

MAHARASHTRA JEEVAN PRADHIKARAN

(Government of Maharashtra Undertaking)



SCHEDULE OF RATES FOR THE YEAR - 2018-2019

NAGPUR & AMRAVATI REGION
(Effective from 01st JUNE 2018)

**APPLICABLE FOR NAGPUR & AMRAVATI REGION
MAHARASHTRA JEEVAN PRADHIKARAN**

Countersigned For The Year 2018-2019

Sd/-
Chief Engineer
Maharashtra Jeevan Pradhikaran Region
Nagpur

महाराष्ट्र जीवन प्राधिकरण प्रादेशिक विभाग, नागपूर

मुख्य अभियंता
प्रा.विभाग, नागपूर



दूरध्वनी(वैयक्तिक) : २५४५५७३
कार्या.आणि फॅक्स : २५५४०२३
फॅक्स नं. : २५६०११२
एस.टी.डी. : ०७१२
ई-मेल : cemjpnpg@gmail.com

इमारत "अ" तळमजला, सी.पी.क्लब जवळ, सिंहोल लाईन्स, नागपूर-४००००९

जा.पत्र .क्र.मजीप्रा/मुअना/तांशा-सा/१०९१८
दिनांक :०८/०६/२०१८

परिपत्रक

विषय:- नागपूर व अमरावती प्रादेशिक विभागाकरीता मजीप्राची दरसुची सन २०१८-१९ लागू करणे.

संदर्भ:- १) मा. सदस्य सचिव, यांनी मध्यवर्ती कार्यालयाच्या दिनांक १९/०५/२०१८ च्या कार्यालयीन टिप्पणीवरील दिनांक ३०/०५/२०१८ रोजी दिलेले निर्देश.
२) मु.अ.मजीप्रा प्रादे.वि.पूणे यांचे पत्र क्र.तांशा-३/दरसुची सन २०१८-१९ /८८०, दि.३१/०५/१८.

महाराष्ट्र जीवन प्राधिकरणाची सन २०१८-१९ ची दरसुची तयार करण्यासाठी मुख्य अभियंता, मजीप्रा प्रादेशिक विभाग, पूणे यांचे अध्यक्षतेखाली दरसूची समितीची स्थापना करण्यात आली होती. सदर समितीने दरसुचीतील दराबाबत आपले अभिप्राय मा. सदस्य सचिव कार्यालयास धारीकेव्वारे सादर केले होते. सदर धारीका अंतिम करून मा. सदस्य सचिव यांनी दिनांक ३०/०५/२०१८ रोजी दरसुची दिनांक ०१/०६/२०१८ पासून लागू करण्याबाबत निर्देश दिलेले आहेत.

सदर निर्देशाच्या अनुंंगाने नागपूर व अमरावती प्रादेशिक विभागासाठी मजीप्राची स्थापत्य कामाची दरसुची सन २०१८-१९ अंतिम करण्यात आली असून सदर दरसूची दिनांक ०१/०६/२०१८ पासून या परिपत्रकाव्वारे लागू करण्यात येत आहे.

सोबत :- दरसुची

१^१(क्ही.बी. जगतारे)
मुख्य अभियंता (प्रभारी)

- प्रत: मा. सदस्य सचिव, मजीप्रा मुंबई-२१ यांना माहितीसाठी सविनय सादर.
- प्रत: मुख्य अभियंता, मजीप्रा, प्रादेशिक विभाग, कोकण, पुणे, अमरावती, नाशिक, औरंगाबाद यांना माहितीसाठी सन्स्नेह अग्रेषित.
- प्रत: आयुक्त, महानगरपालिका, नागपूर / आयुक्त, महानगरपालिका, चंद्रपूर, यांना माहितीकरीता सादर.
- प्रत: मुख्य कार्यकारी अधिकारी, जिल्हा परिषद, नागपूर/भंडारा/गांडिया/चंद्रपूर/वर्धा/गडचिरोली यांना माहितीसाठी.
- प्रत: अधीक्षक अभियंता, मजीप्रा मंडळ, नागपूर/चंद्रपूर यांना माहिती व कार्यवाहीस्तव.
- प्रत: अधीक्षक अभियंता (यां), मजीप्रा, नागपूर यांना माहितीकरीता.
- प्रत: कार्यकारी अभियंता, मजीप्रा विभाग, नागपूर/गांडिया/वर्धा/चंद्रपूर/जलव्यवस्थापन विभाग, नागपूर यांना माहिती करीता.
- प्रत: कार्यकारी अभियंता, ग्रामीण पाणी पुरवठा विभाग, जिल्हा परिषद, नागपूर/भंडारा/गांडिया/चंद्रपूर/वर्धा/गडचिरोली यांना माहितीसाठी.

MAHARASHTRA JEEVAN PRADHIKARAN
NAGPUR & AMRAVATI REGION
SCHEDULE OF RATES
FOR THE YEAR - 2018-2019
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दि. ७ डिसेंबर १९९० चे सहपत्र

परिशिष्ट - १

राज्यातील डोंगरी विभागाचे क्षेत्र दर्शविणारे विवरणपत्र

जिल्हा	तालुका	ज्या डोंगरी भागात आहे त्या डोंगराचे नाव	पूर्ण गट ज्या तालुक्यात ५०% पेक्षा जास्त क्षेत्र आहे तो पूर्णगट	उपगट ज्या तालुक्यात २०% पेक्षा जास्त व ५०% पेक्षा कमी क्षेत्र आहे तो उपगट	शेरा
१. ठाणे	१. मोखाडा	सांगढी पर्वत रांगा			
वसई	२. वाडा	पश्चिम घाट			
	३. शहापूर	पश्चिम घाट	पूर्ण गट (३)		
	४. मुरबाड	पश्चिम घाट	पूर्ण गट (४)		
	५. जव्हार	पश्चिम घाट	पूर्ण गट (५)		
	६. वसई	पश्चिम घाट	---	उपगट (१)	पूर्व भाग
	७. शिवडी	पश्चिम घाट	---	उपगट (२)	उत्तर पश्चिम भाग
२. रायगड	८. कर्जत	पश्चिम घाट	पूर्ण गट (६)		
	९. खालापूर	पश्चिम घाट	पूर्ण गट (७)		
	१०. सुधागड	पश्चिम घाट	पूर्ण गट (८)		
	११. रोहा	पश्चिम घाट	पूर्ण गट (९)		
	१२. माणगांव	पश्चिम घाट	पूर्ण गट (१०)		
	१३. महाड	पश्चिम घाट	पूर्ण गट (११)		
	१४. पोलाद्यूर	पश्चिम घाट	पूर्ण गट (१२)		
	१५. पेण	पश्चिम घाट	पूर्ण गट (१३)		
	१६. मुरुड	पश्चिम घाट	पूर्ण गट (१४)		
	१७. म्हसळा	पश्चिम घाट	पूर्ण गट (१५)		
	१८. पलवेल	पश्चिम घाट	---	उपगट (३)	दक्षिण भाग
३. रत्नागिरी	१९. झेड	पश्चिम घाट	पूर्ण गट (१६)		
	२०. चिपळूण	पश्चिम घाट	पूर्ण गट (१७)		
	२१. संगमेश्वर	पश्चिम घाट	पूर्ण गट (१८)		
	२२. लांजा	पश्चिम घाट	पूर्ण गट (१९)		
	२३. राजापूर	पश्चिम घाट	पूर्ण गट (२०)		
	२४. मंडणगड	पश्चिम घाट	---	उपगट (४)	उत्तरेकडील भाग
४. सिंधुदुर्ग	२५. कळकवली	पश्चिम घाट	पूर्ण गट (२१)		
	२६. सावंतवाडी	पश्चिम घाट	पूर्ण गट (२२)		
	२७. देवगड	पश्चिम घाट	पूर्ण गट (२३)		
	२८. कुडाळ	पश्चिम घाट	पूर्ण गट (२४)		
	२९. वैभववाडी	पश्चिम घाट	पूर्ण गट (२५)		
	३०. मालवण	पश्चिम घाट	---	उपगट (५)	पूर्व भाग

जिल्हा	तालुका	ज्या डॉगरी भागात आहे त्या डॉगराचे नाव	पूर्ण गट ज्या तालुक्यात ७०% पेक्षा जास्त क्षेत्र आहे तो पूर्णगट	उपगट ज्या तालुक्यात २०% पेक्षा जास्त व ७०% पेक्षा कमी क्षेत्र आहे तो उपगट	शेरा
१. नाशिक	३१. इगतपुरी	पर्श्म घाट	पूर्ण गट (२७)		
	३२. नाशिक	पर्श्म घाट	पूर्ण गट (२८)		
	३३. दिंडोरी	पर्श्म घाट	पूर्ण गट (२९)		
	३४. पेठ	पर्श्म घाट	पूर्ण गट (३०)		
	३५. सुरगणा	पर्श्म घाट	पूर्ण गट (३१)		
	३६. कळवण	पर्श्म घाट	पूर्ण गट (३२)		
	३७. बागलाप (सटाणा)	पर्श्म घाट	पूर्ण गट (३३)		
	३८. सिंध्र	पर्श्म घाट	पूर्ण गट (३४)		
६. अहमदनगर	४९. अकोला	पर्श्म घाट	पूर्ण गट (३५)		
	४०. सगमनेर	पर्श्म घाट	पूर्ण गट (३५)		
७. पुणे	४१. जुऱ्यर	सह्याद्री पर्वत रांगा	पूर्णगट (३६)		
	४२. आबेगाव	सह्याद्री पर्वत रांगा	पूर्णगट (३७)		
	४३. खेड (राजगुरुनगर)	सह्याद्री पर्वत रांगा	पूर्णगट (३८)		
	४४. मावळ	सह्याद्री पर्वत रांगा	पूर्णगट (३९)		
	४५. हवली	सह्याद्री पर्वत रांगा	पूर्णगट (४०)		
	४६. मुळशी	सह्याद्री पर्वत रांगा	पूर्णगट (४१)		
	४७. वेल्हे	सह्याद्री पर्वत रांगा	पूर्णगट (४२)		
	४८. भोर	सह्याद्री पर्वत रांगा	पूर्णगट (४३)		
	४९. पुरुदर	सह्याद्री पर्वत रांगा	पूर्णगट (४४)		
८. सातारा	५०. सातारा	सह्याद्री पर्वत रांगा	पूर्णगट (४५)		
	५१. वाई	सह्याद्री पर्वत रांगा	पूर्णगट (४६)		
	५२. पाटणा	सह्याद्री पर्वत रांगा	पूर्णगट (४७)		
	५३. जावळी	सह्याद्री पर्वत रांगा	पूर्णगट (४८)		
	५४. महाबळेश्वर	सह्याद्री पर्वत रांगा	पूर्णगट (४९)		
	५५. खाटव	सह्याद्री पर्वत रांगा	पूर्णगट (५०)		
	५६. रमळाळा	सह्याद्री पर्वत रांगा	पूर्णगट (५१)		
	५७. कोरेगाव	सह्याद्री पर्वत रांगा	पूर्णगट (५२)		
	५८. कराड	सह्याद्री पर्वत रांगा		उपगट (६)	पूर्वेकडील पक्षिम भाग
	५९. छाण	सह्याद्री पर्वत रांगा		उपगट (७)	पूर्वेकडील, दक्षिणेकडील, उत्तरेकडील, पक्षिमेकडील काही भाग
	६०. फलटण	सह्याद्री पर्वत रांगा		उपगट (८)	दक्षिणेकडील व पूर्वेकडील काही भाग
९. सांगली	६१. शिराळा	सह्याद्री पर्वत रांगा	पूर्णगट (५३)		
१०. कोल्हापूर	६२. शाहूवाडी	सह्याद्री पर्वत रांगा	पूर्णगट (५४)		
	६३. पन्हाळा	सह्याद्री पर्वत रांगा	पूर्णगट (५५)		
	६४. करवीर	सह्याद्री पर्वत रांगा	पूर्णगट (५६)		
	६५. गगनबावडा	सह्याद्री पर्वत रांगा	पूर्णगट (५७)		
	६६. राधानगरी	सह्याद्री पर्वत रांगा	पूर्णगट (५८)		

जिल्हा	तालुका	ज्या डोंगरी भागात आहे त्या डोंगरावै नाव	पूर्ण गट ज्या तालुक्यात ७०% येक्षा जास्त क्षेत्र आहे तो पूर्णगट	उपगट ज्या तालुक्यात २०% येक्षा जास्त व ७०% येक्षा कमी क्षेत्र आहे तो उपगट	शेरा
	६७. कागल	सह्याद्री पर्वत रांगा	पूर्णगट (५३)		
	६८. भुदरगड	पश्चिम घाट	पूर्ण गट (६०)		
	६९. आजरा	पश्चिम घाट	पूर्ण गट (६१)		
	७०. दंदगड	पश्चिम घाट	पूर्ण गट (६२)		
	७१. गडाहिरलज	पश्चिम घाट	पूर्ण गट (६३)		
११. शुक्रे	७२. साकी	पश्चिम घाट	पूर्ण गट (६४)		
	७३. नवापुरी	पश्चिम घाट	पूर्ण गट (६५)		
	७४. अक्कलकुवा	सातपुडा डोंगर	पूर्ण गट (६६)		
	७५. अकाणी	सातपुडा डोंगर	पूर्ण गट (६७)		
	७६. शिरारूर	सातपुडा डोंगर	पूर्ण गट (६८)		
	७७. शहादा	सातपुडा डोंगर	---	उपगट (१)	पूर्वेकडील व थोडा उत्तरेकडील भाग
	७८. तलोदा	सातपुडा डोंगर	---	उपगट (१०)	उत्तरेकडील भाग
१२. जळगाव	७९. चोपडा	सातपुडा डोंगर	---	उपगट (११)	उत्तरेकडील भाग
	८०. येवला	सातपुडा डोंगर	---	उपगट (१२)	उत्तरेकडील भाग
	८१. रावेर	सातपुडा डोंगर	---	उपगट (१३)	उत्तरेकडील भाग
	८२. ऐदलाबाद	सातपुडा डोंगर	---	उपगट (१४)	उत्तरेकडील व पूर्वेकडील काही भाग
१३. अमरावती	८३. धारणी	सातपुडा डोंगर	पूर्ण गट (६९)		
	८४. चिखलदरा	सातपुडा डोंगर	पूर्ण गट (७०)		
१४. यवतमाळ	८५. पुसद	सातमाळा रांगा	---	उपगट (१५)	उत्तर पश्चिमेकडील भाग, थोडा मध्यम भाग
	८६. अमरखेड	सातमाळा रांगा	---	उपगट (१६)	उत्तरेकडील व पूर्वेकडील भाग
१७. नांदेड	८७. किनवट	सातमाळा रांगा	पूर्ण गट (७१)		
१६. अकोला	८८. पातूर	अर्जिठाचे डोंगर	---	उपगट (१७)	दक्षिण व पूर्व
१७. बुलढाणा	८९. खामगाव	अर्जिठाचे डोंगर	---	उपगट (१८)	उत्तर व पूर्वेकडील भाग
१८. औरंगाबाद	९०. कळड	अर्जिठाचे डोंगर	---	उपगट (१९)	उत्तर व पूर्वेकडील भाग
	९१. खुलताबाद	अर्जिठाचे डोंगर	---	उपगट (२०)	मध्यला व दक्षिणेकडील भाग
	९२. सोयगाव	अर्जिठाचे डोंगर	पूर्ण गट (७२)		
	९३. सिल्लोड	अर्जिठाचे डोंगर	---	उपगट (२१)	उत्तरेकडील व थोडा दक्षिण पश्चिमेकडील भाग
९४. परभणी	९४. हिंगोली	अर्जिठाचे डोंगर	---	उपगट (२२)	दक्षिणेकडील भाग
	९५. कलमनूरी	अर्जिठाचे डोंगर	---	उपगट (२३)	दक्षिणेकडील भाग

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शासन निर्णय, ग्रामविकास विभाग क्र. ग्रापापु-१०९० / सीआर-१६३/३९-अ

दि. ७ डिसेंबर १९९० चे सहपत्र

परिशिष्ट - २

तालुकावार झाडीतील उपगट म्हणून घोषित केलेल्ज्ञा तालुक्झातील गावांची झाडी दर्शविणारे विवरणपत्र

जिल्हा महणून घोषित केलेला तालुका	उपगट तालुक्झातील गावांची नावे
ठाणे १. वसई	१) चांदंज २) तिपलिया ३) शिवनासा ४) पानसा ५) उसगांव ६) पारोळ ७) शिरवली ८) जळकीया ९) वरसई १०) सारवण ११) घाटेघर १२) भावखळ १३) पेलाट १४) साजिवली १५) दापेवली १६) कार्जुश १७) खाडेकर १८) झिडा १९) ओलसट २०) खेरे २१) संदा २२) चुडाल २३) शितिहेस २४) सावट २५) मरतारी २६) दिलवुडा २७) गया २८) ढडविरा २९) सातिवली ३०) खाडी ३१) दैडा ३२) ढळीप ३३) वामन ३४) काजू ३५) कोळी ३६) कोळा ३७) चिंचाटी ३८) होवाऊळ
२. भिवंडी	१) गणेशपुरी २) वडवली ३) उसगांव ४) धाडगांव ५) आंदीपाडा ६) गोबाटा ७) बोहिली ८) बावरी ९) मालवियोर १०) बेलोली ११) उसपाडी पाडा १२) आंबराई पाडा १३) घ्यार १४) खडकी खुर्द १५) पिंपळशेत १६) खडकी बुदूक १७) भाऊपोळ १८) कुहापाडा १९) कुहा २०) आंबापाडा २१) देवपाडा कुलईपाडा २२) पायगांव २३) पाया २४) परूनपाडा २५) भावडीपाडा २६) खारभाव २७) गाना २८) लाकेवली २९) चिंचपाडा ३०) गौरीपाडा ३१) डोकरनापाडा ३२) अलकौतीरी
गगड ३. पनवेल	१) माणिकघर २) घोडगावना ३) सावला ४) बामणोरी ५) नामदेवी ६) देवलोली ७) छावना ८) कालेवली ९) सारमाई १०) आपटा ११) कासव १२) कारडा १३) देवरी १४) बुलसुदा १५) अकूवडी १६) युराडाव १७) वावेघर १८) कोषी १९) द्वापेवली २०) देवतुला २१) सावला २२) करनाहा २३) कला २४) वडाना २५) कारल २६) बुलघट २७) कासभाट २८) दियारी २९) हातवडी
रत्नागिरी ४. मंडणगड	१) अंबावन बुदूक २) केंजालघर ३) लोरी ४) हेली ५) गारीपाडा ६) पेवा ७) पांडेरी ८) पाडवा ९) अंबरसेंट १०) टीव्हेसाई ११) टेरी १२) लोकरवन १३) महाप्रत १४) हडधर १५) तांभी १६) लोहरा १७) गौरज १८) कुंभार १९) गोवेले २०) पन्हाली २१) धुरी २२) तारवली २३) आबेगण २४) धनगर २५) सारळ २६) अडलळ २७) व्हेसाई २८) पाट २९) अंजला ३०) सोडली तर्फे व्हेसाई ३१) बुदूक ३२) खुर्द ३३) शिगांव ३४) साडा ३५) तलधर ३६) टाकेडी ३७) पाचरोल ३८) धामणी ३९) वोरखट ४०) गोवा ४१) धामणघर ४२) सामोटी ४३) निंगडी
सिंधुदुर्ग ५. मालवण	१) कुसीस २) असरुडी ३) भवानी ४) वंजकार ५) टाटारभाव ६) भाटपावणी ७) शिरवडे ८) शटीवडे ९) आजगणी १०) झाळण ११) हिवळे १२) ओवलीये १३) खाटले १४) दुंडुल १५) वायनगावडे १६) वायरन १७) पोईप १८) नेसुरे १९) वडेच्या पाट २०) नवा पाट २१) गोलवणे २२) ईकवळ २३) चापेच्योल २४) कुमामे २५) नांदोसा २६) तिरावडे २७) पारस २८) डेहूल
सातारा ६. कराड	१) मरळी २) चोरजवाडी ३) कोरीवळे ४) बेलदारे ५) म्होपे ६) भोलेवाडी ७) साकुरी ८) येणके ९) कोळे १०) कुसूर ११) तुळसण १२) सवाडे १३) लाटकेवाडी १४) हवेलवाडी १५) म्हारसोली १६) शेळकेवाडी १७) मनु १८) येवती १९) घराळवाडी २०) हणमंतवाडी २१) टाळगांव २२) येळगांव २३) गौरेवाडी २४) भरेवाडी २५) सोळशिरमे २७) महारगडेवाडी २८) जिती २९) अकाईवाडी ३०) कासारशिरमे ३१) लिंगडी ३२) धीलपावाडी ३३) किंवळ ३४) खोडताईवाडी ३५) मसूर ३६) हुणबरवाडी ३७) वाण्यारी वाडी ३८) मालवाडी ३९) कांबीवाडी ४०) शिरगांव ४१) सुर्ली ४२) पाल ४३) हरपळवाडी ४४) रिसवड ४५) वरची साकुरी ४६) सांजूर ४७) वानरवाडी ४८) उंडाळे ४९) भुरकुशी ५०) जतीनवाडी ५१) नांदलापूर ५२) वरांतगड ५३) चरेगाव ५४) तांबवे ५५) आरेवाडी ५६) गमेवाडी ५७) मोळवाडी ५८) कोळेवाडी ५९) पांढरवाडी ६०) आपै ६१) आबवडे ६२) तारुख ६३) बाङ्गलवाडी ६४) भवालपाडा ६५) शितलवाडी ६६) चिंगली ६७) पांचुद ६८) कामथी ६९) वाईरी ७०) कुरवडी ७१) हजारमारी ७२) बाबरमारी ७३) वनवासमाची ७४) राजमारी ७५) ठेंभू ७६) सज्जाड्ड ७७) कोरेगांव ७८) कार्वे ७९) वडगांव हवेली ८०) शेपोली कालवडे

जिल्हा महानून घोषित केलेला तालुका	उपग्रह तालुकातील गावांची नावे
७. फलटण	१) सालपे २) आदकीखुर्द ३) आळजापूर ४) कोराळे ५) वायोशी ६) लाथवडा ७) मनेवाडी ८) झाडकवाईवाडी ९) वेलोशी १०) उपलवे ११) ढाववाडी १२) भेरवाडी १३) विरवी १४) धुमाळवाडी १५) बेडकेवाडी १६) सासकळ १७) भाडली खुर्द १८) दुधभावी १९) झीरडे २०) जावली २१) आंदुड २२) कुरवाली बु.
८. मान	१) कुळकजई २) कळसकरवाडी ३) गाडेवाडी ४) शिंदे बुद्धक ५) पालवण ६) तोंडले ७) उगळेवाडी ८) खंडचारी वाडी ९) झागराळे १०) शिंगणापूर ११) भांडती १२) इंजलात १३) कळचोंडी १४) विरळी १५) वळई १६) कुकळवाड १७) मढणे १८) काळेवाडी १९) दोरेवाडी २०) किरकसाड २१) झुहिमानगड २२) दिववी २३) पांढरवाडी २४) रवरुपवानवाडी २५) उकिरडे २६) शिंदी बुद्धक २७) बोथे
९. शाहदा	१) काकरेडे खुर्द २) काकरेडे बुद्धक ३) कोंडावळ ४) चांदसेली ५) विरडे ६) वरुड बुद्धक ७) मळगांव ८) भुलाना ९) दश १०) राणीपुरी ११) आकसपूर १२) मानोडाया १३) नागझीरी १४) लंगडी भवसनी १५) कुकुडवाड १६) मळवणे १७) आभाडपूर खुर्द १८) टरबा १९) नायगांव २०) सिसुगा २१) पेटा २२) फोकाराळे २३) चांदपूर २४) गुदा २५) इकरास २६) काटधर २७) पिरपूर
१०. तळोदा	१) सोजूरवाडा २) मालखुर्द ३) चौगांव खुर्द ४) लाकुड शेट ५) खर्दी खुर्द ६) काठेर ७) बंधारा ८) खडी बुद्धक ९) जुवाणी १०) लाखापूर ११) माळ १२) मोरामाळ १३) आंबा गव्हाण १४) सीतपावळी १५) बामनी १६) मलुवा १७) राजापूर
११. चौपडा	१) मराता २) सत्रासेन ३) खांडरा ४) भोरविडा ५) उमरटी ६) गोवापाडा ७) कृष्णापूर ८) खान्यापाडा ९) विजापूर १०) मुख्यावतार ११) शेतपाणी १२) बोअरअनंती १३) मालापूर १४) विषणापूर १५) बोरमळी १६) कजरांगी १७) मेलाना १८) देव्हारी
१२. येवला	१) मनुद्वाई देवस्थान २) लंगडा आंबा ३) गळुच्या ४) जामन्या ५) उसमळी ६) हीरीपुरी ७) नागदेवी ८) वाघझीर ९) आसरावारी
१३. रावेर	१) तिड्या २) अंधारमाळी ३) मोहमोडी ४) विचाडी ५) विमड्या ६) गारझेडा ७) मोहमांडली सून ८) पिंपटकुंड ९) पाल १०) मोरहाल ११) जिन्सी १२) गारझेड १३) सहस्रनिंग १४) लालमाती
१४. ऐदलाबाद	१) दुई २) सुकती ३) सोमणगांव ४) डोलरखेड ५) नोंदवेल ६) वायल ७) चारठाणे ८) देवी मंदीर ९) मोरझिरा १०) जोनधखेड ११) लालगोडा १२) हलखेडा
१५. खामगांव	१) जिरोली २) इसालवाडी ३) चिंचखेडनाथ ४) कठडेगांव ५) चिंचखेडबंड ६) शेंदी ७) मांडणी ८) खेडी ९) वाकी १०) गारझेड ११) गारेडी १२) धार १४) माटरगांव १५) चिंचखेड १६) कान्टी १७) कझर १८) पिंपरी १९) धनगर १८) लाखनवाडी खुर्द २०) पतेपूर २१) लिमखेडा २२) हिवरखेडा २३) निरोडा
१६. आकोला	१) अंबरी २) भानोसा ३) बेलवळ ४) बलकापूर ५) भोकड कंदोली ६) बडी आमराई ७) बौडसा ८) खानापूर ९) काकडदारी १०) कोठारी बुद्धक ११) पासटल १२) कोसगाव १३) माळवाजूरा १४) सावरखेड पातूर १५) शेकापूर १६) कार्ला १८) चारमुठी १९) धरम २०) पांडुणा २१) रोलुना २२) चिखलपावळ २३) चौडी २४) जांब २५) चिंचखेड २६) गोळेगांव २७) आधार सावंगी २८) गावडगांव २९) सावरगांव
१७. पुसद	१) पिंपळगांव २) हौसापूर ३) बामनवाडी ४) कोंहोळ ५) गहुणी ६) चोडी ७) चिंचघाट ८) देवगव्हाण ९) बेलगव्हाण १०) जामनी धुळ ११) मोरगड १२) उडाणी १३) पारवा १४) पांडुणी खुर्द १५) खटकोला १६) पनहाळा १७) मांजरजवळा खुर्द १८) मांजरजवळा १९) सावतमाळ २०) हनवंतखेड २१) मारवाडी २२) अमृतनगर २३) धनतळ २४) अनजळ २५) उपवनवाडी २६) रामपूरनगर २७) दुधगिरी २८) अनसिंग २९) जांबनाइकर ३०) शिलोजा

जिल्हा महून घोषित केलेला तालुका	उपगट तालुक्कातील गावांची नावे
१८. उमरखेड	१) दिडाळा २) पाडी ३) पिरंजी ४) गोविंदपूर ५) कुरळी ६) जाम ७) अकोली ८) सातारा ९) मसळग १०) पाडी ११) जेवळी १२) पिंपळगांव १३) बोडखा १४) पेथा १५) उदापूर १६) सावरगांव १७) परोटी १८) नानी १९) बोरी २०) घेरडी २१) पवनाळा २२) सोनदामी २३) घेंकबा २४) मोरघंगांव २५) कोसंवी २६) चिखली २७) रामपूर २८) बोरगांव २९) ठोंगरगांव ३०) घडोली ३१) भोईर ३२) नवेलालूर ३३) दिग्रस ३४) काटी ३५) कवठा ३६) वहेनी ३७) वानोरा ३८) शिवाजीनगर ३९) जवराळा ४०) उमरी ४१) असोली ४२) सेवालालनगर ४३) वडगांव ४४) दामसरी ४५) थार बुढुक ४६) सेरंडी ४७) दरारी ४८) मधुरानगर
१९. सिल्लोड	१) धनशिंगवाडी २) बाभुळगांव ३) पोखरी ४) बावरा ५) मोमोनाबाड ६) लेहा ७) बाईगाव बुढुक ८) अंधारी ९) जातवा १०) अमरावती ११) घाटाळादा १२) परदेशीवाडी १३) चांरेने १४) धावरा १५) अंधारवाडी १६) कडेगांव १७) सिरसाम १८) नातेगांव १९) घाटमखेळ २०) हालदा २१) पिंपळदी २२) मुख्यावर २३) वाघरा २४) रांजणी २५) अर्जिंठा २६) अनाड २७) आमरसरी २८) नारवी २९) वडाळी
२०. कळड	१) तांदुळवाडी २) पेवळी ३) मुमसापूर ४) पेकडवाडी ५) कोंडवाडी ६) कल्याणी ७) वडनेर ८) अंबाला ९) आंबा १०) जामडी ११) रेळ १२) कुंजखेड १३) नांदगिरवाडी १४) हिवरखेड १५) वडाळी १६) जेवळेड १७) मालेगांव ढोकळ १८) भारवा १९) मालेगांव लोखोडे २०) मोहाडी २१) हसता २२) माहेगांव २३) वेडसर २४) पळसी खुर्द २५) कांबठी २६) भिलदरी २७) गोरपिंपळी २८) सवळेड बुढुक २९) पिंपरखेडा ३०) सफीयाबाड ३१) खडकी ३२) पिसीर ३३) भातवाडी ३४) वासरी ३५) निंभोरा ३६) उमरखेड ३७) सावरगांव ३८) धामपी ३९) आंवेवाडी बुढुक ४०) मेहुण ४१) हरेवाडी ४२) वडगांव ४३) लोझा ४४) पांगेरी ४५) भापेवाडी ४६) सोनवाडी ४७) शिवाट ४८) चिमणापूर ४९) नागापूर ५०) करंजखेड ५१) रेडळगांव ५२) नेवूपूर ५३) घाटशेंठा ५४) टाकळी ५५) अंतूर ५६) लोहगांव
२१. खुलताबाद	१) वडगांव २) पाडळी ३) शिरोळ बुढुक ४) सावरखेडा ५) लोटी ६) बोडक ७) खुलताबाद ८) धामणगांव ९) अबदुलापूर १०) निरगुडी बुढुक ११) पिंपरी १२) जमालवाडी १३) मैसरमाळ १४) शिरसमाळ १५) टाकळी खुर्द १६) आखवतवाड १७) वेरुल १८) मंत्रापूर १९) खुलताबाद २०) सराई २१) बदलाबाड २२) नंदुबाद २३) मापसाळा २४) रसूलपूर २५) शंकरपूरवाडी २६) सादुखेडा २७) खिर्डी २८) सोनखेडा २९) भट्टी ३०) लामगांव ३१) झोतेनापूर ३२) विरमगाव
२२. हिंगोली	१) नररी २) लोहगांव ३) सेवली ४) पिंपळी ५) बोरळा ६) जळगांव ७) शेलेगांव ८) सोनेगांव ९) पिंपरखेड १०) देवळा ११) अनापनवाडी १२) ससुळापूर १३) माथा १४) मूर्तिजापूर १५) केहरपिंपरी १६) सिंद्वेष्ट १७) दिघुळ १८) दुडचना १९) बडुचुना २०) ओढा २१) हजुमानदरी २२) शिवकार २३) जामला २४) जामदन २५) वैजापूर २६) खंदाळा २७) फासेले २८) तबलीगव्हाण २९) मांडेगाव ३०) राख ३१) जामरी खुर्द ३२) पांगंजी ३३) बोराळा ३४) नांदुगा ३५) कडवी ३६) आमनखेड ३७) ब्रह्मपुरी ३८) खळगांव ३९) जामसन ४०) पारडी ४१) खळगांव ४२) रिंदीस ४३) तेजगाव ४४) कोळब ४५) सुकली बुढुक ४६) सुकली ४७) शिंदेपळ ४८) धनगरवाडी ४९) सबळखेड ५०) बाभुळगांव ५१) गोरेगांव ५२) पैंडीखुर्द ५३) ब्रह्मणवाडी ५४) पिंपरी पाथबळ ५५) बोरखेड ५६) एकळा ५७) खंदाळा ५८) चिंचोळी ५९) बेलरा ६०) आडगांव ६१) देवठाण ६२) काळेगांव ६३) कलोखेड ६४) कपचुली ६५) चाटोना ६६) देवठाण
२३. कळमनूरी	१) रेडे २) धानापूर ३) धोना ४) अमरखोजा ५) शिरस खुर्द ६) शिरस बुढुक ७) डिग्रस वापी ८) पिंपरी ९) सांडस १०) रेटकर ११) वराडी १२) खडकत बुढुक १३) खडकस खुर्द १४) मंदारी १५) गारखेड १६) मही खुर्द १७) खडकेत १८) बैज १९) दुधेरी २०) चिंचोळी २१) खोडतला २२) पेडळगांव २३) डोंगी २४) नांदुरा २५) बोलापुरी २६) ताळेगांव २७) जावा २८) मिसे बुढुक २९) कापस ३०) शिपगी ३१) मालवाडी ३२) दाडेगांव ३३) मोतीचोर ३४) विडलवाडी ३५) पिंपरी उर्द ३६) कानेगांव ३७) फाटना ३८) दाभाडी ३९) पुंचा ४०) मोरगांव

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**MAHARASHTRA JEEVAN PRADHIKARAN REGION NAGPUR
CSR 208-19 FOR NAGPUR & AMRAVATI REGION**

**SCHEDULE OF RATES FOR THE YEAR 2018-19
GENERAL NOTES**

- 1 These rates are applicable to all MJP works in the NAGPUR & AMRAVATI REGION with effect from **dated 01 / 06 /2018**.
- 2 Item of excavation is inclusive of normal manual dewatering, however, separate item for dewatering shall be proposed in the estimate where underground water is anticipated in significant magnitude.
- 3 The rates of excavation for O & M works where limited working space is available and work is required to be carried out on emergency basis, the rate should be adopted as per actual rate analysis which shall be approved by concerned S.E. for that particular work only.
- 4 **Rates for all items are excluding GST(Goods & Service Tax) levied by Government of India & State Government . While preparation of estimates pricing GST percentage, provision should be made separately in recapitulation sheet. Labour rates are inclusive of EPF 12.5 % . These rates are applicable only for tendered works, these rates should be reduced by 12.5 % of labour part when works are to be carried out on piecemeal works and other small works without tendering.**
- 5 For all completed items, **initial lead of 5 kms.** is considered for collection of materials like sand, bricks, metal, stone etc. Appropriate addition for lead charges excluding loading , unloading for these materials shall be done while estimation.

Following quantities shall be considered for additional lead charges beyond 5 km for material required for concrete and reinforcement for structures.

Capacity of ESR (Lit)	Staging Height (M)	Quantity of concrete in cum	Reinforcement Qty (MT)
20,000	12	27.40	2.14
30,000	12	32.70	2.55
40,000	12	37.80	2.95
50,000	12	41.90	3.27
60,000	12	46.40	3.62
70,000	12	51.20	3.99
75,000	12	53.00	4.13
80,000	12	56.00	4.37
90,000	12	62.40	4.87

1,25,000	25	107.40	8.38
1,50,000	12	89.80	7.00
1,60,000	12	94.30	7.36
1,75,000	16	117.60	9.17
2,00,000	20	143.60	11.20
2,00,000	25	157.00	12.25
2,50,000	25	177.00	13.81
3,00,000	25	206.00	16.07

Note : Spiral staircase not considered. Above quantities shall be considered for all type of foundation (SBC) and all type of Seismic Zones.

For RCC GSR

Capacity of GSR (Lit)	Concrete Qty (Cum)	Reinforcement Qty (MT)
25,000	13.58	0.945
50,000	18.45	1.586
75,000	3045	2.095
1,00,000	39.31	2.707
1,50,000	54.699	3.778
2,00,000	73.313	6.577
3,00,000	95.092	9.874
5,00,000	143.277	11.900
10,00,000	222.441	15.418

(For WTP & STP works, the quantities of completed/ongoing works shall be considered)

For Capacities beyond the mentioned capacities of ESR and GSR as well as for all capacities of WTP & STPs , the Quantities shall be considered with respect to the already completed/ on going work in the region.All the concrete Items for water retaining structures are taken as M-300 grade. Hence aggregate quantity and sand quantity shall be as per standard consumption.

- 6 These rates are applicable to water supply and sewerage schemes and its allied works only. Rates, for Items required for general construction, buildings, roads, Irrigation Works etc. shall be adopted from the current schedule of rates of P.W.D. or Irrigation Deptt. in respective areas. For bore wells, CSR. of GSDA shall be followed. Increase in percentage over normal schedule of rates will also be as per norms of respective C.S.R.
- 7 For mechanical and electrical items related to water supply and sewerage schemes, CSR for 2016-17 prepared by Superintending Engineer (Mechanical), Maharashtra Jeevan Pradhikaran shall be adopted.

- 8 Following increase in % over normal schedule of rates of M.J.P. for 2017-18 will be applicable. (Ref. PWD GR. No. DSR/1091/CR-6577/Planning-3,dated 08/07/2003)

	Area	% Increase
a	Works in Corporation area	5.00%
b	Works in Municipal areas	2.00%
c	Works in tribal area / hilly and inaccesible areas	10.00%
d	Suger cane area	5.00%
e	Prison / Jail area	15.00%
f	Defence area	20.00%
g	Excavation for pipeline work along National Highway	10.00%
h	Excavation for Dist.system pipe lines,Sewerage system in towns	10.00%
i	Rajbhavan	20.00%
j	For Naxalite Area (Notified)	10.00%

- 9 In case the area of work lies under categories more than one (mentioned at Sr.No.8) the higher percentage increase shall be made applicable (e.g. if any Municipal Council falls in hilly area, then additional percentage in rates will be only 10 % and not with 2 % + 10 %). This additional percentage is only on completed item of work and not applicable to items of providing of materials like steel, pipes, valves, specials etc.
- 10 For hilly and inaccessible areas / Tribal areas approved by Government, Planning Department's Circular Nos.(1)1089/CR-66/Plan-19,DT.23/11/1990 and (2) 1094/P-36/K-1455 dt.02/09/1994, shall be followed . In addition to amendment notification by the planning deptt. time to time.
- 11 For Action Plan Notified Area, Government's Circular in force from time to time shall be followed.
- 12 Whenever basic rates of completed items are increased by percentage given at Sr. No. 9, the issue rates of materials to be supplied by the Department (if any) shall be increased by same percentage.
- 13 This schedule of rates is based on following basic rates for important materials.

	Material	Rate in Rs. Per MT.
a	Cement	4200.00
b	Mild Steel	29670.00
c	Tor Steel/CTD bars	33425.00
d	Structural Steel	34834.00
e	Corrosion Resistant Steel (Fe 500)	32000.00
f	Diesel	62.24 Per Lit.

- 14 Details of standard cement consumption and standard weight of various pipes are incorporated in this CSR .
- 15 Rates for supply of various types of pipes, specials and valves are inclusive of third party inspection charges, storage charges, overhead charges and transportation of materials upto divisional stores / sites and stacking.
- 16 Cost of carting of pipes and valves from departmental stores to site of work is not considered in rate analysis, hence this item must be incorporated in each scheme. While inviting tenders if supply is from departmental store, then this item shall appear in the tender, and if the supply is by contractor then this item shall not appear in the tender, even though same is provided in sanctioned scheme, because the contractor is supposed to bring the pipes and valves directly at site.
- 17 Though the contractor is required to do refilling before hydraulic testing to avoid traffic hurdle, no payment for refilling of the trenches of pipeline shall be payable till satisfactory hydraulic testing is given. Re-excavation required if any, during testing, shall be done by the contractor at his own cost.
- 18 10 % of cost of items of water retaining structures, such as GSR/ESR/MBR shall be retained till satisfactory hydraulic testing is given as per IS code.
- 19 For Dams , Balancing Tanks , Aerated Lagoons and similar structures, the rates for Film membranes as per prevailing rates for Irrigation Department will be followed.
- 20 Capacity of ESR / GSR to be constructed shall be rounded to nearest 1000 litres always on higher side i.e. if required capacity is 1,23,570 litre, it shall be rounded to 1,24,000 litre. Similarly, if required capacity is 8,26,070 litre, it shall be rounded to 8,27,000 litre.

- 21 Capacity of Unconventional / conventional Treatment Plants shall be rounded to nearest 0.5 Mld- always on higher side i.e. if WTP of 2.37 Mld is required; it shall be rounded to 2.5 Mld. For WTP having capacity less than 0.5 mld, package type WTP should be considered.
- 22 ***Provision for insurance @ 1% is considered in Rate analysis of CSR 2017-18 These rates are applicable only for tendered works,these rates should be reduced by 1 % of total rate when works are to be carried out on piecemeal works and other small works without tendering.***
- 23 Rates given in this CSR are for estimation purpose only.
- 24 The makes of Sluice / Butterfly valves etc. to be used for inlet / outlets of ESRs / GSRs / MBRs / Pumping main / Rising main and WTP should be from approved makes of M.J.P .
- 25 Mechanical CSR rates for respective items shall be followed while estimation and the list of approved makes shall be given in the item.
- 26 ***As per Govt. Circular No.DSR 1090/CR 6453/PLN_3 dated 14-07-1993, 1% for labour amenities is considered in the DSR .***
- 27 ***The royalty charges are considered in the rate analysis of CSR 2016-17As per Revenue & Forest department ,Government of Maharashtra Notification dt.11.5.2015.***
- 28 ***As per Govt. in Industries and Power GR No.BCA-2009/CR108/labour 7-A dated 17-06-2010, 1% cess on labour welfare is considered in DSR while arriving the rates.***
- 29 ***Item of hydraulic testing of pipeline are included separately in respective subwork in the Schedule of Rates.***
- 30 In case of water supplied by MJP cost thereof shall be deducted from the item of hydraulic testing with prevailing of non domestic (Bulk Supply) as per MJP notification No.MJP/F II /Cost/23/2015/dt. 17.7.2015
- 31 in case of Geomembrane sheet to be provided by the agency,50 % Payment against supply 30 % Payment against lowering,Laying & 20 % against hydraulic test will be given.
- 32 Diesel rate mentioned in the material section has been worked out with 12 % reduction in the market rate of the diesel.

MAHARASHTRA JEEVAN PRADHIKARAN, NAGPUR REGION, NAGPUR

FOR NAGPUR & AMRAVATI REGION

MATERIAL FOR 2018-19

S.No.	Material Description	Unit	Rate	
1	Alum Grade I Ex-factory	Mt	6538.00	
2	Binding Wire	Kg	56.00	
3	Black enamel paint Anti corrosive	Ltr	157.00	
4	Bricks	No	4.40	
5	Bullies, Struts (125 mm dia 1.5 M long)	rmt	162.00	
6	C.C.Teak wood planks(3" X 6")	Cum	60377.00	
7	Cement (Bags)	Bag	210.00	
8	Cement (M.T.)	Mt	4200.00	
9	Cement Sulphur Resistant	M.T.	5205.00	
10	Charcoal	Kg	21.50	
11	Coarse sand	Cum	691.00	
12	Corrosion Resistant steel	Mt	32000.00	
13	Diesel	Lit	62.24	
14	Epoxy paint	Kg	336.00	
15	Fuse	No	14.00	
16	Gun Powder	Kg	62.00	
17	Liquid chlorine 900 kg Supplier Containor	No.	12757.00	
18	LubricantOil	lit	173.00	
19	M.S.Angle(50x50x6mm)	Kg	33.00	
20	M.S.Bars (Delivery at site)	Mt	29670.00	
21	M.S.Bars (in kgs)	Kg	30.00	
22	M.S.Flats (40 mm x 3 mm)	Kg	35.50	
23	M.S.plate	Kg	35.50	
24	Mild steelGrill ready	Kg	42.00	
25	Mildsteel grill railing	mt	42.00	
26	Mobile oil	Lit	203.00	
27	Murum	cum	222.00	
28	Nails	Kg	55.00	
29	Nutbolts	Kg	71.00	
30	Polling board	cum	14488.50	
31	R.S.Joist channel etc	MT	37156.00	
32	Rapid sand Gravity filter Gravel At Source	Cum	1481.00	
33	Rapid sand Gravity filter Gravel At Source (Godhara, Gokak, Vainganga, Yesagi sand)	Cum	1481.00	
34	Ready mixed lead/zinc paint	Ltr	164.00	
35	Ready mix oil paint	Ltr	183.00	

S.No.	Material Description	Unit	Rate	
36	Ready mix primer for steel	Ltr	127.00	
37	Ready mix synthetic enamel paint	Lit	189.00	
38	Rubber Gasket (8 mm thick)	Kg	67.50	
39	Sand	cum	691.00	
40	Spun Yarn	Kg	84.00	
41	Stone Aggregate 10 mm	cum	750.00	
42	Stone Aggregate 20 mm	cum	750.00	
43	Stone Aggregate 40 mm	cum	750.00	
44	Structural Steel	M.T.	34834.00	
45	T.C.L.(bleaching poweder Gr.I) (5kg pack)	Kg	22.00	
46	T.C.L.(bleaching poweder Gr.I) (10kg pack)	Kg	20.00	
47	T.C.L.(bleaching poweder Gr.I) (25kg pack)	Kg	17.50	
48	Teak wood	Cum	57171.00	
49	Tor Steel	Mt	33425.00	
50	Walling (100x100mm)	cum	13836.00	
51	White cement	Kg	22.00	
52	White lead	Kg	142.00	
53	Wire	Kg	65.00	
54	Plywood Coomercial 12 mm thick Waterproof for centering	sqm	424.00	
55	Welding Rod Having weight 5.25 kg	Box	1175.00	
56	Kasarde sand (for mortar lining work) @ source	cum	1585.00	
57	Rubble	cum	388.00	
58	Oxygen Gas (Refill)	Cylinder	274.00	
59	Acetylene Gas	Nos	600.00	
60	Liquid chlorine 100 kg Deptt Containor .	No.	2233.00	
61	PAC Powder High/medium Basecity	MT	24877.00	
62	PAC Liquid	MT	9090.00	

MAHARASHTRA JEEVAN PRADHIKARAN, NAGPUR REGION

LABOUR FOR 2018-19

S.No.	Material Description	Unit	Rate Adopted
1	Asst Fitter	No.	329.00
2	Bhandhani	No.	362.00
3	Bhisti with pakahal	No.	312.00
4	Blacksmith IInd class	No.	362.00
5	Breaker	No.	362.00
6	Carpainter 1st class	No.	434.00
7	Carpainter 2nd class	No.	362.00
8	Chiseller	No.	362.00
9	Excavator	No.	290.00
10	Fitter 1st class	No.	392.00
11	Glazier	No.	362.00
12	Helper	No.	312.00
13	Hole Driller	No.	362.00
14	Mason 1st class	No.	434.00
15	Mason 2nd class	No.	362.00
16	MAZDOOR (FEMALE)	No.	312.00
17	Mazdoor(Heavy)	No.	362.00
18	Mazdoor (Light)	No.	312.00
19	MAZDOOR (MALE)	No.	312.00
20	Maistry	No.	362.00
21	Mukadam	No.	362.00
22	Painter (for coloring)	No.	362.00
23	Painter	No.	362.00
24	Polisher	No.	362.00
25	Pump Driver	No.	362.00
26	StoneCutter or dresser	No.	362.00
27	Tile layer	No.	362.00
28	Welder	No.	434.00
29	Welder for pipe line	No.	434.00
30	WhiteWasher	No.	362.00
31	TileTurner	No.	362.00
32	L.M.V. Driver	No.	362.00
33	Electrician	No.	434.00
34	Plumber (Building)	No.	434.00
35	Mali	No.	312.00
36	Wireman	No.	362.00
39	Computer Operator (data entryoperator)	No.	507.00
40	Meter Reader	No.	390.00
41	Filter Operator	No.	441.00

HIRE CHARGES OF MACHINERIES			
1	Rent for chain pully block with tripod	Day	450.00
2	& excluding fuel	BHP-Day	180.00
3	Rent for Mech.Mixer with fuel & crew	Day	2415.00
4	Rent for vibrator with fuel and crew	Day	945.00
5	Plate Bender	Day	900.00
6	Rent for welding set with Electric set	Day	1100.00
7	Rent for welding set with Generator	Day	2400.00
8	Rent for Compressor with fuel	Day	2625.00
9	Rent for Concrete breaker & Compressor	Day	2500.00
10	Rent for poclain	Hour	2100.00
11	Rent for Crane	Hour	1365.00
12	Rent for JCB	Hour	1050.00
13	Truck hire charges upto 20 km	Day	2440.00
14	Truck hire charges for 20 km to 50 km	Day	2228.00
15	Truck hire charges for 50 km & above	Day	1697.00
16	Pipe cutter with opertor	Day	1313.00
17	Desludging/ Desilting pump	Day	2520.00
18	(Upto 300 KM.)	Day	3342.00

STATEMENT II

Including loading, unloading and stacking

Lead in km	Av. Speed	No. of Trips(N)=	Km. (2NL+6)	Litres of diesel cons	cost of diesel @ 62.24	Lit. of Mobile oil con-	cost of M.Oil @ 203.00	cost of 6 mazdoor 407.25	Hire of truck /day	Total cost (6+8+ 9+10) Rs. Per day	Add 10% overhead charges	Total 11+12 (13/3) 291.55	cost per trip
1	2	3	4	5	6	7	8	9	10	11	12	13	14
0.5	15	7.5	13.50	4.50	280.08	0.096	19.49	2443.5	2440	5183.07	518.31	5701.38	760.18
1	16	7.11	20.22	6.74	419.5	0.144	29.23	2443.5	2440	5332.23	533.22	5865.45	824.96
1.5	16.5	6.77	26.31	8.77	545.84	0.188	38.16	2443.5	2440	5467.50	546.75	6014.25	888.37
2	17	6.48	31.92	10.64	662.23	0.228	46.28	2443.5	2440	5592.01	559.2	6151.21	949.26
2.5	17.25	6.2	37.00	12.33	767.42	0.264	53.59	2443.5	2440	5704.51	570.45	6274.96	1012.09
3	17.5	5.96	41.76	13.92	866.38	0.298	60.49	2443.5	2440	5810.37	581.04	6391.41	1072.38
3.5	17.75	5.74	46.18	15.39	957.87	0.330	66.99	2443.5	2440	5908.36	590.84	6499.20	1132.26
4	18	5.54	50.32	16.77	1043.76	0.359	72.88	2443.5	2440	6000.14	600.01	6600.15	1191.36
4.5	18.25	5.36	54.24	18.08	1125.3	0.387	78.56	2443.5	2440	6087.36	608.74	6696.10	1249.27
5	18.5	5.19	57.90	19.30	1201.23	0.414	84.04	2443.5	2440	6168.77	616.88	6785.65	1307.45
6	18.75	4.88	64.56	21.52	1339.4	0.461	93.58	2443.5	2440	6316.48	631.65	6948.13	1423.8
7	19	4.61	70.54	23.51	1463.26	0.504	102.31	2443.5	2440	6449.07	644.91	7093.98	1538.82
8	19.183	4.36	75.76	25.25	1571.56	0.541	109.82	2443.5	2440	6564.88	656.49	7221.37	1656.28
9	19.6	4.17	81.06	27.02	1681.72	0.579	117.54	2443.5	2440	6682.76	668.28	7351.04	1762.84
10	20	4	86.00	28.67	1784.42	0.614	124.64	2443.5	2440	6792.56	679.26	7471.82	1867.96
15	25	3.64	115.20	38.40	2390.02	0.823	167.07	2443.5	2440	7440.59	744.06	8184.65	2248.53
20	25	3.08	129.20	43.07	2680.68	0.923	187.37	2443.5	2440	7751.55	775.16	8526.71	2768.41
25	25	2.67	139.50	46.50	2894.16	0.996	202.19	2443.5	2228	7767.85	776.79	8544.64	3200.24
30	25	2.35	147.00	49.00	3049.76	1.050	213.15	2443.5	2228	7934.41	793.44	8727.85	3713.98
35	30	2.4	174.00	58.00	3609.92	1.243	252.33	2443.5	2228	8533.75	853.38	9387.13	3911.3
40	30	2.18	180.40	60.13	3742.49	1.289	261.67	2443.5	2228	8675.66	867.57	9543.23	4377.63
45	30	2	186.00	62.00	3858.88	1.329	269.79	2443.5	2228	8800.17	880.02	9680.19	4840.1
50	30	1.85	191.00	63.67	3962.82	1.364	276.89	2443.5	2228	8911.21	891.12	9802.33	5298.56
60	30	1.6	198.00	66.00	4107.84	1.414	287.04	2443.5	1697	8535.38	853.54	9388.92	5868.08
70	30	1.41	203.40	67.80	4219.87	1.453	294.96	2443.5	1697	8655.33	865.53	9520.86	6752.38
80	30	1.26	207.60	69.20	4307.01	1.483	301.05	2443.5	1697	8748.56	874.86	9623.42	7637.63
90	30	1.14	211.20	70.40	4381.7	1.509	306.33	2443.5	1697	8828.53	882.85	9711.38	8518.75
100	40	1.33	272.00	90.67	5643.3	1.943	394.43	2443.5	1697	10178.23	1017.82	11196.05	8418.08
125	40	1.1	281.00	93.67	5830.02	2.007	407.42	2443.5	1697	10377.94	1037.79	11415.73	10377.94
150	40	0.94	288.00	96.00	5975.04	2.057	417.57	2296.89	1697	10386.50	1038.65	11425.15	12154.41
175	40	0.82	293.00	97.67	6078.98	2.093	424.88	2003.67	1697	10204.53	1020.45	11224.98	13689
200	40	0.73	298.00	99.33	6182.3	2.129	432.19	1783.76	1697	10095.25	1009.53	11104.78	15212.03
250	40	0.59	301.00	100.33	6244.54	2.150	436.45	1441.67	1697	9819.66	981.97	10801.63	18307.85
300	45	0.56	342.00	114.00	7095.36	2.443	495.93	1368.36	1697	10656.65	1065.67	11722.32	20932.71
420	45	0.41	350.40	116.80	7269.63	2.503	508.11	1001.84	1697	10476.58	1047.66	11524.24	28107.9
540	45	0.32	351.60	117.20	7294.53	2.511	509.73	781.92	1697	10283.18	1028.32	11311.50	35348.44
660	45	0.26	349.20	116.40	7244.74	2.494	506.28	635.31	1697	10083.33	1008.33	11091.66	42660.23
780	45	0.22	349.20	116.40	7244.74	2.494	506.28	537.57	1697	9985.59	998.56	10984.15	49927.95
900	45	0.2	366.00	122.00	7593.28	2.614	530.64	488.7	1697	10309.62	1030.96	11340.58	56702.9
1020	45	0.17	352.80	117.60	7319.42	2.520	511.56	415.4	1697	9943.38	994.34	10937.72	64339.53
1140	45	0.15	348.00	116.00	7219.84	2.486	504.66	366.53	1697	9788.03	978.8	10766.83	71778.87

Note: 1) No. of trips in a working of 8 hours N=8 / (2(L+S) + 1) where L = Lead in km

STATEMENT III

Excluding loading, unloading and stacking

Lead in km	Av. Speed	No. of Trips(N)=	Km. Done	Litres of diesel	cost of diesel @	Lit. of Mobile	cost of M.Oil @	cost of 6 mazdoor	Hire charges	Total cost (6+8+ 9+10)	Add 10% overhead	Total 11+12	cost per trip (13/3)
		8/ ((2L/S) +1)	(2NL+6)	cons	62.24	oil con-	203.00	407.25	of truck				
				umed	/lit	sumed	/lit	/day	Rs. Per				
1	2	3	4	5	6	7	8	9	10	11	12	13	14
0.5	15	7.5	13.50	4.50	280.08	0.096	19.49	0	2440	2739.57	273.96	3013.53	401.8
1	16	7.11	20.22	6.74	419.5	0.144	29.23	0	2440	2888.73	288.87	3177.60	446.92
1.5	16.5	6.77	26.31	8.77	545.84	0.188	38.16	0	2440	3024.00	302.4	3326.40	491.34
2	17	6.48	31.92	10.64	662.23	0.228	46.28	0	2440	3148.51	314.85	3463.36	534.47
2.5	17.25	6.2	37.00	12.33	767.42	0.264	53.59	0	2440	3261.01	326.1	3587.11	578.57
3	17.5	5.96	41.76	13.92	866.38	0.298	60.49	0	2440	3366.87	336.69	3703.56	621.4
3.5	17.75	5.74	46.18	15.39	957.87	0.330	66.99	0	2440	3464.86	346.49	3811.35	664
4	18	5.54	50.32	16.77	1043.76	0.359	72.88	0	2440	3556.64	355.66	3912.30	706.19
4.5	18.25	5.36	54.24	18.08	1125.3	0.387	78.56	0	2440	3643.86	364.39	4008.25	747.81
5	18.5	5.19	57.90	19.30	1201.23	0.414	84.04	0	2440	3725.27	372.53	4097.80	789.56
6	18.75	4.88	64.56	21.52	1339.4	0.461	93.58	0	2440	3872.98	387.3	4260.28	873.01
7	19	4.61	70.54	23.51	1463.26	0.504	102.31	0	2440	4005.57	400.56	4406.13	955.78
8	19.183	4.36	75.76	25.25	1571.56	0.541	109.82	0	2440	4121.38	412.14	4533.52	1039.8
9	19.6	4.17	81.06	27.02	1681.72	0.579	117.54	0	2440	4239.26	423.93	4663.19	1118.27
10	20	4	86.00	28.67	1784.42	0.614	124.64	0	2440	4349.06	434.91	4783.97	1195.99
15	25	3.64	115.20	38.40	2390.02	0.823	167.07	0	2440	4997.09	499.71	5496.80	1510.11
20	25	3.08	129.20	43.07	2680.68	0.923	187.37	0	2440	5308.05	530.81	5838.86	1895.73
25	25	2.67	139.50	46.50	2894.16	0.996	202.19	0	2228	5324.35	532.44	5856.79	2193.55
30	25	2.35	147.00	49.00	3049.76	1.050	213.15	0	2228	5490.91	549.09	6040.00	2570.21
35	30	2.4	174.00	58.00	3609.92	1.243	252.33	0	2228	6090.25	609.03	6699.28	2791.37
40	30	2.18	180.40	60.13	3742.49	1.289	261.67	0	2228	6232.16	623.22	6855.38	3144.67
45	30	2	186.00	62.00	3858.88	1.329	269.79	0	2228	6356.67	635.67	6992.34	3496.17
50	30	1.85	191.00	63.67	3962.82	1.364	276.89	0	2228	6467.71	646.77	7114.48	3845.66
55	30	1.71	194.10	64.70	4026.93	1.386	281.36	0	1697	6005.29	600.53	6605.82	3863.05
65	30	1.5	201.00	67.00	4170.08	1.436	291.51	0	1697	6158.59	615.86	6774.45	4516.3
75	30	1.33	205.50	68.50	4263.44	1.468	298.00	0	1697	6258.44	625.84	6884.28	5176.15
85	30	1.2	210.00	70.00	4356.8	1.500	304.50	0	1697	6358.30	635.83	6994.13	5828.44
95	40	1.39	270.10	90.03	5603.47	1.929	391.59	0	1697	7692.06	769.21	8461.27	6087.24
105	40	1.28	274.80	91.60	5701.18	1.963	398.49	0	1697	7796.67	779.67	8576.34	6700.27
130	40	1.07	284.20	94.73	5896	2.030	412.09	0	1697	8005.09	800.51	8805.60	8229.53
155	40	0.91	288.10	96.03	5976.91	2.058	417.77	0	1697	8091.68	809.17	8900.85	9781.15
180	40	0.8	294.00	98.00	6099.52	2.100	426.30	0	1697	8222.82	822.28	9045.10	11306.38
230	40	0.64	300.40	100.13	6232.09	2.146	435.64	0	1697	8364.73	836.47	9201.20	14376.88
280	45	0.6	342.00	114.00	7095.36	2.443	495.93	0	1697	9288.29	928.83	10217.12	17028.53
400	45	0.43	350.00	116.67	7261.54	2.500	507.50	0	1697	9466.04	946.6	10412.64	24215.44
520	45	0.33	349.20	116.40	7244.74	2.494	506.28	0	1697	9448.02	944.8	10392.82	31493.39
640	45	0.27	351.60	117.20	7294.53	2.511	509.73	0	1697	9501.26	950.13	10451.39	38708.85
760	45	0.23	355.60	118.53	7377.31	2.540	515.62	0	1697	9589.93	958.99	10548.92	45864.87
880	45	0.2	358.00	119.33	7427.1	2.557	519.07	0	1697	9643.17	964.32	10607.49	53037.45
1000	45	0.18	366.00	122.00	7593.28	2.614	530.64	0	1697	9820.92	982.09	10803.01	60016.72
1120	45	0.16	364.40	121.47	7560.29	2.603	528.41	0	1697	9785.70	978.57	10764.27	67276.69

STATEMENT VI

Including loading, unloading and stacking

STATEMENT VI													
Including loading, unloading and stacking													
Lead in km	Cost / trip	Lime murum building rubbish	Earth	Manure or sludge	Excavated rock	Sand stone aggregate 40 mm & below	Aggregate 40 mm & above	Soling stone	Concrete block (form)	Timber			
1	2	3	4	5	6	7	8	9	10	11			
	Pay load	6.0 cum	4.8 cum	5.52 cum	3.0 cum	5.75 cum	5.5 cum	4.7 cum	6.0 cum	5.0 cum			
0.5	760.18	126.7	158.37	137.71	253.39	132.21	138.21	161.74	126.70	132.21			
1	824.96	137.49	171.87	149.45	274.99	143.47	149.99	175.52	137.49	143.47			
1.5	888.37	148.06	185.08	160.94	296.12	154.50	161.52	189.01	148.06	154.50			
2	949.26	158.21	197.76	171.97	316.42	165.09	172.59	201.97	158.21	165.09			
2.5	1012.09	168.68	210.85	183.35	337.36	176.02	184.02	215.34	168.68	176.02			
3	1072.38	178.73	223.41	194.27	357.46	186.50	194.98	228.17	178.73	186.50			
3.5	1132.26	188.71	235.89	205.12	377.42	196.91	205.87	240.91	188.71	196.91			
4	1191.36	198.56	248.2	215.83	397.12	207.19	216.61	253.48	198.56	207.19			
4.5	1249.27	208.21	260.26	226.32	416.42	217.26	227.14	265.80	208.21	217.26			
5	1307.45	217.91	272.39	236.86	435.82	227.38	237.72	278.18	217.91	227.38			
6	1423.8	237.3	296.63	257.93	474.60	247.62	258.87	302.94	237.30	247.62			
7	1538.82	256.47	320.59	278.77	512.94	267.62	279.79	327.41	256.47	267.62			
8	1656.28	276.05	345.06	300.05	552.09	288.05	301.14	352.40	276.05	288.05			
9	1762.84	293.81	367.26	319.36	587.61	306.58	320.52	375.07	293.81	306.58			
10	1867.96	311.33	389.16	338.40	622.65	324.86	339.63	397.44	311.33	324.86			
15	2248.53	374.76	468.44	407.34	749.51	391.05	408.82	478.41	374.76	391.05			
20	2768.41	461.4	576.75	501.52	922.80	481.46	503.35	589.02	461.40	481.46			
25	3200.24	533.37	666.72	579.75	1066.75	556.56	581.86	680.90	533.37	556.56			
30	3713.98	619	773.75	672.82	1237.99	645.91	675.27	790.21	619.00	645.91			
35	3911.3	651.88	814.85	708.57	1303.77	680.23	711.15	832.19	651.88	680.23			
40	4377.63	729.61	912.01	793.05	1459.21	761.33	795.93	931.41	729.61	761.33			
45	4840.1	806.68	1008.35	876.83	1613.37	841.76	880.02	1029.81	806.68	841.76			
50	5298.56	883.09	1103.87	959.88	1766.19	921.49	963.37	1127.35	883.09	921.49			
60	5868.08	978.01	1222.52	1063.06	1956.03	1020.54	1066.92	1248.53	978.01	1020.54			
70	6752.38	1125.4	1406.75	1223.26	2250.79	1174.33	1227.71	1436.68	1125.40	1174.33			
80	7637.63	1272.94	1591.17	1383.63	2545.88	1328.28	1388.66	1625.03	1272.94	1328.28			
90	8518.75	1419.79	1774.74	1543.25	2839.58	1481.52	1548.86	1812.50	1419.79	1481.52			
100	8418.08	1403.01	1753.77	1525.01	2806.03	1464.01	1530.56	1791.08	1403.01	1464.01			
125	10377.94	1729.66	2162.07	1880.06	3459.31	1804.86	1886.90	2208.07	1729.66	1804.86			
150	12154.41	2025.74	2532.17	2201.89	4051.47	2113.81	2209.89	2586.04	2025.74	2113.81			
175	13689	2281.5	2851.88	2479.89	4563.00	2380.70	2488.91	2912.55	2281.50	2380.70			
200	15212.03	2535.34	3169.17	2755.80	5070.68	2645.57	2765.82	3236.60	2535.34	2645.57			
250	18307.85	3051.31	3814.14	3316.64	6102.62	3183.97	3328.70	3895.29	3051.31	3183.97			
300	20932.71	3488.79	4360.98	3792.16	6977.57	3640.47	3805.95	4453.77	3488.79	3640.47			
420	28107.9	4684.65	5855.81	5092.01	9369.30	4888.33	5110.53	5980.40	4684.65	4888.33			
540	35348.44	5891.41	7364.26	6403.70	11782.81	6147.55	6426.99	7520.94	5891.41	6147.55			
660	42660.23	7110.04	8887.55	7728.30	14220.08	7419.17	7756.41	9076.64	7110.04	7419.17			
780	49927.95	8321.33	10401.66	9044.92	16642.65	8683.12	9077.81	10622.97	8321.33	8683.12			
900	56702.9	9450.48	11813.1	10272.26	18900.97	9861.37	10309.62	12064.45	9450.48	9861.37			
1020	64339.53	10723.26	13404.07	11655.71	21446.51	11189.48	11698.10	13689.26	10723.26	11189.48			
1140	71778.87	11963.15	14953.93	13003.42	23926.29	12483.28	13050.70	15272.10	11963.15	12483.28			

STATEMENT VII

Including loading, unloading and stacking

Lead in km	Cost / trip	Cement stone block, GI CI CC AC Pipes below 120 mm dia	Tar bitumen Asphalt roofing felt & Flooring Asphalt etc.	Steam coal	Matting thatching bamboo ceiling board rubber PVC pipes fittings	Sheet & plate glass in packs	Bricks modular bricks Traditional bricks	Tiles half & round tiles & Roofing tiles cement flooring tiles	Glass blocks (hollow) 200x200 x120 mm	Empty cement bags			
1	2	3	4	5	6	7	8	9	10	11			
	Pay load	7.0 Mt	4.5 MT	5.5 MT	3.0 MT	7.0 MT	3500 No.	3200 No.	1000 No.	2000 No.			
		per 1 M.T.	per 1 M.T.	per 1 M.T.	per 1 M.T.	per 1 M.T.	per 1000 Nos.	per 1000 Nos.	per 1000 Nos.	per 1000 Nos.			
0.5	760.18	108.60	168.93	138.21	253.39	108.60	217.19	237.56	76.02	380.09			
1	824.96	117.85	183.32	149.99	274.99	117.85	235.70	257.80	82.50	412.48			
1.5	888.37	126.91	197.42	161.52	296.12	126.91	253.82	277.62	88.84	444.19			
2	949.26	135.61	210.95	172.59	316.42	135.61	271.22	296.64	94.93	474.63			
2.5	1012.09	144.58	224.91	184.02	337.36	144.58	289.17	316.28	101.21	506.05			
3	1072.38	153.20	238.31	194.98	357.46	153.20	306.39	335.12	107.24	536.19			
3.5	1132.26	161.75	251.61	205.87	377.42	161.75	323.50	353.83	113.23	566.13			
4	1191.36	170.19	264.75	216.61	397.12	170.19	340.39	372.30	119.14	595.68			
4.5	1249.27	178.47	277.62	227.14	416.42	178.47	356.93	390.40	124.93	624.64			
5	1307.45	186.78	290.54	237.72	435.82	186.78	373.56	408.58	130.75	653.73			
6	1423.80	203.40	316.40	258.87	474.60	203.40	406.80	444.94	142.38	711.90			
7	1538.82	219.83	341.96	279.79	512.94	219.83	439.66	480.88	153.88	769.41			
8	1656.28	236.61	368.06	301.14	552.09	236.61	473.22	517.59	165.63	828.14			
9	1762.84	251.83	391.74	320.52	587.61	251.83	503.67	550.89	176.28	881.42			
10	1867.96	266.85	415.10	339.63	622.65	266.85	533.70	583.74	186.80	933.98			
15	2248.53	321.22	499.67	408.82	749.51	321.22	642.44	702.67	224.85	1124.27			
20	2768.41	395.49	615.20	503.35	922.80	395.49	790.97	865.13	276.84	1384.21			
25	3200.24	457.18	711.16	581.86	1066.75	457.18	914.35	1000.08	320.02	1600.12			
30	3713.98	530.57	825.33	675.27	1237.99	530.57	1061.14	1160.62	371.40	1856.99			
35	3911.30	558.76	869.18	711.15	1303.77	558.76	1117.51	1222.28	391.13	1955.65			
40	4377.63	625.38	972.81	795.93	1459.21	625.38	1250.75	1368.01	437.76	2188.82			
45	4840.10	691.44	1075.58	880.02	1613.37	691.44	1382.89	1512.53	484.01	2420.05			
50	5298.56	756.94	1177.46	963.37	1766.19	756.94	1513.87	1655.80	529.86	2649.28			
60	5868.08	838.30	1304.02	1066.92	1956.03	838.30	1676.59	1833.78	586.81	2934.04			
70	6752.38	964.63	1500.53	1227.71	2250.79	964.63	1929.25	2110.12	675.24	3376.19			
80	7637.63	1091.09	1697.25	1388.66	2545.88	1091.09	2182.18	2386.76	763.76	3818.82			
90	8518.75	1216.96	1893.06	1548.86	2839.58	1216.96	2433.93	2662.11	851.88	4259.38			
100	8418.08	1202.58	1870.68	1530.56	2806.03	1202.58	2405.17	2630.65	841.81	4209.04			
125	10377.94	1482.56	2306.21	1886.90	3459.31	1482.56	2965.13	3243.11	1037.79	5188.97			
150	12154.41	1736.34	2700.98	2209.89	4051.47	1736.34	3472.69	3798.25	1215.44	6077.21			
175	13689.00	1955.57	3042.00	2488.91	4563.00	1955.57	3911.14	4277.81	1368.90	6844.50			
200	15212.03	2173.15	3380.45	2765.82	5070.68	2173.15	4346.29	4753.76	1521.20	7606.02			
250	18307.85	2615.41	4068.41	3328.70	6102.62	2615.41	5230.81	5721.20	1830.79	9153.93			

