

DELHI JAL BOARD, GOVT. OF NCT OF DELHI  
OFFICE OF THE EXECUTIVE ENGINEER (P) WATER-I  
VARUNALAYA PHASE - I, KAROL BAGH  
NEW DELHI-110005

No. DJB/EE (P) W-1/2013/363-302

Dated: 27.2.13

**Instructional Order**

An instructional order was issued by CE(W)Projects vide no DJB/F-1(5)/CE(W)Pr./2013/61 - 75 dated 24.1.2013 regarding selection of material for water pipe lines which is reiterated again for strict compliance.

"A Committee was constituted for selection of material for various dia pipelines to be used in water supply system in Delhi Jal Board under the Chairmanship of Member (WS). A circular was issued by SE (P) W vide letter no. DJB/SE (P) W/F.1 (T)/2004/19-56 dated 13.01.2004. The orders issued were reviewed by the technical committee in view of the availability and use of cast iron pipes in the Department and after deliberating on merits and demerits of each pipe material and their suitability for laying under different site & soil conditions, following decisions were taken:

- i) For proposals involving pipe sizes 100 mm dia to 500 mm dia only DI pipe option is to be considered.
- ii) For proposals involving sizes above 500 mm dia to 1000 mm dia either of the two DI/MS option can be considered as per requirement at site.
- iii) For proposals involving above 1000 mm dia pipes, only MS pipes (lined and coated) options are to be considered.
- iv) In case site conditions warrant deviation from the above guidelines listed at I, II, III, approval of concerned Chief Engineer will be mandatory."

(This issues with the approval of competent authority)

*[Signature]*  
EE (P) W-I

**ALL Executive Engineers**

Copy to:

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2. Member (Admn.)/Member (Finance)/Member (WS)/Member (Dr.)  
for kind information please.
3. All CE's / SE's

*[Signature]*  
EE (P) W-I



**DELHI JAL BOARD: GOVT OF N.C.T. OF DELHI**  
**OFFICE OF THE E E (PLANNING) WATER**  
**VARUNALAYA PHASE-I**  
**KAROL BAGH, NEW DELHI-110005.**

ENGINEER IN CHARGE (W/P)  
 D. No. 3944  
 DATE 31/10/14

**Dated: 31-10-14**

NO.DJ/RA/EE(PLG)W-II/2014/C-4/ **986**  
**SUBJECT:- Rate Analysis based on CPWD Schedule of Rates-2013 & 2014**

The following rate analysis based on CPWD Schedule of Rates-2013 and 2014 are circulated for adoption in the department for preparation of estimates.

S.No.	Description	Unit	Rates Based on DSR 2013 (Rupees)	Rates Based on DSR 2014 (Rupees)
1	Providing Mild Steel Pipes fabricated/ manufactured out of MS plate of steel grade Fe410 as per IS 3589: 2001; internally lined with cement mortar and having external/ outside coal tar coating & wrapping. Inside CM lining shall confirm to IS 3589:2001 and outside coating and wrapping shall confirm to IS 10221:2008; complete in all respect and with upto date amendments in relevant IS Codes and excluding excise duty component.			
	a. 400 mm nominal dia (clear internal dia) pipes of 6 mm thick plate, 7 mm cement mortar lining and 4 mm coal tar wrapping.	Metre	4520.10	4385.15
	b. 600 mm nominal dia (clear internal dia) pipes of 8 mm thick plate, 7 mm cement mortar lining and 4 mm coal tar wrapping.	Metre	8401.40	8135.05
	c. 700 mm nominal dia (clear internal dia) pipes of 8 mm thick plate, 9 mm cement mortar lining and 4 mm coal tar wrapping.	Metre	9804.90	9493.95
	d. 800 mm nominal dia (clear internal dia) pipes of 8 mm thick plate, 9 mm cement mortar lining and 4 mm coal tar wrapping.	Metre	11151.60	10797.80
	e. 900 mm nominal dia (clear internal dia) pipes of 10 mm thick plate, 9 mm cement mortar lining and 4 mm coal tar wrapping.	Metre	15081.80	14584.90
	f. 1000 mm nominal dia (clear internal dia) pipes of 10 mm thick plate, 9 mm cement mortar lining and 4 mm coal tar wrapping.	Metre	16703.00	16152.55
	g. 1100 mm nominal dia (clear internal dia) pipes of 10 mm thick plate, 9 mm cement mortar lining and 4 mm coal tar wrapping.	Metre	18329.50	17725.50
	h. 1200 mm nominal dia (clear internal dia) pipes of 12 mm thick plate, 12 mm cement mortar lining and 4 mm coal tar wrapping.	Metre	23475.70	22681.55
	i. 1400 mm nominal dia (clear internal dia) pipes of 12 mm thick plate, 12 mm cement mortar lining and 4 mm coal tar wrapping.	Metre	27275.30	26352.65
	j. 1500 mm nominal dia (clear internal dia) pipes of 12 mm thick plate, 12 mm cement mortar lining and 4 mm coal tar wrapping.	Metre	29176.30	28189.40

