



**OFFICE OF THE
EXECUTIVE ENGINEER PUBLIC HEALTH
ENGINEERING DIVISION KARACHI.**

NO.EC/AB/ 3307 /2016.
Karachi Dated, 20/5 /2016.

NOTICE INVITING TENDER.

Sealed tender on B-I/B-II form are hereby invited from the interested participants reputed experienced firms & contractors registered with Pakistan Engineering Council.

The tender will be issued up-to 6-6-2016 at 12 noon and the same will be received back & opened on the same date at 12:30(AN). In case the bids are not responded on the next date for receipt & opening in fixed as 10-6-2016 Or 10-6-2016 at 12 noon (FN). The next tender documents can be had from the office of the undersigned on payment of tender fee shown against each item (Non refundable).

The bid security in shape of pay order of any schedule bank in favor of Executive Engineer Public Health Engineering Division Karachi, must be attached with the tender documents. Conditional tenders will not be accepted. The undersigned reserves the rights to reject any bid or all bids or all any time prior to the acceptance.

S.No.	Name Of Work	Estimated Cost	Bid 2% Security	Tender Fee	Time Period
1.	Repair of Clear Water Tank for Rural Water Supply Scheme Ibrahim Hyderi District Malir Karachi.(O/M)	0.844 Million.	0.017 Million	Rs.1000/=	3 Months
2.	Repair of M. Holes & Cleaning of Manholes i/c cleaning of sewer line for Rural Drainage Scheme Memon Goth Distt: Karachi (O/M)	0.835 Million.	0.017	Rs.1000/=	3 Months
3.	Repair of Man holes Replacement of sewer line & Cleaning of Man holes & Sewer Line for R/Drainage Scheme Khamiso Goth Distt: Karachi (O/M)	0.828 Million.	0.017 Million.	Rs. 1000/=	3 Months
4.	Providing Laying Jointing & Testing 12" Dia RCC Sewer Line & Cleaning of Sewer Line for Rural Drainage Scheme Mulla Essa Goth District Malir Karachi.	0.837 Million.	0.017 Million.	Rs. 1000/=	3 Months

P/L Conveyance main PE Pipe 4" dia Repair of C/Water Tank & Repair of civil Structure for Rural Water Supply Scheme Pir Sirhandi Goth Distt: Karachi.	0.860 Million	0.017 Million.	Rs. 1000/=	3 Months
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MANDATORY REQUIREMENTS.

- a. Bid bond in shape pay order in the name of Executive Engineer PHE Division Karachi.
 - b. Valid PEC Registration Certificate in relevant category for Year 2016.
 - c. Field of Specialization CE-09, CE-10, ME-06, EE-04.
 - d. Affidavit in which the bidder undertakes that it is not involved in any litigation.
 - e. National Tax Number Certificate with CNIC, Annual Return Statement of FBR and Audit report for the year 2015.
 - f. Affidavit in which it should be undertaken that the information provided is true and correct.
 - g. Affidavit that the bidders has not been black listed by any Government/Semi Government/Autonomous body.
 - h. Sindh Revenue Board Registration Certificate.
 - i. Bank statement showing 40% funds available for proposed Work.
- Tender documents shall be issued to the firms qualifying the above mentioned conditions.

The blank tender forms can be obtained from office of the undersigned on application during office hour's up-to __/__/2016 on payment of tender fee specified against each work Tenders will be received back on dated ____/2016. Up to 12.00 Noon & Will be opened on same date up to 12.30 PM being executive Engineer/Chairman in the presence of Committee Members, contractors of their authorized representative. In case of un-responded tenders next date the blank tender form can be obtained from office of the undersigned up to 03-06-2016 up to 12.00 Noon on payment of tenders fee specified against each work. The tenders with be received back on same date upto 12.30 PM and will be opened on same date up-to Executive Engineer/Chairman in the presence of Committee Member, contractors of their authorized representatives. The Earnest money specified would be pledged in the name of Executive Engineer Public Health Engineering Division Karachi in the shape of call deposit from any scheduled Bank and must be attached with bid documents, Otherwise it will not be entertained Earnest Money of un-successful bidders shall be returned after issuance of work orders of successful bidders.

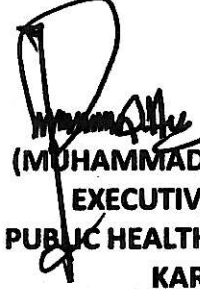
Conditional or telegraphic tenders will not be entertained.

This tender notice (NIT) can also be seen on the Sindh Government website at www.sindh.gov.pk as well as SPPRA website at www.pprasindh.gov.pk.

In case of any kind of Pumping Machinery, Pumps & Pipes provided by the contractors must be provide invoice of authorized dealer/factory in Name of Executive Engineer PHE Division Karachi with sale tax paid certificate otherwise sales tax will be deducted from their

bills as per government policy. The undersigned payment made to contractor after receiving verification certificate from authorized dealer/factory of Pumping Machinery, Pumps & Pipes.

Procuring agency may reject all or any bid subjected to relevant provision of PPRA Rules-2010.



(MUHAMMAD AKBER BALOCH)
EXECUTIVE ENGINEER
PUBLIC HEALTH ENGG: DIVISION
KARACHI.

Copy forwarded with compliments for his kind information to.

1. The Chief Engineer, Public Health Engineering Department Government of Sindh Hyderabad for his kind information.
2. The Director, information Public Relation Department Government of Sindh, Block No.96 Sindh Secretariat Karachi along with (7)Seven Copies for publication in at least three languages leading news papers, i.e Sindhi, Urdu & English.
3. The Director (C.B) Sindh Public Procurement Regulatory Authority (SPPRA) Government of Sindh block No.08 Secretariat No.04-A, Court Road Karachi, Along with demand draft No. 04766793 Dated 19-5- 2016, amounting to Rs.2000/- in the name of Director (A&F) SPPRA Government of Sindh.
4. The Superintending Engineer Public health Engineer Circle Hyderabad for his kind information.
5. The Members of Procurements Committee for information.
6. Assistant Engineer All Under PHE Division Karachi for information.
7. Copy to All Head of Branches PHE Division Karachi for information.
8. Copy to Notice Board for Local Publicity.
9. Copy to office file.



Ph: 022-9210410.
Fax: 022-9210411.
ce.phed.hyderabad@gmail.com

OFFICE OF THE CHIEF ENGINEER
PUBLIC HEALTH ENGG: DEPARTMENT
GOVERNMENT OF SINDH


NO: GM/PHED/ 205 /2016.
Hyderabad dated 17/2 /2016.

OFFICE ORDER:

In Exercise of the power confirmed under Rule 31 of the Sindh public procurement Rules 2010 (amended 2013), the following committee is hereby constituted to redress grievances / complaints that may arise during procuring proceedings in PHE Division Karachi.

Mr. Anjeener Lal Superintending Engineer PHE Circle Hyderabad.	Chairman
Mr. Mohsin Qazi Executive Engineer Local Government Department Govt: of Sindh Karachi.	Member
Mr. Saleem Ahmed Siddique Divisional Accounts Officer PHE Division Karachi.	Member

The Committee shall act in accordance with the rule 31 of Sindh public procurement rules 2010 (amended 2013).


(NAFEES AHMED SHAIKH)
CHIEF ENGINEER
PUBLIC HEALTH ENGG: DEPARTMENT
GOVT: OF SINDH HYDERABAD.

C.C. to the:-

Manager (Assessment-IV) Sindh Public Procurement Regulatory Authority Govt: of Sindh Karachi for information.

Superintending Engineer, PHE Circle Hyderabad for information with reference to his letter No: GM/272 dated 16-02-2016.

Executive Engineer PHE Division Karachi for information with reference to letter No: PHE/148/3022 dated 19-01-2016.

Mr. Mohsin Qazi Executive Engineer Local Govt: Department Govt: of Sindh Karachi for information.

✓ Mr. Saleem Ahmed Siddique Divisional Accounts Officer PHE Division Karachi for information.



GOVERNMENT OF SINDH
PUBLIC HEALTH ENGINEERING
DEPARTMENT

Karachi dated the 6th May, 2013

NOTIFICATION

No.SO(T)/PHE/SPPRA-Rules/2013 (pt-II), In exercise of powers conferred by Rule-7 of SPP Rules-2010, the Division wise Departmental Procurement Committees are hereby constituted in Public Health Engineering Department as under:-

S.#	NAME OF PHE DIVISION	PROCUREMENT COMMITTEE	CHAIRMAN/ MEMBER
01	Hyderabad	Executive Engineer, PHE, Division No. 1 Hyderabad	Chairman
		Executive Engineer, Education Works Division Hyderabad	Member
		Assistant Engineer, PHE Sub-Division. Qasimabad	Member
2	Jamshoro	Executive Engineer, PHE, Division Jamshoro	Chairman
		Executive Engineer, Education Works, Division Hyderabad	Member
		Assistant Engineer, PHE, Sub-Division Jamshoro	Member
3	Thatta	Executive Engineer, PHE, Division Thatta	Chairman
		Executive Engineer, Education Works Division Thatta	Member
		Assistant Engineer, PHE, Sub-Division No. 1 Thatta	Member
4	Tando Muhammad Khan	Executive Engineer, PHE, Division Tando Muhammad Khan	Chairman
		Executive Engineer, Education Works Division Tando Muhammad Khan	Member
		Assistant Executive Engineer, PHE, Sub-Division No. II Tando Muhammad	Member

5	Badin	Executive Engineer, PHE, Division Badin	Chairman
		Executive Engineer, Education Works Division Badin	Member
		Assistant Engineer, PHE, Sub-Division Tando Bago	Member
6	Matiari	Executive Engineer, PHE, Division Matiari	Chairman
		Divisional Accounts Officer Hala Divn. Irrigation Department Hyderabad	Member
		Assistant Engineer, PHE, Sub-Division Matiari	Member
7	Karachi	Executive Engineer, PHE, Division Karachi	Chairman
		Executive Engineer, Local Government Deptt. Karachi	Member
		<i>Assistant</i> Executive Engineer, PHE, Sub- Division No. IV Karachi	Member
8	Mirpurkhas	Executive Engineer, PHE, Division Mirpurkhas	Chairman
		Assistant Engineer, Building Division Works & Services Deptt. Mirpurkhas	Member
		Assistant Engineer, PHE, Sub-Division No. II Mirpurkhas	Member
9	Tando Allahyar	Executive Engineer, PHE, Division Tando Allahyar	Chairman
		Executive Engineer, Highway Division Tando Allahyar	Member
		Assistant Engineer, PHE, Division No. II Tando Allahyar	Member
10	Sanghar	Executive Engineer, PHE, Division Sanghar	Chairman
		Assistant Engineer, Education Works Sub-Division Sinjhora	Member
		Assistant Engineer, PHE Sub-Divn, Qazi Ahmed Sinjhora	Member
11	Tharparkar @ Mithi	Executive Engineer, PHE, Division Tharparkar @ Mithi	Chairman
		Executive Engineer, Education Works & Services Tharparkar @ Mithi	Member

FAX NO. :

24	Kashmore @ Kandhkot	Executive Engineer, PHE, Division Kashmore @ Kandhkot	Chairman
		Executive Engineer, Roads Kashmore @ Kandhkot	Member
		Assistant Engineer, PHE, Sub-Division No. 1 Kashmore @ Kandhkot	Member

Terms of reference of the Committees:

1. Preparing bidding documents
2. Carrying out technical as well as financial evaluation of the bids
3. Preparing evaluation report as provided in Rule 45
4. Making recommendations for the award of contract to the competent authority; and
5. Perform any other function ancillary and incidental to the above.

