PUBLIC PROCUREMENT REGULATORY AUTHORITY (PPRA)

CONTRACT AWARD PROFORMA-I (As Per Rule-47 of PP Rules, 2004)

To Be Filled and Uploaded on PPRA Website in Respect of All Public Contracts of Works, Services and Goods.

NAME OF THE ORGANIZATION / DEPARTMENT. Karachi Port Trust / Civil Works Division

> FEDERAL / PROVINCIAL GOVT.

Federal Govt. (KPT Board of Trustees)

> TITLE OF CONTRACT

MAINTENANCE / REPAIR AND VEHICLE ACCESS CONTROL SYSTEM AT VARIOUS LOCATIONS IN LALAZAR AREA.

> TENDER NUMBER

TS529075E

▶ BRIEF DESCRIPTION OF CONTRACT:

The Chairman, KPT has a great desire to improve upon the security and maintenance of Lalazar and also launch on initiative of "Clean & Green Lalazar". The purpose of these road barriers is to enhance the security and safety of our residents and their property and they will act as a preventive measure, prevailing un-authorized access and ensuring pedestrian and vehicular safety. Road barriers will help to manage the flow of traffic efficiently reducing the risk of congestion and accidents.

> TENDER VALUE

Rs. 998,262.00

ENGINEER'S ESTIMATE (for civil Works only) Rs. 996,364.00

➤ ESTIMATED COMPLETION PERIOD.

30 Days

WHETHER THE PROCUREMENT WAS INCLUDED IN ANNUAL PROCUREMENT PLAN? NO

>	Advertisement:	Yes	No
	i) PPRA Website (Federal Agencies) Dated: 01-01-2024 & PPRA No. TS529075E	✓	
	ii) News Papers (If yes, give names of newspapers and dates)	Yes	No
			1
-	TENDER OPENED ON (DATE & TIME)		l-2024 30 Hrs.
_	NATURE OF PURCHASE	Local	int.
		1	
	EXTENSION IN DUE DATE (If any)	Yes	No
			1

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>	NUMBER OF TENDER DOCUMENTS SOLD Not Known Uploaded Websites	on PPR	A / KPT
7	WHETHER QUALIFICATION CRITERIA WAS INCLUDED IN BIDDING/TENDER DOCUMENTS (If yes enclose a copy).	Yes	No
		√	
>	WHETHER BID EVALUATION CRITERIAWAS INCLUDED IN BIDDING / TENDER DOCUMENTS. (If yes enclose a copy).	Yes	No
	TERDER BOCCINE. (12 year transport of the termes are 13)	✓	
7	WHICH METHOD OF PROCUREMENT WAS USED: - (Tick one)		
	a) SINGLE STAGE - ONE ENVELOPE PROCEDURE		✓
	b) SINGLE STAGE - TWO ENVELOPE PROCEDURE		-
	c) TWO STAGE BIDDING PROCEDURE		-
	d) TWO STAGE - TWO ENVELOPE BIDDING PROCEDURE		-
>	PLEASE SPECIFY IF ANY OTHER METHOD OF PROCUREMENT WAS ADOPTED WITH BRIEF REASONS (i.e. EMERGENCY, DIRECT CONTRACTING, NEGOTIATED TENDERING ETC.)		=
7	WHO IS THE APPROVING AUTHORITY		l Manager CW)
>	WHETHER APPROVAL OF COMPETENT AUTHORITY WAS OBTAINED FOR USING A METHOD OTHER THAN OPEN COMPETITIVE	Yes	No
	BIDDING.		√
>	NUMBER OF BIDS RECEIVED	715-01-0-1	gle Bid ceived
>	WHETHER THE SUCCESSFUL BIDDER WAS LOWEST BIDDER	Yes	No
		✓	
			gle Bid ceived
>	WHETHER INTEGRITY PACT WAS SIGNED	Yes	No
			1

PUBLIC PROCUREMENT REGULATORY AUTHORITY (PPRA) (As Per Rule-47 of PP Rules, 2004)

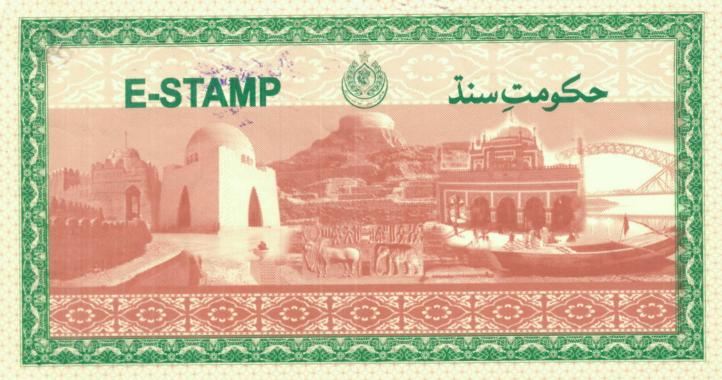
CONTRACT AWARD PROFORMA -II

To Be Filled And Uploaded on PPRA Website in Respect of All Public Contracts of Works, Services & Goods

7	NUMBER OF BIDDERS PRESENT AT THE TIME OF OPENING OF BIDS	Yes
2	NAME AND ADDRESS OF THE SUCCESSFUL BIDDER	M/s. Sun-Tech International, Suite # G-2, Abid Chamber, Shahrah-e-Liaquat, Karachi. Tel: 92-2132621110
>	RANKING OF SUCCESSFUL BIDDER IN EVALUATION REPORT (i.e. 1 st , 2 nd , 3 rd EVALUATED BID)	1 st Evaluation Bid
>	NEED ANALYSIS only the procurement was necessary?)	KPT Authorities is committed to Provide repair / maintenance of existing infrastructure
*	IN CASE EXTENSION WAS MADE IN RESPONSE TIME, WHAT WERE THE REASONS (Briefly describe)	
>	WHETHER NAMES OF THE BIDDERS AND THEIR PRICES WERE READ OUT AT THE TIME OF OPENING OF BIDS	
>	DATE OF CONTRACT SIGNING (Attach a copy of agreement)	04-06-2024
7	CONTRACT AWARD PRICE	Rs. 998,262.00
A	WHETHER COPY OF EVALUATION REPORT GIVEN TO ALL BIDDERS (Attach copy of the bid evaluation report)	Bid Evaluation Report under PPRA Rule-35 attached EV No. EV59423
7	ANY COMPLAINTS RECEIVED (If yes result thereof)	NO
4	ANY DEVIATION FROM SPECIFICATIONS GIVEN IN THE TENDER NOTICE/ DOCUMENTS (If yes give details)	NO
7	DEVIATION FROM QUALIFICATION CRITERIA (If yes give details)	NO
4	SPECIAL CONDITIONS, IF Any (Give Brief Description)	-

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EXECUTIVE ENGINEER (NORTH)
KARACHI FURI TRUST



NBP-0007-2405080004570164

GoS-KHI-D7D911C27658CC15

Non-Judicial

: Contract - 15(a)

Description

Principal

: M/s SUN TECH INTERNATIONAL [41605837]

Contractor

: M/s SUN TECH INTERNATIONAL [41605837]

Applicant

: Muhammad Saqib Səliail [42101-8418117-7] : M/s SUN TECH INTERNATIONAL [41605837]

Stamp Duty Paid by Issue Date

: 08-May-2024, 12:33:09 PM

Paid Through Challan

: 202441BCE7C8D4E4

Amount in Words

: Three Thousand Four Hundred and Ninety Four Rupees Only

Please Write Below This Line -

Rs 3,494/-

This agreementme	de the	day	of	FSINDINGOVERNMENTOF SIMONOGVE	2024

Between the Board of Trustees of the port of Karachi incorporated under the Karachi Port Trust Act VI of 1886 as amended from time to time (hereinafter called the "GM(CW)" of the one part and M/S. Sun-Tech International, of Suite# G-2, Abid Chamber, Shahrah-e-Liaquat, Karachi, (hereinafter called the "Contractor") of the other part WHEREAS the GM(CW) is desirous that certain works should be constructed.

Viz MAINTENANCE / REPAIR AND VEHICLE ACCESS CONTROL SYSTEM AT VARIOUS LOCATIONS IN LALAZAR AREA. (Sanctioned Amount of Rs.998,262.00 (Rupees Nine Hundred Ninety-Eight Thousand Two Hundred Sixty Two Only) and has accepted a Tender by the Contractor for the construction completion and maintenance of such Works AND WHEREAS the Contractor has already deposited with the GM(CW) the sum of Rs. 25,000.00 in words (Rupees Twenty-Five Thousand only) being The Total security amount of Rs. 50,000.00 the balance amount of Rs.25,000.00 Will be deducted through their bill and has given to the GM(CW) a lien over sum as security for the due fulfillment of the contract NOW THIS AGREEMENT WITNESSETH as follows:





- 7. In this Agreement works and expressions shall have the same meanings as are respectively assigned to them in the Conditions of contract hereinafter referred to.
 - The following documents which for the purpose of identification have been signed by Mr. Muhammad Saqib. (Proprietor)on behalf of the Contractor and by Mr. Muhammad Waqar Azeem XEN(N) on behalf of (Rep of Engineer) all of which shall be deemed to form and be read and construed as part of this agreement viz:
 - h) Tender Notice
 - i) Instructions for Tender.
 - j) The Said Tender with Performa "A" & A-1& A-2.alongwith Copy of L.O.I
 - k) The General Conditions of Contract.
 - I) The Specifications Part-I & II
 - m) The Schedule for Quantities with Preamble.
 - n) The Drawings No. 12916 Dt: -23-11-2023
 - 9. In consideration of the payments to be made by the GM (CW) to the Contractor as hereinafter mentioned the Contractor hereby covenants with the Board to construct complete and maintain the work in conformity in all respects with the provisions of the Contract.
 - 10. The GM (CW) hereby covenants to pay the Contractor in consideration of the construction, completion and maintenance of the Works the Contract price in the manner prescribed by the Contract.
- 11. IN WITNESS WHERE OF the parties hereto have hereunto set their respective hands the day and year first above written.

SIGNED AND DELIVERED BY THE

General Manager (CW) on behalf of the Chairman / Board of Trustees of the Port of Karachi.

Signed by

In the Presence of

Muhammad Waqar Azeem Executive Engineer (N) CNIC # 42101-6661208-9



And

General Manager (Civil Works - P

Zahid Hussain

General Manager (CW)

CNIC #42201-6078496-5

Karachi Port Trust

for and behalf of the Chairman

KARACHI

Signed and Delivered by the with named Contractor M/s. Sun-Tech International, through their

Proprietor Mr. Muhammad Sagib.

