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Contract Agreement

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THIS AGREEMENT made the 6th day of September, 2011, between Guwahati Metropolitan Development Authority, Government of Assam, Guwahati, Assam, India (hereinafter "the Employer"), of the one part, and M/s. VISHWA-BRCCPL(JV), 1-11-256/C/24, Plot No. 24, Gagan Vihar Colony, Begumpet, Hyderabad, India (hereinafter "the Contractor"), of the other part:

WHEREAS the Employer desires that the Works known as Procurement of Works (Item Rate) for Supply and Installation of Pipe and Fittings and Installation of Employer Furnished D.I. Pipe for the Water Distribution Network of the North Zone (Contract Identification No. GWSP/LCB/C#02) should be executed by the Contractor, and has accepted a Bid by the Contractor for the execution and completion of these Works and the remedying of any defects therein,

The Employer and the Contractor agree as follows:

- In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
- 2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.
  - the Letter of Acceptance;
  - (ii) the Letter of Technical Bid;
  - (iii) the Letter of Price Bid, Priced Bill of Quantities and Schedule of Adjustment data;
    - (iv) the addenda (following addenda as issued to the Bidders on the date mentioned);

Addendum #1: dated March 03, 2011

Addendum #2: dated March 08, 2011

Addendum #3: dated April 07, 2011

- (v) the Particular Conditions;
  - (vi) the General Conditions;

(vii) the Specification (as issued to the Bidder on Januray 20, 2011 including addenda as above);

Chief Executive Officer

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- (viii) the Drawings (as issued to the Bidder on Januray 20, 2011 including addenda as above);
- (ix) the completed Schedules (as submitted by the Bidder in Technical Bid);
- (x) Acknowledgment of Compliance with Guidelines for Procurement under Japanese ODA Loans; and
- (xi) Forms:
  - a) Performance Security
  - b) Advance Payment Security
  - c) Retention Money Security
- 3. In consideration of the payments to be made by the Employer to the Contractor as indicated in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.
- 4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of India on the day, month and year indicated above.

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ef Executive	Officer
Met <del>ropo</del> litan	Dev. Authority
	ref Executive

Signed by: Sri Preetom Saikia, CEO, GMDA

for and on behalf of the Employer

in the presence of

Signed by: MANISH PROSANNA

for and on behalf the Contractor

in the presence of

Signature:

Name:

C. K. PHUYAN

Designation:

Date:

06 9 2011

Additional Project Director
Project Implementation Unit (P.I.U.)
JICA funded Gowahati Water Supply Project

Signature: Rajuda Kemsi Del

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Designation: Manager - Administration

Date: 06/09/2011

# OFFICE OF THE CHIEF EXECUTIVE OFFICER GUWAHATI METROPOLITAN DEVELOPMENT AUTHORITY BHANGAGARH, GUWAHATI-5

### **Letter of Acceptance**

No. GMDA/JICA/19/2011/5

August 26, 2011

To:

M/s. VISHWA-BRCCPL (JV) 1-11-256/c/24, Plot No. 24 Gagan Vihar Colony, Begumpet Hyderabad – 500016 Andhra Pradesh, India

This is to notify you that your Bid dated 20<sup>th</sup> April 2011 for execution of the Works (Item Rate) for Supply and Installation of Pipe and Fittings and Installation of Employer Furnished D.I. Pipe for the Water Distribution Network of the North Zone (Contract Identification No. GWSP/LCB/C#02) for the Accepted Contract Amount of the equivalent of INR 288,734,749 (Rupees Two Hundred and Eighty Eight Million Seven Hundred Thirty Four Thousand Seven Hundred and Forty Nine Only), as corrected and modified in accordance with the Instructions to Bidders, is hereby accepted by our Agency.

You are requested to furnish the Performance Security within 28 days in accordance with the Conditions of Contract, using for that purpose one of the Performance Security Forms included in Section IX, Annexed to the Particular Conditions - Contract Forms, of the Bidding Document.

Authorized Signature:

prison ( Preetom Saihin)

Name and Title of Signatory: Mr. Preetom Saikia, Chief Executive Officer, GMDA Technology

Name of Agency: Guwahati Metropolitan Development Authority

Attachment: Contract Agreement

Memo No. GMDA/JICA/19/2011/5 - A

August 26, 2011

Copy to:

- 1) The Project Director, Project Implementation Unit, JICA assisted GWSP, Guwahati
- 2) Japan International Cooperation Agency, JICA India Office, New Delhi, India
- 3) Project Management Consultant, Guwahati, India

Chief Executive Officer
Guwahati Metropolitan Dev. Authority

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### VISHWA - BRCCPL (JV)



Office Address: 1-11-256/C/24, Plot No. 24, Gagan Vihar Colony, Begumpet,

Hyderabad - 500 016. A.P (India)

Phone: +91 40 2776 3835 / 36 / 37 Fax: +91 40 2776 3082

### Letter of Technical Bid

Date: 20.03.2011

Loan No.: ID-P 201

Invitation for Bid No.: GWSP/LCB/C-02/10-11

To
The Chief Executive Officer,
JICA ODA Loan Project
Guwahati Metropolitan Development Authority,
3<sup>rd</sup> Floor,STATFED Building, GMCH Road,
Bhangagarh,
Guwahati,-781005,Assam, INDIA.

### We, the undersigned, declare that:

- a) We have examined and have no reservations to the Bidding Document, including Addenda No.: (enclosed) issued in accordance with Instructions to Bidders (ITB) 8;
- b) We offer to execute in conformity with the Bidding Document the following Works: Procurementof Works (Item rate) for supply and installation of pipe and fittings and installation of Employer Furnished D.I Pipe for the water Distribution Network of the North Zone(Contract Package No. C.02)
- c) Our bid consisting of the Technical Bid and the Price Bid shall be valid for a period of 120 days from the date fixed for the bid submission deadline in

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accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

- d) We, including any subcontracts or suppliers for any part of the contract, have or will have nationalities from eligible countries, in accordance with ITB 4.2;
- e) We, including any subcontractors or suppliers for any part of the contract, do not have any conflict of interest in accordance with ITB 4.3;
- f) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with ITB 4.3, other than alternative offers submitted in accordance with ITB 13;

Ganesh Kumar A (NI)
Dy. Manager (BI)

Duly authorized to sign the bid and on behalf of M/s. VISHWA-BRCCPL (JV), 1-11-256/C/24, Plot No. 24, Gagan Vihar Colony, Begumpet, Hyderabad - 500 016. A.P (India) Phone: +91 40 2776 3835 / 36 / 37 Fax: +91 40 2776 3082

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## VISHWA - BRCCPL (JV)



Office Address: 1-11-256/C/24, Plot No. 24, Gagan Vihar Colony, Begumpet,

Hyderabad - 500 016. A.P (India)

Phone: +91 40 2776 3835 / 36 / 37 Fax: +91 40 2776 3082

### Letter of Price Bid

Date: 15.04.2011

Loan No.: ID-P 201

Invitation for Bid No.: GWSP/LCB/C-02/10-11

To
The Chief Executive Officer,
JICA ODA Loan Project
Guwahati Metropolitan Development Authority,
3rd Floor,STATFED Building, GMCH Road,
Bhangagarh,
Guwahati,-781005,Assam, INDIA.

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### We, undersigned, declare that:

- a. We have examined and have no reservations to the Bidding Document, including Addenda No.: (enclosed) issued in accordance with instructions to Bidders (ITB) 8;
- b. We offer to execute in conformity with the Bidding Document and Technical Bid submitted for the following works: Procurementof Works (Item rate) for supply, installation, and Commissioning of M.S Pipes and HDPE pipes & installation and commissioning of D.I pipes for distribution Network in Ramsa Hill & Amiya Nagar of south Central Zone
- c. The total price of our bid, excluding any discounts offered in item (d) below is: (Enclosed Separately)

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- d. The discounts offered and the methodologies for their application are: (+/- 00%)
- e. Our bid shall be valid for a period of 180 days from the date fixed for the bid submission deadline in accordance with the Bidding Document, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.;
- f. If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Document;
- g. We understand that this bid, together with your written acceptance thereof included in your notification of award; shall constitute a binding contract between us, until a formal contract is prepared and executed; and
- h. We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Ganesh Kumar A Dy. Manager (BD)

Duly authorized to sign the bid and on behalf of M/s. VISHWA-BRCCPL (JV), 1-11-256/C/24, Plot No. 24, Gagan Vihar Colony, Begumpet, Hyderabad - 500 016. A.P. (India) Phone: +91 40 2776 3835 / 36 / 37 Fax: +91 40 2776 3082

