Transportation Plan of River Bed Material from Song I River

Mine is well connected to NH-72 & Thano Road is wide enough to facilitate easy and smooth movement of vehicles.

Traffic analysis is carried out by understanding the existing carrying capacity of the roads near to the project site and the connecting main roads in the area. Then depending on the capacity of the mine, the number of trucks that will be added to the present scenario will be compared to the carrying capacity.

Table: - Existing Traffic Scenario & LOS

Road	V	C	Existing V/C Ratio	LOS
Thano Road	152	6,000	0.02	A
NH-72	1973	15,000	0.13	A

Source: Capacity as per IRC: 64-1990

V= Volume of Vehicles in PCU's/day & C= Capacity of Road in PCU's/day

The existing Level of Services (LOS) is "A" i.e. excellent.

V/C	LOS	Performance
0.0-0.2	A	Excellent
0.2-0.4	В	Very Good
- 100 O C C C C C C C C C C C C C C C C C C	C	Good/Average/Fair
0.4-0.6		Poor
0.6-0.8	D	10000000
0.8-1.0	E	Very Poor

Reference: ENVIS Technical Report, IISC, Bangalore.

During Mine operation

Proposed Capacity of mine/annum : 606000

No. of Working days : 270 days

Proposed capacity of mine/day : 2244 TPD

Truck Capacity : 10 tonnes

No. of trucks deployed/day : 224

No. of trucks trips/day : 448

Considering both loaded & empty trucks Increase in PCU/day will be 672 PCUs

Table:- Modified Traffic Scenario & LOS

Road	v	C	Existing V/C Ratio	LOS
Thano Road	600	6,000	0.10	A
NH-72	2152	15,000	0.14	Α

Results

From the traffic study it is observed that there is not much load on the existing roads and highways. Therefrom, the additional load on the carrying capacity of the concerned roads is not likely to have any adverse affect on the LOS. However, the traffic management has been proposed as given below.

Traffic Management:

- Roads will be repaired regularly and maintained in good conditions.
- 2. A supervisor will be appointed to regulate the traffic movement near the site.
- Speed breakers will be constructed accident prone areas to calm the traffic and its speed.\
- Signage will be eracted at the sensitive & precarious places to caution or provide information to road user.

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(ए० के यादत) प्रभागीय सीनिंग प्रान्थक (खनम् उत्तरास विकास निगम करादून

Transportation Plan of River Bed Material from Song II River

Mine is well connected to NH-72 & Thano Road is wide enough to facilitate easy and smooth movement of vehicles.

Traffic analysis is carried out by understanding the existing carrying capacity of the roads near to the project site and the connecting main roads in the area. Then depending on the capacity of the mine, the number of trucks that will be added to the present scenario will be compared to the carrying capacity.

Table: - Existing Traffic Scenario & LOS

Road	V	C	Existing V/C Ratio	LOS
Thano Road	152	6,000	0.02	A
NH-72	1973	15,000	0.13	Α

Source: Capacity as per IRC: 64-1990

V= Volume of Vehicles in PCU's/day & C= Capacity of Road in PCU's/day

The existing Level of Services (LOS) is "A" i.e. excellent.

LOS	Performance
Α	Excellent
В	Very Good
С	Good/Average/Fair
D	Poor
E	Very Poor
	A B C D

Reference: ENVIS Technical Report, IISC, Bangalore.

During Mine operation

Proposed Capacity of mine/annum : 383000

No. of Working days : 270 days

Proposed capacity of mine/day : 1419 TPD

Truck Capacity : 10 tonnes

No. of trucks deployed/day : 142

No. of trucks deployed/day : 142 No. of trucks trips/day : 284 Considering both loaded & empty trucks Increase in PCU/day will be 426 PCUs

Table:- Modified Traffic Scenario & LOS

Road	V	C	Existing V/C Ratio	LOS
Thano Road	266	6,000	0.04	A
NH-72	2143	15,000	0.14	A

Results

From the traffic study it is observed that there is not much load on the existing roads and highways. Therefrom, the additional load on the carrying capacity of the concerned roads is not likely to have any adverse affect on the LOS. However, the traffic management has been proposed as given below.

Traffic Management:

- Roads will be repaired regularly and maintained in good conditions.
- A supervisor will be appointed to regulate the traffic movement near the site.
- Speed breakers will be constructed accident prone areas to calm the traffic and its speed.\
- Signage will be eracted at the sensitive & precarious places to caution or provide information to road user.

प्रभागीय लौगिंग प्रबन्धक (खबन) उत्तराखण्ड **दन** विकास निमम देश्चदन

Transportation Plan of River Bed Material from Song III River

Mine is well connected to NH-72 is wide enough to facilitate easy and smooth movement of vehicles.

Traffic analysis is carried out by understanding the existing carrying capacity of the roads near to the project site and the connecting main roads in the area. Then depending on the capacity of the mine, the number of trucks that will be added to the present scenario will be compared to the carrying capacity.

Table: - Existing Traffic Scenario & LOS

Road	V	С	Existing V/C Ratio	LOS
NH-72	1973	15,000	0.13	Α

Source: Capacity as per IRC: 64-1990

V= Volume of Vehicles in PCU's/day & C= Capacity of Road in PCU's/day

The existing Level of Services (LOS) is "A" i.e. excellent.

V/C	LOS	Performance
0.0-0.2	A	Excellent
0.2-0.4	В	Very Good
0.4-0.6	C	Good/Average/Fair
0.6-0.8	D	Poor
0.8-1.0	Е	Very Poor

Reference: ENVIS Technical Report, IISC, Bangalore.

