Return Wall	Parapet/ Handrail				
64	23038.00	1.8	SLAB		0.6	4.5	5.0				GOOD	SLAB				OK				GOOD CONDITION
65	23216.00	1.8	SLAB		1.3	6.5	7.0				FAIR	SLAB				OK				OK
66	23700.00		PIPE		0.5	4.2	4.5				POOR	PIPE				ONE SIDE OK				DAMAGED
67	23886.00	1.5	SLAB		0.6	4.0	5.5				POOR	SLAB				X				DAMAGED
68	24620.00		SLAB									SLAB				X				DAMAGED
69	24962.00		SLAB									SLAB				X				BLOCK CULVERT
70	25070.00		X		X	X	X									DAMAGED				BLOCK CULVERT
71	25312.00		PIPE		0.7	5.0	5.2				FAIR	PIPE				OK				DAMAGED
72	25740.00	1.8				5.1	5.4				POOR									BLOCKED
73	25977.00															X				BLOCKED AND DAMAGED
74	26245.00	2.2	SLAB		1.4	5.1	6.4				FAIR	SLAB				OK				SLIDING IN BOTH SIDE
75	26289.00	1.8	SLAB		1.0	4.3	5.5				FAIR	SLAB				OK				SOME DAMAGED
76	26569.00		PIPE		0.7	5.0	5.3				GOOD	PIPE				OK				GOOD CONDITION
77	27194.00																			BLOCKED
78	27513.00	2.3	SLAB		1.1	6.1	7.5				GOOD	SLAB				OK				GOOD CONDITION
79	27780.00	3.7	SLAB		3.0	6.6	7.5				POOR					X				DAMAGED
80	27944.00		PIPE		0.7	X	6.0				POOR	PIPE				X				DAMAGED
81	28537.00		PIPE		0.7	5.1	6.2				OK	PIPE				OK				OK
82	28714.00	1.5	SLAB		0.5	5.3	6.5				OK	SLAB				OK				OK
83	28841.50	3.7	SLAB		2.8	6.5	7.5				OK	SLAB				OK				OK
84	28971.00		PIPE		0.7	4.9	5.1				OK	PIPE				DAMAGE				OK
85	29136.00	1.8	SLAB		0.6	4.4	4.9				POOR	SLAB				NO				HILL SIDE SLAB DAMAGE
86	30190.50		X			5.0	5.5				POOR					X				DAMAGED AND BLOCKED
87	30451.50		PIPE		0.5	4.5	4.8				OK	PIPE				OK				OK
88	30667.00		PIPE		0.5	5.0	5.4				OK	PIPE				OK				OK
89	30865.50	2.4	SLAB		1.2	6.4	6.7				OK	SLAB				OK				OK
90	31388.00		PIPE		0.7	4.2	5.0				POOR	PIPE				NO				POOR
91	31912.50		PIPE		0.5	5.0	5.8				OK	PIPE				OK				OK
92	32215.00	6.9	SLAB		5.5	5.3	6.0				OK	SLAB				OK				OK
93	32259.00	1.9	SLAB		0.7	5.8	6.2				OK	SLAB				OK				OK
94	32382.00	1.8	SLAB		0.7	5.7	6.2				OK	SLAB				OK				OK
95	32480.00	7.1	SLAB		6.0	6.6	7.5				OK	SLAB				OK				OK

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								Catch Pit	Apron	Type	Condition	Slab/ Pipe/ Box/ Arch	Head Wall	Wing Wall	Return Wall	Parapet/ Handrail				
96	32529.00	1.8	SLAB		0.7	5.7	6.1				OK	SLAB				OK				OK
97	32857.00	1.8	SLAB		0.7	4.8	5.1				OK	SLAB				OK				OK
98	33416.00		PIPE		0.5	4.8	5.1				OK	PIPE				OK				OK
99	34993.00		PIPE		1.0	4.1	6.2				POOR	PIPE				X				POOR CONDITON
100	34876.50	2.0	SLAB		1.2	6.4	7.1				FAIR	SLAB				OK				OK
101	34661.20	2.0	SLAB		1.2	5.1	6.0				FAIR	SLAB				OK				OK
102	34503.00		PIPE			4.4	5.9				GOOD	PIPE				OK				GOOD CONDITION
103	36345.00	1.9	SLAB		1.0	4.7	5.7				FAIR	SLAB				OK				OK
104	36424.00	2.6	SLAB		2.0	5.3	7.3				GOOD	SLAB				NO				GOOD CONDITION
105	36558.00	1.9	SLAB		1.1	4.7	5.9				GOOD	SLAB				OK				OK
106	36882.00	1.9	SLAB		1.3	4.8	5.7				GOOD	SLAB				OK				OK
107	37825.00	2.5	SLAB		1.4	5.1	6.4				GOOD	SLAB				OK				GOOD CONDITION
108	37930.00		PIPE		1.0	4.6	5.8				GOOD	PIPE				OK				GOOD CONDITION
109	38104.00	1.9	SLAB		1.0	4.9	6.1				OK	SLAB								OK
110	38322.00	1.8	SLAB		1.3	4.8	5.6				OK	SLAB				OK				OK
111	38520.00	2.4	SLAB		1.3	5.6	5.9				OK	SLAB				OK				OK
112	38745.00	2.4	SLAB		1.3	5.7	5.9				OK	SLAB				OK				OK
113	38867.50		PIPE		0.5	5.5	6.3				OK	PIPE				OK				OK
114	39345.50		PIPE		0.7	5.5	6.3				OK	PIPE				OK				OK
115	39508.00	1.8	SLAB		0.7	5.6	6.8				OK	SLAB				NO				VALLEY SIDE PAKKA NALA
116	39717.50	1.8	SLAB		0.7	5.5	6.4				OK	SLAB				OK				HILL SIDE NO PARAPET
117	39922.00		PIPE		0.7	5.0	6.0				OK	PIPE				OK				VALLEY SIDE NO PARAPET
118	40291.00	1.8	SLAB		0.7	4.6	5.5				OK	SLAB				NO				OK
119	40410.00	1.8	SLAB		0.7	5.0	5.8				OK	SLAB				NO				OK
120	40894.00		PIPE		0.7	5.0	6.1				OK	PIPE				OK				HILL SIDE NO PARAPET
121	41149.00		PIPE		0.7	5.8	6.3				OK	PIPE				NO				OK
122	44478.00		PIPE		0.8	3.8	4.9				POOR	PIPE				NO				BITUMIN IS REMOVED
123	44795.00		PIPE		0.5	4.3	5.0				OK	PIPE				NO				OK
124	46524.40	1.2	SLAB		0.5	4.0	5.5				POOR	SLAB				X				DAMAGED
125	47269.00	1.4	SLAB		0.5	4.4	5.7				POOR	SLAB				X				DAMAGED
126	47697.00		PIPE			3.5	5.5				POOR	PIPE				X				DAMAGED
127	47984.00		PIPE			5.0	6.0				FAIR	PIPE				X				OK
128	48069.00	1.5	SLAB		0.7	3.8	5.0				GOOD	SLAB				OK				OK
129	48353.00	1.0	SLAB		0.7	4.1	5.2				POOR	SLAB				X				DAMAGED

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								Catch Pit	Apron	Type	Condition	Slab/ Pipe/ Box/ Arch	Head Wall	Wing Wall	Return Wall	Parapet/ Handrail				
130	48634.50	1.6	SLAB		1.3	5.2	6.5				GOOD	SLAB				OK				GOOD CONDITION
131	49010.50	1.4	SLAB		0.8	3.8	5.5				FAIR	SLAB				X				DAMAGED
132	49609.50	1.7	SLAB		0.7	4.3	5.7				GOOD	SLAB				X				OK
133	49727.00		PIPE		0.9	3.6	5.2				GOOD	PIPE								BOTH SIDE PAKKA NALA
134	49843.00		PIPE		0.9	4.7	6.1				GOOD	PIPE				X				OK
135	50027.00	2.4	SLAB		1.2	4.5	6.2				GOOD	SLAB				ONE SIDE OK				OK
136	50695.50		PIPE		0.7	4.5	6.0				GOOD	PIPE				X				OK
137	50858.00					4.1	5.8									X				DAMAGED
138	51484.00		PIPE		0.9	4.4	6.2									X				OK CONDITION
139	53720.00		PIPE		0.7	4.0	5.0				OK	PIPE				NO				OK
140	54239.00		PIPE		0.7	6.0	7.5				OK	PIPE				OK				HILL SIDE NO PARAPET
141	54575.00		PIPE		0.7	4.4	5.4				OK	PIPE				OK				HILL SIDE NO PARAPET
142	56032.00	1.8	SLAB		0.5	4.0	5.2				OK	SLAB				OK				HILL SIDE NO PARAPET
143	56184.00		PIPE		0.5	4.4	5.4				OK	PIPE				OK				HILL SIDE NO PARAPET
144	56573.00	5.5	SLAB		3.0	5.0	5.5				POOR	SLAB				NO				POOR
145	56837.00		PIPE		0.9	3.7	4.8				POOR	PIPE				OK				HILL SIDE NO PARAPET
146	57222.00	2.2	SLAB		1.4	5.8	6.2				OK	SLAB				OK				OK
147	57593.00	2.2	SLAB		1.4	5.7	6.0				OK	SLAB				OK				OK
148	57845.00	2.0	SLAB		1.3	5.8	6.1				OK	SLAB				OK				OK
149	57883.00	2.5	SLAB		1.5	4.8	5.4				OK	SLAB				NO				OK
150	58088.00	2.2	SLAB		1.2	5.4	6.3				OK	SLAB				OK				VALLEY SIDE NO PARAPET
151	58270.00																			DAMAGED
152	58462.50	2.0	SLAB		1.0	4.7	6.0				POOR	SLAB				NO				POOR
153	59780.00	1.5	SLAB		1.2	4.1	5.4				FAIR	SLAB				ONE SIDE OK				OK
154	60260.00		PIPE		0.9	4.5	6.0				FAIR	PIPE				X				OK
155	60300.00	2.4	SLAB		1.3	3.8	5.4				POOR	SLAB				ONE SIDE OK				DAMAGED
156	60429.00	2.8	SLAB		1.6	4.7	6.1				POOR	SLAB				DAMAGED				DAMAGED

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								Catch Pit	Apron	Type	Condition	Slab/ Pipe/ Box/ Arch	Head Wall	Wing Wall	Return Wall	Parapet/ Handrail				
157	61567.00	1.5	SLAB		0.9	6.0	10.7				POOR	PIPE				X				POOR CONDITION,UP SIDE SLAB
158	62802.00	1.8	SLAB		0.8	4.0	5.7				FAIR	SLAB				X				OK CONDITION
159	63276.00	1.5	SLAB		0.7	5.1	7.3				POOR	SLAB				X				POOR CONDITION
160	63760.00		SLAB									SLAB				X				TOTALLY BREAK DOWN
161	64010.00	2.1	SLAB		1.3	4.5	5.4				GOOD	SLAB				OK				GOOD CONDITION
162	64167.00		PIPE		0.2	4.4	6.2				FAIR	PIPE				X				OK CONDITION
163	65075.00		PIPE		0.4	6.5	8.0				POOR	PIPE				NO				HALF BLOCKED
164	65310.50	5.2	SLAB		3.2	5.2	5.6				OK	SLAB				NO				OK
165	65708.00		PIPE		0.4	5.2	7.5				POOR	PIPE				NO				PIPE IS DAMAGED
166	65764.00	1.8	SLAB		0.7	4.7	5.5				POOR	SLAB				NO				WATER WAY IS 90% JAM
167	66117.00		PIPE		0.7	4.8	6.0				POOR	PIPE				NO				WATER WAY IS 50% JAM
168	66339.00	1.8	SLAB		0.7	4.6	5.6				OK	SLAB				NO				OK
169	66789.00	1.8	SLAB		0.7	5.2	6.1				POOR	SLAB				OK				WATER WAY IS 90% JAM
170	67029.00	2.0	SLAB		1.0	5.7	7.0				POOR	SLAB				OK				WATER WAY IS 90% JAM
171	67296.00		PIPE		0.7	5.5	7.0				OK	PIPE				NO				OK
172	67449.00	1.6	SLAB		0.6	4.9	5.2				OK	SLAB				NO				OK
173	67587.00		PIPE		0.4	4.2	5.3				POOR	PIPE				NO				POOR
174	67791.00		PIPE		0.4	6.0	7.6				POOR	PIPE				NO				POOR
175	67876.00	1.7	SLAB		0.7	5.5	6.2				OK	SLAB				OK				OK
176	68431.00	5.3	SLAB		4.1	4.8	5.4				POOR	SLAB				YES				POOR TO LAND SLIDING
177	68525.00	2.4	SLAB		0.9	5.5	6.1				OK	SLAB				YES				VALLEY AND HILL SIDE PAKKA NALAH
178	68630.50	2.7	SLAB		0.8	5.6	6.0				POOR	SLAB				YES				POOR CONDITION
179	68741.00	X	X		X	4.5	5.0				X	X				X				DAMAGED AND BLOCKED
180	68810.00	X	X		X	5.0	5.5				POOR	X				NO				DAMAGED AND BLOCKED
181	69241.00	X	X		X	4.5	5.4				POOR	X				NO				DAMAGED AND BLOCKED
182	69507.00	1.7	SLAB		1.0	4.9	5.4				POOR	SLAB				NO				HALF BLOCKED
183	69764.00	2.0	SLAB		1.2	5.3	6.2				OK	SLAB				YES				OK

