

CONTRACT DOCUMENTS AND SPECIFICATIONS OF:

*REPARACIÓN DEL SISTEMA DE
IMPERMEABILIZACIÓN DE TECHOS DEL
ESTADIO YLDEFONSO SOLÁ MORALES BO.
PUEBLO, CAGUAS*



Estado Libre Asociado de Puerto Rico
Municipio Autónomo de Caguas

SCOPE OF WORK AND REQUIREMENTS

Instructions to Bidders AND SCOPE OF WORK

- 1.1. Scope of Work
- 1.2. Impermeabilization systems
- 1.3. Pre- Action Requirements
- 1.4. Inspection During the Pre-auction Meting
- 1.5. Removal and Disposal of Water Proofing
- 1.6. Surface Preparation
- 1.7. Installation and Manufacturer Guarantee

1.1 SCOPE OF WORK

El proyecto en referencia consiste en la reparación del sistema de impermeabilización de los techos del estadio. Estos techos incluyen: las gradas, el segundo nivel de las áreas de cabinas de prensa y transmisión, VIP y concesionario y los techos de las entradas principales. Estas áreas totalizan aproximadamente 54,300 pies cuadrados (pc). A continuación, un resumen de las obras que incluye la subasta:

1. Remoción y disposición de todo material aislante y sus componentes existentes en el techo de las gradas.
2. Limpieza, reparación, suplido e instalación de bajantes y canaletas pluviales que puedan estar tapados o en mal estado. Se deben reemplazar las piezas dañadas y verificar que el sistema no esté obstruido, asegurándose que haya flujo hasta las salidas.
3. Instalación de nuevos paneles de aislamiento de uretano de 1" de grosor. El método de instalación será mediante fijación mecánica, con sus tornillos y chapas.
4. Se utilizará el sistema de impermeabilización de membranas termoplásticas reforzadas (equivalente a Flex Membrane 60 mils) o sistema de membrana asfáltica (equivalente a Danosa).
5. Instalación de todos los flashings y sistemas de anclajes para el producto, según las especificaciones del fabricante. Es importante tomar en cuenta las especificaciones de este para calcular su propuesta económica. Se incluyen detalles obtenidos del plano de construcción original para su referencia (ver hoja SI-1.1).
6. Para llevar a cabo la impermeabilización, el contratista será responsable de sustituir las planchas afectadas, igual a las planchas existentes.
7. Reponer planchas en un área de 4,000 pc aproximadamente. El contratista es responsable de cotejar el área a ser reparada usando el tipo de plancha existente.
8. Estos trabajos se harán sin acceder a través del área de juego ni del warning track. Los trabajos se realizarán desde el exterior del edificio (áreas de estacionamiento).
9. Lavado a presión del techo de la entrada principal (tiene sistema flex instalado)..
10. Aplicar material para las juntas del sistema existente (techo de la entrada principal) y reparar cualquier tramo dañado.
11. Lavado a presión del techo de la entrada secundaria, área aproximada de 1,300 pc. y prepararla para la instalación del nuevo sistema.
12. Existen juntas de expansión que deben repararse de acuerdo a las especificaciones del fabricante del sistema que se proponga (ver detalle de referencia 4 en hoja SI-1.1).

13. Suplido e instalación de sistema de impermeabilización de membranas termoplásticas reforzadas (equivalente a Flex Membrane 60 mils) o sistema de membrana asfáltica (equivalente a Danosa), en el área de 1,300 pc.
14. Es responsabilidad del contratista considerar la implementación de un plan de seguridad para sus empleados y cumplir con los requerimientos de OSHA.

1.2 IMPERMEABILIZATION SYSTEMS

1. FLEX Membrane TPO .60 ml in 10' rolls with 4" overlapping between rolls.
2. DANOSA asphaltic membranes layers in heat application

1.3 PRE-AUTION REQUIREMENTS

1. The contractor is required to obtain a manufacturer certification that authorizes the certified installer of their materials, systems and has a minimum of 5 years of experience as a certified contractor approved with the manufacturer.
2. Approval of any / all materials that may in some way affect the performance of your products will be included in this statement. All processes and installation methodology will be done according to the manufacturer's specifications and instructions
3. The contractor is responsible for bringing an official representative of the manufacturer of the installed waterproofing system so that inspections periodically (min 3 visits to the project) that the proper installation processes are carried out according to the manufacturer's specifications and instructions. For the application of a guarantee min 10 years in installation (by the techero) and 10 years in materials (by the manufacturer). The product warranty is requested in writing. For the bidding documents the contractor shall submit in writing commitment by the manufacturer for these inspection visits to the project. This 10-10 years warranty supersede other indicated in these documents.
4. The pre-auction meeting on site is mandatory for the participation of the final auction of the services requested.
5. Present the work estimates by unit cost. Removal and disposal of material, replacement of loose patching areas and installation of new waterproofing system
6. The bidders will consider in his proposal the first and second alternatives of Waterproofing System as described in construction plans and this proposal as separate alternative and provided cost and available date of material for each one. The Municipality of Caguas will evaluate the two ones to determine the best option, so only one alternative will be awarded.

7. It is required to include a work program with cost and time specifying the works to be carried out by areas as part of bidders' proposal documents.
8. All bidders must present a written certification from manufacturer of the systems they are requesting in the proposal.
9. Bidders include in their proposal a Ten (10) years secured "afianzada" warranty of labor, materials and all works in contract.
10. Although the award of the contract will be a lump sum, it is required that the bidder submits with its proposal cost breakdown.
11. The time of work completion will be **120 calendar days**. The Contractor will pay to the Municipality five hundred dollars (\$450.00) daily for liquid damages for each day of delay in execution contracted time the project acceptance.

1.4 INSPECTION DURING THE PRE-AUCTION MEETING

1. The subcontractor will be responsible for inspecting the roof covering and verifying that there are no conditions that could prevent or interfere in any other way with the installation of the proposed roof.
2. During the inspection visit, the contractor is responsible for taking the necessary measures to have the square, linear and volume areas necessary to submit the proposal.
3. Any adverse condition that may affect the performance of the roof will be reported in writing to the MAC (Autonomous Municipality of Caguas) During the time of questions in the auction period. The absence of such notification shall constitute the Subcontractor's verification that the existing conditions will allow the installation of the system in accordance with the Drawings and Specifications and the manufacturer's warranty.

1.5 REMOVAL AND DISPOSAL OF EXISTING WATERPROOFING

1. It is the responsibility of the subcontractor to do the assigned works, including disposition of debris and existing garbage and that are generated during the work period. Verify loading and unloading areas for this process. A trash removal and disposal plan will be submitted for the MAC as part of the proposal.
2. The contractor shall dispose all garbage complying with the laws and regulations of PR that apply.

3. Any damage to the property of the government center and its surroundings (sidewalks, green areas, A / C or other facilities will be restored to their original state

1.6 SURFACE PREPARATION

1. Before beginning roof installation, all roof substrates must be clean and free of debris. Leave the original concrete or lightweight concrete exposed in the requested areas. (follow the material instructions and products indicated by the manufacturer for surface preparation).

1.7 INSTALLATION AND MANUFACTURER GUARANTEE

1. All processes and installation methodology will be done according to the manufacturer's specifications and instructions

PART I:
CONTRACT DOCUMENTS

PART I – CONTRACT DOCUMENTS

pages

BIDDING REQUIREMENTS

A.	INSTRUCTIONS TO BIDDERS	6
B.	PROPOSAL FORM	3
C.	NONCOLLUSIVE AFFIDAVIT	1
D.	BID BOND	2
E.	CERTIFICATE AS TO CORPORATE PRINCIPAL	1
F.	ACKNOWLEDGMENT OF SURETY	1
G.	SCHEDULE OF ADDENDA	1
H.	STATEMENT OF BIDDER'S QUALIFICATIONS	5
I.	RECREATIONAL OR SPORTS EXPERIENCE	2

AGREEMENT AND CONTRACT DOCUMENTS

A.	GENERAL CONDITIONS OF THE CONTRACT	48
B.	SUPPLEMENTARY GENERAL CONDITIONS	7
C.	PERFORMANCE BOND	1
D.	PAYMENT BOND	2
E.	CERTIFICATE AS TO CORPORATE PRINCIPAL	1
F.	ACKNOWLEDGEMENT OF SURETY	1

INSTRUCTIONS TO BIDDERS

ARTICLE 1 – DEFINITIONS

- 1.1 All definitions set forth in the General Conditions of the Contract for Construction, are applicable to these Instructions to Bidders.
- 1.2 Bidding documents include the advertisement or invitation to Bid, Instructions to Bidders, the Bid Form and the proposed Contract Documents, including any Addenda issued prior to receipt of bids.
- 1.3 Addenda are written or graphic instruments issued prior to the execution of the Contract which modify or interpret the bidding documents, including Drawings and Specifications, by additions, deletions, clarifications or corrections. Addenda will become part of the Contract Documents when the Construction Contract is executed.

ARTICLE 2 – EXAMINATION OF BIDDING DOCUMENTS AND SITE

- 2.1 Each bidder shall examine the bidding documents carefully and, not later than two (2) days after the date of the pre-bid meeting, shall make written request to the Architect or Engineer (A/E) for interpretation or correction of any ambiguity, inconsistency or error there in which he may discover. Any interpretation or correction will be issued as an Addendum by the A/E. Only a written interpretation or correction shall be binding. No bidder shall rely upon any interpretation or correction given by any other method.
- 2.2 In unit price Contracts, quantities appearing in the Bid Schedule, are approximate actual cost only and are prepared for the comparison of Bids. Payment to the Contractor will be made only for the actual quantities of work performed and accepted or materials furnished in accordance with the Contract, and it is understood that the schedule quantities of work to be done and materials to be furnished may each be increased, diminished, or omitted as hereinafter provided without in any way invalidating the Contract.
- 2.3 Each bidder is required to visit the Site of the proposed work and to inform himself of the conditions under which the work is to be performed and other relevant matters concerning the work to be performed in such a manner that he will fully understand the facilities, difficulties and restrictions attending the execution of the work under the Contract.
- 2.4 Prior to the receipt of bids, Addenda will be mailed or delivered to each person or firm recorded by the Owner as having received the bidding documents and will be available for inspection whenever the bidding documents are kept available

for that purpose. All such Addenda shall become part of the Contract and all bidders shall be bound by such Addenda.

ARTICLE 3 – BIDDER’S REPRESENTATION

- 3.1 Each bidder by making his bid represents that he has read and understood the bidding documents.
- 3.2 Each bidder by making his bid represents that he has visited the site and familiarized himself with the local conditions under which the Work is to be performed.
- 3.3 The failure or omission of any bidder to receive or examine any form, instrument or document, or to visit the Site and acquaint himself with the conditions there existing, shall in no way relieve said bidder from any obligation with respect to his bid.

ARTICLE 4 – BIDDING PROCEDURES

- 4.1 All bids must be prepared on the form provided by the Owner and submitted in accordance with the Instructions to Bidders.
- 4.2 Proposal shall include the Bid Form, and all other documents forming part of said Proposal, as requested by the Owner with no alterations or change. Each bid shall be enclosed in a sealed envelope properly addressed and marked: “BID DOCUMENTS”, project title and number, bidder’s name and address; date and time of bid opening so as to warn against premature opening. Proposal received after the time for opening of proposals will be returned to the Bidder unopened. When sent by mail, manila envelope containing proposal documents shall be properly wrapped or enclosed within an outer envelope properly addressed warning against premature opening.
- 4.3 In unit price Contracts the bidder shall specify a unit or lump sum price, in both words and figures, for each item for which a quantity is given, and shall also show the products of the respective unit prices and quantities written in figures in the column provided for the purpose, and the total amount of the proposal obtained by adding the amounts of the several items. All words and figures shall be written in ink or typewritten. In case of discrepancy between the price written in words and those written in figures, the price written in words shall govern. Erasures and other changes to the bid must be initialed by the Bidder. When an item in the proposal contains a choice to be made by the bidder, the Bidder shall indicate his choice in accordance with the specifications for that particular item, and there after no further choice shall be permitted.

- 4.4 The bid shall be properly executed. In order to constitute proper execution, the bid shall be executed in strict compliance with the following (No other forms or executions will be accepted):
1. If a bid is by an individual, it shall show the name and post office address of the individual and shall be signed by the individual with the word “Individually” appearing under the signature. If the individual operates under a firm name, the bid shall be signed in the name of the individual doing business under the firm name.
 2. If the bid is a Corporation, it shall be executed in the name of the Corporation by the President or Vice-President. It shall be attested by the Secretary or Assistant Secretary. The seal of the Corporation shall be affixed. If the bid is executed on behalf of a Corporation in any other manner than as above, a certified copy of the minutes of the Board of Directors of said Corporation authorizing the manner and style of execution and the authority of the person executing, shall be attached to the bid. The bid shall show the post office address of the principal office of the Corporation.
 3. If the bid is made by a Partnership it shall be executed in the name of the Partnership by one of the partners. The post office address of the Partnership shall also be shown.
 4. If the bid is a Joint Venture, it shall be executed by each of the Joint Venturers in the appropriate manner said above. In addition, the execution by the Joint Venturers shall sign below their names. The post office address for the Joint Venture shall be shown.
- 4.5 A bidder may withdraw or revise his proposal after it has been deposited with the Owner, provided the request for such withdrawal or revision is received by the Owner in writing or by telegram before the time set for opening proposals. Proposals will be opened and read aloud publicly by the Board of Awards at the time and place indicated in the advertisement or invitation to bid.
- 4.6 Unless otherwise provided in the Special Conditions, no Bidder shall modify, withdraw or cancel his bid or any part thereof for sixty (60) days after the time designated for the receipt of Bids in the advertisement or invitation to bid.
- 4.7 At the time and place fixed for the opening of bids, every bid received within the time fixed for receiving bids will be opened and publicly read aloud, irrespective of any irregularity therein. Bidders and other persons properly interested may be present, in person or by representative. Bids

received after the date and hour specified in the invitation will not be considered and shall be returned.

ARTICLE 5 – REJECTION OF BIDS

- 5.1 The Bidder acknowledges the right of the Owner to reject any or all bids and to waive any informality or irregularity in any bid received. In addition, the Bidder recognizes the right of the Owner to reject a bid if the Bidder failed to furnish any required bid security or to submit the data required by the bidding documents, or if the bid is in any way incomplete or irregular.
- 5.2 Any one of the following causes may be considered sufficient for the disqualification of a Bidder and the rejection of his proposal:
- 1 More than one proposal for the same work from an individual, firm, or Corporation under the same or different names.
 - 2 Evidence of collusion among Bidder's participants in such collusion will receive no recognition as Bidders for any future work of the Owner until any such participant shall have been reinstated as a qualified Bidder.
 - 3 Lack of competency and adequate machinery, plant and other equipment, as revealed by the Statement of Bidders Qualifications required.
 - 4 Unsatisfactory performance record as shown by past work for the Owner, judged from the standpoint of workmanship and progress.
 - 5 Uncompleted work which, in the judgment of the Owner, might hinder or prevent the prompt completion of additional work, if awarded.
 - 6 Failure to pay, or satisfactorily settle, all bills due for labor and material on former contracts in force at the time of letting.
 - 7 Failure to comply with any qualifications or regulations of the Owner.
 - 8 Default under previous contract.
 - 9 If there are unauthorized additions, conditional or alternate bids, or irregularities of any kind which may tend to make the proposal incomplete, indefinite, or ambiguous as to its meaning.
 - 10 If the Bidder adds any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.

11 In unit price contracts, if the proposal fails to contain a unit price for every item indicated except in the case of authorized alternate items.

12 If the statement is not properly filled out or profiled as allowed in paragraph 4.6.

ARTICLE 6 – AWARD AND EXECUTION OF CONTRACT

6.1 The Owner shall pass upon all proposals received. The award of the Contract, if awarded, will be made within twenty (20) working days (or as otherwise specified in the Special Conditions) after the opening of proposals to the lowest responsible and qualified Bidder whose proposal complies with all the requirements prescribed. The successful Bidder will be notified, by letter mailed to the address shown on his proposal, that his Bid has been accepted and that he has been awarded the Contract.

6.2 Both the award of the Contract as the impugnation of the same will be ruled by the Owner. All cases dealing with the impugnation or appeal made by a Bidder shall be brought, in the first place, to the attention of the Board of Awards for a decision. Such impugnation or appeal shall be submitted within 10 days after the date of Notice of Award.

6.3 In the event the award is not made within the time specified, any Bidder whose proposal guaranty has been retained shall have the right to withdraw his proposal without penalty.

6.4 The Owner reserves the right to cancel the award of any Contract at any time before the execution of said Contract without any liabilities against him.

6.5 All proposal guaranties except those of the three (3) lowest bidders will be returned immediately following the opening and checking of the proposals. The retained proposal guaranties of the three (3) lowest Bidders will be returned after the Contract with the successful Bidder has been executed. If no award is made the retained proposal guaranties will be returned to the Bidders after the decision of Not To Award is taken by the Board of Award.

6.6 The Bidder to whom the Contract is awarded shall execute the Contract within ten (10) working days after the date of Notice of Award. No proposal shall be considered binding upon the Owner until the Agreement has been so signed. The Contractor will be furnished with a signed copy of the Agreement.

6.7 Should the Bidder to whom the award is made, fail to execute the Contract within ten (10) working days after the date of Notice of Award, the award may be annulled and the Bidder shall pay to the Owner the difference not to exceed the amount for which the Owner may in good faith Contract with another party to perform the work covered by said bid. Award may then be made to the next lowest responsible Bidder or the work may be re-advertised or performed as the Owner may decide.

ARTICLE 7 – PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND

- 7.1 As specified in paragraph 8.5.1 of the General Conditions of the Contract for the Construction of Public Work, the Bidder to whom the award is made shall furnish to the Owner not later than the date of execution of the Contract, bond covering the faithful performance of the Contract and the payment of all obligations arising hereunder and with such sureties secured through the Bidder's usual sources as may be agreeable to the parties.

ARTICLE 8 – PERMITS AND APPROVALS

- 8.1 Contractor will prepare, submit and obtain approval of the pertinent permits and approvals from the corresponding regulatory agencies required for the commencing the construction work, which among other, will include the following
- 1 Permisó General Consolidado: PGC
 - 2 Not Pollutant Discharge System NPDS
 - 3 Permisó de actividad incidental: corteza terrestre
 - 4 Permisó de poda, corte y remoci3n de 6rboles: Fases de Forestaci3n y Mantenimiento [study provided by the designer].

BID FORM

PROPOSAL FORM

REPARACIÓN DEL SISTEMA DE
IMPERMEABILIZACIÓN DE TECHOS
DEL ESTADIO YLDEFONSO SOLÁ MORALES BO.
PUEBLO, CAGUAS, Puerto Rico

DATE: _____

PROJECT No. _____

Proposal of _____ (hereinafter called "Bidder").

Organized and existing under the laws of the Commonwealth of Puerto Rico, doing

business as _____ .

To the _____ (hereinafter called "Owner").

Gentlemen:

The Bidder, in compliance with your invitation for bids for the construction of _____

_____, having examined the plans and specifications

with related documents and having examined and visited the site of the proposed work,

and being familiar with all of the conditions surrounding the construction of the project,

proposes to furnish all labor, Documents, within the time set forth therein and at the

prices stated below. These prices are to cover all expenses incurred in performing the

work required under the Contract Documents, of which this proposal is part. Bidder

hereby agrees to commence work under this contract on or before a date to be specified in

a written "Notice to Proceed" of the Owner and to fully complete the project within

120 consecutive calendar days thereafter as stipulated in the specifications. Bidder

further agrees to pay as liquidated amount, the sum of \$450 for each calendar day

thereafter and hereafter, if damages are caused by delays attributable to the Contractor in the General Conditions.

BID FORM

Bidder acknowledges receipt of the following Addenda:

ALLOWANCES: The Bidder certifies that the following Allowances are included in the Base Bid Price Proposal stated below:

Allowance No. 1: N/A

Insert “a corporation”, “a partnership”, or an “individual” as applicable.

BASE BID PROPOSAL

The Bidder agrees to perform all the work for the construction of REPARACIÓN DEL SISTEMA DE IMPERMEABILIZACIÓN DE TECHOS DEL ESTADIO YLDEFONSO SOLÁ MORALES, as described in the specifications and shown on the plans for the sum of _____ (\$_____). (Amount shall be shown in both words and figures. In case of discrepancy, the amount shown in words will govern).

