



**GOVERNMENT OF PUNJAB  
PUBLIC WORKS DEPARTMENT**

# **CSR-2020**

**(COMMON SCHEDULE OF RATES)  
CHAPTERS 1 TO 34**

**FOURTH EDITION**

**ISSUED BY:  
CHIEF ENGINEER (HQ), PUNJAB PWD (B&R)  
BLOCK-C, NIRMAN BHAWAN  
DISTRICT ADMINISTRATIVE COMPLEX, PATIALA**

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## FOREWORD

Common Schedule of Rates (CSR) is an illustrative and comprehensive document that is published by the Department of Public Works (B&R), Punjab from time to time to provide a uniform economic base to all the Engineering Departments, Boards/Corporations/Agencies and Private Sector Organizations working with the Punjab Government for the purpose of cost estimation of construction activities.

The maiden issue was published in the year 1962 and was revised subsequently in the year 1987 and then again in 2010. Over the period of time ceiling premiums were provided from time to time as and when required.

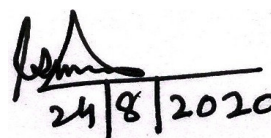
In the year 2020, foreseeing the current and future requirements, technological advances and modified tax structure due to imposition of GST, the CSR has been accordingly revised. While doing so current market rates have been thoroughly studied and taken into consideration. Many new items of work have been included, thereby avoiding the need for Non schedule items.

I am thankful to all the Chief Engineers, Superintending Engineers, Executive Engineers and other drawing and clerical staff members of all Punjab Government Departments who gave their valuable contributions and support for finalizing this edition of CSR.

The contribution of Er. Vipin Bansal, Executive Engineer (CSR Cell), Sh. Bhupinder Mittal, HDM (CSR Cell) and various technical committees remains the pivotal basis for framing this edition of CSR.

I am sure that this CSR will be quite helpful to all the concerned in construction industry carrying out development works in the State of Punjab.

This CSR has been issued with the approval of the Direction Committee of Chief Engineers, in the meeting held on 17.08.2020.



24/8/2020

**Er. V.S. Dhindsa**  
Chief Engineer (H.Q.),  
Punjab, PWD (B&R),  
Patiala.



<b>COMPOSITION OF THE DIRECTION COMMITTEE OF CHIEF ENGINEERS AS PER GOVERNMENT OF PUNJAB, PUBLIC WORKS DEPARTMENT (B&amp;R-3 BRANCH) NOTIFICATION NO. 8/59/2013-3BR3/207 DATED 28.07.2020 (POWER &amp; GUIDELINES ISSUED VIDE PSPW LETTER NO. 8/59/2013-3BR3/679-91 DT. 25.02.2014)</b>		
1.	Chief Engineer (Head Quarter) Convernor	<b>PUBLIC WORKS DEPARTMENT (B&amp;R)</b>
2.	Chief Engineer (Canals)	<b>DEPARTMENT OF WATER RESOURCES</b>
3.	Chief Engineer	<b>DEPARTMENT OF WATER SUPPLY &amp; SANITATION</b>
4.	Chief Engineer	<b>DEPARTMENT OF LOCAL BODIES</b>
5.	Chief Engineer	<b>WATER SUPPLY &amp; SEWERAGE BOARD, PUNJAB</b>
6.	Chief Engineer	<b>DEPARTMENT OF RURAL DEVELOPMENT &amp; PANCHAYATS</b>
7.	Chief Architect	<b>DEPARTMENT OF ARCHITECTURE</b>
8.	Chief Engineer (Electrical)	<b>PUBLIC WORKS DEPARTMENT (B&amp;R), ELECTRICAL WING</b>
	Special Invitees	Any Technical Head of Other departments, Semi Govt. Undertakings/ Organisations/ Corporations.



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## PREFACE

### CSR - 2020

1	Public Works Department, Punjab is the core department of Govt. of Punjab, solely responsible for any revision or change in the Common Schedule of Rates with contribution of Department of Water Resources, Department of Water Supply & Sanitation and Punjab Water Supply & Sewerage Board. Earlier since after independence, the CSR was initially developed in 1962 which was in FPS system. Thereafter it was converted into metric system in the year 1965-66 as interim Common Schedule of Rates. Further it was revised in 1987. Then in the year 2010 third edition CSR-2010 was issued. Further many amendments in shape of A&C slips were done in the last ten years as per the recommendations of Direction Committee of Chief Engineers and various suggestions received form Advisor Technical to Govt. of Punjab from time to time.		
2	Now because of change of taxation structure like introduction of goods & services Tax and other cesses introduced by the Govt, it becomes utmost necessary to reframe this Common Schedule of Rates.		
3	Direction Committee of Chief Engineers has been re-constituted by Govt. on 28.07.2020 where in the Chief Engineers of eight departments are members and Chief Engineer (HQ) PWD (B&R) Punjab being the Convener (Detail of composition appended in the previous page).		
4	The Chapters related to Civil works, irrigation, Water Supply & Sanitation, Sewerage, Horticulture and Electrical works have been reframed by the concerned departments. All the chapters along with one new chapters on Green Buildings have been framed by various sub committees of PWD (B&R) Civil Wing, Electrical wing, DWS, DWSS & PWSSB (As per Appendix-1).		
5	These revised chapters have been compiled and now the CSR - 2020 comprises the following chapters:-		
	(i)	Chapter No. 1 to 18, 21, 22, 24, 26, 27, 31, 32 & 33	Buildings, Culverts, Bridge & Road Works, Horticulture including new chapter on Green Buildings.
	(ii)	Chapter No 19, 20, 23 & 25	Irrigation works such as outlets lining River & Canal Protection works etc.
	(iii)	Chapter No 28 & 30	Public Health works such as Water Supply & Sanitation works.
	(iv)	Chapter No 29	Sewerage & Drainage Works
	(v)	Chapter No. 34	Electrical works
6	This CSR is applicable to the works to be executed by various Govt. Department & Semi-Govt., Boards, Corporations of Punjab State & Important Private Projects.		
7	The CSR-2020 is based on detailed analysis of rates for each item of work. While working out of the rate of the Schedule, current market rates, labour rates issued by Department of Labour Punjab. Input have been taken from various similar sources as DSR, CPWD SOR, MES SOR.		
(i)			

8	The rates given in this CSR are for normal construction and maintenance works. For large scale projects, specialized and emergent works like closure works, flood works etc. separate rates may be determined by, the Chief Engineer of the Department concerned.
9	This CSR will not be applicable to the agreements and work orders already in vogue and these will continue to be operated on the basis of the previous CSR till their completion.
10	The areas in the state have been sub-divided into the following two zones :-
<b>PLAINS (Zone-A)</b>	
	Area of all districts of Punjab excluding sub-mountainous region but including Chandigarh and Municipal areas of towns of the Sub-mountainous region and south west of and including road land width of PGI (Chandigarh) to Mullanpur- Kurali-Ropar-Kathgarh (on Balachaur-Ropar Road) to Rattewal-Bhaddi, Singhpur (on Garhshankar-Anandpur Sahib Road) to Karimur Chahwala Village (Where Kandi Canal crosses) along Kandi Canal (Right Hand Side) to Hoshiarpur-Talwara (Crossing Mukerian-Talwara Road) to Hajipur to Manser meeting at NH:44 (Jalandhar-Pathankot road) to Pathankot-Manmoon Cantt. to Madhopur to Jammu. .
<b>SUB-MOUNTAINOUS REGION (Zone-B)</b>	
	Northern Eastern side ( Right Hand Side) of PGI (Chandigarh) to Mullanpur- Kurali-Ropar-Kathgarh (on Balachaur-Ropar Road) to Rattewal-Bhaddi, Singhpur (on Garhshankar-Anandpur Sahib Road) to Karimur Chahwala Village (Where Kandi Canal crosses) along Kandi Canal (Right Hand Side) to Hoshiarpur-Talwara (Crossing Mukerian-Talwara Road) to Hajipur to Manser meeting at NH:44 (Jalandhar-Pathankot road) to Pathankot-Manmoon Cantt. to Madhopur to Jammu.
11	The works at New Delhi and Delhi shall be carried out on the basis of C.P.W.D. Schedule of Rates and specifications.
12	The Explanatory Notes on each chapter of CSR has also been provided in this edition of CSR.
13	The rates given in this CSR are based on the latest edition of the Punjab P.W.D. specifications supplemented with relevant IS Code including subsequent Addenda and Corrigenda issued from time to time for all chapters except Chapter No.21, 22 "Bridges," Chapter No.24 "Road work" for which the specifications of Road and Bridge work evolved by the roads wings of the Ministry of Road Transport & Highways Published by the Indian Roads Congress New Delhi, are to be adopted. The rates in respects of "Electrical Installations" Chapter 34 are based on revised specifications.
14	Unless otherwise specified, the labour rates for various items of construction work include handling of materials within 100 metres. The through rates include all rehandling of materials at site of work and no payment is due to the contractor on this account. However this rehandling of 100 mtr is not to be deducted from the Payable carriage because this 100 mtr. is not a part of carriage.
15	The through rates, given in the CSR, include the carriage of materials as follows :-
(a)	For materials such as timber, steel, aluminum, glass and electrical goods, etc., which have to be arranged by the contractor, the entire carriage is included in the rate, irrespective of the lead.
(b)	For such materials as brick ballast, bajri, sand, stone, bitumen and cinder, source of bricks is within 5 km from the site of work through rate include carriage, extra lead involved beyond 5 km unless otherwise stated, is payable as per carriage rates and the resources shall be certified as such by the Sub Divisional Engineer in writing.
(ii)	

	(c) For bricks/fly ash bricks, source of bricks is within 5 km from the site of work through rate include carriage. In case the source is beyond the radius of 5 km of the site of work, the through rates include carriage upto first 5 km measured from source of bricks irrespective of the fact whether this initial distance consists of katcha and pucca or partly katcha and pucca. The lead beyond this initial distance of 5 km will be payable at the rates provided in the Schedule of Rates for the corresponding subsequent kilometres. For this purpose the source of bricks shall be the nearest possible working kiln from where the bricks can be obtained and the resources shall be certified as such by the Sub Divisional Engineer in writing.
	(d) Average rates have been taken for quarry material in analysis of rates for working out the rates. However rates from the quarry having cheapest landed price at particular location shall apply and the rate shall be correspondingly adjusted by giving (+) or (-) loading to the average rates for the respective items. Rates of material at various quarries are attached in chapter No. 3- Material.
	(e) Average rates have been taken for brick / tiles in analysis of rates for working out the rates. However rates for the respective districts shall apply and the rate shall be correspondingly adjusted by giving (+) or (-) loading to the average rates for the respective items. District wise rates of bricks/tiles are attached in chapter No. 3- Material.
16	The through rates include all octroi charges, toll tax, GST, Labour Welfare Cess, turnover tax and other local taxes etc., paid by the contractor in bringing the material to the site of work.
17	The Rates of CSR have been worked out with GST rate on Govt. works contract @12%. In case of Non Govt. /commercial project if any, the implication of GST with different rate can be loaded/added in the estimate concerned.
18	The rates include all the expenses on account of contribution of EPF, ESI, Insurance of work & workers, arrangement of Bank Guarantee/ Performance Guarantee, Office Management, Bidding participation Key Personal, Laboratory setup and Supervision of work.
19	The through rates include the wastage and breakage of various materials during construction.
20	Unless otherwise specified, the labour rates include the cost of water, tools and plants, labour and materials for scaffolding and cost of good earth for mud mortar and mud plaster wherever required.
21	In case of works below ground level like basement of buildings and public health works such as sewers, disposal works etc, the rates upto a depth of 4 metres below ground level, shall be the same as for work in superstructure in first storey. For depths greater than 4 metres, additional rates for subsequent storeys shall be added. For works which are not deeper than 1.5 metres from ground level, ordinary rates for works in foundation & plinth shall apply.
22	Where the description of any item is too long, only essential portion may be written in estimates, tenders contract and measurement books, although it will be deemed to cover the entire item nomenclature as described fully in the CSR.
23	Wherever the column for "Rates" is neither headed by "Plains (Zone-A)" nor by "Sub-mountainous Region (Zone-B)" the same may be considered to apply to both the regions.
24	Abbreviations of units, wherever occurring, in the Punjab, P.W.D. CSR-2020, are as mentioned here in after:-
(iii)	

<b>A. LENGTH</b>				<b>B. AREA</b>			
	Millimetre	..	mm		Square millimetre	..	sq mm/sqm
	Centimetre	..	cm		Square centimetre	..	sq cm/sacm/Cm <sup>2</sup>
	Decimetre	..	dm		Squaremetre	..	sq m/sqm
	Metre	..	m		area	..	a
	Decametre	..	dam		hectare	..	ha
	Hectometre	..	hm		Square Kilometre	..	sq km/sqkm
	Kilometre	..	km/Km				
<b>C. VOLUME</b>				<b>D. CAPACITY</b>			
	Cubic millimetre	..	cu mm/cumm		Milli litre	..	ml
	Cubic centimetre	..	cu cm/cucm		Litre	..	ltr
	Cubic metre	..	cu m/cum		Kilo litre	..	kl

<b>E. WEIGHT</b>				<b>F. DENSITY</b>			
	Milli	..	mg		Kilogram per cubic	..	Kg/cum
	gram	..	g				
	kilogram	..	kg/Kg				
	quintal	..	qtl/Qtl				
	Tonne (Metric Tonne)	..	t				
<b>G. DISCHARGE</b>				<b>H. COUNTING</b>			
	Cubic metre per second	..	cu m/s		Number/Numbers	..	no/nos

**Note :-** The abbreviations mentioned herein before are for signify both singular as well as plural number.

<b>MISCELLANEOUS</b>							
	Common Schedule of Rates	..	C.S.R./CSR		Reinforced Cement Concrete	..	R.C.C./RCC
	Director General of supplies and Disposal	..	D.G.S. & D.		Plain Cement Concrete	..	P.C.C./PCC
	Public work Department	..	P.W.D./PWD		Poly Vinyl Chloride	..	P.V.C./PVC
	Indian Standard	..	I.S./IS		Short Way Mesh	..	S.W.M./SWM
	Bureau of Indian Standard	..	B.I.S./BIS		High Density Polyethylene	..	H.D.P.E./HDPE
	Indian Standard Institution	..	I.S.I./ISI		Low Density Polyethylene	..	L.D.P.E./LDPE

(iv)

Indian Roads Congress	..	I.R.C./IRC	Mild Steel	..	M.S./MS
Billet Rolled Committee	..	B.R.C./BRC	Revolutions per minute	..	R.P.M./RPM
Toos and Plants	..	T. & P./T&P	Miniature circuit breaker	..	M.C.B./MCB
Notice Inviting Tender	..	N.I.T./NIT	Alternating Current	..	A.C./AC
Galvanized Iron	..	G.I./GI	Single Pole	..	S.P./SP
Asbestos cement Corrugated	..	A.C.C./ACC	Single pole & neutral	..	S.P. & N./ S.P.N.
Asbestos Cement	..	A.C./AC	Kilo-watt hour	..	K.W.H./kwh
Joint Plan Committee	..	J.P.C./JPC	Plain cement concrete	..	P.C.C./PCC

Cast Iron	..	C.I./CI	Ready Mix Concrete	..	R.M.C./RMC
Heavy Cast Iron	..	H.C.I./HCI			
Rolled Steel.	..	R.S./RS	General Electric Co.	..	G.E.C./GEC
Open Flume	..	O.F./OF	Larsen & Toubro	..	L. & T./L&T
Adjustable Proportionate Module	..	A.P.M./APM	Double Pole	..	D.P./DP
Orifice Semi Module	..	O.S.M./OSM	Triple Pole	..	T.P./TP
Full Supply Depth	..	F.S.D./FSD	Triple Pole with Neutral	..	T.P.N./ T.P. & N.
Natural Surface Level	..	N.S.L./NSL	Aluminium conductor steel reinforced	..	A.C.S.R./ACSR
Ground Level	..	G.L./GL	Normally Open	..	N.O./NO
Spring Level	..	S.L./SL	Normally Closed	..	N.C./NC
Standard wire gauge	..	S.W.G./SWG	Current transformer	..	C.T./CT
Ampere	..	Amp.	High rupturing capacity	..	H.R.C./HRC

(v)

	Diametre	..	dia.		Supply and erection	..	S.&E./S&E
	Internal dia	..	i/d		Branch distribution fuse-board	..	B.D.F.B./BDFB
	Outer dia	..	o/d or OD		Over Head Bus-Bar Chamber	..	O.H.B.B.C./OHB BC
	All Aluminium Conductor	..	A.A.C./AAC		Stone ware	..	S.W./SW

**25 DECIMAL POINTS UPTO WHICH MEASUREMENTS SHALL BE TAKEN ARE AS UNDER:-**

	(i)	All items of Punjab P.W.D. Common Schedule of Rates 2020 except as mentioned below :	..	(a) Dimensions shall be measured to the nearest 0.01 metre. However, rounding off the figures shall not be applicable to conversion of basic dimensions of material and as restricted in the P.W.D. Specifications (Punjab) in force from time to time. (b) Area shall be worked out to the nearest 0.01 sqm. (c) Cubic contents shall be worked out to the nearest 0.01 cu m.
	(ii)	Loading, un-loading, stacking and carriage.	..	Length, breadth and height of stack shall be measured correct to a cm. Suitable deduction shall be made to account for voids in loose stacking according to factor, mentioned in relevant chapters of specifications or CSR.
	(iii)	Dismantling	..	Measurements to be taken correct upto the place of decimal, as per respective original items, mentioned in this para.
	(iv)	Supply and filling cinder on roof including light ramming.	..	Length and breadth shall be measured correct to a cm and average depth to 5mm.
	(v)	Items of skirting and dados, including that on risers and treads of stairs of plaster, precast terrazzo tiles, Agra red stone and of terrazzo, etc.	..	Correct to 3 mm where the height of skirting does not exceed 30 cm and where the height of skirting exceeds 30 cm, it shall be measured correct to a cm.
	(vi)	Items of skirting and dados, including that on risers and treads of stairs of white Makrana Marble, Chittor Black Marble and of Kotah Stone,	..	Correct to 1 mm where the height of skirting does not exceed 30 cm, and where the height of skirting exceeds 30 cm it shall be measured correct to a cm.
	(vii)	Hoisting of wooden beams.	..	Length shall be measured correct to a cm and breadth and depth, correct to 5 mm.
(vi)				

	(viii)	Wood work wrought, planed and fixed for trusses, chowkhats etc.	..	In cubic metres nearest to four places of decimal. Length of each piece shall be measured nearest to a cm and X-sectional dimensions shall be measured as specified in Ch. 17 of the CSR, correct to 5 mm.
	(ix)	Shutters of all type.	..	Shutters shall be measured in sqm nearest to 2 places of decimal, in close position, covering the rebate of the frame. Over lap of two shutters shall not be measured. The width and height of shutter shall be measured correct to a cm.
	(x)	Pelmets.	..	The pelmets shall be measured along the sides and face of planking correct to a cm.
	(xi)	(a) Steel reinforcement.	..	In accordance with the instructions contained in the book of P.W.D. specifications, the standard factor prescribed therein, shall be taken in calculating the consumption of steel.
		(b) Structural steel, steel window		Finished sections shall be measured in running metres correct to a cm and their weight calculated, on the basis of which steel is supplied to the contractor, by the Deptt. or from standard tables for tested steel.
26	The implications of tendered premium above or below (plus or minus) the ceiling premium fixed by the Direction Committee of CE shall be as under:- "The percentage tendered premium/abatment shall be added to/subtracted from Ceiling Premium only. The percentage so arrived at shall be applicable to the basic rates printed in C.S.R."			
27	The rates provided in the CSR-2020 are for preparation of estimates only.			
28	Rates of all the items in CSR are in Indian Rupees.			

**Issued under the Authority of  
The Direction Committee of Chief Engineers,  
Punjab**





Detail of Sub Committees who have made Sincere efforts for the successful Reframing of CSR-2020					Appendix-1	
Sub Committee No.	Officer Name	Convenor /Designation		CSR Chapter	Name & Designation of Coordinating Team (In H.Q. Level)	
					SE/XEN & his team	Supporting Staff
1	2	4		5	6	7
1	Er. Sanjeev Gupta	Convenor	CE (Canal),Water Resources Department, Hydrel Bhawan, Chandigarh	20-Outlets, 25-Canal & Drainage work	Er. Vijay Kumar Garg, XEN, Water Resources, Chandigarh	Er. Arun Kumar Gupta, Er. Anmolpal Er. Harshant verma, SDO, Water Resources.
2		Convenor	CE (Drainage),Water Resources Department,Hydel Bhawan, Chandigarh	23-River & Canal Protection work	Er. Davinder Singh SE, W/S & Sanitation, Circle Patiala	Sh. Tapinder Singh CHD, W/S & Sanitation, Circle Patiala
3		Convenor	CE (Lining),Water Resources Department, Hydrel Bhawan, Chandigarh (Now Merged in Canal)	19-Canal Lining	Er. Vijay Kumar Garg, XEN, Water Resources, Chandigarh	Er. Arun Kumar Gupta, Er. Anmolpal Er. Harshant verma, SDO, Water Resources.
4	Er. Anil Kumar Bansal	Convenor	CE (North), W/S & Sanitation, Patiala	28-Water Supply	Er. J.S. Sidhu, XEN (works), H.Q. W/S & Sanitation, Patiala Er. J.S. Chahal, XEN, W/S & Sanitation, Division Moga	Sh. Sukhveer Singh JDM, W/S & Sanitation, Division Ludhiana
				30-Sanitary Installation	Er. Amrik Singh, XEN, W/S & Sanitation, Division No. 1, Patiala Er. Kamal Kishore, XEN, W/S & Sanitation, Division No. 1, Mohali	Er. Harpreet Singh, AE, Sh. Harmesh Kumar, HDM, W/S & Sanitation, Division No. 1, Patiala
(viii)						

Sub Committee No.	Officer Name	Convenor /Designation		CSR Chapter	Name & Designation of Coordinating Team (In H.Q. Level)	
					SE/XEN & his team	Supporting Staff
1	2	4		5	6	7
5	Er. Harinder Singh	Convenor	Chief Engineer, PWSSB, Patiala	29-Sewerage and Drainage	Er. Jitin Vashudeva XEN, PWSSB, Division No. 1, Jalandhar	Er. Balraj Singh SDE, PWSSB, Sub Division No. 2, Jalandhar
6	Er. V.K. Chopra	Convenor	CE, (Electrical), Punjab PWD ((B&R)) Chandigarh	34-Electrical	Special contribution from all Design Cells specially Er. Vikas Vashisht, AE ER. Deepika Jindal, AE along with officers of Punjab Mandi Board, Health System Corporation Limited, Deppt. of Local Bodies, Panchayti Raj, Punjab Police Housing Corporation, GMADA.	
	Er. Vikas Gupta	Member	SE, Electrical Circle (South), Punjab PWD (B&R), Patiala			
7	Er. Kulwant Singh	Convenor	SE, Construction Circle, PWD (B&R), Ludhiana	2-Machinery 24-Road work	Er. G.S. Sarao, XEN (Plan Road),	Sh. Lal Bahadar (CHD), Drawing Branch (P.R.),
	Er. Rakesh Garg	Member	XEN, Construction Division No. 1, PWD (B&R), Ludhiana			
	Er. Adesh gupta	Member	XEN, Provincial Division, PWD (B&R), Ludhiana			
(ix)						

Sub Committee No.	Officer Name	Convenor /Designation		CSR Chapter	Name & Designation of Coordinating Team (In H.Q. Level)	
					SE/XEN & his team	Supporting Staff
1	2	4		5	6	7
8	Er. Ravi Chawla	Convenor	SE, Construction Circle No. 2, PWD (B&R), Patiala	Input Chpters 1-Daily Wages, 3-Materials 4-Loading & Unloading 5- Carriage	Er. Deepak Goyal, XEN (PMGSY)	Sh. Ajmer Singh (CDM), Drawing Branch (PMGSY)
	Er. Balwinder Singh	Member	XEN, Construction Division, PWD (B&R), Sirhind			
	Er. Bankesh Sharma	Member	XEN, Construction Division, PWD (B&R), Nabha			
	Er. Ajay Garg	Member	XEN (Puda), Patiala			
9	Er. T.R. Katnoria	Convenor	SE, Construction Circle, PWD (B&R), Hoshairpur	6-Earth Work, 7-Rock Cutting, 12-Stone Masonry	Er. J.S. Anand, XEN (LR),	Sh. Darshan Singh (CHD), Drawing Branch (L/R)
	Er. Pawan Kumar	Member	XEN, Construction Division, PWD (B&R), Mukerian			
	Er. Manjit Singh Saini	Member	XEN, Construction Division No. 1, PWD (B&R), Patiala			
10	Er. N.R. Goyal	Convenor	SE, Construction Circle No. 1, PWD (B&R), Patiala	11-Brick Work, 13-Hositing & Roofing, 14-Flooring & Dados, 15-Plastering & Pointing, 16-White washing, Distempering, Painting & Polishing	Er. Manpreet Dua, XEN (Prov. Divin No. 2, Patiala)	Sh. Mohan Singh (HDM), Drawing Branch, Provl. Divn. No. 2, Patiala
	Er. S.L. Garg	Member	XEN, Provincial Division No. 1, PWD (B&R), Patiala			
	Er. Naveen Mittal	Member	XEN, Construction Division, PWD (B&R), Patiala			
(x)						

Sub Committee No.	Officer Name	Convenor /Designation		CSR Chapter	Name & Designation of Coordinating Team (In H.Q. Level)	
					SE/XEN & his team	Supporting Staff
1	2	4		5	6	7
11	Er. J.S. Tung	Convenor	SE, Construction Circle, PWD (B&R), Bathinda	9-Centering and Shuttering, 10-Concrete, 17-Wood work, 18-Steel & Iron work, 26-Miscellaneous, 27-Quantities of Materials	Er. S.L. Garg, XEN, Prov.Divn.-1, Patiala Er. M.K.Garg, SDE, Er. Deepak Goyal, AE	Sh. Lal Singh (HDM), Drawing Branch (Planning Plan Road),
	Er. Neeraj Bhandari	Member	Provincial Division, PWD (B&R), Bathinda			
	Er. Suresh Kumar	Member	Provincial Division, PWD (B&R), Mansa			
12	Er. P.J. Arora	Convenor	SE, Construction Circle, PWD (B&R), Chandigarh	8- Dismantling, 31-Maintenance of Building & Furniture	Er. Tersem Raj XEN (Central Works Divin), Patiala	Sh. Harjeet Singh (HDM), Drawing Branch, Central Works Divison, Patiala
	Er. Arashdeep Singh	Member	XEN, Provincial Division, PWD (B&R), Chandigarh			
	Er. Rajpreet Singh Sidhu	Member	XEN, Provincial Division, PWD (B&R), Mohali			
13	Er. B.S. Tuli	Convenor	SE, Construction Circle, PWD (B&R), Pathankot	21-Bridges Foundations & Sub-Structure, 22-Bridge-Super-Structure & Protection work	Er. S.K. Jindal SE (P&I)	Sh. Balbir Singh (CDM), Drawing Branch (Bridges)
	Er. Manmohan Singh	Member	XEN, Construction Division, PWD (B&R), Pathankot			
	Er. Manmohan Singh	Member	XEN, Provincial Division, PWD (B&R), Gurdaspur			
14	Er. Janail Singh	Convenor	XEN, Horticulture Division, PWD (B&R), Ludhiana	32-Horticulture	Er. Harpreet Singh, AE Horticulture Sub Division, PWD (B&R), Ludhiana	Er. Jasdeep Singh , AE Horticulture Sub Division, PWD (B&R), Ludhiana
	Er. Brij Mohan Bhardawaj	Member	SDE, Horticulture Sub Division, PWD (B&R), Ludhiana			
	Er. Satinder Singh	Member	SDE, Horticulture Sub Division, PWD (B&R), Amritsar			
(xi)						

Sub Committee No.	Officer Name	Convenor /Designation		CSR Chapter	Name & Designation of Coordinating Team (In H.Q. Level)	
					SE/XEN & his team	Supporting Staff
1	2	4		5	6	7
15	Er. Manjit Singh	Convenor	SE, Construction Circle No. 1, PWD (B&R), Jalandhar	New Chapter for Item relates to Water Proofing	Er. Richa Aggarwal , XEN (Training & HRMS)	Sh. Darshan Singh (CHD), Drawing Branch (Bridges Structure)
	Er. Bhagwinder Singh Tuli	Member	XEN, Provincial Division, PWD (B&R), Jalandhar			
	Er. Nek Chand	Member	XEN, Construction Division No.1, PWD (B&R), Jalandhar			
16	Er. Paramjit Goyal	Convenor	SE, Construction Circle, PWD (B&R), Sangrur	New Chapter for Item relates to Green Buildings & Specifications	Er. Parwinder Singh, XEN (NH)	Sh. Amrik Singh (CHD), Drawing Branch (N.H.)
	Er. Deepak Goyal	Member	XEN (HQ), PWD (B&R), Patiala			
	Er. Bankesh Sharma	Member	XEN, Construction Division, PWD (B&R), Nabha			
	Er. Vaneet Singla	Member	Sub Divisional Engineer, PWD (B&R), Nabha			
17	Er. Vipin Bansal	XEN	CSR Cell (HQ), PWD ((B&R)), Patiala	Overall compilation of CSR-2020	Specially invited for assisting with CSR Cell for their technical inputs Er. Harjit Singh SDE, Er. Karan Gupta JE, Sh. Jagdish Singh Clerk	
	Smt. Arvinder Rattan	CHD				
	Sh. Bhupinder Mittal	HDM				
(xii)						



**EXPLANATORY NOTES**

**ON**

**CSR-2020**

**(COMMON SCHEDULE OF RATES)**





## **CHAPTER NO. 1- DAILY WAGES**

Daily wages of labour have been provided according to present day prevailing rates as notified by State Govt. Department of Labour under the Minimum Wages Act w.e.f. 01.09.2019. All classes of labour, which are likely to be employed in any branch of the Public Works Department have been included in this chapter. The rates given in this chapter are primarily for the analysis of rates and take into account one paid holiday per week allowed to labour under the Minimum Wages Act and no additional cost on this account is to be provided over and above these rates. These rates are exclusive of GST, labour cess, contractor's profit and overhead expenses but inclusive of weekly rest.

For employment of departmental labour on muster rolls, the rates given in this chapter may be considered as maximum rates up to which the Executive Engineer can authorize employment of labour. If the prevailing rates in a certain locality are lower than the ones given in this chapter, the Executive Engineer will authorize employment at the prevalent and not at the CSR rates. On the other hand if in a certain locality prevailing conditions necessitate payment on higher rates the Superintending Engineer shall increase the rates suitably up to a maximum of 25% above the CSR rates. This increase in rates shall be for a specific period not exceeding six months after which the rates shall be reviewed and revised downwards, if the conditions so warrant. The Chief Engineer of the department shall have full powers to authorize any increase in the labour wages for departmental work for any length of time in any particular locality.

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## **CHAPTER NO. 2 – HIRE CHARGES OF MACHINERY**

The hire charges of machinery are based on the rates provided for the same in Standard Data Book of MORT&H for the year 2001-02. The rates have been updated by adopting Linking Factor for Manufactured Goods and WPI of Machinery and Equipment. Factor for arriving at present rates has been derived by using Whole Sale Price Index (WPI). The WPI has been worked out for the year 2020.

The rates include all the operational and maintenance charges such as cost of fuels, lubricants, stores, establishment, depreciation and interest charges. In case machinery is provided by the department, the working cost as mentioned below shall be recovered from the contractor. These rates are for estimation purposes and not for hiring of private machinery from the market for which competitive tenders/quotations shall be called and approval of the appropriate competent authority shall be obtained. The outputs mentioned for the construction equipments are for the compacted quantities of the relevant items and not for loose quantities.

These rates are exclusive of GST, contractor's profit, labour welfare cess.

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## CHAPTER NO. 3-MATERIALS

In this chapter rates have been given for those classes of material which appear in the Analysis of Rates of the Common Schedule of Rates. These rates are shown for the purpose of analysis and not for the obtaining supplies from the market. The supplies will be obtained either by placing orders with the Controller of Stores or by calling tenders as may be required under the rules and orders in force.

In case of bricks and tiles, the rates for supply shall not be more than the Controlled Rates fixed by the Deputy Commissioner of the respective districts.

The rates of these items as given in the Schedule of Rates include the cost of land and water. Sometimes land and water are given free of cost as in case of canal lining works in the Department of Water Resources. In such cases the rates shall be suitably reduced. The rates of various items have been provided in this chapter after ascertaining the same from the market or from various executive engineers in the State and in certain cases even from the suppliers. Most of rates given in this chapter are at the source of supply and do not include carriage to the site of work. Wherever, departure from this practice has been made, it has been specifically mentioned in the description of that item.

Regarding revision of rates of cement, steel and quarry rates of different materials, they are fixed/ revised by the Direction Committee of the Chief Engineers and Quarry Committee respectively from time to time.

The rates for stone, bajri, crushed aggregates, sand, etc., include royalty and malkana and nothing extra is payable over and above the rates for these items. The rates for Tor Steel/Structural Steel provided in this chapter are for ISI marked steel.

*Paints:* - In case of paints, rates for branded paints such as Nerolac, Asian, Berger and equivalent classes have been provided.

All the rates in this chapter are inclusive of GST & other taxes as applicable but excludes Contractors Profit and Labour Cess.

*Measurement of materials:* - While making measurements for supply of materials like boulder, aggregate, etc., suitable deduction shall be made to account for voids in loose stacking as mentioned in the relevant specifications of materials given in chapter no. 3 of PWD Specifications.

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## CHAPTER NO. 4- LOADING AND UNLOADING OF MATERIALS

The rates for loading and unloading of materials have been based after taking into consideration the following factors:-

- (a) The rates which are actually being charged by the labour for loading and unloading in the field.
- (b) Time spent in loading or unloading of a particular material.
- (c) Unloading of material is easier than loading because in the latter case the labour has to work against the gravity ; while in unloading of materials-like mild steel, timber, stone, etc., they have just to be thrown down from the wagons or trucks and in case of materials like sand, bajri, stone, metal, etc., they have just to be pushed with rakes. It is therefore essential that in case of such materials the rate for unloading should be lower than the one for loading.
- (d) The bricks and tiles shall be properly stacked in vehicles while loading and when unloading, these shall be directly placed in stacks and not dumped on the ground and then stacked. In case of bricks and tiles, nominal sizes have been mentioned in the Schedule of Rates. In the book of PWD specifications certain tolerance limits have been provided for these materials. Variation of sizes within these limits will be ignored for the purpose of loading, unloading and carriage of these materials.

Lead for loading into wagons or lorries or boats has been specified as 15.00 metre. If the lead involved is more than 15 metre., Carriage rates will be paid for additional lead. for unloading, provision has been made for clearing the materials 1.50 metre. away from the rails or 6.50 metre. away from the water edge.

Rates for stacking of certain class of materials have also been provided in this chapter. These rates include the maximum lead of 15.00 metre., if greater lead is involved, carriage rates will be paid for additional lead. The rates for stacking bricks and tiles are only to be paid when dumped materials are to be stacked. This rate of stacking is not payable over and above the rate for loading, unloading or for carriage because the latter rates include the provision for stacking as well.

These rates are inclusive of all taxes, GST, Labour Welfare Cess and contractor's profit.

Where the lead for loading and unloading is more than the lead specified as mentioned above, this should be paid at carriage rates (Chapter No. 5).While making measurements for loading, unloading or stacking suitable deductions shall be made on

account of voids in the loose stacking according to the factors mentioned in the relevant specifications of materials as given in Chapter No.3 of the P.W.D Specifications. Where the quantity earth work is involved more than 100 cum no unloading will be paid because unloading shall be done by tipping itself.

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## CHAPTER NO. 5-CARRIAGE

The materials have been divided into certain groups which have been formed on the basis of units of measurement, time and labour involved in loading & unloading. Such materials which are measurable in the same units and which require the same labour and time for loading & unloading have been grouped together. Unless otherwise stated, the rates for carriage do not include the labour for loading, unloading and stacking for the purpose of measurement. Where material is unloaded from wagons and then carried, separate payment shall be made for unloading the material from wagons.

Provision for extra payment of 20% over and above the basic rates of the kilometre concerned has been made for carriage of materials on river/choe beds. This extra payment will be made for the actual length involved in river or choe bed. For example if stone boulder is being carried and there is a river or choe half a kilometre wide in the 4<sup>th</sup> kilometre, additional rate of 20% will be allowed on (Rs. 162.08. – Rs. 147.45) /2= Rs.7.31 only.

For carriage of materials on unmetalled roads, 20% extra will be paid on the basic rates of the kilometre concerned for the actual length of unmetalled road. If some material is being carried and the whole of kilometre 4 and half of kilometre 5 is unmetalled, 20 % extra will be allowed on the carriage rate for kilometre 4 and half of kilometre 5. This additional rate for unmetalled roads will not be payable on items 5.2, 5.3 and 5.4 which are for carriage of small consignments or carriage by mazdoors, donkeys, mules, camels or carts.

In case of carriage of materials by road transport, the cost of carriage for the initial kilometre is comparatively much higher than the subsequent kilometres. For very long leads, the rate for subsequent kilometres decreases very much. Direct carriage for actual lead for each kilometers distance covered has been given in CSR from which cost of initial 5 kilometres must be deducted because the same has been added while preparing DAR for a particular item.

However the rates as derived in this chapter are not applicable to under mentioned situations, which are of immediate nature and are unavoidable :-

- (a) When materials like machinery of fittings are to be carried which are likely to be damaged if handled roughly during transit by rail.
- (b) When special materials classified by the Superintending Engineer as being of fragile nature are to be carried.

(c) When due to urgency of work and anticipate delay in arranging trucks, it is considered essential to resort to carriage by private vendors of specialization work with the prior approval of Superintending Engineer.

The Superintending Engineer has full powers to deal such situations after applying his mind and allow extra rates after considering all in & outs. The rates of carriage of materials also include the carriage of containers in which the materials are contained. For instance, if 100 tons of bitumen is carried in drums, the net weight of bitumen will be 100 tons and the weight of drums will be over and above this weight. Nothing extra will be paid for the weight of bitumen drums which are supposed to be carried in addition to the bitumen within the same rate.

In case of carriage of steel, sometimes the length of sections is more than 6 metre which cannot be easily accommodated in the body of a truck. If the material is mild steel / TMT / Tor steel bars, the same should be bent so as to accommodate them in the truck and nothing extra is payable. In case of steel sections like R.S. Joists, rails etc which cannot be easily bent, the same may be carried by making special arrangements like trailers etc., in such case the rates for carriage as given in the Common Schedule of Rates may be increased by 50%.

Where a river is to be crossed by Ferry or Boat Bridge, the loaded trucks cannot be carried across and they have to be unloaded to some extent before crossing the river. The unloaded material has to be carried by manual or animal labour across the river and then reloaded into the trucks. This not only involves additional expenditure, but also extra time. In order to compensate for this, additional rate may be allowed by increasing 50%.

While making measurements of materials for purposes of payment for carriage, suitable deduction shall be made to account for voids in loose stacking. This factor will be different with different materials and may be ascertained from the relevant specifications of that material as given in Chapter No. 5 of Hand Book of Specifications.

The rates under Item No. 5.6 do not provide for special carriage arrangements like cranes, trailers etc. Carriage of machinery not covered by this item should be paid at special rates to be determined after inviting quotations and approved by the Superintending Engineer.

Carriage rates are inclusive of all taxes, GST, Contractors Profit and Labour Welfare Cess. The rates for carriage of materials manually upto 0.50 kilometre and by mechanical means for every kilometre lead, have been given. The actual lead is to be paid, If the lead is in fraction of kilometer, will be payable for full kilometer. For carriage in sub mountainous area S.E concerned may increase the carriage rate suitably up to

maximum 20% of that rate provided for plains in case he is satisfied that the existing CSR are not reasonable.

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## CHAPTER NO. 6- EARTH WORK

The basic rate of Earth Work in excavation has been given without dressing and without compensation of Earth taken from private land and with a combined lead of 15 metre. The combined lead includes horizontal lead plus the vertical lift converted into lead. Items for dressing and payment for compensation have been provided for separately. For converting lift into horizontal lead, the lift upto 3.60 metre will be multiplied by 10 and from 3.60 metre to 6.0 metre, it will be 50% of quantity as obtained from 0 to 3.60 metre multiplying with 10 and above beyond 6.0 metre. it will multiplied with 20. No cross leads what-so-ever shall be measured and paid for. The rates for rehandling of recently deposited earth work and gravel work after excavation will be 20 percent less than the excavation rates. Earth work deposited before monsoon season which has had a full monsoon on it, will be considered as a normal earth work for excavation. The lift shall be measured from the centre of gravity of the excavated earth to that of placed earth. This shall constitute the mean lift for that section. When earth has to be carried over spoil bank and dumped beyond it, the mean lift would be the difference in levels between the centre of gravity of the excavated earth and top of the spoil bank omitting the dowel. Rates for additional lead have been given in slabs for 7.50 metre each of additional lead. If the lead exceeds a slab by 1.50 metre or so, full payment for 7.50 metre lead will be made. These rates are for building works. However for other works, these rates will be applicable upto the quantity of 100 cum where as beyond 100 cum, the rates shall be payable as per the Item No. 6.21 by mechanical means. The rates for carriage of materials manually upto 0.50 kilometre and by mechanical means for every km lead have been given. The actual lead is to be paid, if the lead is in fraction, the rate is to be worked out by interpolation. For borrowing of earth, the rates provided in this chapter are exclusive of compensation/royalty. Extra for compensation/royalty for the earth brought from private land if required be paid as per the Item No. 6.4 of the chapter. Separation of the item of dressing is necessary as in certain cases, the contractor's leave the work incomplete and the balance work has to be got done through other contractual agency.

Separate rate has been provided for dressing of new work and for repair work. The rate for dressing in case of repair work is higher as the quantity of earthwork involved is much less while the cost of dressing is comparatively high. A lower rate for dressing has been provided in case of soils consisting of sand only. These rates are supposed to include all local lifts and leads. The earth work shall be supposed to

have been carried by mechanical transport at the carriage rates given in 'Carriage' chapter. These carriage rates shall be supposed to include the excavation and all other allowances and nothing over and above these rates will be payable.

The basic rate has been fixed for soils having dry bulk density up to 1.6t/cum. For dry bulk density higher than 1.6t/cum, additional rates have been provided. Hardness allowance shall be paid with the approval of the Superintending Engineer. For dry bulk densities more than 1.8t/cum, suitable rates shall be fixed by the Superintending Engineer based upon the actual analysis worked out by the Executive Engineer.

Additional rates have been provided for wet Earth Work. These rates will, however, be payable after obtaining written approval of the Superintending Engineer. If pumping is required in wet earthwork, the same shall be paid on actual basis. Similarly for making payments for slush or daldal, approval of the Superintending Engineer will be obtained.

**Re-handling of Earthwork and Gravel Works:-** Where re-handling of recently deposited earthwork and gravel work is done, payment shall be reduced by 20% of the normal rates in excavation. Earthwork which is deposited before monsoon season and which has had the full monsoon on it, will be considered as normal earthwork in excavation.

**Earthwork in Excavation and Foundations:-** Separate rate has been provided for this item which includes all kinds of soils and no hardness or wetness allowance has to be paid. The rate includes refilling/backfilling the sides of trenches in 15 cm layers, watering, ramming and disposal of surplus soil.

**Earthwork Filling under Floors:-** For earth filling under floors, two rates have been provided-firstly for filling the surplus soil that has been excavated from foundations and secondly the earth work which is actually excavated and then filled in. Separate rates have also been provided for earthwork over roofs for which special good earth is to be brought from outside.

**Other Rates:-** Separate rates have been provided for items like earthwork by boats, earthwork by tramways or rails, dressing dowels, restoring boundary road drains, construction of new boundary road, covering boundary road with sarkanda, ploughing and leveling borrow pits, berm trimming, etc.

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## **CHAPTER NO. 7-ROCK CUTTING**

The separate rates for rock cutting have been provided both in the plain and sub-mountainous region of Punjab. The method of measurement of lift and converting lift into lead is the same as for Earthwork. For the classification of rock cutting, PWD Specifications Book may be referred before applying the rate for any item.

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## CHAPTER NO. 8-DISMANTLING

The rates given in this chapter are for non-hydraulic works. For hydraulic works, rate will be enhanced by 50%. (Hydraulic works are defined as those works which remain submerged under water for most of their lives). The items which can be considered as hydraulic works are:-

"Stone masonry in lime or cement, burnt bricks, tiles lining, tile masonry in lime or cement mortar, lime or cement concrete, reinforced cement concrete and pucca grouted stone pitching when Submerged under water".

The rates of various items provided in this chapter are inclusive of sorting & stacking dismantled material and removing the same within a distance of 100 metres. Unless otherwise specified, the rates cover the cost of all tools and plants, ladders, scaffolding and all other accessories required for dismantling. Rates for removing doors and windows are of two types-Firstly where walls are not be dismantled and the doors & windows are to be removed with chowkhats by making recesses in the walls: Secondly where doors and windows are to be removed along with and dismantling of walls. In latter case, the rates have to be lower as the work become easier. The chapter has been made comprehensive by including the dismantling of nearly every type of material.

The rates of dismantling considered in this chapter involve majority of labour component, the rates of which have been revised as per prevalent applicable rates. The dismantling of same item by mechanical means has also been provided where it is expected that no useful material can be recovered.

Since, now-a-days high strength concrete such as M-25, M-30 & above are used, the demolition, if required, is exercised by using mechanical mixer through specialized agencies, for which rates has been provided which includes disposal of building rubbish/malba, unserviceable material obtained from dismantling by mechanical means, including loading, unloading and transporting to approved municipal dumping ground or as approved by Engineer-in-charge, with all lifts and leads up to 1 kilometer and lead beyond 1 kilometer will be work out as per rates in carriage chapter no.5. Where useful material is obtained from dismantling it will be deposited in Govt. store or auctioned or recovery made from the agency as per conditions evaluated by Engineer-in-charge.

Dismantling should be done with utmost care avoiding damage to the material, so retrieved taking all necessary precautions for the protection of public properties and keeping down dust and nuisance etc.

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## CHAPTER NO. 9: CENTERING AND SHUTTERING

This chapter has been made very comprehensive to include centering & shuttering for every type of structural building component i.e. for foundations, columns, slab, beams, retaining walls, buttresses, louvers, precast components, round walls, arches & domes, etc. In addition to this, centering & shuttering for slabs for culverts with varying spans from 1.00 metre to 6.00 metre has also been covered in this chapter.

All items for centering & shuttering in this chapter have been worked out with steel shuttering, pipe scaffolding & vertical supports with steel pipes and through rates include all costs for material, labour for erecting & removal after casting, loading, unloading and carriage from market to & fro. All rates are for centering & shuttering for height up to 4.00 metre above plinth level. Extra rate has been provided for extra height, if height of single storey exceeds 4.00 metre for additional height of 1.00 metre or part thereof. Extra rate has also been provided for every floor. Extra rate @ 10% of labour rate is payable for smooth surface where no ceiling or RCC wall plaster is to be carried out and through rate be increased accordingly.

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## CHAPTER NO. 10-CONCRETE

This chapter is the basis for all types of building works, public health works, Electrical works as well as for Irrigation works. Coarse sand should be used for all types of RCC works. In this chapter rates for all types of design mixes has been provided as per data received from Research Laboratory Pb. PWD B&R, Patiala which also includes cost of admixture where ever required. Nothing addition or subtraction in these rates is to be carried for using more or less quantity of cement / admixture as per mix design in field. Rates have also been provided for mixing concrete with manual labour, volumetric mixers, batch type mixers and with computerized batch mix plant along with costs for using vibrators etc. Rates for pumping concrete with Hydraulic Pump Floor wise have also been introduced in this chapter along with manual labour, if concreting at upper floors is carried out manually. It is worthwhile to mention here that if concreting is done with Pump then rates for manual labour for respective floors are not payable. The rates for concreting with computerized batch mix plant and transportation with transit mixer includes cost for carriage by Transit mixer up-to 1 kilometre. Extra carriage beyond 1 kilometre lead is payable per cum/ km. as per rates in this chapter.

Rates for Piling with manual work have also been introduced in this chapter for different diameter of piles along with rates for testing and using bentonite, if required.

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## CHAPTER NO. 11-BRICK WORK

This chapter has been made comprehensive by adding normal items of Brick Work, Jibi Work, Gilafi work, Tile masonry, Tile facing, Reinforced brick & Jali work, Brick Work in cement lime & sand mortar. In case of specially moulded brick work for Sewers & Well Shafts, it may not be possible to understand exactly the requirement of brick and tile jali work as given in the Schedule of Rates, detailed sketches of different types of jali work have, therefore, been given in the Hand Book of P.W.D. Specifications which may be referred to for proper execution of work in the field. The following items have also been provided for small quantity of brick work which are otherwise not workable for very small quantum of brick work specially in repair works:-

- (1) Extra for labour for works involving up to 1.00 cum. for first class burnt brick work laid in cement sand mortar in foundation and plinth for repair work.
- (2) Extra for labour for works involving up to 1.00 cum. for first class burnt brick work laid in cement sand mortar in superstructure for repair work.

The main item of brickwork has been divided into two broad classifications-firstly, building works and small engineering works; and secondly, large engineering works. In building works and small engineering works either the quantity of brick work is small or the walls are of thin sections and therefore, per mason is less. On the other hand, in case of large engineering works like piers of bridges, etc., the sections are so thick that each mason can give greater per day and the expenditure on scaffolding per cum. is less. It is therefore, reasonable that rate in case of such large engineering works should be less than the one allowed for building works. Keeping this in view, the rates given in this chapter for general brickwork are for all building works & small engineering works involving total quantity of brick work up to 15.00 cum. A reduction of 10% in the labour charges for large engineering works involving total quantity of brick work exceeding 15.00 cum. The example given below will illustrate this procedure clearly.(Rate calculated for large engineering works involving total quantity of brick work exceeding 15.00 cum.

**Example-** The rate for first class brickwork laid in cement sand mortar (1:6) in first storey upto 4 metre above plinth level is Rs. 537.78 per cum for labour and Rs. 2595.23 for complete work for works in plains. In case of large engineering works, the labour rate for this item will be reduced by 10% and will work out to Rs. 484.00 per cum. Similarly the through rate will be reduced by same amount and will work out to Rs. 2541.45 (Rs. 2595.23 - Rs. 53.78).

In case of building work, it is easy to define the work in foundations and plinth, but in case of Engineering Works and also in case of boundary walls, there is no plinth level. The rates for bricks work done up to 1.5 metres height above the top of foundation concrete in case of compound walls and in other Engineering Works is the same as for brick work in foundation and plinth. In case of foundation of bridges – for these with ordinary open foundations, masonry above top of foundation concrete and in case of well foundation above top of well cap for a height of 1.5 metres shall be paid for at the rate appearing in Schedule for masonry in foundation & plinth.

For rates of brickwork in superstructure, the storey height of 4 metres has been fixed. If the height of any storey is less than 4 metres, the same rate will be applicable, but in any individual case where the storey height is more than 4 metres, the rate for brickwork for that storey will be increased as per rates given under item No. 11.29. The height of a storey will be measured from the finished ground floor level in case of first storey and from the top of structural roof of the lower storey in case of subsequent storeys.

Extra rate has been provided for brickwork in square or rectangular pillars in buildings. The quantity of brick work in the pillars in building work is very small, but the expense on keeping all the four faces in plumb and in making corners true and the surface even, proportionately more labour cost is involved. This extra rate, however is not payable in case of bridges and other engineering works where the sections are quite thick and do not justify any additional labour. For circular pillars constructed with dressed bricks, additional rates have been provided to the cost of dressing each and every brick. Additional rate provided for brickwork in arches has been split up according to the span of arch because the cost of centering goes on increasing with the increase in span of the arch. Extra rate has been provided for profile walls and flared out walls of syphons and super-passage etc., because this involves greater amount of labour. The rate for fire brick work in lining of fire places, flues etc has also been provided. Ground hydrated lime shall be used in all items of brick work in lime mortar.

The item of tile masonry should be differentiated from the item of tile facing. While tile facing will be provided in a single layer on edge in front of brick or stone wall, the tile masonry will be constructed in the entire thickness with brick tiles.

In case it is proposed to use second class brickwork on account of non-availability of first class bricks or on account of temporary nature of the structure, through rates of corresponding items shall be reduced by 10% per cum:, the labour rates will however remain the same.



The labour rates as well as through rates are inclusive of all types of labour involved for mixing of mortar, cost of water, laying for brick work and all other labour required for finishing a particular type of brick work including curing also. In case water is supplied free of cost by the department, rates will be reduced accordingly. The labour rate given in this chapter include the cost of water, tools and plants, scaffolding (Labour & Materials) and cost of good earth for mud mortar and mud plaster, wherever required. Unless otherwise stated, the labour rates include the cost of rehandling of materials with in 100 metres.

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## CHAPTER NO. 12-STONE MASONRY

The definition of various types of stone masonry as in vogue in the Buildings & Roads and Irrigation Branches differs from each other. The stone masonry has been classified into proper types keeping in view the definition and description given by the standard text-books written by various Indian and English authors.

In this chapter the include the cost of water, tools and plant, labour and materials for scaffolding and centering and shuttering, ladders, plant & templates wherever required and cost of good earth for mud mortar where required. Unless otherwise stated, the labour rates include the rehandling of materials within 100 metres. The labour also rates include the cost of dressing stones according to the relevant PWD Specifications. The rates given in this chapter have been worked out assuming the use of quarried stone. Quarried stone is normally softer than the boulder and is easy to dress. Whereas the boulder is not only harder but requires lot of dressing to bring the stone into roughly rectangular shape.

Provision has been made to increase the labour rates for items of stone masonry by 10% per cum where stone masonry is constructed with small boulders or with stones obtained by breaking large boulders. This additional rate is not applicable in case of ashlar masonry because the dressing required is very fine and the cost of dressing is so high that it does not matter whether stone is obtained from quarries or from boulders. In case of Schedule of Rates for sub-mountainous areas, provision has been made for Dhajji walling with different specifications.

The storey height for stonework in superstructure has been kept as 6 metres in case of ashlar masonry and 4 metres in case of other types of masonry. In ashlar work the building will be normally quite high and the ordinary height of 4 metres will not be applicable. In case of ashlar and block-in-course masonry, now separate rate has also been provided for work in foundations and plinth for ease of making payments to the agency though this item is lesser used in plinth & foundation and is largely used in superstructure.

Provision has been made for dry stone masonry in squared rubble and random rubble as Items No. 12.20 and 12.30. This item is provided for making retaining and breast walls in case of road work and the same rate applies both for foundations and superstructure. Items No. 12.40 and 12.42 are not applicable to stone breast or retaining walls which require greater stability but these apply only to works of purely temporary nature like small huts made at the site of work for storage of cement, etc.

The through rates for stone masonry include the cost of stone at the site of work within 5 kilometre of lead. However rates shall be worked out by taking actual leads by increase or decrease over the CSR rates .

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## CHAPTER NO. 13-HOISTING, ROOFING AND WATER-PROOFING

Separate rates have been provided for hoisting and placing in position R.C.C. lintels, battens shelves, bed-plates, wooden battens, wooden beams, wooden trusses, R.S. joists and steel roof trusses. These rates are for hoisting up to 13 feet (4 meters) height above plinth level. For every additional height of 13 feet (4 meters) or part thereof, 20% will be added in case of beams, trusses, R.S. Joists etc. For other items like wooden battens, R.C.C. shelves, etc., only 10% increase will be provided. Two different rates have been given because hoisting of lintels, shelves, bed plates and wooden battens is easier while that of beams and trusses is rather difficult for greater heights. The item for hoisting of roof trusses and plate girders is applicable to buildings of any spans, but for bridges up to 15.00 mt. span/only. For bridge girders having spans more than 15.00 mt, special rates will be worked out and paid for on the merits of each case.

In case of through rates of items like lintels, battens, shelves, bed-plates, beams, trusses, R.S. Joists, etc. the cost of hoisting is already included and is not payable over and above. Rates have been provided for different types of roofing-like first class mud-roofing, 2<sup>nd</sup> class mud-roofing, 3<sup>rd</sup> class mud-roofing, thatch roofing, rooting of cement concrete tiles, corrugated G.I. sheet roofing and asbestos sheet roofing. Effort has been made to include all ancillary items like gutters, ridges, rain water pipes, apron pieces for C.G. and cement asbestos sheet roofing. In case of cement asbestos rain water pipes, two rates have been provided-firstly for fixing the pipes on wall face and secondly for embedding the pipes in masonry work. The rates for cast iron pipes have been provided for fixing on wall face; if these are embedded in the masonry the labour rate will be reduced in the same proportion as cement asbestos rain water pipes.

Miscellaneous items have been provided like top and bottom khurras, khassi, parnalas, etc.

Provision has been made for ceiling of deodar and kail wood planking, dasuty cloth and hessian cloth ceiling, plywood ceiling, asbestos ceiling, celotex and treetex ceiling and plaster of paris ceiling. The rates for ceiling do not include cast of beading. separate rates for beading of different sections have been provided. The design of beading and framework may be different cases and therefore, it has been considered essential to separate out this item from the item of ceiling work.

The rates for followings new items has been introduced in CSR :-

- a) Corrugated sheets Reinforced by organic fibres and/or inorganic synthetic fibres cement .

- b) Extra for straight cutting, roofing accessories. & circular cutting in reinforced by organic fibres and/or inorganic synthetic fibres cement corrugated, semi corrugated sheets..
- c) Extra for providing and fixing wind ties of 40x 6 mm flat iron section Ridges and hips.
- d) Machine moulded aluminium covering of approved pattern & design for expansion joints.
- e) Un-plasticized Rigid PVC rain water pipes dia. 110mm, 160 mm & 200 mm..
- f) light weight calcium silicate false ceiling tiles 15 mm thick densified regular edged eco friendly.
- g) Wall paneling at all heights with integral densified calcium silicate panels/tiles.
- h) False ceiling with integral densified calcium silicate reinforced with fibre and natural filler, GRG (Glass Fibre Reinforced Gypsum) ceiling, Mineral fibre false ceiling of approved texture, design and pattern Anti-microbial false ceiling.
- i) Water proofing treatment of RCC Structure, roof, terraces, basements, retaining walls, water tanks, wet areas and injection grouting etc.

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## CHAPTER NO. 14-FLOORING AND DADOS

This chapter has been made very comprehensive to include every type of flooring which is required to be done these days. Terrazzo flooring has been broadly divided into two types-firstly terrazzo laid in-situ and secondly precast terrazzo tiles. Terrazzo work is then subdivided into four classes according to the use of ordinary or white cement and the pigments to be added to cement. In first category, ordinary cement without addition of any pigment is used. In second category, white cement manufactured in India is used instead of ordinary cement. In third category, such shades are provided as can be obtained by adding pigments to ordinary grey cement. In the fourth category are provided such shades of terrazzo which require addition of pigments like orange, buff, yellow to white cement. Pigments for blue or green terrazzo are even costlier and, therefore, these items have been further separated. All the rates of above categories are for the use of white marble chips. If marble chips of different colours are to be used, the rates have to be increased as coloured marble chips are costlier than the white chips. Similarly the rates for dados and skirting have been subdivided into various classes on the above consideration.

Rates for high-class flooring like marble tile flooring of various kinds (namely Doongri marble, Makarana marble, Pink marble, Black marble, Udaipur Green marble, Morwad marble, Kumari marble), Kotah stone flooring, Teak-wood flooring, Paraquet flooring, Vitrified tile flooring of various sizes and grades, Vitrified mat finish flooring, Full body vitrified tile flooring, Tactile tile flooring for visually impaired persons, Italian marble flooring, Matt finish granite flooring, Polished granite flooring, Flamed granite flooring, Factory machine made cement concrete interlocking paver blocks of different thicknesses from 60 mm to 100 mm., Glass mosaic flooring, Cement concrete flooring with hardner have also been provided. In addition to this rates for filling joints in vitrified tile flooring with epoxy grout has also been added.

The rates given in the schedule are for flooring on ground floor. For every additional storey, the rates may be increased as per note (iv) at the beginning of the chapter. For terrazzo work in-situ on columns, extra rate has been provided to cover the extra expenditure on laying and rubbing as per note (vii) at the beginning of the chapter. The note (v) regarding use of coarse sand in flooring work at the end of the chapter should be kept in view.

As now days the thickness of marble as available in market has been reduced from 15 mm-20 mm to 12 mm-15 mm, the rates for all items of marble has been modified in addition to earlier rates with marble of lesser thickness.

As per IRC- SP: 63, new items for providing & laying interlocking pavers of thicknesses 60, 80 & 100 mm. which are manufactured with block making machine equipped with steel mould and strong vibratory table fixed with table under hydraulic pressure has been introduced. The rates of laying of Dry Brick Ballast 40 mm gauge and of Dry Stone Ballast 40 mm gauge for flooring has also been added.

Use of rubber moulded interlocking pavers 50 mm & 60 mm thick has been restricted to non traffic areas having width upto 3.05 metre. Chequered tiles are to be used over footpaths.

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## CHAPTER NO. 15- PLASTERING & POINTING

**Plastering** – This item of work has been divided into three categories i.e. plastering on walls, plastering on floors and plastering on underside of ceiling. Plastering on floors is the easiest as it does not require any scaffolding. Moreover, there is no wastage of material and a mason can give comparatively more out-turn. The plastering on walls is more difficult than that on floors; scaffolding is required and there is wastage of material and the out-turn per mason becomes less as compared to plastering on floors. Plastering on the underside of the slabs or on ceiling is even more difficult. In this case the quantity of scaffolding required is much more than in case of plastering on walls; the wastage of material is also much more and the out-turn per mason is much less as compared to plastering on walls. Therefore separate rate have been provided for these different classes of work. In every class of work, rates have been provided for various thicknesses of plaster and various mortar mixes. Similarly provision for mud-plaster has been made separately for walls and floors.

The labour as well as through rates worked out under this chapter includes all labour for mixing of mortar, carriage to site of work, scaffolding charges including all types of sundries etc. labour and material, cost of water, tools and plants, preparation of surface for plastering, plastering operations and curing afterwards.

For plastering and pointing in each subsequent storey above the first storey, the labour as well as through rates of plaster and pointing shall be increased as per Item No. 15.84 for every additional storey.

The rates for plastering, pointing given are for superstructure up-to 4 metre height whether the first storey or the subsequent storeys. In case any single storey exceeds 4 metre height (as in case of overhead-reservoir and outer face of walls etc.), the labour as well as through rates of plaster and pointing shall be increased as per Item No. 15.85 for every additional height of 2 metre or part thereof. It is applicable in both cases internal as well as external.

For plastering and pointing the exterior walls of height more than Third storey from ground level for every additional height of single storey upto 4 metre or part thereof, for such situations the labour as well as through rates of plaster and pointing shall be increased as per Item No. 15.22. However in this case the additional rate payable as per Item No. 15.85 as stated above will not be applicable.

Unless otherwise stated the labour rates include the rehandling of materials within 100 metres. The rates include the cost of water, where the water is supplied free



of cost by department, the labour rates shall be reduced by 3% and through accordingly. In case of Plaster for wall and ceiling there is huge involvement of scaffolding and watering. To meet with these expenses, sundries have been provided @ 5% in this chapter.

The effect on account of Gaz. Notification No.S.O 94/C.A. 11/1948/Ss.3and 5/2012 dated 15-11-2012 Note 24 issued by Govt of Punjab Department of Labour has been taken into account while revising the through/labour rates for plastering and pointing outside building above 3 storeys.

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## CHAPTER NO. 16 –WHITE WASHING, DISTEMPERING, PAINTING & POLISHING

Painting work has been broadly classified according to the nature of surface to be painted-namely, woodwork, metallic surfaces and plastered or concrete surfaces. This has been done because each type of surface requires different treatment of different quality of paints. For wood-work ready mixed or synthetic enamel paints are to be used and the surface has to be properly treated for knotting and stopping. In case of metallic surface specially prepared paints which are suitable for metallic surface are to be used. The priming coat is also specially prepared for metallic surfaces. There are separately paints for roofing only which are called "roofing paints". In case of certain metallic surfaces like water tanks, anticorrosive bitumastic paints are to be used. For painting on plastered and concrete surfaces different varieties of paints are manufactured which are not affected by the chemical action of free lime in the cement. Special priming coats are also available to counteract such chemical actions. Special flooring paints are manufactured for painting floors and this item needs less labour than painting on walls etc. Separate rates have been provided for all these items of work. However, an important point to be noted is that synthetic enamel paint is suitable for all types of surfaces whether wooden, metallic, plastered or concrete. In this chapter Enamel Paints means the Enamel paints will be first quality paints manufactured by reputed firms like Nerolac, Asian, Berger or equivalent, approved by the Engineer-in-Charge. However the rates for painting with ordinary quality paint which exists earlier have been deleted from CSR as these has become obsolete and are not used these days.

**Aluminum primer-** According to the latest practice aluminum primer is used for priming coat on woodwork. This primer has excellent sealing qualities and has got better covering capacity than an ordinary priming paint. Use of this primer has, therefore, been adopted in the Schedule of Rates. This priming paint should be preferred over ordinary priming paints.

**Distemping** – Rates for distemping with dry distemper and oil bound distemper have been provided. Rates have been worked out based on superior quality distempers manufactured by standard firms like Shalimar, Jenson and Nicholson, British Paints, etc. The use of inferior distempers has been prohibited and they never give proper quality of lasting surface. The use of proper distempers may be insisted upon in the field while allowing these rates. The practice of mixing pigments and glue with chalk as substitute for distemper may be guarded against.

For filling of dents and imperfections and leveling on primed walls, wooden and metallic surface prior to application of subsequent coats provisions for Acrylic Wall Putty has been introduced in CSR. It is used for interior application only.

Polyurethane polish (PU) – PU is exterior wood finish which is specially formulated to have weather resistance, light fastness and non yellowing properties in all season. PU wood finish is a two component polyurethane wood finish that can be applied on solid wood veneer. It is available in glossy and matt finish.

The rates for white washing, distempering, painting and decorative cement based paints etc. upto 4 metre height whether the first storey or the subsequent storeys, in case any single storey exceeds 4 metre height (as in case of overhead-reservoir and outer face of walls etc.), the labour as well as through rates of white washing, distempering, painting and decorative cement based paints etc. shall be paid as per Item No. 16.72 for every additional height of 2 metre or part thereof. It is applicable in both cases internal as well as external.

The rates for external white washing, distempering, painting and decorative cement based paints etc. for the exterior walls of height more than Third storey from ground level for every additional height of single storey upto 4 metre or part thereof, for such situations the labour as well as through rates of white washing, distempering, painting and decorative cement based paints etc. shall be paid as per Item No. 16.77. However in this case the additional rate payable as per Item No. 16.72 as stated above will not be applicable.

For painting or priming coat on trusses of height above 5 metre, the labour as well as through rates shall be paid as per Item No. 16.71.

Unless otherwise stated the labour rates include the rehandling of materials within 100 metres. The rates given in item No. 16.48, 16.49, 16.50, 16.51, 16.54, 16.55, 16.56 & 16.57 are inclusive of printing & lettering. The labour rates given in this chapter include the cost of tools and plant, i.e. painting brush etc and scaffolding wherever required. The rates include the cost of water, where the water is supplied free of cost by department, the labour rates shall be reduced by 1% and through rates accordingly.

The effect on account as note no. 24 of Gaz. Notification No.S.O 94/C.A. 11/1948/Ss.3 and 5/2012 dated 15-11-2012 issued by Govt of Punjab Department of Labour has been taken into account while revising the through/labour rates for white washing, distempering, painting and decorative cement based paints etc. outside building above 3 storeys.

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## CHAPTER NO. 17-WOOD WORK AND ALUMINUM WORK

In this chapter rates have been provided for wood work wrought, planed and fixed in position for imported species of wood i.e. Imported Teak, Red Meranti, Kapur Sal in addition to conventional species of wood i.e. Deodar, Teak, Sal, Champ, Hollock etc. which were/are already used in the State. Provision has also been made for planking of different types of timber and of different thicknesses. The item on woodwork comprises of two type of work-firstly beams and battens which require only sawing to sizes, planning and fixing in position and secondly such items as roof trusses and built-in-fixtures which require making of joints. The rates for woodwork apply to such items of work as do not involve jointing and a suitable increase has been provided for works where jointing is involved.

Wooden boundary gates shall be paid at the rates of roof trusses.

**Doors and windows-** Rates have been provided for different types of doors and window in different thicknesses for woods as mentioned above. For doors and windows, through rate does not include the cost of fitting but includes the cost of fixing the same. These items have been omitted from the rate because in certain cases tower bolts, handles, etc., of brass or any other specific material are to be used. However, for estimating purposes, the cost for these items to be added to the rates has been worked out separately.

In case of through rates for chowkhats for doors and windows, it includes the cost of holdfasts, corners straps, brass hinges for the shutters and brass screws, chocks, stops and cords along with brass hinges for the chocks, but it does not include the cost of any other fittings like tower bolts, handles etc although it includes the cost of fixing the same. Charges for fixing tower bolts to wire gauze shutters of any species are included in the rate, but the cost and labour for fixing door springs is not included and has to be paid for separately.

Items as Mortise locks have been provided for such situations where either flush shutters or shutters already manufactured by some other agency are got fixed. The contractor is only to make the chowkhats along with holdfasts, etc., fix the same in position and also to fix the shutters along with the fittings supplied by the department. The through rate of the contractor, however, includes the cost of wood for chowkhats, holdfasts, iron/brass hinges, corner straps, cleats, stops, etc. The shutters and fittings like tower bolts, sliding bolts and handles shall be supplied free of cost by the department. For similar items of work for cupboards, the rates shall be reduced as the frame for cupboards will be of thinner sections and there will be saving on timber.

Separate labour rates have been provided for fixing mortice or rim locks or latches and for fixing helical door springs or double action spring hinges or sliding bolts.

**Glazing-** Two types of items for fixed glazing have been provided. In the first type, door or window chowkhats are made and fixed in position and a glazed shutter with styles and rails is then made and screwed into the rebate into the chowkhat. In the second type of fixed glazing, no shutter is made, but the glazing is fixed directly into the door or window chowkhat as the case may be. These two items should, therefore, be differentiated. The through rate, however, includes cost of timber, labour for making chowkhats and shutter where required, fixing the same, glazing, etc.

In certain cases the single door or a single window may be partly fixed and partly openable. In such cases the entire unit will be measured under the general item of glazed doors and windows, if the area of fixed glazing is less than 25% of the openable areas. If the area of fixed glazing exceeds 25% of openable area the two will be measured separately, the measurement in each case being up to the centre line of mullion.

**Frosted Glass Panes-** Where in case of glazed doors and windows of fixed glazing frosted glass panes are used instead of ordinary panes, the through rate shall be increased by Rs. 10 per sqm. of the actual area of frosted glass pane.

**Fixing Glass Panes-** Separate rate has been provided for fixing glass panes. This item can be useful in maintenance work for replacing the broken glass panes.

**Flush Doors-** The labour and through rates have also been provided for flush doors of different varieties from commercial facing to laminated facing factory manufactured solid flush doors. These rate has been provided for various thickness of flush shutters with elm or gurjan facing of both sides, elm or gurjan facing on one side and teak facing on the other side and teak facing on both the sides. The labour rates include the labour only for fixing pre manufactured flush doors and fixing of fittings.

In addition to above new provisions on through rates as well as labour rates basis has been provided in CSR for fixing Expanded metal fixed on chowkhats with moulding of 25 mm thick of different types of wood, Anodized Aluminum Mat Finish handles and tower bolts ISI marked of various size, Decorative high pressure laminated sheet 1mm (SF, 1 Star, 2 Star) thick, Decorative laminated sheet 0.72 mm thick & reverse side of adhesive bonding quality, Aluminum grill with U- type beading or clip rubber, Aluminum wire mesh, Aluminum composite panels (ACP) for external cladding or Facades of buildings, Insulation and Signage, Ball bearing hinges, Ward robe locks etc. Items for supply & installation of Suspended spider glazing system and Frameless

toughened glass, Curtain wall with Aluminum composite panel cladding, Semi-unitized curtain wall glazing system has also been provided in CSR.

The labour rates given in this chapter include the cost of tools & plants and scaffolding (Labour and Material) wherever required. Unless otherwise stated, the labour and through rates include all wastage of timber in sawing & cutting and sawing charges including carriage to & from saw mills. It also includes rehandling of materials within 100 metre.

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## CHAPTER NO. 18-STEEL AND IRON WORK

The items of steel work have been divided into two broad categories-firstly, steel work ordinary and second structural steel work. Ordinary steel work has been further subdivided into two classes-firstly work which is fixed independently without connecting plates like R.S. joists flats, tees, angles, etc. In the second category are taken items like hip and jack rafters, common rafters, purlins, etc. which are fixed with angle cleats and other connecting plates. In case of structural steel work, different items have been provided like roof trusses, plate girders, steel ladders, frame grill gratings, iron grated doors and stanchions. Trusses and girders have been divided into two categories: firstly trussed girders for any span for buildings and for 15 metres spans for bridges; and secondly plate or trussed girders of bridges from 15 to 30 metres span. In these items there may be little difference in fabrication, but hoisting becomes more and more difficult with the increase of span. Labour rate including the cost of hoisting has therefore, to vary with the span, so rent or machinery i.e. hydra cranes etc. involved has been also added in through as well as labour rates. No rates have been provided for bridge girders of span greater than 30 metres and in these cases special rates will be worked out and paid for depending upon the local conditions.

Rates for boundary gates shall be the same as for roof trusses.

**Built-up Girders and Stanchions-** This item has been split up into two parts, Items No.18.6 provides for built up girders or stanchions consisting of single joists or channel section while Item No. 18.7 applies to compound girders or compound stanchions built up from two or more R.S. joists or channels. Cost of fabrication and hoisting will be different in these two cases.

**Mild Steel reinforcement-** Labour and through rates have been provided for bending, binding, placing in position of mild steel reinforcement for R.C.C. work Item has been divided into two classes-(a) 20 mm dia bars and below (b) above 20 mm dia bars. Labour rate for bigger size bars have been reduced because the work involved in bending, binding and placing in position is less for bigger diameter bars weight for weight. The through rate is still lower because the bars of large diametres are cheaper than those of small diametres.

**Steel Windows-** Rates for the supply of steel windows have been provided according to the existing market rates. The rate decreases as the size of windows increases. In case of fixed steel windows, the rate is much less because no shutter is required. These rates are only for the purpose of estimating and analysis and not for actual purchase which will be made on the basis of actual tenders. This provision has

been made because there are quite a few manufactures in the market and their rates vary a little from each other. Labour rates have been provided separately for fixing steel windows. Fixing of glass panes is not included in the items of fixing steel windows as this item requires special metal sash, putty and therefore, special rate for supplying and fixing glass panes in steel windows have been provided.

***Rolling/Collapsible Steel Shutters*** – The items of supplying & fixing rolling/collapsible steel shutters are provided. Payment is to be made for the exact size of opening where rolling shutter is to be fixed.

***Pressed Steel Frames (Chowkhats)*** – Rates for supplying & fixing of pressed steel frames for doors & windows (single rebate & double rebate) of 18 guage (1.25 mm) thick steel sheet of the specified sections including iron lugs, iron hinges including bolts for fixing stops, lock-notch provision for receiving tower bolts, hydraulic spring are also provided.

Before making the payment the gauge, the size and the section of steel chowkhats (whether for single rebate or for double rebate including the sectional size) and the weight of steel chowkhats shall be recorded in the measurement book by the Sub Divisional Engineer/ Engineer-in-Charge to ensure conformity with the above stipulations regarding weight.

***Miscellaneous*** – The through rates are also provided for Japani sheet chowkhats of various thicknesses, Fixing galvanized iron sheet chowkhats, Steelwork using rectangular/square hollow mild steel pipe used in structural work such as sheds etc, Expandable fasteners of specified size with necessary plastic sleeves & galvanized M.S. screws, Stainless steel pipe & fitting, Safety signages, Grab bar of various types, Knobset made of stainless steel, Roofing/Wall cladding with PPGL sheets, Gutter 250 mm wide with PPGL sheet (pre painted galvalume steel).

The rates in this chapter are for both riveted as well as welded work and the cost of all rivets, bolts and nuts are included in the through rates. The labour rates include the cost of tools and plants, welding rods and scaffolding (labour and material) wherever required. The labour rates also cover the electrical and gas charges where welding work is done. The through rates in this chapter are for ISI marked steel. The increase for using integrated plant steel will be decided by the Competent Authority if directed to use it.

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## CHAPTER NO. 19- LINING

The chapter has been framed on the basis of corresponding chapter on lining in CSR-2010. The banks of canal are made up in layers which are compacted with rollers with optimum moisture content. To achieve greater compaction, the sections of the bank are kept more than the designed width. The extra width is removed later on and this item is termed as lip cutting. Separate rates have been provided for lip cutting, which includes all allowances like hardness, lead etc. Item of lip cutting has been further sub-divided in categories as per vertical depth of canal in 1.5m interval. After lip cutting dressing of bed and preparation of sub-grade is to be done for which separate rates have been provided for bed of side slopes. Items have been provided for double layer lining as well as single layer. Concrete lining in canal has been provided. Rates for concrete lining of canal for which concrete is prepared by automatic computerized batching and mixing plant is carried up to site in transit mixers, have been framed. This item has been sub-divided in two categories viz. laying of concrete with help of paver and manual laying.

Further this item has been sub-divided as per depth of channel viz.

- 1) 0m-3.5m vertical height
- 2) 3.5m-5.5m
- 3) 5.5m-7.5m and 7.5m & above.

The rates of carriage of Earth work with tipper & trolley in canal and drains have been separately worked out and provided in this chapter.

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## CHAPTER NO. 20- OUTLETS

The rate of this chapter on outlets has been framed on the basis of corresponding chapter in CSR-2010. The rates have been provided after including GST. All the items of work like earth work for new outlets & dismantling of old outlets has been provided in the rates. The various items have been split up to cover the different classes of work under different Local conditions. The rates for Constructing or dismantling the open Flume APM or OSM type outlet have been classified as per H The rates have been based on discharge of channel as the bank width varies with increase in discharge. Separate rates have provided for different types of adjustments which are required in masonry outlets and APM outlets. The adjustment of Y or B involves different operations & different rates have been provided for these. Again the rates will vary according to the H of the outlet. Separate rates for all these items/situations have, therefore been provided after detailed analysis.

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## **CHAPTER NO. 21-BRIDGES FOUNDATION AND SUB-STRUCTURE**

This chapter has been made very comprehensive to include every type of foundations and sub-structures for different types bridges to arrive a cost for inviting bids. The rates as worked up under this chapter are based upon MORT&H data book and specifications 5<sup>th</sup> revision. All rates under this chapter include 10% contractor profit on material component and 35% extra charges over labour and machinery component, which includes 25% overhead charges towards contractor's establishment, design charges and other petty expenditures and 10% as contractor profit. In addition to these, provisions for sundries charges @ 2% and 1% as labour cess has also been included in rates.

Rates for this chapter have been derived with PPC cement, however Rs: 20/- per bag may be added where OPC cement is to be used. Steel rates have been provided as per chapter No: 3 – Material rates of CSR 2020 for ISI brand steels and where provision for integrated plant steel is to be provided, additional rate will be decided by the Competent Authority . Rates for all RCC items have been devised as per MORT&H Data book which also includes the cost of admixture and nothing extra is payable over and above these rates. Rates for bitumen have been taken as on dated: 01.07.2020, any addition or subtraction from these rates may be carried out while preparing estimates. All rates for material include carriage upto 5.00 Km, further rates may be adjusted accordingly as per lead while calculating landing rates.

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## **CHAPTER NO. 22- BRIDGES-SUPERSTRUCTURE AND PROTECTION WORK**

This chapter has been made very comprehensive to include rates for superstructure for bridges and protection work for approaches to bridges and bridge structure. Rates for RCC anti crash railing and metal crash barrier has also been introduced in this chapter. The rates as worked up under this chapter are based upon MORT&H data book and specifications 5<sup>th</sup> revision. All rates under this chapter include 10% contractor profit on material component and 35% extra charges over labour and machinery component, which includes 25% overhead charges towards contractor's establishment, design charges and other petty expenditures and 10% as contractor profit. In addition to these, provisions for sundries charges @ 2% and 1% as labour cess has also been included in rates.

DAR for this chapter have been derived with PPC cement, however Rs: 20/- per bag may be added where OPC cement is to be used. Steel rates have been provided as per chapter No: 3 – Material rates of CSR 2020 for ISI brand steel and where provision for integrated plant steel is to be provided, additional rate will be decided by the Competent Authority. Rates for all RCC items have been devised as per MORT&H Data book which also includes the cost of admixture and nothing extra is payable over and above these rates. Rates for bitumen has been taken as on dated: 01.07.2020, any addition or subtraction from these rates may be carried out while preparing estimates. All rates for material include carriage up to 5.00 Km, further rates may be adjusted accordingly as per lead while calculating landing rates.

This chapter also includes rates for pre-cast and pre-tensioned girders which are being frequently used these days for longer spans and multi spanned bridge structures. These rates include cost for concrete, HT strands, wedges, pipe casing for strands, centering and shuttering, cost for transportation from casting yard to site of work and hydra cranes for lifting and placing girders.

All types of expansion joints and bearings for bridges are a proprietary item, the manufacturer must be approved by MORT&H and a written warranty for manufacturing defect for 15 years must be taken from the manufacturer before installation.

As new concepts and new technology is being devised for bridge construction during present era, rates for all such new components except the conventional one's as taken in this chapter are subject to the approval of the Chief Engineer.

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## CHAPTER NO. 23- RIVER AND CANAL PROTECTION WORKS

The rate of item No. 23.5 for making pilchhi, farash or sarkanda rolls has been taken excluding supply of materials. This item is only to be paid if pilchhi, farash and sarkanda is supplied in loose form according to item No. 23.1. When supply of this material is taken as compacted in rolls of required diameter and length, no payment over and above item No. 23.1 (b) shall be made. Item 23.8, 23.9 and 23.10 involves the use of pilchhi, farash and sarkanda made into rolls of six inches diameters and five feet long. These rates include the cost of making rolls of pilchhi, farash and sarkanda. No payment for making rolls shall be made over and above the rates of these items as given in the schedule.

The rate of item no. 23.22 for filling empty cement bags with sand or earth and sewing shall include the cost of E. C bags and strings. Sand bags shall be specified as a means of temporary protection only. Cost of earth/ sand and their lead rates are not included in these rates. The rates of filling of empty cement bags with sand or earth after sewing and laying in position (dry/ water) have been provided to lay these filled bags in position.(Item no. 23.26 for positioning in dry and 23.27 for positioning in water with maximum lead of 30 meters taken)

For the item no. 23.29, the size of weaving of wire crates has been taken 1.2 m x 1.2 m. In shallow reaches, size may be increased whereas in deep and inaccessible situations the same may be decreased. Actual size of wire crates used at the site of work shall be as specified by the Engineer-in-charge. The smaller the size of the crate, higher would be the cost of weaving as more MS annealed wire will be used. The crates shall be made from M.S. Annealed Wire No. 6 or 8 S.W.G (4.75 or 4.00 mm) including binding sides and partitions to make crates of the size 15 cm x 15 cm or 25 cm x 7.5 cm.

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## CHAPTER NO. 24 –ROAD WORK

The through & labour rates for laying and consolidation of soling (Granular Sub Base) and wearing course (with WBM & WMM specifications) are provided and they include cost of laying of stone metal, water charges, establishment/running charges of machinery i.e. road roller, mixing plant, motor grader & vibratory roller etc. The rates with different materials are worked out from approved quarries with an average lead of 5 kilometer to work site/plant, difference of quarry rates & bitumen rates with average rate as taken in CSR while driving item rate as on date of preparing estimate. The basic rates of bitumen of various grades as on date 01.07.2020 as issued by IOC/HPCL refineries have been taken. Deduction of suitable rebate by refinery may also to be applied if any. In case of carriage of bitumen, cost of round trip distance (RTD) of 20 kilometer is included in basic rates of bituminous items and beyond RTD of 20 kilometer, Lead beyond 20 km be taken as mentioned in the schedule. However, beyond RTD of 300 kilometer, flat rate @ Rs. 2/- per km./ MT of bitumen is payable.

Rates for surface dressing have been provided for first coat with bitumen VG-10 and prime coat with bitumen emulsion slow setting. The rates under this chapter have been worked out with continuous plant as well as with batch mix plant for all bituminous items of roads as per MORT&H specification (5<sup>th</sup> revision). Items of consolidation with lime treatment, dismantling of the road and restoring the road cut etc. are also added.

Rates for Concrete pavements with Dry Lean Concrete, Carpeting with Slip form paver with electronic sensor with OPC cement as well as cement with addition of Fly ash as per guide lines and as per Job Mix formula received from Research Laboratory, Pb. PWD B&R, Patiala has been introduced in this chapter.

For road signage and safety of road users, rates for all items of mandatory boards, informatory boards, advance direction board, cautionary boards, overhead & cantilever gantry boards as per IRC 67:2012 using retro reflective micro prismatic sheeting for different category of roads are added. Other road safety furniture items i.e. Bollards, Road Studs with double shank, Median Marker, Delineator, Solar Cat eye etc. has also been taken.

Rates for dismantling of existing bituminous crust with Cold Milling Machine, rates for Cast in situ & Precast Kerb & Channels, Road Furniture items like Kilometer Stone, 200 Meters Stone, Boundary Pillar, Making & Filling Expansion Joints with Polysulphide has also been introduced in this chapter.

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## **CHAPTER-NO.-25- MAINTENANCE OF CANALS & DRAINS**

The rate of clearance of Weed, Jalla, Booti, Sarkanda etc. of lined/unlined channels manually is incorporated in this Chapter No. 25 for the maintenance of the channels. The rate varies according to the discharge of the channel. More the discharge, higher is the rate. Similarly, this rate also depends on the growth of weed, jalla, booti, sarkanda, etc. The rate increases as the growth varies from light to medium and then to heavy.

In the item no. 25.3, the clearance of the drains is to be done manually on the basis of the condition of the drain (Wet and Dry) as well as on the basis of discharge of the drain.

Separate rate of mechanical clearance is also added in the item no. 25.7 (a), (b) and 25.8. In item no 25.7(a, b) , the rate proportionate to the width of the bed of the drain has been calculated and included accordingly.

The rates of clearance of drain (manual or mechanical) includes proper disposal of the weed, jalla, sarkanda, booti, etc. on the outer slopes of the embankments.

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## CHAPTER NO. 26- MISCELLANEOUS

In this chapter rates have been provided for such items as are of miscellaneous nature and cannot be grouped under any other chapter. One of the important items is cutting of trees and removal thereof from Government land. The rate for this item depends upon the girth of the tree which is to be measured 1.25 metres above ground level. If the stumps are also to be grubbed in addition to felling of tree, the rates are to be doubled in case of plains schedule and multiplied by 2.5 in case of hill schedule. The trees and stumps which are got cut and removed will be the property of Government and a note to this effect has been given in this chapter. Although these rates have been given, it is suggested that cutting and removing of trees should not normally be done through contractors. Such trees should be sold by auction and the purchase price should include the purchasers liability to get the trees cut and grubbed and to remove them from Government land. However, where it is not considered feasible to do so the trees may be got cut on contract basis but the timber thus obtained will remain the property of Government.

**Jungle Clearance-** Two types of rates have been provided for jungle clearance- firstly for new areas acquired for the construction of roads, buildings, new canals or extension of channels. The rates for these items vary depending upon the intensity of the jungle. The actual rates are to be fixed by the Executive Engineer according to local conditions and the amount of work involved. Separate rates have been provided for jungle clearance along the running canals, branches, distributaries and minors depending upon the discharge of the channel. This jungle clearance normally involves cutting away of bushes and other wild growth on the canal banks or boundary roads. Since it is not possible to assess the exact rate for jungle clearance very correctly, it has been specified that the item of jungle clearance should be got done through departmental labour and the rates provided in the Schedule may be utilized for estimating purpose only.

**Water allowance-** Provision has been made for water allowance for concrete, bricks and stone masonry, plastering, pointing, flooring, etc., depending upon the lead from which water is actually brought. These rates are only for extraordinary water arrangements. For ordinary and normal water arrangements the cost is included in the respective items of the CSR. These additional rates are payable in case of plains when water is not available locally and fixing of hand pumps at the site of work is neither feasible nor practically possible due to small amount of works or due to depth of spring level and where water is actually carried by carts or by mechanical transport from a lead



greater than half a kilometre. In case of hilly areas water allowance is payable only where water cannot be brought by gravity in kuhls from a reasonable distance and where it is not available locally within one furlong of the site of work and where water is actually to be carried by manual labour or by mechanical transport from a distance exceeding one furlong.

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## CHAPTER NO. 27- QUANTITIES OF MATERIALS

The detailed analysis of rates for the entire Common Schedule have been printed separately for the use of departmental officers and the quantities of materials required for each item have been indicated therein. However, important items which are very common in practice have been given in this chapter for ready reference and for preparing the consumption statement on the completion of works. Consumption of materials for such items which have not been given in this chapter can be obtained from the analysis of rates.

While working out the quantity of sand required for various items of work, 15% wastage has been allowed as sand normally gets wasted partially due to getting mixed with soil and partially due to blowing away with the wind.

These consumption factors are for average conditions and are for the purposes of estimates and for preparing consumption accounts. However, in actual practice variation up to 5% above or below can take place due to different grading of materials, tolerances in sizes of materials and due to greater or lesser wastage in handling and construction. It is, therefore, recommended that variations to this extent may not be taken serious notice of nothing extra is payable on excess consumption/wastage of the materials than taken in this chapter.

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## CHAPTER NO. 28 – WATER SUPPLY

The cost of items taken in this chapter involves cost of material (predominately) and labour component (small as compared to cost of material). The material rates taken in this chapter have been taken from Chapter 1,2,3,4,5,6,11,15 and 16 of this CSR. The other rates for material and pipes have been obtained from market rates and/or Wholesale Price Index for 2020, published by Ministry of Commerce (Department for Promotion of Industry and internal Trade), Govt. of India. The labour rates have been taken from Chapter 1 of this CSR. Daily wages of labour which are prevailing rates as notified by State Govt. Department of Labour under the Minimum Wages Act w.e.f. 01.09.2019.

The market rates thus obtained have been compared to WPI to enforce economy and rationality while determining the rates.

The rates of D.I. pipes and specials incorporated in this chapter are based on recommendations of Punjab Water Supply and Sewerage Board (PWSSB), as PWSSB is the major used of D.I. pipes and specials as compared to DWSS.

Efforts have been made to balance all elements like economy, market rates, least cost to government, and market conditions.

These rates are inclusive of GST, contractor's profit, labour welfare cess etc. and all the other applicable taxes, whatsoever.

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## **CHAPTER NO. 29 – Sewerage & Drainage**

The cost of items taken in this chapter involves cost of material and labour component. Some rates required to form the rates of items in this chapter have been taken from Chapter 1,2,3,4,5,6,9,10,11,15,16 and 18 of this CSR. The other rates for materials and pipes have been obtained from market rates. The labour rates have been taken from Chapter 1 of this CSR. Daily wages of labour which are prevailing rates as notified by State Govt. Department of Labour under the Minimum Wages Act w.e.f. 01.09.2019.

The market rates thus obtained have been compared to WPI to enforce economy and rationality while determining the rates.

The rates incorporated in this chapter are based on recommendations of Punjab Water Supply and Sewerage Board (PWSSB), as PWSSB mostly use Sewerage and Drainage items for execution of works.

Efforts have been made to balance all elements like economy, market rates, least cost to government, and market conditions.

These rates are inclusive of GST, contractor's profit, labour welfare cess etc. and all the other applicable taxes, whatsoever.

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## CHAPTER NO. 30 – SANITARY INSTALLATIONS

Provision has been made for sanitary fittings of good Indian manufacturer like Bombay Potteries and Parry's. Sanitary fittings of other equally good Indian manufactures may be used, if approved by the Engineer-in-charge. In this connection the Superintending Engineer will circulate from time to time the list of fittings of good Indian manufactures which may be considered to be on the approved list and which may be allowed to be used on works. Separate rates have been provided for different types of fittings, pipes and specials for different sizes.

Provision has been made for CP fittings of good Indian manufacturer like Asian Paints, Jaquar and Parry's. Sanitary fittings of other equally good Indian manufactures may be used, if approved by the Engineer-in-charge. In this connection the Superintending Engineer will circulate from time to time the list of fittings of good Indian manufactures which may be considered from the approved list and which may be allowed to be used on works. Separate rates have been provided for different types of fittings, pipes and specials of different sizes.

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## CHAPTER NO. 31- MAINTENANCE OF BUILDING AND FURNITURE

In this chapter various items have been provided for repair work in building which are not covered in other chapters. Mainly items include plaster work in patches, fixing of new chowkhats in existing openings, making required size opening in existing brick wall, renewing glass panes in place of existing glass panes and regrading of tile terracing etc. In these items labour component involved is much higher than the normal works.

Rates for spirit polishing of items like tables, side boards, almirahs, book-shelves etc. have been based on superficial of top or front elevation. These items can vary considerably in sizes and therefore, rates have to be provided according to the area. Whereas other items like chairs, peg tables, cane sofas, hat and coat stands, etc., where there is no variation in the surface area involved. For caning work, rates have been provided only for local Bareilly cane. Singapore cane is not available in market and therefore, this item has not been provided for. A substitute for cane has been prepared from plastic. Rates for this item have also been provided under head "Re-caning with artificial (plastic) cane" Rates for polishing and re-caning of seats etc. have been provided on the basis of through rates as the cost of material is approximately small as compared to labour involved. In case of upholstering or recovering of sofas and sofa chairs, both labour and through rates have been given but the through rates do not include the cost of cloth which has to be purchased and supplied by the department as a number of varieties of cloth are available in the market and it is not suitable to specify any one of them in the Schedule of Rates.

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## CHAPTER NO. 32 – HORTICULTURE

In this chapter rates have been provided for Turfing Slopes, Planting Hedges, Landscaping and Horticulture work in buildings and roads. Provision has been made for developing all types of softscape features and associated hardscape elements not covered in any other chapter.

**Cost of irrigation water** - Cost of irrigation water has not been included in any item as water is generally available in most of the buildings. Separate item of irrigation with tractor tanker has been included, which can be added wherever water source is not available on site. Number of irrigations and quantity of water shall be worked out according to season, soil type, size and type of plants. However, cost of labour for watering the plants has been included in all items.

**Digging of pits** – Rate for digging of pits has been provided by volume of pit instead of earlier practice of number of pits of fixed size. Pit size has not been specified for trees, shrubs and specimen plants and shall be decided by the Engineer-in-charge as per specification, soil type and other site conditions.

Plant nurseries are being maintained by Horticulture wings of many departments and manufacture estimates are usually made of production of ornamental plants. Keeping in view this requirement, rates have been provided for different types of potting mixtures, polybags and pots for nurseries.

**Plant species and varieties** – Selection of plant species and varieties shall be at the discretion of Engineer-in-charge as per site conditions, design and availability of plants. General size of plants has been specified for trees and shrubs and rate may be reduced in case plants of specified size are not available and smaller size plants are planted.

**Site clearance** – Rates have been provided for different types of site clearance and must be included in every plantation work, where site has construction debris or other irregularities which can affect plant growth. Objective shall be to provide optimum soil conditions for initial plant growth. Good quality clean top soil must be ensured for a minimum depth of 15 cm.

**Grassing** – Provision of Farm Yard Manure has been excluded from the grassing items as it encourages weed growth. However, if sufficient time is available for development of lawn by repeated irrigation and removal of weeds, Farm Yard Manure may be added as per requirement of site. Rate for chemical fertilizers has been included. Rates for rough grassing for road berms and other low maintenance areas have been provided. Separate rates have been provided for large areas of active use like playgrounds. Rates for fine grassing include planting of roots at different spacings

as well as planting of ready turf and the relevant item may be selected according to site conditions and nature of work.

**Tree guards** – Tree guards are generally required for protecting trees planted along roads and are major component of total cost. Rates for different types of tree guards has been provided to suit different conditions. Rates have also been provided for repair and reuse of steel tree guards. After the trees have grown a sufficiently rigid trunk, the tree guards can be removed and reused for new plantation thus saving tree trunks from physical damage by tree guards and saving expenditure on procurement of new tree guards.

**Irrigation systems** – Rates for drip irrigation, sprinkler irrigation and rain gun systems have been provided for optimum use of water and reduction in labour cost for irrigation. The rates include all accessories required for installation of irrigation systems above the basic pipe network. The rates for basic pipe network are available in the chapters on Public Health and relevant items can be used from that chapter.

**Artificial grass** – Rates have been provided for different types of artificial grass which can be used indoor or at the locations with no direct sunlight available for growth of natural grass. The rates are inclusive of all accessories and materials required for installation of artificial grass and nothing extra shall be paid.

**Vertical garden** – Rates have been provided for installation of outdoor and indoor vertical gardens where ground space is not available for regular plantation but it is desirable to create greenery for environmental and aesthetic functions.

**Roof garden** – The rates for developing green roof have been provided for use in green buildings as required under ECBC. The rates do not include waterproofing, insulation or protection layer of the roof deck which are available in roofing chapter, however, rates for root barrier has been included which must be installed in all types of green roofs. Separate rates for base layers, up to planting media have been provided for extensive and semi-intensive green roofs and intensive green roofs. Rates for planting media have been provided by volume since depth of media may vary depending on design objectives.

**Maintenance of Horticulture works:** Every item of actual planting like shrub, lawn, ground cover, pot plants, vertical garden etc. has a corresponding separate item for its maintenance for one year. However, for maintenance of trees, rates are provided according to age of tree. Maintenance of roof gardens shall be done as per rates provided for maintenance of various plant types and lawn.

Rates of good earth, farm yard manure, dry bamboo, stone, brick tiles and steel items like tree guards have been calculated with carriage lead of 5 kilometre. In case of



items used from other chapters in analyzing the rates e.g. excavation of earth, etc. leads and lifts are as per relevant chapter. In case longer lead and lift is involved in the execution of these items, additional rate shall be paid accordingly. Rates of all other items are inclusive of carriage to the site of work.

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## CHAPTER NO. 33 GREEN BUILDINGS

It is the need of the hour to adopt sustainable, energy efficient and new emerging green & clean technologies in construction to create sustainable built environment. As such, Punjab Energy Conservation Building Code (PECBC) has been notified by Government of Punjab. It has become imperative to include items pertaining to Energy Efficient Materials in Punjab Common Schedule of Rates (CSR) for its implementation. Though, new emerging technologies such as pre-cast concrete tiles, hollow concrete blocks, solid concrete blocks etc are already in use, but many new materials have come up over the past few years and are being used over the conventional building materials.

Rate analysis for various building insulation materials such as PUF (Polyurethane foam) Spray, PUF (Polyurethane foam) Slab, Extruded Polystyrene (XPS), items pertaining to Cool Roofs such as Heat Reflective Paint, Heat Resistant Tile etc., items pertaining to Glazing and UPVC Doors & Windows have been taken. Nothing extra shall be payable on account of carriage of materials as these are specific items and carriage is already included in the item rates. Although, this chapter has been framed to implement ECBC code which implies to building complexes having:-

- Connected load of 100 KW or greater or a contract demand of 120 KVA or greater.
- Conditioned area of 500 m<sup>2</sup> or more.

However, the items as framed may also be used as per the site requirement in all other buildings as per approval of the competent authority.

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## CHAPTER NO. 34 – ELECTRICAL

The rates in this chapter have been based on the new revised schedule of rates- 2020 and are in conformity with the revised general specifications - 2018. The detailed analysis of rates for various items have been prepared on the basis of current market rates. The price of various materials have been taken in the analysis of rates based on the lowest quotations /price list rates. The manufacturer's with minimum required standards / specifications have been considered. Quotation /price list rates for such items of Indian manufacturers which do not meet with minimum required specifications or which have been found defective as a result of practical experience have been ignored.

In the case of recessed/ surface wiring, the wiring items in three categories such as with heavy gauge welded conduit pipe, HDPE & PVC pipe with flame retardant copper wire and Modular /Flush piano type accessories are taken.

While working out the composite rates for various points in case of wiring items, the following lengths of wiring have been taken into account: -

### 1. In case of Recessed welded conduit pipe, HDPE & PVC pipe:-

- |                                                                                                                                                                                                                                                 |             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| (a) Light, Fan or Call-bell point with single control                                                                                                                                                                                           | 5.00 metre  |
| (b) 5-Pin, 6 Amp. wall socket point                                                                                                                                                                                                             | 2.50 metre  |
| (c) 5-Pin, 6 Amp. plug control comprising wall socket point                                                                                                                                                                                     | 0.45 metre  |
| (d) Light point without control (This shall apply where two lights are provided which are operated with one switch only. One of these points shall be paid for as light point with single control and the other as light point without control) | 2.50 metre  |
| (e) Light point with double control (This shall apply in case of light point for stairs or at entrance of hall where one light is to be controlled by two switches in opposite directions)                                                      | 10.00 metre |

### 2. In case of Surface welded conduit pipe & PVC pipe:-

- |                                                                                                                                                                               |            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| (a) Light, Fan or Call-bell point with single control                                                                                                                         | 5.00 metre |
| (b) 5-Pin, 6 Amp. wall socket point                                                                                                                                           | 2.50 metre |
| (c) 5-Pin, 6 Amp. plug control comprising wall socket point                                                                                                                   | 0.45 metre |
| (d) Light point without control (This shall apply where two lights are provided which are operated with one switch only. One of these points shall be paid for as light point | 2.50 metre |

with single control and the other as light point without control)

- (e) Light point with double control (This shall apply in case of 7.00 metre light point for stairs or at entrance halls where one light is to be controlled by two switches in opposite directions)

The lengths of wiring mentioned above apply to old buildings and new buildings, in plains as well as hills, irrespective of type of construction, height of roof and local conditions. Any variations in these items shall be reflected in premium/abatement over the CSR rates.

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## CHAPTER NO. 1

### DAILY WAGES

#### Notes :-

- (i) The wages given below have been adopted for analysing the rates of various items of works.
- (ii) The payment to the labour on daily wages will be paid as per rate fixed by the Labour Department Govt. of Punjab, from time to time.
- (iii) The Chief Engineer of a branch shall have full powers to authorise any increase in the labour wages for departmental work for any length of time in any particular locality.
- (iv) These rates are exclusive of GST, labour cess, contractor's profit and overhead expenses but inclusive of weekly rest.
- (v) The labour rates taken in this chapter are on the basis of minimum wages in Punjab fixed by Labour Department, Government of Punjab as per notification of Labour Deptt. Punjab Letter No. ST/27067 dt. 04-11-2019.
- (vi) The rates of skilled & semi-skilled labour are inclusive of all necessary tools which are normally carried by them according to trade practice in the locality.

Sr. No.	Description	Unit	As on 01.09.2019
1	2	3	4
L.1	Air-Conditioner/Refrigerator Mechanic	Per Day	442.25
L.2	Bajri Spreader (Tarring Work)	Per Day	402.55
L.3	Bar Bender	Per Day	442.25
L.4	Bhisti	Per Day	338.05
L.5	Blacksmith (1st Class)	Per Day	442.25
L.6	Blacksmith (2nd Class)	Per Day	402.55
L.7	Blaster	Per Day	338.05
L.8	Boatman	Per Day	368.05
L.9	Breaker (Hole driller)	Per Day	338.05
L.10	Mason (1st Class)	Per Day	442.25
L.11	Mason (2nd Class)	Per Day	402.55
L.12	Bucketman (Tarring work)	Per Day	368.05
L.13	Carpenter (1st Class)	Per Day	442.25
L.14	Carpenter (2nd Class)	Per Day	402.55
L.15	Driver (L.M.V)	Per Day	402.55
L.16	Driver (H.M.V)	Per Day	442.25
L.17	Diver	Per Day	442.25
L.18	Electrician	Per Day	442.25
L.19	Electrical/Mechanical/Chargeman	Per Day	442.25

Sr. No.	Description	Unit	As on 01.09.2019
1	2	3	4
L.20	Fitter,Turner and Pipe Fitter (1st Class)	Per Day	442.25
L.21	Fitter,Turner and Pipe Fitter (2nd Class)	Per Day	402.55
L.22	Fitter Helper	Per Day	338.05
L.23	Floor Polisher	Per Day	368.05
L.24	Glazier (Glassman)/Grinder (for rubbing)/Guttiman	Per Day	368.05
L.25	Hammer Man	Per Day	368.05
L.26	Handle Man (Tarring work)	Per Day	338.05
L.27	Lineman (1st Class)	Per Day	442.25
L.28	Lineman (2nd Class)	Per Day	402.25
L.29	Mate/Supervisor	Per Day	368.05
L.30	Mason for plaster of paris work (1st Class)	Per Day	442.25
L.31	Mazdoor (Skilled) (Upper)	Per Day	402.55
L.32	Mazdoor (Skilled) (Lower)/Mali	Per Day	368.05
L.33	Mazdoor (Semi Skilled) (Upper)	Per Day	368.05
L.34	Mazdoor (Semi Skilled) (Lower)/Dresser	Per Day	338.05
L.35	Mazdoor (Un-Skilled)/Chowkidar/Cleaner	Per Day	338.05
L.36	H. Skilled Worker ( Upper)	Per Day	402.55
L.37	H. Skilled Worker ( Lower)/Welder	Per Day	368.05
L.38	Mazdoor (Woman)	Per Day	338.05
L.39	Operator	Per Day	402.55
L.40	Painter (1st Class)	Per Day	442.25
L.41	Painter (2nd Class)	Per Day	402.55
L.42	Para Medical Personnal	Per Day	442.25
L.43	Plumber (1st Class)	Per Day	442.25
L.44	Plumber (2nd Class)	Per Day	368.05
L.45	Sprayer (for Tar, Bitumen, etc.)	Per Day	402.55
L.46	Stone Chisler with Cutter (1st Class)	Per Day	402.55
L.47	Sewerman	Per Day	368.05
L.48	Well Sinker	Per Day	442.25
L.49	White Washer (1st Class)	Per Day	402.55
L.50	White Washer (2nd Class)	Per Day	368.05

CHAPTER NO. 2					
HIRE CHARGES OF MACHINERY					
<b>Notes :-</b>					
(i)	These rates are based on Hire Charges of Machinery taken in MORT&H Data Book 2001-02. Present day rates have been derived by using Linking Factor for WPI to arrive at year 2011-12 and further by enhancing these rates as per Whole Sale Price Index for 2020 issued by Govt. of India, Ministry of Commerce & Industry Department for Promotion of Industry and Internal Trade, Office of				
(ii)	The rates include all operational and maintenance charges such as cost of fuels, lubricants, stores, establishment, depreciation and interest charges. In case the machinery is provided by the department, the working cost as mentioned below shall be recovered from the contractor.				
(ii)	These rates are for analysing the rates of various items for works and not for hiring of private machinery from the market for which competitive tenders/quotations shall be called and approval of the appropriate competent authority shall be obtained.				
(iv)	The outputs mentioned for the construction equipments are for the compacted quantities of the relevant items and not for loose quantities.				
(v)	These Rates are exclusive of contractor's profit, labour cess and GST.				
Sl. No.	Description	Activity	Output/Capacity	Unit	Rates (in Rs.)
1	2	3	4	5	6
2.1	Air Compressor	General	170/250 cfm	hour	323.42
2.2	Air compressor with pneumatic chisel attachment for cutting hard clay.	Dismantling of Concrete	--	hour	685.57
2.3	Batching and Mixing Plant 30 cum capacity	Concrete Mixing	20 cum/hour	hour	2260.80
2.4	Batching and Mixing Plant 15 - 20 cum capacity	Concrete Mixing	13 cum/hour	hour	1884.00
2.5	Bitumen Pressure Distributor	Bitumen Spraying	Prime Coat and Tack Coat = 1750 sqm/hour Surface Dressing and Seal Coat type A = 400 sqm/hour	hour	1086.44
2.6	Bitumen Boiler oil fired	Bitumen Heating	1500 litre capacity	hour	200.96
2.7	Concrete Paver Finisher with 40 HP Motor	Concrete Paving	20 cum/hour	hour	2904.50
2.8	Concrete Pump of 45 & 30 cum capacity	Concrete Pumping	33 / 22 cum/hour	hour	259.05
2.9	Concrete Bucket	Concrete Pouring	cum	hour	15.70

Sl. No.	Description	Activity	Output/Capacity	Unit	Rates (in Rs.)
1	2	3	4	5	6
2.10	Concrete Mixer 0.4/0.28 cum	Concrete Mixing	2.5 cum/hour	hour	235.50
2.11	Batch Type Concrete mixer as per IS: 1791	Concrete Mixing	2.5 cum/hour	hour	600.00
2.12	Crane 80 tonnes	Lifting Purpose	80 tonnes capacity	hour	1295.25
2.13	Cranes 35 tonnes	Lifting Purpose	35 tonnes capacity	hour	863.50
2.14	Cranes 3 tonnes	Lifting Purpose	3 tonnes capacity	hour	361.10
2.15	Cranes with grab bucket 0.75 cum capacity	Well Sinking	0.75 cum capacity	hour	994.33
2.16	Dozer D - 80 - A 12	Spreading /Cutting / Clearing	300/ 150/250 cum/hour	hour	3768.00
2.17	Dozer D - 50 - A 15	Spreading /Cutting / Clearing	200/ 120/150 cum/hour	hour	2234.11
2.18	Emulsion Pressure Distributor	Bitumen Spraying	1750 sqm/hour	hour	810.12
2.19	Front End loader 1 cum bucket capacity	Soil loading / Aggregate loading	60 /25 cum/hour	hour	816.40
2.20	Generator 250 KVA	Generation of electric Energy	200 KVA	hour	1766.25
2.21	Generator 125 KVA	Generation of electric Energy	100 KVA	hour	883.13
2.22	Generator 100 KVA	Generation of electric Energy	80 KVA	hour	706.50
2.23	Generator 63 KVA	Generation of electric Energy	50 KVA	hour	541.65
2.24	Generator 33 KVA	Generation of electric Energy	25 KVA	hour	376.80
2.25	GSB Plant 50 cum	Producing GSB	40 cum /hour	hour	1051.90
2.26	Grouting Pump with Agitator	Grouting	--	hour	108.85
2.27	Batch Type Hot Mix Plant - 120 TPH capacity	DBM/BM/SDC/ Premix	40 cum /hour	hour	23707.00
2.28	Continuous type Hotmix Plant - 100 TPH capacity	DBM/BM/SDC/ Premix	30 cum/hour	hour	17532.19



Sl. No.	Description	Activity	Output/Capacity	Unit	Rates (in Rs.)
1	2	3	4	5	6
2.29	Continuous type Hotmix Plant - 60 to 90 TPH capacity	DBM/BM/SDC/ Premix	25 cum/hour	hour	14020.10
2.30	Continuous type Hotmix Plant - 40 to 60 TPH capacity	DBM/BM/SDC/ Premix	17 cum/hour	hour	11225.50
2.31	Hydraulic Chip Spreader	Chip Spreading	1500 sqm/hour	hour	2669.00
2.32	Hydraulic Excavator of 1 cum bucket	Excavation	60 cum/hour	hour	1318.80
2.33	Integrated Stone Crusher 100THP	Crushing of Spalls	100 TPH	hour	8776.30
2.34	Integrated Stone Crusher 200 HP	Crushing of Spalls	200 TPH	hour	18463.20
2.35	Kerb Casting Machine	Kerb Making	80 m/hour	hour	314.00
2.36	Mastic Cooker	Preparation of Mastic Asphalt	1 tonnes capacity	hour	62.80
2.37	Mechanical Broom Hydraulic	Surface Cleaning	1250 sqm/hour	hour	361.10
2.38	Motor Grader 3.35 mtr blade	Clearing /Spreading /GSB /WBM	200/200/50/50 cum/hour	hour	2425.65
2.39	Mobile slurry seal equipment	Mixing and laying slurry seal	2700 sqm/hour	hour	1020.50
2.40	Needle Vibrator	Compaction of Concrete	8 cum/hour	hour	47.10
2.41	Paver Finisher Hydrostatic with sensor control 100 TPH	Paving of DBM/ BM/SDBC/ Premix	25 cum/hour	hour	2708.25
2.42	Paver Finisher Mechanical 100 TPH	Paving of WMM /Paving of DLC/	34/34/15 cum/hour	hour	987.53
2.43	Piling Rig with Bantonite Pump	Piling Work	2 to 3 m/hour	hour	5534.25
2.44	Pneumatic Road Roller	Rolling of Asphalt Surface	25 cum/hour	hour	1259.14
2.45	Pneumatic Sinking Plant	Pneumatic Sinking of wells	1.5 to 2.00 cum/hour	hour	4223.30
2.46	Pot Hole Repair Machine	Repair of potholes	4 cum/hour	hour	918.45
2.47	Pre-stressing Jack with Pump & access	Stressing of steel wires/stands	--	hour	130.31
2.48	Plate compactor	Compaction of Earth	20 cum/hour	hour	94.20
2.49	Plate Vibrator	Compaction of Concrete	8 cum/hour	hour	47.10
2.50	Ripper	Scarifying	60 cum/hour	hour	28.26
2.51	Rotavator	Mixing	25 cum/hour	hour	17.27
2.52	Road marking machine	Road marking	18.75 sqm/hour	hour	94.20

Sl. No.	Description	Activity	Output/Capacity	Unit	Rates (in Rs.)
1	2	3	4	5	6
2.53	Smooth Wheeled Roller 8 tonne	Soil Compaction /BM Compaction/WBM	70/12/8 to 10 cum/hour	hour	314.00
2.54	Screed Vibrator	Compaction of Concrete	8 cum/hour	hour	47.10
2.55	Tandem Road Roller	Rolling of Asphalt Surface	25 cum/hour	hour	1158.66
2.56	Tipper - 5 cum	Transportation of soil, GSB, WMM,	5.5 cum capacity	km	314.00
2.57	Transit Mixer 4.0/4.5 cum	Transportation of Concrete Mix to site	4.5 cum/hour	hour	942.00
2.58	Transit Mixer 3.0 cum	Transportation of Concrete Mix to site	3 cum/hour	hour	863.50
2.59	Tractor with or without trolley	Pulling or transportation	--	hour	261.66
2.60	Tractor with Rotavator	Mixing	25 cum/hour	hour	261.66
2.61	Tractor with Ripper	Scarifying	60 cum/hour	hour	261.66
2.62	Truck 5.5 cum per 10 tonnes	Material Transport	5.50 cum capacity	km	22.77
2.63	Truck 5.5 cum per 10 tonnes	Material Transport	5.50 cum capacity	hour	292.02
2.64	Truck Trailor 30 tonne capacity	Transportation	30 tonnes capacity	hour	785.00
2.65	Vibratory Roller 8 tonne	Earth or soil / GSB / WBM	100/60/60/25 cum/hour	hour	1151.33
2.66	Vacuum Pump with mat & Power Floater	Finishing of Concrete Pavements	6.25 sqm/hour	hour	422.33
2.67	Water Tanker for General work	Water Transport	6 kl capacity	hour	146.95
2.68	Water Tanker for Road work	Water Transport	6 kl capacity	km	261.66
2.69	Wet Mix Plant 100 TPH	Mixing of Wet Mix Macadam	40 cum /hour	hour	2033.15
2.70	Wet Mix Plant 60 TPH	Mixing of Wet Mix Macadam	25 cum/hour	hour	1219.89
2.71	Dragline				
	1 Cu yd Capacity	Excavation of earth work (undressed)	i) 68 cum/hour (dry) ii) 57 cum/hour (wet)	hour	2943.22
	0.75 Cu yd Capacity	Excavation of earth work (undressed)	i) 37 cum/hour (dry) ii) 31 cum/hour (wet)	hour	22.86

### CHAPTER NO. 3

#### MATERIALS

**Notes :-**

- (i) The Rates given below have been adopted for analysing the rates of various items of works and not for obtaining supplies from market.
- (ii) These rates are inclusive of GST & other taxes as applicable but exclusive of contractor's profit and labour cess.
- (iii) All the rates in this chapter are for materials at the source of supply and inclusive of cost of any cases/ drums/containers or any type of bags etc. except where specified otherwise.
- (iv) Supplies from market shall be obtained after calling tenders or quotations, as these rates are for estimation purpose only.
- (v) While making measurements for payment purposes, suitable deduction shall be made for voids to account for loose stacking of aggregates/boulders as stipulated in the relevant specification.
- (vi) The rates of all aggregates include loading charges except for sand, natural bed material and boulders. The loading of sand, natural bed material and boulders shall be paid as per Chapter-4 of CSR.

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
M-1	Aggregates (average rate of all the quarries) Note:- Quarry wise aggregates rates attached at Annexure-I)										
(a)	Stone Metal Hand Broken/Crushed, Crushed Bajri										
	(i)	90mm to 40mm nominal size.	Cum	2517	516.08		5%				541.88
	(ii)	Gravel 75mm to 25mm	Cum	2517	509.27		5%				534.73

Sr. No.	Description	Unit	HSN CODE	Rate	GST					Rates i/c GST.
					0%	5%	12%	18%	28%	
	(iii) 63mm to 45mm nominal size	Cum	2517	517.14		5%				543.00
	(iv) 53mm to 22.4mm nominal size	Cum	2517	512.64		5%				538.27
	(v) 40 mm nominal size	Cum	2517	487.25		5%				511.61
	(vi) 25 mm nominal size	Cum	2517	496.40		5%				521.22
	(vii) 20 mm nominal size	Cum	2517	496.40		5%				521.22
	(viii) 12mm to 13.2mm nominal size	Cum	2517	545.48		5%				572.75
	(ix) 10mm to 11.2mm nominal size	Cum	2517	570.14		5%				598.65
(b)	Water borne stone aggregate	Cum								
	(i) 12mm to 13.2mm nominal size	Cum	2517	529.06		5%				555.51
	(ii) 10mm to 11.2mm nominal size	Cum	2517	546.96		5%				574.31
	(iii) 6 mm nominal size	Cum	2517	702.03		5%				737.13
(c)	Coarse Sand	Cum	2517	680.68		5%				714.71
(d)	Fine Sand with FM not less than 1.6	Cum	2517	673.34		5%				707.01

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
(e)	Stone Dust		Cum	2517	584.73		5%				613.97
(f)	GSB Course Grade-I & II		Cum	2517	537.23		5%				564.09
(g)	Stones breaking into spalls, size 75 mm.		Cum	2517	476.19		5%				500.00
(h)	Stones breaking into ballast (excluding screening and washing)										
	(i)	Size 40 mm gauge.	Cum	2517	500.00		5%				525.00
	(ii)	Size 20 mm gauge.	Cum	2517	520.00		5%				546.00
(i)	Screening ,Stone ballast, shingle or kankar (Labour only).		Cum	2517	70.00		5%				73.50
(j)	Stone ballast or Bajri washing (Labour only).		Cum	2517	70.00		5%				73.50
M-2	(i)	Aluminumstrip 40mm wide 2mm thick.	mtr	7606	42.12				18%		49.70
	(ii)	Aluminumplain strip edging 57mm x 12mm x 3mm.	each	7606	72.00				18%		84.96
	(iii)	Aluminumplain strip edging 38mm x 12mm x 3mm.	each	7606	72.00				18%		84.96
	(iv)	Aluminumstrip 25mm.	Kg	7606	195.00				18%		230.10
	(v)	Aluminumstrip 10mm.	Kg	7606	195.00				18%		230.10

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
M-3	Fly Ash		Cum	2621							free
M-4	Asbestos cement products except pipes at site of work.										
(i)	Gypsum boards (ISI Marked) -										
	(a)	9.5 mm thick.	sqm	6809	136.50				18%		161.07
	(b)	12.5 mm thick.	sqm	6809	160.00				18%		188.80
	(c)	15 mm thick. size 8'x4'	sqm	6809	180.00				18%		212.40
(ii)	Corrugated sheets -										
	(a)	Corrugated sheets 6mm thick.	sqm	6811	150.00				18%		177.00
	(b)	Corrugated sheets 7mm thick.	sqm	6811	170.00				18%		200.60
	(c)	Semi Corrugated sheets 6mm thick.	sqm	6811	155.00				18%		182.90
	(d)	Semi Corrugated sheets 7mm thick.	sqm	6811	160.00				18%		188.80
(iii)	Fibre Sheets:-										
	(a)	Fibre reinforced by organic fibres and / or inorganic synthetic fibres cement corrugated sheet 6 mm thick	sqm	7019	237.93				18%		280.76

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	(b)	Fibre reinforced by organic fibres and/ or inorganic synthetic fibres cement corrugated serrated adjustable ridge	mtr	7019	210.00				18%		247.80
	(c)	Fibre reinforced by organic fibres and/ or inorganic synthetic fibres cement Ridge Finial.	pair	7019	165.00				18%		194.70
	(d)	Fibre reinforced by organic fibres and/ or inorganic synthetic fibres cement corrugated apron piece.	mtr	7019	200.00				18%		236.00
	(e)	fibre cement reinforced by organic fibres and/or inorganic synthetic fibres roofing accessories as Eave's filler	mtr	7019	175.00				18%		206.50
	(f)	Fibre reinforced by organic fibres and/ or inorganic synthetic fibres cement North light Curves.	mtr	7019	280.00				18%		330.40
	(g)	Fibre reinforced by organic fibres and/ or inorganic synthetic fibres cement Ventilators Curves.	mtr	7019	310.00				18%		365.80
	(h)	Fibre reinforced by organic fibres and/ or inorganic synthetic fibres cement Barge Boards.	mtr	7019	400.00				18%		472.00
	(i)	Fibre reinforced by organic fibres and/ or inorganic synthetic fibres cement Ridge Finial.	pair	7019	165.00				18%		194.70
(iv)	<b>Poly Carbonate Sheets:-</b>										
	(a)	12 mm thick multiwalled	sqm	3920	860.00				18%		1014.80

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	(b)	10 mm thick multiwalled	sqm	3920	753.00				18%		888.54
	(c)	1 mm thick solid	sqm	3920	452.00				18%		533.36
	(d)	2 mm thick solid	sqm	3920	807.00				18%		952.26
	(e)	Aluminumstrip for poly carbonate sheet	mtr	7606	308.00				18%		363.44
(v)	Plain sheets -										
	(a)	Plain sheets 4mm thick.	sqm	6811	113.98				18%		134.50
	(b)	Plain sheets 6mm thick.	sqm	6811	170.97				18%		201.74
(vi)	Ridges 1.10 metre Long.		pair	6811	350.00				18%		413.00
M-5	<b>Ballies:-</b>										
(i)	Safeda Ballies-										
	(a)	100 mm dia	m	2516	69.87				18%		82.45
	(b)	125 mm dia	m	2516	90.67				18%		106.99
	(c)	150 mm dia	m	2516	111.82				18%		131.95
M-6	<b>Bamboo:-</b>										
	(i)	25 mm dia, 2.5m long.	each	4602	100.00		5%				105.00



Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	(ii)	25 mm dia, 3m long	each	4602	120.00		5%				126.00
M-7 (a)	<b>Bitumen Rate w.e.f 01.07.2020 (Rate at Panipat refinery) including all taxes but excluding carriage.</b>										
	(i)	VG-10 (BULK)	t	2714	26080.00				18%		30774.40
	(ii)	VG-10 (PACK)	t	2714	NA						
	(iii)	VG-30 (BULK)	t	2714	26880.00				18%		31718.40
	(iv)	VG-30 (PACK)	t	2714	NA						
	(v)	CRMB-50 (BULK)	t	2714	NA						
	(vi)	CRMB-50 (PACK)	t	2714	NA						
	(vii)	CRMB-55 (BULK)	t	2714	29370.00				18%		34656.60
	(viii)	CRMB-55 (PACK)	t	2714	NA						
	(ix)	CRMB-60 (BULK)	t	2714	30630.00				18%		36143.40
	(x)	CRMB-60 (PACK)	t	2714	NA						
	(xi)	EMULSION-RAPID (RS-1) (BULK)	t	2714	28190.00				18%		33264.20
	(xii)	EMULSION-RAPID (RS-1) (PACK)	t	2714	35740.00				18%		42173.20
	(xiii)	EMULSION-MEDIUM (BULK)	t	2714	29920.00				18%		35305.60

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	(xiv)	EMULSION-MEDIUM (PACK)	t	2714	37969.00				18%		44803.42
	(xv)	EMULSION-SLOW (SS-2)(BULK)	t	2714	28061.00				18%		33111.98
	(xvi)	EMULSION-SLOW (SS-2) (PACK)	t	2714	35813.00				18%		42259.34
(b)	Blown Bitumen										
	(i)	R 25/85 Grade.	t	2714	38000.00				18%		44840.00
(c)	Felts-										
	(i)	Bitumen felt, Fibre base, self finished type-2 grade-I	sqm	2715	63.00				18%		74.34
	(i)	Bitumen felt, Fibre base, self finished type-2 grade-II	sqm	2715	63.00				18%		74.34
	(i)	Bitumen felt, Fibre base, self finished type-2 grade-III	sqm	2715	72.00				18%		84.96
M-8	<b>Boards BWP grade ISI Marked:-</b>										
(a)	Standard quality hard board sheets/ ply board sheet.										
	(i)	4.5mm thick. (4mm available)	sqm	4410	258.24				18%		304.72
(b)	Insulation Board Natural colour.										
	(i)	9mm.	sqm	4410	466.87				18%		550.91
	(ii)	12mm.	sqm	4410	538.00				18%		634.84
	(iii)	18mm.	sqm	4410	688.64				18%		812.60

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	(iv)	25mm.	sqm	4410	805.70				18%		950.73
(c)	Particle Boards										
	(i)	12mm.	sqm	4410	270.00				18%		318.60
	(ii)	19mm. (18mm available)	sqm	4410	317.00				18%		374.06
	(iii)	25mm.	sqm	4410	435.00				18%		513.30
M-9	Boulders (at quarry site)										
	(i)	Stone boulders upto 18 kg	cum	2517	568.59		5%				597.02
	(ii)	Stone boulders 18 to 40 kg	cum	2517	667.25		5%				700.61
	(iii)	Stone boulders above 40 kg	cum	2517	613.48		5%				644.15
M-10	Breaking ballast from brick bats (including stacking)										
(a)	(i)	40mm.	cum	6904	333.33		5%				350.00
	(ii)	25mm.	cum	6904	333.33		5%				350.00
	(iii)	20mm.	cum	6904	333.33		5%				350.00
(b)	Extra for breaking from Jhama bricks.		cum	6904	333.33		5%				350.00

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
M-11	<b>Brushes ISI Marked :--</b>										
	(i)	Hard wire brushes (14 gauge) size 200mm x 63mm x 40mm wires raised & fixed in wooden case complete in all respects.	each	9603	17.79				18%		20.99
	(ii)	Painting brushes (Ordinary Quality). 25mm width	each	9603	12.70				18%		14.99
	(iii)	Painting brushes (Ordinary Quality). 50mm width	each	9603	25.45				18%		30.03
	(iv)	Painting brushes (Superior Quality). 75mm width	each	9603	80.00				18%		94.40
	(v)	Painting brushes (Superior Quality). 100mm width	each	9603	169.50				18%		200.01
	(vi)	Katool Brushes (size 250mm x 63mm) of 75mm Coir raised and fixed in wooden case complete in all respects.	each	9603	20.00				18%		23.60
	(vii)	Soft brushes (size 225mm x 63mm) with 63mm raised hair fixed in wooden case complete in all respects.	each	9603	25.00				18%		29.50
M-12	<b>Bricks First Class (Clay/Fly Ash) (at kiln site):- (Note:- District wise rates for Bricks / tiles attached at Annxure-II)</b>										
	(a)	Bricks 22.86cm x 11.11cm x 6.83cm hand moulded at kiln site average rate of all Districts.	1000 nos	6904	4571.43		5%				4800.00
	(b)	Modular brick tiles 19cm x 9cm x 4cm for roofing, flooring, tile masonry and canal lining at kiln site.	1000 nos	6904	5000.00		5%				5250.00
	(c)	Tiles 22.86cm X 11.43cm X 3.81cm hand moulded at kiln site for all Districts.	1000 nos	6904	4761.90		5%				5000.00

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	(d)	Brick bats from well burnt or burnt bricks.	cum	6904	450.00		5%				472.50
M-13	(a)	Abrasive grinding stones ( Number 1,2,2L,3,4,5,6 ) for rubbing & polishing.	Set of 3 stones	6804	200.00				18%		236.00
	(b)	Mild Steel grinding Vatti ( 0 Number ) for cutting & leveling	each	6804	40.00			12%			44.80
	(c)	Ironite - Floor Hardener (Ironite powder to be incorporated into Granolithic topping for Light Medium Heavy duty flooring)	50 kg bag	3214	500.00				18%		590.00
	(d)	Terrazzo tiles 20mm thick	sqm	6810	320.00				18%		377.60
	(e)	Chequered tiles at site of work	sqm	6907	300.00				18%		354.00
	(f)	Precast P.C.C. tiles at site of work	sqm	6907	300.00				18%		354.00
	(g)	Terrazzo tiles with white cement 20mm thick	sqm	6810	430.00				18%		507.40
	(h)	Terrazzo tiles 12.50mm thick	sqm	6810	320.00				18%		377.60
	(i)	Terrazzo tiles with white cement 12.5 mm thick	sqm	6810	350.00				18%		413.00
M-14	<b>Cast iron rain water pipe non pressure ISI Marked :-</b>										
	(i)	C.I. Rain water pipe (Non pressure) 100mm dia.	m	7303	688.00				18%		811.84
	(ii)	C.I. head 100mm dia.	each	7303	475.00				18%		560.50

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	(iii)	C.I. shoe 100mm dia.	each	7303	475.00				18%		560.50
M-15	<b>Cement (Ex Shop in local market)</b>										
	(a)	Portland Pozzolana Cement including bag	per bag of 50 kg	2523	234.37					28%	299.99
	(b)	White Cement including bag	per bag of 50 kg	2523	560.00					28%	716.80
	(c)	Extra rate for OPC Cement	per bag of 50 kg	2523	20.00					28%	25.60
M-16	<b>Cinder 12.5 mm nominal size screened at site (I.S.2686-1977) Bricks</b>		cum	6904	770.00				18%		908.60
M-17	<b>Steam Coal.</b>		t	2701	2380.00		5%				2499.00
M-18	<b>Butt Hinges (All items ISI Marked) Anodized Aluminum Mat Finish</b>										
	(a)	<b>Anodized Aluminum Mat Finish</b>									
	(i)	125mm x 75mm x 4mm.	each	7610	30.00				18%		35.40
	(ii)	100mm x 75mm x 4mm.	each	7610	18.00				18%		21.24
	(iii)	75mm x 40mm x 3.2mm.	each	7610	10.00				18%		11.80
	(b)	<b>Handles Anodized Aluminum Mat Finish</b>									
	(i)	125mm with plate 175mmx32mm.	ten nos	7610	480.00				18%		566.40

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	(ii)	100mm with plate 150mmx32mm.	ten nos	7610	425.00				18%		501.50
	(iii)	75mm with plate 125mmx32mm.	ten nos	7610	400.00				18%		472.00
(c)	<b>Hasps &amp; staples (Safty type) Anodized AluminumMat Finish</b>										
	(i)	150mm.	ten nos	7610	255.00	-	-	-	18%	0%	300.90
	(ii)	115mm.	ten nos	7610	210.00				18%	0%	247.80
	(iii)	90mm.	ten nos	7610	150.00				18%	0%	177.00
(d)	<b>Sliding door bolts - Anodized AluminumMat Finish</b>										
	(i)	300mmx16mm.	each	8302	129.34				18%		152.62
	(ii)	250mmx16mm.	each	8302	116.67				18%		137.67
(e)	<b>Tower Bolts (Barrel type) Anodized AluminumMat Finish</b>		each								
	(i)	250mmx10mm.	each	8302	44.00				18%		51.92
	(ii)	200mmx10mm.	each	8302	35.00				18%		41.30
	(iii)	150mmx10mm.	each	8302	28.00				18%		33.04
	(iv)	100mmx10mm.	each	8302	20.00				18%		23.60

Sr. No.	Description	Unit	HSN CODE	Rate	GST					Rates i/c GST.
					0%	5%	12%	18%	28%	
(f)	Commercial ply wood BWP grade 4mm thick 3 ply ISI Marked at site of work.	sqm	4412	258.24				18%		304.72
M-19	<b>Flush Door BWP grade ISI Marked with liping all sides</b>									
	<b>Block Board Construction.</b>									
(A)	<b>Teak wood Ply on Both faces</b>									
	(i) 40mm thick.	sqm	4412	1592.24				18%		1878.84
	(ii) 35mm thick.	sqm	4412	1194.36				18%		1409.34
	(iii) 30mm thick.	sqm	4412	1140.56				18%		1345.86
	(iv) 25mm thick.	sqm	4412	1032.96				18%		1218.89
(B)	<b>Commercial Ply on Both faces</b>									
	(i) 40mm thick.	sqm	4412	1175.24				18%		1386.78
	(ii) 35mm thick.	sqm	4412	914.60				18%		1079.23
	(iii) 30mm thick.	sqm	4412	860.80				18%		1015.74
	(iv) 25mm thick.	sqm	4412	753.20				18%		888.78
(C)	<b>Commercial Ply on one face &amp; Teak Surface on other surface</b>									
	(i) 40mm thick.	sqm	4412	1130.00				18%		1333.40



Sr. No.	Description	Unit	HSN CODE	Rate	GST					Rates i/c GST.
					0%	5%	12%	18%	28%	
	(ii) 35mm thick.	sqm	4412	1076.00				18%		1269.68
	(iii) 30mm thick.	sqm	4412	1022.20				18%		1206.20
	(iv) 25mm thick.	sqm	4412	914.60				18%		1079.23
M-20	<b>Fuel wood.</b>	qtl	4401	1000.00						1000.00
M-21	<b>Galvanised, iron sheet (0.80mm) plain or corrugated at site of work.</b>	t	7301	65000.00				18%		76700.00
M-22	<b>Galvanised iron wire at site of work 4mm.</b>	qtl	7217	5000.00				18%		5900.00
M-23	<b>Glass strips ISI Marked</b>									
	(i) 4mm thick 40mm deep.	m	7013	10.40				18%		12.27
	(ii) 6mm thick 40mm deep.	m	7013	10.72				18%		12.65
	(iii) 25mm wide 4mm thick.	m	7013	5.50				18%		6.49
	(iv) 50mm wide 4mm thick.	m	7013	13.40				18%		15.81
	(v) 40mm wide 3mm thick.	m	7013	8.04				18%		9.49
	(vi) 32mm wide 4mm thick.	m	7013	7.00				18%		8.26
	(vii) 25mm wide 3mm thick.	m	7013	5.00				18%		5.90
M-24	<b>Glass panes ISI Marked at site of work</b>									

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
(a)	<b>Plain</b>										
	(i)	2mm thick (5.18 kg per sqm)	sqm	7013	220.00				18%		259.60
	(ii)	3mm thick (8.44 kg/sqm)	sqm	7013	300.00				18%		354.00
	(iii)	4mm thick (10.75 kg/sqm)	sqm	7013	360.00				18%		424.80
(b)	<b>Frosted</b>										
	(i)	2mm thick (5.18 kg per sqm)	sqm	7013	164.00				18%		193.52
	(ii)	3mm thick (8.44 kg/sqm)	sqm	7013	246.00				18%		290.28
	(iii)	4mm thick (10.75 kg/sqm)	sqm	7013	328.00				18%		387.04
M-25	<b>Glue</b>		kg	3506	178.00				18%		210.04
M-26	<b>Hirmichi</b>		Qtl	3201	1400.00	-	-	-	18%	-	1652.00
M-27	<b>Jali (Cement Concrete)</b>										
	(i)	50 mm thick.	sqm	6810	547.00				18%		645.46
	(ii)	40 mm thick	sqm	6810	456.00				18%		538.08
	(iii)	25 mm thick	sqm	6810	383.00				18%		451.94

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
M-28	<b>Blank</b>										
M-29	<b>Lime</b>										
(i)	Commercial dry lime (I.S. – 1514).		qtl	2522	600.00		5%				630.00
M-30	<b>Lubricants</b>										
(i)	Burnol 100 gms.		per tube	3004	207.63				18%		245.00
(ii)	Compressor oil		per ltr	8413/3403	102.00				18%		120.36
(iii)	Distilled water		per ltr	2201	10.00		5%				10.50
(iv)	Grease loose		per ltr	3403	128.41				18%		151.52
(v)	Grease (2 kg packing)		2 kg	3403	568.00				18%		670.24
(vi)	Grease (1 kg packing)		1 kg	3403	142.00				18%		167.56
(vii)	Grease (½ kg packing)		1/2 kg	3403	145.00				18%		171.10
(viii)	High speed diesel (as on 31.07.2020)		per ltr	2710	75.00	0%					75.00
(ix)	Hydro brake fluid (1 ltr packing)		per ltr	3819	270.00				18%		318.60
(x)	Hydro brake fluid (½ ltr packing)		per ltr	3819	137.00				18%		161.66
(xi)	Hydro brake fluid (¼ ltr packing)		per ltr	3819	73.00				18%		86.14

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	(xii)	Kerosene oil (Superior)	per ltr	2710	25.09				18%		29.61
	(xiii)	Light diesel oil	per ltr	2710	29.66				18%		35.00
	(xiv)	Mobile oil (Loose)	per ltr	8413/3403	82.60				18%		97.47
	(xv)	Mobile oil (5 ltr packing)	per ltr	8413/3403	933.00				18%		1100.94
	(xvi)	Mobile oil (1 ltr packing)	per ltr	8413/3403	195.00				18%		230.10
	(xvii)	Mobile oil (½ ltr packing)	per ltr	8413/3403	101.00				18%		119.18
	(xviii)	Mobile oil (¼ ltr packing)	per ltr	8413/3403	55.00				18%		64.90
	(xix)	Petrol	per ltr	2710	75.16				18%		88.69
	(xx)	Sarson oil	per kg	1514	110.00		5%				115.50
	(xxi)	Soap	per kg	3401	46.61				18%		55.00
	(xxii)	Waste cotton	per kg	5201	80.00				18%		94.40
M-31	Marble chips 4.75mm & down gauge										
	(a)	White & black.	qtl	6802	85.00				18%		100.30

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	(b)	Chocolate grey or yellow.	qtl	6802	85.00				18%		100.30
	(c)	Baroda green.	qtl	6802	85.00				18%		100.30
M-32	Marble piece for crazy floor 19mm to 20mm.		qtl	6802	110.00				18%		129.80
M-33	Marble tiles plain										
(i)	Udaipur Green Marble 18-20 mm thick										
	a	Size 0.30 sqm to 0.50 sqm	sqm	6802	325.00				18%		383.50
	b	Slabs size above 0.50 sqm	sqm	6802	375.00				18%		442.50
(ii)	Udaipur Green Marble 12-15 mm thick										
	a	Size 0.30 sqm to 0.50 sqm	sqm	6802	300.00				18%		354.00
	b	Slabs size above 0.50 sqm	sqm	6802	350.00				18%		413.00
(iii)	Pink Makrana Marble 18-20mm thick										
	a	Size 0.30 sqm to 0.50 sqm	sqm	6802	450.00				18%		531.00
	b	Slabs size above 0.50 sqm	sqm	6802	550.00				18%		649.00
(iv)	Pink Makrana Marble 12-15mm thick										
	a	Size 0.30 sqm to 0.50 sqm	sqm	6802	400.00				18%		472.00
	b	Slabs size above 0.50 sqm	sqm	6802	450.00				18%		531.00

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
(v)	White Makrana tiles 18-20mm thick										
	a	Size 0.30 sqm to 0.50 sqm	sqm	6802	500.00				18%		590.00
	b	Slabs size above 0.50 sqm	sqm	6802	700.00				18%		826.00
(vi)	Morwad Marble tiles 18-20mm thick										
	a	Size 0.30 sqm to 0.50 sqm	sqm	6802	325.00				18%		383.50
	b	Slabs size above 0.50 sqm	sqm	6802	375.00				18%		442.50
(vii)	Morwad Marble tiles 12-15mm thick										
	a	Size 0.30 sqm to 0.50 sqm	sqm	6802	300.00				18%		354.00
	b	Slabs size above 0.50 sqm	sqm	6802	350.00				18%		413.00
(viii)	White Makrana tiles 12- 15 mm thick										
	a	Size 0.30 sqm to 0.50 sqm	sqm	6802	450.00				18%		531.00
	b	Slabs size above 0.50 sqm	sqm	6802	600.00				18%		708.00
(ix)	Kumari grey without oxide and cavities flooring 18mm to 20mm thick of varying sizes										

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	a	Size 0.30 sqm to 0.50 sqm	sqm	6802	400.00				18%		472.00
	b	Slabs size above 0.50 sqm	sqm	6802	450.00				18%		531.00
(x)	Kumari grey without oxide and cavities flooring 12mm to 15mm thick of varying sizes										
	a	Size 0.30 sqm to 0.50 sqm	sqm	6802	350.00				18%		413.00
	b	Slabs size above 0.50 sqm	sqm	6802	400.00				18%		472.00
(xi)	Black Marble tiles of Kishangarn, Zebra, Makrana , Dhabhi or Doongri Zebra thickness 18mm to 20mm										
	a	Size 0.30 sqm to 0.50 sqm	sqm	6802	450.00				18%		531.00
	b	Slabs size above 0.50 sqm	sqm	6802	500.00				18%		590.00
(xii)	Black Marble tiles of Kishangarn, Zebra, Makrana , Dhabhi or Doongri Zebra thickness 12mm to 15mm										
	a	Size 0.30 sqm to 0.50 sqm	sqm	6802	400.00				18%		472.00
	b	Slabs size above 0.50 sqm	sqm	6802	450.00				18%		531.00
(xiii)	Kotah stone tile flooring 20mm to 30 mm thick		sqm	6802	370.00		5%				388.50
(xiv)	Kotah stone tile flooring 30mm to 40 mm thick		sqm	6802	450.00		5%				472.50
(xv)	Black Granite stone tiles 18mm to 20mm thick		sqm	6802	1722.00				18%		2031.96
(xvi)	Coloured Granite stone tiles 18mm to 20mm thick		sqm	6802	1600.00				18%		1888.00

Sr. No.	Description	Unit	HSN CODE	Rate	GST					Rates i/c GST.
					0%	5%	12%	18%	28%	
(xvii)	Rough red sand stone (from Agra) 40mm thick	sqm	6802	420.00		5%				441.00
(xviii)	Rough kota stone 40 to 50 mm thick	sqm	6802	400.00		5%				420.00
(xix)	Flamed finish granite stone slab Jet Black, Cherry Red, Elite	sqm	6802	1050.00				18%		1239.00
(xx)	Black Granite Stone 19-20mm thick	sqm	6802	1560.20				18%		1841.04
(xxi)	Colored Granite Stone 19-20mm thick	sqm	6802	1610.00				18%		1899.80
(xxii)	Fine dressed red stone (From Agra) flooring 40mm thick	sqm	6802	450.00		5%				472.50
(xxiii)	Plain coloured 3.20mm gauge linoleum covering to floors	sqm	6802	500.00				18%		590.00
(xxiv)	Resilient vinyl sheet floor covering 2 mm thick, having a vinyl plastic wear layer with backing intended for use in light commercial and residential buildings	sqm	6802	500.00				18%		590.00
(xxiv)	Laminate wooden flooring (Grade AC3 or AC3+ laminates) 6 mm to 12 mm thick, having core made up of medium-density fiberboard (MDF), which is less resistant to impact damage and less resistant to being dented by heavy furniture, having a décor layer to give each floor its appearance and consisting of one or more sheets of paper impregnated with melamine resin and top wear layer having clear aluminum oxide finish that protects the decorative layer & imparts the desired level of sheen, from full gloss to low gloss	sqm	6802	1150.00				18%		1357.00
(xxv)	Morward Marble strips 18 to 20 mm. Wide	mtr	6802	45.00				18%		53.10
(xxvi)	Dholpur stone tiles 25 mm thick	sqm	6802	400.00				18%		472.00



Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
(xxvii)	Butch work with rough dressed Dholpur stone 40 mm to 50 mm thick		sqm	6802	200.00				18%		236.00
(xxviii)	Fine dressed and machine rubbed red sand stone ( from Agra ) 25 mm to 50 mm thick		sqm	6802	450.00				18%		531.00
<b>M-34</b>	<b>Munjban at site of work (Coir Yarn)</b>		kg	5308	60.00		5%				63.00
<b>M-35</b>	<b>Niwar</b>										
	(i)	Cotton.	kg	5701	120.00			12%			134.40
	(ii)	Nylon	kg	5407	105.00	-	-	12%	-	-	117.60
<b>M-36</b>	<b>Paints, distempers, oil and primer etc.</b>										
(a)	Distempers of approved manufacture ISI Marked.										
	(i)	Dry distempers (Non washable) in all shades.	kg	3210	30.00				18%		35.40
	(ii)	Oil bound washable distempers in all shades.	kg	3210	30.46				18%		35.94
	(iii)	Distemper primer.	ltr	3210	70.00				18%		82.60
	(iv)	Exterior cement based decorative paint such as snow-cem, Robbia-cem at site of work.	kg	3210	140.00				18%		165.20

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
(b)	<b>Oil</b>										
	(i)	Turpentine oil.	ltr	3805	80.00				18%		94.40
(c)	<b>Paints ISI Marked</b>										
	(i)	Aluminumpaints	ltr	3209	150.00				18%		177.00
	(ii)	Anti corrosive bitumastic paint	ltr	3208	100.00				18%		118.00
	(iii)	Anti corrosive odourless black bitumastic paint.	ltr	3208	100.00				18%		118.00
	(iv)	Methylated spirit, without container.	ltr	2207	68.75				18%		81.13
	(v)	Type wood preservative other than solignum.	ltr	814	260.00				18%		306.80
	(vi)	Paint remover (Thinner).	ltr	3209	68.75				18%		81.13
	(vii)	Ready mixed emulsion paint for plastered or concrete surface (in all shades).Aluminumpaints	ltr	3209	165.00				18%		194.70
	(viii)	Ready mixed exterior paint for plastered or concrete surface (in all shades).Aluminumpaints	ltr	3209	165.00				18%		194.70
	(ix)	Ready mixed exterior paint for metallic surface (in all shades). Aluminumpaints	ltr	3209	165.00				18%		194.70
	(x)	Creosote.	ltr	3209	90.00				18%		106.20

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	(xi)	Ready mixed paint for wood work or wooden surface in (all shades.)	ltr	3209	165.00				18%		194.70
	(xii)	Premium Acrylic dirt resistance Exterior Paint	ltr	3209	270.00				18%		318.60
	(xiii)	<b>Road marking paint white:-</b>									
	(a)	For asphalt surface.	ltr	3208	160.00				18%		188.80
	(b)	For concrete surface.	ltr	3208	210.00				18%		247.80
	(xiv)	<b>Road marking paint (Spirit based yellow)</b>									
	(a)	For asphalt surface.	ltr	3208	160.00				18%		188.80
	(b)	For concrete surface.	ltr	3208	210.00				18%		247.80
	(xv)	<b>Road marking paint (Spirit based black)</b>									
	(a)	For concrete surface.	ltr	3208	145.00				18%		171.10
	(xvi)	Roofing white ready mixed paint for corrugated sheets.	ltr	3208	120.00				18%		141.60
	(xvii)	Roofing red grey or green ready mixed paint for corrugated sheets.	ltr	3208	210.00				18%		247.80
	(xviii)	Black synthetic enamel paint	ltr	3209	160.00				18%		188.80

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	(xix) a)	Thermoplastic paint with coverage of 5kg/10sqm	kg	3209	90.00				18%		106.20
	b)	Glass beads for Thermoplastic paint (350gm per sqm)	kg	7018	77.00				18%		90.86
	(d)	<b>Pigment Steiner</b>									
	(i)	Black red chocolate colours and dark shades.	kg	3209	70.00				18%		82.60
	(ii)	Red chocolate orange buff or yellow paint (Red oxide of iron) Light shades.	kg	3209	65.00				18%		76.70
	(iii)	Green or blue (Indian) medium shade.	kg	3209	72.00				18%		84.96
	(e)	<b>Primers</b>									
	(i)	Aluminumwood primer.	ltr	3209	125.00				18%		147.50
	(ii)	Cement primer.	ltr	3209	60.00				18%		70.80
	(iii)	Pink primer for wood.	ltr	3209	105.00				18%		123.90
	(iv)	Primer for metal.	ltr	3209	95.31				18%		112.47
	(f)	<b>Polish</b>									
	(i)	French spirit polish.	ltr	3209	200.00				18%		236.00
	(ii)	Mansion polish (Ready made).	ltr	3209	280.00				18%		330.40
	(iii)	Wax polish (Ready made).	kg	3208	230.00				18%		271.40

Sr. No.	Description	Unit	HSN CODE	Rate	GST					Rates i/c GST.
					0%	5%	12%	18%	28%	
(g)	<b>Varnish</b>									
	(i) Acid resisting varnish.	ltr	3209	240.00				18%		283.20
	(ii) Ordinary varnish.	ltr	3209	93.75				18%		110.63
	(iii) Superior copal varnish.	ltr	3209	115.00				18%		135.70
	(iv) Superior spare varnish.	ltr	3209	115.00				18%		135.70
	(v) Varnish interior or exterior.	ltr	3209	175.78				18%		207.42
(h)	<b>Miscellaneous</b>									
	(i) Caustic soda.	kg	2815	38.00				18%		44.84
	(ii) Coal tar.	tonne	6807	22000.00				18%		25960.00
	(iii) Creosote oil.	ltr	2707	340.00				18%		401.20
	(iv) Plaster of paris.	kg	2520	5.00		5%				5.25
	(v) Putty for wooden filler.	kg	3214	30.00				18%		35.40
	(vi) Putty for steel work.	kg	3214	51.00				18%		60.18
M-37	<b>Rolling Shutter &amp; its parts</b>									

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	(i)	Rolling shutter made of 80mm x 1.25mm machine rolled laths.	sqm	7309	1800.00				18%		2124.00
	(ii)	Top cover for rolling shutter.	m	7309	500.00				18%		590.00
	(iii)	27.5 cm. long wire spring, grade No.2 for rolling shutter.	each	7320	325.00				18%		383.50
	(iv)	Ball bearing for rolling shutters.	each	8482	970.00				18%		1144.60
	(v)	Exceeding 11.20 up to 16.80 sqm area of door Extra for mechanical devices chain and cranked operation for operating rolling shutters.	sqm	7308	700.00				18%		826.00
	(vi)	Exceeding 16.80 sqm area of door.	sqm	7308	300.00				18%		354.00
M-38		<b>Sand (at quarry site)</b>									
	(a)	Clean & screened sand including removal of over-burden of soil to expose the sand quarry up to the depth of 30 m, if necessary within 30 metres excluding washing but including royalty.	cum	-	-	-	-	-	-	-	
	(b)	Clean & screened sand within 30 metres excluding washing but including royalty where removal of over-burden of Soil above 30 cm depth is necessary.	cum	-	-	-	-	-	-	-	Rate Already included in M-1 (c)
	(c)	Clean, sharp and coarse sand from the following quarries (including royalty etc):-	cum								Rate Already included in M-1 (c)

Sr. No.	Description	Unit	HSN CODE	Rate	GST					Rates i/c GST.
					0%	5%	12%	18%	28%	
M-39	(a) Sand paper. (60, 80, 100, 120 number)	each	6805	1.90				18%		2.24
	(b) Sand Paper steel (100, 150, 180, 220, 320 number)	each	6805	11.00				18%		12.98
M-40	Sealing compound.	kg	3214	270.00				18%		318.60
M-41	Spun Yarn	kg	5205	90.00	-	5%	-	-	-	94.50
M-42	Steel Fe-415, Fe-500, Fe-550 (ISI Marked).(Ex Shop in local Market)									
	(a) Angles	qtl	7216	3550.00				18%		4189.00
	(b) Tor steel Bars	qtl	7213-7215	3894.00				18%		4594.92
	(c) Channels	qtl	7216	3650.00				18%		4307.00
	(d) Flats	qtl	7208-7212	3650.00				18%		4307.00
	(e) Joists	qtl	7216	3850.00				18%		4543.00
	(f) Plates all thickness	qtl	7208-7272	5200.00				18%		6136.00
	(g) Square bars	qtl	7213-7215	3650.00				18%		4307.00
	(h) All rectangular, Square and Circular pipe hollow Sections ISI Marked	qtl	7306	4400.00				18%		5192.00
	(i) Rolled steel T & Z Section.	qtl	7208-7212	4400.00				18%		5192.00

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	(j)	Welded Mesh 25 mm x 25 mm (2.5mm thick)	sqm	7314	220.00				18%		259.60
	(k)	TMT Bars (Fe 500)(ISI Marked).(Ex Shop in local Market)	qtl	7213-7215	4050.00				18%		4779.00
	(l)	TMT Bars (Fe 550)(ISI Marked).(Ex Shop in local Market)	qtl	7213-7215	4102.00				18%		4840.36
	(m)	Extra rate for Steel Fe-415, Fe-500, Fe-550 (Integrated Plant Marked).	qtl	7213.00	300.00				18%		354.00
	(n)	Chicken Mesh	sqm	7217/7229/ 7313	42.00				18%		49.56
	(o)	MS sheet all gauges	qtl	7217/7229/ 7313	4400.00				18%		5192.00
M-43	Surkhi prepared from well burnt bricks, ground and screened at source.		cum	6904	700.00	-	-	-	18%	-	826.00
M-44	<b>Tiles</b>										
(a)	Ceramic Coloured Glazed tiles Matt/Semi Matt/Glossy/ Highly Gloss finish/printed/ highlighter/ emboss										
	(i)	310mm x 450mm x 8mm	sqm	6902	330.00				18%		389.40
	(ii)	300mm x 600mm x 8mm	sqm	6902	360.00				18%		424.80
	(iii)	Acid / Alkali Resistant Tiles - 300 mm x 300 mm	sqm	6902	520				18%		613.60



Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
(b)	White Ceramic graze tile in all colours and design 1st Quality										
	(i)	300mm x 200mm x 6mm	sqm.	6902	260.00				18%		306.80
	(ii)	325mm x 250mm x 8mm	sqm.	6902	260.00				18%		306.80
	(iii)	150mm x 150mm x 6mm	sqm.	6902	240.00				18%		283.20
	(iv)	100mm x 100mm x 6mm	sqm.	6902	220.00				18%		259.60
M-45	<b>Timber</b>										
(a)	<b>Cheel</b>										
	(i)	In sleepers.	cum	4407	48000.00				18%		56640.00
(b)	<b>Deodar Wood</b>										
	(i)	In sleepers.	cum	4407	103000.00				18%		121540.00
	(ii)	In planks.	cum	4407	112000.00				18%		132160.00
(c)	<b>Kail Wood</b>										
	(i)	In sleepers.	cum	4407	74000.00				18%		87320.00
	(ii)	In planks.	cum	4407	80000.00				18%		94400.00
(d)	<b>Sal Wood</b>										

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	(i)	In scantling.	cum	4407	63000.00				18%		74340.00
	(ii)	In planks.	cum	4407	70000.00				18%		82600.00
(e)	<b>Teak Wood</b>										
	(i)	In scantling.	cum	4407	107000.00				18%		126260.00
	(ii)	In planks.	cum	4407	140000.00				18%		165200.00
(f)	<b>Hollock Wood</b>										
	(i)	In scantling.	cum	4407	-						
	(ii)	In planks.	cum	4407	60035.00				18%		70841.30
(g)	<b>Champ</b>										
	(i)	In scantling.	cum	4407	-						
	(ii)	In planks.	cum	4407	94500.00			12%			105840.00
(h)	<b>Red Meranti</b>										
	(a)	Normal (15 to 16 kg per cft. Approx.)	cum	4407	45903.00				18%		54165.54
	(b)	Super (18 to 19 kg per cft. Approx.)	cum	4407	49434.00				18%		58332.12
	(c)	Sinker (20 to 21 kg per cft. Approx.)	cum	4407	54730.50				18%		64581.99
(i)	<b>Yellow Meranti</b>										
	(a)	Normal (15 to 16 kg per cft. Approx.)	cum	4407	44137.50				18%		52082.25
	(b)	Super (18 to 19 kg per cft. Approx.)	cum	4407	47668.50				18%		56248.83

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	(c)	Sinker (20 to 21 kg per cft. Approx.)	cum	4407	52965.00				18%		62498.70
(j)		Imp. Teak Wood @ 1750/- each cft.	cum	4407	61792.50				18%		72915.15
M-46		Wire Gauge 22 gauge 12x12 mesh of (140 G gauge) at site of work .	sqm	7314	207.13				18%		244.41
M-47		Fire Bricks size 22.86 cm x 11.11 cm x 6.83 cm	1000 nos	6902	5000.00		5%				5250.00
M-48		Ladder ( Hire Charges) (10 steps)	per day	9403	8.00				18%		9.44
M-49		Sawing Charges of wood.	cum	2506	1496.00		5%				1570.80
M-50		White lead.	kg	7806	170.00				18%		200.60
M-51		Chalk Mitti.	qtl	2510	1000.00		5%				1050.00
M-52		Interlocking tiles by block making machine									
	(a)	50mm thick Interlocking tiles (rubber moulded)	sqm	7016	310.00				18%		365.80
	(b)	60mm thick Interlocking tiles (rubber moulded)	sqm	7016	340.00				18%		401.20
	(c)	60mm thick Interlocking tiles by block making machine	sqm	7016	364.40				18%		429.99
M-53		80mm thick Interlocking tiles by block making machine	sqm	7016	457.00				18%		539.26
M-54		100mm thick Interlocking tiles by block making machine	sqm	7016	630.00				18%		743.40
M-55		Parameter Channel M.F.-6	m	7318	46.00				18%		54.28

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
M-56		Main Runner 4' M.F.-5	m	1318	80.00				18%		94.40
M-57		Intermediate runner 4' M.F.-7	m	7318	80.00				18%		94.40
M-58		Hanging Strips (Ceiling angle)	m	7318	28.00				18%		33.04
M-59		Filling with jointing compound 0.807 kg per sqm.	m	3302	25.00				18%		29.50
M-60		Metal rawl plug and screw for fixing parameter @ 450mm for fixing ceiling angle.	each	6401	10.00				18%		11.80
M-61		Nuts & Bolts 25mm x 8mm	each	7318	1.70				18%		2.01
M-62		G.I. Connecting Clip.	each	7318	7.00				18%		8.26
M-63		Powder coated Gypsum Screw.	each	7318	0.35				18%		0.41
M-64		Joint paper Tape Role.	each	4802	290.00				18%		342.20
M-65		Bentonite Powder	kg	2508	4.50	5%					4.73
M-66	(a)	Aluminum Glazing all sections	kg	7610	215.00				18%		253.70
	(b)	Extra for 50 Micron powder coating	kg	7616	42.00				18%		49.56
	(c)	EPDM/ Neoprene Rubber gasket for Aluminum joinery.	kg	4002	61.00				18%		71.98
M-67		Square M S beadings for Glass(10x10x1.6 mm tube)	mtr	7216	27.00				18%		31.86

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
M-68 (i)	<b>Vitrified floor tiles in light colour shades made using Soluble Salt Technology / Digital</b>										
	a	600x600 mm size	sqm	6902	280.00				18%		330.40
	b	800 mm x 800 mm size	sqm	6902	320.00				18%		377.60
	c	1000x1000 mm size	sqm	6902	380.00				18%		448.40
(ii)	<b>Vitrified floor tiles in light colour shades made using double charged Technology</b>										
	a	600x600 mm size	sqm	6902	500.00				18%		590.00
	b	800 mm x 800 mm size	sqm	6902	600.00				18%		708.00
	c	1000x1000 mm size	sqm	6902	650.00				18%		767.00
(iii)	<b>Vitrified floor tiles in light colour shades full body same material</b>										
	a	600 x 600 mm size	sqm	6902	750.00				18%		885.00
(iv)	Tactile tile 600 x 600 mm		sqm	6902	480.00				18%		566.40
(v)	<b>Extra Cost for using darker fast shade Vitrified or Rectified Tiles instead of lighter shades.</b>		sqm	6902	50.00				18%		59.00
	a	High polymer modified quick set tile adhesive bag 50 kg.	Bag	6902	450.00				18%		531.00
	b	Cement based grout to be filled in the joints bag 50 kg.	Bag	6902	400.00				18%		472.00

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	c	Epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg)	kg	6902	371.00				18%		437.78
M-69	ACC Strips 40mmx4mm		m	6812	3.60				18%		4.25
M-70	Iron Fitting ISI Marked										
a)	Hinges 75mm		each	7324	8.00				18%		9.44
b)	Hinges 100mm		each	7324	14.00				18%		16.52
c)	Sliding Bolt 200mm		each	7316	90.00				18%		106.20
d)	Sliding Bolt 250mm		each	7316	110.00				18%		129.80
e)	Sliding Bolt 300mm		each	7316	120.00				18%		141.60
f)	Handle 125mm		each	7415	10.00				18%		11.80
g)	Handle 150mm		each	7415	15.00				18%		17.70
h)	Kunda Chapka		each	7415	15.00				18%		17.70
i)	Tower Bolt 150mm		each	7318	40.00				18%		47.20
j)	Tower Bolt 200mm		each	7318	50.00				18%		59.00

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
k)	Door Spring ISI Marked (Ordinary)		each	7320	80.00				18%		94.40
l)	Floor Spring ISI Marked (Small)		each	7320	1450.00				18%		1711.00
m)	Floor Spring ISI Marked (Big)		each	7320	1850.00				18%		2183.00
n)	Hydraulic Door Spring ISI Marked		each	8302	450.00				18%		531.00
M-71	PCC Kerb M-20 Hydraulic made size 250mm high x 165mm bottom x115mm top		mtr	6810	165.00				18%		194.70
M-72	E.C. Bag Plastic 50 kg		each	2017	3.25				18%		3.84
M-73	Polythene films/ sheet of 100,125, 150, 200,250 micron		kg	3920	105.00				18%		123.90
M-74	M.S. annealed wire 4mm		kg	7229	48.00				18%		56.64
M-75	(a)	Supply of Pilchi, Farash, Sarkhanda	q	9603	280.00	0%					280.00
	(b)	Supply of Pilchi, Farash, Sarkhanda including loading, unloading and carriage for 5 km.	q	9603	340.00	0%					340.00
	(c)	Polethene	kg	3920	105.00				18%		123.90
M-76	<b>Coir-rope</b>		kg	5607	65.00		5%				68.25
M-77	<b>Bearing Description</b>										
	1	Free Flot Bearing-100 MT (SPFF-100MT)	each	8483	13855.00				18%		16348.90

Sr. No.	Description		Unit	HSN CODE	Rate	GST					Rates i/c GST.
						0%	5%	12%	18%	28%	
	2	Fixed Bearing-100MT(SPF-X-100 MT)	each	8483	14990.00				18%		17688.20
	3	Slide Guide Bearing (L)-100 MT (SPSG(L)-100 MT)	each	8483	19800.00				18%		23364.00
	4	Slide Guide Bearing (T)-100 MT (SPSG(T)-100 MT	each	8483	21950.00				18%		25901.00
	5	Free Float Bearing-200MT(SPFF-100MT)	each	8483	28300.00				18%		33394.00
	6	Fixed Bearing -200MT(SPF-X-200 MT)	each	8483	32790.00				18%		38692.20
	7	Slide Guide Bearing(L)-200 MT (SPSG(L)-200 MT	each	8483	43300.00				18%		51094.00
	8	Slide Guide Bearing (T)-200 MT (SPSG(T)-200 MT	each	8483	45650.00				18%		53867.00
	9	Free Float Bearing-300 MT(SPFF-300 MT)	each	8483	48400.00				18%		57112.00
	10	Fixed Bearing-300 MT (SPFX-300 MT)	each	8483	50490.00				18%		59578.20
	11	Slide Guide Bearing (L)-300 MT (SPSG(L)-300 MT)	each	8483	77900.00				18%		91922.00
	12	Slide Guide Bearing (T)-300 MT (SPSG (T) -300 MT)	each	8483	79850.00				18%		94223.00
	13	Supply of Elastomeric Bearing as per IRC:83, Part-II	cum	8483	70.00				18%		82.60
M-78	<b>Expansion Joint</b>										
	1	Supply of Strip Seal type Expansion Joint System with Stud type Anchorage capable of accommodation movement up to 80 mm	RM	7308	5000.00				18%		5900.00



**Rate of Aggregate for all Quarries Recived from S.E Construction Circle cum Convenor Quarry Committee vide Letter No. 1046 dt.11.10.2019 through CE (HQ) letter No.295/CSR dt.19.06.2020.**

Rates in Rs. Per cubic metres without GST, Labour, Contractor Profit & other cesses.											Annexure-I
S.No.	Description	Lohand Khad	Bharat Garh (Ropar)	Agampur (Ropar)	Khera Kamlout (Ropar)	Talwara & Kumahi Devi	Mirthal	Damtal	Pathankot Madhopur	Haryaal	Burj Kotia
1	2	3	4	5	6	7	8	9	10	11	12
(i)	12/13.2 mm Crushed Bajri	565.02	656.84	641.53	609.16	633.29	362.19	-	397.17	379.54	664.55
(ii)	10mm/ 11.20 mm Crushed Bajri	565.02	656.84	661.44	626.82	647.81	461.13	-	459.36	386.92	665.94
(iii)	Water Borne Bajri 12/13.2 mm	565.02	656.84	677.70	551.78	612.49	362.19	-	425.44	379.54	530.56
(vi)	53-22.4 mm Stone Metal	582.68	617.99	635.65	653.30	487.43	322.70	-	312.64	307.39	693.98
(vii)	63-45 mm Stone Metal	582.68	617.99	635.65	662.13	536.80	322.70	-	312.64	307.39	676.32
(viii)	90-45 mm Stone Metal	582.68	623.88	-	711.64	588.43	322.70	-	312.64	307.39	679.27
(ix)	Screening 12.5/13.2 mm Type "A"	665.02	656.84	641.53	609.16	633.29	362.19	-	397.17	379.54	664.55
(x)	Screening 10 mm/11.2 mm Type "B"	565.02	656.84	661.44	626.82	647.81	461.13	-	459.36	386.92	665.94
(xi)	boulder (3.6 kg to 18 kg)	-	790.40	-	-	600.70	429.91	-	424.03	429.91	736.57

S.No.	Description	Lohand Khad	Bharat Garh (Ropar)	Agampur (Ropar)	Khera Kamlout (Ropar)	Talwara & Kumahi Devi	Mirthal	Damtal	Pathankot Madhopur	Haryaal	Burj Kotia
1	2	3	4	5	6	7	8	9	10	11	12
(xii)	boulder upto (18Kg to 40 kg)	790.40	790.40	677.70	-	633.29	570.67	-	568.31	570.67	736.57
(xiii)	boulder Above (40Kg)	-	-	-	-	613.48	-	-	-	-	-
(xiv)	Gravel 75mm to 25mm/ Filter Media	-	653.30	600.33	622.41	394.58	415.19	-	395.76	316.26	676.32
(xv)	Stone Matel 40mm	582.68	629.76	-	666.55	459.90	308.41	-	286.92	297.87	665.94
(xvi)	Stone Metal 25mm for BM	565.02	656.84	-	653.30	494.88	308.41	-	286.92	297.87	708.00
(xvii)	GSB course grade I & II	317.82	482.62	600.33	494.39	502.85	616.61	-	590.10	545.93	684.46
(xviii)	Coarse sand	565.02	635.65	694.50	741.59	-	694.05	-	686.29	651.94	776.38
(xix)	Stone Dust.	406.10	485.56	635.65	640.07	573.51	694.05	-	686.29	651.94	489.36

**Rate of Brick/tiles in various Distt. at kiln site without GST, Labour Cess and Contractor's profit & other cesses.**

Annexure-II					
Sr. No.	Name of Distt	Bricks		Tiles	
		Basic Rate	Unit	Basic Rate	Unit
1	2	3	4	5	6
1	Amritsar, Tarn Taran, Jalandhar, Ludhiana, Mohali, Chandigarh	4857.14	1000 Nos	5047.62	1000 Nos
2	Gurdaspur, Pathakot, Patiala, Kapurthala	4761.90	1000 Nos	4952.38	1000 Nos
3	Hoshiarpur, SBS Nagar	5047.62	1000 Nos	5238.10	1000 Nos
4	Ropar, Fatehgarh Sahib	4666.67	1000 Nos	4857.14	1000 Nos
5	Barnala, Ferozpur, Sangrur	4380.95	1000 Nos	4571.43	1000 Nos
6	Faridkot, Mukatsar, Fazilka, Mansa	4000.00	1000 Nos	4190.48	1000 Nos
7	Bathinda	4095.23	1000 Nos	4285.71	1000 Nos
8	Moga	4285.71	1000 Nos	4476.19	1000 Nos



## CHAPTER NO. 4

### LOADING AND UNLOADING

**Notes :-**

- (i) These rates are inclusive of all taxes, GST, Labour Welfare Cess and contractor's profit.
- (ii) Where the lead for loading and unloading is more than the lead specified in the following rates, this should be paid at carriage rates (Chapter No. 5) for second and third chains of 30 metres length as the case may be.
- (iii) The following rates do not provide for any special arrangements such as provision of mechanical equipment for loading purposes. The unloading of heavy machinery or consignments requiring crane work or special arrangements will be paid separately.
- (iv) While making measurements for loading, unloading or stacking suitable deductions shall be made to account for voids in the loose stacking according to the factors mentioned in the relevant specifications of materials as given in chapter No. 3 of the P.W.D specifications.
- (v) The rates of loading, unloading and stacking shall also include the loading, unloading and stacking of containers in which the materials are contained. For instance, if 100 tonnes of bitumen are loaded or unloaded in 160/200 litres drums, the net weight of bitumen will be 100 tonnes and weight of the drum will be over and above this weight. Nothing extra will be paid for the weight of the bitumen drums which are supposed to be carried in addition to the bitumen with in the same rate.
- (vi) Bricks and tiles shall be properly stacked in vehicles and not dumped. While unloading these shall be directly placed into stacks and not dumped on the ground and then stacked.
- (vii) The rates of item No. 4.29 to 4.40 are not payable over and above the rates of item No. 4.3, 4.7, 4.9 to 4.11 and 4.20 to 4.24.
- (viii) Where the earth work involved is more than 100 cum, then no unloading will be paid because unloading shall be done by tipping.

