## CONSTRUCTION OF SEWER LINE ALONG OMTI NALA, JABALPUR

	SUMMARY SHEET	
Sr No.	Item Description	Amount (In Rs.)
1	SEWER	26761685.40
2	SEWAGE TREATMENT PLANT	700000.00
	TOTAL	33761685.40
	ROUNDING OFF TOTAL	3380000.00

In Words three crores thirty eight lakh only.

	BILL OF QUANT				
PRO	VIDING, LAYING, JOINTING, TESTING & COMMISSI JABALPUF		OF T SEWER	LINE ALOI	NG OMTI NALA,
	SECTION -				
	Sterior	•			
Sr. No.	Item Description	Unit	Quantity	RATE	Amount in Rs.
1	EARTHWORK				
	Earth work in Excavation for pipe trench in all kinds				
	of soil and WBM in areas including dressing, watering				
	and ramming and disposal of Excavated earth lead				
	upto 50 meters and lift upto 1.5m, disposal earth to				
	be leveled, neatly dressed.				
а	Lift 0 to 1.5 m	Cu.m	441.00	129.10	56933.10
b	Lift 1.5 m to 3.0 m	Cu.m	2948.40	134.10	395380.44
С	Lift 3.0 m to 4.5 m	Cu.m	3742.20	139.10	520540.02
d	Lift 4.5 m to 6.0 m	Cu.m	2288.00	144.10	329700.80
2	Earth work in excavation for pipe trench in all kinds				
	of rocks in areas including dressing, stacking of useful				
	material and disposal of unserviceable one upto 50 m				
	lead and lift upto 1.5 m				
а	Lift 0 to 1.5 m	Cu.m	49.00	206.00	10094.00
b	Lift 1.5 to 3 m	Cu.m	327.60	211.00	69123.60
С	Lift 3.0 m to 4.5 m	Cu.m	415.80	216.00	89812.80
d	Lift 4.5 m to 6.0 m	Cu.m	228.80	221.00	50564.80
3	Excavation for foundation / pipe trenches in slush				
•	Muddy / marshy / Slushy / soil including use of				
	poclain, labour for dewatering during execution				
	including removing the excavated material upto a				
	distance of 50 meters and the lifts as below, stacking				
	and spreading as directed, preparing the bed by				
	cleaning the mud, labour required for execution for				
	shuttering item but excluding backfilling etc				
	complete.				
а	Lift 0 to 1.5 m	Cu.m	98.00	155.00	15190.00
b	Lift 1.5 m to 3 m	Cu.m	655.20	194.00	127108.80
	Dewatering:				
_	Pumping out water caused by springs, tides or river	<b>D</b>	750.00	F4 00	
3a	seepage broken water mains or drain or well or the	Per Kl	753.20	51.00	38413.20
	like				
4	Close timbering/steel in trenches including strutting,				
	shoring and packing cavities (wherever required)				
	complete. (Measurements to be taken of the face				
	area timbered).				
а	A) Lift 0 to 1.5 m (for non-water logged area)	Sq.m	196.00	99.00	19404.00
b	Additional per Sqm. For further lifts of 1.5 m each	Sq.m	98.00	104.00	10192.00

5	Providing & laying mechanically mixed cement concrete 20mm maximum size graded crushed stone including cost of centering & shuttering. In Plinth & foundation M-10 Concrete				
а		Cu.m	63.00		
b		Cu.m	327.60		
С		Cu.m	340.20		
d		Cu.m	176.00		
		Cu.m	906.80	3595.00	3259946.00
6	Filling with moorum for pipe bedding or over the pipe including supply of moorum.				
а	250 mm	Cu.m	189.00		
b	300 mm	Cu.m	1375.92		
С	350 mm	Cu.m	1814.40		
d	400 mm	Cu.m	1146.24		
_			4525.56	625.00	2828475.00
7	Filling available excavated earth in trenches, plinth				
	sides of foundation in layers not exceeding 20cm. in				
	depth including consolidation of each layer by				
	ramming watering, lead up to 50m and lift up to 1.5m in all kinds of soils				
i	Lift 0 to 1.5 m	Cu.m	176.40	59.00	10407.60
7a	Extra for every additional lift of 1.5 m or part thereof	cu.m	170.40	55.00	10407.00
74	in. All kinds of soil.				
ii	Lift 1.5 m to 3.0 m	Cu.m	1179.36	83.00	97886.88
iii	Lift 3.0 m to 4.5 m	Cu.m	1496.88	107.00	160166.16
iv	Lift 4.5 m to 6.0 m	Cu.m	915.20	131.00	119891.20
8	Providing and Laying non-pressure (NP3) RCC				
	socket & spigot pipes with rubber gasket joint				
	including testing of joints. [ Conforming to IS ;				
	458-1988, ISI marked laying as per IS 783:1985)				
а	250 mm	RM	1260.00	558.00	703080.00
b	300 mm	RM	4680.00	827.00	3870360.00
С	350 mm	RM	3780.00	1390.00	5254200.00
d	400 mm	RM	1600.00	1710.00	2736000.00