Signed by

In the presence of

Sig

Sig

Contractor

Mr. Muhammad Saqib. (Proprietor) CNIC# 42101-8418117-7

Witnesses:

2. Mr. Allah Bra / Calvar CNIC# 9310437367701

Jeo Je



KARACHI PORT TRUST FINANCE DEPARTMENT

SANC-FS/2024/21/22256

Sanction Date: 19-MAR-24

CHIEF ENGINEER

SUB: MAINTENANCE / REPAIR AND EHICLE ACCESS CONTROL
SYSTEM AT VARIOUS LOCATIONS IN LALAZAR AREA. E/N-2(129)/23/

REF: Your E-file No: 0611230013

The GMCW has accorded sanction in subject proposal to SUNTECH INTERNATIONAL, amounting Rs: 998262 (Nine Hundred Ninety-Eight thousand Two Hundred Sixty-Two Only). The expenditure will be debited as follows :

		Account Title	Sanctioned Amount	Project No
Budget Year	Account Head		998262	-
2023-2024	08083084	OPERATIONAL AREAS & BUILDINGS (MAINTENANCE / REPAIRS TO ROADS / BRIDGES / FOOTHPATHS / SECURITY WALLS / TRANSIT PLINTHS / SHEDS / STORES / WARE HOUSES AND OTHER ALLIED WORKS)		

ENCL: Original File is being returned herewith.

FINANCE OFFI

IR No. DATE DCE-I OG Tool br erasing

This document is issued without any A. INTER

KARACHI

PAKISTAN

DCE/III

Entered by: Other

Printed on: March 19, 2024 11:39

Page 1 of 1

Evaluation Results

Organization Name: Karachi Port Trust Download Uploaded Date Evaluation No Evaluation Result Title Karachi Port Trust # Final Evaluation 凹 27/3/2024 Maintenance/Repair and Vehicle.... EV59423 E/N-2(129)/ TS529075E Karachi Port Trust Final Evaluation 27/3/2024 Maintenance and Repair of Water Heaters..... EV59426 E/N-2(103)/ TS529634E Karachi Port Trust Final Evaluation 25/3/2024 Supply and Fixing of Barbed Wire..... EV59362 E/CS-2(989)/ TS521794E Karachi Port Trust Final Evaluation 20/3/2024 Supply and Fixing of Barbed Wire..... EV59228 E/CS-2(989)/ TS524794E Karachi Port Trust Final Evaluation 18/3/2024 Repair & Maintenance EV59165 E/N -2(127) TS528553E Karachi Port Trust Final Evaluation 18/3/2024 Const of Washroom EV59164 E/N -2(120) TS528552E Karachi Port Trust Final Evaluation 18/3/2024 Repair & Maintenance EV59166 E/N -2(134)

Total Results (286)
1 2 3 4 5 6 7 8 9 10 >

TS529996E

Send mail to info@ppra.org.pk with questions or comments about this web site

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KARACHI PORT TRUST ENGINEERING DEPARTMENT



No. E/N-2(129)/ 1394 Dated:

M/s. Sun-Tech International, Suite # G-2, Abid Chamber, Shahrah-e-Liaquat, Karachi.

Tel: 92-2132621110

SUB: MAINTENANCE / REPAIR AND VEHICLE ACCESS CONTROL SYSTEM AT VARIOUS LOCATIONS IN LALAZAR AREA.

With reference to your tender amounting to Rs.998,262.00 (Rupees: Nine Hundred Ninety Eight Thousand Two Hundred Sixty Two Only) inclusive of 5% contingences for the above work, I am directed to inform you that the same has been accepted by the Trustees / Chairman of the Karachi Port Trust in accordance with the terms and conditions of the tender documents issued by the undersigned.

You are, therefore, requested to deposit a Security amounting to Rs.50,000/- being 5% of the contract price in favour of the Chief Accounts Officer, KPT M/s. Habib Bank Ltd. KPT Branch for which necessary Challan Forms can be obtained from this office. You may deposit 50% amount of the total Security Deposit, Challan Forms can be obtained from this office. You may deposit 50% amount of the General Conditions the balance amount will be deducted through your bills as permitted under Clause 9 of the General Conditions of contract, if you desire, After the depositing has been made, please direct your authorized representative to see the undersigned for execution of the Agreement as per Clause 8 of the General Conditions of Contract. Forms of Agreement are sent herewith which may be brought by your representative to this office for Forms of Agreement are sent herewith which may be brought by your representative to this office for Evenus of Agreement are sent herewith which may be brought by your representative to this office for Evenus of Agreement are sent herewith which may be brought by your representative to this office for Evenus of Agreement are sent herewith which may be brought by your representative to this office for Evenus of Agreement are sent herewith which may be brought by your representative to this office for Evenus of Agreement are sent herewith which may be brought by your representative to this office for Evenus of Agreement are sent herewith which may be brought by your representative to this office for Evenus of Evenus Government and Evenus of Evenus Overnment are sent herewith which may be brought by your representative to this office for Evenus of Evenus Overnment are sent herewith which may be brought by your representative to this office for Evenus of Evenus Overnment and Evenus Overnment are sent herewith which may be brought by your representative to this office.

All the above formalities, should however be completed within 14 days of the issue of this letter.

The period of completion of the work will be (30 Days) as per your tender.

You are also requested to intimate the name of your authorized representative whom you propose to employ continuously on the work, for the approval of the Engineer, in terms of clause 14 of General Condition of contract.

On completion of the above formalities, necessary work order will be placed on your postal address.

Kindly acknowledge receipt of this letter immediately.

Encl:- Agreement forms in quadruplicate.

161417-

EXECUTIVE ENGINEER (N)

D + DRIVENORTH AKBARMOI does/C-3





HI. F. JUL KALEEM STAMP VENDOR LICENCE # 16, Plot No: 217, Shop No: 02, Near 100 Bed ALUE R3. MENDOR'S SIGNATURE. SR. NO CHEST Steel Town Karachi SSUED TO WITH ABORESS MR..... THROUGH WITH ADDRESS MA PURPOSE VALUE R3.....

ESDS VON 8 11



AFFIDAVIT

I, SACIB SORAIL s/o Muhemmad Scheil Khan proprietor of SUNTECH INTERNATIONAL, G-2 AL ABID CHAMBER SHAHRAH-E Liaquat , Karachi, do hereby solemmly affirm and declare as under :-

That I am the sole prorietor of the above eald M vm.

That my above saidfirm is not black listed in any government or sami government or in private sector.

That I am well conversant with the fact statedabove.

That the statement made above is true and correct

belief. to the best of my knowledge and

KSRACHI DT: 8.11.2023

DEPONENT





KARACHI PORT TRUST Gateway to Pakistan A Great Heritage – A Vibrant Future TENDER NOTICE

Chief Engineer KPT re-invited Tenders, under PPRA Rule 36 (a) from Bidders i-e Single Stage Single Envelope procedure. All interested Firms who possess experience in the relevant field may obtain the tender documents available on the downloaded version at KPT, PPRA & Ministry of Maritime Affairs Websites.

	MAINTENANCE / REPAIR AND VEHICLE ACCESS CONTROL SYSTEM AT VARIOUS LOCATIONS IN LALAZAR AREA.	DATE & TIME OF RECEIPT AND OPENING OF TENDER
,	The Scope of works includes viz: Dismantling & Chiseling Cement Concrete. Road Cutting with Machine 4" Deep.	16-01-2024 Receipt at 11:00 HRS. & Opening at
,	 Providing & Laying 1:2:4 Cement Concrete. Providing & Fixing Up & Down M.S Barriers. Repairing of Existing M.S Barriers. Coloring / Painting Works. 	11:30 HRS. Tender Fee Rs.1,125/- (Non Refundable)

The Intending bidders must be registered with Pakistan Engineering Council in Category C-6 or above with specialized category CE-10, valid on the date of opening. 2.

The interested Bidder, are required to submit the following documents:-

Copy of Valid PEC.

b. Copy of NTN Certificate.

Copy of Online Tax verification. c.

d. Copy of SRB Certificate.

Affidavit, that the firm is not defaulter in Income tax department nor blacklisted by any Organization. e. f.

Atleast completed two general project worth of Rs. 0.5 million or more.

In case of companies and firms, last three years Audited Financial Statements are to be provided showing minimum average turnover of Rs. 1.0 (M).

In case of individuals / sole proprietors, last three years tax returns filed with FBR are to provided showing minimum turnover of Rs. 1.0 (M) on average.

The Intending Bidders may visit KPT and PPRA Websites for any queries. 3.

The Prescribed Tender Fees amounting to Rs. 1,125/- (Non Refundable) and Bid Security of the work is 4. Rs. 25,000.00 (Rupees: Twenty Five Thousand Only) (Refundable) which will be submitted in a separate envelope & alongwith the Bid at the time of submission of tender in Shape of pay Order, in favor of Chief Account Officer KPT.

KPT may reject all Bids or Proposals at any time prior to the acceptance of the Bid or Proposal. The KPT shall upon 5. request communicate to any supplier or contractor who submitted a bid or proposal, the grounds for its rejection of all bids or proposals, but is not required to justify those grounds.

No: E/N-2(129) Dated: 01-01-2024

CHIEF ENGINEER

KPT Head Office Building, Eduljee Dinshaw Road, Karachi-74000, UAN 111-KPT-111 Ph:99214318

Fax:-99214329-30.

Web site: www.kpt.gov.pk PPRA web site address: www.ppra.org.pk

SUN TECH. INTERNATIONAL





ACHI PORT TRUST ENGINEERING DEPARTMENT

1. The Tenderer should examine carefully the General Conductions of Contract, the Specification and the Drawings supplied herewith. He should visit and inspect the Site on his own responsibility and at his own expense, obtain all the information which may be necessary for the purpose of making a Tender.

2. The rates and prices set down by the Tenderer against the items in the bill of Quantities are to be the full inclusive value of the finished work described there under and shall cover profit and all obligations every kind which under the Contract are to be borne by the Contractor.

