

बीकानेर नगर निगम

नगर निगम मार्ग, बीकानेर (राजस्थान) फ़ैक्स :- 0151-2226906, फोन :- 0151-2226902, 0151-2226905
E-Mail Address :- nagarnigambikaner@gmail.com, Web Site :- www.bikanermc.org

क्रमांक/निर्माण/2022-23/ 10271-73

दिनांक 28/08/2022

ई- निविदा-सूचना सं० 112/2022-23

नगर निगम बीकानेर की ओर से विभिन्न कार्यों (कुल 03 कार्य) के लिये केन्द्र व राज्य सरकार के अभियांत्रिकी विभागों में "एए", "ए" श्रेणी में पंजीकृत संवेदको एवं नगर निगम में उपर्युक्त श्रेणी में पंजीकृत निविदादाताओं से निर्धारित प्रपत्र में ई-प्रोक्यूमेंट प्रक्रिया से ऑन लाईन निविदाएं आमंत्रित की जाती है। निविदा से सम्बन्धित विवरण वेब साईट www.bikanermc.org Web site www.SPPP.raj.nic.in से व <http://eproc.rajasthan.gov.in> पर देखा जा सकता है।

निविदा की अनुमानित लागत :- 285.00 लाख

आयुक्त

नगर निगम, बीकानेर

दिनांक 28/08/2022

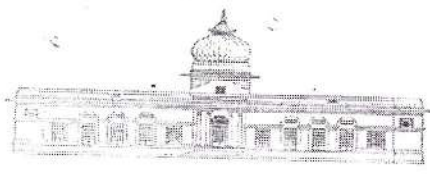
क्रमांक/निर्माण/2022-23/ 10271-73

प्रतिलिपि :-

1. श्रीमान् निदेशक, जनसम्पर्क एवं प्रकाशन विभाग, राजस्थान संवाद जयपुर को प्रेषित कर लेख है कि उपरोक्त निविदा का प्रकाशन कम से कम स्पेस में राज्य सरकार की प्रकाशन नीति के अनुरूप एक मुख्य क्षेत्रीय दैनिक समाचार पत्र, एक मुख्य राज्य स्तरी दैनिक समाचार पत्र बीकानेर संस्करण में प्रकाशन करावें।

आयुक्त

नगर निगम, बीकानेर



बीकानेर नगर निगम

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ई- निविदा-सूचना सं० 112/2022-23

नगर निगम बीकानेर की ओर से निम्नलिखित कार्यों के लिये केन्द्र व राज्य सरकार के अभियांत्रिकी विभागों में "एए", "ए" श्रेणी में पंजीकृत संवेदको एवं नगर निगम में उपर्युक्त श्रेणी में पंजीकृत निविदादाताओं से निर्धारित प्रपत्र में ई-प्रोक्यूमेंट प्रक्रिया से ऑन लाईन निविदाएं आमंत्रित की जाती है। निविदा से सम्बन्धित विवरण वेबसाईट www.bikanermc.org Website www.SPPP.raj.nic.in से व <http://eproc.rajasthan.gov.in> पर देखा जा सकता है।

निविदा कार्य :	1	बंगला नगर की गली नं० 01 में ब्रिजलाल टाडा के बाड़े से पंवार टैंट हाउस, गली नं० 02 जैसलमेर रोड़ से सययद अनवर अली के मकान से तैयब मस्जिद होते हुए सैयद दौलत अली के घर तक नायक बस्ती, गली नं० 03 प्रहलाद बारासा के घर से सैयद मोहम्मद सलीम के मकान तक गली नं० 04 में रसगुल्ला फ़ैक्ट्री वाली गली में एवं आस पास की जुड़ती गलियों में वंचित सीवर लाईन का कार्य। 94.00 Lacs
	2	वार्ड नं० 01 में वंचित क्षेत्रों में सीवर लाईन का कार्य। 95.00 Lacs
	3	वार्ड नं० 19, 20 व सर्वोदय बस्ती व आस-पास वंचित क्षेत्रों सीवर लाईन का कार्य। 96.00 लाख
निविदा की अनुमानित लागत	:	285 लाख
ऑनलाईन निविदा फार्म मिलने की तिथि	:	03/09/22 09.30 बजे से 14/09/22 18:00 बजे तक
ऑनलाईन निविदा फार्म जमा कराने की तारीख	:	03/09/22 09.30 बजे से 14/09/22 18:00 बजे तक
ऑनलाईन निविदा खोलने की तिथि	:	15/09/22 को 17.00 बजे

इच्छुक संवेदको को अपने डिजिटल हस्ताक्षर के माध्यम से वेब साईट <http://eproc.rajasthan.gov.in> पर रजिस्टर्ड होना आवश्यक है।

आयुक्त

नगर निगम, बीकानेर

दिनांक 29/08/2022

क्रमांक/निर्माण/2022-23/10271-73
प्रतिलिपि :-

1. श्रीमान् महापौर महोदया, नगर निगम, बीकानेर।
2. सुरक्षित पत्रावली।

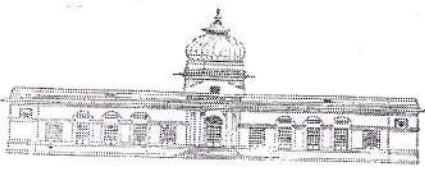
आयुक्त

नगर निगम, बीकानेर

ई- निविदा-सूचना सं0 112/2022-23

निविदा कार्य :	1	बंगला नगर की गली नं0 01 में ब्रिजलाल टाडा के बाड़े से पंवार टैंट हाउस, गली नं0 02 जैसलमेर रोड़ से सययद अनवर अली के मकान से तैयब मस्जिद होते हुए सैयद दौलत अली के घर तक नायक बस्ती, गली नं0 03 प्रहलाद बारासा के घर से सैयद मोहम्मद सलीम के मकान तक गली नं0 04 में रसगुल्ला फैक्ट्री वाली गली में एवं आस पास की जुड़ती गलियों में वंचित सीवर लाईन का कार्य। 94.00 Lacs
		वार्ड नं0 01 में वंचित क्षेत्रों में सीवर लाईन का कार्य। 95.00 Lacs
		वार्ड नं0 19, 20 व सर्वोदय बस्ती व आस-पास वंचित क्षेत्रों सीवर लाईन का कार्य। 96.00 लाख
निविदा की अनुमानित लागत	:	285 लाख
ऑनलाईन निविदा फार्म मिलने की तिथि	:	<u>03/09/22</u> 09.30 बजे से <u>14/09/22</u> 18:00 बजे तक
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ऑनलाईन निविदा खोलने की तिथि	:	<u>15/09/22</u> को 17.00 बजे


 आयुक्त
 नगर निगम, बीकानेर



(वेबसाईट पर अपलोड हेतु)

बीकानेर नगर निगम

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जिला	कार्य/पैकेज का नाम	अनुमानित लागत (लाखों में)	कार्य की अवधि
बीकानेर	बंगला नगर की गली नं० 01 में ब्रिजलाल टाडा के बाड़े से पंवार टैंट हाउस, गली नं० 02 जैसलमेर रोड़ से सययद अनवर अली के मकान से तैयब मस्जिद होते हुए सैयद दौलत अली के घर तक नायक बस्ती, गली नं० 03 प्रहलाद बारासा के घर से सैयद मोहम्मद सलीम के मकान तक गली नं० 04 में रसगुल्ला फ़ैक्ट्री वाली गली में एवं आस पास की जुड़ती गलियों में वंचित सीवर लाईन का कार्य।	94.00	6 माह
बीकानेर	वार्ड नं० 01 में वंचित क्षेत्रों में सीवर लाईन का कार्य।	95.00	6 माह
बीकानेर	वार्ड नं० 19, 20 व सर्वोदय बस्ती व आस-पास वंचित क्षेत्रों सीवर लाईन का कार्य।	96.00	6 माह

निविदा प्रपत्रों को वेब साईट <http://eproc.rajasthan.gov.in> से डाउनलोड किया जा सकता है। इन निविदाओं में भाग लेने वाले संवेदक निविदा को इलेक्ट्रॉनिक फारमेट में वेबसाईट <http://eproc.rajasthan.gov.in> पर अपलोड करावें।

नोट :- स्थानीय निकाय विभाग जयपुर के अन्तर्गत उपर्युक्त श्रेणी में रजिस्टर्ड फर्म एवं नगर निगम बीकानेर संभाग में रजिस्टर्ड "डी" क्लास फर्म 15.00 लाख तक के कार्य एवं "सी" क्लास फर्म 50.00 लाख तक के कार्य एवं "बी" क्लास फर्म 1/2 प्रतिशत धरोहर राशि जमा करवाने पर एवं अन्य विभागों के "एए" अथवा "ए" श्रेणी के संवेदक 2 प्रतिशत धरोहर राशि जमा करवाकर निविदा में भाग ले सकते हे।


आयुक्त
नगर निगम, बीकानेर

निविदा शर्तें

- स्थानीय निकाय विभाग जयपुर के अन्तर्गत उपर्युक्त श्रेणी में रजिस्टर्ड फर्म एवं नगर निगम बीकानेर संभाग में रजिस्टर्ड "डी" क्लास फर्म 15.00 लाख तक के कार्य एवं "सी" क्लास फर्म 50.00 लाख तक के कार्य एवं "बी" क्लास फर्म 1/2 प्रतिशत धरोहर राशि जमा करवाने पर एवं अन्य विभागों के "एए" अथवा "ए" श्रेणी के संवेदक 2 प्रतिशत धरोहर राशि जमा करवाकर निविदा में भाग ले सकते हैं।
- निविदा प्रपत्रों हेतु डाउनलोड की अवधि 03/09/22 09.30 बजे से 14/09/22 18:00 बजे तक होगी।
- (अ) निविदा प्रपत्र फॉरमेट में वेबसाईट <http://eproc.rajasthan.gov.in> पर 03/09/22 09.30 बजे से 14/09/22 18:00 बजे तक जमा करवाये जा सकते हैं एवं प्राप्त निविदाएं, इलैक्ट्रॉनिक फॉरमेट में वेबसाईट <http://eproc.rajasthan.gov.in> पर अधिशाषी अभियंता, नगर निगम, बीकानेर निर्माण अनुभाग में 15/09/22 को 17:00 बजे बाद खोली जावेगी।
- यदि किसी कारणवश उस दिन अवकाश रहता है तो अगले दिन उसी समय व उसी स्थान पर निविदाएं खोली जायेगी।
(अ) निविदा प्रक्रिया ऑन लाईन होगी।
(ब) इलैक्ट्रॉनिक निविदा प्रक्रिया में प्रीबीड मीटिंग का प्रावधान नहीं है।
- अधिशाषी अभियंता, नगर निगम, बीकानेर निर्माण अनुभाग कार्यालय में संवेदक द्वारा 03/09/22 09.30 बजे से 14/09/22 18:00 बजे तक किसी भी कार्य दिवस में निविदा प्रपत्र को देखा जा सकता है। निविदा प्रपत्रों में निविदाकर्ता के लिये योग्यता सूचना तथा निविदाकर्ता की पात्रता, प्लान, स्पेसिफिकेशन, ड्राईंग विभिन्न कार्यों की मात्रा एवं दरों का विवरण, नियम, शर्तें एवं अन्य विवरण वर्णित है।
- निविदा खोलने की दिनांक से 90 दिवस तक निविदा स्वीकृति हेतु मान्य रहेगी। यदि निविदाकर्ता उस अवधि में अपनी निविदा अथवा शर्तों में किसी प्रकार का संशोधन करता है अथवा अपनी निविदा वापस ले लेता है तो उसकी धरोहर राशि जब्त कर ली जावेगी।
- किसी भी निविदा को स्वीकार करने एवं बिना कारण बताये निरस्त करने के समस्त अधिकार सक्षम अधिकारी के पास सुरक्षित है आरपीडब्ल्यू ए-100 की समस्त शर्तें मान्य होगी।
- 10 लाख या अधिक लागत के कार्यों की Defect Liability Period 05 वर्ष का होगा।
- RTPP एक्ट 2012, नियम 2013 के समस्त प्रावधान लागू होंगे। RTTP 2013 के नियम 75A के अनुसार कार्य में दर 15 प्रतिशत से अधिक नीची आने पर बिड की 85 प्रतिशत राशि में से भरी गई बिड के अन्तर राशि का 50 प्रतिशत की राशि अतिरिक्त पी0जी0 के रूप में अनुबंध से पूर्व जमा कराना आवश्यक होगा।
- निविदा शुल्क निम्नानुसार निर्धारित है :-

कार्य की अनुमानित राशि (लाखों में)	शुल्क
नाम	आयुक्त, नगर निगम, बीकानेर।
10 लाख तक	500/-
10 लाख से अधिक	1000/-

- प्रासेसिंग फीस निम्नानुसार निर्धारित है :-

कार्य की अनुमानित राशि (लाखों में)	शुल्क
नाम	Managing Director, RISL, Jaipur
50 लाख तक	500/-
50 लाख से अधिक	1000/-