During Mine operation

Proposed Capacity of mine/annum : 187000
No. of Working days : 270 days
Proposed capacity of mine/day : 693 TPD
Truck Capacity : 10 tonnes

No. of trucks deployed/day : 70 No. of trucks trips/day : 140 Considering both loaded & empty trucks Increase in PCU/day will be 210 PCUs

Table:- Modified Traffic Scenario & LOS

Road	V	C	Existing V/C Ratio	LOS
NH-72	2253	15,000	0.15	Α

Results

From the traffic study it is observed that there is not much load on the existing roads and highways. There from, the additional load on the carrying capacity of the concerned roads is not likely to have any adverse affect on the LOS. However, the traffic management has been proposed as given below.

Traffic Management:

- 1. Roads will be repaired regularly and maintained in good conditions.
- 2. A supervisor will be appointed to regulate the traffic movement near the site.
- Speed breakers will be constructed accident prone areas to calm the traffic and its speed.\
- Signage will be eracted at the sensitive & precarious places to caution or provide information to road user.

प्रभागीय लौगिंग प्रबन्धक (खनन) उत्तराखण्ड वन विकास निगम देहरादन

Transportation Plan of River Bed Material from Jakhan I River

Mine is well connected to NH-72 & Thano Road is wide enough to facilitate easy and smooth movement of vehicles.

Traffic analysis is carried out by understanding the existing carrying capacity of the roads near to the project site and the connecting main roads in the area. Then depending on the capacity of the mine, the number of trucks that will be added to the present scenario will be compared to the carrying capacity.

Table: - Existing Traffic Scenario & LOS

Road	V	C	Existing V/C Ratio	LOS
Thano Road	152	6,000	0.02	Α
NH-72	1973	15,000	0.13	Α

Source: Capacity as per IRC: 64-1990

V= Volume of Vehicles in PCU's/day & C= Capacity of Road in PCU's/day

The existing Level of Services (LOS) is "A" i.e. excellent.

V/C	LOS	Performance
0.0-0.2	A	Excellent
0.2-0.4	В	Very Good
0.4-0.6	С	Good/Average/Fair
0.6-0.8	D	Poor
0.8-1.0	Е	Very Poor

Reference: ENVIS Technical Report, IISC, Bangalore.

During Mine operation

Proposed Capacity of mine/annum : 300000
No. of Working days : 270 days
Proposed capacity of mine/day : 1111 TPD
Truck Capacity : 10 tonnes

No. of trucks deployed/day : 112 No. of trucks trips/day : 224 Considering both loaded & empty trucks Increase in PCU/day will be 336 PCUs

Table:- Modified Traffic Scenario & LOS

Road	V	C	Existing V/C Ratio	LOS
Thano Road	272	6,000	0.05	Λ
NH-72	2153	15,000	0.14	A

Results

From the traffic study it is observed that there is not much load on the existing roads and highways. There from, the additional load on the carrying capacity of the concerned roads is not likely to have any adverse affect on the LOS. However, the traffic management has been proposed as given below.

Traffic Management:

- 1. Roads will be repaired regularly and maintained in good conditions.
- 2. A supervisor will be appointed to regulate the traffic movement near the site.
- Speed breakers will be constructed accident prone areas to calm the traffic and its speed.\
- Signage will be eracted at the sensitive & precarious places to caution or provide information to road user.

प्रभागीय लौगिंग प्रबन्धक (खनम) उत्तराखण्ड बन विकास निगम देहरदून

Transportation Plan of River Bed Material from Jakhan II River

Mine is well connected to NH-72 is wide enough to facilitate easy and smooth movement of vehicles.

Traffic analysis is carried out by understanding the existing carrying capacity of the roads near to the project site and the connecting main roads in the area. Then depending on the capacity of the mine, the number of trucks that will be added to the present scenario will be compared to the carrying capacity.

Table: - Existing Traffic Scenario & LOS

Road	V	C	Existing V/C Ratio	LOS
NH-72	1973	15,000	0.13	Λ

Source: Capacity as per IRC: 64-1990

V= Volume of Vehicles in PCU's/day & C= Capacity of Road in PCU's/day

The existing Level of Services (LOS) is "A" i.e. excellent.

V/C	LOS	Performance
0.0-0.2	A	Excellent
0.2-0.4	В	Very Good
0.4-0.6	C	Good/Average/Fair
0.6-0.8	D	Poor
0.8-1.0	Е	Very Poor

Reference: ENVIS Technical Report, IISC, Bangalore.

During Mine operation

Proposed Capacity of mine/annum : 220000
No. of Working days : 270 days
Proposed capacity of mine/day : 819 TPD
Truck Capacity : 10 tonnes

No. of trucks deployed/day : 82 No. of trucks trips/day : 164 Considering both loaded & empty trucks Increase in PCU/day will be 246 PCUs

Table:- Modified Traffic Scenario & LOS

Road	V	C	Existing V/C Ratio	LOS
NH-72	2219	15,000	0.15	A

Results

From the traffic study it is observed that there is not much load on the existing roads and highways. There from, the additional load on the carrying capacity of the concerned roads is not likely to have any adverse affect on the LOS. However, the traffic management has been proposed as given below.

Traffic Management:

- 1. Roads will be repaired regularly and maintained in good conditions.
- 2. A supervisor will be appointed to regulate the traffic movement near the site.
- Speed breakers will be constructed accident prone areas to calm the traffic and its speed.\
- Signage will be eracted at the sensitive & precarious places to caution or provide information to road user.

प्रभागीय लौजिंग प्रयन्यक (खनम) उत्तराखण्ड धन विकास निगर देहरदूव