

**Highway Schedule of Rates - 2018**  
**Summary**

Item No.	Description	Unit	RATE -2018
<b><u>SECTION - I</u></b>			
<b><u>SECTION OF MODE OF TRANSPORT</u></b>			
T1-001	Transport of soil 25m to 100 m by any means(including loading and unloading)	Cu.m	<b>609.00</b>
T1-002	Transport 100m to 0.5km by any means(Excluding loading)	Cu.m	<b>288.00</b>
T1-003	Transport 0.5km to 1.0km by any means (Excluding loading)	Cu.m	<b>309.00</b>
T1-003A	Transport of each subsequent 1km to 8 km by any means (Excluding loading)	Cu.m	<b>48.00</b>
T1-003B	Transport of each subsequent 1km beyond 8km by any means (Excluding loading)	Cu.m	<b>32.00</b>
T1-006	Transport of material in bulk excluding loading (for distance less than or equal 3 kilometers)	Cu.m	<b>85.00</b>
T1-007	Transport of material in bulk excluding loading (from 3km upto 10km Distance )	Cu.mkm	<b>28.00</b>
T1-007A	Transport of material in bulk excluding loading ( for distance more than 10 km Distance )	Cu.mkm	<b>26.00</b>
T1-009	Transport of premix in bulk, excluding loading other than at mixing plant	M.TonKm	<b>18.00</b>
T1-010	Transport of barrels of bitumen for first 1.0km of transport (Excluding loading and unloading)	Nr.	<b>46.00</b>
T1-010A	Transport of barrels of bitumen for each subsequent 1.0km, from 1.0 - 8.0km, (Excluding loading and unloading)	Nr.	<b>12.00</b>
T1-010B	Transport of barrels of bitumen for each subsequent 1.0km beyond 8.0km (Excluding loading and unloading)	Nr.	<b>8.00</b>
T1-013	loading barrels of bitumen inclusive of rolling upto 25m	Nr.	<b>38.00</b>
T1-014	Unloading barrels of bitumen inclusive of Rolling and stacking	Nr.	<b>16.00</b>
T1-015	Transport of hume pipes 152mm diameter for 1st 1.0km of transport(Excluding loading and unloading)	L.m	<b>35.00</b>
T1-015A	Transport of hume pipes 152mm diameter for each subsquent 1.0km, from1.0 - 8.0km of transport(Excluding loading and unloading)	L.m	<b>10.00</b>
T1-015B	Transport of hume pipes 152mm diameter for each subsequent 1.0km beyond 8.0km of transport(Excluding loading and unloading)	L.m	<b>7.00</b>
T1-018	Transport of hume pipes 229 mm diameter for first 1.0km of transport(Excluding loading and unloading)	L.m	<b>39.00</b>
T1-018A	Transport of hume pipes 229mm diameter for each subsequent 1.0km from 1.0 - 8.0 km of transport(Excluding loading and unloading)	L.m	<b>11.00</b>
T1-018B	Transport of hume pipes 229mm diameter for each subsequent 1.0km beyond 8.0km of transport(Excluding loading and unloading)	L.m	<b>8.00</b>

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>RATE -2018</b>
T1-021	Transport of hume pipes 305mm diameter for first 1.0km of transport(Excluding loading and unloading)	L.m	<b>52.00</b>
T1-021A	Transport of hume pipes 305mm diameter for each subsequent 1.0km, from 1.0 - 8.0 km of Transport(Excluding loading and unloading)	L.m	<b>15.00</b>
T1-021B	Transport of hume pipes 305mm diameter for each subsequent 1.0km beyond 8.0km of transport(Excluding loading and unloading)	L.m	<b>11.00</b>
T1-024	Transport of hume pipes 457mm diameter for first 1.0km of transport(Excluding loading and unloading)	L.m	<b>79.00</b>
T1-024A	Transport of hume pipes 457mm diameter for each subsequent 1.0km from 1.0 - 8.0km of transport(Excluding loading and unloading)	L.m	<b>23.00</b>
T1-024B	Transport of hume pipes 457mm diameter for each subsequent 1.0km beyond 8.0km of transport(Excluding loading and unloading)	L.m	<b>16.00</b>
T1-027	Transport of hume pipes 610mm for first 1.0km of transport(Excluding loading and unloading)	L.m	<b>105.00</b>
T1-027A	Transport of hume pipes 610mm diameter for each subsequent 1.0km from 1.0 - 8.0km of transport(Excluding loading and unloading)	L.m	<b>30.00</b>
T1-027B	Transport of hume pipes 610mm diameter for each subsequent 1.0km beyond 8.0km of transport(Excluding loading and unloading)	L.m	<b>22.00</b>
T1-030	Transport of hume pipes 915mm diameter for first 1.0km of transport(Excluding loading and unloading)	L.m	<b>157.00</b>
T1-030A	Transport of hume pipes 915mm diameter for each subsequent 1.0km, from 1.0 - 8.0km of transport(Excluding loading and unloading)	L.m	<b>45.00</b>
T1-030B	Transport of hume pipes 915mm diameter for each subsequent 1.0km beyond 8.0km of transport(Excluding loading and unloading)	L.m	<b>32.00</b>
T1-033	Transport of hume pipes 1220mm diameter for first 1.0km of transport(Excluding loading and unloading)	L.m	<b>363.00</b>
T1-033A	Transport of hume pipes 1220mm diameter for each subsequent 1.0km, from 1.0 - 8.0km of transport(Excluding loading and unloading)	L.m	<b>139.00</b>
T1-033B	Transport of hume pipes 1220mm diameter for each subsequent 1.0km beyond 8.0km of transport(Excluding loading and unloading)	L.m	<b>101.00</b>
T1-036	Loading and unloading 152mm diameter 2.44m long hume pipes	Nr.	<b>117.00</b>
T1-037	Loading and unloading 229mm diameter 2.44m long hume pipes	Nr.	<b>136.00</b>
T1-038	Loading and unloading 305mm diameter 2.44m long hume pipes	Nr.	<b>270.00</b>
T1-039	Loading and unloading 457mm diameter 2.44m long hume pipes	Nr.	<b>449.00</b>
T1-040	Loading and unloading 610mm diameter 2.44m long hume pipes	Nr.	<b>585.00</b>
T1-041	Loading and unloading 915mm diameter 1.22m long hume pipes	Nr.	<b>1,080.00</b>
T1-042	Loading and unloading 1220mm diameter 1.22m long hume pipes	Nr.	<b>2,160.00</b>
T1-043	Transport of precast kerb stones (All types) for road works, including loading and unloading	L.mKm	<b>2.00</b>

Item No.	Description	Unit	RATE -2018
T1-044	Transport of precast kerb stones for bridge works, including loading and unloading	L.mKm	2.00
T1-045	Transport of precast concrete hand rails, up rights and joints for bridge works, including loading and unloading	L.mKm	4.00
T1-046	Transport of precast concrete slabs 450x450x50 mm for foot walks, including loading and unloading	SqmKm	4.00
T1-047	Transport of precast concrete standard boundary markers including unloading only	NrKm	2.00
T1-048	Transport of emulsion	100ltr km	4.00
T1-049	Transport of gabion mesh 4x1x1 meters	Nr km	1.30
	<b><u>SECTION - II</u></b>		
	<b><u>ROADWAY AND FOUNDATION / TRENCH EXCAVATION</u></b>		
	<b>(INCLUDING LOADING , UNLOADING AND TRANSPORTING WITHIN 25 METRES DISTANCE UNLESS OTHERWISE SPECIFIED)</b>		
<b>NOTE</b>	<b>FOR ROADWAY CONSTRUCTIONS INVOLVING MORE THAN 300CU.M. , MACHINE RATES SHOULD BE ADOPTED.</b>		
E1-001	Excavation in Loose soil(Dry)[SSCM 301.2(iv)]	Cu.m	818.00
E1-002	Excavation in Loose soil (Wet) in slips [SSCM 301.3(0)]	Cu.m	1,014.00
E1-003	Excavation in ordinary soil (Cutting measurement)[SSCM 301.2(v)]	Cu.m	1,209.00
E1-004	Excavation in ordinary soil[Vehicle measurement][SSCM 301.2(v)]	Cu.m	1,088.00
E1-005	Excavation in medium soil (Cutting measurement)[SSCM 301.2(vi)]	Cu.m	1,601.00
E1-006	Excavation in medium soil (Vehicle measurement) [SSCM 301.2(vii)]	Cu.m	1,360.00
E1-007	Excavation in hard soil (Cutting measurement)[SSCM 301.2(vii)]	Cu.m	2,383.00
E1-008	Excavation in hard soil (Vehicle measurement) [SSCM 301.2(vii)]	Cu.m	2,025.00
E1-009	Excavation in unclassified soil(Cutting measurement)[SSCM 301.2 a(1)]	Cu.m	1,731.00
<b>NOTE</b>	<b>SEE CODE NOS.FROM E1-027 FOR ROADWAY EXCAVATION USING MACHINERY</b>		
E1-010	Excavation in soft rock (Cutting measurement)[SSCM 301.2(vii)]	Cu.m	2,578.00
E1-010A	Excavation in mud\marshy material (Cutting measurement) [SSCM 301.2(vii)]	Cu.m	1,992.00
E1-011	Excavation pit\trench for foundation in ordinary soil not Exceeding 1.5m deep, including Levelling and ramming bottom, Exc.material Deposited within 25m or as Directed. (Shoring dewatering if necessary shall be paid seperaely) [SSCM 301.1-.3]	Cu.m	1,601.00

Item No.	Description	Unit	RATE -2018
NOTE	<b>SEE GENERAL NOTES 24(2) FOR DETAILS REGARDING ADDITIONAL EXCAVATION REQUIRED FOR WORKING SPACE.</b>		
E1-012	Excavation pit\trench in foundation in medium soil not exceeding 1.5m deep, including levelling and ramming bottom, exc.material Deposited within 25m or as Directed. (Shoring, Dewatering if necessary shall be paid)[SSCM 301.1-3]	Cu.m	<b>1,992.00</b>
E1-013	Excavation pit\trench in foundation in hard soil not exceeding 1.5m deep, including levelling and ramming bottom, exc.material Deposited within 25m or as Directed. (Shoring, Dewatering if necessary shall be paid)[SSCM	Cu.m	<b>2,774.00</b>
E1-014	Excavation pit\trench in foundation in unclassified soil not exceeding 1.5m deep, including Levelling and ramming bottom, exc.material Deposited within 25m or as Directed.[SSCM	Cu.m	<b>2,122.00</b>
E1-015	Excavation pit\trench in foundation in mud/marsh not Exceeding 1.5m deep, including Levelling and ramming bottom, Exc.material Deposited within 25m or as Directed.[SSCM	Cu.m	<b>2,383.00</b>
E1-019	Excavation soft rock not exceeding 1.5m depth[SSCM 301.2(ii)]	Cu.m	<b>3,165.00</b>
NOTE	<b>EXCAVATION ROCK FOR FOUNDATION TO BE PAID ON S.S.R.</b>		
E1-021	Piling available soil	Cu.m	<b>196.00</b>
E1-022	Loading available soil to a tractor or equivalent	Cu.m	<b>258.00</b>
E1-023	Excavating rock requiring blasting, for roadway for boulders, excluding Dozing away[SSCM 301.2(iii) & 306.1-306.4]	Cu.m	<b>995.00</b>
E1-024	Boulders, sledging piling etc	Cu.m	<b>3,683.00</b>
E1-025	Rock requiring blasting	Cu.m	<b>2,978.00</b>
E1-026	Rock requiring blasting and piling (Bank measurement)	Cu.m	<b>4,119.00</b>
E1-027	Roadway excavation in unclassified soil using machinery excluding loading and piling (Cutting measurement)	Cu.m	<b>238.00</b>
E1-028	Loading materials by machinery in roadway excavations (Cutting measurement)	Cu.m	<b>144.00</b>
E1-029	Trimming / cambering by motor grader (Cutting measuremet)	Cu.m	<b>59.00</b>
E1-029A	Trimming / cambering by motor grader (Cutting measurement)	Sq.m	<b>12.00</b>
	<b><u>SECTION - III</u></b>		
	<b><u>AGGREGATE / RUBBLE PILING (INCLUDING LOADING)</u></b>		
A1-001	Sledging available rock 150-225mm rubble including piling and loading	Cu.m	<b>2,934.00</b>