- निविदा शुल्क, प्रासेसिंग फीस एवं धरोहर राशि के भुगतान की प्रक्रिया ऑनलाईन ही होगी।
- निविदा हेतु ऑनलाईन भुगतान नगर निगम की वेबसाईट www.bikanermc.org पर PAY ONLINE ऑप्शन पर होगा।

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14. ऑनलाईन भुगतान हेतु संवेदक को नगर निगम की वेबसाईट www.bikanermc.org पर **PAY ONLINE** पर भुगतान किये जाने के पश्चात् भुगतान रसीद, फर्म के रजिस्ट्रेशन की प्रति एवं फर्म का जी0एस0टी0 प्रमाण पत्र को ऑनलाईन साईट <http://eproc.rajasthan.gov.in> पर अपलोड करना अनिवार्य होगा।
15. निविदादाता द्वारा निविदा दस्तावेज मय कार्य का "G" Schdule की प्रति को हस्ताक्षर मय नाम, तकनीकी निविदा के साथ अपलोड किया जाना अनिवार्य है अन्यथा हस्ताक्षरित निविदा दस्तावेज के अभाव में निविदा पर विचार नहीं किया जावेगा।
16. ऑनलाईन पेमेंट भुगतान के अतिरिक्त किसी अन्य तरीके के भुगतान करने वाली निविदा पर विचार नहीं किया जावेगा।
17. निविदा शुल्क, प्रोसेसिंग शुल्क Non Refundable होगा।
18. निर्धारित शुल्क से कम भुगतान करने वाली निविदा पर विचार नहीं किया जावेगा।
19. किसी टंकणीय त्रुटि के कारण कार्ड के जी अनुसूची की विभिन्न इकाई की दरे सम्बंधित एस0ओ0आर0/बी0एस0आर0 की दरे मानी जावेगी।
20. निविदा प्रपत्र 02 कवर में होगा। यदि संवेदक द्वारा निविदा प्रपत्र अनुसार निविदा अपलोड करते समय वांछित प्रपत्र संलग्न नहीं किये जाते है तो उस निविदा पर विचार नहीं किया जावेगा।
21. निविदादाता को श्रम नियमों का पालन करना होगा। श्रमिकों के बीमा (इश्योरेन्स) एवं पी0एफ0 जमा आदि करवाने की जिम्मेवारी सफल निविदादाता की होगी। ई0पी0एफ0 एवं ईएसआई जमा राशि के चालान श्रमिकों के नाम सहित प्रस्तुत करने पर ही रनिंग व अंतिम बिल का भुगतान किया जावेगा।
22. ई- टेन्डरिंग के लिये निविदादाता हेतु निर्देश :-
 अ - इन निविदाओं में इच्छुक निविदादाता निविदा प्रपत्रों का इन्टरनेट साईट <http://eproc.rajasthan.gov.in> से डाउनलोड कर सकते है।
 ब - निविदाओं में भाग लेने वाले निविदादाताओं को इन्टरनेट साईट <http://eproc.rajasthan.gov.in> पर रजिस्टर करवाना होगा। ऑनलाईन निविदा में भाग लेने के लिये डिजिटल सर्टिफिकेट टेक्नोलॉजी एक्ट 2000 के तहत प्राप्त करना होगा जो इलेक्ट्रॉनिक निविदा में साईन करने हेतु काम आयेगा। निविदादाता उपरोक्त डिजिटल सर्टिफिकेट सी सी ए द्वारा स्वीकृत एजेन्सी से प्राप्त कर सकते है। जिन निविदादाताओं के पास पूर्व में वैध डिजिटल सर्टिफिकेट है, नया डिजिटल सर्टिफिकेट लेने की आवश्यकता नहीं है।
 स- निविदादाताओं को निविदा प्रपत्र इलेक्ट्रॉनिक फॉर्मेट में उपरोक्त वेबसाईट पर डिजिटल साईन के साथ प्रस्तुत करना होगा। जिसके प्रस्ताव डिजिटल साईन के साथ नहीं होंगे, उनके प्रस्ताव स्वीकार नहीं किये जायेंगे। कोई भी प्रस्ताव अकेले भौतिक फर्म में स्वीकार्य नहीं होगा।
 द- ऑन लाईन निविदाएं निर्धारित दिनांक एवं समय पर उपरोक्त क्रम संख्या - 3 के अनुसार खोली जायेगी।
 य - इलेक्ट्रॉनिक निविदा प्रपत्रों को जमा कराने से पूर्व निविदादाता यह सुनिश्चित कर लेवे कि निविदा प्रपत्रों से संबंधित सभी आवश्यक दस्तावेजों की स्कैन कॉपी निविदा प्रपत्रों के साथ अटैच कर दी गयी है।
 र - कोई भी टेंडर इलेक्ट्रॉनिक जमा कराने में किसी कारण विलम्ब हो जाता है तो उसका जिम्मेदार विभाग नहीं होगा।
 ल - टेंडर के प्रपत्रों में आवश्यक सभी सूचियों को सम्पूर्ण रूप से भरकर ऑनलाईन दर्ज करें।


 आयुक्त
 नगर निगम, बीकानेर



NIT No. 112/22-23 Work No. 01

Municipal Corporation, Bikaner.

Name of Work :- बंगला नगर की गली नं० 01 में ब्रिजलाल टाडा के बाड़े से पंचार टैंट हाउस, गली नं० 02 जैसलमेर रोड से सययद अनवर अली के मकान से तैयब मस्जिद होते हुए सैयद दौलत अली के घर तक नायक बस्ती, गली नं० 03 प्रहलाद बारासा के घर से सैयद मोहम्मद सलीम के मकान तक गली नं० 04 में रसगुल्ला फैक्ट्री वाली गली में एवं आस पास की जुड़ती गलियों में वंचित सीवर लाईन का कार्य।

Name of Contractor :-

Date of Sales : As per NIT	Date of Opening : As per NIT
Tender Cost Rs 9400000/-	Earnest Money Rs. 2% or 1/2%
Earnest Money Cheque Draft No. :	Date :
Earnest Money M.C.B. Receipt No. :	Date :
Earnest Fees M.C.B. Receipt No. :	Date :

"G" Schdule

S. No.	Item Code	Item	Qty.	Unit	Rate	Amount
1.	SOR 2017 17.1.1.1	Earth work for Sewer line and Manhole in excavation in foundation, trenches manholes, road side chambers etc. including dressing of sides and ramming of bottoms, including getting out the excavated material, refilling after laying pipe/ foundation and disposal of surplus excavated material at a lead upto 50m suitable site as per direction of Engineer for following depths, below natural ground / Road top level including allowances for any additional excavation beyond the drawings (measurement for payment to be as per standard drawings), re-handling of material/earth to complete the task. In all types soils/ saturated soil such as moorum, sand, sandy silt, clay, black cotton soil, kankar, etc. Depth up to 1.5 m	01.00	Cum	197.00	197.00
2.	17.1.1.2	depth of excavation above 1.5 m and upto 3.0 m over item no 17.1.1.1	01.00	Cum	211.00	211.00
3.	17.1.1.3	depth of excavation above 3.0 m and upto 4.5 m over item no 17.1.1.1	01.00	Cum	228.50	228.50
4.	17.1.1.4	depth of excavation above 4.5 m and upto 6.0 m over item no 17.1.1.1	01.00	Cum	252.00	252.00
5.	4.25	Providing Barricading for Trenches using 80 - 100 mm dia Wooden Ballies as vertical post, atleast 1.5m above ground level and atleast 30-45 cm below ground level at a spacing of 3 m. Two rows of PVC Tape (preferably red in colour) strip barricading horizontal strip securely tied by the vertical members. Vertical members shall be painted in red and white colour. Rate is inclusive removal and cleaning of site complete in all respect.	01.00	Mtr.	76.50	76.50
6.	17.3.1	Providing and fixing CLOSE timbering in trenches of sewer line and manholes including strutting, shoring and packing cavities (wherever required) complete. (Measurements to be taken of the face area timbered) for following depth below NGL. Depth upto 3.0 m	01.00	Sqm	125.00	125.00
7.	17.3.2	Depth more than 3.0 m and upto 6.0 m	01.00	Sqm	126.00	126.00
8.	17.8.1	Dismantling of flexible pavements for sewer line and manholes and disposal of dismantled materials up to a lead of 50 metres as directed by Engineer including allowances for any additional dismantling beyond the drawings (measurement for payment to be as per standard drawings), re-handling of material/earth to complete the task. Bituminous courses	01.00	Cum	356.00	356.00
9.	17.8.2	Granular courses	01.00	Cum	247.00	247.00
10.	SOR 2017 17.9	Dismantling of cement concrete pavement for sewer line and manholes by mechanical means using pneumatic tools, cutting the peripheral edge by CC cutter, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of	01.00	Cum	802.00	802.00

		dismantled materials up to a lead of 1000 metres including allowances for any additional dismantling beyond the drawings (measurement for payment to be as per standard drawings), rehandling of material/earth to complete the task.				
11.	17.10	Providing and laying in position cement concrete 1:3:6 (1 Cement : 1 graded stone aggregate 20 mm nominal size) in base course complete including all material, labour, machinery, lighting, guarding for road restoration under sewer line and manhole work including allowances for any additional road restoration beyond the drawings (measurement for payment to be as per standard drawings) to complete the task.	01.00	Cum	4500.00	4500.00
12.	17.11.2	Providing and laying in position cement concrete of specified grade over prepared base course complete including finishing, curing, all material, labour, machinery, lighting, guarding for road restoration under sewer line and manhole work including allowances for any additional road restoration beyond the drawings (measurement for payment to be as per standard drawings) to complete the task. 1:1½:3 (1 Cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size).	01.00	Cum	5640.00	5640.00
13.	17.12.1	Providing laying, spreading and compacting stone aggregates of specific sizes as per Table 400-7 to Water Bound Macadam specification including spreading in uniform thickness; hand packing, rolling with power roller 8-10 tonnes, in stages to proper grade and camber, applying and brooming requisite type of screening (Table 400-8) binding materials to fill up the interstices of coarse aggregates, watering (with water browser) and compacting to required density, making necessary earthen bund to protect edges as per clause 404 of MoRT&H specification including all material, labour, machinery, lighting, guarding and maintenance of diversion under sewer line and manhole work complete including allowances for any additional road restoration beyond the drawings (measurement for payment to be as per standard drawings) to complete the task. Hand broken - Grade-I (90-45mm)	01.00	Cum	1470.00	1470.00
14.	17.12.2	Hand broken - Grade-II (63-45mm)	01.00	Cum	1500.00	1500.00
15.	17.12.3	Crusher broken - Grade-II (63-45mm)	01.00	Cum	1590.00	1590.00
16.	17.12.4	Crusher broken - Grade-III (53-22.4mm)	01.00	Cum	1690.00	1690.00
17.	17.13	Providing and applying tack coat on the prepared surface with bitumen emulsion as per IS: 8887 and approved quality @ 0.2 kg/sqm with the help of spray set fitted on bitumen Container (boiler) after cleaning the surface with brooms or soft brushes and finally dusting with old gunny bags and compressed air to receive bituminous treatment complete as per clause 502 of MoRT&H specification including all material, labour, machinery, lighting, guarding under sewer line and manhole work including allowances for any additional road restoration beyond the drawings (measurement for payment to be as per standard drawings) to complete the task.	01.00	Sqm	8.50	8.50
18.	17.15.1	Providing and laying open graded premix carpet 20mm thick (compacted), on prepared surface in a single course as wearing course, composed of specified graded crushed stone aggregate as per Table 500-23, premixed with bituminous binder	01.00	Sqm	113.00	113.00

