

BILL OF QUANTITIES

A. Preamble

1. The Bill of Quantities shall be read in conjunction with the Conditions of Contract, Specifications and Drawings.
2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work executed and measured by the Contractor and verified by the Engineer and valued at the rates and prices entered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix as per the Contract.
3. The rates and prices entered in the priced Bill of Quantities shall, except insofar as it is otherwise provided under the Contract include all costs of Contractor's plant, labour, supervision, materials, execution, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract. Furthermore all duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause, as on the date 28 days prior to deadline for submission of Bids, shall be included in the rates and prices and the total Bid Price submitted by the Bidder.
4. A rate or price shall be entered on the basis of %age above/below on Bill of Quantities. Rates quoted on Bill of Quantities shall be considered as final and no separate Premium/Rebate letters shall be accepted.
5. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of the Works.
6. General directions and description of work and materials are not necessarily repeated nor summarised in the Bill of Quantities. References to the relevant sections of the Bidding Documents shall be made before entering prices against each item in the priced Bill of Quantities.
7. Provisional sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Engineer in accordance with Sub-Clause 58.2 of Part I, General Conditions of Contract



**National Highway Authority
Punjab-South Region
SUMMARY OF BILL OF QUANTITIES
CSR-2022, (Punjab)
Routine Maintenance Work AMP 2022-23**

Bill No.	Description	Item	QTY	Rate	Amount (Rs.)
1	EARTH WORK	As Per CSR-2022 of Punjab		CSR-2022	-
2	BASE, SUB-BASE		-		
3	SURFACING		-		
4	STRUCTURES		-		
5	DRAINAGE & EROSION WORKS		-		
6	ANCILLARY WORKS		-		
TOTAL		-			-



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Bill No. 1: EARTH WORK

Code	Description	Unit	Rate (Rs.)	Quantity	Amount (Rs.)
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	CSR-2022		
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM			
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM			
107d	GRANULAR BACKFILL	CM			
107e	COMMON BACKFILL	CM			
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM			
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM			
NSI-1	CUT VEGETATION (Payment shall be made on quarterly basis as per schedule: 1st Quarter 30%, 2nd Quarter 25%, 3rd Quarter 25% & 4th Quarter 20%.	SM (Per year)	12.17		
TOTAL					

Note: The contractor will maintain / control the grass / vegetation up to 2.5cm height and cleaning of top edge of kerb stone / inner shoulder throughout the year.



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Bill No. 2: BASE,SUB-BASE

Code	Description	Unit	Rate (Rs.)	Quantity	Amount (Rs.)
201	GRANULAR SUB-BASE	CM	CSR-2022		
202	AGGREGATE BASE	CM			
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM			
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)**	CM			
206b	WATER BOUND MACADAM BASE WITH COURSE AGG; CLASS B	CM			
207a	DEEP PATCHING (0-15 cm)	SM			
207b	DEEP PATCHING (15-30 cm)	SM			
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM			
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM			
TOTAL					

** Contractor has to submit original bitumen purchase invoice from NRL, ARL & PARCO along with the IPC's.



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Bill No. 3: SURFACING

Code	Description	Unit	Rate (Rs.)	Quantity	(Amount Rs.)	
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	CSR-2022			
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM				
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT	SM				
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT	SM				
304a	SINGLE SURFACE TREATMENT	SM				
304b	DOUBLE SURFACE TREATMENT	SM				
304c	TRIPPLE SURFACE TREATMENT	SM				
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM				
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)**	CM				
307a	DENSE GRADED HOT BIT-MAC	CM				
307b	OPEN GRADED HOT BIT-MAC	CM				
309a	COLD MILLING, 0-30 mm	SM				
309b	COLD MILLING, 0-50 mm	SM				
309c	COLD MILLING, 0-70 mm	SM				
TOTAL						

