



USAID | BANGLADESH

FROM THE AMERICAN PEOPLE

Dhaka, Bangladesh

July 17, 2014

Dear Prospective Offeror/Quoter:

Subject: RFQ-388-14-000077 – Retrofitting/construction work solicitation

USAID Bangladesh, has a requirement for a contractor for renovation/construction works at the USG residence Polly Villa at Gulshan-2. You are invited to submit quotation. The Request for Quotations (RFQ) consists of the following sections:

1. Standard Form SF-18
2. Scope of Work/Bid Schedule
3. Drawings

USAID plans to award a purchase order. You are encouraged to make your quote competitive. You are also cautioned against any collusion with other potential offerors in regard to price quotations to be submitted. The RFQ does not commit USAID Bangladesh to make any award. USAID may cancel this RFQ or any part of it.

You are requested to be present at **Polly Villa, Road-63, House-24, Gulshan 2, Dhaka at 11:00 hours** for site visit and pre-proposal conference on **Wednesday, July 23, 2014**.

In order to obtain the solicitation package, please forward a request to e-mail: mrahman@usaid.gov. You can also download the solicitation package from the Embassy website: <http://dhaka.usembassy.gov>.

Please read the RFQ carefully, and if you are interested, submit your quotation. Return the completed SF-18 to the address shown in Block 5a of the SF-18 by 1600 hours on **August 01, 2014**. Oral quotations will not be accepted.

Sincerely,

Adonis Mello
Executive/Contracting Officer

Enclosure: as stated

REQUEST FOR QUOTATIONS <i>(THIS IS NOT AN ORDER)</i>		THIS RFQ [] IS [x] IS NOT A SMALL BUSINESS- SMALL PURCHASE SET-ASIDE (52.219-4)			PAGE 1	OF 1	PAGES 115
1. REQUEST NO. REQ-388-14-000077	2. DATE ISSUED 07/17/2014	3. REQUISITION/PURCHASE REQUEST NO. REQ-388-14-000077	4. CERT. FOR NAT. DEF. UNDER BDSA REG. 2 AND/OR DMS REG. 1	RATING			
5A. ISSUED BY The Executive Office, USAID Bangladesh, US Embassy, Baridhara, Dhaka-1212			6. DELIVER BY (Date)				
5B. FOR INFORMATION CALL: (Name and telephone no.) (No collect calls)							7. DELIVERY
NAME Md. Mustafizur Rahman – Procurement Specialist			TELEPHONE NUMBER		<input type="checkbox"/> FOB DESTINATION <input type="checkbox"/> OTHER (See Schedule)		
AREA CODE		NUMBER 8855500					
8. TO:				9. DESTINATION			
a. NAME		b. COMPANY		a. NAME OF CONSIGNEE			
c. STREET ADDRESS				b. STREET ADDRESS			
d. CITY		e. STATE	f. ZIP CODE	c. CITY			
				d. STATE	e. ZIP CODE		
10. PLEASE FURNISH QUOTATIONS TO THE ISSUING OFFICE IN BLOCK 5A ON OR BEFORE CLOSE OF BUSINESS (Date) 08/01/2014		IMPORTANT: This is a request for information, and quotations furnished are not offers. If you are unable to quote, please so indicate on this form and return it to the address in Block 5A. This request does not commit the Government to pay any costs incurred in the preparation of the submission of this quotation or to contract for supplies or services. Supplies are of domestic origin unless otherwise indicated by quoter. Any representations and/or certifications attached to this Request for Quotations must be completed by the quoter					
11. SCHEDULE (Include applicable Federal, State and local taxes)							
ITEM NO. (a)	SUPPLIES/SERVICES (b)		QUANTITY (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	
X	Retrofitting/construction works in the USG residence (Polly Villa, Road #24, House # 24, Gulshan 2, Dhaka as per attached scope of work, bid schedule and drawings. You are requested to be present at Polly Villa, Road-63, House-24, Gulshan 2, Dhaka at 11:00 hours for site visit and pre-proposal conference on July 23, 2014. Please see attached for details.						
12 DISCOUNT FOR PROMPT PAYMENT		a. 10 CALENDAR DAYS %	b. 20 CALENDAR DAYS %	c. 30 CALENDAR DAYS %		d. CALENDAR DAYS	
						NUMBER	%
NOTE: Additional provisions and representations [] are [] are not attached.							
13 NAME AND ADDRESS OF QUOTER			14 SIGNATURE OF PERSON AUTHORIZED TO SIGN QUOTATION		15 DATE OF QUOTATION		
a. NAME OF QUOTER							
b. STREET ADDRESS			16. SIGNER				
c. COUNTY			a. NAME (Type or print)			b. TELEPHONE	
d. CITY	e. STATE	f. ZIP CODE	c. TITLE (Type or print)			AREA CODE	
						NUMBER	

CONSTRUCTION
Solicitation Number: REQ-388-14-000077
Request for Quotations (RFQ) for Construction under

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SF 18

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Attachments

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- Attachment 2: Breakdown of Price by Divisions of Specification
- Attachment 3: Specification
- Attachment 4: Drawing
- Attachment 5: Time schedule
- Attachment 6: Vendor information form

REQUEST FOR QUOTATIONS – CONSTRUCTION
Solicitation Number: REQ-388-14-000077

A. PRICE

The Contractor shall complete all work, including furnishing all labor, material, equipment and services required under this purchase order for the following firm fixed price and within the time specified. This price shall include all labor, materials, all insurances, overhead and profit.

Total Price (including all labor, materials, overhead and profit)	
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A.1 VALUE ADDED TAX

VALUE ADDED TAX (VAT). USAID will issue NBR Certified VAT coupon for applicable VAT amount to the contractor.

B. SCOPE OF WORK

The character and scope of the work are set forth in the contract. The contractor shall furnish and install all materials required by this contract. In case of differences between small and large-scale drawings, the latter will govern. Where a portion of the work is drawn in detail and the remainder of the work is indicated in outline, the parts drawn in detail shall apply also to all other portions of the work. Please see attachment 4 for details specification.

C. PACKAGING AND MARKING : Reserved

D. INSPECTION AND ACCEPTANCE

The COR, or his/her authorized representatives, will inspect from time to time the services being performed and the supplies furnished to determine whether work is being performed in a satisfactory manner, and that all supplies are of acceptable quality and standards.

The Contractor shall be responsible for any countermeasures or corrective action, within the scope of this contract, which may be required by the Contracting Officer as a result of such inspection.

D.1 Substantial Completion

(a) "*Substantial Completion*" means the stage in the progress of the work as determined and certified by the Contracting Officer in writing to the Contractor, on which the work (or a portion designated by the Government) is sufficiently complete and satisfactory. Substantial completion means that the property may be occupied or used for the purpose for which it is intended, and only minor items such as touch-up, adjustments, and minor replacements or installations remain to be completed or corrected which:

- (1) do not interfere with the intended occupancy or utilization of the work, and
- (2) can be completed or corrected within the time period required for final completion.

(b) The "date of substantial completion" means the date determined by the Contracting Officer or authorized Government representative as of which substantial completion of the work has been achieved.

Use and Possession upon Substantial Completion - The Government shall have the right to take possession of and use the work upon substantial completion. Upon notice by the Contractor that the work is substantially complete (a Request for Substantial Completion) and an inspection by the Contracting Officer or an authorized Government representative (including any required tests), the Contracting Officer shall furnish the Contractor a Certificate of Substantial Completion. The certificate will be accompanied by a Schedule of Defects listing items of work remaining to be performed, completed or corrected before final completion and acceptance. Failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The Government's possession or use upon substantial completion shall not be deemed an acceptance of any work under the contract.

D.2 Final Completion and Acceptance

D.2.1 "Final completion and acceptance" means the stage in the progress of the work as determined by the Contracting Officer and confirmed in writing to the Contractor, at which all work required under the contract has been completed in a satisfactory manner, subject to the discovery of defects after final completion, and except for items specifically excluded in the notice of final acceptance.

D.2.2 The "*date of final completion and acceptance*" means the date determined by the Contracting Officer when final completion of the work has been achieved, as indicated by written notice to the Contractor.

D.2.3 Final Inspection and Tests -The Contractor shall give the Contracting Officer at least five (5) days advance written notice of the date when the work will be fully completed and ready for final inspection and tests. Final inspection and tests will be started not later than the date specified in the notice unless the Contracting Officer determines that the work is not ready for final inspection and so informs the Contractor.

D.2.4 Final Acceptance - If the Contracting Officer is satisfied that the work under the contract is complete (with the exception of continuing obligations), the Contracting Officer shall issue to the Contractor a notice of final acceptance and make final payment upon:

- Satisfactory completion of all required tests,
- A final inspection that all items by the Contracting Officer listed in the Schedule of Defects have been completed or corrected and that the work is finally complete (subject to the discovery of defects after final completion), and
- Submittal by the Contractor of all documents and other items required upon completion of the work, including a final request for payment (Request for Final Acceptance).

E. DELIVERIES OR PERFORMANCE

52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK
(APR 1984)

The Contractor shall be required to:

- (a) commence work under this contract within **07** calendar days after the date the Contractor receives the notice to proceed,
- (b) prosecute the work diligently, and,
- (c) complete the entire work ready for use not later than **90 calendar days**

The time stated for completion shall include final cleanup of the premises and completion of punch list items.

52.211-12 LIQUIDATED DAMAGES - CONSTRUCTION (SEP 2000)

(a) If the Contractor fails to complete the work within the time specified in the contract, or any extension, the Contractor shall pay liquidated damages to the Government in the amount of **Tk.2000.00** for each calendar day of delay until the work is completed or accepted.

(b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Default clause.

CONTRACTOR'S SUBMISSION OF CONSTRUCTION SCHEDULES

(a) The time for submission of the schedules referenced in FAR 52.236-15, "Schedules for Construction Contracts", paragraph (a), is hereby modified to reflect the due date for submission as 05 calendar days after receipt of an executed contract".

(b) These schedules shall include the time by which shop drawings, product data, samples and other submittals required by the contract will be submitted for approval.

(c) The Contractor shall revise such schedules (1) to account for the actual progress of the work, (2) to reflect approved adjustments in the performance schedule, and (3) as required by the Contracting Officer to achieve coordination with work by the Government and any separate contractors used by the Government. The Contractor shall submit a schedule, which sequences work so as to minimize disruption at the job site.

(d) All deliverables shall be in the English language and any system of dimensions (English or metric) shown shall be consistent with that used in the contract. No extension of time shall be allowed due to delay by the Government in approving such deliverables if the Contractor has failed to act promptly and responsively in submitting its deliverables. The Contractor shall identify each deliverable as required by the contract.

(e) Acceptance of Schedule: When the Government has accepted any time schedule; it shall be binding upon the Contractor. The completion date is fixed and may be extended only by a written contract modification signed by the Contracting Officer. Acceptance or approval of any schedule or revision thereof by the Government shall not:

- (1) Extend the completion date or obligate the Government to do so,
- (2) Constitute acceptance or approval of any delay, or

- (3) Excuse the Contractor from or relieve the Contractor of its obligation to maintain the progress of the work and achieve final completion by the established completion date.

Notice Of Delay

If the Contractor receives a notice of any change in the work, or if any other conditions arise which are likely to cause or are actually causing delays which the Contractor believes may result in late completion of the project, the Contractor shall notify the Contracting Officer. The Contractor’s notice shall state the effect, if any, of such change or other conditions upon the approved schedule, and shall state in what respects, if any, the relevant schedule or the completion date should be revised. The Contractor shall give such notice promptly, not more than ten (10) days after the first event giving rise to the delay or prospective delay. Only the Contracting Officer may make revisions to the approved time schedule.

Notice to Proceed

(a) After receiving and accepting any bonds or evidence of insurance, the Contracting Officer will provide the Contractor a Notice to Proceed. The Contractor must then prosecute the work, commencing and completing performance not later than the time period established in the contract.