- 3. The Quantities set out in the Bill of Quantities are estimated only and their accuracy or inaccuracy shall in no way affect the validity of the Tender or of any Contract based thereon. - The total amount for the various items set out in the Bill of Quantities at the rates or prices inserted by the Tenderer shall be sated in each case, but this figure is required soley for the purpose of facilitating the comparison of the various Tenders recovered and shall not be deemed to be the actual, sum which is to be paid to the Contractor for the execution of the Works. The actual sum to be paid to the Contractor whose Tender is accepted will b determined by measuring the work actually done in accordance with the Contract and valuing it at the rates or prices inserted by the Contractor in the Bill Quantities.
- 4. The contractor whose Tender is accepted will be required to enter into an Agreement the form of which (subject to any necessary adoptations) will be as set out in the form appended to the General Conditions of
- 5. The Contract whose Tender is accepted will also be required to furnish a Security Deposit, in cash, equivalent to five per cent of the Contract Price for the due. performance of the Contract, (see clause 9 of the
- 6. Tenders must be made on the separate form supplied herewith must be accompanied by two copies of the Bill of Quantities fully priced, monied out and totalled in ink and signed by the Tenderer. Tenders must reach the Chief Engineer, Karachi Port Trust not later than the. time stated in the Tender Notice.
- 7. No unauthorized alteration may be made in the Form of Tender or the accompanying documents and if any such alteration is made or if the Bill of Quantities is not properly filled in, or if these instructions are not fully
- 8. Tenderers must produce evidence with their Tender that they have had experience and are fully capable of carrying out work of this class and magnitude and must give full details of the plant they propose to use of the
- 9. The Board of Trustees of the Karachi Port Trust reserve to themselves the right to reject any tender without any reason or to accept any Tender in whole or in part and do not bind themselves to accept the west or any Tender.
- 10. Should there be any doubt or obscurity as to the meaning of any of the Tender Documents or if any further information is required, the Tenderer must address his enquiry in writing (in duplicate) to the Chief Engineer, Karachi Port Trust, not later than two weeks before the date fixed for the delivery of Tender.
- 11. Unless otherwise agreed all payments to be made to the Contractor under the Contract will be made locally
- 12. Each Tender must be accompanied by the requisite amount of Earnest Money, Deposit, either in cash with the Chief Accounts Officer, Karachi Port Trust or a pay order drawn in favor of the Chief Accounts Officer Karachi Port Trust, The Earnest Money wil be refunded to the unsuccessful Tenderers after the Tenders are, decided. It will be optional with the successful Tenderers to re-appropriate the Earnest Money or part of the Earnest Money for the payment or part payment towards the Security Republic See clause 9, of the General Conditions of Contract.) SUN TECH. INTE

- 13. The Tenders must be sent in a sealed cover prescribed as required in the Tender Notice and must reach the Chief Engineer, Karachi Port Trust, before the due time and date fixed for the opening of the Tenders.,
- 14. Address both of the place of business and residence, if the firm is a Sole Proprietor ship concern shall be given.
- 15. Full particulars of names of the Partners, their residential addresses, address of place of business alongwith a certified. Copy of Partnership Deed and a Certificate of Registration, if it is a Partnership concern shall be furnished while submitting the Tender.
- 16. A complete and up-to-date list of all the Directors of a Private Limited Company together with their residential Addresses And a printed certified copy of the Memorandum and Articles of Association of the Company alongwith a copy of Certificated of Incorporation if it is a Private Limited Company shall be furnished with the Tender.
- 17. Printed certified copy of Memorandum & Articles of Association of the Company alongwith a copy of Certificate of Incorporation if it is a Public Limited Company shall be furnished with tender documents.
- 18. The Contractor/Suppliers are required to execute necessary agreements/contracts, etc., and for furnishing to the K.P.T. any future change in the above particulars and assets.
- 19. The Contractor/Suppliers shall not be allowed to carry on correspondence on "Care of" address and they should supply their independent address for the purpose.
- 20. The Contractors have to quote item rates as per Schedule of Quantities attached with Tender. Any insertion of percentage whether below or above on the rates after filling of the rates shall make the Tender invalid and the Tender will not be considered.

CHIEF ENGINEER
KARACHI PORT TRUST

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KARACHI PORT TRUST

DOCUMENTS TO BE RETURNED

ENGINEERING DEPARTMENT

THE TENDER

(Tenderers are required to fill in the blank spaces in this Tender Form and this attached Proforma "A")

To

The Chief Engineer, Karachi Port Trust, Karachi (Pakistan)

accept any Tender in part or in whole.

Description of Work: MAINTENANCE / REPAIR AND VEHICLE ACCESS CONTROL SYSTEM AT VARIOUS LOCATIONS IN

100	
, 1.	Having examined the Drawings General Conditions of the Contract Special Conditions of Contract (if any)
 Specifica	tion and Bill of Quantities for the construction of the above named-works, we the undersigned offer to construct
	and maintain the whole of the said works in conformity with the said Drawings. General Conditions of Contract.
Special	Conditions of contract (if any), Specification and Bill of Quantities for the sum of
Rupees_	(Rs
Nupces_) or such other sums as may be ascertained with the said Conditions.
2.	If undertake if our Tender is accepted in whole or in part to commence the work within <u>07 days</u> of
receipt o	of the Engineer's order to commence and to complete and deliver the whole of the Works comparised in the Contract
within (3	O Days). calculated from the last day of aforesaid period in which the works are to be commenced
3.	If our Tender is accepted in Whole or in part we will furnish a Security Deposit for due performance of the
Contract	in accordance with Clause 9 of the General Conditions of Contract.
4.	We agree to abide by this tender for a period of 4 Months from the date fixed for receiving the same
and it sh	all remain binding upon us and may be accepted at any time before expiration of that period.
5.	Unless and until a formal Agreement is prepared and executed this tender, together with your written
accepta	ince thereof, shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any Tender you may received

SUN TECH. INTERNATIONAL Chief Executive T.O.

	,			1	£	
	7. W. C. wh.	er agree to pay all cost	towards the execution	of the Contract Agree	ement including the c	ost of
	we further	er agree to pay all cost	COWAIGS THE EXCEUTION	(WW16	1/24	(my) Jes
1	8. We a	agree that should we wi	th draw the offer wi	thin the aforesaid per	iod or fail to execute	the formal
		and / or make the require	ed Security Deposit th	e Board of Trustees	of the Karachi Port T	rust shall be at
		ill and any proof whatco	over of the extent of	such damage or on	account reserving to	themselves are
	right to recover from failure on our parts as	us any further loss or exp	penses to which they r	may have been put di	rectly or indirectly b	y reason or any
		enclose a pay order for R	ls	_ as Bid Security withi	n favour of the Chief	Accounts
	Officer, Karachi Port	rust and hold his receipt	No	dated		
		agree to maintain the v		for a period of 12	Months from the	date of its
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	Messers SVn (Jeh Internal Grosd Chamb	Original Original	Pay order	1 Whi	_
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KARACHI PORT TRUST

ENGINEERING DEPARTMENT

PROFORMA"A"
(To be submitted with the Tender)

,	Particulars		Details		
1.	Experience as a Contractor		1	1/18	
	1.		,	TIMO.	
		2			
2.	Works carried out in the past with det particulars and the year in-which they were undertaken etc.	ailed cost		1	
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,		***			
3.	Banker reference regarding Financial status	3			
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	CACUE-				
4.	Whether registered with any Other Departm or Organization? if so, give details.	nent		!	
/	pa			1.	
DEC	CARCINETIC (Sept.)	8			
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PRÓFORMA"A" Details **Particulars** Plant and equipment in possession (Give details with 5. Technical personnel employed: give names and other 6. Is your firm registered? 7. State capital of your firm? 8. Detail of Income Tax Sales Tax Registration etc. 9. Number of years of actual work carried out in 10. Pakistan Attach attested copies of certificates of past work of the same nature carried out as that in this Tender.

SIGNATURE OF TENDERER

Date Place Warally

Signed by Mr. _______

SUN TECH. INTERNATIONAL Chief Precyrive



KARACHI PORT TRUST

ENGINEERING DEPARTMENT PROFORMA "A-1"

COMPOSITION & PARTICULARS OF THE TENDERING FIRM
(To be submitted with the Tender)

	Particulars		Details)
NOTE:	The information relevant to the tender should be given below, failing which the tender will not be considered.			6/01
1.	in case of Sole proprietorship Concern. a) Business Address. b) Residential Address.	· (42 Abrid chambers, 5 reason	chahra e
2.	In case of Partnership Concern. a) Name of the Partners with their Residential Address. b) Partnership Deed & Certificate of Regis (Attach Certified Copies)	stration.	Mo. Allibu.	
3.	In Case of Private Ltd. Company a) Name of all Directors with their Residential Address.		K.	
	b) Memorandum & Articles of association of the company & Certificate of incorporation. (Attach Printed, Certified Copies)			
4.	in Case of Public Ltd. Company Memorandum and Articles of Association and Certificate, of incorporation (Attach Printed, Certified Copy)		K K	

In submitting the above particular to further bind ourselves of furnishing to the K.P.T. any further changes our particulars and composition of our firm.

We clearly understand that failure we comply with the above or for submitting incorrect or inaccurate information, will render our tender invalid.

EXECUTE TO THE PARTY OF THE PAR

SIGNATURE & SEAL OF THE TENDERER

Signed By Mr.__

for, & on behalf of

ENGGS.



PROFORMA "A-2"

SUB: MAINTENANCE / REPAIR AND VEHICLE ACCESS CONTROL SYSTEM

- a) Copy of Valid PEC. (Certificate Specialized Category CE-10)
- Copy of NTN Certificate.
- Copy of Online Tax verification.
- d) Copy of SRB Certificate.
- e) Affidavit, that the firm is not defaulter in Income tax department nor blacklisted by any Organization.
- f) a.In case of companies and firms, last 03 years Audited Financial Statements are to be provided showing minimum average turnover of Rs. 1.0 (M).
 - b. In case of individuals / sole proprietors, last three years tax returns filed with FBR are to provided showing minimum turnover of Rs. 1.0 Million on average.

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a)

DOCUMENTS TO

BE RETURNED

0 NAME OF WORK: MAINTENANCE / REPAIR AND VEHICLE ACCE VARIOUS LOCATIONS IN LALAZAR AREA.

Notes:-After the completion of the work the contractor is required to clear away and remove from the site all construction plants, surplus material, rubbish, debris and temporary works of every kind etc. to the

entire satisfaction of the Engineer. It may be noted that Contractors' account will not be finalized till

- such time a certificate to this effect is obtained from Executive Engineer and submitted to the Chief Engineer for his information The Contractor must ensure that the dismantled materials should be disposed is accordance with
- safety standards fixed by the civic agencies and specified environmental protection rules
- Debris dismantled materials, rubbish etc. should be disposed in such a way that it should not cause any pollution and shall not be source of harm to public.
- The tenderer must fill all the pages of Performa "A, A-1 & A-2" of tender documents, and ensure d) enclosing of the pay order for bid security amounting to Rs. 25,000/- (Fixed), along with bid, failing which his bid will not be considered by KPT.
- The tenderers are advised to avoid cutting / over writing in B.O.Q. In case any cutting / over writing e) it should be properly re-write, sign and stamp otherwise, the tenders may not be considered.

SUN TECH. INTERNATION Chiefor CHIEF ENGINEER



Karachi Port Trust

Miscellaneous

Bill No.: 0305240075

Issued By Dept. : ENGINEERING

Staff.: PNO ()

Party Name: M/S SUNTECH INTERNATIONAL

Bill Detail.: BEING THE 50% SECURITY DEPOSITED FOR THE WORK"MAINTENANCE / REPAIR & VEHICLE

ACCESS CONTROL SYSTEM AT VARIOUS LOCATION IN LALAZAR.VIDE PAY ORDER

NO.05375893 DT.03-01-2024 FOR RS.25000/- ISSUED BY MEEZAN BANK LTD.

Pay. Mode.: SECURITY DEPOSIT

LPD. Ac No.: 0016-70000947-03

Weight Volume Qty TEUS

Charges Description. budget

New Account Code GLCode-Cost Code Amount.

03 MAY 2024

06038015-092199

Bill Date.:

25,000

(C.M) Yes

Security Deposit Total.

25,000.00

Amount in Words(Rs.)