S.M. KALEEM MAKKI

Secretary to Government of Sindh

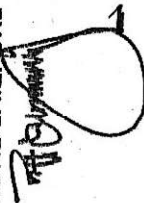
A copy forwarded for information & necessary action to:-

- The Accountant General Sindh, Karachi.
- The Administrative Secretaries (all) in Sindh.
- The Commissioner (all) in Sindh.
- The Chief Engineer, PHED, Hyderabad / Sukkur.
- The Director, Procurement Regulatory Authority Sindh Karachi.
- The Deputy Commissioner (all) in Sindh.
- The Superintending Engineer, PHED (all) in Sindh.
- The Executive Engineer, PHE, Division (all) in Sindh.
- PS to Secretary, PHED, Govt. of Sindh, Karachi.
- Additional Secretary, PHED, Govt. of Sindh, Karachi.

(Signature)
(ABDUL GHAFFAR SHAIKH)
Section Officer (Technical)

PROCUREMENT PLAN FOR THE YEAR 2015-2016, OPERATION & MAINTENANCE
RURAL WATER SUPPLY/DRAINAGE SCHEMES IN PUBLIC HEALTH ENGINEERING DIVISION KARACHI.

S.#	Description of Procurement	Quantity where applicable	Estimated cost.	Fund Allocation for the Year 2015-2016	Sources of the Funding.	Procuring Method	Time of Procurement				Remarks	
							1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter		
1.	Operation & Maintenance of Rural Water Supply/Drainage Scheme in PHE Division Karachi.	Various Items 5 Nos: of Water Supply/Drainage Scheme	4.204 Million	10.000 Million	ADP							9.
1.												


 EXECUTIVE ENGINEER
 PUBLIC HEALTH ENGINEERING DIVISION
 KARACHI.

GOVERNMENT OF SINDH
PUBLIC HEALTH ENGINEERING DEPARTMENT
DISTRICT KARACHI


FUND HEAD	:-	PROVINCIAL
MAJOR HEAD	:-	
MAJOR HEAD	:-	Rural Drainage Scheme Memon Goth (O/M)
SERVICE HEAD	:-	Detailed Working Estimate for Repair of Manholes, & cleaning of Manholes i/c cleaning of sewer line for Rural Drainage Scheme Memon Goth (O/M).

Estimate has been framed in the office of the Executive Engineer Public Health Engineering Division Karachi for the Probable Expenditure that will be incurred for Repair of Manholes, & cleaning of Manholes i/c cleaning of sewer line for Rural Drainage Scheme Memon Goth (O/M).

R 8363 00/-
ESTIMATE COST Rs. 8,35,119/-

GENERAL DESCRIPTION

1. This Estimate for Repair of Manholes, & cleaning of Manholes i/c cleaning of sewer line for Rural Drainage Scheme Memon Goth (O/M).
2. Rates have been provided of General Schedule and Public Health Schedule of Rates.
3. The work will be carried out as per P.W.D specification.
4. Funds are available.


ASSISTANT ENGINEER
PUBLIC HEALTH ENGG:S/DIVN.IV
KARACHI

DETAILED WORKING ESTIMATE FOR REPAIR OF MAN HOLES, & CLEANING OF MANHOLES I/C CLEANING OF SEWER LINE FOR RURAL DRAINAGE SCHEME MEMON GOTH (O/M).

1. Dismantling cement concrete reinforced separating reinforcement From concrete cleaning and straightening the same. (GSI No. 20 P-10)

Roof $1 \times 12 \times 0.785 \times 3.50 \times 3.50 \times 0.75 = 86.54 \text{ Cft}$

86.54 Cft @Rs. 5445/- P.%Cft Rs. 4712/-

2. Reinforced cement concrete work including all labour and material except the cost of still reinforcement and its labour for bending and binding which will be paid separately. This rates also includes all kind of forms mould, lifting shuttering curing rendering and finishing the exposed surface (including screening and washing of shingle) (a) R.C.C work in roof slab beams columns rafts lintels and other structural members laid in position complete in all respects (i) Ratio (1:2:4) (GSI No.6 P/16). Ratio 1:2:4

Roof slab $1 \times 12 \times 0.785 \times 5.0 \times 5.0 \times 0.75 = 176.62 \text{ Cft}$

176.62 Cft @Rs. 337/- P.Cft Rs. 59521/-

3. Fabrication of mild steel reinforcement for cement concrete the cutting bending, laying in position making and fastening i/c cost of binding wire also removal of rust from bars. (G.S.I No. 8(ii) a Page No. 20) 16

$\frac{176.62 \times 4.50}{112} = 7.09 \text{ Cwt}$

7.09 Cwt @Rs. 5001/70 P Cwt Rs. 35462/-

4. Manufacturing and supplying of 21" RCC Manhole cover cast in 1:2:4 Concrete Ratio 3" deep at center, reinforced with 1/2" dia tor steel bar at 3" centre to centre welded to 3/16" thick 3" wide M.S plate two hook of 3/8" dia tor steel bar including compacting i/c curing and transportation within 10 miles. (PHSI. No. 1 P- 30) (R.A approved by Chief Engineer)

Frame/Ring 24" dia $1 \times 50 = 50 \text{ Nos.}$

50 Nos. @ Rs. 1881/18 Each Rs. 94059/-

5. Manufacturing and supplying of RCC ring slab of 21" dia inside 36" dia Outside 7.5 width and 6" thick i/c 3/8" tor steel bar two concentric ring with 3/8" dia 8 Nos. cross link bar welded and two sunk type hook, casted in a 1:1 1/2 :3 concrete with embedded 15 kg. C.I frame in perfect position i/c Transportation charge. (PHSI. NO. 2 P-30) (S.S. 1.7/0 2 - P-30)

$1 \times 32 = 32 \text{ Nos.}$

32 Nos. @ Rs. 1906/60 Each Rs. 61011/-

C.O.B 2547,65/-

6. Shifting to the site and fixing of ³⁶30" dia ring slab in perfect position on Damaged manhole i/c cutting of damaged portion of Manhole in proper Shape and laying of cement mortar of 2" thickness and disposal off Debris. (S-I No.4 Page No.30)

1 x 32 = 32 Nos.

32 Nos. @ Rs. 563/09 Each Rs. 18019/-

7. Providing C.I main hole cover with frame ii cost of material etc. (P.H.S.I No.F-1 Page No.23) 35

only frame

15 x 1.50 = 22.50 Cwt

22.50 Cwt @Rs. 6985/- P. Cwt Rs. 157162/-

8. Cleaning/desilting of Manhole inspection chamber i/c cleaning and Roding of connected Sewers (Average 50' per M.hole removing sewage and solid wastes and throwing outside KMC limits. (GSI.No. 96 P-109) 110

Manholes 1 x 60 = 60 Nos

60 Nos. @Rs. 474/83 Each Rs. 28489/-

9. Cleaning ^{inside} of sewerage line completely restoring original silt free space/ diameter Of pipe line by labour and equipment mechanical/ electrically driven i/c accessories like pully steel rope bucket & size from 6" to 18" dia there to and fro pulling action. The jog i/c all the hire/ caused of equipment & accessories of above winching machine/ devices along with engine with inching drum set having steel rope pully mounted over it steel bucket 6" to 18" dia hook & other protection like safety to labour and other public property & removal off silt/ solid desilting & clearance of site etc complete (SSI No. 5 Page No. 31)

18" dia 1 x 580.0 = 1900.0 Rft @ Rs. 128/80 P.Rft Rs. 2,44,720/-

15" dia 1 x 850.0 = 850.0 Rft @ Rs. 96/60 P.Rft Rs. 82,110/-

12" dia 1 x 560.0 = 560.0 Rft @ Rs. 80/50 P.Rft Rs. 45,080/-

Total Rs. 8,30,345/-

10. Carriage of material of 100 cft / 5 tons of all material like stone aggregate spwall coal Lime etc B.G fail festering paint and crossing bridge guarder pipe sheets rails M.S bars etc or 1000 Nos, bricks 10" x 5" x 3" or 1000 Nos 12" x 6" x 2" or 150 Cft of trucks of any other means owned by the contractor (CSI No. I P/I). (All Lead Approved)

1. Bajri from crusher to site of work (Lead upto ³¹29 miles)


194. 155.0 Cft @Rs. 1520/84 P% Cft


Rs. 3077/2
23571

c.o.b 833422


2.	Sand from Ghagar site of work (Lead upto ⁴¹ 40 miles)		
	97. 78.0 Cft	@Rs. 1879/00 ^{1911/56}	P% Cft ✓ Rs. 1466/- ^{1854/-}
3.	Cement from jawedan cement factory lead upto ²⁵ 36 miles.		
	39. 31.0 Bags	@Rs. 27/93 ^{21/33}	P. Bag ✓ Rs. 866/- ^{832/-}
4.	Steel from ^{Sandhar} Karachi mill to site of work lead ³³ 49 miles.		
	7.09 Cwt. 12. v	@ Rs. 11/95 ^{16/51}	P. Cwt Rs. 85/- ^{198/-}


G.Total Rs. ~~8,35,119/-~~
R 836306/-
say R 836300/-


ASSISTANT ENGINEER
PUBLIC HEALTH ENGG: S/DIVN. IV
KARACHI


EXECUTIVE ENGINEER
PUBLIC HEALTH ENGG: DIVISION
KARACHI

TECHNICAL SANCTIONED For Rs: 836300/
(RUPEES: Eight Lac thirty six thousand
three hundred) ONLY



SUPERINTENDING ENGINEER
Public Health Engg. Circle
Hyderabad


CHIEF ENGINEER,
PUBLIC HEALTH ENGG. DEPTT
GOVERNMENT OF SINDH, HYDERABAD.