# Contract Package No. C#02 Summary of Price Schedule

		Total Amount (INR)	
		Applicable Taxes,	
Description	Basic Rate (CIP)	Duties, etc.	TOTAL
	1	2	3
rvey Work			
	173,313.00	5,670.00	178,983.0
rthwork			
	35,839,080.00	1,129,020.00	36,968,100.0
pelines, Specials and	405 000 005 50	4 000 000 07	100 100 500
purtenances	105,089,205.50	4,393,303.27	109,482,508.
pe Jacking	15.015.000.00	504 300 00	45.047.200
	15,316,090.00	501,200.00	15,817,290.
Ives and Appurtenances	0.407.430.00	124 600 00	0.242.110
	8,107,430.00	134,688.00	8,242,118.
lve Chambers	0.000.340.00	226.045.00	10 217 125
	9,990,210.00	326,915.00	10,317,125.
scellaneous Civil Work	2 064 240 00	66 507 00	2 127 707
	2,061,210.00	66,587.00	2,127,797.
ad Restoration	00.006.010.00	2 244 420 00	102 121 220
·	98,886,810.00	3,244,420.00	102,131,230.
sting, Trial Runs and	2 440 727 00	70 970 00	2 520 507
mmissioning	2,440,727.00	79,870.00	2,520,597.
ıbtotal (Items <u>1-9)</u>	277,904,075.50	9,881,673.27	287,785,748.7
ywork - Labor	277,50 1,070.00	3,002,010.21	
y WOIN - LUBOI	103,320.00	_	103,320.
ywork - Material	100,020.00		
ywork waterial	203,220.00	_	203,220.
ywork - Equipment			
THOIR Equipment	642.460.00	_	642,460.
ubtotal (Itams 10 12)	3.2, .00.00		
ומנטנפו (ונפוווף 10-17)	949,000.00	-	949,000.
rand Total (Items 1-12)			
idila i otal (iteliis 1 12)	278,853,075.50	9,881,673.27	288,734,748.
	ototal (Items 10-12) and Total (Items 1-12)	949,000.00 and Total (Items 1-12)	ototal (Items 10-12) 949,000.00

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	Contr	act C#02	2: Priced Bi	II of Quantitie	s			
Item No.	Description	Unit	Quantity	Unit Rat	e (INR)		Amount (INR)	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
			(1)	(2)	(3)	$(4) = (1) \times (2)$	$(5) = (1) \times (3)$	(6) = (4) + (5)
	SURVEY WORK							
	Topographical survey work using Total Station as directed by the Employer's Representative, including preparation and finalization of survey drawings and CADD files.	km	3.0	1834.00	60.00	5502.00	180.00	5682.00
1.2	Preparation, submission and approval of Working Drawings as per the	km	91.5	1834.00	60.00	167811.00	5490.00	173301.00
	specification and as directed by Employer's Representative.		31.0		00.00	107011.00	3490.00	173301.00
	Subtotal Item No. 1					173,313.00	5,670.00	470.000.00
	Capitali No. 1				I	173,313.00	3,670.00	178,983.00
2	EARTHWORK							
2.1	Earth work for <b>excavation</b> of foundations, pipe trenches, valve chambers, thrust blocks, etc. in all kinds of <b>ordinary soils</b> such as moorum, sand, sandy silt, clay, kankar etc. or in combination. Excavation shall include the removal of roadway surfacing, including dressing, compaction of the bottoms of the excavation, shoring and strutting wherever required, dewatering whenever required, removal of the excavated soil, stockpiling and disposal of surplus excavated soil off-site as directed by the Employer's Representative.							
	Excavation will be paid for in the following segments:	-						
(a)	0 to 1.5 m from GL	m <sup>3</sup>	89,070	165.00	5.00	14696550.00	445350.00	15141900.00
(b)	above 1.5 m to 3.0 m depth from GL	m <sup>3</sup>	5,780	220.00	7.00	1271600.00	40460.00	1312060.00
(c)	above 3.0 m to 4.5 m depth from GL	m <sup>3</sup>	1,920	330.00	11.00	633600.00	21120.00	654720.00
(d)	above 4.5 m depth from GL	m <sup>3</sup>	510	342.00	11.00	174420.00	5610.00	180030.00
	S / Win S							

	Contr	act C#02	2: Priced Bi	II of Quantitie	s			
Item No.	Description	Unit	Quantity	Unit Rat	e (INR)		Amount (INR)	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
			(1)	(2)	(3)	$(4) = (1) \times (2)$	$(5) = (1) \times (3)$	(6) = (4) + (5)
2.2	Earth work for excavation of foundations, pipe trenches, valve chambers, thrust blocks, etc. in all kinds of <b>ordinary rock</b> , Excavation shall include the removal of asphalt and concrete road surfacing, including dressing, compaction of the bottoms, shoring and strutting wherever required, dewatering whenever required, removal of the excavated rock, stockpiling and disposal of surplus excavated rock offsite as directed by the Employer's Representative.							
	Excavation will be paid for in the following segments:			·		•		
(a)	0 to 1.5 m from GL	m <sup>3</sup>	6,480	257.00	8.00	1665360.00	51840.00	1717200.00
(b)	above 1.5m to 3.0 m depth from GL	m <sup>3</sup>	4,680	287.00	9.00	1343160.00		1385280.00
(c)	above 3.0 m to 4.5 m depth from GL	m <sup>3</sup>	230	318.00	10.00	73140.00	2300.00	75440.00
(d)	above 4.5 m depth from GL	m <sup>3</sup>	60	458.00	15.00	27480.00	900.00	28380.00
2.3	Earth work for excavation of foundations, pipe trenches, valve chambers, thrust blocks, etc. in all kinds of hard rock requiring blasting, Excavation shall include dressing, compaction of the bottoms, shoring and strutting wherever required, dewatering whenever required, removal of the excavated rock, stockpiling and disposal of surplus excavated rock off-site as directed by the Employer's Representative.							
	Excavation will be paid for in the following segments:							
(a)	0 to 1.5 m from GL	m <sup>3</sup>	2,140	318.00	10.00	680520.00	21400.00	701920.00
(b)	above 1.5m to 3.0 m depth from GL	m <sup>3</sup>	1,210	287.00	9.00	347270.00	10890.00	358160.00
(c)	above 3.0 m to 4.5 m depth from GL	m <sup>3</sup>	70	318.00	10.00	22260.00	700.00	22960.00
(d)	above 4.5 m depth from GL	m <sup>3</sup>	20	623.00	20.00	12460.00	400.00	12860.00
	WA-BA							

	Contr	act C#02	2: Priced Bi	II of Quantitie	s				
Item No.	Description	Unit	Quantity	Unit Rat	e (INR)		Amount (INR)		
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total	
			(1)	(2)	(3)	$(4) = (1) \times (2)$	$(5) = (1) \times (3)$	(6) = (4) + (5)	
	Earth work for excavation of foundations, pipe trenches, valve chambers, thrust blocks, etc. in all kinds of hard rock (blasting prohibited), Excavation shall include compaction of the bottoms, shoring and strutting wherever required, dewatering whenever required, removal of the excavated rock, stockpiling and disposal of surplus excavated rock off-site as directed by the Employer's Representative.								
	Excavation will be paid for in the following segments:								
(a)	0 to 1.5 m from GL	m <sup>3</sup>	1,100	501.00	16.00	551100.00	17600.00	568700.00	
(b)	above 1.5m to 3.0 m depth from GL	m <sup>3</sup>	140	532.00	17.00	74480.00	2380.00	76860.00	
(c)	above 3.0 m to 4.5 m depth from GL	$m^3$	50	562.00	18.00	28100.00	900.00	29000.00	
(d)	above 4.5 m depth from GL	m <sup>3</sup>	20	795.00	26.00	15900.00	520.00	16420.00	
	Backfilling of pipe trenches, foundations, etc. with approved graded excavated soil (select granular material), excluding rock, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.	m <sup>3</sup>	80,270	31.00	1.00	2488370.00	80270.00	2568640.00	
	Backfilling of pipe trenches, foundations, etc. with approved graded sand, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and standard drawings and as directed by the Employer's Representative.	m <sup>3</sup>	18,190	458.00	15.00	8331020.00	272850.00	8603870.00	
	Backfilling of pipe trenches, foundations, etc. with approved graded gravel, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and standard drawings and as directed by the Employer's Representative.	m <sup>3</sup>	8,570	397.00	13.00	3402290.00	111410.00	3513700.00	

