



**NATIONAL HIGHWAY AUTHORITY**  
MINISTRY OF COMMUNICATIONS  
GOVERNMENT OF PAKISTAN  
ISLAMABAD



**COMPOSITE SCHEDULE OF RATES  
JANUARY 2011**

**(KHYBER PAKHTUNKHWA)**

**WORK SPONSORED BY:**

**PLANNING WING**

**OF**

**NATIONAL HIGHWAY AUTHORITY  
ISLAMABAD**

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# **FOREWORD**

Following the increases in prices of materials and labour in the year 2010, the revision / updation of CSR has been carried out. In the year 2010 we have seen the prices of steel / diesel / bitumen go up considerably. Analysts are still uncertain with the prices in the year 2011. For the year 2010, we have carried out a general revision of all prices up to January 2011 in consultation with leading manufacturers, supplier, and specialist contractors.

These rates have been developed using NHA Rate Analysis formulae developed for previous CSRs with slight improvements wherever necessary. The variation in the proposed rates is anticipated in certain cases, which may be due to varying degrees / levels of productivity and price differences of various inputs at the regional level.

The rates, prices and outputs included in the resources and unit cost calculations, including allowances for wastage, normal productivity and efficiency are based on roadwork and bridge projects being carried out by NHA. The unit rates are average unit rates for a particular district and not project specific. The market can change very rapidly, which would obviously have an impact on the unit rates.

It must be understood that main objective of the CSR is to provide a realistic reference base for preparing Cost Estimates / PC-I and Evaluation of Bids, for NHA projects.

Our gratitude is to The Chairman NHA, Member (Planning), Member (Finance), Member (Operations), Member (Construction) and Member (Motorway) without whose support it would have been difficult to develop this Document.

In the end, my appreciation is for my team, for all the technical and professional efforts to produce Revised Composite Schedule of Rates 2011.

It is hoped that the CSR 2011, would serve as a Basic Engineer's Estimate reference document for National Highway Authority, various Government Departments and the construction industry in general.

Whilst all efforts are made to ensure the accuracy of the data and information used in updating the CSR , neither NHA or M/s Sampak International (Pvt.) Ltd. can in any way accept liability for loss of any kind resulting from the use of CSR, made by any person, institution, company, department etc.

S. M. A Shirazi  
Managing Director  
SAMPAK International (Pvt.) Ltd

## **1. GENERAL**

For many years National Highway Authority has been compiling / updating the Composite Schedule of Rates for use in the Civil Engineering Industry. The Civil Engineering Industry uses this Schedule of Rates for pricing work by the application of unit rates to the quantities measured from the designer's drawings. The main objective of the CSR is to provide a realistic reference base for cost estimates. One has to understand no two projects are the same, there are variables which effect the price of the project i.e., the volume of work below ground, embankment height, cut & fill, increased exposure to weather, and the tremendous variety of the projects, in terms of type, complexity and scale makes the straight forward use of unit rates less reliable. This uncertainty is compounded by the lower number of bill of items generated in Civil Engineering Projects as compared to Building Works so that the precise nature of work is less apparent from bill descriptions and the statistical effect of 'swings and roundabout' has less scope to average out extremes of pricing.

To prepare a price for a Civil Engineering project, then, it is necessary to have regard to the method to be adopted in executing the work, draw up a detailed programme and then cost out the resources necessary to execute the chosen method. The first part of this process is the field of construction planner, there has been a tendency to postpone detailed estimating until the tendering stage itself, with the employer relying, up to that point, upon an estimate prepared on a 'Thumb Rule' basis.

There is increasing growing pressure on the part of project sponsors for an improvement to budgetary advice, so that a decision to commit expenditure to a particular project is taken on firmer grounds. The absence of detailed price method during the pre-contract phase also inhibits the accurate costing of alternative designs and regular cost checking to ensure that the design is being developed within the employer's budget. The CSR gives unit rates for use when quantities can be taken from available drawings. To take some note of the range of unit rates that might apply to an item, the rates themselves are in some cases related to working method – for example by identifying the different types of equipment that would suit varying circumstances. Nonetheless, it would be a folly to propose that all types of Civil Engineering work could be covered by the use of CSR. While developing these unit rates, we had in mind the type and scale of work to be commissioned by NHA.

The CSR does embrace the great majority of work undertaken by NHA. Although almost all projects will have individual features that require careful attention in pricing, there will be some projects that are so specialist that they will not conform to standard pricing information at all. But for most projects, within the range of work covered, this CSR should provide a firm foundation for:

- Preparing Project Cost Estimate and PC-1
- Evaluating Tender / Bids
- Evaluating Claims and Variation Order
- Arbitration Matters

In order to prepare an authentic Composite Schedule of Rates and to keep it effective, the basic requirements are as under:

- Collection of first hand, prudent and legitimate information for inputs (Manpower, Material & Equipment) in the rate analysis.

- Merging the above information in proper proportion according to Design Specifications and Constructional requirements to create the rate of a work item.
- Updating the data inputs every year or from time to time, to revalidate the item rates.

## **2. GENERAL METHODOLOGY:**

- a. Composite Schedule of Rates was originally published in the year 1991 and subsequent revisions were carried out in 1995, 2000, 2005, 2006, 2008 and 2009. There are total of 109 Districts considered and are given numbers in Alphabetical order and their Province wise breakdown as under:

<b>PROVINCE</b>	<b>No. of Districts</b>
Punjab	36
Sind	20
Khyber Pakhtunkhwa	24
Baluchistan	29

Specifications and Methodology for Construction items have been adopted as given in General Specification of National Highway Authority (1998). Items of work for construction have been given the same numbers as appearing in the General Specifications of National Highway Authority. Some items have been added in CSR-2011, which were necessary but are not covered under General Specifications 1998. Hence, it has become imperative to revise and update the Specifications.

- b. These rates are based on the existing formulae and equipment efficiency levels used in the preparation of CSR 2000 with some modifications.
- c. The rates analysis of individual items of CSR 2011 consists of four basic inputs, which have been assigned the same code numbers as in the previous Composite Schedule of Rates.
  - i. Manpower code starting from 1001 onwards
  - ii. Material code starting from 2001 onwards
  - iii. Equipment code starting from 3001 onwards
  - iv. Overheads, Profits & Preliminaries
- d. For the preparation of rates following documents have been referred:
  - i. General Specifications 1998
  - ii. NHA Composite Schedule of Rates 2000 and 2009
  - iii. Statistical Bulletins by Federal Bureau of Statistics
  - iv. Current Market rates study

Code list of Manpower, Material and Equipment appear at the end of the chapter for the convenience of the users.

## **2.1 MANPOWER:**

### **a. Allocation of Code Numbers:**

Costs of manpower engaged on Plant & Equipment have been included in rental charges of Plant & Equipment and only site supervisory staff has been considered under the heading of Manpower. Code numbers are allocated accordingly to such manpower that is directly charged to the items of work. Manpower cost for top supervision, administration and other non-productive works of support services have been considered under overhead charges.

### **b. Formulation of Rates:**

Manpower basic rates collected from districts have been first scrutinized, to eliminate irrational information and following overheads are applied to include fringe benefits and other charges:

- i. Social Security Payment
- ii. E.O.B.I. Payment
- iii. Education Cess Payment
- iv. Yearly Leave Salary (Earned, casual and sick)
- v. Bonus (Compulsory)
- vi. Provident Fund (Contribution of Employer) or Gratuity
- vii. Mess Expenses (Site Staff)
- viii. Entertainment Allowance (Provisional)
- ix. Group Life Insurance
- x. Site Staff Accommodation

After including above overheads, manpower rates for each of the 109 district have been calculated and separate records developed for use by the Computer Program.

## **2.2 CONSTRUCTION MATERIAL:**

### **a. Allocation of Code Numbers to Materials:**

List of materials required for road construction has been first prepared from the construction items appearing in the General Specifications of National Highway Authority. After arranging the construction material list in order, code numbers have been allocated.

**b. Formulation of Rates:**

Considering the location of each district, Engineers decided the most appropriate source of construction materials for all the code numbers. The cost of material at source has been established from field data and transportation rates calculated, to arrive at the landed cost of material at the district headquarters.

**c. Cost of Material**

In order to arrive at a “Material at sources” rate, following considerations have been made.

- i. Material royalty at quarry (actual or estimated)
- ii. Cost of Preparation of material
- iii. Loading of material in truck / trailer etc

**d. Cost of Transportation**

Transportation charges have been taken as actual, where local transporters are available. However, in some districts where local transporters rates are not quoted, transportation charges from graphs have been used.

In case of quarry materials, the source of materials for embankment, Sub-Base or Base Course can be more than one; however, the most appropriate source from the point of view of quality and economy has been used for preparing the Composite Schedule of Rates – 2011.

## **2.3 PLANT AND EQUIPMENT**

**a. Allocation of Code Numbers**

The list of plant and equipment includes major equipment whereas small equipment, tools and attachments are ignored, as these have been charged under the item of overhead. After arranging the list in order, code numbers have been allocated starting from 3001 (onwards).

**b. Power, Performance and Maintenance of Plant & Equipment**

To arrive at the decision for choosing the right horse power, appropriate performance level and reasonable maintenance charges, the recommendation of well known suppliers have been considered. In order to decide the price level of any equipment, average cost has been used, which includes C&F price, plus duties and taxes etc.

**c. Formulation of Rates of Plant and Equipment**

The owning and operating costs are similar for all the districts, unlike manpower and materials where rates may differ for each district.

The owning and operating costs are developed by using a standard format. The duties and taxes have been calculated as per the latest Excise and Land Customs Tariff for calculating total cost of equipment.

Fuel consumption, working efficiency and maintenance costs have been fixed after consulting the recommendation of the manufacturers. Equipment economical life and tire life have been fixed after consulting several organizations using heavy and light equipment in the present indigenous conditions.

The owning and operating costs for 85 types of equipment is provided at the end of this chapter.

## **2.4 FORMULAE FOR CONSTRUCTION ITEMS**

All the basic inputs have been updated in the individual rate analysis. These formulae have been created by appropriate quantitative inputs of the following items:

Manpower	Hour and Number
Material	Weight, Volume, Length and Unit
Plant Equipment	Hour and Number
Overheads, profit and preliminaries	25 percent

## **2.5 OVERHEADS, PROFIT & PRELIMINARIES**

### **a. Profit**

The level of profit is governed by the degree of competition applicable to the job which is in turn a function of the industry's current work load. The appropriate addition is highly variable.

### **b. Head Office Overheads**

An addition to the estimate needs to be made to the net estimate to cover all costs incurred in operating the central services provided by head office. Apart from general management and accountancy, this will normally include the departments dealing with:

- Tendering / Estimating
- Planning & design
- Wages and bonus

Finance Cost: Some companies would include finance costs with head office overheads, but this will vary from contractor to contractor.

The appropriate addition varies with the extent of services provided centrally and company to company, rather than on site, and with size of organization.

### **c. Preliminaries**

Preliminaries cost in Civil Engineering works are indirectly related to the actual quantity of work being carried out. It comprises a definition of method related charges, a checklist of items to be accounted for on typical Civil Engineering Contract.

Generally contract document gives detailed requirements for the facilities and equipment to be provided for the employer and the Engineer's Representative

given in the Bill of Quantities. Thus General Items given in the BOQ are excluded from the check list of preliminaries.

The following checklist is representative but not exhaustive which is not covered in the BOQ or General items section. The list describes the major preliminaries which are included, implicitly or explicitly, in a typically Civil Engineering Contract.

- ***Contractor's site on costs***
- ***Temporary works (other than those included in unit cost)***
- ***General purpose plant (other than those included in unit cost)***
- ***Other services, charges and fees***
- ***Site Staff Salaries***

All non-productive supervisory staff on site i.e., agents, clerks, computer operators, security guards, store men, drivers for staff vehicles, cleaners, general labour for general clearance etc.
- ***Plant Maintenance***

Fitters, electricians and assistants engaged on general plant maintenance on site (excludes drivers who are provided in the unit costs)
- ***Site Transport for Staff and General Use***

Vehicles / buses provided for use of staff and others including O & M costs etc.
- ***Contractor's offices rental / construction / site huts and associated running costs.***
- ***Canteen, welfare / medical***
- ***General office expenditure***
- ***Provision of postage, stationary and other consumables for general office use.***
- ***Mobilization and demobilization of resources.***
- ***Telecommunications***
- ***Furniture and equipment***
- ***Small tools***
- ***Traffic Control, traffic diversion and signs***
- ***Fencing***
- ***Protective clothing***
- ***Health and safety***
- ***Road lighting***
- ***Cleaning roads etc***
- ***Progress photographs***

- ***Water Supply***
- ***Electric connection***
- ***Notice boards and signs***
- ***Insurances / bonds / bank guarantees / Employees liabilities insurance etc.***

There will be many other items of preliminaries which may have to be considered, which probably will be project and site specific. Preliminaries percentage can vary from project to project.

d. **Tax**

Tax has been included as per Government rules.

In the CSR, 25% is added on the estimated unit cost of the items which includes over heads, taxes, preliminaries and profit, however this will vary from project to project and contractor to contractor.

## 2.6 VARIABLES AFFECTING THE RATE ANALYSIS

Rate analysis in CSR have been prepared based on policy explained here above. However, there are certain factors which are to be considered while deciding about more realistic rates in special situations.

a. **Price Escalation**

General and Special escalation has been considered as published by Government Agencies. However, care is to be exercised to consider Government Legislation, which may create condition of Special Escalation.

b. **Double Taxation**

In International tenders, a factor is to be considered which may handicap the contractors from such countries, whose governments have no agreement with the Government of Pakistan to avoid double taxation. Effect of this item will be equal to the limit of tax level in such a country.

c. **Service Roads**

No provision has been made in this rate analysis for road diversion cost or service road, which the contractor has to construct or maintain as a non-BOQ item.

d. **Extra Overhead for Expatriate Staff**

International tenders will require a factor to employ expatriate staff on the project. Effect of this will be equal to the actual expenses on such item.

e. **Other Factors**

Some of the items mentioned in above text included as overhead Cost in Estimates of CSR, may appear as a B.O.Q item in a tender, the cost of such items are to be adjusted from the total estimate of the project.

**CSR-2011**  
**LIST OF MANPOWER CODES**

S. No.	CODE	DESCRIPTION
1	1001	SITE ENGINEER
2	1002	ASPHALT PLANT ENGINEER
3	1003	CONCRETE PLANT ENGINEER
4	1011	FOREMAN ASPHALT
5	1012	FOREMAN EARTHWORK
6	1013	FOREMAN CONCRETE
7	1014	GENERAL FOREMAN
8	1021	SUPERVISOR
9	1022	SURVEYOR
10	1023	ASSISTANT SURVEYOR
11	1031	MASON
12	1032	CARPENTER
13	1033	PAINTER
14	1034	STEEL BINDER/CUTTER
15	1040	HIGHLY SKILLED LABOUR
16	1041	HELPER
17	1042	WELDER
18	1051	LABOUR

**Notes:**

Cost of following Manpower has been included else where as under:

1. Top Management and Senior Engineers etc. included in overhead of the Project.
2. All indirect Manpower such as Clerk, Typist, Accountant, Lab Staff, Workshop Staff, Store Staff, Security Staff etc. are included under overhead.
3. All Operator of Light and Heavy Duty equipment and plant included in the hourly rate of the equipment.

**CSR-2011**  
**LIST OF MATERIAL CODES**

<b>Material Code No.</b>	<b>Description</b>	<b>Unit</b>
2001	ROCK	CM
2002	SOIL CLASS-A1 (A)	CM
2003	SOIL CLASS-A1 (B)	CM
2004	SOIL CLASS-A2 (4)	CM
2005	SOIL CLASS-A2 (5)	CM
2006	SOIL CLASS-A2 (6)	CM
2007	SOIL CLASS-A2 (7)	CM
2008	SOIL CLASS-A3	CM
2009	SOIL CLASS-A4	CM
2010	SOIL CLASS-A5	CM
2011	SOIL CLASS-A6	CM
2012	SOIL CLASS-A7-5	CM
2013	SOIL CLASS-A7-6	CM
2014	CRUSHED AGGREGATE BASE A	CM
2015	CRUSHED AGGREGATE BASE B	CM
2016	CRUSHED AGGREGATE BASE B1	CM
2017	GRANULAR SUB-BASE A	CM
2018	GRANULAR SUB-BASE B	CM
2021	COARSE SAND	CM
2022	FINE SAND	CM
2023	AGGREGATE 2"-1.1/2"	CM
2024	AGGREGATE 1.1/2"-3/4"	CM
2025	AGGREGATE 3/4" - 3/8"	CM
2026	AGGREGATE 3/8"-No.4	CM
2027	AGGREGATE NO.4 - NO.200	CM
2028	FILLER MATERIAL	CM
2029	BRICK CLASS A	NO.
2030	STONE RANDOM CLASS-A	CM
2031	STONE RANDOM CLASS-B	CM
2032	STONE RANDOM CLASS-C	CM
2033	STONE RANDOM CLASS-D	CM
2034	STONE DRESSED	CM
2035	HAND BROKEN STONE 2.1/2"-1/2"	CM
2041	ASPHALT GRADE 60/70	TON
2042	ASPHALT GRADE 80/100	TON
2043	ASPHALT M.C.70	TON
2044	ASPHALT M.C.250	TON
2045	ASPHALT M.C.800	TON
2046	ASPHALT R.C.70	TON
2047	ASPHALT R.C.250	TON
2048	ASPHALT R.C.800	TON
2049	ASPHALT S.S. 1	TON
2050	ASPHALT S.S. 1H	TON
2051	ASPHALT R.S. 1	TON

**CSR-2011**  
**LIST OF MATERIAL CODES**

<b>Material Code No.</b>	<b>Description</b>	<b>Unit</b>
2052	ASPHALT R.S. 2	TON
2053	CEMENT TYPE-I (OPC)	BAG
2054	CEMENT TYPE-II (LOW S.R)	BAG
2055	CEMENT TYPE-III (QUICK SETTING)	BAG
2056	CEMENT TYPE-IV (LOW HEAT STRENGTH)	BAG
2057	CEMENT TYPE-V (HIGH S.R)	BAG
2058	ACCELERATOR	LIT
2059	RETARDER	LIT
2060	CURING COMPOUND	LIT
2061	STEEL GRADE. 40	TON
2062	STEEL GRADE. 60	TON
2063	PRE-STRESSING STRAND, 3/8", 1/2"	TON
2064	STEEL WIRE MESH, 4" x 4"	KG
2065	WATER	1000 LIT
2068	STEEL EXPANSION JOINT (LOCAL)	KG
2070	COLD STEEL WIRE AASHTO M-32	TON
2072	STRUCTURES STEEL SHAPES ASTM A-36	TON
2073	ELASTOMERIC BEARING PAD M-183	CCM
2077	RCC PIPE CLASS II 310 MM (AASHTO M-170)	LM
2078	RCC PIPE CLASS II 380 MM (AASHTO M-170)	LM
2079	RCC PIPE CLASS II 460 MM (AASHTO M-170)	LM
2080	RCC PIPE CLASS II 610 MM (AASHTO M-170)	LM
2081	RCC PIPE CLASS II 760 MM (AASHTO M-170)	LM
2082	RCC PIPE CLASS II 910 MM (AASHTO M-170)	LM
2083	RCC PIPE CLASS II 1070 MM (AASHTO M-170)	LM
2084	RCC PIPE CLASS II 1220 MM (AASHTO M-170)	LM
2085	RCC PIPE CLASS II 1520 MM (AASHTO M-70)	LM
2091	CAT EYE SINGLE (RAISED PROFILE)	NO.
2092	CAT EYE DOUBLE (RAISED PROFILE)	NO.
2093	STEEL/MATAL BEARING DEVICES	KG
2095	BITUMEN IMPREGINATED FIBER BOARD	SM
2096	NEOPRENE RUBBER JOINT FELT	SM
2097	ASPHALT FELT (3 - PLY)	SM
2099	BENTONITE POWDER	KG
2100	JOINT SEALANT FILLER	KG
2101	TRAFFIC SIGN CAT 1	NO.
2102	TRAFFIC SIGN CAT 2	NO.
2103	TRAFFIC SIGN CAT 3 (A, B, C)	SM
2104	PAVEMENT MARKING NON-REFLECTING (CR)	LIT
2105	PAVEMENT MARKING REFLECTING (CR)	LIT
2106	CATS-EYE SINGLE (FLUSH SURFACE)	NO.
2107	CATS-EYE DOUBLE (FLUSH SURFACE)	NO.
2108	TUNGSTON CARBIDE BITS	SET

**CSR-2011**  
**LIST OF MATERIAL CODES**

<b>Material Code No.</b>	<b>Description</b>	<b>Unit</b>
2109	RED OXIDE PAINT	LIT
2110	QUICK LIME	KG
2111	DIESEL	LIT
2112	SUPER – GASOLINE	LIT
2113	REGULAR – GASOLINE	LIT
2114	OILS (ALL TYPES)	LIT
2115	LUBRICANTS (GREASE)	KG.
2116	FURNACE OIL	LIT
2117	BLASTING MATERIAL	CM
2118	ELECTRIC CHARGES COMMERCIAL	KWH
2119	MASTIC WATER PROOF PAINT	KG
2120	SYNTHETIC ENEMAL PAINT	LIT
2121	SHUTTERING (107 b)	CM
2122	SHUTTERING (a)	CM
2123	SHUTTERING (b)	CM
2124	SHUTTERING (c)	CM
2125	SHUTTERING (d)	CM
2126	SHUTTERING (407 h)	LS
2127	SHUTTERING (407 i)	LS
2128	SHUTTERING (407 j)	LS
2129	SCAFFOLDING (A)	CM
2130	SCAFFOLDING (B)	SM
2131	G.M.S BARBED WIRE	KG
2133	ANGLE IRONS DIFFERENT SIZES	KG
2134	STEEL CHANNELS	KG
2135	SHEATHS ( 2" DIA)	LM
2136	LIVE ANCHORAGES (3/8" - 1/2")	NO.
2137	G.I. PIPE 3" DIA	LM
2138	STEEL SHEATH CASING	M
2139	MOBILIZATION OF PILING EQUIPMENT (UPTO 1.0 m DIA)	M
2140	G.M.S SCREW, NUTS, BOLTS AND WASHERS	KG
2142	PLANTATION TREES	NO.
2143	MOBILIZATION OF PILING EQUIPMENT (UPTO 1.0 m DIA)	M
2144	RCC PIPE CLASS IV 310 MM (AASHTO M-170)	LM
2145	RCC PIPE CLASS IV 380 MM (AASHTO M-170)	LM
2146	RCC PIPE CLASS IV 460 MM (AASHTO M-170)	LM
2147	RCC PIPE CLASS IV 610 MM (AASHTO M-170)	LM
2148	RCC PIPE CLASS IV 760 MM (AASHTO M-170)	LM
2149	RCC PIPE CLASS IV 910 MM (AASHTO M-170)	LM
2150	RCC PIPE CLASS IV 1070 MM (AASHTO M-170)	LM
2151	RCC PIPE CLASS IV 1220 MM (AASHTO M-170)	LM
2152	RCC PIPE CLASS IV 1520 MM (AASHTO M-170)	LM
2153	PAVEMENT MARKING NON REFLECTING (TP)	KG

**CSR-2011**  
**LIST OF MATERIAL CODES**

<b>Material Code No.</b>	<b>Description</b>	<b>Unit</b>
2154	PAVEMENT MARKING REFLECTING (TP)	KG
2155	GALVANIZED FLAT STEEL FASTENERS & WASHERS	KG
2156	GALVANIZED U-BOLT CLAMP WITH 2 NUTS & TIE BOLTS	KG
2157	GALVANIZED SUPPORTING HOOKS CAST IN PRECAST POSTS	EACH
2158	GALVANIZED CHAIN LINK WIRE MESH FABRIC	SM
2159	GALVANIZED WIRE 3.76MM Ø TENSION, 3MM Ø STIRRUP	KG
2160	PRE-CAST CONCRETE TUFF KERB STONE (K-5)	EACH
2162	MS SHEET	KG
2164	GALVANIZATION	KG
2165	BRIDGE EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS (50 MM MOVEMENT)-IMPORTED	LM
2166	BRIDGE EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH (110 mm MOVEMENT)-IMPORTED	LM
2167	BRIDGE EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH (300 mm MOVEMENT) – IMPORTED	LM
2168	CEMENTITIOUS GROUT (HIGH STRENGTH)	CM
2169	PVC WATER STOP (8")	LM
2170	STEEL BLOCK C150x100x5 (LENGTH = 350mm)	EACH
2171	STEEL POST C150x100x5 (LENGTH = 1830mm)	EACH
2172	W6x15 STEEL POST (LENGTH = 1800mm)	EACH
2175	STEEL BACKING PLATE 318x270x12 mm	EACH
2176	METAL BEAM RAIL 310mm WIDE	LM
2177	METAL RAIL END PIECES	EACH
2178	P.C.C (1:2:4) FOR FENCE POST	CM
2179	PRECAST PRESTRESSED FENCE POST	EACH
2180	PRECAST R.C.C FENCE POST	EACH
2181	GALVANIZED WIRE MESH FENCE 10 SWG (50mm x 50mm)	SM
2182	STEEL CASING FOR PILES	TON
2183	BRIDGE EXPANSION JOINT MONOBLOC TYPE (56 mm MOVEMENT)-IMPORTED	LM
2184	ELASTOMERIC BEARING PAD M-183 (IMPORTED)	CCM
2185	WELDING RODS	EACH
2186	SHUTTERING (407k)	L.S.
2187	SHUTTERING (407l)	L.S.

**CSR-2011**  
**LIST OF EQUIPMENT CODES**

<b>Equipment Code</b>	<b>Description</b>
3001	BULL-DOZER. 200 H.P.
3002	BULL-DOZER. 120 H.P.
3003	BULL-DOZER. 90 H.P.
3004	FRONT END LOADER. 3.00 CUM.
3005	FRONT END LOADER. 2.50 CUM.
3006	FRONT END LOADER. 1.50 CUM.
3007	GRADER. 165 H.P.
3008	GRADER. 140 H.P.
3011	TANDEM VIBRATORY ROLLER. 10-12 T.
3012	TANDEM VIBRATORY ROLLER 8 T.
3013	TANDEM VIBRATORY ROLLER 6 T.
3014	TANDEM VIBRATORY ROLLER 1.5 T.
3015	COMBINATION ROLLER 18 T.
3016	COMBINATION ROLLER 10-12 T.
3017	COMBINATION ROLLER 8 T.
3018	P.T.R. (9 - WHEELER) 21 T.
3019	P.T.R. (9 - WHEELER) 18 T.
3020	STATIC TANDEM ROLLER 12 T.
3021	STATIC TANDEM ROLLER 8 T.
3022	TRACTOR 80 H.P.
3023	TRACTOR 50 H.P.
3024	WATER TANK BOWSER TYPE 12000 LTR.
3025	WATER TANK TOW TYPE 4000 LTR(INCL TRACTOR)
3031	MOTOR SCRAPER 400 H.P.
3032	DUMPER 18 T.
3033	DUMPER 10 T.
3034	FLAT BODY TRUCK 8 T.
3041	SEDAN CAR 1300 CC.
3042	SEDAN CAR 1000 CC.
3043	PICKUP 2800 CC. 4x4
3044	PICKUP 2200 CC. 4x2
3045	PICKUP 800 CC. 4 x 2
3046	JEEP 1300 CC. 4x4
3047	EXCAVATOR. (TRACK TYPE) 100 H.P.
3048	POWER BROOM.
3051	BITUMEN DIST. TOW TYPE 2000 LTR.

**CSR-2011**  
**LIST OF EQUIPMENT CODES**

Equipment Code	Description
3052	BITUMEN SPRAYER (MANUAL) 250 LTR.
3053	AGGREGATE SPREADER. 4 M WIDE.
3054	ASPHALT PLANT. 120 T.
3055	ASPHALT PLANT. 80 T.
3056	ASPHALT PLANT. 40 T.
3057	ASPHALT PLANT. 20 T.
3058	PAVER 4 M WIDE.
3059	PAVER 2.5 M WIDE.
3061	COMPRESSOR 300 CFM.
3062	ROCK DRILLER.
3071	CONCRETE BATCHING PLANT 30 CUM/H.
3072	CONCRETE STATIC MIXER 1 CUY.
3073	CCONCRETE STATIC MIXER. 1/4 CUY.
3074	CONCRETE TRANSIT MIXER 6 CUM.
3075	CONCRETE TRANSIT MIXER 4 CUM.
3081	TRAILER LOW BED 30 T.
3082	CRANE 45 T.
3083	CRANE 20 T.
3084	COLD MILLING MACHINE 1 M. WIDTH
3085	ROAD MARKING MACHINE.
3086	PUMP 4" DELIVERY (DIESEL)
3087	PUGMILL 40 TONS PER HOUR
3088	CHIPPING SPREADER 3 METER WIDE
3089	SAND BLASTING MACHINE
3120	STRESSING EQUIPMENT
3121	ASPHALT CUTTER
3122	CONCRETE CUTTER
3123	ELECTRIC SAW
3195	TRUCK (3-AXLE).
3196	TRACTER TROLLEY
3198	WELDING PLANT
3199	GENERATOR (DIESEL) 150 KVA.
3200	GENERATOR (DIESEL) 250 KVA.
3202	ROCK CRUSHING & SCREENING (200 T / H
3205	SECONDARY CRUSHER
3206	DIESEL TANKER
3208	JACK HAMME
3209	PILING RIG (Dia. 1m to 2m)

**CSR-2011**  
**LIST OF EQUIPMENT CODES**

<b>Equipment Code</b>	<b>Description</b>
3210	VIBRATOR (POCKER 1.5")
3211	PERCUSSION BORING RIG
3212	FORGOING/SHAPE MACHINE
3214	CONCRETE PUMP
3215	PLATE COMPACTOR
3217	GIRDER LAUNCHER
3218	TRIPOD & CHAIN PULLY (20 TON)
3219	ELECTRIC GENERATOR 50 KVA.
3220	ASPHALT RECYCLING MACHINE
3221	ROAD MARKING MACHINE (TP)
3222	PILING RIG (Dia. up to 1m)

## **PERFORMA FOR ESTIMATED OWNING AND OPERATING COSTS**

Machine & Model: \_\_\_\_\_

Code No: \_\_\_\_\_

Attachments: \_\_\_\_\_

A. Delivered price (including Duties & Taxes in Pakistan).

Front Tire Price: \_\_\_\_\_ Rear Tire Price: \_\_\_\_\_  
Total Tire Price: B

C. Delivered Price less Tire: A - B

D. Trade-in Value or resale Value (Optional) \_\_\_\_\_

E. Net Depreciation Value: C - D

### **OWNING COSTS:**

F. Depreciation Cost:

Depreciation period: Y Years  
Approx. Annual Use: H Hours

$$F = \frac{\text{Net Depreciation Value}}{\text{Depreciation period in hours}} = \frac{E}{(Y \times H)}$$

G. Interest, Insurance, Taxes:

Annual Rates (AR): Int. \_\_\_\_\_ % + Ins. \_\_\_\_\_ % + Taxes \_\_\_\_\_ %

$$G = \frac{\text{Delivered Price} \times \text{Annual Rates}}{\text{Annual Use in Hours} \times 100} = \frac{A \times AR}{H \times 100}$$

H. Total Owning Costs: \_\_\_\_\_ = F + G

### **OPERATING COSTS:**

J. Fuel Cost: Hourly Consumption x Unit Fuel Cost = \_\_\_\_\_

K. Maintenance in Percentage = \_\_\_\_\_ %

$$L. \text{ Maintenance Cost} = \frac{\text{Maint. %age} \times \text{Delivered Price Less Tire Price}}{\text{Depreciation Period in Hours} \times 100} = \frac{K \times C}{(Y \times H) \times 100}$$

M. Tire Cost:

$$\frac{\text{Tire Price}}{\text{Estimated Tire Life}} = \frac{B}{N}$$

N. Operators Hourly Wages: \_\_\_\_\_

P. Total Operating Cost: J + L + M + N

**TOTAL HOURLY OWNING AND OPERATING COST: P + H**

**Client:**  
National Highway Authority  
Islamabad.

**Consultant :**  
Sampak International (Pvt.) Ltd.  
Lahore.

**PLANT & EQUIPMENT OWNING OPERATING COST CSR-2011**  
**(NEW EQUIPMENT)**

<b>Code No.</b>	<b>Description</b>	<b>T-Owning Cost</b>	<b>T-Operating Cost</b>	<b>T-Hourly O.W. &amp; Opr. Cost</b>
3001	BULL-DOZER. 200 H.P.	2,304.42	2,676.03	4,980.45
3002	BULL-DOZER. 120 H.P.	1,975.22	1,320.45	3,295.66
3003	BULL-DOZER. 90 H.P.	1,728.31	989.15	2,717.46
3004	FRONT END LOADER. 3.00 CUM.	2,039.41	2,097.82	4,137.23
3005	FRONT END LOADER. 2.50 CUM.	1,790.74	1,844.72	3,635.46
3006	FRONT END LOADER. 1.50 CUM.	1,417.73	1,504.24	2,921.97
3007	GRADER. 165 H.P.	1,821.11	2,092.78	3,913.90
3008	GRADER. 140 H.P.	1,722.57	1,655.47	3,378.04
3011	TANDEM VIBRATORY ROLLER. 10-12 T.	988.80	1,248.62	2,237.42
3012	TANDEM VIBRATORY ROLLER 8 T.	865.20	1,082.96	1,948.16
3013	TANDEM VIBRATORY ROLLER 6 T.	741.60	760.64	1,502.24
3014	TANDEM VIBRATORY ROLLER 1.5 T.	309.00	259.16	568.16
3015	COMBINATION ROLLER 18 T.	1,043.40	1,706.42	2,749.82
3016	COMBINATION ROLLER 10-12 T.	957.79	1,300.64	2,258.44
3017	COMBINATION ROLLER 8 T.	799.74	953.11	1,752.86
3018	P.T.R. (9 - WHEELER) 21 T.	729.27	1,347.36	2,076.63
3019	P.T.R. (9 - WHEELER) 18 T.	675.71	1,108.47	1,784.18
3020	STATIC TANDEM ROLLER 12 T.	323.71	707.35	1,031.07
3021	STATIC TANDEM ROLLER 8 T.	264.86	704.50	969.35
3022	TRACTOR 80 H.P.	219.33	906.29	1,125.61
3023	TRACTOR 50 H.P.	152.86	565.53	718.39
3024	WATER TANK BOWSER TYPE 12000 LTR.	540.27	905.21	1,445.48
3025	WATER TANK TOW TYPE 4000 LTR (INCL TRACTOR)	171.12	558.74	729.86
3031	MOTOR SCRAPER 400 H.P.	1,955.23	7,071.09	9,026.32
3032	DUMPER 18 T.	679.68	1,553.00	2,232.68
3033	DUMPER 10 T.	528.07	1,022.22	1,550.30
3034	FLAT BODY TRUCK 8 T.	389.12	755.82	1,144.95

**Client:**  
 National Highway Authority  
 Islamabad.

**Consultant :**  
 Sampak International (Pvt.) Ltd.  
 Lahore.

**PLANT & EQUIPMENT OWNING OPERATING COST CSR-2011**  
**(NEW EQUIPMENT)**

<b>Code No.</b>	<b>Description</b>	<b>T-Owning Cost</b>	<b>T-Operating Cost</b>	<b>T-Hourly O.W. &amp; Opr. Cost</b>
3041	SEDAN CAR 1300 CC.	257.82	519.09	776.91
3042	SEDAN CAR 1000 CC.	166.09	436.21	602.29
3043	PICKUP 2800 CC. 4x4	697.62	573.30	1,270.92
3044	PICKUP 2200 CC. 4x2	297.62	553.30	850.92
3045	PICKUP 800 CC. 4 x 2	91.29	359.51	450.79
3046	JEEP 1300 CC. 4x4	341.82	450.33	792.15
3047	EXCAVATOR. (TRACK TYPE) 100 H.P.	1,177.14	1,012.34	2,189.49
3048	POWER BROOM.	169.43	773.44	942.87
3051	BITUMEN DIST. TOW TYPE 2000 LTR.	687.65	100.70	788.35
3052	BITUMEN SPRAYER (MANUAL) 250 LTR.	137.70	63.10	200.80
3053	AGGREGATE SPREADER. 4 M WIDE.	2,383.71	786.88	3,170.60
3054	ASPHALT PLANT. 120 T.	13,104.00	5,626.50	18,730.50
3055	ASPHALT PLANT. 80 T.	11,648.00	4,894.90	16,542.90
3056	ASPHALT PLANT. 40 T.	9,100.00	2,939.00	12,039.00
3057	ASPHALT PLANT. 20 T.	6,500.00	2,332.30	8,832.30
3058	PAVER 4 M WIDE.	2,431.04	801.32	3,232.36
3059	PAVER 2.5 M WIDE.	1,823.28	615.16	2,438.44
3061	COMPRESSOR 300 CFM.	203.43	1,332.57	1,536.00
3062	ROCK DRILLER.	238.00	79.00	317.00
3071	CONCRETE BATCHING PLANT 30 CUM/H.	2,336.88	1,672.18	4,009.06
3072	CONCRETE STATIC MIXER 1 CUY.	136.00	464.65	600.65
3073	CONCRETE STATIC MIXER. 1/4 CUY.	12.75	300.74	313.49
3074	CONCRETE TRANSIT MIXER 6 CUM.	3,062.28	1,562.07	4,624.35
3075	CONCRETE TRANSIT MIXER 4 CUM.	2,893.85	1,225.63	4,119.48
3081	TRAILER LOW BED 30 T.	1,519.97	1,398.03	2,918.00
3082	CRANE 45 T.	1,621.55	1,425.73	3,047.28
3083	CRANE 20 T.	1,297.93	1,166.93	2,464.86

**Client:**  
National Highway Authority  
Islamabad.

**Consultant :**  
Sampak International (Pvt.) Ltd.  
Lahore.

**PLANT & EQUIPMENT OWNING OPERATING COST CSR-2011**  
**(NEW EQUIPMENT)**

<b>Code No.</b>	<b>Description</b>	<b>T-Owning Cost</b>	<b>T-Operating Cost</b>	<b>T-Hourly O.W. &amp; Opr. Cost</b>
3084	COLD MILLING MACHINE 1 M. WIDTH	5,765.08	2,112.54	7,877.62
3085	ROAD MARKING MACHINE.	264.60	235.09	499.68
3086	PUMP 4" DELIVERY (DIESEL)	116.00	376.32	492.32
3087	PUGMILL 40 TONS PER HOUR	1,950.00	1,537.30	3,487.30
3088	CHIPPING SPREADER 3 METER WIDE	147.14	72.14	219.29
3089	SAND BLASTING MACHINE	176.57	1,017.36	1,193.93
3120	STRESSING EQUIPMENT	335.00	999.50	1,334.50
3121	ASPHALT CUTTER	109.93	223.14	333.08
3122	CONCRETE CUTTER	109.93	233.88	343.82
3123	ELECTRIC SAW	68.00	490.45	558.45
3195	TRUCK (3-AXLE).	824.32	995.10	1,819.42
3196	TRACTER TROLLEY	206.54	623.15	829.69
3198	WELDING PLANT	111.67	495.58	607.25
3199	GENERATOR (DIESEL) 150 KVA.	425.00	2,038.25	2,463.25
3200	GENERATOR (DIESEL) 250 KVA.	510.00	3,218.20	3,728.20
3202	ROCK CRUSHING & SCREENING (200 T / H)	3,090.00	5,237.50	8,327.50
3205	SECONDARY CRUSHER	119.00	2,131.30	2,250.30
3206	DIESEL TANKER	758.69	774.40	1,533.09
3208	JACK HAMMER	55.83	205.09	260.92
3209	PILING RIG (Dia. 1m to 2m)	5,947.76	1,778.55	7,726.31
3210	VIBRATOR (POCKER 1.5")	11.60	201.92	213.52
3211	PERCUSSION BORING RIG	238.00	392.32	630.32
3212	FORGOING/SHAPE MACHINE	156.33	921.17	1,077.50
3214	CONCRETE PUMP	3,292.90	1,680.01	4,972.91
3215	PLATE COMPACTOR	101.50	209.67	311.17
3217	GIRDER LAUNCHER	2,205.68	1,453.00	3,658.69
3218	TRIPOD & CHAIN PULLY (20 TON)	33.50	137.00	170.50

**Client:**  
National Highway Authority  
Islamabad.

**Consultant :**  
Sampak International (Pvt.) Ltd.  
Lahore.

**PLANT & EQUIPMENT OWNING OPERATING COST CSR-2011**  
**(NEW EQUIPMENT)**

<b>Code No.</b>	<b>Description</b>	<b>T-Owning Cost</b>	<b>T-Operating Cost</b>	<b>T-Hourly O.W. &amp; Opr. Cost</b>
3219	ELECTRIC GENERATOR 50 KVA.	255.00	2,603.50	2,858.50
3220	ASPHALT RECYCLING MACHINE	17,651.31	6,099.91	23,751.22
3221	ROAD MARKING MACHINE (TP)	592.36	286.14	878.50
3222	PILING RIG (Dia. up to 1m)	3,397.76	1,161.90	4,559.66

**NAME OF PROVINCE: PUNJAB**

<b>Serial No.</b>	<b>Name of District</b>	<b>District Code</b>
1.	ATTOCK	02
2.	BAHAWAL NAGAR	04
3.	BAHAWALPUR	05
4.	BHAKKAR	07
5.	CHAKWAL	09
6.	CHANIOT	09A
7.	D.G. KHAN	11
8.	FAISALABAD	16
9.	GUJRANWALA	17
10.	GUJRAT	18
11.	HAFIZABAD	20A
12.	JHANG	22
13.	JHELUM	23
14.	KASUR	28
15.	KHANEWAL	30
16.	KHUSHAB	32
17.	LAHORE	37
18.	LAYYAH	40
19.	LODHRAN	41A
20.	MIANWALI	45
21.	MULTAN	46
22.	MUZAFFARGARH	47
23.	MANDI BAHA-UD-DIN	47A
24.	NANKANA SAHIB	47E
25.	NAROWAL	49A
26.	OKARA	50
27.	PAKPATTAN	53A
28.	RAHIM YAR KHAN	55
29.	RAJAN PUR	56
30.	RAWALPINDI	57
31.	SAHIWAL	58
32.	SARGODHA	60
33.	SHEIKHUPURA	61
34.	SIALKOT	63
35.	TOBA TEK SINGH	69
36.	VEHARI	71

**NAME OF PROVINCE: BALUCHISTAN**

<b>Serial No.</b>	<b>Name of District</b>	<b>District Code</b>
1.	AWARAN	02A
2.	BARKHAN	06A
3.	BOLAN	07A
4.	CHAGAI	08
5.	DERA BUGTI	14
6.	GWADAR	19
7.	JAFFARABAD	21A
8.	JHAL MAGSI	21C
9.	KACHHI	24
10.	KALAT	25
11.	KHARAN	31
12.	KHUZDAR	33
13.	KOHLU	36
14.	LASBELA	39
15.	LORALAI	41
16.	MASTUNG	47B
17.	MUSAKHEL	47C
18.	MUSLIM BAGH	47D
19.	NASIRABAD	48
20.	NUSHKI	49D
21.	PANGUR	51
22.	PISHIN	53
23.	QUETTA	54
24.	QILLA SAIFULLAH	54A
25.	QILLA ABDULLAH	54B
26.	SIBI	64
27.	TURBAT (KECH)	70
28.	ZHOB	72
29.	ZIARAT	72A

**NAME OF PROVINCE: KHYBER PAKHTUNKHWA**

<b>Serial No.</b>	<b>Name of District</b>	<b>District Code</b>
1.	ABBOTTABAD	01
2.	BANNU	06
3.	BATAGRAM	06B
4.	BUNER	07B
5.	CHITRAL	10
6.	CHARSADDA	10A
7.	D.I. KHAN	12
8.	DIR (LOWER)	15
9.	DIR (UPPER)	15A
10.	HANGU	20B
11.	HARIPUR	20C
12.	KARAK	27
13.	KOHAT	34
14.	KOHISTAN	35
15.	LAKKI MARWAT	37A
16.	MALAKAND	42
17.	MANSEHRA	43
18.	MARDAN	44
19.	NOWSHERA	49C
20.	PESHAWAR	52
21.	SHANGLA	60A
22.	SWAT	66
23.	SWABI	66A
24.	TANK	70A

**NAME OF PROVINCE: SINDH**

<b>Serial No.</b>	<b>Name of District</b>	<b>District Code</b>
1.	BADIN	03
2.	DADU	13
3.	GHOTKI	16A
4.	HYDERABAD	20
5.	JACOBABAD	21
6.	JAMSHORO	21B
7.	KARACHI	26
8.	KASHMORE	27A
9.	KHAIRPUR	29
10.	LARKANA	38
11.	MIRPURKHAS	45A
12.	NAWABSHAH	49
13.	NAUSHAHRO FEROZE	49B
14.	QAMBAR	53B
15.	SANGHAR	59
16.	SHIKARPUR	62
17.	SUKKUR	65
18.	THARPARKAR	67
19.	THATTA	68
20.	UMARKOT	70B

**COMPOSITE SCHEDULE OF RATES CSR 2011**  
**LIST OF QUARRIES - PROVINCE OF KHYBER PAKHTUNKHWA**

DISTRICT CODE	DISTRICT NAME	QUARRY CODE	QUARRY NAME	MATERIAL NO.
1	ABBOTTABAD	1	Khan Da Khouh Quarry	2038, 2030, 2031 & 2034
		2	Aziz Abad Nullah Quarry	2015, 2017, 2018, 2023, 2025, 2026, 2027, 2028 & 2034
		3	Malik Kala Khan	2014, 2017, 2025, 2028, 2030 & 2034
		4	Jadoon Crusher Nadi Dor Nullah	2001, 2025, 2027, 2028, 2030, 2031, 2032, 2033 & 2035
		5	Nadi Dor Nullah (Left Bank)	2014, 2021, 2022, 2024, 2025, 2026, 2027, 2028, 2030, 2031, 2032 & 2033
		8	Haji Mohammad Abbas Crusher	2014, 2025, 2026, 2027, 2028, 2030 & 2031
		9	Ilyasi Stone Crusher	2014, 2015, 2023, 2024, 2025, 2026, 2027, 2028 & 2030
6	BANNU	425	Doha Nullah Quarry	2008, 2017, 2018, 2021 & 2022
		426	Kurram River Quarry	2014, 2015, 2017, 2018, 2025, 2026, 2027, 2028 & 2034
		427	Gulzada Stone Crusher	2017, 2018, 2025, 2026, 2027 & 2028
12	D.I.KHAN	435	Paniala Sand Quarry	2021 & 2022
		436	Chunda Hills Quarry	2014, 2015, 2017, 2018, 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2031, 2032 & 2033
		437	Indus Stone Crusher	2015, 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2031, 2032, 2033 & 2035
		439	Saleem & Zahid Stone Crusher	2001, 2014, 2015, 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2031, 2032, 2033, 2034 & 2035

DISTRICT CODE	DISTRICT NAME	QUARRY CODE	QUARRY NAME	MATERIAL NO.
		440	Ratta Hills Quarry	2014, 2015, 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2031, 2032 & 2033
		448	Indus River Sand Quarry	2021 & 2032
15	DIR (LOWER)	29	Kotki Nullah Quarry	2001, 2030, 2031, 2032, 2033, 2034 & 2035
		47	Mohammad Rasul Khan Crusher	2001, 2014, 2015, 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2031, 2032, 2033 & 2035
		48	Left Bank of Ouch Nullah Quarry	2008, 2017, 2018, 2021, 2022, 2025, 2026, 2027, 2028 & 2034
		49	Gulabad Nullah Quarry	2017, 2018, 2027, 2028 & 2034
		50	Umar Wali Khan Crusher	2008, 2014, 2015, 2017, 2018, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2031, 2032 & 2033.
27	KARAK	402	Khatak Crusher	2014, 2015, 2017, 2018, 2024, 2024, 2025, 2026, 2027 & 2028
		403	Tironk Nullah Quarry	2017 & 2018
		404	Mitha Nullah Quarry	2017 & 2018
		419	Zarki Sand Deposits	2021
		420	Thakhtti Nasratti Nullah Quarry	2008
			Thakhtti Nasratti Nullah Quarry	2017
			Chokarara Shingle Deposits	2017
			Thakhtti Nasratti Nullah Quarry	2018
			Chokarara Shingle Deposits	2018
			Thakhtti Nasratti Nullah Quarry	2022
			Zarki Sand Deposits	2022

DISTRICT CODE	DISTRICT NAME	QUARRY CODE	QUARRY NAME	MATERIAL NO.
		423	Bahadar Khel Hills Quarry	2001, 2030, 2031, 2032, 2033, 2034 & 2035
		424	Bahadar Khel Hills Quarry	2001, 2014, 2015, 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2031, 2032, 2033, 2034 & 2035
34	KOHAT	383	Malik Zahid Khan Stone Crusher	2001, 2014, 2015, 2017, 2024, 2025, 2026, 2027, 2028, 2030, 2031, 2032, 2033, 2034 & 2035
		387	Haji Amir Badshah Stone Crusher	2001, 2014, 2015, 2018, 2025, 2026, 2028, 2030, 2031, 2032, 2033, 2034, & 2035
		389	Gandiali Nullah Quarry	2017, 2018 & 2034
		390	Asmatullah Stone Crusher	2024, 2025, 2026, 2027 & 2028
		391	Babri Banda Hills Quarry	2030, 2031, 2032 & 2033
		392	Qazi Hamid-ud-din Stone Crusher	2024, 2025, 2026, 2027 & 2028
		400	Ukhurwal Nullah Quarry	2018 & 2034
		416	Raisan Nullah Quarry	2017, 2018 & 2034
43	MANSEHRA	15	Kanhar River Right Quarry	2008, 2014, 2015, 2018, 2021, 2022, 2023, 2025, 2027 & 2028
		16	Center of Ichher Nullah Quarry	2023, 2025, 2026, 2027, 2028 & 2030
		17	Katha Nullah Right Bank Quarry	2015, 2023, 2025, 2026, 2027 & 2028
		19	Gadian Stone Crusher	2022, 2023, 2024, 2027, 2030 & 2035
		20	Ichher Nullah Quarry	2001, 2022, 2023, 2024, 2027, 2028, 2030, 2031, 2032, 2033, 2034 & 2035
44	MARDAN	379	Ismailia Quarry	2001, 2017, 2018, 2030, 2031, 2032, 2033 & 2035

DISTRICT CODE	DISTRICT NAME	QUARRY CODE	QUARRY NAME	MATERIAL NO.
52	PESHAWAR	263	Nasir Bagh Nullah Quarry	2017, 2018 & 2034
		267	Barkhat Jamal Stone Crusher	2014, 2015, 2023, 2024, 2025, 2026, 2027 & 2028
		382	Narai Nullah Quarry	2001, 2017, 2018, 2024, 2025, 2026, 2027, 2028, 2030, 2031, 2032, 2033, 2034 & 2035
		385	Ganda Nullah Quarry	2017 & 2018
66	SWAT	21	R.H.S Indus River	2001, 2014, 2017, 2021, 2022, 2025, 2026, 2027, 2030, 2031, 2032, 2033 & 2035
		22	R.H.S Indus River	2031
		231	Aqba Quarry	2001, 2014, 2024, 2025, 2030, 2031, 2032, 2033 & 2035
		232	Nisar Ahmed Stone Crusher	2015, 2022, 2025, 2026, 2027 & 2028
		233	Shirizada Stone Crusher	2014, 2017, 2025, 2027 & 2028
		240	Left Bank of Darai Nullah	2008, 2017, 2018, 2022 & 2034
		241	Right Bank of Ser	2018 & 2021
		243	Left Bank of Swat River	2018, 2022 & 2034
		245	Akbar Khan Stone Crusher	2022, 2025, 2027, 2028, 2034 & 2035
		247	Shamozal Nullah Quarry	2014, 2018, 2023, 2024, 2025, 2026, 2028 & 2034
07B	BUNER	234	Left Side of Jower - Daggar Quarry	2001, 2030, 2031, 2032, 2033 & 2035
		237	Left Bank of Daggar Nullah Quarry	2018, 2021, 2025, 2026, 2028 & 2034
		238	Haji Mohammad Rahim Crusher	2014, 2025, 2027, 2030, 2031, 2032 & 2033
		239	Pir Baba Quarry	2014, 2015, 2024, 2025, 2026, 2027, 2028, 2030, 2031, 2032 & 2032

DISTRICT CODE	DISTRICT NAME	QUARRY CODE	QUARRY NAME	MATERIAL NO.
10A	CHARSADDA	256	Centre of Subhan Nullah Quarry	2001, 2018, 2030, 2031, 2032, 2033, 2034 & 2035
		380	Khiali River Quarry	2008, 2017, 2018, 2021 & 2022
20C	HARIPUR	6	Nadi Dor Nullah Near Sultan Shaheed Bridge	2001, 2025, 2026, 2027, 2028, 2030, 2031, 2032, 2033, 2034 & 2035
		7	Javed Gujar Crusher	2025, 2028, 2030, 2031, 2032, 2033, 2034 & 2035
37A	LAKKI MARWAT	434	Pezu Nullah Quarry	2008, 2021 & 2022
49C	NOWSHERA	253	Centre of Kuklai Nullah Quarry	2017 & 2018
		254	Right Bank of Babu Nullah Quarry	2018, 2021 & 2022
		255	Dhairi Khatti Khel Nullah	2018
		264	Muslim Khan Sand Quarry	2008, 2021 & 2022
		266	Nauman Khan & Co. Crusher	2023, 2024, 2025, 2026, 2027 & 2028
66A	SWABI	269	Baja Hills Quarry	2001, 2017, 2018, 2030, 2031, 2032, 2033, 2034 & 2035
		376	Subedar, Sarazi Khan Crusher	2017, 2018, 2023, 2024, 2025, 2028 & 2034
		377	Totali Nullah Quarry	2017 & 2018
			Subedar, Sarazi Khan Crusher	2026
		378	Shagai Nullah Quarry	2017, 2018, 2021 & 2022
			Subedar, Sarazi Khan Crusher	2027

## **CONVERSION FACTORS**

<b>TO CONVERT</b>	<b>INTO</b>	<b>MULTIPLY BY</b>
<b><u>LENGTH</u></b>		
Inch	Millimeter	25.4
Millimeter	Inch	0.03937
Foot	Metre	0.30480
Metre	Foot	3.28084
Yard	Metre	0.91440
Metre	Yard	1.09361
Mile	Kilometre	1.60934
Mile	Yard	1760
Kilometre	Mile	0.62137
Nautical Mile	Kilometre	1.852
inch	mil	1000

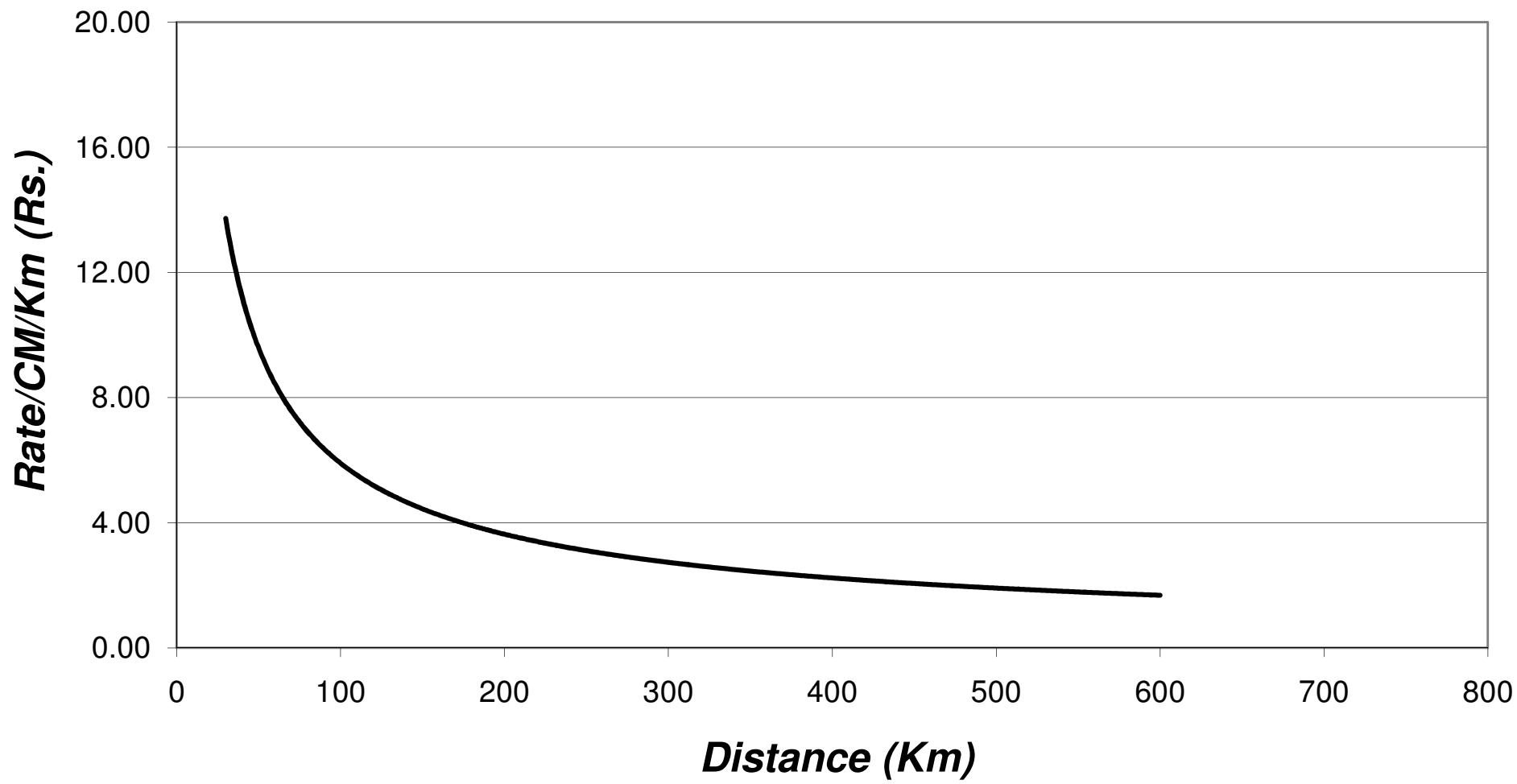
<b>TO CONVERT</b>	<b>INTO</b>	<b>MULTIPLY BY</b>
<b><u>MASS, WEIGHT</u></b>		
Pound	Kilogram	0.45359237
Kilogram	Pound	2.20462
Ounce	Gram	28.3495
Gram	Ounce	0.03527
Quintal	Kilogram	100
Grain	Milligram	64.7989
Hundred Weight	Kilogram	50.8023
Tonne	Hundred Weight	19.6841
Tonne	Kilogram	1000
Ton (Long)	Kilogram	1016.0469
Ton (Long)	Pound	2240
Ton (Long)	Tonne	1.0160469
Tonne	Ton (Long)	0.9842065
Seer	Kilogram	0.9331
Maund	Kilogram	37.324
Tola	Gram	11.664
Ton (Long)	Ton (Short)	1.12

<b>TO CONVERT</b>	<b>INTO</b>	<b>MULTIPLY BY</b>
<b><u>CAPACITY VOLUME</u></b>		
Pint (UK)	Litre	0.568261
Gallon (Imperial)	Litre	4.54609
Gallon (US)	Litre	3.78541
Cubic foot	Litre	28.3168
Cubic Metre	Litre	1000
Litre	Cubic Foot	0.0353147
Fluid Ounce	Millilitre	28.413
Litre	Gallon (Imperial)	0.219969
Cubic Inch	Cubic milliliter	16387.1
Cubic Foot	Cubic metre	0.0283168
Cubic Metre	Cubic foot	35.3147
Cubic Yard	Cubic metre	0.764555
Cubic Metre	Cubic yard	1.30795
Acre Foot	Hectare metre	0.12334
Barrel (Oil)	Litre	158.98729