**DETAILED WORKING ESTIMATE FOR REPAIR OF MAN HOLES, &
CLEANING OF MANHOLES I/C CLEANING OF SEWER LINE FOR RURAL
DRAINAGE SCHEME MEMON GOTH (O/M).**

MATERIAL STATEMENT

S.no	ITEM	QTY	BAJRI	H/SAND	CEMENT	STEEL
1	RCC plain 1:2:4	176.62	155.42	77.71	31.08	--
2	Fabrication	7.09	--	--	--	7.09
3	Rcc M. Hole cover	50	39	19	8	5
TOTAL			155.42 194.42	77.71 96.71	31.08 39.08	7.09 12.09
			155.00 194	78.00 97.	31.00 39.	7.09 12.0


 ASSISTANT ENGINEER
 PUBLIC HEALTH ENGG:S/DIVN.IV
 KARACHI

GOVERNMENT OF SINDH
PUBLIC HEALTH ENGINEERING DEPARTMENT
DISTRICT KARACHI

FUND HEAD	:-	PROVINCIAL
MAJOR HEAD	:-	
MAJOR HEAD	:-	Rural Drainage Scheme Mulla Essa Goth District Malir Karachi. (O/M)
SERVICE HEAD	:-	Detailed Working Estimate for Providing, Laying, Jointing and Testing 12" dia RCC sewer line & Cleaning of Sewer line for Rural Drainage Scheme Mulla Essa Goth District Malir Karachi. (O/M)

Estimate has been framed in the office of the Executive Engineer Public Health Engineering Division Karachi for the Probable Expenditure that will be incurred for Providing, Laying, Jointing and Testing 12" dia RCC sewer line & Cleaning of Sewer line for Rural Drainage Scheme Mulla Essa Goth District Malir Karachi. (O/M)

B 885900/-
ESTIMATE COST Rs. 8,36,900/-

GENERAL DESCRIPTION

- 1: This Estimate for Providing, Laying, Jointing and Testing 12" dia RCC sewer line & Cleaning of Sewer line for Rural Drainage Scheme Mulla Essa Goth District Malir Karachi. (O/M)
2. Rates have been provided of General Schedule and Public Health Schedule of Rates.
3. The work will be carried out as per P.W.D specification.
4. Funds are available.


ASSISTANT ENGINEER
***PUBLIC HEALTH ENGG: S/DIVN.II**
KARACHI

**DETAILED WORKING ESTIMATE FOR PROVIDING, LAYING,
JOINTING AND TESTING 12" DIA R.C.C SEWER LINE & CLEANING
OF SEWER LINE FOR RURAL DRAINAGE SCHEME MULLA ESSA
GOTH, DISTRICT MALIR KARACHI.(O/M)**

- 1: Excavation for pipe line in branches and pits in all kind of soils of murum i/c trimming and dressing side to true alignment and shape leveling of beds of trenches to correct level and grade, cutting joint holes and disposal of surplus earth within a one chain as directed by Engineer, In charge, providing fence guards, Lights, flange and temporary crossing for non vehicular traffic where ever required lift upto 5ft: (1.52m) and lead up to one chain (30.5m) (PHSI No.5 P/ 47).

12" dia $1 \times 500 \times 3.50 \times \frac{4.0 + 6.0}{2} = 8750.0 \text{ Cft}$

8750.0 Cft @ Rs. 4650/- P%oCft Rs. 40688/-

2. Providing R.C.C Pipe of ASTM C-76-62 T / C 76-70 Class - II wall 'B' fixing in trenches i/c cutting, fitting and jointing with rubber ring i/c testing with water to specified pressure (PHSI No. 113 P- 17)

12" dia $1 \times 500 = 500.00 \text{ Rft}$

500.00 Rft @ Rs. 412/- P.Rft Rs. 206000/-

- 3: Refilling the excavated stuff in trenches 6" thick later i/c watering ramming to full Compaction. (PHSI No. 24 P/ 53).77

Qty. of Item No. 1 = 8750.0 Cft
 $\frac{8750 \times 90}{100} = \frac{787500}{100} = 7875 \text{ Cft}$

~~7850.0~~ 7875 Cft @ Rs. 2760/- P%o Cft Rs. 21735/-

- 4: Excavation in foundation of building bridges and other structures including dag belling dressing refilling around structure with excavated earth watering and ramming lead up to 5ft: (C) in ordinary soil (GSI No. (18 Page No. 6).

M. Holes. 0' - 5' depth $1 \times 9 \times 0.785 \times 6.0 \times 6.0 \times 5.0 = 1271.70 \text{ Cft}$

1271.70 Cft @ Rs. 3176/25 P%oCft. Rs. 4039/-

$1 \times 9 \times 0.785 \times 6.0 \times 6.0 \times 1.0 = 254.34 \text{ Cft}$

254.34 Cft @ Rs. 3277/03 P%oCft. Rs. 833/-

3176.25
100.78

3277/03

2,73,295/-

5: Rehandling of earth work upto ^{at lead of 50'} single throw of kassi-pharrah (GSI no.9 P/3)

Qty. same item No. 4 = 1271.70 + 254.34 = 1526.04 Cft

(-) $9 \times 3.14 \times 5.50 \times 0.50 \times 5.0 = 388.57$

~~1526.04 Cft~~

@Rs. 1058/75 ✓

P% Cft ✓

1137.46

Rs.

~~1616/-~~ R 1204/

1137.46

6: Cement concrete plain including placing compacting finish and curing complete i/c screening & washing of stone aggregate without shuttering (GSI No. 16 P/5).

Ratio 1:4:8

Manhole

$9 \times 0.785 \times 6.0 \times 6.0 \times 0.5 = 127.17$ Cft

127.17 Cft ✓

@Rs. 11288/75 ✓

P% Cft ✓

Rs. 14356/- ✓

(b) For C.C Ratio (1: 2: 4)

Chennal
Deduction

$9 \times 0.785 \times 4.0 \times 4.0 \times 1.33 = 150.34$ Cft ✓

$9 \times 0.785 \times 4.0 \times 1.33 \times 1.33 (-) = 49.98$ Cft ✓

Total = ~~100.35~~ 100.35 Cft ✓

100.35 Cft ✓

@ Rs. 14429/25 ✓

P% Cft ✓

Rs. 14480/- ✓

7. Reinforced cement concrete work including all labour and material except the cost of still reinforcement and its labour for bending and binding which will be paid separately. This rates also includes all kind of forms mould, lifting shuttering curing rendering and finishing the exposed surface (including screening and washing of shingle (a) R.C.C work in roof slab beams columns rafts lintels and other structural members laid in position complete in all respects (i) Ratio . (1:2:4) (GSI No.6 P/16).

Ratio 1:2:4

Raft $9 \times 0.785 \times 6.0 \times 6.0 \times 0.50 = 127.17$ Cft ✓

Vertical wall $9 \times 3.142 \times 4.50 \times 0.50 \times 5.0 = 318.13$ Cft ✓

Roof $9 \times 0.785 \times 5.0 \times 5.0 \times 0.75 = 132.47$ Cft ✓

Total = 577.77 Cft ✓

Deduction

Manhole cover $9 \times 0.785 \times 2.0 \times 2.0 \times 0.75 = 21.19$ Cft ✓

Total = 556.57 Cft ✓

557.0 Cft ✓

@Rs. 337/- ✓

P.Cft ✓

Rs. 187709/- ✓

2.0.15 491044/-

8. Fabrication of mild steel reinforcement for cement concrete the cutting bending, laying in position making and fastening i/c cost of binding wire also removal of rust from bars. (G.S.I No. 8(ii) a Page No. 20)

$$\frac{557.0 \times 4.50}{112} = 22.37 \text{ Cwt}$$

22.37 Cwt @Rs. 5001/70 P Cwt Rs. 111888/-

9. Providing C.I main hole cover with frame i/c cost of material etc. (P.H.S.I No.F-1 Page No:23)

only frame $9 \times 1.50 = 13.50 \text{ Cwt}$

13.50 Cwt @Rs. 6985/- P. Cwt Rs. 94298/-

10. Manufacturing and supplying of RCC ring slab of 21" dia inside 36" dia Outside 7.5 width and 6" thick i/c 3/8" tor steel bar two concentric ring with 3/8" dia 8 Nos. cross link bar welded and two sunk type hook, casted in a 1:1 1/2 :3 concrete with embedded 15 kg. C.I frame in perfect position i/c transportation charge. (SI. NO. 2 P-30)

To raise of existing M. Holes.
~~and new~~ 1 x 25 = 25 Nos.

25 Nos. @Rs. 1906/60 Each Rs. 47665/-

11. Manufacturing and supplying RCC Main hole cover in 1:2:4 concrete ratio 4 inch deep at centre reinforcement with 1/2" dia for steel basis at centre reinforcement with 3/8" dia for steel bass at 3" c/c welded to 1/8" thick 2 1/2 inches deep M.S Plate i/c curing stacking and transportation with 10 meter. (SI. No. 1 P-30) (R.A.A. Based on schedule)

24" dia 1 x 50 = 50 Nos

New & Existing

50 Nos. @Rs. 913/63 Each Rs. 45682/-

R 94059/-

12. Cleaning inside sewerage line completely restoring original silt free space Diameter of pipe line by labour and equipment (Mechanically/electrically) i/c accessories like pulleys steel rope, bucket and draggers sizing from 6" to 18" dia there to end fro puling action (No of passes shall be as money as required Etc complete (PHSI. No. 5 P- 31)

12" dia 1 x 300.0 = 300.0 Rft

300.0 Rft @ Rs. 80/50 P.Rft Rs. 24150/-

Total

~~Rs. 8,15,139/-~~

R 863 104/-

13. Cartage of RCC pipe of any class with collar on mechanical transport i/c unloading and stacking at site of work. (PHSI No. 2 P- 46) (Lead 23 miles)

12" dia 500.0 Rft @ Rs. 720/24 P.% Rft Rs. 3601/-

14. Carriage of material of 100 cft / 5 tons of all material like stone aggregate spwall coal Lime etc B.G fail festering paint and crossing bridge guarder pipe sheets rails M.S bars etc or 1000 Nos, bricks 10" x 5" x 3" or 1000 Nos 12" x 6" x 2" or 150 Cft of trucks of any other means owned by the contractor (CSI No. I P/I).