Sr. No.	Description	Unit	Rate for loading into wagon, Trucks or boats within 15 meters lead	Rate for unloading from wagons non-tipping trucks or Boats including clearing 1.5 meters away from the Rail or 6 meters away from the water edge and excluding stacking unless otherwise stated.
1	2	3	4	5
<b>By Mechanical Means</b>				
4.1	(A) Stone (building or pitching) Sand, Earth, Fly Ash, Bajri, Shingle, Spalls, Brick bats, Brick ballast and Stone metal.	cum	19.48	6.27

Sr. No.	Description		Unit	Rate for loading into wagon, Trucks or boats within 15 meters lead	Rate for unloading from wagons non-tipping trucks or Boats including clearing 1.5 meters away from the Rail or 6 meters away from the water edge and excluding stacking unless otherwise stated.
1	2		3	4	5
	(B)	Coal	t	10.24	3.33
<b>By Manual Means</b>					
4.2	(A)	Stone (building or pitching) Sand, Earth, Fly Ash, Bajri, Shingle, Spalls, Brick bats, Brick ballast and Stone metal.	cum	31.36	18.29
	(B)	Coal	t	54.32	36.58
4.3	Bricks 22.86 cm. size (including stacking)		1000 nos	73.17	73.18
4.4	Tiles including stacking :-				
	(i)	30.48 cm x 15.24 cm x 5.08 cm	1000 nos	88.86	88.86
	(ii)	22.86 cm x 11.43 cm x 3.81 cm	1000 nos	52.27	52.26
4.5	(a)	Cement bags full including stacking up to 10 bags height in jute bags.	100 nos	313.60	313.61
	(b)	Cement bags full including stacking up to 10 bags height in paper bags .	100 nos	344.96	344.96
4.6	Empty Cement bags including stacking.		100 nos	18.29	15.68
4.7	White (or non-hydraulic) lime or kankar (or Hydraulic) lime in bags including stacking.		t	62.73	57.50
4.8	White lime or kankar lime in bulk.		t	54.88	47.04
4.9	M.S. Bars, structural steel G.I. pipes and specials, C.I. manhole covers, steps and other castings and other ancillary items like lead, hemp-yarn etc. including stacking.		t	104.54	83.62
4.10	(a)	200 Litres barrel full including stacking.	each	13.06	10.45
	(b)	Bitumen drums full including stacking .	each	10.45	7.84

Sr. No.	Description	Unit	Rate for loading into wagon, Trucks or boats within 15 meters lead	Rate for unloading from wagons non-tipping trucks or Boats including clearing 1.5 meters away from the Rail or 6 meters away from the water edge and excluding stacking unless otherwise stated.
1	2	3	4	5
4.11	Small packages of store up to one qtl including stacking.	qtl	10.45	10.45
4.12	Timber sleepers (Standard sizes and by manual Labour)	100 nos	209.06	177.70
4.13	Packages containing material :-			
(a)	Heavy above one tonne if crane or any other suitable device is arranged by the contractor.	t	313.60	313.61
(b)	(i) Heavy above one tonne if crane or any other suitable device is arranged by the Deptt.	t	83.62	83.62
	(ii) Medium 0.50 tonne to one tonne if crane or any other suitable device is arranged by the Deptt.	t	156.81	156.80
	(iii) Light under 0.50 tonne if crane or any other suitable device is arranged by the Deptt.	t	104.54	104.54
4.14	Rails with fastenings	t	104.54	104.54
4.15	Ballies :-			
	(i) Less than 20 cm girth at centre, 4 metres to 6 metres long.	100 nos	114.98	104.54
	(ii) 20-35 cm girth at centre, 6 to 9m long.	100 nos	156.81	125.44
	(iii) 35-50 cm girth at centre, 6 to 10.5 m long.	100 nos	209.06	156.80
4.16	Shuttering :-			
	(i) In Trucks	truck load	125.46	125.44
	(ii) In wagons (broad gauge)	wagon load	334.52	334.51

Sr. No.	Description		Unit	Rate for loading into wagon, Trucks or boats within 15 meters lead	Rate for unloading from wagons non-tipping trucks or Boats including clearing 1.5 meters away from the Rail or 6 meters away from the water edge and excluding stacking unless otherwise stated.	
1	2		3	4	5	
	(iii)	In bogies (broad gauge)	8 wheeled bogie load	669.01	669.02	
4.17	Stone sets into or from wagons, trucks or boats including stacking within one chain of the unloading point.		cum	52.27	52.26	
4.18	Petrol 10 litre tins including checking and weighing.		100 nos	73.17	73.18	
4.19	Kerosene oil or petrol 20 litre tins including checking and weighing.		100 nos	146.35	146.34	
4.20	Cast iron/RCC Pipes :-					
	(i)	Upton 300mm dia bore	t	104.54	81.01	
	(ii)	Exceeding 300 mm but up to 450 mm dia bore	t	209.06	162.04	
	(iii)	Exceeding 450 mm but up to 600 mm dia bore	t	313.60	243.03	
4.21	Asbestos cement pipes.		t	104.54	81.01	
4.22	Stone ware pipes.		t	104.54	81.01	
4.23	PVC pipes		t	104.54	81.01	
4.24	H.D.P.E, pipes.		t	104.54	81.01	
Stacking within 15 metres of the unloading points into stacks of specified sizes.						
4.25	Pitching stones, spalls brick bats building stone ballast, stone metal, sand bajri and shingle.		cum	20.92		
4.26	Coal		cum	20.92		
4.27	White lime or Kankar lime in bulk.		t	15.68		
4.28	Timber		cum	15.68		
4.29	Bricks 22.86 cm. size		1000 nos	52.27		



Sr. No.	Description	Unit	Rate for loading into wagon, Trucks or boats within 15 meters lead	Rate for unloading from wagons non-tipping trucks or Boats including clearing 1.5 meters away from the Rail or 6 meters away from the water edge and excluding stacking unless otherwise stated.
1	2	3	4	5
4.30	Tiles			
	(i) 30.48 cm x 15.24 cm x 5.08 cm	1000 nos	67.95	
	(ii) 22.86 cm x 11.43 cm x 3.81 cm	1000 nos	41.81	
4.31	Cement bags full.	100 nos	125.46	
4.32	(a) Empty cement bags stacking.	100 nos	2.61	
	(b) Empty cement bags bundling.	100 nos	10.45	
4.33	White (or non-hydraulic) lime or kankar (or Hydraulic) lime in bags.	t	31.36	
4.34	M.S Bars, structural steel G.I. pipes and specials, C.I Manhole covers, steps other castings and other ancillary items like lead, hemp-yarn etc.	t	52.27	
4.35	(a) 200 litres barrel full.	each	4.18	
	(b) Bitumen drums full .	each	2.61	
4.36	Small packages of store up to one qtl .	qtl	2.61	
4.37	Cast iron/RCC Pipes :-			
	(i) Upton 300mm i/d	t	33.96	
	(ii) Exceeding 300 mm but up to 450 mm i/d	t	67.95	
	(iii) Exceeding 450 mm but up to 600 mm i/d	t	88.86	
4.38	Asbestos cement pipes.	t	33.96	
4.39	Stone ware pipes.	t	33.96	
4.40	P.V.C/H.D.P.E. Pipes.	t	33.96	



## CHAPTER NO. 5

### CARRIAGE

#### Notes :-

- (i) The rates for carriage of materials manually upto 0.50 km and by mechanical means for every km lead, have been given. In case of actual lead exceed one K.M and falls into next, full rate of the next K.M will be paid i.e. fraction of K.M. will be payable for the full K.M.
- (ii) These rates are inclusive of all taxes, GST, Labour Welfare cess and contractor's profit.
- (iii) Unless otherwise stated, the carriage rates do not include loading unloading and stacking for purpose of measurements.
- (iv) For carriage of materials on river choe beds 20% extra, over the basic rates of kilometres concerned, should be paid for actual river or choe bed-length involved.
- (v) For carriage of materials on unmetalled roads 20% extra, on the basic rates of kilometres concerned, excepting those for item No. 5.3 to 5.5 should be paid.
- (vi) For carriage in sub mountainous area, the SE concerned may increase the carriage rates suitably upto maximum of 20% of the rates provided for the plains, in case he is satisfied that the existing CSR rates are not reasonable.
- (vii) For carriage of lengths above 6 metres of heavy steel sections like RS Joists, rails etc. which cannot be easily bent, increase the rates for steel in item No. 5.2 by 50 percent.
- (viii) Where a river is to be crossed by Ferry or Boat Bridge, the loaded trucks cannot be carried across and they have to be unloaded to some extent before crossing the river. The unloaded material has to be carried by manual or animal labour across the river and then reloaded into the trucks. This not only involves additional expenditure, but also extra time. In order to compensate for this, additional rate may be allowed by increasing 50%.
- (ix) Carriage rates of all materials carried in the containers include the carriage of containers in which the materials are carried. Only the net weight of material carried is payable excluding the weight of container.
- (x) While making measurements of materials for the purposes of payment for carriage, suitable deduction shall be made to account for voids in loose stacking. The factor will be different with different materials and may be ascertained from the relevant specifications of that material, as given in chapter No. 5 of PWD specifications.
- (xi) The Superintending Engineer concerned may sanction the approved rates of Truck operators Unions in specific and emergent cases, in case he feels that the existing schedule rates are not workable.
- (xii) The rates under item No. 5.6 do not provide for special carriage arrangements like cranes, trailers etc. Carriage of machinery not covered by this item should be paid at special rates to be determined after inviting quotations/Tenders.
- (xiii) The rate for carriage of Bitumen as per item no. 5.2 (iii) are for Round Trip Distance. Round Trip Distance means if lead for single side is 10 km, then RTD will be taken as 20 km, for lead beyond RTD of 300 Km will be payable @ Rs.2/- per km per MT
- (xiv) Carriage of aggregates has been given eparately for total distance / lead and nothing extra to be added for pervious KM.

- (xv) Direct carriage for actual lead for each kilometers distance covered has been given in CSR from which cost of initial 5 kilometres must be deducted because the same has been added while preparing DAR for a particular item.

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
5.1	(i) Surkhi, Sand, Earth, Fly Ash, Bajri, Ballast, Stone Boulders, Kankar and Building Rubbish.		
	1st chain of 30 metres	cum	28.78
	2nd and 3rd chain, per chain of 30 metres	cum	6.24
	For subsequent chain per chain of 30 metres upto 0.50 km	cum	3.36
	(ii) Cement		
	1st chain of 30 metres	t	57.61
	2nd and 3rd chain, per chain of 30 metres	t	4.80
	For subsequent chain per chain of 30 metres upto 0.50 km	t	2.39
	(iii) Tar, Bitumen and other road binders		
	1st chain of 30 metres	t	57.61
	2nd and 3rd chain, per chain of 30 metres	t	4.80
	For subsequent chain per chain of 30 metres upto 0.50 km	t	2.39
	(iv) M.S. Bars, steel, coal, lime G.I. pipes and special C.I. manhole covers, steps and other castings and ancillary miscellaneous items like lead, hemp yarn etc.		
	1st chain of 30 metres	t	96.01
	2nd and 3rd chain, per chain of 30 metres	t	4.80
	For subsequent chain per chain of 30 metres upto 0.50 km	t	2.39
	(v) Timber		
	1st chain of 30 metres	cum	24.00
	2nd and 3rd chain, per chain of 30 metres	cum	3.84
	For subsequent chain per chain of 30 metres upto 0.50 km	cum	1.92
	(vi) Bricks (22.86 cm x 11.11cm x 6.83cm)		
	1st chain of 30 metres	1000 nos	72.00

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	2nd and 3rd chain, per chain of 30 metres	1000 nos	13.45
	For subsequent chain per chain of 30 metres upto 0.50 km	1000 nos	9.59
(vii)	Tiles (30.48 cm x 15.24cm x 5.08cm)		
	1st chain of 30 metres	1000 nos	91.20
	2nd and 3rd chain, per chain of 30 metres	1000 nos	21.59
	For subsequent chain per chain of 30 metres upto 0.50 km	1000 nos	11.52
(viii)	Tiles (22.86 cm x 11.43cm x 3.81cm)		
	1st chain of 30 metres	1000 nos	57.61
	2nd and 3rd chain, per chain of 30 metres	1000 nos	13.45
	For subsequent chain per chain of 30 metres upto 0.50 km	1000 nos	7.19
5.2	(i) Earth, Surkhi, Sand, Earth, Fly Ash, Bajri, Ballast, Stone boulders, Kankar and building rubbish, Earth.		
	0.5 to 1.0 km	cum	96.01
	2.0 km	cum	119.04
	3.0 km	cum	141.12
	4.0 km	cum	162.23
	5.0 km	cum	182.40
	0-6.0 km	cum	200.67
	0-7.0 km	cum	209.81
	0-8.0 km	cum	223.87
	0-9.0 km	cum	234.64
	0-10.0 km	cum	245.43
	0-11.0 km	cum	256.19
	0-12.0 km	cum	266.97
	0-13.0 km	cum	277.76
	0-14.0 km	cum	288.53
	0-15.0 km	cum	299.32
	0-16.0 km	cum	310.09

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-17.0 km	cum	320.88
	0-18.0 km	cum	331.65
	0-19.0 km	cum	342.43
	0-20.0 km	cum	353.20
	0-21.0 km	cum	362.03
	0-22.0 km	cum	370.85
	0-23.0 km	cum	379.67
	0-24.0 km	cum	388.48
	0-25.0 km	cum	392.40
	0-26.0 km	cum	396.32
	0-27.0 km	cum	400.24
	0-28.0 km	cum	404.16
	0-29.0 km	cum	408.08
	0-30.0 km	cum	412.00
	0-31.0 km	cum	415.92
	0-32.0 km	cum	419.84
	0-33.0 km	cum	423.76
	0-34.0 km	cum	427.68
	0-35.0 km	cum	431.60
	0-36.0 km	cum	435.52
	0-37.0 km	cum	439.43
	0-38.0 km	cum	443.36
	0-39.0 km	cum	447.27
	0-40.0 km	cum	451.20
	0-41.0 km	cum	455.11
	0-42.0 km	cum	459.04
	0-43.0 km	cum	462.95
	0-44.0 km	cum	466.88

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-45.0 km	cum	470.79
	0-46.0 km	cum	474.72
	0-47.0 km	cum	478.63
	0-48.0 km	cum	482.56
	0-49.0 km	cum	486.47
	0-50.0 km	cum	490.40
	0-51.0 km	cum	494.31
	0-52.0 km	cum	498.23
	0-53.0 km	cum	502.15
	0-54.0 km	cum	506.07
	0-55.0 km	cum	509.99
	0-56.0 km	cum	513.91
	0-57.0 km	cum	517.83
	0-58.0 km	cum	521.75
	0-59.0 km	cum	525.67
	0-60.0 km	cum	529.59
	0-61.0 km	cum	533.51
	0-62.0 km	cum	537.43
	0-63.0 km	cum	541.35
	0-64.0 km	cum	545.27
	0-65.0 km	cum	549.18
	0-66.0 km	cum	553.11
	0-67.0 km	cum	557.02
	0-68.0 km	cum	560.95
	0-69.0 km	cum	564.86
	0-70.0 km	cum	568.79
	0-71.0 km	cum	572.70
	0-72.0 km	cum	576.63
	0-73.0 km	cum	580.54

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-74.0 km	cum	584.47
	0-75.0 km	cum	588.38
	0-76.0 km	cum	592.31
	0-77.0 km	cum	596.22
	0-78.0 km	cum	600.15
	0-79.0 km	cum	604.06
	0-80.0 km	cum	607.98
	0-81.0 km	cum	610.93
	0-82.0 km	cum	613.87
	0-83.0 km	cum	616.80
	0-84.0 km	cum	619.74
	0-85.0 km	cum	622.68
	0-86.0 km	cum	625.62
	0-87.0 km	cum	628.57
	0-88.0 km	cum	631.50
	0-89.0 km	cum	634.45
	0-90.0 km	cum	636.41
	0-91.0 km	cum	638.36
	0-92.0 km	cum	640.32
	0-93.0 km	cum	642.29
	0-94.0 km	cum	644.25
	0-95.0 km	cum	646.20
	0-96.0 km	cum	648.16
	0-97.0 km	cum	650.13
	0-98.0 km	cum	652.08
	0-99.0 km	cum	654.04
	0-100.0 km	cum	656.00
	0-101.0 km	cum	657.63



Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-102.0 km	cum	659.27
	0-103.0 km	cum	660.90
	0-104.0 km	cum	662.54
	0-105.0 km	cum	664.16
	0-106.0 km	cum	665.81
	0-107.0 km	cum	667.43
	0-108.0 km	cum	669.05
	0-109.0 km	cum	670.70
	0-110.0 km	cum	672.32
	0-111.0 km	cum	673.97
	0-112.0 km	cum	675.60
	0-113.0 km	cum	677.23
	0-114.0 km	cum	678.87
	0-115.0 km	cum	680.50
	0-116.0 km	cum	682.12
	0-117.0 km	cum	683.76
	0-118.0 km	cum	685.40
	0-119.0 km	cum	687.03
	0-120.0 km	cum	688.67
	0-121.0 km	cum	690.29
	0-122.0 km	cum	691.94
	0-123.0 km	cum	693.56
	0-124.0 km	cum	695.20
	0-125.0 km	cum	696.83
	0-126.0 km	cum	698.45
	0-127.0 km	cum	700.10
	0-128.0 km	cum	701.72
	0-129.0 km	cum	703.36
	0-130.0 km	cum	705.00

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-131.0 km	cum	706.63
	0-132.0 km	cum	708.25
	0-133.0 km	cum	709.90
	0-134.0 km	cum	711.52
	0-135.0 km	cum	713.16
	0-136.0 km	cum	714.80
	0-137.0 km	cum	716.42
	0-138.0 km	cum	718.07
	0-139.0 km	cum	719.69
	0-140.0 km	cum	721.32
	0-141.0 km	cum	722.96
	0-142.0 km	cum	724.60
	0-143.0 km	cum	726.23
	0-144.0 km	cum	727.85
	0-145.0 km	cum	729.49
	0-146.0 km	cum	731.12
	0-147.0 km	cum	732.76
	0-148.0 km	cum	734.38
	0-149.0 km	cum	736.03
	0-150.0 km	cum	737.65
	0-151.0 km	cum	739.16
	0-152.0 km	cum	740.67
	0-153.0 km	cum	742.17
	0-154.0 km	cum	743.66
	0-155.0 km	cum	745.17
	0-156.0 km	cum	746.67
	0-157.0 km	cum	748.17
	0-158.0 km	cum	749.68

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-159.0 km	cum	751.18
	0-160.0 km	cum	752.67
	0-161.0 km	cum	754.19
	0-162.0 km	cum	755.69
	0-163.0 km	cum	757.19
	0-164.0 km	cum	758.70
	0-165.0 km	cum	760.20
	0-166.0 km	cum	761.69
	0-167.0 km	cum	763.20
	0-168.0 km	cum	764.70
	0-169.0 km	cum	766.20
	0-170.0 km	cum	767.72
	0-171.0 km	cum	769.20
	0-172.0 km	cum	770.71
	0-173.0 km	cum	772.22
	0-174.0 km	cum	773.72
	0-175.0 km	cum	775.22
	0-176.0 km	cum	776.73
	0-177.0 km	cum	778.22
	0-178.0 km	cum	779.72
	0-179.0 km	cum	781.23
	0-180.0 km	cum	782.73
	0-181.0 km	cum	784.24
	0-182.0 km	cum	785.75
	0-183.0 km	cum	787.24
	0-184.0 km	cum	788.74
	0-185.0 km	cum	790.25
	0-186.0 km	cum	791.75
	0-187.0 km	cum	793.25

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-188.0 km	cum	794.75
	0-189.0 km	cum	796.25
	0-190.0 km	cum	797.75
	0-191.0 km	cum	799.27
	0-192.0 km	cum	800.77
	0-193.0 km	cum	802.27
	0-194.0 km	cum	803.77
	0-195.0 km	cum	805.27
	0-196.0 km	cum	806.77
	0-197.0 km	cum	808.28
	0-198.0 km	cum	809.78
	0-199.0 km	cum	811.28
	0-200.0 km	cum	812.78
	0-201.0 km	cum	814.28
	0-202.0 km	cum	815.79
	0-203.0 km	cum	817.30
	0-204.0 km	cum	818.80
	0-205.0 km	cum	820.30
	0-206.0 km	cum	821.79
	0-207.0 km	cum	823.30
	0-208.0 km	cum	824.80
	0-209.0 km	cum	826.30
	0-210.0 km	cum	827.81
	0-211.0 km	cum	829.30
	0-212.0 km	cum	830.80
	0-213.0 km	cum	832.32
	0-214.0 km	cum	833.82
	0-215.0 km	cum	835.32

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-216.0 km	cum	836.83
	0-217.0 km	cum	838.32
	0-218.0 km	cum	839.82
	0-219.0 km	cum	841.33
	0-220.0 km	cum	842.83
	0-221.0 km	cum	844.33
	0-222.0 km	cum	845.85
	0-223.0 km	cum	847.34
	0-224.0 km	cum	848.84
	0-225.0 km	cum	850.35
	0-226.0 km	cum	851.85
	0-227.0 km	cum	853.35
	0-228.0 km	cum	854.85
	0-229.0 km	cum	856.35
	0-230.0 km	cum	857.85
	0-231.0 km	cum	859.36
	0-232.0 km	cum	860.87
	0-233.0 km	cum	862.37
	0-234.0 km	cum	863.87
	0-235.0 km	cum	865.37
	0-236.0 km	cum	866.87
	0-237.0 km	cum	868.38
	0-238.0 km	cum	869.88
	0-239.0 km	cum	871.38
	0-240.0 km	cum	872.88
	0-241.0 km	cum	874.38
	0-242.0 km	cum	875.88
	0-243.0 km	cum	877.40
	0-244.0 km	cum	878.90

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-245.0 km	cum	880.40
	0-246.0 km	cum	881.90
	0-247.0 km	cum	883.40
	0-248.0 km	cum	884.90
	0-249.0 km	cum	886.41
	0-250.0 km	cum	887.91
	0-251.0 km	cum	889.40
	0-252.0 km	cum	890.92
	0-253.0 km	cum	892.42
	0-254.0 km	cum	893.92
	0-255.0 km	cum	895.43
	0-256.0 km	cum	896.93
	0-257.0 km	cum	898.42
	0-258.0 km	cum	899.93
	0-259.0 km	cum	901.43
	0-260.0 km	cum	902.93
	0-261.0 km	cum	904.44
	0-262.0 km	cum	905.95
	0-263.0 km	cum	907.44
	0-264.0 km	cum	908.95
	0-265.0 km	cum	910.45
	0-266.0 km	cum	911.95
	0-267.0 km	cum	913.46
	0-268.0 km	cum	914.95
	0-269.0 km	cum	916.45
	0-270.0 km	cum	917.95
	0-271.0 km	cum	919.46
	0-272.0 km	cum	920.96

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-273.0 km	cum	922.47
	0-274.0 km	cum	923.97
	0-275.0 km	cum	925.47
	0-276.0 km	cum	926.97
	0-277.0 km	cum	928.48
	0-278.0 km	cum	929.98
	0-279.0 km	cum	931.48
	0-280.0 km	cum	932.98
	0-281.0 km	cum	934.48
	0-282.0 km	cum	935.98
	0-283.0 km	cum	937.50
	0-284.0 km	cum	939.00
	0-285.0 km	cum	940.50
	0-286.0 km	cum	942.00
	0-287.0 km	cum	943.50
	0-288.0 km	cum	945.00
	0-289.0 km	cum	946.51
	0-290.0 km	cum	948.01
	0-291.0 km	cum	949.50
	0-292.0 km	cum	951.01
	0-293.0 km	cum	952.52
	0-294.0 km	cum	954.02
	0-295.0 km	cum	955.53
	0-296.0 km	cum	957.03
	0-297.0 km	cum	958.52
	0-298.0 km	cum	960.03
	0-299.0 km	cum	961.53
	0-300.0 km	cum	963.03
	Beyond 300 km (per km)	cum	1.50

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	(ii) Cement		
	0.5 to 1.0 km	t	39.36
	0-2.0 km	t	55.19
	0-3.0 km	t	70.08
	0-4.0 km	t	82.07
	0-5.0 km	t	92.15
	(iii) Tar, Bitumen and other Road Binders RTD		
	0-20.0 km	t	112.36
	0-21.0 km	t	118.25
	0-22.0 km	t	124.13
	0-23.0 km	t	130.00
	0-24.0 km	t	135.88
	0-25.0 km	t	139.81
	0-26.0 km	t	143.72
	0-27.0 km	t	147.65
	0-28.0 km	t	151.56
	0-29.0 km	t	155.48
	0-30.0 km	t	159.40
	0-31.0 km	t	163.32
	0-32.0 km	t	167.24
	0-33.0 km	t	171.16
	0-34.0 km	t	175.08
	0-35.0 km	t	179.00
	0-36.0 km	t	182.92
	0-37.0 km	t	186.84
	0-38.0 km	t	190.76
	0-39.0 km	t	194.68
	0-40.0 km	t	198.60
	0-41.0 km	t	201.21



Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-42.0 km	t	203.82
	0-43.0 km	t	206.43
	0-44.0 km	t	209.05
	0-45.0 km	t	211.66
	0-46.0 km	t	214.27
	0-47.0 km	t	216.89
	0-48.0 km	t	219.50
	0-49.0 km	t	222.11
	0-50.0 km	t	224.73
	0-51.0 km	t	227.34
	0-52.0 km	t	229.95
	0-53.0 km	t	232.57
	0-54.0 km	t	235.18
	0-55.0 km	t	237.79
	0-56.0 km	t	240.41
	0-57.0 km	t	243.02
	0-58.0 km	t	245.63
	0-59.0 km	t	248.24
	0-60.0 km	t	250.86
	0-61.0 km	t	253.47
	0-62.0 km	t	256.08
	0-63.0 km	t	258.70
	0-64.0 km	t	261.31
	0-65.0 km	t	263.92
	0-66.0 km	t	266.54
	0-67.0 km	t	269.15
	0-68.0 km	t	271.76
	0-69.0 km	t	274.38

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-70.0 km	t	276.99
	0-71.0 km	t	279.60
	0-72.0 km	t	282.21
	0-73.0 km	t	284.83
	0-74.0 km	t	287.44
	0-75.0 km	t	290.05
	0-76.0 km	t	292.67
	0-77.0 km	t	295.28
	0-78.0 km	t	297.89
	0-79.0 km	t	300.51
	0-80.0 km	t	303.12
	0-81.0 km	t	305.40
	0-82.0 km	t	307.69
	0-83.0 km	t	309.97
	0-84.0 km	t	312.27
	0-85.0 km	t	314.55
	0-86.0 km	t	316.84
	0-87.0 km	t	319.12
	0-88.0 km	t	321.41
	0-89.0 km	t	323.69
	0-90.0 km	t	325.98
	0-91.0 km	t	328.26
	0-92.0 km	t	330.56
	0-93.0 km	t	332.84
	0-94.0 km	t	335.13
	0-95.0 km	t	337.41
	0-96.0 km	t	339.70
	0-97.0 km	t	341.98
	0-98.0 km	t	344.27

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-99.0 km	t	346.55
	0-100.0 km	t	348.85
	0-101.0 km	t	350.81
	0-102.0 km	t	352.77
	0-103.0 km	t	354.73
	0-104.0 km	t	356.69
	0-105.0 km	t	358.65
	0-106.0 km	t	360.61
	0-107.0 km	t	362.57
	0-108.0 km	t	364.53
	0-109.0 km	t	366.49
	0-110.0 km	t	368.45
	0-111.0 km	t	370.40
	0-112.0 km	t	372.37
	0-113.0 km	t	374.33
	0-114.0 km	t	376.29
	0-115.0 km	t	378.24
	0-116.0 km	t	380.21
	0-117.0 km	t	382.17
	0-118.0 km	t	384.13
	0-119.0 km	t	386.08
	0-120.0 km	t	388.05
	0-121.0 km	t	390.01
	0-122.0 km	t	391.97
	0-123.0 km	t	393.92
	0-124.0 km	t	395.89
	0-125.0 km	t	397.85
	0-126.0 km	t	399.80

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-127.0 km	t	401.76
	0-128.0 km	t	403.73
	0-129.0 km	t	405.69
	0-130.0 km	t	407.64
	0-131.0 km	t	409.21
	0-132.0 km	t	410.77
	0-133.0 km	t	412.35
	0-134.0 km	t	413.91
	0-135.0 km	t	415.48
	0-136.0 km	t	417.05
	0-137.0 km	t	418.61
	0-138.0 km	t	420.18
	0-139.0 km	t	421.75
	0-140.0 km	t	423.32
	0-141.0 km	t	424.89
	0-142.0 km	t	426.45
	0-143.0 km	t	428.02
	0-144.0 km	t	429.59
	0-145.0 km	t	431.16
	0-146.0 km	t	432.73
	0-147.0 km	t	434.29
	0-148.0 km	t	435.86
	0-149.0 km	t	437.43
	0-150.0 km	t	439.00
	0-151.0 km	t	440.56
	0-152.0 km	t	442.13
	0-153.0 km	t	443.70
	0-154.0 km	t	445.27
	0-155.0 km	t	446.84

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-156.0 km	t	448.40
	0-157.0 km	t	449.97
	0-158.0 km	t	451.54
	0-159.0 km	t	453.11
	0-160.0 km	t	454.68
	0-161.0 km	t	456.24
	0-162.0 km	t	457.81
	0-163.0 km	t	459.38
	0-164.0 km	t	460.94
	0-165.0 km	t	462.52
	0-166.0 km	t	464.08
	0-167.0 km	t	465.65
	0-168.0 km	t	467.22
	0-169.0 km	t	468.78
	0-170.0 km	t	470.36
	0-171.0 km	t	471.92
	0-172.0 km	t	473.49
	0-173.0 km	t	475.06
	0-174.0 km	t	476.62
	0-175.0 km	t	478.20
	0-176.0 km	t	479.76
	0-177.0 km	t	481.33
	0-178.0 km	t	482.90
	0-179.0 km	t	484.46
	0-180.0 km	t	486.04
	0-181.0 km	t	487.60
	0-182.0 km	t	489.16
	0-183.0 km	t	490.74

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-184.0 km	t	492.30
	0-185.0 km	t	493.88
	0-186.0 km	t	495.44
	0-187.0 km	t	497.00
	0-188.0 km	t	498.58
	0-189.0 km	t	500.14
	0-190.0 km	t	501.72
	0-191.0 km	t	503.28
	0-192.0 km	t	504.84
	0-193.0 km	t	506.42
	0-194.0 km	t	507.98
	0-195.0 km	t	509.54
	0-196.0 km	t	511.12
	0-197.0 km	t	512.68
	0-198.0 km	t	514.26
	0-199.0 km	t	515.82
	0-200.0 km	t	517.38
	0-201.0 km	t	518.96
	0-202.0 km	t	520.52
	0-203.0 km	t	522.10
	0-204.0 km	t	523.66
	0-205.0 km	t	525.22
	0-206.0 km	t	526.80
	0-207.0 km	t	528.36
	0-208.0 km	t	529.93
	0-209.0 km	t	531.50
	0-210.0 km	t	533.06
	0-211.0 km	t	534.64
	0-212.0 km	t	536.20

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-213.0 km	t	537.77
	0-214.0 km	t	539.34
	0-215.0 km	t	540.90
	0-216.0 km	t	542.48
	0-217.0 km	t	544.04
	0-218.0 km	t	545.61
	0-219.0 km	t	547.18
	0-220.0 km	t	548.74
	0-221.0 km	t	550.31
	0-222.0 km	t	551.88
	0-223.0 km	t	553.45
	0-224.0 km	t	555.02
	0-225.0 km	t	556.58
	0-226.0 km	t	558.15
	0-227.0 km	t	559.72
	0-228.0 km	t	561.29
	0-229.0 km	t	562.86
	0-230.0 km	t	564.42
	0-231.0 km	t	565.99
	0-232.0 km	t	567.56
	0-233.0 km	t	569.13
	0-234.0 km	t	570.70
	0-235.0 km	t	572.26
	0-236.0 km	t	573.83
	0-237.0 km	t	575.40
	0-238.0 km	t	576.97
	0-239.0 km	t	578.52
	0-240.0 km	t	580.10

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-241.0 km	t	581.67
	0-242.0 km	t	583.24
	0-243.0 km	t	584.81
	0-244.0 km	t	586.36
	0-245.0 km	t	587.94
	0-246.0 km	t	589.51
	0-247.0 km	t	591.08
	0-248.0 km	t	592.65
	0-249.0 km	t	594.20
	0-250.0 km	t	595.78
	0-251.0 km	t	597.35
	0-252.0 km	t	598.91
	0-253.0 km	t	600.49
	0-254.0 km	t	602.04
	0-255.0 km	t	603.62
	0-256.0 km	t	605.19
	0-257.0 km	t	606.75
	0-258.0 km	t	608.33
	0-259.0 km	t	609.88
	0-260.0 km	t	611.46
	0-261.0 km	t	613.03
	0-262.0 km	t	614.59
	0-263.0 km	t	616.17
	0-264.0 km	t	617.72
	0-265.0 km	t	619.29
	0-266.0 km	t	620.87
	0-267.0 km	t	622.43
	0-268.0 km	t	624.01
	0-269.0 km	t	625.56



Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-270.0 km	t	627.13
	0-271.0 km	t	628.71
	0-272.0 km	t	630.27
	0-273.0 km	t	631.85
	0-274.0 km	t	633.40
	0-275.0 km	t	634.97
	0-276.0 km	t	636.55
	0-277.0 km	t	638.11
	0-278.0 km	t	639.68
	0-279.0 km	t	641.24
	0-280.0 km	t	642.81
	0-281.0 km	t	644.39
	0-282.0 km	t	645.95
	0-283.0 km	t	647.52
	0-284.0 km	t	649.08
	0-285.0 km	t	650.65
	0-286.0 km	t	652.23
	0-287.0 km	t	653.79
	0-288.0 km	t	655.36
	0-289.0 km	t	656.92
	0-290.0 km	t	658.49
	0-291.0 km	t	660.07
	0-292.0 km	t	661.63
	0-293.0 km	t	663.20
	0-294.0 km	t	664.76
	0-295.0 km	t	666.33
	0-296.0 km	t	667.90
	0-297.0 km	t	669.47

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	0-298.0 km	t	671.04
	0-299.0 km	t	672.60
	0-300.0 km	t	674.17
	Beyond 300 km RTD per MT/ Km	t	2.00
(iv)	<b>MS Bars, Steel, Coal, Lime, GI pipes and specials, CI manhole covers, steps and other castings and ancillary miscellaneous items like lead, hemp yarn etc.</b>		
	0.5 to 1.0 km	t	72.00
	2.0 km	t	88.32
	3.0 km	t	103.68
	4.0 km	t	117.12
	5.0 km	t	129.61
(v)	<b>Timber</b>		
	0.5 to 1.0 km	cum	49.44
	2.0 km	cum	60.96
	3.0 km	cum	71.52
	4.0 km	cum	81.59
	5.0 km	cum	91.20
(vi)	<b>Bricks (22.86 cm x 11.11cm x 6.83cm)</b>		
	0.5 to 1.0 km	1000 nos	111.36
	2.0 km	1000 nos	180.00
	3.0 km	1000 nos	245.75
	4.0 km	1000 nos	309.12
	5.0 km	1000 nos	369.60
	6.0 km to 10.0 km (Rate per KM)	1000 nos	36.99
	11.0 km to 30.0 km (Rate per KM)	1000 nos	19.00
(vii)	<b>Tiles 30.48 x 15.24x5.08 cm</b>		
	0.5 km to 1.0 km	1000 nos	348.49
	2.0 km	1000 nos	439.69
	3.0 km	1000 nos	510.71

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	4.0 km	1000 nos	573.13
	5.0 km	1000 nos	633.60
	6.0 km to 10.0 km (Rate per KM)	1000 nos	42.01
(viii)	Tiles 22.86x11.43x3.81 cm		
	0.50 km to 1.0 km	1000 nos	108.48
	2.0 km	1000 nos	136.33
	3.0 km	1000 nos	162.23
	4.0 km	1000 nos	187.19
	5.0 km	1000 nos	211.20
	6.0 km to 10.0 km	1000 nos	13.01
	11.0 km to 30.0 km (Rate per KM)	1000 nos	9.50
(ix)(a)	Cast iron pipes 80mm i/d (Truck load 8.50 tonnes)		
	0.50 km to 1.0 km	t	115.20
	2.0 km	t	125.76
	3.0 km	t	136.33
	4.0 km	t	146.90
	5.0 km	t	157.43
(ix)(b)	Cast iron pipes 100mm to 150mm i/d (Truck load 7.0 tonnes)		
	0.50 km to 1.0 km	t	143.99
	2.0 km	t	156.49
	3.0 km	t	168.95
	4.0 km	t	181.44
	5.0 km	t	193.93
(ix)(c)	Cast iron pipes 200mm to 350 mm i/d (Truck load 5.50		
	0.50 km to 1.0 km	t	198.72
	2.0 km	t	215.03
	3.0 km	t	231.36

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	4.0 km	t	247.69
	5.0 km	t	264.00
(ix)(d)	Cast iron pipes 400 mm to 600 mm i/d (Truck load 4.75		
	0.50 km to 1.0 km	t	245.75
	2.0 km	t	264.00
	3.0 km	t	282.24
	4.0 km	t	300.48
	5.0 km	t	318.72
(x)(a)	Cement asbestos pipes 80mm to 150 mm i/d (Truck load		
	0.50 km to 1.0 km	t	158.40
	2.0 km	t	172.82
	3.0 km	t	187.19
	4.0 km	t	201.60
	5.0 km	t	216.00
(x) (b)	Cement asbestos pipes 200mm to 250mm i/d (Truck load		
	0.50 km to 1.0 km	t	217.92
	2.0 km	t	238.07
	3.0 km	t	258.23
	4.0 km	t	278.40
	5.0 km	t	298.56
(xi)	PVC/HDPE pipes all sizes (Truck load 2.20 tonnes)		
	0.50 km to 1.0 km	t	433.91
	2.0 km	t	472.33
	3.0 km	t	510.71
	4.0 km	t	549.11
	5.0 km	t	587.52
(xii)(a)	S.W. pipes 100 mm to 200mm i/d (Truck load 4.50 tonnes)		
	0.50 km to 1.0 km	t	217.92
	2.0 km	t	238.07

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	3.0 km	t	258.23
	4.0 km	t	277.96
	5.0 km	t	298.56
(xii)(b)	S.W. pipes 225mm to 450mm i/d (Truck load 4.00 tonnes)		
	0.50 km to 1.0 km	t	240.00
	2.0 km	t	264.00
	3.0 km	t	288.02
	4.0 km	t	311.99
	5.0 km	t	336.00
(xiii)(a)	Carriage of RCC pipes 100 mm to 150 mm i/d (Truck load 6.75 tonnes)		
	0.50 km to 1.0 km	t	146.90
	2.0 km	t	159.36
	3.0 km	t	171.84
	4.0 km	t	184.32
	5.0 km	t	196.80
(xiii)(b)	RCC pipes 200mm to 300mm i/d (Truck load 6.50 tonnes)		
	0.50 km to 1.0 km	t	152.16
	2.0 km	t	165.12
	3.0 km	t	178.06
	4.0 km	t	191.04
	5.0 km	t	203.99
(xiii)(c)	RCC pipes 350mm to 450mm i/d (Truck load 6.00 tonnes)		
	0.50 km to 1.0 km	t	164.16
	2.0 km	t	178.06
	3.0 km	t	192.00
	4.0 km	t	205.91

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	5.0 km	t	219.84
(xiii) (d)	RCC pipes above 450 mm i/d (Truck load 5.0 tonnes)		
	0.50 km to 1.0 km	t	199.20
	2.0 km	t	216.00
	3.0 km	t	232.83
	4.0 km	t	249.60
	5.0 km	t	266.44
5.3	Carriage for odd jobs.		
(a)	Mazdoor load upto 40 kg and distance upto 3.0 km	Each	76.80
(b)	Mazdoor load upto 40 kg and distance exceeding 3.0km and up to 6.0km	Each	153.60
5.4	Carriage of small consignments out of the Railway premises to a distance of 10 chains of 30 metres each, including loading, unloading and stacking.	qtl	38.40
5.5	Carriage over short distance of small consignments, upto 2.0 qtls in weight including loading, un-loading and stacking.		
(a)	1.0 km	qtl	62.38
(b)	2.0 km	qtl	86.40
(c)	3.0 km	qtl	105.60
(d)	Subsequent km per km	qtl	9.59
5.6	Carriage of light/medium package, containing material.		
(a)	By manual labour, individual piece, weighing from 1.50 qtls to 4.0 qtls and not mounted on wheels, including stacking.		
(i)	Upto 150 metres	Piece	240.00
(ii)	Exceeding 150 metres and upto 300 metres	Piece	384.00
(b)	By mechanical transport including the use of pully block, individual piece weighing upto one tonne.		
(i)	1st 300 metres	t	240.00
(ii)	Add for every 300 metres but up to 1200 metres	t	28.78
(iii)	For 1600 metres exceeding 1200 metres	t	355.21

Sr. No.	Description	Unit	Rates for Zone-A & Zone-B
	(iv) Add for every subsequent km up to 8.00 km	t	35.00
	(v) Add for every subsequent km above 8.00 km up to 16.00 km	t	27.47
5.7	Carriage of empty cement bags including bundling.		
	(i) 1st 300 metres	100 nos	9.59
	(ii) 2nd and 3rd (300 metres)	100 nos	2.36
	(iii) For One km	100 nos	14.40
	(iv) For Two km	100 nos	23.04
	(v) For Three km	100 nos	30.72
	(vi) Above 3.0 km but up to 13.0 km	100 nos	5.99
	(vii) Subsequent km	100 nos	5.00
5.8	Carriage of soaking and mortar mixing tanks.		
	(i) For One km	qtl	24.00
	(ii) For Two km	qtl	38.40
	(iii) For Three km	qtl	43.19
	(iv) For Four km	qtl	51.33
	(v) For Five km	qtl	57.61
	(vi) For Six km	qtl	66.47
	(vii) Subsequent km	qtl	5.99
5.9	Bending MS Bars for carriage purposes.	t	105.60





## CHAPTER NO. 6

### EARTH WORK

#### Notes :-

- (i) Converting lift into horizontal lead :- For converting lift into horizontal lead, the lift upto 3.60 metres will be multiplied by 10, from 3.60 metres to 6.0 metres it will be 50% of qty. as obtained from 0 to 3.60 mtr multiplied with 10 beyond 6.0 metres it will be multiplied by 20. No cross leads what-so-ever shall be measured and paid for.
- (ii) Rehandling of earth work and gravel work :- The rates of rehandling of recently deposited earth work and gravel work after excavation will be 20 percent less on excavation rates. Earth work deposited before monsoon season which has had a full monsoon on it, will be considered as a normal earth work for excavation.
- (iii) Measurement of lift :- The lift shall be measured from the centre of gravity of the excavated earth to that of placed earth. This shall constitute the mean lift for that section. When earth has to be carried over spoil bank and dumped beyond it, the mean lift would be the difference in levels between the centre of gravity of the excavated earth and top of the spoil bank omitting the dowel.
- (iv) Rates for additional lead have been given in slabs for 7.50 metres each of additional lead. If the lead exceeds a slab by 1.50 metres or so, full payment for 7.50 metres lead will be made.
- (v) These rates are for building works and upto quantity of 100 cum only for other engineering works. For other engineering works quantity beyond 100 cum, the rates shall be payable as per the Item by mechanical means Item No. 6.19.
- (vi) The rates for carriage of materials manually upto 0.50 km and by mechanical means for every km lead, have been given. In case actual lead exceeds one KM and falls into next, full rate of next km is to considered i.e. fraction of KM will be payable for the full KM.

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
6.1	Earth work of silt clearance of channels and drains:-					
	(a) Kassi work undressed involving an average horizontal throw up to 2 metres and average vertical lift up to 0.5 metres	cum	77.00	77.00	85.00	85.00
	(b) Basket work with combined lead upto 7.50 metres undressed.	cum	109.00	109.00	120.00	120.00
	(c) Dressing for sub-item (a) and (b) supra.	cum	7.00	7.00	8.00	8.00
	(d) Extra for every 7.5 metres additional lead.	cum	4.00	4.00	4.00	4.00
Note :-	No extra allowance of wetness, slush or humus dal dal are payable for item No. 6.1.					
6.2	Earth work excavation in ordinary soil, exclusive of compensation of earth:-					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(a)	Kassi work undressed involving an average horizontal throw up to 2.0 metres and an average vertical lift up to 0.5 metres including breaking of clods.	cum	77.00	77.00	85.00	85.00
	(b)	Earth work undressed with a combined lead upto 15 metres including breaking of clods.	cum	109.00	109.00	120.00	120.00
	(c)	Lead					
	(i)	Extra for every 7.50 metres additional lead beyond 15 metres but upto 300 metres.	cum	5.00	5.00	6.00	6.00
	(ii)	Extra for 7.50 metres additional lead beyond 300 metres but upto 500 metres.	cum	4.00	4.00	4.00	4.00
Note :-		For leads beyond 500 metres earth work shall be payable at carriage rates for sand, bajri and ballast etc. given in the chapter No. 5 item No. 5.2 and loading, unloading as per chapter No. 4. Except those provided under item No. 6.2 (f) and (g).					
	(d)	Wet Earth work					
	(i)	Extra for wet earth work from bottom of excavation upto level of sub soil water	cum	19.25	19.25	19.25	19.25
	(ii)	Extra for wet earth work from level of sub soil water upto 30 cm above	cum	11.55	11.55	11.55	11.55
	(iii)	Extra for wet earth work for depth above 30 cm of sub soil water level	cum	7.70	7.70	7.70	7.70
	(e)	Hardness					
	(i)	Extra for hard soil with D.B.D. (Dry bulk density) from 1.60 to 1.70 gm/c.c.	cum	18.00	18.00	20.00	20.00
	(ii)	Extra for hard soil with D.B.D. (Dry bulk density) from 1.70 but upto 1.80 gm/ c.c.	cum	36.00	36.00	40.00	40.00
	(iii)	Extra for D.B.D. upto 1.80 gm/ c.c.	cum	54.00	54.00	54.00	54.00
	(f)	Extra for puddling work	cum	91.00	91.00	100.00	100.00
	(g)	Admixtures of shingle or Kankar:					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(i)	Extra for admixture of shingle or kankar exceeding 10 percent but upto 20 percent.	cum	23.00	23.00	25.00	25.00
	(ii)	Extra for admixture of shingle or kankar exceeding 20 percent but upto 30 percent.	cum	36.00	36.00	40.00	40.00
	(iii)	Extra for admixture of shingle or kankar exceeding 30 percent but upto 40 percent.	cum	59.00	59.00	65.00	65.00
Note :-		For admixture above 40% rates for gravel work excavation shall apply --					
	(h)	Extra for slush.	Cum	58.87	58.87	58.87	58.87
	(i)	Extra for daldal	cum	98.11	98.11	98.11	98.11
6.3	Dressing of earth work						
	(i)	New work or remodeling work. Unit	Sqm	1.23	1.23	1.23	1.23
	(ii)	Repair work.	Sqm	1.71	1.71	1.71	1.71
	(iii)	Sand only.	Sqm	0.86	0.86	0.86	0.86
6.4	Extra For compensation & royalty for Ordinary earth/ Ordinary clay taken from private land.		cum	60.22	60.22	60.22	60.22
6.5	Earth work containing Gravel (in loose from in non cohesive binding material) work in excavation with occasional use of picks exclusive of compensation of earth undressed with combined lead upto 15 metres with percentage of gravel or Kankar.						
	(a)	Exceeding 40 % but upto 60 %.	cum	166.00	166.00	183.00	183.00
	(b)	Exceeding 60 % but upto 80 %.	cum	194.00	194.00	213.00	213.00
	(c)	Exceeding 80 % but upto 100 %.	cum	212.00	212.00	233.00	233.00
	(d)	Extra for every 7.5 metres additional lead beyond 15 m.	cum	6.00	6.00	7.00	7.00
	(e)	Extra for wet earth work containing gravel above sub soil water level.	cum	16.60	16.60	16.60	16.60
	(f)	Extra for earth work containing gravel under standing water.	cum	24.90	24.90	24.90	24.90

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(g)	Extra for earth work containing gravel under flowing water.	cum	41.50	41.50	41.50	41.50
	(h)	Extra for dressing earth work containing gravel.	Sqm	1.71	1.71	1.71	1.71
6.6	Earth work in excavation in foundations trenches etc. in all kinds of soil where Pick-Jumper work is not involved and not exceeding 2.0 metres depth including dressing of bottom and sides of trenches, stacking the excavated soil clear from the edge of excavation and subsequent filling around masonry in 15 cm, layers with compaction including disposal of all surplus soil as directed within lead of 30 metres.		cum	182.00	182.00	200.00	200.00
6.7	Earth work in excavation of foundations of bridges culverts, buildings including handling of material with a combined lead of 15 metres dressing of bed and sides stacking the excavated soil from the edge of excavation and subsequent filling around:-						
	(a)	For ordinary gravel soil involving pick work	cum	263.00	263.00	289.00	289.00
	(b)	For semi-conglomerate soil of the nature of pick jumper work.	cum	350.00	350.00	385.00	385.00
	(c)	For hard clayey soil or hard conglomerate or semi-rocky type of the nature of pick-jumper with occasional blasting.	cum	378.00	391.00	416.00	429.00
	(d)	Extra for wet earth work above sub soil water level.	cum	26.30	26.30	26.30	26.30
	(e)	Extra for Earth work under standing water.	cum	39.45	39.45	39.45	39.45
	(f)	Extra for Earth work under flowing water.	cum	65.75	65.75	65.75	65.75
	(g)	Extra for every 7.50 metres additional lead beyond 15 m.	cum	6.00	6.00	7.00	7.00
6.8	Earth filling						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	a (i)	Earth filling under floors with surplus ordinary soil or soil containing gravel or kankar upto 40% excavated from outside the building plinth in 15 cm layers including ramming, watering and consolidating lead upto 30 metres	cum	63.00	63.00	69.00	69.00
	(ii)	Earth filling under floors with surplus soil containing more than 40% gravel or kankar excavated from foundation & taken only from outside the building plinth in 15 cm layers including ramming watering and consolidation lead upto 30 metres	cum	113.00	113.00	124.00	124.00
	b (i)	Earth work (exclusive of compensation for earth) in excavation in ordinary soil or soil containing gravel or kankar upto 40% and filling in 15 cm layers in foundation and plinth including ramming watering and consolidating under floors with earth brought from a distance not exceeding 30 metres	cum	140.00	140.00	154.00	154.00
	(ii)	Earth work in excavation in soil containing more than 40% gravel or kankar (Exclusive of compensation for earth) and filling in 15 cm layers in foundation and plinth including ramming, watering and consolidating under floors with earth brought from a distance not exceeding 30 metres.	cum	194.00	194.00	213.00	213.00
	c (i)	Earth filling under floors with surplus ordinary soil or soil containing gravel or kankar upto 40% taking outside the premises in 15 cm layers including ramming, watering and consolidated lead upto 1000 metres	cum	277.00	277.00	305.00	305.00
	(ii)	Earth filling under floors with surplus soil containing more than 40% taking outside the premises in 15 cm layers including ramming watering and consolidated lead upto 1000 metres	cum	327.00	327.00	360.00	360.00
	(d)	Extra for additional lead above 30 metres.	cum			As per rates under item No. 6.2 (c)	
	(e)	Removal of slips from road side to:-					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(i)	out side road boundary into depressions with combined lead of 15 metres inclusive of cost of of explosive, compressed air T&P.	cum	Rates of items Nos. 7.0 to 7.10 to be paid according to type of work after reducing the rates by 10 percent		Rates of items Nos. 7.0 to 7.10 to be paid according to type of work after reducing the rates by 10 percent	
	(ii)	Extra for every additional 7.5 metres lead above 15 metres.	cum	5.15	5.15	5.15	5.15
6.9	Earth work over Roofs						
	(a)	Earth work over roofs of one story building with good earth free of any admixture of foreign matter including breaking of clods, ramming, watering, dressing and horizontal lead upto 30 metres.	cum	237.00	237.00	261.00	261.00
	(b)	Extra for additional lead beyond 30 metres.	cum			As per rates under item no. 6.2 (c)	
	(c)	Extra for every additional storey.	cum	15.00	15.00	17.00	17.00
6.10	Earth work undressed by boats including hire of boats:-						
	(a)	Digging and loading in boats within 15 metres lead.	cum	109.00	109.00	120.00	120.00
	(b)	Carriage by boats upto 300 metres.	cum	1.00	1.00	1.00	1.00
	(c)	Extra for distance beyond 300 metres and upto 750 metres (per 30 metres).	cum	1.00	1.00	1.00	1.00
Note :-	For lead beyond 750 metres the rates under item No. 6.2 (c) will be applicable.						
	(d)	Unloading earth from boats	cum	59.00	59.00	65.00	65.00
6.11	Earth work undressed by tramway or rail :-						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(a)	Digging and loading into tracks within 15 metres lead.	cum	109.00	109.00	120.00	120.00
	(b)	Hand shunting of N.G. tip wegons (per 30 metres)	cum	7.00	7.00	8.00	8.00
	(c)	Unloading earth from tip wagons and clearing with 3.0 metres from rail.	cum	29.00	29.00	32.00	32.00
	(d)	Unloading earth from B.G. Trucks clearing 1.5 metres from rail.	cum	61.00	61.00	67.00	67.00
	(e)	Unloading earth from B.G. Trucks and spreading 4.5 metres from rail.	cum	81.00	81.00	89.00	89.00
	(f)	Unloading earth from B.G. Trucks and spreading upto 30 metres from rail.	cum	100.00	100.00	110.00	110.00
6.12	Dressing of dowels in addition to payment for dressed earth work.		cum	5.00	5.00	6.00	6.00
6.13	Restoring boundary road drains.		metre	5.00	5.00	6.00	6.00
6.14	Making new boundary road including leveling and dressing 3.0 metres to 5.0 metres wide.						
	(a)	In unploughed Land	metre	12.00	12.00	13.00	13.00
	(b)	In ploughed Land.	metre	25.00	25.00	28.00	28.00
Note :-	The rates for item No. 6.13 are to be paid only in reaches where no earth work for boundary roads is paid for.						
6.15	(a)	Covering boundary road with 7.50 cm deep sarkanda of Jungle upto 300 metres lead including cutting and supply of sarkanda to jungle.	metre	14.00	14.00	15.00	15.00
	(b)	Covering boundary road with 7.50 cm deep sarkanda or jungle lead 300 metres to 1000 metres including cutting and supply of sarkanda or jungle.	metre	28.00	28.00	31.00	31.00
	(c)	Extra for carriage of Sarkanda:-					
	(i)	2nd Kilometree	metre	14.00	14.00	15.00	15.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(ii)	3rd Kilometre	metre	12.00	12.00	13.00	13.00
	(iii)	4th Kilometre	metre	11.00	11.00	12.00	12.00
	(iv)	5th Kilometre	metre	10.00	10.00	11.00	11.00
	(v)	6th Kilometre	metre	9.00	9.00	10.00	10.00
	(vi)	7th Kilometre	metre	8.00	8.00	9.00	9.00
	(vii)	Subsequent Km	metre	6.00	6.00	7.00	7.00
6.16	Ploughing and leveling borrow pits.		Acre	3680.00	3680.00	4048.00	4048.00
6.17	Berm trimming both sides :-						
	(a)	Channels upto one metre depth	Km	4166.00	4166.00	4583.00	4583.00
	(b)	Channels exceeding 1.0 metre but upto 1.50 metre depth.	Km	6101.00	6101.00	6711.00	6711.00
	(c)	Channels exceeding 1.5 metre but upto 2.5 metres depth.	Km	9294.00	9294.00	10223.00	10223.00
6.18	Dag-belling:-						
	(a)	Single Kassi stroke minimum 7.5 cm depth.	Km	805.00	805.00	886.00	886.00
	(b)	Double Kassi strove "V" shaped minimum 10 cm depth.	Km	1602.00	1602.00	1762.00	1762.00
	(c)	Double Kassi strove "V" shaped minimum 15 cm depth.	Km	2115.00	2115.00	2327.00	2327.00
6.19	Excavation in Soil (any type) using Hydraulic Excavator CK 90 with hydraulic excavator of 0.9 cum bucket capacity including cutting, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, including all lifts and combined lead upto 30m.		cum	34.00	34.00	37.00	37.00



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
6.20	Laser leveling of land up to 300 mm with tractor & Laser leveling Machine complete in all respect.						
	(a)	Up to 5 acre	5 acre	12443.20	12443.20	13687.52	13687.52
	(b)	up to 10 acre	10 acre	22397.76	22397.76	24637.54	24637.54
	(c)	Above 10 acre	Per acre	2115.34	2115.34	2326.87	2326.87



## CHAPTER NO. 7

### ROCK CUTTING

#### Notes :-

##### (i) Converting lift into horizontal lead :-

For converting lift into horizontal lead the lift up to 3.60 metres will be multiplied by 10, from 3.60 metres to 6.0 metres it will be squared & multiplied by 3.3 and beyond 6.0 metres, it will be multiplied by 20. No cross leads what-so-ever shall be measured and paid for.

##### (ii) Measurement of lift :-

The lift shall be measured from the centre of gravity of the excavated rock to that of placed rock. This shall constitute the mean lift for that section. When rock has to be carried over a spoil bank and dumped beyond it, the mean lift would be the difference in levels between the centre of gravity of the excavated rock and top of the spoil bank omitting the dowel.

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
	Excavation including handling of materials within 15 meters inclusive of cost of explosives and dressing compressed air and T&P.					
7.1	Pick work	cum	184.00	184.00	202.00	202.00
7.2	Pick and jumper work.	cum	290.00	290.00	319.00	319.00
7.3	Jumper work.	cum	321.00	321.00	353.00	353.00
7.4	Jumper work with occasional blasting.	cum	467.00	486.00	514.00	533.00
7.5	Blasting ordinary Rock.	cum	539.00	569.00	593.00	623.00
7.6	Blasting hard Rock.	cum	765.00	825.00	842.00	902.00
7.7	Blasting conglomerate mass.	cum	905.00	989.00	996.00	1080.00
7.8	Blasting conglomerate trenches.	cum	1184.00	1299.00	1302.00	1417.00
7.9	Through cut Rock excavation.	cum	10 percent extra over above rates			
7.10	Extra for every 7.5 meters additional lead.	cum	2.69	2.69	2.69	2.69



## CHAPTER NO. 8

### DISMANTLING

**Notes:-**

The rates given under this chapter are subject to the following conditions in addition to the conditions laid down in the public works "General Conditions of Contract etc." and PWD specifications.

- (i) Unless otherwise stated, the rates include sorting and stacking dismantled material and removing the same within a distance of 100 metres.
- (ii) The rates given below are for non-hydraulic works. For hydraulic works, which are required to be dismantled these shall be enhanced by 50 per cent. (hydraulic works are those which remain submerged under water for most of their lives). The items, which can be considered as hydraulic works, are :-  
"Stone masonry in lime or cement, burnt bricks, tile lining & tile masonry in lime or cement mortar, lime or cement concrete, reinforced cement concrete and pucca grouted pitching when submerged under water."
- (iii) Unless otherwise specified, the rates cover the cost of all tools & plants, ladders, scaffolding and all other adjuncts required for dismantling.
- (iv) Dismantling should be done with utmost care avoiding damage to the material, so retrieved taking all necessary precautions for the protection of Public properties and keeping down dust and nuisance etc.
- (v) For Disposal of malba will be worked out as per chapter no. 5.

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
8.1	Dismantling stone masonry/Rubble masonry including stacking of serviceable materials and disposal of unserviceable materials.					
	(a) In lime	cum	517.00		569.00	
	(b) In cement	cum	687.00		756.00	
	(c) Scabbled or rubble stone masonry in mud.	cum	256.00		282.00	
	(d) Dry rubble or dry scabbled masonry	cum	175.00		193.00	
8.2	Dismantling stone pitching or soling					
	(a) Stone pitching dry	cum	175.00		193.00	
	(b) Grouted with natural silt and clay	cum	313.00		344.00	
	(c) Stone pitching laid dry and grouted with dry ballast	cum	242.00		266.00	
	(d) Stone pitching grouted with dry ballast and with natural silt and clay	cum	341.00		375.00	

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
8.3	Dismantling stone spalls or Brick bats filling	cum				
	(a) In dry	cum	156.00		172.00	
	(b) Grouted with natural silt and clay	cum	223.00		245.00	
	(c) In wire crates including opening of crates and stacking crate material	cum	275.00		303.00	
Note :- When the work to be dismantled under items No. 8.2 and 8.3 is under water, add 50% to above rates.						
8.4	Dismantling pucca grouted pitching	cum	517.00		569.00	
8.5	Dismantling brick work tile, masonry or tile lining					
	(a) In lime	cum	517.00		569.00	
	(b) In cement	cum	682.00		750.00	
	(c) Arch work in cement or lime	cum	829.00		912.00	
	(d) In mud	cum	256.00		282.00	
	(e) In mud with Jibi face	cum	313.00		344.00	
	(f) Gilafi brick work	cum	175.00		193.00	
	(g) Gilafi Brick work with Jibi face	cum	223.00		245.00	
	(h) Sundried brick work in mud	cum	137.00		151.00	
	(i) Dismantling dry brick work	cum	137.00		151.00	
8.6	Dismantling concrete					
	(a) Lime concrete, cement concrete of 1:6:12 or leaner mix	cum	412.00		453.00	
	(b) Cement concrete plain 1:4:8 or 1:5:10	cum	682.00		750.00	
	(c) Cement concrete plain 1:3:6 mix	cum	976.00		1074.00	
	(d) Cement concrete plain 1:2:4 mix	cum	1365.00		1502.00	
	(e) Reinforced cement concrete	cum	2204.00		2424.00	
8.7	Dismantling metalling or dry brick ballast	cum	175.00		193.00	
8.8	Dismantling roofing					
	(a) First class mud roofing	sqm	63.00		69.00	
	(b) Second class mud roofing	sqm	56.00		62.00	
	(c) Mud roofing with wooden planks laid over battens,.	sqm	52.00		57.00	
	(d) Thatched roofing	sqm	19.00		21.00	

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(e)	Sirki Sarkanda roofing	sqm	26.00		29.00	
	(f)	Jack arch roofing excluding joists or terraced roofing	sqm	64.00		70.00	
8.9		Dismantling wood work from roof.	cum	1207.00		1328.00	
8.10		Stripping and stacking slate or tiles of a roof.	sqm	44.00		48.00	
8.11		Stripping and stacking iron sheets of a roof including ridging, flashing, eaves boards gutters and down pipes.	sqm	29.00		32.00	
8.12		Add for planks and battens in case of items nos 8.10 and 8.11	sqm	25.00		28.00	
8.13		Add for roof trusses of iron or wood, (rafters, purling etc.) in case of item Nos. 8.10 and 8.11.	sqm	53.00		58.00	
8.14		Dismantling mud walling	cum	137.00		151.00	
8.15		Dismantling Dhajji walling.	sqm	52.00		57.00	
8.16		Dismantling cement conglomerate floors 25mm to 50mm thick including concrete base.	sqm	109.00		120.00	
8.17		Dismantling cement conglomerate floors 25mm to 50mm thick without concrete base	sqm	57.00		63.00	
8.18		Dismantling brick or flagged stone flooring including concrete base.	sqm	85.00		94.00	
8.19		Dismantling brick or flagged stone flooring without concrete base.	sqm	28.00		31.00	
8.20		Dismantling plank flooring	sqm	53.00		58.00	
8.21		Dismantling plank ceiling and supporting timber	sqm	67.00		74.00	
8.22		Dismantling cloth ceiling and supporting timber	sqm	29.00		32.00	
8.23		Dismantling stoneware drains and concrete	mtr	19.00		21.00	
8.24		Removing R.C.C. battens from roofs	cum	2066.00		2273.00	
8.25		Removing R S beams from structures or trusses	qtl	343.00		377.00	

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
8.26	Removing Doors and Windows (Steel or wood) with chowkhats by making recesses in walls when the wall is not to be dismantled.					
	(a) Doors of area 3 sqm and below.	each	223.00		245.00	
	(b) Windows of area 3 sqm and below	each	142.00		156.00	
	(c) Clerestory windows of area 3 sqm and below.	each	71.00		78.00	
8.27	Removing hume pipes					
	(a) 150mm to 300 mm dia	mtr	100.00		110.00	
	(b) 300mm to 600 mm dia	mtr	156.00		172.00	
	(c) 600mm to 900 mm dia	mtr	223.00		245.00	
8.28	Removing sal ballies from structures including stacking	each	39.00		43.00	
8.29	Dismantling sleepers from centering including stacking out side	each	39.00		43.00	
8.30	Dismantling tram way track	mtr	14.00		15.00	
8.31	Scraping					
	(a) White wash and colour wash	sqm	7.00		8.00	
	(b) Lime plaster	sqm	36.00		40.00	
	(c) Cement plaster	sqm	36.00		40.00	
	(d) Mud plaster	sqm	6.00		7.00	
	(e) Bricks dismantled from brick work in lime or cement.	1000 nos	1580.00		1738.00	
	(f) Bricks dismantled from brick work in mud.	1000 nos	395.00		435.00	
	(g) Tiles dismantled from the work in lime or cement	1000 nos	2073.00		2280.00	
	(h) Dismantling boulder masonry/concrete					
	(i) In cement or lime	cum	626.00		689.00	
	(ii) In mud	cum	137.00		151.00	
8.32	Dismantling wire gauge with frame work including separating frame work and putting wire gauge into rolls.	sqm	11.00		12.00	



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
8.33	Dismantling reinforced brick work including cutting, cleaning and straightening of bars.	cum	1608.00		1769.00	
8.34	Dismantling rain water pipes of ACC/CI with clamps and specials etc.	mtr	21.00		23.00	
8.35	Dismantling glazed tiles (to be carefully removed).	sqm	127.00		140.00	
8.36	Dismantling asbestos cement celotax or other hard board ceiling or partition walls including supporting timber	sqm	44.00		48.00	
8.37	Dismantling wooden chajjas and sun shades	sqm	52.00		57.00	
8.38	Removing doors and windows together with the dismantling of walls					
	(i) Doors	each	118.00		130.00	
	(ii) Windows	each	79.00		87.00	
	(iii) Clerestory windows	each	79.00		87.00	
8.39	Dismantling of brick work in cement sand mortar / lime mortar including T&P scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material. & staking the serviceable material with all lifts & lead of 100 metre (By Mechanical Means)	cum	660.00		726.00	
8.40	Dismantling of PCC including T&P scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material. & staking the serviceable material with all lifts & lead of 100 mtr (By Mechanical Means)	cum	808.00		889.00	
8.41	Dismantling of pre-stressed / RCC including T&P scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material. & staking the serviceable material with all lifts & lead of 100 mtr (By Mechanical Means)	cum	1553.00		1708.00	
8.42	Dismantling precast concrete Kerb thickness 40mm up to 75mm	This item is to be taken under 8.6 a				

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
8.43	Taking out existing CC interlocking paver blocks from footpath/ central verge/pavement, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in-Charge.	sqm	107.00		118.00	
8.44	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable material and stacking of serviceable material within 50 meters lead as directed by Engineer-in-charge	sqm	46.00		51.00	
8.45	Dismantling barbed wire or flexible wire rope in fencing including making rolls and stacking within 50 metres lead.	Kg	30.00		33.00	
8.46	Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50 metres lead.	kg	5.00		6.00	

**CHAPTER NO. 9**  
**CENTRING AND SHUTTERING**

**Notes :-**

- (i) Unless otherwise stated, the rates include handling of all materials within 100 metres.
- (ii) Where-ever smooth exposed concrete finish is desired and plaster is not to be done 10 percent extra on the labour rates shall be payable. The through rates shall be increased correspondingly.
- (iii) These rates are for steel shuttering only. Hence only steel shuttering is to be used.
- (iv) For estimate purposes shuttering may be taken as under:-
  - (a) For foundation work and plinth beams @ 1.50sqm/cum
  - (b) For slabs & stair case @ 8.25sqm/cum
  - (c) For columns, beams, door lintels @ 8.00sqm/cum
  - (d) For R.C.C. domes @ 10.00sqm/cum
  - (e) For walls @ 13.00sqm/cum
  - (f) For shelves @ 18.50sqm/cum
  - (g) For facia or any thin section @ 20.00sqm/cum

Sr. No.	Description	Unit	Rates	
			Zone-A	Zone-B
1	2	3	4	5
9.1	Shuttering for faces of concrete foundations and foundation beam & plinth beam (vertical or battering)	sqm	210.00	231.00
9.2	Centering and shuttering for faces of walls, partitions, retaining walls and the like (vertical or battering including attached pilasters buttresses etc.	sqm	405.00	446.00
9.3	Centering and shuttering for faces of walls, partitions, retaining walls and the like (vertical or battering) including attached pilasters, buttresses etc when curved.	sqm	445.00	490.00
9.4	Centering and shuttering for columns (Square or rectangular or poly gonal in plain)	Sqm	477.00	525.00
9.5	Centering and shuttering for columns (circular or curved in plain)	sqm	482.00	530.00
9.6	Centering and shuttering for sides and soffits of beam, beams, launching girders, bressumers, lintels.	sqm	380.00	418.00
9.7	Centering and shuttering for arches of varandah, door and windows openings.	sqm	927.00	1020.00
9.8	Centering and shuttering for flat surfaces such as suspended floors, roofs, landings, chajjas, shelves etc.	sqm	532.00	585.00

Sr. No.	Description	Unit	Rates	
			Zone-A	Zone-B
1	2	3	4	5
9.9	Centring and shuttering for stair cases with sloping with soffits including risers and stringers.	sqm	446.00	491.00
9.10	Centring and shuttering for parapet, fascias and other similar items including edges.	sqm	520.00	572.00
9.11	Centring and shuttering for slab of culverts for vent height up to 3.00 mtr	sqm	581.00	639.00
9.12	Centring and shuttering for R.C.C. domes	sqm	1261.00	1387.00
9.13	Shuttering for precast R.C.C. battens/cement concrete block in situ such as staggered RC blocks arrow and plain cement concrete block.	sqm	304.00	334.00
9.14	Shuttering for precast and plain or Reinforced concrete blocks, wall plates, bedplates, shelves etc.	sqm	291.00	320.00
9.15	Extra rate for shuttering in each subsequent storey above the first. Storey work done in subsequent storey above the first storey up to height of 4 metres or part thereof up to the roof top level of that storey.	sqm	10.00	11.00
9.16	Extra rate for shuttering work done above 4 metres height (where any single storey exceeds 4 metres in height) for every additional height of 1 metres or part thereof.	sqm	41.00	45.00

## CHAPTER NO. 10

### CONCRETE

#### Notes :-

- (i) Unless otherwise stated, the labour rates include the rehandling charges of material within 100 metres
- (ii) The labour and through rates include the cost of water. Where water is supplied by the department 3% cost of labour rate should be deducted and through rate should be reduced accordingly.
- (iii) The labour rates as well as through rates of concrete include the cost of curing and protecting in bad weather conditions.
- (iv) The rates given in this chapter are for hand-mixed concrete as well as mixture mixed, batch type mixture mixed.
- (v) The rates given in this chapter are for non-vibrated concrete unless otherwise specified.
- (vi) The rates given for superstructure are work done up to a height of 4 metres above plinth level or up to the first storey roof top level which ever may be lower. The rate given for superstructure are for work done upto a height of 4 meters above plinth level or upto the first storey roof top level, which ever may be lower.
- (vii) To the extent the plinth area of an inter floor remains within and up to 40 percent of the plinth area of the main storey of the building immediately below the said inter-floor such an inter floor should be regarded as mezzanine and if plinth area of the said inter-floor exceeds this limiting figure of 40 per cent then the said inter-floor should be regarded for purposes of note (vi) above as a regular storey. A mezzanine floor is not to be regarded as a separate additional storey in the structure for purposes of allowing extra rate for concrete in superstructure . In the case of building storey having such a mezzanine, therefore, the storey shall be considered for the full height ignoring the existence of the mezzanine inter-floor.
- (viii) The rates given given in this chapter are for both cast-in-situ and precast work. The precast work includes the cost of hoisting and fixing in position.
- (ix) The rates for all items exclude the cost of steel reinforcement and form work/centring and shuttering except for item No. 10.40, rate of which includes the labour and material for centring and shuttering complete.
- (x) The labour rates given in this chapter include the cost of water, Tools and Plant, Scaffolding (Labour and material) and cost of good earth for mud mortar, wherever required.
- (xi) Coarse sand for item No. 10.13 to 10.28, 10.40, 10.59 to 10.65 & 10.70 shall be as per Punjab PWD Specifications No.3.30.
- (xii) 10 percent extra is payable on labour only for work in RCC slabs having inclination more than 25 degrees with the horizontal. Nothing extra shall be paid for lesser inclinations.
- (xiii) Item no 10.1 to 10.12 are without using mechanical mixer allowed for the work where the overall quantity of PCC involved is only up to 5 cum at one site or carrying of mixer is not feasible. Where overall quantity is more than 5 cum, the work is to be executed by using mechanical mixer.

- (xiv) The rate is for mixed design item with or without admixture, nothing extra shall be paid for adding the admixture or cement. Where concreting is done by using RMC/by using concrete pumping machine cement content is required to be increased by 10% of the admixture and 2% of cement content in respective items after getting approval from the competent authority.
- (xv) If the concreting is done by pumping method, then increases in rate for storey wise shall be permitted under respective item in that case item no. 10.48 & 10.49 will not be applicable.
- (xvi) For estimate purposes steel reinforcement may be taken as under:-

Sr.no	Description	Steel for load bearing masonry structure up to 2 storey		Steel for RCC frame structure up to 3 storey	
		In kg	per cum	In kg	per cum
1	2	3	4	5	6
(a)	For foundation	60	per cum	80	per cum
(b)	For Plinth Beam	100	per cum	150	per cum
(c)	Extra in foundation for addl. Each Storey	10	per cum	10	per cum
(d)	For Roof Slab and Door lintel	80	per cum	100	per cum
(e)	For Column	100	per cum	150	per cum
(f)	Extra in columns for addl. Each storey	20	per cum	20	per cum
(g)	For RCC Beam	100	per cum	150	per cum
(h)	For RCC Domes	100	per cum	100	per cum
(i)	For walls	120	per cum	120	per cum
(j)	Extra in walls for addl. Each storey	10	per cum	10	per cum
(k)	For Shelves	60	per cum	60	per cum
(l)	For Fascia or any thin section	70	per cum	70	per cum
(m)	For Piles	30	per cum	40	per cum

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
10.1	Mud concrete with brick ballast 40mm gauge mixing by manual means.	Cum	1699.00	2907.00	1869.00	3077.00
10.2	Mud concrete with stone ballast 40mm gauge mixing by manual means.	Cum	1699.00	2515.00	1869.00	2685.00
10.3	Lime concrete 1:2:8 (0.13 cum lime 0.26 cum surkhi one cum brick ballast) 40mm gauge mixing by manual means.	Cum	1205.00	3440.00	1326.00	3561.00
10.4	Lime concrete 16:24:100 (0.16 cum lime, 0.24 cum surkhi and one cum brick ballast 32mm gauge mixing by manual means.	Cum	1205.00	3594.00	1326.00	3715.00
10.5	Lime concrete 16:24:100 (0.16 cum lime, 0.24 cum surkhi and one cum brick ballast 20mm gauge mixing by manual means.	Cum	1205.00	3594.00	1326.00	3715.00
10.6	Cement concrete 1:8:16					
<b>a</b>	<b>With brick ballast 32mm / 40mm gauge</b>					
i	mixing by manual means	Cum	1205.00	3411.00	1326.00	3532.00
ii	mixing by mechanical means using concrete mixer volumetric type	Cum	1316.00	3523.00	1448.00	3655.00
<b>b</b>	<b>With stone aggregates 40mm gauge</b>					
i	mixing by manual means	Cum	1205.00	3015.00	1326.00	3136.00
ii	mixing by mechanical means using concrete mixer volumetric type	Cum	1316.00	3127.00	1448.00	3259.00
10.7	Cement concrete 1:8:16					
<b>a</b>	<b>With brick ballast 20mm gauge</b>					
i	mixing by manual means	Cum	1205.00	2837.00	1326.00	2958.00
ii	mixing by mechanical means using concrete mixer volumetric type	Cum	1316.00	2948.00	1448.00	3080.00
<b>b</b>	<b>With stone aggregates 20mm gauge</b>					
i	mixing by manual means	Cum	1205.00	3027.00	1326.00	3148.00
ii	mixing by mechanical means using concrete mixer volumetric type	Cum	1316.00	3139.00	1448.00	3271.00
10.8	Cement concrete 1:6:12					
<b>a</b>	<b>With brick ballast 40mm gauge</b>					
i	mixing by manual means	Cum	1205.00	3570.00	1326.00	3691.00
ii	mixing by mechanical means using concrete mixer volumetric type	Cum	1316.00	3664.00	1448.00	3796.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
<b>(b)</b>	<b>With stone aggregate 40mm gauge</b>					
i	mixing by manual means	Cum	1205.00	3178.00	1326.00	3299.00
ii	mixing by mechanical means using concrete mixer volumetric type	Cum	1316.00	3290.00	1448.00	3422.00
10.9	Cement concrete 1:5:10					
<b>a</b>	<b>with brick ballast 40mm gauge</b>					
i	mixing by manual means	Cum	1205.00	3697.00	1326.00	3818.00
ii	mixing by mechanical means using concrete mixer volumetric type	Cum	1316.00	3228.00	1448.00	3360.00
<b>(b)</b>	<b>With stone aggregate 40mm gauge</b>					
i	mixing by manual means	Cum	1205.00	3309.00	1326.00	3430.00
ii	mixing by mechanical means using concrete mixer volumetric type	Cum	1316.00	3421.00	1448.00	3553.00
10.10	Cement concrete 1:4:8					
<b>a</b>	<b>with brick balast 40mm gauge</b>					
i	mixing by manual means	Cum	1205.00	3888.00	1326.00	4009.00
ii	mixing by mechanical means using concrete mixer volumetric type	Cum	1316.00	3999.00	1448.00	4131.00
10.11	Cement concrete 1:4:8					
<b>(a)</b>	<b>with stone ballast 20mm gauge</b>					
i	with stone ballast 20mm gauge	Cum	1205.00	3519.00	1326.00	3640.00
ii	mixing by mechanical means using concrete mixer volumetric type	Cum	1316.00	3630.00	1448.00	3762.00
<b>(b)</b>	<b>With stone aggregate 40mm gauge</b>					
i	mixing by manual means	Cum	1205.00	3508.00	1326.00	3629.00
ii	mixing by mechanical means using concrete mixer volumetric type	Cum	1316.00	3619.00	1448.00	3751.00
10.12	Cement concrete 1:3:6					
<b>a</b>	<b>with stone ballast or shingle</b>					
i	mixing by manual means	Cum	1205.00	3813.00	1326.00	3934.00
ii	mixing by mechanical means using concrete mixer volumetric type	Cum	1316.00	3924.00	1448.00	4056.00
10.13	Cement concrete 1:2:4					
<b>a</b>	<b>With stone ballast or shingle</b>					
i	mixing by manual means	Cum	1205.00	4564.00	1326.00	4685.00



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
ii	mixing by mechanical means using concrete mixer volumetric type	Cum	1316.00	4675.00	1448.00	4807.00
10.14	Extra over item No. 10.1 to 10.13 when work is done in situ in small quantities not exceeding 0.30 cum per block in situ such as staggered blocks, arrows, concrete block over inverted filters, bed plates arches etc.	Cum	267.00	267.00	294.00	294.00
10.15	Reinforced cement concrete M-20 mechanically batch mixed using batch type concrete mixer as per IS:1791 and vibrated by needle vibrator but excluding steel reinforcement centring and shuttering in foundation and plinth.	Cum	1801.00	5158.00	1981.00	1981.00
10.16	Reinforced cement concrete M-25 mechanically batch mixed using batch type concrete mixer as per IS:1791 and vibrated by needle vibrator but excluding steel reinforcement centring and shuttering in foundation and plinth	Cum	1801.00	5385.00	1981.00	5565.00
10.17	Reinforced cement concrete M-30 mechanically batch mixed using batch type concrete mixer as per IS:1791 and vibrated by needle vibrator but excluding steel reinforcement centring and shuttering in foundation and plinth	Cum	1801.00	5676.00	1981.00	5856.00
10.18	Reinforced cement concrete M-35 mechanically batch mixed using batch type concrete mixer as per IS:1791 and vibrated by needle vibrator but excluding steel reinforcement centring and shuttering in foundation and plinth	Cum	1801.00	5974.00	1981.00	6154.00
10.19	Reinforced cement concrete M-40 mechanically batch mixed using batch type concrete mixer as per IS:1791 and vibrated by needle vibrator but excluding steel reinforcement centring and shuttering in foundation and plinth	Cum	1801.00	6135.00	1981.00	6315.00
10.20	Reinforced cement concrete M-20 mechanically batch mixed using batch type concrete mixer as per IS:1791 and vibrated by needle vibrator but excluding steel reinforcement centring and shuttering in superstructure.	Cum	2551.00	5908.00	2806.00	6163.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
10.21	Reinforced cement concrete M-25 mechanically batch mixed using batch type concrete mixer as per IS:1791 and vibrated by needle vibrator but excluding steel reinforcement centring and shuttering in superstructure.	Cum	2551.00	6135.00	2806.00	6390.00
10.22	Reinforced cement concrete M-30 mechanically batch mixed using batch type concrete mixer as per IS:1791 and vibrated by needle vibrator but excluding steel reinforcement centring and shuttering in superstructure.	Cum	2551.00	6426.00	2806.00	6681.00
10.23	Reinforced cement concrete M-35 mechanically batch mixed using batch type concrete mixer as per IS:1791 and vibrated by needle vibrator but excluding steel reinforcement centring and shuttering in superstructure.	Cum	2551.00	6724.00	2806.00	6979.00
10.24	Reinforced cement concrete M-40 mechanically batch mixed using batch mixed using concrete mixer and vibrated by needle vibrator but excluding steel reinforcement centring and shuttering in superstructure.	Cum	2551.00	6884.00	2806.00	7139.00
10.25	Damp proof course 7.5 Cm thick cement concrete 1:2:4 with 2 coats of bitumen 20/30 penetration at 1.65 Kg per sqm laid hot and sanded	sqm.	183.00	534.00	201.00	552.00
10.26	Damp proof course 4cm thick of cement concrete 1:2:4 with 2 coats of bitumen 20/30 penetration at 1.65 Kg per sqm laid hot and sanded	sqm.	98.00	331.00	108.00	341.00
10.27	Damp proof course 4cm thick of cement concrete 1:2:4 with water proofing compound as per manufactures guidelines.	sqm.	98.00	244.00	108.00	254.00
10.28	Damp proof course 2.5cm thick of cement concrete 1:2:4 with 2 coats of bitumen 20/30 penetration at 1.65 Kg per sqm laid hot and sanded	sqm.	75.00	240.00	83.00	248.00
10.29	Supplying & laying dry brick bats	Cum	146.00	992.00	161.00	1007.00
10.30	Supplying & laying dry brick ballast	Cum	146.00	1461.00	161.00	1476.00
10.31	Nicking cement concrete surface (over 28 days old including preparation and laying slurry	Sqm	23.00	28.00	25.00	30.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
10.32	Washing concrete surface scrubbing with brushes including preparing and laying slurry	sqm	14.00	19.00	15.00	20.00
10.33	Nicking lime concrete surface	sqm	16.00	16.00	18.00	18.00
10.34	Grouting concrete between the grooves of gates including labour for shuttering	sqm	317.00	317.00	349.00	349.00
10.35	Preparing watering and ramming surface for laying concrete	sqm				
(a)	Head work					
(i)	Horizontal	sqm	27.00	27.00	30.00	30.00
(ii)	Glacies and crest	sqm	54.00	54.00	59.00	59.00
(b)	Channels (irrigation)					
(i)	Horizontal	sqm	23.00	23.00	25.00	25.00
(ii)	Glacis and crest	sqm	35.00	35.00	39.00	39.00
10.36	Preparing surface for inverted fillers	sqm	13.00	13.00	14.00	14.00
10.37	Plain cement concrete 1:8:16 with stone ballast 40mm guage using 20% plum	Cum	1205.00	2712.00	1326.00	2833.00
10.38	Plum cement concrete 1:6:12 with stone ballast 40mm gauge, using 20% plum	Cum	1205.00	2829.00	1326.00	2950.00
10.39	Plum cement concrete 1:5:10 with stone ballast 40mm gauge using 20 percent plum	Cum	1205.00	2947.00	1326.00	3068.00
10.40	Providing, hoisting and fixing in super structure for first storey precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like including the cost of required centring & shuttering, cost of 1:2:4 hand mixed (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) but excluding the cost of steel reinforcement.(Qty of each unit shall not exceed 0.04 cum)	Cum	5512.00	8776.00	6063.00	9327.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
10.41	Providing, hoisting and fixing in super structure for first storey precast reinforced cement concrete in small lintels not exceeding 1.5m clear span including the cost of required centring & shuttering, cost of 1:2:4 hand mixed (1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal-size) but excluding the cost of steel reinforcement.(Qty of each unit shall not exceed 0.06cum)	Cum	5304.00	8147.00	5834.00	8677.00
10.42	Extra for using batch type concrete mixer as per IS : 1791 where not included in the rates .	Cum	216.00	216.00	238.00	238.00
10.43	Extra for using concrete mixer volumetric type where not included in the rates .	Cum	136.00	136.00	150.00	150.00
10.44	Extra for using needle vibrator where not included in the rates .	Cum	27.00	27.00	30.00	30.00
10.45	Extra for using computerised concrete batch mixing plant including carriage by transit mixer within 1 km lead (note: where concrete mixer is already included in the rate the same shall be deducted )	Cum	340.00	340.00	374.00	374.00
10.46	Extra for pumping charges of Batch Mix Concrete / Ready mix concrete work (RMC)	Cum	88.00	88.00	97.00	97.00
b	Extra rate for enhancement in pumping power, addition of pipe length, scaffolding for handling the pipe arrangement for pumping of concrete in subsequent storey above the below storey up to height of 4 metres or part there of up to the roof top level of that storey	Cum	22.00	22.00	24.00	24.00
10.47	Extra for carriage of RMC/batch mixed concrete with transit mixture beyond 1st km .	Cum/km	34.00	34.00	37.00	37.00
10.48	Extra for R.C.C/PCC. work done in each subsequent storey above the first storey up to height of 4 metres or part thereof up to the roof top level of that storey.	cum	181.00	181.00	199.00	199.00
10.49	Extra for RCC/PCC work done above 4 metres height (where any single storey exceeds 4 metres in height) for every additional height of 1 metres or part thereof.	cum	45.00	45.00	50.00	50.00
10.50	Extra for using admixture in designed mix concrete.	kg	15.00	60.00	17.00	62.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
10.51	Providing precast cement concrete Jali 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 6mm nominal size) reinforced with 1.6 mm dia mild steel wire including centring and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3 (1 cement: 3 fine sand) etc. complete excluding plastering of the jambs, sills and soffits.						
	a	50 mm thick	sqm.	595.00	1304.00	655.00	1364.00
	b	40 mm thick	sqm.	595.00	1186.00	655.00	1246.00
	c	25 mm thick	sqm.	595.00	1091.00	655.00	1151.00
10.52	Extra for laying PCC/RCC in or under foul positions		Cum	220.00	220.00	242.00	242.00
10.53	Boring, providing and installing bored cast-in-situ reinforced cement concrete pile of specified diameter and length below the pile cap to carry a safe working load not less than specified, excluding the cost of concrete and steel reinforcement (The rates of concrete and steel reinforcement are to be taken for respective item of chapter No.10 & 18 respectively) but including the cost of boring with manual auger (without bentonite solution) and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. all complete as per BIS specifications/ codes, including removal of excavated earth with all lifts and leads (Length of pile for payment shall be measured upto bottom of pile cap)						
a	200 mm Dia pile		m	401.00	401.00	441.00	441.00
b	250 mm Dia pile		m	455.00	455.00	501.00	501.00
c	300 mm Dia pile		m	530.00	530.00	583.00	583.00
d	400 mm Dia pile		m	625.00	625.00	688.00	688.00
e	450 mm Dia pile		m	754.00	754.00	829.00	829.00
f	500 mm Dia pile		m	847.00	847.00	932.00	932.00
g	600 mm Dia pile		m	1109.00	1109.00	1220.00	1220.00
10.54	Extra for providing under reamed bulb as per BIS specifications/ codes.						
a	200 mm Dia pile		m	368.00	368.00	405.00	405.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
b	250 mm Dia pile	m	399.00	399.00	439.00	439.00
c	300 mm Dia pile	m	444.00	444.00	488.00	488.00
d	400 mm Dia pile	m	496.00	496.00	546.00	546.00
e	450 mm Dia pile	m	549.00	549.00	604.00	604.00
f	500 mm Dia pile	m	647.00	647.00	712.00	712.00
g	600 mm Dia pile	m	700.00	700.00	770.00	770.00
10.55	Extra for using Bentonite slurry with Bentonite pump in case of unstable bore					
a	200 mm Dia pile	m	212.00	212.00	233.00	233.00
b	250 mm Dia pile	m	212.00	212.00	233.00	233.00
c	300 mm Dia pile	m	382.00	382.00	420.00	420.00
d	400 mm Dia pile	m	481.00	481.00	529.00	529.00
e	450 mm Dia pile	m	557.00	557.00	613.00	613.00
f	500 mm Dia pile	m	632.00	632.00	695.00	695.00
g	600 mm Dia pile	m	776.00	776.00	854.00	854.00
10.56	Vertical load testing of piles in accordance with IS 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of Engineer in-charge.					
a	Single pile upto 50 tonne capacity					
	Initial test.	each test	38869.00	38869.00	42756.00	42756.00
b	Vertical load testing of piles in accordance with IS 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of Engineer in-charge.					
	Single pile upto 50 tonne capacity					
	Routine test.	each test	23004.00	23004.00	25304.00	25304.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
c	Vertical load testing of piles in accordance with IS 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of Engineer in-charge.					
	Single pile above 50 tonne and upto 100 tonne capacity					
	Initial test.	each test	54735.00	54735.00	60209.00	60209.00
d	Vertical load testing of piles in accordance with IS 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of Engineer in-charge.					
	Single pile above 50 tonne and upto 100 tonne capacity					
	Routine test.	each test	35696.00	35696.00	39266.00	39266.00
e	Vertical load testing of piles in accordance with IS 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of Engineer in-charge.					
	Group of two or more piles upto 50 tonne					
	Initial test.	each test	75359.00	75359.00	82895.00	82895.00
f	Vertical load testing of piles in accordance with IS 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of Engineer in-charge.					
	Group of two or more piles upto 50 tonne					
	Routine test.	each test	46009.00	46009.00	50610.00	50610.00
10.57	Cyclic vertical load testing of pile in accordance with IS code of practice IS : 2911 (part-IV) including preparation of pile head etc for.					
a	Single pile					

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
	Upto 50 tonne capacity pile	each test	23004.00	23004.00	25304.00	25304.00
b	Cyclic vertical load testing of pile in accordance with IS code of practice IS : 2911 (part-IV) including preparation of pile head etc for.					
	Single pile					
	Above 50 tonne and upto 100 tonne capacity pile	each test	35696.00	35696.00	39266.00	39266.00
c	Cyclic vertical load testing of pile in accordance with IS code of practice IS : 2911 (part-IV) including preparation of pile head etc for.					
	Group of two piles					
	Upto 50 tonne capacity pile	each test	46009.00	46009.00	50610.00	50610.00
10.58	Lateral load testing of single pile in accordance with IS code of practice IS : 2911 (part-IV) for determining safe allowable lateral load on pile.					
	Upto 50 tonne capacity pile	each test	23004.00	23004.00	25304.00	25304.00
b	Lateral load testing of single pile in accordance with IS code of practice IS : 2911 (part-IV) for determining safe allowable lateral load on pile.					
	Above 50 tonne and upto 100 tonne capacity pile	each test	35696.00	35696.00	39266.00	39266.00



## CHAPTER NO. 11

### BRICK WORK

#### Notes :-

- (i) Unless otherwise stated, the labour rates include the cost of rehandling of materials within 100 metres.
- (ii) These rates are meant for are building works and small engineering works where the total quantity of Brick work does not exceed 15 cum. The labour rates for large engineering works involving more than 15 cum of brick work shall be reduced by ten per cent and the through rates shall be reduced correspondingly.
- (iii) Through rate for brick work with first class clay brick or fly ash brick if the work done with 2nd class Bricks will be reduced by Rs. 10% per cum than the rates with first class clay brick or fly ash brick for that item of work.
- (iv) The labour rates as well as through rates include the cost of water. In case water is supplied free of cost by the department, rates will be reduced accordingly.
- (v) The rates for brick work done, upto 1.5 metres height above the top of foundation concrete in case of compound walls and in other Engineering works is the same as for brick work in foundation and plinth.
- (vi) The Labour rate given in this chapter include the cost of water, tools & plants, scaffolding (Labour & Materials) and cost of good earth for mud mortar and mud plaster, where ever required.
- (vii) To the extent the plinth area of an inter floor called mezzanine remains within and upto 40 per cent of the plinth area for the main storey of the building immediately below the said inter floor, such an inter floor should be regarded as mezzanine and if plinth area of the inter floor exceeds this limiting figure of 40 per cent than the inter floor should be considered, for purpose of item No. 11.29 of this chapter, as a regular storey. A mezzanine floor is not to be regarded as a separate additional storey in the structure for purpose of allowing extra rate for brick work under item No. 11.29. In the case of a building storey having such a mezzanine, that storey shall be considered for the full height as if ignoring the existence of the mezzanine inter floor.
- (viii) Regarding the payment of extra rate, upto first storey (4 mtr height) above plinth level, the rates for super structure will be payable only for subsequent storey above roof of lower floor level, the structure above plinth level, will be considered as first storey.
- (ix) The rate for this chapter has been worked out with fine sand.If coarse sand is to be used then extra rate as per item no.11.73 will be added.
- (x) Ground hydrated lime shall be used in all items of brick work in lime mortar.
- (xi) The rate of item No. 11.29 (a),11.29 (c), 11.47 & 11.52 shall be calculated as under:- i.e.  
Rate of 4th storey= Rate of 1st storey + Extra rate for 2nd storey + Extra rate for 3rd storey + Extra rate for 4th storey.

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	5
11.1 (i)	First class burnt work laid in cement sand mortar 1:7 in foundation and plinth	cum	1327.00	4886.00	1460.00	5019.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	5
11.1 (ii)	Pulverized Fly Ash - Lime Bricks as per class-12.5 of IS: 12894-2002 laid in cement sand mortar 1:7 in foundation and plinth (laying shall be done as per PWD specifications).	cum	1327.00	4509.00	1460.00	4642.00
11.2 (i)	First class burnt brick work laid in cement sand mortar 1:7 in first storey upto 4 metres above plinth level.	cum	1464.00	5008.00	1610.00	5154.00
11.2 (ii)	Pulverized Fly Ash - Lime Bricks as per class-12.5 of IS: 12894-2002 laid in cement Sand mortar 1:7 in first storey upto (4 metres) above plinth level (laying shall be done as per PWD specifications).	cum	1464.00	4647.00	1610.00	4793.00
11.3 (i)	First class burnt brick laid in cement sand mortar 1:6 in foundation and plinth	cum	1327.00	4934.00	1460.00	5067.00
11.3 (ii)	Pulverized Fly Ash - Lime Bricks as per class-12.5 of IS: 12894-002 laid in cement sand mortar 1:6 in foundation and plinth (laying shall be done as per PWD specifications).	cum	1327.00	4573.00	1460.00	4706.00
11.4 (i)	First class burnt brick work laid in cement sand mortar 1:6 in first storey upto 4 metres above plinth level.	cum	1464.00	5071.00	1610.00	5217.00
11.4 (ii)	Pulverized Fly Ash - Lime Bricks as per class-12.5 of IS:12894-2002 laid in cement sand mortar 1:6 in first storey (upto 4 metre height) above plinth level (laying shall be done as per PWD specifications).	cum	1464.00	4711.00	1610.00	4857.00
11.5	First class burnt brick work laid in cement sand mortar 1:5 in foundation and plinth	cum	1327.00	5013.00	1460.00	5146.00
11.5 (ii)	Pulverized Fly Ash - Lime Bricks as per class-12.5 of IS:12894-2002 laid in cement sand mortar 1:5 in foundation and plinth (laying shall be done as per PWD specifications).	cum	1327.00	4653.00	1460.00	4786.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	5
11.6	First class burnt brick work laid in cement sand mortar 1:5 in first storey upto 4 metres above plinth level.	cum	1464.00	5151.00	1610.00	5297.00
11.6 (ii)	Pulverized Fly Ash - Lime Bricks as per class-12.5 of IS: 12894-2002 laid in cement sand mortar 1:5 in first storey upto 4 metres above plinth level (laying shall be done as per PWD specifications).	cum	1464.00	4790.00	1610.00	4936.00
11.7	First class burnt brick work laid in cement sand mortar 1:4 in foundation and plinth	cum	1327.00	5109.00	1460.00	5242.00
11.7 (ii)	Pulverized Fly Ash - Lime Bricks as per class-12.5 of IS:12894-2002 laid in cement sand mortar 1:4 in foundation and plinth (laying shall be done as per PWD specifications).	cum	1327.00	4748.00	1460.00	4881.00
11.8	First class burnt brick work laid in cement sand mortar 1:4 in first storey upto 4 metres above plinth level.	cum	1464.00	5246.00	1610.00	5392.00
11.8 (ii)	Pulverized Fly Ash - Lime Bricks as per class-12.5 of IS:12894-2002 laid in cement sand mortar 1:4 in first storey upto 4 metres above plinth level (laying shall be done as per PWD specifications).	cum	1464.00	4886.00	1610.00	5032.00
11.9	First class burnt brick work laid in cement sand mortar 1:3 in foundation and plinth	cum	1327.00	5315.00	1460.00	5448.00
11.9 (ii)	Pulverized Fly Ash - Lime Bricks as per class-12.5 of IS: 12894-2002 laid in cement sand mortar 1:3 in foundation and plinth (laying shall be done as per PWD specifications).	cum	1327.00	4955.00	1460.00	5088.00
11.10	First class burnt brick work laid in cement sand mortar 1:3 in first storey upto 4 metres above plinth level.	cum	1464.00	5453.00	1610.00	5599.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	5
11.10 (ii)	Pulverized Fly Ash - Lime Bricks as per class-12.5 of IS: 12894-2002 laid in cement sand mortar 1:3 in First storey upto 4 metres above plinth level (laying shall be done as per PWD specifications).	cum	1464.00	5092.00	1610.00	5238.00
11.11	First class burnt brick work laid in cement sand mortar 1:2 in first storey upto 4 metres above plinth level.	cum	1464.00	5787.00	1610.00	5933.00
11.12	First class burnt brick work laid in lime mortar 1:2 (one lime and two surkhi) foundation and plinth	cum	1327.00	5164.00	1460.00	5297.00
11.13	First class burnt brick work laid in lime mortar 1:2 (one lime and two surkhi) in first storey (upto 4 metres height) above plinth level.	cum	1464.00	5301.00	1610.00	5447.00
11.14	First class burnt brick work laid in lime surkhi and mortar 1:1:1 (one lime, one surkhi and one sand) in foundation and plinth.	cum	1327.00	5848.00	1460.00	5981.00
11.15	First class burnt brick work laid in lime surkhi and mortar 1:1:1 (one lime, one surkhi and one sand) in first storey (upto 4 metres height) above plinth level	cum	1464.00	5379.00	1610.00	5525.00
11.16	First class brick work laid in cement, lime, sand mortar 1:1:6 (one cement, one lime and six sand) in foundation and plinth	cum	1327.00	5163.00	1460.00	5296.00
11.17	First class brick work laid in cement, lime sand mortar 1:1:6 in first storey (upto 4 metres height) above plinth level	cum	1464.00	5301.00	1610.00	5447.00
11.18	First class brick work laid in cement, lime, sand mortar 1:2:9 (one cement, two lime and nine sand) in foundation and plinth	cum	1327.00	5115.00	1460.00	5248.00
11.19	First class brick work laid in cement, lime sand mortar 1:2:9 (one cement, two lime and nine sand) in first storey (upto 4 metres height) above plinth level	cum	1464.00	5252.00	1610.00	5398.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	5
11.20	First class brick work laid in cement, lime, sand mortar 1:3:12 (one cement, three lime and Twelve sand) in foundation and plinth	cum	1327.00	5094.00	1460.00	5227.00
11.21	First class brick work laid in cement, lime sand mortar 1:3:12 (one cement, three lime and Twelve sand) in first storey (upto 4 metres height) above plinth level	cum	1464.00	5252.00	1610.00	5398.00
11.22	115mm brick wall laid in cement, lime sand mortar 1:1:6 (one cement, one lime and Six sand) in super structure (up to 4 metre height) above plinth level.	Sqm.	206.00	626.00	227.00	647.00
11.23	First class burnt brick work laid in mud mortar in foundation and plinth	cum	819.00	3833.00	901.00	3915.00
11.24	First class brick work laid in mud mortar in first storey (upto 4 metre height) above plinth level in super structure.	cum	1004.00	4018.00	1104.00	4118.00
11.25	Extra for laying brick work in or under water and/or liquid mud including cost of pumping or bailing out water and removing slush etc. complete.	cum	139.00	139.00	153.00	153.00
11.26	Extra for forming cavity 5cm to 7.5cm wide in cavity walls with necessary weep and vent holes including use of cores and cost of providing and fixing bitumastic coated M .S. ties 300mm long of 25x3mm section at not less than 3 ties per sqm as per approved design.	Sqm	96.00	121.00	106.00	131.00
11.27	Brick work with machine moulded modular bricks of class designation 125 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete above plinth level in super structure in cement mortar 1:6 (1 cement : 6 fine sand).	cum	1021.00	4907.00	1123.00	5009.00
11.28	Brick work with selected F.P.S. bricks of class designation 105 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete above plinth level in super structure. in cement mortar 1:6 (1 cement : 6 fine sand)	cum	1337.00	4965.00	1471.00	5099.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	5
11.29 a	Extra for work done in additional storey upto 4 metre above the top of structural roof of lower storey for Brick Work/ Concrete Block/ Clay Block.	cum	146.00	146.00	161.00	161.00
11.29 b	Extra for c above 4 meters (where any single storey exceeds 4 metres in height) for every additional height of 2 metres or part thereof for Brick Work/ Concrete Block/ Clay Block.	Cum	181.00	181.00	199.00	199.00
11.29 c	Extra for 115mm/100mm thick walls for additional storey upto 4 meters above the top of structural roof of lower storey for Brick Work/ Concrete Block/ Clay Block.	sqm	15.00	15.00	17.00	17.00
11.29 d	Extra for 115mm/100mm thick of walls done above 4 meters (where any single storey exceeds 4 meters in height) for every additional height of 2 meters or parts thereof for Brick Work/ Concrete Block/ Clay Block.	Sqm.	30.00	30.00	33.00	33.00
11.30	(a) Extra for profile walls	Cum	103.00	103.00	113.00	113.00
	(b) Extra for flared out walls of syphon, super	cum	143.00	143.00	157.00	157.00
11.31	Extra for brick work in square or rectangular	cum	430.00	430.00	473.00	473.00
11.32	Extra for burnt brick work in circular pillars constructed with dressed bricks including cost of dressing bricks	cum	975.00	1860.00	1073.00	1958.00
11.33	Extra for burnt brick work in arches excluding cost of shuttering.					
	(a) Upto 1.5 Meters Span	cum	175.00	396.00	193.00	414.00
	(b) More than 1.5 metres but less than 3 metres span	cum	286.00	634.00	315.00	663.00
	(c) More than 3 metres but less than 6 metres span	cum	394.00	837.00	433.00	876.00
11.34	115 mm thick brick wall with every fourth course reinforced with hoop iron laid in 1:4 cement mortar in superstructure	sqm	226.00	695.00	249.00	718.00
11.35	115mm thick brick wall in cement sand mortar 1:4 without reinforcement in foundations and plinth	Sqm.	175.00	611.00	193.00	629.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	5
11.36	115mm thick brick wall in cement sand mortar 1:4 without reinforcement in superstructure	Sqm.	204.00	640.00	224.00	660.00
11.37	115mm thick brick wall in cement sand mortar 1:5 without reinforcement in foundations and plinth	Sqm.	175.00	601.00	193.00	619.00
11.38	115mm thick brick wall in cement sand mortar 1:5 without reinforcement in superstructure	Sqm.	204.00	630.00	224.00	650.00
11.39	75mm thick brick wall laid in cement sand mortar 1:4 with every alternate course reinforced with hoop iron in superstructure	Sqm.	211.00	553.00	232.00	574.00
11.40	First class 115mm thick honey comb brick work laid in cement mortar 1:4	Sqm.	222.00	672.00	244.00	694.00
11.41	First class 225mm thick honey comb brick work laid in cement mortar 1:4	Sqm.	315.00	991.00	347.00	1023.00
11.42	Providing 75 mm first class brick drip course at junction of roof and walls laid in cement sand mortar 1:4 including dressing of bricks	Rmt	55.00	121.00	61.00	127.00
11.43	Providing 75 mm first class brick on edge drip course at junction of roof and walls laid in cement sand mortar 1:4 including dressing of bricks	Rmt	83.00	192.00	91.00	200.00
11.44	Reinforced brick work in lintels 1:3 Cement sand mortar excluding steel reinforcement.	cum	2113.00	6135.00	2324.00	6346.00
11.45	First class brick tile masonry with 22.86x11.43x3.81 cm tiles in cement sand mortar 1:4 in 1st storey upto 4 metres above plinth level.	cum	2109.00	8715.00	2320.00	8926.00
11.46	First class brick tile masonry with 22.86x11.43x3.81cm tiles in cement sand mortar 1:6 in 1st storey upto 4 metres above plinth level.	cum	2109.00	8413.00	2320.00	8624.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	5
11.47	Extra for brick tile masonry in additional storey upto 4 metre above the top of structural roof of lower storey	cum	200.00	200.00	220.00	220.00
11.48	Extra for brick tile masonry in square or rectangular pillars	cum	498.00	498.00	548.00	548.00
11.49	Tile facing with 22.86x11.43x3.81 cm tile laid in cement sand mortar 1:4 in 1st storey upto 4 metres above plinth level without steel reinforcement	Sqm	321.00	631.00	353.00	663.00
11.50	Tile facing with 22.86x11.43x3.81 cm tile laid in cement sand mortar 1:4 in 1st storey upto 4 metres above plinth level without steel reinforcement	Sqm	307.00	716.00	338.00	747.00
11.51	Bricks and bricks jali tile with 22.86cmx11.43 cm thick alternate layer laid in cement sand mortar 1:4 using 30 number bricks tiles 22.56x11.43x3.81cm	Sqm	249.00	676.00	274.00	701.00
11.52	Extra for tile facing in additional storey upto 4 metres above the top of structural roof of the lower storey	Sqm	30.00	30.00	33.00	33.00
11.53	Brick jali with 22.86x11.43cm thick alternative layers laid in cement sand mortar 1:4 using 58 number bricks	Sqm	312.00	775.00	343.00	806.00
11.54	V shaped brick jali in 22.86cm thick walls laid in cement sand mortar 1:6 finished with 12.5mm thick cement sand plaster 1:6 including making straight edges with plaster	Sqm	1182.00	1872.00	1300.00	1990.00
11.55	Dressed or moulded three brick cornice laid in cement sand mortar 1:4 including 12.5mm thick cement plaster 1:4 or pointing as required	Mtr.	116.00	260.00	128.00	272.00
11.56	Dressed or moulded two brick cornice laid in cement sand mortar 1:4 including 12.5mm thick cement plaster 1:4 or pointing as required	Mtr.	165.00	251.00	182.00	268.00
11.57	Dressed or moulded one brick cornice laid in cement sand mortar 1:4 including 12.5mm thick cement plaster 1:4 or pointing as required	Mtr.	81.00	110.00	89.00	118.00



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	5
11.58	Corbelling around almirah including 12.5mm thick cement plaster 1:6	Mtr.	72.00	136.00	79.00	143.00
11.59	Maroo corners making from first class bricks and fixed in position with cement mortar 1:4	Nos.	156.00	194.00	172.00	210.00
11.60	Dressing chamfering of bricks to required shape in masonry work	Nos.	5.00	5.00	6.00	6.00
11.61	Replacing Kallar eaten bricks	Nos.	8.00	16.00	9.00	17.00
11.62	Providing and laying brick work laid dry in walls.	Cum	420.00	4076.00	462.00	4118.00
11.63	Extra for special moulded radiated work in arches of egg-shaped sewers circular barrals and similar drainge works, excluding cost of centering and moulds	Cum	459.00	459.00	505.00	505.00
11.64	Extra for specially moulded brick work in circular work such as well shafts circular sumps, pump chambers etc. in which specially moulded or cut bricks have to be used but for which no centring or supports are required upto 4.5 metre internal diametre.	Cum	311.00	311.00	342.00	342.00
11.65	Chiseling side of head regulator's and other brick work to increase gullet width	Sqm.	342.00	342.00	376.00	376.00
11.66	Fire brick work in linings to fire places flues etc. (except in chimney shafts.)	cum	2391.00	5924.00	2630.00	6163.00
11.67	Pise work (mud walling) including the cost of earth water and laying the earth into shape, pruning and scraping complete in all respect.	Cum	601.00	601.00	661.00	661.00
11.68	Extra labour for First class burnt bricks masonry in well steining of square, rectangular or polygonal well.	cum	1798.00	1798.00	1978.00	1978.00
11.69	Extra labour for First class burnt brick masonry in well steining of circular well.	cum	1978.00	1978.00	2176.00	2176.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	5
11.70	76mm thick brick architrave to windows and ventilators 115mm projected laid in cement sand mortar 1:4 including 12.5 mm thick cement plaster 1:4	Mtr.	60.00	113.00	66.00	119.00
11.71	Providing 5.55cm brick daily facing with brick size 22.86cm x 5.55cm x 6.83cm to be obtained after cutting from full brick size of 22.86cm x 11.11cm x 6.83cm laid in cement sand mortar 1:3 on RCC lintels, beams, facia etc	sqm	261.00	562.00	261.00	562.00
11.72	Providing and laying autoclaved aerated cement blocks masonry with 100mm thick AAC blocks in super structure above plinth level in cement mortar 1:4 (1 cement : 4 fine sand ) The rate includes providing and placing in position 2 Nos. 6 mm dia M.S. bars at every third course of masonry work.	cum	1205.00	5637.00	1326.00	5758.00
11.73	Extra cost for using coarse sand instead of fine sand in brick masonry.					
	A For solid masonry	cum	-	59.48	-	59.48
	B For 115 mm thick masonry	sqm	-	7.00	-	7.00
11.74	Providing and laying in super structure for first storey factory made with vibro-hydraulic compaction machine precast solid block of cement concrete setting in position with cement mortar 1:3 (1 cement:3 course sand ) including cost of hosting, centering and shuttering complete as per IS:2185 (Part-1): 2005.	cum	1774.00	9015.00	1951.00	9192.00
11.75	Providing and laying in super structure for first storey factory made with vibro-hydraulic compaction machine precast Hollow block of cement concrete setting in position with cement mortar 1:3 (1 cement:3 course sand ) including cost of hosting, centering and shuttering complete as per IS:2185 (Part-1): 2005.	cum	1774.00	7484.00	1951.00	7661.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	5
11.76	Providing and laying in super structure for first storey factory made with vibro-hydraulic compaction machine precast solid block of cement concrete 100 mm thick setting in position with cement mortar 1:3 (1 cement:3 course sand ) including cost of hosting, centering and shuttering complete as per IS:2185 (Part-1): 2005.	Sqm	219.00	1023.0	241.00	1045.00
11.77	Providing and laying in super structure for first storey factory made with vibro-hydraulic compaction machine precast hollow block of cement concrete 100 mm thick setting in position with cement mortar 1:3 (1cement:3 course sand ) including cost of hosting, centering and shuttering complete as per IS:2185 (Part-1): 2005.	Sqm	219.00	783.00	241.00	805.00
11.78	Perforated Burnt Clay Bricks having strength 12.5 N/mm2 of IS:2222 laid in cement sand mortar 1:5 in in foundation and plinth (laying shall be done as per PWD specifications).	cum	1327.00	4976.00	1460.00	5109.00
11.79	Perforated Burnt Clay Bricks having strength 12.5 N/mm2 of IS: 2222 laid in cement sand mortar 1:5 in first stoery upto 4 metres above plinth level (laying shall be done as per PWD specifications).	cum	1464.00	5114.00	1610.00	5260.00
11.80	Perforated Burnt Clay Bricks having strength 12.5 N/mm2 of IS: 2222 laid in cement sand mortar 1:6 in in foundation and plinth (laying shall be done as per PWD specifications)	cum	1327.00	4887.00	1460.00	5020.00
11.81	Perforated Burnt Clay Bricks having strength 12.5 N/mm2 of IS: 2222 laid in cement sand mortar 1:6 in first stoery upto 4 metres above plinth level (laying shall be done as per PWD specifications).	cum	1464.00	5025.00	1610.00	5171.00
11.82	Providing & Laying 200 mm thick mansonay in super structure with factory made precast burnt clay hollow blocks conforming to IS: 3952) in position with cement mortar 1:5 including cost of hoisting centering & shuttering complete for first storey, laying shall be done as per PWD specifications.	cum	1454.00	7049.00	1599.00	7194.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	5
11.83	Providing & Laying 100 mm thick mansony in super structure with factory made precast burnt clay hollow blocks conforming to IS: 3952) in position with cement mortar 1:4 including cost of hoisting centering & shuttering complete laying shall be done as per PWD specifications.	sqm	181.00	893.00	199.00	911.00
11.84	Extra for labour for works involving up to 1.00 cum. for First class burnt work laid in cement sand mortar in foundation and plinth for repair work.	cum	332.00	332.00	365.00	365.00
11.85	Extra for labour for works involving up to 1.00 cum. for First class burnt work laid in cement sand mortar in superstructure for repair work.	cum	344.00	367.00	378.00	401.00

## CHAPTER NO. 12

### STONE MASONRY

#### Notes :-

- (i) The labour rates include the cost of water, tools & plant, labour & materials for scaffolding, centring and shuttering, ladders, plant & templates, wherever required, and cost of good earth for mud mortar where required.
- (ii) Unless otherwise stated, the labour rates include the rehandling of materials within 100 metres.
- (iii) The labour rates include the cost of dressing stones according to the relevant PWD Specifications.
- (iv) The labour as well as through rates for item nos. 12.11, to 12.13, 12.16 to 12.24, 12.28 to 12.34 are applicable when quarried stone is used. When work is executed with small boulders or with stone obtained by breaking large boulders, the above rates will be increased by 10% per cum for labour rate on account of extra labour involved in dressing and through rate be derived accordingly.
- (v) The through rate of the stone masonry includes the cost of stone at the site of work irrespective of the distance from the source. But stone masonry will normally be constructed in such area where stone is available locally or in the vicinity of the site of the work. Variations in actual lead in such cases will be taken care of by premium / abatement over the CSR rates. However where stone is not available near at site but has to be brought from long distances, item of stone masonry should not be specified. If some work has to be constructed in stone due to very special reasons, extra provision for carriage of stone should be made in the estimates.

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
	<b>ASHLAR MASONRY</b>					
12.1	Fine ashlar in cement mortar (1:3) upto 6 meters above plinth level.	cum	15309.00	17123.00	16840.00	18654.00
12.2	Fine ashlar in cement mortar (1:6) upto 6 meters above plinth level.	cum	15309.00	16765.00	16840.00	18296.00
12.3	Rough tooled & bastard ashlar in cement mortar (1:3) upto 6 meters above plinth level.	cum	10833.00	12886.00	11916.00	13969.00
12.4	Rough tooled & bastard ashlar in cement mortar (1:6) upto 6 meters above plinth level.	cum	10833.00	12617.00	11916.00	13700.00
12.5	Rustic ashlar in cement mortar 1:3 upto 6 meters above plinth level.	cum	10689.00	12742.00	11758.00	13811.00
12.6	Rustic ashlar in cement mortar 1:6 upto 6 meters above plinth level	cum	10689.00	12055.00	11758.00	13124.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
12.7	Extra for above items for every additional storey of height upto 4 metre above the top of structural roof of lower storey.	cum	303.00	303.00	333.00	333.00
12.8	Extra for arch work excluding centering and shuttering.	cum	653.00	653.00	718.00	718.00
12.9	Cut stone work in cornices, string courses, etc. in cement mortar 1:3	cum	22952.00	24766.00	25247.00	27061.00
12.10	Cut stone work in cornices, string courses, etc. in cement mortar 1:4	cum	22952.00	24697.00	25247.00	26992.00
	<b>Block in Course Rubble Masonry</b>					
12.11	Block in course upto 4 meters above Plinth Level in Cement Mortar 1:4	cum	8345.00	10857.00	9180.00	11692.00
12.12	Block in course upto 4 meters above plinth level in cement mortar 1:5	cum	8345.00	10751.00	9180.00	11586.00
12.13	Block in course upto 4 meters above plinth level in cement mortar 1:6	cum	8345.00	10679.00	9180.00	11514.00
12.14	Extra for above items for every additional storey of height upto 4 meters above the top of structural roof of lower storey.	cum	256.00	256.00	282.00	282.00
12.15	Add extra for arch work including centring and shuttering	cum	653.00	811.00	718.00	876.00
	<b>SQUARED OR RECTANGULAR PILARS OF RUBBLE MASONRY</b>					
12.16	Squared rubble masonry coursed (coursed rubble) in foundations and plinth in Cement mortar 1:4	cum	2588.00	5193.00	2847.00	5452.00
12.17	Squared rubble masonry coursed (coursed rubble) in foundations and plinth in cement mortar 1:5	cum	2588.00	5059.00	2847.00	5318.00
12.18	Squared rubble masonry coursed (coursed rubble) in foundations and plinth in Cement mortar 1:6	cum	2588.00	4971.00	2847.00	5230.00
12.19	Squared rubble masonry coursed (coursed rubble) in foundations and plinth in mud mortar	cum	2279.00	3889.00	2507.00	4117.00
12.20	Squared rubble masonry coursed (coursed rubble) in foundations and plinth and superstructure laid dry					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(a)	where building stone is specially arranged by the Contractor.	cum	1647.00	3257.00	1812.00	3422.00
	(b)	where stone is available within 100 meters from rock cutting already done	cum	1656.00	-	1822.00	-
	(c)	where stone is available within 100 meters from dismantled or failed structure	cum	1373.00	-	1510.00	-
12.21	Squared rubble masonry uncoursed or built to courses in foundations and plinth in cement mortar 1:4 to a pattern if specified.		cum	2810.00	5415.00	3091.00	5696.00
12.22	Squared rubble masonry uncoursed or built to courses in foundations and plinth in cement mortar 1:5 to a pattern if specified.		cum	2810.00	5280.00	3091.00	5561.00
12.23	Squared rubble masonry uncoursed or built to course in foundation and plinth in cement mortar 1:6 to a pattern if specified		cum	2810.00	5192.00	3091.00	5473.00
12.24	Squared rubble masonry uncoursed or built to courses in foundations and plinth in mud mortar to a pattern if specified.		cum	2427.00	4037.00	2670.00	4280.00
12.25	Add for work in superstructure upto 4 meters above plinth level.		cum	420.00	420.00	462.00	462.00
12.26	Extra for above items for every additional storey of height upto 4 meters of above the top of structural roof of lower storey.		cum	273.00	273.00	300.00	300.00
12.27	Extra for arch work including centring and shuttering.		cum	653.00	811.00	718.00	876.00
12.28	Random rubble masonry or polygonal rubble masonry (Kentish Rag) or random or polygonal rubble built to courses in foundations and plinth in cement mortar 1:8		cum	2168.00	4542.00	2385.00	4759.00
12.29	Random rubble masonry or polygonal rubble masonry (Kentish Rag) or random or polygonal rubble built to courses in foundations and plinth in cement mortar 1:7		cum	2168.00	4605.00	2385.00	4822.00
12.30	Random rubble masonry or polygonal rubble masonry (Kentish Rag) or random or polygonal rubble built to courses in foundations and plinth in cement mortar 1:6		cum	2158.00	4667.00	2374.00	4883.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
12.31	Random rubble masonry or polygonal rubble masonry (Kentish Rag) or random or polygonal rubble built to courses in foundations and plinth in mud mortar		cum	1267.00	2876.00	1394.00	3003.00
12.32	Random rubble masonry or polygonal rubble masonry (Kentish Rag) or random or polygonal rubble built to courses in foundations and plinth and superstructure laid dry.						
	(a)	Where building stone in specially arranged by the Contractor	cum	1497.00	3107.00	1647.00	3257.00
	(b)	Where stone is available within 100 meters from rock cutting already done.	cum	1054.00	1054.00	1159.00	1159.00
	(c)	Where stone is available with in 100 meters from dismantled or failed structure.	cum	1356.00	1356.00	1492.00	1492.00
12.33	Boulder masonry in cement mortar (1:6) in foundations and plinth.		cum	2158.00	4793.00	2374.00	5009.00
12.34	Boulder masonry in mud mortar in foundations and plinth.		cum	1131.00	2876.00	1244.00	2989.00
12.35	Add for work in superstructure 4 meters above plinth level		cum	420.00	420.00	462.00	462.00
12.36	Extra for above items for every additional storey of height upto 4 metre above the top of structural roof of lower storey.		cum	273.00	273.00	300.00	300.00
12.37	Rough hammer dressing of boulders:-						
	(a)	Quartzite stone 2-3 faces	cum	782.00	-	860.00	-
	(b)	Quartzite stone 4-5 faces	cum	1289.00	-	1418.00	-
	(C )	Sand stone 2-3 faces	cum	628.00	-	691.00	-
	(d)	Sand stone 4-5 faces	cum	1054.00	-	1159.00	-
12.38	Hammer dressing of stone for face work		Sqm	245.00	-	270.00	-
12.39	Fine chisel dressing (three line dressing) of stones		Sqm	830.00	-	913.00	-
12.40	Ordinary chisel dressing (two-line dressing) of stones.		Sqm	457.00	-	503.00	-
12.41	Rough tooled dressing (one-line dressing) of stone.		Sqm	365.00	365.00	402.00	402.00



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
12.42	Dry stone masonry for work of parley temporary nature (excluding dressing)	cum	641.00	641.00	705.00	705.00
12.43	Stone filling behind retaining walls.	cum	339.00	1501.00	373.00	1535.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
	<b>DHAJI WALLING</b>					
12.44	Walling 12.5 cm thick kail wood framing unwrought with stone in cement mortar 1:6 with plaster and white washing but including treatment of frame work for plastering.	Sqm	642.00	4017.00	706.00	4081.00
12.45	Walling 12.5 cm thick kail wood framing unwrought with stone in mud mortar without plaster and white washing but including treatment of frame work for plastering.	Sqm	625.00	3758.00	688.00	3821.00
12.46	Extra for laying stone masonry in or under water and/or liquid mud including cost of pumping or bailing out water and removing slush etc. Complete.	cum	548.00	548.00	603.00	603.00

**CHAPTER NO. 13**  
**HOISTING, ROOFING AND WATER PROOFING**

**Notes :-**

- (i) Unless otherwise stated, the labour rates include handling of material within 100 metres.
- (ii) The rates for hoisting are for heights upto 4 metres above plinth. For every additional 4 metres height or part thereof, add 10 per cent on item Nos. 13.1 to 13.5 and add 20 per cent on item Nos. 13.6 to 13.9.
- (iii) The rates for hoisting are not to be paid over and above the rates for manufacture of beams/ battens, etc., as given in other chapters, because *these* rates already include hoisting charges.
- (iv) The labour rates given in this chapter include the cost of water, tools & plant, scaffolding (Labour and material) and cost of good earth for mud mortar and mud plaster, wherever required.
- (v) For item No. 13.9 for bridge girders having spans more than 15 metres, special rates will be worked out and paid for on the merits of each case.
- (vi) The rates for item Nos. 13.58 to 13.65 exclude the cost of beading and frame work for base which is to be paid for separately.
- (vii) The rates given are for single storey. For every additional storey of 4 mtr. or part thereof add Rs. 3.00 per sqm for item No. 13.11, 13.13, 13.14 and 13.17.
- (viii) Rates for polycarbonate sheet are with Aluminum strips for roofing purposes, if aluminum strips not provided then through rate should be reduced accordingly.

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.1	Hoisting R.C.C. lintel and placing in position	cum	1717.00	1717.00	1888.70	1888.70
13.2	Hoisting R.C.C. battens and placing in position	cum	2081.00	2081.00	2289.10	2289.10
13.3	Hoisting R.C.C. shelves and placing in position	cum	1374.00	1374.00	1511.40	1511.40
13.4	Hoisting R.C.C. bed plates and placing in position	cum	2060.00	2060.00	2266.00	2266.00
13.5	Hoisting wooden battens and placing in position	cum	1275.00	1275.00	1402.50	1402.50
13.6	Hoisting wooden beams and placing in position	cum	1008.00	1008.00	1108.80	1108.80

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.7	Hoisting wooden trusses and placing in position	cum	4639.00	4639.00	5102.90	5102.90
13.8	Hoisting R.S. Joists and placing in position	Qtl.	398.00	398.00	437.80	437.80
13.9	Hoisting steel roof trusses plate girders of any span for buidlings and plate trusses girders for bridges upto 15m span	Qtl.	730.00	730.00	803.00	803.00
13.10	Assembling at site and hoisting and placing in position tubular trusses, complete with accessories such as parlings , bracing, longitudinal ties, truss shoes, purlin clips and other truss components, complete in all respects.	Qtl.	673.00	673.00	740.30	740.30
13.11	Second class mud roofing consisting of one layer of tiles 22.86 x 11.43 x 3.81 cm laid in cement mortar 1:3 including 6mm thick cement plaster 1:4 on top with two coats of bitumen painting at 2.63 Kg/Sqm covered with 10cm of mud and two layers of 25mm mud plaster with gobri on top and cement plaster 1:4 on parapet between tiles and drip course 1:2 cement pointing under side of tiles and filling of spaces between the battens.	Sqm.	416.00	980.00	457.60	1021.60
13.12	Third class mud roofing consisting of two layers of sirki and sarkanda covered with 12.5 cm mud plaster with gobri leeping on top	Sqm.	171.00	273.00	188.10	290.10
13.13 (i)	Terracing consiting of tiles 22.86x11.43x3.83cm laid over 25 mm mud plaster 7.5 cm mud filling on another layer of 25mm mud plaster including two coats of bitumen laid hot at 1.65 Kg. /Sqm top of R.C.C. slab including grouting with cement sand mortar 1:4 and top surface to be left clean after wire brushing	Sqm.	357.00	720.00	392.70	755.70
13.13 (ii)	Terracing consiting of Machine made vibro-hydraulic compacted burnt clay brick tiles 22.86x11.43x3.83cm laid over 25 mm mud plaster 7.5 cm mud filling on another layer of 25mm mud plaster including two coats of bitumen laid hot at 1.65 Kg. /Sqm on top of R.C.C. slab including grouting with cement sand mortar 1:4 and top surface to be left clean after wire brushing	Sqm.	357.00	726.00	392.70	761.70

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.13 (iii)	Terracing consiting of machine made Hollow Clay Tiles 80mm thick (Smooth surface) confirming to IS: 3951 (Part-I)-2009 laid over 25 mm mud plaster 7.5 cm mud filling on another layer of 25mm mud plaster including two coats of bitumen laid hot at 1.65 Kg. /Sqm on top of R.C.C. slab including grouting with cement sand mortar 1:4 having 10mm wide joints spacing on all sides of tiles and top surface to be left clean complete as per specification (laying shall be done as per PWD specifications).	Sqm.	357.00	975.00	392.70	1010.70
13.14	Roofing consisting of 5cm thick precast cement concrete 1:2:4 tiles laid in position with cement sand mortar 1:3 over R.C.C. battens 0.6 m apart excluding cost of R.C.C. Battens but including 4cm thick screed of cement concrete 1:4:8 over tiles 2 coats of bitumen at 2.34 Kg. per sqm 25mm mud plaster 7.5 mud over another layer of 25mm mud plaster filling space between battens over beam with cement concrete (1:3:6) blocks in cement mortar 1:3 and cement pointing 1:2 on the underside of tiles.	Sqm.	150.00	399.00	165.00	414.00
13.15	Thatching 15 cm thick including bamboo frame and matting but excluding the cost purlins	Sqm.	112.00	715.00	123.20	726.20
13.16	Thatching 23cm thick including bamboo frame and matting but excluding the cost of purlins	Sqm.	138.00	537.00	151.80	550.80
13.17	Tile terracing laid dry over roof consisitng of one layer of tiles 22.86x11.43x3.83 including grouting with cement sand mortar 1:4 top surface to be left clean after wire brushing	Sqm.	96.00	387.00	105.60	396.60
13.18	Corrugated G.I. Sheet roofing 0.80 mm thick fixed with galvanized iron J or L hooks 10mm dia, G.I. Limpot and bitumen washers complete excluding the cost of purling rafters and trusses	Sqm.	87.00	925.00	95.70	933.70
13.19	Corrugated asbestos Sheet roofing 6 mm thick sheets fixed with G.I. hooks and bolts, limpet and bitumen washers complete fixed in position excluding the cost of perlins, rafters and trusses.	Sqm.	116.00	367.00	127.60	378.60

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
13.19 (i)	Providing reinforced by organic fibres and/or inorganic synthetic fibres cement 6 mm thick corrugated sheets (as per IS: 14871) roofing up to any pitch and fixing with polymer coated J, or L hooks, bolts and nuts 8 mm dia. G.I. plain and bitumen washers or with self drilling fastener and EPDM washers etc. complete (excluding the cost of purlins, rafters and trusses), including cutting sheets to size and shape wherever required.		Sqm.	60.00	384.00	66.00	390.00
13.19 (ii)	Extra for straight cutting in reinforced by organic fibres and/or inorganic synthetic fibres cement corrugated, semi corrugated 6 mm thick sheet roofing for making openings of area exceeding 40 square decimeter for chimney stacks, skylights etc.		mt	41.00	44.00	45.10	48.10
13.19 (iii)	Extra for circular cutting in reinforced by organic fibres and/or inorganic synthetic fibres cement corrugated/ semi corrugated 6 mm thick sheet roofing for making openings of area exceeding 40 square decimeter.		mt	113.00	121.00	124.30	132.30
13.19 (iv)	Extra for providing and fixing wind ties of 40x 6 mm flat iron section.		mt	17.00	133.00	18.70	134.70
13.20	Semi Corrugated asbestos Sheet roofing 7 mm thick sheets fixed with G.I. hooks and bolts, limpet and bitumen washers complete fixed in position excluding the cost of perlins, rafters and trusses.		Sqm.	116.00	398.00	127.60	409.60
13.21	Ridges and valleys 45 cm overall, in plain G.I. Sheet 0.80mm fixed with galvanized iron J. and L. hooks 10mm diameter, G.I. Limpet and bitumen washers complete		Mtr.	86.00	416.00	94.60	424.60
13.21 (i)	Providing and fixing ridges and hips in fibre cement reinforced by organic fibres and/or inorganic synthetic fibres roofing with suitable fixing accessories or self drilling fastener and EPDM washer etc. complete.		Mtr.	40.00	371.00	44.00	375.00
	a	Plain wing adjustable ridges	Mtr.	40.00	300.00	44.00	304.00
	b	Close fitting adjustable ridges	Mtr.	52.00	435.00	57.20	440.20
	c	Unserrated adjustable hips	Mtr.	52.00	383.00	57.20	388.20

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.22	G.I. Sheet gutters 0.80mm thick semicircular 15cm diameter including fixing with clamps and making connections with rain water pipes.	Mtr.	187.00	488.00	205.70	506.70
13.23	Asbestos cement ridges fixed with G.I. J & L hooks 10mm diameter G.I. Plain and bitumen washers complete.	Mtr.	58.00	511.00	63.80	516.80
13.24	Asbestos cement valley gutter 45cmx12.5cmx15cm size fixed with galvanised iron J and L hooks 10mm diameter and flat iron clamps 25mmX3mm size G.I. Plain and bitumen washers including asbestos rope and plastic compound in joints complete.	Mtr.	70.00	520.00	77.00	527.00
13.25	Providing and fixing asbestos cement corrugated and semi corrugated apron piece with crank bolts in position etc complete.	Mtr.	61.00	327.00	67.10	333.10
13.25 (i)	Providing and fixing fibre cement reinforced by organic fibres and/or inorganic synthetic fibres roofing accessories in all colours with polymer coated J or L hooks, bolts and nuts and or G.I. seam bolts and nuts, G.I. plain and bitumen washers or with self drilling fastener and EPDM washer etc. complete:	Mtr.	30.00	332.00	33.00	335.00
	<b>Corrugated apron pieces</b>					
13.26	Providing and fixing asbestos cement corrugated ridge Final in the ridge.	Nos.	73.00	465.00	80.30	472.30
13.27	Providing and fixing asbestos cement semicorrugated sheet ridge, Final in the ridge.	Nos.	73.00	530.00	80.30	537.30
13.27 (i)	Providing and fixing fibre cement reinforced by organic fibres and/or inorganic synthetic fibres roofing accessories in all colours with polymer coated J or L hooks, bolts and nuts and or G.I. seam bolts and nuts, G.I. plain and bitumen washers or with self drilling fastener and EPDM washer etc. complete:	Nos.	73.00	1370.00	80.30	1377.30
	Ridge Finial					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
13.27 (ii)	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.						
	(a)	0.50 mm (+ 0.05 %) thick	Sqm	56.00	541.00	62.00	546.60
	(b)	0.60 mm (+ 0.05 %) thick	Sqm	56.00	635.00	62.00	640.60
13.27 (iii)	Providing and fixing ( PPGL) precoated painted galvalume sheet roofing (size, shape and pitch of corrugation as approved by Engineer-in-charge) The end rib shall have anti cappillary groove and return leg. The steel sheet must be having yield strength of 550 MPa ( Fy= 550 MPa) metallic coated with Zinc- Aluminium alloy ( i.e. 55% Al, 43.4%Zinc, 1.6% Si-Zincalume) AZ150 ( Min. 150 bm/mm2 total on both sides), pre painted with super Durable Polyster XRW quality paint includes inorganic infrared reflective pigment. The sheet confirms to general requirement of AS/NZS 2728 type 4/ IS 15965 class 3 durability and gloss value of 25% -40%. should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.						
	(a)	0.50 mm (+ 0.05 %) thick	Sqm	56.00	601.00	62.00	606.60
	(b)	0.60 mm (+ 0.05 %) thick	Sqm	56.00	712.00	62.00	717.60



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.27 (iv)	Providing and fixing Gutter 250mm wide with PPGL 0.50 thick (TCT) manufactured from zinc / aluminium alloy coated high tensile steel, having minimum yield strength of 550 MPa of approved colour fixed by means of self-drilling screws limped washers as per the manufactures guidelines complete in all respect and to the entire satisfaction of engineer in charge.	Mtr	227.00	1352.00	250.00	1374.70
13.27 (v)	Providing and fixing polycarbonate sheet sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws with EPDM seal, and the joints shall be provided with aluminium strips at top and bottom as a seal complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.					
	(a) Polycarbonate sheet Multiwalled 10mm thick	Sqm	182.00	1584.00	200.00	1602.20
	(b) Polycarbonate sheet Multiwalled 12mm thick	Sqm	182.00	1727.00	200.00	1745.20
	(c) Polycarbonate sheet 1mm thick solid type	Sqm	114.00	1114.00	125.00	1125.40
	(d) Polycarbonate sheet 2mm thick solid type	Sqm	114.00	1588.00	125.00	1599.40
13.28	Providing and fixing asbestos cement corrugated sheet eaves filler piece in position etc complete.	Mtr.	46.00	356.00	50.60	360.60
13.28 (i)	Providing and fixing fibre cement reinforced by organic fibres and/or inorganic synthetic fibres roofing accessories in all colours with polymer coated J or L hooks, bolts and nuts and or G.I. seam bolts and nuts, G.I. plain and bitumen washers or with self drilling fastener and EPDM washer etc. complete:	Pair	259.00	225.00	284.90	250.90
13.29	Providing and fixing asbestos cement semicorrugated sheet eaves filler piece in position etc complete	Mtr.	46.00	356.00	50.60	360.60

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.30	Providing and fixing asbestos cement expansion joints for semi corrugated sheets fixed with 16mm dia G.I. Bolts with bitumen and G.I. washer etc complete.	Mtr.	36.00	132.00	39.60	135.60
13.31	Providing and fixing asbestos cement semi corrugated & corrugated sheet north light curves with asbestos sheet roofing and purlins etc.	Mtr.	46.00	875.00	50.60	879.60
13.31 (i)	Providing and fixing fibre cement reinforced by organic fibres and/or inorganic synthetic fibres roofing accessories in all colours with polymer coated J or L hooks, bolts and nuts and or G.I. seam bolts and nuts, G.I. plain and bitumen washers or with self drilling fastener and EPDM washer etc. complete:	Mtr.	36.00	437.00	39.60	440.60
13.31 (ii)	Providing and fixing fibre cement reinforced by organic fibres and/or inorganic synthetic fibres roofing accessories in all colours with polymer coated J or L hooks, bolts and nuts and or G.I. seam bolts and nuts, G.I. plain and bitumen washers or with self drilling fastener and EPDM washer etc. complete:	Mtr.	36.00	478.00	39.60	481.60
13.31 (iii)	Providing and fixing fibre cement reinforced by organic fibres and/or inorganic synthetic fibres roofing accessories in all colours with polymer coated J or L hooks, bolts and nuts and or G.I. seam bolts and nuts, G.I. plain and bitumen washers or with self drilling fastener and EPDM washer etc. complete:	Mtr.	26.00	598.00	28.60	600.60
	Barge Boards					
13.32	Providing and fixing asbestos expansion joints or north light curves etc. complete	Nos.	55.00	314.00	60.50	319.50
13.33	Providing and fixing asbestos expansion joints for ridge etc. complete	Pair	109.00	369.00	119.90	379.90
13.34	Providing and fixing asbestos cement rain water pipe 100mm dia with M.S. holder and clamps fixed on wall face with cement mortar 1:4 complete	Mtr.	144.00	249.00	158.40	263.40
13.35	Embedding asbestos cement 100mm dia rain water pipe in cement mortar curing masonry works	Mtr.	45.00	144.00	49.50	148.50

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.36	Providing and fixing asbestos cement plain bend 100mm dia in position with gutter etc.	Nos.	56.00	120.00	61.60	125.60
13.37	Providing and fixing asbestos cement swan neck 100mm dia in position with asbestos cement pipe	Nos.	80.00	247.00	88.00	255.00
13.38	Providing and fixing asbestos cement hexagonal rainwater head 33cmx24cm for asbestos cement pipe in position.	Nos.	118.00	259.00	129.80	270.80
13.39	Providing and fixing asbestos shoe for asbestos cement rain water pipe in position.	Nos.	80.00	143.00	88.00	151.00
13.40	Providing and fixing union clips in gutter of asbestos cemetn sheet roofing etc complete	Nos.	116.00	129.00	127.60	140.60
13.41	Providing and fixing cast iron 100mm dia rain water pipe with screw and wooden plugs fixed and wall face including filling joints with spun yarn and cement mortar 1:2 excluding head and shoes etc.	Mtr.	163.00	1154.00	179.30	1170.30
13.42	Providing and fixing cast iron head for rain water pipe on wooden plugs fixed on wall face including filling the joints with spun yarn and cement mortar 1:2	Nos.	124.00	774.00	136.40	786.40
13.43	Providing and fixing cast iron shoe for rain water pipe on wooden plugs fixed on wall face including filling the joints with spun yarn and cement mortar 1:2	Nos.	124.00	774.00	136.40	786.40
13.44	Embedding 100mm C.I. rain water pipe non pressure I.S.I. Mark pipe in cement mortar during masonry work.	Mtr.	45.00	1029.00	49.50	1033.50
13.45	Top Khurra 0.6mx0.6m for rain water pipe in 25mm thick cement concrete 1:2:4 over 50.00 thick cement concrete 1:8:16	Nos.	52.00	95.00	57.20	100.20
13.46	Khurra on roof as per item No. 13.43 with C.I. Spouts 100 mm dia fixed in position.	Nos.	74.00	127.00	81.40	134.40

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.47	Khurra on roof as per item No. 13.43 with A.C Spouts 100 mm dia fixed in position.	Nos.	74.00	133.00	81.40	140.40
13.48	Khurra on roof as per item No. 13.43 with G.I Spouts 100 mm dia fixed in position.	Nos.	74.00	123.00	81.40	130.40
13.49	Khurra on roof as per item No. 13.43 with R.C.C. spouts 100 mm dia fixed in position.	Nos.	74.00	123.00	81.40	130.40
13.50	Khassi parnalas 12.5mm thick in ceemnt concrete mortar (1:2) 35cm out side width and upto 4.25m height	Mtr.	72.00	106.00	79.20	113.20
13.51	Bottom khurra on ground 1.2m 0.6m consisting of bricks on edge laid in cement mortar 1:3 over 7.5 cm cement concret 1:8:16 including 12.5mm thick cement plaster 1:3	Nos.	179.00	677.00	196.90	694.90
13.52	Laying 10 cm earth and two coats of 25mm mud plaster with gobri leeping on top including two coats of bitumen painting at 1.65 Kg. Per Sqm	Sqm.	190.00	271.00	209.00	290.00
13.53	Applying bitumen on roof including heating and carrying to roof.	Qtl.	140.00	5065.00	154.00	5079.00
13.54	Extra bitumen painting at 0.69 Kg. per Sqm.	Sqm.	8.00	348.00	8.80	348.80
13.55	Cement concrete 1:2:4 gola 10cm x 10cm concave quadrant along junction of roofs with parapet wall finished smooth, where specially specified.	Mtr.	45.00	65.00	49.50	69.50
13.56	Providing and laying four courses of water proofing treatment with bitumen felt over roofs consisting of first and third courses of blown type bitumen grade 85/25 applied hot at 1.20 Kg. Per sqm of area for each course second course on roofing felt type 3grade-1 (Hession base self finished bitumen felt) and fourth and final course of stone grit 6mm and down size or peasizes grit spread at 0.006cum per Sqm including preparation of surface complete.	Sqm.	67.00	321.00	73.70	327.70
13.57	Supplying and filling cinder on roof (1st story) including light ramming	Cum.	474.00	1472.00	521.40	1519.40

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.58	Kail wood plank ceiling 20mm thick tongued and grooved planking.	Sqm.	278.00	1848.00	305.80	1875.80
13.59	Providing and fixing dasuty cloth ceiling.	Sqm.	55.00	189.00	60.50	194.50
13.60	Providing and fixing hession cloth ceiling	Sqm.	55.00	109.00	60.50	114.50
13.61	Providing and fixing ply-wood (4mm) ceiling	Sqm.	43.00	387.00	47.30	391.30
13.62	Providing and fixing 5mm thick asbestos sheets ceiling	Sqm.	343.00	363.00	377.30	397.30
13.63	Providing and fixing 12.5mm thick insulating perforated board (such as celotax, treetax etc, ceilling)	Sqm.	50.00	675.00	55.00	680.00
13.64	Providing and fixing mineral fibre false ceiling tiles at all heights With 16 mm thick beveled tegular mineral fibre Anti-microbial false ceiling tile of size 595X595mm of approved texture, design and pattern. The tiles should have Humidity Resistance (RH) of 99%, Light Reflection > 85%, Thermal Conductivity k = 0.052 - 0.057 w/m K, Fire Performance as per (BS 476 pt - 6 &7)in true horizontal level suspended on interlocking T-Grid of hot dipped all round galvanized iron section of 0.33 mm thick (galvanized @120 gsm) comprising of main T runners of 15x32 mm of length 3000 mm, cross T of size 15x32mm of length 1200 mm and secondary intermediate cross T of size 15x32 mm of length 600 mm to form grid module of size 600x600 mm suspended from ceiling using galvanized mild steel item (galvanised@80gsm) 50 mm long 8mm outer diameter M-6 dash fasteners, 6 mm diameter fully threaded hanger rod up to 1000 mm length and L-shape level adjuster of size 85x25x2 mm, spaced at 1200 mm centre to centre along main 'T'. The system should rest on periphery walls /partitions with the help of GI perimeter wall angle of size24x24X3000 mm made of 0.40 mm thick sheet, to be fixed to the wall with help of plastic rawl plug at 450 mm centre to centre & 40 mm long dry wall S.S. screws. The exposed bottom portion of all T-sections used in false ceiling support system shall be pre-painted with polyester baked paint, for all heights. The work shall be carried out as per specifications, drawings and as per directions of the engineer-in-charge.	Sqm.	252.00	1856.00	277.20	1881.20

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.65	Providing and Fixing ceiling consisting of 12.5mm thick Gypsum Board of any size G.I. Cradling hanged from the ceiling by means of G.I. hanger complete as per drawings, specifications and to the entire satisfaction of engineer-in-charge.	Sqm.	436.00	1321.00	479.60	1364.60
13.66	Providing and Fixing of Copper Sheet 16 Gauge 350mm wide on expansion joint including covering with C. Concrete complete in all respect as per specifications.	mtr	172.00	4370.00	189.20	4387.20
13.67	Providing and fixing 4mm thick 300mm wide Asbestos sheet with gatties and screw on vertical expansion joints one side fixed and one side fixed with slotted holes complete in all respect as per specifications.	mtr	179.00	237.00	196.90	254.90
13.68	Providing and fixing partition upto ceiling height consisting of G.I. frame and required board including providing and fixing of frame work made of special section power pressed/ role form G.I. sheet with zinc coating of grade 175 consisting of floor and ceiling channel 50mm wide having equal flanges of 32mm and 0.5mm thick fixed to the floor and ceiling at the spacing of 610mm centre to centre with dash fastener of 12.5mm diameter, 40mm length and the studs 48mm wide having one flange of 34mm and other flange 36mm and 0.50mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610mm centre to centre by 6mm dia bolts and nuts at both ends of partition fixed flush to wall with rawl plugs at spacing 450mm centre to centre and fixing of boards to either side of frame work by 25mm drive all screws on studs, floor and ceiling channels at the spacing of 300mm centre to centre, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, joint finisher and two coats of primer suitable for board as per manufacture's specification and direction of engineer-in-charge all complete.	Sqm	453.00	1198.00	498.30	1243.30

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.69	Providing and fixing, in position concealed G.I. section for wall panelling using board of required thickness fixed on the 'W profile (0.55mm thick ) having a knurled web of 51.55mm and two flanges of 26mm each with lips of 10.55 mm placed @ 610mm C/C in perimeter channel having one flange of 20mm and another flange of 30mm with thickness of 0.55mm and web of length 27mm. Perimeter channel is fixed on the floor and the ceiling with the nylon sleeves @ 610mm C/C with fully threaded self-tapping drive all screws. Board is fixed to the 'Wprofile with 25 mm countersunk ribbed head screws @ 200mm C/C, all complete as per the drawing & directions of engineer-in-charge the joints of the boards are finished with specially formulated jointing compound and 48mm wide fiber tape to provide seamless finish.					
13.69 (a)	Tapered edge calcium silicate board made with calcareous & siliceous materials reinforced with cellulose fiber manufactured through autoclaving process to give stable crystalline structure, Non combustible & spread of Flame (as per BS standard 476 Part IV & VII), Water, Termite & Fungus resistant, compressive strength 25 kg/sq.cm, Bending strength 100 kg/sq.cm. 10 mm Thick	Sqm	406.00	1172.00	446.60	1212.60
13.69 (b)	Glass fibre reinforced gypsum board 12.5 mm thick conforming to IS: 2095- 1996: Part - I					
	12.50mm thick	Sqm	406.00	776.00	446.60	816.60
13.70	Providing and fixing thermal insulation of ceiling (under deck insulation) with Resin Bonded Fibre glass wool conforming to IS : 8183 density 24kg/m <sup>3</sup> , 50mm thick, wrapped in 200 G Virgin Polythene bags fixed to ceiling with metallic cleats (50x50x3mm) @ 60 cm and wire mesh of 12.5mm x 24g wire and mesh, for top most ceiling of building.	Sqm	157.00	553.00	172.70	568.70
13.71	Providing and fixing covering 2mm thick 300mm first class fibre sheet with gatties and screw on vertical expansion joints one side fixed and one side fixed with slotted holes to allow movement complete in all respect as per specifications and to the entire satisfaction of engineer- in- charge.	m	72.00	429.00	79.20	436.20

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.72	Providing and fixing covering 200mm wide Aluminium Sheet 14 Gauge with gatties and screw on vertical expansion joints one side fixed and one side fixed with slotted holes to allow movement complete in all respect as per specifications and to the entire satisfaction of engineer- in- charge.	mt	72.00	541.00	79.20	548.20
13.72 a	Providing and fixing machine moulded aluminium covering of approved pattern & design, made out of machine cut aluminium sheet and machine holed for receiving dash fastener, over expansion joints on vertical surfaces/ceiling floors, the fixing on plate in one row on one side of joint only shall be done with stainless steel dash fasteners of 8 mm dia and 75 mm long bolt including providing aluminium washers 2 mm thick & 15 mm dia , at a staggered pitch of 200mm centre to centre including drilling holes in the receiving surface and providing expandable plastic sleeves in holes etc. complete as per direction of Engineerin-charge.	kg	60.00	524.00	66.00	530.00
13.72 b	Powder coated aluminium sheet 2.5mm thick (minimum thickness of powder coating 50 micron)	kg	60.00	555.00	66.00	561.00
13.73	Providing and fixing covering 200mm wide G.I.Sheet 14 Gauge with gatties and screw on vertical expansion joints one side fixed and one side fixed with slotted holes to allow movement complete in all respect as per specifications and to the entire satisfaction of engineer- in- charge.	mt	72.00	392.00	79.20	399.20
13.74	Providing and fixing 110 mm dia . U.P.V.C Rain water pipe of 2.5 kgf./sqm as per IS:4985 including jointing during masonary complete as per specifications and to the entire satisfaction of Engineer-in- charge. (If fixed on wall face clamp to be paid separatly as per respective item)	mt	6.00	122.00	6.60	122.60
13.74 a	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes (working pressure 2.50 kgf / cm <sup>2</sup> ) conforming to IS : 4985, including jointing with seal ring (i) Single socketed pipes.					



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
i	U-PVC pipes (working pressure 2.5 kgf. / sqcm) Single socketed pipe 110 mm dia.		mt	72.00	190.00	79.20	197.20
ii	U-PVC pipes (working pressure 2.5 kg / sqcm) Single socketed pipe 160 mm dia.		mt	72.00	313.00	79.20	320.20
iii	U-PVC pipes (working pressure 2.5 kg / sqcm) Single socketed pipe 200 mm dia.		mt	72.00	445.00	79.20	452.20
13.75	Providing and fixing 110 mm dia. U.P.V.C bend for Rain water pipe as per IS:14735 including jointing complete as per specifications and to the entire satisfaction of Engineer- in- charge.						
	a	UPVC 110 mm bend	nos.	37.00	135.00	40.70	138.70
	b	UPVC 160 mm bend	nos.	37.00	153.00	40.70	156.70
	c	UPVC 200 mm bend	nos.	37.00	166.00	40.70	169.70
13.76	Providing and fixing 110 mm dia. U.P.V.C Coupling/Sockete for Rain water pipe as per IS:14735 including jointing complete as per specifications and to the entire satisfaction of Engineer- in- charge.						
	a	UPVC 110 mm bend	nos.	34.00	84.00	37.40	87.40
	b	UPVC 160 mm bend	nos.	34.00	110.00	37.40	113.40
	c	UPVC 200 mm bend	nos.	34.00	131.00	37.40	134.40
13.77	Preformed fillers for expansion joints in concrete pavement and structures (non-extruding and resilient type) part-3 Polymer Based (CED 13: building construction practices including painting, varnishing and allied finishing) complete as per IS 1838-3 (2011):		Mtr.	682.00	1003.00	750.20	1071.20

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.78	<p>Providing &amp; laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations:</p> <p>(a) Applying a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer- in- charge over the RCC slab including adjoining walls upto 300mm height including cleaning the surface before treatment.</p> <p>(b) Laying brick bats with mortar using broken bricks/ brick bats 25mm to 115mm size with 50% of cement mortar 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS: 2645 and approved by Engineer-in-charge over 20mm thick layer of cement mortar of mix 1:5 ( 1 cement L5 coarse sand) admixed with water proofing compound conforming to IS :2645 and approved by Engineer.</p>	Sqm.	211.00	453.00	232.10	474.10

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.79	<p>Providing and fixing mineral fibre false ceiling tiles ( NRC 0.55 to 0.6) at all heights of size 595X595x16 mm of approved texture, design and pattern. The tiles should have Humidity Resistance (RH) of 99%, Light Reflection &gt; 85%, Thermal Conductivity k = 0.052 - 0.057 w/m K, Fire Performance as per (BS 476 pt - 6 &amp;7) in true horizontal level suspended on interlocking T-Grid of hot dipped all round galvanized iron section of 0.33 mm thick (galvanized @120 gsm) comprising of main T runners of 15x32 mm of length 3000 mm, cross T of size 15x32mm of length 1200 mm and secondary intermediate cross T of size 15x32 mm of length 600 mm to form grid module of size 600x600 mm suspended from ceiling using galvanized mild steel item (galvanised@80gsm) 50 mm long 8mm outer diameter M-6 dash fasteners, 6 mm diameter fully threaded hanger rod up to 1000 mm length and L-shape level adjuster of size 85x25x2 mm, spaced at 1200 mm centre to centre along main 'T'. The system should rest on periphery walls /partitions with the help of GI perimeter wall angle of size 24x24X3000 mm made of 0.40 mm thick sheet, to be fixed to the wall with help of plastic rawl plug at 450 mm centre to centre &amp; 40 mm long dry wall S.S. screws. The exposed bottom portion of all T-sections used in false ceiling support system shall be pre-painted with polyester baked paint, for all heights. The work shall be carried out as per specifications, drawings and as per directions of the engineer-in-charge.</p>	Sqm	283.00	1681.00	311.30	1709.30

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.80	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm ( GI Metal Ceiling Lay in plain Tegular edge Global white color tiles of size 595x595 mm, and 0.5 mm thick with 8 mm drop; made of G I sheet having galvanizing of 100 gms/sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns(minimum), including factory painted after bending.) in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections ( galvanized @ 120 grams/sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all Tsections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.	Sqm	283.00	1234.0	311.30	1262.30

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.81	<p>Providing and fixing tiled false ceiling of specified materials of size 595x595 mm ( GI Metal Ceiling Lay in perforated Tegular edge global white color tiles of size 595x595 mm and 0.5 mm thick with 8 mm drop; made of GI sheet having galvanizing of 100 gms/sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC (Noise Reduction Coefficient ) of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation, and backed with a black Glass fiber acoustical fleece..) in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections ( galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all Tsections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.</p>	Sqm	283.00	1234.0	311.30	311.30

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.82	<p>Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 &amp;7), humidity resistance of 100%, thermal conductivity &lt; 0.043 W/m K as per ASTM 518:1991, in true horizontal level suspended on interlocking metal powder coated T-Grid of hot dipped galvanised iron section of 0.40 mm thick on Silhouette profile, rotary stitched double webbed white with 6mm reveal profile (white/black), comprising of main-T runners of size</p> <p>1912SUB HEAD : 26- N 15x42mm of length 3000 mm, cross - T of size 15x42 mm of length 1200 mm and secondary intermediate cross-T of size 15x42 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x25x2 mm. Galvanised iron perimeter wall angle of size 22x19x0.40 mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450 mm center to center and 40mm long dry wall S.S screws. The work shall be carried out as per specifications, drawing and as per directions of the Engineer-in-Charge.</p>	sqm	283.00	1627.00	311.30	1655.30

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.83	Providing and fixing in position wall panelling at all heights with integral densified calcium silicate panels/tiles of size 595 x 595mm, having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 &7), humidity resistance of 100%, thermal conductivity <0.043 W/m K as per ASTM 518:1991, comprising of a frame made from especially fabricated galvanised mild steel sheet 0.50 mm thick pressed section (galvanizing @120 grams per sqm including both sides) i.e.vertical studs of size 48 x 34 x 36 mm are placed at 600mm center to center in a floor and ceiling channel section of size 50 x 32mm fixed to the floor and soffit at 600mm centers using 12mm dia,50mm long wedge type expanded zinc alloy dash fastner with 10mm bolt. This same channel is then to be fixed in horizontal direction at 600mm center to center so as to form a grid of 600mm x 600mm. Glasswool of 50mm thickness is then to be inserted in the slots and finally calcium silicate non combustible panels/tiles are to be screw fixed with self tapping pan head nickel coated mild steel screws of size 13 x 3.2mm on to this grid leaving an even groove of 1 mm between the panels. The joints between the panels are to be duly jointed and finished using recommended jointing calcium silicate based compound and fiber joint tape roll 50mm wide (90 metre ) roll and two coats of primer suitable for panelling as per manufacturer's specification as per direction of Engineer-in-Charge all complete.	sqm	456.00	2332.00	501.60	2377.60
13.84	Providing and fixing 15 mm thick false ceiling tiles at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 &7), humidity resistance of 100%, thermal conductivity < 0.043 W/m K as per ASTM 518:1991,in true horizontal level on the existing frame work consisting of T-sections and Lsections suitably fixed according to tile size as per direction of Engineer-in-charge.	sqm	250.00	1233.00	275.00	1258.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
13.85	Providing & fixing false ceiling at all heights with GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having moisture content less than 2%, humidity resistance of 99%, NRC0.50 to 0.75 as per IS 8225:1987, Non combustible as per BS 476 (part 4)-1970 and light reflectance of 85% (minimum) to be laid in true horizontal level suspended on inter-locking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main-T runners of size 15x32 mm of length 3000 mm, cross - T of size 15x32 mm of length 1200 mm and secondary intermediate cross-T of size 15x32 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x25x2 mm. Galvanised iron perimeter wall angle of size 24x24x0.40 mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450 mm center to center and 40 mm long dry wall wood screws. The work shall be carried out as per specifications, drawing and as per directions of the Engineer-in-Charge.						
	i	12 mm thick micro tegular edged semi perforated GFRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of Size 595x595 mm	sqm	283.00	1338.00	311.30	1366.30
	ii	With fully perforated 12 mm thick micro tegular edged or 10 mm thick square edged GRG false ceiling tiles.	sqm	283.00	1473.00	311.30	1501.30



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
13.86	Providing and fixing mineral fibre false ceiling tiles at all heights of size 595X595mm of approved texture, design and pattern. The tiles should have Humidity Resistance (RH) of 99%, Light Reflection > 85%, Thermal Conductivity k = 0.052 - 0.057 w/m K, Fire Performance as per (BS 476 pt - 6 & 7) in true horizontal level suspended on interlocking T-Grid of hot dipped all round galvanized iron section of 0.33 mm thick (galvanized @120 gsm) comprising of main T runners of 15x32 mm of length 3000 mm, cross T of size 15x32mm of length 1200 mm and secondary intermediate cross T of size 15x32 mm of length 600 mm to form grid module of size 600x600 mm suspended from ceiling using galvanized mild steel item (galvanised@80gsm) 50 mm long 8mm outer diameter M-6 dash fasteners, 6 mm diameter fully threaded hanger rod up to 1000 mm length and L-shape level adjuster of size 85x25x2 mm, spaced at 1200 mm centre to centre along main 'T'. The system should rest on periphery walls /partitions with the help of GI perimeter wall angle of size 24x24X3000 mm made of 0.40 mm thick sheet, to be fixed to the wall with help of plastic rawl plug at 450 mm centre to centre & 40 mm long dry wall S.S. screws. The exposed bottom portion of all T-sections used in false ceiling support system shall be pre-painted with polyester baked paint, for all heights. The work shall be carried out as per specifications, drawings and as per directions of the engineer-in-charge.						
	i	With 16 mm thick beveled tegular mineral fibre false ceiling tile (NRC 0.55 to 0.6) size 595x595 mm	sqm	233.00	1364.00	256.30	1387.30
	ii	With 20 mm thick beveled tegular mineral fibre false ceiling tile (NRC 0.7)	sqm	475.00	1788.00	522.50	1835.50
	iii	With 16 mm thick beveled tegular mineral fibre Anti-microbial false ceiling tile confirming to ISO 5 (class 100) specifications	sqm	475.00	2157.00	522.50	2204.50
13.87	Extra for addition of synthetic Polyester triangular fibre of length 6 mm, effective diameter 10-40 microns and specific gravity of 1.34 to 1.40 in cement plaster/mortar by using 125 gms. of synthetic Polyester triangular fibre for 50 Kgs. cement used in cement mortar for water proofing treatment to RCC structures as per directions of Engineer-in-Charge.		Per Bag of 50 Kg of Cement	10.00	75.00	11.00	76.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.88	Water proofing treatment of RCC structures (after making the surface clean, dry & free from all internal voids or honey combs ), with Zycosil /equivalent water proofing Solution (1 litre of Zycosil / equivalent & 20 litres of potable water stirred first & 2 litres of Zycoprime / equivalent added and stirred (total 23 litres)) using two coats till it meets the saturation level and testing as per RILEM or by water drops test in which water drops do not absorb but drops remain or rolls.	Sqm	114.00	236.00	125.00	247.40
13.89	Water proofing of roof terraces, Basements, Retaining Walls, Water tanks etc with Zydex Zycoprime / Elastobar / Equivalent solution so as to form a water-resistant cementitious bonding coat and to form on-site seamless cross-linked elastomeric membrane on the concrete surface to reduce its porosity. Creating a cementitious elastomeric polymeric membrane of Elastobar and Zycoprime/Equivalent after application of Zycosil & Zycoprime Solution in New Construction. Take equal parts of Elastobar and Cement and form a paste. Add little water to the paste to make it brushable. Apply the paste on surface with brush. Leave the surface for drying for at least 4 - 6 hours to get elastomeric membrane. After this application, make one more layer of rough cementitious membrane using mixture of 1 Part of Zycoprime + 1 Part of Cement + 1 Part of fine sand. Apply paste on the surface with a brush to make a rough texture. Now your surface is ready to bond well with tiles/screed.	Sqm	161.00	423.00	177.00	439.10
13.90	Supply & Fixing Fiber Glass Coated Mesh with thickness of 45 Gsm for the water proofing of roof terraces, bathrooms , Water tanks, etc. The surface to be levelled, finished, made smooth before fixing of Fiber Glass Mesh, complete in all respect as per manufactures specification and as per directions of Engineer-in-Charge.	Sqm	31.00	119.00	34.00	122.10

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.91	Water proofing treatment of Roof Slab with High performance cementitious two component product, consisting of a powder component and an acrylic polymer using two coats ( Dr Fixit Roofseal flex - Packaging Size: 12 .5 kg (7.5 kg powder + 5 kg polymer) / equivalent water proofing Solution ). The slurry thus formed by mixing the two, is to be applied on new roofs to forms a seamless, highly elastic, non-toxic waterproofing layer on the roof with a life expectancy of 7 years. The work shall be carried out all complete as per specification and the direction of the Engineer-in-charge.	Sqm	161.00	559.09	177.00	575.19
13.92	Waterproofing of wet areas ( Concrete/ Masonary Surface ) and any water retaining structures such as swimming pools, water tanks, Bathrooms, toilets, balconies, planters etc with high performance polymer modified cementitious coating ( DR. FIXIT FASTFLEX / Equivalent ) to provide tough film build-up and highly elastic film formation, which accommodates thermal movements so as to provide seamless coating without any joints to prevents water leakage. The scope of work also includes surface prepration and cleaning, washing and removing dust,dirt and loose particles from concrete / masonry surface complete in all respects.	Sqm	161.00	504.51	177.00	520.61
13.93	Supplying & applying Colour Epoxy bonding adhesive on Floors, having coverage of 0.60 Sqm / Kg of approved make such as Astral / STP or any other equivalent brand, prepared and applied as per manufacturer's specifications including preparation of surface, making the surface clean, dry & free from all internal voids, etc complete fully applied over existing base to provide a high-performance, semi-smooth, impervious, easy to clean and durable surface entirely to the satisfaction of Engineer in Incharge.	Sqm	479.00	1742.00	527.00	1789.90

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
13.94	Providing and applying injection grouting using cement slurry admixed with Fosroc Chemical Conplast WL or any other equivalent compound @ 300 ml/ Bag of cement through the uPVC nozzles ( 12mm dia uPVC/ Plastic Nozzles - 4" to 9" long @ 5 No: / Sqm of area) , provided into the cracks/ honeycombed areas using 140 PSI hand operated Grouting Pump under pressure till the refusal,doing final Cement slurry Grouting (after 28 Days),, finally cutting & sealing of Nozzle. including all labour, supervision, tools and tackles and transportation etc. complete as per direction of Enginner -in- charge.	Sqm	322.00	1076.00	354.00	1108.20

**CHAPTER NO. 14**  
**FLOORING & DADOS**

**Notes :-**

- (i) Unless otherwise stated, the labour rates include the handling charges of materials within 100 metres.
- (ii) As there is huge involvement of water in cement based work, sundries @5% of labour component has been taken in this chapter.
- (iii) The rates include the cost of water. Where the water is supplied free by the Department, the labour rates shall be decreased by 3% and through rates be decreased accordingly.
- (iv) The rates given are for ground floor only. Add Rs. 3/- per sqm for every additional storey.
- (v) The labour rates given in this chapter include the cost of water, tools & plants, cost of good earth for mud mortar and mud plaster, wherever required.
- (vi) Sand (fine aggregate) for 1:2:4 concrete in item of conglomerate, polished and terrazzo flooring shall be as per Punjab PWD Specifications No: 3.30.
- (vii) For Square and rectangular columns, enhance the labour rate for item no. 14.41 to 14.55 by 33.3%. For round and elliptical columns, enhance the labour rates for the item no. 14.53 to 14.55 by 100%. The through rates are to be increased accordingly.
- (viii) Risers of stair-case are to be paid as per skirting or dado rates, while treads and landings are to be paid as per flooring rates of similar specifications.
- (ix) The rates for rubbing and polishing to granolithic finish are for rubbing & polishing to granolithic granite finish.