(M.T)

Twenty-Five thousand Only

Signature of Payee

Signature of Counter Forwarding Officer of KPT

EXECUTIVE ENGINEER (NORTH) KARACHIFURI TRUST

... We hereby declare that the contents of this form are truly stated,

For Bank Use Only

Name & Signature:

- Audited and Cleared

- Under Objection

- Objection Cleared

(Chief Auditor)

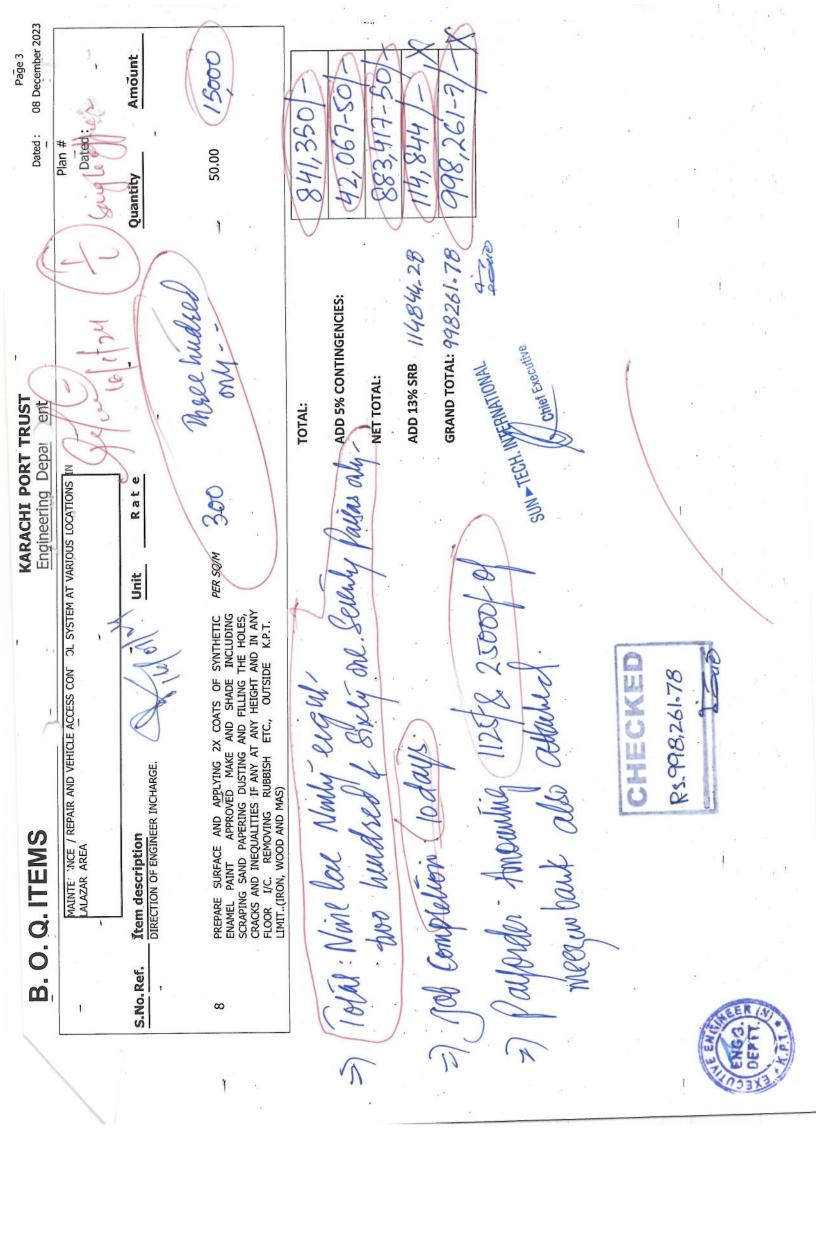
Signature / Date

SHAHEEN.GOHAR@03-May





3	Plan # Dated: 08 December 2023 Plan # Dated: 3.00 7500	65.00 48,750f- 3.00 38,10d	2.00 480,000	2.00 8000	200.00 81,000	65.00 <i>Quad</i>
TRUST	ce in Words	Seven metsede feffy only Mousard and seven maked only	no lae forty Itronsa	forly thousand only	Your numbed and five only	fartien hundred
KARACHI PORT TRUST	Unit Rate PER CUM 2500	EDGES IN PER RIM 750 ENGINEER USING PER CUIM 12,700 DOO LBS.	THAN WALLS JOING SETC	or or ACH	PER JARD PER KG 405 FIPE I OR OR THE	DYGING, CRETC RIGINEER TES ARE MINIMUM LAID IN AVING OF R WITH FILLING AS PER
NS .	MAINTENAN / REPAIR AND VEHICLE ACCESS CONTROL YST LALAZAR AREA Item description DISMANTLING AND CHISELING CEMENT CONCRETE WORK (C.C. OR R.C.C.) INCLUDING DISPOSAL OF MATERIAL AS DIRECTED OUT	ROAD CUTTING WITH MACHINE 4" DEEP OVER PLINTH EDGES IN ALIGNMENT ETC COMPLETE AS PER DIRECTION OF ENGINEER INCHARGE. PROVIDING AND LAYING 1:2:4 CEMENT CONCRETE USING SCREENED GRADED BAJRI 20 MM (3/4") AND DOWN GAUGE HAVING A MINIMUM WORKING CUBE CUUSHING STRENGTH OF 3000 LBS.	1:2:4 IN COLUMN, BEMS, LINTELS, ROOF SLAB, CHAJJA, WALLS STAIRCASE, ETC., OF REQUIRED SHAPE AND DESIGN INCLUDING FORM WORK AND ITS REMOVAL, COMPACTING AND CURING ETC. COMPLETE, BUT EXCLUDING THE COST OF REINFORCEMENT IN BASEMENT AND GROUND FLOOR. PROVIDING AND FIXING UP & DOWN MS BARRIER OF (2 NOS) HORIZONTAL & VERTICAL G.I PIPES 4" DIA 10 GAUGE & MS SHEET COVER IN CC 1:2:4 OR BLOCK MASONRY AT ONE END AND VERTICAL HORIZONTAL SUPPORTING PIPES, PULLEY, WHEELS ETC WHÂT SO FYER ROLIBED 11/2 DAINTANG.	AND SHEDS (REFLECTIVE PAINT) IN CLOUDING CUTTING AND CC WORK COMPLETE FIXED IN POSITION AS PER DIRECTIONS OF THE ENGINEER INCHARGE. REPAIRING OF EXISTING MS BARRIER OF (2 NOS) HORIZONTAL & VERTICAL MS ANGLES COVER IN CC 1:2:4 OR BLOCK MASONRY AT ONE END AND VERTICAL, HORIZONTAL SUPPORTING PIPES, PULLEY, WHEELS FIC WHAT SO EVER RQUIRED I/C PAINTING, OF REQUIRED COLOR AND CHERS (DEED FOR THE COLUMN).	CUTTING AND C. WORK COMPLETE FIXED IN POSITION AS PER DIRECTIONS OF THE ENGINEER INCHARGE. PROVIDING AND FIXING OF GENERAL STEEL WORK AS IN GUARD BAR, GATES (WITHOUT SHEETS), GRILLS, RAILING, LADDERS, BRACKETS, STAIRCASES, BALUSTERS, CHIMNEYS, PULLEYS, PIPE FILUES, SUPPORTS, HANDLES, HOLDFASTS, STANCHIONS, WITH OR WITHOUT CONNECTION ENDS, FIXED WITH FRAME OR INDEPENDENTLY CUT TO SIZE, SHAPE FIGURE INCLIDING THE	COST OF WELDING, BOLTING, RIVETING, JOINTING, FORGING, Chief EXECUTIVE LETTING, INTO STONE, CONCRETE, BRICK OR BLOCK ETC CINET INCLARGE (COVERING TO BE PAID SEPARATELY), THE RATES ARE INCLUSIVE OF ONE COAT OF RED OXIDE PAINT. PROVIDING AND FIXING PRECAST ROAD KERB, GREY OF BEST. APPROVED QUALITY OF SIZE 6" X 12" X 18", HAVING MINIMUM CUBE CRUSHING STRENGTH OF 3000 PSI AT 28 DAYS, LAID IN APPROVED PATTERN AND AT ANY SURFACE INCLUDING LAYING OF MAXIMUM 32. THICK 1:4:8 LEAN BED AS UNDER LAYER WITH LEVELING TO REQUIRED PROFILE, COMPACTION, AND FILLING JOINTS WITH CM 1:4 FOR INTERLOCKING COMPLETE AS PER
B. O. Q. ITEMS	Case -Id MAINTENAN / REPAIR AND LALAZAR AREA S.No. Ref. Item description DISMANTLING AND CHISELING CR R.C.C) INCLUDING DISPOSAL OF SIDE KPT LIMIT ALL AS DIRECTED	2 ROAD CUTTING VALIGNMENT ETC INCHARGE. 3 PROVIDING AND SCREENED GRADER A MINIMUM WORK PEP SO INCHARGE.	112:4 IN COLUMN, STAIRCASE, ETC., FORM WORK AND I COMPLETE, BUT E BASEMENT AND GR PROVIDING AND FI HORIZONTAL & VE COVER IN CC 112:4 VERTICAL/ HORIZON WHAT SO EVER R	AND SHEDS (REFLECT WORK COMPLET) THE ENGINEER INCT THE ENGINEER INCT REPAIRING OF EXIST ONE END AND VOICEY, WHEELS EN REQUIRED COIDER	CUTTING AND CO DIRECTIONS OF THE PROVIDING AND FI BAR, GATES (WITH BRACKETS, STAIRCA FLUES, SUPPORTS, H WITHOUT CONNEC	COST OF WELDING Chief Executive LETTING, INTO STATE Chief Executive OMPLETE AS REQUENCE TO COVERING INCLUSIVE OF ONE CAPROVED QUALITY CUBE CRUSHING ST APPROVED PATTERN MAXIMUM 32. THICK LEVELING TO REQUENTS WITH CM 1
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KARACHI PORT TRUST (ENGINEERING DEPARTMENT)

NAME OF WORK: MAINTENANCE / REPAIR AND VEHICLE ACCESS CONTROL SYSTEM AT VARIOUS LOCATIONS IN LALAZAR AREA.

SPECIFICATIONS (PART I)

General

1. The work shall carried out generally in accordance with the P.W.D. Specification contained in the Bombay P.W.D. Hand Books Vols. I & II of 1950.

Excavations & Foundations

2. The excavations shall be of the depth and width shown in the plan or as directed by the Engineer The excavated material shall be deposited in the building plinth and round foundations or spread near the site of-work or removed from the site as directed. Should more material be taken out than is required it shall be replaced with good broken stones, properly consolidated at the contractor's expense.

Trenches shall he kept in good and dry condition, the bed being properly leveled and rammed where necessary and the sides even, and properly protected with timbering if required.

The rates to include all temporary timbering, draining pumping, fencing and lighting the trench if necessary etc., disposal of excess material to within 200 feets of the site. The rat shall also include filling in round the foundation walls, watering, ramming and securing in the ordinary manner.

The depth of foundations may be increased to more than that shown on the drawings. No. increase in rate will, however, be allowed for such alteration in depth of foundations

Earth Filling

Filling behind wall, inside plinth and in similar situations to be dry filling with sand or as per Engineer's
instructions, carefully deposited, watered and rammed in layers of not, more than 9" in thickness.