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								Catch Pit	Apron	Type	Condition	Slab/ Pipe/ Box/ Arch	Head Wall	Wing Wall	Return Wall	Parapet/ Handrail				
184	69855.00	1.8	SLAB		1.0	5.2	5.6				OK	SLAB				YES				OK
185	69929.50	2.4	SLAB		1.3	5.5	6.2				OK	SLAB				OK				OK
186	70100.00	4.4	SLAB		2.6	6.5	7.6				POOR	SLAB				OK				POOR TO LAND SLIDING
187	70308.00	1.8	SLAB		0.6	5.8	6.2				POOR	SLAB				OK				WATER WAY BLOCKED
188	72202.80	1.8	SLAB		0.6	3.9	5.4					SLAB				OK				UP SIDE BEND AND DAMAGED
189	72685.60	2.3	SLAB		1.3	5.3	6.7				FAIR	SLAB				OK				VALLEY AND HILL SIDE PAKKA NALAH
190	72957.00	1.3	SLAB									SLAB				OK				BOTH SIDE BEND AND DAMAGED
191	73000.00	4.0	SLAB		2.3	6.7	8.3				GOOD	SLAB				OK				VALLEY AND HILL SIDE PAKKA NALAH
192	73070.00	2.8	SLAB		1.9	5.1	6.2				GOOD	SLAB				OK				DOWN SIDE PAKKA NALAH
193	73821.50	2.4	SLAB		1.2	5.0	6.2				GOOD	SLAB				OK				GOOD CONDITION
194	74135.00	3.2	SLAB		2.3	4.2	4.9				GOOD	SLAB								OK CONDITION
195	74475.00	2.4	SLAB		1.2	5.3	6.4				GOOD	SLAB				OK				GOOD CONDITION
196	74711.00	1.8	SLAB		0.6	3.8	4.8				GOOD	SLAB				OK				GOOD CONDITION
197	74953.00	1.9	SLAB		0.6	4.1	4.9				POOR	SLAB				X				POOR CONDITION
198	75416.00	1.3	SLAB		1.0	4.0	5.2				GOOD	SLAB				OK				GOOD CONDITION
199	75735.00	2.2	SLAB		0.7	4.0	5.4				POOR	SLAB				X				POOR CONDITION
200	76007.00	2.5	SLAB		0.8	4.4	6.4				FAIR	SLAB				OK				SOME DAMAGED
201	76282.00	1.6	SLAB		0.7	4.9	5.9				FAIR	SLAB				OK				UP SIDE BEND AND DAMAGED
202	76349.00	2.0	SLAB		1.6	4.7	5.9				GOOD	SLAB				OK				VALLEY AND HILL SIDE PAKKA NALAH
203	76743.00	2.5	SLAB		1.2	6.8	9.0				GOOD	SLAB				OK				BOTH SIDE BEND AND DAMAGED
203	77931.00	2.1	SLAB		1.2	5.2	5.7				OK	SLAB				OK				OK
204	78301.00	2.4	SLAB		1.2	5.6	5.9				OK	SLAB				OK				OK
205	78768.00	1.7	SLAB		1.0	5.0	5.3				OK	SLAB				OK				OK
206	78919.50	2.0	SLAB		1.4	5.4	6.1				OK	SLAB				OK				BITUMIN CARPET DAMAGE ON SLAB
207	79273.50	1.8	SLAB		0.7	4.3	4.7				OK	SLAB				OK				OK
208	79382.00	2.4	SLAB		1.2	8.2	8.9				OK	SLAB				OK				VALLEY SIDE PAKK NALAH
209	80016.00	1.5	SLAB		1.2	5.5	7.7				GOOD	SLAB				OK				GOOD CONDITION

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								Catch Pit	Apron	Type	Condition	Slab/ Pipe/ Box/ Arch	Head Wall	Wing Wall	Return Wall	Parapet/ Handrail				
210	80167.00	2.2	SLAB		1.0	5.5	6.1				POOR	SLAB				ONE SIDE OK				POOR CONDITION
211	80477.50	1.9	SLAB		0.8	4.2	5.0				FAIR	SLAB				OK				OK CONDITION
212	80614.00	1.7	SLAB		0.7	4.8	6.4				GOOD	SLAB				OK				GOOD CONDITION
213	80977.00	1.7	SLAB		0.7	4.9	6.3				GOOD	SLAB				OK				GOOD CONDITION
214	81221.00	2.0	SLAB		0.7	3.9	4.4				POOR	SLAB				X				POOR CONDITION
215	81542.00	2.3	SLAB		1.0	4.6	9.7				FAIR	SLAB				OK				OK CONDITION

PAVEMENT CONDITION SURVEY															Appendix II D		
Road Name : SINGTAM TO GLASING															Sheet No:1		
From :					To:										Dt of Survey :		
District (From) :					District (To) :										Weather :		
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition					Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/VP)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)				
250	300	Surface	POOR			POOR									POOR	YES	ROAD DAMAGED
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															
365	400	Surface	POOR			POOR									POOR	YES	ROAD DAMAGED
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															
2850	3150	Surface	POOR			POOR									POOR	YES	ROAD IS SINKING AND DAMAGED IN MIDDLE & VALLEY SIDE
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															
3180	3220	Surface	POOR			FAILED									POOR	YES	SINKING IN MIDDLE SIDE AND SLIDING BOTH SIDE
		Binder	POOR														
		Base	POOR														
		Sub-base															
		Subgrade															
3325	3400	Surface	POOR			POOR			60%						POOR	NO	DAMAGED
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															
4800	4900	Surface	POOR			FAIR			40%						FAIR	YES	DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
6860	6890	Surface	POOR			POOR			60%						POOR	YES	SINKING IN VALLEY SIDE
		Binder	POOR														
		Base	POOR														
		Sub-base	POOR														
		Subgrade															

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PAVEMENT CONDITION SURVEY															Appendix II D		
Road Name :															Sheet No:1		
From :					To:										Dt of Survey :		
District (From) :					District (To) :										Weather :		
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition					Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/VP)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)				
8375	8400	Surface	POOR			POOR			60%						POOR	YES	SINKING IN MIDDLE SIDE AND DAMAGED
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															
12045	12075	Surface	POOR			POOR			50%						POOR	NO	SINKING IN MIDDLE SIDE
		Binder															
		Base															
		Sub-base															
		Subgrade															
12978	12988	Surface	POOR			POOR			70%						POOR	YES	SINKING IN MIDDLE SIDE
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															
13725	13751	Surface	POOR			POOR			60%						POOR	YES	TOTAL DAMAGED
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															

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PAVEMENT CONDITION SURVEY															Appendix II D			
Road Name :															Sheet No:1			
From :					To:										Dt of Survey :			
District (From) :					District (To) :										Weather :			
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition						Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/VP)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)					
14584	14930	Surface	POOR			TOTALLY FAILED			100%								NO	LAND SLIDING IN HILL SIDE
		Binder	POOR															
		Base																
		Sub-base	POOR															
		Subgrade																
16550	16869	Surface	POOR			POOR			65%								NO	CONCRETE ROAD (DAMAGED)
		Binder	POOR															
		Base																
		Sub-base	POOR															
		Subgrade																
16775	16883	Surface	POOR			POOR			90%								NO	TOTALLY DAMAGED /SINKING ROAD LAND SLIDING IN HILL AND VALLEY SIDE
		Binder	POOR															
		Base																
		Sub-base	POOR															
		Subgrade																
17700	17800	Surface	POOR			POOR			95%								NO	DAMAGED /SINKING ROAD LAND SLIDING IN HILL AND VALLEY SIDE
		Binder	POOR															
		Base																
		Sub-base	POOR															
		Subgrade																
17840	17847	Surface	POOR			POOR			80%								YES	DAMAGED
		Binder	POOR															
		Base	POOR															
		Sub-base																
		Subgrade	POOR															
18696	18704	Surface	POOR			POOR			50%								NO	CONCRETE ROAD (DAMAGED)
		Binder	POOR															
		Base																
		Sub-base	POOR															
		Subgrade																
18750	18900	Surface	POOR			POOR			100%								NO	LAND SLIDING BOTH SIDE TOT... DAMAG
		Binder	POOR															
		Base																
		Sub-base	POOR															
		Subgrade																

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PAVEMENT CONDITION SURVEY															Appendix II D		
Road Name :															Sheet No:1		
From :					To:										Dt of Survey :		
District (From) :					District (To) :										Weather :		
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition								
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/VP)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)	Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
20905	20913	Surface	POOR			POOR			100%							NO	CONCRETE ROAD (DAMAGED)
		Binder	POOR														
		Base															
		Sub-base	POOR														
		Subgrade	POOR														
22793	22800	Surface	POOR			POOR			80%							YES	CONCRETE ROAD (DAMAGED)
		Binder	POOR														
		Base															
		Sub-base	POOR														
		Subgrade															
22833	22840	Surface	POOR			POOR			70%							YES	CONCRETE ROAD (DAMAGED)
		Binder	POOR														
		Base															
		Sub-base	POOR														
		Subgrade															
23389	23395	Surface	POOR			POOR			60%							YES	CONCRETE ROAD (DAMAGED)
		Binder															
		Base															
		Sub-base	POOR														
		Subgrade															
24210	21218	Surface	POOR			POOR			75%							YES	CONCRETE ROAD (DAMAGED)
		Binder	POOR														
		Base															
		Sub-base	POOR														
		Subgrade	POOR														
24259	24266	Surface	POOR			POOR			95%							YES	CONCRETE ROAD (DAMAGED)
		Binder															
		Base															
		Sub-base	POOR														
		Subgrade															
24675	24775	Surface	POOR			POOR			55%							YES	DAMAGED/SINKING ROAD
		Binder	POOR														
		Base															
		Sub-base	POOR														
		Subgrade															

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Road Name :															Sheet No:1		
From :					To:										Dt of Survey :		
District (From) :					District (To) :										Weather :		
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition					Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/VP)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)				
25925	25987	Surface	POOR			POOR			95%							NO	DAMAGED AND SINKING ROAD,SLIDING BOTH SIDE
		Binder															
		Base															
		Sub-base	POOR														
		Subgrade	POOR														
26108	26116	Surface	POOR			POOR			80%							YES	CONCRETE ROAD (DAMAGED)
		Binder	POOR														
		Base															
		Sub-base	POOR														
		Subgrade	POOR														
26860	26925	Surface				POOR			80%							NO	DAMAGED ROAD (SINKING)
		Binder	POOR														
		Base															
		Sub-base	POOR														
		Subgrade															
27720	27790	Surface	POOR			FAIR			45%							YES	DAMAGED ROAD
		Binder															
		Base	POOR														
		Sub-base															
		Subgrade															
28003	28010	Surface	POOR			POOR			95%							NO	CONCRETE ROAD (DAMAGED)
		Binder															
		Base															
		Sub-base	POOR														
		Subgrade	POOR														
28191	28199	Surface	POOR			POOR			80%							YES	CONCRETE ROAD WIDTH 7.5 (DAMAGED)
		Binder															
		Base															
		Sub-base															
		Subgrade															
31215	31224	Surface	POOR			POOR			90%							NO	CONCRETE ROAD WIDTH [illegible] (DAMAG
		Binder															
		Base															
		Sub-base															
		Subgrade															

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District (From) :					District (To) :											Weather :	
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition					Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/VP)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)				
31514	31522	Surface	POOR						100%							YES	CONCRETE ROAD (DAMAGED)
		Binder															
		Base															
		Sub-base															
		Subgrade															
31500	31580	Surface	POOR						30%								DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
31576	31584	Surface	POOR						100%							NO	CONCRETE ROAD WIDTH 7M DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
31650	31656	Surface	POOR						90%							NO	CONCRETE ROAD WIDTH 6.5M DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
34470	34485	Surface	POOR			POOR										YES	DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
34390	34405	Surface	POOR			POOR										YES	DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
35800	35820	Surface	POOR			POOR			40%							YES	DAMAG
		Binder															
		Base															
		Sub-base															
		Subgrade															

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District (From) :					District (To) :										Weather :			
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition									
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/V P)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)		Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
36390	36405	Surface	POOR			POOR			40%								YES	DAMAGED
		Binder																
		Base																
		Sub-base																
		Subgrade																
36900	36960	Surface	POOR			POOR			40%								YES	DAMAGED
		Binder																
		Base																
		Sub-base																
		Subgrade																
37180	37240	Surface	POOR			POOR			40%								YES	DAMAGED
		Binder																
		Base																
		Sub-base																
		Subgrade																
37280	37335	Surface	POOR			POOR			50%								YES	DAMAGED
		Binder																
		Base																
		Sub-base																
		Subgrade																
37551	37560	Surface	POOR			POOR			70%								YES	DAMAGED
		Binder																
		Base																
		Sub-base																
		Subgrade																
37940	37971	Surface	POOR			POOR			80%								YES	DAMAGED
		Binder																
		Base																
		Sub-base																
		Subgrade																
38975	39040	Surface	POOR			POOR			40%								YES	DAMAG
		Binder																
		Base																
		Sub-base																
		Subgrade																

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District (From) :					District (To) :											Weather :	
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition					Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/VP)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)				
40765	40801	Surface	POOR						40%							YES	DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
44379	44010	Surface	POOR						50%							YES	ROAD DAMAGED AND SINKING IN VALLEY SIDE
		Binder	POOR														
		Base	POOR														
		Sub-base															
		Subgrade															
45000	45080	Surface	POOR			POOR			80%							YES	DAMAGED
		Binder	POOR														
		Base	POOR														
		Sub-base															
		Subgrade															
45115	45291	Surface	POOR			POOR			60%							YES	DAMAGED
		Binder	POOR														
		Base	POOR														
		Sub-base															
		Subgrade															
45719	45725	Surface	POOR			POOR			40%							YES	DAMAGED
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															
45820	45845	Surface	POOR			POOR			45%							YES	DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
45922	45930	Surface	POOR			POOR			40%							YES	DAMAG
		Binder															
		Base															
		Sub-base															
		Subgrade															

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Road Name :															Sheet No:1		
From :					To:										Dt of Survey :		
District (From) :					District (To) :										Weather :		
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition								
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/V P)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)	Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
46680	46725	Surface				FAIR			70%							YES	SINKING ROAD
		Binder															
		Base															
		Sub-base															
		Subgrade															
46750	46800	Surface				FAIR			60%							YES	SINKING IN MIDDLE AND VALLEY SIDE
		Binder															
		Base															
		Sub-base															
		Subgrade															
46930	46990	Surface	POOR			POOR			80%							YES	SINKING IN VALLEY SIDE (ROAD DAMAGED)
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															
47360	47480	Surface	POOR			POOR			60%							YES	SINKING IN VALLEY SIDE (ROAD DAMAGED)
		Binder															
		Base															
		Sub-base															
		Subgrade															
47920	47990	Surface	POOR			POOR			80%							YES	SINKING IN VALLEY SIDE (ROAD DAMAGED)
		Binder															
		Base															
		Sub-base															
		Subgrade															
48040	48165	Surface	POOR			POOR			50%							YES	SINKING IN MIDDLE AND VALLEY SIDE
		Binder															
		Base															
		Sub-base															
		Subgrade															
48315	48360	Surface	POOR			POOR			60%							YES	DAMAG
		Binder															
		Base															
		Sub-base															
		Subgrade															

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Road Name :															Sheet No:1		
From :					To:										Dt of Survey :		
District (From) :					District (To) :										Weather :		
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition					Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/VP)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)				
48620	48780	Surface	POOR			POOR										YES	ROAD SINKING AND DAMAGED,SLIDING IN HILL SIDE
		Binder															
		Base															
		Sub-base															
		Subgrade															
48980	49005	Surface	POOR			FAILED										YES	BOTH SIDE NALA (DAMAGED ROAD AND HILL SIDE SLIDING)
		Binder	POOR														
		Base	POOR														
		Sub-base															
		Subgrade															
50295	50337	Surface	POOR			POOR			80%							YES	DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
50475	50500	Surface														YES	ROAD SINKING IN MIDDLE & VALLEY SIDE
		Binder															
		Base															
		Sub-base															
		Subgrade															
50600	50630	Surface														YES	ROAD SINKING
		Binder															
		Base															
		Sub-base															
		Subgrade															
50760	50777	Surface														YES	SINKING ROAD DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
50940	50952	Surface	POOR			POOR										NO	DAMAG
		Binder															
		Base															
		Sub-base															
		Subgrade															

