PLAN

For

Wall fencing around the forest land adjacent to the Proposed 4-Lane Greenfield Road from NH-7 (Jhajhra) to NH-307 (Asharori) to avoid any encroachment and protect forest form collateral damage

Submitted by

Divisional Forest Officer Dehradun Forest Division Dehradun

1. Background

As part of the development of the 4-lane Greenfield Road Project from NH-7 (near Jhajhra) to NH-307 (near Asharori) in Uttarakhand, certain sections of forest land falling under the administrative jurisdiction of the Asarodi Range are proposed for diversion. After construction, residual strips of forest land are expected to remain between the highway and nearby human habitations.

This spatial arrangement poses a strong risk of future encroachment, unauthorized land use, and degradation of these isolated forest areas. To address this risk, a new brick wall of **5962 meters** and repair of **250 meters** of existing wall are proposed to act as physical boundaries for the protection of the forest land. The construction of this wall will ensure the long-term conservation of forest ecosystems and prevent encroachment activities in these vulnerable areas. This plan aligns with directive from the MoEF&CC's REC meeting and the cost of the proposed wall shall be borne by National Highway Authority of India (NHAI).



2. Objectives

- Prevent encroachment in forest areas.
- Preserve ecological balance and avoid collateral harm to flora and fauna.
- Comply with conditions related to forest land diversion and environmental safeguards.

3. Scope of Work

Construction of 5962 meters of new brick boundary wall and Repair of 250 meters of existing damaged wall:

Range	Beat	Length of proposed New Wall (m)	Length of Existing wall proposed for Repair (m)
Asarori	Chandrabani Laldhang Archadia	5962 meter	250 meter

- Wall height: 1.50 meters above ground
- Foundation depth: 0.5 meters with 0.10 m PCC base
- 230 mm thick brick masonry in cement mortar 1:3
- 15 mm cement plaster
- RCC Column Placed at regular intervals for structural support and resists lateral forces

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उप प्रभागीय वनाधिकारी देहरादून वन प्रभाग देहरादून

प्रभागीय वनाधिकारी देहरादून वन प्रभाग, देहरादून

Project Name- Development of 4-lane Greenfield road connecting NH-7 (old NH-72) (near Jhajhra) to Delhi-Dehradun Expressway NH-307 (old NH-72A) at Asharori Section from Km. 0.000 to Km. 12.000 in the State of Uttarakhand.

Construction of Protection Wall Along the 4 lane Greenfield Road Connecting (NH-7 to NH-307) in Asarodi Range, Dehradun Forest Division

Particulars of item	COST		
CIVIL WORKS (Brick Wall)	35471012.38		
GST @ 18%	63,84,782.23		
CONTINGENCY @ 1 %	3,54,710.12		
Total	-42210504.73		
Total (In Lacs)	422.11		

GENERAL ABSTRACT OF COST

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Construction of Protection Wall Along the 4 lane Greenfield Road Connecting (NH-7 to NH-307) in Asarodi Range, Dehradun Forest Division

BILL OF QUANTITY

SI No.	Ref. Code and Item No.	Particulars of item	Quantity	Unit	Rate	Amount
1	2024-25 Bločk 31-A Sahuspur-A Jiem No. 11-1-1-1	Earthwork in excavation for structures as ber drawing and technical specifications Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50 m, dressing of sides and bottom and backfilling in trenches with excavated suitable material. Upto 3 m depth	1788.60	cum	441.40	~7,89,488.04
2	PWD SOR (MORD) 2024-25 Block 31-A Sahaspur-A Item No. 11-4-3-2	Providing concrete for plain/ reinforced concrete in open foundations complete as per drawings and technical specifications Clause 802, 803, 1202 & 1203 P.C.C. grade M 20	357.72	cum	7268.10	~25,99,944.73
3	PWD SOR (MORD) 2024-25 Block 31-A Sahaspur-A Item No. 12-1-1	Brick masonry work in cement mortar in substructure complete excepting pointing and plastering, as per drawing and technical specification Clauses 602, 603, 604, 1202 & 1204 In 1:3 cement mortar	2947.70	cum	8536.00	~25161567.20
4	PWD SOR (MORD) 2024-25 Block 31-A Sahaspur-A Item No. 13-1-3-A	Providing and laying reinforced cement concrete in superstructure as per drawing and technical specifications Clauses 800, 1205.4 and 1205.5 (For height upto 5 m) R.C.C. grade M 30 for Column	189.05	cum	- 9585.80	~ 18,08,414.49
5	PWD SOR (MORD) 2024-25 Block 31-A Sahaspur-/ Item No. 12-7	Supplying, fitting and placing TMT bar reinforcement (Fe 415) in substructrue complete as per drawings and technical specification Clauses 1002, 1005, 1010 & 1202 Steel for Column	7.42	МТ	7 3971.90	√ 5,48,871.50
0	5 PWD SOR (MORD) 2024-25 Block 31-A Sahaspur- Item No. 12-3	& 1204	20064.76	Sqm	⁄ 227.40	45,62,726.42
	Total					35471012.38