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.1	Laying of Dry Brick Ballast 40 mm gauge for flooring.	Cum	244.00	1456.00	268.40	1480.40
14.2	Laying of Dry stone Ballast 40 mm gauge for flooring.	Cum	244.00	1078.00	268.40	1102.40
14.3	Base course of floor consisting of 100mm thick cement concrete 1:8:16 and 100mm sand filling using mechanical mixer for mixing of material	Sqm	138.00	403.00	151.80	416.80
14.4	Floating coat of 1:5mm thick neat cement laid in one operation to the topping	Sqm	14.00	29.00	15.40	30.40
14.5	Conglomerate floor 25mm thick cement concrete topping 1:2:4 using mechanical mixer for mixing of material	Sqm	154.00	238.00	169.40	253.40

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.6	Conglomerate floor 40mm thick cement concrete topping 1:2:4 using mechanical mixer for mixing of material	Sqm	170.00	304.00	187.00	321.00
14.7	Conglomerate floor 50mm thick cement concrete topping 1:2:4 using mechanical mixer for mixing of material	Sqm	178.00	346.00	195.80	363.80
14.8	Conglomerate floor 25mm thick cement concrete rete 1:2:4 on 100mm thick cement concrete 1:8:16 and 100mm sand filling. using mechanical mixer for mixing of material	Sqm	293.00	657.00	322.30	686.30
14.9	Conglomerate floor 40mm thick cement concrete 1:2:4 on 100mm thick cement concrete 1:8:16 and 100mm sand filling. using mechanical mixer for mixing of material	Sqm	308.00	708.00	338.80	738.80
14.10	Conglomerate floor 50mm thick cement concrete rete 1:2:4 on 100mm thick cement concrete 1:8:16 and 100mm sand filling using mechanical mixer for mixing of material	Sqm	316.00	749.00	347.60	780.60
14.11	Screed of 50mm thick cement concrete 1:8:16 to be laid below the topping using mechanical mixer for mixing of material	Sqm	82.00	148.00	90.20	156.20
14.12	Screed of 40mm thick cement concrete 1:8:16 to be laid below the topping using mechanical mixer for mixing of material	Sqm	82.00	155.00	90.20	163.20
14.13	25mm thick conglomerate floor of cement concrete 1:2:4 over flat brick laid dry with 25mm open joints alround filled with cement concrete 1:2:4 simultaneously with topping over 100mm sand filling using mechanical mixer for mixing of material	Sqm	181.00	407.00	199.10	425.10
14.14	25mm thick polished flooring cement concrete 1:2:4 toping finished with 3 mm thick neat coat of cement rubbed and polished using mechanical mixer for mixing of material	Sqm	289.00	402.00	317.90	430.90
14.15	40mm thick grey polished flooring cement concrete 1:2:4 toping finished with 3 mm thick neat coat of cement rubbed and polished using mechanical mixer for mixing of material	Sqm	309.00	472.00	339.90	502.90

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.16	20mm thick grey polished skirting or dado consisting of bottom layer of 16mm thick cement sand plaster 1:3 and finished 3mm thick topping of neat cement rubbed and polished including rounding of junction with floors.	Sqm	457.00	566.00	502.70	611.70
14.17	Flat brick paving laid dry over 25mm thick mud mortar grouted with sand	Sqm	54.00	287.00	59.40	292.40
14.18	Dry brick on edge paving sand grouted over 50mm thick earth and mud plaster	Sqm	94.00	472.00	103.40	481.40
14.19	Laying First Class Dry Brick on edge flooring or paving in ordinary bonded courses or in herring bond or other special courses / bond with rough dressing of soil, final dressing of earth to give level surface and camber. All joints shall be thoroughly filled / grouted with dry sand, applied to a thickness of not less than 20 mm over the surface of flooring and brushed into the joints, rolling the surface with light road roller after sprinkling with water complete in all respects.	Sqm	63.00	441.00	69.30	447.30
14.20	Dry brick on edge paving sand grouted over 50mm thick rammed brick aggregate 40mm gauge	Sqm	88.00	524.00	96.80	532.80
14.21	Flat brick or tile flooring laid in cement sand mortar 1:4 on 100mm thick cement concrete 1:8:16 and 100mm thick sand filling and cement pointed 1:2 on top.	Sqm	307.00	869.00	337.70	899.70
14.22	Brick on edge flooring laid in cement sand mortar 1:4 on 75mm thick cement concrete 1:8:16 and 100mm sand filling cement pointing 1:2 on top	Sqm	357.00	998.00	392.70	1033.70
14.23	Flat brick or tile flooring laid dry over a bed of 6mm thick cement sand mortar 1:6 grouted with cement sand mortar 1:4 and top surface to be left clean after wire brushing	Sqm	101.00	368.00	111.10	378.10
14.24	Brick on edge flooring with bricks of class designation 105, including cement slurry etc. complete in cement mortar 1:4 with F.P.S. bricks.	Sqm	214.00	898.00	235.40	919.40

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.25	40mm thick grey terrazo topping rubbed and polished to a granolithic finish under layer 34mm thick cement concrete 1:2:4 and top layer 6mm thick with 3mm gauge white marble makrana chipping from indigenous marble laid in 1:1½ (50 Kg of ordinary grey cement and 0.05 cum of white marble chippings)	Sqm	364.00	566.00	400.40	602.40
14.26	40mm thick grey terrazo topping rubbed and polished to a granolithic finish under layer 31 mm thick cement concrete 1:2:4 and top layer 9mm (4mm to 7mm thick) with the gauge white marble makrana chipping from indigenous marble laid in 1:1½ (50 Kg of ordinary grey cement and 0.05 cum of white marble chippings)	Sqm	423.00	635.00	465.30	677.30
14.27	40mm thick grey terrazo topping rubbed and polished to a granolithic finish under layer 28 mm thick cement concrete 1:2:4 and top layer 12 mm thick with 7mm 10mm gauge white marble makrana chipping from indigenous marble laid in 1:1½ (50 Kg of ordinary grey cement and 0.05 cum of white marble chippings)	Sqm	423.00	643.00	465.30	685.30
14.28	40mm thick white terrazo topping rubbed and polished to a granolithic finish under layer 34mm thick cement concrete 1:2:4 and top layer 6mm thick with 3mm gauge white marble makrana chipping from indigenous marble laid in 1:1½ (37.5 Kg of white cement, 12.5 kg marble powder and 0.05 cum of white marble chippings)	Sqm	364.00	615.00	400.40	651.40
14.29	40mm thick white terrazo topping rubbed and polished to a granolithic finish under layer 31mm thick cement concrete 1:2:4 and top layer 9mm thick with 4mm to 7 mm gauge white marble makrana chipping from indigenous marble laid in 3:1:6 (37.5 Kg of white cement, 12.5 kg marble powder and 0.05 cum of white marble chippings).	Sqm	423.00	707.00	465.30	749.30
14.30	40mm thick white terrazo topping rubbed and polished to a granolithic finish under layer 28 mm thick cement concrete 1:2:4 and top layer 12 mm thick with 7mm to 10 mm gauge white marble makrana chipping from indigenous marble laid in 3:1:6 (37.5 Kg of white cement, 12.5 Kg marble powder and 0.05 cum of white marble chippings)	Sqm	423.00	732.00	465.30	774.30



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.31	40mm thick black red or chocolate terrazo topping rubbed and polished to a granolithic finish under layer 34mm thick cement concret 1:2:4 and top layer 6mm thick with 1 mm to 4 mm gauge white marble makrana chipping from indigenous marble laid in 3:1:6 (50 Kg of ordinary grey cement with admixture of black red or chocolate pigment to give to required back ground and 0.05 cum of marble chippings)	Sqm	364.00	626.00	400.40	662.40
14.32	40mm thick black red or chocolate terrazo topping rubbed and polished to a granolithic finish under layer 31 mm thick cement concret 1:2:4 and top layer 9mm thick with 4mm to 7mm gauge white marble makrana chipping laid in 3:1:6 (37.50 Kg of ordinary grey cement 12.5 kg marble powder with admixture to black red or chocolate pigment to give to required back ground and 0.05 cum of marble chippings)	Sqm	423.00	726.00	465.30	768.30
14.33	40mm thick black red or chocolate terrazo topping rubbed and polished to a granolithic finish under layer 28 mm thick cement concret 1:2:4 and top layer 12mm thick with 7mm to 10mm gauge white marble makrana chipping laid in 3:1:6 (37.50 Kg of ordinary grey cement 12.5 kg marble powder with admixture to black red or chocolate pigment to give to required back ground and 0.05 cum of marble chippings)	Sqm	423.00	734.00	465.30	776.30
14.34	40mm thick orange, buff, yellow, or pink terrazo topping rubbed and polished to a granolithic finish under layer 34mm thick cement concret 1:2:4 and top layer 6 mm thick with 4mm to 7mm gauge white marble makrana chipping from indigenous marble laid in 3:1:6 ( 37.5 Kg of white cement and 12.5 kg of marble powder with admixture of orange buff, yellow or pink pigment to give to required back ground and 0.05 cum of marble chippings)	Sqm	423.00	725.00	465.30	767.30
14.35	40mm thick orange, buff, yellow, or pink terrazo topping rubbed and polished to a granolithic finish under layer 31mm thick cement concret 1:2:4 and top layer 9 mm thick with 4mm to 7 mm gauge white marble makrana chipping from indigenous marble laid in 3:1:6 (37.50 Kg of white cement with admixture of orange buff, yellow or pink pigment to give to required back ground and 0.05 cum of marble chippings)	Sqm	423.00	785.00	465.30	827.30

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.36	40mm thick orange, buff, yellow, or pink terrazo topping rubbed and polished to a granolithic finish under layer 28mm thick cement concret 1:2:4 and top layer 12 mm thick with 7mm to 10 mm gauge white marble makrana chipping from indigenous marble laid in 3:1:6 (37.50 Kg of white cement with admixture of orange buff, yellow or pink pigment to give to required back ground and 0.05 cum of marble chippings)	Sqm	423.00	821.00	465.30	863.30
14.37	40mm thick blue or green terrazo topping rubbed and polished to a granolithic finish under layer of 34mm thick cement concret 1:2:4 and top layer 6mm thick with 1mm to 4 mm gauge white marble makrana chipping from indigenous marble laid in 3:1:6 (37.50 Kg of white cement with admixture of blue or green colour to give required back ground and 0.05 cum of white marble chippings)	Sqm	364.00	667.00	400.40	703.40
14.38	40mm thick blue or green terrazo topping rubbed and polished to a granolithic finish under layer of 31 mm thick cement concret 1:2:4 and top layer 9mm thick with 4mm to 7mm gauge white marble makrana chipping from indigenous marble laid in 3:1:6 (37.5 Kg of white cement 12.5 kg with admixture of blue or green colour to give required back ground and 0.05 cum of marble chippings)	Sqm	423.00	785.00	465.30	827.30
14.39	40mm thick blue or green terrazo topping rubbed and polished to a granolithic finish under layer of 28 mm thick cement concret 1:2:4 and top layer 12 mm thick with 7mm to 10 mm gauge white marble makrana chipping from indigenous marble laid in 3:1:6 (37.5 Kg of white cement 12.5 kg with admixture of blue or green colour to give required back ground and 0.05 cum of marble chippings)	Sqm	423.00	811.00	465.30	853.30
14.40	50mm thick ironite ( Metallic Floor Hardner to be mixed with Granolithic topping for heavy duty floors) floor consisiting of 40mm thick cement concrete 1:2:4 base and top layer 10mm thick laid with one part of ironite and grey cement mixed together in the ratio of 1:4 by weight to two parts of hard granite chippings 6mm gauge by volume finished smooth with hard rubbing	Sqm	441.00	781.00	485.10	825.10

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.41	20mm thick grey terrazo skirting or dado, rubbed and polished granolithic finish under layer 14mm thick cement sand plaster 1:3 and top layer 6mm thick with 1mm to 4 mm gauge, white marble makrana chippings laid in 1:1½ (50 Kg of ordinary grey cement and 0.05 cum of whit marble chippings ) including rounding of junctions.	Sqm	718.00	862.00	789.80	933.80
14.42	20mm thick grey terrazo skirting or dado, rubbed and polished granolithic finish under layer 11mm thick cement sand plaster 1:3 and top layer 9mm thick with 4mm to 7 mm gauge, white marble makrana chippings laid in 1:1½ (50 Kg of ordinary grey cement and 0.05 cum of whit marble chippings ) including rounding of junctions.	Sqm	718.00	867.00	789.80	938.80
14.43	20mm thick grey terrazo skirting or dado, rubbed and polished granolithic finish under layer 8 mm thick cement sand plaster 1:3 and top layer 12mm thick with 7mm to 10 mm gauge, white marble makrana chippings laid in 1:1½ (50 Kg of ordinary grey cement and 0.05 cum of whit marble chippings ) including rounding of junctions.	Sqm	718.00	909.00	789.80	980.80
14.44	20mm thick white terrazo skirting or dado, rubbed and polished to a granolithic finish, layer 14mm thick cement sand plaster 1:3 and top layer 6mm thick with 1mm to 4 mm gauge, white marble makrana chippings laid in 1:1½ (50 Kg of ordinary grey cement and 0.05 cum of whit marble chippings ) including rounding of junctions.	Sqm	718.00	911.00	789.80	982.80
14.45	20mm thick white terrazo skirting or dado, rubbed and polished to a granolithic finish, under layer 11mm thick cement sand plaster 1:3 and top layer 9mm thick with 4mm to 7mm, gauge white marble makrana chippings laid in 3:1:6 (37.50 Kg of ordinary grey cement 12.50 gk marble powder and 0.05 cum of whit marble chippings ) including rounding of junctions.	Sqm	718.00	940.00	789.80	1011.80

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.46	20mm thick white terrazo skirting or dado, rubbed and polished granolithic finish under layer 8 mm thick cement sand plaster 1:3 and top layer 12mm thick with 7mm to 10 mm gauge, white marble makrana chippings laid in 3:1:6 (37.50 Kg of white cement, 12.5 kg marble powder and 0.05 cum of whit marble chippings ) including rounding of junctions.	Sqm	718.00	990.00	789.80	1061.80
14.47	20mm thick black, red or chocolate terrazo skirting or dado, rubbed and polished to a granolithic finish, layer 14mm thick cement sand plaster 1:3 and 6mm thick with 3mm gauge, white marble makrana chippings from indigenous marble laid in 1:1½ (50 Kg of ordinary grey cement with admixture of black, red or chocolate pigment to give required back ground and 0.05 cum of marble chippings (including rounding of junctions.)	Sqm	718.00	924.00	789.80	995.80
14.48	20mm thick black, red or chocolate terrazo skirting or dado, rubbed and polished to a granolithic finish, layer 11mm thick cement sand plaster 1:3 and 9mm thick with 4mm to 7mm gauge, white marble laid chippings from indigenous marble laid in 1:1½ (50 Kg of ordinary grey cement with admixture of black, red or chocolate pigment to give required back ground and 0.05 cum of marble chippings (including rounding of junctions.)	Sqm	718.00	929.00	789.80	1000.80
14.49	20mm thick black, red or chocolate terrazo skirting or dado, rubbed and polished to a granolithic finish, under layer 8mm thick cement sand plaster 1:3 and 12mm thick with 7mm to 10mm gauge, white marble laid chippings from indigenous marble laid in 1:1½ (50 Kg of ordinary grey cement with admixture of black, red or chocolate pigment to give required back ground and 0.05 cum of marble chippings (including rounding of junctions.)	Sqm	718.00	1030.00	789.80	1101.80

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.50	20mm thick orange bluff, yellow or pink terrazo skirting or dado, rubbed and polished to a granolithic finish, under layer 14mm thick cement sand plaster 1:3 and top layer 6mm thick with 1 mm to 4 mm gauge, white marble makrana chippings from indigenous marble laid in 3:1:6 (37.50 Kg of white cement, 12.50 kg marble powder with admixture of orange bluff, yellow or pink pigment to give required back ground and 0.05 cum of white marble chippings (including rounding of junctions.))	Sqm	718.00	963.00	789.80	1034.80
14.51	20mm thick orange bluff, yellow or pink terrazo skirting or dado, rubbed and polished to a granolithic finish, under layer 11mm thick cement sand plaster 1:3 and top layer 9mm thick with 4mm to 7mm gauge, white marble makrana chippings laid in 3:1:6 i(37.50 Kg of white cement 12.50kg marble powder with admixture of orange buff, yellow or pink pigment to give required back ground and 0.05 cum of white marble chippings (including rounding of junctions.	Sqm	718.00	1044.00	789.80	1115.80
14.52	20mm thick orange bluff, yellow or pink terrazo skirting or dado, rubbed and polished to a granolithic finish, under layer 8 mm thick cement sand plaster 1:3 and top layer 12mm thick with 7mm to 10mm gauge, white marble makrana chippings laid in 3:1:6 i(37.50 Kg of white cement 12.50kg marble powder with admixture of orange buff, yellow or pink pigment to give required back ground and 0.05 cum of white marble chippings (including rounding of junctions.	Sqm	718.00	1111.00	789.80	1182.80
14.53	20mm thick blue or green skirting or dado, rubbed and polished to a granolithic finish, under layer 14mm thick cement sand plaster 1:3 and top layer 6mm thick with 1mm to 4 mm gauge, white marble makrana chippings from indigenous marble laid in 1:1½ (50 Kg of white cement with admixture of blue or green pigment to give required back ground and 0.05 cum of white marble chippings (including rounding of junctions.))	Sqm	718.00	963.00	789.80	1034.80

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.54	20mm thick blue or green skirting or dado, rubbed and polished to a granolithic finish, under layer 11mm thick cement sand plaster 1:3 and top layer 9mm thick with 4mm to 7 mm gauge, white marble makrana chippings from indigenous marble laid in 3:1:6 (37.5 Kg of white cement , 12.5 kg marble powder with admixture of blue or green pigment to give required back ground and 0.05 cum of white marble chippings (including rounding of junctions.)	Sqm	718.00	1044.00	789.80	1115.80
14.55	20mm thick blue or green skirting or dado, rubbed and polished to a granolithic finish, under layer 8mm thick cement sand plaster 1:3 and top layer 12mm thick with 7mm to 10 mm gauge, white marble makrana chippings from indigenous marble laid in 3:1:6 (37.5 Kg of white cement , 12.5 kg marble powder with admixture of blue or green pigment to give required back ground and 0.05 cum of white marble chippings (including rounding of junctions.)	Sqm	718.00	1111.00	789.80	1182.80
14.56 (a)	Extra over item no: 14.24 and 14.42 for plains if 33 % white cement in 6 mm thick top layer is used.	Sqm	17.95	17.95	17.95	17.95
14.56 (b)	Extra labour for projected nosing of stair case of any shape and design.	Mtr.	64.00	64.00	70.40	70.40
14.57	Extra for making chequers of approved pattern on cement concrete floors, steps, landing, pavements etc.	sqm.	44.00	44.00	48.40	48.40
14.58	Precast terrazo tiles of 20mm minimum thickness in ordinary grey cement with marble chips of size and colour as required laid on 20mm thick bed of cement mortar 1:3 (1 cement 3 sand) with neat cement slurry between joints and over the base for floors, treads of steps and landings including rubbing and polishing	Sqm	517.00	1066.00	568.70	1117.70
14.59	Precast chequered tiles of 20mm minimum thickness in ordinary grey cement without chips laid on 20mm thick bed of cement mortar 1:3 with neat cement slurry between joints and over the base for floors, treads of steps and landings	Sqm	228.00	788.00	250.80	810.80

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.60	Precast P.C.C. tiles conforming to IS 1237-1980, 20 cm x 20 cm x 2.5 cm in ordinary grey cement without chips laid on 20mm thick bed of cement mortar 1:3 with neat cement slurry between joints and over the base for floors, treads of steps and landings	Sqm	228.00	788.00	250.80	810.80
14.61	Precast P.C.C. tiles conforming to IS 1237-1980, 25 cm x 25 cm x 2.5 cm in ordinary grey cement without chips laid on 20mm thick bed of cement mortar 1:3 with neat cement slurry between joints and over the base for floors, treads of steps and landings	Sqm	228.00	788.00	250.80	810.80
14.62	Precast P.C.C. tiles conforming to IS 1237-1980, 30 cm x 30 cm x 2.5 cm in ordinary grey cement without chips laid on 20mm thick bed of cement mortar 1:3 with neat cement slurry between joints and over the base for floors, treads of steps and landings	Sqm	228.00	788.00	250.80	810.80
14.63	Precast terrazo tiles of 20mm minimum thickness in white cement with marble chips of size and colour as required laid on 20mm thick bed of cement mortar 1:3 (1 cement and 3 sand) with neat cement slurry made of white cement between joints and over the base for floors, treads of steps and landings including rubbing and polishing.	Sqm	475.00	1254.00	522.50	1301.50
14.64	Precast terrazo tiles of 20mm minimum thickness in white cement mixed with buff, yellow, chocolate or orange pigment as required laid in 20mm thick bed of cement mortar 1:3 with neat cement slurry mixed with pigment to match the shade of tiles between joints and over the base in floors, treads of steps and landings including rubbing and polishing	Sqm	475.00	1276.00	522.50	1323.50
14.65	Precast terrazo tiles of 20mm minimum thickness in white cement mixed with black red or chocolate with marble chips of size and colour as per required laid on 20mm thick bed of cement mortar 1:3 with neat cement slurry mixed with pigment to match the shade of tiles between joints and over the base in floors, treads of steps and landings including rubbing and polishing	Sqm	475.00	1202.00	522.50	1249.50

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.66	Precast terrazo tiles of 20mm minimum thickness in ordinary white cement mixed with green or blue pigment with marble chips of size and colour as per required laid on 20mm thick bed of cement mortar 1:3 with neat cement slurry mixed with pigment to match the shade of tiles between joints and over the base in floors, treads of steps and landings including rubbing and polishing	Sqm	475.00	1276.00	522.50	1323.50
14.67	Precast terrazo tiles of 12.5 minimum thickness in ordinary cement with marble chips of size and colour as required laid on 10mm thick cement plaster 1:3 jointed with neat cement slurry in skirting or dado and risers of steps including and rubbing and polishing	Sqm	658.00	1178.00	723.80	1243.80
14.68	Precast terrazo tiles of 12.5mm minimum thickness in white cement with marble chips of size and colour as required laid on 10mm thick cement plaster 1:3 jointed with neat cement slurry in skirting or dado and risers of steps including and rubbing and polishing.	Sqm	658.00	1272.00	723.80	1337.80
14.69	Precast terrazo tiles of 12.5mm minimum thickness in white cement with , buff, yellow chocolate or orange pigment with marble chips of size and colour as required, laid on 10mm thick cement plaster 1:3 and jointed with neat cement slurry with pigment to match the shade of tiles in skirting, dado and risers of steps including rubbing and polishing.	Sqm	658.00	1294.00	723.80	1359.80
14.70	Precast terrazo tiles of 12.5mm minimum thickness in ordinary cement mixed with black red or chocolate pigment marble chips of size and colour as required, laid on 10mm thick cement plaster 1:3 and jointed with neat cement slurry with pigment to match the shade of tiles in skirting, dado and risers of steps including and polishing	Sqm	658.00	1201.00	723.80	1266.80
14.71	Precast terrazo tiles of 12.5mm minimum thickness in white cement mixed with green or blue pigment as required, laid on 10mm thick cement plaster 1:3 and jointed with neat cement slurry with pigment to match the shade of tiles in skirting, dado and risers of steps including and polishing	Sqm	658.00	1294.00	723.80	1359.80



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.72	Providing and laying Anti skid Ceramic floor tiles of size 300x300 mm x 10 mm thick of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on flooring skirting and dado in 12.5mm thick cement plaster 1:3 in base and jointed with @ 3.3 kg/sqm including pointing the joints with white cement and matching pigment etc., completewhite cement slurry in joints including corners angles and beading.	Sqm	305.00	672.00	335.50	702.50
14.73	Marble stone flooring with 18-20 mm thick marble stone, as per sample of marble approved by Engineer-in-charge, over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry, including rubbing and polishing complete with :					
	(i) Makrana, Doongri, Adanga vined and chack Doongri with grey stretches.					
	(a) Slab sizes from 0.30 sqm to 0.50 sqm.	Sqm	474.00	1376.00	521.40	1423.40
	(b) Slabs sizes above 0.50 sqm	Sqm	474.00	1674.00	521.40	1721.40
	(ii) Kumari grey without oxide and cavaties flooring 18mm to 20mm thick of varing sizes					
	(a) Slab sizes from 0.30 sqm to 0.50 sqm.	Sqm	474.00	1227.00	521.40	1274.40
	(b) Slabs sizes above 0.50 sqm	Sqm	474.00	1301.00	521.40	1348.40
	(iii) Black Marble tiles of Kishangarn, Zebra, Makrana , Dhabi or Doongri Zebra thickness 18mm to 20mm					
	(a) Slab sizes from 0.30 sqm to 0.50 sqm.	Sqm	474.00	1301.00	521.40	1348.40
	(b) Slabs sizes above 0.50 sqm	Sqm	474.00	1376.00	521.40	1423.40
	(iv) Udaipur Green Marble Tiles of thickness 18mm to 20mm					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(a)	Slab sizes from 0.30 sqm to 0.50 sqm.	Sqm	474.00	1115.00	521.40	1162.40
	(b)	Slabs sizes above 0.50 sqm	Sqm	474.00	1190.00	521.40	1237.40
	(v)	Pink plain marble Marble Tiles of various sizes 18mm to 20 mm thick					
	(a)	Slab sizes from 0.30 sqm to 0.50 sqm.	Sqm	474.00	1301.00	521.40	1348.40
	(b)	Slabs sizes above 0.50 sqm	Sqm	474.00	1450.00	521.40	1497.40
	(vi)	Morwad marble Marble Tiles of various sizes 18mm to 20 mm thick					
	(a)	Slab sizes from 0.30 sqm to 0.50 sqm.	Sqm	474.00	1115.00	521.40	1162.40
	(b)	Slabs sizes above 0.50 sqm	Sqm	474.00	1190.00	521.40	1237.40
14.74	Marble stone flooring with 12-15 mm thick marble stone, as per sample of marble approved by Engineer-in-charge, over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry, including rubbing and polishing complete with :						
	(i)	Makrana, Doongri, Adanga vined and chack Doongri with grey stretches.					
	(a)	Slab sizes from 0.30 sqm to 0.50 sqm.	Sqm	474.00	1525.00	521.40	1572.40
	(b)	Slabs sizes above 0.50 sqm	Sqm	474.00	1525.00	521.40	1572.40
	(ii)	Kumari grey without oxide and cavaties flooring 12mm to 15mm thick of varing sizes					
	(a)	Slab sizes from 0.30 sqm to 0.50 sqm.	Sqm	474.00	1152.00	521.40	1199.40

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(b)	Slabs sizes above 0.50 sqm	Sqm	474.00	1227.00	521.40	1274.40
	(iii)	Black Marble tiles of Kishangarn, Zebra, Makrana , Dhabi or Doongri Zebra thickness 12mm to 15mm					
	(a)	Slab sizes from 0.30 sqm to 0.50 sqm.	Sqm	474.00	1366.00	521.40	1413.40
	(b)	Slabs sizes above 0.50 sqm	Sqm	474.00	1450.00	521.40	1497.40
	(iv)	Udaipur Green Marble Tiles of thickness 12mm to 15mm					
	(a)	Slab sizes from 0.30 sqm to 0.50 sqm.	Sqm	474.00	1078.00	521.40	1125.40
	(b)	Slabs sizes above 0.50 sqm	Sqm	474.00	1152.00	521.40	1199.40
	(v)	Pink plain marble Marble Tiles of various sizes 12mm to 15 mm thick					
	(a)	Slab sizes from 0.30 sqm to 0.50 sqm.	Sqm	474.00	1227.00	521.40	1274.40
	(b)	Slabs sizes above 0.50 sqm	Sqm	474.00	1301.00	521.40	1348.40
	(vi)	Morwad marble Marble Tiles of various sizes 12mm to 15 mm thick					
	(a)	Slab sizes from 0.30 sqm to 0.50 sqm.	Sqm	474.00	1078.00	521.40	1125.40
	(b)	Slabs sizes above 0.50 sqm	Sqm	474.00	1152.00	521.40	1199.40
14.75	Extra for pre finished nosing to treads of steps of marble stone. ( Full gola, half round gola etc.)		mt	178.00	178.00	195.80	195.80
14.76	Extra for marble stone flooring in treads of steps and risers using single length up to 2.00 metre.		sqm	426.00	426.00	468.60	468.60

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.77	Marble work of thickness 18-20 mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 coarse sand), including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade (To be secured to the backing by means of cramps, which shall be paid for separately).					
	(i) Makrana, Doongri, Adanga vined and chack Doongri with grey stretches.					
	(a) Tiles Size 0.3 sqm to 0.50 sqm	Sqm	845.00	1705.00	929.50	1789.50
	(b) Slabs sizes above 0.50 Sqm	Sqm	845.00	2003.00	929.50	2087.50
	(ii) Kumari grey without oxide and cavaties Lining 15mm to 20mm thick of varing sizes					
	(a) Tiles Size 0.3 sqm to 0.50 sqm	Sqm	845.00	1556.00	929.50	1640.50
	(b) Slabs sizes above 0.50 Sqm	Sqm	845.00	1630.00	929.50	1714.50
	(iii) Black Marble tiles of Kishangarn, Zebra, Makrana , Dhaba or Doongri Zebra thickness 15mm to 20mm					
	(a) Tiles Size 0.3 sqm to 0.50 sqm	Sqm	845.00	1630.00	929.50	1714.50
	(b) Slabs sizes above 0.50 Sqm	Sqm	845.00	1705.00	929.50	1789.50
	(iv) Udaipur Green Marble Tiles of thickness 15mm to 20mm					
	(a) Tiles Size 0.3 sqm to 0.50 sqm	Sqm	845.00	1444.00	929.50	1528.50
	(b) Slabs sizes above 0.50 Sqm	Sqm	845.00	1519.00	929.50	1603.50
	(v) Plain Pink Marble Tiles of thickness 15mm to 20mm					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(a)	Tiles Size 0.3 sqm to 0.50 sqm	Sqm	845.00	1630.00	929.50	1714.50
	(b)	Slabs sizes above 0.50 Sqm	Sqm	845.00	1779.00	929.50	1863.50
	(vi)	Morwad marble Marble Tiles of various sizes 15mm to 20 mm thick					
	(a)	Tiles Size 0.3 sqm to 0.50 sqm	Sqm	845.00	1407.00	929.50	1491.50
	(b)	Slabs sizes above 0.50 Sqm	Sqm	845.00	1481.00	929.50	1565.50
14.78	Marble work of thickness 12-15 mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 coarse sand), including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade (To be secured to the backing by means of cramps, which shall be paid for separately).						
	(i)	Makrana, Doongri, Adanga vined and chack Doongri with grey stretches.					
	(a)	Tiles Size 0.3 sqm to 0.50 sqm	Sqm	845.00	1630.00	929.50	1714.50
	(b)	Slabs sizes above 0.50 Sqm	Sqm	845.00	1854.00	929.50	1938.50
	(ii)	Kumari grey without oxide and cavaties Lining 12mm to 15mm thick of varing sizes					
	(a)	Tiles Size 0.3 sqm to 0.50 sqm	Sqm	845.00	1481.00	929.50	1565.50
	(b)	Slabs sizes above 0.50 Sqm	Sqm	845.00	1556.00	929.50	1640.50
	(iii)	Black Marble tiles of Kishangarn, Zebra, Makrana , Dhabi or Doongri Zebra					
	(a)	Tiles Size 0.3 sqm to 0.50 sqm	Sqm	845.00	1630.00	929.50	1714.50
	(b)	Slabs sizes above 0.50 Sqm	Sqm	845.00	1779.00	929.50	1863.50
	(iv)	Udaipur Green Marble Tiles of thickness 12mm to 15mm					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(a)	Tiles Size 0.3 sqm to 0.50 sqm	Sqm	845.00	1407.00	929.50	1491.50
	(b)	Slabs sizes above 0.50 Sqm	Sqm	845.00	1481.00	929.50	1565.50
	(v)	Plain Pink Marble Tiles of thickness 12mm to 15mm					
	(a)	Tiles Size 0.3 sqm to 0.50 sqm	Sqm	845.00	1630.00	929.50	1714.50
	(b)	Slabs sizes above 0.50 Sqm	Sqm	845.00	1779.00	929.50	1863.50
	(vi)	Morwad marble Marble Tiles of various sizes 12mm to 15 mm thick					
	(a)	Tiles Size 0.3 sqm to 0.50 sqm	Sqm	845.00	1407.00	929.50	1491.50
	(b)	Slabs sizes above 0.50 Sqm	Sqm	845.00	1481.00	929.50	1565.50
14.79	Providing and fixing stainless steel cramps of required size and shape for anchoring stone wall lining to the backing or securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement : 2 coarse sand), including making the necessary chases in stone and holes in walls wherever required.		kg	254.00	601.00	279.40	626.40
14.80	Providing and fixing copper pins 7.5 cm long 6 mm diameter for securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement : 2 coarse sand), including making the necessary chases.		Each	18.00	33.00	19.80	34.80
14.81	Coloured glazed tiles 20 cm x 20 cm and 5 mm thick in skirting and dado on 12 mm thick cement plaster 1:3 in base and jointing with grey cement slurry @ 3.3kg per sqm and filling joints with white cement slurry in joints including bevelled corners.		Sqm	366.00	785.00	402.60	821.60
14.82	Chittor black marble tiles 15mm to 20 mm thick in risers of steps, skirting dado, walls and pillars laid in 12.5 mm thick cement mortar 1:3 and jointed with neat cement slurry mixed with pigments to match the shade of marble including rubbing and polishing		Sqm	845.00	1599.00	929.50	1683.50

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.83	Rough red sand stone (from Agra) 40mm thick set in cement mortar 1:5 (1 cement 5 sand)	Sqm	378.00	958.00	415.80	995.80
14.84	Kota stone slab 20-25 mm thick flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :	Sqm	428.00	1097.00	470.80	1139.80
14.85	Kotah stone rough dressed 40mm to 50mm thick slabs, set to pattern in pavements over 20mm thick base of cement mortar (1 cement, 3 Sand) laid and jointed with neat cement slurry, mixed with pigment to match the shade of stone	Sqm	428.00	1185.00	470.80	1227.80
14.86	Kotah stone tiles 20mm thick in skirting risers of steps, dado walls and pillars laid in 12.5mm thick cement mortar 1:3 (1 cement 3 coarse sand) and jointed with neat cement slurry mixed with pigment to match the shade of stone, including rubbing and polishing	Sqm	661.00	1335.00	727.10	1401.10
14.86 a	Extra for pre finished nosing in treads of steps of Kota stone/ sand stone slab.	mt	101.00	101.00	111.10	111.10
14.86 b	Extra Labour rate if Kota stone/ sand stone in treads of steps and risers using single length.	sqm	24.00	24.00	26.40	26.40
14.87	Black Granite stone tiles 15mm to 20mm thick in skirting, risers of steps, dado walls and pillars laid in 12.5mm thick cement mortar 1:3 (1 cement 3 coarse sand) and jointed with neat cement slurry mixed with pigment to match the shade of stone, including rubbing and polishing including labour for fixing dowel pins and cramps.	Sqm	792.00	3155.00	871.20	3234.20
14.88	Coloured Granite stone tiles 15mm to 20mm thick in skirting, risers of steps, dado walls and pillars laid in 12.5mm thick cement mortar 1:3 (1 cement 3 coarse sand) and jointed with neat cement slurry mixed with pigment to match the shade of stone, including rubbing and polishing including labour for fixing dowel pins and cramps.	Sqm	792.00	3278.00	871.20	3357.20

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.89 a	Providing and laying flamed finish Granite stone 18mm thick in flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge :					
	Flamed finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	Sqm	427.00	2104.00	469.70	2146.70
14.89 b	Providing and laying Polished Granite stone 18 mm thick flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing , curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.					
	Polished granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	Sqm	427.00	2813.00	469.70	2855.70
14.89 c	Providing and laying Mat finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge :					
	Mat finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	Sqm	378.00	2455.00	415.80	2492.80
14.90	Fine dressed red stone (From Agra) flooring 40mm thick set in 12.5mm thick cement mortar 1:5 including jointing with cement mortar 1:2 with an admixture of pigment to match the shade of stone	Sqm	378.00	1078.00	415.80	1115.80



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.91	Fine dressed red sand stone (from Agra) flooring 40mm thick set in 12.5mm thick cement mortar 1:3 jointing with cement mortar 1:2 with an admixture of pigment to match the shade of stone.	Sqm	378.00	1097.00	415.80	1134.80
14.92	Teak wood 25 mm planking tongued and grooved flooring including fixing with screws complete.	Sqm	320.00	5125.00	352.00	5157.00
14.93	Teak wood 40mm planking tongued and grooved flooring including fixing with screw complete	Sqm	320.00	8329.00	352.00	8361.00
14.94	Parquet flooring 40mm thick consistng of 1st class well seasoned shisham wood of standard patten laid in flooring consistng of bitumen applied hot @ 4.86 Kg. Per Square metrer over 12.5mm thick cement sand plaster 1:4 top surface rubbed smoth and wax polished to a fine finish	Sqm	1244.00	4693.00	1368.40	4817.40
14.95	Rough red stone (From Agra) flooring 40mm thick, set in 12.5mm thick cement sand mortar 1:3 including jointing with cement mortar 1:2 with an admixture of pigment to match the shade of stone	Sqm	378.00	1014.00	415.80	1051.80
14.96	Rough red sand stone (From Agra) flooring 40mm thick, set in 12.5mm thick cement sand mortar 1:5 including jointing with cement mortar 1:2 with an admixture of pigment to match the shade of stone	Sqm	378.00	996.00	415.80	1033.80
14.97	Providing and laying plain coloured 3.20mm gauge linoleum covering to floors laid dry. The term linoleum has been derived from the Latin words linum, meaning linseed, and oleum, meaning oil. Linoleum flooring can be described as a type of flooring that makes use of solidified linseed oil (linoxyn) as the base, along with wood flour, tree resins, cork dust, a touch of ground limestone and pigments (for adding color).	Sqm	44.00	724.00	48.40	728.40

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.98	Providing and laying plain coloured 3.20mm gauge linoleum covering to floors laid dry, if linoleum of exact size is used. The term linoleum has been derived from the Latin words linum, meaning linseed, and oleum, meaning oil. Linoleum flooring can be described as a type of flooring that makes use of solidified linseed oil (linoxyn) as the base, along with wood flour, tree resins, cork dust, a touch of ground limestone and pigments (for adding color).	Sqm	44.00	724.00	48.40	728.40
14.99	Providing and laying resilient vinyl sheet floor covering 2 mm thick, having a vinyl plastic wear layer with backing intended for use in light commercial and residential buildings, duly fixed to the base floor using adhesive as approved by the manufacturer.	Sqm	133.00	852.00	146.30	865.30
14.100	Providing and laying Laminate wooden flooring (Grade AC3 or AC3+ laminates) 6 mm to 12 mm thick, having core made up of medium-density fiberboard (MDF), which is less resistant to impact damage and less resistant to being dented by heavy furniture, having a décor layer to give each floor its appearance and consisting of one or more sheets of paper impregnated with melamine resin and top wear layer having clear aluminum oxide finish that protects the decorative layer & imparts the desired level of sheen, from full gloss to low gloss, duly fixed to the base floor using adhesive as approved by the manufacturer.	Sqm	234.00	1838.00	257.40	1861.40
	NOTE :- AC3 Grade has no backing material while higher grades are provided with a cotton type sheet backing further backed by a sound proofing sheet backing.					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
14.101	Providing and laying Laminate wooden flooring (Grade AC4 or AC4+ laminates) 6 mm to 12 mm thick, having a good backing layer made up of plastic laminate or melamine, core made up of medium-density fiberboard (MDF), which is less resistant to impact damage and less resistant to being dented by heavy furniture, having a décor layer to give each floor its appearance and consisting of one or more sheets of paper impregnated with melamine resin and top wear layer having clear aluminum oxide finish that protects the decorative layer & imparts the desired level of sheen, from full gloss to low gloss, duly fixed to the base floor using adhesive as approved by the manufacturer.		Sqm	234.00	2042.00	257.40	2065.40
14.102	Deodar wood 40mm thick planking tongued and grooved flooring including fixing with screws complete		Sqm	415.00	6522.00	456.50	6563.50
14.103	Kail wood 40mm thick planking tongued and grooved flooring including fixing with screws complete		Sqm	415.00	3884.00	456.50	3925.50
14.104	Providing & fixing glass strips 3mm thick in floor (a) 40mm wide						
	(a)	40 mm wide	Metre	10.00	22.00	11.00	23.00
	(b)	32 mm wide	Metre	10.00	19.00	11.00	20.00
	(c)	25 mm wide	Metre	10.00	17.00	11.00	18.00
14.105	Providing & fixing glass strips 4mm thick in floors						
	(a)	50 mm wide	Metre	10.00	29.00	11.00	30.00
	(b)	40 mm wide	Metre	10.00	25.00	11.00	26.00
	(c)	32 mm wide	Metre	10.00	21.00	11.00	22.00
	(d)	25 mm wide	Metre	10.00	20.00	11.00	21.00
14.106	Providing & fixing 18mm to 20mm thick marble strips in joints of terrazo / cement concrete floors.						
	(a)	50 mm wide	Metre	10.00	53.00	11.00	54.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(b)	40 mm wide	Metre	10.00	46.00	11.00	47.00
14.107	Sand filling under floor and in wells of bridge foundation including handling withing 100 metres		Cum	70.00	1005.00	77.00	1012.00
14.108	Providing and fixing flat iron strip 40mmx5mm thick in flooring (in stepping of floor) including cutting straightening & fixing with nails etc. complete fixed in position		Metre	22.00	110.00	24.20	112.20
14.109	Dholpur stone tiles 25 mm thick in wall facing ( lining ) laid in any pattern as specified on 12.5 mm thick cement sand plaster 1:3 and jointed with neat cement slurry mixed with pigment to match the shade of stone including rubbing & polishing including labour for fixing cramps, pins & dowels etc.		Sqm	757.00	1485.00	832.70	1560.70
14.110	Butch work with rough dressed Dholpur stone 40 mm to 50 mm thick laid on 12.5 mm thick cement coarse sand mortar 1:3 including dressing & cutting the stone to required shape & size.		Sqm	757.00	1178.00	832.70	1253.70
14.111	Fine dressed and machine rubbed red sand stone ( from Agra ) 25 mm to 50 mm thick lining on wall, pillars, skirting, dado & risers of steps laid in any pattern as specified on 12.5 mm thick cement coarse sand mortar 1:3 with neat cement slurry admixture of pigment to match the shade of stone including labour for fixing cramps, dowels, pins, etc.		Sqm	586.00	1391.00	644.60	1449.60
14.112	Providing and laying vitrified floor tiles in different sizes in light colour shades made using Soluble Salt Technology (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 ( 1 cement: 4 fine sand), complete. ( Soluble salt Print Penetration should be up to 1 to 2 mm after the tiles are fired & polished ).						
	a	Size 600x600 mm	Sqm	273.00	749.00	300.30	776.30
	b	Size 800x800 mm	Sqm	273.00	803.00	300.30	830.30
	c	Size 1000x1000 mm	Sqm	273.00	885.00	300.30	912.30

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
14.113	Providing and laying vitrified floor tiles of different sizes in light colour shades made using Double Charge technology (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement: 4 fine sand), complete. ( Design is homogenous throughout the tile body ).						
	a	Size 600x600 mm	Sqm	273.00	1048.00	300.30	1075.30
	b	Size 800x800 mm	Sqm	273.00	1184.00	300.30	1211.30
	c	Size 1000x1000 mm	Sqm	273.00	1253.00	300.30	1280.30
14.114	Deduct for not using 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) bedding in laying of floor tiles and jointing with grey cement slurry @ 3.3 kg/ sqm.		Sqm	273.00	368.00	300.30	395.30
14.115	Providing and laying vitrified floor tiles in different sizes in light colour shades made using Full Body Technology (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement: 4 fine sand), complete. ( Full body vitrified tiles have pigment in entire body / thickness of tile which makes chips and scratches less noticeable and make na ideal choice for high traffic zones.)						
	a	Size 600x600 mm	Sqm	272.00	1421.00	299.20	1448.20

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.116	Providing and Laying Tactile Flooring full body vitrified , low water absorption below 5%, having excellent slip resistance , very dense, durable and abrasion resistant, solid through colour, fade proof, highly chemical and stain resistance unglazed finish porcelain tile of size 300mm x 300mm x 10mm + 5mm thick, approved profile design, Tec-button/Tec-liner laid in ordinary grey cement and on 20mm thick bed of cement mortar 1:3 filling neat cement slurry between joints with White Cement containing pigment to match the shade complete in all respect. (Tile design and pattern will be as per guidelines issued for persons with disability)	Sqm	273.00	1810.00	300.30	1837.30
14.117	Fixing glazed/ Ceramic/ Vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (Water based) conforming to IS: 15477, in average 3mm thickness.	Sqm	305.00	363.00	335.50	393.50
14.118	Grouting the joints of flooring tiles having joints of 3 mm width, using 2mm to 3 mm gap using spacers and later this gap to be filled with cement based grout ) with Cement base grout and matching pigments etc., complete, including filling / grouting and finishing complete as per direction of Engineer-in-charge.					
	a Size 600x600 mm.	Sqm	90.00	124.00	99.00	133.00
	b Size 800x800 mm.	Sqm	68.00	97.00	74.80	103.80
	c Size 1000x1000 mm.	Sqm	45.00	67.00	49.50	71.50
14.119	Extra Cost for using darker fast shade Vitrified or Rectified Tiles instead of lighter shades.	Sqm	0.00	68.00	0.00	70.21
14.120	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in-charge.					
	a Size 600x600 mm.	Sqm	90.00	177.00	99.00	186.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	b	Size 800x800 mm.	Sqm	68.00	140.00	74.80	146.80
	c	Size 1000x1000 mm.	Sqm	45.00	98.00	49.50	102.50
14.121	Deduct for not grouting the joints with white cement and matching pigment in the items of fixing of vitrified tiles.		Sqm	9.00	44.00	9.90	44.90
14.122	Providing and laying Rectified Porcelain floor tiles 400x400mm or more (thickness to be specified by the manufacturer) of premium quality conforming to IS:15622 of approved make in all colours laid on 20mm thick bed of Cement Mortar 1:4 ( 1 Cement : 4 Fine sand) for new flooring complete .		Sqm	273.00	844.00	300.30	871.30
14.123	Providing and laying Rectified Porcelain floor tiles 400x400mm or more (thickness to be specified by the manufacturer) of premium quality conforming to IS:15622 of approved make in all colours laid on 20mm thick bed of Cement Mortar 1:4 ( 1 Cement : 4 Fine sand) for new flooring or laid with cement based high polymer modified quick set tile adhesive (water based) of approved make IS 15477 marked using 5 Kg adhesive per Sqm of tile area in average 3mm thickness over existing floor, including pointing the joints with white cement and matching pigments etc., complete		Sqm	273.00	871.00	300.30	898.30
14.124	Deduct for not using 20mm thick cement mortar 1:4 (1 cement : 4 fine sand ) bedding in laying of floor tiles.		Sqm	183.00	246.00	201.30	264.30
14.125	Providing and fixing 1st quality ceramic glazed wall tiles Matt/Semi Matt/Glosy/Highly Gloss finish/Highlighter/emboss conforming to IS : 15622 (thickness to be specified by the manufacture of approved make in all colours, shades except burgundy, bottle green, black of size 200 x 300 mm, 100x200mm, 200x200mm as approved by Engineer-in-Charge in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:4 (1 cement: 4 fine sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.		Sqm	276.00	699.00	303.60	726.60

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.126	Providing and fixing 1st quality ceramic glazed wall tiles Matt/Semi Matt/Glosy/Highly Gloss finish/Highlighter/emboss conforming to IS : 15622 (thickness to be specified by the manufacture of approved make in all colours, shades except burgundy, bottle green, black of size 250 x 330 mm & 300x300mm as approved by Engineer-in-Charge in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:4 (1 cement: 4 fine sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.	Sqm	276.00	699.00	303.60	726.60
14.127	Providing and fixing 1st quality ceramic glazed wall tiles Matt/Semi Matt/Glosy/Highly Gloss finish/Highlighter/emboss conforming to IS : 15622 (thickness to be specified by the manufacture of approved make in all colours, shades except burgundy, bottle green, black of size 450 x 310 mm as approved by Engineer-in-Charge in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:4 (1 cement: 4 fine sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.	Sqm	276.00	795.00	303.60	822.60
14.128	Providing and fixing 1st quality ceramic glazed wall tiles Matt/Semi Matt/Glosy/Highly Gloss finish/Highlighter/emboss conforming to IS : 15622 (thickness to be specified by the manufacture of approved make in all colours, shades except burgundy, bottle green, black of size 600 x 300 mm as approved by Engineer-in-Charge in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:4 (1 cement: 4 fine sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.	Sqm	305.00	853.00	335.50	883.50



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.129	Providing and fixing 1st quality ceramic glazed wall tiles Matt/Semi Matt/Glosy/Highly Gloss finish/Highlighter/emboss conforming to IS : 15622 (thickness to be specified by the manufacture of approved make in all colours, shades except burgundy, bottle green, black of size 600 x600 mm as approved by Engineer-in-Charge in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:4 (1 cement: 4 fine sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.	Sqm	305.00	893.00	335.50	923.50
14.130	Providing and fixing 10mm thick acid and/or alkali resistant tiles 300 mm x 300 mm of approved make and colour using acid and/or alkali resisting mortar bedding and joints filled with acid and/or alkali resisting cement as per IS : 4457 complete as per the direction of Engineer-in- Charge, in flooring or in dado / skirting on a bed of 12 mm thick mortar 1 : 4 (1 acid proof cement: 4 coarse sand).	Sqm	305.00	1097.00	335.50	1127.50
14.131	Providing and applying Anti Termite Treatment using pre constructional chemical treatment measures as per IS - 6313 - 2001 ( Part 2 ) & using Chemical containg chloropyrifos systemic insecticide diluted to manufacturer's specifications (i) In foundation pits, by treating the bottom & sides upto height of 300mm by uniformly spraying solution @ 5 Litre / Sqm (ii) In the refill earth on both sides of all built up walls @ 7.5 Litre / Running meter ( width - 300 mm, depth - 450 mm ) (iii) Before laying the floor, by uniformly sprinkling the top surface of the consolidated earth within the outer perimeter @ 5 Litre solution per Sqm.	litre	61.00	372.00	67.10	378.10
	Note :- The Engineer in Charge will ensure consumption of chemical as per manufacturer's specifications & minimum 5 years warranty from the concerned dealer.					

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.132	Providing and applying Anti Termite Treatment using post constructional chemical treatment measures as per IS - 6313 - 2001 ( Part 3 ) & using Chemical containg chloropyrifos systemic insecticide diluted to manufacturer's specifications by drilling holes in the floor slab & along skirting 300 mm apart & 12 mm dia, drilling holes along all possible entry points such as junctions of floor and walls, door frames, sewage lines, entry points , etc. & injecting them with the chemical solution.	litre	805.00	1116.00	885.50	1196.50
	Note :- The Engineer in Charge will ensure consumption of chemical as per manufacturer's specifications & minimum 5 years warranty from the concerned dealer.					
14.133	Katani marble flooring 12mm to 15mm thick over 12.5mm thick base of Cement mortar 1:3 laid and jointed with white cement slurry with pigment to mater the shade of marble including rubbing & Polishing.					
	Tiles Size 45 cm x 60 cm & above	Sqm	474.00	1392.00	521.40	1439.40
14.134	Mandana stone tile flooring 15mm to 20 mm thick over 12.5mm thick base of cement mortar 1:3 (1 cement, 3 Sand) laid and jointed with neat cement slurry, mixed with pigment to match the shade of stone including rubbing and polishing	Sqm	474.00	1371.00	521.40	1418.40
14.135	Providing and Laying Out Door precast designer chequered tiles of any size & any shape 25mm thickness having top layer of white cement mixed with pigment, laid on 20mm thick bed of ordinary cement mortar 1:3 (1 ordinary cement: 3 fine sand), joints grouted with white cement slurry containing pigment to match the shade complete in all respect as per specifications and to the entire satisfaction of engineer-in-charge.	Sqm	349.00	1025.00	383.90	1059.90

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.136	Providing and laying 50 mm thick factory made cement concrete interlocking paver block of M-30 grade machine made rubber moulded smooth finish with strong vibratory process or with vibro-hydraulic compaction machine and of approved size and design / shape laid in Ordinary Grey and pattern over and including 40 mm thick compacted bed of coarse sand, filling the joints with fine sand etc, all complete as per directions of Engineer-in-Charge for Non traffic Areas and streets having width less than 3.05 mt. ( Also not to used over footpaths).	Sqm	134.00	602.00	147.40	615.40
14.137	Providing and laying 60 mm thick factory made cement concrete interlocking paver block of M-35 grade machine made rubber moulded smooth finish with strong vibratory process or with vibro-hydraulic compaction machine and of approved size and design / shape laid in Ordinary Grey and pattern over and including 40 mm thick compacted bed of coarse sand, filling the joints with fine sand etc, all complete as per directions of Engineer-in-Charge for Non traffic Areas and streets having width less than 3.05 mt.( Also not to used over footpaths).	Sqm	134.00	645.00	147.40	658.40
14.138	Providing and laying 60 mm thick factory made cement concrete interlocking Paving blocks of M-35 grade manufactured by block making machine equipped with steel mould clamped to a strong vibratory table with hydraulic pressure for compaction of concrete as per IRC SP 63 -2014 and of approved size and design / shape laid in Ordinary Grey Colour and pattern over and including 40 mm thick compacted bed of coarse sand, filling the joints with fine sand etc, all complete as per directions of Engineer-in-Charge.	Sqm	134.00	676.00	147.40	689.40
14.139	Providing and laying 80 mm thick factory made cement concrete interlocking Paving blocks of M-40 grade manufactured by block making machine equipped with steel mould clamped to a strong vibratory table with hydraulic pressure for compaction of concrete as per IRC SP 63 -2014 and of approved size and design / shape laid in Ordinary Grey Colour and pattern over and including 40 mm thick compacted bed of coarse sand, filling the joints with fine sand etc, all complete as per directions of Engineer-in-Charge.	Sqm	134.00	805.00	147.40	818.40

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.140	Providing and laying 100 mm thick factory made cement concrete interlocking Paving blocks of M-50 grade manufactured by block making machine equipped with steel mould clamped to a strong vibratory table with hydraulic pressure for compaction of concrete as per IRC SP 63 -2014 and of approved size and design / shape laid in Ordinary Grey Colour and pattern over and including 40 mm thick compacted bed of coarse sand, filling the joints with fine sand etc, all complete as per directions of Engineer-in-Charge.	Sqm	134.00	1034.00	147.40	1047.40
14.141	Extra Cost for using darker fast shade for interlocking pavers Tiles of any shape & thickness instead of grey colours.	Sqm	0.00	65.00	0.00	66.86
14.142	Providing and fixing Morwad Marble Strip 12mm to 15mm thick and 100 mm wide in kotah stone flooring over 12.50mm thickness base of cement mortar 1:3 jointed with cement slurry including cost of additional mortar equivalent to the kota stone thickness and colouring pigment to match the colour rubbed and polished to granolithic finish complete in all respects.	Rmt.	44.00	124.00	48.40	128.40
14.143	Providing and fixing machine cut, mirror/ eggshell polished , Marble stone work for wall lining (veneer work) including dado, skirting, risers of steps etc., in required design and pattern wherever required, stones of different finished surface texture, on 12 mm (average) thick cement mortar 1:3 (1 cement : 3 coarse sand) laid and jointed with white cement slurry @ 3.3 kg/sqm including pointing with white cement slurry admixed with pigment of matching shade, including rubbing, curing, polishing etc. all complete as per Architectural drawings, and as directed by the Engineer-in-Charge					
	(a) 18 mm thick Italian Marble stone slab, Perlato, Rosso verona, Fire Red or Dark Emperadore etc.	Sqm	2054.00	7297.00	2259.40	7502.40

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
14.144	Providing and laying machine cut, mirror polished, Italian Marble stone flooring laid in required pattern in linear portion of the building all complete as per architectural drawings, with 18 mm thick stone slab laid over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with white cement slurry @ 4.4 kg/sqm including pointing with white cement slurry admixed with pigment to match the marble shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.						
	(a)	18 mm thick Italian Marble stone slab,Perlato, Rosso verona, Fire Red or Dark Emperadore etc.	Sqm	1556.00	6506.00	1711.60	6661.60
14.145	Providing and laying italian machine cut, mirror polished Marble stone flooring, in required design (Simple geometrical, abstract etc.) and in patterns in combination with Italian marble stones of different colours, shades and finished surface texture etc., in linear portions of the building, all complete as per the architectural drawings, with 18 mm thick stone slab laid over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with white cement slurry @ 4.4 kg/sqm, including pointing with white cement slurry admixed with pigment to match the marble shade, including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.						
	(a)	18 mm thick Italian Marble stone slab,Perlato, Rosso verona, Fire Red or Dark Emperadore etc.	Sqm	1751.00	6872.00	1926.10	7047.10
14.146	Providing and fixing Glass mosaaic tiles on finished plain wall surface of size 20 mm x 20 mm x 4 mm in all colour, design , fixing in customize design as per direction of Engineer-in-Charge. The glass mosaic tiles to be fixed on the wall surface with the help of approved adhesive applied at the rate of 2.5 kg per sqm and grouting of the same. The rate is inclusive of all operation, material and required pattern approved by Engineer-in-Charge:		Sqm	244.00	3117.00	268.40	3141.40

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.147	52 mm thick cement concrete flooring with concrete hardener topping, under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacturer's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	Sqm	335.00	396.00	368.50	429.50
14.148	62 mm thick cement concrete flooring with concrete hardener topping, under layer 50 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) and top layer 12mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate, 6mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacture's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	Sqm	350.00	423.00	385.00	458.00
14.149	Providing & laying Epoxy Flooring 2mm thick ( overall thickness) with selflevelling with Hi- build epoxy primer 100 micron thickness, self leveling epoxy screed 900 micron thickness, FQ sand and self levelling epoxy top coat having thickness 1000 micrones with all materials as mentioned / required to provide desired finish to the entire satisfaction of Engineer in charge,	Sqm	146.00	659.00	160.60	673.60
14.150	Providing & laying Epoxy Flooring 1.5 mm thick ( overall thickness) with selflevelling with Hi- build epoxy primer 100 micron thickness, self leveling epoxy screed 500 micron thickness, FQ sand and self levelling epoxy top coat having thickness 900 micrones with all materials as mentioned / required to provide desired finish to the entire satisfaction of Engineer in charge,	Sqm	122.00	550.00	134.20	562.20
14.151	Providing & laying Epoxy Flooring 1.1mm thick ( overall thickness) with selflevelling with Hi- build epoxy primer 100 micron thickness, and self levelling epoxy top coat having thickness 1000 micrones with all materials as mentioned / required to provide desired finish to the entire satisfaction of Engineer in charge,	Sqm	98.00	441.00	107.80	450.80

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
14.152	Wall lining butch work upto 10m height with Dholpur stone 40 mm thick rough facing on the exposed surface with stone strips of minimum length 300 mm and required width, including embedding every tenth layer and bottom most layer in masonry or concrete after making necessary chases of size 75x75 mm and by providing layer of 75 mm thick strips i/c 12 mm thick bed of cement mortar 1:3 (1Cement : 3 coarse sand) i/c ruled pointing in cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment to match the shade of stone complete as per direction of Engineer-in-charge.	sqm	843.00	1740.00	927.30	1824.30
14.153	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12 mm thick cement mortar 1:3 (1cement : 3 coarse sand) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade :(To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) :					
	a 50 mm thick	sqm	2118.00	3065.00	2329.80	3276.80
	b 40mm thick	sqm	2118.00	2942.00	2329.80	3153.80
	c 30mm thick	sqm	2118.00	2818.00	2329.80	3029.80
ii	Red sand stone - Exposed face machine cut and table rubbed with rough backing					
	a 50 mm thick	sqm	3260.00	4207.00	3586.00	4533.00
	b 40mm thick	sqm	3260.00	4084.00	3586.00	4410.00
	c 30mm thick	sqm	3260.00	3960.00	3586.00	4286.00
iii	White sand stone - exposed face fine dressed with rough backing.					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	a	50 mm thick	sqm	2118.00	4065.00	2329.80	4276.80
	b	40mm thick	sqm	2118.00	3741.00	2329.80	3952.80
	c	30mm thick	sqm	2118.00	3418.00	2329.80	3629.80
iv	White sand stone - Exposed face machine cut and table rubbed with rough backing						
	a	50 mm thick	sqm	3260.00	5207.00	3586.00	5533.00
	b	40mm thick	sqm	3260.00	4884.00	3586.00	5210.00
	c	30mm thick	sqm	3260.00	4560.00	3586.00	4886.00
v	Gang saw cut stone						
	a	30mm thick Red sand stone	sqm	975.00	1721.00	1072.50	1818.50
	b	30mm thick White sand stone	sqm	975.00	1869.00	1072.50	1966.50
14.154	Providing and fixing dry cladding upto 10 metre heights with 30mm thick gang saw cut stone with (machine cut edges) of uniform colour and size upto 1mx1m, fixed to structural steel frame work and or with the help of cramps, pins etc. and sealing the joints with approved weather sealant as per Architectural drawing and direction of Engineer-in-charge. (The steel frame work, stainless steel cramps and pins etc. shall be paid for separately).						
	a	30mm thick Red sand stone	sqm	786.00	1665.00	864.60	1743.60
	b	30mm thick White sand stone	sqm	786.00	1812.00	864.60	1890.60



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
14.155	Providing and fixing structural steel frame (for dry cladding with 30 mm thick gang saw cut with machine cut edges sand stone) on walls at all heights using M.S. square/ rectangular tube in the required pattern as per architectural drawing, including cost of cutting, bending, welding etc. The frame work shall be fixed to the wall with the help of M.S. brackets/ lugs of angle iron/ flats etc. which shall be welded to the frame and embedded in brick wall with cement concrete block 1:2:4 (1 cement :2 coarse sand :4 graded stone aggregate 20 mm nominal size) of size 300x230x300 mm, including cost of necessary centring and shuttering and with approved expansion hold fasteners on CC/RCC surface, including drilling necessary holes. Approved cramps/ pins etc. shall be welded to the frame work to support stone cladding, the steel work will be given a priming coat of Zinc primer as approved by Engineer-in-charge and painted with two or more coats of epoxy paint (Shop drawings shall be submitted by the contractor to the Engineer-in-charge for approval before execution). The frame work shall be fixed in true horizontal & vertical lines/planes. (Only structural steel frame work shall be measured for the purpose of payment, tainless steel cramps shall be paid for separately and nothing extra shall be paid).		kg	57.00	138.00	62.70	143.70
14.156	Providing and fixing adjustable stainless steel cramps of approved quality, required shape and size, adjustable with stainless steel nuts, bolts and washer (total weight not less than 260 gms), for dry stone cladding fixed on frame work at suitable location, including making necessary recesses in stone slab, drilling required holes etc complete as per direction of the Engineer-in-charge.		Each	124.00	245.00	136.40	257.40
14.157	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanised M.S. screws including drilling holes in masonry work / CC/ R.C.C. and making good etc. complete.						
	a	25 mm long	Each	6.00	15.00	6.60	15.60
	b	32 mm long	Each	6.00	16.00	6.60	16.60

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	c	40 mm long	Each	6.00	19.00	6.60	19.60
	d	50 mm long	Each	6.00	21.00	6.60	21.60
14.158	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete.		sqm	189.00	234.00	207.90	252.90
14.159	Providing and fixing Mettal extendable hold fasteners on C.C. /R.C.C./Brick masonry surface backing including drilling necessary holes and the cost of bolt etc complete.						
	a	Fastener with threaded dia 6 mm	Each	10.00	25.00	11.00	26.00
	b	Fastener with threaded dia 10 mm	Each	10.00	26.00	11.00	27.00
	c	Fastener with threaded dia 12 mm	Each	10.00	43.00	11.00	44.00
14.160	Cutting of floor topping of concrete / Kota Stone / any kind of marble/ tile floor depth up to 50mm with the help of mechanical cutter and chisel (with due care so that surrounding floor should not be damage) to lay the tactile flooring 300mm wide including cost of providing and laying 25mm to 28mm thick cement concrete 1:2:4 as per requirement complete as per specification, Harmonised guidelines for PwD and as desired by Engineer-in-charge.		Sqm	391.00	503.00	430.10	542.10

**CHAPTER NO. 15**  
**PLASTERING & POINTING**

**Notes :-**

- (i) Unless otherwise stated, the labour rates include the rehandling of materials within 100 metres.
- (ii) The rates include the cost of water. Where the water is supplied free of cost by department, the labour rates shall be reduced by 3% and through rates accordingly.
- (iii) The labour rates for item no. 15.53 to 15.57 include the cost of Earth, Bhusa and Gobri etc.
- (iv) The labour rates given in this chapter include the cost of water, tools & plant, scaffolding & all types of sundries etc (including labour & material).
- (v) In case of Plaster for wall and ceiling there is huge involvement of scaffolding and watering. To meet with these expenses Sundries have been provided @5% in this Chapter.
- (vi) In view of Note No. 24 of Gaz. Notification No. S.O 94/C.A. 11/1948/Ss.3 and 5/2012 Dated 15-11-2012 Issued by Govt of Punjab Department of Labour, has been taken into account while revising the through/ labour rate for plastering and pointing outside building above 3 storey.
- (vii) In Case where item no 15.22 is used then item no 15.85 cannot be applicable above third storey height for External Plaster.

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
15.1	Plastering on walls 6 mm thick cement plaster 1:2	sqm	124.00	164.00	136.00	176.40
15.2	Plastering on walls 6 mm thick cement plaster 1:3	sqm	124.00	156.00	136.00	168.40
15.3	Plastering on walls 6 mm thick cement plaster 1:4	sqm	124.00	150.00	136.00	162.40
15.4	10mm thick Cement Plaster 1:2	sqm	126.00	181.00	139.00	193.60
15.5	10mm thick Cement Plaster 1:3	sqm	126.00	173.00	139.00	185.60
15.6	10mm thick Cement Plaster 1:4	sqm	126.00	164.00	139.00	176.60
15.7	12.5 mm thick cement plaster 1:2	sqm	137.00	213.00	151.00	226.70
15.8	12.5 mm thick cement plaster 1:3	sqm	137.00	199.00	151.00	212.70
15.9	12.5 mm thick cement plaster 1:4	sqm	137.00	189.00	151.00	202.70
15.10	12.5 mm thick cement plaster 1:5	sqm	137.00	181.00	151.00	194.70
15.11	12.5 mm thick cement plaster 1:6	sqm	137.00	175.00	151.00	188.70

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
15.12	12.5mm thick raised cement mortar bend / drip course in cement mortar 1:3	1 metre long and 1 cm wide	3.85	4.58	4.23	4.96
15.13	12.5mm thick raised cement mortar bend / drip course in cement mortar 1:4	1 metre long and 1 cm wide	3.85	4.36	4.23	4.74
15.14	16mm thick cement plaster 1:2 in two coat work	sqm	158.00	253.00	174.00	268.80
15.15	16mm thick cement plaster 1:3 in two coat work	sqm	158.00	238.00	174.00	253.80
15.16	16mm thick cement plaster 1:4 in two coat work	sqm	158.00	223.00	174.00	238.80
15.17	16mm thick cement plaster 1:5 in two coat work	sqm	158.00	212.00	174.00	227.80
15.18	20mm thick cement plaster 1:2 in two coat work	sqm	182.00	295.00	200.00	313.20
15.19	20mm thick cement plaster 1:3 in two coat work	sqm	182.00	279.00	200.00	297.20
15.20	20mm thick cement plaster 1:4 in two coat work	sqm	182.00	260.00	200.00	278.20
15.21	20mm thick cement plaster 1:5 in two coat work	sqm	182.00	247.00	200.00	265.20
15.22	Extra for plastering exterior walls of height more than Third storey from ground level for every additional height of single storey or part thereof.	sqm	31.00	31.00	34.00	34.10
15.23	20mm thick cement mortar bend/ drip course in cement mortar 1:4	per metre long and per cm wide	6.00	7.00	7.00	7.60
15.24	12.5 mm thick lime surkhi sand plaster 1:1:1	sqm	137.00	183.00	151.00	196.70
15.25	12.5 mm thick cement lime sand plaster 1:1:6	sqm	137.00	220.00	151.00	233.70

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
15.26	12.5 mm thick lime surkhi plaster 1:2	sqm	137.00	180.00	151.00	193.70
15.27	12.5 mm thick lime surkhi plaster 2:3(2 lime and 3 surkhi)	sqm	137.00	188.00	151.00	201.70
15.28	20mm thick cement plaster 1:6 in two coats work	sqm	182.00	237.00	200.00	255.20
15.29	20mm thick lime surkhi plaster 1:2 in two coats work	sqm	182.00	260.00	200.00	278.20
15.30	25mm thick cement lime plaster 1:1:6	sqm	185.00	287.00	204.00	305.50
15.31	25mm thick cement plaster 1:2 in 2 coats work	sqm	185.00	336.00	204.00	354.50
15.32	25mm thick cement plaster 1:3 in 2 coats work	sqm	185.00	313.00	204.00	331.50
15.33	25mm thick cement plaster 1:4 in 2 coats work	sqm	185.00	288.00	204.00	306.50
15.34	25mm thick cement plaster 1:5 in two coats work	sqm	185.00	272.00	204.00	290.50
15.35	25mm thick cement plaster 1:6 in two coats work	sqm	185.00	261.00	204.00	279.50
15.36	10mm thick cement plaster 1:2 on floors.	sqm	87.00	144.00	96.00	152.70
15.37	10mm thick cement plaster 1:3 on floors.	sqm	87.00	135.00	96.00	143.70
15.38	10mm thick cement plaster 1 : 4 on floors.	sqm	87.00	126.00	96.00	134.70
15.39	12.5 mm thick cement plaster 1:2 on floors	sqm	95.00	170.00	105.00	179.50
15.40	12.5 mm thick cement plaster 1:3 on floors	sqm	95.00	159.00	105.00	168.50
15.41	Plastering on underside of ceiling 6mm thick cement plaster 1:3	sqm	134.00	166.00	147.00	179.40
15.42	Plastering on underside of ceiling 6mm thick cement plaster 1:4	sqm	134.00	160.00	147.00	173.40

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
15.43	Plastering on underside of ceiling 10mm thick cement plaster 1:3	sqm	136.00	184.00	150.00	197.60
15.44	Plastering on underside of ceiling 10mm thick cement plaster 1:4	sqm	136.00	175.00	150.00	188.60
15.45	12.5 mm thick cement plaster 1:4	sqm	137.00	189.00	151.00	202.70
15.46	MISCELLANEOUS (Extra for mixing soap solution 1% for cement plastering)	sqm	2.00	6.00	2.00	6.20
15.47	Extra for providing and mixing water proofing material in cement plaster work @ 1 kg per 50 kg of cement.	per bag of cement	24.00	69.00	26.00	71.40
15.48	Cement rendering on plaster 1mm thick	sqm	49.00	59.00	54.00	63.90
15.49	12.5mm thick cement plaster in damp proof course 1:3 with two coats of bitumen at 1.65Kg. Per Sqm laid hot and sanded					
	(a) Vertical	sqm	137.00	283.00	151.00	296.70
	B Horizontal	sqm	77.00	223.00	85.00	230.70
15.50	20mm thick cement plaster in damp proof course 1:3 with two coats of bitumen at 1.65Kg. Per Sqm laid hot and sanded					
	(a) Vertical	sqm	182.00	360.00	200.00	378.20
	(b) Horizontal	sqm	146.00	324.00	161.00	338.60
15.51	40 mm thick cement plaster D.P.C. 1:3 with admixture of water proofing compound @ 1 Kg/ Bag of cement.	sqm	250.00	460.00	275.00	485.00
15.52	Bearing Plaster of 10 mm thick cement mortar 1:3 cement sand finished with a floating coat of neat cement and thick coat of Lime wash / P.O.P. on top of walls when dry for bearing of R.C.C. slabs & beams.	sqm	108.00	158.70	119.00	169.50
15.53	Mud plaster 12.5mm thick with gobri leeping including all materials on walls.	sqm	52.00	59.00	57.00	64.20

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
15.54	Mud plaster 25 mm thick with gobri leeping including all materials on walls.	sqm	52.00	65.00	57.00	70.20
15.55	Mud plaster - 12.5mm thick with gobri leeping including all materials on Floors & Roofs.	sqm	41.00	48.00	45.00	52.10
15.56	Mud plaster on floor and roofs 25mm thick with gobri leeping including all materials on Floor & Roofs.	sqm	41.00	54.00	45.00	58.10
15.57	Gobri leeping including all Materials on floors & roofs.	sqm	19.00	19.00	21.00	20.90
15.58	Lime pointing 2:3 weathered and struck.	sqm	110.00	120.00	121.00	131.00
15.59	Cement pointing 1:2 deep variety	sqm	110.00	127.00	121.00	138.00
15.60	Cement pointing 1:3 deep variety	sqm	110.00	123.00	121.00	134.00
15.61	Flush/Ruled/Struck or weathered pointing on tile brick work with cement mortar 1:3 (1 cement :3 fine sand).	sqm	152.00	204.00	167.00	219.20
15.62	Lime pointing 2:3 flush on brick walls	sqm	70.00	79.00	77.00	86.00
15.63	Cement pointing flush 1:2 flush on stone walls	sqm	99.00	129.00	109.00	138.90
15.64	Cement pointing 1:2 (Raised) on stone walls	sqm	132.00	182.00	145.00	195.20
15.65	Striking joints in lime or cement on brick walls	sqm	87.00	87.00	96.00	96.00
15.66	Cement pointing 1:2 flush on brick on edge flooring	sqm	70.00	108.00	77.00	115.00
15.67	Cement pointing 1:2 flush on flat brick flooring	sqm	56.00	70.00	62.00	75.60
15.68	Cement pointing flush 1:2 underside of roofs with bricks tiles 30cmx15cm	sqm	60.00	70.00	66.00	76.00
15.69	Cement pointing on stone slab pavement with cement mortar 1:2	sqm	60.00	68.00	66.00	74.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
15.70	Washed stone grit plaster on exterior walls of height upto 10 M. above ground level in two layers, under layer 12.5mm cement plaster 1:4 (1 cement : 4 coarse sand ) furrowing coarse sand : 2 stone chipping 10mm nominal size) in panels with groove all around Kg of cement per square metre, top layer 15mm cement plaster 1:1/2:2 (1 cement: 1/2the under layer with scratching tool, applying cement slurry on the under layer @ 2 as per approved pattern including scrubbing and washing, the top layer with brushes and water to expose the stone chippings, complete as per specification and direction of Engineer-in- charge (Payment for providing grooves shall be made separately).	sqm	373.00	546.00	410.00	583.30
15.71	Forming groove of uniform size in the top layer of washed stone grit plaster as per approved pattern using wooden battens, nailed to the under layer including removal of wooden battens, repair to the edges of panels and finishing the groove complete as per specifications and direction of the Engineer-in-charge :					
	15 mm wide and 15 mm deep groove	m	32.00	33.00	35.00	36.20
15.72	Forming groove of uniform size in the top layer of washed stone grit plaster as per approved pattern using wooden battens, nailed to the under layer including removal of wooden battens, repair to the edges of panels and finishing the groove complete as per specifications and direction of the Engineer-in-charge :					
	20 mm wide and 15 mm deep groove	m	32.00	36.00	35.00	39.20
15.73	Extra for washed grit plaster on exterior walls of height more than 10m from ground	sqm	88.00	88.00	97.00	97.00
15.74	Extra for washed stone grit plaster on circular work not exceeding 6m in radius (in two coats).	sqm	76.00	76.00	84.00	84.00



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
15.75	Forming groove of uniform size from 12x12mm and upto 25x15mm in plastered surface as per approved pattern using wooden battens, nailed to the under layer including removal of wooden battens, repairs to the edges of plaster panel and finishing the groove complete as per specifications and direction of the Engineer-in-Charge.	m	32.00	35.00	35.00	38.20
15.76	Extra for using white cement in place of ordinary cement in the top layer of the item of washed stone grit, plaster.	sqm	-	94.47	-	104.00
15.77	Floor polishing on masonry or concrete floors with wax polish of approved brand	sqm	45.00	48.00	50.00	52.50
15.78	Providing and fixing facing extruded clay Tile (Glass Reinforced Clay Tiles (GRC)) any size any shade & design on wall with under layer of 12 mm thick cement plaster 1:3 and jointed with neat cement matched with pigment complete as per drawings, specifications and to the entire satisfaction of engineer- in- charge.	sqm	1313.00	2249.00	1444.00	2380.30
15.79	Providing and fixing chicken mesh for brick work and RCC junction of galvanized low carbon wire, annealed wire of diameter 0.6 to 2.0mm distance between the faces of the hexagon 13 to 50mm complete in all respect.	sqm	117.00	187.00	129.00	198.70
15.80	Providing and fixing face Tiles 230 x 75 x17 mm machine made vibro-hydraulic compacted Burnt Clay brick Tile silicon coated on one side (Colour Terracotta series) on wall with under layer of 12 mm thick cement plaster 1:3 and jointed with neat cement matched with pigment complete as per drawings, specifications and to the entire satisfaction of engineer- in- charge.	sqm	1021.00	1682.00	1123.00	1784.10

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
15.81	Providing and fixing face Tiles 230 x 50 x17 mm machine made vibro hydraulic compacted Burnt Clay brick Tile silicon coated on one side (Colour Terracotta series) on wall with under layer of 12 mm thick cement plaster 1:3 and jointed with neat cement matched with pigment complete as per drawings, specifications and to the entire satisfaction of engineer-in- charge.	sqm	1021.00	1770.00	1123.00	1872.10
15.82	Providing and fixing face Tiles 230 x 38 x18 mm machine made vibro hydraulic compacted Burnt Clay brick Tile silicon coated on one side(Colour Terracotta series) on wall with under layer of 12 mm thick cement plaster 1:3 and jointed with neat cement matched with pigment complete as per drawings, specifications and to the entire satisfaction of engineer-in- charge.	sqm	1021.00	1814.00	1123.00	1916.10
15.83	Extra Cost for using darker fast shade face Tiles of any size machine made hydraulic compacted Burnt Clay brick Tile silicon coated on one side instead of lighter shades.	sqm	0.00	147.00	0.00	147.00
15.84	Extra for Plastering in each subsequent storey above the first storey upto 4 metre above plinth level.	sqm	2.00		2.00	
15.85	Extra for Plastering where any single storey height exceeds 4 metres in height for every additional height of 2 metres or part thereof.(Internal or External)	sqm	7.00		8.00	

**CHAPTER NO. 16**  
**WHITE WASHING, DISTEMPERING, PAINTING & POLISHING**

**Notes :-**

- (i) Unless otherwise stated the labour rates include the rehandling of materials within 100 metres.
- (ii) The rates include the cost of water, where the water is supplied free of cost by department, the labour rates shall be reduced by 1% and through rates accordingly.
- (iii) Rates for distempering with dry and oil bound distemper have been provided in this chapter. These rates have been based on superior quality distempers, manufactured by standard firms. The use of inferior/local/non branded distempers shall not be permitted as they never give proper quality of lasting surface.
- (iv) The labour rates given in this chapter include the cost of water, tool & plant, painting brush , scaffolding (Wherever Required) and all types of sundries etc( including labour and materials).
- (v) Only First Quality paint manufactured by reputed firm like Nerolac, Asian, Berger, ICI or Equivalent are to be used as approved by the Engineer-in-charge and no other Local/Ordinary non branded paint shall be used.
- (vi) In view note no. 24 of Gaz. Notifiaction No.S.O 94/C.A. 11/1948/Ss.3and 5/2012 Dated 15-11-2012 Issued by Govt of Punjab Department of Labour has been taken into account while revising the through / labour rate for painting outside building above 3 storey.
- (vii) In Case where item no 16.77 is used then item no 16.72 cannot be applicable above third storey height for External Painting.

Sr. No.	Description of Item	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
16.1	White washing (First coat or subsequent one coat)	sqm	6.00	7.00	7.00	8.00
16.2	White washing (two or more coat)	sqm	9.00	11.00	10.00	12.00
16.3	White washing (Three coat)	Sqm	12.00	15.00	13.00	16.00
16.4	Colour Washing ( First coat or subsequent coat ).	Sqm	11.00	15.00	12.00	16.10
16.5	Colour washing (two or more coats)	Sqm	16.00	22.00	18.00	24.00
16.6	Preparation of plastered surfaces for distempering including surface, applying filling with approved quality filler consisting of plaster of paris and chalk mitti including finishing the surface to the required finish complete	Sqm	59.00	61.00	65.00	67.00

Sr. No.	Description of Item	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
16.7	Distempering with dry distemper of approved manufacture two or more coats over one priming coat to give an even shade	Sqm	49.00	63.00	54.00	68.00
16.8	Distempering with dry distemper of approved manufacture one coat on old distempered work	Sqm	25.00	27.00	28.00	30.00
16.9	Distempering with dry distemper of approved manufacture two or more coats on old distempetered surface when shade is changed	Sqm	41.00	46.00	45.00	50.00
16.10	Distempering with Acrylic washable oil bound distemper (of approved manufacture) two or more coats over one priming coat to give an even shade	Sqm	58.00	71.00	64.00	77.00
16.11	Distempering with Acrylic washable oil bound distemper (of approved manufacture) one coat over one priming coat on old distempered surface	Sqm	27.00	30.00	30.00	33.00
16.12	Distempering with Acrylic washable oil bound distemper (of approved manufacture) two or more coats on old distempered work when shade is changed	Sqm	42.00	46.00	46.00	50.00
16.13	Finishing walls with exterior decorative cement based paint such as snowcem, robbiacem etc. two or more coats to give an even shade	Sqm	41.00	55.00	45.00	59.00
16.14	Finishing walls with exterior decorative cement based such as snowcem, robbiacem etc. on old work one coat to give an even shade	Sqm	27.00	32.00	30.00	35.00
16.15	Preparation of plywood surface for painting including sand papering the surface and applying filling with approved quality fillers consisting of white lead, linseed oil, Varnish, and Chalk Mitti including finishing the surface to required finish complete.	Sqm	29.00	43.00	32.00	46.00
16.16	Applying pink primer or aluminum priming coat on wood work including preparation of surface knotting and stopping etc.	Sqm	20.00	28.00	22.00	30.00

Sr. No.	Description of Item	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
16.17	Painting two or more coats excluding priming coat with synthetic enamel paint in all shades on wood work, metallic or plastered, concrete surface to give an even shade.	Sqm	35.00	66.00	39.00	70.00
16.18	Painting two or more coats with synthetic enamel paints in all shades on old wood work or metallic or plastered or concrete surface to give an even shade including rubbing down old paint.	Sqm	38.00	64.00	42.00	68.00
16.19	Painting one coat with synthetic enamel paint in all shades on old wood work or metallic or plastered or concrete surfaces to give an even shade including rubbing down old paint.	Sqm	22.00	36.00	24.00	38.00
16.20	Applying priming coat with metal primer on new steel or iron work including preparation of surface.	Sqm	17.00	24.00	19.00	26.00
16.21	Painting two or more coats excluding priming coat with ready mixed paint for metallic surfaces in all shades on steel or iron work	sqm	36.00	62.00	40.00	66.00
16.22	Painting one coat with readymixed paint of metallic surfaces in all shades on old steel or iron works.	Sqm	22.00	34.00	24.00	36.00
16.23	Painting two or more coats on iron sheets roofing with ready mixed Paint in all shades to give an even shade	sqm	45.00	77.00	50.00	82.00
16.24	Painting one coat on iron sheets roofing with ready mixed paint in all shades on old work to give an even shade	Sqm	25.00	46.00	28.00	49.00
16.25	Painting two or more coats with aluminum paint to give an even shade excluding priming coat	Sqm	45.00	63.00	50.00	68.00
16.26	Painting one coat with aluminum paint on old work to give an even shade	Sqm	27.00	36.00	30.00	39.00
16.27	Painting two or more coats with anticorrosive bitumastic Paint to give an even shade	Sqm	40.00	54.00	44.00	58.00
16.28	Painting one coat with anticorrosive bitumastic paint on old work to give an even shade	Sqm	26.00	33.00	29.00	36.00

Sr. No.	Description of Item	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
16.29	Painting two or more coats anticorrosive ordourless black bitumatic paint inside steel water tanks	Sqm	42.00	56.00	46.00	60.00
16.30	Painting one coat with anticorrosive ordourless black bitumastic paint inside old steel water tank	Sqm	26.00	33.00	29.00	36.00
16.31	Applying priming coat with cement primer in all shade on newly plastered or concrete exterior surface	Sqm	13.00	21.00	14.00	22.00
16.32	Floor painting two or more coats with epoxy paint in all shades on work to give an even shade	Sqm	40.00	77.00	44.00	81.00
16.33	Floor painting one coat with epoxy paint in all shades on old work to give an even shade	Sqm	20.00	43.00	22.00	45.00
16.34	Burning old paint with blow Lamp	Sqm	37.00	43.00	41.00	47.00
16.35	Removing old paint with caustic soda solution and preparing surface	Sqm	32.00	36.00	35.00	39.00
16.36	Scraping brushing to remove paint to base metal surface	Sqm	101.00	101.00	111.00	111.00
16.37	Painting one coat with solignum	Sqm	12.00	20.00	13.00	21.00
16.38	Painting two coats with solignum	Sqm	18.00	32.00	20.00	34.00
16.39	Varnishing with copal varnish one coat of sizing and two coats of varnishing on wood work including stopping.					
	(a) With superior quality paint	Sqm	45.00	82.00	50.00	87.00
	(b) With ordinary quality Paint	Sqm	45.00	76.00	50.00	81.00
16.40	Varnishing with copal varnish one coat including rubbing of previous coat					
	(a) With special Quality	Sqm	21.00	37.00	23.00	39.00

Sr. No.	Description of Item		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(b)	With ordinary quality Paint	Sqm	21.00	34.00	23.00	36.00
16.41	Oiling wood work with raw linseed oil		Sqm	8.00	16.00	9.00	17.00
16.42	Oiling wood work with raw linseed oil and water		Sqm	10.00	14.00	11.00	15.00
16.43	Painting one coat with creosote		Sqm	12.00	16.00	13.00	17.00
16.44	Painting two coats with creosote		Sqm	18.00	26.00	20.00	28.00
16.45	Spirit polishing two coats including a coat of wood filler on wood work		Sqm	113.00	153.00	124.00	164.00
16.46	Spirit polishing one coat in old wood work		Sqm	62.00	77.00	68.00	83.00
16.47	Painting new letters and figures of black synthetic enamel paint to an even shade		cm ht. per letter	2.73	2.64	2.90	2.99
16.48	Repainting letters and figures of black synthetic enamel paint to give an even shade		cm ht. per letter	1.63	1.68	1.79	1.84
16.49	Painting gauges 60 cm wide reading to centimetre with synthetic enamel Paint (two or more coats ) to give an even shade		metre	350.00	410.00	385.00	445.00
16.50	Painting sounding rods and other gauges reading to centimetre with synthetic enamel paint						
	(a)	One coat work	metre	56.00	65.00	62.00	71.00
	(b)	Two coat work	metre	90.00	108.00	99.00	117.00
16.51	Painting leveling staff with synthetic enamel paint						
	(a)	One coat work	metre	302.00	313.00	332.00	343.00
	(b)	two coat work	metre	455.00	466.00	501.00	512.00

Sr. No.	Description of Item		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7	
16.52	Painting canal gates with Khanki mixture applied hot						
	(a) One coat work	Sqm	11.00	20.00	12.00	21.00	
	(b) two coat work	Sqm	16.00	32.00	18.00	34.00	
16.53	Extra over and above rates in item No. 15.53 where scaffolding is used	Sqm	4.58	4.58	5.04	5.04	
16.54	Painting distance marks with synthetic enamel paint						
	(a) One coat work						
	(i) Main canals	each	38.00	45.00	42.00	49.00	
	(ii) Distributaries	each	27.00	32.00	30.00	35.00	
	(b) Two coat work						
	(i) Main canals	each	54.00	65.00	59.00	70.00	
	(ii) Distributaries	each	38.00	46.00	42.00	50.00	
16.55	Painting 200 metre stones with synthetic enamel paint						
	(a) One coat work	Each	69.00	75.00	76.00	82.00	
	(b) One coat work	Each	112.00	123.00	123.00	134.00	
16.56	Painting kilometre stones with synthetic enamel paint						
	(a) One coat work						
	(i) 5th kilometre Stones	Each	775.00	828.00	853.00	906.00	
	(ii) Ordinary Kilometre Stone	Each	417.00	444.00	459.00	486.00	



Sr. No.	Description of Item		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(iii)	Kilometre stone on Village road	Each	317.00	338.00	349.00	370.00
	(b)	Two coat work					
	(i)	5th kilometre Stones	Each	1260.00	1346.00	1386.00	1472.00
	(ii)	Ordinary Kilometre Stone	Each	679.00	722.00	747.00	790.00
	(iii)	Kilometre stone on Village road	Each	549.00	583.00	604.00	638.00
16.57	Painting village boards with synthetic enamel paint						
	(i)	One coat	Each	184.00	206.00	202.00	224.00
	(ii)	Two coat work	Each	301.00	338.00	331.00	368.00
16.58	Finishing walls with textured exterior paint of required shade with two or more coats applied @ 3.28 litre/10Sqm over and including base coat of water proofing Cement Paint applied @ 2.20 Kg/10 Sqm		Sqm	54.00	155.00	59.00	160.00
16.59	Finishing walls with acrylic smooth exterior paint of required shade with two or more coats applied @ 1.67 litre/10Sqm over and including base coat of water proofing Cement Paint applied @ 2.20 Kg/10 Sqm		Sqm	54.00	91.00	59.00	96.00
16.60	Finishing walls with Premium Acrylic smooth exterior paint with silicon additives of required shade with two or more coats applied @ 1.43litre/10 Sqm over and including base coat of water proofing Cement Paint applied @ 2.20 Kg/10 Sqm		Sqm	54.00	100.00	59.00	105.00
16.61	Painting with oil type wood preservative of approved brand and manufacturer-new work two or more coats		Sqm	16.00	50.00	18.00	52.00

Sr. No.	Description of Item	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
16.62	Providing and applying two coats of fire retardant paint unthined on cleaned wood/ ply surface @ 3.5 litre per 10 Sqm per coat including preparation of base surface as per recommendations of manufacturer to make the surface fire retardant	Sqm	59.00	259.00	65.00	265.00
16.63	Wall painting with plastic emulsion paint of approved brand and manufacturer to give an even shade (two or more coats)	Sqm	59.00	89.00	65.00	95.00
16.64	Painting with acid proof paint of approved brand and manufacture to give an even shade two or more coats	Sqm	59.00	88.00	65.00	94.00
16.65	Preparation of plastered or concrete surface for painting (including sand papering the surface) using ready mixed cement based wall putty by applying two or more coats to get required finish	Sqm	59.00	80.00	65.00	86.00
16.66	Melamine polish two or more coats to give required finish including one coat of wood filler	Sqm	733.00	943.00	806.00	1016.00
16.67	Finishing with epoxy paint two or more coat at all locations prepared and applied as per manufacturer specifications complete.	Sqm	64.00	96.00	70.00	102.00
16.68	Providing surface treatment to external / internal wall with water resistant grade, anti fungal, anti rusting, antifoaming, high percentage acrylic binder washable surface with two coats to be provided with spatula over one coat cement primer including preparation of surface with water resistant grade match colour complete as per specifications and to the entire satisfaction of engineer- in- charge.	Sqm	126.00	265.00	139.00	278.00
16.69	Providing and applying plaster of paris (ISI marked such as JK, Kohinoor, Maharaja etc.) punning 6mm thickness over plastered surface to prepare the surface even and smooth complete in all respect as per the directions of Engineer-in-charge.	Sqm	237.00	282.00	261.00	306.00

Sr. No.	Description of Item	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
16.70	Providing & applying heritage granual homogeneous wall finishing system from Bakelite Coating & Paints Pvt. Consisting of two component system of dry Granual (25 kg/pack) made of 92% silice particle, coated with fade resistant pigments and 100% acrylic co-polymers bonding agent (5 ltr pack) with the applied thickness of coating being between 0.8 to 1.2mm to be applied in single coat on a cured level smooth plastered, as per the shade combination approved and as per manufacturer specification, all complete inclusive of primer on the base.	Sqm	237.00	880.00	261.00	904.00
16.71	Extra labour for Painting or Priming coat on trusses/Gantry board or similar structures of height above 4 metre for every additional	sqm	49.00		54.00	
16.72	Extra rates for white washing, distempering, painting and decorative cement based paints etc for superstructure Where any single storey height exceeding 4 mtr in height for every additional height of 2 mtr or part thereof (External or Internal)	sqm	3.00		3.30	
16.73	Preparation of plastered or concrete surface for painting (including sand papering the surface) using Acrylic Wall Putty by applying two or more coats to get required finish including priming coat to make an even surface before applying Acrylic wall putty on new plastered surface.Complete as per specifications	Sqm	72.00	119.00	79.00	126.00
16.74	Polyurethane polish (PU) two or more coats to give required finish including two coat of wood sealer Including Preparation of surface/base complete as per specification	Sqm	952.00	1371.00	1047.00	1466.00
16.75	Painting two or more coats Italian Pigmented PU white glossy or matt in all shades on wood work surface to give an even shade Including	Sqm	952.00	1359.00	1047.00	1454.00
16.76	Wall painting with (bio grade)plastic emulsion paint of approved brand and manufacturer to give an even shade (two or more coats) Generally used in hospital buildings etc Complete as per Specifications.	Sqm	59.00	125.00	0.00	131.00

Sr. No.	Description of Item	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
16.77	Extra rates for External white washing, distempering, painting and decorative cement based paints etc for walls of height above Third storey from ground level for every additional height of single storey or part thereof.	sqm	12.00		13.20	

## CHAPTER NO. 17 WOOD WORK

### Notes : -

- (i) Unless otherwise stated, the labour rates include rehandling of materials within 100 metres.
- (ii) Unless otherwise stated, the labour and through rates include all wastage of timber in sawing
- (iii) Through rates for items requiring use of wire gauge include the cost of 140 G gauge galvanised
- (iv) The labour rates given in this chapter include the cost of tools & plants and scaffolding (including Labour and material), wherever required.
- (v) The rate for item No. 17.1 to 17.6 apply to simple wood work not involving any jointing such as beams/ battens etc. Where jointing is involved as in case of roof trusses composite beams etc., increase the labour and through rate by Rs. 3600/- per cum. In case of built -in-fixtures involving jointing increase the rates by Rs. 2400/- per cum
- (vi) The rates for item No. 17.10,17.11,17.15, 17.16 exclude the cost of sliding bolts, Tower bolts, handles but include the cost of labour for fixing them.
- (vii) In case fixed glazing is continuous to open able shutter, the area of fixed glazing will be measured up to central line of mullion if the area of fixed glazing exceeds 25 percent of the open able area. If the area of fixed glazing is up to 25 percent of the open able area then the whole area shall be measured as open able and paid for as such.
- (vii) The wood work in chowkhats of doors and windows shall be done at site strictly as per P.W.D Specifications. Nothing extra shall be paid for wastage, or for dimensions, supplied beyond those specified and for horns. The length of each piece shall be measured overall, so as to include the projection for tenons. In case of mouldings, roundings circular rebates, circular and varying sections, the sectional area of the piece shall be taken as the area of the least square or rectangle from which such section can be cut, and nothing extra shall be paid for such moulding and rebates.

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.1	Deodar wood wrought planed and fixed in position	cum	7015.00	180872.00	7717.00	181574.00
17.2	Kail wood wrought planed and fixed in position	cum	7015.00	131697.00	7717.00	132399.00
17.3	Chil wood wrought planed and fixed in position	cum	7015.00	87890.00	7717.00	88592.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.4	Commercial Hard wood such as Hollock	cum	6767.00	100138.00	7444.00	100815.00
17.5	Teak wood wrought planed and fixed in position	cum	6767.00	173182.00	7444.00	173859.00
17.6	Sal wood wrought	cum	6767.00	104750.00	7444.00	105427.00
17.7	Deodar wood planking planed on both sides i.e. based and fixed in position including nails and screws etc.					
	(a) 50mm thick	Sqm	385.00	9821.00	424.00	9860.00
	(b) 45 Thick	Sqm	371.00	8863.00	408.00	8900.00
	(c) 40mm thick	Sqm	357.00	7905.00	393.00	7941.00
	(d) 30mm thick	Sqm	330.00	6137.00	363.00	6170.00
	(e) 25mm thick	Sqm	314.00	5031.00	345.00	5062.00
	(f) 20 mm thick	Sqm	297.00	3926.00	327.00	3956.00
	(g) 12.50mm thick	Sqm	277.00	2600.00	305.00	2628.00
17.8	Kail wood planking planed on both sides rebated and fixed in position including nails and screws etc.					
	(a) 50mm thick	Sqm	385.00	7125.00	424.00	7164.00
	(b) 45 mm Thick	Sqm	371.00	6436.00	408.00	6473.00
	(c) 40mmThick	Sqm	352.00	5536.00	387.00	5571.00
	(d) 30 mm thick	Sqm	330.00	4478.00	363.00	4511.00
	(e) 25 mm thick	Sqm	314.00	3683.00	345.00	3714.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(f)	20 mm thick	Sqm	297.00	2889.00	327.00	2918.70
	(g)	12.5 mm thick	Sqm	277.00	1936.00	305.00	1964.00
17.9	Teak wood planking planed on both sides rebated and fixed in position including nails screws etc.						
	(a)	50mm thick	Sqm	476.00	10080.00	524.00	10128.00
	(b)	45 mm thick	Sqm	462.00	9105.00	508.00	9151.00
	(c)	40 mm thick	Sqm	439.00	7531.00	483.00	7575.00
	(d)	30 mm thick	Sqm	412.00	5731.00	453.00	5772.00
	(e)	25 mm thick	Sqm	399.00	4832.00	439.00	4872.00
	(f)	20 mm thick	Sqm	386.00	3932.00	425.00	3971.00
	(g)	12.5 mm thick	Sqm	366.00	2582.00	403.00	2619.00
17.10 (i)	Deodar wood doors shutter windows shutter including hinges, screw and cords etc. Complete fixed in position						
	(a)	Panelled, glazed or glazed and panelled.					
	(i)	40mm thick (Single Leaf)	sqm	727.00	5288.00	800.00	5361.00
	(ii)	35mm thick	sqm	721.00	4701.00	793.00	4773.00
	(iii)	30mm thick	sqm	714.00	4263.00	785.00	4334.00
	(b)	Battened and framed					
	(i)	50mm thick	sqm	631.00	8021.00	694.00	8084.00
	(ii)	45m thick taking size of door	sqm	625.00	7619.00	688.00	7682.00
	(c.)	Battened and braced shutter 50mm thick complete	sqm	636.00	7299.00	700.00	7363.00
17.10 (ii)	Red meranti Normal (15 to 16 kg per cft. Approx.) doors shutter windows shutter including hinges, screw and cords etc. Complete fixed in position						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(a)	Panelled, glazed or glazed and panelled.					
	(i)	40mm thick (Single Leaf)	sqm	727.00	2718.00	800.00	2791.00
	(ii)	35mm thick	sqm	721.00	2376.00	793.00	2448.00
	(iii)	30mm thick	sqm	714.00	2193.00	785.00	2264.00
	(b)	Battened and framed					
	(i)	50mm thick	sqm	631.00	3699.00	694.00	3762.00
	(ii)	45m thick taking size of door	sqm	625.00	3531.00	688.00	3594.00
	(c)	Battened and braced shutter 50mm thick complete	sqm	636.00	3405.00	700.00	3469.00
17.10 (iii)	Red meranti Normal Super (18 to 19 kg per cft. Approx.) doors shutter windows shutter including hinges, screw and cords etc. Complete fixed in position						
	(a)	Panelled, glazed or glazed and panelled.					
	(i)	40mm thick (Single Leaf)	sqm	727.00	2855.00	800.00	2928.00
	(ii)	35mm thick	sqm	721.00	2500.00	793.00	2572.00
	(iii)	30mm thick	sqm	714.00	2303.00	785.00	2374.00
	(b)	Battened and framed					
	(i)	50mm thick	sqm	631.00	3909.00	694.00	3972.00
	(ii)	45m thick taking size of door	sqm	625.00	3728.00	688.00	3791.00
	(c)	Battened and braced shutter 50mm thick complete	sqm	636.00	3592.00	700.00	3656.00



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
17.10 (iv)	Red meranti Sinker quality (20 to 21 kg per cft. Approx.) doors shutter windows shutter including hinges, screw and cords etc. Complete fixed in position						
	(a)	Panelled, glazed or glazed and panelled.					
	(i)	40mm thick (Single Leaf)	sqm	727.00	3061.00	800.00	3134.00
	(ii)	35mm thick	sqm	721.00	2686.00	793.00	2758.00
	(iii)	30mm thick	sqm	714.00	2469.00	785.00	2540.00
	(b)	Battened and framed					
	(i)	50mm thick	sqm	631.00	4255.00	694.00	4318.00
	(ii)	45m thick taking size of door	sqm	625.00	4056.00	688.00	4119.00
	(c)	Battened and braced shutter 50mm thick complete	sqm	636.00	3904.00	700.00	3968.00
17.10 (v)	Yellow meranti Normal (15 to 16 kg per cft. Approx.) doors shutter windows shutter including hinges, screw and cords etc. Complete fixed in position						
	A	Panelled, glazed or glazed and panelled.					
	(i)	40mm thick (Single Leaf)	sqm	727.00	2649.00	800.00	2722.00
	ii	35mm thick	sqm	721.00	2314.00	793.00	2386.00
	iii	30mm thick	sqm	714.00	2138.00	785.00	2209.00
	(b)	Battened and framed					
	(i)	50mm thick	sqm	631.00	3583.00	694.00	3646.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(ii)	45mm thick taking size of door	sqm	625.00	3421.00	688.00	3484.00
	(c)	Battened and braced shutter 50mm thick complete	sqm	636.00	3301.00	700.00	3365.00
17.10 (vi)	Yellow meranti Super (18 to 19 kg per cft. Approx.) doors shutter windows shutter including hinges, screw and cords etc. Complete fixed in position						
	A	Panelled, glazed or glazed and panelled.					
	(i)	40mm thick (Single Leaf)	sqm	727.00	2787.00	800.00	2860.00
	ii	35mm thick	sqm	721.00	2438.00	793.00	2510.00
	iii	30mm thick	sqm	714.00	2248.00	785.00	2319.00
	(b)	Battened and framed					
	(i)	50mm thick	sqm	631.00	3793.00	694.00	3856.00
	(ii)	Battened and framed 45mm thick taking size of door	sqm	625.00	3619.00	688.00	3682.00
	(c.)	Battened and braced shutter 50mm thick complete	sqm	636.00	3488.00	700.00	3552.00
17.10 (vii)	Yellow meranti Sinkers (20 to 21 kg per cft. Approx.) doors shutter windows shutter including hinges, screw and cords etc. Complete fixed in position						
	(a)	Panelled, glazed or glazed and panelled.					
	(i)	40mm thick (Single Leaf)	sqm	727.00	2993.00	800.00	3066.00
	ii	35mm thick	sqm	721.00	2624.00	793.00	2696.00
	iii	30mm thick	sqm	714.00	2414.00	785.00	2485.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(b)	Battened and framed					
	(i)	50mm thick	sqm	631.00	4161.00	694.00	4224.00
	(ii)	45m thick taking size of door	sqm	625.00	3967.00	688.00	4030.00
	(c)	Battened and braced shutter 50mm thick complete	sqm	636.00	3821.00	700.00	3885.00
17.10 (viii)	Imported Teak Wood doors shutter windows shutter including hinges, screw and cords etc. Complete fixed in position						
	A	Panelled, glazed or glazed and panelled.					
	(i)	40mm thick (Single Leaf)	sqm	727.00	3336.00	800.00	3409.00
	ii	35mm thick	sqm	721.00	2935.00	793.00	3007.00
	iii	30mm thick	sqm	714.00	2691.00	785.00	2762.00
	(b)	Battened and framed					
	(i)	50mm thick	sqm	631.00	4738.00	694.00	4801.00
	(ii)	45m thick taking size of door	sqm	625.00	4514.00	688.00	4577.00
	(C.)	Battened and braced shutter 50mm thick complete	sqm	636.00	4341.00	700.00	4405.00
17.10 (ix)	Deodar wood doors shutter with 12mm thick phenol Bonded BWP ply (Anchor Kit ply, Nova teak , or National or any other ISI approved quality) I/C hinges, screws, chocks & cords etc. Complete fixed in position (Single leaf)						
	a	Phenol Bonded Ply Panel					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(i)	40 mm thick	sqm	700.00	4077.00	770.00	4147.00
	(ii)	35 mm thick	sqm	696.00	3748.00	766.00	3818.00
	(iii)	30 mm thick	sqm	691.00	3413.00	760.00	3482.00
17.10 (x)	Red meranti Normal (15 to 16 kg per cft. Approx.) doors shutter with 12mm thick phenol Bonded BWP ply (Anchor Kit ply, Nova teak , or National or any other ISI approved quality) I/C hinges, screws, chocks & cords etc. Complete fixed in position (Single leaf)						
	a	Phenol Bonded Ply Panel					
	(i)	40 mm thick	sqm	700.00	2542.00	770.00	2612.00
	(ii)	35 mm thick	sqm	696.00	2405.00	766.00	2475.00
	(iii)	30 mm thick	sqm	691.00	2265.00	760.00	2334.00
17.10 (xi)	Red meranti Super (18 to 19 kg per cft. Approx.) doors shutter with 12mm thick phenol Bonded BWP ply (Anchor Kit ply, Nova teak , or National or any other ISI approved quality) I/C hinges, screws, chocks & cords etc. Complete fixed in position (Single leaf)						
	a	Phenol Bonded Ply Panel					
	(i)	40 mm thick	sqm	700.00	2624.00	770.00	2694.00
	(ii)	35 mm thick	sqm	696.00	2477.00	766.00	2547.00
	(iii)	30 mm thick	sqm	691.00	2326.00	760.00	2395.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
17.10 (xii)	Red meranti Sinker (20 to 21 kg per cft. Approx.) doors shutter with 12mm thick phenol Bonded BWP ply (Anchor Kit ply, Nova teak , or National or any other ISI approved quality) I/C hinges, screws, chocks & cords etc. Complete fixed in position (Single leaf)						
	a	Phenol Bonded Ply Panel					
	(i)	40 mm thick	sqm	700.00	2747.00	770.00	2817.00
	(ii)	35 mm thick	sqm	696.00	2584.00	766.00	2654.00
	(iii)	30 mm thick	sqm	691.00	2418.00	760.00	2487.00
17.10 (xiii)	Yellow meranti Normal (15 to 16 kg per cft. Approx.) doors shutter with 12mm thick phenol Bonded BWP ply (Anchor Kit ply, Nova teak , or National or any other ISI approved quality) I/C hinges, screws, chocks & cords etc. Complete fixed in position (Single leaf)						
	(a)	Phenol Bonded Ply Panel					
	(i)	40 mm thick	sqm	700.00	2501.00	770.00	2571.00
	(ii)	35 mm thick	sqm	696.00	2369.00	766.00	2439.00
	(iii)	30 mm thick	sqm	691.00	2234.00	760.00	2303.00
17.10 (xiv)	Yellow meranti Super (18 to 19 kg per cft. Approx.) doors shutter with 12mm thick phenol Bonded BWP ply (Anchor Kit ply, Nova teak , or National or any other ISI approved quality) I/C hinges, screws, chocks & cords etc. Complete fixed in position (Single leaf)						
	a	Phenol Bonded Ply Panel					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(i)	40 mm thick	sqm	700.00	2583.00	770.00	2653.00
	(ii)	35 mm thick	sqm	696.00	2441.00	766.00	2511.00
	(iii)	30 mm thick	sqm	691.00	2295.00	760.00	2364.00
17.10 (xv)	yellow meranti Sinker (20 to 21 kg per cft. Approx.) doors shutter with 12mm thick phenol Bonded BWP ply (Anchor Kit ply, Nova teak , or National or any other ISI approved quality) I/C hinges, screws, chocks & cords etc. Complete fixed in position (Single leaf)						
	a	Phenol Bonded Ply Panel					
	(i)	40 mm thick	sqm	700.00	2706.00	770.00	2776.00
	(ii)	35 mm thick	sqm	696.00	2548.00	766.00	2618.00
	(iii)	30 mm thick	sqm	691.00	2387.00	760.00	2456.00
17.10 (xvi)	Imported Teak Wood (20 to 21 kg per cft. Approx.) doors shutter with 12mm thick phenol Bonded BWP ply (Anchor Kit ply, Nova teak , or National or any other ISI approved quality) I/C hinges, screws, chocks & cords etc. Complete fixed in position (Single leaf)						
	a	Phenol Bonded Ply Panel					
	(i)	40 mm thick	sqm	700.00	2911.00	770.00	2981.00
	(ii)	35 mm thick	sqm	696.00	2728.00	766.00	2798.00
	(iii)	30 mm thick	sqm	691.00	2541.00	760.00	2610.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
17.10 (xvii)	Hollock wood doors shutter windows shutter including hinges, screws, chocks, cheats, stops cords etc. complete fixed in position.						
	a	panelled, glazed or glazed and panelled.					
	i	40 mm thick	sqm	717.00	2907.00	789.00	2979.00
	ii	35 mm thick	sqm	712.00	2538.00	783.00	2609.00
	iii	30 mm thick	sqm	706.00	2338.00	777.00	2409.00
	b	Battened and Framed single leaf					
	i	50 mm thick	sqm	399.00	3648.00	439.00	3688.00
	ii	45 mm thick	sqm	394.00	3459.00	433.00	3498.00
	C	Battened and braced shutter 50mm thick complete	sqm	831.00	3903.00	914.00	3986.00
17.10 (xviii)	Kiln seasoned Hollock wood doors shutter with 12mm thick phenol Bonded BWP ply ISI Marked anchor, Kit ply, Nova Teak, National Or equivalent including Hinges, Screws, Shocks Cleats, Stops and Cords etc. complete fixed in position (Single Leaf).						
	a	Phenol Bonded B.W.P. ply panel					
	(i)	40 mm thick	sqm	700.00	2858.00	770.00	2928.00
	ii	35mm thick	sqm	696.00	2683.00	766.00	2753.00
	iii)	30 mm thick	sqm	691.00	2501.00	760.00	2570.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
17.10 (xix)	Golden Champ, wood, doors, shutter, windows, shutter including hinges, screws, chocks, cheats, stops, cords etc. complete fixed in position.						
	a	panelled, glazed or glazed and panelled.					
	i	40 mm thick	sqm	717.00	2482.00	789.00	2554.00
	ii	35 mm thick	sqm	712.00	2158.00	783.00	2229.00
	iii	30 mm thick	sqm	706.00	1999.00	777.00	2070.00
	b	Battened and framed					
	i	50mm thick	sqm	399.00	2966.00	439.00	3006.00
	ii	45mm thick	sqm	394.00	2820.00	433.00	2859.00
	C	Battened and braced shutter 50mm thick complete.	sqm	831.00	3251.00	914.00	3334.00
17.10 (xx)	Golden Champ wood doors shutter with 12mm thick phenol Bonded BWP ply ISI Marked anchor, Kit ply, Nova Teak, National Or equivalent including Hinges, Screws, Shocks Cleats, Stops and Cords etc. complete fixed in position (Single Leaf)						
	a	Phenol Bonded BWP Ply Panel					
	i	40 mm thick	sqm	700.00	2571.00	770.00	2641.00
	ii	35mm thick	sqm	696.00	2432.00	766.00	2502.00
	iii	30mm thick	sqm	691.00	2288.00	760.00	2357.00



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
17.10 (xxi)	Cheetah Champ (Assam) wood doors shutter windows shutter including hinges, screws, chocks, cheats, stops cords etc. complete fixed in position.						
	a	panelled, glazed or glazed and panelled.					
	i	40 mm thick	sqm	717.00	4041.00	789.00	4113.00
	II	35 mm thick	sqm	712.00	3564.00	783.00	3635.00
	III	30 mm thick	sqm	706.00	3252.00	777.00	3323.00
	B i	Battened and framed					
	i	50 mm thick	sqm	399.00	5454.00	439.00	5494.00
	II	45mm thick	sqm	394.00	5181.00	433.00	5220.00
	C	Battened and braced shutter 50mm thick complete.	sqm	831.00	5584.00	914.00	5667.00
17.10 (xxii)	Cheetah Champ (Assam) wood doors shutter with 12mm thick phenol Bonded BWP ply ISI Marked anchor, Kit ply, Nova Teak, National Or equivalent including Hinges, Screws, Shocks Cleats, Stops and Cords etc. complete fixed in position (Single Leaf)						
	a	Phenol Bonded BWP Ply Panel					
	i	40 mm thick	sqm	700.00	3670.00	770.00	3740.00
	ii	35mm thick	sqm	696.00	3393.00	766.00	3463.00
	iii	30 mm thick	sqm	691.00	3109.00	760.00	3178.00
17.10 (xxiii)	Bansam Champ (Assam) wood doors shutter windows shutter including hinges, screws, chocks, cheats, stops cords etc. complete fixed in position.						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	a	panelled, glazed or glazed and panelled.					
	i	40 mm thick	sqm	717.00	2482.00	789.00	2554.00
	II	35 mm thick	sqm	712.00	2158.00	783.00	2229.00
	III	30 mm thick	sqm	706.00	1999.00	777.00	2070.00
	B	Battened and framed					
	i	50 mm thick	sqm	399.00	2966.00	439.00	3006.00
	ii	45mm thick	sqm	394.00	2820.00	433.00	2859.00
	C	Battened and braced shutter 50mm thick complete.	sqm	831.00	3249.00	914.00	3332.00
17.10 (xxiv)	Bansam Champ (Assam) doors with 12mm thick phenol Bonded BWP ply ISI Marked anchor, Kit ply, Nova Teak, National Or equivalent including Hinges, Screws, Shocks Cleats, Stops and Cords etc. complete fixed in position (Single Leaf)						
	a	Phenol Bonded BWP Ply Panel					
	(i)	40 mm thick	sqm	700.00	2574.00	770.00	2644.00
	ii	35mm thick	sqm	696.00	2432.00	766.00	2502.00
	iii	30 mm thick	sqm	691.00	2288.00	760.00	2357.00
17.11 (i)	Wire gauze deodar wood door shutter without springs housed in chowkats (Single Leaf)						
	i	35 mm thick	sqm	493.00	3583.00	542.00	3632.00
	ii	30mm thick taking size of door	sqm	487.00	3181.00	536.00	3230.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
17.11 (ii)	Wire gauge Hollock wood door shutter without springs housed in chowkhat.						
	A	35 mm thick	sqm	487.00	2004.00	536.00	2053.00
	B	30 mm thick	sqm	482.00	1843.00	530.00	1891.00
17.11 (iii)	Wire Gauge Golden Champ wood door shutter without springs housed in chowkhat.						
	A	35 mm thick	sqm	487.00	1747.00	536.00	1796.00
	B	30 mm thick	sqm	482.00	1603.00	530.00	1651.00
17.11 (iv)	Wire Gauge Cheetah Champ (Assam) wood door shutter without springs housed in chowkats.						
	A	35 mm thick	sqm	487.00	2774.00	536.00	2823.00
	B	30 mm thick	sqm	482.00	2491.00	530.00	2539.00
17.11 (v)	Wire Gauge Bansam Champ (Assam) wood door shutter without springs housed in chowkats.						
	A	35 mm thick	sqm	487.00	1747.00	536.00	1796.00
	B	30 mm thick	sqm	482.00	1603.00	530.00	1651.00
17.11 (vi)	Wire Gauge Red meranti wood Normal (15 to 16 kg per cft. Approx.) door shutter without springs housed in chowkats.						
	(A)	35 mm thick	sqm	487.00	1718.00	536.00	1767.00
	(B)	30 mm thick	sqm	482.00	1578.00	530.00	1626.00
17.11 (vii)	Wire Gauge Red meranti wood Super (18 to 19 kg per cft. Approx.) door shutter without springs housed in chowkats.						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(A)	35 mm thick	sqm	487.00	1795.00	536.00	1844.00
	(B)	30 mm thick	sqm	482.00	1644.00	530.00	1692.00
17.11 (viii)	Wire Gauge Red meranti wood Sinker (20 to 21 kg per cft. Approx.) door shutter without springs housed in chowkats.						
	(A)	35 mm thick	sqm	487.00	1910.00	536.00	1959.00
	(B)	30 mm thick	sqm	482.00	1744.00	530.00	1792.00
17.11 (ix)	Wire Gauge Yellow meranti wood Normal (15 to 16 kg per cft. Approx.) door shutter without springs housed in chowkats.						
	(A)	35 mm thick	sqm	487.00	1680.00	536.00	1729.00
	(B)	30 mm thick	sqm	482.00	1545.00	530.00	1593.00
17.11 (x)	Wire Gauge Yellow meranti wood Super (18 to 19 kg per cft. Approx.) door shutter without springs housed in chowkats.						
	(A)	35 mm thick	sqm	487.00	1756.00	536.00	1805.00
	(B)	30 mm thick	sqm	482.00	1611.00	530.00	1659.00
17.11 (xi)	Wire Gauge Yellow meranti wood Sinker (20 to 21 kg per cft. Approx.) door shutter without springs housed in chowkats.						
	(A)	35 mm thick	sqm	487.00	1871.00	536.00	1920.00
	(B)	30 mm thick	sqm	482.00	1710.00	530.00	1758.00
17.11 (xii)	Wire Gauge Imported teak wood door shutter without springs housed in chowkats.						
	(A)	35 mm thick	sqm	487.00	2063.00	536.00	2112.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(B)	30 mm thick	sqm	482.00	1876.00	530.00	1924.00
Note :- The unit measurement of the item no 17.11 is area of clear shutter opening. In case wire gauge shutter is fixed with additional molding on existing chowkhats, payment will be made on overall measurement of masonry opening							
17.12 (i)	Deodar wood cup board shutter with plywood panels or faced on both side fixed in position (excluding the cost of handles bolts hasp with staple but including the labour for fixing them						
	(a)	30mm thick	sqm	713.00	3064.00	784.00	3135.00
	(b)	25mm thick	sqm	713.00	2809.00	784.00	2880.00
17.12 (ii)	Hollock wood cup board shutter with plywood panels or faced on both side fixed in position (excluding the cost of handles, bolts hasp with staple but including the labour for fixing them)						
	a)	30 mm thick	sqm	708.00	2272.00	779.00	2343.00
	b)	25 mm thick	sqm	708.00	2272.00	779.00	2343.00
17.12 (iii)	Golden Champ cup board shutter with plywood panels or faced on both side fixed in position (excluding the cost of handles, bolts hasp with staple but including the labour for fixing them)						
	a)	30 mm thick	sqm	708.00	2115.00	779.00	2186.00
	b)	25 mm thick	sqm	706.00	1992.00	777.00	2063.00
17.12 (iv)	Cheetah Champ (Assam) cup board shutter with plywood panels or faced on both side fixed in position (excluding the cost of handles, bolts hasp with staple but including the labour for fixing them)						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	a)	30 mm thick	sqm	708.00	2698.00	779.00	2769.00
	b)	25 mm thick	sqm	706.00	2517.00	777.00	2588.00
17.12 (v)	Bansam Champ (Assam) cup board shutter with plywood panels or faced on both side fixed in position (excluding the cost of handles, bolts hasp with staple but including the labour for fixing them)						
	a)	30 mm thick	sqm	708.00	2115.00	779.00	2186.00
	b)	25 mm thick	sqm	706.00	1992.00	777.00	2063.00
17.12 (vi)	Red meranti Normal (15 to 16 kg per cft. Approx.) cup board shutter with plywood panels or faced on both side fixed in position (excluding the cost of handles, bolts hasp with staple but including the labour for fixing them)						
	a)	30 mm thick	sqm	708.00	2098.00	779.00	2169.00
	b)	25 mm thick	sqm	706.00	1977.00	777.00	2048.00
17.12 (vii)	Red meranti Super (18 to 19 kg per cft. Approx.) cup board shutter with plywood panels or faced on both side fixed in position (excluding the cost of handles, bolts hasp with staple but including the labour for fixing them)						
	a)	30 mm thick	sqm	708.00	2141.00	779.00	2212.00
	b)	25 mm thick	sqm	706.00	2016.00	777.00	2087.00
17.12 (viii)	Red meranti Sinker (20 to 21 kg per cft. Approx.) cup board shutter with plywood panels or faced on both side fixed in position (excluding the cost of handles, bolts hasp with staple but including the labour for fixing them)						
	a)	30 mm thick	sqm	708.00	2207.00	779.00	2278.00
	b)	25 mm thick	sqm	706.00	2075.00	777.00	2146.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
17.12 (ix)	Yellow meranti Normal (15 to 16 kg per cft. Approx.) cup board shutter with plywood panels or faced on both side fixed in position (excluding the cost of handles, bolts hasp with staple but including the labour for fixing them)						
	a)	30 mm thick	sqm	708.00	2076.00	779.00	2147.00
	b)	25 mm thick	sqm	706.00	1957.00	777.00	2028.00
17.12 (x)	Yellow meranti Super (18 to 19 kg per cft. Approx.) cup board shutter with plywood panels or faced on both side fixed in position (excluding the cost of handles, bolts hasp with staple but including the labour for fixing them)						
	a)	30 mm thick	sqm	708.00	2120.00	779.00	2191.00
	b)	25 mm thick	sqm	706.00	1997.00	777.00	2068.00
17.12 (xi)	Yellow meranti Sinker (20 to 21 kg per cft. Approx.) cup board shutter with plywood panels or faced on both side fixed in position (excluding the cost of handles, bolts hasp with staple but including the labour for fixing them)						
	a)	30 mm thick	sqm	708.00	2185.00	779.00	2256.00
	b)	25 mm thick	sqm	706.00	2055.00	777.00	2126.00
17.12 (xii)	Imported Teak Wood cup board shutter with plywood panels or faced on both side fixed in position (excluding the cost of handles, bolts hasp with staple but including the labour for fixing them)						
	a)	30 mm thick	sqm	708.00	2294.00	779.00	2365.00
	b)	25 mm thick	sqm	706.00	2153.00	777.00	2224.00
17.13 (i)	Wire gauze fixed on chowkats with 25mm deodar wood cover molding of full width		sqm	162.00	1350.00	178.00	1366.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.13 (ii)	Wire gauge fixed on chowkats with 25mm thick Hollock wood cover molding of full width.	sqm	162.00	979.00	178.00	995.00
17.13 (iii)	Wire gauge fixed on chowkats with 25mm thick Golden Champ wood cover molding of full width.	sqm	162.00	869.00	178.00	885.00
17.13 (iv)	Wire gauge fixed on chowkats with 25mm thick Cheetah Champ (Assam) wood cover molding of full width.	sqm	162.00	1277.00	178.00	1293.00
17.13 (v)	Wire gauge fixed on chowkats with 25mm thick Bansam Champ (Assam) wood cover molding of full width.	sqm	162.00	869.00	178.00	885.00
17.13 (vi)	Wire gauge fixed on chowkats with 25mm thick Red meranti Normal (15 to 16 kg per cft. Approx.) wood cover molding of full width.	sqm	162.00	857.00	178.00	873.00
17.13 (vii)	Wire gauge fixed on chowkats with 25mm thick Red meranti Super (18 to 19 kg per cft. Approx.) wood cover molding of full width.	sqm	162.00	887.00	178.00	903.00
17.13 (viii)	Wire gauge fixed on chowkats with 25mm thick Red meranti Sinker (20 to 21 kg per cft. Approx.) wood cover molding of full width.	sqm	162.00	933.00	178.00	949.00
17.13 (ix)	Wire gauge fixed on chowkats with 25mm thick Yellow meranti Normal (15 to 16 kg per cft. Approx.) wood cover molding of full width.	sqm	162.00	842.00	178.00	858.00
17.13 (x)	Wire gauge fixed on chowkats with 25mm thick yellow meranti super (18 to 19 kg per cft. Approx.) wood cover molding of full width.	sqm	162.00	872.00	178.00	888.00
17.13 (xi)	Wire gauge fixed on chowkats with 25mm thick yellow meranti sinker (20 to 21 kg per cft. Approx.) wood cover molding of full width.	sqm	162.00	918.00	178.00	934.00



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.13 (xii)	Wire gauge fixed on chowkats with 25mm thick Imp. Teak Wood wood cover molding of full width.	sqm	162.00	994.00	178.00	1010.00
17.14 (i)	Expanded metal fixed on chowkats with 25mm deodar wood cover molding of full width	sqm	162.00	1402.00	178.00	1418.00
17.14 (ii)	Expanded metal fixed on chowkats with 25mm Hollock wood cover molding of full width	sqm	162.00	1031.00	178.00	1047.00
17.14 (iii)	Expanded metal fixed on chowkats with 25mm Red meranti Normal (15 to 16 kg per cft. Approx.) cover molding of full width	sqm	162.00	909.00	178.00	925.00
17.14 (iv)	Expanded metal fixed on chowkats with 25mm Red meranti Super(18 to 19 kg per cft. Approx.) cover molding of full width	sqm	162.00	939.00	178.00	955.00
17.14 (v)	Expanded metal fixed on chowkats with 25mm Red meranti Sinker (20 to 21 kg per cft. Approx.) cover molding of full width	sqm	162.00	985.00	178.00	1001.00
17.14 (vi)	Expanded metal fixed on chowkats with 25mm yellow meranti Normal (15 to 16 kg per cft. Approx.) cover molding of full width	sqm	162.00	893.00	178.00	909.00
17.14 (vii)	Expanded metal fixed on chowkats with 25mm Yellow meranti Super(18 to 19 kg per cft. Approx.) cover molding of full width	sqm	162.00	924.00	178.00	940.00
17.14 (viii)	Expanded metal fixed on chowkats with 25mm Yellow meranti Sinker (20 to 21 kg per cft. Approx.) cover molding of full width	sqm	162.00	970.00	178.00	986.00
17.14 (ix)	Expanded metal fixed on chowkats Imp. Teak Wood with 25mm cover molding of full width	sqm	162.00	1046.00	178.00	1062.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.15 (i)	Deodar wood chowkats including iron hold fasts iron hinges corner straps clears, stops wooden knobs fixed in position.					
A	Double Rebate (60mm x 150mm)	Mtr	238.00	1895.00	262.00	1919.00
B	Single Rebate (60mm x 100mm)	Mtr	229.00	1358.00	252.00	1381.00
17.15 (ii)	Chowkats of commercial hard wood such as Hollock confirming to ISI specification no 1003 m kiln seasoned of doors and windows including iron hold fasts, corner straps cleats, stops, bolts for hold fasts etc, complete fixed in position (Section 60mm x 150mm)					
A	Double Rebate (60mm x 150mm) (60mm x 150mm)	Mtr	233.00	1140.00	256.00	1163.00
B	Single Rebate (60mm x 100mm)	Mtr	225.00	846.00	248.00	869.00
17.15 (iii)	Chowkats of commercial hard wood such as Golden Champ confirming to ISI specification no 1003 m kiln seasoned of doors and windows including iron hold fasts, corner straps cleats, stops bolts for hold fasts etc, complete fixed in position (Section 60mm x 150mm)					
A	Double Rebate (60mm x 150mm) (60mm x 150mm)	Mtr	236.00	957.00	260.00	981.00
B	Single Rebate (60mm x 100mm)	Mtr	225.00	721.00	248.00	744.00
17.15 (iv)	Chowkats of commercial hard wood such as Cheetah Champ (Assam) confirming to ISI specification no 1003 m kiln seasoned of doors and windows including iron hold fasts, corner straps cleats, stops bolts for hold fasts etc, complete fixed in position (Section 60mm x 150mm)					
A	Double Rebate (60mm x 150mm) (60mm x 150mm)	Mtr	233.00	1640.00	256.00	1663.00
B	Single Rebate (60mm x 100mm)	Mtr	225.00	1181.00	248.00	1204.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.15 (v)	Chowkats of commercial hard wood such as Bansam Champ (Assam) confirming to ISI specification no 1003 m kiln seasoned of doors and windows including iron hold fasts, corner straps cleats, stops bolts for hold fasts etc, complete fixed in position (Section 60mm x 150mm)					
A	Double Rebate (60mm x 150mm) (60mm x 150mm)	Mtr	233.00	955.00	256.00	978.00
B	Single Rebate (60mm x 100mm)	Mtr	225.00	721.00	248.00	744.00
17.15 (vi)	Chowkats of Red meranti Normal (15 to 16 kg per cft. Approx.) confirming to ISI specification no 1003 m kiln seasoned of doors and windows including iron hold fasts, corner straps cleats, stops bolts for hold fasts etc, complete fixed in position (Section 60mm x 150mm)					
A	Double Rebate (60mm x 150mm) (60mm x 150mm)	Mtr	233.00	935.00	256.00	958.00
B	Single Rebate (60mm x 100mm)	Mtr	225.00	708.00	248.00	731.00
17.15 (vii)	Chowkats of Red meranti Super (18 to 19 kg per cft. Approx.) confirming to ISI specification no 1003 m kiln seasoned of doors and windows including iron hold fasts, corner straps cleats, stops bolts for hold fasts etc, complete fixed in position (Section 60mm x 150mm)					
A	Double Rebate (60mm x 150mm) (60mm x 150mm)	Mtr	233.00	986.00	256.00	1009.00
B	Single Rebate (60mm x 100mm)	Mtr	225.00	742.00	248.00	765.00
17.15 (viii)	Chowkats of Red meranti Sinker (20 to 21 kg per cft. Approx.) confirming to ISI specification no 1003 m kiln seasoned of doors and windows including iron hold fasts, corner straps cleats, stops bolts for hold fasts etc, complete fixed in position (Section 60mm x 150mm)					
A	Double Rebate (60mm x 150mm) (60mm x 150mm)	Mtr	233.00	1063.00	256.00	1086.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
B	Single Rebate (60mm x 100mm)	Mtr	225.00	794.00	248.00	817.00
17.15 (ix)	Chowkats of Yellow meranti Normal (15 to 16 kg per cft. Approx.) confirming to ISI specification no 1003 m kiln seasoned of doors and windows including iron hold fasts, corner straps cleats, stops bolts for hold fasts etc, complete fixed in position (Section 60mm x 150mm)					
A	Double Rebate (60mm x 150mm) (60mm x 150mm)	Mtr	233.00	910.00	256.00	933.00
B	Single Rebate (60mm x 100mm)	Mtr	225.00	691.00	248.00	714.00
17.15 (x)	Chowkats of Yellow meranti Super (18 to 19 kg per cft. Approx.) confirming to ISI specification no 1003 m kiln seasoned of doors and windows including iron hold fasts, corner straps cleats, stops bolts for hold fasts etc, complete fixed in position (Section 60mm x 150mm)					
A	Double Rebate (60mm x 150mm) (60mm x 150mm)	Mtr	233.00	961.00	256.00	984.00
B	Single Rebate (60mm x 100mm)	Mtr	225.00	725.00	248.00	748.00
17.15 (xi)	Chowkats of Yellow meranti Sinkers (20 to 21 kg per cft. Approx.) confirming to ISI specification no 1003 m kiln seasoned of doors and windows including iron hold fasts, corner straps cleats, stops bolts for hold fasts etc, complete fixed in position (Section 60mm x 150mm)					
A	Double Rebate (60mm x 150mm) (60mm x 150mm)	Mtr	233.00	1038.00	256.00	1061.00
B	Single Rebate (60mm x 100mm)	Mtr	225.00	777.00	248.00	800.00
17.15 (xii)	Chowkats of Imp. Teak Wood confirming to ISI specification no 1003 m kiln seasoned of doors and windows including iron hold fasts, corner straps cleats, stops bolts for hold fasts etc, complete fixed in position (Section 60mm x 150mm)					
A	Double Rebate (60mm x 150mm) (60mm x 150mm)	Mtr	233.00	1166.00	256.00	1189.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
B	Single Rebate (60mm x 100mm)	Mtr	225.00	863.00	248.00	886.00
17.15 (xiii)	Sail wood chowkats including iron hold fasts iron hinges corner straps clears, stops wooden knobs fixed in position.					
A	Double Rebate (60mm x 150mm)	Mtr	238.00	1267.00	262.00	1291.00
B	Single Rebate (60mm x 100mm)	Mtr	229.00	935.00	252.00	958.00
17.15 (xiv)	Kapoor Sail wood chowkats including iron hold fasts iron hinges corner straps clears, stops wooden knobs fixed in position.					
A	Double Rebate (60mm x 150mm)	Mtr	238.00	1138.00	262.00	1162.00
B	Single Rebate (60mm x 100mm)	Mtr	229.00	848.00	252.00	871.00
17.16 (i)	Deodar wood cup board chowkats including iron hold facts, iron hinge, corner, straps, wooden knobs or handles fixed in position (Size 45 x 60mm)	Mtr	188.00	730.00	207.00	749.00
17.16 (ii)	Kiln seasonal Hollock wood cup board chowkats including iron hold fasts, iron hinges corner straps, wooden knobs or handles fixed in position (Size 45 x 60mm).	Mtr	187.00	457.00	206.00	476.00
17.16 (iii)	Golden Champ wood cup board chowkats including iron hold fasts, iron hinges corner straps, wooden knobs or handles fixed in position (Size 45 x 60mm).	Mtr	187.00	407.00	206.00	426.00
17.16 (iv)	Cheetah Champ (Assam) wood cup board chowkats including iron hold fasts, iron hinges corner straps, wooden knobs or handles fixed in position (Size 45 x 60mm).	Mtr	187.00	589.00	206.00	608.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.16 (v)	Bansam Champ (Assam) wood cup board chowkats including iron hold fasts, iron hinges corner straps, wooden knobs or handles fixed in position (Size 45 x 60mm).	Mtr	187.00	407.00	206.00	426.00
17.16 (vi)	Red meranti Normal (15 to 16 kg per cft. Approx.) wood cup board chowkats including iron hold fasts, iron hinges corner straps, wooden knobs or handles fixed in position (Size 45 x 60mm).	Mtr	185.00	400.00	204.00	419.00
17.16 (vii)	Red meranti Super (18 to 19 kg per cft. Approx.) wood cup board chowkats including iron hold fasts, iron hinges corner straps, wooden knobs or handles fixed in position (Size 45 x 60mm).	Mtr	187.00	416.00	206.00	435.00
17.16 (viii)	Red meranti Sinker (20 to 21 kg per cft. Approx.) wood cup board chowkats including iron hold fasts, iron hinges corner straps, wooden knobs or handles fixed in position (Size 45 x 60mm).	Mtr	187.00	436.00	206.00	455.00
17.16 (ix)	Yellow meranti Normal (15 to 16 kg per cft. Approx.) wood cup board chowkats including iron hold fasts, iron hinges corner straps, wooden knobs or handles fixed in position (Size 45 x 60mm).	Mtr	187.00	396.00	206.00	415.00
17.16 (x)	Yellow meranti Super (18 to 19 kg per cft. Approx.) wood cup board chowkats including iron hold fasts, iron hinges corner straps, wooden knobs or handles fixed in position (Size 45 x 60mm).	Mtr	187.00	409.00	206.00	428.00
17.16 (xi)	Yellow meranti Sinker (20 to 21 kg per cft. Approx.) wood cup board chowkats including iron hold fasts, iron hinges corner straps, wooden knobs or handles fixed in position (Size 45 x 60mm).	Mtr	187.00	429.00	206.00	448.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.16 (xii)	Imp teak wood cup board chowkats including iron hold fasts, iron hinges corner straps, wooden knobs or handles fixed in position (Size 45 x 60mm).	Mtr	187.00	463.00	206.00	482.00
17.17 (i)	Kail wood doors shutter and window shutter panelled, glazed or glazed and panelled including hinges screws chokes cleats and cords etc. complete Fixed in position (Single Leaf)					
	(a) 40mm thick	sqm	727.00	3878.00	800.00	3951.00
	(b) 35mm thick	sqm	727.00	3581.00	800.00	3654.00
17.17 (ii)	Wire gauze door shutter with Kail wood without springs housed in chowkats (Single Leaf)					
	(a) 35mm thick	sqm	727.00	3052.00	800.00	3125.00
	(b) 30 mm thick	sqm	482.00	2301.00	530.00	2349.00
17.18	Teak wood doors shutter and windows panelled glazed or panelled including Iron hinger, screws etc. complete fixed in position (excluding cost of tower bolts and handles but including labour for fittings the same) (Single Leaf)					
	(a) 35mm thick	sqm	842.00	4374.00	926.00	4458.00
	(b) 30mm thick	sqm	838.00	3923.00	922.00	4007.00
	(c) 25 mm thick	sqm	832.00	3527.00	915.00	3610.00
17.19	Teak wood wire gauge shutters without spring (Single Leaf)					
	(a) 35mm thick (Single Leaf)	sqm	733.00	4307.00	806.00	4380.00
	(b) 30mm thick	sqm	718.00	3325.00	790.00	3397.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(c)	25mm thick (Single Leaf)	sqm	713.00	2950.00	784.00	3021.00
17.20	Fixing wire gauze out side the clerestory window including teak wood chowkats and cover molding		sqm	409.00	3772.00	450.00	3813.00
17.21	Teak wood chowkats including iron hold fasts, corner straps, iron hinges, cleats, stops, wooden knobs or handles fixed in position.						
A	Single Rebate (60mm x 100mm)		mtr	260.00	1406.00	286.00	1432.00
B	Double Rebate (60mm x 150mm)		mtr	266.00	1966.00	293.00	1993.00
17.22 (i)	Fixing mortise or rim locks or latches complete (Labour Only)		nos	138.00	-----	152.00	-----
17.22 (ii)	Providing and fixing bright finished brass door latch with necessary screws etc. complete : 300x16x5 mm		no	138.00	1119.00	152.00	1133.00
17.22 (iii)	Providing and fixing bright finished brass door latch with necessary screws etc. complete : 250x16x5 mm		no	138.00	959.00	152.00	973.00
17.22 (iv)	Providing and fixing bright finished brass 100 mm mortise latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality).		no	105.00	1734.00	116.00	1745.00
17.22 (v)	Providing and fixing Brass 100mm mortise latch and lock with 6 levers without pair of handles (best make of approved quality) for aluminum doors including necessary cutting and making good etc. complete.		No.	105.00	343.00	116.00	354.00
17.23	Cost of aluminum fittings complete for doors, windows such as tower bolts, handles,Stoppers and screw etc. for these fittings (Excluding sliding bolt)						
(i)	For shutter area up to 0.50 sqm		sqm	-----	248.00	-----	248.00
(ii)	For shutter area above 0.50 sqm		sqm	-----	111.00	-----	111.00



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.24	Curtain rod 25mm dia aluminum pipe with brackets fixed in position including nails and screws etc. (Deodar Wood)	mtr	125.00	205.00	138.00	218.00
17.25	Curtain rod 25mm dia aluminum pipe with brackets fixed in position including nails and screws etc. (Teak Wood)	mtr	166.00	245.00	183.00	262.00
17.26	Providing & Fixing glass panes with nails and putty or wooden strip complete in all respect					
(a)	Glazing area upto 0.09 sqm					
(i)	2mm thick or 5.18 Kg/sqm	nos	9.00	32.00	10.00	33.00
(b)	Glazing area above 0.09 sqm					
(i)	3mm thick or 8.44 Kg/ sqm	sqm	110.00	582.00	121.00	593.00
(ii)	4mm thick or 10.78 Kg/ sqm	sqm	110.00	668.00	121.00	679.00
(iii)	5.0mm thick Plate glass (INDIAN)	sqm	132.00	772.00	145.00	785.00
(iv)	8.0mm thick Plate glass(weight not less than 20 kg/ sqm)	sqm	249.00	1058.00	274.00	1083.00
17.27	Factory manufactured flush door fixed in position iron hinges, etc (excluding the cost of any fittings other than specified above but including labour for fixing the same in position (Code : II Revision IS-2191 Part-I) 1973					
(a)	Commercial with elm or gurjan facing on both \ Sides with laminated core and lipped edges:-					
(i)	20mm thick	sqm	273.00	1773.00	300.00	1800.00
(ii)	25mm thick	sqm	273.00	1951.00	300.00	1978.00
(iii)	30mm thick	sqm	273.00	2196.00	300.00	2223.00
(iv)	35mm thick	sqm	273.00	2307.00	300.00	2334.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(b)	Decorative with elm or gurjan facing on one side and teak facing on the other side edges lipped with teak with laminated core					
	(i)	20mm thick	sqm	273.00	2001.00	300.00	2028.00
	(ii)	25mm thick	sqm	273.00	2043.00	300.00	2070.00
	(iii)	30mm thick	sqm	273.00	2196.00	300.00	2223.00
	(iv)	35mm thick	sqm	273.00	2307.00	300.00	2334.00
	(c)	Decorative with teak facing on both sides edges lipped with teak with laminated core					
	(i)	20mm thick	sqm	273.00	2735.00	300.00	2762.00
	(ii)	25mm thick	sqm	273.00	3020.00	300.00	3047.00
	(iii)	30mm thick	sqm	273.00	3163.00	300.00	3190.00
	(iv)	35mm thick	sqm	273.00	3305.00	300.00	3332.00
17.28	Providing and fixing PVC Plug 38mm long including cutting bricks work and fixing in cement mortar 1:3		no	3.00	4.00	3.00	4.00
17.29	Providing and fixing deodar wood plain lining tongued and grooved including PVC Plug plugs placed at 45cm to 60 cm centers complete with necessary screws (frame work shall be payable extra)						
	(a)	20mm thick	sqm	199.00	3407.00	219.00	3427.00
	(b)	12mm thick	sqm	178.00	2105.00	196.00	2123.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
17.30	Providing and fixing Kail wood plain lining tongued and grooved including PVC Plug placed at 45cm to 60cm centers complete with necessary screws (Frame work will be payable extra)						
	(a)	20mm thick	sqm	199.00	2505.00	219.00	2525.00
	(b)	12mm thick	sqm	178.00	1563.00	196.00	1581.00
17.31	Providing and fixing teak wood plain lining tongued and grooved including PVC Plug placed at 45cm to 60cm centres complete with necessary screws frame work shall be payable extra.						
	(a)	40mm thick	sqm	245.00	6906.00	270.00	6931.00
	(b)	25mm thick	sqm	193.00	3664.00	212.00	3683.00
	(c)	20mm thick	sqm	199.00	3532.00	219.00	3552.00
	(d)	12mm thick	sqm	178.00	2179.00	196.00	2197.00
17.32	Providing and fixing ply wood, plain lining, butt jointed including PVC Plug placed at 45 cm to 65 cm centers complete with necessary nails (Frame work shall be payable extra)						
	(a)	4mm thick 3 ply decorative ply wood with teak faced on one side	sqm	99.00	640.00	109.00	650.00
	(b)	6mm thick decorative ply wood teak faced on one side.	sqm	99.00	937.00	109.00	947.00
	(c)	9mm thick decorative wood with teak faced on one side	sqm	99.00	1255.00	109.00	1265.00
	(d)	12mm thick decorative wood with teak faced on one side	sqm	99.00	1334.00	109.00	1344.00
	(e)	4mm thick 3 ply commercial ply wood	sqm	99.00	524.00	109.00	534.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(f)	9mm thick commercial ply wood	sqm	99.00	819.00	109.00	829.00
	(g)	12mm thick commercial ply wood	sqm	99.00	1011.00	109.00	1021.00
17.33	Providing and fixing deodar wood beading in door and window chowkats with iron screws, fixing position, complete as per design and shape required (50mm x 12mm)		mtr	35.00	142.00	39.00	146.00
17.34	Providing and fixing beading to door and windows chowkats of commercial hard wood, such as Hollock, Champ, Chirassy Chaplash etc (Non coniferous timber other than teak conforming to ISI specification no 100., kiln seasoned) with iron screws, fixed in position complete as per design and shape required						
	(a)	50mmx12mm	mtr	32.00	91.00	35.00	94.00
	(b)	40mm x 12mm	mtr	31.00	80.00	34.00	83.00
17.35	Providing and fixing teak wood beading to door windows chowkats with iron screws fixed in position complete as per design and shape required						
	(a)	50mmx12mm	mtr	40.00	143.00	44.00	147.00
	(b)	40mmx12mm	mtr	44.00	127.00	48.00	131.00
17.36	Providing and fixing 12mm thick 100mm wide pelmets with 25mm dia meter aluminum rod and bracket and including fixing with 25mmx 3mm M.S. flat 3cm long and PVC Plug Etc. complete						
	(a)	Deodar wood	mtr	84.00	708.00	92.00	716.00
	(b)	Kail wood	mtr	84.00	578.00	92.00	586.00
	(c)	Commercial hard wood such as Hollock, Champ, Chikrassy and Chaplashek	mtr	83.00	465.00	91.00	473.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(d)	Teak wood	mtr	82.00	680.00	90.00	688.00
17.37	Providing and fixing 12mm thick 150mm wide pelmets with 25mm dia aluminum rod and brackets including fixing with 25mmx3mm MS Flat 10cm long and PVC Plug etc complete						
	(a)	Deodar wood	mtr	115.00	898.00	127.00	910.00
	(b)	Kail wood	mtr	115.00	687.00	127.00	699.00
	(c)	Commercial & hard wood such as Hollock etc. 25mm dia aluminum rod and brackets including (Non coniferous timber other than teak conforming to ISI Specification No. 1003 mklIn seasoned	mtr	115.00	555.00	127.00	567.00
	(d)	Teak wood	mtr	115.00	810.00	127.00	822.00
17.38	Extra for providing and fixing aluminum curtain rail with rollers, stop ends, and brackets in palments instead of teak wood 25mm dia and brackets (Actual length of rail to be measured)		mtr	--	48.00	--	48.00
17.39	Providing and fixing 4mm thick hard board of approved quality in partition including fixing to frames with screws complete (Beading and frame work to be paid separately		mtr	85.00	597.00	94.00	606.00
17.40	Providing and fixing decorative ply wood, 4mm thick three ply teak faced on one side in partition including fixing to frames with steel screws complete		mtr	109.00	621.00	120.00	632.00
17.41	Providing and fixing helical door spring 150mm (superior quality) including necessary screws, complete						
	(a)	Brass helical spring	Each	62.00	218.00	68.00	224.00
	(b)	Iron Helical spring	Each	62.00	190.00	68.00	196.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
17.42	Providing an fixing MS of Double action spring hinges with necessary screws etc. complete						
	(a)	100 mm	Each	48.00	235.00	53.00	240.00
	(b)	125mm	Each	62.00	339.00	68.00	345.00
	(c)	150mm	Each	62.00	373.00	68.00	379.00
17.43	Providing and fixing hydraulic door closer ISI mark with necessary screw etc. complete						
	(a)	ISI designation no I (Size of door up to 700mm)	no	14.00	987.00	15.00	988.00
	(b)	I.S.I Designation No. II (size of door 701mm to 850mm)	no	14.00	1149.00	15.00	1150.00
	(c)	I.S.I Designation No. III (size of door 851mm to 1000mm)	no	14.00	1310.00	15.00	1311.00
17.44	Providing and fixing 0.50mm thick aluminum sheet including cost of necessary fittings i.e. screws, etc. complete		sqm	176.00	496.00	194.00	514.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
17.45	Providing and fixing aluminum work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate z sections and other sections conforming to Is: 733 and IS : 1285 of Jindal, Hindalco, Mahavir or equivalent make approved by Engineer in Charge , fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC Plug/neoprene felt etc. aluminum sections shall be smooth, rust free, straight, mitered and jointed mechanically wherever required including cleat angle, aluminum snap beading for glazing/paneling, C.P.brass/stainless steel screws, all complete as per architectural drawings and the directions of Engineer-In-Charge. (Glazing and paneling to be paid for separately) :						
	(a)	For fixed portion and chawkhats	Kg.	23.00	352.00	25.00	354.00
	(b)	For shutters of doors, windows & ventilators including providing and fixing hinges/pivots and labour for fixing of fittings wherever required including the cost of PVC Plug / neoprene gasket required	Kg.	28.00	368.00	31.00	371.00
17.46 (i)	Providing and fixing 12mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in paneling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of Engineer-In-Charge. Pre-laminated particle board with decorative lamination on one side.		sqm	153.00	956.00	168.00	971.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.46 (ii)	Providing and fixing 12mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in paneling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of Engineer-In-Charge. Pre-laminated particle board with decorative lamination on Both side.	sqm	146.00	1148.00	161.00	1163.00
17.47	Providing and fixing glazing in aluminum door, window, ventilator shutters and partitions etc. with PVC Plug/ neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminum snap beading shall be paid in basic item)					
(i)	Float glass panes of 5 mm thickness	sqm	153.00	1035.00	168.00	1050.00
(ii)	Float glass panes of 4mm thickness	sqm	153.00	924.00	168.00	939.00
17.48	Providing and fixing double action hydraulic floor spring of approved brand and manufacture IS : 6315 marked, for doors including cost of cutting floors as required, embedding in floors and cover plates with brass pivot and single piece MS sheet outer box with slide plate and with stainless steel cover plate etc. complete as per the direction of Engineer-in-charge.	no	177.00	1862.00	195.00	1880.00
17.49	Providing and fixing aluminum sliding door bolts ISI marked anodized (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete :					
A	300mm x 16mm	no	31.00	199.00	34.00	202.00



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
B	250mm x 16mm	no	31.00	183.00	34.00	186.00
17.50	Providing and fixing commercial plywood 12mm thick	sqm	140.00	1006.00	154.00	1020.00
17.51	Providing and fixing commercial plywood 18mm thick	sqm	140.00	1249.00	154.00	1263.00
17.53	Providing and fixing commercial plywood 25mm thick	sqm	151.00	1674.00	166.00	1689.00
17.54	Providing and fixing teak wood plain lining tongued and grooved on and including PVC Plug plugs complete with necessary screws and priming coat on unexposed surface 20 mm thick	sqm	215.00	3504.00	237.00	3526.00
17.55	Providing and fixing teak wood plain lining tongued and grooved including PVC plugs complete with necessary screws and priming coat on unexposed surface 12 mm thick	sqm	197.00	2184.00	217.00	2204.00
17.56	Providing and fixing 12 mm thick, 150 mm wide pelmet of flat pressed 3 layer or graded wood particle board medium density grade-I, IS : 3087 marked including top cover of 6 mm commercial ply wood conforming to IS: 303 BWR grade, nickel plated MS pipe 20 mm dia (heavy type) curtain rod with nickel plated brackets including fixing with 25x3 mm MS flat 10 cm long and rawl plugs 50 mm long (designation 10 no) etc all complete	mtr	133.00	462.00	146.00	475.00
17.57	Providing and fixing 18 mm thick, 150 mm wide pelmet of coir veneer board ISI marked IS : 14842 - 2000, including top cover of 6 mm coir veneer board, nickel plated MS Pipe 20 mm dia (heavy type) curtain rod with nickel plated brackets including fixing with 25x3 mm MS Flat 10 cm long and rawl plug 50 mm long (designation 10 no) etc., all complete	mtr	124.00	549.00	136.00	561.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.58	Providing and fixing oxidized MS Safety chain with necessary fixtures for doors. (Weighing not less than 450 gms.)	no	6.00	79.00	7.00	80.00
17.59	Providing and fixing of 30mm thick factory made Polyvinyl Chloride (PVC) door shutter (without chowkhat) made of styles and rails of a UPVC Plug profile section of size 30mm x 60mm and wall thickness 2mm $\pm$ 0.2mm with inbuilt decorative molding edging on one side. The styles and rails with plastic brackets of size 75x220mm meter and welded at the corners. The- stiles of the shutter reinforced by inserting galvanized MS tube of size 25x20mm and 1mm $\pm$ 0.1mm wall thickness. The lock rail made up of 'H' section, a UPVC Plug profile section of size 30mm x 100mm and 2mm $\pm$ 0.2mm wall thickness welded to the shutter style with a UPVC Plug profile section single panel of size not less than 620mm, having overall thickness of 20 mm and 1 mm $\pm$ 0.1 mm wall thickness with 20 mm panel beading of suitable size /Glass(4mm thick plain glass)/louver section, louver frame of suitable size, as per manufactures specification and direction of Engineering-charge. (For WC and bathroom door Shutter)	sqm	174.00	3302.00	191.00	3319.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.60	Providing and fixing of 25mm thick PVC flush door shutters (without chowkhat) upto 737mm width of colour and shade as approved by Engineer-in-charge made out of a one piece Multi chamber extruded PVC Plug section of the size of 762mm X 25mm or less as per requirement with an average wall thickness of 1mm $\pm$ 0.3mm. PVC Plug foam end cap of size 23x10mm are provided on both vertical edges to ensure the overall thickness of 25mm. An MS tube having dimensions 19mm x 19mm is inserted along the hinge side of the door. Core of the door shutter should be filled with High Density Polyurethane Code Description Unit Quantity Rate Amount foam. The Top & Bottom edges of the shutter are covered with an end-cap of the size 25mm X 11mm. Door shutter shall be reinforced with special polymeric reinforcements as per manufactures' specification and drawing to take up necessary hardware and fixtures. Stickers indicating the locations of hardware will be pasted at appropriate places	sqm	174.00	3425.00	191.00	3442.00
17.61 (i)	Providing & fixing teak wood top size 150mm x 75mm on stair railing including polishing complete in all respect.	rmt	322.00	1939.00	354.00	1971.00
17.61 (ii)	Providing & fixing imported teak wood top size 150mm x 75mm on stair railing including polishing complete in all respect.	rmt	311.00	1248.00	342.00	1279.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.62	Providing & fixing 30mm thick Factory Made solid Panel PVC Door shutter (Pannel thickness 5mm) Consisting of frame made out of M.S tubes of 19 guage thickness and size of 19mm x 19mm for styles & 15mm x 15mm for top & bottom rails. M.S frame shall have a coat of steel primers of approved make & manufacture. M.S frame shall be covered with 5mm thick heat moulded PVC 'C' Channel of size 30 x 50mm forming styles, and 5mm thick, 75mm wide PVC sheets for top rail, lock rail & bottom rail on either side, and 10mm (5mm x 2) thick, 20mm wide cross PVC sheet as gap insert for top rail & bottom rail. Panneling of 5mm thick PVC sheet to be fitted in the M.S Frame welded/Sealed to the styles & Rails with 30mm wide x 5mm thick PVC sheet beading on either side and joined together with solvent cement adhesive.an additional 5mm thick PVC strips of 20mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent cement adhesive etc. complete as per manufacturer's specification, conforming to test criteria specified in IS:4020-1998,Drawings and to the entire satisfaction of engineer-in-charge.	sqm	815.00	2831.00	897.00	2913.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.63	Providing & fixing 30mm thick Factory Made solid Panel PVC Door shutter (Pannel thickness 10mm) Consisting of frame made out of M.S tubes of 19 guage thickness and size of 19mm x 19mm for stiles & 15mm x 15mm for top & bottom rails. M.S frame shall have a coat of steel primers of approved make & manufacture. M.S frame shall be covered with 5mm thick heat moulded PVC 'C' Channel of size 30 x 50mm forming stiles, and 5mm thick, 75mm wide PVC sheets for top rail, lock rail & bottom rail on either side, and 10mm (5mm x 2) thick, 20mm wide cross PVC sheet as gap insert for top rail & bottom rail. Panneling of 5mm thick PVC sheet to be fitted in the M.S Frame welded/Sealed to the stiles & Rails with 30mm wide x 5mm thick PVC sheet beading on either side and joined together with solvent cement adhesive.an additional 5mm thick PVC strips of 20mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent cement adhesive etc. complete as per manufacturer's specification,conforming to test criteria specified in IS:4020-1998, Drawings and to the entire satisfaction of engineer-in-charge.	sqm	815.00	3617.00	897.00	3699.00
17.64	Providing & fixing factory made Solid PVC Chowkhat Door frame of the size 50mm x 47mm with a wall thickness of 5mm made out of extruded 5mm PVC foam sheet, mitre cut at 2 corners & joined with 2Nos of 150mm long brackets of 15 x 15mm M.S square tube. the two vertical doors profiles are to be reinforced with 19 x 19mm M.S square tube of 19 guage, the door framed shall be fixed to the wall using 65/100mm long M.S screws through the frame by using fasteners. a minimum of 4 nos of screws to be provided for each vertical member & minimum 2nos for horizontal member etc. as per manufacturer's specification,conforming to test criteria specified in IS:4020-1998, Drawings and to the entire satisfaction of engineer-in-charge.	rmt	203.00	476.00	223.00	496.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.65	Providing & fixing 30mm thick factory made Hollow PVC Profile PVC Flush door shutter consisting of panel of 20mm thickness, frame made out of M.S. tubes of size of 19mm x 19mm x 19 gauge inserted inside the hollow section of stiles, top and bottom rails and two 19mm x 19mm MS tubes inserted horizontally inside the hollow profile section using 5mm thick PVC sheet using screws. Hollow PVC profile shall be lipped with 10mm (5mm x 2) thick x 20mm width on stiles and rails using solvent cement. the inner panel shall be laminated with 5mm thick termite proof, water proof and fire retardant Prelam PVC sheet using solvent cement on both the sides of panel etc. complete as per manufacturer's specification, conforming to test criteria specified in IS:4020-1998, Drawings and to the entire satisfaction of engineer-in-charge.	sqm	532.00	3277.00	585.00	3330.00
17.66	Providing & fixing 32mm thick factory made Internal solid door shutter consisting of solid core particle board of 24mm thickness, lipped with 15mm (5mm x 3) thick x 32mm width on one stiles & top rails & 10mm (5mm x 2) thick x 32mm width on the other stiles & Bottom rails. The panel laminated with 4mm thick termite proof, water proof & fire resistant PVC sheet both side using rubber adhesive on flush door & solvent Cement adhesive on the PVC lipping etc. complete as per manufacturer's specification, conforming to test criteria specified in IS:4020-1998, Drawings and to the entire satisfaction of engineer-in-charge.	sqm	1137.00	3991.00	1251.00	4105.00
17.67	Providing and fixing 65mm wide and 2 to 3mm thick PVC cover on stair case railing in any shape and size fixed with adhesive compound in all respect as per drawings.	Mtr.	91.00	388.00	100.00	397.00
17.68	Providing & fixing 4" stainless steel handles ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	12.00	72.00	13.00	73.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.69	Providing & fixing 6" stainless steel handles ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	12.00	86.00	13.00	87.00
17.70	Providing & fixing 9" stainless steel handles ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	12.00	146.00	13.00	147.00
17.71	Providing & fixing 12" stainless steel handles ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	12.00	279.00	13.00	280.00
17.72	Providing & fixing 1'-3" stainless steel handles ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	12.00	457.00	13.00	458.00
17.73	Providing & fixing 1'-6" stainless steel handles ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	12.00	546.00	13.00	547.00
17.74	Providing & fixing 2' stainless steel handles ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	12.00	1568.00	13.00	1569.00
17.75	Providing & fixing 4" stainless steel tower bolts ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	15.00	164.00	17.00	166.00
17.76	Providing & fixing 6" stainless steel tower bolts ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	15.00	238.00	17.00	240.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.77	Providing & fixing 8" stainless steel tower bolts ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	15.00	312.00	17.00	314.00
17.78	Providing & fixing 12" stainless steel tower bolts ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	15.00	460.00	17.00	462.00
17.79	Providing & fixing 1'-6" stainless steel tower bolts ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	15.00	682.00	17.00	684.00
17.80	Providing & fixing 2' stainless steel tower bolts ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	15.00	904.00	17.00	906.00
17.81	Providing & fixing 2'-6" stainless steel tower bolts ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	15.00	1127.00	17.00	1129.00
17.82	Providing & fixing 125mm with Plate 175mm X 32 mm anodized aluminum Mat Finish handles ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	12.00	24.00	13.00	25.00
17.83	Providing & fixing 100mm with Plate 150mm X 32 mm anodized aluminum Mat Finish handles ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	12.00	64.00	13.00	65.00



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.84	Providing & fixing 75mm with Plate 125mm X 32 mm anodized aluminum Mat Finish handles ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	12.00	64.00	13.00	65.00
17.85	Providing & fixing 250 X 10 mm anodized aluminum Mat Finish tower bolts ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	15.00	73.00	17.00	75.00
17.86	Providing & fixing 200 X 10 mm anodized aluminum Mat Finish tower bolts ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	15.00	61.00	17.00	63.00
17.87	Providing & fixing 150 X 10 mm anodized aluminum Mat Finish tower bolts ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	15.00	52.00	17.00	54.00
17.88	Providing & fixing 100 X 10 mm anodized aluminum Mat Finish tower bolts ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.	No.	15.00	41.00	17.00	43.00
17.89	Providing & Fixing decorative high pressure laminated sheet 1mm SF thick with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality.	Sqm	598.00	1112.00	658.00	1172.00
17.90	Providing & Fixing decorative high pressure laminated sheet 1mm (1 Star) thick with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality.	Sqm	546.00	1242.00	601.00	1297.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.91	Providing & Fixing decorative high pressure laminated sheet 1mm (2 Star) thick with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality.	Sqm	546.00	1279.00	601.00	1334.00
17.92	Providing & Fixing decorative high pressure laminated sheet 1mm thick High Class Texture with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, ISI marked complete in all respect as per the directions of Engineer-in-charge.	Sqm	546.00	1372.00	601.00	1427.00
17.93	Providing & Fixing decorative laminated sheet 0.72mm thick and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality.	Sqm	546.00	828.00	601.00	883.00
17.94	Providing and fixing aluminum grill 6.3 mm including cost of necessary fittings i.e. screws,u Type Beading etc. complete	sqm	155.00	507.00	171.00	523.00
17.95	Providing and fixing aluminum grill 6.3 mm including cost of necessary fittings i.e. screws With Clip Ruber etc. Complete	kg	171.00	554.00	188.00	571.00
17.96	Providing and fixing aluminum Wire Mesh including cost of necessary fittings i.e. screws,u Type Beading etc. complete	kg	145.00	721.00	160.00	736.00
17.97	Providing & fixing ACP Sheets of various thickness High Class ISI marked complete in all respect as per the directions of Engineer-in-charge.					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(i)	6mm thick ACP Sheet	sqm	760.00	3115.00	836.00	3191.00
	(ii)	4mm thick ACP Sheet	sqm	727.00	2370.00	800.00	2443.00
	(iii)	3mm thick ACP Sheet	sqm	727.00	2085.00	800.00	2158.00
17.98	Providing & fixing Stainless steel ball bearing hinges of size 100x89x3mm ISI marked on door & window frames complete in all respect as per the directions of Engineer-in-charge.		No.	12.00	168.00	13.00	169.00
17.99	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers of approved quality including necessary screws etc. complete in all respect as per the directions of Engineer-in-charge.						
	i	40mm	No.	105.00	167.00	116.00	178.00
	ii	50 mm	No.	105.00	205.00	116.00	216.00
	iii	65 mm	No.	105.00	212.00	116.00	223.00
	iv	75 mm	No.	105.00	231.00	116.00	242.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.100	Design supply & installation of suspended Spider Glazing system designed to withstand the wind pressure as per IS 875 (Part-III). The Suspended System held with Spider Fittings of SS-316 Grade Steel of approved manufacturer with glass panel having 12 mm thick clear toughened glass held together with SS-316 Grade Stainless steel Spider.& bolt assembly with laminated glass fins 21 mm thick. The Glass fins and glass panel assembly shall be connected to Slab/beams by means of SS- 316 Grade stainless steel brackets & Anchor bolts and at the bottom using SS channel of 50x25x2mm using fastener & anchor bolts, non star bushes and separators to prevent bi-metallic contacts, all complete to perform as per specification and approved drawings. The complete system to be designed to accommodate thermal expansion & seismic movements etc. The joints between glass panels (6 to 8 mm) and gaps at the perimeter & in U channel of the assembly to be filled with non staining weather sealant, so as to make the entire system fully water proof & dust proof.	sqm	439.00	7118.00	483.00	7162.00
17.101	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & double acting hydraulic floor spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge	sqm	1082.00	4094.00	1190.00	4202.00
17.102	Designing, fabricating, testing, installing and fixing in position Curtain Wall with aluminum Composite Panel Cladding, with open grooves for linear as well as curvilinear portions of the building , for all heights and all levels etc. including:	sqm	1173.00	3111.00	1290.00	3228.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.103	Providing, assembling and supplying vision glass panels (IGUs) comprising of hermetically-sealed 6-12- 6 mm insulated glass (double glazed) vision panel units of size and shape as required and specified, comprising of an outer heat strengthened float glass 6mm thick, of approved colour and shade with reflective soft coating on surface # 2 of approved colour and shade, an inner Heat strengthened clear float glass 6mm thick, spacer tube 12mm wide, dessicants, including primary seal and secondary seal (structural silicone sealant) etc. all complete for the required performances, as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer-in-Charge. The IGUs shall be assembled in the factory/ workshop of the glass processor.	sqm	507.00	2625.00	558.00	2676.00
17.104	Extra for openable side / top hung vision glass panels (IGUs) including providing and supplying at site all accessories and hardwares for the openable panels as specified and of the approved make such as heavy duty stainless steel friction hinges, min 4 -point cremone locking sets with stainless steel plates, handles, buffers etc. including necessary tainless steel screws/ fasteners, nuts, bolts, washers etc. all complete as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer- in-Charge.	sqm	939.00	2939.00	1033.00	3033.00
17.105	Providing and fixing aluminum tubular handle bar 32 mm outer dia, 3.0 mm thick & 2100 mm long with SS screws etc Powder coated minimum thickness 50 micron aluminum tubular handle bar .complete as per direction of Engineer-in-Charge.	No.	12.00	558.00	13.00	559.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
17.106	Providing and supplying aluminum extruded tubular and other aluminum sections as per the architectural drawings and approved shopdraw ings , the aluminum quality as per grade 6063 T5 or T6 as per BS 1474,including super durable powder coating of 60-80 microns conforming to AAMA 2604 of required colour and shade as approved by the Engineer-in-Charge. ( The item includes cost of material such as cleats, sleeves, screws etc. necessary for fabrication of extruded aluminum frame work. Nothing extra shall be paid on this account). The weight of aluminum extruded section shall be taken for purpose of payment.	sqm	The labour for this item has been including in the complete item under 17.107	355.00	The labour for this item has been including in the complete item under 17.107	355.00
17.107	Designing, fabricating, testing, protection, installing and fixing in position semi (grid) unitized system of structural glazing (with open joints) for linear as well as curvilinear portions of the building for all heights and all levels, including:	sqm	886.00	2093.00	975.00	2182.00
	(a) Structural analysis & design and preparation of shop drawings for the specified design loads conforming to IS 875 part III (the system must passed the proof test at 1.5 times design wind pressure without any failure), including functional design of the aluminum sections for fixing glazing panels of various thicknesses, aluminum cleats, sleeves and splice plates etc. gaskets, screws, toggles, nuts, bolts, clamps etc., structural and weather silicone sealants, flashings, fire stop (barrier)-cum-smoke seals, microwave cured EPDM gaskets for water tightness, pressure equalisation & drainage and protection against fire hazard including					
	(b) Fabricating and supplying serrated M.S. hot dip galvanised / aluminum alloy of 6005 T5 brackets of required sizes, sections and profiles etc. to accommodate 3 Dimensional movement for achieving perfect verticality and fixing structural glazing system rigidly to the RCC/ masonry/structural steel framework of building structure using stainless steel anchor fasteners/ bolts, nylon seperator to prevent bimetallic contacts with nuts and washers etc. of stainless steel grade 316, of the required capacity and in required numbers.					
	(c) Providing and filling, two part pump filled, structural silicone sealant and one part weather silicone sealant compatible with the structural silicone sealant of required bite size in a clean and controlled factory / work shop environment, including double sided spacer tape, setting blocks and backer rod, all of approved grade, brand and manufacture, as per the approved sealant design, within and all around the perimeter for holding glass.					
	(d) Providing and fixing in position flashings of solid aluminum sheet 1 mm thick and of sizes, shapes and profiles, as required as per the site conditions, to seal the gap between the building structure and all its interfaces with curtain glazing to make it watertight.					