1. Bajri from ^{crusher} Gizri to site of work (Lead upto 25 miles)

739 . .
-700.0 Cft @Rs 1390/60 P% Cft

Rs. 16277/-
~~9734/-~~

2. Sand from Ghagar site of work (Lead upto 32 miles)

369 ,
-350.0 Cft @Rs. 1618/52 P% Cft

Rs. 5972/-
~~5665/-~~

3. Cement from jawedan cement factory lead upto 23 miles.

132 ,
-127.0 Bags @Rs. 20/13 P.Bag

Rs. 2657/-
~~2557/-~~

4. Steel from ^{Saddar} Karachi to site of work lead 11 miles.

27.37
-22.37 Cwt. @ Rs. 7/34 P.Cwt

Rs. 256/-
~~209/-~~

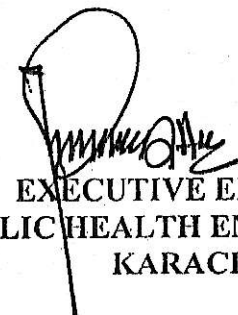
G.Total

R 885867/-
Rs. 8,36,905/-

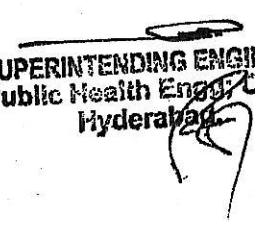
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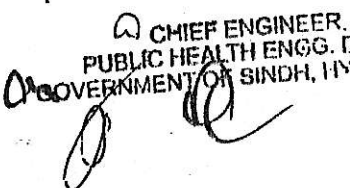
Rs. 8,36,900/-
R 885900/-


ASSISTANT ENGINEER
PUBLIC HEALTH ENGG:S/DIVN.II
KARACHI


EXECUTIVE ENGINEER
PUBLIC HEALTH ENGG: DIVISION
KARACHI

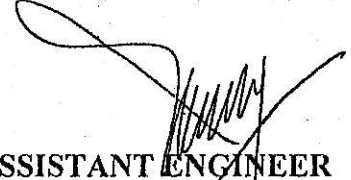
TECHNICAL SANCTIONED For Rs: 885900/-
(RUPEES: Eight lac eighty five
thousand and nine hundred) ONLY


SUPERINTENDING ENGINEER
Public Health Engg. Circle
Hyderabad


CHIEF ENGINEER,
PUBLIC HEALTH ENGG. DEPTT
GOVERNMENT OF SINDH, HYDERABAD.

MATERIAL STATEMENT

S.no	ITEM	QTY	BAJRI	H/SAND	CEMENT	STEEL
1	CC plain 1:4:8	127.00	122.0	44.0 61	12.0	--
2	CC plain 1:2:4	100.00	88.0	44.0	17.0	--
3	RCC plain 1:2:4	557.00	490.0	245.0	98.0	22.37
TOTAL			700.0 739	350.0 369	127.0 132	22.37 27.37


 ASSISTANT ENGINEER
 PUBLIC HEALTH ENGG:S/DIVN.II
 KARACHI

GOVERNMENT OF SINDH
PUBLIC HEALTH ENGINEERING DIVISION KARACHI.

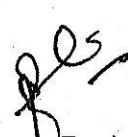
FUND HEAD.	:-	PROVINCIAL.
MAJOR HEAD.	:-	
MINOR HEAD.	:-	RURAL WATER SUPPLY SCHEME IBRAHIM HYDRI, DISTRICT MALIR KARACHI.
SERVICE HEAD.	:-	DETAILED WORKING ESTIMATE FOR REPAIR OF CLEAR WATER TANK FOR RURAL WATER SUPPLY SCHEME IBRAHIM HYDRI, DISTRICT MALIR KARACHI.

Estimate has been framed in the office of the Executive Engineer, Public Health Engineering Division Karachi for the probable expenditure that will be incurred on the work of Repair of clear water tank for Rural Water Supply Scheme Ibrahim Hyderi District Malir, Karachi.

R 833200/-
ESTIMATED COST. RS. ~~8,43,200/-~~

GENERAL DESCRIPTION.

1. This Estimate for the work of. Repair of clear water tank for Rural Water Supply Scheme Ibrahim Hyderi District Malir , Karachi.
2. Rate have been provided of General Schedule and Public Health Schedule of Rates.
3. The work will be carried out as per P.W.D. specification.
4. Funds are available.


Assistant Engineer
Public Health Engineering S/Div-IV
District Karachi.

DETAILED WORKING ESTIMATE FOR REPAIR OF CLEAR WATER TANK FOR RURAL WATER SUPPLY SCHEME IBRAHIM HYDERI DISTRICT MALIR, KARACHI.

REPAIR OF CLEAR WATER TANK

1	Cement plaster (1:4) upto ^{12'} 20' height 3/4" thick (GSI Item No. ^{11(c)} 10 Page No. 52)		
	In side of tank	$2 \times 3.142 \times 60 \times 10.0$	= 3770.40 Sft
	Outer side	$2 \times 3.142 \times 62 \times 3.0$	= 1168.82 Sft
	^{Roof} Roof slab chaja	$2 \times 3.142 \times 62 \times 3.0$	= 1168.82 681.81 Sft
			<u>5621.03</u>
	Total		= 6108.04 Sft

5621.03
6108.04 Sft

@Rs. 3015/76 P.%/Sft

R 169516/-
Rs. 184204/-

2. Cement concrete plain i/c placing compacting finishing and curing complete i/c Screening & washing of stone aggregate w/o shuttering (G.S. Item No. 5 (a) P.16) RATIO. 1:2:4.

^{Roof} Bed of tank	$1 \times 0.785 \times 62.0 \times 62.0 \times 0.167 + 0.25$	= 629.15	609.02 Cft
^{Bed} Bottom	$1 \times 0.785 \times 60.0 \times 60.0 \times 0.33$	= 932.50 Cft	
	Total	= 1541.52 Cft	1561.73

1562.00
Qty. 1541.52 Cft.

@Rs. 14429/25 P.% Cft

R 225385/-
Rs. 222430/-

3. Water proofing layer over the domical or flat slab of the HSR in 2 coat of bitumen laid using 34 lbs % Sft per % (PHSI 2 Page 55)

^{Roof} treatment	$5 \times 0.785 \times 60.0 \times 60.0$	= 14130.0 Sft
	14130.0 Sft	@Rs. 2208/- P.% Sft

Rs. 311990/=

4. P/F in position C.C foundation 1:3:6 M.S ladder of angle iron 2" x 2" x 1/4 a part with M.S Bar 3/4 " dia space 1.00' apart painting 3 coats with anti corrosive steel paint etc. complete (PHS Item No.3 Page No. 15)

for M.S ladder

$4 \times 15.00 =$	60.00 Rft
60.00 Rft	@Rs. 799/- P.Rft.

Rs. 47940/-

2,00,754,831/-

5 Providing C.I main holes cover with frame i/c cost of material etc complete (PHSI No.1 P/35).

Covered only $1 \times 8 = 8.0 \times 30 \text{ kg} = \frac{240.00 \text{ kg}}{50.08} = 4.79 \text{ Cwt}$

4.79 Cwt @Rs. 6985/- P.Cwt

Rs. ~~34458/-~~ ^{33458/-}

Total Rs. ~~8,00,022/-~~ ^{788289/-}

6. Carriage of material of 100 cft / 5 tons of all material like stone aggregate spwall coal Lime etc B.G fail festering paint and crossing bridge guarder pipe sheets rails M.S bars etc or 1000 Nos, bricks 10" x 5" x 3" or 1000 Nos 12" x 6" x 2" or 150 Cft of trucks of any other means owned by the contractor (CSI No. 1 P/I).

1. Bajri from crusher to site of work (Lead upto ²⁵ ~~37~~ miles)
^{1375.} ~~1357.0~~ Cft @Rs. ~~1781/32~~ ^{1390/60} P% Cft ✓

R 19121/-
 Rs. ~~24172/-~~

2. Sand from Ghaghar to site of work (Lead upto ³⁹ ~~46~~ miles)
^{996.} ~~1014.24~~ Cft @Rs. ~~1097/56~~ ^{1846/44} P% Cft ✓

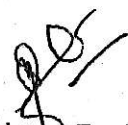
R 18391/-
 Rs. ~~11132/-~~

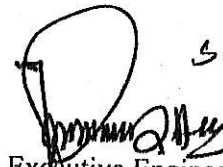
3. Cement from jawedan cement factory. (Lead upto ²⁷ ~~29~~ miles)
^{330.} ~~332.0~~ Bags @Rs. ~~23/73~~ ^{22/53} P.Bag ✓

R 7435/-
 Rs. ~~7878/-~~

G.Total Rs. ~~8,43,204/-~~ ^{833236/-}

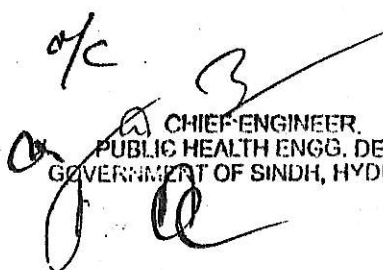
Say R. 833200/-


 Assistant Engineer
 Public Health Engineering S/Div.IV
 District Karachi.


 Executive Engineer
 Public Health Engineering
 Division Karachi.


TECHNICAL SANCTIONED For No: 833200/-
 (RUPEES: Eighty three thousand Two hundred) ONLY

SUPERINTENDING ENGINEER
 Public Health Engg. Circle
 Hyderabad.


 CHIEF ENGINEER,
 PUBLIC HEALTH ENGG. DEPTT
 GOVERNMENT OF SINDH, HYDERABAD.

MATERIAL STATEMENT

S.no	ITEM	QTY	BAJRI	H/SAND	CEMENT	STEEL
1	Cement plaster 1:4 ¾" thick	6108.04 5621.00	--	335.94 309.15	69.63 64.07	--
2	CC plain 1:2:4	1541.60 1562.00	1356.60 1374.56	678.30 687.28	262.00 265.54	--
TOTAL			1356.60 1374.56	1014.24 996.43	331.63 329.61	--
SAY			1357.0 1375	1014.0 996	332.00 330	--


 ASSISTANT ENGINEER
 PUBLIC HEALTH ENGG:S/DIVN.IV
 KARACHI

GOVERNMENT OF SINDH.

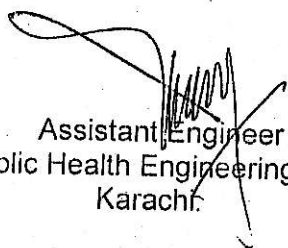
FUND HEAD.	:-	PROVINCIAL.
MAJOR HEAD.	:-	
MINOR HEAD.	:-	RURAL WATER SUPPLY SCHEME PIR SIRHANDI GOTH DISTRICT MALIR KARACHI (O/M)
SERVICE HEAD.	:-	DETAILED WORKING ESTIMATE FOR PROVIDING LAYING CONVEYANCE MAIN P.E PIPE 4" DIA, REPAIR OF CLEAR WATER TANK. & REPAIR OF CIVIL STRUCTURE FOR RURAL WATER SUPPLY SCHEME PIR SIRHANDI GOTH DISTRICT MALIR KARACHI (O/M)

This Estimate has been framed in the office of the Executive Engineer, Public Health Engineering Division Karachi for the probable expenditure that will be incurred for the work of Providing Laying, Conveyance Main P.E Pipe 4" Dia, Repair of Clear Water Tank, & Repair of Civil Structure for Rural Water Supply Scheme Pir Sirhandi Goth District Malir Karachi

^{882.6007}
ESTIMATED COST. Rs. 8,60,330/-

GENERAL DESCRIPTION

1. This Estimate for the work of Providing Laying, Conveyance Main P.E Pipe 4" Dia, Repair of Clear Water Tank, & Repair of Civil Structure for Rural Water Supply Scheme Pir Sirhandi Goth District Malir Karachi
2. Rate have been provided of General Schedule and Public Health Schedule of Rates.
3. The work will be carried out as per P.W.D. specification.
4. Funds are available.