GWSP/LCB/C#02

	Contr	act C#02	2: Priced Bi	II of Quantitie	s			
Item No.	Description	Unit	Quantity	Unit Rate	e (INR)		Amount (INR)	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
			(1)	(2)	(3)	$(4) = (1) \times (2)$	$(5) = (1) \times (3)$	(6) = (4) + (5)
	Subtotal Item No. 2					35,839,080.00	1,129,020.00	36,968,100.00
3	PIPELINES, SPECIALS AND APPURTENANCES							
3.1	Supplying spirally welded MS pipe with internal lining and external coating as per the specification of the following internal diameters and wall thicknesses. The rate shall include third party inspection, transportation, freight charges, loading, unloading and stacking at the project site, with the cost of all labor, material, taxes and duties.							
(a)	100 mm ID 6 mm wall thickness (at drain crossings)	m	8	1638.00	80.00	13104.00	640.00	13744.00
(b)	150 mm ID 6 mm wall thickness (at drain crossings)	m	21	2200.00	111.00	46200.00	2331.00	48531.00
(c)	200 mm ID 6 mm wall thickness (at drain/railroad crossings)	m	32	3056.00	151.00	97792.00	4832.00	102624.00
(d)	250 mm ID 6 mm wall thickness (at drain/railroad crossings)	m	98	3789.00	124.00	371322.00	12152.00	383474.00
(e)	300 mm ID 6 mm wall thickness (at drain crossings)	m	54	4523.00	222.00	244242.00	11988.00	256230.00
(f)	700 mm ID 6 mm wall thickness	m	5,040	10255.00	502.00	51685200.00	2530080.00	54215280.00
(g)	800 mm ID 8 mm wall thickness	m	1,280	14424.00	710.00	18462720.00	908800.00	19371520.00
(h)	1,000 mm ID 8 mm wall thickness	m	280	18225.00	892.00	5103000.00	249760.00	5352760.00
(i)	400 mm ID 20 mm thick MS pipe (at drain/road crossings)	m	20	16074.00	787.00	321480.00	15740.00	337220.00
(j)	500 mm ID 20 mm thick MS pipe (at drain/road crossings)	m	10	19888.00		198880.00	9730.00	208610.00
(k)	600 mm ID 20 mm thick MS pipe (at drain/road crossings)	m	10	23701.00		237010.00	11600.00	248610.00
(1)	700 mm ID 20 mm thick MS pipe (at drain/road crossings)	m	10	27515.00		275150.00	13470.00	288620.00
(m)	800 mm ID 20 mm thick MS pipe (at drain/road crossings)	m	10	31329.00	1533.00	313290.00	15330.00	328620.00

	Contr	act C#0	2: Priced Bi	II of Quantitie	s			
Item No.	Description	Unit	Quantity	Unit Rate	e (INR)		Amount (INR)	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
			(1)	(2)	(3)	$(4) = (1) \times (2)$	$(5) = (1) \times (3)$	(6) = (4) + (5)
3.2	Supplying all types of MS Specials plain ended, socket ended and flanged as required with internal lining and external coating as per the specification, such as bends, tees, tapers, spool pieces, blind flanges, pieces for pipe connection, valve connections, dismantling joints, anchor bolts, straps, air vent pipe, etc. of different diameters, manufactured from Fe 410 grade steel. This item includes loading, transportation to the project site, unloading and stacking, etc. complete with cost of third party inspection, material, labor, taxes and duties.	MT	30.5	61117.00	4800.00	1864068.50	146400.00	2010468.50
3.3	Handling, aligning, laying and jointing MS pipes and specials to correct line and level in trenches. The item includes transportation of pipes and specials from the storeyard to the project site, stacking of pipe as per BIS requirements, loading, unloading, hoisting, lowering, marginal cutting and grinding wherever necessary, assembling, jointing, providing temporary supports, lining and coating at joints etc. for pipe of the following diameters and thicknesses. The rate also shall include radiography of field joints, field testing, etc. as specified and shown on the drawings and specification.							
(a)	100 mm ID 6 mm wall thickness (at drain crossings)	m	8	134.00	4.00	1072.00	32.00	1104.00
(b)	150 mm ID 6 mm wall thickness (at drain crossings)	m	21	141.00		2961.00	105.00	3066.00
(c)	200 mm ID 6 mm wall thickness (at drain/railroad crossings)	m	32	171.00	6.00	5472.00	192.00	5664.00
(d)	250 mm ID 6 mm wall thickness (at drain/railroad crossings)	m	98	208.00	7.00	20384.00	686.00	21070.00
(e)	300 mm ID 6 mm wall thickness (at drain crossings)	m	54	220.00	7.00	11880.00	378.00	12258.00
(f)	700 mm ID 6 mm wall thickness	m	5,040	550.00	18.00	2772000.00	90720.00	2862720.00
(g)	800 mm ID 6 mm wall thickness	m	1,280	672.00	22.00	860160.00	28160.00	888320.00
(h)	1,000 mm ID 8 mm wall thickness	m	280	978.00	32.00	273840.00	8960.00	282800.00
	NA CROW	<u> </u>						

	Contr	act C#02	2: Priced Bi	II of Quantitie	s			
Item No.	Description	Unit	Quantity	Unit Rate	e (INR)		Amount (INR)	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
			(1)	(2)	(3)	$(4) = (1) \times (2)$	$(5) = (1) \times (3)$	(6) = (4) + (5)
3.4	Supplying DI Specials and fittings with plain, double socket, socket & flanged and double flanged end connections as required, with lining and coating as per the specification, and IS 9523 with EPDM rubber gaskets as per IS 5382 as required for successful completion of the work. This item includes third party inspection, transportation, freight, loading and unloading, stacking etc. all complete for various sizes of	MT	77.0		2.17	9412018.00	167.27	9412185.27
3.5	Handling, aligning, <b>laying and jointing</b> of Employer furnished <b>K-9 DI pipe</b> to other pipe and to <b>Contractor furnished fittings and</b> specials, with EPDM rubber O-rings (as per IS 5382) and flange gaskets (as per IS 12288) and the specifications. This item includes transportation of pipes, specials and fittings from the storeyard to the project site, stacking of pipe and fittings as per BIS requirements, loading, unloading, hoisting, lowering, marginal cutting and grinding wherever necessary, assembling, jointing, providing temporary supports etc., all complete with approved equipment, for pipe of the following diameters.							
(a)	100 mm DN DI - K9 pipe	m	21,480	44.00	1.00	945120.00	21480.00	966600.00
(b)	150 mm DN DI - K9 pipe	m	12,530	53.00	2.00	664090.00	25060.00	689150.00
(c)	200 mm DN DI - K9 pipe	m	13,060	72.00	2.00	940320.00	26120.00	966440.00
(d)	250 mm DN DI - K9 pipe	m	5,790	88.00	3.00	509520.00	17370.00	526890.00
(e)	300 mm DN DI - K9 pipe	m	13,630	112.00	4.00	1526560.00	54520.00	1581080.00
(f)	400 mm DN DI - K9 pipe	m	11,910	166.00	5.00	1977060.00	59550.00	2036610.00
(g)	500 mm DN DI - K9 pipe	m	4,820	254.00	8.00	1224280.00	38560.00	1262840.00
(h)	600 mm DN DI - K9 pipe	m	1,690	329.00	11.00	556010.00	18590.00	574600.00

	Contr	act C#0	2: Priced Bi	II of Quantitie	s			
Item No.	Description	Unit	Quantity	Unit Rate	e (INR)		Amount (INR)	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
			(1)	_(2)	(3)	$(4) = (1) \times (2)$	$(5) = (1) \times (3)$	(6) = (4) + (5)
3.6	Supplying of PN10 HDPE (PE80) pipe including all specials confirming to IS 4984 and the specifications, including third party inspection, all taxes and duties, transportation, freight charges, loading and unloading, conveyance to the project site and stacking with cost of all labor and material for following pipe diameters.							
(a)	110 mm OD HDPE PE-80	m	1,000	439.00	7.00	439000.00	7000.00	446000.00
(b)	160 mm OD HDPE PE-80	m	600	931.00	15.00	558600.00	9000.00	567600.00
(c)	200 mm OD HDPE PE-80	m	600	1451.00	24.00	870600.00	14400.00	885000.00
(d)	315 mm OD HDPE PE-80	m	600	3592.00	59.00	2155200.00	35400.00	2190600.00
3.7	Handling, aligning, laying and jointing of PN10 HDPE (PE80) pipes with specials by butt welding / spigot joints confirming to IS and specifications. The item includes transportation of pipes and specials from store yard to site, stacking of pipe as per BIS, loading, unloading, hoisting, lowering, cutting and grinding wherever necessary, assembling, jointing, providing temporary supports etc., all complete with approved equipment, for pipes of following diameters.			. ,				
(a)	110 mm OD HDPE PE-80	m	1,000	33.00	1.00	33000.00	1000.00	34000.00
(b)	160 mm OD HDPE PE-80	m	600	45.00	1.00	27000.00	600.00	27600.00
(c)	200 mm OD HDPE PE-80	m	600	55.00	2.00	33000.00	1200.00	34200.00
(d)	315 mm OD HDPE PE-80	m	600	61.00	2.00	36600.00	1200.00	37800.00
	Subtotal Item No. 3			· · · · · · · · · · · · · · · · · · ·		105,089,205.50	4,393,303.27	109,482,508.77