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
	<p>(e) Making provision for drainage of moisture/ water that enters the curtain glazing system to make it watertight, by incorporating principles of pressure equalization, providing suitable gutter profiles at bottom (if required), making necessary holes of required sizes and of required numbers etc. complete. This item includes cost of all inputs of designing, labour for fabricating and installation of aluminum grid, installation of glazed units, T&amp;P, scaffolding and other incidental charges including wastages etc., enabling temporary structures and services, cranes or cradles etc. as described above and as specified. The item includes the cost of getting all the structural and functional design including shop drawings checked by a structural designer, dully approved by Engineer-in-charge. The item also includes the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working structural glazing as specified, cleaning and protection till the handing over of the building for occupation. In the end, the Contractor shall provide a water tight structural glazing having all the performance characteristics etc. all complete as required, as per the Architectural drawings, as per item description, as specified, as per the aproved shop drawings and as directed by the engineering-Charge.</p>					
	<p>Note:- 1. The cost of providing extruded aluminum frames, shadow boxes, extruded aluminum section capping for fixing in the grooves of the curtain glazing and vermin proof stainless steel wire mesh shall be paid for separately under relevant items under this sub- head. However, for the purpose of payment, only the actual area of structural glazing (including width of grooves) on the external face shall be measured in sqm. up to two decimal places.</p>					
	<p>Note:-2. The following performance test are to be conducted on structural glazing system if area of structural glazing exceeds 2500 Sqm from the certified laboratories accredited by NABL(National Accreditation Board for Testing and Calibration Laboratories), Department of Science &amp; echnologies, India. Cost of testing is payable separately. The NIT approving authority will decide the necessity of testing on the basis of cost of the work, cost of the test and importance of the work. Performance Testing of Structural glazing system Tests to be conducted in the NABL accredited lab or by any other accreditation body which operates in accordance with ISO/ IEC 17011 and accredits labs as per ISO/ IEC 17025.</p>					
	<p>1. Performance Laboratory Test for Air Leakage Test (-50pa to - 300pa) &amp; (+50pa to +300pa) as per ASTM E-283-04 testing method for a range of testing limit 1 to 200 mVhr  2. Static Water Penetration Test. (50pa to 1500pa) as per ASTME- 331-09 testing method for a range up to 2000 ml.  3. Dynamic Water Penetration (50pa to 1500pa) as per AAMA 501.01- 05 testing method for a range upto 2000 ml  4. Structural Performance Deflection and deformation by static air pressure test (1.5 times design wind pressure without any failure) as per ASTME-330- 10 testing method for a range upto 50 mm  5. Seismic Movement Test (upto 30 mm) as per AMA 501.4-09 testing method for Qualitative test, Tests to be conducted on site.  6. Onsite Test for Water Leakage for a pressure range 50 kpa to 240 kpa (35psi) upto 2000 ml</p>					
17.108	Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded)					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	i	Rectangular or square	Sqm	1240.00	1707.00	1364.00	1831.00
	ii	Circular	Sqm	1550.00	2017.00	1705.00	2172.00
17.109	Providing & fixing of knobset made of stainless steel body, having provision of latch and bolt, 3 nos key set, inside push lock model ETL-101A, Finish SS/PB/AB make-ENOX or any equivalent (Lock should be releasable from out side in case of emergency) as per requirement for unisex toilet for PwD complete as per specifications, Harmonised guidelines for PwD and as desired by engineer-in-charge.		Each	142.00	1087.00	156.00	1101.00



## CHAPTER NO. 18

### STEEL AND IRON WORK

**Notes :-**

- (i) The rates in this chapter are for both riveted as well as welded work.
- (ii) The labour and through rates for item Nos. 18.1,18.2,18.3,18.6, 18.7, 18.17, 18.18 and 18.19 are for a height up to 4 m above plinth.
- (iii) The cost of all rivets, bolts and nuts is included in the through rates.
- (iv) The labour rates given in this chapter includes the cost of tools & plants, welding rods and scaffolding (including labour and material) where ever required. The labour rates also cover the electrical and gas charges, where welding work is done.
- (v) The rates given in item No. 18.17 are also applicable for the item of "tie rod" provided in the well steining. These rates also include the cost of flat steel bond ring, threading and welding, whenever done, complete in all respects. Only bottle nuts are payable as per item No. 18.16.
- (vi) Rates for steel boundary gates shall be the same as for the steel roof trusses.
- (vii) Unless otherwise stated, the labour rates include handling of materials within 100 m.
- (viii) The centre mullion in any door and window frame will be counted and paid 1.5 time of outer section of its door for item No. 18.24, 18.50 & 18.51.

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
18.1	Steel work fixed independently without connecting plates including cutting hoisting and fixing in position					
	(a) R S Joists	qtl	1218.00	6496.00	1340.00	6618.00
	(b) FLATS	qtl	1066.00	6066.00	1173.00	6173.00
	(c) Tees angles & channels	qtl	1066.00	5930.00	1173.00	6037.00
18.2	Steel work in hip & jack rafters common rafters purlins etc. with angle cleats and other connecting plates	qtl	1376.00	6240.00	1514.00	6378.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
18.3	Structural steel work in angles, tees, flats, riveted, including cutting, fixing all gusset plates, bolts, nuts, rivets etc. with hoisting and erecting in position.						
	(a)	For roof truss, well curbs, plate girders etc. of any span for building for bridges upto 15M span	qtl	3266.00	8130.00	3593.00	8457.00
	(b)	For plates and trussed girders etc. for bridge of span more than 15 metres but upto 30 mts. Span including cost of all machinery i.e hydra crane etc	qtl	3967.00	8831.00	4364.00	9228.00
18.4	Wrought iron & Mild steel ladders, framed grills, gratings etc. with ends of bars riveted or molded forged framed window guards, barred iron doors stair case iron railing etc. including cost of bolts and nuts, screws, welding rod complete fixing in position		qtl	3868.00	9140.00	4255.00	9527.00
18.5	Iron grated doors, including pintle hinges & arrangements.		qtl	4116.00	8980.00	4528.00	9392.00
18.6	Structural steel work in girders or Stanchions built up of one joist / or channel section. Riveted including cutting and fixing old gusset plates bolts, Nuts, Rivets etc. complete with flange plates, head, sole plates, angle connections etc. with hoisting & erecting in position		qtl	1366.00	6366.00	1503.00	6503.00
18.7	Structural steel work in compound girders or Stanchions built up from two or more R.S. joists or channel section or plates & angles etc. including cutting and fixing all lattice bars, stiffeners, gusset plates, bolts, nuts, rivets, welding rod, etc. complete with flange plates, heads, sole plates, angle connections, etc. with hoisting and erecting in position		qtl	2404.00	7404.00	2644.00	7644.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
18.8	Providing and fixing G.I. Sheet 0.80mm thick garage doors, with 40mm x 40mm x6mm angle iron frame with diagonal braces, 3.15mm thick gusset plates at the top and 25mm dia meter pulleys and T-iron 50mm x 50mm x 6mm guides at bottom including locking arrangement with handles and pintles, etc. complete in all respect.		sqm	1354.00	3077.00	1489.00	3212.00
18.9	Providing and fixing G.I. Sheet 0.80mm thick sliding shutters with 40mmx40mmx6mm angle iron frame with diagonal braces 3.15mm gusset plates at the junctions, hooks at top and 25mm dia pulleys at bottom and 40mmx40mmx25mm dia pulleys at bottom and 40mmx40mmx6mm angle iron top and bottom guides including locking arrangement with handles etc. complete		sqm	1354.00	3432.00	1489.00	3567.00
18.10	Providing and fixing 14 gauge MS sheet garage doors with 40mmx40mmx6mm angle iron frame with diagonal braces 3.15mm gusset plates including locking arrangement with handles etc. complete in respects		sqm	1813.00	3900.00	1994.00	4081.00
18.11	(a)	Supplying and fixing rolling shutters, of approved make, made of 80mmx1.25mm, M.S. Laths, interlocked together through their entire length and jointed together, at the end, by end locks, mounted on specially designed pipe shaft, with brackets, side guides, 27.5cm long wire spring grade No. 2 and arrangement for inside and outside locking with push and pull operation complete, including top cover 0.80mm thick (payment is to be made for the exact size of opening where rolling shutter is to be fixed)	sqm	162.00	2797.00	178.00	2813.00
	(b)	Providing and fixing ball bearing for push and pull type rolling shutters, from 9.20 to 12 sqm area	each	-	1257.00	-	1257.00
	(c)	Extra for providing mechanical device, chain and crank operation, for operating rolling shutter, exceeding 11.20 sqm in area, of the rolling shutter	each	-	907.00	-	907.00
Note :- Payment to be made, for area of clear opening.							

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
18.12	Providing and Fixing in position collapsible steel shutters, with vertical channels 20mmx10mmx2mm and braced with flat iron diagonals 20mmx5mm size with top and bottom rails of T iron 40mmx40mmx6mm with 38mm dia steel pulleys, complete with bolts, nuts, locking arrangements, stoppers, handles, etc. complete in all respects.	sqm	148.00	1703.00	163.00	1718.00
18.13	Supplying and fixing fan clamps with 50mmx6mm flat iron 50cm long and U-hooks of 16mm diameter M.S. Bars, of approved size with nuts including threading etc. complete in all respects.	each	141.00	248.00	155.00	262.00
18.14	Providing and fixing M.S. round or square bars at required spacing in wooden frames of windows and clearstory windows.	kg	24.00	75.00	26.00	77.00
18.15	Nuts & Bolts of all sizes and length required	kg		78.00		78.00
18.16	Mild steel requirement for RCC work where not including the complete rate of RCC including bending, binding and placing in position complete in all respects.					
	(i) Up to 20mm dia bars	qtl	1015.00	6426.00	1117.00	6528.00
	(ii) Above 20mm dia bars	qtl	921.00	6331.00	1013.00	6423.00
18.17	Cold twisted deformed (Ribbed/ Tor steel) Bars (Fe 415 grade as per IS 1786-2008) , for R.C.C works, where not including in the complete rate of RCC including binding & bending and placing in position complete	qtl	874.00	6284.00	961.00	6371.00
18.18	Cold twisted deformed (Ribbed/ Tor steel) Bars (Fe 500 grade as per IS 1786-2008) , for R.C.C works, where not including in the complete rate of RCC including bending and binding placing in position complete	qtl	874.00	6497.00	961.00	6584.00
18.19	Cold twisted deformed (Ribbed/ Tor steel) Bars (Fe 550 grade as per IS 1786-2008) , for R.C.C works, where not including in the complete rate of RCC including binding, bending and placing in position complete	qtl	874.00	6568.00	961.00	6655.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
18.20	Supplying openable steel windows, of standard rolled steel Z sections, joints mitered and Electrically flash-welded, with iron fittings including necessary iron handles, Peg-stay catchers bolts, iron plugs and pressed steel projected hinges and glazing clips, complete (Excluding glazing ) and finished with two coats of ready mixed paint red lead non setting primer					
	(a) Upto 1 sqm area	kg	43.00	110.00	47.00	114.00
	(b) Above one sqm Area	kg	43.00	108.00	47.00	112.00
18.21	Supplying fixed steel windows, of standard rolled steel Z-section joints mitered and electrically flash welded including iron lugs and glazing clips complete (including glazing and Finished with two coats of ready mixed paints, red lead, non setting primer	kg	40.00	105.00	44.00	109.00
18.22	Fixing steel windows in walls with lugs, embedded in 15cmx12cmx7.5cm cement concrete blocks of 1:2:4 excluding of glass panes and cost of cement concrete for lugs	sqm	211.00	-	232.00	-
18.23	Fixing steel window in walls with lugs, embedded in 15cmx12cmx7.5cm of cement concrete block of 1:2:4 mix including cost of cement concrete for lugs.	sqm	211.00	240.00	232.00	261.00
18.24	Supplying Pressed steel sheet frames (chowkhat) consisting of 18gauge (1.25 mm thick steel sheet of the specified section, including iron lugs (hold fast) iron hinges conforming to PWD specification including bolts for fixing stops lock notch provision for receiving tower bolts and finished with 1 primer coat approved quality, fixed in position excluding the cost of cement concrete 1:3:6 for fillings in the frame and cement concrete 1:2:4 for lugs complete					
	(a) Doors and windows frame of size 118mm x 60mm with 40 mm wide single rebate weighing 3.43 kg per meter.	m	214.00	472.00	235.00	493.00
	(b) Doors and windows frame of size 113mm x 60mm with 35 mm wide single rebate weighing 3.38 kg per meter.	m	214.00	469.00	235.00	490.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(c)	Doors and windows frame of size 151mm x 60mm with 35 mm wide double rebate weighing 3.95 kg per meter.	m	214.00	531.00	235.00	552.00
	(d)	Doors and windows frame of size 161mm x 60mm with 40 mm wide double rebate weighing 4.05 kg per meter.	m	215.00	540.00	237.00	562.00
	(e)	Cup board frame of size 75mmx45mm with 25mm wide single rebate	m	218.00	369.00	240.00	391.00
18.25	Supplying and fixing glass panes with glazing clips and special metal sash putty of approved make.						
	(a)	Glass panes 3mm or 8.44 kg per sqm upto 0.4 sqm area	sqm	18.00	512.00	20.00	514.00
	(b)	Glass panes 4mm or 10.75 kg / sqm exceeding 0.4 sqm of area	sqm	18.00	598.00	20.00	600.00
18.26	Extra for providing & fixing Steel beading of approved shape steel tube beading size 12mm X 12mm, 18 gauge of approved shape and section with screw for fixing of glass panes instead of glazing clips and metal slash putty in steel doors , windows & Ventilators complete in all respect		m	27.00	56.00	30.00	59.00
18.27	Wire gauge fixed in steel windows, of standard rolled steel section with 3mm thick flat iron cover moulding of 12.5 mm width, fixed with machine screws, complete in all respects.		sqm	372.00	755.00	409.00	792.00
18.28	Welding by gas or by electric plant, including carriage to and from workshop etc.		Cm		3.00		3.00
18.29	Providing and fixing M.S. angle iron 40x40x6mm chowkhat including iron hold fasts butt hinges fixed in position, finished with red lead non setting primer complete in all respect						
	(a)	For single rebate.	kg	31.00	89.00	34.00	92.00
	(b)	For double rebate	kg	31.00	97.00	34.00	100.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
18.30	Providing and fixing stair case railing made out of M.S. Square bars 20x20mm as vertical cost 0.70 metre high fixed with M.S. Base plate of 40mmx40mmx6mm and flat iron 40mmx6mm as hand rail complete in all respects.	m	262.00	908.00	288.00	934.00
18.31	Providing & Fixing of 10 gauge welded mesh of 25mm x 25mm size fixed on steel glazing with MS flat 20mm x 6mm bedding complete in all respect including painting two coats with Synthetic Enamel Paint and Priming Coat	sqm	146.00	655.00	161.00	670.00
18.32	Providing & Fixing MS Flat 50mm x 6mm, 150mm long with 10mm dia MS bar 175mm long hooks in RCC slab for fixing false ceiling	each	31.00	61.00	34.00	64.00
18.33	Providing & Fixing door floor spring double action of ISI specification for aluminum door/ steel doors	each	592.00	2990.00	651.00	3049.00
18.34	Providing & Fixing of 12mm MS Rod in cement concrete block of size 675mm x 150mm x 150mm including cost of block for cycle stand as per design required completed in all respects.	each	59.00	230.00	65.00	236.00
18.35	Extra for work done in each subsequent storey above the first storey for item No. 18.17, 18.18, 18.19 and 18.34	qtl	13.00	13.00	14.00	14.00
18.36	Extra for Work done in each subsequent storey above the first storey for Item No. 18.1 and 18.2	qtl	20.00	20.00	22.00	22.00
18.37	Extra for work done in each subsequent storey above the first storey for Item No.18.3, 18.6 and 18.7.	qtl	26.00	26.00	29.00	29.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
18.38	Providing & fixing of Box type steel windows, made of various ERW section outer 60mm x 25mm, central mullion 60mm x 25mm, for shutter 50mm x 20mm having thickness of 1.25mm (18 gauge), shash bar MS Tee 25mm x 3mm where required joints mitered and electrically flash-welded, with iron fittings including necessary iron handles, hinged cleat, tower bolts, iron hold fast and pintle hinges complete (excluding glazing and wire gauge) and finished with ready mixed paint red lead non setting primer complete as per specification, Drawings and to the entire satisfaction of engineer-in-charge. (Note:- Glazing, wire gauge and grill will be paid as per respective items)	kg	38.00	128.00	42.00	132.00
18.39	Providing & fixing 16 gauge stainless steel pipe railing of grade 304 duly fixed on steps with the help of bolts grouted on steps with hand rail and newel post of 50mm dia Stainless steel pipe, Balusters of 40mm dia Stainless steel pipe and guard 3 Nos of 15mm dia Stainless Steel pipe complete in all respect	Kg	62.00	481.00	68.00	487.00
18.40	Providing & fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections, joints mitered and welded with 15x3mm lugs, 10cm long embedded in cement concrete blocks 15x10x10 cm of 1:3:6 or with wooden plugs and screws or with dash fastener or rawl plugs and screws or with fixing clips or with bolts and nuts as required including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.	kg	35.00	108.00	39.00	112.00
18.41	Re-barring ( Chemical Anchor) of 8mm dia bar, hole size 12mm, depth 100mm with 10ml injectable mortar epoxy adhesive (Hybrid urethane methacrylate adhesive) re-barring chemical complete in all respect.	each	89.00	183.00	98.00	192.00
18.42	Re-barring ( Chemical Anchor) of 10mm dia bar, hole size 14mm, depth 100mm with 10 ml injectable mortar epoxy adhesive (Hybrid urethane methacrylate adhesive) re-barring chemical complete in all respect.	each	86.00	185.00	95.00	194.00



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
18.43	Re-barring (Chemical Anchor) of 12mm dia bar, hole size 16mm, depth 120mm with 14 ml injectable mortar epoxy adhesive (Hybrid urethane methacrylate adhesive) rebaring chemical complete in all respect.	each	173.00	303.00	190.00	320.00
18.44	Re-barring (Chemical Anchor) per hole for 16mm dia bar, hole size 20mm, depth 160mm with injectable mortar epoxy adhesive (Hybrid urethane methacrylate adhesive) rebaring chemical 24 ML	each	230.00	436.00	253.00	459.00
18.45	Re-barring (Chemical Anchor) of 20mm dia bar, hole size 25mm, depth 200mm with 47 ml injectable mortar epoxy adhesive (Hybrid urethane methacrylate adhesive) rebaring chemical complete in all respect.	each	251.00	633.00	276.00	658.00
18.46	Re-barring (Chemical anchor) of 25mm dia bar, hole size 32mm, depth 250mm with 100 ml injectable mortar epoxy adhesive (Hybrid urethane methacrylate adhesive) rebaring chemical complete in all respect.	each	251.00	992.00	276.00	1017.00
18.47	Providing & fixing 16 gauge stainless steel pipe gate of grade 304 duly fixed at site with the help of M.S pivot & hinges grouted in cement concrete complete in all respect as per any kind of drawing & design	kg	99.00	406.00	109.00	416.00
18.48	Providing Polyester Powder coating 50 micron any coloured specified to alumnum section of various sizes including carriage of material from market to workshop & workshop to site of work.	kg	68.00	68.00	75.00	75.00
18.49	Providing Polyester Powder coating 60 to 70 micron any coloured specified to M.S Grill section of various sizes including carriage of material from market to workshop & workshop to site of work.	kg	26.00	26.00	29.00	29.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
18.50	Supplying and fixing of GI sheet frames (Chowkat) consisting of 18 gauge (1.25mm) thick steel sheet of the specified section (standard design latest), including iron lugs (hold fasts) iron hinges conforming to PWD specifications including bolts for fixing steps, lock notch provision for receiving tower bolts and finished, fixed in position including the cost of cement concrete 1:3:6 for filling in the frame and cement concrete 1:2:4 for lugs complete to the satisfaction of Engineer-in-charge.					
(a)	Doors and windows frame of size 118mm x 60mm with 40 mm wide single rebate weighing 3.43 kg per meter.	m	208.00	539.00	229.00	560.00
(b)	Door and window frame of size 113mmx60mmx with 35mm wide single rebate	m	208.00	534.00	229.00	555.00
(c)	Doors and windows frame of size 151mm x 60mm with 35 mm wide double rebate weighing 3.95 kg per meter.	m	208.00	606.00	229.00	627.00
(d)	Doors and windows frame of size 161mm x 60mm with 40 mm wide double rebate weighing 4.05 kg per meter.	m	208.00	617.00	229.00	638.00
18.51	Supplying and fixing of Japani sheet frames (Chowkat) consisting of 18 gauge (1.25mm) thick steel sheet of the specified section (standard design latest), including iron lugs (hold fasts) iron hinges conforming to PWD specifications including bolts for fixing steps, lock notch provision for receiving tower bolts and finished, fixed in position including the cost of cement concrete 1:3:6 for filling in the frame and cement concrete 1:2:4 for lugs complete to the satisfaction of Engineer-in-charge.					
(a)	Doors and windows frame of size 118mm x 60mm with 40 mm wide single rebate weighing 3.43 kg per meter.	m	210.00	626.00	231.00	647.00
(b)	Door and window frame of size 113mmx60mmx with 35mm wide single rebate	m	210.00	620.00	231.00	641.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(c)	Doors and windows frame of size 151mm x 60mm with 35 mm wide double rebate weighing 3.95 kg per meter.	m	210.00	762.00	231.00	783.00
(d)	Doors and windows frame of size 161mm x 60mm with 40 mm wide double rebate weighing 4.05 kg per meter.	m	210.00	773.00	231.00	794.00
18.52	Steel work in built up tubular (round, square or rectangular hollow tubes etc. ISI Marked) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete having span:-					
(a)	Up to 15.00 Mtr. Span	qtl	3410.00	10327.00	3751.00	10668.00
(b)	Above 15.00 mt. Span including the cost for machinery i.e. Hydra cranes etc. for hoisting in position.	qtl	4122.00	11211.00	4534.00	11623.00
18.53	Steel work in built up tubular pipes (round, square or rectangular hollow tubes etc. ISI Marked) for flat shed (ie.Where no truss work is involved) including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.	qtl	2573.00	9490.00	2830.00	9747.00
18.54	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanised M.S. screws including drilling holes in masonry work / CC/ R.C.C. and making good etc.complete.					
(a)	25 mm long	each	5.00	15.00	6.00	16.00
(b)	32 mm long	each	5.00	16.00	6.00	17.00
(c)	40 mm long	each	5.00	18.00	6.00	19.00
(d)	50 mm long	each	5.00	21.00	6.00	22.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
18.55	Providing and fixing Stainless Steel pipe and fitting of grade A ISI-304 as per IS standard 3448 complete with press type fitting (fitting shall be paid for separately) i/c fixing of the pipe with clamps at 1.00 m spacing including cutting and making good the walls including testing of joints complete as per direction of Engineer-in- charge. (The pipe length inserted in the fitting shall not be measured for payment)					
	(a) 15.88 mm outer dia pipe	m	73.00	230.00	80.00	237.00
	(b) 22.22 mm outer dia Pipe	mt	73.00	373.00	80.00	380.00
	(c) 28.58 mm outer dia Pipe	mt	73.00	407.00	80.00	414.00
	(d) 34 mm outer dia Pipe	mt	73.00	522.00	80.00	529.00
	(e) 42.70 mm outer dia Pipe	mt	73.00	549.00	80.00	556.30
18.56	Providing and fixing Stainless Steel specials & fitting ( such as Elbow, Tee, Reducers, Sockets etc) of grade A ISI-304 as per IS standard 3448 complete for press type fitting (fitting shall be paid for separately) i/c fixing of the fittings with pipe & making good the walls including testing of joints complete as per direction of Engineer-in-charge.					
	10 % of cost for all above mentioned items at Sr. No. 18.55 pipes ranges be increased for labour as well as through rates as required respectively.					
18.57	Providing and Installation of Safety signage as per guideline for person with disability made of retro reflective sheeting as per colour specified and writing matter will be of same material in white fixed / pasted over 4mm thick aluminum composite sheet, including cost of writing matter with braille also firmly fixed on wall with nylon fastener, brass screw and washer complete as per specification and as desired by engineer in charge.	Sqm	1113.00	8509.00	1224.00	8620.00
18.58	Providing Polyester Powder coating 50 micron any coloured specified to aluminum fittings various sizes including carriage of material from market to workshop & workshop to site of work..					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	a	Tower Bolt 100mm to 300 mm Long	each	17.00	17.00	19.00	19.00
	b	Sliding Bolt all Sizes	each	25.00	25.00	28.00	28.00
	c	Handles all Sizes	each	22.00	22.00	24.00	24.00
	d	Door Stopper	each	13.00	13.00	14.00	14.00



## CHAPTER NO. 19

### LINING

#### Notes :-

- (i) Labour rates for lining items include handling of materials within 100 ms.
- (ii) The labour rates and through rates include cost of water, curing, protecting in bad weather conditions .
- (iii) The rates for item Nos. 19.1 to 19.6 include the cost of fine dressing to exact level, watering and preparing sub-grade. All basket earth work to be paid extra at the rates for lip cutting.
- (iv) For Item No. 19.7, 19.9, 19.20, 19.21, 19.22, 19.23, 19.24, 19.25, 19.26, 19.27, the labour & through rates for lining of side slopes from 0 to 3.5m height be reduced by 5%, if the depth of the channel is upto 1.5m.

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
19.1		Dressing bed and preparation of sub grade for lining.	sqm	10.77	10.77	11.85	11.85
19.2		Dressing side slopes and preparation of sub grade for lining.	sqm	17.55	17.55	19.31	19.31
19.3		Dressing bed and preparation of sub grade for lining in earth work with admixture of shingle or kankar :-					
	(a)	Up to 40 per cent	sqm	16.93	16.92	18.62	18.61
	(b)	Above 40 per cent	sqm	21.54	21.54	23.69	23.69
19.4		Dressing side slopes and preparation of sub grade for lining in earth work with admixture of shingle or kankar :-					
	(a)	Up to 40 per cent	sqm	21.54	21.54	23.69	23.69
	(b)	Above 40 per cent	sqm	27.88	27.88	30.67	30.67
19.5		Dressing bed and preparation of sub-grade for lining in mixed gravel and conglomerate reaches.	sqm	31.60	31.60	34.76	34.76

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
19.6		Dressing side slopes and preparation of sub grade for lining in mixed gravel and conglomerate reaches.	sqm	36.45	36.46	40.10	40.11
19.7		Double layer tile lining for irrigation channels consisting of :-					
	(i)	10mm thick cement mortar 1:5 on sub-grade.					
	(ii)	First layer of 5.08 cm. thick tiles 30.48 x 15.24 cm laid in 1:5 cement mortar as mentioned above.					
	(iii)	Sand-wiched plaster 1:3 cement sand mortar 16mm thick.					
	(iv)	Second layer of tile 5.08 cm thick laid in 1:3 cement sand mortar with 6mm thick layer of mortar over sand-wiched					
		The above gives total thickness of lining 13.36 cm					
	(I)	In bed	sqm	165.95	596.50	182.55	613.10
	(II)	On side slopes:-					
	(a)	Upto 3.5 ms height above bed level.	sqm	202.03	632.58	222.23	652.78
	(b)	Above 3.5 ms but upto 5.5 ms height	sqm	208.75	639.30	229.63	660.18
	(c)	Above 5.5 ms but upto 7.5 ms height	sqm	212.11	642.66	233.32	663.87
Note :-	The height is to be measured vertically.						
19.8		Single layer tile lining in bed only consisting of :-					
	(i)	10mm thick cement mortar 1:5 on sub-grade					



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(ii)	Single layer of 5.08 cm thick tiles 30.48x15.24x5.08cm. laid in 1:5 cement sand mortar mentioned above.					
	(iii)	20mm thick cement plaster 1:3 properly rendered and finished.					
			sqm	130.11	393.49	143.12	406.50
19.9		Cement concrete lining 15cm. thick or less for irrigation channels, using cement concrete 1:3:6 :-					
	(a)	hand mixed concrete lining in bed.	cum	1180.75	3436.99	1298.83	3555.07
	(b)	hand mixed concrete lining on side slopes for vertical height up to 3.5m.	cum	1301.55	3557.79	1431.71	3687.95
	(c)	hand mixed concrete lining on side slopes for vertical height above 3.5m	cum	1461.01	3717.25	1607.11	3863.35
	(d)	hand mixed concrete lining on side slopes for vertical height above 5.5m	cum	1620.46	3876.70	1782.51	4038.75
19.10		Excavating conglomerate for drains and bed sleepers under the lining.	cum	883.75	883.75	972.13	972.13
19.11		Making dry brick drains behind lining 7.5cm brick all-round.	m	28.22	28.21	31.04	31.03
19.12		Putting 1:3 (Cement:water) cement slurry with cement @ 2.25 kg per sqm on prepared bed and side slopes before laying concrete on bed and side slopes	sqm	6.39	21.06	7.03	21.70
19.13		Extra allowance for providing templates in curved portion of lining.	sqm of curved surface	1.05	12.49	1.16	12.60
19.14		Extra allowance for form work in concrete lining :-					
	(a)	In bed	cum	128.18	366.15	141.00	378.97
	(b)	On side slopes.	cum	153.81	391.79	169.19	407.17

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
19.15		Extra allowance for scaffolding in tile, brick and concrete lining for side slopes only.	sqm	0.96	11.22	1.06	11.32
Note :-		The rates for item No. 19.15 are payable on area of side slopes only.					
19.16		Filling expansion joints with special impervious hot pour 12.5mm wide.	Per m per cm depth	0.05	1.90	0.06	1.91
19.17		Bending and fixing iron rungs on lined slopes as per IS code:: 3873-1993	each	64.10	499.78	70.51	506.19
19.18		<b>Cement pointing 1:2</b> on tile lining.					
	(a)	In bed	sqm	48.43	59.68	53.27	64.52
	(b)	On side slopes.	sqm	53.93	65.18	59.32	70.57
Note :-		The work of item No. 19.18 is to be done and paid for only when specially permitted by the Superintending Engineer.					
19.19		Earth work for lip cutting for lining of irrigation channels inclusive of all allowances, lead and dressing :-					
	(a)	0 to 1.5 m depth	cum	151.12	151.12	166.23	166.23
	(b)	depth exceeding 1.5 ms but upto 3.0 ms.	cum	158.37	158.37	174.21	174.21
	(c)	depth exceeding 3.0 ms but upto 4.5 ms.	cum	172.89	172.89	190.18	190.18
	(d)	depth exceeding 4.5 ms but upto 6.0 ms.	cum	194.66	194.66	214.13	214.13
	(e)	depth exceeding 6.0 ms but upto 7.5 ms.	cum	216.44	216.44	238.08	238.08

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
Note :-	(i)	The height in item No. 19.19 is to be measured vertically.					
	(ii)	The rates for lip cutting are payable for the entire depth including the					
19.20 (i)		Single layer brick lining for irrigation channels (Distributaries and minors) or section for all depths consisting of :-					
	(a)	First layer 12.5mm thick cement plaster 1:5 on sub grade and finished.					
	(b)	Second layer of 10mm thick cement plaster 1:3 properly rendered and finished.					
	(c)	75mm thick bricks laid in 1:3 cement sand mortar over second layer.	sqm	273.98	687.46	301.38	714.86
19.20 (ii)		In side slopes for all sections Single layer brick lining for irrigation channels (Distributaries and minors) or section for all depths consisting of :-					
	(a)	First layer 12.5mm thick cement plaster 1:5 on sub grade and finished.					
	(b)	Second layer of 10mm thick cement plaster 1:3 properly rendered and finished.					
	(c)	75mm thick bricks laid in 1:3 cement sand mortar over second layer.	sqm	219.19	632.65	241.11	654.57
		<b>In bed for Trapezoidal Section Only</b>					
19.21	(a)	Brick lining 7.5cm thick in 1:3 cement sand mortar over low density polyethylene over dressed sub-grade with 12.5 mm thick sand cushion in curved bed portion only including laying, trenching and jointing LDPE.	sqm	212.28	565.07	233.51	586.30

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(b)	Brick lining 7.5cm thick in 1:3 cement sand mortar over 12.5 mm thick base plaster 1:6 over dressed sub-grade including laying, trenching and jointing of low density polyethylene.					
	(i)	On Side Slopes	sqm	274.32	664.80	301.75	692.23
	(ii)	In Bed (for Trapezoidal Section Only)	sqm	219.46	609.93	241.41	631.88
19.22		Cement concrete lining 15cm. thick or less for irrigation channels, using cement concrete 1:2:4 (M-15)					
	(a)	Hand mixed concrete lining in bed.	cum	1180.75	4081.67	1298.83	4199.75
	(b)	Hand mixed concrete lining on side slopes for vertical height upto 3.5 m.	cum	1301.55	4202.48	1431.71	4332.64
	(c)	Hand mixed concrete lining on side slopes for vertical height above 3.50 m but upto 5.50 m	cum	1461.01	4361.93	1607.11	4508.03
	(d)	Hand mixed concrete lining on side slope for vertical height above 5.5 m but upto 7.50 m	cum	1620.46	4521.38	1782.51	4683.43
19.23		Cement concrete lining 15cm thick or less for irrigation channels, using cement concrete 1:2:4 (M-15)					
	(a)	Machine mixed concrete lining in bed.	cum	1286.26	4187.18	1414.89	4315.81
	(b)	Machine mixed concrete lining on side slopes for vertical height upto 3.5 m.	cum	1407.06	4307.98	1547.77	4448.69

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(c)	Machine mixed concrete lining on side slope for vertical height above 3.50 m but upto 5.50 m.	cum	1566.51	4467.43	1723.16	4624.08
	(d)	Machine mixed concrete lining on side slope for vertical height above 5.5 m but upto 7.50 m	cum	1725.96	4626.89	1898.56	4799.49
19.24		Cement concrete lining 15cm thick or less for irrigation channels, using cement concrete 1:3:6 (M-10)					
	(a)	Machine mixed concrete lining in bed.	cum	1286.25	3542.49	1414.88	3671.12
	(b)	Machine mixed concrete lining on side slopes for vertical height upto 3.5 m.	cum	1407.06	3663.30	1547.77	3804.01
	(c)	Machine mixed concrete lining on side slope for vertical height above 3.50m but upto 5.50 m	cum	1566.51	3822.75	1723.16	3979.40
	(d)	Machine mixed concrete lining on side slope for vertical height above 5.5m but upto 7.50	cum	1725.96	3982.20	1898.56	4154.80
19.25		115 mm thick brick on edge lining in herring bone bond/zig-zag or other specified pattern in 1:3 cement sand mortar over 10mm thick cement plaster 1:3 over 12.50 mm thick cement plaster in 1:5 on sub grade.					
	(a)	On side slopes.	sqm	293.49	873.78	322.84	903.13
	(b)	In bed	sqm	234.79	815.08	258.27	838.56

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
19.26		115 mm thick brick on edge lining in herring bone bond/zig-zag or other specified pattern laid in 1:3 cement sand mortar over LDPE over 12.5 mm thick base plaster 1:6 over dressed sub grade including laying, trenching and jointing of low density polyethylene.					
	(a)	On side slopes.	sqm	324.29	881.94	356.72	914.37
	(b)	In bed	sqm	259.44	817.08	285.38	843.02
19.27		115 mm thick brick on edge lining in herring bone bond/zig-zag or other specified pattern laid in 1:3 cement sand mortar over low density polyethylene over dressed sub grade including laying, trenching & jointing LDPE					
	(a)	On side slopes.	sqm	237.22	751.68	260.94	775.40
	(b)	In Bed (with 15 mm sand cushion underneath lining.)	sqm	189.77	720.62	208.75	739.60
19.28		Filling triangular portion under coping and on side of toe wall underneath lining with 1:3 cement sand mortar.	cum	1103.97	5492.27	1214.37	5602.67
19.29		Raking, cleaning and filling of hollow joints in cement sand mortar 1:3 on side slopes of tile lined channel.					
	(a)	When depth of channel is more than 5ft and water is running	sqm	128.52	133.59	141.37	146.44
	(b)	When depth of channel is more than 5ft and work is done in closure.	sqm	113.67	114.58	125.04	125.95

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
Note:-	(i)	If depth is less than 5 fts. , above rates of item no. 19.29(a), 19.29(b) be decreased by 15%. This rate will also be applicable to bed portion.					
	(ii)	If the work pertains to flat brick lining the labour rates as well as through rates will be increased by 33% of rates of tile lining.					
	(iii)	If the work pertains to brick on edge lining the labour rates as well as through rates will be increased by					
19.30		Brick lining 75 mm thick in 1:3 cement, sand mortar over LDPE over dressed sub-grade with 15 mm thick					
	(a)	On side slopes.	sqm	212.28	559.88	233.51	581.11
	(b)	In bed	sqm	169.83	533.86	186.81	550.84
19.31		Laying brick on edge coping 229mm wide and 115mm thick in cement sand mortar 1:3	m	27.08	140.15	29.79	142.86
19.32		Laying brick on edge coping 356mm wide and 115mm thick in cement sand mortar 1:3	m	42.11	212.59	46.32	216.80
19.33		Laying brick on edge coping 550mm wide and 115mm thick in cement sand mortar 1:3	m	65.13	328.90	71.64	335.41
19.34		Laying E.C bags filled with cement concrete 1:4:8 including sewing and laying in position within 30 ms complete in all respects.	bag	53.35	131.75	58.69	137.09
19.35		Laying E.C bags filled with cement concrete 1:3:6 including sewing and laying in position within 30 ms complete in all respects.	bag	53.35	135.21	58.69	140.55

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
19.36		Cement concrete lining 10cm. thick or less with mechanical Paver for irrigation channels, using cement concrete M-15 with cement content 325 kg/cum mixed in an automatic computerized Batching & Mixing Plant and transported to the site in transit mixers with an average lead of 1 Km					
	(a)	Computerized Batching & Mixing plant mixed concrete lining on bed and on slide slopes upto vertical height 2.0m.	cum	2155.36	5502.76	2370.90	5718.30
	(b)	Computerized Batching & Mixing plant mixed concrete lining on side slopes for vertical height above 2m but upto 3.5m.	cum	2201.68	5549.07	2421.85	5769.24
	(c)	Computerized Batching & Mixing plant mixed concrete lining on side slopes for vertical height above 3.50 m but upto 5.5 M	cum	2269.06	5616.46	2495.97	5843.37
	(d)	Computerized Batching & Mixing plant mixed concrete lining on side slopes for vertical height above 5.5 m but upto 7.5 M	cum	2336.42	5683.82	2570.06	5917.46
	(e)	Computerized Batching & Mixing plant mixed concrete lining on side slopes for vertical height 7.5 M and above	cum	2403.80	5751.20	2644.18	5991.58
19.37		Cement concrete lining 10cm. thick or less with mechanical Paver for irrigation channels, using cement concrete M-10 with cement content 225kg/cum mixed in an automatic computerized Batching & Mixing Plant and transported to the site in transit mixers with an average lead of 1 Km					



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(a)	Computerized Batching & Mixing plant mixed concrete lining on bed and on slide slopes upto vertical height 2.0m.	cum	2155.36	5062.21	2370.90	5277.75
	(b)	Computerized Batching & Mixing plant mixed concrete lining on side slopes for vertical height above 2m but upto 3.5m.	cum	2201.68	5108.52	2421.85	5328.69
	(c)	Computerized Batching & Mixing plant mixed concrete lining on side slopes for vertical height above 3.50 m but upto 5.5 M	cum	2269.06	5175.91	2495.97	5402.82
	(d)	Computerized Batching & Mixing plant mixed concrete lining on side slopes for vertical height above 5.5 m but upto 7.5 M	cum	2336.42	5243.27	2570.06	5476.91
	(e)	Computerized Batching & Mixing plant mixed concrete lining on side slopes for vertical height 7.5 M and above	cum	2403.80	5310.65	2644.18	5551.03
19.38		Excavation of Soil using Hyraulic Excavator and hydraulic Tractor Trolly I/C cutting and loading in Trolly and transporting to the embankment locations with all lifts and leads					
	(a)	Disposal/carraige from 0 upto 450m	cum	59.45	59.45	65.40	65.40
	(b)	Disposal/ carraige additional beyond 450m upto 1Km	cum	16.00	16.00	17.60	17.60
	(c)	Disposal/carraige for every additional Km upto 10Km	cum	25.39	25.39	27.93	27.93

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	Note	1. The above rates are worked out for irrigation works along Katcha Bank of the Canal /Distributory Minor. 2. In case of carriage of earth on Pucca Road along bank of canal .These rates shall be reduced by 20% if lead is more than 450m. 3. These rates are applicable for a lead of 10 km only beyond 10 km rates of carriage of earth by Tipper shall be taken.					
19.39		Excavation of soil using hydraulic Excavator and tippers I/C cutting and loading in tippers and transporting to the embankments location with all lifts and leads. Note- For Katcha Road rates will be increased by 20%.					
	(a)	disposal/carraige from 0m upto 450m.	cum	54.41	54.41	59.85	59.85
	(b)	disposal/carraige for every additional 1km upto 10km(plains)	cum	15.75	15.75	17.32	17.32
	Note	Beyond 10km rates of carraige of earth/soil shall be taken as per CSR chapter-5					
19.40		Cement concrete lining 75mm. thick or less laid manually for irrigation channels, using cement concrete M-15 with cement content 325 kg/cum mixed in an automatic computerized Batching & Mixing Plant and transported to the site in transit mixers with an average lead of 1 Km(FOR TRAPEZOIDAL SECTION AND CUP SECTION OF ALL RADII)	cum	1697.06	5044.47	1866.77	5214.18

## CHAPTER NO. 20

### OUTLETS

**Notes :-**

- (i) The term "discharge" wherever used in this Chapter means designed full supply discharge of the parent channel opposite the outlet.
- (ii) The labour rates include the rehandling of materials within 100 ms.
- (iii) For outlets on lined canals, the basic rate will be 20% extra over and above the rate for katcha canal.

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
20.1	Earth work for outlet:-					
(a)	Earth work for dismantling or construction of new pipe or barrel type outlets (including excavation, refilling, consolidation and dressing)					
	(i) Channel discharge upto 1.5 cums per second.	job	632.00	632.00	695.00	695.00
	(ii) Channel discharge exceeding 1.5 cum/s but upto 3 cum/s	job	1007.00	1007.00	1108.00	1108.00
	(iii) Channel discharge exceeding 3 cum/s but upto 6 cum/s	job	1580.00	1580.00	1738.00	1738.00
	(iv) Channel discharge exceeding 6 cum/s but upto 10 cum/s	job	2488.00	2488.00	2737.00	2737.00
(b)	Earth work involved in dismantling Open flume, A.P.M. or O.S.M. type Outlets (including excavation, refilling, consolidation and dressing)					
	(i) With 'H' upto 0.5 m	job	632.00	632.00	695.00	695.00
	(ii) With 'H' more than 0.5 m. but upto 0.9 m	job	1580.00	1580.00	1738.00	1738.00
	(iii) With 'H' more than 0.9 m but upto 1.10m	job	2488.00	2488.00	2737.00	2737.00
(c)	Earth work involved in dismantling gullet walls of outlets for adjusting 'Y' of A.P.M. or 'B' of open flume outlets:-					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(i)	With 'H' upto 0.5 m	job	190.00	190.00	209.00	209.00
	(ii)	With 'H' more than 0.5 m. but upto 0.9 m	job	592.00	592.00	651.00	651.00
	(iii)	With 'H' more than 0.9 m but upto 1.10m	job	948.00	948.00	1043.00	1043.00
(d)	Earth work involved in constructing new O.F., A.P.M. or O.S.M. type outlets.						
	(i)	With 'H' upto 0.5 m	job	1896.00	1896.00	2086.00	2086.00
	(ii)	With 'H' more than 0.5 m. but upto 0.9 m	job	3673.00	3673.00	4040.00	4040.00
	(iii)	With 'H' more than 0.9 m but upto 1.10m	job	5450.00	5450.00	5995.00	5995.00
20.2	Dismantling outlets including removal of dismantled material involving lead upto 100 metres.						
(a)	Pipe or barrel type outlets						
	(i)	Channel discharge upto 1.5 cum/s	Each	592.00	592.00	651.00	651.00
	(ii)	Channel discharge above 1.5 cum/s but upto 3 cum/s	Each	790.00	790.00	869.00	869.00
	(iii)	Channel discharge above 3 cum/s but upto 6 cum/s	Each	889.00	889.00	978.00	978.00
	(iv)	Channel discharge above 6 cum/s but upto 10 cum/s	Each	948.00	948.00	1043.00	1043.00
(b)	Dismantling O.F., A.P.M. or O.S.M. type outlets consisting of total dismantling i.e. concrete R.C. Slab and cement masonry.						
	(i)	With 'H' upto 0.5 m	job	3317.00	3317.00	3649.00	3649.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(ii)	With 'H' more than 0.5 m. but upto 0.9 m	job	6398.00	6398.00	7038.00	7038.00
	(iii)	With 'H' more than 0.9 m but upto 1.10m	job	9478.00	9478.00	10426.00	10426.00
(c)	Dismantling O.F., A.P.M. Or O.S.M. type outlets involving dismantling cement masonry and removing of precast R.C. Slab						
	(i)	With 'H' upto 0.5 m	job	2370.00	2370.00	2607.00	2607.00
	(ii)	With 'H' more than 0.5 m. but upto 0.9 m	job	5095.00	5095.00	5605.00	5605.00
	(iii)	With 'H' more than 0.9 m but upto 1.10m	job	7820.00	7820.00	8602.00	8602.00
(d)	Dismantling tail cluster bifurcation :-						
	(i)	Complete dismantling including concrete and masonry.	job	5687.00	5687.00	6256.00	6256.00
	(ii)	Cement masonry only	job	4147.00	4147.00	4562.00	4562.00
(e)	Dismantling tail cluster trifurcation:-						
	(i)	Complete dismantling including concrete and masonry.	job	7938.00	7938.00	8732.00	8732.00
	(ii)	Cement masonry only	job	5687.00	5687.00	6256.00	6256.00
(f)	Dismantling tail cluster quadrifurcation:-						
	(i)	Complete dismantling including concrete and masonry	job	10308.00	10308.00	11339.00	11339.00
	(ii)	Cement masonry only	job	7464.00	7464.00	8210.00	8210.00
20.3	Making temporary A.P.M. Block and fixing at site						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
(a)		In case of new outlets where no dismantling and reconstructing of gullet walls is involved	job	408.00	573.00	449.00	614.00
(b)		Extra for dismantling and reconstructing gullet walls where temporary A.P.M. block is to be fixed on existing outlet without change in width of gullet i.e. 'B'					
	(i)	With 'H' upto 0.5 m	job	539.00	1231.00	593.00	1285.00
	(ii)	With 'H' more than 0.5 m. but upto 0.9 m	job	738.00	1802.00	812.00	1876.00
	(iii)	With 'H' more than 0.9 m but upto 1.10m	job	1086.00	2455.00	1195.00	2564.00
(c)		Extra over item No. 20.3(a) in case of old Outlets where dismantling and reconstructing of gullet walls is involved including change in width of gullet i.e. 'B' of the outlet upto 30 m.m.					
	(i)	With 'H' upto 0.5 m	job	742.00	1733.00	816.00	1807.00
	(ii)	With 'H' more than 0.5 m. but upto 0.9 m	job	1266.00	3216.00	1393.00	3343.00
	(iii)	With 'H' more than 0.9 m but upto 1.10m	job	1847.00	4695.00	2032.00	4880.00
<b>20.4</b>	Adjusting A.P.M. to the correct 'Y' and fixing in position:-						
(a)	In case of new outlet where no dismantling and reconstructing of gullet wall is involved.		Job	150.00			
(b)	Extra over item No.20.4(a) In case of outlets where dismantling and reconstructing of gullet walls is involved without change in width of gullet i.e. 'B' of the outlet		Job	Same as for item No. 20.3(b)			

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(c)	Extra over item No. 20.4 In case of old outlets where dismantling and reconstructing of gullet walls is involved including change in width of gullet i.e. 'B' of the outlet upto 30 m.m.	Job	Same as for item No. 20.3(c)			
20.5	Adjusting check plates of open flume outlet to correct 'B' and fixing at site flush with the gullet walls :-					
(a)	In case of new outlets where no dismantling and reconstructing of gullet walls is involved.	job	150.00			
(b)	Extra over item No. 20.5(a) In case of old outlets where dismantling and reconstructing of gullet wall is involved without change in width of gullet Walls i.e. 'B' of the outlet	job	Same as for item No. 20.3(b)			
(c)	Extra over item No. 20.5(a) In case of existing outlets where dismantling and reconstructing side walls is involved including change of 'B' upto 30 mm					
(i)	With 'H' upto 0.5 m	job	836.00	1900.00	920.00	1984.00
(ii)	With 'H' more than 0.5 m but upto 0.9 m	job	1553.00	3938.00	1708.00	4093.00
(iii)	With 'H' more than 0.9 m but upto 1.10m	job	2561.00	6095.00	2817.00	6351.00
20.6	Extra over item Nos. 20.3, 20.4 And 20.5 as the case may be, for adjusting of crest levels of O.F and A.P.M. outlets with 1:2:4 cement concrete when lowering of crest level is involved.					
(a)	With 'H' upto 0.5 m	job	365.00	409.00	402.00	446.00
(b)	With 'H' more than 0.5 m but upto 0.9 m	job	547.00	613.00	602.00	668.00
(c)	With 'H' more than 0.9 m but upto 1.10 m	job	729.00	818.00	802.00	891.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
20.7	Extra over item Nos. 20.3, 20.4 And 20.5 as the case may be, for Adjusting of crest levels of O.F and A.P.M. outlets with 1:2:4 cement concrete when raising of crest level is involved					
(a)	With 'H' upto 0.5 m	job	273.00	318.00	300.00	345.00
(b)	With 'H' more than 0.5 m but upto 0.9 m	job	365.00	431.00	402.00	468.00
(c)	With 'H' more than 0.9 m but upto 1.10 m	job	547.00	635.00	602.00	690.00
20.8	Constructing, watching and removing bund in running water for outlets:-					
(a)	For adjusting 'B"Y' or crest Level of the O.F. and A.P.M. types for plains and for dismantling or constructing pipe or barrel type outlets for sub mountainous region:-					
(i)	For channels with designed F.S. depth upto 0.5m.	job	1250.00	1415.00	1375.00	1540.00
(ii)	for channels with designed F.S. depth above 0.5 m but upto 0.9m	job	2131.00	2448.00	2344.00	2661.00
(iii)	for channels with designed F.S. depth above 0 .90 but upto 1.0 m	job	3864.00	4384.00	4250.00	4770.00
(b)	For constructing complete O.F Or A.P.M. type outlets in running water:-					
(i)	For channels with designed F.S. depth upto 0.5m.	job	2773.00	3169.00	3050.00	3446.00
(ii)	for channels with designed F.S. depth above 0.5 m But upto 0.9m	job	3755.00	4299.00	4131.00	4675.00
(iii)	for channels with designed F.S. depth above 0.90 but upto 1.1 m	job	6188.00	7112.00	6807.00	7731.00
(c )	For dismantling or constructing pipe channels.					



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(i)	For channels with designed F.S. depth upto 0.5m.	job	1250.00	1415.00	1375.00	1540.00
	(ii)	for channels with designed F.S. depth above 0.5 m but upto 0.9 m	job	1340.00	1567.00	1474.00	1701.00
	(iii)	for channels with designed F.S. depth above 0.90 but upto 1.1 m	job	2174.00	2463.00	2391.00	2680.00
20.9	Adjusting 'B' of tail cluster by dismantling and rebuilding throat walls		per outlet	385.00	821.00	424.00	860.00
20.10	Extra labour for dressing bricks On O.F. and A.P.M. type outlets						
	(i)	With 'H' upto 0.5 m	per outlet	720.00			
	(ii)	With 'H' more than 0.5 m. but upto 0.9 m	per outlet	1440.00			
	(iii)	With 'H' more than 0.9 m but upto 1.10m	per outlet	2280.00			
20.11	Repairing damaged reducing collar of hume pipe outlets		per outlet	365.00	394.00	402.00	431.00
20.12	Laying iron pipes for outlets upto 150 m.m. diameter		mtr	52.80			
20.13	Laying R.C.C. pipes for outlets and culverts including joining ends and fixing collar with cement mortar 1:2 :-						
(a)	upto 150 mm inside diameter		mtr	58.00	71.00	64.00	77.00
(b)	above 150 mm but upto 300 mm inside diameter		mtr	122.00	148.00	134.00	160.00
(c)	above 300 mm but upto 600 mm inside diameter		mtr	304.00	376.00	334.00	406.00
(d)	above 600mm but upto 900 mm inside diameter		mtr	608.00	737.00	669.00	798.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
20.14	Hoisting and placing precast R.C. concrete slab or stones in position on outlets or W.C. culverts		per outlet	422.40			
20.15	Providing APM cast iron block complete in all respects including supply of pig iron, casting and pattern making, as per ISI specifications no. 7986-1976						
	(i)	0.20 ft = 6.1 cm (min wt 65 kg)	job	6370.00			
	(ii)	0.25 ft= 7.6 cm (min wt 68 kg)	job	6664.00			
	(iii)	0.32 ft= 9.9 cm (min wt 72 kg)	job	7056.00			
	(iv)	0.40 ft= 12.2 cm (min wt 76 kg)	job	7448.00			
	(v)	0.5 ft= 15.2 cm (min wt 80 kg)	job	7840.00			
	(vi)	0.8 ft= 24.4 cm (min wt 84 kg)	job	8232.00			
	(vii)	1.0 ft= 30.5 cm (min wt 90 kg)	job	8820.00			

**CHAPTER NO. 21**  
**Bridges- Foundations & Sub- Structure**

Notes :-

- 1 The rates are based on PPC cement, however where OPC cement is to be used , additional rate @ Rs. 20/- per bag may be added.
- 2 The rates for all materials include carriage up to 5km., additional carriage be adjusted accordingly while deriving landing rates.
- 3 The rates of bitumen are based as on 01.07.2020.Difference be adjusted as on date while preparing landing rates for estimate.
- 4 All rates for concrete include cost for Tools, Plant, vibrators & admixture wherever necessary as per MORT&H guide lines.
- 5 Separate rates for different heights for sub structure have been added in this chapter, payment be made accordingly.
- 6 10% extra cost of cement has already been taken for works under water, nothing extra should be paid over & above these rates.
- 7 Rates for concrete include transportation of concrete with transit mixture up to 5 km, additional carriage if any be added as per rates under chapter 10 for carriage of concrete by transit mixture.
- 8 All rates include cost for water, if supplied by the department, the rates be reduced accordingly.
- 9 The rates of steel of item No. 21.27, 21.33 and 21.34 are inclusive of wastage, overlaps, couplings, welded joints, spacer bars, chairs, stays, hangers and annealed steel wire or other methods for binding and placing, shall not be measured and cost of these items shall be deemed to be included in the rates for reinforcement as per section 1600 of MORT&H specification.

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
21.1	Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with excavated surplus soil.					
	<b>In Ordinary soil</b>					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
A	<b>Manual Means</b>						
	a	Depth upto 3 m	cum	192.33	192.33	211.56	211.56
	b	Depth 3 m to 6 m	cum	247.28	247.28	272.00	272.00
	c	Depth above 6 m	cum	329.70	329.70	362.67	362.67
B	<b>Mechanical Means</b>			0.00	0.00	0.00	0.00
	a	Depth upto 3 m	cum	69.67	69.67	76.64	76.64
	b	Depth 3 m to 6 m	cum	79.63	79.63	87.59	87.59
	c	Depth above 6m	cum	99.00	99.00	108.90	108.90
C	<b>Ordinary Rock (not requiring</b>						
	a)	Depth upto 3 m by manual means	cum	274.75	274.75	302.22	302.22
	b	Depth upto 3 m by Mechanical Means	cum	86.79	86.79	95.47	95.47
D	<b>Hard Rock (requiring blasting)</b>		cum	531.19	603.77	584.31	656.89
E	<b>Hard Rock ( blasting prohibited )</b>		cum	577.02	577.02	634.72	634.72
F	<b>Marshy Soil</b>						
	a	Depth upto 3 m by manual means	cum	658.32	658.32	724.15	724.15
	b	Depth upto 3 m by Mechanical Means	cum	166.83	166.83	183.52	183.52
G	<b>Back Filling in Marshy</b>		cum	410.61	410.61	451.67	451.67

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
21.2	Filling space around footing in rock with Plain cement concrete 1:3:6 nominal mix or in foundation with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.		cum	1008.98	3632.33	1109.87	3733.23
21.3	Sand Filling in Foundation Trenches as per Drawing & Technical Specification		cum	163.71	1154.32	180.08	1170.69
21.4	Plain cement concrete 1:3:6 nominal mix in foundation with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.		cum	1008.98	3632.33	1109.87	3733.23
21.5	Brick Masonry Work in Cement Mortar 1:3 in Foundation complete excluding Pointing and Plastering, as per Drawing and Technical Specifications.		cum	1567.89	5707.82	1724.68	5864.61
21.6	Stone Masonry Work in Cement Mortar 1:3 in Foundation complete as per Drawing and Technical Specifications.						
	A	Square Rubble Coursed Rubble Masonry (first sort)	cum	2205.87	5072.84	2426.45	5293.42
	B	<b>Random Rubble Masonry</b>	cum	1999.58	4909.33	2199.54	5109.29
21.7	Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications.						
A	PCC Grade M15		cum	1401.94	4319.17	1542.14	4459.36
B	PCC Grade M20		cum	1428.92	4782.82	1571.81	4925.71

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
C	RCC Grade M20						
	(i)	Using Concrete Mixer	cum	1431.16	4824.40	1574.27	4967.52
	(ii)	With Batching Plant, Transit Mixer and Concrete Pump	cum	820.91	4215.39	903.00	4297.48
D	PCC Grade M25						
	(i)	Using Concrete Mixer	cum	1433.67	5131.11	1577.03	5274.47
	(ii)	With Batching Plant, Transit Mixer and Concrete Pump	cum	824.90	4523.89	907.39	4606.38
E	RCC Grade M25						
	(i)	Using Concrete Mixer	cum	1436.13	5135.64	1579.74	5279.25
	(ii)	With Batching Plant, Transit Mixer and Concrete Pump	cum	827.22	4563.95	909.94	4646.67
F	PCC Grade M30						
	(i)	Using Concrete Mixer	cum	1419.13	5153.82	1561.05	5295.74
	(ii)	Using Batching Plant, Transit Mixer and Concrete Pump	cum	811.63	4544.25	892.79	4625.41
G	RCC Grade M30						
	(i)	Using Concrete Mixer	cum	1420.53	5140.41	1562.58	5282.46
	(ii)	Using Batching Plant, Transit Mixer and Concrete Pump	cum	813.14	4571.35	894.45	4652.66
H	RCC Grade M35						
	(i)	Using Concrete Mixer	cum	1391.36	5204.92	1530.50	5344.06
	(ii)	Using Batching Plant, Transit Mixer and Concrete Pump	cum	786.90	4640.12	865.59	4718.81

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
21.8	Providing and Constructing Temporary Island 16 m diameter for Construction of Well Foundation for 8m dia. Well.						
	A	Assuming depth of water 1.0 m and height of island to be 1.25 m.	No	68552.80	129944.55	75408.08	136799.83
	B	Assuming depth of water 4.0 m and height of island 4.5 m	No	156307.52	627403.12	171938.27	643033.87
21.9	Providing and constructing one span service road to reach island location from one pier location to another pier location		m	1710.91	6301.25	1882.00	6472.34
21.10	Providing and Laying Cutting Edge of Mild Steel weighing 40 kg per metre for Well Foundation complete as per Drawing and Technical Specification.		MT	20175.93	75884.80	22193.53	77902.40
21.11	Plain/Reinforced Cement Concrete, in Well Foundation complete as per Drawing and Technical Specification.						
	<b>A</b>	<b>Well curb</b>					
	(i)	RCC Grade M20 Case I					
		Using Concrete Mixer	cum	2414.39	5807.63	2655.83	6049.07
		With Batching Plant, Transit Mixer and Concrete Pump	cum	1710.55	5105.04	1881.60	5276.09
	<b>(ii)</b>	<b>RCC M25 Grade</b>					
		Using Concrete Mixer	cum	2522.82	6265.81	2775.10	6518.09
		With Batching Plant, Transit Mixer and Concrete Pump	cum	1818.34	5560.50	2000.17	5742.33
	<b>(iii)</b>	<b>RCC M35 Grade</b>					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		Using Concrete Mixer	cum	2558.75	6417.63	2814.62	6673.51
		Using Batching Plant, Transit Mixer and Concrete Pump	cum	1854.52	5713.41	2039.98	5898.86
	<b>B</b>	<b>Well steining</b>					
	(i)	PCC M20 Grade					
		Using Concrete Mixer	cum	1794.27	5148.18	1973.70	5327.60
	(ii)	RCC Grade M20 Case I					
	(I)	Using Concrete Mixer	cum	1799.87	5193.12	1979.86	5373.10
	(II)	With Batching Plant, Transit Mixer and Concrete Pump	cum	1154.52	4549.01	1269.98	4664.46
	(iii)	PCC M25 Grade					
		Using Concrete Mixer	cum	1847.52	5544.97	2032.28	5729.72
		With Batching Plant, Transit Mixer and Concrete Pump	cum	1202.23	4901.22	1322.45	5021.44
	(iv)	RCC M25 Grade					
		Using Concrete Mixer	cum	1854.08	5597.08	2039.49	5782.49
		With Batching Plant, Transit Mixer and Concrete Pump	cum	1208.42	4950.58	1329.26	5071.42
	(v)	PCC Grade M30					
		Using Concrete Mixer	cum	1853.30	5587.99	2038.63	5773.32
		Using Batching Plant, Transit Mixer and Concrete Pump	cum	1207.44	4940.06	1328.18	5060.80
	(vi)	RCC Grade M30 Case I					
		Using Concrete Mixer	cum	1857.29	5620.98	2043.02	5806.71



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		Using Batching Plant, Transit Mixer and Concrete Pump	cum	1211.75	4975.44	1332.93	5096.61
	(vii)	RCC Grade M35					
		Using Concrete Mixer	cum	1872.05	5730.93	2059.25	5918.14
		Using Batching Plant, Transit Mixer and Concrete Pump	cum	1226.51	5085.39	1349.16	5208.04
	(viii)	RCC M40 Grade					
		Using Batching Plant, Transit Mixer and Concrete Pump	cum	1245.25	5229.91	1369.78	5354.44
	<b>C</b>	<b>Bottom Plug</b>					
	(i)	PCC Grade M20					
		Using Concrete Mixer	cum	1731.87	5535.28	1905.06	5708.47
		Using Batching Plant, Transit Mixer and Crane/concrete pump	cum	884.96	4711.16	973.45	4799.66
	(ii)	PCC Grade M25					
		Using Concrete Mixer	cum	1748.13	5761.95	1922.94	5936.76
		Using Batching Plant, Transit Mixer and Crane/concrete pump	cum	901.05	4935.52	991.16	5025.62
	(iii)	PCC Grade M30					
		Using Concrete Mixer	cum	1751.51	5808.87	1926.66	5984.02
		Using Batching Plant, Transit Mixer and Crane/concrete pump	cum	904.43	4982.49	994.87	5072.93
	(iv)	PCC Grade M35					
		Using Concrete Mixer	cum	1758.73	5909.25	1934.60	6085.12
		Using Batching Plant, Transit Mixer and Crane/concrete pump	cum	911.64	5082.75	1002.81	5173.91

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	<b>D</b>	<b>Intermediate plug</b>					
	(i)	Grade M20 PCC					
		Using Concrete Mixer	cum	1411.87	4927.19	1553.06	5068.38
		Using Batching Plant, Transit Mixer and Crane/concrete pump	cum	598.69	4134.73	658.56	4194.60
	(ii)	PCC Grade M25					
		Using Concrete Mixer	cum	1411.87	5062.51	1553.06	5203.69
		Using Batching Plant, Transit Mixer and	cum	598.69	4314.78	658.56	4374.64
	(iii)	PCC Grade M30					
		Using Concrete Mixer	cum	1411.87	5144.49	1553.06	5285.68
		Using Batching Plant, Transit Mixer and	cum	598.69	4354.10	658.56	4413.96
	<b>E</b>	<b>Top plug</b>					
	(i)	Grade M15 PCC	cum	1185.35	4100.51	1303.88	4219.04
	(ii)	PCC Grade M20	cum	1185.35	4539.25	1303.88	4657.79
	(iii)	Grade M25 PCC					
		Using Concrete Mixer	cum	1185.35	4880.72	1303.88	4999.26
		With Batching Plant, Transit Mixer and Concrete Pump	cum	598.50	4297.49	658.35	4357.34
	(iv)	Grade M30 PCC					
		Using Concrete Mixer	cum	1185.35	4917.97	1303.88	5036.51
		Using Batching Plant, Transit Mixer and Concrete Pump	cum	598.50	4331.12	658.35	4390.97
	<b>F</b>	<b>Well cap</b>					
	(I)	RCC Grade M20					
		Using Concrete Mixer	cum	1431.16	4824.40	1574.27	4967.52
		Using Batching Plant, Transit Mixer and Concrete Pump	cum	820.91	4215.39	903.00	4297.48

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(ii)	RCC Grade M25					
		Using Batching Plant, Transit Mixer and Concrete Pump	cum	827.22	4569.38	909.94	4652.10
	(iii)	RCC Grade M30					
		Using Batching Plant, Transit Mixer and Concrete	cum	813.14	4576.82	894.45	4658.14
	(iv)	RCC Grade M35					
		Using Batching Plant, Transit Mixer and Concrete	cum	786.90	4645.78	865.59	4724.47
	(v)	RCC M40 Grade					
		Using Batching Plant, Transit Mixer and Concrete	cum	792.52	4777.18	871.78	4856.43
21.12		Sinking of 6 m external diameter well (other than pneumatic method of sinking) through all types of strata namely sandy soil, clayey soil and rock as shown against each case, complete as per drawing and technical specifications. Depth of sinking is reckoned from bed level. The rate inclusive of dewatering					
	<b>A</b>	<b>Sandy Soil</b>					
	(i)	Depth below bed level upto 3.0 M	m	5311.70	5311.70	5842.87	5842.87
	(ii)	Beyond 3m upto 10m depth	m	7491.48	7491.48	8240.63	8240.63
	(iii)	11 m depth	m	7866.06	7866.06	8652.67	8652.67
		12 m depth	m	8259.36	8259.36	9085.30	9085.30
		13 m depth	m	8672.33	8672.33	9539.56	9539.56
		14 m depth	m	9105.95	9105.95	10016.55	10016.55
		15 m depth	m	9561.25	9561.25	10517.38	10517.38

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		16 m depth	m	10039.31	10039.31	11043.24	11043.24
		17 m depth	m	10541.28	10541.28	11595.41	11595.41
		18 m depth	m	11068.34	11068.34	12175.17	12175.17
		19 m depth	m	11621.76	11621.76	12783.94	12783.94
		20 m depth	m	12202.85	12202.85	13423.14	13423.14
	(iv)	21 m depth	m	15741.67	15741.67	17315.84	17315.84
		22 m depth	m	16922.29	16922.29	18614.52	18614.52
		23 m depth	m	18191.46	18191.46	20010.61	20010.61
		24 m depth	m	19555.82	19555.82	21511.40	21511.40
		25 m depth	m	21022.51	21022.51	23124.76	23124.76
		26 m depth	m	22599.20	22599.20	24859.12	24859.12
		27 m depth	m	24294.14	24294.14	26723.55	26723.55
		28 m depth	m	26116.20	26116.20	28727.82	28727.82
		29 m depth	m	28074.91	28074.91	30882.40	30882.40
		30 m depth	m	30180.53	30180.53	33198.58	33198.58
	(v)	31 m depth	m	33198.58	33198.58	36518.44	36518.44
		32 m depth	m	36518.44	36518.44	40170.28	40170.28
		33 m depth	m	40170.28	40170.28	44187.31	44187.31
		34 m depth	m	44187.30	44187.30	48606.03	48606.03
		35 m depth	m	48606.04	48606.04	53466.64	53466.64
		36 m depth	m	44555.53	53466.64	58813.30	58813.30
		37 m depth	m	58813.30	58813.30	64694.63	64694.63
		38 m depth	m	64694.63	64694.63	71164.09	71164.09
		39 m depth	m	71164.09	71164.09	78280.50	78280.50
		40 m depth	m	78280.50	78280.50	86108.55	86108.55
	<b>B</b>	<b>Clayey Soil ( 6m dia. Well )</b>					
	(i)	Depth below bed level upto 3.0 M	m	7520.38	7520.38	8272.41	8272.41

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(ii)	Beyond 3m upto 10m depth	m	17390.10	17390.10	19129.11	19129.11
	(iii)	11 m depth	m	19172.59	19172.59	21089.85	21089.85
		12 m depth	m	20131.22	20131.22	22144.34	22144.34
		13 m depth	m	21137.78	21137.78	23251.56	23251.56
		14 m depth	m	22194.67	22194.67	24414.14	24414.14
		15 m depth	m	23304.40	23304.40	25634.84	25634.84
		16 m depth	m	24469.62	24469.62	26916.58	26916.58
		17 m depth	m	25693.10	25693.10	28262.41	28262.41
		18 m depth	m	26977.76	26977.76	29675.54	29675.54
		19 m depth	m	28326.65	28326.65	31159.32	31159.32
		20 m depth	m	29742.98	29742.98	32717.28	32717.28
	(iv)	21 m depth	m	38063.94	38063.94	41870.33	41870.33
		22 m depth	m	40918.74	40918.74	45010.61	45010.61
		23 m depth	m	43987.64	43987.64	48386.40	48386.40
		24 m depth	m	47286.71	47286.71	52015.38	52015.38
		25 m depth	m	50833.21	50833.21	55916.53	55916.53
		26 m depth	m	54645.70	54645.70	60110.27	60110.27
		27 m depth	m	58744.13	58744.13	64618.54	64618.54
		28 m depth	m	63149.94	63149.94	69464.93	69464.93
		29 m depth	m	67886.19	67886.19	74674.81	74674.81
		30 m depth	m	72977.65	72977.65	80275.42	80275.42
	(v)	31 m depth	m	77064.40	77064.40	84770.84	84770.84
		32 m depth	m	84770.83	84770.83	93247.91	93247.91
		33 m depth	m	93247.92	93247.92	102572.71	102572.71
		34 m depth	m	102572.71	102572.71	112829.98	112829.98
		35 m depth	m	112829.99	112829.99	124112.99	124112.99
		36 m depth	m	124112.99	124112.99	136524.29	136524.29

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		37 m depth	m	136524.29	136524.29	150176.72	150176.72
		38 m depth	m	150176.71	150176.71	165194.38	165194.38
		39 m depth	m	165194.39	165194.39	181713.83	181713.83
		40 m depth	m	181713.83	181713.83	199885.21	199885.21
	<b>C</b>	<b>Soft Rock (6m dia well )</b>					
		Depth in Soft rock strata up to 3m	m	24316.81	24316.81	26748.50	26748.50
	<b>D</b>	<b>Hard Rock (6m dia well )</b>					
		Depth in hard rock strata upto 3 m	m	23477.71	24324.70	25825.49	26672.48
21.13		Sinking of 7 m external diameter well (other than pneumatic method of sinking) through all types of strata namely sandy soil, clayey soil and rock as shown against each case, complete as per drawing and technical specifications. Depth of sinking is reckoned from bed level. The rate inclusive of dewatering.					
	<b>A</b>	<b>Sandy Soil</b>					
	(i)	Depth below bed level upto 3.0 M	m	7917.41	7917.41	8709.15	8709.15
	(ii)	Beyond 3m upto 10m depth	m	10523.13	10523.13	11575.44	11575.44
	(iii)	11 m depth	m	11049.29	11049.29	12154.22	12154.22
		12 m depth	m	11601.75	11601.75	12761.93	12761.93
		13 m depth	m	12181.84	12181.84	13400.02	13400.02
		14 m depth	m	12790.93	12790.93	14070.02	14070.02
		15 m depth	m	13430.48	13430.48	14773.53	14773.53
		16 m depth	m	14102.00	14102.00	15512.20	15512.20

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
	17 m depth	m	14807.10	14807.10	16287.81	16287.81
	18 m depth	m	15547.46	15547.46	17102.21	17102.21
	19 m depth	m	16324.83	16324.83	17957.31	17957.31
	20 m depth	m	17141.07	17141.07	18855.18	18855.18
(iv)	21 m depth	m	22111.98	22111.98	24323.18	24323.18
	22 m depth	m	23770.38	23770.38	26147.42	26147.42
	23 m depth	m	25553.16	25553.16	28108.48	28108.48
	24 m depth	m	27469.64	27469.64	30216.60	30216.60
	25 m depth	m	29529.86	29529.86	32482.85	32482.85
	26 m depth	m	31744.61	31744.61	34919.07	34919.07
	27 m depth	m	34125.46	34125.46	37538.01	37538.01
	28 m depth	m	36684.86	36684.86	40353.35	40353.35
	29 m depth	m	39436.22	39436.22	43379.84	43379.84
	30 m depth	m	42393.94	42393.94	46633.33	46633.33
(v)	31 m depth	m	46633.33	46633.33	51296.66	51296.66
	32 m depth	m	51296.66	51296.66	56426.33	56426.33
	33 m depth	m	56426.33	56426.33	62068.96	62068.96
	34 m depth	m	62068.96	62068.96	68275.86	68275.86
	35 m depth	m	68275.85	68275.85	75103.44	75103.44
	36 m depth	m	75103.43	75103.43	82613.77	82613.77
	37 m depth	m	82613.77	82613.77	90875.15	90875.15
	38 m depth	m	90875.15	90875.15	99962.67	99962.67
	39 m depth	m	99962.66	99962.66	109958.93	109958.93
	40 m depth	m	109958.93	109958.93	120954.82	120954.82
B	Clayey Soil ( 7m dia. Well )					
(i)	Depth below bed level upto 3.0 M	m	10523.13	10523.13	11575.44	11575.44
(ii)	Beyond 3m upto 10m depth	m	17859.97	17859.97	19645.96	19645.96

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(iii)	11 m depth	m	19690.62	19690.62	21659.68	21659.68
		12 m depth	m	20675.15	20675.15	22742.67	22742.67
		13 m depth	m	21708.91	21708.91	23879.80	23879.80
		14 m depth	m	22794.36	22794.36	25073.80	25073.80
		15 m depth	m	23934.08	23934.08	26327.49	26327.49
		16 m depth	m	25130.78	25130.78	27643.86	27643.86
		17 m depth	m	26387.32	26387.32	29026.05	29026.05
		18 m depth	m	27706.69	27706.69	30477.36	30477.36
		19 m depth	m	29092.02	29092.02	32001.22	32001.22
		20 m depth	m	30546.62	30546.62	33601.28	33601.28
	(iv)	21 m depth	m	39092.40	39092.40	43001.64	43001.64
		22 m depth	m	42024.33	42024.33	46226.76	46226.76
		23 m depth	m	45176.15	45176.15	49693.77	49693.77
		24 m depth	m	48564.36	48564.36	53420.80	53420.80
		25 m depth	m	52206.69	52206.69	57427.36	57427.36
		26 m depth	m	56122.19	56122.19	61734.41	61734.41
		27 m depth	m	60331.35	60331.35	66364.49	66364.49
		28 m depth	m	64856.20	64856.20	71341.82	71341.82
		29 m depth	m	69720.41	69720.41	76692.45	76692.45
		30 m depth	m	74949.44	74949.44	82444.38	82444.38
	(v)	31 m depth	m	79146.61	79146.61	87061.27	87061.27
		32 m depth	m	87061.27	87061.27	95767.40	95767.40
		33 m depth	m	95767.40	95767.40	105344.14	105344.14
		34 m depth	m	105344.15	105344.15	115878.57	115878.57
		35 m depth	m	115878.56	115878.56	127466.42	127466.42
		36 m depth	m	127466.42	127466.42	140213.06	140213.06
		37 m depth	m	140213.06	140213.06	154234.37	154234.37
		38 m depth	m	154234.37	154234.37	169657.81	169657.81



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		39 m depth	m	169657.80	169657.80	186623.58	186623.58
		40 m depth	m	186623.58	186623.58	205285.94	205285.94
	<b>C</b>	<b>Soft Rock ( 7m dia well)</b>					
		Depth in soft rock strata upto 3m	m	21409.41	21409.41	23550.35	23550.35
	<b>D</b>	<b>Hard Rock (7m dia well)</b>					
		Depth in Hard rock strata up to 3 m	m	27004.50	28468.92	29704.94	31169.37
21.14		Sinking of 8 m external diameter well ( other than pneumatic method of sinking ) through all types of strata namely sandy soil, clayey soil and rock as shown against each case, complete as per drawing and technical specifications. Depth of sinking is reckoned from bed level.					
	<b>A</b>	<b>Sandy Soil</b>					
	<b>(i)</b>	Depth below bed level upto 3.0 M	m	9671.26	9671.26	10638.39	10638.39
	<b>(ii)</b>	Beyond 3m upto 10m depth	m	11873.97	11873.97	13061.37	13061.37
	<b>(iii)</b>	11 m depth	m	12467.67	12467.67	13714.44	13714.44
		12 m depth	m	13091.06	13091.06	14400.17	14400.17
		13 m depth	m	13745.61	13745.61	15120.17	15120.17
		14 m depth	m	14432.89	14432.89	15876.18	15876.18
		15 m depth	m	15154.53	15154.53	16669.98	16669.98
		16 m depth	m	15912.26	15912.26	17503.49	17503.49
		17 m depth	m	16707.87	16707.87	18378.66	18378.66
		18 m depth	m	17543.26	17543.26	19297.59	19297.59

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		19 m depth	m	18420.42	18420.42	20262.46	20262.46
		20 m depth	m	19341.44	19341.44	21275.58	21275.58
	(iv)	21 m depth	m	24950.46	24950.46	27445.51	27445.51
		22 m depth	m	26821.74	26821.74	29503.91	29503.91
		23 m depth	m	28833.37	28833.37	31716.71	31716.71
		24 m depth	m	30995.88	30995.88	34095.47	34095.47
		25 m depth	m	33320.57	33320.57	36652.63	36652.63
		26 m depth	m	35819.62	35819.62	39401.58	39401.58
		27 m depth	m	38506.09	38506.09	42356.70	42356.70
		28 m depth	m	41394.05	41394.05	45533.46	45533.46
		29 m depth	m	44498.60	44498.60	45533.46	45533.46
		30 m depth	m	47836.00	47836.00	52619.60	52619.60
	(v)	31 m depth	m	52619.59	52619.59	57881.55	57881.55
		32 m depth	m	57881.56	57881.56	63669.72	63669.72
		33 m depth	m	63669.71	63669.71	70036.68	70036.68
		34 m depth	m	70036.68	70036.68	77040.35	77040.35
		35 m depth	m	77040.35	77040.35	84744.39	84744.39
		36 m depth	m	84744.38	84744.38	93218.82	93218.82
		37 m depth	m	93218.82	93218.82	102540.70	102540.70
		38 m depth	m	102540.71	102540.71	112794.78	112794.78
		39 m depth	m	112794.78	112794.78	124074.26	124074.26
		40 m depth	m	124074.26	124074.26	136481.69	136481.69
	<b>B</b>	<b>Clayey Soil ( 8m dia. Well )</b>					
	(I)	Depth below bed level upto 3.0 M	m	12880.86	12880.86	14168.94	14168.94
	(ii)	Beyond 3m upto 10m depth	m	18819.16	18819.16	20701.08	20701.08
	(iii)	11 m depth	m	20748.12	20748.12	22822.93	22822.93
		12 m depth	m	21785.53	21785.53	23964.08	23964.08

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		13 m depth	m	22874.81	22874.81	25162.29	25162.29
		14 m depth	m	24018.55	24018.55	26420.41	26420.41
		15 m depth	m	25219.48	25219.48	27741.43	27741.43
		16 m depth	m	26480.45	26480.45	29128.50	29128.50
		17 m depth	m	27804.47	27804.47	30584.92	30584.92
		18 m depth	m	29194.69	29194.69	32114.16	32114.16
		19 m depth	m	30654.42	30654.42	33719.86	33719.86
		20 m depth	m	32187.14	32187.14	35405.85	35405.85
	(iv)	21 m depth	m	41191.88	41191.88	45311.07	45311.07
		22 m depth	m	44281.26	47602.36	48709.39	48709.39
		23 m depth	m	47602.36	47602.36	52362.60	52362.60
		24 m depth	m	51172.54	51172.54	56289.79	56289.79
		25 m depth	m	55010.48	55010.48	60511.53	60511.53
		26 m depth	m	59136.26	59136.26	65049.89	65049.89
		27 m depth	m	63571.49	63571.49	69928.64	69928.64
		28 m depth	m	68339.35	68339.35	75173.29	75173.29
		29 m depth	m	73464.80	73464.80	80811.28	80811.28
		30 m depth	m	78974.66	78974.66	86872.13	86872.13
	(v)	31 m depth	m	83397.24	83397.24	91736.96	91736.96
		32 m depth	m	91736.96	91736.96	100910.66	100910.66
		33 m depth	m	100910.66	100910.66	111001.73	111001.73
		34 m depth	m	111001.73	111001.73	122101.90	122101.90
		35 m depth	m	122101.90	122101.90	134312.09	134312.09
		36 m depth	m	134312.09	134312.09	147743.30	147743.30
		37 m depth	m	147743.29	147743.29	162517.62	162517.62
		38 m depth	m	162517.62	162517.62	178769.38	178769.38
		39 m depth	m	178769.39	178769.39	196646.33	196646.33
		40 m depth	m	196646.33	196646.33	216310.96	216310.96

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	<b>C</b>	<b>Soft Rock ( 8m dia well)</b>					
		Depth in soft rock strata upto 3m	m	21310.45	21310.45	23441.50	23441.50
	<b>D</b>	<b>Hard Rock(8m dia well)</b>					
		Depth in Hard rock strata up to 3 m	m	29329.35	39744.24	32262.28	42677.17
21.15		Sinking of 9 m external diameter well (other than pneumatic method of sinking) through all types of strata namely sandy soil, clayey soil and rock as shown against each case, complete as per drawing and technical specifications. Depth of sinking is reckoned from bed level.The rate inclusive of dewatering					
	<b>A</b>	<b>Sandy Soil</b>					
	(i)	Depth below bed level upto 3.0 M	m	9820.32	9820.32	10802.35	10802.35
	(ii)	Beyond 3m upto 10m depth	m	13023.95	13023.95	14326.34	14326.34
	(iii)	11 m depth	m	13675.14	13675.14	15042.66	15042.66
		12 m depth	m	14358.90	14358.90	15794.79	15794.79
		13 m depth	m	15076.85	15076.85	16584.54	16584.54
		14 m depth	m	15830.69	15830.69	17413.76	17413.76
		15 m depth	m	16622.22	16622.22	18284.44	18284.44
		16 m depth	m	17453.33	17453.33	19198.66	19198.66
		17 m depth	m	18326.00	18326.00	20158.60	20158.60
		18 m depth	m	19242.30	19242.30	21166.53	21166.53

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		19 m depth	m	20204.42	20204.42	22224.86	22224.86
		20 m depth	m	21214.64	21214.64	23336.10	23336.10
	(iv)	21 m depth	m	27366.89	27366.89	30103.58	30103.58
		22 m depth	m	29419.40	29419.40	32361.34	32361.34
		23 m depth	m	31625.86	31625.86	34788.45	34788.45
		24 m depth	m	33997.80	33997.80	37397.58	37397.58
		25 m depth	m	36547.63	36547.63	40202.39	40202.39
		26 m depth	m	39288.71	39288.71	43217.58	43217.58
		27 m depth	m	42235.36	42235.36	46458.90	46458.90
		28 m depth	m	45403.01	45403.01	49943.31	49943.31
		29 m depth	m	48808.24	48808.24	53689.06	53689.06
		30 m depth	m	52468.85	52468.85	57715.74	57715.74
	(v)	31 m depth	m	57715.73	57715.73	63487.30	63487.30
		32 m depth	m	63487.30	63487.30	69836.03	69836.03
		33 m depth	m	69836.03	69836.03	76819.63	76819.63
		34 m depth	m	76819.63	76819.63	84501.59	84501.59
		35 m depth	m	84501.60	84501.60	92951.76	92951.76
		36 m depth	m	92951.76	92951.76	102246.94	102246.94
		37 m depth	m	102246.94	102246.94	112471.63	112471.63
		38 m depth	m	112471.63	112471.63	123718.79	123718.79
		39 m depth	m	123718.80	123718.80	136090.68	136090.68
		40 m depth	m	136090.68	136090.68	149699.75	149699.75
	<b>B</b>	<b>Clayey Soil ( 9m dia. Well )</b>					
	(i)	Depth below bed level upto 3.0 M	m	13633.78	13633.78	14997.16	14997.16
	(ii)	Beyond 3m upto 10m depth	m	20262.80	20262.80	22289.07	22289.07

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(iii)	11 m depth	m	22339.73	22339.73	24573.70	24573.70
		12 m depth	m	23456.72	23456.72	25802.39	25802.39
		13 m depth	m	24629.56	24629.56	27092.52	27092.52
		14 m depth	m	25861.04	25861.04	28447.14	28447.14
		15 m depth	m	27154.09	27154.09	29869.50	29869.50
		16 m depth	m	28511.79	28511.79	31362.97	31362.97
		17 m depth	m	29937.38	29937.38	32931.12	32931.12
		18 m depth	m	31434.25	31434.25	34577.68	34577.68
		19 m depth	m	33005.96	33005.96	36306.56	36306.56
		20 m depth	m	34656.26	34656.26	38121.89	38121.89
	(iv)	21 m depth	m	44351.76	44351.76	48786.94	48786.94
		22 m depth	m	47678.15	47678.15	52445.97	52445.97
		23 m depth	m	51254.01	51254.01	56379.41	56379.41
		24 m depth	m	55098.06	55098.06	60607.87	60607.87
		25 m depth	m	59230.41	59230.41	65153.45	65153.45
		26 m depth	m	63672.69	63672.69	70039.96	70039.96
		27 m depth	m	68448.14	68448.14	75292.95	75292.95
		28 m depth	m	73581.75	73581.75	80939.93	80939.93
		29 m depth	m	79100.39	79100.39	87010.43	87010.43
		30 m depth	m	85032.91	85032.91	93536.20	93536.20
	(v)	31 m depth	m	89794.75	89794.75	98774.23	98774.23
		32 m depth	m	98774.23	98774.23	108651.65	108651.65
		33 m depth	m	108651.66	108651.66	119516.83	119516.83
		34 m depth	m	119516.83	119516.83	131468.51	131468.51
		35 m depth	m	131468.52	131468.52	144615.37	144615.37
		36 m depth	m	144615.37	144615.37	159076.91	159076.91
		37 m depth	m	159076.91	159076.91	174984.60	174984.60
		38 m depth	m	174984.60	174984.60	192483.06	192483.06

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		39 m depth	m	192483.06	192483.06	211731.37	211731.37
		40 m depth	m	211731.37	211731.37	232904.51	232904.51
	<b>C</b>	<b>Soft Rock (9m dia well)</b>					
		Depth in soft rock strata upto 3m	m	25334.81	25334.81	27868.29	27868.29
	<b>D</b>	<b>Hard Rock(9m dia well)</b>					
		Depth in Hard rock strata up to 3 m	m	31982.04	43616.95	35180.24	46815.16
21.16		Sinking of 10 m external diameter well ( other than pneumatic method of sinking ) through all types of strata namely sandy soil, clayey soil and rock as shown against each case, complete as per drawing and technical specifications. Depth of sinking is reckoned from bed level.					
	<b>A</b>	<b>Sandy Soil</b>					
	(i)	Depth below bed level upto 3.0 M	m	11673.10	11673.10	12840.41	12840.41
	(ii)	Beyond 3m upto 10m depth	m	13788.35	13788.35	15167.18	15167.18
	(iii)	11 m depth	m	14477.77	14477.77	15925.54	15925.54
		12 m depth	m	15201.66	15201.66	16721.83	16721.83
		13 m depth	m	15961.74	15961.74	17557.91	17557.91
		14 m depth	m	16759.83	16759.83	18435.81	18435.81
		15 m depth	m	17597.82	17597.82	19357.60	19357.60
		16 m depth	m	18477.71	18477.71	20325.48	20325.48
		17 m depth	m	19401.60	19401.60	21341.76	21341.76

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		18 m depth	m	20371.68	20371.68	22408.85	22408.85
		19 m depth	m	21390.26	21390.26	23529.29	23529.29
		20 m depth	m	22459.77	22459.77	24705.75	24705.75
	(iv)	21 m depth	m	28973.10	28973.10	31870.41	31870.41
		22 m depth	m	31146.08	31146.08	34260.69	34260.69
		23 m depth	m	33482.04	33482.04	36830.24	36830.24
		24 m depth	m	35993.20	35993.20	39592.52	39592.52
		25 m depth	m	38692.68	38692.68	42561.95	42561.95
		26 m depth	m	41594.63	41594.63	45754.09	45754.09
		27 m depth	m	44714.22	44714.22	49185.64	49185.64
		28 m depth	m	48067.79	48067.79	52874.57	52874.57
		29 m depth	m	51672.88	51672.88	56840.17	56840.17
		30 m depth	m	55548.34	55548.34	61103.17	61103.17
	(v)	31 m depth	m	61103.17	61103.17	67213.49	67213.49
		32 m depth	m	67213.49	67213.49	73934.84	73934.84
		33 m depth	m	73934.83	73934.83	81328.31	81328.31
		34 m depth	m	81328.32	81328.32	89461.15	89461.15
		35 m depth	m	89461.15	89461.15	98407.27	98407.27
		36 m depth	m	98407.27	98407.27	108248.00	108248.00
		37 m depth	m	108248.00	108248.00	119072.80	119072.80
		38 m depth	m	119072.81	119072.81	130980.09	130980.09
		39 m depth	m	130980.08	130980.08	144078.09	144078.09
		40 m depth	m	144078.10	144078.10	158485.91	158485.91
	B	Clayey Soil ( 10m dia. Well )					
	(i)	Depth below bed level upto 3.0 M	m	15240.94	15240.94	16765.04	16765.04
	(ii)	Beyond 3m upto 10m depth	m	20370.07	20370.07	22407.08	22407.08



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(iii)	11 m depth	m	22458.01	22458.01	24703.81	24703.81
		12 m depth	m	23580.91	23580.91	25939.00	25939.00
		13 m depth	m	24759.96	24759.96	27235.96	27235.96
		14 m depth	m	25997.96	25997.96	28597.76	28597.76
		15 m depth	m	27297.86	27297.86	30027.65	30027.65
		16 m depth	m	28662.75	28662.75	31529.03	31529.03
		17 m depth	m	30095.89	30095.89	33105.48	33105.48
		18 m depth	m	31600.68	31600.68	34760.75	34760.75
		19 m depth	m	33180.71	33180.71	36498.78	36498.78
		20 m depth	m	34839.75	34839.75	38323.73	38323.73
	(iv)	21 m depth	m	44586.58	44586.58	49045.24	49045.24
		22 m depth	m	47930.56	47930.56	52723.62	52723.62
		23 m depth	m	51525.35	51525.35	56677.89	56677.89
		24 m depth	m	55389.75	55389.75	60928.73	60928.73
		25 m depth	m	59543.99	59543.99	65498.39	65498.39
		26 m depth	m	64009.79	64009.79	70410.77	70410.77
		27 m depth	m	68810.53	68810.53	75691.58	75691.58
		28 m depth	m	73971.31	73971.31	81368.44	81368.44
		29 m depth	m	79519.16	79519.16	87471.08	87471.08
		30 m depth	m	85483.10	85483.10	94031.41	94031.41
	(v)	31 m depth	m	90270.16	90270.16	99297.18	99297.18
		32 m depth	m	99297.17	99297.17	109226.89	109226.89
		33 m depth	m	109226.88	109226.88	120149.57	120149.57
		34 m depth	m	120149.57	120149.57	132164.53	132164.53
		35 m depth	m	132164.52	132164.52	145380.97	145380.97
		36 m depth	m	145380.97	145380.97	159919.07	159919.07
		37 m depth	m	159919.07	159919.07	175910.98	175910.98
		38 m depth	m	175910.98	175910.98	193502.08	193502.08

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		39 m depth	m	193502.08	193502.08	212852.29	212852.29
		40 m depth	m	212852.28	212852.28	234137.51	234137.51
	<b>C</b>	<b>Soft Rock (10m dia well)</b>					
		Depth in soft rock strata upto 3m	m	27666.90	27666.90	30433.59	30433.59
	<b>D</b>	<b>Hard Rock ( 10m dia well )</b>					
		Depth in Hard rock strata up to 3 m	m	35064.23	46969.52	38570.65	50475.94
21.17		Sinking of 11 m external diameter well ( other than pneumatic method of sinking ) through all types of strata namely sandy soil, clayey soil and rock as shown against each case, complete as per drawing and technical specifications. Depth of sinking is reckoned from bed level.					
	<b>A</b>	<b>Sandy Soil</b>					
	(i)	Depth below bed level upto 3.0 M	m	26535.77	26535.77	29189.35	29189.35
	(ii)	Beyond 3m upto 10m depth	m	21911.83	21911.83	24103.01	24103.01
	(iii)	11 m depth	m	23007.42	23007.42	25308.16	25308.16
		12 m depth	m	24157.79	24157.79	26573.57	26573.57
		13 m depth	m	25365.68	25365.68	27902.25	27902.25
		14 m depth	m	26633.96	26633.96	29297.36	29297.36
		15 m depth	m	27965.66	27965.66	30762.23	30762.23
		16 m depth	m	29363.94	29363.94	32300.33	32300.33
		17 m depth	m	30832.14	30832.14	33915.35	33915.35

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		18 m depth	m	32373.75	32373.75	35611.13	35611.13
		19 m depth	m	33992.44	33992.44	37391.68	37391.68
		20 m depth	m	35692.06	35692.06	39261.27	39261.27
	(iv)	21 m depth	m	46042.75	46042.75	50647.03	50647.03
		22 m depth	m	49495.96	49495.96	54445.56	54445.56
		23 m depth	m	53208.16	53208.16	58528.98	58528.98
		24 m depth	m	57198.77	57198.77	62918.65	62918.65
		25 m depth	m	61488.67	61488.67	67637.54	67637.54
		26 m depth	m	66100.32	66100.32	72710.35	72710.35
		27 m depth	m	71057.84	71057.84	78163.62	78163.62
		28 m depth	m	76387.19	76387.19	84025.91	84025.91
		29 m depth	m	82116.23	82116.23	90327.85	90327.85
		30 m depth	m	88274.94	88274.94	97102.43	97102.43
	(v)	31 m depth	m	97102.44	97102.44	106812.68	106812.68
		32 m depth	m	106812.68	106812.68	117493.95	117493.95
		33 m depth	m	117493.96	117493.96	129243.36	129243.36
		34 m depth	m	129243.35	129243.35	142167.69	142167.69
		35 m depth	m	142167.68	142167.68	156384.45	156384.45
		36 m depth	m	156384.46	156384.46	172022.91	172022.91
		37 m depth	m	172022.90	172022.90	189225.19	189225.19
		38 m depth	m	189225.19	189225.19	208147.71	208147.71
		39 m depth	m	208147.72	208147.72	228962.49	228962.49
		40 m depth	m	228962.48	228962.48	251858.73	251858.73
	B	Clayey Soil ( 11m dia. Well )					
	(i)	Depth below bed level upto 3.0 M	m	25366.02	25366.02	27902.62	27902.62
	(ii)	Beyond 3m upto 10m depth	m	42337.40	42337.40	46571.14	46571.14

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(iii)	11 m depth	m	46676.99	46676.99	51344.69	51344.69
		12 m depth	m	49010.84	49010.84	53911.92	53911.92
		13 m depth	m	51461.38	51461.38	56607.52	56607.52
		14 m depth	m	54034.45	54034.45	59437.90	59437.90
		15 m depth	m	56736.17	56736.17	62409.79	62409.79
		16 m depth	m	59572.98	59572.98	65530.28	65530.28
		17 m depth	m	62551.63	62551.63	68806.79	68806.79
		18 m depth	m	65679.21	65679.21	72247.13	72247.13
		19 m depth	m	68963.17	68963.17	75859.49	75859.49
		20 m depth	m	72411.33	72411.33	79652.46	79652.46
	(iv)	21 m depth	m	92669.26	92669.26	101936.19	101936.19
		22 m depth	m	99619.46	99619.46	109581.41	109581.41
		23 m depth	m	107090.93	107090.93	117800.02	117800.02
		24 m depth	m	115122.75	115122.75	126635.03	126635.03
		25 m depth	m	123756.96	123756.96	136132.66	136132.66
		26 m depth	m	133038.74	133038.74	146342.61	146342.61
		27 m depth	m	143016.64	143016.64	157318.30	157318.30
		28 m depth	m	153742.89	153742.89	169117.18	169117.18
		29 m depth	m	165273.60	165273.60	181800.96	181800.96
		30 m depth	m	177669.13	177669.13	195436.04	195436.04
	(v)	31 m depth	m	187618.60	187618.60	206380.46	206380.46
		32 m depth	m	206380.45	206380.45	227018.50	227018.50
		33 m depth	m	227018.50	227018.50	249720.35	249720.35
		34 m depth	m	249720.35	249720.35	274692.39	274692.39
		35 m depth	m	274692.38	274692.38	302161.62	302161.62
		36 m depth	m	302161.62	302161.62	332377.78	332377.78
		37 m depth	m	332377.79	332377.79	365615.57	365615.57
		38 m depth	m	365615.57	365615.57	402177.13	402177.13

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		39 m depth	m	402177.12	402177.12	442394.83	442394.83
		40 m depth	m	442394.83	442394.83	486634.31	486634.31
	<b>C</b>	<b>Soft Rock (11m dia well)</b>					
		Depth in soft rock strata upto 3m	m	61896.90	61896.90	68086.59	68086.59
	<b>D</b>	<b>Hard Rock ( 11m dia well )</b>					
		Depth in Hard rock strata up to 3 m	m	78612.29	83551.81	86473.52	91413.04
21.18		Sinking of 12 m external diameter well (other than pneumatic method of sinking) through all types of strata namely sandy soil, clayey soil and rock as shown against each case, complete as per drawing and technical specifications. Depth of sinking is reckoned from bed level.The rate inclusive of dewatering.					
	<b>A</b>	<b>Sandy Soil</b>					
	(i)	Depth below bed level upto 3.0 M	m	55388.53	55388.53	60927.38	60927.38
	(ii)	Beyond 3m upto 10m depth	m	62926.54	62926.54	69219.19	69219.19
	(iii)	11 m depth	m	66072.87	66072.87	72680.15	72680.15
		12 m depth	m	69376.51	69376.51	76314.16	76314.16
		13 m depth	m	72845.34	72845.34	80129.87	80129.87
		14 m depth	m	76487.61	76487.61	84136.37	84136.37
		15 m depth	m	80311.99	80311.99	88343.19	88343.19
		16 m depth	m	84327.59	84327.59	92760.35	92760.35
		17 m depth	m	88543.97	88543.97	97398.37	97398.37
		18 m depth	m	92971.17	92971.17	102268.29	102268.29

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		19 m depth	m	97619.73	97619.73	107381.70	107381.70
		20 m depth	m	102500.72	102500.72	112750.79	112750.79
	(iv)	21 m depth	m	132225.92	132225.92	145448.51	145448.51
		22 m depth	m	142142.87	142142.87	156357.16	156357.16
		23 m depth	m	152803.58	152803.58	168083.94	168083.94
		24 m depth	m	164263.85	164263.85	180690.24	180690.24
		25 m depth	m	176583.64	176583.64	194242.00	194242.00
		26 m depth	m	189827.41	189827.41	208810.15	208810.15
		27 m depth	m	204064.46	204064.46	224470.91	224470.91
		28 m depth	m	219369.30	219369.30	241306.23	241306.23
		29 m depth	m	235822.00	235822.00	259404.20	259404.20
		30 m depth	m	253508.64	253508.64	278859.50	278859.50
	(v)	31 m depth	m	278859.50	278859.50	306745.45	306745.45
		32 m depth	m	306745.45	306745.45	337420.00	337420.00
		33 m depth	m	337420.00	337420.00	371162.00	371162.00
		34 m depth	m	371161.99	371161.99	408278.19	408278.19
		35 m depth	m	408278.20	408278.20	449106.02	449106.02
		36 m depth	m	449106.01	449106.01	494016.61	494016.61
		37 m depth	m	494016.61	494016.61	543418.27	543418.27
		38 m depth	m	543418.27	543418.27	597760.10	597760.10
		39 m depth	m	597760.10	597760.10	657536.11	657536.11
		40 m depth	m	657536.11	657536.11	723289.72	723289.72
	<b>B</b>	<b>Clayey Soil ( 12m dia. Well )</b>					
	(i)	Depth below bed level upto 3.0 M	m	61866.71	61866.71	68053.38	68053.38
	(ii)	Beyond 3m upto 10m depth	m	103104.94	103104.94	113415.43	113415.43
	(iii)	11 m depth	m	113673.20	113673.20	125040.52	125040.52

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		12 m depth	m	119356.86	119356.86	131292.55	131292.55
		13 m depth	m	125324.70	125324.70	137857.17	137857.17
		14 m depth	m	131590.94	131590.94	144750.03	144750.03
		15 m depth	m	138170.49	138170.49	151987.54	151987.54
		16 m depth	m	145079.01	145079.01	159586.91	159586.91
		17 m depth	m	152332.96	152332.96	167566.26	167566.26
		18 m depth	m	159949.61	159949.61	175944.57	175944.57
		19 m depth	m	167947.09	167947.09	184741.80	184741.80
		20 m depth	m	176344.44	176344.44	193978.88	193978.88
	(iv)	21 m depth	m	225678.90	225678.90	248246.79	248246.79
		22 m depth	m	242604.81	242604.81	266865.29	266865.29
		23 m depth	m	260800.18	260800.18	286880.20	286880.20
		24 m depth	m	280360.19	280360.19	308396.21	308396.21
		25 m depth	m	301387.20	301387.20	331525.92	331525.92
		26 m depth	m	323991.24	323991.24	356390.36	356390.36
		27 m depth	m	348290.58	348290.58	383119.64	383119.64
		28 m depth	m	374412.36	374412.36	411853.60	411853.60
		29 m depth	m	402493.29	402493.29	442742.62	442742.62
		30 m depth	m	432680.29	432680.29	475948.32	475948.32
	(v)	31 m depth	m	456910.38	456910.38	502601.42	502601.42
		32 m depth	m	502601.42	502601.42	552861.56	552861.56
		33 m depth	m	552861.56	552861.56	608147.72	608147.72
		34 m depth	m	608147.72	608147.72	668962.49	668962.49
		35 m depth	m	668962.50	668962.50	735858.75	735858.75
		36 m depth	m	735858.76	735858.76	809444.64	809444.64
		37 m depth	m	809444.63	809444.63	890389.09	890389.09
		38 m depth	m	890389.09	890389.09	979428.00	979428.00
		39 m depth	m	979428.00	979428.00	1077370.80	1077370.80

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		40 m depth	m	1077370.80	1077370.80	1185107.88	1185107.88
	<b>C</b>	<b>Soft Rock(12m dia well)</b>					
		Depth in soft rock strata upto 3m	m	144194.09	144194.09	158613.49	158613.49
	<b>D</b>	<b>Hard Rock (12m dia well)</b>					
		Depth in Hard rock strata up to 3 m	m	182271.79	182271.79	200498.97	200498.97
21.19		Sinking of Twin D Type well (other than pneumatic method of sinking) through all types of strata namely sandy soil, clayey soil and rock as shown against each case, complete as per drawing and technical specifications. Depth of sinking is reckoned from bed level.The rate inclusive of dewatering (Well size 12 m x 6 m)					
	<b>A</b>	<b>Sandy Soil</b>					
	(i)	Depth below bed level upto 3.0 M	m	12496.05	12496.05	13745.66	13745.66
	(ii)	Beyond 3m upto 10m depth	m	13516.34	13516.34	14867.98	14867.98
	(iii)	11 m depth	m	14192.16	14192.16	15611.38	15611.38
		12 m depth	m	14901.77	14901.77	16391.95	16391.95
		13 m depth	m	15646.86	15646.86	17211.55	17211.55
		14 m depth	m	16429.20	16429.20	18072.12	18072.12
		15 m depth	m	17250.66	17250.66	18975.73	18975.73
		16 m depth	m	18113.19	18113.19	19924.51	19924.51
		17 m depth	m	19018.85	19018.85	20920.74	20920.74
		18 m depth	m	19969.79	19969.79	21966.77	21966.77



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		19 m depth	m	20968.28	20968.28	23065.11	23065.11
		20 m depth	m	22016.69	22016.69	24218.36	24218.36
	(iv)	21 m depth	m	28402.00	28402.00	31242.20	31242.20
		22 m depth	m	30532.00	30532.00	33585.20	33585.20
		23 m depth	m	32822.00	32822.00	36104.20	36104.20
		24 m depth	m	35283.00	35283.00	38811.30	38811.30
		25 m depth	m	37929.00	37929.00	41721.90	41721.90
		26 m depth	m	40774.00	40774.00	44851.40	44851.40
		27 m depth	m	43832.00	43832.00	48215.20	48215.20
		28 m depth	m	47120.00	47120.00	51832.00	51832.00
		29 m depth	m	50654.00	50654.00	55719.40	55719.40
		30 m depth	m	54453.00	54453.00	59898.30	59898.30
	(v)	31 m depth	m	59898.00	59898.00	65887.80	65887.80
		32 m depth	m	65888.00	65888.00	72476.80	72476.80
		33 m depth	m	72476.00	72476.00	79723.60	79723.60
		34 m depth	m	79724.00	79724.00	87696.40	87696.40
		35 m depth	m	87696.00	87696.00	96465.60	96465.60
		36 m depth	m	96466.00	96466.00	106112.60	106112.60
		37 m depth	m	106113.00	106113.00	116724.30	116724.30
		38 m depth	m	116724.00	116724.00	128396.40	128396.40
		39 m depth	m	128396.00	128396.00	141235.60	141235.60
		40 m depth	m	141236.00	141236.00	155359.60	155359.60
	<b>B</b>	<b>Clayey Soil ( Twin D Type well )</b>					
	(i)	Depth below bed level upto 3.0 M	m	14812.65	14812.65	16293.91	16293.91
	(ii)	Beyond 3m upto 10m depth	m	22586.42	22586.42	24845.07	24845.07

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(iii)	11 m depth	m	24902.00	24902.00	27392.20	27392.20
		12 m depth	m	26147.00	26147.00	28761.70	28761.70
		13 m depth	m	27454.00	27454.00	30199.40	30199.40
		14 m depth	m	28827.00	28827.00	31709.70	31709.70
		15 m depth	m	30268.00	30268.00	33294.80	33294.80
		16 m depth	m	31781.00	31781.00	34959.10	34959.10
		17 m depth	m	33370.00	33370.00	36707.00	36707.00
		18 m depth	m	35039.00	35039.00	38542.90	38542.90
		19 m depth	m	36791.00	36791.00	40470.10	40470.10
		20 m depth	m	38630.00	38630.00	42493.00	42493.00
	(iv)	21 m depth	m	49437.80	49437.80	54381.58	54381.58
		22 m depth	m	53145.64	53145.64	58460.20	58460.20
		23 m depth	m	57131.56	57131.56	62844.72	62844.72
		24 m depth	m	61416.43	61416.43	67558.07	67558.07
		25 m depth	m	66022.66	66022.66	72624.93	72624.93
		26 m depth	m	70974.36	70974.36	78071.80	78071.80
		27 m depth	m	76297.44	76297.44	83927.18	83927.18
		28 m depth	m	82019.75	82019.75	90221.73	90221.73
		29 m depth	m	88171.24	88171.24	96988.36	96988.36
		30 m depth	m	94784.08	94784.08	104262.49	104262.49
	(v)	31 m depth	m	100091.99	100091.99	110101.19	110101.19
		32 m depth	m	110101.19	110101.19	121111.31	121111.31
		33 m depth	m	121111.31	121111.31	133222.44	133222.44
		34 m depth	m	133222.44	133222.44	146544.68	146544.68
		35 m depth	m	146544.68	146544.68	161199.15	161199.15
		36 m depth	m	161199.16	161199.16	177319.08	177319.08
		37 m depth	m	177319.07	177319.07	195050.98	195050.98
		38 m depth	m	195050.98	195050.98	214556.08	214556.08

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		39 m depth	m	214556.08	214556.08	236011.69	236011.69
		40 m depth	m	236011.68	236011.68	259612.85	259612.85
	<b>C</b>	<b>Soft Rock(Twin D Type well)</b>					
		Depth in soft rock strata	m	30742.65	30742.65	33816.91	33816.91
	<b>D</b>	<b>Hard Rock ( Twin D Type well )</b>					
		Depth in Hard rock strata up to 3 m	m	38343.26	40401.39	42177.59	44235.72
21.20		Sand Filling in Wells complete as per Drawing and Technical Specifications.	cum	163.71	1154.32	180.08	1170.69
21.21		Providing Steel Liner 10 mm thick for Curbs and 6 mm thick for Steining of Wells including Fabricating and Setting out as per Detailed Drawing.	MT	19964.08	68835.13	21960.49	70831.54
21.22		Bored cast-in-situ M35 grade R.C.C. Pile excluding Reinforcement complete as per Drawing and Technical Specifications and removal of excavated earth with all lifts and lead upto 1000 m.	m	6451.62	9725.94	7096.78	10371.10
21.23		Bored cast-in-situ M35 grade R.C.C. Pile excluding Reinforcement complete as per Drawing and Technical Specifications and removal of excavated earth with all lifts and lead upto 1000 m.	m	7480.82	12194.17	8228.90	12942.25

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
21.24		Pile Load Test on single Vertical Pile in accordance with IS:2911(Part-IV) (The rates are for estimate purpose only.)					
		a) Initial and routine load	MT	0.00	834.26	0.00	0.00
		b) Lateral load test	MT	0.00	6852.85	0.00	0.00
21.25		Cement Concrete for Reinforced Concrete in Pile Cap complete as per Drawing and Technical Specification					
	<b>A</b>	<b>RCC Grade M20</b>					
	(i)	Using Concrete Mixer	cum	1601.11	4957.11	1761.22	5117.22
	(ii)	Using Batching Plant, Transit Mixer and Concrete Pump	cum	879.30	4235.30	967.23	4323.23
	<b>B</b>	<b>RCC Grade M25</b>					
	(i)	Using Concrete Mixer	cum	1489.27	5205.36	1638.20	5354.29
	(ii)	Using Batching Plant, Transit Mixer and Concrete Pump	cum	901.63	4617.72	991.79	4707.88
	<b>C</b>	<b>RCC Grade M30</b>					
	(i)	Using Concrete Mixer	cum	1492.23	5255.91	1641.45	5405.14
	(ii)	Using Batching Plant, Transit Mixer and Concrete Pump	cum	904.58	4668.27	995.04	4758.72
	<b>D</b>	<b>RCC Grade M35</b>					
	(i)	Using Concrete Mixer	cum	1498.13	5357.01	1647.94	5506.83
	(ii)	Using Batching Plant, Transit Mixer and Concrete Pump	cum	910.48	4769.37	1001.53	4860.41

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
21.26		Levelling Course for Pile cap					
		Providing and laying of PCC M15 levelling course 100mm thick below the pile cap.	cum	1185.35	4100.51	1303.88	4219.04
21.27		Supplying, Fitting and Placing un coated HYSD bar Reinforcement in Foundation complete as per Drawing and Technical Specifications.	MT	4766.48	59413.67	5243.13	59890.32
<b>SUB STRUCTURE</b>							
21.28		Brick masonry work in 1:3 in sub-structure complete excluding pointing and plastering, as per drawing and Technical Specifications	cum	1963.04	6399.81	2159.34	6596.11
21.29		Pointing with cement mortar (1:3 ) on brick work in substructure as per Technical Specifications	Sqm	122.69	135.52	134.96	147.79
21.30		Plastering with cement mortar (1:3 ) on brick work in sub-structure as per Technical Specifications	Sqm	122.69	184.29	134.96	196.56
21.31		Stone masonry work in cement mortar 1:3 for substructure complete as per drawing and Technical Specifications					
	A	Random Rubble Masonry	cum	2419.40	5310.53	2661.34	5552.47
	B	Coursed rubble masonry (first sort )	cum	2811.59	5678.55	3092.75	5959.71
	C	Ashlar masonry(first sort)	cum	4146.18	7151.89	4560.80	7566.51

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
21.32		Plain/Reinforced cement concrete in sub-structure complete as per drawing and Technical Specifications					
	A	<b>PCC Grade M15</b>					
		Height upto 5m	Cum	1726.83	4644.06	1899.52	4816.74
	B	<b>PCC Grade M20</b>					
		Height upto 5m	cum	1794.27	5148.18	1973.70	5327.60
	C	<b>PCC Grade M25</b>					
		Height upto 5m					
	(i)	Using Concrete Mixer	cum	1847.52	5544.97	2032.28	5729.72
	cum	With Batching Plant, Transit Mixer and Concrete Pump	cum	1202.23	4901.22	1322.45	5021.44
		Height 5m to 10m					
	(i)	Using Concrete Mixer	cum	2112.39	5809.84	2323.63	6021.08
	(ii)	With Batching Plant, Transit Mixer and Concrete Pump	cum	1443.72	5142.71	1588.09	5287.08
		Height above 10m					
	(i)	Using Concrete Mixer	cum	2443.48	6140.92	2687.83	6385.27
	(ii)	With Batching Plant, Transit Mixer and Concrete Pump	cum	1745.58	5444.58	1920.14	5619.13
	D	<b>PCC Grade M30</b>					
		Height upto 5m					
	(i)	Using Concrete Mixer	cum	1853.30	5587.99	2038.63	5773.32
	(ii)	Using Batching Plant, Transit Mixer and Concrete Pump	cum	1207.44	4940.06	1328.18	5060.80
		Height 5m to 10m					
	(i)	Using Concrete Mixer	cum	2120.48	5855.17	2332.53	6067.22

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(ii)	Using Batching Plant, Transit Mixer and Concrete Pump	cum	1451.02	5183.64	1596.12	5328.74
		Height above 10m					
	(i)	Using Concrete Mixer	cum	2454.45	6189.15	2699.90	6434.59
	(ii)	Using Batching Plant, Transit Mixer and Concrete Pump	cum	1755.49	5488.11	1931.04	5663.66
	<b>E</b>	<b>RCC Grade M20</b>					
		Height upto 5m					
	(i)	Using Concrete Mixer	cum	1800.19	5195.51	1980.21	5375.53
	(ii)	With Batching Plant, Transit Mixer and Concrete Pump	cum	1154.49	4548.77	1269.94	4664.22
		Height 5m to 10m					
	(i)	Using Concrete Mixer	cum	2046.13	5441.44	2250.74	5646.05
	(ii)	With Batching Plant, Transit Mixer and Concrete Pump	cum	1376.89	4771.17	1514.58	4908.86
		Height above 10m					
	(i)	Using Concrete Mixer	cum	2353.55	5748.86	2588.90	5984.22
	(ii)	With Batching Plant, Transit Mixer and Concrete Pump	cum	1654.89	5049.17	1820.37	5214.65
	<b>F</b>	<b>RCC Grade M25</b>					
		Height upto 5m					
	(i)	Using Concrete Mixer	cum	1854.08	5597.08	2039.49	5782.49
	(ii)	With Batching Plant, Transit Mixer and Concrete Pump	cum	1208.39	4950.34	1329.22	5071.18
		Height 5m to 10m					
	(i)	Using Concrete Mixer	cum	2094.83	5837.82	2304.31	6047.30

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(ii)	With Batching Plant, Transit Mixer and Concrete Pump	cum	1427.94	5169.90	1570.74	5312.70
		Height above 10m					
	(i)	Using Concrete Mixer	cum	2455.94	6198.94	2701.54	6444.53
	(ii)	With Batching Plant, Transit Mixer and Concrete Pump	cum	1757.28	5499.24	1933.01	5674.97
	G	<b>RCC Grade M-30</b>					
		Height upto 5m					
	(i)	Using Concrete Mixer	cum	1857.29	5620.98	2043.02	5806.71
	(ii)	Using Batching Plant, Transit Mixer and Concrete Pump	cum	1211.75	4975.44	1332.93	5096.61
		Height 5m to 10m					
	(i)	Using Concrete Mixer	cum	2065.59	5837.75	2272.15	6044.31
	(ii)	Using Batching Plant, Transit Mixer and Concrete Pump	cum	1401.86	5165.55	1542.05	5305.74
		Height above 10m					
	(i)	Using Concrete Mixer	cum	2361.25	6124.94	2597.37	6361.06
	(ii)	Using Batching Plant, Transit Mixer and Concrete Pump	cum	1671.70	5435.38	1838.87	5602.55
	H	<b>RCC Grade M-35</b>					
		Height upto 5m					
	(i)	Using Concrete Mixer	cum	1872.05	5730.93	2059.25	5918.14
	(ii)	Using Batching Plant, Transit Mixer and Concrete Pump	cum	1226.51	5085.39	1349.16	5208.04
		Height 5m to 10m					



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(i)	Using Concrete Mixer	cum	2036.86	5895.74	2240.54	6099.43
	(ii)	Using Batching Plant, Transit Mixer and Concrete Pump	cum	1377.23	5236.12	1514.96	5373.84
		Height above 10m					
	(i)	Using Concrete Mixer	cum	2284.07	6142.95	2512.47	6371.36
	(ii)	Using Batching Plant, Transit Mixer and Concrete Pump	cum	1603.32	5462.20	1763.65	5622.53
21.33		Supplying, fitting and placing HYSD bar reinforcement in sub-structure complete as per drawing and Technical Specifications.	MT	4995.38	59642.57	5494.91	60142.11
21.34		Supplying, fitting and placing Mild steel reinforcement complete in sub-structure as per drawing and Technical Specification	MT	4089.97	53417.03	4498.97	53826.03
21.35		Providing weep holes in Brick masonry/Plain/ Reinforced concrete abutment, wing wall/ return wall with 100 mm dia PVC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing face. Complete as per drawing and Technical Specifications	MT	16.44	249.68	18.09	251.32
21.36		Back filling behind abutment, wing wall and return wall complete as per drawing and Technical Specification					
	<b>A</b>	Granular material	Cum	422.48	1477.47	464.72	1519.72

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	<b>B</b>	Sandy material	cum	422.48	1413.10	464.72	1455.34
21.37	Providing and laying of Filter media with granular materials/stone crushed aggregates satisfying the requirements laid down in clause 2504.2.2. of MoRTH specifications to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and provided over the entire surface behind abutment, wing wall and return wall to the full height compacted to a firm condition complete as per drawing and Technical Specification.		Cum	451.02	1464.06	496.12	1509.16
21.38	Supplying, fitting and fixing in position true to line and level cast steel rocker bearing conforming to IRC: 83(Pt.-1) section IX and clause 2003 of MoRTH specifications complete including all accessories as per drawing and Technical Specifications.		Tonne	3.50	643.18	3.85	643.53
21.39	Supplying, fitting and fixing in position true to line and level forged steel roller bearing conforming to IRC: 83(Pt.-1) section IX and clause 2003 of MoRTH specifications complete including all accessories as per drawing and Technical Specifications.		Tonne	3.50	515.24	3.85	515.59
21.40	Supplying, fitting and fixing in position true to line and level sliding plate bearing with PTFE surface sliding on stainless steel complete including all accessories as per drawing and Technical Specifications and BS: 5400, section 9.1 & 9.2 (for PTFE) and clause 2004 of MoRTH Specifications.		Tonne	10.93	330.77	12.02	331.87

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
21.41	Supplying, fitting and fixing in position true to line and level elastomeric bearing conforming to IRC: 83 (Part-II) section IX and clause 2005 of MoRTH specifications complete including all accessories as per drawing and Technical Specifications.	cum	0.05	0.69	0.05	0.69
21.42	Supplying, fitting and fixing in position true to line and level POT-PTFE bearing consisting of a metal piston supported by a disc or unreinforced elastomer confined within a metal cylinder, sealing rings, dust seals, PTFE surface sliding against stainless steel mating surface, complete assembly to be of cast steel/fabricated structural steel, metal and elastomer elements to be as per IRC: 83 part-I & II respectively and other parts conforming to BS: 5400, section 9.1 & 9.2 and clause 2006 of MoRTH Specifications complete as per drawing and approved Technical Specifications.	Tonne	4.60	106.95	5.06	107.41



**CHAPTER NO. 22**  
**BRIDGES - SUPER STRUCTURE & PROTECTION WORK**

**Notes :-**

- 1 Rates under this chapter are based on PPC cement, however where OPC cement is to be used,
- 2 The rates for all materials include carriage up to 5km., additional carriage be adjusted accordingly
- 3 The rates of bitumen are based as on 01.07.2020, difference be adjusted as on date while
- 4 All rates for concrete include cost for Tools, Plant, vibrators & admixture wherever necessary as per
- 5 Separate rates for different heights for super structure has been added in this chapter, payment be
- 6 Rates for concrete include transportation of concrete with transit mixture up to 5 km, additional
- 7 Rates for Pre stressed & Pre tensioned girders includes all costs for casting yard, casing pipes, HT
- 8 All rates include cost for water, if supplied by the department, the rates be reduced accordingly.
- 9 The rates of steel of item No. 22.2, 22.7, 22.12, 22.10 are inclusive of wastage, overlaps, couplings,

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
22.1	Furnishing and Placing Reinforced/ Prestressed cement concrete in super- structure as per drawing and Technical Specification					
<b>A</b>	<b>RCC Grade M20 Case I</b>					
	<b>Using Concrete Mixer</b>					
	(a) For solid slab super-structure					
	(i) Height up to 5m	cum	2414.39	5807.63	2655.83	6049.07
	(ii) Height 5m to 10m	cum	2721.65	6114.89	2993.81	6387.06
	(iii) Height above 10m	cum	3028.91	6422.15	3331.80	6725.04
	(b) For T-beam & slab					
	(i) Height up to 5m	cum	2721.65	6114.89	2993.81	6387.06
	(ii) Height 5m to 10m	cum	3028.91	6422.15	3331.80	6725.04
	(iii) Height above 10m	cum	3336.17	6729.41	3669.78	7063.03
	<b>Using Batching Plant, Transit Mixer and Concrete Pump</b>					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(a)	For Solid slab super-structure-including centering and shuttering					
	(i)	Height up to 5m	cum	1710.55	5105.04	1881.60	5276.09
	(ii)	Height 5m to 10m	cum	1988.56	5383.05	2187.42	5581.91
	(iii)	Height above 10m	cum	2266.58	5661.06	2493.23	5887.72
	(b)	For T-beam & slab-including centering and shuttering					
	(i)	Height up to 5m	cum	1988.56	5383.05	2187.42	5581.91
	(ii)	Height 5m to 10m	cum	2266.58	5661.06	2493.23	5887.72
	(iii)	Height above 10m	cum	2544.59	5939.07	2799.05	6193.53
<b>B</b>	RCC Grade M25						
	Using Concrete Mixer						
	(a)	For Solid slab super-structure-including centering and shuttering					
	(i)	Height up to 5m	cum	2522.82	6265.81	2775.10	6518.09
	(ii)	Height 5m to 10m	cum	2857.19	6600.18	3142.90	6885.90
	(iii)	Height above 10m	cum	3191.55	6934.55	3510.71	7253.70
	(b)	For T-beam & slab-including centering and shuttering					
	(i)	Height up to 5m	cum	2857.19	6600.18	3142.90	6885.90
	(ii)	Height 5m to 10m	cum	3191.55	6934.55	3510.71	7253.70
	(iii)	Height above 10m	cum	3525.92	7268.91	3878.51	7621.50
	Using Batching Plant, Transit Mixer and Concrete Pump						
	(a)	For Solid slab super-structure-including centering and shuttering					
	(i)	Height up to 5m	cum	1818.34	5560.50	2000.17	5742.33
	(ii)	Height 5m to 10m	cum	2123.30	5865.46	2335.63	6077.79
	(iii)	Height above 10m	cum	2428.26	6170.42	2671.08	6413.25

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(b)	For T-beam & slab-including centering and shuttering					
	(i)	Height up to 5m	cum	2123.30	5865.46	2335.63	6077.79
	(ii)	Height 5m to 10m	cum	2428.26	6170.42	2671.08	6413.25
	(iii)	Height above 10m	cum	2733.22	6475.38	3006.54	6748.70
C	RCC Grade M 30-For solid slab.						
	Using Concrete Mixer						
	(a)	For Solid slab super-structure-including centering and shuttering					
	(i)	Height up to 5m	cum	2529.23	6292.92	2782.16	6545.85
	(ii)	Height 5m to 10m	cum	2865.21	6628.89	3151.73	6915.41
	(iii)	Height above 10m	cum	3201.18	6964.86	3521.29	7284.98
	(b)	For T-beam & slab-including centering and shuttering					
	(i)	Height up to 5m	cum	2865.21	6628.89	3151.73	6915.41
	(ii)	Height 5m to 10m	cum	3201.18	6964.86	3521.29	7284.98
	(iii)	Height above 10m	cum	3537.15	7300.83	3890.86	7654.55
	Using Batching Plant, Transit Mixer and Concrete Pump						
	(a)	For Solid slab super-structure-including centering and shuttering					
	(i)	Height up to 5m	cum	1825.01	5588.70	2007.51	5771.20
	(ii)	Height 5m to 10m	cum	2131.64	5895.32	2344.80	6108.49
	(iii)	Height above 10m	cum	2438.27	6201.95	2682.09	6445.78
	(b)	For T-beam & slab-including centering and shuttering					
	(i)	Height up to 5m	cum	2131.64	5895.32	2344.80	6108.49
	(ii)	Height 5m to 10m	cum	2438.27	6201.95	2682.09	6445.78
	(iii)	Height above 10m	cum	2744.90	6508.58	3019.38	6783.07

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7	
D	RCC/PSC Grade M35-for solid slab						
	Using Concrete Mixer						
	(a)	For Solid slab super-structure-including centering and shuttering					
	(i)	Height up to 5m	cum	2421.41	6280.29	2663.55	6522.43
	(ii)	Height 5m to 10m	cum	2764.76	6623.64	3041.23	6900.12
	(iii)	Height above 10m	cum	3108.11	6966.99	3418.92	7277.80
	(b)	For T-beam & slab-including centering and shuttering					
	(i)	Height up to 5m	cum	2764.76	6623.64	3041.23	6900.12
	(ii)	Height 5m to 10m	cum	3108.11	6966.99	3418.92	7277.80
	(iii)	Height above 10m	cum	3451.46	7310.34	3796.60	7655.49
	(c)	For box girder and balanced cantilever-including centering and shuttering					
	(i)	Height up to 5m	cum	3794.81	7653.69	4174.29	8033.17
	(ii)	Height 5m to 10m	cum	4481.50	8340.39	4929.66	8788.54
	(iii)	Height above 10m	cum	5168.20	9027.09	5685.02	9543.91
	Using Batching Plant, Transit Mixer and Concrete Pump						
	(a)	For Solid slab super-structure-including centering and shuttering					
	(i)	Height up to 5m	cum	1728.92	5587.80	1901.81	5760.70
	(ii)	Height 5m to 10m	cum	2042.93	5901.81	2247.22	6106.10
	(iii)	Height above 10m	cum	2356.93	6215.82	2592.63	6451.51
	(b)	For T-beam & slab-including centering and shuttering					
	(i)	Height up to 5m	cum	2042.93	5901.81	2247.22	6106.10
	(ii)	Height 5m to 10m	cum	2356.93	6215.82	2592.63	6451.51
	(iii)	Height above 10m	cum	2670.94	6529.82	2938.04	6796.92



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(c)	For box girder and balanced cantilever-including centering and shuttering					
	(i)	Height up to 5m	cum	2984.95	6843.83	3283.44	7142.33
	(ii)	Height 5m to 10m	cum	3612.96	7471.84	3974.26	7833.14
	(iii)	Height above 10m	cum	4240.97	8099.86	4665.07	8523.96
<b>E</b>	RCC/PSC Grade M-40						
	Using Concrete Mixer						
	(a)	For Solid slab super-structure-including centering and shuttering					
	(i)	Height up to 5m	cum	2712.67	6650.56	2983.94	6921.82
	(ii)	Height 5m to 10m	cum	3070.25	7008.14	3377.27	7315.16
	(iii)	Height above 10m	cum	3427.83	7365.72	3770.61	7708.50
	(b)	For T-beam & slab-including centering and shuttering					
	(i)	Height up to 5m	cum	3070.25	7008.14	3377.27	7315.16
	(ii)	Height 5m to 10m	cum	3427.83	7365.72	3770.61	7708.50
	(iii)	Height above 10m	cum	3785.41	7723.30	4163.95	8101.84
	Using Batching Plant, Transit Mixer and Concrete Pump						
	(a)	For Solid slab super-structure-including centering and shuttering					
	(i)	Height up to 5m	cum	1777.00	5755.94	1954.70	5933.65
	(ii)	Height 5m to 10m	cum	2101.00	6079.94	2311.10	6290.04
	(iii)	Height above 10m	cum	2424.99	6403.93	2667.49	6646.43
	(b)	For T-beam & slab-including centering and shuttering					
	(i)	Height up to 5m	cum	2101.00	6079.94	2311.10	6290.04
	(ii)	Height 5m to 10m	cum	2424.99	6403.93	2667.49	6646.43
	(iii)	Height above 10m	cum	2748.99	6727.93	3023.89	7002.83

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(c)	For cast-in-situ box girder, segment construction and balanced cantilever- including centering and shuttering					
	(i)	Height up to 5m	cum	2101.00	6079.94	2311.10	6290.04
	(ii)	Height 5m to 10m	cum	2424.99	6403.93	2667.49	6646.43
	(iii)	Height above 10m	cum	2748.99	6727.93	3023.89	7002.83
<b>F</b>	PSC Grade M-45						
	(a)	For Solid/ voided slab super-structure-including centering and shuttering					
	(i)	Height up to 5m	cum	1702.74	5904.75	1873.01	6075.02
	(ii)	Height 5m to 10m	cum	2044.03	6246.03	2248.43	6450.44
	(iii)	Height above 10m	cum	2385.32	6587.32	2623.85	6825.85
	(b)	For T-beam & slab including launching of precast girders by launching truss upto 40 m span.21-31percent of cost of concrete including centering and shuttering.					
	(i)	Height up to 5m	cum	2044.03	6246.03	2248.43	6450.44
	(ii)	Height 5m to 10m	cum	2385.32	6587.32	2623.85	6825.85
	(iii)	Height above 10m	cum	2726.60	6928.61	2999.26	7201.27
	(c)	For cast-in-situ box girder, segment construction and balanced cantilever- including centering and shuttering					
	(i)	Height up to 5m	cum	3067.89	7269.90	3374.68	7576.69
	(ii)	Height 5m to 10m	cum	3750.46	7952.47	4125.51	8327.52
	(iii)	Height above 10m	cum	4433.04	8635.05	4876.34	9078.35
<b>G</b>	PSC Grade M-50						
	(a)	For cast-in-situ box girder, segment construction and balanced cantilever- including centering and shuttering					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(i)	Height up to 5m	cum	3086.09	7447.43	3394.70	7756.04
	(ii)	Height 5m to 10m	cum	3793.37	8154.71	4172.71	8534.05
	(iii)	Height above 10m	cum	4500.65	8861.99	4950.71	9312.05
<b>H</b>	PSC Grade M- 55- Using 515 Kg /cum cement						
	(a)	For cast-in-situ box girder, segment construction and balanced cantilever- including centering and shuttering					
	(i)	Height up to 5m	cum	3221.55	7832.51	3543.71	8154.66
	(ii)	Height 5m to 10m	cum	3967.53	8578.49	4364.28	8975.24
	(iii)	Height above 10m	cum	4713.51	9324.47	5184.86	9795.82
<b>22.2</b>	Supplying, fitting and placing HYSD bar reinforcement in super-structure complete as per drawing and technical specifications.		MT	6531.42	61330.61	7184.56	61983.76
<b>22.3</b>	High tensile steel wires/strands including all accessories for stressing, stressing operations and grouting complete as per drawing and Technical Specifications		MT	17364.59	137193.85	19101.05	138930.30
<b>22.4</b>	<b>Mastic Asphalt</b>						
	<b>A</b>	Providing and laying 6 mm thick mastic asphalt wearing course on top of deck slab excluding prime coat with paving grade bitumen meeting the requirements given in MOST Drg. No SD/200.	sqm	64.64	252.11	71.10	258.58

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	<b>B</b>	Providing and laying 12 mm thick mastic asphalt wearing course on top of deck slab excluding prime coat with paving grade bitumen meeting the requirements given in table 500-29, prepared by using mastic cooker and laid to required level and slope after cleaning the surface, including providing antiskid surface with bitumen precoated fine grained hard stone chipping of 9.5 mm nominal size at the rate of 0.005cum per 10 sqm and at an approximate spacing of 10 cm center to center in both directions, pressed into surface when the temperature of surfaces not less than 100 deg. C, protruding 1 mm to 4 mm over mastic surface, all complete as per clause 515.	sqm	135.16	283.65	148.67	297.17
<b>22.5</b>		Construction of precast RCC railing of M30 Grade , aggregate size not exceeding 12 mm, true to line and grade, tolerance of vertical RCC post not to exceed 1 in 500, centre to centre spacing between vertical post not to exceed 2000 mm, leaving adequate space between vertical post for expansion, complete as per approved drawings and technical specifications.	m	344.54	1319.87	379.00	1354.33
<b>22.6</b>	<b>A</b>	Construction of RCC railing of M30 Grade concrete, in-situ with 20 mm nominal size aggregate, true to line and grade, tolerance of vertical RCC post not to exceed 1 in 500, centre to centre spacing between vertical post not to exceed 2000 mm, leaving adequate space between vertical post for expansion, complete as per approved standard plans of MoRTH vide drawing no. SD/202. and technical specifications.the rate is inclusive of steel	m	287.49	1262.82	316.24	1291.57

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	<b>B</b>	Construction of RCC railing of M20 Grade concrete , in-situ with 20 mm nominal size aggregate, true to line and grade, tolerance of vertical RCC post not to exceed 1 in 500, centre to centre spacing between vertical post not to exceed 2000 mm, leaving adequate space between vertical post for expansion, complete as per approved drawings No 24 of PWD and technical specifications (without steel reinforcement).	m	230.84	613.98	253.93	637.07
	<b>C</b>	Construction of RCC railing of M25 Grade concrete , in-situ with 20 mm nominal size aggregate, true to line and grade, tolerance of vertical RCC post not to exceed 1 in 500, centre to centre spacing between vertical post not to exceed 2000 mm, leaving adequate space between vertical post for expansion, complete as per approved drawings No 24 of PWD and technical specifications (without steel reinforcement).	m	224.45	647.08	246.90	669.53
				0.00	0.00	0.00	0.00
<b>22.7</b>		Providing, fitting and fixing mild steel railing complete as per drawing and Technical Specification	m	414.79	2620.66	456.27	2662.14
<b>22.8</b>	<b>A</b>	Drainage Spouts complete as per drawing no. SD/205 and Technical specification with 6 meter long GI 100 mm dia drainage GI light grade pipe (For ROB,s)	No	545.19	5745.73	599.71	5800.25
	<b>B</b>	Drainage Spouts complete as per drawing no. SD/205 and Technical specification with 0.6 meter long GI 100 mm dia drainage GI light grade pipe (For Bridges)	No	216.68	973.14	238.35	994.81
<b>22.9</b>		PCC M15 Grade,as leveling course below approach slab complete as per drawing and Technical specification	cum	1401.94	4319.17	1542.14	4459.36

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
22.10	Reinforced cement concrete approach slab using M-30 grade concrete , including reinforcement and formwork complete as per drawing and Technical specification	cum	1122.16	7293.76	1234.38	7405.97
22.11	Providing using M-40 grade concrete , precasting, transportation and placing in position precast pretensioned concrete girders as per drawing and technical specifications	cum	6596.88	22350.95	7256.56	23010.64
22.12	<b>Crash Barriers</b>					
A	Provision of an Reinforced cement concrete crash barrier at the edges of the Bridge,road, approaches to bridge structures and medians, constructed with M-40 grade concrete , with HYSD reinforcement conforming to IRC:21 and dowel bars 25 mm dia, 450 mm long at expansion joints filled with pre-moulded asphalt filler board, keyed to the structure on which it is built and installed as per design given in the enclosure to MOST circular No. RW/NH - 33022/1/94-DO III dated 24 June 1994 as per dimensions in the approved drawing and at locations directed by the Engineer, all as specified-with concrete mixture.	m	1305.02	3393.60	1435.52	3524.10
B	Provision of an Reinforced cement concrete crash barrier at the edges of the Bridge,road, approaches to bridge structures and medians, constructed with M-40 grade concrete , as per dimensions in the PWD stanadard drawing No 27.Section 1,Including form work but excluding steel reinforcement- and at locations directed by the Engineer, all as specified-with concrete mixture.	m	527.80	2892.31	580.59	2945.09

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	<b>C</b>	Provision of an Reinforced cement concrete crash barrier at the edges of the Bridge,road, approaches to bridge structures and medians, constructed with M-40 grade concrete , as per dimensions in the Punjab PWD stanadard drawing No 27.Section 2,Including form work but excluding steel reinforcement-and at locations directed by the Engineer, all as specified-with concrete mixture.	m	1109.95	5967.10	1220.94	6078.09
	<b>D</b>	Provision of an Reinforced cement concrete crash barrier at the edges of the Bridge,road, approaches to bridge structures and medians, constructed with M-40 grade concrete using cement , as per dimensions in the PWD stanadard drawing No 27.Section 3,Including form work but excluding steel reinforcement-and at locations directed by the Engineer, all as specified-with concrete mixture.	m	822.22	3458.32	904.44	3540.54
	<b>E</b>	Provision of an Reinforced cement concrete crash barrier at the edges of the Bridge,road, approaches to bridge structures and medians, constructed with M-40 grade concrete , as per dimensions in the PWD stanadard drawing No 27.Section 4,Including form work but excluding steel reinforcement-and at locations directed by the Engineer, all as specified-with concrete mixture.	m	3118.29	6426.97	3430.12	6738.80

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	<b>F</b>	Providing and erecting a "W" metal beam crash barrier comprising of 3 mm thick corrugated sheet metal beam rail, 70 cm above road/ground level, fixed on ISMC series channel vertical post, 150 x 75 x 5 mm spaced 2 m centre to centre, 1.8 m high, 1.1 m below ground/road level, all steel parts and fitments to be galvanised by hot dip process, all fittings to conform to IS:1367 and IS:1364, metal beam rail to be fixed on the vertical post with a spacer of channel section 150 x 75 x 5 mm, 330 mm long complete as per clause 810	m	210.26	3112.92	231.29	3133.94
	<b>Painting on concrete surface</b>						
<b>22.13</b>		Providing and applying 2 coats of water based cement paint to unplastered concrete surface after cleaning the surface of dirt, dust, oil, grease, efflorescence and applying paint @ of 1 litre for 2 sqm.	sqm	31.93	120.59	35.12	123.79
	<b>Burried Joint</b>						
<b>22.14</b>		Providing and laying a burried expansion joint, expansion gap being 20 mm, covered with 12 mm thick, 200 mm wide galvanised weldable structural steel plate as per IS: 2062, placed symmetrical to centre line of the joint, resting freely over the top surface of the deck concrete, welding of 8 mm dia. 100 mm long galvanised nails spaced 300 mm c/c along the centre line of the plate, all as specified in clause 2604.	m	28.96	953.17	31.85	956.06
<b>22.15</b>	Filler joint						
	<b>(i)</b>	Providing & fixing 2 mm thick corrugated copper plate in expansion joint complete as per drawing & Technical Specification.	m	49.98	15539.69	54.98	15544.69



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(ii)	Providing & fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & Technical Specification.	m	10.00	132.83	11.00	133.83
	(iii)	Providing and fixing in position 20 mm thick premoulded joint filler in expansion joint for fixed ends of simply supported spans not exceeding 10 m to cater for a horizontal movement upto 20 mm, covered with sealant complete as per drawing and technical specifications.	m	14.48	374.91	15.93	376.36
	(iv)	Providing and filling joint sealing compound as per drawings and technical specifications with coarse sand and 6 per cent bitumen by weight-10 mm depth	m	28.12	33.13	30.93	35.95
	Asphaltic Plug joint						
<b>22.16</b>	Providing and laying of asphaltic plug joint to provide for horizontal movement of 25 mm and vertical movement of 2 mm, depth of joint varying from 75 mm to 100 mm, width varying from 500 mm to 750 mm (in traffic direction), covered with a closure plate of 200mm x 6mm of weldable structural steel conforming to IS: 2062, asphaltic plug to consist of polymer modified bitumen binder, carefully selected single size aggregate of 12.5 mm nominal size and a heat resistant foam caulking/backer rod, all as per approved drawings and specifications.		m	90.57	799.66	99.63	808.72

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
22.17	Providing and laying of an elastomeric slab steel expansion joint, catering to right or skew (less than 20 deg., moderately curved with maximum horizontal movement upto 50 mm, complete as per approved drawings and standard specifications to be installed by the manufacturer/supplier or their authorised representative ensuring compliance to the manufacturer's instructions for installation and clause 2606 of MoRTH specifications for road & bridge works.	M	72.87	13373.20	80.16	13380.49
22.18	Providing and laying of compression seal joint consisting of steel armoured nosing at two edges of the joint gap suitably anchored to the deck concrete and a preformed chloroprene elastomer or closed cell foam joint sealer compressed and fixed into the joint gap with special adhesive binder to cater for a horizontal movement upto 40 mm and vertical movement of 3 mm.	M	43.72	7567.59	48.10	7571.96
22.19	Providing and laying of a strip seal expansion joint catering to maximum horizontal movement upto 70 mm, complete as per approved drawings and standard specifications to be installed by the manufacturer/supplier or their authorised representative ensuring compliance to the manufacturer's instructions for installation.	M	59.33	4714.45	65.27	4720.38
22.20	Providing and laying of a modular strip Box seal expansion joint including anchorage catering to a horizontal movement beyond 70 mm and upto 140mm, complete as per approved drawings and standard specifications to be installed by the manufacturer/supplier or their authorised representative ensuring compliance to the manufacturer's instructions for installation.	M	91.54	38092.46	100.69	38101.62

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
22.21	Providing and laying of a modular strip box seal expansion joint catering to a horizontal movement beyond 140mm and upto 210mm, complete as per approved drawings and standard specifications to be installed by the manufacturer/supplier or their authorised representative ensuring compliance to the manufacturer's instructions for installation.	M	84.32	69752.69	92.75	69761.12
	<b>BRIDGE TRAINING AND PROTECTION WORKS</b>					
22.22	Providing and laying boulders apron on river bed for protection against scour with stone boulders weighing not less than 18 kg each complete as per drawing and Technical specification. Including excavation for trimming for preparation of bed. Boulder Laid Dry Without Wire Crates.	cum	658.97	1884.38	724.87	1950.28
22.23	Boulder Apron Laid in Wire Crates					
	<b>A</b> Providing and laying of boulder apron laid in wire crates made with 4mm dia GI wire conforming to IS: 280 & IS:4826 in 100mm x 100mm mesh (weaved diagonally) including 10 per cent extra for laps and joints laid with stone boulders weighing not less than 18 kg, Including excavation for trimming for preparation of bed Boulder Apron Laid in Wire Crates	cum	465.98	2493.91	512.58	2540.50
	<b>B</b> Providing and laying of boulder apron laid in wire crates made with 4mm dia GI wire conforming to IS: 280 & IS:4826 in 150mm x 150mm mesh (weaved diagonally) including 10 per cent extra for laps and joints laid with stone boulders weighing not less than 18 kg, Including excavation for trimming.	cum	465.98	2192.91	512.58	2239.51
	Cement Concrete Blocks (size 0.5 x 0.5 x 0.5 m)					

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
22.24	Providing and laying of apron with cement concrete blocks of size 0.5x0.5x0.5 m cast in-situ and made with nominal mix of M-15 grade cement concrete with a minimum cement content of 275 kg/cum as per IRC: 21-2000.	cum	1401.94	4319.17	1542.14	4459.36
22.25	Providing and laying Pitching on slopes laid over prepared filter media including boulder apron laid dry in front of toe of embankment complete as per drawing and Technical specifications	cum	658.97	1884.38	724.87	1950.28
22.26	Providing and laying Filter material underneath pitching in slopes complete as per drawing and Technical specification Includes Mazdoor required for trimming of slope to proper profile and preparation of bed.	cum	711.99	1820.65	783.19	1891.85
22.27	Providing and laying Flooring complete as per drawing and Technical specifications laid over cement concert bedding. Includes cement mortar for laying and filling of joints. Rubble stone laid in cement mortar 1:3	cum	3078.95	6533.24	3386.85	6841.13
22.28	Dry Rubble Flooring	cum	1203.56	2428.97	1323.92	2549.33
22.29	Flexible Apron :Construction of flexible apron 1 m thick comprising of loose stone boulders weighing not less than 18 kg beyond curtain wall.	cum	734.72	1960.13	808.19	2033.60

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
22.30		Providing and construction of a gabian structure for retaining earth with segments of wire crates of size 7 m x 3 m x 0.6 m each divided into 1.5 m compartments by cross netting, made from 4 mm galvanised steel wire @ 32 kg per 10 sqm having minimum tensile strength of 300 Mpa conforming to IS:280 and galvanizing coating conforming to IS:4826, woven into mesh with double twist, mesh size not exceeding 100 x 100 mm, filled with boulders with least dimension of 200 mm, all loose ends to be tied with 4 mm galvanised steel wire	cum	321.22	2757.26	353.35	2789.39
22.31		Providing and constructing gabian structures for erosion control, river training works and protection works with wire crates of size 2 m x 1 m x 0.3 m each divided into 1m compartments by cross netting, made from 4 mm galvanised steel wire @ 32 kg per 10 sqm having minimum tensile strength of 300 Mpa conforming to IS:280 and galvanizing coating conforming to IS:4826, woven into mesh with double twist, mesh size not exceeding 100 mm x 100 mm, filled with boulders with least dimension of 200 mm, all loose ends to be securely tied with 4 mm galvanised steel wire.	cum	337.29	4271.69	371.02	4305.42



## CHAPTER NO. 23

### RIVER AND CANAL PROTECTION WORK

**Note:-**

- (i) The rates for carriage of materials manually upto 0.50 km and by mechanical means for every km lead have been given. The actual lead is to be paid if the lead is in fraction, the rate is to be worked out by interpolation.

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
23.1	Cutting Pilchi, farash and sarkanda and carriage to work lead two K.M. including loading and unloading:-						
	(a)	Loose	cum	135.00	135.00	149.00	149.00
	(b)	Compacted in rolls of required diameter and length.	cum	563.00	563.00	619.00	619.00
23.2	Loading pilchi, farash and sarkanda in boats within 15 meters:-						
	(a)	Loose	Cum	31.00	31.00	34.00	34.00
	(b)	Compacted in rolls	Cum	68.00	68.00	75.00	75.00
23.3	Carriage of Pilchi, farash and sarkanda by boats including loading and unloading:-						
	(a)	Loose:-					
	(i)	One K.M.	Cum	41.00	41.00	45.00	45.00
	(ii)	Two K.M.	Cum	76.00	76.00	84.00	84.00
	(iii)	Three K.M.	Cum	102.00	102.00	112.00	112.00
	(iv)	Four K.M.	Cum	124.00	124.00	136.00	136.00
	(v)	Five K.M.	Cum	143.00	143.00	157.00	157.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(vi)	Subsequent K.M. per K.M.	Cum	15.00	15.00	17.00	17.00
	(b)	Compacted:-					
	(i)	One K.M.	Cum	99.00	99.00	109.00	109.00
	(ii)	Two K.M.	Cum	184.00	184.00	202.00	202.00
	(iii)	Three K.M.	Cum	245.00	245.00	270.00	270.00
	(iv)	Four K.M.	Cum	299.00	299.00	329.00	329.00
	(v)	Five K.M.	Cum	356.00	356.00	392.00	392.00
	(vi)	Subsequent K.M. per K.M.	Cum	38.00	38.00	42.00	42.00
23.4	Unloading pilchi, farash and sarkanda from boats and carriage to yard up to one K.M.:-						
	(a)	Loose	Cum	68.00	68.00	75.00	75.00
	(b)	Compacted	Cum	169.00	169.00	186.00	186.00
23.5	Making pilchi, farash or sarkanda rolls excluding supply of materials:-						
	(a)	20 cm or 23 cm dia and 9 mtr long	Each	118.00	118.00	130.00	130.00
	(b)	15 cm dia and 9 mtr long	Each	79.00	79.00	87.00	87.00
	(c)	15 cm dia and 1.5 m long	Each	9.00	9.00	10.00	10.00
Note:-	(i)	The payment under item No. 23.5 is not to be made in addition to those of item No. 23.1(b), 23.8, 23.9 and 23.10.					
23.6	Making 0.75 mtr dia and 5.5 mtr long pilchi rolls for permeable spurs.		Each	533.00	533.00	586.00	586.00



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
23.7	Launching the above and placing in position.	Each	379.00	379.00	417.00	417.00
23.8	Pilchi, farash or sarkanda pitching on slope with rolls 15 cm dia and 1.5 mtr long including supply of pilchi involving carriage within 2 K.M. and labour for making rolls.	Sqm	592.00	592.00	651.00	651.00
Note:-	(i)	For above items, pitching shall be of 15cm dia. Layers of pilchi laid as header and 1.5. ms in length alternating with 15 cm covering of earth for consolidation including pegs and tying with wire (to be supplied by the department free of cost.)				
23.9	Extra for carriage beyond 2 K.M. of pilchi rolls 15 cm dia and 1.5 mtr long ( vide item No. 23.8)					
(a)	3rd KM	Sqm of pitching surface	47.00	47.00	52.00	52.00
(b)	Subsequent K.M. ( per K.M.)	sqm of pitching surface	29.00	29.00	32.00	32.00
23.10	Pilchi, farash or sarkanda pitching one metre depth.	Sqm of pitching surface	80 percent rate of item No. 23.8 & 23.9.			
23.11	Pilchi revetment including carriage up to 2 K.M.	Sqm	228.00	228.00	251.00	251.00
23.12	Surface protection with pilchi mattress lead up to 2 K.M.	Sqm	158.00	158.00	174.00	174.00
23.13	Weaving mattresses of pilchi 30 cm thick.	Sqm	104.00	104.00	114.00	114.00
23.14	Rolling pilchi mattress to river edge and floating after unrolling:-					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(a)	area of mattress up to 200 Sqm.	Sqm	44.00	44.00	48.00	48.00
	(b)	area of mattress 200 sqm to 250 sq mtr.	Sqm	60.00	60.00	66.00	66.00
	( c )	area of mattress above 250 Sqm.	Sqm	63.00	63.00	69.00	69.00
23.15	Laying Kahi mattress lead up to 2 K.M.		Sqm	142.00	142.00	156.00	156.00
23.16	Special Kahi revetment double lead up to 2 K.M.		Sqm	293.00	293.00	322.00	322.00
23.17	Gachi pitching with average thickness of 30 cm( joints to be broken)		Sqm	142.00	142.00	156.00	156.00
23.18	Gachi pitching (done with slit clearance and berm dressing) with thickness of 30 cm( joints to be broken)		Sqm	135.00	135.00	149.00	149.00
23.19	Fixing floating spurs in channels with material from canal plantation with in 2 K.M.:-						
	(a)	up to F.S. depth 0.5 mtr	Each	3.00	3.00	3.00	3.00
	(b)	F.S. depth exceeding 0.50 mtr but up to 1.0 mtr	Each	6.00	6.00	7.00	7.00
	( c )	F.S. depth exceeding 1.0 mtr but up to 1.25 mtr	Each	9.00	9.00	10.00	10.00
	(d)	above 1.25 mtr F.S. depth.	Each	12.00	12.00	13.00	13.00
23.20	Stacking and bushing with canal plantation within 2 Km.						
	(a) (i)	Pegs 1.0 m long, 5 cm dia	Each	4.00	4.00	4.00	4.00
	(ii)	Driving pegs 1.0 m long, 5 cm dia.	Each	2.00	2.00	2.00	2.00
	(iii)	Wattling brush wood between stakes and intertwining	Metre of One row	6.00	6.00	7.00	7.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(b) (i)	Pegs 1.25 mtr long, 7.5 cm dia sharpened at one end	Each	4.00	4.00	4.00	4.00
	(ii)	Driving pegs 1.25 m long, 7.5 cm dia.	Each	3.00	3.00	3.00	3.00
	(iii)	Wattling brush wood between stakes and intertwining	Metre of one row	6.00	6.00	7.00	7.00
	(c) (i)	Pegs 1.5 m long, 7.5 cm dia sharpened at one end	Each	4.00	4.00	4.00	4.00
	(ii)	Driving pegs 1.5 m long, 7.5 cm dia.	Each	3.00	3.00	3.00	3.00
	(iii)	Wattling brush wood between stakes and intertwining	metre of One row	8.00	8.00	9.00	9.00
	(d) (i)	Pegs 2.0 m long, 7.5 cm dia sharpened at one end	Each	6.00	6.00	7.00	7.00
	(ii)	Driving pegs 2 mtr long, 7.5 cm dia.	Each	4.00	4.00	4.00	4.00
	(iii)	Wattling brush wood between stakes and intertwining	metre of One row	11.00	11.00	12.00	12.00
23.21	Filling brush wood only.		Cum	38.00	38.00	42.00	42.00
23.22	Filling cement bags with sand or earth and sewing including cost of E.C bags and strings.		Each	5.00	10.00	6.00	11.00
23.23	Loading cement bags filled with sand or earth in to trucks or boats with in 100 metres lead		Each	6.00	6.00	7.00	7.00
23.24	Carriage of sand filled in bags by boats:-						
	(a)	1st chain of 30 meters.	100 Nos	47.00	47.00	52.00	52.00
	(b)	2nd to 4th chain per chain of 30 meters.	100 Nos	28.00	28.00	31.00	31.00
	(c)	5th and subsequent chains per chain of 30 meters.	100 Nos	19.00	19.00	21.00	21.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
23.25	Unloading from boats, bags filled with sand and:-						
	(a)	Placing in dry	Each	6.00	6.00	7.00	7.00
	(b)	Placing in water	Each	12.00	12.00	13.00	13.00
23.26	Filling cement bags with sand sewing and laying in position within 30 meters in dry including cost of E.C bags and strings.		Each	9.00	16.00	10.00	17.00
23.27	Filling cement bags with sand, sewing and laying in position within 30 meters in water including cost of E.C bags and strings.		Each	16.00	22.00	18.00	24.00
23.28	Sewing empty cement bags in to sheets.		Each	3.00	9.00	3.00	9.00
23.29	Weaving wire netting for wire crates including binding sides and partitions to make crate of 15 cm x 15 cm or 25 cm x 7.5 cm mesh.		Sqm	53.00	182.00	58.00	187.00
23.30	Filling brick bats in crates and hand packing.		Cum	112.00	742.00	123.00	753.00
23.31	Filling brick in crates and hand packing.		Cum	211.00	3231.00	232.00	3252.00
23.32	Filling stones or spalls into crates and hand packing		Cum	292.00	1355.00	321.00	1384.00
23.33	Tipping wire crates including equipment.		Cum	211.00	211.00	232.00	232.00
23.34	Opening out old wire crates and remaking after filling.		Sqm	22.00	22.00	24.00	24.00
23.35	Labour for dismantling existing portion of old protection work including cutting old trangger and stacking old stones for re-use.		Cum	244.00	244.00	268.00	268.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
23.36	Filling spaces and foundation with old stone obtained from dismantling including labour for dismantling.	Cum	569.00	569.00	626.00	626.00
23.37	Spreading wire crates over pitching connecting with side protective walls inclusive of wire etc.	Sqm	64.00	64.00	70.00	70.00
23.38	Wire crates of specified dimensions from all directions of G.I. wire filled with boulders with square cut faces against the wire.					
	(a) 4 mm dia G.I. wire 25 cm x 7.5 cm mesh	Cum	470.00	470.00	517.00	517.00
	(b) 4 mm dia G.I. wire 15 cm x 15 cm mesh ( diagonal wise)	Cum	470.00	470.00	517.00	517.00
	( c ) 4.75 mm dia G.I. wire 25 cm x 7.5 cm mesh ( diagonal wise)	Cum	470.00	470.00	517.00	517.00
	(d) 4.75 mm dia G.I. wire 15 cm x 15 cm mesh ( diagonal wise)	Cum	470.00	470.00	517.00	517.00
	( e ) 3.25 mm dia G.I. wire 25 cm x 7.5 cm mesh ( diagonal wise)	Cum	470.00	470.00	517.00	517.00
	(f) 3.25 mm dia G.I. wire 15 cm x 15 cm mesh ( diagonal wise)	Cum	470.00	470.00	517.00	517.00
Note:-	(i) The through rate of item No. 23.38 is dependent on the size of crate which varies as per the site conditions and design/ drawing.					
23.39	Dumping stone	Cum	158.00	1221.00	174.00	1237.00
23.40	Extra for anchoring boat for dumping in position.	Cum	23.00	23.00	25.00	25.00
23.41	Dismantling brush wood boulder bandh.	Cum	421.00	421.00	463.00	463.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
23.42	Stone or Kankar block pitching:-						
	(a)	Horizontal	Cum	527.00	527.00	580.00	580.00
	(b)	On slopes of guide bandh and protection works	Cum	677.00	677.00	745.00	745.00
23.43	Stone pitching top coping only		Cum	1171.00	2234.00	1288.00	2351.00
23.44	Filling stone or spall:-						
	(a)	On level.	Cum	158.00	1221.00	174.00	1237.00
	(b)	On side slopes behind pitching.	Cum	167.00	1018.00	184.00	1035.00
23.45	Grouting stone filling or pitching:-						
	(a)	With bajri or shingle.	Sqm	68.00	120.00	75.00	127.00
	(b)	With mortar.	Sqm	108.00	161.00	119.00	172.00
23.46	Grouting masonry joints of floors including finishing:-						
	(a)	When stones are up to 23 cm square	Sqm	50.00	50.00	55.00	55.00
	(b)	When stones are more than 23 cm square but under 45 cm square	Sqm	33.00	33.00	36.00	36.00
Note:-	(i)	The through rate of the above item varies as per thickness of stone & richness of mix as per requirements.					
23.47	Sand grouting stone apron with high pressure hose.		Sqm	9.00	9.00	10.00	10.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
23.48	Weaving- Coir Rope netting for Coir rope crates including binding sides and partitions to make crate of 22.5 cm x 22.5 cm mesh. (including cost of coir rope) Size 10' x 8' x 4' (min. weight per crate = 15.25 Kg)	Sqm	16.00	61.00	18.00	63.00
Note:- (i) The Chief Engineer in-charge of works concerned, may allow on works of temporary nature, the use of black annealed MS Wire number 6 or 8 SWG (4.75 mm or 4.00 mm) conforming to the relevant ISI specifications, in lieu of G.I. Wire.						