Lime

4. The Lime shall be of the pest quality approved by the Engineer freshly burnt, Quite dry, free from ashes, under burnt lumps, dirt and other impurities. It shall be properly slaked with water at the site of the work not less than one week or more than 2 weeks before use. The lime, after slaking shall be screen, through 1/8th inch screen and the residue rejected. If the slaked lime is Stored, it must be properly covered over

All lime that has been in any Way damaged by rain, moisture dirt or any other cause will be rejected.

As a rule, the lime shall be used within 14 days after removal from the Kiln, Fine lime from Bolari or other approved. place only will be allowed.

Sand

5. The sand shall be river sand, sharp, clean, coarse, with silicious grains free from earth, small stokes, dirt, salt peter or other impurities.

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Lime Mortars:

The mortar shall be well mixed in the ratio of 2 parts of sand to 1 of lime. It shall be FIRST in a mill as far as possible, but if a mill is not provided, the materials shall be thoroughly screened before mixing to get rid of any lumps.

The mortar after mixing shall be kept in a large stack protected from sun and rain and not used for two days. It must, however, not be kept so long as to become dry and friable.

Cement Mortar

Wherever Cement Mortar is to be used for the setting of masonry of precast concrete slabs and blocks, it shall be in the proportion of 3 parts of clean coarse river sand to I part of cement, unless otherwise given in Schedule of Quantities.

Lime Concrete for Foundations

The Concrete shall be of hard stones free from impurities, broken, so as to pass in all directions through 2 1/2 ring. The broken stone shall be mixed with sand and lime in the proportions of 4:2:1measured in boxes.

The concrete must always be used when quite fresh. It shall be laid (not thrown) in layers not exceeding 6 inches in thickness and shall be well and quickly rammed with heavy wooden or iron rammers until it hardens.

The concrete laid should not be of too fluid a consistency; the surface during and after consolidation must be kept damp; and in laying consecutive layers the lower course should be well watered and made rough before the upper is laid. No more lime or Concrete shall be mixed than can be used on the day of mixing.

Cement Concrete Foundation

The cement concrete for foundation shall be mixed in the proportions laid down in the Schedule of Quantities or as otherwise indicated by the Engineer.

Where reinforced cement concrete foundations are specified the reinforcement shall consist of M.S. rods or rails, as indicated on the drawings and be laid in accordance with these drawings or as directed by the Engineer.

The concrete shall be mixed and laid as specified for cement concrete work (vide Clause 13 below) and to the satisfaction of the Engineer.

The rate shall include all the work specified above and all from work, shoting and pumping necessary to keep the foundations dry whilst cement concrete is being laid.

Masonry Coursed Rubble

Rubble masonry in foundation and superstructures to be of good sized kutcha stones from any quarry approved by the Engineer.

The stones shall be hammer dressed, laid on their natural bed. The spaces shall be properly filled in with mortar and stone chips, and the whole grouted with mortar so that no hollows are left in the

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masonry. The Masonry in external walls shall be in regular course 8 inches thick and internal walls in course not less than 6 inch thick.

In masonry walls 24" thick and under, through stones shall be inserted not more than 4 feet apart and all through stones shall be marked with Geru. Care should be taken not to place the through stones of successive course above one another.

No stones shall be less in breadth or length than its height and care must be taken to make the stone in different courses break joint,

The interior of walls shall consist of flat bedded stones carefully laid on their proper beds and solid bedded in mortar, chips and sprawls of stones being wedged in wherever necessary, so as to avoid thick beds or joints or mortar, care being taken that no dry work of hollow spaces shall be left anywhere in the masonry

Face work and backing shall be brought up evenly but the backing should be leveled up at each course by the use of chips.

The thickness of joints shall not exceed 5/8"

Dressed Stone Work

11. Quoins, which shall be of the same height at the courses shall be formed of header stones 18 inches long and 12" wide laid lengthwise alternatively along each face. They should be laid square on their beds, which should be fairly dressed to a depth of at least 4 inches. The quoins stones shall be fairly dressed on both faces. Cornices, Dentils etc., shall be fairly dresses stone of the size and shape as on the plan

Watering.

12. All Masonry work must be kept watered for at least 10 days. No part of the work shall be left dry during this period.

Cement Concrete Work

- 13. a) Cement:-All cement used if not supplied by K.P.T. shall be Portland Cement of slow setting quality, unless otherwise specified and shall be in accordance with the latest British Standard Specifications. It shall be of approved manufacture and unadulterated. it shall be sound, fresh unadulterated and of grey and greenish grey color. Cement brought at site for use shall be tested periodically for "Fineness" and "Tensile strength" and other qualities if necessary to see that it conforms with the latest British Standard Specifications for Portland Cement.
 - b) Aggregate: The fine aggregate shall be clean river and free from clay and other impurities, the particles varying in size, as far as possible from fine to 1/4" mesh.

The coars aggregate shall consist of river gravel and crushed pebble 50% each sound hand and durable and of a size so as to pass through a ¾" mesh and be retained by a ¾" mesh. The sizes shall be graded as far as possible. Unless otherwise stated in the Schedule of Quantity or in the Specifications Part-II t he coarse aggregate for plain concrete foundation shall be of broken stone, hard angular free from all impurities and of size so as to pass in all directions through a 2 ½" ring.

c) Mixing of Concretes- The fine and coars aggregates shall be measured in wooden boxes of suitable size to give the correct proportions and the correct quantity of cement added from bags. The

SUN TECH. INTERNATION

materials shall be deposited on a clean, water-tight, boarded or cemented platform and turned over twice dry and twice wet, water being added through a hose. The materials shall be mixed in an approved mechanical mixer only.

The concrete shall be mixed in the proportions required and specified for each particular class of work. The quantities (A various materials being as below:

	1:2:4	1:2 ½ :5	1:3:6
Cement	5 Bags	5 Bags	5 Bags
Fine Aggregate	12 C.Ft	15 C. Ft	18 C. Ft
Coarse	24 C.Ft	30 C. Ft	36 C.Ft

d) Reinforcement:- All reinforcement if not supplied by K.P.T shall be of the best quality mild steel complying with British Standard Specifications No. 15 of structural steel for Bridges etc., and shall be free from rust, scaley grease, paint cif coating of any character preventing the bonding of concrete with the reinforcement. It shall be of the size, spacing and bent to the shape shown on the drawings or as ordered by the Engineer and its re-intersections shall he securely bound together with galvanished iron wire. No reinforcement is to he covered unless inspected by the Engineer. No rods re-rolled from old railway rails or other scrap will be allowed.

e) Concrete Flooring:- The concrete flooring shall be of the thickness shown on the drawings or indicated in the Schedule of Quantities, laid over it layer of well rammed lime concrete or dry metal indicated and covered with a plaster of cement and sand in the proportion of 1:1 mixed with superior geru or any other colour as required and lined in the desired shape or pattern. The flooring to be laid in sections as directed by the Engineer, in joints being painted with hot tar if so required.

f) R.C.C. lintels, posts, brackets, slabs, etc:- Reinforced cement concrete, lintels, slabs etc. shall be as shown on the drawing or according to the Engineer's instructions. The proportions for reinforced cement concrete shall be 1.:294 unless otherwise directed.

The slabs lintels, etc. shall be completely filled in one continuous operation the concreting gently deposited in place and carefully tamped in layers from 3" to 6" thick, Care should be taken to lift the reinforcement so as to ensure proper cover for the steels on the underside of the slabs, lintels etc. The tops 1/2" layer of the roof slab of the top floor shall be waterproofed with "Pudlo" or other waterproofing compound approved by the Engineer, mixed with the concrete in the proportion and manner prescribed by the manufacturers. The contractor will be paid extra for the waterproofing compound.

g) R.C.C. Overhead Tanks:- The sides, bottom and top of the overhead Tank shall be cement concrete 1:2:4 reinforced as shown on the drawings or as directed by the Engineer. The inside and outside of the tank shall be plastered with cement mortar (1:2) mixed with an approved water proofing compound to the entire satisfaction of the Engineer. A manhole shall be provided in the top slab and C.I. Seat and Cover of standard mosquito proof pattern he fixed over it in cement concrete. All edges around the manhole shall be properly finished off to the satisfaction of the Engineer.

The rate shall include all the work specified above and the necessary form work.

h) R.C.C. Shelves:- The shelves shall be of cement concrete (1:2:4) reinforced as directed by the Engineer; and shall he finished with cement plaster 1:2 on both the sides. The thickness of the shelves SUN TECH. INTER

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shall be as indicated on the drawings or in the Schedule of Quantities. The shelves shall be either precast or cast in situ as directed by the Engineer.

The rate shall include all work specified above, formwork and fixing in position including making and filling channel in masonry and providing brackets etc. complete.

i) R.C.C. Sunshades:- The sunshades shall be of cement concrete 1:2:4 reinforced as directed by the Engineer. The reinforcing bars shall be properly and securely anchored to the R.C.C. lintels as directed by the Engineer.

i) R.C.C. Stair Case Steps arid Landing:- Unless otherwise specified all staircase steps, landings, etc. shall be laid in situ with cement concrete 1:2:4 reinforced with mild steel bars as shown on the drawings or as directed by the Engineer. The steps shall be of the width shown on the drawing or as indicated in the Schedule of Quantities. The tread rise and thickness of the slab underneath the steps (known as "Waist") shall be as directed by the Engineer. The steps shall be finished with non slipping treads and moulded noses in cement plaster as directed by the Engineer. The rate shall include erecting and removing centering etc. complete with all necessary beams and brackets.

k) Precast Concrete blocks, panels, etc:- The precast blocks shall be of size indicated by the Engineer, made concrete in the proportion of 1 part of cement co 3 parts of clean river sand and 6 parts of shingle varying from 1/8" to 1/2" in size or in such proportion as given in Schedule of 'Quantities. The blocks may be made by hand or in a machine and with a wet or diy mix as approved by the Engineer.

Precast concrete slabs for the stairs-ases, perforated panels and posts shall be cast in the proportion of 1:2:4, with reinforcement as shown on the drawings or as directed by the Engineer.

The precast blocks, etc., when made shall after the initial set be immersed in a tank of water or kept constantly moist by wet gunny bags for at least a week, and kept under shade for another week before being used. The blocks and slabs etc. shall be set in 3:1 cement mortar, the joints being of unifront thickness not exceeding 3/8"

The concrete block walls 4 inches and less in thickness shall be reinforced with 1/4 inch dia mild steel rods and every alternative course, a suitable grove being left in the edge of the blocks for the purpose. The reinforcing steel shall extend at. least 3 inches and grouted in the main wall,.