		@ 14.60 kg/10sqm (including cost of anti-stripping compound wherever required), including loading of material with F.E. loader, hot mixing of stone aggregate and bitumen in computerised hot mix plant, transporting the mixed material by tippers to paver and laying with paver finisher fitted with electronic sensor control to the required level and grade, compacting smooth wheeled roller 8-10 tonne capacity and finishing to required level to achieve the desired density as per clause 511 of MoRT&H specification including all material, labour, machinery, lighting, guarding but excluding cost of tack coat/ seal coat under sewer line and manhole work including allowances for any additional road restoration beyond the drawings (measurement for payment to be as per standard drawings) to complete the task. With Bitumen VG-grade 30				
19.	17.16.1	Providing and applying liquid seal coat type "A" comprising of a layer of bituminous binder @ 9.8 kg/ 10 Sqm (including cost of antistripping compound wherever required) followed by a cover of stone chipping @ 0.09 Cum/10 sqm of specified grading and rolling with power roller 8-10 tonne complete as per clause 513 of MoRT&H specification including all material, labour, machinery, lighting, guarding under sewer line and manhole work including allowances for any additional road restoration beyond the drawings (measurement for payment to be as per standard drawings) to complete the task. With Bitumen VG-grade 30	01.00	Sqm	65.50	65.50
20.	17.18.1	Providing at site, lowering & laying in trenches, aligning & jointing of RCC pipes NP4 class (with s/s ends) IS: 458 - 2003 (amended up to date) marked and pipes from 300 mm and upto 1800 mm manufactured through vertical casting process at all depths with Rubber gaskets (EPDM/SBR) for sewer lines as per IS: 5382 (including cost of Rubber gaskets, lubricants) as per drawing, sectional hydro testing of the sewer pipe line (including cost and conveyance of water to site for testing) etc., complete as per specification and / or as directed by Engineer. 150 mm internal diameter	01.00	Mtr.	438.00	438.00
21.	17.18.2	200 mm internal diameter	01.00	Mtr.	562.00	562.00
22.	17.18.3	250 mm internal diameter	01.00	Mtr.	804.00	804.00
23.	17.18.4	300 mm internal diameter	01.00	Mtr.	1060.00	1060.00
24.	17.18.5	350 mm internal diameter	01.00	Mtr.	1630.00	1630.00
25.	17.18.6	400 mm internal diameter	01.00	Mtr.	1860.00	1860.00
26.	17.18.7	450 mm internal diameter	01.00	Mtr.	2290.00	2290.00
27.	17.18.8	500 mm internal diameter	01.00	Mtr.	2630.00	2630.00
28.	17.18.9	600 mm internal diameter	01.00	Mtr.	3550.00	3550.00
29.	17.19.1	Providing at site, lowering & laying in trenches, aligning & jointing of RCC pipes NP3 class (with s/s ends) IS: 458 - 1988 (amended up to date) marked and pipes from 300 mm upto 2000 mm manufactured through vertical casting process all levels with Rubber gaskets (EPDM/SBR) for sewer lines as per IS: 5382 (including cost of Rubber gaskets lubricants) as per drawing, sectional hydro testing of the sewer pipe line (including cost and conveyance of water to site for testing) etc., complete as directed by Engineer.150 mm internal diameter	01.00	Mtr.	417.00	417.00
30.	17.19.2	200 mm internal diameter	01.00	Mtr.	521.00	521.00

31.	17.19.3	250 mm internal diameter	01.00	Mtr.	732.00	732.00
32.	17.19.4	300 mm internal diameter	01.00	Mtr.	1010.00	1010.00
33.	17.19.5	350 mm internal diameter	01.00	Mtr.	1510.00	1510.00
34.	17.19.6	400 mm internal diameter	01.00	Mtr.	1740.00	1740.00
35.	17.19.7	450 mm internal diameter	01.00	Mtr.	2120.00	2120.00
36.	17.19.8	500 mm internal diameter	01.00	Mtr.	2530.00	2530.00
37.	17.19.9	600 mm internal diameter	01.00	Mtr.	3230.00	3230.00
38.	17.28.2	Providing granular bedding having width = outer dia of pipe (Bc) + 500mm, thickness below pipe = 0.25Bc or 100mm (whichever is higher) and haunching = 0.5Bc, with graded hard crusher broken stone of 100% passing through 20mm sheive, 20 to 50 % passing through 10mm sheive and 100 % retain on 6.3mm sheive, laying in layers of thickness 10/15cm including ramming, consolidation etc complete for all type of pipes of following sizes as per drawing and or as directed by Engineer. 150 mm internal diameter	01.00	Mtr	115.00	115.00
39.	17.28.3	200 mm internal diameter	01.00	Mtr	133.00	133.00
40.	17.28.4	250 mm internal diameter	01.00	Mtr	149.00	149.00
41.	17.28.5	300 mm internal diameter	01.00	Mtr	170.00	170.00
42.	17.28.6	350 mm internal diameter	01.00	Mtr	227.00	227.00
43.	17.28.7	400 mm internal diameter	01.00	Mtr	257.00	257.00
44.	17.28.8	450 mm internal diameter	01.00	Mtr	289.00	289.00
45.	17.28.9	500 mm internal diameter	01.00	Mtr	321.00	321.00
46.	17.29.10	600 mm internal diameter	01.00	Mtr	404.00	404.00
47.	17.33.1	Providing arranging and Hydraulic testing of following RCC sewer pipe line as per IS: 783 code of practice and / or as directed by Engineer-in-charge complete including cost of water. 150 mm Nominal Inside dia	01.00	Mtr.	45.00	45.00
48.	17.33.2	200 mm internal diameter	01.00	Mtr	54.50	54.50
49.	17.33.3	250 mm internal diameter	01.00	Mtr	57.00	57.00
50.	17.33.4	300 mm internal diameter	01.00	Mtr	62.00	62.00
51.	17.33.5	350 mm internal diameter	01.00	Mtr	87.00	87.00
52.	17.33.6	400 mm internal diameter	01.00	Mtr	91.00	91.00
53.	17.33.7	450 mm internal diameter	01.00	Mtr	105.00	105.00
54.	17.33.8	500 mm internal diameter	01.00	Mtr	110.00	110.00
55.	17.33.9	600 mm internal diameter	01.00	Mtr	158.00	158.00
56.	17.34 17.34.1	Providing and constructing of SEWER-BRICK masonry circular manholes of "Type-A" with internal dia 0.90m and depth upto 1.65m having 230mm thick sewer brick masonry wall in cement sand mortar 1:4, including concreting PCC M-10 grade (1:4:8) for 225mm thick foundation including curing compaction and form work etc complete, PCC M15 for benching and channel portion, RCC M20 for 200mm thick cover slab including reinforcement, PCC M20 for fixing the manhole frame and cover using stone aggregate 20mm nominal size, 20mm thick inside and outside plaster in C. M. 1:3, inside plaster finished with floating coat of neat cement, vata in CM1:1 around pipe entering and leaving the manhole and also at the junction of masonry and concrete slab, providing and fixing of SFRC foot steps of approved make at every 0.30m height fixed in CM 1:3, supplying and fixing heavy duty SFRC manhole frame and cover as per IS 12592 (Part I and II) having clear opening of 560mm, including refilling of Jhiri, including curing, watering, ramming, hydro testing of manhole, conveyance & cost of water, and dewatering complete as directed by the Engineer. NoteExcavation of earth work and road cutting for manhole will be measured and paid separately. Manhole "Type-A" of depth 0.90 m	01.00	Each	11500.00	11500.00
57.	17.34.2	Providing and constructing extra depth of manhole "Type-A" for depth beyond 0.90 m and upto 1.65 m with SEWER-BRICK masonry including 20mm plaster inside and outside as per drawing and direction of Engineer.	01.00	Mtr.	5800.00	5800.00
58.	17.35 17.35.1	Providing and constructing of SEWER-BRICK masonry circular manholes of "Type-B" with internal dia 1.20m and depth upto 2.50m having sewer brick masonry wall 230mm thick upto 1.5m, 345mm thick from 1.50m to 2.50m in cement sand mortar 1:4, including concreting PCC M-10 grade (1:4:8) for	01.00	Each Manhole	22900.00	22900.00

		225mm thick foundation including curing compaction and form work etc complete, PCC M15 for benching and channel portion, RCC M20 for 200mm thick cover slab including reinforcement, PCC M20 for fixing the manhole frame and cover using stone aggregate 20mm nominal size, 20mm thick inside and outside plaster in C. M. 1:3, inside plaster finished with floating coat of neat cement, vata in CM1:1 around pipe entering and leaving the manhole and also at the junction of masonry and concrete slab, providing and fixing of SFRC foot steps of approved make at every 0.30m height fixed in CM 1:3, supplying and fixing heavy duty SFRC manhole frame and cover as per IS 12592 (Part I and II) having clear opening of 560mm, including refilling of Jhiri, including curing, watering, ramming, hydro testing of manhole, conveyance & cost of water, and dewatering complete as directed by the Engineer. Manhole "Type-B" of depth 1.70 m				
59.	17.35.2	Providing and constructing extra depth of manhole "Type-B" for depth beyond 1.70 m and upto 2.50 m with SEWER-BRICK masonry including 20mm plaster inside and outside as per drawing and direction of Engineer.	01.00	Mtr.	10100.00	10100.00
60.	17.36.1	Providing and constructing of SEWER-BRICK masonry circular manholes of "Type-C" with internal dia 1.50m and depth upto 5.0m having sewer brick masonry wall 230mm thick upto 1.5m, 345mm thick from 1.50m to 2.50m and 460mm from 2.50 to 5.0m in cement sand mortar 1:4, including concreting PCC M-10 grade (1:4:8) for 225mm thick foundation including curing compaction and form work etc complete, PCC M15 for benching and channel portion, RCC M20 for 200mm thick cover slab including reinforcement, PCC M20 for fixing the manhole frame and cover using stone aggregate 20mm nominal size, 20mm thick inside and outside plaster in C. M. 1:3, inside plaster finished with floating coat of neat cement, vata in CM1:1 around pipe entering and leaving the manhole and also at the junction of masonry and concrete slab, providing and fixing of SFRC foot steps of approved make at every 0.30m height fixed in CM 1:3, supplying and fixing heavy duty SFRC manhole frame and cover as per IS 12592 (Part I and II) having clear opening of 560mm, including refilling of Jhiri, including curing, watering, ramming, hydro testing of manhole, conveyance & cost of water, and dewatering complete as directed by the Engineer. Note:- Excavation of earth work and road cutting for manhole will be measured and paid separately. Manhole "Type-C" of depth 2.60 m	01.00	Each Manhole	40600.00	40600.00
61.	17.36.2	Providing and constructing extra depth of manhole "Type-C" for depth beyond 2.60 m and upto 5.0 m with SEWER-BRICK masonry including 20mm plaster inside and outside as per drawing and direction of Engineer.	01.00	Mtr.	15900.00	15900.00
62.	17.55.1	Providing, fixing and constructing of pre-cast RCC M-40 grade circular manholes with internal dia 1.0m and up to specified depth having pre-cast RCC M-40 grade circular manhole cover frame (ID 0.56m, OD 0.86m, height 0.20m), conical piece (top ID 0.56m, bottom ID 1.0m, vertical height 0.605m, wall thickness 125mm), and circular rings of required heights (ID 1.0m, height 150 / 300 mm, wall thickness 125mm) below conical piece as per required depth of manhole and having steel reinforcement in all pieces of manhole @ not less than 80 kg per cum of concrete, including cast-in-situ PCC M-10 grade (1:3:6) foundation of 1.625m dia and 150mm thickness, PCC M15 grade circular wall ID 0.925m, wall thickness 200mm, height equal to OD of sewer pipe + 50 mm, PCC M15 grade benching and channel portion and up to top level of sewer pipe etc complete with curing compaction and form work, supplying and fixing heavy duty SFRC manhole cover as per IS 12592 (Part I and II), supplying and fixing plastic encapsulated CI/MS foot steps, including cost of shuttering, steel reinforcement, testing for water tightness etc complete in all respect as per drawing, as	01.00	Each	12200.00	12200.00

		per specification and the direction of the Engineer. Pre-cast RCC M-40 grade circular manholes 1.055 m deep to invert with pre-cast manhole cover frame (height 0.20), conical piece (height 0.605), cast-in-situ PCC M-10 grade foundation, PCC M15 grade circular wall ID 0.925m, wall thickness 200mm height equal to OD of sewer pipe + 50mm, PCC M15 grade benching and channel portion.				
63.	17.55.2	Providing and fixing pre-cast RCC M-40 grade circular ring of ID 1.0m, wall thickness 125mm, height 150 / 300 mm for constructing extra depth of manhole for depth beyond 1.055m as per drawing.	01.00	Mtr.	6160.00	6160.00
64.	17.56.1	Providing, fixing and constructing of pre-cast RCC M-40 grade circular manholes with internal dia 1.2m and up to specified depth having pre-cast RCC M-40 grade circular manhole cover frame (ID 0.56m, OD 0.86m, height 0.20m), conical piece (top ID 0.56m, bottom ID 1.2m, vertical height 0.805m, wall thickness 125mm), and circular rings of required heights (ID 1.2m, height 150/ 300/ 600/ 900mm, wall thickness 125mm) below conical piece as per required depth of manhole and having steel reinforcement in all pieces of manhole @ not less than 80 kg per cum of concrete, including cast-in-situ PCC M-10 grade (1:3:6) foundation of 1.825m dia and 150mm thickness, PCC M15 grade circular wall ID 1.125m, wall thickness 200mm, height equal to OD of sewer pipe +50mm, PCC M15 grade benching and channel portion and up to top level of sewer pipe etc complete with curing compaction and form work, supplying and fixing heavy duty SFRC manhole cover as per IS 12592 (Part I and II), supplying and fixing plastic encapsulated CI/MS foot steps, including cost of shuttering, steel reinforcement, testing for water tightness etc complete in all respect as per drawing, as per specification and the direction of the Engineer. Pre-cast RCC M-40 grade circular manholes 1.255 m deep to invert with pre-cast manhole cover frame (height 0.20), conical piece (height 0.805), cast-in-situ PCC M-10 grade foundation, PCC M15 grade circular wall ID 1.125m, wall thickness 200mm height equal to OD of sewer pipe +50 mm, PCC M15 grade benching and channel portion.	01.00	Each	15300.00	15300.00
65.	17.56.2	Providing and fixing pre-cast RCC M-40 grade circular ring of ID 1.2m, wall thickness 125mm, height 150 /300/600/900mm for constructing extra depth of manhole for depth beyond 1.255m as per drawing.	01.00	Mtr.	6910.00	6910.00
66.	17.57.1	Providing, fixing and constructing of pre-cast RCC M-40 grade circular manholes with internal dia 1.5m and up to specified depth having pre-cast RCC M-40 grade circular manhole cover frame (ID 0.56m, OD 0.86m, height 0.20m), conical piece (top ID 0.56m, bottom ID 1.5m, vertical height 1.105m, wall thickness 125mm), and circular rings of required heights (ID 1.5m, height 150/300/600/900/1200 mm, wall thickness 125mm) below conical piece as per required depth of manhole and having steel reinforcement in all pieces of manhole @ not less than 80 kg per cum of concrete, including cast-in-situ PCC M-10 grade (1:3:6) foundation of 2.125m dia and 150mm thickness, PCC M15 grade circular wall ID 1.425 m, wall thickness 200mm, height equal to OD of sewer pipe+50mm , PCC M15 grade benching and channel portion and up to top level of sewer pipe etc complete with curing compaction and form work, supplying and fixing heavy duty SFRC manhole cover as per IS 12592 (Part I and II), supplying and fixing plastic encapsulated CI/MS foot steps, including cost of shuttering, steel reinforcement, testing for water tightness etc complete in all respect as per drawing, as per specification and the direction of the Engineer. Pre-cast RCC M-40 grade circular manholes 1.555 m deep to invert with pre-cast manhole cover frame (height 0.20), conical piece (height 1.105), cast-in-situ PCC M-10 grade foundation, PCC M15 grade circular wall ID 1.425m, wall thickness 200mm height equal to OD of sewer pipe+50mm, PCC M15 grade benching and channel portion.	01.00	Each	20500.00	20500.00
67.	17.57.2	Providing and fixing pre-cast RCC M-40 grade circular	01.00	Mtr.	8180.00	8180.00