## CHAPTER NO. 24

### ROAD WORK

#### Notes :-

- (i) The clauses of latest addition of MORT&H Specifications, which have been mentioned, may be referred for detailed specifications and construction procedures. The rate mentions only brief description of work.
- (ii) Unless otherwise stated, the rates include rehandling of materials within 100 metres.
- (iii) The rates include the cost of working of road machinery including cost of fuels, lubricants, stores, establishment, depreciation and interest charges. In case the machinery is provided by the department, the working cost as mentioned shall be recovered from the contractor at the rates fixed by the department as per chapter 2 of CSR.
- (iv) All types of quarry materials have been taken from quarry with an average lead of 5 Km to work site/plant site. If the lead increases/decreases from the quarry of cheapest landed rate at work site/plant site, then rates will be adjusted accordingly.
- (v) All type of Bitumen have been taken from Panipat/Bhatinda Refinery with an average round trip lead of 20 Km (10 Km up and 10 Km down) to work site/plant site. The prevailing rates of bitumen has been taken as on July 01, 2020. If the rate of bitumen increases/decreases or round trip lead is more than 20 Km, then the bitumen rates will be adjusted accordingly and extra carriage for bitumen beyond round trip lead 20 Km shall be paid as per chapter no. 5 (carriage of CSR under heading carriage for bitumen).
- (vi) Carriage of mixed material from plant site to work site is not included in the rates and it will be paid as per chapter 5 of CSR. For bituminous items it will be paid 20% above the rates of item no. 5.2(i) of chapter 5 of CSR. The carriage of wet mix macadam will be paid as per rates of item no. 5.2(i) of chapter 5 of CSR.
- (vii) Wherever any extra lead is involved for collection of material, the same shall be payable as per chapter 5 of CSR.
- (viii) Carriage of good earth for embankment construction/binding material has been taken as 1 km with compensation of earth. If the lead increases then the rates will be adjusted accordingly.
- (ix) The rates of item No. 24.37 to 24.57 are inclusive of all leads and nothing extra on account of carriage is payable on these items except 24.41 (b,c,d).
- (x) Lead has been included by transit mixer for batch plant mix concrete under item no. 24.58 to 24.60 has been taken for first 5 Kms. For lead beyond 5 Km, rates per cum/Km will be payable as chapter no. 10 of CSR.
- (xi) Road signage be used as follows:-
  - (a) High intensity Microprismatic grade Retro reflective sheeting Type XI will be used only for SH, NH/ Express way as per IRC -67 2012
  - (b) High intensity Microprismatic grade Retro reflective sheeting Type IV will be used for other roads as per IRC -67 2012

- (xii) Bituminous material retrieved after milling road surface is the property of department and recovery of this material must be deducted from the contractor's payment at rates as available in estimate for landing rates for similar items.
- (xiii) In case mechanical paver finisher is used instead of Hydrostatic paver finisher with sensor control for execution of item no. 24.17 (a), 24.18 (a), 24.19 (a), 24.20 (a), 24.21 (a), 24.21 (b), 24.22 (a), 24.23 (a) over all rate will be deducted @ Rs. 65.00 per cum

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
24.1	Clearing Grass and Removal of Rubbish					
	Clearing grass and removal of rubbish up to a distance of 50 meters outside the periphery of the area as per technical clause 201 of MORT&H specifications	ha	24606.00	24606.00	27066.60	27066.60
24.2	Clearing and Grubbing Road Land					
	Clearing and grubbing road land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth up to 300 mm, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to be used or auctioned, up to a lead of 1000 meters including removal and disposal of top organic soil not exceeding 150 mm in thickness as per technical clause 201 of MORT&H specifications					
A	In area of Light Jungle (By Manual Means)	ha	74184.00	74184.00	81602.40	81602.40
B	In area of Thorny Jungle (By Manual Means)	ha	99155.14	99155.14	109070.66	109070.66
C	In area of Light Jungle (By Mechanical Means)	ha	33500.00	33500.00	36849.90	36849.90
D	In area of Thorny Jungle (By Mechanical Means)	ha	40900.00	40900.00	44990.00	44990.00
24.3	Dismantling of Flexible Pavements (By Mechanical Means)					
(a)	Dismantling of flexible pavements thickness above 50mm by mechanical means and disposal of dismantled materials up to a lead of 1000 meters, stacking serviceable and unserviceable materials separately as per technical clause 202 of MORT&H specifications	Cum.	292.00	292.00	321.20	321.20
24.3	Scarifying Existing Bituminous Surface to a depth of 50mm by Mechanical Means					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(b)	Scarifying the existing Bituminous road surface to a depth of 50mm and disposal of scarified material with in all lifts and lead upto 1000 meters	Sqm	5.00	5.00	5.50	5.50
24.4	Compacting original ground below road crust					
(a)	Loosening, leveling and compacting original ground up to a level of 500mm below road crust, mixed with water at OMC, levelled, graded and compacted in layers by rolling so as to achieve minimum dry density as given in Table 300-2 for sub grade construction as per technical clause 305 of MORT&H specifications	Cum.	65.00	65.00	71.50	71.50
24.4	Compacting original ground below Embankment					
(b)	Loosening, leveling and compacting original ground below embankment to facilitate placement of first layer of embankment, scarified to a depth of 150 mm, mixed with water at OMC and then compacted by rolling so as to achieve minimum dry density as given in Table 300-2 for embankment construction as per technical clause 305 of MORT&H specifications	Cum.	28.00	28.00	30.80	30.80
24.4	Compaction of Earth work					
(c)	Compaction of earth work & Preparation of sub grade including loosening, leveling of earth 225mm thick top layer, rough dressing of soil, final dressing of earth to give level, camber, watering, rolling with road roller, compacting the bed to achieve minimum dry density as given in the Table 300-2 as per Technical clause 305 of MORT&H specifications. (In case of link roads earth work to be done by villagers)	Sqm	6.00	6.00	6.60	6.60
24.5	Construction of Embankment with Good Quality Earth obtained from Borrow pits					
(a)	Construction of embankment with good quality earth obtained from borrow pits including compensation of earth, loading, unloading, carriage to site of work, spreading, grading to required slope and compacting to meet requirement of table 300-2 as per technical clause 305 of MORT&H specifications	Cum.	127.00	308.00	139.70	320.70

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
24.5	Construction of Embankment with Earth obtained from Roadway Cutting or Excavation					
(b)	Construction of embankment with earth obtained from roadway cutting or excavation including spreading, grading to required slope and compacting to meet requirement of table 300-2 as per technical clause 305 of MORT&H specifications	Cum.	94.00	94.00	103.40	103.40
24.5	Compaction					
b (i)	Extra for laying earth/fly ash as per specifications in 20 cm. Layers and dressing but excluding cost of rolling.	Cum.	62.00	62.00	68.20	68.20
b (ii)	Extra for watering the earth/fly ash laid in 20 cm layers as per specifications for compaction.	Cum.	15.00	15.00	16.50	16.50
b (iii)	Extra for rolling to specifications.	Cum.	17.00	17.00	18.70	18.70
24.6	Excavation for Roadway (By Manual Means)					
(a)	Excavation for roadway in soil by manual means including carrying of cut earth to embankment site with all lead and lifts up to 50m as per technical clause 301 of MORT&H specifications	Cum.	185.00	185.00	203.50	203.50
24.6	Excavation for Roadway (By Mechanical Means)					
(b)	Excavation for roadway in soil by mechanical means with dozer including cutting and pushing earth to embankment site with all lead and lifts up to 100m including trimming bottom and side slopes as per technical clause 301 of MORT&H specifications	Cum.	58.00	58.00	63.80	63.80
24.6	Excavation for Roadway (By Mechanical Means)					
(c)	Excavation in Soil (any type) using Hydraulic Excavator CK 90 Excavation with hydraulic excavator of 0.9 cum bucket capacity including cutting trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, including all lift and combined lead up to 60 mtr.	Cum.	32.00	32.00	35.20	35.20
24.7	Granular Sub-Base					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
	Construction of granular sub-base by providing material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density, complete as per MORD technical specifications	Cum.	139.00	1194.00	152.90	1207.90
24.8	Granular Sub-Base (Table 400-1)					
	Construction of granular sub-base by providing material as per grading-III ( Table 400-I of MORT&H 5th revision), mixing in a mechanical mix plant at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per technical clause 401 of MORT&H specifications	Cum.	189.08	1353.00	233.20	1374.20
24.9	Lime Treated Soil for Sub- Base					
	Laying and spreading soil on a prepared sub grade, pulverising, mixing the spread soil in place with rotavator with 3 per cent slaked lime with minimum content of 70 per cent of CaO, grading with motor grader and compacting with the road roller at OMC to achieve at least 98 per cent of the max dry density to form a layer of sub base complete as per technical clause 402 of MORT&H specifications	Cum.	187.00	581.00	205.70	599.70
24.10	Making 50 mm x 50 mm Furrows					
	Making 50 mm x 50 mm furrows 45 degree to the center line of the road and at one meter interval in the existing bituminous wearing coarse including sweeping and disposal of excavated material within 1000 meters lead complete as per technical (Full surface area will be measured for payment)	sqm.	5.00	5.00	5.50	5.50
24.11	Water Bound Macadam Grading I					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(i)	Providing, laying, spreading and compacting stone aggregates of Grading I to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth wheeled roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting to the required density complete as per technical clause 404 of MORT&H specifications	Cum.	460.13	1624.21	506.14	1670.22
24.11	Water Bound Macadam Grading I (without screening for low volume Roads/undersigned					
(ii)	Providing, laying, spreading and compacting stone aggregates of Grading I to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth wheeled roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of binding Materials to fill up the interstices of coarse aggregate, watering and compacting to the required density complete as per technical specifications	Cum.	460.13	1484.73	506.14	1530.74
24.12	Water Bound Macadam Grading II					
(i)	Providing, laying, spreading and compacting stone aggregates of Grading II to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth wheeled roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting to the required density complete as per technical clause 404 of MORT&H specifications	Cum.	460.13	1685.51	506.14	1731.52
24.12	Water Bound Macadam Grading II (without screening for low volume Roads/undersigned Roads					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(ii)	Providing, laying, spreading and compacting stone aggregates of Grading II to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth wheeled roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of binding Materials to fill up the interstices of coarse aggregate, watering and compacting to the required density complete as per technical specifications	Cum.	460.13	1477.92	506.14	1523.93
24.13	Wet Mix Macadam					
	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per technical clause 406 of MORT&H specifications	Cum.	257.01	1579.11	282.71	1604.81
24.14	Brick on end edging					
	Providing and laying of Brick on end edging 6.83cm wide, 11.11cm long and 22.86cm high half brick deep including excavation, refilling and disposal of surplus earth up to 50mtr complete as per Punjab PWD specifications	Mtr.	12.81	71.84	14.09	73.12
24.15	Prime Coat @ 0.85kg per sqm					
	Providing and applying primer coat with bitumen emulsion SS on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.85kg/sqm complete as per technical clause 502 of MORT&H specifications	Sqm	1.80	32.11	1.98	32.29
24.16	Tack Coat @ 0.25kg per sqm					
(a)	Providing and applying tack coat with bitumen emulsion RS using emulsion pressure distributor at the rate of 0.25 kg per sqm on the prepared bituminous surface/granular surface treated with prime coat after cleaning the surface complete as per technical clause 503 of MORT&H specifications	sqm	1.69	10.65	1.86	10.82

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
24.16	Tack Coat @ 0.40kg per sqm					
(b)	Providing and applying tack coat with penetration grade bitumen VG-10 using bitumen pressure distributor at the rate of 0.40 kg per sqm on the prepared bituminous surface/granular surface treated with prime coat after cleaning the surface complete as per technical specifications	sqm	1.92	15.18	2.11	15.37
24.16	Tack Coat @ 1.00 Kg per sqm ( for WBM patches where surface dressing not applied)					
(c)	Providing and applying tack coat with penetration grade bitumen VG-10 using bitumen pressure distributor at the rate of 1.00 kg per sqm on the prepared granular surface after cleaning the surface complete as per technical specifications	sqm	2.35	35.39	2.59	35.63
24.17	Bituminous Macadam 80mm to 100mm thickness (Grading I)					
(a)	Providing and laying bituminous macadam 80mm to 100mm thick with batch type hot mix plant using crushed aggregates of specified grading premixed with bituminous binder VG-30 @ 3.30%, laid over a previously prepared surface with hydrostatic paver finisher with sensor control to the required grade, level and alignment and rolled to achieve the desired compaction complete as per technical clause 504 of MORT&H specifications	Cum	1428.02	5140.42	1570.82	5283.22
24.17	Bituminous Macadam 80mm to 100mm thickness (Grading I)					
(b)	Providing and laying bituminous macadam 80mm to 100mm thick with Continuous type hot mix plant using crushed aggregates of specified grading premixed with bituminous binder VG-30 @ 3.30%, laid over a previously prepared surface with paver finisher mechanical to the required grade, level and alignment and rolled to achieve the desired compaction complete as per technical clause 504 of MORT&H specifications	Cum	1332.00	5044.32	1465.20	5177.52
24.18	Bituminous Macadam 50mm to 75mm thickness (Grading II)					



Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(a)	Providing and laying bituminous macadam 50mm to 75mm thick with batch type hot mix plant using crushed aggregates of specified grading premixed with bituminous binder VG-30 @3.4%, laid over a previously prepared surface with hydrostatic paver finisher with sensor control to the required grade, level and alignment and rolled to achieve the desired compaction complete as per technical clause 504 of MORT&H specifications	Cum	1428.02	5254.05	1570.82	5396.85
24.18	Bituminous Macadam 50mm to 75mm thickness (Grading II)					
(b)	Providing and laying bituminous macadam 50mm to 75mm thick with Continuous type hot mix plant using crushed aggregates of specified grading premixed with bituminous binder VG-30 @3.4%, laid over a previously prepared surface with paver finisher Mechanical to the required grade, level and alignment and rolled to achieve the desired compaction complete as per technical clause 504 of MORT&H specifications	Cum	1332.00	5158.04	1465.20	5291.24
24.19	Dense Graded Bituminous Macadam 80mm to 100mm thickness (Grading I)					
(a)	Providing and laying dense graded bituminous macadam 80mm to 100mm thick with batch type HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30 @ 4%, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete as per technical clause 505 of MORT&H specifications	Cum	1501.25	6327.65	1651.37	6477.77
24.19	Dense Graded Bituminous Macadam 80mm to 100mm thickness (Grading I)					
(b)	Providing and laying dense graded bituminous macadam 80mm to 100mm thick with Continuous type hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30 @ 4%, laying with a Paver Finisher Mechanical to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete as per technical clause 505 of MORT&H specifications	Cum	1338.28	6164.68	1472.11	6298.51

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
24.20	Dense Graded Bituminous Macadam 50mm to 75mm thickness (Grading II)					
(a)	Providing and laying dense graded bituminous macadam 50mm to 75mm thick with batch type HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30 @ 4.5%, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete as per technical clause 505 of MORT&H specifications	Cum	1501.25	6712.45	1651.37	6862.57
24.20	Dense Graded Bituminous Macadam 50mm to 75mm thickness (Grading II)					
(b)	Providing and laying dense graded bituminous macadam 50mm to 75mm thick with Continuous type hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30 @ 4.5%, laying with a Paver Finisher Mechanical to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete as per technical clause 505 of MORT&H specifications	Cum	1338.28	6549.48	1472.11	6683.31
24.21	Semi-Dense Bituminous Concrete 35mm to 40mm thickness (Grading I)					
(a)	Providing and laying semi dense bituminous concrete 35mm to 40mm thick with batch type HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30 @ 4.5%, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete as per IRC-111 (2009) specifications	Cum	1501.25	6743.92	1651.37	6894.04
24.21	Semi-Dense Bituminous Concrete 35mm to 40mm thickness (Grading I)					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(a) i	Providing and laying semi dense bituminous concrete 35mm to 40mm thick with Continuous type hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30 @ 4.5%, laying with a Paver Finisher Mechanical to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete as per IRC-111 (2009) specifications	Cum	829.11	6071.79	912.02	6154.70
24.21	Semi-Dense Bituminous Concrete 25mm to 30mm thickness (Grading II)					
(b)	Providing and laying semi dense bituminous concrete 25mm to 30mm thick with batch type HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30 @ 5%, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete as per IRC-111 (2009) specifications	Cum	1501.25	7139.44	1651.37	7289.56
24.21	Semi-Dense Bituminous Concrete 25mm to 30mm thickness (Grading II)					
(b) i	Providing and laying semi dense bituminous concrete 25mm to 30mm thick with Continuous type hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30 @ 5%, laying with a Paver Finisher Mechanical to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete as per IRC-111 (2009) specifications	Cum	829.11	6467.31	912.02	6550.22
24.22	Bituminous Concrete 50mm to 65mm thickness (Grading I)					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(a)	Providing and laying bituminous concrete 50mm to 65mm thick with batch type hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30 @ 5.20%, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete as per technical clause 507 of MORT&H specifications	Cum	1532.69	7431.50	1685.96	7584.77
24.22	Bituminous Concrete 50mm to 65mm thickness (Grading I)					
(b)	Providing and laying bituminous concrete 50mm to 65mm thick with Continuous type hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30 @ 5.2%, laying with a Paver Finisher Mechanical to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete as per technical clause 507 of MORT&H specifications	Cum	1344.90	7243.71	1479.39	7378.20
24.23	Bituminous Concrete 30mm to 45mm thickness (Grading II)					
(a)	Providing and laying bituminous concrete 30mm to 45mm thick with batch type hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30 @ 5.4%, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete as per technical clause 507 of MORT&H specifications	Cum	1532.69	7597.56	1685.96	7750.83
24.23	Bituminous Concrete 30mm to 45mm thickness (Grading II)					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(b)	Providing and laying bituminous concrete 30mm to 45mm thick with Continuous type hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30 @ 5.4%, laying with a Paver Finisher Mechanical to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete as per technical clause 507 of MORT&H specifications	Cum	1344.90	7409.77	1479.39	7544.26
24.24	Surface Dressing					
	Providing and laying surface dressing in single coat using crushed stone aggregates of specified size on a layer of bituminous binder VG-10 @ 1kg per sqm laid on prepared surface after cleaning the road surface and rolling with 8-10 tonne smooth wheeled steel roller complete as per technical clause 509 of MORT&H specifications	sqm	17.08	58.95	18.79	60.66
24.25	Open - Graded Premix Surfacing 20mm thickness					
(a)	Providing, laying and compaction of open - graded premix surfacing of 20 mm thickness consisting of crushed stone aggregates of specified grading premixed in a Continuous type hot mix plant with bituminous binder VG-10 @ 1.46kg per sqm, laid with Paver Finisher Mechanical and rolling with a smooth wheeled roller 8-10 tonne capacity, finished to required level and grades complete as per technical clause 510 of MORT&H specifications	sqm	24.84	97.06	27.32	99.54
24.25	Open - Graded Premix Surfacing 20mm thickness					
(b)	Providing, laying and compaction of open - graded premix surfacing of 20 mm thickness consisting of crushed stone aggregates of specified grading premixed in a Continuous type hot mix plant with bituminous binder VG-30 @ 1.46kg per sqm, laid with Paver Finisher Mechanical and rolling with a smooth wheeled roller 8-10 tonne capacity, finished to required level and grades complete as per technical clause 510 of MORT&H specifications	sqm	24.84	98.53	27.32	101.01

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
24.26	Close Graded Premix Surfacing/ Mixed Seal Surfacing 20mm thickness (Type A)					
(a)	Providing, laying and rolling of close-graded premix surfacing material of 20 mm thickness Type A consisting of crushed stone aggregates of specified grading premixed in a Continuous type hot mix plant with bituminous binder VG-10 @ 2.2kg per sqm, laying with Paver Finisher Mechanical and rolling with a Smooth wheeled roller 8-10 tonne capacity, and finishing to required level and grade complete as per technical clause 508 of MORT&H specifications	sqm	25.02	122.32	27.52	124.82
24.26	Close Graded Premix Surfacing/ Mixed Seal Surfacing 20mm thickness (Type A)					
(b)	Providing, laying and rolling of close-graded premix surfacing material of 20 mm thickness Type A consisting of crushed stone aggregates of specified grading premixed in a Continuous type hot mix plant with bituminous binder VG-30 @ 2.2kg per sqm, laying with Paver Finisher Mechanical and rolling with a Smooth wheeled roller 8-10 tonne capacity, and finishing to required level and grade complete as per technical clause 508 of MORT&H specifications	sqm	25.02	124.54	27.52	127.04
24.27	Close Graded Premix Surfacing/ Mixed Seal Surfacing 20mm thickness (Type B)					
(a)	Providing, laying and rolling of close-graded premix surfacing material of 20 mm thickness Type B consisting of crushed stone aggregates of specified grading premixed in a Continuous type hot mix plant with bituminous binder VG-10 @ 1.9kg per sqm, laying with Paver Finisher Mechanical and rolling with a Smooth wheeled roller 8-10 tonne capacity, and finishing to required level and grade complete as per technical clause 508 of MORT&H specifications	sqm	25.02	111.54	27.52	114.04
24.27	Close Graded Premix Surfacing/ Mixed Seal Surfacing 20mm thickness (Type B)					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(b)	Providing, laying and rolling of close-graded premix surfacing material of 20 mm thickness Type B consisting of crushed stone aggregates of specified grading premixed in a Continuous type hot mix plant with bituminous binder VG-30 @ 1.9kg per sqm, laying with Paver Finisher Mechanical and rolling with a Smooth wheeled roller 8-10 tonne capacity, and finishing to required level and grade complete as per technical clause 508 of MORT&H specifications	sqm	25.02	113.47	27.52	115.97
24.28	Seal Coat Type A					
(a)	Providing and laying seal coat type A (Liquid Seal Coat) sealing the voids in a bituminous surface using crushed stone aggregates and penetration grade bitumen VG-10 @ 0.98kg per sqm laid to the specified levels, grade and cross fall complete as per technical clause 511 of MORT&H specifications	sqm	13.33	53.93	14.66	55.26
24.28	Seal Coat Type A					
(b)	Providing and laying seal coat type A (Liquid Seal Coat) sealing the voids in a bituminous surface using crushed stone aggregates and penetration grade bitumen VG-30 @ 0.98kg per sqm laid to the specified levels, grade and cross fall complete as per technical clause 511 of MORT&H specifications	sqm	13.33	54.94	14.66	56.27
24.28	Seal Coat Type B					
(c)	Providing and laying of premix sand seal coat premixed in Continuous type hot mix plant using specified fine aggregates and penetration grade bitumen VG-10 @ 0.68kg per sqm, laid to the specified levels, grade and cross fall complete as per technical clause 511 of MORT&H specifications	sqm	12.72	39.08	13.99	40.35
24.28	Seal Coat Type B					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(d)	Providing and laying of premix sand seal coat premixed in Continuous type hot mix plant using specified fine aggregates and penetration grade bitumen VG-30 @ 0.68kg per sqm, laid to the specified levels, grade and cross fall complete as per technical clause 511 of MORT&H specifications	sqm	12.17	39.17	13.39	40.39
24.29	Mastic Asphalt 25mm thickness					
	Providing and laying 25 mm thick mastic asphalt wearing course with paving grade bitumen 85/25 or 30/40 @10.2%, fine aggregates, coarse aggregates, lime filler @ 17.92% of total mix, prepared by using mastic cooker and laid to required level and slope, including providing antiskid surface with bitumen precoated fine grained hard stone chipping at an approximate spacing of 10 cm center to center in both directions, pressed into surface when the temperature of surface is not less than 100 degree C, protruding 1 mm to 4 mm over mastic surface complete as per technical clause 516 of MORT&H specifications.	Sqm.	229.36	614.78	252.30	637.72
24.30	Slurry Seal Type II (4-6 mm thickness)					
(a)	Providing and laying slurry seal Type-II 4-6mm thickness consisting of a mixture of fine aggregates, portland cement filler, bituminous emulsion SS-2 @ 10.50% and water on a road surface including cleaning of surface, mixing of slurry seal in a suitable mobile plant, laying and compacting to provide even riding surface complete as per technical clause 512 of MORT&H specifications	Sqm.	2.39	50.49	2.63	50.73
24.30	Slurry Seal Type-I (2-3mm thickness)					
(b)	Providing and laying slurry seal Type-I 2-3mm thickness consisting of a mixture of fine aggregates, portland cement filler, bituminous emulsion SS-2 @ 13% and water on a road surface including cleaning of surface, mixing of slurry seal in a suitable mobile plant, laying and compacting to provide even riding surface complete as per technical clause 512 of MORT&H specifications	Sqm.	1.36	36.11	1.50	36.25
24.31	Fog Spray					



Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
	Providing and applying low viscosity bitumen emulsion SS-1 @ 0.75kg per sqm for sealing cracks less than 3 mm wide or incipient fretting or disintegration in an existing bituminous surfacing complete as per technical clause 513 of MORT&H specifications	Sqm.	1.33	28.08	1.46	28.21
24.32	Crack Prevention Courses (Stress Absorbing Membrane crack width less than 6mm)					
(a)	Laying of a stress absorbing membrane over a cracked road surface after cleaning the road surface, using modified binder CRMB-55 complying with clause 517 @ 0.90kg per sqm and crushed stone aggregates of specified grading, spraying binder and spreading crushed stone aggregates, sweeping the surface for uniform spread of aggregates complete as per technical clause 517 of MORT&H specifications	sqm	4.07	46.57	4.48	46.98
24.32	Crack Prevention Courses (Stress Absorbing Membrane crack width 6mm to 9mm)					
(b)	Laying of a stress absorbing membrane over a cracked road surface after cleaning the road surface, using modified binder CRMB-55 complying with clause 517 @ 1.1kg per sqm and crushed stone aggregates of specified grading, spraying binder and spreading crushed stone aggregates, sweeping the surface for uniform spread of aggregates complete as per technical clause 517 of MORT&H specifications	sqm	4.07	54.01	4.48	54.42
24.32	Crack Prevention Courses (Stress Absorbing Membrane crack width above 9mm and cracked area above 50%)					
(c)	Laying of a stress absorbing membrane over a cracked road surface after cleaning the road surface, using modified binder CRMB-55 complying with clause 517 @ 1.5kg per sqm and crushed stone aggregates of specified grading, spraying binder and spreading crushed stone aggregates, sweeping the surface for uniform spread of aggregates complete as per technical clause 517 of MORT&H specifications	sqm	4.07	70.71	4.48	71.12
24.32	Crack Prevention Courses (Bitumen Impregnated Geotextile)					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(d)	Laying of a bitumen impregnated geotextile layer after cleaning the road surface, laid over a tack coat of paving grade bitumen VG-10 @ 1.05kg per sqm complete as per technical clause 517 & 702 of MORT&H specifications	sqm	4.63	74.78	5.09	75.24
24.33	Restoration of Rain Cuts					
	Restoration of rain cuts with good quality earth obtained from borrow pits including compensation of earth, carriage, loading, unloading, clearing the loose soil, benching for 300mm width, laying in 250mm thick layers and compacting with plate compactor to restore the original alignment, levels and slopes as per technical clause 3002 of MORT&H specifications	Cum.	128.91	294.57	141.80	307.46
24.34	Patch Work with Close Graded Premix Surfacing/ Mixed Seal Surfacing 20mm thickness (Type B)					
(a)	Providing and laying patch work with close-graded premix surfacing material of 20 mm thickness Type B using penetration grade bitumen VG-10 @ 1.9kg per sqm and crushed stone aggregates of specified grading after trimming the pot hole, removal of failed material, including mixing in a Continuous type hot mix plant, carriage of mixed material to site of work, laying by suitable means and rolling with a smooth wheeled roller to match the adjoining surface complete as per technical clause 508 of MORT&H specifications	sqm	33.50	124.35	36.85	127.70
24.34	Patch Work with Close Graded Premix Surfacing/ Mixed Seal Surfacing 20mm thickness (Type B)					
(b)	Providing and laying patch work with close-graded premix surfacing material of 20 mm thickness Type B using penetration grade bitumen VG-30 @ 1.9kg per sqm and crushed stone aggregates of specified grading after trimming the pot hole, removal of failed material, including mixing in a Continuous type hot mix plant, carriage of mixed material to site of work, laying by suitable means and rolling with a smooth wheeled roller to match the adjoining surface complete as per technical clause 508 of MORT&H specifications	sqm	33.50	126.37	36.85	129.72

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
24.34	Patch work with Open - Graded Premix Surfacing 20 mm thickness					
(c)	Providing and laying patch work with Open-graded premix surfacing material of 20 mm thickness consisting of crushed stone aggregates of specified grading premixed in a Continuous type hot mix plant with bituminous binder VG-10 @ 1.46 kg per sqm, laid with paver and rolling with a smooth wheeled roller 8-10 tonne capacity, finished to required level and grades complete as per technical clauses 510 of MORTH&H specifications.	sqm	33.24	108.92	36.56	112.24
24.35	Patch work Seal Coat Type B					
	Providing and laying of premix sand seal coat for patch work premixed in Continuous type Hot mix Plant using specified fine aggregates and penetration grade bitumen VG-10 @ 0.68kg per sqm, carriage of mixed material to site of work, laid to the specified levels, grade and cross fall complete as per technical clauses 511 of MORT&H specifications	sqm	14.25	43.41	15.67	44.83
24.36	Patch Work with Bituminous Macadam 50mm to 75mm thickness (Grading II)					
(a)	Providing and laying patch work with bituminous macadam 50mm to 75mm thick using crushed stone aggregates of specified grading premixed with bituminous binder VG-30 @ 3.4% in Continuous type hot mix plant, carriage of mixed material to site of work, laid after trimming the pot hole, removal of failed material, laying by suitable means and rolling with a smooth wheeled roller to match the adjoining surface complete as per technical clause 504 of MORT&H specifications	Cum	1674.81	5692.20	1842.29	5859.68
24.36	Patch work with Water Bound Macadam Grading II (With Screening)					
(b)	Providing and laying patch work with stone aggregates of Grading II laid to water bound macadam specification after trimming the pot hole, removal of failed material, hand packing, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and rolling with smooth wheeled roller 8-10 tonnes to match the adjoining surface complete as per technical clause 404 of MORT&H specifications	Cum.	690.19	1965.41	759.21	2034.43

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
24.36	Patch work with Water Bound Macadam Grading II (Without Screening)					
(c)	Providing and laying patch work with stone aggregates of Grading II laid to water bound macadam specification after trimming the pot hole, removal of failed material, hand packing, applying and brooming requisite type of binding materials to fill up the interstices of coarse aggregate, watering and rolling with smooth wheeled roller 8-10 tonnes to match the adjoining surface complete as per technical clause 404 of MORT&H specifications (Without Screening)	Cum.	690.19	1757.82	759.21	1826.84
24.37	Ordinary Kilometer Stone for Plan Roads					
(a)	Reinforced cement concrete M-15 grade ordinary kilometer stone of standard design as per IRC 8-1980 fixing in position including painting and printing etc. complete as per technical clause 804 of MORT&H specifications	Each	2325.99	3549.43	2558.59	3782.03
24.37	5th Kilometer Stone for Plan Roads					
(b)	Reinforced cement concrete M-15 grade 5th kilometer stone of standard design as per IRC 8-1980 fixing in position including painting and printing etc. complete as per technical clause 804 of MORT&H specifications	Each	4089.42	6068.78	4498.36	6477.72
24.37	Kilometer Stone for Village Roads					
(c)	Reinforced cement concrete M-15 grade ordinary kilometer stone of standard design for village roads as per IRC 8-1980 fixing in position including painting and printing etc. complete as per technical clause 804 of MORT&H specifications	Each	1739.45	2622.76	1913.39	2796.70
24.38	200 meter Stone					
	Reinforced cement concrete M-15 grade 200 meter stone of standard design as per IRC 26-1967 fixing in position including painting and printing etc. complete as per technical clause 804 of MORT&H specifications	Each	452.39	624.87	497.63	670.11

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
24.39	Boundary Pillars					
	Reinforced cement concrete M-15 grade boundary pillars of standard design as per IRC 25-1967 fixing in position including painting and printing etc. complete as per technical clause 806 of MORT&H specifications	Each	726.32	1302.15	798.95	1374.78
24.40	Village Board					
	Reinforced cement concrete M-15 grade village board of standard design fixing in position including painting and printing etc. complete as per PWD specifications	Each	3635.12	5219.08	3998.63	5582.59
24.41	Precast Cement Concrete Kerb					
(a)	Providing and laying factory made rubber moulded smooth finish cement concrete Kerb M-20 grade 250mm high with bottom width 165mm and top width 115mm made over strong vibratory table and fixing with cement mortar 1:2 as per MORT&H specifications	M	79.76	357.56	87.74	365.54
24.41	Cast in Situ Cement Concrete M20 Kerb					
(b)	Construction of cement concrete Kerb with top and bottom width 115 and 165 mm respectively, 300 mm high in M 20 grade Kerb stone laid with Kerb laying machine, all complete as per clause 408	M	66.46	203.09	73.11	209.74
24.41	Cast in Situ Cement Concrete M20 Kerb					
(c)	Construction of cement concrete Kerb with M 20 grade concrete Kerb stone laid with Kerb laying machine, complete in all respect as per MORT&H specifications	cum	1582.36	4833.53	1740.60	4991.77
24.41	Cast in Situ Cement Concrete M 20 Kerb with Channel					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(d)	Construction of cement concrete kerb with channel with top and bottom width 115 and 165 mm respectively, 300 mm high in M 20 grade kerb channel 300 mm wide, 50 mm thick in PCCM20 grade, sloped towards the kerb, kerb stone with channel laid with kerb laying machine, foundation concrete laid manually, all complete as per clause 409	M	113.83	336.34	125.21	347.72
24.42	Precast Cement Concrete Channel					
	Providing and laying factory made rubber moulded smooth finish cement concrete Channel M-20 grade 300mm wide and 75mm thick made over strong vibratory table and fixing with cement mortar 1:2 as per MORT&H specifications	M	41.75	233.73	45.93	237.91
24.43	1.2 Meter High G.I. Barbed Wire Fencing					
(a)	1.2 meter high G.I. barbed wire fencing with 1.8 meter angle iron posts 40x40x6mm placed every 3 meters centre to centre 0.6 meter below ground level, every 15th post, end post, corner post suitably struted and provided with 9 horizontal lines and two diagonals interwoven with horizontal wires fixed with GI staples, turn buckles etc. including foundation concrete 1:2:4 of size 0.30x0.30x0.75m for each post complete as per technical clause 808 of MORT&H specifications	M	226.88	505.95	249.57	528.64
24.43	1.8 Meter High G.I. Barbed Wire Fencing					
(b)	1.8 meter high G.I. barbed wire fencing with 2.4 meter angle iron posts 50x50x6mm placed every 3 meters centre to centre 0.6 meter below ground level, every 15th post, end post, corner post suitably struted and provided with 12 horizontal lines and two diagonals interwoven with horizontal wires fixed with GI staples, turn buckles etc. including foundation concrete 1:2:4 of size 0.30x0.30x0.75m for each post complete as per technical clause 808 of MORT&H specifications	M	238.73	645.12	262.60	668.99

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
24.44	Cautionary sign board 900x900x900mm triangular as per IRC 67- 2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 09 and as per IRC 67 2012 fixed over 4mm thick aluminum Composite material (ACM) sheeting having aluminum skin thickness of 0.4 to 0.5 mm on both sided and fixing the same with suitable size aluminum alloy rivets @ 200 mm c/c to back support frame of 25x25x3mm angle iron supported on a square hollow steel section post 60x60x3.2mm conforming to IS 4923 without cost of definition plate firmly fixed to ground in foundation concrete M-25 of size 0.45x0.45x0.75m for vertical post complete as per clause 801 of MORT&H specifications. Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 .					
(a)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	920.83	4384.59	1012.91	4476.67
a (i)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	920.83	4057.68	1012.91	4149.76
24.44	Cautionary sign board 600x600x600mm triangular as per IRC 67- 2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 – 09 and as per IRC 67 – 2012. fixed over 3mm thick aluminium Composite material (ACM) sheeting having aluminium skin thickness of 0.25 to 0.3 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame of 25x25x3mm angle iron supported on a square hollow steel section post 60x60x3.2mmmm conforming to IS 4923 without cost of definition plate firmly fixed to ground in foundation concrete M-25 of size 0.45x0.45x0.60m for vertical post complete as per clause 801 of MORT&H specifications. Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 .					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(b)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	920.83	3261.71	1012.91	3353.79
b (i)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	920.83	3116.41	1012.91	3208.49
24.45	Mandatory sign board 900mm circular as per IRC 67- 2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 – 09 and as per IRC 67 – 2012. Fixed over 4mm thick aluminium Composite material (ACM) sheeting having aluminium skin thickness of 0.4 to 0.5 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame of 25x25x3mm angle iron supported on a square hollow steel section post 60x60x3.2mm conforming to IS 4923 without cost of definition plate firmly fixed to ground in foundation concrete M-25 of size 0.45x0.45x0.60m for vertical post complete as per clause 801 of MORT&H specifications. Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 .					
(a)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	920.83	5760.91	1012.91	5852.99
a (i)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	920.83	5169.10	1012.91	5261.18



Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
24.45	Mandatory sign board 600mm circular as per IRC 67- 2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 – 09 and as per IRC 67 – 2012. Fixed over 3mm thick aluminium Composite material (ACM) sheeting having aluminium skin thickness of 0.25 to 0.3 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame of 25x25x3mm angle iron supported on a square hollow steel section post 60x60x3.2mm conforming to IS 4923 without cost of definition plate firmly fixed to ground in foundation concrete M-25 of size 0.45x0.45x0.60m for vertical post complete as per clause 801 of MORT&H specifications. Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 .					
(b)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	920.83	3834.41	1012.91	3926.49
b (i)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	920.83	3571.29	1012.91	3663.37
24.46	Informatory sign board 800x600mm rectangular as per IRC 67- 2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 – 09 and as per IRC 67 – 2012. fixed over 4mm thick aluminium Composite material (ACM) sheeting having aluminium skin thickness of 0.4 to 0.5 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame of 25x25x3mm angle iron supported on a square hollow steel section post 60x60x3.2mm conforming to IS 4923 without cost of definition plate firmly fixed to ground in foundation concrete M-25 of size 0.45x0.45x0.60m for vertical post complete as per clause 801 of MORT&H specifications. Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 .					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(a)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	920.83	4926.71	1012.91	5018.79
a (i)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	920.83	4480.21	1012.91	4572.29
24.46	Informatory sign board 600x450mm rectangular as per IRC 67- 2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 – 09 and as per IRC 67 – 2012. fixed over 3mm thick aluminium Composite material (ACM) sheeting having aluminium skin thickness of 0.25 to 0.3 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame of 25x25x3mm angle iron supported on a square hollow steel section post 60x60x3.2mm conforming to IS 4923 without cost of definition plate firmly fixed to ground in foundation concrete M-25 of size 0.45x0.45x0.60m for vertical post complete as per clause 801 of MORT&H specifications. Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 .					
(b)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	920.83	3747.59	1012.91	3839.67
b (i)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	920.83	3496.00	1012.91	3588.08

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
24.46	Informatory sign board 600x600mm square as per IRC 67- 2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 – 09 and as per IRC 67 – 2012. with retro reflective high intensity Microprismatic grade sheeting fixed over 3mm thick Aluminium Composite Material (ACM) sheeting having aluminium skin thickness of 0.25 to 0.3 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame of 25x25x3mm angle iron supported on a square hollow steel section post 60x60x3.2mm conforming to IS 4923 without cost of definition plate firmly fixed to ground in foundation concrete M-25 of size 0.45x0.45x0.60m for vertical post complete as per clause 801 of MORT&H specifications. Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 .					
(c)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	920.83	4188.22	1012.91	4280.30
c (i)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	920.83	3853.33	1012.91	3945.41

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
24.47	Place Identification sign board 900x600mm rectangular as per IRC 67- 2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 – 09 and as per IRC 67 – 2012 fixed over 4mm thick aluminium Composite material (ACM) sheeting having aluminium skin thickness of 0.4 to 0.5 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame of 25x25x3mm angle iron supported on two square hollow steel section post 60x60x3.2mm conforming to IS 4923 firmly fixed to ground in foundation concrete M-25 of size 0.45x0.45x0.60m for vertical post complete as per clause 801 of MORT&H specifications. Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 .					
(a)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	1163.47	7072.23	1279.82	7188.58
(b)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	1163.47	6569.91	1279.82	6686.26
24.48	Advance Direction sign board 900x900mm square as per IRC 67- 2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 – 09 and as per IRC 67 – 2012. fixed over 4mm thick aluminium Composite material (ACM) sheeting having aluminium skin thickness of 0.4 to 0.5 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame of 25x25x3mm angle iron supported on two square hollow steel section post 60x60x3.2mm conforming to IS 4923 firmly fixed to ground in foundation concrete M-25 of size 0.60x0.60x0.75m for vertical post complete as per clause 801 of MORT&H specifications . Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 .					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(a)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	1752.18	10295.88	1927.40	10471.10
a (i)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	1752.18	9541.94	1927.40	9717.16
24.48	Advance Direction sign board 1200x900mm rectangular per IRC 67- 2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 – 09 and as per IRC 67 – 2012. grade sheeting fixed over 4mm thick Aluminium Composite Material (ACM) sheeting having aluminium skin thickness of 0.4 to 0.5 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame of 25x25x3mm angle iron supported on two square hollow steel section post 60x60x3.2mm conforming to IS 4923 firmly fixed to ground in foundation concrete M-25 of size 0.60x0.60x0.75m for vertical post complete as per clause 801 of MORT&H specifications. Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 .					
(b)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	2430.37	12316.29	2673.41	12559.33
b (i)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	2430.37	11311.66	2673.41	11554.70

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
24.48	Advance Direction sign board 1200x1200mm rectangular as per IRC 67- 2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 – 09 and as per IRC 67 – 2012. fixed over 4mm thick Aluminium Composite Material (ACM) sheeting having aluminium skin thickness of 0.4 to 0.5 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame of 25x25x3mm angle iron supported on two square hollow steel section post 60x60x3.2mm conforming to IS 4923 firmly fixed to ground in foundation concrete M-25 of size 0.60x0.60x0.75m for vertical post complete as per clause 801 of MORT&H specifications. Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 .					
(c)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	2430.37	14454.84	2673.41	14697.88
c (i)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	2430.37	13115.30	2673.41	13358.34
24.48	Advance Direction sign board 1200x1800mm rectangular as per IRC 67- 2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 – 09 and as per IRC 67 – 2012. fixed over 4mm thick Aluminium Composite Material (ACM) sheeting having aluminium skin thickness of 0.4 to 0.5 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame of 25x25x3mm angle iron supported on two square hollow steel section post 60x60x3.2mm conforming to IS 4923 firmly fixed to ground in foundation concrete M-25 of size 0.60x0.60x0.75m for vertical post complete as per clause 801 of MORT&H specifications. Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 .					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(d)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	2919.74	18873.29	3211.71	19165.26
d (i)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	2919.74	16864.00	3211.71	17155.97
24.49	Definition Plate 600x200mm rectangular as per as per IRC 67- 2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 – 09 and as per IRC 67 – 2012. specifications. Fixed over 3mm thick Aluminium Composite Material (ACM) sheeting having aluminium skin thickness of 0.25 to 0.3 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame welded with vertical post of sign board complete as per clause 801 of MORT&H specifications. Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 .					
(a)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	141.66	758.41	155.83	772.58
(b)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	141.66	646.78	155.83	660.95
24.50	Direction/Diversion Plate 900x300mm rectangular as per IRC 67- 2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 – 09 and as per IRC 67 – 2012. specifications. fixed over 4mm thick Aluminium Composite Material (ACM) sheeting having aluminium skin thickness of 0.4 to 0.5 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame fixed in position complete as per clause 801 of MORT&H specifications. Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 ..					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(a)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	28.16	1279.28	30.98	1282.10
a (i)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	28.16	1027.67	30.98	1030.49
24.50	Direction/Diversion Plate 1800x300mm rectangular as per IRC 67- 2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 – 09 and as per IRC 67 – 2012. fixed over 4mm thick Aluminium Composite Material (ACM) sheeting having aluminium skin thickness of 0.4 to 0.5 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame fixed in position complete as per clause 801 of MORT&H specifications. Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 .					
(b)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	28.16	2525.99	30.98	2528.81
b (i)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	28.16	2023.67	30.98	2026.49
24.51	Hazard Marker sign board 300x900mm rectangular as per IRC 67- 2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 09 and IRC 67 2012, fixed over 4mm thick Aluminium Composite Material (ACM) sheeting having skin thickness of 0.4 to 0.5 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame of 25x25x3mm angle iron supported on a square hollow steel section post 60x60x3.2mm conforming to IS 4923 firmly fixed to ground including foundation concrete M-25 of size 0.45x0.45x0.60m for vertical post complete as per clause 801 of MORT&H specifications					



Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(a)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	920.83	4028.66	1012.91	4120.74
(b)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	920.83	3777.05	1012.91	3869.13
24.52	Overhead sign board 6000x1500mm cantilever type single sided as per IRC 67-2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 – 09 and as per IRC 67 – 2012 fixed over 4mm thick Aluminium Composite Material (ACM) sheeting having aluminium skin thickness of 0.4 to 0.5 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame of 40x40x6mm angle iron supported on designed single support system of MS pipe and plates in the form of a cantilever type truss made with 350NB pipe @50kg per mtr as vertical support, 50NB pipe @ 4.50kg per mtr and 40NB pipe @ 3.61kg per mtr for truss including base plates, gusset plates,designed RCC foundation for fixing in ground complete as per clause 802 of MORT&H specifications. Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 .					
(a)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	42625.62	197904.63	46888.18	202167.19
a (i)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	42625.62	189532.60	46888.18	193795.16

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
24.52	Overhead sign board 6000x1500mm cantilever type double sided as per IRC 67-2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 – 09 and as per IRC 67 – 2012 fixed over 4mm thick Aluminium Composite Material (ACM) sheeting having aluminium skin thickness of 0.4 to 0.5 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame of 40x40x6mm angle iron supported on designed single support system of MS pipe and plates in the form of a cantilever type truss made with 350NB pipe @50kg per mtr as vertical support, 50NB pipe @ 4.50kg per mtr and 40NB pipe @ 3.61kg per mtr for truss including base plates, gusset plates, designed RCC foundation for fixing in ground complete as per clause 802 of MORT&H specifications. Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 ..					
(b)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	43954.23	246594.70	48349.65	250990.12
b (i)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	43954.23	229850.67	48349.65	234246.09

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
24.53	Overhead sign board 9000x1500mm simply supported type double sided as per IRC 67-2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 – 09 and as per IRC 67 – 2012 fixed over 4mm thick aluminium Composite material (ACM) sheeting having aluminium skin thickness of 0.4 to 0.5 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame of 40x40x6mm angle iron supported on designed double support system of MS pipe and plates in the form of a simply supported type truss made with 350NB pipe @50kgper mtr as vertical support, 50NB pipe @ 4.50kg per mtr and 40NB pipe @ 3.61kg per mtr for truss including base plates, gusset plates, designed RCC foundation for fixing in ground complete as per clause 802 of MORT&H specifications. Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 .					
(a)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	72041.58	401553.69	79245.74	408757.85
(b)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	Each	72041.58	376437.62	79245.74	383641.78

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
24.54	Overhead sign board 12000x1500mm simply supported type double sided as per IRC 67-2012 with high intensity Microprismatic grade retro reflective Sheeting as per ASTM D 4956 – 09 and as per IRC 67 . fixed over 4mm thick aluminium Composite material (ACM) sheeting having aluminium skin thickness of 0.4 to 0.5 mm on both sided and fixing the same with suitable size aluminium alloy rivets @ 200 mm c/c to back support frame of 40x40x6mm angle iron supported on designed double support system of MS pipe and plates in the form of a simply supported type truss made with 350NB pipe @50kg per mtr as vertical support, 50NB pipe @ 4.50kg per mtr and 40NB pipe @ 3.61kg per mtr for truss including base plates, gusset plates, designed RCC foundation for fixing in ground complete as per clause 802 of MORT&H specifications. Supplier shall provide a warranty as per clause 6.9 of IRC 67-2012 for retro reflective sheeting & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012.					
(a)	Using high intensity Microprismatic grade retro reflective Sheeting Type XI as per ASTM D 4956 09 and as per IRC 67 2012	Each	84337.68	483687.23	92771.45	492121.00
(b)	Using high intensity Microprismatic grade retro reflective Sheeting Type IV as per ASTM D 4956 09 and as per IRC 67 2012	1	84337.68	450199.13	92771.45	458632.90
24.55	Hume Pipe Road Indicator					
	Hume pipe road indicator of 350mm dia NP-2 hume pipe 1200mm high, 900mm above ground level, 300mm embedded in ground in cement concrete 1:4:8 of size 0.75x0.75x0.60m, filled with earth and plugged from top with 300mm thick cement concrete 1:2:4, painted with two coats ready mixed exterior paint in black and white strips fixed in position complete as per PWD specifications	Each	1006.50	2291.07	1107.15	2391.72
24.56	"W" Type Metal Beam Crash Barrier Single Sided					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(a)	Providing & erecting "W" type metal beam crash barrier single sided comprising of 3mm thick corrugated sheet metal beam rail 70cm above road or ground level fixed on channel vertical post 150x75x5mm spaced 2mtr centre to centre 1.80mtr high, 1.1mtr below road or ground level, all steel parts and fitments to be galvanized by hot dip process, all fittings to conform to IS:1367 & IS:1364, metal beam rail to be fixed on the vertical post with a spacer of channel section 150x75x5mm, 330mm long fixed firmly into ground with vertical hydraulic self driving machine for vertical post complete as per approved drawings and technical clause IRC: 119-2015.	M	498.31	2618.44	548.14	2668.27
24.56	"W" Type Metal Beam Crash Barrier Double Sided					
(b)	Providing & erecting "W" type metal beam crash barrier double sided comprising of 3mm thick corrugated sheet metal beam rail 70cm above road or ground level fixed on both sided on channel vertical post 150x75x5mm spaced 2mtr centre to centre 1.80mtr high, 1.1mtr below road or ground level, all steel parts and fitments to be galvanized by hot dip process, all fittings to conform to IS:1367 & IS:1364, metal beam rails to be fixed on the vertical post with a spacer of channel section 150x75x5mm, 330mm long on both sides fixed firmly into ground with vertical hydraulic self driving machine for vertical post complete as per approved drawings and technical clause IRC: 119-2015.	M	632.23	4060.26	695.45	4123.48
24.57	Road Marking with Thermoplastic Compound					
	Road marking with hot applied thermoplastic compound 2.5mm thick including reflectorising glass beads @ 0.25kg per sqm area as per IRC:35 1997 complete as per technical clause 803 of MORT&H specifications	sqm	22.28	616.67	24.51	618.90
24.58	Plain Cement Concrete Pavement					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
	Construction of unreinforced plain cement concrete pavement in M-30 mix design over a prepared sub base with OPC 43 grade conforming to IS:383 mixed with concrete mixer using batch type concrete mixer as per IS:1791, laid in position, compacted with needle vibrator, screed vibrator and plate vibrator, dewatering of free water with vaccum pump, finishing the surface with power floater, finishing to required lines and grades as per drawings and technical clause 1501 of MORD specifications	cum	2069.92	5313.25	2276.91	5520.24
24.59	Dry Lean Cement Concrete Sub- base					
	Construction of dry lean cement concrete Sub-base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per table 600-1, cement content not to be less than 150 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site with transit mixer with lead up to 10 km., laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing.	cum	717.01	2825.92	788.71	2897.62
24.60	Cement Concrete Pavement					
(a)	Construction of un-reinforced M-30 grade concrete pavement with dowel jointed over a prepared sub base with 43 grade OPC cement with Fly ash (subject to maximum 25% of cement content) of concrete, coarse and fine aggregate conforming to IS 383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a fully computerised batch mix plant as per approved mix design, transported to site in transit mixer with lead up to 10 km. laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per clause 602 of MORT&H 5th Revision	Cum	1022.55	5275.65	1124.80	5377.90

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
24.60	Cement Concrete Pavement					
(b)	Construction of un-reinforced M-30 grade concrete pavement with dowel jointed over a prepared sub base with 43 grade OPC cement of concrete, coarse and fine aggregate conforming to IS 383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a fully computerised batch mix plant as per approved mix design, transported to site in transit mixer with lead up to 10 km. laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per clause 602 of MORT&H 5th Revision	Cum	1022.55	5599.48	1124.80	5701.73
24.60	Cement Concrete Pavement					
(c)	Construction of un-reinforced M-35 grade concrete pavement with dowel jointed over a prepared sub base with 43 grade OPC cement with Fly ash (subject to maximum 25% of cement content) of concrete, coarse and fine aggregate conforming to IS 383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a fully computerised batch mix plant as per approved mix design, transported to site in transit mixer with lead up to 10 km. laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per clause 602 of MORT&H 5th Revision	Cum	1022.55	5513.21	1124.80	5615.46
24.60	Cement Concrete Pavement					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(d)	Construction of un-reinforced M-35 grade concrete pavement with dowel jointed over a prepared sub base with 43 grade OPC cement of concrete, coarse and fine aggregate conforming to IS 383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a fully computerised batch mix plant as per approved mix design, transported to site in transit mixer with lead up to 10 km. laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per clause 602 of MORT&H 5th Revision	Cum	1022.55	5865.07	1124.80	5967.32
24.60	Cement Concrete Pavement					
(e)	Construction of un-reinforced M-40 grade concrete pavement with dowel jointed over a prepared sub base with 43 grade OPC cement with Fly ash (subject to maximum 25% of cement content) of concrete, coarse and fine aggregate conforming to IS 383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a fully computerised batch mix plant as per approved mix design, transported to site in transit mixer with lead up to 10 km. laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per clause 602 of MORT&H 5th Revision	Cum	1022.55	5663.71	1124.80	5765.96
24.60	Cement Concrete Pavement					



Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
(f)	Construction of un-reinforced M-40 grade concrete pavement with dowel jointed over a prepared sub base with 43 grade OPC cement of concrete, coarse and fine aggregate conforming to IS 383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a fully computerised batch mix plant as per approved mix design, transported to site in transit mixer with lead up to 10 km. laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per clause 602 of MORT&H 5th Revision	Cum	1022.55	6053.32	1124.80	6155.57
24.61	Fibre Board Expansion Joints					
(a)	Providing and fixing 25mm thick compressible fibre board in expansion joints complete as per drawings and technical clause 2605 of MORT&H specifications	mtr per cm depth	0.35	5.41	0.38	5.44
24.61	Joint Sealing Compound					
(b)	Providing and filling joint sealing compound with coarse sand and 6 percent bitumen by weight complete as per drawings and technical clause 2605 of MORT&H specifications	mtr per cm depth	2.49	2.84	2.74	3.09
24.62	Rumble Strips with thermoplastic road marking					
(a)	Providing and making rumble strips 15-20mm high at centre, 250mm wide placed at 1m centre to centre over freshly laid bituminous layer by using close graded premix surfacing material type B at approved locations to control speed and marked with 100mm wide white strips of thermoplastic road marking paint. The close graded premix surfacing material type B shall conform to technical clause 512 and thermoplastic road marking paint shall conform to technical clause 803 of MORT&H specifications	M	8.48	89.55	9.33	98.51

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
24.62	Rumble Strips without thermoplastic road marking					
(b)	Providing and making rumble strips 15-20mm high at centre, 250mm wide placed at 1m centre to centre over freshly laid bituminous layer by using close graded premix surfacing material type B at approved locations to control speed. The close graded premix surfacing material type B shall conform to technical clause 512 of MORT&H specifications	M	6.26	27.89	6.88	30.68
24.63	Moulded Shank Road Stud					
	Supplying and fixing of single mould twin shank reflective road studs made out of poly carbonate/ABS moulded body and reflective panels with micro prismatic lens or Glass Beeds capable of providing total internal reflection of the light entering the lens face with retro reflectance and chromaticity values shall be as given in the detailed specifications and the product shall conform to ASTM D4280. The raised pavement marker shall also meet all the testing conditions of ASTM D4280 and fixed to the road surface using the adhesive. Two cylindrical Polymer Shanks of not less than 20 mm diameter and not less than 30 mm length shall be molded in the RPM body. The marker shall support a load of 13635 Kg tested in accordance with ASTM D4280. The marker shall withstand flexural strength of 909 kgf force in accordance with ASTM D4280. Marker lenses shall be moulded of Polycarbonate or methyl methacrylate conforming to ASTM D788. The supplier shall provide a 2 years warranty for satisfactory field performance as per clause 804.7.3 of MORT&H 5th revision specifications.	Each	81.31	243.71	89.44	251.84
24.64	Flexible Median Marker					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
	Providing and Fixing of Flexible Median Markers as per IRC 79:2019 which shall be made of combination of tough, high impact resistant molded thermoplastic body along with florescent yellow color retro-reflective type XI sheeting with minimum exposed reflective area 285 square mm and with rebound property. The reflective sheeting should confirm to Type XI Florescent Yellow sheeting as per IRC 67 2012 and ASTM D4956-11. The flexible median marker shall have overall height of minimum 180 mm, body thickness of minimum 2mm and shank depth of minimum 30mm. The retro-reflective sheeting shall be on both sides of the Flexible Median Marker and shall be edge protected with no exposed edges which will prevent edge lifting, vandalism, sheeting damage, etc. The edge of sheeting should not come out easily by putting nails, sharp objects etc. The logo of the manufacturer shall be embossed on either side of the body. The product design has to with stand all natural impacts and should not get damaged if any pedestrian stamp on top of it intentionally or unintentionally. The product should bend up to 90 degree on both sides without breakage or damage.	Each	16.44	239.32	18.08	240.96
24.65	Solar RPM/ Stud					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
	Providing and installation of solar cateye produced from an engineered polymer selected for superior impact resistance and weather-ability. The top of the solar stud should be transparent for solar charging and light output in active mode. The base of the body shall be yellow or neutral white as approved by Engineer In-charge. The marker shall incorporate a solar panel (comprising of solar cells) for converting solar energy into electricity, a storage device for storing the energy, LEDs for illumination and a design for providing 360 degree smooth illumination. The Solar stud shall be round in shape for providing illumination in all directions. The solar stud shall also have high reflective lenses for conspicuity in passive mode and dual shanks for improved road presence. The solar studs are intended for application directly onto pavement surfaces and shall be applied with epoxy resin adhesives designed for use with raised pavement markers and as supplied by the marker manufacturer separately. The solar cateye shall be of height: 65 ± 2 mm & Maximum Diameter: 136 ± 4 mm. The body of the solar cateye shall be resistant to dust and water ingress as per IP 65 standards. The marker shall support a load of 13635 Kg tested in accordance with ASTM D4280.	Each	53.27	1173.27	58.60	1178.60
24.66	Road Delineator/Vertical Guide Post Delineator					

Sr. No.	Description		Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
	Providing and fixing of Standard Metal Delineator as per IRC 79:2019 consisting of retro reflective area in white color using full cube corner micro prismatic non-metallic retro reflective sheeting on each side conforming with IRC 67 2012 and meeting the coefficient of retro reflection values as per ASTM D 4956 Type XI table specification. The delineator shall be painted with only black color powder coat of minimum 40 microns thickness, on top of which retro reflective sheeting only in white colour shall be pasted on both sides. The structure shall have height not less than 800 mm above the ground, width not less than 100 mm and shall extend not more than 300mm below the ground while being installed. The delineator shall have grooves across the length to make the reflective sheets vandal-proof. The delineator is meant for application on gaps in median, traffic islands, dangerous bends, roundabouts, narrow bridges etc. or as desired by site engineer.	Each	18.50	1175.25	20.35	1177.10
24.67	Milling on Bitumen Surface					
	Dismantling of existing damaged Bitumen surface by Cold Milling Machine upto 30 mm depth	Sqm	32.32	32.32		



**CHAPTER NO. 25**  
**MAINTENANCE OF CANAL AND DRAIN**

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
25.1	Clearance of weed, jalla, deela etc manually from inner section of unlined channel						
(a)	Unlined (heavy growth)						
	(i)	discharge upto 0.42 cumecs	mtr	27.00	27.00	30.00	30.00
	(ii)	discharge exceeding 0.42 but upto 1.42 cumecs	mtr	39.00	39.00	43.00	43.00
	(iii)	discharge exceeding 1.42 but upto 2.83 cumecs	mtr	54.00	54.00	59.00	59.00
	(iv)	discharge exceeding 2.83 cumecs	mtr	70.00	70.00	77.00	77.00
(b)	Unlined (medium growth)						
	(i)	discharge upto 0.42 cumecs	mtr	22.00	22.00	24.00	24.00
	(ii)	discharge exceeding 0.42 but upto 1.42 cumecs	mtr	31.00	31.00	34.00	34.00
	(iii)	discharge exceeding 1.42 but upto 2.83 cumecs	mtr	44.00	44.00	48.00	48.00
	(iv)	discharge exceeding 2.83 cumecs	mtr	56.00	56.00	62.00	62.00
(c)	Unlined (Light growth)						
	(i)	discharge upto 0.42 cumecs	mtr	19.00	19.00	21.00	21.00
	(ii)	discharge exceeding 0.42 but upto 1.42 cumecs	mtr	27.00	27.00	30.00	30.00
	(iii)	discharge exceeding 1.42 but upto 2.83 cumecs	mtr	38.00	38.00	42.00	42.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
	(iv) discharge exceeding 2.83 cumecs	mtr	49.00	49.00	54.00	54.00
Note: 1) Man days are taken as per actual progress assessed by the committee of Engineers constituted by Chief Engineer, Canals. 2) In case of heavy weed, jalla, deela etc growth category, concerned SDO and Executive Engineer will certify after physical verification. 3) In case of medium and light weed, jalla, deela etc growth category, concerned SDO will certify after physical verification and concerned Executive Engineer will also certify after satisfying himself. 4) The rate includes the proper disposal of weed, jalla, deela etc. also.						
25.2	Clearance of weed, jalla, deela, sarkanda,jungle,					
(a)	Lined (heavy growth)					
	(i) discharge upto 0.283 cumecs	mtr	25.00	25.00	28.00	28.00
	(ii) discharge exceeding 0.283 but upto 1.42 cumecs	mtr	38.00	38.00	42.00	42.00
	(iii) discharge exceeding 1.42 but upto 2.83 cumecs	mtr	51.00	51.00	56.00	56.00
	(iv) discharge exceeding 2.83 cumecs	mtr	64.00	64.00	70.00	70.00
(b)	Lined (medium growth)					
	(i) discharge upto 0.283 cumecs	mtr	19.00	19.00	21.00	21.00
	(ii) discharge exceeding 0.283 but upto 1.42 cumecs	mtr	29.00	29.00	32.00	32.00
	(iii) discharge exceeding 1.42 but upto 2.83 cumecs	mtr	38.00	38.00	42.00	42.00
	(iv) discharge exceeding 2.83 cumecs	mtr	48.00	48.00	53.00	53.00
(c)	Lined (Light growth)					
	(i) discharge upto 0.283 cumecs	mtr	13.00	13.00	14.00	14.00



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(ii)	discharge exceeding 0.283 but upto 1.42 cumecs	mtr	19.00	19.00	21.00	21.00
	(iii)	discharge exceeding 1.42 but upto 2.83 cumecs	mtr	25.00	25.00	28.00	28.00
	(iv)	discharge exceeding 2.83 cumecs	mtr	32.00	32.00	35.00	35.00
<p>Note: 1) Man days are taken as per actual progress accessed by the committee of Engineers constituted by Chief Engineer, Canals.</p> <p>2) In case of heavy weed, jalla, deela, sarkanda, jungle, butti, dhora, silts etc. growth category, concerned SDO and Executive Engineer will certify after physical verification.</p> <p>3) In case of medium and light weed, jalla, deela, sarkanda, jungle, butti, dhora, silts etc growth category, concerned SDO will certify after physical verification and concerned Executive Engineer will also certify after satisfying himself.</p> <p>4) The rate includes the proper disposal of weed, jalla, deela, sarkanda, jungle, butti, dhora, silts etc also.</p> <p>5) Wherever there is no silt in the bed of the distributary/minor, rates should further be decreased by 40% of that of normal norms of weed, jalla, deela, sarkanda, jungle, butti, dhora etc. with silt.</p>							
25.3	Clearing weed growth manually from different section of the drain						
1 (a)	Wet conditions (heavy)						
	(i)	Bed width less than 7.62 mtr	sqm	14.00	14.00	15.00	15.00
	(ii)	Bed width 7.62 mtr to 15.24 mtr	sqm	16.00	16.00	18.00	18.00
	(iii)	Bed width more than 15.24 mtr	sqm	20.00	20.00	22.00	22.00
2 (a)	Wet conditions (medium)						
	(i)	Bed width less than 7.62 mtr	sqm	10.00	10.00	11.00	11.00
	(ii)	Bed width 7.62 mtr to 15.24 mtr	sqm	12.00	12.00	13.00	13.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(iii)	Bed width more than 15.24 mtr	sqm	15.00	15.00	17.00	17.00
3 (a)	Wet conditions (light)						
	(i)	Bed width less than 7.62 mtr	sqm	7.00	7.00	8.00	8.00
	(ii)	Bed width 7.62 mtr to 15.24 mtr	sqm	8.00	8.00	9.00	9.00
	(iii)	Bed width more than 15.24 mtr	sqm	10.00	10.00	11.00	11.00
Note: Where it is not possible to manually clear the section of any drain, machinery rates will be applicable.							
1 (b)	dry conditions (heavy)						
	(i)	Bed width less than 7.62 mtr	sqm	7.00	7.00	8.00	8.00
	(ii)	Bed width 7.62 mtr to 15.24 mtr	sqm	8.00	8.00	9.00	9.00
	(iii)	Bed width more than 15.24 mtr	sqm	9.00	9.00	10.00	10.00
2 (b)	dry conditions (medium)						
	(i)	Bed width less than 7.62 mtr	sqm	6.00	6.00	7.00	7.00
	(ii)	Bed width 7.62 mtr to 15.24 mtr	sqm	6.00	6.00	7.00	7.00
	(iii)	Bed width more than 15.24 mtr	sqm	7.00	7.00	8.00	8.00
3 (b)	dry conditions (light)						
	(i)	Bed width less than 7.62 mtr	sqm	4.00	4.00	4.00	4.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(ii)	Bed width 7.62 mtr to 15.24 mtr	sqm	4.00	4.00	4.00	4.00
	(iii)	Bed width more than 15.24 mtr	sqm	4.00	4.00	4.00	4.00
Note: 1) Man days are taken as per actual progress assessed by the committee of Engineers constituted by Chief Engineer, Drainage. 2) In case of heavy weed growth category, concerned SDO and Executive Engineer will certify after physical verification. 3) In case of medium and light weed growth category, concerned SDO will certify after physical verification and concerned Executive Engineer will also certify after satisfying himself.							
25.4	Running and maintenance of pumping set 8 H.P./ Generator set for dewatering arrangements complete in all respects		hours		36.37		40.00
Note:-	(i)	The Engine with pumping set of 8 H.P. will run 4 bores.					
	(ii)	The generator set having engine of 8 H.P. coupled with alternator of 5 H.P. will run motor of 4 H.P.					
25.5	Making bore and installation of pumping set for dewatering arrangements complete in all respects		Rmt		53.00		58.00
25.6	Making dewatering arrangement by pumping set 4" *4" (Tractor driven)		hour		787.00		866.00
25.7	Clearance of sarkanda, weed, jala, booti etc. from wet drains by machinery having bed width						
	(i)	Upto 20 feet	Sqm	15.00	15.00	17.00	17.00
	(ii)	More than 20 feet	Sqm	18.00	18.00	20.00	20.00
25.8	Removal/ Clearance of slush from wet drains by mechanical means		Cum	81.00	81.00	89.00	89.00



**CHAPTER NO. 26**  
**MISCELLANEOUS**

**Notes :-**

- (i) The rates given below are labour rates unless otherwise stated.
- (ii) Unless otherwise stated, the labour rates include rehandling of materials within 100 m.

Sr. No.	Description	Unit	Rate for Zone-A & Zone-B
1	2	3	4
26.1	Cutting Girders with Hack-saw.		
	(a) Upto 300 mm depth.	cut	180.00
	(b) Above 300mm to 450mm depth.	cut	210.00
26.2	Drilling holes in girders.	each	20.00
26.3	Cutting/Fixing of copper sheets		
	(a) Cutting of copper sheets 15mm, thick flashing.	m	68.00
	(b) Fixing copper flashing into position.	m	27.00
26.4	Assembling 40 mm. pressure pipes.	m	15.00
26.5	Boring and fixing 40 mm pressure pipes.	m	75.00
26.6	Boring for hand-pump in clay fitting strainer and pipe.		
	(a) Upto 75mm dia bore.		
	(i) From 0 to 15 m.	m	89.70
	(ii) Exceeding 15 m but upto 30 m.	m	227.70
	(iii) Exceeding 30 m.	m	338.10
	(b) Above 75mm dia bore but not exceeding 100mm.		
	(i) From 0 to 15 m.	m	120.00
	(ii) Exceeding 15 m but upto 30 m.	m	282.90
	(iii) Exceeding 30 m.	m	338.10

Sr. No.	Description	Unit	Rate for Zone-A & Zone-B
1	2	3	4
26.7	Boring hand-pump in soil with admixture of shingle.		
	(a) Upto 75mm dia bore.		
	(i) From 0 to 15 m.	m	158.70
	(ii) Exceeding 15 m but upto 30 m.	m	282.90
	(iii) Exceeding 30 m.	m	338.10
	(b) Above 75mm dia. but not exceeding 100mm dia. bores		
	(i) From 0 to 15 m.	m	179.40
	(ii) Exceeding 15 m but upto 30 m.	m	338.10
	(iii) Exceeding 30 m.	m	396.75
26.8	Hand pumps		
	(a) Pulling out pipe and filters.	m	27.60
	(b) Lowering pipe in the hole up to 40mm dia.	m	27.60
	(c) fixing head including clamps and handle.	each	138.00
26.9	Fixing F.I gauges flush with masonry including cost of hooks.	m	111.00
26.10	Fixing handles to iron rammers including cost of handles.	each	50.00
26.11	Cutting down trees, filling holes and levelling of ground, lopping branches trimming, removal not exceeding 100 m stacking clearing site.		
	(a) girth up to 60 cm	each	170.00
	(b) girth more than 60 cm. but up to 120 cm.	each	303.00
	(c) girth more than 120 cm. but up to 180 cm.	each	605.00

Sr. No.	Description		Unit	Rate for Zone-A & Zone-B
1	2		3	4
	(d)	girth more than 180 cm. but up to 250 cm.	each	1010.00
Note :-	(i)	The girth is to be measured 1.25 m above ground level.		
	(ii)	When stumps are grubbed up in addition, take rates as double the above rates for trees cut and grubbed. payment for grubbing will only be made when specially ordered by the Sub- Divisional officer in cases where it is essential to remove the stumps.		
	(iii)	Trees requiring to be cut will normally be sold as they stand, the purchase price including the purchasers liability to cut or grub and remove the tree from Govt. Land.		
	(iv)	Where these have not been sold, the trees cut and removed will be the property of the Govt.		
26.12	Felling trees, cutting and stacking fuel wood from plantation.		qtl	70.00
26.13	Splitting fuel wood.		qtl	100.00
26.14	Supply of wooden pegs for levelling work from canal or road plantation 40 mm to 50mm dia and 15cm to 23 cm long.		100 nos	170.00
26.15	Supply of wooden pegs for alignment work, 40 cm long 75mm dia from canal or road plantation.		100 nos	675.00
26.16	Supply of bamboo jhandies 3 m to 3.5 m including iron shoes and flags 40 cm Square painted black and white.		each	170.00
26.17	Fixing glass pieces on top of walls.		m	44.00
26.18	Water allowance.			
	(a)	for concrete, brick masonry in lime or cement mortar		
	(i)	Where lead involved is 800 m to 1.6Km	cum	24.00
	(ii)	Where lead involved is above 1.6Km to 2.4 Km	cum	48.00

Sr. No.	Description		Unit	Rate for Zone-A & Zone-B
1	2		3	4
	(b)	For plastering in lime or cement mortar, pointing, flooring :-		
	(i)	Where lead involved is 800 m to 1.6Km	sqm	4.00
	(ii)	Where lead involved is above 1.6Km to 2.4 Km	sqm	7.00
Note :-	The above rates are payable only where water is not available locally and where fixing of hand pump is neither feasible nor practically possible due to small amount of work and where water is actually carried by carts or by mechanical transport.			
26.19	Digging pits and fixing distance marks or boundary stones.		each	50.00
26.20	Supplying manure or compost, including carriage of 100 m.		cum	430.00
26.21	Ploughing two times.		hectare	3000.00
26.22	Filling 200 litres drums with diesel oil (not payable to diesel dealer)		each	14.00
26.23	Jungle clearance.		hectare	1076 to 5283
26.24	Ordinary jungle clearance of both banks of running distributaries, minors and drains with discharge upto 9cum/s including boundary road :-			
	(a)	Discharge upto 1.5 cum/s	km	1398 to 2151
	(b)	Discharge exceeding 1.5 cum/s but upto 4.5 cum/s	km	2151 to 2796
	(c)	Discharge exceeding 4.5 cum/s.	km	2796 to 3549
26.25	Jungle clearance on running canals and branches, and drains with discharge more than 9 cum/s.			
	(i)	Light	km	8606.00
	(ii)	Medium	km	10752.00
	(iii)	Heavy	km	21504.00
	Notes for Item No.26.21 to 26.23			



Sr. No.	Description		Unit	Rate for Zone-A & Zone-B
1	2		3	4
	(i)	The rates are applicable to areas acquired for new canals, and drains, extension of channels and for construction of roads and Buildings.		
	(ii)	The rate is to be decided by the Executive Engineer according to density of jungle to be cleared.		
	(iii)	The rates of item Nos. 26.36 to 26.38 are for estimating purposes only.		
26.26	Filling loose cement bags in empty cement bags weighing, sewing and stacking with in 30m.		bag	9.00
26.27	Filling cement bags with steam coal or kankar lime, sewing including cost of string.		Cum	98.00
26.28	Stencilling and bundling empty cement bags.		100 nos	41.00
26.29	Tempering of Kassies, Belchas, Khurpas and pick axes.		each	50.00



**CHAPTER NO. 27**  
**QUANTITIES OF MATERIALS**

**Note :-**

One cement bag weighs 50 Kg and measures 0.03472 cum.

Sr. No.	Description	Unit	Quantities			
			Cement (Bags)	Coarse Sand (cum)	Coarse aggregates (cum)	Admixture (kg)
1	2	3	4	5	6	7

27.1	RCC/PCC Design mix with PPC Cement and Coarse Sand :-						
	(i) M-20	cum	6.70	0.43	0.85		
	(ii) M-25	cum	7.50	0.43	0.85	5.00	
	(iii) M-30	cum	7.70	0.43	0.85	5.95	
	(iv) M-35	cum	8.50	0.43	0.85	6.68	
	(v) M-40	cum	8.90	0.43	0.85		
	(vi) 1:2:4	cum	6.50	0.45	0.90		

				Cement (Bags)	Fine Sand (cum)	Coarse aggregates (cum)		
	<b>Plain Cement Concrete :-</b>							
	(i)	1:3:6	cum	4.50	0.47	0.94		
	(ii)	1:4:8	cum	3.50	0.48	0.96		
	(iii)	1:5:10	cum	2.80	0.49	0.98		
	(iv)	1:6:12	cum	2.35	0.495	0.99		
	(v)	1:8:16	cum	1.80	0.50	1.00		

				Lime (cum)	Surkhi (cum)	Ballast (cum)		
27.2	Lime concrete							
	(i)	1:2:8 (Brick ballast 40mm gauge)	cum	0.13 (76 Kg)	0.26	1.00		
	(ii)	16:24:100 (Brick ballast 30mm gauge)	cum	0.16 (93.54 Kg)	0.24	1.00		
	(iii)	16:24:100 (Brick ballast 20mm gauge)	cum	0.16 (93.54 Kg)	0.24	1.00		

				Cement (Bags)	Sand (cum)	Bricks (Nos)		
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Sr. No.	Description		Unit	Quantities			
				Cement (Bags)	Coarse Sand (cum)	Coarse aggregate s (cum)	Admixture (kg)
1	2		3	4	5	6	7
27.3	(a)	Brick work in cement sand mortar with bricks of size 22.86 cmx11.11cmx6.83cm					
	(i)	1:2	cum	3.45	0.24	480	
	(ii)	1:3	cum	2.40	0.25	480	
	(iii)	1:4	cum	1.75	0.25	480	
	(iv)	1:5	cum	1.45	0.25	480	
	(v)	1:6	cum	1.20	0.25	480	
	(vi)	1:7	cum	1.00	0.25	480	
				Lime Qtl	Surkhi (cu m)	Bricks (Nos)	Sand (cum)
	(b)	Brick work laid in lime surkhi mortar 1:2 with bricks of size 22.86cm x 11.11cm x 6.83cm					
	(i)	1:2	cum	0.70	0.24	480	-
	(c)	Brick work laid in lime, surkhi, sand mortar 1:1:1 with bricks of size 22.86cm x 11.11cm x 6.83cm	cum	0.84	0.12	480	0.12
				Cement (Bags)	Lime (Qtl.)	Sand (cum)	Bricks (Nos)
	(d)	Brick work laid in cement, lime, sand mortar with bricks of size 22.86cm x 11.11cm x 6.83cm					
	(i)	1:1:6	cum	1.20	0.29	0.25	480
	(ii)	1:2:9	cum	0.80	0.39	0.25	480
	(iii)	1:3:12	cum	0.61	0.44	0.25	480
	(e)	115mm thick brick wall laid in cement, lime, sand mortar 1:1:6 with bricks size of 22.86cm x 11.11cm x 6.83cm.					
	(i)	1:1:6	sqm	0.137	0.032	0.0286	55

Sr. No.	Description		Unit	Quantities				
				Cement (Bags)	Coarse Sand (cum)	Coarse aggregate s (cum)	Admixture (kg)	
1	2		3	4	5	6	7	
			Cement (Bags)	Sand (cum)	Tiles (Nos)			
27.4	(a)	Brick work in cement sand mortar with tiles size 22.86 cm X 11.43cm x 3.81 cm						
	(i)	1:4	cum	2.85	0.40	780		
	(ii)	1:5	cum	2.30	0.40	780		
	(iii)	1:6	cum	1.90	0.40	780		
				Cement (Bags)	Sand (cum)	Tiles (Nos)		
	(b)	Brick work in cement sand mortar with tiles size 30.48cm X 15.24cm x 5.08 cm :-						
	(i)	1:4	cum	1.75	0.25	425		
	(ii)	1:6	cum	1.20	0.25	425		
				Cement (Bags)	Sand (cum)	lime (cum)	Bricks (Nos)	
							Pucca	Sundried
27.5	Gilafi masonry with jibi face (1:5 mortar)		cum	0.25	0.044	0.002	240	250
27.6	Brick work laid in mortar with jibi face (1.5 mortar)		cum	0.32	0.054	-	480	-
				Cement (Bags)	Sand (cum)	Stone (cum)		
27.7	Stone Masonry :							
	(i)	Fine ashlar 1:3	cum	0.96	0.10	1.33		
	(ii)	Fine ashlar 1:6	cum	0.48	0.10	1.33		
	(iii)	Rough-tooled ashlar 1:3	cum	1.72	0.18	1.25		
	(iv)	Rough-tooled ashlar 1:6	cum	0.86	0.18	1.25		
	(v)	Block in course 1:4	cum	1.72	0.24	1.20		
	(vi)	Block in course 1:5	cum	1.38	0.24	1.20		

Sr. No.	Description		Unit	Quantities			
				Cement (Bags)	Coarse Sand (cum)	Coarse aggregate s (cum)	Admixture (kg)
1	2		3	4	5	6	7
	(vii)	Block in course 1:6	cum	1.15	0.24	1.20	
	(viii)	Squared rubble masonry. 1:4	cum	2.15	0.30	1.10	
	(ix)	Squared rubble masonry. 1:5	cum	1.72	0.30	1.10	
	(x)	Squared rubble masonry. 1:6	cum	1.44	0.30	1.10	
	(xi)	Random or polygonal rubble 1:6	cum	1.67	0.35	1.10	
	(xii)	Boulder masonry 1:6	cum	1.90	0.40	1.10	
	(xiii)	Random or polygonal rubble 1:7	cum	1.44	0.35	1.10	
	(xiv)	Random or polygonal rubble 1:8	cum	1.24	0.35	1.10	
				<b>Cement (Bags)</b>	<b>Sand (cum)</b>		
27.8	(a)	Cement plaster 6mm thick :-					
	(i)	1:2	sqm	0.10	0.008		
	(ii)	1:3	sqm	0.08	0.008		
	(iii)	1:4	sqm	0.06	0.008		
	(b)	Cement plaster 10mm <i>thick</i> :-					
	(i)	1:2	sqm	0.15	0.01		
	(ii)	1:3	sqm	0.12	0.012		
	(iii)	1:4	sqm	0.09	0.012		
	(c)	Cement plaster 12.50mm thick :-					
	(i)	1:2	sqm	0.20	0.014		
	(ii)	1:3	sqm	0.16	0.016		
	(iii)	1:4	sqm	0.12	0.016		
	(iv)	1:5	sqm	0.094	0.016		
	(v)	1:6	sqm	0.078	0.016		

Sr. No.	Description		Unit	Quantities			
				Cement (Bags)	Coarse Sand (cum)	Coarse aggregate s (cum)	Admixture (kg)
1	2		3	4	5	6	7
	(d)	Cement plaster 20mm thick :-					
	(i)	1:2	sqm	0.30	0.021		
	(ii)	1:3	sqm	0.24	0.024		
	(iii)	1:4	sqm	0.18	0.024		
	(iv)	1:5	sqm	0.14	0.024		
	(v)	1:6	sqm	0.117	0.024		
	(e)	Cement plaster 25mm thick :-					
	(i)	1:2	sqm	0.40	0.028		
	(ii)	1:3	sqm	0.32	0.032		
	(iii)	1:4	sqm	0.24	0.032		
	(iv)	1:5	sqm	0.188	0.032		
	(v)	1:6	sqm	0.156	0.032		
				<b>Cement (Bags)</b>	<b>Sand (cum)</b>	<b>Lime (Kg)</b>	
27.9	(i)	Cement lime plaster 12.5mm thick 1:1:6 mortar.	sqm	0.08	0.016	1.55	
	(ii)	Cement lime plaster 25mm thick 1:1:6 mortar.	sqm	0.16	0.032	3.10	
				<b>Lime (Kg)</b>	<b>Surkhi (cum)</b>		
27.10	(a)	Lime plaster 12.5mm thick 2 lime 3 surkhi.	sqm	4.95	0.0128		
				<b>Cement (Bags)</b>	<b>Sand (cum)</b>	<b>Bitumen (kg)</b>	
	(b)(i)	12.5 mm thick cement plaster damp proof course 1:3 with two coats of bitumen laid hot and sanded.	sqm	0.16	0.016	1.65	

Sr. No.	Description		Unit	Quantities				
				Cement (Bags)	Coarse Sand (cum)	Coarse aggregate s (cum)	Admixture (kg)	
1	2		3	4	5	6	7	
	(ii)	20mm thick cement plaster damp proof course 1:3 with two coats of bitumen laid hot and sanded.	sqm	0.24	0.024	1.65		
				Good Earth (cum)	Old Bhusa (Kg)	Cow Dung		
	(c)(i)	Mud plaster 12.50mm thick with gobri leeping.	sqm	0.35	23	L.S.		
	(ii)	Mud plaster 25mm thick with gobri leeping.	sqm	0.70	45	L.S.		
				Cement (Bags)	Sand (cum)			
27.11	Flush or deep cement pointing on brick walls or brick on edge flooring :-							
	(i)	1:2	sqm	0.044	0.003			
	(ii)	1:3	sqm	0.033	0.003			
27.12	Flush cement pointing on flat brick flooring :-							
	(i)	1:2	sqm	0.035	0.0024			
27.13	Flush cement pointing on underside of roof tiles :-							
	(30.48cm x 15.24cm x 5.08cm) 1:2 mortar		sqm	0.026	0.0018			
				Lime (cum)	Surkhi (cum)			
27.14	Lime pointing 2:3 flush or weathered and struck.		sqm	0.0013 (0.90 kg)	0.0023			
				Cement	Sand			
27.15	Cement pointing 1:2 on stone walls :-							
	(i)	Flush	sqm	0.065	0.0046			
	(ii)	Raised	sqm	0.130	0.009			



Sr. No.	Description		Unit	Quantities			
				Cement (Bags)	Coarse Sand (cum)	Coarse aggregates (cum)	Admixture (kg)
1	2		3	4	5	6	7
	(iii)	On stone slab pavement	sqm	0.022	0.0015		
27.16		Cement rendering on plaster 1mm thick.	sqm	0.025	-		
				Lime (kg)			
27.17		White washing :-					
	(i)	One coat	sqm	0.15			
	(ii)	Two coats	sqm	0.25			
	(iii)	Three coats	sqm	0.35			
27.18		Colour washing :-					
	(i)	One coat	sqm	0.10			
	(ii)	Two coats	sqm	0.20			
				Cement (Bags)	Sand (cum)	Tiles (Nos)	Aggregates (cum)
27.19		Second class mud roofing					
	(i)	When space between battens is filled with concrete blocks.	sqm	0.24	0.027	22	0.0026
	(ii)	When space between battens is filled with wooden pieces.	sqm	0.23	0.026	22	-
27.20		Tile terracing on roof (Tile size 22.86 cm x 11.43 cm x 3.81 cm)	sqm	0.035	0.0049	37	-
				Paints (Litres)			
27.21		Painting :-					
	(i)	Two coats of synthetic enamel paint on new wood or steel work.	sqm	0.145			

Sr. No.	Description		Unit	Quantities			
				Cement (Bags)	Coarse Sand (cum)	Coarse aggregate s (cum)	Admixture (kg)
1	2		3	4	5	6	7
	(ii)	Two coats of ready, mixed paint on new wood or steel work.	sqm	0.122			
	(iii)	Two coats of synthetic enamel paint on old wood or steel work.	sqm	0.118			
	(iv)	Two coats of ready, mixed paint on old wood or steel work.	sqm	0.098			
	(v)	One coat of synthetic enamel paint on old wood or steel work.	sqm	0.065			
	(vi)	One coat of ready mixed paint on old wood or steel work.	sqm	0.054			
	(vii)	Priming coat on wood work.	sqm	0.061			
	(viii)	Priming coat on new steel work.	sqm	0.054			
				Red lead Genuine (Kg)	Turpentine Oil (Litre)	Linseed Oil (Litre)	
	(ix)	Priming coat consisting of red lead mixed with linseed oil and turpentine oil in equal proportion or with genuine red lead on steel work.	sqm	0.085	0.0306	0.0306	
	(x)	Two coats on iron sheets with roofing red, ready mixed paint on new work to give an even shade.	sqm	0.093	-	-	
				Red lead Genuine (Kg)	Turpentine Oil (Litre)	Linseed Oil (Litre)	
	(xi)	One coat on iron sheet with roofing red, ready mixed paint on old work to give an even shade.	sqm	0.059	-	-	

Sr. No.	Description		Unit	Quantities				
				Cement (Bags)	Coarse Sand (cum)	Coarse aggregates (cum)	Admixture (kg)	
1	2		3	4	5	6	7	
			Paints (Litres)					
	(xii)	Two coats on iron sheets with roofing white, grey or green ready mixed paint on new work to give an even shade.	sqm	0.15	-	-		
	(xiii)	One coat on iron sheets with roofing white, grey or green ready mixed paint on new work to give an even shade.	sqm	0.0947	-	-		
	(xiv)	Two coats with aluminium paint on new work to give an even shade.	sqm	0.093	-	-		
	(xv)	One coat with aluminium paint on new work to give an even shade .	sqm	0.0445	-	-		
	(xvi)	Two coats with anti- corrosive bitumastic paint on new work to give an even shade (with black enamel paint).	sqm	0.1086	-	-		
	(xvii)	One coat with anti- corrosive bitumastic paints on old work to give an even shade (with black enamel paint)	sqm	0.0543	-	-		
27.22	Solignum or creosote paint :-							
	(i)	Two coats	sqm	0.069				
	(ii)	One coat	sqm	0.039				
27.23	Distempering (dry or oil- bound)							
	(i)	Two coats on new work.	sqm	0.171				
	(ii)	One coat on old work.	sqm	0.073				
	(iii)	Two coats on old work.	sqm	0.146				

Sr. No.	Description		Unit	Quantities			
				Cement (Bags)	Coarse Sand (cum)	Coarse aggregate s (cum)	Admixture (kg)
1	2		3	4	5	6	7
27.24	cement concrete 1:3:6 for filling in the frame and cement concrete 1:2:4 for lugs complete.						
	(i)	113mm x 60mm with 35 mm wide single rebate	Mtr.	0.066	0.0055	0.011	
	(ii)	151mmx 60mm with 35 mm wide double rebate	Mtr.	0.0684	0.0062	0.0125	
				Cement (bags)	Sand (cum)	Tiles (30.48cm x 15.24cm x 5.08cm.) (Nos)	
27.25	Double layer tile lining (13.36 cm thick)		sqm	0.355	0.049	40	
27.26	Single layer tile lining		sqm	0.273	0.040	20	
				Stone (cum)	G.I. Wire No. 6 S.W.G (4.75 mm)		
27.27	Filling stone in wire-crates (hand packed)		cum	1.00	3.3kg per sqm of wire netting 15cm mesh.		
				Stone (cum)			
28.28	Stone pitching.		cum	1.00 Shingle or stone aggregate s (10mm) ring			
28.29	Dry grouting dry stone pitching.		cum	0.20			
				Cement Mortar (cum)			
28.30	Cement mortar dry brick pitching or						
	(i)	7.5cm thick floor	sqm	0.019			
	(ii)	11.50 cm thick floor	sqm	0.029			

Sr. No.	Description		Unit	Quantities				
				Cement (Bags)	Coarse Sand (cum)	Coarse aggregate s (cum)	Admixture (kg)	
1	2		3	4	5	6	7	
			Cement (bags)	Sand (cum)	Shingle or Aggregate (cum)			
28.31	Cement grouting stone ptiching :-							
	(i)	1:2:4	cum	1.45	0.10	0.20		
	(ii)	1:3:6	cum	0.96	0.10	0.20		
				Cement (bags)	Sand (cum)	15 percent extra sand for wastage (cum)	Total Sand (cum)	
28.32	Cement Sand mortar :-							
	(i)	1:2	cum	13.63	0.96	0.14	1.10	
	(ii)	1:3	cum	9.60	1.00	0.15	1.15	
	(iii)	1:4	cum	6.89	1.00	0.15	1.15	
				Cement (bags)	Sand (cum)	15 percent extra sand for wastage (cum)	Total Sand (cum)	
	(iv)	1:5	cum	5.75	1.00	0.15	1.15	
	(v)	1:6	cum	4.80	1.00	0.15	1.15	
				No. of bricks of size 22.86cm x 11.11cm x 6.83cm (Nos)	Cement in bags of 50 Kg (Bags)	Sand (cum)	Lime (quintal)	Surkhi (cum)
27.33	Flat brick paving laid dry over 25mm thick mud mortar grouted with sand.		10 sqm	364	--	0.075	--	--
27.34	Dry brick on edge paving sand grouted over 50mm thick earth and mud plaster.		10 sqm	575	--	0.15	--	--

Sr. No.	Description		Unit	Quantities				
				Cement (Bags)	Coarse Sand (cum)	Coarse aggregate s (cum)	Admixture (kg)	
1	2		3	4	5	6	7	
27.35	First class dry flat brick flooring templates over rammed and dressed foundations and to correct longitudinal and cross slopes.		10 sqm	364	--	0.075	--	--
27.36	First class dry brick on edge flooring as described in item no. 27.38		10 sqm	575	--	0.15	--	--
27.37	First class flat brick paving or flooring laid over and in lime mortar/in cement sand mortar 1:5 or 1:6 etc.							
	(i)	In & on lime mortar	10 sqm	383	--	--	0.74	0.125
	(ii)	In & on cement sand mortar 1:6	10 sqm	383	0.599	0.144	--	--
	(iii)	In & on cement sand mortar 1:5	10 sqm	383	0.718	0.144	--	--
	(iv)	In & on cement sand mortar 1:4	10 sqm	383	0.860	0.144	--	--
27.38	First class brick on edge paving or flooring laid over and in lime mortar/in cement sand mortar 1:4, 1:5 or 1:6 etc.							
	(i)	In & on lime mortar	10 sqm	617	--	--	0.87	0.149
				No. of bricks of size 22.86cm x 11.11cm x 6.83cm (Nos)	Cement in bags of 50 Kg (Bags)	Sand (cum)	Lime (quintal)	Surkhi (cum)
	(ii)	In & on cement sand mortar 1:6	10 sqm	617	0.714	0.171	--	--
	(iii)	In & on cement sand mortar 1:5	10 sqm	617	0.856	0.171	--	--
	(iv)	In & on cement sand mortar 1:4	10 sqm	617	1.025	0.171	--	--

Sr. No.	Description	Unit	Quantities			
			Cement (Bags)	Coarse Sand (cum)	Coarse aggregates (cum)	Admixture (kg)
1	2	3	4	5	6	7
			No. of bricks of size 22.86cm x 11.11cm x 6.83cm (Nos)	Cement in bags of 50 Kg (Bags)	Sand (cum)	
27.39	Dry brick on edge paving sand grouted over 50mm thick rammed	10 sqm	575	--	0.15	
27.40	Flat brick or tile flooring laid in cement sand mortar 1:4 on 100mm	10 sqm	383	3.01	0.668	
27.41	Brick on edge flooring laid in cement sand mortar 1:4 in 75mm thick	10 sqm	617	2.725	1.570	
27.42	Flat brick or tile flooring laid dry over bed of 6mm thick cement sand	10 sqm	383	0.70	0.13	
27.43	Laying flat road brick soling in work.	10 sqm	383	--	--	
27.44	Laying brick on edge soling in road work.	10 sqm	617	--	--	





## CHAPTER NO. 28

### WATER SUPPLY

**Note :- 1.** The rates for stringingout cast iron,A.C., P.V.C. ,D.I and H.D.P.E. pipes etc. provided under this chapter includes the cost of jointing of pipes only. However the payment of joints due to fixing of specials in the pipe line shall be paid extra.

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.1	Excavation manually in trenches for pipe lines with straight or open cutting in streets and lanes in builtup area where width of street / Lane from wall to wall is less than 3 meter including trimming and dressing sides levelling of beds of trenches to correct grade, cutting joint holes, refilling consolidation,watering , including the cost of dewatering of rain water, diversion for traffic, night signals. Providing & fixing caution boards, watching, fencing, etc. and removal of surplus soil from the site upto 15 meter distance complete in all respects.						
	Note:						
(a)	Earth work upto 1.5 m. Depth						
	i	All classes of soil except rocky	Cum.	169.03		185.93	
	ii	For Ordinary soil having gravel upto 40%	Cum.	221.22		243.34	
	iii	For semi conglomerate soil of having gravel/Boulder upto 50%	Cum.	221.22		243.34	
(b)	Exceeding 1.5 m depth but not exceeding 2.25 m depth						
	i	All classes of soil except rocky	Cum.	175.10		192.61	
	ii	For Ordinary soil having gravel upto 40%	Cum.	227.29		250.02	
	iii	For semi conglomerate soil of having gravel/Boulder upto 50%	Cum.	233.09		256.40	
(c)	Exceeding 2.25 m depth upto 3.00 m depth						
	i	All classes of soil except rocky	Cum.	192.51		211.76	

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	ii	For Ordinary soil having gravel upto 40%	Cum.	262.08		288.29	
	iii	For semi conglomerate soil of having gravel/Boulder upto 50%	Cum.	349.06		383.97	
(d)	Exceeding 3.00 m depth upto 4.50 m depth						
	i	All classes of soil except rocky	Cum.	238.62		262.48	
	ii	For Ordinary soil having gravel upto 40%	Cum.	325.60		358.15	
	iii	For semi conglomerate soil of having gravel/Boulder upto 50%	Cum.	447.36		492.10	
(e)	Exceeding 4.5 m depth upto 6.0 m depth						
	i	All classes of soil except rocky	Cum.	308.20		339.02	
	ii	For Ordinary soil having gravel upto 40%	Cum.	412.57		453.83	
	iii	For semi conglomerate soil of having gravel/Boulder upto 50%	Cum.	586.52		645.17	
(f)	Exceeding 6.0m depth upto 7.5 m depth						
	i	All classes of soil except rocky	Cum.	342.99		377.29	
	ii	For Ordinary soil having gravel upto 40%	Cum.	447.36		492.10	
	iii	For semi conglomerate soil of having gravel/Boulder upto 50%	Cum.	638.71		702.58	

Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
28.2	Excavation by mechanical means(JCB or Hydraulic excavator) in trenches for pipe lines with straight or open cutting in streets or open area including trimming and dressing sides levelling of beds of trenches to correct grade, cutting joint holes, refilling consolidation,watering , including the cost of dewatering of rain water, diversion for traffic, night signals. providing & fixing caution boards, crossing over trenches for access to the houses, watching, fencing, etc. and removal of surplus soil out side/inside the town involving lead upto 15 meter complete in all respect.					
(a)	Earth work upto 1.5 m. Depth for					
	i All classes of soil except rocky	Cum.	99.10		109.01	
	ii For Ordinary soil having gravel upto 40%	Cum.	124.43		136.88	
	iii For semi conglomerate soil of having gravel/Boulder upto 50%	Cum.	135.30		148.83	
(b)	Exceeding 1.5 m depth but not exceeding 2.25 m depth					
	i All classes of soil except rocky	Cum.	106.34		116.98	
	ii For Ordinary soil having gravel upto 40%	Cum.	126.25		138.87	
	iii For semi conglomerate soil of having gravel/Boulder upto 50%	Cum.	135.30		148.83	
(c)	Exceeding 2.25 m depth upto 3.00 m depth					
	i All classes of soil except rocky	Cum.	116.94		128.63	
	ii For Ordinary soil having gravel upto 40%	Cum.	141.37		155.50	
	iii For semi conglomerate soil of having gravel/Boulder upto 50%	Cum.	201.08		221.19	
(d)	Exceeding 3.00 m depth upto 4.5 m depth					
	i All classes of soil except rocky	Cum.	137.83		151.61	

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	ii	For Ordinary soil having gravel upto 40%	Cum.	153.40		168.73	
	iii	For semi conglomerate soil of having gravel/Boulder upto 50%	Cum.	251.12		276.23	
(e)	Exceeding 4.5 m depth upto 6.0 m depth						
	i	All classes of soil except rocky	Cum.	175.11		192.62	
	ii	For Ordinary soil having gravel upto 40%	Cum.	233.20		256.51	
	iii	For semi conglomerate soil of having gravel/Boulder upto 50%	Cum.	327.12		359.83	
(f)	Exceeding 6.0m depth upto 7.5 m depth						
	i	All classes of soil except rocky	Cum.	195.01		214.52	
	ii	For Ordinary soil having gravel upto 40%	Cum.	251.12		276.23	
	iii	For semi conglomerate soil of having gravel/Boulder upto 50%	Cum.	357.88		393.67	
28.3 A	Extra for disposal of surplus soil on item No 28.1 and 28.2 beyond 15 meters			Rate for this item will be given as per chapter of Carriage.			
28.3 B	Extra for lowering the sub soil water level			Rate for this item will be given as per chapter -29.			
28.4	Extra for cutting Through Cement Concrete Roads and their foundations including sorting and stacking the soling at the site of work as ordered by the Engineer-in-charge.			Rate for this item will be given as per Chapter 8 of dismantling.			
28.5	Extra for cutting through metalled Roads and their foundation including sorting screening and stacking the soling stone and road metal at the site of work as ordered by the Engineer-in-charge.			Rate for this item will be given as per Chapter 24 of road work.			

Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
28.6 (a)	Consolidation of road cuts with hammers, hand rollers and laying of flat brick soling/pavement (at formation level) complete so as to allow unobstructed traffic (with dismantled material at site).	SqMtr.	Rate for this item will be given as per Chapter 24 of road work.			
28.6 (b)	Recondition road cuts with hammers, hand rollers and laying of stone metal / bajri in soling / base coarse conforming to WBM specifications (at formation level) complete so as to allow unobstructed traffic (with dismantled material at site).	Cum	Rate for this item will be given as per Chapter 24 of road work.			
28.7 A	Providing, Stringing out, cutting, Jointing and testing of ISI Marked C.I. Pipes Class-LA per IS:1536 and laying the same in trenches to correct alignment and gradients, jointed with rubber tyton joints fitted complete including all cartage.					
	(a) 80mm i/d pipe lines laid complete	Mtr	29.95	1091.29	32.94	1094.28
	(b) 100mm i/d pipe lines laid complete	Mtr	39.12	1356.45	43.03	1360.36
	(c) 150mm i/d pipe lines laid complete	Mtr	53.39	2151.84	58.73	2157.18
	(d) 200mm i/d pipe lines laid complete	Mtr	72.17	3115.77	79.39	3122.99
	(e) 250mm i/d pipe lines laid complete	Mtr	92.21	4123.09	101.43	4132.31
	(f) 300mm i/d pipe lines laid complete	Mtr	148.95	5254.79	163.84	5269.69
	(g) 350mm i/d pipe lines laid complete	Mtr	162.33	7565.61	178.57	7581.84
	(h) 400mm i/d pipe lines laid complete	Mtr	196.55	9208.43	216.20	9228.08
	(i) 450mm i/d pipe lines laid complete	Mtr	238.90	11093.34	262.79	11117.23
	(j) 500mm i/d pipe lines laid complete	Mtr	278.78	12970.84	306.66	12998.72
	(k) 600mm i/d pipe lines laid complete	Mtr	362.25	17211.71	398.48	17247.93

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	<b>Note (i)</b>	In case ISI marked CI pipe class-A as per IS 1536 is used, the through rate will be increased by 10% in item no 28.7-A					
	<b>(ii)</b>	In case ISI marked CI pipe class-B as per IS 1536 is used, the through rate will be increased by 20% in item no 28.7-A					
28.7 B	Providing, Stringing out, cutting, Jointing and testing of ISI Marked D.I. Pipe (S&S) as per IS 8329 and laying the same in trenches to correct alignment and gradients, jointed with rubber tyton joints fitted complete including all cartage, cost of rubber ring.						
<b>A</b>	<b>D.I. Pipe as per IS 8329 DI-K7</b>						
	(a)	80mm i/d pipe lines laid complete	Mtr	27.09	912.82	29.80	915.53
	(b)	100mm i/d pipe lines laid complete	Mtr	30.76	1098.43	34.35	1102.02
	(c)	150mm i/d pipe lines laid complete	Mtr	38.39	1613.56	38.03	1613.20
	(d)	200mm i/d pipe lines laid complete	Mtr	45.98	1987.50	50.72	1992.24
	(e)	250mm i/d pipe lines laid complete	Mtr	55.19	2756.30	60.61	2761.72
	(f)	300mm i/d pipe lines laid complete	Mtr	78.39	3388.96	85.48	3396.05
	(g)	350mm i/d pipe lines laid complete	Mtr	93.58	4326.33	101.85	4334.60
	(h)	400mm i/d pipe lines laid complete	Mtr	108.64	4848.01	118.07	4857.44
	(i)	450mm i/d pipe lines laid complete	Mtr	124.21	6021.55	134.83	6032.17
	(j)	500mm i/d pipe lines laid complete	Mtr	142.55	6860.48	154.54	6872.47
	(k)	600mm i/d pipe lines laid complete	Mtr	177.69	8739.00	192.09	8753.40
	(l)	700mm i/d pipe lines laid complete	Mtr	221.72	11832.28	239.08	11849.64
	(m)	750mm i/d pipe lines laid complete	Mtr	243.08	13754.48	261.96	13773.36
	(n)	800mm i/d pipe lines laid complete	Mtr	271.78	15611.68	292.88	15632.78

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	(o)	900mm i/d pipe lines laid complete	Mtr	321.94	18973.97	346.57	18998.60
	(p)	1000mm i/d pipe lines laid complete	Mtr	376.21	22856.56	404.65	22885.00
<b>B</b>	<b>D.I. Pipe as per IS 8329 DI-K9</b>						
	(a)	80mm i/d pipe lines laid complete	Mtr	28.63	940.80	31.95	944.12
	(b)	100mm i/d pipe lines laid complete	Mtr	32.90	1226.05	36.62	1229.77
	(c)	150mm i/d pipe lines laid complete	Mtr	42.11	1774.14	46.51	1778.54
	(d)	200mm i/d pipe lines laid complete	Mtr	51.32	2407.36	56.39	2412.43
	(e)	250mm i/d pipe lines laid complete	Mtr	62.50	3196.06	68.38	3201.94
	(f)	300mm i/d pipe lines laid complete	Mtr	88.20	3965.65	97.57	3975.02
	(g)	350mm i/d pipe lines laid complete	Mtr	105.87	4736.68	116.98	4747.79
	(h)	400mm i/d pipe lines laid complete	Mtr	123.24	5522.49	136.04	5535.29
	(i)	450mm i/d pipe lines laid complete	Mtr	142.63	6719.00	157.29	6733.66
	(j)	500mm i/d pipe lines laid complete	Mtr	163.01	7693.00	179.64	7709.63
	(k)	600mm i/d pipe lines laid complete	Mtr	204.47	10240.91	224.90	10261.34
	(l)	700mm i/d pipe lines laid complete	Mtr	255.81	13012.63	280.93	13037.75
	(m)	750mm i/d pipe lines laid complete	Mtr	282.73	15200.09	310.34	15227.70
	(n)	800mm i/d pipe lines laid complete	Mtr	313.88	16565.90	344.57	16596.59
	(o)	900mm i/d pipe lines laid complete	Mtr	372.90	20470.27	409.07	20506.44
	(p)	1000mm i/d pipe lines laid complete	Mtr	436.61	24541.11	478.71	24583.21
28.8	Extra for fixing of double flanged pipes in vertical position for over head reservoir & stand pipes, scaffolding, derricks, Jim poles, tools and plants, ropes, guys, etc. Complete as desired by Engineer-in-Charge.						
	(a)	80mm i/d pipe lines laid complete	Mtr	78.82		86.70	
	(b)	100mm i/d pipe lines laid complete	Mtr	103.28		113.61	
	(c)	125mm i/d pipe lines laid complete	Mtr	141.95		156.14	
	(d)	150mm i/d pipe lines laid complete	Mtr	178.01		195.82	

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	(e)	200mm i/d pipe lines laid complete	Mtr	256.93		282.62	
	(f)	250mm i/d pipe lines laid complete	Mtr	346.99		381.69	
	(g)	300mm i/d pipe lines laid complete	Mtr	448.11		492.92	
	(h)	350mm i/d pipe lines laid complete	Mtr	507.50		558.25	
	(i)	400mm i/d pipe lines laid complete	Mtr	562.83		619.11	
	(j)	450mm i/d pipe lines laid complete	Mtr	620.31		682.34	
	(k)	500mm i/d pipe lines laid complete	Mtr	676.69		744.36	
	(l)	600mm i/d pipe lines laid complete	Mtr	733.45		806.80	
28.9	Providing, Stringing out, cutting Jointing & testing A.C. Pipes ISI marked as per IS 1592-2003 class-15 with suitable A C coupling along the trenches and laying the same into Trenches to correct alignment and gradients, including all carriage complete.						
	(a)	80mm i/d pipe	Mtr	31.85	120.64	35.04	123.83
	(b)	100mm i/d pipe	Mtr	45.51	165.61	50.06	170.16
	(c)	150mm i/d pipe	Mtr	58.44	309.11	64.29	314.95
	(d)	200mm i/d pipe	Mtr	94.33	543.43	103.76	552.86
	(e)	250mm i/d pipe	Mtr	134.96	794.11	148.46	807.61
28.10	Supplying and fixing of ISI Marked CI D-joint (complete with nut, bolts & rubber ring) as per IS:8794 for repair of pipe line including cutting , jointing and testing etc. but excluding cost of excavation complete.						
a	80 mm		Each	177.64	446.52	195.41	464.28
b	100 mm		Each	213.18	558.22	234.50	579.54
c	150 mm		Each	236.86	853.01	260.54	876.69
d	200 mm		Each	260.56	1077.24	286.61	1103.29
e	250 mm		Each	284.23	1352.20	312.66	1380.62



Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.11	Providing, laying, jointing, fixing and testing ISI Marked uPVC Pipe with G.I. specials as per ISI-4985, including cost of G.I. specials such as tees, bends, sockets, elbows etc. testing inside building complete.						
A	<b>uPVC Pipe 10 Kgf/cm2</b>						
	a	20mm i/d	Mtr.	64.44	87.88	70.89	94.33
	b	25mm i/d	Mtr.	80.38	116.74	88.42	124.78
	c	32mm i/d	Mtr.	94.83	154.61	104.31	164.10
	d	40mm i/d	Mtr.	101.89	191.62	112.08	201.80
	e	50mm i/d	Mtr.	109.98	249.59	120.98	260.59
B	<b>uPVC Pipe 6 Kgf/cm2</b>						
	a	40mm i/d	Mtr.	101.89	156.72	112.08	166.90
	b	50mm i/d	Mtr.	109.98	194.52	120.98	205.52
28.12	Providing and laying, jointing, fixing and testing ISI Marked uPVC Pipe Lines as per ISI 4985-2000, including specials such as tees, bends, sockets, elbow etc., cutting, testing (including cost of specials) in the ground complete in all respects.						
A	<b>uPVC Pipe 10 Kgf/cm2</b>						
	a	20mm i/d	Mtr.	21.56	39.96	23.72	42.12
	b	25mm i/d	Mtr.	28.13	56.68	30.95	59.49
	c	32mm i/d	Mtr.	39.17	86.12	43.08	90.04
	d	40mm i/d	Mtr.	44.83	115.33	49.32	119.81
	e	50mm i/d	Mtr.	46.56	156.22	51.21	160.88
B	<b>uPVC Pipe 6 Kgf/cm2</b>						
	a	40mm i/d	Mtr.	40.89	83.97	44.98	88.05
	b	50mm i/d	Mtr.	42.62	109.02	46.88	113.28

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.13	Providing, Laying , fixing & jointing of P.V.C. Pipes as per ISI-4985 (ISI marked with the prior approval of Engineer-in-Charge) along the Trenches and laying the same in Trenches to correct alignment and gradients, cutting, jointing and testing complete as per specifications.						
	i	63mm o/d pipe of 10 Kgf. / sqcm	Mtr	10.33	147.39	11.36	148.43
	ii	75mm o/d pipe of 10 Kgf. / sqcm	Mtr	12.20	206.46	13.42	207.68
	iii	90mm o/d pipe of 10 Kgf. / sqcm	Mtr	14.60	290.01	16.07	291.47
	iv	110mm o/d pipe of 10 Kgf. / sqcm	Mtr	18.21	429.42	20.03	431.24
	v	160mm o/d pipe of 10 Kgf. / sqcm	Mtr	24.24	892.91	26.66	895.33
	vi	200mm o/d pipe of 10 Kgf. / sqcm	Mtr	35.69	1393.57	39.26	1397.14
	vii	250mm o/d pipe of 10 Kgf. / sqcm	Mtr	45.51	2194.99	50.06	2199.55
	viii	110mm o/d pipe of 8 Kgf. / sqcm	Mtr	18.21	379.77	20.03	381.59
	ix	160mm o/d pipe of 8 Kgf. / sqcm	Mtr	24.24	797.66	26.66	800.09
	x	200mm o/d pipe of 8 Kgf. / sqcm	Mtr	35.69	1237.97	39.26	1241.54
	xi	250mm o/d pipe of 8 Kgf. / sqcm	Mtr	45.51	2010.57	50.06	2015.12
	xii	63mm o/d pipe of 6 Kgf. / sqcm	Mtr	10.33	97.16	11.36	98.19
	xiii	75mm o/d pipe of 6 Kgf. / sqcm	Mtr	12.20	133.41	13.42	134.63
	xiv	90mm o/d pipe of 6 Kgf. / sqcm	Mtr	14.60	186.37	16.07	187.83
	xv	110mm o/d pipe of 6 Kgf. / sqcm	Mtr	18.21	266.00	20.03	267.82
	xvi	160mm o/d pipe of 6 Kgf. / sqcm	Mtr	24.24	552.99	26.66	555.41
	xvii	200mm o/d pipe of 6 Kgf. / sqcm	Mtr	35.69	897.39	39.26	900.96
	xviii	250mm o/d pipe of 6 Kgf. / sqcm	Mtr	45.51	1386.19	50.06	1390.74
	xix	63mm o/d PVC pipe of 4 Kgf. / sqcm	Mtr	10.33	73.18	11.36	74.21
	xx	75mm o/d PVC pipe of 4 Kgf. / sqcm	Mtr	12.20	100.81	13.42	102.03
	xxi	90mm o/d pipe of 4 Kgf. / sqcm	Mtr	14.60	137.74	16.07	139.20
	xxii	110mm o/d PVC pipe of 4 Kgf. / sqcm	Mtr	18.21	197.83	20.03	199.65

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	xxiii	160mm o/d PVC pipe of 4 Kgf. / sqcm	Mtr	24.24	408.57	26.66	411.00
	xxiv	200mm o/d PVC pipe of 4 Kgf. / sqcm	Mtr	35.69	633.35	39.26	636.92
	xxv	250mm o/d PVC pipe of 4 Kgf. / sqcm	Mtr	45.51	968.67	50.06	973.22
	xxvi	90mm o/d PVC pipe of 2.5 Kgf. / sqcm	Mtr	14.60	93.83	16.07	95.29
	xxvii	110mm o/d PVC pipe of 2.5 Kgf. / sqcm	Mtr	18.41	137.58	20.25	139.42
	xxviii	160mm o/d PVC pipe of 2.5 Kgf. / sqcm	Mtr	24.24	271.15	26.66	273.57
	xxix	200mm o/d pipe of 2.5 Kgf. / sqcm	Mtr	35.69	421.05	39.26	424.62
	xxx	250mm o/d PVC pipe of 2.5 Kgf. / sqcm	Mtr	45.51	643.89	50.06	648.44
28.14	Providing, laying ,fixing & jointing of ISI Marked H.D.P.E. Pipes as per ISI - 4984-1995 the Trenches and laying the same in Trenches to correct alignment and gradients, cutting, jointing and testing complete as per specifications.						
	i	90mm o/d H.D.P.E pipe of 6 Kg. PE-63	Mtr	12.24	359.55	13.47	360.78
	ii	110mm o/d H.D.P.E pipe of 6 Kg. PE-63	Mtr	13.92	521.68	15.31	523.07
	iii	90mm o/d H.D.P.E pipe of 4 Kg. PE-63	Mtr	12.24	239.04	13.47	240.27
	iv	110mm o/d H.D.P.E pipe of 4 Kg. PE-63	Mtr	13.92	356.51	15.31	357.90
28.15	Providing, Laying, fixing & jointing of ISI Marked H.D.P.E. Pipes as per ISI - 4984-1995 casting along the Trenches and laying the same in Trenches to correct alignment and gradients, cutting, jointing and testing complete as per specifications.						
A	H.D.P.E pipe of 10 Kg. PE-80						

Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
(a)	25mm o/d	Mtr	5.69	38.70	6.26	39.27
(b)	32 mm o/d	Mtr	6.76	59.24	7.44	59.92
( c )	40 mm o/d	Mtr	7.84	92.48	8.62	93.26
(d)	50 mm o/d	Mtr	8.92	140.09	9.81	140.98
(e)	63 mm o/d	Mtr	9.99	217.33	10.99	218.33
(f)	75 mm o/d	Mtr	11.17	305.68	12.28	306.79
(g)	90 mm o/d	Mtr	12.24	432.00	13.47	433.23
(h)	110 mm o/d	Mtr	13.31	635.32	14.64	636.65
(i)	125 mm o/d	Mtr	14.37	809.88	15.81	811.31
(j)	140 mm o/d	Mtr	15.46	1014.08	17.00	1015.63
(k)	160 mm o/d	Mtr	16.53	1328.28	18.18	1329.93
(l)	180 mm o/d	Mtr	17.61	1667.87	19.37	1669.63
(m)	200 mm o/d	Mtr	18.68	2049.78	20.55	2051.65
(n)	225 mm o/d	Mtr	19.76	2600.94	21.73	2602.92
(o)	250 mm o/d	Mtr	20.82	3219.80	22.90	3221.88
(p)	280 mm o/d	Mtr	21.90	4046.00	24.09	4048.19
(q)	315 mm o/d	Mtr	22.97	5143.03	25.27	5145.32
( r )	355 mm o/d	Mtr	24.05	6498.15	26.45	6500.56
(s)	400 mm o/d	Mtr	25.12	8251.05	27.63	8253.56
(t)	450 mm o/d	Mtr	26.20	10435.55	28.82	10438.17
(u)	500 mm o/d	Mtr	27.26	12933.17	29.99	12935.90
(v)	560 mm o/d	Mtr	28.34	16192.46	31.17	16195.30
(w)	630 mm o/d	Mtr	29.42	20551.93	32.36	20554.87
B	H.D.P.E pipe of 8 Kg. PE-80					
(a)	32 mm o/d	Mtr	6.76	51.62	7.44	52.30
(b)	40 mm o/d	Mtr	7.84	77.24	8.62	78.03
( c )	50 mm o/d	Mtr	8.92	115.55	9.81	116.44

Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
(d)	63 mm o/d	Mtr	9.99	179.25	10.99	180.25
(e)	75 mm o/d	Mtr	11.17	251.51	12.28	252.63
(f)	90 mm o/d	Mtr	12.24	357.54	13.47	358.76
(g)	110 mm o/d	Mtr	13.31	519.38	14.64	520.72
(h)	125 mm o/d	Mtr	14.37	674.48	15.81	675.92
(i)	140 mm o/d	Mtr	15.46	836.36	17.00	837.91
(j)	160 mm o/d	Mtr	16.53	1091.32	18.18	1092.97
(k)	180 mm o/d	Mtr	17.61	1371.67	19.37	1373.43
(l)	200 mm o/d	Mtr	18.68	1690.10	20.55	1691.97
(m)	225 mm o/d	Mtr	19.76	2135.47	21.73	2137.45
(n)	250 mm o/d	Mtr	20.82	2644.31	22.90	2646.40
(o)	280 mm o/d	Mtr	21.90	3305.50	24.09	3307.69
(p)	315 mm o/d	Mtr	22.97	4169.78	25.27	4172.08
(q)	355 mm o/d	Mtr	21.47	5287.97	23.62	5290.11
( r)	400 mm o/d	Mtr	25.12	6753.12	27.63	6755.63
(s)	450 mm o/d	Mtr	26.20	8489.10	28.82	8491.72
(t)	500 mm o/d	Mtr	27.26	10605.87	29.99	10608.60
(u)	560 mm o/d	Mtr	28.34	13272.76	31.17	13275.59
(v)	630 mm o/d	Mtr	29.42	16785.94	32.36	16788.88
C	H.D.P.E pipe of 6 Kg. PE-80					
(a)	40 mm o/d	Mtr	7.84	64.55	8.62	65.33
(b)	50 mm o/d	Mtr	8.92	96.94	9.81	97.83
( c)	63 mm o/d	Mtr	9.99	146.25	10.99	147.25
(d)	75 mm o/d	Mtr	11.17	208.34	12.28	209.46
(e)	90 mm o/d	Mtr	12.24	288.98	13.47	290.20
(f)	110 mm o/d	Mtr	13.31	427.99	14.64	429.32
(g)	125 mm o/d	Mtr	14.37	547.52	15.81	548.96

Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
(h)	140 mm o/d	Mtr	15.46	688.25	17.00	689.80
(i)	160 mm o/d	Mtr	16.53	896.67	18.18	898.33
(j)	180 mm o/d	Mtr	17.61	1130.47	19.37	1132.23
(k)	200 mm o/d	Mtr	18.68	1389.66	20.55	1391.53
(l)	225 mm o/d	Mtr	19.76	1746.19	21.73	1748.17
(m)	250 mm o/d	Mtr	20.82	2145.01	22.90	2147.09
(n)	280 mm o/d	Mtr	21.90	2704.63	24.09	2706.82
(o)	315 mm o/d	Mtr	22.97	3408.13	25.27	3410.43
(p)	355 mm o/d	Mtr	24.05	4314.73	26.45	4317.14
(q)	400 mm o/d	Mtr	25.12	5483.68	27.63	5486.20
( r)	450 mm o/d	Mtr	26.20	6923.45	28.82	6926.07
(s)	500 mm o/d	Mtr	27.26	8574.78	29.99	8577.51
(t)	560 mm o/d	Mtr	28.34	10776.20	31.17	10779.04
(u)	630 mm o/d	Mtr	29.42	13654.68	32.36	13657.62
D	H.D.P.E pipe of 4 Kg. PE-80					
(a)	50 mm o/d	Mtr	8.92	69.00	9.81	69.89
(b)	63 mm o/d	Mtr	9.99	104.78	10.99	105.78
( c)	75 mm o/d	Mtr	11.17	141.50	12.28	142.62
(d)	90 mm o/d	Mtr	12.24	204.36	13.47	205.58
(e)	110 mm o/d	Mtr	13.31	292.58	14.64	293.91
(f)	125 mm o/d	Mtr	14.37	371.50	15.81	372.94
(g)	140 mm o/d	Mtr	15.46	459.76	17.00	461.30
(h)	160 mm o/d	Mtr	16.53	600.47	18.18	602.13
(i)	180 mm o/d	Mtr	18.35	763.08	20.18	764.91
(j)	200 mm o/d	Mtr	18.68	928.45	20.55	930.32
(k)	225 mm o/d	Mtr	19.76	1183.40	21.73	1185.38
(l)	250 mm o/d	Mtr	20.82	1451.05	22.90	1453.13

Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
(m)	280 mm o/d	Mtr	22.48	1816.62	24.73	1818.86
(n)	315 mm o/d	Mtr	22.97	2307.95	25.27	2310.24
(o)	355 mm o/d	Mtr	24.05	2892.97	26.45	2895.37
(p)	400 mm o/d	Mtr	25.12	3664.16	27.63	3666.67
(q)	450 mm o/d	Mtr	26.20	4646.94	28.82	4649.56
( r)	500 mm o/d	Mtr	27.26	5718.55	29.99	5721.28
(s)	560 mm o/d	Mtr	28.34	7179.48	31.17	7182.31
(t)	630 mm o/d	Mtr	29.42	9084.71	32.36	9087.65
28.16	Providing,Laying , fixing & jointing of ISI Marked H.D.P.E. Pipes as per ISI - 4984 along the Trenches and laying the same in Trenches to correct alignment and gradients, cutting, jointing and testing complete as per specifications.					
A	H.D.P.E pipe of 10 Kg. PE-100					
(a)	32 mm o/d	Mtr	6.76	53.31	7.44	53.98
(b)	40 mm o/d	Mtr	7.84	79.78	8.62	80.56
( c)	50 mm o/d	Mtr	8.92	119.77	9.81	120.66
(d)	63 mm o/d	Mtr	9.99	187.71	10.99	188.71
(e)	75 mm o/d	Mtr	11.17	260.83	12.28	261.94
(f)	90 mm o/d	Mtr	12.24	371.92	13.47	373.14
(g)	110 mm o/d	Mtr	13.31	542.24	14.64	543.57
(h)	125 mm o/d	Mtr	14.37	691.40	15.81	692.84
(i)	140 mm o/d	Mtr	15.46	870.21	17.00	871.76
(j)	160 mm o/d	Mtr	16.53	1133.63	18.18	1135.29
(k)	180 mm o/d	Mtr	17.61	1430.91	19.37	1432.67
(l)	200 mm o/d	Mtr	18.68	1762.04	20.55	1763.91
(m)	225 mm o/d	Mtr	19.76	2220.11	21.73	2222.09
(n)	250 mm o/d	Mtr	20.82	2737.40	22.90	2739.49

Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
(o)	280 mm o/d	Mtr	21.90	3432.44	24.09	3434.63
(p)	315 mm o/d	Mtr	23.72	4348.25	26.09	4350.62
(q)	355 mm o/d	Mtr	24.05	5508.00	26.45	5510.40
( r)	400 mm o/d	Mtr	25.12	7049.31	27.63	7051.83
(s)	450 mm o/d	Mtr	26.20	8912.23	28.82	8914.85
(t)	500 mm o/d	Mtr	27.26	11029.01	29.99	11031.74
(u)	560 mm o/d	Mtr	28.34	13738.21	31.17	13741.05
(v)	630 mm o/d	Mtr	29.42	17378.36	32.36	17381.30
B	H.D.P.E pipe of 8 Kg. PE-100					
(a)	40 mm o/d	Mtr	7.84	67.08	8.62	67.87
(b)	50 mm o/d	Mtr	8.92	100.32	9.81	101.21
( c)	63 mm o/d	Mtr	9.99	152.16	10.99	153.16
(d)	75 mm o/d	Mtr	11.17	215.97	12.28	217.08
(e)	90 mm o/d	Mtr	12.24	301.67	13.47	302.90
(f)	110 mm o/d	Mtr	13.31	444.92	14.64	446.25
(g)	125 mm o/d	Mtr	14.37	564.46	15.81	565.90
(h)	140 mm o/d	Mtr	15.46	716.18	17.00	717.73
(i)	160 mm o/d	Mtr	16.53	930.52	18.18	932.18
(j)	180 mm o/d	Mtr	17.61	1168.55	19.37	1170.31
(k)	200 mm o/d	Mtr	18.68	1440.44	20.55	1442.31
(l)	225 mm o/d	Mtr	19.76	1822.35	21.73	1824.33
(m)	250 mm o/d	Mtr	20.82	2238.10	22.90	2240.18
(n)	280 mm o/d	Mtr	21.90	2793.49	24.09	2795.68
(o)	315 mm o/d	Mtr	22.97	3535.07	25.27	3537.37
(p)	355 mm o/d	Mtr	24.05	4475.53	26.45	4477.93
(q)	400 mm o/d	Mtr	25.12	5737.57	27.63	5740.09
( r)	450 mm o/d	Mtr	26.20	7261.97	28.82	7264.59



Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
(s)	500 mm o/d	Mtr	27.26	8930.22	29.99	8932.94
(t)	560 mm o/d	Mtr	28.34	11199.35	31.17	11202.18
(u)	630 mm o/d	Mtr	29.42	14137.05	32.36	14139.99
<b>C</b>	<b>H.D.P.E pipe of 6 Kg. PE-100</b>					
(a)	50 mm o/d	Mtr	8.92	83.39	9.81	84.28
(b)	63 mm o/d	Mtr	9.99	125.93	10.99	126.93
(c)	75 mm o/d	Mtr	11.17	177.04	12.28	178.16
(d)	90 mm o/d	Mtr	12.24	249.20	13.47	250.42
(e)	110 mm o/d	Mtr	13.31	370.44	14.64	371.77
(f)	125 mm o/d	Mtr	14.37	471.36	15.81	472.80
(g)	140 mm o/d	Mtr	15.46	586.70	17.00	588.25
(h)	160 mm o/d	Mtr	16.53	769.72	18.18	771.38
(i)	180 mm o/d	Mtr	17.61	961.22	19.37	962.98
(j)	200 mm o/d	Mtr	18.68	1186.56	20.55	1188.43
(k)	225 mm o/d	Mtr	19.76	1500.76	21.73	1502.74
(l)	250 mm o/d	Mtr	20.82	1848.81	22.90	1850.89
(m)	280 mm o/d	Mtr	21.90	2306.87	24.09	2309.06
(n)	315 mm o/d	Mtr	22.97	2908.82	25.27	2911.11
(o)	355 mm o/d	Mtr	24.05	3688.48	26.45	3690.88
(p)	400 mm o/d	Mtr	25.12	4713.56	27.63	4716.07
(q)	450 mm o/d	Mtr	26.20	5975.60	28.82	5978.22
(r)	500 mm o/d	Mtr	27.26	7373.05	29.99	7375.78
(s)	560 mm o/d	Mtr	28.34	9168.26	31.17	9171.09
(t)	630 mm o/d	Mtr	29.42	11581.27	32.36	11584.21

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.17	Providing, Stringing out, cutting, Jointing and testing of THIN WALLED FLEXIBLE QUICK COUPLING PIPES as per IS 11722/86 (ISI marked with the prior approval of Engineer-in-Charge) laying the same in trenches to correct alignment and gradients, jointed with coupler including cost of specials and all cartage complete.						
	<b>Quick Coupling Jointing pipe IS 11722/86</b>						
	a	50.80mm o/d pipe lines laid complete	Mtr	9.82	378.71	10.80	379.69
	b	63.50mm o/d pipe lines laid complete	Mtr	10.00	495.38	11.00	496.38
	c	76.20mm o/d pipe lines laid complete	Mtr	10.20	547.36	11.22	548.38
	d	101.60mm o/d pipe lines laid complete	Mtr	11.65	726.13	12.81	727.29
	e	127.00mm o/d pipe lines laid complete	Mtr	11.16	884.83	12.27	885.95
	f	152.40mm o/d pipe lines laid complete	Mtr	14.27	1062.68	15.70	1064.11
	g	203.40mm o/d pipe lines laid complete	Mtr	18.96	1986.35	20.86	1988.25
	h	254.00mm o/d pipe lines laid complete	Mtr	24.05	3156.34	26.45	3158.75
	i	304.80mm o/d pipe lines laid complete	Mtr	30.44	4229.28	33.49	4232.32
28.18	<b>Supplying, fixing and jointing PVC / H.D.P.E pipe's specials complete as desired by Engineer-in-Charge.</b>		Mtr				
	a	For pipe lines laid inside habitation	Mtr	<b>5% Extra will be taken for the respective i/d of pipe.</b>		<b>5% Extra will be taken for the respective i/d of pipe.</b>	

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	b	For pipe lines laid outside habitation & in the open area/ field	Mtr	2% Extra will be taken for the respective i/d of pipe.		2% Extra will be taken for the respective i/d of pipe.	
28.19	<b>CONCEALED IN WALL: Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes as per IS 15778 (ISI marked with the prior approval of Engineer-in-Charge), having thermal stability for hot &amp; cold water supply, including all CPVC plain &amp; brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing including jointing of pipes &amp; fittings, with one step CPVC solvent cement and testing of pipes complete as per direction of Engineer-in-Charge.</b>						
	a	CPVC SDR 11 Pipe & fitting 16mm o/d	Mtr	94.95	178.72	104.45	188.21
	b	SDR 11 CPVC pipes & fittings 20mm o/d	Mtr	94.95	221.35	104.45	230.84
	c	CPVC SDR 11 Pipe & fitting 25mm o/d	Mtr	94.95	285.75	104.45	295.24
	d	CPVC SDR 11 Pipe & fitting 32mm o/d	Mtr	94.95	382.37	104.45	391.86
	e	CPVC SDR 11 Pipe & fitting 40mm o/d	Mtr	94.95	505.27	104.45	514.77
	f	CPVC SDR 11 Pipe & fitting 50mm o/d	Mtr	94.95	750.79	104.45	760.28

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.20	<b>INTERNAL - EXPOSED ON WALL :</b> Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes as per IS 15778 (ISI marked with the prior approval of Engineer-in-Charge), having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing including jointing of pipes & fittings with one step PVC solvent cement and testing of pipes complete as per direction of Engineer-in-Charge.						
	(a)	SDR 11 CPVC pipes & fittings 16mm o/d	Mtr	94.95	152.79	104.45	162.28
	(b)	SDR 11 CPVC pipes & fittings 20mm o/d	Mtr	94.95	182.22	104.45	191.71
	(c)	SDR 11 CPVC pipes & fittings 25mm o/d	Mtr	94.95	226.70	104.45	236.19
	(d)	SDR 11 CPVC pipes & fittings 32mm o/d	Mtr	85.96	307.67	94.56	316.26
	(e)	SDR 11 CPVC pipes & fittings 40mm o/d	Mtr	94.95	378.27	104.45	387.77
	(f)	SDR 11 CPVC pipes & fittings 50mm o/d	Mtr	94.95	547.79	104.45	557.28
	(g)	CPVC Pipe Schd 40 & Schd 80 fittings 65mm i/d	Mtr	121.30	954.95	133.43	967.08
	(h)	CPVC Pipe Schd 40 & Schd 80 fittings 80mm i/d	Mtr	121.30	1204.34	133.43	1216.47
	(i)	CPVC pipes Schd 40 & Schd 80 fittings 100mm i/d	Mtr	121.30	1653.64	133.43	1665.77
28.21	Providing, Stringing out, cutting, Jointing and testing of C.I. Double Flanged pipes with casted flanged as per IS:7181, Class-B (ISI marked with the prior approval of Engineer-in-Charge) and laying the same in trenches to correct alignment and gradients, jointed with nut bolts and rubber insertion fitted complete including all cartage.						
	a	80mm i/d pipe lines laid complete	Mtr	49.27	1523.66	54.20	1528.59

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	b	100mm i/d pipe lines laid complete	Mtr	64.55	1920.61	71.00	1927.06
	c	125mm i/d pipe lines laid complete	Mtr	71.03	2497.66	78.13	2504.77
	d	150mm i/d pipe lines laid complete	Mtr	86.92	3131.50	95.62	3140.19
	e	200mm i/d pipe lines laid complete	Mtr	115.63	4492.79	127.19	4504.35
	f	250mm i/d pipe lines laid complete	Mtr	146.83	6069.62	161.52	6084.30
	g	300mm i/d pipe lines laid complete	Mtr	214.02	7849.64	235.42	7871.04
	h	350mm i/d pipe lines laid complete	Mtr	253.02	10314.98	278.32	10340.28
	i	400mm i/d pipe lines laid complete	Mtr	306.60	12579.36	337.26	12610.02
	j	450mm i/d pipe lines laid complete	Mtr	372.88	15470.32	410.17	15507.60
	k	500mm i/d pipe lines laid complete	Mtr	434.24	18068.15	477.66	18111.58
	l	600mm i/d pipe lines laid complete	Mtr	570.27	26044.87	627.30	26101.90
28.22	Providing, Stringing out, cutting, Jointing and testing of C.I. Double Flanged pipes with screwed flanged as per IS:1536, class-B (ISI marked with the prior approval of Engineer-in-Charge) and laying the same in trenches to correct alignment and gradients,including cost of nut bolts and rubber insertion complete including all cartage.						
	a	80mm i/d pipe lines laid complete	Mtr	44.16	1262.98	48.58	1267.39
	b	100mm i/d pipe lines laid complete	Mtr	58.07	1409.04	63.88	1414.85
	c	125mm i/d pipe lines laid complete	Mtr	62.65	1860.64	68.92	1866.91
	d	150mm i/d pipe lines laid complete	Mtr	76.13	2242.55	83.74	2250.17
	e	200mm i/d pipe lines laid complete	Mtr	100.60	3271.36	110.66	3281.42
	f	250mm i/d pipe lines laid complete	Mtr	126.32	4399.39	138.96	4412.02
	g	300mm i/d pipe lines laid complete	Mtr	179.77	5690.87	197.75	5708.85
	h	350mm i/d pipe lines laid complete	Mtr	209.71	8181.04	230.68	8202.02
	i	400mm i/d pipe lines laid complete	Mtr	253.40	9954.67	278.74	9980.01
	j	450mm i/d pipe lines laid complete	Mtr	309.01	12005.27	339.91	12036.17
	k	500mm i/d pipe lines laid complete	Mtr	360.27	14052.79	396.30	14088.82

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	I	600mm i/d pipe lines laid complete	Mtr	466.48	18713.58	513.13	18760.22
28.23	Providing, Stringing out, cutting, Jointing and testing of ISI Marked D.I. Double Flanged pipes with screwed flanged as per IS:8329-2000, Class-K9 and laying the same in trenches to correct alignment and gradients,jointed with nut bolts and rubber insertion joints fitted complete including all cartage.						
	a	80mm i/d pipe lines laid complete	Mtr	42.25	1675.32	46.47	1679.54
	b	100mm i/d pipe lines laid complete	Mtr	57.68	1848.34	63.45	1854.11
	c	125mm i/d pipe lines laid complete	Mtr	61.52	2334.33	67.67	2340.48
	d	150mm i/d pipe lines laid complete	Mtr	74.02	2723.73	81.42	2731.13
	e	200mm i/d pipe lines laid complete	Mtr	94.85	3582.95	104.34	3592.44
	f	250mm i/d pipe lines laid complete	Mtr	117.60	4872.75	129.36	4884.51
	g	300mm i/d pipe lines laid complete	Mtr	152.85	6235.64	168.13	6250.92
	h	350mm i/d pipe lines laid complete	Mtr	186.83	7846.88	205.51	7865.56
	i	400mm i/d pipe lines laid complete	Mtr	216.23	9441.48	237.85	9463.10
	j	450mm i/d pipe lines laid complete	Mtr	270.13	11193.62	297.15	11220.64
	k	500mm i/d pipe lines laid complete	Mtr	313.42	15303.95	344.76	15335.30
	l	600mm i/d pipe lines laid complete	Mtr	403.48	20165.89	443.83	20206.23
28.24	Supplying and laying C.I. specials as per IS:1538 complete as desired by Engineer-in-Charge conforming to ISI specifications. Note: If C.I specials of ISI Marked is used instead of specials conforming to ISI Specifications , than 10% extra on rates of this item will be paid.						
	a	C.I. specials upto 300mm i/d	Kg.	3.71	77.99	4.08	78.36
	b	C.I. specials above 300mm i/d	Kg.	4.64	99.18	5.10	99.64

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.25	Supplying and laying D.I. specials/fittings as per IS:9523-2000 (ISI marked with the prior approval of Engineer-in-Charge), class K-12 suitable for tyton joint with external bitumen coating and inside cement mortar lining, scaffolding, tools and plants, ropes, guys, etc. Complete in all respects.						
	a	D.I. specials upto 300mm i/d	Kg.	3.71	115.81	4.08	116.18
	b	D.I. specials above 300mm i/d	Kg.	4.64	174.80	5.10	175.26
28.26	<b>EXTERNAL IN THE GROUND : Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes as per IS 15778 (ISI marked with the prior approval of Engineer-in-Charge), having thermal stability for hot &amp; cold water supply including all CPVC plain &amp; brass threaded fittings. This includes jointing of pipes &amp; fittings with one step CPVC solvent cement, &amp; testing of joints excluding cost of excavation complete as per direction of Engineer-in-Charge.</b>						
	a	CPVC SDR 11 pipes & fittings 16mm o/d	Mtr	75.20	135.62	82.72	143.14
	b	CPVC SDR 11 Pipe & fittings 20mm o/d	Mtr	75.20	166.38	82.72	173.90
	c	CPVC SDR 11 pipe & Fittings 25mm o/d	Mtr	75.20	212.84	82.72	220.35
	d	CPVC SDR 11 pipe & fittings 32mm o/d	Mtr	75.92	283.28	83.52	290.87
	e	CPVC SDR 11 pipes & fittings 0/d 40mm	Mtr	75.20	371.21	82.72	378.73
	f	CPVC SDR 11 pipe & fittings 50mm o/d	Mtr	75.20	548.33	82.72	555.85
	g	CPVC SChd 40pipe & Schd 80 fittings ( 62.5 mm i/d)	Mtr	75.20	946.22	82.72	953.74
	h	CPVC SChd 40pipe & Schd 80 fittings ( 75 mm i/d)	Mtr	87.44	1219.03	96.18	1227.77
	I	CPVC SChd 40pipe & Schd 80 fittings ( 100 mm i/d)	Mtr	87.44	1688.48	96.18	1697.23

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.27	Providing & fixing C.I/D.I Flanged end, stem of SS (AIS 1410) and Bronze(gunmetal) working parts Sluice Valves ISI marked 14846-2000, including jointing , testing & cost of Nut ,Bolt & insertion sheet, all carriage complete (with the approval of Engineer in-charge).						
<b>A</b>	<b>Class PN-1 as per ISI</b>						
	(a)	80mm i/d Sluice Valves flanged	Each	372.18	4205.64	409.39	4242.85
	(b)	100mm i/d Sluice Valves flanged	Each	434.29	5711.07	477.72	5754.50
	(c)	150mm i/d Sluice Valves flanged	Each	562.63	8461.49	618.90	8517.75
	(d)	200mm i/d Sluice Valves flanged	Each	696.74	14467.73	766.41	14537.41
	(e)	250mm i/d Sluice Valves flanged	Each	874.14	20973.48	961.55	21060.89
	(f)	300mm i/d Sluice Valves flanged	Each	1065.89	26271.54	1172.48	26378.13
	(g)	350mm i/d Sluice Valves flanged	Each	1254.86	46177.44	1380.35	46302.92
	(h)	400mm i/d Sluice Valves flanged	Each	1484.58	56112.28	1633.04	56260.73
	(i)	450mm i/d Sluice Valves flanged	Each	1543.80	65690.25	1698.18	65844.63
	(j)	500mm i/d Sluice Valves flanged	Each	1590.29	106966.22	1749.32	107125.25
	(k)	600mm i/d Sluice Valves flanged	Each	1985.93	124133.02	2184.52	124331.62
<b>B</b>	<b>Class PN-1.6 as per ISI</b>						
	(a)	80mm i/d Sluice Valves flanged	Each	372.18	4502.23	409.39	4539.45
	(b)	100mm i/d Sluice Valves flanged	Each	434.29	6111.01	477.72	6154.44
	(c)	150mm i/d Sluice Valves flanged	Each	562.63	9058.04	618.90	9114.30
	(d)	200mm i/d Sluice Valves flanged	Each	696.74	15521.35	766.41	15591.03
	(e)	250mm i/d Sluice Valves flanged	Each	874.14	22337.15	961.55	22424.57
	(f)	300mm i/d Sluice Valves flanged	Each	1065.89	27999.03	1172.48	28105.62
	(g)	350mm i/d Sluice Valves flanged	Each	1254.86	49363.53	1380.35	49489.01
	(h)	400mm i/d Sluice Valves flanged	Each	1484.58	60387.27	1633.04	60535.72
	(i)	450mm i/d Sluice Valves flanged	Each	1543.80	70683.63	1698.18	70838.01



Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.28	Providing & fixing Fire Hydrants with jointing including all carriages complete. (without Fire Hydrant surface box) Size 80mm complete in all respect.						
	(a)	C.I Fire Hydrants 1S-908	Each	290.84	6770.93	319.93	6800.01
	(b)	C.I Fire Hydrants S.V. Type IS-909	Each	290.84	11887.03	319.93	11916.11
	(c)	C.I Fire Hydrants Stand Post Type IS-908	Each	300.44	10621.62	330.48	10651.66
28.29	Providing & fixing Single air valve ISI Marked as per IS-14845 including jointing , cost of nut bolts & rubber insertion all carriages complete.						
	(a)	C.I Single air valve screwed (Size 25mm)	Each	290.84	1757.59	319.93	1786.67
	(b)	C.I Single air valve screwed (Size 32mm)	Each	290.84	1913.04	319.93	1942.12
	(c)	C.I Single air valve screwed (Size 40mm)	Each	290.84	2261.73	319.93	2290.82
	(d)	C.I Single air valve screwed (Size 50mm)	Each	290.84	2387.76	319.93	2416.85
	(e)	C.I Single air valve screwed (Size 80mm)	Each	290.84	4278.23	319.93	4307.31
28.30	Providing & fixing double air valve ISI Marked as per IS-14845 including jointing all carriages complete.						
	(a)	C.I Double air valve (Size 40mm)	Each	290.84	4426.67	319.93	4455.75
	(b)	C.I Double air valve (Size 50mm)	Each	290.84	4636.71	319.93	4665.80
	(c)	C.I Double air valve (Size 65mm)	Each	290.84	4859.37	319.93	4888.45
	(d)	C.I Double air valve (Size 80mm)	Each	290.84	5350.90	319.93	5379.98
	(e)	C.I Double air valve (Size 100mm)	Each	290.84	7468.22	319.93	7497.30

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.31	Proving & fixing ISI Marked Non-return valves flanged end class PN-1.0 as per IS:5312/2004 in pipe lines including jointing & cost of Nut Bolt , rubber insertion etc. complete. Note: If Non-return valves class PN-1.6 is used instead of class PN-1.0 , than 5% will be paid extra.						
A	Class PN-1.0 as per ISI with rubber Flap						
	(a)	80mm i/d Non-return valve	Each	372.18	3815.78	409.39	3853.00
	(b)	100mm i/d Non-return valve	Each	434.29	4897.75	477.72	4941.17
	( c )	125mm i/d Non-return valve	Each	471.81	7177.23	518.99	7224.41
	(d)	150mm i/d Non-return valve	Each	562.63	8339.67	618.90	8395.93
	(e)	200mm i/d Non-return valve	Each	696.74	15662.52	766.41	15732.19
	(f)	250mm i/d Non-return valve	Each	874.14	23118.54	961.55	23205.95
	(g)	300mm i/d Non-return valve	Each	1254.86	29923.02	1380.35	30048.51
	(h)	350mm i/d Non-return valve	Each	1359.19	50907.97	1495.11	51043.89
	(i)	400mm i/d Non-return valve	Each	1484.58	61019.11	1633.04	61167.56
	(j)	450mm i/d Non-return valve	Each	1543.80	71586.85	1698.18	71741.23
	(k)	500mm i/d Non-return valve	Each	1590.29	126072.61	1749.32	126231.64
B	Class PN-1.0 as per ISI with gun metal flap						
	(a)	80mm i/d Non-return valve	Each	372.18	4024.16	409.39	4061.38
	(b)	100mm i/d Non-return valve	Each	434.29	5115.35	477.72	5158.78
	( c )	125mm i/d Non-return valve	Each	471.81	7473.82	518.99	7521.00
	(d)	150mm i/d Non-return valve	Each	562.63	8730.35	618.90	8786.61
	(e)	200mm i/d Non-return valve	Each	696.74	16089.34	766.41	16159.01
	(f)	250mm i/d Non-return valve	Each	874.14	23995.73	961.55	24083.14
	(g)	300mm i/d Non-return valve	Each	1254.86	30839.68	1380.35	30965.17
	(h)	350mm i/d Non-return valve	Each	1359.19	53342.90	1495.11	53478.82
	(i)	400mm i/d Non-return valve	Each	1484.58	63944.72	1633.04	64093.18

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	(j)	450mm i/d Non-return valve	Each	1543.80	75013.23	1698.18	75167.61
	(k)	500mm i/d Non-return valve	Each	1590.29	126072.61	1749.32	126231.64
28.32	Providing, fixing and jointing Cast Iron surface box for Sluice valve, Air valve, Fire hydrant etc. including all carriages complete.		Kg.	5.64	68.32	6.21	68.89
28.33	Providing & Fixing C.I indicating plates of size 100mm x 100 mm for SV/FH including synthetic enamel paint & letters in white enamel paint, fixing in the ground with angle iron of size 25x25x5mm, 230mm height from ground including concrete block complete in all respect as directed by Engineer-in-charge		Each	79.83	239.39	87.82	247.37
28.34	Providing ISI Marked G.M ferrule as per IS:2692, drilling and tapping cast iron pipe lines of all diameters and screwing in Ferrule and connections complete in all respect.						
	(a)	10mm i/d Ferrule medium	Each	148.04	400.10	162.85	414.91
	(b)	15mm i/d Ferrule medium	Each	169.90	457.81	186.89	474.80
	(c)	20mm i/d Ferrule medium	Each	345.36	665.76	379.90	700.30
	(d)	15mm i/d Ferrule heavy duty	Each	169.90	528.39	186.89	545.38
	(e)	20mm i/d Ferrule heavy duty	Each	345.36	839.42	379.90	873.95
	(f)	25mm i/d Ferrule heavy duty	Each	466.58	1558.85	513.24	1605.51
28.35	Providing ,laying, jointing, fixing and testing ISI Marked G.I. Pipe (as per IS 1239) B-Class including cost of specials (such as tees, bends, sockets, elbows etc.) ,painting with anti corrosive bitumastic paint, testing, cutting, threading Inside building complete.						
	a	15mm i/d	Mtr	69.08	205.07	75.99	211.98
	b	20mm i/d	Mtr	78.96	249.19	86.86	257.08
	c	25mm i/d	Mtr	88.83	314.79	97.71	323.67
	d	32mm i/d	Mtr	108.56	402.90	119.42	413.75

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	e	40mm i/d	Mtr	118.43	457.69	130.27	469.53
	f	50mm i/d	Mtr	128.31	567.69	141.14	580.52
28.36	Providing and laying, jointing, fixing, testing ISI Marked G.I. Pipe (as per IS 1239) B-Class, including cost of Specials such as tees, bends, sockets elbow etc., cutting, threading and testing in trenches in the ground complete.						
	a	15mm i/d	Mtr	25.80	130.27	28.39	132.85
	b	20mm i/d	Mtr	28.39	162.50	31.23	165.33
	c	25mm i/d	Mtr	38.26	230.43	42.09	234.26
	d	32mm i/d	Mtr	58.76	300.26	64.63	306.14
	e	40mm i/d	Mtr	61.33	341.72	67.46	347.86
	f	50mm i/d	Mtr	63.92	430.97	70.31	437.37
	g	65mm i/d	Mtr	67.68	601.19	74.45	607.96
	h	80mm i/d	Mtr	69.08	770.31	75.99	777.22
	i	100mm i/d	Mtr	88.83	1115.36	97.71	1124.24
28.37	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilised with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80°C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required ) e.g. elbows , tees, reducers, couplers & connectors etc. with clamps at 1.00 m spacing including testing of pipes complete as per direction of the engineer in charge.						
	Concealed work- including cutting chase & making good the wall etc.						
	(a)	1216 (16 mm o/d) pipe	Mtr	71.78	271.14	78.95	278.32
	(b)	1620 (20 mm o/d) pipe	Mtr	72.79	332.54	80.07	339.82
	(c)	2025 (25 mm o/d) pipe	Mtr	73.80	403.98	81.18	411.36

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	(d)	2532 (32 mm o/d) pipe	Mtr	74.81	495.51	82.29	502.99
	(e)	3240 (40 mm o/d) pipe	Mtr	75.81	687.48	83.39	695.06
	(f)	4050 (50 mm o/d) pipe	Mtr	76.82	839.27	84.50	846.95
28.38	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 - 2004 U.V. stabilised with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80° C including all special fittings of composite material (engineering plastic blend & brass inserts wherever required ) e.g. elbows ,tees ,reducers, couplers & connectors etc. with trenching, refilling and testing of joints complete as per direction of the engineer in charge. Internal work - Exposed on wall						
	a)	1216 (16 mm o/d) pipe	Mtr	49.84	193.44	54.82	198.42
	b)	1620 (20mm o/d) pipe	Mtr	50.85	238.04	55.94	243.12
	c)	2025 (25mm o/d) pipe	Mtr	51.85	289.90	57.04	295.08
	d)	2532 (32mm o/d) pipe	Mtr	52.86	356.24	58.15	361.53
	e)	3240 (40mm o/d) pipe	Mtr	53.87	495.05	59.26	500.44
	f)	4050 (50mm o/d) pipe	Mtr	54.89	604.88	60.37	610.37
28.39 A	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes (as per IS:15801-2008) SDR 7.4 U V stabilized & anti microbial fusion welded, having thermal stability for hot & cold water supply including all PP-R plain & brass threaded polypropylene random fittings i/c fixing the pipe with clamps at 1.00 m spacing including testing of pipes complete as per direction of Engineer in Charge.						
	Concealed work- including cutting chase & making good the wall etc.						
	a)	PN - 16 Pipe, 16mm o/d	Mtr	80.54	134.21	88.59	142.26
	b)	PN - 16 Pipe, 20mm o/d	Mtr	82.90	151.74	91.19	160.03
	c)	PN - 16 Pipe, 25mm o/d	Mtr	85.28	191.83	93.80	200.36

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	d)	PN - 16 Pipe, 32mm o/d	Mtr	86.45	257.66	95.10	266.31
	e)	PN - 16 Pipe, 40mm o/d	Mtr	87.64	344.43	96.40	353.20
	f)	PN - 16 Pipe, 50mm o/d	Mtr	88.83	491.09	97.71	499.97
28.39 B	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes (as per IS:15801-2008) SDR 7.4 U V stabilized & anti microbial fusion welded, having thermal stability for hot & cold water supply including all PP-R plain & brass threaded polypropylene random fittings i/c trenching .refilling & testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall						
	(a)	PN- 16 Pipe, 16 mm o/d	Mtr	69.37	115.75	76.31	122.68
	b)	PN- 16 Pipe, 20 mm o/d	Mtr	70.50	130.00	77.55	137.05
	c)	PN- 16 Pipe, 25 mm o/d	Mtr	71.64	163.72	78.80	170.89
	d)	PN- 16 Pipe, 32 mm o/d	Mtr	72.20	220.16	79.41	227.38
	e)	PN- 16 Pipe, 40 mm o/d	Mtr	72.77	294.69	80.04	301.97
	f)	PN- 16 Pipe, 50 mm o/d	Mtr	73.33	420.97	80.66	428.30
28.40	Providing, fixing and jointing G.I Union Couplings(of approved make with the approval EIC) as per IS 1879 in G.I. Pipe lines complete in all respect.						
	a)	15mm i/d G.I. Union	Each	15.50	91.00	17.05	92.55
	b)	20mm i/d G.I. Union	Each	20.46	150.83	22.51	152.88
	c)	25mm i/d G.I. Union	Each	21.71	190.38	23.88	192.55
	d)	32mm i/d G.I. Union	Each	24.80	245.44	27.28	247.92
	e)	40mm i/d G.I. Union	Each	24.80	325.66	27.28	328.14
	f)	50mm i/d G.I. Union	Each	27.07	415.45	29.78	418.16
	g)	65mm i/d G.I. Union	Each	32.02	651.99	35.22	655.19
	h)	80mm i/d G.I. Union	Each	32.65	976.27	35.91	979.53
	i)	100mm i/d G.I. Union	Each	33.26	1501.11	36.59	1504.44

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.41	Providing and placing in position hand pump of approved quality for 40 mm diameter G.I. pipe complete with all accessories.		Each	118.45	936.91	130.30	948.75
28.42	Providing water connection with grooved coupler and service coupler in Quick coupling pipe line complete in all respect.						
	a)	In 50.80mm outside diameter pipe line	Each	116.07	789.98	127.67	801.59
	b)	In 63.50mm outside diameter pipe line	Each	118.43	899.67	130.27	911.51
	c)	In 76.20 mm outside diameter pipe line	Each	142.12	973.62	156.33	987.83
	d)	In 101.60mm outside diameter pipe line	Each	144.49	1155.74	158.94	1170.19
	e)	In 152.40mm outside diameter pipe line	Each	148.04	1600.84	162.85	1615.65
28.43	Providing, fixing and jointing ISI Marked Gun-Metal peet valves (Heavy Pattern) as per IS 778 with hand wheels, on G.I. Pipe lines laid in the ground or inside buildings including all carriages complete.						
	a)	15mm i/d Gun Metal peet valve heavy pattern.	Each	28.18	403.40	31.00	406.22
	b)	20mm i/d Gun Metal peet valve heavy pattern.	Each	34.44	562.67	37.88	566.11
	c)	25mm i/d Gun Metal peet valve heavy pattern.	Each	38.75	772.96	42.63	776.84
	d)	32mm i/d Gun Metal peet valve heavy pattern.	Each	44.28	1181.93	48.71	1186.36
	e)	40mm i/d Gun Metal peet valve heavy pattern.	Each	51.67	1564.53	56.83	1569.70
	f)	50mm i/d Gun Metal peet valve heavy pattern.	Each	68.89	2407.42	75.78	2414.31
	g)	65mm i/d Gun Metal peet valve heavy pattern.	Each	88.57	3790.38	97.43	3799.24

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	h)	80mm i/d Gun Metal peet valve heavy pattern.	Each	103.33	5778.70	113.66	5789.04
	i)	100mm i/d Gun Metal peet valve heavy pattern.	Each	103.33	11131.85	113.66	11142.18
28.44	Providing, fixing and jointing Brass Ball valves screwed with SS/BRASS ball & spindle & Teflon seats, on G.I. Pipe lines including all carriages complete.						
	a	15mm i/d Brass Ball valves	Each	53.84	254.99	59.22	260.38
	b	20mm i/d Brass Ball valves	Each	65.80	338.63	72.38	345.21
	c	25mm i/d Brass Ball valves	Each	74.02	526.83	81.42	534.23
	d	32mm i/d Brass Ball valves	Each	84.59	848.51	93.05	856.97
	e	40mm i/d Brass Ball valves	Each	98.69	1045.86	108.56	1055.73
	f	50mm i/d Brass Ball valves	Each	131.59	1705.03	144.75	1718.19
28.45	Making connection with the existing G.I. branch main up to 40mm size pipe including cutting of existing pipe line, threading of pipe lines from both ends and fixing of G.I Tee etc. in the pipe line (including cost of G.I Tee) complete in all respects.		Each	317.42	375.31	349.16	407.05
28.46	Providing, fixing & jointing water meter of approved make as per IS:779/94 in G.I. pipe line including cutting and threading pipe including cost of water meter but excluding cost of specials in all respect complete.						
	a	15mm size	Each	414.50	1221.96	455.95	1263.41
	b	20mm size	Each	426.36	1770.45	469.00	1813.09
	c	25mm size	Each	444.14	2337.47	488.55	2381.88
28.47	Providing & fixing Cast Iron surface box for Peet Valve, Stop Cock including all carriages complete.		Kg.	16.93	79.61	18.63	81.31



Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.48	Providing and filling sand grading as per specifications or fine grade around the various sizes of G.I. pipes in external work.		Cum.	21.82	652.90	24.00	655.09
28.49	Bailing out water from the trenches for making new connections in existing pipe lines including cleaning trimming and dressing the trenches to correct alignment and grade as required by the Engineer-in-charge.						
	a	Connection with pipe line Upto 300mm i/d	Each connecti on.	947.82		1042.60	
	b	Connection with pipe line beyond 300mm i/d	Each connecti on.	1421.73		1563.90	
28.50	Disinfecting water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory.						
	a	80mm diameter C.I. pipe.	Mtr	6.89	7.07	7.58	7.76
	b	100mm diameter C.I. pipe.	Mtr	8.99	9.26	9.89	10.16
	c	125mm diameter C.I. pipe.	Mtr	10.77	11.18	11.85	12.26
	d	150mm diameter C.I. pipe.	Mtr	13.06	13.66	14.37	14.97
	e	200mm diameter C.I. pipe.	Mtr	16.81	17.88	18.49	19.56
	f	250mm diameter C.I. pipe.	Mtr	21.10	22.78	23.21	24.89
	g	300mm diameter C.I. pipe.	Mtr	23.13	25.54	25.44	27.85
	h	350mm diameter C.I. pipe.	Mtr	25.33	28.60	27.87	31.13
	i	400mm diameter C.I. pipe.	Mtr	28.16	32.44	30.97	35.26
	j	450mm diameter C.I. pipe.	Mtr	29.90	35.32	32.89	38.31
	k	500mm diameter C.I. pipe.	Mtr	32.04	38.73	35.25	41.94
	l	600mm diameter C.I. pipe.	Mtr	36.89	46.50	40.58	50.19

Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
28.51	Providing and placing in horizontal layers filtering media screened, washed and cleaned as described below:-					
	(a) Top Layer:Top layer :----- Fine sand screened, cleaned and washed and graded (effective size 0.2 to 0.4mm with uniformity coefficient 2.00 to 3.00) from Pathankot or other approved source.	Cum.	880.21	1669.08	968.23	1757.11
	(b) Second Layer :----- Coarse sand screened, cleaned and washed and graded from 3mm to 6mm (from Pathankot or approved equivalent quarry).	Cum.	950.75	2037.00	1045.82	2132.07
	(c) Third Layer :----- Bajri screened, cleaned and washed and graded from 6mm to 20mm (from Pathankot or approved equivalent quarry).	Cum.	471.56	1398.01	518.71	1445.16
	(d) Fourth Layer :----- Bajri (Coarse) screened, cleaned and washed and graded from 20mm to 25mm (from Pathankot or approved equivalent quarry).	Cum.	527.51	1319.70	580.26	1372.45
	(e) Bottom Layer :----- Broken stone, screened, cleaned and washed and graded from 50mm to 75mm (from Pathankot or approved equivalent quarry).	Cum.	527.51	1305.09	580.26	1357.84
28.52	Painting G.I. Pipes and Specials with synthetic enamel Paint in all shades as per I.S.I. specification on existing or new work, two coats paints including cleaning rubbing surface, etc.					
	a 15mm & 20mm i/d G.I. Pipe	Mtr	2.27	4.29	2.50	4.51
	b 25mm & 32mm i/d G.I. Pipe	Mtr	2.97	5.64	3.26	5.94
	c 40mm & 50mm i/d G.I. Pipe	Mtr	4.64	8.93	5.10	9.39

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.53	Repainting G.I. Pipes and Specials with synthetic enamel Paint in all shades as per I.S.I. specification on existing work, one coats paints including cleaning rubbing surface, etc.						
	a	15mm & 20mm i/d G.I. Pipe	Mtr	2.36	3.90	2.60	4.13
	b	25mm & 32mm i/d G.I. Pipe	Mtr	3.02	5.02	3.33	5.32
	c	40mm & 50mm i/d G.I. Pipe	Mtr	4.83	8.10	5.31	8.58
28.54	Painting G.I. Pipes and Specials with Aluminium Paint Paint in all shades as per I.S.I. specification on existing or new work, two coats paints including cleaning rubbing surface, etc.						
	a	15mm & 20mm i/d G.I. Pipe	Mtr	2.98	4.14	3.28	4.44
	b	25mm & 32mm i/d G.I. Pipe	Mtr	3.88	5.44	4.26	5.83
	c	40mm & 50mm i/d G.I. Pipe	Mtr	6.06	8.56	6.67	9.16
28.55	Repainting G.I. Pipes and Specials with Aluminium Paint Paint in all shades as per I.S.I. specification on existing work, one coats paints including cleaning rubbing surface, etc.						
	a	15mm & 20mm i/d G.I. Pipe	Mtr	2.98	4.14	3.28	4.44
	b	25mm & 32mm i/d G.I. Pipe	Mtr	3.88	5.44	4.26	5.83
	c	40mm & 50mm i/d G.I. Pipe	Mtr	6.06	8.56	6.67	9.16
28.56	Cutting holes upto 23cm square through B.B. in cement walls or stone masonry wall in cement for pipes, and making good the same & finishing according to existing finish where required.						
	a	Through wall 11.43 cm thick	Each	167.46		184.21	
	b	Through wall 22.86 cm thick	Each	238.93		262.82	
	c	Through wall 34.29 cm thick	Each	305.97		336.57	
	d	Through wall 45.72 cm thick	Each	391.53		430.68	

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	e	Through wall 57.15 cm thick	Each	419.78		461.75	
	f	Through wall 68.58 cm thick	Each	493.02		542.33	
28.57	Cutting holes upto 23cm square for pipes in flooring and roofs of bricks, tiles with lime concrete or cement concrete and making good the same & finishing according to existing finish where required.						
	a	Through floor or roof 7.5cm thick	Each	89.17		98.09	
	b	Through floor or roof 11.5cm thick	Each	145.41		159.95	
	c	Through floor or roof 15.00cm thick	Each	175.93		193.52	
	d	Through floor or roof 19.00cm thick	Each	195.16		214.68	
	e	Through floor or roof 22.50cm thick	Each	199.94		219.94	
28.58	Cutting holes upto 23cm square for pipes in floor and roofs of cement concrete, reinforced concrete or reinforced brick work and making good the same & finishing according to existing finish where required.						
	a	Through floor or roof 7.5cm thick	Each	81.22		89.34	
	b	Through floor or roof 11.5cm thick	Each	101.33		111.46	
	c	Through floor or roof 15.00cm thick	Each	158.29		174.12	
	d	Through floor or roof 19.00cm thick	Each	159.89		175.88	
	e	Through floor or roof 22.50cm thick	Each	164.67		181.14	
28.59	Dismantling lead Caulked Joints of cast iron Socketted Pipes, Valves and Specials by heating the Joints including the cast of Labour, Fuel and tools, etc., collecting the lead taken out from the joints and ride back the same to the Engineer-in-charge.						
	(a)	50mm i/d of pipes, valves and specials	Each	32.38		35.62	
	(b)	65mm i/d of pipes, valves and specials	Each	32.58		35.84	

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	(c)	80mm i/d of pipes, valves and specials	Each	63.02		69.32	
	(d)	100mm i/d of pipes, valves and specials	Each	64.06		70.47	
	(e)	125mm i/d of pipes, valves and specials	Each	67.02		73.72	
	(f)	150mm i/d of pipes, valves and specials	Each	95.61		105.18	
	(g)	175mm i/d of pipes, valves and specials	Each	118.87		130.75	
	(h)	200mm i/d of pipes, valves and specials	Each	142.95		157.24	
	(i)	225mm i/d of pipes, valves and specials	Each	158.86		174.75	
	(j)	250mm i/d of pipes, valves and specials	Each	182.53		200.78	
	(k)	300mm i/d of pipes, valves and specials	Each	220.29		242.32	
	(l)	350mm i/d of pipes, valves and specials	Each	264.42		290.86	
	(m)	375mm i/d of pipes, valves and specials	Each	272.59		299.84	
	(n)	400mm i/d of pipes, valves and specials	Each	287.11		315.82	
	(o)	450mm i/d of pipes, valves and specials	Each	369.99		406.99	
	(p)	500mm i/d of pipes, valves and specials	Each	430.11		473.12	
	(q)	525mm i/d of pipes, valves and specials	Each	461.04		507.14	
	(r)	550mm i/d of pipes, valves and specials	Each	506.56		557.22	
	(s)	600mm i/d of pipes, valves and specials	Each	552.08		607.29	

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.60	Dismantling flanged Joints for Cast iron Pipes, Valves and specials complete in all respects.						
	a	50mm, 65mm, 80mm, 100mm internal diameter of pipe, valves or special.	Each	18.95		20.85	
	b	125mm, 150mm, 175mm, 200mm, 225mm and 250mm internal diameter of pipe, valves or special.	Each	39.08		42.98	
	c	300mm, 350mm and 375mm internal diameter of pipe, valves or special.	Each	78.18		85.99	
	d	400mm and 450mm internal diameter of pipe, valves or special.	Each	118.45		130.30	
	e	500mm and 525mm internal diameter of pipe, valves or special.	Each	130.28		143.31	
	f	550mm and 600mm internal diameter of pipe, valves or special.	Each	142.13		156.34	
28.61	Taking out dismantled Cast Iron flanged or socketed / G.I/D.I Pipes valves and, specials etc. out side from the trenches and Stacking the same as desire by Engineer-in-charge complete in all respects.						
	a	Upto 100 mm internal diameter of pipe.	Mtr	9.41		10.35	
	b	Upto 200 mm internal diameter of pipe.	Mtr	10.35		11.38	
	c	Upto 300 mm internal diameter of pipe.	Mtr	12.23		13.45	
	d	Upto 450 mm internal diameter of pipe.	Mtr	14.11		15.52	
	e	Upto 600 mm internal diameter of pipe.	Mtr	15.05		16.56	
28.62	Dismantling cast Iron surface boxes for sluice valves/Air valve and fire hydrants complete in all respects.		Each	67.74		74.51	

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.63	Dismantling, disjoining, removal of G.I. pipe lines, specials, valves and fittings complete in all respects.						
	a	15mm internal diameter pipe line.	Mtr	19.73		21.71	
	b	20mm internal diameter pipe line.	Mtr	23.69		26.06	
	c	25mm internal diameter pipe line.	Mtr	31.58		34.74	
	d	32mm internal diameter pipe line.	Mtr	43.16		47.48	
	e	40mm internal diameter pipe line.	Mtr	43.96		48.36	
	f	50mm internal diameter pipe line.	Mtr	44.54		49.00	
	g	65mm internal diameter pipe line.	Mtr	45.12		49.64	
	h	80mm internal diameter pipe line.	Mtr	54.05		59.46	
	i	100mm internal diameter pipe line.	Mtr	59.21		65.14	
28.64	Construction of Gravel Pit outside the Pump Chamber. (0.90m Dia.) as per standard design & drawings of public health department.		Each	7142.80	16836.95	7857.08	17551.23
28.65	CONSTRUCTION OF V-NOTCH HAUDI.(size 1.80 m x 0.90 m) excluding cost V-notch as per standard design & drawings of public health department.		Each	6092.95	14328.88	6702.24	14938.17
28.66	Construction of masonry Sluice Valve Chamber excluding Sluice valve cover as per standard design & drawings of public health department.						
	a	Size 0.6 m. x 0.6 m.	Each	1726.76	5305.96	1899.44	5478.64
	b	Size 0.9 m. x 0.9 m.	Each	2468.75	7828.67	2715.62	8075.54

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.67	Boring with 100 mm diameter casing pipe for hand pump/ tube well in all soils except ordinary hard rocks requiring blasting including removing the casing pipe after the hand pump/tube well is lowered and tested.						
	a	Upto 6 mtr depth.	Mtr	426.29		468.92	
	b	Beyond 6 mtr and upto 12 mtr depth.	Mtr	502.54		552.80	
	c	Beyond 12 mtr and upto 18 mtr depth.	Mtr	581.22		639.35	
28.68	Providing and placing in position filters of 40 mm diameter G.I. pipe with brass strainer of approved quality.		Mtr	119.83	641.89	131.81	653.87
28.69	Providing and fixing and lowering G.I Pipe (Medium) 40 mm i/d with filter excluding cost of filter for shallow tube well including cleaning and priming the tube well.		Mtr	62.79	319.94	69.07	326.22
28.70	Providing, laying, fixing and testing M.S. pipe lines as per IS-1239 and specials such as tees, bends, sockets, elbows etc. in trenches in the ground including cutting, threading and testing etc. complete.						
	a	80 mm internal diameter (thickness 4.05 mm)	Mtr	98.69	670.67	108.56	680.54
	b	100mm internal diameter (thickness 4.50 mm)	Mtr	98.69	935.19	108.56	945.06
	c	150mm internal diameter (thickness 4.85 mm)	Mtr	148.04	1437.99	162.85	1452.80
	d	200mm internal diameter (thickness 6.00 mm)	Mtr	148.04	2308.96	162.85	2323.77
28.71	Hand boring Horizontally for crossing of pipe under road or any other obstacle by using Auger/Bocki method.Including excavation , stringing and jointing of pipe upto 160mm complete		Mtr	850.46		935.51	



Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
28.72	Boring with casing pipe for tubewell in all soils except ordinary hard rocks requiring blasting including removing the casing pipe after the tube well is lowered & tested , equipment as required such as hand boring machine and its accessory, transportation to site and vice versa etc. complete in all respect.					
a	<b>Boring with 150mm id Housing Pipe</b>					
	<b>Upto 150 m depth BGL.</b>	Mtr.	853.92		939.31	
b	<b>Boring with 200mm id Housing Pipe</b>					
	<b>Upto 150 m depth BGL.</b>	Mtr.	879.66		967.63	
c	<b>Boring with 250mm id Housing Pipe</b>					
	<b>Upto 150 m depth BGL.</b>	Mtr.	893.42		982.77	
d	<b>Boring with 300mm id Housing Pipe</b>					
	<b>Upto 150 m depth BGL.</b>	Mtr.	906.29		996.92	
28.73	Extra for Boring beyond 150 m depth		30% Extra will be taken for the respective i/d of boring of item No.28.72			
28.74 A	Supplying, lowering of MS Pipe as per IS:4270-2001 including MS sockets having dimensions as per IS code duly welded with MS electrode to have extra strength to lower the pipe into tubewell bore.					
(a)	<b>100mm nominal diameter (weight 14.5 kg per metre) 5.40 mm thickness</b>	Mtr.	307.41	1258.55	338.15	1289.29
(b)	<b>150mm nominal diameter (weight 21.6 kg per metre) 5.4 mm thickness</b>	Mtr.	308.35	1705.86	339.18	1736.69
(c)	<b>200mm nominal diameter (weight 33.6 kg per metre) 6.4mm thickness</b>	Mtr.	309.29	2505.41	340.22	2536.34
(d)	<b>200mm nominal diameter (weight 41.6 kg per metre) 8.0 mm thickness</b>	Mtr.	309.29	3127.02	340.22	3157.95

Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
(e)	250mm nominal diameter (weight 52.3 kg per metre) 8.0 mm thickness	Mtr.	311.17	3863.01	342.29	3894.13
(f)	300mm nominal diameter (weight 62.3 kg per metre) 8.0 mm thickness	Mtr.	312.11	4586.85	343.32	4618.06
(g)	300mm nominal diameter (weight 77.4 kg per metre) 9.50 mm thickness	Mtr.	313.05	5288.56	344.36	5319.87
28.74 B	Supplying, lowering of MS Pipe as per IS: 4270-2001 including MS sockets having dimensions as per IS code duly welded with MS electrode to have extra strength to lower the pipe into tubewell bore complete in all respect.					
(a)	323.9 mm outer diameter (weight 47.04 kg per metre) minimum 6.0 mm thickness	Mtr.	313.05	3837.15	344.36	3868.45
(b)	355.6 mm outer diameter (weight 51.72 kg per metre) minimum 6.0 mm thickness	Mtr.	318.70	4209.55	350.57	4241.42
28.75 A	Supplying, Fixing & lowering of Stainless Steel Cage type wire wound screen as per IS:8110-2000 or latest ISI marked Duly welded with suitable grade S.S welding electrode.to lower the strainer into tubewell bore.					
a	150mm Steel Strainer (slot size 0.15/0.20mm) 5.0 mm thickness	Mtr.	377.94	6452.52	415.74	6490.32
b	150mm Steel Strainer (slot size 0.50mm) 5.00 mm thickness	Mtr.	377.94	5982.03	415.74	6019.82
c	150mm Steel Strainer (slot size 0.75mm) 5.00 mm thickness	Mtr.	377.94	5908.20	415.74	5946.00
d	150mm Steel Strainer (slot size 1.00mm) 5.0 mm thickness	Mtr.	377.94	5747.43	415.74	5785.23
e	150mm Steel Strainer (slot size 0.15mm) 6.30 mm thickness	Mtr.	377.94	8119.80	415.74	8157.59

Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
f	150mm Steel Strainer (slot size 0.50mm)6.30 mm thickness	Mtr.	377.94	7633.44	415.74	7671.24
g	150mm Steel Strainer (slot size 0.75mm) 6.30 mm thickness	Mtr.	377.94	7348.77	415.74	7386.57
h	150mm Steel Strainer (slot size 1.00mm) 6.30 mm thickness	Mtr.	377.94	6814.94	415.74	6852.74
i	200mm Steel Strainer (slot size 0.15mm) 6.30 mm thickness	Mtr.	385.00	10445.15	423.50	10483.65
j	200mm Steel Strainer (slot size 0.50mm) 6.30 mm thickness	Mtr.	385.00	9469.84	423.50	9508.34
k	200mm Steel Strainer (slot size 0.75mm) 6.30 mm thickness	Mtr.	385.00	9085.00	423.50	9123.50
l	200mm Steel Strainer (slot size 1.00mm) 6.30 mm thickness	Mtr.	385.00	8743.63	423.50	8782.13
m	200mm Steel Strainer (slot size 0.15mm)8.00 mm thickness	Mtr.	385.00	13762.54	423.50	13801.04
n	200mm Steel Strainer (slot size 0.50mm)8.00 mm thickness	Mtr.	385.00	12576.32	423.50	12614.82
o	200mm Steel Strainer (slot size 0.75mm)8.00 mm thickness	Mtr.	385.00	11690.63	423.50	11729.13
p	200mm Steel Strainer (slot size 1.00mm)8.00 mm thickness	Mtr.	385.00	11326.91	423.50	11365.41
q	250mm Steel Strainer (slot size 0.15mm) 7.30 mm thickness	Mtr.	406.17	16258.84	446.78	16299.45
r	250mm Steel Strainer (slot size 0.50mm) 7.30 mm thickness	Mtr.	406.17	15833.15	446.78	15873.77
s	250mm Steel Strainer (slot size 0.75mm) 7.30 mm thickness	Mtr.	406.17	15773.83	446.78	15814.45
t	250mm Steel Strainer (slot size 1.00mm) 7.30 mm thickness	Mtr.	406.17	15170.21	446.78	15210.82
u	300mm Steel Strainer (slot size 0.15mm) 8.00 mm thickness	Mtr.	420.27	20102.97	462.30	20145.00
v	300mm Steel Strainer (slot size 0.50mm) 8.00 mm thickness	Mtr.	420.27	19254.26	462.30	19296.28

Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
w	<b>300mm Steel Strainer (slot size 0.75mm) 8.00 mm thickness</b>	Mtr.	420.27	18700.68	462.30	18742.70
x	<b>300mm Steel Strainer (slot size 1.00mm) 8.00 mm thickness</b>	Mtr.	420.27	18634.76	462.30	18676.79
28.75 AA	<b>Supplying, Fixing &amp; lowering of Stainless Steel Socket as per IS:8110-2000 or latest ISI marked Duly welded with suitable grade S.S welding electrode.to lower the strainer into tubewell bore complete in all respect.</b>					
a	<b>150mm internal diameter</b>	No.	349.73	4123.00	384.70	4157.97
b	<b>200mm internal diameter</b>	No.	349.73	4877.90	384.70	4912.87
c	<b>250mm internal diameter</b>	No.	349.73	7142.63	384.70	7177.60
28.75 B	<b>Supplying, lowering 200mm inner dia Electric Resistance welded (ERW) LOW CARBON GALAVANIZED CAGE TYPE VEE Wire WOUND SCREEN . It shall be of Continuous trapezoidal wire spirally wound around fabricated cage. The screen must Consist of 'V' shaped (Wedge) profile wire of various dimensions as per IS:8110-2000 with latest amendments and material specification as IS :280-7887-1992 Grades or AISI Grade 1012 &amp; slot width will be 0.75mm, thickness of pipe 8mm at T/Well site.</b>					
	<b>200mm internal diameter (slot size 0.75/1.0mm) 7.30 mm thickness</b>	Mtr.	406.17	9847.62	446.78	9888.23
28.76	<b>Supplying, lowering &amp; fixing of M.S Special socket to connect S.S Strainer to M.S Pipe duly welded with suitable grade welding electrode complete in all respect.</b>					
(a)	<b>100mm internal diameter</b>	Each	82.90	437.48	91.19	445.77
(b)	<b>150mm internal diameter</b>	Each	94.74	565.82	104.21	575.29

Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
(c)	<b>200mm internal diameter</b>	Each	106.58	696.71	117.24	707.37
(d)	<b>250mm internal diameter</b>	Each	118.45	825.09	130.30	836.93
(e)	<b>300mm internal diameter</b>	Each	177.64	1003.32	195.41	1021.08
28.77	Supplying & fixing of M.S Clamp of size 150mm X 12mm made out of MS Flat 1.52m long, suitable to fit Housing pipe including the cost Nut & Bolts of Suitable size complete in all respect.	Each	59.20	2673.23	65.12	2679.15
28.78	Supplying at site Wooden Box of suitable size with Lid & locking arrangement for preserving strata sample collected from the bore.	Each	59.20	577.63	65.12	583.55
28.79 A	Supplying & Fixing of bail plug of M.S pipe complete with inverted U-hook attached to the bottom plug complete in all respect.					
(a)	<b>100mm internal diameter (weight 14.5 kg per metre) 5.40 mm thickness</b>	mtr	50.92	998.93	56.01	1004.02
(b)	<b>150mm internal diameter (weight 21.6 kg per metre) 5.4 mm thickness</b>	mtr	52.33	1441.49	57.56	1446.73
(c)	<b>200mm internal diameter (weight 41.6 kg per metre) 8.0 mm thickness</b>	mtr	53.74	2854.42	59.11	2859.79
(d)	<b>250mm internal diameter (weight 52.3 kg per metre) 8.00 mm thickness</b>	mtr	55.15	3564.74	60.66	3570.25
(e)	<b>300mm internal diameter (weight 62.3 kg per metre) 8.0 mm thickness</b>	mtr	55.15	4254.40	60.66	4259.92
28.79 B	Supplying & Fixing of M.S pipe bail plug suitable for 200 mm dia UPVC casing pipe having thickness of socket as 12 mm ,length 100 mm & base plate of 8 mm thick complete in all respect.	each	118.45	756.08	130.30	767.93

Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
28.79 C	Providing and fixing M.S. taper / reducer made out of 6 mm thick M.S. sheet complete in all respect.					
a	<b>Reducer 350mm x 200 mm</b>	EACH	236.86	2939.44	260.54	2963.12
b	<b>Reducer 300mm x 200 mm</b>	EACH	236.86	2805.54	260.54	2829.22
c	<b>Reducer 250mm x 150 mm</b>	EACH	236.86	2671.65	260.54	2695.34
28.80	Supplying & Fixing of well cap having thread to fix on housing pipe complete in all respect.					
(a)	<b>100mm internal diameter</b>	EACH	82.90	258.29	91.19	266.58
(b)	<b>150mm internal diameter</b>	EACH	94.74	396.52	104.21	405.99
(c)	<b>200mm internal diameter</b>	EACH	106.58	738.23	117.24	748.89
(d)	<b>250mm internal diameter</b>	EACH	118.45	1091.59	130.30	1103.44
(e)	<b>300mm internal diameter</b>	EACH	130.28	1705.48	143.31	1718.51
(f)	<b>350mm internal diameter</b>	EACH	130.28	2044.15	143.31	2057.18
28.81	Development and Stabilizing of the tubewell with air compressor of required capacity as directed by the engineer-in- charge including cost of tools, appliances & consumable to the satisfaction of Engineer-in-charge.					
(a)	<b>Capacity of Air compressor 300 cfm at 250 PSI</b>	Hour	3001.17		3301.29	
(b)	<b>Capacity of Air compressor 500 cfm at 150 PSI</b>	Hour	4665.14		5131.65	
28.82	Development and Stabilizing of the tubewell with submersible pump of required capacity as directed by the engineer-in- charge including cost of tools, appliances & consumable to the satisfaction of Engineer-in-charge.	Hour	1631.62		1794.78	

Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
28.83	Collection of water sample from different strata and testing of sample from approved laboratory (Physical & chemical Analysis)	Each	280.38		308.42	
28.84	Testing of water sample for Heavy metal from approved laboratory (Toxic material such as Arsenic, lead, mercury, pesticide etc.)	Each	5677.68		6245.45	
28.85 A	Drilling of 675mm dia bore with Reverse Rotatry Rig in all kinds of soil including the cost of consumable stores, fuel oil and transportation of rig to the site. complete in all respect.					
(a)	Drilling of 675mm dia bore with Reverse Rotatry Rig Upto 150 m depth BGL.	Mtr	1247.89		1372.68	
(b)	Drilling of 675mm dia bore with Reverse Rotatry Rig Beyond 150 m depth up to 300 Mtr	Mtr	1638.08		1801.89	
(c)	Drilling of 675mm dia bore with Reverse Rotatry Rig Beyond 300 m depth up to onward depth	Mtr	2028.28		2231.10	
28.85 B	Drilling of 650mm dia bore with Reverse Rotatry Rig in all kinds of soil including the cost of consumable stores, fuel oil and transportation of rig to the site. complete in all respect.					
(a)	Drilling of 650mm dia bore with Reverse Rotatry Rig Upto 150 m depth BGL.	Mtr	1219.86		1341.85	
(b)	Drilling of 650 mm dia bore with Reverse Rotatry Rig Beyond 150 m depth up to 300 Mtr	Mtr	1593.22		1752.54	
(c)	Drilling of 650mm dia bore with Reverse Rotatry Rig Beyond 300 m depth BGL up to onward depth	Mtr	1966.59		2163.24	

Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
28.85 C	Drilling of 600mm dia bore with Reverse Rotatry Rig in all kinds of soil including the cost of consumable stores, fuel oil and transportation of rig to the site. complete in all respect.					
(a)	Drilling of 600mm dia bore with Reverse Rotatry Rig Upto 150 m depth BGL.	Mtr	1191.81		1311.00	
(b)	Drilling of 600mm dia bore with Reverse Rotatry Rig Beyond 150 m depth BGL up to 300 Mtr	Mtr	1553.97		1709.36	
(c )	Drilling of 600mm dia bore with Reverse Rotatry Rig Beyond 300 m depth BGL to onward depth	Mtr	1890.00		2079.00	
28.85D	Drilling of 550mm dia bore with Reverse Rotatry Rig in all kinds of soil including the cost of consumable stores, fuel oil and transportation of rig to the site. complete in all respect.					
a	Drilling of 550mm dia bore with Reverse Rotatry Rig Upto 150 m depth BGL.	Mtr	1135.75		1249.32	
b	Drilling of 550mm dia bore with Reverse Rotatry Rig Beyond 150 m depth BGL up to 300 Mtr	Mtr	1497.90		1647.69	
c	Drilling of 550mm dia bore with Reverse Rotatry Rig Beyond 300 m depth BGL to onward depth	Mtr	1833.93		2017.33	
28.85E	Drilling of 500mm dia bore with Reverse Rotatry Rig in all kinds of soil including the cost of consumable stores, fuel oil and transportation of rig to the site. complete in all respect.					
a	Drilling of 500mm dia bore with Reverse Rotatry Rig Upto 150 m depth BGL.	Mtr	1107.70		1218.47	
b	Drilling of 500mm dia bore with Reverse Rotatry Rig Beyond 150 m depth BGL up to 300 Mtr	Mtr	1441.82		1586.00	



Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
c	Drilling of 500mm dia bore with Reverse Rotatry Rig Beyond 300 m depth BGL to onward depth	Mtr	1777.85		1955.64	
28.86	Making temporary water supply arrangement for drilling of tubewell with reverse rotary rig till completion of bore & packing of gravel					
	Depth of temporary bore up to 90 m	Mtr	545.63		600.19	
28.87	Making electric Logging of borehole with electronic well logger including cost of equipment at site etc.complete in all respect	Each	15848.57		17433.43	
28.88	Supplying at quarry site of gravel of 1/16" to 1/8" sizes including pouring and packing in the annular space between the pipes assembly and the bore.The gravel should be free from, dust,dirt, or the vegetable manner as per IS 4097/1967 with latest amendments (to be paid as per actual length of pipe)	Cum	88.52	738.68	97.38	747.53
28.89	Supplying and fixing mild steel centering guides made out of 32mm x 6mm thick M.S. bar complete in all respects.	Each	56.45	290.79	62.09	296.44
28.90	Supplying,fixing and testing at site Automatic electronic type water level indication system with gun metal float sensor and electrical cable suitable for three phase pump submersible / monoblock to be fixed on existing panel for OHSRs complete in all respects.	Each	992.11	11360.62	1091.32	11459.83
28.91	Boring/drilling bore well of required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer – in-charge, upto 90 metre depth below ground level.	Each				
<b>A</b>	<b>All types of soil.</b>					

Sr. No.	Description.	Unit	Zone-A		Zone-B	
			Labour Rates	Through Rates	Labour Rates	Through Rates
1	2	3	4	5	6	7
(a)	300 mm dia.	Mtr	468.53		515.38	
(b)	350 mm dia.	Mtr	512.46		563.70	
(c)	400 mm dia.	Mtr	655.94		721.53	
<b>B</b>	<b>Rocky Strata including Boulders</b>	Mtr				
(a)	300 mm dia.	Mtr	1048.60		1153.46	
(b)	350 mm dia.	Mtr	1085.62		1194.18	
(c)	400 mm dia.	Mtr	1209.75		1330.72	
28.92	Supplying, assembling, lowering and fixing in vertical position in bore well,unplasticized PVC medium well casing (CM) pipe of required dia, conforming to IS: 12818-2010, including required hire and labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer – in-charge.					
(a)	100 mm nominal size dia.	Mtr	24.43	496.01	26.87	498.46
(b)	150 mm nominal size dia.	Mtr	25.52	1012.58	28.08	1015.14
(c)	200 mm nominal size dia.	Mtr	26.62	1808.83	29.28	1811.49
28.93	Supplying, assembling, lowering and fixing in vertical position in bore well unplasticized PVC medium well screen (RMS) pipes with ribs, conforming to IS:12818, including hire & labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer-in-charge.					
(a)	100 mm nominal size dia.	Mtr	48.50	632.52	53.35	637.37
(b)	150 mm nominal size dia.	Mtr	59.44	1344.64	65.38	1350.58
(c)	200 mm nominal size dia.	Mtr	70.37	2565.43	77.41	2572.47

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.94	Providing and fixing factory made precast RCC perforated drain covers, having concrete of strength not less than M-25, of size 1000 x 450x50 mm, reinforced with 8 mm dia four nos longitudinal & 9 nos cross sectional T.M.T. hoop bars, including providing 50 mm dia perforations @ 100 to 125 mm c/c, including providing edge binding with M.S. flats of size 50 mm x 1.6 mm complete, all as per direction of Engineer -in-charge.		Each	103.84	1246.12	114.22	1256.50
28.95 A	Jointing P.V.C. / H.D.P.E Pipes and specials with PVC coupling and cement solvent excluding the cost of PVC coupling and cement solvent, including testing etc. complete in all respect.						
	(a)	20 mm o/d pipe and specials	each	9.48		10.42	
	(b)	25 mm o/d pipe and specials	each	10.66		11.73	
	(c)	32 mm o/d pipe and specials	each	11.26		12.38	
	(d)	40 mm o/d pipe and specials	each	11.84		13.02	
	(e)	50 mm o/d pipe and specials	each	12.43		13.68	
	(f)	63 mm o/d pipe and specials	each	13.03		14.33	
	(g)	75 mm o/d pipe and specials	each	14.21		15.63	
	(h)	90 mm o/d pipe and specials	each	14.81		16.29	
	(i)	110 mm o/d pipe and specials	each	15.40		16.94	
	(j)	125 mm o/d pipe and specials	each	15.99		17.59	
	(k)	140 mm o/d pipe and specials	each	16.58		18.23	
	(l)	160 mm o/d pipe and specials	each	17.17		18.89	
	(m)	180 mm o/d pipe and specials	each	17.76		19.54	
	(n)	200 mm o/d pipe and specials	each	18.36		20.19	
	(o)	225 mm o/d pipe and specials	each	18.95		20.85	
	(p)	250 mm o/d pipe and specials	each	19.54		21.50	
	(q)	280 mm o/d pipe and specials	each	20.14		22.15	

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	(r)	315 mm o/d pipe and specials	each	20.73		22.80	
	(s)	355 mm o/d pipe and specials	each	21.31		23.44	
	(t)	400 mm o/d pipe and specials	each	21.91		24.10	
	(u)	450 mm o/d pipe and specials	each	22.50		24.75	
	(v)	500 mm o/d pipe and specials	each	23.09		25.40	
	(w)	560 mm o/d pipe and specials	each	23.69		26.06	
	(x)	630 mm o/d pipe and specials	each	24.28		26.71	
28.95 B	Cutting P.V.C. / H.D.P.E Pipes and specials and chipping or filing the cut surface to a uniform finish complete: -						
	(a)	20 mm o/d pipe	each	4.29		4.72	
	(b)	25 mm o/d pipe	each	4.87		5.36	
	(c)	32 mm o/d pipe	each	5.47		6.01	
	(d)	40 mm o/d pipe	each	6.06		6.67	
	(e)	50 mm o/d pipe	each	6.80		7.48	
	(f)	63 mm o/d pipe	each	7.39		8.13	
	(g)	75 mm o/d pipe	each	7.97		8.77	
	(h)	90 mm o/d pipe	each	8.57		9.42	
	(i)	110 mm o/d pipe	each	9.16		10.08	
	(j)	125 mm o/d pipe	each	9.90		10.89	
	(k)	140 mm o/d pipe	each	10.48		11.53	
	(l)	160 mm o/d pipe	each	11.08		12.18	
	(m)	180 mm o/d pipe	each	11.67		12.84	
	(n)	200 mm o/d pipe	each	12.26		13.49	
	(o)	225 mm o/d pipe	each	12.86		14.14	
	(p)	250 mm o/d pipe	each	13.59		14.94	
	(q)	280 mm o/d pipe	each	14.18		15.60	

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	(r)	315 mm o/d pipe	each	14.77		16.25	
	(s)	355 mm o/d pipe	each	15.37		16.90	
	(t)	400 mm o/d pipe	each	15.96		17.56	
	(u)	450 mm o/d pipe	each	16.55		18.21	
	(v)	500 mm o/d pipe	each	17.14		18.85	
	(w)	560 mm o/d pipe	each	17.73		19.50	
	(x)	630 mm o/d pipe	each	18.32		20.16	
28.96 A	Jointing of C.I. Pipes as per IS:1536, Valves and specials with lead caulked joints ,excluding cost of lead and yarn but including cost of labour fuel and tools etc tested complete.						
	(a)	80mm i/d pipe lines	each	115.49		127.04	
	(b)	100mm i/d pipe lines	each	158.39		174.23	
	(c)	150mm i/d pipe lines	each	201.76		221.93	
	(d)	200mm i/d pipe lines	each	255.63		281.19	
	(e)	250mm i/d pipe lines	each	305.20		335.72	
	(f)	300mm i/d pipe lines	each	378.38		416.22	
	(g)	350mm i/d pipe lines	each	421.08		463.18	
	(h)	400mm i/d pipe lines	each	507.54		558.29	
	(i)	450mm i/d pipe lines	each	614.76		676.23	
	(j)	500mm i/d pipe lines	each	692.13		761.34	
	(k)	600mm i/d pipe lines	each	886.05		974.66	
28.96 B	Jointing of C.I. Pipes as per IS:1536, Valves and specials with lead caulked joints ,including cost of lead , yarn and cost of labour fuel and tools etc with testing complete.						
	(a)	For 80mm i/d pipe lines	each	88.83	544.36	97.71	553.24
	(b)	For 100mm i/d pipe lines	each	118.43	728.34	130.27	740.18

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	(c)	For 150mm i/d pipe lines	each	142.12	1059.53	156.33	1073.74
	(d)	For 200mm i/d pipe lines	each	177.65	1389.04	195.42	1406.81
	(e)	For 250mm i/d pipe lines	each	213.18	1729.46	234.50	1750.78
	(f)	For 300mm i/d pipe lines	each	272.40	2125.42	299.63	2152.66
	(g)	For 350mm i/d pipe lines	each	296.08	2467.75	325.69	2497.36
	(h)	For 400mm i/d pipe lines	each	355.30	3011.23	390.83	3046.76
	(i)	For 450mm i/d pipe lines	each	438.20	3579.41	482.02	3623.23
	(j)	For 500mm i/d pipe lines	each	509.26	4103.23	560.19	4154.15
	(k)	For 600mm i/d pipe lines	each	651.38	5090.91	716.52	5156.04
28.97	Cutting of C.I. Pipes , specials and chipping or filing the surface to a uniform finish.						
	(a)	80mm i/d pipe lines	each	41.14		45.25	
	(b)	100mm i/d pipe lines	each	52.98		58.27	
	(c)	150mm i/d pipe lines	each	67.63		74.39	
	(d)	200mm i/d pipe lines	each	91.31		100.44	
	(e)	250mm i/d pipe lines	each	116.40		128.04	
	(f)	300mm i/d pipe lines	each	131.05		144.16	
	(g)	350mm i/d pipe lines	each	156.14		171.75	
	(h)	400mm i/d pipe lines	each	191.67		210.83	
	(i)	450mm i/d pipe lines	each	230.00		253.00	
	(j)	500mm i/d pipe lines	each	253.69		279.06	
	(k)	600mm i/d pipe lines	each	318.52		350.37	
28.98	Jointing of A.C. Pipes and specials with A.C coupling or C.I detachable joint, fitting with bolts and nuts of grooved ends ,excluding cost of C.I D-Joint, A.C coupling rubber rings , bolts & nuts including testing etc complete in all respect						

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	(a)	80mm i/d pipe lines	each	59.21		65.14	
	(b)	100mm i/d pipe lines	each	88.83		97.71	
	(c)	150mm i/d pipe lines	each	138.17		151.99	
	(d)	200mm i/d pipe lines	each	236.87		260.56	
	(e)	250mm i/d pipe lines	each	355.30		390.83	
28.99	Cutting of A.C. Pipes and specials and chipping or filing the cut surface to a uniform finish complete in all respect						
	(a)	80mm i/d pipe lines	each	30.31		33.34	
	(b)	100mm i/d pipe lines	each	36.51		40.16	
	(c)	150mm i/d pipe lines	each	42.72		46.99	
	(d)	200mm i/d pipe lines	each	48.91		53.80	
	(e)	250mm i/d pipe lines	each	55.12		60.63	
28.100	Jointing of D.I. Pipe and Specials with rubber tyton joints fitted complete excluding the cost rubber gasket including testing etc complete in all respect						
	(a)	80mm i/d pipe lines	Each	82.90		91.19	
	(b)	100mm i/d pipe lines	Each	88.83		97.71	
	(c)	150mm i/d pipe lines	Each	94.75		104.23	
	(d)	200mm i/d pipe lines	Each	100.67		110.73	
	(e)	250mm i/d pipe lines	Each	106.59		117.25	
	(f)	300mm i/d pipe lines	Each	118.43		130.27	
	(g)	350mm i/d pipe lines	Each	130.28		143.31	
	(h)	400mm i/d pipe lines	Each	142.12		156.33	
	(i)	450mm i/d pipe lines	Each	153.97		169.36	
	(j)	500mm i/d pipe lines	Each	165.80		182.39	
	(k)	600mm i/d pipe lines	Each	177.65		195.42	

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	(l)	700mm i/d pipe lines	Each	189.49		208.44	
	(m)	750mm i/d pipe lines	Each	201.33		221.46	
	(n)	800mm i/d pipe lines	Each	225.02		247.52	
	(o)	900mm i/d pipe lines	Each	248.71		273.58	
	(p)	1000mm i/d pipe lines	Each	272.40		299.63	
28.101	Cutting of D.I. Pipe and specials and chipping or filing the cut surface to a uniform finish complete in all respect						
	(a)	80mm i/d pipe lines	Each	52.98		58.27	
	(b)	100mm i/d pipe lines	Each	58.90		64.79	
	(c)	150mm i/d pipe lines	Each	67.63		74.39	
	(d)	200mm i/d pipe lines	Each	73.55		80.91	
	(e)	250mm i/d pipe lines	Each	80.88		88.96	
	(f)	300mm i/d pipe lines	Each	89.60		98.56	
	(g)	350mm i/d pipe lines	Each	102.84		113.12	
	(h)	400mm i/d pipe lines	Each	114.69		126.16	
	(i)	450mm i/d pipe lines	Each	129.34		142.27	
	(j)	500mm i/d pipe lines	Each	141.18		155.29	
	(k)	600mm i/d pipe lines	Each	158.63		174.49	
	(l)	700mm i/d pipe lines	Each	173.28		190.60	
	(m)	750mm i/d pipe lines	Each	185.11		203.62	
	(n)	800mm i/d pipe lines	Each	199.76		219.74	
	(o)	900mm i/d pipe lines	Each	211.61		232.77	
	(p)	1000mm i/d pipe lines	Each	232.18		255.39	
28.102	Supplying and Fixing PVC Repair/service saddle for repair of PVC pipe line excluding the cost of excavation complete in all respects.						



Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	a	90 mm i/d	Each	124.01	227.45	136.41	239.85
	b	110 mm i/d	Each	155.00	273.16	170.50	288.66
	c	160 mm i/d	Each	186.00	364.50	204.60	383.10
28.103	Supplying and Fixing PVC Detachable joint for reappear of PVC pipe line excluding the cost of excavation complete in all respects.						
	a	90 mm i/d	Each	62.00	158.85	68.20	165.05
	b	110 mm i/d	Each	93.00	211.39	102.31	220.69
	c	160 mm i/d	Each	124.01	285.43	136.41	297.83
	d	250 mm i/d	Each	155.00	424.05	170.50	439.55
28.104 A	Providing and installing in position of domestic water pressure boosting pump of approved make (To the approval of Engineer-in-charge) including all pump accessories but excluding cost of G.I pipe & specials complete in all respects.						
	a)	Pressure pump of 0.5 HP with 2700 LPH, 35meter head with C.I pump & 19 litre capacity Tank	Each	1184.33	18594.76	1302.77	18713.20
	b)	Pressure pump of 0.65 HP with 2700 LPH, 37meter head with SS pump & 19 litre capacity Tank	Each	1184.33	20236.29	1302.77	20354.72
	c)	Pressure pump of 1.0 HP with 3300 LPH, 50meter head with C.I pump & 19 litre capacity Tank	Each	1184.33	20439.27	1302.77	20557.71
	d)	Pressure pump of 0.8 HP with 4800 LPH, 40meter head with C.I pump & 19 litre capacity Tank	Each	1184.33	23845.21	1302.77	23963.64
	e)	Pressure pump of 1.0 HP with 4800 LPH, 45meter head with SS pump & 19 litre capacity Tank	Each	1184.33	25302.39	1302.77	25420.83

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	f)	Pressure pump of 0.5 HP with 2000 LPH, 32meter head with C.I pump & 5 litre capacity Tank	Each	1184.33	10174.29	1302.77	10292.72
28.104 B	Providing and installing in position premium range water pressure boosting pump (To the approval of Engineer-in-charge) including all pump accessories but excluding cost of G.I pipe & specials complete in all respects.						
	a)	Pressure pump of 0.7 HP with 3100 LPH, 25.6 meter head with SS pump & 24 litre capacity Tank Model : CM 3-4	Each	1184.33	31807.52	1302.77	31925.95
	b)	Pressure pump of 0.7 HP with 4700 LPH, 20.3meter head with SS pump & 24 litre capacity Tank Model : CM 5-3	Each	1184.33	29765.13	1302.77	29883.56
	c)	Pressure pump of 0.9 HP with 4700 LPH, 27.3meter head with SS pump & 24 litre capacity Tank Model : CM 5-4	Each	1184.33	36261.96	1302.77	36380.39
	d)	Pressure pump of 0.7 HP with 2000 LPH, 25 meter head with SS pump & 18 litre capacity Tank Model : CM 3-3	Each	1184.33	29163.32	1302.77	29281.75
	e)	Pressure pump of 0.4 HP with 2000 LPH, 18 meter head with SS pump & 8 litre capacity Tank	Each	1184.33	26796.15	1302.77	26914.58
28.105	Providing, laying, fixing, testing and commissioning of 'C' Class heavy duty MS Pipe conforming to Indian Standard IS : 1239/3589 including fittings like tees, bends, sockets, elbows, flanges, tapers, nuts bolts, gaskets etc. in ground with anti corrosive treatment with wrapping coating tape (4mm pypkote tape) as per IS : 10221 including cost of primer etc. excluding cost of excavation and refilling complete in all resepts.						
	a	100mm internal diameter	Mtr	214.35	1646.65	235.78	1668.08

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	b	150mm internal diameter	Mtr	293.29	2388.02	322.62	2417.35
	c	200mm internal diameter	Mtr	372.25	3534.28	409.48	3571.50
28.106	Providing, laying, fixing, testing and commissioning of 'C' Class heavy duty MS Pipe conforming to Indian Standard IS : 1239/3589 including fittings like tees, bends, sockets, elbows, flanges, tapers, nuts bolts, gaskets etc. on surface and providing angle iron support or cement concrete block as support including painting with two or more coats of synthetic enamel paint of required shade complete in all respects.						
	a	100mm internal diameter	Mtr	214.35	1440.86	235.78	1462.29
	b	150mm internal diameter	Mtr	293.29	2090.33	322.62	2119.66
	c	200mm internal diameter	Mtr	372.25	3166.86	409.48	3204.09
28.107	Providing, laying, fixing, testing and commissioning of 'C' Class heavy duty MS Pipe conforming to Indian Standard IS : 1239/3589 including fittings like tees, bends, sockets, elbows, flanges, tapers, nuts bolts, gaskets etc. fixing the pipe on the wall / ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete in all respects.						
	a	25mm internal diameter	Mtr	49.81	298.01	54.79	302.99
	b	32mm internal diameter	Mtr	54.51	374.44	59.96	379.90
	c	40mm internal diameter	Mtr	73.32	445.94	80.65	453.27
	d	50mm internal diameter	Mtr	99.62	654.53	109.59	664.49
	e	65mm internal diameter	Mtr	127.84	816.57	140.62	829.36
	f	80mm internal diameter	Mtr	157.91	992.66	173.70	1008.45
	g	100mm internal diameter	Mtr	214.35	1440.86	235.78	1462.29
	h	150mm internal diameter	Mtr	293.29	2090.33	322.62	2119.66
	i	200mm internal diameter	Mtr	372.25	3166.86	409.48	3204.09

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.108	Supplying, Installation, Testing and Commissioning of G.M Single headed hydrant valve with instantaneous Gun metal peet coupling of 63 mm dia with cast iron wheel ISI marked conforming to IS 5290 (TypeA) with blank Gunmetal Cap and chain including orifice plate made of 6mm th Stainless steel to keep the pressure not more than 3.5 per sqcm at any point complete in all respects.		Each	177.64	6440.03	195.41	6457.79
28.109	Supplying, Installation, Testing and Commissioning of G.M Double headed hydrant valve with instantaneous Gun metal peet coupling of 63 mm dia with cast iron wheel ISI marked conforming to IS 5290 (TypeA) with blank Gunmetal Cap and chain including orifice plate made of 6mm th Stainless steel to keep the pressure not more than 3.5 per sqcm at any point complete in all respects.		Each	177.64	12632.80	195.41	12650.57
28.110	Supplying, Installation, Testing and Commissioning 63 mm dia gun-metal Branch Pipe (ISI marked) with 20mm (nominal internal dia) size Gun metal nozzle confirming to IS 903, suitable for instantaneous connection to interconnect hose pipe coupling as required.		Each	71.06	1943.47	78.17	1950.58
28.111	Supplying, Installation, Testing and Commissioning of Single suction collecting head with cast iron body, nose coupling (draw out connection) with female outlet complete bolts, nuts and rubber insertions, but without 100mm dia. MS suction pipe (with puddle flange) with a foot valve, complete as required.		Each	236.86	4378.33	260.54	4402.02
28.112	Providing and fixing fire brigade inlet connection of cast iron body with Gun metal 63mm dia instantaneous type male coupling with built in check valves and 150mm dia flanged outlet complete with bolts, nuts and rubber insertions as per IS:904. (to be connected to static tank).						
a	Four Way inlet connection		Each	355.31	9249.06	390.84	9284.59
b	Three Way inlet connection		Each	355.31	7506.55	390.84	7542.08

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	c	Two Way inlet connection	Each	355.31	6239.28	390.84	6274.81
28.113	Supplying, Installation, Testing and Commissioning of RRL FIRE hose Type A, IS:636, 63mm dia x 15m long with gunmetal male & female couplings (ISI marked) bound & riveted to hose pipes with copper rivets and copper wire as required.		Each	118.45	4471.85	130.30	4483.70
28.114	Supplying, Installation, Testing and Commissioning of Non-percolating flexible CP HOSE as per IS:8423 / 1994 ISI marked 63mm dia x 15 m long complete with instantaneous type gun-metal 63 mm dia male & female coupling (IS: 903) bound and riveted to hose pipes.		Each	118.45	3984.09	130.30	3995.94
28.115	Supplying, Installation, Testing and Commissioning of First Aid-fire Hose reel with MS construction spray painted in post office red, confirming to IS 884 with upto date amendments, complete with rubber hose pipe (IS:444/1987) 20mm dia 30 meter long type-2, hose reel Drum with bracket as per IS:884, 20mm dia GM nozzle and 20mm dia GM gate valve as required complete with G.I pipe connention with main pipe complete in all respect.		Each	710.60	9048.00	781.65	9119.06
28.116	Supplying, Installation, Testing and Commissioning standard Fire Man's axe with heavy insulated rubber conforming to IS 936 complete in all respect.		Each	28.21	805.85	31.03	808.67
28.117	Supplying, Installation, Testing and Commissioning of weather proof cabinet for hose fabricated out of 1.6mm thickness M.S. sheet with front glass door having locking arrangement, suitable to accommodate all the necessary pipes, accessories, fittings etc including painting the metal portion with one coat of ready mixed primer paint and two coats of synthetic enamel paint of approved shade and quality, sign writing etc.						
	a	900 mm wide x 600 mm high x 500 mm deep Size (for Yard Hydrant)	Each	473.74	5260.20	521.11	5307.57

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	b	600 mm wide x 600 mm high x 300 mm deep Size - (for RRL Reel)	Each	355.31	4104.70	390.84	4140.23
	c	750 mm wide x 600 mm high x 250 mm deep Size	Each	355.31	4344.03	390.84	4379.56
	d	1200 mm wide x 900 mm high x 400 mm deep Size	Each	355.31	6737.26	390.84	6772.79
28.118	Supplying & fixing air vessel made out of 250mm. Dia, 8 mm thick MS sheet, 1200mm height with air release valves on top and flanged connection to risers, drain arrangements with 25 mm dia gunmetal wheel valves, with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade as required		Each	710.60	17412.02	781.65	17483.08
28.119	Supplying & fixing air vessel made out of 450mm. Dia, 8 mm thick MS sheet, 2000mm height with air release valves on top and flanged connection to risers, drain arrangements with 50 mm dia gunmetal wheel valves, with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade as required		Each	829.05	23683.64	911.95	23766.54
28.120	Providing and fixing of Pressure switch of approved make in MS pipe line suitable for line pressure up to 15kg/cm <sup>2</sup> & including connection with main panel etc. as required complete in all respects		Each	355.31	3606.33	390.84	3641.87
28.121	Providing and fixing S.S Pressure Gauge complete as required complete in all respects.						
	a	Dial diameter 150mm calibration 0-16 Kg	Each	146.65	1027.61	161.32	1042.28
	b	Dial diameter 100mm calibration 0-16 Kg	Each	146.65	768.51	161.32	783.17

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.122	Supplying an Fixing Pendant / Upright type sprinkler with quartzoid bulb, operating temperature 68 / 79 degree centigrade of 15 mm dia orifice sprinler head to approved by UL/SN		Each	46.49	255.07	51.14	259.72
28.123	Supplying and Fixing Sidewall Sprinkler rated at 68 / 79degree centigrade, quartzoid bulb type, 15 mm dia orifice sprinler head to approved by UL/SN complete in all respect.		Each	46.49	295.23	51.14	299.88
28.124	Providing and fixing of FIRE EXTINGUISHER, ABC Powder type (stored pressure) as per IS: 15683 complete with all accessories as per Manufactures Specification. ISI Mark complete in all respect.						
	a	2 Kg. Capacity	Each	124.01	1645.99	136.41	1658.39
	b	4 Kg. Capacity	Each	124.01	2161.24	136.41	2173.64
	c	6 Kg. Capacity	Each	124.01	2790.98	136.41	2803.38
28.125	Providing and fixing of FIRE EXTINGUISHER, CO2 type as per IS: 15683 complete with all accessories as per Manufactures Specification. ISI Mark complete in all respect.						
	a	2 Kg. Capacity	Each	124.01	4852.01	136.41	4864.41
	b	3 Kg. Capacity	Each	124.01	5768.03	136.41	5780.43
	c	4.5 Kg. Capacity	Each	124.01	6787.08	136.41	6799.48
28.126	Providing and fixing of FIRE EXTINGUISHER, Mechanical Foam Type 9 ltr IS: 15683 Stored Pressure type complete with all accessories as per Manufactures Specification. ISI Mark of approved make complete in all respect.		Each	124.01	2848.26	136.41	2860.66
28.127	Supplying and Installation control valve C/W water motor gong complete with alarm Valve, constant trim, water motor bell, 2No. Pressure Gauge. All parts UL listed. Make Newage complete in all respect.						
	a	150 mm control valve	Each	434.00	30827.70	477.40	30871.10

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	b	100 mm control valve	Each	434.00	26429.88	477.40	26473.28
28.128	Supplying, Laying, Testing and Commissioning of ISI marked BUTTERFLY VALVE PN 1.6, with Gun metal seal duly ISI marked complete with rubber insertion, nuts, bolts and washers, matching flanges of required thickness, etc. complete as per specifications.						
	a	80 mm i/d	Each	236.86	2566.13	260.54	2589.82
	b	100 mm i/d	Each	296.08	3256.80	325.69	3286.41
	c	150 mm i/d	Each	355.31	5179.16	390.84	5214.70
	d	200 mm i/d	Each	414.50	8929.44	455.95	8970.89
28.129	Supplying, Installation, Testing and Commissioning of cast iron flanged Y type strainer with stainless steel mesh in PN-1.0 including cost of Nut Bolt , rubber insertion complete in all respects.						
	a	150 mm i/d	Each	177.64	7330.01	195.41	7347.77
	b	200 mm i/d	Each	236.86	14430.10	260.54	14453.79
28.130	Proving & fixing Dual plate check valve flanged end class PN-1.6 as per IS with nitrile seat SS shaft & springs in pipe lines including jointing & cost of Nut Bolt , rubber insertion etc. complete.						
	(a)	80mm i/d check valve .	Each	236.86	3152.33	260.54	3176.02
	(b)	100mm i/d check valve	Each	296.08	4450.47	325.69	4480.08
	(c)	150mm i/d check valve	Each	355.31	7880.71	390.84	7916.24
	(d)	200mm i/d check valve	Each	414.50	12808.01	455.95	12849.46
28.131	Providing and fixing in position Cast Iron Foot valves flanged ends with rubber sheat as per IS 4038 including cost of Nut Bolt , rubber insertion complete in all respect						
	a)	50mm i/d Cast Iron Foot valves	Each	124.00	1464.55	136.39	1476.95



Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
	b)	65mm i/d Cast Iron Foot valves	Each	124.00	1659.48	136.39	1671.88
	c)	80mm i/d Cast Iron Foot valves	Each	155.00	2157.64	170.50	2173.14
	d)	100mm i/d Cast Iron Foot valves	Each	186.00	3452.32	204.60	3470.92
	e)	150mm i/d Cast Iron Foot valves	Each	217.00	6198.88	238.70	6220.58
28.132	Providing and fixing Vane type Water flow switch in MS Pipe line for a service pressure up to 450PSI , Minimum flow rate for alarm 10GPM (38 LPM ), Minimum surge 18 FPS (5.5 m/s ) including connection with panel complete in all respect						
	a	For 50mm to 150 mm pipe line	Each	3652.31	12691.83	4017.54	13057.06
	b	For 200mm pipe line	Each	3948.39	14472.28	4343.23	14867.12
28.133	Providing and fixing Sprinkler flexible drops stainless steel SS 304 C/W ½ “ NPT on reducer thread, with Max. working pressure of 175 PSI , Test pressure 875 PSI ( BURST ) with branch line ( inlet ) 1” NPT female thread , 01 No reducer , 01 no nipple , 02 no side brackets, 01 no centre brackets etc. complete set , unbraided UL listed complete in all respect.						
	a	1000 mm length	Each	118.45	1025.32	130.30	1037.17
	b	1200 mm length	Each	118.45	1128.96	130.30	1140.80
	c	1500 mm length	Each	118.45	1180.77	130.30	1192.62
28.134	Drilling of 625mm dia bore with Percussion Rig (Telescopic Method) in all kinds of soil including the cost of consumable stores, fuel oil and transportation of rig to the site. complete in all respect in Area of District pathankot , Talwara and Nagal.						
	a	Drilling of 625mm dia bore with Percussion Rig (Telescopic Method) Upto 150 m depth BGL.	Mtr	10534.98		11588.48	

Sr. No.	Description.		Unit	Zone-A		Zone-B	
				Labour Rates	Through Rates	Labour Rates	Through Rates
1	2		3	4	5	6	7
28.135	Drilling of 400mm dia bore with Direct Rotatry Rig in all kinds of soil including the cost of consumable stores, fuel oil and transportation of rig to the site. complete in all respect.						
	a	Drilling of 400mm dia bore with Direct Rotatry Rig Upto 200 m depth BGL.	Mtr.	6474.43		7121.87	
	b	Drilling of 400mm dia bore with ReverseDirect Rig Beyond 150 m depth up to 300 Mtr	Mtr.	5472.30		6019.53	
28.135A	Drilling of 450mm dia bore with Direct Rotatry Rig in all kinds of soil including the cost of consumable stores, fuel oil and transportation of rig to the site. complete in all respect.						
	a	Drilling of 450mm dia bore with Direct Rotatry Rig Upto 150 m depth BGL.	Mtr.	6586.57		7245.23	
	b	Drilling of 450mm dia bore with Direct Rotatry Rig Beyond 150 m depth up to 300 Mtr	Mtr.	7033.08		7736.39	
	c	Drilling of 450 mm dia bore with Direct Rotatry Rig Beyond 300 m depth up to onward depth	Mtr.	7479.58		8227.54	
28.135B	Drilling of 500 mm dia bore with Direct Rotatry Rig in all kinds of soil including the cost of consumable stores, fuel oil and transportation of rig to the site. complete in all respect.						
	a	Drilling of 500mm dia bore with Direct Rotatry Rig Upto 150 m depth BGL.	Mtr.	6698.73		7368.60	
	b	Drilling of 500mm dia bore with Direct Rotatry Rig Beyond 150 m depth up to 300 Mtr	Mtr.	7145.23		7859.75	
	c	Drilling of 500 mm dia bore with Direct Rotatry Rig Beyond 300 m depth up to onward depth	Mtr.	7591.73		8350.90	

## CHAPTER NO. 29

### SEWERAGE AND DRAINAGE

- 1 Considering cost factor HDPE pipe sewer should be avoided to the best possible, It is recommended only for particular situations/ site conditions such as for crossing above and below railway lines, roads, canals, drains, ponds and under sub soil water etc where direct heavy loads are not coming on the pipes.
- 2 For Technical reasons UPVC pipes be preferred upto 400 mm i/d, being cheap, long life, requires lesser self cleaning velocity, lesser gradients, available in bulk, leak proof joints, easy to install, local sand is used in stead of PCC, hence reducing the depths of Main Pumping Stations and Sewerage Treatment Plants (As such the Costs) along with low maintenance cost ,
- 3 Where sewers are to be remain immersed under water for most of the time, in such conditions RCC s/s pipes having HDPE lining be preferred and in the worst situations HDPE sewer can be used with prior approval of Technical Sanctioning Authority.
- 4 For the rising mains UPVC pipes upto 400 mm id, above 400 upto 1000 mm id HDPE and above 1000 mm id RCC s/s pipes having HDPE lining be preferred. All joints must be tested before back filling of earth for desired pressure to be leak proof. PCC blocks can be provided on joints of RCC pipe's in rising mains.
- 5 Where ever at road crossings the required cover on pipe is less and are subjected to heavy vehicular traffic, bridging on wells and drains crossings etc, pipes be protected by providing PCC or RCC enclosures depending upon the site requirements.
- 6 When lump sum rate is quoted by contractor for any item of excavation work covered in CSR, the work will be got executed as per PWD specifications and payment will be made only for sections as per standard norms or sections taken in tender bid if any. Nothing extra will be payable to contractor due to increase in section or change in nature of soil or change in nature of timbering what so ever may be required to be done for the specified excavation work except dewatering of sub soil water if required.
- 7 Through rates in Chapter 29 of PWD (CSR) for all pipe sewers are only for estimation purpose. The Allotment Authority before the allotment of the works will have to verify the prevailing lowest and reasonable rates throughout in the open market taking into accounts all discounts and facilities etc. offered by the supplier/manufacturer for supply in bulk. The entire responsibility of rates approval will rest on allotting authorities in person, where as the recommendation received by the allotting authority will not be a justification.

Note:1 Contractor must provide, fix and maintain sign boards, fencing of trenches indicator for the work under execution, provision for diversion for traffic, protection of existing services i.e. telephone cables ,electric lines, water supply lines and gas lines etc. night signals, profiles, pegs, sight rails, boning rods, fixing and maintenance of caution boards and any other safety measure required at site.

Note: 2 Until unless specified in DNIT, the maximum width of trenches for payment purposes shall be as given in PWD specification book, If actual width of trench is less than the specified, in this case the actual volume of excavation shall be paid. If the actual width of trench is greater than specified in this case only standard specified section will be paid.

- Note: 3 Nothing extra will be payable in respect of item No. 29.1 to 29.5 for any seepage of water during excavation work above spring level.
- Note: 4 The rates of item No. 29.1 to 29.5 includes and cover the cost of removing trees, roots, kankars and other hard materials met in excavation
- Note: 5 If excavation for any sewer is carried out by 'cut and cover' i.e. sinking shaft and tunneling in between, the contractor shall be paid for such work as if the trench had been opened for full length, but no extra will be allowed other than the full measurement of trench. it will be entirely on the discretion of Engineer in charge to permit the excavation by cut and cover method. Back filling of shafts and tunnels must all times be carried throughly and to the satisfaction of Engineer in charge.
- Note: 6 If any excavation is abandoned due to change in alignment of sewer necessiated by any obstruction such as pipes, electric/ telephone cables or other reason what so ever may be, the contractor will be paid actual work done in that trench and back fillings etc.
- Note: 7 Where Engineer in charge so directs earth filling in trenches will be carried out by mechanical rammers, extra for compaction rate will be payable under road chapter.
- Note: 8 No extra shall be payable in respect of item 29.1 to 29.5 , due to other unforeseen difficulties, hardness of soil, or surface and other factors. This rate does not include cutting through metalled roads and sorting stacking of road metall, which will be paid separately.
- Note: 9 Excavation from items 29.1 to 29.5 is to be done as per PWD specifications, standard sections and contract drawings. In case of unavoidable circumstances where excavation is required with open cuttings, concerned Superintending Engineer to his satisfaction depending upon the nature of soil and site conditions is competent grant prior approval for open cutting along with the side slopes. This approval will be for particular street/ lane but not for the whole area. Section approved by the Suprintending Engineer will be final.
- Note: 10 If road cutting is involved in excavation, then it's width should not be more than 115 mm beyond edge of excavated trenches on each side. where width of road cut is required to be increased than the standard widths, prior approval of the Superintending Engineis is required. In case road cut done at site is more than norms/ approved by the Superintending Engineer, excess road cut will not be payable. On the other hand cost of reconditioning of excess road cut must be recovered from the contractor.
- Note: 11 Excavation work will be done manually in built up street/ lane where wall to wall width is upto 3.0 metre. Where as in open area or built up street/ lane having wall to wall width more than 3.0 metre, excavation will be done by mechanical means. In case of unavoidable circumstances,if, manual excavation is required other than the specified above, Superintending Engineer is competent to permit after his personnel satisfacion subject to prior approval on the record. If prior approval is not accorded for manual excavation then contractor will be paid as excavation by mech. means and the contactor will have no claim for that.
- Note: 12 Where and which type of timbering is required to support sides of trench in particular street/ lane, will be decided by the Engineer in charge depending upon nature of soil and site conditions before laying sewer and .will also put on record the nature of soil and site condition, that is for first 2.0 metre depth of trench and further for subsequent band of 1.80 metre depths. In a particular strip if nature of soil changes within the strip, then timbering be decided for this whole strip as required for the worst soil met in that strip.

- Note: Removal of surplus spoils/earth from the site of work if required, will be decided by the Engineer in charge. He must take up tantative quantities in writting with Local Administrations (M.C./ N.A.C./ Panchyat/ Owner of the project) so that surplus spoils/ earth may be filled in public place (the destination/ destinations). Before so fillings, levels of site be recorded with respect to fixed bench mark near site and then again levels be recorded after filling. Record actual measurement of earth filling and lead in measurement book (loading or unloading will not be payable). If local administration do not response to repeated requests, then Engineer in charge will decide the destination in public intrest and the record the reasons of his choice and paid accordinly.
- 13
- Note: For RCC pipe sewers, width of khutti will be 1.25D (here D is outer diametre of pipe's barrel), depth of khutti will be 0.5D, excavated bed of khutti will be 0.25D below the barrel of pipe. As such packing below pipes will be 0.25D thick at centre and 0.5D at outer edges with top surface horizontal. Each pipe can rest on both ends at precasted PCC blocks of PCC 1:2:4 having length equal to 0.5D, width 0.1D and depth 0.25D and local sand can be used as packing material in stead of lean concrete. Where as in case of PVC/ UPVC/ HDPE pipes used for sanitary/ storm sewers/ rising mains, nominal section local dry sand 100 mm thick in bed and hounches can be used instead of lean concretes. Since these pipes have lengths from 5.0 to 6.0 metres, hence 3 Nos PCC1:2:4 blocks of size 100x100 mm and length 0.5 D can be used to support each pipe).Local sand and PCC blocks will be paid separately.
- 14
- Note: To protect entry of earth, slush or mud into sewer lines/manhole chambers is contractor's responsibility. If any mud, slush, debries etc. enters into sewers/ manholes that will be removed by contractor at his own cost. Before commissioning Engineer in charge should confirm and record that sewer lines are free from any type of debries/ earth/ slush etc. If contractor fails to do so, then it should be got done at the risk and cost of the contractor,
- 15
- Note: RCC plain ended pipes are strictly prohibited for sewerage works. Where RCC plain pipes are used for some works other than sewerage, these will also be covered under rates of S/S pipes but including the cost of RCC collar. For a collar two socket joints will be paid. In case spun yarn is used instead of rubber ring nothing extra will be paid as rubber ring jointing is saved in that case.
- 16
- Note: All the sewer lines will be got tested by contractor before filling. If there is any leakage or damage during execution or after commissioning, the same will be rectified by the contractor at his own cost, loss or damage what so ever may be shall be borne by the contractor.
- 17
- Note: Dewatering of sub soil water if required at site, will be physically checked by Engineer in charge at site with respect to bench mark before dewatering proccess and will be recorded in site order book at regular intervals fortnightly along with the RDs by SDE and paid accordingly.The decision of Engineer in charge will be final and binding on the contractor.
- 18
- Note: Material defect, execution defect or other defects such as gradient etc if any on the part of the contractor, found at later stage which could not be traced while execution due to hidden work and are not part of maintenace, will remain the responsibility of the contractor to set right the same at his own cost though he may have taken his all dues.
- 19
- Note: Additional 1:2 cement sand mortar on tyton rubber joint of RCC pipes will be provided only if Engineer in charge permitts so in writting considering the requirements, other wise contractor will have no right to claim payment of cement sand mortar joint on tytone rubber joints. No cement sand mortar joint will be paid on tytone rubber joints in of RCC S/S flush jointing pipes.
- 20
- Note: If any plastic encapsulated orange colour safety footstep is fitted by the contractor in wall without providing required PCC block, not only payment of PCC is to be deducted from the items rate but nothing is to be paid for footstep so fixed and the work stands rejected. Any masonry work carried out by contractor without fixing step simutaneously in the walls were required, would be stand rejected because steps fitted on later stage will have loose grip and cause high risk to lives of sewermen.
- 21

Note: The rates in CSR items are for "ISI" marked steel reinforced RCC pipes only having sockets extended out side pipe's barrel. These rates do not cover unreinforced CC pipes and steel reinforced RCC s/s pipes having male/ female barrel flush joints. Unreinforced cement concrete pipes can only be used where BIS code permits so and that too with prior approval of allotting authority not less than Chief Engineer or Superintending Engineer (where S.E. is the highest technical post ). The rates of Unreinforced cement concrete pipes and Reinforced pipes having S/S flush joints be reduced than of CSR as per difference of the lowest rates in market.

Note: The Sewerage work shall not be treated as completed until its proper functioning is physically checked by the Engineer in charge and is duly certified.

Note: The complete rates of manhole chambers and cast in situ sewers given in CSR and its RCC slabs are only for estimation purposes, however payment of manhole chambers and cast in situ sewers are to be made only as per individual items rates in PWD Common Schedule.

Note: Steel reinforcement provided in RCC slabs and other works should be as per structural design and be recorded at the spot as actual in measurement book before pouring cement concrete and payment will be made only for actual steel consumed at site. Only Fe 500 is permitted for RCC works.

Note: Steel shuttering is to be used for RCC slabs of manhole chambers at bottom, sides and openings. Use of kucha shuttering or wooden shuttering is strictly prohibited. RCC slabs casted by using kucha or wooden shuttering will stand rejected and be recasted by using steel shuttering, nothing shall be paid for the rejected slabs on the other hands such slabs must be recasted by using steel shutterings .

Note: For jointing in SW and RCC s/s pipes (without rubber ring) by using spun Jute yarn and cement sand mortar, the one fourth length of groove inbetween socket and spigot is to be packed with spun Jute yarn fully grouted in neat cement slurry and the remaining three fourth groove length is to be filled with prescribed cement sand mortar with help of tools.

Note 28 Until otherwise specified, the labour rate for various items of construction includes handling of material within 100 metres. Through rate includes all rehandling of materials at site of work and no payment is due to the contractor on this count.

Note 29 Through rates, given in the schedule, includes the carriage of material as follow: - (a) For material such as timber, mild steel , electric goods, all types of pipes, all types of manhole covers, all types of road gullies, PVC foot steps, ventilating column pipes , cement and spun yarn etc. which have to be arranged by the contractor, the entire carriage is included in the rate irrespective of the lead. Only for the materials bricks, brick ballast, bajri, sand, stone, bitumen and cinder, extra lead involved beyond 5 km is payable as per carriage rates. -----(b) For bricks through rate includes carriage within radius of 5 km of site of work, if the source of bricks is within that limit. In case the source is beyond 5 km of the site of work, the through rate includes carriage upto first 5 km measured from source of bricks irrespective of the fact whether this initial distance consists of Katcha and pucca or partly katcha and pucca. The lead beyond this initial 5 km will be payable at the rates provided in Schedule of rates for the corresponding subsequent kilometres. For this purpose the source of bricks shall be the nearest possible working kiln or dump from where the bricks can be obtained and source shall be certified as such by the Sub Divisional Engineer in writing before releasing the payment.

Note 30 The through rate includes all octroi charges, toll tax, VAT, Labour Welfare Cess, turnover tax and other local taxes etc., what so ever paid by the contractor to bring the material at site of work.

Note 31 Through rates include the wastage and beaking of various materials during construction.

Note 32 Unless otherwise specified, the labour rate includes the cost of water, tools and plants, labour and material of scaffolding and cost of good earth for mud mortar or mud plaster where required.

- Note 33 In case of works below ground level like basement of buildings and public health works such as sewers and disposal works etc., the rates upto 4.0 metre below the ground level shall be the same as for works in superstructure or first story. For depths greater than 4.0 metres, additional rates for subsequent story will be added. For works which are not deeper than 1.50 metre from the ground level, ordinary rates for works in foundation and plinth shall apply
- Note 34 Where description of any item is too long, only essential portion may be written in estimates, tender contracts and measurement books, although it will be deemed to cover the entire item as described fully in Common shedule of rates, PWD specification and BIS codes.
- Note 35 Abrivation of units, wherever occuring in Punjab PWD Common Schedule of Rates 2010 will be applicable in revised CSR Chapter 29
- Note 36 The CSR item rates are driven on the basis of daily wages fixed by Labour Department as per minimum wages as on Sept 2019.
- Note 37 Hire charges rates include all operational and maintenance charges such as cot of fuel, lubricants, stores, establishment, depriciation and intrest charges. These rates are for estimation purpose and not for hiring private machinary from the market for which competative tenders/ quotations shall be called and approved by the competent authority. The output of machinary/ equipments are for the compact quantities of the ralevent items and not for loose quantities.
- Note 38 The rates of materials adopted for analysing the rates of various items of works includes cost of any cases/ drums/ containers/ or any type of bags etc. and are not for obtaining suppllies from the market.
- Note 39 For excavation works covered under chapter 29 separate rates have been given for streches at various depths of excavation below ground levels and are to be paid accordingly. In these chapter no lift will be converted into horizontal lead.
- Note 40 Unless otherwise stated, the dismantalling rates include sorting and stacking dismentalled material and removing the same within the distance of 100 metres. The rate cover the the cost of all tools and plants, ladders, scaffolding and other adjuncts required or dismantalling. while dismantaling also to take all necessary precautions of public property and keeping down the dust and nuisance etc.
- Note 41 The rates are including cost of steel shuteering. So only steel shuteering is to be used.
- Note 42 The labour rates as well as through rates includes cost of curing and protection in bad weather conditions.
- Note 43 The rates in these chapters are by automatic batch mixing plants or RMC, by using vibrator. For M20 and rich CC, mix should be got designed from competant lab with cement, fine and coarse ingradientis along with water ratio to be used.
- Note 44 The rates of brick work covered under chapter 29 are by using first class bricks. Second class bricks will not be permiited even by reducing the item rate.
- Note 45 Through rates of mild steel placed in RCC where not covered through rate of RCC, includes wastage and cost of binding wire.
- Note 46 The rates of all items in CSR are in Indian Rupees, including all taxes and contractors profit.

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
29.1-A	Excavation manually in trenches with straight or open cutting in built up street/ lane having wall to wall width of street/ lane upto 3.0 metre, for intramural sullage drains, extramural intercepting drains and outfall drains, storm water channels and other work contingent or incident thereto, to full dimensions and depth as shown on the drawings or as shall be required by Engineer-in-charge including dressing to correct sections and dimensions according to templates and levels, dewatering of rain water, diversion of traffic. Providing and fixing and maintenance of caution boards, fencing, night signals, for leads upto 15m and for all lifts and subsequent refilling, watering and dressing upto ground level, including removal of surplus spoil from the site upto 15 metre distance complete in all respects.						
	i	All classes of soil except rocky	Cum.	171.00	171.00	188.00	188.00
	ii	For Ordinary gravel soil having gravel upto 40%	Cum.	257.00	257.00	283.00	283.00
	iii	For semi conglomerate soil of having gravel/boulder above 40% upto 50%	Cum.	257.00	257.00	283.00	283.00



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
29.1 B	Excavation in trenches with straight or open cutting in streets, lanes or in open areas for intramural sullage drains, intramural intercepting drains and outfall drains storm water channels and other work contingent or incident thereto, by mechanical means (JCB or Hydraulic excavator) including manually dressing of bed, trimming of sides and sides slopes to full dimensions and depth as shown on the drawings or as shall be required by Engineer-in-charge including dressing to correct sections and dimensions according to templates and levels, dewatering of rain water, diversion of traffic, providing and fixing and maintenance of caution boards, fencing, night signals, watching etc. subsequent refilling, watering and dressing upto ground level for lead upto 15 m and for all lifts including disposing surplus soils up to 15 metre complete in all respects.						
	A	Depth upto 2.00 m.					
	i	All kinds of soil except rocky	Cum.	89.00	89.00	98.00	98.00
	ii	For Ordinary soil having gravel up to 40%	Cum.	101.00	101.00	111.00	111.00
	iii	For Semi Conglomerate soil having gravel bolder above 40% up to 50%	Cum.	108.00	108.00	119.00	119.00
29.2	Earth work in excavation for storage and sedimentation tanks, high level tanks, filter beds, clear water reservoirs, pump houses, sumps, screening chambers and other similar works having straight or open cuttings in foundations trenches etc. with 3D Excavator/ JCB including manually dressing of bed, trimming of sides and side slopes to full dimension and depth as shown on the drawings or as shall be required by Engineer-in-charge, including dressing of bottom and sides of trenches, stacking the excavated soil clear from the excavation and subsequent filling around plinth/structures including watering dressing and disposal of surplus soils as directed upto 15 metre complete in all respects.						
	A	Depth upto 1.5 m B.G.L					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	i	All classes of soil except rocky	Cum.	84.00	83.00	92.00	91.00
	ii	For Ordinary gravel soil having gravel upto 40%	Cum.	106.00	105.00	117.00	116.00
	iii	For semi conglomerate or soil of the nature of pick and jumper work	Cum.	113.00	112.00	124.00	123.00
B	Where depths of excavation exceeds 2.0 metre below ground levels or total quantity of excavation is more than 100 cum						
Note		Where depths of excavation exceeds 2.0 meter below ground levels or total quantity of excavation is more than 100 cum		Total excavation will be paid as per chapter 6.21 and quantity of back filling quantity as per item 4.1 (a)			
29.3		Extra for rehandling earth beyond 15 metre on item No. 29.1, 29.2A, 29.4 and 29.5	cum	Extra for rehandling of earth if any beyond specified lead, will be payable under item 5.1(i) for 2nd, 3rd and subsequent chain upto 0.5 km with the prior approved by the Engineer in charge depending upon site conditions. In case rehandling exceeds 0.5 km distance payment will be made as per item 5.2(i) after deducting the cost of first chain of 30 metre.			
29.4	Excavation of trenches in a Streets, Lanes or in Open Area for Storm Sewers and Manholes to Full Depths as Shown in Drawings,excluding Shoring, Timbering of Poling Board Frame System Type, dressing to correct sections and dewatering, provision for diversion for traffic, protection of existing services i.e. telephone cables ,electric lines, water supply lines and gas lines.night signals, profiles, Pegs, Sight rails, boning rods, crossing over trenches for access to the houses, watching, fencing etc., fixing and maintenance of caution boards, refilling trenches, watering of refill in 15 cm layers, ramming and restoration of surface to original conditions and removal of Surplus Spoil from the Site of Works, for all Works other than connections to Ventilating Shafts upto a Lead of 15 mtr						
A	For depth not exceeding 2 m. below Ground level						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	i	All classes of soil except rocky	cum	224.00	224.00	246.00	246.00
	ii	For Ordinary gravel soil having gravel upto 40%	cum	313.00	313.00	344.00	344.00
	iii	For semi conglomerate soil of having gravel/boulder above 40% upto 50%	cum	257.00	256.00	283.00	282.00
B	For depth not exceeding 2 metres but not exceeding 3 metres below natural ground level :						
	i	All classes of soil except rocky	cum	251.00	251.00	276.00	276.00
	ii	For Ordinary gravel soil having gravel upto 40%	cum	358.00	358.00	394.00	394.00
	iii	For semi conglomerate soil of having gravel/boulder above 40% upto 50%	cum	510.00	509.00	561.00	560.00
C	For depth exceeding 3 ms but not exceeding 4.5 ms below natural ground level						
	i	All classes of soil except rocky	cum	298.00	298.00	328.00	328.00
	ii	For Ordinary gravel soil having gravel upto 40%	cum	425.00	425.00	468.00	468.00
	iii	For semi conglomerate soil of having gravel/boulder above 40% upto 50%	cum	610.00	610.00	671.00	671.00
D	For depth exceeding 4.5 ms but not exceeding 6 ms below natural ground level						
	i	All classes of soil except rocky	cum	401.00	400.00	441.00	440.00
	ii	For Ordinary gravel soil having gravel upto 40%	cum	559.00	559.00	615.00	615.00
	iii	For semi conglomerate soil of having gravel/boulder above 40% upto 50%	cum	817.00	817.00	899.00	899.00
E	For depth exceeding 6 ms but not exceeding 7.5 ms below natural ground level						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	i	All classes of soil except rocky	cum	454.00	454.00	499.00	499.00
	ii	For Ordinary gravel soil having gravel upto 40%	cum	610.00	610.00	671.00	671.00
	iii	For semi conglomerate soil of having gravel/boulder above 40% upto 50%	cum	900.00	899.00	990.00	989.00
F	For depth exceeding 7.5 ms but not exceeding 9 ms below natural ground level						
	i	All classes of soil except rocky	cum	530.00	530.00	583.00	583.00
	ii	For Ordinary gravel soil having gravel upto 40%	cum	688.00	688.00	757.00	757.00
	iii	For semi conglomerate soil of having gravel/boulder above 40% upto 50%	cum	585.00	585.00	644.00	644.00
29.5	Excavation in trenches with straight or open cutting in streets, lanes or in open area with 3D/JCB or excavator including manually dressing bed, trimming sides and side slopes for sewers and manholes to full depths as shown in drawings,including, dressing to correct sections and dewatering, provision for diversion for traffic, protection of existing services i.e. telephone cables, electric lines, water supply lines and gas lines etc. night signals, profiles, pegs, sight rails, boning rods, watching, etc., fixing and maintenance of caution boards, fencing, refilling trenches, watering, ramming and restoration of surface to original level and removal of surplus spoil from the site of works, upto one chain (15m) complete in all respects.						
a	Depth not exceeding 3 m. BGL						
	i	All kinds of soil except rocky	cum	99.00	99.00	109.00	109.00
	ii	For Ordinary Soil having gravel 40%	cum	134.00	134.00	147.00	147.00
	iii	For Semi Conglomerate soil having gravel/boulder above 40% up to 50%	cum	216.00	216.00	238.00	238.00
b	For depth exceeding 3.00 m but not exceeding 4.5 B.G.L						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	i	All kinds of soil except rocky	Cum.	115.00	115.00	127.00	127.00
	ii	For Ordinary Soil having gravel 40%	Cum.	134.00	134.00	147.00	147.00
	iii	For Semi Conglomerate soil having gravel/boulder above 40% up to 50%	cum	216.00	216.00	238.00	238.00
c	For depth exceeding 4.50 m but not exceeding 6.00 B.G.L						
	i	All kinds of soil except rocky	cum	162.00	162.00	178.00	178.00
	ii	For Ordinary Soil having gravel 40%	cum	210.00	210.00	231.00	231.00
	iii	For Semi Conglomerate soil having gravel/boulder above 40% up to 50%	cum	289.00	289.00	318.00	318.00
d	For depth exceeding 6.00 m but not exceeding 7.50 B.G.L						
	i	All kinds of soil except rocky	cum	169.00	169.00	186.00	186.00
	ii	for Ordinary Soil having gravel 40%	cum	216.00	216.00	238.00	238.00
	iii	for Semi Conglomerate soil having gravel/boulder above 40% up to 50%	cum	306.00	305.00	337.00	336.00
e	For depth exceeding 7.50 m but not exceeding 9.00 B.G.L						
	i	All kinds of soil except rocky	cum	192.00	192.00	211.00	211.00
	ii	for Ordinary Soil having gravel 40%	cum	250.00	250.00	275.00	275.00
	iii	for Semi Conglomerate soil having gravel/boulder above 40% up to 50%	cum	337.00	337.00	371.00	371.00
<b>Note :-</b>		The rates for excavation beyond 4.50 depth are same for manual as well as by mechanical mean					

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
29.6	Extra over and above the rate of item No. 29.2, 29.4, 29.5 ( a to e) for lowering sub-soil water level from its natural level, as decided by the Engineer-in-charge, by every 0.30 m depth (upto requisite depth), including cost of bore holes machinery and carrying out the work in safe manner complete in all respects.					
	It is assumed that 120 meters sewer will be laid in one month. Boring on both sides alternatively at 3 meters C/C and pumping of water with 5.00 B.H.P motors working 24 hours onl 8 nos . Bores, 4 on each side of the sewer will be sufficient to lower the sub soil water level upto 2.1 mteres.					
	a For sewers below 760 mm i/d.	m	821.00	821.00	903.00	903.00
	b For Sewer 760mm i/d and above	m	963.00	963.00	1059.00	1059.00
<b>Note:1</b>	In case of deep excavation for item no 29.2 above the excavation may be done giving appropriate side slow which may be fixed by Engineer-in-charge.					
<b>Note:2</b>	The rates for item No. 29.1 to 29.5 inclusive, cover the cost of removing tree and roots and removal of kankare and other hard material met in the excavation					
<b>Note:-3</b>	The maximum and minimum width of trenches and excavation for which payment shall be admissible to the contractor shall be those laid down in the contract specification					
<b>Note:-4</b>	The depth of spring level below ground level from where the wet sinking of excavation below spring level is to be done will be decided by the Engineer-in-charge and the decision will be final and binding on the contractor. Where ever water is depressed by pumping, rate shall be for wet earth work if actually wet and not for work under standing or flowing water and wetness allowance shall be payable only after obtaining the written approval of the superintending Engineer.					
<b>Note:-5</b>	If the excavation for any sewer shall be carried out by cut and cover i.e. sinking shafts and tunneling in between, the contractor shall be paid for such work as if the trench had been opened the full length, but no extra shall be allowed other than the full measurement of the trench excavation @ of item No. 29.4. it will be intirely be at the discretion of the Engineer-in-charge to permit excavation by cut and cover method. Back filling of shafts and tunnels must be at all times be carried out throughly and to the satisfaction of Engineer-in-charge.					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
Note:-6	If any excavation of trenches in which timbering has not been done has to be abandoned due to change of alignment of the sewer necessiated by any obstruction such as pipe line, electric or telephone cables, wired poles comeing in the way of the sewer or for any other cause what so ever the contractor will be paid @ 95.36, 131.32 and 139.14 per cum for all classes of soil, except rocky, gravel solid and conglomerate solid respectively in plain or submountainous area such excavation not with standingthat he may have made arrangments the timbering of such trenches or actually brought it to the site payment for abandoned treanches at the above rate will include for the back filling of the trenches in 15 cm layers, well watered and consolidatated and for the restoration of the site to its original conditio.						
29.7 A	<b>Wet Earth work</b>						
	i	i) Extra for wet earth work from bottom of excavation upto level of sub soil water	Cum	36.00	36.00	39.6	39.6
	ii	ii) Extra for wet earth work from level of sub soil water upto 30 cm above	Cum	18.00	18.00	19.8	19.8
29.7 B	<b>Extra for filling earth in 15 cm layers and compaction</b>						
	i	For item no. 29.1 to 29.2 & 29.4 to 29.5	Cum	52.00	52.00	57.00	57.00
29.8	Provding and fixing timbering on face of trenches if required for sewers and manholes for item 29.4 and 29.5 irrespective of the depth, measuring each timbered surfaces of trench on which timbering is done.						
A	Type-I Simple form of timbering						
	i	For trench heavy width up to 1 mtr	sqm	15.00	57.00	17.00	59.00
	ii	For trench having width above 1m and upto 2m	sqm	15.00	82.00	17.00	84.00
	iii	For trench having width above 2m and upto 3m	sqm	15.00	107.00	17.00	109.00
	iv	For trench having width above 3m and upto 4m	sqm	15.00	133.00	17.00	135.00
B	Type-II Poling board frame type timbering						
	i	For trench heavy width up to 1 mtr	sqm	26.00	79.00	29.00	82.00
	ii	For trench having width above 1 mtr and upto 2.0m	sqm	26.00	101.00	29.00	104.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	iii	For trench having width above 2 mtr and upto 3.0m	sqm	26.00	123.00	29.00	126.00
	iv	For trench having width above 3 mtr and upto 4.0m	sqm	26.00	144.00	29.00	147.00
C		Close board frame type (Confined ) timbering					
	i	For trench heavy width up to 1 mtr	sqm	35.00	101.00	39.00	105.00
	ii	For trench having width above 1 mtr and upto 2.0m	sqm	35.00	123.00	39.00	127.00
	iii	For trench having width above 2 mtr and upto 3.0m	sqm	35.00	145.00	39.00	149.00
	iv	For trench having width above 3 mtr and upto 4.0m	sqm	35.00	166.00	39.00	170.00
29.9	Extra rate for shuttering in Confined Earth work as per specifications & desired by Engineer-in-Charge.						
	a	For trenches having width upto 2.0m	sqm	605.00	605.00	666.00	666.00
	b	For trenches having width above 2.0m upto 3.00m	sqm	610.00	610.00	671.00	671.00
	c	For trenches having width 3.00m upto 4.00m	sqm	616.00	616.00	678.00	678.00
29.10	Providing & fixing steel Box timbering on faces of trenches if required measuring each surface of trench where shuttering is done up to 4m depth.		sqm	181.00	207.00	199.00	225.00
29.11	Dismantling existing drains of different size cunnetts, section only excluding recovery of all useable materials, stacking the same within 100 metre from site of dismantled works and disposal of all rubbish off site of works.						
	(a)	House connection drains.	m	19.00	19.00	21.00	21.00
	(b)	Type I drain.	m	29.00	29.00	32.00	32.00
	(c)	Type II Drain	m	67.00	67.00	74.00	74.00



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
	(d) Type III Drain	m	85.00	85.00	94.00	94.00
	(e) Type IV Drain	m	100.00	100.00	110.00	110.00
	<b>Brick Flooring &amp; Pitching</b>					
A	Reimbursement to Drains & flooring in strips					
29.12	Tega 7.5 cm thick formed of first class bricks on end laid in cement sand mortar 1:5 and projecting to a maximum height of not more than 12.5 cm above top of drain along house sides of drains where required for protection of house walls.	m	42.00	109.00	46.00	113.00
29.13	Tega 11.50 cm thick formed of first class bricks on end laid in cem. sand Mortar 1:5	m	54.00	153.00	59.00	158.00
29.14	First class flat brick 7.50 cm thick laid in reimbursements in and on cement mortar 1:5 on sides of drains and in other work where required over lime concrete or other foundations. All joints to be left completely filled and struck flush.	m	49.00	333.00	54.00	338.00
29.15	First class flat brick 7.5 cms thick laid in reimbursement in and on 1:6 cement sand mortar.	m	49.00	336.00	54.00	341.00
29.16	First class flat brick 7.50 cm thick laid in reimbursement in and on 1:5 cement sand mortar.	m	49.00	333.00	54.00	338.00
29.17	First class for brick 7.50 cm thick laid in reimbursements in and on 1:4 cement sand mortar.	m	49.00	343.00	54.00	348.00
29.18	First class brick on edge 11.50 cm thick laid in reimbursements in and on cement mortar 1:4 on sides of drains and in other work where required over lime concrete or other foundation, all joints to be left complete filled and struck flush.	m	49.00	498.00	54.00	503.00
29.19	First class brick on edge 11.50 cm thick laid in reimbursements in and on 1:6 cement sand mortar.	m	49.00	478.00	54.00	483.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
29.20	First class brick on edge 11.50 cm thick laid in reimbursements in and on 1:5 cement sand mortar.	m	49.00	489.00	54.00	494.00
29.21	First class brick on edge 11.50 cm thick laid in reimbursements in and on 1:4 cement sand mortar.	m	49.00	498.00	54.00	503.00
<b>B</b>	<b>Flooring and Paving</b>					
29.22	First class dry flat brick flooring and paving in ordinary bonded courses or in herring bond or other special courses or bond laid to template over rammed and dressed foundations and to correct longitudinal and cross slopes as shall be required by the Engineer-in-Charge. All joints shall be thoroughly filled with dry sand grouting which shall be applied to a thickness of not less 20mm over the surface of the flooring and brushed into the joints. All joints shall be fully filled with sand.	sqm	60.00	280.00	66.00	286.00
29.23	First class dry brick on edge flooring or paving in ordinary bonded courses or in herring bond or other special courses or bond, laid as described in item no. 29.22.	sqm	70.00	419.00	77.00	426.00
29.24	First class flat brick paving or flooring laid over and in cement sand mortar 1:6 in ordinary bonded courses or in herring bone or other special courses, to templates, over dressed foundation and to correct longitudinal and cross slopes as shall be required by the Engineer-in-charge. All joints shall be filled with mortar and struck flushed as the work proceeds.	sqm	74.00	328.00	81.00	335.00
29.25	First class flat brick paving or flooring laid over and in cement sand mortar 1:5 in ordinary bonded courses or in herring bone or other special courses, to templates, over dressed foundation and to correct longitudinal and cross slopes as shall be required by the Engineer-in-charge. All joints shall be filled with mortar and struck flushed as the work proceeds.	sqm	74.00	331.00	81.00	338.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
29.26	First class brick on edge paving or flooring laid over and in cement sand mortar 1:6 in ordinary bonded courses or in herring bone or other special courses, to templates, over dressed foundation and to correct longitudinal and cross slopes as shall be required by the Engineer-in-charge. All joints shall be filled with mortar and struck flushed as the work proceeds.	sqm	122.00	519.00	134.00	531.00
29.27	First class brick on edge paving or flooring laid over and in cement sand mortar 1:5 in ordinary bonded courses or in herring bone or other special courses, to templates, over dressed foundation and to correct longitudinal and cross slopes as shall be required by the Engineer-in-charge. All joints shall be filled with mortar and struck flushed as the work proceeds.	sqm	118.00	520.00	130.00	532.00
29.28	First class brick on edge paving or flooring laid over and in cement sand mortar 1:4 in ordinary bonded courses or in herring bone or other special courses, to templates, over dressed foundation and to correct longitudinal and cross slopes as shall be required by the Engineer-in-charge. All joints shall be filled with mortar and struck flushed as the work proceeds.	sqm	118.00	525.00	130.00	537.00
29.29	Extra over and above the rates for items No. 29.22 to 29.28 inclusive for pitching on the slope to sullage drains above cunnettes and to storm water channels, etc. where required.	sqm	16.00	16.00	18.00	18.00
29.30	Brick ballast well or over burnt, broken and screened through a 32mm x 32mm square mesh screen laid consolidated and rammed to a finished thickness of 50mm to template and levels to correct longitudinal slopes cross slopes cambers, etc. under paving or flooring.	sqm	32.00	76.00	35.00	79.00
29.31	Brick ballast well or over burnt, broken and screened through a 32mm x 32mm square mesh screen laid consolidated and rammed to a finished thickness of 75mm as above.	sqm	48.00	118.00	53.00	123.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
29.32	Clay concrete, consisting of 100 parts by volume of well burnt or over burnt brick ballast screened through 32mm x 32mm square mesh screen mixed with 33 parts by volume of fine Puddle clay, thoroughly mixed, laid consolidated and rammed to a finished thickness of 50mm to template and levels and to a correct longitudinal slopes, cross slopes, cambers, etc. under paving or flooring as shall be required by the Engineer-in-Charge.		sqm	28.00	72.00	31.00	75.00
29.33	Clay concrete as above but laid consolidated and rammed to a finished thickness of 75mm as above.		Sqm	33.00	99.00	36.00	102.00
29.34	Providing & fixing 560 mm, 500 mm and 450 mm internal diameter circular or 450 mm x 600 mm clear inside opening rectangular RCC manhole cover and frame ISI marked as per IS:12592-2002 including carriage from the stores of the Engineer-in-charge to site of work, loading, unloading including stacking and setting the same to correct lines over manholes including cement concrete coping (M:20) around the frame etc. Dia of steel for lifting hook is 16mm. (for EHD and HD).						
<b>A</b>	<b>RCC Man hole cover with Frame</b>						
<b>a</b>	<b>560mm i/d RCC man hole cover with frame as per ISI</b>						
	i	Extra Heavy duty	each	296.00	2128.00	326.00	2158.00
	ii	Heavy duty	each	296.00	1942.00	326.00	1972.00
	iii	Medium duty	each	296.00	1709.00	326.00	1739.00
	iv	Light duty	each	296.00	1538.00	326.00	1568.00
<b>b</b>	<b>500mm i/d RCC man hole cover with frame as per ISI</b>						
	i	Extra Heavy duty	each	284.00	2019.00	312.00	2047.00
	ii	Heavy duty	each	284.00	1823.00	312.00	1851.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	iii	Medium duty	each	284.00	1561.00	312.00	1589.00
	iv	Light duty	each	284.00	1390.00	312.00	1418.00
<b>c</b>	<b>450mm i/d RCC man hole cover with frame as per ISI</b>						
	i	Extra Heavy duty	each	250.00	1735.00	275.00	1760.00
	ii	Heavy duty	each	250.00	1631.00	275.00	1656.00
	iii	Medium duty	each	250.00	1342.00	275.00	1367.00
	iv	Light duty	each	250.00	1172.00	275.00	1197.00
<b>d</b>	<b>455 x 610 mm rectangular clear opening RCC man hole cover with</b>						
	i	Extra Heavy duty	each	250.00	2129.00	275.00	2154.00
	ii	Heavy duty	each	250.00	1853.00	275.00	1878.00
	iii	Medium duty	each	250.00	1497.00	275.00	1522.00
	iv	Light duty	each	250.00	1316.00	275.00	1341.00
29.35	<b>Foot Rest for Manhole.</b>						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		Providing orange colour safety footrest of minimum 6mm thick plastic encapsulated as per IS:10910 on 12mm dia steel bar confirming to IS: 1786 having minimum cross section as 23mm x 25mm and over all minimum length 263mm and width as 165mm with minimum 112mm space between protruded legs having 2mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specification and having manufacturer's permanent identification mark to be visible even after fixing, including fixing in manholes with 230x150x75cm cement concrete block 1:2:4 (1 cement: 2 sand: 4 stone aggregate) complete as per design.	each	61.00	209.00	67.00	215.00
29.36	<b>Providing and fixing RCC manhole covers only</b>						
<b>A</b>	<b>560mm i/d RCC man hole cover only as per ISI</b>						
	i	Extra Heavy duty	each	48.00	1188.00	53.00	1193.00
	ii	Heavy duty	each	48.00	1110.00	53.00	1115.00
	iii	Medium duty	each	48.00	874.00	53.00	879.00
	iv	Medium duty	each	48.00	769.00	53.00	774.00
<b>B</b>	<b>500mm i/d RCC man hole cover only as per ISI</b>						
	i	Extra Heavy duty	each	48.00	1110.00	53.00	1115.00
	ii	Heavy duty	each	48.00	1057.00	53.00	1062.00
	iii	Medium duty	each	48.00	821.00	53.00	826.00
	iv	Medium duty	each	48.00	743.00	53.00	748.00
<b>C</b>	<b>450mm i/d RCC man hole cover only as per ISI</b>						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	i	Extra Heavy duty	each	48.00	1018.00	53.00	1023.00
	ii	Heavy duty	each	48.00	965.00	53.00	970.00
	iii	Medium duty	each	48.00	716.00	53.00	721.00
	iv	Light duty	each	48.00	703.00	53.00	708.00
<b>d</b>	<b>455 x 610 mm rectangular RCC man hole cover only as per ISI</b>						
	i	Extra Heavy duty	each	48.00	1302.00	53.00	1307.00
	ii	Heavy duty	each	48.00	1216.00	53.00	1221.00
	iii	Medium duty	each	48.00	956.00	53.00	961.00
	iv	Light duty	each	48.00	841.00	53.00	846.00
29.37	Providing and Erection of cast RCC ventilating column having minimum 200mm internal diameter including excavation, bases, columns, caps, cowls or wire domes, etc. complete including carriage from the stores of the Engineer-In-Charge of works, to sites of works, loading and unloading fixing and jointing and setting the same in position complete in all respects.						
	a	11 m. Height	each	23162.00	60242.00	25478.00	62558.00
	b	9.10 m. Height	each	18745.00	50428.00	20620.00	52303.00
<b>PAINTING VENT SHAFTS</b>							
29.38	Finishing RCC vent shafts minimum 200mm internal Diameter with exterior decorative cement based paints on new work two coats to give and even finish.						
	a	11 m. Height R.C.C. ventilator shaft	each	960.00	1188.00	1056.00	1284.00
	b	9 m. Height R.C.C. ventilator shaft	each	786.00	973.00	865.00	1052.00
29.39	Finishing RCC vent shaft of minimum 200mm internal Diameter with exterior decorative cement based paints on old work one coat to give an even shade.						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	a	11 m. Height R.C.C. ventilator shaft	each	640.00	711.00	704.00	775.00
	b	9 m. Height R.C.C. ventilator shaft	each	524.00	582.00	576.00	634.00
29.40	Construction of standard RCC cum bricks circular sewers complete in all respects as per drawing design and specifications PCC 1:2:4, RCC M-20, brick work of inner ring in 1:2 cement sand mortar, outer ring in 1:5 cement sand mortar, total inner plaster 12.5 mm thick using 1:2 cement sand mortar with 1 mm thick neat cement rendering, steel reinforcement TMT Fe 500, 3mm thick steel form work, complete in all respects by using mechanical mixer and vibrator.						
<b>A</b>	Type - I (Sewer for lower sub soil water tables / dry conditions)						
	a	760mm i/d P.T. sewer	m	2637.00	8095.00	2901.00	8359.00
	b	915mm i/d P.T. sewer	m	3044.00	9267.00	3348.00	9571.00
	c	990mm i/d P.T. sewer	m	7223.00	25924.00	7945.00	26646.00
	d	1065mm i/d P.T. sewer	m	3444.00	10433.00	3788.00	10777.00
	e	1145mm i/d P.T. sewer	m	3676.00	11182.00	4044.00	11550.00
	f	1220mm i/d P.T. sewer	m	3875.00	11581.00	4263.00	11969.00
	g	1295mm i/d P.T. sewer	m	4098.00	12430.00	4508.00	12840.00
	h	1370mm i/d P.T. sewer	m	4306.00	13045.00	4737.00	13476.00
	i	1450mm i/d P.T. sewer	m	4517.00	13663.00	4969.00	14115.00
	j	1525mm i/d P.T. sewer	m	4725.00	14277.00	5198.00	14750.00
<b>B</b>	Type II (Under Medium Sub - Soil water conditions)						
	a	760mm i/d P.T. sewer	m	2672.00	8428.00	2939.00	8695.00
	b	915mm i/d P.T. sewer	m	3061.00	9563.00	3367.00	9869.00
	c	990mm i/d P.T. sewer	m	3256.00	10143.00	3582.00	10469.00
	d	1065mm i/d P.T. sewer	m	3444.00	10694.00	3788.00	11038.00
	e	1145mm i/d P.T. sewer	m	4080.00	12807.00	4488.00	13215.00
	f	1220mm i/d P.T. sewer	m	4267.00	13351.00	4694.00	13778.00



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	g	1295mm i/d P.T. sewer	m	4149.00	13711.00	4564.00	14126.00
	h	1370mm i/d P.T. sewer	m	5114.00	16284.00	5625.00	16795.00
	i	1450mm i/d P.T. sewer	m	5352.00	17027.00	5887.00	17562.00
	j	1525mm i/d P.T. sewer	m	5585.00	17739.00	6144.00	18298.00
C	Type III (Under High Sub - Soil water conditions)						
	a	760mm i/d P.T. sewer	m	3227.00	10603.00	3550.00	10926.00
	b	915mm i/d P.T. sewer	m	3966.00	12907.00	4363.00	13304.00
	c	990mm i/d P.T. sewer	m	4241.00	13780.00	4665.00	14204.00
	d	1065mm i/d P.T. sewer	m	4214.00	14314.00	4635.00	14735.00
	e	1145mm i/d P.T. sewer	m	4221.00	15261.00	4643.00	15683.00
	f	1220mm i/d P.T. sewer	m	5158.00	17186.00	5674.00	17702.00
	g	1295mm i/d P.T. sewer	m	5429.00	18067.00	5972.00	18610.00
	h	1370mm i/d P.T. sewer	m	5704.00	18963.00	6274.00	19533.00
	i	1450mm i/d P.T. sewer	m	5990.00	19894.00	6589.00	20493.00
	j	1525mm i/d P.T. sewer	m	6263.00	20483.00	6889.00	21109.00
	<b>Salt Glazed Stone ware Pipes sewers and Drains</b>						

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
29.41	Providing, lowering, cutting & jointing salt glazed stone ware pipes and specials ISI marked as per IS: 651-2007 class Sp-1 into trenches for all depths and laying out the same to correct alignment, gradients, levels etc., cutting of concrete beds and joints holes, supporting the pipes and specials, in correct position in a suitable rigid manner while the same are being jointed and until the surrounding benching, haunching and envelopes are completed including jointing of pipes and specials in trenches, using cement sand mortar 1:1 and best spun Jute yarn as per IS:1887, finishing and trowelling of each joint at an angle of 45 degree with the longitudinal axes of pipe, watering, keeping the joint covered and wetted till the same are cured, testing the sewerage line for leakage and making all leakages and defects good as laid in the contract specification, chipping and finishing the cut surface to uniform finish to the entire satisfaction of engineer-in-charge Including all cartage etc complete in all respects.					
	a 100mm i/d pipe	m	159.00	285.00	175.00	301.00
	b 150mm i/d pipe	m	205.00	423.00	226.00	444.00
	c 200mm i/d pipe	m	212.00	487.00	233.00	508.00
	d 250mm i/d pipe	m	400.00	928.00	440.00	968.00
	e 300mm i/d pipe	m	461.00	1264.00	507.00	1310.00
	f 400mm i/d pipe	m	485.00	2549.00	534.00	2598.00
	g 450mm i/d pipe	m	647.00	3056.00	712.00	3121.00
	j 600mm i/d pipe	m	691.00	5852.00	760.00	5921.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
29.42	Providing, lowering in trenches to correct gradient and allignments, jointing with tytone rubber joint and cutting of RCC S/S pipes having inside HDPE. lining ISI marekd as per ISI code IS:458-2003 into trenches for all depths and laying out the same to correct alignment, gradients, levels etc.,cutting of concrete beds and joints holes, supporting the pipes and specials in correct position in a suitable rigid manner while the same are being jointed and until the surrounding benchings, haunches and envelopes are completed. The pipes shall rest on the beds at all joints through their lengths and to ensure this, testing the pipes for leakage and making good the same leakage and all defects to the entire satisfaction of the Engineer incharge including all cartage etc copmplete in all respects.					
<b>A</b>	<b>R.C.C. pipe with inside H.D.P.E. lining class- NP-3</b>					
	a 400mm i/d pipe with inside H.D.P.E. lining	m	500.00	3390.00	550.00	3440.00
	b 450mm i/d pipe with inside H.D.P.E. lining	m	586.00	4068.00	645.00	4127.00
	c 500mm i/d pipe with inside H.D.P.E. lining	m	660.00	4734.00	726.00	4800.00
	d 600mm i/d pipe with inside H.D.P.E. lining	m	811.00	5696.00	892.00	5777.00
	e 700mm i/d pipe with inside H.D.P.E. lining	m	920.00	7485.00	1012.00	7577.00
	f 800mm i/d pipe with inside H.D.P.E. lining	m	1131.00	8978.00	1244.00	9091.00
	g 900mm i/d pipe with inside H.D.P.E. lining	m	1360.00	10700.00	1496.00	10836.00
	h 1000mm i/d pipe with inside H.D.P.E. lining	m	1499.00	12103.00	1649.00	12253.00
	i 1100mm i/d pipe with inside H.D.P.E. lining	m	1822.00	14533.00	2004.00	14715.00
	j 1200mm i/d pipe with inside H.D.P.E. lining	m	1982.00	15843.00	2180.00	16041.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	k	1400mm i/d pipe with inside H.D.P.E. lining	m	1982.00	20954.00	2180.00	21152.00
	l	1600mm i/d pipe with inside H.D.P.E. lining	m	1982.00	24654.00	2180.00	24852.00
	m	1800mm i/d pipe with inside H.D.P.E. lining	m.	1982.00	28585.00	2180.00	28783.00
	n	2000mm i/d pipe with inside H.D.P.E. lining	m.	1982.00	35207.00	2180.00	35405.00
	o	2200mm i/d pipe with inside H.D.P.E. lining	m.	1982.00	40239.00	2180.00	40437.00
	p	2400mm i/d pipe with inside H.D.P.E. lining	m.	1982.00	44593.00	2180.00	44791.00
	q	2600mm i/d pipe with inside H.D.P.E. lining	m.	1982.00	53645.00	2180.00	53843.00
<b>B</b>	<b>R.C.C. pipe with inside H.D.P.E. lining class- NP-4</b>						
	a	400mm i/d pipe with inside H.D.P.E. lining	m.	500.00	3542.00	550.00	3592.00
	b	450mm i/d pipe with inside H.D.P.E. lining	m.	586.00	4275.00	645.00	4334.00
	c	500mm i/d pipe with inside H.D.P.E. lining	m	660.00	4996.00	726.00	5062.00
	d	600mm i/d pipe with inside H.D.P.E. lining	m	811.00	6186.00	892.00	6267.00
	e	700mm i/d pipe with inside H.D.P.E. lining	m	920.00	8088.00	1012.00	8180.00
	f	800mm i/d pipe with inside H.D.P.E. lining	m	1131.00	10162.00	1244.00	10275.00
	g	900mm i/d pipe with inside H.D.P.E. lining	m	1360.00	11837.00	1496.00	11973.00
	h	1000mm i/d pipe with inside H.D.P.E. lining	m	1499.00	13514.00	1649.00	13664.00
	i	1100mm i/d pipe with inside H.D.P.E. lining	m	1822.00	16361.00	2004.00	16543.00
	j	1200mm i/d pipe with inside H.D.P.E. lining	m	1982.00	17829.00	2180.00	18027.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	k	1400mm i/d pipe with inside H.D.P.E. lining	m	1982.00	23777.00	2180.00	23975.00
	l	1600mm i/d pipe with inside H.D.P.E. lining	m	1982.00	27445.00	2180.00	27643.00
	m	1800mm i/d pipe with inside H.D.P.E. lining	m	1982.00	32693.00	2180.00	32891.00
	n	2000mm i/d pipe with inside H.D.P.E. lining	m	1982.00	38464.00	2180.00	38662.00
	o	2200mm i/d pipe with inside H.D.P.E. lining	m	1982.00	44814.00	2180.00	45012.00
	p	2400mm i/d pipe with inside H.D.P.E. lining	m	1982.00	51797.00	2180.00	51995.00
	q	2600mm i/d pipe with inside H.D.P.E. lining	m	1982.00	59532.00	2180.00	59730.00
29.43	Providing, laying in trenches to correct gradient and alignment and jointing of UPVC pipes having ISI specification IS:15328-2003 class-SN-8 marked make Supreme, Finolex, Kissan, Jain, Prince or equivalent good on them and laying the same in trenches to correct alignment and gradients, cutting and jointing, testing for water tightness and making good the leakages and defects including cost of specials (Specials and Solvent should be of same make as that of pipes) complete in all respects.						
	a	110mm o/d pipe	m	23.00	360.00	25.00	362.00
	b	125mm o/d pipe	m	23.00	412.00	25.00	414.00
	c	160mm o/d pipe	m	31.00	753.00	34.00	756.00
	d	200mm o/d pipe	m	45.00	1180.00	50.00	1185.00
	e	250mm o/d pipe	m	55.00	1810.00	61.00	1816.00
	f	315mm o/d pipe	m	71.00	2802.00	78.00	2809.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
29.44	Providing, laying in trenches and jointing of HDPE pipes having ISI specification IS:14333, PE100, class PN-6 marked on them, make Reliance/ Hasti / Dura-Line , laying the same in trenches to correct alignment and gradients, cutting and jointing testing for water tightness and making good the leakages and defects including cost of specials complete in all respects.						
	a	110mm o/d pipe	m	23.00	616.00	25.00	618.00
	b	125mm o/d pipe	m	23.00	783.00	25.00	785.00
	c	160mm o/d pipe	m	31.00	1272.00	34.00	1275.00
	d	200mm o/d pipe	m	45.00	1981.00	50.00	1986.00
	e	250mm o/d pipe	m	55.00	3067.00	61.00	3073.00
	f	315mm o/d pipe	m	71.00	4839.00	78.00	4846.00
	g	400mm o/d pipe	m	71.00	7922.00	78.00	7929.00
	h	500mm o/d pipe	m	71.00	12323.00	78.00	12330.00
	i	630mm o/d pipe	m	71.00	19467.00	78.00	19474.00
	j	710mm o/d pipe	m	71.00	24685.00	78.00	24692.00
	k	800mm o/d pipe	m	71.00	31294.00	78.00	31301.00
	l	900mm o/d pipe	m	71.00	39620.00	78.00	39627.00
	m	1000mm o/d pipe	m	71.00	48931.00	78.00	48938.00
29.45	Extra over the rate laid down in this schedule for cement concrete work for making and finishing benching and complicated floor work in manholes including formation of channels and bulldozing and smooth finishing the surface accurately to templete.		Sqm	111.00	111.00	122.00	122.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
29.46	Providing, lowering in trenches to correct gradient and alignment, jointing with tyton rubber joint and cutting of reinforced cement concrete spigot and socketed pipes and specials with rubber ring ISI marekd as per IS code IS 458-2003 into trenches for all depths and laying out the same to correct alignment, gradients, levels etc. cutting of concrete beds and joints holes, supporting the pipes and specials in correct position in a suitable rigid manner while the same are being jointed and until the surrounding benchings, haunches and envelopes are completed. The pipes shall rest on the beds at all joints through their lengths and fixing of rubber ring, facing, testing the pipes for leakage and making good the same leakage and all defects to the entire satisfaction of the Engineer-in-charge including all cartage etc.						
<b>A</b>	<b>R.C.C. Pipe P -1</b>						
	a	100mm i/d pipe	m	54.00	508.00	59.00	513.00
	b	150mm i/d pipe	m	72.00	588.00	79.00	595.00
	c	200mm i/d pipe	m	92.00	670.00	101.00	679.00
	d	250mm i/d pipe	m	106.00	767.00	117.00	778.00
	e	300mm i/d pipe	m	122.00	1030.00	134.00	1042.00
	f	400mm i/d pipe	m	335.00	1532.00	369.00	1566.00
	g	450mm i/d pipe	m	380.00	1784.00	418.00	1822.00
	h	500mm i/d pipe	m	430.00	2164.00	473.00	2207.00
	i	600mm i/d pipe	m	512.00	3030.00	563.00	3081.00
	j	700mm i/d pipe	m	622.00	3470.00	684.00	3532.00
	k	800mm i/d pipe	m	758.00	4309.00	834.00	4385.00
	l	900mm i/d pipe	m	882.00	5837.00	970.00	5925.00
	m	1000mm i/d pipe	m	1067.00	6641.00	1174.00	6748.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	n	1100mm i/d pipe	m	1248.00	7854.00	1373.00	7979.00
	o	1200mm i/d pipe	m	1423.00	8607.00	1565.00	8749.00
<b>B</b>	<b>R.C.C. Pipe NP -2</b>						
	a	100mm i/d pipe	m	54.00	417.00	59.00	422.00
	b	150mm i/d pipe	m	72.00	485.00	79.00	492.00
	c	200mm i/d pipe	m	92.00	555.00	101.00	564.00
	d	250mm i/d pipe	m	106.00	635.00	117.00	646.00
	e	300mm i/d pipe	m	126.00	852.00	139.00	865.00
	f	400mm i/d pipe	m	335.00	1292.00	369.00	1326.00
	g	450mm i/d pipe	m	380.00	1503.00	418.00	1541.00
	h	500mm i/d pipe	m	430.00	1817.00	473.00	1860.00
	i	600mm i/d pipe	m	512.00	2527.00	563.00	2578.00
	j	700mm i/d pipe	m	622.00	2901.00	684.00	2963.00
	k	800mm i/d pipe	m	758.00	3599.00	834.00	3675.00
	l	900mm i/d pipe	m	882.00	4846.00	970.00	4934.00
	m	1000mm i/d pipe	m	1067.00	5526.00	1174.00	5633.00
	n	1100mm i/d pipe	m	1248.00	6533.00	1373.00	6658.00
	o	1200mm i/d pipe	m	1423.00	7500.00	1565.00	7642.00
	p	1400mm i/d pipe	m	2196.00	10123.00	2416.00	10343.00
	q	1600mm i/d pipe	m	2783.00	12692.00	3061.00	12970.00
	r	1800mm i/d pipe	m	3218.00	15109.00	3540.00	15431.00
	s	2000mm i/d pipe	m	3370.00	17409.00	3707.00	17746.00



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	t	2200mm i/d pipe	m	3993.00	20508.00	4392.00	20907.00
<b>C</b>	<b>R.C.C. Pipe NP -3</b>						
	a	100mm i/d pipe	m	54.00	522.00	59.00	527.00
	b	150mm i/d pipe	m	72.00	574.00	79.00	581.00
	c	200mm i/d pipe	m	92.00	733.00	101.00	742.00
	d	250mm i/d pipe	m	106.00	939.00	117.00	950.00
	e	300mm i/d pipe	m	126.00	1287.00	139.00	1300.00
	f	400mm i/d pipe	m	511.00	2636.00	562.00	2687.00
	g	450mm i/d pipe	m	580.00	3108.00	638.00	3166.00
	h	500mm i/d pipe	m	653.00	3585.00	718.00	3650.00
	i	600mm i/d pipe	m	805.00	4321.00	886.00	4402.00
	j	700mm i/d pipe	m	915.00	5184.00	1007.00	5276.00
	k	800mm i/d pipe	m	1134.00	6397.00	1247.00	6510.00
	l	900mm i/d pipe	m	1376.00	7863.00	1514.00	8001.00
	m	1000mm i/d pipe	m	1514.00	8973.00	1665.00	9124.00
	n	1100mm i/d pipe	m	1859.00	10485.00	2045.00	10671.00
	o	1200mm i/d pipe	m	2022.00	11422.00	2224.00	11624.00
	p	1400mm i/d pipe	m	2196.00	14397.00	2416.00	14617.00
	q	1600mm i/d pipe	m	2783.00	18261.00	3061.00	18539.00
	r	1800mm i/d pipe	m	3218.00	22259.00	3540.00	22581.00
	s	2000mm i/d pipe	m	3370.00	27071.00	3707.00	27408.00
	t	2200mm i/d pipe	m	3993.00	34801.00	4392.00	35200.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	u	2400mm i/d pipe	m	4580.00	39613.00	5038.00	40071.00
	v	2600mm i/d pipe	m	5485.00	44743.00	6034.00	45292.00
<b>D</b>	<b>R.C.C. Pipe NP -4</b>						
	a	100mm i/d pipe	m	54.00	577.00	59.00	582.00
	b	150mm i/d pipe	m	72.00	626.00	79.00	633.00
	c	200mm i/d pipe	m	92.00	830.00	101.00	839.00
	d	250mm i/d pipe	m	106.00	1094.00	117.00	1105.00
	e	300mm i/d pipe	m	126.00	1600.00	139.00	1613.00
	f	400mm i/d pipe	m	511.00	2703.00	562.00	2754.00
	g	450mm i/d pipe	m	580.00	3157.00	638.00	3215.00
	h	500mm i/d pipe	m	653.00	3669.00	718.00	3734.00
	i	600mm i/d pipe	m	805.00	4874.00	886.00	4955.00
	j	700mm i/d pipe	m	915.00	5912.00	1007.00	6004.00
	k	800mm i/d pipe	m	1134.00	7202.00	1247.00	7315.00
	l	900mm i/d pipe	m	1376.00	9391.00	1514.00	9529.00
	m	1000mm i/d pipe	m	1514.00	10583.00	1665.00	10734.00
	n	1100mm i/d pipe	m	1859.00	12410.00	2045.00	12596.00
	o	1200mm i/d pipe	m	1832.00	13327.00	2015.00	13510.00
	p	1400mm i/d pipe	m	2196.00	18684.00	2416.00	18904.00
	q	1600mm i/d pipe	m	2783.00	23097.00	3061.00	23375.00
	r	1800mm i/d pipe	m	3218.00	29278.00	3540.00	29600.00
	s	2000mm i/d pipe	m	3370.00	35438.00	3707.00	35775.00
	t	2200mm i/d pipe	m	3993.00	45268.00	4392.00	45667.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	u	2400mm i/d pipe	m	4580.00	48420.00	5038.00	48878.00
	v	2600mm i/d pipe	m	5485.00	58532.00	6034.00	59081.00
29.47	Extra for providing 1:2 cement sand mortar on tytone rubber joint of RCC pipes having sockets extended out of barrel, in trenches including facing trowelling and finishing the joints at the angle of 45 degree with faces of socket keeping joints wet till cured, testing the pipe joints for leakproof and making good all leakage and defects as per specifications.						
I	NP1, NP2 and P-1 S/S joints pipes having internal dia meter:-						
	a	100mm i/d pipe	each	68.00	76.00	75.00	83.00
	b	150mm i/d pipe	each	91.00	100.00	100.00	109.00
	c	200mm i/d pipe	each	113.00	125.00	124.00	136.00
	d	250mm i/d pipe	each	136.00	149.00	150.00	163.00
	e	300mm i/d pipe	each	152.00	168.00	167.00	183.00
	f	400mm i/d pipe	each	169.00	187.00	186.00	204.00
	g	450mm i/d pipe	each	186.00	206.00	205.00	225.00
	h	500mm i/d pipe	each	203.00	224.00	223.00	244.00
	i	600mm i/d pipe	each	219.00	243.00	241.00	265.00
	j	700mm i/d pipe	each	236.00	262.00	260.00	286.00
	k	800mm i/d pipe	each	253.00	281.00	278.00	306.00
	l	900mm i/d pipe	each	270.00	300.00	297.00	327.00
	m	1000mm i/d pipe	each	286.00	318.00	315.00	347.00
	n	1100mm i/d pipe	each	303.00	337.00	333.00	367.00
	o	1200mm i/d pipe	each	320.00	356.00	352.00	388.00
	p	1400mm i/d pipe	each	353.00	393.00	388.00	428.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	q	1600mm i/d pipe	each	387.00	431.00	426.00	470.00
	r	1800mm i/d pipe	each	420.00	469.00	462.00	511.00
	s	2000mm i/d pipe	each	454.00	506.00	499.00	551.00
	t	2200mm i/d pipe	each	487.00	544.00	536.00	593.00
II	NP-3 & NP4 Pipes S/S joints having internal dia meter of pipe:-						
	a	100mm i/d pipe	each	68.00	76.00	75.00	83.00
	b	150mm i/d pipe	each	91.00	100.00	100.00	109.00
	c	200mm i/d pipe	each	113.00	125.00	124.00	0.00
	d	250mm i/d pipe	each	136.00	149.00	150.00	163.00
	e	300mm i/d pipe	each	152.00	168.00	167.00	183.00
	f	400mm i/d pipe	each	169.00	187.00	186.00	204.00
	g	450mm i/d pipe	each	186.00	206.00	205.00	225.00
	h	500mm i/d pipe	each	203.00	224.00	223.00	244.00
	i	600mm i/d pipe	each	219.00	243.00	241.00	265.00
	j	700mm i/d pipe	each	236.00	262.00	260.00	286.00
	k	800mm i/d pipe	each	253.00	281.00	278.00	306.00
	l	900mm i/d pipe	each	270.00	300.00	297.00	327.00
	m	1000mm i/d pipe	each	286.00	318.00	315.00	347.00
	n	1100mm i/d pipe	each	303.00	337.00	333.00	367.00
	o	1200mm i/d pipe	each	320.00	356.00	352.00	388.00
	p	1400mm i/d pipe	each	353.00	394.00	388.00	429.00
	q	1600mm i/d pipe	each	387.00	431.00	426.00	470.00
	r	1800mm i/d pipe	each	420.00	469.00	462.00	511.00
	s	2000mm i/d pipe	each	454.00	506.00	499.00	551.00
	t	2200mm i/d pipe	each	487.00	544.00	536.00	593.00
	u	2400mm i/d pipe	each	521.00	582.00	573.00	634.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	v	2600mm i/d pipe	each	554.00	619.00	609.00	674.00
29.48 A	Making soak pit 2.5 m outer Diameter 3.0 metre deep 230mm thick 1:5 brick work honey comb with bricks of 1st Class and S.W. drain pipe 100 mm Diameter, 1.8 m long complete as per standard design.						
		With F.P.S. bricks	1 Soak Pit	4133.00	22331.00	4546.00	22744.00
29.48 B	Constructing soak pit 1.20x1.20x1.6 m deep, 230mm thick 1:5 brick work honey comb with bricks of 1st Class filled with brickbats including S.W. drain pipe 100 mm Diameter and 1.20 m long complete as per standard design.		1 Soak Pit	285.00	1438.00	314.00	1467.00
29.49	Providing & Fixing RCC Road Gully grating & frame						
	a	RCC Road Gully grating & frame size 610mm*457mm	each	367.00	1442.00	404.00	1479.00
	b	RCC Road Gully grating & frame size 610mm*300mm	each	367.00	1186.00	404.00	1223.00
	c	RCC Road Gully grating & frame size 457mm*457mm	each	367.00	1271.00	404.00	1308.00
29.50	Constructing Punjab Standard Drain, type house connection complete consisting of cement concrete drain moulded and laid over lime concrete foundation, rendered and finished smooth with 6mm thick rendering concrete to be of 1:2½:5 parts by volume of cement :sand: stone bajri and rendering to be 1:1 cement sand mortar.		m	76.00	156.00	84.00	164.00
29.51	Constructing Punjab standard drain type I as above.		m	114.00	225.00	125.00	236.00
29.52	Constructing Punjab standard drain type II as above.		m	263.00	583.00	289.00	609.00
29.53	Constructing Punjab standard drain type III as above.		m	371.00	765.00	408.00	802.00
29.54	Constructing Punjab standard drain type IV as above.		m	475.00	945.00	523.00	993.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
29.55	Constructing brick masonry manhole in cement mortar 1:5 ( 1 cement : 5 coarse sand ) R.C.C. top slab 20cm thick using M-20 mix by using mixer and vibrator, TMT Fe500 @ 80.00 kg/per cum, foundation concrete 1:4:8 mix (1 cement: 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with floating coat of neat cement and making 40mm thick benching in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement, Orange coloured PVC steps including RCC cover with frame complete as per standard design complete in all respects.						
	a	Inside size 75x120 cm and 120 cm deep	each	6245.00	23066.00	6870.00	23691.00
	b	Inside size 90x150 cm and 120 cm deep	each	7776.00	29224.00	8554.00	30002.00
	c	Inside size 120x180 cm and 120 cm deep	each	9719.00	37847.00	10691.00	38819.00
	d	Inside size 150x180 cm and 120 cm deep	each	11100.00	41408.00	12210.00	42518.00
29.56	Constructing brick masonry manhole in cement mortar 1:5 ( 1 cement : 5 coarse sand ) with RCC core wall between masonry, R.C.C. top slab 20mm thick using M-20 mix, foundation concrete 1:4:8 mix (1 cement: 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with floating coat of neat cement and making benching in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement, Orange coloured PVC steps including RCC cover with frame internal dimensions.complete as per standard design. (In water logged area).						
	a	Inside size 75x120 cm and 120 cm deep	each	10609.00	40187.00	11670.00	41248.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	b	Inside size 90x150 cm and 120 cm deep	each	12399.00	47495.00	13639.00	48735.00
	c	Inside size 120x180 cm and 120 cm deep	each	15082.00	57087.00	16590.00	58595.00
	d	Inside size 150x180 cm and 120 cm deep	each	17097.00	62972.00	18807.00	64682.00
29.57	Extra payable for every 0.30 m additional depth of manhole chamber in item 29.85 upto 1.80 m increase in depth.						
	a	Inside size 75x120 cm	each Depth of 0.30 m.	1482.00	5316.00	1630.00	5464.00
	b	Inside size 90x150 cm	each Depth of 0.30 m.	1700.00	6026.00	1870.00	6196.00
	c	Inside size 120x180 cm	each Depth of 0.30 m.	2051.00	7269.00	2256.00	7474.00
	d	Inside size 150x180 cm	each Depth of 0.30 m.	2211.00	7798.00	2432.00	8019.00
29.58	Extra payable for every 0.30 m additional depth of manhole chamber in item 29.55 upto 1.80 m increase in depth.						
	a	Inside size 75x120 cm	each Depth of 0.30 m.	704.00	2220.00	774.00	2290.00
	b	Inside size 90x150 cm	each Depth of 0.30 m.	831.00	2596.00	914.00	2679.00
	c	Inside size 120x180 cm	each Depth of 0.30 m.	1014.00	3149.00	1115.00	3250.00
	d	Inside size 150x180 cm	each Depth of 0.30 m.	1099.00	3400.00	1209.00	3510.00
29.59	Extra payable for every 0.30 m additional depth of manhole chamber in item 29.55 beyond 1.80 m upto 3.60 m beyond additional depth.						
	a	Inside size 75x120 cm	each Depth of 0.30 m.	743.00	2374.00	817.00	2448.00
	b	Inside size 90x150 cm	each Depth of 0.30 m.	884.00	2801.00	972.00	2889.00
	c	Inside size 120x180 cm	each Depth of 0.30 m.	898.00	3148.00	988.00	3238.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	d	Inside size 150x180 cm	each Depth of 0.30 m.	1138.00	3553.00	1252.00	3667.00
29.60	Construction of brick masonry inspection chambers size as given below upto 0.60 metre average depth in 1:5 cement sand mortar, C.C.1:4:8 ( 150mm thick) in foundation, cement concrete 1:2:4 benching 12.50mm thick cement plaster 1:2 with a floating coat of 1mm thick of neat cement, R.C.C. 1:2:4 slabs 100mm thick cement concrete topping 50mm thick with 455mm x 455mm, 455mm x 610mm inside R.C.C. inspection chamber cover and frame (Weight as per I.S.I specifications) painted with 3 coats of black bitumastic paint conforming to I.S.I complete as per standard design.						
	(a)	Size 450mm x 450mm inside with RCC 455mm x 455mm cover and frame light duty double seal	each	2126.00	9931.00	2339.00	10144.00
	(b)	450mm x 600mm inside with 455mm x 610mm cover and frame light duty double seal	each	2902.00	11505.00	3192.00	11795.00
	(c)	600mm x 900mm inside with 455mm x 455mm cover and frame light duty double seal	each	3804.00	13583.00	4184.00	13963.00
29.61	<b>Extra for every 0.30 metre depth of inspection chamber.</b>						
	(a)	450mm x 450mm inside	each Depth of 0.30 m.	405.00	1160.00	446.00	1201.00
	(b)	450mm x 600mm inside	each Depth of 0.30 m.	456.00	1293.00	502.00	1339.00
	(c)	600mm x 900mm inside	each Depth of 0.30 m.	627.00	1749.00	690.00	1812.00



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
29.62	Constructing Brick masonry ventilating chambers as per standard drawing including dressing of beds and sides of chamber to exact profiles 15cm. C.C 1:6:12 (150mm thick) in foundation, first class brick work laid in cement sand mortar 1:5, cement concrete 1:2:4 for reinforced concrete work in slab, 12.5mm thick cement plaster 1:2 rendered with a floating coat of neat cement 1mm thick over exposed brick tablet and inside walls, lime pointing 2:3 on outside complete and as required by the Engineer-In-Charge.	each	4,853.00	13,134.00	5,338.00	13,619.00
29.63	Constructing brick masonry road gully chambers as per standard drawings (as per sizes given below) including dressing of beds and sides of chambers to exact profiles, 15cm thick C.C 1:6:12 in foundation, first class brick work laid in cement sand mortar 1:5, 40mm thick cement concrete 1:2:4 topping inside the chamber with a floating coat of 1.5mm thick neat cement laid in one operation to the topping, the entire inner surface of the chamber rendered with neat cement not less than 12.50mm in thickness of 1:2 cement sand plaster and finished with a floating coat of neat cement 1mm thick left absolutely smooth polished and correct to template including cost of precasted RCC road gully grating and frame including paint with coal tar (as specified in item No. 29.74) complete and to the requirement of the					
A	Single Road Gully chamber					
a	Size 610mm x 457mm x 800mm	each	1795.00	5981.00	1975.00	6161.00
b	Size 610mm x 457mm x 1105mm	each	2188.00	7371.00	2407.00	7590.00
B	Double Road Gully Chamber					
a	Size 1448mm x 457mm x 800mm	each	3201.00	10521.00	3521.00	10841.00
b	Size 1448mm x 457mm x 1105mm	each	3853.00	12754.00	4238.00	13139.00
29.64	<b>Reduction for every 7.50cm depth of road gully chamber from the rate of item No. 29.92 above :-</b>					
(a)	Single Road Gully Chamber	each	99.00	310.00	109.00	320.00
(b)	Double Road Gully Chamber	each	165.00	510.00	182.00	527.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
29.65	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement: 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:2 (1 cement : 2 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete.						
	a	For pipes 100 to 250 mm Diameter	One connection	286.00	336.00	315.00	365.00
	b	For pipes 300 to 450 mm Diameter	One connection	379.00	467.00	417.00	505.00
29.66	Dismantling of manhole chamber including R.C.C. top slab, C.I. cover with frame including stacking of useful materials near the site including disposal of unserviceable material within 100 m. as desired by Engineer-in-charge.						
	a	Rectangular manhole 75x120 cm and 45 cm deep	each	1797.00	1797.00	1977.00	1977.00
	b	Rectangular manhole 90x150 cm and 45 cm deep	each	2415.00	2415.00	2657.00	2657.00
	c	Rectangular manhole 120x180 cm and 45 cm deep	each	3156.00	3156.00	3472.00	3472.00
	d	Rectangular manhole 150x180 cm and 45 cm deep	each	3604.00	3604.00	3964.00	3964.00
29.67	Extra for depth of manholes dismantled for additional depth of 0.300 m. including disposal of dismantled material within 100 m. as desired by Engineer-in-charge.						
	a	Rectangular manhole 75x120 cm	each	227.00	227.00	250.00	250.00
	b	Rectangular manhole 90x150 cm	each	269.00	269.00	296.00	296.00
	c	Rectangular manhole 120x180 cm	each	331.00	331.00	364.00	364.00
	d	Rectangular manhole 150x180 cm	each	358.00	358.00	394.00	394.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
29.68	Raising RCC slab of all thickness on Man hole chamber to desired height and placing back in position after raising the Manhole (Raising depth of Brick Work and Plaster will be paid extra as per CSR Item.)						
	a	Inside size 75x120 cm	each	2220.00	4987.00	2442.00	5209.00
	b	Inside size 90x150 cm	each	3083.00	6856.00	3391.00	7164.00
	c	Inside size 120x180 cm	each	4588.00	10131.00	5047.00	10590.00
	d	Inside size 150x180 cm	each	5531.00	12105.00	6084.00	12658.00
29.69	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials and disposal of unserviceable materials within 100 m. as desired by Engineer-in-Charge.						
	a	100 mm Diametre	m	48.00	48.00	53.00	53.00
	b	150 mm Diametre	m	54.00	54.00	59.00	59.00
	c	200 mm Diametre	m	57.00	57.00	63.00	63.00
	d	230 mm Diametre	m	59.00	59.00	65.00	65.00
	e	250 mm Diametre	m	60.00	60.00	66.00	66.00
	f	300 mm Diametre	m	64.00	64.00	70.00	70.00
	g	350 mm Diametre	m	74.00	74.00	81.00	81.00
	h	400 mm Diametre	m	80.00	80.00	88.00	88.00
	i	450 mm Diametre	m	84.00	84.00	92.00	92.00
29.70	Disilting all types of main sewers 760 mm and onwards internal dia by silt clearing machines addopting all safety measures and disposal of silt upto 5km complete in all respects.		m	408.00	408.00	449.00	449.00
29.71	Disilting of manhole including all safety measures, cost of container T & P and disposal of silt upto 5km complete in all respects.						
	a	Depth upto 3 m.	cum	1719.00	1719.00	1891.00	1891.00
	b	Depth above 3 m.	cum	2293.00	2293.00	2522.00	2522.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
29.72	Making connection of newly laid sewer in walls of existing manhole of fully charge sewer including cost of plugging sewer, desilting, removal of sullage water and making good of khudda						
	A	Sewer connections upto 300 mm id	One Connection	6060.00	6060.00	6666.00	6666.00
	B	Sewer connection above 300 mm i/d and upto 700 mm i/d	One Connection	11547.00	11547.00	12702.00	12702.00
	C	All type of connections above 760 mm i/d and above	One Connection	18830.00	18830.00	20713.00	20713.00
29.73	Extra for making connections of all sizes newly laid sewers within benching of fully charged sewers including plugging of sewer, dewatering & desilting of manholes etc.						
	A	with existing sewer of 300 mm id and below	One Connection	704.00	704.00	774.00	774.00
	B	With existing sewer above 300 mm i/d upto 700 mm i/d	One Connection	1646.00	1646.00	1811.00	1811.00
	C	With existing sewer of 760 mm i/d and above	One Connection	2640.00	2640.00	2904.00	2904.00
29.74	Providing & Fixing Monolithically pre-casted RCC Inspection chamber of RCC M-25 grade with Manhole frame cover of 450 mm i/d of Grade MD-10 as per IS 12592		each	2611.00	8728.00	2872.00	8989.00

**CHAPTER NO. 30**  
**SANITARY INSTALLATIONS**

**Notes:-**

- (i) All the labour rates provided under this chapter includes the carriage of material within a distance of 100mtr from the site.
- (ii) The labour as well as through rates provided under this chapter include the wastage and breakage of various material during construction
- (iii) Provision has been made under this chapter for sanitary fittings of approved make presently available in the market. In this connection the Superintending Engineer will circulate from time to time the list of sanitary fittings of best Indian manufacture (approved by the department). Sanitary fittings of approved make (to the approval of Engineer-in-charge) will only be allowed to be used while executing the work.
- (iv) Material defect, execution defect or other defects if any on the part of the contractor, found at later stage which could not be traced while execution of work and are not part of maintenance, will remain the responsibility of the contractor to set right the same at his own cost, though he may have taken all his dues.

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
30.1	Providing and fixing in position set of EWC and WHB size 46x36 cm for Handicapped person of approved make (to the approval of the Engineer-in-charge) consisting of matching cistern, one pair mounting brackets, seat cover, one no. hinges rail 76cm and 4 no. grab rails 60cm complete in all respect and to the entire satisfaction of Engineer-in-charge.	each	3316.00	63972.00	3648.00	64304.00
30.2	Providing and fixing in position Chinaware Indian Orisa water closet size 580x440 mm of approved make (to the approval of the Engineer-in-charge) consisting of 10 ltr. PVC flushing cistern ISI marked including cost of PVC long bend 32 mm dia complete in all respect and to the entire satisfaction of Engineer-in-charge.	each	1559.00	5323.00	1715.00	5479.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
30.3	Providing and fixing in position Chinaware Floor Mounted One Piece EWC type with matching chinaware cistern 10 ltr. Capacity. (without cistern fitting) with P trap or S trap of approved make (to the approval of the Engineer-in-charge) and seat cover complete in all respect and to the entire satisfaction of Engineer-in-charge.						
	a)	Chinaware Floor Mounted One Piece EWC type with matching chinaware cistern 10 ltr. Capacity (without cistern fitting) size 62x37x67 cm with P trap or S trap and seat cover complete in all respect.	each	1480.00	10048.00	1628.00	10196.00
	b)	Chinaware Floor Mounted One Piece EWC rim less type with matching chinaware cistern 10 ltr. Capacity. (without cistern fitting) size 69x36x74 cm with P trap or S trap and seat cover complete in all respect.	each	1550.00	16520.00	1705.00	16675.00
30.4	Providing and fixing in position Chinaware European type water closet P trap or S trap of approved make (to the approval of the Engineer-in-charge) consisting of 10 ltr. PVC flushing cistern ISI marked, PVC short bend 32 mm dia including cost of seat cover complete in all respect and to the entire satisfaction of Engineer-in-charge.		each	1494.00	4780.00	1643.00	4929.00
30.5	Providing and fixing in position Chinaware extended wall mounted E. W.C. type suite (size 66 x 46 x 77.5 cm ) with P trap or S trap of approved make (to the approval of the Engineer-in-charge) with or without 10 ltr. chinaware matching flushing cistern and seat cover complete in all respect and to the entire satisfaction of Engineer-in-charge.						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	a)	Chinaware extended wall mounted E W.C. with matching chinaware cistern and seat cover complete in all respect.	each	1649.00	13199.00	1814.00	13364.00
	b)	Chinaware wall mounted E.W.C without cistern including seat cover complete in all respect.	each	1494.00	9868.00	1643.00	10017.00
30.6 (A)	Providing and fixing PVC Cistern 10 Ltr. Capacity ISI marked IS 7231:1994( size 32.5x47.6x15.5 cm) of approved make(to the approval of the Engineer-in-charge) including PVC fittings complete.		each	178.00	1467.00	196.00	1485.00
30.6 (B)	(i)	Providing and fixing vitreous Chinaware chinware 10 Ltr. Capacity with PVC internal fitting (Size 34.x 50 x 22.5 cm) of approved make(to the approval of the Engineer-in-charge) including PVC fittings and brackets complete.	each	296.00	4079.00	326.00	4109.00
	(ii)	Providing and fixing Chinaware Cistern (Dual flush) 10 Ltr. Capacity with PVC internal fitting. (Size 38x43x17.5 cm) of approved make(to the approval of the Engineer-in-charge) including PVC fittings and brackets complete.	each	296.00	4913.00	326.00	4943.00
	(iii)	Providing and fixing PVC accessory fittings in Chinaware flushing cistern 10 Litres capacity complete.	each	118.00	936.00	130.00	948.00
	(iv)	Providing and fixing PVC accessory fittings for dual flush Chinaware flushing cistern 10 Litres capacity complete.	each	296.00	1636.00	326.00	1666.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(v)	Providing and fixing PVC accessory fittings for dual flush suitable for extended wall mounted Chinaware flushing cistern complete.	each	284.00	2087.00	312.00	2115.00
30.6 (C)	Providing and fixing in position concealed cistern including flushing plate of approved make (to the approval of the Engineer-in-charge) complete in all respect.		each	1184.00	9369.00	1302.00	9487.00
30.7 (A)	Providing and fixing C.P. brass 32mm long bend complete		each	43.00	759.00	47.00	763.00
30.7 (B)	Providing and fixing C.P. brass 32mm short bend complete		each	43.00	423.00	47.00	427.00
30.7 (C)	Extra for providing and fixing C.P. Brass long flush bend 32mm instead of PVC long bend.		each	---	471.37	---	471.37
30.7 (D)	Extra for providing and fixing C.P. Brass short flush bend 32mm instead of PVC short bend.		each	---	257.41	---	257.41
30.8	Providing and fixing jet spray with 2'-6" long PVC pipe.						
	a)	With C.P. Brass nut	each	118.00	476.00	130.00	488.00
	b)	With PTMT nut	each	118.00	362.00	130.00	374.00
30.9	Providing and fixing plastic hygenic seat cover with lid complete.						
	a)	Plastic Seat Cover Premium star white/pastel/special colour	each	83.00	765.00	91.00	773.00
	b)	Seat Cover Constellation Soft Close Star white	each	83.00	1431.00	91.00	1439.00



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
30.10 (a)	Providing and fixing in position Chinaware Indian Orisa water closet size 580x440 mm of approved make (to the approval of the Engineer-in-charge) complete in all respect	each	1438.00	3729.00	1582.00	3873.00
30.10 (b)	Providing and fixing in position Chinaware European type water closet P trap or S trap of approved make (to the approval of the Engineer-in-charge) complete in all respect.	each	902.00	2949.00	992.00	3039.00
30.11	Providing and fixing in position Metropole flush valve push type 32mm size dual flow (Concealed body) with exposed shut off provision and round plate complete in all respect.	each	237.00	3250.00	261.00	3274.00
30.12	Providing and fixing in position CP Brass Grab Bar of approved make (to the approval of the Engineer-in-charge) fixed in to wall with brass screws complete in all respect.	each	148.00	1672.00	163.00	1687.00
30.13	Providing and fixing in position SS Grab Bar Grade 304 of approved make (to the approval of the Engineer-in-charge) fixed in to wall with brass screws complete in all respect.					
	a) 35mm dia 225mm (9") long	each	148.00	982.00	163.00	997.00
	b) 35mm dia 300mm (12") long	each	148.00	1066.00	163.00	1081.00
	c) 35mm dia 450mm (18") long	each	148.00	1218.00	163.00	1233.00
	d) 35mm dia 600mm (24") long	each	148.00	1319.00	163.00	1334.00
	e) 35mm dia 900mm (36") long	each	148.00	1740.00	163.00	1755.00
	f) 35mm dia 1200mm (48") long	each	148.00	2667.00	163.00	2682.00
	g) Foldable U Type 762mm long	each	148.00	6315.00	163.00	6330.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
30.14 (a)	Extra for providing and fixing 10 litres capacity Chinaware low level flushing cistern with PVC internal fitting, instead of 10 litres capacity PVC flushing cistern.	each	---	2572.77	---	2572.77
30.14 (b)	Extra for providing and fixing 10 litres capacity Chinaware low level dual flushing cistern with PVC internal fitting, instead of 10 litres capacity PVC flushing cistern.	each	---	3433.25	---	3433.25
30.15	Providing & fixing in position vitreous Chinware white Indian make flat back or angular lipped front small urinals size 265x315x440mm approved make (to the approval of the Engineer-in-charge) with C.P. brass tube connection 300 mm long complete in all respect.	each	1184.00	2987.00	1302.00	3105.00
30.16	Providing and fixing in position vitreous Chinaware white Indian make large flat back or angular lipped front urinal 375 x 390 x 590 mm of approved make (to the approval of the Engineer-in-charge) consisting of C.P. brass Urinal waste Coupling dome type 32mm outer length 75 mm , C.P. brass Urinal Spreader Ocular-Regular and C.P. brass tube connection 300 mm long complete.	each	1184.00	6551.00	1302.00	6669.00
30.17 (A)	Providing and fixing in position vitreous Chinaware white Senso urinal size 37 x 39 x 61 cm of approved make (to the approval of Engineer-in-charge) consisting of C.P. brass Urinal waste Coupling dome type 32mm outer length 75 mm complete in all respect.	each	1184.00	19356.00	1302.00	19474.00
30.17 (B)	Providing and fixing in position Vitreous Chinaware white urinal with concealed or in built P-trap (size 310x370x640 mm) with built in water seal, outlet to wall and water inlet from back of approved make (to the approval of Engineer-in-charge) complete in all respect.	each	1184.00	10544.00	1302.00	10662.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
30.18 A	Providing and fixing in position Sensor electric for urinal of approved make (to the approval of Engineer-in-charge) complete in all respect.	each	155.00	6473.00	171.00	6489.00
30.18 B	Providing and fixing in position Sensor Battery Operated for urinal of approved make (to the approval of Engineer-in-charge) complete in all respect.	each	155.00	6052.00	171.00	6068.00
30.19 (a)	Extra for providing and fixing G.I. 32mm waste pipe for urinal including elbow, reducer etc complete in all respect.	each	118.00	423.00	130.00	435.00
30.19 (b)	Extra for providing and fixing G.I. 40mm waste pipe including elbow, reducer etc complete in all respect.	each	118.00	466.00	130.00	478.00
30.20	Providing and fixing P.V.C Waste Pipe Collapsible 32mm complete in all respect.	each	62.00	113.00	68.00	119.00
30.21 (A)	Providing and fixing partition for different type of urinals.					
	i) Chittor Black Slabs 19-20mm thick marble partition size 375mm x 750mm	each	296.00	711.00	326.00	741.00
	ii) 19 to 20 mm thick Granite stone partition size 375mm x 750mm	each	296.00	1079.00	326.00	1109.00
	iii) Toughened Glass Partition 8mm thickness size 450 x 900 mm C/S	each	296.00	6025.00	326.00	6055.00
30.21 (B)	Vitreous white Chinaware Partition					
	i) Small partitions size 69 x 16.5 x 32.5 cm	each	296.00	2284.00	326.00	2314.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	ii)	Large partition size 75 x 16.5 x 36.5 cm	each	296.00	4652.00	326.00	4682.00
30.22	Providing and fixing in position C.P. brass Tumbler Holder of approved make (to the approval of Engineer-in-charge ) fixed into wall with rawl plugs and C.P brass screws complete in all respect.		each	83.00	778.00	91.00	786.00
30.23	Providing and fixing C.P. brass Urinal Spreader Ocular-Regular complete with fittings for urinals complete.		each	83.00	437.00	91.00	445.00
30.24	Providing and fixing Stainless steel health faucet complete in all respect.		each	118.00	1139.00	130.00	1151.00
30.25	Providing & fixing in position Water Cooler without Stablizer of approved make (to the approval of Engineer-in-charge ) including carriage complete in all respect.						
	(a)	Water Cooler Full Steel Body 40/80 ltr Capacity without Stablizer	each	533.00	31289.00	586.00	31342.00
	(b)	Water Cooler Full Steel Body 60/80 ltr Capacity without Stablizer	each	533.00	32935.00	586.00	32988.00
	c)	Water Cooler Semi Steel Body 80/120 ltr Capacity without Stablizer	each	533.00	35682.00	586.00	35735.00
	d)	Water Cooler Full Steel Body 150/150 ltr without Stablizer	each	533.00	44470.00	586.00	44523.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
30.26	Providing & fixing in position Water Dispenser Top Loading (with refrigeration capacity 15 ltr) of approved make (to the approval of Engineer-in-charge ) dispensing hot/cold/ambient water including cost of two no. 20 ltrs packaged drinking water bottles and carriage complete in all respect.	each	148.00	8646.00	163.00	8661.00
30.27	Providing & fixing in position Commercial RO without reservoir with four no cartridge/ membrane having flow rate 50 ltr/hr with 6 stage purification process of approved make (to the approval of Engineer-in-charge ) including carriage and fixing in position complete in all respect.	each	592.00	38184.00	651.00	38243.00
30.28	Providing & fixing in position UV filter having flow rate 200 ltr/hr with 3 stage purification process having 16 watt UV lamp and 35 Watt power rating of approved make (to the approval of Engineer-in-charge ) including carriage and fixing in position complete in all respect.	each	296.00	12691.00	326.00	12721.00
30.29	Providing and fixing PTMT 15 mm Urinal spreader of approved make (to the approval of Engineer-in-charge) size 95x69x100 mm with 1/2" BSP thread and shapes, weighing not less than 60gms. complete in all respect.	each	74.00	221.00	81.00	228.00
30.30	Providing and fixing PTMT urinal cock of approved make (to the approval of Engineer-in-charge) 15 mm nominal bore, 80mm long. 42 mm high and 30mm wide with BSP female threads weighing not less than 48gms of approved quality and colour complete in all respect.	each	74.00	221.00	81.00	228.00
30.31	Providing and fixing in position vitreous chinaware white lavatory suites of approved make (to the approval of Engineer-in-charge) including Rack Bolt Screw Pair 115mm long without CP fittings complete in all respect.					
	i) Size 450mmx300mm	each	592.00	1699.00	651.00	1758.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	ii)	Size 550 mm x 400 mm x 815 mm	each	592.00	1943.00	651.00	2002.00
	iii)	Size 630 mm x 450 mm x 830 mm	each	592.00	3527.00	651.00	3586.00
	iv)	Size 500 mm x 400 mm x 820 mm	each	592.00	1783.00	651.00	1842.00
	v)	Size 560mm x 430mm x 820 mm	each	592.00	2247.00	651.00	2306.00
	vi)	Size 560mm x 410mm (above counter oval)	each	592.00	2698.00	651.00	2757.00
	vii)	Size 49 cm dia (above counter round)	each	592.00	3103.00	651.00	3162.00
	viii)	Size 630mm x 500mm (above counter oval)	each	592.00	4459.00	651.00	4518.00
	ix)	Size 560mm x 450mm (Under counter oval)	each	592.00	2690.00	651.00	2749.00
	x)	size 44cm dia (under counter round)	each	592.00	2783.00	651.00	2842.00
	xi)	Table Top (size 49 x 40 x 15 cm)	each	592.00	8301.00	651.00	8360.00
	xii)	Table Top round (size 40.5 x 40.5 x 14 cm)	each	592.00	7155.00	651.00	7214.00
	xiii)	Table Top square (size 39 x 39 x 15 cm)	each	592.00	7466.00	651.00	7525.00
	xiv)	Size 460mm x 330mm x 805 mm	each	592.00	1826.00	651.00	1885.00
30.32	Providing and fixing in position vitreous chinaware white lavatory suites of approved make (to the approval of Engineer-in-charge) consisting of C.P. brass waste 32mm dia with one C.P. brass pillar tap including Rack Bolt Screw Pair 115mm long complete in all respect.						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	i)	Size 450mmx300mm	each	829.00	3369.00	912.00	3452.00
	ii)	Size 550 mm x 400 mm x 815 mm	each	829.00	3614.00	912.00	3697.00
	iii)	Size 630 mm x 450 mm x 830 mm	each	829.00	5197.00	912.00	5280.00
	iv)	Size 500mm x 400 mm x 820 mm	each	829.00	3454.00	912.00	3537.00
	v)	Size 560mm x 430mm x 820 mm	each	829.00	3917.00	912.00	4000.00
	vi)	Size 560mm x 410mm (above counter oval)	each	922.00	4306.00	1014.00	4398.00
	vii)	Size 49 cm dia (above counter round)	each	922.00	4710.00	1014.00	4802.00
	viii)	Size 630mm x 500mm (above counter oval)	each	922.00	6067.00	1014.00	6159.00
	ix)	Size 560mm x 450mm (Under counter oval)	each	922.00	4297.00	1014.00	4389.00
	x)	size 44cm dia (under counter round)	each	922.00	4390.00	1014.00	4482.00
	xi)	Table Top (size 49 x 40 x 15 cm)	each	592.00	8301.00	651.00	8360.00
	xii)	Table Top round (size 40.5 x 40.5 x 14 cm)	each	592.00	7155.00	651.00	7214.00
	xiii)	Table Top square (size 39 x 39 x 15 cm)	each	592.00	7466.00	651.00	7525.00
	xiv)	Size 460mm x 330mm x 805 mm	each	829.00	3496.00	912.00	3579.00
30.33	Providing and fixing in position 15mm C.P. Pillar cock foam flow of approved make (to the approval of Engineer-in-charge)		each	78.00	935.00	86.00	943.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
30.34	Providing and fixing in position C.P. Brass Auto close Pillar Cock of approved make (to the approval of Engineer-in-charge)	each	78.00	2504.00	86.00	2512.00
30.35	Providing and fixing in position C.P. Brass Auto close bib Cock of approved make (to the approval of Engineer-in-charge)	each	78.00	2355.00	86.00	2363.00
30.36	Providing and fixing in position C.P. Brass Urinal button flusher 15 mm of approved make (to the approval of Engineer-in-charge)	each	78.00	2391.00	86.00	2399.00
30.37	Providing and fixing in position C.P brass basin mixer without pop-up waste system with 450 mm long flexible hose of approved make (to the approval of Engineer-in-charge) complete in all respect.	each	124.00	2864.00	136.00	2876.00
30.38	Providing and fixing in position C.P brass basin mixer without pop-up waste system with 450 mm long flexible hose of approved make (to the approval of Engineer-in-charge) instead of C.P. brass pillar tap complete in all respect.	each	124.00	2007.00	136.00	2019.00
30.39	Providing and fixing in position C.P brass Single Lever basin mixer without Popup waste with 450 mm Long Braided Hoses approved make (to the approval of Engineer-in-charge) complete in all respect.	each	124.00	2914.00	136.00	2926.00
30.40	Providing and fixing in position CP Brass single lever surgical mixer with swinging spout approved make (to the approval of Engineer-in-charge) complete in all respect.	each	124.00	5454.00	136.00	5466.00
30.41 (A)	Providing and fixing in position C.P elbow action pillar tap of approved make (to the approval of Engineer-in-charge) complete in all respect.	each	78.00	2110.00	86.00	2118.00



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
30.41 (B)	Providing and fixing in position C.P elbow action bib tap of approved make (to the approval of Engineer-in-charge) complete in all respect.		each	78.00	1819.00	86.00	1827.00
30.42 (A)	Providing and fixing in position 32 mm dia G.I waste pipe embedded in wall upto floor level including cost of fittings complete as required by the Engineer-in-charge.		each	226.00	619.00	249.00	642.00
30.42 B)	Providing and fixing 40 mm i/d G.I waste pipe embedded in walls upto floor level as required by the Engineer-in-Charge		each	226.00	662.00	249.00	685.00
30.43	Providing and fixing vitreous chinaware pedestal of approved make (to the approval of Engineer-in-charge) for wash hand basin complete in all respect.						
	i)	Vitreous chinaware standard white pedestal for wash hand basin.	each	62.00	2010.00	68.00	2016.00
	ii)	Vitreous chinaware standard white half pedestal for wash hand basin.	each	62.00	1465.00	68.00	1471.00
30.44	Providing and fixing in position C.P. brass bottle trap 32mm dia with 40 mm seal of approved make (to the approval of Engineer-in-charge) complete in all respect.		each	124.00	1122.00	136.00	1134.00
30.45	Providing and fixing PTMT Bottle trap 31mm single piece moulded with height of 270mm, effective length of tail pipe 260mm from the centre of the waste coupling 77mm breadth with 25mm minimum water seal, weighing not less than 260gms of approved make (to the approval of Engineer-in-charge) for wash hand basin and sink complete in all respect..		each	124.00	542.00	136.00	554.00
30.46	Providing & fixing in position 15 mm i/d C.P brass wall mixer of approved make (to the approval of Engineer-in-charge ) complete in all respect.						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	a)	C.P. brass wall mixer with Telephonic Shower	each	118.00	3766.00	130.00	3778.00
	b)	C.P. brass wall mixer without telephonic shower	each	118.00	2895.00	130.00	2907.00
30.47	Providing and fixing in position stainless steel sinks of approved make (to the approval of Engineer-in-charge) 1mm thick, grade-304 (18/8) with waste coupling complete in all respect.						
	(a)	Rectangular Sink with Deluxe Border Single Bowl Overall Size 700 mm x 555 mm x 230 mm	each	1590.00	7740.00	1749.00	7899.00
	(b)	Rectangular Sink with Deluxe Border Single Bowl Overall Size 555 mm x 475mm x 200 mm	each	1590.00	6481.00	1749.00	6640.00
	(c)	Sink with drain board overall size 1070x464mm bowl size 430x355x200mm and waste coupling	each	1590.00	8304.00	1749.00	8463.00
	(d)	Double bowl Sink without drain board Overall size 1114 x 490 mm with bowl size 460x385x200mm including waste coupling	each	1590.00	13811.00	1749.00	13970.00
	(e)	Double bowl Sink without drain board Overall size 1330x515 bowl size 560x410x200mm	each	1590.00	14803.00	1749.00	14962.00
30.48	Providing & fixing in position C.P. brass Sink Cock with swinging spout (wall mounted) of approved make (to the approval of Engineer-in-charge) complete in all respect.		each	78.00	1461.00	86.00	1469.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
30.49	Providing & fixing in position C.P. brass Sink Cock swinging casted spout (table mounted) of approved make (to the approval of Engineer-in-charge) complete in all respect.		each	78.00	1819.00	86.00	1827.00
30.50	Providing & fixing in position C.P brass Sink mixer swivel spout (Wall mounted) of approved make (to the approval of Engineer-in-charge) complete in all respect.		each	124.00	2959.00	136.00	2971.00
30.51	Providing & fixing in position C.P brass Sink mixer swinging spout (table mounted) with 450mm long flexible hose of approved make (to the approval of Engineer-in-charge) complete in all respect.		each	124.00	3063.00	136.00	3075.00
30.52	Providing & Fixing in position CP Brass bath tub spout with wall flange of approved make (to the approval of Engineer-in-charge) complete in all respect.		each	78.00	1257.00	86.00	1265.00
30.53	Providing & Fixing in position CP Brass Spout Operated Pillar Tap with base flange (for foot operated valve) of approved make (to the approval of Engineer-in-charge) complete in all respect.		each	155.000	1613.000	171.00	1629.00
30.54	Providing and Fixing in position Glass shower enclosure L shaped 8mm thick with chrome finish with sliding door and entry from the front of approved make (to the approval of Engineer-in-charge) complete in all respect.						
	a)	1200x800 x 1950mm	each	1749.00	27022.00	1924.00	27197.00
	b)	1200x900 x 1950mm	each	1749.00	27508.00	1924.00	27683.00
	c)	1200x1000 x 1950mm	each	1749.00	27994.00	1924.00	28169.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
30.55	Providing and fixing in position vitreous Chinaware white laboratory sinks of approved make (to the approval of Engineer-in-charge) consisting of a pair of brackets, C.P. brass waste 40mm complete in all respect.						
	(a)	Size 450 mm x 300 mm x 150 mm	each	1590.00	4741.00	1749.00	4900.00
	(b)	Size 470mmx370mmx180mm	each	1590.00	6426.00	1749.00	6585.00
30.56 A	Providing and fixing in position C.P. brass overhead shower 1 flow with shower arm with 15mm i/d inlet of approved make (to the approval of Engineer-in-charge) complete in all respect.		each	95.00	1025.00	105.00	1035.00
30.56 B	Providing and fixing in position C.P. brass overhead shower 1 flow without shower arm with 15mm i/d inlet of approved make (to the approval of Engineer-in-charge) complete in all respect.		each	95.00	821.00	105.00	831.00
30.56 C	Providing and fixing in position C.P. brass overhead shower round or square 1 flow without shower arm with 15mm i/d inlet of approved make (to the approval of Engineer-in-charge) complete in all respect.						
	i)	CP Brass rain Fall Shower without arm 4" round	each	95.00	1020.00	105.00	1030.00
	ii)	CP Brass rain Fall Shower without arm 6" round	each	95.00	1433.00	105.00	1443.00
	iii)	CP Brass rain Fall Shower without arm 8" round	each	95.00	2063.00	105.00	2073.00
	iv)	CP Brass rain Fall Shower without arm 4" square	each	95.00	1134.00	105.00	1144.00
	v)	CP Brass rain Fall Shower without arm 6" square	each	95.00	1673.00	105.00	1683.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	vi)	CP Brass rain Fall Shower without arm 8" square	each	95.00	2363.00	105.00	2373.00
30.56 D	Providing and fixing in position C.P. brass overhead shower arm chrome round or square with 15mm i/d inlet of approved make (to the approval of Engineer-in-charge) complete in all respect.						
	i)	CP Brass rain Fall Shower arm 15" length round chrome	each	95.00	1193.00	105.00	1203.00
	ii)	CP Brass rain Fall Shower arm 18" length round chrome	each	95.00	1297.00	105.00	1307.00
	iii)	CP Brass rain Fall Shower arm 24" length round chrome	each	95.00	1905.00	105.00	1915.00
	iv)	CP Brass rain Fall Shower arm 15" length square chrome	each	95.00	1487.00	105.00	1497.00
	v)	CP Brass rain Fall Shower arm 18" length square chrome	each	95.00	1587.00	105.00	1597.00
	vi)	CP Brass rain Fall Shower arm 24" length square chrome	each	95.00	2345.00	105.00	2355.00
30.57	Providing and fixing in position paper holders of approved make (to the approval of Engineer-in-charge ) fixed in to wall with C.P brass screws complete in all respect.						
	(a)	C.P. brass toilet paper holder	each	95.00	1084.00	105.00	1094.00
30.58	Providing and fixing in position towel rails / ring of approved make (to the approval of Engineer-in-charge ) fixed in with rawl plugs embedded in walls with brass screws complete in all respect.						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(a)	C.P. brass towel Rails size 15mm dia 610mm long	each	178.00	1539.00	196.00	1557.00
	(b)	C.P brass towel ring	each	95.00	911.00	105.00	921.00
	(c)	Acrylic towel Rails size 20mm dia 600mm long	each	178.00	409.00	196.00	427.00
	(d)	C.P. brass towel bracket (610mm long)	each	178.00	3285.00	196.00	3303.00
30.59	Providing and fixing in position C.P. Acrylic shelf with C.P.bracket and guard rails of approved make (to the approval of Engineer-in-charge ) fixed in with rawl plugs and C.P brass screws complete in all respect.						
	(a)	CP brass Acrylic Shelf size 560mmx130mm	each	95.00	1669.00	105.00	1679.00
	(b)	C.P. brass Glass Corner with rail 8 mm thickness and height 250 mm	each	95.00	979.00	105.00	989.00
30.60	Providing and fixing in position C.P. brass soap dish of approved make (to the approval of Engineer-in-charge ) fixed into wall with rawl plugs and C.P brass screws complete in all respect.		each	95.00	843.00	105.00	853.00
30.61	Providing & Fixing in position 5mm thick bevelled edge mirror of superior glass (of approved make) complete with 4mm thick hard board backing fixed in with rawl plugs 50mm, C.P. brass screws and washers and S/S Studs on top complete in all respect (as required by the Engineer-in- Charge)						
	(a)	Size 600mmx450mm	each	296.00	1199.00	326.00	1229.00
	(b)	Size 550mmx400mm	each	296.00	1116.00	326.00	1146.00
	(c)	Size 1500mmx600mm or any other size	each	355.00	2767.00	391.00	2803.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
30.62 A	Providing & Fixing in position plastic moulded frame mirror Size 550mmx400mm with 4mm thick hard board backing of required shape fixed in position with rawl plugs, C.P. brass screws and washers complete in all respect	each	178.00	682.00	196.00	700.00
30.62 B	Providing & Fixing in position mirror of superior glass Size 1500mm x600mm or any other required size (of approved quality) and of required shape and size with high quality polystyrene moulding frame of 40 to 50mm size (of approved quality and shade) with 4mm thick hardboard backing fixed in with rawl plugs 50mm, C.P. brass screws and washers complete in all respect	sqm	355.00	2241.00	391.00	2277.00
30.63	Providing & Fixing in position C.P./Aluminium Khunti of approved make (to the approval of Engineer-in-charge ) fixed into wall with C.P. brass screws and rawl plugs etc. complete in all respect.					
	(a) C.P. Brass khunti with 3 pegs	each	95.00	367.00	105.00	377.00
	(b) C.P. Brass khunti with 4 pegs	each	95.00	458.00	105.00	468.00
	(c) C.P. Brass khunti with 6 pegs	each	95.00	639.00	105.00	649.00
	(d) Aluminium khunti with 3 pegs	each	95.00	179.00	105.00	189.00
	(e) Aluminium khunti with 4 pegs	each	95.00	192.00	105.00	202.00
	(f) Aluminium khunti with 6 pegs	each	95.00	257.00	105.00	267.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
30.64 A	Providing & Fixing in position C.P. Brass flange Dome of approved make (to the approval of Engineer-in-charge ) under various fixtures complete in all respect.		each	12.00	63.00	13.00	64.00
30.64 B	Providing & Fixing in position C.P. Brass extension piece 25mm long to 100mm long of approved make (to the approval of Engineer-in-charge )with various fixtures complete in all respect.						
	i)	C.P. Brass extension piece, 25mm long to 50mm long	each	31.00	107.00	34.00	110.00
	ii)	C.P. Brass extension piece 75mm long	each	31.00	174.00	34.00	177.00
	iii)	C.P. Brass extension piece 100 mm long	each	31.00	216.00	34.00	219.00
30.64 C	Providing & Fixing in position C.P. Brass Hexa Nipple 15mm of approved make (to the approval of Engineer-in-charge ) complete in all respect.		each	31.00	83.00	34.00	86.00
30.65 A	Providing & Fixing in position 15 mm i/d bib cock of approved make (to the approval of Engineer-in-charge )complete in all respect.						
	(i)	C.P. brass Bib cock long nose/ long body foam flow without flange	each	78.00	1153.00	86.00	1161.00
	(ii)	C.P. brass Bib cock foam flow without flange	each	78.00	917.00	86.00	925.00
	(iii)	C.P. brass Bib cock self closing	each	78.00	524.00	86.00	532.00
	(iv)	Brass Bib cock/Stop cock 15mm x 400gm	each	43.00	423.00	47.00	427.00
	(v)	Brass Nozel Bib cock 15mm x 250gm.	each	43.00	338.00	47.00	342.00



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(vi)	PTMT Tap/Bib cock	each	43.00	193.00	47.00	197.00
	(vii)	PTMT Pillar tap	each	43.00	287.00	47.00	291.00
	(viii)	PTMT push cock	each	43.00	161.00	47.00	165.00
30.65 B	Providing & Fixing in position C.I.bib cock as per IS:210 with stainless steel spindle of approved make (to the approval of Engineer-in-charge ) complete in all respect.						
	(i)	15mm i/d	each	43.00	187.00	47.00	191.00
	(ii)	20mm i/d	each	43.00	275.00	47.00	279.00
	(iii)	25mm i/d	each	43.00	392.00	47.00	396.00
30.66	Providing & Fixing in position stop cock / Angle valve of approved make (to the approval of Engineer-in-charge ) complete in all respect.						
	(a)	C.P.brass 15mm stop cock Male and female end	each	78.00	803.00	86.00	811.00
	(b)	C.P.brass 15mm Concealed stop cock with flange.	each	124.00	1204.00	136.00	1216.00
	(c)	C.P.brass 15mm Angle valve without flange	each	78.00	826.00	86.00	834.00
	(d)	C.P.brass 20mm concealed stop cock with flange	each	124.00	1399.00	136.00	1411.00
	(e)	PTMT 15mm stop cock Male and female end	each	78.00	233.00	86.00	241.00
	(f)	PTMT 15mm Concealed stop cock with flange.	each	124.00	345.00	136.00	357.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(g)	PTMT 15mm Angle valve	each	62.00	234.00	68.00	240.00
	(h)	PTMT 20mm stop cock	each	62.00	241.00	68.00	247.00
	(i)	PTMT 20mm concealed stop cock with flange	each	124.00	369.00	136.00	381.00
30.67	Providing & Fixing in position liquid soap container of approved make (to the approval of Engineer-in-charge ) complete in all respect.						
	(a)	C.P. brass liquid soap container	each	95.00	1855.00	105.00	1865.00
	(b)	Acrylic liquid soap container	each	95.00	1013.00	105.00	1023.00
30.68	Providing & fixing 15 mm C.P brass laboratory cock swan neck of approved make (to the approval of Engineer-in-charge ) complete in all respect.						
	(a)	Laboratory cock swan neck One Way	each	95.00	1350.00	105.00	1360.00
	(b)	Laboratory cock swan neck Two Way	each	95.00	1687.00	105.00	1697.00
	(c)	Laboratory cock swan neck Three Way	each	95.00	2024.00	105.00	2034.00
30.69	Providing and fixing in position premium range C.P. Brass Fittings and accessories of approved make (to the approval of Engineer-in-charge ) complete in all respect.						
	<b>Note:-To be provided only for VIP Installations and with prior approval of the Engineer-in-charge.</b>						
	<b>A)</b>	<b>C.P. Brass fittings:</b>					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	i)	C.P. Brass Pillar Cock foam flow	each	78.00	1900.00	86.00	1908.00
	ii)	C.P. brass Bib cock with Wall flange	each	78.00	1608.00	86.00	1616.00
	iii)	C.P.brass 15mm Angular stop cock with Wall flange	each	78.00	1025.00	86.00	1033.00
	iv)	C.P. brass 15mm Concealed stop cock with adjustable wall flange with seal.(Outer +Inner Body)	each	124.00	1533.00	136.00	1545.00
	v)	C.P. brass 3-Hole Basin Mixer Without Popup Waste System	each	124.00	4207.00	136.00	4219.00
	vi)	C.P. Brass Wall mixer with Non telephonic shower arrangement.	each	118.00	4347.00	130.00	4359.00
	vii)	C.P brass Sink mixer with swinging spout.(wall mounted)	each	124.00	4012.00	136.00	4024.00
	viii)	C.P brass Sink mixer with regular spout table mounted with 450mm long flexible hose	each	124.00	3186.00	136.00	3198.00
	ix)	C.P. brass Sink Cock with regular swinging spout and wall mounted	each	78.00	2362.00	86.00	2370.00
	x)	C.P. brass overhead shower Φ180mm round shape single flow with shower arm with 20mm i/d Inlet and 300mm long round shape with 900 bend with flange.	each	95.00	3837.00	105.00	3847.00
	B)	C.P. Brass Accessories:					
	i)	C.P. brass towel rail 600 mm long	each	178.00	1320.00	196.00	1338.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	ii)	C.P brass towel ring square	each	95.00	1115.00	105.00	1125.00
	iii)	C.P. brass soap dish holder with glass dish	each	95.00	654.00	105.00	664.00
	iv)	C.P. brass toilet roll holder with flap	each	95.00	1115.00	105.00	1125.00
	v)	C.P. Glass Shelf 600mm long	each	95.00	1115.00	105.00	1125.00
	vi)	C.P. brass towel rack 600mm long with lower hangers	each	178.00	2802.00	196.00	2820.00
30.70	Providing and fixing divertors of approved make (to the approval of Engineer-in-charge ) for bath and shower system complete in all respect.						
	a)	Single lever concealed diverter of bath and shower system (with body and upper part)	each	211.00	4584.00	232.00	4605.00
	b)	Single lever concealed diverter for bath and shower system (high flow) (with body and upper part)	each	211.00	4067.00	232.00	4088.00
	c)	Single lever concealed diverter for bath and shower system (3 inlet flow) with body and upper part	each	211.00	4997.00	232.00	5018.00
30.71 (A)	Providing and fixing in position C.P. brass Foot operated auto closing valve for Basin taps and spouts (Table mounted)with two 900x1200mm long braided hoses with 15mm nuts of approved make (to the approval of Engineer-in-charge)		each	296.00	2751.00	326.00	2781.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
30.72 (B)	Providing and fixing in position C.P. Brass Foot operated auto closing valve with pressmatic Basin taps only with plug (Table mounted)with two 900x1200mm long braided hoses with 15mm nuts of approved make (to the approval of Engineer-in-charge)		each	296.00	2823.00	326.00	2853.00
30.72	Providing & fixing in position PVC flexible tube connection of approved make (to the approval of Engineer-in-charge ) complete in all respect.						
	(a)	PVC tube connection of size 15 mm x 300 mm with C.P. Brass nut	each	59.00	174.00	65.00	180.00
	(b)	PVC tube connection of size 15 mm x 450 mm with C.P. Brass nut	each	59.00	182.00	65.00	188.00
	(c)	PVC tube connection of size 15 mm x 300 mm with PTMT nut	each	59.00	108.00	65.00	114.00
	(d)	PVC tube connection of size 15 mm x 375 mm with PTMT nut	each	59.00	116.00	65.00	122.00
	(e)	PVC tube connection of size 15 mm x 450 mm with PTMT nut	each	59.00	120.00	65.00	126.00
	(f)	PVC tube connection of size 15 mm x 600 mm with C.P. Brass nut	each	59.00	196.00	65.00	202.00
	(g)	PVC tube connection of size 15 mm x 900 mm with C.P. Brass nut	each	59.00	228.00	65.00	234.00
	(h)	PVC tube connection of size 15 mm x 600 mm with PTMT nut	each	59.00	132.00	65.00	138.00
	(i)	PVC tube connection of size 15 mm x 900 mm with PTMT nut	each	59.00	159.00	65.00	165.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(j)	PVC tube connection of size 15 mm x 1200 mm with C.P. Brass nut	each	59.00	270.00	65.00	276.00
	(k)	PVC tube connection of size 15 mm x 1200 mm with PTMT nut	each	59.00	192.00	65.00	198.00
30.73	Providing & fixing in position C.P. copper tube connection of approved make (to the approval of Engineer-in-charge ) complete in all respect.						
	(a)	C.P. copper tube connection of size 15 mm x 300 mm with C.P. Brass nut	each	59.00	312.00	65.00	318.00
	(b)	C.P. copper tube connection of size 15 mm x 450 mm with C.P. Brass nut	each	59.00	346.00	65.00	352.00
	(c)	C.P. copper tube connection of size 15 mm x 600 mm with C.P. Brass nut	each	59.00	421.00	65.00	427.00
30.73 B	Providing & fixing in position C.P. brass tube connection braided SS304 of approved make (to the approval of Engineer-in-charge ) complete in all respect.						
	i)	CP Brass Flexible tube Connection Braided SS304 of size 15mm x 600 mm long	each	59.00	251.00	65.00	257.00
	ii)	CP Brass Flexible tube Connection Braided SS304 of size 15mm x 900mm long	each	59.00	309.00	65.00	315.00

**CHAPTER NO. 30**  
**SANITARY INSTALLATIONS**

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
30.74 (i)	Providing and fixing in position H.C.I. soil waste vent or antisiphonage pipes to I.S.I. specification of E.D.C manufacture or of any other reputed firm including cutting, jointing, wastage, but excluding cost of lead jointing.						
	a	150mm i/d H.C.I. pipe lines laid complete	m.	117.00	1965.00	129.00	1977.00
	b	100mm i/d H.C.I. pipe lines laid complete	m.	117.00	1206.53	129.00	1218.00
	c	75mm i/d H.C.I. pipe lines laid complete	m.	117.00	1012.36	129.00	1024.00
	d	50mm i/d H.C.I. pipe lines laid complete	m.	117.00	794.89	129.00	807.00
30.74 ii	Providing and fixing in position Centrifugally cast iron soil waste vent or antisiphonage pipes single socket to I.S.I. specification of E.D.C manufacture or of any other reputed firm including cutting, jointing, wastage, but excluding cost of lead jointing.						
	a	150mm i/d single socket Centrifugally cast iron pipe lines laid complete	m.	117.00	1926.70	129.00	1938.00
	b	100mm i/d single socket Centrifugally cast iron pipe lines laid complete	m.	117.00	1019.09	129.00	1031.00
	c	75 mm i/d single socket Centrifugally cast iron pipe lines laid complete	m.	117.00	877.42	129.00	889.00
30.74 iii	Providing and fixing in position singel socket SWR UPVC soil waste or antisiphonage pipes as per IS 13592 of E.D.C manufacture or of any other reputed firm including cutting, jointing, wastage, but excluding cost of jointing.						
<b>30.74 iii</b>	<b>Single Socket Type A</b>						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	a	160mm o/d single socket SWR UPVC pipe lines laid complete	m.	117.00	519.27	129.00	531.00
	b	110mm o/d single socket SWR UPVC pipe lines laid complete	m.	117.00	297.79	129.00	309.00
	c	90mm o/d single socket SWR UPVC pipe lines laid complete	m.	117.00	255.18	129.00	267.00
	d	75mm o/d single socket SWR UPVC pipe lines laid complete	m.	117.00	218.24	129.00	230.00
<b>B</b>	<b>Single Socket Type B</b>						
	a	160mm o/d SWR UPVC pipe lines laid complete	m.	117.00	612.37	129.00	624.00
	b	110mm o/d SWR UPVC pipe lines laid complete	m.	117.00	376.04	129.00	388.00
	c	90mm o/d SWR UPVC pipe lines laid complete	m.	117.00	327.19	129.00	339.00
	d	75mm o/d SWR UPVC pipe lines laid complete	m.	117.00	291.24	129.00	303.00
30.75	Providing and fixing in position C.I. gully trap cover weighing approximately 7.26 kg and frame for gully trap chamber clear opening size 300mm x 300mm and out side size 330mmx330mm including painting the exposed surface with 3 coats of black bitumastic superior paint of approved manufacture etc.		Each	149.00	732.67	164.00	748.00
30.76	Providing and fixing in position gratings 150mm x 150mm for gully trap.						
	a	H.C.I. grating including painting with black bitumastic superior paint of approved manufacture three coats.	Each	19.00	96.36	21.00	98.00
	b	PVC grating (P.T.M.T.)	Each	19.00	83.41	21.00	85.00
30.77 (A)	Providing lead caulked joints to H.C.I. pipes and specials conforming to I.S.I. Specification of E.L.C. manufacture or any other reputed firm including cost of lead yarn,fuel and tools etc.						