Item No.	Description	Unit	RATE -2018
	<b>THE RATES FOR ITEMS STARTING FROM NO.A1-002 TO A1-016 INCLUDED A 16KM AVERAGE TRANSPORT DISTANCE FROM THE SOURCE AND ALSO UNLOADING AND PILING. IF THE TRANSPORT DISTANCE EXCEEDS 16KM , ADDITIONAL MIELLAGE OVER AND ABOVE TO BE COMPUTED AS PER RATE GIVEN FOR ITEM T1-007A AND ADDED.THE METAL PRICES OBTAINED FROM THE ANALYSIS WERE CROSS-CHECKED WITH THE EX-QUARRY PRICES AND DECIDED AS A AVERAGE REPRESENTATIVE SIGURE FOR ESTIMATE PURPOSES.</b>		
A1-002	Blasting etc and piling 150-225mm rubble including loading	Cu.m	4,086.00
A1-002A	Blasting sledging etc. and piling 150-225mm rubble using compressor and hand held drills including loading	Cu.m	2,559.00
A1-003	Blasting etc. and piling 100mm aggregate including loading	Cu.m	1,435.00
A1-004	Blasting etc and piling 75mm aggregate including loading	Cu.m	1,654.00
A1-005	Blasting etc and piling 50mm aggregate including loading	Cu.m	1,512.00
A1-009	50 mm aggregate, single size crusher production including piling and loading[SSCM 404.1-406.1 : table 1701-4	Cu.m	2,968.00
A1-010	37.5 mm aggregate, single size crusher production including piling and loading[SSCM 404.1-406.1 : table 1701-4	Cu.m	2,968.00
A1-011	19 mm aggregate, single size crusher production including piling and loading[SSCM 404.1-406.1 ]	Cu.m	3,011.00
A1-012	12.5 mm aggragate, single size crusher production including piling and loading for 1.0 Cu.m	Cu.m	3,286.00
	<b>PLANT PRODUCED AGGREGATE DENSE GRADED AGGREGATE BASE COURSE</b>		
A1-013	Aggregate 37.5 mm Down graded (SSCM-table 1701.5 ) including piling and loading	Cu.m	2,163.00
A1-014	Crusher fines 6.3 mm down, including piling and loading for 1.0 cu.m	Cu.m	3,180.00
A1-015	Aggregate 19 mm for seal coat treatments as per SSCM table 1701-8, including piling and loading	Cu.m	2,466.00
A1-016	Aggregate 12.5 mm for seal coat treatments as per SSCM table 1701-8, including piling and loading	Cu.m	2,220.00
A1-017	Blended aggregate for rectification overlay, with 37.5 mm single size aggregate and 19mm &12.5 mm crushed aggregated mixed in the volume ratio of 7:2:1: including mix. & loading(piling to be paid separately)	Cu.m	3,134.00
A1-018	Piling available aggregate	Cu.m	212.00
A1-019	Piling available rubble	Cu.m	424.00
A1-020	Loading available aggregate / rubble	Cu.m	391.00

Item No.	Description	Unit	RATE -2018
	<b><u>SECTION - IV</u></b>		
	<b><u>APPROVED EARTH FILLING &amp; COMPACTION</u></b>		
NOTE	<b>RATES FOR BORROW EARTH SUPPLY GIVEN UNDER ITEM CODES EW1-001 &amp; EW1-011 IN THIS SHEDULE IS BASED ON MANUAL EXCAVATION AND INTENDED FOR SMALL WORKS INVOLVING LESS THAN 300 CU.M. IN THE CASE OF BORROW EARTH SUPPLY EXCEEDS 300 CU.M. (FOR THE WHOLE PROJECT), RATES BASED ON MACHINE EXCAVATION AS PER BO-201,BO-202,EW1-013 OR EW1-014 SHALL BE ADOPTED. FOR ANY DEVIATIONS THE PROCUREMENT PROCEDURE GIVEN IN GENERAL NOTES , SHALL BE FOLLOWED.</b>		
EW-001	Approved soil (Type i & ii materials) excavation for bases & shoulder construction including loading and piling (Loose volume)[SSCM 601.1 to 601.4]	Cu.m	<b>2,302.00</b>
EW-002	Spreading piled approved soil (Loose volume)	Cu.m	<b>275.00</b>
EW-003	Approved soil spread & rolled including roller hire charges, fuel & watering (loose volume) [SSCM 601.1 - 4] (including roller hire)	Cu.m	<b>494.00</b>
	<b>*SEE GENERAL NOTES SECTION 26.4 FOR RATE ON COMPACTED VOLUME.</b>		
NOTE	<b>THE ITEMS EW1-003 OR EW1-004 ON MANUAL SPREADING SHOULD BE ADOPTED FOR SMALL WORKS ONLY. WHEN MACHINERY IS USED FOR SPEADING AND COMPACTION, EW1-003A SHALL BE ADOPTED.</b>		
EW-003A	Approved soil spread & rolled using machinery including motor grader & roller hire charges, fuel & watering (Loose volume)[SSCM 601.1 - 4] (including roller hire )	Cu.m	<b>285.00</b>
	<b>SEE GENERAL NOTES SECTION 26.4 FOR RATE ON COMPACTED VOLUME.</b>		
EW-004	Approved soil spread & rolled in strips where average width is less than 1.2 metres for road widening including roller hire charges, fuel & watering (Loose volume)[SSCM 601.1 - 4] (including roller hire )	Cu.m	<b>576.00</b>
	<b>SEE GENERAL NOTES SECTION 26.4 FOR RATE ON COMPACTED VOLUME.</b>		
EW-006	Approved soil spread & compacted in places behind abutments and structures, shoulders above sub bases level and service line trenches,using 1/2 to 1 ton vibrating roller including watering (Loose volume)[SSCM 601.1 - 4]	Cu.m	<b>645.00</b>
	<b>SEE GENERAL NOTES SECTION 26.4 FOR RATE ON COMPACTED VOLUME.</b>		
EW-007	Approved soil spread & compacted in 150 to 225 mm thick layers using machine rammer at narrow places (Loose volume)	Cu.m	<b>662.00</b>

Item No.	Description	Unit	RATE -2018
EW-008	Spreading , levelling and compacting manually using standard cast iron stamper or equivalent and filling in 150-225 mm thick layers (Loose volume)	Cu.m	880.00
EW-009	Trimming , levelling and compaction of original ground/subgrade to 100 % STD Density [SSCM 304.3(c)] (including roller hire)	Sq.m	104.00
EW-010	Trimming , levelling and compaction of original ground/subgrade to 95 % STD Density [SSCM 304.3(c)] (including roller hire)	Sq.m	95.00
EW-011	Approved soil excavation for embankment filling including loading and piling (Loose volume)[SSCM 601.1 to 601.4]	Cu.m	1,637.00
EW-013	Approved soil (Type i & ii materials) excavation using machinery for bases & shoulder construction including loading and piling(Loose volume)[SSCM 601.1 - 4]	Cu.m	1,234.00
EW-014	Approved soil (Type i & ii ) excavation using machinery for embankment filling including loading and piling(Loose volume)[SSCM 601.1 - 4]	Cu.m	874.00
EW-015	Grading and spreading by motor grader	Cu.m	110.00
	<b><u>SECTION - V</u></b>		
	<b><u>RUBBLE PITCHING / PAVING (RUBBLE TO BE PAID SEPERATELY)</u></b>		
P1-001	Pitched paving 225 mm thick	Sq.m	516.00
P1-002	Pitched paving 150 mm thick	Sq.m	387.00
P1-003	Flat paving 225 mm thick	Sq.m	343.00
P1-004	Flat paving 150 mm thick	Sq.m	258.00
	<b><u>SECTION - VI</u></b>		
	<b><u>AGGREGATE SPREADING AND COMPACTION</u></b>		
	<b><u>COST OF WATERING TO BE DIDUCT FROM RATE IF NOT CARRIED OUT UNDER THE RELEVENT ITEMS</u></b>		
M1-001	Spreading , watering & rolling 100 mm aggregate including hire charges of roller(Loose volume) [SSCM 304.3(d),(e)]	Cu.m	1,103.00
M1-002	Braking road surface to 50 mm Depth by hand , screen & replace old aggregate	Sq.m	144.00
M1-003	Scarifying road surface to 50 mm Depth by roller, screen, & replace old aggregate. (including roller hire)	Sq.m	101.00
M1-004	Spreading & compaction 50-19 mm new aggregate by roller including watering hire, etc. (loose volume) [SSCM 403.3(c)] (Including roller hire)	Cu.m	1,716.00
M1-005	Breaking 50 mm additional Depth by hand screening & replacing old aggregate	Sq.m	86.00
M1-006	Scarifying 50 mm additional Depth with roller, Screening & replacing old aggregate (including hire charges)	Sq.m	79.00

Item No.	Description	Unit	RATE -2018
M1-007	Spreading watering & compacting 50-19 mm aggregate in edge correction using roller including hire, etc. (loose volume ) [SSCM 1103.3] (including hire charges)	Cu.m	2,019.00
M1-008	Spreading watering & compacting 50-19 mm aggregate in strip correction using roller including hire ,etc (loose volume) [SSCM 1103.3] (including hire charges)	Cu.m	1,677.00
M1-009	Spreading & compacting 50-19 mm aggregate by 8-10 ton roller after applying track coat in overlay (loose volume) (Tack coat paid separately) (including hire charges)	Cu.m	1,535.00
M1-010	Water bound macadam spreading water & comp 50-25 mm aggregate & filling the voids to refusal with crusher fines by watering & rolling to form a water bound macadam base .(loose volume (SSCM 404.1) (including hire charges)	Cu.m	6,368.00
M1-011	Dry bound macadam spread, water & comp. 50-25 mm aggregate & filling voids to refusal with crusher fines by rolling with vibrating roller to form a Dry bound macadam base (Loose volume) [404] (including hire charges)	Cu.m	6,118.00
M1-012A	Dense graded agg. base (Agg. base course) spreading water and comp. graded 37.5 mm agg to form a Dense agg. base using machinery including motor grader & roller hire charges. (Loose volume)	Cu.m	2,713.00
M1-013	Dense graded agg.base [ABC], spreading watering and Compacting graded 37.5mm aggregate to form a Dense aggregate base in strips, avg width not exceeding 1.2m for road widening (Loose volume)[SSCM 405.1 - .4](including hire charges)	Cu.m	3,816.00
NOTE	<b>THIS ITEM M1-013 ON MANUAL LABOUR SHOULD BE ADOPTED FOR SMALL WORKS (upto 50 Cu.m) ONLY. WHEN MACHINERY IS USE FOR SREADING AND COMPACTION, M1-012A / M1-013A SHALL BE ADOPTED DEPENDING ON THE SITUATION.</b>		
M1-013A	Graded 37.5 ABC material spread and rolled in strips, average width not exceeding 1.2m using machinery incl motor graders and roller hire charges fuel and watering(Loose vol)[SSCM 405.1-.4] (including hire charges)	Cu.m	2,795.00
	<b>*FOR THE RATE ON COMPACTED VOLUME , INCREASE THE LOOSE VOLUME RATE BY 42%. IF MEASUREMENT IS ON END PROJECT, PILING COST OF AGGREGATE AS PER A1-018 SHALL BE DEDUCTED.</b>		
	<b><u>SECTION - VII</u></b>		
	<b><u>ROAD SURFACE TREATMENT</u></b>		
	<b>(SAND TRANSPORT UP TO 16 KM INCLUDED IN THE RATES) TRANSPORT OF BITUMEN TO BE PAID SEPERATELY</b>		
S1-001	Bitumen surface 1st coat using 2ltr/sq.m including blinding with sand @ the rate of 125 sq.m/cu.m[SSCM 503.1] (including cost of bitumen)	Sq.m	241.00