	Contr	act C#02	2: Priced B	ill of Quantitie	s			
Item No.	Description	Unit	Quantity	Unit Rat	e (INR)		Amount (INR)	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
			(1)	(2)	(3)	$(4) = (1) \times (2)$	$(5) = (1) \times (3)$	(6) = (4) + (5)
4	PIPE JACKING							
4.1	Pipe jack for crossings as required with Jacking and Pushing method. The item include pushing jointing following diameter MS pipe of required length, construction of Receiving and Jacking pit with suitable shoring and strutting (if required), including installation of jacking platform, thrust resistant arrangement of required capacity including, hydraulic jacking with required accessories, required excavation inside the jacking pipe and disposal the same, etc. all complete as per drawing, specification and as directed.							
(a)	Jacking and pushing of 400 mm ID 20 mm thick MS pipe	m	20	. 36670.00	1200.00	733400.00	24000.00	757400.00
(b)	Jacking and pushing of 500 mm ID 20 mm thick MS pipe	m	10	42782.00	1400.00	427820.00	14000.00	441820.00
(c)	Jacking and pushing of 600 mm ID 20 mm thick MS pipe	m	10	55005.00	1800.00	550050.00	18000.00	568050.00
(d)	Jacking and pushing of 700 mm ID 20 mm thick MS pipe	m	10	61117.00	2000.00	611170.00	20000.00	631170.00
(e)	Jacking and pushing of 800 mm ID 20 mm thick MS pipe	m	10	73341.00	2400.00	733410.00	24000.00	757410.00
4.2	Laying of pipe and jointing by trenchless technology including construction of pit with required accessories, all civil and mechanical works, disposal of excess earth, etc. all complete as per specification and instruction of Employer's Representative.							
(a)	110 mm OD HDPE PE-80	m	640	4278.00	140.00	2737920.00	89600.00	2827520.00
(b)	160 mm OD HDPE PE-80	m	380	5501.00	180.00	2090380.00	68400.00	2158780.00
(c)	200 mm OD HDPE PE-80	m	400	7334.00	240.00	2933600.00	96000.00	3029600.00
(d)	315 mm OD HDPE PE-80	m	460	9779.00	320.00	4498340.00	147200.00	4645540.00
	Subtotal Item No. 4					15,316,090.00	501,200.00	15,817,290.00

	Contr	act C#0	2: Priced B	ill of Quantitie	es	-		
Item No.	Description	Unit	Quantity	Unit Rat	e (INR)		Amount (INR)	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
			(1)	(2)	(3)	$(4) = (1) \times (2)$	$(5) = (1) \times (3)$	(6) = (4) + (5)
5	VALVES AND APPURTENANCES					•		
5.1	Supplying cast iron PN 1.0 rated Sluice Valves of the following diameters as per IS 14864 with double flanged ends and all accessories required for fixing and jointing, as per the specifications and drawings. The rate shall include all taxes and duties, third party inspection, transportation, freight charges, loading and unloading, at the storeyard, with the cost of all labor and materials.							
(a)	100 mm diameter	No.	54	7872.00	130.00	425088.00	7020.00	432108.00
(b)	150 mm diameter	No.	27	11808.00	190.00	318816.00	5130.00	323946.00
(c)	200 mm diameter	No.	28	21367.00	340.00	598276.00	9520.00	607796.00
(d)	250 mm diameter	No.	12	30828.00	490.00	369936.00	5880.00	375816.00
(e)	300 mm diameter	No.	52	40936.00	650.00	2128672.00	33800.00	2162472.00
5.2	Handling, aligning and installing in true to line and level cast iron PN 1.0 rated double flanged Sluice Valves (IS 14864) of the following diameters. This item includes transportation of valves and accessories from the storeyard to the project site, loading, unloading, hoisting, lowering, assembling and jointing including the cost of all jointing materials such as rubber gaskets, nuts, bolts, etc., and providing temporary supports, as per the specifications and drawings.							
(a)	100 mm diameter	No.	54	623.00	20.00	33642.00	1080.00	34722.00
(b)	150 mm diameter	No.	27	953.00	31.00	25731.00	837.00	26568.00
(c)	200 mm diameter	No.	28	1149.00	38.00	32172.00	1064.00	33236.00
(d)	250 mm diameter	No.	12	1528.00	50.00	18336.00	600.00	18936.00
(e)	300 mm diameter	No.	52	1711.00	56.00	88972.00	2912.00	91884.00

	Contr	act C#0	2: Priced B	ill of Quantitie	es			
Item No.	Description	Unit	Quantity	Unit Rat	e (INR)		Amount (INR)	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
			(1)	(2)	(3)	$(4) = (1) \times (2)$	$(5) = (1) \times (3)$	(6) = (4) + (5)
	Supplying cast iron PN 1.0 rated Butterfly Valves (manually operated as per IS 13095) of the following diameters with double flanged ends and all accessories required for fixing and jointing, as per the specifications and drawings. The rate shall include all taxes and duties, third party inspection, transportation, freight charges, loading and unloading, at the storeyard, with the cost of all labor and materials.							
(a)	400 mm diameter	No.	22	68109.00	1080.00	1498398.00	23760.00	1522158.00
(b)	500 mm diameter	No.	6	96382.00	1530.00	578292.00	9180.00	587472.00
(c)	600 mm diameter	No.	4	133773.00	2130.00	535092.00	8520.00	543612.00
(d)	700 mm diameter	No.	1	179037.00	2840.00	179037.00	2840.00	181877.00
(e)	800 mm diameter	No.	1	250984.00	3990.00	250984.00	3990.00	254974.00
5.4	Handling, aligning and installing in true to line and level cast iron PN 1.0 rated double flanged Butterfly Valves of the following diameters. This item includes transportation of valves and accessories from the storeyard to the project site, loading, unloading, hoisting, lowering, assembling and jointing including the cost of all jointing materials such as rubber gaskets, nuts, bolts, etc., and providing temporary supports, as per the specifications and drawings.							
(a)	400 mm diameter	No.	22	2494.00	82.00	54868.00	1804.00	56672.00
(b)	500 mm diameter	No.	6	3300.00	108.00	19800.00	648.00	20448.00
(c)	600 mm diameter	No.	4	3960.00	130.00	15840.00	520.00	16360.00
(d)	700 mm diameter	No.	1	4889.00	160.00	4889.00	160.00	5049.00
(e)	800 mm diameter	No.	1	6723.00	220.00	6723.00	220.00	6943.00
	A - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -							

	Contr	ract C#0	2: Priced B	ill of Quantitie	s			***
Item No.	Description	Unit	Quantity	Unit Rate	e (INR)		Amount (INR)	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
			(1)	(2)	(3)	$(4) = (1) \times (2)$	$(5) = (1) \times (3)$	(6) = (4) + (5)
5.5	Providing and supplying of following diameters of Double chamber Air valves with in built sluice valve PN 1.0 rating with flanged ends as per IS 14845, with all accessories required, including anti-corrosive painting etc. all complete. The rate shall include all local and central taxes, third party inspection, transportation, freight charges, loading and unloading, conveyance to store yard and stacking the same, with cost of all labor, and material. The item shall be as per specification, drawing and as directed.							
(a)	80 mm diameter	No.	32	15316.00	240.00	490112.00	7680.00	497792.00
(b)	100 mm diameter	No.	6	22393.00	360.00	134358.00	2160.00	136518.00
(c)	150 mm diameter	No.	3	48173.00	770.00	144519.00	2310.00	146829.00
5.6	Handling, aligning, and installing in true to line and level following diameters of PN 1.0 rated Double chamber Air valves with in built sluice valve with all accessories and as per specifications and drawings. This item includes transportation of valves and accessories from the storeyard to the project site, loading, unloading, hoisting, assembling and jointing, including the cost of jointing materials such as rubber packing, nuts, bolts, etc., as per the specifications and drawings.							
(a)	80 mm diameter	No.	32	623.00	20.00	19936.00	640.00	20576.00
(b)	100 mm diameter	No.	6	623.00	20.00	3738.00	120.00	3858.00
(c)	150 mm diameter	No.	3	953.00	31.00	2859.00	93.00	2952.00