I) Boxing of R.S Joist Rails etc.:- The boxing of R.S. foists, Rails etc. shall be done as shown on the drawings or as directed by the Engineer. The Joists rails, etc. shall be thoroughly cleaned so as to be free from rust, scale etc., and be passed by the Engineer before being covered with cement concrete. The wire hoping round the joists shall be provided where shown on the drawings and shall consist of two ply tour pointed barbed wire of approved quality wound in a spiral with a pitch not exceeding 4 inches.

m. Formwork:- The formwork shall be sufficiently strong and so constructed as to remain rigid during the laying, tamping and setting of concrete. It shall be approved by the engineer before concreting is started, but the contractor shall be responsible for its sufficiency. All joints must be close enough to prevent undue leakages of the liquid cement.

All rubbish must be removed from the interior of time forms before the concrete is placed. The formwork in contact with the concrete shall be clean and thoroughly wetted or treated, with oil or other composition as required and approved by the Engineer, so as to give a clean surface to the concrete.

The formwork shall be arranged as to permit of easy removal without jarring the concrete. Wedges and clamps being used wherever practicable instead of nails.

No formwork shall be removed for at least 14 days after the placing of concrete.

n. Concrete:- Concrete shall be laid as soon as it is mixed; it shall be carefully and gently deposited not thrown from a height.

No joints will be allowed in beams; joints slabs where unavoidable shall be made on the beams or on walls. For joints between successive days work, the old concrete shall be hacked, washed and brushed to remove all loose particles of dust and dirt, and grouted with neat cement immediately before placing the new concrete. The new concrete shall be well rammed against the joints.

Freshly laid concrete, shall be kept moist by wet cement bags and frequent sprinkling of water for first 4 hours and then after removing the bags, earth shall he built sufficiently high so as to maintain about 2 inches of water for 14 days.

All concrete while setting shall be protected from the direct rays of the sun and shall be prevented from drying out for 14 days.

All exposed concrete surfaces shall be finished smooth with cement plaster or neru as required. No extra payment will be made for such work:- The cement plaster shall be lined in the desired shape or pattern wherever required.

The rate of all cement concrete work, shall include moulds, formwork, centering, watering etc.

Damp Proof Course:

1. The damp proof course at plinth level is to consist of a layer of 1:2:4 cement concrete mixed with "Pudlo" or other cement water-proofing compound approved by the Engineer. The mixing of the water-proofing compound shall be (lone in the proportion and manner recommended by the manufacturers of the purpose and to the satisfaction of the Engineer.

The damp-proof course shall extend over the whole of walls and be of a thickness shown on the drawings or in Schedule of Quantities.

The "Pudlo" or other approved Water-proofing compound shall be provided by the contractor and included in his rate.

Lime Plastering

All joints in masonry to be raked out to it depth of at least 3/4 inch and the walls to be thoroughly washed with water before plastering is commenced. The first coat of lime plaster 1:2 with 10 lbs. of boiled sugar every 100 C. Ft. of mortar shall be applied 3/4" thick and well beaten in for 1 to 2 days with hand tappers until it is reduced to 1/2" thickness; after the first coat has become, a prix of '2 of fine lime and 1of white wash lime and choppen gunny bags 6 lbs. to 100 C. Ft. or mortar shall be applied as a thin coat., lightly beaten and well rubbed with a plaster's float. The finishing coat with 1 of fine lime 2 of white wash lime shall be applied very thin and rubbed and polished with a large trowel until it is smooth and even. The complete plaster shall be allowed to rest for 24 hours and then be sprinkled with water at short intervals for 4 to 5 days.

Cement Plaster

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16. The surface to be prepared as for lime plaster. A rendering of morter consisting of I part of cement and 3 parts of fine sand shall he applied in layers not exceeding 1/4 inch in thickness to a total thickness of 1 inch. They rendering shall be kept rough and should not be beaten, but finished off with a thin coat of 1/8 inch of pure cement and polished well with a trowel.

Cement Plaster to Outside of External Walls

17. Before rendering, the surface of the wall shall be thoroughly cleaned with water and all the joints well raked out to provide it good key as shown in Clause 15 above. A rendering of morter consisting of I part of cement and 3 parts of sharp washed sand, shall be applied in layers not exceeding 3/4 inch in thl(k less) to true up the surface. This coat shall be ruled off and thoroughly combed with wavy horizontal lines about 1 /2 inch a part and not less than 1/8 inch deep to form a good key (or the second coat and shall be left for at least 48 hours before the application of the finishing coat which shall be applied when there is slight amount of moisture left on the surface. The finishing coat shall consist of one part of cement and one part of sharp washed sand and the thickness not to exceed 1/4". The surface shah be finished with a wooden float and brought to it true finish, care being taken to ensure that the gauging water is kept uniform for each mix, and to the satisfaction of the Engineer.

1 When the finishing coat has hardened off, the surface must be kept moist for at least seven days.

Coloured cement wash shall be applied to the finished surface in two coats or more if necessary to ensure uniformity to the satisfaction of the Engineer. The coloured cement shall be fresh, water proofed and of the best duality and shade and be approved by the Engineer before use. The surface shall he sprinkled gently with water for at least 48 hours before and after each coat applied or any longer period as directed by the Engineer. The finishing coat shall be watered for 6 days. The tern ,it wash shall not he allowed to dry out until it has attained its set, and does not dust of.

Pointing

The joints of the work to be "Pointed" shall be neatly defined by the pointing and the lines shall be regular and uniform in breadth. No false joints shall be allowed.

a. Cement Pointing:- The joints shall be done as soon as rapidly as possible and not touched again after it has once begun to set. The old mortar shall be raked out of the joints at last 3/4 inch, the dust shall then be brushed out of the joints and the work well vatted and washed with water before pointing is started. Mortar for pointing to consist of one part of Portland Cement and two of fine sand. The work pointed shall be kept wet for at least ten days.

White Washing

19. The walls to be well cleaned and brushed before white washing. The white washing material to be prepared from fresh burnt white "lime stone or from shell lime if available. The lime to be dissolved in a tub with sufficient quantity of water and the whole well mixed strained through a clean cloth. Clean gum dissolved in hot water to be added in the proportion of 2 oz. of gum to I C. Ft. of lime along with a small quantity of marine blue as directed by the Engineer.

Three coasts to be applied

Chalk Wash

20. The walls shall be well cleaned and brushed before chalk-washing clean white chalk of approved quality shall be slaked thoroughly with hot water in a covered vessel. To every one cwt of chalk 14 1

SUM TECH. WEEKING

/2 lbs, of salt dissolved in host water, 8 1/2 lbs, of coarse rice pounded or boiled to a thick paste, 1 1/2 lbs of blue cleaned by dissolving in hot water (the dirty refuse being rejected) and a small quantity of marine blue shall be added. All the ingredients shall be well mixed and brought to the required consistency by the addition of hot water, then allowed to simmer over a fire for a few hours, the strained and applied two coats with brush.

Distemper

Distemper shall be oil bound of best manufacture approved by the Engineer and of the required colour and shade. The distemper shall be mixed and applied strictly in accordance with manufacturer's or as directed by the Engineer. The plasterwork shall be carefully rubbed down smooth with sand paper and cracks, holes and other inequalities be filled with a mixture consisting of hot glue; whiting alum, and little distemper.. The filling shall be allowed to set harp before distemper is applied.

Two coat of distemper of a approved tint shall then be applied with a perfectly uniform finish free from laps or streaks.

R.S Beams & Girders and Other Iron Work in Windows

22. The steel must be of such strength and quality as to confirm with the latest British Standard Specification for structural steel.

All Beams, or Girders etc. shall be free from gust scales, blistrs lamination cracked edges, and defect of every sort.

Painting for Iron Work

All steel and iron work, except that used as reinforcement in concrete shall be painted with one coat of Red lead before fixing and two coats of other approved point after fixing, portions buried in masonry to be given one coat of hot tar. Surfaces to be painted to be thoroughly dry, clean smooth, and free of rush and dirt; all colors to be laid on evenly and properly with best type of brushes. The paint work should show no hair marks, or drops of paint, each tort shall be allowed to dry thoroughly before the next is laid.

Country Flat Tile Over Roof

The tiles flooring over roof shall consist of 1st class well shaped, well burnt and sound country tiles 12" \times 12"x $\frac{1}{2}$ " in size laid in lime mortar and cement pointed, in laying the care shall be taken to obtain a perfectly smooth floor and to break the joints. The tiles shall be thoroughly wetted for at least 24 hours before use.

Mud Plaster

The clay for mud plaster shall be free from all vegetable matter, gravel and other impurities and shall be mixed with chopped straw, cow-dung and water in sufficient quantities so as to make a sticky and plastic mixture which shall be kept for at least a week before use. The plaster shall be applied in two layers, the second layer being laid after the first is thoroughly dry. Any crakes in the plaster which may appear on drying shall be filled up with fine coat of clay mixed with cow dung to the entire satisfaction of the Engineer-SUN TECH INTERNATION

Cement Tile Flooring



26. The tile flooring shall be of Nusserwanjis patent Cement Tiles or any other make approved by the Engineer. The tiles ,hall be in one plain colour with a design in colour, and with a suitable border as indicated in the schedule of Quantities. The colour and design will be selected by the Engineer.

The tiles shall be laid on a base of 3" lime concrete well watered and consolidated with a flooring of 1" inch of sand-lime mortar over it. A liquid mixture of neat cement and water should then be poured over this floating and the tiles set one by one over this grounting by tapping gently with wooden hammer. Before the tiles are so set they must be first dipped in water for about half a minute and then allowed to trip out of all the water. As the tiles are being fixed, care must be taken that the joints are close in straight lines and filled in with cement grout by means of a fine trowel and by pouring cement grout over the whole of the titled surface. The titles shall be set evenly and in level. The title laid each day shall at the close of work be thorough cleaned with white (Deoder) saw-dust or with washed gunny bag pieces slightly moistened in water to remove any super fluous cement that may be laying on the surface of the titles. It found necessary, the tile flooring shall again be washed and thoroughly cleaned in the manner directed by the Engineer on completion of the work and before it is taken over.

The rate shall include lime concrete base, supplying and laying tiles and cleaning as specified. The payment will be based on final square measurement of completed flooring.

Cement Skirting Tiles

27. Skirting tiles shall be of the corresponding type and make it specified for cement flooring tiles vide Clause 26. The colour and design shall be approved by the Engineer.

The tiles shall be laid in cement mortar and finished in the same way as cement flooring tiles and to the entire satisfaction of the Engineer.

The rate shall include supplying and laying of cement. skirting tiles and cleaning etc. The payment will be based on final lineal feat of the completed skirtings.

Chimney Flue

28. Chimney flue shall be constructed exactly as shown on the drawing or as indicated by the Engineer.

The rate shall include all the work required in the construction of the flue and of all the chimneys etc. on different floor served by the same flue as per design details on the drawings.

Wood Work

29. All timber, shall be best, quality sound free from sap, shakes, larges loose or dead knots and thoroughly seasoned. It shall be approved by the Engineer before being used. The kind of timber used shall be pucca teak or as indicated in the schedule of Quantities or Specification Part 11.