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District (From) :					District (To) :											Weather :			
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition										
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/VP)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)			Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
52260	54001	Surface	POOR						20%										METAL CARPET IS CRACKD AND MANY SIDE IS TOTALLY DAMAGED
		Binder	POOR																
		Base																	
		Sub-base																	
		Subgrade																	
54300	54385	Surface	POOR						30%										METAL CARPET IS CRACKD AND MANY SIDE IS TOTALLY DAMAGED
		Binder																	
		Base																	
		Sub-base																	
		Subgrade																	
54620	54720	Surface	POOR						30%										THE ROAD SHAPE IS DAMAGED DUE TO LAND SLIDING
		Binder	POOR																
		Base																	
		Sub-base																	
		Subgrade																	
54750	54790	Surface	POOR						20%										THE ROAD SHAPE IS DAMAGED DUE TO LAND SLIDING
		Binder	POOR																
		Base																	
		Sub-base																	
		Subgrade																	
54895	55020	Surface	POOR						40%										METAL CARPET IS CRACKD AND DAMAGED
		Binder																	
		Base																	
		Sub-base																	
		Subgrade																	
55070	55100	Surface	POOR						30%										METAL CARPET IS CRACKD AND DAMAGED
		Binder																	
		Base																	
		Sub-base																	
		Subgrade																	
55520	55620	Surface	POOR						20%										THE ROAD SHAPE IS DAMAGE[illegible] TO LAND S[illegible]
		Binder																	
		Base																	
		Sub-base																	
		Subgrade																	

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From :					To:											Dt of Survey :	
District (From) :					District (To) :											Weather :	
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition					Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/VP)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)				
56200	56250	Surface	POOR						30%							YES	METAL CARPET IS DAMAGED OF LAND SLIDE
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															
56295	56305	Surface	POOR						40%							YES	METAL CARPET IS DAMAGED OF LAND SLIDE
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															
56320	56380	Surface	POOR						20%								METAL CARPET IS DAMAGED OF LAND SLIDE
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															
56472	56528	Surface	POOR						30%							YES	METALMCARPET IS DAMAGE
		Binder															
		Base															
		Sub-base															
		Subgrade															
56560	56746	Surface	POOR						60%							YES	METALMCARPET IS DAMAGE
		Binder															
		Base															
		Sub-base															
		Subgrade															
56800	56860	Surface	POOR						70%							YES	METAL CARPET IS DAMAGED OF LAND SLIDE
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															
56885	57120	Surface	POOR						60%								METAL CARPET IS DAMAGED OF LAND SLIDE
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															

Surveyed by Prepared by Checked by

PAVEMENT CONDITION SURVEY															Appendix II D		
Road Name :															Sheet No:1		
From :					To:										Dt of Survey :		
District (From) :					District (To) :										Weather :		
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition								
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/VP)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)	Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
57204	57225	Surface	POOR						90%							YES	NO METAL CARPET
		Binder															
		Base															
		Sub-base															
		Subgrade															
57652	57680	Surface	POOR						20%								METAL CARPET DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
57967	58040	Surface	POOR						20%								METAL CARPET DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
58040	58340	Surface	POOR						90%								METAL CARPET IS DAMAGED OF LAND SLIDE
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															
58345	58400	Surface	POOR						60%								METAL CARPET
		Binder															
		Base															
		Sub-base															
		Subgrade															
58420	58600	Surface	POOR						70%								METAL CARPET IS DAMAGED OF LAND SLIDE
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															
58760	58785	Surface	POOR						15%								METAL CARPET IS DAMAGED O... SLIDE
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															

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PAVEMENT CONDITION SURVEY																Appendix II D	
Road Name :																Sheet No:1	
From :					To:											Dt of Survey :	
District (From) :					District (To) :											Weather :	
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition					Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/VP)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)				
60238	60260	Surface														YES	SINKING IN MIDDLE SIDE
		Binder															
		Base															
		Sub-base															
		Subgrade															
60417	60423	Surface														YES	SINKING IN MIDDLE SIDE
		Binder															
		Base															
		Sub-base															
		Subgrade															
60600	60610	Surface														YES	SINKING IN VALLEY SIDE
		Binder															
		Base															
		Sub-base															
		Subgrade															
63695	63705	Surface														YES	SINKING IN VALLEY SIDE
		Binder															
		Base															
		Sub-base															
		Subgrade															
63955	63982	Surface														YES	SINKING IN VALLEY SIDE
		Binder															
		Base															
		Sub-base															
		Subgrade															
64015	64030	Surface	POOR						60%							YES	DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
64075	64085	Surface														YES	ROAD SINKING IN VALLEY S
		Binder															
		Base															
		Sub-base															
		Subgrade															

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PAVEMENT CONDITION SURVEY															Appendix II D			
Road Name :															Sheet No:1			
From :					To:										Dt of Survey :			
District (From) :					District (To) :										Weather :			
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition						Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/VP)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)					
65220	65245	Surface	POOR						25%								YES	ROAD SHAPE IS DAMAGED DUE TO LOW LAND SLIDING
		Binder																
		Base																
		Sub-base																
		Subgrade																
65625	65681	Surface	POOR						70%								YES	ROAD SHAPE AND BITUMIN CARPET IS DAMAGED DUE TO LAND SLIDE
		Binder	POOR															
		Base																
		Sub-base																
		Subgrade																
65866	66022	Surface	POOR						35%								YES	ROAD SHAPE IS DAMAGED DUE TO LOW LAND SLIDING
		Binder	POOR															
		Base																
		Sub-base																
		Subgrade																
66277	66297	Surface	POOR						20%								YES	ROAD SHAPE IS DAMAGED DUE TO LOW LAND SLIDING
		Binder	POOR															
		Base																
		Sub-base																
		Subgrade																
66410	66560	Surface	POOR						50%								YES	ROAD SHAPE IS DAMAGED DUE TO LOW LAND SLIDING
		Binder	POOR															
		Base																
		Sub-base																
		Subgrade																
66720	66760	Surface	POOR						30%								YES	ROAD SHAPE IS DAMAGED DUE TO LOW LAND SLIDING
		Binder	POOR															
		Base																
		Sub-base																
		Subgrade																
66810	66930	Surface	POOR						30%								YES	ROAD SHAPE IS DAMAGED D... LOW LAND S...
		Binder	POOR															
		Base																
		Sub-base																
		Subgrade																

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PAVEMENT CONDITION SURVEY																Appendix II D		
Road Name :																Sheet No:1		
From :					To:											Dt of Survey :		
District (From) :					District (To) :											Weather :		
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition									
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/V P)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)		Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
67010	67095	Surface	POOR						30%								YES	ROAD SHAPE IS DAMAGED DUE TO LOW LAND SLIDING
		Binder	POOR															
		Base																
		Sub-base																
		Subgrade																
67110	67280	Surface	POOR						30%								YES	ROAD SHAPE IS DAMAGED DUE TO LOW LAND SLIDING
		Binder	POOR															
		Base																
		Sub-base																
		Subgrade																
67525	67551	Surface	POOR						70%								YES	ROAD IS DAMAGED DUE TO LAND SLIDING
		Binder	POOR															
		Base																
		Sub-base																
		Subgrade																
67730	67760	Surface	POOR						20%								YES	BITUMIN CARPET IS DAMAGED
		Binder																
		Base																
		Sub-base																
		Subgrade																
68000	68025	Surface	POOR						40%								YES	ROAD SHAPE IS DAMAGED DUE TO LOW LAND SLIDING
		Binder	POOR															
		Base																
		Sub-base																
		Subgrade																
68290	68405	Surface	POOR						30%								YES	ROAD SHAPE IS DAMAGED DUE TO LOW LAND SLIDING
		Binder	POOR															
		Base																
		Sub-base																
		Subgrade																
68435	68750	Surface	POOR						30%								YES	ROAD SHAPE IS DAMAGED D... LOW LAND S...
		Binder	POOR															
		Base																
		Sub-base																
		Subgrade																

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PAVEMENT CONDITION SURVEY															Appendix II D		
Road Name :															Sheet No:1		
From :					To:										Dt of Survey :		
District (From) :					District (To) :										Weather :		
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition								
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/V P)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)		Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
68803	68820	Surface	POOR			POOR			50%								YES	DAMAGED ROAD
		Binder	POOR															
		Base																
		Sub-base																
		Subgrade																
69240	69283	Surface	POOR			POOR			20%								YES	DAMAGED ROAD AND SLIDING IN VALLEY SIDE
		Binder																
		Base																
		Sub-base																
		Subgrade																
69470	69525	Surface	POOR			POOR			20%								YES	DAMAGED ROAD AND SLIDING IN VALLEY SIDE
		Binder																
		Base																
		Sub-base																
		Subgrade																
69540	69580	Surface	POOR			POOR			20%								YES	ROAD DAMAGED
		Binder																
		Base																
		Sub-base																
		Subgrade																
69730	69760	Surface	POOR			POOR			40%								YES	ROAD DAMAGED
		Binder																
		Base																
		Sub-base																
		Subgrade																
69900	70035	Surface	POOR			POOR			30%								YES	DAMAGED ROAD AND SLIDING IN VALLEY SIDE
		Binder																
		Base																
		Sub-base																
		Subgrade																
70080	70125	Surface	POOR			POOR			30%								YES	DAMAGED ROAD AND SLIDI... VALLEY S...
		Binder																
		Base																
		Sub-base																
		Subgrade																

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PAVEMENT CONDITION SURVEY															Appendix II D			
Road Name :															Sheet No:1			
From :						To:									Dt of Survey :			
District (From) :						District (To) :									Weather :			
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition						Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/VP)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)					
70140	70222	Surface	POOR			POOR			20%								YES	ROAD DAMAGED
		Binder																
		Base																
		Sub-base																
		Subgrade																
70230	70260	Surface	POOR			POOR			20%								YES	ROAD DAMAGED AND SLIDING IN VALLEY SIDE
		Binder	POOR															
		Base																
		Sub-base																
		Subgrade																
70500	70520	Surface	POOR						15%								YES	ROAD DAMAGED AND SLIDING IN VALLEY SIDE
		Binder																
		Base																
		Sub-base																
		Subgrade																
70658	70690	Surface	POOR			POOR			30%								YES	ROAD DAMAGED AND LOW SLIDING IN VALLEY SIDE
		Binder	POOR															
		Base																
		Sub-base																
		Subgrade																
70817	70840	Surface	POOR			POOR			20%								YES	ROAD DAMAGED
		Binder																
		Base																
		Sub-base																
		Subgrade																
70960	71025	Surface	POOR			POOR			20%								YES	ROAD DAMAGED
		Binder																
		Base																
		Sub-base																
		Subgrade																

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PAVEMENT CONDITION SURVEY															Appendix II D		
Road Name :															Sheet No:1		
From :					To:										Dt of Survey :		
District (From) :					District (To) :										Weather :		
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition					Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/VP)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)				
72080	72090	Surface	POOR													YES	SINKING ROAD
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															
72245	72265	Surface														YES	SINKING ROAD MIDDLE AND VALLEY SIDE
		Binder															
		Base															
		Sub-base															
		Subgrade															
73105	73200	Surface							70%							YES	DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
73494	73510	Surface	POOR													YES	DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
74107	74145	Surface	POOR													YES	DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
74480	74550	Surface	POOR			TOTALLY FAILED										NO	ROAD SINKING AND DAMAGED
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															
75235	75267	Surface	POOR			POOR			60%							YES	ROAD DAM
		Binder															
		Base															
		Sub-base															
		Subgrade															

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PAVEMENT CONDITION SURVEY																Appendix II D	
Road Name :																Sheet No:1	
From :					To:											Dt of Survey :	
District (From) :					District (To) :											Weather :	
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition					Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/VP)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)				
77063	77079	Surface	POOR						60%							YES	BITUMIN CARPET IS REMOVED
		Binder															
		Base															
		Sub-base															
		Subgrade															
77147	77165	Surface	POOR						60%							YES	BITUMIN CARPET IS REMOVED
		Binder															
		Base															
		Sub-base															
		Subgrade															
77255	77303	Surface	POOR						15%							YES	BITUMIN CARPET IS REMOVED
		Binder															
		Base															
		Sub-base															
		Subgrade															
77380	77550	Surface	POOR						50%							YES	ROAD IS DAMAGED DUE TO LAND SLIDING
		Binder	POOR														
		Base															
		Sub-base															
		Subgrade															
77860	77887	Surface	POOR						20%							YES	BITUMIN CARPET IS DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
78943	79010	Surface	POOR						20%							YES	BITUMIN CARPET IS DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
79250	79310	Surface	POOR						20%							YES	BITUMIN CARPET IS DAMAG
		Binder															
		Base															
		Sub-base															
		Subgrade															

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PAVEMENT CONDITION SURVEY														Appendix II D			
Road Name : SINGTAM TO GLAISING														Sheet No:1			
From :						To:								Dt of Survey :			
District (From) :						District (To) :								Weather :			
CHAINAGE		PAVEMENT COMPOSITION			Shoulder		Riding Quality		Pavement Condition					Pavement Edge drop (mm)	Embankment Condition(Good/Fair/Poor)	Road Side Drain (NE/PF/F)	Remarks
From (km)	To (Km)	Composition	Type	Thickness (mm)	Composition	Condition (Fair/Poor/ Failed)	Speed (km/hr)	Quality (G/F/P/VP)	Cracking (%)	Raveling(%)	Potholing No and % 100m	Rut(None/Moderate/Severe)	Patching (No and % 100m)				
79340	79385	Surface	POOR			POOR			30%							YES	ROAD DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
79428	79440	Surface							15%							YES	HILL SIDE ROAD AND DRAIN IS DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															
80690	80760	Surface	POOR			POOR			60%							YES	ROAD DAMAGED
		Binder															
		Base															
		Sub-base															
		Subgrade															

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Appendix - IIF

DETAILS OF JUNCTION

S.No	Link	Location in KM	Type	Crossing Left/Right/Cross	Remarks
1	MANPURI	20-38	GRAVEL ROAD	RIGHT	TO VILLAGE
2	AMOL BAZAR	2750-2765	METAL ROAD	LEFT	TO BERMI FATAK
3	TARKU	12055-12065	GRAVEL ROAD	LEFT	TO AIFALTAR (MARKET) (DISTANCE 2.45KM)
4	PERSONAL ROAD	13154-13163	METAL ROAD	LEFT	TO PERSONAL ROAD
5	TO NAMCHI	14284-14304	METAL ROAD	LEFT	0 POINT (TARKU TO NAMCHI)
6	VILLAGE	21039-21047	GRAVEL ROAD	RIGHT	TO VILLAGE
7	MANGLI VILLAGE	21623-21634	GRAVEL ROAD	RIGHT	TO MANGLE VILLAGE
8	NAMRIK	22172-22182	GRAVEL ROAD	RIGHT	TO NAMRIK VILLAGE
9	SCHOOLE	22784-22791	GRAVEL ROAD	LEFT	TO VILLAGE
10	TO KOYRI	28974-28986	GRAVEL ROAD	RIGHT	TO KOYRI(STONE MILE)
11	TO SANYMOO	29607-29629	GRAVEL ROAD	RIGHT	TO SANGMOO (PRIMARY HEALTH CENTER)
12	PRIVATE HOME	31170-31175	GRAVEL ROAD	LEFT	TO VILLAGE BHSI FATAK (PRIVATE HOME)
13	ARMY BARRACK	32767-32777	METAL ROAD	LEFT	TO ARMY BARRACK AT RAVANGLA
14	DAMTHANG	33765-33783	METAL ROAD	LEFT	TO DAMTHANG
15	TO SBI	33988.2-33993.3	METAL ROAD	LEFT	TO BANK,PS,OTHER OFFICE
16	MARKET	33979-33988.5	METAL ROAD	RIGHT	TO RABONY MARKET
17	VILLAGE	34970-34975	GRAVEL ROAD	RIGHT	TO VILLAGE
18	RANGIT POWER HOUSE	34976-34985	METAL ROAD	LEFT	TO POWER HOUSE
19	S.D.A.C	35795-35807	METAL ROAD	LEFT	TO SUB DIVISIONAL ADMINISTRATIVE CENTER
20	JORUNG	35857-35876	METAL ROAD	RIGHT	JARUNG VILLAGE
21	HALIPATE	36151-36164	METAL ROAD	LEFT	TO HALIPATE
22	VILLAGE	37096-37102	GRAVEL ROAD	LEFT	TO VILLAGE
23	DALING GUMPA	40163-40174	GRAVEL ROAD	RIGHT	KEWIZING PWD ROAD
24	LAMTING (MANGBRA)	41156-41165	GRAVEL ROAD	LEFT	KEWIZING LEGSHIP ROAD TO LAMTHANG
25	TO VILLAGE	41941-41947	METAL ROAD	RIGHT	TO VILLAGE
26	KEWZING BAZAR	42343-42356	METAL ROAD	RIGHT	TO KEWZING BAZAR
27	KAZIKI KOTHI	42648-42660	METAL ROAD	RIGHT	TO KAZIKO KOTHI
28	STONE MINE	42883-42889	GRAVEL ROAD	LEFT	SHORT ROAD TO STONE TRANSPORTATION
29	TINGMO VILLAGE	43883-43893	GRAVEL ROAD	LEFT	LEGSHIP TO KWIZING ROAD
30	DALIP	49120-49134	GRAVEL ROAD	RIGHT	TO PRIMARY HEALTH SUB CENTRE
31	VIP GUEST HOUSE	52474-52488	METAL ROAD	LEFT	SORT ROAD TO GOING VIP GUEST HOUSE
32	DAV PUBLIC SCHOOL	52507-52518	METAL ROAD	RIGHT	HINGDAM VILLAGE