Assistant Engineer
Public Health Engineering S/Div:II
Karachi.

**DETAILED WORKING ESTIMATE FOR PROVIDING LAYING CONVEYANCE MAIN
P.E PIPE 4" DIA, REPAIR OF CLEAR WATER TANK, & REPAIR OF CIVIL
STRUCTURE FOR RURAL WATER SUPPLY SCHEME PIR SIRHANDI GOTH
DISTRICT MALIR KARACHI (O/M)**

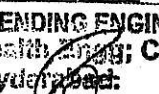
GENERAL ABSTRACT OF COST

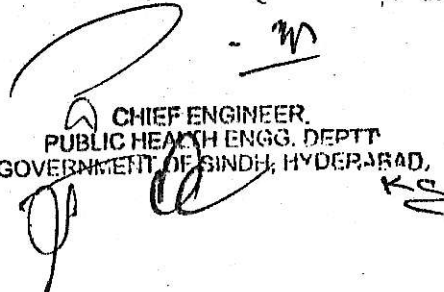
1. CONVEYANCE MAIN 4" DIA.	275066/- Rs. -2,73,465/-
2. REPAIR OF CLEAR WATER TANK	258237/- Rs. 2,54,900/-
3. REPAIR OF CIVIL STRUCTURE	349277/- Rs. 3,31,966/-
TOTAL	882580/- Rs. 8,60,331/-
SAY	882600/- Rs. 8,60,330/-


Assistant Engineer
Public Health Engg: S/Division No. II
District Karachi


Executive Engineer
Public Health Engineering
Division Karachi

TECHNICAL SANCTIONED For Rs: 882600/-
(RUPEES: Eight Lacs eighty two
Thousand Six Hundred) ONLY


SUPERINTENDING ENGINEER
Public Health Engg; Circle
Hyderabad:


CHIEF ENGINEER,
PUBLIC HEALTH ENGG. DEPTT
GOVERNMENT OF SINDH, HYDERABAD.

DETAILED WORKING ESTIMATE FOR 4" DIA CONVEYANCE MAIN AT WATER SUPPLY SCHEME PIR SARHANDI GOTH DISTRICT MALIR KARACHI.(O/M)

1. Dismantling and removing road mentalling (GSI No. 51 P13)

$1 \times 140 \times 6.0 \times 1.50 = 1260.00 \text{ Cft}$

Qty. 1260.00 Cft. @ Rs. 605/- P.% Cft. Rs 7623/=

2. Excavation for pipe line in trenches and pits in all kinds of soil of murum i/c trimming and dressing sides to true alignment and shape leveling of beds of trenches to Correct level and grade, cutting, joints, holes and disposal of surplus earth Within a one chain as directed by Engineer incharge, providing fence guards Lights, flags and temporary crossing for non vehicular traffic where ever Required lift upto 5 ft.(1.52 m) and lead upto one chain.(30.5 m) (PHSI No. 5 Page No. 62).

For crossing $1 \times 200.0 \times 6.0 \times 4.0 = 4800.00 \text{ Cft}$

Qty. 4800.00 Cft. @ Rs. 4650/- P.% Cft. Rs 22320/=

3. Excavation for pipe line in trenches and pit in soft rock by hammering and chiseling where blasting is prohibited dressing sides to true alignment and shape leveling of beds of trenches to Correct level and grade, cutting, joints, holes and disposal of surplus earth Within a one chain as directed by Engineer incharge, providing fence guards Lights, flags and temporary crossing for non vehicular traffic where ever Required lift upto 5 ft. and lead upto one chain.(PHSI No. 7 Page No. 47).62

For crossing $1 \times 200.0 \times 6.0 \times 3.0 = 3600.00 \text{ Cft}$

Qty. ~~3300.00~~ 3600 Cft. @ Rs. 10770/- P.% Cft. Rs. ~~38795/=~~ 38772/-

4. Excavation for pipe line in trenches and pit in hard rock by blasting i/c trimming and dressing sides to true alignment and shape leveling of beds of trenches to Correct level and grade, cutting, joints, holes and disposal of surplus earth Within a one chain as directed by Engineer incharge, providing fence guards Lights, flags and temporary crossing for non vehicular traffic where ever Required lift upto 5 ft.(1.52m) and lead upto one chain.(30.5 m) (PHSI No. 10 Page No. 48).69

$1 \times \frac{200.0 \times 6+5}{2} \times 3.0 = 3300.00 \text{ Cft.}$

Qty. 3300.00 Cft. @ Rs. 24150/- P.% Cft. Rs. 79659/=

1075. Supply of Pit sand excavation. (SMI No. 49 P-4)

$1 \times 200.0 \times 3.0 \times 2.0 = 1200.00$
 $= 1800.00 \text{ Cft.}$
 39.25
 Ded: of pipe $200 \times 0.785 \times 0.75 \times 0.75 = 88.00 \text{ Cft}$
 0.50×0.50
 $= 1160.75$
 Total = 4712.00 Cft

Qty. 1712.00 Cft. @ Rs. 900/- P.% Cft. Rs. 15408/=

= 10499/-

99 R. 158833/

6. Providing laying & ^{fixing} jointing of polyethylene pipe (HDPE-100) SDR-13.67 PN-8 conforming to ISO-4427-Dim 8074.8.75 & PS-3380:1994-
 Manufactured by API-certified, ^{fixing in trench including cutting fitting}
 And jointing, including testing with water to a pressure of also includes ^{complete in all respect wsl.}
 Transportation charges of pipe from Factory to site of work Ayooob Goth
 District Karachi @ working pressure of 6 bars (266 ft/87 PSI) ^{Density}
 (PHSI. No. P-25): (110 mm P.E Pipe) ^{for HDPE pipes (HDPE-100)}
 Main road 4" dia 1 x 200 = 200.0 Rft ^{B-S. 3580 & PS 13051 (PHSI No. 1) - P-25}

Qty. 200.00 Rft. @ Rs. 224/- P.Rft. Rs. 44800/=

1077. C.I. Sluice valve heavy pattern (Test-pressure 300 lb/sq. inch (imported) (PHSM. Item No.2 Page No.9).

4" dia. 1 x 2 = 2 Nos. @ Rs. 5460/- Each. Rs. 10920/=

1078. C.I. tail piece. (SMI. No. 9 P-15)

4" dia. 1 x 4 = 4 Nos. @ Rs. 487/50 Each. Rs. 1950/=

1079. Fire Hydrant tee (PHSI. No. 10 P-A6)

4" dia. 1 x 4 = 4 Nos. @ Rs. 1112/50 Each. Rs. 4450/=

10710. Air valve double acting 3" x 1" (imported) (SMI. No. 8 P-18)

1 x 4 = 4 Nos. @ Rs. 4000/= Each. Rs. 16000/=

10711. But fusion joint of P.E. Pipe. (PHSI. No. ii P- 20)

4" dia. 1 x 2 = 2 Joints @ Rs. 1000/00 P.Joint Rs. 2000/=

12. Making joint of C.I special fitting i/c laying of the required diameter and Testing joint along with abestes cement pressure time to the specified Pressure & making boot all leady joint etc. complete (PHSI No. 1 P-18)

4" dia 2 x 2 = 4 Joints. @ Rs. 937/- P. Joint Rs. 3721/=

13. Refilling the Excavation stuff and trenches 6" thick layer Including watering, ramming and full compaction etc. Complete. (P.H.S. Item No. 24 Page No. 53)

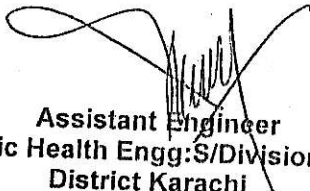
90% Qty. as Item No. 2+3 & 4 = 4800+3600+3300 = 11700-
 $\frac{-11700.0 \times 90}{100} = -10530.0 \text{ Cft.}$

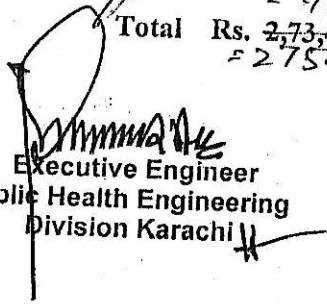
Qty. 10619.0 Cft @ Rs. 2760/- P.%o Cft. Rs. 29309/

C/O Rs. 270304/.

14. Cartage of UPVC/ P.E pipe of any class by mechanical transport
i/c loading unloading and stacking at site.
4" dia (100mm) P.E pipe from factory to site of work (Lead 36 miles)

92/38
Qty. 200.00 Rft. @ Rs. 46/19- P. % Rft. = 185/-
Add 10% Cont. - Profit on S. 112. on Rs. 45769/- Rs. ~~92/-~~
= 45771/-
Total Rs. ~~2,73,465/-~~
= 275066/-


Assistant Engineer
Public Health Engg: S/Division No. II
District Karachi


Executive Engineer
Public Health Engineering
Division Karachi

DETAILED WORKING ESTIMATE FOR REPAIR OF CLEAR WATER TANK FOR RURAL WATER SUPPLY SCHEME, PIR SARHANDI GOTH, UC DARSANO CHHANO DISTRICT KARACHI (G/M)

PART-B

REPAIR OF CLEAR WATER TANK

1. Cement plaster (1:4) upto ^{12'} 20' height $\frac{3}{4}$ " thick (GSI No. 11(c) Page No. 51)

Inside $1 \times 3.142 \times 40 \times 10.00 = 1256.80$ Sft.

Outside wall $1 \times 3.142 \times 42 \times 3.00 = 395.89$ Sft.

Roof slab Chajja $1 \times 3.142 \times 42.00 \times 3.00 = 230.93$
~~207.37~~ sft.

TOTAL 1883.62
1860.06 Sft.

1860.06 Sft.

@ Rs. 3015/76 P%Sft.

= 56817/-
 Rs. 56095/-

2. Cement concrete plain i/c placing compacting and curing complete i/c screening & washing of stone aggregate w/o shuttering (GSI No. 5 P/15) Ratio 1:2:4

Top of Tank $1 \times 0.785 \times 44.0 \times 44.0 \times \frac{0.167 + 0.25}{2} = 316.86$ cft

Bottom Bed $1 \times 0.785 \times 40.00 \times 40.00 \times 0.33 = 414.48$ cft.

TOTAL 731.34 cft.

731.34 Cft

@ Rs. 14429/25 P%Sft.