(b) It is possible that the Contracting Officer may elect to issue the Notice to Proceed before receipt and acceptance of any bonds or evidence of insurance. Issuance of a Notice to Proceed by the Government before receipt of the required bonds or insurance certificates or policies shall not be a waiver of the requirement to furnish these documents.

Working Hours

All work shall be performed during **8.00am to 6.00 pm (all weekdays, Fridays and Saturdays)** Other hours, if requested by the Contractor, may be approved by the Contracting Officer's Representative (COR). The Contractor shall give 24 hours in advance to COR who will consider any deviation from the hours identified above. Changes in work hours, initiated by the Contractor, will not be a cause for a price increase.

Preconstruction Conference

A preconstruction conference will be held 10 days after contract award **at USAID Office, US Embassy, Baridhara, Dhaka** to discuss the schedule, submittals, notice to proceed, mobilization and other important issues that effect construction progress. See FAR 52.236-26, Preconstruction Conference.

Deliverables - The following items shall be delivered under this contract:			
<u>Description</u>	<u>Quantity</u>	<u>Deliver Date</u>	<u>Deliver To</u>
Section G. Securities/Insurance	1	10 days after award	CO
Section E. Construction Schedule	1	05 days after award	COR
Section E. Preconstruction Conference	1	05 days after award	COR
Section G. Personnel Biographies	1	05 days after award	COR
Section F. Payment Request	1	Last calendar day of each month	COR
Section D. Request for Substantial Completion	1	15 days before inspection	COR

Section D. Request for Final Acceptance	1	5 days before inspection	COR
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F. ADMINISTRATIVE DATA

652.242-70 CONTRACTING OFFICER'S REPRESENTATIVE (COR) (AUG 1999)

(a) The Contracting Officer may designate in writing one or more Government employees, by name or position title, to take action for the Contracting Officer under this contract. Each designee shall be identified as a Contracting Officer's Representative (COR). Such designation(s) shall specify the scope and limitations of the authority so delegated; provided, that the designee shall not change the terms or conditions of the contract, unless the COR is a warranted Contracting Officer and this authority is delegated in the designation.

(b) The COR for this contract is **Mr. Kamaruzzaman, Mission Engineer**

Payment: The Contractor's attention is directed to Section H, 52.232-5, "Payments Under Fixed-Price Construction Contracts". The following elaborates on the information contained in that clause.

Requests for payment, may be made no more frequently than monthly. Payment requests shall cover the value of labor and materials completed and in place, including a prorated portion of overhead and profit.

After receipt of the Contractor's request for payment, and on the basis of an inspection of the work, the Contracting Officer shall make a determination as to the amount, which is then due. If the Contracting Officer does not approve payment of the full amount applied for, less the retainage allowed by in 52.232-5, the Contracting Officer shall advise the Contractor as to the reasons.

Under the authority of 52.232-27(a), the 14 day period identified in FAR 52.232-27(a)(1)(i)(A) is hereby changed to 30 days.

Please submit the invoice to The Controller, Office of Financial Management, USAID Bangladesh, US Embassy, Dhaka.

The Contractor shall show Value Added Tax (VAT) as a separate item on invoice submitted for payment

USAID will issue NBR Certified VAT coupons against applicable VAT amount.

G. SPECIAL REQUIREMENTS

G.1.0 Performance/Payment Protection - The Contractor shall furnish some form of payment protection as described in 52.228-13 in the amount of 20% of the contract price

G.1.1 The Contractor shall provide the information required by the paragraph above within ten (10) calendar days after award. Failure to timely submit the required security may result in rescinding or termination of the contract by the Government. If the contract is terminated, the Contractor will be liable

for those costs as described in FAR 52.249-10, Default (Fixed-Price Construction), which is included in this purchase order.

G.1.2 The bonds or alternate performance security shall guarantee the Contractor's execution and completion of the work within the contract time. This security shall also guarantee the correction of any defects after completion, the payment of all wages and other amounts payable by the Contractor under its subcontracts or for labor and materials, and the satisfaction or removal of any liens or encumbrances placed on the work.

G.1.3 The required securities shall remain in effect in the full amount required until final acceptance of the project by the Government. Upon final acceptance, the penal sum of the performance security shall be reduced to 10% of the contract price. The security shall remain in effect for one year after the date of final completion and acceptance, and the Contractor shall pay any premium required for the entire period of coverage.

G.2.0 Insurance - The Contractor is required by FAR 52.228-5, "Insurance - Work on a Government Installation" to provide whatever insurance is legally necessary. The Contractor shall at its own expense provide and maintain during the entire performance period, whatever insurance is legally necessary.

G.2.1 General : Reserved

G.2.2 The foregoing types and amounts of insurance are the minimums required. The Contractor shall obtain any other types of insurance required by local law or that are ordinarily or customarily obtained in the location of the work. The limit of such insurance shall be as provided by law or sufficient to meet normal and customary claims.

G.2.3 The Contractor agrees that the Government shall not be responsible for personal injuries or for damages to any property of the Contractor, its officers, agents, servants, and employees, or any other person, arising from and incident to the Contractor's performance of this contract. The Contractor shall hold harmless and indemnify the Government from any and all claims arising therefrom, except in the instance of gross negligence on the part of the Government.

G.2.4 The Contractor shall obtain adequate insurance for damage to, or theft of, materials and equipment in insurance coverage for loose transit to the site or in storage on or off the site.

G.2.5 The general liability policy required of the Contractor shall name "the United States of America, acting by and through the Department of State", as an additional insured with respect to operations performed under this contract.

G.3.0 Document Descriptions

G.3.1 Supplemental Documents: The Contracting Officer shall furnish from time to time such detailed drawings and other information as is considered necessary, in the opinion of the Contracting Officer, to interpret, clarify, supplement, or correct inconsistencies, errors or omissions in the Contract documents, or to describe minor changes in the work not involving an increase in the contract price or extension of the contract time. The Contractor shall comply with the requirements of the supplemental documents, and unless prompt objection is made by the Contractor within 20 days, their issuance shall not provide for any claim for an increase in the Contract price or an extension of contract time.

G.3.1.1. Record Documents. The Contractor shall maintain at the project site:

- (1) a current marked set of Contract drawings and specifications indicating all interpretations and clarification, contract modifications, change orders, or any other departure from the contract requirements approved by the Contracting Officer; and,
- (2) a complete set of record shop drawings, product data, samples and other submittals as approved by the Contracting Officer.

G.3.1.2. "As-Built" Documents: After final completion of the work, but before final acceptance thereof, the Contractor shall provide:

- (1) a complete set of "as-built" drawings, based upon the record set of drawings, marked to show the details of construction as actually accomplished; and,
- (2) record shop drawings and other submittals, in the number and form as required by the specifications.

G.4.0 Laws and Regulations - The Contractor shall, without additional expense to the Government, be responsible for complying with all laws, codes, ordinances, and regulations applicable to the performance of the work, including those of the host country, and with the lawful orders of any governmental authority having jurisdiction. Host country authorities may not enter the construction site without the permission of the Contracting Officer. Unless otherwise directed by the Contracting Officer, the Contractor shall comply with the more stringent of the requirements of such laws, regulations and orders and of the contract. In the event of a conflict between the contract and such laws, regulations and orders, the Contractor shall promptly advise the Contracting Officer of the conflict and of the Contractor's proposed course of action for resolution by the Contracting Officer.

G.4.1 The Contractor shall comply with all local labor laws, regulations, customs and practices pertaining to labor, safety, and similar matters, to the extent that such compliance is not inconsistent with the requirements of this contract.

G.4.2 The Contractor shall give written assurance to the Contracting Officer that all subcontractors and others performing work on or for the project have obtained all requisite licenses and permits.

G.4.3 The Contractor shall submit proper documentation and evidence satisfactory to the Contracting Officer of compliance with this clause.

G.5.0 Construction Personnel - The Contractor shall maintain discipline at the site and at all times take all reasonable precautions to prevent any unlawful, riotous, or disorderly conduct by or among those employed at the site. The Contractor shall ensure the preservation of peace and protection of persons and property in the neighborhood of the project against such action. The Contracting Officer may require, in writing that the Contractor remove from the work any employee that the Contracting Officer deems incompetent, careless, insubordinate or otherwise objectionable, or whose continued employment on the project is deemed by the Contracting Officer to be contrary to the Government's interests.

G.5.1 If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice, including all relevant information, to the Contracting Officer.

G.5.2 After award, the Contractor has five calendar days to submit to the Contracting Officer a list of workers and supervisors assigned to this project for the Government to conduct all necessary security checks. It is anticipated that security checks will take 30 days to perform. For each individual the list shall include:

Full Name
Place and Date of Birth
Current Address
Identification number

Failure to provide any of the above information may be considered grounds for rejection and/or resubmittal of the application. Once the Government has completed the security screening and approved the applicants a badge will be provided to the individual for access to the site. This badge may be revoked at any time due to the falsification of data, or misconduct on site.

G.5.3 The Contractor shall provide an English speaking supervisor on site at all times. This position is considered as key personnel under this purchase order.

G.6.0 Materials and Equipment - All materials and equipment incorporated into the work shall be new and for the purpose intended, unless otherwise specified. All workmanship shall be of good quality and performed in a skillful manner that will withstand inspection by the Contracting Officer.

G.7.0 Special Warranties

G.7.1 Any special warranties that may be required under the contract shall be subject to the stipulations set forth in 52.246-21, "Warranty of Construction", as long as they are not in conflict.

G.7.2 The Contractor shall obtain and furnish to the Government all information required to make any subcontractor's, manufacturer's, or supplier's guarantee or warranty legally binding and effective. The Contractor shall submit both the information and the guarantee or warranty to the Government in sufficient time to permit the Government to meet any time limit specified in the guarantee or warranty, but not later than completion and acceptance of all work under this contract.

G.8.0 Equitable Adjustments

Any circumstance for which the contract provides an equitable adjustment that causes a change within the meaning of paragraph (a) of the "Changes" clause shall be treated as a change under that clause; provided, that the Contractor gives the Contracting Officer prompt written notice (within 20 days) stating:

- (a) the date, circumstances, and applicable contract clause authorizing an equitable adjustment and
- (b) that the Contractor regards the event as a changed condition for which an equitable adjustment is allowed under the contract

The Contractor shall provide written notice of a differing site condition within 10 calendar days of occurrence following FAR 52.236-2, Differing Site Conditions.

G.9.0 Zoning Approvals and Permits

The Government shall be responsible for:

- obtaining proper zoning or other land use control approval for the project
- obtaining the approval of the Contracting Drawings and Specifications
- paying fees due for the foregoing; and,
- for obtaining and paying for the initial building permits.

H. CLAUSES

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es): <http://www.acquisition.gov/far/> or <http://farsite.hill.af.mil/vffara.htm>. Please note these addresses are subject to change.

If the Federal Acquisition Regulation (FAR) is not available at the locations indicated above, use the Department of State Acquisition website at <http://www.statebuy.state.gov/> to access links to the FAR. You may also use an internet “search engine” (for example, Google, Yahoo, Excite) to obtain the latest location of the most current FAR.