	Contr	ract C#02	2: Priced B	ill of Quantitie	s			
Item No.	Description	Unit	Quantity	Unit Rat	e (INR)	-	Amount (INR)	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
			(1)	(2)	(3)	$(4) = (1) \times (2)$	$(5) = (1) \times (3)$	(6) = (4) + (5)
5.7	Supplying Fire Hydrants of 100 mm diameter as per IS 909, consisting of a single flanged outlet oblique type hydrant valve as per the specifications and drawings. The rate shall include all taxes and duties, third party inspection, transportation, freight charges, loading and unloading at the project site, with the cost of all labor, and materials.	No.	8	14674.00	230.00	117392.00	1840.00	
5.8	Handling, aligning, and installing Fire Hydrants true to line and level. This item includes transportation of valves and accessories from the storeyard to the project site, loading, unloading, hoisting, lowering, assembling and jointing with the cost of jointing material such as rubber packing, nuts bolts, providing temporary supports etc., as per the specifications and drawings.	No.	8	1369.00	45.00	10952.00	360.00	11312.00
	Subtotal Item No. 5					8,107,430.00	134,688.00	8,242,118.00
6	VALVE CHAMBERS							
6.1	Construction of RCC and Brick Masonry Chambers for valves, hydrants, flow meters, etc. including the cost of PCC and RCC work, the cost of supplying, bending and placing reinforcing steel with required shuttering, the cost of brick work with plastering the interior and exterior, precast slabs and the supply and installation of SFRC frames and covers. This item includes all of the miscellaneous items of work as per the specifications and drawings, but excludes the supply and installation of pipes, specials and valves, which are listed elsewhere.							
(a)	Chamber for Sluice Valve TYPE S	No.	173	30559.00	1000.00	5286707.00	173000.00	5459707.00
(b)	Chamber for Butterfly Valve TYPE B	No.	34	55005.00		1870170.00	61200.00	1931370.00
(c)	Chamber for Air Valve TYPE A	No.	14	56631.00		792834.00	25942.00	818776.00
(d)	Chamber for Fire Hydrant TYPE F	No.	8	36670.00	1200.00	293360.00	9600.00	302960.00

	Contr	ract C#02	2: Priced Bi	ill of Quantitie	s			
Item No.	Description	Unit	Quantity	Unit Rate	e (INR)		Amount (INR)	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
			(1)	(2)	(3)	$(4) = (1) \times (2)$	$(5) = (1) \times (3)$	(6) = (4) + (5)
(e)	Chamber for Washout Valve TYPE W1	No.	28		1000.00	855652.00		883652.00
(f)	Chamber for Washout Valve TYPE W2	No.	16	30559.00	1000.00	488944.00	16000.00	504944.00
(g)	Chamber for Flowmeter TYPE P1	No.	1	54174.00	1773.00	54174.00	1773.00	55947.00
(m)	Chamber for Flowmeter TYPE P2	No.	1	73341.00	2400.00	73341.00	2400.00	75741.00
(n)	Chamber for Flowmeter TYPE P3	No.	3	91676.00	3000.00	275028.00	9000.00	284028.00
	Subtotal Item No. 6					9,990,210.00	326,915.00	10,317,125.00
7	MISCELLENEOUS CIVIL WORK	-						
7.1	Plain Cement Concrete Work			-				
	Providing and placing plain cement concrete (PCC) of one of the following grades for thrust blocks, anchor blocks, floatation blocks, etc. with 20-40mm stone aggregate (crusher broken) including finishing the surface, shuttering and staging, curing etc. as per the specifications and drawings and as directed by the Employer's Representative. This is Work not included in Item 6.							
(a)	Grade M15 concrete	m³	160	5501.00	180.00	880160.00	28800.00	908960.00
(b)	Grade M20 concrete	m <sup>3</sup>	30	6417.00	210.00	192510.00	6300.00	198810.00
7.2	Reinforced Cement Concrete Work							
	Providing and placing reinforced cement concrete (RCC) of one of the following grades with 10-20 mm stone aggregate (crusher broken) including shuttering and staging, curing etc. as per the specifications and drawings and as directed by the Employer's Representative. This is Work not included in Item 6.							
(b)	Grade M25 concrete							
(i)	Foundation State Leotings	m <sup>3</sup>	10	6662.00	218.00	66620.00	2180.00	-68800.00

GWSP/LCB/C#02

Item	Description	Unit	Quantity	Unit Rate	e (INR)		Amount (INR)	
No.			Quantity	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
			(1)	(2)	(3)	$(4) = (1) \times (2)$	$(5) = (1) \times (3)$	(6) = (4) + (5)
(ii)	Beams	m <sup>3</sup>	3	8495.00	278.00	25485.00		26319.0
(iii)	Columns	m <sup>3</sup>	3	8495.00	278.00	25485.00	834.00	26319.00
(iv)	Elevated Slabs	m <sup>3</sup>	5	7884.00	258.00	39420.00	1290.00	40710.00
7.3	Concrete Reinforcement							
	Providing and fabricating steel reinforcement with Fe 415 grade steel for RCC work including straightening, cutting, bending, placing in position and tying (including cost of tie wire) ,taxes and duties, transportation etc. all complete, as per specifications and drawings and as directed by the Employer's Representative. This is Work not included in Item 6.	kg	4,760	61.00	2.00	290360.00	9520.00	299880.00
7.4	Brick Masonry Work							
	Construction of Brick Masonry for sub/superstructure of 230/350 mm thick walls using cement mortar with a cement to sand ratio of 1:6. This item includes the cost of transportation of all materials, labor, scaffolding, curing etc. as per specifications and drawings and as directed by the Employer's Representative. This is Work not included in Item 6.	m <sup>3</sup>	24	6195.00	203.00	148680.00	4872.00	153552.00
7.5	Plastering Work							
(a)	Providing and applying cement sand plaster 12 mm thick in a single coat using cement mortar with a cement to sand ratio of 1:4 without near finish to concrete or brick surfaces including scaffolding and curing as directed by the Employer's Representative. This is Work not included in Item 6.	m²	205	144.00	5.00	29520.00	1025.00	30545.00

	Contr	act C#02	2: Priced Bi	II of Quantitie	s			
Item No.	Description	Unit	Quantity	Unit Rate	e (INR)		Amount (INR)	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
			(1)	(2)	(3)	$(4) = (1) \times (2)$	$(5) = (1) \times (3)$	(6) = (4) + (5)
(b)	Providing and applying cement sand plaster 20 mm thick in a single coat using cement mortar with a cement to sand ratio of 1:4 without near finish to concrete or brick surfaces including scaffolding and curing as directed by the Employer's Representative. This is Work not included in Item 6.	m <sup>2</sup>	36	169.00	6.00	6042.00		6257.00
7.6	Providing and laying 100 mm thick brick soling for foundations and under flooring with best quality jhama brick, sand packed and laid to level after preparing the subgrade including all labor and materials and dewatering if necessary, complete and as per the specifications and drawings and as directed by the Employer's Representative. This is Work not included in Item 6.	m²	60	367.00	12.00	21928.00	717.00	22645.00
7.7	Structural Steel Work				-			
	Providing and fabricating structural steel work in rolled sections including joists, channels, angles, beams, etc. including cutting, fabricating, grinding, hoisting, erecting, fixing in position making bolted/welded connections, applying coatings etc., as per the specifications and drawings and as directed by the Employer's Representative.	kg	5,000	67.00	2.00	335000.00	10000.00	345000.00
	Subtotal Item No. 7					2,061,210.00	66,587.00	2,127,797.00
8	ROAD RESTORATION						-	
_	Reconstruction of Bituminous Asphalt Roads							
(a)	Providing and laying of Granular sub base (GSB), as per specifications, drawings, and as directed	m <sup>3</sup>	12,600	1222.00	40.00	15397200.00	504000.00	15901200.00
	Providing and laying of Prime Coat, as per specifications, drawings, and as directed	m <sup>2</sup>	78,000	24.00	1.00	1872000.00	78000.00	1950000.00
(c)	Providing and laying of Wet Mix Macadam (WMM), as per specifications drawings, and as directed	m <sup>3</sup>	18,600	2567.00	84.00	47746200.00	1562400.00	49308600.00