<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>RATE -2018</b>
S1-002	Bitumen surfacing 1st coat using 2ltr/sq.m including blinding with gravel where sand is not available within 16km.(including cost of bitumen)	Sq.m	<b>221.00</b>
S1-003	Double bituminous surface treatment with hot bitumen(Manual) including internal transport(Binder and aggregate paid separately)[SSCM 505.1-.5 and table 505.1] including roller hire)	Sq.m	<b>255.00</b>
S1-004	Single bituminous Surface treatment with hot bitumen (Manual, including internal transport)(binder and aggregate paid separately)[SSCM 505.1-.5 and table 505.1] (including roller hire))	Sq.m	<b>135.00</b>
S1-005	Double bituminous surface treatment with emulsion (CRS-1) (Manual including internal transport)(Binder and aggregate paid separately) (including roller hire))	Sq.m	<b>251.00</b>
S1-006	Single bituminous surface treatment with emulsion (CRS-1) (manual including internal transport)(Binder and aggregate paid separately) (including roller hire)	Sq.m	<b>132.00</b>
S1-007	Bitumen surfacing subsequent coat using 0.75ltr/sq.m including blinding with sand @ 125 sq.m/cu.m [SSCM 503.1(b)] (including cost of bitumen)	Sq.m	<b>136.00</b>
S1-008	Bitumen surfacing 2nd/subsequent coat using 1.0ltr/sq.m including blinding with sand @ rate of 125 sq.m/cu.m (New work) [SSCM 503.1(b)] (including cost of bitumen)	Sq.m	<b>152.00</b>
S1-009	Bitumen surfacing subsequent coat using 0.75ltr/sq.m including blinding with gravel free of clay where sand is not available within 20 km [SSCM 503.1(b)] (including cost of bitumen)	Sq.m	<b>115.00</b>
S1-010	Bitumen surfacing 2nd/subsequent coat using 1.0ltr/sq.m including blinding with gravel free of clay where sand is not available within 20 km (New work) [SSCM 503.4(c)] (including cost of bitumen)	Sq.m	<b>132.00</b>
S1-011	Emulsion/cold bitumen(CRS-1) surface treatment 1 st coat with 3.5 ltr/sq.m including blinding with sand, @ 125 sq.m/cu.m (manual)(incl cost of emulsion)	Sq.m	<b>346.00</b>
S1-012	Emulsion/cold bitumen(CRS-1) surface treatment 1st coat with 3.5 ltr/sq.m(using trolley,emulsion) including blinding with sand, @ 125 sq.m/cu.m(incl cost of emulsion)	Sq.m	<b>327.00</b>
S1-013	Emulsion/cold bitumen(CRS-1) surface treatment subsequent Coat with .75 ltr/sq.m including blinding with sand, @ 125 sq.m/Cu.m (Manual)(incl cost of emulsion)	Sq.m	<b>119.00</b>
S1-014	Emulsion/Cold bitumen(CRS-1) surface treatment subsequent coat with .75 ltr/sq.m (using trolley, emulsion) including blinding with sand, @ 125 sq.m/cu.m(incl cost of emulsion)	Sq.m	<b>112.00</b>
S1-015	Tack coat using emulsion (CRS-1) @ the rate of 0.5 ltr/Sq.m inclusive of brushing, cleaning road surface and cost of emulsion (manual) [SSCM 502.3]	Sq.m	<b>58.00</b>
S1-015A	Tack coat using emulsion (CRS-1) @ the rate of 0.5 ltr/sq.m(incl cost of emulsion)	Sq.m	<b>51.00</b>
S1-015B	Brushing and cleaning road surface for tack coat	Sq.m	<b>7.00</b>

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>RATE -2018</b>
S1-016	Tack coat using emulsion (CRS-1) @ the rate of 0.5 ltr/sq.m inclusive of brushing, cleaning road surface and cost of emulsion (Manual) [SSCM 502.3]	Ltr	<b>116.00</b>
S1-017	Tack coat using emulsion (CRS-1) @ the rate of 0.75 ltr/sq.m inclusive of brushing, cleaning road surface and cost of emulsion (Manual) [SSCM 502.1-503.3] (including cost of emulsion)	Sq.m	<b>70.00</b>
S1-018	Tack coat with 30% cut back bitumen using 0.5 ltr/sq.m including brushing and cleaning road surface (Manual) (including cost of bitumen)	Sq.m	<b>80.00</b>
S1-018A	Tack coat with 30% cut back bitumen using 0.5 ltr/sq.m Excluding brushing and cleaning road surface (Manual) data for 372 sq.m tack coat (part1) (Excluding cost of bitumen)	Sq.m	<b>50.00</b>
S1-019	Tack coat with 30% cut back bitumen(80/100) using 0.5 ltr/sq.m including brushing and cleaning road surface (Manual) (Excluding cost of bitumen)	Ltr	<b>160.00</b>
S1-020	Tack coat with 30% cut back bitumen using 0.75 ltr/sq.m including brushing and cleaning road surface (Manual) [SSCM 503.4(d)](including cost of bitumen)	Sq.m	<b>100.00</b>
S1-021	Rolling over blinding material spread over subsequent bitumen surfacing using diesel roller (8-10 Tones) [SSCM 503.4(d)]	Sq.m	<b>12.00</b>
S1-022	Prime coat with emulsion/cold bitumen(CSS-1) using 1 ltr/sq.m including blinding with sand at the rate of 250 sq.m/cu.m and brushing cleaning and moistening road surface : (including cost of emulsion)	Sq.m	<b>124.00</b>
S1-022A	Prime coat with emulsion/cold bitumen(CSS-1) using 1 ltr/sq.m including blinding with sand at the rate of 250 sq.m/cu.m(including cost of emulsion)	Sq.m	<b>116.00</b>
S1-022B	Brushing, cleaning and moistening road surface(Manual)	Sq.m	<b>8.00</b>
S1-023	Prime coat with emulsion/cold bitumen(CSS-1) using 1 ltr/sq.m without blinding, but inclusive of brushing, cleaning and moistning road surface(including cost of emulsion)	Sq.m	<b>98.00</b>
S1-024	Prime coat with 30% cut back bitumen using 1 ltr/ sq.m including blinding with sand at the rate of 250 sq.m/cu.m and brushing, cleaning and mostening road surface (including cost of bitumen)	Sq.m	<b>147.00</b>
S1-025	Prime coat with 30% cut back bitumen using 1 ltr/ sq.m without blinding but inclusive brushing, cleaning and mostening road surface (including cost of bitumen)	Sq.m	<b>120.00</b>
S1-026	Sweeping over tarred surface to arrest bleeding.	Sq.m	<b>6.00</b>
S1-027	Application of asphalt emulsion for surface treatment using CRS-1 (using plant) "rate per litre"(including cost of emulsion)	litre	<b>88.00</b>
S1-028	Blinding the bitumen surfacing with sand at the rate of 125 sq.m1 cu.m using material from stock pile	Sq.m	<b>53.00</b>

Item No.	Description	Unit	RATE -2018
S1-029	Single bituminous surface treatment with emulsion (CRS2) using plant.(Binder and aggregate paid separately) (Rate to include transport cost of aggregate up to 16kms) [SSCM 505(b).	Sq.m	80.00
S1-030	Double bituminous surface treatment with emulsion(CRS-2) using plant.(Binder and aggregate paid separately) (Rate of including transport cost of aggregate up to 16 kms) [SSCM 505.5(e)]	Sq.m	164.00
S1-030A	Double bituminous surface treatment with hot bitumen(80/100) using 19mm and 12.5mm single size selected aggregates on existing bituminous surface using plant. Rate to include all labour, material, plant and transport cost of aggregate up to 16Km.(Transport of Binder and Additional transport of aggregate to be paid separately)[SSCM505.5(e)]:	Sq.m	372.00
S1-030B	Double bituminous surface treatment with hot bitumen(80/100) using 19mm and 9.5mm single size selected aggregates on existing bituminous surface using plant. Rate to include all labour, material, plant and transport cost of aggregate up to 16 km.(Transport of Binder and Additional transport of aggregate to be paid separately)[SSCM505.5(e)]:	Sq.m	361.00
S1-031	Supply, lay & compact asphalt concrete (19mm, binder(60/70) 6%mix) - Dense(Plant made) in wearing surface of small worksuch as bridge Decking, reinstatement of trenches etc.(transport of premix to be paid separately)[SSCM 506] (including roller hire)	M.ton	11,645.00
S1-032	Supply,lay, comp. asp. bound premix(37.5mm, binder(80/100) 3.53%mix - Dense base mat(Plant made) in small works( bridge decking, reinstatement of trenches )(Transport of premix to be paid separately)[SSCM 506](including roller hire)	M.ton	10,272.00
S1-033	Supply, lay & compt. asplt conc. cold mix(19mm 20% cutback with binder(80/100)5.5%mix) dense plant made in small wrks. suc. as brdg. decking reinst. of treches(Transport.of premix to be paid separately. (SSCM 506)(including roller hire)	M.ton	12,010.00
S1-033A	Supply,lay & compt. asplt contrt. cold mixwith emul css.1(6.67% wt of agg. 19mm dense plant made) in small wrks. suc. as brdg. decking reinstatement of trenches etc(Transport.of premix to be paid separately.(SSCM 506)(including roller hire)	M.ton	2,837.00
<b>NOTE</b>	<b>AVERAGE 0.6270 CU.M. OF AGGREGATE REQUIRED FOR 1.0 M.TON OF PREMIX (ALL TYPES)</b>		
S1-034	Lay and compact asphalt premix using paver (Cost of premix, and premix transport to site paid separately)	M.ton	1,659.00
S1-035	Bitumen surfacing (Sand sealing -manual) using emulsion (CRS 1) @ 1 ltr./sq.m including preparing surface, blinding with sand @ 4 cu.m/500 sq.m & pressing with hand rollers.(patching pot holes if necsry & external transport to be paid separately.(including cost of emulsion)	Sq.m	142.00