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(a)	150mm i/d (1.60 kg.)	Each	178.00	448.06	196.00	466.00
	(b)	100mm i/d (1.36 kg.)	Each	154.00	370.11	169.00	386.00
	(c)	75mm i/d (1.13 kg.)	Each	118.00	305.16	130.00	317.00
30.77 B	Providing drip seal joint to H.C.I. pipes and specials including cost of drip seal, yarn and tool etc. of approved mate to the approval of Engineer in Charge.						
	(a)	150mm i/d	Each	101.00	150.48	111.00	161.00
	(b)	100mm i/d	Each	89.00	129.96	98.00	139.00
	(c)	75mm i/d	Each	77.00	107.77	85.00	115.00
30.77 C	Providing PVC solvent cement joints to SWR Pipes and specials including cost of PVC solvent cement and tools etc of approved make (to the approval of Engineer-in-charge )						
	(a)	160mm o/d	Each	101.00	115.28	111.00	125.00
	(b)	110mm o/d	Each	89.00	96.13	98.00	105.00
	(c)	90mm o/d	Each	77.00	81.36	85.00	89.00
	(d)	75mm o/d	Each	77.00	79.91	85.00	88.00
30.78	Providing & Fixing in position M.S or heavy flat iron clamps made out of M.S flat iron not less than 5 mm of the approved design for fixing C.I. soil waste, vent or antisiphonage pipes to walls complete in all respects including cutting and making good the walls and floors etc. and painting.						
	(a)	M.S. Holder bats clamps for 100mm i/d H.C.I. pipes	Each	47.00	206.15	52.00	211.00
	(b)	M.S. Holder bats clamps for 75mm i/d H.C.I. pipes	Each	47.00	192.54	52.00	197.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
30.79	Providing and fixing H.C.I. Floor traps conforming to I.S.I. Specification of reputed firm of the self cleaning design with S.S. grating with frame with or without vent arm and including cement concrete 1:2:4 under and around the floor trap where required upto floor level complete in all respects including cutting and making good the walls and floors,etc.					
	(a) With 100mm x 75mm i/d Floor Trap (weighing 4.0 Kg)	Each	118.00	756.57	130.00	768.00
	(b) With 100mm x 75mm i/d Floor Trap (weighing 5.8 Kg)	Each	118.00	989.58	130.00	1001.00
30.79 A	Providing and fixing Centrifugally cast iron Floor traps conforming to I.S.I. Specification (IS:3989) of approved make (to the approval of Engineer-in-charge) of the self cleaning design with C.P. brass hinged grating with frame with or without vent arm and including cement concrete 1:2:4 under and around the floor trap where required upto floor level complete in all respects including cutting and making good the walls and floors,etc. minimum depth of water should be 150mm with a minimum seal 50mm.					
	(a) 100mm x 75mm i/d 300 mm long	Each	118.00	1255.28	130.00	1267.00
	(b) 100mm x 75mm i/d 450 mm long	Each	118.00	1299.74	130.00	1312.00
	(c) 100mm x 75mm i/d 600 mm long	Each	118.00	1622.72	130.00	1635.00
	(d) 100mm x 75mm i/d deep seal	Each	118.00	984.02	130.00	996.00
30.80	Providing and fixing in position SS Grating with frame of approved make (to the approval of engineer in charge) complete in all respects.	Each	31.00	110.66	34.00	114.00
30.81 (i)	Providing and fixing in position H.C.I special for soil waste vent or anti syphonage pipes to I.S.I specifications of E.L.C manufacture or any other reputed firm including cutting and wastage etc. cutting holes in walls roofs or floors etc. and making good to its original condition but excluding cost of lead joining.					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
A	<b>For 100mm i/d pipes</b>						
	i	100mm i/d H.C.I. Heal Rest Bend	Each	59.00	635.38	65.00	641.00
	ii	100mm i/d Door Tee	Each	59.00	932.81	65.00	939.00
	iii	100mm i/d Plain Tee	Each	59.00	834.76	65.00	841.00
	iv	100mm i/d door Bend	Each	59.00	635.38	65.00	641.00
	v	100mm i/d Bend plain	Each	59.00	518.59	65.00	524.00
	vi	100mm i/d Cowls	Each	11.00	400.16	12.00	401.00
	vii	100mm i/d Collars	Each	59.00	361.05	65.00	367.00
	viii	Off sets 75mm Projection	Each	59.00	626.57	65.00	632.00
	ix	100mm i/d Off sets 150mm projection	Each	59.00	754.35	65.00	760.00
	x	100mm i/d P-Trap	Each	59.00	870.02	65.00	876.00
B	<b>For 75mm i/d pipes</b>						
	i	75mm i/d H.C.I. Heal Rest Bend	Each	59.00	518.59	65.00	524.00
	ii	75mm i/d Door Tee	Each	59.00	746.64	65.00	753.00
	iii	75mm i/d Plain Tee	Each	59.00	626.57	65.00	632.00
	iv	75mm i/d Door Bend	Each	59.00	498.76	65.00	505.00
	v	75mm i/d Bend plain	Each	59.00	421.65	65.00	428.00
	vi	75mm i/d Cowls	Each	11.00	283.39	12.00	284.00
	vii	75mm i/d Collars	Each	59.00	293.85	65.00	300.00
	viii	Off sets 75mm Projection	Each	59.00	469.02	65.00	475.00
	ix	Off sets 150mm Projection	Each	59.00	628.76	65.00	635.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
30.81 (ii)	Providing and fixing in position Centrifugally cast iron special for soil waste vent or anti syphonage pipes to I.S.I specifications of E.L.C manufacture or any other reputed firm including cutting and wastage etc. cutting holes in walls roofs or floors etc. and making good to its original condition but excluding cost of lead joining.						
<b>A</b>	<b>For 100mm i/d pipes</b>						
	i	100mm i/d Centrifugally cast iron Heal Rest Bend	Each	59.00	584.51	65.00	590.00
	ii	100mm i/d Door Tee	Each	59.00	746.88	65.00	753.00
	iii	100mm i/d Plain Tee	Each	59.00	671.60	65.00	678.00
	iv	100mm i/d Door Bend	Each	59.00	558.20	65.00	564.00
	v	100mm i/d Bend plain	Each	59.00	492.87	65.00	499.00
	vi	100mm i/d Cowls	Each	11.00	372.38	12.00	373.00
	vii	100mm i/d Collars	Each	59.00	431.17	65.00	437.00
	viii	100mm i/d Off sets 75mm projection	Each	59.00	549.11	65.00	555.00
	ix	Off sets 150mm projection	Each	59.00	620.79	65.00	627.00
	x	100mm i/d P-Trap	Each	59.00	819.47	65.00	825.00
<b>B</b>	<b>For 75mm i/d pipes</b>						
	i	75mm i/d Centrifugally cast iron Heal Rest Bend	Each	59.00	444.79	65.00	451.00
	ii	75mm i/d Door Tee	Each	59.00	517.36	65.00	523.00
	iii	75mm i/d Plain Tee	Each	59.00	467.45	65.00	473.00
	iv	75mm i/d Door Bend	Each	59.00	405.76	65.00	412.00
	v	75mm i/d Bend plain	Each	59.00	351.33	65.00	357.00
	vi	75mm i/d Cowls	Each	11.00	300.71	12.00	302.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	vii	75mm i/d Collars	Each	59.00	327.75	65.00	334.00
	viii	Off sets 75mm projection	Each	59.00	378.56	65.00	384.00
	ix	Off sets 150mm projection	Each	59.00	460.21	65.00	466.00
30.81 (iii)	Providing and fixing in position SWR UPVC special for soil waste vent or anti syphonage pipes as per as per IS - 14735 including cutting and wastage etc. cutting holes in walls roofs or floors etc. and making good to its original condition but excluding cost of lead joining.						
<b>A</b>	<b>For 160mm o/d pipes</b>						
	i	Single Tee with Door	Each	59.00	504.85	65.00	511.00
	ii	Single Tee	Each	59.00	429.03	65.00	435.00
	iii	Door Elbow 90 degree (all side socket)	Each	36.00	321.13	40.00	325.00
	iv	Elbow 90 degree (all side socket)	Each	36.00	300.07	40.00	304.00
	v	Vent Cowl	Each	11.00	67.74	12.00	69.00
	vi	Coupler	Each	36.00	204.87	40.00	208.00
	vii	Single Y-Junction	Each	59.00	558.77	65.00	565.00
	viii	Reducing Tee 160mm x 110mm	Each	83.00	384.50	91.00	393.00
	ix	Reducing Door Tee 160mm x 110mm	Each	83.00	416.51	91.00	425.00
	x	Reducing Single Y 160mm x 110mm	Each	83.00	471.27	91.00	480.00
<b>B</b>	<b>For 110mm o/d pipes</b>						
	i	Door Cap	Each	3.10	69.75	3.00	70.00
	ii	Single Tee With Door	Each	59.00	224.32	65.00	230.00
	iii	Single Tee	Each	59.00	195.68	65.00	202.00
	iv	Door Elbow 90 Degree (All side socketed)	Each	36.00	188.03	40.00	192.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	v	Elbow 90 Degree (All side socketed)	Each	36.00	154.31	40.00	158.00
	vi	Vent Cows	Each	11.00	43.09	12.00	44.00
	vii	Reducer 110mm x 75mm	Each	24.00	86.05	26.00	88.00
	viii	Coupler	Each	36.00	105.45	40.00	109.00
	ix	P Trap/Floor Trap 110mm x 110mm	Each	59.00	321.20	65.00	327.00
	x	P Trap/Floor Trap 110mm x 75mm	Each	59.00	294.25	65.00	300.00
	xi	Single Y-Junction	Each	59.00	227.70	65.00	234.00
	xii	Single Y-Junction with door	Each	59.00	290.89	65.00	297.00
	xiii	Double Y-Junction	Each	83.00	314.59	91.00	323.00
	xiv	Double Y-Junction with door	Each	83.00	379.44	91.00	388.00
	xv	110x75 Reducer Tee	Each	59.00	188.10	65.00	194.00
	xvi	Cross Tee/Double Tee	Each	83.00	243.80	91.00	252.00
	xvii	Nahani trap without jali 110mmx110mm	Each	59.00	172.93	65.00	179.00
	xviii	Nahani trap without jali 110mmx90mm	Each	59.00	163.67	65.00	170.00
	xix	Nahani trap without jali 110mmx75mm	Each	59.00	150.19	65.00	156.00
	xx	Reducing Tee Ring Type 110mm x 90mm with door bend	Each	59.00	223.48	65.00	229.00
<b>C</b>	<b>For 90mm o/d pipes</b>						
	i	Door Cap	Each	31.00	66.37	34.00	69.00
	ii	Single Tee With Door	Each	59.00	205.79	65.00	212.00
	iii	Single Tee	Each	59.00	175.47	65.00	181.00
	iv	Door elbow 90 degree (all side socket)	Each	36.00	136.63	40.00	140.00
	v	Elbow 90 degree (all side socket)	Each	37.00	114.71	41.00	118.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	vi	Vent Cowls	each	11.00	35.72	12.00	37.00
	(vii)	Cross Plain Tee	each	83.00	217.69	91.00	226.00
	(viii)	Coupler (Description Changed)	each	36.00	103.78	40.00	107.00
	(ix)	Single Y-Junction	each	59.00	197.37	65.00	203.00
<b>D</b>	<b>For 75mm o/d pipes</b>						
	(i)	Door Cap	each	31.00	57.95	34.00	61.00
	(ii)	Single Tee With Door (Description Changed)	each	59.00	151.03	65.00	157.00
	(iii)	Single Tee (Description Changed)	each	59.00	132.50	65.00	138.00
	(iv)	Door elbow 90 degree (all side socket) (Description Changed)	each	36.00	77.66	40.00	81.00
	(v)	Elbow 90 degree (all side socket) (Description Changed)	each	36.00	70.92	40.00	75.00
	(vi)	Vent Cowls (Description Changed)	each	11.00	29.83	12.00	31.00
	(vii)	Coupler (Description Changed)	each	36.00	70.92	40.00	75.00
	(viii)	P Trap/Floor Trap 75mm x 75mm	each	59.00	195.68	65.00	202.00
	(ix)	Single Y-Junction	each	59.00	143.44	65.00	149.00
	(x)	Single Y-Junction with door	each	59.00	173.78	65.00	180.00
	(xi)	Double Y-Junction	each	83.00	200.84	91.00	209.00
	(xii)	Double Y-Junction with door	each	83.00	252.24	91.00	261.00
	(xiii)	Cross Tee/Double Tee	each	59.00	168.72	65.00	175.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
30.82	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of: i) Ist course of applying cement slurry @ 4.4 Kg/ sqm mixed with water proofing compound conforming to IS : 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. ii) IInd course of 20 mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface. iii) IIIrd course of applying blown or residual bitumen applied hot at 1.7 kg per sqm of area. iv) IVth course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 Kg/sqm).	10sqm	2808.00	5005.85	3089.00	5287.00
30.83	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : a) First layer of slurry of cement @ 0.488 kg /sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure for 4 hours. b) Second layer of slurry of cement @ 0.242 kg/ sqm mixed with water proofing cement compound @ 0.126 kg/ sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	10sqm	2530.00	3187.12	2783.00	3505.84
30.84	Providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	each	962.00		1058.20	
30.85	Cutting chase in brick walls in cement or in floor for embedding G.I. or C.I pipes line and making good the same to its original condition.					



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(a)	Size 75 mm x 75 mm	m	69.00		76.00	
	(b)	Size 150 mm x 150 mm	m	114.00		125.00	
	(c)	Size 75 mm x 50 mm	m	57.00		63.00	
	(d)	Size 225 mm x 225 mm	m	171.00		188.00	
30.86	Dismantling H.C.I Soil pipes including disposal as desired by the Engineer-in-Charge.						
	(a)	100mm i/d H.C.I. pipe	m	25.00		28.00	
	(b)	75mm i/d H.C.I. pipe	m	24.00		26.00	
	(c)	50mm i/d H.C.I. pipe	m	24.00		26.00	
30.87	Dismantling H.C.I specials including dismantling of lead joints including cartage / disposal within 5 Km.						
	(a)	100mm i/d H.C.I. specials	each	33.00		36.00	
	(b)	75mm i/d H.C.I. specials	each	26.00		29.00	
	(c)	50mm i/d H.C.I. specials	each	26.00		29.00	
30.88	Dismantling Sanitary fixtures such as European/Indian/Orissa W.C., PVC / China ware cistern, Wash Hand Basin, Urinal Pot, Sinks and CP Fittings and disposal of dismantled material within a distance of 100 Mtr. complete in all respect as required by Engineer-in-Charge.						
	(a)	European/Indian/Orissa W.C.,	each	219.00		241.00	
	(b)	PVC / China Ware Cistern	each	164.00		180.00	
	(c)	Wash Hand Basin / Urinal Pot	each	109.00		120.00	
	(d)	Stainless Steel Sink /Mosaic Sink	each	314.00		345.00	
	(e)	CP Bib Cock/Angle Cock/Stop Cock/Shower/Bottle Trap	each	24.00		26.00	

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(f)	Wall mixer / Sink Mixer / Basin Mixer / Concealed Stop Cock	each	55.00		61.00	
	(g)	Bathroom Accessories such as Soap Dish, Towel Rail, Towel Ring, Towel Bracket, Mirror, Toilet Paper Holder, Seat Cover, Jet Pressure and all other accessories.	each	22.00		24.00	
30.89	Dismantling heavy flat iron clamps including cartage / disposal within 5 Km.						
	(a)	100mm i/d Clamps	each	21.00		23.00	
	(b)	75mm i/d Clamps	each	23.00		25.00	
	(c)	50mm i/d Clamps	each	23.00		25.00	
30.90	Painting H.C.I soil waste and vent pipes and fitting with black bitumastic ISI marked paint of approved make (to the approval of Engineer-in-charge) one coat on old work.						
	(a)	100mm i/d H.C.I. Pipe	m	6.93	19.53	8.00	20.00
	(b)	75mm i/d H.C.I. Pipe	m	5.05	14.21	6.00	15.00
30.91	Painting H.C.I soil waste and vent pipes and fitting with black bitumastic ISI marked paint of approved make (to the approval of Engineer-in-charge) two coats on new work.						
	(a)	100mm i/d H.C.I. Pipe	m	10.92	33.43	12.00	35.00
	(b)	75mm i/d H.C.I. Pipe	m	7.94	24.32	9.00	25.00
30.92	Painting H.C.I soil waste and vent pipes and fitting with I.S.I marked quality synthetic enamel paints in all shades of approved make (to the approval of Engineer-in-charge) on old work one coat paint including rubbing down old work.						
	(a)	100mm i/d H.C.I. Pipe	m	6.19	19.80	7.00	20.00
	(b)	75mm i/d H.C.I. Pipe	m	4.50	20.29	5.00	21.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
30.93	Painting H.C.I soil waste and vent pipes and fitting with I.S.I marked quality synthetic enamel paints in all shades of approved make (to the approval of Engineer-in-charge) on old work two coat paint including rubbing down old work.						
	(a)	100mm i/d H.C.I. Pipe	m	11.67	29.39	13.00	31.00
	(b)	75mm i/d H.C.I. Pipe	m	8.49	21.38	9.00	22.00
30.94	Dismantling of wall tiles at any floor of the building, laid in cement mortar including scraping of cement plaster and disposal of malba at a suitable place within a distance of 100 Mtrs of the complex complete in all respect.		sqm	104.00		114.00	
30.95	Dismantling of floor tiles at any floor of the building, laid in cement mortar including dismantling of cement concrete base and disposal of malba at a suitable place within a distance of 100 Mtrs of the complex complete in all respect.		sqm	108.00		119.00	
Internal Water Supply							
30.96	Providing and fixing in position automatic brass Ball Cock in tanks.						
A	Plastic Ball Cock with rod and Plastic Ball						
(i)	15mm i/d		each	59.00	279.92	65.00	286.00
(ii)	20mm i/d		each	59.00	386.08	65.00	392.00
(iii)	25mm i/d		each	59.00	669.13	65.00	675.00
(iv)	32mm i/d		each	82.00	909.32	90.00	918.00
(v)	40mm i/d		each	82.00	1103.08	90.00	1111.00
(vi)	50mm i/d		each	82.00	1588.33	90.00	1597.00
B	Brass Ball Cock with rod and Plastic Ball						

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(i)	15mm i/d	each	55.00	489.76	61.00	495.00
	(ii)	20mm i/d	each	55.00	574.15	61.00	580.00
	(iii)	25mm i/d	each	55.00	902.69	61.00	908.00
	(iv)	32mm i/d	each	82.00	1518.73	90.00	1527.00
	(v)	40mm i/d	each	82.00	1707.29	90.00	1715.00
	(vi)	50mm i/d	each	82.00	2928.20	90.00	2936.00
30.97 A	Providing & placing in position on terrace (at all floor levels) HDPE water storage tanks of approved make (to the approval of Engineer - in-charge) with cover with suitable locking arrangement and making necessary holes for inlet, outlet and over flo pipes but without fittings and base support for tank.						
	(i)	Triple Layer Tanks	Litre	0.56	10.80	1.00	11.00
	(ii)	Double Layer Tanks	Litre	0.56	8.72	1.00	9.00
30.97 B	Providing & fixing in position on terrace (at all floor levels) HDPE tank cover for water storage tanks of approved make (to the approval of Engineer -in-charge) complete in all respect.						
	(i)	Upto 500 ltr capacity tank	each	49.07	308.28	54.00	313.00
	(ii)	For 1000 ltr capacity tank and above	each	49.07	373.08	54.00	378.00
30.98	Providing and fixing in position G.I. Tank Nipple of approved make (to the approval of Engineer-in-charge) in PVC Water storage tanks complete in all respect.						
	(a)	G.I. tank nipple 15mm i/d	each	22.00	91.85	24.00	94.00
	(b)	G.I. tank nipple 20mm i/d	each	22.00	118.10	24.00	120.00
	(c)	G.I. tank nipple 25mm i/d	each	27.00	188.72	30.00	191.00
	(d)	G.I. tank nipple 32mm i/d	each	33.00	266.11	36.00	269.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(e)	G.I. tank nipple 40mm i/d	each	55.00	357.95	61.00	363.00
	(f)	G.I. tank nipple 50mm i/d	each	55.00	535.84	61.00	541.00
	<b>DRAINAGE</b>						
30.99	Providing and fixing in position gully traps fixed in cement concrete 1:4:8 complete with Grating 150mm x 150mm, cover and frame clear opening 300mm x 300mm and out of side size 330mm x 330mm and chamber including cost of all bricks work in cement mortar 1:5 cement concrete 1:2:4 in coping around cover and frame etc. as per standard design minimum depth of water should be 150 mm with a minimum seal 50mm.						
	(a)	100mm internal Diametre S.W.gully trap with H.C.I. grating and cast iron cover weighing approximately 7.26 kg. and frame clear opening 300mm x 300mm and out of side size 330mm x 330mm	each	255.00	1832.00	281.00	1858.00
	(b)	100mm internal Diametre H.C.I. gully trap with H.C.I. grating and cast iron cover weighing approximately 7.26 kg. and frame clear opening 300mm x 300mm and out of side size 330mm x 330mm	each	255.00	2341.34	281.00	2367.00
	(c)	150mm internal Diametre S.W.gully trap with H.C.I. grating and cast iron cover weighing approximately 7.26 kg. and frame clear opening 300mm x 300mm and out of side size 330mm x 330mm	each	255.00	1844.94	281.00	1870.00
30.100	Providing and fixing in position vitreous Chinaware white channel of approved make (to the approval of Engineer-in-charge) of size 600 mmx100mm including laying and fixing in cement concrete 1:2:4 complete in all respect.		each	66.00	484.90	73.00	492.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
30.101	Providing and fixing in postion storage type automatic electric water heater pressure / non pressure type thermostatically controlled, single phase, vertical wall mounted of approved make (to the approval of Engineer-in-charge) with thermostats, inner container of stainless steel complete with 1 Mtr. three core flexible cord with plug, non return valve and pressure release valve complete including fixing and testing complete in all respect.						
	(a)	25 litre capacity water heater	each	438.00	8850.56	482.00	8894.00
	(b)	35 litre capacity water heater	each	656.00	12738.75	722.00	12804.00
	(c)	50 litre capacity water heater	each	711.00	14700.22	782.00	14771.00
30.101 (A)	Providing and fixing in postion storage type automatic electric water heater pressure type thermostatically controlled, single phase wall mounted of approved make (to the approval of Engineer-in-charge) with thermostats, inner container of stainless steel, Inner glass lining with B-Rating minimum 3 stars complete with 1 Mtr. three core flexible cord with plug, non return valve and pressure release valve complete including fixing and testing complete in all respect.						
	a	Vertical type					
	(i)	15 litre capacity water heater	each	328.00	10793.90	361.00	10827.00
	(ii)	25 litre capacity water heater	each	438.00	12594.65	482.00	12638.00
	(iii)	40 litre capacity water heater	each	656.00	13396.64	722.00	13462.00
	(iv)	60 litre capacity water heater	each	711.00	16250.83	782.00	16322.00
	(v)	80 litre capacity water heater	each	766.00	18521.81	843.00	18598.00
	b	Horizontal type					
	(i)	15 litre capacity water heater	each	328.00	10268.99	361.00	10302.00
	(ii)	25 litre capacity water heater	each	438.00	12069.74	482.00	12114.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(iii)	40 litre capacity water heater	each	656.00	13396.64	722.00	13462.00
	(iv)	60 litre capacity water heater	each	711.00	16250.83	782.00	16322.00
	(v)	80 litre capacity water heater	each	766.00	18521.81	843.00	18598.00

**CHAPTER NO. 31**  
**MAINTENANCE OF BUILDINGS AND FURNITURE**

**Notes :-**

- (i) Unless otherwise stated, the labour rates include rehandling of materials within 100 mtr.

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	5	6
31.1	Repairs to plaster in patches of Area 2.5 sqm and under including cutting the patch in proper shape and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground within 50 Metres lead						
	(a)	With cement mortar 1:4 (1 cement: 4 sand) Taking area 2.5 sqm	sqm	99.00	150.00	109.00	159.90
	(b)	With cement mortar 1:7 (1 cement: 7 sand) Taking area 2.5 sqm	sqm	99.00	132.00	109.00	142.00
	(c)	With cement lime mortar 1:1:7 ( cement:1: lime putty:7 fine sand) Taking area 2.5 sqm	sqm	99.00	151.00	109.00	161.00
31.2	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls, cutting masonry for hold fasts embedding hold fasts in cement concrete holes with cement concrete 1:3:6, painting two coats of bitumen to sides of chowkhats and making good the damages to walls and floors as required complete including disposal of rubbish to the dumping ground within 50 m lead						
	(a)	Door chowkhats (1.22 m x 2.06 m)	each	419.00	488.00	461.00	530.00
	(b)	Window chowkhats size 1.52mx1.22m	each	354.00	419.00	389.00	454.00
	(c)	Clerestorey window chowkhats (1.22 m x 0.45 m)	each	301.00	337.00	331.00	367.00
31.3	Making the opening in brick masonry including dismantling, fixing, chowkhats in floor or walls, cutting masonry & fixing hold fasts in cement concrete 1:3:6, painting two coats of coal tar to sides of chowkhats and making good the damages to walls and floors complete to match the existing surface :-						
	(a)	For Door chowkhats (1.22 m x 2.06 m)	each	831.00	964.00	914.00	1047.00
	(b)	For window chowkat (size 1.52m x 1.22m)	each	694.00	834.00	763.00	903.00



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	5	6
	(c)	For Clerestory window (size 1.22 m x 0.46 m	each	571.00	641.00	628.00	698.00
31.4	Providing and fixing wooden cleats of size and 100mmx75mmx50mm to doors and windows with approved mild steel fittings including removal of old cleats where necessary including painting, polishing or bees waxing to match the existing shade :-						
	(a)	1st class Teak wood cleats with steel hinges and screws	each	78.00	170.00	86.00	178.00
	(b)	1st class Deodar wood cleats with steel hinges and screws	each	78.00	169.00	86.00	177.00
	(c)	Sal wood cleats with steel hinges and screws	each	78.00	142.00	86.00	150.00
	(d)	1st class kail wood cleats with steel hinges and screws	each	78.00	148.00	86.00	156.00
	(e)	Red Meranthi wood cleats with steel hinges and screws	each	78.00	132.00	86.00	140.00
31.5	Renewing glass panes with putty and nails wherever necessary						
	(a)	Glass Panes weighing 8.44 Kg/sqm	sqm	185.00	228.00	204.00	247.00
	(b)	Glass panes weighing 10.75 Kg/sqm	sqm	185.00	610.00	204.00	629.00
	(c)	Frosted glass panes weighing 8.44 Kg/sqm	sqm	185.00	578.00	204.00	597.00
31.6	Renewing glass panes with wooden fillets wherever necessary						
	(a)	Glass panes weighing 8.44 Kg/sqm	sqm	179.00	669.00	197.00	687.00
	(b)	Glass panes weighing 10.75 Kg/sqm	sqm	179.00	764.00	197.00	782.00
	(c)	Frosted glass Panes weighing 8.44Kg/sqm	sqm	179.00	733.00	197.00	751.00
31.7	Renewing glass panes and refixing existing wooden fillets						
	(a)	Glass panes weighing 8.44 Kg/sqm	sqm	111.00	398.00	122.00	409.00
	(b)	Glass panes weighing 10.75 kg/sqm	sqm	111.00	493.00	122.00	504.00
	(c)	Frosted glass Panes weighing 8.44Kg/sqm	sqm	139.00	490.00	153.00	504.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	5	6
31.8	Supplying and fixing new wooden fillets wherever necessary						
	(a)	1st class teak wood fillets 3.20mx0.0125mx0.0125m	mtr	18.00	50.00	20.00	52.00
	(b)	1st class Deodar wood fillets 3.20m x 0.0125m x 0.0125m	mtr	18.00	49.00	20.00	51.00
	(c)	1st class Kail wood fillets 3.20m x 0.0125m x 0.0125m	Mtr	18.00	40.00	20.00	42.00
	(d)	Red Meranthi wood fillets 3.20mx0.0125mx0.0125m	mtr	18.00	33.00	20.00	35.00
31.9	Renewal of old putty of glass panes						
	(a)	Refixing old glass panes with putty and Nails	sqm	139.00	178.00	153.00	192.00
	(b)	Fixing old glass panes with wooden fillets	sqm	67.00	67.00	74.00	74.00
31.10	Providing and fixing 16mm M.S. fan clamps of standard shape and size in existing R.C.C. slab including cutting and making good and painting exposed portion of the clamps complete		each	278.00	324.00	306.00	352.00
31.11	Regrading terracing of mud plaster covered with tiles or bricks in cement by dismantling tiles or bricks, removing mud plaster, preparing the surface of mud plaster to proper slope, relaying mud plaster Gobri leaping and tiles or bricks grouted in cement mortar 1:3 (1 cement and 3 fine sand) including replacing unserviceable tiles, or bricks with new over and disposal of unserviceable material to the dumping ground within 50 m lead (The cost of new tiles or bricks excluded).		sqm	382.00	401.00	420.00	439.00
31.12	Providing and fixing cotton string 6mm dia Metre (machine made) including supplying and fixing, wherever necessary, the plate and ring as per existing fitting or as required of the clerestorey window						
	(a)	Mild steel plate and ring	each	71.00	544.00	78.00	551.00
	(b)	Brass plate and ring	each	71.00	544.00	78.00	551.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	5	6
31.13	Renewing wooden battens in roof including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete including removal of rubbish to the dumping ground with in 50 Metre lead						
	(a)	Salwood Battens	cum	7477.00	136747.00	8225.00	137495.00
	(b)	First class deodar wood battens	cum	7477.00	214526.00	8225.00	215274.00
	(c)	Ist class Kail wood battens	cum	7477.00	155370.00	8225.00	156118.00
	(d)	Red meramthi wood battens	cum	7477.00	108655.00	8225.00	109403.00
	(e)	Yelow meramthi wood battens	cum	7477.00	105391.00	8225.00	106139.00
	(f)	Golden meramthi wood battens	cum	7477.00	94827.00	8225.00	95575.00
31.14	Renewing wooden beams in roofs including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete including removal of rubbish to the dumping ground within 50 m lead.						
	(a)	Sal wood Battens (Length 4mx0.228mx0.127	cum	5980.00	135249.00	6578.00	135847.00
	(b)	Ist class deodar wood beams	cum	5980.00	213029.00	6578.00	213627.00
	(c)	Hollock wood beams	cum	5980.00	116964.00	6578.00	117562.00
	(d)	Kail wood beams	cum	5980.00	153872.00	6578.00	154470.00
	(e)	Above 4 metre and upto 5.00 metre length					
	(i)	Sal wood beams	cum	7779.00	137749.00	8557.00	138527.00
	(ii)	Ist class deodar wood beams	cum	7779.00	214828.00	8557.00	215606.00
	(iii)	Ist class kail wood beams	cum	7779.00	155671.00	8557.00	156449.00
	(iv)	HOLLOCK WOOD BEAMS	cum	7779.00	118763.00	8557.00	119541.00
	(v)	RED MERANRHI BEAMS	cum	7779.00	108957.00	8557.00	109735.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	5	6
	(vi)	YELLOW MERANRHI BEAMS	cum	7779.00	105693.00	8557.00	106471.00
	(vii)	GOLDEN CHAMP BEAMS	cum	7779.00	81018.00	8557.00	81796.00
31.15	Renewing 100mm dia. 2.5 m long sal wood Ballies post embedded 60cm in the ground in a hole 45cm. dia. and 70cm deep, filled with cement concrete 1:5:10 (1 cement, 5 fine sand, 10 stone aggregate) (40 mm. nominal size) including necessary excavation cement concrete foundation & painting two coats with oil type wood preservative of approved brand and manufacture complete, including disposal of rubbish to the dumping ground within 50 m lead.		each	648.00	1113.00	713.00	1178.00
31.16	Raking out joints in lime or cement mortar and preparing the surface for repointing or replastering including disposal of rubbish to the dumping ground within 50 m lead (excluding the cost of scraping of plaster and replastering).		sqm	152.00	203.00	167.00	218.00
31.17	Extra for making opening or recesses in A.C. corrugated/ semi corrugated sheet roofing of girth not more than 1 Metre						
	(a)	Those exceeding 100 square centimetre in area	each	465.00	1115.00	512.00	1162.00
	(b)	Those exceeding 100 square centimetre but not exceeding 400 Sq. cm in area	each	620.00	1524.00	682.00	1586.00
	(c)	Those exceeding 400 square centimetre in area	each	775.00	1858.00	853.00	1936.00
31.18	Flush pointing with cement sand mortar 1:3 (1 cement:3 fine sand) mixed with 5% crude oil by weight of cement for flat tile bricks or top of mud plaster						
	a	With brick tiles	sqm	72.00	101.00	79.00	108.00
	b	With modular brick tiles	sqm	72.00	98.00	79.00	105.00
31.19	<b>Spirit or Wax polishing .</b>						
	(a)	Tables					
	(i)	Tables (area up to 0.5 Sqm)	Each		222.00	-	244.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	5	6
	(II)	Tables (area 0.5 to 1 Sqm)	Each	-	349.00	-	384.00
	(III)	Dinning Tables with Chares (Up to 8 Nos)	Each	-	1500.00	-	1650.00
	(iv)	Tables Pedestal Type	Each	-	228.00	-	251.00
	(v)	Teapoy	Each	-	920.00	-	1012.00
	(vi)	Peg table	Each	-	254.00	-	279.00
	(vii)	Side Board.	Sqm	-	355.00		391.00
	(b)	<b>Chairs</b>					
	(i)	Office with caned back	each	-	190.00	-	209.00
	(ii)	Office with wooden back	each	-	222.00	-	244.00
	(iii)	Dining with caned back	each	-	190.00	-	209.00
	(iv)	Dining with wooden back	each	-	222.00	-	244.00
	(v)	Easy chair	each	-	254.00	-	279.00
	(vi)	Sofa with wooden Arms	each	-	444.00	-	488.00
	(vii)	Sofa chair with wooden Arms	each	-	286.00	-	315.00
	(viii)	Cane sofa III Seater (Varnish )	each	-	400.00	-	440.00
	(ix)	Cane sofa chair (Varnish )	each	-	190.00	-	209.00
	(c)	Almirah or chest of drawers	Each	-	1000.00	-	1100.00
	(d)	Hat and coat stand	Each	-	63.00	-	69.00
	(e)	Office side rack	each	-	159.00	-	69.00
	(f)	Book case of almirah with glazed shutters	each	-	762.00	-	838.00
	(g)	Commode	each	-	190.00	-	209.00
	(h)	Towel stand	each	-	25.00	-	28.00
	(i)	Bed-steads	each	-	203.00	-	223.00
	(j)	Hat-pegs	Per set	-	63.00	-	69.00
	(k)	Pelmets of doors/windows	sqm	-	254.00	-	279.00
31.20	Painting one coat of I.S.I marked quality paint.						
	(a)	Wooden patras for bath room.	Each	-	150.00	-	165.00
	(b)	Towel stand	each	-	150.00	-	165.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	5	6
	(c)	Pelmets of doors and windows	Each	-	41.00	-	45.00
31.21	Re-canning of chairs with artificial (Plastic cane)						
	(a)	Easy chairs back and seat (Single variety)	each	-	701.00	-	771.00
	(b)	Office chair back and seat (Single variety)	each	-	600.00	-	660.00
	(c)	Office chair seat only (Single variety)	each	-	400.00	-	440.00
	(d)	Office chair back (Double variety)	each	-	301.00	-	331.00
	(e)	Office chair seat (Double variety)	each	-	301.00	-	331.00
31.22	<b>Washing</b>						
	(a)	Durries	Sqm	-	20.00	-	22.00
	(b)	Linen	100 pieces	-	600.00	-	660.00
	(c)	Bed sheet single	each	-	25.00	-	28.00
	(d)	Bed sheet double	each	-	41.00	-	45.00
	(e)	Pillow cover	each	-	10.00	-	11.00
	(f)	Towel	each	-	10.00	-	11.00
	(g)	Napkin	each	-	5.00	-	6.00
	(h)	Quilt cover	each	-	41.00	-	45.00
	(j)	Apron	each	-	15.00	-	17.00
	(k)	Safe Cover	Set of Three	-	76.00	-	84.00
	(l)	Door Curtain above 2.75 Mtr.	each	-	63.00	-	69.00
	(m)	Door Curtain up to 2.75mtr.	Per Seat	-	57.00	-	63.00
	(n)	Window Curtains	Each	-	34.00	-	37.00
31.23	<b>Upholstering</b>						
	(a)	Restuffing easy of Sofa Chair (Market Rate)	Each	-	527.00	-	580.00
	(b)	Restuffing sofa	Per Seat	-	1015.00	-	1117.00
	(c)	Recovering easy of sofa chair with cloth	Each	-	444.00	-	488.00
	(d)	Recovering sofa with cloth	Each	-	952.00	-	1047.00
	(e)	Recovering and restuffing easy or sofa chairs	Each	-	666.00	-	733.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	5	6
	(f)	Re-stuffing and Re-converting sofa	Per Seat	-	635.00	-	699.00
31.24	<b>Dry Cleaning</b>						
	(a)	Woolen Blanket	Each	-	254.00	-	279.00
	(b)	Woolen Carpet	Sqm	-	127.00	-	140.00
	(c)	Door Curtains (Market Rate)	Each	-	127.00	-	140.00
	(d)	Window Curtains	Each	-	100.00	-	110.00
	(e)	Bed cover Single	Each	-	80.00	-	88.00
	(f)	Bed cover double	Each	-	140.00	-	154.00
31.25	<b>Shampooing with Machine</b>						
	(a)	Sofa Set	Per Seat	-	209.00	-	230.00
	(b)	Woolen Carpet	Sqm	-	80.00	-	88.00
	(c)	Dewan Cushioned	Each	-	350.00	-	385.00
31.26	Cleaning of glass panes both sides		Sqm (to be measured on one side only)	-	15.00	-	17.00
31.27	Cleaning of joinery with surf soda and application of oil thereafter.		Sqm (to be measured on Both sides)	-	10.00	-	11.00
31.28	Cleaning of switch boards. (Market Rate)		Each	-	2.00	-	2.00
31.29	Cleaning and polishing brass fittings with brasso.		Each	-	10.00	-	11.00
31.30	Cleaning of terazzo floors with tartaric acid with granite finish including machine charge.		Sqm	-	121.00	-	133.00
31.31	Tailoring of curtains		Metre	-	105.00	-	116.00
31.32	Providing and fixing railing for curtains.						
	(a)	C' Type	Metre		552.00	-	607.00
	(b)	I' Type	Metre		500.00	-	550.00
31.33	Providing and fixing curtain rail 1.90cm chrome-plated with end bracket. Including sockets and brackets		Metre		301.00	-	331.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	5	6
31.34	Providing and fixing steel rings chrome-plated 3.80 cm. dia. for curtains. (Market Rate)	each		6.00	-	7.00
31.35	Providing and fixing plastic rings 3.80cm. dia. With hooks for curtains.	each		4.00	-	4.00
31.36	<p>Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to seven story height made with 40 mm dia M.S. tube 1.5 m centre to centre, horizontal &amp; vertical tubes joining with cup &amp; lock system with M.S. tubes, M.S. tube challies, M.S.clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it there after .The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as per directions and approval of Engineer-in-charge .The elevational area of the scaffolding shall be measured for payment purpose .The payment will be made once irrespective of duration of scaffolding.</p> <p>Note: - This item to be used for maintenance work judicially, necessary deduction for scaffolding in the existing item to be done.</p>	sqm		206.00		227.00





## CHAPTER NO. 32

### HORTICULTURE

#### Notes :-

- (i) The rates given under this chapter are subject to the P.W.D. specifications.
- (ii) Stacks of well decayed farm yard manure 32.5 cm in height, shall be measured and paid for 30 cm height.
- (iii) The through rates for planting and maintenance are excluding the cost of irrigation water since water is available in most of buildings. Wherever water is not available, cost may be included from item no. 32.52 and quantity may be decided as per specifications, soil type and season.
- (iv) The rates noted below are applicable for gardening works in lawns of the buildings, road sides, high slopes, canal embankments and arboriculture. The depth required to be excavated for planting of trees/grass etc. shall be decided by the Engineer-in-charge considering the size of root ball, site and climatic conditions. In exceptional conditions, any deviation from standard specification shall be paid/ deducted accordingly.
- (v) The procurement of earth/sludge or manure shall be from the sources as specified by the Engineer-in-charge. In case these are imported from a distant place longer than the ones specified in the items, additional rates shall be paid.
- (vi) Rates are inclusive of loading unloading charges unless specified.
- (vii) The cost of saplings of trees /shrubs potted plants and specimen plant or grass etc., of higher specification, if specifically procured for planting shall be paid separately.
- (viii) The cost of specialized items for irrigation systems which are not included in this chapter, if specifically procured, shall be paid separately.

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
32.1	Supplying and stacking at site of work well decayed farm yard manure from approved site of work including screening through sieve of I.S. designation 16 mm with 5 km lead.	cum	62.00	625.00	68.00	631.00
32.2	Supplying at site of work good quality top soil, free from debris and weeds, from approved site of work with 5 km lead.	cum	-	557.00	-	557.00
32.3	Supplying of good earth/ soil-less media and/or organic matter, preparation of top dressing mixture or pot media					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(a)	Screening farm yard manure through sieve of I.S. designation 16 mm and mixing with good earth in ratio of 1:1.	cum	85.00	668.00	94.00	677.00
	(b)	Screening manure through sieve of I.S. designation 16 mm and mixing with good earth in ratio of 1:2.	cum	85.00	666.00	94.00	675.00
	(c)	Screening manure through sieve of I.S. designation 16 mm and mixing with good earth and cocopeat in ratio of 2:1:1, adding fertilizers to make potting media.	cum	85.00	1135.00	94.00	1144.00
	(d)	Mixture of sand and vermicompost in ratio 1:1	cum	24.00	2878.00	26.00	2880.00
	(e)	Mixture of neem cake powder and sand in ratio 1:3	cum	24.00	4646.00	26.00	4648.00
	(f)	Mixture of cocopeat, vermiculite and perlite in ratio of 2:1:1, adding fertilizers to make potting media.	cum	24.00	4317.00	26.00	4319.00
32.4	Site clearance						
	(a)	Excavation in dumped stone or malba including stacking of unserviceable material separately and disposal of unserviceable material. Lead up to 50 m and lift up to 1.5 m, disposed material to be neatly dressed in all kinds of soils.	cum	332.00	332.00	365.00	365.00
	(b)	Surface dressing of ground including removing rank vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m in all kinds of soil.	sqm	15.00	15.00	17.00	17.00
	(c)	Clearing jungle manually including uprooting rank vegetation, grass, woody vegetation up to 30 cm girth measured at height of 1 m above ground level and removal of rubbish up to distance of 50 m outside the periphery of the area cleared	sqm	7.96	7.96	8.76	8.76

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(d)	Felling trees of the girth (measured at a height of 1 m above ground level), including cutting of trunks and branches, removing the roots and stacking of serviceable material, disposal of unserviceable material and filling in pits and repressions - Beyond 30 cm girth up to and including 60 cm girth.	each	237.00	237.00	261.00	261.00
	(e)	Felling trees of the girth (measured at a height of 1 m above ground level), including cutting of trunks and branches, removing the roots and stacking of serviceable material, disposal of unserviceable material and filling in pits and repressions - Beyond 60 cm girth up to and including 120 cm girth.	each	1066.00	1066.00	1173.00	1173.00
	(f)	Felling trees of the girth (measured at a height of 1 m above ground level), including cutting of trunks and branches, removing the roots and stacking of serviceable material, disposal of unserviceable material and filling in pits and repressions - Beyond 120 cm girth up to and including 240 cm girth.	each	4976.00	4976.00	5474.00	5474.00
	(g)	Felling trees of the girth (measured at a height of 1 m above ground level), including cutting of trunks and branches, removing the roots and stacking of serviceable material, disposal of unserviceable material and filling in pits and repressions - Above 240 cm girth.	each	9952.00	9952.00	10947.00	10947.00
32.5	Rough grassing including uprooting rank vegetation and weeds by digging the area to a depth of 15 cm, removing all weeds and other growth with roots by forking repeatedly, breaking clods, mixing fertilizer, levelling and dressing for planting new grass, including disposal of all rubbish with all leads and lifts, planting doob grass in rows 15 cm apart in both directions, watering and maintenance till first mowing.		sqm	23.00	28.00	25.00	30.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
32.6	Maintenance of rough grassing including fertilizer application, watering and mowing for one year.	sqm	20.00	20.00	22.00	22.00
32.7	Grassing of grounds with doob grass including uprooting rank vegetation and weeds by digging the area to a depth of 15 cm, removing all weeds and other growth with roots by forking repeatedly, breaking clods, mixing fertilizer, rough dressing and then fine dressing for planting new grass, including disposal of all rubbish with all leads and lifts, planting grass roots in rows 10 cm apart in both directions, watering, weeding and maintenance till turf is formed	sqm	27.00	35.00	30.00	38.00
32.8	Maintenance of grassy grounds including fertilizer application, watering, weeding, top dressing with good earth and manure mixture, maintaining fine level, regular mowing and removal of rubbish with all lifts and leads.	sqm	25.00	30.00	28.00	33.00
32.9	Fine grassing including uprooting rank vegetation and weeds by digging the area to a depth of 30 cm, removing all weeds and other growth with roots by forking repeatedly, breaking clods, rough dressing, flooding with water, uprooting fresh growth after 10 to 15 days, mixing fertilizer and then fine dressing for planting new grass, including disposal of all rubbish with all leads and lifts, watering, weeding and maintenance for 30 days or till thick lawn is formed.					
	(a) Planting Selection no. 1 grass roots in rows 5 cm apart in both directions.	sqm	45.00	69.00	50.00	74.00
	(b) Planting Selection no. 1 grass roots in rows 7.5 cm apart in both directions.	sqm	41.00	56.00	45.00	60.00
	(c) Planting Selection no. 1 grass roots in rows 10 cm apart in both directions.	sqm	40.00	51.00	44.00	55.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(d)	Providing and fixing Selection no. 1 grass turf with earth 50mm to 60 mm thickness and ramming with required wooden tools, rolling with light roller to make the surface smooth and even.	sqm	42.00	125.00	46.00	129.00
	(e)	Planting Neelgiri/ Mexican grass roots in rows 5 cm apart in both directions.	sqm	45.00	114.00	50.00	119.00
	(f)	Planting Neelgiri/ Mexican grass roots in rows 7.5 cm apart in both directions.	sqm	41.00	83.00	45.00	87.00
	(g)	Planting Neelgiri/ Mexican grass roots in rows 10 cm apart in both directions.	sqm	40.00	70.00	44.00	74.00
	(h)	Providing and fixing Neelgiri/ Mexican grass turf with earth 50mm to 60 mm thickness and ramming with required wooden tools, rolling with light roller to make the surface smooth and even.	sqm	42.00	278.00	46.00	282.00
32.10	Maintenance of fine grass lawn for one year including fertilizer application, watering, weeding, top dressing with good earth and manure mixture, maintaining fine level, regular mowing and removal of rubbish with all lifts and leads.		sqm	44.00	49.00	48.00	53.00
32.11	Removal of weeds from lawn grass.						
	(a)	Weeding out of lawn, where weeds are up to 50%, by removal of all weeds and other wild growth with roots by forking including disposal of garden rubbish with all loads and lifts complete.	sqm	15.00	15.00	17.00	17.00
	(b)	Weeding out of lawn, where weeds are up to 25%, by removal of all weeds and other wild growth with roots by forking including disposal of garden rubbish with all loads and lifts complete.	sqm	7.74	7.74	8.51	8.51
	(c)	Broadleaf Weed control in garden using weedicide, once, including cost of chemical.	sqm	0.10	0.25	0.11	0.26

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(d)	Nutgrass (Motha) control in garden using weedicide, once, including cost of chemical.	sqm	0.10	0.56	0.11	0.57
32.12	Renovating lawns including weeding, cheeling the grass, forking the ground, top dressing with mixture of good earth and manure 1:1, mixing the same with forked soil, watering and maintaining the lawn for 30 days or more till the grass forms a thick lawn free from weeds and fit for mowing and disposal of rubbish as directed		sqm	27.00	43.00	30.00	46.00
32.13	Digging of pits in all kinds of soil & refilling the same, with the excavated earth mixed with well decayed farm yard manure @ 30% of pit volume and insecticide for termite control		cum	208.00	388.00	229.00	409.00
32.14	Supplying and planting permanent trees in prepared pits and watering		each	5.16	170.00	5.68	171.00
32.15	Maintenance of tree including fertilization, application of insecticide, watering, weeding, training, pruning, disposal of debris and other activities.						
	(a)	Maintenance of trees for the 1st year	each	629.00	704.00	692.00	767.00
	(b)	Maintenance of trees for the 2nd year	each	420.00	545.00	462.00	587.00
	(c)	Maintenance of trees for the 3rd year	each	314.00	477.00	345.00	508.00
	(d)	Maintenance of trees for the 4th and 5th year (Cost per year)	each	189.00	428.00	208.00	447.00
	(e)	Maintenance of trees for 6th year onwards (Cost per year)	each	126.00	217.00	139.00	230.00
32.16	Pruning, trimming, shaping of mature trees /shrubs (ht 15 feet and above) including removal of cut materials up to 50m lead.		each	66.00	66.00	73.00	73.00
32.17	Staking of Trees						
	(a)	Providing and fixing single stake for a tree with bamboo 38 mm dia, 1.50 m long	each	6.45	125.00	7.10	126.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(b)	Providing and fixing double stake for tree with bamboos 38 mm dia, 1.50 m long	each	13.00	250.00	14.00	251.00
	(c)	Three point guying of large palms and trees with coir ropes	each	17.00	163.00	19.00	165.00
32.18	Supplying and planting permanent shrubs in prepared pits and watering		each	2.58	66.00	2.84	66.00
32.19	Maintenance of shrubs for one year including training, pruning, fertilization, application of insecticide, watering and weeding.						
	(a)	Individual shrubs	each	157.00	210.00	173.00	226.00
	(b)	Shrubs planted in groups making continuous block.	sqm	252.00	311.00	277.00	336.00
32.20	Planting specimen plants in prepared pits and watering		each	10.00	1406.00	11.00	1407.00
32.21	Maintenance of specimen plants for one year including, fertilization, application of insecticide, watering and weeding.		each	629.00	824.00	692.00	887.00
32.22	Planting seasonal flower in beds						
	(a)	Planting seedlings including digging of beds to 15 cm depth and mixing FYM, fertilizer and insecticides, planting of seedlings at 20cm distance from plant to plant and row to row.	sqm	36.00	259.00	40.00	263.00
	(b)	Planting seasonals at flowering stage in beds including digging of beds to 15 cm depth and mixing FYM, fertilizer and insecticides, planting at 20cm distance from plant to plant and row to row.	sqm	36.00	1020.00	40.00	1024.00
32.23	Maintenance of seasonal flower beds including digging of beds to 15 cm depth mixing FYM, fertilizer and insecticides, planting of sapling at 20cm distance from plant to plant and row to row, three times a year.		sqm	176.00	792.00	194.00	810.00



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
32.24	Planting bulbous flower beds including digging of beds to 15 cm depth and mixing FYM, fertilizer and insecticides, planting of sapling at 30cm distance from plant to plant and row to row.	sqm	36.00	565.00	40.00	569.00
32.25	Maintenance of bulbous flower beds including digging of beds to 15 cm depth mixing FYM, fertilizer and insecticides, planting of sapling at 30cm distance from plant to plant and row to row, twice a year.	sqm	145.00	1174.00	160.00	1189.00
32.26	Planting ground covers (ordinary) including digging of beds to 15 cm depth and mixing FYM, fertilizer and insecticides, planting of sapling at 25cm distance from plant to plant and row to row.	sqm	53.00	277.00	58.00	282.00
32.27	Maintenance of ground cover (ordinary) for one year including application of FYM, fertilizer, insecticides, pruning and casualty replacement	sqm	139.00	201.00	153.00	215.00
32.28	Planting ground covers (special) including digging of beds to 15 cm depth and mixing FYM, fertilizer and insecticides, planting of sapling at 25cm distance from plant to plant and row to row.	sqm	53.00	676.00	58.00	681.00
32.29	Maintenance of ground cover (special) for one year including application of FYM, fertilizer, insecticides, pruning and casualty replacement	sqm	150.00	251.00	165.00	266.00
32.30	Planting Rose beds including digging of beds to 15 cm depth and mixing FYM, fertilizer and insecticides, triangular planting of sapling at 60cm distance from plant to plant and row to row.	sqm	36.00	174.00	40.00	178.00
32.31	Maintenance of Rose beds for one year including application of FYM, fertilizer, insecticides, pruning and casualty replacement	sqm	97.00	157.00	107.00	167.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
32.32	Planting edging plants around beds, lawn or along paths including of digging trench 45 cm wide to 15 cm depth and mixing FYM, fertilizer and insecticides, planting of sapling at 20cm distance from plant to plant.	m	16.00	114.00	18.00	116.00
32.33	Maintenance of edging plants for one year including application of FYM, fertilizer, insecticides, pruning and casualty replacement	m	50.00	74.00	55.00	79.00
32.34	Planting hedge including digging of trench 60 cm wide to 15 cm depth and mixing FYM, fertilizer and insecticides, planting of sapling at 30cm distance from plant to plant in two rows.	m	18.00	165.00	20.00	167.00
32.35	Maintenance of hedge plants for one year including application of FYM, fertilizer, insecticides, pruning and casualty replacement	m	129.00	167.00	142.00	180.00
32.36	Providing black nursery polybags filled with mixture of screened manure and good earth in the ratio 1:2 filled to full volume.					
	(a) Polybag size 10 cm dia x 15 cm height	each	0.53	1.55	0.58	1.60
	(b) Polybag size 15 cm dia x 20 cm height	each	2.10	5.04	2.31	5.25
	(c) Polybag size 25 cm dia x 30 cm height	each	8.74	20.00	9.61	21.00
	(d) Polybag size 35 cm dia x 35 cm height	each	20.00	47.00	22.00	49.00
	(e) Polybag size 45 cm dia x 45 cm height	each	42.00	97.00	46.00	101.00
32.37	Providing earthen pots at site of work, filling with mixture of screened manure, good earth and cocopeat in the ratio 2:1:1 as specified.					
	(a) 15 cm size of pots filled to full volume.	each	1.22	35.00	1.34	35.00
	(b) 20 cm size of pots filled to full volume.	each	2.14	59.00	2.35	59.00
	(c) 25 cm size of pots filled to full volume	each	4.21	79.00	4.63	79.00
	(d) 30 cm size of pots filled to full volume	each	7.20	102.00	7.92	103.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
32.38	Providing cement pots at site of work, filling 2/3rd volume with mixture of good earth and screened manure and cocopeat in the ratio 2:1:1.					
	(a) 30 cm size of pots	each	6.71	97.00	7.38	98.00
	(b) 35 cm size of pots	each	11.00	160.00	12.00	161.00
	(c) 45 cm size of pots	each	23.00	260.00	25.00	262.00
	(d) 50 cm size of pots	each	31.00	388.00	34.00	391.00
	(e) 60 cm size of pots	each	54.00	569.00	59.00	574.00
32.39	Providing plastic pot with base plate at site of work, filling with mixture of good earth and screened manure and cocopeat in the ratio 2:1:1.					
	(a) 15 cm size of pots filled to full volume	each	1.22	17.00	1.34	17.00
	(b) 20 cm size of pots filling to full volume	each	2.14	34.00	2.35	34.00
	(c) 25 cm size of pots filled to full volume	each	4.21	67.00	4.63	67.00
	(d) 30 cm size of pots filled to full volume	each	7.20	110.00	7.92	111.00
	(e) 35 cm size of pots filled to 2/3 of volume.	each	11.00	134.00	12.00	135.00
	(f) 40 cm size of pots filled to 2/3 of volume.	each	16.00	214.00	18.00	216.00
	(g) 45 cm size of pots filled to 2/3 of volume.	each	23.00	324.00	25.00	326.00
	(h) 50 cm size of pots filled to 2/3 of volume.	each	31.00	511.00	34.00	514.00
	(i) 60 cm size of pots filled to 2/3 of volume.	each	54.00	932.00	59.00	937.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
32.40	Supplying seasonal flowers in earthen pots at site of work, as specified by Engineer-in-charge						
	(a)	Seasonal flower seedlings in 20 cm size of pots	each	1.98	79.00	2.18	79.00
	(b)	Seasonal flower seedlings in 25 cm size of pots	each	3.43	111.00	3.77	111.00
	(c)	Planting and supplying seasonal plants in flowering stage in 25 cm size of pots	each	2.86	183.00	3.15	183.00
32.41	Supplying Dahlia/Chrysanthemum plants in earthen pots at site of work, as specified by Engineer-in-charge						
	(a)	Korean/ Spray type chrysanthemum cuttings in 25 cm size of pots, 3 cuttings in each pot.	each	3.43	96.00	3.77	96.00
	(b)	Ball type Dahlia/Chrysanthemum cuttings in 25 cm size of pots	each	3.43	81.00	3.77	81.00
	(c)	Planting and supplying Dahlia/Chrysanthemum plants in flowering stage in 25 cm size of pots	each	2.86	386.00	3.15	386.00
32.42	Maintenance of seasonal plants, Dahlia and Chrysanthemum in pots for one month		each	3.78	17.00	4.16	17.00
32.43	Supplying pot plant in 30 cm pots with plastic plate for indoor display at site of work.						
	(a)	In plastic pot	each	10.00	243.00	11.00	244.00
	(b)	In earthen pot	each	10.00	235.00	11.00	236.00
32.44	Maintenance of indoor pot plants for one year.		each	252.00	280.00	277.00	305.00
32.45	Supplying specimen pot plant in 45 cm plastic pots with plastic plate for indoor display at site of work.		each	26.00	908.00	29.00	911.00
32.46	Maintenance of indoor specimen pot plants for one year.		each	630.00	729.00	693.00	792.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
32.47	Supplying plant in 30 cm cement pots for outdoor display at site of work.	each	17.00	287.00	19.00	289.00
32.48	Maintenance of outdoor pot plants for one year.	each	473.00	504.00	520.00	551.00
32.49	Supplying specimen pot plant in 45 cm cement pots for outdoor display at site of work.	each	26.00	919.00	29.00	922.00
32.50	Maintenance of outdoor specimen pot plants for one year.	each	630.00	728.00	693.00	791.00
32.51	Preparation of mounds of various size and shapes including supply of good earth, in layers not exceeding 20 cm in depth, breaking of clods, watering each layer, dressing etc, lead up to 50 m and lift up to 1.5 m complete as per directions	cum	320.00	899.00	352.00	931.00
32.52	Watering of trees, shrubs, ground covers etc. through tractor tanker of 6000 litre capacity including cost of water with all leads and lifts.	per tanker	494.00	529.00	543.00	578.00
32.53	Anti termite treatment of lawns, mature trees.					
	(a) Treatment of lawn area through Imidacloprid 30.5% SC including cost of	sqm	0.20	4.27	0.22	4.29
	(b) Treatment around mature trees by digging holes 30 cm deep and 4 cm dia, 6 to 7 holes around tree using 1% chemical emulsion of Chlorpyrifos 20%	each	10.00	97.00	11.00	98.00
32.54	Edging of paths/ beds with bricks/tiles laid dry, including required excavation, refilling, consolidating with hand and spreading surplus					
	(a) Bricks laid lengthwise with half brick depth	m	5.62	37.00	6.18	38.00
	(b) Alternate bricks laid horizontally and vertically	m	6.08	47.00	6.69	48.00
	(c) Vertical bricks, half brick projecting above ground	m	6.08	70.00	6.69	71.00
	(d) Brick inclined at 60 deg to horizontal	m	6.08	60.00	6.69	61.00
	(e) Tiles laid lengthwise with half tile depth	m	5.64	38.00	6.20	39.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(f)	Alternate tiles laid horizontally and vertically	m	6.08	48.00	6.69	49.00
32.55	Providing and fixing of white river (Stone) pebbles size of 2" to 2.50" dia in natural colour at site of work including loading, unloading and carriage		sqm	62.00	684.00	68.00	690.00
32.56	Clearing herbaceous wild growth						
	(a)	Clearing by manual labour, collection and disposal of undesirable material.	sqm	4.20	4.20	4.62	4.62
	(b)	From central verge, narrow road berm or uneven area with brush cutter, collection and disposal of undesirable material.	sqm	1.50	1.50	1.65	1.65
	(c)	From open areas with shrub master and brush cutter, collection and disposal of undesirable material.	ha	6678.00	6678.00	7346.00	7346.00
32.57	Supply and installation of garden bench						
	(a)	Chair type garden bench with L-shaped sides made of reinforced concrete (M-30), thickness 100 mm, overall height 1000 mm, base width 620 mm. Back and seat shall consist of 5 Nos. reinforced concrete planks 1500 mm x 100 mm x 50 mm one plank 1500 mm x 200 mm x 50 mm. Seating height of the bench shall be 450 mm. The bench shall be fixed with nuts on concrete mount, all holes sealed after assembly and installation	each	73.00	5299.00	80.00	5306.00
	(b)	Rectangular garden bench with h-shaped sides made of reinforced concrete (M-30), thickness 100 mm, back height 750 mm, base width 450 mm. Back and seat shall consist of rectangular reinforced concrete planks 1500 mm x 350 mm x 50 mm. Seating height of the bench shall be 450 mm. The bench shall be fixed with nuts on concrete mount, all holes sealed after assembly and installation	each	99.00	3964.00	109.00	3974.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
	(c) Cast Iron bench of 1800 mm length, 900 mm width, 450 mm seating height, sides made of cast iron. Seat and back shall be made of 10 strips of M.S. pipes 63 mm x 25 mm of 14 gauge with one M.S. Flat 25 x 10 mm welded at the centre, below and back of the seat and back rest. Spray painted with approved brand paint. Fixed by grouting with 1:2:4 cement concrete (Minimum weight of each bench 105 kg)	each	99.00	12518.00	109.00	12528.00
32.58	Supply of wooden planter covers for indoor pot plants.					
	(a) Wooden planter 420mm x 420mm x 420mm, consisting of 4 panels each made of 4 Nos wooden slats of size 420 mm x 38 mm x 38 mm, 20 Nos wooden slats of 420 mm x 38 mm x 25 mm, and 4 Nos water proof plywood sheets 4 mm thick of size 344 mm x 382 mm fixed on inner side of each panel fixed with nails, one coat of primer and two coats of enamel paint.	each	757.00	1718.00	833.00	1794.00
	(b) Wooden planter for 10 inch pot, outer size 330mm x 330mm x 320mm, made of 30 mm x 20 mm horizontal wooden slats and 30 mm x 30 mm vertical slats fixed with nails, finished with spirit polish and varnish as per specifications complete.	each	1530.00	2242.00	1683.00	2395.00
	(c) Wooden planter for 12 inch pot, outer size 400mm x 400mm x 360mm, made of 40 mm x 20 mm horizontal wooden slats and 30 mm x 30 mm vertical slats fixed with nails, finished with spirit polish and varnish as per specifications complete.	each	2050.00	3164.00	2255.00	3369.00
	(d) Wooden planter for 18 inch pot, outer size 600mm x 600mm x 600mm, made of 55 mm x 20 mm horizontal wooden slats and 40 mm x 40 mm vertical slats fixed with nails, finished with spirit polish and varnish as per specifications complete.	each	2619.00	5412.00	2881.00	5674.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
32.59	Half brick circular tree guard in 1st class bricks internal dia 1.25 mtr. And height 1.2 mtrs above ground and 0.20 mtrs. Below ground bottom two courses laid dry and top three courses in cement mortar (1:6) i.e. 1 cement and 6 sand and the intermediate course.	each	260.00	1742.00	286.00	1768.00
32.60	Providing and fixing bamboo tree guard with 4 No. legs of bamboo sticks of 25mm dia and 1.5 metre length. Rings of bamboos duly attached to the legs with nuts bolts and washers. Legs up to 30cm dipped in bitumen.	each	52.00	638.00	57.00	643.00
32.61	PCC tree-guard with appropriate reinforcement with MS bars of 8mm, 6mm and 4mm, having four panels of equal size and specification, consisting of overall height of 1800 mm and overall width of 620 mm including all carriage.	each	76.00	2279.00	84.00	2287.00
32.62	Providing and fixing steel tree guard					
(a)	MS circular tree guard 60 cm dia and 1.8 mtrs. height above ground level formed of 4 Nos. of angle irons of 25 x 25 x 3 mm 2.10 m long, 4 Nos. 25mm x 3mm, 1.5 m long vertical MS flat welded to 3 no. 25 mm x 6mm M.S flat iron rings in two halves bolted together with 8mm dia & 30 mm long bolts and fixing 250 mm X 100 mm iron plate, fixed in ground with 1:2:4 cement concrete, complete in all respects.	each	1306.00	2501.00	1437.00	2632.00
(b)	MS circular tree guard with wire mesh, having 4 No. legs of angle iron size 25x25x3mm, 1.80 mtr. height, 3 No rings of M.S Flats of 25 x 6 mm, 60cm dia and fixing of wire mesh size 50x75mm. Tree guard in two halves bolted together with 8mm dia & 30 mm long bolts, and fixing 250 mm X 100 mm iron plate, fixed in ground with 1:2:4 cement concrete, complete in all respects.	each	1438.00	2906.00	1582.00	3050.00



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(c)	M.S. Bar circular iron tree guard 60 cm dia, 1.8 m total height, formed of 3 Nos. of MS Round Bars 12 mm dia. 1.9 m long, wire mesh 50 x 75 mm welded to 3 no. 8 mm M.S. Bars rings, fixed in ground with 1:2:4 cement concrete, complete in all respects.	each	926.00	1978.00	1019.00	2071.00
	(d)	M.S. Flat iron tree guard 45 cm square and 1.8 mtrs. height above ground level formed of 4 Nos. of angle irons of 25 x 25 x 3 mm 2.1 m long, 5 Nos. 25mm x 3mm horizontal MS flats welded to verticals on each side. Tree guard in two halves bolted together with 8mm dia & 30 mm long bolts, fixed in ground with 1:2:4 cement concrete, complete in all respects.	each	1023.00	1963.00	1125.00	2065.00
	(e)	M.S. Flat iron tree guard 45 cm square and 1.8 mtrs. height above ground level formed of 4 Nos. of angle irons of 25 x 25 x 3 mm 2.1 m long, 5 Nos. 25mm x 3mm horizontal MS flats welded to verticals on each side, wire mesh 50 x 75 mm welded to angles and flats. Tree guard in two halves bolted together with 8mm dia & 30 mm long bolts, fixed in ground with 1:2:4 cement concrete, complete in all respects.	each	1158.00	2425.00	1274.00	2541.00
	(f)	M.S. Flat iron tree guard 45 cm square and 0.8 mtrs. height above ground level formed of 4 Nos. of angle irons of 25 x 25 x 3 mm 1.1 m long, 2 Nos. 25mm x 3mm horizontal MS flats welded to verticals on each side. Tree guard in two halves bolted together with 8mm dia & 30 mm long bolts, fixed in ground with 1:2:4 cement concrete, complete in all respects.	each	522.00	1027.00	574.00	1079.00
32.63	Removing, repairing and refixing steel tree guard with 1:2:4 cement concrete						
	(a)	MS circular tree guard 60 cm dia and 1.8 mtrs. height in two halves bolted together	each	247.00	409.00	272.00	434.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(b)	MS circular tree guard with wire mesh, 1.80 mtr. height, in two halves bolted together.	each	257.00	428.00	283.00	454.00
	(c)	M.S. Bar circular iron tree guard 60 cm dia, 1.8 m total height, with wire mesh, welded.	each	300.00	423.00	330.00	453.00
	(d)	M.S. Flat iron tree guard 45 cm square and 1.8 mtrs. Height, in two halves bolted together.	each	245.00	400.00	270.00	425.00
	(e)	M.S. Flat iron tree guard 45 cm square and 1.8 mtrs. Height with wire mesh wire mesh, in two halves bolted together.	each	260.00	426.00	286.00	452.00
32.64	Providing and fixing bamboo jaffery/ fencing consisting of superior quality 25 mm dia (Average) half cut bamboo placed vertically and fixed together with three numbers horizontal running members of Sal wood in scantling of section 50 x 25 mm, fixed with nails and 4 mm gauge G.I. wire on existing support complete as per directions of Engineer-in-charge.		sqm	129.00	1563.00	142.00	1576.00
32.65	Providing and fixing of garden fencing of green hexagonal net.						
	(a)	Fixing of fencing with MS angles 25 x 25 x 3 mm, 1.5 m above ground fixed 30 cm in ground at 3m with cement concrete 1:2:4. Net to be fixed with nut bolts with washer at three places and one 4 mm GI wire running through the net at top and bottom for stability and strength.	sqm	39.00	281.00	43.00	285.00
	(b)	Fixing of fencing with MS angles 25 x 25 x 3 mm frame, vertical members 1.5 m above ground fixed 30 cm in ground at 2m with cement concrete 1:2:4. Net to be fixed with nut bolts and washers.	sqm	371.00	896.00	408.00	933.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
32.66	Providing and fixing vertical garden panels on aluminium tube (50 x25 x 1.5 mm) frame, fixed on wall, with growing media of cocopeat, perlite and vermiculite 2:1:1, amended with fertilizers and plants as specified by the engineer in					
	(a) Indoor vertical garden	sqm	410.00	8778.00	451.00	8819.00
	(b) Outdoor vertical garden	sqm	410.00	7915.00	451.00	7956.00
32.67	Maintenance of vertical garden for one year, complete with replacement of plants, panels, drip equipment etc., replenishing decomposed media, watering and fertilization.					
	(a) Indoor vertical garden	sqm	93.00	1019.00	102.00	1028.00
	(b) Outdoor vertical garden	sqm	93.00	932.00	102.00	941.00
32.68	Supply and installation of inline drip irrigation					
	(a) LDPE Emitting Pipe 16 mm; Class 2 (0.6 m x 1 to 4 Lph), Anti-rodent, complete with all accessories.	m	1.96	17.00	2.16	17.00
	(b) LDPE Emitting Pipe 16 mm; Class 2 (0.5 m x 1 to 4 Lph), Anti-rodent, complete with all accessories.	m	1.96	17.00	2.16	17.00
	(c) LDPE Emitting Pipe 16 mm; Class 2 (0.4 m x 1 to 4 Lph), Anti-rodent, complete with all accessories.	m	1.96	19.00	2.16	19.00
	(d) LDPE Emitting Pipe 16 mm; Class 2 (0.3 m x 1 to 4 Lph), Anti-rodent, complete with all accessories.	m	1.96	19.00	2.16	19.00
	(e) LDPE Emitting Pipe 16 mm; Class 2 (0.6 m x 1 to 4 Lph), complete with all accessories.	m	1.96	15.00	2.16	15.00
	(f) LDPE Emitting Pipe 16 mm; Class 2 (0.5 m x 1 to 4 Lph), complete with all accessories.	m	1.96	17.00	2.16	17.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(g)	LDPE Emitting Pipe 16 mm; Class 2 (0.4 m x 1 to 4 Lph), complete with all accessories.	m	1.96	18.00	2.16	18.00
	(h)	LDPE Emitting Pipe 16 mm; Class 2 (0.3 m x 1 to 4 Lph), complete with all accessories.	m	1.96	19.00	2.16	19.00
	(i)	LDPE Emitting Pipe 16 mm; Class 2 (0.6 m x 1 to 4 Lph), pressure compensating, complete with all accessories.	m	1.96	19.00	2.16	19.00
	(j)	LDPE Emitting Pipe 16 mm; Class 2 (0.5 m x 1 to 4 Lph), pressure compensating, complete with all accessories.	m	1.96	21.00	2.16	21.00
	(k)	LDPE Emitting Pipe 16 mm; Class 2 (0.4 m x 1 to 4 Lph), pressure compensating, complete with all accessories.	m	1.96	21.00	2.16	21.00
	(l)	LDPE Emitting Pipe 16 mm; Class 2 (0.3 m x 1 to 4 Lph), pressure compensating, complete with all accessories.	m	1.96	22.00	2.16	22.00
	(m)	LDPE Emitting Pipe 16 mm; Class 2 (0.6 m x 1 to 4 Lph), pressure compensating, Anti siphoning, complete with all accessories.	m	1.96	23.00	2.16	23.00
	(n)	LDPE Emitting Pipe 16 mm; Class 2 (0.5 m x 1 to 4 Lph), pressure compensating, Anti siphoning, complete with all accessories.	m	1.96	23.00	2.16	23.00
	(o)	LDPE Emitting Pipe 16 mm; Class 2 (0.4 m x 1 to 4 Lph), pressure compensating, Anti siphoning, complete with all accessories.	m	1.96	24.00	2.16	24.00
	(p)	LDPE Emitting Pipe 16 mm; Class 2 (0.3 m x 1 to 4 Lph), pressure compensating, Anti siphoning, complete with all accessories.	m	1.96	24.00	2.16	24.00

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
32.69	Supply and installation of drip irrigation lines with external emitters/ micro-sprinklers/bubblers					
	(a) LDPE lateral Pipe 16 mm; Class 2 2.5 kg/cm <sup>2</sup> , complete with all accessories.	m	1.96	18.00	2.16	18.00
	(b) Installation of pressure compensating drip emitters	each	4.10	10.00	4.51	10.00
	(c) Installation of pressure compensating Non leakage drip emitters	each	4.10	12.00	4.51	12.00
	(d) Installation of Non pressure compensating drip emitters	each	4.10	9.00	4.51	9.00
	(e) Micro sprinkler having 1.5-4 m throw radius with stake, vinyl tubing and all other accessories	each	12.00	121.00	13.00	122.00
	(f) Installation of adjustable flow bubbler with all accessories complete.	each	12.00	462.00	13.00	463.00
32.70	Supply and installation of pop up sprinklers					
	(a) Pop up Impact Rotors 3/4" inlet and radius ranging from 7-12 m with interchangeable nozzles and all accessories complete and setting flow rate as directed.	each	29.00	1157.00	32.00	1160.00
	(b) Pop up geared rotors 3/4" inlet and radius ranging from 7-12 m with interchangeable nozzles and all accessories complete and setting flow rate as directed.	each	29.00	1286.00	32.00	1289.00
	(c) Pop up Spray heads 1/2" inlet and radius ranging from 3-5 m with interchangeable nozzles and all accessories complete and setting flow rate as directed.	each	29.00	449.00	32.00	452.00
32.71	Supply and installation of Rain Gun					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(a)	Rain Gun with throw radius of 14-22 m, with interchangeable nozzles and arc adjustment and all accessories complete	each	273.00	9908.00	300.00	9935.00
	(b)	Rain Gun with throw radius of 20-35 m, with interchangeable nozzles and arc adjustment and all accessories complete	each	273.00	39524.00	300.00	39551.00
	(c)	Portable system Rain Gun with throw radius of 14-22 m, interchangeable nozzles, arc adjustment, stand and all accessories complete	each	273.00	13466.00	300.00	13493.00
32.72	Supply and installation of filters/ pressure relief valve for drip/ sprinkler system						
	(a)	Sand/Media filter 25 cum/hr, with back wash and bypass	each	273.00	32451.00	300.00	32478.00
	(b)	Sand/Media filter 40 cum/hr, with back wash and bypass	each	273.00	38887.00	300.00	38914.00
	(c)	Sand/Media filter 50 cum/hr, with back wash and bypass	each	273.00	55619.00	300.00	55646.00
	(d)	Disc filter 15 cum/hr, with flush valve	each	273.00	4392.00	300.00	4419.00
	(e)	Disc filter 25 cum/hr, with flush valve	each	273.00	7224.00	300.00	7251.00
	(f)	Disc filter 50 cum/hr, with flush valve	each	273.00	8640.00	300.00	8667.00
	(g)	Hydrocyclone/ Sand separator 10-16 cum/hr, with flush valve	each	273.00	7996.00	300.00	8023.00
	(h)	Hydrocyclone/ Sand separator 12-30 cum/hr, with flush valve	each	273.00	11214.00	300.00	11241.00
	(i)	Hydrocyclone/ Sand separator 20-40 cum/hr, with flush valve	each	273.00	12887.00	300.00	12914.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(j)	Supply and installation of hydraulic pressure relief valve for pressure regulation of irrigation system	each	78.00	11662.00	86.00	11670.00
32.73	Supply and installation of artificial grass with tape, adhesive and all accessories, complete						
	(a)	40 mm artificial turf	sqm	21.00	838.00	23.00	840.00
	(b)	35 mm artificial turf	sqm	21.00	678.00	23.00	680.00
	(c)	25 mm artificial turf	sqm	21.00	600.00	23.00	602.00
	(d)	20 mm artificial turf	sqm	21.00	510.00	23.00	512.00
	(e)	10 mm artificial turf	sqm	21.00	394.00	23.00	396.00
32.74	Installation of green roof structural layers on already waterproofed roof deck						
	(a)	Base layers for Extensive and semi-intensive green roof consisting of 1 mm thick root barrier, 25 mm layer of water borne stone aggregate (6 mm size) and 2 layers of geotextile (120 gsm and 200 gsm) but excluding plant substrate	sqm	34.00	279.00	37.00	282.00
	(b)	Base layers for Extensive and semi-intensive green roof consisting of 1 mm thick root barrier, 20 mm drain cell and 120 gsm geotextile but excluding plant substrate	sqm	33.00	467.00	36.00	470.00
	(c)	Base layers for Intensive green roof consisting of 1 mm thick root barrier, 50 mm layer of water borne stone aggregate (6 mm size) and 2 layers of geotextile (120 gsm and 200 gsm) but excluding plant substrate.	sqm	34.00	299.00	37.00	302.00
	(d)	Base layers for intensive green roof consisting of 1 mm thick root barrier, 30 mm drain cell and 200 gsm geotextile but excluding plant substrate	sqm	33.00	567.00	36.00	570.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(e)	Supply and installation of light weight plant substrate as specified.	cum	83.00	6346.00	91.00	6354.00
	(f)	Supply and installation of medium weight plant substrate as specified.	cum	118.00	3455.00	130.00	3467.00
	(g)	Supply and installation of amended soil for plant substrate as specified.	cum	136.00	1335.00	150.00	1349.00
	(h)	Supply and installation of non woven coir mat minimum 600 gsm without netting, latex bound as water absorption and storage layer for green roof.	sqm	1.00	116.00	1.00	116.00
32.75	Providing and fixing pair of Plastic dustbins 100 litre volume each, of two different colours, for dry and wet waste, made of virgin plastic to be mounted on MS rectangular hollow section 50 x 25 x 3 mm frames pivoted on 3 MS square hollow section verticals, 1 m above ground, one 35 cm RHS welded to each vertical member at base and grouted in 180 x 40 x 30 cm 1:2:4 cement concrete.		each	2907.00	12753.00	3198.00	13044.00





## CHAPTER NO. 33

### Green Buildings

**Notes :-**

- (i) Unless otherwise stated, the labour rates include the cost of rehandling of materials within 100 metres.
- (ii) The Labour rate given in this chapter include the cost of water, tools & plants, scaffolding (including Labour & Materials), where ever required.

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
33.01	Providing and fixing thermal insulation on external wall with CFC Free closed cell, high performance rigid Polyurethane Foam(PUF) Insulation Slab conforming to IS: 12436 having density not less than 36±2 kg/m <sup>3</sup> , thermal conductivity (K-value) 0.021 W/m.K measured at 10 deg. C mean temperature and classified as "not easily ignitable" per BS: 476, Part-5, fixed with the help of adhesive (patch applied) & PVC fastener to the wall surface and all complete as per the instruction of engineer-in-charge					
	(a) 40 mm thick Polyurethane foam(PUF) rigid insulation board	sqm	30.00	1083.00	33.00	1086.00
	(b) 50 mm thick Polyurethane foam(PUF) rigid insulation board	sqm	30.00	1254.00	33.00	1257.00
33.02	Providing and applying thermal insulation on external wall with impervious sprayed CFC free, closed cell rigid Polyurethane foam wall insulation conforming to IS-12432 Part III (density of foam being 35±5 kg/m <sup>3</sup> , thermal conductivity (K- value) 0.023 W/m.K over a coat of polyurethane primer applied @ 6-8 sqm per litre and covering it externally as per specs and direction of engineer-in- charge.					
	(a) 40 mm thick PUF Spray	sqm	296.00	993.00	326.00	1022.60
	(b) 50 mm thick PUF Spray	sqm	296.00	1135.00	326.00	1164.60

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
33.03	Providing & fixing on external side of finished external wall, extruded polystyrene (XPS) thermal insulating boards with ship lap joining on length side, (having thermal conductivity of 0.028 W/m.K on 90 days aging at 24 deg.C as per ASTM C518, compressive strength of over 250 kpa as per ASTM D1621, tensile strength of over 300 kpa as per ASTM D1623 and has flammability of Class B2 as per DIN 4102, water absorption of less than 1% as per ASTM D2842) with the help of a minimum 2 mm thick polymerized mortar adhesive & mountings as per manufacturer's guidelines; over the installed XPS boards, providing & laying a 3-4 mm thick finishing layer of polymerized mortar base coat with fibre glass mesh of min. 150 gsm embedded in it using notched trowel as per manufacturer's guidelines and as per the instruction of engineer-in- charge.					
	(a) 25 mm thick Extruded polystyrene rigid insulation board	sqm	44.00	506.00	48.00	510.40
	(b) 50 mm thick Extruded polystyrene rigid insulation board	sqm	44.00	903.00	48.00	907.40
	(c) 75 mm thick Extruded polystyrene rigid insulation board	sqm	44.00	1300.00	48.00	1304.40
	(d) 100 mm thick Extruded polystyrene rigid insulation board	sqm	44.00	1696.00	48.00	1700.40
33.04	Providing and fixing between 2 layers of brick work/ concrete walls, thermal insulation with CFC free closed cell, high performance rigid Polyurethane Foam (PUF) insulation slab conforming to IS: 12436 having density not less than 36±2kg/m <sup>3</sup> , thermal conductivity (K-value) 0.021 W/m.K measured at 10 deg. C mean temperature and classified as "not easily ignitable" per BS: 476, Part-5 fixed to the wall with the screw, raw plug and washers etc. and holding in position with crisscross GI wire, in staggered form and all complete as per specs or directions of engineer-in-charge.					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(a)	40 mm thick Polyurethane foam(PUF) rigid insulation board	sqm	30.00	759.00	33.00	762.00
	(b)	50 mm thick Polyurethane foam(PUF) rigid insulation board	sqm	30.00	930.00	33.00	933.00
33.05	Providing and injecting/pouring CFC free closed cell, high performance rigid Polyurethane foam between 2 layers of brick work/ concrete walls having thermal insulation not more than 0.024 W/m.K, core density 35±5 kg/m3 (conforming to IS-13205) and water absorption not more than 2.5%, inside wall cavity after making injection ports at 60 cm center to center. The insulation foam shall be injected with the help of high pressure specially designed foaming machine like gusmer/graco or equivalent in dry brick wall cavity including plugging of holes and all complete as per the instruction of engineer-in-charge.						
	(a)	40 mm thick PUF Spray	sqm	437.00	1056.00	481.00	1099.70
	(b)	50 mm thick PUF Spray	sqm	437.00	1198.00	481.00	1241.70
33.06	Providing and fixing thermal insulation with resin bonded Rock wool between 2 layers of brick work/ concrete walls conforming to IS: 8183 and density 48 kg/m3 having thermal conductivity value of not more than 0.043 W/m.K, wrapped in 200G virgin polythene bags fixed to the wall with the screw, rawl plug and washers and held in position by crisscross GI wire etc. and all complete as per specs or directions of engineer-in-charge.						
	(a)	25 mm thick Resin bonded Rock wool	sqm	59.00	282.00	65.00	287.90
	(b)	50 mm thick Resin bonded Rock wool	sqm	59.00	291.00	65.00	296.90
	(c)	65 mm thick Resin bonded Rock wool	sqm	59.00	346.00	65.00	351.90

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(d)	75 mm thick Resin bonded Rock wool	sqm	59.00	411.00	65.00	416.90
33.07	Providing and fixing between 2 layers of brick work/ concrete walls thermal insulation with Resin Bonded Fibre glass wool conforming to IS: 8183 having density 48 kg/m <sup>3</sup> , wrapped in 200G Virgin Polythene Bags fixed to wall with screw, rawl plug & washers and held in position by criss crossing GI wire etc. complete as per directions of Engineer-in-Charge.						
	(a)	12 mm thick Resin bonded Glass wool	sqm	59.00	227.00	65.00	232.90
	(b)	25 mm thick Resin bonded Glass wool	sqm	59.00	262.00	65.00	267.90
	(c)	50 mm thick Resin bonded Glass wool	sqm	59.00	323.00	65.00	328.90
33.08	Providing and fixing between 2 layers of brick work/ concrete walls extruded polystyrene (XPS) thermal insulating boards with ship lap joining on length side, (having thermal conductivity of 0.028 W/m.K on 90 days aging at 24 deg.C as per ASTM C518, compressive strength of over 250 kpa as per ASTM D1621, tensile strength of over 300 kpa as per ASTM D1623 and has flammability of Class B2 as per DIN 4102, water absorption of less than 1% as per ASTM D2842 fixed with suitable water based adhesive and fastener, complete in all respect as per the direction of Engineer-in-Charge.						
	(a)	50 mm thick Extruded polystyrene rigid insulation board	sqm	30.00	885.00	33.00	888.00
	(b)	75 mm thick Extruded polystyrene rigid insulation board	sqm	30.00	1313.00	33.00	1316.00
	(c)	100 mm thick Extruded polystyrene rigid insulation board	sqm	30.00	1740.00	33.00	1743.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
33.09	Providing and fixing thermal insulation of ceiling (under deck insulation) with Resin Bonded Rockloyd Rockwool (Non Combustible Grade) conforming to IS: 8183 and density 48 kg/ m <sup>3</sup> , wrapped in 200 G Virgin Polythene bags fixed to ceiling with metallic cleats (50x50x3 mm) @ 60 cm and wire mesh of 12.5mm x 24gauge wire mesh, for top most ceiling of building and all complete as per engineer in charge						
	(a)	25 mm thick Resin bonded Rock wool	sqm	175.00	503.00	193.00	520.50
	(b)	50 mm thick Resin bonded Rock wool	sqm	175.00	512.00	193.00	529.50
	(c)	65 mm thick Resin bonded Rock wool	sqm	175.00	568.00	193.00	585.50
	(d)	75 mm thick Resin bonded Rock wool	sqm	175.00	633.00	193.00	650.50
33.10	Providing and laying on smooth roof surface with CFC free, closed cell free Rigid Polyurethane foam slab over deck insulation conforming to IS -12436 (density of foam being 36±2 kg/m <sup>3</sup> ) having thermal conductivity not more than 0.024 W/m.K, over a coat of cold adhesive like CPRX compound, laying 400 G polythene sheet over PUF slab and providing a wearing course of 40 mm thick cement screed 1: 2 : 4 (1 cement : 2 coarse sand : 4 stone aggregate 20 mm nominal size) in chequered rough finish, in panels of 2.5 m x 2.5 m and embedding with 24 G wire netting and sealing the joints with polymerized mastic, all complete as per direction of engineer-in-charge						
	(a)	40 mm thick Polyurethane foam( PUF) rigid insulation board	sqm	296.00	1367.00	326.00	1396.60
	(b)	50 mm thick Polyurethane foam (PUF) rigid insulation board	sqm	296.00	1538.00	326.00	1567.60
	(c)	60 mm thick Polyurethane foam (PUF) rigid insulation board	sqm	296.00	1665.00	326.00	1694.60

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(d)	70 mm thick Polyurethane foam (PUF) rigid insulation board	sqm	296.00	1835.00	326.00	1864.60
33.11	Providing and laying roof insulation with impervious sprayed, closed cell CFC free Rigid Polyurethane foam over deck insulation conforming to IS - 12432 Pt. III (density of foam being 40-45 kg/cum), over a coat of polyurethane primer applied @ 6-8 sqm per litre, laying 400G polythene sheet over PUF spray and providing a wearing course of 40mm thick cement screed 1 : 2 : 4 (1 cement : 2 coarse sand : 4 stone aggregate 20mm nominal size) in chequered rough finish, in panels of 2.5m x 2.5 m and embedding with 24 G wire netting and sealing the joints with polymerised mastic and all complete as per direction of Engineer-in-Charge.						
	(a)	40 mm thick PUF Spray	sqm	296.00	1189.00	326.00	1218.60
	(b)	50 mm thick PUF Spray	sqm	296.00	1322.00	326.00	1351.60
	(c)	60 mm thick PUF Spray	sqm	296.00	1454.00	326.00	1483.60
	(d)	70 mm thick PUF Spray	sqm	296.00	1586.00	326.00	1615.60

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
33.12	Providing and laying on smooth roof surface with extruded polystyrene (XPS) thermal insulating boards with ship lap joining on length side, (having thermal conductivity of 0.028 W/m.K on 90 days aging at 24 deg.C as per ASTM C518, compressive strength of over 250 kpa as per ASTM D1621, tensile strength of over 300 kpa as per ASTM D1623 and has flammability of Class B2 as per DIN 4102, water absorption of less than 1% as per ASTM D2842, over a coat of cold adhesive like CPRX compound, laying 400 G polythene sheet over PUF slab and providing a wearing course of 40 mm thick cement screed 1: 2 : 4 (1 cement : 2 coarse sand : 4 stone aggregate 20 mm nominal size) in chequered rough finish, in panels of 2.5 m x 2.5 m and embedding with 24 G wire netting and sealing the joints with polymerized mastic, all complete as per direction of engineer-in-charge					
	(a) 50 mm thick Extruded polystyrene rigid insulation board	sqm	296.00	1431.00	326.00	1460.60
	(b) 75 mm thick Extruded polystyrene rigid insulation board	sqm	296.00	1827.00	326.00	1856.60
	(c) 100 mm thick Extruded polystyrene rigid insulation board	sqm	296.00	2224.00	326.00	2253.60
33.13	Providing and applying two coats of High Albedo paint having minimum Solar Reflective Index (SRI) 108 (with solar reflectance & thermal emittance tested as per ASTM C 1549 and ASTM C 1371 respectively), VOC less than 10 cc/gm. The coating thickness and the methodology of application shall be strictly as per manufacturer's specifications and as approved by Engineer-in-Charge. Surface preparation includes cleaning with metal wire brush to remove all dust, fungus etc., washing with water all complete. The contractor shall give guarantee for the performance of SRI and also the durability of coating, all complete as per direction of Engineer-in-Charge	sqm	59.00	273.00	65.00	278.90



Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
33.14	Providing and fixing Heat Resistant Terrace Tiles (300 mm x 300 mm x 20 mm) with SRI (solar refractive index) > 78, solar reflection > 0.70 and initial emittance > 0.75 on waterproof and sloped surface of terrace, laid on 20 mm thick cement sand mortar in the ratio of 1:4 (1 cement : 4 coarse sand) and grouting the joints with mix of white cement & marble powder in ratio of 1:1, including rubbing and polishing of the surface upto 3 cuts complete, including providing skirting upto 150 mm height along the parapet walls in the same manner	sqm	293.00	1180.00	322.00	1209.30
33.15	Providing and Fixing Single Glazing with 6mm thick glass with high performance coating as per relevant codal provisions as per satisfaction of Engineer-in-Charge.	sqm	1122.00	2551.00	1234.00	2663.20
33.16	Providing and fixing double glazed hermetically sealed glazing in aluminium windows, ventilators and partition etc. with 6 mm thick clear float glass both side, having 12 mm air gap, including providing EPDM gasket, perforated aluminium spacers, desiccants, sealant (Both primary and secondary sealant) etc. as per specifications, drawings and direction of Engineer-in-charge complete.	sqm	402.00	3734.00	442.00	3774.20

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
33.17	Providing, assembling and supplying vision glass panels (IGUs) comprising of hermetically-sealed 6-12- 6 mm insulated glass (double glazed) vision panel units of size and shape as required and specified, comprising of an outer heat strengthened float glass 6mm thick, of approved colour and shade with reflective soft coating on surface # 2 of approved colour and shade, an inner Heat strengthened clear float glass 6mm thick, spacer tube 12mm wide, dessicants, including primary seal and secondary seal (structural silicone sealant) etc. all complete for the required performances, as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer-in-Charge. The IGUs shall be assembled in the factory/ workshop of the glass processor. For payment, only the actual area of glass on face # 1 of the glass panels (excluding the areas of the grooves and weather silicone sealant) provided and fixed in position, shall be measured in sqm. (i) Coloured tinted float glass 6mm thick substrate with reflective soft coating on face # 2, + 12mm Airgap + 6mm Heat Strengthened clear Glass of approved make having properties as visible Light transmittance (VLT) of 25 to 35 %, Light reflection internal 10 to 15%, light reflection external 10 to 20 %, shading coefficient (0.25- 0.28) and U value of 3.0 to 3.3 W/m2 degree K etc. The properties of performance glass shall be decided by technical sanctioning authority as per the site requirement.	sqm	402.00	3572.00	442.00	3612.20

Sr. No.	Description	Unit	Zone-A		Zone-B		
			Labour Rate	Through Rate	Labour Rate	Through Rate	
1	2	3	4	5	6	7	
33.18	Providing and fixing factory made uPVC white colour casement/casement cum fixed glazed windows comprising of uPVC multi-chambered frame, sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension, EPDM gasket, stainless steel (SS 304 grade) friction hinges, zinc alloy (white powder coated) casement handles, G.I fasteners 100 x 8 mm size for fixing frame to finished wall, plastic packers, plastic caps and necessary stainless steel screws etc. Profile of frame & sash shall be mitered cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes and silicon sealant shall be paid separately) Note: For uPVC frame, sash and mullion extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Variation in profile dimension on higher side shall be accepted but no extra payment on this account shall be made.						
	(a)	Casement window single panel with S.S. friction hinges (300 x 19 x 1.9 mm), made of (small series) frame 47 x 50 mm & sash 47 x 68 mm both having wall thickness of 1.9 ± 0.2 mm and single glass pane glazing bead of appropriate dimension. (Area of window upto 0.75 sqm.)	sqm	1184.00	9172.00	1302.00	9290.40
	(b)	Casement window double panels with S.S. friction hinges (300 x 19 x 1.9 mm) made of (small series) frame 47 x 50 mm, sash 47 x 68 mm & mullion 47 x 68 mm all having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension. (Area of window above 0.75 sqm upto 1.50 sqm)	sqm	1184.00	8437.00	1302.00	8555.40

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(c)	Casement window double panels with top fixed with S.S. friction hinges (350 x 19 x 1.9 mm) made of (small series) frame 47 x 50 mm, sash 47 x 68 mm & mullion 47 x 68 mm all having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension. (Area of window upto 2.50 sqm).	sqm	1184.00	6481.00	1302.00	6599.40
	(d)	Casement window single panel with S.S. friction hinges (400 x 19 x 1.9 mm) made of (big series) frame 67 x 60 mm & sash 67 x 80 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of window above 0.75 sqm).	sqm	1184.00	8700.00	1302.00	8818.40
	(e)	Casement window double panels with S.S. friction hinges (350 x 19 x 1.9 mm) made of (big series) frame 67 x 60 mm & sash / mullion 67 x 80 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead/ double glazing bead of appropriate dimension. (Area of window above 1.50 sqm).	sqm	1184.00	9036.00	1302.00	9154.40
	(f)	Casement cum fixed panel window having both end single casement panel, middle fixed panels and at top completely fixed ventilator with S.S friction hinges (350 x 19 x 1.9) made of (big series) frame 67 x 60 mm , sash 67 x 80 mm & mullion 67 x 80 mm all having wall thickness of 2.3 ± 0.2 mm and single glazing bead/double glazing bead of appropriate dimension. (Area of window above 3.00 sqm upto 5.00 sqm).	sqm	1184.00	6882.00	1302.00	7000.40
	(g)	Fixed window / ventilator made of (small series) frame 47 x 50 mm & mullion 47 x 68 mm both having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension. (Area upto 0.75 sqm)	sqm	1184.00	6259.00	1302.00	6377.40

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
33.19	<p>Providing and fixing factory made uPVC white colour casement/ Casement cum fixed glazed door comprising of uPVC multi-chambered frame, sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape &amp; size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension, EPDM gasket, zinc alloy (white powder coated) 3D hinges and one handle on each side of panels along with zinc plated mild steel multi point locking having transmission gear, cylinder with keeps and one side key, G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws, etc. Profile of frame &amp; sash shall be mitered cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing &amp; direction of Engineer-in-Charge. (Single / double glass panes and silicon sealant shall be paid separately). Casement door with 3D hinges made of (big series) frame 67 x 64 mm &amp; sash 67 x 110 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of door upto 2.00 sqm). Note: For uPVC frame, sash and mullion extruded profiles minus 5% tolerance in dimension i.e. in depth &amp; width of profile shall be acceptable. Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made.</p>	sqm	1184.00	8839.00	1302.00	8957.40

Sr. No.	Description	Unit	Zone-A		Zone-B	
			Labour Rate	Through Rate	Labour Rate	Through Rate
1	2	3	4	5	6	7
33.20	Providing and fixing in position, 200 mm thick factory made Expanded Polystyrene Core (EPS Core) wall panels consisting of EPS core sandwiched between two Engineered sheets of welded wire fabric mesh duly finished with shotcrete materials on outer faces. The fabric mesh shall be made of 3 mm dia G.I. wire mesh with 50 mm pitch in both the directions and on both faces of the wall, kept at 120-135 mm gap and connected by the zig zag G.I. wire of 3 mm dia at alternate row by welding (at an angle ranging from 50-70 degree) . The EPS core shall consist of 100 mm thick EPS of density not less than 20 kg/ per cum. Both the outer faces of the panel shall be finished by applying the layer of 50 mm thick cement mortar 1:3 {1 cement: 3 coarse sand (not having more than 40% stone chips of size upto 6 mm)} with the help of shotcreting/guniting equipment etc at a pressure not less than 1 bar (100Kn/m2) and both surfaces finished with trowel. Fixing operations of wall panels shall be completed in all respect as per drawings and specifications and under the overall direction of the Engineer-in-charge	sqm	658.00	3814.00	724.00	3879.80



**COMMON SCHEDULE OF RATES**  
**CHAPTER NO.34**

Sr. No.	Description	Unit	Zone-A		Zone-B		
			Labour Rate	Through Rate	Labour Rate	Through Rate	
1	2	3	4	5	6	7	
34.01	RECESSED HGW CONDUIT PIPE WIRING SYSTEM WITH MODULAR SWITCHES:						
	Wiring in PVC insulated copper conductor single core FR cable (ISI marked) overall 1.5sq. mm, 1100volts grade to be laid in heavy gauge welded conduit pipe 20mm/ 25mm dia (1.6mm thick) ISI Marked, recessed in wall etc., complete with powder coated/anodized concealed metal boxes (1.6mm thick with Brass lugs) required for suitable number of modules (Modular accessories) for having Step type electronic fan regulators (two module) 100watts, bell push, 6Amp. 2/3 universal socket (shuttered), 16/20Amp. combined/ universal Socket (shuttered), 6/10Amp. Switches, 16/20Amp. switches with indicator etc. and covered with Frame Plate etc., PVC connector (For Fan Box and Call Bell), PVC Bush, Steel Hooks, Sheet metal fan box (1.6mm thick shape hexagonal), CI Circular junction Boxes (Four way 1½" deep for walls and 3" deep for ceiling), bonding to earth with PVC insulated copper conductor single core FR cable (ISI marked) 1sq. mm, 1100volts grade (For 6Amp. wall socket & plug control point) and other petty material etc. including the cost of above material, cutting and filling up of chases (with finishing the surface):-						
	(i) a	Wiring fan point (Without fan box)	Each	307.00	1167.00	338.00	1197.70
	(i) b	Wiring fan point (With fan box)	Each	307.00	1261.00	338.00	1291.70
	(ii)	Wiring light point	Each	254.00	888.00	279.00	913.40
	(iii)	Wiring call-bell point	Each	254.00	883.00	279.00	908.40
	(iv)	Wiring 6Amp. wall socket point	Each	204.00	668.00	224.00	688.40
	(v)	Wiring 6Amp. Plug control comprising wall socket point	Each	175.00	388.00	193.00	405.50
	(vi)	Wiring 16/20Amp. power plug control point	Each	204.00	438.00	224.00	458.40
	(vii)	Wiring light point without control switch.	Each	145.00	429.00	160.00	443.50
	(viii)	Wiring light point with double control switches.	Each	350.00	1607.00	385.00	1642.00



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.01		RECESSED AIR CONDITIONER SUPPLY TERMINAL POINT (USED FOR HGW, PVC CONDUIT & HDPE PIPE WIRING SYSTEM WITH MODULAR ACCESSORIES):					
	(ix)	Wiring air conditioner supply terminal point recessed in wall etc., complete with powder coated/anodized concealed metal boxes required for suitable number of modules (Modular accessories) for having 25Amp. combined/ universal Socket (shuttered) and modular motor starter 25Amp. (2Module), covered with Frame Plate and other petty material etc. including the cost of above material, cutting and filling up of chases (with finishing the surface):-					
		Wiring AC supply terminal point having 1No. 25Amp. universal Socket (shuttered) erected at AC height and 1No. Motor starter 25Amp. erected at switchboard height.	Each	204.00	654.00	224.00	674.40
34.01		RECESSED COMPUTER SUPPLY TERMINAL POINTS (USED FOR HGW, PVC CONDUIT & HDPE PIPE WIRING SYSTEM WITH MODULAR ACCESSORIES):					
	(x)	Wiring Computer supply terminal points recessed in wall etc., complete with powder coated/anodized concealed metal boxes required for suitable number of modules (Modular accessories) for having 6Amp. 2/3 universal socket (shuttered), 16/20Amp. combined/ universal Socket (shuttered), 6/10/16/20Amp. Switches and blanking plate etc., and covered with Frame Plate and other petty material etc. including the cost of above material, cutting and filling up of chases (with finishing the surface):-					
	(a)	Wiring Computer terminal point having 3 Nos. 6Amp. 2/3 universal socket (shuttered), 1No. 16 Amp. switch with indicator and 1No. blanking plate (Modular accessories).	Each	204.00	560.00	224.00	580.40

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(b)	Wiring Computer terminal point having 2 Nos. 6Amp. 2/3 universal socket (shuttered), 1No. 16/20Amp. universal Socket (shuttered) and 2Nos. 16/20Amp. switch with indicator (Modular accessories).	Each	204.00	654.00	224.00	674.40
	(c)	Wiring Computer terminal point having 3 Nos. 6Amp. 2/3 universal socket (shuttered), 1No. 16/20Amp. universal Socket (shuttered), 2Nos. 16/20Amp. switch with indicator and 2Nos. blanking plate (Modular accessories).	Each	291.00	875.00	320.00	904.10
<b>34.01</b>		<b>RECESSED TV, TELEPHONE &amp; NETWORKING SOCKETS OUTLET POINTS (USED FOR HGW, PVC CONDUIT &amp; HDPE PIPE WIRING SYSTEM WITH MODULAR ACCESSORIES):</b>					
	(xi)	<b>Supply and erection of TV socket, Telephone socket and Networking socket points in powder coated/anodized concealed metal boxes recessed in wall required for suitable number of modules (Modular accessories) for having TV sockets, Telephone sockets RJ11 &amp; Networking socket RJ45 (one module), covered with Frame Plate and other petty material etc., including the cost of above material, cutting and filling up of chases (with finishing the surface):-</b>					
	(a)	Wiring TV socket point (one module)	Each	175.00	280.00	193.00	297.50
	(b)	Wiring Telephone socket point RJ11 (one module)	Each	175.00	281.00	193.00	298.50
	(c)	Wiring Networking socket point RJ45 (one module)	Each	175.00	365.00	193.00	382.50

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.02		<b>RECESSED PVC CONDUIT PIPE WIRING SYSTEM WITH MODULAR SWITCHES:</b>					
		Wiring in PVC insulated copper conductor single core FR cable (ISI marked) overall 1.5sq. mm, 1100volts grade to be laid in heavy gauge PVC conduit pipe 20mm/ 25mm dia. (ISI Marked) recessed in wall etc., complete with powder coated/anodized concealed metal boxes (1.6mm thick with Brass lugs) required for suitable number of modules (Modular accessories) for having Step type electronic fan regulators (two module) 100watts, bell push, 6Amp. 2/3 universal socket (shuttered), 16/20Amp. combined/ universal Socket (shuttered), 6/10Amp. Switches, 16/20Amp. switches with indicator etc. and covered with Frame Plate etc., PVC connector (For Fan Box and Call Bell), Steel Hooks, Sheet metal fan box (1.6mm thick shape hexagonal), Circular junction Boxes (Four way PVC 1½" deep for walls and CI 3" deep for ceiling), bonding to earth with PVC insulated copper conductor single core FR cable (ISI marked) 1sq. mm, 1100volts grade (For 6Amp. wall socket & plug control point) and other petty material etc., including the cost of above material, cutting and filling up of chases (with finishing the surface):-					
	(i) a	Wiring fan point (Without fan box)	Each	189.00	829.00	208.00	847.90
	(i) b	Wiring fan point (With fan box)	Each	189.00	919.00	208.00	937.90
	(ii)	Wiring light point	Each	155.00	579.00	171.00	594.50
	(iii)	Wiring call-bell point	Each	155.00	565.00	171.00	580.50
	(iv)	Wiring 6Amp. wall socket point	Each	130.00	470.00	143.00	483.00
	(v)	Wiring 6Amp. Plug control comprising wall socket point	Each	87.00	282.00	96.00	290.70
	(vi)	Wiring 16/20Amp. power plug control point	Each	130.00	363.00	143.00	376.00
	(vii)	Wiring light point without control switch.	Each	73.00	254.00	80.00	261.30
	(viii)	Wiring light point with double control switches.	Each	175.00	1007.00	193.00	1024.50

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.03		<b>RECESSED HDPE PIPE WIRING SYSTEM WITH MODULAR SWITCHES:</b>					
		Wiring in PVC insulated copper conductor single core FR cable (ISI marked), overall 1.5sq. mm, 1100volts grade to be laid in HDPE electrical conduit pipe 20mm/25mm dia. ISI Marked, recessed in wall etc., complete with powder coated/anodized concealed metal boxes (1.6mm thick with Brass lugs) required for suitable number of modules (Modular accessories) for having Step type electronic fan regulators (two module) 100watts, bell push, 6Amp. 2/3 universal socket (shuttered), 16/20Amp. combined/ universal Socket (shuttered), 6/10Amp. Switches, 16/20Amp. switches with indicator etc. and covered with Frame Plate etc., PVC connector (For Fan Box and Call Bell), PVC Bush, Steel Hooks, Sheet metal fan box (1.6mm thick shape hexagonal), CI Circular junction Boxes (Four way 1½" deep for walls and 3" deep for ceiling), bonding to earth with PVC insulated copper conductor single core FR cable (ISI marked) 1sq. mm, 1100volts grade (For 6Amp. wall socket & plug control point) and other petty material etc., including the cost of above material, cutting and filling up of chases (with finishing the surface):-					
	(i) a	Wiring fan point (Without fan box)	Each	189.00	865.00	208.00	883.90
	(i) b	Wiring fan point (With fan box)	Each	189.00	955.00	208.00	973.90
	(ii)	Wiring light point	Each	155.00	874.00	171.00	889.50
	(iii)	Wiring call-bell point	Each	155.00	775.00	171.00	790.50
	(iv)	Wiring 6Amp. wall socket point	Each	130.00	575.00	143.00	588.00
	(v)	Wiring 6Amp. Plug control comprising wall socket point	Each	87.00	443.00	96.00	451.70
	(vi)	Wiring 16/20Amp. power plug control point	Each	130.00	363.00	143.00	376.00
	(vii)	Wiring light point without control switch.	Each	73.00	359.00	80.00	366.30
	(viii)	Wiring light point with double control switches.	Each	175.00	1382.00	193.00	1399.50

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.04		<b>RECESSED HGW CONDUIT PIPE WIRING SYSTEM WITH FLUSH PIANO TYPE SWITCHES:</b>					
		Wiring in PVC insulated copper conductor single core FR cable (ISI marked) overall 1.5sq. mm, 1100volts grade to be laid in heavy gauge welded conduit pipe 20mm/25mm dia (1.6mm thick) ISI Marked recessed in wall etc., complete with powder coated/anodized concealed metal boxes (1.6mm thick with Brass lugs) required for having (Flush/ Piano type accessories) Step type electronic fan regulators 100watts (socket size), bell push, 5Pin 6Amp. sockets (4Module Box), 16Amp. universal sockets (6Module Box), 6/16/20Amp. Switches etc. and covered with brown bakelite white glazed translucent backside painted sheet 3mm thick etc., PVC connector (For Fan Box and Call Bell), PVC Bush, Steel Hooks, Sheet metal fan box (1.6mm thick shape hexagonal), CI Circular junction Boxes (Four way 1½" deep for walls and 3" deep for ceiling), bonding to earth with PVC insulated copper conductor single core FR cable (ISI marked) 1sq. mm, 1100volts grade (For 6Amp. wall socket & plug control point) and other petty material etc., including the cost of above material, cutting and filling up of chases (with finishing the surface):-					
	(i) a	Wiring fan point (Without fan box)	Each	307.00	1092.00	338.00	1122.70
	(i) b	Wiring fan point (With fan box)	Each	307.00	1186.00	338.00	1216.70
	(ii)	Wiring light point	Each	254.00	858.00	279.00	883.40
	(iii)	Wiring call-bell point	Each	254.00	837.00	279.00	862.40
	(iv)	Wiring 6Amp. wall socket point	Each	204.00	616.00	224.00	636.40
	(v)	Wiring 6Amp. Plug control comprising wall socket point	Each	175.00	335.00	193.00	352.50
	(vi)	Wiring 16/20Amp. power plug control point	Each	204.00	394.00	224.00	414.40
	(vii)	Wiring light point without control switch.	Each	145.00	429.00	160.00	443.50
	(viii)	Wiring light point with double control switches.	Each	350.00	1480.00	385.00	1515.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.05		<b>RECESSED PVC CONDUIT PIPE WIRING SYSTEM WITH FLUSH PIANO TYPE SWITCHES:</b>					
		Wiring in PVC insulated copper conductor single core FR cable (ISI marked) overall 1.5sq. mm, 1100volts grade to be laid in heavy gauge PVC conduit pipe 20mm/ 25mm dia (ISI Marked) recessed in wall etc., complete with powder coated/anodized concealed metal boxes (1.6mm thick with Brass lugs) required for having (Flush/ Piano type accessories) Step type electronic fan regulators 100watts (socket size), bell push, 5Pin 6Amp. sockets (4Module Box), 16/20Amp. universal sockets (6Module Box), 6/16/20Amp. Switches etc. and covered with brown bakelite white glazed translucent backside painted sheet 3mm thick etc., PVC connector (For Fan Box and Call Bell), Steel Hooks, Sheet metal fan box (1.6mm thick shape hexagonal), Circular junction Boxes (Four way PVC 1½" deep for walls and CI 3" deep for ceiling), bonding to earth with PVC insulated copper conductor single core FR cable (ISI marked) 1sq. mm, 1100volts grade (For 6Amp. wall socket & plug control point) and other petty material etc., including the cost of above material, cutting and filling up of chases (with finishing the surface):-					
	(i) a	Wiring fan point (Without fan box)	Each	189.00	785.00	208.00	803.90
	(i) b	Wiring fan point (With fan box)	Each	189.00	844.00	208.00	862.90
	(ii)	Wiring light point	Each	155.00	549.00	171.00	564.50
	(iii)	Wiring call-bell point	Each	155.00	506.00	171.00	521.50
	(iv)	Wiring 6Amp. wall socket point	Each	130.00	418.00	143.00	431.00
	(v)	Wiring 6Amp. Plug control comprising wall socket point	Each	87.00	229.00	96.00	237.70
	(vi)	Wiring 16/20Amp. power plug control point	Each	130.00	319.00	143.00	332.00
	(vii)	Wiring light point without control switch.	Each	73.00	254.00	80.00	261.30
	(viii)	Wiring light point with double control switches.	Each	175.00	880.00	193.00	897.50

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.06		<b>RECESSED HDPE PIPE WIRING SYSTEM WITH FLUSH PIANO TYPE SWITCHES:</b>					
		Wiring in PVC insulated copper conductor single core FR cable (ISI marked), overall 1.5sq. mm, 1100volts grade to be laid in HDPE conduit pipe 20mm/25mm dia. (ISI Marked), recessed in wall etc., complete with powder coated/anodized concealed metal boxes (1.6mm thick with Brass lugs) required for having (Flush/ Piano type accessories) Step type electronic fan regulators 100watts (socket size), bell push, 5Pin 6Amp. sockets (4Module Box), 16Amp. universal sockets (6Module Box), 6/16/20Amp. Switches etc. and covered with brown bakelite white glazed translucent backside painted sheet 3mm thick etc., PVC connector (For Fan Box and Call Bell), Steel Hooks, Sheet metal fan box (1.6mm thick shape hexagonal), Circular junction Boxes (Four way PVC 1½" deep for walls and CI 3" deep for ceiling), bonding to earth with PVC insulated copper conductor single core FR cable (ISI marked) 1sq. mm, 1100volts grade (For 6Amp. wall socket & plug control point) and other petty material etc., including the cost of above material, cutting and filling up of chases (with finishing the surface):-					
	(i) a	Wiring fan point (Without fan box)	Each	189.00	789.00	208.00	807.90
	(i) b	Wiring fan point (With fan box)	Each	189.00	880.00	208.00	898.90
	(ii)	Wiring light point	Each	155.00	781.00	171.00	796.50
	(iii)	Wiring call-bell point	Each	155.00	729.00	171.00	744.50
	(iv)	Wiring 6Amp. wall socket point	Each	130.00	515.00	143.00	528.00
	(v)	Wiring 6Amp. Plug control comprising wall socket point	Each	87.00	244.00	96.00	252.70
	(vi)	Wiring 16/20Amp. power plug control point	Each	130.00	299.00	143.00	312.00
	(vii)	Wiring light point without control switch.	Each	73.00	359.00	80.00	366.30
	(viii)	Wiring light point with double control switches.	Each	175.00	1300.00	193.00	1317.50

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.07		<b>SURFACE HGW CONDUIT PIPE WIRING SYSTEM WITH MODULAR SWITCHES:</b>					
		Wiring in PVC insulated copper conductor single core FR cable (ISI marked), overall 1.5sq. mm, 1100volts grade to be laid in heavy gauge welded conduit pipe 20mm/25mm dia (1.6mm thick) ISI Marked installed on surface etc., complete with PVC boxes (Plastic on surface boxes) required for suitable number of modules (Modular accessories) for having Step type electronic fan regulators (two module) 100watts, bell push, 6Amp. 2/3 universal socket (shuttered), 16/20Amp. combined/ universal Socket (shuttered), 6/10Amp. Switches, 16/20Amp. switches with indicator etc. and covered with Frame Plate etc., PVC connector (For Fan Box and Call Bell), PVC Bush, GI saddle clamp, CI Circular junction Boxes (Four way 1½" deep for walls), bonding to earth with PVC insulated copper conductor single core FR cable (ISI marked) 1sq. mm, 1100volts grade (For 6Amp. wall socket & plug control point) and other petty material etc., including the cost of above material and painting as required:-					
	(i)	Wiring fan point (Without fan box)	Each	198.00	1066.00	218.00	1085.80
	(ii)	Wiring light point	Each	148.00	761.00	163.00	775.80
	(iii)	Wiring call-bell point	Each	148.00	782.00	163.00	796.80
	(iv)	Wiring 6Amp. wall socket point	Each	118.00	592.00	130.00	603.80
	(v)	Wiring 6Amp. Plug control comprising wall socket point	Each	98.00	318.00	108.00	327.80
	(vi)	Wiring 16/20Amp. power plug control point	Each	118.00	359.00	130.00	370.80
	(vii)	Wiring light point without control switch.	Each	98.00	359.00	108.00	368.80
	(viii)	Wiring light point with double control switches.	Each	198.00	1420.00	218.00	1439.80



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.07		<b>SURFACE AIR CONDITIONER SUPPLY TERMINAL POINTS (USED FOR HGW, PVC CONDUIT &amp; HDPE PIPE WIRING SYSTEM WITH MODULAR ACCESSORIES):</b>					
	(ix)	Supply and erection of air conditioner supply terminal point on surface on wall etc., complete with PVC boxes (Plastic on surface boxes) required for suitable number of modules (Modular accessories) for having 25Amp. combined/ universal Socket (shuttered) and modular motor starter 25Amp. (2 Module), covered with Frame Plate etc., & including the cost of above material and other petty material with necessary connections etc.:-					
		Wiring AC supply terminal point having 1No. 25Amp. universal Socket (shuttered) erected at AC height and 1No. Motor starter 25Amp. erected at switchboard height.	Each	118.00	574.00	130.00	585.80
34.07		<b>SURFACE COMPUTER SUPPLY TERMINAL POINTS (USED FOR HGW, PVC CONDUIT &amp; HDPE PIPE WIRING SYSTEM WITH MODULAR ACCESSORIES):</b>					
	(x)	Wiring Computer supply terminal points on surface on wall etc., complete with PVC boxes (Plastic on surface boxes) required for suitable number of modules (Modular accessories) for having 6Amp. 2/3 universal socket (shuttered), 16/20Amp. combined/ universal Socket (shuttered), 6/10/16/20Amp. Switches and blanking plate, covered with Frame Plate etc., & including the cost of above material and other petty material with necessary connections etc.:-					
	(a)	Wiring Computer terminal point having 3 Nos. 6Amp. 2/3 universal socket (shuttered), 1No. 16 Amp. switch with indicator and 1No. blanking plate	Each	118.00	480.00	130.00	491.80

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(b)	Wiring Computer terminal point having 2 Nos. 6Amp. 2/3 universal socket (shuttered), 1No. 16/20Amp. universal Socket (shuttered), 2Nos. 16/20Amp. switch with indiicator	Each	118.00	574.00	130.00	585.80
	(c)	Wiring Computer terminal point having 3 Nos. 6Amp. 2/3 universal socket (shuttered), 1No. 16/20Amp. universal Socket (shuttered), 2Nos. 16/20Amp. switch with indiicator and 2Nos. blanking plate	Each	169.00	783.00	186.00	799.90
<b>34.07</b>		<b>SURFACE TV, TELEPHONE &amp; NETWORKING SOCKETS OUTLET POINTS (USED FOR HGW, PVC CONDUIT &amp; HDPE PIPE WIRING SYSTEM WITH MODULAR ACCESSORIES):</b>					
	(xi)	Wiring TV socket, Telephone socket and Networking socket points on surface etc., complete with PVC boxes (Plastic on surface boxes) required for suitable number of modules (Modular accessories) for having TV sockets, Telephone sockets RJ11 & Networking socket RJ45 (one module), covered with Frame Plate etc., & including the cost of above material and other petty material with necessary connections etc.:-					
	(a)	Wiring TV socket point (one module)	Each	118.00	230.00	130.00	241.80
	(b)	Wiring Telephone socket point RJ11 (one module)	Each	95.00	208.00	105.00	217.50
	(c)	Wiring Networking socket point RJ45 (one module)	Each	118.00	315.00	130.00	326.80

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.07A		<b>SURFACE PVC CONDUIT PIPE WIRING SYSTEM WITH MODULAR SWITCHES:</b>					
		Wiring in PVC insulated copper conductor single core FR cable (ISI marked) overall 1.5sq. mm, 1100volts grade to be laid in heavy gauge PVC conduit pipe 20mm/ 25mm dia (ISI Marked) installed on surface etc., complete with PVC boxes (Plastic on surface boxes) required for suitable number of modules (Modular accessories) for having Step type electronic fan regulators (two module) 100watts, bell push, 6Amp. 2/3 universal socket (shuttered), 16/20Amp. combined/ universal Socket (shuttered), 6/10Amp. Switches, 16/20Amp. switches with indicator etc. and covered with Frame Plate etc., PVC connector (For Fan Box and Call Bell), MS saddle clamp, PVC Circular junction Boxes (Four way 1½" deep for walls), bonding to earth with PVC insulated copper conductor single core FR cable (ISI marked) 1sq. mm, 1100volts grade (For 6Amp. wall socket & plug control point) and other petty material etc., including the cost of above material and painting as required:-					
	(i)	Wiring fan point (Without fan box)	Each	198.00	846.00	218.00	865.80
	(ii)	Wiring light point	Each	148.00	540.00	163.00	554.80
	(iii)	Wiring call-bell point	Each	148.00	563.00	163.00	577.80
	(iv)	Wiring 6Amp. wall socket point	Each	118.00	469.00	130.00	480.80
	(v)	Wiring 6Amp. Plug control comprising wall socket point	Each	98.00	300.00	108.00	309.80
	(vi)	Wiring 16/20Amp. power plug control point	Each	118.00	381.00	130.00	392.80
	(vii)	Wiring light point without control switch.	Each	98.00	265.00	108.00	274.80
	(viii)	Wiring light point with double control switches.	Each	169.00	834.00	186.00	850.90

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.07B		<b>SURFACE PVC CONDUIT PIPE WIRING SYSTEM WITH FLUSH PIANO TYPE SWITCHES:</b>					
		Wiring in PVC insulated copper conductor single core FR cable (ISI marked) overall 1.5sq. mm, 1100volts grade to be laid in heavy gauge PVC conduit pipe 20mm/ 25mm dia (ISI Marked) installed on surface etc., complete with PVC boxes (Plastic on surface boxes) required for having (Flush/ Piano type accessories) Step type electronic fan regulators 100watts (socket size), bell push, 5Pin 6Amp. (4Module Box), 16Amp. universal sockets (6Module Box), 6/16/20Amp. Switches etc. and covered with brown bakelite white glazed translucent backside painted sheet 3mm thick etc., PVC connector (For Fan Box and Call Bell), MS saddle clamp, PVC Circular junction Boxes (Four way 1½" deep for walls), bonding to earth with PVC insulated copper conductor single core FR cable (ISI marked) 1sq. mm, 1100volts grade (For 6Amp. wall socket & plug control point) and other petty material etc., including the cost of above material and painting as required:-					
	(i)	Wiring fan point (Without fan box)	Each	198.00	769.00	218.00	788.80
	(ii)	Wiring light point	Each	148.00	509.00	163.00	523.80
	(iii)	Wiring call-bell point	Each	148.00	516.00	163.00	530.80
	(iv)	Wiring 6Amp. wall socket point	Each	118.00	407.00	130.00	418.80
	(v)	Wiring 6Amp. Plug control comprising wall socket point	Each	98.00	238.00	108.00	247.80
	(vi)	Wiring 16/20Amp. power plug control point	Each	118.00	315.00	130.00	326.80
	(vii)	Wiring light point without control switch.	Each	98.00	265.00	108.00	274.80
	(viii)	Wiring light point with double control switches.	Each	169.00	744.00	186.00	760.90

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.08		REPLACEMENT OF WIRES, COVER FRAMES, MODULAR SWITCHES, CONCEALED METAL BOXES AND OTHER ACCESSORIES IN THE EXISTING RECESSED CONDUIT PIPE WIRING SYSTEM (WITH MODULAR TYPE ACCESSORIES) Derived from 34.01:					
		Replacement of PVC insulated copper conductor single core FR cable (ISI marked) overall 1.5sq. mm, 1100volts grade to be laid in existing heavy gauge welded conduit pipe 20 mm/25 mm dia (1.6mm thick) ISI Marked, recessed in wall etc., complete with powder coated/anodized concealed metal boxes (1.6mm thick with Brass lugs) required for suitable number of modules (Modular accessories) for having Step type electronic fan regulators (two module) 100watts, bell push, 6Amp. 2/3 universal socket (shuttered), 16/20Amp. combined/ universal Socket (shuttered), 6/10Amp. Switches, 16/20Amp. switches with indicator etc. and covered with Frame Plate etc., PVC connector (For Fan Box and Call Bell), PVC Bush, bonding to earth with PVC insulated copper conductor single core FR cable (ISI marked) 1sq. mm, 1100volts grade (For 6Amp. wall socket & plug control point) and other petty material etc. including the cost of above material, cutting and filling up of chases (with finishing the surface):- (Derived From CSR 34.01)					
	(i) a	Wiring fan point (Without fan box)	Each	147.00	666.00	162.00	680.70
	(i) b	Wiring fan point (With fan box)	Each	147.00	701.00	162.00	715.70
	(ii)	Wiring light point	Each	127.00	376.00	140.00	388.70
	(iii)	Wiring call-bell point	Each	127.00	397.00	140.00	409.70
	(iv)	Wiring 6Amp. wall socket point	Each	108.00	369.00	119.00	379.80
	(v)	Wiring 6Amp. Plug control comprising wall socket point	Each	107.00	292.00	118.00	302.70
	(vi)	Wiring 16/20Amp. power plug control point	Each	204.00	438.00	224.00	458.40
	(vii)	Wiring light point without control switch.	Each	70.00	132.00	77.00	139.00
	(viii)	Wiring light point with double control switches.	Each	147.00	672.00	162.00	686.70

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.08A		REPLACEMENT OF WIRES, SHEETS, SWITCHES AND OTHER ACCESSORIES IN THE EXISTING RECESSED CONDUIT PIPE WIRING SYSTEM (WITH FLUSH PIANO TYPE ACCESSORIES) Derived From CSR 34.03:					
		Replacement of PVC insulated copper conductor single core FR cable (ISI marked) overall 1.5sq. mm, 1100volts grade to be laid in existing heavy gauge welded conduit pipe 20 mm/25 mm dia (1.6mm thick) ISI Marked, recessed in wall etc., complete with (Flush/ Piano type accessories) Step type electronic fan regulators 100watts (socket size), bell push, 5Pin 6Amp., 16Amp. universal sockets, 6/16/20Amp. Switches etc. and covered with brown bakelite white glazed translucent backside painted sheet 3mm thick etc., PVC connector (For Fan Box and Call Bell), PVC Bush, Brass Screws, bonding to earth with PVC insulated copper conductor single core FR cable (ISI marked) 1sq. mm, 1100volts grade (For 6Amp. wall socket & plug control point) and other petty material etc. including the cost of above material and repair of chases (with finishing the surface):- (Derived From CSR 34.03)					
	(i) a	Wiring fan point (Without fan box)	Each	118.00	525.00	130.00	536.80
	(i) b	Wiring fan point (With fan box)	Each	118.00	560.00	130.00	571.80
	(ii)	Wiring light point	Each	98.00	291.00	108.00	300.80
	(iii)	Wiring call-bell point	Each	98.00	293.00	108.00	302.80
	(iv)	Wiring 6Amp. wall socket point	Each	79.00	259.00	87.00	266.90
	(v)	Wiring 6Amp. Plug control comprising wall socket point	Each	47.00	154.00	52.00	158.70
	(vi)	Wiring 16/20Amp. power plug control point	Each	47.00	189.00	52.00	193.70
	(vii)	Wiring light point without control switch.	Each	47.00	109.00	52.00	113.70
	(viii)	Wiring light point with double control switches.	Each	118.00	512.00	130.00	523.80

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.09		<b>PVC INSULATED FR COPPER CONDUCTOR CABLES:</b>					
		<b>Supply and erection of PVC insulated FR single core Unsheathed copper conductor cable (ISI marked) suitable upto 1100 volts grade confirm to IS:694/1990 left bare in pipe or casing of suitable size complete in all respect as desired by the Engineer-in-charge:-</b>					
	(i)	Overall size 1sq.mm (Un-sheathed)	Metre	6.00	14.00	7.00	14.60
	(ii)	Overall size 1.5sq.mm (Un-sheathed)	Metre	6.00	18.00	7.00	18.60
	(iii)	Overall size 2.5sq.mm (Un-sheathed)	Metre	7.00	27.00	8.00	27.70
	(iv)	Overall size 4sq.mm (Un-sheathed)	Metre	7.00	39.00	8.00	39.70
	(v)	Overall size 6sq.mm (Un-sheathed)	Metre	7.00	54.00	8.00	54.70
	(vi)	Overall size 10sq.mm (Un-sheathed)	Metre	9.00	88.00	10.00	88.90
	(vii)	Overall size 16sq.mm (Un-sheathed)	Metre	9.00	137.00	10.00	137.90
	(viii)	Overall size 25sq.mm (Un-sheathed)	Metre	12.00	216.00	13.00	217.20
	(ix)	Overall size 35sq.mm (Un-sheathed)	Metre	12.00	297.00	13.00	298.20
	(x)	Overall size 50sq.mm (Un-sheathed)	Metre	12.00	415.00	13.00	416.20
	(xi)	Overall size 70sq.mm (Un-sheathed)	Metre	12.00	585.00	13.00	586.20
34.09		<b>PVC INSULATED PVC SHEATHED FR ROUND FLEXIBLE COPPER CONDUCTOR CABLE:</b>					
	(xii)	<b>Supply and erection of PVC insulated PVC sheathed FR (2Core) round flexible wire with copper conductor cable (ISI marked) confirm to IS:694/1990 left bare in pipe or on surface with cleats of suitable size complete in all respect as desired by the Engineer-in-charge:-</b>					
	(a)	Overall size 0.5sq.mm (16/0.20mm), 2Core	Metre	4.00	19.00	4.00	19.40
	(b)	Overall size 0.75sq.mm (24/0.20mm), 2Core	Metre	4.00	23.00	4.00	23.40

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(c)	Overall size 1.0sq.mm (32/0.20mm), 2Core	Metre	4.00	27.00	4.00	27.40
	(d)	Overall size 1.5sq.mm (48/0.20mm), 2Core	Metre	4.00	35.00	4.00	35.40
	(e)	Overall size 2.5sq.mm (50/0.25mm), 2Core	Metre	6.00	55.00	7.00	55.60
	(f)	Overall size 4.0sq.mm (84/0.3mm), 2Core	Metre	6.00	81.00	7.00	81.60
	(g)	Overall size 6.0sq.mm (56/0.3mm), 2Core	Metre	6.00	114.00	7.00	114.60
<b>34.09</b>	<b>(xiii)</b>	<b>Supply and erection of PVC insulated PVC sheathed (3 core) round flexible wire with copper conductor (FR) cable (ISI marked) confirm to IS:694/1990 left bare in pipe or casing of suitable size complete in all respect as desired by the Engineer-in-charge:-</b>					
	(a)	Overall size 1.0sq.mm (32/0.20mm), 3Core	Metre	6.00	36.00	7.00	36.60
	(b)	Overall size 1.5sq.mm (48/0.20mm), 3Core	Metre	6.00	49.00	7.00	49.60
	(c)	Overall size 2.5sq.mm (50/0.25mm), 3Core	Metre	7.00	76.00	8.00	76.70
	(d)	Overall size 4.0sq.mm (84/0.3mm), 3Core	Metre	7.00	113.00	8.00	113.70
	(e)	Overall size 6.0sq.mm (56/0.3mm), 3Core	Metre	7.00	164.00	8.00	164.70
<b>34.09</b>	<b>(xiv)</b>	<b>Supply and erection of XLPE/ PVC insulated PVC sheathed (10 core) unarmoured copper conductor cable (ISI marked) confirm to IS:7098 (PART-I), 1988 loose in the existing trench or pipe with suitable size of copper thimbles/ lugs complete in all respect as desired by the Engineer-in-charge:-</b>					
	(a)	Overall size 1.5sq.mm (10 Core)	Metre	15.00	173.00	17.00	174.50
	(b)	Overall size 2.5sq.mm (10 Core)	Metre	15.00	258.00	17.00	259.50



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.10		<b>XLPE INSULATED LT CABLES:</b>					
34.10 A		<b>XLPE INSULATED ARMoured CABLES (UNDERGROUND):</b>					
		<b>Supply, laying and erection of aluminium conductor XLPE insulated PVC sheathed armoured and served cable 1100 volts grade as per IS:7098 (Part-1)1988 to be laid 1metre below ground level including excavation, sand cushioning, covering with sand &amp; First Class bricks and back filling the trench etc., of the required size as per PWD General Specifications:-</b>					
	(i)	Overall size 6sq.mm (2Core) Armoured (Underground)	Metre	99.00	348.00	109.00	357.90
	(ii)	Overall size 10sq.mm (2Core) Armoured (Underground)	Metre	99.00	360.00	109.00	369.90
	(iii)	Overall size 16sq.mm (2Core) Armoured (Underground)	Metre	99.00	373.00	109.00	382.90
	(iv)	Overall size 25sq.mm (2Core) Armoured (Underground)	Metre	107.00	384.00	118.00	394.70
	(v)	Overall size 35sq.mm (2Core) Armoured (Underground)	Metre	107.00	403.00	118.00	413.70
	(vi)	Overall size 50sq.mm (2Core) Armoured (Underground)	Metre	107.00	431.00	118.00	441.70
	(vii)	Overall size 4sq.mm (3Core) Armoured (Underground)	Metre	99.00	344.00	109.00	353.90
	(viii)	Overall size 6sq.mm (3Core) Armoured (Underground)	Metre	99.00	354.00	109.00	363.90
	(ix)	Overall size 10sq.mm (3Core) Armoured (Underground)	Metre	99.00	372.00	109.00	381.90
	(x)	Overall size 16sq.mm (3Core) Armoured (Underground)	Metre	99.00	378.00	109.00	387.90
	(xi)	Overall size 25sq.mm (3Core) Armoured (Underground)	Metre	107.00	410.00	118.00	420.70
	(xii)	Overall size 35sq.mm (3Core) Armoured (Underground)	Metre	107.00	440.00	118.00	450.70
	(xiii)	Overall size 50sq.mm (3Core) Armoured (Underground)	Metre	107.00	478.00	118.00	488.70

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(xiv)	Overall size 70sq.mm (3Core) Armoured (Underground)	Metre	116.00	550.00	128.00	561.60
	(xv)	Overall size 95sq.mm (3Core) Armoured (Underground)	Metre	116.00	610.00	128.00	621.60
	(xvi)	Overall size 120sq.mm (3Core) Armoured (Underground)	Metre	145.00	699.00	160.00	713.50
	(xvii)	Overall size 150sq.mm (3Core) Armoured (Underground)	Metre	145.00	783.00	160.00	797.50
	(xviii)	Overall size 185sq.mm (3Core) Armoured (Underground)	Metre	145.00	883.00	160.00	897.50
	(xix)	Overall size 240sq.mm (3Core) Armoured (Underground)	Metre	164.00	1057.00	180.00	1073.40
	(xx)	Overall size 300sq.mm (3Core) Armoured (Underground)	Metre	164.00	1204.00	180.00	1220.40
	(xxi)	Overall size 400sq.mm (3Core) Armoured (Underground)	Metre	164.00	1435.00	180.00	1451.40
	(xxii)	Overall size 25sq.mm (3½ Core) Armoured (Underground)	Metre	107.00	424.00	118.00	434.70
	(xxiii)	Overall size 35sq.mm (3½ Core) Armoured (Underground)	Metre	107.00	458.00	118.00	468.70
	(xxiv)	Overall size 50sq.mm (3½ Core) Armoured (Underground)	Metre	107.00	507.00	118.00	517.70
	(xxv)	Overall size 70sq.mm (3½ Core) Armoured (Underground)	Metre	116.00	591.00	128.00	602.60
	(xxvi)	Overall size 95sq.mm (3½ Core) Armoured (Underground)	Metre	116.00	652.00	128.00	663.60
	(xxvii)	Overall size 120sq.mm (3½ Core) Armoured (Underground)	Metre	145.00	766.00	160.00	780.50
	(xxviii)	Overall size 150sq.mm (3½ Core) Armoured (Underground)	Metre	145.00	846.00	160.00	860.50
	(xxix)	Overall size 185sq.mm (3½ Core) Armoured (Underground)	Metre	145.00	973.00	160.00	987.50
	(xxx)	Overall size 240sq.mm (3½ Core) Armoured (Underground)	Metre	164.00	1158.00	180.00	1174.40
	(xxxi)	Overall size 300sq.mm (3½ Core) Armoured (Underground)	Metre	164.00	1340.00	180.00	1356.40
	(xxxii)	Overall size 400sq.mm (3½ Core) Armoured (Underground)	Metre	164.00	1608.00	180.00	1624.40

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(xxxiii)	Overall size 500sq.mm (3½ Core) Armoured (Underground)	Metre	179.00	2075.00	197.00	2092.90
	(xxxiv)	Overall size 630sq.mm (3½ Core) Armoured (Underground)	Metre	179.00	2687.00	197.00	2704.90
	(xxxv)	Overall size 6sq.mm (4Core) Armoured (Underground)	Metre	107.00	372.00	118.00	382.70
	(xxxvi)	Overall size 10sq.mm (4Core) Armoured (Underground)	Metre	107.00	392.00	118.00	402.70
	(xxxvii)	Overall size 16sq.mm (4Core) Armoured (Underground)	Metre	107.00	403.00	118.00	413.70
	(xxxviii)	Overall size 25sq.mm (4Core) Armoured (Underground)	Metre	107.00	434.00	118.00	444.70
	(xxxix)	Overall size 35sq.mm (4Core) Armoured (Underground)	Metre	107.00	476.00	118.00	486.70
	(xl)	Overall size 50sq.mm (4Core) Armoured (Underground)	Metre	107.00	529.00	118.00	539.70
	(xli)	Overall size 70sq.mm (4Core) Armoured (Underground)	Metre	116.00	621.00	128.00	632.60
	(xlii)	Overall size 95sq.mm (4Core) Armoured (Underground)	Metre	116.00	690.00	128.00	701.60
	(xliii)	Overall size 120sq.mm (4Core) Armoured (Underground)	Metre	145.00	806.00	160.00	820.50
	(xliv)	Overall size 150sq.mm (4Core) Armoured (Underground)	Metre	145.00	914.00	160.00	928.50
	(xlv)	Overall size 185sq.mm (4Core) Armoured (Underground)	Metre	145.00	1055.00	160.00	1069.50
	(xlvi)	Overall size 240sq.mm (4Core) Armoured (Underground)	Metre	164.00	1275.00	180.00	1291.40
	(xlvii)	Overall size 300sq.mm (4Core) Armoured (Underground)	Metre	164.00	1464.00	180.00	1480.40
	(xlviii)	Overall size 400sq.mm (4Core) Armoured (Underground)	Metre	164.00	1765.00	180.00	1781.40
	(xlix)	Overall size 500sq.mm (4Core) Armoured (Underground)	Metre	179.00	2284.00	197.00	2301.90
	(xlx)	Overall size 630sq.mm (4Core) Armoured (Underground)	Metre	179.00	2961.00	197.00	2978.90

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.10 B		<b>XLPE INSULATED ARMoured CABLES (LOOSE):</b>					
		<b>Supply, laying and erection of aluminium conductor XLPE insulated PVC sheathed armoured and served cable 1100 volts grade as per IS 7098 (Part-1)1988 to be laid loose in the existing trench or pipe as per PWD General Specifications:-</b>					
	(i)	Overall size 6sq.mm (2Core) Armoured (Loose)	Metre	15.00	76.00	17.00	77.50
	(ii)	Overall size 10sq.mm (2Core) Armoured (Loose)	Metre	15.00	88.00	17.00	89.50
	(iii)	Overall size 16sq.mm (2Core) Armoured (Loose)	Metre	15.00	100.00	17.00	101.50
	(iv)	Overall size 25sq.mm (2Core) Armoured (Loose)	Metre	15.00	103.00	17.00	104.50
	(v)	Overall size 35sq.mm (2Core) Armoured (Loose)	Metre	15.00	123.00	17.00	124.50
	(vi)	Overall size 50sq.mm (2Core) Armoured (Loose)	Metre	15.00	150.00	17.00	151.50
	(vii)	Overall size 4sq.mm (3Core) Armoured (Loose)	Metre	15.00	72.00	17.00	73.50
	(viii)	Overall size 6sq.mm (3Core) Armoured (Loose)	Metre	15.00	82.00	17.00	83.50
	(ix)	Overall size 10sq.mm (3Core) Armoured (Loose)	Metre	15.00	100.00	17.00	101.50
	(x)	Overall size 16sq.mm (3Core) Armoured (Loose)	Metre	15.00	106.00	17.00	107.50
	(xi)	Overall size 25sq.mm (3Core) Armoured (Loose)	Metre	15.00	129.00	17.00	130.50
	(xii)	Overall size 35sq.mm (3Core) Armoured (Loose)	Metre	15.00	159.00	17.00	160.50
	(xiii)	Overall size 50sq.mm (3Core) Armoured (Loose)	Metre	15.00	197.00	17.00	198.50
	(xiv)	Overall size 70sq.mm (3Core) Armoured (Loose)	Metre	23.00	269.00	25.00	271.30
	(xv)	Overall size 95sq.mm (3Core) Armoured (Loose)	Metre	23.00	329.00	25.00	331.30

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(xvi)	Overall size 120sq.mm (3Core) Armoured (Loose)	Metre	40.00	406.00	44.00	410.00
	(xvii)	Overall size 150sq.mm (3Core) Armoured (Loose)	Metre	40.00	491.00	44.00	495.00
	(xviii)	Overall size 185sq.mm (3Core) Armoured (Loose)	Metre	40.00	590.00	44.00	594.00
	(xix)	Overall size 240sq.mm (3Core) Armoured (Loose)	Metre	58.00	762.00	64.00	767.80
	(xx)	Overall size 300sq.mm (3Core) Armoured (Loose)	Metre	58.00	909.00	64.00	914.80
	(xxi)	Overall size 400sq.mm (3Core) Armoured (Loose)	Metre	58.00	1140.00	64.00	1145.80
	(xxii)	Overall size 25sq.mm (3½ Core) Armoured (Loose)	Metre	15.00	143.00	17.00	144.50
	(xxiii)	Overall size 35sq.mm (3½ Core) Armoured (Loose)	Metre	15.00	177.00	17.00	178.50
	(xxiv)	Overall size 50sq.mm (3½ Core) Armoured (Loose)	Metre	15.00	226.00	17.00	227.50
	(xxv)	Overall size 70sq.mm (3½ Core) Armoured (Loose)	Metre	23.00	310.00	25.00	312.30
	(xxvi)	Overall size 95sq.mm (3½ Core) Armoured (Loose)	Metre	23.00	370.00	25.00	372.30
	(xxvii)	Overall size 120sq.mm (3½ Core) Armoured (Loose)	Metre	40.00	473.00	44.00	477.00
	(xxviii)	Overall size 150sq.mm (3½ Core) Armoured (Loose)	Metre	40.00	553.00	44.00	557.00
	(xxix)	Overall size 185sq.mm (3½ Core) Armoured (Loose)	Metre	40.00	680.00	44.00	684.00
	(xxx)	Overall size 240sq.mm (3½ Core) Armoured (Loose)	Metre	58.00	863.00	64.00	868.80
	(xxxi)	Overall size 300sq.mm (3½ Core) Armoured (Loose)	Metre	58.00	1045.00	64.00	1050.80
	(xxxii)	Overall size 400sq.mm (3½ Core) Armoured (Loose)	Metre	58.00	1313.00	64.00	1318.80
	(xxxiii)	Overall size 500sq.mm (3½ Core) Armoured (Loose)	Metre	72.00	1780.00	79.00	1787.20

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(xxxiv)	Overall size 630sq.mm (3½ Core) Armoured (Loose)	Metre	72.00	2392.00	79.00	2399.20
	(xxxv)	Overall size 6sq.mm (4Core) Armoured (Loose)	Metre	15.00	91.00	17.00	92.50
	(xxxvi)	Overall size 10sq.mm (4Core) Armoured (Loose)	Metre	15.00	111.00	17.00	112.50
	(xxxvii)	Overall size 16sq.mm (4Core) Armoured (Loose)	Metre	15.00	123.00	17.00	124.50
	(xxxviii)	Overall size 25sq.mm (4Core) Armoured (Loose)	Metre	15.00	154.00	17.00	155.50
	(xxxix)	Overall size 35sq.mm (4Core) Armoured (Loose)	Metre	15.00	195.00	17.00	196.50
	(xl)	Overall size 50sq.mm (4Core) Armoured (Loose)	Metre	15.00	248.00	17.00	249.50
	(xli)	Overall size 70sq.mm (4Core) Armoured (Loose)	Metre	23.00	339.00	25.00	341.30
	(xlii)	Overall size 95sq.mm (4Core) Armoured (Loose)	Metre	23.00	409.00	25.00	411.30
	(xlili)	Overall size 120sq.mm (4Core) Armoured (Loose)	Metre	40.00	513.00	44.00	517.00
	(xliv)	Overall size 150sq.mm (4Core) Armoured (Loose)	Metre	40.00	621.00	44.00	625.00
	(xlv)	Overall size 185sq.mm (4Core) Armoured (Loose)	Metre	40.00	763.00	44.00	767.00
	(xlvi)	Overall size 240sq.mm (4Core) Armoured (Loose)	Metre	58.00	980.00	64.00	985.80
	(xlvii)	Overall size 300sq.mm (4Core) Armoured (Loose)	Metre	58.00	1169.00	64.00	1174.80
	(xlviii)	Overall size 400sq.mm (4Core) Armoured (Loose)	Metre	58.00	1470.00	64.00	1475.80
	(xlix)	Overall size 500sq.mm (4Core) Armoured (Loose)	Metre	72.00	1989.00	79.00	1996.20
	(xlx)	Overall size 630sq.mm (4Core) Armoured (Loose)	Metre	72.00	2666.00	79.00	2673.20

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.10 C		<b>XLPE INSULATED UN-ARMoured CABLES (ON SURFACE):</b>					
		<b>Supply, laying and erection of aluminium conductor XLPE insulated PVC sheathed Un-armoured and served cable 1100 volts grade as per IS 7098 (Part-1)1988 to be laid (On Surface) as per PWD General Specifications:-</b>					
	(i)	Overall size 6sq.mm (2Core) Un-armoured (On-Surface)	Metre	17.00	65.00	19.00	66.70
	(ii)	Overall size 10sq.mm (2Core) Un-armoured (On-Surface)	Metre	17.00	72.00	19.00	73.70
	(iii)	Overall size 16sq.mm (2Core) Un-armoured (On-Surface)	Metre	17.00	82.00	19.00	83.70
	(iv)	Overall size 25sq.mm (2Core) Un-armoured (On-Surface)	Metre	17.00	99.00	19.00	100.70
	(v)	Overall size 35sq.mm (2Core) Un-armoured (On-Surface)	Metre	17.00	118.00	19.00	119.70
	(vi)	Overall size 50sq.mm (2Core) Un-armoured (On-Surface)	Metre	17.00	143.00	19.00	144.70
	(vii)	Overall size 4sq.mm (3Core) Un-armoured (On-Surface)	Metre	17.00	62.00	19.00	63.70
	(viii)	Overall size 6sq.mm (3Core) Un-armoured (On-Surface)	Metre	17.00	70.00	19.00	71.70
	(ix)	Overall size 10sq.mm (3Core) Un-armoured (On-Surface)	Metre	17.00	82.00	19.00	83.70
	(x)	Overall size 16sq.mm (3Core) Un-armoured (On-Surface)	Metre	17.00	99.00	19.00	100.70
	(xi)	Overall size 25sq.mm (3Core) Un-armoured (On-Surface)	Metre	17.00	125.00	19.00	126.70
	(xii)	Overall size 35sq.mm (3Core) Un-armoured (On-Surface)	Metre	17.00	152.00	19.00	153.70
	(xiii)	Overall size 50sq.mm (3Core) Un-armoured (On-Surface)	Metre	17.00	191.00	19.00	192.70
	(xiv)	Overall size 70sq.mm (3Core) Un-armoured (On-Surface)	Metre	26.00	264.00	29.00	266.60
	(xv)	Overall size 95sq.mm (3Core) Un-armoured (On-Surface)	Metre	26.00	318.00	29.00	320.60

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(xvi)	Overall size 120sq.mm (3Core) Un-armoured (On-Surface)	Metre	46.00	406.00	51.00	410.60
	(xvii)	Overall size 150sq.mm (3Core) Un-armoured (On-Surface)	Metre	46.00	489.00	51.00	493.60
	(xviii)	Overall size 185sq.mm (3Core) Un-armoured (On-Surface)	Metre	46.00	594.00	51.00	598.60
	(xix)	Overall size 240sq.mm (3Core) Un-armoured (On-Surface)	Metre	69.00	768.00	76.00	774.90
	(xx)	Overall size 300sq.mm (3Core) Un-armoured (On-Surface)	Metre	69.00	926.00	76.00	932.90
	(xxi)	Overall size 400sq.mm (3Core) Un-armoured (On-Surface)	Metre	69.00	1143.00	76.00	1149.90
	(xxii)	Overall size 25sq.mm (3½ Core) Un-armoured (On-Surface)	Metre	17.00	140.00	19.00	141.70
	(xxiii)	Overall size 35sq.mm (3½ Core) Un-armoured (On-Surface)	Metre	17.00	170.00	19.00	171.70
	(xxiv)	Overall size 50sq.mm (3½ Core) Un-armoured (On-Surface)	Metre	17.00	217.00	19.00	218.70
	(xxv)	Overall size 70sq.mm (3½ Core) Un-armoured (On-Surface)	Metre	26.00	299.00	29.00	301.60
	(xxvi)	Overall size 95sq.mm (3½ Core) Un-armoured (On-Surface)	Metre	26.00	363.00	29.00	365.60
	(xxvii)	Overall size 120sq.mm (3½ Core) Un-armoured (On-Surface)	Metre	46.00	467.00	51.00	471.60
	(xxviii)	Overall size 150sq.mm (3½ Core) Un-armoured (On-Surface)	Metre	46.00	552.00	51.00	556.60
	(xxix)	Overall size 185sq.mm (3½ Core) Un-armoured (On-Surface)	Metre	46.00	679.00	51.00	683.60
	(xxx)	Overall size 240sq.mm (3½ Core) Un-armoured (On-Surface)	Metre	69.00	874.00	76.00	880.90
	(xxxi)	Overall size 300sq.mm (3½ Core) Un-armoured (On-Surface)	Metre	69.00	1056.00	76.00	1062.90
	(xxxii)	Overall size 400sq.mm (3½ Core) Un-armoured (On-Surface)	Metre	69.00	1310.00	76.00	1316.90
	(xxxiii)	Overall size 500sq.mm (3½ Core) Un-armoured (On-Surface)	Metre	80.00	1690.00	88.00	1698.00



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(xxxiv)	Overall size 630sq.mm (3½ Core) Un-armoured (On-Surface)	Metre	72.00	2258.00	79.00	2265.20
	(xxxv)	Overall size 6sq.mm (4Core) Un-armoured (On-Surface)	Metre	17.00	78.00	19.00	79.70
	(xxxvi)	Overall size 10sq.mm (4Core) Un-armoured (On-Surface)	Metre	17.00	94.00	19.00	95.70
	(xxxvii)	Overall size 16sq.mm (4Core) Un-armoured (On-Surface)	Metre	17.00	115.00	19.00	116.70
	(xxxviii)	Overall size 25sq.mm (4Core) Un-armoured (On-Surface)	Metre	17.00	147.00	19.00	148.70
	(xxxix)	Overall size 35sq.mm (4Core) Un-armoured (On-Surface)	Metre	17.00	185.00	19.00	186.70
	(xl)	Overall size 50sq.mm (4Core) Un-armoured (On-Surface)	Metre	17.00	236.00	19.00	237.70
	(xli)	Overall size 70sq.mm (4Core) Un-armoured (On-Surface)	Metre	26.00	328.00	29.00	330.60
	(xlii)	Overall size 95sq.mm (4Core) Un-armoured (On-Surface)	Metre	26.00	402.00	29.00	404.60
	(xlili)	Overall size 120sq.mm (4Core) Un-armoured (On-Surface)	Metre	46.00	512.00	51.00	516.60
	(xliv)	Overall size 150sq.mm (4Core) Un-armoured (On-Surface)	Metre	46.00	622.00	51.00	626.60
	(xlv)	Overall size 185sq.mm (4Core) Un-armoured (On-Surface)	Metre	46.00	760.00	51.00	764.60
	(xlvi)	Overall size 240sq.mm (4Core) Un-armoured (On-Surface)	Metre	69.00	981.00	76.00	987.90
	(xlvii)	Overall size 300sq.mm (4Core) Un-armoured (On-Surface)	Metre	69.00	1182.00	76.00	1188.90
	(xlviii)	Overall size 400sq.mm (4Core) Un-armoured (On-Surface)	Metre	69.00	1469.00	76.00	1475.90
	(xlix)	Overall size 500sq.mm (4Core) Un-armoured (On-Surface)	Metre	80.00	1895.00	88.00	1903.00
	(xlx)	Overall size 630sq.mm (4Core) Un-armoured (On-Surface)	Metre	80.00	2524.00	88.00	2532.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.10 D		<b>XLPE INSULATED UN-ARMoured CABLES (LOOSE):</b>					
		<b>Supply, laying and erection of aluminium conductor XLPE insulated PVC sheathed Un-armoured and served cable 1100 volts grade as per IS 7098 (Part-1)1988 to be laid loose in the existing trench or pipe as per PWD General Specifications:-</b>					
	(i)	Overall size 6sq.mm (2Core) Un-armoured (Loose)	Metre	12.00	50.00	13.00	51.20
	(ii)	Overall size 10sq.mm (2Core) Un-armoured (Loose)	Metre	12.00	58.00	13.00	59.20
	(iii)	Overall size 16sq.mm (2Core) Un-armoured (Loose)	Metre	12.00	68.00	13.00	69.20
	(iv)	Overall size 25sq.mm (2Core) Un-armoured (Loose)	Metre	12.00	84.00	13.00	85.20
	(v)	Overall size 35sq.mm (2Core) Un-armoured (Loose)	Metre	12.00	103.00	13.00	104.20
	(vi)	Overall size 50sq.mm (2Core) Un-armoured (Loose)	Metre	12.00	129.00	13.00	130.20
	(vii)	Overall size 4sq.mm (3Core) Un-armoured (Loose)	Metre	12.00	48.00	13.00	49.20
	(viii)	Overall size 6sq.mm (3Core) Un-armoured (Loose)	Metre	12.00	55.00	13.00	56.20
	(ix)	Overall size 10sq.mm (3Core) Un-armoured (Loose)	Metre	12.00	68.00	13.00	69.20
	(x)	Overall size 16sq.mm (3Core) Un-armoured (Loose)	Metre	12.00	84.00	13.00	85.20
	(xi)	Overall size 25sq.mm (3Core) Un-armoured (Loose)	Metre	12.00	110.00	13.00	111.20
	(xii)	Overall size 35sq.mm (3Core) Un-armoured (Loose)	Metre	12.00	137.00	13.00	138.20
	(xiii)	Overall size 50sq.mm (3Core) Un-armoured (Loose)	Metre	12.00	177.00	13.00	178.20
	(xiv)	Overall size 70sq.mm (3Core) Un-armoured (Loose)	Metre	17.00	246.00	19.00	247.70
	(xv)	Overall size 95sq.mm (3Core) Un-armoured (Loose)	Metre	17.00	300.00	19.00	301.70

Sr. No.	Description				Unit	Zone-A		Zone-B	
						Labour Rate	Through Rate	Labour Rate	Through Rate
1	2				3	4	5	6	7
	(xvi)	Overall size 120sq.mm (3Core) Un-armoured (Loose)			Metre	35.00	383.00	39.00	386.50
	(xvii)	Overall size 150sq.mm (3Core) Un-armoured (Loose)			Metre	35.00	467.00	39.00	470.50
	(xviii)	Overall size 185sq.mm (3Core) Un-armoured (Loose)			Metre	35.00	572.00	39.00	575.50
	(xix)	Overall size 240sq.mm (3Core) Un-armoured (Loose)			Metre	54.00	741.00	59.00	746.40
	(xx)	Overall size 300sq.mm (3Core) Un-armoured (Loose)			Metre	54.00	899.00	59.00	904.40
	(xxi)	Overall size 400sq.mm (3Core) Un-armoured (Loose)			Metre	54.00	1115.00	59.00	1120.40
	(xxii)	Overall size 25sq.mm (3½ Core) Un-armoured (Loose)			Metre	12.00	125.00	13.00	126.20
	(xxiii)	Overall size 35sq.mm (3½ Core) Un-armoured (Loose)			Metre	12.00	155.00	13.00	156.20
	(xxiv)	Overall size 50sq.mm (3½ Core) Un-armoured (Loose)			Metre	12.00	202.00	13.00	203.20
	(xxv)	Overall size 70sq.mm (3½ Core) Un-armoured (Loose)			Metre	17.00	280.00	19.00	281.70
	(xxvi)	Overall size 95sq.mm (3½ Core) Un-armoured (Loose)			Metre	17.00	344.00	19.00	345.70
	(xxvii)	Overall size 120sq.mm (3½ Core) Un-armoured (Loose)			Metre	35.00	445.00	39.00	448.50
	(xxviii)	Overall size 150sq.mm (3½ Core) Un-armoured (Loose)			Metre	35.00	529.00	39.00	532.50
	(xxix)	Overall size 185sq.mm (3½ Core) Un-armoured (Loose)			Metre	35.00	657.00	39.00	660.50
	(xxx)	Overall size 240sq.mm (3½ Core) Un-armoured (Loose)			Metre	54.00	846.00	59.00	851.40
	(xxxi)	Overall size 300sq.mm (3½ Core) Un-armoured (Loose)			Metre	54.00	1029.00	59.00	1034.40
	(xxxii)	Overall size 400sq.mm (3½ Core) Un-armoured (Loose)			Metre	54.00	1283.00	59.00	1288.40
	(xxxiii)	Overall size 500sq.mm (3½ Core) Un-armoured (Loose)			Metre	66.00	1662.00	73.00	1668.60

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(xxxiv)	Overall size 630sq.mm (3½ Core) Un-armoured (Loose)	Metre	66.00	2230.00	73.00	2236.60
	(xxxv)	Overall size 6sq.mm (4Core) Un-armoured (Loose)	Metre	12.00	64.00	13.00	65.20
	(xxxvi)	Overall size 10sq.mm (4Core) Un-armoured (Loose)	Metre	12.00	80.00	13.00	81.20
	(xxxvii)	Overall size 16sq.mm (4Core) Un-armoured (Loose)	Metre	12.00	100.00	13.00	101.20
	(xxxviii)	Overall size 25sq.mm (4Core) Un-armoured (Loose)	Metre	12.00	132.00	13.00	133.20
	(xxxix)	Overall size 35sq.mm (4Core) Un-armoured (Loose)	Metre	12.00	171.00	13.00	172.20
	(xl)	Overall size 50sq.mm (4Core) Un-armoured (Loose)	Metre	12.00	221.00	13.00	222.20
	(xli)	Overall size 70sq.mm (4Core) Un-armoured (Loose)	Metre	17.00	309.00	19.00	310.70
	(xlii)	Overall size 95sq.mm (4Core) Un-armoured (Loose)	Metre	17.00	383.00	19.00	384.70
	(xlili)	Overall size 120sq.mm (4Core) Un-armoured (Loose)	Metre	35.00	490.00	39.00	493.50
	(xliv)	Overall size 150sq.mm (4Core) Un-armoured (Loose)	Metre	35.00	600.00	39.00	603.50
	(xlv)	Overall size 185sq.mm (4Core) Un-armoured (Loose)	Metre	35.00	737.00	39.00	740.50
	(xlvi)	Overall size 240sq.mm (4Core) Un-armoured (Loose)	Metre	54.00	954.00	59.00	959.40
	(xlvii)	Overall size 300sq.mm (4Core) Un-armoured (Loose)	Metre	54.00	1154.00	59.00	1159.40
	(xlviii)	Overall size 400sq.mm (4Core) Un-armoured (Loose)	Metre	54.00	1442.00	59.00	1447.40
	(xlix)	Overall size 500sq.mm (4Core) Un-armoured (Loose)	Metre	66.00	1868.00	73.00	1874.60
	(xlx)	Overall size 630sq.mm (4Core) Un-armoured (Loose)	Metre	66.00	2497.00	73.00	2503.60

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.10 E		<b>XLPE INSULATED ARMOURED CABLES (ON SURFACE):</b>					
		<b>Supply, laying and erection of aluminium conductor XLPE insulated PVC sheathed armoured and served cable 1100 volts grade as per IS:7098 (Part-1)1988 to be laid (On Surface) as per PWD General Specifications:-</b>					
	(i)	Overall size 6sq.mm (2Core) Armoured (On-Surface)	Metre	23.00	93.00	25.00	95.30
	(ii)	Overall size 10sq.mm (2Core) Armoured (On-Surface)	Metre	23.00	105.00	25.00	107.30
	(iii)	Overall size 16sq.mm (2Core) Armoured (On-Surface)	Metre	23.00	117.00	25.00	119.30
	(iv)	Overall size 25sq.mm (2Core) Armoured (On-Surface)	Metre	23.00	120.00	25.00	122.30
	(v)	Overall size 35sq.mm (2Core) Armoured (On-Surface)	Metre	23.00	140.00	25.00	142.30
	(vi)	Overall size 50sq.mm (2Core) Armoured (On-Surface)	Metre	23.00	167.00	25.00	169.30
	(vii)	Overall size 4sq.mm (3Core) Armoured (On-Surface)	Metre	23.00	89.00	25.00	91.30
	(viii)	Overall size 6sq.mm (3Core) Armoured (On-Surface)	Metre	23.00	99.00	25.00	101.30
	(ix)	Overall size 10sq.mm (3Core) Armoured (On-Surface)	Metre	23.00	117.00	25.00	119.30
	(x)	Overall size 16sq.mm (3Core) Armoured (On-Surface)	Metre	23.00	123.00	25.00	125.30
	(xi)	Overall size 25sq.mm (3Core) Armoured (On-Surface)	Metre	23.00	147.00	25.00	149.30
	(xii)	Overall size 35sq.mm (3Core) Armoured (On-Surface)	Metre	23.00	175.00	25.00	177.30
	(xiii)	Overall size 50sq.mm (3Core) Armoured (On-Surface)	Metre	23.00	215.00	25.00	217.30
	(xiv)	Overall size 70sq.mm (3Core) Armoured (On-Surface)	Metre	32.00	288.00	35.00	291.20
	(xv)	Overall size 95sq.mm (3Core) Armoured (On-Surface)	Metre	32.00	348.00	35.00	351.20

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(xvi)	Overall size 120sq.mm (3Core) Armoured (On-Surface)	Metre	55.00	431.00	61.00	436.50
	(xvii)	Overall size 150sq.mm (3Core) Armoured (On-Surface)	Metre	55.00	515.00	61.00	520.50
	(xviii)	Overall size 185sq.mm (3Core) Armoured (On-Surface)	Metre	55.00	616.00	61.00	621.50
	(xix)	Overall size 240sq.mm (3Core) Armoured (On-Surface)	Metre	80.00	798.00	88.00	806.00
	(xx)	Overall size 300sq.mm (3Core) Armoured (On-Surface)	Metre	80.00	944.00	88.00	952.00
	(xxi)	Overall size 400sq.mm (3Core) Armoured (On-Surface)	Metre	80.00	1175.00	88.00	1183.00
	(xxii)	Overall size 25sq.mm (3½ Core) Armoured (On-Surface)	Metre	23.00	161.00	25.00	163.30
	(xxiii)	Overall size 35sq.mm (3½ Core) Armoured (On-Surface)	Metre	23.00	195.00	25.00	197.30
	(xxiv)	Overall size 50sq.mm (3½ Core) Armoured (On-Surface)	Metre	23.00	244.00	25.00	246.30
	(xxv)	Overall size 70sq.mm (3½ Core) Armoured (On-Surface)	Metre	32.00	328.00	35.00	331.20
	(xxvi)	Overall size 95sq.mm (3½ Core) Armoured (On-Surface)	Metre	32.00	389.00	35.00	392.20
	(xxvii)	Overall size 120sq.mm (3½ Core) Armoured (On-Surface)	Metre	55.00	499.00	61.00	504.50
	(xxviii)	Overall size 150sq.mm (3½ Core) Armoured (On-Surface)	Metre	55.00	578.00	61.00	583.50
	(xxix)	Overall size 185sq.mm (3½ Core) Armoured (On-Surface)	Metre	55.00	706.00	61.00	711.50
	(xxx)	Overall size 240sq.mm (3½ Core) Armoured (On-Surface)	Metre	80.00	898.00	88.00	906.00
	(xxxi)	Overall size 300sq.mm (3½ Core) Armoured (On-Surface)	Metre	80.00	1080.00	88.00	1088.00
	(xxxii)	Overall size 400sq.mm (3½ Core) Armoured (On-Surface)	Metre	80.00	1349.00	88.00	1357.00
	(xxxiii)	Overall size 500sq.mm (3½ Core) Armoured (On-Surface)	Metre	91.00	1812.00	100.00	1821.10
	(xxxiv)	Overall size 630sq.mm (3½ Core) Armoured (On-Surface)	Metre	91.00	2425.00	100.00	2434.10