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<p>2 Providing Mild Steel Specials fabricated/ manufactured out of MS plate of steel grade Fe410 as per IS 3589: 2001; internally lined with cement mortar and having external/ outside coal tar coating &amp; wrapping. Inside CM lining shall conform to IS 3589:2001 and outside coating and wrapping shall conform to IS 10221:2008; complete in all respect and with upto date amendments in relevant IS Codes and excluding excise duty component.</p> <p>a. 400 mm nominal dia (clear internal dia) Specials of 6 mm thick plate, 7 mm cement mortar lining and 4 mm coal tar wrapping.</p> <p>b. 600 mm nominal dia (clear internal dia) Specials of 8 mm thick plate, 7 mm cement mortar lining and 4 mm coal tar wrapping.</p> <p>c. 700 mm nominal dia (clear internal dia) Specials of 8 mm thick plate, 9 mm cement mortar lining and 4 mm coal tar wrapping.</p> <p>d. 800 mm nominal dia (clear internal dia) Specials of 8 mm thick plate, 9 mm cement mortar lining and 4 mm coal tar wrapping.</p> <p>e. 900 mm nominal dia (clear internal dia) Specials of 10 mm thick plate, 9 mm cement mortar lining and 4 mm coal tar wrapping.</p> <p>f. 1000 mm nominal dia (clear internal dia) Specials of 10 mm thick plate, 9 mm cement mortar lining and 4 mm coal tar wrapping.</p> <p>g. 1100 mm nominal dia (clear internal dia) Specials of 10 mm thick plate, 9 mm cement mortar lining and 4 mm coal tar wrapping.</p> <p>h. 1200 mm nominal dia (clear internal dia) Specials of 12 mm thick plate, 12 mm cement mortar lining and 4 mm coal tar wrapping.</p> <p>i. 1400 mm nominal dia (clear internal dia) Specials of 12 mm thick plate, 12 mm cement mortar lining and 4 mm coal tar wrapping.</p> <p>j. 1500 mm nominal dia (clear internal dia) Specials of 12 mm thick plate, 12 mm cement mortar lining and 4 mm coal tar wrapping.</p>	<p>Kg</p> <p>Kg</p> <p>Kg</p> <p>Kg</p> <p>Kg</p> <p>Kg</p> <p>Kg</p> <p>Kg</p> <p>Kg</p> <p>Kg</p>	<p>55.95</p> <p>55.80</p> <p>53.00</p> <p>53.00</p> <p>53.00</p> <p>53.00</p> <p>53.00</p> <p>51.00</p> <p>50.90</p> <p>51.00</p>	<p>54.30</p> <p>54.05</p> <p>51.35</p> <p>51.30</p> <p>51.65</p> <p>51.65</p> <p>51.60</p> <p>49.20</p> <p>49.20</p> <p>49.20</p>
<p>3 Providing Mild Steel Pipes fabricated/ manufactured out of MS plate of steel grade Fe410 as per IS 3589: 2001; with epoxy paint inside and black anticorrosive bitumastic paint outside; all confirming to relevant IS codes; complete in all respect and with upto date amendments in relevant IS Codes and excluding excise duty component.</p> <p>a. 150 mm nominal dia (clear internal dia) Pipe of 4.5 mm thick plate.</p> <p>b. 200 mm nominal dia (clear internal dia) Pipes of 5 mm thick plate.</p> <p>c. 250 mm nominal dia (clear internal dia) Pipes of 5 mm thick plate.</p> <p>d. 300 mm nominal dia (clear internal dia) Pipes of 5 mm thick plate.</p> <p>e. 350 mm nominal dia (clear internal dia) Pipes of 6 mm thick plate.</p> <p>f. 400 mm nominal dia (clear internal dia) Pipes of 6 mm thick plate.</p> <p>g. 450 mm nominal dia (clear internal dia) Pipes of 6 mm thick plate.</p> <p>h. 500 mm nominal dia (clear internal dia) Pipes of 6 mm thick plate.</p> <p>i. 600 mm nominal dia (clear internal dia) Pipes of 8 mm thick plate.</p> <p>j. 700 mm nominal dia (clear internal dia) Pipes of 8 mm thick plate.</p> <p>k. 800 mm nominal dia (clear internal dia) Pipes of 8 mm thick plate.</p> <p>l. 900 mm nominal dia (clear internal dia) Pipes of 10 mm thick plate.</p> <p>m. 1000 mm nominal dia (clear internal dia) Pipes of 10 mm thick plate.</p> <p>n. 1100 mm nominal dia (clear internal dia) Pipes of 10 mm thick plate.</p> <p>o. 1200 mm nominal dia (clear internal dia) Pipes of 12 mm thick plate.</p>	<p>Metre</p> <p>Metre</p> <p>Metre</p> <p>Metre</p> <p>Metre</p> <p>Metre</p> <p>Metre</p> <p>Metre</p> <p>Metre</p> <p>Metre</p> <p>Metre</p> <p>Metre</p> <p>Metre</p> <p>Metre</p> <p>Metre</p>	<p>1024.70</p> <p>1500.50</p> <p>1867.20</p> <p>2232.35</p> <p>3094.65</p> <p>3529.85</p> <p>3964.00</p> <p>4399.10</p> <p>6956.20</p> <p>8100.00</p> <p>9243.60</p> <p>12910.05</p> <p>14328.30</p> <p>15747.90</p> <p>20522.30</p>	<p>993.55</p> <p>1453.70</p> <p>1808.95</p> <p>2162.70</p> <p>2994.30</p> <p>3415.40</p> <p>3835.40</p> <p>4256.45</p> <p>6719.65</p> <p>7824.55</p> <p>8929.20</p> <p>12458.55</p> <p>13827.15</p> <p>15197.20</p> <p>19791.15</p>