		ring of ID 1.5m, wall thickness 125mm, height 150/300/600/900/1200mm for constructing extra depth of manhole for depth beyond 1.555m as per drawing.				
68.	17.63.1	Constructing providing and fixing of pre-cast RCC M-40 grade circular Road Side Inspection Chamber including earthwork using sulphate resistant cement with following dia and depth cylindrical piece with 100mm wall thickness, 100mm base slab, inbuilt cover & frame on top, provision for 110mm OD in and out sewer connection with making proper in built benching and channel with PCC M-15 grade including providing cast-in-situ 100mm thick foundation of PCC M-10 grade, supplying and fixing circular precast SFRC Circular 300 mm dia manhole cover with frame - M.D. - 10, including steel reinforcement minimum @ 80kg/cum, testing for water tightness complete in all respect as per drawing, specification and the direction of the Engineer. Pre-cast Road side inspection chamber of 300mm dia (internal), 450mm depth and 600mm dia base foundation	01.00	Each	2920.00	2920.00
69.	17.63.2	Pre-cast Road side inspection chamber of 450mm dia (internal), 600mm depth and 750mm dia base foundation	01.00	Each	4520.00	4520.00
70.	17.63.3	Pre-cast Road side inspection chamber of 450mm dia (internal), 900mm depth and 750mm dia base foundation	01.00	Each	5630.00	5630.00
71.	17.65	Providing and making connection to the manhole/ road side chamber/ property chamber by cutting hole in wall, making good the same with brick work/ stone masonry work in cement mortar 1:4, plaster in cement mortar 1:3, encasement of pipe at manhole with 75mm thick M15 grade concrete etc complete as directed by Engineer.	01.00	Each	707.00	707.00
72.	17.66.1	Providing PVC-U pipes as per IS 15328 drop connection externally for depth from 0.60 m and upto 1.0 m drop from branch sewer line to main sewer manhole or vise versa including inspection and cleaning eye, PVC-U drop pipe and bend encased around with cement concrete M15 with all form work, cutting holes in walls and making good with brick/ stone masonry work in cement sand mortar 1:4 plastered with cement sand mortar 1:3 with stiff cement mortar 1:1 around PVC-U pipe in masonry wall, making required channels complete as per standard design and specifications and/ or as the directed of the Engineer: 110 mm dia	01.00	Each	4800.00	4800.00
73.	17.66.2	160 mm dia	01.00	Each	7990.00	7990.00
74.	17.66.3	200 mm dia	01.00	Each	11100.00	11100.00
75.	17.68	Providing, fixing and erecting precast RCC (M20) Vent shaft with cowl, 125mm and 225mm internal and external dia respectively at top, 300mm and 450mm internal and external dia at bottom and 9.0m over all length, bottom 1.175m below ground level fixed in the pit 900mmx900mmx1500mm with PCC M15, 250mm in bed and minimum 200mm all around with top 150mm in PCC M15 with 20mm nominal size graded stone aggregate , junction of vent shaft and concrete grouted with cement mortar 1: including making connection with sewer manhole with 150mm dia NP4 RCC pipe (IS 458-ammended upto date) as required including Type-A bedding complete as per standard design and finished with water proofing cement of approved brand as per drawings and/or as directed by Engineer. Note : Only Excavation work will be measured and paid separately	01.00	Each	26700.00	26700.00
76.	17.77	Emptying of septic tank/ soakage well etc, disposing of sludge within a lead of 5km and taking out sewage including refilling with local earth, ramming and compaction in layers, cleaning of site.	01.00	Each	3560.00	3560.00

77.	17.83.1 17.83.1	Cleaning and Flow Test of RCC/SW pipes already laid but not commissioned (including cost and conveyance of water to site) complete in all respect as per direction of Engineer-In-Charge. 150 mm dia	01.00	Mtr.	30.50	30.50
78.	17.83.2	200 mm internal diameter	01.00	Mtr.	41.00	41.00
79.	17.83.3	250 mm internal diameter	01.00	Mtr.	43.50	43.50
80.	17.83.4	300 mm internal diameter	01.00	Mtr.	48.50	48.50
81.	17.83.6	400 mm internal diameter	01.00	Mtr.	65.00	65.00
82.	17.83.7	450 mm internal diameter	01.00	Mtr.	71.50	71.50
83.	17.83.8	500 mm internal diameter	01.00	Mtr.	83.00	83.00
84.	17.83.9	600 mm internal diameter	01.00	Mtr.	90.50	90.50
85.	17.72.1	Supplying & fixing 560mm dia SFRC manhole frame & cover as per IS : 12592-2002 in existing manholes including grouting the frame in PCC M-15 complete in all respect as directed by the Engineer. HD 20	01.00	Each	2400.00	2400.00
86.	21.1.7	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level : 1:4:8 (1 Cement : 4 fine/ coarse sand : 8 graded stone aggregate 40 mm nominal size)	01.00	Cum	3360.00	3360.00
87.	21.1.2	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level : 1:1½:3 (1 Cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size).	01.00	Cum	4700.00	4700.00
88.	22.1.1	Centring and shuttering with plywood or steel sheet upto two stories or height upto 7.5 metre above plinth level including strutting, propping etc. and removal of form for : Foundations, footings, bases of columns, etc. for mass concrete.	01.00	Sqm	162.00	162.00
89.	23.1.2	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering, finishing and reinforcement - All work upto plinth level : 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size)	01.00	Cum	4960.00	4960.00
90.	24.1.2	Brick work with FPS bricks of class designation 75 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand).	01.00	Cum	3760.00	3760.00
91.	.26 29.26.2	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	01.00	Kg.	87.50	87.50
92.	32.3.2	Cement plastering including T&P, scaffolding, material and complete labpour, including cost of water, curing, racking of joints etc. with 20 mm cement plaster of mix : 1:4 (1 cement : 4 fine/ coarse sand)	01.00	Sqm	210.00	210.00
Amounting up to Rs						94.00 Lacs

I/We Tendering above work @ above/below "G" Schedule.

Signature of Tendering Contractor



NIT No. 112/22-23 Work No. 02

Municipal Corporation, Bikaner.

Name of Work :- वार्ड नं० ०१ में वंचित क्षेत्रों में सीवर लाईन का कार्य।

Name of Contractor :-

Date of Sales : As per NIT	Date of Opening : As per NIT
Tender Cost Rs 9500000/-	Earnest Money Rs. 2% or 1/2%
Earnest Money Cheque Draft No. :	Date :
Earnest Money M.C.B. Receipt No. :	Date :
Earnest Fees M.C.B. Receipt No. :	Date :

"G" Schdule

S. No.	Item Code	Item	Qty.	Unit	Rate	Amount
1.	SOR 2017 17.1.1.1	Earth work for Sewer line and Manhole in excavation in foundation, trenches manholes, road side chambers etc. including dressing of sides and ramming of bottoms, including getting out the excavated material, refilling after laying pipe/ foundation and disposal of surplus excavated material at a lead upto 50m suitable site as per direction of Engineer for following depths, below natural ground / Road top level including allowances for any additional excavation beyond the drawings (measurement for payment to be as per standard drawings), re-handling of material/earth to complete the task. In all types soils/ saturated soil such as moorum, sand, sandy silt, clay, black cotton soil, kankar, etc. Depth up to 1.5 m	01.00	Cum	197.00	197.00
2.	17.1.1.2	depth of excavation above 1.5 m and upto 3.0 m over item no 17.1.1.1	01.00	Cum	211.00	211.00
3.	17.1.1.3	depth of excavation above 3.0 m and upto 4.5 m over item no 17.1.1.1	01.00	Cum	228.50	228.50
4.	17.1.1.4	depth of excavation above 4.5 m and upto 6.0 m over item no 17.1.1.1	01.00	Cum	252.00	252.00
5.	4.25	Providing Barricading for Trenches using 80 - 100 mm dia Wooden Ballies as vertical post, atleast 1.5m above ground level and atleast 30-45 cm below ground level at a spacing of 3 m. Two rows of PVC Tape (preferably red in colour) strip barricading horizontal strip securely tied by the vertical members. Vertical members shall be painted in red and white colour. Rate is inclusive removal and cleaning of site complete in all respect.	01.00	Mtr.	76.50	76.50
6.	17.3.1	Providing and fixing CLOSE timbering in trenches of sewer line and manholes including strutting, shoring and packing cavities (wherever required) complete. (Measurements to be taken of the face area timbered) for following depth below NGL. Depth upto 3.0 m	01.00	Sqm	125.00	125.00
7.	17.3.2	Depth more than 3.0 m and upto 6.0 m	01.00	Sqm	126.00	126.00
8.	17.8.1	Dismantling of flexible pavements for sewer line and manholes and disposal of dismantled materials up to a lead of 50 metres as directed by Engineer including allowances for any additional dismantling beyond the drawings (measurement for payment to be as per standard drawings), re-handling of material/earth to complete the task. Bituminous courses	01.00	Cum	356.00	356.00
9.	17.8.2	Granular courses	01.00	Cum	247.00	247.00
10.	SOR 2017 17.9	Dismantling of cement concrete pavement for sewer line and manholes by mechanical means using pneumatic tools, cutting the peripheral edge by CC cutter, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials up to a lead of 1000 metres including allowances for any additional dismantling beyond the drawings (measurement for payment to be as per standard drawings),	01.00	Cum	802.00	802.00

		rehandling of material/earth to complete the task.				
11.	17.10	Providing and laying in position cement concrete 1:3:6 (1 Cement : 1 graded stone aggregate 20 mm nominal size) in base course complete including all material, labour, machinery, lighting, guarding for road restoration under sewer line and manhole work including allowances for any additional road restoration beyond the drawings (measurement for payment to be as per standard drawings) to complete the task.	01.00	Cum	4500.00	4500.00
12.	17.11.2	Providing and laying in position cement concrete of specified grade over prepared base course complete including finishing, curing, all material, labour, machinery, lighting, guarding for road restoration under sewer line and manhole work including allowances for any additional road restoration beyond the drawings (measurement for payment to be as per standard drawings) to complete the task. 1:1½:3 (1 Cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size).	01.00	Cum	5640.00	5640.00
13.	17.12.1	Providing laying, spreading and compacting stone aggregates of specific sizes as per Table 400-7 to Water Bound Macadam specification including spreading in uniform thickness; hand packing, rolling with power roller 8-10 tonnes, in stages to proper grade and camber, applying and brooming requisite type of screening (Table 400-8) binding materials to fill up the interstices of coarse aggregates, watering (with water browser) and compacting to required density, making necessary earthen bund to protect edges as per clause 404 of MoRT&H specification including all material, labour, machinery, lighting, guarding and maintenance of diversion under sewer line and manhole work complete including allowances for any additional road restoration beyond the drawings (measurement for payment to be as per standard drawings) to complete the task. Hand broken - Grade-I (90-45mm)	01.00	Cum	1470.00	1470.00
14.	17.12.2	Hand broken - Grade-II (63-45mm)	01.00	Cum	1500.00	1500.00
15.	17.12.3	Crusher broken - Grade-II (63-45mm)	01.00	Cum	1590.00	1590.00
16.	17.12.4	Crusher broken - Grade-III (53-22.4mm)	01.00	Cum	1690.00	1690.00
17.	17.13	Providing and applying tack coat on the prepared surface with bitumen emulsion as per IS: 8887 and approved quality @ 0.2 kg/sqm with the help of spray set fitted on bitumen Container (boiler) after cleaning the surface with brooms or soft brushes and finally dusting with old gunny bags and compressed air to receive bituminous treatment complete as per clause 502 of MoRT&H specification including all material, labour, machinery, lighting, guarding under sewer line and manhole work including allowances for any additional road restoration beyond the drawings (measurement for payment to be as per standard drawings) to complete the task.	01.00	Sqm	8.50	8.50
18.	17.15.1	Providing and laying open graded premix carpet 20mm thick (compacted), on prepared surface in a single course as wearing course, composed of specified graded crushed stone aggregate as per Table 500-23, premixed with bituminous binder @ 14.60 kg/ 10sqm (including cost of anti-stripping compound wherever required), including loading of material with F.E. loader, hot mixing of stone	01.00	Sqm	113.00	113.00