The following Federal Acquisition Regulation clause(s) is/are incorporated by reference (48 CFR CH. 1):

<u>CLAUSE</u>	<u>TITLE AND DATE</u>
52.202-1	DEFINITIONS (NOV 2013)
52.204-9	PERSONAL VERIFICATION OF CONTRACTOR PERSONNEL (JAN 2011)
52.204-10	REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS (JUL 2013)
52.204-12	DATA UNIVERSAL NUMBERING SYSTEM NUMBER MAINTENANCE (DEC 2012)
52.204-13	SYSTEM FOR AWARD MANAGEMENT MAINTENANCE (JUL 2013)
52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED OR PROPOSED FOR DEBARMENT (AUG 2013)
52.209-9	UPDATES OF INFORMATION REGARDING RESPONSIBILITY MATTERS (JUL 2013)
52.213-4	TERMS AND CONDITIONS –SIMPLIFIED ACQUISITIONS (OTHER THAN COMMERCIAL ITEMS) (JAN 2014)
52.216-7	ALLOWABLE COST AND PAYMENT (JUNE 2013)
52.222-1	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)
52.222-19	CHILD LABOR – COOPERATION WITH AUTHORITIES AND REMEDIES (JAN 2014)
52.222-27	PROMPT PAYMENT CONSTRUCTION (JUL 2013)
52.222-50	COMBATING TRAFFICKING IN PERSONS (FEB 2009)

- 52.223-18 ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING (AUG 2011)
- 52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUNE 2008)
- 52.225-14 INCONSISTENCY BETWEEN ENGLISH VERSION AND TRANSLATION OF CONTRACT (FEB 2000)
- 52.228-4 WORKERS' COMPENSATION AND WAR-HAZARD INSURANCE OVERSEAS (APR 1984)
- 52.228-5 INSURANCE - WORK ON A GOVERNMENT INSTALLATION (JAN 1997)
- 52.228-11 PLEDGES OF ASSETS (JAN 2012)
- 52.228-13 ALTERNATIVE PAYMENT PROTECTION (JUL 2000)
- 52.229-6 TAXES - FOREIGN FIXED-PRICE CONTRACTS (FEB 2013)
- 52.229-7 TAXES- FIXED PRICE CONTRACTS WITH FOREIGN GOVERNMENTS (FEB 2013)
- 52.232-5 PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS (SEP 2002)
- 52.232-8 DISCOUNTS FOR PROMPT PAYMENT (FEB 2002)
- 52.232-11 EXTRAS (APR 1984)
- 52.232-18 AVAILABILITY OF FUNDS (APR 1984)
- 52.232-22 LIMITATION OF FUNDS (APR 1984)
- 52.232-24 PROHIBITION OF ASSIGNMENT OF CLAIMS (JAN 1986)
- 52.232-25 PROMPT PAYMENT (JUL 2013)
- 52.232-27 PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (JUL 2013)
- 52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER - SYSTEM FOR AWARD MANAGEMENT (JUL 2013)
- 52.232-34 PAYMENT BY ELECTRONIC FUNDS TRANSFER – OTHER THAN SYSTEM FOR AWARD MANAGEMENT (JUL 2013)
- 52.233-1 DISPUTES (JULY 2002) *Alternate I (DEC 1991)*
- 52.233-3 PROTEST AFTER AWARD (AUG 1996)
- 52.236-2 DIFFERING SITE CONDITIONS (APR 1984)
- 52.236-3 SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK (APR 1984)

- 52.236-5 MATERIAL AND WORKMANSHIP (APR 1984)
- 52.236-6 SUPERINTENDENCE BY THE CONTRACTOR (APR 1984)
- 52.236-7 PERMITS AND RESPONSIBILITIES (NOV 1991)
- 52.236-8 OTHER CONTRACTS (APR 1984)
- 52.236-9 PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS (APR 1984)
- 52.236-10 OPERATIONS AND STORAGE AREAS (APR 1984)
- 52.236-11 USE AND POSSESSION PRIOR TO COMPLETION (APR 1984)
- 52.236-12 CLEANING UP (APR 1984)
- 52.236-14 AVAILABILITY AND USE OF UTILITY SERVICES (APR 1984)
- 52.236-15 SCHEDULES FOR CONSTRUCTION CONTRACTS (APR 1984)
- 52.236-21 SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (FEB 1997)
- 52.236-26 PRECONSTRUCTION CONFERENCE (FEB 1995)
- 52.242-14 SUSPENSION OF WORK (APR 1984)
- 52.243-4 CHANGES (JUNE 2007)
- 52.243-5 CHANGES AND CHANGED CONDITIONS (APR 1984)
- 52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS (DEC 2013)
- 52.245-2 GOVERNMENT PROPERTY INSTALLATION OPERATION SERVICES (APR 2012)
- 52.245-9 USE AND CHARGES (APR 2012)
- 52.246-12 INSPECTION OF CONSTRUCTION (AUG 1996)
- 52.246-17 WARRANTY OF SUPPLIES OF A NONCOMPLEX NATURE (JUNE 2003)
- 52.246-21 WARRANTY OF CONSTRUCTION (MAR 1994)
- 52.249-2 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (APR 2012) *Alternate I (SEP 1996)*
- 52.249-10 DEFAULT (FIXED-PRICE CONSTRUCTION) (APR 1984)
- 52.249-14 EXCUSABLE DELAYS (APR 1984)

The following Department of State Acquisition Regulation (DOSAR) clause(s) is/are set forth in full text:

652.204-70 DEPARTMENT OF STATE PERSONAL IDENTIFICATION CARD ISSUANCE PROCEDURES (MAY 2011)

(a) The Contractor shall comply with the Department of State (DOS) Personal Identification Card Issuance Procedures for all employees performing under this contract who require frequent and continuing access to DOS facilities, or information systems. The Contractor shall insert this clause in all subcontracts when the subcontractor's employees will require frequent and continuing access to DOS facilities, or information systems.

(b) The DOS Personal Identification Card Issuance Procedures may be accessed at <http://www.state.gov/m/ds/rls/rpt/c21664.htm>.

(End of clause)

CONTRACTOR IDENTIFICATION (JULY 2008)

Contract performance may require contractor personnel to attend meetings with government personnel and the public, work within government offices, and/or utilize government email.

Contractor personnel must take the following actions to identify themselves as non-federal employees:

- 1) Use an e-mail signature block that shows name, the office being supported and company affiliation (e.g. "John Smith, Office of Human Resources, ACME Corporation Support Contractor");
- 2) Clearly identify themselves and their contractor affiliation in meetings;
- 3) Identify their contractor affiliation in Departmental e-mail and phone listings whenever contractor personnel are included in those listings; and
- 4) Contractor personnel may not utilize Department of State logos or indicia on business cards.

(End of clause)

652.236-70 ACCIDENT PREVENTION (APR 2004)

(a) *General.* The Contractor shall provide and maintain work environments and procedures which will safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to contractor operations and activities; avoid interruptions of Government operations and delays in project completion dates; and, control costs in the performance of this contract. For these purposes, the Contractor shall:

- (1) Provide appropriate safety barricades, signs and signal lights;
- (2) Comply with the standards issued by any local government authority having jurisdiction over occupational health and safety issues; and,
- (3) Ensure that any additional measures the Contracting Officer determines to be reasonably necessary for this purpose are taken.
- (4) For overseas construction projects, the Contracting Officer shall specify in writing additional requirements regarding safety if the work involves:
 - (i) Scaffolding;
 - (ii) Work at heights above two (2) meters;
 - (iii) Trenching or other excavation greater than one (1) meter in depth;

- (iv) Earth moving equipment;
- (v) Temporary wiring, use of portable electric tools, or other recognized electrical hazards. Temporary wiring and portable electric tools require the use of a ground fault circuit interrupter (GFCI) in the affected circuits; other electrical hazards may also require the use of a GFCI;
- (vi) Work in confined spaces (limited exits, potential for oxygen less than 19.5 percent or combustible atmosphere, potential for solid or liquid engulfment, or other hazards considered to be immediately dangerous to life or health such as water tanks, transformer vaults, sewers, cisterns, etc.);
- (vii) Hazardous materials – a material with a physical or health hazard including but not limited to, flammable, explosive, corrosive, toxic, reactive or unstable, or any operations which creates any kind of contamination inside an occupied building such as dust from demolition activities, paints, solvents, etc.; or
- (viii) Hazardous noise levels.

(b) *Records.* The Contractor shall maintain an accurate record of exposure data on all accidents incident to work performed under this contract resulting in death, traumatic injury, occupational disease, or damage to or theft of property, materials, supplies, or equipment. The Contractor shall report this data in the manner prescribed by the Contracting Officer.

(c) *Subcontracts.* The Contractor shall be responsible for its subcontractors' compliance with this clause.

(d) *Written program.* Before commencing work, the Contractor shall:

(1) Submit a written plan to the Contracting Officer for implementing this clause. The plan shall include specific management or technical procedures for effectively controlling hazards associated with the project; and,

(2) Meet with the Contracting Officer to discuss and develop a mutual understanding relative to administration of the overall safety program.

(e) *Notification.* The Contracting Officer shall notify the Contractor of any non-compliance with these requirements and the corrective actions required. This notice, when delivered to the Contractor or the Contractor's representative on site, shall be deemed sufficient notice of the non-compliance and corrective action required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to promptly take corrective action, the Contracting Officer may issue an order suspending all or part of the work until satisfactory corrective action has been taken. The Contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any suspension of work order issued under this clause.

(End of clause)

652.242-73 AUTHORIZATION AND PERFORMANCE (AUG 1999)

(a) The Contractor warrants the following:

(1) That it has obtained authorization to operate and do business in the country or countries in which this contract will be performed;

(2) That it has obtained all necessary licenses and permits required to perform this contract; and,

(3) That it shall comply fully with all laws, decrees, labor standards, and regulations of said country or countries during the performance of this contract.

(b) If the party actually performing the work will be a subcontractor or joint venture partner, then such subcontractor or joint venture partner agrees to the requirements of paragraph (a) of this clause.

652.243-70 NOTICES (AUG 1999)

Any notice or request relating to this contract given by either party to the other shall be in writing. Said notice or request shall be mailed or delivered by hand to the other party at the address provided in the schedule of the contract. All modifications to the contract must be made in writing by the Contracting Officer.

652.229-71 PERSONAL PROPERTY DISPOSITION AT POSTS ABROAD (AUG 1999)

Regulations at 22 CFR Part 136 require that U.S. Government employees and their families do not profit personally from sales or other transactions with persons who are not themselves entitled to exemption from import restrictions, duties, or taxes. Should the Contractor experience importation or tax privileges in a foreign country because of its contractual relationship to the United States Government, the Contractor shall observe the requirements of 22 CFR Part 136 and all policies, rules, and procedures issued by the chief of mission in that foreign country.

I. LIST OF ATTACHMENTS

ATTACHMENT NUMBER	DESCRIPTION OF ATTACHMENT	NUMBER OF PAGES
Attachment 1	Sample Letter of Bank Guaranty	1
Attachment 2	Breakdown of Price by Divisions of Specification	5
Attachment 3	Technical Specification	30
Attachment 4	Drawings	22
Attachment 5	Time schedule	1
Attachment 6	Vendor information form	1

J. QUOTATION INFORMATION

A. QUALIFICATIONS OF OFFERORS

Offerors/quoters must be technically qualified and financially responsible to perform the work described in this solicitation. At a minimum, each Offeror/Quoter must meet the following requirements:

- (1) Be able to understand written and spoken English;
 - (2) Have an established business with a permanent address and telephone listing;
 - (3) Have all licenses and permits required by local law;
 - (4) Meet all local insurance requirements;
 - (5) Have the ability to obtain or to post adequate performance security, such as bonds, irrevocable letters of credit or guarantees issued by a reputable financial institution;
 - (6) Have no adverse criminal record; and
 - (7) Have no political or business affiliation which could be considered contrary to the interests of the United States.
- (8) Should have financially sound for executing TK. 1 Crore project .
- (9) Should have at least 10-year experience in Civil construction projects
- (10) Should have following manpower (minimum) in his firm:
- a) A Graduate Civil Engineer with 7yrs of working experience or a Diploma Civil Engineer with 10yrs working experience. Their practical experience in piling and concrete work is mandatory . Must enclose their CV reflecting experience in the related field .
 - b) Rigger/Piling Foreman - 1
 - c) Mason - 1
 - d) Rod binder - 1
 - e) Formwork Carpenter - 1
 - f) General Foreman - 1

Should possess following equipment & tools :

- a) Piling Rig
 - b) Winch Machine
 - c) Tremie Pipe
 - d) Casing Pipe
 - e) Concrete Mixture Machine
 - f) Welding Machine
 - g) Rod Cutting Machine
 - h) Concrete Vibrator
 - i) Water Pump
 - j) Drilling Machine
 - k) Grinding Machine
 - l) Small Generator 3 KVA
 - m) Concrete measuring box
 - n) Slump Cone
 - o) Cylinder/Cube Mould
 - p) Mini truck/Similar Vehicle
1. Should have sufficient number of steel props , formworks & shattering materials .