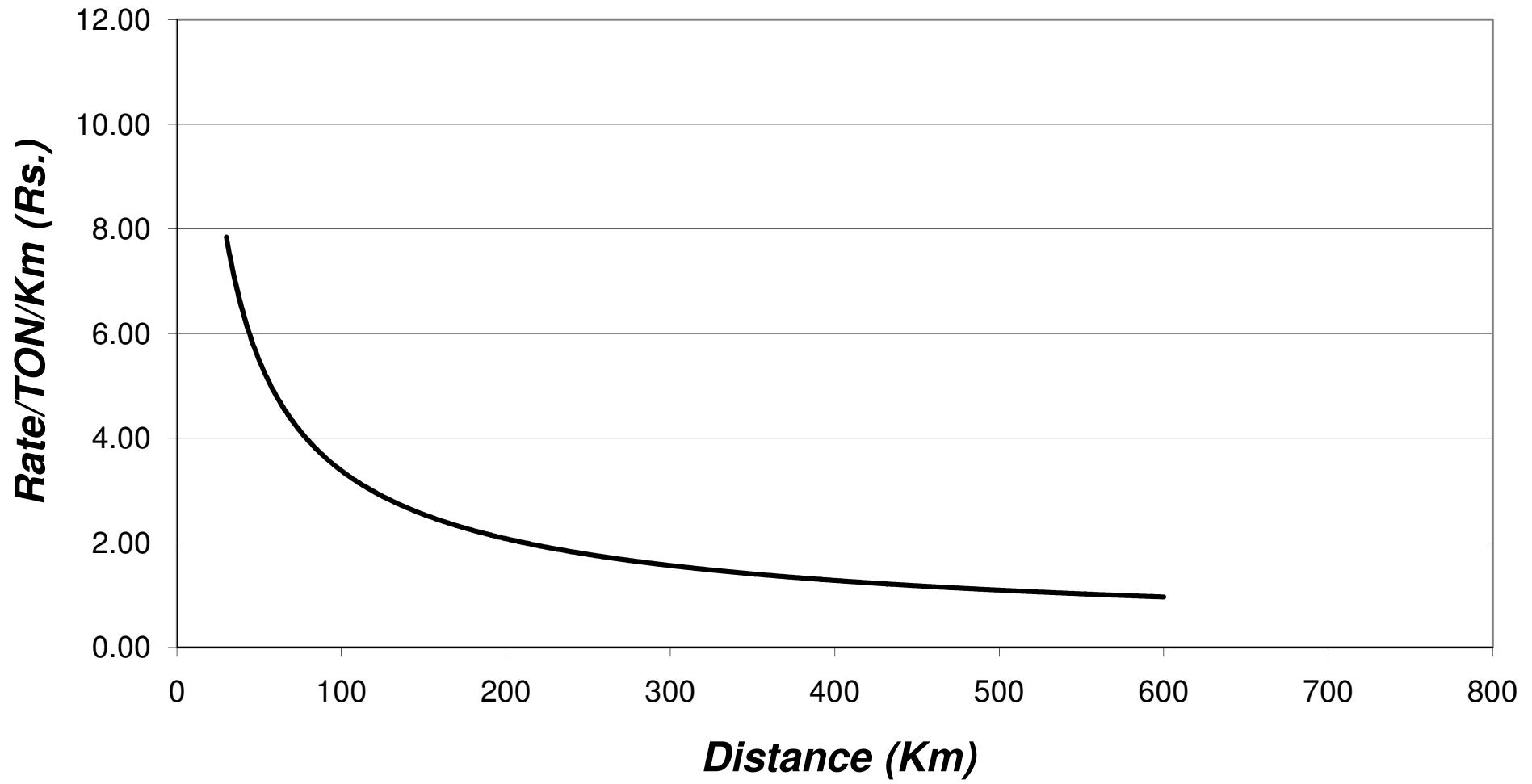
<b>TO CONVERT</b>	<b>INTO</b>	<b>MULTIPLY BY</b>
<b><u>AREA</u></b>		
Square inch	Square milimetre	645.16
Square millimeter	Square inch	0.00155
Square foot	Square metre	0.0929
Square metre	Square foot	10.7639
Square yard	Square metre	0.836127
Square metre	Square yard	1.19599
Acre	Square metre	4046.8564
Acre	Hectare	0.40468564
Hectare	Acre	2.47105
Hectare	Square metre	10000
Square mile	Square Kilometre	2.58999
Square Kilometre	Square mile	0.386102
Square mile	Hectare	258.99
Hectare	Square mile	0.00386102
<b><u>Mass Per Unit Area</u></b>		
Ton per square mile	Kilogram per square kilometer	392.298
Pound per Square foot	Kilogram per square metre	4.88243
Kilogram per square metre	Pound per square foot	0.204816
<b><u>Mass Per Unit Volume</u></b>		
Ton Per Cubic Foot	Kilogram per cubic metre	16.0185
Pound Per Cubic foot	Grams per litre	16.0185
Kilogram per Cubic metre	Pound per cubic foot	0.062428
Grams per litre	Pound per cubic foot	0.062428

<b>TO CONVERT</b>	<b>INTO</b>	<b>MULTIPLY BY</b>
<b><u>POWER</u></b>		
Kilo Watt	BTU per Hour	3412.1416
Kilo Watt	Ton (Refrigeration)	0.28434514
Kilo Watt	Kilo calorie per hour	859.84523
HP (British)	Watt	745.69987
Ton (Refrigeration)	BTU per Hour	12000
<b><u>PRESSURE</u></b>		
Atmosphere	Kilo Pascal	101.325
Atmosphere	Foot H <sub>2</sub> O	33.898538
Atmosphere	Pound per sq. inch	14.695949
Atmosphere	mm Hg (Torr)	760.0021
Pound per sq. inch	Kilo Pascal	6.8947573
Pound per sq. inch	Pound per sq. foot	144
Kilogram per sq.cm	Pound per sq. inch	14.223343
Pound per sq. inch	Kilogram per sq.cm	0.07030696
Bar	Kilo Pascal	100

**CSR-2011**  
**DISTANCE V/S RATE/CM/KM CHART (KP)**



**CSR-2011**  
**DISTANCE V/S RATE/TON/KM CHART (KP)**



# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

# **KHYBER PAKHTUNKHWA**



**SAMPAK INTERNATIONAL**

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

## **ABBOTTABAD**

### **(01)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 01 ABBOTTABAD

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.95	15.76	0.00	4.18	20.89
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	9.71	262.58	1.88	68.54	342.70
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	27.61	635.47	4.22	166.83	834.13
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	110.43	2,541.89	16.89	667.30	3,336.51
103	STRIPPING	CM	3.41	153.65	0.00	39.26	196.31
104	COMPACTION OF NATURAL GROUND	SM	0.49	14.95	2.70	4.54	22.68
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	6.38	227.95	0.00	58.58	292.92
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	152.21	360.08	125.00	159.32	796.62
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	23.05	541.85	0.00	141.23	706.13
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	15.48	422.98	0.00	109.61	548.07
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	5.22	205.65	0.00	52.72	263.58
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	152.21	360.08	125.00	159.32	796.62
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	26.78	492.05	0.00	129.71	648.53
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	13.17	422.98	0.00	109.04	545.20
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	10.47	221.54	0.00	58.00	290.01
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	89.54	664.63	74.15	207.08	1,035.39
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	148.78	400.09	125.00	168.47	842.34
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	133.90	442.22	0.00	144.03	720.15
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	76.52	316.49	0.00	98.25	491.25
107d	GRANULAR BACKFILL	CM	45.87	193.34	709.36	237.14	1,185.71
107e	COMMON BACKFILL	CM	37.94	110.10	18.00	41.51	207.56
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	9.60	234.11	18.00	65.43	327.13

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 01 ABBOTTABAD

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	27.30	578.46	144.73	187.62	938.11
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	20.47	637.82	8.55	166.71	833.56
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	18.20	574.85	8.00	150.26	751.31
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	10.88	119.41	159.08	72.34	361.71
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	8.47	121.79	18.00	37.07	185.33
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	19.73	277.82	10.70	77.06	385.31
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.92	43.86	5.15	12.73	63.66
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.39	30.11	2.73	8.56	42.79
110	IMPROVED SUB-GARDE	CM	13.77	190.72	229.97	108.62	543.08
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	1.14	23.59	2.80	6.88	34.42
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.75	26.79	2.80	7.83	39.17
201	GRANULAR SUB-BASE	CM	11.12	231.80	495.03	184.49	922.44
202	AGGREGATE BASE	CM	13.16	282.85	721.48	254.37	1,271.86
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	106.78	2,324.40	8,856.19	2,821.84	14,109.21
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	106.78	2,324.40	9,226.14	2,914.33	14,571.64
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	114.85	2,427.71	8,847.46	2,847.51	14,237.53
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	114.85	2,427.71	9,236.11	2,944.67	14,723.34
204b	CEMENT STABILIZED BASE	CM	39.87	780.07	921.49	435.36	2,176.78
204c	CEMENT CONTENT	TON	144.00	0.00	6,930.00	1,768.50	8,842.50
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	340.91	2,060.49	61,493.06	15,973.61	79,868.07

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 01 ABBOTTABAD

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	340.91	2,060.49	61,493.06	15,973.61	79,868.07
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	124.02	188.22	926.91	309.79	1,548.93
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	208.45	3,721.78	7,308.06	2,809.57	14,047.87
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	136.39	207.88	769.27	278.39	1,391.93
207a	DEEP PATCHING (0-15 cm)	SM	2.32	64.78	24.35	22.86	114.31
207b	DEEP PATCHING (15-30 cm)	SM	2.32	64.78	24.35	22.86	114.31
208	REINSTATEMENT OF ROAD SURFACE	SM	2.51	104.50	1.98	27.25	136.24
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	6.52	373.82	12.00	98.08	490.42
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.30	40.20	2.40	10.98	54.88
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.42	2.36	69.21	18.00	89.99
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.41	2.36	60.32	15.77	78.86
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.17	0.86	27.79	7.21	36.03
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.17	0.86	24.11	6.29	31.43
304a	SINGLE SURFACE TREATMENT	SM	1.11	11.24	147.50	39.96	199.82
304b	DOUBLE SURFACE TREATMENT	SM	1.62	21.60	278.33	75.39	376.94
304c	TRIPLE SURFACE TREATMENT	SM	2.73	30.32	323.52	89.15	445.73
304d	SEAL COAT	SM	1.03	6.38	34.47	10.47	52.35
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	95.29	2,293.29	9,597.60	2,996.54	14,982.72
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	95.29	2,198.28	10,231.51	3,131.27	15,656.35
307a	DENSE GRADED HOT BIT-MAC	CM	230.40	513.14	6,936.29	1,919.96	9,599.78
307b	OPEN GRADED HOT BIT-MAC	CM	230.40	513.14	6,694.60	1,859.53	9,297.66

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 01 ABBOTTABAD

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	40.20	1,050.92	3,603.18	1,173.57	5,867.87
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	298.78	1,746.20	61,493.06	15,884.51	79,422.55
309a	COLD MILLING, 0-30 mm	SM	1.37	52.01	18.61	18.00	89.98
309b	COLD MILLING, 0-50 mm	SM	2.28	86.68	31.01	29.99	149.96
309c	COLD MILLING, 0-70 mm	SM	3.41	130.02	46.52	44.99	224.94
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	733.37	2,175.42	3,664.46	1,643.31	8,216.56
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	733.37	2,175.42	4,279.16	1,796.99	8,984.94
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	733.37	2,175.42	4,598.84	1,876.91	9,384.54
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	733.37	2,175.42	3,893.57	1,700.59	8,502.95
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	733.37	2,175.42	4,508.22	1,854.25	9,271.26
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	733.37	2,175.42	4,827.80	1,934.15	9,670.74
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	733.37	2,175.42	4,146.62	1,763.85	8,819.26
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	733.37	2,175.42	4,761.27	1,917.51	9,587.57
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	733.37	2,175.42	5,069.73	1,994.63	9,973.15
401b	CONCRETE CLASS B	CM	940.84	1,109.69	3,068.89	1,279.86	6,399.28
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	712.85	2,175.42	3,432.61	1,580.22	7,901.11
401cii	CONCRETE CLASS C (ON GROUND)	CM	712.85	2,175.42	4,047.26	1,733.88	8,669.42
401ciii	CONCRETE CLASS C (ELEVATED)	CM	712.85	2,175.42	4,366.94	1,813.80	9,069.02
401d	CONCRETE CLASS D1	CM	1,139.33	2,689.24	6,173.90	2,500.62	12,503.09
401e	CONCRETE CLASS Y	CM	1,581.86	703.81	4,815.84	1,775.38	8,876.89
401f	LEAN CONCRETE	CM	586.83	759.81	2,582.11	982.19	4,910.93
401gi	PRECAST CONCRETE, CLASS A1	CM	2,363.21	1,470.83	4,254.59	2,022.16	10,110.79
401gii	PRECAST CONCRETE CLASS A3	CM	2,363.21	1,470.83	4,775.26	2,152.33	10,761.63
401giii	PRECAST CONCRETE, CLASS B	CM	2,363.21	1,470.83	3,718.30	1,888.09	9,440.43
401giv	PRECAST CONCRETE CLASS D1	CM	2,363.21	1,470.83	6,180.89	2,503.73	12,518.67

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 01 ABBOTTABAD

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,363.21	1,470.83	6,846.50	2,670.14	13,350.68
401gvi	PRECAST CONCRETE CLASS D3	CM	2,363.21	1,470.83	7,512.88	2,836.73	14,183.65
401h	PLUM CONCRETE	CM	1,036.84	1,109.69	2,390.17	1,134.18	5,670.88
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	2,244.86	0.00	71,544.85	18,447.43	92,237.13
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	2,244.86	0.00	75,744.85	19,497.43	97,487.13
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,800.73	3,667.20	87,008.40	23,119.08	115,595.41
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	3,510.84	12,010.50	148,045.75	40,891.77	204,458.86
405b	LAUNCHING OF GIRDER	TON	81.72	796.91	0.00	219.66	1,098.29
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	155.35	0.00	1,429.69	396.26	1,981.30
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	155.35	0.00	836.69	248.01	1,240.05
406ci	STEEL EXPANSION JOINTS (Local)	KG	12.86	18.40	139.89	42.79	213.95
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	532.82	0.00	84,597.15	21,282.49	106,412.46
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	550.82	0.00	132,497.37	33,262.05	166,310.23
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	604.82	0.00	1,127,679.85	282,071.17	1,410,355.83
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	532.82	0.00	71,968.22	18,125.26	90,626.30
406dii	PVC WATER STOP 8" SIZE	M	134.27	0.00	452.17	146.61	733.05
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.58	0.40	2.00
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.31	0.83	4.16
406f	ASPHALT FELT (3 PLY)	SM	55.51	0.00	252.45	76.99	384.94

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 01 ABBOTTABAD

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	26.41	48.58	149.46	56.11	280.56
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	344.85	3,155.77	488.87	997.37	4,986.87
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	524.17	4,796.77	653.71	1,493.66	7,468.31
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	524.17	7,330.09	816.32	2,167.65	10,838.23
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	873.61	12,216.82	1,150.47	3,560.23	17,801.13
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	728.01	10,180.69	1,011.24	2,979.98	14,899.92
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,310.42	18,325.24	1,568.15	5,300.95	26,504.76
407h	PILE LOAD TEST UPTO 120 TON	EACH	30,085.86	86,125.76	117,540.84	58,438.12	292,190.58
407i	PILE LOAD TEST UPTO 240 TON	EACH	30,085.86	86,125.76	251,229.63	91,860.31	459,301.56
407j	PILE LOAD TEST UPTO 360 TON	EACH	81,925.86	95,444.48	342,156.12	129,881.62	649,408.08
407k	PILE LOAD TEST UPTO 550 TON	EACH	120,805.86	119,305.60	546,299.40	196,602.72	983,013.58
407l	PILE LOAD TEST UPTO 800 TON	EACH	178,798.80	143,166.72	884,800.20	301,691.43	1,508,457.15
407m	CONFIRMATORY BORING (NX SIZE)	M	246.88	2,639.89	22.50	727.32	3,636.59
407n	PERMANENT PILE CASING FOR PILES	Ton	323.61	3,993.41	86,095.49	22,603.13	113,015.63
410	BRICK WORK	CM	451.23	453.06	3,806.55	1,177.71	5,888.54
411a	STONE MASONRY RANDOM DRY	CM	474.93	165.94	930.29	392.79	1,963.94
411b	STONE MASONRY RANDOM WITH MORTAR	CM	562.53	263.54	1,985.52	702.90	3,514.49
411c	STONE MASONRY DRESSED UNCOURSED DRY	CM	651.33	165.94	1,122.72	485.00	2,424.99
411d	STONE MASONRY DRESSED UNCOURSED WITH MORTAR	CM	740.13	263.54	2,100.90	776.14	3,880.71
411g	ROLL POINTING	SM	96.23	19.52	97.24	53.25	266.23
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	974.13	419.50	2,100.90	873.63	4,368.16
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	302.37	554.74	918.13	443.81	2,219.04

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 01 ABBOTTABAD

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	302.37	616.97	1,094.31	503.41	2,517.06
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	287.75	1,097.40	1,320.35	676.38	3,381.88
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	300.86	1,377.91	1,930.71	902.37	4,511.84
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	350.02	1,772.89	3,189.35	1,328.07	6,640.33
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	436.01	2,187.37	4,917.52	1,885.22	9,426.12
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	564.24	2,171.36	5,949.15	2,171.19	10,855.95
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	663.72	2,636.66	11,389.42	3,672.45	18,362.25
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	787.34	3,076.10	16,427.70	5,072.79	25,363.93
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	302.37	554.74	1,189.14	511.56	2,557.80
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	294.03	616.97	1,442.75	588.44	2,942.19
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	287.75	1,097.40	1,668.79	763.49	3,817.43
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	300.86	1,377.91	2,588.88	1,066.91	5,334.55
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	350.02	1,772.89	4,002.38	1,531.32	7,656.62
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	436.01	2,187.37	6,001.56	2,156.23	10,781.17
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	564.24	2,171.36	7,497.78	2,558.35	12,791.74
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	663.72	2,636.66	14,108.69	4,352.27	21,761.33
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	787.34	3,076.10	21,111.61	6,243.76	31,218.81
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	119.93	157.23	697.84	243.75	1,218.75

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 01 ABBOTTABAD

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	1,064.16	845.94	3,142.22	1,263.08	6,315.41
507a	STEEL WIRE MESH FOR GABIONS	KG	7.50	0.00	121.10	32.15	160.75
507b	ROCK FILL IN GABIONS	CM	128.02	0.00	576.73	176.19	880.94
508a	BRICK PAVING (SINGLE COURSE)	SM	149.60	38.19	316.08	125.97	629.84
508b	BRICK PAVING (DOUBLE COURSE)	SM	267.20	38.19	624.90	232.57	1,162.87
509a	RIPRAP, CLASS A	CM	648.67	0.00	617.93	316.65	1,583.24
509b	RIPRAP, CLASS B	CM	474.78	180.10	612.98	316.96	1,584.82
509c	RIPRAP, CLASS C	CM	465.25	187.60	617.93	317.69	1,588.47
509c1	RIPRAP, CLASS D	CM	465.25	225.12	617.93	327.07	1,635.37
509d	GROUTED RIPRAP, CLASS A	CM	793.31	170.59	2,424.05	846.99	4,234.93
509e	GROUTED RIPRAP, CLASS B	CM	614.49	316.57	2,234.96	791.50	3,957.52
509f	GROUTED RIPRAP, CLASS C	CM	591.27	301.33	2,236.21	782.20	3,911.01
509f1	GROUTED RIPRAP, CLASS D	CM	591.27	338.85	2,409.91	835.01	4,175.03
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	1,075.52	481.58	3,665.27	1,305.59	6,527.97
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	65.25	275.72	715.18	264.04	1,320.19
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	135.38	884.71	0.00	255.02	1,275.11
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	204.21	103.71	100.41	102.08	510.41
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	261.39	132.75	128.53	130.67	653.33
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	332.43	288.91	530.66	288.00	1,440.00
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	415.53	361.14	663.32	360.00	1,800.00
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	332.43	288.91	283.12	226.11	1,130.57
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	415.53	361.14	353.90	282.64	1,413.21

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 01 ABBOTTABAD

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	485.93	1,157.76	5,504.10	1,786.95	8,934.74
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,353.33	782.78	5,491.02	1,906.78	9,533.91
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	35.95	66.38	608.57	177.72	888.62
603	BRICK EDGING	M	11.90	0.00	48.00	14.97	74.87
604a	METAL GUARD RAIL	M	90.25	55.31	2,602.47	687.01	3,435.05
604b	METAL GUARD RAIL END PIECES	EACH	118.71	533.21	2,927.94	894.97	4,474.83
604d	STEEL POST FOR METAL GUARD RAIL	EACH	135.36	533.21	2,571.28	809.96	4,049.82
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,425.66	1,160.70	12,232.35	3,954.68	19,773.38
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,425.66	801.50	11,394.45	3,655.40	18,277.01
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	312.44	393.19	8,684.17	2,347.45	11,737.25
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	95.40	589.78	10,456.38	2,785.39	13,926.95
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	312.44	844.19	18,812.99	4,992.40	24,962.02
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	1,018.26	921.65	34,650.73	9,147.66	45,738.31
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	203.65	223.78	16,204.16	4,157.90	20,789.49
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	388.66	0.00	2,315.25	675.98	3,379.89
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	388.66	0.00	3,472.88	965.39	4,826.93
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.91	6.00	26.01	8.98	44.90
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.30	3.51	60.68	16.37	81.87
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.91	6.00	34.71	11.15	55.77
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.30	3.51	80.93	21.44	107.18
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	106.33	29.98	251.37	96.92	484.60

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 01 ABBOTTABAD

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	106.33	52.71	764.61	230.91	1,154.56
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.89	7.50	36.31	12.17	60.87
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.89	13.18	104.74	30.70	153.50
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.89	7.50	48.42	15.20	76.00
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.89	13.18	139.65	39.43	197.14
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	106.33	29.98	350.60	121.73	608.63
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	106.33	52.71	1,320.69	369.93	1,849.66
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	88.33	29.98	167.58	71.47	357.36
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	88.33	52.71	510.51	162.89	814.43
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	88.33	29.98	233.73	88.01	440.05
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	88.33	52.71	881.79	255.71	1,278.53
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	12.90	111.18	176.87	75.24	376.18
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	12.90	111.18	208.37	83.11	415.56
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	137.96	182.71	359.07	169.94	849.68
610c	KILOMETER POST	EACH	858.06	1,321.13	1,823.57	1,000.69	5,003.46
610d	TEN KILOMETER POST	EACH	1,656.13	2,642.27	3,481.70	1,945.02	9,725.12
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	177.02	66.38	1,203.60	361.75	1,808.74
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	157.50	821.01	2.10	245.15	1,225.76

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

**BANNU**  
**(06)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06 BANNU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.77	15.76	0.00	4.13	20.66
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	8.02	262.58	1.88	68.12	340.59
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	22.45	635.47	4.22	165.54	827.68
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	89.79	2,541.89	16.89	662.14	3,310.71
103	STRIPPING	CM	2.88	153.65	0.00	39.13	195.65
104	COMPACTION OF NATURAL GROUND	SM	0.41	14.95	2.70	4.52	22.59
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	5.80	227.95	0.00	58.44	292.19
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	132.92	360.08	125.00	154.50	772.51
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	19.81	541.85	0.00	140.42	702.08
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	13.43	422.98	0.00	109.10	545.52
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	4.75	205.65	0.00	52.60	262.99
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	132.92	360.08	125.00	154.50	772.51
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	23.45	492.05	0.00	128.87	644.37
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	11.32	422.98	0.00	108.58	542.88
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	9.37	221.54	0.00	57.73	288.64
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	77.68	664.63	75.56	204.47	1,022.33
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	130.27	400.09	125.00	163.84	819.20
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	117.24	442.22	0.00	139.86	699.32
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	66.99	316.49	0.00	95.87	479.35
107d	GRANULAR BACKFILL	CM	38.53	193.34	401.79	158.41	792.06
107e	COMMON BACKFILL	CM	30.87	110.10	18.00	39.74	198.71
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	8.41	234.11	18.00	65.13	325.64

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06 BANNU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	23.41	578.46	144.73	186.65	933.25
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	17.56	637.82	8.55	165.98	829.91
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	15.61	574.85	8.00	149.61	748.07
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	9.38	119.41	159.08	71.97	359.84
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	7.38	121.79	18.00	36.79	183.96
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	16.78	277.82	10.70	76.32	381.62
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.67	43.86	5.15	12.67	63.35
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.21	30.11	2.73	8.51	42.57
110	IMPROVED SUB-GARDE	CM	11.80	190.72	206.65	102.29	511.47
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	0.97	23.59	2.80	6.84	34.21
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.50	26.79	2.80	7.77	38.86
201	GRANULAR SUB-BASE	CM	9.65	231.80	399.40	160.21	801.06
202	AGGREGATE BASE	CM	11.56	282.85	455.75	187.54	937.70
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	88.16	2,324.40	9,181.90	2,898.62	14,493.08
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	88.16	2,324.40	9,422.21	2,958.69	14,793.46
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	95.14	2,427.71	9,173.14	2,924.00	14,619.98
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	95.14	2,427.71	9,432.16	2,988.75	14,943.75
204b	CEMENT STABILIZED BASE	CM	34.51	780.07	1,220.27	508.71	2,543.56
204c	CEMENT CONTENT	TON	110.00	0.00	7,035.00	1,786.25	8,931.25
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	297.83	2,060.49	61,611.71	15,992.51	79,962.54

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06 BANNU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	297.83	2,060.49	61,611.71	15,992.51	79,962.54
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	97.80	188.22	981.83	316.96	1,584.81
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	175.24	3,721.78	7,450.20	2,836.80	14,184.02
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	107.07	207.88	1,024.64	334.90	1,674.49
207a	DEEP PATCHING (0-15 cm)	SM	2.01	64.78	13.29	20.02	100.09
207b	DEEP PATCHING (15-30 cm)	SM	2.01	64.78	13.29	20.02	100.09
208	REINSTATEMENT OF ROAD SURFACE	SM	2.18	104.50	1.98	27.17	135.83
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	5.85	373.82	12.00	97.92	489.59
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.17	40.20	2.40	10.94	54.71
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.37	2.36	69.33	18.01	90.07
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.36	2.36	60.44	15.79	78.95
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.15	0.86	27.84	7.21	36.07
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.15	0.86	24.16	6.29	31.47
304a	SINGLE SURFACE TREATMENT	SM	0.98	11.24	148.88	40.27	201.37
304b	DOUBLE SURFACE TREATMENT	SM	1.43	21.60	281.13	76.04	380.20
304c	TRIPLE SURFACE TREATMENT	SM	2.41	30.32	327.07	89.95	449.76
304d	SEAL COAT	SM	0.91	6.38	35.34	10.66	53.28
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	79.39	2,293.29	9,867.06	3,059.93	15,299.67
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	79.39	2,198.28	10,473.65	3,187.83	15,939.15
307a	DENSE GRADED HOT BIT-MAC	CM	189.20	513.14	7,207.17	1,977.38	9,886.88
307b	OPEN GRADED HOT BIT-MAC	CM	189.20	513.14	6,907.69	1,902.51	9,512.53

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06 BANNU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	33.33	1,050.92	3,603.18	1,171.86	5,859.28
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	259.21	1,746.20	61,611.71	15,904.28	79,521.41
309a	COLD MILLING, 0-30 mm	SM	1.19	52.01	18.96	18.04	90.19
309b	COLD MILLING, 0-50 mm	SM	1.98	86.68	31.60	30.06	150.32
309c	COLD MILLING, 0-70 mm	SM	2.96	130.02	47.40	45.10	225.48
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	638.64	2,175.42	3,694.75	1,627.20	8,136.01
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	638.64	2,175.42	4,321.21	1,783.82	8,919.09
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	638.64	2,175.42	4,646.98	1,865.26	9,326.30
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	638.64	2,175.42	3,879.05	1,673.28	8,366.39
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	638.64	2,175.42	4,505.41	1,829.87	9,149.34
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	638.64	2,175.42	4,831.07	1,911.28	9,556.42
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	638.64	2,175.42	4,178.96	1,748.26	8,741.28
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	638.64	2,175.42	4,805.32	1,904.85	9,524.23
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	638.64	2,175.42	5,109.67	1,980.93	9,904.66
401b	CONCRETE CLASS B	CM	808.65	1,109.69	2,978.88	1,224.31	6,121.53
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	610.67	2,175.42	3,456.11	1,560.55	7,802.75
401cii	CONCRETE CLASS C (ON GROUND)	CM	610.67	2,175.42	4,082.47	1,717.14	8,585.70
401ciii	CONCRETE CLASS C (ELEVATED)	CM	610.67	2,175.42	4,408.24	1,798.58	8,992.91
401d	CONCRETE CLASS D1	CM	992.43	2,689.24	6,197.46	2,469.78	12,348.92
401e	CONCRETE CLASS Y	CM	1,370.59	703.81	4,910.37	1,746.19	8,730.96
401f	LEAN CONCRETE	CM	482.31	759.81	2,477.45	929.89	4,649.45
401gi	PRECAST CONCRETE, CLASS A1	CM	1,997.60	1,470.83	4,304.65	1,943.27	9,716.34
401gii	PRECAST CONCRETE CLASS A3	CM	1,997.60	1,470.83	4,809.40	2,069.46	10,347.29
401giii	PRECAST CONCRETE, CLASS B	CM	1,997.60	1,470.83	3,615.56	1,771.00	8,854.99
401giv	PRECAST CONCRETE CLASS D1	CM	1,997.60	1,470.83	6,204.35	2,418.20	12,090.98

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06 BANNU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	1,997.60	1,470.83	6,881.68	2,587.53	12,937.63
401gvi	PRECAST CONCRETE CLASS D3	CM	1,997.60	1,470.83	7,561.00	2,757.36	13,786.79
401h	PLUM CONCRETE	CM	881.99	1,109.69	2,373.18	1,091.21	5,456.07
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	1,969.77	0.00	71,601.81	18,392.89	91,964.47
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	1,969.77	0.00	75,801.81	19,442.89	97,214.47
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,580.26	3,667.20	88,646.40	23,473.47	117,367.33
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	3,218.25	12,010.50	150,845.51	41,518.57	207,592.83
405b	LAUNCHING OF GIRDER	TON	74.91	796.91	0.00	217.96	1,089.78
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	132.63	0.00	1,455.70	397.08	1,985.41
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	132.63	0.00	851.49	246.03	1,230.14
406ci	STEEL EXPANSION JOINTS (Local)	KG	11.13	18.40	142.37	42.98	214.88
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	466.40	0.00	86,208.52	21,668.73	108,343.65
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	480.15	0.00	135,021.13	33,875.32	169,376.59
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	521.40	0.00	1,149,159.46	287,420.21	1,437,101.07
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	466.40	0.00	73,339.04	18,451.36	92,256.80
406dii	PVC WATER STOP 8" SIZE	M	114.28	0.00	460.78	143.76	718.82
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.61	0.41	2.04
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.37	0.85	4.24
406f	ASPHALT FELT (3 PLY)	SM	48.68	0.00	256.22	76.23	381.13

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06 BANNU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	22.45	48.58	151.02	55.51	277.56
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	314.95	3,155.77	489.54	990.06	4,950.32
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	478.72	4,796.77	654.72	1,482.55	7,412.76
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	478.72	7,330.09	817.44	2,156.56	10,782.82
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	797.87	12,216.82	1,152.33	3,541.76	17,708.78
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	664.89	10,180.69	1,012.79	2,964.59	14,822.96
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,196.80	18,325.24	1,570.95	5,273.25	26,366.24
407h	PILE LOAD TEST UPTO 120 TON	EACH	23,618.52	86,125.76	87,641.56	49,346.46	246,732.30
407i	PILE LOAD TEST UPTO 240 TON	EACH	23,618.52	86,125.76	191,738.65	75,370.73	376,853.66
407j	PILE LOAD TEST UPTO 360 TON	EACH	63,218.52	95,444.48	252,258.92	102,730.48	513,652.40
407k	PILE LOAD TEST UPTO 550 TON	EACH	92,918.52	119,305.60	399,666.40	152,972.63	764,863.15
407l	PILE LOAD TEST UPTO 800 TON	EACH	137,498.64	143,166.72	649,661.20	232,581.64	1,162,908.20
407m	CONFIRMATORY BORING (NX SIZE)	M	209.81	2,639.89	22.50	718.05	3,590.24
407n	PERMANENT PILE CASING FOR PILES	Ton	274.63	3,993.41	87,735.30	23,000.84	115,004.18
410	BRICK WORK	CM	386.34	453.06	3,960.50	1,199.98	5,999.89
411a	STONE MASONRY RANDOM DRY	CM	404.55	165.94	1,156.92	431.85	2,159.27
411b	STONE MASONRY RANDOM WITH MORTAR	CM	476.05	263.54	2,082.91	705.63	3,528.13
411c	STONE MASONRY DRESSED UNCOURSED DRY	CM	553.05	165.94	1,586.30	576.32	2,881.61
411d	STONE MASONRY DRESSED UNCOURSED WITH MORTAR	CM	630.05	263.54	2,469.79	840.85	4,204.23
411g	ROLL POINTING	SM	82.93	19.52	96.53	49.75	248.73
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	822.55	419.50	2,469.79	927.96	4,639.80
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	243.07	554.74	928.71	431.63	2,158.14

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06 BANNU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	243.07	616.97	1,113.73	493.44	2,467.21
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	235.17	1,097.40	1,350.97	670.89	3,354.43
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	243.79	1,377.91	1,984.48	901.54	4,507.72
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	284.85	1,772.89	3,302.64	1,340.10	6,700.48
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	357.67	2,187.37	5,088.71	1,908.44	9,542.19
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	462.87	2,171.36	6,120.50	2,188.68	10,943.41
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	542.41	2,636.66	11,566.60	3,686.42	18,432.08
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	646.56	3,076.10	17,145.73	5,217.10	26,085.49
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	243.07	554.74	1,199.72	499.38	2,496.90
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	235.43	616.97	1,462.18	578.65	2,893.23
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	235.17	1,097.40	1,699.41	758.00	3,789.98
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	243.79	1,377.91	2,642.65	1,066.09	5,330.43
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	284.85	1,772.89	4,115.67	1,543.35	7,716.77
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	357.67	2,187.37	6,172.75	2,179.45	10,897.24
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	462.87	2,171.36	7,669.13	2,575.84	12,879.20
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	542.41	2,636.66	14,285.85	4,366.23	21,831.14
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	646.56	3,076.10	21,829.64	6,388.08	31,940.38
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	97.47	157.23	403.68	164.60	822.98

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06 BANNU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	914.36	845.94	3,053.32	1,203.41	6,017.03
507a	STEEL WIRE MESH FOR GABIONS	KG	6.50	0.00	123.41	32.48	162.39
507b	ROCK FILL IN GABIONS	CM	101.95	0.00	782.71	221.16	1,105.82
508a	BRICK PAVING (SINGLE COURSE)	SM	125.69	38.19	326.67	122.64	613.20
508b	BRICK PAVING (DOUBLE COURSE)	SM	224.69	38.19	649.62	228.13	1,140.64
509a	RIPRAP, CLASS A	CM	549.51	0.00	838.61	347.03	1,735.16
509b	RIPRAP, CLASS B	CM	413.21	180.10	831.90	356.30	1,781.51
509c	RIPRAP, CLASS C	CM	406.67	187.60	838.61	358.22	1,791.11
509c1	RIPRAP, CLASS D	CM	406.67	225.12	838.61	367.60	1,838.01
509d	GROUTED RIPRAP, CLASS A	CM	671.10	170.59	2,584.61	856.57	4,282.86
509e	GROUTED RIPRAP, CLASS B	CM	532.48	316.57	2,400.04	812.27	4,061.36
509f	GROUTED RIPRAP, CLASS C	CM	513.40	301.33	2,399.26	803.50	4,017.48
509f1	GROUTED RIPRAP, CLASS D	CM	513.40	338.85	2,563.74	854.00	4,269.98
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	897.89	481.58	3,589.72	1,242.30	6,211.49
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	52.48	275.72	402.85	182.76	913.81
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	115.30	884.71	0.00	250.00	1,250.00
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	172.06	103.71	136.27	103.01	515.06
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	220.24	132.75	174.43	131.86	659.28
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	281.84	288.91	526.92	274.42	1,372.10
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	352.30	361.14	658.65	343.02	1,715.12
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	281.84	288.91	295.91	216.67	1,083.33
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	352.30	361.14	369.89	270.83	1,354.16

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06 BANNU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	423.80	1,157.76	5,528.91	1,777.62	8,888.08
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,147.03	782.78	5,520.09	1,862.48	9,312.38
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	30.31	66.38	581.01	169.42	847.12
603	BRICK EDGING	M	9.92	0.00	52.80	15.68	78.39
604a	METAL GUARD RAIL	M	76.86	55.31	2,652.72	696.23	3,481.13
604b	METAL GUARD RAIL END PIECES	EACH	100.02	533.21	2,984.36	904.40	4,521.99
604d	STEEL POST FOR METAL GUARD RAIL	EACH	115.28	533.21	2,620.47	817.24	4,086.20
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	1,981.51	1,160.70	12,338.74	3,870.24	19,351.18
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	1,981.51	801.50	11,500.42	3,570.86	17,854.29
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	261.47	393.19	8,854.87	2,377.38	11,886.91
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	79.75	589.78	10,663.48	2,833.25	14,166.26
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	261.47	844.19	19,128.02	5,058.42	25,292.10
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	821.21	921.65	35,245.78	9,247.16	46,235.80
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	164.24	223.78	16,499.82	4,221.96	21,109.80
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	345.26	0.00	2,359.35	676.15	3,380.76
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	345.26	0.00	3,539.03	971.07	4,855.36
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.25	6.00	26.51	8.94	44.70
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.08	3.51	61.83	16.61	83.04
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.25	6.00	35.37	11.16	55.78
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.08	3.51	82.47	21.77	108.83
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	94.39	29.98	256.16	95.13	475.66

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06 BANNU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	94.39	52.71	779.17	231.57	1,157.84
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.07	7.50	37.00	12.14	60.71
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.07	13.18	106.73	30.99	154.97
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.07	7.50	49.34	15.23	76.13
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.07	13.18	142.31	39.89	199.44
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	94.39	29.98	357.27	120.41	602.05
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	94.39	52.71	1,345.85	373.24	1,866.18
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	77.89	29.98	170.77	69.66	348.30
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	77.89	52.71	520.23	162.71	813.54
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	77.89	29.98	238.18	86.51	432.56
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	77.89	52.71	898.59	257.30	1,286.48
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	11.00	111.18	180.04	75.56	377.78
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	11.00	111.18	212.14	83.58	417.90
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	110.33	182.71	363.73	164.19	820.97
610c	KILOMETER POST	EACH	718.35	1,321.13	1,838.86	969.59	4,847.94
610d	TEN KILOMETER POST	EACH	1,381.71	2,642.27	3,510.03	1,883.50	9,417.51
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	146.42	66.38	1,272.92	371.43	1,857.14
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	132.58	821.01	2.14	238.93	1,194.67

**NATIONAL HIGHWAY AUTHORITY**  
**COMPOSITE SCHEDULE OF RATES**

**January-2011**

**BATAGRAM**  
**(06B)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06B BATAGRAM

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.95	15.76	0.00	4.18	20.89
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	9.71	262.58	1.88	68.54	342.70
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	27.61	635.47	4.22	166.83	834.13
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	110.43	2,541.89	16.89	667.30	3,336.51
103	STRIPPING	CM	3.41	153.65	0.00	39.26	196.31
104	COMPACTION OF NATURAL GROUND	SM	0.49	14.95	2.70	4.54	22.68
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	6.38	227.95	0.00	58.58	292.92
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	152.21	360.08	125.00	159.32	796.62
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	23.05	541.85	0.00	141.23	706.13
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	15.48	422.98	0.00	109.61	548.07
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	5.22	205.65	0.00	52.72	263.58
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	152.21	360.08	125.00	159.32	796.62
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	26.78	492.05	0.00	129.71	648.53
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	13.17	422.98	0.00	109.04	545.20
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	10.47	221.54	0.00	58.00	290.01
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	89.54	664.63	74.15	207.08	1,035.39
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	148.78	400.09	125.00	168.47	842.34
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	133.90	442.22	0.00	144.03	720.15
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	76.52	316.49	0.00	98.25	491.25
107d	GRANULAR BACKFILL	CM	45.87	193.34	802.14	260.34	1,301.68
107e	COMMON BACKFILL	CM	37.94	110.10	18.00	41.51	207.56
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	9.60	234.11	18.00	65.43	327.13

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06B BATAGRAM

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	27.30	578.46	144.73	187.62	938.11
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	20.47	637.82	8.55	166.71	833.56
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	18.20	574.85	8.00	150.26	751.31
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	10.88	119.41	159.08	72.34	361.71
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	8.47	121.79	18.00	37.07	185.33
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	19.73	277.82	10.70	77.06	385.31
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.92	43.86	5.15	12.73	63.66
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.39	30.11	2.73	8.56	42.79
110	IMPROVED SUB-GARDE	CM	13.77	190.72	336.07	135.14	675.70
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	1.14	23.59	2.80	6.88	34.42
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.75	26.79	2.80	7.83	39.17
201	GRANULAR SUB-BASE	CM	11.12	231.80	930.11	293.26	1,466.29
202	AGGREGATE BASE	CM	13.16	282.85	1,301.62	399.41	1,997.04
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	106.78	2,324.40	9,692.22	3,030.85	15,154.24
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	106.78	2,324.40	9,914.80	3,086.49	15,432.46
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	114.85	2,427.71	9,683.42	3,056.50	15,282.48
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	114.85	2,427.71	9,924.71	3,116.82	15,584.09
204b	CEMENT STABILIZED BASE	CM	39.87	780.07	1,751.09	642.76	3,213.78
204c	CEMENT CONTENT	TON	144.00	0.00	7,665.00	1,952.25	9,761.25
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	340.91	2,060.49	61,557.88	15,989.82	79,949.10

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06B BATAGRAM

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	340.91	2,060.49	61,557.88	15,989.82	79,949.10
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	124.02	188.22	1,401.29	428.38	2,141.91
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	208.45	3,721.78	7,896.32	2,956.64	14,783.20
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	136.39	207.88	1,088.34	358.15	1,790.77
207a	DEEP PATCHING (0-15 cm)	SM	2.32	64.78	19.93	21.76	108.78
207b	DEEP PATCHING (15-30 cm)	SM	2.32	64.78	19.93	21.76	108.78
208	REINSTATEMENT OF ROAD SURFACE	SM	2.51	104.50	1.98	27.25	136.24
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	6.52	373.82	12.00	98.08	490.42
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.30	40.20	2.40	10.98	54.88
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.42	2.36	69.27	18.01	90.07
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.41	2.36	60.38	15.79	78.94
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.17	0.86	27.82	7.21	36.07
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.17	0.86	24.14	6.29	31.47
304a	SINGLE SURFACE TREATMENT	SM	1.11	11.24	151.27	40.90	204.52
304b	DOUBLE SURFACE TREATMENT	SM	1.62	21.60	287.95	77.79	388.97
304c	TRIPLE SURFACE TREATMENT	SM	2.73	30.32	335.13	92.05	460.23
304d	SEAL COAT	SM	1.03	6.38	36.32	10.93	54.66
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	95.29	2,293.29	10,366.32	3,188.72	15,943.62
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	95.29	2,198.28	10,962.52	3,314.02	16,570.10
307a	DENSE GRADED HOT BIT-MAC	CM	230.40	513.14	7,595.17	2,084.68	10,423.38
307b	OPEN GRADED HOT BIT-MAC	CM	230.40	513.14	7,285.79	2,007.33	10,036.66

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06B BATAGRAM

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	40.20	1,050.92	3,603.18	1,173.57	5,867.87
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	298.78	1,746.20	61,557.88	15,900.72	79,503.58
309a	COLD MILLING, 0-30 mm	SM	1.37	52.01	18.61	18.00	89.98
309b	COLD MILLING, 0-50 mm	SM	2.28	86.68	31.01	29.99	149.96
309c	COLD MILLING, 0-70 mm	SM	3.41	130.02	46.52	44.99	224.94
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	733.37	2,175.42	4,293.62	1,800.60	9,003.02
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	733.37	2,175.42	4,908.43	1,954.30	9,771.52
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	733.37	2,175.42	5,228.11	2,034.22	10,171.12
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	733.37	2,175.42	4,465.11	1,843.47	9,217.37
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	733.37	2,175.42	5,079.76	1,997.14	9,985.68
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	733.37	2,175.42	5,399.29	2,077.02	10,385.10
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	733.37	2,175.42	4,796.52	1,926.33	9,631.64
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	733.37	2,175.42	5,411.17	2,079.99	10,399.95
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	733.37	2,175.42	5,698.11	2,151.72	10,758.62
401b	CONCRETE CLASS B	CM	940.84	1,109.69	3,528.21	1,394.69	6,973.43
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	712.85	2,175.42	4,042.77	1,732.76	8,663.81
401cii	CONCRETE CLASS C (ON GROUND)	CM	712.85	2,175.42	4,657.42	1,886.42	9,432.12
401ciii	CONCRETE CLASS C (ELEVATED)	CM	712.85	2,175.42	4,977.10	1,966.34	9,831.72
401d	CONCRETE CLASS D1	CM	1,139.33	2,689.24	6,851.48	2,670.01	13,350.05
401e	CONCRETE CLASS Y	CM	1,581.86	703.81	5,533.36	1,954.76	9,773.79
401f	LEAN CONCRETE	CM	586.83	759.81	3,004.39	1,087.76	5,438.78
401gi	PRECAST CONCRETE, CLASS A1	CM	2,363.21	1,470.83	4,889.65	2,180.92	10,904.62
401gii	PRECAST CONCRETE CLASS A3	CM	2,363.21	1,470.83	5,405.46	2,309.88	11,549.38
401giii	PRECAST CONCRETE, CLASS B	CM	2,363.21	1,470.83	4,167.84	2,000.47	10,002.35
401giv	PRECAST CONCRETE CLASS D1	CM	2,363.21	1,470.83	6,858.77	2,673.20	13,366.02

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06B BATAGRAM

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,363.21	1,470.83	7,574.36	2,852.10	14,260.50
401gvi	PRECAST CONCRETE CLASS D3	CM	2,363.21	1,470.83	8,292.78	3,031.70	15,158.52
401h	PLUM CONCRETE	CM	1,036.84	1,109.69	2,729.99	1,219.13	6,095.65
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	2,244.86	0.00	71,623.53	18,467.10	92,335.49
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	2,244.86	0.00	75,823.53	19,517.10	97,585.49
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,800.73	3,667.20	87,008.40	23,119.08	115,595.41
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	3,510.84	12,010.50	148,126.90	40,912.06	204,560.29
405b	LAUNCHING OF GIRDER	TON	81.72	796.91	0.00	219.66	1,098.29
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	155.35	0.00	1,429.76	396.28	1,981.39
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	155.35	0.00	836.76	248.03	1,240.14
406ci	STEEL EXPANSION JOINTS (Local)	KG	12.86	18.40	139.89	42.79	213.95
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	532.82	0.00	84,597.15	21,282.49	106,412.46
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	550.82	0.00	132,497.37	33,262.05	166,310.23
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	604.82	0.00	1,127,679.85	282,071.17	1,410,355.83
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	532.82	0.00	71,968.22	18,125.26	90,626.30
406dii	PVC WATER STOP 8" SIZE	M	134.27	0.00	452.17	146.61	733.05
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.58	0.40	2.00
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.31	0.83	4.16
406f	ASPHALT FELT (3 PLY)	SM	55.51	0.00	252.51	77.00	385.02

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06B BATAGRAM

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	26.41	48.58	149.46	56.11	280.56
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	344.85	3,155.77	488.87	997.37	4,986.87
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	524.17	4,796.77	653.71	1,493.66	7,468.31
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	524.17	7,330.09	816.32	2,167.65	10,838.23
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	873.61	12,216.82	1,150.47	3,560.23	17,801.13
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	728.01	10,180.69	1,011.24	2,979.98	14,899.92
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,310.42	18,325.24	1,568.15	5,300.95	26,504.76
407h	PILE LOAD TEST UPTO 120 TON	EACH	30,085.86	86,125.76	105,111.72	55,330.84	276,654.18
407i	PILE LOAD TEST UPTO 240 TON	EACH	30,085.86	86,125.76	226,371.39	85,645.75	428,228.76
407j	PILE LOAD TEST UPTO 360 TON	EACH	81,925.86	95,444.48	304,868.76	120,559.78	602,798.88
407k	PILE LOAD TEST UPTO 550 TON	EACH	120,805.86	119,305.60	485,566.20	181,419.42	907,097.08
407l	PILE LOAD TEST UPTO 800 TON	EACH	178,798.80	143,166.72	787,344.60	277,327.53	1,386,637.65
407m	CONFIRMATORY BORING (NX SIZE)	M	246.88	2,639.89	22.50	727.32	3,636.59
407n	PERMANENT PILE CASING FOR PILES	Ton	323.61	3,993.41	86,095.49	22,603.13	113,015.63
410	BRICK WORK	CM	451.23	453.06	3,838.35	1,185.66	5,928.30
411a	STONE MASONRY RANDOM DRY	CM	474.93	165.94	930.29	392.79	1,963.94
411b	STONE MASONRY RANDOM WITH MORTAR	CM	562.53	263.54	2,013.02	709.77	3,548.87
411c	STONE MASONRY DRESSED UNCOURSED DRY	CM	651.33	165.94	1,611.42	607.17	3,035.87
411d	STONE MASONRY DRESSED UNCOURSED WITH MORTAR	CM	740.13	263.54	2,625.98	907.41	4,537.06
411g	ROLL POINTING	SM	96.23	19.52	98.39	53.53	267.67
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	974.13	419.50	2,625.98	1,004.90	5,024.50
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	302.37	554.74	928.11	446.30	2,231.52

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06B BATAGRAM

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	302.37	616.97	1,109.88	507.31	2,536.53
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	287.75	1,097.40	1,342.45	681.90	3,409.50
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	300.86	1,377.91	1,966.39	911.29	4,556.45
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	350.02	1,772.89	3,258.51	1,345.35	6,726.77
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	436.01	2,187.37	5,019.50	1,910.72	9,553.60
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	564.24	2,171.36	6,051.90	2,196.88	10,984.39
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	663.72	2,636.66	11,497.63	3,699.50	18,497.51
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	787.34	3,076.10	16,827.99	5,172.86	25,864.29
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	302.37	554.74	1,199.12	514.06	2,570.29
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	294.03	616.97	1,458.32	592.33	2,961.66
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	287.75	1,097.40	1,690.89	769.01	3,845.05
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	300.86	1,377.91	2,624.56	1,075.83	5,379.16
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	350.02	1,772.89	4,071.54	1,548.61	7,743.06
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	436.01	2,187.37	6,103.54	2,181.73	10,908.65
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	564.24	2,171.36	7,600.53	2,584.04	12,920.18
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	663.72	2,636.66	14,216.89	4,379.32	21,896.59
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	787.34	3,076.10	21,511.89	6,343.83	31,719.17
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	119.93	157.23	812.73	272.47	1,362.37

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06B BATAGRAM

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	1,064.16	845.94	3,609.33	1,379.86	6,899.28
507a	STEEL WIRE MESH FOR GABIONS	KG	7.50	0.00	121.10	32.15	160.75
507b	ROCK FILL IN GABIONS	CM	128.02	0.00	576.73	176.19	880.94
508a	BRICK PAVING (SINGLE COURSE)	SM	149.60	38.19	309.02	124.20	621.01
508b	BRICK PAVING (DOUBLE COURSE)	SM	267.20	38.19	612.19	229.40	1,146.98
509a	RIPRAP, CLASS A	CM	648.67	0.00	617.93	316.65	1,583.24
509b	RIPRAP, CLASS B	CM	474.78	180.10	612.98	316.96	1,584.82
509c	RIPRAP, CLASS C	CM	465.25	187.60	617.93	317.69	1,588.47
509c1	RIPRAP, CLASS D	CM	465.25	225.12	617.93	327.07	1,635.37
509d	GROUTED RIPRAP, CLASS A	CM	793.31	170.59	2,463.99	856.97	4,284.85
509e	GROUTED RIPRAP, CLASS B	CM	614.49	316.57	2,270.53	800.39	4,001.97
509f	GROUTED RIPRAP, CLASS C	CM	591.27	301.33	2,279.08	792.92	3,964.60
509f1	GROUTED RIPRAP, CLASS D	CM	591.27	338.85	2,456.24	846.59	4,232.95
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	1,075.52	481.58	4,161.94	1,429.76	7,148.80
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	65.25	275.72	801.56	285.63	1,428.16
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	135.38	884.71	0.00	255.02	1,275.11
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	204.21	103.71	100.41	102.08	510.41
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	261.39	132.75	128.53	130.67	653.33
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	332.43	288.91	531.03	288.09	1,440.47
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	415.53	361.14	663.79	360.12	1,800.58
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	332.43	288.91	290.04	227.85	1,139.23
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	415.53	361.14	362.55	284.81	1,424.03

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06B BATAGRAM

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	485.93	1,157.76	5,842.35	1,871.51	9,357.55
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,353.33	782.78	5,832.35	1,992.12	9,960.58
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	35.95	66.38	657.68	190.00	950.00
603	BRICK EDGING	M	11.90	0.00	48.00	14.97	74.87
604a	METAL GUARD RAIL	M	90.25	55.31	2,602.47	687.01	3,435.05
604b	METAL GUARD RAIL END PIECES	EACH	118.71	533.21	2,927.94	894.97	4,474.83
604d	STEEL POST FOR METAL GUARD RAIL	EACH	135.36	533.21	2,571.28	809.96	4,049.82
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,425.66	1,160.70	12,954.78	4,135.28	20,676.42
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,425.66	801.50	12,115.94	3,835.77	19,178.87
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	312.44	393.19	8,769.49	2,368.78	11,843.89
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	95.40	589.78	10,584.35	2,817.38	14,086.91
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	312.44	844.19	19,013.68	5,042.58	25,212.89
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	1,018.26	921.65	34,951.77	9,222.92	46,114.61
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	203.65	223.78	16,264.37	4,172.95	20,864.75
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	388.66	0.00	2,315.25	675.98	3,379.89
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	388.66	0.00	3,472.88	965.39	4,826.93
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.91	6.00	26.01	8.98	44.90
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.30	3.51	60.68	16.37	81.87
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.91	6.00	34.71	11.15	55.77
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.30	3.51	80.93	21.44	107.18
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	106.33	29.98	251.37	96.92	484.60

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 06B BATAGRAM

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	106.33	52.71	764.61	230.91	1,154.56
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.89	7.50	36.31	12.17	60.87
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.89	13.18	104.74	30.70	153.50
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.89	7.50	48.42	15.20	76.00
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.89	13.18	139.65	39.43	197.14
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	106.33	29.98	350.60	121.73	608.63
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	106.33	52.71	1,320.69	369.93	1,849.66
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	88.33	29.98	167.58	71.47	357.36
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	88.33	52.71	510.51	162.89	814.43
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	88.33	29.98	233.73	88.01	440.05
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	88.33	52.71	881.79	255.71	1,278.53
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	12.90	111.18	177.15	75.31	376.53
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	12.90	111.18	208.65	83.18	415.91
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	137.96	182.71	415.08	183.94	919.70
610c	KILOMETER POST	EACH	858.06	1,321.13	2,010.15	1,047.34	5,236.68
610d	TEN KILOMETER POST	EACH	1,656.13	2,642.27	3,778.90	2,019.33	10,096.63
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	177.02	66.38	1,203.60	361.75	1,808.74
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	157.50	821.01	2.10	245.15	1,225.76

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

**BUNER**  
**(07B)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 07B BUNER

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.95	15.76	0.00	4.18	20.89
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	9.71	262.58	1.88	68.54	342.70
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	27.61	635.47	4.22	166.83	834.13
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	110.43	2,541.89	16.89	667.30	3,336.51
103	STRIPPING	CM	3.41	153.65	0.00	39.26	196.31
104	COMPACTION OF NATURAL GROUND	SM	0.49	14.95	2.70	4.54	22.68
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	6.38	227.95	0.00	58.58	292.92
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	152.21	360.08	125.00	159.32	796.62
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	23.05	541.85	0.00	141.23	706.13
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	15.48	422.98	0.00	109.61	548.07
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	5.22	205.65	0.00	52.72	263.58
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	152.21	360.08	125.00	159.32	796.62
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	26.78	492.05	0.00	129.71	648.53
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	13.17	422.98	0.00	109.04	545.20
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	10.47	221.54	0.00	58.00	290.01
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	89.54	664.63	74.15	207.08	1,035.39
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	148.78	400.09	125.00	168.47	842.34
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	133.90	442.22	0.00	144.03	720.15
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	76.52	316.49	0.00	98.25	491.25
107d	GRANULAR BACKFILL	CM	45.87	193.34	642.78	220.50	1,102.48
107e	COMMON BACKFILL	CM	37.94	110.10	18.00	41.51	207.56
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	9.60	234.11	18.00	65.43	327.13

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 07B BUNER

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	27.30	578.46	144.73	187.62	938.11
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	20.47	637.82	8.55	166.71	833.56
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	18.20	574.85	8.00	150.26	751.31
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	10.88	119.41	159.08	72.34	361.71
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	8.47	121.79	18.00	37.07	185.33
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	19.73	277.82	10.70	77.06	385.31
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.92	43.86	5.15	12.73	63.66
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.39	30.11	2.73	8.56	42.79
110	IMPROVED SUB-GARDE	CM	13.77	190.72	264.96	117.36	586.81
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	1.14	23.59	2.80	6.88	34.42
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.75	26.79	2.80	7.83	39.17
201	GRANULAR SUB-BASE	CM	11.12	231.80	638.48	220.35	1,101.75
202	AGGREGATE BASE	CM	13.16	282.85	1,031.50	331.88	1,659.39
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	106.78	2,324.40	9,644.04	3,018.80	15,094.02
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	106.78	2,324.40	9,888.81	3,080.00	15,399.98
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	114.85	2,427.71	9,635.26	3,044.45	15,222.27
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	114.85	2,427.71	9,898.68	3,110.31	15,551.55
204b	CEMENT STABILIZED BASE	CM	39.87	780.07	1,755.35	643.82	3,219.10
204c	CEMENT CONTENT	TON	144.00	0.00	7,350.00	1,873.50	9,367.50
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	340.91	2,060.49	61,415.36	15,954.19	79,770.96