Item No.	Description	Unit	RATE -2018
S1-035A	Patching minor pot holes using sand emulsion mix 1:8 where necessary, prior to sand sealing ( Including cost of emulsion)	Sq.m	23.00
S1-036	Sand sealing with emulsion CRS-1 at the rate of 1ltr,sq.m using plant.incd.brushing,cleaning, blinding. with sand@ 125 sq.mand rolng. with pneumtc. roller & internal trnsport.[SSCM 504](including roller hire)	Sq.m	159.00
NOTE	<b>THE ABOVE RATES IS APPLICABLE FOR PAYMENT ONLY IF CHIP SPREADER (SELF PROPELLED) AND PNEUMATIC ROLLER ARE USED FOR THE CONSTRUCTION. OTHERWISE APPROVED SSR SHOULD BE ADOPTED.</b>		
S1-037	Reconstruct base with penetration macadam using nominal size 50mm aggregate and 19mm key aggregate from stock piles, to accomplish 75mm on existing pavements[SSCM 406] (Binder to be paid separately)	Sq.m	191.00
S1-038	Reconstruct base with penetration macadam using nominal size 37.5 mm aggregate and 12.5 mm key aggregate from stock piles , to a compacted thickness of 55mm on existing pavements [SSCM 406] cost of aggregate including transport to be paid separately	Sq.m	135.00
S1-039	Correction of Corrugations, Depressions and Cambering road surfaces using asphalt Concrete compacted by vibrating roller including internal transport (application of tack coat and supply of asphalt concrete to be paid separately)	M.ton	2,677.00
S1-040	Sand sealing with emul CRS-2 at the rate of .8 ltr/sq.m using plant ,& blinding with sand at rate 125sq.m/cu.m on D.B.S.T./S.B.S.T. (Triple seal) incl. internal trport (SSCM 504) binder trnport to site to pay separately (including cost of emulsion & roller hire)	Sq.m	147.00
NOTE	<b>THIS ITEM SHOULD BE USED ONLY FOR SEALING ON ROAD SURFACE AFTER D.B.S.T./S.B.S.T. WORK AND USE OF PNEUMATIC ROLLER IS ESSENTIAL. IF EMULSION AND/OR THE RATE OF APPLICATION OR THE METHOD OF SAND SPREADING TO BE CHANGED , S.S.R. SHALL BE PREPARED AND APPROVED.</b>		
S1-041	Slurry sealing to a thickness of 6mm using machinery with modified emulsion (using CSS -1) as the binder (Including cost of emulsion)	Sq.m	142.00
	<b><u>SECTION - VIII</u></b>		
	<b><u>ROAD SURFACE MAINTAIN</u></b>		
	<b>INTERNAL TRANSPORT OF HOT BITUMEN UP TO 16 KM AND SAND TRANSPORT UP TO 16 KM INCLUDING IN THE RATES</b>		
MN-001	Patching with hot bitumen(80/100) using 14 litres per 1/2 km(SSCM 1102.1-3)	1/2 K.m	3,278.00
MN-002	Patching with hot bitumen using 21 ltrs. per 1/2 k.m.	1/2 K.m	4,693.00

Item No.	Description	Unit	RATE -2018
MN-003	Patching with hot bitumen using 28 ltrs. per 1/2 k.m.	1/2 K.m	6,258.00
MN-004	Patching with hot bitumen using 35 ltrs. per 1/2 k.m.	1/2 K.m	7,822.00
MN-005	Patching with hot bitumen using 42 ltrs. per 1/2 k.m.	1/2 K.m	9,386.00
MN-006	Patching with hot bitumen using 49 ltrs. per 1/2 k.m.	1/2 K.m	10,951.00
MN-007	Patching with hot bitumen using 56 ltrs. per 1/2 k.m.	1/2 K.m	12,515.00
MN-008	Extensive Patching for every additional 7 ltrs. hot bitumen	1/2 K.m	1,564.00
MN-009	Patching with cold bitumen (CRS-1) using 14 ltrs per 1/2 k.m.	1/2 K.m	2,490.00
MN-010	Patching with cold bitumen (CRS-1) using 21 ltrs. per 1/2 k.m.	1/2 K.m	3,735.00
MN-011	Patching with cold bitumen (CRS-1) using 28 ltrs. per 1/2 k.m.	1/2 K.m	4,980.00
MN-012	Patching with cold bitumen (CRS-1) using 35 ltrs. per 1/2 k.m.	1/2 K.m	6,225.00
MN-013	Patching with cold bitumen (CRS-1) using 42 ltrs. per 1/2 k.m.	1/2 K.m	7,470.00
MN-014	Patching with cold bitumen (CRS-1) using 49 ltrs. per 1/2 k.m.	1/2 K.m	8,715.00
MN-015	Patching with cold bitumen (CRS-1) using 56 ltrs. per 1/2 k.m.	1/2 K.m	9,960.00
MN-016	Extensive patching for every additional 7 ltrs. cold bitumen, CRS-1:	1/2 K.m	1,245.00
MN-017	50 mm-19mm aggregate roller patching(including roller hire)	Cu.m	5,155.00
MN-018	50 mm - 19mm aggregate stamped patching	Cu.m	6,683.00
	<b><u>SECTION - IX</u></b>		
	<b><u>SIDES AND DRAINAGE</u></b>		
	<b>(RATE TO INCLUDE SPREADING THE RESULTING MATERIALS SUITABLY IN THE VICINITY UNLESS OTHERWISE DIRECTED.)</b>		
DR-001	Cutting new side Drains in ord. soil	Cu.m	1,089.00
DR-002	Cutting new side Drains in Med. soil	Cu.m	1,512.00
DR-003	Cutting new side Drains in hard soil	Cu.m	1,936.00
DR-004	Cutting new side Drains in soft soil	Cu.m	2,148.00
DR-005	Cutting new side Drains in unclassified soil	Cu.m	1,512.00
DR-005A	Cutting side drains of std. Dimensions in unclassified soil using machine (Back hoe J.C.B) including shipping trimming and levelling bottom manually	Cu.m	722.00
DR-006	Cutting new side Drains in rock	Cu.m	3,837.00

Item No.	Description	Unit	RATE -2018
DR-007	Turfing (Excluding royalty, transport and watering maintenance) [SSCM 802.3 (a)]	Sq.m	238.00
DR-008	Watering and maintaining turf for Three months including transport of water	Sq.m	288.00
DR-009	Levelling & trimming earth	Sq.m	31.00
DR-010	Clearing silt etc. from kerbs & channels (SSCM 12053)	L.m	19.00
DR-011	Cutting scupper Drains on any soil other than rock to and average width of 0.75 m with proper gradient and ave. Depth of 100 mm (SSCM 1304.3)	L.m	136.00
DR-012	Clearing and Desilting of culverts (SSCM 1303.3)	No	386.00
DR-013	Clearing choked culverts (With head room > 1m.)	Cu.m	1,601.00
DR-014	Cleaning desilting existing side drains and lead up drains to proper shape and gradient and transport of excavated materials from road side up to 100m	L.m	47.00
DR-015	Clearing inlets and outlets of culverts	No	347.00
	<b><u>SECTION -X</u></b>		
	<b><u>BRIDGES AND STRUCTURES</u></b>		
ST-001	Demolishing Dry coursed masonry including stacking or loading ,(SSCM 202.2)	Cu.m	4,759.00
ST-002	Demolishing coursed masonry in cement mortar including stacking or loading	Cu.m	5,542.00
ST-003	Demolishing random rubble masonry in cement mortar including stacking or loading	Cu.m	2,477.00
ST-004	Random rubble masonry, 150-225 mm rubble in approved cement & sand mortar 1:6 (Including transport of rubble & piling) [SSCM 1006.3]	Cu.m	13,875.00
ST-005	Random rubble masonry, 150-225 mm rubble in approved cement & sand mortar 1:5 (Including transport of rubble) [SSCM 1006.3]	Cu.m	14,225.00
ST-006	Random rubble masonry, in approved cement & sand mortar 1:6 with available rubble 150-225mm	Cu.m	11,479.00
ST-007	Random rubble masonry in approved cement & sand mortar 1:5 with available rubble 150-225 mm.	Cu.m	11,822.00
ST-008	Dry masonry with available heavy rubble or boulders(SSCM 1006.3)	Cu.m	6,628.00
ST-009	Dry masonry with rubble 150-225 mm (Including transport of rubble & piling)	Cu.m	7,123.00
ST-010	Dry masonry with available rubble 150-225mm.	Cu.m	5,302.00
ST-011	Packing available rubble and aggregate filter layers behind masonry walls.	Cu.m	1,405.00
ST-012	Clay puddled & laid behind masonry walls(Excluding transport of clay) [SSCM 705.3]	Cu.m	2,844.00

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>RATE -2018</b>
ST-013	Grouting coursed stone masonry joints with approved cement & sand mortar 1:3 (SSCM 804.2(C))	Sq.m	<b>517.00</b>
ST-014	Grouting rubble paving with concrete class C, 1:2:4(19 mm) (Including transport of aggr. for concrete & piling)	Cu.m	<b>2,462.00</b>
ST-015	Grouting rubble paving with approved cement & sand mortar (1:3)	Sq.m	<b>836.00</b>
ST-016	Forming weep holes in masonry construction (Labour only)[SSCM 706.3]	Nr.	<b>451.00</b>
ST-017	Forming weep holes using PVC pipes of internal diameter. not less than 100mm complete with Drip ledge and surround finish smooth.	L.m	<b>687.00</b>
ST-018	Shoring with 37.5 mm thick class II timber planks up to 3 m Depth	Sq.m	<b>1,171.00</b>
ST-019	Supplying & fixing class II timber struts etc. for shoring up to 3m Depth	Cu.dm	<b>97.00</b>
ST-020	Supplying and fixing class II timber in shoring up to 3m Depth (Rate per area basis)	Sq.m	<b>1,411.00</b>
ST-021	Lifting soil for every 1.5 m beyond the initial 1.5m.	Cu.m lift	<b>782.00</b>
ST-022	Lifting wedge stones for every 1.5 m beyond the initial 1.5m.	Cu.m lift	<b>2,347.00</b>
ST-023	Lifting rubble or concrete every 1.5 m beyond the initial 1.5m.	Cu.m lift	<b>1,174.00</b>
ST-024	Lowering wedged stones every 1.5m beyond the initial 1.5 m beyond the initial 1.5 m	Cu.m lwr	<b>1,565.00</b>
ST-025	Lowering rubble or concrete every 1.5m beyond the initial 1.5 m	Cu.m lwr	<b>782.00</b>
ST-026	Rendering 12.5 mm thick in cement sand mortar 1:2 mix (Rough)	Sq.m	<b>833.00</b>
ST-027	Rendering 12.5 mm thick in cement sand mortar 1:2 mix (Smooth finish)	Sq.m	<b>947.00</b>
ST-028	Rendering 19 mm thick in cement sand mortar 1:2 mix (Rough)	Sq.m	<b>1,156.00</b>
ST-029	Rendering 19 mm thick in cement sand mortar 1:2 mix (Smooth finish)	Sq.m	<b>1,269.00</b>
ST-030	Rendering 12.5 mm thick in cement sand mortar 1:3 mix (Rough)	Sq.m	<b>820.00</b>
ST-031	Rendering 12.5mm thick in cement sand mortar 1:3 mix (Smooth finish)	Sq.m	<b>943.00</b>
ST-032	Rendering 19 mm thick in cement sand mortar 1:3 mix (Rough)	Sq.m	<b>1,138.00</b>
ST-033	Rendering 19mm thick in cement sand mortar 1:3 mix (Smooth finish)	Sq.m	<b>1,251.00</b>
ST-034	Mixing & laying manually, cement concrete 1:4:8 (50 mm) (Volume batching) using crusher run aggregate (Incl. transport of aggregate & piling) [SSCM 1001.4]	Cu.m	<b>15,211.00</b>