	grade M-10 (Nominal Mix) with stone aggregate 40mm nominal size, RCC grade M-20 (Nominal Mix)	Nos.	205.00	13215.00	2709075.00
		1005.	205.00	13213.00	2703073.00
	with stone aggregate M-20 nominal size on top slab and making channel in cement concrete grade M-15				
	(Nominal Mix) with stone aggregate 20mm nominal				
	size neatly finished, curing and fixing of SFRC cover				
	and frame (heavy duty HD-20) 560mm internal dia				
	conforming to IS 12592.				
	Extra for increasing depth of manhole mentioned at				
	Item above from 1680 mm to 2290 mm with modular	RM	56.00	5400.00	302400.00
9a	brick class designation 40.				
9d	Providing MS/CI foot rests and fixing in manhole with				
	CC blocks of Cement Concrete grade M-10 (Nominal				
	Mix) with stone aggregate 20 mm nominal size of size				
	20x20x10cm				
	With 20mm square bar/casting one foot rest (average	KG	4350.00	66.00	287100.00
10	weight of 1 foot rest 2.35kg				
10	Man hole with above specifications having inside size 900x450mm and 900mm deep including Pre Cast RCC				
	Man hole Cover (Heavy Duty)				
	500mm dia having 100mm thickness conforming to IS	Nos.	320.00	6557.00	2098240.00
	: 12592 - 2002 complete.				
11					
	Property Connection				
	Providing, laying and jointing following P.V.C U				
	pipes with solvent cement joint for Non-pressure		2200.00	105.00	F03000 00
	gravity drain and sewer applications including testing	RM	3200.00	185.00	592000.00
	of joints, cost of jointing materials etc. complete in all				
	respect. [Conform to IS 15328:2003, solvent cement				
	shall conform to IS 14182]. 110 MM Dia pipe				
	Total				26761685.4

		E	BILL OF QU	ANTITIES					
	PROVIDING, LAYING, JOINTING, TESTING	G & CO	MMISSIO	NING OF T	SEWER LIN	NE ALONG C	OMTI NALA	, JABALPUI	2
			SECTIC	DN - I					
Sr. No.	Item Description	Unit	No	Length	Width	Depth/ Height	Quantity	RATE	Amount in Rs.
1	EARTHWORK Earth work in Excavation for pipe trench in all kinds of soil and WBM in areas including dressing, watering and ramming and disposal of Excavated earth lead upto 50 meters and lift upto 1.5m, disposal earth to be leveled, neatly dressed.								
а	Lift 0 to 1.5 m	Cu.m	2.0	630.00	0.50	0.70	441.00	129.10	56933.10
b	Lift 1.5 m to 3.0 m	Cu.m	2.0	2340.00	0.70	0.90	2948.40	134.10	395380.44
С	Lift 3.0 m to 4.5 m	Cu.m	2.0	1890.00	0.90	1.10	3742.20	139.10	520540.02
d	Lift 4.5 m to 6.0 m	Cu.m	2.0	800.00	1.10	1.30	2288.00	144.10	329700.80
2	Earth work in excavation for pipe trench in all kinds of rocks in areas including dressing, stacking of useful material and disposal of unserviceable one upto 50 m lead and lift upto 1.5 m								
а	Lift 0 to 1.5 m	Cu.m	2.0	70.00	0.50	0.70	49.00	206.00	10094.00
b	Lift 1.5 to 3 m	Cu.m	2.0	260.00	0.70	0.90	327.60	211.00	69123.60
С	Lift 3.0 m to 4.5 m	Cu.m	2.0	210.00	0.90	1.10	415.80	216.00	89812.80
d	Lift 4.5 m to 6.0 m	Cu.m	2.0	80.00	1.10	1.30	228.80	221.00	50564.80

3	Excavation for foundation / pipe trenches in slush Muddy / marshy / Slushy / soil including use of poclain, labour for dewatering during execution including removing the excavated material upto a distance of 50 meters and the lifts as below, stacking and spreading as directed, preparing the bed by cleaning the mud, labour required for execution for shuttering item but excluding backfilling etc complete.								
а	Lift 0 to 1.5 m	Cu.m	2.0	140.00	0.50	0.70	98.00	155.00	15190.00
b	Lift 1.5 m to 3 m	Cu.m	2.0	520.00	0.70	0.90	655.20	194.00	127108.80
	Dewatering: Pumping out water caused by springs, tides or river seepage broken water mains or drain or well or the like						753.20	51.00	38413.20
4	Close timbering/steel in trenches including strutting,								
	shoring and packing cavities (wherever required)								
	complete. (Measurements to be taken of the face area timbered).								
а	A) Lift 0 to 1.5 m (for non-water logged area)	Sq.m	2.0	280.00	0.50	0.70	196.00	99.00	19404.00
b	Additional per Sqm. For further lifts of 1.5 m each	Sq.m	2.0	140.00	0.50	0.70	98.00	104.00	10192.00
5	Providing & laying mechanically mixed cement concrete								
	20mm maximum size graded crushed stone including								
	cost of centering & shuttering.								
	In Plinth & foundation								
	M-10 Concrete								
а		Cu.m	2.0	630.00	0.50	0.10	63.00		
b		Cu.m	2.0	2340.00	0.70	0.10			
С		Cu.m	2.0	1890.00	0.90	0.10	340.20		
d		Cu.m	2.0	800.00	1.10	0.10	176.00		
		Cu.m					906.80	3595.00	3259946.00
6	Filling with moorum for pipe bedding or over the pipe including supply of moorum.								