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 07B BUNER

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	340.91	2,060.49	61,415.36	15,954.19	79,770.96
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	124.02	188.22	1,387.90	425.03	2,125.17
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	208.45	3,721.78	7,844.51	2,943.69	14,718.43
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	136.39	207.88	1,071.50	353.94	1,769.71
207a	DEEP PATCHING (0-15 cm)	SM	2.32	64.78	18.82	21.48	107.40
207b	DEEP PATCHING (15-30 cm)	SM	2.32	64.78	18.82	21.48	107.40
208	REINSTATEMENT OF ROAD SURFACE	SM	2.51	104.50	1.98	27.25	136.24
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	6.52	373.82	12.00	98.08	490.42
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.30	40.20	2.40	10.98	54.88
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.42	2.36	69.13	17.98	89.90
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.41	2.36	60.24	15.75	78.77
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.17	0.86	27.76	7.20	36.00
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.17	0.86	24.08	6.28	31.40
304a	SINGLE SURFACE TREATMENT	SM	1.11	11.24	150.53	40.72	203.61
304b	DOUBLE SURFACE TREATMENT	SM	1.62	21.60	286.04	77.32	386.58
304c	TRIPLE SURFACE TREATMENT	SM	2.73	30.32	332.95	91.50	457.51
304d	SEAL COAT	SM	1.03	6.38	36.32	10.93	54.66
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	95.29	2,293.29	10,327.99	3,179.14	15,895.71
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	95.29	2,198.28	10,922.64	3,304.05	16,520.26
307a	DENSE GRADED HOT BIT-MAC	CM	230.40	513.14	7,571.20	2,078.68	10,393.41
307b	OPEN GRADED HOT BIT-MAC	CM	230.40	513.14	7,235.82	1,994.84	9,974.19

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 07B BUNER

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	40.20	1,050.92	3,603.18	1,173.57	5,867.87
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	298.78	1,746.20	61,415.36	15,865.09	79,325.44
309a	COLD MILLING, 0-30 mm	SM	1.37	52.01	18.61	18.00	89.98
309b	COLD MILLING, 0-50 mm	SM	2.28	86.68	31.01	29.99	149.96
309c	COLD MILLING, 0-70 mm	SM	3.41	130.02	46.52	44.99	224.94
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	733.37	2,175.42	4,198.95	1,776.93	8,884.67
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	733.37	2,175.42	4,813.76	1,930.64	9,653.19
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	733.37	2,175.42	5,133.44	2,010.56	10,052.79
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	733.37	2,175.42	4,341.75	1,812.63	9,063.17
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	733.37	2,175.42	4,956.40	1,966.30	9,831.49
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	733.37	2,175.42	5,275.93	2,046.18	10,230.90
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	733.37	2,175.42	4,664.99	1,893.45	9,467.23
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	733.37	2,175.42	5,279.64	2,047.11	10,235.54
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	733.37	2,175.42	5,565.66	2,118.61	10,593.06
401b	CONCRETE CLASS B	CM	940.84	1,109.69	3,457.36	1,376.97	6,884.87
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	712.85	2,175.42	3,929.83	1,704.53	8,522.64
401cii	CONCRETE CLASS C (ON GROUND)	CM	712.85	2,175.42	4,544.48	1,858.19	9,290.95
401ciii	CONCRETE CLASS C (ELEVATED)	CM	712.85	2,175.42	4,864.16	1,938.11	9,690.55
401d	CONCRETE CLASS D1	CM	1,139.33	2,689.24	6,699.19	2,631.94	13,159.69
401e	CONCRETE CLASS Y	CM	1,581.86	703.81	5,441.93	1,931.90	9,659.50
401f	LEAN CONCRETE	CM	586.83	759.81	2,955.23	1,075.47	5,377.33
401gi	PRECAST CONCRETE, CLASS A1	CM	2,363.21	1,470.83	4,799.03	2,158.27	10,791.34
401gii	PRECAST CONCRETE CLASS A3	CM	2,363.21	1,470.83	5,272.05	2,276.52	11,382.62
401giii	PRECAST CONCRETE, CLASS B	CM	2,363.21	1,470.83	4,090.17	1,981.05	9,905.27
401giv	PRECAST CONCRETE CLASS D1	CM	2,363.21	1,470.83	6,706.45	2,635.12	13,175.62

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 07B BUNER

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,363.21	1,470.83	7,389.72	2,805.94	14,029.71
401gvi	PRECAST CONCRETE CLASS D3	CM	2,363.21	1,470.83	8,075.76	2,977.45	14,887.25
401h	PLUM CONCRETE	CM	1,036.84	1,109.69	2,703.00	1,212.38	6,061.91
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	2,244.86	0.00	71,622.47	18,466.83	92,334.16
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	2,244.86	0.00	75,822.47	19,516.83	97,584.16
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,800.73	3,667.20	87,008.40	23,119.08	115,595.41
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	3,510.84	12,010.50	148,087.81	40,902.29	204,511.43
405b	LAUNCHING OF GIRDER	TON	81.72	796.91	0.00	219.66	1,098.29
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	155.35	0.00	1,429.61	396.24	1,981.20
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	155.35	0.00	836.61	247.99	1,239.95
406ci	STEEL EXPANSION JOINTS (Local)	KG	12.86	18.40	139.89	42.79	213.95
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	532.82	0.00	84,597.15	21,282.49	106,412.46
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	550.82	0.00	132,497.37	33,262.05	166,310.23
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	604.82	0.00	1,127,679.85	282,071.17	1,410,355.83
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	532.82	0.00	71,968.22	18,125.26	90,626.30
406dii	PVC WATER STOP 8" SIZE	M	134.27	0.00	452.17	146.61	733.05
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.58	0.40	2.00
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.31	0.83	4.16
406f	ASPHALT FELT (3 PLY)	SM	55.51	0.00	252.37	76.97	384.85

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 07B BUNER

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	26.41	48.58	149.46	56.11	280.56
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	344.85	3,155.77	488.87	997.37	4,986.87
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	524.17	4,796.77	653.71	1,493.66	7,468.31
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	524.17	7,330.09	816.32	2,167.65	10,838.23
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	873.61	12,216.82	1,150.47	3,560.23	17,801.13
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	728.01	10,180.69	1,011.24	2,979.98	14,899.92
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,310.42	18,325.24	1,568.15	5,300.95	26,504.76
407h	PILE LOAD TEST UPTO 120 TON	EACH	30,085.86	86,125.76	102,004.44	54,554.02	272,770.08
407i	PILE LOAD TEST UPTO 240 TON	EACH	30,085.86	86,125.76	220,156.83	84,092.11	420,460.56
407j	PILE LOAD TEST UPTO 360 TON	EACH	81,925.86	95,444.48	295,546.92	118,229.32	591,146.58
407k	PILE LOAD TEST UPTO 550 TON	EACH	120,805.86	119,305.60	470,382.90	177,623.59	888,117.95
407l	PILE LOAD TEST UPTO 800 TON	EACH	178,798.80	143,166.72	762,980.70	271,236.56	1,356,182.78
407m	CONFIRMATORY BORING (NX SIZE)	M	246.88	2,639.89	22.50	727.32	3,636.59
407n	PERMANENT PILE CASING FOR PILES	Ton	323.61	3,993.41	86,095.49	22,603.13	113,015.63
410	BRICK WORK	CM	451.23	453.06	4,544.05	1,362.08	6,810.42
411a	STONE MASONRY RANDOM DRY	CM	474.93	165.94	1,018.56	414.86	2,074.29
411b	STONE MASONRY RANDOM WITH MORTAR	CM	562.53	263.54	2,093.54	729.90	3,649.52
411c	STONE MASONRY DRESSED UNCOURSESED DRY	CM	651.33	165.94	1,360.85	544.53	2,722.65
411d	STONE MASONRY DRESSED UNCOURSESED WITH MORTAR	CM	740.13	263.54	2,362.84	841.63	4,208.14
411g	ROLL POINTING	SM	96.23	19.52	97.97	53.43	267.14
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	974.13	419.50	2,362.84	939.12	4,695.58
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	302.37	554.74	910.75	441.96	2,209.82

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 07B BUNER

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	302.37	616.97	1,081.36	500.17	2,500.87
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	287.75	1,097.40	1,300.16	671.33	3,356.63
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	300.86	1,377.91	1,896.31	893.77	4,468.84
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	350.02	1,772.89	3,119.10	1,310.50	6,552.52
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	436.01	2,187.37	4,811.10	1,858.62	9,293.09
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	564.24	2,171.36	5,843.17	2,144.69	10,723.47
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	663.72	2,636.66	11,279.56	3,644.98	18,224.92
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	787.34	3,076.10	15,988.10	4,962.89	24,814.43
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	302.37	554.74	1,181.76	509.72	2,548.58
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	294.03	616.97	1,429.80	585.20	2,926.01
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	287.75	1,097.40	1,648.60	758.44	3,792.18
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	300.86	1,377.91	2,554.48	1,058.31	5,291.56
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	350.02	1,772.89	3,932.13	1,513.76	7,568.80
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	436.01	2,187.37	5,895.15	2,129.63	10,648.16
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	564.24	2,171.36	7,391.81	2,531.85	12,659.27
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	663.72	2,636.66	13,998.82	4,324.80	21,624.00
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	787.34	3,076.10	20,672.02	6,133.86	30,669.32
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	119.93	157.23	644.73	230.47	1,152.37

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 07B BUNER

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	1,064.16	845.94	3,535.14	1,361.31	6,806.55
507a	STEEL WIRE MESH FOR GABIONS	KG	7.50	0.00	121.10	32.15	160.75
507b	ROCK FILL IN GABIONS	CM	128.02	0.00	659.12	196.79	983.93
508a	BRICK PAVING (SINGLE COURSE)	SM	149.60	38.19	392.00	144.95	724.74
508b	BRICK PAVING (DOUBLE COURSE)	SM	267.20	38.19	778.51	270.98	1,354.88
509a	RIPRAP, CLASS A	CM	648.67	0.00	706.20	338.72	1,693.59
509b	RIPRAP, CLASS B	CM	474.78	180.10	700.55	338.86	1,694.28
509c	RIPRAP, CLASS C	CM	465.25	187.60	706.20	339.76	1,698.81
509c1	RIPRAP, CLASS D	CM	465.25	225.12	706.20	349.14	1,745.71
509d	GROUTED RIPRAP, CLASS A	CM	793.31	170.59	2,537.67	875.39	4,376.95
509e	GROUTED RIPRAP, CLASS B	CM	614.49	316.57	2,345.11	819.04	4,095.21
509f	GROUTED RIPRAP, CLASS C	CM	591.27	301.33	2,351.34	810.98	4,054.92
509f1	GROUTED RIPRAP, CLASS D	CM	591.27	338.85	2,527.35	864.37	4,321.84
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	1,075.52	481.58	4,045.66	1,400.69	7,003.46
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	65.25	275.72	644.40	246.34	1,231.72
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	135.38	884.71	0.00	255.02	1,275.11
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	204.21	103.71	114.76	105.67	528.35
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	261.39	132.75	146.89	135.26	676.28
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	332.43	288.91	539.18	290.13	1,450.65
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	415.53	361.14	673.98	362.66	1,813.32
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	332.43	288.91	300.39	230.43	1,152.16
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	415.53	361.14	375.49	288.04	1,440.20

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 07B BUNER

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	485.93	1,157.76	5,791.92	1,858.90	9,294.51
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,353.33	782.78	5,784.08	1,980.05	9,900.24
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	35.95	66.38	650.80	188.28	941.41
603	BRICK EDGING	M	11.90	0.00	62.40	18.57	92.87
604a	METAL GUARD RAIL	M	90.25	55.31	2,637.99	695.89	3,479.45
604b	METAL GUARD RAIL END PIECES	EACH	118.71	533.21	2,962.26	903.55	4,517.73
604d	STEEL POST FOR METAL GUARD RAIL	EACH	135.36	533.21	2,582.37	812.74	4,063.68
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,425.66	1,160.70	12,882.90	4,117.31	20,586.56
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,425.66	801.50	12,044.07	3,817.81	19,089.03
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	312.44	393.19	8,749.05	2,363.67	11,818.35
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	95.40	589.78	10,553.70	2,809.72	14,048.60
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	312.44	844.19	18,969.50	5,031.53	25,157.66
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	1,018.26	921.65	34,885.50	9,206.36	46,031.78
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	203.65	223.78	16,251.11	4,169.64	20,848.19
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	388.66	0.00	2,315.25	675.98	3,379.89
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	388.66	0.00	3,472.88	965.39	4,826.93
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.91	6.00	26.01	8.98	44.90
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.30	3.51	60.68	16.37	81.87
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.91	6.00	34.71	11.15	55.77
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.30	3.51	80.93	21.44	107.18
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	106.33	29.98	251.37	96.92	484.60

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 07B BUNER

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	106.33	52.71	764.61	230.91	1,154.56
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.89	7.50	36.31	12.17	60.87
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.89	13.18	104.74	30.70	153.50
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.89	7.50	48.42	15.20	76.00
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.89	13.18	139.65	39.43	197.14
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	106.33	29.98	350.60	121.73	608.63
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	106.33	52.71	1,320.69	369.93	1,849.66
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	88.33	29.98	167.58	71.47	357.36
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	88.33	52.71	510.51	162.89	814.43
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	88.33	29.98	233.73	88.01	440.05
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	88.33	52.71	881.79	255.71	1,278.53
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	12.90	111.18	177.03	75.28	376.39
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	12.90	111.18	208.53	83.15	415.77
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	137.96	182.71	409.83	182.63	913.14
610c	KILOMETER POST	EACH	858.06	1,321.13	1,995.46	1,043.66	5,218.32
610d	TEN KILOMETER POST	EACH	1,656.13	2,642.27	3,756.55	2,013.74	10,068.68
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	177.02	66.38	1,243.06	371.61	1,858.07
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	157.50	821.01	2.10	245.15	1,225.76

**NATIONAL HIGHWAY AUTHORITY**  
**COMPOSITE SCHEDULE OF RATES**

**January-2011**

**CHARSADDA  
(10A)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10A CHARSADDA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.88	15.76	0.00	4.16	20.80
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	8.85	262.58	1.88	68.32	341.62
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	25.40	635.47	4.22	166.27	831.37
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	101.61	2,541.89	16.89	665.10	3,325.48
103	STRIPPING	CM	3.06	153.65	0.00	39.18	195.88
104	COMPACTION OF NATURAL GROUND	SM	0.43	14.95	2.70	4.52	22.61
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	5.44	227.95	0.00	58.35	291.74
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	133.55	360.08	125.00	154.66	773.29
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	20.45	541.85	0.00	140.58	702.88
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	13.64	422.98	0.00	109.16	545.78
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	4.45	205.65	0.00	52.52	262.62
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	133.55	360.08	125.00	154.66	773.29
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	23.45	492.05	0.00	128.88	644.38
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	11.69	422.98	0.00	108.67	543.34
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	9.02	221.54	0.00	57.64	288.20
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	78.93	664.63	74.15	204.43	1,022.13
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	130.30	400.09	125.00	163.85	819.24
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	117.27	442.22	0.00	139.87	699.35
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	67.01	316.49	0.00	95.87	479.37
107d	GRANULAR BACKFILL	CM	41.33	193.34	692.33	231.75	1,158.75
107e	COMMON BACKFILL	CM	34.90	110.10	18.00	40.75	203.75
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	8.40	234.11	18.00	65.13	325.64

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10A CHARSADDA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	24.26	578.46	144.73	186.86	934.31
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	18.19	637.82	8.55	166.14	830.71
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	16.17	574.85	8.00	149.75	748.77
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	9.62	119.41	159.08	72.03	360.14
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	7.45	121.79	18.00	36.81	184.05
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	17.63	277.82	10.70	76.54	382.69
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.69	43.86	5.15	12.67	63.37
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.22	30.11	2.73	8.51	42.57
110	IMPROVED SUB-GARDE	CM	12.24	190.72	347.94	137.72	688.62
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	1.02	23.59	2.80	6.85	34.26
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.55	26.79	2.80	7.78	38.92
201	GRANULAR SUB-BASE	CM	9.81	231.80	978.77	305.09	1,525.47
202	AGGREGATE BASE	CM	11.50	282.85	1,297.23	397.90	1,989.48
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	97.29	2,324.40	9,558.50	2,995.05	14,975.23
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	97.29	2,324.40	9,823.01	3,061.18	15,305.88
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	104.44	2,427.71	9,549.72	3,020.47	15,102.33
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	104.44	2,427.71	9,832.91	3,091.26	15,456.31
204b	CEMENT STABILIZED BASE	CM	35.19	780.07	1,612.75	607.00	3,035.01
204c	CEMENT CONTENT	TON	137.52	0.00	7,350.00	1,871.88	9,359.40
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	299.03	2,060.49	61,285.83	15,911.34	79,556.70

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10A CHARSADDA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	299.03	2,060.49	61,285.83	15,911.34	79,556.70
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	116.27	188.22	1,442.82	436.83	2,184.14
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	187.72	3,721.78	7,872.54	2,945.51	14,727.56
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	128.21	207.88	794.21	282.58	1,412.88
207a	DEEP PATCHING (0-15 cm)	SM	2.04	64.78	14.40	20.30	101.52
207b	DEEP PATCHING (15-30 cm)	SM	2.04	64.78	14.40	20.30	101.52
208	REINSTATEMENT OF ROAD SURFACE	SM	2.21	104.50	1.98	27.17	135.86
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	5.60	373.82	12.00	97.85	489.27
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.12	40.20	2.40	10.93	54.65
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.37	2.36	69.00	17.93	89.67
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.36	2.36	60.11	15.71	78.54
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.15	0.86	27.71	7.18	35.90
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.15	0.86	24.03	6.26	31.30
304a	SINGLE SURFACE TREATMENT	SM	0.97	11.24	150.59	40.70	203.50
304b	DOUBLE SURFACE TREATMENT	SM	1.42	21.60	287.19	77.55	387.76
304c	TRIPLE SURFACE TREATMENT	SM	2.38	30.32	334.03	91.68	458.42
304d	SEAL COAT	SM	0.90	6.38	35.71	10.75	53.73
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	86.32	2,293.29	10,248.88	3,157.12	15,785.61
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	86.32	2,198.28	10,868.72	3,288.33	16,441.65
307a	DENSE GRADED HOT BIT-MAC	CM	210.66	513.14	7,465.70	2,047.38	10,236.88
307b	OPEN GRADED HOT BIT-MAC	CM	210.66	513.14	7,216.55	1,985.09	9,925.44

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10A CHARSADDA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	36.53	1,050.92	3,603.18	1,172.66	5,863.28
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	263.36	1,746.20	61,285.83	15,823.85	79,119.25
309a	COLD MILLING, 0-30 mm	SM	1.20	52.01	18.61	17.95	89.77
309b	COLD MILLING, 0-50 mm	SM	2.00	86.68	31.01	29.92	149.62
309c	COLD MILLING, 0-70 mm	SM	3.01	130.02	46.52	44.89	224.43
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	644.75	2,175.42	4,028.19	1,712.09	8,560.45
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	644.75	2,175.42	4,642.97	1,865.78	9,328.92
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	644.75	2,175.42	4,962.65	1,945.70	9,728.52
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	644.75	2,175.42	4,246.05	1,766.55	8,832.77
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	644.75	2,175.42	4,860.70	1,920.22	9,601.09
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	644.75	2,175.42	5,180.23	2,000.10	10,000.50
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	644.75	2,175.42	4,578.80	1,849.74	9,248.72
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	644.75	2,175.42	5,193.45	2,003.41	10,017.03
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	644.75	2,175.42	5,486.61	2,076.70	10,383.48
401b	CONCRETE CLASS B	CM	834.71	1,109.69	3,377.52	1,330.48	6,652.40
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	633.88	2,175.42	3,889.62	1,674.73	8,373.65
401cii	CONCRETE CLASS C (ON GROUND)	CM	633.88	2,175.42	4,504.27	1,828.39	9,141.96
401ciii	CONCRETE CLASS C (ELEVATED)	CM	633.88	2,175.42	4,823.95	1,908.31	9,541.56
401d	CONCRETE CLASS D1	CM	1,001.46	2,689.24	6,543.87	2,558.64	12,793.21
401e	CONCRETE CLASS Y	CM	1,395.64	703.81	5,210.89	1,827.59	9,137.93
401f	LEAN CONCRETE	CM	536.28	759.81	2,873.15	1,042.31	5,211.55
401gi	PRECAST CONCRETE, CLASS A1	CM	2,120.44	1,470.83	4,618.95	2,052.56	10,262.78
401gii	PRECAST CONCRETE CLASS A3	CM	2,120.44	1,470.83	5,193.43	2,196.17	10,980.87
401giii	PRECAST CONCRETE, CLASS B	CM	2,120.44	1,470.83	4,028.91	1,905.05	9,525.23
401giv	PRECAST CONCRETE CLASS D1	CM	2,120.44	1,470.83	6,551.03	2,535.58	12,677.88

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10A CHARSADDA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,120.44	1,470.83	7,243.36	2,708.66	13,543.29
401gvi	PRECAST CONCRETE CLASS D3	CM	2,120.44	1,470.83	7,938.52	2,882.45	14,412.24
401h	PLUM CONCRETE	CM	926.39	1,109.69	2,597.05	1,158.28	5,791.40
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	1,963.04	0.00	71,627.77	18,397.70	91,988.51
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	1,963.04	0.00	75,827.77	19,447.70	97,238.51
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,574.53	3,667.20	87,008.40	23,062.53	115,312.66
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	2,972.44	12,010.50	148,081.45	40,766.10	203,830.49
405b	LAUNCHING OF GIRDER	TON	69.19	796.91	0.00	216.52	1,082.62
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	138.46	0.00	1,429.47	391.98	1,959.91
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	138.46	0.00	836.47	243.73	1,218.66
406ci	STEEL EXPANSION JOINTS (Local)	KG	11.36	18.40	139.89	42.41	212.07
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	466.70	0.00	84,597.15	21,265.96	106,329.81
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	483.89	0.00	132,497.37	33,245.31	166,226.57
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	535.46	0.00	1,127,679.85	282,053.83	1,410,269.13
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	466.70	0.00	71,968.22	18,108.73	90,543.65
406dii	PVC WATER STOP 8" SIZE	M	119.92	0.00	452.17	143.02	715.11
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.58	0.40	2.00
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.31	0.83	4.16
406f	ASPHALT FELT (3 PLY)	SM	48.56	0.00	252.24	75.20	376.00

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10A CHARSADDA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	23.60	48.58	149.46	55.41	277.06
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	292.78	3,155.77	488.87	984.36	4,921.79
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	445.03	4,796.77	653.71	1,473.88	7,369.39
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	445.03	7,330.09	816.32	2,147.86	10,739.31
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	741.72	12,216.82	1,150.47	3,527.25	17,636.26
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	618.10	10,180.69	1,011.24	2,952.51	14,762.53
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,112.58	18,325.24	1,568.15	5,251.49	26,257.46
407h	PILE LOAD TEST UPTO 120 TON	EACH	28,280.46	86,125.76	89,575.32	50,995.39	254,976.93
407i	PILE LOAD TEST UPTO 240 TON	EACH	28,280.46	86,125.76	195,298.59	77,426.20	387,131.01
407j	PILE LOAD TEST UPTO 360 TON	EACH	77,787.66	95,444.48	258,259.56	107,872.93	539,364.63
407k	PILE LOAD TEST UPTO 550 TON	EACH	114,918.06	119,305.60	409,649.70	160,968.34	804,841.70
407l	PILE LOAD TEST UPTO 800 TON	EACH	170,102.64	143,166.72	665,525.10	244,698.62	1,223,493.08
407m	CONFIRMATORY BORING (NX SIZE)	M	220.72	2,639.89	22.50	720.78	3,603.89
407n	PERMANENT PILE CASING FOR PILES	Ton	289.58	3,993.41	86,095.49	22,594.62	112,973.10
410	BRICK WORK	CM	401.38	453.06	3,998.85	1,213.32	6,066.62
411a	STONE MASONRY RANDOM DRY	CM	423.95	165.94	836.50	356.60	1,782.98
411b	STONE MASONRY RANDOM WITH MORTAR	CM	504.36	263.54	1,812.61	645.13	3,225.64
411c	STONE MASONRY DRESSED UNCOURSED DRY	CM	582.66	165.94	932.06	420.17	2,100.83
411d	STONE MASONRY DRESSED UNCOURSED WITH MORTAR	CM	660.96	263.54	1,859.90	696.10	3,480.51
411g	ROLL POINTING	SM	85.22	19.52	96.31	50.26	251.31
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	874.68	419.50	1,859.90	788.52	3,942.60
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	280.18	554.74	894.19	432.28	2,161.39

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10A CHARSADDA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	280.18	616.97	1,055.20	488.09	2,440.45
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	263.90	1,097.40	1,262.16	655.87	3,279.33
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	277.42	1,377.91	1,835.12	872.61	4,363.06
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	321.88	1,772.89	3,001.23	1,274.00	6,370.00
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	398.93	2,187.37	4,635.43	1,805.43	9,027.16
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	516.26	2,171.36	5,667.53	2,088.79	10,443.95
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	608.75	2,636.66	11,095.15	3,585.14	17,925.69
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	719.91	3,076.10	15,295.34	4,772.84	23,864.19
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	280.18	554.74	1,165.21	500.03	2,500.17
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	273.13	616.97	1,403.64	573.44	2,867.18
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	263.90	1,097.40	1,610.60	742.98	3,714.88
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	277.42	1,377.91	2,493.29	1,037.15	5,185.77
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	321.88	1,772.89	3,814.26	1,477.26	7,386.29
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	398.93	2,187.37	5,719.47	2,076.44	10,382.21
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	516.26	2,171.36	7,216.16	2,475.95	12,379.73
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	608.75	2,636.66	13,814.41	4,264.95	21,324.77
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	719.91	3,076.10	19,979.25	5,943.81	29,719.07
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	110.38	157.23	713.05	245.17	1,225.83

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10A CHARSSADDA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	944.32	845.94	3,455.30	1,311.39	6,556.95
507a	STEEL WIRE MESH FOR GABIONS	KG	6.61	0.00	121.10	31.93	159.65
507b	ROCK FILL IN GABIONS	CM	119.31	0.00	489.20	152.13	760.63
508a	BRICK PAVING (SINGLE COURSE)	SM	134.77	38.19	328.44	125.35	626.76
508b	BRICK PAVING (DOUBLE COURSE)	SM	240.58	38.19	652.80	232.89	1,164.47
509a	RIPRAP, CLASS A	CM	581.19	0.00	524.14	276.33	1,381.65
509b	RIPRAP, CLASS B	CM	417.58	180.10	528.15	281.46	1,407.28
509c	RIPRAP, CLASS C	CM	407.95	187.60	540.69	284.06	1,420.30
509c1	RIPRAP, CLASS D	CM	407.95	225.12	548.96	295.51	1,477.54
509d	GROUTED RIPRAP, CLASS A	CM	711.45	170.59	2,293.81	793.96	3,969.81
509e	GROUTED RIPRAP, CLASS B	CM	542.10	316.57	2,117.35	744.01	3,720.03
509f	GROUTED RIPRAP, CLASS C	CM	520.89	301.33	2,128.15	737.59	3,687.96
509f1	GROUTED RIPRAP, CLASS D	CM	520.89	338.85	2,304.20	790.98	3,954.92
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	973.00	481.58	3,982.26	1,359.21	6,796.06
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	60.45	275.72	688.46	256.16	1,280.78
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	120.86	884.71	0.00	251.39	1,256.96
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	183.62	103.71	85.17	93.13	465.63
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	235.03	132.75	109.02	119.20	596.01
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	297.68	288.91	490.90	269.37	1,346.86
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	372.10	361.14	613.63	336.72	1,683.58
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	297.68	288.91	259.34	211.48	1,057.42
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	372.10	361.14	324.18	264.35	1,321.77

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10A CHARSADDA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	426.76	1,157.76	5,701.25	1,821.44	9,107.21
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,212.12	782.78	5,688.47	1,920.84	9,604.21
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	32.31	66.38	622.21	180.22	901.11
603	BRICK EDGING	M	10.77	0.00	52.80	15.89	79.47
604a	METAL GUARD RAIL	M	80.57	55.31	2,573.71	677.40	3,386.99
604b	METAL GUARD RAIL END PIECES	EACH	106.75	533.21	2,898.85	884.70	4,423.52
604d	STEEL POST FOR METAL GUARD RAIL	EACH	120.84	533.21	2,554.65	802.18	4,010.88
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,225.32	1,160.70	12,676.38	4,015.60	20,078.00
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,225.32	801.50	11,837.49	3,716.08	18,580.39
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	282.21	393.19	8,757.41	2,358.20	11,791.01
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	86.23	589.78	10,566.24	2,810.56	14,052.81
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	282.21	844.19	18,951.85	5,019.56	25,097.80
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	941.68	921.65	34,859.02	9,180.59	45,902.95
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	188.34	223.78	16,245.82	4,164.48	20,822.42
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	336.86	0.00	2,315.25	663.03	3,315.14
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	336.86	0.00	3,472.88	952.44	4,762.18
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.54	6.00	26.01	8.89	44.44
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.18	3.51	60.68	16.34	81.71
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.54	6.00	34.71	11.06	55.32
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.18	3.51	80.93	21.41	107.03
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	92.21	29.98	251.37	93.39	466.95

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10A CHARSADDA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	92.21	52.71	764.61	227.38	1,136.91
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.43	7.50	36.31	12.06	60.30
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.43	13.18	104.74	30.59	152.93
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.43	7.50	48.42	15.09	75.43
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.43	13.18	139.65	39.31	196.57
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	92.21	29.98	350.60	118.20	590.98
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	92.21	52.71	1,320.69	366.40	1,832.01
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	76.97	29.98	167.58	68.63	343.16
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	76.97	52.71	510.51	160.05	800.23
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	76.97	29.98	233.73	85.17	425.85
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	76.97	52.71	881.79	252.87	1,264.33
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	11.51	111.18	176.91	74.90	374.49
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	11.51	111.18	208.41	82.77	413.87
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	128.25	182.71	393.01	175.99	879.96
610c	KILOMETER POST	EACH	774.85	1,321.13	1,937.23	1,008.30	5,041.52
610d	TEN KILOMETER POST	EACH	1,498.90	2,642.27	3,663.05	1,951.06	9,755.28
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	161.10	66.38	1,344.61	393.02	1,965.11
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	141.70	821.01	2.10	241.20	1,206.02

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

# **CHITRAL**

## **(10)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10 CHITRAL

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.95	15.76	0.00	4.18	20.89
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	9.71	262.58	1.88	68.54	342.70
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	27.61	635.47	4.22	166.83	834.13
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	110.43	2,541.89	16.89	667.30	3,336.51
103	STRIPPING	CM	3.41	153.65	0.00	39.26	196.31
104	COMPACTION OF NATURAL GROUND	SM	0.49	14.95	2.70	4.54	22.68
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	6.38	227.95	0.00	58.58	292.92
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	152.21	360.08	125.00	159.32	796.62
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	23.05	541.85	0.00	141.23	706.13
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	15.48	422.98	0.00	109.61	548.07
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	5.22	205.65	0.00	52.72	263.58
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	152.21	360.08	125.00	159.32	796.62
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	26.78	492.05	0.00	129.71	648.53
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	13.17	422.98	0.00	109.04	545.20
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	10.47	221.54	0.00	58.00	290.01
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	89.54	664.63	75.56	207.43	1,037.16
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	148.78	400.09	125.00	168.47	842.34
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	133.90	442.22	0.00	144.03	720.15
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	76.52	316.49	0.00	98.25	491.25
107d	GRANULAR BACKFILL	CM	45.87	193.34	1,099.00	334.55	1,672.77
107e	COMMON BACKFILL	CM	37.94	110.10	18.00	41.51	207.56
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	9.60	234.11	18.00	65.43	327.13

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10 CHITRAL

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	27.30	578.46	144.73	187.62	938.11
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	20.47	637.82	8.55	166.71	833.56
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	18.20	574.85	8.00	150.26	751.31
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	10.88	119.41	159.08	72.34	361.71
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	8.47	121.79	18.00	37.07	185.33
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	19.73	277.82	10.70	77.06	385.31
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.92	43.86	5.15	12.73	63.66
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.39	30.11	2.73	8.56	42.79
110	IMPROVED SUB-GARDE	CM	13.77	190.72	365.80	142.57	712.86
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	1.14	23.59	2.80	6.88	34.42
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.75	26.79	2.80	7.83	39.17
201	GRANULAR SUB-BASE	CM	11.12	231.80	1,052.00	323.73	1,618.65
202	AGGREGATE BASE	CM	13.16	282.85	1,121.27	354.32	1,771.60
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	106.78	2,324.40	9,677.93	3,027.28	15,136.38
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	106.78	2,324.40	9,885.03	3,079.05	15,395.26
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	114.85	2,427.71	9,669.12	3,052.92	15,264.60
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	114.85	2,427.71	9,894.99	3,109.39	15,546.94
204b	CEMENT STABILIZED BASE	CM	39.87	780.07	1,707.16	631.77	3,158.86
204c	CEMENT CONTENT	TON	144.00	0.00	8,739.99	2,221.00	11,104.99
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	340.91	2,060.49	61,647.05	16,012.11	80,060.56

CLIENT:

CSR - 2011

CONSULTANT:

NATIONAL HIGHWAY AUTHORITY  
ISLAMABADSAMPAK INTERNATIONAL (Pvt.) LTD  
LAHORE**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10 CHITRAL

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	340.91	2,060.49	61,647.05	16,012.11	80,060.56
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	124.02	188.22	1,397.97	427.55	2,137.75
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	208.45	3,721.78	7,908.41	2,959.66	14,798.30
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	136.39	207.88	1,240.49	396.19	1,980.95
207a	DEEP PATCHING (0-15 cm)	SM	2.32	64.78	30.04	24.28	121.42
207b	DEEP PATCHING (15-30 cm)	SM	2.32	64.78	30.04	24.28	121.42
208	REINSTATEMENT OF ROAD SURFACE	SM	2.51	104.50	1.98	27.25	136.24
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	6.52	373.82	12.00	98.08	490.42
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.30	40.20	2.40	10.98	54.88
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.42	2.36	69.36	18.04	90.19
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.41	2.36	60.47	15.81	79.06
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.17	0.86	27.86	7.22	36.11
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.17	0.86	24.18	6.30	31.51
304a	SINGLE SURFACE TREATMENT	SM	1.11	11.24	151.35	40.93	204.63
304b	DOUBLE SURFACE TREATMENT	SM	1.62	21.60	288.18	77.85	389.26
304c	TRIPLE SURFACE TREATMENT	SM	2.73	30.32	335.33	92.10	460.49
304d	SEAL COAT	SM	1.03	6.38	36.20	10.90	54.51
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	95.29	2,293.29	10,328.41	3,179.24	15,896.22
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	95.29	2,198.28	10,934.25	3,306.95	16,534.77
307a	DENSE GRADED HOT BIT-MAC	CM	230.40	513.14	7,562.27	2,076.45	10,382.25
307b	OPEN GRADED HOT BIT-MAC	CM	230.40	513.14	7,270.25	2,003.44	10,017.22

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10 CHITRAL

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	40.20	1,050.92	3,603.18	1,173.57	5,867.87
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	298.78	1,746.20	61,647.05	15,923.01	79,615.04
309a	COLD MILLING, 0-30 mm	SM	1.37	52.01	18.96	18.08	90.42
309b	COLD MILLING, 0-50 mm	SM	2.28	86.68	31.60	30.14	150.69
309c	COLD MILLING, 0-70 mm	SM	3.41	130.02	47.40	45.21	226.04
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	733.37	2,175.42	4,843.67	1,938.11	9,690.57
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	733.37	2,175.42	5,470.17	2,094.74	10,473.71
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	733.37	2,175.42	5,795.94	2,176.18	10,880.92
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	733.37	2,175.42	5,049.46	1,989.56	9,947.81
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	733.37	2,175.42	5,675.82	2,146.15	10,730.76
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	733.37	2,175.42	6,001.44	2,227.56	11,137.79
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	733.37	2,175.42	5,367.98	2,069.19	10,345.97
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	733.37	2,175.42	5,994.34	2,225.78	11,128.92
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	733.37	2,175.42	6,289.48	2,299.57	11,497.84
401b	CONCRETE CLASS B	CM	940.84	1,109.69	4,001.72	1,513.06	7,565.32
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	712.85	2,175.42	4,493.89	1,845.54	9,227.71
401cii	CONCRETE CLASS C (ON GROUND)	CM	712.85	2,175.42	5,120.25	2,002.13	10,010.66
401ciii	CONCRETE CLASS C (ELEVATED)	CM	712.85	2,175.42	5,446.02	2,083.57	10,417.87
401d	CONCRETE CLASS D1	CM	1,139.33	2,689.24	7,646.39	2,868.74	14,343.70
401e	CONCRETE CLASS Y	CM	1,581.86	703.81	6,137.78	2,105.86	10,529.32
401f	LEAN CONCRETE	CM	586.83	759.81	3,409.67	1,189.08	5,945.38
401gi	PRECAST CONCRETE, CLASS A1	CM	2,363.21	1,470.83	5,443.10	2,319.29	11,596.43
401gii	PRECAST CONCRETE CLASS A3	CM	2,363.21	1,470.83	5,993.73	2,456.94	12,284.71
401giii	PRECAST CONCRETE, CLASS B	CM	2,363.21	1,470.83	4,629.94	2,116.00	10,579.98
401giv	PRECAST CONCRETE CLASS D1	CM	2,363.21	1,470.83	7,654.11	2,872.04	14,360.19

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10 CHITRAL

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,363.21	1,470.83	8,468.50	3,075.63	15,378.17
401gvi	PRECAST CONCRETE CLASS D3	CM	2,363.21	1,470.83	9,285.05	3,279.77	16,398.87
401h	PLUM CONCRETE	CM	1,036.84	1,109.69	3,150.12	1,324.16	6,620.82
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	2,244.86	0.00	71,771.68	18,504.13	92,520.67
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	2,244.86	0.00	75,971.68	19,554.13	97,770.67
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,800.73	3,667.20	88,646.40	23,528.58	117,642.91
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	3,510.84	12,010.50	151,072.55	41,648.47	208,242.36
405b	LAUNCHING OF GIRDER	TON	81.72	796.91	0.00	219.66	1,098.29
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	155.35	0.00	1,455.74	402.77	2,013.86
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	155.35	0.00	851.53	251.72	1,258.60
406ci	STEEL EXPANSION JOINTS (Local)	KG	12.86	18.40	142.37	43.41	217.05
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	532.82	0.00	86,208.52	21,685.34	108,426.68
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	550.82	0.00	135,021.13	33,892.99	169,464.93
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	604.82	0.00	1,149,159.46	287,441.07	1,437,205.34
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	532.82	0.00	73,339.04	18,467.96	92,339.82
406dii	PVC WATER STOP 8" SIZE	M	134.27	0.00	460.78	148.76	743.81
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.61	0.41	2.04
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.37	0.85	4.24
406f	ASPHALT FELT (3 PLY)	SM	55.51	0.00	256.26	77.94	389.71

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10 CHITRAL

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	26.41	48.58	151.02	56.50	282.51
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	344.85	3,155.77	489.54	997.54	4,987.69
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	524.17	4,796.77	654.72	1,493.91	7,469.57
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	524.17	7,330.09	817.44	2,167.93	10,839.63
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	873.61	12,216.82	1,152.33	3,560.69	17,803.46
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	728.01	10,180.69	1,012.79	2,980.37	14,901.87
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,310.42	18,325.24	1,570.95	5,301.65	26,508.26
407h	PILE LOAD TEST UPTO 120 TON	EACH	30,085.86	86,125.76	134,688.12	62,724.94	313,624.68
407i	PILE LOAD TEST UPTO 240 TON	EACH	30,085.86	86,125.76	285,831.77	100,510.85	502,554.24
407j	PILE LOAD TEST UPTO 360 TON	EACH	81,925.86	95,444.48	393,398.60	142,692.24	713,461.18
407k	PILE LOAD TEST UPTO 550 TON	EACH	120,805.86	119,305.60	629,553.00	217,416.12	1,087,080.58
407l	PILE LOAD TEST UPTO 800 TON	EACH	178,798.80	143,166.72	1,018,549.00	335,128.63	1,675,643.15
407m	CONFIRMATORY BORING (NX SIZE)	M	246.88	2,639.89	22.50	727.32	3,636.59
407n	PERMANENT PILE CASING FOR PILES	Ton	323.61	3,993.41	87,735.30	23,013.08	115,065.39
410	BRICK WORK	CM	451.23	453.06	4,310.20	1,303.62	6,518.11
411a	STONE MASONRY RANDOM DRY	CM	474.93	165.94	1,246.39	471.81	2,359.07
411b	STONE MASONRY RANDOM WITH MORTAR	CM	562.53	263.54	2,581.08	851.79	4,258.94
411c	STONE MASONRY DRESSED UNCOURSESED DRY	CM	651.33	165.94	1,597.19	603.62	3,018.08
411d	STONE MASONRY DRESSED UNCOURSESED WITH MORTAR	CM	740.13	263.54	2,823.75	956.86	4,784.28
411g	ROLL POINTING	SM	96.23	19.52	104.99	55.18	275.92
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	974.13	419.50	2,823.75	1,054.34	5,271.72
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	302.37	554.74	949.26	451.59	2,257.95

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10 CHITRAL

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	302.37	616.97	1,140.46	514.95	2,574.75
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	287.75	1,097.40	1,383.83	692.24	3,461.22
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	300.86	1,377.91	2,029.05	926.95	4,634.77
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	350.02	1,772.89	3,370.98	1,373.47	6,867.36
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	436.01	2,187.37	5,183.26	1,951.66	9,758.30
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	564.24	2,171.36	6,216.71	2,238.08	11,190.40
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	663.72	2,636.66	11,673.71	3,743.52	18,717.61
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	787.34	3,076.10	17,431.30	5,323.69	26,618.43
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	302.37	554.74	1,220.27	519.34	2,596.71
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	294.03	616.97	1,488.90	599.98	2,999.89
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	287.75	1,097.40	1,732.28	779.36	3,896.79
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	300.86	1,377.91	2,687.22	1,091.50	5,457.48
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	350.02	1,772.89	4,184.02	1,576.73	7,883.66
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	436.01	2,187.37	6,267.30	2,222.67	11,113.35
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	564.24	2,171.36	7,765.34	2,625.24	13,126.19
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	663.72	2,636.66	14,392.97	4,423.34	22,116.69
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	787.34	3,076.10	22,115.20	6,494.66	32,473.30
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	119.93	157.23	1,098.55	343.93	1,719.65

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10 CHITRAL

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	1,064.16	845.94	4,094.21	1,501.08	7,505.39
507a	STEEL WIRE MESH FOR GABIONS	KG	7.50	0.00	123.41	32.73	163.63
507b	ROCK FILL IN GABIONS	CM	128.02	0.00	866.20	248.56	1,242.78
508a	BRICK PAVING (SINGLE COURSE)	SM	149.60	38.19	353.41	135.30	676.50
508b	BRICK PAVING (DOUBLE COURSE)	SM	267.20	38.19	697.74	250.78	1,253.91
509a	RIPRAP, CLASS A	CM	648.67	0.00	928.08	394.19	1,970.93
509b	RIPRAP, CLASS B	CM	474.78	180.10	873.58	382.11	1,910.57
509c	RIPRAP, CLASS C	CM	465.25	187.60	941.33	398.54	1,992.72
509c1	RIPRAP, CLASS D	CM	465.25	225.12	1,002.04	423.10	2,115.51
509d	GROUTED RIPRAP, CLASS A	CM	793.31	170.59	2,982.28	986.54	4,932.72
509e	GROUTED RIPRAP, CLASS B	CM	614.49	316.57	2,717.36	912.10	4,560.51
509f	GROUTED RIPRAP, CLASS C	CM	591.27	301.33	2,802.63	923.81	4,619.03
509f1	GROUTED RIPRAP, CLASS D	CM	591.27	338.85	3,064.59	998.68	4,993.38
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	1,075.52	481.58	4,728.00	1,571.27	7,856.37
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	65.25	275.72	1,102.45	360.85	1,804.27
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	135.38	884.71	0.00	255.02	1,275.11
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	204.21	103.71	150.81	114.68	573.41
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	261.39	132.75	193.04	146.79	733.97
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	332.43	288.91	633.39	313.68	1,568.41
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	415.53	361.14	791.74	392.10	1,960.52
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	332.43	288.91	376.59	249.48	1,247.41
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	415.53	361.14	470.74	311.85	1,559.27

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10 CHITRAL

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	485.93	1,157.76	6,147.62	1,947.83	9,739.13
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,353.33	782.78	6,133.21	2,067.33	10,336.65
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	35.95	66.38	702.43	201.19	1,005.94
603	BRICK EDGING	M	11.90	0.00	52.80	16.17	80.87
604a	METAL GUARD RAIL	M	90.25	55.31	2,662.74	702.08	3,510.38
604b	METAL GUARD RAIL END PIECES	EACH	118.71	533.21	2,995.20	911.78	4,558.91
604d	STEEL POST FOR METAL GUARD RAIL	EACH	135.36	533.21	2,630.55	824.78	4,123.91
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,425.66	1,160.70	13,479.73	4,266.52	21,332.61
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,425.66	801.50	12,639.39	3,966.64	19,833.18
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	312.44	393.19	8,980.78	2,421.60	12,108.02
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	95.40	589.78	10,852.35	2,884.38	14,421.91
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	312.44	844.19	19,548.47	5,176.27	25,881.37
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	1,018.26	921.65	35,876.45	9,454.09	47,270.46
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	203.65	223.78	16,625.95	4,263.35	21,316.73
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	388.66	0.00	2,359.35	687.00	3,435.01
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	388.66	0.00	3,539.03	981.92	4,909.61
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.91	6.00	26.51	9.10	45.52
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.30	3.51	61.83	16.66	83.31
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.91	6.00	35.37	11.32	56.60
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.30	3.51	82.47	21.82	109.11
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	106.33	29.98	256.16	98.12	490.58

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 10 CHITRAL

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	106.33	52.71	779.17	234.55	1,172.76
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.89	7.50	37.00	12.35	61.73
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.89	13.18	106.73	31.20	156.00
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.89	7.50	49.34	15.43	77.15
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.89	13.18	142.31	40.09	200.47
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	106.33	29.98	357.27	123.40	616.98
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	106.33	52.71	1,345.85	376.22	1,881.10
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	88.33	29.98	170.77	72.27	361.35
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	88.33	52.71	520.23	165.32	826.59
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	88.33	29.98	238.18	89.12	445.61
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	88.33	52.71	898.59	259.91	1,299.53
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	12.90	111.18	181.12	76.30	381.50
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	12.90	111.18	213.22	84.33	421.63
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	137.96	182.71	454.93	193.90	969.51
610c	KILOMETER POST	EACH	858.06	1,321.13	2,137.42	1,079.16	5,395.78
610d	TEN KILOMETER POST	EACH	1,656.13	2,642.27	3,983.76	2,070.54	10,352.70
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	177.02	66.38	1,345.98	397.34	1,986.72
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	157.50	821.01	2.14	245.16	1,225.81

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

**D.I. KHAN**  
**(12)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 12 D.I. KHAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.79	15.76	0.00	4.14	20.69
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	8.09	262.58	1.88	68.14	340.68
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	23.01	635.47	4.22	165.68	828.38
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	92.03	2,541.89	16.89	662.70	3,313.50
103	STRIPPING	CM	2.84	153.65	0.00	39.12	195.61
104	COMPACTION OF NATURAL GROUND	SM	0.41	14.95	2.70	4.51	22.57
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	5.32	227.95	0.00	58.32	291.59
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	126.84	360.08	125.00	152.98	764.90
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	19.21	541.85	0.00	140.27	701.33
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	12.90	422.98	0.00	108.97	544.85
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	4.35	205.65	0.00	52.50	262.50
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	126.84	360.08	125.00	152.98	764.90
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	22.32	492.05	0.00	128.59	642.95
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	10.98	422.98	0.00	108.49	542.45
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	8.72	221.54	0.00	57.57	287.83
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	74.62	664.63	75.56	203.70	1,018.50
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	123.98	400.09	125.00	162.27	811.34
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	111.58	442.22	0.00	138.45	692.25
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	63.76	316.49	0.00	95.06	475.31
107d	GRANULAR BACKFILL	CM	38.23	193.34	578.19	202.44	1,012.19
107e	COMMON BACKFILL	CM	31.62	110.10	18.00	39.93	199.65
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	8.00	234.11	18.00	65.03	325.13

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 12 D.I. KHAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	22.75	578.46	144.73	186.49	932.43
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	17.06	637.82	8.55	165.86	829.29
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	15.17	574.85	8.00	149.50	747.51
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	9.06	119.41	159.08	71.89	359.44
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	7.06	121.79	18.00	36.71	183.56
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	16.44	277.82	10.70	76.24	381.20
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.60	43.86	5.15	12.65	63.26
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.16	30.11	2.73	8.50	42.50
110	IMPROVED SUB-GARDE	CM	11.47	190.72	329.25	132.86	664.30
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	0.95	23.59	2.80	6.84	34.18
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.46	26.79	2.80	7.76	38.80
201	GRANULAR SUB-BASE	CM	9.27	231.80	902.12	285.80	1,428.99
202	AGGREGATE BASE	CM	10.97	282.85	996.27	322.52	1,612.61
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	88.98	2,324.40	9,258.76	2,918.03	14,590.17
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	88.98	2,324.40	9,498.75	2,978.03	14,890.16
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	95.71	2,427.71	9,249.98	2,943.35	14,716.75
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	95.71	2,427.71	9,508.75	3,008.04	15,040.21
204b	CEMENT STABILIZED BASE	CM	33.22	780.07	1,273.25	521.63	2,608.17
204c	CEMENT CONTENT	TON	120.00	0.00	6,930.00	1,762.50	8,812.50
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	284.09	2,060.49	61,845.84	16,047.61	80,238.03

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 12 D.I. KHAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	284.09	2,060.49	61,845.84	16,047.61	80,238.03
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	103.35	188.22	1,027.94	329.88	1,649.39
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	173.71	3,721.78	7,514.64	2,852.53	14,262.66
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	113.66	207.88	850.54	293.02	1,465.10
207a	DEEP PATCHING (0-15 cm)	SM	1.93	64.78	11.08	19.45	97.23
207b	DEEP PATCHING (15-30 cm)	SM	1.93	64.78	11.08	19.45	97.23
208	REINSTATEMENT OF ROAD SURFACE	SM	2.09	104.50	1.98	27.14	135.71
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	5.43	373.82	12.00	97.81	489.06
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.09	40.20	2.40	10.92	54.61
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.35	2.36	69.56	18.07	90.35
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.34	2.36	60.67	15.84	79.22
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.14	0.86	27.94	7.24	36.18
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.14	0.86	24.26	6.32	31.58
304a	SINGLE SURFACE TREATMENT	SM	0.93	11.24	149.66	40.46	202.28
304b	DOUBLE SURFACE TREATMENT	SM	1.35	21.60	282.87	76.46	382.28
304c	TRIPLE SURFACE TREATMENT	SM	2.28	30.32	329.11	90.43	452.14
304d	SEAL COAT	SM	0.86	6.38	35.55	10.70	53.48
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	79.40	2,293.29	9,946.69	3,079.85	15,399.23
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	79.40	2,198.28	10,554.58	3,208.07	16,040.33
307a	DENSE GRADED HOT BIT-MAC	CM	192.00	513.14	7,270.91	1,994.01	9,970.05
307b	OPEN GRADED HOT BIT-MAC	CM	192.00	513.14	6,970.11	1,918.81	9,594.05

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 12 D.I. KHAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	33.50	1,050.92	3,603.18	1,171.90	5,859.49
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	248.98	1,746.20	61,845.84	15,960.26	79,801.29
309a	COLD MILLING, 0-30 mm	SM	1.14	52.01	18.96	18.03	90.13
309b	COLD MILLING, 0-50 mm	SM	1.90	86.68	31.60	30.04	150.22
309c	COLD MILLING, 0-70 mm	SM	2.84	130.02	47.40	45.07	225.33
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	611.14	2,175.42	3,646.84	1,608.35	8,041.75
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	611.14	2,175.42	4,273.31	1,764.97	8,824.83
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	611.14	2,175.42	4,599.08	1,846.41	9,232.04
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	611.14	2,175.42	3,829.06	1,653.90	8,269.52
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	611.14	2,175.42	4,455.42	1,810.49	9,052.47
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	611.14	2,175.42	4,781.08	1,891.91	9,459.55
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	611.14	2,175.42	4,136.96	1,730.88	8,654.39
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	611.14	2,175.42	4,763.32	1,887.47	9,437.34
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	611.14	2,175.42	5,066.64	1,963.30	9,816.50
401b	CONCRETE CLASS B	CM	784.03	1,109.69	2,948.89	1,210.65	6,053.26
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	594.04	2,175.42	3,435.39	1,551.21	7,756.07
401cii	CONCRETE CLASS C (ON GROUND)	CM	594.04	2,175.42	4,061.75	1,707.80	8,539.02
401ciii	CONCRETE CLASS C (ELEVATED)	CM	594.04	2,175.42	4,387.52	1,789.25	8,946.23
401d	CONCRETE CLASS D1	CM	949.43	2,689.24	6,123.46	2,440.53	12,202.67
401e	CONCRETE CLASS Y	CM	1,318.22	703.81	4,857.54	1,719.89	8,599.46
401f	LEAN CONCRETE	CM	489.02	759.81	2,454.99	925.95	4,629.77
401gi	PRECAST CONCRETE, CLASS A1	CM	1,969.33	1,470.83	4,257.40	1,924.39	9,621.96
401gii	PRECAST CONCRETE CLASS A3	CM	1,969.33	1,470.83	4,766.13	2,051.57	10,257.86
401giii	PRECAST CONCRETE, CLASS B	CM	1,969.33	1,470.83	3,586.63	1,756.70	8,783.49
401giv	PRECAST CONCRETE CLASS D1	CM	1,969.33	1,470.83	6,130.32	2,392.62	11,963.10

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 12 D.I. KHAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	1,969.33	1,470.83	6,797.46	2,559.41	12,797.03
401gvi	PRECAST CONCRETE CLASS D3	CM	1,969.33	1,470.83	7,466.84	2,726.75	13,633.75
401h	PLUM CONCRETE	CM	864.03	1,109.69	2,308.80	1,070.63	5,353.15
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	1,870.71	0.00	71,488.41	18,339.78	91,698.90
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	1,870.71	0.00	75,688.41	19,389.78	96,948.90
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,500.60	3,667.20	88,646.40	23,453.55	117,267.75
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	2,925.66	12,010.50	150,829.84	41,441.50	207,207.49
405b	LAUNCHING OF GIRDER	TON	68.10	796.91	0.00	216.25	1,081.26
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	129.46	0.00	1,455.95	396.35	1,981.76
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	129.46	0.00	851.74	245.30	1,226.50
406ci	STEEL EXPANSION JOINTS (Local)	KG	10.72	18.40	142.37	42.87	214.37
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	444.00	0.00	86,208.52	21,663.13	108,315.65
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	459.00	0.00	135,021.13	33,870.03	169,350.16
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	504.00	0.00	1,149,159.46	287,415.86	1,437,079.32
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	444.00	0.00	73,339.04	18,445.76	92,228.80
406dii	PVC WATER STOP 8" SIZE	M	111.89	0.00	460.78	143.17	715.84
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.61	0.41	2.04
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.37	0.85	4.23
406f	ASPHALT FELT (3 PLY)	SM	46.26	0.00	256.45	75.68	378.39

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 12 D.I. KHAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	22.00	48.58	151.02	55.40	277.01
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	287.37	3,155.77	489.54	983.17	4,915.85
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	436.80	4,796.77	654.72	1,472.07	7,360.36
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	436.80	7,330.09	817.44	2,146.08	10,730.42
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	728.00	12,216.82	1,152.33	3,524.29	17,621.45
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	606.67	10,180.69	1,012.79	2,950.04	14,750.19
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,092.00	18,325.24	1,570.95	5,247.05	26,235.24
407h	PILE LOAD TEST UPTO 120 TON	EACH	25,071.36	86,125.76	81,427.00	48,156.03	240,780.15
407i	PILE LOAD TEST UPTO 240 TON	EACH	25,071.36	86,125.76	179,309.53	72,626.66	363,133.31
407j	PILE LOAD TEST UPTO 360 TON	EACH	68,271.36	95,444.48	233,615.24	99,332.77	496,663.85
407k	PILE LOAD TEST UPTO 550 TON	EACH	100,671.36	119,305.60	369,299.80	147,319.19	736,595.95
407l	PILE LOAD TEST UPTO 800 TON	EACH	148,998.72	143,166.72	600,933.40	223,274.71	1,116,373.55
407m	CONFIRMATORY BORING (NX SIZE)	M	205.73	2,639.89	22.50	717.03	3,585.15
407n	PERMANENT PILE CASING FOR PILES	Ton	269.67	3,993.41	87,735.30	22,999.59	114,997.97
410	BRICK WORK	CM	376.02	453.06	3,926.91	1,189.00	5,944.99
411a	STONE MASONRY RANDOM DRY	CM	395.78	165.94	980.37	385.52	1,927.61
411b	STONE MASONRY RANDOM WITH MORTAR	CM	468.78	263.54	1,866.12	649.61	3,248.04
411c	STONE MASONRY DRESSED UNCOURSED DRY	CM	542.78	165.94	1,128.69	459.35	2,296.75
411d	STONE MASONRY DRESSED UNCOURSED WITH MORTAR	CM	616.78	263.54	1,979.75	715.02	3,575.08
411g	ROLL POINTING	SM	80.19	19.52	95.76	48.87	244.34
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	811.78	419.50	1,979.75	802.75	4,013.77
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	251.97	554.74	959.23	441.48	2,207.42

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 12 D.I. KHAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	251.97	616.97	1,165.28	508.56	2,542.78
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	239.79	1,097.40	1,428.93	691.53	3,457.65
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	250.72	1,377.91	2,115.37	936.00	4,679.99
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	291.68	1,772.89	3,566.37	1,407.74	7,038.68
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	363.34	2,187.37	5,484.97	2,008.92	10,044.60
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	470.20	2,171.36	6,516.67	2,289.56	11,447.79
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	553.10	2,636.66	11,979.13	3,792.22	18,961.11
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	656.12	3,076.10	18,760.89	5,623.28	28,116.38
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	251.97	554.74	1,230.24	509.24	2,546.19
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	245.03	616.97	1,513.72	593.93	2,969.65
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	239.79	1,097.40	1,777.38	778.64	3,893.21
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	250.72	1,377.91	2,773.54	1,100.54	5,502.70
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	291.68	1,772.89	4,379.40	1,610.99	8,054.97
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	363.34	2,187.37	6,569.02	2,279.93	11,399.66
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	470.20	2,171.36	8,065.30	2,676.72	13,383.58
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	553.10	2,636.66	14,698.39	4,472.04	22,360.18
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	656.12	3,076.10	23,444.80	6,794.25	33,971.26
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	99.94	157.23	601.24	214.61	1,073.03

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 12 D.I. KHAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	886.80	845.94	3,022.22	1,188.74	5,943.70
507a	STEEL WIRE MESH FOR GABIONS	KG	6.25	0.00	123.41	32.41	162.07
507b	ROCK FILL IN GABIONS	CM	106.68	0.00	617.93	181.15	905.76
508a	BRICK PAVING (SINGLE COURSE)	SM	124.67	38.19	323.14	121.50	607.50
508b	BRICK PAVING (DOUBLE COURSE)	SM	222.67	38.19	643.27	226.03	1,130.16
509a	RIPRAP, CLASS A	CM	540.56	0.00	662.06	300.66	1,503.28
509b	RIPRAP, CLASS B	CM	395.65	180.10	656.77	308.13	1,540.64
509c	RIPRAP, CLASS C	CM	387.71	187.60	662.06	309.34	1,546.71
509c1	RIPRAP, CLASS D	CM	387.71	225.12	662.06	318.72	1,593.61
509d	GROUTED RIPRAP, CLASS A	CM	661.09	170.59	2,379.65	802.83	4,014.16
509e	GROUTED RIPRAP, CLASS B	CM	512.07	316.57	2,199.48	757.03	3,785.15
509f	GROUTED RIPRAP, CLASS C	CM	492.73	301.33	2,195.40	747.36	3,736.81
509f1	GROUTED RIPRAP, CLASS D	CM	492.73	338.85	2,356.36	796.98	3,984.92
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	896.27	481.58	3,542.46	1,230.08	6,150.38
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	54.38	275.72	573.35	225.86	1,129.31
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	112.82	884.71	0.00	249.38	1,246.90
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	170.17	103.71	107.59	95.37	476.84
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	217.82	132.75	137.71	122.07	610.35
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	277.02	288.91	492.50	264.61	1,323.04
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	346.28	361.14	615.62	330.76	1,653.80
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	277.02	288.91	264.05	207.50	1,037.48
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	346.28	361.14	330.06	259.37	1,296.85