All workmanship shall be of the best description and all joints must fit accurately without wedging. All faces shall be planned true acid and the edges shall be square. All wood work to be embedded masonry to be well coated with hot tar.

a. <u>Door and Windows:-</u> Shall de glazed panneled or ledged and braced as shown on the drawing or as directed by the Engineer. The sizes of scantling, etc. and the kind of timber used for frames & shutters of doors and windows shall be as shown on the drawings or as directed by the Engineer. The door and window frames shall be provided with 2 or 3 iron hold fasts on each side as required.

Measurement for door and windows shall he taken inclusive of frames. The rates shall include at

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fitting, iron-bars where specified, glazing with frosted glass 1/6" thick and 3 coats of paint or varnish as required.

- b. Trellis Work:-The batten in the trellis work shall be 1 ½ x ½" in section and be iet into the framing and secured to each other so as to cross diagonally in 2 direction at an angle 45° to the framing (or horizontally and vertically if so required) leaving 1 ½" openings. The scantlings of the doors and windows and framing Trellis work shall be of the sizes shown on the drawings. The rate of the trellis work shall include all fittings and painting as generally specified
- c. <u>Fittings:-</u> All metal fittings for doors and windows shall be of brass of best quality approved by the Engineer. Iron fittings shall only be provided in cases particularly indicated. Screws shall be of Brass or iron according to the fittings and shall be properly driven and not hammered.

All doors and windows shall be provided with wooden chocks 6" long 2" thick screwed to the frames with brass screws to prevent the shutters opening against and damaging the walls. Other fittings to be provided doors and windows shall be as detailed in Specifications Part-II.

d. Roof Structures, Posts etc: The wood-work for trusses, rafters, purlins, beams, wallplates, eaves boards, etc., of the roof structures and post shall be of the variety of timber specified in the Schedule of Quantities or Specifications Part II, neatly planed painted and in other respect as specified for wood-work in general. The unexposed portions of the timber shall be worked smooth but not planed. All the members of the roof structure shall be constructed in accordance with and be of the same size as shown on the drawings. All mortice and tenon joints, scarf etc., to be fitted together accurately in the workmanship manner and to the satisfaction of the Engineer.

The purlins shall be of such lengths as to have joints only at the wall supports or trusses and shall be secured in position by purlins blocks as shown on the drawings or as directed by the Engineer.

All iron straps, bolts etc. used in the work shall be good workmanship and to be blue heated and brushed over with coal tar.

The rate for the roof-work shall include fixing in position with all the iron straps and fittings necessary and three coats of approved paint to wood and iron-work. The rates for post shall include fixing position in the floor and making good the floor with cement plaster etc.

e. Painting:- No wood work shall be without paint or varnish unless otherwise directed by the Engineer. The surface to be painted or varnished shall be cleaned of all dirt, and dust, rubbed smooth and painted with one coat of best boiled linseed oil Subsequent, one coat of M/s. Jenson & Nicholson's Brand white lead paint shall be applied and after it is quite dry, Al holes and cracks shall be proper filled in with putty. The final cost shall be applied after a sufficient interval of time. The best paints or varnish approved by the Engineer shall only be used.

Paint Oil, Varnish, French Polish

Shall be of best manufacture as directed by the Engineer. Paint shall be dense of good body, tenacity, drying powers, required colour, durable, shall give smooth. Varnish shall be of permanent gloss, tough, hard and durable on exposure to weather; it shall give smooth, even and bright surface and it shall stand washing retain its colour and not blister exposure.

Asbestos Cement Sheets and Ridges

31. The asbestos cement sheets and ridges shall be of the thickness, type and manufacture specified in the Schedule of Quantities or in Part II of Specification. The lengths of the sheets shall be selected to

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suit the spacing of the purlines and shall be first approved by the Engineer.

The sheets shall be laid so as to have the vertical joint at right angles to and straight from the eaves to the ridge. The side lap shall be at least one and a half corrugation and the end lap not less than-6 inches. The corners shall be properly mitred where necessary at the junctions.

The sheets shall be fastened to the purlins on each side of the vertical lap with 5/16 inch galvanized drive screws 4 ½ inches long or with 5/16 inch G.I hook bolts of proper length in the case of steel purlines and provided with 1-1/26 inch bitument filled washers. The holes in the sheets shall be carefully drilled and not punched through the crown of the corrugations. An ordinary brace and twist drill should be used for drilling the holes which shall be 1/16 inch larger than the largest diameter of the screw or bolt. The sheets should not be fixed more tightly then necessary to attach them securely and should not under any circumstances be screwed down too rigidly to the purlins. The screws shall be properly worked and not hammered, just far enough to seat the washers over the crown of the corrugations, but no further. The spacing of the fixing screws and hook bolts shall be as recommended by the manufacturers of the sheets and as approved by the Engineer.

The payment shall be on the square measurement of the finished roof area and on lineal measurement of ridging as laid. The rate shall include laying with necessary overlapping and fixing securely to the roof structure with the required screws, washers etc.

NOTE:

Asbestos Sheets measuring less than the specified thickness will not be accepted, irrespective of the manufacturer's specification of the sheets, should the asbestos cement sheets offered by contractor be found wanting in any respect, the contractor shall provide any other make of sheets specified by the Engineer by the rate quoted in his tender, the, difference in cost if any, being borne by hint (the contractor)

Asbestos Cement Down take Pipes

32. The asbestos cement down-take pipe shall be of the internal diameter as given in the Schedule of Quantities or Specification Part-II with deep sockets and of approval quality and manufacture. The pipes shall be fixed by means of approved iron clips screwed to wooden plugs inserted in the walls in such it manner as to keep the pipes clear of the wall. All joint shall be made with a one and one cement and sand mixture tightly packed or to a hemp gasket and neatly pointed.

The rate shall include all connection of corresponding shape and size square and obtuse elbows with inspection holes, T, &Y branches, offsets shoes, head, gratings, etc., complete to the satisfaction of the Engineer.

3"4" Dia Cast Iron Pipes etc

33. The cast iron pipes and their requisite fitting shall be truly cylindrical, of the clear internal diameter specified, of a uniform thickness, smooth and with strong and deep sockets, free from flaws, air bubbles, cracks, and holes acid other defects. They shall not be brittle and shall all allow of ready cutting clipping, or drilling. The thickness of metal of the pipes shall be at least 3/16ths of an inch and the weight of the pipes shall be less than 9 lbs. per foot run. The rate shall include fixing the pipes in position providing necessary fitting connection and painting with 3 coats paints. The apes shall coated with Dr. Augus Smith's Composition. All bends and tees shall have inspection holes with water and gas-light covers, All joints shall be made perfectly air and water-light to the satisfaction of the

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Cast Iron Nahni and Gulley traps

34. All traps to be set perfectly true and level and shall be of size as shown the drawings or as directed by the Engineer.

UnderFIRST Drain

35. Pipes for the drain shall be of best quality fire-clay or stone-ware salt glaze, thoroughly burnt through out the whole thickness, of a close and event texture, free from air blows, fire blister, cracks and other Imperfections, and with perfectly glazed internal and external surfaces.

The drain should be laid to the alignment level and gradients shown on the drawing or as directed by the Engineer. The socket ends of the pipes shall always face the upstream of the flow. All the joints shall be thoroughly cleaned and moistured and then neat cement paste shall be forced into the joints until the whole space around the spigot between it and the socket is full, the cement being sprayed off to form a net fillet round the pipe. The inside of each joints shall be carefully cleaned in order to remove any surplus cement extruded from the joints.

The rate for drain work shall include excavation and refilling of the trenches, dry metalled foundation 6 inches thick by 12 inches wide under the drains and all the work in connection with the supply, alignment, jointing and laying of drain pipes.

The trenches shall not be filled in until the joints have been tested and the alignment levels, etc., examined and passed by the Engineer.

Syphon Traps

36. The sypons traps be of the best quality fire-clay or stone-ware salt-glazed, thoroughly burnt though the whole thickness of a close and event texture, free from air blows and other imperfection with surfaces both internal and external perfectly glazed.

The rate of the syphon traps shall include their supply and laying in cement mortar as directed by the Engineer.

Manholes & Inspection Chambers

37. Manholes etc., shall be of course rubble masonry or cement concrete block masonry set in cement mortar and arranged as shown on the drawings, or as directed by the Engineer. The top of the manhole shall be covered with 1:2:4 reinforced cement concrete slab set in situ or precast and set in cement mortal- and provided with a cast iron seat and cover as shown on the drawings. The floor of the manhole shall be "benched" towards the centre to form at the bottom a semicircular channel of the same diameter as the pipe and in alignment with it.

All exposed surfaces shall be finished smooth with cement plaster. Iron rings shall be fixed inside manholes as shown on the drawings.

The manhole covers and seating shall be of cast iron of approved quality free, from all defects and flaws and shall be gas-tight and of the type and design shown on the drawings.

The letter K.P.T. shall be cast on the cover. The rates of manhole shall include all work and material necessary for the complete construction of the manholes as specified above to the satisfaction of the

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Engineer.

In all rates, the contractor should make allowances for and pumping and timbering that may be required in construction.

White Glazed Channel Drain

38. The drain shall consist of 6" dia: white glazed channel pipes with 6" white glazed tiles on both sides laid in cement mortar as shown on the drawing or as indicated by the Engineer. The channel pipes and the tiles shall be ¾" thick of best quality, free from cracks flaws and other imperfections and have smooth and perfectly glazed white surfaces.

Rates for the drain shall include supplying and laying the channel pipes and tiles in cement mortar completelin every respect.

The channel pipes and tiles shall be best quality. British or other approved manufacture

Sullage Water Drains

39. The drain shall be 1:2:4 cement concrete and of the size and shape as shown on the drawings or as directed by the Engineer. It shall be laid on foundation of lime concrete 18" wide by 6 inches deep and finished smooth with 1" thick cement plaster.

The rate for the drain shall include excavation lime concrete foundation, cement concrete work 1 inch thick cement plaster and all filling required for the drain complete in all respect.

Sanitary Fittings etc.

40. The bath tubs, wash basins English and Eastern patter: W.C. seats together with all necessary soil, vent and autisyphon pipes brackets, flushing cistern and other fitting shall be of approved quality and manufacture, and shall be supplied and fitted in position by the contractor to the satisfaction of the Engineer and in accordance with the rules and regulations of the Karachi Metropolitan Corporation.

The W.C. seats (English and Indian pattern) shall be fixed as to have the water traps above the floor and the soil pipe taken through the wall of the building.

Water Supply

A1 Supply pipelines and all plumbing work concerned therewith will be carried out of the Port Trust unless otherwise stated in the Schedule of Quantities.

Drainage

- 42. Septic Tank and other drainage work not included in the tender will be either carried out departmentally or by a separate contract
 - Other specification in accordance with Part II.
 - Strike off when not required.

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KARACHI PORT TRUST ENGINEERING DEPARTMENT SPECIFICATION PART-II

NAME OF WORK: MAINTENANCE / REPAIR AND VEHICLE ACCESS CONTROL SYSTEM AT VARIOUS LOCATIONS IN LALAZAR AREA.