Item No.	Description	Unit	RATE -2018
ST-035	Mixing & laying using concrete mixer,cement concrete 1:4:8 (50 mm) (Volume batching) using crusher run aggregate (Incl. transport of aggregate & piling) (SSCM 1001.8 - 9)	Cu.m	14,859.00
ST-036	Mixing & laying manually cement concrete 1:4:8 (50 mm) with 20% plums (Volume batching) using crusher run aggregate (Incl. transport of aggregate & piling)	Cu.m	14,494.00
ST-037	Mixing & laying using concrete mixer, cement concrete 1:4:8 (50 mm) with 20% plums (Volume batching) using crusher run aggregate (Incl. transport of aggregate & piling)	Cu.m	13,318.00
ST-038	Mixing & laying manually cement concrete 1:3:6 (37.5 mm) with 20% plums (Volume batching) using crusher run aggregate (Incl. transport of aggregate & piling)	Cu.m	15,061.00
ST-039	Mixing & laying using concrete mixer, cement concrete 1:3:6 (37.5 mm) with 20% plums (Volume batching) using crusher run aggregate (Incl. transport of aggregate & piling)	Cu.m	13,983.00
ST-040	Mixing & laying manually cement concrete 1:3:6 (37.5 mm) (Volume batching) using crusher run aggregate (Incl. transport of aggregate & piling)[SSCM 1001.4]	Cu.m	17,173.00
ST-041	Mixing & laying using concrete mixer, cement concrete 1:3:6 (37.5 mm) (Volume batching) using crusher run aggregate (Incl. transport of aggregate & piling)	Cu.m	16,040.00
NOTE	<b>WHEN HAND BROKEN AGGREGATE (50MM OR 37.5MM) ARE USED INPLACE OF CRUSHER RUN AGGREGATE , ON APPROVAL BY PD/CE SSRR TO BE PREPARED BASED ON THE SAME NORMS</b>		
ST-042	Mixing & laying manually cement concrete 1:3:6 (19 mm) (Volume batching) using crusher run aggregate (Incl. transport of aggregate & piling)	Cu.m	17,113.00
ST-043	Mixing & laying using concrete mixer, cement concrete 1:3:6 (19 mm) (Volume batching) using crusher run aggregate (Incl. transport of aggregate & piling)	Cu.m	15,832.00
ST-044	Mixing & laying manually cement concrete 1:2:4 (37.5 mm) (Volume batching) using crusher run aggregate (Incl. transport of aggregate & piling)	Cu.m	18,422.00
ST-045	Mixing & laying using concrete mixer, cement concrete 1:2:4 (37.5 mm) (Volume batching) using crusher run aggregate (Incl. transport of aggregate & piling)	Cu.m	17,560.00
	<b>** (RATE INCLUDES VIBRATOR COST)</b>		
NOTE	<b>WHEN HAND BROKEN AGGREGATE (50MM OR 37.5MM) ARE USED INPLACE OF CRUSHER RUN AGGREGATE , ON APPROVAL BY PD/CE SSRR TO BE PREPARED BASED ON THE SAME NORMS</b>		



<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>RATE -2018</b>
ST-046	Mixing & laying manually cement concrete 1:2:4 (19 mm) (Volume batching) using crusher run aggregate (Incl. transport of aggregate & piling)	Cu.m	<b>18,187.00</b>
ST-047	Mixing & laying using concrete mixer, cement concrete 1:2:4 (19 mm) (Volume batching) using crusher run aggregate (Incl. transport of aggregate & piling)	Cu.m	<b>17,312.00</b>
ST-048	Mixing & laying using concrete mixer(w/batching), cement concrete for Grade 25 (19 mm) using crusher run aggregate in foundation and floors.(Incl. transport of aggregate & piling)	Cu.m	<b>18,609.00</b>
ST-048A	Mixing & laying using concrete mixer(w/batching), cement concrete for Grade 25 (70% 37.5 + 30% 19 mm) using crusher run aggregate (Incl. transport of aggregate & piling)	Cu.m	<b>17,770.00</b>
ST-049	Mixing & laying using concrete mixer(w/batching), cement concrete for Grade 30 (19 mm) with crusher run aggregate (Incl. transport of aggregate & piling)	Cu.m	<b>20,361.00</b>
ST-050	Mixing & laying using concrete mixer(w/batching), cement concrete for Grade 40 (19 mm) with crusher run aggregate (Incl. transport of aggregate & piling)	Cu.m	<b>22,102.00</b>
ST-051	Mixing & laying using concrete by hand	Cu.m	<b>6,683.00</b>
ST-052	Mixing & laying using concrete by power Driven concrete mixer V/batching	Cu.m	<b>5,556.00</b>
ST-053	Curing of concrete Decks, slabs , beams, walls etc. [SSCM 1011.11]	Sq.m/day	<b>50.00</b>
ST-054	Fabricate & lay M.S bars as reinforcement (Including transport & wastage)	Kg	<b>281.00</b>
ST-055	Fabricate & lay tor steel as reinforcement (Including transport& wastage)	Kg	<b>281.00</b>
ST-056	Cutting & laying reinforcement fabric (Excluding cost of reinforcement fabric)	Sq.m	<b>277.00</b>
ST-057	Supplying & fixing 25 mm thick planks of class II timber as shuttering, including removing [1008.3(b)]	Sq.m	<b>1,415.00</b>
ST-058	Supplying & fixing class ii timber bearers, joists , Etc. including Dismantling in shuttering (SSCM 1008.3 (a))	Cu.dm	<b>73.00</b>
ST-059	100-150 mm Dia. round jungle timber supplied & fixed as props.	L.m	<b>112.00</b>
ST-060	150-200 mm Dia. round jungle timber supplied & fixed as props.	L.m	<b>123.00</b>
ST-061	Formwork smooth finish with class II timber for bridge beams, bridge deck under sides and sides including Dismantling (SSCM 1008.3(b))	Sq.m	<b>3,435.00</b>
ST-062	Formwork smooth finish with class II timber for bridge column shafts including dismantling (SSCM 1008.3(b))	Sq.m	<b>3,131.00</b>
ST-063	Formwork smooth finish, using plywood(Shutter 15 mm) and class ii timber bearers, joists and jungle timber props for bridge abutments, wing walls etc.	Sq.m	<b>3,374.00</b>

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>RATE -2018</b>
ST-064	Supplying & fixing 25mm thick planks and struts of class ii timber as formwork rough finish, in foundation etc. including removing (SSCM 1008.3(b))	Sq.m	<b>1,575.00</b>
ST-065	Formwork smooth finish for general purposes, using 25mm thick planks & struts of class ii timber and round jungle timber props 100 - 150 mm Dia. including Dismantling	Sq.m	<b>2,146.00</b>
ST-066	Laying & jointing 152mm Dia. concrete pipes (transport and bedding material paid separately) [SSCM 707.3 - 4]	L.m	<b>2,648.00</b>
ST-067	Laying & jointing 229mm Dia. concrete pipes (transport and bedding material paid separately) [SSCM 707.3 - 4]	L.m	<b>3,800.00</b>
ST-068	Laying & jointing 305mm Dia. concrete pipes (Transport and bedding material paid separately) [SSCM 707.3 - 4]	L.m	<b>4,050.00</b>
ST-069	Laying & jointing 457mm Dia. concrete pipes (Transport and bedding material paid separately) [SSCM 707.3 - 4]	L.m	<b>5,457.00</b>
ST-070	Laying & jointing 610mm Dia. concrete pipes (Transport and bedding material paid separately) [SSCM 707.3 - 4]	L.m	<b>8,079.00</b>
ST-071	Laying & jointing 915mm Dia. concrete pipes (Transport and bedding material paid separately) [SSCM 707.3 - 4]	L.m	<b>13,730.00</b>
ST-072	Laying & jointing 1220mm Dia. concrete pipes (Transport and bedding material paid separately) [SSCM 707.3 - 4]	L.m	<b>20,103.00</b>
ST-073	Laying & jointing 152 mm Dia. available concrete pipes and collars	L.m	<b>875.00</b>
ST-074	Laying & jointing 229 mm Dia. available concrete pipes and collars	L.m	<b>923.00</b>
ST-075	Laying & jointing 305-450 mm Dia. available concrete pipes and collars	L.m	<b>1,005.00</b>
ST-076	Laying & jointing 610 mm Dia. available concrete pipes and collars	L.m	<b>1,982.00</b>
ST-077	Laying & jointing 915 mm Dia. available concrete pipes and collars	L.m	<b>3,373.00</b>
ST-078	Laying & jointing 1220 mm Dia. available concrete pipes and collars	L.m	<b>4,800.00</b>
ST-079	Fixing new bridge planks runners and stacking old planks (Available) [SSCM 1402.2(a)]	Nr.	<b>1,189.00</b>
ST-080	Removing & re-setting old bridge planks	Nr.	<b>743.00</b>
ST-081	Supplying & fixing new bridge planks of class I timber	Cu.dm	<b>141.00</b>
ST-082	Supplying & fixing 31 mm thick Deck planks of class I timber	Sq.m	<b>5,892.00</b>
ST-083	Fixing new chequered or M.S. plates on timber - decked bridge [SSCM 1402.2(d)]	L.m	<b>1,754.00</b>
ST-084	Removing & refixing chequered M.S. plates on timber-decked bridge	L.m	<b>2,339.00</b>
ST-085	Tightening bolts & nuts of chequered of M.S. plates	L.m	<b>378.00</b>

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>RATE -2018</b>
ST-086	Removing & refixing "U" clips. [SSCM 1402.2(b)]	Nr.	<b>246.00</b>
ST-087	Cleaning, wire brushing & painting steelwork, one coat enamel paint	Sq.m	<b>326.00</b>
ST-088	cleaning, wire brushing & applying tar on steelwork, one coat	Sq.m	<b>251.00</b>
ST-089	Cleaning, with cotton waste and painting steel work with enamel paint, one coat	Sq.m	<b>187.00</b>
ST-090	Chipping to bare metal etc. & painting with anticorrosive paint, one coat	Sq.m	<b>1,101.00</b>
ST-091	Painting with one coat of enamel paint after cleaning, de-rusting & application of one coat anticorrosive paint[SSCM 1401.3(C)]	Sq.m	<b>737.00</b>
ST-092	Painting with two coats of enamel paint, after cleaning, de-rusting & application of one coat anticorrosive paint	Sq.m	<b>913.00</b>
ST-093	Oiling steel cables on suspension bridges [SSCM 1405.3]	Sq.m	<b>924.00</b>
ST-094	Cleaning booms of steel bridges including scaffolding where necessary [SSCM 1401.3]	L.m	<b>90.00</b>
ST-095	Demolishing unreinforced cement concrete including cleaning of Debris in foundation and superstructure in dry condition excluding under water structures [SSCM 202.2]	Cu.m	<b>4,151.00</b>
ST-096	Demolishing reinforced concrete and debris cleared	Cu.m	<b>5,846.00</b>
ST-097	Demolishing reinforced concrete in very heavy structures build up of grade 30 above concrete in work such as bridge beams & deck slabs, including collecting and removing	Cu.m	<b>12,665.00</b>
ST-098	Supplying and fixing M.S. dowels spliced and dove tailed with wedge at one end, 16mm dia, and 1m long, boring holes to 0.3m depth in fixing	Nr.	<b>862.00</b>
ST-099	Supplying and fixing M.S. dowels, spliced and dove tailed with wedge at one end, 20mm dia, and 1m long, boring holes to 0.3m depth in fixing.	Nr.	<b>1,068.00</b>
ST-100	Supplying & fixing M.S.dowels, spliced and Dove tailed with wedge at one end, 25mm dia, and 1m long. boring holes to 0.3m depth in fixing.	Nr.	<b>1,422.00</b>
ST-101	Lay standard type road kerbs(125mmX900mm) set on19mm thick 1:3 cement mortar layer on 150mm X 275mm 1:2:4(19) concrete foundation with av. 157mm X 150mm wide backing with same concrete including excavation and shuttering (cost of kerb stones.)	L.m	<b>2,853.00</b>
ST-102	Lay standard precast bridge kerbs [Type Drawing No T/B/106-rev 1 of RDA](Cost of precast kerbs & transport to be paid separately)	L.m	<b>661.00</b>
ST-103	Constructing 150 X 50 mm thick insitu lower kerb in grade 20 (14 mm) concrete for bridges: (Incl. aggregate transport )	L.m	<b>325.00</b>
ST-104	Laying 450 X 450 X 50 mm precast concrete slabs on foot walks including av. 40mm thick 1:3 cement Mortar bedding (Cost of sabs & transport paid separately)	Sq.m	<b>2,017.00</b>