STATEMENT VIII

Including loading, unloading and stacking

Lead in km	Cost / trip	R.C.C. STEEL CYLINDER, R.C PIPES, C.I. PIPES,, UNREINFORCED CEMENT PIPES, PRECAST CONCRETE PIPES												
		100 mm	125 mm	150 mm	200 mm	250 mm	300 mm	300 & 400 mm	450 & 500 mm	600, 700 & 750 mm	800, 900 & 1000 mm	1200 & 1800 MM		
	Pay load in Rmt	292.8	219.6	183	109.8	80.52	62.22	54.9	29.28	18.183	15	5		
1	2	3	4	5	6	7	8	9	10	11	12	13		
UNIT PER 100 RMT														
0.5	760.18	259.62	346.17	415.4	692.33	944.09	1221.76	1384.66	2596.24	4153.99	5067.87	15203.6		
1	824.96	281.75	375.66	450.8	751.33	1024.54	1325.88	1502.66	2817.49	4507.98	5499.73	16499.2		
1.5	888.37	303.41	404.54	485.45	809.08	1103.29	1427.79	1618.16	3034.05	4854.48	5922.47	17767.4		
2	949.26	324.2	432.27	518.72	864.54	1178.91	1525.65	1729.07	3242.01	5187.21	6328.4	18985.2		
2.5	1012.09	345.66	460.88	553.05	921.76	1256.94	1626.63	1843.52	3456.59	5530.55	6747.27	20241.8		
3	1072.38	366.25	488.33	586	976.67	1331.82	1723.53	1953.33	3662.5	5860	7149.2	21447.6		
3.5	1132.26	386.7	515.6	618.72	1031.2	1406.18	1819.77	2062.4	3867.01	6187.21	7548.4	22645.2		
4	1191.36	406.89	542.51	651.02	1085.03	1479.58	1914.75	2170.05	4068.85	6510.16	7942.4	23827.2		
4.5	1249.27	426.66	568.88	682.66	1137.77	1551.5	2007.83	2275.54	4266.63	6826.61	8328.47	24985.4		
5	1307.45	446.53	595.38	714.45	1190.76	1623.76	2101.33	2381.51	4465.33	7144.54	8716.33	26149		
6	1423.8	486.27	648.36	778.03	1296.72	1768.26	2288.33	2593.44	4862.7	7780.33	9492	28476		
7	1538.82	525.55	700.74	840.89	1401.48	1911.1	2473.19	2802.95	5255.53	8408.85	10258.8	30776.4		
8	1656.28	565.67	754.23	905.07	1508.45	2056.98	2661.97	3016.9	5656.69	9050.71	11041.87	33125.6		
9	1762.84	602.06	802.75	963.3	1605.5	2189.32	2833.24	3211	6020.63	9633.01	11752.27	35256.8		
10	1867.96	637.96	850.62	1020.74	1701.24	2319.87	3002.19	3402.48	6379.64	10207.43	12453.07	37359.2		
15	2248.53	767.94	1023.92	1228.7	2047.84	2792.51	3613.84	4095.68	7679.41	12287.05	14990.2	44970.6		
20	2768.41	945.5	1260.66	1512.79	2521.32	3438.16	4449.39	5042.64	9454.95	15127.92	18456.07	55368.2		
25	3200.24	1092.98	1457.3	1748.77	2914.61	3974.47	5143.43	5829.22	10929.78	17487.65	21334.93	64004.8		
30	3713.98	1268.44	1691.25	2029.5	3382.5	4612.49	5969.11	6764.99	12684.36	20294.97	24759.87	74279.6		
35	3911.3	1335.83	1781.1	2137.32	3562.2	4857.55	6286.24	7124.41	13358.27	21373.22	26075.33	78226		
40	4377.63	1495.09	1993.46	2392.15	3986.91	5436.7	7035.73	7973.83	14950.92	23921.48	29184.2	87552.6		
45	4840.1	1653.04	2204.05	2644.86	4408.11	6011.05	7779.01	8816.21	16530.4	26448.63	32267.33	96802		
50	5298.56	1809.62	2412.82	2895.39	4825.65	6580.43	8515.85	9651.29	18096.17	28953.88	35323.73	105971.2		
60	5868.08	2004.13	2672.17	3206.6	5344.34	7287.73	9431.18	10688.67	20041.26	32066.01	39120.53	117361.6		
70	6752.38	2306.14	3074.85	3689.83	6149.71	8385.97	10852.43	12299.42	23061.41	36898.25	45015.87	135047.6		
80	7637.63	2608.48	3477.97	4173.57	6955.95	9485.38	12275.2	13911.89	26084.8	41735.68	50917.53	152752.6		
90	8518.75	2909.41	3879.21	4655.05	7758.42	10579.67	13691.34	15516.85	29094.09	46550.55	56791.67	170375		
100	8418.08	2875.03	3833.37	4600.04	7666.74	10454.64	13529.54	15333.48	28750.27	46000.44	56120.53	168361.6		
125	10377.94	3544.38	4725.84	5671.01	9451.68	12888.65	16679.43	18903.35	35443.78	56710.05	69186.27	207558.8		
150	12154.41	4151.1	5534.8	6641.75	11069.59	15094.9	19534.57	22139.18	41510.96	66417.54	81029.4	243088.2		
175	13689	4675.2	6233.61	7480.33	12467.21	17000.75	22000.96	24934.43	46752.05	74803.28	91260	273780		
200	15212.03	5195.37	6927.15	8312.58	13854.31	18892.24	24448.78	27708.62	51953.65	83125.85	101413.5	304240.6		
250	18307.85	6252.68	8336.91	10004.29	16673.82	22737.02	29424.38	33347.63	62526.81	100042.9	122052.3	366157		
300	20932.71	7149.15	9532.2	11438.64	19064.4	25996.91	33643.06	38128.8	71491.5	114386.39	139551.4	418654.2		
420	28107.9	9599.69	12799.59	15359.51	25599.18	34907.97	45175.02	51198.36	95996.93	153595.08	187386	562158		
540	35348.44	12072.55	16096.74	19316.09	32193.48	43900.2	56812.02	64386.96	120725.55	193160.87	235656.3	706968.8		
660	42660.23	14569.75	19426.33	23311.6	38852.67	52980.91	68563.53	77705.34	145697.51	233116.01	284401.5	853204.6		
780	49927.95	17051.9	22735.86	27283.03	45471.72	62006.89	80244.21	90943.44	170518.95	272830.33	332853	998559		
900	56702.9	19365.74	25820.99	30985.19	51641.99	70420.89	91132.92	103283.97	193657.45	309851.91	378019.3	1134058		
1020	64339.53	21973.88	29298.51	35158.21	58597.02	79905.03	103406.51	117194.04	219738.83	351582.13	428930.2	1286791		
1140	71778.87	24514.64	32686.19	39223.43	65372.38	89144.15	115363.02	130744.75	245146.41	392234.26	478525.8	1435577		

STATEMENT IX

Including loading, unloading and stacking

STONEWARE PIPES

Load in k	Cost/trip	100 mm	150 mm	200 mm	230 mm	250 mm	300 mm	350 mm	400 mm				
	Pay Load	480 m	240 m	135 m	105 m	84 m	66 m	43 m	27 m				
1	2	3	4	5	6	7	8	9	10				
Unit Per 100 Rmt													
0.5	760.18	158.37	316.74	563.1	723.98	904.98	1151.79	1767.86	2815.48				
1	824.96	171.87	343.73	611.08	785.68	982.1	1249.94	1918.51	3055.41				
1.5	888.37	185.08	370.15	658.05	846.07	1057.58	1346.02	2065.98	3290.26				
2	949.26	197.76	395.53	703.16	904.06	1130.07	1438.27	2207.58	3515.78				
2.5	1012.09	210.85	421.7	749.7	963.9	1204.87	1533.47	2353.7	3748.48				
3	1072.38	223.41	446.83	794.36	1021.31	1276.64	1624.82	2493.91	3971.78				
3.5	1132.26	235.89	471.78	838.71	1078.34	1347.93	1715.55	2633.16	4193.56				
4	1191.36	248.2	496.4	882.49	1134.63	1418.29	1805.09	2770.6	4412.44				
4.5	1249.27	260.26	520.53	925.39	1189.78	1487.23	1892.83	2905.28	4626.93				
5	1307.45	272.39	544.77	968.48	1245.19	1556.49	1980.98	3040.58	4842.41				
6	1423.8	296.63	593.25	1054.67	1356	1695	2157.27	3311.16	5273.33				
7	1538.82	320.59	641.18	1139.87	1465.54	1831.93	2331.55	3578.65	5699.33				
8	1656.28	345.06	690.12	1226.87	1577.41	1971.76	2509.52	3851.81	6134.37				
9	1762.84	367.26	734.52	1305.81	1678.9	2098.62	2670.97	4099.63	6529.04				
10	1867.96	389.16	778.32	1383.67	1779.01	2223.76	2830.24	4344.09	6918.37				
15	2248.53	468.44	936.89	1665.58	2141.46	2676.82	3406.86	5229.14	8327.89				
20	2768.41	576.75	1153.5	2050.67	2636.58	3295.73	4194.56	6438.16	10253.37				
25	3200.24	666.72	1333.43	2370.55	3047.85	3809.81	4848.85	7442.42	11852.74				
30	3713.98	773.75	1547.49	2751.1	3537.12	4421.4	5627.24	8637.16	13755.48				
35	3911.3	814.85	1629.71	2897.26	3725.05	4656.31	5926.21	9096.05	14486.3				
40	4377.63	912.01	1824.01	3242.69	4169.17	5211.46	6632.77	10180.53	16213.44				
45	4840.1	1008.35	2016.71	3585.26	4609.62	5762.02	7333.48	11256.05	17926.3				
50	5298.56	1103.87	2207.73	3924.86	5046.25	6307.81	8028.12	12322.23	19624.3				
60	5868.08	1222.52	2445.03	4346.73	5588.65	6985.81	8891.03	13646.7	21733.63				
70	6752.38	1406.75	2813.49	5001.76	6430.84	8038.55	10230.88	15703.21	25008.81				
80	7637.63	1591.17	3182.35	5657.5	7273.93	9092.42	11572.17	17761.93	28287.52				
90	8518.75	1774.74	3549.48	6310.19	8113.1	10141.37	12907.2	19811.05	31550.93				
100	8418.08	1753.77	3507.53	6235.61	8017.22	10021.52	12754.67	19576.93	31178.07				
125	10377.94	2162.07	4324.14	7687.36	9883.75	12354.69	15724.15	24134.74	38436.81				
150	12154.41	2532.17	5064.34	9003.27	11575.63	14469.54	18415.77	28266.07	45016.33				
175	13689	2851.88	5703.75	10140	13037.14	16296.43	20740.91	31834.88	50700				
200	15212.03	3169.17	6338.35	11268.17	14487.65	18109.56	23048.53	35376.81	56340.85				
250	18307.85	3814.14	7628.27	13561.37	17436.05	21795.06	27739.17	42576.4	67806.85				
300	20932.71	4360.98	8721.96	15505.71	19935.91	24919.89	31716.23	48680.72	77528.56				
420	28107.9	5855.81	11711.63	20820.67	26769.43	33461.79	42587.73	65367.21	104103.33				
540	35348.44	7364.26	14728.52	26184.03	33665.18	42081.48	53558.24	82205.67	130920.15				
660	42660.23	8887.55	17775.1	31600.17	40628.79	50785.99	64636.71	99209.84	158000.85				
780	49927.95	10401.66	20803.31	36983.67	47550.43	59438.04	75648.41	116111.51	184918.33				
900	56702.9	11813.1	23626.21	42002.15	54002.76	67503.45	85913.48	131867.21	210010.74				
1020	64339.53	13404.07	26808.14	47658.91	61275.74	76594.68	97484.14	149626.81	238294.56				
1140	71778.87	14953.93	29907.86	53169.53	68360.83	85451.04	108755.86	166927.6	265847.67				

STATEMENT IV

Including loading, unloading and stacking

Lead in km	Cost per trip	Cement pay load 9.00 MT	Steel pay load 9.00 MT	Bulk Asphalt in Bouzer pay load 4.50 MT	M.S.Bar 9.0 MT	Sand 5.75 cum
1	2	3	4	5	6	7
0.5	760.18	84.46	84.46	168.93	84.46	132.21
1	824.96	91.66	91.66	183.32	91.66	143.47
1.5	888.37	98.71	98.71	197.42	98.71	154.50
2	949.26	105.47	105.47	210.95	105.47	165.09
2.5	1012.09	112.45	112.45	224.91	112.45	176.02
3	1072.38	112.45	112.45	224.91	119.15	186.50
3.5	1132.26	125.81	125.81	251.61	125.81	196.91
4	1191.36	132.37	132.37	264.75	132.37	207.19
4.5	1249.27	138.81	138.81	277.62	138.81	217.26
5	1307.45	145.27	145.27	290.54	145.27	227.38
6	1423.8	158.20	158.20	316.40	158.20	247.62
7	1538.82	170.98	170.98	341.96	170.98	267.62
8	1656.28	184.03	184.03	368.06	184.03	288.05
9	1762.84	195.87	195.87	391.74	195.87	306.58
10	1867.96	207.55	207.55	415.10	207.55	324.86
15	2248.53	249.84	249.84	499.67	249.84	391.05
20	2768.41	307.60	307.60	615.20	307.60	481.46
25	3200.24	355.58	355.58	711.16	355.58	556.56
30	3713.98	412.66	412.66	825.33	412.66	645.91
35	3911.3	434.59	434.59	869.18	434.59	680.23
40	4377.63	486.40	486.40	972.81	486.40	761.33
45	4840.1	537.79	537.79	1075.58	537.79	841.76
50	5298.56	588.73	588.73	1177.46	588.73	921.49
60	5868.08	652.01	652.01	1304.02	652.01	1020.54
70	6752.38	750.26	750.26	1500.53	750.26	1174.33
80	7637.63	848.63	848.63	1697.25	848.63	1328.28
90	8518.75	946.53	946.53	1893.06	946.53	1481.52
100	8418.08	935.34	935.34	1870.68	935.34	1464.01
125	10377.94	1153.10	1153.10	2306.21	1153.10	1804.86
150	12154.41	1350.49	1350.49	2700.98	1350.49	2113.81
175	13689	1521.00	1521.00	3042.00	1521.00	2380.70
200	15212.03	1690.23	1690.23	3380.45	1690.23	2645.57
250	18307.85	2034.21	2034.21	4068.41	2034.21	3183.97
300	20932.71	2325.86	2325.86	4651.71	2325.86	3640.47
420	28107.9	3123.10	3123.10	6246.20	3123.10	4888.33
540	35348.44	3927.60	3927.60	7855.21	3927.60	6147.55
660	42660.23	4740.03	4740.03	9480.05	4740.03	7419.17
780	49927.95	5547.55	5547.55	11095.10	5547.55	8683.12
900	56702.9	6300.32	6300.32	12600.64	6300.32	9861.37
1020	64339.53	7148.84	7148.84	14297.67	7148.84	11189.48
1140	71778.87	7975.43	7975.43	15950.86	7975.43	12483.28

STATEMENT V

Excluding loading, unloading and stacking

Lead in km	Cost per trip	Cement pay load 9.00 MT	Steel pay load 9.00 MT	Bulk Asphalt in Bouzer pay load 4.50 MT
1	2	3	4	5
0.5	401.8	44.64	44.64	89.29
1	446.92	49.66	49.66	99.32
1.5	491.34	54.59	54.59	109.19
2	534.47	59.39	59.39	118.77
2.5	578.57	64.29	64.29	128.57
3	621.4	64.29	64.29	128.57
3.5	664	73.78	73.78	147.56
4	706.19	78.47	78.47	156.93
4.5	747.81	83.09	83.09	166.18
5	789.56	87.73	87.73	175.46
6	873.01	97.00	97.00	194.00
7	955.78	106.20	106.20	212.40
8	1039.8	115.53	115.53	231.07
9	1118.27	124.25	124.25	248.50
10	1195.99	132.89	132.89	265.78
15	1510.11	167.79	167.79	335.58
20	1895.73	210.64	210.64	421.27
25	2193.55	243.73	243.73	487.46
30	2570.21	285.58	285.58	571.16
35	2791.37	310.15	310.15	620.30
40	3144.67	349.41	349.41	698.82
45	3496.17	388.46	388.46	776.93
50	3845.66	427.30	427.30	854.59
55	3863.05	429.23	429.23	858.46
65	4516.3	501.81	501.81	1003.62
75	5176.15	575.13	575.13	1150.26
85	5828.44	647.60	647.60	1295.21
95	6087.24	676.36	676.36	1352.72
105	6700.27	744.47	744.47	1488.95
130	8229.53	914.39	914.39	1828.78
155	9781.15	1086.79	1086.79	2173.59
180	11306.38	1256.26	1256.26	2512.53
230	14376.88	1597.43	1597.43	3194.86
280	17028.53	1892.06	1892.06	3784.12
400	24215.44	2690.60	2690.60	5381.21
520	31493.39	3499.27	3499.27	6998.53
640	38708.85	4300.98	4300.98	8601.97
760	45864.87	5096.10	5096.10	10192.19
880	53037.45	5893.05	5893.05	11786.10
1000	60016.72	6668.52	6668.52	13337.05
1120	67276.69	7475.19	7475.19	14950.38

STATEMENT SHOWING STANDARD WEIGHTS OF PIPES TO BE FOLLOWED FOR CARTING OF VARIOUS DIAMETERS AND TYPES OF PIPES

I) C.I.Pipes (IS:1536-1989)

Diameter of pipes in mm	Class of pipes and its weights in kg. per meter length		
	LA	A	B
80	16.00	17.38	18.46
100	19.82	21.82	23.27
125	25.82	28.18	30.36
150	32.10	35.27	38.00
200	47.09	51.09	55.27
250	63.45	69.09	74.73
300	81.82	89.45	96.91
350	103.09	111.82	121.27
400	125.45	137.09	140.00
450	151.27	166.10	179.27
500	177.09	192.91	208.73
600	236.00	257.64	335.01
700	304.55	335.73	359.45
750	341.09	372.91	404.55
800	381.00	416.00	450.00
900	465.09	507.45	549.80
1000	558.73	610.36	659.64

**STATEMENT SHOWING THE TOTAL WEIGHTS OF VARIOUS DIA D.I.K-9 PIPES
INCLUDING WEIGHT OF MORTER LINING PER LENGTH**

II) D.I. PIPES

- 1) Barrel Mass as per IS : 8329-1994
- 2) Socket Mass as per IS : 8329-1994
- 3) Cement Mortar Lining Weights as per ISO : 4179-1985

Nominal dia meter	Weight / M Length of D.I. K-9 Pipes of			
	4M	5M	5.50M	6M
80 mm wt. of D.I. pipe / M	13.00	13.00	12.91	12.67
weight morter / m	1.56	1.56	1.56	1.56
Total wt. / M	14.56	14.56	10.47	14.23
100 mm wt. of D.I. pipe / M	16.25	16.00	16.00	15.86
weight morter / m	1.93	1.93	1.93	1.93
Total wt. / M	18.18	17.93	17.93	17.76
125 mm wt. of D.I. pipe / M	20.50	20.00	20.00	19.83
weight morter / m	2.45	2.42	2.42	2.42
Total wt. / M	22.92	22.42	22.42	22.25
150 mm wt. of D.I. pipe / M	24.75	24.20	24.18	24.00
weight morter / m	2.90	2.90	2.90	2.90
Total wt. / M	27.65	27.10	27.08	26.90
200 mm wt. of D.I. pipe / M	33.25	32.60	33.54	32.33
weight morter / m	3.88	3.88	3.88	3.88
Total wt. / M	37.13	36.48	36.42	36.21
250 mm wt. of D.I. pipe / M	43.75	43.00	42.73	42.50
M weight morter / m	4.84	4.84	4.84	4.84
Total wt. / M	88.59	47.84	47.57	47.34
300 mm wt. of D.I. pipe / M	55.50	54.60	54.18	53.83
weight morter / m	5.80	5.80	5.80	5.80
Total wt. / M	61.30	60.40	59.98	59.63
350 mm wt. of D.I. pipe / M	69.25	68.00	67.45	67.17
weight morter / m	12.12	12.12	12.12	12.12
Total wt. / M	81.37	80.12	79.57	79.29
400 mm wt. of D.I. pipe / M	82.75	81.40	80.91	80.33
weight morter / m	13.82	13.82	13.82	13.82
Total wt. / M	96.57	95.22	94.73	94.15
450 mm wt. of D.I. pipe / M	98.75	97.00	96.36	95.83
weight morter / m	15.53	15.53	15.53	15.53
Total wt. / M	114.28	112.53	111.89	111.36
500 mm wt. of D.I. pipe / M	115.00	112.80	112.00	111.50
weight morter / m	17.26	17.26	17.26	17.26
Total wt. / M	132.26	130.06	129.26	128.76
600 mm wt. of D.I. pipe / M	152.00	149.00	147.82	147.00
weight morter / m	320.75	20.75	320.75	320.75
Total wt. / M	172.73	169.73	168.55	167.73
700 mm wt. of D.I. pipe / M	193.75	189.80	188.36	187.70
weight morter / m	29.45	29.45	29.45	29.45
Total wt. / M	223.20	219.25	217.81	217.25
750 mm wt. of D.I. pipe / M	217.50	213.00	211.45	210.00
weight morter / m	31.56	31.56	31.56	31.56
Total wt. / M	249.06	244.56	243.01	241.56
800 mm wt. of D.I. pipe / M	240.75	235.80	233.82	232.33

Nominal dia meter	Weight / M Length of D.I. K-9 Pipes of			
	4M	5M	5.50M	6M
weight morter / m	33.69	33.69	33.69	33.69
Total wt. / M	274.44	269.49	267.51	265.92
900 mm wt. of D.I. pipe / M	292.75	286.20	283.82	281.83
weight morter / m	37.89	37.89	37.89	37.89
Total wt. / M	330.64	324.09	321.71	319.72
1000 mm wt. of D.I. pipe / M	3495.75	341.60	338.55	336.17
weight morter / m	42.08	42.08	42.08	42.08
Total wt. / M	391.83	383.68	380.63	378.25

Note:

These weights are as per the circular issued by Superintending Engineer, (HQ) vide L.No.Maharashtra Jeevan Pradhikaran/10-2000/The Superintending Engineer, Maharashtra Jeevan Pradhikara, Circle, Amravati. (HQ)/DI/15/ AMDT/Stores/255 Dt.:26.6.2000.

**STATEMENT SHOWING STANDARD WEIGHTS TO BE FOLLOWED FOR CARTING OF
VARIOUS DIAMETERS AND TYPES OF PIPES**

III) M.S. Pipes

Note: Weight of M.S. pipes is to be computed by considering density of steel as 7850 kg/cum considering the diameter and thickness of plate used for manufacturing of M.S. pipes

IV) A.C. Pressure Pipes (ISO-160)

Diameter of pipes in mm	Class of pipes and its weights in kg per meter length			
	Class 5	Class 10	Class 15	Class 20
80	6.00	6.20	6.40	6.80
100	7.60	7.70	8.20	10.30
125	9.57	9.80	11.00	13.30
150	11.87	12.20	15.30	19.00
200	15.57	19.30	25.60	32.70
250	19.25	25.20	32.70	41.50
300	24.97	32.30	45.10	58.10
350	39.77	47.52	55.27	71.42
400	49.20	60.20	71.36	93.10
450	56.92	70.27	83.63	111.37
500	72.84	89.54	104.25	136.52
600	102.50	137.32	148.35	193.16

V) P.V.C. Pipes (IS:4985-1988)

Diameter of pipe in mm	Class of pipes and its weights in kg per meter length		
	4.00 sq.cm	6.00 sq.cm	10.00 sq.cm
63	0.47	0.67	1.01
75	0.67	0.93	1.44
90	0.92	1.33	2.05
110	1.32	1.89	3.08
140	2.13	3.10	4.99
160	2.78	3.92	6.56
180	3.56	5.07	8.10
200	4.26	7.00	10.20
225	5.48	7.84	12.56
250	6.63	10.19	15.31
280	8.34	12.16	19.80
315	10.55	15.37	25.00

VI) R.C.C. Pipes

Diameter of pipe in mm	Class of pipes and its weights in kg per meter length					
	P-1	P-2	P-3	NP-2	NP-3	NP-4
100	23.56	23.56	23.56	21.20	21.20	21.20
150	33.00	33.00	33.00	29.40	29.40	29.40
200	42.10	42.10	42.10	37.90	37.90	37.90
250	51.84	63.40	75.18	57.10	67.60	77.20
300	74.64	102.50	117.10	92.25	105.40	119.10
350	92.28	134.30	168.10	120.80	151.30	170.20
400	104.16	169.60	208.10	152.60	187.30	212.40
450	127.92	188.70	235.23	169.90	211.70	240.80
500	141.36	229.90	261.37	206.90	235.23	270.50
600	192.96	305.70	313.64	275.10	282.27	320.20
700	225.59	325.80	365.92	293.20	329.32	370.90
800	257.82	345.19	418.19	310.60	376.30	425.40
900	290.00	389.58	470.47	350.60	423.00	482.30
1000	322.28	443.98	510.00	399.80	459.00	531.40

V) P.V.C. Pipes (IS:4985-1988)

Diameter of pipe in mm	Class of pipes and its weights in kg per meter length		
	4.00 sq.cm	6.00 sq.cm	10.00 sq.cm
63	0.47	0.67	1.01
75	0.67	0.93	1.44
90	0.92	1.33	2.05
110	1.32	1.89	3.08
140	2.13	3.10	4.99
160	2.78	3.92	6.56
180	3.56	5.07	8.10
200	4.26	7.00	10.20
225	5.48	7.84	12.56
250	6.63	10.19	15.31
280	8.34	12.16	19.80
315	10.55	15.37	25.00

VI) R.C.C. Pipes

Diameter of pipe in mm	Class of pipes and its weights in kg per meter length					
	P-1	P-2	P-3	NP-2	NP-3	NP-4
100	23.56	23.56	23.56	21.20	21.20	21.20
150	33.00	33.00	33.00	29.40	29.40	29.40
200	42.10	42.10	42.10	37.90	37.90	37.90
250	51.84	63.40	75.18	57.10	67.60	77.20
300	74.64	102.50	117.10	92.25	105.40	119.10
350	92.28	134.30	168.10	120.80	151.30	170.20
400	104.16	169.60	208.10	152.60	187.30	212.40
450	127.92	188.70	235.23	169.90	211.70	240.80
500	141.36	229.90	261.37	206.90	235.23	270.50
600	192.96	305.70	313.64	275.10	282.27	320.20
700	225.59	325.80	365.92	293.20	329.32	370.90
800	257.82	345.19	418.19	310.60	376.30	425.40
900	290.00	389.58	470.47	350.60	423.00	482.30
1000	322.28	443.98	510.00	399.80	459.00	531.40

VII) P.S.C. Pipes of all classes and B.W.S.C. Pipes of all classes

Diameter of pipes in mm	Weight of pipe per meter length for all classes
350	197.50 kg/km
400	240.00 kg/km
450	257.50 kg/km
500	292.50 kg/km
600	375.00 kg/km
700	432.50 kg/km
800	582.50 kg/km
900	705.00 kg/km
1000	825.00 kg/km
1100	947.50 kg/km
1200	1115.00 kg/km
1300	1190.00 kg/km
1400	1370.00 kg/km
1500	1560.00 kg/km
1600	1767.50 kg/km
1700	1987.50 kg/km
1800	2205.50 kg/km

VIII) Stoneware Pipes

Diameter of pipes in mm	Weight of 0.60 M long pipe in kg per pipe
100	8.70 kg/each
150	15.00 kg/each
200	20.85 kg/each
225	23.70 kg/each
250	27.57 kg/each
300	43.60 kg/each

IX) G.I. Pipes

Diameter of pipes in mm	Class of pipes and its weights in kg per meter length		
	Light (Blue)	Medium (Yellow)	Heavy (Red)
15	0.96	1.23	1.46
20	1.42	1.59	1.91
25	2.03	2.40	2.99
32	2.61	3.17	3.97
40	3.29	3.65	4.47
50	4.18	5.16	6.24
65	5.92	6.63	8.02
80	6.98	8.64	10.30
100	10.20	12.40	14.70
125	--	16.70	18.30
150	--	19.70	21.80

SECTION-D- CEMENT CONSUMPTION

STANDARD CEMENT CONSUMPTION TO BE FOLLOWED FOR VARIOUS ITEMS OF WORKS

Sr. No.	Item of Works	Unit	Standard Cement Consumption
A.	P.C.C. & R.C.C. Works		
	1: $\frac{1}{2}$:1 (M-300) with finishing in CM 1:3 proportion	Cum	9.20 bags
	1: $\frac{1}{2}$:2 (M-250) with finishing in CM 1:3 proportion	Cum	8.50 bags
	1: $\frac{1}{2}$:3 (M-200) with finishing in CM 1:3 proportion	Cum	6.90 bags
	1: $\frac{1}{2}$:3 (M-200) without finishing	Cum	6.80 bags
	1:2:4 (M-150) without finishing in CM 1:3 proportion	Cum	5.90 bags
	1:2:4 (M-150) without finishing	Cum	5.80 bags
B.	Brick Masonry Works		
	B.B. Masonry - IIInd sort in CM 1:6 proportion	Cum	1.44 bags
	B.B. Masonry - IIInd sort in CM 1:5 proportion	Cum	1.62 bags
	B.B. Masonry - IIInd sort in CM 1:4 proportion	Cum	2.30 bags
	Half brick walls in CM 1:4 proportion	Cum	0.22 bags
C.	Half brick walls in CM 1:4 proportion		
	Stone Masonry Works		
	U.C.R. Masonry - IIInd sort in CM 1:6 proportion	Cum	1.77 bags
	U.C.R. Masonry - IIInd sort in CM 1:4 proportion	Cum	2.65 bags
	Random Rubble Masonry - IIInd sort in CM 1:6 proportion	Cum	1.77 bags
	Random Rubble Masonry - IIInd sort in CM 1:4 proportion	Cum	2.65 bags
	C.R. Masonry - IIInd sort in CM 1:4 proportion	Cum	2.45 bags
	C.R. Masonry - IIInd sort in CM 1:6 proportion	Cum	1.50 bags
D.	Water Proofing Works		
1	Damp-proof course 50 mm thick in 1:2:4 proportion with bituman layer W.P. compound	Sqm.	0.35 bags
	Integral finishing to newly laid slab in CM 1:3 proportion with W.P. Compound	Sqm.	0.06 bags
	Water Proofing treatment over old slab with W.P. cement slurry as tack coat 12 mm thick, W.P. plaster in CM 1:3 proportion, brick bat coba average 9.50 cm thick in CM 1:6 proportion and 20 mm thick W.P. cement plaster over it in CM 1:3 proportion and finishing with cement slurry with novelling	Sqm.	0.37 bags
E.	Plastering and Pointing Works		
	i) 12 mm thick plaster		
	CM 1:2 proportion	Sqm.	0.16 bags

Sr. No.	Item of Works	Unit	Standard Cement Consumption
	CM 1:3 proportion	Sqm.	0.12 bags
	CM 1:4 proportion	Sqm.	0.10 bags
	ii) 20 mm thick plaster		
	CM 1:2 proportion	Sqm.	0.27 bags
	CM 1:3 proportion	Sqm.	0.19 bags
	CM 1:4 proportion	Sqm.	0.15 bags
	iii) 25 mm thick plaster		
	CM 1:2 proportion	Sqm.	0.34 bags
	CM 1:3 proportion	Sqm.	0.25 bags
	CM 1:4 proportion	Sqm.	0.19 bags
	iv) Cement pointing in CM 1:3 proportion	Sqm.	0.03 bags
	v) Tuck cement pointing in CM 1:3 proportion	Sqm.	0.05 bags
	vi) Sand faced plaster in CM 1:4 proportion including base coat 15 mm thick in CM 1:4 proportion with W.P. compound	Sqm.	0.22 bags
	vii) Rough cast cement plaster in CM1:4 proportion in two coats.	Sqm.	0.22 bags
F.	Flooring Works		
	i) I.P.S. flooring - 40 mm thick	Sqm.	0.30 bags
	i) I.P.S. flooring - 50 mm thick	Sqm.	0.37 bags
	i) Rough Shahabad - any other similar flooring in CM 1:4 proportion bedding	Sqm.	0.15 bags
	iv) All types of cement / kadappa / polished / mosaic tiles flooring or skirting / dado set on CM 1:4 proportion bedding	Sqm.	0.18 bags
	v) Glazed / Ceramic tiles flooring or skirting / dado fixed with plain cement slurry	Sqm.	0.22 bags

Section - E- Excavation				
Sr No	Item Description	Unit	Rate (in Rs.) 2018-2019	LABOUR INVOLVED
1	Excavation for foundation / pipe trenches in earth, soils of all types, sand, gravel and soft murum , including removing the excavated material upto a distance of 50 metres and lifts as below, stacking and spreading as directed, manual dewatering, preparing the bed for foundation and excluding backfilling, etc. complete. (Bd-A-1/259)			
2	Lift 0 to 1.5 M Excavation for foundation / pipe trenches in hard murum including removing the excavated material upto a distace of 50 M and lifts as below, stacking and spreading as directed by Engineer-in-charge, normal dewatering, preparing the bed for foundation and excluding backfilling, etc. complete.	Cu.m	140.00	139.00
3	Lift 0 to 1.5 M Excavation for foundation / pipe trenches in hard murum and boulders , W.B.M. road including removing the excavated material upto a distance of 50 M beyond the area and lifts as below, stacking and spreading as directed by Engineer-in-charge, normal dewatreeing, preparing the bed for foundation and excluding backfilling, etc. complete. (Bd-A-2/259)	Cu.m	157.00	156.00
4	Lift 0 to 1.5 M Add for every additional lift of 1.5 M beyond initial lift of 1.5 M for Item Nos. 1 to 3	Cu.m Cu.m	175.00 13.00	172.00 13.00

Sr No	Item Description	Unit	Rate (in Rs.) 2018- 2019	LABOUR INVOLVED
5	Excavation for foundation / pipe trenches in soft rock and old cement and lime masonry foundation asphalt road by all means including removing the excavated material upto a distance of 50 M beyond area and lifts as below, stacking as directed by Engineer-in-charge, normal dewatering, preparing the bed for foundation and excluding backfilling, etc. complete. (Bd-A-4/259)			
6	Lift 0 to 1.5 M Excavation for foundation / pipe trenches in hard rock by controlled blasting , including trimming and levelling the bed by chiselling where necessary and removing the excavated material and stacking it in measurable heaps within a distance of 50 metres from the area and lifts as below, normal dewatering, excluding backfilling, etc. complete.	Cu.m	493.00	437.00
7	Lift 0 to 1.5 M Excavation for foundation / pipe trenches in hard rock and concrete road by chiselling , wedging, line drilling, by mechanical means or by all means other than blasting including trimming and levelling the bed, removing the excavated material upto a distance of 50 metres beyond the area and lifts as below, stacking as directed by Engineer-in-charge, normal dewatering, excluding backfilling, etc. complete by all means. (Bd-A-5/259)	Cu.m	658.00	551.00
	Lift 0 to 1.50 M	Cu.m	920.00	910.00

Section-E- Excavation

Sr No	Item Description	Unit	Rate (in Rs.) 2018- 2019	LABOUR INVOLVED
8	Excavation for foundation /pipe trenches in Slush Muddy/ Marshy /Slushy /Soil including use of poclaim, labour for dewatering during execution including removing the excavated material upto a distance of 50 metres and lifts as below, stacking and spreading as directed, preparing the bed by cleaning the mud, labour required for execution for shutterng item but excluding back filling etc. complete. Providing and fixing shuttering shall be paid separately.			
9	Lift 0 to 1.5 M Add for every additional lift of 1.5 M beyond initial lift of 1.5 M for Item Nos 5 to 9	Cu.m Cu.m	344.00 24.00	202.00 24.00
10	HEAD WORKS Excavation in general in soft material comprising of soft soil, soft murum, sand, hard murum with boulders in wet or dry condition for Head Works i.e. Intake Well, Connecting Pipe, Jack Well, Pump House, Supply Well, etc. for lift 0 to 1.5 M and lead of 150 M including baricating, gurading, disposing off surplus excavated stuff within a radius of 0.5 km. as directed by Engineer-in- charge, etc. complete excluding refilling. a) For Head Works on river or dam submergence for initial lift of 0 to 1.5 M b) For Head works on nalla or any other site of GSDA for initial Lift of 0 to 1.5M c) Add for every additional lift of 1.5 M beyond initial lift of 1.5 M	Cu.m Cum Cu.m	406.00 284.00 24.00	400.00 281.00 24.00

Section-E- Excavation

Sr No	Item Description	Unit	Rate (in Rs.) 2018- 2019	LABOUR INVOLVED
11	Excavation in general in hard material comprising of soft rock, hard rock, Manjara rock , etc, by blasting / controlled blasting, chiselling as required in wet or dry condition for Head Works i.e. Intake Well, Connecting Pipe, Jack Well, Pump House, supply Well, etc. for lift 0 to 1.5 M and lead of 150 M including baricading, guarding, disposing off surplus excavated stuff within a radius of 0.5 km. as directed by Engineer-in-charge, excluding refilling.			
a)	For Head Works on river or dam sub mergence for initial lift of 0 to 1.5 M	Cu.m	868.00	679.00
b)	For Head Works on nalla or any other site of GSDA for initial lift of 0 to 1.5 M	Cum	599.00	437.00
c)	Add for each additional lift to 1.5 M beyond initial lift of 1.5 M	Cu.m	24.00	24.00
12	Excavation in general in soft material comprising of soft soil, soft murum, sand, hard murum with boulders in wet or dry condition for Head Works and allied works by well sinking process for average depth of 12 M and lead of 150 M including shoring, barricading, guarding, refilling, disposing of surplus excavated stuff as directed by Engineer-in-charge, etc. complete.			
a)	Diameter upto and including 3 M	Cu.m	781.00	742.00
b)	Diameter more than 3 M	Cu.m	658.00	623.00
13	Desilting the Supply Well, Intake Well / Head Works, sump of water supply/ sewerage works etc. in wet or dry condition including lifts upto 10.5 M and lead upto 150 M as required beyond the work site, stacking, spreading, including necessary guarding, etc. complete, as directed by Engineer-in-charge.			
	Add for every additional lift of 1.5 M beyond initial lift of 10.50 M	Cu.m	703.00	666.00
		Cu.m	22.00	21.00

Section-E- Excavation

Sr No	Item Description	Unit	Rate (in Rs.) 2018- 2019	LABOUR INVOLVED
14	<p>Dewatering the excavated trenches and pools of water in the building trenches / pipeline trenches, well works by using pumps and other devices including disposing off water to safe distance as directed by Engineer-in-charge (including cost of machinery, labour, fuel), etc. complete.</p> <p>i) The contractor at his request may allowed to start construction of masonry steining so as not to allow silting of well in oncoming mansoon and while paying masonry, 25% amount shall be withheld and released only when excavation to the full depth is completed.</p> <p>ii) Dewatering : Total dewatering charges are to be proposed in tender as lumpsum amount and 75% is payable for excavation and 25% is payable for construction of well / gallery. Out of 75% excavation breakup shall be as under</p> <p>25% for last 1 Mtr. Depth.</p> <p>20% for 2 M depth which just above last 1 M depth.</p> <p>15% for 2 M depth which just above last 3 M depth.</p> <p>15% for the rest of depth from water table level</p> <p>The above conditions will restrict the tendancy of agencies to avoid deeping of wells etc. to the required depths.</p>	Bhp/ Hr	64.00	11.00
15	Refilling the trenches with available excavated stuff with soft material first over pipeline and then hard material in 15 cm layers with all leads and lifts including consolidation, surcharging, etc. complete.	Cu.m	65.00	63.00
16	Filling in plinth and floors murum bedding in trenches with approved murum from excavated materials from foundation 15cm to 20cm layers including watering and compaction complete.	Cu.m	65.00	63.00

Section-E- Excavation

Sr No	Item Description	Unit	Rate (in Rs.) 2018- 2019	LABOUR INVOLVED
17	Filling in plinth and floors / trenches with contractor's murum for bedding in 15cm to 20cm layers including watering and compaction complete.	Cu.m	637.00	70.00
18	Providing dry trap / granite / quartzite / gneiss, rubble stone soling in 15cm to 20 cm thick layers (including hand packing and compacting), etc. complete.	Cu.m	903.00	200.00
19	Providing and filling in sand boxing in pipeline or for foundation with sand of approved quality including watering compaction, etc. complete.	Cu.m	924.00	154.00
20	Open timbering in trenches of depth more than 1.5 m for shoring and strutting including use of and waste of all necessary timber works including walling, struts, open polling boards/ horizontal sheeting, runners, etc. as may be necessary and fixing and removal complete. (Measurements to be taken of the face/area timbered)(NBO Item No. 4-15 page No.59)			
a)	Lift 0 to 1.5 M [for non-water logged area] Additional per Sqm. for further lifts of 1.5M each.	Sq.m	168.00	3.00
b)	Lift for 0 to 1.5 M [For water logged area.] Additional per Sqm. for further lifts of 1.5M each	Sq.m	177.00	9.00
	Note:- For the trenches with more than 1.5 M depth shoring if required from G.L. is to be done and is payable from GL.	Sq.m	30.00	13.00
			23.00	6.00

Section-E- Excavation

Section - F- Iron And Structural Steel Work.

Sr. No.	Item Description	Unit	Rate (in Rs.) 2018-2019	LABOUR INVOLVED
1	Providing and fixing mild steel grill work for windows/ventilators of 20 Kg./Sqm. as per drawings including necessary welding and painting with one coat of anticorrosive paint and two coats of oil painting, etc. complete. (Bd-U-1/537)	Sq.m	1160.00	58.00
2	Providing and fixing mild steel grill railing of 20 Kg./Sqm. with teak wood hand railing, still and newel posts for staircase and including fabricating, fixtures, erecting, painting the grill work with approved oil paint and polishing the hand rail and newel posts with French polish two coats, etc. complete. (Bd-U-2 /537)	Sq.m	1901.00	176.00
3	Providing structural steel work in rolled stanchions fixed with connecting plates or angle cleats as in main and cross beams, hip and jack rafters, purlins connecting to truss members and like as per detailed desings and drawings or as directed by Engineer-in-charge including cutting, fabricating, hoisting, erecting, fixing in position, making riveted / bolted /welded connections and one coat of anticorrosive paints and over it two coats of oil painting, etc. complete. (Bd-C-3 /275)	M.T	52204.00	4837.00

Sr. No.	Item Description	Unit	Rate (in Rs.) 2018-2019	LABOUR INVOLVED
4	Providing structural steel work in single stanchions composed of RSJ, channel, etc, with caps, bases, mild steel plates, angles, brackets, cleats, gusset plates, anchor bolts, etc. as per detailed design and drawing or as directed by Engineer-in-charge including cutting, fabrication, hoisting, erecting, fixing in position, making riveted/ bolted / welded connections and one coats of anticorrosive paint and over it two coats of oil painting, etc. complete. (Bd-C-6 /277)	M.T	51163.00	4498.00
5	Providing structural steel work in rolled sections like joists, channels, angles, tees, etc. as per detailed designs and drawings including fixing in position without connecting plates, braces, etc. and one coat of anticorrosive paint and over it two coats of oil painting, of approved quality and shade, etc. complete. (Bd-C-2 /275)	M.T	55938.00	5242.00
6	Providing structural steel work in trusses, other similar trussed purlins and members with all bracing, gusset plates, etc. as per detailed design and drawing or as directed by Engineer-in-charge including cutting, fabricating, hoisting, erecting and fixing in position, making reveted / bolted / welded connections and one coat of anticorrosive paint and over it two coat of oil painting, etc. complete. (Bd-C-8 /278)	M.T	67116.00	12008.00

Section-F-Iron Structural Steel Work

Section - G- Plain and Reinforced Cement Concrete

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
1	Providing and laying in situ following grades of Plain Cement concrete of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including normal dewatering, form work, compaction and curing, etc, complete. Use of L & T, A.C.C., Ambuja, Birla Gold, Manikgad, Rajashree, etc. cement is permitted.) (Bd-E-1 /287)			
a	In PCC M-100	Cu.m	3636.00	775.00
b	In PCC M-150	Cu.m	3769.00	715.00
2	Providing and laying in situ Cement concrete of trap/granite/quartzite/ gneiss metal for RCC work in foundation like raft, grillage, strip foundation and footing of RCC columns and steel stanchions including normal dewatering, 'plywood form work, bully/steel propups, compaction, finishing and curing, etc, complete. (By weigh batching and mix design for M-250 and M-300 only. Use of L & T, A.C.C., Ambuja, Birla Gold, Manikgad, Rajashree, etc. cement is permitted.) (excluding M.S. or Tor reinforcement)			
a	In RCC M-150	Cu.m	4444.00	850.00
b	In RCC M-200	Cu.m	4496.00	839.00
c	In RCC M-250	Cu.m	4901.00	827.00
d	In RCC M-300	Cu.m	5077.00	793.00
3	Providing and casting in situ Cement Concrete of trap/granite/quartzite/ gneiss metal of approved quality for RCC work as per detailed drawings and designs or as directed by Engineer-in-charge including normal dewatering, centering, 'plywood formwork, bully/steel prop-ups, compaction, finishing the formed surfaces with CM 1:3 of sufficient minimum thickness if special finish is to be provided and curing, etc. complete. (By weigh batching and mix design for M-250 and M-300 only. Use of L&T, A.C. C., Ambuja, Birla Gold, Manikgad, Rajashree, etc. cement is permitted) (excluding M.S, or Tor reinforcement)			

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
a	For RCC M-150 grade - all types of columns	Cu.m	5488.00	810.00
b	For RCC M-200 grade - all types of columns.	Cu.m	5676.00	800.00
c	For RCC M-250 grade - all types of columns.	Cu.m	6081.00	795.00
d	For RCC M-300 grade - all types of columns.	Cu.m	6258.00	792.00
4	Providing and casting in situ Cement Concrete of trap/granite/quartzite/ gneiss metal of approved quality for RCC work as per detailed drawings and designs or as directed by Engineer-in-charge including normal dewatering, centering, 'plywood formwork, bully/steel prop-ups, compaction, finishing the formed surfaces with CM 1:3 of sufficient minimum thickness if special finish is to be provided and curing, etc. complete. (By weigh batching and mix design for M-250 and M-300 only. Use of L&T, A.C. C., Ambuja, Birla Gold, Manikgad, Rajashree, etc. cement is permitted) (excluding M.S, or Tor reinforcement)			
a	For RCC M-150 grade Beams/Braces/Lintels	Cu.m	5376.00	575.00
b	For RCC M-200 grade Beams/Braces/Lintels	Cu.m	5592.00	789.00
c	For RCC M-250 grade Beams/Braces/Lintels	Cu.m	5969.00	783.00
d	For RCC M-300 grade Beams/Braces/Lintels	Cu.m	6147.00	781.00
5	Providing and casting in situ Cement Concrete of trap/granite/quartzite/ gneiss metal of approved quality for RCC work as per detailed drawings and designs or as directed by Engineer-in-charge including normal dewatering, centering, 'plywood formwork, bully/steel prop-ups, compaction, finishing the formed surfaces with CM 1:3 of sufficient minimum thickness if special finish is to be provided and curing, etc. complete. (By weigh batching and mix design for M-250 and M-300 only. Use of L&T, A.C. C., Ambuja, Birla Gold, Manikgad, Rajashree, etc. cement is permitted) (excluding M.S, or Tor reinforcement)			
a	For RCC M-150 grade Slabs / Landings / Vertical Walls / Waist Slabs / Steps for Staircase	Cu.m	5793.00	771.00

Section-G-Plain and Reinforced Cement Concrete

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
b	For RCC M-200 grade Slabs / Landings / Vertical Walls / Waist Slabs / Steps for Staircase	Cu.m	6107.00	798.00
c	For RCC M-250 grade Slabs / Landings / Vertical Walls / Waist Slabs / Steps for Staircase	Cu.m	6511.00	792.00
d	For RCC M-300 grade Slabs / Landings / Vertical Walls / Waist Slabs / Steps for Staircase	Cu.m	6689.00	791.00
6	Providing and casting in situ Cement Concrete of trap/granite/quartzite/ gneiss metal of approved quality for RCC work as per detailed drawings and designs or as directed by Engineer-in-charge including normal dewatering, centering, 'plywood formwork, bully/steel prop-ups, compaction, finishing the formed surfaces with CM 1:3 of sufficient minimum thickness if special finish is to be provided and curing, etc. complete. (By weigh batching and mix design for M-250 and M-300 only. Use of L&T, A.C. C., Ambuja, Birla Gold, Manikgad, Rajashree, etc. cement is permitted) (excluding M.S, or Tor reinforcement)			
a	For RCC M-150 grade Chajjas / Parapets / Curtain Walls / Partition Walls / Pardies	Cu.m	5886.00	783.00
b	For RCC M-200 grade Chajjas / Parapets / Curtain Walls / Partition Walls / Pardies	Cu.m	6074.00	794.00
c	For RCC M-250 grade Chajjas / Parapets / Curtain Walls / Partition Walls / Pardies	Cu.m	6479.00	789.00
d	For RCC M-300 grade Chajjas / Parapets / Curtain Walls / Partition Walls / Pardies	Cum	6656.00	786.00
7	Providing and casting in situ Cement Concrete of trap/granite/quartzite/ gneiss metal of approved quality for RCC work as per detailed drawings and designs or as directed by Engineer-in-charge including normal dewatering, centering, 'plywood formwork, bully/steel prop-ups, compaction, finishing the formed surfaces with CM 1:3 of sufficient minimum thickness if special finish is to be provided and curing, etc. complete. (By weigh batching and mix design for M-250 and M-300 only. Use of L&T, A.C. C., Ambuja, Birla Gold, Manikgad, Rajashree, etc. cement is permitted) (excluding M.S, or Tor reinforcement)			

Section-G-Plain and Reinforced Cement Concrete

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
a	For RCC M-150 grade - Domes	Cu.m	6183.00	795.00
b	For RCC M-200 grade - Domes	Cu.m	6372.00	787.00
c	For RCC M-250 grade - Bottom Domes only	Cu.m	6776.00	782.00
d	For RCC M-300 grade - Bottom Domes only	Cu.m	6953.00	781.00
8	Providing and fixing in position steel bar reinforcement of various diameters for RCC piles, caps, footings, foundations, slabs, beams, columns, canopies, staircases. newels, chajjas, lintels, pardies, copings, fins, arches, etc. as per detailed designs, drawings and schedules; including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required, etc. complete. (including cost of binding wire).			
a	Mild Steel	M.T.	42829.00	3891.00
b	Tor Steel	M.T	42829.00	3891.00
c	Corrosion Resistant steel (Fe 500)	M.T	46168.00	5907.00
d	Only Fabrication (Labour) For all types of steel	M.T	7985.00	4822.00
9	Providing fusion bonded epoxy coating to reinforcement bars as per IS-13620-1993 specifiaion for a thickness of 175 (+50) microns including extra cost on account of careful handling, extra cost on account of using PVC coated binding wire instead of G. I. wire, extra cost on account of touch-up material supplied by coating agency and repair work extra cost on account of transportation , loading, unloading, etc. complete.			
(a)	For reinforcement Diameterwise rates.			
1	8 mm dia.	M.T	15935.00	
2	10 mm dia.	M.T	14059.00	
3	12 mm dia.	M.T	12828.00	
4	16 mm dia.	M.T	12359.00	
5	20 mm dia.	M.T	11361.00	
6	25 mm dia.	M.T	10305.00	
7	28 mm dia.	M.T	9836.00	
8	32 mm dia.	M.T	9132.00	

Section-G-Plain and Reinforced Cement Concrete

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
(b)	Average rates (for estimation only) 1 For 8mm to 20mm dia 2 For above 20mm dia	M.T. M.T.	13308.00 9758.00	
	Notes for Estimations			
1	All the rates of Reinforced Cement Concrete Items From 2 to 7 shall be increased by 10% for each brace height above 1st brace for R.C.C. E. S. R.s.e.g. For a R.C.C. E.S. R. with 7 M staging and first brace at 3.50 M above ground, the concrete in columns above first brace, concrete of ring beam and bottom slab is entitled for 10% increase, concrete of vertical wall, roof slab and roof beams, columns in container are entitled for 20% increase.			
2	All the rates of Reinforced Cement Concrete Items from 2 to 7 shall be increased by 2% for every floor height above ground floor for building works.			
3	These rates are applicable for R. C. C. well works also.These rates shall be increased by 10% for every 5 M depth below initial 5 M depth.			
4	Rates for Item Nos. 8 and 9 shall be increased by 5% for each brace height above first brace for R.C.C.E.S.Rs. By 5% for every ring beam below first ring beam for R. C. C. wells. By 1% building works for every floor height.			
5	Volumetric mix as per 1: 11/2 :3 shall be adopted with 56.5 kg. of cement for RCC-250 and 59.5 kg. of cement for RCC- 300, per load of mixer of 1bag capacity.			
6	Fusion bonded epoxy coating to be proposed only in Coastal Area with prior approval of the Chief Engineer.			

Section-G-Plain and Reinforced Cement Concrete

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
7	For estimation purpose, average rates as per item no. 8 b shall be considered wherever necessary.			
10	READY MIX CONCRETE Providing and laying in situ Ready Mix Cement Concrete grade of trap/granite/quartzite/ gneiss metal for RCC work in foundation like raft, grillage, strip foundation and footing of RCC column and steel stanchions including normal dewatering, form work, compaction, finishing and curing including transporting from mixing plant upto distance of 25 km., pouring the concrete at work site for 1.5 M lift above G. L. and 5.0 M lift below G. L., etc. complete. (Excluding reinforcement and structural steel)			
	a) In RCC M-200	Cu.m	5219.00	798.00
	b) In RCC M-250	Cu.m	5452.00	808.00
	c) In RCC M-300	Cu.m	5536.00	814.00
11	Providing and casting in situ Ready Mix Cement Concrete grade of trap/granite/quartzite/ gneiss metal of approved quality for RCC work as per detailed drawings and designs or as directed by Engineer-in-charge including normal dewatering centering, form work, compaction, finishing the formed surfaces with CM 1:3 of sufficient minimum thickness to give a smooth and even surface wherever necessary or roughening if special finish is to be provided and curing including transporting from mixing plant upto distance of 25 km., pouring the concrete at work site for 1.5 M lift above G. L. and 5.0 M lift below G. L., etc. complete. (Excluding reinforcement and structural steel)			
	a) In RCC M-200 - all types of columns	Cu.m	6625.00	3051.00
	b) In RCC M-250 - all types of columns	Cu.m	6671.00	2939.00
	c) In RCC M-300 - all types of columns	Cu.m	6679.00	2882.00

Section-G-Plain and Reinforced Cement Concrete

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
12	Providing and casting in situ Ready Mix Cement Concrete grade of trap/granite/quartzite/ gneiss metal of approved quality for RCC work as per detailed drawings and designs or as directed by Engineer-in-charge including normal dewatering, centering, form work compaction, finishing the formed surfaces with CM 1:3 of sufficient minimum thickness to give a smooth and even surface wherever necessary or roughening if special finish is to be provided and curing including transporting from mixing plant upto distance of 25 km., pouring the concrete at work site for 1.5 M lift above G. L. and 5.0 M lift below G. L., etc. complete. (Excluding reinforcement and structural steel) a) In RCC M-200 - Beams / Braces / Lintels b) In RCC M-250 - Beams / Braces / Lintels c) In RCC M-300 - Beams / Braces / Lintels			
13	Providing and casting in situ Ready Mix Cement Concrete grade of trap/granite/quartzite/ gneiss metal of approved quality for RCC work as per detailed drawings and designs or as directed by Engineer-in-charge including normal dewatering centering, form work, compaction, finishing the formed surfaces with CM 1:3 of sufficient minimum thickness to give a smooth and even surface wherever necessary or roughening if special finish is to be provided and curing including transporting from mixing plant upto distance of 30 km., pouring the concrete at work site for 1.5 M lift above G. L. and 5.0 M lift below G. L., etc. complete. (Excluding reinforcement and structural steel) a) In RCC M-200 Slabs / Landings / Vertical Walls / Waist Slabs / Steps for Staircase b) In RCC M-250 Slabs / Landings / Vertical Walls / Waist Slabs / Steps for Staircase c) In RCC M-300 Slabs / Landings / Vertical Walls / Waist Slabs / Steps for Staircase	Cu.m	6613.00 6841.00 6854.00	2654.00 2663.00 2600.00

Section-G-Plain and Reinforced Cement Concrete

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
14	Providing and casting in situ Ready Mix Cement Concrete grade of trap/granite/quartzite/ gneiss metal of approved quality for RCC work as per detailed drawings and designs or as directed by Engineer-in-charge including normal dewatering, centering, form work compaction, finishing the formed surfaces with CM 1:3 of sufficient minimum thickness to give a smooth and even surface wherever necessary or roughening if special finish is to be provided and curing including transporting from mixing plant upto distance of 25 km., pouring the concrete at work site for 1.5 M lift above G. L. and 5.0 M lift below G. L., etc. complete. (Excluding reinforcement and structural steel) a) For RCC M-200 Chajjas / Parapets / Curtain Walls / Partition Walls / Pardies b) For RCC M-250 Chajjas / Parapets / Curtain Walls / Partition Walls / Pardies c) For RCC M-300 Chajjas / Parapets / Curtain Walls	Cu.m	7148.00	3505.00
15	Providing and casting in situ Ready Mix Cement Concrete grade of trap/granite/quartzite/ gneiss metal of approved quality for RCC work as per detailed drawings and designs or as directed by Engineer-in-charge including normal dewatering, centering, form work compaction, finishing the formed surfaces with CM 1:3 of sufficient minimum thickness to give a smooth and even surface wherever necessary or roughening if special finish is to be provided and curing including transporting from mixing plant upto distance of 25 km., pouring the concrete at work site for 1.5 M lift above G. L. and 5.0 M lift below G. L., etc. complete. (Excluding reinforcement and structural steel) a) For RCC M-200 - Domes b) For RCC M-250 - Domes c) For RCC M-300 - Domes	Cu.m	7370.00	3518.00
		Cu.m	7449.00	3527.00
		Cu.m	7401.00	4018.00
		Cu.m	7610.00	4036.00
		Cu.m	7620.00	3978.00

Section-G-Plain and Reinforced Cement Concrete

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
	<p>Note :</p> <p>1) Add Rs.10/- per Cum for transportation beyond 25 km. for every additional lead of 1 km.</p> <p>2) Beyond 1.5 M above G.L. and 5.0 M below G. L., concreting is to be done by pumping by the Company.</p> <p>3) Additional rate of pumping</p> <p>a) Static pump Rs. 175/- per Cum</p> <p>b) Mobile pump Rs. 250/- per Cum</p> <p>4) For Ready Mix Concrete, prior permission from Chief Engineer shall be obtained.</p>			

Section - H- Miscellaneous Works				
Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
1	Providing and fixing G.I. pipe railing having 1.0 M height consisting 50 x 50 x 6 mm thick M. S. angles as verticals at 1.5 M c/c, and additional posts at every corner with 3 rows of 25 mm dia G.I. pipes of medium class variety as horizontal and painting 3 coats of oil paint over 1 coat of anticorrosive paint of approved colour and shade including cost of all labour, transporting bends to curved shape, etc. complete.			
1A	As above but with only 2 rows	RMT	853.00	47.00
2	Dismantling of ESRs of various capacities and heights using crane (10 MT capacity) and handing over M.S./C.I./ G.I. pipes, valves, bends, etc. to the Department However taking steel reinforcement by the dismantling agency including removing dismantled materials from site and disposing them at suitable place as directed, etc.complete.	RMT	616.00	30.00
a	Capacity of E.S.R. upto 2 lakh litres and staging upto 12.00 M height	Litres	2.00	2.00
i)	conjusted area.	Litres	1.00	1.00
ii)	Open Area			
b	Capacity of ESR above 2 lakh ltrs. and staging upto 12 M hieght	Litres	2.00	2.00
i)	Conjusted area	Litres	1.00	1.00
ii)	Open Area			
3	Providing and fixing M.S. gate 2.5 M wide for compound with 40 mm dia M.S.black pipe medium class, approved grill work, RCC M - 150 side pillars of 25 cm x 40 cm x 2.5 M height, its foundation, finishing, painting etc. complete.	No.	23690.0	2748.00
4	Proividing and fixing Wicket gate 1.0 M wide for compound with 40 mm dia M.S.black pipe medium class, approved grill work, RCC M-150 side pillars of 25 cm x 40 cm x 2.5 M height, its foundiaion, finishing painting, etc. complete.	No.	13832.00	1859.00

Section-H-Miscellaneous Works

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
5	Taking Trial Bore (Core Bore Sampling) by Calyx machine with TCT/NX bits together undisturbed strata samples for investigation in all types of strata soft soil, murum, hard murum with boulders, soft rock hard rock & quartzite etc. The item includes all Hire & running cost of Calyx Machine conveying all materials to site of work excluding conveyance of calyx, machine and back sampling all over burden strata in glass jar and core samples serially numbered at site in a wooden Core Box, Samples to be taken at 1.0 m interval and conveying to the place as directed by Engineer-in-charge, The diameter of bore in overburden shall be 100 mm and of NX size (50mm) in other strata. The item shall also include M.S. casing pipe of 2.5 mm thick plate in overburden only and shall be 1.0 m above GL with cap over it.			
a	In Overburden (Soft soil, murum)	RMT	1728.00	225.00
b	In Weathered rock with boulders	RMT	5171.00	1354.00
c	In Weathered rock / Soft rock	RMT	2657.00	691.00
d	In Hard rock other than quartzite	RMT	3488.00	911.00
e	In Hard rock quartzite	RMT	8334.00	2117.00
6	Providing pressure grouting at a pressure of 0.56 kg./sqcm in required row/zigzag fashion as specified at 1.5 M interval as per site conditions to stop leakages through water retaining structures to the entire satisfaction of the Engineer-in-charge including material compound, hardening materials, compressor equipment including scaffolding smooth finishing, etc. complete.			
a	For masonry structure	Bag	901.00	59.00
b	For Concrete structure	Bag	890.00	55.00
7	Drilling 40 mm dia holes in masonry or concrete structure with providing and fixing 0.5 M long G. I. pipe line for pressure grouting including all Material labour cost and machinery charges, etc. complete.			
8	Providing and casting ferrocute water tank at site inculding all cost of labour and material, etc, complete. upto 25,000 literes (for foundation and providing and fixing taps, etc. shall be considered speareately).	RMT	884.00	72.00
		Litre	5.10	

Section-H-Miscellaneous Works

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
9	Providing and applying two coat of Gamma coating or equivalent such as Dr. Bake, Krishna conchem, Asian Paint, Atul ltd. Burger Paints, Epoxy primer 50 to 60 microns thick and covering two coat of Gamma coating or equivalent such as Dr. Bake, Krishna conchem, Asian Paint, Atul ltd. Burger Paints, 30 micron thick is to new M.S. pipe and structural steel or concrete surface including preparing the surface by finishing by solvent degreasing and derusting by applying chemical method and sacffolding of necessary etc. complete as manufcaturer's specifications.	sqm	298.00	148.00
10	Making cross connection to existing distribution main of any type including excavation, breaking and removing exiting pipes, lowering, laying of specials and pipes in their position, refilling, closing the water supply in that area, dewatering and restarting the water supply, etc. complete as directed by Engineer-in-charge for following diameters of existing pipeline, irrespective of diameter of branch line (the number of joints involved will be paid separately depending upon the nature of joints and required pipes, valves and specials will be supplied free of cost at stores).	No	1798.00	1528.00
	80 mm	No	2036.00	1729.00
	100 mm	No	2240.00	1904.00
	125 mm	No	2519.00	2141.00
	150 mm	No	2659.00	2260.00
	200 mm	No	3196.00	2716.00
	250 mm	No	3740.00	3179.00
	300 mm	No	4401.00	3741.00
	350 mm	No	5286.00	4493.00
	400 mm	No	5923.00	5034.00
	450 mm	No	7299.00	6204.00
	500 mm	No	12964.00	11020.00
	600 mm	No	15934.00	13544.00
	700 mm	No	20095.00	17080.00
	750 mm	No	25838.00	21963.00
	800 mm	No	33777.00	28710.00
	900 mm	No	47069.00	40009.00
	1000 mm			

Note : Only 75% rate shall be payable till satisfactory hydraulic testing is given.