а	250 mm	Cu.m					189.00		
b	300 mm	Cu.m					1375.92		
			-		-				
С	350 mm	Cu.m					1814.40		
d	400 mm	Cu.m					1146.24		
_							4525.56	625.00	2828475.00
7	Filling available excavated earth in trenches, plinth sides								
	of foundation in layers not exceeding 20cm. in depth								
	including consolidation of each layer by ramming								
	watering, lead up to 50m and lift up to 1.5m in all kinds								
	of soils								
i	Lift 0 to 1.5 m	Cu.m					176.40	59.00	10407.60
7a	Extra for every additional lift of 1.5 m or part thereof in.								
	All kinds of soil.								
ii	Lift 1.5 m to 3.0 m	Cu.m					1179.36	83.00	97886.88
iii	Lift 3.0 m to 4.5 m	Cu.m					1496.88	107.00	160166.16
iv	Lift 4.5 m to 6.0 m	Cu.m					915.20	131.00	119891.20
8	Providing and Laying non-pressure (NP3) RCC								
	socket & spigot pipes with rubber gasket joint								
	including testing of joints. [ Conforming to IS ;								
	458-1988, ISI marked laying as per IS 783:1985)								
а	250 mm	RM	2.0	630.00			1260.00	558.00	703080.00
b	300 mm	RM	2.0	2340.00		1	4680.00	827.00	3870360.00
С	350 mm	RM	2.0	1890.00		1	3780.00	1390.00	5254200.00
d	400 mm	RM	2.0	800.00			1600.00	1710.00	2736000.00

9	Construction of circular type manhole 1200mm internal dia at bottom, 560mm dia at top in brick masonry class designation 40 with 1:4 cement mortar 1:4 (1 cement : 4 Coarse sand) 1680m depth, 12mm thick cement plaster 1:3 cement plaster (1 cement : 3 Coarse sand) finished with a floating coat of neat cement. 30cm thick foundation in cement concrete grade M-10 (Nominal Mix) with stone aggregate 40mm nominal size, RCC grade M-20 (Nominal Mix) with stone aggregate M-20 nominal size on top slab and making channel in cement concrete grade M-15 (Nominal Mix) with stone aggregate 20mm nominal size neatly finished, curing and fixing of SFRC cover and frame (heavy duty HD-20) 560mm internal dia conforming to IS 12592.		205		205.00	13215.00	2709075.00
9a	Extra for increasing depth of manhole mentioned at Item above from 1680 mm to 2290 mm with modular brick class designation 40.	RM			56.00	5400.00	302400.00
	Providing MS/CI foot rests and fixing in manhole with CC blocks of Cement Concrete grade M-10 (Nominal Mix) with stone aggregate 20 mm nominal size of size 20x20x10cm						
	With 20mm square bar/casting one foot rest (average weight of 1 foot rest 2.35kg	KG			4350.00	66.00	287100.00
10	Man hole with above specifications having inside size 900x450mm and 900mm deep including Pre Cast RCC Man hole Cover (Heavy Duty) 500mm dia having 100mm thickness conforming to IS : 12592 - 2002 complete.	Nos.			320.00	6557.00	2098240.00

11							
	Property Connection Providing, laying and jointing following P.V.C U pipes with solvent cement joint for Non-pressure gravity drain and sewer applications including testing of joints, cost of jointing materials etc. complete in all respect. [Conform to IS 15328:2003, solvent cement shall conform to IS 14182].110 MM dia pipe	RM			3200.00	185.00	592000.00
	Total						26761685.4

	BILL OF QUANTITIES				
	CONSTRUCTION OF SWEREAGE TREATEME	NT PLANT			
	SECTION - I				
1	Design, Supply, Installation, Construction, Testing & Commissioning of following capacities of compact sewage treatment plants based on the principle of aerobic attached growth non - clogging Moving Bed Bio - Reactor (MBBR) including all E&M and civil works for STP so as to achieve the required parameters as specified in the technical specifications.				
	0.5 MLD	2.00	Jobs	3500000.00	7000000.00
	TOTAL				700000.00

BILL OF QUANTITIES CONSTRUCTION OF SWEREAGE TREATEMENT PLANT SECTION - II										
S.No	PARTICULARS	No	Length	Width	Depth/ Height	Quantity	UNIT	Rate (in Rs)	Amount	
1	Design, Supply, Installation, Construction, Testing & Commissioning of following capacities of compact sewage treatment plants based on the principle of aerobic attached growth non - clogging Moving Bed Bio - Reactor (MBBR) including all E&M and civil works for STP so as to achieve the required parameters as specified in the technical specifications.									
	0.5 MLD	2.00				2.00	Jobs	3500000.00	700000.00	
	TOTAL								700000.00	