

ORIGINAL

Section - 6

SPECIFICATIONS

**(General specifications have been mentioned in drawings
and Bills of Quantities)**

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• Section - 7

• **BILLS OF QUANTITIES**

- 1. Include Preliminary Bill items as Bill No. 1**
- 2. VAT Component shall be filled in Bills of Quantities and it shall not be carried to Form of Bid.**
- 3. Any discount offered will not be considered for Provisional Sum Items**

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MUNICIPAL ENGINEERS' DEPARTMENT
COLOMBO MUNICIPAL COUNCIL

CONSTRUCTION OF LATERAL SEWER LINES AT KATHIRESHAN STREET, COLOMBO.13.

ITEM	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
	Bill No 01				
1.0	Preliminaries				
1.1	Provisional sum for providing Performance security.		Provisional sum		60,000.00
1.2	Provisional sum for providing an Advance Payment security.		Provisional sum		100,000.00
1.3	Provisional sum for insurance of the works, Machinery & equipment, Plant, Materials, third party persons & property and Employer's personnel & property at site as per contract.		Provisional sum		22,000.00
1.4	Provisional sum for Insurance of against accident and injury to contractor's personnel as per th contract.		Provisional sum		20,000.00
	Contractor's Facilities				
1.5	Allow lump sum for constructing, maintaining, dismantling and removal on completion of the works, a temporary site office of adequate size including staff rest roomand toilets and other facilities for the contractor's site management staff in accordance with the plans prepared by the Contractor and concurred by the Engineer.	Item			
1.6	Allow lump sum for constructing, maintaining, dismantling and removal on completion of the works, building to be used as workshops and stores for perishable materials. Buildings shall be constructed in accordance with the drawing prepared by the Contractor and concurred by the Engineer. The lump sum shall also include for altering, modifying or dismantling and re-erecting within the site all temporary buildings/stuctures if required.	Item			
1.7	Allow lump sum for providing Accomadation including sanitary facilities and transport Contractor's staff and workment off site.	Item			
1.8	Allow lump sum for providing telephone and facsimile facilities, electricity and water'services for the contractor's site office for their use in connection with the works.	Item			
1.9	Allow lump sum for maintenance, rental, consumption charges etc. for telephone and facsimile facilities, electricity and water services for the contractor's site office for their use in connection with the works.	item			

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ITEM	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
	<u>QUALITY, STANDARDS & PROGRESS</u>				
1.10	Allow Lump sum for provision of progress report photographic record and other schedules including in the ICTAD publication-Guideline for Effective Construction Management. (ICTAD/CM/01), relevant to contract administration as directed by the Engineer.	Item			
1.11	Allow lump sum for all cost in connection with preparing samples for testing, making arrangement for testing of materials, goods etc, as stipulated in the specification, obtaining test reports and submitting the same to the Engineer.	Item			
1.12	Allow lump sum for provision of shop drawings, bar schedules etc.for Engineer's approval.	Item			
	<u>Health, Safety & Environment</u>				
1.13	Allow lump sum for following services throughout the period of a) Employing Workmen to clean and maintain all areas to be in good hygienic conditions including toilets, wash areas, kitchen etc. rest room, canteen facilities, kitchen b) Supplying adequate drinking water, water for washing purposes, soap, detergent, etc. throuhtout the period of costruction.	Item			
1.14	Allow Lump sum for providing all necessary safety measures to workmen at site conforming to the latest industrial safety regulation and as directed by the Engineer.	Item			
1.15	Allow Lump sum for demobilization, removal of all rubbish & debris and clearing up site on completion, leaving all in good order and handing over.	Item			
1.16	Allow Lump sum for employing an adequate number of security personnel and security system on full time basis throughout the period of construction, and provide for necessary security lighting and a warning system.	Item			
1.17	Allow lump sum for provding and maintaining necessary fencing, hoarding, and gates for safeguarding the works, materials and plant as directed by the Engineer.	Item			
1.18	Allow lump sum for stamp duty in accordance with the prevailing regulations of the Government.	Item			
	<u>Total carried over to summary</u>				

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ITEM	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
	SECTION - 1				
	Note : All the items below, rate included for supplying of materials.				
2.0	Bill No 02				
	NOTE : Road cutting Permit should be taken by the contractor from the Central Road Maintenance Unit ((CRMU) of CMC).				
2.1	TEMPORARY REINSTATEMENT				
	Removing of Asphalt surface and temporary reinstate dealing with all existing utility service.	m2	120.00		
	NOTE : Permanent reinstatement should be done by CRMU of CMC and reinstatement cost has to be paid to CRMU separately by the contractor.				
2.2	PERMANENT REINSTATEMENT				
	Permanent reinstatement of damage bitumen surface in pre-mixed road.			Provincial Sum	1,335,000.00
2.3	PIPE WORK				
	Item shall include excavation in trenches, removal of excess earth, shoring, dewatering, preparation surfaces, backfilling and compaction with suitable imported material by 150mm thick compacted layers. Rate to include for 300mm thick Quarry Dust layer on top of the pipe line.				
2.3.1	Provide lay and join spigot and socket grade 600 UPVC pipes of nominal bore 160mm diameter in open trenches.				
	Invert depth 2.0m	Lm	70.00		
2.3.2	Provide lay and join spigot and socket grade 600 UPVC pipes of nominal bore 225mm diameter in open trenches.				
	Invert depth 2.0m	Lm	10.00		
2.4	CONCRETE				
	100mm thick 1:2:4(20mm) cement concrete in bed and haunching along the UPVC pipes. Rate shall include for Form work. Refer Drawing No. ME/DR/AB/SW/13/2021/DR-01	m ³	7.00		