33	RANGIT POWER STATION	53156-53172	METAL ROAD	LEFT	SORT ROAD TO POWER STATION
34	DAV PUBLIC SCHOOL	53182-53196	METAL ROAD	RIGHT	DAV PUBLIC SCHOOL R NAGOR 3 SIKKIM BATTALION
35	TO VILLAGE	53195-53212	METAL ROAD	LEFT	TO VILLAGE
36	SERVANT QUARTERS	53610-53620	METAL ROAD	LEFT	T RANGIT POWER STATION SERVANT QUARTERS
37	TASHIDING	53973-53980	GRAVEL ROAD	RIGHT	TO TASHIDING
38	RANGIT POWER STATION	54847-54857	METAL ROAD	RIGHT	RANGIT POWER STATION SERVANT QUARTERS(LEGSHIP)
39	RANGIT POWER STATION	54888-54907	METAL ROAD	LEFT	RANGIT POWER STATION SERVANT QUARTERS(HING DAM)
40	TO VILLAGE	55012-55018	GRAVEL ROAD	LEFT	TO VILLAGE
41	RANGIT POWER STATION	55412-55426	METAL ROAD	RIGHT	RANGIT NAGAR SERVENT QUARTER HINGDAM
42	TO VILLAGE	55909-55917	METAL ROAD	RIGHT	TO VILLAGE
43	PELLING	57174-57184	METAL ROAD	RIGHT	TO TASHIDING PELLING
44	TASHIDING	57860-57865	METAL ROAD	RIGHT	TASHIDING
45	JORTHANG	59143-59170	METAL ROAD	LEFT	TO JORTHANG
46	TO RESIDENT	63876-63892	GRAVEL ROAD	LEFT	TO HOUSES
47	TO GEYZING PRASA	67696-67703	GRAVEL ROAD	RIGHT	SPWD ROAD TO GEYZING PRASA SAN KENDRA
48	TO VILLAGE	68822-68835	GRAVEL ROAD	LEFT	TO VILLAGE
49	GYALSHIG ROAD	71404.4-71420	GRAVEL ROAD	LEFT	TO BHANU SALIK
50	JUNGLE	71967-71973	GRAVEL ROAD	RIGHT	TO JUNGLE
51		72378.6-72386.2	METAL ROAD	CROSS	TO GAYZING BAZAR
52		72369.6-72380	GRAVEL ROAD	CROSS	TO VILLAGE
53		73003-73016	METAL ROAD	LEFT	TO POWER COLONY WITH LINGCHOM
54		73433-73440	METAL ROAD	RIGHT	TO GYALSHING BAZAR
55		73502-73507.5	GRAVEL ROAD	RIGHT	TO MARKET VILLAGE
56		73636-73695	METAL ROAD	RIGHT	TO MARKET
57		74947-74953	METAL ROAD	RIGHT	KRISHI VIGYAN KENDRA
58		75435.5-75443.5	METAL ROAD	LEFT	TO SCHOOL(ST.MARY'S CONVENT SCHOOL)
59		75851-75865	METAL ROAD	RIGHT	TO YANTHANG
60	TO OFFICE OF THE SE	77648-77659	METAL ROAD	RIGHT	OFFICE OF THE ROAD AND BRIDGES DEPARTMENT
61	TO GAYZING BAZAR	77855-77865	METAL ROAD	RIGHT	GAYZING BAZAR
62	TO ZILLA SAINIK BOARD	78200-78217	GRAVEL ROAD	LEFT	TO ZILLA SAINIK BOARD OFFICE CUM REST HOUSE
63	DISTRICT ADMIN OFFICE	78522-78535	METAL ROAD	RIGHT	DISTRICT ADMIN OFFICE
64	GOVT.OFFICE	78587-78599	METAL ROAD	RIGHT	GOVT. OFFICE
65	DIVISINAL ENGINEER	79019-79027	METAL ROAD	LEFT	PELLING
66		79545-79554	GRAVEL ROAD	RIGHT	TO VILLAGE
67		80116-80136	METAL ROAD	RIGHT	THE ELIGIN MOUNT PANDINA ,PELLING
68		80484-80490	METAL ROAD	LEFT	TO SCHOOL
69		81223-81235	METAL ROAD	LEFT	TO GOVT.SR,SEC,SCHOOL,PELLING
70		81617-81644	METAL ROAD	CROSS	PELLING TO DENTAM

BRIDGE LOCATION (SINGTAM TO GAYZING)						
SL. NO	CHAINAGE IN M		CARRIAGE WIDTH IN M	BRIDGE WIDTH IN M	Type of Bridges	REMARKS
	FROM	TO				
1	5078.300	5129.200	4	4.2	Steel	Poor Condition
2	19295.000	19321.500	4.4	5.6	Steel	Poor Condition
3	24563.200	24589.400	3.65	4.4	Steel	Poor Condition
4	37051.300	37059.700	3.7	4.7	Steel	Poor Condition
5	37605.800	37616.000	3.7	4.7	Steel	Poor Condition
6	58874.800	58983.000	8.6	14	Steel	Poor Condition
7	59308.000	59318.000	4.7	5.6	Steel	Poor Condition
8	64250.000	64261.000	4.7	5.6	Steel	Poor Condition
9	64460.900	64469.300	4	4.9	Steel	Poor Condition
10	65611.400	65621.000	4.6	5.5	Steel	Poor Condition
11	75207.600	75215.600	4.3	5.4	Steel	Poor Condition

VILLAGE (SINGTAM TO GAYZING)				
SL. NO.	VILLAGE NAME	VILLAGE LOCATION (M)		REMARKS
		FROM	TO	
1	AMAL	2000	4200	
2	LOWAR TAMAK	6300	7800	
3	NEPAL GAON	8900	10900	
4	UP TAMAK	11000	11800	
5	KHADI	12500	12900	
6	TARKU 'O'	13500	14325	
7	DINTAM	15165	15600	
8	SIMKHARKA BUSTY	17100	18245	
9	DODUNG	19700	20200	
10	BEN-SIMKHARKA	20550	20700	
11	BEN-THALABORI	21350	21600	
12	BEN-THAKA	22285	22950	
13	CHEERKH	24850	25600	
14	RANKY	26300	28500	
15	NINGAN	29400	30600	
16	BHSI FATEK	30900	31500	
17	RABONGHA	33580	35300	
18	SIFAM AGRICALTURE	35900	36100	
19	ANIMAL HOSPITAL	36200	36340	
20	HORTICULTURE FARM	36340	36900	
21	14 TH MILE	37000	38000	
22	KEWZING BAKHIM	38800	43500	
23	CHANGEHA	45280	46000	
24	MAMRING	46000	47100	
25	UPOR DAR GOON 8 TH MILE	47500	48200	
26	LOWER DAR GOON 7 TH MILE	48200	49800	
27	HINGDAM	52200	56100	
28	HARDANG	56300	58800	
29	LEGSHIP	58800	60500	
30	OMCHING	64500	65300	
31	MIDDLE GAZING 6 TH MILE	67300	68400	
32	KYONGSHA	68700	70100	
33	LOWAR GAYZING 8 TH MILE	70300	72000	
34	GAYZZING	72540	74000	
35	SENT MERI SCHOOL	75000	75600	
36	NAYA BOSTI	75600	77200	
37	TIKJUK	77300	79000	
38	PEMAYANGTES GOMPA	79600	80980	
39	PELLING MARKET	81440	81630	

Singtam To gayzing			
Sl.no	**Form**	**To**	**Remarks**
1	2100	2384	Tatal Sinking area
2	2217	2290	Breats wall hight 1m damage
3	2100	2385	Retaining Wall
4	2280	2342	Road Surfce Poor Road Binder poor Condition is to Bad
5	2300	2312	The building is cracking and sinking in this ch 2300-2312
6	2125	2175	Land slaiding
7			the Road condition is not Well
8	2850	3150	Total sinking area
9			Breats wall is Crack and damaged
10			Retaining Wall bracking and damaged
11	2875	3150	Land slaiding
12	2850	3150	Velly Canel Slaiding
13			Conerete Road Length 10 m Width 6.2 m Cracking and damage
14			The Slab of culvert in this sinking slab of culvert 1.4m opening 70cm cracking brack and damage
15			Road condition is totally Faild
16	74480	74550	Total sinking area
17	74484	74542	Reatining wall is slading barcking and damage
18	74480	74540	Road surface bikaler poor and damage
19	74480	74540	Land slaiding Road condition is totally poor
20	4500	45080	Sinking area
21	44995	45285	Retaning Wall damage
22	449980	45286	Land saliding
23			Road side drain
24			The road condition is poor
25	46669	46725	Sinking area
26	46690	46725	Retaning Wall
27	46690	46725	Breast wall damage
28	46692	46717	Velly Sliding
29			Road midel and velly side sinking
30	46930	46990	Sinking area
31			Retaininig wall crascking and damage
32			Road hill and velly side silding
33			Road midel and velly side
34			Road condition is poor
35	47360	47480	Sinking area
36			Reatining wall damage
37			Road hill and velly side silding
38			Road sinking medle and velly side
39			Road condition is poor
40	47792	47990	Sinking area
41			Retaining and breast wall damage
42			Road hill and velly land silding
43			Road medle and velly side sinking
44			Road surface and binder damage
45	48040	48166	Sinking area
46			Retaning wall cracking sinking
47			Road medle and velly side sinking
48			Road surface poor
49	48620	48780	Sinking area

50			Retaining wall good
51			Hill side sliding
52			Road surface poor
53			Covered the road for land sliding binder

HORIZONTAL CURVE DETAILS

Curve No	Curve Sign	BS	BC	CP	EC	ES	Delta	Speed	Radius	Lc	Ts	Te	Super elevation
1	RHS	78.114	108.114	115.554	122.699	152.699	85.153	25	30	14.585	30	30	9.26%
2	LHS	166.828	181.828	205.531	229.014	244.014	342.199	65	-200	47.186	15	15	9.39%
3	LHS	370.773	385.773	423.347	460.532	475.532	342.923	80	-300	74.759	15	15	9.48%
4	LHS		588.733	604.035	619.326		356.147	80	-450	30.593	0	0	6.32%
5	LHS	730.946	745.946	763.334	780.567	795.567	341.163	50	-150	34.621	15	15	7.41%
6	LHS	834.774	849.774	853.257	856.735	871.735	343.280	40	-75	6.961	15	15	9.48%
7	RHS	897.960	912.960	923.374	933.655	948.655	27.296	40	75	20.695	15	15	9.48%
8	LHS	957.754	972.754	973.844	974.934	989.934	356.176	80	-250	2.180	15	15	10.00%
9	RHS		1004.216	1020.602	1036.915		9.378	65	200	32.699	0	0	9.39%
10	LHS	1050.848	1065.848	1078.688	1091.387	1106.387	336.830	50	-100	25.539	15	15	10.00%
11	RHS		1185.056	1193.714	1202.370		2.600	80	400	17.314	0	0	7.11%
12	LHS		1327.625	1348.458	1369.268		355.330	80	-500	41.643	0	0	5.69%
13	RHS		1515.178	1532.577	1549.962		4.009	80	500	34.784	0	0	5.69%
14	LHS	1702.779	1717.779	1737.259	1756.660	1771.660	347.663	80	-250	38.881	15	15	10.00%
15	LHS	1866.165	1881.165	1916.858	1952.217	1967.217	343.702	80	-300	71.052	15	15	9.48%
16	LHS		2121.821	2144.823	2167.802		355.691	80	-600	45.981	0	0	4.74%
17	LHS		2240.015	2297.429	2354.495		349.080	80	-600	114.480	0	0	4.74%
18	LHS		2442.301	2474.931	2507.447		351.754	80	-450	65.146	0	0	6.32%
19	RHS		2526.183	2544.588	2562.973		4.693	80	450	36.790	0	0	6.32%
20	RHS		2797.367	2807.27	2817.169		2.864	80	400	19.802	0	0	7.11%
21	RHS	2884.752	2899.752	2913.918	2927.576	2942.576	40.989	40	60	27.824	15	15	10.00%
22	RHS	2994.804	3009.804	3013.028	3016.247	3031.247	18.915	40	65	6.443	15	15	10.00%
23	LHS	3063.321	3078.321	3080.2	3082.078	3097.078	342.133	40	-60	3.757	15	15	10.00%
24	RHS	3129.379	3144.379	3145.453	3146.526	3161.526	16.439	40	60	2.147	15	15	10.00%
25	LHS	3170.470	3185.470	3195.51	3205.431	3220.431	333.368	40	-75	19.961	15	15	9.48%
26	LHS	3259.411	3274.411	3278.873	3283.329	3298.329	346.409	50	-100	8.918	15	15	10.00%
27	RHS	3333.343	3348.343	3358.629	3368.868	3383.868	16.286	50	125	20.525	15	15	8.89%
28	LHS	3393.475	3408.475	3419.116	3429.737	3444.737	349.716	65	-200	21.262	15	15	9.39%
29	RHS	3449.483	3464.483	3465.528	3466.574	3481.574	6.634	50	150	2.091	15	15	7.41%
30	RHS	3526.208	3541.208	3542.904	3544.600	3559.600	7.101	50	150	3.392	15	15	7.41%
31	LHS	3560.116	3575.116	3589.904	3604.361	3619.361	328.421	40	-80	29.245	15	15	8.89%
32	LHS	3649.401	3664.401	3680.408	3695.874	3710.874	322.067	40	-70	31.473	15	15	10.00%
33	RHS	3721.825	3736.825	3760.005	3782.381	3797.381	34.810	50	100	45.556	15	15	10.00
34	LHS	3810.160	3840.160	3840.539	3840.918	3870.918	309.790	30	-35	0.758	30	30	10.00
35	RHS	3878.643	3893.643	3929.276	3963.200	3978.200	37.273	50	130	69.557	15	15	8.55
36	LHS	4012.255	4027.255	4029.449	4031.642	4046.642	346.250	40	-80	4.387	15	15	8.89%