Upon receipt of written notice of the acceptance of the bid, the Bidder will execute the Formal Contract within 10 days and deliver a Surety Bond or Bonds as required.

Signed and sealed this _____ day of _____ of 2019.

Name of Bidder

Signature of Bidder's Representative

SEAL

BID FORM

NON-COLLUSIVE AFFIDAVIT

United States of America) ss
Commonwealth of Puerto Rico)

_____, being first duly sworn, deposes and says:

That he is _____
(an individual, a partnership, or an officer of a Corporation, etc.)

of the party making the foregoing proposal or bid, that such proposal or bid is genuine and not collusive or sham; that said bidder has not colluded, conspired, connived, or agreed, directly or indirectly, with any bidder, or person, to put in a sham bid or to refrain from bidding; that he has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference, with any person to fix the bid price of affiant or of any other bidder, or to fix any overhead, profit or cost element of said bid price, or of that of any bidder, or to secure any advantage against the

(Name of Owner)
proposed Contract; and that all statements in said proposal or bid are true.

In the City of _____, Puerto Rico, this ___ Day, of _____ 2019.

Name of Bidder

Signature of Bidder's Representative

AFFIDAVIT NUMBER _____

Sworn and subscribed to before me in the place and date above stated by
_____ of legal age and personally known to me.

(Notary Public)

BID FORM

BID BOND

KNOW ALL MEN BY THESE PRESENTS, THAT _____
_____(hereinafter called the Principal), and
_____ a
Corporation organized and existing under the laws of _____
and authorized to transact business under the laws of the Commonwealth of Puerto Rico,
(hereinafter called the Surety), as Surety, are held and firmly bound unto _____
_____ hereinafter called the Owner, in the penal
sum of _____ (\$ _____), lawful
money of the United States of America, for the payment of which, well and truly to be made, the
said Principal and said Surety bind ourselves, our heirs, executors, administrators and assigns,
jointly and severally, firmly by these presents.

WHEREAS, the said Principal has submitted the accompanying bid dated _____
_____ for _____

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the Contract be
awarded to the Principal, and the Principal, after such award, shall enter into the Contract so
awarded and file bond with good and sufficient surety or sureties as may be required for the
faithful performance and fulfillment of the resulting Contract then this obligation shall be void,
otherwise to remain in full force and effect.

IN WITNESS WHEREOF, the above bounded parties have executed this instrument
under their several seals this _____ day of _____ 2019, the
name and Corporate Seal of each corporate party being here-to affixed and these presents duly
signed by its undersigned representatives, pursuant to authority of its governing body.

BID FORM

SIGNED AND SEALED this _____ day of _____ 2019.

IN PRESENCE OF:

(Individual Principal)

Address

(Business Address)

(Individual Principal)

Address

(Business Address)

(Corporate Principal)

Attest:

Business Address _____

By: _____

(Corporate Seal)

(Corporate Surety)

Attest:

Business Address: _____

By: _____

(Corporate Seal)

BID BOND 2

BID FORM

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the Secretary of the Corporation
named as Principal in the foregoing Performance Bond; that _____,
(Name of Principal Representative)
who signed this Bond on behalf of the Principal, was then _____ of
(Title of Position)
said Corporation, that said Bond was duly signed for and on behalf of said Corporation by
authority of its governing body, and is within the scope of its Corporate powers, this ____ day, of
_____ 2019, at _____, Puerto Rico.

(Corporate Seal)

(Secretary's Signature)

CERTIFICATE AS TO INDIVIDUAL PRINCIPAL

On the ____ day of _____ 2019, appear before me _____
(Name of Principal)
of _____, _____, of legal age and personally
(Address) (Occupation)
Known to me and upon oath, stated to have executed the foregoing Performance Bond.

(Notary Seal)

(Notary Public)

**CERTIFICATE AS TO 1
CORPORATE PRINCIPAL**

BID FORM

ACKNOWLEDGEMENT OF SURETY

ISLAND OF PUERTO RICO)
CITY OF SAN JUAN)

On this ____ day of _____, 2019, before me, the subscriber, a Notary Public of the
City of _____, Puerto Rico, duly commissioned and qualified came _____
_____ as attorney in fact of the _____

to me personally known to be the officer who executed the proceeding instrument, and he
acknowledges execution of the same and being by me duly sworn, depose, and saith, that he is
the said officer of the Company aforesaid, and that his signature as such officer was duly affixed
and subscribed to said instrument by authority and direction of the said Company given the
Power of Attorney executed by said Company on the ____ day of _____, 2019.

The original of which is on file in the office of the Superintendent of Insurance of Puerto Rico.

In TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal, at the
City of _____, Puerto Rico, the day and year first above written.

(Notary Seal)

(Notary Public)

Power of Attorney

This Bid Bond must be accompanied by a copy of a current, valid Power of Attorney from the Surety
to the person issuing the Bond on behalf of the Surety.

ACKNOWLEDGEMENT OF SURETY 1

BID FORM

SCHEDULE OF ADDENDA

(I) or (We) acknowledge receipt of the Addenda to the plans and specifications hereinafter named, for the project(s) included in this Bid and declare that (I) or (we) accept these Addenda and that every change is included in this proposal.

Relation of Addenda:

Addenda number _____ Date _____

Addenda number _____ Date _____

Addenda number _____ Date _____

Addenda number _____ Date _____

Addenda number _____ Date _____

Addenda number _____ Date _____

Addenda number _____ Date _____

Addenda number _____ Date _____

Addenda number _____ Date _____

In the City of _____, Puerto Rico, this __ day of _____ 2019.

(Corporate Seal)

(Name of Bidder's Representative)

BID FORM**STATEMENT OF BIDDERS QUALIFICATION**

The undersigned hereby certifies, under oath, the truth and correctness of all statements and of all answers to questions made hereinafter:

Submitted to: _____
(Name of Owner)

Submitted by: _____
(Name of Bidders Representative)

___ Corporation
___ Partnership
___ Individual
___ Joint Venture
___ Other

[NOTE: Attach separate sheets as required]

1. How many years has your organization been in business as a General Contractor?
_____.

2. How many years has your organization been in business under its present name?
_____.

3. If a Corporation answer the following:

- a) Date of Incorporation: _____
- b) Where Incorporated: _____
- c) President's name: _____
- d) Vice-president's name: _____
- e) Secretary's or clerks name: _____
- f) Treasurer's name: _____

4. If individual or partnership, answer the following:

- a) Date of organization: _____
- b) Name and address of all partners (State whether general or limited partnership)

5. If other than a Corporation or Partnership, describe organization and name principals:

BID FORM

6. General character or work performed by your Company:
7. We normally perform _____ % of the work with our own forces.
8. Have you ever failed to complete any work awarded to you? If so, indicate when, where, and why:
9. Have you ever defaulted in any Contract?
10. Has any officer or partner of your organization ever been an officer or partner of another organization that failed to complete a construction Contract? If so, state circumstances:
11. List name of projects, owner, architect, contract amount, percent completed, and scheduled completion of the major projects your organization has in process on this date. (Date this form is being filled)
12. List the name of projects, owner, architect, contract amount, date of completion, percent of work done with own forces of the major projects your organization has completed in the past five years:

BID FORM

13. List the construction experience and background of the principal, individual and officers of your organization:

14. List major equipment available for this Contract.

15. Trade references: (Submit written evidence)

16. Bank references: (Submit written evidence)

17. Name of Bonding Company and name of Agent:

18. Attach Statement of Financial Conditions, duly certified and audited by a Certified Public Accountant, including Contractor's latest regular dated financial statement or balance sheet which must contain the following items (the most recent reports):

Current Assets: (Cash, joint venture accounts, accounts receivable, accrued interest on notes, deposits, materials and prepaid expenses) net fixed assets and other assets.

BID FORM

Current Liabilities: (Accounts payable, notes payable, accrued interest on notes, provisions for income taxes, advanced received from owners, accrued payroll taxes) other liabilities, and capital (Capitol stock, authorized and outstanding shares per value, earned surplus).

Date of Statement or Balance Sheet:

Name of firm preparing Statement:

19. The undersigned hereby agrees to fill out any detailed Financial Statement that the Owner may require to submit in connection with this Bid and to furnish any other information that may be required by said Owner
20. The undersigned hereby authorize and request from any person, firm or corporation to disclose or furnish any information requested by _____ in verification of the recitals comprised in this Statement of Bidder's Qualifications.

In _____, Puerto Rico, this ___ day, of _____, 2019.

(Name of Bidder)

(Address)

(Bidder's Representative)

(Title)

Affidavit Number _____

BID FORM

Sworn and subscribed to before me on the place and date above stated by _____ and personally known to me.

(Date)

(Notary Public)

BID FORM

SPORTS PROJECT EXPERIENCE

Please fill the information required below pertaining five roofing or re-roofing projects of 30,000 s.f. or more by your firm during the last five years:

PROJECT NO. 1

1. Name of project:
2. Location:
3. Lot size:
4. Owner
5. Description of project:
6. Contact person name: phone number:

PROJECT NO. 2

1. Name of project:
2. Location:
3. Lot size:
4. Owner
5. Description of project:
6. Contact person name: phone number:

PROJECT NO. 3

1. Name of project:
2. Location:
3. Lot size:
4. Owner
5. Description of project:
6. Contact person name: phone number:

BID FORM

QUALIFICATIONS

PROJECT NO. 4

1. Name of project:
2. Location:
3. Lot size:
4. Owner
5. Description of project:

6. Contact person name:

phone number:

PROJECT NO. 5

1. Name of project:
2. Location:
3. Lot size:
4. Owner
5. Description of project:

6. Contact person name:

phone number:

CONTRACT DOCUMENTS

TABLE OF CONTENTS GENERAL CONDITIONS OF THE CONTRACT

Article 1.	Definitions
	1.1 Definition of Terms
Article 2.	Contract Documents
	2.1 Definitions
	2.2 Execution, Correlation, Intent and Interpretations
	2.3 Copies Furnished and Ownership
Article 3.	Architect or Engineer
	3.1 Definitions
	3.2 Administration of the Contract
Article 4.	Owner
	4.1 Definitions
	4.2 Information and Services Required of the Owner
	4.3 Owner's Right to Stop the Work
	4.4 Owner's Right to Carry Out the Work Without Termination the Employment of the Contractor
Article 5.	Contractor
	5.1 Definition
	5.2 Review of Contract Documents
	5.3 Supervision and Construction Procedures
	5.4 Labor and Materials
	5.5 Warranty
	5.6 Taxes
	5.7 Permits, Fees and Notices
	5.8 Superintendent
	5.9 Responsibility for those Performing the Work
	5.10 Prosecution and Progress
	5.11 Drawings and Specifications at the Site
	5.12 Shop Drawings and Samples
	5.13 Use of Site
	5.14 Cutting and Patching of Work
	5.15 Cleaning up
	5.16 Indemnification

CONTRACT DOCUMENTS

- Article 6. Subcontractors
 - 6.1 Definitions
 - 6.2 Award of subcontractors for Portions of the Work
 - 6.3 Sub-contractual Relation
 - 6.4 Payments to Subcontractors

- Article 7. Separate Contracts
 - 7.1 Owner's Right to Award Separate Contracts
 - 7.2 Mutual Responsibility of Contractors
 - 7.3 Cutting and Patching Under Separate Contracts
 - 7.4 Owner's Right to Clean Up

- Article 8. Miscellaneous Provisions
 - 8.1 Governing Law
 - 8.2 Successors and Assigns
 - 8.3 Written Notice
 - 8.4 Notice of Injuries or Damages
 - 8.5 Performance Bond and Labor and Material Payment Bond
 - 8.6 Rights and Remedies
 - 8.7 Royalties and Patents
 - 8.8 Procurement and Delivery of Materials
 - 8.9 Samples and Tests
 - 8.10 Federal Aid Provisions (Not Applicable)
 - 8.11 Maintenance During Constructions

- Article 9. Time
 - 9.1 Definitions
 - 9.2 Progress and Completion
 - 9.3 Delays and Extensions of Time
 - 9.4 Liquidated Damages

- Article 10. Payment and Completion, Payment and Measurement
 - 10.1 Contract Sum
 - 10.2 Schedule of Values
 - 10.3 Progress Payments
 - 10.4 Payments Withheld
 - 10.5 Measurement and Payment
 - 10.6 Failure of Payment
 - 10.7 Substantial Completions and Final Payment

- Article 11. Protection of Persons and Property
 - 11.1 Safety Precautions and Programs
 - 11.2 Safety of Persons and Property
 - 11.3 Emergencies

CONTRACT DOCUMENTS

- Article 12. Insurance
 - 12.1 Contractors Bond and Insurance
 - 12.2 Workmen's Compensation and Employer's Liability
 - 12.3 Comprehensive General and Automobile Liability Insurance
 - 12.4 Builder's Risk
 - 12.5 Installation Floater
 - 12.6 Subcontractor's and Sub-Sub-contractor's Insurance
- Article 13 Changes in the Work
 - 13.1 Change Order and Extra Work Orders
 - 13.2 Claims for Additional Cost
 - 13.3 Minor Changes in the Work
 - 13.4 Field Orders
- Article 14 Uncovering and Correction of Work
 - 14.1 Uncovering of Work
 - 14.2 Correction of Work
 - 14.3 Acceptance of Defective or Non-Conforming Work
- Article 15 Disputes and Appeals
 - 15.1 Settlements of Disputes
 - 15.2 Arbitration
- Article 16 Termination of the Contract
 - 16.1 Owner's Right to Postpone or Discontinue Operations
 - 16.2 Owner's Right to Terminate the Employment of the Contractor
 - 16.3 Contractor's Right to Terminate the Contract.
- Article 17 Repealing Clause
- Article 18 Effectiveness

GENERAL CONDITIONS OF THE CONTRACT

Article 1 Definitions

1.1. Definitions of Terms

- 1.1.1. Contract Item or Pay Item. A portion of work specifically described and which a price either unit or lump sum is provided. It includes performances of all work and the furnishing of labor, equipment and materials described in the specifications.

CONTRACT DOCUMENTS

- 1.1.2. Force Account Work. Additional work that is paid for on the basis of cost plus an established fee.
- 1.1.3. Federal Agency (Not Applicable)
- 1.1.4. Inspector. An authorized representative of the Owner, assigned to make a detailed inspections of performance of any or all portions of the work.
- 1.1.5. Laboratory. The testing laboratory of the Owner of Contractor or any other testing laboratory approved by the Architect or the Engineer.
- 1.1.6. Mayor and Minor Contract Items. Any items having a contract value equal to or greater than five (5) per cent of the original contract amount shall be considered as major items. All the other contract items shall be considered as minor items. A minor may become a major item when the minor item is increased to the extent that the total cost of the item is equal to or greater than five (5) per cent of the original contract amount.
- 1.1.7. Plans or Drawings. The approved drawings and supplement showing the location, character, dimensions, and details of the work to be done and which are to be considered as a part of the Contract.
- 1.1.8. Project. The project is the total construction as designed, of which the work to be performed under the Contract Documents may be a whole or a part.
- 1.1.9. Resident Engineer or Resident Inspector. The authorized representative of the Owner in immediate charge of the inspection force.
- 1.1.10. Right of Way. A general term denoting land, property, or interest, therein, usually in a strip, acquired for or intended to a project or public utilities.
- 1.1.11. Special Conditions. Special requirements regulations or directions covering conditions peculiar to a particular project. Special Conditions shall prevail over the General Conditions, Technical Specifications, and Plans. On each sheet of Special Conditions, for positive identification, there shall appear the caption "Special Conditions".
- 1.1.12. Supplemental Agreement. A written agreement executed by the Contractor and the Owner supplementing the Contract to cover changes conditions incidental to and necessary for the acceptable completion of the project.
- 1.1.13. Technical Specifications. The directions, provisions and requirements setting forth or relating to the performance of the work and to the kind and quality of materials and labor to be furnished under the Contract for the execution of the project, and to the method and manner of evaluating and paying for the work.

CONTRACT DOCUMENTS

1.1.14. The work. The work includes all labor necessary to produce the construction required by the contract documents, and all materials and equipment incorporated in the such construction.

1.1.15. Contract Limits. The portion of the site within which the work is to be performed..

1.1.16. Off-Site Work. Work to be performed outside of the contract limits.

Article 2 Contract Documents

2.1. Definitions

2.1.1. The Contract Documents. The contract documents consists of the following component parts.

1. The agreement, including
 - a. Performance Bond
 - b. Payment Bond
 - c. Workmen's Compensation Insurance
 - d. Employer Liability (Public Liability)
 - e. Comprehensive General and Automobile Liability Insurance
 - f. Builder's Risk all risks form including earthquake
 - g. Installation Floater
2. Date Contractor's Proposal
3. All Addenda issued prior to execution of the contract.
4. Special Conditions
5. Instruction to Bidders
6. General Conditions
7. Technical Specifications
8. The Drawings

2.1.2. The Contract. The contract Documents form the Contract. The Contract represents the entire and integrated agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either written or

CONTRACT DOCUMENTS

oral, including the bidding documents. The Contract may be amended or modified only by a modification as defined in subparagraph 2.1.3.

- 2.1.3. A modification is a written amendment to the contract signed by both parties covering (1) A Changer Order (2) An Extra Work Order (3) A Supplemental Agreement (4) A written Interpretation issued by the Architect or Engineer pursuant to Subparagraph or Engineer, pursuant to Paragraph 13.3. A modification may be made only after execution of the Contract.

2.2. Execution, Correlation, Intent and Interpretations

- 2.2.1. The Agreement shall be signed in not less than triplicate by the Owner and Contractor or their authorized representatives. The other component parts of the Contract Document if not signed by the Owner or Contractor shall be identified by their authorized representatives.
- 2.2.2. By executing the Contract the Contractor represents that he has visited the site familiarized himself with the local conditions under which the Work is to be performed and correlated his observations with the requirements of the contract Documents.
- 2.2.3. The Contract Documents are complementary, and what is required by any one shall be as binding as if required by all. The intention of the Documents is to include all labor, materials, equipments and other items as provided in Subparagraph 5.4.1 necessary for the proper execution and completion of the work.
- 2.2.4. It is not intended that work no covered under any heading, section, branch, class or trade of the Specifications shall be supplied unless it is required elsewhere in the Contract Documents. Words which have well-know technical or trade meanings are used herein in accordance with such recognized meanings.
- 2.2.5. The organization of the Specifications into divisions, sections and articles, and the arrangement to Drawings shall not control the contractor in dividing the work among subcontractors or in establishing the extent of work to be performed by any trade.
- 2.2.6. Written interpretations necessary for the proper execution or progress of the work in the form of drawings or otherwise, will be issued with reasonable promptness by the Architect or Engineer and in accordance with any schedule agreed upon.

Either party to the Contract may make written request to the Architect or Engineer for such interpretations. Such interpretations shall be consistent with and reasonably infer able from the Contract Documents and may be effected by Field Order. Interpretation drawings are not changes in the Work.

CONTRACT DOCUMENTS

2.3. Copies Furnished and Ownership

- 2.3.1. Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, six (6) complete sets of Drawings and Specifications reasonably necessary for the execution of the work.
- 2.3.2. All Drawings, Specifications and copies thereof furnished by the Architect or the Engineer are and shall remain property of the Owner.

Article 3 Architect or Engineer

3.1. Definition

- 3.1.1. The Architect or Engineer is the person licensed to practice architecture or engineering in Puerto Rico and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Architect or Engineer means the Architect or Engineer or his authorized representative.
- 3.1.2. Nothing contained in the Contract Documents shall create any contractual relationship between the Architect or Engineer and the Contractor.

3.2. Administration of the Contract

- 3.2.1. The Architect or Engineer will provide general Administration of the Construction Contract, including performance of the functions hereinafter described.
- 3.2.2. The Architect or Engineer will be the Owner's representative. The Architect or Engineer will have authority to act on behalf of the Owner to the extent provided in the Contract Documents, unless otherwise modified by written instrument which will be shown to the Contractor.
- 3.2.3. The Architect or Engineer shall at all times have access to the work whenever it is in preparation and progress. The contractor shall provide facilities for such access so the Architect or Engineer may perform his functions under the Contract Documents.
- 3.2.4. The Architect or Engineer will make periodic visits to the site to familiarize himself generally with the progress and quality of the Work and to determine in general if the Work is proceeding in accordance with the Contract Documents. On the basis of his on-site observations as an architect, or engineer, he will keep the Owner informed of the progress of the Work, and will endeavor to guard the Owner against defects and deficiencies in the Work of the Contractor.