	Contr	act C#0	2: Priced Bi	II of Quantitie	S			
Item No.	Description	Unit	Quantity	Unit Rat	e (INR)		Amount (INR)	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
			(1)	(2)	(3)	$(4) = (1) \times (2)$	$(5) = (1) \times (3)$	(6) = (4) + (5)
	Providing and laying of Dense Graded Bituminous Macadam (DBM), as per specifications, drawings, and as directed	m <sup>3</sup>	820	7334.00	240.00	6013880.00		6210680.0
` '	Providing and laying of Semi Dense Bituminous Concrete (SDBC), as per specifications, drawings, and as directed	m <sup>3</sup>	410	7945.00	260.00	3257450.00	106600.00	3364050.0
(f)	Providing and laying of Tack Coat (TC), as per specifications, drawings, and as directed	m²	41,100	12.00	0.00	493200.00	0.00	493200.0
10/	Providing and laying of Bituminous Macadam (BM), as per specifications, drawings, and as directed	m <sup>3</sup>	1,230	7334.00	240.00	9020820.00	295200.00	9316020.0
` '	Providing and laying of Premix Carpet (PC), as per specifications, drawings, and as directed	m²	1,320	183.00	6.00	241560.00	7920.00	249480.0
` '	Providing and laying of Seal Coat (SC), as per specifications, drawings, and as directed	m²	41,100	147.00	5.00	6041700.00	205500.00	6247200.0
8.2	Reconstruction of WBM Roads							
	Providing, laying spreading and compacting stone aggregates of specific sizes as per specification and drawing to water bound macadam including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of stone screenings & binding material, and completer as per specification drawing and as directed	m <sup>3</sup>	2,400	1467.00	48.00	3520800.00	115200.00	3636000.00
8.3	Reconstruction of Concrete Roads							
	Providing, placing and finishing Cement Concrete roads to match the existing roadway which was removed, if directed by the Employer's Representative . Grade M20 concrete shall be used and placed to the same depth as the existing roadway surface. A screeded finish shall be applied.	m <sup>3</sup>	500	6112.00	200.00	3056000.00	100000.00	3156000.00
	NA-BRO							

	Contra	act C#0	2: Priced Bi	II of Quantitie	s			
Item No.	Description	Unit	Quantity	Unit Rate	e (INR)		Amount (INR)	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
		-	(1)	(2)	(3)	$(4) = (1) \times (2)$	$(5) = (1) \times (3)$	(6) = (4) + (5)
8.4	Reconstruction of Brick Roads							
	Providing and laying of bricks on edge for road restoration on earth subgrade. The bricks shall be on edge, diagonally placed, and gap filled up with sand, all complete, as per specification and drawings.	m²	2,800	795.00	26.00	2226000.00	72800.00	2298800.00
	Subtotal Item No. 8		l			98,886,810.00	3,244,420.00	102,131,230.00
9	TESTING, TRIAL RUNS AND COMMISSIONING							
9.1	Hydraulic testing of the distribution system piping of the following diameters in segments at the required test pressures. This item includes the costs of water, labor, pumping, etc. all complete, as per the specifications and as directed by the Employer's Representative.							
(a)	100 mm - 200mm diameter	km	47.2	12223.00	400.00	576926.00	18880.00	595806.00
(b)	Above 200 mm - 300 mm diameter	km	19.4	21391.00	700.00	414985.00	13580.00	428565.00
(c)	Above 300 mm - 500 mm diameter	km	16.6	30559.00	1000.00	507279.00	16600.00	523879.00
(d)	Above 500 mm - 800 mm diameter	km	8.0	45838.00	1500.00	366704.00	12000.00	378704.00
(e)	Above 800 mm diameter	km	0.3	51950.00	1700.00	15585.00	510.00	16095.00
9.2	Trial Runs and Commissioning including the cost of labor, electricity, etc., all complete as per specification and as directed by the Employer's Representative.	km	91.5	6112.00	200.00	559248.00	18300.00	577548.00
	Subtotal Item No. 9					2,440,727.00	79,870.00	2,520,597.00
	GRAND TOTAL (Items 1-9)					277,904,075.50	9,881,673.27	287,785,748.77

HYD-16

Contract C#02: Priced Bill of Quantities - Daywork

Item No	Description	Quantity	Unit	Unit Rate (1) Local	Amount <sup>(1)</sup> Local
	The following provisional items and quantities are to be priced by the Bidde	er. The resultant ra	ites shall be		
10	Danwark Labor		+		
10	Daywork - Labor				
10.01	Skilled Labor	50	man days	489.00	24,450.00
10.02	Unskilled Labor	50	man days	306.00	15,300.00
10.03	Carpenter	20	man days	489.00	9,780.00
10.04	Blacksmith	20	man days	489.00	9,780.00
10.05	Mason	20	man days	489.00	9,780.00
10.00					
10.06	Pipelayer / Fitter	50	man days	489.00	24,450.00
10.07	Welder	20	man days	489.00	9,780.00
	Subtotal Item No. 10				103,320.00
11	Daywork - Material		1 1		
	Daywork - Material				
11.01	Cement - ordinary portland type (43 Grade) in 50 kg bags	50	bags	391.00	19,550.00
	Provide Fe 415 steel reinforcing bars up to 20 mm diameter as per the specification	2,000	kg	45.00	90,000.00
11.03	Fine aggregate for concrete as per the specification	20	m <sup>3</sup>	1161.00	23,220.00
11.04	Coarse aggregate for concrete as per the specification	20	m <sup>3</sup>	1711.00	34,220.00
11.05	First class bricks as per the specification	250	No.	9.00	2,250.00
11.06	Primer paint as per the specification	10	liters	159.00	1,590.00
11.07	Epoxy paint as per the specification	10	liters	183.00	1,830.00
11,08	Welding rods in 5 kg packs	10	packs	3056.00	30,560.00
1/11	Subtotal Item No. 11				203,220.00

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Contract C#02: Priced Bill of Quantities - Daywork

Item No	Description	Quantity	Unit	Unit Rate (1)	Amount (1)
140		L		Loodi	Local
12	Daywork - Equipment				
12.01	Dump Truck (min capacity 4 m <sup>3</sup> )	20	days	4889.00	97,780.00
12.02	Water tank truck ( min capacity 11,000 liters)	20	days	8312.00	166,240.00
12.03	Mobile crane ( up to 10 ton capacity)	10	days	0.00	-
12.04	Wheeled bucket excavator (min capacity 0.45 m <sup>3</sup> )	20	days	11735.00	234,700.00
12.05	Wheeled front-end loader (min capacity 0.75 m <sup>3</sup> )	10	days	7334.00	73,340.00
12.06	Compressor (at least 3.2 m³/minute capacity)	10	days	2542.00	25,420.00
12.07	Generator (at least 15 kw capacity)	20	days		
12.08	Dewatering Pump (at least 60 m³/hour capacity and 100 mm diameter discahrge) with piping and valving	10	days	1076.00	10,760.00
12.09	Concrete Mixer (at least 0.25 m³ capacity )	20	days	1173.00	23,460.00
12.10	Portable vibratory plate or ramming compactor	10	days	1076.00	10,760.00
	Subtotal Item No. 12				642,460.00
	GRAND TOTAL (Items 10-12)				949,000.00

#### Notes:

- 1 Currencies shall be in Indian Rupees (INR)
- 2 Per day rates will be calculated considering 8 hours of work per day.
- 3 Payment for Daywork will only be paid based upon the time the personnal or equipment is present at the Project Site. No additional payment will be made for time in transit.
- 4 Partial payment is applicable for working less than 8 hours in a day and will be prorated on a percenatge basis.
- 5 Equipment shall be provided with a driver and fuel.
- 6 Items under Daywork will be executed as directed by the Employer's Representative for unforseen work including removal of encumbrances and relocation of utilities.