Curve No	Curve Sign	BS	BC	CP	EC	ES	Delta	Speed	Radius	Lc	Ts	Te	Super elevation
37	RHS	4057.003	4072.003	4076.862	4081.699	4096.699	23.726	40	60	9.696	15	15	10.00%
38	LHS	4099.153	4114.153	4115.978	4117.803	4132.803	349.440	50	-100	3.650	15	15	10.00%
39	RHS	4139.475	4154.475	4164.651	4174.663	4189.663	31.030	40	65	20.188	15	15	10.00%
40	LHS	4198.839	4213.839	4221.52	4229.118	4244.118	331.108	40	-60	15.279	15	15	10.00%
41	RHS	4248.578	4263.578	4275.684	4287.583	4302.583	29.930	40	75	24.005	15	15	9.48%
42	LHS	4307.190	4322.190	4328.426	4334.645	4349.645	344.295	50	-100	12.455	15	15	10.00%
43	RHS	4362.544	4377.544	4378.322	4379.099	4394.099	6.384	50	150	1.555	15	15	7.41%
44	RHS	4424.687	4439.687	4442.467	4445.244	4460.244	15.741	40	75	5.557	15	15	9.48%
45	LHS	4461.656	4481.656	4490.328	4498.789	4518.789	312.754	35	-45	17.133	20	20	10.00%
46	LHS	4525.138	4540.138	4540.565	4540.991	4555.991	346.106	40	-65	0.853	15	15	10.00%
47	RHS	4556.518	4571.518	4578.259	4584.980	4599.980	16.377	50	100	13.462	15	15	10.00%
48	RHS	4718.281	4733.281	4754.585	4774.642	4789.642	46.266	40	70	41.361	15	15	10.00%
49	RHS	4859.005	4874.005	4886.381	4898.604	4913.604	25.299	50	90	24.599	15	15	10.00%
50	RHS	4973.613	4988.613	4993.794	4998.969	5013.969	11.671	50	125	10.356	15	15	8.89%
51	LHS	5036.280	5051.280	5068.993	5085.727	5100.727	312.912	40	-60	34.447	15	15	10.00%
52	RHS	5118.739	5133.739	5136.07	5138.399	5153.399	15.042	40	75	4.660	15	15	9.48%
53	RHS	5203.016	5218.016	5229.062	5240.020	5255.020	21.217	50	100	22.004	15	15	10.00%
54	LHS	5262.614	5292.614	5319.763	5336.747	5366.747	218.424	25	-30	44.133	30	30	9.26%
55	RHS	5370.397	5385.397	5392.263	5399.091	5414.091	21.956	40	75	13.694	15	15	9.48%
56	RHS	5437.250	5452.250	5455.963	5459.670	5474.670	17.224	40	75	7.420	15	15	9.48%
57	LHS	5503.403	5518.403	5520.452	5522.500	5537.500	347.927	50	-90	4.097	15	15	10.00%
58	LHS	5546.050	5561.050	5567.597	5574.093	5589.093	333.255	40	-60	13.043	15	15	10.00%
59	LHS	5602.603	5632.603	5634.938	5637.264	5667.264	293.814	25	-30	4.661	30	30	9.26%
60	RHS	5668.759	5688.759	5700.372	5711.649	5731.649	44.806	35	55	22.890	20	20	9.90%
61	RHS	5732.605	5747.605	5761.355	5774.803	5789.803	32.268	40	75	27.198	15	15	9.48%
62	RHS	5825.170	5840.170	5852.197	5863.910	5878.910	37.085	40	60	23.740	15	15	10.00%
63	LHS	5888.789	5903.789	5915.977	5927.954	5942.954	330.201	40	-75	24.165	15	15	9.48%
64	LHS	5980.804	5995.804	5998.942	6002.076	6017.076	343.894	40	-75	6.272	15	15	9.48%
65	RHS	6019.793	6039.793	6056.46	6067.583		108.330	20	20	27.790	20	0	8.89%
66	RHS		6115.375	6123.091	6130.104	6150.104	70.937	20	20	14.729	0	20	8.89%
67	LHS		6160.868	6165.468	6169.998		342.682	25	-30	9.130	0	0	9.26%
68	RHS		6188.789	6193.813	6198.744		19.134	25	30	9.955	0	0	9.26%
69	LHS		6212.447	6221.993	6230.930		324.706	25	-30	18.483	0	0	9.26%
70	RHS		6243.893	6251.205	6258.237		27.486	25	30	14.344	0	0	9.26
71	LHS	6270.665	6290.665	6304.195	6314.456		263.313	20	-20	23.791	20	0	8.89
72	LHS		6315.618	6337.905	6349.195	6369.195	235.255	20	-20	33.577	0	20	8.89
73	RHS	6380.402	6395.402	6405.47	6414.829	6429.829	65.757	25	30	19.427	15	15	9.26

Curve No	Curve Sign	BS	BC	CP	EC	ES	Delta	Speed	Radius	Lc	Ts	Te	Super elevation
74	LHS	6432.305	6447.305	6449.533	6451.760	6466.760	341.476	40	-60	4.455	15	15	10.00%
75	RHS	6480.022	6495.022	6497.096	6499.168	6514.168	18.286	40	60	4.146	15	15	10.00%
76	RHS	6567.646	6587.646	6592.884	6597.892		58.031	20	20	10.246	20	0	8.89%
77	RHS		6598.356	6632.136	6639.805	6659.805	147.459	20	20	41.449	0	20	8.89%
78	LHS	6662.753	6682.753	6686.073	6689.366	6709.366	309.244	25	-30	6.613	20	20	9.26%
79	RHS	6715.184	6730.184	6734.323	6738.450	6753.450	20.588	40	65	8.266	15	15	10.00%
80	LHS	6768.639	6783.639	6798.913	6813.774	6828.774	325.540	40	-75	30.135	15	15	9.48%
81	RHS	6837.833	6852.833	6855.508	6858.180	6873.180	19.545	40	60	5.347	15	15	10.00%
82	LHS	6881.722	6896.722	6911.602	6925.894	6940.894	317.841	40	-60	29.172	15	15	10.00%
83	RHS	6980.432	6995.432	6995.846	6996.259	7011.259	12.164	40	75	0.827	15	15	9.48%
84	LHS	7012.853	7027.853	7033.919	7039.959	7054.959	339.374	40	-75	12.106	15	15	9.48%
85	RHS	7080.015	7100.015	7118.586	7135.240	7155.240	70.453	35	45	35.225	20	20	10.00%
86	LHS	7155.925	7175.925	7191.52	7202.416		255.558	20	-20	26.491	20	0	8.89%
87	LHS		7202.559	7218.188	7229.092	7249.092	255.384	20	-20	26.533	0	20	8.89%
88	LHS	7274.345	7289.345	7294.075	7298.785	7313.785	336.763	40	-60	9.440	15	15	10.00%
89	RHS	7319.813	7334.813	7339.705	7344.576	7359.576	23.777	40	60	9.763	15	15	10.00%
90	LHS	7367.562	7387.562	7395.947	7404.142	7424.142	313.503	35	-45	16.580	20	20	10.00%
91	RHS	7440.125	7460.125	7470.544	7480.603	7500.603	51.581	35	45	20.478	20	20	10.00%
92	RHS	7534.222	7554.222	7564.767	7574.938	7594.938	51.910	35	45	20.716	20	20	10.00%
93	LHS	7606.247	7621.247	7659.274	7695.077	7710.077	319.287	50	-125	73.830	15	15	8.89%
94	RHS	7716.360	7731.360	7739.113	7746.780	7761.780	29.186	40	60	15.420	15	15	10.00%
95	LHS	7763.564	7778.564	7796.11	7812.704	7827.704	313.148	40	-60	34.140	15	15	10.00%
96	LHS	7838.052	7858.052	7863.73	7869.348	7889.348	320.177	35	-45	11.296	20	20	10.00%
97	RHS	7893.539	7913.539	7920.056	7926.373	7946.373	62.772	25	30	12.834	20	20	9.26%
98	RHS	7977.502	7997.502	8007.001	8015.239		79.552	20	20	17.737	20	0	8.89%
99	RHS		8015.748	8040.841	8051.662	8071.662	131.554	20	20	35.914	0	20	8.89%
100	LHS	8071.971	8091.971	8099.032	8105.546	8125.546	263.934	20	-20	13.575	20	20	8.89%
101	RHS	8127.668	8142.668	8150.127	8157.510	8172.510	28.623	40	60	14.842	15	15	10.00%
102	LHS	8173.971	8188.971	8189.953	8190.934	8205.934	347.109	40	-75	1.963	15	15	9.48%
103	RHS	8210.881	8225.881	8259.272	8287.573	8302.573	67.623	40	65	61.692	15	15	10.00%
104	LHS	8307.057	8327.057	8335.203	8343.286	8363.286	332.383	40	-75	16.229	20	20	9.48%
105	RHS	8411.486	8426.486	8440.168	8453.764	8468.764	17.326	50	140	27.278	15	15	7.94%
106	LHS	8478.710	8508.710	8522.646	8534.803	8564.803	252.891	25	-30	26.093	30	30	9.26%
107	RHS	8598.747	8613.747	8650.747	8684.623	8699.623	49.233	50	100	70.876	15	15	10.0
108	LHS	8715.601	8745.601	8751.461	8757.175	8787.175	280.746	25	-30	11.574	30	30	9.26
109	RHS	8899.854	8914.854	8922.94	8930.963	8945.963	23.904	40	75	16.109	15	15	9.48
110	LHS	8959.995	8974.995	8985.88	8996.728	9011.728	345.993	50	-150	21.733	15	15	7.41

Curve No	Curve Sign	BS	BC	CP	EC	ES	Delta	Speed	Radius	Lc	Ts	Te	Super elevation
111	RHS	9020.554	9035.554	9043.843	9052.042	9067.042	27.804	40	65	16.488	15	15	10.00%
112	LHS	9070.738	9090.738	9092.955	9095.168	9115.168	328.998	35	-45	4.430	20	20	10.00%
113	RHS	9117.651	9132.651	9142.122	9151.438	9166.438	32.396	40	60	18.787	15	15	10.00%
114	RHS		9180.213	9199.69	9219.127		6.403	80	350	38.914	0	0	8.13%
115	RHS	9247.499	9267.499	9281.176	9294.054	9314.054	59.355	35	45	26.555	20	20	10.00%
116	RHS	9409.846	9429.846	9444.775	9459.001	9479.001	51.259	35	55	29.155	20	20	9.90%
117	LHS	9487.870	9517.870	9532.592	9545.742	9575.742	265.384	30	-35	27.872	30	30	10.00%
118	RHS	9585.421	9605.421	9624.663	9642.441	9662.441	59.402	35	55	37.020	20	20	9.90%
119	LHS	9751.038	9766.038	9784.728	9802.275	9817.275	311.121	40	-60	36.237	15	15	10.00%
120	RHS	9836.144	9856.144	9859.143	9862.134	9882.134	33.165	35	45	5.990	20	20	10.00%
121	RHS	9898.913	9918.913	9927.468	9935.821	9955.821	47.076	35	45	16.908	20	20	10.00%
122	LHS	9963.454	9978.454	9985.271	9992.030	10007.030	332.821	40	-60	13.576	15	15	10.00%
123	LHS	10083.625	10103.625	10113.906	10123.840	10143.840	308.923	35	-45	20.215	20	20	10.00%
124	LHS	10185.147	10200.147	10207.729	10215.232	10230.232	331.313	40	-60	15.085	15	15	10.00%
125	LHS	10282.104	10297.104	10297.57	10298.036	10313.036	347.936	40	-75	0.932	15	15	9.48%
126	RHS	10327.164	10342.164	10348.355	10354.518	10369.518	21.024	40	75	12.354	15	15	9.48%
127	LHS	10378.487	10393.487	10393.845	10394.203	10409.203	354.121	50	-150	0.716	15	15	7.41%
128	RHS	10414.592	10429.592	10430.733	10431.874	10446.874	15.235	40	65	2.282	15	15	10.00%
129	LHS	10447.981	10467.981	10469.823	10471.663	10491.663	329.974	35	-45	3.682	20	20	10.00%
130	RHS	10491.939	10511.939	10516.294	10520.604	10540.604	47.004	30	35	8.665	20	20	10.00%
131	LHS	10548.176	10568.176	10581.731	10592.001		263.248	20	-20	23.825	20	0	8.89%
132	LHS		10592.289	10613.539	10624.917	10644.917	238.013	20	-20	32.628	0	20	8.89%
133	RHS	10651.305	10666.305	10668.82	10671.333	10686.333	15.301	40	75	5.028	15	15	9.48%
134	RHS	10693.467	10708.467	10709.059	10709.651	10724.651	15.504	40	60	1.184	15	15	10.00%
135	LHS	10728.183	10743.183	10748.352	10753.495	10768.495	335.938	40	-60	10.312	15	15	10.00%
136	RHS	10776.509	10791.509	10795.068	10798.626	10813.626	10.180	50	125	7.117	15	15	8.89%
137	LHS	10819.133	10834.133	10836.24	10838.346	10853.346	343.189	40	-65	4.213	15	15	10.00%
138	RHS	10870.007	10885.007	10887.832	10890.657	10905.657	9.603	50	125	5.650	15	15	8.89%
139	RHS	10937.560	10957.560	10980.818	11000.493	11020.493	80.232	35	45	42.933	20	20	10.00%
140	RHS	11066.605	11081.605	11090.527	11099.320	11114.320	31.310	40	60	17.715	15	15	10.00%
141	LHS	11116.940	11131.940	11145.257	11158.300	11173.300	328.436	40	-75	26.360	15	15	9.48%
142	RHS	11245.601	11260.601	11270.03	11279.361	11294.361	25.861	40	75	18.760	15	15	9.48%
143	LHS	11317.969	11332.969	11339.575	11346.177	11361.177	351.937	65	-200	13.208	15	15	9.39%
144	LHS	11470.728	11485.728	11508.397	11529.351	11544.351	308.405	40	-65	43.623	15	15	10.0
145	RHS	11550.897	11565.897	11571.182	11576.439	11591.439	24.456	40	60	10.542	15	15	10.0
146	LHS	11640.858	11655.858	11698.157	11739.902	11754.902	341.090	80	-300	84.044	15	15	9.48
147	LHS		11836.776	11881.499	11925.852		347.308	80	-400	89.076	0	0	7.11