CONTRACT DOCUMENTS

- 3.2.5. Based on such observations and the Contractor Application for Payment, the Architect or Engineer will determine the amount owed to the Contractor and will issue Certificates for Payment in such amount, as provided in Paragraph 10.3.
- 3.2.6. The Architect or Engineer will be, in the first instance, the interpreter of the requirements of the Contract Documents. The Architect or Engineer will within a reasonable time, render such interpretations as he may deem necessary for the proper execution or progress of the Work.
- 3.2.7. Claims, disputed and other matters in question relating to the execution or progress of the Work or the interpretation of the Contract Documents shall be referred initially to the Architect or Engineer for decision which he will render in writing within a reasonable time.
- 3.2.8. All interpretations and decisions of the Architect or Engineer shall be consistent with the intent of the Contract Documents. In his capacity as interpreter and judge, he will exercise his best efforts to insure faithful performance.
- 3.2.9. All disputes under this contract shall be decided by the Architect or Engineer whose decision shall be final and binding, except disputes concerning the cost or amount of claims involving change in contract price, which shall be decided by the Architect or Engineer subject to arbitration as specified in Article 15.
- 3.2.10. The Architect or Engineer will have authority to reject work which does not conform to the Contract Documents. Whenever, in his reasonable opinion, he considers it necessary or advisable to insure the proper implementation of the intent of Contract Documents, he will have authority to require special inspection or testing of the work in accordance with Paragraph 8.9 whether or not such work be then fabricated, installed or completed. However, neither the Architect's or Engineer's authority to act under this subparagraph 3.2.10, nor any decision made by him in good faith either to exercise or not exercise such authority, shall give rise to any duty or responsibility of the Architect, or Engineer to the Contractor, any Subcontractor, any of their agents or employees, or any other person performing any of the work, nor will the Contractor be relieved from his obligations under the Contract.
- 3.2.11. The Architect or Engineer will review Shop Drawings and Samples as provided in subparagraphs 5.12.1 through 5.12.8 inclusive.
- 3.2.12. The Architect or Engineer will prepare Change Orders, and Extra Work Orders, in accordance with Article 13.
- 3.2.13. The Architect or Engineer will conduct inspections to determine the dates of substantial Completion and Final Completion and will receive and review written guarantees and related documents required by the Contract.

CONTRACT DOCUMENTS

- 3.2.14. The Architect or Engineer will not be responsible for the acts or omissions of the contractors, or any Subcontractor, or any of their agents, or employees, or any other persons performing any of the work.
- 3.2.15. The Architect or Engineer shall have the authority to stop the Work wholly or in part when such stoppage be necessary to insure the proper execution of the Contract.
- 3.2.16. The Owner may designate one or more assistants or representatives to represent him as Resident Engineers or Inspectors for the work, fully empowered to represent the Owner in all matters pertaining to inspection of work done and materials furnished by the Contractor and Subcontractors. Such inspection may extent to all or any part of the work and to the preparation or manufacture of the materials to be used. In case of any dispute between the Contractor and any one Resident Engineer or Inspector as to materials furnished or the manner of performing the work, the Resident Engineer or the Inspector shall have the authority to reject materials or suspend the work until the question at issue can be referred to and decided by the Architect or Engineers and Inspectors are not authorized to alter or waive any requirements of the Contract.

Article 4 Owner

4.1. Definition

- 4.1.1. The Municipal Government of Caguas, Puerto Rico

4.2. Information and Services Required of the Owner

- 4.2.1. The Owner shall furnish all available information describing the physical characteristics, legal limits and utility locations for the Project.
- 4.2.2. Unless otherwise specified, the Owner will set construction stakes establishing property lines, slopes, continuous profile-grade, centerline, and bench marks for the project and will furnish the Contract or with all necessary information relating to lines, slopes and grades. These stakes and marks shall constitute the field control by and in accordance with which the contractor shall establish other necessary controls and perform the work. The stakes and marks, and if any of the construction stakes or the cost of replacing them will be charged against him and will be deducted from the work. The Owner will be responsible for the accuracy of lines, slopes grades and other engineering work which is set forth under this section. When the Contractor is required to perform the stake and marks with his own personnel and he shall assume all responsibility for the accuracy of staking and for its preservation and replacing until the work is completed.

CONTRACT DOCUMENTS

The Owner will provide information regarding references points for location and construction and may, at any time, check the stakes and marks set by the Contractor's expense.

- 4.2.3. Information or services under the Owner's control shall be furnished by the Owner with reasonable promptness to avoid delay in the orderly progress of the work.

4.3. Owner's Right to Stop The Work

- 4.3.1. The Owner may Order the Contractor to stop the work, or any portion thereof, until the cause for such order has been eliminated, if the Contractor fails to correct defective work, persistently fails to supply materials or equipment in accordance with the Contract Documents, or for any other reason deemed necessary to insure the proper execution of the Contract.

4.4. Owner's Right to Carry out the Work without Terminating the Employment of the Contractor

- 4.4.1. If the Contractor neglects to carry out the Work in accordance with the Contract Document or fails to perform any provision of the Contract, the Owner may, after written notice to the Contractor and Surety and without prejudice to any other remedy he may have, make good such deficiencies. In such case, an appropriate deduction shall be made from the payments then or deficiencies. thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

Article 5 Contractor

5.1. Definition

- 5.1.1. The Contractor is the person, or organization with whom this Contract is made by the Owner. The term Contractor identified as such in the Agreement means the Contractor or his authorized representative.

5.2. Review of Contract Documents

- 5.2.1. The Contractor shall carefully study and compare the Contract Documents and shall at once report to the Architect or Engineer any error, inconsistency or omission he may discover. The Contractor shall not be liable to the Owner for any errors, inconsistencies or omissions in the Contract Documents. The Contractor shall take no advantage of any such errors, inconsistencies or omissions. The Architect or Engineer after being notified by the Contractor of such errors inconsistencies or omissions will make the corrections and interpretations as may be deemed necessary for fulfilling the intent of the Contract Documents.

CONTRACT DOCUMENTS

5.3. Review of Contract Documents

- 5.3.1. The Contractor shall supervise and direct the work, using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the work under the contract.

The Contractor shall give the work the constant attention necessary to facilitate the progress thereof, and shall cooperate with the Architect or Engineer, the Inspectors and other Contractors in every way possible, in order to comply with the Contract Documents.

5.4. Labor and Materials

- 5.4.1. Unless otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, construction equipment and machinery water, light, power, transportation, superintendence, temporary construction of every nature, utilities, and all other services and facilities of every nature whatsoever necessary to execute, complete, and deliver the work under the Contract within the specified time.

5.5. Warranty

- 5.5.1. The Contractor warrants to the owner that all materials and equipment furnished under this contract will be new unless otherwise specified, and that all work will be of the best quality, free from faults and defects and in accordance with the Contract Documents. If required by the Architect or Engineer the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

5.6. Taxes

- 5.6.1. The Contractor shall pay all sales, consumer, use and any other taxes required by law and necessary for the execution and completion of this Contract.

5.7. Permits, Fees and Notices

- 5.7.1. The Contractor shall secure and pay for all permits, governmental fees and licenses necessary for the proper execution and completion of this Contract, which are applicable at the time the bids are received.
- 5.7.2. The Contractor shall give notice and comply with Municipal and State Laws of the Commonwealth of Puerto Rico, ordinances, rules, regulations, by-laws, and all orders or decrees as exist at present or may be enacted later by bodies or tribunals having any jurisdiction or authority which in any manner affect those engaged or employed shall save the Owner and its representatives harmless from any claim or

CONTRACT DOCUMENTS

liability arising from or bases on the infraction or violation of any such laws, ordinances, rules, regulations, by-laws, and all orders or decrees.

Should the Contractor observe that the Contract Documents are at variance with any Municipal and State Laws of the Commonwealth of P.R., ordinances, rules regulations, by laws, and all orders or decrees, he shall promptly notify the Owner, who shall instruct the Contractor as to his further procedure. In the event of any change in the Contract Documents to comply with any Municipal and State Law of the Commonwealth of P.R., ordinances, rules, regulations, by- laws, and all orders or decrees and such change involves a change in the contract price, it will be adjusted as provided in the Contract Documents.

If the Contractor performs any work knowing it to be contrary to such Municipal and State Laws of the Commonwealth of P.R., ordinances, rules, regulations, by-laws, and State Laws of the Commonwealth of P.R., ordinances, rules, regulations, by- laws, and all orders or decrees and without such notice to the Owner, the Contractor shall assume responsibility therefore, and shall bear all costs arising there from.

5.8. Superintendent

5.8.1. The Contractor shall employ a competent construction superintendent and necessary assistants who shall be in attendance at the project site at all times during the prosecution of the work. The superintendent shall be satisfactory to the Owner or his representatives and shall not be changed except with the consent of the Owner, unless the Superintendent proves to be unsatisfactory to the Contractor and ceases to be in his employ. The Superintendent shall be invested with authority to act for the Contractor on all matters that may arise during the prosecution of the work and all the instruction given to him by the Owner or his authorized representative shall be as binding as if given to the Contractor. Important communications will be so confirmed on written request in each case. Such superintendent shall be furnished by the Contractor irrespective of the total amount of the work. The contractor shall, before commencing operations submit to the Owner the name and qualifications of the Superintendent.

5.9. Responsibility for Those Performing the Work

5.9.1. The contractor shall be responsible to the Owner for the acts and omissions of all of his employees and all subcontractors, their agents and employees and all other persons performing any of the work under a Contract with the Contractor.

5.9.2. The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the work any unfit person or anyone not skilled in the task assigned to him.

CONTRACT DOCUMENTS

5.9.3. The Contractor shall rebuild, repair, restore any injuries or damages to any portion of the work before its completion and acceptance, and shall bear the expense thereof, except damage to the work due to unforeseen causes beyond the control of and without fault or negligence of the Contractor, including but not restricted to acts of God as defined in Article 9, of the public enemy, acts of the Government, or partial acceptance by the Owner.

5.9.4. In case of temporary suspension of work for any cause whatsoever the Contractor shall be responsible for the project and shall take such reasonable precautions as may be necessary to prevent damage to the project, provide suitable drainage and erect necessary temporary structures, signs or other facilities, at his expense.

5.10. Prosecution and Progress

5.10.1. Immediately after being awarded the Contract, the Contractor shall deliver to the Owner a construction progress schedule in form satisfactory to the Owner showing the proposed dates of commencement and completion of each of the various items of the work. This schedule after approved by the Owner shall become a part of the Contract Documents and shall be revised as required by the conditions of the work, subject to the Owner's approval.

5.10.2. Immediately after receipt of award, the Contractor and the Architect or Engineer will establish a mutually agreeable date on which a preconstruction conference will be held.

5.10.3. After the Contract has been executed, the Contractor will be formally notified to proceed with the work or services provided in the Contract. The Notice to Proceed will stipulate the date on which it is accepted the Contractor will begin construction and from which date Contract time will be charged.

5.10.4. The Contractor shall start work on the part of the project set forth in the progress schedule, Special Provisions or Drawings, and the work shall be conducted in such a manner and with sufficient materials, equipment and labor as considered necessary to insure its completion in accordance with the Contract Documents within the time set forth in the Contract.

5.11. Drawings and Specification at the Site

5.11.1. The Contractor shall keep available at the site for the Owner and his representative one copy of Contract Documents and all modifications, in good order and marked to record all changes made during construction.

5.12. Shop Drawings and Samples

5.12.1. Shop drawings are drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which illustrate some portion of the Work.

CONTRACT DOCUMENTS

- 5.12.2. Samples are physical examples furnished by the Contractor to illustrate materials, equipment or workmanship, and to establish standards by which the work will be judged.
- 5.12.3. The Contractor shall review, stamp with his approval and submit, with reasonable promptness and in orderly sequence so as to cause no delay in the work or in the work of any other Contractor, all Shop Drawings and Samples required by the Contract Documents or subsequently by the Owner as covered by Modifications. Shop drawings and Samples shall be properly identified as specific, or as the Owner may require. At the time of submission the Contractor shall inform the Owner in writing of any deviation in the Shop Drawings or Samples from the requirements of the Contract Documents.
- 5.12.4. By approving and submitting Shop Drawings and Samples, the Contractor thereby represents that he has determined and verified all field measurements, field construction criteria, materials, catalog number and similar data, or will do so, and that he has checked and coordinated each Shop Drawing and Sample with the requirements of the Work and of the Contract Documents.
- 5.12.5. The Owner will review and approve Shop Drawings, and Samples with reasonable promptness so as to cause no delay, but only for conformance with the design concept of the Project and with the information given in the Contract Documents. The Owner's approval of a separate item shall not indicate approval of an assembly in which the item functions.
- 5.12.6. The Contractor shall make any corrections required by the Owner and shall resubmit the required number of corrected copies of Shop Drawings or new Samples until approved. The Contractor shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than the corrections requested by the Owner's on previous submissions.
- 5.12.7. The Owner's approval of Shop Drawings or Samples shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents unless the Contractor has informed the Owner in writing of such deviation, nor shall the Owner's approval relieve the Contractor from responsibility for errors or omissions in the Shop Drawing or Samples.
- 5.12.8. No portion of the Work requiring a Shop Drawing or Sample submission shall be commenced until the submission has been approved by the Owner. All such portion of the Work shall be in accordance with approved Shop Drawings and Sample.
- 5.13. Use of Site

CONTRACT DOCUMENTS

5.13.1. The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents and shall not unreasonably encumber the site with any materials or equipment.

5.14. Cutting and Patching of Work

5.14.1. Except as may be provided elsewhere, the Contractor shall do all cutting fitting or patching of his work that may be required to make its several parts fit together properly and shall not endanger any work by cutting, excavating or otherwise altering the Work or any part of it.

5.15. Cleaning Up

5.15.1. The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of the Work he shall remove all his waste materials and rubbish from and about the Project as well as all his tools, construction equipment, machinery and surplus materials, and shall clean all glass surfaces and leave the work “broom clean” or its equivalent, except as otherwise specified.

5.15.2. If the Contractor fails to clean up, the Owner may do so and the cost there of shall be charged to the Contractors as provided in Paragraph 4.4.

5.16. Indemnification

5.16.1. The Contractor, for itself, its agents, employees, successors and assigns, agrees to protect, indemnify and save the Owner, its officers, agents, employees, successors and assigns harmless from every kind and character of damages, losses, expenses, demands, claims, actions or causes of actions together with any and all losses, costs or expenses in connection therewith or related thereto, asserted by any person or persons arising or in any manner growing out of or incident to the Work performed or to be performed and operations to be conducted by the Contractor, its officers, agents and employees, or any other persons, firm, or corporation whatsoever, whether such injuries, death or damage result from or are claimed to have resulted from the negligence of the Contractor, its officers, agents or employees, or whether resulting from or alleged to have resulted from concurrent negligence of the Owner, its officers agents or employees and/or the subcontractors, their officers agents or employees, and the Contractor at his own expense, shall defend any suit or action brought against the Owner based on any such alleged injury, death or damage and shall pay all damages, costs and expenses including attorney’s fees in connection therewith or in any manner resulting there from.

CONTRACT DOCUMENTS

- 5.16.2. The Policy shall be specifically endorsed to cover the liability assumed by the named insured under the contract, and shall quote the above “Save Harmless” clause.
- 5.16.3. The limits of insurance for this coverage shall be the same as for the Comprehensive General Liability Policy.

Article 6 Sub-Contractors

6.1. Definition

- 6.1.1. A subcontractor is a person or organization who has a direct contract with the Contractor to perform any of the work at the site. The term Subcontractor as referred though the Contract Documents means the Subcontractor or his authorized representative.
- 6.1.2. A Sub-subcontractors a person or organization who has a direct or indirect contract with a Subcontractor to perform any of the work at the site. The term Sub-subcontractor as referred throughout the Contract Documents means the Subsubcontractor or his authorized representative.
- 6.1.3. Nothing contained in the Contract Documents and specifically those in this Article 6 shall create any contractual relation between the Owner and any Subcontractor or Sub-subcontractor.

6.2. Award or Subcontractors for Portions of the Work

- 6.2.1. Unless otherwise specified in the Contract Documents the Contractor, as soon as practicable after the award of the Contract, shall furnish to the Owner in writing for his acceptance a list of the names of the Subcontractors proposed for the principal portions of the Work. The Owner shall promptly notify the Contractor in writing if he, after due investigation, has reasonable objection to any Subcontractor on such list and does not accept him. If within fifteen (15) days from submittal by the Contractor, the Owner or Architect or Engineer fails to make objection to any Subcontractor on the list, it shall constitute acceptance of such subcontractor.
- 6.2.2. The Contractor shall not contract with any Subcontractor or any person or organization (including those who are to furnish materials or equipment fabricated to a special design) proposed for portions of the Work designated in the Contract Documents or, if none is so designated, with any Subcontractor proposed for the principal portions of the Work who has been rejected by the Owner.
- 6.2.3. If the Owner refuses to accept any Subcontractor or person or organization on list submitted by the Contractor in response to the requirements of the Contract

CONTRACT DOCUMENTS

Document the Contractor shall submit an acceptable substitute. No increase in the Contract Sum shall be allowed for any such substitution.

6.2.4. The Contractor shall not make any substitution for any Subcontractor who has been accepted by the Owner, unless the substitution is acceptable to the Owner.

6.2.5. Unless otherwise specified the Contractor shall execute with his own organization work amounting to not less than fifty (50) percent of the original total contract cost. Any items designated in the Contract Documents as "Specialty Items" shall be deducted from original total cost before computing the amount of the work required to be performed by the contractor with his own organization.

6.3. Sub-contractual Relations

6.3.1. All work performed for the Contractor by a Subcontractor shall be pursuant to an appropriate agreement between the Contractor and the Subcontractor (and where appropriate between Subcontractors and Sub-subcontractors which shall contain provisions that:

1. Preserve and protect the right of the Owner under the Contract with respect to the Work to be performed under the subcontract so that the subcontracting thereof will not prejudice such rights.
2. Require that such work be performed in accordance with the requirements of the Contract Documents.
3. Require submission to the Contractor of applications for payment under each subcontract to which the Contractor is party, in reasonable time to enable the Contractor to apply for payment in accordance with Article 10.
4. Require that all claims of additional costs, extensions of time, damages for delays or otherwise with respect to subcontracted portions of the Work shall be submitted to the contractor (via any Subcontractor or Subsubcontractor where appropriate) in sufficient time so that the Contractor may comply in the manner provided in the Contracts Documents for like claims by the Contractor upon the Owner.
5. Waive all rights the contracting parties may have against one another for damages caused by fire or other perils covered by the property insurance described in Paragraph 12.3 except such insurance held by the Owner as trustee under Paragraph 12.3 and.
6. Obligate each Subcontractor specifically to consent to the provisions of this Paragraph 6.3

6.4. Payments to Subcontractors

CONTRACT DOCUMENTS

- 6.4.1. The Contractor shall pay each subcontractor upon receipt of payment from the Owner, an amount equal to the percentage of completion allowed to the Contractor on account of such Subcontractor's work, less the percentage retained from payments to the Contractor. The Contractor shall also require each Subcontractor to make similar payments to his sub-contractors.
- 6.4.2. If the Owner fails to issue a Certificate for Payment for any cause which is the fault of the Contractor and not the fault of a particular Subcontractor, the Contractor shall pay that Subcontractor on demand, made at any time after the Certificate for Payment should otherwise have been issued, for his work to the extent completed, less the retained percentage.
- 6.4.3. The contractor shall pay each Subcontractor a just share of any insurance moneys received by the Contractor under Article 12, and he shall require each Subcontractor to make similar payments to his subcontractors.
- 6.4.4. The Owner may, on request and at his discretion, furnish to any Subcontractor, if practicable, information regarding percentage of completion certified to the Contractor on account of Work done by such Subcontractors.
- 6.4.5. The Owner shall not have any obligation to pay or to see to the payment of any moneys to any Subcontractor except as may otherwise be required by law.

Article 7 Separate Contracts

- 7.1. Owner's Right to Award Separate Contracts
 - 7.1.1. The Owner reserves the right to award other contracts in connections with other portions of the Project under these or similar conditions of the Contract.
 - 7.1.2. When separate contracts are awarded for different portions of the Project, "the Contractor" in the Contract Documents in each case shall be the contractor who signs each separate contract.
- 7.2. Mutual Responsibility of Contractors
 - 7.2.1. The Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall properly connect and coordinate his work with theirs.
 - 7.2.2. If any part of the Contractor's work depends for proper execution or results upon the work of any other separate contractor shall inspect and promptly report to the Architect or Engineer any apparent discrepancies or defects in such other work that render it unsuitable for such proper execution and results.