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 12 D.I. KHAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	404.94	1,157.76	5,498.58	1,765.32	8,826.60
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,127.77	782.78	5,490.11	1,850.16	9,250.82
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	29.96	66.38	576.08	168.10	840.52
603	BRICK EDGING	M	9.91	0.00	52.80	15.68	78.39
604a	METAL GUARD RAIL	M	75.21	55.31	2,652.72	695.81	3,479.06
604b	METAL GUARD RAIL END PIECES	EACH	98.93	533.21	2,984.36	904.13	4,520.63
604d	STEEL POST FOR METAL GUARD RAIL	EACH	112.80	533.21	2,620.47	816.62	4,083.10
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,021.38	1,160.70	12,290.38	3,868.11	19,340.57
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,021.38	801.50	11,453.41	3,569.07	17,845.36
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	260.37	393.19	8,853.89	2,376.86	11,884.30
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	79.50	589.78	10,662.01	2,832.82	14,164.12
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	260.37	844.19	19,113.14	5,054.42	25,272.12
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	848.55	921.65	35,223.46	9,248.42	46,242.08
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	169.71	223.78	16,495.35	4,222.21	21,111.05
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	323.88	0.00	2,359.35	670.81	3,354.04
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	323.88	0.00	3,539.03	965.73	4,828.64
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.26	6.00	26.51	8.94	44.71
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.09	3.51	61.83	16.61	83.04
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.26	6.00	35.37	11.16	55.79
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.09	3.51	82.47	21.77	108.84
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	88.61	29.98	256.16	93.69	468.43

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 12 D.I. KHAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	88.61	52.71	779.17	230.12	1,150.61
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.07	7.50	37.00	12.14	60.71
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.07	13.18	106.73	31.00	154.98
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.07	7.50	49.34	15.23	76.13
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.07	13.18	142.31	39.89	199.45
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	88.61	29.98	357.27	118.96	594.82
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	88.61	52.71	1,345.85	371.79	1,858.95
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	73.61	29.98	170.77	68.59	342.95
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	73.61	52.71	520.23	161.64	808.19
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	73.61	29.98	238.18	85.44	427.21
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	73.61	52.71	898.59	256.23	1,281.13
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	10.75	111.18	179.96	75.47	377.36
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	10.75	111.18	212.06	83.50	417.48
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	114.97	182.71	360.65	164.58	822.91
610c	KILOMETER POST	EACH	715.05	1,321.13	1,828.27	966.11	4,830.57
610d	TEN KILOMETER POST	EACH	1,380.10	2,642.27	3,492.84	1,878.80	9,394.02
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	147.51	66.38	1,409.31	405.80	2,029.00
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	131.25	821.01	2.14	238.60	1,193.00

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

**DIR (LOWER)**  
**(15)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15 DIR (LOWER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.82	15.76	0.00	4.14	20.72
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	8.29	262.58	1.88	68.19	340.93
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	23.66	635.47	4.22	165.84	829.19
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	94.63	2,541.89	16.89	663.35	3,316.75
103	STRIPPING	CM	2.89	153.65	0.00	39.13	195.67
104	COMPACTION OF NATURAL GROUND	SM	0.41	14.95	2.70	4.52	22.58
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	5.33	227.95	0.00	58.32	291.60
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	128.34	360.08	125.00	153.36	766.78
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	19.51	541.85	0.00	140.34	701.70
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	13.07	422.98	0.00	109.01	545.06
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	4.36	205.65	0.00	52.50	262.51
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	128.34	360.08	125.00	153.36	766.78
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	22.57	492.05	0.00	128.65	643.27
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	11.15	422.98	0.00	108.53	542.67
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	8.77	221.54	0.00	57.58	287.89
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	75.62	664.63	75.56	203.95	1,019.75
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	125.37	400.09	125.00	162.62	813.08
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	112.83	442.22	0.00	138.76	693.81
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	64.48	316.49	0.00	95.24	476.20
107d	GRANULAR BACKFILL	CM	39.03	193.34	863.81	274.04	1,370.21
107e	COMMON BACKFILL	CM	32.51	110.10	18.00	40.15	200.76
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	8.09	234.11	18.00	65.05	325.25

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15 DIR (LOWER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	23.12	578.46	144.73	186.58	932.88
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	17.34	637.82	8.55	165.93	829.64
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	15.41	574.85	8.00	149.56	747.82
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	9.20	119.41	159.08	71.92	359.61
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	7.15	121.79	18.00	36.73	183.67
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	16.74	277.82	10.70	76.31	381.57
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.62	43.86	5.15	12.66	63.29
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.17	30.11	2.73	8.50	42.51
110	IMPROVED SUB-GARDE	CM	11.66	190.72	305.66	127.01	635.05
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	0.97	23.59	2.80	6.84	34.20
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.48	26.79	2.80	7.77	38.83
201	GRANULAR SUB-BASE	CM	9.39	231.80	805.38	261.64	1,308.21
202	AGGREGATE BASE	CM	11.08	282.85	907.69	300.41	1,502.03
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	91.19	2,324.40	9,144.32	2,889.98	14,449.88
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	91.19	2,324.40	9,433.39	2,962.24	14,811.22
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	98.02	2,427.71	9,135.55	2,915.32	14,576.59
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	98.02	2,427.71	9,443.39	2,992.28	14,961.40
204b	CEMENT STABILIZED BASE	CM	33.68	780.07	1,133.31	486.77	2,433.83
204c	CEMENT CONTENT	TON	125.00	0.00	8,106.00	2,057.75	10,288.75
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	287.42	2,060.49	61,508.96	15,964.22	79,821.09

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15 DIR (LOWER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	287.42	2,060.49	61,508.96	15,964.22	79,821.09
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	106.96	188.22	1,175.66	367.71	1,838.54
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	177.31	3,721.78	7,580.38	2,869.87	14,349.35
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	117.74	207.88	929.04	313.67	1,568.33
207a	DEEP PATCHING (0-15 cm)	SM	1.96	64.78	24.90	22.91	114.54
207b	DEEP PATCHING (15-30 cm)	SM	1.96	64.78	24.90	22.91	114.54
208	REINSTATEMENT OF ROAD SURFACE	SM	2.12	104.50	1.98	27.15	135.75
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	5.46	373.82	12.00	97.82	489.09
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.09	40.20	2.40	10.92	54.61
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.36	2.36	69.22	17.99	89.93
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.35	2.36	60.33	15.76	78.80
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.14	0.86	27.80	7.20	36.01
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.14	0.86	24.12	6.28	31.41
304a	SINGLE SURFACE TREATMENT	SM	0.93	11.24	149.23	40.35	201.76
304b	DOUBLE SURFACE TREATMENT	SM	1.37	21.60	283.37	76.59	382.93
304c	TRIPLE SURFACE TREATMENT	SM	2.30	30.32	329.34	90.49	452.46
304d	SEAL COAT	SM	0.87	6.38	34.72	10.49	52.46
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	81.21	2,293.29	9,834.60	3,052.28	15,261.38
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	81.21	2,198.28	10,486.03	3,191.38	15,956.90
307a	DENSE GRADED HOT BIT-MAC	CM	197.00	513.14	7,116.94	1,956.77	9,783.84
307b	OPEN GRADED HOT BIT-MAC	CM	197.00	513.14	6,922.20	1,908.08	9,540.42

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15 DIR (LOWER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	34.30	1,050.92	3,603.18	1,172.10	5,860.49
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	252.32	1,746.20	61,508.96	15,876.87	79,384.35
309a	COLD MILLING, 0-30 mm	SM	1.15	52.01	18.96	18.03	90.15
309b	COLD MILLING, 0-50 mm	SM	1.92	86.68	31.60	30.05	150.25
309c	COLD MILLING, 0-70 mm	SM	2.88	130.02	47.40	45.08	225.38
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	618.78	2,175.42	4,250.86	1,761.26	8,806.32
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	618.78	2,175.42	4,877.28	1,917.87	9,589.35
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	618.78	2,175.42	5,203.05	1,999.31	9,996.57
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	618.78	2,175.42	4,537.42	1,832.91	9,164.53
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	618.78	2,175.42	5,163.78	1,989.50	9,947.48
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	618.78	2,175.42	5,489.43	2,070.91	10,354.53
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	618.78	2,175.42	4,821.30	1,903.87	9,519.37
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	618.78	2,175.42	5,447.66	2,060.46	10,302.32
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	618.78	2,175.42	5,759.96	2,138.54	10,692.70
401b	CONCRETE CLASS B	CM	796.25	1,109.69	3,579.99	1,371.48	6,857.42
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	603.77	2,175.42	4,017.65	1,699.21	8,496.04
401cii	CONCRETE CLASS C (ON GROUND)	CM	603.77	2,175.42	4,644.01	1,855.80	9,278.99
401ciii	CONCRETE CLASS C (ELEVATED)	CM	603.77	2,175.42	4,969.78	1,937.24	9,686.21
401d	CONCRETE CLASS D1	CM	961.24	2,689.24	6,993.97	2,661.11	13,305.56
401e	CONCRETE CLASS Y	CM	1,336.27	703.81	5,443.19	1,870.82	9,354.09
401f	LEAN CONCRETE	CM	501.66	759.81	3,019.56	1,070.26	5,351.28
401gi	PRECAST CONCRETE, CLASS A1	CM	2,007.67	1,470.83	4,841.74	2,080.06	10,400.30
401gii	PRECAST CONCRETE CLASS A3	CM	2,007.67	1,470.83	5,462.91	2,235.35	11,176.75
401giii	PRECAST CONCRETE, CLASS B	CM	2,007.67	1,470.83	4,220.75	1,924.81	9,624.06
401giv	PRECAST CONCRETE CLASS D1	CM	2,007.67	1,470.83	7,001.37	2,619.97	13,099.83

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15 DIR (LOWER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,007.67	1,470.83	7,774.22	2,813.18	14,065.89
401gvi	PRECAST CONCRETE CLASS D3	CM	2,007.67	1,470.83	8,548.24	3,006.68	15,033.42
401h	PLUM CONCRETE	CM	879.59	1,109.69	2,785.31	1,193.65	5,968.23
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	1,890.71	0.00	71,705.61	18,399.08	91,995.40
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	1,890.71	0.00	75,905.61	19,449.08	97,245.40
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,516.60	3,667.20	88,646.40	23,457.55	117,287.75
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	2,925.66	12,010.50	150,989.68	41,481.46	207,407.30
405b	LAUNCHING OF GIRDER	TON	68.10	796.91	0.00	216.25	1,081.26
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	131.68	0.00	1,455.59	396.82	1,984.08
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	131.68	0.00	851.38	245.76	1,228.82
406ci	STEEL EXPANSION JOINTS (Local)	KG	10.87	18.40	142.37	42.91	214.56
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	449.00	0.00	86,208.52	21,664.38	108,321.90
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	464.63	0.00	135,021.13	33,871.44	169,357.19
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	511.50	0.00	1,149,159.46	287,417.74	1,437,088.69
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	449.00	0.00	73,339.04	18,447.01	92,235.05
406dii	PVC WATER STOP 8" SIZE	M	113.89	0.00	460.78	143.67	718.34
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.61	0.41	2.04
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.37	0.85	4.24
406f	ASPHALT FELT (3 PLY)	SM	46.76	0.00	256.12	75.72	378.60

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15 DIR (LOWER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	22.40	48.58	151.02	55.50	277.51
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	287.63	3,155.77	489.54	983.24	4,916.18
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	437.20	4,796.77	654.72	1,472.17	7,360.86
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	437.20	7,330.09	817.44	2,146.18	10,730.92
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	728.67	12,216.82	1,152.33	3,524.46	17,622.28
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	607.22	10,180.69	1,012.79	2,950.18	14,750.88
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,093.00	18,325.24	1,570.95	5,247.30	26,236.49
407h	PILE LOAD TEST UPTO 120 TON	EACH	25,971.36	86,125.76	120,238.52	58,083.91	290,419.55
407i	PILE LOAD TEST UPTO 240 TON	EACH	25,971.36	86,125.76	256,932.57	92,257.42	461,287.11
407j	PILE LOAD TEST UPTO 360 TON	EACH	70,971.36	95,444.48	350,049.80	129,116.41	645,582.05
407k	PILE LOAD TEST UPTO 550 TON	EACH	104,721.36	119,305.60	558,947.00	195,743.49	978,717.45
407l	PILE LOAD TEST UPTO 800 TON	EACH	154,998.72	143,166.72	905,251.00	300,854.11	1,504,270.55
407m	CONFIRMATORY BORING (NX SIZE)	M	209.48	2,639.89	22.50	717.97	3,589.84
407n	PERMANENT PILE CASING FOR PILES	Ton	274.67	3,993.41	87,735.30	23,000.84	115,004.22
410	BRICK WORK	CM	382.22	453.06	4,191.24	1,256.63	6,283.15
411a	STONE MASONRY RANDOM DRY	CM	402.78	165.94	1,033.54	400.56	2,002.81
411b	STONE MASONRY RANDOM WITH MORTAR	CM	477.78	263.54	2,230.10	742.85	3,714.26
411c	STONE MASONRY DRESSED UNCOURSED DRY	CM	552.78	165.94	1,367.31	521.51	2,607.54
411d	STONE MASONRY DRESSED UNCOURSED WITH MORTAR	CM	627.78	263.54	2,476.68	842.00	4,210.00
411g	ROLL POINTING	SM	81.39	19.52	102.07	50.75	253.73
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	827.78	419.50	2,476.68	930.99	4,654.94
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	259.72	554.74	926.64	435.28	2,176.38

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15 DIR (LOWER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	259.72	616.97	1,105.37	495.52	2,477.58
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	246.29	1,097.40	1,333.72	669.35	3,346.76
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	257.99	1,377.91	1,949.01	896.23	4,481.13
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	299.86	1,772.89	3,217.99	1,322.69	6,613.43
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	372.88	2,187.37	4,956.59	1,879.21	9,396.05
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	482.55	2,171.36	5,989.41	2,160.83	10,804.16
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	568.10	2,636.66	11,434.33	3,659.77	18,298.86
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	673.20	3,076.10	16,546.14	5,073.86	25,369.29
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	259.72	554.74	1,197.65	503.03	2,515.14
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	252.78	616.97	1,453.82	580.89	2,904.46
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	246.29	1,097.40	1,682.16	756.46	3,782.31
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	257.99	1,377.91	2,607.17	1,060.77	5,303.83
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	299.86	1,772.89	4,031.03	1,525.95	7,629.73
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	372.88	2,187.37	6,040.63	2,150.22	10,751.10
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	482.55	2,171.36	7,538.04	2,547.99	12,739.95
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	568.10	2,636.66	14,153.59	4,339.59	21,697.93
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	673.20	3,076.10	21,230.05	6,244.84	31,224.18
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	102.78	157.23	862.44	280.61	1,403.06

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15 DIR (LOWER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	900.68	845.94	3,665.77	1,353.10	6,765.49
507a	STEEL WIRE MESH FOR GABIONS	KG	6.33	0.00	123.41	32.44	162.18
507b	ROCK FILL IN GABIONS	CM	110.18	0.00	667.54	194.43	972.16
508a	BRICK PAVING (SINGLE COURSE)	SM	127.27	38.19	345.20	127.66	638.32
508b	BRICK PAVING (DOUBLE COURSE)	SM	227.27	38.19	682.96	237.10	1,185.52
509a	RIPRAP, CLASS A	CM	550.81	0.00	715.23	316.51	1,582.54
509b	RIPRAP, CLASS B	CM	400.65	180.10	662.43	310.79	1,553.97
509c	RIPRAP, CLASS C	CM	392.21	187.60	728.48	327.07	1,635.35
509c1	RIPRAP, CLASS D	CM	392.21	225.12	789.19	351.63	1,758.14
509d	GROUTED RIPRAP, CLASS A	CM	673.84	170.59	2,663.48	876.98	4,384.88
509e	GROUTED RIPRAP, CLASS B	CM	519.07	316.57	2,411.46	811.78	4,058.88
509f	GROUTED RIPRAP, CLASS C	CM	499.23	301.33	2,486.05	821.65	4,108.26
509f1	GROUTED RIPRAP, CLASS D	CM	499.23	338.85	2,735.49	893.39	4,466.96
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	916.27	481.58	4,282.81	1,420.16	7,100.82
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	56.05	275.72	866.96	299.68	1,498.40
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	114.82	884.71	0.00	249.88	1,249.40
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	173.61	103.71	116.22	98.39	491.93
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	222.22	132.75	148.77	125.93	629.67
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	282.22	288.91	571.24	285.59	1,427.96
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	352.78	361.14	714.05	356.99	1,784.95
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	282.22	288.91	322.81	223.49	1,117.43
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	352.78	361.14	403.51	279.36	1,396.78

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15 DIR (LOWER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	409.86	1,157.76	5,829.27	1,849.22	9,246.11
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,149.03	782.78	5,810.35	1,935.54	9,677.69
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	30.56	66.38	631.81	182.19	910.93
603	BRICK EDGING	M	10.14	0.00	52.80	15.73	78.67
604a	METAL GUARD RAIL	M	76.54	55.31	2,662.74	698.65	3,493.24
604b	METAL GUARD RAIL END PIECES	EACH	100.93	533.21	2,995.20	907.34	4,536.68
604d	STEEL POST FOR METAL GUARD RAIL	EACH	114.80	533.21	2,630.55	819.64	4,098.20
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,076.38	1,160.70	12,818.02	4,013.77	20,068.87
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,076.38	801.50	11,978.46	3,714.09	18,570.43
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	266.03	393.19	8,927.58	2,396.70	11,983.50
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	81.25	589.78	10,772.55	2,860.89	14,304.47
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	266.03	844.19	19,381.62	5,122.96	25,614.79
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	874.05	921.65	35,626.18	9,355.47	46,777.35
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	174.81	223.78	16,575.90	4,243.62	21,218.11
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	326.38	0.00	2,359.35	671.43	3,357.16
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	326.38	0.00	3,539.03	966.35	4,831.76
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.33	6.00	26.51	8.96	44.80
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.11	3.51	61.83	16.61	83.07
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.33	6.00	35.37	11.18	55.88
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.11	3.51	82.47	21.77	108.87
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	89.31	29.98	256.16	93.86	469.31

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15 DIR (LOWER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	89.31	52.71	779.17	230.30	1,151.49
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.17	7.50	37.00	12.17	60.83
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.17	13.18	106.73	31.02	155.10
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.17	7.50	49.34	15.25	76.25
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.17	13.18	142.31	39.91	199.57
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	89.31	29.98	357.27	119.14	595.70
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	89.31	52.71	1,345.85	371.97	1,859.83
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	74.31	29.98	170.77	68.76	343.82
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	74.31	52.71	520.23	161.81	809.06
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	74.31	29.98	238.18	85.62	428.09
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	74.31	52.71	898.59	256.40	1,282.00
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	10.94	111.18	180.74	75.71	378.57
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	10.94	111.18	212.84	83.74	418.69
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	118.63	182.71	402.95	176.08	880.38
610c	KILOMETER POST	EACH	730.55	1,321.13	1,963.80	1,003.87	5,019.36
610d	TEN KILOMETER POST	EACH	1,411.10	2,642.27	3,707.03	1,940.10	9,700.51
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	151.11	66.38	1,343.55	390.26	1,951.30
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	133.92	821.01	2.14	239.27	1,196.35

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

**DIR (UPPER)**  
**(15A)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15A DIR (UPPER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.82	15.76	0.00	4.14	20.72
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	8.29	262.58	1.88	68.19	340.93
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	23.66	635.47	4.22	165.84	829.19
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	94.63	2,541.89	16.89	663.35	3,316.75
103	STRIPPING	CM	2.89	153.65	0.00	39.13	195.67
104	COMPACTION OF NATURAL GROUND	SM	0.41	14.95	2.70	4.52	22.58
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	5.33	227.95	0.00	58.32	291.60
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	128.34	360.08	125.00	153.36	766.78
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	19.51	541.85	0.00	140.34	701.70
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	13.07	422.98	0.00	109.01	545.06
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	4.36	205.65	0.00	52.50	262.51
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	128.34	360.08	125.00	153.36	766.78
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	22.57	492.05	0.00	128.65	643.27
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	11.15	422.98	0.00	108.53	542.67
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	8.77	221.54	0.00	57.58	287.89
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	75.62	664.63	75.56	203.95	1,019.75
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	125.37	400.09	125.00	162.62	813.08
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	112.83	442.22	0.00	138.76	693.81
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	64.48	316.49	0.00	95.24	476.20
107d	GRANULAR BACKFILL	CM	39.03	193.34	1,180.98	353.34	1,766.68
107e	COMMON BACKFILL	CM	32.51	110.10	18.00	40.15	200.76
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	8.09	234.11	18.00	65.05	325.25

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15A DIR (UPPER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	23.12	578.46	144.73	186.58	932.88
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	17.34	637.82	8.55	165.93	829.64
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	15.41	574.85	8.00	149.56	747.82
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	9.20	119.41	159.08	71.92	359.61
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	7.15	121.79	18.00	36.73	183.67
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	16.74	277.82	10.70	76.31	381.57
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.62	43.86	5.15	12.66	63.29
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.17	30.11	2.73	8.50	42.51
110	IMPROVED SUB-GARDE	CM	11.66	190.72	382.39	146.19	730.96
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	0.97	23.59	2.80	6.84	34.20
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.48	26.79	2.80	7.77	38.83
201	GRANULAR SUB-BASE	CM	9.39	231.80	1,120.03	340.31	1,701.53
202	AGGREGATE BASE	CM	11.08	282.85	1,209.95	375.97	1,879.85
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	91.19	2,324.40	9,535.63	2,987.80	14,939.01
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	91.19	2,324.40	9,818.72	3,058.58	15,292.88
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	98.02	2,427.71	9,526.81	3,013.13	15,065.67
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	98.02	2,427.71	9,828.69	3,088.60	15,443.02
204b	CEMENT STABILIZED BASE	CM	33.68	780.07	1,517.00	582.69	2,913.44
204c	CEMENT CONTENT	TON	125.00	0.00	8,316.00	2,110.25	10,551.25
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	287.42	2,060.49	61,591.22	15,984.78	79,923.92

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15A DIR (UPPER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	287.42	2,060.49	61,591.22	15,984.78	79,923.92
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	106.96	188.22	1,490.27	446.36	2,231.81
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	177.31	3,721.78	7,917.57	2,954.17	14,770.83
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	117.74	207.88	1,338.96	416.15	2,080.73
207a	DEEP PATCHING (0-15 cm)	SM	1.96	64.78	32.18	24.73	123.64
207b	DEEP PATCHING (15-30 cm)	SM	1.96	64.78	32.18	24.73	123.64
208	REINSTATEMENT OF ROAD SURFACE	SM	2.12	104.50	1.98	27.15	135.75
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	5.46	373.82	12.00	97.82	489.09
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.09	40.20	2.40	10.92	54.61
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.36	2.36	69.31	18.01	90.03
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.35	2.36	60.41	15.78	78.91
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.14	0.86	27.83	7.21	36.05
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.14	0.86	24.15	6.29	31.45
304a	SINGLE SURFACE TREATMENT	SM	0.93	11.24	151.26	40.86	204.30
304b	DOUBLE SURFACE TREATMENT	SM	1.37	21.60	288.98	77.99	389.94
304c	TRIPLE SURFACE TREATMENT	SM	2.30	30.32	335.94	92.14	460.71
304d	SEAL COAT	SM	0.87	6.38	35.48	10.68	53.40
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	81.21	2,293.29	10,231.54	3,151.51	15,757.56
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	81.21	2,198.28	10,874.05	3,288.39	16,441.93
307a	DENSE GRADED HOT BIT-MAC	CM	197.00	513.14	7,432.44	2,035.64	10,178.22
307b	OPEN GRADED HOT BIT-MAC	CM	197.00	513.14	7,229.25	1,984.85	9,924.23

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15A DIR (UPPER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	34.30	1,050.92	3,603.18	1,172.10	5,860.49
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	252.32	1,746.20	61,591.22	15,897.44	79,487.18
309a	COLD MILLING, 0-30 mm	SM	1.15	52.01	18.96	18.03	90.15
309b	COLD MILLING, 0-50 mm	SM	1.92	86.68	31.60	30.05	150.25
309c	COLD MILLING, 0-70 mm	SM	2.88	130.02	47.40	45.08	225.38
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	618.78	2,175.42	4,626.94	1,855.28	9,276.42
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	618.78	2,175.42	5,253.40	2,011.90	10,059.50
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	618.78	2,175.42	5,579.17	2,093.34	10,466.71
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	618.78	2,175.42	4,901.47	1,923.92	9,619.58
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	618.78	2,175.42	5,527.83	2,080.51	10,402.53
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	618.78	2,175.42	5,853.44	2,161.91	10,809.55
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	618.78	2,175.42	5,205.09	1,999.82	9,999.11
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	618.78	2,175.42	5,831.45	2,156.41	10,782.06
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	618.78	2,175.42	6,135.77	2,232.49	11,162.46
401b	CONCRETE CLASS B	CM	796.25	1,109.69	3,948.78	1,463.68	7,318.40
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	603.77	2,175.42	4,384.21	1,790.85	8,954.25
401cii	CONCRETE CLASS C (ON GROUND)	CM	603.77	2,175.42	5,010.57	1,947.44	9,737.20
401ciii	CONCRETE CLASS C (ELEVATED)	CM	603.77	2,175.42	5,336.34	2,028.88	10,144.42
401d	CONCRETE CLASS D1	CM	961.24	2,689.24	7,381.11	2,757.90	13,789.49
401e	CONCRETE CLASS Y	CM	1,336.27	703.81	5,834.68	1,968.69	9,843.46
401f	LEAN CONCRETE	CM	501.66	759.81	3,390.18	1,162.91	5,814.55
401gi	PRECAST CONCRETE, CLASS A1	CM	2,007.67	1,470.83	5,217.66	2,174.04	10,870.19
401gii	PRECAST CONCRETE CLASS A3	CM	2,007.67	1,470.83	5,839.22	2,329.43	11,647.15
401giii	PRECAST CONCRETE, CLASS B	CM	2,007.67	1,470.83	4,603.48	2,020.49	10,102.46
401giv	PRECAST CONCRETE CLASS D1	CM	2,007.67	1,470.83	7,388.97	2,716.87	13,584.33

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15A DIR (UPPER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,007.67	1,470.83	8,163.53	2,910.51	14,552.53
401gvi	PRECAST CONCRETE CLASS D3	CM	2,007.67	1,470.83	8,939.73	3,104.56	15,522.79
401h	PLUM CONCRETE	CM	879.59	1,109.69	3,106.79	1,274.02	6,370.09
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	1,890.71	0.00	71,743.56	18,408.57	92,042.84
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	1,890.71	0.00	75,943.56	19,458.57	97,292.84
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,516.60	3,667.20	88,646.40	23,457.55	117,287.75
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	2,925.66	12,010.50	151,025.14	41,490.32	207,451.62
405b	LAUNCHING OF GIRDER	TON	68.10	796.91	0.00	216.25	1,081.26
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	131.68	0.00	1,451.82	395.88	1,979.38
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	131.68	0.00	851.47	245.79	1,228.93
406ci	STEEL EXPANSION JOINTS (Local)	KG	10.87	18.40	142.37	42.91	214.56
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	449.00	0.00	86,208.52	21,664.38	108,321.90
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	464.63	0.00	135,021.13	33,871.44	169,357.19
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	511.50	0.00	1,149,159.46	287,417.74	1,437,088.69
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	449.00	0.00	73,339.04	18,447.01	92,235.05
406dii	PVC WATER STOP 8" SIZE	M	113.89	0.00	460.78	143.67	718.34
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.61	0.41	2.04
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.37	0.85	4.24
406f	ASPHALT FELT (3 PLY)	SM	46.76	0.00	256.20	75.74	378.70

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15A DIR (UPPER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	22.40	48.58	151.02	55.50	277.51
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	287.63	3,155.77	489.54	983.24	4,916.18
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	437.20	4,796.77	654.72	1,472.17	7,360.86
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	437.20	7,330.09	817.44	2,146.18	10,730.92
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	728.67	12,216.82	1,152.33	3,524.46	17,622.28
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	607.22	10,180.69	1,012.79	2,950.18	14,750.88
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,093.00	18,325.24	1,570.95	5,247.30	26,236.49
407h	PILE LOAD TEST UPTO 120 TON	EACH	25,971.36	86,125.76	140,686.20	63,195.83	315,979.15
407i	PILE LOAD TEST UPTO 240 TON	EACH	25,971.36	86,125.76	297,827.93	102,481.26	512,406.31
407j	PILE LOAD TEST UPTO 360 TON	EACH	70,971.36	95,444.48	411,392.84	144,452.17	722,260.85
407k	PILE LOAD TEST UPTO 550 TON	EACH	104,721.36	119,305.60	658,861.80	220,722.19	1,103,610.95
407l	PILE LOAD TEST UPTO 800 TON	EACH	154,998.72	143,166.72	1,065,579.40	340,936.21	1,704,681.05
407m	CONFIRMATORY BORING (NX SIZE)	M	209.48	2,639.89	22.50	717.97	3,589.84
407n	PERMANENT PILE CASING FOR PILES	Ton	274.67	3,993.41	87,735.30	23,000.84	115,004.22
410	BRICK WORK	CM	382.22	453.06	4,287.59	1,280.72	6,403.60
411a	STONE MASONRY RANDOM DRY	CM	402.78	165.94	1,202.99	442.92	2,214.62
411b	STONE MASONRY RANDOM WITH MORTAR	CM	477.78	263.54	2,516.49	814.45	4,072.26
411c	STONE MASONRY DRESSED UNCOURSED DRY	CM	552.78	165.94	1,847.02	641.43	3,207.17
411d	STONE MASONRY DRESSED UNCOURSED WITH MORTAR	CM	627.78	263.54	3,048.60	984.98	4,924.90
411g	ROLL POINTING	SM	81.39	19.52	104.23	51.29	256.43
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	827.78	419.50	3,048.60	1,073.97	5,369.84
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	259.72	554.74	940.68	438.78	2,193.92

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15A DIR (UPPER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	259.72	616.97	1,126.87	500.89	2,504.45
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	246.29	1,097.40	1,364.23	676.98	3,384.90
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	257.99	1,377.91	1,997.17	908.27	4,541.33
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	299.86	1,772.89	3,308.74	1,345.37	6,726.86
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	372.88	2,187.37	5,090.95	1,912.80	9,564.00
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	482.55	2,171.36	6,123.96	2,194.47	10,972.35
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	568.10	2,636.66	11,576.32	3,695.27	18,476.34
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	673.20	3,076.10	17,065.73	5,203.76	26,018.78
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	259.72	554.74	1,211.69	506.54	2,532.68
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	252.78	616.97	1,475.31	586.26	2,931.32
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	246.29	1,097.40	1,712.67	764.09	3,820.45
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	257.99	1,377.91	2,655.33	1,072.81	5,364.03
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	299.86	1,772.89	4,121.77	1,548.63	7,743.15
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	372.88	2,187.37	6,175.00	2,183.81	10,919.06
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	482.55	2,171.36	7,672.60	2,581.63	12,908.15
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	568.10	2,636.66	14,295.58	4,375.08	21,875.42
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	673.20	3,076.10	21,749.64	6,374.73	31,873.67
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	102.78	157.23	1,179.69	359.92	1,799.62

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15A DIR (UPPER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	900.68	845.94	4,036.78	1,445.85	7,229.26
507a	STEEL WIRE MESH FOR GABIONS	KG	6.33	0.00	123.41	32.44	162.18
507b	ROCK FILL IN GABIONS	CM	110.18	0.00	825.70	233.97	1,169.85
508a	BRICK PAVING (SINGLE COURSE)	SM	127.27	38.19	356.81	130.57	652.84
508b	BRICK PAVING (DOUBLE COURSE)	SM	227.27	38.19	703.87	242.33	1,211.66
509a	RIPRAP, CLASS A	CM	550.81	0.00	884.68	358.87	1,794.35
509b	RIPRAP, CLASS B	CM	400.65	180.10	965.35	386.52	1,932.62
509c	RIPRAP, CLASS C	CM	392.21	187.60	1,061.61	410.35	2,051.77
509c1	RIPRAP, CLASS D	CM	392.21	225.12	1,150.08	441.85	2,209.25
509d	GROUTED RIPRAP, CLASS A	CM	673.84	170.59	2,912.52	939.24	4,696.18
509e	GROUTED RIPRAP, CLASS B	CM	519.07	316.57	2,785.63	905.32	4,526.59
509f	GROUTED RIPRAP, CLASS C	CM	499.23	301.33	2,895.07	923.91	4,619.53
509f1	GROUTED RIPRAP, CLASS D	CM	499.23	338.85	3,182.34	1,005.10	5,025.52
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	916.27	481.58	4,645.58	1,510.86	7,554.28
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	56.05	275.72	1,184.87	379.16	1,895.79
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	114.82	884.71	0.00	249.88	1,249.40
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	173.61	103.71	143.76	105.27	526.35
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	222.22	132.75	184.01	134.75	673.73
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	282.22	288.91	625.42	299.14	1,495.70
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	352.78	361.14	781.78	373.92	1,869.62
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	282.22	288.91	365.55	234.17	1,170.85
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	352.78	361.14	456.94	292.71	1,463.57

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15A DIR (UPPER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	409.86	1,157.76	6,031.06	1,899.67	9,498.34
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,149.03	782.78	6,012.03	1,985.96	9,929.80
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	30.56	66.38	665.77	190.68	953.38
603	BRICK EDGING	M	10.14	0.00	52.80	15.73	78.67
604a	METAL GUARD RAIL	M	76.54	55.31	2,662.74	698.65	3,493.24
604b	METAL GUARD RAIL END PIECES	EACH	100.93	533.21	2,995.20	907.34	4,536.68
604d	STEEL POST FOR METAL GUARD RAIL	EACH	114.80	533.21	2,630.55	819.64	4,098.20
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,076.38	1,160.70	13,224.33	4,115.35	20,576.76
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,076.38	801.50	12,384.33	3,815.55	19,077.76
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	266.03	393.19	8,967.97	2,406.80	12,033.98
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	81.25	589.78	10,833.13	2,876.04	14,380.19
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	266.03	844.19	19,519.57	5,157.45	25,787.23
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	874.05	921.65	35,833.10	9,407.20	47,036.01
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	174.81	223.78	16,617.28	4,253.97	21,269.84
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	326.38	0.00	2,359.35	671.43	3,357.16
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	326.38	0.00	3,539.03	966.35	4,831.76
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.33	6.00	26.51	8.96	44.80
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.11	3.51	61.83	16.61	83.07
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.33	6.00	35.37	11.18	55.88
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.11	3.51	82.47	21.77	108.87
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	89.31	29.98	256.16	93.86	469.31

CLIENT:

CSR - 2011

CONSULTANT:

NATIONAL HIGHWAY AUTHORITY  
ISLAMABADSAMPAK INTERNATIONAL (Pvt.) LTD  
LAHORE**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 15A DIR (UPPER)

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	89.31	52.71	779.17	230.30	1,151.49
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.17	7.50	37.00	12.17	60.83
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.17	13.18	106.73	31.02	155.10
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.17	7.50	49.34	15.25	76.25
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.17	13.18	142.31	39.91	199.57
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	89.31	29.98	357.27	119.14	595.70
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	89.31	52.71	1,345.85	371.97	1,859.83
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	74.31	29.98	170.77	68.76	343.82
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	74.31	52.71	520.23	161.81	809.06
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	74.31	29.98	238.18	85.62	428.09
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	74.31	52.71	898.59	256.40	1,282.00
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	10.94	111.18	180.95	75.77	378.84
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	10.94	111.18	213.05	83.79	418.96
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	118.63	182.71	436.40	184.44	922.18
610c	KILOMETER POST	EACH	730.55	1,321.13	2,077.67	1,032.34	5,161.70
610d	TEN KILOMETER POST	EACH	1,411.10	2,642.27	3,889.31	1,985.67	9,928.35
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	151.11	66.38	1,343.55	390.26	1,951.30
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	133.92	821.01	2.14	239.27	1,196.35

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

**HANGU**  
**(20B)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20B HANGU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.88	15.76	0.00	4.16	20.80
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	8.85	262.58	1.88	68.32	341.62
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	25.40	635.47	4.22	166.27	831.37
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	101.61	2,541.89	16.89	665.10	3,325.48
103	STRIPPING	CM	3.06	153.65	0.00	39.18	195.88
104	COMPACTION OF NATURAL GROUND	SM	0.43	14.95	2.70	4.52	22.61
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	5.44	227.95	0.00	58.35	291.74
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	133.55	360.08	125.00	154.66	773.29
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	20.45	541.85	0.00	140.58	702.88
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	13.64	422.98	0.00	109.16	545.78
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	4.45	205.65	0.00	52.52	262.62
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	133.55	360.08	125.00	154.66	773.29
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	23.45	492.05	0.00	128.88	644.38
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	11.69	422.98	0.00	108.67	543.34
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	9.02	221.54	0.00	57.64	288.20
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	78.93	664.63	74.15	204.43	1,022.13
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	130.30	400.09	125.00	163.85	819.24
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	117.27	442.22	0.00	139.87	699.35
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	67.01	316.49	0.00	95.87	479.37
107d	GRANULAR BACKFILL	CM	41.33	193.34	963.07	299.43	1,497.17
107e	COMMON BACKFILL	CM	34.90	110.10	18.00	40.75	203.75
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	8.40	234.11	18.00	65.13	325.64

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20B HANGU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	24.26	578.46	144.73	186.86	934.31
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	18.19	637.82	8.55	166.14	830.71
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	16.17	574.85	8.00	149.75	748.77
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	9.62	119.41	159.08	72.03	360.14
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	7.45	121.79	18.00	36.81	184.05
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	17.63	277.82	10.70	76.54	382.69
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.69	43.86	5.15	12.67	63.37
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.22	30.11	2.73	8.51	42.57
110	IMPROVED SUB-GARDE	CM	12.24	190.72	342.53	136.37	681.87
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	1.02	23.59	2.80	6.85	34.26
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.55	26.79	2.80	7.78	38.92
201	GRANULAR SUB-BASE	CM	9.81	231.80	956.61	299.55	1,497.77
202	AGGREGATE BASE	CM	11.50	282.85	1,370.46	416.20	2,081.01
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	97.29	2,324.40	9,291.30	2,928.25	14,641.24
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	97.29	2,324.40	9,504.15	2,981.46	14,907.29
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	104.44	2,427.71	9,282.53	2,953.67	14,768.34
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	104.44	2,427.71	9,514.07	3,011.55	15,057.77
204b	CEMENT STABILIZED BASE	CM	35.19	780.07	1,332.24	536.88	2,684.38
204c	CEMENT CONTENT	TON	137.52	0.00	6,930.00	1,766.88	8,834.40
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	299.03	2,060.49	61,481.36	15,960.22	79,801.10

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20B HANGU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	299.03	2,060.49	61,481.36	15,960.22	79,801.10
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	116.27	188.22	1,069.84	343.58	1,717.91
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	187.72	3,721.78	7,554.25	2,865.94	14,329.70
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	128.21	207.88	1,404.77	435.21	2,176.07
207a	DEEP PATCHING (0-15 cm)	SM	2.04	64.78	26.17	23.25	116.24
207b	DEEP PATCHING (15-30 cm)	SM	2.04	64.78	26.17	23.25	116.24
208	REINSTATEMENT OF ROAD SURFACE	SM	2.21	104.50	1.98	27.17	135.86
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	5.60	373.82	12.00	97.85	489.27
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.12	40.20	2.40	10.93	54.65
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.37	2.36	69.20	17.98	89.91
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.36	2.36	60.31	15.76	78.78
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.15	0.86	27.79	7.20	36.00
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.15	0.86	24.11	6.28	31.40
304a	SINGLE SURFACE TREATMENT	SM	0.97	11.24	149.10	40.33	201.64
304b	DOUBLE SURFACE TREATMENT	SM	1.42	21.60	282.05	76.27	381.33
304c	TRIPLE SURFACE TREATMENT	SM	2.38	30.32	328.14	90.21	451.06
304d	SEAL COAT	SM	0.90	6.38	35.45	10.68	53.41
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	86.32	2,293.29	9,946.23	3,081.46	15,407.29
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	86.32	2,198.28	10,552.13	3,209.18	16,045.91
307a	DENSE GRADED HOT BIT-MAC	CM	210.66	513.14	7,259.19	1,995.75	9,978.74
307b	OPEN GRADED HOT BIT-MAC	CM	210.66	513.14	6,962.90	1,921.67	9,608.37

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20B HANGU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	36.53	1,050.92	3,603.18	1,172.66	5,863.28
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	263.36	1,746.20	61,481.36	15,872.73	79,363.65
309a	COLD MILLING, 0-30 mm	SM	1.20	52.01	18.61	17.95	89.77
309b	COLD MILLING, 0-50 mm	SM	2.00	86.68	31.01	29.92	149.62
309c	COLD MILLING, 0-70 mm	SM	3.01	130.02	46.52	44.89	224.43
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	644.75	2,175.42	3,885.06	1,676.31	8,381.54
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	644.75	2,175.42	4,499.83	1,830.00	9,150.00
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	644.75	2,175.42	4,819.51	1,909.92	9,549.60
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	644.75	2,175.42	4,058.31	1,719.62	8,598.10
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	644.75	2,175.42	4,672.96	1,873.28	9,366.42
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	644.75	2,175.42	4,992.53	1,953.18	9,765.88
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	644.75	2,175.42	4,338.91	1,789.77	8,948.85
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	644.75	2,175.42	4,953.56	1,943.43	9,717.16
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	644.75	2,175.42	5,249.87	2,017.51	10,087.55
401b	CONCRETE CLASS B	CM	834.71	1,109.69	3,208.59	1,288.25	6,441.23
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	633.88	2,175.42	3,582.82	1,598.03	7,990.15
401cii	CONCRETE CLASS C (ON GROUND)	CM	633.88	2,175.42	4,197.47	1,751.69	8,758.46
401ciii	CONCRETE CLASS C (ELEVATED)	CM	633.88	2,175.42	4,517.15	1,831.61	9,158.06
401d	CONCRETE CLASS D1	CM	1,001.46	2,689.24	6,343.85	2,508.64	12,543.18
401e	CONCRETE CLASS Y	CM	1,395.64	703.81	5,079.03	1,794.62	8,973.10
401f	LEAN CONCRETE	CM	536.28	759.81	2,727.48	1,005.89	5,029.45
401gi	PRECAST CONCRETE, CLASS A1	CM	2,120.44	1,470.83	4,483.49	2,018.69	10,093.45
401gii	PRECAST CONCRETE CLASS A3	CM	2,120.44	1,470.83	4,955.13	2,136.60	10,683.00
401giii	PRECAST CONCRETE, CLASS B	CM	2,120.44	1,470.83	3,813.89	1,851.29	9,256.45
401giv	PRECAST CONCRETE CLASS D1	CM	2,120.44	1,470.83	6,351.09	2,485.59	12,427.95

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20B HANGU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,120.44	1,470.83	7,003.26	2,648.63	13,243.16
401gvi	PRECAST CONCRETE CLASS D3	CM	2,120.44	1,470.83	7,656.96	2,812.06	14,060.29
401h	PLUM CONCRETE	CM	926.39	1,109.69	2,583.23	1,154.83	5,774.13
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	1,963.04	0.00	71,635.11	18,399.54	91,997.68
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	1,963.04	0.00	75,835.11	19,449.54	97,247.68
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,574.53	3,667.20	87,008.40	23,062.53	115,312.66
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	2,972.44	12,010.50	148,048.36	40,757.82	203,789.12
405b	LAUNCHING OF GIRDER	TON	69.19	796.91	0.00	216.52	1,082.62
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	138.46	0.00	1,425.81	391.07	1,955.34
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	138.46	0.00	836.68	243.79	1,218.93
406ci	STEEL EXPANSION JOINTS (Local)	KG	11.36	18.40	139.89	42.41	212.07
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	466.70	0.00	84,597.15	21,265.96	106,329.81
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	483.89	0.00	132,497.37	33,245.31	166,226.57
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	535.46	0.00	1,127,679.85	282,053.83	1,410,269.13
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	466.70	0.00	71,968.22	18,108.73	90,543.65
406dii	PVC WATER STOP 8" SIZE	M	119.92	0.00	452.17	143.02	715.11
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.58	0.40	2.00
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.31	0.83	4.16
406f	ASPHALT FELT (3 PLY)	SM	48.56	0.00	252.43	75.25	376.24

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20B HANGU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	23.60	48.58	149.46	55.41	277.06
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	292.78	3,155.77	488.87	984.36	4,921.79
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	445.03	4,796.77	653.71	1,473.88	7,369.39
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	445.03	7,330.09	816.32	2,147.86	10,739.31
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	741.72	12,216.82	1,150.47	3,527.25	17,636.26
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	618.10	10,180.69	1,011.24	2,952.51	14,762.53
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,112.58	18,325.24	1,568.15	5,251.49	26,257.46
407h	PILE LOAD TEST UPTO 120 TON	EACH	28,280.46	86,125.76	122,632.52	59,259.69	296,298.43
407i	PILE LOAD TEST UPTO 240 TON	EACH	28,280.46	86,125.76	261,412.99	93,954.80	469,774.01
407j	PILE LOAD TEST UPTO 360 TON	EACH	77,787.66	95,444.48	357,431.16	132,665.83	663,329.13
407k	PILE LOAD TEST UPTO 550 TON	EACH	114,918.06	119,305.60	571,179.20	201,350.72	1,006,753.58
407l	PILE LOAD TEST UPTO 800 TON	EACH	170,102.64	143,166.72	924,723.60	309,498.24	1,547,491.20
407m	CONFIRMATORY BORING (NX SIZE)	M	220.72	2,639.89	22.50	720.78	3,603.89
407n	PERMANENT PILE CASING FOR PILES	Ton	289.58	3,993.41	86,095.49	22,594.62	112,973.10
410	BRICK WORK	CM	401.38	453.06	3,925.06	1,194.88	5,974.38
411a	STONE MASONRY RANDOM DRY	CM	423.95	165.94	1,279.37	467.31	2,336.57
411b	STONE MASONRY RANDOM WITH MORTAR	CM	504.36	263.54	2,357.75	781.41	3,907.06
411c	STONE MASONRY DRESSED UNCOURSESED DRY	CM	582.66	165.94	1,785.75	633.59	3,167.94
411d	STONE MASONRY DRESSED UNCOURSESED WITH MORTAR	CM	660.96	263.54	2,781.28	926.45	4,632.23
411g	ROLL POINTING	SM	85.22	19.52	97.63	50.59	252.95
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	874.68	419.50	2,781.28	1,018.87	5,094.33
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	280.18	554.74	917.49	438.10	2,190.51

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20B HANGU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	280.18	616.97	1,092.92	497.52	2,487.59
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	263.90	1,097.40	1,317.98	669.82	3,349.10
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	277.42	1,377.91	1,926.25	895.39	4,476.97
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	321.88	1,772.89	3,179.37	1,318.53	6,592.67
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	398.93	2,187.37	4,902.28	1,872.15	9,360.73
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	516.26	2,171.36	5,933.91	2,155.38	10,776.92
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	608.75	2,636.66	11,373.83	3,654.81	18,274.04
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	719.91	3,076.10	16,361.44	5,039.36	25,196.81
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	280.18	554.74	1,188.50	505.85	2,529.27
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	273.13	616.97	1,441.36	582.86	2,914.32
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	263.90	1,097.40	1,666.42	756.93	3,784.65
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	277.42	1,377.91	2,584.41	1,059.93	5,299.67
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	321.88	1,772.89	3,992.41	1,521.79	7,608.97
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	398.93	2,187.37	5,986.33	2,143.16	10,715.79
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	516.26	2,171.36	7,482.55	2,542.54	12,712.72
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	608.75	2,636.66	14,093.09	4,334.62	21,673.11
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	719.91	3,076.10	21,045.35	6,210.34	31,051.70
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	110.38	157.23	965.12	308.18	1,540.92

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20B HANGU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	944.32	845.94	3,281.93	1,268.05	6,340.23
507a	STEEL WIRE MESH FOR GABIONS	KG	6.61	0.00	121.10	31.93	159.65
507b	ROCK FILL IN GABIONS	CM	119.31	0.00	902.55	255.46	1,277.32
508a	BRICK PAVING (SINGLE COURSE)	SM	134.77	38.19	330.27	125.81	629.05
508b	BRICK PAVING (DOUBLE COURSE)	SM	240.58	38.19	652.71	232.87	1,164.35
509a	RIPRAP, CLASS A	CM	581.19	0.00	967.01	387.05	1,935.25
509b	RIPRAP, CLASS B	CM	417.58	180.10	959.28	389.24	1,946.19
509c	RIPRAP, CLASS C	CM	407.95	187.60	967.01	390.64	1,953.20
509c1	RIPRAP, CLASS D	CM	407.95	225.12	967.01	400.02	2,000.10
509d	GROUTED RIPRAP, CLASS A	CM	711.45	170.59	2,787.60	917.41	4,587.04
509e	GROUTED RIPRAP, CLASS B	CM	542.10	316.57	2,594.22	863.22	4,316.11
509f	GROUTED RIPRAP, CLASS C	CM	520.89	301.33	2,598.80	855.25	4,276.26
509f1	GROUTED RIPRAP, CLASS D	CM	520.89	338.85	2,774.42	908.54	4,542.70
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	973.00	481.58	3,781.93	1,309.13	6,545.64
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	60.45	275.72	965.43	325.40	1,627.00
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	120.86	884.71	0.00	251.39	1,256.96
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	183.62	103.71	157.14	111.12	555.59
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	235.03	132.75	201.14	142.23	711.15
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	297.68	288.91	587.13	293.43	1,467.16
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	372.10	361.14	733.92	366.79	1,833.94
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	297.68	288.91	336.86	230.86	1,154.31
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	372.10	361.14	421.07	288.58	1,442.89

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20B HANGU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	426.76	1,157.76	5,625.39	1,802.48	9,012.38
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,212.12	782.78	5,616.69	1,902.90	9,514.49
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	32.31	66.38	608.63	176.83	884.14
603	BRICK EDGING	M	10.77	0.00	49.92	15.17	75.87
604a	METAL GUARD RAIL	M	80.57	55.31	2,650.51	696.60	3,482.99
604b	METAL GUARD RAIL END PIECES	EACH	106.75	533.21	2,975.81	903.94	4,519.72
604d	STEEL POST FOR METAL GUARD RAIL	EACH	120.84	533.21	2,594.97	812.26	4,061.28
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,225.32	1,160.70	12,510.99	3,974.25	19,871.26
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,225.32	801.50	11,672.01	3,674.71	18,373.54
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	282.21	393.19	8,700.84	2,344.06	11,720.30
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	86.23	589.78	10,481.39	2,789.35	13,946.74
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	282.21	844.19	18,861.53	4,996.98	24,984.91
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	941.68	921.65	34,723.55	9,146.72	45,733.61
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	188.34	223.78	16,218.72	4,157.71	20,788.55
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	336.86	0.00	2,315.25	663.03	3,315.14
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	336.86	0.00	3,472.88	952.44	4,762.18
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.54	6.00	26.01	8.89	44.44
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.18	3.51	60.68	16.34	81.71
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.54	6.00	34.71	11.06	55.32
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.18	3.51	80.93	21.41	107.03
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	92.21	29.98	251.37	93.39	466.95

CLIENT:

CSR - 2011

CONSULTANT:

NATIONAL HIGHWAY AUTHORITY  
ISLAMABADSAMPAK INTERNATIONAL (Pvt.) LTD  
LAHORE**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20B HANGU

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	92.21	52.71	764.61	227.38	1,136.91
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.43	7.50	36.31	12.06	60.30
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.43	13.18	104.74	30.59	152.93
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.43	7.50	48.42	15.09	75.43
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.43	13.18	139.65	39.31	196.57
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	92.21	29.98	350.60	118.20	590.98
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	92.21	52.71	1,320.69	366.40	1,832.01
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	76.97	29.98	167.58	68.63	343.16
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	76.97	52.71	510.51	160.05	800.23
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	76.97	29.98	233.73	85.17	425.85
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	76.97	52.71	881.79	252.87	1,264.33
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	11.51	111.18	176.90	74.90	374.48
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	11.51	111.18	208.40	82.77	413.85
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	128.25	182.71	380.48	172.86	864.30
610c	KILOMETER POST	EACH	774.85	1,321.13	1,898.58	998.64	4,993.20
610d	TEN KILOMETER POST	EACH	1,498.90	2,642.27	3,602.65	1,935.96	9,679.78
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	161.10	66.38	1,275.90	375.85	1,879.23
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	141.70	821.01	2.10	241.20	1,206.02

**NATIONAL HIGHWAY AUTHORITY**  
**COMPOSITE SCHEDULE OF RATES**

**January-2011**

**HARIPUR  
(20C)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20C HARIPUR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.95	15.76	0.00	4.18	20.89
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	9.71	262.58	1.88	68.54	342.70
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	27.61	635.47	4.22	166.83	834.13
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	110.43	2,541.89	16.89	667.30	3,336.51
103	STRIPPING	CM	3.41	153.65	0.00	39.26	196.31
104	COMPACTION OF NATURAL GROUND	SM	0.49	14.95	2.70	4.54	22.68
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	6.38	227.95	0.00	58.58	292.92
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	152.21	360.08	125.00	159.32	796.62
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	23.05	541.85	0.00	141.23	706.13
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	15.48	422.98	0.00	109.61	548.07
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	5.22	205.65	0.00	52.72	263.58
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	152.21	360.08	125.00	159.32	796.62
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	26.78	492.05	0.00	129.71	648.53
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	13.17	422.98	0.00	109.04	545.20
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	10.47	221.54	0.00	58.00	290.01
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	89.54	664.63	74.15	207.08	1,035.39
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	148.78	400.09	125.00	168.47	842.34
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	133.90	442.22	0.00	144.03	720.15
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	76.52	316.49	0.00	98.25	491.25
107d	GRANULAR BACKFILL	CM	45.87	193.34	894.08	283.32	1,416.61
107e	COMMON BACKFILL	CM	37.94	110.10	18.00	41.51	207.56
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	9.60	234.11	18.00	65.43	327.13

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20C HARIPUR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	27.30	578.46	144.73	187.62	938.11
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	20.47	637.82	8.55	166.71	833.56
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	18.20	574.85	8.00	150.26	751.31
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	10.88	119.41	159.08	72.34	361.71
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	8.47	121.79	18.00	37.07	185.33
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	19.73	277.82	10.70	77.06	385.31
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.92	43.86	5.15	12.73	63.66
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.39	30.11	2.73	8.56	42.79
110	IMPROVED SUB-GARDE	CM	13.77	190.72	293.82	124.58	622.89
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	1.14	23.59	2.80	6.88	34.42
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.75	26.79	2.80	7.83	39.17
201	GRANULAR SUB-BASE	CM	11.12	231.80	756.85	249.94	1,249.71
202	AGGREGATE BASE	CM	13.16	282.85	1,088.70	346.18	1,730.88
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	106.78	2,324.40	9,616.22	3,011.85	15,059.24
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	106.78	2,324.40	9,783.65	3,053.71	15,268.53
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	114.85	2,427.71	9,607.43	3,037.50	15,187.49
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	114.85	2,427.71	9,793.53	3,084.02	15,420.11
204b	CEMENT STABILIZED BASE	CM	39.87	780.07	1,534.72	588.66	2,943.32
204c	CEMENT CONTENT	TON	144.00	0.00	7,851.69	1,998.92	9,994.61
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	340.91	2,060.49	61,242.75	15,911.04	79,555.19

CLIENT:

CSR - 2011

CONSULTANT:

NATIONAL HIGHWAY AUTHORITY  
ISLAMABADSAMPAK INTERNATIONAL (Pvt.) LTD  
LAHORE**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20C HARIPUR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	340.91	2,060.49	61,242.75	15,911.04	79,555.19
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	124.02	188.22	1,186.19	374.61	1,873.03
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	208.45	3,721.78	7,952.85	2,970.77	14,853.86
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	136.39	207.88	1,238.95	395.81	1,979.03
207a	DEEP PATCHING (0-15 cm)	SM	2.32	64.78	27.09	23.55	117.74
207b	DEEP PATCHING (15-30 cm)	SM	2.32	64.78	27.09	23.55	117.74
208	REINSTATEMENT OF ROAD SURFACE	SM	2.51	104.50	1.98	27.25	136.24
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	6.52	373.82	12.00	98.08	490.42
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.30	40.20	2.40	10.98	54.88
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.42	2.36	68.96	17.94	89.68
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.41	2.36	60.07	15.71	78.55
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.17	0.86	27.69	7.18	35.91
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.17	0.86	24.01	6.26	31.31
304a	SINGLE SURFACE TREATMENT	SM	1.11	11.24	151.15	40.88	204.38
304b	DOUBLE SURFACE TREATMENT	SM	1.62	21.60	289.17	78.10	390.49
304c	TRIPLE SURFACE TREATMENT	SM	2.73	30.32	336.21	92.32	461.59
304d	SEAL COAT	SM	1.03	6.38	35.40	10.70	53.51
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	95.29	2,293.29	10,206.34	3,148.73	15,743.64
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	95.29	2,198.28	10,757.21	3,262.70	16,313.48
307a	DENSE GRADED HOT BIT-MAC	CM	230.40	513.14	7,416.80	2,040.08	10,200.41
307b	OPEN GRADED HOT BIT-MAC	CM	230.40	513.14	7,222.94	1,991.62	9,958.09

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20C HARIPUR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	40.20	1,050.92	3,603.18	1,173.57	5,867.87
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	298.78	1,746.20	61,242.75	15,821.93	79,109.67
309a	COLD MILLING, 0-30 mm	SM	1.37	52.01	18.61	18.00	89.98
309b	COLD MILLING, 0-50 mm	SM	2.28	86.68	31.01	29.99	149.96
309c	COLD MILLING, 0-70 mm	SM	3.41	130.02	46.52	44.99	224.94
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	733.37	2,175.42	4,349.81	1,814.65	9,073.26
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	733.37	2,175.42	4,964.58	1,968.34	9,841.71
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	733.37	2,175.42	5,284.26	2,048.26	10,241.31
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	733.37	2,175.42	4,616.25	1,881.26	9,406.30
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	733.37	2,175.42	5,230.90	2,034.92	10,174.61
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	733.37	2,175.42	5,550.46	2,114.81	10,574.06
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	733.37	2,175.42	4,923.15	1,957.99	9,789.93
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	733.37	2,175.42	5,537.80	2,111.65	10,558.24
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	733.37	2,175.42	5,833.54	2,185.58	10,927.91
401b	CONCRETE CLASS B	CM	940.84	1,109.69	3,711.61	1,440.54	7,202.68
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	712.85	2,175.42	4,136.77	1,756.26	8,781.31
401cii	CONCRETE CLASS C (ON GROUND)	CM	712.85	2,175.42	4,751.42	1,909.92	9,549.62
401ciii	CONCRETE CLASS C (ELEVATED)	CM	712.85	2,175.42	5,071.10	1,989.84	9,949.22
401d	CONCRETE CLASS D1	CM	1,139.33	2,689.24	6,957.88	2,696.61	13,483.06
401e	CONCRETE CLASS Y	CM	1,581.86	703.81	5,521.48	1,951.79	9,758.95
401f	LEAN CONCRETE	CM	586.83	759.81	3,186.52	1,133.29	5,666.44
401gi	PRECAST CONCRETE, CLASS A1	CM	2,363.21	1,470.83	4,936.20	2,192.56	10,962.80
401gii	PRECAST CONCRETE CLASS A3	CM	2,363.21	1,470.83	5,541.55	2,343.90	11,719.49
401giii	PRECAST CONCRETE, CLASS B	CM	2,363.21	1,470.83	4,357.08	2,047.78	10,238.90
401giv	PRECAST CONCRETE CLASS D1	CM	2,363.21	1,470.83	6,965.70	2,699.94	13,499.68