Curve No	Curve Sign	BS	BC	CP	EC	ES	Delta	Speed	Radius	Lc	Ts	Te	Super elevation
148	LHS	11956.246	11971.246	11977.121	11982.959	11997.959	334.566	40	-60	11.713	15	15	10.00%
149	RHS	12005.923	12020.923	12024.717	12028.501	12043.501	21.655	40	60	7.578	15	15	10.00%
150	LHS	12044.726	12059.726	12064.148	12068.554	12083.554	337.363	40	-60	8.828	15	15	10.00%
151	LHS	12120.107	12145.107	12155.57	12165.243	12190.243	273.920	25	-30	20.136	25	25	9.26%
152	RHS	12191.420	12216.420	12219.351	12222.264	12247.264	58.992	25	30	5.844	25	25	9.26%
153	LHS	12251.394	12266.394	12267.685	12268.976	12283.976	344.525	40	-65	2.582	15	15	10.00%
154	RHS	12309.405	12324.405	12330.519	12336.596	12351.596	23.988	40	65	12.191	15	15	10.00%
155	RHS	12369.990	12399.990	12410.634	12420.447	12450.447	96.500	25	30	20.457	30	30	9.26%
156	LHS	12472.309	12487.309	12512.702	12535.726	12550.726	304.241	40	-65	48.417	15	15	10.00%
157	RHS	12553.309	12583.309	12591.612	12599.510	12629.510	88.269	25	30	16.201	30	30	9.26%
158	LHS		12642.065	12660.73	12679.346		352.998	80	-300	37.281	0	0	9.48%
159	LHS		12700.292	12720.829	12741.331		354.166	80	-400	41.039	0	0	7.11%
160	LHS	12823.845	12838.845	12846.442	12853.971	12868.971	333.546	40	-65	15.126	15	15	10.00%
161	RHS	12912.424	12932.424	12946.565	12957.042		99.212	20	20	24.618	20	0	8.89%
162	RHS		12957.263	12972.691	12983.545	13003.545	104.007	20	20	26.282	0	20	8.89%
163	LHS	13023.999	13038.999	13039.249	13039.499	13054.499	351.145	50	-100	0.500	15	15	10.00%
164	LHS	13098.819	13113.819	13115.355	13116.891	13131.891	354.876	65	-200	3.072	15	15	9.39%
165	LHS	13156.810	13171.810	13174.675	13177.537	13192.537	340.269	40	-60	5.727	15	15	10.00%
166	RHS	13195.304	13210.304	13216.229	13222.115	13237.115	25.623	40	60	11.811	15	15	10.00%
167	LHS	13258.207	13273.207	13275.814	13278.419	13293.419	348.443	50	-100	5.212	15	15	10.00%
168	LHS	13333.217	13353.217	13379.395	13389.953	13409.953	197.593	20	-20	36.736	20	20	8.89%
169	RHS	13487.250	13502.250	13518.932	13535.143	13550.143	34.305	40	80	32.893	15	15	8.89%
170	RHS	13562.256	13582.256	13603.133	13621.351	13641.351	75.317	35	45	39.095	20	20	10.00%
171	LHS	13662.440	13692.440	13699.161	13705.663	13735.663	277.461	25	-30	13.223	30	30	9.26%
172	RHS	13737.394	13752.394	13773.264	13793.408	13808.408	35.743	50	90	41.014	15	15	10.00%
173	RHS	13828.249	13858.249	13861.592	13864.914	13894.914	60.076	30	35	6.665	30	30	10.00%
174	LHS	13944.495	13974.495	13985.115	13994.909	14024.909	263.855	25	-30	20.414	30	30	9.26%
175	RHS	14037.284	14067.284	14072.917	14078.420	14108.420	78.693	25	30	11.136	30	30	9.26%
176	LHS	14135.683	14165.683	14169.056	14172.408	14202.408	300.002	30	-35	6.725	30	30	10.00%
177	RHS	14210.533	14230.533	14245.844	14260.049	14280.049	63.167	35	45	29.516	20	20	10.00%
178	RHS	14308.355	14328.355	14333.02	14337.653	14357.653	37.334	35	45	9.298	20	20	10.00%
179	LHS	14358.775	14378.775	14388.051	14397.071	14417.071	311.301	35	-45	18.296	20	20	10.00%
180	RHS	14422.206	14437.206	14439.004	14440.801	14455.801	14.254	40	75	3.595	15	15	9.48%
181	RHS	14507.860	14522.860	14531.172	14539.380	14554.380	30.242	40	60	16.520	15	15	10.0
182	LHS	14555.522	14570.522	14571.882	14573.242	14588.242	348.738	50	-90	2.720	15	15	10.0
183	RHS	14603.482	14618.482	14619.813	14621.144	14636.144	15.589	40	65	2.662	15	15	10.0
184	LHS		14657.297	14658.506	14659.714		355.529	25	-30	2.417	0	0	9.26

Curve No	Curve Sign	BS	BC	CP	EC	ES	Delta	Speed	Radius	Lc	Ts	Te	Super elevation
185	LHS	14812.912	14827.912	14843.482	14858.892	14873.892	338.997	50	-125	30.980	15	15	8.89%
186	RHS	14898.762	14913.762	14938.845	14962.175	14977.175	48.539	40	75	48.413	15	15	9.48%
187	LHS	14991.790	15006.790	15018.065	15029.148	15044.148	329.468	40	-70	22.358	15	15	10.00%
188	RHS	15051.332	15066.332	15072.795	15079.241	15094.241	16.057	50	100	12.909	15	15	10.00%
189	LHS	15144.998	15164.998	15175.284	15183.999	15203.999	248.301	20	-20	19.001	20	20	8.89%
190	LHS	15245.045	15260.045	15264.79	15269.516	15284.516	336.771	40	-60	9.471	15	15	10.00%
191	RHS	15293.153	15308.153	15320.313	15332.148	15347.148	37.278	40	60	23.995	15	15	10.00%
192	LHS	15360.272	15375.272	15376.041	15376.810	15391.810	344.275	40	-60	1.538	15	15	10.00%
193	RHS	15392.997	15407.997	15408.613	15409.229	15424.229	10.339	50	90	1.232	15	15	10.00%
194	LHS	15440.404	15455.404	15469.872	15483.798	15498.798	318.668	40	-60	28.394	15	15	10.00%
195	RHS	15572.091	15587.091	15601.098	15614.612	15629.612	40.647	40	60	27.521	15	15	10.00%
196	LHS	15633.428	15648.428	15648.827	15649.226	15664.226	345.035	40	-60	0.798	15	15	10.00%
197	RHS	15665.224	15680.224	15681.139	15682.055	15697.055	10.845	50	90	1.831	15	15	10.00%
198	LHS	15699.567	15714.567	15717.617	15720.662	15735.662	339.902	40	-60	6.095	15	15	10.00%
199	RHS	15748.995	15763.995	15774.627	15785.119	15800.119	27.713	40	75	21.124	15	15	9.48%
200	LHS	15812.684	15837.684	15841.747	15845.782	15870.782	312.654	30	-40	8.098	25	25	10.00%
201	RHS	15926.530	15946.530	15952.041	15957.498	15977.498	39.551	35	45	10.968	20	20	10.00%
202	LHS	15979.564	15999.564	16003.857	16008.123	16028.123	323.675	35	-45	8.559	20	20	10.00%
203	RHS	16035.721	16050.721	16050.928	16051.136	16066.136	14.754	40	60	0.415	15	15	10.00%
204	RHS		16158.758	16188.511	16218.246		3.484	80	1000	59.488	0	0	2.84%
205	RHS	16273.716	16288.716	16306.959	16324.925	16339.925	24.456	50	120	36.209	15	15	9.26%
206	LHS	16357.113	16387.113	16391.692	16396.220	16426.220	296.104	30	-35	9.107	30	30	10.00%
207	RHS	16453.847	16468.847	16482.456	16495.613	16510.613	40.031	40	60	26.766	15	15	10.00%
208	LHS	16515.250	16530.250	16540.211	16549.993	16564.993	326.872	40	-60	19.743	15	15	10.00%
209	RHS	16597.045	16612.045	16613.74	16615.434	16630.434	17.653	40	60	3.389	15	15	10.00%
210	LHS	16633.037	16648.037	16653.466	16658.865	16673.865	335.363	40	-60	10.828	15	15	10.00%
211	RHS	16675.678	16690.678	16700.034	16709.240	16724.240	32.193	40	60	18.562	15	15	10.00%
212	RHS	16726.355	16742.355	16745.83	16749.296	16764.296	21.548	40	60	6.941	16	15	10.00%
213	RHS	16828.346	16843.346	16849.819	16856.249	16871.249	24.708	40	65	12.903	15	15	10.00%
214	LHS	16880.794	16895.794	16900.022	16904.236	16919.236	337.741	40	-60	8.442	15	15	10.00%
215	RHS	16923.857	16938.857	16940.516	16942.173	16957.173	17.555	40	60	3.316	15	15	10.00%
216	LHS	16962.565	16977.565	16980.467	16983.364	16998.364	340.188	40	-60	5.799	15	15	10.00%
217	RHS	17000.086	17020.086	17021.243	17022.400	17042.400	28.519	35	45	2.314	20	20	10.00%
218	LHS	17045.037	17060.037	17061.357	17062.678	17077.678	348.794	50	-90	2.641	15	15	10.0
219	RHS	17093.557	17108.557	17112.106	17115.650	17130.650	16.979	40	75	7.093	15	15	9.48
220	LHS	17198.020	17213.020	17229.355	17242.937	17257.937	274.345	25	-30	29.917	15	15	9.26
221	RHS	17258.317	17273.317	17280.253	17286.949	17301.949	54.829	25	30	13.632	15	15	9.26

Curve No	Curve Sign	BS	BC	CP	EC	ES	Delta	Speed	Radius	Lc	Ts	Te	Super elevation
222	LHS	17309.433	17324.433	17325.397	17326.360	17341.360	350.315	50	-100	1.927	15	15	10.00%
223	RHS	17351.663	17366.663	17381.822	17396.626	17411.626	32.224	40	80	29.963	15	15	8.89%
224	LHS	17445.667	17460.667	17468.842	17476.994	17491.994	346.279	50	-130	16.327	15	15	8.55%
225	LHS	17558.473	17578.473	17586.019	17593.391	17613.391	310.131	30	-40	14.918	20	20	10.00%
226	RHS	17614.936	17629.936	17635.712	17641.452	17656.452	25.355	40	60	11.516	15	15	10.00%
227	LHS	17661.996	17676.996	17680.14	17683.281	17698.281	343.794	40	-75	6.285	15	15	9.48%
228	RHS	17765.607	17780.607	17790.231	17799.795	17814.795	19.637	50	100	19.188	15	15	10.00%
229	LHS	17819.413	17834.413	17840.111	17845.774	17860.774	334.915	40	-60	11.361	15	15	10.00%
230	RHS	17867.373	17882.373	17895.937	17909.052	17924.052	39.807	40	60	26.679	15	15	10.00%
231	LHS	17927.928	17942.928	17943.793	17944.658	17959.658	345.278	40	-65	1.730	15	15	10.00%
232	LHS	18018.219	18038.219	18045.269	18052.205	18072.205	316.819	35	-45	13.986	20	20	10.00%
233	RHS	18074.231	18094.231	18103.552	18112.612	18132.612	48.874	35	45	18.381	20	20	10.00%
234	RHS	18166.248	18186.248	18188.142	18190.035	18210.035	30.313	35	45	3.787	20	20	10.00%
235	LHS	18212.916	18232.916	18236.216	18239.505	18259.505	326.263	35	-45	6.589	20	20	10.00%
236	RHS	18273.702	18293.702	18303.107	18312.457	18332.457	22.248	50	100	18.755	20	20	10.00%
237	LHS	18341.525	18356.525	18366.225	18375.688	18400.688	315.174	35	-50	19.163	15	25	10.00%
238	RHS	18493.065	18523.065	18535.282	18546.268	18576.268	101.711	25	30	23.203	30	30	9.26%
239	LHS	18599.742	18614.742	18624.127	18633.456	18648.456	340.684	50	-100	18.714	15	15	10.00%
240	RHS	18677.044	18692.044	18707.029	18721.671	18736.671	32.063	40	80	29.627	15	15	8.89%
241	LHS	18749.103	18764.103	18780.724	18796.533	18811.533	314.775	40	-60	32.430	15	15	10.00%
242	LHS	18822.716	18837.716	18843.301	18848.854	18863.854	335.101	40	-60	11.138	15	15	10.00%
243	RHS	18893.112	18908.112	18923.158	18938.061	18953.061	20.632	50	125	29.949	15	15	8.89%
244	LHS	18956.879	18971.879	18985.236	18998.436	19013.436	336.246	50	-100	26.557	15	15	10.00%
245	RHS	19020.864	19040.864	19042.937	19045.007	19065.007	30.798	35	45	4.143	20	20	10.00%
246	LHS	19069.013	19099.013	19103.139	19107.214	19137.214	287.116	25	-30	8.201	30	30	9.26%
247	RHS	19139.012	19154.012	19155.145	19156.278	19171.278	11.068	50	90	2.266	15	15	10.00%
248	LHS	19217.669	19232.669	19237.941	19243.187	19258.187	335.774	40	-60	10.518	15	15	10.00%
249	RHS	19264.256	19279.256	19284.148	19289.018	19304.018	23.764	40	60	9.762	15	15	10.00%
250	LHS	19307.167	19322.167	19325.307	19328.442	19343.442	339.688	40	-60	6.275	15	15	10.00%
251	RHS	19473.144	19503.144	19511.265	19519.006	19549.006	87.660	25	30	15.862	30	30	9.26%
252	RHS	19570.108	19585.108	19601.313	19614.824	19629.824	85.403	25	30	29.716	15	15	9.26%
253	LHS	19631.458	19651.458	19656.872	19662.234	19682.234	320.952	35	-45	10.776	20	20	10.00%
254	LHS	19715.235	19745.235	19751.873	19758.300	19788.300	277.781	25	-30	13.065	30	30	9.26%
255	LHS	19838.569	19858.569	19865.683	19872.681	19892.681	316.581	35	-45	14.112	20	20	10.00%
256	RHS	19907.906	19927.906	19946.482	19957.846		114.453	20	20	29.940	20	0	8.89%
257	RHS		19988.388	19997.737	20005.879	20025.879	78.822	20	20	17.491	0	20	8.89%
258	LHS	20029.106	20044.106	20046.297	20048.486	20063.486	335.394	35	-45	4.380	15	15	10.00%