Section-H-Miscellaneous Works

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
11	Dismantling dead pipeline of M.S./R.C.C./ C.I./ P.S.C. and G.I./ A. C. / P. V. C. / S. W. / H. D. P. E. pipe including cost of necessary excavation and refilling of trenches, breaking the joints, lifting the pipes and stacking to the place as directed by Engineer-in-charge with all leads and lifts including cleaning the surface, etc. complete.			
A	For M.S./R. C. C./ C.I./ P. S. C.			
	80 mm	RMT	135.00	29.00
	100 mm	RMT	150.00	43.00
	125 mm	RMT	154.00	46.00
	150 mm	RMT	156.00	49.00
	200 mm	RMT	172.00	58.00
	250 mm	RMT	190.00	68.00
	300 mm	RMT	207.00	78.00
	350 mm	RMT	233.00	96.00
	400 mm	RMT	252.00	110.00
	450 mm	RMT	286.00	121.00
	500 mm	RMT	300.00	127.00
	600 mm	RMT	368.00	161.00
	700 mm	RMT	431.00	187.00
	750 mm	RMT	483.00	212.00
B	For G.I./AC/PVC/S. W. / H.D.P.E.			
	80 mm	RMT	81.00	18.00
	100 mm	RMT	89.00	25.00
	125 mm	RMT	91.00	28.00
	150 mm	RMT	92.00	29.00
	200 mm	RMT	105.00	35.00
	250 mm	RMT	115.00	42.00
	300 mm	RMT	123.00	46.00
	350 mm	RMT	139.00	58.00
	400 mm	RMT	152.00	66.00
	450 mm	RMT	170.00	72.00
	500 mm	RMT	181.00	76.00
	600 mm	RMT	220.00	96.00
	700 mm	RMT	258.00	113.00
	750 mm	RMT	289.00	127.00

Section-H-Miscellaneous Works

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
12	Providing and constructing two taps standpost as per type design wih excavation 15 cm thick PCC 1:3:6 bedding 20 mm thick PCC 1:2:4 concrete for platform of 1.75 M dia. with side curb and bucket rest, 80 mm dia, heavy duty GI pipe central post duly filled therein with C. C. 1:2:4, 5 M long, 20 mm dia. medium G.I. pipe from point of tapping to standpost additional 20 mm dia G.I. pipe fixed vertically upto 15 mm dia self closing water taps, one brass ferrule etc. complete together with all labour and material charges as per drawing and as directed by Engineer-in-charge when good foundation is available. Rate includes draining arrangement by excavating open gutters.			
a	As above but when R.C.C. platform or Precast standpost issued free of cost.	No	7614.00	1012.00
		No.	4378.00	463.00
13	Providing and constructing two taps standpost as per type design wih excavation 15cm thick boulder filling,15 cm thick PCC 1:3:6 bedding 20 mm thick PCC 1:2:4 concrete for platform of 1.75 M dia. with side curb and bucket rest, 80 mm dia, heavy duty GI pipe central post duly filled therein with C. C. 1:2:4, 5 M long, 20 mm dia. medium G.I. pipe from point of tapping to standpost additional 20 mm dia G.I. pipe fixed vertically upto 15 mm dia self closing water taps, one brass ferrule etc. complete together with all labour and material charges as per drawing and as directed by Engineer-in-charge when B.C.Soil is available . Rate includes draining arrangement by excavating open gutters.			
a	As above but when R.C.C. platform or Precast standpost issued free of cost.	No	7998.00	1013.00
		No	4968.00	553.00

Section-H-Miscellaneous Works

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
14	Pushing of M.S. pipe of following dia for road crossing and Railway crossing by push through method in all types of strata by using hydraulic jack and drilling machine of required diameter, below 3.0 m depth including lowering, laying, jointing of M.S. casing pipe including cost of labour fuels and material, required welding machinery, tripod, chain pulley block, vrane, blower etc. transportation and dewatering etc. complete as directed by Engineer-in-charge but excluding cost of M.S. pipe a) 200 mm dia to 499 mm dia M.S. Pipe b) 500 mm dia to 1000 mm dia M.S. Pipe	Rmt Rmt	23202.00 29004.00	-- --
15	Providing V wire underdrain system including V wire screen made of SS 304 fitted on UPVC base 90 mm diameter, V wire screen having screen shot of 300/350 microns having 16 % open area. Base pipe of lateral 80 mm dia UPVC SCH-40, Air header made up of UPVC SCH 40. Tee for mainfold with main header is of UPVC saddle with SS304 nuts and bolts. Rate to include all material,labour,providing and welding of end ring per 2 m lateral length, cutting, threading of UPVC pipes couplers,tees,air nipples,clamps with stainless steel fasteners including all taxes etc complete.	Rmt	9426.00	
16	Laying V wire underdrain system including laying and fixing of laterals in position,fixing end caps to one end and tee to other end of the lateral,fixing separate air header with coupler over tee of the lateral and air header with couple whole assembly over themainfold. All central assembly and end of the laterals must be embedded with M25 concrete,curing,testing,dewatering charges,consumables,transporationg taxes etc. complete, but excluding the cost of concrete which will be paid separately.	Rmt of Laterl as	694.00	

Section-H-Miscellaneous Works

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
17	<p>Providing and making MDPE pipe consumer service connection on C.I/D.I./H.D.P.E. pipe. With the help of electrofusion machine or Ratechet and dye drill including all labour, MDPE pipe 10 m length MDPE Specials like electrofusion tee, double compression elbow, female threaded adapter with metal insert, UPVC compression end ball valve, G.I. casing pipe of 40/50 mm for road crossing. The rate to include labour required, excavation fitting, refilling, Closing the water supply, transportation etc. complete as directed by Engineer in charge.</p> <p>A) For connection on HDPE Pipes (With Road Crossing)</p>			
i) 15 mm	No.	3961.00		
ii) 20 mm	No.	4634.00		
iii) 25 mm	No.	5350.00		
B) For connection on HDPE Pipes (Without Road Crossing)				
i) 15 mm	No.	3298.00		
ii) 20 mm	No.	3503.00		
iii) 25 mm	No.	3882.00		
C) For connection on C.I./D.I./G.I. Pipes (With Road Crossing)				
i) 15 mm	No.	2775.00		
ii) 20 mm	No.	3447.00		
iii) 25 mm	No.	4072.00		
D) For connection on C.I./D.I./G.I. Pipes (With Road Crossing)				
i) 15 mm	No.	2083.00		
ii) 20 mm	No.	2451.00		
iii) 25 mm	No.	2696.00		

Section-H-Miscellaneous Works

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
18	<p>Providing and applying 3 layer polyethylene coating of minimum 1000 micron composite coating and internal fusion bounded epoxy lining as per IS 3589 annex Cove 400 micron thickness for under ground laying M.S. pipes, Similarly dual layer polyester coating of 400 micron externally and internal fusion bounded lining as per Is 3531 for above ground laying M.S. pipes. Rate shall include cost of material coating and wrapping over the pipes handing charges, preparation of pipe surface, all labour, material, including transportation of pipes from site of works to factory and back to site of works after coating etc. complete. (The rate is for inside plus outside area both included)</p> <p>Note - Pipe coating shall be done at factory.</p>			
	Rate with E.D.	Sqm	1470.00	
	Rate without E.D.	Sqm	1308.00	
19	<p>Supply and installation of pre fabricated ground water storage bolted tanks, a complete package in knockdown ready to assemble construction consisting of outer wall surface made out of special grade hot dip aluminum -Zinc alloy, metallic factory coated steel confirming to IS - 15961-2012, minimum thickness of 0.6 mm. The inner surface should be provided with liners of minimum 0.6 mm thickness of reinforce polyethylene or polypropylene or metallo cene material suitable for drinking water purpose. Top cover shall be of polyethene ape monophylament yarn or woven polypropylene Ikor corrugated G.I. sheets. Rate includes cost of the inlet, outlet, overflow. Pipes upto 5 m from periphery fo the tank including ball valves of sandeard quality, aluminum ladder, level inicagtor, water tightness test, transportation upto site of work and all taxes etc. complete.</p>			
	Notes:-			

Section-H-Miscellaneous Works

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
	1) Above tanks can be installed on elevated platform.(ESR) The rate of tank dose not include the cost of elevated platform.2% extra to be considered for installation of tank on elevated or elevated platform. The elevated platform needs to be designed as per requirements & which will be paid separately. The elevated platform must be of steel framed structure.			
	2) For the dome type corrugated roof structure with hot dip galvanized trusses with GI manhole for access for cleaning and maintenance. 10% extra shall be added.			
	3) For heavy duty layer polypropylene reinforced liner with metallocene contact layer having a minimum thickness of 1 mm. 10% extra shall be added.			
	4) In case rain water harvesting filters & system to catch the rain from the GI tank roof is mounted on the tank roof and supplied with the tank then 10% extra shall be added.			
Sr.N O.	Capacity in Litres	Unit	Rate for 2018-19	
			With R.C.C. Foundation	Without Foundation
1	25000	Lit.	11.46	10.87
2	30000	Lit.	10.4	9.81
3	50000	Lit.	9.50	8.91
4	7500	Lit.	8.09	7.50
5	100000	Lit.	6.98	6.39
6	150000	Lit.	6.25	5.66
7	200000	Lit.	5.81	5.22
8	250000	Lit.	5.27	4.68
9	300000	Lit.	5.10	4.51
10	375000	Lit.	4.47	3.88
11	500000	Lit.	4.10	3.51
12	750000	Lit.	3.83	3.24
13	1000000	Lit.	3.69	3.1
14	1500000	Lit.	3.41	2.82

Section-H-Miscellaneous Works

SECTION - I : C. I. PIPES

Sr. No.	Description	Unit	Rate (in Rs.)		Rate (in Rs.) 2019-2020																													
			2018-2019	4																														
1	2	3	4	5																														
1.	<p>1. C.I. PIPES</p> <p>Providing and supplying ISI mark C.I. S/S pipe (push on joints pressure pipes of following class and diameters confirming to the I. S. specification inclusive cost of jointing materials (Rubber gasket of EPDM Quality) excluding GST levied by GOI & GOM in all respect including Third party inspection charges of TPI Agency approved by MJP including Transit insurance, Railway Freight, Unloading from railway wagon, Loading into Truck, Transportation to departmental store, unloading, stacking etc. completed as directed by Engineer in charge (IS 1536/2001 for pipes and IS 158/1969 and IS 12820/1989 or latest edition/revision with amendments for Rubber Gaskets. (IS-1536 / 2001) (Suitable for Tyton / Pig lead joints)</p> <p>a) Class 'LA'</p> <table> <tbody> <tr> <td>i)</td> <td>80 mm</td> <td>Rmt</td> <td>759.00</td> <td></td> </tr> <tr> <td>ii)</td> <td>100 mm</td> <td>Rmt</td> <td>951.00</td> <td></td> </tr> <tr> <td>iii)</td> <td>150 mm</td> <td>Rmt</td> <td>1545.00</td> <td></td> </tr> <tr> <td>iv)</td> <td>200 mm</td> <td>Rmt</td> <td>2224.00</td> <td></td> </tr> <tr> <td>v)</td> <td>250 mm</td> <td>Rmt</td> <td>2997.00</td> <td></td> </tr> <tr> <td>vi)</td> <td>300 mm</td> <td>Rmt</td> <td>3865.00</td> <td></td> </tr> </tbody> </table>	i)	80 mm	Rmt	759.00		ii)	100 mm	Rmt	951.00		iii)	150 mm	Rmt	1545.00		iv)	200 mm	Rmt	2224.00		v)	250 mm	Rmt	2997.00		vi)	300 mm	Rmt	3865.00				
i)	80 mm	Rmt	759.00																															
ii)	100 mm	Rmt	951.00																															
iii)	150 mm	Rmt	1545.00																															
iv)	200 mm	Rmt	2224.00																															
v)	250 mm	Rmt	2997.00																															
vi)	300 mm	Rmt	3865.00																															

Sr. No.	Description	Unit	Rate (in Rs.)	Rate (in Rs.)
			2018-2019	2019-2020
1	2	3	4	5
	1. C.I. PIPES ‘A’ Class Continued			
	B) Class ‘A’			
i)	80 mm	Rmt	769.00	
ii)	100 mm	Rmt	961.00	
iii)	125 mm	Rmt	1250.00	
iv)	150 mm	Rmt	1539.00	
v)	200 mm	Rmt	2224.00	
vi)	250 mm	Rmt	3006.00	
vii)	300 mm	Rmt	3891.00	
viii)	350 mm	Rmt	4864.00	
ix)	400 mm	Rmt	5965.00	
x)	450 mm	Rmt	7226.00	
xi)	500 mm	Rmt	8285.00	
xii)	600 mm	Rmt	11063.00	
xiii)	700 mm	Rmt	14418.00	
xiv)	750 mm	Rmt	16014.00	
xv)	800 mm	Rmt	17903.00	
xvi)	900 mm	Rmt	21791.00	
xvii)	1000 mm	Rmt	26211.00	

Sr. No.	Description	Unit	Rate (in Rs.)	Rate (in Rs.)
			2018-2019	2019-2020
1	2	3	4	5
	c) Class 'B'			
i)	80 mm	Rmt	818.00	
ii)	100 mm	Rmt	1024.00	
iii)	125 mm	Rmt	1346.00	
iv)	150 mm	Rmt	1657.00	
v)	200 mm	Rmt	2404.00	
vi)	250 mm	Rmt	3250.00	
vii)	300 mm	Rmt	4215.00	
viii)	350 mm	Rmt	5276.00	
xiv)	400 mm	Rmt	6092.00	
x)	450 mm	Rmt	7797.00	
xi)	500 mm	Rmt	8963.00	
xii)	600 mm	Rmt	11809.00	
xiii)	700 mm	Rmt	15436.00	
xiv)	750 mm	Rmt	17374.00	
xv)	800 mm	Rmt	19366.00	
xvi)	900 mm	Rmt	23609.00	
xvii)	1000 mm	Rmt	28325.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019		Rate (in Rs.) 2019-2020	
1	2	3	4		5	
2.	Lowering laying and jointing with SBR rubber gaskets C.I. S/S pipes of various classes with CI / MS specials of following diameter in proper position, grade and alignment as directed by Engineer-in-charge including conveyance of material from stores to site of work, including cost of jointing materials and rubber rings labour etc. complete. Note : Only SBR Rubber gaskets to be used as per IS-5382 and IS-12820. <ul style="list-style-type: none"> a) C.I. 'L.A.' Class / Mortar inlined DI K-9/K-7 <ul style="list-style-type: none"> i) 80 mm. ii) 100 mm. iii) 125 mm. iv) 150 mm. v) 200 mm. vi) 250 mm. vii) 300 mm. viii) 350 mm. ix) 400 mm. x) 450 mm. xi) 500 mm. xii) 600 mm. xiii) 700 mm. xiv) 750 mm. xv) 800 mm. xvi) 900 mm. xvii) 1000 mm. B) C.I. 'A' Class <ul style="list-style-type: none"> i) 80 mm. ii) 100 mm. iii) 125 mm. iv) 150 mm. v) 200 mm. vii) 250 mm. viii) 300 mm. 		Without Rubber Rings	With Rubber Rings	Without Rubber Rings	With Rubber Rings
		Rmt	44.00	50.00		
		Rmt	53.00	58.00		
		Rmt	66.00	73.00		
		Rmt	71.00	79.00		
		Rmt	94.00	104.00		
		Rmt	123.00	135.00		
		Rmt	133.00	152.00		
		Rmt	165.00	186.00		
		Rmt	199.00	230.00		
		Rmt	199.00	242.00		
		Rmt	230.00	280.00		
		Rmt	302.00	372.00		
		Rmt	390.00	524.00		
		Rmt	436.00	573.00		
		Rmt	534.00	672.00		
		Rmt	638.00	844.00		
		Rmt	754.00	1023.00		
		Rmt	45.00	56.00		
		Rmt	56.00	66.00		
		Rmt	72.00	79.00		
		Rmt	78.00	85.00		
		Rmt	101.00	111.00		
		Rmt	133.00	146.00		
		Rmt	145.00	163.00		

Sr. No.	Description	Unit	Rate (in Rs.)		Rate (in Rs.)	
			2018-2019	2019-2020	4	5
1	2	3				
			Without Rubber Rings	With Rubber Rings	Without Rubber Rings	With Rubber Rings
viii)	350 mm.	Rmt	178.00	200.00		
ix)	400 mm.	Rmt	201.00	231.00		
x)	450 mm.	Rmt	211.00	244.00		
xi)	500 mm.	Rmt	248.00	297.00		
xii)	600 mm	Rmt	328.00	397.00		
xiii)	700 mm.	Rmt	422.00	555.00		
xiv)	750 mm.	Rmt	475.00	609.00		
xv)	800 mm.	Rmt	560.00	696.00		
xvi)	900 mm.	Rmt	674.00	879.00		
xvii)	1000 mm.	Rmt	787.00	1056.00		
c)	CI 'B' Class					
i)	80 mm.	Rmt	50.00	58.00		
ii)	100 mm.	Rmt	59.00	72.00		
iii)	125 mm.	Rmt	77.00	85.00		
iv)	150 mm.	Rmt	86.00	96.00		
v)	200 mm.	Rmt	111.00	124.00		
vi)	250 mm.	Rmt	144.00	163.00		
vii)	300 mm.	Rmt	157.00	175.00		
viii)	350 mm.	Rmt	193.00	224.00		
ix)	400 mm.	Rmt	224.00	254.00		
x)	450 mm.	Rmt	228.00	261.00		
xi)	500 mm.	Rmt	267.00	316.00		
xii)	600 mm.	Rmt	355.00	422.00		
xiii)	700 mm.	Rmt	456.00	586.00		
xiv)	750 mm.	Rmt	515.00	649.00		
xv)	800 mm.	Rmt	601.00	735.00		
xvi)	900 mm.	Rmt	712.00	916.00		
xvii)	1000 mm.	Rmt	813.00	1079.00		
Note : Only 85% rate shall be payable till satisfactory hydraulic testing is given.						

Sr. No.	Description	Unit	Rate (in Rs.)	Rate (in Rs.)
			2018-2019	2019-2020
1	2	3	4	5
3.	Providing D.I. pipes (push on joints pressure pipes of D. I. of following class and diameters confirming to the I. S. specification inclusive cost of jointing materials (Rubber gasket of EPDM Quality) excluding GST levied by GOI & GOM in all respect including Third party inspection charges of TPI Agency approved by MJP including Transit insurance, Railway Freight, Unloading from railway wagon, Loading into Truck, Transportation to departmental store, unloading, stacking etc. completed as directed by Engineer in charges (IS 1536/2001 for pipes and IS 158/1969 and IS 12820/1989 or latest edition/revision with amendments for Rubber Gaskets.			
	(IS:8329-2000 Latest Version)			
			D. I. K-7	D. I. K-9
i)	100 mm.	Rmt	739.00	793.00
ii)	150 mm.	Rmt	1070.00	1151.00
iii)	200 mm.	Rmt	1328.00	1565.00
iv)	250 mm.	Rmt	1807.00	2081.00
v)	300 mm.	Rmt	2245.00	2576.00
vi)	350 mm.	Rmt	2947.00	3268.00
vii)	400 mm.	Rmt	3390.00	3810.00
viii)	450 mm.	Rmt	4100.00	4640.00
ix)	500 mm.	Rmt	4785.00	5314.00
x)	600 mm.	Rmt	6245.00	7081.00

Sr. No.	Description	Unit	Rate (in Rs.)		Rate (in Rs.)
			2018-2019	2019-2020	
1	2	3	4	5	
	xi) 700 mm.	Rmt	8530.00	9001.00	
	xii) 750 mm.	Rmt	9760.00	10525.00	
	xiii) 800 mm.	Rmt	10805.00	11467.00	
	xiv) 900 mm.	Rmt	13240.00	14180.00	
	xv) 1000 mm.	Rmt	16400.00	17007.00	
	xvi) 1100 mm	Rmt	20930.00	21159.00	
	xvii) 1200 mm	Rmt	23475.00	23315.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
4.	<p>Providing and making lead caulked joint with molten lead to Cast Iron pipes and / or specials of all classes and fitting of following dia including cost of lead and all jointing material, labour, hydraulic testing etc. complete.</p> <ul style="list-style-type: none"> i) 80 mm. ii) 100 mm. iii) 125 mm. iv) 150 mm. v) 200 mm. vi) 250 mm. vii) 300 mm. viii) 350 mm. ix) 400 mm. x) 450 mm. xi) 500 mm. xii) 600 mm. xiii) 700 mm. xiv) 750 mm. xv) 800 mm. xvi) 900 mm. xvii) 1000 mm. <p>Note : Only 85 % rate shall be payable till satisfactory Hydraulic testing is given.</p>	Joint	720.00	
5.	<p>Providing and supplying ISI standard CI double flanged pipes excluding GST levied by GOI & GOM in all respect including railway freight, insurance, unloading from railway wagon, loading into truck transport to stores, unloading etc. complete as directed by Engineer-in-charge.</p> <ul style="list-style-type: none"> i) 80 mm. ii) 100 mm. iii) 125 mm. iv) 150 mm. v) 200 mm. 	Rmt	1246.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	vi) 250 mm. vii) 300 mm. viii) 350 mm. ix) 400 mm. x) 450 mm. xi) 500 mm. xii) 600 mm. xiii) 700 mm. xix) 750 mm.	Rmt	5173.00 6651.00 8681.00 10585.00 12710.00 14917.00 21220.00 28429.00 30932.00	
6.	Providing and supplying ISI standard CI flanged / S& S specials excluding GST levied by GOI & GOM in all respect including railway freight, insurance, unloading from railway wagon, loading into truck transport to departmental store, unloading stacking etc. complete. a) D/F Specials i) 80 to 300 mm dia ii) 350 to 600 mm dia iii) Above 600 mm dia b) S/S Specials / Socketed Branch Flanged Specials i) 80 to 300 mm dia ii) 350 to 600 mm dia iii) Above 600 mm dia C) Plain ended/ plain ended branch flanged specials i) 80 to 300 mm dia ii) 350 to 600 mm dia iii) Above 600 mm dia	Kg.	62.00 66.00 71.00 60.00 64.00 68.00 58.00 64.00 68.00	
7.	Providing and supplying ISI standard MS specials of required thickness with 3 coats of approved make epoxy paint (Shalimar, Ciba or Mahindra & Mahindra make) from inside and outside excluding GST levied by GOI & GOM in all respect including inspection charges, transportation to stores and stacking, etc. complete. a) Machine ends suitable for PSC pipes of all diameters as per detailed drawing with 10 mm thick x 0.7 M long barrel welded to it. b) Only flanges with machining and drilling holes, etc. complete more than 40 mm thick.	Kg.	70.00 68.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	c) Double flanged specials of all diameters	Kg.	66.00	
	d) All socketed specials or socketed branch flanged specials of all diameters.	Kg.	66.00	
	e) Plain ended specials or plain ended branch flanged specials of all diameters.	Kg.	66.00	
	f) MS barrels (pipe pieces) locally manufactured (for small quantities)	Kg.	64.00	
8.	Providing and making flanged joints to flanged C.I./ M.S. pipes of all classes/specials etc. including cost of all jointing materials (rubber packing, nut bolts, etc.), labour, hydraulic testing etc. complete.			
	i) 80 mm.	Joint	199.00	
	ii) 100 mm.	Joint	343.00	
	iii) 125 mm.	Joint	359.00	
	iv) 150 mm.	Joint	689.00	
	v) 200 mm.	Joint	714.00	
	vi) 250 mm.	Joint	1024.00	
	vii) 300 mm.	Joint	1063.00	
	viii) 350 mm.	Joint	1385.00	
	ix) 400 mm.	Joint	1726.00	
	x) 450 mm.	Joint	2109.00	
	xi) 500 mm.	Joint	2183.00	
	xii) 600 mm.	Joint	2344.00	
	xiii) 700 mm.	Joint	3531.00	
	xiv) 750 mm.	Joint	3630.00	
	xv) 800 mm.	Joint	5023.00	
	xvi) 900 mm	Joint	5207.00	
	xvii) 1000 mm	Joint	5390.00	
	Note : Only 85 % rate shall be payable till satisfactory Hydraulic testing is given.			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
9.	Erecting and hoisting in position and jointing, testing M.S./ C.I. D/F pipes and specials in vertical position including cost of all jointing materials (rubber packing, nut bolts, etc.) labour, scaffolding, hydraulic testing etc. complete. i) 80 mm. ii) 100 mm. iii) 125 mm. iv) 150 mm. v) 200 mm. vi) 250 mm. vii) 300 mm. viii) 350 mm. ix) 400 mm. x) 450 mm. xi) 500 mm. xii) 600 mm. xiii) 700 mm. xiv) 750 mm. xv) 800 mm. xvi) 900 mm xvii) 1000 mm	Joint	220.00 372.00 393.00 731.00 776.00 1109.00 1170.00 1520.00 1890.00 2309.00 2416.00 2652.00 3934.00 4084.00 5530.00 5821.00 6135.00	
	Note : Only 85 % rate shall be payable till satisfactory hydraulic testing is given.			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
10.	<p>Providing and supplying ISI standard D. I. specials & fitting with sealing rubber gasket of S.B.R, complete with cast iron follower gland and M. S. nut bolts coated or otherwise protected from rusting and suitable for D.I.pipes including cost of labour, materials, and transportation to stores, loading and unloading excluding GST levied by GOI & GOM in all respect etc. complete as per IS-9523. For all types of specials, bends tees etc.</p> <p>a) 80 to 300 mm dia.</p> <p>b) 350 mm & above dia.</p>	Kg.	96.00	
11.	<p>Providing and supplying ISI standard welded DI double flanged pipe excluding GST levied by GOI & GOM in all respect but including railway freight, insurance, unloading from railway wagon, loading into truck transport to store, unloading, stacking etc. complete as directed by Engineer -in- charge. (for 2.75 m bare pipe)</p> <p>i) 100 mm</p> <p>ii) 150 mm</p> <p>iii) 200 mm</p> <p>iv) 250 mm</p> <p>v) 300 mm</p> <p>vi) 350 mm</p> <p>vii) 400 mm</p> <p>viii) 450 mm</p> <p>ix) 500 mm</p> <p>x) 600 mm</p> <p>xi) 700 mm</p> <p>xii) 800 mm</p> <p>xiii) 900 mm</p> <p>xiv) 1000 mm</p>	Rmt.	1643.00	
		Rmt.	2231.00	
		Rmt.	2854.00	
		Rmt.	3875.00	
		Rmt.	4876.00	
		Rmt.	6351.00	
		Rmt.	7688.00	
		Rmt.	9187.00	
		Rmt.	10678.00	
		Rmt.	14059.00	
		Rmt.	18918.00	
		Rmt.	23125.00	
		Rmt.	28704.00	
		Rmt.	33703.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																																																																																						
1	2	3	4	5																																																																																						
12.	<p>Hydraulic testing of C.I./D.I. pipe line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position using water supplied by the contractor.</p> <p>A) C.I. L.A. Class / Mortar lined D.I.K-9/ K-7</p> <table> <tbody> <tr> <td>i)</td><td>80 mm.</td><td>Km</td><td>4856.00</td><td>5595.00</td></tr> <tr> <td>ii)</td><td>100 mm.</td><td>Km</td><td>5912.00</td><td>6546.00</td></tr> <tr> <td>iii)</td><td>125 mm.</td><td>Km</td><td>7285.00</td><td>8129.00</td></tr> <tr> <td>iv)</td><td>150 mm.</td><td>Km</td><td>7813.00</td><td>8763.00</td></tr> <tr> <td>v)</td><td>200 mm.</td><td>Km</td><td>10452.00</td><td>11508.00</td></tr> <tr> <td>vii)</td><td>250 mm.</td><td>Km</td><td>13619.00</td><td>14992.00</td></tr> <tr> <td>vii)</td><td>300 mm.</td><td>Km</td><td>14781.00</td><td>16892.00</td></tr> <tr> <td>viii)</td><td>350 mm.</td><td>Km</td><td>18370.00</td><td>20587.00</td></tr> <tr> <td>ix)</td><td>400 mm.</td><td>Km</td><td>22065.00</td><td>25549.00</td></tr> <tr> <td>x)</td><td>450 mm.</td><td>Km</td><td>22065.00</td><td>26922.00</td></tr> <tr> <td>xi)</td><td>500 mm.</td><td>Km</td><td>25549.00</td><td>31039.00</td></tr> <tr> <td>xii)</td><td>600 mm.</td><td>Km</td><td>33573.00</td><td>41385.00</td></tr> <tr> <td>xiii)</td><td>700 mm.</td><td>Km</td><td>43286.00</td><td>58169.00</td></tr> <tr> <td>xiv)</td><td>750 mm.</td><td>Km</td><td>48459.00</td><td>63662.00</td></tr> <tr> <td>xv)</td><td>800 mm.</td><td>Km</td><td>59333.00</td><td>74747.00</td></tr> <tr> <td>xvi)</td><td>900 mm.</td><td>Km</td><td>70841.00</td><td>93751.00</td></tr> <tr> <td>xvii)</td><td>1000 mm.</td><td>Km</td><td>83827.00</td><td>113704.00</td></tr> </tbody> </table>	i)	80 mm.	Km	4856.00	5595.00	ii)	100 mm.	Km	5912.00	6546.00	iii)	125 mm.	Km	7285.00	8129.00	iv)	150 mm.	Km	7813.00	8763.00	v)	200 mm.	Km	10452.00	11508.00	vii)	250 mm.	Km	13619.00	14992.00	vii)	300 mm.	Km	14781.00	16892.00	viii)	350 mm.	Km	18370.00	20587.00	ix)	400 mm.	Km	22065.00	25549.00	x)	450 mm.	Km	22065.00	26922.00	xi)	500 mm.	Km	25549.00	31039.00	xii)	600 mm.	Km	33573.00	41385.00	xiii)	700 mm.	Km	43286.00	58169.00	xiv)	750 mm.	Km	48459.00	63662.00	xv)	800 mm.	Km	59333.00	74747.00	xvi)	900 mm.	Km	70841.00	93751.00	xvii)	1000 mm.	Km	83827.00	113704.00	Without Rubber Rings	With Rubber Rings		
i)	80 mm.	Km	4856.00	5595.00																																																																																						
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Sr. No.	Description	Unit	Rate (in Rs.)		Rate (in Rs.)
1	2	3	2018-2019		2019-2020
			4	5	
	B) C.I. "A" Class		Without Rubber Rings	With Rubber Rings	
i)	80 mm.	Rmt	5068.00	6229.00	
ii)	100 mm.	Rmt	6229.00	7285.00	
iii)	125 mm.	Rmt	7918.00	8763.00	
iv)	150 mm.	Rmt	8657.00	9502.00	
v)	200 mm.	Rmt	11297.00	12247.00	
vii)	250 mm.	Rmt	14781.00	16153.00	
vii)	300 mm.	Rmt	16047.00	18053.00	
viii)	350 mm.	Rmt	19848.00	22171.00	
ix)	400 mm.	Rmt	22276.00	25655.00	
x)	450 mm.	Rmt	23438.00	27133.00	
xi)	500 mm.	Rmt	27555.00	33045.00	
xii)	600 mm.	Rmt	36423.00	44130.00	
xiii)	700 mm.	Rmt	46875.00	61656.00	
xiv)	750 mm.	Rmt	52682.00	67674.00	
xv)	800 mm.	Rmt	62184.00	77386.00	
xvi)	900 mm.	Rmt	74958.00	97762.00	
xvii)	1000 mm.	Rmt	87416.00	117294.00	
	B) C.I. "B" Class				
i)	80 mm.	Rmt	5595.00	6546.00	
ii)	100 mm.	Rmt	6651.00	7918.00	
iii)	125 mm.	Rmt	8552.00	9502.00	
iv)	150 mm.	Rmt	9607.00	10663.00	
v)	200 mm.	Rmt	12247.00	13725.00	
vii)	250 mm.	Rmt	15942.00	18159.00	
vii)	300 mm.	Rmt	17420.00	19426.00	
viii)	350 mm.	Rmt	21432.00	24916.00	
ix)	400 mm.	Rmt	24916.00	28294.00	
x)	450 mm.	Rmt	25232.00	29033.00	
xi)	500 mm.	Rmt	29667.00	35051.00	
xii)	600 mm.	Rmt	39379.00	46875.00	
xiii)	700 mm.	Rmt	50676.00	65140.00	
xiv)	750 mm.	Rmt	57222.00	72108.00	
xv)	800 mm.	Rmt	66723.00	81715.00	
xvi)	900 mm.	Rmt	79181.00	101774.00	
xvii)	1000 mm.	Rmt	90267.00	119933.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																																																																							
1	2	3	4	5																																																																							
13.	<p>Providing and supplying C.I. detachable joints suitable for A. C. pressure pipes manufactured as per IS-1538-1993 standards of following calass and diameter including cost of insurance, railway freight, inspection charges, unloading from railway wagon, loding into truck, transporting to departmental store, unloading, stacking and cost of rubber rings, nut bolts. excluding GST levied by GOI & GOM in all respect etc. complete (IS-1538-1993)</p> <p>Class 10/15</p> <table> <tbody> <tr> <td>i)</td><td>80 mm.</td><td>Rmt.</td><td>242.00</td><td></td></tr> <tr> <td>ii)</td><td>100 mm.</td><td>Rmt.</td><td>306.00</td><td></td></tr> <tr> <td>iii)</td><td>125 mm.</td><td>Rmt.</td><td>411.00</td><td></td></tr> <tr> <td>iv)</td><td>150 mm.</td><td>Rmt.</td><td>512.00</td><td></td></tr> <tr> <td>v)</td><td>200 mm.</td><td>Rmt.</td><td>773.00</td><td></td></tr> <tr> <td>vii)</td><td>250 mm.</td><td>Rmt.</td><td>969.00</td><td></td></tr> <tr> <td>vii)</td><td>300 mm.</td><td>Rmt.</td><td>1329.00</td><td></td></tr> </tbody> </table> <p>Class 20</p> <table> <tbody> <tr> <td>i)</td><td>80 mm.</td><td>Rmt.</td><td>373.00</td><td></td></tr> <tr> <td>ii)</td><td>100 mm.</td><td>Rmt.</td><td>389.00</td><td></td></tr> <tr> <td>iii)</td><td>125 mm.</td><td>Rmt.</td><td>483.00</td><td></td></tr> <tr> <td>iv)</td><td>150 mm.</td><td>Rmt.</td><td>579.00</td><td></td></tr> <tr> <td>v)</td><td>200 mm.</td><td>Rmt.</td><td>778.00</td><td></td></tr> <tr> <td>vii)</td><td>250 mm.</td><td>Rmt.</td><td>1098.00</td><td></td></tr> <tr> <td>vii)</td><td>300 mm.</td><td>Rmt.</td><td>1572.00</td><td></td></tr> </tbody> </table>	i)	80 mm.	Rmt.	242.00		ii)	100 mm.	Rmt.	306.00		iii)	125 mm.	Rmt.	411.00		iv)	150 mm.	Rmt.	512.00		v)	200 mm.	Rmt.	773.00		vii)	250 mm.	Rmt.	969.00		vii)	300 mm.	Rmt.	1329.00		i)	80 mm.	Rmt.	373.00		ii)	100 mm.	Rmt.	389.00		iii)	125 mm.	Rmt.	483.00		iv)	150 mm.	Rmt.	579.00		v)	200 mm.	Rmt.	778.00		vii)	250 mm.	Rmt.	1098.00		vii)	300 mm.	Rmt.	1572.00					
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Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																																												
1	2	3	4	5																																												
1.	<p>II. P. V. C. PIPES</p> <p>Providing and supplying in standard lengths ISI mark rigid unplasticised PVC pipes suitable for potable water with solvent cement joints including cost of couplers, as per IS specification no. 4985 / 1988 excluding GST levied by GOI and GOM in all respect, including transportation, freight charges, inspection charges, loading, unloading, conveyance to the departmental stores and stacking the same in closed shed duly protected from sun rays and rains including cost of jointing material i.e. solvent cement, etc. complete (selffit type to be jointed with cement solvent).</p> <p>Note : 1) 10% of cost of pipes shall be considered for cost of PVC specials for estimate purpose only. 2) One coupler and required cement solvent shall be provided with each full length pipe cost of which is included in rates below.</p> <p>a) Working Pressure 4 Kg./Sq.cm</p> <table> <tbody> <tr> <td>i)</td><td>63 mm.</td><td>Rmt</td><td>48.00</td></tr> <tr> <td>ii)</td><td>75 mm.</td><td>Rmt</td><td>68.00</td></tr> <tr> <td>iii)</td><td>90 mm.</td><td>Rmt</td><td>94.00</td></tr> <tr> <td>iv)</td><td>110 mm.</td><td>Rmt</td><td>129.00</td></tr> <tr> <td>v)</td><td>140 mm</td><td>Rmt</td><td>215.00</td></tr> <tr> <td>vi)</td><td>160 mm.</td><td>Rmt</td><td>283.00</td></tr> <tr> <td>vii)</td><td>180 mm.</td><td>Rmt</td><td>387.00</td></tr> <tr> <td>viii)</td><td>200 mm.</td><td>Rmt</td><td>477.00</td></tr> <tr> <td>ix)</td><td>225 mm.</td><td>Rmt</td><td>610.00</td></tr> <tr> <td>x)</td><td>250 mm.</td><td>Rmt</td><td>746.00</td></tr> <tr> <td>xi)</td><td>280 mm.</td><td>Rmt</td><td>991.00</td></tr> </tbody> </table>	i)	63 mm.	Rmt	48.00	ii)	75 mm.	Rmt	68.00	iii)	90 mm.	Rmt	94.00	iv)	110 mm.	Rmt	129.00	v)	140 mm	Rmt	215.00	vi)	160 mm.	Rmt	283.00	vii)	180 mm.	Rmt	387.00	viii)	200 mm.	Rmt	477.00	ix)	225 mm.	Rmt	610.00	x)	250 mm.	Rmt	746.00	xi)	280 mm.	Rmt	991.00			
i)	63 mm.	Rmt	48.00																																													
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xi)	280 mm.	Rmt	991.00																																													

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	xii) 315 mm.	Rmt	1261.00	
	b) Working Pressure 6 Kg./ Sq.cm			
	i) 63 mm.	Rmt	68.00	
	ii) 75 mm.	Rmt	96.00	
	iii) 90 mm.	Rmt	140.00	
	iv) 110 mm.	Rmt	191.00	
	v) 140 mm.	Rmt	319.00	
	vi) 160 mm.	Rmt	412.00	
	vii) 180 mm.	Rmt	548.00	
	viii) 200 mm.	Rmt	701.00	
	ix) 225 mm.	Rmt	884.00	
	x) 250 mm.	Rmt	1103.00	
	xi) 280 mm.	Rmt	1454.00	
	xii) 315 mm.	Rmt	1856.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	C) Working Pressure 8 Kg/Sq.cm <ul style="list-style-type: none"> i) 63 mm. ii) 75 mm. iii) 90 mm. iv) 110 mm. v) 140 mm. vi) 160 mm. vii) 180 mm. viii) 200 mm. ix) 225 mm. x) 250 mm. xi) 280 mm. xii) 315 mm. 	Rmt	93.00	
		Rmt	133.00	
		Rmt	189.00	
		Rmt	268.00	
		Rmt	443.00	
		Rmt	581.00	
		Rmt	769.00	
		Rmt	967.00	
		Rmt	1228.00	
		Rmt	1535.00	
		Rmt	2022.00	
		Rmt	2561.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	d) Working Pressure 10 Kg./Sq.cm			
ii)	63 mm.	Rmt	113.00	
ii)	75 mm.	Rmt	161.00	
iii)	90 mm.	Rmt	230.00	
iv)	110 mm.	Rmt	326.00	
v)	140 mm.	Rmt	528.00	
vi)	160 mm.	Rmt	690.00	
vii)	180 mm.	Rmt	951.00	
viii)	200 mm.	Rmt	1176.00	
ix)	225 mm.	Rmt	1500.00	
x)	250 mm.	Rmt	1895.00	
xi)	280 mm.	Rmt	2384.00	
xii)	315 mm.	Rmt	3028.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	<p>e) Working Pressure 12.50 Kg./Sq.cm</p> <p>ii) 63 mm. Rmt 144.00</p> <p>ii) 75 mm. Rmt 202.00</p> <p>iii) 90 mm. Rmt 292.00</p> <p>iv) 110 mm. Rmt 413.00</p> <p>v) 140 mm. Rmt 673.00</p> <p>vi) 160 mm. Rmt 886.00</p> <p>vii) 180 mm. Rmt 1210.00</p> <p>viii) 200 mm. Rmt 1501.00</p> <p>ix) 225 mm. Rmt 1908.00</p> <p>x) 250 mm. Rmt 2412.00</p> <p>xi) 280 mm. Rmt 3036.00</p> <p>xii) 315 mm. Rmt 3870.00</p>			

Sr. No.	Description	Unit	Rate (in Rs.)	Rate (in Rs.)
			2018-2019	2019-2020
1	2	3	4	5
2.	Providing and supplying in standard lengths ISI mark rigid unplastised PVC for potable water with rubber ring joints including cost of rubber ring as per IS-4985-1998, excluding GST levied by GOI and GOM in all respect, including transportation, freight charges, transit insurance, inspection charges, loading, unloading, conveyance to store and stacking the same in closed shed duly protected from sun rays and rains, etc. complete (with third party inspection) (socketed)			
	a) Working Pressure 4 Kg/Sq.cm			
i)	63 mm	Rmt	50.00	
ii)	75 mm	Rmt	70.00	
iii)	90 mm	Rmt	100.00	
iv)	110 mm	Rmt	137.00	
v)	125 mm	Rmt	188.00	
vi)	140 mm	Rmt	228.00	
vii)	160 mm	Rmt	301.00	
viii)	180 mm	Rmt	409.00	
ix)	200 mm	Rmt	504.00	
x)	225 mm	Rmt	647.00	
xi)	250 mm	Rmt	793.00	
xii)	280 mm	Rmt	1051.00	
xiii)	315 mm	Rmt	1335.00	
	b) Working Pressure 6 Kg/Sq.cm			
i)	63 mm	Rmt	71.00	
ii)	75 mm	Rmt	103.00	
iii)	90 mm	Rmt	148.00	
iv)	110 mm	Rmt	202.00	
v)	125 mm	Rmt	279.00	
vi)	140 mm	Rmt	339.00	
vii)	160 mm	Rmt	436.00	
viii)	180 mm	Rmt	583.00	
ix)	200 mm	Rmt	741.00	
x)	225 mm	Rmt	936.00	
xi)	250 mm	Rmt	1170.00	
xii)	280 mm	Rmt	1542.00	
xiii)	315 mm	Rmt	1966.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	<p>c) Working Pressure 8 Kg./Sq.cm</p> <p>i) 63 mm. Rmt 97.00</p> <p>ii) 75 mm. Rmt 143.00</p> <p>iii) 90 mm. Rmt 200.00</p> <p>iv) 110 mm. Rmt 283.00</p> <p>v) 125 mm Rmt 390.00</p> <p>vi) 140 mm. Rmt 469.00</p> <p>vii) 160 mm. Rmt 615.00</p> <p>viii) 180 mm. Rmt 816.00</p> <p>ix) 200 mm. Rmt 1025.00</p> <p>x) 225 mm. Rmt 1301.00</p> <p>xi) 250 mm. Rmt 1626.00</p> <p>xii) 280 mm. Rmt 2144.00</p> <p>xiii) 315 mm. Rmt 2716.00</p>			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	d) Working Pressure 10 Kg./Sq.cm			
i)	63 mm.	Rmt	120.00	
ii)	75 mm.	Rmt	171.00	
iii)	90 mm.	Rmt	244.00	
iv)	110 mm.	Rmt	346.00	
v)	125 mm	Rmt	475.00	
vi)	140 mm.	Rmt	559.00	
vii)	160 mm.	Rmt	732.00	
viii)	180 mm.	Rmt	1008.00	
ix)	200 mm.	Rmt	1246.00	
x)	225 mm.	Rmt	1590.00	
xi)	250 mm.	Rmt	2011.00	
xii)	280 mm.	Rmt	2527.00	
xiii)	315 mm	Rmt	3211.00	
	e) Working Pressure 12.5 Kg./Sq.cm			
i)	63 mm.	Rmt	151.00	
ii)	75 mm.	Rmt	214.00	
iii)	90 mm.	Rmt	310.00	
iv)	110 mm.	Rmt	440.00	
v)	125 mm	Rmt	606.00	
vi)	140 mm.	Rmt	714.00	
vii)	160 mm.	Rmt	937.00	
viii)	180 mm.	Rmt	1283.00	
ix)	200 mm.	Rmt	1591.00	
x)	225 mm.	Rmt	2023.00	
xi)	250 mm.	Rmt	2556.00	
xii)	280 mm.	Rmt	3217.00	
xiii)	315 mm	Rmt	4100.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																																																																																																															
1	2	3	4	5																																																																																																															
3.	<p>Providing and supplying in ISI mark rigid PVC-O class-500 s/s pipe (push on joints) pressure pipes confirming to IS specifications no 16647-2017 inclusive cost of EPDM gasket seals on joints including all statutory duties excluding GST levied by Government of India and Government of Maharashtra in all respect including third party inspection charges of agency approved by MJP, transit insurance loading, unloading charges conveyance to the departmental store / site and stacking the same in closed shade duly protected from sunrays etc complete.</p> <p>Note :-</p> <p>a) 10% cost of pipe shall be considered for the cost of O-PVC /DI compatable specials for estimate purpose</p> <p>b) Diameter wise overlapping lengths are respectively, 110mm 2.92%, 160mm- 3.33%, 200mm 3.75%, 250mm 4.5%, 315mm 5.42%, 400mm 6.25%</p> <table> <tbody> <tr> <td>a) Class - 500 PN - 12.5</td><td></td><td></td><td></td><td></td></tr> <tr> <td>i) 110 mm.</td><td>Rmt</td><td>483.00</td><td></td><td></td></tr> <tr> <td>ii) 160 mm.</td><td>Rmt</td><td>833.00</td><td></td><td></td></tr> <tr> <td>iii) 200 mm.</td><td>Rmt</td><td>1141.00</td><td></td><td></td></tr> <tr> <td>iv) 250 mm.</td><td>Rmt</td><td>1564.00</td><td></td><td></td></tr> <tr> <td>v) 315 mm</td><td>Rmt</td><td>2028.00</td><td></td><td></td></tr> <tr> <td>vi) 400 mm.</td><td>Rmt</td><td>3126.00</td><td></td><td></td></tr> <tr> <td>vii) 450 mm.</td><td>Rmt</td><td>3763.00</td><td></td><td></td></tr> <tr> <td>viii) 500 mm.</td><td>Rmt</td><td>4630.00</td><td></td><td></td></tr> <tr> <td>ix) 560 mm.</td><td>Rmt</td><td>5812.00</td><td></td><td></td></tr> <tr> <td>x) 630 mm.</td><td>Rmt</td><td>7393.00</td><td></td><td></td></tr> <tr> <td>b) Class - 500 PN - 16</td><td></td><td></td><td></td><td></td></tr> <tr> <td>i) 110 mm.</td><td>Rmt</td><td>579.00</td><td></td><td></td></tr> <tr> <td>ii) 160 mm.</td><td>Rmt</td><td>969.00</td><td></td><td></td></tr> <tr> <td>iii) 200 mm.</td><td>Rmt</td><td>1202.00</td><td></td><td></td></tr> <tr> <td>iv) 250 mm.</td><td>Rmt</td><td>1691.00</td><td></td><td></td></tr> <tr> <td>v) 315 mm</td><td>Rmt</td><td>2131.00</td><td></td><td></td></tr> <tr> <td>vi) 400 mm.</td><td>Rmt</td><td>3251.00</td><td></td><td></td></tr> <tr> <td>vii) 450 mm.</td><td>Rmt</td><td>4287.00</td><td></td><td></td></tr> <tr> <td>viii) 500 mm.</td><td>Rmt</td><td>5350.00</td><td></td><td></td></tr> <tr> <td>ix) 560 mm.</td><td>Rmt</td><td>6661.00</td><td></td><td></td></tr> <tr> <td>x) 630 mm.</td><td>Rmt</td><td>8438.00</td><td></td><td></td></tr> </tbody> </table>	a) Class - 500 PN - 12.5					i) 110 mm.	Rmt	483.00			ii) 160 mm.	Rmt	833.00			iii) 200 mm.	Rmt	1141.00			iv) 250 mm.	Rmt	1564.00			v) 315 mm	Rmt	2028.00			vi) 400 mm.	Rmt	3126.00			vii) 450 mm.	Rmt	3763.00			viii) 500 mm.	Rmt	4630.00			ix) 560 mm.	Rmt	5812.00			x) 630 mm.	Rmt	7393.00			b) Class - 500 PN - 16					i) 110 mm.	Rmt	579.00			ii) 160 mm.	Rmt	969.00			iii) 200 mm.	Rmt	1202.00			iv) 250 mm.	Rmt	1691.00			v) 315 mm	Rmt	2131.00			vi) 400 mm.	Rmt	3251.00			vii) 450 mm.	Rmt	4287.00			viii) 500 mm.	Rmt	5350.00			ix) 560 mm.	Rmt	6661.00			x) 630 mm.	Rmt	8438.00						
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Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	c) Class - 500 PN - 25			
	i) 110 mm.	Rmt	738.00	
	ii) 160 mm.	Rmt	1072.00	
	iii) 200 mm.	Rmt	1459.00	
	iv) 250 mm.	Rmt	2042.00	
	v) 315 mm	Rmt	3185.00	
	vi) 400 mm.	Rmt	4830.00	
	vii) 450 mm.	Rmt	6187.00	
	viii) 500 mm.	Rmt	7657.00	
	ix) 560 mm.	Rmt	9588.00	
	x) 630 mm.	Rmt	12124.00	
4.	Lowering, laying and jointing with P.V.C. pipes and specials of following class and diameter including cost of conveyance from stores to site of works including cost of all labour, material, except cement solvent, rubber ring, as per IS code, etc. complete (with cement solvent joint / ring fit joint). Note: For PVC O pipes of all pressure 4 (b) rates applied.			
	a) Working Pressure 4 Kg./Sq.cm.			
	i) 63 mm.	Rmt	16.00	
	ii) 75 mm.	Rmt	21.00	
	iii) 90 mm.	Rmt	25.00	
	iv) 110 mm.	Rmt	29.00	
	v) 125 mm.	Rmt	31.00	
	vi) 140 mm.	Rmt	34.00	
	vii) 160 mm.	Rmt	38.00	
	viii) 180 mm.	Rmt	42.00	
	xi) 200 mm	Rmt	45.00	
	x) 225 mm	Rmt	53.00	
	xi) 250 mm	Rmt	57.00	
	xii) 280 mm	Rmt	63.00	
	xiii) 315 mm	Rmt	71.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	b) Working Pressure 6 to 12.5 Kg./Sq.cm.			
i)	63 mm.	Rmt	22.00	
ii)	75 mm.	Rmt	29.00	
iii)	90 mm.	Rmt	33.00	
iv)	110 mm.	Rmt	37.00	
v)	125 mm.	Rmt	40.00	
vi)	140 mm.	Rmt	44.00	
vii)	160 mm	Rmt	46.00	
viii)	180 mm	Rmt	53.00	
ix)	200 mm	Rmt	58.00	
x)	225 mm	Rmt	63.00	
xi)	250 mm	Rmt	69.00	
xii)	280 mm	Rmt	78.00	
xiii)	315 mm	Rmt	86.00	
xiv)	400 mm.	Rmt	95.00	
xv)	450 mm.	Rmt	104.00	
xiv)	500 mm.	Rmt	114.00	
xiiv)	560 mm.	Rmt	124.00	
xiiv)	630 mm.	Rmt	135.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																																							
1	2	3	4	5																																							
5.	<p>Hydraulic testing of PVC pipe line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position.</p> <p>a) Working Pressure 4 Kg./Sq.cm.</p> <table> <tbody> <tr> <td>i) 63 mm.</td> <td>Km</td> <td>2050.00</td> </tr> <tr> <td>ii) 75 mm.</td> <td>Km</td> <td>2050.00</td> </tr> <tr> <td>iii) 90 mm.</td> <td>Km</td> <td>3075.00</td> </tr> <tr> <td>iv) 110 mm.</td> <td>Km</td> <td>3075.00</td> </tr> <tr> <td>v) 125 mm</td> <td>Km</td> <td>3588.00</td> </tr> <tr> <td>vi) 140 mm.</td> <td>Km</td> <td>4100.00</td> </tr> <tr> <td>vii) 160 mm.</td> <td>Km</td> <td>4100.00</td> </tr> <tr> <td>viii) 180 mm.</td> <td>Km</td> <td>5125.00</td> </tr> <tr> <td>ix) 200 mm</td> <td>Km</td> <td>5125.00</td> </tr> <tr> <td>x) 225 mm</td> <td>Km</td> <td>6150.00</td> </tr> <tr> <td>xi) 250 mm</td> <td>Km</td> <td>6150.00</td> </tr> <tr> <td>xii) 280 mm</td> <td>Km</td> <td>7175.00</td> </tr> <tr> <td>xiii) 315 mm</td> <td>Km</td> <td>8200.00</td> </tr> </tbody> </table>	i) 63 mm.	Km	2050.00	ii) 75 mm.	Km	2050.00	iii) 90 mm.	Km	3075.00	iv) 110 mm.	Km	3075.00	v) 125 mm	Km	3588.00	vi) 140 mm.	Km	4100.00	vii) 160 mm.	Km	4100.00	viii) 180 mm.	Km	5125.00	ix) 200 mm	Km	5125.00	x) 225 mm	Km	6150.00	xi) 250 mm	Km	6150.00	xii) 280 mm	Km	7175.00	xiii) 315 mm	Km	8200.00			
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Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	b) Working Pressure 6 to 12.5 Kg./Sq.cm.			
	i) 63 mm.	Km	2050.00	
	ii) 75 mm.	Km	3075.00	
	iii) 90 mm.	Km	4100.00	
	iv) 110 mm.	Km	4100.00	
	v) 125 mm	Km	4613.00	
	vi) 140 mm.	Km	5125.00	
	vii) 160 mm.	Km	5125.00	
	viii) 180 mm.	Km	6150.00	
	is) 200 mm.	Km	6150.00	
	x) 225 mm.	Km	7175.00	
	xi) 250 mm.	Km	7175.00	
	xii) 280 mm	Km	8200.00	
	xiii) 315 mm	Km	9225.00	
	xiv) 400 mm.	Km	9225.00	
	xv) 450 mm.	Km	10250.00	
	xiv) 500 mm.	Km	10250.00	
	xiiv) 560 mm.	Km	11275.00	
	xiiiv) 630 mm.	Km	12300.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	<p>1) Only 85% rate shall be payable till satisfactory hydraulic testing is given.</p> <p>2) Third party inspecting agency shall invariably carry out.</p> <p>I) Specific Gravity Test.</p> <p>II) Weight / Rmt.</p> <p>III) Ash Content Test and confirm in writing that those are within prescribed limits. This condition shall appear in tender conditions.</p> <p>3) After receipt of pipes at site, concerned Deputy Engineer shall confirm that weight of pipe for every class and diameter is not less than the prescribed standard weight as per IS-4985/1998 (Which is given in CSR), Under weight pipes shall be rejected. This condition shall appear in the tender conditions.</p>			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																																																									
1	2	3	4	5																																																									
1.	<p>III. G. I. PIPES</p> <p>Providing ISI mark G.I. pipe of following class and dia. excluding GST levied by GOI and GOM in all respect including inspection charges, transportation to stores, etc. complete as per IS-1239/2004.</p> <p>Note : One coupler shall be provided with each full length of pipe cost of which is included in rates below.</p> <p>a) LIGHT</p> <table> <tbody> <tr> <td>i)</td><td>15 mm. (0.96 kg./m)</td><td>Rmt</td><td>58.00</td></tr> <tr> <td>ii)</td><td>20 mm. (1.42 kg./m)</td><td>Rmt</td><td>86.00</td></tr> <tr> <td>iii)</td><td>25 mm. (2.03 kg./m)</td><td>Rmt</td><td>118.00</td></tr> <tr> <td>iv)</td><td>32 mm. (2.61 kg./m)</td><td>Rmt</td><td>150.00</td></tr> <tr> <td>v)</td><td>40 mm. (3.29 kg./m)</td><td>Rmt</td><td>188.00</td></tr> <tr> <td>vi)</td><td>50 mm. (4.18 kg./m)</td><td>Rmt</td><td>230.00</td></tr> <tr> <td>vii)</td><td>65 mm. (5.92 kg./m)</td><td>Rmt</td><td>316.00</td></tr> <tr> <td>viii)</td><td>80 mm. (6.98 kg./m)</td><td>Rmt</td><td>380.00</td></tr> <tr> <td>ix)</td><td>100 mm. (10.20 kg./m)</td><td>Rmt</td><td>539.00</td></tr> </tbody> </table> <p>b) MEDIUM</p> <table> <tbody> <tr> <td>i)</td><td>15 mm. (1.23 kg./m)</td><td>Rmt</td><td>69.00</td></tr> <tr> <td>ii)</td><td>20 mm. (1.59 kg./m)</td><td>Rmt</td><td>89.00</td></tr> <tr> <td>iii)</td><td>25 mm. (2.40 kg./m)</td><td>Rmt</td><td>136.00</td></tr> <tr> <td>iv)</td><td>32 mm. (3.17 kg./m)</td><td>Rmt</td><td>171.00</td></tr> <tr> <td>v)</td><td>40 mm. (3.65 kg./m)</td><td>Rmt</td><td>197.00</td></tr> </tbody> </table>	i)	15 mm. (0.96 kg./m)	Rmt	58.00	ii)	20 mm. (1.42 kg./m)	Rmt	86.00	iii)	25 mm. (2.03 kg./m)	Rmt	118.00	iv)	32 mm. (2.61 kg./m)	Rmt	150.00	v)	40 mm. (3.29 kg./m)	Rmt	188.00	vi)	50 mm. (4.18 kg./m)	Rmt	230.00	vii)	65 mm. (5.92 kg./m)	Rmt	316.00	viii)	80 mm. (6.98 kg./m)	Rmt	380.00	ix)	100 mm. (10.20 kg./m)	Rmt	539.00	i)	15 mm. (1.23 kg./m)	Rmt	69.00	ii)	20 mm. (1.59 kg./m)	Rmt	89.00	iii)	25 mm. (2.40 kg./m)	Rmt	136.00	iv)	32 mm. (3.17 kg./m)	Rmt	171.00	v)	40 mm. (3.65 kg./m)	Rmt	197.00				
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Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	vi) 50 mm. (5.16 kg./m)	Rmt	273.00	
	vii) 65 mm. (6.63 kg./m)	Rmt	346.00	
	viii) 80 mm. (8.64 kg./m)	Rmt	455.00	
	ix) 100 mm. (12.40 kg./m)	Rmt	649.00	
	xx) 125 mm (16.70 kg/m)	Rmt	884.00	
	xxi) 150 mm.(19.70 kg./m)	Rmt	1039.00	
c)	HEAVY			
	i) 15 mm. (1.46 kg./m)	Rmt	79.00	
	ii) 20 mm. (1.91 kg./m)	Rmt	102.00	
	iii) 25 mm. (2.99 kg./m)	Rmt	159.00	
	iv) 32 mm. (3.97 kg./m)	Rmt	202.00	
	v) 40 mm. (4.47 kg./m)	Rmt	234.00	
	vi) 50 mm. (6.24 kg./m)	Rmt	324.00	
	vii) 65 mm. (8.02 kg./m)	Rmt	416.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	viii) 80 mm. (10.30 kg./m)	Rmt	532.00	
	ix) 100 mm. (14.70 kg./m)	Rmt	768.00	
	x) 125 mm (18.30 kg/m)	Rmt	951.00	
	xi) 150 mm (21.80 kg./m)	Rmt	1143.00	
2.	Lowering, laying and jointing G. I. pipes and specials of following class and diameter including conveyance from stores to site of works, all labour, etc. complete either underground or in vertical position, as directed by Engineer-in-charge.			
	a) LIGHT			
	i) 15 mm.	Rmt	24.00	
	ii) 20 mm.	Rmt	26.00	
	iii) 25 mm.	Rmt	33.00	
	iv) 32 mm.	Rmt	37.00	
	v) 40 mm.	Rmt	45.00	
	vi) 50 mm.	Rmt	55.00	
	vii) 65 mm.	Rmt	80.00	
	viii) 80 mm.	Rmt	88.00	
	ix) 100 mm.	Rmt	106.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	b) MEDIUM			
i)	15 mm.	Rmt	25.00	
ii)	20 mm.	Rmt	28.00	
iii)	25 mm.	Rmt	34.00	
iv)	32 mm.	Rmt	39.00	
v)	40 mm	Rmt	51.00	
vi)	50 mm	Rmt	59.00	
vii)	65 mm	Rmt	86.00	
viii)	80 mm	Rmt	97.00	
ix)	100 mm	Rmt	106.00	
x)	125 mm	Rmt	114.00	
xi)	150 mm	Rmt	119.00	
	c) HEAVY			
i)	15 mm.	Rmt	27.00	
ii)	20 mm.	Rmt	31.00	
iii)	25 mm.	Rmt	36.00	
iv)	32 mm.	Rmt	42.00	
v)	40 mm.	Rmt	54.00	
vi)	50 mm.	Rmt	67.00	
vii)	65 mm.	Rmt	94.00	
viii)	80 mm.	Rmt	114.00	
ix)	100 mm.	Rmt	106.00	
x)	125 mm	Rmt	118.00	
xi)	150 mm	Rmt	127.00	
Note : Only 85% rate shall be payable till satisfactory hydraulic testing is given.				

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
3	<p>Hydraulic testing of G. I. pipe line to specified pressure including cost of all materials and labour and water for testing for the length upto 1km using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour operation charges etc. required for testing, The rates under this item shall also include cost of retesting if necessary and reinstating to original position.</p> <p>a) LIGHT</p> <ul style="list-style-type: none"> i) 15 mm. Km 2050.00 ii) 20 mm. Km 3075.00 iii) 25 mm. Km 3075.00 iv) 32 mm. Km 4100.00 v) 40 mm. Km 5125.00 vi) 50 mm. Km 6150.00 vii) 65 mm. Km 9225.00 viii) 80 mm. Km 10250.00 ix) 100 mm. Km 11275.00 			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	b) MEDIUM			
i)	15 mm.	Km	3075.00	
ii)	20 mm.	Km	3075.00	
iii)	25 mm.	Km	4100.00	
iv)	32 mm.	Km	4100.00	
v)	40 mm	Km	5125.00	
vi)	50 mm	Km	6150.00	
vii)	65 mm	Km	9225.00	
viii)	80 mm	Km	10250.00	
ix)	100 mm	Km	11275.00	
x)	125 mm	Km	12300.00	
xi)	150 mm	Km	13325.00	
	c) HEAVY			
i)	15 mm.	Km	3075.00	
ii)	20 mm.	Km	3075.00	
iii)	25 mm.	Km	4100.00	
iv)	32 mm.	Km	5125.00	
v)	40 mm.	Km	6150.00	
vi)	50 mm.	Km	7175.00	
vii)	65 mm.	Km	10250.00	
viii)	80 mm.	Km	12300.00	
ix)	100 mm.	Km	11275.00	
x)	125 mm	Km	13325.00	
xi)	150 mm	Km	14350.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
1	(IV) D.I. Specials & D.I. Mechanical Joints : D.I. Socket and flanged fittings :- Providing and supplying D.I. fitting with ISI mark socket push on joints or flanged joints confirming to table 12 to 31 of IS 9523/2000 upto latest amendments including cost of SBR/EDPM tyton rings. Fittings should be with internally ordinary portland cement mortor lined and externally metallic zinc coating/zinc rich paint with finishing layer of black bitumen coating including transportation upto store excluding GST levied by GOI & GOM in all respect etc. complete.			
I	Diameter in mm	Unit		
I	Double socket bend 90 degree			
	80 mm dia	Nos	1039.00	
	100 mm dia	Nos	1295.00	
	150 mm dia	Nos	2333.00	
	200 mm dia	Nos	2968.00	
	250 mm dia	Nos	5674.00	
	300 mm dia	Nos	7875.00	
	350 mm dia	Nos	11123.00	
	400 mm dia	Nos	14703.00	
	450 mm dia	Nos	19177.00	
	500 mm dia	Nos	24178.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
II	600 mm dia	Nos	39257.00	
	700 mm dia	Nos	61007.00	
	Double socket bend 45 degree			
	80 mm dia	Nos	962.00	
	100 mm dia	Nos	1167.00	
	150 mm dia	Nos	1805.00	
	200 mm dia	Nos	3068.00	
	250 mm dia	Nos	4317.00	
	300 mm dia	Nos	6045.00	
	350 mm dia	Nos	8310.00	
	400 mm dia	Nos	10867.00	
	450 mm dia	Nos	13807.00	
	500 mm dia	Nos	16990.00	
	600 mm dia	Nos	25877.00	
	700 mm dia	Nos	39527.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
III	Double socket bend 22.50 degree			
	80 mm dia	Nos	842.00	
	100 mm dia	Nos	1082.00	
	150 mm dia	Nos	1677.00	
	200 mm dia	Nos	2589.00	
	250 mm dia	Nos	3515.00	
	300 mm dia	Nos	5181.00	
	350 mm dia	Nos	6832.00	
	400 mm dia	Nos	8474.00	
	450 mm dia	Nos	10867.00	
	500 mm dia	Nos	13330.00	
	600 mm dia	Nos	20649.00	
	700 mm dia	Nos	30999.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
IV	Double socket bend 11.25 degree			
	80 mm dia	Nos	842.00	
	100 mm dia	Nos	1039.00	
	150 mm dia	Nos	1550.00	
	200 mm dia	Nos	2461.00	
	250 mm dia	Nos	3410.00	
	300 mm dia	Nos	4593.00	
	350 mm dia	Nos	5448.00	
	400 mm dia	Nos	7350.00	
	450 mm dia	Nos	9716.00	
	500 mm dia	Nos	11762.00	
	600 mm dia	Nos	17251.00	
	700 mm dia	Nos	24910.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
V	Double socket concentric reducer			
	100 x 80 mm dia	Nos	962.00	
	150 x 80 mm dia	Nos	1550.00	
	150 x 100 mm dia	Nos	1677.00	
	200 x 80 mm dia	Nos	2406.00	
	200 x 100 mm dia	Nos	2406.00	
	200 x 150 mm dia	Nos	2552.00	
	250 x 80 mm dia	Nos	3330.00	
	250 x 100 mm dia	Nos	3206.00	
	250 x 150 mm dia	Nos	3536.00	
	250 x 200 mm dia	Nos	3410.00	
	300 x 100 mm dia	Nos	4687.00	
	300 x 150 mm dia	Nos	4811.00	
	300 x 200 mm dia	Nos	4721.00	
	300 x 250 mm dia	Nos	4440.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	350 x 200 mm dia	Nos	6571.00	
	350 x 250 mm dia	Nos	6399.00	
	350 x 300 mm dia	Nos	6312.00	
	400 x 200 mm dia	Nos	8694.00	
	400 x 250 mm dia	Nos	7926.00	
	400 x 300 mm dia	Nos	7671.00	
	400 x 350 mm dia	Nos	6832.00	
	450 x 350 mm dia	Nos	9205.00	
	450 x 400 mm dia	Nos	8474.00	
	500 x 350 mm dia	Nos	12430.00	
	500 x 400 mm dia	Nos	11762.00	
	500 x 450 mm dia	Nos	11108.00	
	600 x 300 mm dia	Nos	18819.00	
	600 x 350 mm dia	Nos	19369.00	
	600 x 400 mm dia	Nos	18296.00	

SECTION - I : D.I. Specials & D.I. Mechanical Joints

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
VI	600 x 450 mm dia	Nos	17774.00	
	600 x 500 mm dia	Nos	16205.00	
	700 x 450 mm dia	Nos	30846.00	
	700 x 500 mm dia	Nos	27446.00	
	700 x 600 mm dia	Nos	29235.00	
	800 x 600 mm dia	Nos	38284.00	
	800 x 700 mm dia	Nos	28706.00	
	All Socket Tee			
	80 x 80 mm dia	Nos	1422.00	
	100 x 80 mm dia	Nos	1677.00	
	100 x 100 mm dia	Nos	1805.00	
	150 x 80 mm dia	Nos	2406.00	
	150 x 100 mm dia	Nos	2589.00	
	150 x 150 mm dia	Nos	2972.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	200 x 80 mm dia	Nos	3373.00	
	200 x 100 mm dia	Nos	3628.00	
	200 x 150 mm dia	Nos	4139.00	
	200 x 200 mm dia	Nos	4814.00	
	250 x 80 mm dia	Nos	4564.00	
	250 x 100 mm dia	Nos	4849.00	
	250 x 150 mm dia	Nos	5250.00	
	250 x 200 mm dia	Nos	6168.00	
	250 x 250 mm dia	Nos	7031.00	
	300 x 80 mm dia	Nos	5779.00	
	300 x 100 mm dia	Nos	5906.00	
	300 x 150 mm dia	Nos	7092.00	
	300 x 200 mm dia	Nos	7875.00	
	300 x 250 mm dia	Nos	8635.00	
	300 x 300 mm dia	Nos	9621.00	
	350 x 80 mm dia	Nos	7414.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	350 x 100 mm dia	Nos	7543.00	
	350 x 150 mm dia	Nos	8694.00	
	350 x 200 mm dia	Nos	9588.00	
	350 x 250 mm dia	Nos	11507.00	
	350 x 300 mm dia	Nos	12785.00	
	350 x 350 mm dia	Nos	13040.00	
	400 x 80 mm dia	Nos	9333.00	
	400 x 100 mm dia	Nos	9205.00	
	400 x 150 mm dia	Nos	11507.00	
	400 x 200 mm dia	Nos	11762.00	
	400 x 250 mm dia	Nos	13424.00	
	400 x 300 mm dia	Nos	15045.00	
	400 x 400 mm dia	Nos	16621.00	
	450 x 100 mm dia	Nos	11507.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	450 x 150 mm dia	Nos	13424.00	
	450 x 200 mm dia	Nos	14703.00	
	450 x 250 mm dia	Nos	15305.00	
	450 x 300 mm dia	Nos	17121.00	
	450 x 350 mm dia	Nos	19177.00	
	450 x 400 mm dia	Nos	21096.00	
	450 x 450 mm dia	Nos	21479.00	
	500 x 100 mm dia	Nos	14041.00	
	500 x 150 mm dia	Nos	16336.00	
	500 x 200 mm dia	Nos	16990.00	
	500 x 250 mm dia	Nos	19603.00	
	500 x 300 mm dia	Nos	20911.00	
	500 x 400 mm dia	Nos	24178.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
VII	Double Socket Tee with Flange branch-PN-10			
	80 x 80 mm dia	Nos	1685.00	
	100 x 80 mm dia	Nos	1805.00	
	100 x 100 mm dia	Nos	1925.00	
	150 x 80 mm dia	Nos	2527.00	
	150 x 100 mm dia	Nos	2587.00	
	150 x 150 mm dia	Nos	3249.00	
	200 x 80 mm dia	Nos	3489.00	
	200 x 100 mm dia	Nos	3729.00	
	200 x 150 mm dia	Nos	4332.00	
	200 x 200 mm dia	Nos	4994.00	
	250 x 80 mm dia	Nos	4564.00	
	250 x 100 mm dia	Nos	4626.00	
	250 x 150 mm dia	Nos	5674.00	
	250 x 200 mm dia	Nos	6414.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	250 x 250 mm dia	Nos	7401.00	
	300 x 80 mm dia	Nos	5921.00	
	300 x 100 mm dia	Nos	6168.00	
	300 x 150 mm dia	Nos	7031.00	
	300 x 200 mm dia	Nos	8018.00	
	300 x 250 mm dia	Nos	9129.00	
	300 x 300 mm dia	Nos	9868.00	
	350 x 80 mm dia	Nos	7414.00	
	350 x 100 mm dia	Nos	7543.00	
	350 x 150 mm dia	Nos	8948.00	
	350 x 200 mm dia	Nos	9716.00	
	350 x 250 mm dia	Nos	11507.00	
	350 x 300 mm dia	Nos	14063.00	
	350 x 350 mm dia	Nos	14574.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	400 x 80 mm dia	Nos	8948.00	
	400 x 100 mm dia	Nos	9333.00	
	400 x 150 mm dia	Nos	10228.00	
	400 x 200 mm dia	Nos	11762.00	
	400 x 250 mm dia	Nos	14063.00	
	400 x 300 mm dia	Nos	14574.00	
	400 x 400 mm dia	Nos	18538.00	
	450 x 80 mm dia	Nos	11123.00	
	450 x 100 mm dia	Nos	11250.00	
	450 x 150 mm dia	Nos	12529.00	
	450 x 200 mm dia	Nos	13807.00	
	450 x 250 mm dia	Nos	15342.00	
	450 x 300 mm dia	Nos	17132.00	
	450 x 350 mm dia	Nos	21734.00	
	450 x 400 mm dia	Nos	21863.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
VIII	450 x 450 mm dia	Nos	22260.00	
	500 x 80 mm dia	Nos	13330.00	
	500 x 100 mm dia	Nos	13461.00	
	500 x 150 mm dia	Nos	16075.00	
	500 x 200 mm dia	Nos	16467.00	
	500 x 250 mm dia	Nos	19603.00	
	500 x 300 mm dia	Nos	20126.00	
	500 x 400 mm dia	Nos	23655.00	
	Flange Socket-PN-10			
	80 mm dia	Nos	866.00	
	100 mm dia	Nos	974.00	
	150 mm dia	Nos	1516.00	
	200 mm dia	Nos	2272.00	
	250 mm dia	Nos	2988.00	
	300 mm dia	Nos	3922.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
IX	350 mm dia	Nos	5062.00	
	400 mm dia	Nos	6213.00	
	450 mm dia	Nos	6961.00	
	500 mm dia	Nos	8469.00	
	600 mm dia	Nos	12351.00	
	700 mm dia	Nos	21344.00	
	Flange Spigot-PN-10			
	80 mm dia	Nos	854.00	
	100 mm dia	Nos	1075.00	
	150 mm dia	Nos	1723.00	
	200 mm dia	Nos	2473.00	
	250 mm dia	Nos	3490.00	
	300 mm dia	Nos	4462.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
X	350 mm dia	Nos	6558.00	
	400 mm dia	Nos	7479.00	
	450 mm dia	Nos	9549.00	
	500 mm dia	Nos	8760.00	
	600 mm dia	Nos	18349.00	
	700 mm dia	Nos	27654.00	
	Blank Flange -PN-1			
	80 mm dia	Nos	444.00	
	100 mm dia	Nos	536.00	
	150 mm dia	Nos	887.00	
	200 mm dia	Nos	1220.00	
	250 mm dia	Nos	1933.00	
	300 mm dia	Nos	2775.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
XI	350 mm dia	Nos	3966.00	
	400 mm dia	Nos	4927.00	
	450 mm dia	Nos	6730.00	
	500 mm dia	Nos	7977.00	
	600 mm dia	Nos	11537.00	
	700 mm dia	Nos	23999.00	
	Double Flange Bend 90 Deg -PN-'10			
	80 mm dia	Nos	1110.00	
	100 mm dia	Nos	1332.00	
	150 mm dia	Nos	2398.00	
	200 mm dia	Nos	3495.00	
	250 mm dia	Nos	6213.00	
	300 mm dia	Nos	8407.00	
	350 mm dia	Nos	11057.00	
	400 mm dia	Nos	14181.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
XII	450 mm dia	Nos	20431.00	
	500 mm dia	Nos	22584.00	
	600 mm dia	Nos	36331.00	
	700 mm dia	Nos	69616.00	
	Double Flange Bend 45 Deg -PN-10			
	80 mm dia	Nos	1054.00	
	100 mm dia	Nos	1332.00	
	150 mm dia	Nos	2109.00	
	200 mm dia	Nos	3053.00	
	250 mm dia	Nos	4647.00	
	300 mm dia	Nos	8734.00	
	350 mm dia	Nos	9254.00	
	400 mm dia	Nos	11778.00	
	450 mm dia	Nos	14421.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
XIII	500 mm dia	Nos	22673.00	
	600 mm dia	Nos	33716.00	
	700 mm dia	Nos	48098.00	
	Double Flange Duck Foot Bend -PN-10			
	80 mm dia	Nos	1705.00	
	100 mm dia	Nos	2130.00	
	150 mm dia	Nos	3674.00	
	200 mm dia	Nos	5766.00	
	250 mm dia	Nos	9213.00	
	300 mm dia	Nos	12817.00	
	350 mm dia	Nos	18688.00	
	400 mm dia	Nos	23075.00	
	450 mm dia	Nos	32688.00	
	500 mm dia	Nos	41630.00	
	600 mm dia	Nos	58301.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
XIV	700 mm dia	Nos	101822.00	
	All Flange Tee -PN-10			
	80 x 80 mm dia	Nos	1776.00	
	100 x 80 mm dia	Nos	1998.00	
	100 x 100 mm dia	Nos	2109.00	
	150 x 80 mm dia	Nos	3108.00	
	150 x 100 mm dia	Nos	3219.00	
	150 x 150 mm dia	Nos	3552.00	
	200 x 80 mm dia	Nos	4551.00	
	200 x 100 mm dia	Nos	4796.00	
	200 x 150 mm dia	Nos	4996.00	
	200 x 200 mm dia	Nos	5440.00	
	250 x 80 mm dia	Nos	6177.00	
	250 x 100 mm dia	Nos	7392.00	
	250 x 150 mm dia	Nos	7011.00	
	250 x 200 mm dia	Nos	8643.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	250 x 250 mm dia	Nos	8757.00	
	300 x 80 mm dia	Nos	7407.00	
	300 x 100 mm dia	Nos	9848.00	
	300 x 150 mm dia	Nos	8648.00	
	300 x 200 mm dia	Nos	10803.00	
	300 x 250 mm dia	Nos	10580.00	
	300 x 300 mm dia	Nos	12851.00	
	350 x 80 mm dia	Nos	10957.00	
	350 x 100 mm dia	Nos	13460.00	
	350 x 150 mm dia	Nos	12562.00	
	350 x 200 mm dia	Nos	14132.00	
	350 x 250 mm dia	Nos	15200.00	
	350 x 300 mm dia	Nos	16462.00	
	350 x 350 mm dia	Nos	18387.00	
	400 x 80 mm dia	Nos	13178.00	
	400 x 100 mm dia	Nos	16748.00	

SECTION - I : D.I. Specials & D.I. Mechanical Joints

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	400 x 150 mm dia	Nos	15045.00	
	400 x 200 mm dia	Nos	17426.00	
	400 x 250 mm dia	Nos	18156.00	
	400 x 300 mm dia	Nos	18988.00	
	400 x 400 mm dia	Nos	20431.00	
	450 x 100	Nos	21279.00	
	450 x 150 mm dia	Nos	17031.00	
	450 x 200 mm dia	Nos	22353.00	
	450 x 250 mm dia	Nos	20170.00	
	450 x 300 mm dia	Nos	20964.00	
	450 x 350 mm dia	Nos	24035.00	
	450 x 400 mm dia	Nos	23971.00	
	450 x 450 mm dia	Nos	27041.00	
	500 x 100 mm dia	Nos	25775.00	
	500 x 150 mm dia	Nos	26143.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	500 x 200 mm dia	Nos	26389.00	
	500 x 250 mm dia	Nos	27002.00	
	500 x 300 mm dia	Nos	32398.00	
	500 x 400 mm dia	Nos	32876.00	
	500 x 500 mm dia	Nos	35823.00	
	600 x 100 mm dia	Nos	42550.00	
	600 x 150 mm dia	Nos	42991.00	
	600 x 200 mm dia	Nos	42647.00	
	600 x 250 mm dia	Nos	45658.00	
	600 x 300 mm dia	Nos	44254.00	
	600 x 400 mm dia	Nos	45976.00	
	600 x 500 mm dia	Nos	46011.00	
	600 x 600 mm dia	Nos	50863.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
XV	Double Socket Level Invert Flange Branch Tee PN10			
	200 x 80 mm dia	Nos	3175.00	
	250 x 80 mm dia	Nos	4140.00	
	300 x 80 mm dia	Nos	5526.00	
	350 x 80 mm dia	Nos	6904.00	
	350 x 100 mm dia	Nos	7549.00	
	400 x 100 mm dia	Nos	9027.00	
	450 x 80 mm dia	Nos	10973.00	
	450 x 100 mm dia	Nos	11206.00	
	500 x 80 mm dia	Nos	12585.00	
	500 x 100 mm dia	Nos	13775.00	
XVI	Cap			
	80 mm dia	Nos	424.00	
	100 mm dia	Nos	546.00	
	150 mm dia	Nos	969.00	
	200 mm dia	Nos	1726.00	
	250 mm dia	Nos	2075.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
XVII	300 mm dia	Nos	3271.00	
	350 mm dia	Nos	5292.00	
	400 mm dia	Nos	6904.00	
	450 mm dia	Nos	8744.00	
	500 mm dia	Nos	10703.00	
	600 mm dia	Nos	14937.00	
	700 mm dia	Nos	26502.00	
	Plug			
	80 mm dia	Nos	310.00	
	100 mm dia	Nos	530.00	
	150 mm dia	Nos	942.00	
	200 mm dia	Nos	1458.00	
	250 mm dia	Nos	2017.00	
	300 mm dia	Nos	3180.00	
	350 mm dia	Nos	5062.00	
	400 mm dia	Nos	5983.00	
	450 mm dia	Nos	7922.00	
	500 mm dia	Nos	9645.00	
	600 mm dia	Nos	14281.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	D.I. FITTINGS (Mechanical Joints)			
1.	Providing and supplying D.I. fittings with ISI mark Mechanical joint confirming to tables 12 to table 31 of IS 9523/2000 upto latest amendments including cost of SBR/ EDPM gaskets, Nuts, Bolts, Washers and Ductile iron follower glands. Fittings should be with internally Ordinary portland cement mortar lined and externally metallic zinc coating/zinc rich paint with finishing layer of black bitumen coating including transportation upto store excluding GST levied by GOI & GOM in all respect etc. complete.			
I	MJ Collar/Coupling			
	80 mm dia	Nos	1998.00	
	100 mm dia	Nos	2183.00	
	150 mm dia	Nos	2671.00	
	200 mm dia	Nos	4776.00	
	250 mm dia	Nos	6319.00	
	300 mm dia	Nos	8190.00	
	350 mm dia	Nos	11588.00	
	400 mm dia	Nos	14498.00	
	450 mm dia	Nos	16780.00	