Draughtsman Dehradun Forest Division

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Construction of Protection Wall Along the 4 lane Greenfield Road Connecting (NH-7 to NH-307) in Asarodi Range, Dehradun Forest Division

SI No **Item Description** No L(m)H(m)Quantity B(m) Unit Earthwork in excavation for structures 1 as per drawing and technical specifications Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50 m, dressing of sides and bottom and backfilling in trenches with excavated suitable material. Upto 3 m depth 1722.(1) 1 5962.00 0.60 0.50 1 × oum 2 Providing concrete for plain/ reinforced concrete in open foundations complete as per drawings and technical specifications Clause 802, 803, 1202 & 1203 P.C.C. grade M 20 357.72 1 × 1 5962.00 0.60 0.10 CHIER Brick masonry work in cement mortar in 3 substructure complete excepting pointing and plastering, as per drawing and technical specification Clauses 602, 603, 604, 1202 & 1204 In 1:3 cement mortar New Wall 553.20 5538.00 × 1 0.50 0.20 CARTO Column space b/w wall -443.04 × 1 5538.00 040 0.20 cum 1846*0.23-424 mtr 1910.61 New wall- 5962-424=5538 meter 1 5538.00 0.23 1.50 1 × CHAM Repair of Existing wall × 1 250.00 0.23 0.70 40.25 comi Total 2947.70 enm 4 Providing and laying reinforced cement concrete in superstructure as per drawing and technical specifications Clauses 800, 1205 A and 1205.5 (For height upto 5 m) R.C.C. grade M 30 for Column 185.54 × 1846 0.23 0.23 1.90 CUMI 1 × 83 0.23 0.23 0.80 3.51 CUIN Total 189.05 CU M Supplying, fitting and placing TMT bar 5 reinforcement (Fe'415) in substructrue complete as per drawings and technical 0.5% of specification Clauses 1002, 1005, 1010 17A2 MT RCC & 1202 Steel for Column Plastering with cement mortar (1:4), 15 6 mm thick on brickwork in substructure as per technical specification Clauses 613.4 & 1204 New wall 2 5962.00 × 1.50 17886.00 Sam Existing wall 2 250.00 × 1.50 750.00 Sqm Top of wall 1 × 1 6212.00 0.23 1428.76 Total 20064.76 Sqm Cu

DETAILS OF MEASUREMENT

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Construction of Protection Wall Along the 4 lane Greenfield Road Connecting (NH-7 to NH-307) in Asarodi Range, Dehradun Forest Division

SI No.	Ref. Code and Item No.	Unit	Rate	
1	PWD SOR (MORD) 2024-25 Block 31-A Sahaspur-A Item No. 11-1-1-1	cum	441.40	
2	PWD SOR (MORD) 2024-25 Block 31-A Sahaspur-A Item No. 11-4-3-2	cum	7268.10	
3	PWD SOR (MORD) 2024-25 Block 31-A Sahaspur-A Item No. 12-1-1	cum	.8536.00	
4	PWD SOR (MORD) 2024-25 Block 31-A Sahaspur-A Item No. 13-1-3-A	cum	9 565.80	
5	PWD SOR (MORD) 2024-25 Block 31-A Sahaspur-A Item No. 12-7	MT	73971.90	
6	PWD SOR (MORD) 2024-25 Block 31-A Sahaspur-A Item No. 12-3	Sqm	,2 27.40	

RATES

Draughtsman Dehradun Forest Division

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