Failure of the Contractor so to inspect and report shall constitute acknowledgment that the other contractor's work is suitable to receive his work, except as to

CONTRACT DOCUMENTS

defects which may develop in the other separate contractor's work after the execution of the Contractor's work. Nothing in this subparagraph shall, however, make the contractor responsible for the acceptability of the other Contractor's Work.

- 7.2.3. Should the Contractor cause damage to the work or property of any separate contractor on the Project, the Contractor shall, upon due notice, settle with such other contractor by agreement or arbitration, if he will so settle. If such separate contractor sues the Owner or initiates an arbitration proceeding on account of any damage alleged to have been so sustained, the Owner shall notify the Contractor who shall defend such proceedings at the Owner's expense; and if any judgement or award against the Owner arises therefrom the Contractor shall pay or satisfy it and shall pay or satisfy it and shall reimburse the Owner for all attorneys fees and court or arbitration costs which the Owner has incurred.

7.3. Cutting and Patching

- 7.3.1. Under Separate contracts shall be responsible for any cutting fitting, and patching that may be required to complete his Work except as otherwise specifically provided in the Contract Documents.

A Contractor shall not endanger any work of any other contractors by cutting, excavating or otherwise altering any work and shall not cut or alter the work of any other contractor except with the written consent of the Architect or Engineer.

- 7.3.2. Any costs caused by defective or ill-timed work shall be borne by the party responsible therefore.

7.4. Owner's Right to Clean UP

- 7.4.1. If a dispute arises between the separate contractors as to their responsibility for cleaning up as required by Paragraph 5.15, the Owner may clean up and charge the cost thereof to the several contractor as the Architect or Engineer shall determine to be just.

Article 8 Miscellaneous Provisions

8.1. Governing Law

- 8.1.1. The Contract shall be governed by the laws of the Commonwealth of Puerto Rico.

8.2. Successors and Assigns

- 8.2.1. The Owner and the Contractor each binds himself, his partners, successors, assigns and legal representatives to the other party hereto and to the partners, successors, assigns and legal representatives of such other party in respect to all covenants, agreements and obligations contained in the Contract Documents. Neither party

CONTRACT DOCUMENTS

to the Contract shall assign the Contract or sublet it as a whole without the written consent of the other nor shall the Contractor assign any moneys due or to become due to him hereunder, without the previous written consent of the Owner.

8.3. Written Notice

8.3.1. Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the firm or to an officer of the corporation for whom it was intended, or if delivered at or sent by registered or certified mail to the last business address known by the person who gives the notice.

8.4. Notice of Injuries or Damages

8.4.1. Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the other party or of any of his employees, agents or others for whose acts he is legally liable, a notice shall be made in writing to such other party within a reasonable time after the first observance of such injury or damage.

8.5. Performance Bond and Labor Material Payment Bond.

8.5.1. Unless otherwise specified in the Contract Documents, the Contractor shall furnish a Performance Bond in an amount equal to fifty (50) percent of the Contract Sum as security for the faithful performance of this Contract and also Labor and Material Payment Bond in an amount not less than fifty (50) percent of the Contract Sum as security for the payment of all persons performing labor on the Project under this Contract and furnishing materials in connection with this Contract. The Performance Bond and the Labor and Material Payment Bond shall be delivered to the Owner not later than the date of execution of the Contract.

8.6. Rights and Remedies

8.6.1. The duties and obligations imposed by the Contract Documents and the rights and remedies available there under shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise or available by law.

8.7. Royalties and Patents

8.7.1. The Contractor shall pay all royalties and license fees. The Contractor shall defend all suits or claims for infringements of any patent rights and shall save the Owner harmless from loss on account thereof, except that the Owner shall be responsible for all such loss when a particular design, process, or the product of a particular design, process or the product of particular manufacturer or manufacturer's specified, but if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the Owner.

CONTRACT DOCUMENTS

8.8. Procurement and Delivery of Materials

- 8.8.1. The Contractor shall produce with reasonable diligence and deliver to the job site all material required to insure timely execution and completion of the work.
- 8.8.2. Within period of then (10) calendar days after the owner's approval, the Contractor will be required to place with the manufacturer or manufacturer's representative all orders for materials and or equipment not commercially produced or available in Puerto Rico.
- 8.8.3. Delivery at the site of all materials and equipment required for the execution and completion of the work shall be scheduled at a convenient time within the limits fixed for the termination of the contract so as to avoid delays in the prosecution and completion of the work.

8.9. Samples and Tests

- 8.9.1. The Contractor shall furnish promptly for approval without additional charge to the Owner, all materials reasonably necessary for any test as stipulated under the Technical Specifications or as may be required by the Architect or Engineer.
- 8.9.2. Approval of any sample shall be general only and shall not constitute a waiver of the Owner's right to demand full compliance with the Contract requirements.

8.10. Federal Aid Provisions (Not Applicable)

8.11. Maintenance

- 8.11.1. The contractor shall maintain the work during construction and until the project is accepted. This maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces to the end that all work covered by the Contract is kept in satisfactory and acceptable conditions at all times.
- 8.11.2. All cost of maintenance work during construction and before the project is accepted shall be included in the unit prices bided on the various pay items and the Contractor will not be paid an additional amount for such work.
- 8.11.3. If the Contractor at any time fails to comply with the provisions of paragraph 8.11, the Architect or Engineer will immediately notify the Contractor of such non-compliance. If the contractor fails to remedy unsatisfactory maintenance within 24 hours after receipt of such notice, the Architect or Engineer may immediately notify the Contractor of such non-compliance. If the Contractor fails to remedy unsatisfactory maintenance within 24 hours after receipt of such notice, the Architect or Engineer may immediately proceed to maintain the project, and the entire cost of this maintenance will be deducted from monies due or to become due the Contractor on his Contract.

CONTRACT DOCUMENTS

Article 9 Time

- 9.1. The Contract Time is the period of time allotted in the contract documents for completion of the work.
 - 9.1.1. The date of commencement of the work is the date established in the Notice to Proceed.
 - 9.1.2. The date of substantial completion of the work or designated portion thereof is date certified by the Architect or Engineer when construction is sufficiently complete, in accordance with the Contract Documents, so the Owner may occupy the work or designated portion thereof for the use for which it is intended.
 - 9.1.3. The term days used in the Contract Document shall mean calendar day.
 - 9.1.4. Acts of God are events in nature so extraordinary that the history of climate variations and other conditions in the particular locality affords no reasonable warning of them, such as an earthquake, hurricane or other cataclysmic phenomenon. A rain, windstorm, flood or other natural phenomenon of normal intensity for the particular locality shall not be construed as an Act of God.
- 9.2. Progress and Completion
 - 9.2.1. All time limits stated in the Contract Documents are of the essence for the contract.
 - 9.2.2. The time limit for the execution of this Contract has been figured out on the basis that work on the premises will be carried out only during regular working week of eight (8) hours working day nor more than forty four (44) hours per week, and taking into consideration all Sundays and legal holidays included within the said time limit. No work shall be performed on extra hours, Sundays or holidays, except in cases of emergency, or unless prior written permission has been granted by the Architect or Engineer. Except in case of emergency, request for permission to work extra hours, Sundays or legal holidays shall be filed by the contractor with the Architect or Engineer not less than forty-eight (48) hours in advance. In case of emergency, for completion of the daily work, permission for extra hours should be arranged with the Resident Engineer or Resident Inspector. Work that is not expected to be completed in the course of the working day should not be started.
 - 9.2.3. It is understood that the legal holidays mentioned in subparagraph 9.2.2 are the following:
 - 1. New Year's Day
 - 2. Three Kings Day

CONTRACT DOCUMENTS

3. Good Friday
 4. Labor Day
 5. U.S. Independence Day
 6. Commonwealth of Puerto Rico Constitution Day
 7. Election Day (When occurring)
 8. Thanksgiving Day
 9. Christmas Day
- 9.2.4. The Contractor shall begin the work on the date of commencement as defined in subparagraph 9.1.2. He shall carry the work forward expeditiously with adequate forces and shall complete it within the Contract time.
- 9.2.5. The date or time of completion included in the Contract, shall be the date of Substantial Completion as defined in Subparagraph 9.1.3 including authorized extensions.
- 9.3. Delays and Extensions of Time
- 9.3.1. No extension of the completion date will be allowed for any reason except as provided below:
1. If satisfactory fulfillment of the Contract with authorized extensions and increases shall require the performance of work in greater quantities than those set forth in the proposal so that the total final payment is greater than the total original contract prices, then the time allowance may be increased on a basis commensurate with the amount and difficulty of the added work.
 2. In case of total suspension ordered not due to any fault of the contractor, the total number of calendar days during which the work is suspended shall be added to the Contract Time. In case of partial suspension ordered by the Owner not due to any fault of the Contractor, the Contract Time may be extended to the extent of the effect that such suspension may bear on the Contract, as determined by the Owner.
 3. In case of damages to the work due to unforeseen causes such as Acts of God or by the public enemy, the Owner may make allowance of Contract Time for the time required to repair the damage. If the Contractor is allowed to recover the expense to repair the damage and an allowance of Contract Time has been made for the cost therefore said amount shall not

CONTRACT DOCUMENTS

be considered in the total cost of the contract for the purpose of time extension.

4. In case of delays or interruptions to the Work caused by any Act of the Owner, or by any separate Contractor employed by the Owner, or by labor disputes, fire, unusual delay in transportation, unavoidable casualties, by any other cause not attributable to the fault or negligence of the Contractor, then the Contract Time shall be extended by written order for reasonable time as the Architect or Engineer may determine.
5. Additional time will be allowed if at the time of executing a Change Order, Extra Work Order of Supplemental Agreement, a time extension is agreed upon and so stipulated in the written order or agreement, in which case the added cost of such work will not be considered for time extension. If no time extension is stated, any added cost resulting thereof will be considered for time extension.
6. As certified by the Resident Engineer or Resident Inspector, additional time will be allowed due to weather conditions which render the performance of work impossible.

9.3.2. Extension in Contract Time shall not be considered or allowed for the following reasons:

1. Suspensions of work ordered by the Owner, Architect, or Engineer due to the fault of the Contractor or his Subcontractor.
2. Unauthorized suspensions of work by the Contractor.

9.3.3. All claims for extension of time shall be made in writing to the Architect or Engineer not more than fifteen (15) days after the occurrence of the delay; otherwise they shall not be considered, except when the cause for delay is directly attributable to the Owner. These claims shall include (a) the circumstances as may be required by Architect or Engineer, (b) the operation (s) alleged to have been delayed (c) the calendar dates on which the operation (s) were delayed and (d) the number of calendar days by which he is requesting the completion date to be extended.

9.4. Liquidated Damages

9.4.1. Should the Contractor or, the Surety in case of default, fail to complete all the work within the time specified in the Contract or as extended by the written authorization of the Owner, a deduction of the amount stipulated in the Supplementary General Conditions and the Agreement will be made for each and

CONTRACT DOCUMENTS

every calendar day that such work remains uncompleted after the expiration of the date of completion up to the date of substantial completion. This amount will be deducted from any money due or that may become due to the Contractor.

- 9.4.2. The amount stipulated in the Supplementary General Conditions and the Agreement shall be considered and treated not as a penalty, but as fixed and agreed liquidated damages due the Owner by the Contractor or, by the Surety in case of default, by reason of public inconvenience obstruction to traffic, interference with business, increasing of engineering, inspection and administrative cost to the Owner, and other items which have caused and expenditure of public funds, resulting from the Contractor's or in case of default of the Surety's failure to complete the work within the time specified in the Contract or as extended by written authorization by the Owner.
- 9.4.3. Permitting the Contractor to continue and finish the work or any part thereof after expiration of the date of completion shall in no way operate as a waiver on the part of the Owner of any of its rights under this contract.

Article 10 Payment and Completion, Payment and Measurement

10.1. Contract Sum

- 10.1.1. The Contract Sum is the contract Price as stated in the Agreement and is the total amount payable by the Owner to the Contractor for the performance of the Work under the Contract Document subject to additions and deductions.

The amount payable to the Contractor shall be the actual total cost of the work performed and accepted.

10.2. Schedule of Values

- 10.2.1. In Lump - Sum Contractor within fifteen (15) days after the date of execution of the Contract will submit for approval to the Architect or Engineer whichever applicable, a schedule of values of the various portions of the work aggregating the total Contract Sum, divided so as to facilitate monthly partial payments, prepared in approved forms. Each item in the schedule of values shall include its proper share or overhead and profit, except that such initial disbursements as the portion complete for mobilization, temporary facilities, premiums for insurance and bonds any government regulations shall be separately itemized to facilitate its request in the first partial payment. This schedule when approved by the Architect or Engineer shall be used only as a basis for the monthly partial payments.
- 10.2.2. In Unit-Price Contracts, the Contractor will submit for approval to the Architect or Engineer whichever applicable a schedule of values for those Lump-Sum bid

CONTRACT DOCUMENTS

items only. This schedule when approved by the Architect or Engineer shall be used only as a basis for the monthly partial payments.

10.3. Progress Payments

10.3.1. After the Architect or Engineer has approved the schedule of values and progress submitted by the Contractor, partial payments will be made monthly as the work progresses, of the value on the work performed and accepted during the preceding calendar month on the bases of the monthly certificate for partial payment dully certified by the Resident Engineer or Resident Inspector and approved by the Architect or Engineer.

10.3.2. From each partial payment the Owner shall retain ten (10) percent of the estimated amount except as provided in subparagraph.

10.3.3. After fifty (50) percent of the adjusted work has been completed the Owner may pay in full any of the subsequent partial estimates, provided the progress and quality of work is satisfactory.

10.3.4. Immediately after the Architect or Engineer on the basis of an inspection has determined and certified that the work is totally complete and acceptable, the Owner may release to the Contractor fifty (50) percent of the amount previously retained provided the following conditions are met:

1. A written consent of Surety to make such payment is submitted.
2. There are no claims to be settled from the Owner to the Contractor; otherwise the Owner will pay to the Contractor the undisputed amount.
3. Liquidated damages do not exceed fifty (50) percent of the amount previously retained by the Owner.

10.3.5. Advance payment may be made to the Contractor for the ninety (90) percent of the cost of materials which are to be incorporated into the work and which are on hand at the job site or stored in acceptable storage places in the vicinity of the project. At the option of the Architect or Engineer payment may be made to the Contractor for materials fabricated, processed or otherwise produced for this specific project and stored at an approved site in Puerto Rico other than in the immediate vicinity of the project. No advance payment will be made on living or perishable plant materials. In the case of materials which have been purchased by the Contractor through the use of his own workmen or equipment, the cost shall be determined by the Architect or Engineer in accordance with and based upon that particular unit of the project in which the materials are to be utilized.

The Contractor shall present signed receipts or other documentary evidence to prove that the cost of the materials for which he is to receive advance payment has been paid in full. If the materials have not been paid for, the invoice shall be

CONTRACT DOCUMENTS

accompanied by a release from the materials dealer expressing his conformity with the payment for such materials to the Contractor by the Owner. If at any time after the Contractor has received advance payment for materials, the Architect or Engineer shall obtain evidence indicating that said materials, or part thereof, do not conform to the specifications, the Architect or Engineer shall proceed to deduct from any of the succeeding partial payments due to the Contractor for work actually performed, a sum sufficient to cover the cost of materials, or part or parts thereof, found to be defective damaged or lost (except as covered in Subparagraph 11.2.4).

Materials for which the Contractor has received advance payment shall be properly housed or stored in a manner that will insure the preservation of their quality and fitness for the work, moreover, the Contractor shall not withdraw said materials for any purpose other than incorporation into the project, unless he has written authority from the Owner to do so. An amount equal to the value of materials incorporated into the work and for which advance payment has been made, shall be deducted from the partial estimates.

10.3.6. All work performed or labor and materials furnished on a force account basis shall be paid for as follows.

1. Labor: For all labor, and for foremen in direct charge of specific operations, the Contractor shall receive the rate of wage agreed upon in writing before beginning work for each and every hour that said labor and foremen are actually engaged in such work.

The Contractor shall also receive the actual cost paid to or on behalf of workmen by reason of subsistence and travel allowance, health and welfare benefits, pension fund benefits and other benefits when such amount are required by collective bargaining agreement or other employment or other employment contract generally applicable to the classes of labor employed on the work. To said cost and amount equal to 20 percent of the sum thereof shall be added, unless otherwise specified in the Special Conditions.

2. Materials: For all materials accepted by the Architect or Engineer and used, the Contractor shall receive the actual cost of such materials, delivered on the work, including transportation charges paid by him. To said cost and amount equal to 15 percent of the sum thereof shall be added, unless otherwise specified in the Special Conditions.
3. Equipment
 - a. Equipment on the Work: For all equipment authorized by the

Architect or Engineer to be used on the force account work the Contractor shall receive rental payment computed using an hourly rate which is 1/176th. of the monthly rate listed in the Associated Equipment Distributor's current rental book. Rental will be paid for the time in hours the equipment is in actual operation on the force account work.

The minimum rental time to be paid for each day of operation shall be not less than eight (8) hours, except if the contractor uses such equipment on other work then he will be paid only for actual time used in the force account work. If monthly rates for the equipment actually being used are not listed in the Associated Equipment Distributors current rental book, the rental rate shall be computed using an hourly rate which is 1/176th of the prevailing monthly rates being paid for such equipment in the area in which the project is located. To compensate for fuel, lubricants, all repairs, and all other operating and maintenance costs other than operation's wages, the Contractor will be reimbursed thirty five (35) percent of the rental rates specified above. To the rental rate specified above an amount equal to fifteen (15) percent shall be added to equipment not owned by the Contractor. Equipment not on the work: For the use of equipment moved in on the Work and used exclusively for the work paid for on a force account basis, the Contractor will be paid the rental rates listed in the Associates Equipment Distributors current rental book. If rental rates for the equipment are not listed in the Associated Distributor's current rental book, the Contractor shall receive the prevailing rental rates being paid for such equipment in the area in which the project is located.

The rental time to be paid shall be the time that the equipment is at the site of the force account work, and shall terminate at end of the day on which the Architect or Engineer or his representative directs the Contractor to discontinue the used of such equipment, including the time required to move the equipment to and form the location of the force account work. If the Architect or Engineer determines that the contractor could not reasonably obtain the equipment at the rental rates listed in the Associates Equipment Distributor's current rental book, the Architect or Engineer may authorize payment for the use of such equipment at equipment rental rates in excess of those listed as applicable for the use of such equipment at equipment rental rates in excess of those listed as applicable for the use of such equipment subject of the following conditions: (1) The Architect or Engineer shall specifically approve the necessity for the use of particular

CONTRACT DOCUMENTS

equipment on such work, (2). The Contractor shall establish to the satisfaction of the Architect or Engineer that such equipment cannot be obtained from his normal equipment source at the rate listed in the Associated Equipment Distributor's current rental book, (3). The Contractor shall establish to the satisfaction of the Architect or Engineer that the proposed equipment rental rate for such equipment from his proposed source is reasonable and appropriate for the expected period of use, and that (4) the Architect or Engineer shall approve the equipment source and the equipment rental rate to be paid by the Owner before the Contractor begins work involving the use of said equipment.

The Contractor will be reimbursed for the cost of transporting equipment to the location of the force account work and its return to its original location. Should the Contractor desire the return of the equipment to a location other than its original location, the Owner will pay the cost of transportation, provided such payment shall not exceed the cost of moving the equipment to the site of the force account work as provided in Paragraph 10.3.6 3a. Rental time will not be allowed while equipment is in operative due to breakdown. To compensate for fuel, lubricants, all repairs, and all others operating and maintenance costs other than operator's wages, the Contractor will be reimbursed thirty five (35) percent of the rental rates specified above. To the rental rates specified above, an amount equal to fifteen (15) percent shall be added.