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ITEM	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
2.5	MANHOLE Item shall include excavation, removal of excess earth, shoring, preparation of surface, dewatering, backfilling and compaction with suitable imported material 150mm thick compacted layers. Form work, concrete work reinforcement, connection of pipe ends, providing and fixing of D 400 Type clear opening of 600mm Diameter D.I.Cover & Frame, comply with (BS. EN.124) & 25mm diameter hot dip galvanized steps at 300mm c/c. Comply with (BS.EN. ISO 1461 : 2009).				
2.5.1	750 X 750mm internal dimensions, 75mm thick screed with 1:3:6 (25mm) cement concrete & 200mm thick base and walls with 1:11/2:3(20mm) concrete, single reinforced rectangular manholes.Rate to include for 1:3 cement sand plaster in benching and concrete walls should have a satisfactory smooth finish , plastering not allowed.ME/DR/AB/SW/13/2021/DR-02 Invert depth not exceeding 1.0m (P1 to P6)	Nos	6.00		
2.6	Protection of other services. (Rate shall include for precautions to these service lines or diverting them and repairs to structures if it is damaged due to construction processes.)			Provisional sum	100,000.00
2.7	Temporary diversion of existing flow of sewer line during the construction period.	Item	Allow	Sum	
2.8	Back Drop Connection of new pipe line to the existing Road Manhole and repair manholes walls properly without any leakage.(02 Nos)	Item	Allow	Sum	
TOTAL CARRIED TO GRAND SUMMARY					
SECTION - 2					
	Note : All the items below, rate included for supplying of materials.				
3.0	Bill No 03 NOTE : Road cutting Permit should be taken by the contractor from the Central Road Maintenance Unit ((CRMU) of CMC).				
3.1	TEMPORARY REINSTATEMENT Removing of Asphalt surface and temporary reinstate dealing with all existing utility service.	m2	102.00		

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ITEM	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
	NOTE : Permanent reinstatement should be done by CRMU of CMC and reinstatement cost has to be paid to CRMU separately by the contractor.				
3.2	PERMANENT REINSTATEMENT Permanent reinstatement of damage bitumen surface in pre-mixed road.			Provincial Sum	1,135,000.00
3.3	PIPE WORK Item shall include excavation in trenches, removal of excess earth, shoring, dewatering, preparation surfaces, backfilling and compaction with suitable imported material by 150mm thick compacted layers. Rate to include for 300mm thick Quarry Dust layer on top of the pipe line.				
3.3.1	Provide lay and join spigot and socket grade 600 UPVC pipes of nominal bore 160mm diameter in open trenches. Invert depth 2.0m	Lm	58.00		
3.3.2	Provide lay and join spigot and socket grade 600 UPVC pipes of nominal bore 225mm diameter in open trenches. Invert depth 2.0m	Lm	10.00		
3.4	CONCRETE 100mm thick 1:2:4(20mm) cement concrete in bed and haunching along the UPVC pipes. Rate shall include for Form work .ME/DR/AB/SW/13/2021/DR-01	m ³	6.00		
3.5	MANHOLE Item shall include excavation, removal of excess earth, shoring, preparation of surface, dewatering, backfilling and compaction with suitable imported material 150mm thick compacted layers. Form work, concrete work reinforcement, connection of pipe ends, providing and fixing of D 400 Type clear opening of 600mm Diameter D.I. Cover & Frame, comply with (BS. EN.124) & 25mm diameter hot dip galvanized steps at 300mm c/c. Comply with (BS.EN. ISO 1451 - 2001)				
3.5.1	750 X 750mm internal dimensions, 75mm thick screed with 1:3:6 (25mm) cement concrete & 200mm thick base and walls with 1:11/2:3(20mm) concrete, single reinforced rectangular manholes. Rate to include for 1:3 cement sand plaster in benching and concrete walls should have a satisfactory smooth finish , plastering not allowed. ME/DR/AB/SW/13/2021/DR-02				