SECTION - I : D.I. Specials & D.I. Mechanical Joints

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	500 mm dia	Nos	21687.00	
	600 mm dia	Nos	27391.00	
	700 mm dia	Nos	37588.00	
II	Double Socket Bend 90 degree			
	80 mm dia	Nos	1072.00	
	100 mm dia	Nos	1350.00	
	150 mm dia	Nos	2329.00	
	200 mm dia	Nos	3494.00	
	250 mm dia	Nos	4952.00	
	300 mm dia	Nos	6618.00	
	350 mm dia	Nos	9632.00	
	400 mm dia	Nos	12403.00	
	450 mm dia	Nos	16042.00	
	500 mm dia	Nos	18296.00	
	600 mm dia	Nos	26724.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
III	Double Socket Bend 45 degree			
	80 mm dia	Nos	1072.00	
	100 mm dia	Nos	1257.00	
	150 mm dia	Nos	1968.00	
	200 mm dia	Nos	3004.00	
	250 mm dia	Nos	4040.00	
	300 mm dia	Nos	5648.00	
	350 mm dia	Nos	8399.00	
	400 mm dia	Nos	10718.00	
	450 mm dia	Nos	12254.00	
	500 mm dia	Nos	14273.00	
	600 mm dia	Nos	20499.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
IV	Double Socket Bend 22.5 degree			
	80 mm dia	Nos	990.00	
	100 mm dia	Nos	1257.00	
	150 mm dia	Nos	1886.00	
	200 mm dia	Nos	2690.00	
	250 mm dia	Nos	3587.00	
	300 mm dia	Nos	5019.00	
	350 mm dia	Nos	7266.00	
	400 mm dia	Nos	8863.00	
	450 mm dia	Nos	11130.00	
	500 mm dia	Nos	13286.00	
	600 mm dia	Nos	17157.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
V	Double Socket Bend 11.25 degree			
	80 mm dia	Nos	990.00	
	100 mm dia	Nos	1300.00	
	150 mm dia	Nos	1793.00	
	200 mm dia	Nos	2597.00	
	250 mm dia	Nos	3411.00	
	300 mm dia	Nos	4576.00	
	350 mm dia	Nos	6287.00	
	400 mm dia	Nos	8090.00	
	450 mm dia	Nos	10478.00	
	500 mm dia	Nos	12522.00	
	600 mm dia	Nos	15563.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
VI	Double socket concentric reducer			
	100 x 80 mm dia	Nos	1765.00	
	150 x 80 mm dia	Nos	2543.00	
	150 x 100 mm dia	Nos	2771.00	
	200 x 80 mm dia	Nos	3578.00	
	200 x 100 mm dia	Nos	3590.00	
	200 x 150 mm dia	Nos	3994.00	
	250 x 80 mm dia	Nos	4679.00	
	250 x 100 mm dia	Nos	4891.00	
	250 x 150 mm dia	Nos	5214.00	
	250 x 200 mm dia	Nos	5214.00	
	300 x 100 mm dia	Nos	6486.00	
	300 x 150 mm dia	Nos	6805.00	
	300 x 200 mm dia	Nos	6540.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	300 x 250 mm dia	Nos	7018.00	
	350 x 200 mm dia	Nos	9885.00	
	350 x 300 mm dia	Nos	10284.00	
	400 x 200 mm dia	Nos	12255.00	
	400 x 300 mm dia	Nos	12487.00	
	400 x 350 mm dia	Nos	11741.00	
	450 x 400 mm dia	Nos	14252.00	
	500 x 300 mm dia	Nos	19029.00	
	500 x 350 mm dia	Nos	17657.00	
	500 x 400 mm dia	Nos	17419.00	
	600 x 350 mm dia	Nos	24483.00	
	600 x 400 mm dia	Nos	24219.00	
	600 x 500 mm dia	Nos	22547.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
VII	All Socket Tee			
	80 x 80 mm dia	Nos	2398.00	
	100 x 80 mm dia	Nos	2818.00	
	100 x 100 mm dia	Nos	3029.00	
	150 x 80 mm dia	Nos	4081.00	
	150 x 100 mm dia	Nos	4292.00	
	150 x 150 mm dia	Nos	4939.00	
	200 x 80 mm dia	Nos	5311.00	
	200 x 100 mm dia	Nos	5701.00	
	200 x 150 mm dia	Nos	6478.00	
	200 x 200 mm dia	Nos	7573.00	
	250 x 80 mm dia	Nos	6899.00	
	250 x 100 mm dia	Nos	7256.00	
	250 x 150 mm dia	Nos	7887.00	
	250 x 200 mm dia	Nos	9167.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	250 x 250 mm dia	Nos	10138.00	
	300 x 80 mm dia	Nos	8730.00	
	300 x 100 mm dia	Nos	8940.00	
	300 x 150 mm dia	Nos	10430.00	
	300 x 200 mm dia	Nos	11418.00	
	300 x 250 mm dia	Nos	12680.00	
	300 x 300 mm dia	Nos	13814.00	
	350 x 80 mm dia	Nos	12551.00	
	350 x 100 mm dia	Nos	12794.00	
	350 x 150 mm dia	Nos	14252.00	
	350 x 200 mm dia	Nos	15385.00	
	350 x 250 mm dia	Nos	17896.00	
	350 x 300 mm dia	Nos	19839.00	
	350 x 350 mm dia	Nos	21135.00	
	400 x 80 mm dia	Nos	16033.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	400 x 100 mm dia	Nos	15952.00	
	400 x 150 mm dia	Nos	18767.00	
	400 x 200 mm dia	Nos	19351.00	
	400 x 250 mm dia	Nos	20972.00	
	400 x 300 mm dia	Nos	22836.00	
	400 x 400 mm dia	Nos	26803.00	
	450 x 100 mm dia	Nos	19373.00	
	450 x 150 mm dia	Nos	21941.00	
	450 x 200 mm dia	Nos	22408.00	
	450 x 250 mm dia	Nos	23484.00	
	450 x 300 mm dia	Nos	25831.00	
	450 x 350 mm dia	Nos	30811.00	
	450 x 400 mm dia	Nos	31424.00	
	450 x 450 mm dia	Nos	32553.00	
	500 x 100 mm dia	Nos	20281.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
VIII	500 x 150 mm dia	Nos	23263.00	
	500 x 200 mm dia	Nos	23741.00	
	500 x 250 mm dia	Nos	28565.00	
	500 x 300 mm dia	Nos	29467.00	
	500 x 400	Nos	32927.00	
	Double Socket Tee with Flange branch-PN-10			
	80 x 80 mm dia	Nos	2615.00	
	100 x 80 mm dia	Nos	3074.00	
	100 x 100	Nos	3304.00	
	150 x 80 mm dia	Nos	4452.00	
	150 x 100 mm dia	Nos	4682.00	
	150 x 150 mm dia	Nos	5388.00	
	200 x 80 mm dia	Nos	5794.00	
	200 x 100 mm dia	Nos	6219.00	
	200 x 150 mm dia	Nos	7067.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	200 x 200 mm dia	Nos	8262.00	
	250 x 80 mm dia	Nos	7527.00	
	250 x 100	Nos	7915.00	
	250 x 150 mm dia	Nos	8604.00	
	250 x 200 mm dia	Nos	10000.00	
	250 x 250 mm dia	Nos	11060.00	
	300 x 80 mm dia	Nos	9523.00	
	300 x 100 mm dia	Nos	9752.00	
	300 x 150 mm dia	Nos	11378.00	
	300 x 200 mm dia	Nos	12455.00	
	300 x 250 mm dia	Nos	13833.00	
	300 x 300 mm dia	Nos	15070.00	
	350 x 80 mm dia	Nos	13692.00	
	350 x 100 mm dia	Nos	13957.00	
	350 x 150 mm dia	Nos	15547.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	350 x 200 mm dia	Nos	16784.00	
	350 x 250 mm dia	Nos	19523.00	
	350 x 300 mm dia	Nos	21642.00	
	350 x 350 mm dia	Nos	23056.00	
	400 x 80 mm dia	Nos	17491.00	
	400 x 100 mm dia	Nos	17402.00	
	400 x 150 mm dia	Nos	20473.00	
	400 x 200 mm dia	Nos	21110.00	
	400 x 250 mm dia	Nos	22879.00	
	400 x 300 mm dia	Nos	24912.00	
	400 x 400 mm dia	Nos	29240.00	
	450 x 80	Nos	21134.00	
	450 x 100 mm dia	Nos	23936.00	
	450 x 150 mm dia	Nos	24446.00	
	450 x 200 mm dia	Nos	25618.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	450 x 250 mm dia	Nos	28180.00	
	450 x 300 mm dia	Nos	33612.00	
	450 x 350 mm dia	Nos	34281.00	
	450 x 400 mm dia	Nos	35513.00	
	450 x 450 mm dia	Nos	22125.00	
	500 x 80 mm dia	Nos	25378.00	
	500 x 100 mm dia	Nos	25899.00	
	500 x 150 mm dia	Nos	31161.00	
	500 x 200 mm dia	Nos	32146.00	
	500 x 250 mm dia	Nos	35920.00	
	500 x 300 mm dia	Nos	30594.00	
	500 x 400 mm dia	Nos	34489.00	
	500 x 500 mm dia	Nos	40476.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
IX	Flange Socket-PN-10			
	80 mm dia	Nos	1383.00	
	100 mm dia	Nos	1518.00	
	150 mm dia	Nos	2302.00	
	200 mm dia	Nos	3209.00	
	250 mm dia	Nos	4421.00	
	300 mm dia	Nos	5784.00	
	350 mm dia	Nos	8587.00	
	400 mm dia	Nos	10415.00	
	450 mm dia	Nos	11686.00	
	500 mm dia	Nos	13992.00	
	600 mm dia	Nos	19478.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																																																																												
1	2	3	4	5																																																																												
1.	<p>V. R.C.C. PIPES</p> <p>Providing ISI standard R.C.C. pipes in standard lengths of following class and diameter suitable for either collar joints or rubber ring joints, excluding GST levied by GOI & GOM in all respect including inspection charges, transport to departmental stores, unloading and stacking etc. complete as per IS-458/1988.</p> <p>Note : One collar should be supplied with each full length plain ended RCC pipe, cost including in rates below. One rubber ring should be supplied with each full length of socketed pipe, cost included in rates below.</p> <p>a) Class 'P-I'</p> <table> <thead> <tr> <th></th> <th></th> <th>Collar Joints</th> <th>Rubber Ring Joints</th> </tr> </thead> <tbody> <tr> <td>i)</td> <td>80 mm.</td> <td>Rmt</td> <td>272.00</td> </tr> <tr> <td>ii)</td> <td>100 mm.</td> <td>Rmt</td> <td>284.00</td> </tr> <tr> <td>iii)</td> <td>150 mm.</td> <td>Rmt</td> <td>300.00</td> </tr> <tr> <td>iv)</td> <td>200 mm.</td> <td>Rmt</td> <td>348.00</td> </tr> <tr> <td>v)</td> <td>225 mm.</td> <td>Rmt</td> <td>397.00</td> </tr> <tr> <td>vi)</td> <td>250 mm.</td> <td>Rmt</td> <td>435.00</td> </tr> <tr> <td>vii)</td> <td>300 mm.</td> <td>Rmt</td> <td>556.00</td> </tr> <tr> <td>viii)</td> <td>350 mm.</td> <td>Rmt</td> <td>599.00</td> </tr> <tr> <td>ix)</td> <td>400 mm.</td> <td>Rmt</td> <td>760.00</td> </tr> <tr> <td>x)</td> <td>450 mm.</td> <td>Rmt</td> <td>935.00</td> </tr> <tr> <td>xi)</td> <td>500 mm.</td> <td>Rmt</td> <td>1126.00</td> </tr> <tr> <td>xii)</td> <td>600 mm.</td> <td>Rmt</td> <td>1419.00</td> </tr> <tr> <td>xiii)</td> <td>700 mm.</td> <td>Rmt</td> <td>1849.00</td> </tr> <tr> <td>xiv)</td> <td>800 mm.</td> <td>Rmt</td> <td>2134.00</td> </tr> <tr> <td>xv)</td> <td>900 mm.</td> <td>Rmt</td> <td>2685.00</td> </tr> <tr> <td>xvi)</td> <td>1000 mm.</td> <td>Rmt</td> <td>3147.00</td> </tr> <tr> <td>xvii)</td> <td>1100 mm.</td> <td>Rmt</td> <td>3574.00</td> </tr> <tr> <td>xviii)</td> <td>1200 mm.</td> <td>Rmt</td> <td>4294.00</td> </tr> </tbody> </table>			Collar Joints	Rubber Ring Joints	i)	80 mm.	Rmt	272.00	ii)	100 mm.	Rmt	284.00	iii)	150 mm.	Rmt	300.00	iv)	200 mm.	Rmt	348.00	v)	225 mm.	Rmt	397.00	vi)	250 mm.	Rmt	435.00	vii)	300 mm.	Rmt	556.00	viii)	350 mm.	Rmt	599.00	ix)	400 mm.	Rmt	760.00	x)	450 mm.	Rmt	935.00	xi)	500 mm.	Rmt	1126.00	xii)	600 mm.	Rmt	1419.00	xiii)	700 mm.	Rmt	1849.00	xiv)	800 mm.	Rmt	2134.00	xv)	900 mm.	Rmt	2685.00	xvi)	1000 mm.	Rmt	3147.00	xvii)	1100 mm.	Rmt	3574.00	xviii)	1200 mm.	Rmt	4294.00			
		Collar Joints	Rubber Ring Joints																																																																													
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Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
			Collar Joints	Rubber Ring Joints
b)	Class 'P-II'			
i)	80 mm.	Rmt	290.00	256.00
ii)	100 mm.	Rmt	308.00	277.00
iii)	150 mm.	Rmt	369.00	333.00
iv)	200 mm.	Rmt	496.00	450.00
v)	225 mm.	Rmt	588.00	530.00
vi)	250 mm.	Rmt	637.00	579.00
vii)	300 mm.	Rmt	841.00	802.00
viii)	350 mm.	Rmt	1050.00	950.00
ix)	400 mm.	Rmt	1171.00	1066.00
x)	450 mm.	Rmt	1420.00	1274.00
xi)	500 mm.	Rmt	1983.00	1807.00
xii)	600 mm.	Rmt	2459.00	2217.00
xiii)	700 mm.	Rmt	3350.00	3047.00
xiv)	800 mm.	Rmt	4028.00	3671.00
xv)	900 mm.	Rmt	4538.00	4572.00
xvi)	1000 mm.	Rmt	5491.00	4944.00
c)	Class 'P-III'			
i)	80 mm.	Rmt	312.00	307.00
ii)	100 mm.	Rmt	338.00	332.00
iii)	150 mm.	Rmt	384.00	384.00
iv)	200 mm.	Rmt	522.00	522.00
v)	225 mm.	Rmt	622.00	622.00
vi)	250 mm.	Rmt	728.00	727.00

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
			Collar Joints	Rubber Ring Joints
vii)	300 mm.	Rmt	1013.00	1012.00
viii)	350 mm.	Rmt	1320.00	1320.00
ix)	400 mm.	Rmt	1817.00	1817.00
x)	450 mm.	Rmt	2112.00	2086.00
xi)	500 mm.	Rmt	2545.00	2544.00
xii)	600 mm.	Rmt	3268.00	3268.00
xiii)	700 mm.	Rmt	4663.00	4662.00
xiv)	800 mm.	Rmt	5921.00	5921.00
d)	Class 'NP-II' (For 2.00 m. length)		Collar Joints	Rubber Ring Joints
i)	80 mm.	Rmt	234.00	236.00
ii)	100 mm.	Rmt	240.00	245.00
iii)	150 mm.	Rmt	262.00	262.00
iv)	200 mm.	Rmt	327.00	327.00
v)	225 mm.	Rmt	366.00	373.00
vi)	250 mm.	Rmt	394.00	402.00
vii)	300 mm.	Rmt	510.00	510.00
	(For 2.50 m. length)			
viii)	350 mm.	Rmt	644.00	657.00
ix)	400 mm.	Rmt	743.00	743.00
x)	450 mm.	Rmt	878.00	891.00
xi)	500 mm.	Rmt	941.00	941.00
xii)	600 mm.	Rmt	1188.00	1188.00
xiii)	700 mm.	Rmt	1584.00	1584.00
xiv)	800 mm.	Rmt	1782.00	1782.00
xv)	900 mm.	Rmt	2277.00	2277.00

Sr. No.	Description	Unit	Rate (in Rs.)		Rate (in Rs.)	
			2018-2019	2019-2020	4	5
1	2	3				
			Collar Joints	Rubber Ring Joints	Collar Joints	Rubber Ring Joints
xvi)	1000 mm.	Rmt	2772.00	2772.00		
xvii)	1100 mm.	Rmt	3780.00	3780.00		
xviii)	1200 mm.	Rmt	4512.00	4512.00		
xix)	1400 mm.	Rmt	5465.00	5574.00		
xx)	1600 mm.	Rmt	6275.00	6400.00		
xxi)	1800 mm.	Rmt	8789.00	8965.00		
e)	Class NP-III (For 2.00 m. length)					
)	80 mm	Rmt	265.00	269.00		
ii)	100 mm	Rmt	291.00	306.00		
iii)	150 mm	Rmt	331.00	337.00		
iv)	200 mm	Rmt	455.00	372.00		
v)	225 mm	Rmt	510.00	434.00		
vi)	250 mm	Rmt	540.00	510.00		
vii)	300 mm.	Rmt	701.00	714.00		
viii)	350 mm.	Rmt	1239.00	1188.00		
ix)	400 mm.	Rmt	1388.00	1267.00		
x)	450 mm.	Rmt	1651.00	1366.00		
xi)	500 mm.	Rmt	1833.00	1683.00		
xii)	600 mm.	Rmt	2415.00	1980.00		
xiii)	700 mm.	Rmt	3218.00	2772.00		
xiv)	800 mm.	Rmt	3911.00	2970.00		
xv)	900 mm.	Rmt	4518.00	3466.00		
xvi)	1000 mm.	Rmt	5148.00	3862.00		
xvii)	1100 mm.	Rmt	6394.00	6522.00		
xviii)	1200 mm.	Rmt	7435.00	7435.00		
xix)	1400 mm	Rmt	8742.00	8742.00		
xx)	1600 mm	Rmt	13135.00	13263.00		
xxi)	1800 mm	Rmt	16233.00	16233.00		

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019		Rate (in Rs.) 2019-2020	
1	2	3	4		5	
f)	Class ‘NP-IV’		Collar Joints	Rubber RingJoints	Collar Joints	Rubber RingJoints
i)	80 mm.	Rmt	285.00	290.00		
ii)	100 mm.	Rmt	334.00	340.00		
iii)	150 mm.	Rmt	378.00	386.00		
iv)	200 mm.	Rmt	528.00	421.00		
v)	225 mm.	Rmt	582.00	495.00		
vi)	250 mm.	Rmt	639.00	582.00		
vii)	300 mm.	Rmt	896.00	891.00		
viii)	350 mm.	Rmt	1361.00	1267.00		
ix)	400 mm.	Rmt	1457.00	1386.00		
x)	450 mm.	Rmt	1718.00	1485.00		
xi)	500 mm.	Rmt	2100.00	1832.00		
xii)	600 mm.	Rmt	2568.00	2376.00		
xiii)	700 mm.	Rmt	3844.00	2970.00		
xiv)	800 mm.	Rmt	4390.00	3218.00		
xv)	900 mm.	Rmt	5140.00	3763.00		
xvi)	1000 mm.	Rmt	7278.00	4159.00		
xvii)	1100 mm.	Rmt	7895.00	7981.00		
xviii)	1200 mm.	Rmt	7931.00	8089.00		
xix)	1400 mm.	Rmt	12383.00	11522.00		
xx)	1600 mm.	Rmt	15439.00	15481.00		
xxi)	1800 mm.	Rmt	21164.00	19980.00		
Note : Only 85% rate is payable till satisfactory hydraulic testing is given.						

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019		Rate (in Rs.) 2019-2020	
1	2	3	4		5	
2.	Lowering, laying and jointing in proper grade and alignment R.C.C. pipes with collar joints in C.M.1:1 proportion or socketed R.C.C. pipes with rubber joints (excluding cost of rubber ring or R.C.C. collar,) including cost of conveyance from stores to site of work, cost of jointing material, labour, etc. complete as directed by Engineer-in-charge (For all class of pipes.) as per IS-783-1985.		Collar Joints	Rubber Ring Joints		
i)	80 mm.	Rmt	44.00	32.00		
ii)	100 mm.	Rmt	52.00	37.00		
iii)	150 mm.	Rmt	80.00	56.00		
iv)	200 mm.	Rmt	106.00	75.00		
v)	225 mm.	Rmt	124.00	87.00		
vi)	250 mm.	Rmt	139.00	97.00		
vii)	300 mm.	Rmt	168.00	118.00		
viii)	350 mm.	Rmt	172.00	121.00		
ix)	400 mm.	Rmt	219.00	155.00		
x)	450 mm.	Rmt	267.00	185.00		
xi)	500 mm.	Rmt	290.00	202.00		
xii)	600 mm.	Rmt	367.00	254.00		
xiii)	700 mm.	Rmt	415.00	288.00		
xiv)	800 mm.	Rmt	481.00	333.00		
xv)	900 mm.	Rmt	529.00	368.00		
xvi)	1000 mm.	Rmt	579.00	403.00		
xvii)	1100 mm.	Rmt	805.00	545.00		
xviii)	1200 mm.	Rmt	854.00	580.00		
xix)	1400 mm.	Rmt	951.00	651.00		
xx)	1600 mm.	Rmt	1049.00	721.00		
xxi)	1800 mm.	Rmt	1147.00	790.00		

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020	
1	2	3	4	5	
3.	<p>Hydraulic testing of RCC pipe line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position.</p> <p>i) 80 mm. ii) 100 mm. iii) 150 mm. iv) 200 mm. v) 225 mm. Km 5125.00 3075.00 Km 6150.00 4100.00 Km 9225.00 6150.00 Km 11275.00 8200.00 Km 13325.00 9225.00</p> <p>vi) 250 mm. vii) 300 mm. viii) 350 mm. ix) 400 mm. x) 450 mm. Km 15375.00 11275.00 Km 18450.00 13325.00 Km 19475.00 13325.00 Km 24600.00 17425.00 Km 29725.00 20500.00</p> <p>xi) 500 mm. xii) 600 mm. xiii) 700 mm. xiv) 800 mm. xv) 900 mm. Km 31775.00 22550.00 Km 41000.00 28700.00 Km 46125.00 31775.00 Km 53300.00 36900.00 Km 58425.00 41000.00</p> <p>xvi) 1000 mm. xvii) 1100 mm. xviii) 1200 mm. xix) 1400 mm. xx) 1600 mm. xxi) 1800 mm. Km 64575.00 45100.00 Km 89175.00 60475.00 Km 95325.00 64575.00 Km 105575.00 72775.00 Km 116850.00 79950.00 Km 127100.00 88150.00</p>		Collar Joints	Rubber Ring Joints	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																																																																					
1	2	3	4	5																																																																					
1.	<p>VI. P. S. C. PIPES</p> <p>Providing ISI standard Pre - stressed Cement concrete pipes of following class and diameter including cost of all material and labour required, cost, inspection charges, transportaion to stores, unloading and stacking excluding GST levied by GI & GOM in all respect etc. complete as per IS-784-2001.</p> <p>i) Factory test pressure a) Site test pressure + 01N/mm², For working pressure upto 1 N/mm² b) Site test pressure + 02N/mm², For working pressure upto 1 N/mm²</p> <p>ii) Site test pressure - 1.5 times working pressure pertaining to the section or 1.1 times static pressure, which ever is more (such pressure is to be control within 25% of pumphead incase of pumping main)</p> <p>iii) Working pressure - The maximum sustained internal pressure excluding surge to which each portion of pipeline my be subjected when installed.</p> <p>Note : One rubber ring should be supplied with each pipe, cost included in rates below.</p> <p>a) Factory Test Pressure 2 kg/Sqcm</p> <table> <tbody> <tr> <td>i)</td><td>350 mm.</td><td>Rmt</td><td>2913.00</td></tr> <tr> <td>ii)</td><td>400 mm.</td><td>Rmt</td><td>3134.00</td></tr> <tr> <td>iii)</td><td>450 mm.</td><td>Rmt</td><td>3287.00</td></tr> <tr> <td>iv)</td><td>500 mm.</td><td>Rmt</td><td>3619.00</td></tr> <tr> <td>v)</td><td>600 mm.</td><td>Rmt</td><td>4351.00</td></tr> <tr> <td>vi)</td><td>700 mm.</td><td>Rmt</td><td>4844.00</td></tr> <tr> <td>vii)</td><td>800 mm.</td><td>Rmt</td><td>5982.00</td></tr> <tr> <td>viii)</td><td>900 mm.</td><td>Rmt</td><td>7439.00</td></tr> <tr> <td>ix)</td><td>1000 mm.</td><td>Rmt</td><td>8673.00</td></tr> <tr> <td>x)</td><td>1100 mm.</td><td>Rmt</td><td>9904.00</td></tr> <tr> <td>xi)</td><td>1200 mm.</td><td>Rmt</td><td>11444.00</td></tr> <tr> <td>xii)</td><td>1300 mm.</td><td>Rmt</td><td>13233.00</td></tr> <tr> <td>xiii)</td><td>1400 mm.</td><td>Rmt</td><td>14560.00</td></tr> <tr> <td>xiv)</td><td>1500 mm.</td><td>Rmt</td><td>16664.00</td></tr> <tr> <td>xv)</td><td>1600 mm.</td><td>Rmt</td><td>18483.00</td></tr> <tr> <td>xvi)</td><td>1700 mm.</td><td>Rmt</td><td>20302.00</td></tr> <tr> <td>xvii)</td><td>1800 mm.</td><td>Rmt</td><td>22122.00</td></tr> </tbody> </table>	i)	350 mm.	Rmt	2913.00	ii)	400 mm.	Rmt	3134.00	iii)	450 mm.	Rmt	3287.00	iv)	500 mm.	Rmt	3619.00	v)	600 mm.	Rmt	4351.00	vi)	700 mm.	Rmt	4844.00	vii)	800 mm.	Rmt	5982.00	viii)	900 mm.	Rmt	7439.00	ix)	1000 mm.	Rmt	8673.00	x)	1100 mm.	Rmt	9904.00	xi)	1200 mm.	Rmt	11444.00	xii)	1300 mm.	Rmt	13233.00	xiii)	1400 mm.	Rmt	14560.00	xiv)	1500 mm.	Rmt	16664.00	xv)	1600 mm.	Rmt	18483.00	xvi)	1700 mm.	Rmt	20302.00	xvii)	1800 mm.	Rmt	22122.00				
i)	350 mm.	Rmt	2913.00																																																																						
ii)	400 mm.	Rmt	3134.00																																																																						
iii)	450 mm.	Rmt	3287.00																																																																						
iv)	500 mm.	Rmt	3619.00																																																																						
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xv)	1600 mm.	Rmt	18483.00																																																																						
xvi)	1700 mm.	Rmt	20302.00																																																																						
xvii)	1800 mm.	Rmt	22122.00																																																																						

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	b) Factory Test Pressure 4 kg/Sqcm			
i)	350 mm.	Rmt	2913.00	
ii)	400 mm.	Rmt	3135.00	
iii)	450 mm.	Rmt	3287.00	
iv)	500 mm.	Rmt	3619.00	
v)	600 mm.	Rmt	4352.00	
vi)	700 mm.	Rmt	4846.00	
vii)	800 mm.	Rmt	5982.00	
viii)	900 mm.	Rmt	7440.00	
ix)	1000 mm.	Rmt	8675.00	
x)	1100 mm.	Rmt	9906.00	
xi)	1200 mm.	Rmt	11445.00	
xii)	1300 mm.	Rmt	13236.00	
xiii)	1400 mm.	Rmt	14561.00	
xiv)	1500 mm.	Rmt	16668.00	
xv)	1600 mm.	Rmt	18486.00	
xvi)	1700 mm.	Rmt	20306.00	
xvii)	1800 mm.	Rmt	22125.00	
	c) Factory Test Pressure 6 kg/Sqcm			
i)	350 mm.	Rmt	2918.00	
ii)	400 mm.	Rmt	3152.00	
iii)	450 mm.	Rmt	3297.00	
iv)	500 mm.	Rmt	3646.00	
v)	600 mm.	Rmt	4409.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	vi) 700 mm. vii) 800 mm. viii) 900 mm. ix) 1000 mm. x) 1100 mm. xi) 1200 mm. xii) 1300 mm. xiii) 1400 mm. xiv) 1500 mm. xv) 1600 mm. xvi) 1700 mm. xvii) 1800 mm.	Rmt	5014.00 6203.00 7734.00 9020.00 10271.00 11897.00 13744.00 15122.00 17322.00 19238.00 21154.00 23070.00	
d)	Factory Test Pressure 8 kg/Sqcm			
	i) 350 mm. ii) 400 mm. iii) 450 mm. iv) 500 mm. v) 600 mm.	Rmt	2921.00 3175.00 3317.00 3697.00 4558.00	
	vi) 700 mm. vii) 800 mm. viii) 900 mm. ix) 1000 mm. x) 1100 mm.	Rmt	5267.00 6466.00 8062.00 9426.00 10786.00	
	xi) 1200 mm. xii) 1300 mm. xiii) 1400 mm. xiv) 1500 mm. xv) 1600 mm. xvi) 1700 mm. xvii) 1800 mm.	Rmt	12489.00 14446.00 15966.00 18295.00 20642.00 22990.00 25340.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	e) Factory Test Pressure 10 kg/Sqcm			
i)	350 mm.	Rmt	2937.00	
ii)	400 mm.	Rmt	3217.00	
iii)	450 mm.	Rmt	3433.00	
iv)	500 mm.	Rmt	3845.00	
v)	600 mm.	Rmt	4754.00	
vi)	700 mm.	Rmt	5478.00	
vii)	800 mm.	Rmt	6796.00	
viii)	900 mm.	Rmt	8469.00	
ix)	1000 mm.	Rmt	9919.00	
x)	1100 mm.	Rmt	11382.00	
xi)	1200 mm.	Rmt	13186.00	
xii)	1300 mm.	Rmt	15267.00	
xiii)	1400 mm.	Rmt	17257.00	
xiv)	1500 mm.	Rmt	19784.00	
xv)	1600 mm.	Rmt	22045.00	
xvi)	1700 mm.	Rmt	24308.00	
xvii)	1800 mm.	Rmt	26570.00	
f) Factory Test Pressure 12 kg/Sqcm				
i)	350 mm.	Rmt	3008.00	
ii)	400 mm.	Rmt	3303.00	
iii)	450 mm.	Rmt	3542.00	
iv)	500 mm.	Rmt	3976.00	
v)	600 mm.	Rmt	4943.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	vi) 700 mm. vii) 800 mm. viii) 900 mm. ix) 1000 mm. x) 1100 mm.	Rmt	5726.00 7120.00 8852.00 10373.00 11890.00	
	xi) 1200 mm. xii) 1300 mm. xiii) 1400 mm. xiv) 1500 mm. xv) 1600 mm. xvi) 1700 mm. xvii) 1800 mm.	Rmt	14014.00 16138.00 17958.00 20563.00 22914.00 25263.00 27613.00	
	g) Factory Test Pressure 14 kg./Sqcm.			
	i) 350 mm. ii) 400 mm. iii) 450 mm. iv) 500 mm. v) 600 mm.	Rmt	3082.00 3391.00 3650.00 4105.00 5134.00	
	vi) 700 mm. vii) 800 mm. viii) 900 mm. ix) 1000 mm. x) 1100 mm.	Rmt	5973.00 7442.00 9275.00 11064.00 12714.00	
	xi) 1200 mm. xii) 1300 mm. xiii) 1400 mm.	Rmt	14739.00 17015.00 19390.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	xiv) 1500 mm. xv) 1600 mm.	Rmt	22219.00 24848.00	
	xvi) 1700 mm. xvii) 1800 mm.	Rmt	27477.00 30105.00	
	h) Factory Test Pressure 16 kg./Sqcm.			
	i) 350 mm.	Rmt	3150.00	
	ii) 400 mm.	Rmt	3482.00	
	iii) 450 mm.	Rmt	3764.00	
	iv) 500 mm.	Rmt	4242.00	
	v) 600 mm.	Rmt	5322.00	
	vi) 700 mm.	Rmt	6225.00	
	vii) 800 mm.	Rmt	7764.00	
	viii) 900 mm.	Rmt	10306.00	
	ix) 1000 mm.	Rmt	11598.00	
	x) 1100 mm.	Rmt	13919.00	
	xi) 1200 mm.	Rmt	16067.00	
	xii) 1300 mm.	Rmt	18493.00	
	xiii) 1400 mm.	Rmt	20412.00	
	xiv) 1500 mm.	Rmt	24245.00	
	xv) 1600 mm.	Rmt	27195.00	
	xvi) 1700 mm.	Rmt	30144.00	
	xvii) 1800 mm.	Rmt	33091.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	<p>i) Factory Test Pressure 18 kg/Sqcm</p> <p>i) 350 mm. Rmt 3222.00</p> <p>ii) 400 mm. Rmt 3578.00</p> <p>iii) 450 mm. Rmt 3871.00</p> <p>iv) 500 mm. Rmt 4373.00</p> <p>v) 600 mm. Rmt 5512.00</p> <p>vi) 700 mm. Rmt 6808.00</p> <p>vii) 800 mm. Rmt 8495.00</p> <p>viii) 900 mm. Rmt 10744.00</p> <p>ix) 1000 mm. Rmt 12626.00</p> <p>x) 1100 mm. Rmt 14570.00</p> <p>xi) 1200 mm. Rmt 16841.00</p> <p>xii) 1300 mm. Rmt 19397.00</p> <p>xiii) 1400 mm. Rmt 25596.00</p> <p>xiv) 1500 mm. Rmt 28861.00</p> <p>xv) 1600 mm. Rmt 32531.00</p> <p>xvi) 1700 mm. Rmt 36198.00</p> <p>xvii) 1800 mm. Rmt 39866.00</p>			

Sr. No.	Description	Unit	Rate (in Rs.)	Rate (in Rs.)
			2018-2019	2019-2020
1	2	3	4	5
	J) Factory Test pressure 20 kg/Sqcm.			
	i) 350 mm.	Rmt	3297.00	
	ii) 400 mm.	Rmt	3664.00	
	iii) 450 mm.	Rmt	3984.00	
	iv) 500 mm.	Rmt	4509.00	
	v) 600 mm.	Rmt	5707.00	
	vi) 700 mm.	Rmt	7541.00	
	vii) 800 mm.	Rmt	10033.00	
	viii) 900 mm.	Rmt	11859.00	
	ix) 1000 mm.	Rmt	14267.00	
	x) 1100 mm.	Rmt	16960.00	
	xi) 1200 mm.	Rmt	21329.00	
	xii) 1300 mm.	Rmt	23468.00	
	xiii) 1400 mm.	Rmt	27416.00	
	xiv) 1500 mm.	Rmt	31080.00	
	xv) 1600 mm.	Rmt	34760.00	
	xvi) 1700 mm.	Rmt	38439.00	
	xvii) 1800 mm.	Rmt	42119.00	
	Note : 1) Only 85% rates of providing item shall be payable till satisfactory hydraulic testing is given.			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
2.	<p>Lowering, laying and jointing in proper grade and alignment Pre-Stressed Cement Concrete Pipes with rubber ring joints including cost of conveyance from stores to site of works, all labour involved, etc. complete but excluding cost of rubber rings (for all class of pipes)</p> <p>i) 350 mm.</p> <p>ii) 400 mm.</p> <p>iii) 450 mm.</p> <p>iv) 500 mm.</p> <p>v) 600 mm.</p> <p>vi) 700 mm.</p> <p>vii) 800 mm.</p> <p>viii) 900 mm.</p> <p>ix) 1000 mm.</p> <p>x) 1100 mm</p> <p>xi) 1200 mm</p> <p>xii) 1300 mm</p> <p>xiii) 1400 mm</p> <p>xiv) 1500 mm</p> <p>xv) 1600 mm</p> <p>xvi) 1700 mm.</p> <p>xvii) 1800 mm.</p>	Rmt	105.00	
		Rmt	148.00	
		Rmt	179.00	
		Rmt	202.00	
		Rmt	271.00	
		Rmt	296.00	
		Rmt	334.00	
		Rmt	344.00	
		Rmt	444.00	
		Rmt	583.00	
		Rmt	624.00	
		Rmt	741.00	
		Rmt	782.00	
		Rmt	986.00	
		Rmt	1110.00	
		Rmt	1236.00	
		Rmt	1202.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
3.	<p>Hydraulic testing of Pre-Stressed Cement Concrete Pipes with rubber ring joints to specified pressure including cost of all materials and labour and water for testing for the length upto 1 km., using reciprocating type pumps which should be able to provide specified test pressure guages and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary.</p> <p>i) 350 mm. Km 11275.00</p> <p>ii) 400 mm. Km 16400.00</p> <p>iii) 450 mm. Km 19475.00</p> <p>iv) 500 mm. Km 22550.00</p> <p>v) 600 mm. Km 29725.00</p> <p>vi) 700 mm. Km 32800.00</p> <p>vii) 800 mm. Km 36900.00</p> <p>viii) 900 mm. Km 37925.00</p> <p>ix) 1000 mm. Km 49200.00</p> <p>x) 1100 mm Km 64575.00</p> <p>xi) 1200 mm Km 69700.00</p> <p>xii) 1300 mm Km 82000.00</p> <p>xiii) 1400 mm Km 87125.00</p> <p>xiv) 1500 mm Km 109675.00</p> <p>xv) 1600 mm Km 123000.00</p> <p>xvi) 1700 mm. Km 137350.00</p> <p>xvii) 1800 mm. Km 145550.00</p>			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
1.	<p>VII. BAR WRAPPED STEEL CYLINDER PIPES (BWSC)</p> <p>Providing and supplying European Standard EN 639/1994 and EN 641/1994 or AWWA C-303 standard and reinforced concrete pressure pipes cylinder type or IS-15155-2002 (Bar wrapped steel cylinder pipes suitable for overlapping steel welded joint or butt welded steel joints) of following class and diameter including cost of all material and labour required, inspection charges, transportation to stores, transit insurance, loading, unloading and stacking excluding GST levied by GOI & GOM in all respect,etc. complete.</p> <p>i) Factory test pressure</p> <p>a) Site test pressure + 01N/mm², For working pressure upto 1 N/mm²</p> <p>b) Site test pressure + 02N/mm², For working pressure upto 1 N/mm²</p> <p>ii) Site test pressure - 1.5 times working pressure pertaining to the section or 1.1 times static pressure, which ever is more (such pressure is to be controlled within 25% of pumphead incase of pumping main)</p> <p>iii) Working pressure - The maximum sustained internal pressure excluding surge to which each portion of pipeline may be subjected when installed.</p> <p>Note : 1) Class mentioned below represents the working pressure of pipe.</p> <p>2) For external coating at site to the joints, necessary polythene wrapping for pouring cement slurry shall also be given free with each pipe.</p>			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	a) Factory Test Pressure 4 kg / Sqcm			
i)	300 mm	Rmt	2948.00	
ii)	350 mm.	Rmt	3316.00	
iii)	400 mm.	Rmt	3637.00	
iv)	450 mm.	Rmt	4027.00	
v)	500 mm.	Rmt	4479.00	
vi)	600 mm.	Rmt	5824.00	
vii)	700 mm.	Rmt	6731.00	
viii)	800 mm.	Rmt	7310.00	
ix)	900 mm.	Rmt	10215.00	
x)	1000 mm.	Rmt	11772.00	
xi)	1100 mm.	Rmt	16919.00	
xii)	1200 mm.	Rmt	18868.00	
xiii)	1300 mm.	Rmt	22035.00	
xiv)	1400 mm.	Rmt	23634.00	
xv)	1500 mm.	Rmt	25222.00	
xvi)	1600 mm.	Rmt	27172.00	
xvii)	1700 mm.	Rmt	28827.00	
xviii)	1800 mm.	Rmt	30779.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	b) Factory Test Pressure 6 kg / Sqcm			
i)	300 mm	Rmt	2951.00	
ii)	350 mm.	Rmt	3319.00	
iii)	400 mm.	Rmt	3641.00	
iv)	450 mm.	Rmt	4029.00	
v)	500 mm.	Rmt	4488.00	
vi)	600 mm.	Rmt	5833.00	
vii)	700 mm.	Rmt	6737.00	
viii)	800 mm.	Rmt	7316.00	
ix)	900 mm.	Rmt	10221.00	
x)	1000 mm.	Rmt	11778.00	
xi)	1100 mm.	Rmt	16927.00	
xii)	1200 mm.	Rmt	18876.00	
xiii)	1300 mm.	Rmt	22039.00	
xiv)	1400 mm.	Rmt	23641.00	
xv)	1500 mm.	Rmt	25229.00	
xvi)	1600 mm.	Rmt	27180.00	
xvii)	1700 mm.	Rmt	28833.00	
xviii)	1800 mm.	Rmt	30784.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
c)	Factory Test Pressure 8 kg / Sqcm			
i)	300 mm	Rmt	2954.00	
ii)	350 mm.	Rmt	3324.00	
iii)	400 mm.	Rmt	3644.00	
iv)	450 mm.	Rmt	4032.00	
v)	500 mm.	Rmt	4497.00	
vi)	600 mm.	Rmt	5841.00	
vii)	700 mm.	Rmt	6746.00	
viii)	800 mm.	Rmt	7325.00	
ix)	900 mm.	Rmt	10231.00	
x)	1000 mm.	Rmt	11788.00	
xi)	1100 mm.	Rmt	16936.00	
xii)	1200 mm.	Rmt	18884.00	
xiii)	1300 mm.	Rmt	22049.00	
xiv)	1400 mm.	Rmt	23649.00	
xv)	1500 mm.	Rmt	25238.00	
xvi)	1600 mm.	Rmt	27190.00	
xvii)	1700 mm.	Rmt	28842.00	
xviii)	1800 mm.	Rmt	30795.00	
d)	Factory Test Pressure 10 kg / Sqcm			
i)	300 mm.	Rmt	2955.00	
ii)	350 mm.	Rmt	3325.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2013-2014	Rate (in Rs.) 2014-2015
1	2	3	4	5
	iii) 400 mm.	Rmt	3648.00	
	iv) 450 mm.	Rmt	4034.00	
	v) 500 mm.	Rmt	4510.00	
	vi) 600 mm.	Rmt	5856.00	
	vii) 700 mm.	Rmt	6761.00	
	viii) 800 mm.	Rmt	7340.00	
	ix) 900 mm.	Rmt	10245.00	
	x) 1000 mm.	Rmt	11801.00	
	xi) 1100 mm.	Rmt	16949.00	
	xii) 1200 mm.	Rmt	18899.00	
	xiii) 1300 mm.	Rmt	22064.00	
	xiv) 1400 mm.	Rmt	23662.00	
	xv) 1500 mm.	Rmt	25252.00	
	xvi) 1600 mm.	Rmt	27202.00	
	xvii) 1700 mm.	Rmt	28857.00	
	xviii) 1800 mm.	Rmt	30809.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2015-2017
1	2	3	4	5
e)	Factory Test Pressure 12 kg / Sqcm			
i)	300 mm	Rmt	2958.00	
ii)	350 mm.	Rmt	3329.00	
iii)	400 mm.	Rmt	3650.00	
iv)	450 mm.	Rmt	4039.00	
v)	500 mm.	Rmt	4530.00	
vi)	600 mm.	Rmt	5873.00	
vii)	700 mm.	Rmt	6778.00	
viii)	800 mm.	Rmt	8382.00	
ix)	900 mm.	Rmt	10245.00	
x)	1000 mm.	Rmt	12736.00	
xi)	1100 mm.	Rmt	16968.00	
xii)	1200 mm.	Rmt	18917.00	
xiii)	1300 mm.	Rmt	22082.00	
xiv)	1400 mm.	Rmt	23683.00	
xv)	1500 mm.	Rmt	25541.00	
xvi)	1600 mm.	Rmt	28253.00	
xvii)	1700 mm.	Rmt	30580.00	
xviii)	1800 mm.	Rmt	34009.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	f) Factory Test Pressure 14 kg / Sqcm			
i)	300 mm	Rmt	2963.00	
ii)	350 mm.	Rmt	3334.00	
iii)	400 mm.	Rmt	3653.00	
iv)	450 mm.	Rmt	4050.00	
v)	500 mm.	Rmt	4610.00	
vi)	600 mm.	Rmt	5980.00	
vii)	700 mm.	Rmt	7782.00	
viii)	800 mm.	Rmt	9123.00	
ix)	900 mm.	Rmt	11253.00	
x)	1000 mm.	Rmt	13549.00	
xi)	1100 mm.	Rmt	17038.00	
xii)	1200 mm.	Rmt	18910.00	
xiii)	1300 mm.	Rmt	22628.00	
xiv)	1400 mm.	Rmt	25570.00	
xv)	1500 mm.	Rmt	28450.00	
xvi)	1600 mm.	Rmt	31725.00	
xvii)	1700 mm.	Rmt	34833.00	
xviii)	1800 mm.	Rmt	38109.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	g) Factory Test Pressure 16 kg / Sqcm			
i)	300 mm	Rmt	2965.00	
ii)	350 mm.	Rmt	3337.00	
iii)	400 mm.	Rmt	3658.00	
iv)	450 mm.	Rmt	4193.00	
v)	500 mm.	Rmt	4945.00	
vi)	600 mm.	Rmt	6419.00	
vii)	700 mm.	Rmt	8283.00	
viii)	800 mm.	Rmt	9926.00	
ix)	900 mm.	Rmt	12275.00	
x)	1000 mm.	Rmt	14920.00	
xi)	1100 mm.	Rmt	17971.00	
xii)	1200 mm.	Rmt	20956.00	
xiii)	1300 mm.	Rmt	24965.00	
xiv)	1400 mm.	Rmt	28181.00	
xv)	1500 mm.	Rmt	31428.00	
xvi)	1600 mm.	Rmt	34950.00	
xvii)	1700 mm.	Rmt	38793.00	
xviii)	1800 mm.	Rmt	43287.00	
h) Factory Test Pressure 18 kg / Sqcm				
i)	300 mm.	Rmt	2970.00	
ii)	350 mm.	Rmt	3342.00	
iii)	400 mm.	Rmt	3712.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	iv) 450 mm. v) 500 mm. vi) 600 mm. vii) 700 mm. viii) 800 mm.	Rmt	4325.00 5092.00 6663.00 8759.00 10337.00	
	ix) 900 mm. x) 1000 mm. xi) 1100 mm. xii) 1200 mm.	Rmt	12776.00 15586.00 18754.00 21852.00	
	xiii) 1300 mm. xiv) 1400 mm. xv) 1500 mm. xvi) 1600 mm. xvii) 1700 mm. xviii) 1800 mm.	Rmt	25947.00 29651.00 32749.00 37150.00 41202.00 45603.00	
	i) Factory Test Pressure 20 kg / Sqcm			
	i) 300 mm. ii) 350 mm. iii) 400 mm.	Rmt	3030.00 3329.00 3920.00	
	iv) 450 mm. v) 500 mm. vi) 600 mm. vii) 700 mm. viii) 800 mm.	Rmt	4477.00 5429.00 7102.00 9234.00 11271.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	ix) 900 mm.	Rmt	13918.00	
	x) 1000 mm.	Rmt	17028.00	
	xi) 1100 mm.	Rmt	20437.00	
	xii) 1200 mm.	Rmt	23760.00	
	xiii) 1300 mm.	Rmt	28224.00	
	xiv) 1400 mm.	Rmt	32527.00	
	xv) 1500 mm.	Rmt	36633.00	
	xvi) 1600 mm.	Rmt	40916.00	
	xvii) 1700 mm.	Rmt	45709.00	
	xviii) 1800 mm.	Rmt	50598.00	

Notes :

- 1) For lowering, laying & pouring of cement mortar in the field on joints (after laying and welding), rates as per P. S. C. pipes lowering, laying and jointing shall be adopted.
 - 2) For field welding rates applicable for similar welding in M. S. pipes given in that section shall be adopted.
 - 3) Whenever manufacturer is separate and contractor for lowering laying, jointing and testing is separate, the principal contractor shall be enter into an agreement with B. W. S. C. pipe manufacturer for satisfactory manufacturing transporting, lowering, laying, jointing and testing of pipes.
- This footnote shall appear into the tender condition.**
- 4) Only 85% providing rates shall be payable till satisfactory Hydraulic testing is given.
 - 5) No negative tolerance shall be accepted for the M. S. Shell thickness of B. W. S. C. pipes over the thickness mentioned in E. N. 641 of AWWA AC 303.

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																																				
1	2	3	4	5																																				
	<p style="text-align: center;">VIII. GLASS REINFORCED PLASTIC PIPES (GRP)</p> <p>1. Providing and supplying Glass fibre reinforced polyester pipes confirming to BIS - 12709 / BIS 14402 with double bell REKA GRP coupling EPDM rubber gaskets for sealing of following pressure diameter and stiffness class including cost of all material and labour required, insurance, transportation to store, unloading and stacking excluding GST levied by GOI & GOM in all respect etc. complete.</p> <p style="text-align: center;">A. Class (SN) 2500</p> <p>a) 3 Kg/Sq. cm :</p> <table> <tbody> <tr> <td>i) 300 mm</td> <td>Rmt</td> <td>1377.00</td> </tr> <tr> <td>ii) 350 mm</td> <td>Rmt</td> <td>1593.00</td> </tr> <tr> <td>iii) 400 mm</td> <td>Rmt</td> <td>1754.00</td> </tr> <tr> <td>iv) 450 mm</td> <td>Rmt</td> <td>1973.00</td> </tr> <tr> <td>v) 500 mm</td> <td>Rmt</td> <td>2232.00</td> </tr> <tr> <td>vi) 600 mm</td> <td>Rmt</td> <td>2868.00</td> </tr> <tr> <td>vii) 700 mm</td> <td>Rmt</td> <td>3565.00</td> </tr> <tr> <td>viii) 800 mm</td> <td>Rmt</td> <td>4377.00</td> </tr> <tr> <td>ix) 900 mm</td> <td>Rmt</td> <td>5348.00</td> </tr> <tr> <td>x) 1000 mm</td> <td>Rmt</td> <td>6344.00</td> </tr> <tr> <td>xi) 1100 mm</td> <td>Rmt</td> <td>7712.00</td> </tr> <tr> <td>xii) 1200 mm</td> <td>Rmt</td> <td>8978.00</td> </tr> </tbody> </table>	i) 300 mm	Rmt	1377.00	ii) 350 mm	Rmt	1593.00	iii) 400 mm	Rmt	1754.00	iv) 450 mm	Rmt	1973.00	v) 500 mm	Rmt	2232.00	vi) 600 mm	Rmt	2868.00	vii) 700 mm	Rmt	3565.00	viii) 800 mm	Rmt	4377.00	ix) 900 mm	Rmt	5348.00	x) 1000 mm	Rmt	6344.00	xi) 1100 mm	Rmt	7712.00	xii) 1200 mm	Rmt	8978.00			
i) 300 mm	Rmt	1377.00																																						
ii) 350 mm	Rmt	1593.00																																						
iii) 400 mm	Rmt	1754.00																																						
iv) 450 mm	Rmt	1973.00																																						
v) 500 mm	Rmt	2232.00																																						
vi) 600 mm	Rmt	2868.00																																						
vii) 700 mm	Rmt	3565.00																																						
viii) 800 mm	Rmt	4377.00																																						
ix) 900 mm	Rmt	5348.00																																						
x) 1000 mm	Rmt	6344.00																																						
xi) 1100 mm	Rmt	7712.00																																						
xii) 1200 mm	Rmt	8978.00																																						

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	xiii) 1300 mm	Rmt	10166.00	
	xiv) 1400 mm	Rmt	11739.00	
	xv) 1500 mm	Rmt	13342.00	
	xvi) 1600 mm	Rmt	15538.00	
	xvii) 1700 mm	Rmt	18570.00	
	xviii) 1800 mm	Rmt	20264.00	
	xix) 1900 mm	Rmt	22652.00	
	xx) 2000 mm	Rmt	24490.00	
	xxi) 2100 mm	Rmt	27367.00	
	xxii) 2200 mm	Rmt	29376.00	
	xxiii) 2300 mm	Rmt	31747.00	
	xiv) 2400 mm	Rmt	33936.00	
b)	6 Kg/Sq. cm :			
i)	300 mm	Rmt	1430.00	
ii)	350 mm	Rmt	1634.00	
iii)	400 mm	Rmt	1836.00	
iv)	450 mm	Rmt	2038.00	
v)	500 mm	Rmt	2317.00	
vi)	600 mm	Rmt	3002.00	
vii)	700 mm	Rmt	3732.00	
viii)	800 mm	Rmt	4573.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	ix) 900 mm	Rmt	5571.00	
	x) 1000 mm	Rmt	6626.00	
	xi) 1100 mm	Rmt	8030.00	
	xii) 1200 mm	Rmt	9292.00	
	xiii) 1300 mm	Rmt	10632.00	
	xiv) 1400 mm	Rmt	12166.00	
	xv) 1500 mm	Rmt	13878.00	
	xvi) 1600 mm	Rmt	16186.00	
	xvii) 1700 mm	Rmt	19352.00	
	xviii) 1800 mm	Rmt	21057.00	
	xix) 1900 mm	Rmt	23563.00	
	xx) 2000 mm	Rmt	25446.00	
	xxi) 2100 mm	Rmt	28448.00	
	xxii) 2200 mm	Rmt	30657.00	
	xxiii) 2300 mm	Rmt	33041.00	
	xiv) 2400 mm	Rmt	35283.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	c) 9 Kg/Sq. cm :			
i)	300 mm	Rmt	1475.00	
ii)	350 mm	Rmt	1714.00	
iii)	400 mm	Rmt	1911.00	
iv)	450 mm	Rmt	2166.00	
v)	500 mm	Rmt	2456.00	
vi)	600 mm	Rmt	3185.00	
vii)	700 mm	Rmt	3967.00	
viii)	800 mm	Rmt	4941.00	
ix)	900 mm	Rmt	6036.00	
x)	1000 mm	Rmt	7147.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	xi) 1100 mm	Rmt	8637.00	
	xii) 1200 mm	Rmt	10029.00	
	xiii) 1300 mm	Rmt	11581.00	
	xiv) 1400 mm	Rmt	13307.00	
	xv) 1500 mm	Rmt	15113.00	
	xvi) 1600 mm	Rmt	17644.00	
	xvii) 1700 mm	Rmt	21140.00	
	xviii) 1800 mm	Rmt	23119.00	
	xix) 1900 mm	Rmt	25683.00	
	xx) 2000 mm	Rmt	27868.00	
	xxi) 2100 mm	Rmt	31013.00	
	xxii) 2200 mm	Rmt	33341.00	
	xxiii) 2300 mm	Rmt	36000.00	
	xiv) 2400 mm	Rmt	38824.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	d) 12 Kg/Sq. cm :			
i)	300 mm	Rmt	1563.00	
ii)	350 mm	Rmt	1804.00	
iii)	400 mm	Rmt	2009.00	
iv)	450 mm	Rmt	2624.00	
v)	500 mm	Rmt	2274.00	
vi)	600 mm	Rmt	3421.00	
vii)	700 mm	Rmt	4244.00	
viii)	800 mm	Rmt	5258.00	
ix)	900 mm	Rmt	6447.00	
x)	1000 mm	Rmt	7685.00	
xi)	1100 mm	Rmt	9420.00	
xii)	1200 mm	Rmt	10987.00	
xiii)	1300 mm	Rmt	12434.00	
xiv)	1400 mm	Rmt	14311.00	
xv)	1500 mm	Rmt	16363.00	
xvi)	1600 mm	Rmt	18979.00	
xvii)	1700 mm	Rmt	22784.00	
xviii)	1800 mm	Rmt	24979.00	
xix)	1900 mm	Rmt	27650.00	
xx)	2000 mm	Rmt	30068.00	
xxi)	2100 mm	Rmt	33521.00	
xxii)	2200 mm	Rmt	36173.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	e) 15 Kg/Sq. cm :			
i)	300 mm	Rmt	1627.00	
ii)	350 mm	Rmt	1879.00	
iii)	400 mm	Rmt	2091.00	
iv)	450 mm	Rmt	2409.00	
v)	500 mm	Rmt	2769.00	
vi)	600 mm	Rmt	3659.00	
vii)	700 mm	Rmt	4563.00	
viii)	800 mm	Rmt	5694.00	
ix)	900 mm	Rmt	7019.00	
x)	1000 mm	Rmt	8330.00	
xi)	1100 mm	Rmt	10220.00	
xii)	1200 mm	Rmt	11858.00	
xiii)	1300 mm	Rmt	13611.00	
xiv)	1400 mm	Rmt	15666.00	
xv)	1500 mm	Rmt	17773.00	
xvi)	1600 mm	Rmt	20622.00	
xvii)	1700 mm	Rmt	25102.00	
xvii)	1800 mm	Rmt	27433.00	
xix)	1900 mm	Rmt	30632.00	
xx)	2000 mm	Rmt	33337.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	B. Class (SN) 5000			
	a) 3 Kg/Sq. cm :			
i)	300 mm	Rmt	1476.00	
ii)	350 mm	Rmt	1732.00	
iii)	400 mm	Rmt	1973.00	
iv)	450 mm	Rmt	2245.00	
v)	500 mm	Rmt	2484.00	
vi)	600 mm	Rmt	3237.00	
vii)	700 mm	Rmt	4052.00	
viii)	800 mm	Rmt	5021.00	
ix)	900 mm	Rmt	6184.00	
x)	1000 mm	Rmt	7354.00	
xi)	1100 mm	Rmt	8915.00	
xii)	1200 mm	Rmt	10449.00	
xiii)	1300 mm	Rmt	11898.00	
xiv)	1400 mm	Rmt	13674.00	
xv)	1500 mm	Rmt	15605.00	
xvi)	1600 mm	Rmt	18140.00	
xvii)	1700 mm	Rmt	21737.00	
xviii)	1800 mm	Rmt	23841.00	
xix)	1900 mm	Rmt	26535.00	
xx)	2000 mm	Rmt	28861.00	
xxi)	2100 mm	Rmt	32133.00	
xxii)	2200 mm	Rmt	34684.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
b)	6 Kg/Sq. cm :			
i)	300 mm	Rmt	1499.00	
ii)	350 mm	Rmt	1762.00	
iii)	400 mm	Rmt	1946.00	
iv)	450 mm	Rmt	2219.00	
v)	500 mm	Rmt	2556.00	
vi)	600 mm	Rmt	3307.00	
vii)	700 mm	Rmt	4155.00	
viii)	800 mm	Rmt	5142.00	
ix)	900 mm	Rmt	6334.00	
x)	1000 mm	Rmt	7519.00	
xi)	1100 mm	Rmt	9197.00	
xii)	1200 mm	Rmt	10690.00	
xiii)	1300 mm	Rmt	12216.00	
xiv)	1400 mm	Rmt	14017.00	
xv)	1500 mm	Rmt	15969.00	
xvi)	1600 mm	Rmt	18587.00	
xvii)	1700 mm	Rmt	22268.00	
xviii)	1800 mm	Rmt	24416.00	
xix)	1900 mm	Rmt	27198.00	
xx)	2000 mm	Rmt	29633.00	
xxi)	2100 mm	Rmt	32964.00	
xxii)	2200 mm	Rmt	35636.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	c) 9 Kg/Sq. cm :			
i)	300 mm	Rmt	1554.00	
ii)	350 mm	Rmt	1821.00	
iii)	400 mm	Rmt	2049.00	
iv)	450 mm	Rmt	2333.00	
v)	500 mm	Rmt	2669.00	
vi)	600 mm	Rmt	3667.00	
vii)	700 mm	Rmt	4355.00	
viii)	800 mm	Rmt	5609.00	
ix)	900 mm	Rmt	6621.00	
x)	1000 mm	Rmt	7899.00	
xi)	1100 mm	Rmt	12752.00	
xii)	1200 mm	Rmt	14508.00	
xiii)	1300 mm	Rmt	16346.00	
xiv)	1400 mm	Rmt	18298.00	
xv)	1500 mm	Rmt	20961.00	
xvi)	1600 mm	Rmt	23813.00	
xvii)	1700 mm	Rmt	28669.00	
xviii)	1800 mm	Rmt	31240.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	d) 12 Kg/Sq. cm :			
i)	300 mm	Rmt	1598.00	
ii)	350 mm	Rmt	1895.00	
iii)	400 mm	Rmt	2095.00	
iv)	450 mm	Rmt	2426.00	
v)	500 mm	Rmt	2771.00	
vi)	600 mm	Rmt	3659.00	
vii)	700 mm	Rmt	4612.00	
viii)	800 mm	Rmt	5692.00	
ix)	900 mm	Rmt	7108.00	
x)	1000 mm	Rmt	8360.00	
xi)	1100 mm	Rmt	10275.00	
xii)	1200 mm	Rmt	11941.00	
xiii)	1300 mm	Rmt	13685.00	
xiv)	1400 mm	Rmt	15770.00	
xv)	1500 mm	Rmt	17912.00	
xvi)	1600 mm	Rmt	20703.00	
xvii)	1700 mm	Rmt	24921.00	
xviii)	1800 mm	Rmt	27396.00	
xix)	1900 mm	Rmt	30360.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	e) 15 Kg/Sq. cm :			
i)	300 mm	Rmt	1655.00	
ii)	350 mm	Rmt	1970.00	
iii)	400 mm	Rmt	2203.00	
iv)	450 mm	Rmt	2544.00	
v)	500 mm	Rmt	2903.00	
vi)	600 mm	Rmt	3853.00	
vii)	700 mm	Rmt	4850.00	
viii)	800 mm	Rmt	6068.00	
ix)	900 mm	Rmt	7484.00	
x)	1000 mm	Rmt	8922.00	
xi)	1100 mm	Rmt	10852.00	
xii)	1200 mm	Rmt	12715.00	
xiii)	1300 mm	Rmt	14530.00	
xiv)	1400 mm	Rmt	16765.00	
xv)	1500 mm	Rmt	19068.00	
xvi)	1600 mm	Rmt	22077.00	
xvii)	1700 mm	Rmt	26510.00	
xviii)	1800 mm	Rmt	29197.00	

Note : 1) For lowering, laying & jointing rates of GRP pipes 50 % rates for lowering, laying & jointing of PSC pipes of corresponding diameter shall be adopted.
2) Where manufacturer is separate & contractor for lowering, laying jointing & testing is separate the principal contractor shall enter into an agreement with G.R.P. pipe manufacturer for satisfactory manufacturing, transporting, lowering, laying, jointing & testing of pipe.
This foot Note shall appear in tender conditions.
3) Only 85 % Payment shall be payable till satisfactory hydraulic testing is given.

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
1.	IX. H. D. P. E. PIPES			
A.)	PE-100			
	a) 6 Kg/Sq. cm :			
i)	63 mm	Rmt	79.00	
ii)	75 mm	Rmt	111.00	
iii)	90 mm	Rmt	157.00	
iv)	110 mm	Rmt	228.00	
v)	125 mm	Rmt	313.00	
vi)	140 mm	Rmt	393.00	
vii)	160 mm	Rmt	508.00	
viii)	180 mm	Rmt	640.00	
ix)	200 mm	Rmt	750.00	
x)	225 mm	Rmt	966.00	
xi)	250 mm	Rmt	1188.00	
xii)	280 mm	Rmt	1488.00	
xiii)	315 mm	Rmt	1885.00	
xiv)	355 mm	Rmt	2389.00	
xv)	400 mm	Rmt	3130.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
xvi)	450 mm	Rmt	4124.00	
xvii)	500 mm	Rmt	5099.00	
xviii)	560 mm	Rmt	6383.00	
xix)	630 mm	Rmt	8033.00	
xx)	710 mm	Rmt	10372.00	
xxi)	800 mm	Rmt	12504.00	
xxii)	900 mm	Rmt	15841.00	
xxiii)	1000 mm	Rmt	19534.00	
b) 8 Kg/Sq. cm :				
i)	63 mm	Rmt	100.00	
ii)	75 mm	Rmt	134.00	
iii)	90 mm	Rmt	191.00	
iv)	110 mm	Rmt	279.00	
v)	125 mm	Rmt	362.00	
vi)	140 mm	Rmt	495.00	
vii)	160 mm	Rmt	642.00	
viii)	180 mm	Rmt	810.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	ix) 200 mm	Rmt	953.00	
	x) 225 mm	Rmt	1224.00	
	xi) 250 mm	Rmt	1508.00	
	xii) 280 mm	Rmt	1891.00	
	xiii) 315 mm	Rmt	2395.00	
	xiv) 355 mm	Rmt	3031.00	
	xv) 400 mm	Rmt	3979.00	
	xvi) 450 mm	Rmt	5320.00	
	xvii) 500 mm	Rmt	6562.00	
	xviii) 560 mm	Rmt	8238.00	
	xix) 630 mm	Rmt	10365.00	
	xx) 710 mm	Rmt	13384.00	
	xxi) 800 mm	Rmt	16145.00	
	xxii) 900 mm	Rmt	19947.00	
	xxiii) 1000 mm	Rmt	20437.00	

1	Description	Unit	Rate (in Rs.)	Rate (in Rs.)
			2018-2019	2019-2020
3	4	5		
c) 10 Kg/Sq. cm :				
i) 63 mm	Rmt	123.00		
ii) 75 mm	Rmt	174.00		
iii) 90 mm	Rmt	250.00		
iv) 110 mm	Rmt	368.00		
v) 125 mm	Rmt	473.00		
vi) 140 mm	Rmt	591.00		
vii) 160 mm	Rmt	768.00		
viii) 180 mm	Rmt	973.00		
ix) 200 mm	Rmt	1141.00		
x) 225 mm	Rmt	1461.00		
xi) 250 mm	Rmt	1823.00		
xii) 280 mm	Rmt	2252.00		
xiii) 315 mm	Rmt	2891.00		
xiv) 355 mm	Rmt	3628.00		
xv) 400 mm	Rmt	4833.00		

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
xvi)	450 mm	Rmt	6430.00	
xvii)	500 mm	Rmt	7948.00	
xviii)	560 mm	Rmt	9559.00	
xix)	630 mm	Rmt	12547.00	
xx)	710 mm	Rmt	15938.00	
xxi)	800 mm	Rmt	19210.00	
xxii)	900 mm	Rmt	19439.00	
xxiii)	1000 mm	Rmt	21840.00	
d)	12.5 Kg/Sq. cm :			
i)	63 mm	Rmt	146.00	
ii)	75 mm	Rmt	205.00	
iii)	90 mm	Rmt	295.00	
iv)	110 mm	Rmt	435.00	
v)	125 mm	Rmt	562.00	
vi)	140 mm	Rmt	705.00	
vii)	160 mm	Rmt	917.00	
viii)	180 mm	Rmt	1159.00	
ix)	200 mm	Rmt	1363.00	
x)	225 mm	Rmt	1758.00	
xi)	250 mm	Rmt	2162.00	
xii)	280 mm	Rmt	2712.00	
xiii)	315 mm	Rmt	3433.00	
xiv)	355 mm	Rmt	4359.00	
xv)	400 mm	Rmt	5729.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
xvi)	450 mm	Rmt	7656.00	
xvii)	500 mm	Rmt	9436.00	
xviii)	560 mm	Rmt	11485.00	
xix)	630 mm	Rmt	15086.00	
xx)	710 mm	Rmt	15558.00	
xxi)	800 mm	Rmt	17043.00	
xxii)	900 mm	Rmt	21592.00	
xxiii)	1000 mm	Rmt	26297.00	
e)	16 Kg/Sq. cm :			
i)	63 mm	Rmt	174.00	
ii)	75 mm	Rmt	248.00	
iii)	90 mm	Rmt	354.00	
iv)	110 mm	Rmt	523.00	
v)	125 mm	Rmt	677.00	
vi)	140 mm	Rmt	844.00	
vii)	160 mm	Rmt	1108.00	
viii)	180 mm	Rmt	1393.00	
ix)	200 mm	Rmt	2188.00	
x)	225 mm	Rmt	2765.00	
xi)	250 mm	Rmt	3410.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
xii)	280 mm	Rmt	4277.00	
xiii)	315 mm	Rmt	5407.00	
xiv)	355 mm	Rmt	6857.00	
xv)	400 mm	Rmt	8885.00	
xvi)	450 mm	Rmt	11261.00	
xvii)	500 mm	Rmt	13887.00	
xviii)	560 mm	Rmt	15277.00	
xix)	630 mm	Rmt	16040.00	
xx)	710 mm	Rmt	17124.00	
xxi)	800 mm	Rmt	20631.00	
xxii)	900 mm	Rmt	26112.00	
xxiii)	1000 mm	Rmt	32061.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
2.	<p>Lowering, Laying and Jointing H. D. P. E/M. D. P. E. pipes in proper position including all specials by compression fitting/electrofusion and butt fusion jointing procedure as per relevant IS Code complete with all materials for jointing procedure like Electrofusion machine, Electric heater/butt fusion welding machine with hydraulic jack, top loading clamp etc. and all labours as directed by engineer in charge as per IS-7634 Part II</p> <p>For all classes.</p> <p>i) 20 mm Rmt. 10.00</p> <p>ii) 25 mm Rmt. 15.00</p> <p>iii) 32 mm Rmt. 19.00</p> <p>iv) 40 mm Rmt. 25.00</p> <p>v) 50 mm Rmt. 31.00</p> <p>vi) 63 mm Rmt. 37.00</p> <p>vii) 75 mm Rmt. 40.00</p> <p>viii) 90 mm Rmt. 55.00</p> <p>ix) 110 mm Rmt. 58.00</p> <p>x) 125 mm Rmt. 66.00</p> <p>xi) 140 mm Rmt. 88.00</p> <p>xii) 160 mm Rmt. 95.00</p> <p>xiii) 180 mm Rmt. 95.00</p> <p>xiv) 200 mm Rmt. 106.00</p> <p>xv) 225 mm Rmt. 136.00</p> <p>xvi) 250 mm Rmt. 140.00</p> <p>xvii) 280 mm Rmt. 174.00</p>			

Sr. No.	Description	Unit	Rate (in Rs.)	Rate (in Rs.)
			2018-2019	2019-2020
1	2	3	4	5
	xviii) 315 mm xix) 355 mm xx) 400 mm xxi) 450 mm xxii) 500 mm xxiii) 560 mm xxiv) 630 mm	Rmt. Rmt. Rmt. Rmt. Rmt. Rmt. Rmt.	191.00 208.00 211.00 238.00 306.00 344.00 386.00	
3.	Hydraulic testing of H. D. P. E./ M. D. P. E. pipe line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position..			
	i) 20 mm dia ii) 25 mm dia iii) 32 mm dia	Km. Km. Km.	1025.00 2050.00 2050.00	
	iv) 40 mm dia v) 50 mm dia vi) 63 mm dia	Km. Km. Km.	3075.00 3075.00 4100.00	

Sr. No.	Description	Unit	Rate (in Rs.)	Rate (in Rs.)
			2018-2019	2019-2020
1	2	3	4	5
	vii) 75 mm dia	Km.	4100.00	
	viii) 90 mm dia	Km.	6150.00	
	ix) 110 mm dia	Km.	6150.00	
	x) 125 mm dia	Km.	7175.00	
	xi) 140 mm dia	Km.	10250.00	
	xii) 160 mm dia	Km.	10250.00	
	xiii) 180 mm dia	Km.	10250.00	
	xiv) 200 mm dia	Km.	11275.00	
	xv) 225 mm dia	Km.	15375.00	
	xvi) 250 mm dia	Km.	15375.00	
	xvii) 280 mm dia	Km.	19475.00	
	xviii) 315 mm dia	Km.	21525.00	
	xix) 355 mm dia	Km.	23575.00	
	xx) 400 mm dia	Km.	23575.00	
	xxi) 450 mm dia	Km.	26650.00	
	xxii) 500 mm dia	Km.	33825.00	
	xxiii) 560 mm dia	Km.	37925.00	
	xxiv) 630 mm dia	Km.	43050.00	

Sr. No.	Description	Unit	Rate (in Rs.)		Rate (in Rs.) 2019-2020
			2018-2019	4	
1	2	3	4	5	
4.	Providing supplying in standard length (PE material) HDPE Double wall corrugated pipe for non pressure underground drainage and sewerage with smooth internal & corrugated external surface confirming to IS 16098:Part-2 2013 with spigot or plain end with necessary jointing material coupler including transportation and freight charges, inspection charges, loading and unloading charges, conveyance to departmental store and stacking the same in closed shade duly protecting from direct sun ray and rains excluding GST levied by Gol and GoM in all respect, etc. complete.				
Rate for SN 4 and SN 8					
			Class SN4	Class SN 8	
i)	ID 135 mm dia	Rmt.	262.00	314.00	
ii)	ID 150 mm dia	Rmt.	335.00	401.00	
iii)	ID 170 mm dia	Rmt.	389.00	466.00	
iv)	ID 200 mm dia	Rmt.	533.00	640.00	
v)	ID 250 mm dia	Rmt.	879.00	1055.00	
vi)	ID 300 mm dia	Rmt.	1357.00	1629.00	
vii)	ID 400 mm dia	Rmt.	1832.00	2198.00	
viii)	ID 500 mm dia	Rmt.	3025.00	3630.00	
ix)	ID 600 mm dia	Rmt.	4604.00	5525.00	
x)	ID 800 mm dia	Rmt.	7466.00	8958.00	

Sr. No.	Description	Unit	Rate (in Rs.)	Rate (in Rs.)
			2018-2019	2019-2020
1	2	3	4	5
5.	Lowering, Laying and Jointing (PE material) HDPE double wall corrugated pipe for non pressure underground by heating to the ends of pipes with the help of tefflon coated electric heater to the required temparature and then pressing the ends together against each other, to form a monolithic & leak proof joint by thermosetting process. The pressing may be required to be done with Jacks/ Hydraulic Jacks/Butt fusion machine etc. complete with all materials labours as directed by Engineer - in - charge. including			
Rate for SN 4 and SN 8				
i)	ID 135 mm dia	Rmt.	31.00	
ii)	ID 150 mm dia	Rmt.	33.00	
iii)	ID 170 mm dia	Rmt.	36.00	
iv)	ID 200 mm dia	Rmt.	39.00	
v)	ID 250 mm dia	Rmt.	48.00	
vi)	ID 300 mm dia	Rmt.	59.00	
vii)	ID 400 mm dia	Rmt.	72.00	
viii)	ID 500 mm dia	Rmt.	85.00	
ix)	ID 600 mm dia	Rmt.	98.00	
x)	ID 800 mm dia	Rmt.	114.00	

Sr. No.	Description	Unit	Rate (in Rs.)	Rate (in Rs.)
			2018-2019	2019-2020
1	2	3	4	5
6.	Hydraulic testing of HDPE double wall corrugated pipe for non pressure underground line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position			
Rate for SN 4 and SN 8				
i)	ID 135 mm dia	Km.	3075.00	
ii)	ID 150 mm dia	Km.	3075.00	
iii)	ID 170 mm dia	Km.	4100.00	
iv)	ID 200 mm dia	Km.	4100.00	
v)	ID 250 mm dia	Km.	5125.00	
vi)	ID 300 mm dia	Km.	6150.00	
vii)	ID 400 mm dia	Km.	7175.00	
viii)	ID 500 mm dia	Km.	8200.00	
ix)	ID 600 mm dia	Km.	10250.00	
x)	ID 800 mm dia	Km.	11275.00	
Only 85% rates of providing item shall be payable till satisfactory hydraulic testing is given.				