4. Tools: No allowance shall be made for the use of small tools and manual equipment.
5. Bond, Insurance, Tax: For Workmen's compensation insurance premium, unemployment insurance contribution, social security taxes, any other employment, taxes or fees required by law, and property damage and liability insurance premiums on the force account work, the Contractor shall receive the actual cost plus an amount equal to six (6) percent of actual cost. The Contractor shall furnish satisfactory evidence of the rate paid for such bonds, insurance and taxes.
6. Superintendence and Owner: No additional allowance shall be made for general superintendence overhead or other costs for which no specific allowance is herein provided.
7. Compensation as set forth above shall be received by the Contractor as payment in full of the extra work done on a force account basis.

CONTRACT DOCUMENTS

8. At the end of each day, the Contractor and the Resident Engineer or Resident Inspector shall compare records of the cost of work done on force account basis. Copies of these records shall be made upon suitable forms and signed by both the Resident Inspector and the Contractor or their authorized representatives and each party will retain one copy. All claims for extra work done on a force account basis shall be submitted each month to the Architect or Engineer together with receipted bills or certified statement of the cost of materials used and any other expenses in connection with said work.
9. No payment will be made for force account work unless the Contractor shall furnish the Architect or Engineer duplicate itemized statement of the cost of such force account work detailed as to following:
 - a. Nature of work performed.
 - b. Name, classification, date, daily hours, total hours, rate benefits and extension for each laborer, foremen equipment operation.
 - c. Designation, dates, daily hours, total hours, rental rate and extension for each unit of machinery and equipment.
 - d. Quantities of Material used, prices and extensions.
 - e. Transportation of materials.
 - f. Cost of insurance premiums and taxed.
- 10.3.7. Materials which have been delivered to the project in accordance with the requirement of the plans or Contract, but which due to revisions or elimination of items authorized by the Architect or Engineer or due to discrepancies in the plans or Contract, are not used in the work, the Contractor upon request will be reimbursed for the actual verified cost of such material delivered at the project site, including handling charges less any discount allowed on the invoice, but with no percentage added, and such material will thereafter become the property of the Owner.
- 10.3.8. The Contractor warrants and guarantees that title to all work, materials and equipment covered by a certification for payment, whether incorporated in the Project or not, will pass to the Owner upon the receipt of such payment by the Contractor, free and clear of all liens, claims, security interests or encumbrances hereinafter referred to in this Article 10 as "liens" and that no Work, materials or equipment covered by a Certificate for Payment will have been acquired by the Contractor; or by any other person performing the Work at the site or furnishing materials and equipment for the Project subject to and agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person.

CONTRACT DOCUMENTS

10.3.9. The issuance of Certificate for Payment will constitute a representation by the Resident Engineer or Resident Inspector based on his observations at the site that the Work has progressed to the point indicated; that, to the best of his knowledge, information and belief, the quality of the work is in accordance with the Contract Documents (subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial completion, to the results of any subsequent test required by the Contract Documents correctable prior to completion, and to any specific, qualifications stated in his Certificate); and that the contractor is entitled to payment in the amount certified. In addition, the Owner's Final Certificate for Payment will constitute a further representation that the conditions precedent to the Contractor's being entitled to final payment have been fulfilled. However, by issuing a Certificate for Payment, the Owner or his representative shall not thereby be deemed to represent that he has made exhaustive or continues on site inspections to check the quality or quantity of the work or that he has reviewed the construction means, methods, techniques, sequences or procedures, or that he has made any examination to ascertain how or for what purpose the Contractor has used the moneys previously paid on account of the Contract Sum.

10.3.10. No certificate for a progress payment, nor any progress payment, or any partial or entire use or occupancy of the Project by the Owner shall constitute an acceptance of any work not in accordance with the Contract Documents.

10.4. Payments Withheld.

10.4.1. The Architect or Engineer without incurring in liability may decline to approve any Certificate for Payment or because of subsequently discovered evidence or subsequent inspection, he may nullify the whole or any part of any Certificate for Payment previously issued, to such extent as may be necessary in his opinion to protect the Owner from loss because of:

1. Defective work not remedied.
2. Failure of the Contractor to comply with any requirement of the Contract Documents.

10.5. Measurement and Payment

10.5.1. The determination of quantities for work acceptably completed under the terms of the contract will be made by the Architect or Engineer and based on measurements made by him or his assistants according to the units or measure for each item as shown in the proposal and by the method indicated in the corresponding specification for said item.

10.6. Failure of Payment

CONTRACT DOCUMENTS

10.6.1. In those cases where the Owner is responsible for the preparation of monthly certificates if the Owner fails to pay the Contractor within forty five (45) calendar days after the date established by the Owner in writing for the preparation of the monthly certificate of the progress estimate as certified by the Resident Engineer, interest at the rate of six (6) percent per annum will be paid to the Contractor beginning on the 46th day after the date established by the Owner in writing for the preparation of the monthly certificate of the progress estimate as certified by the Resident Engineer and extending to the date the monthly certificate is provided that the contractor review, accepts and sign the monthly certificate on the same date it is actually prepared and certified by the Resident Engineer. In the event the contractor fails to review, accept, and sign the monthly certificate on the same date it is actually prepared and certified by the Resident Engineer, and monthly certificate is not paid within the stipulated forty five (45) days after the date established by the Owner in writing for the preparation of the monthly certificate of the Progress estimate as certified by the Resident Engineer, the number of days on which interest accrues will be reduced by the number of days the Contractor requires to prepare and submit the monthly certificate after the date established by the Owner in writing to do so.

10.6.2. In those cases where the Contractor is responsible for the preparation and submission of the monthly certificate, if the Owner fails to pay the Contractor within forty five (45) days after the date established by the Owner in writing for the preparation and submission by the contractor of the monthly certificate of the progress estimate as certified by the Resident Engineer, interest at the rate or six (6) percent per annum will be paid to the Contractor beginning on the 46th day after the date established by the Owner in writing for the preparation and submission by the Contractor of the monthly certificate of progress estimate as certificate is paid, provided that the Contractor prepares and submit the monthly certificate on the date establish by the Owner in writing for its preparation and submittal by the Contractor and duly Certified by the Resident Engineer. In the event the Contractor fails to prepare and submit the certified monthly certificate on the date established by the Owner in writing the number of days on which interest accrues will be reduced by the number days the Contractor requires to prepare and submit the monthly certificate after the date established by the Owner in writing to do so.

10.7. Substantial Completion and Final Payment

10.7.1. Partial Acceptance. If at any time during the prosecution of the project the Contractor substantially completes a unit or a portion of the project, he may request the Architect or Engineer to make final inspection of that unit portion. If the Architect or Engineer finds upon inspection that the units has been substantially completed in compliance with the Contract Documents he may accept that unit as being completed and the Contractor upon written notice may be

CONTRACT DOCUMENTS

relieved of further responsibility for that unit. Such partial acceptance shall in no way void or alter any of the terms of the contract.

10.7.2. Final Acceptance, Upon due notice from the Contractor of presumptive completion of the entire project, the Engineer will make an inspection provided for and contemplated by the contracts is found completed to his satisfaction, that inspection shall constitute the final inspection and the Architect or Engineer will notify the Contractor in writing of the final acceptance. If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory, the Architect or Engineer will give the Contractor the necessary instructions for correction of same, and the Contractor shall immediately comply with and execute such instruction. Upon correction of the work, another inspection will be made which shall constitute the final inspection provided the work has been satisfactorily completed. In such event, the Architect or Engineer will notify the Contractor in writing of the final acceptance.

10.7.3. When the final acceptance have been duly notified by the Architect of Engineer as provided in Article 10.7.2, the Architect or Engineer shall prepare the final estimate of the various classes of work performed, and after the approval of such final estimate by the Owner and by the Contractor, there shall be paid to the Contractor the entire sum found to be due after deducting all previous payments and all amounts to be retained or deducted under the provisions of the contract.

10.7.4. Neither the final payment nor the remaining retained percentage shall become due until the Contractor submits to the Owner (1) an Affidavit that all payrolls, bills for materials and equipment and other indebtedness connected with the work for which the Owner or his property might in any way be responsible, have been paid or otherwise satisfied, (2) consent or surety to final payment and (3), if required by the Owner, other data establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of liens arising out of the Contract, to the extent and in such form as may be designated by the Owner. If any subcontractor refuses to furnish a release or waive required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify him against any such lien. If any such lien remains unsatisfied after all payments are made, the Contractor shall refund to the Owner all moneys that the latter may be compelled to pay in discharging such lien, including all costs and reasonable attorney's fees.

10.7.5. If after Substantial Completion of the Work final completion thereof is materially delayed through no fault of the Contractor, and the Architect or Engineer so confirms, the Owner shall, upon certification by the Architect or Engineer make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for work not fully completed or corrected is less than the retain age stipulated in the Contract Documents, and if bonds have been furnished as required in Subparagraph 8.5.1, the written consent of the surety to the payment of the balance due for that portion of the work fully completed and

CONTRACT DOCUMENTS

accepted shall be submitted by the Contractor to the Owner prior to certification of such payment. Such payment shall be made under the term and conditions governing final payment except that it shall not constitute a waiver of claims.

10.7.6. The making of final payment shall constitute a waiver of all claims by the Owner except those arising from:

1. Unsettled liens and unsettled claims previously made in writing.
2. Faulty or defective work appearing after Substantial Completion, as specified in Subparagraph 14.2.2.
3. Failure of the Work to comply with the requirements of the Contract Documents, or
4. Terms of any special guarantees required by the Contract Documents.

10.7.7. The acceptance of final payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and still unsettled.

10.7.8. Should final payment on project not be made within ninety (90) calendar days after the Contractor has submitted all the documents required for final payments for those items mutually accepted by both parties, interest at the rate of six (6) percent per annum will be paid the Contractor for the period beginning on the 91st. day after the Contractor has submitted the documents required for final payment and extending to the date the final estimate is paid.

Article 11 Protection of Persons and Property

11.1. Safety Precaution and Programs

11.1.1. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the project.

11.2. Safety of Persons and Property

11.2.1. The Contractor shall take all reasonable precaution for the safety of, and shall provide al reasonable protection to prevent damage, injury or loss to:

1. all employees on the Work and all other persons who may be affected thereby;
2. all the work and all materials and equipment to be incorporated therein, whether in storage on or off the site, under the care, custody or control of the Contractor or any of his Subcontractors or Sub-contractors and;

CONTRACT DOCUMENTS

3. other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities of construction.

11.2.2. The Contractor shall comply with all applicable laws, ordinances, rules, regulations and lawful orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. He shall erect and maintain, as required by existing conditions and progress of the work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent utilities.

11.2.3. When the use or storage of explosives or other hazardous materials or equipment is necessary for the execution of the project, the Contractor shall exercise the utmost care as not to endanger life or property and shall carry on such activities under the supervision of property qualified personnel.

The Contractor shall keep the Architect or Engineer informed as to his approval before blasting, when required. The contractor, when required, shall use mats or other accepted means to reduce blasting. The Contractor shall notify each public utility company and other private entities having facilities in the proximity to the site of the work of his intention to use explosives. Such notice shall be given sufficiently in advance to enable the companies and the private entities to take such steps as they may deem necessary to protect the property from injury.

11.2.4. All damage or loss to any property referred to in Subparagraph 11.2.12 and 11.2.13 caused in whole or in part by the Contractor, any Subcontractor, any Subsubcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, shall be remedied by the Contractor, except damages or loss attributable to faulty Drawing or Specifications or to the acts or omissions of the Owner or Engineer or anyone employed by either of them or for whose acts either or them may be liable, and not attributable to the fault or negligence of the Contractor.

11.2.5. The Contractor shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents.

11.2.6. The Contractor shall not load or permit any part of the work to be loaded so as to endanger its safety.

11.2.7. The Contractor shall be responsible for the protection of all public and private property, monuments, telephone and telegraph lines and other public utilities along and adjacent to the project. He shall use every precaution to prevent damage to pipes conduits and underground structures and shall cooperate with the owners of utility companies in the removal or relocation of their facilities in such a way that their operation is not interrupted. The time and labor for the relocation

CONTRACT DOCUMENTS

of these facilities shall be reduced to a minimum, so that the services that might be affected by the Contractor shall be repaired by him immediately. The contractor shall protect carefully all property limit monuments. He shall notify the responsible person or agency, if these must be moved or changed in any way, and shall not affect them until and authorized agent has referenced them and authorized their relocation or removal. All roads adjacent to or intersecting the project shall be protected from damage. The Contractor shall take all necessary precautions to preserve all objects of art, antiques and minerals found in the area of the work or in the construction operations and shall notify about them to the Engineer, Architect or Contracting Officer. All such articles or objects shall be delivered to the Owner and shall be extracted and removed in accordance with the instructions of the Architects or Engineer. When any direct or indirect damage is done to the public or private property by an act, omission, neglect or fault of the Contractor in the execution of the work, such property shall be restored by the Contractor without the right to additional compensation. Otherwise the contractor shall compensate the affected person or entity in a form acceptable to the parties.

- 11.2.8. The Contractor shall provide and maintain in a neat sanitary condition such accommodations for the use of his employees as may be necessary to comply with the requirements and regulations of the Health Department and other bodies having jurisdiction there over. He shall neatly clean up all camp sites, dispose of all rubbish and perishable material and leave the premises in a neat and sanitary condition when he has completed the occupancy of the site.
- 11.2.9. The Contractor shall exercise every reasonable precaution throughout the life of the project to prevent silting of rivers, streams, lakes and reservoirs. Construction of drainage facilities as well as performance of other contract work which will contribute to the control of siltation shall be carried out in conjunction with earthwork operation or as soon thereafter as is practicable. Unless otherwise approved in writing by the Architect or Engineer, construction operations in rivers, streams, lakes and reservoirs shall be restricted to those areas where channel changes are shown on the plans and to those areas which must be entered for the construction of temporary or permanent structures. Rivers, streams, lakes and reservoirs shall be promptly cleared of all false work, piling, debris, or other obstructions placed therein or caused by the construction operations. Frequent fording of live streams with construction equipment will not be permitted. Temporary bridges or other structures shall be used wherever and appreciable number of stream crossings are necessary. Unless otherwise approved in writing by the Architect or Engineer mechanized equipment shall not be operated in live streams except as may be required to construct channel and temporary or permanent structures. The Contractor shall exercise every reasonable precaution throughout the life of the project to prevent pollution of rivers, streams, lakes or reservoirs. Pollutants such as chemicals, fuels, lubricants, bitumens, raw sewage and other harmful waste shall not be discharged into or alongside rivers, streams, lakes or reservoirs or into natural or manmade channels leading thereto. The

CONTRACT DOCUMENTS

Contractor shall also comply with the applicable regulations relating to the prevention and abatement of water pollution.

- 11.2.10. In carrying out work within or adjacent to Commonwealth National Forests, the Contractors shall comply with all regulations of the Commonwealth Fire Service, Conservation Commission, Department of Agriculture, or other authority having jurisdiction, governing the protection of forests and the carrying out of work within forests, and shall observe all sanitary laws and regulations with respect to the performance of work in forest areas. He shall keep the areas in an orderly condition, dispose of all refuse, obtain permits for the construction and maintenance of all construction camps, stores, warehouses, residences, latrines, cesspools, septic tanks, and other structures in accordance with the requirements of the Forest Supervisor. The Contractor shall take all reasonable precaution to prevent and suppress forest fires and shall require his employees and subcontractors, both independently and at the request of Forest officials, to do all reasonable within their power to prevent and suppress and to assist in preventing and suppressing forest fires and to make every possible effort to notify a Forest official at the earliest possible moment of the location and extent of any fire seen by them.

11.3. Emergencies

- 11.3.1. In any emergency affecting the safety of persons or property, the Contractor shall act, at his discretion to prevent threatened damage injury or loss. Any additional compensation or extension of time claimed by the Contractor on account of emergency work shall be determined as provided in Article 9 and 13 for Time and Changes in the Work.

Article 12 Insurance

- 12.1.1. The Contractor must, within ten (10) consecutive calendar days from the date of Notice of award, furnish and file with the Owner, in form satisfactory to and with sureties approved by the Owner the following:

1. Performance Bond to guarantee the faithful performance of the Contract, in an amount equal to fifty (50) percent of his bid.
2. Payment Bond including Labor Bond in an amount equal to fifty (50) percent of his bid.
3. Evidence of the following insurance Coverage if required in the Contract Documents:

CONTRACT DOCUMENTS

- a. Workmen's Compensation Insurance Policy issued by the Puerto Rico State Insurance Fund.
- b. Employer's Liability
- c. Comprehensive General and Automobile Liability Insurance.
- d. Builder's Risk all risks form including earthquake.
- e. Installation Floater Policy

12.1.2. All the above referred to bonds and policies must be satisfactory to the Owner in compliance with the law, and in form and amount properly sufficient to protect the Owner.

12.1.3. It shall be the responsibility of the Contractor to maintain adequate insurance coverage at all times. Failure to maintain adequate coverage shall not relieve the Contractor of any contractual responsibility or obligation. The certificates filed with the Owner shall state that thirty (30) days written notice will given to the Owner before any policy covered thereby is changed or canceled.

12.1.4. If at the due date of the policies the project is still under construction and the Contractor has not renewed the policies the Owner can renew them and deduct the amount paid for the premium from the next payment.

12.2. Workmen's Compensation and Employee's Liability

12.2.1. This insurance shall protect the Contractor against all claims under applicable state workmen's compensation law. The Contractor shall also be protected against claims for injury, disease, or death of employees which, for any reason, may not all within the provisions of a workmen's compensation law. The liability limits shall not be less than:

Workmen's Compensation	Statutory
Employers's Liability	\$100,000 each person

12.3. Comprehensive General and Automobile Liability Insurance

12.3.1. Public liability insurance shall be written in comprehensive form and shall protect the Contractor against all claims arising from injuries to members of the public or damage to property of others arising out of any act or omission of the Contractor of his agents or employees. In addition this policy shall specifically insure the contractual liability assumed by the Contractor under the General Conditions.

CONTRACT DOCUMENTS

The liability limits shall not be less than:

Bodily injury	500,000.00	each occurrence
Property damage	100,000	each occurrence
	500,000	Aggregate

12.3.2. After the execution of the contract in the event that the work may require blasting, explosive conditions, or underground operation, the comprehensive general liability coverage shall contain an endorsement relative to blasting, explosion, collapse of buildings, or damage to underground property at the expense of the Owner.

12.3.3. The public liability insurance shall carry an endorsement in form satisfactory to the Owner to the effect that the Contractor shall save harmless the Owner from any claims and damages as per paragraph 5.16 (INDEMNIFICATION).

12.3.4. Automobile Liability insurance shall be written in comprehensive form and shall protect the Contractor against all claims for injuries to member of the public and damage to property of others arising from the use of motor vehicles, and shall cover operation on or off the site of all motor vehicles, whether they are owned nonowner, or hired. The liability limits shall not be less than:

Bodily injury	\$250,000	each person
	\$500,000	each occurrence
Property Damage	\$100,000	each occurrence
	\$200,000	aggregate

12.4. Builder's Risk

12.4.1. This insurance shall be written under and all risks form including earthquake and shall protect the Contractor and the Owner against damages to buildings, structures and materials and equipment not otherwise covered under installation floater insurance. The amount of such insurance shall be not less than insurance value of the work at completion less the value of the insurance. Equipment such as pumps, engine-generators, compressors, basin equipment, and other similar equipment shall be insured under installation floater insurance when the aggregate value of the equipment exceeds \$100,000.00. If the work does not include the construction of structures, builders risk insurance may be omitted at the option of the owner as indicated in the Contract Documents. Builder's risk insurance shall

CONTRACT DOCUMENTS

provide for losses to be payable to the Contractor and the Owner as their interests may appear and shall contain a waiver of sub-rogation rights against the insured parties.

12.5. Installation Floater

12.5.1. The insurance shall protect the Contractor and the Owner from all insurable risks of physical loss or damage to materials and equipment not otherwise covered under builder's risk insurance, while in warehouses or storage areas, during installation, testing, and after the work is completed. It shall be of the "all risks" type, with coverage designed for the circumstances which may occur in the particular work included in this contract. The coverage shall be for an amount not less than the insurable value of the work at completion, less the value of the materials and equipment insured under builder's risk insurance. The value shall include the aggregate value of the Owner's furnished equipment and materials to be erected or installed by the Contractor not otherwise insured under builder's risk insurance. Installation floater insurance shall provide for losses to be payable to the Contractor and the Owner as their interest may appear and shall contain a waiver of sub-rogation rights, against the insured parties. If the aggregate value of the Owner's furnished and Contractor's furnished equipment is less than \$10,000, such equipment may be covered under builder's risk insurance, and if so covered this installation floater insurance shall quote the insuring agreement and all exclusions as they appear in the policy or in lieu of certificates, copies of the complete policy may be submitted.