	h. 450 mm nominal dia (clear internal dia) pipes	Meter	3.60	3.80
	i. 500 mm nominal dia (clear internal dia) pipes	Meter	4.05	4.30
	j. 600 mm nominal dia (clear internal dia) pipes	Meter	5.10	5.40
	k. 700 mm nominal dia (clear internal dia) pipes	Meter	6.35	6.70
	l. 800 mm nominal dia (clear internal dia) pipes	Meter	7.80	8.20
	m. 900 mm nominal dia (clear internal dia) pipes	Meter	9.40	9.90
	n. 1000 mm nominal dia (clear internal dia) pipes	Meter	11.20	11.80
	o. 1100 mm nominal dia (clear internal dia) pipes	Meter	13.25	13.90
	p. 1200 mm nominal dia (clear internal dia) pipes	Meter	15.40	16.20
	q. 1400 mm nominal dia (clear internal dia) pipes	Meter	20.40	21.40
	r. 1500 mm nominal dia (clear internal dia) pipes	Meter	23.15	24.30
6	Laying in position M. S. Pipes/Steel cylinder reinforced concrete pipes suitable for rubber ring jointing or welding or flanged jointing (excluding cost of pipe).	Quintal	124.40	137.40
7	Laying in position M.S. Specials/Steel cylinder reinforced concrete specials suitable for rubber ring jointing or welding or flanged jointing (excluding cost of specials).	Quintal	231.35	255.40
8	Shifting of water connection from old CI/DI water main to new CI/DI water main including boring in the new main i/c providing fixing brass ferrule 6mm dia (weight not less than 150gms.), 1meter long (one meter) G.I. pipe (medium class) 15mm dia nominal bore i/c fittings, trenching, refilling and disconnecting the existing connection from old water main i/c plugging the bore hole and depositing all serviceable as well as unserviceable material obtained during disconnection in the store of the department; complete in all respects as directed by Engineer-in-Charge.	Each	499.45	545.65
9	Taking out S&S PSC pipes from the trenches after de-jointing and stacking the same along the trench with in a lead of 50 meters.	Meter	933.00	1030.50
	a. 900 mm diameter	Meter	1072.95	1185.10
	b. 1000 mm diameter	Meter	1228.45	1356.85
	c. 1100 mm diameter	Meter	1446.15	1597.30
	d. 1200 mm diameter	Meter		
10	Disinfection of water main by flushing with water containing bleaching powder @ 0.5 gm. per litre of water and cleaning the same with fresh water, operation to be repeated three times, i/c getting the samples from the disinfected water main tested in DJB Laboratory.	Meter	48.45	52.35
	a. 700 mm diameter	Meter	55.85	60.15
	b. 800 mm diameter	Meter	63.70	68.40
	c. 900 mm diameter	Meter	72.05	77.15
	d. 1000 mm diameter	Meter	80.90	86.40
	e. 1100 mm diameter	Meter	90.20	96.10
	f. 1200 mm diameter	Meter	120.95	128.10
	g. 1500 mm diameter	Meter		