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																																																																																											
1	2	3	4	5																																																																																											
1.	<p>X. M. D. P. E. PIPES</p> <p>Providing and Supplying Blue MDPE pipes conforming to ISO 4427:1996 manufactured from virgin resin PE 80 Food grade compounded Raw Material having Blue Colour only with quality assurance certificate from quality agencies like WRC / CIPET (India) / DVGM / KIWA / SPGN etc. for usage in Drinking Water system. The cost shall include testing of all materials, Inspection charges, transportation up to store, transit insurance, loading, as specified and directed, unloading, stacking excluding GST levied by GOI & GOM in all respect, etc. complete as specified and directed.</p> <p>a) PN 16 (SDR 9)</p> <table> <tbody> <tr> <td>i) 20 mm</td> <td>Rmt</td> <td>23.00</td> <td></td> <td></td> </tr> <tr> <td>ii) 25 mm</td> <td>Rmt</td> <td>31.00</td> <td></td> <td></td> </tr> <tr> <td>iii) 32 mm</td> <td>Rmt</td> <td>51.00</td> <td></td> <td></td> </tr> <tr> <td>iv) 40 mm</td> <td>Rmt</td> <td>75.00</td> <td></td> <td></td> </tr> <tr> <td>v) 50 mm</td> <td>Rmt</td> <td>113.00</td> <td></td> <td></td> </tr> <tr> <td>vi) 63 mm</td> <td>Rmt</td> <td>167.00</td> <td></td> <td></td> </tr> <tr> <td>vii) 75 mm</td> <td>Rmt</td> <td>225.00</td> <td></td> <td></td> </tr> <tr> <td>viii) 90 mm</td> <td>Rmt</td> <td>326.00</td> <td></td> <td></td> </tr> <tr> <td>ix) 110 mm</td> <td>Rmt</td> <td>483.00</td> <td></td> <td></td> </tr> <tr> <td>x) 125 mm</td> <td>Rmt</td> <td>624.00</td> <td></td> <td></td> </tr> <tr> <td>xi) 140 mm</td> <td>Rmt</td> <td>784.00</td> <td></td> <td></td> </tr> <tr> <td>xii) 160 mm</td> <td>Rmt</td> <td>1039.00</td> <td></td> <td></td> </tr> <tr> <td>xiii) 180 mm</td> <td>Rmt</td> <td>1316.00</td> <td></td> <td></td> </tr> <tr> <td>xiv) 200 mm</td> <td>Rmt</td> <td>1627.00</td> <td></td> <td></td> </tr> <tr> <td>xv) 225 mm</td> <td>Rmt</td> <td>2060.00</td> <td></td> <td></td> </tr> <tr> <td>xvi) 250 mm</td> <td>Rmt</td> <td>2534.00</td> <td></td> <td></td> </tr> <tr> <td>xvii) 280 mm</td> <td>Rmt</td> <td>3184.00</td> <td></td> <td></td> </tr> <tr> <td>xviii) 315 mm</td> <td>Rmt</td> <td>4095.00</td> <td></td> <td></td> </tr> </tbody> </table>	i) 20 mm	Rmt	23.00			ii) 25 mm	Rmt	31.00			iii) 32 mm	Rmt	51.00			iv) 40 mm	Rmt	75.00			v) 50 mm	Rmt	113.00			vi) 63 mm	Rmt	167.00			vii) 75 mm	Rmt	225.00			viii) 90 mm	Rmt	326.00			ix) 110 mm	Rmt	483.00			x) 125 mm	Rmt	624.00			xi) 140 mm	Rmt	784.00			xii) 160 mm	Rmt	1039.00			xiii) 180 mm	Rmt	1316.00			xiv) 200 mm	Rmt	1627.00			xv) 225 mm	Rmt	2060.00			xvi) 250 mm	Rmt	2534.00			xvii) 280 mm	Rmt	3184.00			xviii) 315 mm	Rmt	4095.00						
i) 20 mm	Rmt	23.00																																																																																													
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xviii) 315 mm	Rmt	4095.00																																																																																													

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	b) PN 12.5 (SDR 11)			
i)	25 mm	Rmt	29.00	
ii)	32 mm	Rmt	48.00	
iii)	40 mm	Rmt	71.00	
iv)	50 mm	Rmt	100.00	
v)	63 mm	Rmt	135.00	
vi)	75 mm	Rmt	188.00	
vii)	90 mm	Rmt	273.00	
viii)	110 mm	Rmt	401.00	
ix)	125 mm	Rmt	523.00	
x)	140 mm	Rmt	652.00	
xi)	160 mm	Rmt	854.00	
xii)	180 mm	Rmt	1108.00	
xiii)	200 mm	Rmt	1357.00	
xiv)	225 mm	Rmt	1718.00	
xv)	250 mm	Rmt	2128.00	
xvi)	280 mm	Rmt	2652.00	
xvii)	315 mm	Rmt	3362.00	
c) PN 10 (SDR 13.6)				
i)	63 mm	Rmt	115.00	
ii)	75 mm	Rmt	162.00	
iii)	90 mm	Rmt	233.00	
iv)	110 mm	Rmt	344.00	
v)	125 mm	Rmt	443.00	
vi)	140 mm	Rmt	556.00	
vii)	160 mm	Rmt	726.00	
viii)	180 mm	Rmt	919.00	
ix)	200 mm	Rmt	1133.00	
x)	225 mm	Rmt	1436.00	
xi)	250 mm	Rmt	1767.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	xii) 280 mm xiii) 315 mm	Rmt Rmt	2215.00 2798.00	
	d) PN 8 (SDR 17)			
	i) 63 mm. ii) 75 mm iii) 90 mm iv) 110 mm v) 125 mm vi) 140 mm vii) 160 mm	Rmt Rmt Rmt Rmt Rmt Rmt Rmt	92.00 131.00 189.00 280.00 358.00 450.00 588.00	
	viii) 180 mm ix) 200 mm x) 225 mm xi) 250 mm	Rmt Rmt Rmt Rmt	747.00 919.00 1167.00 1463.00	
	xii) 280 mm xiii) 315 mm	Rmt Rmt	1832.00 2321.00	
	e) PN 6 (SDR 21)			
	i) 63 mm. ii) 75 mm. iii) 90 mm	Rmt Rmt Rmt	71.00 104.00 146.00	
	iv) 110 mm v) 125 mm vi) 140 mm vii) 160 mm	Rmt Rmt Rmt Rmt	221.00 279.00 353.00 461.00	
	viii) 180 mm ix) 200 mm x) 225 mm xi) 250 mm xii) 280 mm xiii) 315 mm	Rmt Rmt Rmt Rmt Rmt Rmt	576.00 717.00 907.00 1110.00 1403.00 1764.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	
2.	Providing & Supply of Electro Fusion Fittings in accordance with BS EN12201: Part-3 suitable for drinking water with in black/ blue colour manufactured from compounded PE80/ PE100 virgin polymer and compatible with PE80/PE100 pipes, in pressure rating SDR11 with min PN12.5 rated for water application and shall be inclusive of all cost such as testing, inspection charges, transportation up to store, transit insurance, loading, unloading, stacking excluding GST levied by GOI & GOM in all respect, etc. complete.			
	Couplers 20	No.	84.00	
	Couplers 25	No.	84.00	
	Couplers 32	No.	84.00	
	Couplers 40	No.	145.00	
	Couplers 50	No.	181.00	
	Couplers 63	No.	215.00	
	Couplers 75	No.	364.00	
	Couplers 90	No.	399.00	
	Couplers 110	No.	555.00	
	Couplers 125	No.	565.00	
	Couplers 140	No.	1209.00	
	Couplers 160	No.	1313.00	
	Couplers 180	No.	1885.00	
	Couplers 200	No.	2117.00	
	Couplers 225	No.	2668.00	
	Couplers 250	No.	4159.00	
	Couplers 280	No.	4684.00	
	Couplers 315	No.	5116.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	Equal or Reducing Tee			
	Equal Tee 20	No.	176.00	
	Equal Tee 25	No.	176.00	
	Equal Tee 32	No.	176.00	
	Equal Tee 40	No.	388.00	
	Equal Tee 50	No.	396.00	
	Equal Tee 63	No.	648.00	
	Equal Tee 75	No.	950.00	
	Equal Tee 90	No.	1355.00	
	Equal Tee 110	No.	1882.00	
	Equal Tee 125	No.	2596.00	
	Equal Tee 160	No.	4500.00	
	Equal Tee 180	No.	5652.00	
	Equal Tee 200	No.	9060.00	
	Equal Tee 225	No.	10217.00	
	Equal Tee 250	No.	14968.00	
	Elbow 90 Deg. 20	No.	93.00	
	Elbow 90 Deg. 25	No.	93.00	
	Elbow 90 Deg. 32	No.	94.00	
	Elbow 90 Deg. 40	No.	128.00	
	Elbow 90 Deg. 50	No.	152.00	
	Elbow 90 Deg. 63	No.	211.00	
	Elbow 90 Deg. 75	No.	330.00	
	Elbow 90 Deg. 90	No.	389.00	
	Elbow 90 Deg. 110	No.	536.00	
	Elbow 90 Deg. 125	No.	683.00	
	Elbow 90 Deg. 160	No.	1494.00	
	Elbow 90 Deg. 180	No.	1732.00	
	Elbow 90 Deg. 200	No.	2241.00	
	Elbow 90 Deg. 225	No.	4885.00	
	Elbow 90 Deg. 250	No.	9153.00	

Sr. No.	Description	Unit	Rate	Rate
			(in Rs.) 2018-2019	(in Rs.) 2019-2020
1	2	3	4	5
	Elbow 45 Deg. 32	No.	100.00	
	Elbow 45 Deg. 40	No.	121.00	
	Elbow 45 Deg. 50	No.	144.00	
	Elbow 45 Deg. 63	No.	201.00	
	Elbow 45 Deg. 75	No.	313.00	
	Elbow 45 Deg. 90	No.	370.00	
	Elbow 45 Deg. 110	No.	536.00	
	Elbow 45 Deg. 125	No.	683.00	
	Elbow 45 Deg. 160	No.	1258.00	
	Elbow 45 Deg. 180	No.	1648.00	
	Elbow 45 Deg. 200	No.	1732.00	
	Elbow 45 Deg. 225	No.	2241.00	
	Elbow 45 Deg. 250	No.	4885.00	
	Reducer 25 x 20	No.	126.00	
	Reducer 32 x 20	No.	132.00	
	Reducer 32 x 25	No.	138.00	
	Reducer 40 x 32	No.	150.00	
	Reducer 50 x 32	No.	150.00	
	Reducer 50 x 40	No.	150.00	
	Reducer 63 x 32	No.	181.00	
	Reducer 63 x 40	No.	181.00	
	Reducer 63 x 50	No.	181.00	
	Reducer 90 x 63	No.	449.00	
	Reducer 110 x 75	No.	583.00	
	Reducer 110 x 90	No.	583.00	
	Reducer 125 x 90	No.	647.00	
	Reducer 160 x 110	No.	1145.00	
	Reducer 180 x 125	No.	1426.00	
	Reducer 200 x 160	No.	1690.00	
	Reducer 225 x 160	No.	2472.00	
	Reducer 250 x 160	No.	3414.00	
	Reducer 250 x 200	No.	3734.00	

Sr. No.	Description	Unit	Rate (in Rs.)	Rate (in Rs.)
			2018-2019	
1	2	3	4	5
	End Cap 20	No.	33.00	
	End Cap 25	No.	33.00	
	End Cap 32	No.	46.00	
	End Cap 40	No.	50.00	
	End Cap 50	No.	53.00	
	End Cap 63	No.	70.00	
	End Cap 75	No.	258.00	
	End Cap 90	No.	293.00	
	End Cap 110	No.	412.00	
	End Cap 125	No.	522.00	
	End Cap 140	No.	854.00	
	End Cap 160	No.	925.00	
	End Cap 180	No.	1014.00	
	End Cap 200	No.	1719.00	
	End Cap 225	No.	2953.00	
	End Cap 250	No.	3806.00	
	End Cap 315	No.	6296.00	
	Ferrule tapping tee 63 x 1/2"	No.	633.00	
	Ferrule tapping tee 63 x 3/4"	No.	633.00	
	Ferrule tapping tee 63 x 1"	No.	633.00	
	Ferrule tapping tee 75 x 1/2"	No.	633.00	
	Ferrule tapping tee 75 x 3/4"	No.	633.00	
	Ferrule tapping tee 75 x 1"	No.	633.00	
	Ferrule tapping tee 90 x 1/2"	No.	633.00	
	Ferrule tapping tee 90 x 3/4"	No.	624.00	
	Ferrule tapping tee 90 x 1"	No.	624.00	
	Ferrule tapping tee 90 x 1 1/4"	No.	822.00	
	Ferrule tapping tee 90 x 1 1/2"	No.	822.00	
	Ferrule tapping tee 90 x 2"	No.	822.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	Ferrule tapping tee 110 x 1/2"	No.	633.00	
	Ferrule tapping tee 110 x 3/4"	No.	633.00	
	Ferrule tapping tee 110 x 1"	No.	633.00	
	Ferrule tapping tee 110 x 1¼"	No.	822.00	
	Ferrule tapping tee 100 x 1½"	No.	822.00	
	Ferrule tapping tee 110 x 2"	No.	822.00	
	Ferrule tapping tee 160 x 1/2"	No.	633.00	
	Ferrule tapping tee 160 x 3/4"	No.	633.00	
	Ferrule tapping tee 160 x 1"	No.	633.00	
	Ferrule tapping tee 160 x 1¼"	No.	895.00	
	Ferrule tapping tee 160 x 1½"	No.	895.00	
	Ferrule tapping tee 160 x 2"	No.	895.00	
	Ferrule tapping tee 200 x 1/2"	No.	893.00	
	Ferrule tapping tee 200 x 3/4"	No.	893.00	
	Ferrule tapping tee 200 x 1"	No.	893.00	
	Ferrule tapping tee 200 x 1¼"	No.	1288.00	
	Ferrule tapping tee 200 x 1½"	No.	1288.00	
	Ferrule tapping tee 200 x 2"	No.	1288.00	
	Ferrule tapping tee 250 x 1/2"	No.	893.00	
	Ferrule tapping tee 250 x 3/4"	No.	893.00	
	Ferrule tapping tee 250 x 1"	No.	893.00	
	Ferrule tapping tee 250 x 1¼"	No.	1288.00	
	Ferrule tapping tee 250 x 1½"	No.	1288.00	
	Ferrule tapping tee 250 x 2"	No.	1288.00	
	Ferrule tapping tee 315 x 1/2"	No.	1063.00	
	Ferrule tapping tee 315 x 3/4"	No.	1063.00	
	Ferrule tapping tee 315 x 1"	No.	1063.00	
	Ferrule tapping tee 315 x 1¼"	No.	1444.00	
	Ferrule tapping tee 315 x 1½"	No.	1444.00	
	Ferrule tapping tee 315 x 2"	No.	1444.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
3.	Providing & Supply of Compression fittings , PN16 rated in conformation to ISO:14236-2000 and shall be tested as per ISO:3459, ISO:3501 & ISO:3503, suitable for drinking water & approved by WRAS, UK/KIWA etc, in food grade polypropylene and shall be inclusive of all cost such as testing, inspection charges, transportation up to store, transit insurance, loading, unloading, stacking excluding GST levied by GOI & GOM in all respect, etc. complete.			
	Male Adaptor 20 x 1/2"	No.	57.00	
	Male Adaptor 25 x 3/4"	No.	65.00	
	Male Adaptor 32 x 1"	No.	84.00	
	Male Adaptor 40 x 1¼"	No.	154.00	
	Male Adaptor 50 x 1½"	No.	202.00	
	Male Adaptor 63 x 2"	No.	287.00	
	Female Adaptor 20 x 1/2"	No.	61.00	
	Female Adaptor 25 x 3/4"	No.	72.00	
	Female Adaptor 32 x 1"	No.	91.00	
	Female Adaptor 40 x 1¼"	No.	169.00	
	Female Adaptor 50 x 1½"	No.	216.00	
	Female Adaptor 63 x 2"	No.	305.00	
	Coupling 20 x 20	No.	59.00	
	Coupling 25 x 25	No.	64.00	
	Coupling 32 x 32	No.	82.00	
	Coupling 40 x 40	No.	156.00	
	Coupling 50 x 50	No.	201.00	
	Coupling 63 x 63	No.	290.00	
	Reducing Coupling 25 x 20	No.	107.00	
	Reducing Coupling 32 x 20	No.	142.00	
	Reducing Coupling 32 x 25	No.	142.00	
	Reducing Coupling 40 x 25	No.	242.00	
	Reducing Coupling 40 x 32	No.	242.00	
	Reducing Coupling 50 x 32	No.	313.00	
	Reducing Coupling 50 x 40	No.	313.00	
	Reducing Coupling 63 x 50	No.	444.00	

Sr. No.	Description	Unit	Rate (in Rs.)	Rate (in Rs.)
			2018-2019	2019-2020
1	2	3	4	5
	90 Deg. Elbow 20	No.	109.00	
	90 Deg. Elbow 25	No.	130.00	
	90 Deg. Elbow 32	No.	159.00	
	90 Deg. Elbow 40	No.	261.00	
	90 Deg. Elbow 50	No.	371.00	
	90 Deg. Elbow 63	No.	502.00	
	90 Deg. Elbow threaded male off take 20 x 1/2"	No.	65.00	
	90 Deg. Elbow threaded male off take 25 x 3/4"	No.	80.00	
	90 Deg. Elbow threaded male off take 32 x 1"	No.	103.00	
	90 Deg. Elbow threaded male off take 40 x 1/4"	No.	164.00	
	90 Deg. Elbow threaded male off take 50 x 1/2"	No.	225.00	
	90 Deg. Elbow threaded male off take 63 x 2"	No.	313.00	
	90 Deg. Elbow threaded Female off take 20 x 1/2"	No.	75.00	
	90 Deg. Elbow threaded Female off take 25 x 3/4"	No.	92.00	
	90 Deg. Elbow threaded Female off take 32 x 1"	No.	110.00	
	90 Deg. Elbow threaded Female off take 40 x 1¼"	No.	215.00	
	90 Deg. Elbow threaded Female off take 50 x 1½"	No.	281.00	
	90 Deg. Elbow threaded Female off take 63 x 2"	No.	371.00	
	Equal Tee 20 x 20 x 20	No.	130.00	
	Equal Tee 25 x 25 x 25	No.	170.00	
	Equal Tee 32 x 32 x 32	No.	220.00	
	Equal Tee 40 x 40 x 40	No.	365.00	
	Equal Tee 50 x 50 x 50	No.	494.00	
	Equal Tee 63 x 63 x 63	No.	312.00	
	End Cap 20	No.	33.00	
	End Cap 25	No.	33.00	
	End Cap 32	No.	46.00	
	End Cap 40	No.	50.00	
	End Cap 50	No.	53.00	
	End Cap 63	No.	70.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020													
1	2	3	4	5													
1.	<p>XI. P. C. C. PIPES</p> <p>Providing and Supplying Prestressed Concrete Cylinder Pipes suitable for sliding ovrelap weld joint or confined rubber ring joint with necessary rubber ring of following class and diameter including cost of transportation, inspection charges to store, transit insurance, unloading and stacking excluding GST levied by GOI & GOM in all respect etc. complete.</p> <p>i) Factory test pressure</p> <p>a) Site test pressure + 01N/mm², For working pressure upto 1 N/mm²</p> <p>b) Site test pressure + 02N/mm², For working pressure upto 1 N/mm²</p> <p>ii) Site test pressure - 1.5 times working pressure pertaining to the section or 1.1 times static pressure, which ever is more (such pressure is to be control within 25% of pumphead incase of pumping main)</p> <p>iii) Working pressure - The maximum sustained internal pressure excluding surge to which each portion of pipeline my be subjected when installed.</p> <p>As Per 784 : 2001</p> <p>a) F T P - 4 Kg/Sq. cm</p> <table> <tbody> <tr> <td>i) 350 mm</td> <td>Rmt</td> <td>4041.00</td> </tr> <tr> <td>ii) 400 mm</td> <td>Rmt</td> <td>4442.00</td> </tr> <tr> <td>iii) 450 mm</td> <td>Rmt</td> <td>4880.00</td> </tr> <tr> <td>iv) 500 mm</td> <td>Rmt</td> <td>5400.00</td> </tr> </tbody> </table>	i) 350 mm	Rmt	4041.00	ii) 400 mm	Rmt	4442.00	iii) 450 mm	Rmt	4880.00	iv) 500 mm	Rmt	5400.00				
i) 350 mm	Rmt	4041.00															
ii) 400 mm	Rmt	4442.00															
iii) 450 mm	Rmt	4880.00															
iv) 500 mm	Rmt	5400.00															

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
v)	600 mm	Rmt	6530.00	
vi)	700 mm	Rmt	7544.00	
vii)	800 mm	Rmt	8495.00	
viii)	900 mm	Rmt	10411.00	
ix)	1000 mm	Rmt	12023.00	
x)	1100 mm	Rmt	13461.00	
xi)	1200 mm	Rmt	14799.00	
xii)	1300 mm	Rmt	17099.00	
xiii)	1400 mm	Rmt	18568.00	
xiv)	1500 mm	Rmt	20775.00	
xv)	1600 mm	Rmt	22175.00	
xvi)	1700 mm.	Rmt	23577.00	
xvii)	1800 mm.	Rmt	24975.00	
b)	T P - 5.5 Kg/Sq. cm			
i)	350 mm	Rmt	4041.00	
ii)	400 mm	Rmt	4463.00	
iii)	450 mm	Rmt	4906.00	
iv)	500 mm	Rmt	5431.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
v)	600 mm	Rmt	6575.00	
vi)	700 mm	Rmt	7604.00	
vii)	800 mm	Rmt	8594.00	
viii)	900 mm	Rmt	10507.00	
ix)	1000 mm	Rmt	12141.00	
x)	1100 mm	Rmt	13616.00	
xi)	1200 mm	Rmt	15533.00	
xii)	1300 mm	Rmt	17351.00	
xiii)	1400 mm	Rmt	18890.00	
xiv)	1500 mm	Rmt	21112.00	
xv)	1600 mm	Rmt	22513.00	
xvi)	1700 mm.	Rmt	23913.00	
xvii)	1800 mm.	Rmt	25314.00	
c)	F T P - 7 Kg/Sq. cm			
i)	350 mm	Rmt	4050.00	
ii)	400 mm	Rmt	4481.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	iii) 450 mm	Rmt	4928.00	
	iv) 500 mm	Rmt	5460.00	
	v) 600 mm	Rmt	6619.00	
	vi) 700 mm	Rmt	7675.00	
	vii) 800 mm	Rmt	8716.00	
	viii) 900 mm	Rmt	10642.00	
	ix) 1000 mm	Rmt	12325.00	
	x) 1100 mm	Rmt	13841.00	
	xi) 1200 mm	Rmt	15802.00	
	xii) 1300 mm	Rmt	17670.00	
	xiii) 1400 mm	Rmt	19419.00	
	xiv) 1500 mm	Rmt	21143.00	
	xv) 1600 mm	Rmt	22544.00	
	xvi) 1700 mm.	Rmt	23946.00	
	xvii) 1800 mm.	Rmt	25345.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
d)	F T P - 8.5 Kg/Sq. cm			
i)	350 mm	Rmt	4066.00	
ii)	400 mm	Rmt	4506.00	
iii)	450 mm	Rmt	4954.00	
iv)	500 mm	Rmt	5491.00	
v)	600 mm	Rmt	6678.00	
vi)	700 mm	Rmt	7765.00	
vii)	800 mm	Rmt	8840.00	
viii)	900 mm	Rmt	10793.00	
ix)	1000 mm	Rmt	12510.00	
x)	1100 mm	Rmt	14065.00	
xi)	1200 mm	Rmt	16208.00	
xii)	1300 mm	Rmt	18135.00	
xiii)	1400 mm	Rmt	19789.00	
xiv)	1500 mm	Rmt	21528.00	
xv)	1600 mm	Rmt	22928.00	
xvi)	1700 mm.	Rmt	24329.00	
xvii)	1800 mm.	Rmt	25729.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	e) F T P - 10 Kg/Sq. cm			
i)	350 mm	Rmt	4081.00	
ii)	400 mm	Rmt	4524.00	
iii)	450 mm	Rmt	4985.00	
iv)	500 mm	Rmt	5537.00	
v)	600 mm	Rmt	6742.00	
vi)	700 mm	Rmt	7853.00	
vii)	800 mm	Rmt	8973.00	
viii)	900 mm	Rmt	10943.00	
ix)	1000 mm	Rmt	12694.00	
x)	1100 mm	Rmt	14418.00	
xi)	1200 mm	Rmt	16482.00	
xii)	1300 mm	Rmt	18459.00	
xiii)	1400 mm	Rmt	20167.00	
xiv)	1500 mm	Rmt	21923.00	
xv)	1600 mm	Rmt	23326.00	
xvi)	1700 mm.	Rmt	24726.00	
xvii)	1800 mm.	Rmt	26126.00	
f) F T P - 11.5 Kg/Sq. cm				
i)	350 mm	Rmt	4097.00	
ii)	400 mm	Rmt	4552.00	
iii)	450 mm	Rmt	5022.00	
iv)	500 mm	Rmt	5584.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
v)	600 mm	Rmt	6810.00	
vi)	700 mm	Rmt	7942.00	
vii)	800 mm	Rmt	9223.00	
viii)	900 mm	Rmt	10127.00	
ix)	1000 mm	Rmt	12880.00	
x)	1100 mm	Rmt	14648.00	
xi)	1200 mm	Rmt	16758.00	
xii)	1300 mm	Rmt	18786.00	
xiii)	1400 mm	Rmt	20550.00	
xiv)	1500 mm	Rmt	22322.00	
xv)	1600 mm	Rmt	23722.00	
xvi)	1700 mm.	Rmt	25123.00	
xvii)	1800 mm.	Rmt	26524.00	
g)	F T P - 13 Kg/Sq. cm			
i)	350 mm	Rmt	4129.00	
ii)	400 mm	Rmt	4589.00	
iii)	450 mm	Rmt	5064.00	
iv)	500 mm	Rmt	5630.00	
v)	600 mm	Rmt	6875.00	
vi)	700 mm	Rmt	8032.00	
vii)	800 mm	Rmt	9376.00	
viii)	900 mm	Rmt	11243.00	
ix)	1000 mm	Rmt	13150.00	
x)	1100 mm	Rmt	14881.00	
xi)	1200 mm	Rmt	17040.00	
xii)	1300 mm	Rmt	19117.00	
xiii)	1400 mm	Rmt	20927.00	
xiv)	1500 mm	Rmt	22716.00	
xv)	1600 mm	Rmt	24118.00	
xvi)	1700 mm.	Rmt	25517.00	
xvii)	1800 mm.	Rmt	26907.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	h) F T P - 14.5 Kg/Sq. cm			
i)	350 mm	Rmt	4165.00	
ii)	400 mm	Rmt	4631.00	
iii)	450 mm	Rmt	5115.00	
iv)	500 mm	Rmt	5684.00	
v)	600 mm	Rmt	6945.00	
vi)	700 mm	Rmt	8561.00	
vii)	800 mm	Rmt	9528.00	
viii)	900 mm	Rmt	11504.00	
ix)	1000 mm	Rmt	13343.00	
x)	1100 mm	Rmt	15113.00	
xi)	1200 mm	Rmt	17316.00	
xii)	1300 mm	Rmt	19443.00	
xiii)	1400 mm	Rmt	21872.00	
xiv)	1500 mm	Rmt	23702.00	
xv)	1600 mm	Rmt	25104.00	
xvi)	1700 mm.	Rmt	26504.00	
xvii)	1800 mm.	Rmt	27904.00	
i) F T P - 17 Kg/Sq. cm				
i)	350 mm	Rmt	4198.00	
ii)	400 mm	Rmt	4674.00	
iii)	450 mm	Rmt	5166.00	
iv)	500 mm	Rmt	5746.00	
v)	600 mm	Rmt	7035.00	
vi)	700 mm	Rmt	8216.00	
vii)	800 mm	Rmt	9713.00	
viii)	900 mm	Rmt	11667.00	
ix)	1000 mm	Rmt	13537.00	
x)	1100 mm	Rmt	15358.00	
xi)	1200 mm	Rmt	17599.00	
xii)	1300 mm	Rmt	19775.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	xiii) 1400 mm xiv) 1500 mm xv) 1600 mm xvi) 1700 mm. xvii) 1800 mm.	Rmt	22293.00 24144.00 25544.00 26945.00 28345.00	
	j) F T P - 18.5 Kg/Sq. cm			
	i) 350 mm ii) 400 mm iii) 450 mm iv) 500 mm	Rmt	4230.00 4715.00 5219.00 5809.00	
	v) 600 mm vi) 700 mm vii) 800 mm viii) 900 mm	Rmt	7124.00 8319.00 10032.00 11871.00	
	ix) 1000 mm x) 1100 mm xi) 1200 mm xii) 1300 mm	Rmt	13769.00 15597.00 17881.00 20725.00	
	xiii) 1400 mm xiv) 1500 mm xv) 1600 mm xvi) 1700 mm. xvii) 1800 mm.	Rmt	22872.00 24248.00 25650.00 27051.00 28451.00	
	k) F T P - 20 Kg/Sq. cm			
	i) 350 mm ii) 400 mm iii) 450 mm iv) 500 mm	Rmt	4264.00 4759.00 5271.00 5875.00	
	v) 600 mm vi) 700 mm	Rmt	7213.00 8525.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
vii)	800 mm	Rmt	10272.00	
viii)	900 mm	Rmt	12142.00	
ix)	1000 mm	Rmt	14088.00	
x)	1100 mm	Rmt	15967.00	
xi)	1200 mm	Rmt	18816.00	
xii)	1300 mm	Rmt	21171.00	
xiii)	1400 mm	Rmt	23377.00	
xiv)	1500 mm	Rmt	24775.00	
xv)	1600 mm	Rmt	26176.00	
xvi)	1700 mm.	Rmt	27577.00	
xvii)	1800 mm.	Rmt	28977.00	
I) F T P - 21.5 Kg/Sq. cm				
i)	350 mm	Rmt	4302.00	
ii)	400 mm	Rmt	4802.00	
iii)	450 mm	Rmt	5322.00	
iv)	500 mm	Rmt	5937.00	
v)	600 mm	Rmt	7318.00	
vi)	700 mm	Rmt	8943.00	
vii)	800 mm	Rmt	10435.00	
viii)	900 mm	Rmt	12413.00	
ix)	1000 mm	Rmt	14410.00	
x)	1100 mm	Rmt	16771.00	
xi)	1200 mm	Rmt	19283.00	
xii)	1300 mm	Rmt	21663.00	
xiii)	1400 mm	Rmt	24660.00	
xiv)	1500 mm	Rmt	26114.00	
xv)	1600 mm	Rmt	27517.00	
xvi)	1700 mm.	Rmt	28917.00	
xvii)	1800 mm.	Rmt	30319.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	m) F T P - 23 Kg/Sq. cm			
i)	350 mm	Rmt	4334.00	
ii)	400 mm	Rmt	4843.00	
ii)	450 mm	Rmt	5376.00	
iv)	500 mm	Rmt	6000.00	
v)	600 mm	Rmt	7472.00	
vi)	700 mm	Rmt	9225.00	
vii)	800 mm	Rmt	10755.00	
viii)	900 mm	Rmt	12681.00	
ix)	1000 mm	Rmt	14730.00	
x)	1100 mm	Rmt	17215.00	
xi)	1200 mm	Rmt	19759.00	
xii)	1300 mm	Rmt	22277.00	
xiii)	1400 mm	Rmt	25118.00	
xiv)	1500 mm	Rmt	26591.00	
xv)	1600 mm	Rmt	27993.00	
xvi)	1700 mm.	Rmt	29394.00	
xvii)	1800 mm.	Rmt	30792.00	
n) F T P - 24.5 Kg/Sq. cm				
i)	350 mm	Rmt	4367.00	
ii)	400 mm	Rmt	4887.00	
iii)	450 mm	Rmt	5429.00	
iv)	500 mm	Rmt	6065.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
v)	600 mm	Rmt	7772.00	
vi)	700 mm	Rmt	9352.00	
vii)	800 mm	Rmt	10767.00	
viii)	900 mm	Rmt	12896.00	
ix)	1000 mm	Rmt	15421.00	
x)	1100 mm	Rmt	17661.00	
xi)	1200 mm	Rmt	20238.00	
xii)	1300 mm	Rmt	24044.00	
xiii)	1400 mm	Rmt	25597.00	
xiv)	1500 mm	Rmt	27089.00	
xv)	1600 mm	Rmt	28490.00	
xvi)	1700 mm.	Rmt	29889.00	
xvii)	1800 mm.	Rmt	31291.00	
Note :				
1)	For PCCP pipes lowering, laying, and pouring of cement mortar in the field on joints (after laying and welding), rates as per PSC pipes lowering, laying and jointing shall be adopted.			
2)	For field welding rates applicable for similar welding in MS pipes given in that section shall be adopted.			
3)	Whenever manufacturer is separate and contractor for lowering, laying, jointing and testing is separate the principal contractor shall enter into an agreement with PCCP pipe manufacturer for satisfactory manufacturing transporting, lowering, laying, jointing and testing of pipes.			
This foot notes shall appear in the tender conditions.				
4)	Only 85% providing rates shall be payable til satisfactory Hydraulic testing is given.			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																																																												
1	2	3	4	5																																																												
1.	<p style="text-align: center;">XII. PIPES APPURTENANCES</p> <p>Providing and supplying ISI mark CI D/F reflux valves (non-return valves) of following dia including railway freight, inspection charges, unloading from railway wagon, loading into truck, transportation upto departmental stores, unloading, stacking excluding GST levied by GOI & GOM in all respect etc. complete.</p> <p>Reflux valves as per I.S.5312 Part I (1984)</p> <p>a) Without by pass arrangement - PN -1</p> <table> <tbody> <tr> <td>i)</td><td>50 mm.</td><td>No.</td><td>2820.00</td></tr> <tr> <td>ii)</td><td>65 mm.</td><td>No.</td><td>3301.00</td></tr> <tr> <td>iii)</td><td>80 mm.</td><td>No.</td><td>3476.00</td></tr> <tr> <td>iv)</td><td>100 mm.</td><td>No.</td><td>4854.00</td></tr> <tr> <td>v)</td><td>125 mm.</td><td>No.</td><td>6930.00</td></tr> <tr> <td>vi)</td><td>150 mm.</td><td>No.</td><td>8391.00</td></tr> <tr> <td>vii)</td><td>200 mm.</td><td>No.</td><td>15082.00</td></tr> <tr> <td>viii)</td><td>250 mm.</td><td>No.</td><td>25738.00</td></tr> <tr> <td>ix)</td><td>300 mm.</td><td>No.</td><td>35267.00</td></tr> <tr> <td>x)</td><td>350 mm.</td><td>No.</td><td>54857.00</td></tr> <tr> <td>xi)</td><td>400 mm.</td><td>No.</td><td>65252.00</td></tr> <tr> <td>xii)</td><td>450 mm.</td><td>No.</td><td>93828.00</td></tr> <tr> <td>xiii)</td><td>500 mm.</td><td>No.</td><td>139026.00</td></tr> <tr> <td>xiv)</td><td>600 mm.</td><td>No.</td><td>170246.00</td></tr> <tr> <td>xv)</td><td>700 mm.</td><td>No.</td><td>399341.00</td></tr> </tbody> </table>	i)	50 mm.	No.	2820.00	ii)	65 mm.	No.	3301.00	iii)	80 mm.	No.	3476.00	iv)	100 mm.	No.	4854.00	v)	125 mm.	No.	6930.00	vi)	150 mm.	No.	8391.00	vii)	200 mm.	No.	15082.00	viii)	250 mm.	No.	25738.00	ix)	300 mm.	No.	35267.00	x)	350 mm.	No.	54857.00	xi)	400 mm.	No.	65252.00	xii)	450 mm.	No.	93828.00	xiii)	500 mm.	No.	139026.00	xiv)	600 mm.	No.	170246.00	xv)	700 mm.	No.	399341.00			
i)	50 mm.	No.	2820.00																																																													
ii)	65 mm.	No.	3301.00																																																													
iii)	80 mm.	No.	3476.00																																																													
iv)	100 mm.	No.	4854.00																																																													
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vi)	150 mm.	No.	8391.00																																																													
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xiii)	500 mm.	No.	139026.00																																																													
xiv)	600 mm.	No.	170246.00																																																													
xv)	700 mm.	No.	399341.00																																																													

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	b) With by pass arrangement - PN -1			
i)	80 mm.	No.	4014.00	
ii)	100 mm.	No.	5718.00	
iii)	125 mm.	No.	7786.00	
iv)	150 mm.	No.	9246.00	
v)	200 mm.	No.	17239.00	
vi)	250 mm.	No.	28178.00	
vii)	300 mm.	No.	37824.00	
viii)	350 mm.	No.	62013.00	
ix)	400 mm.	No.	75041.00	
x)	450 mm.	No.	97362.00	
xi)	500 mm.	No.	158011.00	
xii)	600 mm.	No.	195783.00	
xiii)	700 mm.	No.	604532.00	
xiv)	750 mm.	No.	661716.00	
xv)	800 mm.	No.	718902.00	
xvi)	900 mm.	No.	784257.00	
xvii)	1000 mm.	No.	914967.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	<p>c) Without by pass arrangement - PN -1.6</p> <p>i) 50 mm. No. 2750.00</p> <p>ii) 65 mm No. 2971.00</p> <p>iii) 80 mm. No. 4874.00</p> <p>iv) 100 mm. No. 6243.00</p> <p>v) 125 mm. No. 8697.00</p> <p>vi) 150 mm No. 11823.00</p> <p>vii) 200 mm. No. 20700.00</p> <p>viii) 250 mm. No. 33231.00</p> <p>ix) 300 mm. No. 44927.00</p> <p>x) 350 mm. No. 68572.00</p> <p>xi) 400 mm. No. 81565.00</p> <p>xii) 450 mm. No. 109044.00</p> <p>xiii) 500 mm. No. 173782.00</p> <p>xiv) 600 mm. No. 212807.00</p> <p>xv) 700 mm. No. 314540.00</p> <p>xvi) 750 mm. No. 361079.00</p> <p>xvii) 800 mm. No. 410829.00</p> <p>xviii) 900 mm. No. 519954.00</p> <p>xix) 1000 mm. No. 641919.00</p> <p>xx) 1100 mm No. 776720.00</p> <p>xxi) 1200 mm No. 924703.00</p>			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	d) With by pass arrangement - PN -1.6			
i)	50 mm.	No.	2823.00	
ii)	65 mm	No.	3177.00	
iii)	80 mm.	No.	4675.00	
iv)	100 mm.	No.	6045.00	
v)	125 mm.	No.	8448.00	
vi)	150 mm	No.	10254.00	
vii)	200 mm.	No.	20711.00	
viii)	250 mm.	No.	31296.00	
ix)	300 mm.	No.	47284.00	
x)	350 mm.	No.	73061.00	
xi)	400 mm.	No.	93801.00	
xii)	450 mm.	No.	111966.00	
xiii)	500 mm.	No.	181743.00	
xiv)	600 mm.	No.	244728.00	
xv)	700 mm.	No.	320373.00	
xvi)	750 mm.	No.	367775.00	
xvii)	800 mm.	No.	418447.00	
xviii)	900 mm.	No.	529597.00	
xix)	1000 mm.	No.	653822.00	
xx)	1100 mm	No.	791125.00	
xxi)	1200 mm	No.	941504.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																																																																																																										
1	2	3	4	5																																																																																																										
2.	<p>Providing double flange sluice valve confirming for IS-14846 including worn gear arrangements as per test pressure, stainless steel spindle, caps, including inspection charges, transportation upto departmental store, unloading, stacking excluding GST levied by GOI & GOM in all respect etc. complete.</p> <p>a) Sluice valves - PN -1 (Without by pass)</p> <table> <tbody> <tr> <td>i)</td><td>50 mm.</td><td>No.</td><td>3566.00</td><td></td></tr> <tr> <td>ii)</td><td>65 mm.</td><td>No.</td><td>4219.00</td><td></td></tr> <tr> <td>iii)</td><td>80 mm.</td><td>No.</td><td>4360.00</td><td></td></tr> <tr> <td>iv)</td><td>100 mm.</td><td>No.</td><td>5807.00</td><td></td></tr> <tr> <td>v)</td><td>125 mm.</td><td>No.</td><td>7263.00</td><td></td></tr> <tr> <td>vi)</td><td>150 mm.</td><td>No.</td><td>8709.00</td><td></td></tr> <tr> <td>vii)</td><td>200 mm.</td><td>No.</td><td>15786.00</td><td></td></tr> <tr> <td>viii)</td><td>250 mm.</td><td>No.</td><td>24407.00</td><td></td></tr> <tr> <td>ix)</td><td>300 mm.</td><td>No.</td><td>30986.00</td><td></td></tr> <tr> <td>x)</td><td>350 mm.</td><td>No.</td><td>45583.00</td><td></td></tr> <tr> <td>xi)</td><td>400 mm.</td><td>No.</td><td>60013.00</td><td></td></tr> <tr> <td>xii)</td><td>450 mm.</td><td>No.</td><td>64520.00</td><td></td></tr> <tr> <td>xiii)</td><td>500 mm.</td><td>No.</td><td>92991.00</td><td></td></tr> <tr> <td>xiv)</td><td>600 mm.</td><td>No.</td><td>137770.00</td><td></td></tr> <tr> <td>xv)</td><td>700 mm.</td><td>No.</td><td>256083.00</td><td></td></tr> <tr> <td>xvi)</td><td>750 mm.</td><td>No.</td><td>290104.00</td><td></td></tr> <tr> <td>xvii)</td><td>800 mm.</td><td>No.</td><td>353884.00</td><td></td></tr> <tr> <td>xviii)</td><td>900 mm.</td><td>No.</td><td>464033.00</td><td></td></tr> <tr> <td>xix)</td><td>1000 mm.</td><td>No.</td><td>694007.00</td><td></td></tr> <tr> <td>xx)</td><td>1100 mm</td><td>No.</td><td>889730.00</td><td></td></tr> <tr> <td>xxi)</td><td>1200 mm.</td><td>No.</td><td>1051941.00</td><td></td></tr> </tbody> </table>	i)	50 mm.	No.	3566.00		ii)	65 mm.	No.	4219.00		iii)	80 mm.	No.	4360.00		iv)	100 mm.	No.	5807.00		v)	125 mm.	No.	7263.00		vi)	150 mm.	No.	8709.00		vii)	200 mm.	No.	15786.00		viii)	250 mm.	No.	24407.00		ix)	300 mm.	No.	30986.00		x)	350 mm.	No.	45583.00		xi)	400 mm.	No.	60013.00		xii)	450 mm.	No.	64520.00		xiii)	500 mm.	No.	92991.00		xiv)	600 mm.	No.	137770.00		xv)	700 mm.	No.	256083.00		xvi)	750 mm.	No.	290104.00		xvii)	800 mm.	No.	353884.00		xviii)	900 mm.	No.	464033.00		xix)	1000 mm.	No.	694007.00		xx)	1100 mm	No.	889730.00		xxi)	1200 mm.	No.	1051941.00					
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Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
b)	Sluice valves - PN -1.0 (With by pass arrangement)			
i)	50 mm.	No.	3743.00	
ii)	65 mm.	No.	4228.00	
iii)	80 mm.	No.	4360.00	
iv)	100 mm.	No.	5807.00	
v)	125 mm.	No.	7263.00	
vi)	150 mm.	No.	9172.00	
vii)	200 mm.	No.	15815.00	
viii)	250 mm.	No.	24435.00	
ix)	300 mm.	No.	31014.00	
x)	350 mm.	No.	47277.00	
xi)	400 mm.	No.	60102.00	
xii)	450 mm.	No.	74101.00	
xiii)	500 mm.	No.	93130.00	
xiv)	600 mm.	No.	137974.00	
xv)	700 mm.	No.	260397.00	
xvi)	750 mm.	No.	290392.00	
xvii)	800 mm.	No.	354233.00	
xviii)	900 mm.	No.	464492.00	
xix)	1000 mm.	No.	704599.00	
xx)	1100 mm	No.	890611.00	
xxi)	1200 mm.	No.	1052945.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
c)	Sluice valve - PN - 1.6 (Without by pass arrangement)			
i)	50 mm.	No.	4470.00	
ii)	65 mm.	No.	5273.00	
iii)	80 mm.	No.	5742.00	
iv)	100 mm.	No.	7651.00	
v)	125 mm.	No.	9559.00	
vi)	150 mm.	No.	10138.00	
vii)	200 mm.	No.	19737.00	
viii)	250 mm.	No.	30517.00	
ix)	300 mm.	No.	38754.00	
x)	350 mm.	No.	59009.00	
xi)	400 mm.	No.	74912.00	
xii)	450 mm.	No.	92572.00	
xiii)	500 mm.	No.	116176.00	
xiv)	600 mm.	No.	172171.00	
xv)	700 mm.	No.	260783.00	
xvi)	750 mm.	No.	290822.00	
xvii)	800 mm.	No.	354759.00	
xviii)	900 mm.	No.	465181.00	
xix)	1000 mm.	No.	717574.00	
xx)	1100 mm	No.	891934.00	
xxi)	1200 mm.	No.	1054544.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
d)	Sluice valve - PN - 1.6 (With by pass arrangement)			
i)	50 mm.	No.	4947.00	
ii)	65 mm.	No.	5283.00	
iii)	80 mm.	No.	5752.00	
iv)	100 mm.	No.	7665.00	
v)	125 mm.	No.	9573.00	
vi)	150 mm.	No.	11464.00	
vii)	200 mm.	No.	19765.00	
viii)	250 mm.	No.	30546.00	
ix)	300 mm.	No.	38781.00	
x)	350 mm.	No.	59096.00	
xi)	400 mm.	No.	75024.00	
xii)	450 mm.	No.	92709.00	
xiii)	500 mm.	No.	116348.00	
xiv)	600 mm.	No.	172427.00	
xv)	700 mm.	No.	261105.00	
xvi)	750 mm.	No.	291181.00	
xvii)	800 mm.	No.	355198.00	
xviii)	900 mm.	No.	465756.00	
xix)	1000 mm.	No.	718459.00	
xx)	1100 mm	No.	893034.00	
xxi)	1200 mm.	No.	1055847.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
3	<p>Providing, double flanged short body pattern type manually operated Butterfly Valve having body, disc and end cover in graded cast iron to IS-210 Gr.CF 200 generally confirming to IS-13095-1991, Synthetic rubber faced ring secured on disc by retaining ring with stainless steel screw stub shaft of stainless steel riding in teflon bearing including inspection charges, transportation up to departmental store, unloading, stacking excluding GST levied by GOI & GOM in all respect etc. excluding C.C. foundation /structural steel support.</p> <p>a) Butterfly valve - PN - 1 (With by pass arrangement)</p> <p>i) 80 mm. No. 4950.00</p> <p>ii) 100 mm. No. 6328.00</p> <p>iii) 125 mm. No. 7217.00</p> <p>iv) 150 mm. No. 9329.00</p> <p>v) 200 mm. No. 12432.00</p> <p>vii) 250 mm. No. 15539.00</p> <p>viii) 300 mm. No. 24587.00</p> <p>viii) 350 mm. No. 40344.00</p> <p>ix) 400 mm. No. 50052.00</p> <p>x) 450 mm. No. 58423.00</p> <p>xi) 500 mm. No. 63110.00</p> <p>xii) 600 mm. No. 73908.00</p> <p>xiii) 700 mm. No. 110819.00</p> <p>xiv) 750 mm. No. 131242.00</p> <p>xv) 800 mm. No. 139778.00</p> <p>xvi) 900 mm. No. 179453.00</p> <p>xvii) 1000 mm. No. 231347.00</p> <p>xviii) 1100 mm. No. 495884.00</p> <p>xix) 1200 mm. No. 469239.00</p> <p>xx) 1400 mm. No. 715468.00</p> <p>xxi) 1500 mm. No. 889004.00</p>			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
b)	Butterfly valve - PN - 1.6 (With by pass arrangement)			
i)	80 mm.	No.	5493.00	
ii)	100 mm.	No.	7192.00	
iii)	125 mm.	No.	7941.00	
iv)	150 mm.	No.	10727.00	
v)	200 mm.	No.	14299.00	
vii)	250 mm.	No.	17870.00	
viii)	300 mm.	No.	28275.00	
viii)	350 mm.	No.	50429.00	
ix)	400 mm.	No.	61777.00	
x)	450 mm.	No.	71373.00	
xi)	500 mm.	No.	78368.00	
xii)	600 mm	No.	92385.00	
xiii)	700 mm	No.	138524.00	
xiv)	750 mm	No.	164052.00	
xv)	800 mm	No.	174724.00	
xvi)	900 mm	No.	224316.00	
xvii)	1000 mm	No.	289184.00	
xviii)	1100 mm	No.	586552.00	
xix)	1200 mm	No.	619847.00	
xx)	1400 mm	No.	894335.00	
xxi)	1500 mm	No.	1103741.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
4.	<p>Lowering, laying and jointing in position following C.I.D/F Reflex valves, Butterfly valves and Sluice valves including cost of all labour jointing material, including nut bolts and giving satisfactory hydraulic testing etc. complete. (Rate for all class of valves.)</p> <p>i) 50 mm. No. 688.00</p> <p>ii) 65 mm. No. 1034.00</p> <p>iii) 80 mm. No. 1436.00</p> <p>iv) 100 mm. No. 1877.00</p> <p>v) 125 mm. No. 2337.00</p> <p>vi) 150 mm. No. 2950.00</p> <p>vii) 200 mm. No. 3069.00</p> <p>viii) 250 mm. No. 3999.00</p> <p>ix) 300 mm. No. 4148.00</p> <p>x) 350 mm. No. 5112.00</p> <p>xi) 400 mm. No. 6167.00</p> <p>xii) 450 mm. No. 7338.00</p> <p>xii) 500 mm. No. 7598.00</p> <p>xiv) 600 mm. No. 8065.00</p> <p>xv) 700 mm. No. 8695.00</p> <p>xvi) 750 mm. No. 9576.00</p> <p>xvii) 800 mm. No. 11411.00</p> <p>xviii) 900 mm. No. 12108.00</p> <p>xix) 1000 mm. No. 14274.00</p> <p>xx) 1100 mm. No. 16482.00</p> <p>xxi) 1200 mm. No. 18112.00</p>			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
b.	Giving satisfactory hydraulic testing of following C. I. D / F Reflex valves, Butterfly valves and Sluice valves. <ul style="list-style-type: none"> i) 50 mm. ii) 65 mm. iii) 80 mm. iv) 100 mm. v) 125 mm. vi) 150 mm. vii) 200 mm. viii) 250 mm. ix) 300 mm. x) 350 mm. xi) 400 mm. xii) 450 mm. xii) 500 mm. xiv) 600 mm. xv) 700 mm. xvi) 750 mm. xvii) 800 mm. xviii) 900 mm. xix) 1000 mm. xx) 1100 mm. xxi) 1200 mm. to 1500 mm. 			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																																																
1	2	3	4	5																																																
5.	<p>Providing and supplying Air Valves as per IS-14845-2000 and MJP's standard specifications of approved make and quality of following diameters including railway freight, inspection charges, unloading from railway wagons, loading into truck, transportation upto departmental stores, unloading and stacking excluding GST levied by GOI & GOM in all respect etc. complete.</p> <p>a) Air Valve Single Ball Flanged / Screwed Type - PN -1</p> <table> <tbody> <tr> <td>i)</td><td>12/15 mm.</td><td>No.</td><td>538.00</td></tr> <tr> <td>ii)</td><td>20 mm.</td><td>No.</td><td>649.00</td></tr> <tr> <td>iii)</td><td>25 mm.</td><td>No.</td><td>895.00</td></tr> <tr> <td>iv)</td><td>32 mm.</td><td>No.</td><td>978.00</td></tr> <tr> <td>v)</td><td>40 mm.</td><td>No.</td><td>1076.00</td></tr> <tr> <td>vi)</td><td>50 mm.</td><td>No.</td><td>1182.00</td></tr> </tbody> </table> <p>b) Air Valve Single Ball Flanged / Screwed Type - PN -1.6</p> <table> <tbody> <tr> <td>i)</td><td>12/15 mm.</td><td>No.</td><td>630.00</td></tr> <tr> <td>ii)</td><td>20 mm.</td><td>No.</td><td>895.00</td></tr> <tr> <td>iii)</td><td>25 mm.</td><td>No.</td><td>1076.00</td></tr> <tr> <td>iv)</td><td>32 mm.</td><td>No.</td><td>1160.00</td></tr> <tr> <td>v)</td><td>40 mm.</td><td>No.</td><td>1243.00</td></tr> <tr> <td>vi)</td><td>50 mm.</td><td>No.</td><td>1622.00</td></tr> </tbody> </table>	i)	12/15 mm.	No.	538.00	ii)	20 mm.	No.	649.00	iii)	25 mm.	No.	895.00	iv)	32 mm.	No.	978.00	v)	40 mm.	No.	1076.00	vi)	50 mm.	No.	1182.00	i)	12/15 mm.	No.	630.00	ii)	20 mm.	No.	895.00	iii)	25 mm.	No.	1076.00	iv)	32 mm.	No.	1160.00	v)	40 mm.	No.	1243.00	vi)	50 mm.	No.	1622.00			
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Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																								
1	2	3	4	5																								
6.	<p>Providing and supplying Air Valves as per IS-14845 and MJP's standard specifications double orifice type combined with screw down isolating valve, small orifice elastic ball resting on a gun metal orifice nipple, large orifice vulcanite ball seating on moulded seat ring, inlet face and drilled, including insurance, third party inspection charges, loading, unloading, transportation upto departmental stores, excluding GST levied by GOI & GOM in all respect etc. complete.</p> <p>a) Air Valve Double Ball Flanged Type - PN -1</p> <table> <tr> <td>i)</td><td>50 mm.</td><td>No.</td><td>4970.00</td></tr> <tr> <td>ii)</td><td>65 mm.</td><td>No.</td><td>5799.00</td></tr> <tr> <td>iii)</td><td>80 mm.</td><td>No.</td><td>6624.00</td></tr> </table> <p>b) Air Valve Double Ball Flanged Type - PN -1.6</p> <table> <tr> <td>i)</td><td>50 mm.</td><td>No.</td><td>6584.00</td></tr> <tr> <td>ii)</td><td>65 mm.</td><td>No.</td><td>7455.00</td></tr> <tr> <td>iii)</td><td>80 mm.</td><td>No.</td><td>9225.00</td></tr> </table>	i)	50 mm.	No.	4970.00	ii)	65 mm.	No.	5799.00	iii)	80 mm.	No.	6624.00	i)	50 mm.	No.	6584.00	ii)	65 mm.	No.	7455.00	iii)	80 mm.	No.	9225.00			
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Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																								
1	2	3	4	5																								
7.	<p>Providing and supplying Air Valves as per IS-14845-2000 and MJP's standard specifications double orifice type combined with isolating sluice valve, mounted in horizontal position and operated by wheel gearing, small orifice elastic ball resting on a gun metal orifice nipple, large orifice vulcanite ball seating on moulded seat ring, inlet face and drilled, including insurance, third party inspection charges, loading, unloading, transportation upto departmental store, excluding GST levied by GOI & GOM in all respect etc. complete.</p> <p>a) Air Valve Double Ball Flanged Type - PN -1</p> <table> <tr> <td>i)</td><td>100 mm.</td><td>No.</td><td>8376.00</td></tr> <tr> <td>ii)</td><td>150 mm.</td><td>No.</td><td>15265.00</td></tr> <tr> <td>iii)</td><td>200 mm.</td><td>No.</td><td>25672.00</td></tr> </table> <p>b) Air Valve Double Ball Flanged Type - PN -1.6</p> <table> <tr> <td>i)</td><td>100 mm.</td><td>No.</td><td>12806.00</td></tr> <tr> <td>ii)</td><td>150 mm.</td><td>No.</td><td>18041.00</td></tr> <tr> <td>iii)</td><td>200 mm.</td><td>No.</td><td>30341.00</td></tr> </table>	i)	100 mm.	No.	8376.00	ii)	150 mm.	No.	15265.00	iii)	200 mm.	No.	25672.00	i)	100 mm.	No.	12806.00	ii)	150 mm.	No.	18041.00	iii)	200 mm.	No.	30341.00			
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iii)	200 mm.	No.	25672.00																									
i)	100 mm.	No.	12806.00																									
ii)	150 mm.	No.	18041.00																									
iii)	200 mm.	No.	30341.00																									

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																		
1	2	3	4	5																		
8.	<p>Providing and supplying Kinetic Double Orifice type Air Valves confirming to IS 14845 as per MJP's standard specifications combined with screw down isolating valve, small orifice elastic ball resting on a gun metal orifice nipple, large orifice vulcanite ball seating on moulded seat ring, inlet face and drilled, including insurance, third party inspection charges, loading, unloading, transportation upto departmental stores, excluding GST levied by GOI & GOM in all respect etc. complete.</p> <p>a) Kinetic Air Valve Flanged Type - PN -1</p> <table> <tbody> <tr> <td>i) 40 mm.</td> <td>No.</td> <td>7701.00</td> </tr> <tr> <td>ii) 50 mm.</td> <td>No.</td> <td>8705.00</td> </tr> <tr> <td>iii) 80 mm.</td> <td>No.</td> <td>10212.00</td> </tr> </tbody> </table> <p>b) Kinetic Air Valve Flanged Type - PN -1.6</p> <table> <tbody> <tr> <td>i) 40 mm.</td> <td>No.</td> <td>9625.00</td> </tr> <tr> <td>ii) 50 mm.</td> <td>No.</td> <td>10881.00</td> </tr> <tr> <td>iii) 80 mm.</td> <td>No.</td> <td>12764.00</td> </tr> </tbody> </table>	i) 40 mm.	No.	7701.00	ii) 50 mm.	No.	8705.00	iii) 80 mm.	No.	10212.00	i) 40 mm.	No.	9625.00	ii) 50 mm.	No.	10881.00	iii) 80 mm.	No.	12764.00			
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Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																								
1	2	3	4	5																								
9.	<p>Providing and supplying Kinetic Double Orifice type Air Valves confirming to IS 14845 as per MJP's standard specifications having small orifice elastic ball resting on a gun metal orifice nipple, large orifice vulcanite ball seating on moulded seat ring,with built-in Kinetic features, isolating sluice valve mounted in horizontal position and operated by wheel gearing, inlet face and drilled, including insurance, third party inspection charges, loading, unloading, transportation upto departmental stores, excluding GST levied by GOI & GOM in all respect etc. complete.</p> <p>a) Kinetic Air Valve Flanged Type - PN -1</p> <table> <tr> <td>i)</td><td>100 mm.</td><td>No.</td><td>11132.00</td></tr> <tr> <td>ii)</td><td>150 mm.</td><td>No.</td><td>15569.00</td></tr> <tr> <td>iii)</td><td>200 mm.</td><td>No.</td><td>24273.00</td></tr> </table> <p>b) Kinetic Air Valve Flanged Type - PN -1.6</p> <table> <tr> <td>i)</td><td>100 mm.</td><td>No.</td><td>13916.00</td></tr> <tr> <td>ii)</td><td>150 mm.</td><td>No.</td><td>19460.00</td></tr> <tr> <td>iii)</td><td>200 mm.</td><td>No.</td><td>30341.00</td></tr> </table>	i)	100 mm.	No.	11132.00	ii)	150 mm.	No.	15569.00	iii)	200 mm.	No.	24273.00	i)	100 mm.	No.	13916.00	ii)	150 mm.	No.	19460.00	iii)	200 mm.	No.	30341.00			
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10.	<p>Lowering, laying and fixing in proper alignment and position all types of C.I. air valves as directed by Engineer-in-charge including cost of conveyance from stores to site of work, cost of all material and giving satisfactory hydraulic testing, etc. complete. (for all class of valves).</p> <p>a) Air Valve Single Ball (PN-1 and PN - 1.6)</p> <table> <tbody> <tr><td>i)</td><td>15 mm.</td><td>No.</td><td>110.00</td></tr> <tr><td>ii)</td><td>20 mm.</td><td>No.</td><td>139.00</td></tr> <tr><td>iii)</td><td>25 mm.</td><td>No.</td><td>180.00</td></tr> <tr><td>iv)</td><td>32 mm.</td><td>No.</td><td>199.00</td></tr> <tr><td>v)</td><td>40 mm.</td><td>No.</td><td>213.00</td></tr> <tr><td>vi)</td><td>50 mm.</td><td>No.</td><td>231.00</td></tr> <tr><td>vii)</td><td>65 mm.</td><td>No.</td><td>243.00</td></tr> <tr><td>viii)</td><td>80 mm.</td><td>No.</td><td>254.00</td></tr> <tr><td>ix)</td><td>100 mm.</td><td>No.</td><td>284.00</td></tr> <tr><td>x)</td><td>125 mm.</td><td>No.</td><td>344.00</td></tr> <tr><td>xi)</td><td>150 mm.</td><td>No.</td><td>382.00</td></tr> <tr><td>xii)</td><td>200 mm.</td><td>No.</td><td>420.00</td></tr> </tbody> </table> <p>b) Air Valve Double Ball (PN-1 and PN - 1.6)</p> <table> <tbody> <tr><td>i)</td><td>15 mm.</td><td>No.</td><td>120.00</td></tr> <tr><td>ii)</td><td>20 mm.</td><td>No.</td><td>149.00</td></tr> <tr><td>iii)</td><td>25 mm.</td><td>No.</td><td>180.00</td></tr> <tr><td>iv)</td><td>32 mm.</td><td>No.</td><td>204.00</td></tr> <tr><td>v)</td><td>40 mm.</td><td>No.</td><td>238.00</td></tr> <tr><td>vi)</td><td>50 mm.</td><td>No.</td><td>275.00</td></tr> <tr><td>vii)</td><td>65 mm.</td><td>No.</td><td>317.00</td></tr> <tr><td>viii)</td><td>80 mm.</td><td>No.</td><td>378.00</td></tr> <tr><td>ix)</td><td>100 mm.</td><td>No.</td><td>400.00</td></tr> <tr><td>x)</td><td>125 mm.</td><td>No.</td><td>440.00</td></tr> <tr><td>xi)</td><td>150 mm.</td><td>No.</td><td>602.00</td></tr> <tr><td>xii)</td><td>200 mm.</td><td>No.</td><td>662.00</td></tr> </tbody> </table>	i)	15 mm.	No.	110.00	ii)	20 mm.	No.	139.00	iii)	25 mm.	No.	180.00	iv)	32 mm.	No.	199.00	v)	40 mm.	No.	213.00	vi)	50 mm.	No.	231.00	vii)	65 mm.	No.	243.00	viii)	80 mm.	No.	254.00	ix)	100 mm.	No.	284.00	x)	125 mm.	No.	344.00	xi)	150 mm.	No.	382.00	xii)	200 mm.	No.	420.00	i)	15 mm.	No.	120.00	ii)	20 mm.	No.	149.00	iii)	25 mm.	No.	180.00	iv)	32 mm.	No.	204.00	v)	40 mm.	No.	238.00	vi)	50 mm.	No.	275.00	vii)	65 mm.	No.	317.00	viii)	80 mm.	No.	378.00	ix)	100 mm.	No.	400.00	x)	125 mm.	No.	440.00	xi)	150 mm.	No.	602.00	xii)	200 mm.	No.	662.00			
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Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	c) Kinetic Air Valve (PN-1 and PN - 1.6)			
	i) 40 mm.	No.	273.00	
	ii) 50 mm.	No.	315.00	
	iii) 65 mm.	No.	344.00	
	iv) 80 mm.	No.	378.00	
	v) 100 mm.	No.	416.00	
	vi) 125 mm.	No.	454.00	
	vii) 150 mm.	No.	651.00	
	viii) 200 mm.	No.	709.00	
11.	Providing erecting Cast Steel/ Spheroidal Graphite (S.G) Iron D/F Sluice Valves / Butterfly Valves with jointing to pipe work (including all hardware and packing) water works quality, having non-rising spindle with hand wheel and without bypass arrangement, spindle of stainless steel as per requirement, inspection charges, transportation upto departmental store, unloading, stacking, excluding GST levied by GOI & GOM in all respect etc. excluding C. C. foundation / structural steel support.			
A)	For Rating Class 150 (Working Pressure 20 kg/cm² and Test Pressure 30 kg/cm²)			
	a) Sluice Valves			
	i) 80 mm dia.	No.	12840.00	
	ii) 100 mm dia.	No.	17119.00	
	iii) 150 mm dia.	No.	25679.00	
	iv) 200 mm dia.	No.	40048.00	
	v) 250 mm dia.	No.	57633.00	
	vi) 300 mm dia.	No.	73741.00	
	vii) 350 mm dia.	No.	98322.00	
	viii) 400 mm dia.	No.	164071.00	
	ix) 450 mm dia.	No.	223857.00	
	x) 500 mm dia.	No.	263361.00	
	xi) 600 mm dia.	No.	300669.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	b) Butterfly Valves. CS-150			
	i) 300 mm	No.	92726.00	
	ii) 350 mm	No.	98851.00	
	iii) 400 mm	No.	111031.00	
	iv) 450 mm	No.	118281.00	
	v) 500 mm	No.	136919.00	
	vi) 600 mm	No.	154087.00	
12.	Providing erecting Cast Steel D/F Sluice Valves / Butterfly Valves with jointing to pipe work (including all hardware and packing) water works quality having non-rising spindle with hand wheel and without bypass arrangement, spindle of stainless steel as per requirement, inspection charges, transportation upto departmental store, unloading, stacking, excluding GST levied by GOI & GOM in all respect etc. excluding C. C. foundation / structural steel support.			
	For Rating Class 300 (Working Pressure 52 kg/cm² and Test Pressure 78 kg/cm²)			
	a) Sluice Valves CS-300			
	i) 80 mm	No.	13821.00	
	ii) 100 mm	No.	21821.00	
	iii) 150 mm	No.	33269.00	
	iv) 200 mm	No.	52177.00	
	v) 250 mm	No.	56324.00	
	vi) 300 mm	No.	94950.00	
	vii) 350 mm	No.	160135.00	
	viii) 400 mm	No.	233610.00	
	ix) 450 mm	No.	281268.00	
	x) 500 mm	No.	438190.00	
	xi) 600 mm	No.	662312.00	
	b) Butterfly Valves CS-300			
	i) 300 mm	No.	113125.00	
	ii) 350 mm	No.	120599.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	iii) 400 mm iv) 450 mm v) 500 mm vi) 600 mm	No.	135457.00 144303.00 167043.00 187986.00	
13.	Providing erecting Cast Steel /Spheroidal Graphite (S.G) Iron D/F Reflux Valves Single Door with jointing to pipe work (including all hardware and packing) water works quality with jointing to pipe without bypass arrangement, with gunmetal seats including inspection charges, transportation upto departmental store, unloading, stacking excluding GST levied by GOI & GOM in all respect etc. completed but excluding C. C. foundation / structural steel support. For Rating Class 150 (Working Pressure 20 kg/cm² and Test Pressure 30 kg/cm²) Reflux valve CS-150 i) 80 mm ii) 100 mm iii) 150 mm iv) 200 mm v) 250 mm vi) 300 mm	No.	8960.00 13719.00 23242.00 44191.00 76946.00 101373.00	
14.	Providing erecting Cast Steel D/F Reflux Valves Single door with jointing to pipe work (including all hardware and packing) water works quality with jointing to pipe without bypass arrangement, with gunmetal seat including inspection charges, transportation upto departmental store, unloading, stacking excluding GST levied by GOI & GOM in all respect etc. completed but excluding C. C. foundation / structural steel support. For Rating Class 300 (Working Pressure 52 kg/cm² and Test Pressure 78 kg/cm²) Reflux valve CS-300 i) 80 mm	No.	13349.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	ii) 100 mm iii) 150 mm iv) 200 mm v) 250 mm vi) 300 mm	No.	18815.00 31290.00 55432.00 100357.00 122192.00	
15.	Providing, erecting Kinetic Double Orifice Cast Steel Air Valves with an isolating Sluice Valve mounted in horizontal position operated by wheel gear suitable for working pressure of Class-150 rating (20 kg/cm ²)			
	Air valve CS-150			
	i) 80 mm ii) 100 mm iii) 150 mm iv) 200 mm	No.	25885.00 36081.00 69139.00 89371.00	
16.	Providing, erecting Kinetic Double Orifice Cast Steel Air Valves with an isolating Sluice Valve mounted in horizontal position operated by wheel gear suitable for working pressure of Class 300 rating (52 kg/cm ²)			
	KDB Air valve CS-300			
	i) 80 mm ii) 100 mm iii) 150 mm iv) 200 mm	No.	31535.00 36048.00 84240.00 101686.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
17.	<p>Providing and fixing in position air valve shaft including providing and fixing GI Medium Class or 6 mm thick M.S. pipe shaft 2.70 M long over branch flange of air valve tee, providing PCC block of M-150 concrete, 150 mm thick around the air valve tee including encasing of vertical shaft in PCC M-150 as shown in type design together with providing and making flanged joints wherever required and fixing of air valve tee, etc. complete as per type design and as directed by Engineer -in- charge for following diameters of pipe lines (type design attached.)</p> <p>a) Foundation on Murum and Harder Strata.</p> <ul style="list-style-type: none"> i) upto 150mm ii) 200 to 400 mm iii) 450 to 900mm iv) 1000 to 1200 mm <p>b) Foundation in B. C. Soil or Any Other Soil.</p> <ul style="list-style-type: none"> i) upto 150 mm ii) 200 to 400 mm iii) 450 to 900 mm iv) 1000 to 1200 mm 			
18.	<p>Providing and supplying C.I. D/F angle type spring loaded pressure relief valves of approved make and quality including inspection charges, transportation to departmental stores excluding GST levied by GOI & GOM in all respect etc. complete.</p> <p>a) Type PN-1</p> <ul style="list-style-type: none"> i) 25 mm ii) 40 mm iii) 50 mm iv) 80 mm v) 100 mm vi) 125 mm vii) 150 mm viii) 200 mm 			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	ix) 250 mm x) 300 mm	No. No.	62600.00 82556.00	
	b) Type PN-1.6			
	i) 25 mm ii) 40 mm iii) 50 mm	No. No. No.	4516.00 5882.00 6667.00	
	iv) 80 mm v) 100 mm vi) 125 mm	No. No. No.	10702.00 14693.00 22055.00	
	vii) 150 mm viii) 200 mm ix) 250 mm x) 300 mm	No. No. No. No.	25208.00 55664.00 78249.00 103436.00	
19.	Lowering, laying and fixing in proper alignment and position all types of C.I. D/F angle type spring loaded pressure relief valves including cost of all material, labour, cost of conveyance from stores to site of work and giving satisfactory hydraulic testing, etc. complete. (For all class of valves.)			
	i) 25 mm ii) 40 mm iii) 50 mm	No. No. No.	205.00 273.00 316.00	
	iv) 80 mm v) 100 mm vi) 125 mm	No. No. No.	377.00 414.00 461.00	
	vii) 150 mm viii) 200 mm ix) 250 mm x) 300 mm	No. No. No. No.	651.00 710.00 829.00 946.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
20.	Cutting and champhering of pipes of following diameters including cost of all materials and labour involved, etc. complete as directed by Engineer-in-charge (for all class of pipes).			
	a) C.I.Pipes			
	i) 80 mm	No.	37.00	
	ii) 100 mm	No.	43.00	
	iii) 150 mm	No.	66.00	
	iv) 200 mm	No.	84.00	
	v) 250 mm	No.	120.00	
	vi) 300 mm	No.	142.00	
	vii) 350 mm	No.	146.00	
	viii) 400 mm	No.	185.00	
	ix) 450 mm	No.	215.00	
	x) 500 mm	No.	257.00	
	xi) 600 mm	No.	314.00	
	xii) 700 mm	No.	370.00	
	xiii) 750 mm	No.	442.00	
	xiv) 800 mm	No.	483.00	
	xv) 900 mm	No.	531.00	
	xvi) 1000 mm	No.	577.00	
21.	Providing and supplying I.S.I. mark rubber gasket suitable for C.I. or D. I. pipe of all class for tyton joints including inspection charges, transportation upto departmental stores excluding GST levied by GOI & GOM in all respect etc. complete.			
	a) S.B.R. Gaskets for C. I. / D.I. Pipes			
	i) 80 mm	No.	37.00	
	ii) 100 mm	No.	41.00	
	III) 150 mm	No.	57.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	iv) 200 mm v) 250 mm vi) 300 mm vii) 350 mm viii) 400 mm ix) 450 mm x) 500 mm xi) 600 mm xii) 700 mm xiii) 750 mm xiv) 800 mm xv) 900 mm xvi) 1000 mm	No. No. No. No. No. No. No. No. No. No. No. No. No.	97.00 126.00 177.00 203.00 282.00 308.00 420.00 583.00 1037.00 1078.00 1117.00 1615.00 2075.00	
b)	Sealing ‘O’ Rings of SBR (for CID Joints)			
i) ii) iii) iv)	80 mm 100 mm 125 mm 150 mm	Set. Set. Set. Set.	42.00 51.00 60.00 71.00	
c)	Flat Flanged Gaskets moulded out of SBR (For Flanged Joints)			
i) ii) iii) iv) v) vi) vii) viii) ix) x) xi) xii)	80 mm 100 mm 125 mm 150 mm 200 mm 250 mm 300 mm 350 mm 400 mm 450 mm 500 mm 600 mm	No. No. No. No. No. No. No. No. No. No. No. No.	78.00 103.00 122.00 168.00 207.00 290.00 308.00 373.00 461.00 504.00 590.00 794.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	d) Providing Rubber Gasket - EPDM Gaskets for C. I. / D.I. Pipes			
	i) 80 mm.	No.	43.00	
	ii) 100 mm.	No.	45.00	
	iii) 150 mm.	No.	67.00	
	iv) 200 mm.	No.	111.00	
	v) 250 mm.	No.	152.00	
	vi) 300 mm.	No.	201.00	
	vii) 350 mm.	No.	234.00	
	viii) 400 mm.	No.	320.00	
	ix) 450 mm.	No.	358.00	
	x) 500 mm.	No.	474.00	
	xi) 600 mm.	No.	666.00	
	xii) 700 mm.	No.	1250.00	
	xiii) 750 mm.	No.	1310.00	
	xiv) 800 mm.	No.	1598.00	
	xv) 900 mm.	No.	2063.00	
	xvi) 1000 mm	No.	2397.00	
22.	Providing and fixing in position and jointing high performance C. I. Air valves for water combination type (Kinetic air valve along with automatic air valves) double ball, double orifice with stainless steel ball, tamper proof air vents rolling seal mechanism for air release and anti vacuum application designed for 16 Kg. Per sq. cm. working pressure and tested for 20 for kg per sq. cm. pressure. (Rate to include cost of gaskets, bolt, nut and any other material required for jointing and its transportation etc. excluding GST levied by GOI & GOM in all respect.			
	i) C. I. ARV FLFF PN 1.6 50mm Dia.	No.	8109.00	
	ii) 2. C. I. ARV FLFF PN 1.6 80mm Dia.	No.	11252.00	
	iii) 3. C. I. ARV FLFF PN 1.6 100mm Dia.	No.	18092.00	
	iv) 4. C. I. ARV FLFF PN 1.6 150mm Dia.	No.	30284.00	
	v) 5. C. I. ARV FLFF PN 1.6 200mm Dia.	No.	36683.00	