B. SUBMISSION OF QUOTATIONS

This solicitation is for the performance of the construction services described in SCOPE OF WORK, and the Attachments which are a part of this request for quotation.

Each quotation must consist of the following:		
Volume	Title	Number of Copies
I	Standard Form 18 including a completed Attachment 2, "BREAKDOWN OF PROPOSAL PRICE BY DIVISIONS OF SPECIFICATIONS	03
II	Performance schedule in the form of a "bar chart" and Business Management/Technical Proposal	03

Submit the complete quotation to the address indicated. If mailed, on Standard Form 18, or if hand-delivered, use the address set forth below.

The Executive Officer
USAID Bangladesh
US Embassy
Baridhara
Dhaka-1212

The Offeror/Quoter shall identify and explain/justify any deviations, exceptions, or conditional assumptions taken with respect to any of the instructions or requirements of this request for quotation in the appropriate volume of the offer.

Volume II: Performance schedule and Business Management/Technical Proposal.

(a) Present the performance schedule in the form of a "bar chart" indicating when the various portions of the work will be commenced and completed within the required schedule. This bar chart shall be in sufficient detail to clearly show each segregable portion of work and its planned commencement and completion date.

(b) The Business Management/Technical Proposal shall be in two parts, including the following information:

Proposed Work Information - Provide the following:

- (1) A list of the names, addresses and telephone numbers of the owners, partners, and principal officers of the Offeror;
- (2) The name and address of the Offeror's field superintendent for this project;
- (3) A list of the names, addresses, and telephone numbers of subcontractors and principal materials suppliers to be used on the project, indicating what portions of the work will be performed by them; and,

Experience and Past Performance - List all contracts and subcontracts your company has held over the past three years for the same or similar work. Provide the following information for each contract and

subcontract:

- (1) Customer's name, address, and telephone numbers of customer's lead contract and technical personnel;
- (2) Contract number and type;
- (3) Date of the contract award place(s) of performance, and completion dates; Contract dollar value;
- (4) Brief description of the work, including responsibilities; and
- (5) Any litigation currently in process or occurring within last 5 years.

C. 52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995)

(a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.

- (b) A site visit and pre-proposal conference has been scheduled for **July 23, 2014 at 11.00 am** and participants will meet at **Polly Villa, House-24, Road-63, Gulshan-2, Dhaka**

D. MAGNITUDE OF CONSTRUCTION PROJECT

It is anticipated that the range in price of this contract will be: **\$25,000-\$150,000.**

E. LATE QUOTATIONS. Late quotations shall be handled in accordance with FAR.

F. 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates the following provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at: <http://acquisition.gov/far/index.html/> or <http://farsite.hill.af.mil/vffara.htm>. Please note these addresses are subject to change.

If the Federal Acquisition Regulation (FAR) is not available at the locations indicated above, use the Department of State Acquisition website at <http://www.statebuy.state.gov> to access the link to the FAR, or use of an Internet "search engine" (for example, Google, Yahoo or Excite) is suggested to obtain the latest location of the most current FAR.

The following Federal Acquisition Regulation provisions are incorporated by reference (48 CFR CH. 1):

<u>PROVISION</u>	<u>TITLE AND DATE</u>
52.204-6	DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER (JUL 2013)
52.204-7	SYSTEM FOR AWARD MANAGEMENT (JUL 2013)

52.214-34 SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE (APR 1991)

52.215-1 INSTRUCTIONS TO OFFERORS--COMPETITIVE ACQUISITION (JAN 2004)

K. EVALUATION CRITERIA

Award will be made to the lowest priced, acceptable, responsible quoter. The Government reserves the right to reject quotations that are unreasonably low or high in price.

The Government will determine acceptability by assessing the offeror's compliance with the terms of the RFQ. The Government will determine responsibility by analyzing whether the apparent successful quoter complies with the requirements of FAR 9.1, including:

- ability to comply with the required performance period, taking into consideration all existing commercial and governmental business commitments;
- satisfactory record of integrity and business ethics;
- necessary organization, experience, and skills or the ability to obtain them;
- necessary equipment and facilities or the ability to obtain them; and
- otherwise qualified and eligible to receive an award under applicable laws and regulations.

SECTION L - REPRESENTATIONS, CERTIFICATIONS AND
OTHER STATEMENTS OF OFFERORS OR QUOTERS

L.1 52.204-3 TAXPAYER IDENTIFICATION (OCT 1998)

(a) Definitions

"Common parent", as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

"Taxpayer Identification Number (TIN)", as used in this provision, means the number required by the IRS to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

(b) All offerors must submit the information required in paragraphs (d)through (f) of this provision in order to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325 (d), reporting requirements of 26 USC 6041, 6041A, and 6050M and implementing regulations issued by the Internal Revenue Service (IRS). If the resulting contract is subject to the reporting requirements described in FAR 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

(c) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 USC 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(d) Taxpayer Identification Number (TIN)

TIN:	
<input type="checkbox"/>	TIN has been applied for
<input type="checkbox"/>	TIN is not required because:
<input type="checkbox"/>	Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the U.S. and does not have an office or place of business or a fiscal paying agent in the U.S.
<input type="checkbox"/>	Offeror is an agency or instrumentality of a foreign government
<input type="checkbox"/>	Offeror is an agency or instrumentality of the Federal Government

(e) Type of Organization

<input type="checkbox"/>	Sole Proprietorship
<input type="checkbox"/>	Partnership
<input type="checkbox"/>	Corporate Entity (not tax exempt)
<input type="checkbox"/>	Corporate Entity (tax exempt)
<input type="checkbox"/>	Government entity (Federal, State or local)
<input type="checkbox"/>	Foreign Government
<input type="checkbox"/>	International organization per 26 CFR 1.6049-4
<input type="checkbox"/>	Other:

(f) Common Parent

<input type="checkbox"/>	Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this clause.
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	Name and TIN of common parent
Name	
TIN	

(End of provision)

L.2 52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (JAN 2014)

(a)(1) The North American Industry Classification System (NAICS) code(s) for this acquisition is/are:

- 236118 - Construction Management, residential remodeling
- 236220 - Construction Management, commercial and institutional building or Warehouse construction
- 237110 - Construction Management, water and sewage line and related structures
- 237310 - Construction Management, highway road, street or bridge
- 237990 - Construction Management, outdoor recreation facility

(2) The small business size standard is **\$33.5 Million USD**.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b)(1) If the provision at 52.204-7, System for Award Management, is included in this solicitation, paragraph (d) of this provision applies.

(2) If the provision at 52.204-7 is not included in this solicitation, and the offeror is currently registered in the System for Award Management (SAM), and has completed the Representations and Certifications section of SAM electronically, the offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

(i) Paragraph (d) applies.

(ii) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c)(1) The following representations or certifications in SAM are applicable to this solicitation as indicated:

(i) 52.203-2, Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless—

(A) The acquisition is to be made under the simplified acquisition procedures in Part 13;

(B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or

(C) The solicitation is for utility services for which rates are set by law or regulation.

(ii) 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed \$150,000.

(iii) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include the provision at 52.204-7, System for Award Management.

(iv) 52.204-5, Women-Owned Business (Other Than Small Business). This provision applies to solicitations that—

(A) Are not set aside for small business concerns;

(B) Exceed the simplified acquisition threshold; and

(C) Are for contracts that will be performed in the United States or its outlying areas.

- (v) 52.209-2, Prohibition on Contracting with Inverted Domestic Corporations—Representation. This provision applies to solicitations using funds appropriated in fiscal years 2008, 2009, 2010, or 2012.
- (vi) 52.209-5, Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.
- (vii) 52.214-14, Place of Performance—Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.
- (viii) 52.215-6, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.
- (ix) 52.219-1, Small Business Program Representations (Basic & Alternate I). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.
- (A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.
- (B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.
- (x) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.
- (xi) 52.222-22, Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at 52.222-26, Equal Opportunity.
- (xii) 52.222-25, Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at 52.222-26, Equal Opportunity.
- (xiii) 52.222-38, Compliance with Veterans’ Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial items.
- (xiv) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA–designated items; or include the clause at 52.223-2, Affirmative Procurement of Biobased Products Under Service and Construction Contracts.
- (xv) 52.223-4, Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA–designated items.
- (xvi) 52.225-2, Buy American Act Certificate. This provision applies to solicitations containing the clause at 52.225-1.
- (xvii) 52.225-4, Buy American Act—Free Trade Agreements—Israeli Trade Act Certificate. (Basic, Alternates I, II, and III.) This provision applies to solicitations containing the clause at 52.225-3.
- (A) If the acquisition value is less than \$25,000, the basic provision applies.
- (B) If the acquisition value is \$25,000 or more but is less than \$50,000, the provision with its Alternate I applies.
- (C) If the acquisition value is \$50,000 or more but is less than \$79,507, the provision with its Alternate II applies.
- (D) If the acquisition value is \$79,507 or more but is less than \$100,000, the provision with its Alternate III applies.
- (xviii) 52.225-6, Trade Agreements Certificate. This provision applies to solicitations containing the clause at 52.225-5.
- (xix) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan—Certification. This provision applies to all solicitations.
- (xx) 52.225-25, Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran-Representation and Certifications. This provision applies to all solicitations.
- (xxi) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to—
- (A) Solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions; and

(B) For DoD, NASA, and Coast Guard acquisitions, solicitations that contain the clause at 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns.

(2) The following certifications are applicable as indicated by the Contracting Officer:

[Contracting Officer check as appropriate.]

__ (i) 52.219-22, Small Disadvantaged Business Status.

__ (A) Basic.

__ (B) Alternate I.

__ (ii) 52.222-18, Certification Regarding Knowledge of Child Labor for Listed End Products.

__ (iii) 52.222-48, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment Certification.

__ (iv) 52.222-52, Exemption from Application of the Service Contract Act to Contracts for Certain Services—Certification.

__ (v) 52.223-9, with its Alternate I, Estimate of Percentage of Recovered Material Content for EPA—Designated Products (Alternate I only).

__ (vi) 52.227-6, Royalty Information.

__ (A) Basic.

__ (B) Alternate I.

__ (vii) 52.227-15, Representation of Limited Rights Data and Restricted Computer Software.

(d) The offeror has completed the annual representations and certifications electronically via the SAM website accessed through <https://www.acquisition.gov>. After reviewing the SAM database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [*offeror to insert changes, identifying change by clause number, title, date*]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR CLAUSE #	TITLE	DATE	CHANGE
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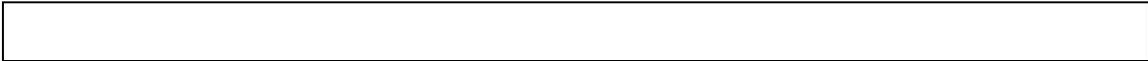
Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on SAM.

(End of provision)

L.4 AUTHORIZED CONTRACT ADMINISTRATOR

If the offeror does not fill-in the blanks below, the official who signed the offer will be deemed to be the offeror's representative for Contract Administration, which includes all matters pertaining to payments.

Name:
Telephone Number:
Address:



[Proposal Note: If the bidder/offeror has indicated “yes” in blocks (a)(1), (2), or (3) of the following provision, the bidder/offeror shall include Defense Base Act insurance costs covering those employees in their proposed prices. The bidder/offeror may obtain DBA insurance directly from any Department of Labor approved providers at the DOL website at <http://www.dol.gov/owcp/dlhwc/lscarrier.htm>.]