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20C HARIPUR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,363.21	1,470.83	7,700.66	2,883.68	14,418.38
401gvi	PRECAST CONCRETE CLASS D3	CM	2,363.21	1,470.83	8,437.24	3,067.82	15,339.10
401h	PLUM CONCRETE	CM	1,036.84	1,109.69	2,791.70	1,234.56	6,172.79
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	2,244.86	0.00	71,478.31	18,430.79	92,153.96
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	2,244.86	0.00	75,678.31	19,480.79	97,403.96
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,800.73	3,667.20	87,008.40	23,119.08	115,595.41
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	3,510.84	12,010.50	148,159.41	40,920.19	204,600.94
405b	LAUNCHING OF GIRDER	TON	81.72	796.91	0.00	219.66	1,098.29
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	155.35	0.00	1,429.42	396.19	1,980.96
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	155.35	0.00	836.42	247.94	1,239.71
406ci	STEEL EXPANSION JOINTS (Local)	KG	12.86	18.40	139.89	42.79	213.95
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	532.82	0.00	84,597.15	21,282.49	106,412.46
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	550.82	0.00	132,497.37	33,262.05	166,310.23
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	604.82	0.00	1,127,679.85	282,071.17	1,410,355.83
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	532.82	0.00	71,968.22	18,125.26	90,626.30
406dii	PVC WATER STOP 8" SIZE	M	134.27	0.00	452.17	146.61	733.05
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.58	0.40	2.00
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.31	0.83	4.16
406f	ASPHALT FELT (3 PLY)	SM	55.51	0.00	252.20	76.93	384.64

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20C HARIPUR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	26.41	48.58	149.46	56.11	280.56
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	344.85	3,155.77	488.87	997.37	4,986.87
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	524.17	4,796.77	653.71	1,493.66	7,468.31
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	524.17	7,330.09	816.32	2,167.65	10,838.23
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	873.61	12,216.82	1,150.47	3,560.23	17,801.13
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	728.01	10,180.69	1,011.24	2,979.98	14,899.92
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,310.42	18,325.24	1,568.15	5,300.95	26,504.76
407h	PILE LOAD TEST UPTO 120 TON	EACH	30,085.86	86,125.76	125,232.92	60,361.14	301,805.68
407i	PILE LOAD TEST UPTO 240 TON	EACH	30,085.86	86,125.76	266,613.79	95,706.35	478,531.76
407j	PILE LOAD TEST UPTO 360 TON	EACH	81,925.86	95,444.48	365,232.36	135,650.68	678,253.38
407k	PILE LOAD TEST UPTO 550 TON	EACH	120,805.86	119,305.60	583,885.70	205,999.29	1,029,996.45
407l	PILE LOAD TEST UPTO 800 TON	EACH	178,798.80	143,166.72	945,113.10	316,769.66	1,583,848.28
407m	CONFIRMATORY BORING (NX SIZE)	M	246.88	2,639.89	22.50	727.32	3,636.59
407n	PERMANENT PILE CASING FOR PILES	Ton	323.61	3,993.41	86,095.49	22,603.13	113,015.63
410	BRICK WORK	CM	451.23	453.06	3,931.07	1,208.84	6,044.20
411a	STONE MASONRY RANDOM DRY	CM	474.93	165.94	621.32	315.55	1,577.74
411b	STONE MASONRY RANDOM WITH MORTAR	CM	562.53	263.54	1,816.85	660.73	3,303.66
411c	STONE MASONRY DRESSED UNCOURSED DRY	CM	651.33	165.94	1,723.35	635.16	3,175.78
411d	STONE MASONRY DRESSED UNCOURSED WITH MORTAR	CM	740.13	263.54	2,826.50	957.54	4,787.72
411g	ROLL POINTING	SM	96.23	19.52	100.46	54.05	270.26
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	974.13	419.50	2,826.50	1,055.03	5,275.16
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	302.37	554.74	897.85	438.74	2,193.70

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20C HARIPUR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	302.37	616.97	1,057.64	494.25	2,471.23
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	287.75	1,097.40	1,262.46	661.90	3,309.51
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	300.86	1,377.91	1,830.46	877.31	4,386.54
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	350.02	1,772.89	2,981.28	1,276.05	6,380.24
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	436.01	2,187.37	4,602.02	1,806.35	9,031.75
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	564.24	2,171.36	5,634.58	2,092.55	10,462.74
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	663.72	2,636.66	11,064.03	3,591.10	17,955.51
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	787.34	3,076.10	15,111.83	4,743.82	23,719.09
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	302.37	554.74	1,168.86	506.49	2,532.46
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	294.03	616.97	1,406.08	579.27	2,896.36
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	287.75	1,097.40	1,610.90	749.01	3,745.06
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	300.86	1,377.91	2,488.63	1,041.85	5,209.25
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	350.02	1,772.89	3,794.31	1,479.31	7,396.53
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	436.01	2,187.37	5,686.06	2,077.36	10,386.80
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	564.24	2,171.36	7,183.21	2,479.71	12,398.53
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	663.72	2,636.66	13,783.29	4,270.92	21,354.58
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	787.34	3,076.10	19,795.74	5,914.79	29,573.97
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	119.93	157.23	887.66	291.21	1,456.03

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20C HARIPUR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	1,064.16	845.94	3,794.69	1,426.20	7,130.99
507a	STEEL WIRE MESH FOR GABIONS	KG	7.50	0.00	121.10	32.15	160.75
507b	ROCK FILL IN GABIONS	CM	128.02	0.00	288.37	104.10	520.48
508a	BRICK PAVING (SINGLE COURSE)	SM	149.60	38.19	320.45	127.06	635.30
508b	BRICK PAVING (DOUBLE COURSE)	SM	267.20	38.19	632.77	234.54	1,172.70
509a	RIPRAP, CLASS A	CM	648.67	0.00	308.96	239.41	1,197.04
509b	RIPRAP, CLASS B	CM	474.78	180.10	306.49	240.34	1,201.71
509c	RIPRAP, CLASS C	CM	465.25	187.60	308.96	240.45	1,202.26
509c1	RIPRAP, CLASS D	CM	465.25	225.12	308.96	249.83	1,249.16
509d	GROUTED RIPRAP, CLASS A	CM	793.31	170.59	2,231.30	798.80	3,993.99
509e	GROUTED RIPRAP, CLASS B	CM	614.49	316.57	2,032.32	740.84	3,704.22
509f	GROUTED RIPRAP, CLASS C	CM	591.27	301.33	2,042.74	733.83	3,669.17
509f1	GROUTED RIPRAP, CLASS D	CM	591.27	338.85	2,229.59	789.93	3,949.64
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	1,075.52	481.58	4,338.14	1,473.81	7,369.05
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	65.25	275.72	898.81	309.95	1,549.73
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	135.38	884.71	0.00	255.02	1,275.11
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	204.21	103.71	50.21	89.53	447.66
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	261.39	132.75	64.26	114.60	573.00
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	332.43	288.91	514.04	283.84	1,419.22
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	415.53	361.14	642.55	354.80	1,774.02
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	332.43	288.91	263.18	221.13	1,105.65
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	415.53	361.14	328.98	276.41	1,382.06

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20C HARIPUR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	485.93	1,157.76	5,866.05	1,877.43	9,387.17
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,353.33	782.78	5,850.94	1,996.76	9,983.81
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	35.95	66.38	667.54	192.47	962.33
603	BRICK EDGING	M	11.90	0.00	48.00	14.97	74.87
604a	METAL GUARD RAIL	M	90.25	55.31	2,602.47	687.01	3,435.05
604b	METAL GUARD RAIL END PIECES	EACH	118.71	533.21	2,927.94	894.97	4,474.83
604d	STEEL POST FOR METAL GUARD RAIL	EACH	135.36	533.21	2,571.28	809.96	4,049.82
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,425.66	1,160.70	12,873.52	4,114.97	20,574.84
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,425.66	801.50	12,036.41	3,815.89	19,079.46
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	312.44	393.19	8,774.49	2,370.03	11,850.14
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	95.40	589.78	10,591.86	2,819.26	14,096.29
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	312.44	844.19	19,057.96	5,053.65	25,268.24
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	1,018.26	921.65	35,018.20	9,239.53	46,197.64
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	203.65	223.78	16,277.65	4,176.27	20,881.36
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	388.66	0.00	2,315.25	675.98	3,379.89
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	388.66	0.00	3,472.88	965.39	4,826.93
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.91	6.00	26.01	8.98	44.90
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.30	3.51	60.68	16.37	81.87
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.91	6.00	34.71	11.15	55.77
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.30	3.51	80.93	21.44	107.18
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	106.33	29.98	251.37	96.92	484.60

CLIENT:

CSR - 2011

CONSULTANT:

NATIONAL HIGHWAY AUTHORITY  
ISLAMABADSAMPAK INTERNATIONAL (Pvt.) LTD  
LAHORE**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 20C HARIPUR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	106.33	52.71	764.61	230.91	1,154.56
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.89	7.50	36.31	12.17	60.87
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.89	13.18	104.74	30.70	153.50
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.89	7.50	48.42	15.20	76.00
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.89	13.18	139.65	39.43	197.14
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	106.33	29.98	350.60	121.73	608.63
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	106.33	52.71	1,320.69	369.93	1,849.66
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	88.33	29.98	167.58	71.47	357.36
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	88.33	52.71	510.51	162.89	814.43
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	88.33	29.98	233.73	88.01	440.05
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	88.33	52.71	881.79	255.71	1,278.53
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	12.90	111.18	177.35	75.36	376.79
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	12.90	111.18	208.85	83.23	416.16
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	137.96	182.71	410.12	182.70	913.49
610c	KILOMETER POST	EACH	858.06	1,321.13	1,989.51	1,042.18	5,210.88
610d	TEN KILOMETER POST	EACH	1,656.13	2,642.27	3,744.24	2,010.66	10,053.30
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	177.02	66.38	1,247.44	372.71	1,863.54
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	157.50	821.01	2.10	245.15	1,225.76

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

**KARAK**  
**(27)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 27 KARAK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.77	15.76	0.00	4.13	20.66
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	8.02	262.58	1.88	68.12	340.59
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	22.45	635.47	4.22	165.54	827.68
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	89.79	2,541.89	16.89	662.14	3,310.71
103	STRIPPING	CM	2.88	153.65	0.00	39.13	195.65
104	COMPACTION OF NATURAL GROUND	SM	0.41	14.95	2.70	4.52	22.59
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	5.80	227.95	0.00	58.44	292.19
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	132.92	360.08	125.00	154.50	772.51
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	19.81	541.85	0.00	140.42	702.08
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	13.43	422.98	0.00	109.10	545.52
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	4.75	205.65	0.00	52.60	262.99
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	132.92	360.08	125.00	154.50	772.51
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	23.45	492.05	0.00	128.87	644.37
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	11.32	422.98	0.00	108.58	542.88
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	9.37	221.54	0.00	57.73	288.64
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	77.68	664.63	74.15	204.11	1,020.57
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	130.27	400.09	125.00	163.84	819.20
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	117.24	442.22	0.00	139.86	699.32
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	66.99	316.49	0.00	95.87	479.35
107d	GRANULAR BACKFILL	CM	38.53	193.34	622.72	213.65	1,068.23
107e	COMMON BACKFILL	CM	30.87	110.10	18.00	39.74	198.71
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	8.41	234.11	18.00	65.13	325.64

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 27 KARAK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	23.41	578.46	144.73	186.65	933.25
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	17.56	637.82	8.55	165.98	829.91
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	15.61	574.85	8.00	149.61	748.07
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	9.38	119.41	159.08	71.97	359.84
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	7.38	121.79	18.00	36.79	183.96
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	16.78	277.82	10.70	76.32	381.62
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.67	43.86	5.15	12.67	63.35
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.21	30.11	2.73	8.51	42.57
110	IMPROVED SUB-GARDE	CM	11.80	190.72	324.82	131.84	659.18
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	0.97	23.59	2.80	6.84	34.21
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.50	26.79	2.80	7.77	38.86
201	GRANULAR SUB-BASE	CM	9.65	231.80	883.98	281.35	1,406.77
202	AGGREGATE BASE	CM	11.56	282.85	941.43	308.96	1,544.80
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	88.16	2,324.40	9,071.24	2,870.95	14,354.75
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	88.16	2,324.40	9,313.08	2,931.41	14,657.06
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	95.14	2,427.71	9,062.50	2,896.34	14,481.68
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	95.14	2,427.71	9,323.05	2,961.47	14,807.37
204b	CEMENT STABILIZED BASE	CM	34.51	780.07	1,125.17	484.94	2,424.68
204c	CEMENT CONTENT	TON	110.00	0.00	6,930.00	1,760.00	8,800.00
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	297.83	2,060.49	61,541.41	15,974.93	79,874.65

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 27 KARAK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	297.83	2,060.49	61,541.41	15,974.93	79,874.65
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	97.80	188.22	899.06	296.27	1,481.34
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	175.24	3,721.78	7,357.99	2,813.75	14,068.77
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	107.07	207.88	800.49	278.86	1,394.30
207a	DEEP PATCHING (0-15 cm)	SM	2.01	64.78	13.29	20.02	100.09
207b	DEEP PATCHING (15-30 cm)	SM	2.01	64.78	13.29	20.02	100.09
208	REINSTATEMENT OF ROAD SURFACE	SM	2.18	104.50	1.98	27.17	135.83
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	5.85	373.82	12.00	97.92	489.59
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.17	40.20	2.40	10.94	54.71
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.37	2.36	69.26	18.00	89.99
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.36	2.36	60.37	15.77	78.86
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.15	0.86	27.81	7.21	36.03
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.15	0.86	24.13	6.29	31.43
304a	SINGLE SURFACE TREATMENT	SM	0.98	11.24	148.25	40.12	200.58
304b	DOUBLE SURFACE TREATMENT	SM	1.43	21.60	279.47	75.62	378.12
304c	TRIPLE SURFACE TREATMENT	SM	2.41	30.32	325.12	89.46	447.32
304d	SEAL COAT	SM	0.91	6.38	35.14	10.61	53.03
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	79.39	2,293.29	9,750.91	3,030.90	15,154.48
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	79.39	2,198.28	10,360.94	3,159.65	15,798.27
307a	DENSE GRADED HOT BIT-MAC	CM	189.20	513.14	7,106.82	1,952.29	9,761.44
307b	OPEN GRADED HOT BIT-MAC	CM	189.20	513.14	6,810.41	1,878.18	9,390.92

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 27 KARAK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	33.33	1,050.92	3,603.18	1,171.86	5,859.28
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	259.21	1,746.20	61,541.41	15,886.70	79,433.52
309a	COLD MILLING, 0-30 mm	SM	1.19	52.01	18.61	17.95	89.75
309b	COLD MILLING, 0-50 mm	SM	1.98	86.68	31.01	29.92	149.59
309c	COLD MILLING, 0-70 mm	SM	2.96	130.02	46.52	44.88	224.38
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	638.64	2,175.42	3,683.19	1,624.31	8,121.56
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	638.64	2,175.42	4,297.93	1,778.00	8,889.99
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	638.64	2,175.42	4,617.61	1,857.92	9,289.59
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	638.64	2,175.42	3,863.10	1,669.29	8,346.45
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	638.64	2,175.42	4,477.75	1,822.95	9,114.76
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	638.64	2,175.42	4,797.33	1,902.85	9,514.24
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	638.64	2,175.42	4,140.73	1,738.70	8,693.50
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	638.64	2,175.42	4,755.38	1,892.36	9,461.81
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	638.64	2,175.42	5,055.47	1,967.38	9,836.92
401b	CONCRETE CLASS B	CM	808.65	1,109.69	2,967.74	1,221.52	6,107.60
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	610.67	2,175.42	3,399.13	1,546.31	7,731.53
401cii	CONCRETE CLASS C (ON GROUND)	CM	610.67	2,175.42	4,013.78	1,699.97	8,499.84
401ciii	CONCRETE CLASS C (ELEVATED)	CM	610.67	2,175.42	4,333.46	1,779.89	8,899.44
401d	CONCRETE CLASS D1	CM	992.43	2,689.24	6,153.94	2,458.90	12,294.51
401e	CONCRETE CLASS Y	CM	1,370.59	703.81	4,877.35	1,737.94	8,689.70
401f	LEAN CONCRETE	CM	482.31	759.81	2,475.07	929.30	4,646.48
401gi	PRECAST CONCRETE, CLASS A1	CM	1,997.60	1,470.83	4,281.56	1,937.50	9,687.49
401gii	PRECAST CONCRETE CLASS A3	CM	1,997.60	1,470.83	4,760.80	2,057.31	10,286.54
401giii	PRECAST CONCRETE, CLASS B	CM	1,997.60	1,470.83	3,590.89	1,764.83	8,824.15
401giv	PRECAST CONCRETE CLASS D1	CM	1,997.60	1,470.83	6,160.83	2,407.31	12,036.57

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 27 KARAK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	1,997.60	1,470.83	6,825.78	2,573.55	12,867.76
401gvi	PRECAST CONCRETE CLASS D3	CM	1,997.60	1,470.83	7,492.23	2,740.16	13,700.82
401h	PLUM CONCRETE	CM	881.99	1,109.69	2,323.14	1,078.70	5,393.52
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	1,969.77	0.00	71,622.47	18,398.06	91,990.30
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	1,969.77	0.00	75,822.47	19,448.06	97,240.30
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,580.26	3,667.20	87,008.40	23,063.97	115,319.83
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	3,218.25	12,010.50	148,029.86	40,814.65	204,073.26
405b	LAUNCHING OF GIRDER	TON	74.91	796.91	0.00	217.96	1,089.78
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	132.63	0.00	1,429.74	390.59	1,952.96
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	132.63	0.00	836.74	242.34	1,211.71
406ci	STEEL EXPANSION JOINTS (Local)	KG	11.13	18.40	139.89	42.35	211.77
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	466.40	0.00	84,597.15	21,265.89	106,329.44
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	480.15	0.00	132,497.37	33,244.38	166,221.89
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	521.40	0.00	1,127,679.85	282,050.31	1,410,251.56
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	466.40	0.00	71,968.22	18,108.66	90,543.28
406dii	PVC WATER STOP 8" SIZE	M	114.28	0.00	452.17	141.61	708.06
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.58	0.40	2.00
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.31	0.83	4.16
406f	ASPHALT FELT (3 PLY)	SM	48.68	0.00	252.49	75.29	376.47

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 27 KARAK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	22.45	48.58	149.46	55.12	275.61
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	314.95	3,155.77	488.87	989.90	4,949.49
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	478.72	4,796.77	653.71	1,482.30	7,411.50
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	478.72	7,330.09	816.32	2,156.28	10,781.42
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	797.87	12,216.82	1,150.47	3,541.29	17,706.45
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	664.89	10,180.69	1,011.24	2,964.20	14,821.02
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,196.80	18,325.24	1,568.15	5,272.55	26,362.74
407h	PILE LOAD TEST UPTO 120 TON	EACH	23,618.52	86,125.76	86,468.04	49,053.08	245,265.40
407i	PILE LOAD TEST UPTO 240 TON	EACH	23,618.52	86,125.76	189,084.03	74,707.08	373,535.39
407j	PILE LOAD TEST UPTO 360 TON	EACH	63,218.52	95,444.48	248,937.72	101,900.18	509,500.90
407k	PILE LOAD TEST UPTO 550 TON	EACH	92,918.52	119,305.60	394,466.40	151,672.63	758,363.15
407l	PILE LOAD TEST UPTO 800 TON	EACH	137,498.64	143,166.72	641,161.20	230,456.64	1,152,283.20
407m	CONFIRMATORY BORING (NX SIZE)	M	209.81	2,639.89	22.50	718.05	3,590.24
407n	PERMANENT PILE CASING FOR PILES	Ton	274.63	3,993.41	86,095.49	22,590.88	112,954.41
410	BRICK WORK	CM	386.34	453.06	3,943.55	1,195.74	5,978.70
411a	STONE MASONRY RANDOM DRY	CM	404.55	165.94	974.42	386.23	1,931.14
411b	STONE MASONRY RANDOM WITH MORTAR	CM	476.05	263.54	1,959.03	674.66	3,373.28
411c	STONE MASONRY DRESSED UNCOURSED DRY	CM	553.05	165.94	1,098.90	454.47	2,272.36
411d	STONE MASONRY DRESSED UNCOURSED WITH MORTAR	CM	630.05	263.54	2,024.11	729.42	3,647.12
411g	ROLL POINTING	SM	82.93	19.52	96.06	49.63	248.13
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	822.55	419.50	2,024.11	816.54	4,082.69
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	243.07	554.74	921.65	429.86	2,149.32

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 27 KARAK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	243.07	616.97	1,101.21	490.31	2,451.56
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	235.17	1,097.40	1,331.58	666.04	3,330.19
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	243.79	1,377.91	1,950.97	893.17	4,465.83
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	284.85	1,772.89	3,233.09	1,322.71	6,613.54
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	357.67	2,187.37	4,983.93	1,882.24	9,411.21
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	462.87	2,171.36	6,015.58	2,162.45	10,812.26
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	542.41	2,636.66	11,457.82	3,659.22	18,296.11
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	646.56	3,076.10	16,710.66	5,108.33	25,541.65
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	243.07	554.74	1,192.66	497.62	2,488.08
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	235.43	616.97	1,449.65	575.51	2,877.56
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	235.17	1,097.40	1,680.03	753.15	3,765.75
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	243.79	1,377.91	2,609.14	1,057.71	5,288.55
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	284.85	1,772.89	4,046.12	1,525.97	7,629.83
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	357.67	2,187.37	6,067.97	2,153.25	10,766.26
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	462.87	2,171.36	7,564.21	2,549.61	12,748.05
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	542.41	2,636.66	14,177.08	4,339.04	21,695.18
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	646.56	3,076.10	21,394.57	6,279.31	31,396.54
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	97.47	157.23	641.76	224.12	1,120.58

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 27 KARAK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	914.36	845.94	3,041.07	1,200.34	6,001.72
507a	STEEL WIRE MESH FOR GABIONS	KG	6.50	0.00	121.10	31.90	159.50
507b	ROCK FILL IN GABIONS	CM	101.95	0.00	617.93	179.97	899.85
508a	BRICK PAVING (SINGLE COURSE)	SM	125.69	38.19	326.67	122.64	613.20
508b	BRICK PAVING (DOUBLE COURSE)	SM	224.69	38.19	649.62	228.13	1,140.64
509a	RIPRAP, CLASS A	CM	549.51	0.00	662.06	302.89	1,514.47
509b	RIPRAP, CLASS B	CM	413.21	180.10	656.77	312.52	1,562.59
509c	RIPRAP, CLASS C	CM	406.67	187.60	662.06	314.08	1,570.42
509c1	RIPRAP, CLASS D	CM	406.67	225.12	662.06	323.46	1,617.32
509d	GROUTED RIPRAP, CLASS A	CM	671.10	170.59	2,424.05	816.43	4,082.16
509e	GROUTED RIPRAP, CLASS B	CM	532.48	316.57	2,239.20	772.06	3,860.31
509f	GROUTED RIPRAP, CLASS C	CM	513.40	301.33	2,239.15	763.47	3,817.34
509f1	GROUTED RIPRAP, CLASS D	CM	513.40	338.85	2,406.96	814.80	4,074.01
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	897.89	481.58	3,580.07	1,239.89	6,199.43
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	52.48	275.72	619.18	236.84	1,184.22
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	115.30	884.71	0.00	250.00	1,250.00
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	172.06	103.71	107.59	95.84	479.20
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	220.24	132.75	137.71	122.68	613.38
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	281.84	288.91	509.64	270.10	1,350.50
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	352.30	361.14	637.05	337.62	1,688.12
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	281.84	288.91	278.88	212.41	1,062.04
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	352.30	361.14	348.60	265.51	1,327.55

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 27 KARAK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	423.80	1,157.76	5,517.40	1,774.74	8,873.69
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,147.03	782.78	5,508.68	1,859.62	9,298.12
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	30.31	66.38	579.48	169.04	845.20
603	BRICK EDGING	M	9.92	0.00	52.80	15.68	78.39
604a	METAL GUARD RAIL	M	76.86	55.31	2,602.47	683.66	3,418.31
604b	METAL GUARD RAIL END PIECES	EACH	100.02	533.21	2,927.94	890.29	4,451.46
604d	STEEL POST FOR METAL GUARD RAIL	EACH	115.28	533.21	2,571.28	804.94	4,024.72
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	1,981.51	1,160.70	12,297.74	3,859.99	19,299.93
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	1,981.51	801.50	11,458.91	3,560.48	17,802.39
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	261.47	393.19	8,684.71	2,334.84	11,674.20
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	79.75	589.78	10,457.19	2,781.68	13,908.39
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	261.47	844.19	18,786.69	4,973.09	24,865.44
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	821.21	921.65	34,611.29	9,088.54	45,442.69
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	164.24	223.78	16,196.27	4,146.07	20,730.37
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	345.26	0.00	2,315.25	665.13	3,325.64
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	345.26	0.00	3,472.88	954.54	4,772.68
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.25	6.00	26.01	8.82	44.08
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.08	3.51	60.68	16.32	81.59
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.25	6.00	34.71	10.99	54.95
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.08	3.51	80.93	21.38	106.91
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	94.39	29.98	251.37	93.93	469.67

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 27 KARAK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	94.39	52.71	764.61	227.93	1,139.63
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.07	7.50	36.31	11.97	59.84
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.07	13.18	104.74	30.50	152.48
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.07	7.50	48.42	14.99	74.97
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.07	13.18	139.65	39.22	196.12
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	94.39	29.98	350.60	118.74	593.70
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	94.39	52.71	1,320.69	366.95	1,834.73
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	77.89	29.98	167.58	68.86	344.31
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	77.89	52.71	510.51	160.28	801.38
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	77.89	29.98	233.73	85.40	427.00
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	77.89	52.71	881.79	253.10	1,265.48
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	11.00	111.18	176.78	74.74	373.70
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	11.00	111.18	208.28	82.61	413.07
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	110.33	182.71	362.28	163.83	819.15
610c	KILOMETER POST	EACH	718.35	1,321.13	1,835.41	968.72	4,843.62
610d	TEN KILOMETER POST	EACH	1,381.71	2,642.27	3,501.12	1,881.28	9,406.38
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	146.42	66.38	1,213.34	356.53	1,782.67
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	132.58	821.01	2.10	238.92	1,194.62

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

**KOHAT**  
**(34)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 34 KOHAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.88	15.76	0.00	4.16	20.80
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	8.85	262.58	1.88	68.32	341.62
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	25.40	635.47	4.22	166.27	831.37
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	101.61	2,541.89	16.89	665.10	3,325.48
103	STRIPPING	CM	3.06	153.65	0.00	39.18	195.88
104	COMPACTION OF NATURAL GROUND	SM	0.43	14.95	2.70	4.52	22.61
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	5.44	227.95	0.00	58.35	291.74
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	133.55	360.08	125.00	154.66	773.29
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	20.45	541.85	0.00	140.58	702.88
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	13.64	422.98	0.00	109.16	545.78
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	4.45	205.65	0.00	52.52	262.62
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	133.55	360.08	125.00	154.66	773.29
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	23.45	492.05	0.00	128.88	644.38
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	11.69	422.98	0.00	108.67	543.34
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	9.02	221.54	0.00	57.64	288.20
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	78.93	664.63	74.15	204.43	1,022.13
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	130.30	400.09	125.00	163.85	819.24
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	117.27	442.22	0.00	139.87	699.35
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	67.01	316.49	0.00	95.87	479.37
107d	GRANULAR BACKFILL	CM	41.33	193.34	846.15	270.20	1,351.02
107e	COMMON BACKFILL	CM	34.90	110.10	18.00	40.75	203.75
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	8.40	234.11	18.00	65.13	325.64

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Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	24.26	578.46	144.73	186.86	934.31
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	18.19	637.82	8.55	166.14	830.71
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	16.17	574.85	8.00	149.75	748.77
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	9.62	119.41	159.08	72.03	360.14
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	7.45	121.79	18.00	36.81	184.05
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	17.63	277.82	10.70	76.54	382.69
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.69	43.86	5.15	12.67	63.37
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.22	30.11	2.73	8.51	42.57
110	IMPROVED SUB-GARDE	CM	12.24	190.72	313.98	129.24	646.18
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	1.02	23.59	2.80	6.85	34.26
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.55	26.79	2.80	7.78	38.92
201	GRANULAR SUB-BASE	CM	9.81	231.80	839.53	270.28	1,351.42
202	AGGREGATE BASE	CM	11.50	282.85	996.27	322.65	1,613.27
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	97.29	2,324.40	9,133.16	2,888.71	14,443.56
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	97.29	2,324.40	9,349.21	2,942.72	14,713.62
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	104.44	2,427.71	9,124.41	2,914.14	14,570.69
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	104.44	2,427.71	9,359.12	2,972.82	14,864.08
204b	CEMENT STABILIZED BASE	CM	35.19	780.07	1,188.99	501.06	2,505.32
204c	CEMENT CONTENT	TON	137.52	0.00	6,930.00	1,766.88	8,834.40
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	299.03	2,060.49	61,369.38	15,932.23	79,661.13

**Rate Analysis Summary (Construction)**

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Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	299.03	2,060.49	61,369.38	15,932.23	79,661.13
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	116.27	188.22	945.16	312.41	1,562.06
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	187.72	3,721.78	7,414.95	2,831.11	14,155.57
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	128.21	207.88	1,015.67	337.94	1,689.70
207a	DEEP PATCHING (0-15 cm)	SM	2.04	64.78	23.50	22.58	112.91
207b	DEEP PATCHING (15-30 cm)	SM	2.04	64.78	23.50	22.58	112.91
208	REINSTATEMENT OF ROAD SURFACE	SM	2.21	104.50	1.98	27.17	135.86
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	5.60	373.82	12.00	97.85	489.27
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.12	40.20	2.40	10.93	54.65
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.37	2.36	69.09	17.95	89.77
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.36	2.36	60.19	15.73	78.64
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.15	0.86	27.75	7.19	35.95
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.15	0.86	24.07	6.27	31.35
304a	SINGLE SURFACE TREATMENT	SM	0.97	11.24	148.13	40.09	200.43
304b	DOUBLE SURFACE TREATMENT	SM	1.42	21.60	279.51	75.63	378.16
304c	TRIPLE SURFACE TREATMENT	SM	2.38	30.32	325.17	89.47	447.35
304d	SEAL COAT	SM	0.90	6.38	35.15	10.61	53.03
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	86.32	2,293.29	9,787.03	3,041.66	15,208.29
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	86.32	2,198.28	10,394.42	3,169.75	15,848.77
307a	DENSE GRADED HOT BIT-MAC	CM	210.66	513.14	7,134.02	1,964.45	9,822.27
307b	OPEN GRADED HOT BIT-MAC	CM	210.66	513.14	6,838.45	1,890.56	9,452.81

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 34 KOHAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	36.53	1,050.92	3,603.18	1,172.66	5,863.28
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	263.36	1,746.20	61,369.38	15,844.74	79,223.69
309a	COLD MILLING, 0-30 mm	SM	1.20	52.01	18.61	17.95	89.77
309b	COLD MILLING, 0-50 mm	SM	2.00	86.68	31.01	29.92	149.62
309c	COLD MILLING, 0-70 mm	SM	3.01	130.02	46.52	44.89	224.43
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	644.75	2,175.42	3,776.88	1,649.26	8,246.31
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	644.75	2,175.42	4,391.63	1,802.95	9,014.75
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	644.75	2,175.42	4,711.31	1,882.87	9,414.35
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	644.75	2,175.42	3,953.70	1,693.47	8,467.33
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	644.75	2,175.42	4,568.35	1,847.13	9,235.65
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	644.75	2,175.42	4,887.93	1,927.02	9,635.12
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	644.75	2,175.42	4,227.14	1,761.83	8,809.14
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	644.75	2,175.42	4,841.79	1,915.49	9,577.45
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	644.75	2,175.42	5,140.86	1,990.26	9,951.29
401b	CONCRETE CLASS B	CM	834.71	1,109.69	3,086.54	1,257.73	6,288.67
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	633.88	2,175.42	3,470.20	1,569.88	7,849.38
401cii	CONCRETE CLASS C (ON GROUND)	CM	633.88	2,175.42	4,084.85	1,723.54	8,617.69
401ciii	CONCRETE CLASS C (ELEVATED)	CM	633.88	2,175.42	4,404.53	1,803.46	9,017.29
401d	CONCRETE CLASS D1	CM	1,001.46	2,689.24	6,246.04	2,484.18	12,420.92
401e	CONCRETE CLASS Y	CM	1,395.64	703.81	4,970.99	1,767.61	8,838.05
401f	LEAN CONCRETE	CM	536.28	759.81	2,599.06	973.79	4,868.93
401gi	PRECAST CONCRETE, CLASS A1	CM	2,120.44	1,470.83	4,375.26	1,991.63	9,958.16
401gii	PRECAST CONCRETE CLASS A3	CM	2,120.44	1,470.83	4,846.14	2,109.35	10,546.76
401giii	PRECAST CONCRETE, CLASS B	CM	2,120.44	1,470.83	3,689.13	1,820.10	9,100.50
401giv	PRECAST CONCRETE CLASS D1	CM	2,120.44	1,470.83	6,253.10	2,461.09	12,305.47

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Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,120.44	1,470.83	6,912.31	2,625.89	13,129.47
401gvi	PRECAST CONCRETE CLASS D3	CM	2,120.44	1,470.83	7,572.88	2,791.04	13,955.18
401h	PLUM CONCRETE	CM	926.39	1,109.69	2,414.47	1,112.64	5,563.18
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	1,963.04	0.00	71,585.34	18,387.09	91,935.47
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	1,963.04	0.00	75,785.34	19,437.09	97,185.47
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,574.53	3,667.20	87,008.40	23,062.53	115,312.66
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	2,972.44	12,010.50	148,044.53	40,756.87	203,784.34
405b	LAUNCHING OF GIRDER	TON	69.19	796.91	0.00	216.52	1,082.62
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	138.46	0.00	1,429.56	392.00	1,960.02
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	138.46	0.00	836.56	243.75	1,218.77
406ci	STEEL EXPANSION JOINTS (Local)	KG	11.36	18.40	139.89	42.41	212.07
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	466.70	0.00	84,597.15	21,265.96	106,329.81
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	483.89	0.00	132,497.37	33,245.31	166,226.57
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	535.46	0.00	1,127,679.85	282,053.83	1,410,269.13
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	466.70	0.00	71,968.22	18,108.73	90,543.65
406dii	PVC WATER STOP 8" SIZE	M	119.92	0.00	452.17	143.02	715.11
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.58	0.40	2.00
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.31	0.83	4.16
406f	ASPHALT FELT (3 PLY)	SM	48.56	0.00	252.32	75.22	376.10

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406g	STEEL OR METAL BEARING DEVICES	KG	23.60	48.58	149.46	55.41	277.06
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	292.78	3,155.77	488.87	984.36	4,921.79
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	445.03	4,796.77	653.71	1,473.88	7,369.39
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	445.03	7,330.09	816.32	2,147.86	10,739.31
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	741.72	12,216.82	1,150.47	3,527.25	17,636.26
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	618.10	10,180.69	1,011.24	2,952.51	14,762.53
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,112.58	18,325.24	1,568.15	5,251.49	26,257.46
407h	PILE LOAD TEST UPTO 120 TON	EACH	28,280.46	86,125.76	115,153.40	57,389.91	286,949.53
407i	PILE LOAD TEST UPTO 240 TON	EACH	28,280.46	86,125.76	246,454.75	90,215.24	451,076.21
407j	PILE LOAD TEST UPTO 360 TON	EACH	77,787.66	95,444.48	334,993.80	127,056.49	635,282.43
407k	PILE LOAD TEST UPTO 550 TON	EACH	114,918.06	119,305.60	534,633.50	192,214.29	961,071.45
407l	PILE LOAD TEST UPTO 800 TON	EACH	170,102.64	143,166.72	866,080.50	294,837.47	1,474,187.33
407m	CONFIRMATORY BORING (NX SIZE)	M	220.72	2,639.89	22.50	720.78	3,603.89
407n	PERMANENT PILE CASING FOR PILES	Ton	289.58	3,993.41	86,095.49	22,594.62	112,973.10
410	BRICK WORK	CM	401.38	453.06	3,897.86	1,188.08	5,940.39
411a	STONE MASONRY RANDOM DRY	CM	423.95	165.94	974.42	391.08	1,955.39
411b	STONE MASONRY RANDOM WITH MORTAR	CM	504.36	263.54	2,018.80	696.67	3,483.37
411c	STONE MASONRY DRESSED UNCOURSED DRY	CM	582.66	165.94	1,456.40	551.25	2,756.25
411d	STONE MASONRY DRESSED UNCOURSED WITH MORTAR	CM	660.96	263.54	2,426.44	837.74	4,188.68
411g	ROLL POINTING	SM	85.22	19.52	97.06	50.45	252.24
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	874.68	419.50	2,426.44	930.15	4,650.77
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	280.18	554.74	904.05	434.74	2,173.71

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501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	280.18	616.97	1,071.01	492.04	2,460.21
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	263.90	1,097.40	1,285.55	661.71	3,308.57
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	277.42	1,377.91	1,872.93	882.06	4,410.32
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	321.88	1,772.89	3,074.30	1,292.27	6,461.33
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	398.93	2,187.37	4,745.05	1,832.84	9,164.19
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	516.26	2,171.36	5,776.69	2,116.08	10,580.39
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	608.75	2,636.66	11,209.44	3,613.71	18,068.55
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	719.91	3,076.10	15,730.76	4,881.69	24,408.47
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	280.18	554.74	1,175.06	502.49	2,512.47
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	273.13	616.97	1,419.45	577.39	2,886.94
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	263.90	1,097.40	1,633.99	748.82	3,744.12
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	277.42	1,377.91	2,531.10	1,046.61	5,233.03
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	321.88	1,772.89	3,887.33	1,495.52	7,477.62
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	398.93	2,187.37	5,829.10	2,103.85	10,519.25
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	516.26	2,171.36	7,325.33	2,503.24	12,516.19
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	608.75	2,636.66	13,928.70	4,293.53	21,467.63
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	719.91	3,076.10	20,414.67	6,052.67	30,263.36
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	110.38	157.23	848.11	278.93	1,394.65

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502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	944.32	845.94	3,159.88	1,237.53	6,187.67
507a	STEEL WIRE MESH FOR GABIONS	KG	6.61	0.00	121.10	31.93	159.65
507b	ROCK FILL IN GABIONS	CM	119.31	0.00	617.93	184.31	921.54
508a	BRICK PAVING (SINGLE COURSE)	SM	134.77	38.19	326.02	124.75	623.73
508b	BRICK PAVING (DOUBLE COURSE)	SM	240.58	38.19	645.06	230.96	1,154.79
509a	RIPRAP, CLASS A	CM	581.19	0.00	662.06	310.81	1,554.06
509b	RIPRAP, CLASS B	CM	417.58	180.10	656.77	313.61	1,568.05
509c	RIPRAP, CLASS C	CM	407.95	187.60	662.06	314.40	1,572.02
509c1	RIPRAP, CLASS D	CM	407.95	225.12	662.06	323.78	1,618.92
509d	GROUTED RIPRAP, CLASS A	CM	711.45	170.59	2,461.40	835.86	4,179.29
509e	GROUTED RIPRAP, CLASS B	CM	542.10	316.57	2,272.67	782.84	3,914.18
509f	GROUTED RIPRAP, CLASS C	CM	520.89	301.33	2,274.01	774.06	3,870.29
509f1	GROUTED RIPRAP, CLASS D	CM	520.89	338.85	2,446.81	826.64	4,133.18
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	973.00	481.58	3,673.76	1,282.09	6,410.43
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	60.45	275.72	848.26	296.11	1,480.53
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	120.86	884.71	0.00	251.39	1,256.96
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	183.62	103.71	107.59	98.73	493.65
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	235.03	132.75	137.71	126.37	631.87
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	297.68	288.91	533.65	280.06	1,400.30
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	372.10	361.14	667.06	350.07	1,750.37
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	297.68	288.91	287.84	218.61	1,093.04
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	372.10	361.14	359.81	273.26	1,366.30

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 34 KOHAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	426.76	1,157.76	5,565.68	1,787.55	8,937.75
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,212.12	782.78	5,556.97	1,887.97	9,439.84
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	32.31	66.38	598.05	174.18	870.92
603	BRICK EDGING	M	10.77	0.00	49.92	15.17	75.87
604a	METAL GUARD RAIL	M	80.57	55.31	2,650.51	696.60	3,482.99
604b	METAL GUARD RAIL END PIECES	EACH	106.75	533.21	2,975.81	903.94	4,519.72
604d	STEEL POST FOR METAL GUARD RAIL	EACH	120.84	533.21	2,594.97	812.26	4,061.28
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,225.32	1,160.70	12,386.18	3,943.05	19,715.24
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,225.32	801.50	11,547.79	3,643.65	18,218.27
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	282.21	393.19	8,689.06	2,341.11	11,705.57
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	86.23	589.78	10,463.72	2,784.93	13,924.66
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	282.21	844.19	18,819.82	4,986.55	24,932.77
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	941.68	921.65	34,660.98	9,131.08	45,655.39
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	188.34	223.78	16,206.21	4,154.58	20,772.91
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	336.86	0.00	2,315.25	663.03	3,315.14
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	336.86	0.00	3,472.88	952.44	4,762.18
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.54	6.00	26.01	8.89	44.44
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.18	3.51	60.68	16.34	81.71
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.54	6.00	34.71	11.06	55.32
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.18	3.51	80.93	21.41	107.03
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	92.21	29.98	251.37	93.39	466.95

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 34 KOHAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	92.21	52.71	764.61	227.38	1,136.91
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.43	7.50	36.31	12.06	60.30
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.43	13.18	104.74	30.59	152.93
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.43	7.50	48.42	15.09	75.43
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.43	13.18	139.65	39.31	196.57
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	92.21	29.98	350.60	118.20	590.98
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	92.21	52.71	1,320.69	366.40	1,832.01
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	76.97	29.98	167.58	68.63	343.16
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	76.97	52.71	510.51	160.05	800.23
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	76.97	29.98	233.73	85.17	425.85
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	76.97	52.71	881.79	252.87	1,264.33
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	11.51	111.18	176.85	74.89	374.43
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	11.51	111.18	208.35	82.76	413.80
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	128.25	182.71	370.31	170.32	851.58
610c	KILOMETER POST	EACH	774.85	1,321.13	1,862.86	989.71	4,948.56
610d	TEN KILOMETER POST	EACH	1,498.90	2,642.27	3,545.02	1,921.55	9,607.74
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	161.10	66.38	1,275.90	375.85	1,879.23
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	141.70	821.01	2.10	241.20	1,206.02

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

# **KOHISTAN**

## **(35)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 35 KOHISTAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.95	15.76	0.00	4.18	20.89
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	9.71	262.58	1.88	68.54	342.70
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	27.61	635.47	4.22	166.83	834.13
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	110.43	2,541.89	16.89	667.30	3,336.51
103	STRIPPING	CM	3.41	153.65	0.00	39.26	196.31
104	COMPACTION OF NATURAL GROUND	SM	0.49	14.95	2.70	4.54	22.68
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	6.38	227.95	0.00	58.58	292.92
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	152.21	360.08	125.00	159.32	796.62
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	23.05	541.85	0.00	141.23	706.13
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	15.48	422.98	0.00	109.61	548.07
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	5.22	205.65	0.00	52.72	263.58
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	152.21	360.08	125.00	159.32	796.62
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	26.78	492.05	0.00	129.71	648.53
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	13.17	422.98	0.00	109.04	545.20
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	10.47	221.54	0.00	58.00	290.01
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	89.54	664.63	75.56	207.43	1,037.16
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	148.78	400.09	125.00	168.47	842.34
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	133.90	442.22	0.00	144.03	720.15
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	76.52	316.49	0.00	98.25	491.25
107d	GRANULAR BACKFILL	CM	45.87	193.34	1,071.81	327.75	1,638.77
107e	COMMON BACKFILL	CM	37.94	110.10	18.00	41.51	207.56
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	9.60	234.11	18.00	65.43	327.13

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 35 KOHISTAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	27.30	578.46	144.73	187.62	938.11
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	20.47	637.82	8.55	166.71	833.56
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	18.20	574.85	8.00	150.26	751.31
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	10.88	119.41	159.08	72.34	361.71
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	8.47	121.79	18.00	37.07	185.33
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	19.73	277.82	10.70	77.06	385.31
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.92	43.86	5.15	12.73	63.66
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.39	30.11	2.73	8.56	42.79
110	IMPROVED SUB-GARDE	CM	13.77	190.72	368.75	143.31	716.55
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	1.14	23.59	2.80	6.88	34.42
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.75	26.79	2.80	7.83	39.17
201	GRANULAR SUB-BASE	CM	11.12	231.80	1,064.11	326.76	1,633.78
202	AGGREGATE BASE	CM	13.16	282.85	1,425.73	430.44	2,152.18
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	106.78	2,324.40	9,614.27	3,011.36	15,056.81
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	106.78	2,324.40	9,890.18	3,080.34	15,401.69
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	114.85	2,427.71	9,605.45	3,037.00	15,185.01
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	114.85	2,427.71	9,900.15	3,110.68	15,553.38
204b	CEMENT STABILIZED BASE	CM	39.87	780.07	1,589.87	602.45	3,012.26
204c	CEMENT CONTENT	TON	144.00	0.00	8,464.05	2,152.01	10,760.06
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	340.91	2,060.49	61,648.76	16,012.54	80,062.70

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 35 KOHISTAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	340.91	2,060.49	61,648.76	16,012.54	80,062.70
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	124.02	188.22	1,530.48	460.68	2,303.40
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	208.45	3,721.78	7,971.17	2,975.35	14,876.76
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	136.39	207.88	1,219.64	390.98	1,954.89
207a	DEEP PATCHING (0-15 cm)	SM	2.32	64.78	28.67	23.94	119.71
207b	DEEP PATCHING (15-30 cm)	SM	2.32	64.78	28.67	23.94	119.71
208	REINSTATEMENT OF ROAD SURFACE	SM	2.51	104.50	1.98	27.25	136.24
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	6.52	373.82	12.00	98.08	490.42
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.30	40.20	2.40	10.98	54.88
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.42	2.36	69.36	18.04	90.19
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.41	2.36	60.47	15.81	79.06
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.17	0.86	27.86	7.22	36.11
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.17	0.86	24.18	6.30	31.51
304a	SINGLE SURFACE TREATMENT	SM	1.11	11.24	151.67	41.01	205.03
304b	DOUBLE SURFACE TREATMENT	SM	1.62	21.60	289.93	78.29	391.45
304c	TRIPLE SURFACE TREATMENT	SM	2.73	30.32	337.09	92.54	462.69
304d	SEAL COAT	SM	1.03	6.38	35.67	10.77	53.84
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	95.29	2,293.29	10,310.15	3,174.68	15,873.41
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	95.29	2,198.28	10,947.32	3,310.22	16,551.11
307a	DENSE GRADED HOT BIT-MAC	CM	230.40	513.14	7,500.33	2,060.96	10,304.82
307b	OPEN GRADED HOT BIT-MAC	CM	230.40	513.14	7,287.11	2,007.66	10,038.30

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 35 KOHISTAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	40.20	1,050.92	3,603.18	1,173.57	5,867.87
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	298.78	1,746.20	61,648.76	15,923.44	79,617.18
309a	COLD MILLING, 0-30 mm	SM	1.37	52.01	18.96	18.08	90.42
309b	COLD MILLING, 0-50 mm	SM	2.28	86.68	31.60	30.14	150.69
309c	COLD MILLING, 0-70 mm	SM	3.41	130.02	47.40	45.21	226.04
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	733.37	2,175.42	4,749.23	1,914.51	9,572.53
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	733.37	2,175.42	5,375.71	2,071.12	10,355.62
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	733.37	2,175.42	5,701.48	2,152.57	10,762.83
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	733.37	2,175.42	5,017.94	1,981.68	9,908.42
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	733.37	2,175.42	5,644.30	2,138.27	10,691.37
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	733.37	2,175.42	5,969.91	2,219.68	11,098.38
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	733.37	2,175.42	5,324.12	2,058.23	10,291.13
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	733.37	2,175.42	5,950.48	2,214.82	11,074.08
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	733.37	2,175.42	6,252.89	2,290.42	11,452.10
401b	CONCRETE CLASS B	CM	940.84	1,109.69	4,048.63	1,524.79	7,623.95
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	712.85	2,175.42	4,485.98	1,843.56	9,217.82
401cii	CONCRETE CLASS C (ON GROUND)	CM	712.85	2,175.42	5,112.34	2,000.15	10,000.77
401ciii	CONCRETE CLASS C (ELEVATED)	CM	712.85	2,175.42	5,438.11	2,081.60	10,407.98
401d	CONCRETE CLASS D1	CM	1,139.33	2,689.24	7,525.68	2,838.56	14,192.80
401e	CONCRETE CLASS Y	CM	1,581.86	703.81	5,969.84	2,063.88	10,319.40
401f	LEAN CONCRETE	CM	586.83	759.81	3,482.67	1,207.33	6,036.64
401gi	PRECAST CONCRETE, CLASS A1	CM	2,363.21	1,470.83	5,340.08	2,293.53	11,467.65
401gii	PRECAST CONCRETE CLASS A3	CM	2,363.21	1,470.83	5,956.69	2,447.68	12,238.42
401giii	PRECAST CONCRETE, CLASS B	CM	2,363.21	1,470.83	4,702.45	2,134.12	10,670.62
401giv	PRECAST CONCRETE CLASS D1	CM	2,363.21	1,470.83	7,533.63	2,841.92	14,209.59

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 35 KOHISTAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,363.21	1,470.83	8,318.80	3,038.21	15,191.05
401gvi	PRECAST CONCRETE CLASS D3	CM	2,363.21	1,470.83	9,105.67	3,234.93	16,174.64
401h	PLUM CONCRETE	CM	1,036.84	1,109.69	3,222.61	1,342.29	6,711.43
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	2,244.86	0.00	71,725.78	18,492.66	92,463.30
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	2,244.86	0.00	75,925.78	19,542.66	97,713.30
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,800.73	3,667.20	88,646.40	23,528.58	117,642.91
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	3,510.84	12,010.50	151,037.73	41,639.77	208,198.83
405b	LAUNCHING OF GIRDER	TON	81.72	796.91	0.00	219.66	1,098.29
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	155.35	0.00	1,455.74	402.77	2,013.86
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	155.35	0.00	851.53	251.72	1,258.60
406ci	STEEL EXPANSION JOINTS (Local)	KG	12.86	18.40	142.37	43.41	217.05
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	532.82	0.00	86,208.52	21,685.34	108,426.68
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	550.82	0.00	135,021.13	33,892.99	169,464.93
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	604.82	0.00	1,149,159.46	287,441.07	1,437,205.34
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	532.82	0.00	73,339.04	18,467.96	92,339.82
406dii	PVC WATER STOP 8" SIZE	M	134.27	0.00	460.78	148.76	743.81
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.61	0.41	2.04
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.37	0.85	4.24
406f	ASPHALT FELT (3 PLY)	SM	55.51	0.00	256.26	77.94	389.71

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 35 KOHISTAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	26.41	48.58	151.02	56.50	282.51
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	344.85	3,155.77	489.54	997.54	4,987.69
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	524.17	4,796.77	654.72	1,493.91	7,469.57
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	524.17	7,330.09	817.84	2,168.03	10,840.13
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	873.61	12,216.82	1,152.73	3,560.79	17,803.96
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	728.01	10,180.69	1,013.19	2,980.47	14,902.37
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,310.42	18,325.24	1,571.35	5,301.75	26,508.76
407h	PILE LOAD TEST UPTO 120 TON	EACH	30,085.86	86,125.76	130,837.24	61,762.22	308,811.08
407i	PILE LOAD TEST UPTO 240 TON	EACH	30,085.86	86,125.76	278,130.01	98,585.41	492,927.04
407j	PILE LOAD TEST UPTO 360 TON	EACH	81,925.86	95,444.48	381,845.96	139,804.08	699,020.38
407k	PILE LOAD TEST UPTO 550 TON	EACH	120,805.86	119,305.60	610,736.20	212,711.92	1,063,559.58
407l	PILE LOAD TEST UPTO 800 TON	EACH	178,798.80	143,166.72	988,354.60	327,580.03	1,637,900.15
407m	CONFIRMATORY BORING (NX SIZE)	M	246.88	2,639.89	22.50	727.32	3,636.59
407n	PERMANENT PILE CASING FOR PILES	Ton	323.61	3,993.41	87,735.30	23,013.08	115,065.39
410	BRICK WORK	CM	451.23	453.06	4,867.29	1,442.89	7,214.47
411a	STONE MASONRY RANDOM DRY	CM	474.93	165.94	1,373.26	503.53	2,517.66
411b	STONE MASONRY RANDOM WITH MORTAR	CM	562.53	263.54	2,729.54	888.90	4,444.51
411c	STONE MASONRY DRESSED UNCOURSESED DRY	CM	651.33	165.94	1,529.17	586.61	2,933.04
411d	STONE MASONRY DRESSED UNCOURSESED WITH MORTAR	CM	740.13	263.54	2,766.00	942.42	4,712.08
411g	ROLL POINTING	SM	96.23	19.52	105.09	55.21	276.04
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	974.13	419.50	2,766.00	1,039.91	5,199.53
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	302.37	554.74	949.62	451.68	2,258.41

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 35 KOHISTAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	302.37	616.97	1,141.02	515.09	2,575.45
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	287.75	1,097.40	1,384.74	692.47	3,462.36
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	300.86	1,377.91	2,030.30	927.27	4,636.33
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	350.02	1,772.89	3,372.86	1,373.94	6,869.71
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	436.01	2,187.37	5,186.37	1,952.44	9,762.18
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	564.24	2,171.36	6,219.52	2,238.78	11,193.91
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	663.72	2,636.66	11,676.65	3,744.26	18,721.29
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	787.34	3,076.10	17,442.57	5,326.50	26,632.52
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	302.37	554.74	1,220.63	519.43	2,597.17
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	294.03	616.97	1,489.46	600.12	3,000.58
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	287.75	1,097.40	1,733.18	779.58	3,897.91
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	300.86	1,377.91	2,688.47	1,091.81	5,459.04
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	350.02	1,772.89	4,185.89	1,577.20	7,886.00
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	436.01	2,187.37	6,270.41	2,223.45	11,117.23
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	564.24	2,171.36	7,768.15	2,625.94	13,129.70
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	663.72	2,636.66	14,395.91	4,424.07	22,120.36
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	787.34	3,076.10	22,126.48	6,497.48	32,487.41
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	119.93	157.23	1,073.87	337.76	1,688.79

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 35 KOHISTAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	1,064.16	845.94	4,138.19	1,512.07	7,560.37
507a	STEEL WIRE MESH FOR GABIONS	KG	7.50	0.00	123.41	32.73	163.63
507b	ROCK FILL IN GABIONS	CM	128.02	0.00	984.62	278.16	1,390.80
508a	BRICK PAVING (SINGLE COURSE)	SM	149.60	38.19	419.02	151.70	758.51
508b	BRICK PAVING (DOUBLE COURSE)	SM	267.20	38.19	829.40	283.70	1,418.49
509a	RIPRAP, CLASS A	CM	648.67	0.00	1,054.95	425.90	2,129.52
509b	RIPRAP, CLASS B	CM	474.78	180.10	1,046.51	425.35	2,126.73
509c	RIPRAP, CLASS C	CM	465.25	187.60	1,054.95	426.95	2,134.75
509c1	RIPRAP, CLASS D	CM	465.25	225.12	1,054.95	436.33	2,181.65
509d	GROUTED RIPRAP, CLASS A	CM	793.31	170.59	3,114.11	1,019.50	5,097.50
509e	GROUTED RIPRAP, CLASS B	CM	614.49	316.57	2,894.80	956.46	4,782.32
509f	GROUTED RIPRAP, CLASS C	CM	591.27	301.33	2,918.77	952.84	4,764.21
509f1	GROUTED RIPRAP, CLASS D	CM	591.27	338.85	3,121.37	1,012.87	5,064.37
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	1,075.52	481.58	4,754.97	1,578.02	7,890.09
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	65.25	275.72	1,074.43	353.85	1,769.26
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	135.38	884.71	0.00	255.02	1,275.11
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	204.21	103.71	171.43	119.84	599.19
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	261.39	132.75	219.43	153.39	766.96
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	332.43	288.91	651.75	318.27	1,591.36
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	415.53	361.14	814.69	397.84	1,989.21
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	332.43	288.91	397.05	254.60	1,272.98
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	415.53	361.14	496.31	318.25	1,591.23

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 35 KOHISTAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	485.93	1,157.76	6,095.39	1,934.77	9,673.85
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,353.33	782.78	6,076.43	2,053.13	10,265.67
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	35.95	66.38	700.31	200.66	1,003.29
603	BRICK EDGING	M	11.90	0.00	64.32	19.05	95.27
604a	METAL GUARD RAIL	M	90.25	55.31	2,665.99	702.89	3,514.45
604b	METAL GUARD RAIL END PIECES	EACH	118.71	533.21	2,998.72	912.66	4,563.31
604d	STEEL POST FOR METAL GUARD RAIL	EACH	135.36	533.21	2,633.83	825.60	4,128.00
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,425.66	1,160.70	13,347.20	4,233.39	21,166.94
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,425.66	801.50	12,507.40	3,933.64	19,668.20
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	312.44	393.19	8,979.29	2,421.23	12,106.14
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	95.40	589.78	10,850.10	2,883.82	14,419.10
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	312.44	844.19	19,559.76	5,179.10	25,895.48
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	1,018.26	921.65	35,893.38	9,458.33	47,291.63
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	203.65	223.78	16,629.34	4,264.19	21,320.96
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	388.66	0.00	2,359.35	687.00	3,435.01
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	388.66	0.00	3,539.03	981.92	4,909.61
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.91	6.00	26.51	9.10	45.52
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.30	3.51	61.83	16.66	83.31
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.91	6.00	35.37	11.32	56.60
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.30	3.51	82.47	21.82	109.11
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	106.33	29.98	256.16	98.12	490.58

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 35 KOHISTAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	106.33	52.71	779.17	234.55	1,172.76
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.89	7.50	37.00	12.35	61.73
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.89	13.18	106.73	31.20	156.00
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.89	7.50	49.34	15.43	77.15
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.89	13.18	142.31	40.09	200.47
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	106.33	29.98	357.27	123.40	616.98
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	106.33	52.71	1,345.85	376.22	1,881.10
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	88.33	29.98	170.77	72.27	361.35
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	88.33	52.71	520.23	165.32	826.59
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	88.33	29.98	238.18	89.12	445.61
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	88.33	52.71	898.59	259.91	1,299.53
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	12.90	111.18	181.06	76.28	381.42
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	12.90	111.18	213.16	84.31	421.54
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	137.96	182.71	446.47	191.79	958.93
610c	KILOMETER POST	EACH	858.06	1,321.13	2,110.75	1,072.49	5,362.44
610d	TEN KILOMETER POST	EACH	1,656.13	2,642.27	3,941.77	2,060.04	10,300.21
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	177.02	66.38	1,224.20	366.90	1,834.50
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	157.50	821.01	2.14	245.16	1,225.81