Curve No	Curve Sign	BS	BC	CP	EC	ES	Delta	Speed	Radius	Lc	Ts	Te	Super elevation
259	RHS	20065.744	20080.744	20081.594	20082.443	20097.443	21.366	35	45	1.699	15	15	10.00%
260	LHS	20106.300	20136.300	20136.965	20137.631	20167.631	300.279	25	-30	1.331	30	30	9.26%
261	RHS	20171.912	20201.912	20203.235	20204.556	20234.556	62.456	25	30	2.644	30	30	9.26%
262	LHS	20258.567	20273.567	20294.199	20313.311	20328.311	307.783	40	-60	39.744	15	15	10.00%
263	RHS	20365.462	20380.462	20408.017	20432.125	20447.125	63.733	40	60	51.663	15	15	10.00%
264	LHS	20458.584	20478.584	20507.043	20529.336	20549.336	270.050	35	-45	50.752	20	20	10.00%
265	RHS	20558.174	20578.174	20614.503	20639.301	20659.301	103.384	35	45	61.127	20	20	10.00%
266	LHS	20663.520	20678.520	20703.132	20725.233	20740.233	301.085	40	-60	46.713	15	15	10.00%
267	RHS	20753.119	20768.119	20770.291	20772.462	20787.462	11.225	50	100	4.343	15	15	10.00%
268	RHS	20805.535	20820.535	20837.405	20853.960	20868.960	27.853	50	100	33.425	15	15	10.00%
269	RHS	20912.090	20927.090	20928.501	20929.911	20944.911	18.697	35	55	2.821	15	15	9.90%
270	LHS	20945.952	20960.952	20965.017	20969.053	20984.053	327.004	30	-40	8.101	15	15	10.00%
271	RHS	20984.763	20999.763	21004.255	21008.717	21023.717	30.646	35	45	8.954	15	15	10.00%
272	LHS	21025.235	21040.235	21045.586	21050.887	21065.887	327.377	35	-45	10.652	15	15	10.00%
273	LHS	21099.346	21114.346	21119.887	21125.373	21140.373	326.970	35	-45	11.027	15	15	10.00%
274	RHS	21141.873	21156.873	21158.087	21159.300	21174.300	11.194	50	90	2.427	15	15	10.00%
275	RHS	21233.774	21248.774	21255.576	21262.373	21277.373	8.279	65	200	13.599	15	15	9.39%
276	LHS	21279.489	21294.489	21305.416	21316.107	21331.107	325.172	40	-60	21.618	15	15	10.00%
277	RHS	21359.381	21379.381	21382.785	21386.160	21406.160	51.229	25	30	6.779	20	20	9.26%
278	LHS	21406.853	21426.853	21427.808	21428.763	21448.763	324.276	30	-35	1.910	20	20	10.00%
279	RHS	21449.766	21464.766	21481.613	21497.006	21512.006	60.269	35	45	32.240	15	15	10.00%
280	LHS	21564.069	21579.069	21595.912	21611.910	21626.910	314.448	40	-60	32.841	15	15	10.00%
281	RHS	21632.184	21647.184	21649.722	21652.259	21667.259	9.220	50	125	5.075	15	15	8.89%
282	RHS	21671.942	21686.942	21694.368	21701.767	21716.767	17.138	50	100	14.825	15	15	10.00%
283	LHS	21718.277	21733.277	21741.038	21748.698	21763.698	328.394	35	-55	15.421	15	15	9.90%
284	RHS	21791.699	21806.699	21808.337	21809.974	21824.974	14.060	40	75	3.275	15	15	9.48%
285	RHS	21861.593	21881.593	21893.858	21905.649	21925.649	50.491	35	50	24.056	20	20	10.00%
286	LHS	21935.254	21960.254	21981.547	21998.512	22023.512	256.541	30	-35	38.258	25	25	10.00%
287	LHS	22053.032	22068.032	22078.422	22088.609	22103.609	326.112	40	-60	20.577	15	15	10.00%
288	LHS	22117.583	22132.583	22137.006	22141.416	22156.416	339.061	40	-65	8.833	15	15	10.00%
289	RHS	22199.549	22214.549	22235.166	22254.267	22269.267	52.267	40	60	39.718	15	15	10.00%
290	LHS	22271.119	22286.119	22292.305	22298.448	22313.448	333.931	40	-60	12.329	15	15	10.00%
291	RHS	22320.164	22335.164	22336.603	22338.042	22353.042	15.839	40	65	2.878	15	15	10.00%
292	LHS	22363.176	22378.176	22384.976	22391.674	22406.674	323.853	35	-45	13.498	15	15	10.00%
293	RHS	22411.145	22426.145	22429.029	22431.909	22446.909	19.936	40	60	5.764	15	15	10.00%
294	LHS	22448.383	22463.383	22466.788	22470.185	22485.185	339.309	40	-60	6.802	15	15	10.00%
295	RHS	22488.306	22503.306	22503.819	22504.332	22519.332	7.458	50	125	1.026	15	15	8.89%

Curve No	Curve Sign	BS	BC	CP	EC	ES	Delta	Speed	Radius	Lc	Ts	Te	Super elevation
296	RHS	22554.295	22574.295	22574.932	22575.569	22595.569	22.268	35	55	1.274	20	20	9.90%
297	LHS	22604.610	22619.610	22621.883	22624.154	22639.154	341.369	40	-60	4.544	15	15	10.00%
298	RHS	22664.925	22679.925	22705.698	22729.575	22744.575	49.435	40	75	49.650	15	15	9.48%
299	RHS	22780.656	22795.656	22796.413	22797.170	22812.170	10.047	50	95	1.514	15	15	10.00%
300	LHS	22813.604	22828.604	22830.207	22831.807	22846.807	325.251	25	-30	3.203	15	15	9.26%
301	RHS	22847.856	22862.856	22864.42	22865.982	22880.982	23.181	35	45	3.126	15	15	10.00%
302	LHS	22882.491	22897.491	22903.524	22909.517	22924.517	334.272	40	-60	12.026	15	15	10.00%
303	RHS		22937.519	22947.29	22957.056		3.334	80	350	19.537	0	0	8.13%
304	RHS	22982.983	22997.983	22999.559	23001.136	23016.136	6.942	50	150	3.153	15	15	7.41%
305	LHS	23024.311	23044.311	23090.956	23116.612	23136.612	242.593	35	-45	72.301	20	20	10.00%
306	RHS	23183.934	23203.934	23212.041	23219.977	23239.977	45.956	35	45	16.043	20	20	10.00%
307	LHS	23240.936	23255.936	23257.874	23259.812	23274.812	351.480	50	-125	3.876	15	15	8.89%
308	RHS	23311.592	23331.592	23338.711	23345.712	23365.712	43.529	35	45	14.120	20	20	10.00%
309	LHS	23372.828	23387.828	23398.247	23407.884	23422.884	293.169	25	-30	20.056	15	15	9.26%
310	RHS	23423.670	23438.670	23447.526	23456.255	23471.255	31.119	40	60	17.585	15	15	10.00%
311	RHS	23477.789	23492.789	23496.854	23500.897	23515.897	29.474	35	45	8.108	15	15	10.00%
312	RHS	23525.617	23540.617	23541.909	23543.200	23558.200	13.578	40	75	2.583	15	15	9.48%
313	LHS	23559.874	23574.874	23580.837	23586.645	23601.645	308.911	25	-30	11.771	15	15	9.26%
314	RHS	23606.101	23621.101	23630.2	23639.161	23654.161	31.601	40	60	18.060	15	15	10.00%
315	RHS	23691.411	23706.411	23714.56	23722.610	23737.610	29.880	40	60	16.199	15	15	10.00%
316	LHS	23739.744	23754.744	23758.638	23762.488	23777.488	316.672	25	-30	7.744	15	15	9.26%
317	RHS	23784.780	23799.780	23814.007	23827.719	23842.719	41.041	40	60	27.939	15	15	10.00%
318	LHS	23899.224	23919.224	23937.5	23953.944	23973.944	290.423	35	-45	34.720	20	20	10.00%
319	RHS	23982.792	23997.792	24001.279	24004.759	24019.759	21.070	40	60	6.967	15	15	10.00%
320	LHS	24021.868	24036.868	24037.684	24038.500	24053.500	347.390	40	-75	1.632	15	15	9.48%
321	RHS	24055.186	24070.186	24071.148	24072.109	24087.109	13.039	40	75	1.923	15	15	9.48%
322	RHS	24130.236	24145.236	24146.52	24147.804	24162.804	8.076	50	125	2.568	15	15	8.89%
323	LHS	24226.233	24246.233	24249.763	24253.289	24273.289	340.678	40	-80	7.056	20	20	8.89%
324	LHS	24308.430	24323.430	24325.292	24327.155	24342.155	351.422	50	-125	3.725	15	15	8.89%
325	LHS	24350.695	24365.695	24367.466	24369.233	24384.233	324.704	25	-30	3.538	15	15	9.26%
326	RHS	24389.299	24404.299	24407.544	24410.764	24425.764	41.098	25	30	6.465	15	15	9.26%
327	LHS	24429.059	24444.059	24455.602	24466.097	24481.097	289.364	25	-30	22.038	15	15	9.26%
328	RHS	24488.313	24503.313	24517.927	24530.512	24545.512	80.692	25	30	27.199	15	15	9.26%
329	LHS	24548.974	24563.974	24569.291	24574.499	24589.499	311.272	25	-30	10.525	15	15	9.26
330	RHS	24594.350	24609.350	24614.271	24619.105	24634.105	47.387	25	30	9.755	15	15	9.26
331	RHS	24661.387	24676.387	24679.331	24682.256	24697.256	39.906	25	30	5.869	15	15	9.26
332	LHS	24706.832	24721.832	24730.709	24739.092	24754.092	298.433	25	-30	17.260	15	15	9.26

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333	RHS	24757.284	24772.284	24776.798	24781.263	24796.263	39.288	30	35	8.979	15	15	10.00%
334	LHS	24797.819	24817.819	24839.138	24857.637	24877.637	283.873	35	-45	39.818	20	20	10.00%
335	RHS	24905.577	24930.577	24936.42	24942.058		55.044	25	25	11.481	25	0	10.00%
336	RHS		24976.351	24988.08	24998.285	25013.285	67.533	25	25	21.934	0	15	10.00%
337	LHS	25014.357	25029.357	25032.001	25034.631	25049.631	321.392	25	-30	5.274	15	15	9.26%
338	RHS	25053.611	25068.611	25072.289	25075.950	25090.950	28.529	35	45	7.339	15	15	10.00%
339	RHS	25110.018	25125.018	25133.819	25142.514	25157.514	28.740	40	65	17.496	15	15	10.00%
340	LHS	25197.983	25212.983	25218.853	25224.702	25239.702	340.986	40	-80	11.719	15	15	8.89%
341	LHS	25265.928	25280.928	25282.132	25283.336	25298.336	353.356	50	-150	2.408	15	15	7.41%
342	RHS	25314.191	25329.191	25340.498	25351.580	25366.580	33.030	40	65	22.389	15	15	10.00%
343	LHS	25378.796	25403.796	25419.474	25432.690	25457.690	257.104	25	-30	28.894	25	25	9.26%
344	RHS	25502.654	25517.654	25521.937	25526.205	25541.205	22.538	40	60	8.551	15	15	10.00%
345	RHS	25543.109	25558.109	25567.73	25576.729	25591.729	64.292	25	30	18.620	15	15	9.26%
346	LHS	25595.346	25610.346	25617.001	25623.444	25638.444	306.373	25	-30	13.098	15	15	9.26%
347	LHS	25665.358	25690.358	25705.535	25719.370	25744.370	282.641	30	-40	29.012	25	25	10.00%
348	RHS	25747.955	25762.955	25765.748	25768.539	25783.539	11.886	50	100	5.584	15	15	10.00%
349	RHS	25813.592	25828.592	25829.119	25829.647	25844.647	9.336	50	100	1.055	15	15	10.00%
350	LHS	25846.601	25861.601	25866.32	25871.019	25886.019	336.825	40	-60	9.418	15	15	10.00%
351	RHS	25890.759	25910.759	25921.979	25932.752	25952.752	53.473	35	45	21.993	20	20	10.00%
352	LHS	25953.883	25968.883	25997.411	26023.689	26038.689	310.053	40	-80	54.806	15	15	8.89%
353	RHS	26094.913	26124.913	26132.141	26139.098	26169.098	84.434	25	30	14.185	30	30	9.26%
354	LHS	26173.604	26188.604	26197.219	26205.718	26220.718	329.477	40	-60	17.114	15	15	10.00%
355	RHS	26245.094	26260.094	26272.833	26284.187	26299.187	74.778	25	30	24.093	15	15	9.26%
356	LHS	26302.410	26317.410	26324.259	26330.877	26345.877	305.771	25	-30	13.467	15	15	9.26%
357	RHS	26361.109	26376.109	26401.983	26418.810	26433.810	110.204	25	30	42.701	15	15	9.26%
358	LHS	26444.081	26459.081	26469.87	26480.431	26495.431	325.334	40	-60	21.350	15	15	10.00%
359	RHS	26498.305	26513.305	26513.832	26514.360	26529.360	9.337	50	100	1.055	15	15	10.00%
360	LHS	26536.518	26561.518	26566.682	26571.828	26596.828	331.232	40	-70	10.310	25	25	10.00%
361	LHS	26639.879	26654.879	26661.355	26667.819	26682.819	347.284	50	-125	12.940	15	15	8.89%
362	LHS	26719.706	26734.706	26742.388	26750.000	26765.000	333.416	40	-65	15.294	15	15	10.00%
363	RHS	26768.426	26783.426	26794.45	26805.267	26820.267	32.547	40	65	21.841	15	15	10.00%
364	LHS	26857.627	26872.627	26895.908	26917.042	26932.042	303.374	40	-60	44.415	15	15	10.00%
365	RHS	26975.952	27000.952	27021.186	27036.555	27061.555	115.849	25	30	35.603	25	25	9.26%
366	LHS	27064.983	27079.983	27086.849	27093.655	27108.655	332.648	40	-60	13.672	15	15	10.0
367	RHS	27122.930	27137.930	27152.382	27165.341	27180.341	69.513	30	35	27.411	15	15	10.0
368	LHS	27193.548	27213.548	27271.266	27295.321	27315.321	230.437	35	-45	81.773	20	20	10.0
369	LHS	27442.856	27457.856	27477.164	27494.334	27509.334	294.519	35	-45	36.478	15	15	10.0