L.5 652.228-70 DEFENSE BASE ACT – COVERED CONTRACTOR EMPLOYEES (JUNE 2006)

(a) Bidders/offerors shall indicate below whether or not any of the following categories of employees will be employed on the resultant contract, and, if so, the number of such employees:

<u>Category</u>	<u>Yes/No</u>	<u>Number</u>	
(1) United States citizens or residents			
(2) Individuals hired in the United States, regardless of citizenship			
(3) Local nationals or third country nationals where contract performance takes place in a country where there are no local workers’ compensation laws		local nationals:	
		third-country nationals:	
(4) Local nationals or third country nationals where contract performance takes place in a country where there are local workers’ compensation laws		local nationals:	
		third-country nationals:	

(b) The Contracting Officer has determined that for performance in the country of Bangladesh

- Workers’ compensation laws exist that will cover local nationals and third country nationals.
- Workers’ compensation laws do not exist that will cover local nationals and third country nationals.

(c) If the bidder/offeror has indicated “yes” in block (a)(4) of this provision, the bidder/offeror shall not purchase Defense Base Act insurance for those employees. However, the bidder/offeror shall assume liability toward the employees and their beneficiaries for war-hazard injury, death, capture, or detention, in accordance with the clause at FAR 52.228-4.

(d) RESERVED

(End of provision)

ATTACHMENT - 1

SAMPLE LETTER OF BANK GUARANTY

Place: Dhaka
Date []

The Executive Officer
USAID Bangladesh
US Embassy, Baridhara
Dhaka-1212

Letter of Guaranty No. _____

SUBJECT: Performance and Guaranty

The Undersigned, acting as the duly authorized representative of the bank, declares that the bank hereby guarantees to make payment to the Contracting Officer by check made payable to the Treasurer of the United States, immediately upon notice, after receipt of a simple written request from the Contracting Officer, immediately and entirely without any need for the Contracting Officer to protest or take any legal action or obtain the prior consent of the Contractor to show any other proof, action, or decision by an other authority, up to the sum of **[amount equal to 20% of the contract price in U.S. dollars during the period ending with the date of final acceptance and 10% of the contract price during contract guaranty period]**, which represents the deposit required of the Contractor to guarantee fulfillment of his obligations for the satisfactory, complete, and timely performance of the said contract **[contract number]** for **[description of work]** at **[location of work]** in strict compliance with the terms, conditions and specifications of said contract, entered into between the Government and **[name of contractor]** of **[address of contractor]** on **[contract date]**, plus legal charges of 10% per annum on the amount called due, calculated on the sixth day following receipt of the Contracting Officer's written request until the date of payment.

The undersigned agrees and consents that said contract may be modified by Change Order or Supplemental Agreement affecting the validity of the guaranty provided, however, that the amount of this guaranty shall remain unchanged.

The undersigned agrees and consents that the Contracting Officer may make repeated partial demands on the guaranty up to the total amount of this guaranty, and the bank will promptly honor each individual demand.

This letter of guaranty shall remain in effect until 3 months after completion of the guaranty period of Contract requirement.

ATTACHMENT – 2
Breakdown of Price by Division of Specification
(Please see a separate document in excel format)

ATTACHMENT – 3
Technical Specification

TECHNICAL SPECIFICATION :

Section - 1A

EARTH WORK

1. SCOPE OF WORK

- 1.1 The work includes but not necessarily limited to, the furnishing all materials and equipment and performing all operation necessary for and properly incidental to accomplishing all excavating, removal of surplus materials away from site, compacting, backfilling and grading work, trenching and backfilling for utilities as necessary to complete the project as shown and noted on the drawings and specified therein.
- 1.2 Any sub-soil investigations conducted by the Employer/ Consultant representative will be made available for the Contractor's review. The Consultant assumes no responsibility regarding the correctness of these data and makes them available solely for information. It is responsibility of the Contractor to verify all sub-surface conditions prior to submitting Tender.

2. APPLICABLE STANDARDS

- 2.1 Pertinent provisions of the following listed current reference standards shall apply to the work of this section, except as they may be modified herein, and are hereby made a part of this specification to the extent required.

- 2.1.1 American Society for Testing and Materials (ASTM);

- D1556 Test for Density of Soil in Place by Sand-Cone Method.

- D1557 Test for Moisture-Density Relations of soils, using 10-pound Rammer and 450mm Drop.

3. SPECIFICATIONS

- 3.1.1 Fill: All soil or granular materials placed to raise the natural grade of the site or to backfill excavation.
- 3.2 On-site Material : Soil or granular material which is obtained from the required excavation on the site bounded by the property limits.
- 3.3 Imported Material : soil or granular material which is hauled in from off-site areas.
- 3.4 Selected Material : On-site and /or imported material which is approved by the EIC's representative for use as mechanical fill.

3.5 Compacted Fill: Fill upon which the EIC's representative has made sufficient observations and test to determine and confirm that the fill has been placed and compacted in accordance with the specification requirements.

3.6 Degree of Compaction : The ratio, expressed as a percentage, of the dry density of the fill material as compacted in the field to the maximum dry density of the same material as determined by ASTM Test Designation D 1557 above.

4. INSPECTION AND TESTING

4.1.1 All site preparation, cutting and shaping, excavating, filling shall be carried out under the inspection and control of the EIC's & Consultant representative, who will perform appropriate field and laboratory test to evaluate the suitability of fill material, the proper moisture content for compaction and degree of compaction achieved. Any fill that does not meet the specification, requirements shall be removed and/or re-compacted until the requirement are satisfied.

4.1.2 Cutting and shaping, excavating, conditioning, filling and compacting procedures require approval of the EIC's & Consultant representative as they are successively performed. Any work found unsatisfactory or any work disturbed by subsequent operations before approval is granted shall be corrected in an approved manner as directed by the EIC's & Consultant representative.

4.3 Test for compaction will be made for in accordance with test procedure outlined in ASTM D1557(c), as applicable. Field testing of soils or compacted fill in place shall conform with applicable requirements of ASTM D 1556.

5. WEATHER CONDITIONS

5.1 Fill material shall not be placed, spread or rolled during unfavourable weather conditions. When the work is interrupted by rain, fill operation shall not be resumed until field test by the Consultant indicates that the moisture content and the density of the fill area as specified in these specifications or are condition suitable enough, in the opinion of the Employer, for resuming the work.

5.2 The control through the duration of this Contract shall be sole responsibility of the contractor. Control method shall be subject to the approval of the EIC including the Contractor's equipment, plans, method and installation procedures etc.

6. SOIL MATERIALS

6.1 Select material

6.1.1 All material to be used for mechanical fill and backfill shall be an inert, non-expansive soil (less than 50 percent passing a no. 100 standard sieve), free from vegetable matter and other deleterious substances, and of such quality that it will compact thoroughly without the presence of excessive voids when watered and rolled. Fill material shall not contain rocks or lumps over 4 inch in greatest dimension. All fill materials to be used under the building, slabs, pavements and

structures and backfill shall be on-site and /or imported material, conforming to the above, with a liquid limit less than 30 and plasticity index less than 15. Excavated on-site material will be considered suitable for compacted fill if it is free from organic matter and other deleterious substances and conforms to the requirements specified above.

The Consultant shall be notified at least one week prior to start the filling and backfilling operations so that he may select for approval samples of the material intended to be used for filling and backfilling. No material shall be placed without the approval of the EIC's representative.

6.2 On-site Material

6.2.1 Excavated earth material which is suitable for compacted fill or backfill, as determined by the EIC's representative, shall be conditioned for reuse and properly stockpiled as directed for later filling and backfilling operations. Conditioned material shall be free of debris and rubble. All rocks and aggregates exceeding 100 mm in largest dimension and deleterious materials shall be removed and disposed off in a manner as specified herein the specifications.

6.3 Imported Material

6.3.1 Where conditions require the fill material to be imported shall be granular soil totally free of organic matter and shall meet or exceed the minimum requirements specified above have to be selected. In addition , imported material may consist of pit-run sand or sand-gravel mixture with a minimum size of 75 mm and not more than 5 percent passing a no. 200 US standard Sieve (wet sieve).

6.4 Sand

Sand for compacted sand fill under concrete footings, foundations, slabs, and/or brick soling or for aggregate drainage fill, shall be a clean and graded, all passing a no. 4 US Standard Sieve, conforming generally to ASTM C33 for fine aggregate, with fineness modulus not less than 1.2 or as determined by the EIC's representative.

7. STAKES AND GRADES

7.1 Contractor shall layout his work, establish all necessary marks, bench marks, grading stakes and other stakes as required, all as specified herein the specifications.

7.2 Finished elevation for work to be constructed under this contract are indicated in the drawings and unless an inconsistency therein is brought to the attention of the EIC's & consultant representative in writing prior to commencement of construction, the contractor will be held responsible for the proper location and elevation of all work.

8. EXCAVATION

- 8.1 Excavation for foundations, pits, trenches, footings, floor slabs, concrete walks, roadway pavements, parking areas and apron and any other structures indicated as well as common excavation for grading purposes, shall be to the lines and levels required. The bottom of all trenches shall be to grade, tamped firm, clean and free from all debris or foreign matter.
- 8.2 Excavation shall be kept free from water at all times. Adequate equipment shall be maintained at the site in accordance with art. 5 above.
- 8.3 If material below and beyond the required dimensions has been removed or disturbed due to unauthorized over excavation or for any other reason, the space shall be placed, filled and compacted with select material, as directed by the EIC's representative, with no additional cost to the owner.
- 8.4 Excavated earth material which is suitable for compacted fill or backfill, as determined by the Consultant, shall be conditioned for re-use and properly stockpiled for later use as hereinbefore specified under "Soil Material".
- 8.5 Abandoned sewers, piping and any other utilities encountered in the progress of excavation, shall be removed and the ends plugged with concrete or in any other manner which is acceptable to the EIC's.
- 8.6 Active sewers, water and gas pipes, electric power, light or telephone poles, conduits or wires and any other active utility lines encountered, shall be immediately reported to the EIC's & Consultant representative and authorities involved. The owner and proper authorities shall allow free access take that measure they may deem necessary to repair, relocate or remove the obstruction as determined by the owner's representative to the satisfaction of the Consultant.
- 8.7 All debris and excess earth shall be removed from the site and disposed off as specified in section 1C of this specification.
- 8.8 Open excavations, trenches and the like shall be protected with fences, barricades, cover and railing as required to maintain safe personnel and vehicular traffic passage. Freshly graded surfaces shall be protected from erosion until such time as permanent drainage and erosion control works have been installed.

9. COMMON FILL

- 9.1.1 Where pits, holes, low spots, or depressions are required to be filled or backfilled in order to bring the finish grade to the grades and elevations indicated in the drawings, and where structures are not involved, the fill material shall be suitable on site or imported material which contains no more than 10 percent by volume of organic material. Common fill requires approval of the EIC's & Consultant representative before it may be used.
- 9.1.2 Common fill shall be spread uniformly in layers not to exceed 300 mm before compaction. Compaction shall be 85 percent. If required to be moistened or dried, follow the procedures hereinbefore specified for compacted fill

10. BACK FILLING

10.1.1 Backfilling shall not be placed against footing or building walls or other structure approved by the EIC's & Consultant representative .

10.2 Backfill material shall consists of select material as herein before specified for compacted fill.

10.3 Backfill shall be placed in 150 mm layers, leveled, rammed and tamped in place. Jetting shall not be permitted; excessive puddling will not be permitted. Compaction of all layers shall be 95 percent.

11. FINISH GRADING

Finish grading in all areas shall be to elevation and grades indicted on the drawings.

12. METHOD OF MEASUREMENT

12.1 Excavation and backfilling

All excavation shall be measured between the out side lines of the element in plan. No extra measurement shall be allowed for excavation in excess of that shown in drawing. Measurement for backfilling to trenches by using excavated materials shall be measured for payment. The unit of measurement shall be in cubic feet (cft)

12.2 Filling, Common or Compacted

Measurement shall be made for completed work in place and shall be determined by pre-work contour levels multiplied by average sections of fills. Backfilling of foundation trenches and pits, if not by using imported materials, shall not be measured for payment. The unit of measurement shall be in cubic feet (cft).