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Bill No. 4: STRUCTURES

Code	Description	Unit	Rate (Rs.)	Quantity	Amount (Rs.)	
401a1i	CONCRETE CLASS A1 (UNDER GROUND)	CM	CSR-2022			
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM				
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM				
401a2i	CONCRETE CLASS A2 (UNDER GROUND)	CM				
401a2ii	CONCRETE CLASS A2 (ON GROUND)	CM				
401a2iii	CONCRETE CLASS A2 (ELEVATED)	CM				
401a3i	CONCRETE CLASS A3 (UNDER GROUND)	CM				
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM				
401a3iii	CONCRETE CLASS A3 (ELEVATED)	CM				
401b	CONCRETE CLASS B	CM				
401ci	CONCRETE CLASS C (UNDER GROUND)	CM				
401cii	CONCRETE CLASS C (ON GROUND)	CM				
401ciii	CONCRETE CLASS C (ELEVATED)	CM				
401d	CONCRETE CLASS D1	CM				
401e	CONCRETE CLASS Y	CM				
401f	LEAN CONCRETE	CM				
401h	PLUM (CYCLOPEAN / RUBBLE) CONCRETE (2:1 CONC. STONE RATIO)	CM				
404a	REINFORCEMENT AS PER AASHTO M. GRADE 40	TON				
404b	REINFORCEMENT AS PER AASHTO M. GRADE 60	TON				
410	BRICK WORK	CM				
411a	STONE MASONRY RANDOM DRY	CM				
411b	STONE MASONRY RANDOM WITH MORTAR	CM				
411g	ROLL POINTING	SM				
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM				
TOTAL						



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Bill No. 5: DRAINAGE & EROSION WORKS

Code	Description	Unit	Rate (Rs.)	Quantity	Amount (Rs.)
507a	STEEL WIRE MESH FOR GABIONS	KG	CSR-2022		
507b	ROCK FILL IN GABIONS	CM			
509h	FILTER LAYER OF GRANULAR MATERIAL	CM			
510	DISMENTLING OF STRUCTURES AND OBSTRUCTION	CM			
511a1	DRY STONE PITCHING (15-20 CM THICK)	SM			
511a2	DRY STONE PITCHING (20-25 CM THICK)	SM			
TOTAL					



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Bill No. 6: ANCILLARY WORKS

Code	Description	Unit	Rate (Rs.)	Quantity	Amount (Rs.)
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M			
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M			
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING HAUNCHING	M			
604a	METAL GUARD RAIL	M			
604b	METAL GUARD RAIL END PIECES	EACH			
604d	STEEL POST FOR METAL GUARD RAIL	EACH			
605a	CONCRETE BEAM GUARD RAIL (INCL. REINFORCEMENT)	CM			
605c	CONCRETE POST FOR GUARD RAIL (INCL. REINFORCEMENT)	CM			
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH			
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH			
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH			
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH			
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM			
607f	ADDITIONAL PANNEL SIZE 60 cm x 30 cm.	EACH			
607g	ADDITIONAL PANNEL SIZE 90 cm x 30 cm.	EACH			
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M			
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 CM WIDTH	M			
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M			
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M			
609c	REFLECTORISED ALUMINIUM PAVEMENT STUD (RAISED PROFILE TYPE SINGLE)	EACH			
609ci	REFLECTORISED PLASTIC PAVEMENT STUD (RAISED PROFILE TYPE SINGLE)	EACH			
610c	KILOMETER POST (NHA STANDARD DRAWING P-152)	EACH			
610d	TEN KILOMETER POST (NHA STANDARD DRAWING P-153)	EACH			
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH INCL. PRESTRESSED & RCC POSTS COMPLETE IN ALL RESPECT AS PER M-2 STANDARD	M			
1051	LABOUR (MANDAYS)	No.	1200		
3005	FRONT END LOADER. 2.50 CUM.	Hour			
3008	GRADER. 140 H.P.	Hour			
3022	TRACTOR 80 H.P.	Hour			
3032	DUMPER 18 T	Hour			
3047	EXCAVATOR. (TRACK TYPE) 100 H.P.	Hour			
3121	AASPHALT CUTTER	Hour			
3196	TRACTOR TROLLY	Hour			
TOTAL					