Sr. No.	Description	Unit	Rate (in Rs.)	Rate (in Rs.)
			2018-2019	2019-2020
1	2	3	4	5
23.	<p>Providing and supplying at site of ductile iron / spheroidal graphite (S.G) iron D/F double eccentric resilient seated short body butterfly valves with gear box & handwheel, without bypass arrangement. Valves in accordance with BS EN 593 of PN 10/16 rated, with body & disc of ductile iron confirming to EN 1563/IS 1865 Gr.500/7 or Gr.400/15, Body seat of intergral SG Iron/S.S. AISI 316, seal retaining ring of steel C45/S.S. 1.4436, Shaft of S.S. 1.4021, Periferial disc seal and “O” rings of WRAS approved EPDM rubber (suitable for drinking water), Internal fasteners of stainless steel A2. Body & disc coated inside & outside with electrostatically applied epoxy powder coated blue colour.</p> <p>(suitable for drinking water.) as per DIN 30677- 2 & GSK guidelines with a coating thickness of min. 250 microns. Valves should be 100% tight shut-off. Face to face is per IS 13095 short body. Flange drilling as per IS 1538 raised face & pressure testing at manufactures works shall be done as per IS 13095. including transportation charges excluding GST levied by GOI & GOM in all respect etc. complete.</p>			
			PN-10	PN-16
i)	200 mm.	No.	66441.00	80250.00
ii)	250 mm.	No.	83212.00	103845.00
iii)	300 mm.	No.	106815.00	137200.00
iv)	350 mm.	No.	132997.00	162189.00
v)	400 mm.	No.	158519.00	185089.00
vi)	450 mm.	No.	205398.00	250887.00
vii)	500 mm.	No.	224065.00	300737.00
viii)	600 mm.	No.	326204.00	459530.00
ix)	700 mm.	No.	542530.00	632951.00
x)	800 mm.	No.	644254.00	774235.00
xi)	900 mm.	No.	791188.00	938123.00
xii)	1000 mm	No.	1118966.00	1204873.00

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
24.	<p>Providing and supplying at site of ductile iron / spheroidal graphite (S.G.) iron D/F non-rising spindle resilient seated glandless sluice valves with handwheel & without bypass arrangement. Valves in accordance with BS 5163 of PN-10/ 16 rated, with body and bonnet of ductile iron confirming to IS 1865 Gr. 500/7 or Gr.400/15. Wedge fully encapsulated WRAS approved EPDM rubber (approved for drinking water), Wedge nut of brass, shaft of stainless steel 1.4021/1.4104, stem seals min. 3 nos. of NBR, internal fasteners of stainless steel A2. Body & Bonnet coated inside & outside with electrostatically applied epoxy powder coated blue colour (suitable for drinking water) as per DIN 30677-2 & GSK guidelines with a coating thickness of min. 250 microns. Valves should be full bore & tight shut-off. Flange drilling as per IS 1538 raised face & pressure testing at manufacturers works shall be done as per IS 14846. including transportation charges excluding GST levied by GOI & GOM in all respect etc. complete. (For PN 10 & 16)</p> <p>i) 50 mm dia ii) 80 mm dia iii) 100 mm dia iv) 150 mm dia v) 200 mm dia vi) 250 mm dia vii) 300 mm dia viii) 350 mm dia ix) 400 mm dia x) 450 mm dia xi) 500 mm dia xii) 600 mm dia</p>			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
25.	<p>Providing and supplying at site ductile iron / Spherical Graphite (S.G) iron single / Double chamber tamper proof air valve without isolating sluice valve. Valves in accordance with BSEN 1074-4 of PN 10/16 rated, with body and bonnet of ductile iron confirming to EN 1563/IS 1865 Gr. 500/7 or Gr.400/15 floats, float guide, seat ring of stainless steel 1.4436/1.4306, seat ring gasket of WRAS approved EPDM rubber (suitable for drinking water), internal fasteners of stainless steel A2. Body & Bonnet coated inside & outside with electrostatically applied epoxy powder coated blue colour (suitable for drinking water) as per DIN 30677-2 & GSK guidelines with a coating thickness of min. 250 microns. Flange connections as per IS 1538 raised face & pressure testing at manufacturers works shall be done as per IS 14845. including transportation charges excluding GST levied by GOI & GOM in all respect etc. complete. (For PN 10 & 16)</p> <p>i) 50 mm dia</p> <p>ii) 80 mm dia</p> <p>iii) 100 mm dia</p> <p>iv) 150 mm dia</p> <p>v) 200 mm dia</p>	No.	21062.00	21613.00

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
1.	<p>XIII. MECHANICAL JOINTS / FITTING</p> <p>Supply of C. I. Mechanical Compression Flanged / Socket Tailpiece (Popularly known as I TM Flanged / Socket Tailpiece) suitable for making flanged connection with the plain barrel of C. I. Spun Pipes (as per - IS - 1536 /2001) and D. I. Pipes (as per IS: 8329 / 2000).The Tailpiec to be supplied complete with sealing rubber gasket of S.B.R, C.I. Follower Glands and M.S. Nut Bolts.The whole assembly should be mechanically and hydraulically tested to the provisions as laid down in IS:1538 /1993. The rates are inclusive of cost of material, freight charges, loading, transportation and unloading at departmental store, excluding GST levied by Gol and GoM in all respect, etc. complete as directed.</p> <p>i) 80 mm dia. ii) 100 mm dia. iii) 125 mm dia. iv) 150 mm dia. v) 200 mm dia. vi) 250 mm dia. vii) 300 mm dia. viii) 350 mm dia. ix) 400 mm dia. x) 450 mm dia. xi) 500 mm dia. xii) 600 mm dia. xiii) 700 mm dia. xiv) 750 mm dia.</p>			
2.	<p>Supply of C. I. Mechanical Compression Collar Coupling suitable for C. I. Spun Pipes (as per - IS - 1536 /2001) and complete with sealing rubber gasket of SBR,.C.I. follower Glands and M.S. nut Bolts.The whole assembly should be mechanically and hydraulically tested to the provisions as laid down in IS:1538 /1993.</p> <p>i) 80 mm dia. ii) 100 mm dia. iii) 125 mm dia. iv) 150 mm dia.</p>			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	v) 200 mm dia. vi) 250 mm dia. vii) 300 mm dia. viii) 350 mm dia. ix) 400 mm dia.	No.	1581.00	
	x) 450 mm dia. xi) 500 mm dia. xii) 600 mm dia. xiii) 700 mm dia. xiv) 750 mm dia.	No.	6985.00 9545.00 11906.00 15556.00 18252.00	
3.	Supply of C. I. Mechanical Joint Double Socket 90° ($1\frac{1}{4}$"") Bends as dimensionally described in Table-14 of IS-13382/1992 complete with sealing rubber gasket of SBR (dimensionally described in IS-12820/1989) with cast iron follower gland and mild steel nut bolts coated or otherwise protected from rusting and suitable for C. I. pipes .			
	i) 80 mm dia. ii) 100 mm dia. iii) 125 mm dia. iv) 150 mm dia. v) 200 mm dia.	No.	2043.00 2370.00 2768.00 4352.00 5775.00	
	vi) 250 mm dia. vii) 300 mm dia. viii) 350 mm dia. ix) 400 mm dia. x) 450 mm dia.	No.	8595.00 10461.00 17321.00 23607.00 30133.00	
	xi) 500 mm dia. xii) 600 mm dia. xiii) 700 mm dia. xiv) 750 mm dia.	No.	37497.00 52995.00 83651.00 95008.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
4.	Supply of CI Mechanical joint Double Socket 45° (1¹/₈"") Bends as dimensionally described in Table -15 of IS - 13382/1992 complete with sealing rubber gasket of S.B.R. (dimensionally described in IS-12820/1989) with cast iron follower gland mild steel nut bolts coated or otherwise protected from rusting and suitable for C. I. pipes.			
	i) 80 mm dia.	No.	1897.00	
	ii) 100 mm dia.	No.	2112.00	
	iii) 125 mm dia.	No.	2669.00	
	iv) 150 mm dia.	No.	3665.00	
	v) 200 mm dia.	No.	4828.00	
	vi) 250 mm dia.	No.	7083.00	
	vii) 300 mm dia.	No.	8545.00	
	viii) 350 mm dia.	No.	14255.00	
	ix) 400 mm dia.	No.	17590.00	
	x) 450 mm dia.	No.	24535.00	
	xi) 500 mm dia.	No.	27335.00	
	xii) 600 mm dia.	No.	37848.00	
	xiii) 700 mm dia.	No.	53935.00	
	xiv) 750 mm dia.	No.	71329.00	
5.	Supply of C. I. Mechanical Joint Double Socket 22.5° (1¹/₆"") Bends as dimensionally described in Table -16 of IS-13382/1992 complete with sealing rubber gasket of SBR (dimensionally described in IS-12820/1989) with cast iron follower gland and mild steel nut bolts coated or otherwise protected from rusting and suitable for C. I. pipes.			
	i) 80 mm dia.	No.	1821.00	
	ii) 100 mm dia.	No.	2027.00	
	iii) 125 mm dia.	No.	2434.00	
	iv) 150 mm dia.	No.	3441.00	
	v) 200 mm dia.	No.	4315.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
6.	vi) 250 mm dia. vii) 300 mm dia. viii) 350 mm dia. ix) 400 mm dia. x) 450 mm dia. xi) 500 mm dia. xii) 600 mm dia. xiii) 700 mm dia. xiv) 750 mm dia.	No.	6526.00	
		No.	7876.00	
		No.	12434.00	
		No.	15940.00	
		No.	20165.00	
		No.	23501.00	
		No.	31138.00	
		No.	46840.00	
		No.	51581.00	
	Supply of CI Mechanical joint Double Socket 11.25^0 ($\frac{1}{32}$"") Bends as dimensionally described in Table -17 of IS - 13382/1992 complete with sealing rubber gasket of S.B.R.(dimensionally described in IS-12820/1989) with cast iron follower gland and mild steel nut bolts coated or otherwise protected from rusting and suitable for C. I. pipes.			
	i) 80 mm dia.	No.	1803.00	
	ii) 100 mm dia.	No.	1980.00	
	iii) 125 mm dia.	No.	2151.00	
	iv) 150 mm dia.	No.	3364.00	
	v) 200 mm dia.	No.	4142.00	
	vi) 250 mm dia.	No.	6123.00	
	vii) 300 mm dia.	No.	6784.00	
	viii) 350 mm dia.	No.	10706.00	
	ix) 400 mm dia.	No.	14501.00	
	x) 450 mm dia.	No.	18304.00	
	xi) 500 mm dia.	No.	19952.00	
	xii) 600 mm dia.	No.	27351.00	
	xiii) 700 mm dia.	No.	36872.00	
	xiv) 750 mm dia.	No.	41135.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
7	<p>Supply of CI Mechanical joint All Socket Tees as dimensionally described in Table -18 of IS - 13382/1992 complete with sealing rubber gasket of S.B.R. (dimensionally described in IS-12820/1989) with cast iron follower gland and mild steel nut bolts coated or otherwise protected from rusting and suitable for C. I. pipes.</p> <p>i) 80 x 80 x 80 mm. dia. No. 2763.00</p> <p>ii) 100 x 100 x 80 mm. dia. No. 2970.00</p> <p>iii) 100 x 100 x 100 mm. dia. No. 3293.00</p> <p>iv) 150 x 150 x 80 mm. dia. No. 4613.00</p> <p>v) 150 x 150 x 100 mm. dia. No. 4678.00</p> <p>vi) 150 x 150 x 150 mm. dia. No. 5802.00</p> <p>vii) 200 x 200 x 80 mm. dia. No. 5564.00</p> <p>viii) 200 x 200 x 100 mm. dia. No. 5625.00</p> <p>ix) 200 x 200 x 150 mm. dia. No. 6700.00</p> <p>x) 200 x 200 x 200 mm. dia. No. 7372.00</p> <p>xi) 250 x 250 x 80 mm. dia. No. 7835.00</p> <p>xii) 250 x 250 x 100 mm. dia. No. 8008.00</p> <p>xiii) 250 x 250 x 150 mm. dia. No. 9557.00</p> <p>xiv) 250 x 250 x 200 mm. dia. No. 10098.00</p> <p>xv) 250 x 250 x 250 mm. dia. No. 11326.00</p> <p>xvi) 300 x 300 x 80 mm. dia. No. 8592.00</p> <p>xvii) 300 x 300 x 100 mm. dia. No. 8785.00</p> <p>xviii) 300 x 300 x 150 mm. dia. No. 11266.00</p> <p>xix) 300 x 300 x 200 mm. dia. No. 11639.00</p> <p>xx) 300 x 300 x 250 mm. dia. No. 12323.00</p> <p>xxi) 300 x 300 x 300 mm. dia. No. 13600.00</p>			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
8.	<p>Supply of CI Mechanical joint Double Socket with Flanged Tees dimensionally described in Table -19 of IS - 13382/1992 complete with sealing rubber gasket of S.B.R.(dimensionally described in IS-12820/1989) with cast iron follower gland and mild steel nut bolts coated or galvanised coated or otherwise protected from rusting and suitable for C. I. pipes.</p> <p>1) 80 x 80 x 80 mm. dia. No. 2705.00</p> <p>2) 100 x 100 x 80 mm. dia. No. 2969.00</p> <p>3) 100 x 100 x 100 mm. dia. No. 3141.00</p> <p>4) 150 x 150 x 80 mm. dia. No. 4480.00</p> <p>5) 150 x 150 x 100 mm. dia. No. 4591.00</p> <p>6) 150 x 150 x 150 mm. dia. No. 5468.00</p> <p>7) 200 x 200 x 80 mm. dia. No. 5258.00</p> <p>8) 200 x 200 x 100 mm. dia. No. 5609.00</p> <p>9) 200 x 200 x 150 mm. dia. No. 6460.00</p> <p>10) 200 x 200 x 200 mm. dia. No. 7406.00</p> <p>11) 250 x 250 x 80 mm. dia. No. 7426.00</p> <p>12) 250 x 250 x 100 mm. dia. No. 7815.00</p>			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	13) 250 x 250 x 150 mm. dia.	No.	9273.00	
	14) 250 x 250 x 200 mm. dia.	No.	9703.00	
	15) 250 x 250 x 250 mm. dia.	No.	10047.00	
	16) 300 x 300 x 80 mm. dia.	No.	8718.00	
	17) 300 x 300 x 100 mm. dia.	No.	8889.00	
	18) 300 x 300 x 150 mm. dia.	No.	10263.00	
	19) 300 x 300 x 200 mm. dia.	No.	10350.00	
	20) 300 x 300 x 250 mm. dia.	No.	11422.00	
	21) 300 x 300 x 300 mm. dia.	No.	13998.00	
	22) 350 x 350 x 80 mm. dia.	No.	12194.00	
	23) 350 x 350 x 100 mm. dia.	No.	12968.00	
	24) 350 x 350 x 150 mm. dia	No.	13953.00	
	25) 350 x 350 x 200 mm. dia.	No.	16259.00	
	26) 350 x 350 x 300 mm. dia	No.	16657.00	
	27) 350 x 350 x 350 mm. dia.	No.	19062.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	28) 400 x 400 x 80 mm.dia.	No.	15940.00	
	29) 400 x 400 x 100 mm.dia.	No.	16897.00	
	30) 400 x 400 x 150 mm.dia.	No.	18813.00	
	31) 400 x 400 x 200 mm.dia.	No.	19192.00	
	32) 400 x 400 x 300 mm.dia.	No.	23129.00	
	33) 400 x 400 x 400 mm.dia.	No.	26482.00	
	34) 450 x 450 x 80 mm.dia	No.	19012.00	
	35) 450 x 450 x 100 mm.dia	No.	19972.00	
	36) 450 x 450 x 200 mm.dia.	No.	23422.00	
	37) 450 x 450 x 300 mm.dia.	No.	29555.00	
	38) 450 x 450 x 350 mm.dia.	No.	31185.00	
	39) 450 x 450 x 450 mm.dia.	No.	33874.00	
	40) 500 x 500 x 100 mm.dia.	No.	21390.00	
	41) 500 x 500 x 250 mm.dia.	No.	29250.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	42) 500 x 500 x 300 mm.dia.	No.	30303.00	
	43) 500 x 500 x 400 mm.dia.	No.	36537.00	
	44) 500 x 500 x 500 mm.dia.	No.	44112.00	
	45) 600 x 600 x 100 mm.dia.	No.	30569.00	
	46) 600 x 600 x 300 mm.dia.	No.	41977.00	
	47) 600 x 600 x 400 mm.dia.	No.	47823.00	
	48) 600 x 600 x 500 mm.dia.	No.	51752.00	
	49) 600 x 600 x 600 mm.dia.	No.	63542.00	
	50) 700 x 700 x 100 mm.dia.	No.	40514.00	
	51) 700 x 700 x 200 mm.dia.	No.	46936.00	
	52) 700 x 700 x 350 mm.dia.	No.	56714.00	
	53) 700 x 700 x 400 mm.dia.	No.	60931.00	
	54) 750 x 750 x 150 mm.dia.	No.	48321.00	
	55) 750 x 750 x 250 mm.dia.	No.	55416.00	
	56) 750 x 750 x 750 mm.dia.	No.	106318.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
9.	Supply of CI Mechaincal joint Double Socket Reducers as described in Table -21 of IS - 13382/1992 complete with sealing rubber gasket of SBR(dimensionally described in IS-12820/1989) with cast iron follower gland and mild steel nut bolts coated or otherwise protected from rusting and suitable for C. I. pipes. <ul style="list-style-type: none"> 1) 100 x 80 mm. dia. No. 1916.00 2) 150 x 80 mm. dia. No. 3015.00 3) 150 x 100 mm. dia. No. 3192.00 4) 200 x 100 mm. dia. No. 3674.00 5) 200 x 150 mm. dia. No. 4018.00 6) 250 x 200 mm. dia. No. 5355.00 7) 250 x 150 mm. dia. No. 5489.00 8) 300 x 150 mm. dia. No. 6752.00 9) 300 x 200 mm. dia. No. 6763.00 10) 300 x 250 mm. dia. No. 6878.00 11) 350 x 200 mm. dia. No. 9720.00 12) 350 x 250 mm dia. No. 9751.00 13) 350 x 300 mm. dia. No. 9636.00 14) 400 x 250 mm. dia. No. 14681.00 15) 400 x 300 mm. dia No. 13006.00 . 16) 400 x 350 mm. dia. No. 13093.00 17) 450 x 300 mm. dia. No. 16258.00 18) 450 x 350 mm. dia. No. 16249.00 19) 450 x 400 mm. dia. No. 16045.00 20) 500 x 350 mm. dia. No. 19545.00 21) 500 x 400 mm. dia. No. 19247.00 22) 500 x 450 mm. dia. No. 18760.00 23) 600 x 400 mm. dia. No. 28379.00 24) 600 x 450 mm. dia. No. 27620.00 25) 600 x 500 mm. dia. No. 25933.00 26) 700 x 500 mm. dia. No. 38955.00 27) 700 x 600 mm. dia. No. 35354.00 28) 750 x 600 mm. dia. No. 41990.00 29) 750 x 700 mm. dia. No. 38813.00 30) 800 x 450 mm. dia. No. 57767.00 31) 800 x 700 mm. dia. No. 49590.00 			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																																																													
1	2	3	4	5																																																													
1.	<p>XIV. M. S. PIPES</p> <p>Manufacturing, providing and supplying spirally welded / ERW/ SAW / fabricated M. S. pipes (Commercial Quality) including procurements of plates, gas cutting to required size rolling, tack welding assembling in suitable lengths to form pipes, welding on automatic welding machine and forming 'V' edge on both ends of pipes including railway freight, insurance, unloading from railway wagon, loading into truck, transport to stores, unloading, stacking excluding GST levied by GOI & GOM in all respect, etc, complete as per IS - 3589 and IS-5504 as applicable as per specifications (No negative tolerance in thickness is permissible).</p> <p>a) Dia of Pipe : 219.10 mm (O. D.) Thickness of pipe :</p> <table> <tbody> <tr> <td>i)</td><td>4.8 mm</td><td>RMT</td><td>1314.00</td></tr> <tr> <td>ii)</td><td>5.6 mm</td><td>RMT</td><td>1527.00</td></tr> <tr> <td>iii)</td><td>6.4 mm</td><td>RMT</td><td>1739.00</td></tr> <tr> <td>iv)</td><td>7.0 mm</td><td>RMT</td><td>1896.00</td></tr> <tr> <td>v)</td><td>7.9 mm</td><td>RMT</td><td>2131.00</td></tr> <tr> <td>vi)</td><td>8.2 mm</td><td>RMT</td><td>2209.00</td></tr> <tr> <td>vii)</td><td>8.7 mm</td><td>RMT</td><td>2338.00</td></tr> <tr> <td>viii)</td><td>9.5 mm</td><td>RMT</td><td>2543.00</td></tr> </tbody> </table> <p>b) Dia of Pipe : 273.10 mm (O. D.) Thickness of pipe :</p> <table> <tbody> <tr> <td>i)</td><td>4.8 mm</td><td>RMT</td><td>1645.00</td></tr> <tr> <td>ii)</td><td>5.6 mm</td><td>RMT</td><td>1913.00</td></tr> <tr> <td>iii)</td><td>6.4 mm</td><td>RMT</td><td>2180.00</td></tr> <tr> <td>iv)</td><td>7.2 mm</td><td>RMT</td><td>2445.00</td></tr> <tr> <td>v)</td><td>7.8 mm</td><td>RMT</td><td>2643.00</td></tr> <tr> <td>vi)</td><td>8.7 mm.</td><td>RMT</td><td>2938.00</td></tr> <tr> <td>vii)</td><td>9.3 mm.</td><td>RMT</td><td>3133.00</td></tr> </tbody> </table>	i)	4.8 mm	RMT	1314.00	ii)	5.6 mm	RMT	1527.00	iii)	6.4 mm	RMT	1739.00	iv)	7.0 mm	RMT	1896.00	v)	7.9 mm	RMT	2131.00	vi)	8.2 mm	RMT	2209.00	vii)	8.7 mm	RMT	2338.00	viii)	9.5 mm	RMT	2543.00	i)	4.8 mm	RMT	1645.00	ii)	5.6 mm	RMT	1913.00	iii)	6.4 mm	RMT	2180.00	iv)	7.2 mm	RMT	2445.00	v)	7.8 mm	RMT	2643.00	vi)	8.7 mm.	RMT	2938.00	vii)	9.3 mm.	RMT	3133.00				
i)	4.8 mm	RMT	1314.00																																																														
ii)	5.6 mm	RMT	1527.00																																																														
iii)	6.4 mm	RMT	1739.00																																																														
iv)	7.0 mm	RMT	1896.00																																																														
v)	7.9 mm	RMT	2131.00																																																														
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i)	4.8 mm	RMT	1645.00																																																														
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vi)	8.7 mm.	RMT	2938.00																																																														
vii)	9.3 mm.	RMT	3133.00																																																														

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	<p>c) Dia of Pipe : 323.90 mm (O. D.) Thickness of pipe :</p> <p>i) 5.6 mm RMT 2277.00 ii) 6.4 mm RMT 2595.00 iii) 7.1 mm RMT 2872.00 iv) 7.9 mm RMT 3188.00 v) 8.4 mm RMT 3385.00 vi) 8.7 mm. RMT 3502.00 vii) 9.5 mm. RMT 3815.00</p> <p>d) Dia of Pipe : 355.7 mm (O. D.) Thickness of pipe :</p> <p>i) 5.6 mm. RMT 2503.00 ii) 6.4 mm. RMT 2855.00 iii) 7.1 mm. RMT 3161.00 iv) 7.9 mm. RMT 3508.00 v) 8.7 mm. RMT 3854.00 vi) 9.5 mm. RMT 4200.00</p> <p>e) Dia of Pipe : 406.00 mm (O. D.) Thickness of pipe :</p> <p>i) 5.6 mm. RMT 2863.00 ii) 6.4 mm. RMT 3266.00 iii) 7.1 mm. RMT 3617.00 iv) 7.9 mm. RMT 4017.00 v) 8.7 mm. RMT 4414.00 vi) 9.5 mm. RMT 4811.00 vii) 10.00 mm. RMT 5058.00</p> <p>f) Dia of Pipe : 457.00 mm (O. D.) Thickness of pipe :</p> <p>i) 5.6 mm. RMT 3229.00 ii) 6.4 mm. RMT 3683.00 iii) 7.1 mm. RMT 4080.00 iv) 7.9 mm. RMT 4531.00 v) 8.7 mm. RMT 4981.00 vi) 9.5 mm. RMT 5430.00 vii) 10.00 mm. RMT 5709.00</p>			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	<p>g) Dia of Pipe : 508.00 mm (O. D.) Thickness of pipe :</p> <p>i) 5.6 mm. ii) 6.4 mm. iii) 7.1 mm. iv) 7.9 mm. v) 8.7 mm. vi) 9.5 mm. vii) 10.00 mm.</p>	RMT	3594.00 4100.00 4542.00 5046.00 5548.00 6049.00 6361.00	
	<p>h) Dia of Pipe : 559.00 mm (O. D.) Thickness of pipe :</p> <p>i) 5.6 mm. ii) 6.4 mm. iii) 7.1 mm. iv) 7.9 mm. v) 8.7 mm. vi) 9.5 mm. vii) 10.00 mm.</p>	RMT	3958.00 4517.00 5005.00 5561.00 6115.00 6668.00 7012.00	
	<p>i) Dia of Pipe : 610.00 mm (O. D.) Thickness of pipe :</p> <p>i) 5.6 mm ii) 6.4 mm. iii) 7.1 mm. iv) 7.9 mm. v) 8.7 mm. vi) 9.5 mm. vii) 10.00 mm. viii) 12.00 mm</p>	RMT	4323.00 4934.00 5467.00 6075.00 6681.00 7286.00 7663.00 9165.00	
	<p>j) Dia of Pipe : 660.00 mm (O. D.) Thickness of pipe :</p> <p>i) 5.6 mm ii) 6.4 mm. iii) 7.1 mm. iv) 7.9 mm. v) 8.7 mm. vi) 9.5 mm. vii) 10.00 mm.</p>	RMT	4681.00 5342.00 5921.00 6579.00 7237.00 7893.00 8302.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	k) Dia of Pipe : 711.00 mm (O. D.) Thickness of pipe : i) 5.6 mm. ii) 6.4 mm. iii) 7.1 mm. iv) 7.9 mm. v) 8.7 mm. vi) 9.5 mm. vii) 10.00 mm. viii) 12.00 mm	RMT	5045.00 5759.00 6383.00 7094.00 7803.00 8512.00 8953.00 10713.00	
	l) Dia of Pipe : 762.00 mm (O. D.) Thickness of pipe : i) 5.6 mm. ii) 6.4 mm. iii) 7.1 mm. iv) 7.9 mm. v) 8.7 mm. vi) 9.5 mm. vii) 10.00 mm.	RMT	5410.00 6177.00 6846.00 7608.00 8370.00 9131.00 9605.00	
	m) Dia of Pipe : 813.00 mm (O. D.) Thickness of pipe : i) 5.6 mm. ii) 6.4 mm. iii) 7.1 mm. iv) 7.9 mm. v) 8.7 mm. vi) 9.5 mm. vii) 10.00 mm. viii) 12.00 mm	RMT	5775.00 6593.00 7308.00 8123.00 8937.00 9749.00 10256.00 12276.00	
	n) Dia of Pipe : 864.00 mm (O. D.) Thickness of pipe : i) 5.6 mm. ii) 6.4 mm. iii) 7.1 mm. iv) 7.9 mm. v) 8.7 mm. vi) 9.5 mm. vii) 10.00 mm.	RMT	6139.00 7010.00 7771.00 8638.00 9503.00 10367.00 10907.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	o) Dia of Pipe : 914.00 mm (O. D.) Thickness of pipe : i) 5.6 mm. ii) 6.4 mm. iii) 7.1 mm. iv) 7.9 mm. v) 8.7 mm. vi) 9.5 mm. vii) 10.00 mm.	RMT	6497.00 7418.00 8223.00 9142.00 10059.00 10975.00 11545.00	.
	p) Dia of Pipe : 965.00 mm (O. D.) Thickness of pipe : i) 5.6 mm. ii) 6.4 mm. iii) 7.1 mm. iv) 7.9 mm. v) 8.7 mm. vi) 9.5 mm. vii) 10.00 mm.	RMT	6861.00 7836.00 8686.00 9657.00 10626.00 11593.00 12197.00	
	q) Dia of Pipe : 1016.00 mm (O. D.) Thickness of pipe : i) 5.6 mm. ii) 6.4 mm. iii) 7.1 mm. iv) 7.9 mm. v) 8.7 mm. vi) 9.5 mm. vii) 10.00 mm. viii) 12.00 mm	RMT	7226.00 8253.00 9148.00 10172.00 11193.00 12212.00 12848.00 15388.00	
	r) Dia of Pipe : 1067.00 mm (O. D.) Thickness of pipe : i) 5.6 mm. ii) 6.4 mm. iii) 7.1 mm. iv) 7.9 mm. v) 8.7 mm. vi) 9.5 mm. vii) 10.00 mm.	RMT	7592.00 8669.00 9611.00 10686.00 11759.00 12830.00 13499.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
s)	Dia of Pipe : 1118.00 mm (O. D.) Thickness of pipe : i) 5.6 mm. ii) 6.4 mm. iii) 7.1 mm. iv) 7.9 mm. v) 8.7 mm. vi) 9.5 mm. vii) 10.00 mm.	RMT	7956.00 9086.00 10073.00 11201.00 12326.00 13449.00 14151.00	
t)	Dia of Pipe : 1168.00 mm (O. D.) Thickness of pipe : i) 5.6 mm. ii) 6.4 mm. iii) 7.1 mm. iv) 7.9 mm. v) 8.7 mm. vi) 9.5 mm. vii) 10.00 mm.	RMT	8314.00 9495.00 10527.00 11705.00 12882.00 14056.00 14790.00	
u)	Dia of Pipe : 1219.00 mm (O. D.) Thickness of pipe : i) 6.4 mm. ii) 7.1 mm. iii) 7.9 mm. iv) 8.7 mm. v) 9.5 mm. vi) 10.00 mm. vii) 12.00 mm.	RMT	9912.00 10989.00 12219.00 13448.00 14675.00 15441.00 18498.00	
v)	Dia of Pipe : 1296.00 mm (O. D.) Thickness of pipe : i) 9.5 mm. ii) 9.98 mm. iii) 10.00 mm.	RMT	15609.00 16391.00 16425.00	
w)	Dia of Pipe : 1321.00 mm (O. D.) Thickness of pipe : i) 6.4 mm. ii) 7.1 mm. iii) 7.9 mm. iv) 8.7 mm. v) 9.5 mm. vi) 10.00 mm.	RMT	10745.00 11914.00 13249.00 14582.00 15912.00 16744.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
x)	Dia of Pipe : 1422.00 mm (O. D.) Thickness of pipe : i) 7.1 mm. ii) 7.9 mm. iii) 8.7 mm. iv) 9.5 mm. v) 10.00 mm. vi) 12.00 mm.	RMT	12830.00 14268.00 15704.00 17138.00 18034.00 21610.00	
y)	Dia of Pipe : 1473.00 mm (O. D.) Thickness of pipe : i) 9.5 mm. ii) 9.98 mm.	RMT	17757.00 18648.00	
z)	Dia of Pipe : 1524.00 mm (O. D.) Thickness of pipe : i) 7.1 mm. ii) 7.9 mm. iii) 8.7 mm. iv) 9.5 mm. v) 10.00 mm. vi) 11.90 mm. vii) 12.00 mm.	RMT	13755.00 15297.00 16837.00 18376.00 19337.00 	
aa)	Dia of Pipe : 1550.00 mm (O. D.) Thickness of pipe : i) 10.00 mm. ii) 11.00 mm.	RMT	19668.00 21621.00	
ab)	Dia of Pipe : 1576.00 mm (O. D.) Thickness of pipe : i) 9.5 mm. ii) 10.00 mm.	RMT	19007.00 20001.00	
ac)	Dia of Pipe : 1626.00 mm (O. D.) Thickness of pipe : i) 7.1 mm. ii) 7.9 mm. iii) 8.7 mm. iv) 9.5 mm. v) 10.00 mm. vi) 12.00 mm.	RMT	14680.00 16327.00 17971.00 19613.00 20639.00 24737.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	ad) Dia of Pipe : 1650.00 mm (O. D.) Thickness of pipe : i) 7.9 mm. ii) 8.7 mm. iii) 9.5 mm. iv) 10.00 mm. v) 12.00 mm.	RMT	16569.00 18237.00 19904.00 20945.00 25104.00	
	ae) Dia of Pipe : 1700.00 mm (O. D.) Thickness of pipe : i) 7.9 mm. ii) 8.7 mm. iii) 9.5 mm. iv) 10.00 mm. v) 12.00 mm.	RMT	17072.00 18792.00 20511.00 21584.00 25870.00	
	af) Dia of Pipe : 1750.00 mm (O. D.) Thickness of pipe : i) 7.9 mm. ii) 8.7 mm. iii) 9.5 mm. iv) 10.00 mm. v) 12.00 mm.	RMT	17577.00 19348.00 21118.00 22223.00 26637.00	
	ag) Dia of Pipe : 1800.00 mm (O. D.) Thickness of pipe : i) 7.9 mm. ii) 8.7 mm. iii) 9.5 mm. iv) 10.00 mm. v) 12.00 mm.	RMT	18082.00 19904.00 21725.00 22861.00 27403.00	
	ah) Dia of Pipe : 1850.00 mm (O. D.) Thickness of pipe : i) 7.9 mm. ii) 8.7 mm. iii) 9.5 mm. iv) 10.00 mm. v) 12.00 mm.	RMT	20459.00 22331.00 23500.00 28169.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	ai) Dia of Pipe : 1900.00 mm (O. D.) Thickness of pipe : i) 7.9 mm. ii) 8.7 mm. iii) 9.5 mm. iv) 10.00 mm. v) 12.00 mm.	RMT	19091.00 21015.00 22938.00 24139.00 28936.00	
	aj) Dia of Pipe : 1950.00 mm (O. D.) Thickness of pipe : i) 7.9 mm. ii) 8.7 mm. iii) 9.5 mm. iv) 10.00 mm. v) 12.00 mm.	RMT	19595.00 21570.00 23544.00 24777.00 29702.00	
	ak) Dia of Pipe : 2000.00 mm (O. D.) Thickness of pipe : i) 7.9 mm. ii) 8.7 mm. iii) 9.5 mm. iv) 10.00 mm. v) 12.00 mm.	RMT	20100.00 22126.00 24151.00 25416.00 30469.00	
	al) Dia of Pipe : 2050.00 mm (O. D.) Thickness of pipe : i) 7.9 mm. ii) 8.7 mm. iii) 9.5 mm. iv) 10.00 mm. v) 12.00 mm.	RMT	20604.00 22682.00 24757.00 26054.00 31235.00	
	am) Dia of Pipe : 2100.00 mm (O. D.) Thickness of pipe : i) 7.9 mm. ii) 8.7 mm. iii) 9.5 mm. iv) 10.00 mm. v) 12.00 mm.	RMT	21109.00 23237.00 25365.00 26693.00 32001.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	an) Dia of Pipe : 2150.00 mm (O. D.) Thickness of pipe : i) 7.9 mm. ii) 8.7 mm. iii) 9.5 mm. iv) 10.00 mm. v) 12.00 mm.	RMT	21614.00 23793.00 25971.00 27332.00 32767.00	
	ao) Dia of Pipe : 2200.00 mm (O. D.) Thickness of pipe : i) 7.9 mm. ii) 8.7 mm. iii) 9.5 mm. iv) 10.00 mm. v) 12.00 mm.	RMT	22117.00 24348.00 26578.00 27970.00 33534.00	
	ap) Dia of Pipe : 2250.00 mm (O. D.) Thickness of pipe : i) 7.9 mm. ii) 8.7 mm. iii) 9.5 mm. iv) 10.00 mm. v) 12.00 mm.	RMT	22622.00 24904.00 27184.00 28609.00 34300.00	
	aq) Dia of Pipe : 2300.00 mm (O. D.) Thickness of pipe : i) 7.9 mm. ii) 8.7 mm. iii) 9.5 mm. iv) 10.00 mm. v) 12.00 mm.	RMT	23127.00 25460.00 27791.00 29247.00 35066.00	
	ar) Dia of Pipe : 2350.00 mm (O. D.) Thickness of pipe : i) 7.9 mm. ii) 8.7 mm. iii) 9.5 mm. iv) 10.00 mm. v) 12.00 mm.	RMT	23631.00 26015.00 28397.00 29886.00 35832.00	
	as) Dia of Pipe : 2400.00 mm (O. D.) Thickness of pipe : i) 7.9 mm. ii) 8.7 mm. iii) 9.5 mm. iv) 10.00 mm. v) 12.00 mm.	RMT	24136.00 26571.00 29004.00 30525.00 36599.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	at) Dia of Pipe : 2450.00 mm (O. D.) Thickness of pipe : i) 7.9 mm. ii) 8.7 mm. iii) 9.5 mm. iv) 10.00 mm. v) 12.00 mm.	RMT	24640.00	
	au) Dia of Pipe : 2500.00 mm (O. D.) Thickness of pipe : i) 7.9 mm. ii) 8.7 mm. iii) 9.5 mm. iv) 10.00 mm. v) 12.00 mm. vi) 16.00 mm.	RMT	25144.00	
2.	Manufacturing, providing and supplying spirally welded / ERW/ SAW / fabricated M. S. pipes (Commercial Quality) including procurements of plates, gas cutting to required size rolling, tack welding assembling in suitable lengths to form pipes, welding on automatic welding machine and forming 'V' edge on both ends of pipes including railway freight, insurance, unloading from railway wagon, loading into truck, transport to stores, unloading, stacking, excluding GST levied by GOI & GOM in all respect etc. complete as per IS - 3589 and IS-5504 as applicable as per specifications (No negative tolerance in thickness is permissible).			
	a) Dia of Pipe : 200.00 mm (I. D.) Thickness of pipe : i) 5.00 mm. ii) 6.00 mm. iii) 7.00 mm. iv) 8.00 mm. v) 9.00 mm. vi) 10.00mm.	RMT	1309.00	
		RMT	1578.00	
		RMT	1851.00	
		RMT	2125.00	
		RMT	2402.00	
		RMT	2682.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																																																																																																	
1	2	3	4	5																																																																																																	
	<p>b) Dia of Pipe : 250.00 mm (I. D.) Thickness of pipe :</p> <table> <tbody> <tr><td>i)</td><td>5.00 mm.</td><td>RMT</td><td>1629.00</td></tr> <tr><td>ii)</td><td>6.00 mm.</td><td>RMT</td><td>1962.00</td></tr> <tr><td>iii)</td><td>7.00 mm.</td><td>RMT</td><td>2298.00</td></tr> <tr><td>iv)</td><td>8.00 mm.</td><td>RMT</td><td>2636.00</td></tr> <tr><td>v)</td><td>9.00 mm.</td><td>RMT</td><td>2978.00</td></tr> <tr><td>vi)</td><td>10.00mm.</td><td>RMT</td><td>3321.00</td></tr> </tbody> </table> <p>c) Dia of Pipe : 300.00 mm (I. D.) Thickness of pipe :</p> <table> <tbody> <tr><td>i)</td><td>5.00 mm.</td><td>RMT</td><td>1947.00</td></tr> <tr><td>ii)</td><td>6.00 mm.</td><td>RMT</td><td>2345.00</td></tr> <tr><td>iii)</td><td>7.00 mm.</td><td>RMT</td><td>2744.00</td></tr> <tr><td>iv)</td><td>8.00 mm.</td><td>RMT</td><td>3147.00</td></tr> <tr><td>v)</td><td>9.00 mm.</td><td>RMT</td><td>3552.00</td></tr> <tr><td>vi)</td><td>10.00mm.</td><td>RMT</td><td>3960.00</td></tr> </tbody> </table> <p>d) Dia of Pipe : 350.00 mm (I. D.) Thickness of pipe :</p> <table> <tbody> <tr><td>i)</td><td>5.00 mm.</td><td>RMT</td><td>2267.00</td></tr> <tr><td>ii)</td><td>6.00 mm.</td><td>RMT</td><td>2728.00</td></tr> <tr><td>iii)</td><td>7.00 mm.</td><td>RMT</td><td>3192.00</td></tr> <tr><td>iv)</td><td>8.00 mm.</td><td>RMT</td><td>3658.00</td></tr> <tr><td>v)</td><td>9.00 mm.</td><td>RMT</td><td>4127.00</td></tr> <tr><td>vi)</td><td>10.00mm.</td><td>RMT</td><td>4598.00</td></tr> </tbody> </table> <p>e) Dia of Pipe : 400.00 mm (I. D.) Thickness of pipe :</p> <table> <tbody> <tr><td>i)</td><td>5.00 mm.</td><td>RMT</td><td>2586.00</td></tr> <tr><td>ii)</td><td>6.00 mm.</td><td>RMT</td><td>3111.00</td></tr> <tr><td>iii)</td><td>7.00 mm.</td><td>RMT</td><td>3639.00</td></tr> <tr><td>iv)</td><td>8.00 mm.</td><td>RMT</td><td>4168.00</td></tr> <tr><td>v)</td><td>9.00 mm.</td><td>RMT</td><td>4702.00</td></tr> <tr><td>vi)</td><td>10.00mm.</td><td>RMT</td><td>5237.00</td></tr> </tbody> </table>	i)	5.00 mm.	RMT	1629.00	ii)	6.00 mm.	RMT	1962.00	iii)	7.00 mm.	RMT	2298.00	iv)	8.00 mm.	RMT	2636.00	v)	9.00 mm.	RMT	2978.00	vi)	10.00mm.	RMT	3321.00	i)	5.00 mm.	RMT	1947.00	ii)	6.00 mm.	RMT	2345.00	iii)	7.00 mm.	RMT	2744.00	iv)	8.00 mm.	RMT	3147.00	v)	9.00 mm.	RMT	3552.00	vi)	10.00mm.	RMT	3960.00	i)	5.00 mm.	RMT	2267.00	ii)	6.00 mm.	RMT	2728.00	iii)	7.00 mm.	RMT	3192.00	iv)	8.00 mm.	RMT	3658.00	v)	9.00 mm.	RMT	4127.00	vi)	10.00mm.	RMT	4598.00	i)	5.00 mm.	RMT	2586.00	ii)	6.00 mm.	RMT	3111.00	iii)	7.00 mm.	RMT	3639.00	iv)	8.00 mm.	RMT	4168.00	v)	9.00 mm.	RMT	4702.00	vi)	10.00mm.	RMT	5237.00				
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Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																												
1	2	3	4	5																												
	<p>f) Dia of Pipe : 450.00 mm (I. D.) Thickness of pipe :</p> <table> <tbody> <tr><td>i)</td><td>5.00 mm.</td><td>RMT</td><td>2906.00</td></tr> <tr><td>ii)</td><td>6.00 mm.</td><td>RMT</td><td>3494.00</td></tr> <tr><td>iii)</td><td>7.00 mm.</td><td>RMT</td><td>4086.00</td></tr> <tr><td>iv)</td><td>8.00 mm.</td><td>RMT</td><td>4680.00</td></tr> <tr><td>v)</td><td>9.00 mm.</td><td>RMT</td><td>5276.00</td></tr> <tr><td>vi)</td><td>10.00mm.</td><td>RMT</td><td>5875.00</td></tr> </tbody> </table>	i)	5.00 mm.	RMT	2906.00	ii)	6.00 mm.	RMT	3494.00	iii)	7.00 mm.	RMT	4086.00	iv)	8.00 mm.	RMT	4680.00	v)	9.00 mm.	RMT	5276.00	vi)	10.00mm.	RMT	5875.00							
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	<p>g) Dia of Pipe : 500.00 mm (I. D.) Thickness of pipe :</p> <table> <tbody> <tr><td>i)</td><td>5.00 mm.</td><td>RMT</td><td>3225.00</td></tr> <tr><td>ii)</td><td>6.00 mm.</td><td>RMT</td><td>3878.00</td></tr> <tr><td>iii)</td><td>7.00 mm.</td><td>RMT</td><td>4532.00</td></tr> <tr><td>iv)</td><td>8.00 mm.</td><td>RMT</td><td>5191.00</td></tr> <tr><td>v)</td><td>9.00 mm.</td><td>RMT</td><td>5851.00</td></tr> <tr><td>vi)</td><td>10.00mm.</td><td>RMT</td><td>6514.00</td></tr> </tbody> </table>	i)	5.00 mm.	RMT	3225.00	ii)	6.00 mm.	RMT	3878.00	iii)	7.00 mm.	RMT	4532.00	iv)	8.00 mm.	RMT	5191.00	v)	9.00 mm.	RMT	5851.00	vi)	10.00mm.	RMT	6514.00							
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	<p>h) Dia of Pipe : 550.00 mm (I. D.) Thickness of pipe :</p> <table> <tbody> <tr><td>i)</td><td>5.00 mm.</td><td>RMT</td><td>3544.00</td></tr> <tr><td>ii)</td><td>6.00 mm.</td><td>RMT</td><td>4261.00</td></tr> <tr><td>iii)</td><td>7.00 mm.</td><td>RMT</td><td>4980.00</td></tr> <tr><td>iv)</td><td>8.00 mm.</td><td>RMT</td><td>5701.00</td></tr> <tr><td>v)</td><td>9.00 mm.</td><td>RMT</td><td>6426.00</td></tr> <tr><td>vi)</td><td>10.00mm.</td><td>RMT</td><td>7152.00</td></tr> </tbody> </table>	i)	5.00 mm.	RMT	3544.00	ii)	6.00 mm.	RMT	4261.00	iii)	7.00 mm.	RMT	4980.00	iv)	8.00 mm.	RMT	5701.00	v)	9.00 mm.	RMT	6426.00	vi)	10.00mm.	RMT	7152.00							
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	<p>i) Dia of Pipe : 600.00 mm (I. D.) Thickness of pipe :</p> <table> <tbody> <tr><td>i)</td><td>5.00 mm.</td><td>RMT</td><td>3863.00</td></tr> <tr><td>ii)</td><td>6.00 mm.</td><td>RMT</td><td>4643.00</td></tr> <tr><td>iii)</td><td>7.00 mm.</td><td>RMT</td><td>5427.00</td></tr> <tr><td>iv)</td><td>8.00 mm.</td><td>RMT</td><td>6212.00</td></tr> <tr><td>v)</td><td>9.00 mm.</td><td>RMT</td><td>7000.00</td></tr> <tr><td>vi)</td><td>10.00mm.</td><td>RMT</td><td>7790.00</td></tr> <tr><td>vii)</td><td>12.00 mm.</td><td>RMT</td><td>9379.00</td></tr> </tbody> </table>	i)	5.00 mm.	RMT	3863.00	ii)	6.00 mm.	RMT	4643.00	iii)	7.00 mm.	RMT	5427.00	iv)	8.00 mm.	RMT	6212.00	v)	9.00 mm.	RMT	7000.00	vi)	10.00mm.	RMT	7790.00	vii)	12.00 mm.	RMT	9379.00			
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ii)	6.00 mm.	RMT	4643.00																													
iii)	7.00 mm.	RMT	5427.00																													
iv)	8.00 mm.	RMT	6212.00																													
v)	9.00 mm.	RMT	7000.00																													
vi)	10.00mm.	RMT	7790.00																													
vii)	12.00 mm.	RMT	9379.00																													

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
j)	Dia of Pipe : 650.00 mm (I. D.) Thickness of pipe :			
i)	5.00 mm.	RMT	4183.00	
ii)	6.00 mm.	RMT	5027.00	
iii)	7.00 mm.	RMT	5873.00	
iv)	8.00 mm.	RMT	6723.00	
v)	9.00 mm.	RMT	7575.00	
vi)	10.00 mm.	RMT	8429.00	
vii)	12.00 mm.	RMT	10146.00	
k)	Dia of Pipe : 700.00 mm (I. D.) Thickness of pipe :			
i)	5.00 mm	RMT	4502.00	
ii)	6.00 mm.	RMT	5410.00	
iii)	7.00 mm.	RMT	6321.00	
iv)	8.00 mm.	RMT	7234.00	
v)	9.00 mm.	RMT	8149.00	
vi)	10.00 mm.	RMT	9068.00	
vii)	12.00 mm.	RMT	10913.00	
l)	Dia of Pipe : 750.00 mm (I. D.) Thickness of pipe :			
i)	5.00 mm.	RMT	4822.00	
ii)	6.00 mm.	RMT	5793.00	
iii)	7.00 mm.	RMT	6768.00	
iv)	8.00 mm.	RMT	7745.00	
v)	9.00 mm.	RMT	8724.00	
vi)	10.00 mm.	RMT	9706.00	
vii)	12.00 mm.	RMT	11678.00	
m)	Dia of Pipe : 800.00 mm (I. D.) Thickness of pipe :			
i)	5.00 mm	RMT	5140.00	
ii)	6.00 mm.	RMT	6177.00	
ii)	7.00 mm.	RMT	7215.00	
iii)	8.00 mm.	RMT	8256.00	
iv)	9.00 mm.	RMT	9299.00	
v)	10.00 mm.	RMT	10345.00	
vi)	12.00 mm.	RMT	12445.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020																																																																																																																	
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	<p>n) Dia of Pipe : 850.00 mm (I. D.) Thickness of pipe :</p> <table> <tbody> <tr><td>i)</td><td>5.00 mm.</td><td>RMT</td><td>5460.00</td></tr> <tr><td>ii)</td><td>6.00 mm.</td><td>RMT</td><td>6559.00</td></tr> <tr><td>iii)</td><td>7.00 mm.</td><td>RMT</td><td>7661.00</td></tr> <tr><td>iv)</td><td>8.00 mm.</td><td>RMT</td><td>8766.00</td></tr> <tr><td>v)</td><td>9.00 mm.</td><td>RMT</td><td>9873.00</td></tr> <tr><td>vi)</td><td>10.00mm.</td><td>RMT</td><td>10983.00</td></tr> <tr><td>vii)</td><td>12.00 mm.</td><td>RMT</td><td>13211.00</td></tr> </tbody> </table> <p>o) Dia of Pipe : 900.00 mm (I. D.) Thickness of pipe :</p> <table> <tbody> <tr><td>i)</td><td>5.00 mm.</td><td>RMT</td><td>5779.00</td></tr> <tr><td>ii)</td><td>6.00 mm.</td><td>RMT</td><td>6943.00</td></tr> <tr><td>iii)</td><td>7.00 mm.</td><td>RMT</td><td>8109.00</td></tr> <tr><td>iv)</td><td>8.00 mm.</td><td>RMT</td><td>9277.00</td></tr> <tr><td>v)</td><td>9.00 mm.</td><td>RMT</td><td>10448.00</td></tr> <tr><td>vi)</td><td>10.00mm.</td><td>RMT</td><td>11622.00</td></tr> <tr><td>vii)</td><td>12.00 mm.</td><td>RMT</td><td>13978.00</td></tr> </tbody> </table> <p>p) Dia of Pipe : 950.00 mm (I. D.) Thickness of pipe :</p> <table> <tbody> <tr><td>i)</td><td>5.00 mm</td><td>RMT</td><td>6099.00</td></tr> <tr><td>ii)</td><td>6.00 mm.</td><td>RMT</td><td>7326.00</td></tr> <tr><td>iii)</td><td>7.00 mm.</td><td>RMT</td><td>8556.00</td></tr> <tr><td>iv)</td><td>8.00 mm.</td><td>RMT</td><td>9788.00</td></tr> <tr><td>v)</td><td>9.00 mm.</td><td>RMT</td><td>11024.00</td></tr> <tr><td>vi)</td><td>10.00mm.</td><td>RMT</td><td>12261.00</td></tr> <tr><td>vii)</td><td>12.00 mm.</td><td>RMT</td><td>14743.00</td></tr> </tbody> </table> <p>q) Dia of Pipe : 1000.00 mm (I. D.) Thickness of pipe :</p> <table> <tbody> <tr><td>i)</td><td>5.00 mm.</td><td>RMT</td><td>6418.00</td></tr> <tr><td>ii)</td><td>6.00 mm.</td><td>RMT</td><td>7709.00</td></tr> <tr><td>iii)</td><td>7.00 mm.</td><td>RMT</td><td>9003.00</td></tr> <tr><td>iv)</td><td>8.00 mm.</td><td>RMT</td><td>10300.00</td></tr> <tr><td>v)</td><td>9.00 mm.</td><td>RMT</td><td>11598.00</td></tr> <tr><td>vi)</td><td>10.00mm.</td><td>RMT</td><td>12899.00</td></tr> <tr><td>vii)</td><td>12.00 mm.</td><td>RMT</td><td>15510.00</td></tr> </tbody> </table>	i)	5.00 mm.	RMT	5460.00	ii)	6.00 mm.	RMT	6559.00	iii)	7.00 mm.	RMT	7661.00	iv)	8.00 mm.	RMT	8766.00	v)	9.00 mm.	RMT	9873.00	vi)	10.00mm.	RMT	10983.00	vii)	12.00 mm.	RMT	13211.00	i)	5.00 mm.	RMT	5779.00	ii)	6.00 mm.	RMT	6943.00	iii)	7.00 mm.	RMT	8109.00	iv)	8.00 mm.	RMT	9277.00	v)	9.00 mm.	RMT	10448.00	vi)	10.00mm.	RMT	11622.00	vii)	12.00 mm.	RMT	13978.00	i)	5.00 mm	RMT	6099.00	ii)	6.00 mm.	RMT	7326.00	iii)	7.00 mm.	RMT	8556.00	iv)	8.00 mm.	RMT	9788.00	v)	9.00 mm.	RMT	11024.00	vi)	10.00mm.	RMT	12261.00	vii)	12.00 mm.	RMT	14743.00	i)	5.00 mm.	RMT	6418.00	ii)	6.00 mm.	RMT	7709.00	iii)	7.00 mm.	RMT	9003.00	iv)	8.00 mm.	RMT	10300.00	v)	9.00 mm.	RMT	11598.00	vi)	10.00mm.	RMT	12899.00	vii)	12.00 mm.	RMT	15510.00				
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Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
r)	Dia of Pipe : 1050.00 mm (I. D.) Thickness of pipe :			
	i) 5.00 mm.	RMT	6737.00	
	ii) 6.00 mm.	RMT	8092.00	
	iii) 7.00 mm.	RMT	9449.00	
	iv) 8.00 mm.	RMT	10810.00	
	v) 9.00 mm.	RMT	12173.00	
	vi) 10.00 mm.	RMT	13538.00	
	vii) 12.00mm.	RMT	16276.00	
s)	Dia of Pipe : 1100.00 mm (I. D.) Thickness of pipe :			
	i) 5.00 mm.	RMT	7056.00	
	ii) 6.00 mm.	RMT	8475.00	
	iii) 7.00 mm.	RMT	9897.00	
	iv) 8.00 mm.	RMT	11321.00	
	v) 9.00 mm.	RMT	12748.00	
	vi) 10.00mm.	RMT	14176.00	
	vii) 12.00 mm.	RMT	17043.00	
t)	Dia of Pipe : 1150.00 mm (I. D.) Thickness of pipe :			
	i) 5.00 mm.	RMT	7376.00	
	ii) 6.00 mm.	RMT	8859.00	
	iii) 7.00 mm.	RMT	10344.00	
	iv) 8.00 mm.	RMT	11832.00	
	v) 9.00 mm.	RMT	13322.00	
	vi) 10.00mm.	RMT	14815.00	
	vii) 12.00 mm.	RMT	17809.00	
u)	Dia of Pipe : 1200.00 mm (I. D.) Thickness of pipe :			
	i) 5.00 mm.	RMT	7695.00	
	ii) 6.00 mm.	RMT	9242.00	
	iii) 7.00 mm.	RMT	10791.00	
	iv) 8.00 mm.	RMT	12342.00	
	v) 9.00 mm.	RMT	13897.00	
	vi) 10.00mm.	RMT	15454.00	
	vii) 12.00 mm.	RMT	18575.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
v)	Dia of Pipe : 1250.00 mm (I. D.) Thickness of pipe :			
i)	6.00 mm.	RMT	9625.00	
ii)	7.00 mm.	RMT	11238.00	
iii)	8.00 mm.	RMT	12854.00	
iv)	9.00 mm.	RMT	14472.00	
v)	10.00mm.	RMT	16092.00	
vi)	12.00 mm.	RMT	19342.00	
w)	Dia of Pipe : 1300.00 mm (I. D.) Thickness of pipe :			
i)	6.00 mm.	RMT	10008.00	
ii)	7.00 mm.	RMT	11685.00	
iii)	8.00 mm.	RMT	13365.00	
iv)	9.00 mm.	RMT	15046.00	
v)	10.00mm.	RMT	16731.00	
vi)	12.00 mm.	RMT	20108.00	
x)	Dia of Pipe : 1350.00 mm (I. D.) Thickness of pipe :			
i)	7.00 mm.	RMT	12132.00	
ii)	8.00 mm.	RMT	13875.00	
iii)	9.00 mm.	RMT	15621.00	
iv)	10.00mm.	RMT	17370.00	
v)	12.00 mm.	RMT	20875.00	
y)	Dia of Pipe : 1400.00 mm (I. D.) Thickness of pipe :			
i)	7.00 mm.	RMT	12578.00	
ii)	8.00 mm.	RMT	14386.00	
iii)	9.00 mm.	RMT	16196.00	
iv)	10.00mm.	RMT	18008.00	
v)	12.00 mm.	RMT	21640.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	z) Dia of Pipe : 1450.00 mm (I. D.) Thickness of pipe : i) 7.00 mm. ii) 8.00 mm. iii) 9.00 mm. iv) 10.00mm. v) 12.00 mm.	RMT	13026.00 14897.00 16770.00 18647.00 22407.00	
	aa) Dia of Pipe : 1500.00 mm (I. D.) Thickness of pipe : i) 7.00 mm. ii) 8.00 mm. iii) 9.00 mm. iv) 10.00mm. v) 12.00 mm.	RMT	13473.00 15407.00 17345.00 19285.00 23173.00	
	ab) Dia of Pipe : 1550.00 mm (I. D.) Thickness of pipe : i) 7.00 mm. ii) 8.00 mm. iii) 9.00 mm. iv) 10.00mm. v) 12.00 mm.	RMT	13920.00 15919.00 17920.00 19924.00 23940.00	
	ac) Dia of Pipe : 1600.00 mm (I. D.) Thickness of pipe : i) 7.00 mm. ii) 8.00 mm. iii) 9.00 mm. iv) 10.00mm. v) 12.00 mm.	RMT	14367.00 16430.00 18495.00 20563.00 24705.00	
	ad) Dia of Pipe : 1650.00 mm (I. D.) Thickness of pipe : i) 8.00 mm. ii) 9.00 mm. iii) 10.00mm. iv) 12.00 mm.	RMT	16941.00 19070.00 21201.00 25472.00	

Sr. No.	Description	Unit	Rate (in Rs.)	Rate (in Rs.)
			2018-2019	2019-2020
1	2	3	4	5
	ae) Dia of Pipe : 1700.00 mm (I. D.) Thickness of pipe :			
	i) 8.00 mm.	RMT	17451.00	
	ii) 9.00 mm.	RMT	19645.00	
	iii) 10.00 mm.	RMT	21840.00	
	iv) 12.00mm.	RMT	26238.00	
	af) Dia of Pipe : 1750.00 mm (I. D.) Thickness of pipe :			
	i) 8.00 mm.	RMT	17962.00	
	ii) 9.00 mm.	RMT	20219.00	
	iii) 10.00 mm.	RMT	22478.00	
	iv) 12.00mm.	RMT	27005.00	
	ag) Dia of Pipe : 1800.00 mm (I. D.) Thickness of pipe :			
	i) 8.00 mm.	RMT	18473.00	
	ii) 9.00 mm.	RMT	20794.00	
	iii) 10.00 mm.	RMT	23117.00	
	iv) 12.00mm.	RMT	27771.00	
	ah) Dia of Pipe : 1850.00 mm (I. D.) Thickness of pipe :			
	i) 8.00 mm.	RMT	18984.00	
	ii) 9.00 mm.	RMT	21369.00	
	iii) 10.00 mm.	RMT	23756.00	
	iv) 12.00mm.	RMT	28537.00	
	ai) Dia of Pipe : 1900.00 mm (I. D.) Thickness of pipe :			
	i) 8.00 mm.	RMT	19495.00	
	ii) 9.00 mm.	RMT	21943.00	
	iii) 10.00 mm.	RMT	24394.00	
	iv) 12.00mm.	RMT	29304.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	<p>aj) Dia of Pipe : 1950.00 mm (I. D.)</p> <p>Thickness of pipe :</p> <p>i) 8.00 mm. ii) 9.00 mm. iii) 10.00mm. iv) 12.00 mm.</p>	RMT	20006.00 22518.00 25033.00 30070.00	
	<p>ak) Dia of Pipe : 2000.00 mm (I. D.)</p> <p>Thickness of pipe :</p> <p>i) 8.00 mm. ii) 9.00 mm. iii) 10.00mm. iv) 12.00 mm. v) 16.00 mm.</p>	RMT	20516.00 23093.00 25672.00 30837.00 41197.00	
	<p>al) Dia of Pipe : 2050.00 mm (I. D.)</p> <p>Thickness of pipe :</p> <p>i) 8.00 mm. ii) 9.00 mm. iii) 10.00mm. iv) 12.00 mm. v) 16.00 mm.</p>	RMT	21027.00 23667.00 26310.00 31602.00 42219.00	
	<p>am) Dia of Pipe : 2100.00 mm (I. D.)</p> <p>Thickness of pipe :</p> <p>i) 8.00 mm. ii) 9.00 mm. iii) 10.00mm. iv) 12.00 mm. v) 16.00 mm.</p>	RMT	21539.00 24242.00 26949.00 32369.00 43240.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	<p>an) Dia of Pipe : 2150.00 mm (I. D.)</p> <p>Thickness of pipe :</p> <p>i) 8.00 mm. ii) 9.00 mm. iii) 10.00 mm. iv) 12.00mm. v) 16.00 mm.</p>			
	<p>ao) Dia of Pipe : 2200.00 mm (I. D.)</p> <p>Thickness of pipe :</p> <p>i) 8.00 mm. ii) 9.00 mm. iii) 10.00 mm. iv) 12.00mm. v) 16.00 mm</p>			
	<p>ap) Dia of Pipe : 2250.00 mm (I. D.)</p> <p>Thickness of pipe :</p> <p>i) 8.00 mm. ii) 9.00 mm. iii) 10.00 mm. iv) 12.00mm. v) 16.00 mm</p>			
	<p>aq) Dia of Pipe : 2300.00 mm (I. D.)</p> <p>Thickness of pipe :</p> <p>i) 8.00 mm. ii) 9.00 mm. iii) 10.00 mm. iv) 12.00mm. v) 16.00 mm.</p>			