SECTION – 1B

PLAIN AND REINFORCED CONCRETE

1. SCOPE OF WORK

The work to be performed under this section includes the manufacturing, transporting, placing, finishing and curing of all concrete as shown and noted on the drawings and as specified herein.

2. APPLICABLE STANDARD

2.1 Pertinent provisions of the following listed reference standards shall apply to the work of this section, except as they may be modified herein and are hereby made a part of this specification to the extent required.

2.2 American Concrete Institute (ACI) ; Current issues

ACI 301 Specifications for Structural Concrete for Building

ACI 211.1 Recommended Practices for Selecting Proportions of Normal Weight Concrete

ACI 304 Recommended Practices for Measuring, Mixing, Transporting and Placing of Concrete

ACI 305 Recommended Practices for Hot Weather Concreting

ACI 318 Building Code Requirements for Reinforced Concrete.

2.3. American Society for Testing and Materials (ASTM)

C 31 Making and Coring Concrete Compressive and Flexural Strength Test Specimens in the field.

C 33 Specification for Concrete Aggregates.

C 39 Test for Compressive Strength of Cylindrical Concrete Specimens.

C 42 Obtaining and Testing Drilled Cores and Sawed beams of Concrete.

C 87 Test for Effect of Organic Impurities in Fine Aggregate on Strength of Mortar.

C 136 Test for Sieve or Screen Analysis of Fine and Coarse Aggregates.

C 143 Test for Slump of Portland Cement Concrete.

C 150 Specification for Portland Cement.

C 172 Sampling Fresh Concrete.

C 494 Specification for Chemical Admixtures for Concrete.

D 1751 Specification for Expansion Joint Fillers for Concrete Paving and Structural Construction (No Extruding and Resilient Bituminous Type).

D 1850 Specification for Concrete Joint Sealer, Cold-Application Type.

3. MATERIALS

3.1 Portland Cement : Portland cement shall conform to the specification for Portland Cement (ASTM C-150 or equal, Type-1).

3.1.1 The cement shall be stored in such a manner as to permit easy access for proper inspection and handling. One brand of cement shall be used throughout on the same work except by written permission from the EIC's & Consultant representative; different type of cement shall be stored separately and shall not be mixed. The cement shall be protected from moisture and

damage in transit and in storage. The floor of the store room shall be raised at least 300 mm from ground by wooden platform, dunnage, or pallet and shall be maintained moisture free at all times. Deteriorated and hardened cement will not be permitted in the work and will be rejected by the EIC's & Consultant representative. Any cement rejected shall be promptly removed from the site.

3.1.2 The cement shall meet the chemical and physical requirements of ASTM C 150 for type 1 cement. A supplier's certificate attesting to the compliance of the cement to the ASTM requirement shall be furnished with each shipment and from each source of cement procured. No cement will be approved for use in the work without such certification. The EIC's & Consultant Representative may, at his opinion, arrange to sample and test cement delivered, in accordance with ASTM Standard, for verification of quality. Cement failing to pass such tests will be rejected for in the project.

3.2 Concrete Aggregate : Concrete aggregates shall conform to the "Specification for Concrete Aggregates" ASTM C-33 or to a standard acceptable to the EIC's & Consultant representative producing concrete strengths called for in Section 11.05 of these specifications.

3.2.1 Fine Aggregates

- a) General characteristics : Fine aggregate shall consist of natural sand conforming these specifications.
- b) Grading : Fine aggregate shall be graded within the following limits, using U. S. Standard sieve sizes :-

Sieve	Percentage Passing
20 mm	100
No. 4	95 to 100
No. 8	80 to 100
No. 16	50 to 85
No. 30	25 to 60
No. 50	10 to 30
No. 100	02 to 10

The fine aggregate shall have not more than 45 percent retained between any two consecutive sieves as shown above and its fineness modulus shall not less than 2.5.

- c) Deleterious Substances : The amount of deleterious substances in fine aggregate shall not exceed the limits prescribed below :-

Item	Maximum, percentage by Weight of total samples
Clay lumps	3.0
Materials finer than no. 200 sieve	5.0
Coal and Lignite	1.0

Chloride content	Nil
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d) Organic Impurities

1. Fine aggregates shall be free of injurious amounts of organic impurities. Except as herein provided, aggregate subjected to test for organic impurities and producing a colour darker than the standard shall be rejected.
2. A fine aggregate failing in the test may be used, provided that the discolouration is due principally to the presence of small quantities of coal, lignites or similar discrete particles.
3. A fine aggregate failing in the test may be used, provided that, when tested for the effect of organic impurities on strength of mortar, the relative strength at 7 days calculated in accordance with method ASTM C-87 is not less than 95 percent.
4. Fine aggregate shall not contain any materials that are deleteriously reactive with the alkalis in the cement in an amount sufficient to cause excessive expansion of mortar or concrete.

e) Soundness : Fine aggregate subjected to five cycles of the soundness test, shall show a loss, weighted in accordance with the grading of sample complying with the limitations set forth under the head "Grading" not greater than 10 percent when sodium sulfate is used or 15 percent when magnesium sulfate is used.

3.2.2

a) Coarse aggregate : Coarse aggregate shall be as per Clause 4.3 and conforming to the requirements ASTM C-33 and shall be clean, hard, tough and grade in size, free from vegetable or other organic matter. The size coarse aggregate shall be one of the three sizes tabulated below but should be as large as possible while conforming to the condition that the largest size of aggregate shall not exceed 1/5 of the narrowest clearance between forms or 3/4 of the narrowest distance between parallel reinforcement bars.

b). Grading : grading requirement of Coarse Aggregate

Sieve No	Nominal size (Sieve with square opening)	Amounts finer than laboratory sieve (with openings) weight percent.							
		50 mm	40 mm	25 mm	20 mm	12 mm	10 mm	No. 4	No. 8
467	40 mm to No.4	100	95 to 100	-	35 to 70	-	10 to 30	0 to 5	-
57	25 mm to No. 4	-	100	95 to 100	-	25 to 60	-	0 to 10	0 to 5
67	20 mm to No.4	-	-	100	90 to 100	-	20 to 55	0 to 10	0 to 5

The fine and coarse aggregate shall be washed at least once in clean water immediately before being used in concrete production.

- c) Soundness : Coarse aggregate, subjected to five cycles of the soundness test, shall show a loss, weighted in accordance with the grading of sample complying with designated limitations set forth under “Grading” not greater than 12 percent when sodium sulfate is used or 18 percent when magnesium sulfate is used.
- d) Limits for deleterious substances in coarse aggregate :-

Item	Percentage by weight of total sample
Clay lumps	0.25
Soft particles	5.0
Materials finer than No.200 sieve	1.0
Coal and Lignite	0.5
Chloride content	Nil

- e) Abrasion : Coarse Aggregates tested for abrasion shall have a loss of not more than 27 percent for stone chips and 33 percent for brick khoa. Loss shall be determined on the test size or sizes or more nearly corresponding to the grading is to be used, the limit on abrasion shall apply to each.
- f) The boulders to be used for coarse aggregate shall have the following properties :-

Compressive strength (minimum)	28 Mpa
Specific gravity	2.4 to 2.6
Unit weight	2245 to 2565 kg/ cum.
Porosity	2.1 %
Water absorption	1.5 to 6 % (by wt)
Minimum size	100 mm

3.3 Admixture

- 3.3.1 Contractor, shall include in the mix approved concrete admixture, in basement walls and Water reservoir to reduce porosity and permeability in concrete and at his option, may also include approved admixture in the mix to improve the water-cement ratio or workability of the concrete, providing the strengths specified and other desirable characteristics of the concrete can be achieved and maintained. Chemical admixtures shall conform to the applicable requirements of ASTM C-494.
- 3.3.2 Applicable products are “patient” Concrete Densifier as manufactured by by Sika Chemical Corporation, Passaic, New Jersey, Pozzolith as manufactured by Master Builder Co. Cleveland, Ohio. “Tricosal” as manufactured by the Tricosal Company, san

Francisco,

California or approved equal, of type recommended by the admixture manufacturer for the installation.

- 3.3.3. Any and all admixtures must be approved by the EIC's & Consultants representative and must be part of the laboratory designated mix before they used in the project.
- 3.3.4 Water : Water used in concrete shall be potable and free from objectionable qualities of silt, acid,alkali, salt, oil or any other impurities.
- 3.3.5 Curing Materials : Where it is required to cure or protect wall surfaces or other vertical surfaces after form removal, furnish appropriate water proof sheet materials conforming to ASTM C171 or burlap conforming generally to Fed. SPEC. CCC-C-467. Where it is required to protect slab surfaces, use appropriate waterproof sheet materials conforming to ASTM C-171.
- 3.3.6 Combination Curing/hardening Compound : All concrete slabs, both interior and exterior, shall be cured, sealed and hardened with a combination chemical clear liquid compound, such as "Hunt Process M d & C" as manufactured by Hunt Process Co. Inc., "Magic Kote Cure and Hard" as manufactured by Symon Corporation, or approved equal.
- 3.3.7 Expansion Joint Filler : Resin bonded cork of size and thickness as shown on the drawing.
- 3.3.8 Expansion Joint Sealing Compound : Cold-applied poured latex rubber tyoe sealant, conforming to ASTM D-1850.

4 LABORATORY TEST OF MATERIALS

- 4.1 General : Testing of cement and aggregates will be performed in a qualified testing laboratory. The laboratory will perform all tests requested and authorized by the EIC's & Consultant representative. Tests and manufacturer's certification of compliance with ASTM Specifications will be accepted in lieu of testing of cement, and analysis of aggregates. The EIC's & consultants representative may order independent verification tests, at his discretion. Tests and services will consist of the following :
 - 1. Testing of Portland cement in accordance with ASTM C-150.
 - 2. Analysis of aggregates in accordance with ASTM C-33 and sieve analysis of fine and coarse aggregates in accordance with ASTM C-136.
- 4.2 Samples : Contractor shall furnish and deliver identified sample of all materials required for analysis and tests in the amounts required by the testing laboratory without charge. Deliver samples of cement and aggregates to the Testing Laboratory at least 30 days prior to use on the job.
- 4.3 Strength of concrete : As Shown in the working Drawing .
- 5.1 Design of Concrete mixes, including recommended amount of admixture (if any) and water

to be used in the mixes, shall be determined by the Contractor by test before actual work.

5.2 Upon receipt of acceptable design mixes from the Testing Laboratory, Contractor shall submit these designs to the client/consultant for review.

5.2.1 Contractor shall be responsible for incorporating into the structure concrete of the minimum strengths and slumps specified on the basis of approved mix design. No casting shall be allowed without the mix-design report.

6. MIXING

6.1 Mixing of ingredients shall be conducted in a mixture machine of approved type. Mixing shall be continued after all ingredients are in mixer for at least 1.5 minutes before any part of batch is released. Drum shall revolve at the rate of 15 to 20 revolutions per minute. Drum shall be completely emptied before any portion of succeeding batch is placed therein. Total volume of all materials used per batch shall not exceed catalogue-rated capacity of the machine.

Water tank shall so arranged that the amount of water can be positively measured, while Tank is discharged, inlet shall be cut off automatically.

4. PROPORTIONING

7.1 The proportions in which the various ingredients are to be used for different parts of the work shall be as determined

7.2 All materials shall be measured by volume or by weight, but either method must be approved by the EIC & Consultant representative. Cement content shall be the minimum amount necessary for strength, workability and plasticity. Total water for each batch shall be the minimum amount to produce a plastic mixture which will work readily into the corners and angles of the forms and around reinforcement with the method of placing employed on the work, but without permitting the materials to segregate or excess free water to accumulate on the surface. The method of measuring consistency of concrete shall be controlled and checked by slump test at site.