		aggregate and bitumen in computerised hot mix plant, transporting the mixed material by tippers to paver and laying with paver finisher fitted with electronic sensor control to the required level and grade, compacting smooth wheeled roller 8-10 tonne capacity and finishing to required level to achieve the desired density as per clause 511 of MoRT&H specification including all material, labour, machinery, lighting, guarding but excluding cost of tack coat/ seal coat under sewer line and manhole work including allowances for any additional road restoration beyond the drawings (measurement for payment to be as per standard drawings) to complete the task. With Bitumen VG-grade 30				
19.	17.16.1	Providing and applying liquid seal coat type "A" comprising of a layer of bituminous binder @ 9.8 kg/ 10 Sqm (including cost of antistripping compound wherever required) followed by a cover of stone chipping @ 0.09 Cum/10 sqm of specified grading and rolling with power roller 8-10 tonne complete as per clause 513 of MoRT&H specification including all material, labour, machinery, lighting, guarding under sewer line and manhole work including allowances for any additional road restoration beyond the drawings (measurement for payment to be as per standard drawings) to complete the task. With Bitumen VG-grade 30	01.00	Sqm	65.50	65.50
20.	17.18.1	Providing at site, lowering & laying in trenches, aligning & jointing of RCC pipes NP4 class (with s/s ends) IS: 458 - 2003 (amended up to date) marked and pipes from 300 mm and upto 1800 mm manufactured through vertical casting process at all depths with Rubber gaskets (EPDM/SBR) for sewer lines as per IS: 5382 (including cost of Rubber gaskets, lubricants) as per drawing, sectional hydro testing of the sewer pipe line (including cost and conveyance of water to site for testing) etc., complete as per specification and / or as directed by Engineer. 150 mm internal diameter	01.00	Mtr.	438.00	438.00
21.	17.18.2	200 mm internal diameter	01.00	Mtr.	562.00	562.00
22.	17.18.3	250 mm internal diameter	01.00	Mtr.	804.00	804.00
23.	17.18.4	300 mm internal diameter	01.00	Mtr.	1060.00	1060.00
24.	17.18.5	350 mm internal diameter	01.00	Mtr.	1630.00	1630.00
25.	17.18.6	400 mm internal diameter	01.00	Mtr.	1860.00	1860.00
26.	17.18.7	450 mm internal diameter	01.00	Mtr.	2290.00	2290.00
27.	17.18.8	500 mm internal diameter	01.00	Mtr.	2630.00	2630.00
28.	17.18.9	600 mm internal diameter	01.00	Mtr.	3550.00	3550.00
29.	17.19.1	Providing at site, lowering & laying in trenches, aligning & jointing of RCC pipes NP3 class (with s/s ends) IS: 458 - 1988 (amended up to date) marked and pipes from 300 mm upto 2000 mm manufactured through vertical casting process all levels with Rubber gaskets (EPDM/SBR) for sewer lines as per IS: 5382 (including cost of Rubber gaskets lubricants) as per drawing, sectional hydro testing of the sewer pipe line (including cost and conveyance of water to site for testing) etc., complete as directed by Engineer. 150 mm internal diameter	01.00	Mtr.	417.00	417.00
30.	17.19.2	200 mm internal diameter	01.00	Mtr.	521.00	521.00
31.	17.19.3	250 mm internal diameter	01.00	Mtr.	732.00	732.00
32.	17.19.4	300 mm internal diameter	01.00	Mtr.	1010.00	1010.00
33.	17.19.5	350 mm internal diameter	01.00	Mtr.	1510.00	1510.00
34.	17.19.6	400 mm internal diameter	01.00	Mtr.	1740.00	1740.00

35.	17.19.7	450 mm internal diameter	01.00	Mtr.	2120.00	2120.00
36.	17.19.8	500 mm internal diameter	01.00	Mtr.	2530.00	2530.00
37.	17.19.9	600 mm internal diameter	01.00	Mtr.	3230.00	3230.00
38.	17.28.2	Providing granular bedding having width = outer dia of pipe (Bc) + 500mm, thickness below pipe = 0.25Bc or 100mm (whichever is higher) and haunching = 0.5Bc, with graded hard crusher broken stone of 100% passing through 20mm sheive, 20 to 50 % passing through 10mm sheive and 100 % retain on 6.3mm sheive, laying in layers of thickness 10/15cm including ramming, consolidation etc complete for all type of pipes of following sizes as per drawing and or as directed by Engineer. 150 mm internal diameter	01.00	Mtr	115.00	115.00
39.	17.28.3	200 mm internal diameter	01.00	Mtr	133.00	133.00
40.	17.28.4	250 mm internal diameter	01.00	Mtr	149.00	149.00
41.	17.28.5	300 mm internal diameter	01.00	Mtr	170.00	170.00
42.	17.28.6	350 mm internal diameter	01.00	Mtr	227.00	227.00
43.	17.28.7	400 mm internal diameter	01.00	Mtr	257.00	257.00
44.	17.28.8	450 mm internal diameter	01.00	Mtr	289.00	289.00
45.	17.28.9	500 mm internal diameter	01.00	Mtr	321.00	321.00
46.	17.29.10	600 mm internal diameter	01.00	Mtr	404.00	404.00
47.	17.33.1	Providing arranging and Hydraulic testing of following RCC sewer pipe line as per IS: 783 code of practice and / or as directed by Engineer-in-charge complete including cost of water. 150 mm Nominal Inside dia	01.00	Mtr.	45.00	45.00
48.	17.33.2	200 mm internal diameter	01.00	Mtr	54.50	54.50
49.	17.33.3	250 mm internal diameter	01.00	Mtr	57.00	57.00
50.	17.33.4	300 mm internal diameter	01.00	Mtr	62.00	62.00
51.	17.33.5	350 mm internal diameter	01.00	Mtr	87.00	87.00
52.	17.33.6	400 mm internal diameter	01.00	Mtr	91.00	91.00
53.	17.33.7	450 mm internal diameter	01.00	Mtr	105.00	105.00
54.	17.33.8	500 mm internal diameter	01.00	Mtr	110.00	110.00
55.	17.33.9	600 mm internal diameter	01.00	Mtr	158.00	158.00
56.	17.34 17.34.1	Providing and constructing of SEWER-BRICK masonry circular manholes of "Type-A" with internal dia 0.90m and depth upto 1.65m having 230mm thick sewer brick masonry wall in cement sand mortar 1:4, including concreting PCC M-10 grade (1:4:8) for 225mm thick foundation including curing compaction and form work etc complete, PCC M15 for benching and channel portion, RCC M20 for 200mm thick cover slab including reinforcement, PCC M20 for fixing the manhole frame and cover using stone aggregate 20mm nominal size, 20mm thick inside and outside plaster in C. M. 1:3, inside plaster finished with floating coat of neat cement, vata in CM1:1 around pipe entering and leaving the manhole and also at the junction of masonry and concrete slab, providing and fixing of SFRC foot steps of approved make at every 0.30m height fixed in CM 1:3, supplying and fixing heavy duty SFRC manhole frame and cover as per IS 12592 (Part I and II) having clear opening of 560mm, including refilling of Jhiri, including curing, watering, ramming, hydro testing of manhole, conveyance & cost of water, and dewatering complete as directed by the Engineer. NoteExcavation of earth work and road cutting for manhole will be measured and paid separately. Manhole "Type-A" of depth 0.90 m	01.00	Each	11500.00	11500.00
57.	17.34.2	Providing and constructing extra depth of manhole "Type-A" for depth beyond 0.90 m and upto 1.65 m with SEWER-BRICK masonry including 20mm plaster inside and outside as per drawing and direction of Engineer.	01.00	Mtr.	5800.00	5800.00
58.	17.35 17.35.1	Providing and constructing of SEWER-BRICK masonry circular manholes of "Type-B" with internal dia 1.20m and depth upto 2.50m having sewer brick masonry wall 230mm thick upto 1.5m, 345mm thick from 1.50m to 2.50m in cement sand mortar 1:4, including concreting PCC M-10 grade (1:4:8) for 225mm thick foundation including curing compaction and form work etc complete, PCC M15 for benching and channel portion, RCC M20 for 200mm thick cover slab including reinforcement, PCC M20 for fixing the	01.00	Each Manhole	22900.00	22900.00

		manhole frame and cover using stone aggregate 20mm nominal size, 20mm thick inside and outside plaster in C. M. 1:3, inside plaster finished with floating coat of neat cement, vata in CM1:1 around pipe entering and leaving the manhole and also at the junction of masonry and concrete slab, providing and fixing of SFRC foot steps of approved make at every 0.30m height fixed in CM 1:3, supplying and fixing heavy duty SFRC manhole frame and cover as per IS 12592 (Part I and II) having clear opening of 560mm, including refilling of Jhiri, including curing, watering, ramming, hydro testing of manhole, conveyance & cost of water, and dewatering complete as directed by the Engineer. Manhole "Type-B" of depth 1.70 m				
59.	17.35.2	Providing and constructing extra depth of manhole "Type-B" for depth beyond 1.70 m and upto 2.50 m with SEWER-BRICK masonry including 20mm plaster inside and outside as per drawing and direction of Engineer.	01.00	Mtr.	10100.00	10100.00
60.	17.36.1	Providing and constructing of SEWER-BRICK masonry circular manholes of "Type-C" with internal dia 1.50m and depth upto 5.0m having sewer brick masonry wall 230mm thick upto 1.5m, 345mm thick from 1.50m to 2.50m and 460mm from 2.50 to 5.0m in cement sand mortar 1:4, including concreting PCC M-10 grade (1:4:8) for 225mm thick foundation including curing compaction and form work etc complete, PCC M15 for benching and channel portion, RCC M20 for 200mm thick cover slab including reinforcement, PCC M20 for fixing the manhole frame and cover using stone aggregate 20mm nominal size, 20mm thick inside and outside plaster in C. M. 1:3, inside plaster finished with floating coat of neat cement, vata in CM1:1 around pipe entering and leaving the manhole and also at the junction of masonry and concrete slab, providing and fixing of SFRC foot steps of approved make at every 0.30m height fixed in CM 1:3, supplying and fixing heavy duty SFRC manhole frame and cover as per IS 12592 (Part I and II) having clear opening of 560mm, including refilling of Jhiri, including curing, watering, ramming, hydro testing of manhole, conveyance & cost of water, and dewatering complete as directed by the Engineer. Note:- Excavation of earth work and road cutting for manhole will be measured and paid separately. Manhole "Type-C" of depth 2.60 m	01.00	Each Manhole	40600.00	40600.00
61.	17.36.2	Providing and constructing extra depth of manhole "Type-C" for depth beyond 2.60 m and upto 5.0 m with SEWER-BRICK masonry including 20mm plaster inside and outside as per drawing and direction of Engineer.	01.00	Mtr.	15900.00	15900.00
62.	17.55.1	Providing, fixing and constructing of pre-cast RCC M-40 grade circular manholes with internal dia 1.0m and up to specified depth having pre-cast RCC M-40 grade circular manhole cover frame (ID 0.56m, OD 0.86m, height 0.20m), conical piece (top ID 0.56m, bottom ID 1.0m, vertical height 0.605m, wall thickness 125mm), and circular rings of required heights (ID 1.0m, height 150 / 300 mm, wall thickness 125mm) below conical piece as per required depth of manhole and having steel reinforcement in all pieces of manhole @ not less than 80 kg per cum of concrete, including cast-in-situ PCC M-10 grade (1:3:6) foundation of 1.625m dia and 150mm thickness, PCC M15 grade circular wall ID 0.925m, wall thickness 200mm, height equal to OD of sewer pipe + 50 mm, PCC M15 grade benching and channel portion and up to top level of sewer pipe etc complete with curing compaction and form work, supplying and fixing heavy duty SFRC manhole cover as per IS 12592 (Part I and II), supplying and fixing plastic encapsulated CI/MS foot steps, including cost of shuttering, steel reinforcement, testing for water tightness etc complete in all respect as per drawing, as per specification and the direction of the Engineer. Pre-cast RCC M-40 grade circular manholes 1.055 m deep to invert with pre-cast manhole cover frame (height 0.20), conical piece (height 0.605), cast-in-situ PCC	01.00	Each	12200.00	12200.00