12.6. Subcontractor's and Sub-Contractor's Insurance.

12.6.1. The Contractor shall, throughout the performance of work under the contract, procure and maintain in effect, and require all subcontractors and others performing any such work to maintain in effect, insurance of the types and with limits not less than the minimum amounts specified above, or insure the activity of his subcontractors in his own policy.

Article 13 **Change Orders and Extra Work Orders**

13.1.1. The Owner without invalidating the Contract may order extra work or make change in the Work within the general scope of the Contract consisting of additions, deletions of any or all of the quantities in the items of the Bid schedule or other revisions the Contract sum and the Contract time being adjusted accordingly. All such alterations shall be authorized by Change Orders or Extra Work Orders and shall be executed under the applicable conditions of the Contract Documents.

CONTRACT DOCUMENTS

- 13.1.2. A Change Order is a written order to the Contractor signed by the Owner or his representatives, authorizing a change in the work or an adjustment in the Contract Sum and or the Contract Time. In unit-price contracts the Contractor shall perform the work as altered at the original unit prices.
- 13.1.3. In Lump Sum Contracts the cost or credit to the Owner resulting from a Change in the Work shall be determined in one of the following ways:
1. by mutual acceptance of a lump sum properly itemized.
 2. By unit process stated in the contract Documents of subsequently agreed upon;
 3. by cost and a mutually acceptable fixed or percentage fee.
- 13.1.4. If none of the methods set forth in Subparagraph 13.1.3 is agreed upon, the Contractor, provided he receives a Change Order, shall promptly proceed with the Work involved. The cost of such Work shall then be determined as per paragraph 10.3.6.
- 13.1.5. If unit price are stated in the Contract Documents of subsequently agreed upon, and if the quantities originally contemplated are so changed in a proposed Change Order that application of the agreed unit prices to the quantities of work proposed will create a hardship on the Owner or the Contractor, the applicable unit prices shall be equitably to prevent such hardship.
- 13.1.6. The amount of credit to be allowed by the Contractor to the Owner for any deletion or change which results in a net decrease in cost will be the amount of the actual net decrease as confirmed by the Architect or Engineer. When both additions and credits are involved in any one change, the allowance for overhead and profit shall be figured on the basis of net increase, if any.
- 13.1.7. Should concealed conditions encountered in the performance of the work below the surface of the ground be at variance with the conditions indicted by the Contract Documents or should unknown physical conditions below the surface of the ground of an unusual nature, differing materially from those ordinary encountered and generally recognized as inherent in work of the character provided for in this Contract, be encountered, the Contract Sum shall be equitably adjusted by Change order upon claim by either, the Contract Sum shall be equitably adjusted by Change Order upon claim by either party made within twenty days after the first observance of the conditions.
- 13.1.8. If the Contractor claims that additional cost is involved because of (1) any written interpretation issued pursuant to Subparagraph 2.2.6 (2) any order by the Owner to stop the work pursuant to Paragraph 4.3 where the Contractor was not as fault, or (3) any written order for a minor change in the work issued pursuant to

CONTRACT DOCUMENTS

Paragraph 13.3 the contractor shall make such claims as provided in Paragraph 13.2.

13.1.9. An Extra Work Order is a written order signed by the Owner or his representative authorizing a change in the Work, adjustment in the Contract Sum and the Contract time for services or work for which there is no applicable basis of payment, either direct or indirect, provided in the proposal or the contract or if the resulting overruns of any items or items exceed certain percentages. The percentages and the method to be followed for unit price adjustment shall be as follows:

1. Overruns of more than twenty five (25) percent of any major item or items shall require an negotiated unit price which shall be covered by a Supplement Agreement. The original unit price shall apply to all work performed up to one hundred twenty five (125) percent of the original proposal quantity for the item, and the negotiated unit price shall apply only to the quantity of the work performed in excess of said 125 percent. If a satisfactory negotiated price cannot be agreed upon for any item or items, the Owner reserves the right to require the Contractor to perform the work by Force Account or to eliminate the increased quantity from the Contract. Underruns of more than twenty five 25 percent of any major item or items shall require a negotiated unit price for the units of work finally performed which shall be covered by a Supplemental Agreement. The total quantity of work finally performed shall be paid at the negotiated unit price, but in no case will the amount paid for the total quantity performed exceed seventy-five (75) percent of the original total amount for the item.
2. Overruns of a minor item to the extent that the amount of the item calculated at the original unit price, exceeds 6.25 percent of the original contract amount, shall require a negotiated unit price which shall be covered by a Supplemental Agreement. The original unit price shall apply to all work performed in the item up to a value of 6.25 percent of the original contract amount and the negotiated unit price shall apply to the additional work. If satisfactory negotiated price cannot be agreed upon, the Owner reserves the right to requires the contractor to perform the work by force account or to eliminate the increase quantity from the Contract.

13.1.10. Subparagraphs 13.1.9, 13.1.9.1 13.1.9.2 and 13.1.9.3 shall not apply to Lump Sum Contracts.

13.2. Claims for Additional Cost

13.2.1. If the Contractor wishes to make a claim for an increase in the Contract Sum, he shall give the Architect or Engineer written notice thereof within twenty days after the occurrence or the event giving rise to such claims. This notice shall be given by the Contractor before proceeding to execute the work, except in an

CONTRACT DOCUMENTS

emergency endangering life or property. No such claims shall be valid unless so made. Any change in the Contract Sum resulting from such claim shall be authorized by Change Order or Extra Work Order.

13.3. Minor Changes in the Work

13.3.1. The Owner shall have authority to order minor changes in the work, not involving and adjustment in the Contract Sum or an extension of the Contract time and not inconsistent with the intent of the Contract Documents. Such changes may be effected by Field Order or by other written order. Such changes shall be binding on the Owner and the Contractor.

13.4. Field Orders

13.4.1. The Architect or Engineer may issue written Field Orders covering minor changes in the Work without change in Contract Sum or Contract Time. The Contractor shall carry out such Field Orders promptly.

Article 14 Uncovering and Correction of Work

14.1. Uncovering of Work

14.1.1. If any work should be covered contrary to the request of the Architect or Engineer, it must, if required by the Architect or Engineer, be uncovered for his observation and replaced at the contractor's expense.

14.1.2. If any other work has been covered which the Architect or Engineer has not specifically requested to observe prior to being covered, the Architect or Engineer may request to see such work and it shall be uncovered by the Contractor. If such work be found in accordance with the Contract Documents, the cost of uncovering and replacement shall, by appropriate Change Order or Extra Work Order, be changed to the Owner. If such work be found not in accordance with the Contract Documents, the contractor shall pay such costs unless it be found that this condition was caused by a separate contractor employed as provided in Article 7 and in that event the Owner shall be responsible for the payment of such costs.

14.2. Correction of Work

14.2.1. The Contractor shall promptly correct all work rejected by the Architect or Engineer as defective as failing to conform to the Contract Documents whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear all cost of correcting such rejected work.

CONTRACT DOCUMENTS

14.2.2. If, within one year after the Date of Substantial Completion or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any of the work is found to be defective or not in accordance with the Contract Documents, the Contractor shall correct it promptly after receipt of a written notice from the Owner to do so, unless the Owner has previously given the Contractor a written acceptance of such condition as provided in Subparagraph 14.3.1. The Owner shall give such give notice promptly after the discovery and confirmation of the condition.

14.2.3. All such defective or non-conforming work under Subparagraph 14.2.1 and 14.2.2 shall be removed from the site within a reasonable time fixed in a written notice from the Architect or Engineer to that effect, and the work shall be corrected to comply with the Contract Documents without cost to the Owner.

14.2.4. The Contract shall bear the cost of making good all work of separate contractors destroyed or damaged by such removal or correction.

14.2.5. If the Contractor does not remove such defective or nonconforming work within a reasonable time fixed by written notice form the Architect or Engineer, the Owner may remove it and may store the materials or equipment at the expense of the Contractor. If the Contractor does not pay the cost of such removal and storage within ten days thereafter, the Owner may upon the adaptec days written notice call such materials and equipment at auction or at private sale and shall account for the net proceeds thereof, after deducting all the costs that should have been borne by the Owner.

14.2.6. In such proceeds of sale do not cover all costs which the Contractor should have borne, the difference shall be charge to the Contractor and an appropriate Change Order shall be issued. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

14.2.7. If the Contractor fails to correct such defective or nonconforming work, the Owner may correct it in accordance with Paragraph 4.4.

14.3. Acceptance of Defective or Non-Conforming Work

14.3.1. If the Owner prefers to accept defective or non-conforming work, he may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect and appropriate reduction in the Contract Sum, or if the amount is determined after final payment, it shall be obtained from Contractor or surety by any appropriate means.

Article 15 Disputes and Appeals

15.1. Settlement of Disputes

15.1.1. All claims, disputes and other matters in question arising out of, or relating to, this Contractor or the break thereof, except for claims which have been waived by the making or acceptance or final payment as provided by Subparagraphs 10.7.6 and 10.7.7, shall be decided by the Architect or Engineer as provided in Subparagraph 3.2.7.3.2.9.

15.2. Arbitration

15.2.1. In case of any dispute involving a change in contract price, the party not satisfied with the Architect or Engineer's written decision may request arbitration by filing a demand in writing with the Architect or Engineer within thirty (30) calendar days from the date of the decision.

15.2.2. In case a demand for arbitration is filled as contemplated above, the parties may agree on one arbitrator only; otherwise there, one named in writing by each party within fifteen (15) calendar days after demand has been given, and a third arbitrator to be chosen by the two appointed within fifteen (15) calendar days following their appointment. In case that this third arbitrator is not selected within the fifteen day period then this third arbitrator shall be appointed by the Court Administrator Judge.

15.2.3. If no demand for arbitration is filed, on time, or should the demanding party fail to appoint an arbitrator fifteen (15) calendar days after the filing of such demand, it shall be interpreted that the demand has been withdrawn and the Architect or Engineer's decision will stand final and binding. If the other party fails to appoint an arbitrator within the fifteen day period, then this arbitrator shall be appointed by the Court Administrator Judge.

15.2.4. The demand for arbitration shall be made within the time limits specified in Subparagraph 15.2.1. 15.2.2 and 15.2.3 after the claims, dispute or other matter in question has arisen, and in no event shall it be made after the date when institution of legal or equitable proceedings based on such claims, disputes or other matter in question would be barred by the applicable statute of limitations.

15.2.5. The arbitrators so appointed shall then proceed in accordance with the provisions of the Puerto Rico Arbitration Law.

15.2.6. The arbitrators shall fix own compensation, unless otherwise provided by agreement, and shall assess the cost and charges of the arbitration equally upon both parties. The arbitrators shall have the right to retain and consult experts and competent authorities skilled in the matter or matters under arbitration.

CONTRACT DOCUMENTS

- 15.2.7. If there be one arbitrator, his decision shall be binding, if there be three, the decision of any two shall be binding. In any case his/their decision will be rendered in accordance to law.
- 15.2.8. The Contractor shall carry on the work and maintain the progress schedule during any arbitration proceedings unless otherwise agreed by him and the Owner in writing.

Article 16 Termination of the Contract

16.1. Owner's Right to Postpone or Discontinue Operations

- 16.1.1. If the Owner shall consider it necessary or desirable, for any reason whatsoever, before completion of the work hereunder, to postpone or abandon further operations, the Contract may be terminated by the Owner and in that event the Owner shall pay the Contractor, in full settlement of all claims by him hereunder, and amount to be determined as follows:
1. The work performed and accepted by the Owner shall be paid in accordance with the terms of the Contract.
 2. The actual cost of all acceptable materials for which orders have been placed by the Contractor for use under this Contract, it being agreed that, if required by the Owner, the Contractor shall make every possible effort, to cancel such orders.
 3. The actual cost of acceptable fabricated materials, called for hereunder, and already fabricated whether in the shop or in transit thereto.
 4. The actual amounts paid by the Contractor for construction equipment rentals up to the time of the aforementioned termination, plus any amounts accrued or payable underwritten contracts for the rental of such equipment it being agreed that the Contractor shall make every possible effort to cancel any such contracts. If the equipment is owned by the Contractor, he will be paid the prevailing rental rates.
 5. The actual cost to the Contractor of bonds, insurance and taxes as required under the Contract, for the period of the work's stoppage.
 6. Fixed Expenses for the period of the work's stoppage, such as supervisory, administrative, and operations personnel salaries, utilities, equipment, and miscellaneous expenses such as safety and vigilance.

CONTRACT DOCUMENTS

7. Overhead and profit in the amount of 15% of all expenses detailed under 2.,3.,4 and 6 above only, provided, that such costs are not in excess of reasonable market prices for the same or similar materials, equipment and services. From the total of all the foregoing costs thus determined there shall be deducted all payments thereon previously made and all proper charges to the Contractor in relation therewith.
- 16.1.2. In case the Contract is terminated under the above provisions the Contractor shall be under no further obligation to the Owner with reference to the work eliminated.
- 16.1.3. Termination of a contract, as stated above, will not relieve the Contractor of his responsibilities for the completed work, nor shall relieve his surety of its obligation for and concerning any just claims arising out of the completed work.
- 16.2. Owner's Right to Terminate the Employment of the Contractor.
 - 16.2.1. If the Contractor (1) should be adjudged a bankruptcy or (2) if he should make a general assignment for the benefit of his creditors, or (3) if a receiver should be appointed on account of this insolvency or (4) if an attachment should be made upon his properties and it is not vacated or the claim otherwise secured within five (5) days, thereafter, or (5) if he should persistently or repeatedly refuse or fail to supply enough properly skilled workmen or sufficient and proper materials, or equipment, or (6) if he should fail to make prompt payment to subcontractors or for materials, service or labor,

or (7) persistently disregard laws, ordinances of the instructions of the Architect or Engineer or (8) if he fails to begin the work within the period of time specified in the order to proceed or (9) if he refuses or fails to prosecute the work, or any part thereof, with such diligence as will insure its completion within the time specified or any extension thereof, or (10) if he should fail to complete the work within said time, or (11) if he should neglect or refuse to remove condemned work materials or satisfactorily perform a new such work as may have been rejected as being defective or unsuitable, or (12) if he should abandon or discontinue the prosecution of the work without authority; or (13) if should otherwise be guilty of a substantial violation of any provision of the Contract, then the Owner may, without prejudice to any other right or remedy under the provisions of the Contract, and after giving the Contractor and his sureties five (5) days written notice, terminate the employment of the Contractor and take possession of the premises and of all materials, tools and appliances thereon as may be acceptable, suitable and necessary, and proceed with until completion by contract or by whatever other method it may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the work is finished.
 - 16.2.2. If the unpaid balance of the contract price shall exceed the total expense of finishing the work, including liquidated damages, and compensation for additional

CONTRACT DOCUMENTS

engineering and managerial and administrative services, such excess shall be paid to the Contractor.

16.2.3. If the total expense of finishing the work, including liquidated damages, and compensation for the additional services listed above shall exceed the unpaid of contract price, the Contractor and his sureties shall pay the difference to the Owner.

16.2.4. In computing the liquidated damages contemplated above and fixing the date of final completion by the Owner by Contract or otherwise, unnecessary delays by the Owner or the subsequent contractor shall be taken in consideration with reference to the time for completion as originally set or extended.

16.2.5. The foregoing provisions are in addition to, and not in limitation of the rights of the Owner under any other provisions of the Contract.

16.3. Contractor's Right to Terminate the Contract

16.3.1. If the work should be substantially stopped by the Owner by any reasons whatsoever through no act or fault of the Contractor for a period of ninety (90) calendar days from written notice of the Owner and the Architect or Engineer, the Contractor may terminate the Contract and recover from the Owner payment for all work executed as specified in Subparagraph 16.1.1.1., 16.1.1.2., 16.1.1.3, 16.1.1.4, 16.1.1.6 and 16.1.1.7

Article 17 Repealing Clause

17.1. The General Conditions for the Contracting of Insular Public Works approved on March 14, 1946 as per Act. No. 198 of May 15, 1943 as amended are hereby repealed.

Article 18 Effectiveness

18.1. These General Conditions of the Contract for the Construction of Public Works shall take effect ninety (90) day after their approval.

CONTRACT DOCUMENTS

SUPPLEMENTARY GENERAL CONDITIONS REPARACIÓN DEL SISTEMA DE IMPERMEABILIZACIÓN DE TECHOS DEL ESTADIO YLDEFONSO SOLÁ MORALES BO. PUEBLO, CAGUAS

1. SCOPE

- A. The work of this contract includes labor, transportation, materials, appliances, tools, equipment and plant and performing of all work for the construction of **REPARACIÓN DEL SISTEMA DE IMPERMEABILIZACIÓN DE TECHOS DEL ESTADIO YLDEFONSO SOLÁ MORALES BO. PUEBLO, CAGUAS**. The location of the Project is as shown on the Site Plan and Location plan.

2. DEFINITIONS

- A. The following definitions shall apply:

1. The word **Owner** in these specifications refers to the:

Caguas Municipal Government

2. The word **Architect** in these specifications refers to:

3. The word **Contractor** in these specifications refers to the persons, firm, company, partnership or corporation within whom the Owner enters into contract to perform the labor and furnish the materials for the whole work shown on the drawings and specified herein.

4. The **Bidding Documents** shall be considered to include the following:

- a) Instruction to Bidders.
- b) Proposal Form
- c) Non Collusive Affidavit
- d) Bid Bond
- e) Certificate as to Corporate Principal
- f) Acknowledgment of Surety
- g) Schedule of Addenda (if any)
- h) Statement of Bidders Qualifications
- i) General Conditions
- j) Supplementary General Conditions.
- k) Technical Specifications.
- l) Construction Drawing
- m) Addenda (if any)

CONTRACT DOCUMENTS

5. The **Contract Documents** shall include all of the Bidding Documents listed above. In addition they shall include the following:

- a) Agreement between Owner and Contractor.
- b) Performance and Payment bond.
- c) Other documents (e.g. insurance policies that are required by the General and Supplementary General Conditions of the Contract)

3. DRAWINGS AND SPECIFICATIONS

- A. Figured dimensions shall be followed without regard to scale, where no figures or memoranda are given, exact dimensions shall be requested from the Architect.
- B. These specifications and drawings shall be considered as part of the contract to be subsequently executed. The spirit as well as the letter of the drawings and specifications shall be followed and all work shall be executed according to the true intent and meaning of the drawings and specifications. Anything mentioned in the specifications shall be of like effect as though shown and mentioned in both. Symbols for the various systems used in the specifications and drawings shall be strictly adhered to, and any question concerning such symbols shall be immediately referred to the interpretation of the Architect, whose decision shall be final.

4. EXAMINATION OF DRAWINGS AND SPECIFICATIONS

- A. It shall be the responsibility of the Contractor to examine the drawings and specifications carefully before submitting his bid with particular attention to errors, omissions, conflict with provisions of law and codes having jurisdiction, conflict between portions of drawings, or between drawings and specifications, and ambiguous definitions of the extent of coverage between his contract and other contracts. Any such discrepancy discovered shall be brought immediately to the attention of the Architect for interpretation and correction.
- B. Should there be any conflict, or discrepancy between other conditions of the Contract Documents and the Supplementary Conditions of the Contract, the stipulation stated in the latter shall govern.

5 . SHOP DRAWINGS

CONTRACT DOCUMENTS

- A. Furnish five (5) copies, showing evidence of approval of Contract prior to submittal. Marked-up copies, prints, or other reproductions of Architects or Engineers drawings will not be accepted as Shop Drawings.
- B. All submittals not checked by Contractor will be returned to Contractor.
- C. Furnish additional copies of approved Shop Drawings for job use as required, stamped or otherwise designated as copies of approved drawings.
- D. Contractor shall verify all measurements in the field. Measurements available prior to submittal of Shop Drawings shall be shown and so noted on the drawings. Measurements not available prior to submitting Shop Drawings shall be so noted on drawings and obtained as soon as available, in all cases prior to fabrication.
- E. The Architect shall review Shop drawings and return same to the Contractor within a period of 15 days after his receipt of same.