Chief Executive Officer
Suwahati Metropolitan Dev. Authoritypage 2 of 2

GWSP/LCB/C#02

Item No.	Description	Basic Amount in	Non- adjusta		Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
		INR	а	1	b	c1	c2	d
3.0	PIPELINES, SPECIALS AND APPURTENANCES							
3.1	Supplying spirally welded MS pipe with internal lining and external coating as per the specification of the following internal diameters and wall thicknesses. The rate shall include third party inspection, transportation, freight charges, loading, unloading and stacking at the project site, with the cost of all labor, material, taxes and duties.							
(a)	100 mm ID 6 mm wall thickness (at drain crossings)			25%	3.75%	63.75%	0%	7.5%
(b)	150 mm ID 6 mm wall thickness (at drain crossings)		era ek	25%	3.75%	63.75%	0%	7.5%
(c)	200 mm ID 6 mm wall thickness (at drain/railroad crossings)		er ish	25%	3.75%	63.75%	0%	7.5%
(d)	250 mm ID 6 mm wall thickness (at drain/railroad crossings)			25%	3.75%	63.75%	0%	7.5%
(e)	300 mm ID 6 mm wall thickness (at drain crossings)		LEVAS	25%	3.75%	63.75%	0%	7.5%
(f)	700 mm ID 6 mm wall thickness			25%	3.75%	63.75%	0%	7.5%
(g)	800 mm ID 8 mm wall thickness		PARTIE.	25%	3.75%	63.75%	0%	7.5%
(h)	1,000 mm ID 8 mm wall thickness			25%	3.75%	63.75%	0%	7.5%
(i)	400 mm ID 20 mm thick MS pipe (at drain/road crossings)			25%	3.75%	63.75%	0%	7.5%
(j)	500 mm ID 20 mm thick MS pipe (at drain/road crossings)		3 6 2 5	25%	3.75%	63.75%	0%	7.5%
(k)	600 mm ID 20 mm thick MS pipe (at drain/road crossings)		HINKS	25%	3.75%	63.75%	0%	7.5%
(1)	700 mm ID 20 mm thick MS pipe (at drain/road crossings)			25%	3.75%	63.75%	0%	7.5%
(m)	800 mm ID 20 mm thick MS pipe (at drain/road crossings)			25%	3.75%	63.75%	0%	7.5%
	Sub-total						·	
3.2	Supplying all types of MS Specials plain ended, socket ended and flanged as required with internal lining and external coating as per the specification, such as bends, tees, tapers, spool pieces, blind flanges, pieces for pipe connection, valve connections, dismantling joints, anchor bolts, straps, air vent pipe, etc. of different diameters, manufactured from Fe 410 grade steel. This item includes loading, transportation to the project site, unloading and stacking, etc. complete with cost of third party inspection, material, labor, taxes and duties.			25%	3.75%	63.75%	0%	7.5%

	Supply and Delivery of Materials	to be inco	porated	into	permanent	works	-	
Item No.	Description	Basic Amount in	Non- adjusta		Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
		INR	а		b	c1	c2	d
3.4	Supplying DI Specials and fittings with plain, double socket, socket & flanged and double flanged end connections as required, with lining and coating as per the specification, and IS 9523 with EPDM rubber gaskets as per IS 5382 as required for successful completeion of the work. This item includes third party inspection, transportation, freight, loading and unloading, stacking etc. all complete for various sizes of DI			25%	3.75%	63.75%	0%	7.5%
3.6	Supplying of PN10 HDPE (PE80) pipe including all specials confirming to IS 4984 and the specifications, including third party inspection, all taxes and duties, transportation, freight charges, loading and unloading, conveyance to the project site and stacking with cost of all labor and material for following pipe diameters.							
(a)	110 mm OD HDPE PE-80			25%	3.75%	0%	63.75%	7.5%
(b)	160 mm OD HDPE PE-80		No. of the last	25%	3.75%	0%	63.75%	7.5%
(c)	200 mm OD HDPE PE-80			25%	3.75%	0%	63.75%	7.5%
(d)	315 mm OD HDPE PE-80			25%	3.75%	0%	63.75%	7.5%
	Sub-total			25%	3.75%	0%	63.75%	7.5%
4.0	PIPE JACKING							
4.1	Pipe jack for crossings as required with Jacking and Pushing method. The item include pushing jointing following diameter MS pipe of required length, construction of Receiving and Jacking pit with suitable shoring and strutting (if required), including installation of jacking platform, thrust resistant arrangement of required capacity including, hydraulic jacking with required accessories, required excavation inside the jacking pipe and disposal the same, etc. all complete as per drawing, specification and as directed.							
(a)	Jacking and pushing of 400 mm ID 20 mm thick MS pipe			25%	3%	64.00%	0%	8.0%
(b)	Jacking and pushing of 500 mm ID 20 mm thick MS pipe		No. of the	25%	3%	64.00%	0%	8.0%
(c)	Jacking and pushing of 600 mm ID 20 mm thick MS pipe		121 13	25%	3%	64.00%	0%	8.0%
(d)	Jacking and pushing of 700 mm ID 20 mm thick MS pipe		STERRED	25%	3%	64.00%	0%	8.0%

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Item No.	Description		Non- adjusta	able	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
		INR	a		b_	c1	c2	d
(e)	Jacking and pushing of 800 mm ID 20 mm thick MS pipe			25%	3%	64.00%	0%	8.0%
	Sub-total Sub-total							
5.0	VALVES AND APPURTENANCES							
5.1	Supplying cast iron PN 1.0 rated Sluice Valves of the following diameters as per IS 14864 with double flanged ends and all accessories required for fixing and jointing, as per the specifications and drawings. The rate shall include all taxes and duties, third party inspection, transportation, freight charges, loading and unloading, at the storeyard, with the cost of all labor and materials.							
(a)	100 mm diameter			25%	3.75%	63.75%	0%	7.5%
(b)	150 mm diameter			25%	3.75%	63.75%	0%	7.5%
(c)	200 mm diameter			25%	3.75%	63.75%	0%	7.5%
(d)	250 mm diameter			25%	3.75%	63.75%	0%	7.5%
(e)	300 mm diameter			25%	3.75%	63.75%	0%	7.5%
	Sub-total							
5.3	Supplying cast iron PN 1.0 rated Butterfly Valves (manually operated as per IS 13095) of the following diameters with double flanged ends and all accessories required for fixing and jointing, as per the specifications and drawings. The rate shall include all taxes and duties, third party inspection, transportation, freight charges, loading and unloading, at the storeyard, with the cost of all labor and materials.							
(a)	400 mm diameter			25%	3.75%	63.75%	0%	7.5%
(b)	500 mm diameter			25%	3.75%	63.75%	0%	7.5%
(c)	600 mm diameter			25%	3.75%	63.75%	0%	7.5%
(d)	700 mm diameter			25%	3.75%	63.75%	0%	7.5%
(e)	800 mm diameter		P1 ( 1.5)	25%	3.75%	63.75%	0%	7.5%

Supply and Delivery of Materials to be incorporated into permanent works							
Item No.	Description		Non- adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
5.5	Providing and supplying of following diameters of Double chamber Air valves with in built sluice valve PN 1.0 rating with flanged ends as per IS 14845, with all accessories required, including anti-corrosive painting etc. all complete. The rate shall include all local and central taxes, third party inspection, transportation, freight charges, loading and		a	b	c1	c2	d
(2)	unloading, conveyance to store yard and stacking the same, with cost of all labour, and material. The item shall be as per specification, drawing and as directed.  80 mm diameter		25%	2.750/	62.750/	00/	7.50
(a) (b)	100 mm diameter		25%				
(c)	150 mm diameter		25%				
	Sub-total Sub-total						
5.7	Supplying Fire Hydrants of 100 mm diameter as per IS 909, consisting of a single flanged outlet oblique type hydrant valve as per the specifications and drawings. The rate shall include all taxes and duties, third party inspection, transportation, freight charges, loading and unloading at the project site, with the cost of all labor, and materials.		25%	3.75%	63.75%	0%	7.5%
	Total						

### Contract C#02: Schedule of Adjustment Data (Civil Work)

Civil Works								
Item No.	Description	Basic Amount in	Non- adjusta	able	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
		INR	a		b	c1	c2	d
2.0	EARTHWORK				ļ			
2.1	Earth work for excavation of foundations, pipe trenches, valve chambers, thrust blocks, etc. in all kinds of ordinary soils such as murum, sand, sandy silt, clay, kankar etc. or in combination. Excavation shall include the removal of WBM roadway surface							
	Excavation will be paid for in the following segments:							
(a)	0 to 1.5 m from GL		AVESCE	25%	20%		40%	15%
(b)	above 1.5 m to 3.0 m depth from GL		1517	25%	20%		40%	15%
(c)	above 3.0 m to 4.5 m depth from GL			25%	20%		40%	15%
(d)	above 4.5 m depth from GL			25%	20%		40%	15%
2.2	Earth work for excavation of foundations, pipe trenches, valve chambers, thrust blocks, etc. in all kinds of ordinary rock, Excavation shall include the removal of asphalt and concrete road surfacing, including dressing, compaction of the bottoms, shorin Excavation will be paid for in the following segments:							
(a)	0 to 1.5 m from GL		Street	25%	20%		40%	15%
(b)	above 1.5m to 3.0 m depth from GL		D. C.	25%	20%		40%	15%
(c)	above 3.0 m to 4.5 m depth from GL	-	bi in the	25%	20%		40%	15%
(d)	above 4.5 m depth from GL			25%	20%		40%	15%
2.3	Earth work for excavation of foundations, pipe trenches, valve chambers, thrust blocks, etc. in all kinds of hard rock requiring blasting, Excavation shall include dressing, compaction of the bottoms, shoring and strutting wherever required, dewatering whenever required, removal of the excavated rock, stockpiling and disposal of surplus excavated rock off-site as directed by the Employer's Representative.							
	Excavation will be paid for in the following segments:							
(a)	0 to 1.5 m from GL		MARK.	25%			40%	15%
(b)	above 1 50 m depth from GL			25%	20%		40%	15%