		M-10 grade foundation, PCC M15 grade circular wall ID 0.925m, wall thickness 200mm height equal to OD of sewer pipe + 50mm, PCC M15 grade benching and channel portion.				
63.	17.55.2	Providing and fixing pre-cast RCC M-40 grade circular ring of ID 1.0m, wall thickness 125mm, height 150 / 300 mm for constructing extra depth of manhole for depth beyond 1.055m as per drawing.	01.00	Mtr.	6160.00	6160.00
64.	17.56.1	Providing, fixing and constructing of pre-cast RCC M-40 grade circular manholes with internal dia 1.2m and up to specified depth having pre-cast RCC M-40 grade circular manhole cover frame (ID 0.56m, OD 0.86m, height 0.20m), conical piece (top ID 0.56m, bottom ID 1.2m, vertical height 0.805m, wall thickness 125mm), and circular rings of required heights (ID 1.2m, height 150/ 300/ 600/ 900mm, wall thickness 125mm) below conical piece as per required depth of manhole and having steel reinforcement in all pieces of manhole @ not less than 80 kg per cum of concrete, including cast-in-situ PCC M-10 grade (1:3:6) foundation of 1.825m dia and 150mm thickness, PCC M15 grade circular wall ID 1.125m, wall thickness 200mm, height equal to OD of sewer pipe +50mm, PCC M15 grade benching and channel portion and up to top level of sewer pipe etc complete with curing compaction and form work, supplying and fixing heavy duty SFRC manhole cover as per IS 12592 (Part I and II), supplying and fixing plastic encapsulated CI/MS foot steps, including cost of shuttering, steel reinforcement, testing for water tightness etc complete in all respect as per drawing, as per specification and the direction of the Engineer. Pre-cast RCC M-40 grade circular manholes 1.255 m deep to invert with pre-cast manhole cover frame (height 0.20), conical piece (height 0.805), cast-in-situ PCC M-10 grade foundation, PCC M15 grade circular wall ID 1.125m, wall thickness 200mm height equal to OD of sewer pipe +50 mm, PCC M15 grade benching and channel portion.	01.00	Each	15300.00	15300.00
65.	17.56.2	Providing and fixing pre-cast RCC M-40 grade circular ring of ID 1.2m, wall thickness 125mm, height 150 /300/600/900mm for constructing extra depth of manhole for depth beyond 1.255m as per drawing.	01.00	Mtr.	6910.00	6910.00
66.	17.57.1	Providing, fixing and constructing of pre-cast RCC M-40 grade circular manholes with internal dia 1.5m and up to specified depth having pre-cast RCC M-40 grade circular manhole cover frame (ID 0.56m, OD 0.86m, height 0.20m), conical piece (top ID 0.56m, bottom ID 1.5m, vertical height 1.105m, wall thickness 125mm), and circular rings of required heights (ID 1.5m, height 150/300/600/900/1200 mm, wall thickness 125mm) below conical piece as per required depth of manhole and having steel reinforcement in all pieces of manhole @ not less than 80 kg per cum of concrete, including cast-in-situ PCC M-10 grade (1:3:6) foundation of 2.125m dia and 150mm thickness, PCC M15 grade circular wall ID 1.425 m, wall thickness 200mm, height equal to OD of sewer pipe+50mm , PCC M15 grade benching and channel portion and up to top level of sewer pipe etc complete with curing compaction and form work, supplying and fixing heavy duty SFRC manhole cover as per IS 12592 (Part I and II), supplying and fixing plastic encapsulated CI/MS foot steps, including cost of shuttering, steel reinforcement, testing for water tightness etc complete in all respect as per drawing, as per specification and the direction of the Engineer. Pre-cast RCC M-40 grade circular manholes 1.555 m deep to invert with pre-cast manhole cover frame (height 0.20), conical piece (height 1.105), cast-in-situ PCC M-10 grade foundation, PCC M15 grade circular wall ID 1.425m, wall thickness 200mm height equal to OD of sewer pipe+50mm, PCC M15 grade benching and channel portion.	01.00	Each	20500.00	20500.00
67.	17.57.2	Providing and fixing pre-cast RCC M-40 grade circular ring of ID 1.5m, wall thickness 125mm, height 150/300/600/900/1200mm for constructing extra depth of manhole for depth beyond 1.555m as per drawing.	01.00	Mtr.	8180.00	8180.00
68.	17.63.1	Constructing providing and fixing of pre-cast RCC M-	01.00	Each	2920.00	2920.00

		40 grade circular Road Side Inspection Chamber including earthwork using sulphate resistant cement with following dia and depth cylindrical piece with 100mm wall thickness, 100mm base slab, inbuilt cover & frame on top, provision for 110mm OD in and out sewer connection with making proper in built benching and channel with PCC M-15 grade including providing cast-in-situ 100mm thick foundation of PCC M-10 grade, supplying and fixing circular precast SFRC Circular 300 mm dia manhole cover with frame - M.D. - 10, including steel reinforcement minimum @ 80kg/cum, testing for water tightness complete in all respect as per drawing, specification and the direction of the Engineer. Pre-cast Road side inspection chamber of 300mm dia (internal), 450mm depth and 600mm dia base foundation				
69.	17.63.2	Pre-cast Road side inspection chamber of 450mm dia (internal), 600mm depth and 750mm dia base foundation	01.00	Each	4520.00	4520.00
70.	17.63.3	Pre-cast Road side inspection chamber of 450mm dia (internal), 900mm depth and 750mm dia base foundation	01.00	Each	5630.00	5630.00
71.	17.65	Providing and making connection to the manhole/ road side chamber/ property chamber by cutting hole in wall, making good the same with brick work/ stone masonry work in cement mortar 1:4, plaster in cement mortar 1:3, encasement of pipe at manhole with 75mm thick M15 grade concrete etc complete as directed by Engineer.	01.00	Each	707.00	707.00
72.	17.66.1	Providing PVC-U pipes as per IS 15328 drop connection externally for depth from 0.60 m and upto 1.0 m drop from branch sewer line to main sewer manhole or vise versa including inspection and cleaning eye, PVC-U drop pipe and bend encased around with cement concrete M15 with all form work, cutting holes in walls and making good with brick/ stone masonry work in cement sand mortar 1:4 plastered with cement sand mortar 1:3 with stiff cement mortar 1:1 around PVC-U pipe in masonry wall, making required channels complete as per standard design and specifications and/ or as the directed of the Engineer: 110 mm dia	01.00	Each	4800.00	4800.00
73.	17.66.2	160 mm dia	01.00	Each	7990.00	7990.00
74.	17.66.3	200 mm dia	01.00	Each	11100.00	11100.00
75.	17.68	Providing, fixing and erecting precast RCC (M20) Vent shaft with cowl, 125mm and 225mm internal and external dia respectively at top, 300mm and 450mm internal and external dia at bottom and 9.0m over all length, bottom 1.175m below ground level fixed in the pit 900mmx900mmx1500mm with PCC M15, 250mm in bed and minimum 200mm all around with top 150mm in PCC M15 with 20mm nominal size graded stone aggregate , junction of vent shaft and concrete grouted with cement mortar 1: including making connection with sewer manhole with 150mm dia NP4 RCC pipe (IS 458-amended upto date) as required including Type-A bedding complete as per standard design and finished with water proofing cement of approved brand as per drawings and/or as directed by Engineer. Note : Only Excavation work will be measured and paid separately	01.00	Each	26700.00	26700.00
76.	17.77	Emptying of septic tank/ soakage well etc, disposing of sludge within a lead of 5km and taking out sewage including refilling with local earth, ramming and compaction in layers, cleaning of site.	01.00	Each	3560.00	3560.00
77.	17.83.1 17.83.1	Cleaning and Flow Test of RCC/SW pipes already laid but not commissioned (including cost and conveyance of water to site) complete in all respect as per direction of Engineer-In-Charge. 150 mm dia	01.00	Mtr.	30.50	30.50

78.	17.83.2	200 mm internal diameter	01.00	Mtr.	41.00	41.00
79.	17.83.3	250 mm internal diameter	01.00	Mtr.	43.50	43.50
80.	17.83.4	300 mm internal diameter	01.00	Mtr.	48.50	48.50
81.	17.83.6	400 mm internal diameter	01.00	Mtr.	65.00	65.00
82.	17.83.7	450 mm internal diameter	01.00	Mtr.	71.50	71.50
83.	17.83.8	500 mm internal diameter	01.00	Mtr.	83.00	83.00
84.	17.83.9	600 mm internal diameter	01.00	Mtr.	90.50	90.50
85.	17.72.1	Supplying & fixing 560mm dia SFRC manhole frame & cover as per IS : 12592-2002 in existing manholes including grouting the frame in PCC M-15 complete in all respect as directed by the Engineer. HD 20	01.00	Each	2400.00	2400.00
86.	21.1.7	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level : 1:4:8 (1 Cement : 4 fine/ coarse sand : 8 graded stone aggregate 40 mm nominal size)	01.00	Cum	3360.00	3360.00
87.	21.1.2	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level : 1:1½:3 (1 Cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size).	01.00	Cum	4700.00	4700.00
88.	22.1.1	Centring and shuttering with plywood or steel sheet upto two stories or height upto 7.5 metre above plinth level including strutting, propping etc. and removal of form for : Foundations, footings, bases of columns, etc. for mass concrete.	01.00	Sqm	162.00	162.00
89.	23.1.2	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering, finishing and reinforcement - All work upto plinth level : 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size)	01.00	Cum	4960.00	4960.00
90.	24.1.2	Brick work with FPS bricks of class designation 75 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand).	01.00	Cum	3760.00	3760.00
91.	.26 29.26.2	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	01.00	Kg.	87.50	87.50
92.	32.3.2	Cement plastering including T&P, scaffolding, material and complete labpour, including cost of water, curing, racking of joints etc. with 20 mm cement plaster of mix : 1:4 (1 cement : 4 fine/ coarse sand)	01.00	Sqm	210.00	210.00
Amounting up to Rs						95.00 Lacs

I/We Tendering above work @ above/below "G" Schedule.

Signature of Tendering Contractor



NIT No. 112/22-23 Work No. 03

Municipal Corporation, Bikaner.

Name of Work :- वार्ड नं० 19,20 व सर्वोदय बस्ती व आस-पास वंचित क्षेत्रों में सीवर लाईन का कार्य।

Name of Contractor :-

Date of Sales : As per NIT	Date of Opening : As per NIT	
Tender Cost Rs 9600000/-	Earnest Money Rs. 2% or 1/2%	Tender Fess :1000/-
Earnest Money Cheque Draft No. :	Date :	
Earnest Money M.C.B. Receipt No. :	Date :	
Earnest Fees M.C.B. Receipt No. :	Date :	