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(xxxv)	Overall size 6sq.mm (4Core) Armoured (On-Surface)	Metre	23.00	108.00	25.00	110.30
	(xxxvi)	Overall size 10sq.mm (4Core) Armoured (On-Surface)	Metre	23.00	129.00	25.00	131.30
	(xxxvii)	Overall size 16sq.mm (4Core) Un-armoured (On-Surface)	Metre	23.00	140.00	25.00	142.30
	(xxxviii)	Overall size 25sq.mm (4Core) Armoured (On-Surface)	Metre	23.00	171.00	25.00	173.30
	(xxxix)	Overall size 35sq.mm (4Core) Armoured (On-Surface)	Metre	23.00	212.00	25.00	214.30
	(xl)	Overall size 50sq.mm (4Core) Armoured (On-Surface)	Metre	23.00	266.00	25.00	268.30
	(xli)	Overall size 70sq.mm (4Core) Armoured (On-Surface)	Metre	32.00	358.00	35.00	361.20
	(xlii)	Overall size 95sq.mm (4Core) Armoured (On-Surface)	Metre	32.00	427.00	35.00	430.20
	(xliii)	Overall size 120sq.mm (4Core) Armoured (On-Surface)	Metre	55.00	539.00	61.00	544.50
	(xliv)	Overall size 150sq.mm (4Core) Armoured (On-Surface)	Metre	55.00	647.00	61.00	652.50
	(xlv)	Overall size 185sq.mm (4Core) Armoured (On-Surface)	Metre	55.00	788.00	61.00	793.50
	(xlvi)	Overall size 240sq.mm (4Core) Armoured (On-Surface)	Metre	80.00	1015.00	88.00	1023.00
	(xlvii)	Overall size 300sq.mm (4Core) Armoured (On-Surface)	Metre	80.00	1204.00	88.00	1212.00
	(xlviii)	Overall size 400sq.mm (4Core) Armoured (On-Surface)	Metre	80.00	1506.00	88.00	1514.00
	(xlix)	Overall size 500sq.mm (4Core) Armoured (On-Surface)	Metre	91.00	2022.00	100.00	2031.10
	(xlx)	Overall size 630sq.mm (4Core) Armoured (On-Surface)	Metre	91.00	2698.00	100.00	2707.10

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.11		<b>HEAVY GAUGE WELDED CONDUIT PIPES:</b>					
		<b>Supply &amp; erection of Heavy gauge welded conduit pipe (ISI marked) as per IS:9537:Part-II for wiring purposes including bends, junction boxes, Steel hooks, GI saddle clamps and other petty materials etc., where necessary including painting as per PWD General Specifications:-</b>					
	(i)	HGW Conduit Pipe 20mm dia. (1.6mm thick) On Surface	Metre	9.00	74.00	10.00	74.90
	(ii)	HGW Conduit Pipe 25mm dia. (1.6mm thick) On Surface	Metre	9.00	92.00	10.00	92.90
	(iii)	HGW Conduit Pipe 32mm dia. (1.6mm thick) On Surface	Metre	12.00	134.00	13.00	135.20
	(iv)	HGW Conduit Pipe 40mm dia. (2mm thick) On Surface	Metre	12.00	152.00	13.00	153.20
	(v)	HGW Conduit Pipe 50mm dia. (2mm thick) On Surface	Metre	12.00	203.00	13.00	204.20
	(vi)	HGW Conduit Pipe 20mm dia. (1.6mm thick) Flushed	Metre	23.00	90.00	25.00	92.30
	(vii)	HGW Conduit Pipe 25mm dia. (1.6mm thick) Flushed	Metre	23.00	107.00	25.00	109.30
	(viii)	HGW Conduit Pipe 32mm dia. (1.6mm thick) Flushed	Metre	29.00	153.00	32.00	155.90
	(ix)	HGW Conduit Pipe 40mm dia. (2mm thick) Flushed	Metre	29.00	171.00	32.00	173.90
	(x)	HGW Conduit Pipe 50mm dia. (2mm thick) Flushed	Metre	29.00	224.00	32.00	226.90
	(xi)	Supply & erection of 19/20mm dia. M.S. conduit pipe (1.6mm thick), White painted suspension rod for ceiling fan.	Metre	24.00	100.00	26.00	102.40



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.12		<b>PVC, HDPE PIPES &amp; PVC FLEXIBLE PIPES:</b>					
		<b>Supply &amp; erection of PVC Conduit Pipes (ISI marked) as per IS9537:Part-III &amp; HDPE pipes (ISI marked) as per IS:4984:1995 for wiring purposes including bends, junction boxes, Steel hooks, M.S. saddle clamps and other petty materials etc., as per PWD General Specifications:-</b>					
	(i)	Heavy Gauge PVC Conduit Pipe 20mm dia. (On Surface)	Metre	6.00	32.00	7.00	32.60
	(ii)	Heavy Gauge PVC Conduit Pipe 25mm dia. (On Surface)	Metre	6.00	39.00	7.00	39.60
	(iii)	Heavy Gauge PVC Conduit Pipe 32mm dia.(On Surface)	Metre	9.00	59.00	10.00	59.90
	(iv)	Heavy Gauge PVC Conduit Pipe 40mm dia. (On Surface)	Metre	9.00	75.00	10.00	75.90
	(v)	Heavy Gauge PVC Conduit Pipe 50mm dia. (On Surface)	Metre	9.00	107.00	10.00	107.90
	(vi)	Medium Gauge PVC Conduit Pipe 20mm dia. (On Surface)	Metre	6.00	27.00	7.00	27.60
	(vii)	Medium Gauge PVC Conduit Pipe 25mm dia. (On Surface)	Metre	6.00	34.00	7.00	34.60
	(viii)	Medium Gauge PVC Conduit Pipe 32mm dia. (On Surface)	Metre	9.00	53.00	10.00	53.90
	(ix)	Heavy Gauge PVC Conduit Pipe 20mm dia. (Flushed)	Metre	14.00	41.00	15.00	42.40
	(x)	Heavy Gauge PVC Conduit Pipe 25mm dia. (Flushed)	Metre	14.00	48.00	15.00	49.40
	(xi)	Heavy Gauge PVC Conduit Pipe 32mm dia. (Flushed)	Metre	14.00	66.00	15.00	67.40
	(xii)	Heavy Gauge PVC Conduit Pipe 40mm dia. (Flushed)	Metre	19.00	87.00	21.00	88.90
	(xiii)	Heavy Gauge PVC Conduit Pipe 50mm dia. (Flushed)	Metre	19.00	120.00	21.00	121.90
	(xiv)	Medium Gauge PVC Conduit Pipe 20mm dia. (Flushed)	Metre	14.00	37.00	15.00	38.40

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(xv)	Medium Gauge PVC Conduit Pipe 25mm dia. (Flushed)	Metre	14.00	43.00	15.00	44.40
	(xvi)	Medium Gauge PVC Conduit Pipe 32mm dia. (Flushed)	Metre	14.00	60.00	15.00	61.40
	(xvii)	HDPE Electrical Conduit Pipe 20mm dia. (On Surface)	Metre	6.00	39.00	7.00	39.60
	(xviii)	HDPE Electrical Conduit Pipe 25mm dia. (On Surface)	Metre	6.00	50.00	7.00	50.60
	(xix)	HDPE Electrical Conduit Pipe 32mm dia. (On Surface)	Metre	9.00	62.00	10.00	62.90
	(xx)	HDPE Electrical Conduit Pipe 40mm dia. (On Surface)	Metre	9.00	67.00	10.00	67.90
	(xxi)	HDPE Electrical Conduit Pipe 20mm dia. (Flushed)	Metre	14.00	48.00	15.00	49.40
	(xxii)	HDPE Electrical Conduit Pipe 25mm dia. (Flushed)	Metre	14.00	59.00	15.00	60.40
	(xxiii)	HDPE Electrical Conduit Pipe 32mm dia. (Flushed)	Metre	14.00	69.00	15.00	70.40
	(xxiv)	HDPE Electrical Conduit Pipe 40mm dia. (Flushed)	Metre	19.00	79.00	21.00	80.90
<b>34.12</b>	<b>(xxv)</b>	<b>Supply and erection of PVC flexible pipe complete without compression glands, locking arrangement, check-nuts as required:-</b>					
	(a)	PVC Flexible Pipe 20mm dia.	Metre	4.00	12.00	4.00	12.40
	(b)	PVC Flexible Pipe 25mm dia.	Metre	4.00	17.00	4.00	17.40
	(c)	PVC Flexible Pipe 32mm dia.	Metre	5.00	26.00	6.00	26.50
	(d)	PVC Flexible Pipe 40mm dia.	Metre	5.00	33.00	6.00	33.50
<b>34.12</b>	<b>(xxvi)</b>	<b>Supply and erection of Compression glands, Locking arrangement, Check-nuts for PVC flexible pipe complete with as required:-</b>					
	(a)	PVC compression Socket gland 20mm dia.	Each	6.00	17.00	7.00	17.60
	(b)	PVC compression Socket gland 25mm dia.	Each	6.00	21.00	7.00	21.60

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(c)	PVC compression Socket gland 32mm dia.	Each	8.00	25.00	9.00	25.80
	(d)	PVC compression Socket gland 40mm dia.	Each	8.00	31.00	9.00	31.80
<b>34.12</b>	<b>(xxvii)</b>	<b>Supply &amp; erection of PVC Casing 'n' Capping (Double Lock) ISI marked for wiring purposes including cost of bends (L), (U), (T) &amp; inspection boxes etc., where necessary including other petty material:-</b>					
	(a)	PVC Casing 'n' Capping Size 20mm x 12mm	Metre	6.00	23.00	7.00	23.60
	(b)	PVC Casing 'n' Capping Size 25mm x 16mm	Metre	6.00	30.00	7.00	30.60
	(c)	PVC Casing 'n' Capping Size 38mm x 16mm	Metre	9.00	55.00	10.00	55.90
	(d)	PVC Casing 'n' Capping Size 50mm x 16mm	Metre	9.00	66.00	10.00	66.90
<b>34.13</b>		<b>GALVANIZED IRON PIPES AND G.I. EARTHING</b>					
		<b>Supply &amp; erection of G.I. pipe (A-Class) as per IS:1239 (Part-I) 2004 including sockets, bends, inspection boxes, Steel hooks, GI saddle clamps and other petty materials etc., where necessary including painting as per PWD General Specifications:-</b>					
	(i)	Galvanized Iron Pipe 15mm dia. (A-class) On surface	Metre	12.00	115.00	13.00	116.20
	(ii)	Galvanized Iron Pipe 20mm dia. (A-class) On surface	Metre	12.00	146.00	13.00	147.20
	(iii)	Galvanized Iron Pipe 25mm dia. (A-class) On surface	Metre	12.00	194.00	13.00	195.20
	(iv)	Galvanized Iron Pipe 32mm dia. (A-class) On surface	Metre	16.00	243.00	18.00	244.60
	(v)	Galvanized Iron Pipe 40mm dia. (A-class) On surface	Metre	16.00	302.00	18.00	303.60
	(vi)	Galvanized Iron Pipe 50mm dia. (A-class) On surface	Metre	16.00	381.00	18.00	382.60

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(vii)	Galvanized Iron Pipe 15mm dia. (A-class) Flushed	Metre	26.00	127.00	29.00	129.60
	(viii)	Galvanized Iron Pipe 20mm dia. (A-class) Flushed	Metre	26.00	158.00	29.00	160.60
	(ix)	Galvanized Iron Pipe 25mm dia. (A-class) Flushed	Metre	26.00	206.00	29.00	208.60
	(x)	Galvanized Iron Pipe 32mm dia. (A-class) Flushed	Metre	29.00	254.00	32.00	256.90
	(xi)	Galvanized Iron Pipe 40mm dia. (A-class) Flushed	Metre	29.00	311.00	32.00	313.90
	(xii)	Galvanized Iron Pipe 50mm dia. (A-class) Flushed	Metre	29.00	391.00	32.00	393.90
<b>34.13</b>	<b>G.I. EARTHING:</b>						
	(xiii)	Earthing with G.I. wire/ rope in G.I. pipe partly recessed and partly on surface complete with 150cm long 50mm dia. G.I. earth pipe (Cutting threads and 36 Nos. holes, 1cm dia. to make a mesh around the GI Pipe) with G.I. reducing socket including erection of the same, 4.50 metre (14.76 feet) below ground level with 20Kg. charcoal & salt mixture etc., up to 8 metre in length (including boring & refilling).					
	(a)	Earthing with 8 S.W.G. (4mm dia.) G.I. wire in 15mm dia G.I. pipe with G.I. reducing socket 50mm x 15mm (upto 8Metre in length)	Each	971.00	2518.00	1068.00	2615.10
	(b)	Earthing with 7/14 S.W.G. (7/2.18mm dia.) G.I. rope in 20mm dia G.I. pipe with G.I. reducing socket 50mm x 20mm (upto 8Metre in length)	Each	971.00	2800.00	1068.00	2897.10
	(c)	Earthing with 7/12 S.W.G. (7/2.80mm dia.) G.I. rope in 20mm dia G.I. pipe with G.I. reducing socket 50mm x 20mm (upto 8Metre in length)	Each	971.00	2863.00	1068.00	2960.10

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.13	(xiv)	Earthing with G.I. wire/ rope in G.I. pipe partly recessed and partly on surface complete with 150cm long 50mm dia. G.I. earth pipe (Cutting threads and 36 Nos. holes, 1cm dia. to make a mesh around the GI Pipe) and with G.I. reducing socket including erection of the same, 10.50 metre (34.44 feet) below ground level with 20Kg. charcoal & salt mixture etc., up to 14 metre in length (including boring & refilling).					
	(a)	Earthing with 8 S.W.G. (4mm dia.) G.I. wire in 15mm dia G.I. pipe with G.I. reducing socket 50mm x 15mm (upto 14Metre in length)	Each	1661.00	3820.00	1827.00	3986.10
	(b)	Earthing with 7/14 S.W.G. (7/2.18mm dia.) G.I. rope in 20mm dia G.I. pipe with G.I. reducing socket 50mm x 20mm (upto 14Metre in length)	Each	1661.00	4299.00	1827.00	4465.10
	(c)	Earthing with 7/12 S.W.G. (7/2.80mm dia.) G.I. rope in 20mm dia G.I. pipe with G.I. reducing socket 50mm x 20mm (upto 14Metre in length)	Each	1661.00	4409.00	1827.00	4575.10
34.13	(xv)	Earthing earth rod 20 mm dia for providing earth connections upto line earth with G.I. Wire 8 S.W.G. (4mm dia.). The rod shall be tapered at one end and flatted on other end. The hole size 10mm dia shall be drilled on the flatened side for facilitating connection with G.I. wire and thimble etc. The rod shall be erected in ground upto complete length vertically:-					
	(a)	GI Earth rod 20 mm dia., 3 mtr. Long	Each	404.00	968.00	444.00	1008.40
	(b)	GI Earth rod 20 mm dia., 4.5 mtr. Long	Each	577.00	1367.00	635.00	1424.70
	(c)	GI Earth rod 20 mm dia., 6 mtr. Long	Each	749.00	1831.00	824.00	1905.90
34.13		<b>G.I. EARTHING WIRE/ ROPE (AS ADDITIONAL LENGTH):</b>					
	(xvi)	Fixing additional length of earthing with G.I. wire/ rope in G.I. pipe (On Surface) with sockets, elbows and MS saddle clamps including painting etc.					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(a)	Additional length G.I. wire 8 S.W.G. (4mm dia.) in 15mm dia. G.I. pipe (On Surface)	Metre	14.00	125.00	15.00	126.40
	(b)	Additional length G.I. rope 7/14 S.W.G. (7/2.18mm dia.) in 20mm dia. G.I. pipe (On Surface)	Metre	14.00	164.00	15.00	165.40
	(c)	Additional length G.I. rope 7/12 S.W.G. (7/2.80mm dia.) in 20mm dia. G.I. pipe (On Surface)	Metre	14.00	172.00	15.00	173.40
<b>34.13</b>	<b>(xvii)</b>	<b>Fixing additional length of earthing with G.I. wire/ rope in G.I. pipe (Flushed in wall and floor) with sockets, elbows and Steel hooks including the cost of cutting and filling up of chases (with finishing the surface):-</b>					
	(a)	Additional length G.I. wire 8 S.W.G. (4mm dia.) in 15mm dia. G.I. pipe (Flushed)	Metre	42.00	151.00	46.00	155.20
	(b)	Additional length G.I. wire 7/14 S.W.G. (7/2.18mm dia.) in 20mm dia. G.I. pipe (Flushed)	Metre	42.00	190.00	46.00	194.20
	(c)	Additional length G.I. wire 7/12 S.W.G. (7/2.80mm dia.) in 20mm dia. G.I. pipe (Flushed)	Metre	42.00	198.00	46.00	202.20
<b>34.13</b>		<b>BONDING TO EARTH WITH G.I. WIRE/ ROPE:</b>					
	<b>(xviii)</b>	<b>Bonding to existing earth with G.I. wire/ rope in heavy gauge (1.6mm thick) welded conduit pipe (On Surface) with bends, junction boxes, MS saddle clamps including painting etc.</b>					
	(a)	Bonding with G.I. wire 8S.W.G. (4mm dia) in HGW conduit pipe 20mm dia. (on surface)	Metre	8.00	77.00	9.00	77.80
	(b)	Bonding with G.I. rope 7/14S.W.G. (7/2.18mm dia) in HGW conduit pipe 20mm dia. (on surface)	Metre	8.00	86.00	9.00	86.80
	(c)	Bonding with G.I. rope 7/12S.W.G. (7/2.80mm dia) in HGW conduit pipe 25mm dia. (on surface)	Metre	8.00	108.00	9.00	108.80

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.13	(xix)	Bonding to existing earth with G.I. wire/ rope in heavy gauge (1.6mm thick) welded conduit pipe (Flushed in wall) with bends, junction boxes and Steel hooks including the cost of cutting and filling up of chases (with finishing the surface):-					
	(a)	Bonding with G.I. wire 8S.W.G. (4mm dia) in HGW conduit pipe 20mm dia. (Flushed).	Metre	42.00	109.00	46.00	113.20
	(b)	Bonding with G.I. rope 7/14S.W.G. (7/2.18mm dia) in HGW conduit pipe 20mm dia. (Flushed)	Metre	42.00	117.00	46.00	121.20
	(c)	Bonding with G.I. rope 7/12S.W.G. (7/2.80mm dia) in HGW conduit pipe 25mm dia. (Flushed)	Metre	42.00	170.00	46.00	174.20
34.13	(xx)	Bonding to existing earth with 8S.W.G. (4mm dia) G.I. wire fixed with stapples on wall.	Metre	5.00	12.00	6.00	12.50

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.14		<b>COPPER EARTHING:</b>					
		<b>8 SWG COPPER EARTHING :</b>					
	(i)	Earthing with 8 SWG (4mm dia.) electrolytic copper wire thimble (1No. copper thimble with suitable size steel bolt, washers & double nut) with 30cm x 60cm x 2mm thick copper plate (made cylindrical) buried below ground level in the hole of excavation having bore dia. 125mm and surrounded by salt & charcoal dust mixture (20 kg.) including fixing the copper wire run through 20mm dia. G.I. pipe (A-Class) recessed in wall and in floor etc., up to suitable Length in metre (including bore Length). G.I. pipe 20mm dia. (A-class) of suitable Length should be laid in the hole of excavation 1 feet below ground level and having GI Reducer 50mm x 20mm with PVC Cap (For pouring water) fixed on the top level of the pipe. 300mm x 300mm x 300mm deep haudi of First class bricks finished with 1:4 cement plaster and haudi covered with cast iron lid having size 300mm x 300mm (Heavy) around the hole of excavation:-					
	(a)	Earthing with 8 SWG (4mm dia.) copper wire thimble with 30cm x 60cm x 2mm thick copper plate buried 4.50 metre (14.76 feet) below ground level (up to 8metre in Length) with G.I. pipe 20mm dia. (A-class), 3metre long	Each	867.00	5744.00	954.00	5830.70
	(b)	Earthing with 8 SWG (4mm dia.) copper wire thimble with 30cm x 60cm x 2mm thick copper plate buried 10.50 metre (34.44 feet) below ground level (up to 14metre in Length) with G.I. pipe 20mm dia. (A-class), 9metre long	Each	1557.00	7556.00	1713.00	7711.70
	(c)	Earthing with 8 SWG (4mm dia.) copper wire thimble with 30cm x 60cm x 2mm thick copper plate buried 19.50 metre (63.96 feet) below ground level (up to 23metre in Length) with G.I. pipe 20mm dia. (A-class), 18metre long	Each	2591.00	10273.00	2850.00	10532.10



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.14		<b>COPPER EARTHING (Upto 8 metre in Length):</b>					
	(ii)	Earthing with electrolytic Copper Tape rivetted (with 5Nos. copper rivets)/Steel Nut & bolts (with 4Nos. 32mm long, 8mm thick with washer and double nut) to 30cm x 120cm x 2mm thick copper plate (made cylindrical) buried 4.50 metre (14.76 feet) below ground level in the hole of excavation having bore dia. 125mm and surrounded by salt & charcoal dust mixture (20 kg.) including fixing the Copper Tape recessed in wall and in floor etc., up to 8metre in Length (including bore Length). G.I. pipe 20mm dia. (A-class), 3metre long should be laid in the hole of excavation 1 feet below ground level and having GI Reducer 50mm x 20mm with PVC Cap (For pouring water) fixed on the top level of the pipe. 300mm x 300mm x 300mm deep haudi of First class bricks finished with 1:4 cement plaster and haudi covered with cast iron lid having size 300mm x 300mm (Heavy) around the hole of excavation:-					
	(a)	Earthing with 20mm x 3mm Copper Tape (upto 8Metre in Length)	Each	867.00	9309.00	954.00	9395.70
	(b)	Earthing with 25mm x 3mm Copper Tape (upto 8Metre in Length)	Each	867.00	9906.00	954.00	9992.70
	(c)	Earthing with 30mm x 3mm Copper Tape (upto 8Metre in Length)	Each	867.00	10595.00	954.00	10681.70
	(d)	Earthing with 25mm x 5mm Copper Tape (upto 8Metre in Length)	Each	954.00	12181.00	1049.00	12276.40
	(e)	Earthing with 40mm x 5mm Copper Tape (upto 8Metre in Length)	Each	954.00	15393.00	1049.00	15488.40

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.14		COPPER EARTHING (Upto 14 metre in Length):					
	(iii)	Earthing with electrolytic Copper Tape rivetted (with 5Nos. copper rivets)/Steel Nut & bolts (with 4Nos. 32mm long, 8mm thick with washer and double nut) to 30cm x 120cm x 2mm thick copper plate (made cylindrical) buried 10.50 metre (34.44 feet) below ground level in the hole of excavation having bore dia. 125mm and surrounded by salt & charcoal dust mixture (20 kg.) including fixing the Copper Tape recessed in wall and in floor etc., up to 14metre in Length (including bore Length). G.I. pipe 20mm dia. (A-class), 9metre long should be laid in the hole of excavation 1 feet below ground level and having GI Reducer 50mm x 20mm with PVC Cap (For pouring water) fixed on the top level of the pipe. 300mm x 300mm x 300mm deep haudi of First class bricks finished with 1:4 cement plaster and haudi covered with cast iron lid having size 300mm x 300mm (Heavy) around the hole of excavation:-					
	(a)	Earthing with 20mm x 3mm Copper Tape (upto 14Metre in Length)	Each	1557.00	12654.00	1713.00	12809.70
	(b)	Earthing with 25mm x 3mm Copper Tape (upto 14Metre in Length)	Each	1557.00	13778.00	1713.00	13933.70
	(c)	Earthing with 30mm x 3mm Copper Tape (upto 14Metre in Length)	Each	1557.00	14902.00	1713.00	15057.70
	(d)	Earthing with 25mm x 5mm Copper Tape (upto 14Metre in Length)	Each	1644.00	17613.00	1808.00	17777.40
	(e)	Earthing with 40mm x 5mm Copper Tape (upto 14Metre in Length)	Each	1644.00	23235.00	1808.00	23399.40

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.14		<b>COPPER EARTHING (Upto 23 metre in Length):</b>					
	(iv)	Earthing with electrolytic Copper Tape rivetted (with 5Nos. copper rivets)/Steel Nut & bolts (with 4Nos. 32mm long, 8mm thick with washer and double nut) to 30cm x 120cm x 2mm thick copper plate (made cylindrical) buried 19.50 metre (63.96 feet) below ground level in the hole of excavation having bore dia. 125mm and surrounded by salt & charcoal dust mixture (20 kg.) including fixing the Copper Tape recessed in wall and in floor etc., up to 23metre in Length (including bore Length). G.I. pipe 20mm dia. (A-class), 18metre long should be laid in the hole of excavation 1 feet below ground level and having GI Reducer 50mm x 20mm with PVC Cap (For pouring water) fixed on the top level of the pipe. 300mm x 300mm x 300mm deep haudi of First class bricks finished with 1:4 cement plaster and haudi covered with cast iron lid having size 300mm x 300mm (Heavy) around the hole of excavation:-					
	(a)	Earthing with 20mm x 3mm Copper Tape (upto 23Metre in Length)	Each	2591.00	17670.00	2850.00	17929.10
	(b)	Earthing with 25mm x 3mm Copper Tape (upto 23Metre in Length)	Each	2591.00	19518.00	2850.00	19777.10
	(c)	Earthing with 30mm x 3mm Copper Tape (upto 23Metre in Length)	Each	2591.00	21365.00	2850.00	21624.10
	(d)	Earthing with 25mm x 5mm Copper Tape (upto 23Metre in Length)	Each	2679.00	25762.00	2947.00	26029.90
	(e)	Earthing with 40mm x 5mm Copper Tape (upto 23Metre in Length)	Each	2679.00	34997.00	2947.00	35264.90

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.14		<b>COPPER EARTHING STRIP (As Additional Length):</b>					
	(v)	<b>Fixing additional Length of earthing with Copper Tape (On Surface/Flushed) with petty material as required etc.:-</b>					
	(a)	Additional Length 20mm x 3mm thick Copper Tape	Metre	24.00	351.00	26.00	353.40
	(b)	Additional Length 25mm x 3mm thick Copper Tape	Metre	24.00	432.00	26.00	434.40
	(c)	Additional Length 30mm x 3mm thick Copper Tape	Metre	24.00	511.00	26.00	513.40
	(d)	Additional Length 25mm x 5mm thick Copper Tape	Metre	30.00	705.00	33.00	708.00
	(e)	Additional Length 40mm x 5mm thick Copper Tape	Metre	30.00	1106.00	33.00	1109.00
34.14	(vi)	<b>Fixing additional Length of earthing with 8 S.W.G. (4mm dia.) copper wire in G.I. pipe with sockets, elbows, steel hooks and GI saddle clamps including painting etc.:-</b>					
	(a)	Additional Length copper wire 8 S.W.G. (4mm dia.) in 20mm dia. G.I. pipe (On Surface)	Metre	19.00	221.00	21.00	222.90
	(b)	Additional Length copper wire 8 S.W.G. (4mm dia.) in 20mm dia. G.I. pipe (Flushed)	Metre	33.00	233.00	36.00	236.30
34.14		<b>BONDING TO EARTH WITH COPPER WIRE:</b>					
	(vii)	<b>Bonding to existing earth with copper wire in heavy gauge (1.6mm thick) welded conduit pipe with bends, junction boxes, steel hooks and MS saddle clamps including painting etc.:-</b>					
	(a)	Bonding with copper wire 8S.W.G. (4mm dia) in HGW conduit pipe 20mm dia. (on surface)	Metre	12.00	140.00	13.00	141.20

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(b)	Bonding with copper wire 8S.W.G. (4mm dia) in HGW conduit pipe 20mm dia. (Flushed)	Metre	31.00	157.00	34.00	160.10
34.14	(viii)	Bonding to existing earth with 8S.W.G. (4mm dia) copper wire behind casing or fixed with staples on wall.	Metre	5.00	75.00	6.00	75.50
34.15	<b>SUPPLY AND ERECTION OF WIRING ACCESSORIES:</b>						
	<b>Supply and erection of switches, sockets and other accessories (flush piano type/modular accessories) in the existing bakelite/ modular cover frame including fixing &amp; connections and petty material etc.,:-</b>						
	(i)	One Way 6amp. Switch Flush Piano type	Each	8.00	21.00	9.00	21.80
	(ii)	Two Way 6amp. Switch Flush Piano type	Each	8.00	26.00	9.00	26.80
	(iii)	Single Pole 16/20amp. Switch with indicator Flush Piano type	Each	12.00	63.00	13.00	64.20
	(iv)	One Way 6amp. Bell Push	Each	8.00	26.00	9.00	26.80
	(v)	5pin 6amp. Wall Socket Flush Piano type	Each	10.00	30.00	11.00	31.00
	(vi)	16amp. Universal Wall Socket Flush Piano type	Each	16.00	62.00	18.00	63.60
	(vii)	Step type Fan Regulator Flush Piano type (Switch size)	Each	10.00	164.00	11.00	165.00
	(viii)	Step type Fan Regulator Flush Piano type (Socket size)	Each	10.00	208.00	11.00	209.00
	(ix)	Telephone Socket Flush Piano type (Switch size)	Each	8.00	35.00	9.00	35.80
	(x)	TV Socket Flush Piano type (Switch size)	Each	8.00	28.00	9.00	28.80
	(xi)	6/10amp. One Way Modular Switch (One Module)	Each	8.00	37.00	9.00	37.80
	(xii)	6/10amp. Two Way Modular Switch (One Module)	Each	8.00	52.00	9.00	52.80
	(xiii)	16/20amp. One Way Modular Switch with Indicator (One Module)	Each	12.00	80.00	13.00	81.20

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(xiv)	6/10amp. One Way Modular Bell Push (One Module)	Each	8.00	57.00	9.00	57.80
	(xv)	6amp. 2/3 Universal Modular Shuttered Socket (two Module)	Each	10.00	56.00	11.00	57.00
	(xvi)	16/20amp. Universal Modular Shuttered Socket (two Module)	Each	16.00	100.00	18.00	101.60
	(xvii)	25amp. Universal Modular Shuttered Socket (two Module)	Each	16.00	109.00	18.00	110.60
	(xviii)	Step type Modular Electronic Fan Regulator 100watts (One Module)	Each	10.00	203.00	11.00	204.00
	(xix)	Step type Modular Electronic Fan Regulator 100watts (Two Module)	Each	10.00	247.00	11.00	248.00
	(xx)	Modular TV Socket (One Module)	Each	8.00	51.00	9.00	51.80
	(xxi)	Modular Telephone Socket (RJ-11) One Module	Each	8.00	52.00	9.00	52.80
	(xxii)	Modular RJ-45 Modem Jack for Computer (One Module)	Each	21.00	148.00	23.00	150.10
	(xxiii)	Modular Motor Starter 25Amp. (Two Module)	Each	12.00	237.00	13.00	238.20
	(xxiv)	Modular MCB 20Amp. (Two Module)	Each	12.00	221.00	13.00	222.20
	(xxv)	Modular Blanking Plate (One Module)	Each	4.00	16.00	4.00	16.40
	(xxvi)	Ceiling Rose (Flush Piano type)	Each	8.00	30.00	9.00	30.80
	(xxvii)	Bakelite Batten Holder (Large size)	Each	8.00	34.00	9.00	34.80
	(xxviii)	Call Bell 220/230 volts AC Ding Dong	Each	16.00	109.00	18.00	110.60
	(xxix)	3 Pin Plug Top 6Amp. (ISI marked)	Each	6.00	38.00	7.00	38.60
	(xxx)	3 Pin Plug Top 16Amp. (ISI marked)	Each	6.00	55.00	7.00	55.60
	(xxxi)	3 Pin Plug Top 25Amp. (ISI marked)	Each	6.00	57.00	7.00	57.60
<b>34.15</b>	<b>(xxxii)</b>	<b>Supply and erection of Modular Cover Frame (Complete set) on the existing metal box including fixing and connection of existing switches and sockets and other petty material etc:-</b>					
	(a)	Modular Cover Frame One or Two Module	Each	8.00	34.00	9.00	34.80
	(b)	Modular Cover Frame Three Module	Each	9.00	44.00	10.00	44.90

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(c)	Modular Cover Frame Four Module	Each	10.00	49.00	11.00	50.00
	(d)	Modular Cover Frame Six Module	Each	12.00	63.00	13.00	64.20
	(e)	Modular Cover Frame Eight Module	Each	16.00	83.00	18.00	84.60
	(f)	Modular Cover Frame Twelve Module	Each	21.00	119.00	23.00	121.10
<b>34.15</b>	(xxxiii)	<b>BAKELITE SHEET:</b>					
	(a)	Supply and erection of brown bakelite sheet white glazed translucent backside painted 3mm thick (thickness not less than 3mm) on the existing metal box including cutting, fixing and connection of existing switches and sockets and other petty material etc.	Sq. inch	0.59	1.28	1.00	1.34
	(b)	Supply and erection of brown bakelite sheet white glazed translucent backside painted 3mm thick (thickness not less than 3mm) on the existing metal box/ metal inspection boxes including fixing and other petty material etc.	Sq. inch	0.19	0.95	0.21	0.97
<b>34.15</b>	(xxxiv)	<b>Supply and erection of Concealed Metal Boxes of various sizes (1/2M, 3M, 4M, 6M, 8M, 12M, 16/18M) with brass lugs recessed in wall for mounting modular accessories including fixing and other petty material etc., including the cost of cutting and filling up of chases (with finishing the surface):-</b>					
	(a)	Powder Coated Concealed Metal Box with Brass Lugs One/Two Module	Each	14.00	53.00	15.00	54.40
	(b)	Powder Coated Concealed Metal Box with Brass Lugs Three Module	Each	14.00	59.00	15.00	60.40
	(c)	Powder Coated Concealed Metal Box with Brass Lugs four Module	Each	14.00	67.00	15.00	68.40
	(d)	Powder Coated Concealed Metal Box with Brass Lugs Six Module	Each	16.00	83.00	18.00	84.60
	(e)	Powder Coated Concealed Metal Box with Brass Lugs Eight Module	Each	16.00	92.00	18.00	93.60
	(f)	Powder Coated Concealed Metal Box with Brass Lugs Twelve Module	Each	23.00	125.00	25.00	127.30

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(g)	Powder Coated Concealed Metal Box with Brass Lugs Sixteen/ Eighteen Module (16/18 Module)	Each	23.00	168.00	25.00	170.30
34.15	(xxxv)	<b>Supply and erection of Plastic surface boxes of various sizes (1/2M, 3M, 4M, 6M, 8M, 12M) on surface on wall for mounting modular accessories including fixing and other petty material etc.:-</b>					
	(a)	Plastic Surface Box for Modular Accessories One/Two Module	Each	8.00	50.00	9.00	50.80
	(b)	Plastic Surface Box for Modular Accessories Three Module	Each	8.00	60.00	9.00	60.80
	(c)	Plastic Surface Box for Modular Accessories Four Module	Each	8.00	66.00	9.00	66.80
	(d)	Plastic Surface Box for Modular Accessories Six Module	Each	10.00	86.00	11.00	87.00
	(e)	Plastic Surface Box for Modular Accessories Eight Module	Each	10.00	115.00	11.00	116.00
	(f)	Plastic Surface Box for Modular Accessories Twelve Module	Each	16.00	148.00	18.00	149.60
34.15		<b>CAPACITORS &amp; BALL BEARINGS:</b>					
	(xxxvi)	<b>Supply and erection of Capacitors of different capacity for ceiling fans, exhaust fan &amp; street light fittings etc.:-</b>					
	(a)	Capacitor 2 $\mu$ F	Each	8.00	27.00	9.00	27.80
	(b)	Capacitor 2.5 $\mu$ F	Each	8.00	30.00	9.00	30.80
	(c)	Capacitor 4 $\mu$ F	Each	10.00	43.00	11.00	44.00
	(d)	Capacitor 6 $\mu$ F	Each	10.00	56.00	11.00	57.00
	(e)	Capacitor 10 $\mu$ F	Each	12.00	64.00	13.00	65.20
	(f)	Capacitor 20 $\mu$ F	Each	12.00	116.00	13.00	117.20
34.15	(xxxvi i)	<b>Supply and erection of Ball Bearing of different sizes for ceiling fans and exhaust fan etc.:-</b>					
	(a)	Ball Bearing 6201	Each	31.00	70.00	34.00	73.10
	(b)	Ball Bearing 6202	Each	31.00	70.00	34.00	73.10



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.15		<b>PLASTIC DISTRIBUTION BOARDS:</b>					
	(xxxvi ii)	<b>Supply and erection of Plastic enclosure DB's of various sizes on surface on wall for mounting MCB's SP/ DP/ FP including fixing and other petty material etc.:-</b>					
	(a)	Plastic enclosure MCB DB 2way	Each	12.00	102.00	13.00	103.20
	(b)	Plastic enclosure MCB DB 4way	Each	21.00	152.00	23.00	154.10
34.15		<b>PVC CHANNEL (uPVC TRUNKING):</b>					
	(xxxix)	<b>Supply and erection of PVC Channel (uPVC Trunking) with cover of various sizes (On Surface) on wall, Flat angle, internal &amp; external angle, Flat Tee, End cap and mounting boxes including the cost of joint cover, fixing and other petty material etc.:-</b>					
	(a)	PVC Channel (uPVC Trunking) 50mm x 50mm	Metre	12.00	398.00	13.00	399.20
	(b)	PVC Channel (uPVC Trunking) 100mm x 50mm	Metre	21.00	734.00	23.00	736.10
	(c)	Flat Angle 50mm x 50mm	Each	8.00	154.00	9.00	154.80
	(d)	Flat Angle 100mm x 50mm	Each	8.00	231.00	9.00	231.80
	(e)	External Angle 50mm x 50mm	Each	8.00	169.00	9.00	169.80
	(f)	External Angle 100mm x 50mm	Each	8.00	186.00	9.00	186.80
	(g)	Internal Angle 50mm x 50mm	Each	8.00	158.00	9.00	158.80
	(h)	Internal Angle 100mm x 50mm	Each	8.00	281.00	9.00	281.80
	(i)	Flat Tee 50mm x 50mm	Each	8.00	109.00	9.00	109.80
	(j)	Flat Tee 100mm x 50mm	Each	8.00	212.00	9.00	212.80
	(k)	End Cap 50mm x 50mm	Each	8.00	72.00	9.00	72.80
	(l)	End Cap 100mm x 50mm	Each	8.00	108.00	9.00	108.80
	(m)	Mounting Box 1-3 Module	Each	12.00	111.00	13.00	112.20
	(n)	Mounting Box 4-5 Module	Each	12.00	132.00	13.00	133.20
	(o)	Mounting Box 8 Module	Each	12.00	214.00	13.00	215.20

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.16		MINIATURE CIRCUIT BREAKERS/ RCBO's/ RCCB's:					
34.16 A		MINIATURE CIRCUIT BREAKERS:					
		Supply and erection of Miniature Circuit Breaker MCB's for circuit protection against overload and short circuit current fault suitable for 240/ 415 volts 50cycles AC supply with breaking capacity of 10kA, Curve-C and low watt losses as per IS/IEC 60898-1, energy limitation class-3, true contact indication, label holder facility in the existing MCB distribution board as per PWD General Specifications including connections with suitable size of thimbles/lugs:-					
	(i)	MCB Single Pole 0.5-4amp. (10kA, Curve-C)	Each	12.00	209.00	13.00	210.20
	(ii)	MCB Single Pole 6-32amp. (10kA, Curve-C)	Each	12.00	134.00	13.00	135.20
	(iii)	MCB Single Pole 40amp. (10kA, Curve-C)	Each	12.00	278.00	13.00	279.20
	(iv)	MCB Single Pole 50, 63amp. (10kA, Curve-C)	Each	12.00	321.00	13.00	322.20
	(v)	MCB Double Pole 0.5-4amp. (10kA, Curve-C)	Each	18.00	539.00	20.00	540.80
	(vi)	MCB Double Pole 6-32amp. (10kA, Curve-C)	Each	18.00	408.00	20.00	409.80
	(vii)	MCB Double Pole 40amp. (10kA, Curve-C)	Each	18.00	555.00	20.00	556.80
	(viii)	MCB Double Pole 50, 63amp. (10kA, Curve-C)	Each	18.00	654.00	20.00	655.80
	(ix)	MCB Triple Pole 0.5-4amp. (10kA, Curve-C)	Each	25.00	756.00	28.00	758.50
	(x)	MCB Triple Pole 6-32amp. (10kA, Curve-C)	Each	25.00	605.00	28.00	607.50
	(xi)	MCB Triple Pole 40amp. (10kA, Curve-C)	Each	25.00	836.00	28.00	838.50
	(xii)	MCB Triple Pole 50, 63amp. (10kA, Curve-C)	Each	25.00	932.00	28.00	934.50

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(xiii)	MCB Four Pole 0.5-4amp. (10kA, Curve-C)	Each	31.00	1040.00	34.00	1043.10
	(xiv)	MCB Four Pole 6-32amp. (10kA, Curve-C)	Each	31.00	834.00	34.00	837.10
	(xv)	MCB Four Pole 40amp. (10kA, Curve-C)	Each	31.00	1077.00	34.00	1080.10
	(xvi)	MCB Four Pole 50, 63amp. (10kA, Curve-C)	Each	31.00	1231.00	34.00	1234.10
<b>34.16 B</b>		<b>RCBO's:</b>					
		<b>Supply and erection of RCBO (Residual Current Breaker Overload) for Earth leakage, overload and short circuit protection suitable for 240/415 volts 50 cycles AC supply with breaking capacity of 10kA as per IEC 61009 in the existing MCB distribution board as per PWD General Specifications including connections with suitable size of thimbles/lugs:-</b>					
	(i)	RCBO Double Pole 16/25amp., Sensitivity 30mA	Each	18.00	2326.00	20.00	2327.80
	(ii)	RCBO Double Pole 32amp., Sensitivity 30mA	Each	18.00	2440.00	20.00	2441.80
	(iii)	RCBO Double Pole 40amp., Sensitivity 30mA	Each	18.00	2993.00	20.00	2994.80
	(iv)	RCBO Double Pole 63amp., Sensitivity 30mA	Each	18.00	3543.00	20.00	3544.80
	(v)	RCBO Double Pole 16/25amp., Sensitivity 100/300mA	Each	18.00	2405.00	20.00	2406.80
	(vi)	RCBO Double Pole 32amp., Sensitivity 100/300mA	Each	18.00	2526.00	20.00	2527.80
	(vii)	RCBO Double Pole 40amp., Sensitivity 100/300mA	Each	18.00	3072.00	20.00	3073.80
	(viii)	RCBO Double Pole 63amp., Sensitivity 100/300mA	Each	18.00	3775.00	20.00	3776.80
	(ix)	RCBO Four Pole 16/25amp., Sensitivity 30mA	Each	31.00	3079.00	34.00	3082.10
	(x)	RCBO Four Pole 32amp., Sensitivity 30mA	Each	31.00	3183.00	34.00	3186.10

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(xi)	RCBO Four Pole 40amp., Sensitivity 30mA	Each	31.00	3229.00	34.00	3232.10
	(xii)	RCBO Four Pole 63amp., Sensitivity 30mA	Each	31.00	3815.00	34.00	3818.10
	(xiii)	RCBO Four Pole 16/25amp., Sensitivity 100mA	Each	31.00	3294.00	34.00	3297.10
	(xiv)	RCBO Four Pole 32amp., Sensitivity 100mA	Each	31.00	3329.00	34.00	3332.10
	(xv)	RCBO Four Pole 40amp., Sensitivity 100mA	Each	31.00	3422.00	34.00	3425.10
	(xvi)	RCBO Four Pole 63amp., Sensitivity 100mA	Each	31.00	3886.00	34.00	3889.10
	(xvii)	RCBO Four Pole 16/25amp., Sensitivity 300mA	Each	31.00	3394.00	34.00	3397.10
	(xviii)	RCBO Four Pole 32amp., Sensitivity 300mA	Each	31.00	3394.00	34.00	3397.10
	(xix)	RCBO Four Pole 40amp., Sensitivity 300mA	Each	31.00	3461.00	34.00	3464.10
	(xx)	RCBO Four Pole 63amp., Sensitivity 300mA	Each	31.00	3886.00	34.00	3889.10
<b>34.16 C</b>		<b>RCCB's:</b>					
		<b>Supply and erection of RCCB (Residual Current Circuit Breaker) for Earth leakage protection suitable for 240/415 volts 50 cycles AC supply with breaking capacity of 10kA as per IEC 61008-1 in the existing MCB distribution board as per PWD General Specifications including connections with suitable size of thimbles/lugs:-</b>					
	(i)	RCCB Double Pole 16/25amp., Sensitivity 30mA	Each	18.00	1608.00	20.00	1609.80
	(ii)	RCCB Double Pole 32/40amp., Sensitivity 30mA	Each	18.00	1772.00	20.00	1773.80
	(iii)	RCCB Double Pole 63amp., Sensitivity 30mA	Each	18.00	2104.00	20.00	2105.80
	(iv)	RCCB Double Pole 16/25amp., Sensitivity 100mA	Each	18.00	1701.00	20.00	1702.80

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(v)	RCCB Double Pole 32/40amp., Sensitivity 100mA	Each	18.00	1772.00	20.00	1773.80
	(vi)	RCCB Double Pole 63amp., Sensitivity 100mA	Each	18.00	2276.00	20.00	2277.80
	(vii)	RCCB Double Pole 16/25amp., Sensitivity 300mA	Each	18.00	1716.00	20.00	1717.80
	(viii)	RCCB Double Pole 32/40amp., Sensitivity 300mA	Each	18.00	1859.00	20.00	1860.80
	(ix)	RCCB Double Pole 63amp., Sensitivity 300mA	Each	18.00	2312.00	20.00	2313.80
	(x)	RCCB Four Pole 16/25amp., Sensitivity 30mA	Each	31.00	2113.00	34.00	2116.10
	(xi)	RCCB Four Pole 32/40amp., Sensitivity 30mA	Each	31.00	2166.00	34.00	2169.10
	(xii)	RCCB Four Pole 63amp., Sensitivity 30mA	Each	31.00	2396.00	34.00	2399.10
	(xiii)	RCCB Four Pole 16/25amp., Sensitivity 100mA	Each	31.00	2198.00	34.00	2201.10
	(xiv)	RCCB Four Pole 32/40amp., Sensitivity 100mA	Each	31.00	2229.00	34.00	2232.10
	(xv)	RCCB Four Pole 63amp., Sensitivity 100mA	Each	31.00	2463.00	34.00	2466.10
	(xvi)	RCCB Four Pole 16/25amp., Sensitivity 300mA	Each	31.00	2212.00	34.00	2215.10
	(xvii)	RCCB Four Pole 32/40amp., Sensitivity 300mA	Each	31.00	2293.00	34.00	2296.10
	(xviii)	RCCB Four Pole 63amp., Sensitivity 300mA	Each	31.00	2505.00	34.00	2508.10

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.17		<b>SHEET METAL DOUBLE DOOR DISTRIBUTION BOARD FOR MCB's/ RCBO's/ RCCB's:</b>					
		<b>Supply and erection of sheet metal Double Door Distribution Boards IP 43- IK09 metal door (dust protected) as per IS 8623-1&amp;3, IEC 61439-1&amp;3 suitable for flush mounting with fully insulated copper busbars, shrouded neutral bars, earth bars, cement spill protector, color-coded interconnecting wire set, cable ties, blanking plates and circuit identifications label and of required no. of ways for mounting miniature circuit breakers/ RCBO's/ RCCB's in the distribution board (For SP&amp;N distribution board with provision DP MCB's/ RCCB's/ RCBO's as incomer and SP MCB's as outgoings and for TP&amp;N horizontal distribution board with provision TPN/ FP MCB's/ RCCB's/ RCBO's as incomer and SP MCB's as outgoings) as per PWD General specifications including connections with suitable size of thimbles and bonding to existing earth etc:-</b>					
	(i)	SP&N Double Door Distribution Board 4 way each	Each	117.00	909.00	129.00	920.70
	(ii)	SP&N Double Door Distribution Board 8 way each	Each	145.00	1169.00	160.00	1183.50
	(iii)	SP&N Double Door Distribution Board 12 way each	Each	175.00	1484.00	193.00	1501.50
	(iv)	SP&N Double Door Distribution Board 16 way each	Each	175.00	1786.00	193.00	1803.50
	(v)	TP&N Horizontal Double Door Distribution Board 4 way each	Each	219.00	2406.00	241.00	2427.90
	(vi)	TP&N Horizontal Double Door Distribution Board 6 way each	Each	292.00	2965.00	321.00	2994.20
	(vii)	TP&N Horizontal Double Door Distribution Board 8 way each	Each	292.00	3540.00	321.00	3569.20
	(viii)	TP&N Horizontal Double Door Distribution Board 12 way each	Each	350.00	4910.00	385.00	4945.00
	(ix)	TP&N Vertical Double Door Distribution Board 4 way each	Each	219.00	5585.00	241.00	5606.90

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(x)	TP&N Vertical Double Door Distribution Board 8 way each	Each	292.00	7031.00	321.00	7060.20
	(xi)	TP&N Vertical Double Door Distribution Board 12 way each	Each	350.00	8823.00	385.00	8858.00
	(xii)	AC Plug and Socket SP&N with provision of One Single Pole MCB 20amp.	Each	117.00	727.00	129.00	738.70
	(xiii)	AC Plug and Socket TP&N with provision of One Triple Pole MCB 20amp.	Each	145.00	1454.00	160.00	1468.50
	(xiv)	AC Plug and Socket TP&N with provision of One Triple Pole MCB 30/32amp.	Each	145.00	1994.00	160.00	2008.50
34.17	(xv)	<b>Supply and erection of sheet metal double door Phase segregated distribution boards IP 43-IK09 metal door (dust protected) as per IS:8623-1&amp;3, IEC61439-1&amp;3 suitable for flush mounting with fully insulated copper busbars for each phase, 3 Nos. shrouded neutral bars, 3 Nos. earth bars, cement spill protector, color-coded interconnecting wire set, cable ties, blanking plates and circuit identifications label, compartmentalizing each phase (separated incomer, sub incomer &amp; outgoing) and of required no. of ways for mounting FP MCB's as incomer, DP/RCBO's/RCCB's as sub incomer and SP MCB's as outgoings in the distribution board as per PWD General specifications including connections with suitable size of thimbles and bonding to existing earth etc.:-</b>					
	(a)	TP&N Double Door Phase Segregated Distribution Board 4 way each	Each	219.00	5209.00	241.00	5230.90
	(b)	TP&N Double Door Phase Segregated Distribution Board 6 way each	Each	292.00	5919.00	321.00	5948.20
	(c)	TP&N Double Door Phase Segregated Distribution Board 8 way each	Each	292.00	6738.00	321.00	6767.20
	(d)	TP&N Double Door Phase Segregated Distribution Board 12 way each	Each	350.00	8389.00	385.00	8424.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.17	(xvi)	Supply and erection of sheet metal double door vertical distribution boards IP 43-IK09 metal door (dust protected) as per IS:8623-1&3, IEC 61439-1&3 suitable for flush mounting with fully insulated copper busbars for each phase, 2 Nos. shrouded neutral bars, 2Nos. earth bars, cement spill protector, color-coded interconnecting wire set, cable ties, blanking plates and circuit identifications label and of required no. of ways for mounting MCCB's as incomer and outgoings SP/TP miniature circuit breakers in the distribution board as per PWD General specifications including connections with suitable size of thimbles and bonding to existing earth etc.:-					
	(a)	TP&N Double Door Vertical DB's 4 way each (With provision of FP MCCB upto 125amp)	Each	437.00	6305.00	481.00	6348.70
	(b)	TP&N Double Door Vertical DB's 8 way each (With provision of FP MCCB upto 125amp.)	Each	577.00	7981.00	635.00	8038.70
	(c)	TP&N Double Door Vertical DB's 12 way each (With provision of FP MCCB upto 125amp.)	Each	699.00	10521.00	769.00	10590.90
	(d)	TP&N Double Door Vertical DB's 4 way each (With provision of FP MCCB 160amp)	Each	437.00	6886.00	481.00	6929.70
	(e)	TP&N Double Door Vertical DB's 8 way each (With provision of FP MCCB 160amp.)	Each	577.00	8587.00	635.00	8644.70
	(f)	TP&N Double Door Vertical DB's 12 way each (With provision of FP MCCB 160amp.)	Each	699.00	11359.00	769.00	11428.90
	(g)	TP&N Double Door Vertical DB's 4 way each (With provision of FP MCCB 200-250amp.)	Each	437.00	10700.00	481.00	10743.70
	(h)	TP&N Double Door Vertical DB's 8 way each (With provision of FP MCCB 200-250amp.)	Each	577.00	13143.00	635.00	13200.70



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(i)	TP&N Double Door Vertical DB's 12 way each (With provision of FP MCCB 200-250amp.)	Each	699.00	14138.00	769.00	14207.90
34.17	(xvii)	<b>Supply and erection of sheet metal Cable End Box (Make is same as MCB Distribution Board) mounting on the top or bottom of the MCB Distribution Board (Either Horizontal or Vertical) to keep loose wires &amp; cables as per PWD General specifications including petty materials etc as required:-</b>					
	(a)	Cable End Box for SPN 4Way	Each	117.00	426.00	129.00	437.70
	(b)	Cable End Box for SPN 8 Way	Each	145.00	496.00	160.00	510.50
	(c)	Cable End Box for SPN 12 Way	Each	175.00	584.00	193.00	601.50
	(d)	Cable End Box for SPN 16 Way	Each	175.00	631.00	193.00	648.50
	(e)	Cable End Box for TPN 4 Way	Each	219.00	783.00	241.00	804.90
	(f)	Cable End Box for TPN 6 Way	Each	292.00	881.00	321.00	910.20
	(g)	Cable End Box for TPN 8 Way	Each	292.00	1003.00	321.00	1032.20
	(h)	Cable End Box for TPN 12 Way	Each	350.00	1218.00	385.00	1253.00
	(i)	Cable End Box for TPN Vertical 4/8/12Way	Each	219.00	1316.00	241.00	1337.90
34.18		<b>SHEET METAL IRON CLAD SWITCHES:</b>					
		<b>Supply and erection of sheet metal Iron Clad Switches on existing surface with G.I. bolts &amp; nuts/ rag bolts and nuts etc., according to the size of holes in the body of the enclosure including connections with suitable size of thimbles and bonding to the existing earth as Per PWD General Specifications:-</b>					
	(i)	ICDP Switch 32amp., 415volts	Each	198.00	1158.00	218.00	1177.80
	(ii)	ICDP Switch 63amp., 415volts	Each	198.00	2008.00	218.00	2027.80
	(iii)	ICDP Switch 100amp., 415volts	Each	237.00	3886.00	261.00	3909.70
	(iv)	ICDP Switch 200amp., 415volts	Each	237.00	10554.00	261.00	10577.70
	(v)	ICTPN Switch 32amp., 415volts	Each	237.00	1362.00	261.00	1385.70

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(vi)	ICTPN Switch 63amp., 415volts	Each	237.00	2904.00	261.00	2927.70
	(vii)	ICTPN Switch 100amp., 415volts	Each	296.00	4927.00	326.00	4956.60
	(viii)	ICTPN Switch 200amp., 415volts	Each	474.00	7161.00	521.00	7208.40
	(ix)	ICTPN Switch 320amp., 415volts	Each	790.00	10054.00	869.00	10133.00
	(x)	ICTPN Switch 400amp., 415volts	Each	790.00	12723.00	869.00	12802.00
<b>34.18</b>	<b>PORCELAIN FUSE UNITS:</b>						
	(xi)	<b>Supply and erection of Porcelain Fuse Unit with Extension Strip on existing surface with G.I. bolts &amp; nuts/ rag bolts and nuts etc., including connections with suitable size of thimbles and bonding to the existing earth as Per PWD General Specifications :-</b>					
	(a)	Porcelain Fuse Unit 16Amp., 240volts	Each	39.00	77.00	43.00	80.90
	(b)	Porcelain Fuse Unit 32Amp., 415volts	Each	39.00	163.00	43.00	166.90
	(c)	Porcelain Fuse Unit 63Amp., 415volts,	Each	39.00	278.00	43.00	281.90
	(d)	Porcelain Fuse Unit 100Amp., 415volts with Extension Strip	Each	59.00	555.00	65.00	560.90
	(e)	Porcelain Fuse Unit 200Amp., 415volts with Extension Strip	Each	59.00	1108.00	65.00	1113.90
	(f)	Porcelain Fuse Unit 320Amp., 415volts with Extension Strip	Each	98.00	1741.00	108.00	1750.80
	(g)	Porcelain Fuse Unit 400Amp., 415volts with Extension Strip	Each	98.00	2004.00	108.00	2013.80
	(h)	Porcelain Fuse Unit 500Amp., 415volts with Extension Strip	Each	98.00	2334.00	108.00	2343.80

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.19		<b>SHEET METAL IRON CLAD CHANGEOVER SWITCHES:</b>					
		<b>Supply and erection of sheet metal Iron Clad Changeover Switch on existing surface with G.I. bolts &amp; nuts/rag bolts and nuts etc., according to the size of holes in the body of the switch including connections with suitable size of thimbles and bonding to the existing earth as per PWD General Specifications:</b>					
	(i)	ICDP Changeover Switch 32amp., 415volts	Each	237.00	1230.00	261.00	1253.70
	(ii)	ICDP Changeover Switch 63amp., 415volts	Each	237.00	2423.00	261.00	2446.70
	(iii)	ICDP Changeover Switch 100amp., 415volts	Each	296.00	7841.00	326.00	7870.60
	(iv)	ICDP Changeover Switch 200amp., 415volts	Each	296.00	10697.00	326.00	10726.60
	(v)	IC Four Pole Changeover Switch 32amp., 415volts	Each	296.00	1645.00	326.00	1674.60
	(vi)	IC Four Pole Changeover Switch 63amp., 415volts	Each	296.00	3332.00	326.00	3361.60
	(vii)	IC Four Pole Changeover Switch 100amp., 415volts	Each	474.00	5635.00	521.00	5682.40
	(viii)	IC Four Pole Changeover Switch 200amp., 415volts	Each	790.00	8736.00	869.00	8815.00
	(ix)	IC Four Pole Changeover Switch 320amp., 415volts	Each	888.00	15877.00	977.00	15965.80
	(x)	IC Four Pole Changeover Switch 400amp., 415volts	Each	888.00	20444.00	977.00	20532.80

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.20		<b>SHEET METAL BUS BAR CHAMBERS (COPPER STRIPS):</b>					
		<b>Supply and erection of sheet metal bus-bar chamber (factory fabricated) duly powder coated on existing surface with required 4Nos. of tin plated copper bus-bar strips of suitable length and cross-sectional area mounted on DMC/ SMC moulds at sufficient distance, enclosure made of M.S. sheet 1.6mm thick with hinged cover and lock, fitted with dust excluding gaskets and secured with sufficient no. of cadmium plated iron screws and of given overall dimensions and to be fixed with G.I. bolts and nuts/ rag bolts and nuts etc. complete with all accessories including connections with suitable size of thimbles, bonding to the existing earth and painting etc. as desired by the Engineer-in-charge at site:-</b>					
	(i)	Bus Bar Chamber 63amp., 415volts Overall Dimensions (300mm x 345mm x 120mm) nominal	Each	296.00	3975.00	326.00	4004.60
	(ii)	Bus Bar Chamber 63amp., 415volts Overall Dimensions (350mm x 450mm x 150mm) nominal	Each	296.00	4648.00	326.00	4677.60
	(iii)	Bus Bar Chamber 100amp., 415volts Overall Dimensions (300mm x 345mm x 120mm) nominal	Each	391.00	4700.00	430.00	4739.10
	(iv)	Bus Bar Chamber 100amp., 415volts Overall Dimensions (350mm x 450mm x 150mm) nominal	Each	391.00	5331.00	430.00	5370.10
	(v)	Bus Bar Chamber 100amp., 415volts Overall Dimensions (455mm x 455mm x 150mm) nominal	Each	391.00	6339.00	430.00	6378.10
	(vi)	Bus Bar Chamber 200amp., 415volts Overall Dimensions (350mm x 450mm x 150mm) nominal	Each	474.00	6254.00	521.00	6301.40
	(vii)	Bus Bar Chamber 200amp., 415volts Overall Dimensions (455mm x 455mm x 150mm) nominal	Each	474.00	7598.00	521.00	7645.40

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(viii)	Bus Bar Chamber 200amp., 415volts Overall Dimensions (610mm x 510mm x 215mm) nominal	Each	592.00	9313.00	651.00	9372.20
	(ix)	Bus Bar Chamber 200amp., 415volts Overall Dimensions (780mm x 510mm x 215mm) nominal	Each	592.00	11036.00	651.00	11095.20
<b>34.21</b>		<b>SWITCH DISCONNECTOR FUSE UNIT:</b>					
<b>34.21 A</b>		<b>SWITCH DISCONNECTOR FUSE UNIT (Without Sheet Enclosure):</b>					
		<b>Supply and erection of Switch Disconnector Fuse Unit with HRC Fuses (Suitable for DIN HRC Fuses) in the existing Cubical Panel Confirms to IS 13947 (Part-III), IEC 60947-3 complete with G.I. Bolts, Nuts &amp; Connections on both sides of switch with suitable size of thimbles, including cost of DIN HRC fuses as per PWD General Specifications (Panel mounting Cubicle type):-</b>					
	(i)	SDF TP&N 32Amp., 415volts	Each	296.00	1818.00	326.00	1847.60
	(ii)	SDF TP&N 63Amp., 415volts	Each	296.00	2303.00	326.00	2332.60
	(iii)	SDF TP&N 100Amp., 415volts	Each	391.00	4173.00	430.00	4212.10
	(iv)	SDF TP&N 125Amp., 415volts	Each	391.00	4423.00	430.00	4462.10
	(v)	SDF TP&N 160Amp., 415volts	Each	391.00	5392.00	430.00	5431.10
	(vi)	SDF TP&N 200Amp., 415volts	Each	391.00	6069.00	430.00	6108.10
	(vii)	SDF TP&N 250Amp., 415volts	Each	592.00	7585.00	651.00	7644.20
	(viii)	SDF TP&N 320Amp., 415volts	Each	592.00	9972.00	651.00	10031.20
	(ix)	SDF TP&N 400Amp., 415volts	Each	592.00	11022.00	651.00	11081.20
	(x)	SDF TP&N 630Amp., 415volts	Each	888.00	17945.00	977.00	18033.80
	(xi)	SDF Four Pole 63Amp., 415volts	Each	296.00	2345.00	326.00	2374.60
	(xii)	SDF Four Pole 100Amp., 415volts	Each	391.00	3717.00	430.00	3756.10
	(xiii)	SDF Four Pole 125Amp., 415volts	Each	391.00	4599.00	430.00	4638.10
	(xiv)	SDF Four Pole 200Amp., 415volts	Each	391.00	6071.00	430.00	6110.10
	(xv)	SDF Four Pole 250Amp., 415volts	Each	592.00	7327.00	651.00	7386.20

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(xvi)	SDF Four Pole 320Amp., 415volts	Each	592.00	9738.00	651.00	9797.20
	(xvii)	SDF Four Pole 400Amp., 415volts	Each	592.00	11214.00	651.00	11273.20
	(xviii)	SDF Four Pole 630Amp., 415volts	Each	888.00	15007.00	977.00	15095.80
<b>34.21 B</b>		<b>SWITCH DISCONNECTOR FUSE UNIT (With Sheet Enclosure):</b>					
		<b>Supply and erection of Switch Disconnecter Fuse Unit with HRC Fuses (Suitable for DIN HRC Fuses) in sheet enclosure on the existing surface Confirms to IS 13947 (Part-III), IEC 60947-3 complete with G.I. Bolts, Nuts &amp; Connections on both sides of switch with suitable size of thimbles, including cost of DIN HRC fuses as per PWD General Specifications:-</b>					
	(i)	SDF TP&N 32Amp., 415volts (With Sheet Enclosure)	Each	296.00	2814.00	326.00	2843.60
	(ii)	SDF TP&N 63Amp., 415volts (With Sheet Enclosure)	Each	296.00	3298.00	326.00	3327.60
	(iii)	SDF TP&N 100Amp., 415volts (With Sheet Enclosure)	Each	391.00	5165.00	430.00	5204.10
	(iv)	SDF TP&N 125Amp., 415volts (With Sheet Enclosure)	Each	391.00	5419.00	430.00	5458.10
	(v)	SDF TP&N 160Amp., 415volts (With Sheet Enclosure)	Each	391.00	7145.00	430.00	7184.10
	(vi)	SDF TP&N 200Amp., 415volts (With Sheet Enclosure)	Each	391.00	7800.00	430.00	7839.10
	(vii)	SDF TP&N 250Amp., 415volts (With Sheet Enclosure)	Each	592.00	9338.00	651.00	9397.20
	(viii)	SDF TP&N 320Amp., 415volts (With Sheet Enclosure)	Each	592.00	12017.00	651.00	12076.20
	(ix)	SDF TP&N 400Amp., 415volts (With Sheet Enclosure)	Each	592.00	13067.00	651.00	13126.20
	(x)	SDF TP&N 630Amp., 415volts (With Sheet Enclosure)	Each	888.00	20571.00	977.00	20659.80

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.22		ON LOAD CHANGEOVER SWITCH:					
34.22 A		ON LOAD CHANGEOVER SWITCH (Without Sheet Enclosure):					
		Supply and erection of On Load Change over Switch with advance neutral UNIT (Panel mounting Cubical type) in the existing Cubical Panel Confirms to IS 13947 (Part-3) complete with G.I. Bolts, Nuts & Connections on both sides of switch with suitable size of thimbles as per PWD General Specifications:-					
	(i)	On Load Change Over Switch Four Pole 63amp., 415volts	Each	296.00	3325.00	326.00	3354.60
	(ii)	On Load Change Over Switch Four Pole 100amp., 415volts	Each	391.00	4366.00	430.00	4405.10
	(iii)	On Load Change Over Switch Four Pole 125amp., 415volts	Each	391.00	6303.00	430.00	6342.10
	(iv)	On Load Change Over Switch Four Pole 160amp., 415volts	Each	391.00	6838.00	430.00	6877.10
	(v)	On Load Change Over Switch Four Pole 200amp., 415volts	Each	391.00	8106.00	430.00	8145.10
	(vi)	On Load Change Over Switch Four Pole 250amp., 415volts	Each	592.00	11810.00	651.00	11869.20
	(vii)	On Load Change Over Switch Four Pole 320amp., 415volts	Each	592.00	12436.00	651.00	12495.20
	(viii)	On Load Change Over Switch Four Pole 400amp., 415volts	Each	592.00	17826.00	651.00	17885.20
	(ix)	On Load Change Over Switch Four Pole 630amp., 415volts	Each	888.00	21151.00	977.00	21239.80
	(x)	On Load Change Over Switch Four Pole 800amp., 415volts	Each	1184.00	31462.00	1302.00	31580.40
	(xi)	On Load Change Over Switch Four Pole 1000amp., 415volts	Each	1184.00	52686.00	1302.00	52804.40

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.22 B		<b>ON LOAD CHANGEOVER SWITCH (With Sheet Enclosure):</b>					
		<b>Supply and erection of On Load Change over Switch with advance neutral UNIT in sheet enclosure on the existing surface. (Confirms to IS 13947 (Part-3). complete with G.I. Bolts, Nuts etc. according to the size of holes in the body of the enclosure &amp; Connections on both sides of switch with suitable size of thimbles as per PWD General Specifications:-</b>					
	(i)	On Load Change Over Switch Four Pole 63amp., 415volts (With Sheet Enclosure)	Each	296.00	4409.00	326.00	4438.60
	(ii)	On Load Change Over Switch Four Pole 100amp., 415volts (With Sheet Enclosure)	Each	391.00	5642.00	430.00	5681.10
	(iii)	On Load Change Over Switch Four Pole 125amp., 415volts (With Sheet Enclosure)	Each	391.00	8248.00	430.00	8287.10
	(iv)	On Load Change Over Switch Four Pole 160amp., 415volts (With Sheet Enclosure)	Each	391.00	8787.00	430.00	8826.10
	(v)	On Load Change Over Switch Four Pole 200amp., 415volts (With Sheet Enclosure)	Each	391.00	10051.00	430.00	10090.10
	(vi)	On Load Change Over Switch Four Pole 250amp., 415volts (With Sheet Enclosure)	Each	592.00	14293.00	651.00	14352.20
	(vii)	On Load Change Over Switch Four Pole 320amp., 415volts (With Sheet Enclosure)	Each	592.00	14920.00	651.00	14979.20
	(viii)	On Load Change Over Switch Four Pole 400amp., 415volts (With Sheet Enclosure)	Each	592.00	21424.00	651.00	21483.20
	(ix)	On Load Change Over Switch Four Pole 630amp., 415volts (With Sheet Enclosure)	Each	888.00	24749.00	977.00	24837.80
	(x)	On Load Change Over Switch Four Pole 800amp., 415volts (With Sheet Enclosure)	Each	1184.00	36813.00	1302.00	36931.40
	(xi)	On Load Change Over Switch Four Pole 1000amp., 415volts (With Sheet Enclosure)	Each	1184.00	67290.00	1302.00	67408.40



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.23		LT PANELS & MCCB's (MOULDED CASE CIRCUIT BREAKERS):					
34.23 A		LT PANELS:					
		<p>Designing, Supply, Erection, Testing &amp; commissioning of indoor Type LT cubical panel enclosure (dust, vermin and interchangeable modules with facilities for extensions or reduction as per the space or requirements). The Panel shall be suitable for operation at 415+6% Volts, 50HZ, 3 phase 4 wire &amp; earth system. The assembly manufacturer should be ISO approved and CPRI tested for short circuit of (minimum 50kA) as well as IP degree of protection (IP 54/55).</p> <p>Fabrication:- Panel shall be made from 14/16 SWG CRCA sheet, conforming to IS 8623/1977-82. The sheet metal used for the fabrication of control panel will be 2mm for load bearing member's door and fittings plates etc. the partitions and other non load bearing members will be fabricated out of 1.6mm sheet, the sheet will be of mild steel CRCA type. The base channel will be made out of 75 x 40 x 5mm rolled channel.</p>					
		<p>The door should be double folded without edge and the gasket should be 'S' type puffed neutral rubber gasket for long life. The hinges of the door should be bolted type with double hole arrangement. The panel door lock should be quick openable type spring loaded. There should not be any special tool or key to open the lock. Minimum depth 400mm / wide 300 mm for busbar/ Cable ally at the front of the panel. The panel will be free standing floor mounting type having provision for cable entry from bottom/top with cable glands etc.</p>					
		<p>The fabrication should be such that all the member i.e. vertical/horizontal should be detachable type i.e. total bolted. In case of any changes required at site. it should be possible then and their self without any cutting or welding. The fabrication of the panel in 3B construction fully compartmentalized type i.e. bus bar chamber as well as the cable chamber should be totally isolated from the feeder chamber. Where there crossing of the wire or bus links. It should have proper rubber gourmets or non-hygroscopic material. No live part should be in visible condition.</p>					

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
		<p><b>Painting:-</b> The sheet metal is sprayed with corrosion resistant etch Primer. The finishing treatment shall be applicable with air drying paint (7/9 tank Powder coated process should present in company premises) after necessary putty work .</p> <p><b>Busbars:-</b>The panel shall be provided with TPN aluminium busbar of suitable size according to the size of MCCB's. Busbar shall be of high conductivity (53% to 58%) E91-E Grade aluminium (1A/Sq.mm). All Busbar will be air insulated with codified in Red, Yellow, Blue &amp; Black as per standard for cable termination with the help of extended busbar only with proper adjustable cable supports. The main busbar would be supported upon non-hygroscopic SMC/DMC supports.</p>					
		<p><b>Metering:-</b>The panel shall be completed with digital metering unit (with selector switches, voltmeter &amp; ammeter) epoxy insulator, gasket, PVC sleeves, CT's &amp; L.E.D. type indicator etc.</p> <p>Manufacturer of Panel should be CPRI Approved (Approval not older then 5 years) &amp; ISO certified (Manufacturer workshop as per ISO 9001: 2015 standard) The Concerned contractor shall be approved the detailed drawing of panel with complete specification from the Engineer in charge at site.</p> <p>Detail of capacities of MCCB's to be installed in the cubical panel Enclosure (Excluding the cost of MCCB's) as per following:-</p>					
	(i)	LT Panel enclosure having space for 1No. Incomer MCCB 160Amp. and 4Nos. outgoing MCCB's 40amp. to 100amp. according to the requirement at site (Approx. size 1825 x 900 x 300mm)	Each	1749.00	51684.00	1924.00	51858.90
	(ii)	LT Panel enclosure having space for 1No. Incomer MCCB 200Amp. and 4Nos. outgoing MCCB's 40amp. to 100amp. according to the requirement at site (Approx. size 1825 x 1000 x 300mm)	Each	1749.00	61143.00	1924.00	61317.90
	(iii)	LT Panel enclosure having space for 1No. Incomer MCCB 250Amp. and 6Nos. outgoing MCCB's 40amp. to 125amp. according to the requirement at site (Approx. size 1300 x 1650 x 400mm)	Each	2313.00	79453.00	2544.00	79684.30

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(iv)	LT Panel enclosure having space for 1No. Incomer MCCB 250Amp. and 8Nos. outgoing MCCB's 40amp. to 100amp. according to the requirement at site (Approx. size 1575 x 1700 x 400mm)	Each	2877.00	91461.00	3165.00	91748.70
	(v)	LT Panel enclosure having space for 1No. Incomer MCCB 400Amp. and 4Nos. outgoing MCCB's 100amp. to 160amp. according to the requirement at site (Approx. size 2025 x 1100 x 400mm)	Each	2313.00	76976.00	2544.00	77207.30
	(vi)	LT Panel enclosure having space for 1No. Incomer MCCB 400Amp. and 8Nos. outgoing MCCB's 40amp. to 160amp. according to the requirement at site (Approx. size 1750 x 1750 x 400mm)	Each	3442.00	106178.00	3786.00	106522.20
	(vii)	LT Panel enclosure having space for 1No. Incomer MCCB 400Amp. and 10Nos. outgoing MCCB's 40amp. to 160amp. according to the requirement at site (Approx. size 2025 x 1800 x 400mm)	Each	4006.00	117700.00	4407.00	118100.60
	(viii)	LT Panel enclosure having space for 1No. Incomer MCCB 630Amp. and 6Nos. outgoing MCCB's 40amp. to 160amp. according to the requirement at site (Approx. size 1475 x 1800 x 400mm)	Each	3442.00	95099.00	3786.00	95443.20
	(ix)	LT Panel enclosure having space for 1No. Incomer MCCB 630Amp. and 6Nos. outgoing MCCB's 40amp. to 250amp. (Option: MCCB 200-250amp.= 1No. and MCCB's 40-100amp.= 5Nos.) according to the requirement at site (Approx. size 1475 x 1800 x 400mm)	Each	4006.00	95663.00	4407.00	96063.60
	(x)	LT Panel enclosure having space for 1No. Incomer MCCB 630Amp. and 6Nos. outgoing MCCB's 40amp. to 250amp. (Option: MCCB 200-250amp.= 2Nos. and MCCB's 40-100amp.= 4Nos.) according to the requirement at site (Approx. size 1475 x 1800 x 400mm)	Each	4006.00	95663.00	4407.00	96063.60

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.23 B		MCCB's (FOR PANELS & SHEET ENCLOSURE):					
		Supply and erection of Moulded Case Circuit Breaker (Panel mounting Cubical type) in the existing Cubical Panel (confirm to IEC:60947-2) having Ics=100% Icu, 100% neutral with spreader terminal links, Extended rotary handle and relevant PWD general specifications complete with G.I. Bolts, Nuts & Connection on both sides of MCCB with suitable size of thimbles etc:-					
	(i)	MCCB Four Pole 40amp., 415volts, ≥25kA Fixed Magnetic and Adjustable Thermal Setting	Each	296.00	5251.00	326.00	5280.60
	(ii)	MCCB Four Pole 63/80/100amp., 415volts, ≥25kA Fixed Magnetic and Adjustable Thermal Setting	Each	296.00	5251.00	326.00	5280.60
	(iii)	MCCB Four Pole 125amp., 415volts, ≥25kA Fixed Magnetic and Adjustable Thermal Setting	Each	391.00	6334.00	430.00	6373.10
	(iv)	MCCB Four Pole 160amp., 415volts, ≥25kA Fixed Magnetic and Adjustable Thermal Setting	Each	391.00	7635.00	430.00	7674.10
	(v)	MCCB Four Pole 200amp., 415volts, ≥25kA Fixed Magnetic and Adjustable Thermal Setting	Each	391.00	9480.00	430.00	9519.10
	(vi)	MCCB Four Pole 250amp., 415volts, ≥25kA Fixed Magnetic and Adjustable Thermal Setting	Each	592.00	10425.00	651.00	10484.20
	(vii)	MCCB Four Pole 250amp., 415volts, ≥36kA Microprocessor Based Adjustable Thermal and Magnetic Setting	Each	592.00	17645.00	651.00	17704.20
	(viii)	MCCB Four Pole 400amp., 415volts, ≥36kA Microprocessor Based Adjustable Thermal and Magnetic Setting	Each	592.00	23901.00	651.00	23960.20
	(ix)	MCCB Four Pole 630amp., 415volts, ≥36kA Microprocessor Based Adjustable Thermal and Magnetic Setting	Each	888.00	26020.00	977.00	26108.80

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.23 C		MCCB's (MOULDED CASE CIRCUIT BREAKER):					
		Supply and erection of Moulded Case Circuit Breaker (Panel mounting Cubical type) in the existing Cubical Panel (confirm to IEC:60947-2) having Ics=100% Icu, 100% neutral with spreader links and relevant PWD general specifications complete with G.I. Bolts, Nuts & Connection on both sides of MCCB with suitable size of thimbles etc:-					
	(i)	MCCB Four Pole 40amp., 415volts, $\geq 25$ kA Fixed Magnetic and Adjustable Thermal Setting	Each	296.00	4493.00	326.00	4522.60
	(ii)	MCCB Four Pole 63/80/100amp., 415volts, $\geq 25$ kA Fixed Magnetic and Adjustable Thermal Setting	Each	296.00	4493.00	326.00	4522.60
	(iii)	MCCB Four Pole 125amp., 415volts, $\geq 25$ kA Fixed Magnetic and Adjustable Thermal Setting	Each	391.00	5576.00	430.00	5615.10
	(iv)	MCCB Four Pole 160amp., 415volts, $\geq 25$ kA Fixed Magnetic and Adjustable Thermal Setting	Each	391.00	6877.00	430.00	6916.10
	(v)	MCCB Four Pole 200amp., 415volts, $\geq 25$ kA Fixed Magnetic and Adjustable Thermal Setting	Each	391.00	8722.00	430.00	8761.10
	(vi)	MCCB Four Pole 250amp., 415volts, $\geq 25$ kA Fixed Magnetic and Adjustable Thermal Setting	Each	592.00	9667.00	651.00	9726.20
	(vii)	MCCB Four Pole 250amp., 415volts, $\geq 36$ kA Microprocessor Based Adjustable Thermal and Magnetic Setting	Each	592.00	17500.00	651.00	17559.20
	(viii)	MCCB Four Pole 400amp., 415volts, $\geq 36$ kA Microprocessor Based Adjustable Thermal and Magnetic Setting	Each	592.00	23143.00	651.00	23202.20
	(ix)	MCCB Four Pole 630amp., 415volts, $\geq 36$ kA Microprocessor Based Adjustable Thermal and Magnetic Setting	Each	888.00	25262.00	977.00	25350.80

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.23 D		MS SHEET ENCLOSURE FOR MCCB's:					
	(i)	Supply & Erection of indoor type MCCB enclosure of suitable size having provision for MCCB with extended rotary handle. The Enclosure shall be made from 14/16 SWG CRCA sheet, confirming to IS 8623/1977-82. The door should be double folded without edge and the gasket should be 'S' type puffed neutral rubber gasket for long life. The hinges of the door should be bolted type with double hole arrangement. The Enclosure door lock should be quick openable type spring loaded. There should not be any special tool or key to open the lock. The Enclosure will be wall mounting type having provision for cable entry from bottom/top with cable glands etc. The sheet metal is sprayed with corrosion resistant etch primer. The finishing treatment shall be applicable with air drying paint (7/9 tank Powder coated process should present in company pemises) after necessary putty work:-					
	(a)	MS Sheet Enclosure having provision for MCCB 40-160Amp.with extended rotary handle (Approx. Size 500mm x 300mm x 200mm)	Each	296.00	2266.00	326.00	2295.60
	(b)	MS Sheet Enclosure having provision for MCCB 200-630Amp.with extended rotary handle (Approx. Size 750mm x 300mm x 250mm)	Each	395.00	4218.00	435.00	4257.50

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.24	<b>AIR CIRCUIT BREAKERS:</b>						
	Supply & erection of Air circuit-breaker of suitable ampere rating at 415V, 50Hz, 4 Pole Electrical draw-out type with inbuilt microprocessor based trip sytem with thermal memory, zone selective interlocking, pre trip alarm, individual fault indicating LED, O/C, S/C, Instantaneous & E/F internal protection, Impulse withstand voltage 12kV, rated insulation voltage 1000V, rated operational voltage 690V, fully rated neutral, protection against overload & shortcircuit with setting at 50%-100%-OFF, suitability for isolation as per IEC 60947-2. The ACB should be capable for recording 10 fault history, LCD Display of current & voltage, Icu = Ics = Icw (1 Sec.) = 50kA with no derating upto 50 degree celcius on the existing industrial panel (With terminal adapter on load and line side of breaker), including bonding to the existing earth and making necessary connections with suitable size of thimbles as required by the Engineer-in-Charge at site and as per PWD General Specifications:-						
	(i)	Air Circuit Breaker Four Pole, 800amp., 415volts (Electrical Draw-Out Type)	Each	3497.00	127590.00	3847.00	127939.70
	(ii)	Air Circuit Breaker Four Pole, 1000amp., 415volts (Electrical Draw-Out Type)	Each	3934.00	134016.00	4327.00	134409.40
	(iii)	Air Circuit Breaker Four Pole, 1250amp., 415volts (Electrical Draw-Out Type)	Each	4372.00	153565.00	4809.00	154002.20
	(iv)	Air Circuit Breaker Four Pole, 1600amp., 415volts (Electrical Draw-Out Type)	Each	4809.00	164768.00	5290.00	165248.90
	(v)	Air Circuit Breaker Four Pole, 2000amp., 415volts (Electrical Draw-Out Type)	Each	5246.00	192592.00	5771.00	193116.60
	(vi)	Air Circuit Breaker Four Pole, 2500amp., 415volts (Electrical Draw-Out Type)	Each	5683.00	219723.00	6251.00	220291.30
	(vii)	Air Circuit Breaker Four Pole, 3200amp., 415volts (Electrical Draw-Out Type)	Each	6120.00	275966.00	6732.00	276578.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.25		<b>CABLE TRAY:</b>					
		Supply and erection of MS perforated cable tray (MS Sheet thickness 2mm) with DA gray paint on the existing surface with the help of MS angle iron support (to be painted with approved paint) of size 50mm x 50mm x 6mm thick to be fixed with fastners/ nut & bolts etc., complete in all respect as desired by the Engineer-in-charge and as per PWD General Specifications:-					
	(i)	Cable Tray Size 150mm x 50mm x 50mm (2mm thick)	Metre	154.00	723.00	169.00	738.40
	(ii)	Cable Tray Size 300mm x 50mm x 50mm (2mm thick)	Metre	195.00	987.00	215.00	1006.50
	(iii)	Cable Tray Size 450mm x 50mm x 50mm (2mm thick)	Metre	268.00	1290.00	295.00	1316.80
34.26		<b>AUTOMATIC VOLTAGE STABLIZER, TIMER:</b>					
34.26 A		<b>AUTOMATIC VOLTAGE STABLIZER:</b>					
		Supply and erection of Single phase copper wound Automatic voltage stablizer of suitable capacity electronically controlled circuit with input voltage 140-260 volts single phase AC supply and output voltage 220 ± 5% volts single phase AC supply having main silicon core copper wound step up transformer with suitable nos. of turns on primary side and secondary side the transformer should be fully insulated inside the MS sheet box of suitable size. There should be power control relay and single pole MCB (C-curve, 10kA) of suitable capacity complete with internal copper wiring along with amp. meter and volt meter, high voltage cut off 280 volt input (240 volt output) and 90 volt maximum boost and overloading protection to be provided:-					
	(i)	Automatic Voltage Stablizer 2 KVA	Each	118.00	3657.00	130.00	3668.80
	(ii)	Automatic Voltage Stablizer 3 KVA	Each	118.00	4541.00	130.00	4552.80



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(iii)	Automatic Voltage Stabilizer 4 KVA	Each	118.00	5222.00	130.00	5233.80
	(iv)	Automatic Voltage Stabilizer 5 KVA	Each	198.00	5981.00	218.00	6000.80
	(v)	Automatic Voltage Stabilizer 7.5 KVA	Each	395.00	8900.00	435.00	8939.50
	(vi)	Automatic Voltage Stabilizer 10 KVA	Each	592.00	10458.00	651.00	10517.20
<b>34.26 B</b>		<b>TIMER:</b>					
	(i)	S/E of Microprocessor Based Street Light Controller with digital time switch daily programmed with stand by lithium battery with back up of 6 years with min. time between 2 switching operations is 1 minute, three pole power contactors 40A. with coil voltage 220-230V AC with 1 no. aux. contact NO, MCB 2 pole 40amp. (C-Curve, 10kA) & power wiring with single core PVC insulated FR cable 10 sq. mm and control wiring with PVC insulated FR cable 1 sq. mm, 1 no. two position selector switch to bypass timer and other accessories & petty material (din rail, 4 pole bakelite terminal strip 63A/440V AC, required nut bolts) should be fixed on bakelite sheet 6mm thick to be mounted in a IP54 surface/ flush mounting powder coated sheet metal (1.60mm thick) cabinet having size 450mm x 600mm x 150mm to switch 'ON' all the 3 phases & switch 'OFF' 3 phases pre-fixed timings complete in all respect as per satisfaction of Engineer-in-charge:-					
	(a)	Street Light Controller (For Three Single Phase Circuits) with 3 Nos. Three Pole Power Contactors 40A, 1 no. aux. contactor 6 amp. (2NO+2NC) with coil voltage 220V AC, 3 Nos. MCB 2 Pole 40amp. (C-Curve,10kA) & petty material (Din rail, 2 Nos. 4 pole bakelite terminal strip 63A/440V AC, required nut bolts)	Each	592.00	14581.00	651.00	14640.20
	(b)	Street Light Controller (For Single Phase Circuit) with 1 No. Three Pole Power Contactor 40A, 1 No. MCB 2 Pole 40amp. (C-Curve,10kA) & petty material (Din rail, 1 No. 4 pole bakelite terminal strip 63A/440V AC, required nut bolts)	Each	391.00	8917.00	430.00	8956.10

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.27		<b>PAINTING INCLUDING LABOUR AND MATERIAL:</b>					
	(i)	Painting of Ceiling fan complete with blades, canopy and suspension rod with two coats of approved paint (With brush).	Each	40.00	130.00	44.00	134.00
	(ii)	<b>Painting of Steel tubular pole with brackets with two coats of aluminium paint (With brush):-</b>					
	(a)	Overall Length 7 Metre	Each	76.00	205.00	84.00	212.60
	(b)	Overall Length 8 Metre	Each	87.00	236.00	96.00	244.70
	(c)	Overall Length 8.5 to 9 Metre	Each	102.00	257.00	112.00	267.20
	(d)	Overall Length 9.5 to 10 Metre	Each	125.00	300.00	138.00	312.50
34.27	(iii)	<b>Painting of Galvanized iron pipe pole including bracket with two coats of aluminium paint (With brush):-</b>					
	(a)	Overall Length 4 Metre	Each	45.00	97.00	50.00	101.50
	(b)	Overall Length 6.1 Metre	Each	63.00	160.00	69.00	166.30
34.27	(iv)	<b>Painting of G.I./ Conduit pipes with two coats of approved paint (With brush) including cleaning the surface etc.:-</b>					
	(a)	Painting of G.I. Pipe 15mm and Conduit Pipe 20mm dia.	Metre	6.00	10.00	7.00	10.60
	(b)	Painting of G.I. Pipe 20mm and Conduit Pipe 25mm dia.	Metre	6.00	11.00	7.00	11.60
	(c)	Painting of G.I. Pipe 25mm and Conduit Pipe 32mm dia.	Metre	6.00	12.00	7.00	12.60
	(d)	Painting of G.I. Pipe 32mm and Conduit Pipe 40mm dia.	Metre	8.00	17.00	9.00	17.80
	(e)	Painting of G.I. Pipe 40mm and Conduit Pipe 50mm dia.	Metre	8.00	19.00	9.00	19.80
	(f)	Painting of G.I. Pipe 50mm dia.	Metre	11.00	24.00	12.00	25.10
	(g)	Painting of G.I. Pipe 65mm dia.	Metre	11.00	28.00	12.00	29.10
	(h)	Painting of G.I. Pipe 80mm dia.	Metre	14.00	33.00	15.00	34.40
	(i)	Painting of G.I. Pipe 100mm dia.	Metre	14.00	36.00	15.00	37.40

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.28		<b>ERECTION, REPAIR AND REWINDING OF FANS:</b>					
34.28 A		<b>ERECTION OF FANS:</b>					
	(i)	<b>Erection of Ceiling/ Cabin/ Exhaust fan having connection with PVC insulated PVC sheathed two single core copper conductor (FR) cable 0.75sq.mm complete:-</b>					
	(a)	Erection of Ceiling fan	Each	59.00	78.00	65.00	83.90
	(b)	Erection of Cabin fan on the wall	Each	47.00	61.00	52.00	65.70
	(c)	Erection of Exhaust fan with louver shutter on the wall/ window grill	Each	118.00	234.00	130.00	245.80
34.28 A	(ii)	<b>Erection of light fixtures on wall/ ceiling having connection with PVC insulated PVC sheathed two single core copper conductor (FR) cable 0.75sq.mm complete:-</b>					
	(a)	Erection of 1X20/28/36/40W Box Type (LED/ Fluorescent) light fixture	Each	59.00	80.00	65.00	85.90
	(b)	Erection of 1X28/36/40W and 2X28/36/40W Mirror optics (LED/ Fluorescent) light fixture	Each	79.00	104.00	87.00	111.90
34.28 B		<b>REPAIR AND REWINDING OF CEILING/ EXHAUST FANS:</b>					
		<b>Providing Full stator rewinding of a Ceiling fan/ Exhaust fan (Capacitor type) with super enamelled copper wire including cleaning &amp; insulating the stator slots, sleeving, soldering, wrapping of cotton tape, varnishing, re-assembling &amp; testing etc., complete:-</b>					
	(i)	Rewinding of Ceiling Fan 900mm Sweep	Each	296.00	473.00	326.00	502.60
	(ii)	Rewinding of Ceiling Fan 1200mm Sweep	Each	296.00	524.00	326.00	553.60
	(iii)	Rewinding of Ceiling Fan 1400mm Sweep	Each	296.00	573.00	326.00	602.60
	(iv)	Rewinding of Exhaust Fan 300mm Sweep	Each	296.00	476.00	326.00	505.60

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(v)	Rewinding of Exhaust Fan 380mm Sweep	Each	391.00	670.00	430.00	709.10
	(vi)	Rewinding of Exhaust Fan 450mm Sweep	Each	592.00	922.00	651.00	981.20
<b>34.29</b>		<b>GI PIPE POLES &amp; BRACKETS:</b>					
<b>34.29 A</b>		<b>GI PIPE POLES:</b>					
		Supply and erection of G.I. pipe 'A' quality of suitable length and dia. confirming to IS:1239 (Part-I) 1979, including fixing up to a given depth below G/L, the hole of excavation about 30cm dia. and given depth to be filled in up to 15cm below G/L with 1:2:4 cement concrete including painting of pole with two coats of approved aluminium paint as required:-					
	(i)	G.I. Pipe Pole 4 metre Long, Dia. 65mm, Planting Depth 80cm with Pit Depth 95cm.	Each	742.00	2759.00	816.00	2833.20
	(ii)	G.I. Pipe Pole 6.1 metre Long, Dia. 80mm, Planting Depth 120cm with Pit Depth 135cm.	Each	892.00	4426.00	981.00	4515.20
	(iii)	G.I. Pipe Pole 6.1 metre Long, Dia. 100mm, Planting Depth 120cm with Pit Depth 135cm.	Each	892.00	5799.00	981.00	5888.20
<b>34.29 B</b>		<b>SINGLE ARM BRACKETS FOR GI PIPE POLE:</b>					
	(i)	Supply and erection of G.I. Pipe 40mm dia. (A-class) Single arm bracket of suitable length give a total overhang at a tentative angle of 100/105°, the bracket should be fixed on the top of the GI pipe pole having top outer dia. 80mm/100mm with GI reducer of suitable size with two coats of an approved aluminium paint complete in all respect as approved by the Engineer-in-charge at site:-					
	(a)	Single Arm Bracket 1 metre Long with G.I. Reducer 80mm x 40mm	Each	110.00	887.00	121.00	898.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(b)	Single Arm Bracket 1.5 metre Long with G.I. Reducer 80mm x 40mm	Each	110.00	1021.00	121.00	1032.00
	(c)	Single Arm Bracket 1 metre Long with G.I. Reducer 100mm x 40mm	Each	110.00	913.00	121.00	924.00
	(d)	Single Arm Bracket 1.5 metre Long with G.I. Reducer 100mm x 40mm	Each	110.00	1047.00	121.00	1058.00
<b>34.29 B</b>	<b>(ii)</b>	<b>Supply and erection of G.I. Pipe (A-Class) Single arm bracket of suitable length to give a total overhang at a tentative angle of 100/105°, the bracket should be fixed on the existing surface/ wall with 2nos. MS flat clamp 25mm x 5mm, 30cm long and 4nos. fastner 10mm x 75mm long with two coats of an approved aluminium paint complete in all respect as approved by the Engineer-in-charge at site:-</b>					
	(a)	Single Arm Bracket 1 metre Long G.I. Pipe 40mm Dia.	Each	133.00	582.00	146.00	595.30
	(b)	Single Arm Bracket 1.5 metre Long G.I. Pipe 40mm Dia.	Each	133.00	723.00	146.00	736.30
	(c)	Single Arm Bracket 2 metre Long G.I. Pipe 40mm Dia.	Each	133.00	858.00	146.00	871.30
	(d)	Single Arm Bracket 1 metre Long G.I. Pipe 50mm Dia.	Each	162.00	680.00	178.00	696.20
	(e)	Single Arm Bracket 1.5 metre Long G.I. Pipe 50mm Dia.	Each	162.00	855.00	178.00	871.20
	(f)	Single Arm Bracket 2 metre Long G.I. Pipe 50mm Dia.	Each	162.00	1021.00	178.00	1037.20

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.29 C		<b>SINGLE/ DOUBLE/ TRIPLE/ FOUR/ SIX ARMS BRACKET FOR STEEL TUBULAR POLE:</b>					
	(i)	Supply and erection of G.I. Pipe 50mm dia. (Medium) Single/ Double/ Triple arm bracket of suitable length welded with MS canopy 80mm inner dia., outer dia 89.5mm (Medium), 450mm long suitable for 3 stepped steel tubular swaged and welded pole with top outer section dia. 76.1mm. The MS canopy should have 3no. holes for fixing the bracket at the top end of the pole with the help of 3Nos. ½" x 1½" size nut bolt fully threaded. The bracket should have MS sheet (1.62mm thick) ring of 89.5mm dia. for covering the top end of the canopy. The MS canopy and GI bracket should be welded at tentative angle 105° (105 degree) inclination with MS sheet 5mm thick triangular in shape having dimensions 225/300/375mm x 150mm x 5mm thick (225mm for 1.5m, 300mm for 2m & 375mm for 2.5m long bracket) with two coats of an approved aluminium paint as desired by Engineer-in-charge at site:-					
	(a)	Single Arm Bracket 1 metre Long for Steel Tubular Pole (7 to 8m)	Each	171.00	1429.00	188.00	1446.10
	(b)	Single Arm Bracket 1.5 metre Long for Steel Tubular Pole (7 to 8m)	Each	171.00	1633.00	188.00	1650.10
	(c)	Single Arm Bracket 2 metre Long for Steel Tubular Pole (7 to 8m)	Each	171.00	1869.00	188.00	1886.10
	(d)	Single Arm Bracket 2.5 metre Long for Steel Tubular Pole (7 to 8m)	Each	171.00	2104.00	188.00	2121.10
	(e)	Double Arm Bracket 1 metre Long for Steel Tubular Pole (7 to 8m)	Each	226.00	2278.00	249.00	2300.60
	(f)	Double Arm Bracket 1.5 metre Long for Steel Tubular Pole (7 to 8m)	Each	226.00	2684.00	249.00	2706.60
	(g)	Double Arm Bracket 2 metre Long for Steel Tubular Pole (7 to 8m)	Each	226.00	3155.00	249.00	3177.60
	(h)	Double Arm Bracket 2.5 metre Long for Steel Tubular Pole (7 to 8m)	Each	226.00	3626.00	249.00	3648.60

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(i)	Triple Arm Bracket 1 metre Long for Steel Tubular Pole (7 to 8m)	Each	272.00	3118.00	299.00	3145.20
	(j)	Triple Arm Bracket 1.5 metre Long for Steel Tubular Pole (7 to 8m)	Each	272.00	3726.00	299.00	3753.20
	(k)	Triple Arm Bracket 2 metre Long for Steel Tubular Pole (7 to 8m)	Each	272.00	4432.00	299.00	4459.20
	(l)	Triple Arm Bracket 2.5 metre Long for Steel Tubular Pole (7 to 8m)	Each	272.00	5138.00	299.00	5165.20
<b>34.29 C</b>	(ii)	<b>Supply and erection of G.I. Pipe 50mm dia. (Medium) Single/ Double/ Triple/ Four/ Six arm bracket of suitable length welded with MS canopy 125mm inner dia., outer dia 140.8mm (Medium), 450mm long suitable for 3 stepped steel tubular swaged and welded pole with top outer section dia. 114.3mm. The MS canopy should have 3no. holes for fixing the bracket at the top end of the pole with the help of 3Nos. ½" x 1½" size nut bolt fully threaded. The bracket should have MS sheet (1.62mm thick) ring of 140.8mm dia. for covering the top end of the canopy. The MS canopy and GI bracket should be welded at tentative angle 105° (105 degree) inclination with MS sheet 5mm thick triangular in shape having dimensions 225/300/375mm x 150mm x 5mm thick (225mm for 1.5m, 300mm for 2m &amp; 375mm for 2.5m long bracket) with two coats of an approved aluminium paint as desired by Engineer-in-charge at site:-</b>					
	(a)	Single Arm Bracket 1 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	171.00	1643.00	188.00	1660.10
	(b)	Single Arm Bracket 1.5 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	171.00	1848.00	188.00	1865.10
	(c)	Single Arm Bracket 2 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	171.00	2083.00	188.00	2100.10
	(d)	Single Arm Bracket 2.5 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	171.00	2319.00	188.00	2336.10
	(e)	Double Arm Bracket 1 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	226.00	2492.00	249.00	2514.60
	(f)	Double Arm Bracket 1.5 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	226.00	2899.00	249.00	2921.60

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(g)	Double Arm Bracket 2 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	226.00	3369.00	249.00	3391.60
	(h)	Double Arm Bracket 2.5 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	226.00	3840.00	249.00	3862.60
	(i)	Triple Arm Bracket 1 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	272.00	3332.00	299.00	3359.20
	(j)	Triple Arm Bracket 1.5 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	272.00	3940.00	299.00	3967.20
	(k)	Triple Arm Bracket 2 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	272.00	4646.00	299.00	4673.20
	(l)	Triple Arm Bracket 2.5 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	272.00	5353.00	299.00	5380.20
	(m)	Four Arm Bracket 1 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	331.00	4185.00	364.00	4218.10
	(n)	Four Arm Bracket 1.5 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	331.00	4994.00	364.00	5027.10
	(o)	Four Arm Bracket 2 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	331.00	5936.00	364.00	5969.10
	(p)	Four Arm Bracket 2.5 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	331.00	6878.00	364.00	6911.10
	(q)	Six Arm Bracket 1 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	451.00	5560.00	496.00	5605.10
	(r)	Six Arm Bracket 1.5 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	451.00	6773.00	496.00	6818.10
	(s)	Six Arm Bracket 2 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	451.00	8186.00	496.00	8231.10
	(t)	Six Arm Bracket 2.5 metre Long for Steel Tubular Pole (8.5 to 11m)	Each	451.00	9598.00	496.00	9643.10



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.29 C	(iii)	Supply and erection of G.I. Pipe 50mm dia. (Medium) Single/ Double/ Triple/ Four/ Six arm bracket of suitable length welded with MS canopy 179.7mm inner dia., outer dia 193.7mm (Medium), 450mm long suitable for 3 stepped steel tubular swaged and welded pole with top outer section dia. 139.7 to 165.1mm. The MS canopy should have 3no. holes for fixing the bracket at the top end of the pole with the help of 3Nos. ½" x 1½" size nut bolt fully threaded. The bracket should have MS sheet (1.62mm thick) ring of 193.7 dia. for covering the top end of the canopy. The MS canopy and GI bracket should be welded at tentative angle 105° (105 degree) inclination with MS sheet 5mm thick triangular in shape having dimensions 225/300/375mm x 150mm x 5mm thick (225mm for 1.5m, 300mm for 2m & 375mm for 2.5m long bracket) with two coats of an approved aluminium paint as desired by Engineer-in-charge at site:-					
	(a)	Single Arm Bracket 1 metre Long for Steel Tubular Pole (12 to 16m)	Each	171.00	1813.00	188.00	1830.10
	(b)	Single Arm Bracket 1.5 metre Long for Steel Tubular Pole (12 to 16m)	Each	171.00	2017.00	188.00	2034.10
	(c)	Single Arm Bracket 2 metre Long for Steel Tubular Pole (12 to 16m)	Each	171.00	2252.00	188.00	2269.10
	(d)	Single Arm Bracket 2.5 metre Long for Steel Tubular Pole (12 to 16m)	Each	171.00	2488.00	188.00	2505.10
	(e)	Double Arm Bracket 1 metre Long for Steel Tubular Pole (12 to 16m)	Each	226.00	2662.00	249.00	2684.60
	(f)	Double Arm Bracket 1.5 metre Long for Steel Tubular Pole (12 to 16m)	Each	226.00	3068.00	249.00	3090.60
	(g)	Double Arm Bracket 2 metre Long for Steel Tubular Pole (12 to 16m)	Each	226.00	3539.00	249.00	3561.60
	(h)	Double Arm Bracket 2.5 metre Long for Steel Tubular Pole (12 to 16m)	Each	226.00	4009.00	249.00	4031.60
	(i)	Triple Arm Bracket 1 metre Long for Steel Tubular Pole (12 to 16m)	Each	272.00	3502.00	299.00	3529.20
	(j)	Triple Arm Bracket 1.5 metre Long for Steel Tubular Pole (12 to 16m)	Each	272.00	4109.00	299.00	4136.20

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(k)	Triple Arm Bracket 2 metre Long for Steel Tubular Pole (12 to 16m)	Each	272.00	4815.00	299.00	4842.20
	(l)	Triple Arm Bracket 2.5 metre Long for Steel Tubular Pole (12 to 16m)	Each	272.00	5522.00	299.00	5549.20
	(m)	Four Arm Bracket 1 metre Long for Steel Tubular Pole (12 to 16m)	Each	331.00	4354.00	364.00	4387.10
	(n)	Four Arm Bracket 1.5 metre Long for Steel Tubular Pole (12 to 16m)	Each	331.00	5164.00	364.00	5197.10
	(o)	Four Arm Bracket 2 metre Long for Steel Tubular Pole (12 to 16m)	Each	331.00	6105.00	364.00	6138.10
	(p)	Four Arm Bracket 2.5 metre Long for Steel Tubular Pole (12 to 16m)	Each	331.00	7047.00	364.00	7080.10
<b>34.29 C</b>		<b>ROUND BRACKET OF 5' (5 FEET) DIA.:</b>					
	(iv)	Supply and erection of G.I. Pipe 50mm dia. (Medium) Round bracket to make a ring of 5' (5 feet) dia. (1.52 metre long) with 3nos. inclined member 3' (3 feet) long welded with MS canopy 125mm inner dia., outer dia 140.8mm (medium), 450mm long suitable for 3 stepped steel tubular swaged and welded pole with top outer section dia. 114.3mm. The MS canopy should have 3no. holes for fixing the bracket at the top end of the pole with the help of 3Nos. ½" x 1½" size nut bolt fully threaded. The bracket should have MS sheet (1.62mm thick) ring of 140.8mm dia. for covering the top end of the canopy. The MS canopy and GI bracket should be welded at an angle according to the size of ring inclination with MS sheet 5mm thick triangular in shape having dimensions 375mm x 150mm x 5mm thick with two coats of an approved aluminium paint as desired by Engineer-in-charge at site.	Each	649.00	6595.00	714.00	6659.90

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.29 C	(v)	Supply and erection of G.I. Pipe 50mm dia. (Medium) Round bracket to make a ring of 5' (5 feet) dia. (1.52 metre long) with 3nos. inclined member 3' (3 feet) long welded with MS canopy 179.7mm inner dia., outer dia 193.7mm (medium), 450mm long suitable for 3 stepped steel tubular swaged and welded pole with top outer section dia. 139.7 to 165.1mm. The MS canopy should have 3no. holes for fixing the bracket at the top end of the pole with the help of 3Nos. ½" x 1½" size nut bolt fully threaded. The bracket should have MS sheet (1.62mm thick) ring of 193.7mm dia. for covering the top end of the canopy. The MS canopy and GI bracket should be welded at an angel according to the size of ring inclination with MS sheet 5mm thick triangular in shape having dimensions 375mm x 150mm x 5mm thick with two coats of an approved aluminium paint as desired by Engineer-in-charge at site.	Each	649.00	6765.00	714.00	6829.90
34.29 D		Supply and erection of G.I. pipe along the pole fixed with 2Nos. MS flat clamp of size 50mm x 6mm thick for protection of under ground cables (upto 3 metre in length):-					
	(i)	Galvanized Iron Pipe 50mm dia. (A-class)	Each	245.00	1268.00	270.00	1292.50

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.30		<b>GALVANIZED STEEL OCTAGONAL POLES FOR WIND VELOCITY OF 169 Km/ HOUR:</b>					
		Supply and erection of Galvanized Steel Octagonal Pole (Sheet thickness 3mm) designed to withstand wind speed 169km/hour of suitable length (Raw material conforming to IS-5986 (FE-510), BSEN-10025S-355J or ASTM-572A (GR-50)) and thickness of galvanization (70mm thick) conforming to IS:2629/ IS:2633/ IS:4759, BSEN-ISO-1461-1991 OR ASTM-A123/A123M-02. The pole shall be in single piece hot dip galvanized and shall be tapered towards the top. The bottom section shall have openable slot with exterior surface door & shall have suitable locking arrangement for housing three phase 4wire cable connection, bakelite sheet, MCB, loop in and out arrangement for incoming/ outgoing cables. There shall be suitable arrangement for earthing. Rigid Base plate of suitable size and thickness shall be welded inside and outside at the bottom of pole with provision for fixing 4 foundation bolts. The octagonal pole shall be bolted on a pre- cast foundation with a set of four foundation bolts for greater rigidity. The foundation shall be erected over cement concrete M20 with steel of given size as per design of original pole manufacturer to fixed up to a required planting depth below ground level as required:-					
	(i)	Galvanized Octagonal Pole Overall Length 4 metre, Top dia.(A/F) 70mm & Bottom dia. (A/F) 130mm, Foundation size below G/L 550mm x 550mm x 900mm, 4Nos. Foundation Bolts size 16mm dia., Length≥450mm with Base Plate Dimensions 200mm x 200mm x 12mm Thick	Each	814.00	11265.00	895.00	11346.40
	(ii)	Galvanized Octagonal Pole Overall Length 5 metre (Sheet thickness 3mm), Top dia.(A/F) 70mm and Bottom dia. (A/F) 130mm, Foundation size below G/L 550mm x 550mm x 1200mm, 4Nos. Foundation Bolts size 16mm dia., Length≥600mm with Base Plate Dimensions 200mm x 200mm x 12mm Thick	Each	910.00	13430.00	1001.00	13521.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(iii)	Galvanized Octagonal Pole Overall Length 6 metre (Sheet thickness 3mm), Top dia.(A/F) 70mm and bottom dia. (A/F) 130mm, Foundation size below G/L 550mm x 550mm x 1200mm, 4Nos. Foundation Bolts size 20mm dia., Length≥600mm with Base Plate Dimensions 220mm x 220mm x 12mm Thick	Each	910.00	15500.00	1001.00	15591.00
	(iv)	Galvanized Octagonal Pole Overall Length 7 metre (Sheet thickness 3mm), Top dia.(A/F) 70mm and bottom dia. (A/F) 130mm, Foundation size below G/L 550mm x 550mm x 1400mm, 4Nos. Foundation Bolts size 20mm dia., Length≥700mm with Base Plate Dimensions 240mm x 240mm x 16mm Thick	Each	1232.00	18050.00	1355.00	18173.20
	(v)	Galvanized Octagonal Pole Overall Length 8 metre (Sheet thickness 3mm), Top dia.(A/F) 70mm and bottom dia. (A/F) 135mm, Foundation size below G/L 550mm x 550mm x 1500mm, 4Nos. Foundation Bolts size 20mm dia., Length≥750mm with Base Plate Dimensions 240mm x 240mm x 16mm Thick	Each	1232.00	19863.00	1355.00	19986.20
	(vi)	Galvanized Octagonal Pole Overall Length 9 metre (Sheet thickness 3mm), Top dia.(A/F) 70mm and bottom dia. (A/F) 155mm, Foundation size below G/L 600mm x 600mm x 1700mm, 4Nos. Foundation Bolts size 24mm dia., Length≥750mm with Base Plate Dimensions 275mm x 275mm x 16mm Thick	Each	1615.00	24546.00	1777.00	24707.50
	(vii)	Galvanized Octagonal Pole Overall Length 10 metre (Sheet thickness 3mm), Top dia.(A/F) 70mm and bottom dia. (A/F) 175mm, Foundation size below G/L 600mm x 600mm x 1800mm, 4Nos. Foundation Bolts size 24mm dia., Length≥750mm with Base Plate Dimensions 275mm x 275mm x 16mm Thick	Each	1615.00	26586.00	1777.00	26747.50

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(viii)	Galvanized Octagonal Pole Overall Length 11 metre (Sheet thickness 3mm), Top dia.(A/F) 90mm and bottom dia. (A/F) 210mm, Foundation size below G/L 600mm x 600mm x 2000mm, 4Nos. Foundation Bolts size 24mm dia., Length≥750mm with Base Plate Dimensions 300mm x 300mm x 20mm Thick	Each	2180.00	31408.00	2398.00	31626.00
	(ix)	Galvanized Octagonal Pole Overall Length 12 metre (Sheet thickness 3mm), Top dia.(A/F) 90mm and bottom dia. (A/F) 240mm, Foundation size below G/L 650mm x 650mm x 2200mm, 4Nos. Foundation Bolts size 24mm dia., Length≥850mm with Base Plate Dimensions 320mm x 320mm x 20mm Thick	Each	2180.00	40347.00	2398.00	40565.00
<b>34.30</b>		<b>GALVANIZED OCTAGONAL POLE BRACKETS:</b>					
		<b>SINGLE/ DOUBLE ARM BRACKETS:</b>					
	(x)	<b>Supply and erection of bracket for galvanized octagonal pole, the bracket should be fixed on the top of the pole having top outer dia. 70mm to 90mm (A/F) complete in all respect as approved by the Engineer-in-charge at site:-</b>					
	(a)	Single arm bracket 0.5 metre long for galvanized octagonal pole	Each	118.00	1272.00	130.00	1283.80
	(b)	Single arm bracket 1 metre long for galvanized octagonal pole	Each	118.00	1490.00	130.00	1501.80
	(c)	Single arm bracket 1.5 metre long for galvanized octagonal pole	Each	148.00	2063.00	163.00	2077.80
	(d)	Single arm bracket 2 metre long for galvanized octagonal pole	Each	148.00	2423.00	163.00	2437.80
	(e)	Double arm bracket 0.5 metre long for galvanized octagonal pole	Each	148.00	1703.00	163.00	1717.80
	(f)	Double arm bracket 1 metre long for galvanized octagonal pole	Each	148.00	2285.00	163.00	2299.80
	(g)	Double arm bracket 1.5 metre long for galvanized octagonal pole	Each	169.00	2306.00	186.00	2322.90

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(h)	Double arm bracket 2 metre long for galvanized octagonal pole	Each	169.00	3930.00	186.00	3946.90
<b>34.31</b>	<b>3-STEPPED STEEL TUBULAR POLE:</b>						
		<b>Supply and erection of 3-Stepped steel tubular swaged and welded pole (410-SP Mpa) of suitable length confirming to IS: 2713- (PART-II)-1980 (Steel tubes confirming to IS: 1161-1979, UTS 42 kgf/Sq.mm) to fix up to a required planting depth below ground level in a hole of excavation about 45 cm dia. and suitable depth to fill up to 15 cm below G/L with 1:2:4 cement concrete mixture including painting of pole with two coats of approved aluminium paint as required:-</b>					
	(i)	Overall length 7 metre, with planting depth 1.25 metre, length of sections 4 metre, 1.5 metre and 1.5 metre (Bottom, Middle and Top respectively), Outer dia and thickness of sections 114.3mm x 4.5mm, 88.9mm x 4.05mm and 76.1mm x 3.25mm (Bottom, Middle and Top respectively) with approximate weight 73 kg. (410 SP-2) and base Plate weight 7.5 kg. of size 12mm thick about 30 cm dia.	Each	931.00	6741.00	1024.00	6834.10
	(ii)	Overall length 7.5 metre, with planting depth 1.25 metre, length of sections 4.5 metre, 1.5 metre and 1.5 metre (Bottom, Middle and Top respectively), Outer dia and thickness of sections 114.3mm x 4.5mm, 88.9mm x 4.05mm and 76.1mm x 3.25mm (Bottom, Middle and Top respectively) with approximate weight 79 kg. (410 SP-5) base Plate weight 7.5 kg. of size 12mm thick about 30 cm dia.	Each	931.00	7138.00	1024.00	7231.10
	(iii)	Overall length 8 metre, with planting depth 1.5 metre, length of sections 4.5 metre, 1.75 metre and 1.75 metre (Bottom, Middle and Top respectively), Outer dia and thickness of sections 139.7mm x 4.5mm, 114.3mm x 3.65mm and 88.9mm x 3.25mm (Bottom, Middle and Top respectively) with approximate weight 101 kg. (410 SP-13) base Plate weight 7.5 kg. of size 12mm thick about 30 cm dia.	Each	931.00	8666.00	1024.00	8759.10

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(iv)	Overall length 8 metre, with planting depth 1.5 metre, length of sections 4.5 metre, 1.75 metre and 1.75 metre (Bottom, Middle and Top respectively), Outer dia and thickness of sections 139.7mm x 5.4mm, 114.3mm x 4.5mm and 88.9mm x 3.25mm (Bottom, Middle and Top respectively) with approximate weight 119 kg. (410 SP-15) base Plate weight 7.5 kg. of size 12mm thick about 30 cm dia.	Each	931.00	9832.00	1024.00	9925.10
	(v)	Overall length 8.5 metre, with planting depth 1.5 metre, length of sections 5 metre, 1.75 metre and 1.75 metre (Bottom, Middle and Top respectively), Outer dia and thickness of sections 165.1mm x 4.50mm, 139.7mm x 4.5mm , 114.3mm x 3.65mm (Bottom, Middle and Top respectively) with approximate weight 141 kg. (410 SP-22) base Plate weight 7.5 kg. of size 12mm thick about 30 cm dia.	Each	1181.00	11489.00	1299.00	11607.10
	(vi)	Overall length 9 metre, with planting depth 1.5 metre, length of sections 5 metre, 2 metre and 2metre (Bottom, Middle and Top respectively), Outer dia and thickness of sections 114.3mm x 5.4mm, 88.9mm x 4.85mm and 76.1mm x 3.25mm (Bottom, Middle and Top respectively) with approximate weight 108 kg. (410 SP-27) base Plate weight 7.5 kg. of size 12mm thick about 30 cm dia.	Each	1181.00	9409.00	1299.00	9527.10
	(vii)	Overall length 9 metre, with planting depth 1.5 metre, length of sections 5 metre, 2 metre and 2metre (Bottom, Middle and Top respectively), Outer dia and thickness of sections 165.1mm x 4.85mm, 139.7mm x 4.5mm and 114.3mm x 3.65mm (Bottom, Middle and Top respectively) with approximate weight 154 kg. (410 SP-32) base Plate weight 7.5 kg. of size 12mm thick about 30 cm dia.	Each	1181.00	12339.00	1299.00	12457.10



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(viii)	Overall length 9.5 metre, with planting depth 1.8 metre, length of sections 5 metre, 2.25 metre and 2.25 metre (Bottom, Middle and Top respectively), Outer dia and thickness of sections 165.1mm x 4.85mm, 139.7mm x 4.5mm and 114.3mm x 3.65mm (Bottom, Middle and Top respectively) with approximate weight 160 kg. (410 SP-38) base Plate weight 7.5 kg. of size 12mm thick about 30 cm dia.	Each	1181.00	12736.00	1299.00	12854.10
	(ix)	Overall length 10 metre, with planting depth 1.8 metre, length of sections 5.20 metre, 2.4 metre and 2.4metre (Bottom, Middle and Top respectively), Outer dia and thickness of sections 165.1mm x 4.85mm, 139.7mm x 4.5mm and 114.3mm x 3.65mm (Bottom, Middle and Top respectively) with approximate weight 168 kg. (410 SP-44) base Plate weight 7.5 kg. of size 12mm thick about 30 cm dia.	Each	1181.00	13397.00	1299.00	13515.10
	(x)	Overall length 11 metre, with planting depth 1.8 metre, length of sections 5.6 metre, 2.7 metre and 2.7metre (Bottom, Middle and Top respectively), Outer dia and thickness of sections 165.1mm x 5.4mm, 139.7mm x 4.5mm and 114.3mm x 3.65mm (Bottom, Middle and Top respectively) with approximate weight 194 kg. (410 SP-54) base Plate weight 7.5 kg. of size 12mm thick about 30 cm dia.	Each	1181.00	15098.00	1299.00	15216.10
	(xi)	Overall length 12 metre, with planting depth 2 metre, length of sections 5.8 metre, 3.1 metre and 3.1metre (Bottom, Middle and Top respectively), Outer dia and thickness of sections 193.7mm x 5.4mm, 165.1mm x 4.5mm and 139.7mm x 4.5mm (Bottom, Middle and Top respectively) with approximate weight 259 kg. (410 SP-62) base Plate weight 7.5 kg. of size 12mm thick about 30 cm dia.	Each	1369.00	19558.00	1506.00	19694.90

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(xii)	Overall length 13 metre, with planting depth 2 metre, length of sections 5.8 metre, 3.6 metre and 3.6metre (Bottom, Middle and Top respectively), Outer dia and thickness of sections 219.1mm x 5.6mm, 193.7mm x 4.85mm and 165.1mm x 4.5mm (Bottom, Middle and Top respectively) with approximate weight 333 kg. (410 SP-71) base Plate weight 7.5 kg. of size 12mm thick about 30 cm dia.	Each	1557.00	24508.00	1713.00	24663.70
	(xiii)	Overall length 16 metre, with planting depth 2.3 metre, length of sections 7 metre, 4.5 metre and 4.5metre (Bottom, Middle and Top respectively), Outer dia and thickness of sections 219.1mm x 5.6mm, 193.7mm x 4.85mm and 165.1mm x 4.50mm (Bottom, Middle and Top respectively) with approximate weight 403 kg. (410 SP-79) base Plate weight 7.5 kg. of size 12mm thick about 30 cm dia.	Each	1745.00	29410.00	1920.00	29584.50
<b>34.32</b>	<b>PCC POLES:</b>						
		<b>Supply and erection of pre-stressed cement concrete pole of suitable length with a given planting depth confirming to IS-1678/ 1960/1978 below ground level in excavated pit of suitable dimensions complete in all respect as approved by Engineer-in-charge at site:-</b>					
	(i)	PCC Pole Overall Length 8 metre, Planting depth 1.5 metre, W/L 200 kg.	Each	950.00	3282.00	1045.00	3377.00
	(ii)	PCC Pole Overall Length 9 metre, Planting depth 1.5 metre, W/L 200 kg.	Each	1136.00	3702.00	1250.00	3815.60
	(iii)	PCC Pole Overall Length 11 metre, Planting depth 1.80 metre, W/L 400 kg	Each	1322.00	7463.00	1454.00	7595.20
<b>34.33</b>	<b>LAYING OF UNDER GROUND CABLES, DISMANTALLING &amp; ERECTION OF POLES AND CEMENT CONCRETE MUFFS:</b>						
	(i)	Laying of under ground cable to be laid 1 metre below ground level including excavation, sand cushioning, covering with sand & First class bricks and back filling the trench etc.	Metre	93.00	238.00	102.00	247.30

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(ii)	Labour for dismantling G.I. pipe pole upto length 6.1 m.	Each	437.00	437.00	481.00	480.70
	(iii)	Labour for dismantling 3-stepped steel tubular pole upto 16m.	Each	1439.00	1439.00	1583.00	1582.90
<b>34.33</b>	(iv)	<b>Erection of G.I. Pipe/ 3-Stepped Steel tubular pole in suitable planting depth below ground level in a hole of excavation and suitable depth to filled in up to 15 cm below G/L with 1:2:4 cement concrete mixture but excluding cost of pole including two coats of approved aluminium paint etc:-</b>					
	(a)	Erection of G.I. pipe pole upto 6 m length (hole of excavation about 30 cm dia.)	Each	386.00	825.00	425.00	863.60
	(b)	Erection of 3-stepped steel tubular pole upto 10 m length (hole of excavation about 45 cm dia.)	Each	575.00	1643.00	633.00	1700.50
<b>34.33</b>		<b>CEMENT CONCRETE MUFFS:</b>					
	(v)	<b>Making of cement concrete muff of overall size 450mmdia., suitable length (15cm below ground level) with 1:2:4 cement concrete mixture. The muff is to be made around the steel tubular pole/ GI pipe pole. The outer surface of the muff shall be finished with 1:2 cement plaster with two coats of white snowcem complete in all respect as approved and desired by the Engineer in-Charge at site:-</b>					
	(a)	Cement Concrete Muff of Overall Size 450mm dia., 45cm long	Each	146.00	381.00	161.00	395.60
	(b)	Cement Concrete Muff of Overall Size 450mm dia., 60cm long	Each	175.00	501.00	193.00	518.50
	(c)	Cement Concrete Muff of Overall Size 600mm dia., 60cm long	Each	219.00	653.00	241.00	674.90

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.33	(vi)	Making of Cement Concrete muff of suitable size and length with 1:2:4 cement concrete mixture. The muff is to be made around the steel tubular pole sufficient to completely flush a SMC Junction Box (Glass Fibre reinforced polyester sheet moulding compound) confirming to IS:14772, inner dimensions 250mm x 200mm x 100mm with $\pm 10\%$ tolerance in size & hinged water tight cover with locking arrangement having 1No. terminal strip with 4Nos. terminals & 1No. Single pole MCB of required capacity fixed on din bar (Din Bar Provision for 2Nos. MCB's). The SMC junction box is to be fixed with the pole by a MS flat clamp of size 20mm x 2mm thick. PVC pipe 40mm dia. (2No.x0.60m) should be provided for incoming and outgoing cables. The outer surface of the muff shall be finished with pure cement & two coats of white snowcem complete in all respect as approved and desired by the Engineer In-Charge at site:-					
	(a)	Cement Concrete Muff of Overall Size 450mm dia., 80cm Long with making an extra collar (If pole installed in Centre verge/ Footpath) will be provided with 1:2:4 cement Sand & concrete mixture around the Steel tubular pole. The size of collar (height is 40cm & dia. is 45cm including pole dia i.e. 168.3mm)	Each	291.00	1984.00	320.00	2013.10
	(b)	Cement Concrete Muff of Overall Size 450mm dia., 80cm Long	Each	219.00	1662.00	241.00	1683.90
	(c)	Cement Concrete Muff of Overall Size 600mm dia., 80cm Long with making an extra collar (If pole installed in Centre verge/ Footpath) will be provided with 1:2:4 cement Sand & concrete mixture around the Steel tubular pole. The size of collar (height is 40cm & dia. is 60cm including pole dia i.e. 168.3mm)	Each	350.00	2278.00	385.00	2313.00
	(d)	Cement Concrete Muff of Overall Size 600mm dia., 80cm Long	Each	292.00	2095.00	321.00	2124.20

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.33	(vii)	Supply and erection of SMC Junction Box (Glass Fibre reinforced polyester sheet moulding compound) confirm to IS:14772 (Recessed/ On surface), robustly constructed, safe & shock proof, rust & tamper proof of suitable inner & outer dimensions with $\pm 10\%$ tolerance in size & hinged water tight cover with locking arrangement having 1No. terminal strip with 4Nos. terminals & 1No. Single pole MCB of required capacity fixed on din bar (Din Bar Provision for 2Nos. MCB's) complete in all respect as approved and desired by the Engineer In-Charge at site:-					
	(a)	SMC Junction Box (Glass Fibre reinforced polyester sheet moulding compound) confirm to IS:14772, inner dimensions 140mm x 140mm x 95mm with hinged water tight cover with locking arrangement	Each	118.00	724.00	130.00	735.80
	(b)	SMC Junction Box (Glass Fibre reinforced polyester sheet moulding compound) confirm to IS:14772, inner dimensions 200mm x 140mm x 95mm with hinged water tight cover with locking arrangement	Each	118.00	804.00	130.00	815.80
	(c)	SMC Junction Box (Glass Fibre reinforced polyester sheet moulding compound) confirm to IS:14772, inner dimensions 250mm x 200mm x 100mm with hinged water tight cover with locking arrangement	Each	148.00	1091.00	163.00	1105.80

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.33		<b>SMC GLASS FIBRE INSPECTION BOXES:</b>					
	(viii)	Supply and erection of SMC Junction Box (Glass Fibre reinforced polyester sheet moulding compound) confirming to IS:14772, (Recessed/ On surface), robustly constructed, safe & shock proof, rust & tamper proof of suitable inner & outer dimensions with $\pm 10\%$ tolerance in size & hinged water tight cover with locking arrangement complete in all respect as approved and desired by the Engineer In-Charge at site:-					
	(a)	SMC Junction Box (Glass Fibre reinforced polyester sheet moulding compound) confirm to IS:14772, inner dimensions 300mm x 200mm x 105mm with hinged water tight cover with locking arrangement	Each	197.00	1045.00	217.00	1064.70
	(b)	SMC Junction Box (Glass Fibre reinforced polyester sheet moulding compound) confirm to IS:14772, inner dimensions 380mm x 225mm x 140mm with hinged water tight cover with locking arrangement	Each	197.00	1510.00	217.00	1529.70
34.34		<b>OVER HEAD DISTRIBUTION ALUMINIUM CABLES, ACSR CONDUCTORS, CLAMPS, JUMPERS &amp; JOINT KITS:</b>					
	(i)	Wiring over-head line in PVC insulated & PVC sheathed two single core aluminium conductor cable overall 1100 volts grade binding with G.I. wire 2mm dia. (14 SWG) with brass/ aluminium link clips complete in all respect as approved and desired by the Engineer In-Charge at site.					
	(a)	PVC insulated & PVC sheathed aluminium conductor cable Overall Size 4mm <sup>2</sup> (1/1.40mm) Twin Core	Metre	8.00	28.00	9.00	28.80
	(b)	PVC insulated & PVC sheathed aluminium conductor cable Overall Size 6mm <sup>2</sup> (1/1.40mm) Twin Core	Metre	8.00	33.00	9.00	33.80

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(c)	PVC insulated & PVC sheathed aluminium conductor cable Overall Size 10mm <sup>2</sup> (1/1.40mm) Twin Core	Metre	11.00	45.00	12.00	46.10
	(d)	PVC insulated & PVC sheathed aluminium conductor cable Overall Size 16mm <sup>2</sup> (1/1.40mm) Twin Core	Metre	11.00	68.00	12.00	69.10
<b>34.34</b>	<b>(ii)</b>	<b>Wiring over-head line in PVC insulated &amp; PVC sheathed two single core aluminium conductor cable overall 1100 volts grade complete in all respect as approved and desired by the Engineer In-Charge at site.</b>					
	(a)	PVC insulated & PVC sheathed aluminium conductor cable Overall Size 4mm <sup>2</sup> (1/1.40mm) Twin Core	Metre	6.00	22.00	7.00	22.60
	(b)	PVC insulated & PVC sheathed aluminium conductor cable Overall Size 6mm <sup>2</sup> (1/1.40mm) Twin Core	Metre	6.00	27.00	7.00	27.60
	(c)	PVC insulated & PVC sheathed aluminium conductor cable Overall Size 10mm <sup>2</sup> (1/1.40mm) Twin Core	Metre	8.00	38.00	9.00	38.80
	(d)	PVC insulated & PVC sheathed aluminium conductor cable Overall Size 16mm <sup>2</sup> (1/1.40mm) Twin Core	Metre	8.00	61.00	9.00	61.80
<b>34.34</b>		<b>DIE CAST ALUMINIUM CLAMPS (T-LINE):</b>					
	<b>(iii)</b>	<b>Supply &amp; erection of Die-cast aluminium clamp for making T-Line end terminal/ ends including cost of nuts &amp; bolts etc. complete in all respect as approved by the Engineer-in-Charge:-</b>					
	(a)	Dead end clamps of die-cast aluminium size 20-100sq. mm	Each	118.00	339.00	130.00	350.80
	(b)	PG die-cast aluminium clamp suitable for ACSR conductor size 30-50sq. mm	Each	118.00	181.00	130.00	192.80
	(c)	PG di-cast aluminium clamp suitable for ACSR conductor size 80-100sq. mm	Each	118.00	222.00	130.00	233.80

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.34		<b>JUMPERS FOR OVERHAED LINES:</b>					
	(iv)	<b>Supply &amp; erection of PVC insulated PVC sheathed aluminium conductor single core cable for providing jumpering arrangement on overhead lines:-</b>					
	(a)	Overall Size 50sq. mm (Aluminium Jumper)	Metre	59.00	121.00	65.00	126.90
	(b)	Overall Size 70sq. mm (Aluminium Jumper)	Metre	59.00	141.00	65.00	146.90
	(c)	Overall Size 120sq. mm (Aluminium Jumper)	Metre	59.00	199.00	65.00	204.90
34.34	(v)	<b>Supply stringing and sagging of aluminium conductor steel reinforced (ACSR) on poles including binding with insulators using aluminium wires complete as desired by the Engineer in charge of the site:-</b>					
	(a)	ACSR-WEASEL conductor (30 sq. mm) Size (6/2.55 Al.+1/2.55mm GI)	Metre	7.00	32.00	8.00	32.70
	(b)	ACSR-RABIT conductor (50 sq. mm) Size (6/3.35 Al.+1/3.35mm GI)	Metre	10.00	52.00	11.00	53.00
	(c)	ACSR-RACOON conductor (80 sq. mm) Size (6/4.09 Al.+1/4.09mm GI)	Metre	14.00	75.00	15.00	76.40
	(d)	ACSR-DOG conductor (100 sq. mm) Size (6/4.55 Al.+1/4.55mm GI)	Metre	16.00	95.00	18.00	96.60
34.34 A		<b>S/E of LT Cast Resin type/ Heat Shrinkable Termination Kit for Outdoor/ Indoor supply of 1.1 KV grade PVC/XLPE cable as desired by the Engineer in charge of the site:-</b>					
	(i)	Outdoor/Indoor Cast Resin Type Termination Kit for Cable Size 3 Core 16 sq. mm - 25 sq. mm	Each	148.00	410.00	163.00	424.80
	(ii)	Outdoor/Indoor Cast Resin Type Termination Kit for Cable Size 3 Core 35 sq. mm - 70 sq. mm	Each	148.00	445.00	163.00	459.80
	(iii)	Outdoor/Indoor Cast Resin Type Termination Kit for Cable Size 3 Core 95 sq. mm - 185 sq. mm	Each	296.00	617.00	326.00	646.60



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(iv)	Outdoor/Indoor Cast Resin Type Termination Kit for Cable Size 3 Core 240 sq. mm - 300 sq. mm	Each	498.00	1000.00	548.00	1049.80
	(v)	Outdoor/Indoor Cast Resin Type Termination Kit for Cable Size 3½/4 Core 25 sq. mm - 50 sq. mm	Each	148.00	445.00	163.00	459.80
	(vi)	Outdoor/Indoor Cast Resin Type Termination Kit for Cable Size 3½/4 Core 70 sq. mm - 150 sq. mm	Each	296.00	617.00	326.00	646.60
	(vii)	Outdoor/Indoor Cast Resin Type Termination Kit for Cable Size 3½/4 Core 185sq.mm	Each	296.00	731.00	326.00	760.60
	(viii)	Outdoor/Indoor Cast Resin Type Termination Kit for Cable Size 3½/4 Core 240sq.mm - 300sq.mm	Each	496.00	998.00	546.00	1047.60
	(ix)	Outdoor/Indoor Cast Resin Type Termination Kit for Cable Size 3½/4 Core 400 sq. mm	Each	496.00	1100.00	546.00	1149.60
	(x)	Heat Shrinkable Outdoor/ Indoor End Termination Kit for Cable Size 3½/4 Core 10-16sq.mm	Each	148.00	877.00	163.00	891.80
	(xi)	Heat Shrinkable Outdoor/ Indoor End Termination Kit for Cable Size 3½/4 Core 25-50sq.mm	Each	148.00	1089.00	163.00	1103.80
	(xii)	Heat Shrinkable Outdoor/ Indoor End Termination Kit for Cable Size 3½/4 Core 70-150sq.mm	Each	296.00	1303.00	326.00	1332.60
	(xiii)	Heat Shrinkable Outdoor/ Indoor End Termination Kit for Cable Size 3½/4 Core 185sq.mm	Each	296.00	1626.00	326.00	1655.60
	(xiv)	Heat Shrinkable Outdoor/ Indoor End Termination Kit for Cable Size 3½/4 Core 225-300sq.mm	Each	496.00	1867.00	546.00	1916.60
	(xv)	Heat Shrinkable Outdoor/ Indoor End Termination Kit for Cable Size 3½/4 Core 400-630sq.mm	Each	496.00	2188.00	546.00	2237.60

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.34 B		S/E of LT Straight Through Joint Kit Cast Resin type for 1.1 KV grade PVC/XLPE cable as desired by the Engineer in charge of the site:-					
	(i)	Straight Through Joint Kit Resin Cast type for Cable Size 2 Core 16 sq. mm - 35 sq. mm	Each	118.00	562.00	130.00	573.80
	(ii)	Straight Through Joint Kit Resin Cast type for Cable Size 2 Core 50 sq. mm - 70 sq. mm	Each	118.00	614.00	130.00	625.80
	(iii)	Straight Through Joint Kit Resin Cast type for Cable Size 3 Core 16 sq. mm - 25 sq. mm	Each	237.00	680.00	261.00	703.70
	(iv)	Straight Through Joint Kit Resin Cast type for Cable Size 3 Core 35 sq. mm - 50 sq. mm	Each	237.00	733.00	261.00	756.70
	(v)	Straight Through Joint Kit Resin Cast type for Cable Size 3 Core 70 sq. mm	Each	237.00	753.00	261.00	776.70
	(vi)	Straight Through Joint Kit Resin Cast type for Cable Size 3 Core 95 sq. mm	Each	391.00	1097.00	430.00	1136.10
	(vii)	Straight Through Joint Kit Resin Cast type for Cable Size 3 Core 120 sq. mm - 150 sq. mm	Each	391.00	1169.00	430.00	1208.10
	(viii)	Straight Through Joint Kit Resin Cast type for Cable Size 3 Core 185 sq. mm	Each	391.00	1490.00	430.00	1529.10
	(ix)	Straight Through Joint Kit Resin Cast type for Cable Size 3 Core 240 sq. mm	Each	592.00	1928.00	651.00	1987.20
	(x)	Straight Through Joint Kit Resin Cast type for Cable Size 3 Core 300 sq. mm	Each	592.00	2196.00	651.00	2255.20
	(xi)	Straight Through Joint Kit Resin Cast type for Cable Size 3½ Core 25 sq. mm - 35 sq. mm	Each	237.00	733.00	261.00	756.70
	(xii)	Straight Through Joint Kit Resin Cast type for Cable Size 3½/4 Core 50 sq. mm	Each	237.00	753.00	261.00	776.70
	(xiii)	Straight Through Joint Kit Resin Cast type for Cable Size 3½/4 Core 70 sq. mm	Each	237.00	943.00	261.00	966.70
	(xiv)	Straight Through Joint Kit Resin Cast type for Cable Size 3½/4 Core 95 sq. mm	Each	391.00	1169.00	430.00	1208.10

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(xv)	Straight Through Joint Kit Resin Cast type for Cable Size 3½/4 Core 120 sq. mm - 150 sq. mm	Each	391.00	1490.00	430.00	1529.10
	(xvi)	Straight Through Joint Kit Resin Cast type for Cable Size 3½/4 Core 185 sq. mm	Each	391.00	1572.00	430.00	1611.10
	(xvii)	Straight Through Joint Kit Resin Cast type for Cable Size 3½/4 Core 240 sq. mm	Each	592.00	2196.00	651.00	2255.20
	(xviii)	Straight Through Joint Kit Resin Cast type for Cable Size 3½/4 Core 300 sq. mm	Each	592.00	2459.00	651.00	2518.20
	(xix)	Straight Through Joint Kit Resin Cast type for Cable Size 3½/4 Core 400 sq. mm	Each	592.00	2966.00	651.00	3025.20
	(xx)	Straight Through Joint Kit Resin Cast type for Cable Size 3½/4 Core 500 sq. mm	Each	592.00	3368.00	651.00	3427.20
	(xxi)	Straight Through Joint Kit Resin Cast type for Cable Size 3½/4 Core 630 sq. mm	Each	592.00	3852.00	651.00	3911.20
<b>34.35</b>		<b>OVER HEAD DISTRIBUTION INSULATORS, STAY SETS &amp; CRADLE GUARDS:</b>					
		<b>INSULATORS:</b>					
	(i)	Supply and erection of insulators confirming to IS-2544 & 5350 (Test Certificates of CPRI) includes supply and erection of nuts bolts and other accessories whatsoever required at site for fixing it to the structure pole. The job is to be completed as approved by Engineer-in-charge:-					
	(a)	Egg/ Strain Insulator	Each	59.00	111.00	65.00	116.90
	(b)	11kV Pin Insulator with G.I. Pin	Each	59.00	202.00	65.00	207.90
	(c)	11kV Disc Insulator	Each	118.00	591.00	130.00	602.80
	(d)	Shackle Insulator (Medium)	Each	59.00	157.00	65.00	162.90
	(e)	11kV Lightning Arrester with clamps of required size (With seprate earth)	Each	118.00	3359.00	130.00	3370.80

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.35		<b>STAY SETS:</b>					
	(ii)	Supply and erection of Stay Set consisting of 19/20mm dia.of suitable length G.I. stay rod duly threaded upto 300mm at one end and shaped on the other end. MS plate size 30cm x 30cm x 6mm with 20mm dia. hole drilled in the centre of the plate G.I. stay wire size 7/10 SWG, G.I. thimble for stay binding, Egg/Strain insulator, MS elbow made out of 16mm plain sheet and a 20cm long piece of 50mm x 50mm x 6mm angle iron made to the shape as approved by Engineer-in-charge. Stay set complete shall be fixed to the pole by providing suitable size full clamps made out 50mm x 6mm size MS flat with required number of nut and bolts 16mm dia. on one end and shall be embedded on the other end. The stay plate shall be covered with cement concrete having total volume of the concrete not less than 0.042Cum. The job shall include excavation of pit and back filling and after pouring concrete with excavated soil etc. as approved/desired by the the Engineer-in-charge:-					
	(a)	Stay Set consisting of 19/20mm dia., 1.8 metre Long G.I. Stay Rod	Each	592.00	2609.00	651.00	2668.20
	(b)	Stay Set consisting of 19/20mm dia., 2.4 metre Long G.I. Stay Rod	Each	592.00	2953.00	651.00	3012.20
34.35		<b>CRADLE GUARD:</b>					
	(iii)	Supply & erection of cradle guard suitable for overhead lines as required at site as approved by Engineer-in-charge:-					
	(a)	Cradle Guard for 2 Lines Overhead Line	Each	47.00	69.00	52.00	73.70
	(b)	Cradle Guard for 4 Lines Overhead Line	Each	47.00	72.00	52.00	76.70

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.36		XLPE INSULATED HT CABLES:					
34.36 A		XLPE INSULATED HT ARMoured CABLES (UNDERGROUND):					
		Supply & laying of Circular Aluminium Conductor screened with extruded semiconducting compound, XLPE insulated, insulation screened with extruded semiconducting combination in combination with copper tape (0.3KA for 1sec.) cores laid up, FR PVC inner sheathed, galvanized steel strip armoured and overall FR PVC sheathed cable confirming to IS:7098 (Part-2), 2011 working voltage 11KV(E) grade to be laid 1.50 meter below ground level including excavation, sand cushioning, covering with sand & First class bricks and back filling the trench etc., of the required size:-					
	(i)	HT Cable Overall size 35sq.mm (3Core)	Metre	124.00	743.00	136.00	755.40
	(ii)	HT Cable Overall size 50sq.mm (3Core)	Metre	124.00	799.00	136.00	811.40
	(iii)	HT Cable Overall size 70sq.mm (3Core)	Metre	133.00	899.00	146.00	912.30
	(iv)	HT Cable Overall size 95sq.mm (3Core)	Metre	133.00	1005.00	146.00	1018.30
	(v)	HT Cable Overall size 120sq.mm (3Core)	Metre	177.00	1154.00	195.00	1171.70
	(vi)	HT Cable Overall size 150sq.mm (3Core)	Metre	177.00	1246.00	195.00	1263.70
	(vii)	HT Cable Overall size 185sq.mm (3Core)	Metre	177.00	1390.00	195.00	1407.70
	(viii)	HT Cable Overall size 240sq.mm (3Core)	Metre	196.00	1615.00	216.00	1634.60
	(ix)	HT Cable Overall size 300sq.mm (3Core)	Metre	196.00	1816.00	216.00	1835.60
	(x)	HT Cable Overall size 400sq.mm (3Core)	Metre	196.00	2183.00	216.00	2202.60

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
<b>34.36 B</b>		<b>XLPE INSULATED HT ARMOURED CABLES (LOOSE):</b>					
		<b>Supply &amp; laying of Circular Aluminium Conductor screened with extruded semiconducting compound, XLPE insulated, insulation screened with extruded semiconducting combination in combination with copper tape (0.3KA for 1sec.) cores laid up, FR PVC inner sheathed, galvanized steel strip armoured and overall FR PVC sheathed cable confirming to IS:7098 (Part-2), 2011 working voltage 11KV(E) grade to be laid loose in the existing trench or pipe:-</b>					
	(i)	HT Cable Overall size 35sq.mm (3Core)	Metre	15.00	445.00	17.00	446.50
	(ii)	HT Cable Overall size 50sq.mm (3Core)	Metre	15.00	501.00	17.00	502.50
	(iii)	HT Cable Overall size 70sq.mm (3Core)	Metre	23.00	601.00	25.00	603.30
	(iv)	HT Cable Overall size 95sq.mm (3Core)	Metre	23.00	707.00	25.00	709.30
	(v)	HT Cable Overall size 120sq.mm (3Core)	Metre	32.00	821.00	35.00	824.20
	(vi)	HT Cable Overall size 150sq.mm (3Core)	Metre	32.00	913.00	35.00	916.20
	(vii)	HT Cable Overall size 185sq.mm (3Core)	Metre	32.00	1057.00	35.00	1060.20
	(viii)	HT Cable Overall size 240sq.mm (3Core)	Metre	40.00	1270.00	44.00	1274.00
	(ix)	HT Cable Overall size 300sq.mm (3Core)	Metre	40.00	1472.00	44.00	1476.00
	(x)	HT Cable Overall size 400sq.mm (3Core)	Metre	40.00	1838.00	44.00	1842.00
<b>34.36 C</b>		<b>S/E of Heat shrinkable cable end termination/ Straight through joint kit for 11 KVA /6.6 KV (E) XLPE Cables as approved &amp; desired by Engineer in charge:-</b>					
	(i)	Heat Shrinkable End Termination for cable size 35 sq. mm, 3Core (Indoor Type)	Each	148.00	1881.00	163.00	1895.80
	(ii)	Heat Shrinkable End Termination for cable size 50-95 sq. mm, 3Core (Indoor Type)	Each	296.00	2123.00	326.00	2152.60
	(iii)	Heat Shrinkable End Termination for cable size 120-185 sq. mm, 3Core (Indoor Type)	Each	296.00	2558.00	326.00	2587.60

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(iv)	Heat Shrinkable End Termination for cable size 240-400 sq. mm, 3Core (Indoor Type)	Each	496.00	3143.00	546.00	3192.60
	(v)	Heat Shrinkable End Termination for cable size 35 sq. mm, 3Core (Outdoor Type)	Each	148.00	2219.00	163.00	2233.80
	(vi)	Heat Shrinkable End Termination for cable size 50-95 sq. mm, 3Core (Outdoor Type)	Each	296.00	2457.00	326.00	2486.60
	(vii)	Heat Shrinkable End Termination for cable size 120-185 sq. mm, 3Core (Outdoor Type)	Each	296.00	3115.00	326.00	3144.60
	(viii)	Heat Shrinkable End Termination for cable size 240-400 sq. mm, 3Core (Outdoor Type)	Each	496.00	3711.00	546.00	3760.60
	(ix)	Heat Shrinkable type Straight Through Joint Kit for cable size 35 sq. mm, 3Core	Each	237.00	6212.00	261.00	6235.70
	(x)	Heat Shrinkable type Straight Through Joint Kit for cable size 50-95 sq. mm, 3Core	Each	391.00	6927.00	430.00	6966.10
	(xi)	Heat Shrinkable type Straight Through Joint Kit for cable size 120-185 sq. mm, 3Core	Each	391.00	7524.00	430.00	7563.10
	(xii)	Heat Shrinkable type Straight Through Joint Kit for cable size 240-400 sq. mm, 3Core	Each	592.00	8757.00	651.00	8816.20
<b>34.37</b>		<b>DOUBLE WALLED CORRUGATED (DWC) HDPE PIPES:</b>					
<b>34.37 A</b>		<b>Supply and erection of Double Walled Corrugated (DWC) HDPE pipe to be laid 1mtr. below ground level including excavation placing the pipe in position and back filling with excavated soil etc. of the required size:-</b>					
	(i)	Double Walled Corrugated HDPE Pipe 50/38mm (Outer/ Inner dia.)	Metre	74.00	127.00	81.00	134.40
	(ii)	Double Walled Corrugated HDPE Pipe 63/51mm (Outer/ Inner dia.)	Metre	74.00	148.00	81.00	155.40

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(iii)	Double Walled Corrugated HDPE Pipe 90/76mm (Outer/ Inner dia.)	Metre	74.00	189.00	81.00	196.40
	(iv)	Double Walled Corrugated HDPE Pipe 120/103.5mm (Outer/ Inner dia.)	Metre	74.00	276.00	81.00	283.40
	(v)	Double Walled Corrugated HDPE Pipe 160/136mm (Outer/ Inner dia.)	Metre	74.00	324.00	81.00	331.40
	(vi)	Double Walled Corrugated HDPE Pipe 180/152mm (Outer/ Inner dia.)	Metre	74.00	405.00	81.00	412.40
	(vii)	Double Walled Corrugated HDPE Pipe 200/170mm (Outer/ Inner dia.)	Metre	74.00	478.00	81.00	485.40
<b>34.37 B</b>		<b>Supply and erection of Double Walled Corrugated (DWC) HDPE pipe to be laid 1/2mtr. below ground level including excavation placing the pipe in position and back filling with excavated soil etc. of the required size:-</b>					
	(i)	Double Walled Corrugated HDPE Pipe 50/38mm (Outer/ Inner dia.)	Metre	42.00	95.00	46.00	99.20
	(ii)	Double Walled Corrugated HDPE Pipe 63/51mm (Outer/ Inner dia.)	Metre	42.00	116.00	46.00	120.20
	(iii)	Double Walled Corrugated HDPE Pipe 90/76mm (Outer/ Inner dia.)	Metre	42.00	157.00	46.00	161.20
	(iv)	Double Walled Corrugated HDPE Pipe 120/103.5mm (Outer/ Inner dia.)	Metre	42.00	244.00	46.00	248.20
	(v)	Double Walled Corrugated HDPE Pipe 160/136mm (Outer/ Inner dia.)	Metre	42.00	292.00	46.00	296.20
	(vi)	Double Walled Corrugated HDPE Pipe 180/152mm (Outer/ Inner dia.)	Metre	42.00	373.00	46.00	377.20
	(vii)	Double Walled Corrugated HDPE Pipe 200/170mm (Outer/ Inner dia.)	Metre	42.00	446.00	46.00	450.20



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.38		<b>SHEET METAL CUBICAL PEDESTAL, TOWER STRUCTURES, HT &amp; LT LINE ITEMS, MS CHANNELS, BRASS GLANDS, ALUMINIUM &amp; COPPER THIMBLES:</b>					
		<b>CUBICAL PEDESTAL:</b>					
	(i)	Supply and erection of Sheet metal cubical pedestal made from 50mmx50mmx6mm thick MS angle iron frame with 5 sides welded & covered with MS sheet 2mm thick & front side hinged with 4" hinges & locking system with single/ double door openable placed on MS strip of size 12.5mm x 2.5mm thick welded with MS sheet, 4Nos. legs of 50mmx50mmx6mm thick MS angle iron each of 600mm long with MS sheet 100mmx100mmx6mm thick at the bottom end of the legs. Front door welded x-sectionally with MS flat 25mmx5mm. The front side with MS sheet each 75mm wide & a bend of 75mm width outwards & inwards on all sides with tapered top 200mm high and pedestal with 4 Nos. supporting members each of MS flat 50mmx6mm thick according to cubical size duly welded & complete pedestal to be painted with 1 coat of red oxide & 2 coats of paint & bonding to the existing earth. The Pedestal platform should be filled with 1:2:4 cement concrete mixture and erected 150mm high from the top of the cement concrete platform. The job is to be completed as approved by Engineer-in-charge:-					
	(a)	Cubical Size 900mm high, 600mm wide and 350mm deep with platform dimensions 700mm x 450mm x 450mm	Each	1411.00	8571.00	1552.00	8712.10
	(b)	Cubical Size 1200mm high, 900mm wide and 350mm deep with platform dimensions 1000mm x 450mm x 450mm	Each	1552.00	12173.00	1707.00	12328.20
	(c)	Cubical Size 1200mm high, 1000mm wide and 500mm deep with platform dimensions 1100mm x 600mm x 450mm	Each	1693.00	14555.00	1862.00	14724.30
	(d)	Cubical Size 1400mm high, 1200mm wide and 500mm deep with platform dimensions 1300mm x 600mm x 450mm	Each	1975.00	17673.00	2173.00	17870.50

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(e)	Cubical Size 1200mm high, 1500mm wide and 350mm deep with platform dimensions 1600mm x 450mm x 450mm	Each	2257.00	17997.00	2483.00	18222.70
	(f)	Cubical Size 1200mm high, 1800mm wide and 350mm deep with platform dimensions 1900mm x 450mm x 450mm	Each	2257.00	20330.00	2483.00	20555.70
<b>34.38</b>		<b>M.S. JUNCTION BOX FOR STREET LIGHT:</b>					
	(ii)	Supply and erection of M.S. Junction box of suitable size made from M.S. Sheet 16 SWG (1.60mm thick). Junction box should have one locking arrangement and 2 nos. hinges on front side. It should have 1 No. Brass terminal connecting strip, 1 No. Kit kat 16 Amp/240 Volts along with M.S. Flat 20mm x 2mm clamp with nuts and bolts for fixing on the pole. The junction box should be painted with one coat of good quality primer and two coats of post office red enamel paint inside and outside complete in all respect:-					
	(a)	M.S. Junction Box 205mm x 155mm x 95mm	Each	160.00	597.00	176.00	613.00
	(b)	M.S. Junction Box 300mm x 200mm x 100mm	Each	160.00	689.00	176.00	705.00

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.38		<b>MS TOWER STRUCTURE:</b>					
	(iii)	Supply and erection of M.S. angle iron structure upto 8.4 meter high 1500mm base & 750mm at the top & 6Nos. horizontal support of M.S. angle iron 50mm x 50mm x 5mm from G/L of length 1.46 m x 4, 1.33m x 4, 1.24 m x 4, 1.11 m x 4, 0.98m x 4 & 0.84m x 4 from bottom to top resp., 6 Nos. inclined angle support of M.S. angle iron 50mm x 50mm x 5mm from G/Lof length 1.87m x 8, 1.79m x 8, 1.70m x 8, 1.64m x8, 1.54m x 8 & 1.31 mtr x 8 from bottom to top resp., 2 Nos. horizontal support for ladder of M.S. angle iron 30mm x 30mm x 5mm of lengths 1.10m & 1.35m to be welded with M.S. angle iron 65mm x 65mm x 6mm., 4Nos. vertical angle support for the raising of tower of M.S. angle iron 65mm x 65mm x 6mm for the fixing of the above horizontal and vertical supports of length 8.4m each and for the fixing of octagonal platform on it. The vertical angle supports to be welded with M.S. base plates of thickness 20mm &10mm each of size 200mm x 200mm 4Nos.each under the base plate, spacer of M.S. Flat 40mm x 5mm (24Nos.) for inclined angles to be erected with nuts & bolts 16mm dia (176Nos.). The job is to be completed as approved by Engineer-in-charge.	Each	2257.00	50008.00	2483.00	50233.70
34.38		<b>MS TOWER LADDER:</b>					
	(iv)	Supply and erection of M.S. Tower Ladder suitable for tower structure of height 8.4mtr. made from M.S. Angle iron 30mm x 30mm x 5mm of length 6.94mtr with 24Nos. steps made from M.S. Rods of 16mm dia. for climbing on the tower/ octagonal platform. Each rod should be 300mm long and welded with vertical M.S. angle iron of tower ladder.		1975.00	5949.00	2173.00	6146.50

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.38		<b>MS OCTAGONAL TOP OF TOWER:</b>					
	(v)	Supply and erection of M.S. Octagonal top of the tower structure of height 8.4mtr. & base consists of 8 sides of M.S. angle iron 40mm x 40mm x 5mm. Out of 8 sides, 4 sides of length 760mm and 4 sides of length 700mm. The octagonal top of 8 Nos. vertical supports each of length 840mm for mounting railing on it. The top end of the railing of 8 sides for fixing the fittings on it. Out of 8 sides, 4 sides of length 830mm & 4 sides of length 650mm. The platform of the octagonal top of mesh made from M.S. Square bars 8mm dia of weight 41 Kg. The platform of opening (double door) with frame of M.S. Angle iron 40mm x 40mm x 5mm with locking arrangement. The octagonal top of railing made from M.S. Flat 40mmx5mm having 8 sides between the top & bottom (in middle). Out of 8 sides, 4 sides of length 830mm and 4 sides of length 650mm. The whole platform of base made from M.S. Channel 75mmx40mmx4mm fixed x-sectionally having lengths 1750mm x 2 , 460mm x 2 and 760mm x 4 for fixing the opening system platform mesh etc on it.	Each	1975.00	13605.00	2173.00	13802.50

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
34.38		<b>FOUNDATION FOR TOWER HEIGHT 8.4 MTR. AND BASE 1500MM X 1500MM:</b>					
	(vi)	Making of foundation 2050mm deep suitable for tower of height 8.4mtr and base 1500mm x 1500mm with 100mm (4") cement concrete 1:5:10 with brick blast 40mm guage. Foundation should have Reinforced cement concrete M-20 mechanically batch mixed using batch type concrete mixer as per IS:1791 and vibrated by needle vibrator with centering and shuttering complete in all respect. Foundation should have cold twisted deformed bars for slab reinforcement (10mm dia.), columns (12mm dia.) and rings (8mm dia.).For slab reinforcement, there should be 8 Nos. steel bars each of length 1000mm for each column for bottom and top seperately. For R.C.C. Column, there should be 6Nos. vertical steel bars each of length 2100mm and 8 Nos. rings of dia 300mm each for each column. At the top of each column there should be 10mm thick M.S. Base plate size 200mm x 200mm. Foundation should have the provision of M.S. Nuts and bolts of size 20mm dia 700mm long 4Nos. for each column for fixing the tower on it. Foundation should be 150mm above ground level.	Each	1411.00	20311.00	1552.00	20452.10
34.38		<b>HT &amp; LT LINE ITEMS:</b>					
	(vii)	Supply & erection of 11kV GO switch confirming to ISI specifications. The item includes supply and erection of operating pipe and handle arrangement of MS flat 50mm x 6mm and channels 75mm x 40mm sheet. The GO switch is to be fitted with locking arrangement so as it locks upward on 'ON' position and locks downward in 'OFF' position. The entire GO switch assembly/unit should be properly earthed and the job is to be completed as approved by Engineer-in-charge.	Each	874.00	8986.00	961.00	9073.40
	(viii)	Supply & erection of 'D' iron clamp 50mm x 6mm flat iron complete with fixing bolts and nuts (16mm x 200mm) including making holes in the pole as approved by Engineer-in-charge.	Each	59.00	156.00	65.00	161.90

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(ix)	Supply & erection of 'V' shape cross arm of MS channel 75mm x 40mm as per standard drawing. The item include supply and erection of half clamp made out of 50mm x 6mm flat including cost of nut and bolts as approved by Engineer-in-charge.	Each	118.00	545.00	130.00	556.80
	(x)	Supply & erection of 11kV Top Hamper made out of MS flat 50mm x 6mm as per standard drawing. The item includes supply and erection of nut and bolts (19mmx 125mm) as required. The job is to be completed as approved by Engineer-in-charge.	Each	118.00	329.00	130.00	340.80
<b>34.38</b>	<b>MISCELLANEOUS ITEMS:</b>						
	<b>COOLER STAND:</b>						
	(xi)	Supply and erection of M.S. Cooler stand made from M.S. Angle iron 40mm x 40mm x 5mm having dimensions of base 700mm x 700mm and top 700mm x 700mm on which cooler is to be fixed. M.S. Angle iron ( 4Nos. ) legs of stand should be 700mm high. The stand should be painted with one coat of primer and two coats of approved paint.	Each	339.00	1992.00	373.00	2025.90
<b>34.38</b>	<b>M.S. FLAT/ CHANNEL BRACKETS:</b>						
	(xii)	Supply and erection of M.S. Flat bracket made from 50mm x 6mm of length 600mm and width 300mm for installing metal halide flood light fitting on it. Bracket should be fixed with the existing pipe of cover shed with M.S. Flat clamp of size 50mm x 6mm The bracket should be painted with one coat of primer and two coats of approved paint.	Each	212.00	625.00	233.00	646.20
	(xiii)	Supply and erection of M.S. Channel bracket made from 100mm x 50mm of length 600mm and height 600mm with M.S. angle iron 40mm x 40mm x 5mm for installing metal halide flood light fitting on it. Bracket should be fixed/ welded with the existing pipe of cover shed. The bracket should be painted with one coat of primer and two coats of approved paint.	Each	212.00	1057.00	233.00	1078.20

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(xiv)	Supply and erection of MS sheet metal box (1mm thick) of length 1225mm, breadth 400mm, height 425mm with MS angle iron 40mm x 40mm x 5mm frame at the base of the box for storing metal halide flood light fitting in it. Sheet metal should have top portion hinged with 6" (6 inch) hinges and divided into equal 8 compartments with sheet 1mm thick.	Each	847.00	4294.00	932.00	4378.70
<b>34.38</b>	<b>MS CHANNELS/ FLATS:</b>						
	(xv)	<b>Supply and Erection of MS angle iron (Channel)/ MS Flats of suitable size with cutting, bending and necessary holes as desired by Engineer-in-charge at site:-</b>					
	(a)	MS angle iron size 50mm x 50mm x 5mm thick	Metre	103.00	281.00	113.00	291.30
	(b)	MS angle iron size 50mm x 50mm x 6mm thick	Metre	103.00	312.00	113.00	322.30
	(c)	MS angle iron size 30mm x 30mm x 5mm thick	Metre	103.00	206.00	113.00	216.30
	(d)	MS angle iron size 40mm x 40mm x 5mm thick	Metre	103.00	239.00	113.00	249.30
	(e)	MS angle iron size 100mm x 50mm x 6mm thick	Metre	124.00	503.00	136.00	515.40
	(f)	MS angle iron size 75mm x 40mm x 4mm thick	Metre	124.00	397.00	136.00	409.40
	(g)	MS flat iron size 50mm x 5mm thick	Metre	31.00	124.00	34.00	127.10
	(h)	MS flat iron size 40mm x 5mm thick	Metre	31.00	92.00	34.00	95.10
	(i)	MS flat iron size 25mm x 5mm thick	Metre	31.00	78.00	34.00	81.10
<b>34.38 A</b>		<b>Supply and erection of heavy duty aluminium thimbles/lugs for cable end termination duly crimped including making necessary connections completely:-</b>					
	(i)	Aluminium thimble cable Core size 4 - 6sq.mm	Each	12.00	13.00	13.00	14.20
	(ii)	Aluminium thimble cable Core size 10 - 16sq.mm	Each	12.00	14.00	13.00	15.20

Sr. No.	Description						Unit	Zone-A		Zone-B	
								Labour Rate	Through Rate	Labour Rate	Through Rate
1	2						3	4	5	6	7
	(iii)	Aluminium thimble cable Core size 25 - 35sq.mm					Each	12.00	17.00	13.00	18.20
	(iv)	Aluminium thimble cable Core size 50sq.mm					Each	20.00	27.00	22.00	29.00
	(v)	Aluminium thimble cable Core size 70sq.mm					Each	20.00	30.00	22.00	32.00
	(vi)	Aluminium thimble cable Core size 95sq.mm					Each	20.00	35.00	22.00	37.00
	(vii)	Aluminium thimble cable Core size 120sq.mm					Each	24.00	43.00	26.00	45.40
	(viii)	Aluminium thimble cable Core size 150sq.mm					Each	24.00	52.00	26.00	54.40
	(ix)	Aluminium thimble cable Core size 185sq.mm					Each	24.00	62.00	26.00	64.40
	(x)	Aluminium thimble cable Core size 240sq.mm					Each	47.00	100.00	52.00	104.70
	(xi)	Aluminium thimble cable Core size 300sq.mm					Each	47.00	116.00	52.00	120.70
	(xii)	Aluminium thimble cable Core size 400sq.mm					Each	47.00	157.00	52.00	161.70
	(xiii)	Aluminium thimble cable Core size 500sq.mm					Each	59.00	212.00	65.00	217.90
	(xiv)	Aluminium thimble cable Core size 630sq.mm					Each	59.00	278.00	65.00	283.90
	(xv)	Aluminium thimble cable Core size 800sq.mm					Each	59.00	354.00	65.00	359.90
	(xvi)	Aluminium thimble cable Core size 1000sq.mm					Each	59.00	467.00	65.00	472.90
34.38 B		Supply and erection of heavy duty Copper thimbles/lugs for cable end termination duly crimped including making necessary connections etc. completely:-									
	(i)	Copper thimble cable Core size 4 - 6sq.mm					Each	12.00	18.00	13.00	19.20
	(ii)	Copper thimble cable Core size 10 - 16sq.mm					Each	12.00	22.00	13.00	23.20



Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(iii)	Copper thimble cable Core size 25 - 35sq.mm	Each	12.00	34.00	13.00	35.20
	(iv)	Copper thimble cable Core size 50sq.mm	Each	20.00	55.00	22.00	57.00
	(v)	Copper thimble cable Core size 70sq.mm	Each	20.00	74.00	22.00	76.00
	(vi)	Copper thimble cable Core size 95sq.mm	Each	20.00	102.00	22.00	104.00
	(vii)	Copper thimble cable Core size 120sq.mm	Each	24.00	138.00	26.00	140.40
<b>34.38 C</b>		<b>Supply and erection of heavy duty brass single compression gland for cable end termination duly complete with checknuts etc. including making necessary connections:-</b>					
	(i)	Brass Gland for Aluminium cable 2/3 Core size 2.5sq.mm	Each	30.00	51.00	33.00	54.00
	(ii)	Brass Gland for Aluminium cable 2/3/4 Core size 4sq.mm	Each	30.00	54.00	33.00	57.00
	(iii)	Brass Gland for Aluminium cable 2/3/4 Core size 6sq.mm	Each	30.00	61.00	33.00	64.00
	(iv)	Brass Gland for Aluminium cable 2/3/4 Core size 10sq.mm	Each	47.00	83.00	52.00	87.70
	(v)	Brass Gland for Aluminium cable 2/3/4 Core size 16sq.mm	Each	47.00	103.00	52.00	107.70
	(vi)	Brass Gland for Aluminium cable 2/3/3½/4 Core size 25-35sq.mm	Each	47.00	114.00	52.00	118.70
	(vii)	Brass Gland for Aluminium cable 2/3/3½/4 Core size 50sq.mm	Each	59.00	142.00	65.00	147.90
	(viii)	Brass Gland for Aluminium cable 3/3½/4 Core size 70sq.mm	Each	59.00	151.00	65.00	156.90
	(ix)	Brass Gland for Aluminium cable 3/3½/4 Core size 95-120sq.mm	Each	79.00	199.00	87.00	206.90
	(x)	Brass Gland for Aluminium cable 3/3½/4 Core size 150sq.mm	Each	79.00	232.00	87.00	239.90
	(xi)	Brass Gland for Aluminium cable 3/3½/4 Core size 185sq.mm	Each	79.00	275.00	87.00	282.90
	(xii)	Brass Gland for Aluminium cable 3/3½/4 Core size 240sq.mm	Each	118.00	356.00	130.00	367.80
	(xiii)	Brass Gland for Aluminium cable 3/3½/4 Core size 300sq.mm	Each	118.00	407.00	130.00	418.80

Sr. No.	Description		Unit	Zone-A		Zone-B	
				Labour Rate	Through Rate	Labour Rate	Through Rate
1	2		3	4	5	6	7
	(xiv)	Brass Gland for Aluminium cable 3/3½/4 Core size 400sq.mm	Each	118.00	506.00	130.00	517.80
	(xv)	Brass Gland for Aluminium cable 3½/4 Core size 500sq.mm	Each	148.00	653.00	163.00	667.80
	(xvi)	Brass Gland for Aluminium cable 3½/4 Core size 630sq.mm	Each	148.00	787.00	163.00	801.80
<b>34.39</b>		<b>DISMANTLING WIRING POINTS &amp; FITTINGS:</b>					
		<b>Dismantling old wiring points including necessary repairs to wall etc:-</b>					
	(i)	Fan, light or call bell point	Each	12.00	12.00	13.00	13.20
	(ii)	Wall socket, power plug point	Each	9.00	9.00	10.00	9.90
	(iii)	Removal of existing Tube fitting etc.	Each	18.00	18.00	20.00	19.80
	(iv)	Removal of existing Ceiling fans/ Exhaust fans	Each	23.00	24.00	25.00	26.30