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

**LAKKI MARWAT**  
**(37A)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 37A LAKKI MARWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.77	15.76	0.00	4.13	20.66
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	8.02	262.58	1.88	68.12	340.59
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	22.45	635.47	4.22	165.54	827.68
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	89.79	2,541.89	16.89	662.14	3,310.71
103	STRIPPING	CM	2.88	153.65	0.00	39.13	195.65
104	COMPACTION OF NATURAL GROUND	SM	0.41	14.95	2.70	4.52	22.59
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	5.80	227.95	0.00	58.44	292.19
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	132.92	360.08	125.00	154.50	772.51
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	19.81	541.85	0.00	140.42	702.08
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	13.43	422.98	0.00	109.10	545.52
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	4.75	205.65	0.00	52.60	262.99
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	132.92	360.08	125.00	154.50	772.51
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	23.45	492.05	0.00	128.87	644.37
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	11.32	422.98	0.00	108.58	542.88
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	9.37	221.54	0.00	57.73	288.64
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	77.68	664.63	75.56	204.47	1,022.33
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	130.27	400.09	125.00	163.84	819.20
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	117.24	442.22	0.00	139.86	699.32
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	66.99	316.49	0.00	95.87	479.35
107d	GRANULAR BACKFILL	CM	38.53	193.34	705.05	234.23	1,171.14
107e	COMMON BACKFILL	CM	30.87	110.10	18.00	39.74	198.71
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	8.41	234.11	18.00	65.13	325.64

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 37A LAKKI MARWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	23.41	578.46	144.73	186.65	933.25
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	17.56	637.82	8.55	165.98	829.91
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	15.61	574.85	8.00	149.61	748.07
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	9.38	119.41	159.08	71.97	359.84
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	7.38	121.79	18.00	36.79	183.96
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	16.78	277.82	10.70	76.32	381.62
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.67	43.86	5.15	12.67	63.35
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.21	30.11	2.73	8.51	42.57
110	IMPROVED SUB-GARDE	CM	11.80	190.72	305.32	126.96	634.80
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	0.97	23.59	2.80	6.84	34.21
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.50	26.79	2.80	7.77	38.86
201	GRANULAR SUB-BASE	CM	9.65	231.80	804.00	261.36	1,306.80
202	AGGREGATE BASE	CM	11.56	282.85	919.08	303.37	1,516.86
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	88.16	2,324.40	9,442.03	2,963.65	14,818.24
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	88.16	2,324.40	9,676.71	3,022.32	15,111.59
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	95.14	2,427.71	9,433.24	2,989.02	14,945.10
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	95.14	2,427.71	9,686.65	3,052.37	15,261.87
204b	CEMENT STABILIZED BASE	CM	34.51	780.07	1,461.65	569.06	2,845.28
204c	CEMENT CONTENT	TON	110.00	0.00	7,455.00	1,891.25	9,456.25
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	297.83	2,060.49	61,719.12	16,019.36	80,096.80

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 37A LAKKI MARWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	297.83	2,060.49	61,719.12	16,019.36	80,096.80
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	97.80	188.22	1,191.92	369.48	1,847.42
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	175.24	3,721.78	7,679.47	2,894.12	14,470.61
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	107.07	207.88	1,130.19	361.29	1,806.43
207a	DEEP PATCHING (0-15 cm)	SM	2.01	64.78	18.27	21.26	106.32
207b	DEEP PATCHING (15-30 cm)	SM	2.01	64.78	18.27	21.26	106.32
208	REINSTATEMENT OF ROAD SURFACE	SM	2.18	104.50	1.98	27.17	135.83
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	5.85	373.82	12.00	97.92	489.59
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.17	40.20	2.40	10.94	54.71
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.37	2.36	69.43	18.04	90.21
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.36	2.36	60.54	15.82	79.08
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.15	0.86	27.89	7.22	36.12
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.15	0.86	24.21	6.30	31.52
304a	SINGLE SURFACE TREATMENT	SM	0.98	11.24	150.32	40.64	203.18
304b	DOUBLE SURFACE TREATMENT	SM	1.43	21.60	285.07	77.02	385.12
304c	TRIPLE SURFACE TREATMENT	SM	2.41	30.32	331.68	91.10	455.52
304d	SEAL COAT	SM	0.91	6.38	35.82	10.78	53.88
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	79.39	2,293.29	10,129.09	3,125.44	15,627.20
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	79.39	2,198.28	10,731.83	3,252.38	16,261.88
307a	DENSE GRADED HOT BIT-MAC	CM	189.20	513.14	7,413.14	2,028.87	10,144.34
307b	OPEN GRADED HOT BIT-MAC	CM	189.20	513.14	7,112.29	1,953.66	9,768.28

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 37A LAKKI MARWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	33.33	1,050.92	3,603.18	1,171.86	5,859.28
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	259.21	1,746.20	61,719.12	15,931.13	79,655.66
309a	COLD MILLING, 0-30 mm	SM	1.19	52.01	18.96	18.04	90.19
309b	COLD MILLING, 0-50 mm	SM	1.98	86.68	31.60	30.06	150.32
309c	COLD MILLING, 0-70 mm	SM	2.96	130.02	47.40	45.10	225.48
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	638.64	2,175.42	4,050.13	1,716.05	8,580.24
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	638.64	2,175.42	4,676.61	1,872.67	9,363.34
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	638.64	2,175.42	5,002.38	1,954.11	9,770.56
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	638.64	2,175.42	4,237.33	1,762.85	8,814.24
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	638.64	2,175.42	4,863.69	1,919.44	9,597.19
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	638.64	2,175.42	5,189.34	2,000.85	10,004.25
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	638.64	2,175.42	4,550.67	1,841.18	9,205.92
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	638.64	2,175.42	5,177.03	1,997.77	9,988.87
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	638.64	2,175.42	5,476.73	2,072.70	10,363.49
401b	CONCRETE CLASS B	CM	808.65	1,109.69	3,311.47	1,307.45	6,537.27
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	610.67	2,175.42	3,797.41	1,645.88	8,229.38
401cii	CONCRETE CLASS C (ON GROUND)	CM	610.67	2,175.42	4,423.77	1,802.47	9,012.33
401ciii	CONCRETE CLASS C (ELEVATED)	CM	610.67	2,175.42	4,749.54	1,883.91	9,419.54
401d	CONCRETE CLASS D1	CM	992.43	2,689.24	6,616.92	2,574.65	12,873.24
401e	CONCRETE CLASS Y	CM	1,370.59	703.81	5,284.96	1,839.84	9,199.20
401f	LEAN CONCRETE	CM	482.31	759.81	2,792.20	1,008.58	5,042.89
401gi	PRECAST CONCRETE, CLASS A1	CM	1,997.60	1,470.83	4,657.48	2,031.48	10,157.39
401gii	PRECAST CONCRETE CLASS A3	CM	1,997.60	1,470.83	5,177.58	2,161.50	10,807.52
401giii	PRECAST CONCRETE, CLASS B	CM	1,997.60	1,470.83	3,952.71	1,855.29	9,276.43
401giv	PRECAST CONCRETE CLASS D1	CM	1,997.60	1,470.83	6,624.12	2,523.14	12,615.69

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 37A LAKKI MARWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	1,997.60	1,470.83	7,330.36	2,699.70	13,498.49
401gvi	PRECAST CONCRETE CLASS D3	CM	1,997.60	1,470.83	8,038.87	2,876.83	14,384.13
401h	PLUM CONCRETE	CM	881.99	1,109.69	2,637.08	1,157.19	5,785.95
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	1,969.77	0.00	71,607.45	18,394.30	91,971.52
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	1,969.77	0.00	75,807.45	19,444.30	97,221.52
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,580.26	3,667.20	88,646.40	23,473.47	117,367.33
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	3,218.25	12,010.50	150,902.66	41,532.85	207,664.26
405b	LAUNCHING OF GIRDER	TON	74.91	796.91	0.00	217.96	1,089.78
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	132.63	0.00	1,455.82	397.11	1,985.55
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	132.63	0.00	851.60	246.06	1,230.29
406ci	STEEL EXPANSION JOINTS (Local)	KG	11.13	18.40	142.37	42.98	214.88
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	466.40	0.00	86,208.52	21,668.73	108,343.65
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	480.15	0.00	135,021.13	33,875.32	169,376.59
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	521.40	0.00	1,149,159.46	287,420.21	1,437,101.07
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	466.40	0.00	73,339.04	18,451.36	92,256.80
406dii	PVC WATER STOP 8" SIZE	M	114.28	0.00	460.78	143.76	718.82
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.61	0.41	2.04
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.37	0.85	4.24
406f	ASPHALT FELT (3 PLY)	SM	48.68	0.00	256.33	76.25	381.26

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 37A LAKKI MARWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	22.45	48.58	151.02	55.51	277.56
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	314.95	3,155.77	489.54	990.06	4,950.32
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	478.72	4,796.77	654.72	1,482.55	7,412.76
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	478.72	7,330.09	817.44	2,156.56	10,782.82
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	797.87	12,216.82	1,152.33	3,541.76	17,708.78
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	664.89	10,180.69	1,012.79	2,964.59	14,822.96
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,196.80	18,325.24	1,570.95	5,273.25	26,366.24
407h	PILE LOAD TEST UPTO 120 TON	EACH	23,618.52	86,125.76	101,624.76	52,842.26	264,211.30
407i	PILE LOAD TEST UPTO 240 TON	EACH	23,618.52	86,125.76	219,705.05	82,362.33	411,811.66
407j	PILE LOAD TEST UPTO 360 TON	EACH	63,218.52	95,444.48	294,208.52	113,217.88	566,089.40
407k	PILE LOAD TEST UPTO 550 TON	EACH	92,918.52	119,305.60	467,993.40	170,054.38	850,271.90
407l	PILE LOAD TEST UPTO 800 TON	EACH	137,498.64	143,166.72	759,302.20	259,991.89	1,299,959.45
407m	CONFIRMATORY BORING (NX SIZE)	M	209.81	2,639.89	22.50	718.05	3,590.24
407n	PERMANENT PILE CASING FOR PILES	Ton	274.63	3,993.41	87,735.30	23,000.84	115,004.18
410	BRICK WORK	CM	386.34	453.06	4,055.35	1,223.69	6,118.45
411a	STONE MASONRY RANDOM DRY	CM	404.55	165.94	1,221.44	447.98	2,239.91
411b	STONE MASONRY RANDOM WITH MORTAR	CM	476.05	263.54	2,258.99	749.64	3,748.22
411c	STONE MASONRY DRESSED UNCOURSESED DRY	CM	553.05	165.94	1,655.97	593.74	2,968.70
411d	STONE MASONRY DRESSED UNCOURSESED WITH MORTAR	CM	630.05	263.54	2,632.14	881.43	4,407.16
411g	ROLL POINTING	SM	82.93	19.52	98.80	50.31	251.56
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	822.55	419.50	2,632.14	968.55	4,842.73
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	243.07	554.74	947.08	436.22	2,181.11

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 37A LAKKI MARWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	243.07	616.97	1,142.35	500.60	2,502.99
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	235.17	1,097.40	1,391.99	681.14	3,405.70
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	243.79	1,377.91	2,050.10	917.95	4,589.74
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	284.85	1,772.89	3,428.24	1,371.50	6,857.48
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	357.67	2,187.37	5,275.03	1,955.02	9,775.09
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	462.87	2,171.36	6,307.23	2,235.36	11,176.82
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	542.41	2,636.66	11,763.13	3,735.55	18,677.75
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	646.56	3,076.10	17,874.78	5,399.36	26,996.80
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	243.07	554.74	1,218.09	503.97	2,519.87
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	235.43	616.97	1,490.80	585.80	2,929.00
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	235.17	1,097.40	1,740.43	768.25	3,841.25
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	243.79	1,377.91	2,708.26	1,082.49	5,412.44
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	284.85	1,772.89	4,241.28	1,574.76	7,873.78
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	357.67	2,187.37	6,359.08	2,226.03	11,130.15
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	462.87	2,171.36	7,855.87	2,622.52	13,112.62
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	542.41	2,636.66	14,482.39	4,415.36	22,076.82
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	646.56	3,076.10	22,558.69	6,570.34	32,851.69
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	97.47	157.23	713.70	242.10	1,210.50

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 37A LAKKI MARWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	914.36	845.94	3,390.36	1,287.67	6,438.33
507a	STEEL WIRE MESH FOR GABIONS	KG	6.50	0.00	123.41	32.48	162.39
507b	ROCK FILL IN GABIONS	CM	101.95	0.00	842.92	236.22	1,181.09
508a	BRICK PAVING (SINGLE COURSE)	SM	125.69	38.19	334.62	124.63	623.13
508b	BRICK PAVING (DOUBLE COURSE)	SM	224.69	38.19	663.92	231.70	1,158.51
509a	RIPRAP, CLASS A	CM	549.51	0.00	903.13	363.16	1,815.80
509b	RIPRAP, CLASS B	CM	413.21	180.10	895.90	372.30	1,861.51
509c	RIPRAP, CLASS C	CM	406.67	187.60	903.13	374.35	1,871.75
509c1	RIPRAP, CLASS D	CM	406.67	225.12	903.13	383.73	1,918.65
509d	GROUTED RIPRAP, CLASS A	CM	671.10	170.59	2,731.85	893.38	4,466.91
509e	GROUTED RIPRAP, CLASS B	CM	532.48	316.57	2,538.03	846.77	4,233.84
509f	GROUTED RIPRAP, CLASS C	CM	513.40	301.33	2,544.18	839.73	4,198.63
509f1	GROUTED RIPRAP, CLASS D	CM	513.40	338.85	2,718.63	892.72	4,463.59
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	897.89	481.58	3,942.47	1,330.48	6,652.42
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	52.48	275.72	704.82	258.25	1,291.27
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	115.30	884.71	0.00	250.00	1,250.00
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	172.06	103.71	146.76	105.63	528.17
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	220.24	132.75	187.85	135.21	676.05
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	281.84	288.91	562.55	283.33	1,416.63
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	352.30	361.14	703.19	354.16	1,770.79
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	281.84	288.91	323.53	223.57	1,117.86
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	352.30	361.14	404.42	279.47	1,397.33

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 37A LAKKI MARWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	423.80	1,157.76	5,718.29	1,824.96	9,124.81
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,147.03	782.78	5,708.11	1,909.48	9,547.40
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	30.31	66.38	611.67	177.09	885.44
603	BRICK EDGING	M	9.92	0.00	52.80	15.68	78.39
604a	METAL GUARD RAIL	M	76.86	55.31	2,652.72	696.23	3,481.13
604b	METAL GUARD RAIL END PIECES	EACH	100.02	533.21	2,984.36	904.40	4,521.99
604d	STEEL POST FOR METAL GUARD RAIL	EACH	115.28	533.21	2,620.47	817.24	4,086.20
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	1,981.51	1,160.70	12,699.92	3,960.53	19,802.66
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	1,981.51	801.50	11,861.54	3,661.14	18,305.68
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	261.47	393.19	8,896.05	2,387.68	11,938.38
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	79.75	589.78	10,725.25	2,848.69	14,243.47
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	261.47	844.19	19,260.67	5,091.58	25,457.91
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	821.21	921.65	35,444.75	9,296.90	46,484.52
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	164.24	223.78	16,539.61	4,231.91	21,159.54
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	345.26	0.00	2,359.35	676.15	3,380.76
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	345.26	0.00	3,539.03	971.07	4,855.36
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.25	6.00	26.51	8.94	44.70
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.08	3.51	61.83	16.61	83.04
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.25	6.00	35.37	11.16	55.78
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.08	3.51	82.47	21.77	108.83
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	94.39	29.98	256.16	95.13	475.66

CLIENT:

CSR - 2011

CONSULTANT:

NATIONAL HIGHWAY AUTHORITY  
ISLAMABADSAMPAK INTERNATIONAL (Pvt.) LTD  
LAHORE**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 37A LAKKI MARWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	94.39	52.71	779.17	231.57	1,157.84
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.07	7.50	37.00	12.14	60.71
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.07	13.18	106.73	30.99	154.97
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.07	7.50	49.34	15.23	76.13
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.07	13.18	142.31	39.89	199.44
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	94.39	29.98	357.27	120.41	602.05
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	94.39	52.71	1,345.85	373.24	1,866.18
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	77.89	29.98	170.77	69.66	348.30
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	77.89	52.71	520.23	162.71	813.54
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	77.89	29.98	238.18	86.51	432.56
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	77.89	52.71	898.59	257.30	1,286.48
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	11.00	111.18	180.32	75.63	378.13
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	11.00	111.18	212.42	83.65	418.25
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	110.33	182.71	393.20	171.56	857.80
610c	KILOMETER POST	EACH	718.35	1,321.13	1,936.31	993.95	4,969.75
610d	TEN KILOMETER POST	EACH	1,381.71	2,642.27	3,664.93	1,922.23	9,611.14
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	146.42	66.38	1,277.79	372.65	1,863.23
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	132.58	821.01	2.14	238.93	1,194.67

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

# **MALAKAND**

## **(42)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 42 MALAKAND

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.82	15.76	0.00	4.14	20.72
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	8.29	262.58	1.88	68.19	340.93
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	23.66	635.47	4.22	165.84	829.19
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	94.63	2,541.89	16.89	663.35	3,316.75
103	STRIPPING	CM	2.89	153.65	0.00	39.13	195.67
104	COMPACTION OF NATURAL GROUND	SM	0.41	14.95	2.70	4.52	22.58
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	5.33	227.95	0.00	58.32	291.60
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	128.34	360.08	125.00	153.36	766.78
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	19.51	541.85	0.00	140.34	701.70
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	13.07	422.98	0.00	109.01	545.06
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	4.36	205.65	0.00	52.50	262.51
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	128.34	360.08	125.00	153.36	766.78
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	22.57	492.05	0.00	128.65	643.27
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	11.15	422.98	0.00	108.53	542.67
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	8.77	221.54	0.00	57.58	287.89
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	75.62	664.63	74.15	203.60	1,017.99
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	125.37	400.09	125.00	162.62	813.08
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	112.83	442.22	0.00	138.76	693.81
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	64.48	316.49	0.00	95.24	476.20
107d	GRANULAR BACKFILL	CM	39.03	193.34	1,081.16	328.38	1,641.90
107e	COMMON BACKFILL	CM	32.51	110.10	18.00	40.15	200.76
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	8.09	234.11	18.00	65.05	325.25

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

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Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	23.12	578.46	144.73	186.58	932.88
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	17.34	637.82	8.55	165.93	829.64
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	15.41	574.85	8.00	149.56	747.82
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	9.20	119.41	159.08	71.92	359.61
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	7.15	121.79	18.00	36.73	183.67
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	16.74	277.82	10.70	76.31	381.57
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.62	43.86	5.15	12.66	63.29
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.17	30.11	2.73	8.50	42.51
110	IMPROVED SUB-GARDE	CM	11.66	190.72	358.24	140.15	700.77
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	0.97	23.59	2.80	6.84	34.20
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.48	26.79	2.80	7.77	38.83
201	GRANULAR SUB-BASE	CM	9.39	231.80	1,021.00	315.55	1,577.74
202	AGGREGATE BASE	CM	11.08	282.85	1,252.94	386.72	1,933.60
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	91.19	2,324.40	9,633.67	3,012.31	15,061.57
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	91.19	2,324.40	9,888.21	3,075.95	15,379.74
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	98.02	2,427.71	9,624.87	3,037.65	15,188.24
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	98.02	2,427.71	9,898.10	3,105.96	15,529.78
204b	CEMENT STABILIZED BASE	CM	33.68	780.07	1,690.16	625.98	3,129.89
204c	CEMENT CONTENT	TON	125.00	0.00	8,146.11	2,067.78	10,338.89
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	287.42	2,060.49	61,439.29	15,946.80	79,734.01

**Rate Analysis Summary (Construction)**

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Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	287.42	2,060.49	61,439.29	15,946.80	79,734.01
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	106.96	188.22	1,396.73	422.98	2,114.88
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	177.31	3,721.78	7,909.67	2,952.19	14,760.95
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	117.74	207.88	1,155.14	370.19	1,850.95
207a	DEEP PATCHING (0-15 cm)	SM	1.96	64.78	29.89	24.16	120.78
207b	DEEP PATCHING (15-30 cm)	SM	1.96	64.78	29.89	24.16	120.78
208	REINSTATEMENT OF ROAD SURFACE	SM	2.12	104.50	1.98	27.15	135.75
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	5.46	373.82	12.00	97.82	489.09
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.09	40.20	2.40	10.92	54.61
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.36	2.36	69.15	17.97	89.84
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.35	2.36	60.26	15.74	78.72
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.14	0.86	27.77	7.19	35.97
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.14	0.86	24.09	6.27	31.37
304a	SINGLE SURFACE TREATMENT	SM	0.93	11.24	150.84	40.76	203.78
304b	DOUBLE SURFACE TREATMENT	SM	1.37	21.60	287.40	77.59	387.96
304c	TRIPLE SURFACE TREATMENT	SM	2.30	30.32	334.36	91.75	458.73
304d	SEAL COAT	SM	0.87	6.38	36.01	10.81	54.07
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	81.21	2,293.29	10,304.88	3,169.84	15,849.22
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	81.21	2,198.28	10,899.77	3,294.81	16,474.07
307a	DENSE GRADED HOT BIT-MAC	CM	197.00	513.14	7,523.31	2,058.36	10,291.80
307b	OPEN GRADED HOT BIT-MAC	CM	197.00	513.14	7,238.66	1,987.20	9,935.99

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Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	34.30	1,050.92	3,603.18	1,172.10	5,860.49
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	252.32	1,746.20	61,439.29	15,859.45	79,297.26
309a	COLD MILLING, 0-30 mm	SM	1.15	52.01	18.61	17.94	89.71
309b	COLD MILLING, 0-50 mm	SM	1.92	86.68	31.01	29.90	149.52
309c	COLD MILLING, 0-70 mm	SM	2.88	130.02	46.52	44.86	224.28
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	618.78	2,175.42	4,589.84	1,846.01	9,230.05
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	618.78	2,175.42	5,204.64	1,999.71	9,998.54
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	618.78	2,175.42	5,524.32	2,079.63	10,398.14
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	618.78	2,175.42	4,789.14	1,895.84	9,479.18
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	618.78	2,175.42	5,403.79	2,049.50	10,247.49
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	618.78	2,175.42	5,723.33	2,129.38	10,646.91
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	618.78	2,175.42	5,099.54	1,973.43	9,867.17
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	618.78	2,175.42	5,714.19	2,127.10	10,635.48
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	618.78	2,175.42	6,004.29	2,199.62	10,998.11
401b	CONCRETE CLASS B	CM	796.25	1,109.69	3,847.96	1,438.47	7,192.37
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	603.77	2,175.42	4,295.67	1,768.71	8,843.57
401cii	CONCRETE CLASS C (ON GROUND)	CM	603.77	2,175.42	4,910.32	1,922.38	9,611.89
401ciii	CONCRETE CLASS C (ELEVATED)	CM	603.77	2,175.42	5,230.00	2,002.30	10,011.49
401d	CONCRETE CLASS D1	CM	961.24	2,689.24	7,258.46	2,727.23	13,636.17
401e	CONCRETE CLASS Y	CM	1,336.27	703.81	5,833.70	1,968.45	9,842.23
401f	LEAN CONCRETE	CM	501.66	759.81	3,300.24	1,140.43	5,702.14
401gi	PRECAST CONCRETE, CLASS A1	CM	2,007.67	1,470.83	5,179.78	2,164.57	10,822.84
401gii	PRECAST CONCRETE CLASS A3	CM	2,007.67	1,470.83	5,712.92	2,297.85	11,489.27
401giii	PRECAST CONCRETE, CLASS B	CM	2,007.67	1,470.83	4,481.89	1,990.10	9,950.48
401giv	PRECAST CONCRETE CLASS D1	CM	2,007.67	1,470.83	7,266.06	2,686.14	13,430.70

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Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,007.67	1,470.83	8,022.48	2,875.24	14,376.22
401gvi	PRECAST CONCRETE CLASS D3	CM	2,007.67	1,470.83	8,781.02	3,064.88	15,324.40
401h	PLUM CONCRETE	CM	879.59	1,109.69	3,020.03	1,252.33	6,261.63
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	1,890.71	0.00	71,618.20	18,377.23	91,886.14
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	1,890.71	0.00	75,818.20	19,427.23	97,136.14
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,516.60	3,667.20	87,008.40	23,048.05	115,240.25
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	2,925.66	12,010.50	148,198.47	40,783.66	203,918.29
405b	LAUNCHING OF GIRDER	TON	68.10	796.91	0.00	216.25	1,081.26
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	131.68	0.00	1,429.63	390.33	1,951.64
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	131.68	0.00	836.63	242.08	1,210.39
406ci	STEEL EXPANSION JOINTS (Local)	KG	10.87	18.40	139.89	42.29	211.46
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	449.00	0.00	84,597.15	21,261.54	106,307.69
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	464.63	0.00	132,497.37	33,240.50	166,202.49
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	511.50	0.00	1,127,679.85	282,047.84	1,410,239.18
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	449.00	0.00	71,968.22	18,104.31	90,521.53
406dii	PVC WATER STOP 8" SIZE	M	113.89	0.00	452.17	141.52	707.58
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.58	0.40	2.00
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.31	0.83	4.16
406f	ASPHALT FELT (3 PLY)	SM	46.76	0.00	252.39	74.79	373.94

**Rate Analysis Summary (Construction)**

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Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	22.40	48.58	149.46	55.11	275.56
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	287.63	3,155.77	488.87	983.07	4,915.35
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	437.20	4,796.77	653.71	1,471.92	7,359.60
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	437.20	7,330.09	816.32	2,145.90	10,729.52
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	728.67	12,216.82	1,150.47	3,523.99	17,619.95
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	607.22	10,180.69	1,011.24	2,949.79	14,748.94
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,093.00	18,325.24	1,568.15	5,246.60	26,232.99
407h	PILE LOAD TEST UPTO 120 TON	EACH	25,971.36	86,125.76	133,077.24	61,293.59	306,467.95
407i	PILE LOAD TEST UPTO 240 TON	EACH	25,971.36	86,125.76	282,302.43	98,599.89	492,999.44
407j	PILE LOAD TEST UPTO 360 TON	EACH	70,971.36	95,444.48	388,765.32	138,795.29	693,976.45
407k	PILE LOAD TEST UPTO 550 TON	EACH	104,721.36	119,305.60	622,215.90	211,560.72	1,057,803.58
407l	PILE LOAD TEST UPTO 800 TON	EACH	154,998.72	143,166.72	1,006,619.70	326,196.29	1,630,981.43
407m	CONFIRMATORY BORING (NX SIZE)	M	209.48	2,639.89	22.50	717.97	3,589.84
407n	PERMANENT PILE CASING FOR PILES	Ton	274.67	3,993.41	86,095.49	22,590.89	112,954.46
410	BRICK WORK	CM	382.22	453.06	4,490.44	1,331.43	6,657.16
411a	STONE MASONRY RANDOM DRY	CM	402.78	165.94	1,146.96	428.92	2,144.59
411b	STONE MASONRY RANDOM WITH MORTAR	CM	477.78	263.54	2,411.80	788.28	3,941.39
411c	STONE MASONRY DRESSED UNCOURSESED DRY	CM	552.78	165.94	1,490.29	552.25	2,761.25
411d	STONE MASONRY DRESSED UNCOURSESED WITH MORTAR	CM	627.78	263.54	2,651.73	885.76	4,428.80
411g	ROLL POINTING	SM	81.39	19.52	101.90	50.70	253.51
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	827.78	419.50	2,651.73	974.75	4,873.75
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	259.72	554.74	920.85	433.83	2,169.14

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Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	259.72	616.97	1,094.70	492.85	2,464.24
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	246.29	1,097.40	1,316.79	665.12	3,325.60
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	257.99	1,377.91	1,919.30	888.80	4,443.99
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	299.86	1,772.89	3,155.42	1,307.04	6,535.21
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	372.88	2,187.37	4,861.85	1,855.53	9,277.63
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	482.55	2,171.36	5,894.71	2,137.16	10,685.78
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	568.10	2,636.66	11,336.46	3,635.30	18,176.52
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	673.20	3,076.10	16,148.41	4,974.43	24,872.13
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	259.72	554.74	1,191.86	501.58	2,507.90
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	252.78	616.97	1,443.14	578.22	2,891.11
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	246.29	1,097.40	1,665.24	752.23	3,761.16
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	257.99	1,377.91	2,577.46	1,053.34	5,266.69
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	299.86	1,772.89	3,968.45	1,510.30	7,551.50
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	372.88	2,187.37	5,945.90	2,126.54	10,632.69
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	482.55	2,171.36	7,443.34	2,524.31	12,621.57
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	568.10	2,636.66	14,055.72	4,315.12	21,575.59
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	673.20	3,076.10	20,832.32	6,145.40	30,727.02
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	102.78	157.23	1,079.84	334.96	1,674.81

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Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	900.68	845.94	3,934.16	1,420.20	7,100.98
507a	STEEL WIRE MESH FOR GABIONS	KG	6.33	0.00	121.10	31.86	159.30
507b	ROCK FILL IN GABIONS	CM	110.18	0.00	778.96	222.29	1,111.43
508a	BRICK PAVING (SINGLE COURSE)	SM	127.27	38.19	381.41	136.72	683.58
508b	BRICK PAVING (DOUBLE COURSE)	SM	227.27	38.19	753.79	254.81	1,274.06
509a	RIPRAP, CLASS A	CM	550.81	0.00	834.60	346.35	1,731.76
509b	RIPRAP, CLASS B	CM	400.65	180.10	832.30	353.26	1,766.31
509c	RIPRAP, CLASS C	CM	392.21	187.60	847.85	356.91	1,784.57
509c1	RIPRAP, CLASS D	CM	392.21	225.12	908.56	381.47	1,907.36
509d	GROUTED RIPRAP, CLASS A	CM	673.84	170.59	2,809.36	913.45	4,567.24
509e	GROUTED RIPRAP, CLASS B	CM	519.07	316.57	2,605.02	860.16	4,300.82
509f	GROUTED RIPRAP, CLASS C	CM	499.23	301.33	2,632.80	858.34	4,291.69
509f1	GROUTED RIPRAP, CLASS D	CM	499.23	338.85	2,886.61	931.17	4,655.85
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	916.27	481.58	4,498.88	1,474.18	7,370.90
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	56.05	275.72	1,084.81	354.14	1,770.72
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	114.82	884.71	0.00	249.88	1,249.40
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	173.61	103.71	135.62	103.24	516.18
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	222.22	132.75	173.60	132.14	660.71
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	282.22	288.91	606.22	294.34	1,471.69
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	352.78	361.14	757.77	367.92	1,839.61
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	282.22	288.91	350.39	230.38	1,151.91
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	352.78	361.14	437.99	287.98	1,439.88

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Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	409.86	1,157.76	5,999.76	1,891.85	9,459.23
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,149.03	782.78	5,986.53	1,979.58	9,897.92
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	30.56	66.38	659.80	189.18	945.91
603	BRICK EDGING	M	10.14	0.00	57.60	16.93	84.67
604a	METAL GUARD RAIL	M	76.54	55.31	2,583.58	678.86	3,394.30
604b	METAL GUARD RAIL END PIECES	EACH	100.93	533.21	2,908.52	885.66	4,428.32
604d	STEEL POST FOR METAL GUARD RAIL	EACH	114.80	533.21	2,558.43	801.61	4,008.05
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,076.38	1,160.70	13,205.28	4,110.59	20,552.94
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,076.38	801.50	12,366.50	3,811.09	19,055.47
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	266.03	393.19	8,793.49	2,363.18	11,815.89
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	81.25	589.78	10,620.36	2,822.85	14,114.24
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	266.03	844.19	19,129.02	5,059.81	25,299.04
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	874.05	921.65	35,124.78	9,230.12	46,150.60
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	174.81	223.78	16,298.97	4,174.39	20,871.95
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	326.38	0.00	2,315.25	660.41	3,302.04
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	326.38	0.00	3,472.88	949.82	4,749.08
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.33	6.00	26.01	8.84	44.18
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.11	3.51	60.68	16.33	81.63
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.33	6.00	34.71	11.01	55.05
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.11	3.51	80.93	21.39	106.94
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	89.31	29.98	251.37	92.66	463.32

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 42 MALAKAND

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	89.31	52.71	764.61	226.66	1,133.28
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.17	7.50	36.31	11.99	59.97
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.17	13.18	104.74	30.52	152.60
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.17	7.50	48.42	15.02	75.10
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.17	13.18	139.65	39.25	196.24
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	89.31	29.98	350.60	117.47	587.35
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	89.31	52.71	1,320.69	365.68	1,828.38
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	74.31	29.98	167.58	67.97	339.83
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	74.31	52.71	510.51	159.38	796.91
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	74.31	29.98	233.73	84.50	422.52
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	74.31	52.71	881.79	252.20	1,261.01
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	10.94	111.18	177.54	74.91	374.57
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	10.94	111.18	209.04	82.79	413.94
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	118.63	182.71	436.14	184.37	921.86
610c	KILOMETER POST	EACH	730.55	1,321.13	2,077.70	1,032.35	5,161.73
610d	TEN KILOMETER POST	EACH	1,411.10	2,642.27	3,885.48	1,984.71	9,923.57
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	151.11	66.38	1,278.97	374.12	1,870.58
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	133.92	821.01	2.10	239.26	1,196.30

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

# **MANSEHRA**

## **(43)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 43 MANSEHRA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.95	15.76	0.00	4.18	20.89
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	9.71	262.58	1.88	68.54	342.70
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	27.61	635.47	4.22	166.83	834.13
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	110.43	2,541.89	16.89	667.30	3,336.51
103	STRIPPING	CM	3.41	153.65	0.00	39.26	196.31
104	COMPACTION OF NATURAL GROUND	SM	0.49	14.95	2.70	4.54	22.68
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	6.38	227.95	0.00	58.58	292.92
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	152.21	360.08	125.00	159.32	796.62
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	23.05	541.85	0.00	141.23	706.13
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	15.48	422.98	0.00	109.61	548.07
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	5.22	205.65	0.00	52.72	263.58
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	152.21	360.08	125.00	159.32	796.62
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	26.78	492.05	0.00	129.71	648.53
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	13.17	422.98	0.00	109.04	545.20
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	10.47	221.54	0.00	58.00	290.01
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	89.54	664.63	74.15	207.08	1,035.39
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	148.78	400.09	125.00	168.47	842.34
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	133.90	442.22	0.00	144.03	720.15
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	76.52	316.49	0.00	98.25	491.25
107d	GRANULAR BACKFILL	CM	45.87	193.34	1,007.21	311.60	1,558.02
107e	COMMON BACKFILL	CM	37.94	110.10	18.00	41.51	207.56
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	9.60	234.11	18.00	65.43	327.13

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 43 MANSEHRA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	27.30	578.46	144.73	187.62	938.11
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	20.47	637.82	8.55	166.71	833.56
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	18.20	574.85	8.00	150.26	751.31
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	10.88	119.41	159.08	72.34	361.71
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	8.47	121.79	18.00	37.07	185.33
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	19.73	277.82	10.70	77.06	385.31
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.92	43.86	5.15	12.73	63.66
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.39	30.11	2.73	8.56	42.79
110	IMPROVED SUB-GARDE	CM	13.77	190.72	361.04	141.38	706.91
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	1.14	23.59	2.80	6.88	34.42
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.75	26.79	2.80	7.83	39.17
201	GRANULAR SUB-BASE	CM	11.12	231.80	1,032.50	318.86	1,594.28
202	AGGREGATE BASE	CM	13.16	282.85	1,208.66	376.17	1,880.83
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	106.78	2,324.40	9,272.36	2,925.88	14,629.42
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	106.78	2,324.40	9,529.91	2,990.27	14,951.35
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	114.85	2,427.71	9,263.59	2,951.54	14,757.68
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	114.85	2,427.71	9,539.87	3,020.61	15,103.04
204b	CEMENT STABILIZED BASE	CM	39.87	780.07	1,320.74	535.17	2,675.85
204c	CEMENT CONTENT	TON	144.00	0.00	6,930.00	1,768.50	8,842.50
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	340.91	2,060.49	61,573.84	15,993.81	79,969.05

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 43 MANSEHRA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	340.91	2,060.49	61,573.84	15,993.81	79,969.05
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	124.02	188.22	1,066.23	344.62	1,723.08
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	208.45	3,721.78	7,582.74	2,878.24	14,391.22
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	136.39	207.88	909.79	313.52	1,567.58
207a	DEEP PATCHING (0-15 cm)	SM	2.32	64.78	26.57	23.42	117.08
207b	DEEP PATCHING (15-30 cm)	SM	2.32	64.78	26.57	23.42	117.08
208	REINSTATEMENT OF ROAD SURFACE	SM	2.51	104.50	1.98	27.25	136.24
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	6.52	373.82	12.00	98.08	490.42
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.30	40.20	2.40	10.98	54.88
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.42	2.36	69.29	18.02	90.09
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.41	2.36	60.40	15.79	78.96
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.17	0.86	27.83	7.21	36.07
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.17	0.86	24.15	6.29	31.47
304a	SINGLE SURFACE TREATMENT	SM	1.11	11.24	149.28	40.41	202.04
304b	DOUBLE SURFACE TREATMENT	SM	1.62	21.60	282.61	76.46	382.29
304c	TRIPLE SURFACE TREATMENT	SM	2.73	30.32	328.75	90.45	452.26
304d	SEAL COAT	SM	1.03	6.38	35.43	10.71	53.54
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	95.29	2,293.29	9,939.29	3,081.97	15,409.83
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	95.29	2,198.28	10,539.55	3,208.28	16,041.40
307a	DENSE GRADED HOT BIT-MAC	CM	230.40	513.14	7,238.78	1,995.58	9,977.89
307b	OPEN GRADED HOT BIT-MAC	CM	230.40	513.14	6,953.21	1,924.18	9,620.92

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 43 MANSEHRA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	40.20	1,050.92	3,603.18	1,173.57	5,867.87
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	298.78	1,746.20	61,573.84	15,904.71	79,523.53
309a	COLD MILLING, 0-30 mm	SM	1.37	52.01	18.61	18.00	89.98
309b	COLD MILLING, 0-50 mm	SM	2.28	86.68	31.01	29.99	149.96
309c	COLD MILLING, 0-70 mm	SM	3.41	130.02	46.52	44.99	224.94
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	733.37	2,175.42	3,879.81	1,697.15	8,485.75
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	733.37	2,175.42	4,494.57	1,850.84	9,254.20
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	733.37	2,175.42	4,814.25	1,930.76	9,653.80
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	733.37	2,175.42	4,060.18	1,742.24	8,711.21
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	733.37	2,175.42	4,674.83	1,895.90	9,479.52
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	733.37	2,175.42	4,994.40	1,975.80	9,878.98
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	733.37	2,175.42	4,338.64	1,811.86	9,059.29
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	733.37	2,175.42	4,953.29	1,965.52	9,827.60
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	733.37	2,175.42	5,250.53	2,039.83	10,199.15
401b	CONCRETE CLASS B	CM	940.84	1,109.69	3,239.75	1,322.57	6,612.85
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	712.85	2,175.42	3,603.55	1,622.96	8,114.79
401cii	CONCRETE CLASS C (ON GROUND)	CM	712.85	2,175.42	4,218.20	1,776.62	8,883.10
401ciii	CONCRETE CLASS C (ELEVATED)	CM	712.85	2,175.42	4,537.88	1,856.54	9,282.70
401d	CONCRETE CLASS D1	CM	1,139.33	2,689.24	6,341.79	2,542.59	12,712.94
401e	CONCRETE CLASS Y	CM	1,581.86	703.81	5,067.76	1,838.36	9,191.79
401f	LEAN CONCRETE	CM	586.83	759.81	2,761.68	1,027.08	5,135.40
401gi	PRECAST CONCRETE, CLASS A1	CM	2,363.21	1,470.83	4,477.30	2,077.83	10,389.17
401gii	PRECAST CONCRETE CLASS A3	CM	2,363.21	1,470.83	4,955.82	2,197.47	10,987.33
401giii	PRECAST CONCRETE, CLASS B	CM	2,363.21	1,470.83	3,861.17	1,923.80	9,619.01
401giv	PRECAST CONCRETE CLASS D1	CM	2,363.21	1,470.83	6,349.05	2,545.77	12,728.87

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 43 MANSEHRA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,363.21	1,470.83	7,001.48	2,708.88	13,544.40
401gvi	PRECAST CONCRETE CLASS D3	CM	2,363.21	1,470.83	7,655.37	2,872.35	14,361.76
401h	PLUM CONCRETE	CM	1,036.84	1,109.69	2,516.10	1,165.66	5,828.30
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	2,244.86	0.00	71,579.70	18,456.14	92,280.69
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	2,244.86	0.00	75,779.70	19,506.14	97,530.69
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,800.73	3,667.20	87,008.40	23,119.08	115,595.41
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	3,510.84	12,010.50	148,048.93	40,892.57	204,462.84
405b	LAUNCHING OF GIRDER	TON	81.72	796.91	0.00	219.66	1,098.29
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	155.35	0.00	1,429.78	396.28	1,981.41
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	155.35	0.00	836.78	248.03	1,240.16
406ci	STEEL EXPANSION JOINTS (Local)	KG	12.86	18.40	139.89	42.79	213.95
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	532.82	0.00	84,597.15	21,282.49	106,412.46
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	550.82	0.00	132,497.37	33,262.05	166,310.23
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	604.82	0.00	1,127,679.85	282,071.17	1,410,355.83
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	532.82	0.00	71,968.22	18,125.26	90,626.30
406dii	PVC WATER STOP 8" SIZE	M	134.27	0.00	452.17	146.61	733.05
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.58	0.40	2.00
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.31	0.83	4.16
406f	ASPHALT FELT (3 PLY)	SM	55.51	0.00	252.52	77.01	385.04

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 43 MANSEHRA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	26.41	48.58	149.46	56.11	280.56
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	344.85	3,155.77	488.87	997.37	4,986.87
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	524.17	4,796.77	653.71	1,493.66	7,468.31
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	524.17	7,330.09	816.32	2,167.65	10,838.23
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	873.61	12,216.82	1,150.47	3,560.23	17,801.13
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	728.01	10,180.69	1,011.24	2,979.98	14,899.92
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,310.42	18,325.24	1,568.15	5,300.95	26,504.76
407h	PILE LOAD TEST UPTO 120 TON	EACH	30,085.86	86,125.76	123,755.40	59,991.76	299,958.78
407i	PILE LOAD TEST UPTO 240 TON	EACH	30,085.86	86,125.76	263,658.75	94,967.59	474,837.96
407j	PILE LOAD TEST UPTO 360 TON	EACH	81,925.86	95,444.48	360,799.80	134,542.54	672,712.68
407k	PILE LOAD TEST UPTO 550 TON	EACH	120,805.86	119,305.60	576,666.00	204,194.37	1,020,971.83
407l	PILE LOAD TEST UPTO 800 TON	EACH	178,798.80	143,166.72	933,528.00	313,873.38	1,569,366.90
407m	CONFIRMATORY BORING (NX SIZE)	M	246.88	2,639.89	22.50	727.32	3,636.59
407n	PERMANENT PILE CASING FOR PILES	Ton	323.61	3,993.41	86,095.49	22,603.13	113,015.63
410	BRICK WORK	CM	451.23	453.06	4,579.14	1,370.86	6,854.29
411a	STONE MASONRY RANDOM DRY	CM	474.93	165.94	907.90	387.19	1,935.96
411b	STONE MASONRY RANDOM WITH MORTAR	CM	562.53	263.54	1,991.38	704.36	3,521.81
411c	STONE MASONRY DRESSED UNCOURSESED DRY	CM	651.33	165.94	1,241.63	514.73	2,573.63
411d	STONE MASONRY DRESSED UNCOURSESED WITH MORTAR	CM	740.13	263.54	2,240.99	811.17	4,055.83
411g	ROLL POINTING	SM	96.23	19.52	97.71	53.36	266.82
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	974.13	419.50	2,240.99	908.65	4,543.27
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	302.37	554.74	928.69	446.45	2,232.24

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 43 MANSEHRA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	302.37	616.97	1,111.51	507.71	2,538.56
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	287.75	1,097.40	1,345.81	682.74	3,413.70
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	300.86	1,377.91	1,972.52	912.82	4,564.11
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	350.02	1,772.89	3,271.68	1,348.65	6,743.24
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	436.01	2,187.37	5,040.69	1,916.02	9,580.08
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	564.24	2,171.36	6,072.31	2,201.98	11,009.90
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	663.72	2,636.66	11,518.23	3,704.65	18,523.26
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	787.34	3,076.10	16,921.45	5,196.22	25,981.11
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	302.37	554.74	1,199.70	514.20	2,571.00
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	294.03	616.97	1,459.96	592.74	2,963.70
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	287.75	1,097.40	1,694.25	769.85	3,849.25
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	300.86	1,377.91	2,630.68	1,077.36	5,386.81
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	350.02	1,772.89	4,084.72	1,551.91	7,759.54
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	436.01	2,187.37	6,124.74	2,187.03	10,935.14
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	564.24	2,171.36	7,620.95	2,589.14	12,945.70
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	663.72	2,636.66	14,237.49	4,384.47	21,922.33
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	787.34	3,076.10	21,605.36	6,367.20	31,836.00
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	119.93	157.23	1,011.34	322.13	1,610.63

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 43 MANSEHRA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	1,064.16	845.94	3,313.08	1,305.80	6,528.98
507a	STEEL WIRE MESH FOR GABIONS	KG	7.50	0.00	121.10	32.15	160.75
507b	ROCK FILL IN GABIONS	CM	128.02	0.00	555.84	170.96	854.82
508a	BRICK PAVING (SINGLE COURSE)	SM	149.60	38.19	404.36	148.04	740.19
508b	BRICK PAVING (DOUBLE COURSE)	SM	267.20	38.19	800.76	276.54	1,382.69
509a	RIPRAP, CLASS A	CM	648.67	0.00	595.54	311.05	1,555.26
509b	RIPRAP, CLASS B	CM	474.78	180.10	634.57	322.36	1,611.80
509c	RIPRAP, CLASS C	CM	465.25	187.60	683.84	334.17	1,670.86
509c1	RIPRAP, CLASS D	CM	465.25	225.12	727.99	354.59	1,772.94
509d	GROUTED RIPRAP, CLASS A	CM	793.31	170.59	2,419.31	845.80	4,229.01
509e	GROUTED RIPRAP, CLASS B	CM	614.49	316.57	2,272.37	800.86	4,004.28
509f	GROUTED RIPRAP, CLASS C	CM	591.27	301.33	2,318.60	802.80	4,014.00
509f1	GROUTED RIPRAP, CLASS D	CM	591.27	338.85	2,538.80	867.23	4,336.15
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	1,075.52	481.58	3,796.02	1,338.28	6,691.41
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	65.25	275.72	1,009.05	337.51	1,687.53
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	135.38	884.71	0.00	255.02	1,275.11
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	204.21	103.71	96.78	101.17	505.87
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	261.39	132.75	123.87	129.50	647.51
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	332.43	288.91	535.35	289.17	1,445.86
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	415.53	361.14	669.18	361.46	1,807.32
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	332.43	288.91	284.13	226.37	1,131.84
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	415.53	361.14	355.16	282.96	1,414.80

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 43 MANSEHRA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	485.93	1,157.76	5,620.23	1,815.98	9,079.89
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,353.33	782.78	5,611.03	1,936.79	9,683.93
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	35.95	66.38	626.48	182.20	911.00
603	BRICK EDGING	M	11.90	0.00	62.40	18.57	92.87
604a	METAL GUARD RAIL	M	90.25	55.31	2,602.47	687.01	3,435.05
604b	METAL GUARD RAIL END PIECES	EACH	118.71	533.21	2,927.94	894.97	4,474.83
604d	STEEL POST FOR METAL GUARD RAIL	EACH	135.36	533.21	2,571.28	809.96	4,049.82
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,425.66	1,160.70	12,493.27	4,019.91	20,099.53
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,425.66	801.50	11,654.95	3,720.53	18,602.63
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	312.44	393.19	8,700.80	2,351.61	11,758.04
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	95.40	589.78	10,481.33	2,791.63	13,958.13
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	312.44	844.19	18,863.24	5,004.97	25,024.84
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	1,018.26	921.65	34,726.12	9,166.51	45,832.54
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	203.65	223.78	16,219.24	4,161.67	20,808.34
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	388.66	0.00	2,315.25	675.98	3,379.89
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	388.66	0.00	3,472.88	965.39	4,826.93
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.91	6.00	26.01	8.98	44.90
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.30	3.51	60.68	16.37	81.87
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.91	6.00	34.71	11.15	55.77
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.30	3.51	80.93	21.44	107.18
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	106.33	29.98	251.37	96.92	484.60

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 43 MANSEHRA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	106.33	52.71	764.61	230.91	1,154.56
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.89	7.50	36.31	12.17	60.87
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.89	13.18	104.74	30.70	153.50
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.89	7.50	48.42	15.20	76.00
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.89	13.18	139.65	39.43	197.14
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	106.33	29.98	350.60	121.73	608.63
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	106.33	52.71	1,320.69	369.93	1,849.66
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	88.33	29.98	167.58	71.47	357.36
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	88.33	52.71	510.51	162.89	814.43
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	88.33	29.98	233.73	88.01	440.05
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	88.33	52.71	881.79	255.71	1,278.53
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	12.90	111.18	176.90	75.25	376.23
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	12.90	111.18	208.40	83.12	415.60
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	137.96	182.71	379.59	175.07	875.33
610c	KILOMETER POST	EACH	858.06	1,321.13	1,894.96	1,018.54	5,092.70
610d	TEN KILOMETER POST	EACH	1,656.13	2,642.27	3,596.55	1,973.74	9,868.68
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	177.02	66.38	1,232.83	369.05	1,845.27
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	157.50	821.01	2.10	245.15	1,225.76

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

# **MARDAN**

## **(44)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 44 MARDAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.82	15.76	0.00	4.14	20.72
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	8.29	262.58	1.88	68.19	340.93
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	23.66	635.47	4.22	165.84	829.19
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	94.63	2,541.89	16.89	663.35	3,316.75
103	STRIPPING	CM	2.89	153.65	0.00	39.13	195.67
104	COMPACTION OF NATURAL GROUND	SM	0.41	14.95	2.70	4.52	22.58
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	5.33	227.95	0.00	58.32	291.60
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	128.34	360.08	125.00	153.36	766.78
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	19.51	541.85	0.00	140.34	701.70
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	13.07	422.98	0.00	109.01	545.06
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	4.36	205.65	0.00	52.50	262.51
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	128.34	360.08	125.00	153.36	766.78
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	22.57	492.05	0.00	128.65	643.27
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	11.15	422.98	0.00	108.53	542.67
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	8.77	221.54	0.00	57.58	287.89
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	75.62	664.63	74.15	203.60	1,017.99
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	125.37	400.09	125.00	162.62	813.08
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	112.83	442.22	0.00	138.76	693.81
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	64.48	316.49	0.00	95.24	476.20
107d	GRANULAR BACKFILL	CM	39.03	193.34	734.44	241.70	1,208.50
107e	COMMON BACKFILL	CM	32.51	110.10	18.00	40.15	200.76
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	8.09	234.11	18.00	65.05	325.25

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 44 MARDAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	23.12	578.46	144.73	186.58	932.88
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	17.34	637.82	8.55	165.93	829.64
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	15.41	574.85	8.00	149.56	747.82
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	9.20	119.41	159.08	71.92	359.61
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	7.15	121.79	18.00	36.73	183.67
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	16.74	277.82	10.70	76.31	381.57
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.62	43.86	5.15	12.66	63.29
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.17	30.11	2.73	8.50	42.51
110	IMPROVED SUB-GARDE	CM	11.66	190.72	313.98	129.09	645.45
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	0.97	23.59	2.80	6.84	34.20
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.48	26.79	2.80	7.77	38.83
201	GRANULAR SUB-BASE	CM	9.39	231.80	839.52	270.18	1,350.89
202	AGGREGATE BASE	CM	11.08	282.85	1,229.45	380.85	1,904.23
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	91.19	2,324.40	9,445.79	2,965.34	14,826.72
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	91.19	2,324.40	9,677.26	3,023.21	15,116.05
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	98.02	2,427.71	9,437.03	2,990.69	14,953.44
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	98.02	2,427.71	9,687.06	3,053.20	15,265.98
204b	CEMENT STABILIZED BASE	CM	33.68	780.07	1,510.38	581.03	2,905.16
204c	CEMENT CONTENT	TON	125.00	0.00	8,020.32	2,036.33	10,181.65
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	287.42	2,060.49	61,184.55	15,883.12	79,415.58

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 44 MARDAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	287.42	2,060.49	61,184.55	15,883.12	79,415.58
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	106.96	188.22	1,234.34	382.38	1,911.90
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	177.31	3,721.78	7,688.46	2,896.89	14,484.44
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	117.74	207.88	1,086.38	353.00	1,765.00
207a	DEEP PATCHING (0-15 cm)	SM	1.96	64.78	18.82	21.39	106.95
207b	DEEP PATCHING (15-30 cm)	SM	1.96	64.78	18.82	21.39	106.95
208	REINSTATEMENT OF ROAD SURFACE	SM	2.12	104.50	1.98	27.15	135.75
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	5.46	373.82	12.00	97.82	489.09
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.09	40.20	2.40	10.92	54.61
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.36	2.36	68.90	17.90	89.52
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.35	2.36	60.01	15.68	78.40
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.14	0.86	27.67	7.17	35.85
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.14	0.86	23.99	6.25	31.25
304a	SINGLE SURFACE TREATMENT	SM	0.93	11.24	149.39	40.39	201.96
304b	DOUBLE SURFACE TREATMENT	SM	1.37	21.60	283.54	76.63	383.13
304c	TRIPLE SURFACE TREATMENT	SM	2.30	30.32	329.89	90.63	453.15
304d	SEAL COAT	SM	0.87	6.38	35.64	10.72	53.61
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	81.21	2,293.29	10,129.81	3,126.08	15,630.38
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	81.21	2,198.28	10,724.73	3,251.06	16,255.28
307a	DENSE GRADED HOT BIT-MAC	CM	197.00	513.14	7,404.54	2,028.67	10,143.34
307b	OPEN GRADED HOT BIT-MAC	CM	197.00	513.14	7,104.62	1,953.69	9,768.43

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 44 MARDAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	34.30	1,050.92	3,603.18	1,172.10	5,860.49
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	252.32	1,746.20	61,184.55	15,795.77	78,978.83
309a	COLD MILLING, 0-30 mm	SM	1.15	52.01	18.61	17.94	89.71
309b	COLD MILLING, 0-50 mm	SM	1.92	86.68	31.01	29.90	149.52
309c	COLD MILLING, 0-70 mm	SM	2.88	130.02	46.52	44.86	224.28
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	618.78	2,175.42	4,300.92	1,773.78	8,868.89
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	618.78	2,175.42	4,915.70	1,927.47	9,637.37
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	618.78	2,175.42	5,235.38	2,007.39	10,036.97
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	618.78	2,175.42	4,498.42	1,823.16	9,115.78
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	618.78	2,175.42	5,113.07	1,976.82	9,884.09
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	618.78	2,175.42	5,432.62	2,056.71	10,283.53
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	618.78	2,175.42	4,814.46	1,902.16	9,510.82
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	618.78	2,175.42	5,429.11	2,055.83	10,279.13
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	618.78	2,175.42	5,721.78	2,128.99	10,644.97
401b	CONCRETE CLASS B	CM	796.25	1,109.69	3,506.39	1,353.08	6,765.42
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	603.77	2,175.42	4,028.21	1,701.85	8,509.25
401cii	CONCRETE CLASS C (ON GROUND)	CM	603.77	2,175.42	4,642.86	1,855.51	9,277.56
401ciii	CONCRETE CLASS C (ELEVATED)	CM	603.77	2,175.42	4,962.54	1,935.43	9,677.16
401d	CONCRETE CLASS D1	CM	961.24	2,689.24	6,950.36	2,650.21	13,251.05
401e	CONCRETE CLASS Y	CM	1,336.27	703.81	5,545.20	1,896.32	9,481.60
401f	LEAN CONCRETE	CM	501.66	759.81	2,951.28	1,053.19	5,265.94
401gi	PRECAST CONCRETE, CLASS A1	CM	2,007.67	1,470.83	4,892.62	2,092.78	10,463.89
401gii	PRECAST CONCRETE CLASS A3	CM	2,007.67	1,470.83	5,430.15	2,227.16	11,135.81
401giii	PRECAST CONCRETE, CLASS B	CM	2,007.67	1,470.83	4,136.96	1,903.86	9,519.32
401giv	PRECAST CONCRETE CLASS D1	CM	2,007.67	1,470.83	6,957.50	2,609.00	13,044.99

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 44 MARDAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,007.67	1,470.83	7,716.57	2,798.77	13,993.83
401gvi	PRECAST CONCRETE CLASS D3	CM	2,007.67	1,470.83	8,477.99	2,989.12	14,945.60
401h	PLUM CONCRETE	CM	879.59	1,109.69	2,760.59	1,187.47	5,937.33
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	1,890.71	0.00	71,570.58	18,365.32	91,826.62
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	1,890.71	0.00	75,770.58	19,415.32	97,076.62
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,516.60	3,667.20	87,008.40	23,048.05	115,240.25
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	2,925.66	12,010.50	148,167.61	40,775.94	203,879.71
405b	LAUNCHING OF GIRDER	TON	68.10	796.91	0.00	216.25	1,081.26
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	131.68	0.00	1,429.36	390.26	1,951.29
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	131.68	0.00	836.36	242.01	1,210.04
406ci	STEEL EXPANSION JOINTS (Local)	KG	10.87	18.40	139.89	42.29	211.46
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	449.00	0.00	84,597.15	21,261.54	106,307.69
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	464.63	0.00	132,497.37	33,240.50	166,202.49
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	511.50	0.00	1,127,679.85	282,047.84	1,410,239.18
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	449.00	0.00	71,968.22	18,104.31	90,521.53
406dii	PVC WATER STOP 8" SIZE	M	113.89	0.00	452.17	141.52	707.58
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.58	0.40	2.00
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.31	0.83	4.16
406f	ASPHALT FELT (3 PLY)	SM	46.76	0.00	252.14	74.72	373.62