11	Laying in position M.S./Steel cylinder reinforced concrete gap pieces in trenches, through culverts or over pillars suitable for welding or other jointing (Excluding the cost of gap pieces).	Quintal	136.85	151.15
12	Providing & erecting 1.6m high corrugated G.I. Sheet barricading supported on safeda ballies 100 mm dia. 2 m high placed at 2.5 m c/c; corrugated G.I. sheets fixed with nails of required length and dia to safeda ballies i/c excavating holes of size 0.3x0.3x0.40 m, getting out the excavated soil and then returning the soil i/c consolidating by ramming and watering etc. all complete i/c disposal of surplus excavated earth with in a lead of 50 m lift upto 1.5m and painting on full surface of C.G.I. sheet (on one side) with bright paint of red & white colour in vertical strips 0.3m wide alternately as directed by Engineer-in-Charge. (The barricading dismantled on completion of the work shall remain the property of contractor).	Sq.m	29.40	31.75
13	Providing lead caulked joints to spun iron or C.I. pipes and specials including testing of joints but excluding the cost of pig lead. <ul style="list-style-type: none"> <li>a. 700 mm diameter</li> <li>b. 800 mm diameter</li> <li>c. 900 mm diameter</li> <li>d. 1000 mm diameter</li> </ul>	Each Each Each Each	1424.35 1570.95 1853.70 2031.20	1559.50 1719.90 2029.30 2224.00
14	Fixing in position C.I. sluice valve and providing flanged joints (2 Nos.) with bolts, nuts, rubber insertion etc. all complete is including testing of joints. <ul style="list-style-type: none"> <li>a. 400 mm dia</li> <li>b. 450 mm dia</li> <li>c. 500 mm dia</li> <li>d. 600 mm dia</li> <li>e. 700 mm dia</li> <li>f. 800 mm dia</li> <li>g. 900 mm dia</li> <li>h. 1000 mm dia</li> <li>i. 1100 mm dia</li> <li>j. 1200 mm dia</li> </ul>	Each Each Each Each Each Each Each Each Each Each	2445.60 3128.30 3950.00 4642.50 8411.15 11711.45 14670.50 20307.05 24012.25 29792.95	2574.40 3296.50 4180.00 4911.90 8805.75 12253.65 15410.10 21314.55 25193.15 31073.40
15	Providing and laying S&S centrifugally cast(spun)/ Ductile Iron class K-7 pipes confirming to IS:8329 excluding excise duty component. <ul style="list-style-type: none"> <li>a. 100 mm dia</li> <li>b. 150 mm dia</li> <li>c. 200 mm dia</li> <li>d. 250 mm dia</li> <li>e. 300 mm dia</li> <li>f. 350 mm dia</li> <li>g. 400 mm dia</li> </ul>	Meter Meter Meter Meter Meter Meter Meter	823.00 1190.65 1647.10 2230.20 3070.90 3661.40 4272.45	825.00 1193.60 1650.95 2235.25 3077.20 3669.90 4282.60

Centrifugally cast(spun)/ Ductile Iron class K-9 pipes conforming to IS:8329 excluding excise duty	Meter	5159.45	5171.30
	Meter	6091.10	6104.95
	Meter	7949.85	7967.80
	Meter	10217.40	10241.85
	Meter	12856.20	12887.75
	Meter	17031.40	17068.05
	Meter	18129.90	18175.05
	Meter	851.80	1009.15
	Meter	1277.70	1281.10
	Meter	1758.00	1762.65
	Meter	2447.70	3436.00
	Meter	3044.60	3114.50
	Meter	3745.60	3797.30
Meter	4794.30	4807.80	
Meter	5543.50	5557.90	
Meter	6993.10	7009.90	
Meter	8452.45	8474.30	
Meter	11671.70	11700.00	
Meter	12670.90	12702.30	
Meter	12827.30	12861.90	
Meter	15479.00	15520.65	
Meter	17413.00	17462.30	
Specials of class K-12 suitable for mechanical jointing as per IS:9523 excluding excise duty component.	Quintal	14404.50	14428.50
	Quintal	20555.20	20579.20
Specials of class K-12 suitable for push on jointing as per IS:9523 excluding excise duty component.	Quintal	13680.85	13704.90
	Quintal	18849.50	18873.55

- Note:-
1. MS Pipes should be used as per the Instructional order issued by EE(P)W-1 vide no EE(P)W-1/2013/263-302 dated- 27.02.2013 (copy enclosed).
  2. As per standard practice in the department MS pipes with inside Epoxy paint and outside Anti Corrosive Bitumastic paint are utilized in trenchless work.
  3. Where ever MS Pipes of higher thickness are required to be laid, the Ras for such pipes shall be got approved from the planning duly supported with technical design.

This issues as per authorization by SE(Planning) Water

EE (Planning) Water-II



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EE (Planning) Water-II



EE (EDP) Cell

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