7.3 The following slumps are suggested for the different concrete members :

	Minimum	Maximum
1. Foundation, footing, pile cap	25 mm	40 mm
2. Column, beam, lintel, wall	25 mm	40 mm
3. Suspended structural slab	25 mm	40 mm
4. Thin member	40 mm	50 mm
5. Pile	75 mm	100 mm

The suggested slump of the concrete shall be as shown above. However, Consultants reserve the right to order a higher or lower slump to be used whenever, in his opinion, concrete of a particular structure is required to be deposited with higher or lower slump. During the course of work, tests will be made by the contractor under the direction of the EIC & Consultant representative and

the contractor shall render all the necessary assistance for carrying out these tests. The amount of water to added to the concrete mix shall be determined by means of standard slum tests, (ASTM C-143) which shall be carried out daily while concrete is being placed.

8. TESTING OF CONCRETE

8.1 Slump : This determination shall be made at the commencement of concreting, on the occasion of each change in mix proportion, and thereafter as desired by the Consultant .The test shall be in accordance with ASTM C-143.

8.2 Strength Tests

8.2.1 The Consultants field personnel will prepare and cure compression test samples. One set of at least three cylinders will made in accordance with ASTM C-31 for each 100 cum of concrete fraction thereof placed each day.

8.2.2 Composite samples will be taken in accordance with ASTM C 172. Each sample will be obtained from the different batch of concrete on random basis, avoiding any selection of the test batch other than by a number selected at random before commencement of concrete placement.

8.2.3 All cylinders in a set will be marked with a number on one end. The Consultant will record this number on record of concrete placed. The cylinders will be cured at job site under field condition.

8.2.4 One cylinder from each set shall be tested at 7 day and a second at 28 days in accordance with ASTM C39 in the laboratory as directed by the EIC & Consultant representative. Strength at 7 days shall not be less than 75 % of the design strength.

8.2.5 The third cylinder from each set shall be kept at the job site until the 28-day test report on the second cylinder in the same set has been received by the Consultant, If this report is satisfactory, discard the third the third cylinder. In the event the second cylinder test result are below the required strength, the laboratory will then test the third cylinder at the age selected by the Consultant .

8.2.6 In the event the compressive strength of the third cylinder, when tested, is below the specified minimum, The Consultants may require core test of hardened structure. The core sample shall be tested in accordance with ASTM C42. If such test result indicates below the required strength, the concrete in question shall be removed and replaced without cost to the owner. Any other work damaged as a result of this concrete removal shall be replaced with new materials to the satisfaction of the consultant at no additional cost to the owner. The cost of coring will be deducted from the contract amount. Where core cylinder taken by the laboratory and the concrete proved to be satisfactory, the cut out section shall be restored to the original condition in a manner satisfactory to Consultant at no additional cost to the owner.

9. CONVEYING AND PLACING CONCRETE

9.1 **Notification** : the Consultant shall be notified at least 72 hours in advance of the placing of concrete. In any case, concrete pours shall be performed in accordance with the pre-established schedule.

- 9.2 **Earth Bearing Surface** : Soil bottoms for footings and slabs shall be approved by the EIC & Consultant representative before placing concrete.
- 9.3 **Forms** : Before placing concrete, forms shall be thoroughly inspected. All chips, dirt and debris shall be removed, all temporary bracing and cleats taken out, all opening for pipes, conduits and sleeves, properly boxed, all forms properly secured in their correct position and made tight, all reinforcements, anchors, steel nails, and embedded items secured in their proper places. Concrete which may be on the forms or reinforcements, and which is set or dry, shall be cleaned off and the forms and steel washed off before proceeding. Remove water and all foreign matters from forms and excavations. Unless otherwise directed, sand or sandy loam shall be moist but not saturated just prior to placing concrete.
- 9.4 **Anchors and Embedded Items** : Anchors, bolts, regulates, sleeves, inserts, steel nails, and any other items to be cast or embedded in the concrete shall be accurately secured in position before the concrete is placed.
- 9.5 **Handling and depositing** :
- 9.5.1 Concreting, once started, shall be carried on as a continuous operation until the section of approved size and shape is completed.
- 9.5.2 Concrete shall be handled as rapidly as practicable from the mixer to the place of final deposit by methods which prevent the separation or loss of ingredients. It shall be deposited, as nearly as practicable, in its final position to avoid re-handling or flowing.
- 9.5.3 Concrete shall not be dropped freely as it cause segregation. It shall not be dropped freely more than 1200 mm in height. Concrete shall be deposited to maintain a plastic surface approximately horizontal.
- 9.5.4 In placing in wall or thin sections of height greater than 3000 mm, opening in the forms, elephant trunk triemie pipe, or other approved device, shall be used which will permit the concrete to be placed without segregation or accumulation of hardened concrete in the forms or on exposed reinforcement. Such devices shall be installed so that the concrete will be dropped vertically.
- 9.5.5 Concrete which has partially hardened shall not be deposited in the work. The discharge of concrete shall be started less than 60 minutes after the introduction of mixing water. Placing of concrete shall be completed within 60 minutes of the first introduction of water into the mix.
- 9.5.6 **Pumping** : Concrete may be placed by pumping if first approved in writing by the EIC & Consultants representative for the location proposed. Equipment for pumping shall be such size and design as to insure continuous flow of concrete at the delivery end without separation of materials. The concrete mix shall be designed to the same requirements as herein before specified, and may be richer in lubricating components in order to permit proper pumping.
- 9.6 **Vibrating and Compacting**

- 9.6.1 All concrete shall be thoroughly compacted and consolidated by suitable means during the operation of placing and depositing, and shall be thoroughly worked around reinforcement, embedded items and into the corners of forms. Internal vibrations shall be used under experienced supervision and shall be kept out of contact with reinforcement and wood forms. Vibrators shall not be used in manner that forces mortar between individual form members.
- 9.6.2 Vibrators shall be flexible electric type or approved compressed air type, adequately powered and capable of transmitting to the concrete not less than 7000 impulses per minute. Vibration shall be sufficiently intense to cause the aggregate to flow or settle readily into place without separation of ingredients. A sufficient numbers of vibrators shall be employed so that complete compaction is secured throughout the entire volume of each layer of concrete . At least one vibrator shall be kept standby for emergency use. Vibrator shall be such that the concrete becomes uniformly plastic with their use.
- 9.6.3 Vibration shall be close to the forms but shall not be continued at one spot to the extent that large areas of grout are formed or the heavier aggregates are caused to settle. Care shall be taken not to disturb concrete which has its initial set. Vibrators shall not be lowered deeper than the layer placed.
- 9.6.4 Where situation makes compacting difficult or where the reinforcement is congested, batches of mortar containing the same proportion for cement to sand as used in concrete shall first be deposited in the forms, to a depth of at least 25 mm.
- 9.6.5 The responsibility for providing fully filled out, smooth, clean and properly aligned surfaces free from objectionable pockets and blemishes shall rest entirely with the Contractor.

i) CONSTRUCTION JOINTS

- 10.1 When construction joints are necessary, they shall be made and located as indicated in the drawings. If for any reason the contractor feels a change is necessary, he shall devise a placing plan showing all construction joints and shall submit the EIC & Consultant representative for approval. Joints not indicated in the drawings shall be made and located to impair least the strength of the structure and their locations shall be approved by the EIC & Consultants representative.
- 10.2.1 Where a joint is to be made, the surface of the concrete shall be thoroughly cleaned with water and air jet, after concrete has semi-set, to remove all laitance. In addition to foregoing, vertical joint shall be thoroughly wetted, but not saturated, before placing new concrete.
- 10.3 Approved key shall be used at all joints, unless indicated otherwise. All joints not shown on the drawings shall require the prior approval of the EIC & Consultant representative. Forms shall be tightened before placing of concrete is continued.
- 10.3 Control joints in slabs on grade shall be located to surround or enclose areas not exceed 89 sqm with a maximum one-way dimension of 10 m.

11. PROTECTION AND CURING

- 11.1 Protect concrete from injurious action of the elements defacement of any nature during construction operations.
- 11.2 Keep concrete in a thoroughly moist condition from the time it is placed until it has cured for at least 14 days but not less than as shown in section 2-A.
- 11.3 All formwork, until removed, shall be kept continuously wet to prevent drying of the concrete. If any form are removed before the end of ten days after placing of concrete, the exposed concrete shall be kept continuously wet for the remaining period the concrete with burlap kept continuously moist. Concrete shall not be allowed to dry during the curing period because of finishing operations.
- 11.4 Carefully protect exposed concrete corners from traffic or use which will damage them in any way.
- 11.5 Protect freshly placed and finished concrete slabs from damage from drying wind or rain by covering with appropriate water proof sheet materials, as and when required.

12. CONCRETE FINISHING

Surface finish of concrete shall be according to type of finish in Architectural, structural drawings or in schedule of work.

- 12.1 “As cast fair face” concrete surface shall receive no extra finishes and shall be level, smooth and free from surface imperfections such as honeycomb, dents, bulges, sand streak, pits, air bubbles, misalignment, offset and must be uniform in texture and colour all through, as it is cast and shall be acceptable to the EIC & Consultants representative. Design of form, proportioning of concrete mix and casting procedure for producing the “As cast fair face” concrete surface shall be the responsibility of the Contractor.
- 12.2 Making up of pits and air bubble etc. may be allowed to some extent only with permission of the EIC & Consultant representative and retouching of surfaces may also be allowed in case of no uniformity of colour at contractor’s own cost.
- 12.3 Plaster finish concrete surface shall receive plaster finish later and shall be even, level and free from honeycombs, dents, bulges, sand streaks and other defects such as misalignment and offset. Patching of defective works (within limits) shall be allowed only on permission from the EIC & Consultant representative.
- 12.4 Sample panels large enough in two lifts of “As cast fair face” concrete shall be built and shall be approved by the EIC & Consultant representative at least 30 days in advance before the actual work.

13. METHOD OF MEASUREMENT

Measurement shall be made volumetrically by neat outside lines of structural elements as shown in drawing or as directed in writing by EIC & Consultant representative for all classes of concrete and shall exclude all works of formwork as specified under section 2-A. Reinforcement and other embedded items shall not be measured for payment under this section. The unit of measurement shall be cubic feet (cft).

SECTION – 1C

REINFORCING STEEL

1. SCOPE OF WORKS

The work to be performed under the provision of this section includes furnishing, cutting, bending and placing of all steel reinforcements for all reinforced cement concrete work as shown on the drawing and as specified herein.

2. CODE AND STANDARDS

2.2 Pertinent provisions of the following listed codes and standards shall apply to the work of this section, as they may be modified herein and hereby made a part of its specification to the extent required.

2.2.1 American Concrete Institute (ACI); Current issue:

ACI 301 specifications for structural Concrete for Building, Chapter 5 – Reinforcement

ACI 315 Manual of Standard Practice for Detailing Reinforced Concrete Structures.

ACI 318 Building Code Requirements for Reinforced Concrete.

2.2.2 American Society for Testing and Materials (ASTM)

A 82 Specification for Cold-Drawn Steel wire for Concrete Reinforcement.

A 615 Specification deformed and plain Billet-Steel Bar for Concrete Reinforcement.

2.2.3 American Welding Society (AWS)

D 12.1 Recommended Practice for Welding the Reinforcing Steel, Metal Inserts and Connections in Reinforced Concrete Construction.