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ITEM	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
	Invert depth not exceeding 1.0m-1.5m (P7 to P11)	Nos	5.00		
3.6	Protection of other services. (Rate shall include for precautions to these service lines or diverting them and repairs to structures if it is damaged due to construction processes.)			Provisional sum	100,000.00
3.7	Temporary diversion of existing flow of sewer line during the construction period.	Item	Allow	Sum	
3.8	Back Drop Connection of new pipe line to the existing Road Manhole and repair manholes walls properly without any leakage.(02 Nos)	Item	Allow	Sum	
TOTAL CARRIED TO GRAND SUMMARY					
SECTION - 3					
	Bill No 04 Note : All the items below, rate included for supplying of materials. NOTE : Road cutting Permit should be taken by the contractor from the Central Road Maintenance Unit ((CRMU) of CMC).				
4.1	TEMPORARY REINSTATEMENT				
4.1.1	Removing of pre-mixed surface and temporary reinstatement dealing with all existing utility service.	m2	46.50		
	NOTE : Permanent reinstatement should be done by CRMU of CMC and reinstatement cost has to be paid to CRMU separately by the contractor.				
4.2	PERMANENT REINSTATEMENT				
4.2.1	Permanent reinstatement of damage Asphalt paved surface			Provincial Sum	848,000.00
4.3	DEMOLISHING				
	Demolishing & removing existing pipe line, manhole and removing them away from the site.	Item	Allow	Sum	

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ITEM	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
4.4	PIPE WORK Item shall include excavation in trenches, removal of excess earth, shoring, dewatering, preparation surfaces, backfilling and compaction with suitable imported material by 150mm thick compacted layers. Rate to include for 300mm thk Quarry Dust layer on top of the pipe line.				
4.4.1	Provide lay and join spigot and socket grade 600 UPVC pipes of nominal bore 160mm diameter in open trenches. Invert depth 2.0m	Lm	21.00		
4.4.2	Provide lay and join spigot and socket grade 600 UPVC pipes of nominal bore 225mm diameter in open trenches. Invert depth 2.0m	Lm	10.00		
4.5	CONCRETE 100mm thick 1:2:4(20mm) cement concrete in bed and haunching along the UPVC pipes. Rate shall include for Form work .ME/DR/AB/SW/13/2021/DR-01	m ³	3.00		
4.6	MANHOLE Item shall include excavation, removal of excess earth, shoring, preparation of surface, dewatering, backfilling and compaction with suitable imported material 150mm thick compacted layers. Form work, concrete work reinforcement, connection of pipe ends, providing and fixing of D 400 Type clear opening of 600mm Diameter D.I.Cover & Frame, comply with (BS. EN.124) & 25mm diameter hot dip galvanized steps at 300mm c/c. Comply with (BS.EN. ISO 1461 : 2009).				
4.6.1	750 X 750mm internal dimensions, 75mm thick screed with 1:3:6 (25mm) cement concrete & 200mm thick base and walls with 1:11/2:3(20mm) concrete, single reinforced rectangular manholes. Rate to include for 1:3 cement sand plaster in benching and concrete walls should have a satisfactory smooth finish , plastering not allowed.(P12,P13 & P14)ME/DR/AB/SW/13/2021/DR-02 Invert depth not exceeding 1.0m - 1.5m	Nos.	3.00		
4.6.2	1200 X 900mm internal dimensions, 75mm thick screed with 1:3:6 (25mm) cement concrete & 200mm thick base and walls with 1:11/2:3(20mm) concrete, double reinforced rectangular manholes. Rate to include for 1:3 cement sand plaster in benching and concrete walls should have a satisfactory smooth finish , plastering not allowed. (Proposed MH1)ME/DR/AB/SW/13/2021/DR-03				

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ITEM	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
4.7	Invert depth not exceeding 3.5m SHORING For Manhole Supply and install a suitable earth support system using steel, timber or timber and steel together during the construction period. Invert depth exceeding 2.0m.	Nos m2	1.00 44.00		
4.8	Protection of other services. (Rate shall include for precautions to these service lines or diverting them and repairs to structures if it is damaged due to construction processes.)		Provisional sum		100,000.00
4.9	Temporary diversion of existing flow of sewer line during the construction period.	Item	Allow	Sum	
4.10	Back Drop Connection of new pipe line to the existing Road Manhole and repair manholes walls properly without any leakage.(01 Nos)	Item	Allow	Sum	
4.11	AS BUILT DRAWING Submission of as built drawing indicating the ground level, invert level & location of manholes & alignment of the drain with respect to the national coordinates & mean sea level.The reference line of the road edge, curb edge & other features as directed by the engineer to be produced in 1: 1000 scale in A1 size.		Provisional Sum		25,000.00
TOTAL CARRIED TO GRAND SUMMARY					

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CONSTRUCTION OF LATERAL SEWER LINES AT KATHIRESHAN STREET, COLOMBO.13.

SUMMERY	
Bill No 01 Preliminaries	
Bill No 02 (Section 1)	
Bill No 03 (Section 2)	
Bill No 04 (Section 3)	
Sub Total	
10% Contingencies	
Grand Total	
8% VAT	
Project Amount	

Bidder's Signature

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Section -8
DRAWINGS