Sr. No.	Description	Unit	Rate	Rate
			(in Rs.)	(in Rs.)
1	2	3	4	5
	ar) Dia of Pipe : 2350.00 mm (I. D.) Thickness of pipe :			
	i) 8.00 mm.	RMT	24092.00	
	ii) 9.00 mm.	RMT	27116.00	
	iii) 10.00mm.	RMT	30142.00	
	iv) 12.00 mm.	RMT	36200.00	
	v) 16.00 mm.	RMT	48349.00	
	as) Dia of Pipe : 2400.00 mm (I. D.) Thickness of pipe :			
	i) 8.00 mm.	RMT	24604.00	
	ii) 9.00 mm.	RMT	27691.00	
	iii) 10.00mm.	RMT	30780.00	
	iv) 12.00 mm.	RMT	36967.00	
	v) 16.00 mm.	RMT	49370.00	
	at) Dia of Pipe : 2450.00 mm (I. D.) Thickness of pipe :			
	i) 8.00 mm.	RMT	25115.00	
	ii) 9.00 mm.	RMT	28265.00	
	iii) 10.00mm.	RMT	31418.00	
	iv) 12.00 mm.	RMT	37732.00	
	v) 16.00 mm.	RMT	50393.00	
	au) Dia of Pipe : 2500.00 mm (I. D.) Thickness of pipe :			
	i) 8.00 mm.	RMT	25625.00	
	ii) 9.00 mm.	RMT	28840.00	
	iii) 10.00mm.	RMT	32057.00	
	iv) 12.00 mm.	RMT	38499.00	
	v) 16.00 mm.	RMT	51414.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
1.	<p>XV. FABRICATION OF M.S. PIPES & SPECIALS</p> <p>Providing, fabricating and fixing expansion joints for pipelines as per the drawing. The rate to include machining the strakes and steel ring as shown in the drawing and welding on either automatic welding machine or manually, Rate includes plates and flats required for expansion joint and all other materials such as synthetic rubber, rubber ring, etc. including packing as per specifications, grease, bolts and nuts, local handling, excluding GST levied by GOI & GOM in all respect etc. complete.</p> <p>Expansion joints suitable for pipe diameters.</p> <ul style="list-style-type: none"> i) 300 mm. dia. ii) 400 mm. dia. iii) 450 mm. dia. iv) 500 mm. dia. v) 600 mm. dia. vi) 700 mm. dia. vii) 750 mm. dia. viii) 800 mm. dia. ix) 900 mm. dia. x) 1000 mm. dia. xi) 1200 mm. dia. 			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
2.	Blast cleaning the surface of the old or new pipeline internally to remove all rust etc. complete, including providing sand, machinery, labour, cutting of pipes at required places and rewelding the same etc, complete as directed by Engineer-in-charge. (Pipes pieces if required for rewelding of old pipeline shall be paid separately.)	Sqm.	103.00	
3.	Blast Cleaning of old or new pipeline surface internally with mechanical cleaning machine having steel scraper blades with required passes including removing all rust, scaling etc. including cutting of pipes at required places, rewelding the same including cost of all materials and labour, etc, complete (Pipes pieces if required for rewelding of old pipeline shall be paid separately.)	Sqm.	103.00	
4.	Blast Cleaning of old pipeline surface internally by using swabbing method by passing polyurethane foam “Pig” with required hydraulic pressure, cutting of pipes at required places, rewelding the same including cost of all materials and labour, etc. complete. (Pipe pieces if required for rewelding of old pipeline shall be paid separately.)	Sqm.	122.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
5.	Blast cleaning the surface of the old or new pipeline externally to remove all rust including providing sand machinery etc. complete as directed by Engineer-in-charge.	Sqm.	122.00	
6.	Providing and applying primer and one coat of red oxide of iron paint internally to blast cleaned surface of the pipes.	Sqm.	33.00	
7.	Providing and applying primer and one coat of red oxide of iron paint internally including cleaning the surface of the pipes with steel scrapers , wire brushes, and metal cleaning solution, etc.	Sqm.	56.00	
8.	Providing and applying primer and one coat of red oxide of iron paint externally to blast cleaned surface of the pipes.	Sqm.	37.00	
9	Providing and applying primer and one coat of red oxide of iron paint externally including cleaning the surface of the pipes with steel scrapers , wire brushes, and metal cleaning solution, etc.	Sqm.	80.00	
10.	Providing and applying covering coat of grey graphite of approved quality including dusting the surface etc. complete.	Sqm.	41.00	
11.	Providing and applying one coat of zinc rich epoxy primer to the internal surface of pipe line at site.	Sqm.	87.00	
12.	Providing and applying primer first coat of intertol 49 W emaline 05/58 pipe coat or any other equivalent approved paint to the internal surface of pipe line at site.	Sqm.	67.00	
	b) Second coat	Sqm.	54.00	
	c) Third coat	Sqm.	53.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
1.	<p>XVI. M. S. PIPES LAYING</p> <p>Lowering, laying in position to correct line and level including M. S. pipes with / without any outcoating on pedestals or chairs upon prepared formation. The rate to include loading, unloading, hoisting, marginal cutting wherever required, assembling and tack welding, and transportation upto 500 M. etc. completed as specified.</p> <p>a) 5 mm to 8 mm thick</p> <ul style="list-style-type: none"> i) Upto 250 mm. dia. Rmt 375.00 ii) Above 250 mm. Upto 500 mm. dia. Rmt 442.00 iii) Above 500 mm. Upto 750 mm. dia. Rmt 506.00 iv) Above 750 mm. Upto 1000 mm. dia. Rmt 574.00 v) Above 1000 mm. Upto 1250 mm. dia. Rmt 641.00 <p>b) Above 8 mm upto 12 mm thick</p> <ul style="list-style-type: none"> i) From 750 mm.Upto 1000 mm. dia. Rmt 764.00 ii) Above 1000 mm. Upto1250 mm. dia. Rmt 851.00 iii) Above 1250 mm. Upto 1500 mm. dia. Rmt 939.00 iv) Above 1500 mm. Upto 1750 mm. dia. Rmt 1029.00 v) Above 1750 mm. Upto 2000 mm. dia. Rmt 1117.00 vi) Above 2000 mm. Upto 2250 mm. dia. Rmt 1205.00 vii) Above 2250 mm. Upto 2500 mm. dia. Rmt 1297.00 			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	c) Above 12 mm upto 16 mm thick			
	i) From 2000 mm. Upto 2250 mm. dia.	Rmt	1149.00	
	ii) Above 2250 mm. Upto 2500 mm. dia.	Rmt	1240.00	
	iii) Above 2500 mm. Upto 2750 mm. dia.	Rmt	1324.00	
	iv) Above 2750 mm. Upto 3000 mm. dia.	Rmt	1409.00	
	v) Above 3000 mm. Upto 3250 mm. dia.	Rmt	1494.00	
	vi) Above 3250 mm. Upto 3500 mm. dia.	Rmt	1581.00	
	d) Above 16 mm upto 20 mm thick			
	i) From 2500 mm. Upto 2750 mm. dia.	Rmt	1736.00	
	ii) Above 2750 mm. Upto 3000 mm. dia.	Rmt	1833.00	
	iii) Above 3000 mm. Upto 3250 mm. dia.	Rmt	1930.00	
	iv) Above 3250 mm. Upto 3500 mm. dia.	Rmt	2024.00	
	v) Above 3500 mm. Upto 3750 mm. dia.	Rmt	2122.00	
	vi) Above 3750 mm. Upto 4000 mm. dia.	Rmt	2219.00	
	e) Above 20 mm upto 25 mm thick			
	i) From 3500 mm. Upto 3750 mm. dia.	Rmt	2366.00	
	ii) Above 3750 mm. Upto 4000 mm. dia.	Rmt	2501.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
2.	<p>Lowering, laying in position to correct line and level including M. S. specials with / without any outcoating such as distance pieces, straps, bends, tapers, etc. on pedestals or chairs upon formation. The rate to include loading, unloading, hoisting, marginal cutting wherever required, assembling and tack welding, and transportation upto 500M etc. complete.</p> <p>a) 5 mm to 8 mm thick</p> <ul style="list-style-type: none"> i) Upto 250 mm. dia. Rmt 524.00 ii) Above 250 mm. Upto 500 mm. dia. Rmt 615.00 iii) Above 500 mm. Upto 750 mm. dia. Rmt 711.00 iv) Above 750 mm. Upto 1000 mm. dia. Rmt 802.00 v) Above 1000 mm. Upto 1250 mm. dia. Rmt 896.00 <p>b) Above 8 mm upto 12 mm thick</p> <ul style="list-style-type: none"> i) From 750 mm.Upto 1000 mm. dia. Rmt 1069.00 ii) Above 1000 mm. Upto1250 mm. dia. Rmt 1193.00 iii) Above 1250 mm. Upto 1500 mm. dia. Rmt 1315.00 iv) Above 1500 mm. Upto 1750 mm. dia. Rmt 1439.00 v) Above 1750 mm. Upto 2000 mm. dia. Rmt 1566.00 vi) Above 2000 mm. Upto 2250 mm. dia. Rmt 1687.00 vii) Above 2250 mm. Upto 2500 mm. dia. Rmt 1812.00 <p>c) Above 12 mm upto 16 mm thick</p> <ul style="list-style-type: none"> i) From 2000 mm. Upto 2250 mm. dia. Rmt 1666.00 ii) Above 2250 mm. Upto 2500 mm. dia. Rmt 1734.00 iii) Above 2500 mm. Upto 2750 mm. dia. Rmt 1855.00 iv) Above 2750 mm. Upto 3000 mm. dia. Rmt 1973.00 v) Above 3000 mm. Upto 3250 mm. dia. Rmt 2095.00 vi) Above 3250 mm. Upto 3500 mm. dia. Rmt 2213.00 			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	d) Above 16 mm upto 20 mm thick			
	i) From 2500 mm. Upto 2750 mm. dia.	Rmt	2390.00	
	ii) Above 2750 mm. Upto 3000 mm. dia.	Rmt	2497.00	
	iii) Above 3000 mm. Upto 3250 mm. dia.	Rmt	2702.00	
	iv) Above 3250 mm. Upto 3500 mm. dia.	Rmt	2836.00	
	v) Above 3500 mm. Upto 3750 mm. dia.	Rmt	2969.00	
	vi) Above 3750 mm. Upto 4000 mm. dia.	Rmt	3105.00	
	e) Above 20 mm upto 25 mm thick			
	i) From 3500 mm. Upto 3750 mm. dia.	Rmt	3309.00	
	ii) Above 3750 mm. Upto 4000 mm. dia.	Rmt	3500.00	
3.	Lowering, laying in position to correct line and level including M. S. pipes with / without any outcoating, on pedestals or chairs upon piers, trestles etc. The rate to include loading, unloading, hoisting, marginal cutting wherever required, assembling and tack welding, transportation upto 500 m. etc. complete.			
	a) 5 mm to 8 mm thick			
	i) Upto 250 mm. dia.	Rmt	449.00	
	ii) Above 250 mm. Upto 500 mm. dia.	Rmt	527.00	
	iii) Above 500 mm. Upto 750 mm. dia.	Rmt	608.00	
	iv) Above 750 mm. Upto 1000 mm. dia.	Rmt	688.00	
	v) Above 1000 mm. Upto 1250 mm. dia.	Rmt	769.00	
	b) Above 8 mm upto 12 mm thick			
	i) From 750 mm.Upto 1000 mm. dia.	Rmt	916.00	
	ii) Above 1000 mm. Upto1250 mm. dia.	Rmt	1021.00	
	iii) Above 1250 mm. Upto 1500 mm. dia.	Rmt	1128.00	
	iv) Above 1500 mm. Upto 1750 mm. dia.	Rmt	1234.00	
	v) Above 1750 mm. Upto 2000 mm. dia.	Rmt	1342.00	
	vi) Above 2000 mm. Upto 2250 mm. dia.	Rmt	1447.00	
	vii) Above 2250 mm. Upto 2500 mm. dia.	Rmt	1552.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	<p>c) Above 12 mm upto 16 mm thick</p> <p>i) From 2000 mm. Upto 2250 mm. dia.</p> <p>ii) Above 2250 mm. Upto 2500 mm. dia.</p> <p>iii) Above 2500 mm. Upto 2750 mm. dia.</p> <p>iv) Above 2750 mm. Upto 3000 mm. dia.</p> <p>v) Above 3000 mm. Upto 3250 mm. dia.</p> <p>vi) Above 3250 mm. Upto 3500 mm. dia.</p>	Rmt	1322.00	
	<p>d) Above 16 mm upto 20 mm thick</p> <p>i) From 2500 mm. Upto 2750 mm. dia.</p> <p>ii) Above 2750 mm. Upto 3000 mm. dia.</p> <p>iii) Above 3000 mm. Upto 3250 mm. dia.</p> <p>iv) Above 3250 mm. Upto 3500 mm. dia.</p> <p>v) Above 3500 mm. Upto 3750 mm. dia.</p> <p>vi) Above 3750 mm. Upto 4000 mm. dia.</p>	Rmt	2083.00	
	<p>e) Above 20 mm upto 25 mm thick</p> <p>i) From 3500 mm. Upto 3750 mm. dia.</p> <p>ii) Above 3750 mm. Upto 4000 mm. dia.</p>	Rmt	2837.00	
		Rmt	3001.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
4	<p>Lowering and laying in position to correct line and level including M. S. specials such as distance pieces, straps, bends, tapers, etc. on pedestals or chairs upon piers or trestles. The rate to include loading, unloading, hoisting, marginal cutting wherever required, assembling and tack welding, and including transportation upto 500 m. etc. complete as specified.</p> <p>a) 5 mm to 8 mm thick</p> <ul style="list-style-type: none"> i) Upto 250 mm. dia. Rmt 628.00 ii) Above 250 mm. Upto 500 mm. dia. Rmt 740.00 iii) Above 500 mm. Upto 750 mm. dia. Rmt 850.00 iv) Above 750 mm. Upto 1000 mm. dia. Rmt 964.00 v) Above 1000 mm. Upto 1250 mm. dia. Rmt 1072.00 <p>b) Above 8 mm upto 12 mm thick</p> <ul style="list-style-type: none"> i) From 750 mm.Upto 1000 mm. dia. Rmt 1283.00 ii) Above 1000 mm. Upto1250 mm. dia. Rmt 1432.00 iii) Above 1250 mm. Upto 1500 mm. dia. Rmt 1580.00 iv) Above 1500 mm. Upto 1750 mm. dia. Rmt 1728.00 v) Above 1750 mm. Upto 2000 mm. dia. Rmt 1878.00 vi) Above 2000 mm. Upto 2250 mm. dia. Rmt 2028.00 vii) Above 2250 mm. Upto 2500 mm. dia. Rmt 2176.00 			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	c) Above 12 mm upto 16 mm thick			
	i) From 2000 mm. Upto 2250 mm. dia.	Rmt	1999.00	
	ii) Above 2250 mm. Upto 2500 mm. dia.	Rmt	2079.00	
	iii) Above 2500 mm. Upto 2750 mm. dia.	Rmt	2225.00	
	iv) Above 2750 mm. Upto 3000 mm. dia.	Rmt	2369.00	
	v) Above 3000 mm. Upto 3250 mm. dia.	Rmt	2511.00	
	vi) Above 3250 mm. Upto 3500 mm. dia.	Rmt	2658.00	
	d) Above 16 mm upto 20 mm thick			
	i) From 2500 mm. Upto 2750 mm. dia.	Rmt	2920.00	
	ii) Above 2750 mm. Upto 3000 mm. dia.	Rmt	3079.00	
	iii) Above 3000 mm. Upto 3250 mm. dia.	Rmt	3242.00	
	iv) Above 3250 mm. Upto 3500 mm. dia.	Rmt	3399.00	
	v) Above 3500 mm. Upto 3750 mm. dia.	Rmt	3563.00	
	vi) Above 3750 mm. Upto 4000 mm. dia.	Rmt	3727.00	
	e) Above 20 mm upto 25 mm thick			
	i) From 3500 mm. Upto 3750 mm. dia.	Rmt	3974.00	
	ii) Above 3750 mm. Upto 4000 mm. dia.	Rmt	4199.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
5.	<p>Transporting within 500 meters, laying in position to correct line and level M. S. pipes with / without any outcoating, on prepared bedding in trenches including marginal cutting wherever required, assembling tack welding the same. The rate to include loading, unloading, hoisting, etc. complete as specified.</p> <p>a) 5 mm to 8 mm thick</p> <ul style="list-style-type: none"> i) Upto 250 mm. dia. Rmt 383.00 ii) Above 250 mm. Upto 500 mm. dia. Rmt 453.00 iii) Above 500 mm. Upto 750 mm. dia. Rmt 521.00 iv) Above 750 mm. Upto 1000 mm. dia. Rmt 588.00 v) Above 1000 mm. Upto 1250 mm. dia. Rmt 657.00 <p>b) Above 8 mm upto 12 mm thick</p> <ul style="list-style-type: none"> i) From 750 mm.Upto 1000 mm. dia. Rmt 783.00 ii) Above 1000 mm. Upto1250 mm. dia. Rmt 873.00 iii) Above 1250 mm. Upto 1500 mm. dia. Rmt 964.00 iv) Above 1500 mm. Upto 1750 mm. dia. Rmt 1056.00 v) Above 1750 mm. Upto 2000 mm. dia. Rmt 1144.00 vi) Above 2000 mm. Upto 2250 mm. dia. Rmt 1234.00 vii) Above 2250 mm. Upto 2500 mm. dia. Rmt 1324.00 			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	c) Above 12 mm upto 16 mm thick			
i)	From 2000 mm. Upto 2250 mm. dia.	Rmt	1218.00	
ii)	Above 2250 mm. Upto 2500 mm. dia.	Rmt	1271.00	
iii)	Above 2500 mm. Upto 2750 mm. dia.	Rmt	1358.00	
iv)	Above 2750 mm. Upto 3000 mm. dia.	Rmt	1445.00	
v)	Above 3000 mm. Upto 3250 mm. dia.	Rmt	2674.00	
vi)	Above 3250 mm. Upto 3500 mm. dia.	Rmt	1622.00	
	d) Above 16 mm upto 20 mm thick			
i)	From 2500 mm. Upto 2750 mm. dia.	Rmt	1775.00	
ii)	Above 2750 mm. Upto 3000 mm. dia.	Rmt	1872.00	
iii)	Above 3000 mm. Upto 3250 mm. dia.	Rmt	1973.00	
iv)	Above 3250 mm. Upto 3500 mm. dia.	Rmt	2073.00	
v)	Above 3500 mm. Upto 3750 mm. dia.	Rmt	1791.00	
vi)	Above 3750 mm. Upto 4000 mm. dia.	Rmt	2271.00	
	e) Above 20 mm upto 25 mm thick			
i)	From 3500 mm. Upto 3750 mm. dia.	Rmt	2417.00	
ii)	Above 3750 mm. Upto 4000 mm. dia.	Rmt	2557.00	

Sr. No.	Descriptiona	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
6.	<p>Transporting within 500 meters, laying in position to correct line and level M. S. specials pipes with / without any outcoating, such as distance pieces, straps, bends, tapers, etc. on prepared bedding in trenches including marginal cutting wherever required, assembling tack welding, the same. The rate to include loading, unloading, hoisting, etc. complete as specified.</p> <p>a) 5 mm to 8 mm thick</p> <ul style="list-style-type: none"> i) Upto 250 mm. dia. Rmt 540.00 ii) Above 250 mm. Upto 500 mm. dia. Rmt 632.00 iii) Above 500 mm. Upto 750 mm. dia. Rmt 728.00 iv) Above 750 mm. Upto 1000 mm. dia. Rmt 822.00 v) Above 1000 mm. Upto 1250 mm. dia. Rmt 920.00 <p>b) Above 8 mm upto 12 mm thick</p> <ul style="list-style-type: none"> i) From 750 mm.Upto 1000 mm. dia. Rmt 1096.00 ii) Above 1000 mm. Upto1250 mm. dia. Rmt 1223.00 iii) Above 1250 mm. Upto 1500 mm. dia. Rmt 1348.00 iv) Above 1500 mm. Upto 1750 mm. dia. Rmt 1475.00 v) Above 1750 mm. Upto 2000 mm. dia. Rmt 1714.00 vi) Above 2000 mm. Upto 2250 mm. dia. Rmt 1789.00 vii) Above 2250 mm. Upto 2500 mm. dia. Rmt 1855.00 			

Sr. No.	Descriptiona	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	c) Above 12 mm upto 16 mm thick			
	i) From 2000 mm. Upto 2250 mm. dia.	Rmt	1705.00	
	ii) Above 2250 mm. Upto 2500 mm. dia.	Rmt	1845.00	
	iii) Above 2500 mm. Upto 2750 mm. dia.	Rmt	1899.00	
	iv) Above 2750 mm. Upto 3000 mm. dia.	Rmt	2023.00	
	v) Above 3000 mm. Upto 3250 mm. dia.	Rmt	2150.00	
	vi) Above 3250 mm. Upto 3500 mm. dia.	Rmt	2271.00	
	d) Above 16 mm upto 20 mm thick			
	i) From 2500 mm. Upto 2750 mm. dia.	Rmt	2467.00	
	ii) Above 2750 mm. Upto 3000 mm. dia.	Rmt	2624.00	
	iii) Above 3000 mm. Upto 3250 mm. dia.	Rmt	2763.00	
	iv) Above 3250 mm. Upto 3500 mm. dia.	Rmt	2902.00	
	v) Above 3500 mm. Upto 3750 mm. dia.	Rmt	3040.00	
	vi) Above 3750 mm. Upto 4000 mm. dia.	Rmt	3181.00	
	e) Above 20 mm upto 25 mm thick			
	i) From 3500 mm. Upto 3750 mm. dia.	Rmt	3383.00	
	ii) Above 3750 mm. Upto 4000 mm. dia.	Rmt	3581.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
7.	<p>Welding in all positions with required number of runs, for M. S. pipes internally and/or externally including gauging wherever necessary, fixing appurtenances and other accessories in connection with pipe laying work as per specification.</p> <p>A) Butt Joints : Plate thickness</p> <p>i) 4 mm. Rmt 174.00</p> <p>ii) 5 mm. Rmt 263.00</p> <p>iii) 6 mm. Rmt 619.00</p> <p>iv) 7 mm. Rmt 690.00</p> <p>v) 8 mm. Rmt 867.00</p> <p>vi) 10 mm. Rmt 1062.00</p> <p>vii) 12 mm. Rmt 1137.00</p> <p>viii) 14 mm. Rmt 1354.00</p> <p>ix) 16 mm. Rmt 1640.00</p> <p>x) 18 mm. Rmt 1775.00</p> <p>xi) 20 mm. Rmt 2127.00</p> <p>xii) 22 mm. Rmt 2670.00</p> <p>xiii) 25 mm. Rmt 3624.00</p>			

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
	B) Lap joints with convex fillet welds Lap Lengths			
	i) 5 mm.	Rmt	244.00	
	ii) 6 mm.	Rmt	312.00	
	iii) 8 mm.	Rmt	413.00	
	iv) 10 mm.	Rmt	461.00	
	v) 12 mm.	Rmt	690.00	
	vi) 14 mm.	Rmt	937.00	
	vii) 16 mm.	Rmt	1032.00	
	viii) 18 mm.	Rmt	1253.00	
	ix) 20 mm.	Rmt	1412.00	
	x) 22 mm.	Rmt	1888.00	
	xi) 25 mm.	Rmt	2292.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
8.	<p>Shifting and aligning ring girders including removing tack welds and re-tacking in the correct position etc. complete as per specification for the pipes of following diameter.</p> <p>i) From 1000 mm. Upto1250 mm. dia.</p> <p>ii) Above 1250 mm. Upto 1500 mm. dia.</p> <p>iii) Above 1500 mm. Upto 1750 mm. dia.</p> <p>iv) Above 1750 mm. Upto 2000 mm. dia.</p> <p>v) Above 2000 mm. Upto 2250 mm. dia.</p> <p>vi) Above 2250 mm. Upto 2500 mm. dia.</p> <p>vii) Above 2500 mm. Upto 2750 mm. dia.</p> <p>viii) Above 2750 mm. Upto 3000 mm. dia.</p> <p>ix) Above 3000 mm. Upto 3250 mm. dia.</p> <p>x) Above 3250 mm. Upto 3500 mm. dia.</p> <p>xi) Above 3500 mm. Upto 3750 mm. dia.</p> <p>xii) Above 3750 mm. Upto 4000 mm. dia.</p>	Rmt	473.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
9.	<p>Transporting within 500 meters and fixing in position stools, base plates, roller sets, grease box covers, etc. including welding wherever necessary. The rate also to include fixing stools, base plates, etc. in true line and level, connecting the base plate to anchor bolts by flush welding including cutting the bolts, if required, assembling and aligning C. I. or M. S. roller sets of any size including oiling, greasing, etc. The rate also to include grouting anchor bolts, welding of two halves of grease box covers as directed by Engineer-in-charge, for pipes of following dia.</p> <p>i) From 1000 mm. Upto1250 mm. dia. ii) Above 1250 mm. Upto 1500 mm. dia. iii) Above 1500 mm. Upto 1750 mm. dia. iv) Above 1750 mm. Upto 2000 mm. dia. v) Above 2000 mm. Upto 2250 mm. dia. vi) Above 2250 mm. Upto 2500 mm. dia. vii) Above 2500 mm. Upto 2750 mm. dia. viii) Above 2750 mm. Upto 3000 mm. dia. ix) Above 3000 mm. Upto 3250 mm. dia. x) Above 3250 mm. Upto 3500 mm. dia. xi) Above 3500 mm. Upto 3750 mm. dia. xii) Above 3750 mm. Upto 4000 mm. dia.</p>	Each	1728.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
10.	<p>Transporting within 500 meters and aligning, fixing in position and tack welding expansion joints suitable for pipeline of diameters.</p> <p>i) From 1000 mm. Upto1250 mm. dia.</p> <p>ii) Above 1250 mm. Upto 1500 mm. dia.</p> <p>iii) Above 1500 mm. Upto 1750 mm. dia.</p> <p>iv) Above 1750 mm. Upto 2000 mm. dia.</p> <p>v) Above 2000 mm. Upto 2250 mm. dia.</p> <p>vi) Above 2250 mm. Upto 2500 mm. dia.</p> <p>vii) Above 2500 mm. Upto 2750 mm. dia.</p> <p>viii) Above 2750 mm. Upto 3000 mm. dia.</p> <p>ix) Above 3000 mm. Upto 3250 mm. dia.</p> <p>x) Above 3250 mm. Upto 3500 mm. dia.</p> <p>xi) Above 3500 mm. Upto 3750 mm. dia.</p> <p>xii) Above 3750 mm. Upto 4000 mm. dia.</p>	Each	5847.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
11.	<p>Transporting within 500 meters aligning and fixing in position and tack welding only, including marginal cutting, supplying and providing rubber packing etc. where necessary.</p> <p>A) Minor fixtures such as manhole cover, pressure and non-pressure type blank flanges, loose rings, small pipes to form saddle bypass arrangement, plug plates, ladders, platform, stiffener rings, etc.</p> <p>B) Minor fixtures such as tees, domes, 'Y' branches, insulating flange ring assembly, etc.</p>	MT	10466.00	
12.	<p>Gas cutting (either square cut or V cut) pipes, plates, etc. of thickness.</p> <p>i) Upto 5 mm.</p> <p>ii) Above 5 mm. Upto 10 mm.</p> <p>iii) Above 10 mm. Upto 14 mm.</p> <p>iv) Above 14 mm. Upto 18 mm.</p> <p>v) Above 18 mm. Upto 22 mm.</p> <p>vi) Above 22 mm.</p>	Rmt	79.00	
		Rmt	112.00	
		Rmt	144.00	
		Rmt	165.00	
		Rmt	229.00	
		Rmt	306.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
13.	Gas cutting holes upto 50 mm dia (for plugs) Thickness of shell <ul style="list-style-type: none"> a) 5 mm. to 12 mm b) Above 12 mm 		No. 86.00 No. 121.00	
14.	Providing M.S. bar mesh prepared out of 16 mm dia M.S. bar at 15 cm. c/c both ways, welded to flanged ring including tack welding of bars and fixing the same with nuts and bolts on open faces of outlet/inlet pipes in the sump or reservoir, etc. complete as directed by Engineer-in-charge.	Sqm	1587.00	
15.	Providing permanent test points on the pipe line as per drawing and as directed by Engineer-in-charge including providing and fixing sluice valves, road boxes for sluice valves of size 80 mm to 250 mm in one brick masonry chamber 300 mm x 300 mm clear C. M. 1:5 with 12 mm thick in 1:3 cement plaster both inside and outside on M-100 C.C. 150 mm thick etc. complete as specified and directed.	No.	3559.00	
16.	Supplying transporting, the S.P. fire hydrants including duck foot bend, S.V. and S.V. road box, painting the hydrant,fixing the saddle piece, supplying, and laying required length of C.I. pipeline and jointing the same spun yarn, molten lead including caulking, fixing the S.V. road box in one brick masonry chamber in 1:5 C.M. with 12 mm thick 1:3 cement plaster both inside and outside on 1:3:6: C.C.150 mm thick etc, complete specified and directed. [As per I.S.900/1965 Revised]	No.	14097.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
17.	Hydraulic testing of M.S. pipeline to specified pressure including cost of all materials and labour and water for testing for the length upto 1km., using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary.			
a)	i) Upto 600 mm. dia. (I.D.)	Km.	49549.00	
	ii) Above 600 mm. upto 750 mm. dia. (I.D.)	Km.	49622.00	
	iii) Above 750 mm. upto 900 mm. dia. (I.D.)	Km.	49736.00	
	iv) Above 900 mm. upto 1050 mm. dia. (I.D.)	Km.	49908.00	
	v) Above 1050 mm. upto 1200 mm. dia. (I.D.)	Km.	50078.00	
	vi) Above 1200 mm. upto 1500 mm. dia. (I.D.)	Km.	50416.00	
	vii) Above 1500 mm. upto 1800 mm. dia. (I.D.)	Km.	50912.00	
	viii) Above 1800 mm. upto 2250 mm. dia. (I.D.)	Km.	51744.00	
	ix) Above 2250 mm. upto 2500 mm. dia. (I.D.)	Km.	52351.00	
	x) Above 2500 mm. dia. (I.D.)	Km.	52956.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
b)	Extra work initial km			
	xi) Upto 600 mm dia. (I.D.)	Km.	251.00	
	xii) Above 600 mm dia. upto 750 mm dia. (I.D.)	Km.	361.00	
	xiii) Above 750 mm dia. upto 900 mm dia. (I.D.)	Km.	535.00	
	xiv) Above 900 mm dia. upto 1050 mm dia. (I.D.)	Km.	707.00	
	xv) Above 1050 mm dia. upto 1200 mm dia. (I.D.)	Km.	910.00	
	xvi) Above 1200 mm dia. upto 1500 mm dia. (I.D.)	Km.	1345.00	
	xvii) Above 1500 mm dia. upto 1800 mm dia. (I.D.)	Km.	2032.00	
	xviii) Above 1800 mm dia. upto 2250 mm dia. (I.D.)	Km.	3118.00	
	xix) Above 2250 mm dia. upto 2500 mm dia. (I.D.)	Km.	3883.00	
	xx) Above 2500 mm dia. upto 2750 mm dia. (I.D.)	Km.	4697.00	
	xxi) Above 2750 mm dia. upto 3000 mm dia. (I.D.)	Km.	5542.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
18.	Providing and applying with mechanical arrangement 1:3 proportion cement sand gunite, 40 to 50 mm thick to M. S. pipe surface under 2.1 kg. per sqcm. to 2.80 kg. per sqcm. pressure including removing the loose materials as directed by Engineer-in-charge and including scrapping the surface with wire brushes, degreasing, cleaning by compressed air and providing fixing BRC fabric no.14 as reinforcement, curing for 21 days, disposing off the rebound materials within a lead of 50 M, etc. complete as directed by Engineer-in-charge.	Sqm.	554.00	
19.	Providing and applying pipe coating of fibres, coal tar and solvent based rubber modified bituminous primer of density 0.92 gms/cu cm and viscosity of 1000-2000 cps @ 150 gms/sqm followed by seven layers(4mm thick) of polythene polymerised bitumen and polyester of local 7 layers) pipe coat 4 mm should conform to requirement of IS-10221 and AWWA C-203 for pre-fabricated tapes including covering cost on pipe coating. Rates shall include cost of material coating and wrapping over the pipes, handling charges, preparation of pipe surface, all labour, material, etc. complete.	Sqm.	596.00	

Note : Pipe coating is to be done at laying work site only.

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
20.	Providing and applying with mechanical arrangement cement sand gunite of 50 mm thickness to floors, walls, floor slabs or any other structure under 2.1 kg. per sqcm. to 2.80 kg. per sqcm. pressure including removing the loose materials on surface, cleaning with compressed air, degreasing, etc. including scaffolding and curing for 21 days, providing and fixing BRC fabric no. 14 but excluding cost of reinforcement, if any and removing rebound materials within a lead of 50 M, etc. complete as directed by Engineer-in-charge (for GSRs and buildings.)	Sqm.	545.00	
21.	Providing and applying with mechanical arrangement cement sand gunite of 50 mm thickness to floors, walls, roof slabs or any other structure under 2.1 kg. per sqcm. to 2.80 kg. per sqcm. pressure including removing the loose materials on surface, cleaning with compressed air, degreasing, etc. including scaffolding and curing for 21 days, providing and fixing BRC fabric no. 14 but excluding cost of reinforcement, if any and removing rebound materials within a lead of 50 M, for staging and bottom of bottom slab, etc. complete as directed by Engineer-in-charge (for RCC ESRs)	Sqm.	482.00	
22.	Providing and making inner cement mortar lining to M.S. pipes with mechanical devices in cement mortar 1:1 proportion, including cost of all materials, labour, special sand required, machinery, power generation, all equipments and taking necessary access openings and manholes, cuts at suitable intervals as directed by Engineer-in-charge and rewelding the same after done with doubler plates pipes including necessary excavation, refilling concrete breaking and remaking if any, breaking guniting and remaking the same, repainting wherever required with epoxy paint in 3 coats, all dewatering including emptying the pipeline and refilling the same after done with (water to be supplied by department free of cost within 5 km. lead at fixed point and all other arrangements to be done by agency), including carrying out "C" value performance test of pipeline, complete job as per the directions of the Engineer-in-charge. i) 9 mm thick for pipes upto 700 mm dia. ii) 12 mm thick for pipes above 700 mm dia.	Sqm.	433.00	
		Sqm.	502.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
23.	Providing and applying of elastomeric (450% elongation), thermoplastic, fire retardant, coating skin tensile strength 18 to 21 kg/cm ² , antifungal, antibacterial, anticorrosive, graft co-polymer Coating on smooth plastered surface. 100 Micron dyufilm thickness of self bonding with plastered surface and 100 Micron of top cost. For sewage treatment plant (R. C. C. Tank inside coating) and water treatment plant.	Sqm.	1406.00	
24.	Providing and applying external and internal coating for steel structures in sewage treatment plant/water treatment plant with elastomeric (450% elongation), thermoplastic, fire retardant, coating skin tensile strength 18 to 21 kg/cm ² , antifungal, antibacterial, anticorrosive, graft co-polymer. 50 Micron DFT. of self bonding with steel, 50 Micron DFT. of inner coat and 50 Micron DFT of top coat.	Sqm.	822.00	
25.	Providing and applying of elastomeric (450% elongation), thermoplastic, fire retardant, coating skin tensile strength 18 to 21 kg/cm ² , antifungal, antibacterial, anticorrosive, graft co-polymer coating on external pipe lines in unlaid/laid condition after proper cleaning. 50 micron DFT of self bonding grade with metal surface, 50 Micron DFT of self bonding grade with metal surface, 50 Micron DFT inner coat and 50 Micron DFT of top coat.	Sqm.	860.00	
26.	1) Water and sewage pipe lines (external) in unlaid condition.	Sqm.	882.00	
	2) Water and sewage pipe lines (external) in laid condition.	Sqm.	1083.00	
	Providing and applying of elastomeric (450% elongation), thermoplastic, fire retardant, coating skin tensile strength 18 to 21 Kg/cm ² , antifungal, antibacterial, anticorrosive, graft co-polymer coating on internal surface of pipe lines. 100 Micron DFT of site bonding grade with steel surface and 100 Micron DFT of top coat.	Sqm.	1155.00	
	1) Pipe line in unlaid condition	Sqm.		
	2) Pipe line in laid condition	Sqm.		

Sr. No.	Description	Unit	Rate (in Rs.) 2018-2019	Rate (in Rs.) 2019-2020
1	2	3	4	5
27.	<p>Providing and applying of elastomeric (450% elongation), thermoplastic, fire retardant, coating skin tensile strength 18 to 21 kg/cm², antifungal, antibacterial, anticorrosive, graft co-polymer coating on cleaned steel reinforcement bars. 80 to 100 micron DFT With self bonding trade of bar coating.</p> <p>1. 6 mm dia. 2. 8 mm dia. 3. 10 mm dia. 4. 12 mm dia. 5. 16 mm dia. 6. 20 mm dia. 7. 25 mm dia. 8. 32 mm dia. 9. 40 mm dia.</p>	MT	39372.00	
		MT	30127.00	
		MT	23873.00	
		MT	19865.00	
		MT	14875.00	
		MT	12105.00	
		MT	9559.00	
		MT	7661.00	
		MT	5818.00	
28.	Providing and applying of H D P E coating for MS pipe internally as well as externally including cost of H D P E powder moulding pipe grade, labour, scrapping the pipe surface with wire brushes, degreasing, cleaning by compressed air and surface grinding and finishing including cost of loading , unloading and handling of pipe at factory etc. complete as directed by Engineer -in -charge.			
HDPE coating thickeness in micron			Total coating thickness in micron	Unit
	External	Internal		
1.	0	2000	2000	Sq. m
2.	2000 micron	1000	3000	Sq. m
3.	3000 micron	1000	4000	Sq. m
4.	3000 micron	2000	5000	Sq. m

Section - I- (XVIII) - TREATMENT PLANT (W.T.P. & S.T.P.)			
Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
1	<p>Designing (aesthetically), providing and constructing high rate Unconventional Water Treatment Plant i.e. Simplified Water Treatment Plants consisting of Civil works including cost of Providing and applying Epoxy paint to inside surface of water retaining structures in contact with chlorine and providing anti - termite treatment to entire structure below Ground level, ceramic tiles for florng, Acrylic emulsion with silicon additives paint from outside. stainless steel railing, Mechanical and Electrical components of various sub-works as given below : including necessary hydraulic testing, structural testing and trial run for 3 months, etc. complete as directed by Engineer-in-charge (turn-key job) works.</p> <p>1) Aeration Fountain 2) Inlet arrangements 3) Mixing channel with ventury flume and flow measuring arrangement 4) Inlet channel 5) Flocculator - Confirming to I.S. 7208-1974 (Type - C) with detention period of 30 minutes 6) Tube Settlers - “Designing, fabricate and construct Tube Settlers with square or any other shaped tube like Circular, Cheveron, Hexagonal etc. having proven performance.” 7) Rapid sand gravity filters. All valve shall be glandless. 8) Filter house 9) Chemical house 10) Alum tanks 2 Nos. with mixing carrying and dosing arrangements with piping. 11) 100 kg chlorine cylinder for capacity upto 5 mld and chlorine tonner for capacity above 5 mld. 12) TCL solution tank with mixing, carrying and dosing arrangement with piping 13) Bye-pass arrangement 14) External and internal electrification 15) Laboratory equipments 16) Wash water tanks of capacity equal to 12 minutes to wash specified number of filter beds at time at 600 lit/m²/m under head of 12 m at under drain 17) Wash water pumps with 100% standby</p>		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	
18)	Air blowers capable of delivering 600 LPM per square metre of free air of filter area at 0.4 Kg/sqcm at the under drains (100% standby) Air blowers shall be adopted for WTP having capacity more than 3 mld only. Below 3 mld capacity, Air blowers shall not be adopted.			
19)	Pure water sump capacity equal to 1 hour pumping capacity			
20)	Pure water pump house over the sump / by the side of sump			
21)	Drainage arrangements			
22)	Alum store			
23)	Sanitary block with necessary water supply and drainage arrangement and internal WBM roads			
24)	These rates are applicable for seismic zones 2,3 and 4			
25)	Rates given below are inclusive of uplift pressure if any and dewatering during the entire work			
26)	All RCC structures shall be constructed in M-250. Structures in contact with water shall be in M-300.			
27)	Unconventional Treatment Plants less than 1 MLD capacity shall not be constructed.			
28)	All the structural steel work / fabrications are to be provided with application of Hot Dip Zinc coating according to specifications as per IS 4759 :1996 (Reaffirmed 2006)			
Note:	Conditions from Sr. No. 1 to 28 shall form a part and parcel of the tender and must be included in draft tender papers for the work of unconventional treatment plants.			LABOUR
Unconventional Water Treatment Plant				
S.No.	Capacity in Mld	Unit	Rate in Lakhs	Rate in Lakhs
1	Fixed cost for 1 MLD	Job	46.66	18.83
2	Add for capacity above 1 MLD upto 2 MLD	MLD	21.12	8.36
3	Cost of 2 MLD Treatment Plant	Job	67.78	27.20
4	Add for capacity above 2 MLD upto 5 MLD	MLD	15.85	6.26
5	Cost of 5 MLD Treatment Plant	Job	115.30	46.03
6	Add for capacity above 5 MLD	MLD	12.32	5.01
7	Cost of 10 MLD Treatment Plant	Job	176.91	70.76

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
2	<p>Designing (aesthetically), providing and constructing and commissioning Conventional Water Treatment Plant consisting of all Civil, works including cost of Providing and applying Epoxy paint to inside surface of water retaining structures in contact with chlorine and providing anti - termite treatment to entire structure below Ground level, ceramic tiles for floring, Acrylic emulsion with silicon additives paint from outside. stainless steel railing, Mechanical and Electrical components of variours sub-works as given below : including necessary hydralic testing, structural testing equipment testing, trial run for a period of 3 months, etc. complete as directed by Engineer-in-charge (turn-key job).</p> <p>1) Aeration Fountain Plan area not less than 0.625 square metre per MLD</p> <p>2) Ventury Flume With necessary devices, consisting of simple mechanical indicator. (Pedestal type gauge)</p> <p>3) Flash Mixer Rapid mixing device, detention time 60 seconds to give velocity gradient 300 to 400 sec-1 vane mixer type confirming to I.S. 7090 of 1985.</p> <p>4) Flocculator Confirming to I.S. 7208 of 1974 (Type-C) with detention period of 30 minutes.</p> <p>5) Clarifier Horizontal flow circular tank, detention period 2-5 hours, overflow rate 30 cubic metre per square metre per day (to be specified), Weir loading not more than 300 cubic metre per metre per day, with mechanical sludge scraper conforming to I.S. No. 10313 -1982 with necessary inlet arrangements.</p> <p>6) Rapid Sand Filters and Filter House Filter designed for filtration rate of 4800 liters per square metre per hour for normal run and it shall not exceed 6000 liters per square metre per hour when one bed is under maintenance, minimum 2 beds for plant upto 10 MLD, for larger plants as specified, filters to be located in filter house with roof slab, pipe gallery and platform minimum 5.5 metre in width with constant rate filtration or declining rate filtration. All valve shall be glandless.</p> <p>a) Filter Sand</p>		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	<p>Effective size 0.45 to 0.70 mm, uniformity coefficient not more than 1.7, nor less than 1.3, depth of water over sand 0.75 M, free board 50 cm, gravel 0.45 M in depth, sand and gravel confirming to I.S. 849 (i)-77, back wash by air wash, standard appurtenances</p> <p>b) Wash Water Tank Capacity to be specified and suitable to supply water to wash specified number of filter beds at a time 12 minutes @ 600 lit/sqm/min. under a head of 12 m at under drain.</p> <p>c) Wash Water Pumps Capacity to fill water tank in 1 hour with 100 % standby.</p> <p>d) Air Blowers Capable of delivering 600 LMP per square metre of free air, of filter area at 0.4 kg/square cm at the underdrains (100% stand by) for period of 5 min. Air blowers shall be adopted for WTP having capacity more than 3 mld only. Below 3 mld capacity, Air blowers shall not be adopted.</p>		
7)	<p>Chemical House in Two Storeys</p> <p>a) Ground floor to accommodate 7 days alum requirement and sundry storage (Minimum 4 m height)</p> <p>b) First floor to accommodate alum and lime tanks. chain pulley block etc. (min. 5 m height)</p> <p>c) Solution tanks Minimum 3 tanks (one for preparation. second for dosing and third as standby), each tank capable of giving 8 hours maximum dose without interruption, minimum free board 0.30 M, trays for dissolving, level indicator, mechanical agitation devices, solution feed and drain lines, solution feed device (constant head device, strength of solution upto 10% only) conforming to I.S. 9222 part-I/1979.</p>		
8)	<p>Pure Water Sump and Pump House</p> <p>a) Capacity of sump One hour of designed flow.</p> <p>b) Pump House Pump house of required size over the sump or by the side.</p>		
9)	<p>Store House Suitable for alum storage of three months and 7 days temporary storage, 7 days TCL requirement in monsoon with 20 % extra capacity for other sundry articles.</p>		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	
10)	Vacuum feed type chlorinators - make to be approved by MJP. a) Confirming to I.S. 10533 - A Part-II 1983. b) Rate of withdrawal. Temperature Kg.of Chlorine discharge per day			
	Degree "C"		<u>Cylinders</u>	
		45	67	Tonners
	10	6.35	9.50	110
	15	10.75	16.10	130
	20	14.50	21.24	254
	27 & above	18.70	28.12	315
c)	Chlorinator equipment and container room: to confirm to I.S. 10553 Part - I 1983.			
d)	100% Standbye shall be provided			
e)	100 kg chlorine cylinder for capacity upto 5 mld and chlorine tonner for capacity above 5 mld.			
11)	By pass arrangements - D.I. pipes. i) By passing all units of T.P. ii) By passing flash mixer, clariflocculator. iii) By passing flash mixer, clariflocculator & filter units			
12)	Disposal of waste from WTP : Safe disposal arrangement to nearby nalla including cost of pipe			
13)	For WTP of capacity 30 mld and more additional arrangement for backwash water recycle shall be provided, including sump, pumping machinery, rising main etc. complete.			
14)	Drainage arrangements To decant all units of WTP with DI pipes upto boundary of each unit and further extension with RCC pipes to nearby nalla.			

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	
15)	Electrical installation. Both internal and external including entire plant area.			
16)	Laboratory equipment. As per requirement (to be specified during tendering.)			
17)	Sanitary blocks. Carpet area-15 square metre minimum upto 25 Mld and 25 square metre above 25 Mld.			
18)	Administrative block and internal road. To accommodate office room, chlorine room, laboratory room, panel board room, blower room etc. and WBM road to connect all units from main gate of plot.			
19)	Rates given below are inclusive of uplift pressure if any and dewatering during entire work.			
20)	Disposal of waste from WTP: Safe disposal arrangement to nearby nalla including cost of pipes.			
21)	For WTP of capacity 30 mld and more additional arrangement for backwash water recycle shall be provided, including sump, pumping machinery, rising main etc. complete.			
22)	All pipes conduits channel with 20% overloading.			
23)	These rates are applicable for seismic zones-2,3 and 4.			
24)	All RCC structures shall be constructed in M-300.			
25)	All pipes and conduits channel with 20% overloading capacity.			
26)	All the structural steel work / fabrications are to be provided with application of Hot Dip Zinc coating according to specifications as per IS 4759 :1996 (Reaffirmed 2006)			
Note:	Conditions from Sr. No. 1 to 26 shall form a part and parcel of the tender and must be incorporated in draft tender papers of conventional treatment plants.			
Rates for Conventional Treatment Plants			LABOUR	
S.No.	Capacity in Mld	Unit	Rate in Lakhs	Rate in Lakhs
1	Upto 5 MLD	MLD	29.97	12.07
2	Cost of 5 MLD Treatment Plant	Job	149.87	60.41
3	Add for capacity above 5 MLD upto 10 MLD	MLD	21.80	8.63
4	Cost of 10 MLD Treatment Plant	Job	258.86	103.55
5	Add for capacity above 10 MLD upto 20 MLD	MLD	13.62	5.63
6	Cost of 20 MLD Treatment Plant	Job	395.10	159.67

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	
7	Add for capacity above 20 MLD upto 50 MLD	MLD	12.72	5.18
8	Cost of 50 MLD Treatment Plant	Job	776.57	314.98
9	Add for capacity above 50 MLD upto 100 MLD	MLD	7.63	3.05
10	Cost of 100 MLD Treatment Plant	Job	1158.05	465.14
11	Add for capacity above 100 MLD	MLD	6.56	2.62
3	Designing (aesthetically), providing, fabricating, Package Water Treatment Plant. At the shop, transporting to site, installing, testing and commissioning at the site, giving necessary one month's free test and trial run with guarantee for one year, etc. complete.			
Prefabricated Package Water Treatment Plant comprising following				
1	Rapid mixing channel in M.S. sheets and M. S. baffle.			
2	Flocculator not less than 10 minutes detention, in M.S. prefabricated box, flocculation being achieved either by glass pebbles of graded size or PVC tetrapod or equivalent arrangement to ensure good flocformation.			
3	Plate or tube settlers of not less than 30 minutes detention, in M.S. prefabricated box, plates / tubes mounted in the settler basin with inclination of not less than 60 degree to horizontal.			
4	Rapid sand gravity filter in M. S. prefabricated box with filter sand not less than 500 mm thick, supported on false floor below with polypropylene nozzles spaced at not more than 500 mm centres in either direction			
5	Backwashing, inlet facilities only shall be provided. Department shall provide either ESR giving 8 to 10 M head at filter nozzles or backwash pump, having flow rate of 0.6 Cum per minute per square metre of filter bed. (Limit upto 5.0 M. from W.T.P. face)			
6	All civil works for foundation, consisting of raised RCC platform above G.L. or walls in B.B. masonry or UCR masonry shall be provided as per needs at site.			
7	Bypass in the form of pipes or M.S. channels included in the design, effecting bypass of such new tank and filter individually or both. (Limit upto 5.0 M. from W.T.P. face)			

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
8	The entire M.S. fabricated tank provided with FRP lining (5 mm thick) to inside face in contact with water epoxy painting- two coats with one coat of primer on outside. The thickness of plates employed shall not be less than 6 mm		
9	Alum dosing and mixing arrangements to be provided in twin tanks, each of 8 hours capacity, capable of importing doses of 20 ppm with 5% solution. The alum tanks provided with a dose in steps of 5 ppm and entire unit mounted on the top of flocculator / settler box, in the form of prefabricated structure, with access platform and ladder. Alum boxes with FRP lining (5 mm thick) inside and epoxy paint two coats with one coat of primer on outside.		
10	Both flocculator and settling basins provided with hopper bottom with slope not less than 45 degrees to the horizontal drain pipes and valves provided to both flocculator and settling basin.		
11	Flow ratings to conform following parameters :		
a)	Velocities in channels not to exceed 0.6 M./Second.		
b)	Velocities in filter outlet pipes and valves not to exceed 1 M./Second.		
c)	Velocities in interconnecting pipe and controls not to exceed 1M./Second.		
d)	Backwash with air : Not required.		
e)	Backwash with water : Not less than 0.6 M./ Sqm. of filter bed area in filter box.		
12	Free board for all units not less than 300 mm		
13	Rates as above exclude all taxes, GST levied by GOI & GOM which would be specific to the site locations.		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	
S.No.	Rates for Package Water Treatment Plant			LABOUR
S.No.	Capacity in Mld	Unit	Rate in Lakhs	Rate in Lakhs
1	21 Cum / Hr. (0.50 MLD)	Each	24.88	10.08
2	34 Cum / Hr. (0.80 MLD)	Each	30.61	12.27
3	42 Cum / Hr. (1.00 MLD)	Each	34.33	13.72
4	63 Cum / Hr. (1.50 MLD)	Each	43.06	17.26
5	83 Cum / Hr. (2.00 MLD)	Each	51.04	20.44
6	125 Cum / Hr. (3.00 MLD)	Each	65.75	26.25
Note : Depending upon the capacity required for the scheme, one of the above capacity should be choiced.				
SEWAGE TREATMENT PLANT (STP)				
	A) Designing (aesthetically), providing, and constructing and giving satisfactory trials of modernised Sewage Treatment Plant consisting of receiving chamber, screen chamber, grit chamber, measuring flume, distribution chamber with primary and secondary treatment, etc. as detailed below, administration block of suitable size including allied units for waste disposal with all civil and mechanical works involved, etc. complete (Turn key job).			
	A) Primary and Secondary Treatment (Extended Aeration Process)			LABOUR
S.No.	Capacity of Plant	Unit	Rate in Lakhs	Rate in Lakhs
1)	1. Upto 10 MLD	MLD	43.59	17.26
2)	2. Cost of 10 MLD Plant	Job	435.97	172.58
3)	3. Add for capacity above 10 MLD upto 20 MLD	MLD	36.97	14.61
4)	4. Cost of 20 MLD Plant	Job	817.44	323.32
5)	5. Add for capacity above 20 MLD	MLD	32.70	12.98
6)	6. Cost of 50 MLD Plant	Job	1798.37	712.82
7)	7. Add for capacity above 50 MLD	MLD	19.43	7.71
8)	8. Cost of 100 MLD Plant	Job	2769.75	1098.28

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
B)	Designing (Aesthetically) Providing and constructing, hydraulic testing commissioning and giving satisfactory trials of modernised sewage treatment plant consisting of inlet chamber, screen chamber, Detritus tanks, Parshall flume, primary settling tanks, Aeration tanks, Secondary settling tanks, Sludge Sump and Pump House ,Sludge Thickner, Primary digester , Secondary digester, SST Sump and Pump house, Chlorine contact tank, Chlorinators, Chlorinator room, sump cum blending tank, PST sludge sump cum blending tank,Pump house, Sludge Centrifuge, gas holder, necessary piping work with required valves, gates, drains, pathways, Administrative Building cum Laboratory, Laboratory equipments, tools and plants, Spare parts etc. complete as turnkey job with all involved civil electrical and mechanical works inclusive of following items, units as per detailed specification for civil, Electrical and Mechanical Components with all duties etc.complete.		
1	Inlet Chamber:		
	Designing, providing and constructing R.C.C. (M:300) Inlet chamber designed for the peak flow 2 DWF including necessary excavation in all types of strata including walkway around the periphery. Each compartment will have phosper bronze, steel gate with extension rod, head stock, opeating wheel, G.I. Pipe railing etc. The work includes providing and making necessary arrangements to connect the flow to screen chamber by approach channel as directed and as per specifications.		
2	Screen Chambers:		
	Designing, providing and constructing and testing commissioning screen chamber, designed for average 1DWF & maximum 2 DWF in RCC (M-300), including inlet pipe/Channel from inlet chamber outlet, pipe/channel to detritus tank, free board of 0.50 m minimum, RCC walkway 1.2M wide with G.I. Pipe railing. RCC stair case of 1.2 m width from G.L. to screen chamber.		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
3	Detritus Tank : Designing, providing and constructing continuously grit removal type of Detritus Tank, mechanically operated in RCC (M-300) capable of removing 100% 0.20mm size particle and above, having specific gravity 2.30, designed for one peak 2 DWF with suitable arrangement of separation of grit from putrescible solids including providing and making necessary arrangement of JB-1. inlet and outlet channels of required sizes as may be required to connect the flow to parshall flume etc. complete including hydraulic testing for water tightness of the structure having minimum free board of 0.30 m, washout arrangement to grit chamber and platform 1.20m wide RCC walkway with G.I. pipe hand railing shall be provided. A pit for collecting grit conveyed by conveyor shall be provided It should be suitable to handle the grit for carting. All arrangements shall be as per detailed specifications and as directed.		
4	Parshall Flume: Designing, Providing and constructing Parshall Flume Channel in RCC(M-300) for		
5	measuring quantity of sewage received at the treatment works, max flow of 2 DWF and minimum flow of 1/2 DWF including providing and making necessary arrangement of approach channel as may be required to connect the flow having minimum velocity of 0.3m per second to Distribution Box (DB-1) The unit shall be provided with walkway & RCC staircase having width of 1.20 m each etc. complete, including hydraulic testing for water tightness of the civil structure having free board of 0.6 m including electrically operated, flow indicating and flow integrating devices having a standby of float operated ROF meter. All arrangements as per specifications.		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	Primary Settling Tanks With Equipments :		
	Designing, providing, constructing and hydraulic testing in RCC (M-300) water tight Primary Settling Tanks of 1 DWF capacity with feed chamber sludge and effluent chamber, base adequately supported providing 1.20m wide clear peripheral and approach walkway interconnecting C.I. double flanged pipes from feed chamber of the clarifier distribution well grouting wherever necessary, including foundation etc. as per specifications water depth at outer side shall be minimum 3.0 meters, weir loading shall not be greater than 125 cum DMF for average flow Bottom slope shall be 1:12		
	The floor of clarifier shall have 40 mm thick (min.) screed course of cement grout of mix in C.M. 1:2 Detention period shall be 2.25 hrs. dispersion box and stiffened weir plate made of mild steel plate not less than 8 mm thick, anticorrosive epoxy paint on both faces shall be provided Minimum free board of 0.50 m. be provided it includes inlet pipe from distribution chamber, central shaft inlet baffle outlet chamber, Scum remover, skimming device, scum chamber, connecting channel from PST outlet chamber to DB-2 as per detailed specifications.		
6	Aeration Tank (AT) :		
	Designing, providing and constructing in RCC mix (M-300) Aeration Tank in compartments to handle combined flow of 1 DWF, incoming flow and recirculation flow including construction of inlet, outlet and distribution chamber DB-3 and providing 1.20m wide clear peripheral and approach walk ways, expansion joints wherever necessary, including foundation etc. as per specifications. Peak factor shall be 2, F/M ratio shall be 0.40, low speed aerator speed between 20 to 100 RPM recirculation		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	flow @ 50% and free board 0.60 m Depth, (SWD) 3.50 m minimum D.O. level at A.T. 2 Mg/Lit, MLVSS concentration shall be 2500 Mg/Lit and MLVSS concentration shall be 2000 Mg/Lit, HRT shall be 4 to 6 hours and STR 6-8 days. It should have compartments for washing, oxygen transfer capacity of mechanical aerator shall not be less than 1.5 Kg/KWH, BOD of effluent 20 mg/lit with input to aerator 0.15 to 0.30 Kwh/1000 Cum of Aeratoin tank. All related works shall be as per detailed specifications.		
7	Secondary Settling Tanks with equipments :		
	Designing, providing & constructing in RCC (M-300) water tight secondary settling tank having detention period 2 hours and SWD shall be 4.20 meter. The effluent BOD & SS from the secondary clarifier shall not be more then 20 Mg/lit and 30 mg/lit respectively. It should be hydraulically tested, bottom floor slope of 1:12 and free board of 0.60 m minimum Dispersion box shall be made of Mild Steel plate not less then 8 mm thick with anticorrosive epoxy paint from both faces and well stiffened The sewage admitted at the centre flowing upward and outwards towards periphery be slowly and continuously collected towards a convenient discharge point near centre by a rotating wheel arm. The Clarifier will be completed with end drive half rotating bridge, structural steel rake, over flow weir, walkway diffuser, over load alarms, having push buttons, starters for the clarifier, walkway and the suitable sludge withdrawing arrangement with flush valve capable of withdrawing moisture content not more then 97% to 98%, slopping floor shall have 40 mm thickness (Minimum), screed		
	rotating sludge scrapper mechanism fitted with squeezes including providing and making necessary arrangement to connect the flow to outlet chamber (DB-4) then the gravity mains for final diaposal and as per detailed specifications and obligatory provision. All other arrangements shall be as per detailed specifications.		
8	Sludge Thickner with equipments:		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	Designing providing and constructing water tight of Sludge Thickner (Gravity type) including foundation in RCC (M-300) with inlet and outlet chamber influent well, inlet and outlet pipes, with sludge pit and sludge removal arrangement, grouting wherever necessary with walkway all around of 1.20 m width G.I. pipe railing interconnecting CI pipes all complete as per specifications Detention time 24 hours. SWD shall be 4.25 metre with necessary fixed bridge scraper arrangement as per detailed specifications and necessary inlet and outlet arrangement. All other arrangement as per detailed specifications.		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
9	Primary Digester with mixer equipment (Fixed Cover)		
	Designing, providing and constructing unit of water tight and gas tight Primary Digester suitable for 1 DWF plant and complete with pipe gallery, building, staircase for access from dome of digester into inside staircase, walkways at springing levels etc. walls and base slab being in RCC M-300, domes in stucultural concrete including providing burners and civil works for gas collection, grouting wherever necessary etc. complete as per specifications. It should be designed for min 90 C and max. 450C. and minimum detention time of 30 days, water depth shall not be more then 8.5m free board shall be 0.6m with inlet and outlet arrangement of D.I. flanged pipes including giving hydraulic testing and air tightness testing. The item includes providing works for collecting Gas and Gas burner as per specification.		
10	Secondary Digester with equipment (Fixed cover)		
	Designing, providing and constructing including foudation unit of watertight and gastight Secondary Digester to deal with 1 DWF complete with pipe gallery, building, staircase for access from dome of digester into inside, staircase to walkways at springing levels etc., Walls and base slab and domes being in RCC M-300, providing arrangement for digested sludge from digesters to centrifuge, providing burners and civil works for gas collection grouting wherever necessary etc. complete. as per specifications and obligatory provision All other arrangements as per detailed specifications.		
11	S.S.T. Sump & Pump House with recirculation Pumps and Sludge Pumps to Digester:		
	Designing, providing & constructing Sump & Pump house of requisite capacity with ceiling height not less then 6.M., Sludge stream for recirculation to aeration tank & excess sludge to SCBT, including C.I. Piping to carry this flow to sump as per detailed specification & as directed by Engineer-in-charge.		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
12	Chlorine Contact Tank : Designing, providing and constructing Chlorine Contact chamber of adequate capacity to deal with 1 DWF. Average flow. The chlorine contact tank should be of 30 minutes capacity during average flow to achieve 99.99% coliform reduction. Chlorine dose shall be maintained as per standard provisions including provisions including designing, providing and constructing water supply arrangement for chlorination, including providing dewatering and by-pass arrangements jointing to final effluent main and outlet weir etc complete. The effluent quality should match with the standards laid down by Maharashtra Water pollution Control Board and as per the obligatary provision and detailed specifications and as directed by Engineer-in- charge.		
13	Chlorinator and chlorinator Room/Tonner Room. Designing, providing and constructing chlorinators vaccum type 2 Nos each having capacity of 10 Kg/Hr as per obligatory provisions and detailed sprcifications with necessary provision of chlorinator room having floor area not less then 30 Sqmt including automatic residual chiorine controller with actuator and residual chlorine analyser including cost of chlorine cylinder, piping, valves, measuring and controlling equipments, safty devices, lifting equipments, etc. complete as per I.S - 10553 (Part-II) 1982.The tonner room should have 3 MT capacity crane for loading and unloading facility. Tonner storage should distincitly isolated and should be for minumum 10 Tonners space and arrangements as per gas laws 1981 and factory act shall be provided. and all other matching amenities be provided, 5 MT gantry shall be provded for full length of Tonner room at 6 m height from floor level, with /outlet chember and treated effluent outlet channel etc. complete as per detailed specifications.		
14	Sump cum Blending Tank (SCBT) Designing providing and constructing sump cum blending tank of appropiate size and detention time with free board of 0.60 m. The slope of floor 1:4 with suction pit at the centre as per detailed specifications and obligatory requirements.		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
15	P.S.T. Sump Cum Blending Tank, Pump House with recirculation pumps:		
	Designing providing and constructing pump house of appropriate size with pumps, ceiling height minimum 6m over the circular sump for discharging the sludge to thickner and recycling of flow for blending with D.I. piping etc. complete as per detailed specifications.		
16	Sludge Centrifuge Room with Centrifuges.:		
	Designing, providing constructing and installing including foundation etc. Sludge Centrifuge to handle the sludge flow of one day in one hour per unit with sludge dewatering unit drain etc. Complete as per specifications. sludge centrifuge with all necessary arrangements as per detailed specifications mentioned in Volume -II and Volume -III of tender and obligatory provisions, be provided with satisfactory functioning.		
17	Gas Holder:		
	Designing, providing and constructing gas holder having gas collection system, gas flow meter and gas burner with floating dome arrangement and storage time 6 hrs. to be constructed in M-300 having appropriate diameter as per detailed specifications and obligatory provisions. The floating dome shall be of 8mm thick M.S. Plate minimum and shall be provided with two coats of anticorrosive epoxy coating from both faces.		
18	Outfall Sewer :		
	Designing providing and constructing appropriate Outfall Sewer of R.C.C. NP-2 pipe, to discharge treated effluent, untreated effluent form outlet chamber (after secondary clarifier) to the local nallah at a point shown on the drawing including necessary chambers for inspection / cleaning including necessary excavation dewatering, refilling, concrete encasing/bedding concrete steps to reach the nallah bed level. pitching and energy dissipation chamber in the nallah portion etc. complete.		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
19	Piping work in D.I.- including Sluice Valve, Reflux Valve, M. S. Gate.		
	Providing laying and jointing pipes other than those already included in the above items for interconnection by-pass drains etc. of all units including adequate numbers of manhole chambers. The item includes excavations, refilling and hydraulic testing of pipes, valves, gates, accessories and cost of jointing materials. The item includes required channels with gates for interconnection of units by pass drains etc. for all units and as directed etc. complete as per detailed specifications.		
20	All the structural steel work / fabrications are to be provided with application of Hot Dip Zinc coating according to specifications as per IS 4759 :1996 (Reaffirmed 2006)		
21	Administrative Building Cum Laboratory (G+1)		
	Designing providing and constructing Adminisrative Building, Office Cum Laboratory including stores. This shall be a building having appropriate Carpet area at ground floor and at first floor complete as per specifications including necessary excavation, foundation in RCC M-250 framed structure B. B. masonry (II-Class in C. M. 1:6) 20 mm cement plaster in C. M. 1:3 inside and outside painting. Alluminum door and window with glass pannels, mosaic tile flooring and skirting and all other allied items, fixtures fastening electrification arrangement water supply arrangment etc. complete. The building will have laboratory on upper floor of administrative building and should be so centralised that it should not be attached with any unit but should have complete control of every unit as per Laboratory Equipment, beautification, telephone and intercom arrangement and Wireless system etc. complete		
22	Primary and secondary treatment-with digesters, sludge drying beds etc. complete.		Rs.in Lakh

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	
			Unit	Labour
1	Upto 10 MLD	MLD	51.78	20.70
2	Cost of 10 MLD Plant	Job	517.72	207.04
3	Add for capacity above 10 MLD upto 20 MLD	MLD	45.41	18.16
4	Cost of 20 MLD Plant	Job	971.85	388.69
5	Add for capacity above 20 MLD	MLD	39.05	15.53
6	Cost of 50 MLD Plant	Job	2143.51	854.58
7	Add for capacity above 50 MLD	MLD	23.35	9.27
8	Cost of 100 MLD Plant	Job	3310.97	1317.70

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
5	Moving Media Bio Reactor (MMBR) / FAB (Fluidised Aerated Bed) Process		
	Designing, providing, construction, hydraulic testing, commissioning and giving satisfactorily trials of STP consisting of Inlet Chamber, screen chamber, Grit Separator, MMBR / FAB (Based on technologies providing attached growth on plastic meddi kept suspended in the waste water due to low density of plastic & provided with compressed air for aeration with very high MLSS of greater than 15,000 mg/lit.) tank, Secondary Clari settler, Sludge sump, Sludge Thickener, Chlorine Contact Tank, Chlorinator room/Shed, sludge Centrifuge, associated piping work with required valves, gates, drains, pathways, Administration Block cum Laboratory, Laboratory Equipments, spares parts for 2 years of operation, etc. complete as turnkey job with all involved civil, electrical and mechanical works inclusive of following items, units as per detailed specifications		
	for civil, electrical and mechanical components with all duties etc. complete to acheive BOD < 10 ppm, COD < 50 ppm, TSS < 10 ppm Ph between 7 to 8.5, oil and Grease < 10 ppm recyclable qaulity of water for industrial / agricultural purpose		
	FOLLOWING UNITS ARE INCLUDED		
	1. Inlet Chamber		
	Designing, providing and constructing RCC (M:25) inlet chamber designed for the peak flow including necessary excavation in all types of strata including walkway all around the periphery. Each compartment will have CI gates with extension rod. Head stock, operating wheels, GI pipe railing etc. The work includes providing and making necessary arrangements to connect the flow to screen chamber by approach channel as directed and as per specifications.		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	2. Screen Chamber Designing, providing, constructing, testing and commissioning of screen chamber, designed for peak flow in RCC (M-300), including walkway 1.2 m wide with GI pipe.		
	3. Grit Separator Designing, providing & constructing detritor type grit removal mechanism in RCC (M-300) capable of removing 100% 0.2 mm size particle & above having specific gravity 2.30 designed for peak flow with suitable arrangement of separation of grit from putrescible solids including providing & making necessary arrangements of Jb-1. Inlet & outlet channels of required sizes as make be required to connect the flow to connecting unit etc. complete including hydraulic testing for water tightness of structure having minimum FB of 0.3 m, wash out arrangement to grit chamber & platform 1.2 m wide RCC walkway with GI pipe handling shall be provided. A pit for collecting grit conveyed by conveyor shall be provided. It should be suitable to handle the grit for carting. All arrangements shall be as detailed specifications and as directed.		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	4. MMBR / FAB Tank		
	Designing, providing & constructing in RCC (M-300) biological reactor tank for removal of BOD along with nutrient removal to handle the average flow & having hydraulics suitable to handle peak flow conditions with suitable 1.2 m wide walk way, expansion joints as required, including foundation etc as per specifications. The tank shall be equipped with inlet & outlet arrangement, air blowers for supply of air, coarse bubble diffusers & aeration grid in SS 304, PP carrier bio media etc. FB of 0.5 m & SWD as required should be complete as per detailed specifications.		
	5. Secondary Clarisettler		
	Designing, providing & constructing in RCC (M-300) water tight secondary clarisettler having SWD of 3.75 m + 0.5 m FB & has tube media in the clarification zone to provide additional surface area for settling. The settler shall be provided with a scraper mechanism in MS with epoxy painting for collecting the settled solids at the bottom (bottom slope 1:12). The central feed well shall be made of MS with epoxy painting from both faces & well stiffened. The sewage will be admitted in the feed well & then will move outwards towards periphery slowly & continuously over a weir & will be collected in a launder.		
	6. Chlorine Contact Tank		
	Designing, providing & constructing chlorine contact tank of adequate capacity to deal with average flow. The contact time provided is 30 mm to achieve 99.99 % reduction in coliform during average flow condition. Chlorine dosage will be as per standard provisions including designing, providing & constructing water supply provision for chlorination, including providing dewatering & by pass arrangement for joining to final effluent mains & outlet weir etc complete. The effluent quality should match with the standards laid down by Maharashtra Pollution Control Board & as per obligatory provision & as detailed specification & as directed by engineer in charge.		
	7. Chlorinator & Chlorinator Room / Tonner Room		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	Designing, providing & constructing vacuum type chlorinators having adequate capacity for dosage of adequate chlorine to ensure 99.99% coliform reduction as per obligatory provisions detailed specifications with necessary provision of having chlorinator room of adequate size. The chlorinator equipment shall include chlorine cylinders 1 tonners, piping, valves, measuring controlling equipments, safety devises, lifting equipment etc. complete as per IS 10553 (Part II) 1982. The tonner room should have mm 3 MT capacity crane for loading & unloading facility. Tonner storage should be distinctly isolated and should have min. storage space as per the detailed specifications & as per gas law 1981 & factory act shall be provided. All other matching amenities shall be provided, 5 MT gantry rail shall be provided for full length of tonner room a 6 m Ht from level of tonner room with outlet.		
	8. Sludge Sump		
	Designing, providing & constructing of sludge sump and pump for discharging sludge to sludge thickener using MS pipe complete as per detailed specification.		
	9. Sludge Thickener		
	Designing, providing & constructing water tight of sludge thickener - gravity type in RCC (M-300) with inlet & outlet pipes, central feed well, sludge it & sludge removal arrangement, grouting wherever necessary with walkway all around of 1.20 m with GI pipe railing interconnecting CI pipes all complete as per specifications, having bottom slope 1:8 & 3 m SWD with necessary fixed bridge scraper arrangement as per detailed specifications & necessary inlet & outlet arrangement. All other arrangement as per detailed specifications.		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	10. Sludge Centrifuge Platform with Centrifuge		
	Designing, providing, constructing & installing including foundation etc. Sludge centrifuge to handle the sludge flow of 1 day in 18 hrs per unit with sludge dewatering unit drain etc complete is per specification. Sludge centrifuge with necessary arrangements as per detailed specification mentioned in tender and obligatory provisions to be provided with satisfactory functioning.		
	11. Outfall sewer		
	Designing, providing, constructing appropriate outfall sewer of RCC NP2 pipe to discharge treated effluent, untreated effluent from outlet chamber (after basin / chlorination tank) to the local Nallah at the point shown on the drawing including necessary chambers for inspection & cleaning including excavation, dewatering, refilling, concrete encasing I bedding concrete.		
	12. Pining work in CI- LA class including sluice valves, reflux valves, MS Gates		
	Providing, laying & jointing pipes other than hose already included in the above items for interconnection by pass drains etc. of all units including adequate numbers of manhole chambers. The item includes excavations, refilling & hydraulic testing of pipes, valves, gates, accessories & cost of jointing materials. The item includes required channels with gates or interconnection of units, by pass drains etc. for ill units as directed etc complete as per detailed specifications.		
	13. All the structural steel work / fabrications are to be provided with application of Hot Dip Zinc coating according to specifications as per IS 4759 :1996 (Reaffirmed 2006)		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	14. Administrative Building cum Laboratory (G+1)		
	Designing, providing & constructing administrative building, office cum laboratory including stores. This shall be building having appropriate carpet area & ground floor & at first floor complete as per specifications including necessary excavation, foundation in RCC M-250 framed structure, BB masonry (II class in CM 1:6) 20 mm cement plaster in CM 1:3 inside & outside painting, aluminum door & window with glass panels, mosaic tile flooring & skirting & all other allied items, fixtures, fastening, electrification arrangement, water supply arrangement etc complete. The building will have laboratory on upper floor of administrative building & should have complete control of every unit as per laboratory equipment, beautification, telephone & intercom arrangement & wireless system etc. complete.		
	Capacity of Plant	Area Required	
	01	0450	MLD 132.04
	03	0650	MLD 77.74
	05	1000	MLD 67.02
	08	1500	MLD 60.85
	10	1800	MLD 59.52
	13	2300	MLD 53.85
	15	2650	MLD 48.98
	18	3250	MLD 48.33
	20	3500	MLD 46.67
	25	4350	MLD 44.88
	30		MLD 43.33
	40		MLD 42.50
	50		MLD 42.00
	60		MLD 41.67
	70		MLD 41.43
	80		MLD 40.25
	90		MLD 40.22
	100		MLD 40.00