"G" Schdule

S. No.	Item Code	Item	Qty.	Unit	Rate	Amount
1.	SOR 2017 17.1.1.1	Earth work for Sewer line and Manhole in excavation in foundation, trenches manholes, road side chambers etc. including dressing of sides and ramming of bottoms, including getting out the excavated material, refilling after laying pipe/ foundation and disposal of surplus excavated material at a lead upto 50m suitable site as per direction of Engineer for following depths, below natural ground / Road top level including allowances for any additional excavation beyond the drawings (measurement for payment to be as per standard drawings), re-handling of material/earth to complete the task. In all types soils/ saturated soil such as moorum, sand, sandy silt, clay, black cotton soil, kankar, etc. Depth up to 1.5 m	01.00	Cum	197.00	197.00
2.	17.1.1.2	depth of excavation above 1.5 m and upto 3.0 m over item no 17.1.1.1	01.00	Cum	211.00	211.00
3.	17.1.1.3	depth of excavation above 3.0 m and upto 4.5 m over item no 17.1.1.1	01.00	Cum	228.50	228.50
4.	17.1.1.4	depth of excavation above 4.5 m and upto 6.0 m over item no 17.1.1.1	01.00	Cum	252.00	252.00
5.	4.25	Providing Barricading for Trenches using 80 - 100 mm dia Wooden Ballies as vertical post, atleast 1.5m above ground level and atleast 30-45 cm below ground level at a spacing of 3 m. Two rows of PVC Tape (preferably red in colour) strip barricading horizontal strip securely tied by the vertical members. Vertical members shall be painted in red and white colour. Rate is inclusive removal and cleaning of site complete in all respect.	01.00	Mtr.	76.50	76.50
6.	17.3.1	Providing and fixing CLOSE timbering in trenches of sewer line and manholes including strutting, shoring and packing cavities (wherever required) complete. (Measurements to be taken of the face area timbered) for following depth below NGL. Depth upto 3.0 m	01.00	Sqm	125.00	125.00
7.	17.3.2	Depth more than 3.0 m and upto 6.0 m	01.00	Sqm	126.00	126.00
8.	17.8.1	Dismantling of flexible pavements for sewer line and manholes and disposal of dismantled materials up to a lead of 50 metres as directed by Engineer including allowances for any additional dismantling beyond the drawings (measurement for payment to be as per standard drawings), re-handling of material/earth to complete the task. Bituminous courses	01.00	Cum	356.00	356.00
9.	17.8.2	Granular courses	01.00	Cum	247.00	247.00
10.	SOR 2017 17.9	Dismantling of cement concrete pavement for sewer line and manholes by mechanical means using pneumatic tools, cutting the peripheral edge by CC cutter, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials up to a lead of 1000 metres including allowances for any additional dismantling beyond the drawings (measurement for payment to be as per standard drawings),	01.00	Cum	802.00	802.00

		rehandling of material/earth to complete the task.				
11.	17.10	Providing and laying in position cement concrete 1:3:6 (1 Cement : 1 graded stone aggregate 20 mm nominal size) in base course complete including all material, labour, machinery, lighting, guarding for road restoration under sewer line and manhole work including allowances for any additional road restoration beyond the drawings (measurement for payment to be as per standard drawings) to complete the task.	01.00	Cum	4500.00	4500.00
12.	17.11.2	Providing and laying in position cement concrete of specified grade over prepared base course complete including finishing, curing, all material, labour, machinery, lighting, guarding for road restoration under sewer line and manhole work including allowances for any additional road restoration beyond the drawings (measurement for payment to be as per standard drawings) to complete the task. 1:1½:3 (1 Cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size).	01.00	Cum	5640.00	5640.00
13.	17.12.1	Providing laying, spreading and compacting stone aggregates of specific sizes as per Table 400-7 to Water Bound Macadam specification including spreading in uniform thickness; hand packing, rolling with power roller 8-10 tonnes, in stages to proper grade and camber, applying and brooming requisite type of screening (Table 400-8) binding materials to fill up the interstices of coarse aggregates, watering (with water browser) and compacting to required density, making necessary earthen bund to protect edges as per clause 404 of MoRT&H specification including all material, labour, machinery, lighting, guarding and maintenance of diversion under sewer line and manhole work complete including allowances for any additional road restoration beyond the drawings (measurement for payment to be as per standard drawings) to complete the task. Hand broken - Grade-I (90-45mm)	01.00	Cum	1470.00	1470.00
14.	17.12.2	Hand broken - Grade-II (63-45mm)	01.00	Cum	1500.00	1500.00
15.	17.12.3	Crusher broken - Grade-II (63-45mm)	01.00	Cum	1590.00	1590.00
16.	17.12.4	Crusher broken - Grade-III (53-22.4mm)	01.00	Cum	1690.00	1690.00
17.	17.13	Providing and applying tack coat on the prepared surface with bitumen emulsion as per IS: 8887 and approved quality @ 0.2 kg/sqm with the help of spray set fitted on bitumen Container (boiler) after cleaning the surface with brooms or soft brushes and finally dusting with old gunny bags and compressed air to receive bituminous treatment complete as per clause 502 of MoRT&H specification including all material, labour, machinery, lighting, guarding under sewer line and manhole work including allowances for any additional road restoration beyond the drawings (measurement for payment to be as per standard drawings) to complete the task.	01.00	Sqm	8.50	8.50
18.	17.15.1	Providing and laying open graded premix carpet 20mm thick (compacted), on prepared surface in a single course as wearing course, composed of specified graded crushed stone aggregate as per Table 500-23, premixed with bituminous binder @ 14.60 kg/10sqm (including cost of anti-stripping compound wherever required), including loading of material with F.E. loader, hot mixing of stone	01.00	Sqm	113.00	113.00

		aggregate and bitumen in computerised hot mix plant, transporting the mixed material by tippers to paver and laying with paver finisher fitted with electronic sensor control to the required level and grade, compacting smooth wheeled roller 8-10 tonne capacity and finishing to required level to achieve the desired density as per clause 511 of MoRT&H specification including all material, labour, machinery, lighting, guarding but excluding cost of tack coat/ seal coat under sewer line and manhole work including allowances for any additional road restoration beyond the drawings (measurement for payment to be as per standard drawings) to complete the task. With Bitumen VG-grade 30				
19.	17.16.1	Providing and applying liquid seal coat type "A" comprising of a layer of bituminous binder @ 9.8 kg/ 10 Sqm (including cost of antistripping compound wherever required) followed by a cover of stone chipping @ 0.09 Cum/10 sqm of specified grading and rolling with power roller 8-10 tonne complete as per clause 513 of MoRT&H specification including all material, labour, machinery, lighting, guarding under sewer line and manhole work including allowances for any additional road restoration beyond the drawings (measurement for payment to be as per standard drawings) to complete the task. With Bitumen VG-grade 30	01.00	Sqm	65.50	65.50
20.	17.18.1	Providing at site, lowering & laying in trenches, aligning & jointing of RCC pipes NP4 class (with s/s ends) IS: 458 - 2003 (amended up to date) marked and pipes from 300 mm and upto 1800 mm manufactured through vertical casting process at all depths with Rubber gaskets (EPDM/SBR) for sewer lines as per IS: 5382 (including cost of Rubber gaskets, lubricants) as per drawing, sectional hydro testing of the sewer pipe line (including cost and conveyance of water to site for testing) etc., complete as per specification and / or as directed by Engineer. 150 mm internal diameter	01.00	Mtr.	438.00	438.00
21.	17.18.2	200 mm internal diameter	01.00	Mtr.	562.00	562.00
22.	17.18.3	250 mm internal diameter	01.00	Mtr.	804.00	804.00
23.	17.18.4	300 mm internal diameter	01.00	Mtr.	1060.00	1060.00
24.	17.18.5	350 mm internal diameter	01.00	Mtr.	1630.00	1630.00
25.	17.18.6	400 mm internal diameter	01.00	Mtr.	1860.00	1860.00
26.	17.18.7	450 mm internal diameter	01.00	Mtr.	2290.00	2290.00
27.	17.18.8	500 mm internal diameter	01.00	Mtr.	2630.00	2630.00
28.	17.18.9	600 mm internal diameter	01.00	Mtr.	3550.00	3550.00
29.	17.19.1	Providing at site, lowering & laying in trenches, aligning & jointing of RCC pipes NP3 class (with s/s ends) IS: 458 - 1988 (amended up to date) marked and pipes from 300 mm upto 2000 mm manufactured through vertical casting process all levels with Rubber gaskets (EPDM/SBR) for sewer lines as per IS: 5382 (including cost of Rubber gaskets lubricants) as per drawing, sectional hydro testing of the sewer pipe line (including cost and conveyance of water to site for testing) etc., complete as directed by Engineer. 150 mm internal diameter	01.00	Mtr.	417.00	417.00
30.	17.19.2	200 mm internal diameter	01.00	Mtr.	521.00	521.00
31.	17.19.3	250 mm internal diameter	01.00	Mtr.	732.00	732.00
32.	17.19.4	300 mm internal diameter	01.00	Mtr.	1010.00	1010.00
33.	17.19.5	350 mm internal diameter	01.00	Mtr.	1510.00	1510.00
34.	17.19.6	400 mm internal diameter	01.00	Mtr.	1740.00	1740.00

35.	17.19.7	450 mm internal diameter	01.00	Mtr.	2120.00	2120.00
36.	17.19.8	500 mm internal diameter	01.00	Mtr.	2530.00	2530.00
37.	17.19.9	600 mm internal diameter	01.00	Mtr.	3230.00	3230.00
38.	17.28.2	Providing granular bedding having width = outer dia of pipe (Bc) + 500mm, thickness below pipe = 0.25Bc or 100mm (whichever is higher) and haunching = 0.5Bc, with graded hard crusher broken stone of 100% passing through 20mm sheive, 20 to 50 % passing through 10mm sheive and 100 % retain on 6.3mm sheive, laying in layers of thickness 10/15cm including ramming, consolidation etc complete for all type of pipes of following sizes as per drawing and or as directed by Engineer. 150 mm internal diameter	01.00	Mtr	115.00	115.00
39.	17.28.3	200 mm internal diameter	01.00	Mtr	133.00	133.00
40.	17.28.4	250 mm internal diameter	01.00	Mtr	149.00	149.00
41.	17.28.5	300 mm internal diameter	01.00	Mtr	170.00	170.00
42.	17.28.6	350 mm internal diameter	01.00	Mtr	227.00	227.00
43.	17.28.7	400 mm internal diameter	01.00	Mtr	257.00	257.00
44.	17.28.8	450 mm internal diameter	01.00	Mtr	289.00	289.00
45.	17.28.9	500 mm internal diameter	01.00	Mtr	321.00	321.00
46.	17.29.10	600 mm internal diameter	01.00	Mtr	404.00	404.00
47.	17.33.1	Providing arranging and Hydraulic testing of following RCC sewer pipe line as per IS: 783 code of practice and / or as directed by Engineer-in-charge complete including cost of water. 150 mm Nominal Inside dia	01.00	Mtr.	45.00	45.00
48.	17.33.2	200 mm internal diameter	01.00	Mtr	54.50	54.50
49.	17.33.3	250 mm internal diameter	01.00	Mtr	57.00	57.00
50.	17.33.4	300 mm internal diameter	01.00	Mtr	62.00	62.00
51.	17.33.5	350 mm internal diameter	01.00	Mtr	87.00	87.00
52.	17.33.6	400 mm internal diameter	01.00	Mtr	91.00	91.00
53.	17.33.7	450 mm internal diameter	01.00	Mtr	105.00	105.00
54.	17.33.8	500 mm internal diameter	01.00	Mtr	110.00	110.00
55.	17.33.9	600 mm internal diameter	01.00	Mtr	158.00	158.00
56.	17.34 17.34.1	Providing and constructing of SEWER-BRICK masonry circular manholes of "Type-A" with internal dia 0.90m and depth upto 1.65m having 230mm thick sewer brick masonry wall in cement sand mortar 1:4, including concreting PCC M-10 grade (1:4:8) for 225mm thick foundation including curing compaction and form work etc complete, PCC M15 for benching and channel portion, RCC M20 for 200mm thick cover slab including reinforcement, PCC M20 for fixing the manhole frame and cover using stone aggregate 20mm nominal size, 20mm thick inside and outside plaster in C. M. 1:3, inside plaster finished with floating coat of neat cement, vata in CM1:1 around pipe entering and leaving the manhole and also at the junction of masonry and concrete slab, providing and fixing of SFRC foot steps of approved make at every 0.30m height fixed in CM 1:3, supplying and fixing heavy duty SFRC manhole frame and cover as per IS 12592 (Part I and II) having clear opening of 560mm, including refilling of Jhiri, including curing, watering, ramming, hydro testing of manhole, conveyance & cost of water, and dewatering complete as directed by the Engineer. NoteExcavation of earth work and road cutting for manhole will be measured and paid separately. Manhole "Type-A" of depth 0.90 m	01.00	Each	11500.00	11500.00
57.	17.34.2	Providing and constructing extra depth of manhole "Type-A" for depth beyond 0.90 m and upto 1.65 m with SEWER-BRICK masonry including 20mm plaster inside and outside as per drawing and direction of Engineer.	01.00	Mtr.	5800.00	5800.00
58.	17.35 17.35.1	Providing and constructing of SEWER-BRICK masonry circular manholes of "Type-B" with internal dia 1.20m and depth upto 2.50m having sewer brick masonry wall 230mm thick upto 1.5m, 345mm thick from 1.50m to 2.50m in cement sand mortar 1:4, including concreting PCC M-10 grade (1:4:8) for 225mm thick foundation including curing compaction and form work etc complete, PCC M15 for benching and channel portion, RCC M20 for 200mm thick cover slab including reinforcement, PCC M20 for fixing the	01.00	Each Manhole	22900.00	22900.00