### Contract C#02: Schedule of Adjustment Data (Civil Work)

Temporal No.   Description   Basic Amount in INR   Amount inR   A			Civil Works					
(c) above 3.0 m to 4.5 m depth from GL  25% 20% 40%  40%  2.4 Earth work for excavation of foundations, pipe trenches, valve chambers, thrust blocks, etc. in all kinds of hard rock (blasting prohibited), Excavation shall include dressing, compaction of the bottoms, shoring and strutting wherever required, dewatering whenever required, removal of the excavated rock, stockpiling and disposal of surplus excavated rock off-site as directed by the Employer's Representative.  Excavation will be paid for in the following segments:  (a) 0 to 1.5 m from GL  25% 20.00% 40%  (b) above 1.5 m to 3.0 m depth from GL  25% 20.00% 40%  (c) above 3.0 m to 4.5 m depth from GL  25% 20.00% 40%  2.5 Backfilling of pipe trenches, foundations, etc. with approved graded excavated soil (select granular material), excluding rock, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.6 Backfilling of pipe trenches, foundations, etc. with approved graded excavated soil (select granular material), excluding rock, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.7 Backfilling of pipe trenches, foundations, etc. with approved graded gravel, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.		Description				Steel (MS)		Equipment operation (E)
(d) above 4.5 m depth from GL  2.4 Earth work for excavation of foundations, pipe trenches, valve chambers, thrust blocks, etc. in all kinds of hard rock (blasting prohibited), Excavation shall include dressing, compaction of the bottoms, shoring and strutting wherever required, dewatering whenever required, removal of the excavated rock stockpling and disposal of surplus excavated rock off-site as directed by the Employer's Representative.  Excavation will be paid for in the following segments:  (a) 0 to 1.5 m from GL  (b) above 1.5 m to 3.0 m depth from GL  (c) above 3.0 m to 4.5 m depth from GL  (d) above 4.5 m depth from GL  25%  20.00%  40%  (d) above 4.5 m depth from GL  25%  20.00%  40%  2.5 Backfilling of pipe trenches, foundations, etc. with approved graded excavated soil (select granular material), excluding rock, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.6 Backfilling of pipe trenches, foundations, etc. with approved graded sand, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.7 Backfilling of pipe trenches, foundations, etc. with approved graded gravel, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.			INR					d
2.4 Earth work for excavation of foundations, pipe trenches, valve chambers, thrust blocks, etc. in all kinds of hard rock (blasting prohibited). Excavation shall include dressing, compaction of the bottoms, shoring and strutting wherever required, dewatering whenever required, removal of the excavated rock, stockpiling and disposal of surplus excavated rock off-site as directed by the Employer's Representative.  Excavation will be paid for in the following segments:  (a) 0 to 1.5 m from GL  (b) above 1.5 m to 3.0 m depth from GL  (c) above 3.0 m to 4.5 m depth from GL  25%  20.00%  40%  (d) above 4.5 m depth from GL  25%  20.00%  40%  2.5 Backfilling of pipe trenches, foundations, etc. with approved graded excavated soil (select granular material), excluding rock, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.6 Backfilling of pipe trenches, foundations, etc. with approved graded sand, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.7 Backfilling of pipe trenches, foundations, etc. with approved graded gravel, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.	(c)	above 3.0 m to 4.5 m depth from GL		THE RESERVE AND DESCRIPTION OF THE PARTY OF			40%	15%
chambers, thrust blocks, etc. in all kinds of hard rock (blasting prohibited). Excavation shall include dressing, compaction of the bottoms, shoring and strutting wherever required, dewatering whenever required, removal of the excavated rock, stockpilling and disposal of surplus excavated rock off-site as directed by the Employer's Representative.  Excavation will be paid for in the following segments:  (a) 0 to 1.5 m from GL  (b) above 1.5m to 3.0 m depth from GL  (c) above 3.0 m to 4.5 m depth from GL  (d) above 4.5 m depth from GL  25% 20.00%  40%  (d) above 4.5 m depth from GL  25% 20.00%  40%  2.5 Backfilling of pipe trenches, foundations, etc. with approved graded excavated soil (select granular material), excluding rock, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.6 Backfilling of pipe trenches, foundations, etc. with approved graded sand, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.7 Backfilling of pipe trenches, foundations, etc. with approved graded gravel, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.	(d)	above 4.5 m depth from GL		25%	20%		40%	15%
(a) 0 to 1.5 m from GL (b) above 1.5 m to 3.0 m depth from GL (c) above 3.0 m to 4.5 m depth from GL (d) above 4.5 m depth from GL  25% 20.00% 40% (e) above 4.5 m depth from GL 25% 20.00% 40%  2.5 Backfilling of pipe trenches, foundations, etc. with approved graded excavated soil (select granular material), excluding rock, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.6 Backfilling of pipe trenches, foundations, etc. with approved graded sand, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.7 Backfilling of pipe trenches, foundations, etc. with approved graded gravel, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.	2.4	chambers, thrust blocks, etc. in all kinds of hard rock (blasting prohibited), Excavation shall include dressing, compaction of the bottoms, shoring and strutting wherever required, dewatering whenever required, removal of the excavated rock, stockpiling and disposal of surplus excavated rock off-site as directed by the						
(b) above 1.5m to 3.0 m depth from GL  (c) above 3.0 m to 4.5 m depth from GL  (d) above 4.5 m depth from GL  2.5 Backfilling of pipe trenches, foundations, etc. with approved graded excavated soil (select granular material), excluding rock, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.6 Backfilling of pipe trenches, foundations, etc. with approved graded sand, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.7 Backfilling of pipe trenches, foundations, etc. with approved graded gravel, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.8 Backfilling of pipe trenches, foundations, etc. with approved graded gravel, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as		Excavation will be paid for in the following segments:						
(c) above 3.0 m to 4.5 m depth from GL  (d) above 4.5 m depth from GL  25%  20.00%  40%  25%  20.00%	(a)	0 to 1.5 m from GL		25%	20.00%		40%	15.0%
(d) above 4.5 m depth from GL  2.5 Backfilling of pipe trenches, foundations, etc. with approved graded excavated soil (select granular material), excluding rock, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.6 Backfilling of pipe trenches, foundations, etc. with approved graded sand, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.7 Backfilling of pipe trenches, foundations, etc. with approved graded gravel, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.	(b)	above 1.5m to 3.0 m depth from GL		25%	20.00%		40%	15.0%
(d) above 4.5 m depth from GL  25% 20.00% 40%  2.5 Backfilling of pipe trenches, foundations, etc. with approved graded excavated soil (select granular material), excluding rock, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.6 Backfilling of pipe trenches, foundations, etc. with approved graded sand, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.7 Backfilling of pipe trenches, foundations, etc. with approved graded gravel, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.	(c)	above 3.0 m to 4.5 m depth from GL		25%	20.00%		40%	15.0%
excavated soil (select granular material), excluding rock, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.6 Backfilling of pipe trenches, foundations, etc. with approved graded sand, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.7 Backfilling of pipe trenches, foundations, etc. with approved graded gravel, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as		above 4.5 m depth from GL		25%	20.00%		40%	15.0%
sand, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.  2.7 Backfilling of pipe trenches, foundations, etc. with approved graded gravel, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as	2.5	excavated soil (select granular material), excluding rock, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the		25%	20.00%		40%	15.0%
gravel, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as	2.6	sand, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as		25%	20.00%		40%	15.0%
	2.7	gravel, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as		25%	20.00%		40%	15.0%
Subtotal Item No. 2		Subtotal Item No. 2						