2.2.4 Concrete Reinforcing Steel Institute (CRSI)

- a. CRSI Handbook.
- b. Manual of Standard Practice.
- c. CRSI Publication “Reinforcing bar Splices”

d. CRSI Publication “Placing Reinforcing Bars”

3. MATERIALS

- 3.1 Reinforcing Bars: Reinforcing bars(rebar) shall be new, deformed, billet-steel bars, conforming to ASTM A615, with a minimum specified strength of 60 ksi, 70 ksi and ultimate tensile strength of 80 ksi, 95 ksi respectively which will be being bent at room temperature around a pin of the same diameter as of the steel being tested without cracking on the outside of the bent portion.
- 3.2 Welded Wire Fabric : Welded Wire Fabric shall be new, rectangular mesh, welded deformed steel fabric, conforming to ASTM A497. Gauge or diameter of wire and centre to centre spacing of wire shall be as indicated on the drawings.
- 3.3 Accessories : Reinforcing accessories, consisting of spacers, chairs, ties, pre cast concrete blocks and similar item shall be provided as required for spacing, assembling and supporting the reinforcement in place.
- 3.3.1 For footings, slabs and beams, use supports of concrete blocks and metal chairs. Concrete blocks shall be pre-cast with required thickness and sufficiently cured at least 14 days. Proportion shall not be less than 1:2:
- 3.3.2 For exposed-to-view concrete surface, where legs of supports are in contact with the forms, provide supports with legs which are hot-dip galvanized or plastic protected or stainless steel protected.
- 3.4 Tie Wire : Tie wire for reinforcement shall be No.22 gauge or heavier, black or galvanized, mild or commercial grade soft steel wire.

4. SHOP DRAWINGS

- 4.1 Fully detailed shop drawings, including bending schedules and bending diagrams, shall be submitted by the contractor to the EIC & Consultant representative for review and approval. Shop drawing shall show fabrication and placing details and size & location of all reinforcing steel. Shop drawing shall be prepared in accordance with applicable requirements and guidelines of ACI 315.
- 4.2 Shop drawing shall be such detail and completeness that all fabrications and placements at the site can be accomplished without the use of contract drawings for reference. Shop drawing shall include number of of pieces, sizes and markings of reinforcing steel, laps and splices, supporting devices and accessories and any other information required for fabrication and placement.
- 4.3 Contract drawing for air conditioning, anchor bolts schedules and locations, anchors, hangers, inserts, sleeves, conduits, steel rail and other steel sections and any other items to be cast in concrete shall be checked for possible interference with reinforcing steel. Required clearance shall be indicated on shop drawings

5 CERTIFICATION

Mill affidavits or test reports from BUET or similar certification, stating the grades

and physical properties of the reinforcing steel and conformance with ASTM Specifications, shall be submitted to Employer/Consultant before delivery of steel to the job site.

6. DELIVERY, STORAGE AND HANDLING

- 6.1 Steel reinforcement shall be delivered to the jobsite, stored and covered in a manner which will ensure that no damage shall occur to from moisture, dirt, grease or any other cause which might impair bond with concrete.
- 6.2 A sufficient supply of approved reinforcing steel shall be stored at site at all times to ensure that there will be no delay of work.
- 6.3 Identification of steel shall be maintained after bundles are opened.

7. IDENTIFICATION

Reinforcing steel shall be bundled and tagged with grade, size and suitable identification marks for checking, sorting and placing. Sizes and mark numbers shall correspond to placing drawings and schedules. Tags and markings shall be waterproof and shall not be removed until steel is placed.

8. FABRICATION

- 8.1 General : Fabrication of steel will be in accordance with the shop drawing approved by the Consultant. Where specific details are not indicated, comply with applicable requirements of the code and standard hereinbefore specified.
- 8.2 Cutting and bending : Cutting and bending shall be performed at central location, equipped and suitable for the purpose. Bars shall be accurately cut and bent as indicated on the approved shop drawings. Bars shall be bent cold. Heating of bars for bending or straightening will not be permitted. Bars shall not be bent or straightened in any manner which will injure the material.
- 8.3 Welding : Welding of reinforcement, where indicated or approved, including preparation of bars, shall conform with the applicable requirements of AWS D12.1. welder shall be prequalified in accordance with AWS requirements. Useful penetration butt welds by the electric arc method unless otherwise indicated or approved. Weld splices to develop 125 % of the specified yield strength of the bars, or the smaller bar in transition splices. Clean bar from oil, grease, dirt and other foreign substances and flame dry before welding. Preheat bars before welding. Stagger splices in adjacent bars.
- 8.4 Fabrication tolerances : Where fabrication tolerance are not indicated on the drawing, comply with the applicable requirements specified in ACI 301.

9. TESTING

- 9.1 Test of reinforcing steel shall be performed by BRTC, BUET, in accordance with applicable ASTM Standards and as directed by EIC. The Contractor will arrange for all testing and will pay for all works required of the Testing Laboratory.
- 9.2 When independent laboratory testing is required by EIC & Consultant, materials to analyzed or tested shall be delivered to the testing laboratory by the contractor. Specimen for testing shall be taken random from bundles as delivered from the mill.
- 9.3 Further testing of material already delivered to jobsite may be waived by the EIC & Consultant representative, provided proper certification has been furnished as hereinafter specified.
- 9.4 All relevant mill and laboratory test results for the materials supplied shall be submitted to the owner & Consultant.
- 9.5 Standard chart for steel is given below:
Measurement of M.S. works shall be given for the linear measurement of reinforcement and weight shall be calculated to the following British Standard BS 4449, BS 4461.
Specification of weight of 1000 kg = 1 Ton

Dia. of Bar mm	Weight Kg / m
6 mm	0.222
8 mm	0.395
10 mm	0.616
12 mm	0.888
14 mm	1.208
16 mm	1.579
18 mm	2.000
20 mm	2.466
22 mm	2.983
25 mm	3.854
28 mm	4.829
30 mm	5.549
32 mm	6.313

No extra claim on account of over weight of rod used than the above standard will be entertained. The contractor shall take into consideration any such differences in weight of rod in the unit price while tendering. Payment for M.S. work shall be made as per approved bar bending schedule for steel reinforcement work.

10. PLACING

- 10.1 General : Reinforcing steel shall be placed in accordance with the drawings and approved shop drawings and the applicable requirements of the code and standard herein before specified. Install reinforcement accurately and secure against movement particularly under the weight of workmen and placement of the concrete.

- 10.2 Reinforcement support : Bars shall be supported on metal chairs or spacers or concrete blocks, fully cured min 25mmx25mm accurately placed and securely fastened to steel reinforcement in place at a spacing not more than 1 block per 1 sqm for slab and 1 block /m for beam or as directed by the EIC & Consultant representative. Additional bars shall be furnished whether specifically shown on drawings or not where necessary to securely fasten reinforcement in place. Support legs of accessories in forms without embedding in the form surface. Hooks and stirrups shall be accurately spaced and wire to the reinforcing. No wood will be permitted inside the form.
- 10.3 Placing and Tying : reinforcement shall be set in place and rigidly & securely tied or wired with steel tie wire at all splices and all crossing points and intersections in the positions shown. Rebending on bars on jobsite to fit existing conditions will not be permitted without written authorization of the EIC & Consultant representative. Point end of the wire shall be away from the form.
- 10.4 Spacing : Centre-to-centre distance between parallel bars shall be in accordance with the drawings or where not indicated, the clear spacing shall be nominal bar dia but in no case less than 25 mm nor less than 1.33 times the maximum size of aggregate or as directed and approved by the EIC & Consultant representative.
- 10.5 Splices : Laps on slices shall be adequate to transfer stress of bond. Unless indicated otherwise on the drawing, lap bars a minimum of 40 times bar dia with hook. Whenever possible, splices of adjacent bars shall be staggered a minimum lap length.
- 10.6 Welded wire fabric : Wire fabric shall be in as long length as practicable and shall be wired at all laps and splices. End laps shall be offset in adjacent widths. Lap shall be a minimum of one full mesh plus 50 mm, welded wire fabric shall be secured in position with suitable supports, accessories and tie wire as indicated and required to ensure against movement from workmen and placement of concrete.
- 10.7 Dowels : Provide dowels where indicated or required. Dowels shall be tied securely in place before concrete is deposited. Provide additional bars for support and anchorage where required. Where sleeves are required for dowels for load transfer in slabs or for other dowels, sleeves shall be black or galvanized steel pipe, standard weight, of size required to clear dowel 3 mm all around.
- 10.8 Protective concrete clear covering : Except where indicated otherwise shown on drawings, the minimum concrete cover for steel reinforcement shall be as follows :-
1. Where concrete is placed against earth trench form 75 mm
 2. Slabs on grade or against earth 50 mm
 3. Walls below grade, columns 38 mm
 3. Walls above grade & slabs 25 mm
 5. All other formed concrete exposed to earth 50 mm
 6. Concrete in Saline zone add 10mm extra covering over above mentioned figure.

10.9 Placement tolerances : Where placement tolerance are not indicated on the drawing, comply with the applicable requirements specified in ACI 301. Bars may be moved as necessary to avoid interference with other bars, conduit or embedded items. If bars are moved more than one bar diameter, or enough to exceed specified tolerance, resulting arrangement of bars shall be subject to the EIC & Consultant representative's acceptance.

ii) CLEANING.

Reinforcement, when in place, shall be free dirt, loose scale, paint, oil or other foreign materials.

12. NOTIFICATION AND INSPECTION

Contractor shall notify the EIC at least 72 hours ahead of each concrete pour, and no concrete shall be placed until all installed reinforcing steel has been inspected and approved by EIC

13 CORRECTION DURING CONCRETE PLACEMENT

Capable steel work men shall be kept on the work at all times during the placing of concrete, and they shall properly reset any reinforcement displaced by runways, workmen, or other causes. Reinforcement shall not be bent after being partially embedded in hardened concrete.

14. DEFECTIVE WORK

The following reinforcing steel work will be considered defective and may be ordered by the EIC & Consultant representative to be removed and replaced by the Contractor at no additional cost of Owner.

1. Bras with kinks or bends not indicated on drawing,
2. Bras injured due to bending or straightening; and
3. Reinforcement not placed in accordance with the drawing and /or specification.

15 METHOD OF MEASUREMENT

Measurement shall be made and paid for actual quantity reinforcement placed in position and embedded in concrete as shown in drawing in as ordered by the Consultant in writing. Measurement shall not include for the splices, laps, spacers, hangers, hooks, welding, wastage of reinforcement, fasteners etc. Standard weight of reinforcement as per ASTM A615 shall be considered in the measurement. The unit of measurement shall be in Kilogram (kg.)

SECTION-1D

BRICK FALT SOLING

1. SCOPE OF WORK

The work covered by this item shall consist of supplying and laying brick on top of the earth sand bed or anywhere as shown in the drawing to form a sub-base.

2. DESCRIPTION OF WORKS

Bricks shall comply with requirements of first class brick unless otherwise specified by consultant.

The blinding sand will have F.M:1.5 and shall be lean, free from organic matters. Brick shall be laid flat in surface to contact with adjoining bricks and their joints shall be filled with sand. The sand shall be brushed in until joints are filled. Flushing of sand of sand with water will not be done unless permitted.

3. METHODS OF MEASUREMENT

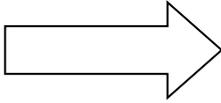
Brick soling shall be measured by the square meter in place. The amount of completed and accepted work, measured as described above, will be paid for at the contract unit price per square feet (sft), which is inclusive of all material, transportation, Placing, labor, equipment, tools and incidental necessary to complete the work.

ATTACHMENT – 4
Drawings
(Please see a separate document in AutoCAD Version)

ATTACHMENT – 5
Time Schedule
(Please see a separate document in Excel format)

ATTACHMENT – 6: Vendor Information Form

DIRECT DEPOSIT SIGN-UP



1) Please Type or Block Print Clearly in Black Ink.

Vendor/Company Name: _____

Address: _____

Telephone: _____ Email (Mandatory): _____

Type of Deposit Account: CD Savings Others

Account Number:

--	--	--	--	--	--	--	--	--	--	--

Name of Financial Institution: _____

Address: _____

SWIFT Number of Financial Institution

Swift Code

(Specific to branch)

CERTIFICATION:

In signing this form, I authorize payment to be sent to the financial institution named above to the designated account.

SIGNATURE

DATE