		manhole frame and cover using stone aggregate 20mm nominal size, 20mm thick inside and outside plaster in C. M. 1:3, inside plaster finished with floating coat of neat cement, vata in CM1:1 around pipe entering and leaving the manhole and also at the junction of masonry and concrete slab, providing and fixing of SFRC foot steps of approved make at every 0.30m height fixed in CM 1:3, supplying and fixing heavy duty SFRC manhole frame and cover as per IS 12592 (Part I and II) having clear opening of 560mm, including refilling of Jhiri, including curing, watering, ramming, hydro testing of manhole, conveyance & cost of water, and dewatering complete as directed by the Engineer. Manhole "Type-B" of depth 1.70 m				
59.	17.35.2	Providing and constructing extra depth of manhole "Type-B" for depth beyond 1.70 m and upto 2.50 m with SEWER-BRICK masonry including 20mm plaster inside and outside as per drawing and direction of Engineer.	01.00	Mtr.	10100.00	10100.00
60.	17.36.1	Providing and constructing of SEWER-BRICK masonry circular manholes of "Type-C" with internal dia 1.50m and depth upto 5.0m having sewer brick masonry wall 230mm thick upto 1.5m, 345mm thick from 1.50m to 2.50m and 460mm from 2.50 to 5.0m in cement sand mortar 1:4, including concreting PCC M-10 grade (1:4:8) for 225mm thick foundation including curing compaction and form work etc complete, PCC M15 for benching and channel portion, RCC M20 for 200mm thick cover slab including reinforcement, PCC M20 for fixing the manhole frame and cover using stone aggregate 20mm nominal size, 20mm thick inside and outside plaster in C. M. 1:3, inside plaster finished with floating coat of neat cement, vata in CM1:1 around pipe entering and leaving the manhole and also at the junction of masonry and concrete slab, providing and fixing of SFRC foot steps of approved make at every 0.30m height fixed in CM 1:3, supplying and fixing heavy duty SFRC manhole frame and cover as per IS 12592 (Part I and II) having clear opening of 560mm, including refilling of Jhiri, including curing, watering, ramming, hydro testing of manhole, conveyance & cost of water, and dewatering complete as directed by the Engineer. Note:- Excavation of earth work and road cutting for manhole will be measured and paid separately. Manhole "Type-C" of depth 2.60 m	01.00	Each Manhole	40600.00	40600.00
61.	17.36.2	Providing and constructing extra depth of manhole "Type-C" for depth beyond 2.60 m and upto 5.0 m with SEWER-BRICK masonry including 20mm plaster inside and outside as per drawing and direction of Engineer.	01.00	Mtr.	15900.00	15900.00
62.	17.55.1	Providing, fixing and constructing of pre-cast RCC M-40 grade circular manholes with internal dia 1.0m and up to specified depth having pre-cast RCC M-40 grade circular manhole cover frame (ID 0.56m, OD 0.86m, height 0.20m), conical piece (top ID 0.56m, bottom ID 1.0m, vertical height 0.605m, wall thickness 125mm), and circular rings of required heights (ID 1.0m, height 150 / 300 mm, wall thickness 125mm) below conical piece as per required depth of manhole and having steel reinforcement in all pieces of manhole @ not less than 80 kg per cum of concrete, including cast-in-situ PCC M-10 grade (1:3:6) foundation of 1.625m dia and 150mm thickness, PCC M15 grade circular wall ID 0.925m, wall thickness 200mm, height equal to OD of sewer pipe + 50 mm, PCC M15 grade benching and channel portion and up to top level of sewer pipe etc complete with curing compaction and form work, supplying and fixing heavy duty SFRC manhole cover as per IS 12592 (Part I and II), supplying and fixing plastic encapsulated CI/MS foot steps, including cost of shuttering, steel reinforcement, testing for water tightness etc complete in all respect as per drawing, as per specification and the direction of the Engineer. Pre-cast RCC M-40 grade circular manholes 1.055 m deep to invert with pre-cast manhole cover frame (height 0.20), conical piece (height 0.605), cast-in-situ PCC	01.00	Each	12200.00	12200.00

		M-10 grade foundation, PCC M15 grade circular wall ID 0.925m, wall thickness 200mm height equal to OD of sewer pipe + 50mm, PCC M15 grade benching and channel portion.				
63.	17.55.2	Providing and fixing pre-cast RCC M-40 grade circular ring of ID 1.0m, wall thickness 125mm, height 150 / 300 mm for constructing extra depth of manhole for depth beyond 1.055m as per drawing.	01.00	Mtr.	6160.00	6160.00
64.	17.56.1	Providing, fixing and constructing of pre-cast RCC M-40 grade circular manholes with internal dia 1.2m and up to specified depth having pre-cast RCC M-40 grade circular manhole cover frame (ID 0.56m, OD 0.86m, height 0.20m), conical piece (top ID 0.56m, bottom ID 1.2m, vertical height 0.805m, wall thickness 125mm), and circular rings of required heights (ID 1.2m, height 150/ 300/ 600/ 900mm, wall thickness 125mm) below conical piece as per required depth of manhole and having steel reinforcement in all pieces of manhole @ not less than 80 kg per cum of concrete, including cast-in-situ PCC M-10 grade (1:3:6) foundation of 1.825m dia and 150mm thickness, PCC M15 grade circular wall ID 1.125m, wall thickness 200mm, height equal to OD of sewer pipe +50mm, PCC M15 grade benching and channel portion and up to top level of sewer pipe etc complete with curing compaction and form work, supplying and fixing heavy duty SFRC manhole cover as per IS 12592 (Part I and II), supplying and fixing plastic encapsulated CI/MS foot steps, including cost of shuttering, steel reinforcement, testing for water tightness etc complete in all respect as per drawing, as per specification and the direction of the Engineer. Pre-cast RCC M-40 grade circular manholes 1.255 m deep to invert with pre-cast manhole cover frame (height 0.20), conical piece (height 0.805), cast-in-situ PCC M-10 grade foundation, PCC M15 grade circular wall ID 1.125m, wall thickness 200mm height equal to OD of sewer pipe +50 mm, PCC M15 grade benching and channel portion.	01.00	Each	15300.00	15300.00
65.	17.56.2	Providing and fixing pre-cast RCC M-40 grade circular ring of ID 1.2m, wall thickness 125mm, height 150 /300/600/900mm for constructing extra depth of manhole for depth beyond 1.255m as per drawing.	01.00	Mtr.	6910.00	6910.00
66.	17.57.1	Providing, fixing and constructing of pre-cast RCC M-40 grade circular manholes with internal dia 1.5m and up to specified depth having pre-cast RCC M-40 grade circular manhole cover frame (ID 0.56m, OD 0.86m, height 0.20m), conical piece (top ID 0.56m, bottom ID 1.5m, vertical height 1.105m, wall thickness 125mm), and circular rings of required heights (ID 1.5m, height 150/300/600/900/1200 mm, wall thickness 125mm) below conical piece as per required depth of manhole and having steel reinforcement in all pieces of manhole @ not less than 80 kg per cum of concrete, including cast-in-situ PCC M-10 grade (1:3:6) foundation of 2.125m dia and 150mm thickness, PCC M15 grade circular wall ID 1.425 m, wall thickness 200mm, height equal to OD of sewer pipe+50mm , PCC M15 grade benching and channel portion and up to top level of sewer pipe etc complete with curing compaction and form work, supplying and fixing heavy duty SFRC manhole cover as per IS 12592 (Part I and II), supplying and fixing plastic encapsulated CI/MS foot steps, including cost of shuttering, steel reinforcement, testing for water tightness etc complete in all respect as per drawing, as per specification and the direction of the Engineer. Pre-cast RCC M-40 grade circular manholes 1.555 m deep to invert with pre-cast manhole cover frame (height 0.20), conical piece (height 1.105), cast-in-situ PCC M-10 grade foundation, PCC M15 grade circular wall ID 1.425m, wall thickness 200mm height equal to OD of sewer pipe+50mm, PCC M15 grade benching and channel portion.	01.00	Each	20500.00	20500.00
67.	17.57.2	Providing and fixing pre-cast RCC M-40 grade circular ring of ID 1.5m, wall thickness 125mm, height 150/300/600/900/1200mm for constructing extra depth of manhole for depth beyond 1.555m as per drawing.	01.00	Mtr.	8180.00	8180.00
68.	17.63.1	Constructing providing and fixing of pre-cast RCC M-	01.00	Each	2920.00	2920.00

		40 grade circular Road Side Inspection Chamber including earthwork using sulphate resistant cement with following dia and depth cylindrical piece with 100mm wall thickness, 100mm base slab, inbuilt cover & frame on top, provision for 110mm OD in and out sewer connection with making proper in built benching and channel with PCC M-15 grade including providing cast-in-situ 100mm thick foundation of PCC M-10 grade, supplying and fixing circular precast SFRC Circular 300 mm dia manhole cover with frame - M.D. - 10, including steel reinforcement minimum @ 80kg/cum, testing for water tightness complete in all respect as per drawing, specification and the direction of the Engineer. Pre-cast Road side inspection chamber of 300mm dia (internal), 450mm depth and 600mm dia base foundation				
69.	17.63.2	Pre-cast Road side inspection chamber of 450mm dia (internal), 600mm depth and 750mm dia base foundation	01.00	Each	4520.00	4520.00
70.	17.63.3	Pre-cast Road side inspection chamber of 450mm dia (internal), 900mm depth and 750mm dia base foundation	01.00	Each	5630.00	5630.00
71.	17.65	Providing and making connection to the manhole/ road side chamber/ property chamber by cutting hole in wall, making good the same with brick work/ stone masonry work in cement mortar 1:4, plaster in cement mortar 1:3, encasement of pipe at manhole with 75mm thick M15 grade concrete etc complete as directed by Engineer.	01.00	Each	707.00	707.00
72.	17.66.1	Providing PVC-U pipes as per IS 15328 drop connection externally for depth from 0.60 m and upto 1.0 m drop from branch sewer line to main sewer manhole or vise versa including inspection and cleaning eye, PVC-U drop pipe and bend encased around with cement concrete M15 with all form work, cutting holes in walls and making good with brick/ stone masonry work in cement sand mortar 1:4 plastered with cement sand mortar 1:3 with stiff cement mortar 1:1 around PVC-U pipe in masonry wall, making required channels complete as per standard design and specifications and/ or as the directed of the Engineer: 110 mm dia	01.00	Each	4800.00	4800.00
73.	17.66.2	160 mm dia	01.00	Each	7990.00	7990.00
74.	17.66.3	200 mm dia	01.00	Each	11100.00	11100.00
75.	17.68	Providing, fixing and erecting precast RCC (M20) Vent shaft with cowl, 125mm and 225mm internal and external dia respectively at top, 300mm and 450mm internal and external dia at bottom and 9.0m over all length, bottom 1.175m below ground level fixed in the pit 900mmx900mmx1500mm with PCC M15, 250mm in bed and minimum 200mm all around with top 150mm in PCC M15 with 20mm nominal size graded stone aggregate , junction of vent shaft and concrete grouted with cement mortar 1: including making connection with sewer manhole with 150mm dia NP4 RCC pipe (IS 458-amended upto date) as required including Type-A bedding complete as per standard design and finished with water proofing cement of approved brand as per drawings and/or as directed by Engineer. Note : Only Excavation work will be measured and paid separately	01.00	Each	26700.00	26700.00
76.	17.77	Emptying of septic tank/ soakage well etc, disposing of sludge within a lead of 5km and taking out sewage including refilling with local earth, ramming and compaction in layers, cleaning of site.	01.00	Each	3560.00	3560.00
77.	17.83.1 17.83.1	Cleaning and Flow Test of RCC/SW pipes already laid but not commissioned (including cost and conveyance of water to site) complete in all respect as per direction of Engineer-In-Charge. 150 mm dia	01.00	Mtr.	30.50	30.50

78.	17.83.2	200 mm internal diameter	01.00	Mtr.	41.00	41.00
79.	17.83.3	250 mm internal diameter	01.00	Mtr.	43.50	43.50
80.	17.83.4	300 mm internal diameter	01.00	Mtr.	48.50	48.50
81.	17.83.6	400 mm internal diameter	01.00	Mtr.	65.00	65.00
82.	17.83.7	450 mm internal diameter	01.00	Mtr.	71.50	71.50
83.	17.83.8	500 mm internal diameter	01.00	Mtr.	83.00	83.00
84.	17.83.9	600 mm internal diameter	01.00	Mtr.	90.50	90.50
85.	17.72.1	Supplying & fixing 560mm dia SFRC manhole frame & cover as per IS : 12592-2002 in existing manholes including grouting the frame in PCC M-15 complete in all respect as directed by the Engineer. HD 20	01.00	Each	2400.00	2400.00
86.	21.1.7	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level : 1:4:8 (1 Cement : 4 fine/ coarse sand : 8 graded stone aggregate 40 mm nominal size)	01.00	Cum	3360.00	3360.00
87.	21.1.2	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level : 1:1½:3 (1 Cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size).	01.00	Cum	4700.00	4700.00
88.	22.1.1	Centring and shuttering with plywood or steel sheet upto two stories or height upto 7.5 metre above plinth level including strutting, propping etc. and removal of form for : Foundations, footings, bases of columns, etc. for mass concrete.	01.00	Sqm	162.00	162.00
89.	23.1.2	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering, finishing and reinforcement - All work upto plinth level : 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size)	01.00	Cum	4960.00	4960.00
90.	24.1.2	Brick work with FPS bricks of class designation 75 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand).	01.00	Cum	3760.00	3760.00
91.	.26 29.26.2	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	01.00	Kg.	87.50	87.50
92.	32.3.2	Cement plastering including T&P, scaffolding, material and complete labpour, including cost of water, curing, racking of joints etc. with 20 mm cement plaster of mix : 1:4 (1 cement : 4 fine/ coarse sand)	01.00	Sqm	210.00	210.00
Amounting up to Rs						96.00 Lacs

I/We Tendering above work @ above/below "G" Schedule.

Signature of Tendering Contractor