Rs. 105526/-

3. Water Proofing layer over the domical or flat slab of the HSR in 2 coasts of bitumen laid using 34 lbs % Sft. per % (PHSI No. 2 Page 55)

C.W.T Slab $1 \times 0.785 \times 44.0 \times 44.0 = 1519.76$ sft.

1519.76 Sft

@ Rs. 2208/- P%Sft.

Rs. 33556/-

Rs. 195899/-

4. Providing and fixing C.C. foundation (1:3:6) M.S. Ladder M.S. Single iron 2" x 2" x 1/4" and part M.S. bar 3/4" dia spaced 1.0 part painting 3 coats with anticorrosive steel paint etc. complete (PHSI No. 3 Page No.55)

For M.S. Ladder

2 x 15.00 = 30.00 Rft.
 30.00 Rft. @ Rs. 799/- P.rft. Rs. 23970/-


5. Providing C.I. Manhole cover with frame i/c cost of material etc. complete. (PHSI No. 14 Page No.13).

1 x 4 = 4 d 30.00 Kg. = $\frac{120 \text{ Kg.}}{50.08} = 2.396 \text{ cwt.}$
 2.396 cwt. @ Rs. 4318/- P.cwt. = 10346/-
 TOTAL Rs. 229493/- = 236605/-

6. Cartage of 100 Cft/5 tons of all material like stone aggregate, spawl, coal, lime, surkhi etc. B.G Rail fastenings points and crossing bridges Guarder pipe sheets rails, M.S. Bars etc. or 1000 Nos. bricks 10" x 5" x 3" or 1000 Nos. 12" x 6" x 2" or 15 Cft. or Trunks of any other means owned by the contractors (GSI No.

i) Bajri: from Crusher to site of work (lead upto ⁴⁵ 37 miles)
 Qty 644.0 Cft. @ Rs. 1781/32 P% Cft. = 11472/-
 ii) Sand from Ghagghar to site of work (lead upto ⁴ 16 miles)
 Qty 389.0 Cft. @ Rs. 1097/56 P% Cft. = 4270/-
 iii) Cement from cement factory. (Lead upto ⁵² 29 Miles).
 Qty 138.0 Bags. @ Rs. 23/73 P.Bag = 5479/-
 Total Rs. 248510/- = 258337/-

ASSISTANT ENGINEER
 PUBLIC HEALTH ENGINEERING SUB-DIVN: II
 KARACHI


 EXECUTIVE ENGINEER
 PUBLIC HEALTH ENGINEERING
 DIVISION KARACHI

MATERIAL STATEMENT

FOR CLEAR WATER TANK

SR	ITEM OF WORK	QTY	BAJRI	HILL SAND	CEMENT	STEEL
1	C.C. Plain 1:4:8	3019.46	2898.68	1449.34	289.86	--
2	R.C.C. Work 1:2:4	7706.20	6781.45	3390.72	1348.58	--
3	Cement Plaster $\frac{3}{2}$ " thick 1:4	2969.15 1884.0	--	106.89 103.62	21.67 21.47	--
4	C.C. Plain 1:2:4	594.00 731.34	522.72 643.57	261.36 321.78	100.98 124.32	--
5	Fabrication	447.72	--	--	--	447.72
TOTAL			10202.85	5208.31	1761.09	447.72
SAY			10203.00	5208.00	1761.00	448.00

643.57 425.40 145.79
644.0 425.0 146.0

Assistant Engineer
Public Health Engineering S/Div-II
District Karachi

**DETAILED WORKING ESTIMATE FOR REPAIR OF CIVIL WORK
FOR RURAL WATER SUPPLY SCHEME, PIR SARHANDI GOTH, UC
DARSANO CHHANO DISTRICT KARACHI (O/M)**

PART-C

**REPAIR OF COMPOUND WALL / STAFF QUARTE R &
PUMP HOUSE**

1. Excavation in foundation building bridges and other structure including leveling dressing refilling around the structure with excavated earth ramming lead upto 5' in ordinary soil (G.S. Item No. 18.b Page No. 4).

In ordinary Soil				
Size of C/Wall	1 x 100(+)	30 (+)	20.0	= 150.0 Cft.
	150.0 x 2.0 x 2.50			= 750.0
				= 2382.00
Qty 2382.0 Cft.	@ Rs. 3176/25	P%oCft.		Rs. 2382/-

2. Cement concrete brick or stone ballast 1 ½ to 2" gauge Ratio (1:4:8) (G.S. Item No. 4 (b) P. No. 14).

Wall	1 x 150 x 2.0 x 0.50	=	150.00 Cft.
For Path	1 x 80.0 x 10.00 x 0.33	=	264.00 Cft.
Gate Pillars	1 x 20.0 x 10.0 x 0.33	=	66.0 Cft.
		Total =	330.0 Cft.
			480.0
Qty 330.0 Cft.	@ Rs. 9416/28	P%oCft.	Rs. 31074/-

3. Erection and removal of centering RCC or plain cement concrete work of Deodar wood 2nd class (vertical) (G.S. Item No. 19/b (ii) P.No. 17) 19

Wall	2 x 150.0 x 3.0	=	900.0 Sft.
Qty 900.0 Sft.	@ Rs. 3127/41	P%Sft.	Rs. 28147/-

C/O Rs. 75727/-

4. Cement concrete plain i/c placing compacting finishing and curing complete i/c screening & washing of stone aggregate w/o shuttering (G.S. Item No. 5 (a) P.15)

Ratio 1:3:6.

Wall $1 \times 150 \times 1.0 \times 3.0 = 450.0 \text{ Cft.}$
 Qty 450.0 Cft. @ Rs. 12595/- P% Cfft. Rs. 56678/-

5. Providing laying (1:3:6) cement concrete solid block masonry wall above 6" thickness set in (1:6) cement mortar in ground floor super structure i/c sacking out joints & curing etc. complete (G.S. Item No. 23 P. No. 18).

Wall $1 \times 150 \times 0.50 \times 4.50 = 338.00 \text{ Cft.}$
 Extra Pillars $25 \times 0.50 \times 0.50 \times 4.50 = 28.00 \text{ Cft.}$
old & new
 Total = 366.00 Cft.

Qty 366.00 Cft. @ Rs. 15771/01 P% Cfft. Rs. 57722/-

6. Cement plaster (1:4) upto ^{12'} 20' height $\frac{1}{2}$ " thick (G.S. Item No. 11 (b) Page No. 5)

Plinth for wall $2 \times 150 \times 1.50 = 450.0 \text{ Sft.}$
 For wall $2 \times 150 \times 4.50 \times 1350.00 = 1350.00 \text{ Sft.}$
 Top $1 \times 150 \times 0.50 = 75.00 \text{ Sft.}$
 For S.Q. Plinth $2 \times (19.50 + 11.50) \times 1.50 = 93.00 \text{ sft.}$
 For P.House Plinth $2 \times (15 + 13.0) \times 1.50 = 84.00$
 Total = 2052.00 Sft.
_{1902.00}

Qty 2052.00 Sft. @ Rs. 2283/93 P% Sft.

$= 434401 -$
 Rs. 46,866/-

Rs. 233567/-

7. Providing & Laying thick topping C.C. (1:2:4) including surface finding and dividing into panel (GSI No. 16 Page 41)

2" thick.

Staff Quarter		13	195.0
On Slab over Room =	1 x 15.0 x 9.0 =	9.0	135.00
On Slab over Verandah =	1 x 15.0 x 13.0 =		195.00
Pump House = <i>Roof</i>	1 x 15.0 x 13.0 =		195.00
			525.00 sft.

Qty 525.00 Sft. @ Rs. 3275/50 P%Sft. Rs. 17,196/-

8. Prime Coat of Chalk distemper (GSI No. 23 P/53)⁵⁴

For Compound wall = $2 \times 150.0 \times 4.50 = 1350.00$ sft.

TOP = $1 \times 150.0 \times 0.50 = 75.00$ sft.

Staff Quarter
Room inside = $2 \times (12+10) \times \frac{10.50+10.0}{2} = 451.00$ sft.

Verandah = $2 \times (12+6) \times \frac{8.50+8.00}{2} = 297.00$ sft.

Room O/S = $1 \times 14.0 \times 10.00 = 140.00$ sft.

Verandah O/S = $2 \times 7 \times \frac{8.50+8.00}{2} = 246.00$ sft.

Verandah front side = $1 \times 14.00 \times 8.00 = 112.00$ sft.

Pump House
Inside = $2 \times (12+10) \times \frac{10.5+10.0}{2} = 451.00$ sft.

Outside = $2 \times (13.5+11.5) \times \frac{10.5+10}{2} = 513.00$ sft.
3504.50

Deduction

Verandah opening = $2 \times 8.0 \times 6.50 = 104.00$ sft.

Door = $2 \times 2 \times 3.50 \times 6.50 = 91.00$ sft.

Window = $2 \times 5.00 \times 3.00 \times 4.00 = 120.00$ sft.
~~315.00 sft.~~

Net Qty 3751.00 (-) 315.00 = 3189.50
3190.00 = 4336.00 sft.

Qty 4336.00 Sft. @ Rs. 442/75 P%Sft. Rs. 19,198/-

3190.00

19124/-
90 Do. 264887/-

Weather coat (c) Rabboring 38 (a) P-56)

9. Distemping Three coat (G.S.I No. 24 (c) P/53).
The surface with 2 coats

Same Qty of Chalk = 4336.00 sft. ^{3189.50}
Qty 4336.00 Sft. @ Rs. 1079/65 P%Sft. ^{3190.} = 4237/-
Rs. 46,814/- ^{1328/25}

10. Painting old surface, painting door & window any type (GSI No. 4 (c)
Page No. 67) ⁶⁸ 2 coat

Door $2 \times 2 \times 3.50 \times 6.50 = 91.00$ sft.

Window $2 \times 5.0 \times 3.0 \times 4.0 = 120.00$ sft.
TOTAL 211.00 sft.