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370	RHS	27514.157	27539.157	27557.685	27572.352	27597.352	111.245	25	30	33.195	25	25	9.26%
371	LHS	27621.557	27636.557	27693.19	27735.120	27750.120	278.669	40	-80	98.563	15	15	8.89%
372	RHS	27751.306	27771.306	27805.294	27822.164	27842.164	135.444	25	30	50.858	20	20	9.26%
373	LHS	27868.711	27883.711	27897.28	27910.211	27925.211	312.546	35	-50	26.500	15	15	10.00%
374	RHS	27932.645	27947.645	27985.255	28010.301	28025.301	98.950	35	45	62.656	15	15	10.00%
375	LHS	28027.045	28047.045	28076.631	28096.169	28116.169	246.917	30	-35	49.124	20	20	10.00%
376	RHS	28123.263	28143.263	28167.309	28185.401	28205.401	101.758	30	35	42.138	20	20	10.00%
377	LHS	28279.798	28299.798	28360.306	28378.732	28398.732	218.319	30	-40	78.934	20	20	10.00%
378	RHS	28425.999	28450.999	28463.459	28474.618	28499.618	92.901	25	30	23.619	25	25	9.26%
379	LHS	28508.278	28523.278	28534.842	28546.126	28561.126	323.932	40	-60	22.848	15	15	10.00%
380	RHS	28607.050	28627.050	28630.792	28634.519	28654.519	31.563	35	50	7.469	20	20	10.00%
381	LHS		28677.562	28688.006	28698.443		356.718	80	-350	20.881	0	0	8.13%
382	RHS	28715.698	28740.698	28755.469	28768.149	28793.149	100.247	25	30	27.451	25	25	9.26%
383	LHS	28816.925	28831.925	28834.776	28837.618	28852.618	330.448	30	-40	5.693	15	15	10.00%
384	RHS	28853.714	28868.714	28872.765	28876.768	28891.768	44.141	25	30	8.054	15	15	9.26%
385	LHS	28894.447	28909.447	28915.25	28920.913	28935.913	309.485	25	-30	11.466	15	15	9.26%
386	LHS	28984.847	28999.847	29002.641	29005.434	29020.434	354.122	65	-200	5.587	15	15	9.39%
387	RHS	29026.859	29041.859	29054.27	29066.336	29081.336	37.830	40	60	24.477	15	15	10.00%
388	RHS	29101.083	29116.083	29119.995	29123.905	29138.905	10.560	50	125	7.822	15	15	8.89%
389	LHS	29155.731	29170.731	29178.805	29186.817	29201.817	336.273	40	-75	16.086	15	15	9.48%
390	RHS	29214.692	29229.692	29232.154	29234.614	29249.614	15.245	40	75	4.922	15	15	9.48%
391	RHS	29267.620	29282.620	29287.678	29292.701	29307.701	28.801	35	50	10.081	15	15	10.00%
392	LHS	29314.724	29329.724	29339.229	29348.134	29363.134	296.263	25	-30	18.410	15	15	9.26%
393	RHS	29364.608	29379.608	29380.332	29381.057	29396.057	12.708	40	75	1.449	15	15	9.48%
394	RHS	29402.080	29417.080	29421.582	29426.081	29441.081	11.012	50	125	9.001	15	15	8.89%
395	LHS	29498.913	29528.913	29533.654	29538.318	29568.318	284.829	25	-30	9.405	30	30	9.26%
396	LHS	29580.401	29595.401	29597.165	29598.928	29613.928	345.961	40	-75	3.527	15	15	9.48%
397	RHS	29641.375	29661.375	29679.516	29696.180	29716.180	62.819	35	50	34.805	20	20	10.00%
398	LHS	29724.165	29739.165	29742.84	29746.507	29761.507	338.803	40	-60	7.342	15	15	10.00%
399	RHS	29777.102	29792.102	29797.201	29802.284	29817.284	19.280	40	75	10.182	15	15	9.48%
400	LHS	29854.412	29869.412	29925.021	29959.104	29974.104	260.118	40	-60	89.692	15	15	10.00%
401	LHS	30070.804	30085.804	30109.361	30131.623	30146.623	316.516	40	-80	45.819	15	15	8.89%
402	LHS	30193.281	30208.281	30226.751	30244.117	30259.117	311.503	40	-60	35.836	15	15	10.00%
403	RHS	30321.452	30336.452	30390.761	30430.462	30445.462	83.370	40	75	94.010	15	15	9.48
404	RHS	30470.085	30485.085	30496.3	30507.260	30522.260	35.640	40	60	22.175	15	15	10.0
405	LHS	30531.661	30551.661	30563.349	30574.530	30594.530	305.425	35	-45	22.869	20	20	10.0
406	RHS	30644.861	30659.861	30682.427	30704.512	30719.512	27.422	50	125	44.651	15	15	8.89

Curve No	Curve Sign	BS	BC	CP	EC	ES	Delta	Speed	Radius	Lc	Ts	Te	Super elevation
407	RHS	30732.890	30752.890	30766.073	30778.539	30798.539	58.170	35	45	25.649	20	20	10.00%
408	LHS	30807.044	30822.044	30849.769	30873.987	30888.987	296.136	40	-60	51.943	15	15	10.00%
409	RHS	30940.320	30955.320	30957.707	30960.094	30975.094	11.446	50	100	4.774	15	15	10.00%
410	LHS	31082.344	31097.344	31107.562	31117.586	31132.586	326.468	40	-60	20.242	15	15	10.00%
411	RHS	31136.771	31151.771	31152.918	31154.065	31169.065	13.319	40	75	2.294	15	15	9.48%
412	RHS	31202.551	31222.551	31227.556	31232.520	31252.520	38.221	35	45	9.969	20	20	10.00%
413	RHS	31284.147	31299.147	31302.28	31305.403	31320.403	27.187	35	45	6.256	15	15	10.00%
414	LHS	31324.277	31339.277	31351.129	31362.455	31377.455	311.447	35	-45	23.178	15	15	10.00%
415	RHS	31385.186	31400.186	31404.605	31409.012	31424.012	21.021	40	65	8.826	15	15	10.00%
416	LHS	31435.357	31450.357	31453.09	31455.820	31470.820	342.079	40	-65	5.463	15	15	10.00%
417	RHS	31484.847	31499.847	31511.757	31523.407	31538.407	34.042	40	65	23.560	15	15	10.00%
418	LHS	31573.521	31588.521	31608.229	31626.606	31641.606	309.376	40	-60	38.085	15	15	10.00%
419	RHS	31666.061	31681.061	31694.969	31708.463	31723.463	37.462	40	65	27.402	15	15	10.00%
420	LHS	31791.014	31806.014	31830.301	31854.170	31869.170	335.959	50	-150	48.156	15	15	7.41%
421	RHS	31946.470	31961.470	31968.733	31975.980	31990.980	13.614	50	125	14.510	15	15	8.89%
422	RHS	32021.895	32036.895	32045.404	32053.800	32068.800	30.471	40	60	16.905	15	15	10.00%
423	LHS	32108.602	32123.602	32136.576	32149.156	32164.156	321.334	40	-60	25.554	15	15	10.00%
424	RHS	32179.907	32194.907	32202.015	32209.081	32224.081	22.326	40	75	14.174	15	15	9.48%
425	LHS	32225.628	32240.628	32252.812	32264.785	32279.785	330.111	40	-75	24.157	15	15	9.48%
426	RHS	32321.630	32336.630	32344.206	32351.731	32366.731	23.104	40	75	15.101	15	15	9.48%
427	LHS	32392.579	32407.579	32421.135	32434.526	32449.526	336.113	50	-100	26.947	15	15	10.00%
428	RHS	32534.458	32549.458	32561.722	32573.653	32588.653	37.537	40	60	24.195	15	15	10.00%
429	LHS	32589.787	32604.787	32611.428	32618.015	32633.015	333.138	40	-60	13.228	15	15	10.00%
430	RHS	32653.580	32668.580	32673.274	32677.956	32692.956	18.670	40	75	9.376	15	15	9.48%
431	LHS	32729.657	32744.657	32746.421	32748.184	32763.184	352.983	50	-150	3.527	15	15	7.41%
432	RHS	32795.442	32810.442	32818.368	32826.273	32841.273	14.268	50	125	15.831	15	15	8.89%
433	LHS	32854.218	32869.218	32874.593	32879.940	32894.940	335.468	40	-60	10.722	15	15	10.00%
434	RHS	32896.082	32911.082	32913.582	32916.082	32931.082	9.175	50	125	5.000	15	15	8.89%

VERTICAL CURVE DETAILS

Sr. No.	VIP Chainage	X Coordinate	Y Coordinate	Level	Length of curve	In gradient	Out gradient	Vertical curve Radius	--M-VALUE---
1	0.000	94250.033	50634.925	353.000	0			INFINITY	0.000
2	164.509	94167.485	50745.387	353.000	35	0.00%	5.98%	584.909	17.097
3	996.070	94008.008	51520.748	402.759	45	5.98%	-5.83%	-381.053	-26.243
4	1077.058	93978.733	51596.095	398.041	35	-5.83%	5.90%	298.399	33.512
5	1499.822	93707.804	51920.113	423.000	25	5.90%	0.00%	-423.463	-23.615
6	1690.008	93587.339	52067.216	423.000	35	0.00%	6.14%	570.383	17.532
7	2827.514	92533.674	52393.118	492.800	20	6.14%	0.00%	-325.933	-30.681
8	2888.997	92472.587	52400.083	492.800	20	0.00%	6.13%	326.281	30.648
9	2933.045	92433.380	52418.090	495.500	25	6.13%	0.00%	-407.852	-24.519
10	3018.719	92376.997	52482.390	495.500	25	0.00%	6.50%	384.615	26.000
11	3375.215	92135.420	52728.672	518.672	45	6.50%	10.40%	1154.377	8.663
12	3733.393	91826.840	52855.445	555.916	55	10.40%	7.03%	-1630.509	-6.133
13	4128.694	91452.487	52775.455	583.686	75	7.03%	-0.65%	-977.608	-10.229
14	4305.420	91282.258	52807.584	582.543	35	-0.65%	-2.52%	-1867.644	-5.354
15	4424.748	91168.110	52841.022	579.535	35	-2.52%	-1.16%	2562.622	3.902
16	4559.727	91042.901	52850.931	577.976	45	-1.16%	-1.23%	-59739.473	-0.167
17	4708.875	90898.672	52814.709	576.141	75	-1.23%	-0.45%	9618.337	1.040
18	5112.372	90619.854	53063.245	574.323	55	-0.45%	-1.38%	-5908.901	-1.692
19	5492.577	90377.835	53041.696	569.071	85	-1.38%	5.42%	1250.079	7.999
20	5774.386	90387.597	52803.058	584.340	125	5.42%	2.61%	-4454.625	-2.245
21	5917.181	90309.617	52689.744	588.070	35	2.61%	4.93%	1509.707	6.624
22	6041.510	90260.109	52576.943	594.200	35	4.93%	0.00%	-709.872	-14.087
23	6142.062	90183.437	52618.412	594.200	35	0.00%	5.07%	690.279	14.487
24	6263.413	90176.133	52737.027	600.353	55	5.07%	6.76%	3255.203	3.072
25	7301.280	89984.584	52976.837	670.513	55	6.76%	7.00%	22920.577	0.436
26	8808.242	89702.062	52917.882	776.000	200	7.00%	4.91%	-9577.116	-1.044
27	9736.481	89230.227	53336.886	821.592	150	4.91%	6.50%	9446.907	1.059
28	10375.316	89028.900	53820.001	863.113	100	6.50%	5.51%	-10144.354	-0.986
29	10666.517	88884.884	53874.314	879.169	55	5.51%	6.38%	6365.502	1.571
30	10963.142	89137.512	53724.799	898.087	55	6.38%	1.42%	-1108.525	-9.021
31	11137.270	89088.355	53572.030	900.553	75	1.42%	5.58%	1802.612	5.548
32	11431.075	88943.258	53321.392	916.938	55	5.58%	6.43%	6454.801	1.549
33	12512.223	89307.431	52583.090	986.444	55	6.43%	5.02%	-3914.371	-2.555
34	12909.231	89116.686	52282.674	1006.389	55	5.02%	6.05%	5343.449	1.871
35	13199.296	89183.244	52464.807	1023.947	65	6.05%	3.95%	-3095.903	-3.230
36	13481.572	89158.312	52552.723	1035.107	45	3.95%	5.22%	3552.237	2.815
37	14909.551	88408.984	53380.340	1109.653	65	5.22%	7.01%	3643.064	2.745
38	15113.360	88444.682	53576.549	1123.929	55	7.01%	5.81%	-4621.419	-2.164
39	15412.045	88220.991	53603.402	1141.296	65	5.81%	7.00%	5483.004	1.824
40	16610.779	87199.872	53090.654	1225.207	125	7.00%	5.14%	-6705.607	-1.491
41	17040.386	86815.926	52990.202	1247.271	65	5.14%	6.08%	6907.994	1.448
42	17265.373	86613.784	53013.916	1260.943	65	6.08%	4.04%	-3186.72	-3.138
43	17415.531	86472.342	52986.063	1267.005	55	4.04%	6.22%	2524.903	3.961
44	17499.484	86390.091	53000.773	1272.223	45	6.22%	6.67%	9885.616	1.012
45	17705.839	86207.348	52930.133	1285.988	45	6.67%	2.64%	-1117.039	-8.952
46	17796.219	86136.101	52874.791	1288.376	100	2.64%	5.30%	3758.925	2
47	18049.462	85909.290	52773.107	1301.804	35	5.30%	6.85%	2265.408	4
48	18694.233	85383.696	52719.164	1345.954	125	6.85%	-3.44%	-1215.377	-8
49	19100.693	85046.893	52884.515	1331.982	45	-3.44%	-5.70%	-1988.936	-5.028
50	19626.054	84684.952	52685.663	1302.036	35	-5.70%	-7.00%	-2692.307	-3.714
51	20043.595	84515.465	52851.260	1272.809	45	-7.00%	0.66%	587.503	17.021

Sr. No.	VIP Chainage	X Coordinate	Y Coordinate	Level	Length of curve	In gradient	Out gradient	Vertical curve Radius	--M-VALUE---
52	20175.257	84583.445	52954.247	1273.677	75	0.66%	-2.15%	-2674.6	-3.739
53	20294.532	84656.616	53039.054	1271.119	35	-2.15%	1.81%	884.295	11.308
54	20405.488	84682.537	53145.463	1273.131	35	1.81%	-1.29%	-1129.604	-8.853
55	20599.403	84753.493	53291.819	1270.639	75	-1.29%	5.23%	1150.752	8.690
56	20798.089	84890.680	53416.975	1281.035	35	5.23%	6.38%	3037.884	3.292
57	20873.882	84946.499	53466.418	1285.874	45	6.38%	2.11%	-1053.56	-9.492
58	20958.254	85024.591	53496.415	1287.657	65	2.11%	2.47%	18093.82	0.553
59	21093.340	85137.588	53565.173	1290.997	45	2.47%	5.74%	1378.867	7.252
60	21224.469	85192.795	53682.200	1298.519	65	5.74%	6.35%	10547.75	0.948
61	21690.007	85438.710	54035.149	1328.091	55	6.35%	7.50%	4792.166	2.087
62	22028.288	85636.489	54267.817	1353.462	100	7.50%	6.00%	-6680.025	-1.497
63	22246.957	85476.474	54397.795	1366.589	35	6.00%	6.46%	7718.154	1.296
64	23304.860	84809.981	54918.521	1434.892	55	6.46%	6.90%	12401.412	0.806
65	24899.866	83431.158	54738.306	1544.947	55	6.90%	5.10%	-3055.612	-3.273
66	25964.826	82702.277	54834.481	1599.260	150	5.10%	3.41%	-8895.274	-1.124
67	26203.229	82541.556	54707.404	1607.398	55	3.41%	6.90%	1579.253	6.332
68	26520.195	82385.813	54877.778	1629.258	30	6.90%	6.70%	-15517.06	-0.644
69	27560.366	81883.848	55460.036	1698.981	35	6.70%	6.46%	-14621.898	-0.684
70	28745.536	81933.832	56302.155	1775.586	55	6.46%	5.51%	-5735.177	-1.744
71	28998.453	82169.784	56261.056	1789.509	40	5.51%	3.10%	-1663.099	-6.013
72	29110.868	82277.223	56249.698	1792.993	45	3.10%	3.79%	6511.175	1.536
73	29245.085	82398.453	56196.178	1798.081	40	3.79%	6.20%	1657.33	6.034
74	30031.821	82909.434	56450.057	1846.891	35	6.20%	6.72%	6830.338	1.464
75	31063.205	82373.845	57094.234	1916.165	35	6.72%	6.26%	-7609.596	-1.314
76	31769.540	82224.031	57742.529	1960.358	35	6.26%	6.50%	14551.261	0.687
77	32470.015	82107.501	58413.043	2005.869	50	6.50%	5.64%	-5879.09	-1.701
78	32944.120	82051.596	58874.518	2032.626	0			INFINITY	0.000