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 44 MARDAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	22.40	48.58	149.46	55.11	275.56
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	287.63	3,155.77	488.87	983.07	4,915.35
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	437.20	4,796.77	653.71	1,471.92	7,359.60
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	437.20	7,330.09	816.32	2,145.90	10,729.52
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	728.67	12,216.82	1,150.47	3,523.99	17,619.95
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	607.22	10,180.69	1,011.24	2,949.79	14,748.94
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,093.00	18,325.24	1,568.15	5,246.60	26,232.99
407h	PILE LOAD TEST UPTO 120 TON	EACH	25,971.36	86,125.76	102,004.44	53,525.39	267,626.95
407i	PILE LOAD TEST UPTO 240 TON	EACH	25,971.36	86,125.76	220,156.83	83,063.49	415,317.44
407j	PILE LOAD TEST UPTO 360 TON	EACH	70,971.36	95,444.48	295,546.92	115,490.69	577,453.45
407k	PILE LOAD TEST UPTO 550 TON	EACH	104,721.36	119,305.60	470,382.90	173,602.47	868,012.33
407l	PILE LOAD TEST UPTO 800 TON	EACH	154,998.72	143,166.72	762,980.70	265,286.54	1,326,432.68
407m	CONFIRMATORY BORING (NX SIZE)	M	209.48	2,639.89	22.50	717.97	3,589.84
407n	PERMANENT PILE CASING FOR PILES	Ton	274.67	3,993.41	86,095.49	22,590.89	112,954.46
410	BRICK WORK	CM	382.22	453.06	4,364.27	1,299.89	6,499.45
411a	STONE MASONRY RANDOM DRY	CM	402.78	165.94	1,150.97	429.92	2,149.61
411b	STONE MASONRY RANDOM WITH MORTAR	CM	477.78	263.54	2,260.19	750.38	3,751.89
411c	STONE MASONRY DRESSED UNCOURSED DRY	CM	552.78	165.94	1,526.74	561.36	2,806.82
411d	STONE MASONRY DRESSED UNCOURSED WITH MORTAR	CM	627.78	263.54	2,568.77	865.02	4,325.11
411g	ROLL POINTING	SM	81.39	19.52	99.17	50.02	250.10
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	827.78	419.50	2,568.77	954.01	4,770.05
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	259.72	554.74	890.14	426.15	2,130.75

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 44 MARDAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	259.72	616.97	1,045.88	480.64	2,403.22
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	246.29	1,097.40	1,245.67	647.34	3,236.70
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	257.99	1,377.91	1,804.24	860.03	4,300.17
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	299.86	1,772.89	2,932.56	1,251.33	6,256.64
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	372.88	2,187.37	4,529.59	1,772.46	8,862.30
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	482.55	2,171.36	5,562.35	2,054.07	10,270.34
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	568.10	2,636.66	10,987.78	3,548.14	17,740.68
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	673.20	3,076.10	14,833.32	4,645.65	23,228.27
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	259.72	554.74	1,161.15	493.90	2,469.51
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	252.78	616.97	1,394.32	566.02	2,830.09
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	246.29	1,097.40	1,594.12	734.45	3,672.26
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	257.99	1,377.91	2,462.41	1,024.58	5,122.89
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	299.86	1,772.89	3,745.59	1,454.59	7,272.93
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	372.88	2,187.37	5,613.64	2,043.47	10,217.36
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	482.55	2,171.36	7,110.99	2,441.23	12,206.14
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	568.10	2,636.66	13,707.04	4,227.95	21,139.75
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	673.20	3,076.10	19,517.23	5,816.63	29,083.16
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	102.78	157.23	743.50	250.88	1,254.39

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 44 MARDAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	900.68	845.94	3,591.26	1,334.47	6,672.36
507a	STEEL WIRE MESH FOR GABIONS	KG	6.33	0.00	121.10	31.86	159.30
507b	ROCK FILL IN GABIONS	CM	110.18	0.00	782.71	223.22	1,116.11
508a	BRICK PAVING (SINGLE COURSE)	SM	127.27	38.19	363.75	132.30	661.51
508b	BRICK PAVING (DOUBLE COURSE)	SM	227.27	38.19	722.01	246.87	1,234.34
509a	RIPRAP, CLASS A	CM	550.81	0.00	838.61	347.36	1,736.78
509b	RIPRAP, CLASS B	CM	400.65	180.10	831.90	353.16	1,765.81
509c	RIPRAP, CLASS C	CM	392.21	187.60	838.61	354.60	1,773.02
509c1	RIPRAP, CLASS D	CM	392.21	225.12	838.61	363.98	1,819.92
509d	GROUTED RIPRAP, CLASS A	CM	673.84	170.59	2,712.22	889.16	4,445.81
509e	GROUTED RIPRAP, CLASS B	CM	519.07	316.57	2,514.02	837.42	4,187.08
509f	GROUTED RIPRAP, CLASS C	CM	499.23	301.33	2,528.19	832.19	4,160.93
509f1	GROUTED RIPRAP, CLASS D	CM	499.23	338.85	2,708.12	886.55	4,432.74
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	916.27	481.58	4,190.99	1,397.21	6,986.04
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	56.05	275.72	734.15	266.48	1,332.39
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	114.82	884.71	0.00	249.88	1,249.40
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	173.61	103.71	136.27	103.40	516.99
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	222.22	132.75	174.43	132.35	661.75
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	282.22	288.91	565.13	284.07	1,420.33
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	352.78	361.14	706.41	355.08	1,775.41
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	282.22	288.91	327.15	224.57	1,122.85
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	352.78	361.14	408.93	280.71	1,403.56

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 44 MARDAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	409.86	1,157.76	5,843.96	1,852.89	9,264.47
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,149.03	782.78	5,831.68	1,940.87	9,704.35
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	30.56	66.38	631.33	182.06	910.32
603	BRICK EDGING	M	10.14	0.00	57.60	16.93	84.67
604a	METAL GUARD RAIL	M	76.54	55.31	2,576.69	677.14	3,385.68
604b	METAL GUARD RAIL END PIECES	EACH	100.93	533.21	2,900.02	883.54	4,417.71
604d	STEEL POST FOR METAL GUARD RAIL	EACH	114.80	533.21	2,545.33	798.33	3,991.67
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,076.38	1,160.70	12,916.52	4,038.40	20,191.99
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,076.38	801.50	12,078.31	3,739.05	18,695.23
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	266.03	393.19	8,771.76	2,357.74	11,788.72
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	81.25	589.78	10,587.77	2,814.70	14,073.49
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	266.03	844.19	19,020.35	5,032.64	25,163.21
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	874.05	921.65	34,961.78	9,189.37	45,946.85
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	174.81	223.78	16,266.37	4,166.24	20,831.20
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	326.38	0.00	2,315.25	660.41	3,302.04
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	326.38	0.00	3,472.88	949.82	4,749.08
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.33	6.00	26.01	8.84	44.18
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.11	3.51	60.68	16.33	81.63
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.33	6.00	34.71	11.01	55.05
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.11	3.51	80.93	21.39	106.94
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	89.31	29.98	251.37	92.66	463.32

CLIENT:

CSR - 2011

CONSULTANT:

NATIONAL HIGHWAY AUTHORITY  
ISLAMABADSAMPAK INTERNATIONAL (Pvt.) LTD  
LAHORE**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 44 MARDAN

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	89.31	52.71	764.61	226.66	1,133.28
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.17	7.50	36.31	11.99	59.97
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.17	13.18	104.74	30.52	152.60
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.17	7.50	48.42	15.02	75.10
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.17	13.18	139.65	39.25	196.24
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	89.31	29.98	350.60	117.47	587.35
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	89.31	52.71	1,320.69	365.68	1,828.38
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	74.31	29.98	167.58	67.97	339.83
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	74.31	52.71	510.51	159.38	796.91
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	74.31	29.98	233.73	84.50	422.52
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	74.31	52.71	881.79	252.20	1,261.01
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	10.94	111.18	177.30	74.85	374.27
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	10.94	111.18	208.80	82.73	413.65
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	118.63	182.71	411.77	178.28	891.40
610c	KILOMETER POST	EACH	730.55	1,321.13	1,994.24	1,011.48	5,057.40
610d	TEN KILOMETER POST	EACH	1,411.10	2,642.27	3,751.66	1,951.26	9,756.29
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	151.11	66.38	1,252.31	367.45	1,837.25
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	133.92	821.01	2.10	239.26	1,196.30

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

**NOWSHERA**  
**(49C)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 49C NOWSHERA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.88	15.76	0.00	4.16	20.80
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	8.85	262.58	1.88	68.32	341.62
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	25.40	635.47	4.22	166.27	831.37
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	101.61	2,541.89	16.89	665.10	3,325.48
103	STRIPPING	CM	3.06	153.65	0.00	39.18	195.88
104	COMPACTION OF NATURAL GROUND	SM	0.43	14.95	2.70	4.52	22.61
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	5.44	227.95	0.00	58.35	291.74
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	133.55	360.08	125.00	154.66	773.29
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	20.45	541.85	0.00	140.58	702.88
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	13.64	422.98	0.00	109.16	545.78
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	4.45	205.65	0.00	52.52	262.62
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	133.55	360.08	125.00	154.66	773.29
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	23.45	492.05	0.00	128.88	644.38
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	11.69	422.98	0.00	108.67	543.34
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	9.02	221.54	0.00	57.64	288.20
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	78.93	664.63	74.15	204.43	1,022.13
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	130.30	400.09	125.00	163.85	819.24
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	117.27	442.22	0.00	139.87	699.35
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	67.01	316.49	0.00	95.87	479.37
107d	GRANULAR BACKFILL	CM	41.33	193.34	568.42	200.77	1,003.86
107e	COMMON BACKFILL	CM	34.90	110.10	18.00	40.75	203.75
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	8.40	234.11	18.00	65.13	325.64

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 49C NOWSHERA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	24.26	578.46	144.73	186.86	934.31
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	18.19	637.82	8.55	166.14	830.71
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	16.17	574.85	8.00	149.75	748.77
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	9.62	119.41	159.08	72.03	360.14
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	7.45	121.79	18.00	36.81	184.05
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	17.63	277.82	10.70	76.54	382.69
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.69	43.86	5.15	12.67	63.37
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.22	30.11	2.73	8.51	42.57
110	IMPROVED SUB-GARDE	CM	12.24	190.72	309.90	128.21	641.07
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	1.02	23.59	2.80	6.85	34.26
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.55	26.79	2.80	7.78	38.92
201	GRANULAR SUB-BASE	CM	9.81	231.80	822.78	266.10	1,330.48
202	AGGREGATE BASE	CM	11.50	282.85	1,147.08	360.36	1,801.79
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	97.29	2,324.40	9,352.02	2,943.43	14,717.14
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	97.29	2,324.40	9,584.17	3,001.46	15,007.32
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	104.44	2,427.71	9,343.27	2,968.85	14,844.27
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	104.44	2,427.71	9,594.02	3,031.54	15,157.70
204b	CEMENT STABILIZED BASE	CM	35.19	780.07	1,432.13	561.85	2,809.23
204c	CEMENT CONTENT	TON	137.52	0.00	7,035.00	1,793.13	8,965.65
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	299.03	2,060.49	61,189.37	15,887.22	79,436.12

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 49C NOWSHERA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	299.03	2,060.49	61,189.37	15,887.22	79,436.12
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	116.27	188.22	1,166.23	367.68	1,838.40
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	187.72	3,721.78	7,616.78	2,881.57	14,407.86
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	128.21	207.88	1,536.87	468.24	2,341.20
207a	DEEP PATCHING (0-15 cm)	SM	2.04	64.78	12.18	19.75	98.76
207b	DEEP PATCHING (15-30 cm)	SM	2.04	64.78	12.18	19.75	98.76
208	REINSTATEMENT OF ROAD SURFACE	SM	2.21	104.50	1.98	27.17	135.86
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	5.60	373.82	12.00	97.85	489.27
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.12	40.20	2.40	10.93	54.65
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.37	2.36	68.91	17.91	89.55
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.36	2.36	60.01	15.68	78.42
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.15	0.86	27.67	7.17	35.86
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.15	0.86	23.99	6.25	31.26
304a	SINGLE SURFACE TREATMENT	SM	0.97	11.24	149.01	40.31	201.53
304b	DOUBLE SURFACE TREATMENT	SM	1.42	21.60	282.43	76.36	381.80
304c	TRIPLE SURFACE TREATMENT	SM	2.38	30.32	328.59	90.33	451.63
304d	SEAL COAT	SM	0.90	6.38	35.50	10.70	53.48
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	86.32	2,293.29	10,025.34	3,101.24	15,506.18
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	86.32	2,198.28	10,627.17	3,227.94	16,139.71
307a	DENSE GRADED HOT BIT-MAC	CM	210.66	513.14	7,318.63	2,010.61	10,053.04
307b	OPEN GRADED HOT BIT-MAC	CM	210.66	513.14	7,024.62	1,937.10	9,685.52

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 49C NOWSHERA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	36.53	1,050.92	3,603.18	1,172.66	5,863.28
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	263.36	1,746.20	61,189.37	15,799.73	78,998.67
309a	COLD MILLING, 0-30 mm	SM	1.20	52.01	18.61	17.95	89.77
309b	COLD MILLING, 0-50 mm	SM	2.00	86.68	31.01	29.92	149.62
309c	COLD MILLING, 0-70 mm	SM	3.01	130.02	46.52	44.89	224.43
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	644.75	2,175.42	3,777.24	1,649.35	8,246.76
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	644.75	2,175.42	4,392.01	1,803.05	9,015.23
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	644.75	2,175.42	4,711.69	1,882.97	9,414.83
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	644.75	2,175.42	3,957.70	1,694.47	8,472.33
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	644.75	2,175.42	4,572.35	1,848.13	9,240.65
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	644.75	2,175.42	4,891.91	1,928.02	9,640.09
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	644.75	2,175.42	4,274.04	1,773.55	8,867.76
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	644.75	2,175.42	4,888.69	1,927.22	9,636.08
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	644.75	2,175.42	5,182.87	2,000.76	10,003.80
401b	CONCRETE CLASS B	CM	834.71	1,109.69	3,085.04	1,257.36	6,286.80
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	633.88	2,175.42	3,579.08	1,597.10	7,985.48
401cii	CONCRETE CLASS C (ON GROUND)	CM	633.88	2,175.42	4,193.73	1,750.76	8,753.79
401ciii	CONCRETE CLASS C (ELEVATED)	CM	633.88	2,175.42	4,513.41	1,830.68	9,153.39
401d	CONCRETE CLASS D1	CM	1,001.46	2,689.24	6,238.58	2,482.32	12,411.59
401e	CONCRETE CLASS Y	CM	1,395.64	703.81	4,975.96	1,768.85	8,844.26
401f	LEAN CONCRETE	CM	536.28	759.81	2,590.92	971.75	4,858.75
401gi	PRECAST CONCRETE, CLASS A1	CM	2,120.44	1,470.83	4,375.04	1,991.58	9,957.89
401gii	PRECAST CONCRETE CLASS A3	CM	2,120.44	1,470.83	4,888.63	2,119.97	10,599.87
401giii	PRECAST CONCRETE, CLASS B	CM	2,120.44	1,470.83	3,714.22	1,826.37	9,131.86
401giv	PRECAST CONCRETE CLASS D1	CM	2,120.44	1,470.83	6,245.46	2,459.18	12,295.91

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 49C NOWSHERA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,120.44	1,470.83	6,916.13	2,626.85	13,134.25
401gvi	PRECAST CONCRETE CLASS D3	CM	2,120.44	1,470.83	7,589.33	2,795.15	13,975.75
401h	PLUM CONCRETE	CM	926.39	1,109.69	2,509.05	1,136.28	5,681.41
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	1,963.04	0.00	71,567.13	18,382.54	91,912.71
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	1,963.04	0.00	75,767.13	19,432.54	97,162.71
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,574.53	3,667.20	87,008.40	23,062.53	115,312.66
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	2,972.44	12,010.50	148,040.78	40,755.93	203,779.64
405b	LAUNCHING OF GIRDER	TON	69.19	796.91	0.00	216.52	1,082.62
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	138.46	0.00	1,429.36	391.96	1,959.78
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	138.46	0.00	836.36	243.71	1,218.53
406ci	STEEL EXPANSION JOINTS (Local)	KG	11.36	18.40	139.89	42.41	212.07
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	466.70	0.00	84,597.15	21,265.96	106,329.81
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	483.89	0.00	132,497.37	33,245.31	166,226.57
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	535.46	0.00	1,127,679.85	282,053.83	1,410,269.13
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	466.70	0.00	71,968.22	18,108.73	90,543.65
406dii	PVC WATER STOP 8" SIZE	M	119.92	0.00	452.17	143.02	715.11
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.58	0.40	2.00
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.31	0.83	4.16
406f	ASPHALT FELT (3 PLY)	SM	48.56	0.00	252.15	75.18	375.88

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 49C NOWSHERA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	23.60	48.58	149.46	55.41	277.06
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	292.78	3,155.77	488.87	984.36	4,921.79
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	445.03	4,796.77	653.71	1,473.88	7,369.39
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	445.03	7,330.09	816.32	2,147.86	10,739.31
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	741.72	12,216.82	1,150.47	3,527.25	17,636.26
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	618.10	10,180.69	1,011.24	2,952.51	14,762.53
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,112.58	18,325.24	1,568.15	5,251.49	26,257.46
407h	PILE LOAD TEST UPTO 120 TON	EACH	28,280.46	86,125.76	83,360.76	49,441.75	247,208.73
407i	PILE LOAD TEST UPTO 240 TON	EACH	28,280.46	86,125.76	182,869.47	74,318.92	371,594.61
407j	PILE LOAD TEST UPTO 360 TON	EACH	77,787.66	95,444.48	239,615.88	103,212.01	516,060.03
407k	PILE LOAD TEST UPTO 550 TON	EACH	114,918.06	119,305.60	379,283.10	153,376.69	766,883.45
407l	PILE LOAD TEST UPTO 800 TON	EACH	170,102.64	143,166.72	616,797.30	232,516.67	1,162,583.33
407m	CONFIRMATORY BORING (NX SIZE)	M	220.72	2,639.89	22.50	720.78	3,603.89
407n	PERMANENT PILE CASING FOR PILES	Ton	289.58	3,993.41	86,095.49	22,594.62	112,973.10
410	BRICK WORK	CM	401.38	453.06	3,943.25	1,199.42	5,997.12
411a	STONE MASONRY RANDOM DRY	CM	423.95	165.94	1,371.66	490.39	2,451.93
411b	STONE MASONRY RANDOM WITH MORTAR	CM	504.36	263.54	2,283.53	762.86	3,814.28
411c	STONE MASONRY DRESSED UNCOURSED DRY	CM	582.66	165.94	1,410.25	539.71	2,698.56
411d	STONE MASONRY DRESSED UNCOURSED WITH MORTAR	CM	660.96	263.54	2,283.15	801.91	4,009.57
411g	ROLL POINTING	SM	85.22	19.52	94.94	49.92	249.59
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	874.68	419.50	2,283.15	894.33	4,471.66
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	280.18	554.74	882.52	429.36	2,146.81

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 49C NOWSHERA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	280.18	616.97	1,036.97	483.53	2,417.66
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	263.90	1,097.40	1,236.01	649.33	3,246.64
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	277.42	1,377.91	1,793.18	862.13	4,310.63
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	321.88	1,772.89	2,920.67	1,253.86	6,269.30
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	398.93	2,187.37	4,515.93	1,775.56	8,877.79
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	516.26	2,171.36	5,547.72	2,058.84	10,294.19
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	608.75	2,636.66	10,969.08	3,553.62	17,768.11
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	719.91	3,076.10	14,826.80	4,655.70	23,278.51
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	280.18	554.74	1,153.53	497.11	2,485.57
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	273.13	616.97	1,385.41	568.88	2,844.39
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	263.90	1,097.40	1,584.46	736.44	3,682.20
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	277.42	1,377.91	2,451.35	1,026.67	5,133.34
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	321.88	1,772.89	3,733.71	1,457.12	7,285.60
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	398.93	2,187.37	5,599.97	2,046.57	10,232.84
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	516.26	2,171.36	7,096.35	2,445.99	12,229.97
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	608.75	2,636.66	13,688.34	4,233.44	21,167.18
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	719.91	3,076.10	19,510.71	5,826.68	29,133.40
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	110.38	157.23	586.98	213.65	1,068.24

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 49C NOWSHERA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	944.32	845.94	3,159.49	1,237.44	6,187.18
507a	STEEL WIRE MESH FOR GABIONS	KG	6.61	0.00	121.10	31.93	159.65
507b	ROCK FILL IN GABIONS	CM	119.31	0.00	988.68	277.00	1,384.99
508a	BRICK PAVING (SINGLE COURSE)	SM	134.77	38.19	324.91	124.47	622.34
508b	BRICK PAVING (DOUBLE COURSE)	SM	240.58	38.19	646.45	231.30	1,156.52
509a	RIPRAP, CLASS A	CM	581.19	0.00	1,059.30	410.12	2,050.61
509b	RIPRAP, CLASS B	CM	417.58	180.10	1,050.83	412.12	2,060.62
509c	RIPRAP, CLASS C	CM	407.95	187.60	1,059.30	413.71	2,068.56
509c1	RIPRAP, CLASS D	CM	407.95	225.12	1,059.30	423.09	2,115.46
509d	GROUTED RIPRAP, CLASS A	CM	711.45	170.59	2,779.07	915.28	4,576.38
509e	GROUTED RIPRAP, CLASS B	CM	542.10	316.57	2,595.40	863.52	4,317.59
509f	GROUTED RIPRAP, CLASS C	CM	520.89	301.33	2,597.79	855.00	4,275.00
509f1	GROUTED RIPRAP, CLASS D	CM	520.89	338.85	2,759.71	904.86	4,524.30
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	973.00	481.58	3,673.44	1,282.01	6,410.04
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	60.45	275.72	564.89	225.27	1,126.33
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	120.86	884.71	0.00	251.39	1,256.96
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	183.62	103.71	172.14	114.87	574.33
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	235.03	132.75	220.33	147.03	735.15
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	297.68	288.91	553.40	285.00	1,424.98
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	372.10	361.14	691.75	356.25	1,781.23
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	297.68	288.91	325.57	228.04	1,140.20
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	372.10	361.14	406.96	285.05	1,425.25

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 49C NOWSHERA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	426.76	1,157.76	5,565.11	1,787.41	8,937.03
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,212.12	782.78	5,556.08	1,887.74	9,438.72
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	32.31	66.38	598.14	174.21	871.03
603	BRICK EDGING	M	10.77	0.00	52.80	15.89	79.47
604a	METAL GUARD RAIL	M	80.57	55.31	2,559.19	673.77	3,368.85
604b	METAL GUARD RAIL END PIECES	EACH	106.75	533.21	2,883.13	880.77	4,403.87
604d	STEEL POST FOR METAL GUARD RAIL	EACH	120.84	533.21	2,540.03	798.52	3,992.61
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,225.32	1,160.70	12,424.17	3,952.55	19,762.73
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,225.32	801.50	11,586.00	3,653.20	18,266.02
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	282.21	393.19	8,715.28	2,347.67	11,738.34
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	86.23	589.78	10,503.04	2,794.76	13,973.82
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	282.21	844.19	18,831.99	4,989.60	24,947.98
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	941.68	921.65	34,679.23	9,135.64	45,678.22
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	188.34	223.78	16,209.86	4,155.49	20,777.47
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	336.86	0.00	2,315.25	663.03	3,315.14
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	336.86	0.00	3,472.88	952.44	4,762.18
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.54	6.00	26.01	8.89	44.44
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.18	3.51	60.68	16.34	81.71
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.54	6.00	34.71	11.06	55.32
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.18	3.51	80.93	21.41	107.03
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	92.21	29.98	251.37	93.39	466.95

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 49C NOWSHERA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	92.21	52.71	764.61	227.38	1,136.91
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.43	7.50	36.31	12.06	60.30
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.43	13.18	104.74	30.59	152.93
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.43	7.50	48.42	15.09	75.43
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.43	13.18	139.65	39.31	196.57
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	92.21	29.98	350.60	118.20	590.98
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	92.21	52.71	1,320.69	366.40	1,832.01
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	76.97	29.98	167.58	68.63	343.16
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	76.97	52.71	510.51	160.05	800.23
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	76.97	29.98	233.73	85.17	425.85
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	76.97	52.71	881.79	252.87	1,264.33
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	11.51	111.18	176.72	74.85	374.26
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	11.51	111.18	208.22	82.73	413.64
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	128.25	182.71	372.41	170.84	854.22
610c	KILOMETER POST	EACH	774.85	1,321.13	1,868.83	991.20	4,956.01
610d	TEN KILOMETER POST	EACH	1,498.90	2,642.27	3,554.09	1,923.82	9,619.08
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	161.10	66.38	1,292.97	380.11	1,900.57
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	141.70	821.01	2.10	241.20	1,206.02

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

**PESHAWAR**  
**(52)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 52 PESHAWAR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.88	15.76	0.00	4.16	20.80
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	8.85	262.58	1.88	68.32	341.62
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	25.40	635.47	4.22	166.27	831.37
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	101.61	2,541.89	16.89	665.10	3,325.48
103	STRIPPING	CM	3.06	153.65	0.00	39.18	195.88
104	COMPACTION OF NATURAL GROUND	SM	0.43	14.95	2.70	4.52	22.61
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	5.44	227.95	0.00	58.35	291.74
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	133.55	360.08	125.00	154.66	773.29
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	20.45	541.85	0.00	140.58	702.88
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	13.64	422.98	0.00	109.16	545.78
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	4.45	205.65	0.00	52.52	262.62
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	133.55	360.08	125.00	154.66	773.29
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	23.45	492.05	0.00	128.88	644.38
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	11.69	422.98	0.00	108.67	543.34
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	9.02	221.54	0.00	57.64	288.20
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	78.93	664.63	74.15	204.43	1,022.13
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	130.30	400.09	125.00	163.85	819.24
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	117.27	442.22	0.00	139.87	699.35
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	67.01	316.49	0.00	95.87	479.37
107d	GRANULAR BACKFILL	CM	41.33	193.34	936.37	292.76	1,463.80
107e	COMMON BACKFILL	CM	34.90	110.10	18.00	40.75	203.75
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	8.40	234.11	18.00	65.13	325.64

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 52 PESHAWAR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	24.26	578.46	144.73	186.86	934.31
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	18.19	637.82	8.55	166.14	830.71
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	16.17	574.85	8.00	149.75	748.77
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	9.62	119.41	159.08	72.03	360.14
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	7.45	121.79	18.00	36.81	184.05
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	17.63	277.82	10.70	76.54	382.69
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.69	43.86	5.15	12.67	63.37
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.22	30.11	2.73	8.51	42.57
110	IMPROVED SUB-GARDE	CM	12.24	190.72	302.32	126.32	631.60
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	1.02	23.59	2.80	6.85	34.26
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.55	26.79	2.80	7.78	38.92
201	GRANULAR SUB-BASE	CM	9.81	231.80	791.70	258.33	1,291.63
202	AGGREGATE BASE	CM	11.50	282.85	987.21	320.39	1,601.95
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	97.29	2,324.40	9,191.88	2,903.39	14,516.97
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	97.29	2,324.40	9,428.00	2,962.42	14,812.11
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	104.44	2,427.71	9,183.15	2,928.82	14,644.11
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	104.44	2,427.71	9,437.91	2,992.51	14,962.57
204b	CEMENT STABILIZED BASE	CM	35.19	780.07	1,273.23	522.12	2,610.61
204c	CEMENT CONTENT	TON	137.52	0.00	7,035.00	1,793.13	8,965.65
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	299.03	2,060.49	61,285.83	15,911.34	79,556.70

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 52 PESHAWAR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	299.03	2,060.49	61,285.83	15,911.34	79,556.70
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	116.27	188.22	1,027.93	333.10	1,665.52
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	187.72	3,721.78	7,477.07	2,846.64	14,233.22
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	128.21	207.88	887.60	305.92	1,529.62
207a	DEEP PATCHING (0-15 cm)	SM	2.04	64.78	28.20	23.76	118.78
207b	DEEP PATCHING (15-30 cm)	SM	2.04	64.78	28.20	23.76	118.78
208	REINSTATEMENT OF ROAD SURFACE	SM	2.21	104.50	1.98	27.17	135.86
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	5.60	373.82	12.00	97.85	489.27
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.12	40.20	2.40	10.93	54.65
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.37	2.36	69.00	17.93	89.67
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.36	2.36	60.11	15.71	78.54
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.15	0.86	27.71	7.18	35.90
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.15	0.86	24.03	6.26	31.30
304a	SINGLE SURFACE TREATMENT	SM	0.97	11.24	148.43	40.16	200.80
304b	DOUBLE SURFACE TREATMENT	SM	1.42	21.60	280.53	75.89	379.44
304c	TRIPLE SURFACE TREATMENT	SM	2.38	30.32	326.38	89.77	448.85
304d	SEAL COAT	SM	0.90	6.38	35.27	10.64	53.18
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	86.32	2,293.29	9,862.14	3,060.44	15,302.18
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	86.32	2,198.28	10,470.04	3,188.66	15,943.30
307a	DENSE GRADED HOT BIT-MAC	CM	210.66	513.14	7,189.86	1,978.42	9,892.08
307b	OPEN GRADED HOT BIT-MAC	CM	210.66	513.14	6,897.91	1,905.43	9,527.14

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 52 PESHAWAR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	36.53	1,050.92	3,603.18	1,172.66	5,863.28
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	263.36	1,746.20	61,285.83	15,823.85	79,119.25
309a	COLD MILLING, 0-30 mm	SM	1.20	52.01	18.61	17.95	89.77
309b	COLD MILLING, 0-50 mm	SM	2.00	86.68	31.01	29.92	149.62
309c	COLD MILLING, 0-70 mm	SM	3.01	130.02	46.52	44.89	224.43
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	644.75	2,175.42	3,932.70	1,688.22	8,441.08
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	644.75	2,175.42	4,547.45	1,841.91	9,209.53
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	644.75	2,175.42	4,867.13	1,921.83	9,609.13
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	644.75	2,175.42	4,108.03	1,732.05	8,660.25
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	644.75	2,175.42	4,722.68	1,885.71	9,428.56
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	644.75	2,175.42	5,042.25	1,965.61	9,828.03
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	644.75	2,175.42	4,381.38	1,800.39	9,001.94
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	644.75	2,175.42	4,996.03	1,954.05	9,770.26
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	644.75	2,175.42	5,293.27	2,028.36	10,141.80
401b	CONCRETE CLASS B	CM	834.71	1,109.69	3,217.38	1,290.45	6,452.23
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	633.88	2,175.42	3,605.18	1,603.62	8,018.10
401cii	CONCRETE CLASS C (ON GROUND)	CM	633.88	2,175.42	4,219.83	1,757.28	8,786.41
401ciii	CONCRETE CLASS C (ELEVATED)	CM	633.88	2,175.42	4,539.51	1,837.20	9,186.01
401d	CONCRETE CLASS D1	CM	1,001.46	2,689.24	6,417.06	2,526.94	12,634.69
401e	CONCRETE CLASS Y	CM	1,395.64	703.81	5,131.57	1,807.76	9,038.78
401f	LEAN CONCRETE	CM	536.28	759.81	2,728.31	1,006.10	5,030.49
401gi	PRECAST CONCRETE, CLASS A1	CM	2,120.44	1,470.83	4,530.45	2,030.43	10,152.15
401gii	PRECAST CONCRETE CLASS A3	CM	2,120.44	1,470.83	4,998.79	2,147.51	10,737.57
401giii	PRECAST CONCRETE, CLASS B	CM	2,120.44	1,470.83	3,843.22	1,858.62	9,293.11
401giv	PRECAST CONCRETE CLASS D1	CM	2,120.44	1,470.83	6,424.33	2,503.90	12,519.50

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 52 PESHAWAR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,120.44	1,470.83	7,086.67	2,669.49	13,347.43
401gvi	PRECAST CONCRETE CLASS D3	CM	2,120.44	1,470.83	7,750.34	2,835.40	14,177.01
401h	PLUM CONCRETE	CM	926.39	1,109.69	2,524.06	1,140.03	5,700.17
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	1,963.04	0.00	71,605.24	18,392.07	91,960.36
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	1,963.04	0.00	75,805.24	19,442.07	97,210.36
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,574.53	3,667.20	87,008.40	23,062.53	115,312.66
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	2,972.44	12,010.50	148,063.78	40,761.68	203,808.39
405b	LAUNCHING OF GIRDER	TON	69.19	796.91	0.00	216.52	1,082.62
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	138.46	0.00	1,429.47	391.98	1,959.91
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	138.46	0.00	836.47	243.73	1,218.66
406ci	STEEL EXPANSION JOINTS (Local)	KG	11.36	18.40	139.89	42.41	212.07
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	466.70	0.00	84,597.15	21,265.96	106,329.81
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	483.89	0.00	132,497.37	33,245.31	166,226.57
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	535.46	0.00	1,127,679.85	282,053.83	1,410,269.13
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	466.70	0.00	71,968.22	18,108.73	90,543.65
406dii	PVC WATER STOP 8" SIZE	M	119.92	0.00	452.17	143.02	715.11
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.58	0.40	2.00
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.31	0.83	4.16
406f	ASPHALT FELT (3 PLY)	SM	48.56	0.00	252.24	75.20	376.00

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 52 PESHAWAR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	23.60	48.58	149.46	55.41	277.06
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	292.78	3,155.77	488.87	984.36	4,921.79
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	445.03	4,796.77	653.71	1,473.88	7,369.39
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	445.03	7,330.09	816.32	2,147.86	10,739.31
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	741.72	12,216.82	1,150.47	3,527.25	17,636.26
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	618.10	10,180.69	1,011.24	2,952.51	14,762.53
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,112.58	18,325.24	1,568.15	5,251.49	26,257.46
407h	PILE LOAD TEST UPTO 120 TON	EACH	28,280.46	86,125.76	128,340.20	60,686.61	303,433.03
407i	PILE LOAD TEST UPTO 240 TON	EACH	28,280.46	86,125.76	272,828.35	96,808.64	484,043.21
407j	PILE LOAD TEST UPTO 360 TON	EACH	77,787.66	95,444.48	374,554.20	136,946.59	684,732.93
407k	PILE LOAD TEST UPTO 550 TON	EACH	114,918.06	119,305.60	599,069.00	208,323.17	1,041,615.83
407l	PILE LOAD TEST UPTO 800 TON	EACH	170,102.64	143,166.72	969,477.00	320,686.59	1,603,432.95
407m	CONFIRMATORY BORING (NX SIZE)	M	220.72	2,639.89	22.50	720.78	3,603.89
407n	PERMANENT PILE CASING FOR PILES	Ton	289.58	3,993.41	86,095.49	22,594.62	112,973.10
410	BRICK WORK	CM	401.38	453.06	4,106.82	1,240.32	6,201.58
411a	STONE MASONRY RANDOM DRY	CM	423.95	165.94	1,018.56	402.11	2,010.56
411b	STONE MASONRY RANDOM WITH MORTAR	CM	504.36	263.54	2,134.88	725.69	3,628.47
411c	STONE MASONRY DRESSED UNCOURSESED DRY	CM	582.66	165.94	1,170.41	479.75	2,398.76
411d	STONE MASONRY DRESSED UNCOURSESED WITH MORTAR	CM	660.96	263.54	2,196.65	780.29	3,901.44
411g	ROLL POINTING	SM	85.22	19.52	98.36	50.77	253.87
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	874.68	419.50	2,196.65	872.71	4,363.53
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	280.18	554.74	897.97	433.22	2,166.12

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 52 PESHAWAR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	280.18	616.97	1,059.75	489.23	2,446.13
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	263.90	1,097.40	1,267.62	657.23	3,286.16
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	277.42	1,377.91	1,841.40	874.18	4,370.91
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	321.88	1,772.89	3,007.84	1,275.65	6,378.26
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	398.93	2,187.37	4,644.35	1,807.66	9,038.32
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	516.26	2,171.36	5,676.07	2,090.93	10,454.63
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	608.75	2,636.66	11,105.52	3,587.73	17,938.66
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	719.91	3,076.10	15,307.44	4,775.86	23,879.32
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	280.18	554.74	1,168.99	500.98	2,504.89
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	273.13	616.97	1,408.19	574.57	2,872.86
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	263.90	1,097.40	1,616.06	744.34	3,721.71
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	277.42	1,377.91	2,499.57	1,038.72	5,193.62
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	321.88	1,772.89	3,820.87	1,478.91	7,394.54
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	398.93	2,187.37	5,728.39	2,078.67	10,393.37
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	516.26	2,171.36	7,224.70	2,478.08	12,390.41
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	608.75	2,636.66	13,824.78	4,267.55	21,337.73
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	719.91	3,076.10	19,991.35	5,946.84	29,734.20
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	110.38	157.23	929.50	299.28	1,496.39

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 52 PESHAWAR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	944.32	845.94	3,291.83	1,270.52	6,352.61
507a	STEEL WIRE MESH FOR GABIONS	KG	6.61	0.00	121.10	31.93	159.65
507b	ROCK FILL IN GABIONS	CM	119.31	0.00	659.12	194.61	973.04
508a	BRICK PAVING (SINGLE COURSE)	SM	134.77	38.19	350.47	130.86	654.29
508b	BRICK PAVING (DOUBLE COURSE)	SM	240.58	38.19	692.45	242.81	1,214.03
509a	RIPRAP, CLASS A	CM	581.19	0.00	706.20	321.85	1,609.23
509b	RIPRAP, CLASS B	CM	417.58	180.10	700.55	324.56	1,622.78
509c	RIPRAP, CLASS C	CM	407.95	187.60	706.20	325.44	1,627.19
509c1	RIPRAP, CLASS D	CM	407.95	225.12	706.20	334.82	1,674.09
509d	GROUTED RIPRAP, CLASS A	CM	711.45	170.59	2,553.75	858.95	4,294.73
509e	GROUTED RIPRAP, CLASS B	CM	542.10	316.57	2,359.62	804.57	4,022.87
509f	GROUTED RIPRAP, CLASS C	CM	520.89	301.33	2,363.95	796.54	3,982.71
509f1	GROUTED RIPRAP, CLASS D	CM	520.89	338.85	2,542.91	850.66	4,253.30
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	973.00	481.58	3,828.91	1,320.87	6,604.37
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	60.45	275.72	941.34	319.38	1,596.88
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	120.86	884.71	0.00	251.39	1,256.96
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	183.62	103.71	114.76	100.52	502.61
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	235.03	132.75	146.89	128.67	643.34
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	297.68	288.91	558.09	286.17	1,430.85
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	372.10	361.14	697.62	357.71	1,788.57
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	297.68	288.91	305.39	223.00	1,114.98
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	372.10	361.14	381.74	278.74	1,393.72

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 52 PESHAWAR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	426.76	1,157.76	5,649.46	1,808.49	9,042.47
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,212.12	782.78	5,640.41	1,908.83	9,544.14
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	32.31	66.38	611.36	177.51	887.55
603	BRICK EDGING	M	10.77	0.00	52.80	15.89	79.47
604a	METAL GUARD RAIL	M	80.57	55.31	2,559.19	673.77	3,368.85
604b	METAL GUARD RAIL END PIECES	EACH	106.75	533.21	2,883.13	880.77	4,403.87
604d	STEEL POST FOR METAL GUARD RAIL	EACH	120.84	533.21	2,540.03	798.52	3,992.61
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,225.32	1,160.70	12,544.16	3,982.54	19,912.72
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,225.32	801.50	11,705.53	3,683.09	18,415.44
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	282.21	393.19	8,702.21	2,344.40	11,722.01
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	86.23	589.78	10,483.45	2,789.86	13,949.32
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	282.21	844.19	18,876.53	5,000.73	25,003.65
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	941.68	921.65	34,746.04	9,152.34	45,761.72
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	188.34	223.78	16,223.22	4,158.84	20,794.18
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	336.86	0.00	2,315.25	663.03	3,315.14
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	336.86	0.00	3,472.88	952.44	4,762.18
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.54	6.00	26.01	8.89	44.44
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.18	3.51	60.68	16.34	81.71
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.54	6.00	34.71	11.06	55.32
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.18	3.51	80.93	21.41	107.03
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	92.21	29.98	251.37	93.39	466.95

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 52 PESHAWAR

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	92.21	52.71	764.61	227.38	1,136.91
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.43	7.50	36.31	12.06	60.30
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.43	13.18	104.74	30.59	152.93
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.43	7.50	48.42	15.09	75.43
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.43	13.18	139.65	39.31	196.57
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	92.21	29.98	350.60	118.20	590.98
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	92.21	52.71	1,320.69	366.40	1,832.01
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	76.97	29.98	167.58	68.63	343.16
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	76.97	52.71	510.51	160.05	800.23
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	76.97	29.98	233.73	85.17	425.85
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	76.97	52.71	881.79	252.87	1,264.33
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	11.51	111.18	176.98	74.92	374.58
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	11.51	111.18	208.48	82.79	413.96
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	128.25	182.71	383.43	173.60	867.99
610c	KILOMETER POST	EACH	774.85	1,321.13	1,907.34	1,000.83	5,004.16
610d	TEN KILOMETER POST	EACH	1,498.90	2,642.27	3,616.16	1,939.33	9,696.66
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	161.10	66.38	1,213.09	360.14	1,800.71
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	141.70	821.01	2.10	241.20	1,206.02

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

## **SHANGLA**

### **(60A)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 60A SHANGLA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.82	15.76	0.00	4.14	20.72
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	8.29	262.58	1.88	68.19	340.93
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	23.66	635.47	4.22	165.84	829.19
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	94.63	2,541.89	16.89	663.35	3,316.75
103	STRIPPING	CM	2.89	153.65	0.00	39.13	195.67
104	COMPACTION OF NATURAL GROUND	SM	0.41	14.95	2.70	4.52	22.58
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	5.33	227.95	0.00	58.32	291.60
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	128.34	360.08	125.00	153.36	766.78
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	19.51	541.85	0.00	140.34	701.70
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	13.07	422.98	0.00	109.01	545.06
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	4.36	205.65	0.00	52.50	262.51
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	128.34	360.08	125.00	153.36	766.78
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	22.57	492.05	0.00	128.65	643.27
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	11.15	422.98	0.00	108.53	542.67
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	8.77	221.54	0.00	57.58	287.89
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	75.62	664.63	74.15	203.60	1,017.99
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	125.37	400.09	125.00	162.62	813.08
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	112.83	442.22	0.00	138.76	693.81
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	64.48	316.49	0.00	95.24	476.20
107d	GRANULAR BACKFILL	CM	39.03	193.34	906.02	284.59	1,422.97
107e	COMMON BACKFILL	CM	32.51	110.10	18.00	40.15	200.76
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	8.09	234.11	18.00	65.05	325.25

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 60A SHANGLA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	23.12	578.46	144.73	186.58	932.88
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	17.34	637.82	8.55	165.93	829.64
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	15.41	574.85	8.00	149.56	747.82
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	9.20	119.41	159.08	71.92	359.61
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	7.15	121.79	18.00	36.73	183.67
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	16.74	277.82	10.70	76.31	381.57
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.62	43.86	5.15	12.66	63.29
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.17	30.11	2.73	8.50	42.51
110	IMPROVED SUB-GARDE	CM	11.66	190.72	328.64	132.76	663.78
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	0.97	23.59	2.80	6.84	34.20
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.48	26.79	2.80	7.77	38.83
201	GRANULAR SUB-BASE	CM	9.39	231.80	899.63	285.21	1,426.03
202	AGGREGATE BASE	CM	11.08	282.85	1,266.64	390.14	1,950.72
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	91.19	2,324.40	9,665.31	3,020.22	15,101.12
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	91.19	2,324.40	9,887.87	3,075.86	15,379.32
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	98.02	2,427.71	9,656.51	3,045.56	15,227.79
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	98.02	2,427.71	9,897.83	3,105.89	15,529.44
204b	CEMENT STABILIZED BASE	CM	33.68	780.07	1,710.07	630.96	3,154.78
204c	CEMENT CONTENT	TON	125.00	0.00	7,665.00	1,947.50	9,737.50
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	287.42	2,060.49	61,710.03	16,014.49	80,072.43

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 60A SHANGLA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	287.42	2,060.49	61,710.03	16,014.49	80,072.43
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	106.96	188.22	1,364.88	415.02	2,075.08
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	177.31	3,721.78	7,869.52	2,942.15	14,710.77
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	117.74	207.88	1,183.24	377.22	1,886.08
207a	DEEP PATCHING (0-15 cm)	SM	1.96	64.78	24.87	22.90	114.50
207b	DEEP PATCHING (15-30 cm)	SM	1.96	64.78	24.87	22.90	114.50
208	REINSTATEMENT OF ROAD SURFACE	SM	2.12	104.50	1.98	27.15	135.75
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	5.46	373.82	12.00	97.82	489.09
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.09	40.20	2.40	10.92	54.61
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.36	2.36	69.43	18.04	90.18
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.35	2.36	60.53	15.81	79.05
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.14	0.86	27.88	7.22	36.11
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.14	0.86	24.20	6.30	31.51
304a	SINGLE SURFACE TREATMENT	SM	0.93	11.24	151.39	40.89	204.46
304b	DOUBLE SURFACE TREATMENT	SM	1.37	21.60	287.99	77.74	388.69
304c	TRIPLE SURFACE TREATMENT	SM	2.30	30.32	335.16	91.95	459.73
304d	SEAL COAT	SM	0.87	6.38	36.32	10.89	54.46
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	81.21	2,293.29	10,339.50	3,178.50	15,892.50
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	81.21	2,198.28	10,937.96	3,304.36	16,521.81
307a	DENSE GRADED HOT BIT-MAC	CM	197.00	513.14	7,575.13	2,071.32	10,356.58
307b	OPEN GRADED HOT BIT-MAC	CM	197.00	513.14	7,265.01	1,993.78	9,968.92

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 60A SHANGLA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	34.30	1,050.92	3,603.18	1,172.10	5,860.49
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	252.32	1,746.20	61,710.03	15,927.14	79,635.69
309a	COLD MILLING, 0-30 mm	SM	1.15	52.01	18.61	17.94	89.71
309b	COLD MILLING, 0-50 mm	SM	1.92	86.68	31.01	29.90	149.52
309c	COLD MILLING, 0-70 mm	SM	2.88	130.02	46.52	44.86	224.28
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	618.78	2,175.42	4,424.12	1,804.58	9,022.89
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	618.78	2,175.42	5,038.92	1,958.28	9,791.40
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	618.78	2,175.42	5,358.60	2,038.20	10,191.00
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	618.78	2,175.42	4,591.30	1,846.37	9,231.87
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	618.78	2,175.42	5,205.95	2,000.04	10,000.19
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	618.78	2,175.42	5,525.49	2,079.92	10,399.61
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	618.78	2,175.42	4,900.00	1,923.55	9,617.74
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	618.78	2,175.42	5,514.65	2,077.21	10,386.05
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	618.78	2,175.42	5,802.39	2,149.15	10,745.73
401b	CONCRETE CLASS B	CM	796.25	1,109.69	3,651.72	1,389.42	6,947.08
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	603.77	2,175.42	4,098.74	1,719.48	8,597.42
401cii	CONCRETE CLASS C (ON GROUND)	CM	603.77	2,175.42	4,713.39	1,873.15	9,365.73
401ciii	CONCRETE CLASS C (ELEVATED)	CM	603.77	2,175.42	5,033.07	1,953.07	9,765.33
401d	CONCRETE CLASS D1	CM	961.24	2,689.24	6,991.78	2,660.56	13,302.82
401e	CONCRETE CLASS Y	CM	1,336.27	703.81	5,663.90	1,925.99	9,629.97
401f	LEAN CONCRETE	CM	501.66	759.81	3,133.20	1,098.67	5,493.33
401gi	PRECAST CONCRETE, CLASS A1	CM	2,007.67	1,470.83	5,020.14	2,124.66	10,623.29
401gii	PRECAST CONCRETE CLASS A3	CM	2,007.67	1,470.83	5,509.59	2,247.02	11,235.11
401giii	PRECAST CONCRETE, CLASS B	CM	2,007.67	1,470.83	4,288.74	1,941.81	9,709.04
401giv	PRECAST CONCRETE CLASS D1	CM	2,007.67	1,470.83	6,999.37	2,619.47	13,097.33

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 60A SHANGLA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,007.67	1,470.83	7,707.51	2,796.50	13,982.51
401gvi	PRECAST CONCRETE CLASS D3	CM	2,007.67	1,470.83	8,417.84	2,974.08	14,870.42
401h	PLUM CONCRETE	CM	879.59	1,109.69	2,893.23	1,220.63	6,103.14
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	1,890.71	0.00	71,584.21	18,368.73	91,843.66
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	1,890.71	0.00	75,784.21	19,418.73	97,093.66
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,516.60	3,667.20	87,008.40	23,048.05	115,240.25
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	2,925.66	12,010.50	148,133.99	40,767.54	203,837.68
405b	LAUNCHING OF GIRDER	TON	68.10	796.91	0.00	216.25	1,081.26
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	131.68	0.00	1,429.93	390.40	1,952.01
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	131.68	0.00	836.93	242.15	1,210.76
406ci	STEEL EXPANSION JOINTS (Local)	KG	10.87	18.40	139.89	42.29	211.46
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	449.00	0.00	84,597.15	21,261.54	106,307.69
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	464.63	0.00	132,497.37	33,240.50	166,202.49
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	511.50	0.00	1,127,679.85	282,047.84	1,410,239.18
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	449.00	0.00	71,968.22	18,104.31	90,521.53
406dii	PVC WATER STOP 8" SIZE	M	113.89	0.00	452.17	141.52	707.58
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.58	0.40	2.00
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.31	0.83	4.16
406f	ASPHALT FELT (3 PLY)	SM	46.76	0.00	252.66	74.85	374.27

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 60A SHANGLA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	22.40	48.58	149.46	55.11	275.56
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	287.63	3,155.77	488.87	983.07	4,915.35
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	437.20	4,796.77	653.71	1,471.92	7,359.60
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	437.20	7,330.09	816.32	2,145.90	10,729.52
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	728.67	12,216.82	1,150.47	3,523.99	17,619.95
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	607.22	10,180.69	1,011.24	2,949.79	14,748.94
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,093.00	18,325.24	1,568.15	5,246.60	26,232.99
407h	PILE LOAD TEST UPTO 120 TON	EACH	25,971.36	86,125.76	118,975.24	57,768.09	288,840.45
407i	PILE LOAD TEST UPTO 240 TON	EACH	25,971.36	86,125.76	254,098.43	91,548.89	457,744.44
407j	PILE LOAD TEST UPTO 360 TON	EACH	70,971.36	95,444.48	346,459.32	128,218.79	641,093.95
407k	PILE LOAD TEST UPTO 550 TON	EACH	104,721.36	119,305.60	553,308.40	194,333.84	971,669.20
407l	PILE LOAD TEST UPTO 800 TON	EACH	154,998.72	143,166.72	896,047.20	298,553.16	1,492,765.80
407m	CONFIRMATORY BORING (NX SIZE)	M	209.48	2,639.89	22.50	717.97	3,589.84
407n	PERMANENT PILE CASING FOR PILES	Ton	274.67	3,993.41	86,095.49	22,590.89	112,954.46
410	BRICK WORK	CM	382.22	453.06	4,738.76	1,393.51	6,967.56
411a	STONE MASONRY RANDOM DRY	CM	402.78	165.94	1,018.56	396.82	1,984.09
411b	STONE MASONRY RANDOM WITH MORTAR	CM	477.78	263.54	2,233.86	743.80	3,718.98
411c	STONE MASONRY DRESSED UNCOURSESED DRY	CM	552.78	165.94	932.05	412.69	2,063.46
411d	STONE MASONRY DRESSED UNCOURSESED WITH MORTAR	CM	627.78	263.54	2,046.03	734.34	3,671.68
411g	ROLL POINTING	SM	81.39	19.52	100.61	50.38	251.90
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	827.78	419.50	2,046.03	823.32	4,116.62
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	259.72	554.74	951.81	441.57	2,207.83

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 60A SHANGLA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	259.72	616.97	1,147.44	506.03	2,530.17
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	246.29	1,097.40	1,397.14	685.21	3,426.04
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	257.99	1,377.91	2,054.65	922.64	4,613.18
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	299.86	1,772.89	3,429.00	1,375.44	6,877.19
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	372.88	2,187.37	5,273.73	1,958.49	9,792.47
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	482.55	2,171.36	6,306.09	2,240.00	11,200.01
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	568.10	2,636.66	11,764.38	3,742.28	18,711.42
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	673.20	3,076.10	17,832.59	5,395.47	26,977.36
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	259.72	554.74	1,222.82	509.32	2,546.60
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	252.78	616.97	1,495.88	591.41	2,957.04
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	246.29	1,097.40	1,745.58	772.32	3,861.59
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	257.99	1,377.91	2,712.81	1,087.18	5,435.88
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	299.86	1,772.89	4,242.03	1,578.70	7,893.48
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	372.88	2,187.37	6,357.78	2,229.51	11,147.54
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	482.55	2,171.36	7,854.72	2,627.16	13,135.80
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	568.10	2,636.66	14,483.64	4,422.10	22,110.50
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	673.20	3,076.10	22,516.50	6,566.45	32,832.24
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	102.78	157.23	908.03	292.01	1,460.05

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 60A SHANGLA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	900.68	845.94	3,732.83	1,369.87	6,849.33
507a	STEEL WIRE MESH FOR GABIONS	KG	6.33	0.00	121.10	31.86	159.30
507b	ROCK FILL IN GABIONS	CM	110.18	0.00	836.64	236.71	1,183.53
508a	BRICK PAVING (SINGLE COURSE)	SM	127.27	38.19	412.94	144.60	723.00
508b	BRICK PAVING (DOUBLE COURSE)	SM	227.27	38.19	818.47	270.98	1,354.91
509a	RIPRAP, CLASS A	CM	550.81	0.00	706.20	314.25	1,571.26
509b	RIPRAP, CLASS B	CM	400.65	180.10	700.55	320.32	1,601.62
509c	RIPRAP, CLASS C	CM	392.21	187.60	706.20	321.50	1,607.51
509c1	RIPRAP, CLASS D	CM	392.21	225.12	706.20	330.88	1,654.41
509d	GROUTED RIPRAP, CLASS A	CM	673.84	170.59	2,635.12	869.89	4,349.43
509e	GROUTED RIPRAP, CLASS B	CM	519.07	316.57	2,432.33	816.99	4,084.97
509f	GROUTED RIPRAP, CLASS C	CM	499.23	301.33	2,444.69	811.31	4,056.55
509f1	GROUTED RIPRAP, CLASS D	CM	499.23	338.85	2,632.90	867.74	4,338.71
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	916.27	481.58	4,292.44	1,422.57	7,112.86
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	56.05	275.72	908.25	310.00	1,550.02
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	114.82	884.71	0.00	249.88	1,249.40
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	173.61	103.71	114.76	98.02	490.10
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	222.22	132.75	146.89	125.47	627.33
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	282.22	288.91	571.73	285.72	1,428.58
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	352.78	361.14	714.66	357.14	1,785.72
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	282.22	288.91	322.64	223.44	1,117.22
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	352.78	361.14	403.30	279.30	1,396.52

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 60A SHANGLA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	409.86	1,157.76	5,910.12	1,869.43	9,347.17
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,149.03	782.78	5,900.13	1,957.98	9,789.91
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	30.56	66.38	644.71	185.41	927.05
603	BRICK EDGING	M	10.14	0.00	64.32	18.61	93.07
604a	METAL GUARD RAIL	M	76.54	55.31	2,637.99	692.46	3,462.31
604b	METAL GUARD RAIL END PIECES	EACH	100.93	533.21	2,962.26	899.10	4,495.50
604d	STEEL POST FOR METAL GUARD RAIL	EACH	114.80	533.21	2,582.37	807.60	4,037.98
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,076.38	1,160.70	13,061.67	4,074.69	20,373.43
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,076.38	801.50	12,223.30	3,775.29	18,876.47
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	266.03	393.19	8,766.05	2,356.32	11,781.58
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	81.25	589.78	10,579.19	2,812.56	14,062.78
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	266.03	844.19	19,054.93	5,041.29	25,206.44
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	874.05	921.65	35,013.65	9,202.34	46,011.69
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	174.81	223.78	16,276.74	4,168.83	20,844.17
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	326.38	0.00	2,315.25	660.41	3,302.04
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	326.38	0.00	3,472.88	949.82	4,749.08
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.33	6.00	26.01	8.84	44.18
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.11	3.51	60.68	16.33	81.63
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.33	6.00	34.71	11.01	55.05
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.11	3.51	80.93	21.39	106.94
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	89.31	29.98	251.37	92.66	463.32

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 60A SHANGLA

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	89.31	52.71	764.61	226.66	1,133.28
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.17	7.50	36.31	11.99	59.97
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.17	13.18	104.74	30.52	152.60
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.17	7.50	48.42	15.02	75.10
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.17	13.18	139.65	39.25	196.24
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	89.31	29.98	350.60	117.47	587.35
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	89.31	52.71	1,320.69	365.68	1,828.38
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	74.31	29.98	167.58	67.97	339.83
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	74.31	52.71	510.51	159.38	796.91
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	74.31	29.98	233.73	84.50	422.52
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	74.31	52.71	881.79	252.20	1,261.01
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	10.94	111.18	177.31	74.86	374.29
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	10.94	111.18	208.81	82.73	413.66
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	118.63	182.71	425.15	181.62	908.12
610c	KILOMETER POST	EACH	730.55	1,321.13	2,044.63	1,024.08	5,120.40
610d	TEN KILOMETER POST	EACH	1,411.10	2,642.27	3,834.09	1,971.86	9,859.32
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	151.11	66.38	1,213.09	357.64	1,788.22
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	133.92	821.01	2.10	239.26	1,196.30

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

**SWABI**  
**(66A)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66A SWABI

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.82	15.76	0.00	4.14	20.72
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	8.29	262.58	1.88	68.19	340.93
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	23.66	635.47	4.22	165.84	829.19
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	94.63	2,541.89	16.89	663.35	3,316.75
103	STRIPPING	CM	2.89	153.65	0.00	39.13	195.67
104	COMPACTION OF NATURAL GROUND	SM	0.41	14.95	2.70	4.52	22.58
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	5.33	227.95	0.00	58.32	291.60
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	128.34	360.08	125.00	153.36	766.78
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	19.51	541.85	0.00	140.34	701.70
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	13.07	422.98	0.00	109.01	545.06
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	4.36	205.65	0.00	52.50	262.51
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	128.34	360.08	125.00	153.36	766.78
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	22.57	492.05	0.00	128.65	643.27
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	11.15	422.98	0.00	108.53	542.67
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	8.77	221.54	0.00	57.58	287.89
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	75.62	664.63	74.15	203.60	1,017.99
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	125.37	400.09	125.00	162.62	813.08
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	112.83	442.22	0.00	138.76	693.81
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	64.48	316.49	0.00	95.24	476.20
107d	GRANULAR BACKFILL	CM	39.03	193.34	739.03	242.85	1,214.24
107e	COMMON BACKFILL	CM	32.51	110.10	18.00	40.15	200.76
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	8.09	234.11	18.00	65.05	325.25

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66A SWABI

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	23.12	578.46	144.73	186.58	932.88
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	17.34	637.82	8.55	165.93	829.64
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	15.41	574.85	8.00	149.56	747.82
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	9.20	119.41	159.08	71.92	359.61
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	7.15	121.79	18.00	36.73	183.67
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	16.74	277.82	10.70	76.31	381.57
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.62	43.86	5.15	12.66	63.29
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.17	30.11	2.73	8.50	42.51
110	IMPROVED SUB-GARDE	CM	11.66	190.72	302.32	126.18	630.88
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	0.97	23.59	2.80	6.84	34.20
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.48	26.79	2.80	7.77	38.83
201	GRANULAR SUB-BASE	CM	9.39	231.80	791.70	258.22	1,291.12
202	AGGREGATE BASE	CM	11.08	282.85	1,137.07	357.75	1,788.76
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	91.19	2,324.40	9,311.94	2,931.88	14,659.41
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	91.19	2,324.40	9,575.01	2,997.65	14,988.25
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	98.02	2,427.71	9,303.17	2,957.22	14,786.12
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	98.02	2,427.71	9,584.93	3,027.66	15,138.31
204b	CEMENT STABILIZED BASE	CM	33.68	780.07	1,323.48	534.31	2,671.54
204c	CEMENT CONTENT	TON	125.00	0.00	7,350.00	1,868.75	9,343.75
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	287.42	2,060.49	61,270.72	15,904.66	79,523.29