211.00 Sft. @ Rs. 1160/06 P%Sft. Rs. 2448/-
= 309706/-
Total Rs. 308525/-

11. Cartage 100 Cft/ 5 Tons of all materials like stone aggregate spawl, coal, lime, surkhi etc. B.G. Rail fastenings points and crossing bridges, Girders, pipes, sheets Rails, M.S. Bars etc. or 1000 Nos. bricks, 10" x 5" x 3" or 1000 Nos. tiles, HYPERLINK "mailto: 12@ x 6" x 2" or 150 Cft. Of Timber or 100 mounds of feul wood by truck or any other means owned by the contractors (G.S. Item No. 1 Page No. 1).

i) Stone ballast: from Gizri to site of work (lead upto 35 miles) ⁵⁴
Qty 317.0 Cft. @ Rs. 1716/20 P%Cft. ^{461.} = 10764/-
Rs. 5440/- ^{2334/84}

ii) Bajri: from Crusher to site of work (lead upto 37 miles) ⁴⁵
Qty 813.0 Cft. @ Rs. 1781/32 P%Cft. ^{828.} = 16906/-
Rs. 7035/- ^{2041/80}

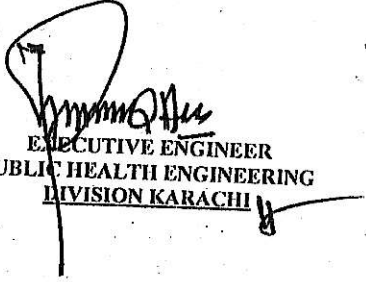
iii) Sand from Ghagghar to site of work (lead upto 16 miles) ⁴
Qty 641.0 Cft. @ Rs. 1097/56 P%Cft. ^{712.} = 5033/-
Rs. 7035/- ^{706/84}

Rs. 342409/-

iv) Cement from cement factory. (Lead upto 29-Miles). ⁵² = 6868/-
183.0 ^{37/53}
Qty 469.0 Bags. @ Rs. 23/73 P.Bag Rs.4010/-

Total Rs.339492/-
= 349277/-


ASSISTANT ENGINEER
PUBLIC HEALTH ENGINEERING SUB-DIVN:II
KARACHI


EXECUTIVE ENGINEER
PUBLIC HEALTH ENGINEERING
DIVISION KARACHI

MATERIAL STATEMENT

S#	ITEM OF WORK	QTY.	STONE BALLAST	BAJRI	HILL SAND	CEMENT	STEEL
1	C.C. Brick or stone ballast 1:4:8	330.00 480.	317.00 461.	--	158.00 230.	32.00 46.	--
2	C.C. Plain 1:3:6	450.00	--	414.00	207.00	59.00	---
3	Block Masonry 1:3:6	366.00	--	322.00 337.0	163.00 168.0	47.00 48.0	---
4	Cement Plaster ½" thick 1:4	2052.00 1902.0	---	---	74.00 68.0	15.00 14.0	---
5	2" thick topping	525.00		77.00	39.00	16.00	---
	TOTAL	--	317.00 461.	813.00 828.	641.00 712	169.00 183.0	--
	SAY	--	317.00 461.0	813.00 828.	641.00 712.	169.00 183.0	--


 Assistant Engineer
 Public Health Engg/Sub-Divn: No.II
 District Karachi

GOVERNMENT OF SINDH
PUBLIC HEALTH ENGINEERING DEPARTMENT
DISTRICT KARACHI


FUND HEAD	: -	PROVINCIAL
MAJOR HEAD	: -	
MAJOR HEAD	: -	Rural Drainage Scheme Khamiso Goth (O/M)
SERVICE HEAD	: -	Detailed Working Estimate for Repair of Manholes, Replacement of sewer line & cleaning of Manholes & sewer line for Rural Drainage Scheme Khamiso Goth (O/M).

Estimate has been framed in the office of the Executive Engineer Public Health Engineering Division Karachi for the Probable Expenditure that will be incurred for Repair of Manholes, Replacement of sewer line & cleaning of Manholes & sewer line for Rural Drainage Scheme Khamiso Goth (O/M).

R 886500/
ESTIMATE COST Rs. 8,27,730/-

GENERAL DESCRIPTION

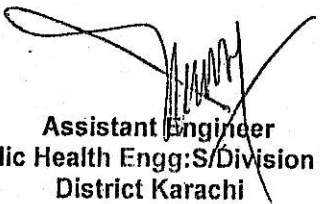
- 1: This Estimate for Repair of Manholes, Replacement of sewer line & cleaning of Manholes & sewer line for Rural Drainage Scheme Khamiso Goth (O/M).
2. Rates have been provided of General Schedule and Public Health Schedule of Rates.
3. The work will be carried out as per P.W.D specification.
4. Funds are available.

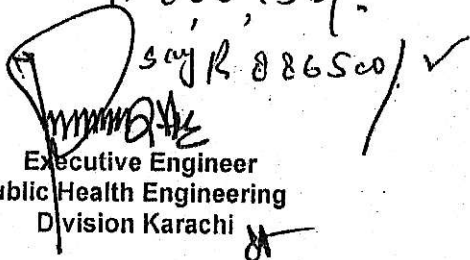

ASSISTANT ENGINEER
PUBLIC HEALTH ENGG.S/DIVN.II
KARACHI

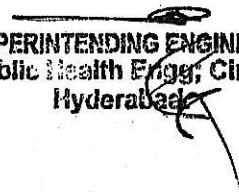
**DETAILED WORKING ESTIMATE FOR REPAIR OF MAN HOLES,
REPLACEMENT OF SEWER LINE & CLEANING OF MANHOLES & SEWER LINE
FOR RURAL DRAINAGE SCHEME KHAMISO GOTH (O/M).**

GENERAL ABSTRACT OF COST

1. REPAIR OF MANHOLES.	Rs. 1,20,601/- ^{147461/-}
2. REPLACEMENT OF SEWER LINE	Rs. 6,18,410/- ^{650280/-}
3. CLEANING OF SEWER & MANHOLES	Rs. 88,717/- ✓
TOTAL	Rs. 8,27,730/- ^{8,86,458/-} ✓


Assistant Engineer
Public Health Engg: S/Division No. II
District Karachi


Executive Engineer
Public Health Engineering
Division Karachi


SUPERINTENDING ENGINEER
Public Health Engg. Circle
Hyderabad

TECHNICAL SANCTIONED For Rs: 886500/-
(RUPEES: Eight lac eighty six
thousand five hundred) ONLY


CHIEF ENGINEER,
PUBLIC HEALTH ENGG. DEPT.
GOVERNMENT OF SINDH, HYDERABAD.

**DETAILED WORKING ESTIMATE FOR REPAIR OF MAN HOLES,
REPLACEMENT OF SEWER LINE & CLEANING OF MANHOLES & SEWER LINE
FOR RURAL DRAINAGE SCHEME KHAMISO GOTH (O/M).**

REPAIR OF MANHOLES

1. Dismantling cement concrete reinforced separating reinforcement-
From concrete cleaning and straightening the same. (GSI No. 20 P-10)

M.Hole $1 \times 7 \times \frac{0.785 \times 4.0 + 3.5 \times 4.0 + 3.50 \times 0.75}{2} = 57.95 \text{ Cft}$
Roof

57.95 Cft @Rs. 5445/- P.%Cft Rs. 3155/-

2. Reinforced cement concrete work including all labour and material except the cost of still reinforcement and its labour for bending and binding which will be paid separately. This rates also includes all kind of forms mould, lifting shuttering curing rendering and finishing the exposed surface (including screening and washing of shingle (a) R.C.C work in roof slab beams columns rafts lintels and other structural members laid in position complete in all respects (i) Ratio . (1:2:4) (GSI No.6 P/16).
Ratio 1:2:4

Roof slab $1 \times 7 \times 0.785 \times 5.0 \times 5.0 \times 0.75 = 103.03 \text{ Cft}$

103.03 Cft @Rs. 337/- P.Cft Rs. 34721/-

3. Fabrication of mild steel reinforcement for cement concrete the cutting bending, laying in position making and fastening i/c cost of binding wire also removal of rust from bars. (G.S.I No.8(ii)a Page No.16)

$\frac{103.03 \times 4.0}{112} = 3.67 \text{ Cwt}$
4.50 4.13

4.13
~~3.67~~ Cwt @Rs. 5001/70 P Cwt Rs. ~~18356/-~~ 20657/-

4. Manufacturing and supplying of 24" RCC Manhole cover cast in 1:2:4 Concrete Ratio 3" deep at center, reinforced with 1/2" dia tor steel bar at 4" centre to centre welded to 3/16" thick 2" wide M.S plate two hook of 3/8" dia tor steel bar including compacting i/c curing and transportation within 10 miles. (PHSI. No. 1 P- 30) (R.A approved by Chief Engineer No. DWE/239 Hyd. Dt. 24/2/2016 for R/D/S Haji Gul Hassan Goth) ~~R.A.A Based on schedule~~

24" dia $1 \times 7 = 7 \text{ Nos.}$

7 Nos. @ Rs. 1881/18 Each Rs. 13168/-

5. Providing C.I main hole cover with frame ii cost of material etc. (P.H.S.I No.J-1 Page No.35)

only frame/Reinf $1 \times 7 \times \frac{1.50}{1.0} = 7.0 \text{ Cwt}$
7.0 Cwt @Rs. 6985/- P. Cwt

R 73343/-
Rs. ~~48895/-~~

Total Rs. ~~1,19,160/-~~

R 145044/-

6 Carriage of material of 100 cft / 5 tons of all material like stone aggregate spwall coal Lime etc B.G fail festering paint and crossing bridge guarder pipe sheets rails M.S bars etc or 1000 Nos, bricks 10" x 5" x 3" or 1000 Nos 12" x 6" x 2" or 150 Cft of trucks of any other means owned by the contractor (CSI No. 1/P71).

1.	Bajri from crusher to site of work (Lead upto 16 miles)			
	91.0 99.0 Cft	@Rs 1097/56	P% Cft	Rs. 10871 9951
2.	Sand from Ghagar site of work (Lead upto 40 miles)			
	45.0 48.0 Cft	@Rs. 1879/-	P% Cft	Rs. 8461 9021
3.	Cement from jawedan cement factory lead upto 20 miles.			
	18.0 19.0 Bags	@Rs. 18/33	P.Bag	Rs. 3301 3481
4.	Steel from ^{saddar} Karachi mill to site of work lead ³³ 95 miles.			
	3.67 4.83 Cwt.	@ Rs. 13/25 16/51	P.Cwt	Rs. 4351 801
G.Total				Rs. 1,20,601/- 1,47,461

REPLACEMENT OF SEWER LINE

1. Excavation for pipe line in branches and pits in all kind of soils of murum i/c trimming and dressing side to true alignment and shape leveling of beds of trenches to correct level and grade, cutting joint holes and disposal of surplus earth within a one chain as directed by Engineer, In charge, providing fence guards, Lights, flange and temporary crossing for non vehicular traffic where ever required lift upto 5ft: (1.52m) and lead up to one chain (30.5m) (PHSI No.5 P/ 62).

0' - 5' depth.

12" dia 1 x 290 x 3.50 x 5.0 = 5075.0 Cft

18" dia 1 x 60 x 4.50 x 5.0 = 1350.0 Cft

Total = 6425.0 Cft

6425.0 Cft @ Rs. 4650/- P%oCft

Rs. 29876/-

5' - 8' depth.