6. SAMPLES

- A. Selection of colors of equipment and materials that come to the job completely finished, also colors of finish applied on the job, shall be selected by the Architect.
- B. The Contractor shall submit for approval of the Architect , within thirty (30) days after selection of colors by the Architect, the complete selection of color samples, and color ships of all equipment, materials and finishes he proposes to use. When approved these color samples and color approved samples in color, texture or finish shall be cause for rejection on the job.
- C. Partial submittals of color samples and color ships will not be accepted, without written approval of the Architect.

7. LAWS, CODES AND REGULATIONS

- A. The Contractor shall comply fully with all applicable laws, codes and regulations of the place of work.
- B. In case of conflict between applicable laws, codes and regulations the matter shall be immediately referred to the Architect who shall make, or cause to be made, an interpretation as to which law, code or regulations is determining.
- C. The Contractor shall procure all necessary permits or licenses to perform his work and pay the lawful fees thereof. He shall also obtain and pay for all

CONTRACT DOCUMENTS

necessary certificates of approval, which must be delivered to the Owner before final acceptance of the work.

8. PROTECTION OF WORK AND PROPERTY

- A. If during the construction, public or private property is damaged or destroyed, the Contractor shall at his own expense, restore such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, rebuilding or replacing it, or otherwise making good such damage or destruction in a manner acceptable to the Architect.

9. LABOR

- A. All labor shall be performed in the best and most workmanlike manner by mechanics skilled in their respective trades. The standard of work required throughout shall be such grade as will bring results of first class only.
- B. Mechanics whose work is unsatisfactory or who are otherwise objectionable to either the Owner, the Resident Inspector or the Architect shall be immediately dismissed upon notice from any of the above to the Contractor.

10. CONTRACTOR'S INSURANCE

- A. The Contractor and Sub-contractor not covered by Contractor's insurance, shall obtain all insurance required by the Contract and file certificates of same in duplicate with Resident Engineer for transmittal to and approval by the Owner before starting any work. All insurance shall be acceptable to the Resident Engineer before starting any work. All insurance companies shall be acceptable to the Resident Engineer and Owner, and authorized to transact business in all jurisdictions where work under the Contract is to be performed.
- B. All insurance shall be maintained during the life of the Contract and all policies shall be endorsed to provide that ten (10) days prior notice shall be given to the Owner before cancellation of, or material change in any policy.
- C. All insurance shall be such as will protect the Owner harmless from all liability for any and all damages which may result from operations under the Contract.
- D. The Contractor and Sub-contractor's shall carry insurance as follows:

- 1 Workmen's Compensation and Unemployment as required by law.

CONTRACT DOCUMENTS

- 2 Comprehensive General Liability Insurance providing for Bodily Injury in the amount of \$100,000.00 for injuries, including death, to two or more persons as the result of any accident, and for Property damage Liability in the amount of \$100,000.00 for any one accident and \$500,000.00 aggregate, collapse and damage to underground utilities.
- 3 Contractor's Protective Liability Insurance to protect the Contractor against claims arising out of work performed by sub-contractor's for the same liabilities and in the same amount as stipulated under paragraph 2, above.
- 4 Automotive Liability and Property Damage in the amount of \$100,000.00 for injuries, including wrongful death to any one person as a result of any accident, and in the amount of \$500,000.00 for injury sustained by two or more persons as the result of any one accident, and in the amount of \$100,000.00 for property damage done to others, coverage to extent to any automobile or truck owned or hired by the Contractor, his employees or his sub-contractor's employees operating in connection with the work.
- 5 All Risk Builder's Risk Insurance covering loss or damage to materials, equipment and all property to become a part of or used in the completion of the project including coverage for Contractor's tools and equipment, in an amount sufficient to cover any loss or damage which may be sustained to the project. Such insurance shall be arranged to cover the Owner and the Contractor as their interest may appear.

11. GUARANTY BONDS

- A. The successful contract bidder shall deliver to the Owner, simultaneously with the executed contract a Performance Bond and Payment bond, executed on the form included with the Contract Documents. Each Bond shall be in the amount of 100% of the Contract price.
- B. All surety companies shall be acceptable to the Owner and authorized to transact business in Puerto Rico.

12. MANUFACTURER'S TRADE NAMES

- A. Wherever a trade name or the name of a certain manufacturer appears on the drawings or in the specifications, it is included to establish a quality of construction and design only.

CONTRACT DOCUMENTS

- B. The materials mentioned by trade or manufacturers name shall form the basis of the contract. If the Contractor desires to use another material in lieu thereof, he shall request approval in writing. The Contractor shall also provide data and samples for the Architects or Engineers consideration. No such substitutions will be considered after 60 days from the date of award of contract.
- C. All manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer, unless herein specified to the contrary.

13. PROGRESS AND PAYMENT SCHEDULE

- A. The Contractor shall submit for approval of Architect, prior to any payment being requested under the Contract, three copies of a progress schedule and three of a schedule of values for Architects approval.
- B. Progress schedule shall be in the form of progress chart of suitable size and scale, showing the various divisions of the work, the dates on which he will start and complete the various divisions of the work, including approximately the percentage of work scheduled to be in progress at any time.
- C. The schedule of value shall show the various divisions of the work with quantities aggregating the total sum of the contract sum awarded to facilitate payment.

14. PAYMENT

- A. The Contractor shall be paid monthly, 90% of the value of work performed, including the cost of materials and/or equipment delivered and stored at the site to be incorporated into the work.
- B. No partial payment will be made after the time fixed for the completion of the work or time to which completion may be extended under the terms of the Contract, until the full and final acceptance of all work herein agreed upon.
- C. Final payment of withheld percentage will be made thirty (30) days after final completion and acceptance.

15. LAYOUT OF WORK

- A. The Contractor shall layout all work according to all plans, shop drawings, details and instructions of latest issue.

CONTRACT DOCUMENTS

- B. Maintain one complete set of up-to-date drawings, specifications, details and instructions at the job.
- C. All work shall be laid out plumb, square and true, to exact and correct dimensions. Work incorrectly laid out shall be removed and properly rebuilt at no extra expense to the Owner.
- D. All work shall be laid out with regard to the work of other trades so that all work shall fit and form good joints.

16. CORRELATION OF WORK

- A. The Contractor assumes full responsibility for the correction of all parts of the work and shall cross check all drawings, specifications and instructions. All inconsistencies and errors shall be promptly referred to the Architect.
- B. Decisions required from the Architect shall be anticipated by the Contractor to provide ample time for inspection, and investigation of drawings and shop drawings.

17. COMPLETION TIME

- A. Time is of essence on this project. All work covered by the Contract Documents, exclusive of any subsequent adjustment thereto, shall be completed within 120 calendar days from the date of written notice to the Contractor to proceed with the work.

18. LIQUIDATED DAMAGES

- A. Should the Contractor fail to complete the work stipulated within the time indicated in Article 17 above, including authorized extensions thereto, then he shall be liable to the Owner for, and shall pay the Owner, liquidated damages an account of the loss of usage of the project and additional expenses for incidental supervision and overhead
- B. These liquidated damages shall be in the amount of \$450.00 for each and every consecutive calendar day beyond the time stipulated, and until the final termination and acceptance of the work.

END SUPPLEMENTARY GENERAL CONDITIONS

CONTRACT DOCUMENTS

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, THAT we _____ as Principal, and _____ as Surety, are hereby held and firmly bound unto _____ herein after called the "Owner", in the sum of _____ (\$ _____), lawful money of the United States, for the payment of which well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, whereas the Principal did on the ____ day of _____ 2019, enter into a Contract with the Owner for furnishing materials and performing labor for the construction of:

NOW THEREFORE, if the Principal shall:

Well and truly perform and fulfill all the undertaking, covenants, terms, conditions, and Agreements of said contract, including any and all duly authorized modifications thereof, notice to the Surety of such modifications being hereby waived, then this obligation shall be void: otherwise the same shall remain in full force and effect, it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the Amount of this obligation as herein stated.

Signed and sealed this _____ day of _____ 2019.

Principal

Surety

Attest: _____ By: _____

Attorney-in-fact

CONTRACT DOCUMENTS

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, THAT

_____ as Principal, and

_____ as Surety, are hereby held and firmly bound unto the Caguas Municipal Government hereinafter called the "Owner" in the sum of

_____ Dollars (\$ _____), lawful money of the United States of America, for the payment of which, well and truly to be made, we hereby and severally bind ourselves, our heirs, executors, administrators and assigns firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, whereas the Principal did on the _____ day of _____, 2019 enter into a contract with the Owner for furnishing materials and performing labor for construction of:

**REPARACIÓN DEL SISTEMA DE IMPERMEABILIZACIÓN DE TECHOS
DEL ESTADIO YLDEFONSO SOLÁ MORALES BO. PUEBLO, CAGUAS**

NOW THEREFORE, if the Principal shall:

Promptly make payments to all persons supplying labor and materials in the prosecution of the work provided for in said contract, including any and all duly authorized modifications thereof, notice to surety of such modifications being hereby waived, then this obligation shall be void; otherwise the same shall remain in full force and effect, it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the amount of this obligation as herein stated.

THE SAID SURETY stipulates and agrees that no modifications, omissions or additions in or to the terms of the said contract or in or to the drawings and specifications therefore in any way affect the obligation of said Surety on its bond.

SIGNED AND SEALED this ____ day of _____, 2019.

IN PRESENCE OF:

(Individual Principal)

Address

(Business Address)

(Individual Principal)

Address

(Business Address)

(Corporate Principal)

Attest:

Business Address _____

By: _____

(Corporate Seal)

(Corporate Surety)

Attest:

Business Address: _____

By: _____

(Corporate Seal)

CONTRACT DOCUMENTS

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the Secretary of the Corporation named as Principal in the foregoing Performance Bond; that _____
(Name of Principal's Representative)
who signed this bond on behalf of the Principal, was then _____ of
(Title of Position)
said Corporation, that said bond was duly signed for and on behalf of said Corporation by authority of its governing body, and is within the scope of its Corporate Powers, this ____ day of _____ 2019, at _____, Puerto Rico.

(Corporate Seal)

(Secretary's Signature)

CERTIFICATE AS TO CORPORATE PRINCIPAL

On the ____ day of _____ 2019, appear before me _____
(Name of Principal)
of _____, _____, of legal age
(Occupation)
and personally known to me and upon oath stated to have executed the foregoing Performance Bond.

(Notary Seal)

(Notary Public)

CERTIFICATE AS TO 1
CORPORATE PRINCIPAL

ACKNOWLEDGEMENT OF SURETY

ISLAND OF PUERTO RICO)
CITY OF SAN JUAN)

On this ____ day of _____, 2019, before me, the subscriber, a Notary Public of the
City of _____, Puerto Rico, duly commissioned and qualified came _____
_____ as attorney in fact of the _____

to me personally known to be the officer who executed the proceeding instrument, and he
acknowledges execution of the same and being by me duly sworn, deposeth, and saith, that he is
the said officer of the Company aforesaid, and that his signature as such officer was duly affixed
and subscribed to said instrument by authority and direction of the said Company given the
Power of Attorney executed by said Company on the ____ day of _____, 2019.

The original of which is on file in the office of the Superintendent of Insurance of Puerto Rico.

In TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal, at the
City of _____, Puerto Rico, the day and year first above written.

(Notary Seal)

(Notary Public)

Power of Attorney

This Bid Bond must be accompanied by a copy of a current, valid Power of Attorney from the Surety
to the person issuing the Bond on behalf of the Surety.

PART II:
GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS	5
ARTICLE 2. -INTERPRETATION AND COORDINATION OF CONTRACT DOCUMENTS.	11
Section 2.01 -Entire Contract	11
Section 2.02 -Ultra Vires Act	11
Section 2.03 -Severability	11
Section 2.04 -Governing Law	11
Section 2.05 -Binding Nature of Contract: No Assignment	12
Section 2.06 -Nature of Relationship	12
Section 2.07 -Interpretation of certain words	12
Section 2.08 -Prior Coetaneous Agreements	12
Section 2.09- Numbers and Words	12
Section 2.10- Heading	12
Section 2.11 - Interpretation	13
Section 2.12 - Copies Furnished And Ownership	13
ARTICLE 3. -REPRESENTATIONS AND GUARANTEES	14
Section 3.01 -Representation and Warranties of Contractor	14
Section 3.02- Representations and Warranties of Municipality of Caguas	15
ARTICLE 4. -SCOPE OF WORK	18
Section 4.01- Intent of Contract Documents	18
Section 4.02 -Performance Standards	18
Section 4.03 -General Guarantee	18
Section 4.04 -Amending and Supplementing Contract Documents	18
Section 4.05- Change Order / Extra Work Order	18
Section 4.06 -Written Amendment	20
Section 4.07 -Local Hiring and Procurement	20
Section 4.08 -Protection of Existing Structures	20
Section 4.09 -Project for Improvement to Existing Facilities	20
Section 4.10- Subsurface Studies	21
Section 4.11 -Differing Subsurface or Physical Conditions	21
Section 4.12 -Obstructions	22
Section 4.13 -Contractor Environmental Responsibility	23
Section 4.14- Hazardous Environmental Conditions at Site	23
Section 4.15- Force Account Work	25
Section 4.16- Cleaning Up	28
Section 4.17 -Indemnity	28
Section 4.18 -Press	29
Section 4.19 -Traffic	29

GENERAL CONDITIONS

Section 4.20 -Use of Explosives	29
Section 4.21- Trenching	30
Section 4.22 -Dewatering	30
Section 4.23- Lines and Grades	31
ARTICLE 5. - PROSECUTION OF WORK	32
Section 5.01 - Construction Plan and Progress Schedule	32
Section 5.02 - Contractor's Quality Control Plan	32
Section 5.03 - Submittal Schedule	33
Section 5.04 - Price Breakdown	33
Section 5.05 - Safety Plan	33
Section 5.06 - Initial Acceptance of Schedules and Plans	33
Section 5.07 - Pre-construction Conference	34
Section 5.08 - Contract Time	35
Section 5.09 - Liquidated Damages	36
Section 5.10 - Subletting of Contract	37
Section 5.11- Prosecution	37
Section 5.12 - Delays and Extension of Contract Time	38
Section 5.13 - Extended Overhead	39
Section 5.14 - Force Majeure	40
Section 5.15 - As-Built Drawings	40
Section 5.16 - Photographs	41
Section 5.17- Records	41
Section 5.18 - Termination of Contractor's Responsibility	41
Section 5.19 - Voluntary Termination by Municipality of Caguas	41
Section 5.20 - Contractor's Default	42
Section 5.21 – Municipality of Caguas Remedies under Contractor's Default	42
Section 5.22 – Municipality of Caguas Default	43
Section 5.23 - Contractor's Remedies Under Municipality of Caguas Default	43
Section 5.24 - Right to Cure under Default	44
Section 5.25 - No release of obligations due to default	44
Section 5.26 - Emergencies	44
ARTICLE 6. -SUBMITTALS	45
ARTICLE 7. -ENVIRONMENTAL PROTECTION AND RESTORATION	46
Section 7.01 -General	46
Section 7.02 -Construction Procedures	46
Section 7.03 -Prohibited Construction Procedures	46
Section 7.04 -Access and Temporary Roads	47

GENERAL CONDITIONS

Section 7.05 -Storage of Materials and Equipment	47
Section 7.06 -Site and Access Clearing	47
Section 7.07 -Stockpiling Backfill Material	48
Section 7.08 -Protection of Trees and Shrubs	48
Section 7.09 -Stream Crossing, Erosion, and Sediment Control	48
Section 7.10- Construction in Vicinity of Slopes	49
Section 7.11- Environmental Protection During Temporary Work Stoppages	49
Section 7.12- Protection of Wetlands	49
Section 7.13 -Erosion and Silt Control.	49
Section 7.14- Dust and Noise Control	50
Section 7.15 -Restoration Procedures	50
Section 7.16- Adverse Solid Ground and Groundwater Conditions	51
Section 7.17- Slopes Restoration and Streams Banks	51
Section 7.18 -Time of Restoration	51
Section 7.19 -Restoration Materials	51
Section 7.20 -Pest and Rodent Control	52
Section 7.21 -Mitigation Measures	52
ARTICLE 8. -CONTRACTOR'S PERSONNEL	54
Section 8.01- Superintendent	54
Section 8.02 - Skills and Conduct Required	54
Section 8.03 -Qualifications of Labor	54
Section 8.04 -Affirmative Action Plan to Relieve Unemployment of Young Persons	54
Section 8.05- Minimum Wage Rates and Working Conditions	56
Section 8.06- Working Hours	56
Section 8.07 -Payment of Employees	57
Section 8.08- Professional Licenses and Association Membership	57
ARTICLE 9 -MATERIALS AND EQUIPMENT	58
Section 9.01- General Requirement	58
Section 9.02 -Materials Manufactured in Puerto Rico	58
Section 9.03 -Equipment with Diesel and Gasoline Engines	58
Section 9.04 -Inspections	58
Section 9.05- Warranties and Guarantees	59
Section 9.06 -Storage	59
Section 9.07 -Contractor's Responsibility for Materials and Equipment	59
Section 9.08 -Materials to be Furnished by Municipality of Caguas	60
Section 9.09- "Or Equal" Clause	60
Section 9.10- Substitute Items	60

GENERAL CONDITIONS

Section 9.11 -Equipment to be Furnished and/or Installed	61
Section 9.12 -Description of Equipment to be Submitted	61
Section 9.13 -Operation and Maintenance Manual	64
Section 9.14- Lead Content	65
Section 9.15 -AASHTO and Other Standards	65
ARTICLE 10. -LEGAL RELATIONS AND RESPONSIBILITY	66
Section 10.01- Laws to be Observed	66
Section 10.02 -Change in Law	66
Section 10.03- Permits, Licenses, Fees and Taxes	66
Section 10.04- Patents and Copyrights	70
Section 10.05 -Fines	70
Section 10.06- No Waiver of Legal Rights	70
Section 10.07- Health, Safety and Sanitary Provisions	71
Section 10.08- Labor Laws and Regulations	72
Section 10.09- Archeological Material and Historical Monuments	72
ARTICLE 11. -CONTROL OF WORK	74
Section 11.01 -Engineer	74
Section 11.02 -Control of Installation	75
Section 11.03- Contractor's Quality Control	75
Section 11.04- Inspection by Engineer	78
Section 11.05- Uncovering Work	79
Section 11.06- Improper or Defective Work	79
Section 11.07- Removal of Unacceptable and Unauthorized Work	79
Section 11.08- Quality Assurance	79
ARTICLE 12. -INVOICES AND PAYMENT	80
Section 12.01 -Payments	80
Section 12.02 -Payment for Lump Sum Items	81
Section 12.03 -Payment for Unit Price Items	81
Section 12.04- Payment for Force Account Work	82
Section 12.05 -Payment for Partial Elimination of the Work	82
Section 12.06 -Withholding of Payments	82
Section 12.07 -Final Payment	83
ARTICLE 13. -INSURANCE AND BONDS	84
Section 13.01 -Policies	84
Section 13.02- Hold Harmless Agreement (Broad Form)	86
Section 13.03- Non-Cancellation Clause	86
Section 13.04 -Furnishing of Policies and Bonds	86

ARTICLE 14. -DISPUTES AND REMEDIES _____ 88

 Section 14.01- Disputes _____ 88

 Section 14.02 -Remedies _____ 88

ARTICLE 1 - DEFINITIONS

Unless otherwise specified or required where ever used in the Bidding Documents and Contract Documents, the following terms shall have the meaning indicated which are applicable to both the singular and plural thereof.