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	NOTES		
	1 Screen chamber & grit separator up to 5 MLD Capacity are manual type.		
	2 Up to 5 MLD Capacity STP chlorination is done by using sodium hypochlorite solution. Above 5 MLD capacity gas chlorinator is provided.		
	3 Sludge thickener is not provided up to 3 MLD capacity STP. Sludge will be collected into sludge sump & pumped directly to sludge dewatering system		
	4 For all STP sludge dewatering is using solid bowl centrifuge.		
	5 Chlorinator room not provided for STP up to 3 MLD. For STP up to 3 MLD laboratory I administration building is not provided. Only a room for operator is provided.		
	6 Boundary wall, fencing, gate, storm water drains, site clearance is not considered in scope.		
	7 All water retaining structures are in M -300 grade of concrete.		
	8 Water table is considered 5 m below GL for design.		
	9 Soil bearing capacity is considered as 20 TIm2 at 1.5 m below GL.		
	10 Lead for excavation is considered as 0.5 km.		
	11 Grade of cement used is OPC 43 grade.		
	12 Grade of steel used is Fe 415.		
	13 Peak factor considered for design for plants up to 3 MLD is 3, 4 to 15 MLD is 2.5,16 to 20 MLD is 2.0.		
	14 Chemicals required during trial run & commissioning is not considered.		
	15 Water & power during construction, trial run & commissioning shall be provided by client.		
	16 Power available at STP location is assumed as LT power supply.		
	IV MAKES OF EQUIPMENT		
	S.No. Description	Make	
1	Centrifugal Pumps -	Kirloskar / Jhonson /Kishor / Eqv.	
2	Screw Pumps -	Roto/Tushaco/Eqv.	
3	Air Blower -	Usha/Swam/Kay/ Kulkarni / Eqv.	
4	Dosing Pumps -	Milton Roy/VK Pumps/Positive/ Minimax / Eqv.	
5	Agitators/ -	Pavan/Fibre&Fibre	

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	
	Flocculators - / Ceecons fabricated as per MJP approved design / make			
7	Screens - To be fabricated as per MJP approved design / make			
8	Grit Separator - To be fabricated as per MJP approved design / make			
9	Chlorinator - Toshcon Jesco / Banaco/Perfect Chloro/Chlorocon- trol/Metito/Eqv.			
10	Chlorine Tonner - Meenakshi / Eqv.			
11	Solid Bowl Centrifuge - Alfa Laval/Humbolt /Wedag/Hiller/Eqv.			
12	Motors - Crompton/Siemens /Lakshmi			
13	Cables - Finolex/ Polycab			
14	MS pipes - Mahalakshmi Seamless/ Mahara- shtra Seamless/ Suryaroshni/Jindal /Eqv.			
15	CI Pipes - Truform/Electrosteel /Kejriwal/Eqv.			
16	Valves - Intervalve/BDK/ Procon/Tyco/AV valves/Eqv.			
17	Clarissettler - Media Cooldeck/ Munters			
18	Bio Reactor - As per MJP approved Carrier Media - design /make			

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
6	CYCLIC ACTIVATED SLUDGE PROCESS (CASP)		
	Designing , providing, constructing, hydraulic testing, commissioning and giving satisfactory trials of Cyclic Activated Sludge Process Based(CASP) on Sequencing Batch Reactor (SBR) Technology,STP consisting of Inlet Chamber, Screen Chamber, Detritus Tanks, Distribution Chamber, Biological CASP Basins, Sludge thickner and equipment, Sludge Sump, Chlorine Contact Tank, Chlorinator Room / Shed, Sludge Centrifuge with necessary piping work including required valves,gates,drains,pathways administration Block cum Laboratory, Laboratory Equipments, Tools and Plants, Spare Parts etc. complete as turnkey job with all involved civil,electrical and mechanical works inclusive of following items,units as per detailed specification for civil,electrical and mechanical components with all duties and taxes etc. complete to achieve BOD < 5 mg/l, COD <100 mg/l, TSS < 10 mg/l,		
	to get recyclable quality of water for industrial / agricultural purposes. (In case Cyclic activated sludge plant is designed N,P removal outlet parameters shall also include TN < 10 mg/l, NH ₃ N < 2 mg/l & TP < 1 mg/l). All structural steel works / fabrications are to be provided, with application of hot dip zinc coating according to specifications as per IS 4759 : 1996 (Reaffirmed 2006)		
	UNITS INCLUDED		
	1. Inlet Chamber		
	Designing, providing, and constructing RCC (M-300) inlet chamber for the peak flow of 2 DWF including necessary excavation in all types of strata including walkway all around the periphery. Each compartment will have phosphor bronze steel gates with extension rod, head stock, operating wheels. GI pipe railing etc. The work includes providing and making necessary arrangements to connect the flow to screen chamber by approach channel as directed and as per specifications.		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	2. Screen Chamber Designing, providing, constructing, testing and commissioning of screen chamber, designed for average 1 DWF and maximum peak flow of 2 DWF in RCC (M -300), including inlet pipe / channel from inlet chamber, outlet pipe channel to detritus tank, free board of 0.5 m minimum, RCC walkway 1.2 m wide with GI pipe railing, RCC stair case of 1.2 m width from GL to screen chamber.		
	3. Detritus Tank Designing, providing and constructing continuous grit removal type of Detritus Tank, mechanically operated in RCC (M 300) capable of removing 100% of 0.2 mm size particle and above, having specific gravity 2.30 designed for one peak 2 DWF with suitable arrangement of separation of grit from putrescible solids. Inlet and outlet channels of required sizes as may be required to connect the flow to connecting unit etc. Complete including hydraulic testing for water tightness of structure having minimum FB of 0.3 m, wash out arrangement to Grit chamber and platform 1.2 m wide RCC walkway with GI pipe handling shall be provided. A pit for collecting grit conveyed by conveyor shall be provided. It should be suitable to handle the grit for carting. All arrangements shall be as detailed specifications and as directed.		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	4. CASP Basins Designing, providing and constructing in RCC (M-300), CASP basins for biological removal of BOD along with nitrification, denitrification, Bio-P removal in compartments to handle combine flow of 1 DWF incoming flow and recirculation flow including construction of selector compartments and providing 1.2 m wide clear approach walkways, expansion joints wherever necessary, including foundations etc as per specifications. Peak factor shall be 2, F/M ration shall be 0.15, complete with air blowers, fine diffused aeration grid / equipment and FB 0.5 m and SWD as required. DO level in basin to be minimum 2 mg/l complete with "Oxygen Uptake Rate" control system and all related instruments. Stainless steel decanters and automation works. MLSS concentrations shall be 2000-5500 mg/l or more, MLVSS to MLSS ratio to be 0.8. HRT shall be between 12 to 13 hrs and SRT suitable for fully digested sludge. It should have all other related works as per detailed specification. In Case CASP is designed to achieve N, P removal HRT		
	5. Chlorine Contact Tank		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	Designing providing and constructing chlorine contact chamber of adequate capacity to deal with 1 DWF average flow. The chlorine contact tank should be 30 min capacity, during average flow to achieve 99.99% coliform reduction. Chlorine dose shall be maintained as per standard provisions, including designing, providing and constructing water supply provision for chlorination including providing dewatering and by pass arrangement jointing to final effluent mains and outlet weir, etc complete. The effluent quality should match with the standards laid down by Maharashtra water pollution control board and as per obligatory provision and as detailed specification and as directed by Engineer-in-charge.		
	6. Chlorinator and Chlorinator Room / Tonner Room		
	Designing, providing and constructing chlorinators vacuum type 2 Nos. with auto switchover facility and having capacity for dosage of adequate chlorine to ensure 99.99% coliform reduction as		
	per obligatory provisions and detailed specifications with necessary provision of having chlorinator room of adequate size. The chlorinator equipment shall include cost of chlorine cylinders / tonner piping, valves, measuring and controlling equipments, safety devices, lifting equipments, etc. complete as per IS-10553 (part II) 1982. The tonner room should have minimum 3 MT capacity Hoist for loading and unloading facility. Tonner storage should be distinctly isolated and should be for minimum storage space as directed in the design specification and as per gas laws 1981 and factory act shall be provided. All other matching amenities shall be provided, 5 MT gantry rail shall be provided for full length of tonner room at 6 m height from level of tonner room, with outlet chamber and treated effluent outlet channel etc. complete.		
	7. Sludge Sump		
	Designing, providing and constructing of sludge sump and pump house of appropriate size with pumps, ceiling height minimum 6 m over sump for discharging sludge to centrifuge using D.I. pipe complete as per detailed specification.		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	8. Sludge Centrifuge Platform with Centrifuges		
	Designing, providing, constructing and installing including foundation etc., sludge centrifuge to handle the sludge flow of 1 day in 20 hours per unit with sludge dewatering unit drain etc complete as per specification. Sludge centrifuges with the necessary arrangement, as per detailed specification mentioned in tender and obligatory provisions to be provided with satisfactory functioning.		
	9. Outfall Sewer		
	Designing, providing and constructing appropriate outfall sewer of RCC NP2 pipe, to discharge treated effluent from outlet chamber after chlorination		
	tank to the local Nallah at the point shown on the drawing including necessary chamber for inspection and cleaning including necessary excavation, dewatering, refilling concrete encasing / bedding concrete steps to reach the nallah bed level, pitching and energy dissipation chamber in nallah portion etc. complete upto 50 m length RCC NP2 pipe line and including all above items.		
	10. Piping work in D.I. - including Sluice valves, Reflux Valves, MS gates		
	Providing laying and jointing pipes other than those already included in the above items for interconnection by - pass drains etc. of all units including adequate numbers of manhole chambers. The item includes excavations, refilling and hydraulic testing of pipes, valves, gates, accessories and cost of jointing materials. The items includes required channels with gates for interconnection of units by pass drains etc for all units as directed etc complete as per detailed specifications.		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	11. Administrative Building cum Laboratory (G+1)		
	Designing, providing and constructing administrative building, office cum laboratory including stores. This shall be a building having appropriate carpet area and ground floor and at first floor complete as per specifications including necessary excavation, foundation in RCC M-250 framed structure B. B masonry (11- class in C.M. 1:6) 20 mm cement plaster in CM 1:3 inside and outside painting. Aluminium door and window with glass panels, mosaic tile flooring and skirting and all other allied items, fixtures fastening electrification arrangement water supply arrangement etc complete. The building will have laboratory on upper floor of administrative building and should be so centralized that it should not be attached with any unit but should have complete control of every unit		
	as per laboratory equipment, beautification, telephone and intercom arrangement and wireless system.		
	Capacity of Area required No. of the Plant in in Ha Basins		
	MLD		
	1 0.5 2	MLD	302.42
	2 0.6 2	MLD	202.2
	5 0.65 2	MLD	127.04
	10 0.70 2	MLD	103.79
	15 0.75 2	MLD	90.06
	20 0.80 4	MLD	85.24
	25 1.00 4	MLD	84.63
	30 1.20 4	MLD	79.66
	40 1.60 4	MLD	74.68
	50 1.75 4	MLD	73.02
	60 1.90 4	MLD	62.53
	75 2.25 4	MLD	61.08
	100 2.40 6	MLD	58.17
	125 3.00 6	MLD	55.26
	150 3.50 6	MLD	53.81

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	NOTES		
	a. These Rates are for Civil Works, in M- 300 grade RCC.		
	b. Water Table is considered at 5 m below ground level.		
	c. Soil bearing capacity considered as 20 T/m ² at 1.5 m below ground level.		
	d. OPC has been considered for costing purposes.		
	e. All civil items, electrical, piping, valves, pumps, motors, blowers, etc. are considered as per MJP Schedule of Rates.		
	f. I. No.1,2 includes sludge drying beds instead of sludge centrifuge and DWPE dosing system.		
	g. I. No.1,2,3 includes NaOCl Dosing System instead of Gas Chlorination.		
	h. I. No.1,2,3 do not include Lab and Lab Equipments.		
	i. O&M shall be added extra		
	j. No piling, dewatering, soil improvent, desilting considered in the cost.		
	k. Site is cleared flat and levelled. No site development works filling dewatering considered.		
	l. Peak factor considered as 2.0 times average flow. For every 25% increase in peak factor, 10% extra cost shall be added over the above rates.		
	m. OPC TOR steel considered.		
	n. Treated water disposal upto 50 m considered.		
	o. N&P reduction not considered.		
	p. HT electrical works shall be added as per case specific conditions.		
	q. Raw sewage pumping shall be added as per case specific conditions.		
	r. In case TN<10 & TP<1 quality is required, above rates shall be increased by 10%		
	s. Cost of I.No. 1 to 5 do not include HT station, Lab and Mechanical dewatering of sludge.		

Section - I- (XIX) - R.C.C. G.S.Rs AND SUMPS			
Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	<p>Designing (aesthetically), and constructing RCC ground service reservoirs / RCC sumps in M-300 mix. of required capacity including excavation in all types of strata, foundation concrete, container walls, bottom slab top RCC roof slab / or dome, 20 mm thick cement plaster with water proofing compound in CM 1:3 proportion. to inside face of the container, including epoxy paint from inside including refilling and disposing of surplus stuff within lead of 50 M, all labour and material charges, for laying and jointing of pipe assembly for inlet, outlet washout, over flow and bye-pass arrangement consisting of D.I./ M.S. D/F. pipes, specials and valves of given diameters, providing and fixing accessories such as M.S. ladder outside, Stainless Steel Ladder in container, C.I. Manhole frame and cover, water top slab, B.B. masonry chamber for all valves,</p> <p>ventilating shafts, including giving satisfactory hydraulic test and water tightness test as per IS code and providing three coat of Acrylic emulsion with silicon additives paint to all expose surface of structure including roof surface etc. complete as per design data, criteria, obligatory requirements and detailed specifications. Anti terminate treatment shall be given for under ground portion of the structure.</p>		
	<p>Note :</p> <ol style="list-style-type: none"> 1 The designing shall be in accordance with various relevant I.S. specification (I.S. 456/2000, I.S. 875 - 1987, I.S.3370-1965 or revised.) 2 Only M.S. bars grade I confirming to I.S. 432 part-I or high yield strength deformed bars confirming to I.S. 1786 or I.S.1139 shall be used grade II M.S. bars shall not be used. 		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	<p>3 Entire structure shall be in M - 300 only.</p> <p>4 The scope of pipe assembly work shall be upto 5 metre beyond outside face of the wall, cost of pipes valves and specials is not included in the rate but labour cost for laying and jointing is included.</p> <p>5 The G.S.R. / Sump above 15 lakh litres capacity shall be in two compartment</p> <p>6 The job includes designing the structure for uplift pressure and dewatering if required using entire execution and disposal of surplus excavated stuff within lead of 50 metres as directed by Engineer-in-charge. If up lifts considered in design then these rate shall be increased by 7.5%.</p> <p>7 G.S.R. outlets shall be with bell mouth of approved pattern in bottom slab and cost of designing bell mouth is included in the rate. Sump well includes cost of suction pit required at bottom.</p> <p>8 For pipe diameters upto 300 mm only DI pipes and DI specials shall be used. For pipe diameters above 300mm, M.S. pipes and specials minimum 10 mm thick shall be used with proper anticorrosive epoxy treatment from in side and outside.</p> <p>9 Cost of pump house is not included in these rates.</p> <p>10 Above rates are applicable for seismic zones-2,3 and 4</p>		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
11	75% part rate shall be payable for reinforcement,concrete and plastering items of all types of G.S.R.s. and sumps till satisfactory hydraulic testing for water tightness test is given and till that work shall be treated as incomplete		
12	10% shall be added for sump if overhead pump house is proposed		
Note: Condition from Sr. No. 1 to 11 shall form a part and parcel of tender and must be included in the Draft tender papers for work of R.C.C. GSRs and sump. Rates for R.C.C.G.S.Rs or Sumps			
Rates for R.C.C. G.S.Rs and Sumps			
S.No.	Capacity in Litres	Unit	Rate in Rs. Labour Rates in Rs.
1	Upto 25000 lit	Lit.	10.99 4.32
2	Cost of 25000 lit capacity		##### 109927.64
3	Add for capacity above 25000 to 50000 lit	Lit.	6.48 2.61
	Cost of 50000 lit capacity		##### 174780.75
4	Add for capacity above 50000 to 75000 lit	Lit.	5.33 2.16
5	Cost of 75000 lit capacity		##### 228060.28
	Add for capacity above 75000 to 100000 lit	Lit.	4.75 2.16
6	Cost of 100000 lit capacity		##### 275554.26
7	Add for capacity above 100000 to 150000 lit	Lit.	4.49 1.80
	Cost of 150000 lit capacity		##### 365391.46
8	Add for capacity above 150000 to 200000 lit	Lit.	3.83 1.53
9	Cost of 200000 lit capacity		##### 442182.98
	Add for capacity above 200000 to 300000 lit	Lit.	3.70 1.53
10	Cost of 300000 lit capacity		##### 590254.94
11	Add for capacity above 300000 to 500000 lit	Lit.	2.87 1.17
12	Cost of 500000 lit capacity		##### 820269.34

Section-I-(XIX)-R.C.C. G.S.Rs AND SUMPS

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	
13	Add for capacity above 500000 to 1000000 lit Cost of 1000000 lit capacity	Lit.	2.65	1.08
14	Add for capacity above 1000000 to 1500000 lit	Lit.	#####	1349365.25
15	Cost of 1500000 lit capacity Add for capacity above 1500000	Lit.	2.12	0.90
			#####	1771946.67
			1.58	0.63

Section - I- (XX) - R.C.C. E.S.Rs

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
	<p>Designing (aesthetically), and constructing RCC elevated service reservoirs of following capacity with RCC staging consisting of columns, internal and external bracings spaced vertically not more than 4.5 meters centre to centre for ESR having Capacity upto 500 Cum. and not more than 6 m c/c for ESRs having capacity above 500 cum including excavation in all types of strata, foundation concrete, cement plaster with water proofing compound to the inside face of the container including refilling disposing of the surplus stuff within a lead of 50 meters, all labour and material charges including lowering, laying, erecting, hoisting and jointing of pipe assembly of inlet, outlet, washout, overflow and bypass arrangements as per departmental design, providing and fixing accessories such as M.S. ladder out side, stainless steel Ladder in container, C. I. manhole frame and covers water level indicators, lightening conductor, G. I. pipe railing around walk way and top slab, providing spiral staire case from ground level to roof level,M.S.grill gate of 2 mtr.height with locking arrangement of approved design. B.B. masonry chambers for all valves, ventilating shafts, providing and applying three coats of Acrylic emulsion with silicon additives paint to the structure including roof slab epoxy painting to internal surface & anti termite treatment for underground parts of the structure. and giving satisfactory water tightness test as per I.S. code, The job to include painting the name of the scheme and other details on the reservoir as per the directions of Engineer-in-charge.</p> <p>1 The design of the structure be in accordance with relevant (I.S.3370 - 2009 or revised)</p> <p>2 The design shall satisfy the stipulation as per IS 1893-1984 and I.S. 13920/1993 for seismic force and I.S.- 11682/1985 for R.C.C. staging of overhead tanks.</p>		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19
3	For design having more than 6 columns, Providing of internal bracing is obligatory,. External bracking is also obligatory.		
4	The entire structure shall be in M/250 mix only. However concrete in contact with water such as container, base slab, wall, roof slab & footing in water borne area shall be in M-300		
5	Plain round mild steel bars grade - I confirming to I.S:432 Part-I or high yield strength deformed bars confirming to I.S. 1786 or I.S. 1139 shall be used, grade-II mild steel bars will not be allowed.		
6	Irrespective of the type of foundation proposed in the design, one set of bracing be provided at the gound level.		
7	These rates include providing, M.S. ladder for E.S.R's upto 2 lakhs liters capacity and providing sprial staircase for E.S.R. above 2 lakhs liters capacity.		
8	Stagging shall have to be designed with stresses of M-200 for ESR. However all RCC construction should be done in M-250 except concrete in contact with water shall be designed & constructed in M-300		
9	These rates are including the cost of uplift pressure if any and entire dewatering during execution. In case of water logging area where water is struck at shallow depth extra provision of dewatering shall be made as per site condition.		
10	All condition given in the Member Secretary"s Circular No.MJP/TS-I/350/1668 dt. 2.8.97 and MJP/S-I/350/2127 dt. 13.7.99 shall be strictly followed and additional cost, if any due to these conditions is included in the rates mentioned below.		

Sr No	Item Description		Unit	Rate (in Rs.) 2018-19
	11	75% part rate shall be payable for reinforced concrete and plastering items of containers of E.S.R. till satisfactory hydraulic testing for water tightness is given ; and till that work shall be treated as incomplete.		
	12	The rates indicated in the table are excluding the cost of pipes, specials and valves required for inlet, outlet washout overflow and by-pass arrangement. The scope of work, however includes cost of erecting, laying and jointing of pipes and valves including cost of jointing materials upto 5M beyond outer face of outermost column.		
	13	For ESR upto 500cum capacity D.I. double flanged pipes upto 300mm dia shall be provided and C.I.Specials shall be used. For ESR above 500 cum capacity D.I./M.S. pipes assembly with minimum 8mm thickness up to 500mm dia. And minimum 10mm thickness above 500mm dia can be used with proper anti-corrosive epoxy treatment from inside and outside.		
	14	Below mentioned rates are for foundation, with individual footing with bearing capacity of 30 tonnes per square metre. For raft foundations, these rates shall be increased by 7.5% where safe bearing capacity (SBC) is 5 M.T. per Sq.m and by 5% where SBC is more than 5 MT/Sqm. and upto 10MT/Sqm. This percentage of 5% or 7.5% is applicable for estimation of amount of L.S. items ESR for Extra item due to change from individual footing foundation to raft actual increase in concrete and steel quantities be paid as per relevant DSR Item.		

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19						
	<p>15 The rates shall be increase by 30% for brearing piles upto depth of 10m and for further increased in depth by 5M each it shall be increased by another 10% These rates are applicable where raft is not feasible for pile foundation sulfate resistant cement shall only be used. Single pile for the column is not permitted Group of piles shall be designed with pile cap for each column of ESR.</p> <p>16 These rates are applicable for staging height of 12 M These rates shall be increased or decreased for per metre variation in the staging height as below</p> <table> <tr> <td>12 to 16 M staging</td> <td>2% per metre</td> </tr> <tr> <td>16 to 20m staging</td> <td>3% per meter</td> </tr> <tr> <td>20 M and abovd</td> <td>4% per metre</td> </tr> </table> <p>i.e. for 17m stagging height percentage calculation will be like below</p> $12 \text{ to } 16m = 4 \times 2 = 8\%$ $16 \text{ to } 17 m \times 1 \times 3 = 3\%$ <p>Total = 11 %</p> <p>For 21 m stagging height Percentage calculation will be like below</p> $12 \text{ to } 16m = 4 \times 2 = 8\%$ $16 \text{ to } 20m = 4 \times 3 = 12\%$ $20 \text{ to } 21m = 1 \times 4 = 4\%$ <p>Total = 24%</p>	12 to 16 M staging	2% per metre	16 to 20m staging	3% per meter	20 M and abovd	4% per metre		
12 to 16 M staging	2% per metre								
16 to 20m staging	3% per meter								
20 M and abovd	4% per metre								
17	Following rates are for seismic zone-III for Zone-IV these rates shall be increased by 5% and for Zone-II, these rates shall be decreased by 5% concerned Executive Engineer shall confirm the seismic zone for the scheme from seismic zones plan before estimation and adopt appropriate rates as per actual seismic zones(Seismic maps attached in this C.S.R.)								

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	
S.No.	Capacity in Litres	Unit	for Seismic Zone-III Rate in Lakh Rs.	LABOUR Rate in Lakh Rs.
1	Upto 250000 lit	Litre	23.83	6.56
2	Cost of 25000 lit capacity	Job	595680.00	164092.00
3	Add for capacity above 25000 to 50000 lit	Litre	10.57	2.88
4	Cost of 50000 lit capacity	Job	859860.00	236924.00
5	Add for capacity above 50000 to 75000 lit	Litre	7.38	2.03
6	Cost of 75000 lit capacity	Job	1044480.00	287415.00
7	Add for capacity above 75000 to 100000 lit	Litre	7.38	2.23
8	Cost of 100000 lit capacity	Job	1229100.00	491724.00
9	Add for capacity above 100000 to 150000 lit	Litre	5.65	2.32
10	Cost of 150000 lit capacity	Job	1511640.00	604822.00
11	Add for capacity above 150000 to 200000 lit	Litre	5.65	2.29
12	Cost of 200000 lit capacity	Job	1794180.00	717757.00
13	Add for capacity above 200000 to 250000 lit	Litre	5.65	2.30
14	Cost of 250000 lit capacity	Job	2076720.00	830861.00
15	Add for capacity above 250000 to 300000 lit	Litre	3.93	1.54
16	Cost of 300000 lit capacity	Job	2273070.00	909313.00
17	Add for capacity above 300000 to 400000 lit	Litre	3.93	1.55
18	Cost of 400000 lit capacity	Job	2665770.00	1066475.00
19	Add for capacity above 400000 to 500000 lit	Litre	3.92	1.55
20	Cost of 500000 lit capacity	Job	3058470.00	1223388.00
21	Add for capacity above 500000 to 750000 lit	Litre	3.92	1.57
22	Cost of 750000 lit capacity	Job	4040220.00	1616004.00
23	Add for capacity above 750000 to 1000000 lit	Litre	3.32	1.33
24	Cost of 1000000 lit capacity	Job	4870500.00	1948426.00
25	Add for capacity above 1000000 to 1500000 lit	Litre	3.32	1.26
26	Cost of 1500000 lit capacity	Job	6530500.00	2611867.00
27	Add for capacity above 1500000 to 2000000 lit	Litre	3.32	1.27
28	Cost of 2000000 lit capacity	Job	8190500.00	3276115.00

Section -I (XXI)- CHAMBERS, MANHOLES and DRAINAGE DROPS

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
1	<p>Providing and constructing B.B. masonry valve chamber with 15 cm thick 1:3:6 proportion PCC bedding, excluding excavation, B.B. masonry in C.M. 1:5 Proportion precast RCC frame and cover, etc. complete as directed by Engineer-in-charge.</p> <p>Note: Wall thickness : 0.23 M for depth of 1.2 M and 0.35 M for balance depth exceeding 1.2 M)</p>			
A.	As above of 60 x 45 cm internal size and depth upto 0.9M .	No	5287.00	1328.00
	a). Add for every increase of depth of 30cm or part thereof.	30cm depth	1150.00	316.00
B.	As above of 95 x 45 cm internal size and depth upto 1.2M .	No	7824.00	1996.00
	a). Add for every increase of depth of 30cm or part thereof.	30cm depth	1375.00	380.00
C.	As above of 90 x 60 cm internal size and depth upto 1.2M .	No	8505.00	2183.00
	a). Add for every increase of depth of 30cm or part thereof.	30cm depth	1487.00	414.00
D.	As above of 90 x 90 cm internal size and depth upto 1.2M .	No	9254.00	2380.00
	a). Add for every increase of depth of 30cm or part thereof.	30cm depth	1638.00	462.00
E.	As above of 1.2 x 1.2 M internal size and depth upto 1.2M .	No	11911.00	3065.00
	a). Add for every increase of depth of 30cm or part thereof.	30cm depth	1948.00	547.00
F.	As above of 1.5 x 1.5M internal size and depth upto 1.5M .	No	13643.00	3511.00
	a). Add for every increase of depth of 30cm or part thereof.	30cm depth	2179.00	627.00
G.	As above of 90 cm internal dia size and depth upto 1.2 M .	No	10410.00	2742.00
	a). Add for every increase of depth of 30cm or part thereof.	30cm depth	1830.00	534.00

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
2	<p>Providing and constructing B.B. masonry valve chamber with 15 cm thick 1:3:6 proportion PCC bedding, excluding excavation, B.B. masonry in C.M. 1:5 proportion 12 mm thick cement plaster in cm 1:4 proportion on both sides with providing and fixing C.I. manhole frame and cover in RCC 1:2:4 coping or RCC 1:2:4 proportion 15 cm thick slab, etc.complete as directed by Engineer-in-charge.</p> <p>Note: Wall thickness : 0.23 M for depth of 1.2 M and 0.35 M for balance depth exceeding 1.2 M</p> <p>Valve Chamber with Cast iron frame & covers.</p> <p>A. As above of 60x45 cm internal size and depth upto 0.9 M with 60 x 45 cm size CI manhole frame and cover of 40 kg</p> <p>a). Add for every increase in depth of 30cm or part thereof</p> <p>B. As above of 90x45 cm internal size and depth upto 1.2 M with 90 x 45 cm size CI manhole frame and cover of 40 kg</p> <p>a). Add for every increase in depth of 30cm or part thereof</p> <p>C. As above of 90x60 cm internal size and depth upto 1.2 M with 90 x 60 cm size CI manhole frame and cover of 50 kg</p> <p>a). Add for every increase in depth of 30cm or part thereof</p> <p>D. As above of 90x90 cm internal size and depth upto 1.2 M with 53 cm dia CI manhole frame and cover of 90 kg fixed in R.C.C. Slab</p> <p>a). Add for every increase in depth of 30cm or part thereof</p>			

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
E.	As above of 1.2 x 1.2M internal size and depth upto 1.2 M with 53 cm dia CI manhole frame and cover of 90 kg fixed in R.C.C. Slab	No	19869.00	3224.00
F.	a). Add for every increase in depth of 30cm or part thereof	30cm depth	2178.00	625.00
F.	As above of 1.5 x 1.5 M internal size and depth upto 1.5 M with 53 cm dia CI manhole frame and cover of 90 kg fixed in R.C.C. Slab	No	25639.00	4849.00
	a). Add for every increase in depth of 30cm or part thereof	30cm depth	2635.00	767.00
3	Providing and constructing B.B. masonry valve chamber with 15 cm thick 1:3:6 proportion PCC bedding, excluding excavation, B.B. masonry in C.M. 1:5 Proportion precast S. F. R. C.frame and cover,etc.complete as directed by Engineer-in-charge.			
	Note: Wall thickness : 0.23 M for depth of 1.2 M and 0.35 M for balance depth exceeding 1.2 M			
	Valve Chamber with Precast steel fibre reinforced concrete (S.F.R.C.) frame & covers.			
A.	As above of 60x45 cm internal size and depth upto 0.9 M .	No	7634.00	1412.00
	a). Add for every increase in depth of 30cm or part thereof	30cm depth	1155.00	213.00
B.	As above of 90x45 cm internal size and depth upto 1.2 M .	No	11001.00	2035.00
	a). Add for every increase in depth of 30cm or part thereof	30cm depth	1318.00	244.00
C.	As above of 90x60 cm internal size and depth upto 1.2 M .	No	12110.00	2241.00
	a). Add for every increase in depth of 30cm or part thereof	30cm depth	1429.00	264.00
D.	As above of 90x90 cm internal size and depth upto 1.2 M .	No	14242.00	2635.00
	a). Add for every increase in depth of 30cm or part thereof	30cm depth	1650.00	305.00

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
E.	As above of 1.2 x 1.2M internal size and depth upto 1.2 M with S.F.R.C. frame and cover of size 540 mm dia fixed in R.C.C. Slab a). Add for every increase in depth of 30cm or part thereof	No 30cm depth	17655.00 2189.00	3267.00 405.00
F.	As above of 1.5 x 1.5 M internal size and depth upto 1.2 M with S.F.R.C. frame and cover of size 540 mm dia fixed in R.C.C. Slab a). Add for every increase in depth of 30cm or part thereof	No 30cm depth	23679.00 2647.00	4380.00 490.00
4	Providing and fixing in position M.S. Air valve boxes fabricated with 2 mm thick M.S. plate, 30 x 30 x3 mm size M.S. angle frame, concreting in M-150 for fixing the box in position, applying two coats of oil paint, painting chainage, locking arrangement, etc. complete as directed by Engineer-in-charge. a) For single ball air valve b) For Double ball air valve	No No	1986.00 2784.00	76.00 198.00
5	Providing and fixing C.I. road box including loading, unloading and carting to site of work including all necessary excavation in all types of strata and fixing in murum packing, etc. complete. a) 100 mm x 225 mm (20 kg) b) 225 mm x 300 mm (40 kg)	No No	1429.00 2858.00	265.00 529.00
6	Providing and constructing on sewer, B.B. masonry circular manhole concentric cone 1.2 M dia. at bottom and 0.5 M dia. at top and upto a depth of 2.00 M with 23 cm brick work in CM 1:4 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in c.c.1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm.dia. etc. complete as directed by Engineer-in-charge. a) Rebate for every decrease in depth of 50 cm or part thereof	No 50cm depth	20770.00 2763.00	3553.00 1325.00

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
7	Providing and constructing on sewer, B.B. masonry circular manhole concentric cone 1.5 M dia. at bottom and 0.5 M dia. at top and upto a depth of 5.00 M with 23 cm brick work up to depth of 2 M from top and 35 cm thick brick work for balance depth in CM 1:4 proportion with 20 mm thick smooth plaster on both side in cm 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in c.c.1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighting 5.5 kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm.dia. etc. complete as directed by Engineer-in-charge.	No	56839.00	3553.00

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
8	a) Rebate for every decrease in depth of 50 cm or part thereof Providing and constructing on sewer, B.B. masonry circular manhole with concentric cone 1.5 M dia. at bottom and 0.5 M dia. at top and upto a depth of 9.00 M with 23 cm brick work, upto depth of 2 M from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth upto 9 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation, including foundation concrete 250 mm thick and haunches and channels in c.c.1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm.dia. etc. complete as directed by Engineer-in-charge.	50cm depth No	5517.00 119060.00	3689.00 3535.00
9	a) Rebate for every decrease in depth of 50 cm or part thereof Providing and constructing B.B. masonry circular manhole without conical shape excluding excavation, RCC 1:2:4 proportion, 20 cm bedding brick masonry in CM 1:4 proportion, 23 cm thick for 2 M depth from top 35 cm thick for 2 M below it and 45 cm thick for balance depth, RCC slab at top and at 2 M depth from top for supporting brick masonry above it, plastering with smooth finish in CM 1:2 proportion C.C.1:2:4 finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 kg., providing and fixing S.F.R.C. frame and cover of 56 cm.dia. at top including cost of all materials and labour, etc.complete.	50cm depth	6852.00	4928.00
A.	1.00 M dia x 2 M Depth a). Rebate for every decrease in depth of 50 cm or part thereof	No 50cm depth	19027.00 2790.00	3213.00 653.00
B.	1.00 M dia x 3 M Depth	No	27349.00	5124.00

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
C.	a). Rebate for every decrease in depth of 50 cm or part thereof 1.00 M dia x 4.5 M Depth a). Rebate for every decrease in depth of 50 cm or part thereof	50cm depth No 50cm depth	3897.00 41461.00 4824.00	862.00 8392.00 1073.00
D.	1.50 M dia x 2 M Depth a). Rebate for every decrease in depth of 50 cm or part thereof	50cm depth No 50cm depth	28388.00 3343.00	4973.00 856.00
E.	1.50 M dia x 3 M Depth a). Rebate for every decrease in depth of 50 cm or part thereof	No 50cm depth	36299.00 5002.00	7292.00 1188.00
F.	1.50 M dia x 4.5 M Depth a). Rebate for every decrease in depth of 50 cm or part thereof	No 50cm depth	54262.00 6182.00	11690.00 1455.00
Drainage Drops				
10	Providing 150 mm dia S.W. or R.C.C.pipes in vertical drop arrangement including providing 150 mm dia S.W.and R.C.C. pipe fixed in B.B. masonry of manhole at the required level including providing 150 mm dia double tee, 150 mm dia right angled bend, encasing in B.B. masonry 1:4 proportion all around the pipe,double tee, bend upto the foundation of manhole, jointing, cutting, filleting including neat cement rendering, plugging the opening with jungle wood knob complete as directed by Engineer-in-charge (0.60M depth) excluding cost of chamber.	No	1774.00	332.00
	a). Extra for every 0.5 M depth beyond initial depth of o.60 M	50cm depth	733.00	100.00
11	As above but for 200 mm dia. Pipes & depth 0.60 M a). Extra for every 0.5 M depth beyond initial depth of o.60 M	No 50cm depth	2253.00 835.00	410.00 116.00
12	As above but for 250 mm dia. Pipes & depth 0.60 M a). Extra for every 0.5 M depth beyond initial depth of o.60 M	No 50cm depth	2678.00 979.00	499.00 138.00

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
13	As above but for 300 mm dia. Pipes & depth 0.60 M a). Extra for every 0.5 M depth beyond initial depth of o.60 M	No 50cm depth	3302.00 1216.00	600.00 156.00
14	As above but for 400 mm dia. Pipes & depth 0.60 M a). Extra for every 0.5 M depth beyond initial depth of o.60 M	No 50cm depth	4772.00 1758.00	827.00 187.00
15	As above but for 500 mm dia. Pipes & depth 0.60 M a). Extra for every 0.5 M depth beyond initial depth of o.60 M	No 50cm depth	6417.00 2206.00	1093.00 215.00
16	As above but for 600 mm dia. Pipes & depth 0.60 M a). Extra for every 0.5 M depth beyond initial depth of o.60 M	No 50cm depth	8552.00 2430.00	1466.00 230.00
17	Providing and fixing in position steel fibre reinforced concrete (S.F.R.C.) frame and covers of approved make including loading, unloading, transportation, all taxes, etc. complete as directed by Engineer-in-charge (20 tonnes capacity) a) 540 mm dia b) 560 mm dia c) 90 x 45 cm size d) 90 x 60 cm size e) 60 x 60 cm size f) 60 x 45 cm size			
	a) 540 mm dia	No	2738.00	507.00
	b) 560 mm dia	No	3904.00	722.00
	c) 90 x 45 cm size	No	2738.00	507.00
	d) 90 x 60 cm size	No	2967.00	549.00
	e) 60 x 60 cm size	No	2710.00	501.00
	f) 60 x 45 cm size	No	2348.00	434.00

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
18	Providing and fixing intercepting sewer trap including concrete bedding, etc. complete.			
a)	150 x 100 mm	No	448.00	45.00
b)	100 x 100 mm	No	324.00	30.00
19	Providing and fixing in position S.W. bends of various size,etc. complete.			
a)	100 mm	No	144.00	12.00
b)	150 mm	No	171.00	14.00
20	Providing and fixing 'Y' junction and labour, etc. complete.			
a)	Saddle junction 100 x 100 mm	No	158.00	13.00
b)	"Y" junction 150 x 150 x 100 mm	No	190.00	17.00
c)	"Y" junction 300 x 300 x 300 mm	No	225.00	20.00
d)	"Y" junction 300 x 300 x 100 mm	No	190.00	17.00
21	Providing and fixing in position A.C. soil ventilators / slotted as necessary and as directed by Engineer-in-charge etc. complete.			
a)	80 mm	No	158.00	13.00
b)	100 mm	No	190.00	15.00
c)	150 mm	No	270.00	22.00
22	Providing and fixing A.C. soil pipe or downtake pipe with all required fittings, taking hole, etc. complete (as per manufacturer's code of practice).			
a)	80 mm	No	271.00	22.00
b)	100 mm	No	329.00	26.00
c)	150 mm	No	494.00	40.00
23	Providing and fixing Cast Iron soil pipe of 1.8 M length including taking out holes and all required fittings, etc. complete. S / S			
a)	80 mm	No	931.00	74.00
b)	100 mm	No	1067.00	85.00
	D / S			
a)	80 mm	No	1012.00	81.00
b)	100 mm	No	1168.00	93.00

Section -J - WELL SINKING AND RIVER INFILTRATION WORKS

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
1	<p>Providing, constructing coffer dam in river basin / dam storages as per type design including excavation, filling, the middle portion with B. C. soil (in gunny bags if required). Providing impervious / semipervious materials on both side of B.C. soil (in gunny bags if required) including ramming, compacting to the satisfaction of Engineer-in-charge, till the completion of work including dismantling coffer dam after completion of works and disposing off the material as directed by the Engineer-in-charge.</p> <p>Note : Pay line maximum- Top width payable shall be 2 mtr. And maximum payable side slopes shall be 1.5 Horizontal to 1 vertical, if the constructed top width of the side slopes are less, then the measurements at actual are payable. Extra top width or flatter slopes are not payable Contractor is free to use ballies, plastic sheets, piles, pipes, CGI sheets for supporting hearting materials instead of impervious/semipervious hearting materials for which no extra payments shall be payable. 30% payment shall be withheld for dismantling of coffer dam. This foot note shall appear in tender condition. (type section is shown on last page of type design section of CSR)</p>	Cum	661.00	19.00

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
2	Providing and fabricating at work shop, carting to site of work, including transport, loading, unloading, hoisting, lowering and setting out at actual site of well, sinking M.S. plate cutting edge. for R.C.C. well curb consisting of 350 mm M.S. plate, 10 mm thick, champhering at bottom. Cutting edge should be provided in pieces not less than 2 M in length. Each joint should be plain from outside and jointed by gusset plate 400 x 200 x 12 mm thick M. S. plate with 12 nos. of 20 mm dia crurshank headed bolts (gusset plates 14mm from bottom so that 15mm side should be in contact with cutting edge with overlap of 300 mm joints. 16 mm dia bar should be welded to M.S. plate 200 mm below the top surface and length should be 1.8 M above plate with a bend 300 mm from plate surface including 3 coats of anticorrosive paint as directed by Engineer-in-chage.	Kg	67.00	10.00
3	Providing and filling puddle (selected good impervious clay) in Kolhapur type weirs in proper layers of 15 cm including watering, ramming and compaction, etc. complete with all leads and lifts.	Cum	242.00	105.00
4	Providing and filling around the well boulders filling of selected variety and size of boulders including cost of all materials, labour, transportation, etc. complete with all leads and lifts.	Cum	762.00	169.00
5	Providing, and fixing 80 mm dia A.C./P.V.C. pipe weep holes at 1.5 M c/c staggered including cost of all materials and labour involved with all leads and lifts.etc. complete with all leads and lifts.	Rmt	168.00	33.00

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
6	Providing and fixing M.S. chaquered plate flooring of following thickness supported on M.S. angles (25 x 25 x 5 mm size) including welding, cutting and fabricating the plate to the required square or rounding shape, making holes in the plate, including providing and applying 3 coats of anticorrosive paint, etc. complete as directed by Engineer-in-charge.			
	a) 6 mm thick	Sqm	2877.00	262.00
	b) 8 mm thick	Sqm	3632.00	259.00
7	Providing at site of works ISI standard RCC slotted pipes of NP-3 class including cost of all central and local taxes, octroi, inspection, transportation, etc. complete including cost of RCC collar, etc. complete.			
	450 mm dia	RMT	3498.00	
	600 mm dia	RMT	5441.00	
8	Lowering, laying and jointing RCC slotted pipes of following diameters including all leads and lifts, cost of jointing material, labour, etc. complete as directed by Engineer-in-charge.			
	450 mm dia	RMT	196.00	128.00
	600 mm dia	RMT	261.00	166.00
9	Lowering, laying and jointing CI 'B' class connecting mains with rubber gaskets including transportation of pipes from stores to site of works, cost of jointing materials, cost of rubber gasket with all leads and lifts, etc. complete.			
	300 mm dia	RMT	269.00	244.00
	350 mm dia	RMT	328.00	295.00
	400 mm dia	RMT	399.00	366.00
	450 mm dia	RMT	388.00	368.00
	500 mm dia	RMT	449.00	437.00
	600 mm dia	RMT	626.00	616.00
	700 mm dia	RMT	821.00	778.00

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
	750 mm dia	RMT	930.00	900.00
10	Providing, lowering, laying and placing in position, shrouding material for porous pipe gallery / slotted pipe gallery/ trench gallery with all leads and lifts involved including transportation of materials to site of works, screening and washing of materials and placing in position with given section, etc. complete as directed by Engineer-in-charge.			
	40 mm pebbles	Cu.m	1317.00	202.00
	12 mm to 20 mm pebbles	Cu.m	1594.00	230.00
	6 mm to 12 mm pebbles	Cu.m	1816.00	262.00
	Fine Sand (from river sand at site)	Cu.m	901.00	130.00
11	Providing and fixing in position C.I. Type dapuri steps of 22 mm dia. M.S. bar step with proper anchorage, etc. and providing and applying 3 coats of ant-corrosive paint, etc complete as directed by Engineer-in-charge.	No	370.00	51.00
12	Providing and fixing M.S. sluice gates in position as per detailed drawing and specification including cost of all materials, labour, operating pedestal, connecting rod, painting with three coats of anti-corrosive paint, etc. complete as directed by Engineer-in-charge.	Kg	70.00	26.00
13	Providing and fixing in position C.I. /M.S. rose pieces in intake wells including cost of all materials and labour, painting with three coats of anti-corrosive oil paint, etc.complete as directed by Engineer-in-charge.	Kg	77.00	11.00
14	Providing and spreading around the well 1 mm thick polyethylene sheet complete as directed by Engineer-in-charge.	Sq.m	23.00	3.00
15	Dewatering charges for estimation purpose for head works in river basin or dam			
	Approach channel	RMT	5203.00	676.00

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
	Intake well of 3 M dia	No	69391.00	9012.00
	Inspection well of 2 M dia	No	44681.00	6784.00
	Connecting main	RMT	4170.00	648.00
	Jack well of 6 M dia	No	208161.00	20969.00
	Approach Bridge	RMT	701.00	128.00
	Notes			
1)	The Contractor at his request may be allowed to start construction of masonry steining so as not to allow silting of well inoncoming withheld and released only when excavation to the full depth is completed.			
2)	Dewatering: Total dewatering charges are to be proposed in the tender as lumpsum amount and 75% is payable for excavation and 25% is payable for construction of well / gallery. Out of 75% excavation, break-up shall be as under: 25% for last 1 M depth. 20% for 2M depth which just above last 1M depth. 15% for 2M depth which just above last 3M depth. 15% for the rest of depth from watertable level.			
3)	The provisions made for dewatering in the tender being on lumpsum basis, the same shall have to be reduced / increased proportionately as the length of approach channel, connecting main or approach bridge reduces / increases during actual execution.			
	Condition No. 1 and 2 shall appear in Tender condition			

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
16	<p>Carrying out recuperation / Yield test for ascertaining the discharge of constructed well / excavated profile as directed by Engineer - In - Charge. The test carried out by drawing down water from the well / profile below normal / subsoil water level upto full depth rise is recorded. The normal water level / subsoil water level / subsoil water level in the well / profile as well as strainer / suction level at pump as per design of W.S. Scheme shall be recorded prior to the test including cost of all materials, overload, labours etc. complete as directed.</p> <p>The test shall be carried out as per technical circular No. 2597 dt. 20.11.1997 and shall be carried out for 7 days.</p> <p>a) Lps more than 25000 b) Lps less than 25000</p>			
17	<p>Providing and laying HDPE Geo-membrane sheet of following thickness 100% acid, alkali proof, 100% rain forced sealing quality, every joints electronically welded, as per relevant IS specification & placing in proper position on prepared bed on foundation/ embankment with welding the joints of sheet using hot sedge and extrusion welding techniques according to the liner manufacturers specifications at ambient temperaturs of 5⁰ C to 45⁰ C including all taxes & labour for jointing and placing etc. complete.</p> <p>500 micron 250 micron</p>	Day Day Per Sqm. Per Sqm.	3362.00 3344.00 235.00 162.50	2075.40 2168.80

Section -K - ANCILLARY ITEMS FOR RESERVOIRS

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
1	Providing and fixing in position copper lightening conductor including copper rod of 20 mm dia as per upper terminal 1.5 M long with a knob at end and with conical spike at top, copper tape conductor 20 x 3 mm size, copper earth plate of 3 mm thick and 0.81 sqm. in area, clamps at 1 M centre to centre including, necessary excavation, laying and fixing the conductor, providing and fixing 40 mm G.I pipe upto 3 M height from ground and 0.5 M below ground including making all connections, filling the earthing pit with charcoal, salt, etc. and refilling and watering, etc. complete as per specifications laid down in relevant I.S. codes.			
i)	For Tape of 10M length	No	10227.00	909.00
ii)	Rebate / Extra rate per metre length or part thereof over and above initial length of 10M	Mtr	267.00	10.00
2	Providing and fixing in position copper lightening conductor including copper rod of 20 mm dia as per upper terminal 1.5M long with a knob at end and with conical spike at top, aluminium tape conductor 20 x 3 mm size copper earth plate of 3 mm thick and 0.81 sqm. in area, clamps at 1 M centre to centre including, necessary excavation, laying and fixing the conductor, providing & fixing 40 mm G.I pipe upto 3 M height from ground and 0.5 M below ground including making all connections, filling the earthing pit with charcoal, salt, etc. and refilling and watering, etc. complete as per specifications laid down in relevant I.S. codes.			
i)	For Tape of 10M length	No	9328.00	912.00
ii)	Rebate / Extra rate per metre length or part thereof over and above initial length of 10M	Mtr	123.00	5.00
3	Providing, hoisting and fixing in position inverted 'J' type 100 mm dia. C.I. cowl type ventilators with mosquitoproof aluminium mesh at top including applying 2 coats of anti-corrosive paint, etc. complete as directed by Engineer-in-charge, weighing not less than 35 kg.	No	1932.00	928.00
4	Providing, hoisting and fixing in position C.I. manhole, frame and cover of best quality and of required size and shape with locking arrangements including applying 2 coats of anti-corrosive paint, etc. complete			
i)	90 x 60 cm size and weight 35 kg	No	2658.00	200.00
ii)	Rate on weight basis for any size and type of frame and cover	Kg	76.00	6.00

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
5	Providing and fixing in position M.S. ladder 0.50 M wide consisting of 75 x 10 mm M.S. flats as stringers and 16 mm dia M.S. bars in double rows as steps placed at 25 cm c/c including cost of material and labour involved, welding, anchoring and applying 3 coat of anti-corrosive paint, etc. complete as directed by Engineer-in-charge.	RMT	1238.00	178.00
6	Providing and applying epoxy paint of approved make (Shalimar, Ciba or Mahindra & Mahindra) to concrete surface of RCC ESR or GSR or any other structure including cleaning the surface by scrapping and air blowers to the satisfaction of Engineer-in-charge, necessary scaffolding, etc complete with all leads and lifts and giving satisfactory hydraulic test for water tightness as per I.S. codes	Sq.m	582.00	306.00
	a) For new surfaces - Two coats.	Sq.m	655.00	368.00
b) For old surfaces - Two coats.				
7	Providing and constructing RCC spiral staircase in M-150 mix concrete at site of work and consisting of central vertical column of 400 mm dia and steps in RCC M-150, tie members at each brace level, RCC parapet wall 80 cm high including cost of all labour and material involved, cost of scaffolding, centering, shuttering, curing, finishing in CM 1:3 proportion including RCC M-150 footing foundation, its excavation, refilling and cleaning the site, etc. complete as per type design, with 3 coats of cement paint.	RMT	5085.00	344.00
8	Providing and constructing RCC ventilating shaft of diameters and height mentioned below with required number of RCC 15 x 15 cm size columns and RCC circular slab or dome over the pillars in M-150 including cost of all material and labour, providing and fixing steel or wooden frame & providing & fixing G.I. flyproof mesh of 26 gauge and providing and applying in 3 coats of oil paint to wooden or steel frame and cement paint to concrete structure. etc. complete as directed by Engineer-in-charge.	No	5373.00	611.00
i)	0.9 M dia x 1.35 M height	No	6940.00	793.00
ii)	1.2 M dia x 1.80 M height	No	10954.00	1270.00
iii)	1.5 M dia x 2.25 M height			

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
9	Providing and installing mercury water level indicator for RCC ESR and wash water tank site as per instructions of Engineer-in-charge at ground level of the tank or nearing pump house or room for RCC ESR having 15 mtrs. staging height and 5 mtrs. water storage height with indication of water height in storage tank in metre and 1/10th of meter including providing and installing 15 mm dia class 'B' G.I. piping with necessary accessories from bottom of the tank upto the instrument as per instructions of Engineer-in-charge.	No	17496.00	2920.00
	For Extra stage height over 15M or part thereof and water depth over 5 M or part thereof	Mtr	933.00	156.00
10	Providing and Erecting, installing and commissioning Barometric Leg Chlorination system for water treatment plant upto 5 MLD. capacity as per manufacturers specifications with all required materials viz. 15 Kg. pressure yellow PVC pipe, specially prepared chamber, mixing chamber, scrubber unit, gas pressure flexible pipe, brass nozzle nipple, electronic alarm unit, PPM dose, indicator of 25 mm dia. 4mm thick glass tube (Borosil), gas ubit opening spanner 3 hole type, instruction board, aluminium pipe upto sump (Maximum length 15 Mtr.) etc. including civil works wherever required for above material fittings, including satisfactory test and trial at work site etc. complete. (Item do not include construction of chlorine Gas Room of 3.0 x 3.0 Mtr. or adequate size).	1No. per unit	113141.00	10906.00
	For 5 MLD Capacity	MLD	3817.00	375.00
11	Add/Deduct per MLD or part of per MLD capacity.	No	9120.00	1626.00
12	Providing and fixing water level indicator upto 5 M height including M.S. enamelled gauge plate 300 mm wide 3 mm thick, P.V.C. float, providing and fixing required accessories such as pointer, pulleys, nylon thread including cost of all material, labour, etc. complete.	No	5622.00	1658.00

Section -L - TRIAL RUN

Sr No	Item Description	Unit	Rate (in Rs.) 2018-19	LABOUR INVOLVED
1	<p>Commissioning running and maintaining the scheme to quantites, rated capacity, including manning necessary personnel such as operator, valveman, etc. as per requirements of the scheme and who should also administer chemical dose for a period of 1 month for individual scheme and 3 months for regional scheme, together with training of personnel spared by MJP/ Local Body and handing over the scheme to Local Body after completion of the above period as directed by Engineer-in-charge.</p> <p>Note:</p> <p>Required chemicals to be supplied by Department free of cost and electricity bill will also be paid by the Department.</p> <ul style="list-style-type: none"> a) For single village (3 months) b) For regional scheme upto 3 villages with raw water pumping, one treatment plant with pumps, raw water pumping main, leading main, ESR, BPT and distribution system etc. (6 months) c) For regional scheme upto 3 villages with pumping, pumping main, leading main, ESR, BPT and distribution system etc. (6 months) (Without WTP). d) For regional schemes upto 3 villages, trial period shall be one year with raw water pumping , one treatment plant with pumps,raw water pumping main, leading main,ESR, BPT and distribution system etc. (for One year) e) For regional schemes upto 3 villages, trial period shall be one year with raw water pumping , pumps , raw water pumping main, leading main,ESR, BPT and distribution system etc. (Without WTP) (for One year) f) Add for every additional village g) Add for every pumping station. 			
		Job	55997.00	38610.00
		Job	231862.00	192518.00
		Job	149967.00	124518.00
		Job	470371.00	390554.00
		Job	304480.00	252814.00
		Mont	6913.00	5105.00
		Mont	11374.00	10597.00

ORIENTED PVC PIPE (O-PVC)

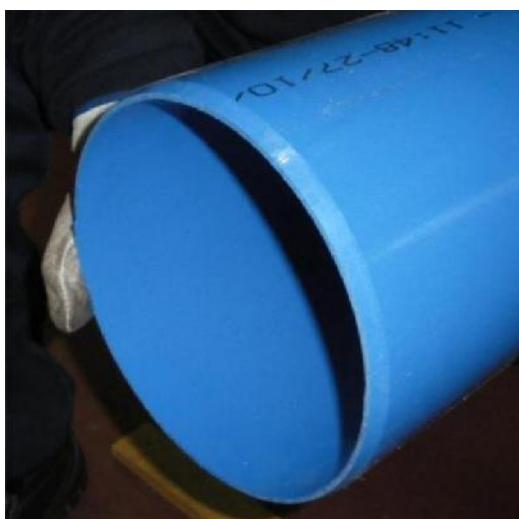
RECEPTION, STORAGE, INSTALLATION AND TEST INSTRUCTIONS

RECEPTION

After the reception of the pipes, it is necessary to check their state. Before its installation, you should remove the caps and make a sampling to verify that all the pipes are correct.

Checking the next points is particularly important:

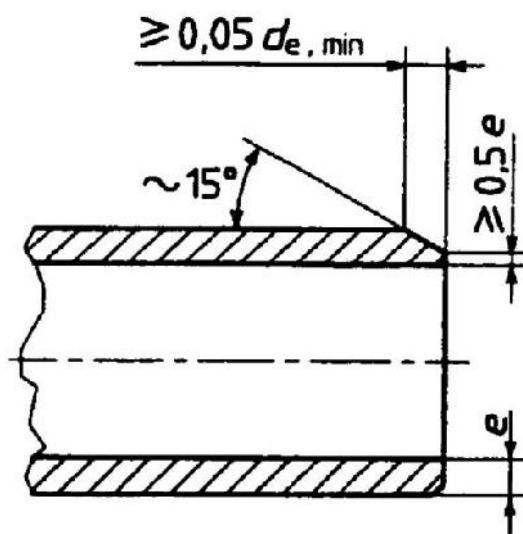
- The pipes should be free of dirt.
- The chamfer in the spigot end should not be damaged.



CORRECT



INCORRECT



- The seals should be placed correctly in their housings.



CORRECT



INCORRECT

- The surface and the inner part of the pipes and sockets should not be damaged.

STORAGE

We suggest the following guidelines:

- Store the pipes horizontally on a flat surface and place supports every 1.5 meters to avoid the bending of the product.
- Avoid scratches especially in the crest of the socket, due to dragging the pipe on the ground, mainly if the surface is made of stone, concrete or asphalt.
- Do not stack more than 1.5 meters high, as this can damage lower pipes or even the upper pipes could fall.
- The sockets should be free, alternating sockets and ends.
- In case of prolonged sun exposure, protect pallets with an opaque material. White colour is preferable because it avoids the over-heating of the pipes.



REALIZATION OF THE TRENCH

The trench must be free of stones at the bottom and at the sides.

Stones smaller than 10-20 mm are allowed, but they cannot be the main size of the ground particles.

Minimum trench width:

DN (mm)	Minimum width of trench B (m)	Depth of trench H (m)	Minimum width of trench B (m)
90-250	0.60	$h < 1.00$	0.60
315	0.85	$1.00 < h < 1.75$	0.80
355	1.00	$1.75 < h < 4.00$	0.90
400	1.10	$h > 4.00$	1.00
450	1.15		
500	1.20		
630	1.35		
800	1.65		

As a rule of thumb, when there is no road traffic involved, the pipes' crown will be at a minimum depth of 0.6 meters; with road traffic, the minimum depth is 1 meter.

BEDDING AND FILLING THE TRENCH

Pipe must be installed in the following circumstances:

1. Before placing the pipe, a sand bed should be prepared (a fine granular material could be used instead of sand) with a thickness from 10 cm to 15 cm. The pipe should be well aligned and levelled.
2. The pipe must lie on the sand bed. It must be ensured that all the lower part of the pipe is settled on the sand bed trying to soak as much as possible in order to make the angle of sand that supports the kidneys of the pipe as big as possible.
3. Once the pipe is placed, chamberlain sides must be filled with the selected material and compacted to achieve >95% Proctor Normal.
4. The trench must be filled with the selected material and compacted laterally until the upper part of the pipe is buried at least 30 cm.
5. Steps 3 and 4 can be done with the same natural material obtained from the excavation, trying to avoid rocks and large stones, and checking that this natural material can support the forces produced by the pressure inside of the pipe.

Natural soil can be used as the selected filler material whenever it fulfills the following criteria:

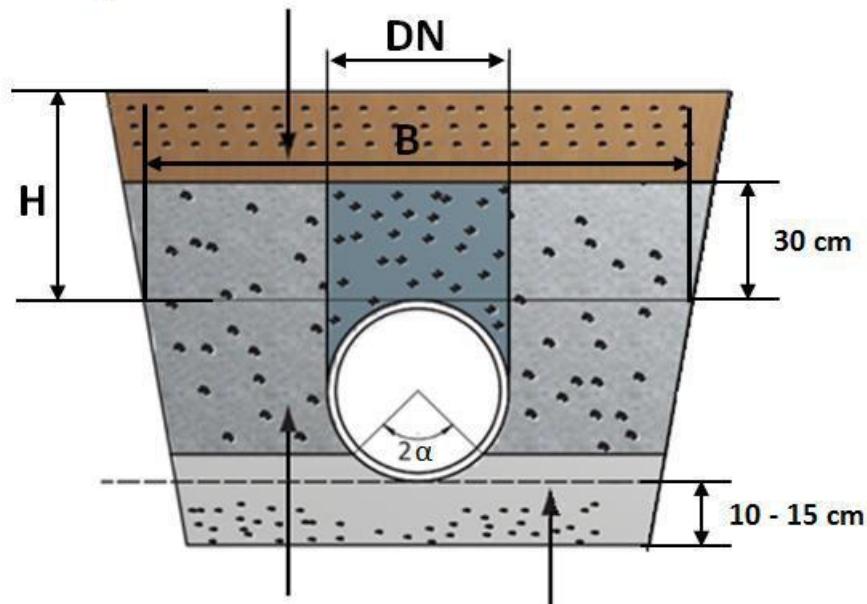
- The material cannot consist of angular stones or similar material.
- Filler material should not contain bigger particles than the ones shown in the following table.
- Filler material should not contain blocks of soil twice the size of the maximum dimensions of the particles given in the table.

Maximum particle size

Nominal diameter DN	Maximum size mm
DN <100	15
100≤ DN <300	20
300≤ DN <600	30
600≤ DN	40

- From the 30 cm above the pipe until the surface of the ground, the trench can be filled with natural material not specifically selected and compacting directly over the whole surface of the trench.

**Natural, tightly-packed
filling 100% P.N.**



**Selected,
tightly-packed
filling
>95% P.N.**

**Granular
tightly-packed
material
>95% P.N.**

ASSEMBLY

- Remove the protection caps.
- Verify that the pipe is clean and in good condition. Paying attention to the sockets and spigot ends.
- Check that the chamfer is correct and free of cracks.
- Verify that the seal is in its place, clean and free of foreign materials (stones, sand, etc.).
- Lubricate the chamfer of the spigot and the seal with joint lubricant.
- Line up the pipe as much as possible horizontal and vertically.
- Insert only the chamfer edge of the socket, just to support the pipe but leaving the socket lip free.
- In the case of pipes with nominal diameter ≤ 250 mm, a firm and dry push should be given to seize the momentum produced by the free movement in the lip of the socket and introduce it until the mark is hidden into the socket.
- When installing diameters > 250 mm, one should use mechanical means to introduce the pipe using materials such as wood, hoists, tackles or slings.



In the next table, you can find an approximated number of assemblies per diameter with 1kg of lubricant.

DN (mm)	90	110	140	160	200	225	250	315	355	400	450	500	630	800
Assemblies	87	76	54	46	34	32	30	25	21	17	16	14	12	9

PIPE CUTTING

Pipes can be cut transversally using a circular saw or a hacksaw. The resulting male cut ends should be chamfered in order to be entered manually in another socket pipe or fitting. The chamfer can be made with a circular saw and be reviewed later with a file. The chamfer should be approximately of 15° .

A mask must be worn to prevent dust inhalation and protections and safety measures must be taken for cutting machines.

Pipes chamfered on-site are less accurate than those made at the factory. Because of that, they could require higher introduction efforts or even require simple mechanical means to place the spigot inside the socket.

COLD BENDING OF PIPE (23° C)

The pipe can bend at room temperatures ($\pm 23^\circ\text{C}$) in the trench up to the limits defined in the next table. These curves must be done always in cold (don't heat any part of the pipe or socket) by manual efforts (you can use simple items to help in case of pipes DN> 250mm) and without damaging the geometry of the plugs.

		Pipe curvature			Angular deviation of the socket angle	Curvature + angular deviation (full angle) angular		
DN	L	R	$\alpha/2$	A		R'	$\alpha'/2$	A'
mm	m	m	degrees	m	degrees	m	degrees	m
90	5,78	18	9,2	0,92	2	15	11,2	1,12
110	5,78	22	7,5	0,75	2	17	9,5	0,95
140	5,76	28	5,9	0,59	2	21	7,9	0,79
160	5,75	32	5,1	0,52	2	23	7,1	0,71
200	5,73	40	4,1	0,41	2	27	6,1	0,61
225	5,70	45	3,6	0,36	2	29	5,6	0,56
250	5,68	50	3,3	0,32	2	31	5,3	0,52
315	5,63	63	2,6	0,25	2	35	4,6	0,45
355	5,61	71	2,3	0,22	2	38	4,3	0,42
400	5,58	80	2,0	0,19	2	40	4,0	0,39
450	5,56	90	1,8	0,17	2	42	3,8	0,37
500	5,58	100	1,6	0,16	2	44	3,6	0,35
630	5,53	126	1,3	0,12	2	49	3,3	0,31
800	5,42	160	1,0	0,09	2	52	3,0	0,28

The pipes may be subjected to greater curvatures with high efforts, but it is not recommended to overcome these limits to avoid compromising the safety coefficient of the pipe.

ANGULAR DEVIATION ALLOWED IN THE SOCKET

In addition to the curvature of the pipe, an angular deviation is allowed at the junction between pipes. Therefore in the final layout of the pipes, one can add both effects.

It is important not to exceed the established values of angular deviation in the socket-end when bending the pipe.



(1) Total length of the pipe: 5.95 meters.

DN mm	Maximum angular deviation angle ($^{\circ}$)	Displacement in the socket (D) D(mm) ⁽¹⁾	
90-800	2 $^{\circ}$		200

The pipe connections can be subject to greater angular deviations if subjected to high stresses. It's recommended not to exceed those limits in order to avoid endangering the safety coefficients of the assembly under pressure.

FORCES PRODUCED BY THE BENDING OF THE PIPE

The bent pipeline behaves like a narrow-angle curve; this means that there is some backpressure on the ground as the table below shows. These cross-pressures, under normal conditions, can be supported by a sufficiently compacted soil, otherwise, if necessary, they should be supported with anchors in excessive curvatures.

DN mm	Forces in a curved pipe ($\alpha / 2$) ⁽²⁾					
	bar kN	bar kN	bar kN	bar kN	bar kN	bar kN
90	0,10	0,51	1,02	1,53	2,04	2,55
110	0,12	0,62	1,25	1,87	2,49	3,12
140	0,16	0,79	1,58	2,37	3,17	3,96
160	0,18	0,90	1,81	2,71	3,61	4,51
200	0,22	1,12	2,25	3,37	4,50	5,62
225	0,25	1,26	2,52	3,78	5,04	6,29
250	0,28	1,39	2,79	4,18	5,58	6,97
315	0,35	1,74	3,48	5,22	6,96	8,70
355	0,39	1,96	3,91	5,87	7,82	9,78
400	0,44	2,19	4,38	6,57	8,76	10,96
450	0,49	2,46	4,91	7,37	9,82	12,28
500	0,55	2,74	5,48	8,22	10,96	13,69
630	0,68	3,42	6,84	10,26	13,68	17,10
800	0,85	4,26	8,51	12,77	17,03	21,28

(2) Resultant forces in a pipe 5.95 meters long.

PRESSURE TEST AT WORKS

On-site testing should be performed according to local regulations and instructions laid down in the project.

During the assembly, the pipe installed should be tested in sections fully executed (the length may vary between 500 and 1.000 meters). The ends of the sections should be closed with appropriate fittings when being tested.

- Two main aspects must be taken into account: When the assembly are exposed, the water-tightness of the network should be checked, to see if there is any leak in such unions and locate them in case they exist. Except the cases of seal expulsion due to over-pressures or excessive angular deflections, leaks are manifested especially at very low pressures.
- On the other hand, for testing high-pressure pipes and fittings, they must be properly anchored (reductions, changes in direction, junctions, valves, cutting, etc.) and the pipes should be conveniently set in the trench (burial and compaction landfill). Otherwise, pipes and fittings could be unplugged by landslides in the field.

Therefore, it is recommended to test one of the following methods:

■ **Method A:**

Burying the pipe conveniently with enough compaction to be able to withstand the stresses caused by the pressure of the test, but leaving assemblies uncovered (in some circumstances it is difficult to anchor pipes and fittings, leaving the unions visible). Any reductions, changes in direction, junctions and shutoff valves must be properly anchored.

Under these conditions, all pressure and leakage tests can be performed observing the uncovered unions and spot the appearance of leaks.

■ **Method B:**

Perform a shallower anchorage of pipes and fittings, leaving assemblies out of any possible problems. Doing a first leak test by filling the line with water and observe that there are no water losses at the unions (most of the leaks occur at low pressures). In case of leaks, the reparation would be easier than with the fully anchored and buried pipes.

If required by local regulations, you could anchor the pipes and accessories conveniently for testing high pressure, keeping the assemblies exposed. If not, you can complete the burial of pipes and fittings with the correct compaction, thus facilitating the necessary anchorage for the high pressure test.

The pressures and time limits to test the pipes on-site are:

	Pressure	Maximum Time	Pressure	Maximum Time
PN16	Up to 21 bars	120 minutes	21 – 22.4 bars	60 minutes
PN20	Up to 25 bars	120 minutes	25 - 28 bars	60 minutes
PN25	Up to 30 bars	120 minutes	30 - 35 bars	60 minutes

EFFECT OF TEMPERATURE

When the temperature is high, plastic pipes undergo a loss of mechanical properties and we must take this into account. Because of that, we must avoid the following conditions during pressure tests:

- Pipe partially or fully exposed to weathering (line uncovered).
- High outside temperature.
- Standing water inside the pipe.
- Prolonged sun exposure prior to the test.

All these circumstances may increase the temperature of the pipe above its operating temperature, so the overpressure test can damage the pipeline. In order to avoid that, it is recommended to:

- Cover the pipe once the tightness of the network is verified.
- Wait for pressure testing when the pipe has been exposed to sunlight.

High temperatures (over 25°C) or demanding or aggressive applications can reduce Allowable Operating Pressure (**PFA**) of pipes in comparison to the Nominal Pressure (NP).

$$PFA = PN \cdot f_r \cdot f_A$$

The derating factor (f_T) as function of operating temperature can be obtained from the graph on the right.

The derating factor related to application of the system (f_A) must be determined by the Project Manager.

Note: Project design and execution is responsibility of the Project Manager and the Contractor, respectively.

Temperature Ratio Graph