Item No.	Description	Unit	RATE -2018
ST-105	Laying 450 x 450 x 50 mm precast concrete slabs on foot walks including av.40mm thick sand bedding (Cost of precast slabs and transport to be paid separately)	Sq.m	1,409.00
ST-106	Fixing precast hand railing and uprights using grade 25(19) concrete including formworks for pockets (Cost of precast items & transport paid separately and incl. aggr. transport ) [Type Dwg No T/B/102/B]	L.m	1,788.00
ST-107	Construction of RCC grade 25(19mm) end pillaster, type 1(Incl. transport of aggregate.) [Type Dwg No T/B/106-Rev 1]	Nr.	50,145.00
ST-108	Construction of RCC Grade 25(19mm) end pillaster, type ii (Incl. transport of aggregate.) [type Dwg No T/B/106-Rev 1]	Nr.	56,210.00
ST-109	Construction of RCC grade 25(19mm) end pillaster, type iii (Incl. transport of aggregate.) [Type Dwg No T/B/106-Rev 1]	Nr.	32,308.00
ST-110	Construction of RCC grade 25(19mm) end pillaster, type iv (Incl. transport of aggregate.) [Type Dwg No T/B/106-Rev 1]	Nr.	34,492.00
ST-111	Laying of grade 20 concrete precast pin kerbs in grade 20(19) concrete foundation as edging (Incl. transport of aggregate.)	L.m	963.00
ST-112	Supplying and fixing 25mm thick tong and grooved planks with 50x50mm struts of Class 1 timber in panels as smooth shuttering for concrete Drains	Sq.m	1,450.00
ST-113	Supply and packing 50-200 mm Dry stone lining behind abutments and wind walls (Incl. transport of aggregate.)	Cu.m	3,027.00
ST-114	Laying geotextile on prepared surface supply and transport to pay separately	Sq.m	80.00
ST-115	Construction of gabion wall using 4x1x1m mesh including lacing wire on prepared ground.(supply and transport of gabion mesh to be paid separately);	Cu.m	7,555.00
ST-116	Construction of gabion wall using 4x1x0.5 m mesh including lacing wire on prepared ground (Supply and transport of gabion mesh to be paid separately)	Cu.m	8,142.00
ST-117	Construction of kerb inlet as per Drawing type - k1/t1 with cover slabs. (Including of transport of aggregate (rate per 1kerb inlet pit with 1.2m length)	No	12,155.00
	<b>EARTH EXCAVATION TO BE CONSIDERED BY THE ENGINEER AS PER SITE CONDITION AND ADD SEPERATELY IF REQUIRED.</b>		
	<b>ITEM RESERVED FOR BRIDGE WORKS ONLY</b>		
	<b>THE RATES IN THE FOLLOWING ITEMS FROM ST1-118 TO ST1-120 SHOULD BE ADDED TO THE CONCRETE RATE SELECTED FROM ITEM CODES ST1-038 TO ST1-050 , DEPENDING ON THE STRUCTURAL LOCATION.</b>		
ST-118	Additional labour for pouring, compacting and levelling concrete in screed under foundation slabs	Cu.m	1,110.00

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>RATE -2018</b>
ST-119	Additional labour for pouring, compacting concrete in abutments , wing walls, capping beams of piers and foot walks of bridges	Cu.m	<b>311.00</b>
ST-120	Additional labour for pouring, compacting and levelling infiller concrete between bridge beams including ccreed of bridge Decks.	Cu.m	<b>1,584.00</b>
ST-121	Laying ready mixed grade concrete including vibration * (suppl;y of concrete to be paid seperately )	Cu.m	<b>2,280.00</b>
ST-122	Supplying and laying approved hard Rubber bearing pads 75mm x 12mm over capping beams and under the approach slabs	L.m	<b>1,732.00</b>
ST-123	Bitumenous sealing material supplied and laid under beam ends to prevent grout leak on to capping beam. transport of emulsion not included. (including cost of emulsion )	L.m	<b>179.00</b>
ST-124	230mm Dia. polythene Displacers supplied and filled with saw Dust or similar light material in deck. transport of saw dust to be paid separately	L.m	<b>52.00</b>
ST-125	230mm Dia. polythene Displacers supplied and filled with saw Dust or similar light material in deck. transport of saw dust to be paid separately	L.m	<b>90.00</b>
ST-126	325mm Dia. polythene Displacers supplied and filled with saw Dust or similar light material in deck. transport of saw dust to be paid separately	L.m	<b>143.00</b>
ST-127	PCC beams 16.15m long launched into position	Nr.	<b>19,063.00</b>
ST-128	PCC beams 13.41m and 12.19m long launched into position	Nr.	<b>13,236.00</b>
ST-129	PCC beams 10.67m, 9.75m and 8.23m long launched into position	Nr.	<b>10,113.00</b>
ST-130	PCC beams 7.01m, 6.09m, 5.18m and 4.26m long launched into position	Nr.	<b>7,730.00</b>
ST-131	M.S. angle iron and hard rubber expnsion joints as per Drawing No T/B/107 Rev. 1	L.m	<b>9,261.00</b>
ST-132	Transport of 355 X 355 X 9144 mm R.C. sheet piles to the site excluding unloading and stacking	Nr/km	<b>91.00</b>
ST-133	Stacking of 355 X 355 X 9144 mm R.C. sheet piles	Nr.	<b>5,760.00</b>
ST-134	Transport of 305 X 200 X 6100 mm R.C. sheet piles to the site excluding unloading and stacking	Nr/km	<b>24.00</b>
ST-135	Stacking of 305 X 355 X 6100 mm R.C. sheet piles	Nr.	<b>2,806.00</b>
ST-136	Driving 305 X 200 X 6100 mm R.C. sheet piles using hand monkey	L.m	<b>10,118.00</b>
ST-137	Saturated sand filling	Cu.m	<b>6,263.00</b>
ST-138	Stacking of P.S.C. beam 16.15m (53 inch) long	Nr.	<b>11,520.00</b>
ST-139	Transport of PSC Beams 16.15m(53inch)long to the site	per beam/km	<b>183.00</b>

Item No.	Description	Unit	RATE -2018
ST-140	Stacking of P.S.C. beam 13.41m (44 inch) and 12.19m (40 inch) long	Nr.	8,418.00
ST-141	Transport of PSC Beams 13.41m(44inch) or 12.19m (40inch)long to the site	per beam/km	122.00
ST-142	Stacking of P.S.C. beam 10.63m (35 inch) and 9.75m (32 inch) or 8.23m (27 inch) long	Nr.	6,313.00
ST-143	Transport of PSC Beams 10.63m(35inch) or 9.75m (32inch)or 8.23m(27inch)long to the site	per beam/km	91.00
ST-144	Stacking of P.S.C. beam 7.01m (23 inch) long	Nr.	4,209.00
ST-145	Transport of PSC Beams 7.01m(23inch) long to the site	per beam/km	61.00
ST-146	50mm thick cover slabs for service ducts in grade 25(20) concrete inclusive of light reinforcement	Sq.m	2,806.00
ST-147	100mm 0 type 400 PVC service duct supplying and fixing in Deck	L.m	813.00
ST-148	110mm 0 type 250 PVC rain water outlets supplying and fixed through deck	L.m	872.00
ST-149	50mm 0 type 400 PVC Drain pipes supplying and fixed through deck	L.m	439.00
ST-150	25mm 0 type 1000 PVC Drain pipes supplying and fixed through deck	L.m	330.00
	<b><u>SECTION - XI</u></b>		
	<b><u>KM AND GUARD STONES</u></b>		
RF1-001	White washing, Two coats to guide / guard stones	Nr.	90.00
RF1-002	Whitewashing Two coats k.m. stones inc. numbering & Tar skirting.	Nr.	950.00
RF1-003	Painting white back ground on parapets etc. & stencilling nos.	Nr.	354.00
RF1-004	Fixing guard stones in any soil	Nr.	277.00
RF1-005	Casting STD k.m. stones with R.C.C. [1:2:4(19 mm) & cement 282.5 kg/cu.m ] including curing, for "A" and "B" class roads	Nr.	7,023.00
RF1-006	Casting STD k.m. stones with R.C.C. [1:2:4(19 mm) & cement 282.5 kg/cu.m ] including curing, for "C" and "D" class roads	Nr.	4,672.00
RF1-007	Fixing standard type k.m. stones in any soil	Nr.	2,060.00
RF1-008	Fixing new or refixing type guard stones in cement concrete [1:3:6(37.5mm) and cement 219 kg/cu.m ] with min. cover 75mmx 300 mm Deph	Nr.	975.00
RF1-009	Casting standard type guard stones in concrete [1:2:4(19mm) & cement 282.5 kg / cu.m]	Nr.	2,471.00
RF1-009A	Casting standard type guard stones in concrete grade 20(19) as per drawing no. T/B/100-REV.1 for bridges and culverts	Nr.	3,220.00
RF1-010	Route numbering with reflective paint on 2 sides	Nr.	701.00

Item No.	Description	Unit	RATE -2018
RF1-011	Casting standard boundary markers in reinforced concrete [1:2:4(19mm)] with admixtures, including 14 days curing and loading to vehicle at yard(Incl. transport of aggregate.)	Nr.	1,953.00
<b>NOTE</b>	<b>19MM AGGREGATE PER BOUNDARY MARKER IS 0.039 CU.M.</b>		
	<b><u>SECTION - XII</u></b>		
	<b><u>NOTICE AND SIGN BOARDS</u></b>		
	<b>(SSCM 810.2 AND 1501.3) (ALL PAINTS SHOULD CONFORM TO THE REQUIREMENTS OF S.L.S. AS GIVEN IN SSCM 1707)</b>		
RS1-001	Notice and traffic signs boards etc. fixed in concrete [1:3:6] 37.5mm and cement 219 kg/cu.m (Including transport of aggregate)	Nr.	1,794.00
RS1-001A	Warning and Regulatory traffic signs etc. fixed in place using concrete [1:3:6] 37.5mm and cement 219 kg/cu.m. Complete including all labour, materials and plant.	Nr.	4,379.00
RS1-002	Cleaning and White washing 2coat town name boards(inc Tar Skirt)	Nr.	520.00
RS1-003	Cleaning, painting one coat & relettering etc.traffic sign boards inc. paint post in B/W	Nr.	2,470.00
RS1-004	Cleaning and painting 1 coat on notice board	Nr.	408.00
RS1-005	lettering & numbering below 50 mm	Nr.	59.00
RS1-006	Lettering and numbering 50mm-75mm	Nr.	71.00
RS1-007	lettering & numbering 75 mm - 150 mm	Nr.	88.00
RS1-008	lettering & numbering 150 mm - 225 mm	Nr.	118.00
RS1-009	Painting 2 coats continuous centre line,100 mm wide with enamel paint	L.m	160.00
RS1-010	Painting 1 coats continuous centre line,100 mm wide with road marking paint (White)	L.m	159.00
RS1-011	Painting 2 coats broken centre line,100 mm wide with enamel paint	L.m	151.00
RS1-012	Painting 1 coats continuous centre line (Without reflective studs),100 mm wide, at 3 metre intervals with road marking paint (White)	L.m	154.00
RS1-013	Barricading with empty (Hot tar) barrels including white washing, transporting and cost of barrels	Nr.	312.00
RS1-014	Revetment to banks etc. with empty barrels in horizontal tiers with vertical batter(1:8) including transport of barrels	Nr.	793.00
RS1-015	Road marking continuous centre line 100 mm width, using thermoplastic paint (White) , inclusive barricading.(Paint materials & reflective glass beads to pay separately)	Sq.m	355.00