(1) Preparation of Surface:

All surface, whether concrete, wood or steel to be colour washed, white washed, distempered or painted etc. would be thoroughly cleaned by wire brushing scrapping or burning with blow lamp as and where necessary irrespective of the fact whether it is specified in the Schedule of Rates or not. Nothing will be allowed to be applied on the surface unless the surface has been thoroughly cleaned and certified by the Engineer Incharge.

(2) White Washing:

The surface to be white-washed shall be thoroughly cleaned of mortar drops and foreign matter by and papering before white-wash is applied. The white-wash shall be prepared from fresh white limo of the best quality.

Unslake lime shall be placed in a large vessel full of water and shall be thoroughly mixed and stirred up with pole or rod until the mixture attains the consistency of thin cream. It will then be strained through clean and coarse cloth. Clean gum dissolved in hot water to be added in, the proportion of 2 oz. of gum to 1 cft of lime alongwith a small quantity or marine blue as directed by the Engineer. The white-wash shall then be applied with a brush vertically and horizontally alternately to a smooth uniform and white finish, the finishing stroke will be applied vertically. The full operation / of applying once horizontally and once vertically will be reckoned as one coat. Doors, windows and floors, must be protected from being splashed with wash. Splashing and dropping if any shall be at once removed and the surface cleaned (the same day).

Each coat of white-wash is to be allowed to dry and should be approved by the Engineer-in-charge before applying the next. When dry, a coat of white-wash should show no sign of cracking nor of coming off on the finger tip when rubbed.

(3) Colour Washing:

Colour wash is made in the same way as white-wash (Item No. 2) with sufficient of the specified colouring matter added to give the desired tint-ort drying.

When, completed the walls must be of a uniform colour free from blotches and the wash must be such as will neither crack nor come off on the finger when rubbed.

(4) <u>Distempering:</u>

Distemper shall be of the approved quality and make to be approved by the Engineer-in- Charge.

Distemper shall be of such a quality as consists of lime proof, pigment. Before work of distempering is commenced the plastered surface must be treated with a priming coat. Distemper shall be applied quickly and holdly with large flat brushes of approved make. The brush is to be, dipped and stroke cross-wise on the wall and then immediately stroked up and down. This process shall be considered to be one coat of distemper. The distemper shall be mixed in the manner specified by the makers and each coat shall be inspected and passed by the Engineer-in-charge before next coat is applied. The finished surface shall be carefully stippled to remove any brush marks.

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(5) Applying Snowcem:

Snowcem shall be obtained from approved manufacturers. It shall be obtained in sealed tins which shall be opened in the presence of Engineer-in-charge and used on the work. No foreign material whatsoever should i,e added to snowcom.

Snowcem must be mixed in two stages. First by adding a little quantity of water to form a paste and then further quantity of water being added to get a mix of liquid consistency. water immediately before applying the first coat.

In the first stage one measure of water to a similar measure of. snowcem must be thoroughly stirred and allowed to stand for 10 minutes. A further measure of water should then be added and thoroughly mixed. This mix must be applied within one hour of the mixing. The lid of the container must be tightly replaced immediately after the materials been taken out from it. The surface over which the snowcom is to be applied shall be thoroughly staturaled with

The snowcem should be applied with brushes of approved make and manufacture. The first coat of snowcem shall be well scrubbed into the surface by means of brushes and allowed to set for a period of 24 hours. after this period of 24 hours the second coat shall be applied.

Alter two coats have been applied the surface shall present a uniform smooth surface, proper curing should be done as directed by Engineer.

The Contractor's rate for applying snowcern shall include the cost of all material, labour, and scaffolding etc.

(6) Painting Over Wood Work and Iron Work (General)

The painting shall not be started till the Engineer-in-charge has inspected the work to be painted and given his approval in writing to commence the painting.

Only best quality of paint made by an approved manufacturer and packed in sealed tins shall be used

The wood work shall be painted only when thoroughly dry. The surface to be painted shall be finished smooth and rubbed thoroughly with sand paper.

All holes, cracks and defects etc. in the wood shall be levelled up with approved quality of putty before application of the paint and to the satisfaction of Engineer-in-charge.

The steel surface to be painted shall be cleaned off all rusts scale, dirt etc. by using a scrapper or a steel wire brush. The surface should be absolutely dry before paint is applied.

Paint shall be applied only by skilled painters who shall use paint brushes of approved manufacture.

The paint shall be constantly stirred while being applied and will not be allowed to settle in the can. The stirring must be done with a smooth stick of not by the paint brush.

At the close of the day's work the brushes shall be kept with the bristles immersed in raw linseed oil. Before using the brushes oil must be rubbed out. A brush in which the paint has been allowed to dry shall not be allowed to be re-used on the work. Brushes required to be used for another colour shall be rinsed out with turpentine or washed with kerosene oil.

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The contractor shall remove all stains, smears, splashed and droppings of every kind from floors, glazing etc.

For the purpose of payment the area of the project of the work on vertical plane will be measured by multiplying the length or width by the height of the painting The area thus obtained shall be further multiplied as given below for the various types of surfaces mentioned against each.

a.	Panelled or battened door:	The area of one side shall be multiplied by 1 $\frac{1}{4}$ and will cover the work on both sides.
b.	Partly glazed doors and windows:	The area of one side shall be multiplied by 2 and will cover the work on both sides.
c.	Fully glazed doors and windows	The area of one side shall be multiplied by 1 and will cover the work on both sides.
d.	Fully wire glazed doors and windows:	The area shall be multiplied by 1 $\frac{1}{2}$
e.	Partly wire glazed doors and windows:	The area shall be multiplied by 1.
f.	Framed battened and braced or framed	The area shall be multiplied by 2.

and battened or lodged & braced doors
and windows:

g. Trellis work, iron bars or grill work. The area shall be multiplied by 1.

h. Louvered doors The area shall be multiplied by 2 ½.

The measured area will be of one side and the factor specified will be used to cover the work on both

The area shall be multiplied by 1 1/2

The rate shall include cost of scaffolding. ladders, materials and other appliances lot efficient execution of the work.

(7) General:

i.

Blusterade

The contractor shall carry out as many coats as specified in the Schedule of Quantities in accordance with the above specifications. The number of coats specified are enough for producing the uniform smooth finish and finish produced by the Contractor if not upto this specification he will be required to apply as many more coats as may be required to produce the required uniform finish and no payment for extra coats applied to produce the desired uniformity will be made.

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KARACHI PORT TRUST

ENGINEERING DEPARTMENT PREAMBLE TO THE SCHEDULE OF QUANTITIES

The following is the list of Drawn	ıgs .
Plan No	
Dated:	

GENERALDIRECTIONS

CLAUSE

- These General Directions describe the method of measurement which will be pursued in respect of
 certain items also the particulars of what is to be included in the rates set down 'or the various
 items and are applicable to each and every portion of this bill of Quantities.
- 2. The terms "Clause" at the head of the left hand column refers to paragraphs containing general direction of descriptive matter not required to be priced.

'The term "Item": refers to matter to which rates are to be affixed.

3. The units of measurement used in this Bill of Quantities.

Linear	Liner				Meter	То	R.M
		9		abl	oreviated		
Superficial	Square				Meter	•	Sq.M
Volume Weight	Cubic			•	Meter		Cu.M
A. M.	Ton (of	٠	*	. 3	-	-	Kg.
	1000 Kgs.)						
	Kilogram		*	20	-	-	
Number	Number	920				-	No.

Where the unit is stated to be 100 R.M. 100 sq. M. or 100 cu. M. the quantities set down in the quantity column are the actual number of meters and not the number of units.

The rate inserted by the Tenderer is to be per unit.

- 4. The Bill of quantities must be read with the General Conditions, and the specification, and the Contractor shall be deemed to have examined the Drawings Specification, General Conditions and to have acquainted himself with the detailed descriptions of the works to be done and the way in which they are to 'be carried out.
- , 5. The Quantities set down against the items in this Bill of Quantities are an estimate of how much of each kind of work is included in the Contract and are given for the convenience of forming a common basis for tenders, and they are not to be taken as a guarantee that the total quantities scheduled or every item will be carried out or required.
 - 6. The Quantities shall therefore, not be considered as representing the final measurements, it being the intention of the Contract (except where otherwise specifically stated) that all work embraced therein shall be measured upon completion by the Engineer or his authorized representative and paid for at the prices and rates entered in the Bill of Quantities by the Contractor.



- 7. The special methods of measurement which will be pursued in respect or certain items (such as excavation, filling, etc.) are stated hereafter. All other materials will be measured net as fixed in the work and no allowance made for waste.
- 8. Each item in the Bill of Quantities is to be priced or if any of the items are left un-priced the Contractor is to indicate that the value of the work or commitments described there-under is allowed for elsewhere in the Bill. No tender will be considered unless these requirements have been fulfilled.
- 9. The rates set down against the items are to be the full inclusive value of the finished work described there under and are also to cover the cost of every description of temporary work executed or used in connection therewith, except those in respect of which specific provision is made by way of separate items, including (but not by way of limitation) all labour, transport, cartage, materials, plant, machinery and appliances, staging, jetties, moorings, wharves, temporary railway, roads, workshops, offices sheds, latrines, wash places, medical and welfare facilities, housing accommodation for contractors staff and employees, fuel, water lighting, drainage including diversion of storm water, all pumping and keeping the works free from water, all costs in connection with labour ordinances, customs, harbor or others dues establishment, charges, royalties, rent, telephone, services, insurance premiums, assistance, attendance, watching and all contingent expenses, liabilities and responsibilities mentioned and referred to or to be inferred from the Conditions of Contract, Drawings and Specification.
- 10. The rates set down in the Bill of Quantities will not be held to apply to the "materials on the ground "upon which advances are to be made, but temporary rates for these advances will be settled by the Engineer.
- The General descriptions and descriptions of material given in the Specification are not necessarily repeated in the Bill of Quantities.
- 12. Special attention is called to the Specification directing that all trenches and excavations should be kept dry.

13. STEEL

- a. All M.S. or hard grade deformed bars and structural steel. etc. of different sizes required for the work will have to be arranged by the Contractor. The contractor should make their own arrangements to procure the required steel, as per specifications given below, from the market.
- b. All Reinforcement should be cleaned by the Contractor by using Wire Brush etc. to remove all rust and oil before using the same in reinforced concrete work. No extra payment for this will be made to the Contractor.
- c. In case some restriction is imposed by the government on the procurement of reinforcing bars etc.

 the K.P.T Administration may assist in procuring necessary permits to the contractor but it should be the sole responsibility of the Contractor to arrange for the supply of quality steel at site.

13-A MILD OR HARD GRADE DEFORMED STEEL RE-INFORCEMENT

The steel for re-enforcement shall unless otherwise specified, be made by approved manufacturers in accordance with the B.S.S. 4449 or ASTM. A-615.

13-B STRUCTURAL STEEL

Structural steel sections and all fastenings shall be made by the approved manufacturers in accordance with the B.S.S.4360 or A-36 for structural steel.

- 19. The Contractor is required to maintain the work in good order for a period of Twelve months from the date of its completion, at his own cost.
- 20. The Contractors shall employ a qualified graduate Engineer for supervision of his work.

CHIEF ENGINEER K.P.T.

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