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66A SWABI

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	287.42	2,060.49	61,270.72	15,904.66	79,523.29
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	106.96	188.22	1,304.53	399.93	1,999.63
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	177.31	3,721.78	7,692.86	2,897.99	14,489.94
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	117.74	207.88	1,075.37	350.25	1,751.23
207a	DEEP PATCHING (0-15 cm)	SM	1.96	64.78	19.93	21.67	108.33
207b	DEEP PATCHING (15-30 cm)	SM	1.96	64.78	19.93	21.67	108.33
208	REINSTATEMENT OF ROAD SURFACE	SM	2.12	104.50	1.98	27.15	135.75
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	5.46	373.82	12.00	97.82	489.09
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.09	40.20	2.40	10.92	54.61
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.36	2.36	68.99	17.93	89.63
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.35	2.36	60.09	15.70	78.50
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.14	0.86	27.71	7.18	35.89
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.14	0.86	24.03	6.26	31.29
304a	SINGLE SURFACE TREATMENT	SM	0.93	11.24	149.53	40.43	202.14
304b	DOUBLE SURFACE TREATMENT	SM	1.37	21.60	284.53	76.87	384.37
304c	TRIPLE SURFACE TREATMENT	SM	2.30	30.32	330.78	90.85	454.25
304d	SEAL COAT	SM	0.87	6.38	35.02	10.57	52.84
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	81.21	2,293.29	9,999.10	3,093.40	15,467.00
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	81.21	2,198.28	10,642.32	3,230.45	16,152.26
307a	DENSE GRADED HOT BIT-MAC	CM	197.00	513.14	7,252.08	1,990.55	9,952.77
307b	OPEN GRADED HOT BIT-MAC	CM	197.00	513.14	7,040.72	1,937.71	9,688.56

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66A SWABI

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	34.30	1,050.92	3,603.18	1,172.10	5,860.49
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	252.32	1,746.20	61,270.72	15,817.31	79,086.55
309a	COLD MILLING, 0-30 mm	SM	1.15	52.01	18.61	17.94	89.71
309b	COLD MILLING, 0-50 mm	SM	1.92	86.68	31.01	29.90	149.52
309c	COLD MILLING, 0-70 mm	SM	2.88	130.02	46.52	44.86	224.28
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	618.78	2,175.42	3,971.56	1,691.44	8,457.19
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	618.78	2,175.42	4,586.30	1,845.12	9,225.62
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	618.78	2,175.42	4,905.98	1,925.04	9,625.22
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	618.78	2,175.42	4,226.00	1,755.05	8,775.24
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	618.78	2,175.42	4,840.65	1,908.71	9,543.56
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	618.78	2,175.42	5,160.19	1,988.60	9,942.98
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	618.78	2,175.42	4,527.14	1,830.34	9,151.68
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	618.78	2,175.42	5,141.79	1,984.00	9,919.99
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	618.78	2,175.42	5,443.11	2,059.33	10,296.64
401b	CONCRETE CLASS B	CM	796.25	1,109.69	3,358.30	1,316.06	6,580.30
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	603.77	2,175.42	3,801.55	1,645.18	8,225.92
401cii	CONCRETE CLASS C (ON GROUND)	CM	603.77	2,175.42	4,416.20	1,798.85	8,994.23
401ciii	CONCRETE CLASS C (ELEVATED)	CM	603.77	2,175.42	4,735.88	1,878.77	9,393.83
401d	CONCRETE CLASS D1	CM	961.24	2,689.24	6,522.56	2,543.26	12,716.30
401e	CONCRETE CLASS Y	CM	1,336.27	703.81	5,124.14	1,791.05	8,955.27
401f	LEAN CONCRETE	CM	501.66	759.81	2,851.18	1,028.16	5,140.81
401gi	PRECAST CONCRETE, CLASS A1	CM	2,007.67	1,470.83	4,557.10	2,008.90	10,044.49
401gii	PRECAST CONCRETE CLASS A3	CM	2,007.67	1,470.83	5,150.00	2,157.12	10,785.61
401giii	PRECAST CONCRETE, CLASS B	CM	2,007.67	1,470.83	3,990.42	1,867.23	9,336.15
401giv	PRECAST CONCRETE CLASS D1	CM	2,007.67	1,470.83	6,529.79	2,502.07	12,510.35

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66A SWABI

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,007.67	1,470.83	7,225.94	2,676.11	13,380.55
401gvi	PRECAST CONCRETE CLASS D3	CM	2,007.67	1,470.83	7,923.98	2,850.62	14,253.10
401h	PLUM CONCRETE	CM	879.59	1,109.69	2,680.91	1,167.55	5,837.73
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	1,890.71	0.00	71,529.15	18,354.97	91,774.83
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	1,890.71	0.00	75,729.15	19,404.97	97,024.83
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,516.60	3,667.20	87,008.40	23,048.05	115,240.25
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	2,925.66	12,010.50	148,089.40	40,756.39	203,781.94
405b	LAUNCHING OF GIRDER	TON	68.10	796.91	0.00	216.25	1,081.26
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	131.68	0.00	1,429.45	390.28	1,951.41
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	131.68	0.00	836.45	242.03	1,210.16
406ci	STEEL EXPANSION JOINTS (Local)	KG	10.87	18.40	139.89	42.29	211.46
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	449.00	0.00	84,597.15	21,261.54	106,307.69
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	464.63	0.00	132,497.37	33,240.50	166,202.49
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	511.50	0.00	1,127,679.85	282,047.84	1,410,239.18
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	449.00	0.00	71,968.22	18,104.31	90,521.53
406dii	PVC WATER STOP 8" SIZE	M	113.89	0.00	452.17	141.52	707.58
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.58	0.40	2.00
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.31	0.83	4.16
406f	ASPHALT FELT (3 PLY)	SM	46.76	0.00	252.23	74.75	373.73

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66A SWABI

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	22.40	48.58	149.46	55.11	275.56
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	287.63	3,155.77	488.87	983.07	4,915.35
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	437.20	4,796.77	653.71	1,471.92	7,359.60
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	437.20	7,330.09	816.32	2,145.90	10,729.52
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	728.67	12,216.82	1,150.47	3,523.99	17,619.95
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	607.22	10,180.69	1,011.24	2,949.79	14,748.94
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,093.00	18,325.24	1,568.15	5,246.60	26,232.99
407h	PILE LOAD TEST UPTO 120 TON	EACH	25,971.36	86,125.76	105,111.72	54,302.21	271,511.05
407i	PILE LOAD TEST UPTO 240 TON	EACH	25,971.36	86,125.76	226,371.39	84,617.13	423,085.64
407j	PILE LOAD TEST UPTO 360 TON	EACH	70,971.36	95,444.48	304,868.76	117,821.15	589,105.75
407k	PILE LOAD TEST UPTO 550 TON	EACH	104,721.36	119,305.60	485,566.20	177,398.29	886,991.45
407l	PILE LOAD TEST UPTO 800 TON	EACH	154,998.72	143,166.72	787,344.60	271,377.51	1,356,887.55
407m	CONFIRMATORY BORING (NX SIZE)	M	209.48	2,639.89	22.50	717.97	3,589.84
407n	PERMANENT PILE CASING FOR PILES	Ton	274.67	3,993.41	86,095.49	22,590.89	112,954.46
410	BRICK WORK	CM	382.22	453.06	4,305.35	1,285.16	6,425.79
411a	STONE MASONRY RANDOM DRY	CM	402.78	165.94	1,239.25	451.99	2,259.95
411b	STONE MASONRY RANDOM WITH MORTAR	CM	477.78	263.54	2,285.98	756.82	3,784.12
411c	STONE MASONRY DRESSED UNCOURSED DRY	CM	552.78	165.94	1,408.75	531.87	2,659.33
411d	STONE MASONRY DRESSED UNCOURSED WITH MORTAR	CM	627.78	263.54	2,389.55	820.22	4,101.08
411g	ROLL POINTING	SM	81.39	19.52	97.49	49.60	248.00
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	827.78	419.50	2,389.55	909.21	4,546.03
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	259.72	554.74	894.93	427.35	2,136.74

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66A SWABI

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	259.72	616.97	1,055.39	483.02	2,415.10
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	246.29	1,097.40	1,261.56	651.31	3,256.56
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	257.99	1,377.91	1,832.59	867.12	4,335.61
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	299.86	1,772.89	2,992.95	1,266.43	6,332.13
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	372.88	2,187.37	4,622.19	1,795.61	8,978.06
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	482.55	2,171.36	5,654.27	2,077.05	10,385.24
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	568.10	2,636.66	11,082.21	3,571.74	17,858.71
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	673.20	3,076.10	15,227.92	4,744.30	23,721.52
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	259.72	554.74	1,165.94	495.10	2,475.50
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	252.78	616.97	1,403.83	568.39	2,841.97
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	246.29	1,097.40	1,610.00	738.42	3,692.11
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	257.99	1,377.91	2,490.75	1,031.66	5,158.31
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	299.86	1,772.89	3,805.99	1,469.69	7,348.43
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	372.88	2,187.37	5,706.24	2,066.62	10,333.12
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	482.55	2,171.36	7,202.91	2,464.21	12,321.04
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	568.10	2,636.66	13,801.47	4,251.56	21,257.79
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	673.20	3,076.10	19,911.83	5,915.28	29,576.41
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	102.78	157.23	744.73	251.18	1,255.92

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66A SWABI

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	900.68	845.94	3,436.08	1,295.68	6,478.38
507a	STEEL WIRE MESH FOR GABIONS	KG	6.33	0.00	121.10	31.86	159.30
507b	ROCK FILL IN GABIONS	CM	110.18	0.00	865.10	243.82	1,219.10
508a	BRICK PAVING (SINGLE COURSE)	SM	127.27	38.19	365.52	132.74	663.72
508b	BRICK PAVING (DOUBLE COURSE)	SM	227.27	38.19	725.19	247.66	1,238.31
509a	RIPRAP, CLASS A	CM	550.81	0.00	926.89	369.42	1,847.12
509b	RIPRAP, CLASS B	CM	400.65	180.10	919.47	375.05	1,875.27
509c	RIPRAP, CLASS C	CM	392.21	187.60	926.89	376.67	1,883.37
509c1	RIPRAP, CLASS D	CM	392.21	225.12	926.89	386.05	1,930.27
509d	GROUTED RIPRAP, CLASS A	CM	673.84	170.59	2,740.70	896.28	4,481.41
509e	GROUTED RIPRAP, CLASS B	CM	519.07	316.57	2,548.22	845.96	4,229.82
509f	GROUTED RIPRAP, CLASS C	CM	499.23	301.33	2,555.55	839.03	4,195.13
509f1	GROUTED RIPRAP, CLASS D	CM	499.23	338.85	2,729.21	891.82	4,459.10
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	916.27	481.58	3,981.61	1,344.86	6,724.31
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	56.05	275.72	739.77	267.88	1,339.42
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	114.82	884.71	0.00	249.88	1,249.40
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	173.61	103.71	150.62	106.99	534.93
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	222.22	132.75	192.79	136.94	684.71
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	282.22	288.91	567.91	284.76	1,423.81
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	352.78	361.14	709.89	355.95	1,779.76
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	282.22	288.91	327.93	224.77	1,123.83
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	352.78	361.14	409.92	280.96	1,404.79

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66A SWABI

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	409.86	1,157.76	5,666.89	1,808.63	9,043.14
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,149.03	782.78	5,651.35	1,895.79	9,478.94
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	30.56	66.38	610.01	176.74	883.68
603	BRICK EDGING	M	10.14	0.00	57.60	16.93	84.67
604a	METAL GUARD RAIL	M	76.54	55.31	2,576.69	677.14	3,385.68
604b	METAL GUARD RAIL END PIECES	EACH	100.93	533.21	2,900.02	883.54	4,417.71
604d	STEEL POST FOR METAL GUARD RAIL	EACH	114.80	533.21	2,545.33	798.33	3,991.67
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,076.38	1,160.70	12,558.59	3,948.92	19,744.58
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,076.38	801.50	11,720.87	3,649.69	18,248.44
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	266.03	393.19	8,744.34	2,350.89	11,754.45
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	81.25	589.78	10,546.64	2,804.42	14,022.09
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	266.03	844.19	18,946.20	5,014.10	25,070.52
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	874.05	921.65	34,850.55	9,161.56	45,807.81
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	174.81	223.78	16,244.12	4,160.68	20,803.39
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	326.38	0.00	2,315.25	660.41	3,302.04
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	326.38	0.00	3,472.88	949.82	4,749.08
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.33	6.00	26.01	8.84	44.18
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.11	3.51	60.68	16.33	81.63
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.33	6.00	34.71	11.01	55.05
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.11	3.51	80.93	21.39	106.94
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	89.31	29.98	251.37	92.66	463.32

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66A SWABI

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	89.31	52.71	764.61	226.66	1,133.28
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.17	7.50	36.31	11.99	59.97
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.17	13.18	104.74	30.52	152.60
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.17	7.50	48.42	15.02	75.10
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.17	13.18	139.65	39.25	196.24
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	89.31	29.98	350.60	117.47	587.35
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	89.31	52.71	1,320.69	365.68	1,828.38
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	74.31	29.98	167.58	67.97	339.83
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	74.31	52.71	510.51	159.38	796.91
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	74.31	29.98	233.73	84.50	422.52
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	74.31	52.71	881.79	252.20	1,261.01
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	10.94	111.18	177.00	74.78	373.89
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	10.94	111.18	208.50	82.65	413.27
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	118.63	182.71	385.13	171.62	858.10
610c	KILOMETER POST	EACH	730.55	1,321.13	1,909.01	990.17	4,950.87
610d	TEN KILOMETER POST	EACH	1,411.10	2,642.27	3,617.20	1,917.64	9,588.21
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	151.11	66.38	1,271.79	372.32	1,861.60
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	133.92	821.01	2.10	239.26	1,196.30

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

**SWAT**  
**(66)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66 SWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.82	15.76	0.00	4.14	20.72
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	8.29	262.58	1.88	68.19	340.93
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	23.66	635.47	4.22	165.84	829.19
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	94.63	2,541.89	16.89	663.35	3,316.75
103	STRIPPING	CM	2.89	153.65	0.00	39.13	195.67
104	COMPACTION OF NATURAL GROUND	SM	0.41	14.95	2.70	4.52	22.58
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	5.33	227.95	0.00	58.32	291.60
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	128.34	360.08	125.00	153.36	766.78
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	19.51	541.85	0.00	140.34	701.70
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	13.07	422.98	0.00	109.01	545.06
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	4.36	205.65	0.00	52.50	262.51
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	128.34	360.08	125.00	153.36	766.78
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	22.57	492.05	0.00	128.65	643.27
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	11.15	422.98	0.00	108.53	542.67
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	8.77	221.54	0.00	57.58	287.89
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	75.62	664.63	74.15	203.60	1,017.99
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	125.37	400.09	125.00	162.62	813.08
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	112.83	442.22	0.00	138.76	693.81
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	64.48	316.49	0.00	95.24	476.20
107d	GRANULAR BACKFILL	CM	39.03	193.34	690.83	230.80	1,154.00
107e	COMMON BACKFILL	CM	32.51	110.10	18.00	40.15	200.76
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	8.09	234.11	18.00	65.05	325.25

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66 SWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	23.12	578.46	144.73	186.58	932.88
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	17.34	637.82	8.55	165.93	829.64
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	15.41	574.85	8.00	149.56	747.82
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	9.20	119.41	159.08	71.92	359.61
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	7.15	121.79	18.00	36.73	183.67
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	16.74	277.82	10.70	76.31	381.57
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.62	43.86	5.15	12.66	63.29
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.17	30.11	2.73	8.50	42.51
110	IMPROVED SUB-GARDE	CM	11.66	190.72	290.66	123.26	616.30
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	0.97	23.59	2.80	6.84	34.20
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.48	26.79	2.80	7.77	38.83
201	GRANULAR SUB-BASE	CM	9.39	231.80	743.89	246.27	1,231.35
202	AGGREGATE BASE	CM	11.08	282.85	987.21	320.29	1,601.43
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	91.19	2,324.40	9,361.63	2,944.30	14,721.52
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	91.19	2,324.40	9,549.41	2,991.25	14,956.25
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	98.02	2,427.71	9,352.86	2,969.65	14,848.23
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	98.02	2,427.71	9,559.33	3,021.26	15,106.32
204b	CEMENT STABILIZED BASE	CM	33.68	780.07	1,430.77	561.13	2,805.65
204c	CEMENT CONTENT	TON	125.00	0.00	7,350.00	1,868.75	9,343.75
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	287.42	2,060.49	61,415.36	15,940.82	79,704.10

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66 SWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	287.42	2,060.49	61,415.36	15,940.82	79,704.10
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	106.96	188.22	1,115.72	352.72	1,763.62
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	177.31	3,721.78	7,586.04	2,871.28	14,356.41
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	117.74	207.88	904.66	307.57	1,537.86
207a	DEEP PATCHING (0-15 cm)	SM	1.96	64.78	18.82	21.39	106.95
207b	DEEP PATCHING (15-30 cm)	SM	1.96	64.78	18.82	21.39	106.95
208	REINSTATEMENT OF ROAD SURFACE	SM	2.12	104.50	1.98	27.15	135.75
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	5.46	373.82	12.00	97.82	489.09
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.09	40.20	2.40	10.92	54.61
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.36	2.36	69.13	17.96	89.81
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.35	2.36	60.24	15.74	78.69
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.14	0.86	27.76	7.19	35.96
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.14	0.86	24.08	6.27	31.36
304a	SINGLE SURFACE TREATMENT	SM	0.93	11.24	149.11	40.32	201.61
304b	DOUBLE SURFACE TREATMENT	SM	1.37	21.60	281.98	76.24	381.18
304c	TRIPLE SURFACE TREATMENT	SM	2.30	30.32	328.15	90.19	450.97
304d	SEAL COAT	SM	0.87	6.38	35.68	10.73	53.66
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	81.21	2,293.29	9,998.84	3,093.33	15,466.67
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	81.21	2,198.28	10,605.84	3,221.33	16,106.67
307a	DENSE GRADED HOT BIT-MAC	CM	197.00	513.14	7,312.73	2,005.71	10,028.57
307b	OPEN GRADED HOT BIT-MAC	CM	197.00	513.14	6,994.30	1,926.11	9,630.54

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66 SWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	34.30	1,050.92	3,603.18	1,172.10	5,860.49
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	252.32	1,746.20	61,415.36	15,853.47	79,267.35
309a	COLD MILLING, 0-30 mm	SM	1.15	52.01	18.61	17.94	89.71
309b	COLD MILLING, 0-50 mm	SM	1.92	86.68	31.01	29.90	149.52
309c	COLD MILLING, 0-70 mm	SM	2.88	130.02	46.52	44.86	224.28
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	618.78	2,175.42	4,102.91	1,724.28	8,621.39
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	618.78	2,175.42	4,717.69	1,877.97	9,389.86
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	618.78	2,175.42	5,037.37	1,957.89	9,789.46
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	618.78	2,175.42	4,262.77	1,764.24	8,821.21
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	618.78	2,175.42	4,877.42	1,917.91	9,589.53
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	618.78	2,175.42	5,196.98	1,997.80	9,988.98
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	618.78	2,175.42	4,551.22	1,836.35	9,181.77
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	618.78	2,175.42	5,165.87	1,990.02	9,950.09
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	618.78	2,175.42	5,459.03	2,063.31	10,316.53
401b	CONCRETE CLASS B	CM	796.25	1,109.69	3,357.51	1,315.86	6,579.32
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	603.77	2,175.42	3,758.33	1,634.38	8,171.90
401cii	CONCRETE CLASS C (ON GROUND)	CM	603.77	2,175.42	4,372.98	1,788.04	8,940.22
401ciii	CONCRETE CLASS C (ELEVATED)	CM	603.77	2,175.42	4,692.66	1,867.96	9,339.82
401d	CONCRETE CLASS D1	CM	961.24	2,689.24	6,633.53	2,571.00	12,855.01
401e	CONCRETE CLASS Y	CM	1,336.27	703.81	5,334.27	1,843.59	9,217.94
401f	LEAN CONCRETE	CM	501.66	759.81	2,847.89	1,027.34	5,136.69
401gi	PRECAST CONCRETE, CLASS A1	CM	2,007.67	1,470.83	4,701.34	2,044.96	10,224.80
401gii	PRECAST CONCRETE CLASS A3	CM	2,007.67	1,470.83	5,165.36	2,160.96	10,804.81
401giii	PRECAST CONCRETE, CLASS B	CM	2,007.67	1,470.83	3,947.17	1,856.42	9,282.08
401giv	PRECAST CONCRETE CLASS D1	CM	2,007.67	1,470.83	6,640.78	2,529.82	12,649.09

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66 SWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	2,007.67	1,470.83	7,331.05	2,702.39	13,511.93
401gvi	PRECAST CONCRETE CLASS D3	CM	2,007.67	1,470.83	8,023.09	2,875.40	14,376.98
401h	PLUM CONCRETE	CM	879.59	1,109.69	2,604.25	1,148.38	5,741.90
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	1,890.71	0.00	71,638.23	18,382.24	91,911.18
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	1,890.71	0.00	75,838.23	19,432.24	97,161.18
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,516.60	3,667.20	87,008.40	23,048.05	115,240.25
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	2,925.66	12,010.50	148,087.81	40,755.99	203,779.96
405b	LAUNCHING OF GIRDER	TON	68.10	796.91	0.00	216.25	1,081.26
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	131.68	0.00	1,429.61	390.32	1,951.61
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	131.68	0.00	836.61	242.07	1,210.36
406ci	STEEL EXPANSION JOINTS (Local)	KG	10.87	18.40	139.89	42.29	211.46
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	449.00	0.00	84,597.15	21,261.54	106,307.69
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	464.63	0.00	132,497.37	33,240.50	166,202.49
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	511.50	0.00	1,127,679.85	282,047.84	1,410,239.18
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	449.00	0.00	71,968.22	18,104.31	90,521.53
406dii	PVC WATER STOP 8" SIZE	M	113.89	0.00	452.17	141.52	707.58
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.58	0.40	2.00
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.31	0.83	4.16
406f	ASPHALT FELT (3 PLY)	SM	46.76	0.00	252.37	74.78	373.91

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66 SWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	22.40	48.58	149.46	55.11	275.56
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	287.63	3,155.77	488.87	983.07	4,915.35
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	437.20	4,796.77	653.71	1,471.92	7,359.60
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	437.20	7,330.09	816.32	2,145.90	10,729.52
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	728.67	12,216.82	1,150.47	3,523.99	17,619.95
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	607.22	10,180.69	1,011.24	2,949.79	14,748.94
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,093.00	18,325.24	1,568.15	5,246.60	26,232.99
407h	PILE LOAD TEST UPTO 120 TON	EACH	25,971.36	86,125.76	102,004.44	53,525.39	267,626.95
407i	PILE LOAD TEST UPTO 240 TON	EACH	25,971.36	86,125.76	220,156.83	83,063.49	415,317.44
407j	PILE LOAD TEST UPTO 360 TON	EACH	70,971.36	95,444.48	295,546.92	115,490.69	577,453.45
407k	PILE LOAD TEST UPTO 550 TON	EACH	104,721.36	119,305.60	470,382.90	173,602.47	868,012.33
407l	PILE LOAD TEST UPTO 800 TON	EACH	154,998.72	143,166.72	762,980.70	265,286.54	1,326,432.68
407m	CONFIRMATORY BORING (NX SIZE)	M	209.48	2,639.89	22.50	717.97	3,589.84
407n	PERMANENT PILE CASING FOR PILES	Ton	274.67	3,993.41	86,095.49	22,590.89	112,954.46
410	BRICK WORK	CM	382.22	453.06	4,644.05	1,369.83	6,849.17
411a	STONE MASONRY RANDOM DRY	CM	402.78	165.94	930.29	374.75	1,873.75
411b	STONE MASONRY RANDOM WITH MORTAR	CM	477.78	263.54	2,061.77	700.77	3,503.85
411c	STONE MASONRY DRESSED UNCOURSED DRY	CM	552.78	165.94	1,122.72	460.36	2,301.80
411d	STONE MASONRY DRESSED UNCOURSED WITH MORTAR	CM	627.78	263.54	2,167.08	764.60	3,823.00
411g	ROLL POINTING	SM	81.39	19.52	98.91	49.96	249.78
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	827.78	419.50	2,167.08	853.59	4,267.94
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	259.72	554.74	912.52	431.74	2,158.72

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66 SWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	259.72	616.97	1,083.48	490.04	2,450.21
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	246.29	1,097.40	1,302.63	661.58	3,307.90
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	257.99	1,377.91	1,899.20	883.77	4,418.86
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	299.86	1,772.89	3,122.31	1,298.77	6,493.83
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	372.88	2,187.37	4,815.27	1,843.88	9,219.41
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	482.55	2,171.36	5,847.32	2,125.31	10,626.55
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	568.10	2,636.66	11,284.60	3,622.34	18,111.70
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	673.20	3,076.10	15,993.99	4,935.82	24,679.11
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	259.72	554.74	1,183.53	499.50	2,497.48
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	252.78	616.97	1,431.92	575.42	2,877.08
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	246.29	1,097.40	1,651.07	748.69	3,743.45
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	257.99	1,377.91	2,557.37	1,048.32	5,241.58
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	299.86	1,772.89	3,935.34	1,502.02	7,510.12
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	372.88	2,187.37	5,899.32	2,114.89	10,574.47
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	482.55	2,171.36	7,395.96	2,512.47	12,562.35
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	568.10	2,636.66	14,003.87	4,302.16	21,510.78
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	673.20	3,076.10	20,677.90	6,106.80	30,534.00
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	102.78	157.23	696.52	239.13	1,195.66

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66 SWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	900.68	845.94	3,435.29	1,295.48	6,477.40
507a	STEEL WIRE MESH FOR GABIONS	KG	6.33	0.00	121.10	31.86	159.30
507b	ROCK FILL IN GABIONS	CM	110.18	0.00	576.73	171.73	858.64
508a	BRICK PAVING (SINGLE COURSE)	SM	127.27	38.19	403.30	142.19	710.95
508b	BRICK PAVING (DOUBLE COURSE)	SM	227.27	38.19	801.11	266.64	1,333.21
509a	RIPRAP, CLASS A	CM	550.81	0.00	617.93	292.18	1,460.92
509b	RIPRAP, CLASS B	CM	400.65	180.10	612.98	298.43	1,492.16
509c	RIPRAP, CLASS C	CM	392.21	187.60	617.93	299.43	1,497.16
509c1	RIPRAP, CLASS D	CM	392.21	225.12	617.93	308.81	1,544.07
509d	GROUTED RIPRAP, CLASS A	CM	673.84	170.59	2,484.70	832.28	4,161.41
509e	GROUTED RIPRAP, CLASS B	CM	519.07	316.57	2,289.18	781.21	3,906.03
509f	GROUTED RIPRAP, CLASS C	CM	499.23	301.33	2,296.02	774.14	3,870.71
509f1	GROUTED RIPRAP, CLASS D	CM	499.23	338.85	2,476.74	828.70	4,143.51
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	916.27	481.58	3,963.53	1,340.34	6,701.72
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	56.05	275.72	691.46	255.81	1,279.03
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	114.82	884.71	0.00	249.88	1,249.40
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	173.61	103.71	100.41	94.43	472.17
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	222.22	132.75	128.53	120.87	604.37
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	282.22	288.91	534.95	276.52	1,382.60
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	352.78	361.14	668.68	345.65	1,728.25
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	282.22	288.91	296.15	216.82	1,084.11
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	352.78	361.14	370.19	271.03	1,355.14

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66 SWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	409.86	1,157.76	5,741.46	1,827.27	9,136.35
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,149.03	782.78	5,732.76	1,916.14	9,580.70
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	30.56	66.38	616.50	178.36	891.79
603	BRICK EDGING	M	10.14	0.00	64.32	18.61	93.07
604a	METAL GUARD RAIL	M	76.54	55.31	2,637.99	692.46	3,462.31
604b	METAL GUARD RAIL END PIECES	EACH	100.93	533.21	2,962.26	899.10	4,495.50
604d	STEEL POST FOR METAL GUARD RAIL	EACH	114.80	533.21	2,582.37	807.60	4,037.98
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,076.38	1,160.70	12,737.91	3,993.75	19,968.73
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,076.38	801.50	11,898.89	3,694.19	18,470.97
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	266.03	393.19	8,724.92	2,346.04	11,730.18
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	81.25	589.78	10,517.51	2,797.13	13,985.67
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	266.03	844.19	18,930.78	5,010.25	25,051.25
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	874.05	921.65	34,827.42	9,155.78	45,778.90
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	174.81	223.78	16,239.50	4,159.52	20,797.61
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	326.38	0.00	2,315.25	660.41	3,302.04
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	326.38	0.00	3,472.88	949.82	4,749.08
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.33	6.00	26.01	8.84	44.18
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.11	3.51	60.68	16.33	81.63
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.33	6.00	34.71	11.01	55.05
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.11	3.51	80.93	21.39	106.94
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	89.31	29.98	251.37	92.66	463.32

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 66 SWAT

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	89.31	52.71	764.61	226.66	1,133.28
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.17	7.50	36.31	11.99	59.97
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.17	13.18	104.74	30.52	152.60
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.17	7.50	48.42	15.02	75.10
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.17	13.18	139.65	39.25	196.24
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	89.31	29.98	350.60	117.47	587.35
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	89.31	52.71	1,320.69	365.68	1,828.38
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	74.31	29.98	167.58	67.97	339.83
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	74.31	52.71	510.51	159.38	796.91
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	74.31	29.98	233.73	84.50	422.52
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	74.31	52.71	881.79	252.20	1,261.01
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	10.94	111.18	177.10	74.81	374.03
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	10.94	111.18	208.60	82.68	413.40
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	118.63	182.71	398.20	174.89	874.43
610c	KILOMETER POST	EACH	730.55	1,321.13	1,955.31	1,001.75	5,008.75
610d	TEN KILOMETER POST	EACH	1,411.10	2,642.27	3,692.14	1,936.38	9,681.89
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	151.11	66.38	1,223.58	360.27	1,801.33
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	133.92	821.01	2.10	239.26	1,196.30

# **NATIONAL HIGHWAY AUTHORITY**

## **COMPOSITE SCHEDULE OF RATES**

**January-2011**

## **TANK**

### **(70A)**



**SAMPAK INTERNATIONAL**

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 70A TANK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
101	CLEARING AND GRUBBING	SM	0.79	15.76	0.00	4.14	20.69
102a	REMOVAL OF TREES 150-300 mm GIRTH	EACH	8.09	262.58	1.88	68.14	340.68
102b	REMOVAL OF TREES 301-600 mm GIRTH	EACH	23.01	635.47	4.22	165.68	828.38
102c	REMOVAL OF TREES 601 mm OR OVER GIRTH	EACH	92.03	2,541.89	16.89	662.70	3,313.50
103	STRIPPING	CM	2.84	153.65	0.00	39.12	195.61
104	COMPACTION OF NATURAL GROUND	SM	0.41	14.95	2.70	4.51	22.57
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	5.32	227.95	0.00	58.32	291.59
106bi	EXCAVATE UNSUITABLE HARD ROCK MATERIAL	CM	126.84	360.08	125.00	152.98	764.90
106bii	EXCAVATE UNSUITABLE MEDIUM ROCK MATERIAL	CM	19.21	541.85	0.00	140.27	701.33
106biii	EXCAVATE UNSUITABLE SOFT ROCK MATERIAL	CM	12.90	422.98	0.00	108.97	544.85
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	4.35	205.65	0.00	52.50	262.50
106di	EXCAVATE SURPLUS HARD ROCK MATERIAL	CM	126.84	360.08	125.00	152.98	764.90
106dii	EXCAVATE SURPLUS MEDIUM ROCK MATERIAL	CM	22.32	492.05	0.00	128.59	642.95
106diii	EXCAVATE SURPLUS SOFT ROCK MATERIAL	CM	10.98	422.98	0.00	108.49	542.45
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	8.72	221.54	0.00	57.57	287.83
107b	STRUCTURAL EXCAVATION IN COMMON MATERIAL BELOW WATER LEVEL	CM	74.62	664.63	75.56	203.70	1,018.50
107ci	STRUCTURAL EXCAVATION IN HARD ROCK MATERIAL	CM	123.98	400.09	125.00	162.27	811.34
107cii	STRUCTURAL EXCAVATION IN MEDIUM ROCK MATERIAL	CM	111.58	442.22	0.00	138.45	692.25
107ciii	STRUCTURAL EXCAVATION IN SOFT ROCK MATERIAL	CM	63.76	316.49	0.00	95.06	475.31
107d	GRANULAR BACKFILL	CM	38.23	193.34	822.45	263.50	1,317.51
107e	COMMON BACKFILL	CM	31.62	110.10	18.00	39.93	199.65
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	8.00	234.11	18.00	65.03	325.13

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 70A TANK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
108bi	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN HARD ROCK MATERIAL	CM	22.75	578.46	144.73	186.49	932.43
108bii	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN MEDIUM ROCK MATERIAL	CM	17.06	637.82	8.55	165.86	829.29
108biii	FORMAITON OF EMBANKMENT FROM ROADWAY EXCAVATION IN SOFT ROCK MATERIAL	CM	15.17	574.85	8.00	149.50	747.51
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	9.06	119.41	159.08	71.89	359.44
108d	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	7.06	121.79	18.00	36.71	183.56
108e	FORMATION OF EMBANKMENT FROM STRUCTURAL EXCAVATION IN ANY TYPE OF ROCK MATERIAL	CM	16.44	277.82	10.70	76.24	381.20
109a	SUBGRADE PREPARATION IN EARTH CUT	SM	1.60	43.86	5.15	12.65	63.26
109bi	SUBGRADE PREPARATION IN EXISTING ROAD WITHOUT ANY FILL	SM	1.16	30.11	2.73	8.50	42.50
110	IMPROVED SUB-GARDE	CM	11.47	190.72	339.87	135.52	677.59
114a	DRESSING OF BERM WITHOUT EXTRA MATERIAL	SM	0.95	23.59	2.80	6.84	34.18
114b	DRESSING OF BERM WITH EXTRA MATERIAL	SM	1.46	26.79	2.80	7.76	38.80
201	GRANULAR SUB-BASE	CM	9.27	231.80	945.70	296.69	1,483.46
202	AGGREGATE BASE	CM	10.97	282.85	1,183.18	369.25	1,846.25
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS A)	CM	88.98	2,324.40	9,395.08	2,952.11	14,760.57
203b	ASPHALTIC BASE COURSE PLANT MIX (CLASS B)	CM	88.98	2,324.40	9,632.12	3,011.37	15,056.87
203c	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS A)	CM	95.71	2,427.71	9,386.29	2,977.43	14,887.13
203d	ASPHALTIC LEVELLING COURSE PLANT MIX (CLASS B)	CM	95.71	2,427.71	9,642.09	3,041.38	15,206.89
204b	CEMENT STABILIZED BASE	CM	33.22	780.07	1,401.68	553.74	2,768.71
204c	CEMENT CONTENT	TON	120.00	0.00	7,245.00	1,841.25	9,206.25
204d	LIQUID ASPHALT FOR CURING SEAL, TYPE MC-250	TON	284.09	2,060.49	61,854.31	16,049.72	80,248.61

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 70A TANK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
204e	EMULSIFIED ASPHALT FOR CURING SEAL, TYPE SS-1	TON	284.09	2,060.49	61,854.31	16,049.72	80,248.61
205a	GRADED CRUSHED AGGREGATE CRACK-RELIEF LAYER	CM	103.35	188.22	1,139.73	357.82	1,789.12
205b	ASPHALTIC OPEN-GRADED PLANT MIX CRACK RELIEF LAYER	CM	173.71	3,721.78	7,633.36	2,882.21	14,411.07
206b	WATER BOUND MACADAM BASE WITH COARSE AGG: CLASS B	CM	113.66	207.88	1,145.99	366.88	1,834.41
207a	DEEP PATCHING (0-15 cm)	SM	1.93	64.78	20.48	21.80	108.99
207b	DEEP PATCHING (15-30 cm)	SM	1.93	64.78	20.48	21.80	108.99
208	REINSTATEMENT OF ROAD SURFACE	SM	2.09	104.50	1.98	27.14	135.71
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	5.43	373.82	12.00	97.81	489.06
209b	SCARIFICATION OF EXISTING ROAD PAVEMENT	SM	1.09	40.20	2.40	10.92	54.61
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.35	2.36	69.57	18.07	90.36
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	0.34	2.36	60.68	15.85	79.23
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.14	0.86	27.94	7.24	36.18
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT.	SM	0.14	0.86	24.26	6.32	31.58
304a	SINGLE SURFACE TREATMENT	SM	0.93	11.24	150.32	40.62	203.11
304b	DOUBLE SURFACE TREATMENT	SM	1.35	21.60	284.76	76.93	384.65
304c	TRIPLE SURFACE TREATMENT	SM	2.28	30.32	331.32	90.98	454.91
304d	SEAL COAT	SM	0.86	6.38	35.78	10.75	53.77
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS A)	CM	79.40	2,293.29	10,085.46	3,114.54	15,572.69
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS B)	CM	79.40	2,198.28	10,689.82	3,241.88	16,209.38
307a	DENSE GRADED HOT BIT-MAC	CM	192.00	513.14	7,380.48	2,021.40	10,107.02
307b	OPEN GRADED HOT BIT-MAC	CM	192.00	513.14	7,078.12	1,945.81	9,729.07

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 70A TANK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
308a	RECYCLING OF ASPHALT CONCRETE (0-60 mm THICK)	CM	33.50	1,050.92	3,603.18	1,171.90	5,859.49
308b	BITUMEN BINDER GRADE (40-50, 60-70, 80-100)	TON	248.98	1,746.20	61,854.31	15,962.37	79,811.87
309a	COLD MILLING, 0-30 mm	SM	1.14	52.01	18.96	18.03	90.13
309b	COLD MILLING, 0-50 mm	SM	1.90	86.68	31.60	30.04	150.22
309c	COLD MILLING, 0-70 mm	SM	2.84	130.02	47.40	45.07	225.33
401a1i	CONCRETE CLASS A1 (UNDERGROUND)	CM	611.14	2,175.42	4,014.07	1,700.16	8,500.79
401a1ii	CONCRETE CLASS A1 (ON GROUND)	CM	611.14	2,175.42	4,640.55	1,856.78	9,283.89
401a1iii	CONCRETE CLASS A1 (ELEVATED)	CM	611.14	2,175.42	4,966.32	1,938.22	9,691.10
401a2i	CONCRETAE CLASS A2 (UNDERGROUND)	CM	611.14	2,175.42	4,195.15	1,745.43	8,727.14
401a2ii	CONCRETAE CLASS A2 (ON GROUND)	CM	611.14	2,175.42	4,821.51	1,902.02	9,510.09
401a2iii	CONCRETAE CLASS A2 (ELEVATED)	CM	611.14	2,175.42	5,147.16	1,983.43	9,917.15
401a3i	CONCRETAE CLASS A3 (UNDERGROUND)	CM	611.14	2,175.42	4,492.62	1,819.79	9,098.97
401a3ii	CONCRETE CLASS A3 (ON GROUND)	CM	611.14	2,175.42	5,118.98	1,976.38	9,881.92
401a3iii	CONCRETAE CLASS A3 (ELEVATED)	CM	611.14	2,175.42	5,419.83	2,051.60	10,257.99
401b	CONCRETE CLASS B	CM	784.03	1,109.69	3,289.99	1,295.93	6,479.64
401ci	CONCRETE CLASS C (UNDERGROUND)	CM	594.04	2,175.42	3,727.00	1,624.12	8,120.58
401cii	CONCRETE CLASS C (ON GROUND)	CM	594.04	2,175.42	4,353.36	1,780.71	8,903.53
401ciii	CONCRETE CLASS C (ELEVATED)	CM	594.04	2,175.42	4,679.13	1,862.15	9,310.75
401d	CONCRETE CLASS D1	CM	949.43	2,689.24	6,548.43	2,546.78	12,733.88
401e	CONCRETE CLASS Y	CM	1,318.22	703.81	5,239.23	1,815.32	9,076.58
401f	LEAN CONCRETE	CM	489.02	759.81	2,786.55	1,008.84	5,044.22
401gi	PRECAST CONCRETE, CLASS A1	CM	1,969.33	1,470.83	4,622.71	2,015.72	10,078.60
401gii	PRECAST CONCRETE CLASS A3	CM	1,969.33	1,470.83	5,120.03	2,140.05	10,700.24
401giii	PRECAST CONCRETE, CLASS B	CM	1,969.33	1,470.83	3,929.99	1,842.54	9,212.69
401giv	PRECAST CONCRETE CLASS D1	CM	1,969.33	1,470.83	6,555.76	2,498.98	12,494.90

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 70A TANK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
401gv	PRECAST CONCRETE CLASS D2	CM	1,969.33	1,470.83	7,238.94	2,669.78	13,348.88
401gvi	PRECAST CONCRETE CLASS D3	CM	1,969.33	1,470.83	7,923.99	2,841.04	14,205.19
401h	PLUM CONCRETE	CM	864.03	1,109.69	2,643.60	1,154.33	5,771.65
404a	REINFORCEMENT AS PER AASHTO M. 31 GRADE 40	TON	1,870.71	0.00	71,560.96	18,357.92	91,789.59
404b	REINFORCEMENT AS PER AASHTO M. 31 GRADE 60	TON	1,870.71	0.00	75,760.96	19,407.92	97,039.59
404h	REINFORCEMENT (STRUCTURAL SHAPES) AS PER ASTM-A-36	TON	1,500.60	3,667.20	88,646.40	23,453.55	117,267.75
405a	PRE-STRESSING WIRE STRAND 3/8"-1/2" DIA COMPLETE IN ALL RESPECT.	TON	2,925.66	12,010.50	150,880.84	41,454.25	207,271.25
405b	LAUNCHING OF GIRDER	TON	68.10	796.91	0.00	216.25	1,081.26
406a	PREMOULDED JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	129.46	0.00	1,455.96	396.36	1,981.78
406b	NEOPRENE RUBBER JOINT FILLER 12 mm THICK WITH BITUMASTIC JOINT SEAL	SM	129.46	0.00	851.75	245.30	1,226.51
406ci	STEEL EXPANSION JOINTS (Local)	KG	10.72	18.40	142.37	42.87	214.37
406cii	STEEL EXPANSION JOINT WITH TWO EXTRUDED ALUMINIUM ALLOY SECTIONS FOR 50mm MOVEMENT (IMPORTED)	M	444.00	0.00	86,208.52	21,663.13	108,315.65
406ciii	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY TRIANGULAR TEETH FOR 110mm MOVEMENT (IMPORTED)	M	459.00	0.00	135,021.13	33,870.03	169,350.16
406civ	STEEL EXPANSION JOINT WITH CAST ALUMINIUM ALLOY CANTILEVER TEETH FOR 300mm MOVEMENT (IMPORTED)	M	504.00	0.00	1,149,159.46	287,415.86	1,437,079.32
406cv	STEEL EXPANSION JOINT MONOBLOC TYPE FOR 65mm MOVEMENT (IMPORTED)	M	444.00	0.00	73,339.04	18,445.76	92,228.80
406dii	PVC WATER STOP 8" SIZE	M	111.89	0.00	460.78	143.17	715.84
406e	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - LOCAL	c.cm	0.02	0.00	1.61	0.41	2.04
406ei	ELASTOMERIC BEARING PADS (ACCORDING TO SIZE AND THICKNESS) - IMPORTED	c.cm	0.02	0.00	3.37	0.85	4.23
406f	ASPHALT FELT (3 PLY)	SM	46.26	0.00	256.46	75.68	378.40

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 70A TANK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
406g	STEEL OR METAL BEARING DEVICES	KG	22.00	48.58	151.02	55.40	277.01
407d1	CAST IN PLACE PILES UPTO 1.00 M DIA IN NORMAL SOIL (BORING ONLY)	M	287.37	3,155.77	489.54	983.17	4,915.85
407d2	CAST IN PLACE PILES UPTO 1.00 M DIA IN GRAVEL STRATA (BORING ONLY)	M	436.80	4,796.77	654.72	1,472.07	7,360.36
407d3	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN NORMAL SOIL (BORING ONLY)	M	436.80	7,330.09	817.44	2,146.08	10,730.42
407d4	CAST IN PLACE PILES 1.1 - 1.5 M DIA IN GRAVEL STRATA (BORING ONLY)	M	728.00	12,216.82	1,152.33	3,524.29	17,621.45
407d5	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN NORMAL SOIL (BORING ONLY)	M	606.67	10,180.69	1,012.79	2,950.04	14,750.19
407d6	CAST IN PLACE PILES 1.6 - 2.0 M DIA IN GRAVEL STRATA (BORING ONLY)	M	1,092.00	18,325.24	1,570.95	5,247.05	26,235.24
407h	PILE LOAD TEST UPTO 120 TON	EACH	25,071.36	86,125.76	107,839.32	54,759.11	273,795.55
407i	PILE LOAD TEST UPTO 240 TON	EACH	25,071.36	86,125.76	232,134.17	85,832.82	429,164.11
407j	PILE LOAD TEST UPTO 360 TON	EACH	68,271.36	95,444.48	312,852.20	119,142.01	595,710.05
407k	PILE LOAD TEST UPTO 550 TON	EACH	100,671.36	119,305.60	498,360.00	179,584.24	897,921.20
407l	PILE LOAD TEST UPTO 800 TON	EACH	148,998.72	143,166.72	808,030.00	275,048.86	1,375,244.30
407m	CONFIRMATORY BORING (NX SIZE)	M	205.73	2,639.89	22.50	717.03	3,585.15
407n	PERMANENT PILE CASING FOR PILES	Ton	269.67	3,993.41	87,735.30	22,999.59	114,997.97
410	BRICK WORK	CM	376.02	453.06	4,055.95	1,221.26	6,106.29
411a	STONE MASONRY RANDOM DRY	CM	395.78	165.94	1,299.56	465.32	2,326.59
411b	STONE MASONRY RANDOM WITH MORTAR	CM	468.78	263.54	2,379.94	778.06	3,890.32
411c	STONE MASONRY DRESSED UNCOURSESED DRY	CM	542.78	165.94	1,473.41	545.53	2,727.66
411d	STONE MASONRY DRESSED UNCOURSESED WITH MORTAR	CM	616.78	263.54	2,477.20	839.38	4,196.89
411g	ROLL POINTING	SM	80.19	19.52	99.32	49.76	248.78
412a	STONE MASONRY DRESSED COURSED WITH MORTAR	CM	811.78	419.50	2,477.20	927.12	4,635.58
501a	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 310 mm	M	251.97	554.74	967.15	443.47	2,217.33

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 70A TANK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
501b	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 380 mm	M	251.97	616.97	1,175.36	511.08	2,555.39
501c	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 460 mm	M	239.79	1,097.40	1,441.23	694.60	3,473.02
501d	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 610 mm	M	250.72	1,377.91	2,131.39	940.00	4,700.01
501e	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 760 mm	M	291.68	1,772.89	3,589.14	1,413.43	7,067.15
501f	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 910 mm	M	363.34	2,187.37	5,516.31	2,016.75	10,083.77
501g	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1070 mm	M	470.20	2,171.36	6,548.27	2,297.46	11,487.29
501h	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1220 mm	M	553.10	2,636.66	12,014.84	3,801.15	19,005.75
501i	R.C.C. PIPE CULVERT AASHTO M 170 CLASS II DIA 1520 mm	M	656.12	3,076.10	18,846.60	5,644.70	28,223.52
501j	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 310 mm	M	251.97	554.74	1,238.16	511.22	2,556.09
501k	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 380 mm	M	245.03	616.97	1,523.80	596.45	2,982.26
501l	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 460 mm	M	239.79	1,097.40	1,789.67	781.71	3,908.57
501m	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 610 mm	M	250.72	1,377.91	2,789.55	1,104.54	5,522.71
501n	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 760 mm	M	291.68	1,772.89	4,402.18	1,616.69	8,083.45
501o	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 910 mm	M	363.34	2,187.37	6,600.35	2,287.76	11,438.82
501p	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1070 mm	M	470.20	2,171.36	8,096.90	2,684.62	13,423.08
501q	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1220 mm	M	553.10	2,636.66	14,734.11	4,480.97	22,404.83
501r	R.C.C. PIPE CULVERT AASHTO M 170 CLASS IV DIA 1520 mm	M	656.12	3,076.10	23,530.51	6,815.68	34,078.41
502a	GRANULAR MATERIAL IN BED TO CONCRETE PIPE CULVERT	CM	99.94	157.23	832.75	272.48	1,362.41

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 70A TANK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
502b	CONCRETE CLASS B IN BEDDING AND ENCASEMENT OF CONCRETE PIPE CULVERT	CM	886.80	845.94	3,366.66	1,274.85	6,374.25
507a	STEEL WIRE MESH FOR GABIONS	KG	6.25	0.00	123.41	32.41	162.07
507b	ROCK FILL IN GABIONS	CM	106.68	0.00	915.83	255.63	1,278.15
508a	BRICK PAVING (SINGLE COURSE)	SM	124.67	38.19	338.15	125.25	626.26
508b	BRICK PAVING (DOUBLE COURSE)	SM	222.67	38.19	670.28	232.78	1,163.92
509a	RIPRAP, CLASS A	CM	540.56	0.00	981.25	380.45	1,902.26
509b	RIPRAP, CLASS B	CM	395.65	180.10	973.40	387.29	1,936.43
509c	RIPRAP, CLASS C	CM	387.71	187.60	981.25	389.14	1,945.70
509c1	RIPRAP, CLASS D	CM	387.71	225.12	981.25	398.52	1,992.60
509d	GROUTED RIPRAP, CLASS A	CM	661.09	170.59	2,830.24	915.48	4,577.39
509e	GROUTED RIPRAP, CLASS B	CM	512.07	316.57	2,633.75	865.60	4,327.99
509f	GROUTED RIPRAP, CLASS C	CM	492.73	301.33	2,639.62	858.42	4,292.09
509f1	GROUTED RIPRAP, CLASS D	CM	492.73	338.85	2,817.30	912.22	4,561.10
509g	REINFORCED CONCRETE SLOPE PROTECTION 20 cm THICK EXCLUDING REINFORCEMENT	CM	896.27	481.58	3,907.72	1,321.39	6,606.96
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	54.38	275.72	822.00	288.03	1,440.13
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	112.82	884.71	0.00	249.38	1,246.90
511a1	DRY STONE PITCHING (15-20 cm THICK)	SM	170.17	103.71	159.45	108.33	541.67
511a2	DRY STONE PITCHING (20-25 cm THICK)	SM	217.82	132.75	204.10	138.67	693.34
511b1	GROUTED STONE PITCHING (15-20 cm THICK) WITH BITUMEN JOINTS	SM	277.02	288.91	583.29	287.31	1,436.53
511b2	GROUTED STONE PITCHING (20-25 cm THICK) WITH BITUMEN JOINTS	SM	346.28	361.14	729.12	359.13	1,795.67
511b3	GROUTED STONE PITCHING (15-20 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	277.02	288.91	340.41	226.59	1,132.93
511b4	GROUTED STONE PITCHING (20-25 cm THICK) WITHIN PCC BANDS (PAID SEPERATELY) W/O BITUMEN JOINTS	SM	346.28	361.14	425.51	283.23	1,416.16

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 70A TANK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	404.94	1,157.76	5,697.12	1,814.95	9,074.77
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	1,127.77	782.78	5,687.62	1,899.54	9,497.71
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIZE 450X150 mm INCL. BEDDING & HAUNCHING	M	29.96	66.38	607.92	176.06	880.31
603	BRICK EDGING	M	9.91	0.00	52.80	15.68	78.39
604a	METAL GUARD RAIL	M	75.21	55.31	2,652.72	695.81	3,479.06
604b	METAL GUARD RAIL END PIECES	EACH	98.93	533.21	2,984.36	904.13	4,520.63
604d	STEEL POST FOR METAL GUARD RAIL	EACH	112.80	533.21	2,620.47	816.62	4,083.10
605a	CONCRETE BEAM GUARDRAIL (INCL. REINFORCEMENT)	CM	2,021.38	1,160.70	12,651.45	3,958.38	19,791.90
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	2,021.38	801.50	11,813.62	3,659.12	18,295.62
607a	TRAFFIC ROAD SIGNS CATEGORY 1	EACH	260.37	393.19	8,880.45	2,383.50	11,917.50
607b	TRAFFIC ROAD SIGNS CATEGORY 2	EACH	79.50	589.78	10,701.85	2,842.78	14,213.92
607c	TRAFFIC ROAD SIGNS CATEGORY 3 (a)	EACH	260.37	844.19	19,243.60	5,087.04	25,435.19
607d	TRAFFIC ROAD SIGNS CATEGORY 3 (b)	EACH	848.55	921.65	35,419.15	9,297.34	46,486.69
607e	TRAFFIC ROAD SIGNS CATEGORY 3 (c)	SM	169.71	223.78	16,534.49	4,232.00	21,159.98
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm.	EACH	323.88	0.00	2,359.35	670.81	3,354.04
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm.	EACH	323.88	0.00	3,539.03	965.73	4,828.64
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	3.26	6.00	26.51	8.94	44.71
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	1.09	3.51	61.83	16.61	83.04
608c1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 20 cm WIDTH	M	3.26	6.00	35.37	11.16	55.79
608c2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 20 cm WIDTH	M	1.09	3.51	82.47	21.77	108.84
608d1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	88.61	29.98	256.16	93.69	468.43

**Rate Analysis Summary (Construction)**

Province KHYBER PAKHTUNKHWA

Dcode 70A TANK

Code	Description	Unit	Manpower	Equipment	Material	OH-Profit	Rate
608d2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	88.61	52.71	779.17	230.12	1,150.61
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	4.07	7.50	37.00	12.14	60.71
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	4.07	13.18	106.73	31.00	154.98
608i1	PAVEMENT MARKING IN REFLECTIVE CR PAINT OF 20 cm WIDTH	M	4.07	7.50	49.34	15.23	76.13
608i2	PAVEMENT MARKING IN REFLECTIVE TP PAINT OF 20 cm WIDTH	M	4.07	13.18	142.31	39.89	199.45
608j1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR 4.0 M ARROWS	EACH	88.61	29.98	357.27	118.96	594.82
608j2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR 4.0 M ARROWS	EACH	88.61	52.71	1,345.85	371.79	1,858.95
608n1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR STOP	EACH	73.61	29.98	170.77	68.59	342.95
608n2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR STOP	EACH	73.61	52.71	520.23	161.64	808.19
608n3	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR STOP	EACH	73.61	29.98	238.18	85.44	427.21
608n4	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR STOP	EACH	73.61	52.71	898.59	256.23	1,281.13
609c	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - SINGLE)	EACH	10.75	111.18	180.30	75.56	377.79
609d	REFLECTORISED PAVEMENT STUD (RAISED PROFILE TYPE - DOUBLE)	EACH	10.75	111.18	212.40	83.58	417.92
610b	RIGHT OF WAY MARKER (0.20 x 0.20 x 1.2) M	EACH	114.97	182.71	390.42	172.03	860.13
610c	KILOMETER POST	EACH	715.05	1,321.13	1,928.59	991.19	4,955.97
610d	TEN KILOMETER POST	EACH	1,380.10	2,642.27	3,653.13	1,918.87	9,594.37
611a	GALVANIZED WIRE MESH FENCE 1500 mm HIGH PRECAST PRESTRESSED R.C.C. POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	147.51	66.38	1,409.31	405.80	2,029.00
612a	FURNISHING AND PLANTING OF TREES INCLUDING MAINTENANCE FOR 2 YEARS	EACH	131.25	821.01	2.14	238.60	1,193.00

# **PATRONAGE (NHA – Client)**

**Senior Executives of National Highway Authority, whose patronage and support contributed towards successful accomplishment of the assignment:**

## **National Highway Authority**

**Engr. Raja Noshwan**

**Member (Planning)**

**Engr. Sabir Hassan**

**Member (BOT)**

**Engr. Asim Amin**

**General Manager (Design-I)**

**Engr. Nand Kumar Soofi**

**Director (QS)**

**Engr. Atta-ul-Mohsin**

**Deputy Director (QS)**

# **SERVICES (Sampak International)**

**Sampak Team Members, whose dedicated services contributed towards successful accomplishment of the assignment:**

**Engr. S. M. A. Shirazi**

**Team Leader**

**Engr. S. Hasan A. Shirazi**

**Project Incharge**

**Mr. Mubashar Hussain**

**I. T. Expert**

**Engr. Muneeb Ahmad Qureshi**

**Cost Engineer**

**Engr. Agha Zafar Ali**

**Field / Cost Engineer**

**Engr. Hasan Murtajiz Khan**

**Field / Cost Engineer**

**Mr. Rana Afzaal Ahmad**

**Field Work Supervisor**

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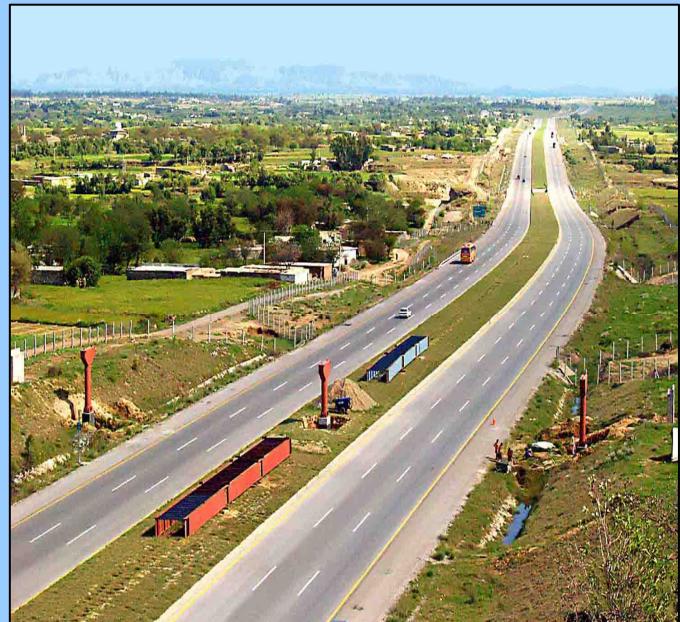
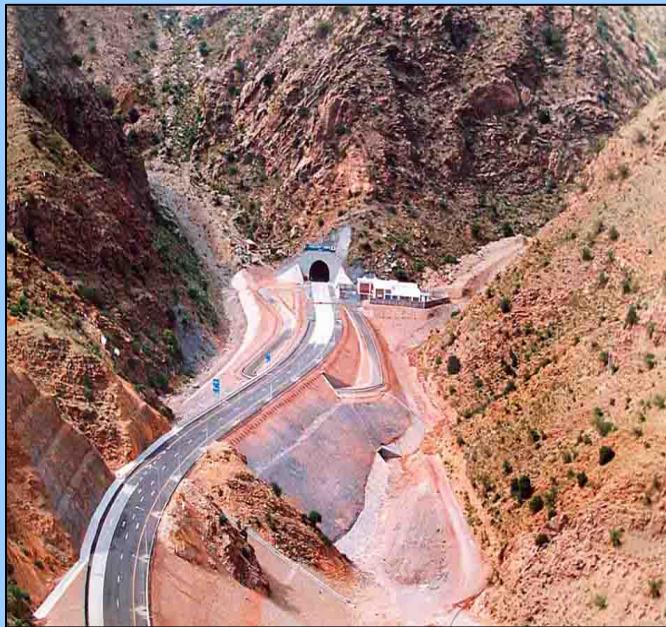
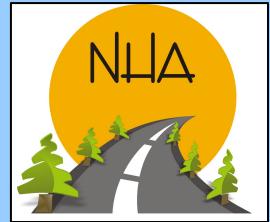
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