Item No.	Description	Unit	RATE -2018
NOTE	<b>1 KG OF THERMO PLASTIC PAINT COVERS 0.28 SQ.M. AREA AT 1.5MM THICKNESS 25KG OF GLASS BEADS WILL COVER 100 SQ.M. AREA</b>		
RS1-016	Road marking standard pedestrian crossing, using thermoplastic paint (White) , inclusive barricading.(Paint materials & reflective glass beads to pay separately)	L.m	<b>755.00</b>
NOTE	<b>1 KG OF THERMO PLASTIC PAINT COVERS 0.28 SQ.M. AREA AT 1.5MM THICKNESS 25KG OF GLASS BEADS WILL COVER 100 SQ.M. AREA</b>		
	<b><u>SECTION - XIII</u></b>		
	<b><u>MISCELLANEOUS</u></b>		
MS1-001	Preparing stock piling premix using pen, Grade bitumen (Incl. transport of aggregate)(Site made) (including cost of bitumen)	Cu.m	<b>16,972.00</b>
MS1-002	Patching shallow pot holes. Depth less 20mm using hot bitumen 1.2ltr/sq.m & 12.5mm chips single size @ 13.75 codec m/sq.m include. hand tamping rat. including cost of bitumen & including cost of materials.)(Incl. transpt. of aggregate & excl. transpt. of bitumen )	Sq.m	<b>255.00</b>
MS1-003	Patching shallow potholes, Depth less than 20mm using 10-20% cutback 80/100bitumen 1.2ltr/sq.m and 12.5mm chips, single size at the rate of 13.75 cuDeci m/sq.m including hand tamping(rate includes cost of bitumen and materials)(Incl. transport of aggregate and excl. transport of bitumen)	Sq.m	<b>277.00</b>
MS1-003B	Patching shallow potholes, Depth less than 20mm using 10-20% cutback bitumen 1.2ltr/sq.m and 12.5mm chips, single size at 13.75 cudeci m/sq.m including hand tamping(incl. Tr. agg,bitumen )	Sq.m	<b>0.00</b>
MS1-003A	Patching shallow potholes, part 1 of item no MS-003 (including cost of bitumen)	litre	<b>86.00</b>
MS1-004	Patching shallow pot holes,depth less than 20mm using emulsion (crs1) @ 1.2ltr/sq.m & 12.5mm cu.deci m/sqm includig hand tamping transport of emulsion to site etc. rate includes cost of emulsion and incl other materials)(incl. transprt of aggregate)	Sq.m	<b>0.00</b>
MS1-004	Patching shallow pot holes,depth less than 20mm using emulsion (crs1) @the rate of 1.2ltr/sq.m & 12.5mm chips single size at the rate of 13.75 cu.deci m/sqm includig hand tamping transport of emulsion to site etc. rate includes cost of emulsion and incl other materials)(Incl. transprt of aggregate)	Sq.m	<b>264.00</b>
MS1-005	Patching potholes, of medium Depth 20-75mm with premix using 10-20% cutback bitumen .rate include preparation of surface tack coat .75ltr/Sqm,laying and tamping.	Sq.m	<b>0.00</b>



<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>RATE -2018</b>
MS1-005	Patching potholes, of medium Depth 20-75mm with premix material (site made) using cut back 80/100 bitumen 10-20% @ the rate of 83.5lit per cu.m of 19mm and down gauge stone aggregate, including preparation of surface tack coat with emulsion(CSS1) at .75ltr/Sqm,trimming sides,laying premix and tamping.(rate inclusive of premix made at site & tack coat)(Incl. transport of aggregate)	Sq.m	<b>2,011.00</b>
MS1-005A	Patching pot holes of medium ,depth of 20-75mm - part 1 of the item MS-005	Sq.m	<b>250.00</b>
MS1-005B	Patching pot holes of medium ,depth of 20-75mm - part 2 of the item MS-005 (Exclude cost of emulsion)	Sq.m	<b>554.00</b>
MS1-005C	Patching potholes of medium Depth - part 3 of item MS-005	Cu.m	<b>18,002.00</b>
MS1-006	Patching potholes using plant made premix bound including sealing the patching with emulsion (CRS-1) painting @ 7.3 ltr/m.ton cover with sand (Transport of premix paid separately) (include cost of emulsion)	M.ton	<b>13,304.00</b>
MS1-007	Patching potholes of medium Depth 20-75mm using graded aggregate 19-12.5mm with hot bitumen 1.75 ltr/sq.m and blot. material at 1 cu.m/125 sq.m andf .75ltr/sq.m tack coat(CSS-1) (Excluding cost of emulsion & bitumen)	Sq.m	<b>1,257.00</b>
MS1-008	Patching Deep pot holes deeper than 75 mm with c/b premix material (site made) to a depth of 37.5 mm using 10-20% cut back bitumen at the rate of 83.5 ltr/cu.m of 19 mm .75 ltr/sq.m	Sq.m	<b>1,148.00</b>
MS1-009	patching pot hols more then 75mm deep with water bound gravel material using 50mm or 12.5 mm single size aggregate along with useable old aggregate obtain from picking and preparation of surface inc. laying watering spreading gravel of approved quality	Sq.m	<b>76.00</b>
MS1-010	Patching ruts and Depressions upto 75mm Depth using site made cold mix(Cut back) material with the surface and edge prepared as per specifications .75ltr/sq.m tack coat (include cost of emulsion)	Sq.m	<b>1,792.00</b>
MS1-010A	Patching ruts and Depressions part 1 of item MS-010	Sq.m	<b>32.00</b>
MS1-011	Patching ruts and Depressions upto 75mm Depth using plant made cold mix(cut back) material with .75ltr/sq.m tack coat(CSS-1)(premix paid separately) (including cost of emulsion)	Sq.m	<b>1,494.00</b>
MS1-012	Patching ruts and Depressions upto 75mm Deep with .75ltr/sq.m tack coat(CSS-1) 50mm Down aggregate, hot bitumen applied at 1.75ltr/sq.m, blotting material at 1 cu.m/125 sq.m(Agg. paid separately) (including cost of emulsion & bitumen)	Sq.m	<b>1,571.00</b>
MS1-012C	Patching ruts and Depressions Deeper than 75mm - part C of item MS-012	Sq.m	<b>5,139.00</b>
MS1-013	Patching ruts and Depressions upto 75mm Deep with .75ltr/sq.m tack coat(CSS-1) 50mm Down aggregate, hot bitumen applid at 1.75ltr/sq.m, blotting material at 1 cu.m/125 sq.m(agg. paid separately) including cost of emulsion & bitumen)	Sq.m	<b>1,172.00</b>

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>RATE -2018</b>
MS1-014	Patching ruts and Depressions Deeper than 75mm with .75ltr/sq.m tack coat(CSS-1) 50mm Down aggregate, hot bitumen applid at 1.75ltr/sq.m, blotting material at 1 cu.m/125 sq.m(Agg. paid separately)	Sq.m	<b>1,341.00</b>
MS1-015	Correcting and strengthening edges of the road by cold mix 40mm thick, cutback 10-20%, at the rate of 83.5ltr/cu.m on 19mm down aggregate, over 50mm down aggregate, tack coat .75 ltr/sq.m(CSS 1) (including cost of emulsion)	Sq.m	<b>1,943.00</b>
MS1-015B	Correcting and strengthening the edges of road by cold mix - part B of the item MS1-015	Cu.m	<b>5,149.00</b>
MS1-016	Correcting & strengthening edges of road by cutback(10-20%) cold mix 40mm thick with 83.5ltr/cu.m 19mm Down aggregate .75ltr/sq.m tack coat(CSS-1) over 50 mm down over Closely packed 100mm agg. with excav. width 225mm, depth 225mm (inc.emul & bitumen)	Sq.m	<b>2,281.00</b>
MS1-016B	Correcting and strengthening edges part B of the item MS-016	Cu.m	<b>2,173.00</b>
MS1-017	Patch sealing with emulsion painting the surface by spray of crs-1 @ .75ltr/sq.m squeegee the emulsion and spreading the blotting material (Sand) at the rate of 1 cu.m/125 sq.m . (including cost of emulsion)	Sq.m	<b>149.00</b>
MS1-018	Patch sealing with hot bitumen painting the surface by using .75ltr/sq.m squeegee the bitumen and spreading the blotting material (Sand) at the rate of 1 cu.m/125 sq.m (Transport of bitumen paid separately) (including cost of bitumen)	Sq.m	<b>143.00</b>
MS1-019	Patch sealing of pitted surface, using hot sand bitumen mix 104 ltr/cu.m of sand spread and tamped including brushing and cleaning of surface.(including cost of bitumen)	Sq.m	<b>344.00</b>
MS1-019A	Patch sealing of pitted surface, part A of item MS-019 (including cost of bitumen)	Sq.m	<b>18,459.00</b>
MS1-019B	Patch sealing of pitted surface, part B of item MS-019A	Sq.m	<b>67.00</b>
MS1-020	Patch sealing of pitted surface, using emulsion sand slurry.	Sq.m	<b>356.00</b>
MS1-020A	Patch sealing of pitted surface with sand emulsion slurry, part A of item MS-020A (Including cost of emulsion)	Sq.m	<b>15,273.00</b>
MS1-020B	Patch sealing of pitted surface, using emulsion sand slurry, part B of item MS-020A	Sq.m	<b>58.00</b>
MS1-021	General upkeep of road sides including maintaining the right of way in a neat condition by trimming, weeding & clearing of the road sides, drains , drainage structures, scupper drains & cleaning minor slips	Sq.m	<b>38.00</b>
MS1-022	Cleaning ordinary jungle including removing high growing plants and trees of girth < 300 mm other than those designated to remain by uprooting or by cutting and then uprootin the stumps or by cutting only as directed (SSCM 1203.2)	Sq.m	<b>5.00</b>