18" dia 1 x 60 x 4.50 x 3.02 = 810.0 Cft

540 810.0 Cft @ Rs. 5200/- P%oCft

Rs. ~~42131~~ 2808

2. Providing R.C.C Pipe of ASTM C-76-62 T / C 76-70 Class - II wall 'B' fixing in trenches i/c cutting, fitting and jointing with rubber ring i/c testing with water to specified pressure (PHSI No. 8 (1) P- 17)

12" dia 1 x 290 = 290.00Rft

290.00 Rft @ Rs. 412/- P.Rft

Rs. 119480/-

18" dia 1 x 60.0 = 60.00Rft

60.00 Rft @ Rs. 618/- P.Rft

Rs. 37080/-

C.O.L. 1906/18
R 1895/11

3: Refilling the excavated stuff in trenches 6" thick later i/c watering ramming to full Compaction. (PHSI No. 24 P/77).

Qty. of Item No. 1 = $6425.0 + 810.0 = 7235.0$ Cft

$\frac{7235.0 \times 90}{100} = 6511.50$ Cft

6511.50 Cft @ Rs. 2760/- P%o Cft Rs. 17972/-

4: Excavation in foundation of building bridges and other structures including dag belling dressing refilling around structure with excavated earth watering and ramming lead up to 5ft: (C) in ordinary soil (GSI No. 18 C Page No.4).

for 12" Sewer line

0' - 5' depth $1 \times 7 \times 0.785 \times 6.0 \times 6.0 \times 5.0 = 989.10$ Cft

989.10 Cft @ Rs. 3554/38 P%o Cft Rs. 3516/-

5' - 8' depth $1 \times 6 \times 0.785 \times 6.0 \times 6.0 \times 1.0 = 197.82$ Cft

197.82 Cft @ Rs. 3655/16 P%o Cft Rs. 827/-

5: Rehandling of earth work upto ^{a lead of 50'} single throw kassi phacrah (GSI no.9 P/3)

Qty. same item No. 4 = $989.10 + 197.82 = 1186.92$ Cft

(-) $7 \times 3.14 \times 5.50 \times 0.50 \times 5.0 = 302.22$
 1186.92 Cft @ Rs. 1058/75 P%o Cft Rs. 1257/-

6: Cement concrete plain including placing compacting finish and curing complete i/c screening & washing of stone aggregate without shuttering (GSI No. 18 P/5).

Ratio 1:4:8

Manhole bed $1 \times 7 \times 0.785 \times 6.0 \times 6.0 \times 0.5 = 98.91$ Cft

98.91 Cft @ Rs. 11288/75 P% Cft Rs. 11166/-

(b) For C.C Ratio (1: 2: 4)

12" dia $1 \times 6 \times 0.785 \times 4.0 \times 4.0 \times 1.33 = 100.22$ Cft

18" dia $1 \times 0.785 \times 4.0 \times 4.0 \times 1.83 = 22.98$ Cft

Total = 123.20 Cft

Deduction

12" 15" dia $1 \times 0.785 \times 6 \times 4.0 \times 1.33 \times 1.33 = 33.32$ Cft

18" 12" dia $1 \times 0.785 \times 4.0 \times 1.83 \times 1.83 = 10.51$ Cft

Total = 43.83 Cft

$123.20 (-) 43.83 = 79.37$ Cft.

79.37 Cft @ Rs. 14429/25 P% Cft Rs. 11452/-

235144

07. Reinforced cement concrete work including all labour and material except the cost of still reinforcement and its labour for bending and binding which will be paid separately. This rates also includes all kind of forms mould, lifting shuttering curing rendering and finishing the exposed surface (including screening and washing of shingle) (a) R.C.C work in roof slab beams columns rafts lintels and other structural members laid in position complete in all respects (i) Ratio . (1:2:4) (GSI No.6 P/18).

Ratio 1:2:4

Raft $1 \times 7 \times 0.785 \times 6.0 \times 6.0 \times 0.50 = 98.91 \text{ Cft}$

Vertical wall $1 \times 6 \times 3.142 \times 4.50 \times 0.50 \times 5.0 = 212.08 \text{ Cft}$

$1 \times 3.142 \times 4.50 \times 0.50 \times 6.0 = 42.41 \text{ Cft}$

Roof $1 \times 7 \times 0.785 \times 5.0 \times 5.0 \times 0.75 = 103.03 \text{ Cft}$

Total = 456.43 Cft

Deduction

Pipes $2 \times 6 \times 0.785 \times 1.33 \times 1.33 \times 0.50 = 8.33 \text{ Cft}$

$1 \times 2 \times 0.785 \times 1.83 \times 1.83 \times 0.50 = 2.62 \text{ Cft}$

Manhole cover $1 \times 7 \times 0.785 \times 2.0 \times 2.0 \times 0.75 = 16.48 \text{ Cft}$

Total = 27.43 Cft

Net Qty $456.43 (-) 27.43 = 429.00 \text{ Cft}$

429.00 Cft

@Rs. 337/-

P.Cft

Rs. 144573/-

08. Fabrication of mild steel reinforcement for cement concrete the cutting bending, laying in position making and fastening i/c cost of binding wire also removal of rust from bars. (G.S.I No. 7(ii) a Page No. 20)

$429.0 \times 4.0 = 17.25$
 $17.25 \times 112 = 15.32 \text{ Cwt}$

17.25
15.32 Cwt

@Rs. 5001/70

P.Cwt

Rs. 86279/-
~~Rs. 76626/-~~

09. Providing C.I main hole cover with frame ii cost of material etc.

(P.H.S.I No.F-1

Page No. 23) 35

10.50

$1 \times 7 \times 1.0 \times 1.50 = 7.0 \text{ Cwt}$

= 7.0 Cwt

only frame

10.50 7.0 Cwt

@Rs. 6985/-

P. Cwt

Rs. 73343/-
~~Rs. 48895/-~~

10. Manufacturing and supplying RCC Main hole cover in 1:2:4 concrete ratio 3 inch deep at centre reinforcement with 3/8" dia for steel basis at centre reinforcement with 3/8" dia for steel bass at 4; c/c welded to 1/8" thick 2.5 inches deep M.S Plate i/c curing stacking and transportation with 10 meter. (R.A approved by Ch. Engr.)

Extra $1 \times 7 = 7 \text{ Nos}$

$1 \times 43 = 43 \text{ Nos.}$

Total = 50 Nos.

50 Nos.

@Rs. 1881/18

Each

Total

Rs. 94059/-

Rs. 6,00,887/-

Rs. 633,398/-

11. Cartage of RCC pipe of any class with collar on mechanical transport i/c unloading and stacking at site of work. (PHSI No. 2 P- 46) (Load 19 Miles)

12" dia 290.0 Rft

@Rs. 1003/29

P.% Rft

Rs. 1883/-

18" dia 60.0 Rft

@Rs. 2023/13

P.% Rft

Rs. 1214/-

1244/93

747/-

Rs. 636028/-

12. Carriage of material of 100 cft / 5 tons of all material like stone aggregate spwall coal Lime etc B.G fail festering paint and crossing bridge guarder pipe sheets rails M.S bars etc or 1000 Nos, bricks 10" x 5" x 3" or 1000 Nos 12" x 6" x 2" or 150 Cft of trucks of any other means owned by the contractor (CSI No. I P/I).

2. Bajri from crusher to site of work (Lead upto 16 miles)

~~542.0~~
581

@Rs 1097/56 P% Cft

Rs. ~~5949/-~~
6377/-

2. Sand from Ghagar site of work (Lead upto 40 miles)

~~271.0~~
290

@Rs. 1879/- P% Cft

Rs. ~~5092/-~~
5449/-

3. Cement from jawedan cement factory lead upto 20 miles.

~~98.0~~
106

@Rs. 18/33 P.Bag

Rs. ~~1796/-~~
1943/-

5. Steel from Karachi mill to site of work lead 95 miles.

~~15.32~~
29.125 Cwt.

@Rs. ~~13/25~~
16/51 P.Cwt

Rs. ~~562/-~~
483/-

G.Total

~~Rs. 6,18,410/-~~
Rs. 6,50,280/-

CLEANING OF SEWER & MANHOLES

1. Cleaning/desilting of Manhole inspection chamber i/c cleaning and Roding of connected Sewers (Average 50' per M.hole removing sewage and solid wastes and throwing outside KMC limits. (GSI.No. 96 P-1097)

Manholes 1 x 19 = 19 Nos

19 Nos.

@Rs. 474/83 Each

Rs. 9022/-

2. Cleaning inside sewerage line completely restoring original silt free space/ diameter of pipe line by labour and equipment mechanical/ electrically driven i/c accessories like pully steel rope bucket & size from 6" to 18" dia there to and fro pulling action. The jog i/c all the hire/ caused of equipment & accessories of above winching machine/ devices along with engine with inching drum set having steel rope pully mounted over it steel bucket 6" to 18" dia hook & other protection like safety to labour and other public property & removal off silt/ solid desilting & clearance of site etc complete (SSI No. 5 Page No. 31)

18" dia 1 x 400.0 = 400.0 Rft @ Rs. 128/80 P.Rft

Rs. 51,520/-

12" dia 1 x 350.0 = 350.0 Rft @ Rs. 80/50 P.Rft

Rs. 28,175/-

Total

Rs. 88,717/-

ASSISTANT ENGINEER
PUBLIC HEALTH ENGG:S/DIVN.II
KARACHI

EXECUTIVE ENGINEER
PUBLIC HEALTH ENGG: DIVISION
KARACHI

REPLACEMENT OF SEWER LINE

MATERIAL STATEMENT

S.no	ITEM	QTY	BAJRI	H/SAND	CEMENT	STEEL
1	CC plain 1:4:8	98.91 ✓	94.95 ✓	47.47 ✓	9.49 ✓	--
2	CC plain 1:2:4	79.37 ✓	69.84 ✓	34.92 ✓	13.49 ✓	--
3	RCC plain 1:2:4 <i>M. H. Cover</i>	429.0 ✓ <i>50</i>	377.52 ✓ <i>30.0</i>	188.76 ✓ <i>10.7</i>	75.50 ✓ <i>8.0</i>	17.25 ✓ <i>15.32</i>
TOTAL			542.00	271.0 290.15	98.00 106.48	15.32 22.25

~~550.51~~
~~550.~~
 581.31
 581

290.
 106.48
 106

22.25

ASSISTANT ENGINEER
 PUBLIC HEALTH ENGG: S/DIVN.II
 KARACHI

REPAIR OF MANHOLES

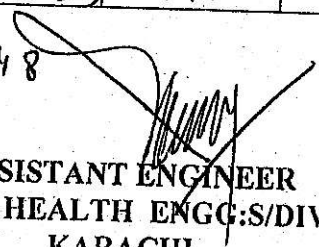
MATERIAL STATEMENT

S.no	ITEM	QTY	BAJRI	H/SAND	CEMENT	STEEL
1	RCC plain 1:2:4	103.03	90.66	45.00	18.0	4.13
			8	3.0	1	3.67
	TOTAL		91.00 98.66	45.00 48.33	18.0 19.	0.7 3.67 4.13

99

48

4.83


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