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>RATE -2018</b>
MS1-023	Cleaning medium jungle including removing high growing plants and trees of girth < 300 mm other than those designated to remain by uprooting or by cutting and then uprootin the stumps or by cutting only as directed	Sq.m	<b>6.00</b>
MS1-024	Cleaning heavy jungle including removing all high growing plants and trees of girth < 300 mm other than those designated to remain by uprooting or by cutting and then uprootin the stumps or by cutting only as directed	Sq.m	<b>8.00</b>
MS1-025	Repairs to damage of shoulders verges & embkments slopes incl making good depressions,ruts,holes & erosion path with aprvred gravelly soil & compact same with roller(8-10 ton)as Directed(gravel soil paid seperately if brought outside ( including roller hire)	Cu.m	<b>644.00</b>
MS1-026	Regrade & regravellig of shoulders with gravel of approved quality , duly compacted with roller (8-10 ton) as directed for repairing high sides caused by heavings deposits and construction debries, to required levels by using motor grader (120-140hp).	Cu.m	<b>341.00</b>
MS1-027	Regrade and regravell of shoulders with gravel of approved quality , duly compacted with roller (8-10 ton) as directed for repairing high side caud by heavng deposit & constructon debrie, to required level manly gravel(loose volume.	Cu.m	<b>723.00</b>
MS1-028	Replacing Damaged crack concrete slabs with precast/cast insitu cement concrete 1:2:4 (19 mm) using 19 mm & down guage stone minimum thickness 50 mm including fixing laying with cement mortar 1:3 joints over compacted bed etc.[SSCM 1204.3]	Sq.m	<b>2,714.00</b>
MS1-029	Cutting and removing fallen trees upto 600 mm girth including cutting into required number of pieces including disposal as directed. minimum piece shall not be less than 2m(SSCM 1203.2)	Nr.	<b>969.00</b>
MS1-030	Cutting and removing fallen trees 600 - 900 mm girth including cutting into required number of pieces including Disposal as Directed. minimum piece shall not be less than 2m(SSCM 1203.2)	Nr.	<b>1,384.00</b>
MS1-031	Weeding masonry culverts small bridges and retaining walls (SSCM 1303.3)	Nr.	<b>245.00</b>
MS1-032	Masonry random rubble with boulders including collect (SSCM 1006.3(b))	Cu.m	<b>1,758.00</b>
MS1-033	Fixing cats eyes in tar macadam including breaking road surface, barricade etc.[SSCM 810-.3(c)]	Nr.	<b>506.00</b>
MS1-034	Reducing high sides in ordinary soil [SSCM 301.3/1201.3(c)]	Cu.m	<b>837.00</b>
MS1-035	Reducing high sides in medium soil	Cu.m	<b>1,228.00</b>
MS1-036	Reducing high sides in hard soil	Cu.m	<b>1,619.00</b>
MS1-037	Reducing high sides in soft rock	Cu.m	<b>2,010.00</b>
MS1-038	Reducing high sides in rock requiring blasting	Cu.m	<b>3,660.00</b>
MS1-039	Reducing high sides in rock requiring blasting	Sqm	<b>57.00</b>

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>RATE -2018</b>
MS1-040	White washing 2 coat to parapets of bridges and culverts	Sq.m	<b>98.00</b>
MS1-041	White washing 1 coat to parapets of bridges and culverts after cleaning attending to minor repairs	Sq.m	<b>71.00</b>
MS1-042	White washing 2 cote to parapets of bridges and culverts after cleaning attending to minor repairs	Sq.m	<b>113.00</b>
MS1-043	Painting with emulsion 1 coat to parapets of bridges and culverts, guard stones and km posts after cleaning and attending to minor repairs [ SSCM 1501.3(a)-(v)]	Sq.m	<b>222.00</b>
MS1-044	Painting with enamel 1 coat to parapets of bridges and culverts, guard stones and km posts after cleaning and attending to minor repairs [ SSCM 1501.3(a)-(v)]	Sq.m	<b>235.00</b>
MS1-045	Painting with enamel 2 coats to parapets of bridges and culverts, guard stones and km posts after cleaning and attending to minor repairs [ SSCM 1501.3(a)-(v)]	Sq.m	<b>402.00</b>
MS1-046	Painting with emulsion 2 coat to parapets of bridges and culverts, guard stones and km posts after cleaning and attending to minor repairs [ SSCM 1501.3(a)-(v)]	Sq.m	<b>389.00</b>
MS1-047	Painting with emulsion 1 coat to parapets of bridges and culverts, guard stones and km posts including preparing surface of old work [ SSCM 1501.3(b)-(v)]	Sq.m	<b>210.00</b>
MS1-048	Painting sub coat emulsion to parapets of bridges and culverts, guard stones and km posts including preparing surface [SCM 1501.3(b)-(v)]	Sq.m	<b>183.00</b>
MS1-049	Painting 1 coat emulsion paint to parapets of bridges and culverts, guard stones and km posts including preparing surface of new work [ SSCM 1501.3(b)-(v)]	Sq.m	<b>193.00</b>
MS1-050	Cleaning & painting 100 mm wide stripe for skirting to guard stones.(SSCM 1501.3(b)(v)) :	L.m	<b>114.00</b>
MS1-051	Painting 2 coats standard pedestrian crossing for carriageway [SSCM 810.2(c)]	L.m	<b>2,316.00</b>
MS1-052	Painting 1 coat standard pedestrian crossing for carriageway using road marking paints [SSCM 810.2(c)]	L.m	<b>2,331.00</b>
MS1-053	Erecting, barricading in jungle timber 75-100 mm Dia, vertical posts at .9m centres and 1.2 above ground including white washing. [SSCM 1709]	L.m	<b>410.00</b>
MS1-054	Temporary scaffolding for painting or tarring bridges and for weeding on bridges or retaining wall including dismantling after work. [SSCM 1008.3(a)]	Sq.m	<b>168.00</b>
MS1-055	Roughening existing Smooth tarred metalled carriageway by hand for bonding , collecting Disposal of all loose materials [SSCM 03.3(b)]	Sq.m	<b>26.00</b>
MS1-056	Supply of Diesel for machineries	litre	<b>114.00</b>

Item No.	Description	Unit	RATE -2018
MS1-057	Patching road with premix(Loose volume) after prep, surface with emulsion (CSS-1) at .75 ltr/sq.m at tack coat including internal transport and hand stamping. (Supply of premix (Loose volume) paid separately) [SSCM 1102.3(b)] ( including cost of emulsion)	Cu.m	7,591.00
MS1-058	Patching road with premix after preparing surface with emulsion (CSS-1) at .75 ltr/sq.m as tack coat, including internal transport and stamping with machine (Supply of premix paid separately) [SSCM 1102.3(b)(i)] (including cost of emulsion)	M.ton	7,453.00
MS1-059	Painting two coats enamel paint on kerbs, after cleaning and preparing surface	Sq.m	457.00
MS1-060	Preparing and stock piling premix at site using 12.5 mm aggregate and emulsion (CSS-1) (Excluding transport of aggregate) :( including cost of emulsion)	Cu.m	15,499.00
MS1-061	Breaking manually asphalt layer 2"-3" thick on the carriageway for kerb laying	L.m	628.00
MS1-062	Supplying and fixing of 1/2" thick regiform sheets as directed by Engineer	Sq.m	300.00
MS1-063	Supplying and fixing of Gauge 700 polythene sheet as directed by Engineer	kg	275.00
MS1-064	Curing of Concrete for Road Surfaces	Sq.m/day	5.00
SSR	Asphalt Concrete wearing course binder 60/70 bitumen 4.7% Mix-Dense (19mm) Ex-plant	M.ton	8,808.00
SSR	Asphalt concrete binder course binder bitumen 4.1% MIX-dense [19mm] - Ex-plant	M.ton	8,058.00
SSR	Asphalt Concrete Cut Back (19 mm)	M.ton	9,430.00
	<b><u>Paving Blocks</u></b>		
	<b>Natural Colour Blocks</b>		
MS1-065	Supply & paving <b>80mm thick Rectangular(Approx. size 200mm x 110mm )</b> natural colour precast interlocking paving blocks of 40 N/mm <sup>2</sup> compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying.	Sq.m	3,500.00
MS1-066	Supply & paving <b>80mm thick Rectangular (Approx. size 200mm x 110mm )</b> natural colour precast interlocking paving blocks of 30 N/mm <sup>2</sup> compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying.	Sq.m	3,130.00

Item No.	Description	Unit	RATE -2018
MS1-067	Supply & paving 60mm thick Rectangular (Approx. size 200mm x 100mm ) natural colour precast interlocking paving blocks of 15 N/mm <sup>2</sup> compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the Low volume traffic areas or Pedestrian areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying.	Sq.m	2,825.00
MS1-068	Supply & paving 80mm thick Non-Rectangular (Approx. size 220mm x 100mm ) natural colour precast interlocking paving blocks of 40 N/mm <sup>2</sup> compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying.	Sq.m	3,470.00
MS1-069	Supply & paving 80mm thick Non-Rectangular (Approx. size 220mm x 100mm ) natural colour precast interlocking paving blocks of 30 N/mm <sup>2</sup> compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying.	Sq.m	3,135.00
MS1-070	Supply & paving 60mm thick Non-Rectangular (Approx. size 220mm x 110mm ) natural colour precast interlocking paving blocks of 15 N/mm <sup>2</sup> compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the Low volume traffic areas or Pedestrian areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying.	Sq.m	2,665.00
<b>Coloured Blocks</b>			
MS1-071	Supply & paving 80mm thick Rectangular (Approx. size 200mm x 100mm ) coloured precast interlocking paving blocks of 40 N/mm <sup>2</sup> compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying.	Sq.m	4,170.00
MS1-072	Supply & paving 80mm thick Rectangular (Approx. size 200mm x 100mm ) coloured precast interlocking paving blocks of 30 N/mm <sup>2</sup> compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying.	Sq.m	3,925.00

Item No.	Description	Unit	RATE -2018
MS1-073	Supply & paving 60mm thick Rectangular (Approx. size 200mm x 100mm ) coloured precast interlocking paving blocks of 15 N/mm <sup>2</sup> compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the Low volume traffic areas or Pedestrian areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying.	Sq.m	3,190.00
MS1-074	Supply & paving 80mm thick Non-Rectangular (Approx. size 220mm x 110mm ) coloured precast interlocking paving blocks of 40 N/mm <sup>2</sup> compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying.	Sq.m	3,940.00
MS1-075	Supply & paving 80mm thick Non-Rectangular (Approx. size 220mm x 110mm ) coloured precast interlocking paving blocks of 30 N/mm <sup>2</sup> compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying.	Sq.m	3,585.00
MS1-076	Supply & paving 60mm thick Non-Rectangular (Approx. size 220mm x 110mm ) coloured precast interlocking paving blocks of 15 N/mm <sup>2</sup> compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the Low volume traffic areas or Pedestrian areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying.	Sq.m	3,025.00
	<b><u>SECTION - XIV</u></b>		
	<b><u>SURVEYING</u></b>		
SV1-001	Supply of unskilled labour	Days	2,160.00
SV1-002	Supply of semiskilled labour	Days	2,340.00
SV1-003	Supply of skilled "A" Grade labour	Days	2,640.00
SV1-004	Supply of skilled "B" Grade labour	Days	2,520.00
SV1-005	Clearing jungle (Light) to a width of 1.22 metres for survey work	km	8,251.00
SV1-006	Clearing jungle (Medium) to a width of 1.22 metres for survey work	km	11,001.00
SV1-007	Clearing jungle (Heavy) to a width of 1.22 metres for survey work	km	16,502.00
SV1-008	Supply of labour for chaining and cutting Pages and Pegging	km	2,235.00
SV1-009	Levelling Chaining and Pegging and establish bench marks on Concrete rock or pegs and Checking back levels	km	4,469.00
SV1-010	Surveying includign fixing pickets & taking angles	km	4,469.00
SV1-011	Changing traverse lines and taking off-sets	km	5,959.00