1. Addenda-- Written or graphic instruments issued by Municipality of Caguas prior to the opening of Bids, which clarify, correct, or change the Bidding Documents.
2. Agreement--Shall mean the Agreement for the construction of the Project together with the exhibits or schedules, including all Change Orders and Written Amendments modifying the provisions of the original agreement.
3. Bidder--Used to designate any party or parties submitting in proper form a proposal to accomplish the Work to be performed specified in the Contract Documents. The successful Bidder, selected by Municipality of Caguas to perform the Work will thereafter be known as Contractor.
4. Bidding Documents--Standard and Supplementary Instructions to Bidders; Bid Bond; Addenda issue prior to receipt of bids; Proposal Form; Financial. Experience and Equipment Statements; Contract Documents; and all other documents provided to prospective Bidders to be used by them to submit their proposals.
5. Certificate of Substantial Completion--Certificate issued by Engineer to Contractor indicating the date that the Project reached Substantial Completion.
6. Certificate of Final Acceptance--Certificate issued by Engineer to Contractor indicating the date that the Project reached Final Acceptance.
7. Change in Law--Shall mean the enactment or adoption by any legislative, regulatory, executive or administrative body of the Government of Puerto Rico or of the United States of America of any law, rule or regulation or any change or amendment to any law, rule or regulation in force as of the date of the Agreement, or any change in the interpretation thereof not subject to administrative or judicial review, or if subject to administrative or judicial review the validity or interpretation of which has been sustained by final judgment, which cannot be complied with by the parties without incurring in additional costs, such as but not limited to, capital expenditures, remediation, or corrective action.
8. Change Order--Shall mean a written order issued by Municipality of Caguas directing Contractor to if necessary add new Work, delete part of the Work, increase or the quantity of any item or portion of Work or to delete any item or portion of Work, or modify the Project, the Contract Prices adjusted accordingly, and the Contract Time being adjusted if justified as determined by Municipality of Caguas based on the requirements of the approved progress schedule.
9. Contract Documents--Shall mean the rights and obligations of the parties in this contract and include the Advertisement for Bids, Standard and Supplementary Instruction to Bidders,

GENERAL CONDITIONS

Payment and Performance Bond, Notice of Award, Construction Drawings, General Conditions, Supplementary Conditions, Technical Specifications, Supplementary Technical Specifications, Addenda, Site Visit Affidavit, Hold Harmless Agreement, Proposal, Agreement, Notice to Proceed, Change Orders, Written Amendments, Release of Debt. Supplementary Content and any other documents included in Exhibit A. Only printed or hard copies of these items are Contract Documents.

10. Contract Price--The moneys payable by Municipality of Caguas to Contractor for completion of the Work in the Project In accordance With the Contract Documents as stated in the Agreement. If the Proposal includes items to be paid on a unit price basis, then Contract Price is subject to the provisions of section titled "Payment of Unit Items" of the General Conditions. Contract Price includes, but is not limited to the following: personnel salaries and wages; supervision and overhead; materials and supplies; equipment installed; construction equipment and machinery; repair of machinery and equipment; payment to Subcontractors; Professional services, fees and expenses; payable expenses; utility services; sanitary facilities; safety; temporary facilities; transportation; insurance; municipal license taxes; municipal excise tax; municipal taxes; property taxes on property owned by Contractor; excise taxes; franchise taxes or similar charges; other fees, taxes or charges other than income taxes imposed by any private or governmental entity resulting from the performance by Contractor of the Work under this Agreement; cost of design, implementation, inspection and certification by qualified professionals of any plan, permit or requirement by any private entity or government body related to the execution of the Work; fines and/or penalties imposed due to noncompliance with applicable Laws and Regulations resulting from the execution of the Work; costs associated with the preservation and protection of the Project until Contractor receives Notice of Final Acceptance; cost of Hazardous Environmental Conditions created with any materials or equipment brought to the site by Contractor; and any other cost to Contractor for the performance, testing, start-up, and completion of project as described in the Contract Documents.

11. Contract Time--The number of calendar days or working days, as specified in the Agreement to: a) achieve Substantial Completion; and b) achieve Final Acceptance. If a specific calendar date for completion is specified in the Agreement in lieu of a number of calendar days or working days, Substantial Completion and Final Acceptance shall be achieved by the specified date. Contract Time starts on the Date of Commencement of Work indicated in the Notice to Proceed sent to Contractor by Municipality of Caguas

12. Contractor--Used to designate the party or parties contracting to perform the Work or his or their heirs, executors, administrators, successors or assigns.

13. Contractor 's Overhead Cost--Contractor costs that are incurred in support of the overall company construction program and that generally cannot be charged to any specific project. It includes general expenses such as office rent, office insurance, power, office supplies, furniture, Telephone, salaries of executives and office employees and others. Costs of this nature that are incurred at a specific project site or that can be charged to a specific project are not considered Contractor Overhead.

GENERAL CONDITIONS

14. Construction Drawings--That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Construction Drawings as so defined.

15. Contract Item Or Pay Item--A portion of work specifically described and for which a price either unit or lump sum is provided. It includes the performance of all work and the furnishing of labor, equipment, and materials described in the specifications.

16. Date of Commencement of Work--The date of commencement of the Work is the date established in the Notice to Proceed sent to Contractor by Engineer.

17. Day--The term day as used in the Contract Documents shall mean calendar day.

18. Engineer--The Engineer appointed by the _____
_____ acting directly within the scope of the particular duties assigned to him and within the scope of the authority vested in him. Engineer will assume all duties and responsibilities and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

19. Force Account Work--Additional work that is paid for on the basis of actual cost plus an established fee.

20. Federal Agency--Any agency of the government of the United States of America or its succeeding agency.

21. Final Acceptance--Shall mean the acceptance of the Work by Engineer after the final inspection as evidenced by the Certificate of Final Acceptance sent to Contractor by Engineer.

22. Force Majeure--An act of God; earthquake; tidal wave, hurricane, act of the public enemy; war; blockade; public riot; lighting; flood; explosion; a strike, excluding strikes and any other activity or demonstration by Municipality of Caguas personnel that does not interfere directly with the Work; and any other cause, whether of tend specifically enumerated herein or otherwise, which is not reasonably within the sole control of Contractor. A rain, windstorm flood or other natural phenomenon of normal intensity for the particular locality shall not be construed as Force Majeure.

23. Funding Agency--The agency providing or insuring a loan or a grant to Municipality of Caguas for financing this project.

24. Hazardous Environmental Condition--The presence at the site of asbestos, Polychlorinated biphenyls (PCBs), petroleum, hazardous waste, or radioactive material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

GENERAL CONDITIONS

25. Hazardous Waste--The term Hazardous Waste has the meaning as defined in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) 42 USC 103, or in the Resource, Conservation and Recovery Act of 1976 (RCRA). 42 USC §6901 and subsequent amendments, et seq.

26. Inspector--An authorized representative of Engineer assigned to make detailed inspections of performance of any or all portions of the Work included in the contract.

27. Laws and Regulations--Shall mean all applicable laws and regulations of the United States of America (Federal), Government of Puerto Rico, and other laws and municipal ordinances, executive orders of the Governor of Puerto Rico applicable to Municipality of Caguas codes, rules, regulations and statutes, including without limitation, those relating to fire, safety, land use, health, labor, environmental protection, conservation, handicapped access, zoning and construction and all such orders or decrees as exist at present or may be enacted later by bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the Work, or which in any way affect the conduct of the Work.

28. Laboratory--The testing laboratory of the Owner of any other testing laboratory approved by the Architect or the Engineer.

29. Milestone--A principal event specified in the Contract Documents related to an intermediate completion date or time prior to the Substantial Completion of the whole Work.

30. Major And Minor Contract Items--Any item having a contract value equal to or greater than five (5) per cent of the original contract amount shall be considered as a major item. All the other contract item shall be considered as minor items. A minor item may become a major item when the minor item is increased to the extent that the total cost of the item is equal to or greater than five (5) per cent of the original contract amount.

31. Notice of Award--Written communication issued by Municipality of Caguas to Contractor indicating that the project has been awarded to him.

32. Notice to Proceed-- Written communication issued by Engineer to Contractor authorizing him to proceed with the Project and establishing the Date of Commencement of the Work.

33. Project--The term Project shall mean the total development activity undertaken by Contractor pursuant to this Contract as defined in Contract Documents.

34: Proposal Guarantee--A certified check or bid bond in prescribed form, from a reliable surety: company authorized to do business in Puerto Rico and satisfactory to Municipality of Caguas, furnished by the Bidder with his proposal, as a guaranty that he will enter into a contract for the work if his proposal is accepted.

35. Plans Or Drawings--The approved drawings and supplement drawings showing the location, character, dimension, and details of the work to be done and which are to be considered as apart of the Contract.

GENERAL CONDITIONS

36. Quality Assurance--Verification by Municipality of Caguas (or by its consultants) of the quality of the work performed by a Contractor under this contract. Quality Assurance Includes inspection and testing.

37. Right Of Way--A general term denoting land, property, or interest therein, usually in a strip, acquired for or intended to a project or public utilities.

38. Special Conditions--Special requirements regulations or directions covering conditions peculiar to a particular project. Special Conditions shall prevail over the General Conditions, Technical Specifications, and Plans. On each sheet of Special Conditions, for positive identification, there shall appear the caption "Special Conditions".

39. Shop Drawings--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.

40. Subcontractor--An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.

41. Substantial Completion--The point of progress of the Work where, in the opinion Of Municipality of Caguas, the Work is ready for its intended use (operational or beneficial occupancy), in accordance with the Contract Documents, as evidenced by the Certificate of Substantial Completion sent to Contractor by Municipality of Caguas.

42. Superintendent--Refers to the resident licensed engineer appointed by Contractor to represent him on the project, to receive orders and to execute the Work.

43. Technical Specifications.--The directions, provisions and requirements setting forth or relating to the performance of the work and to the kind and quality of materials and labor to be furnished under the Contract for the execution of the project, and to the method and manner of evaluating and paying for the work.

44. Work--The furnishing of all labor, materials, equipment and incidentals necessary or convenient to the successful and satisfactory completion of the project and the carrying out of the duties and obligations imposed by the contract upon the Contractor. The Work includes and is the result of performing or providing at Contractor's expense, without limitation, all personnel salaries and wages; supervision and overhead; materials and supplies; installed equipment; construction equipment and machinery; repair of machinery and equipment; subcontracts; professional services, fees and expenses; payable expenses; tools; appliances; fuel; illumination; air condition, telephone; water, sewer, power, and other utility services; sanitary facilities; safety; temporary facilities; transportation; insurance; municipal license taxes; property taxes on property owned by Contractor; excise taxes; franchise taxes or similar charges; other taxes or charges other than income taxes imposed by any governmental entity resulting from performance by Contractor of the obligations under this contract; cost of design, implementation, inspection and certification by qualified professionals of any plan, permit or requirement by any private entity or government body resulting from performance by Contractor of the obligations under this contract; any fees that must be paid by Contractor to private or government entities resulting from performance by Contractor of the obligations under this contract; fines and/or penalties imposed due to noncompliance with applicable Laws and Regulations resulting from the-

GENERAL CONDITIONS

performance by Contractor of obligations under this contract; costs associated with the preservation and protection of the Project until Contractor receives the Notice of Final Acceptance; cost of Hazardous Environmental Conditions created with any materials or equipment brought to the site by Contractor; and any other cost to Contractor for the performance, testing, start-up, and completion of project as described in the Contract Documents.

45. Written Amendment--Written agreement modifying the Contract Documents, signed by Municipality of Caguas and Contractor on or after the effective date of the Agreement.

46. Contract Limits – The portion of the site within the work is to be performed.

47. Off-Site Work – Work to be performed outside the contract limits.

ARTICLE 2. -INTERPRETATION AND COORDINATION OF CONTRACT DOCUMENTS.

Section 2.01 -Entire Contract

The Contract Documents contains the entire understanding among the parties hereto with respect to the subject matter hereof and supersedes all prior and contemporaneous agreements and understandings, inducements, and conditions, expressed or implied oral or written, except as herein contained. This Contract may not be modified or amended other than by Written Amendment, signed by the parties hereto.

Section 2.02 -Ultra Vires Act

Municipality of Caguas and Contractor acknowledge that no service or work under this contract will be performed until both parties duly sign the Agreement. Furthermore, the parties agree that no work or service will be rendered or received under the terms of the Agreement until both parties sign the same. Likewise, no services will be performed nor received under the Agreement beyond the termination date, unless at the date of termination there is a written Agreement to extend its term. No payment and/or disbursement will be made or paid for services rendered in violation of this clause, since any officer, employee, advisor or consultant that requests and/or accepts services from associates in violation of this provision will be doing it without any legal authorization whatsoever.

Section 2.03 -Severability

If any part of this contract is found to be invalid or unenforceable by a court having jurisdiction, such finding shall not invalidate the remaining portions hereof, but such provisions shall remain in full force and effect, provided, however, that the parties may immediately renegotiate, reasonably and in good faith, the term(s) and provision(s) found to be invalid, as well as any other term(s) and provision(s) as necessary to achieve as nearly as possible the parties original contractual intent as evidenced hereby and in a manner which protects and preserves the parties procedural, economic and remedial expectations as set forth herein.

Section 2.04 -Governing Law

These Contract Documents and all questions relating to their validity, performance, interpretation and enforcement, shall be governed by and construed in accordance with the Laws of the Government of Puerto Rico. Any legal action brought concerning the above shall be brought exclusively in the Courts of the Government of Puerto Rico. San Juan.

Section 2.05 -Binding Nature of Contract: No Assignment

This contract shall be binding upon and inure to the benefit of the parties hereto and their successors and assigns, except that no party may assign or transfer its rights or obligations under this Contract without the prior written Consent of the other party hereto.

Section 2.06 -Nature of Relationship

The relationship which the parties intend to create under this contract is that of principal and independent Contractor and nothing herein is intended or shall be construed So as to create a relationship of any kind or manner, such as but not limited to partnership, Co-venturers, or employment between Municipality of Caguas and Contractor.

Section 2.07 -Interpretation of certain words

Unless the Contract Documents clearly require otherwise, words of masculine gender shall be construed to include the correlative words of feminine and neuter genders and vice versa, and words of singular number shall be construed to include correlative word of plural number and vice versa. Words importing persons include forms, associations and corporations. The words "herein", "hereof", and "hereunder" and words of similar import refer to this Contract as a whole. This Contract and all the provisions hereof shall be liberally construed to effectuate the purposes set forth herein and to sustain the validity hereof.

Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

Section 2.08 -Prior Coetaneous Agreements

All proposals, negotiations and representations with reference to the matters covered by this contract are merged in the Contract Documents, and no representations, amendment, or modifications hereof shall be valid unless evidenced in writing and signed on behalf of the parties hereto by the representatives duly authorized.

Section 2.09- Numbers and Words

If there should be a difference in the text between the name or word that identifies a number and the figure or symbol of the same number, then the name or word that identifies said number shall always prevail.

Section 2.10- Heading

The heading contained in the Contract Documents are used solely for convenience and not constitute a part of the Contract between the Parties hereto, nor should they be used to aid in any manner in the interpretation of the Contract

Section 2.11 - Interpretation

Written interpretation necessary for the proper execution or progress of the work in the form of drawings or otherwise, will be issued with reasonable promptness by the Architect or Engineer and in accordance with any schedule agreed upon. Either party to the Contract may make written request to the Architect or Engineer for such interpretation. Such interpretation shall be consistent with and reasonably inferable from the Contract Document and may be affected by Field Order. Interpretation drawings are not changes in the work.

Section 2.12 - Copies Furnished And Ownership

Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, six (6) complete set of Drawings and Specifications reasonably necessary for the execution of the Work. All Drawings, Specifications and copies thereof furnished by the architect or the Engineer are and shall remain property of the Owner.

ARTICLE 3. -REPRESENTATIONS AND GUARANTEES

Section 3.01 -Representation and Warranties of Contractor

Contractor represents and warrants to Municipality of Caguas that:

1. Contractor is a juridical person in good standing, duly organized and validly existing under the applicable laws of the Government of Puerto Rico, or of the jurisdiction in which it was created and organized, and that he is duly authorized to do business in and within Puerto Rico; or, if Contractor is a natural person, that he is a person in good standing, legally existing, operating and authorized to do business in and within Puerto Rico. Contractor has full power and capacity to carry on his business, and to enter into and perform the transactions contemplated in this Contract;
2. Contractor's execution, delivery and performance of the Agreement has been duly authorized by all necessary corporate or other pertinent action and does not and shall not conflict with or constitute a default under any agreement or instrument to which Contractor is a party or by which Contractor may be bound or affected;
3. This Contract constitutes a legal, valid and binding obligation of Contractor, enforceable against Contractor in accordance with its respective terms.
4. Contractor represents and warrants to Municipality of Caguas that he has authority to enter into this Contract under all applicable Federal and Puerto Rico and Regulations and that he has to the best of their knowledge and belief, complied with such Laws and Regulations as may be required to render the services herein describe and that he has the necessary licenses, permits and professional expertise to perform the services and obligations under this Contract.
5. Contractor hereby certify that he is duly authorized to conduct business in Puerto Rico and as such acknowledge, admit and recognizes that all applicable taxes, of any kind or form, federal nor Puerto Rico income taxes nor payroll taxes and any other tax of any kind or form will not be withheld or paid by Municipality of Caguas except as provided in the Contract Documents.
6. Contractor shall comply with the following: a) Executive Order of the Governor of Puerto Rico OE- 1991-24, dated June 18,1991 and Executive Order; b) Executive Order of the Governor of Puerto Rico OE-1992-52 dated August 28, 1992 and c) Circular Letter from the Department of Treasury Number 1300-13-97.
7. Contractor recognizes that he is responsible to file and pay, according to law, all applicable taxes of any kind or form. Contractor furthermore certifies that as of this date he has complied with all tax laws of Puerto Rico and that he is not indebted in any way whatsoever to the Government of Puerto Rico or any municipality including but not limited to income tax, excise taxes (arbitrios), municipal license tax (patente municipal), municipal excise tax (arbitrios municipales), property taxes, all license taxes, payroll taxes, interests, dividends or for any other matter, and all other taxes and fees required by Laws and Regulations; or an installment payment plan has been agreed and Contractor is complying with its terms and conditions.

GENERAL CONDITIONS

8. Contractor hereby warrants that no officer, employee, advisor or consultant of Municipality of Caguas nor any member of his family unit, has any direct or indirect economic interest in this Contract and that no officer, employee, advisor or consultant of the executive branch of the Government of Puerto Rico nor any member of his family unit have any interest and/or participation in the economic benefits or earnings related to this Contract.

9. Contractor hereby acknowledges and warrants that in fulfillment of its obligations under this Contract he owes complete loyalty to Municipality of Caguas, in relations to third parties, which include, among others, not having adverse interests relate to Municipality of Caguas. These adverse interests shall include but shall not be limited to offering services or be involve with any person or entity that might have adverse interests against Municipality of Caguas. This obligation also includes the duty of continuous disclosure to Municipality of Caguas of all circumstances related to Contractor's relationship with clients and third parties and o any interest that might influence Municipality of Caguas when executing this Contract or during the term of the same. Contractor hereby warrant none of its officers, employees, directors, associates, advisors or consultants nor any member of their family unit has any conflict of interest related to the provisions and obligations arising from this Contract.

10. Contractor agrees that under no circumstances he shall invoice Municipality of Caguas for the same Work, matter, account or item more than one time. Should Contractor be found responsible for such an act Municipality of Caguas may have the right to terminate this Contract, at its sole option, and Contractor must immediately reimburse Municipality of Caguas any money received plus an amount equal to the highest interest rat Municipality of Caguas is obtaining in any banking institution in the Puerto Rico.

11. Contractor warrants that he has freely and voluntary entered into this Contract and that he has not been coerced, forced or unduly influenced or induced to enter into the same. Contractor further warrants that he has, and has used its bargaining power in the negotiation of this contract. Contractor expressly recognizes that this is not a contract of adhesion.

Section 3.02- Representations and Warranties of Municipality of Caguas

Municipality of Caguas represents and warrants to Contractor:

1. Municipality of Caguas is a corporate body and governmental instrumentality of Puerto Rico has all necessary power, authority and capacity to own its properties, to carry on its business as presently conducted and to execute, deliver, enter into and perform the transactions contemplated in this Contract;

2. The execution, delivery and performance of this Contract has been duly authorized by all necessary actions, and do not, and shall not, conflict with the Laws and Regulations or constitute a default under any resolution agreement or other instrument to which Municipality of Caguas is a party or by which Municipality of Caguas may be bound or affected;

3. This Contract constitutes a legal valid and binding obligation of Municipality of Caguas enforceable against Municipality of Caguas in accordance with its respective terms;

GENERAL CONDITIONS

4. All consents, approvals, permits, clearances, endorsements, authorizations and orders of qualifications with any governmental or regulatory authorities, which are required to be obtained by Municipality of Caguas for consummation of the transactions contemplated by this Contract, have been or will be duly and validly obtained or performed on. As to those already obtained, they are all in full force and no default exists there under.

5. Municipality of Caguas hereby warrants that no officer, employee, advisor or consultant of Municipality of Caguas nor any member immediate family, has any direct or indirect economic interest in this Contract and that no officer, employee, advisor or consultant of the executive branch of the Government of Puerto Rico nor any member of their family unit has any interest and/or participation in the economic benefits or earnings related to this Contract.

6. Except and to the extent that it may expressly and specifically be qualified limited or disclaimed below and notwithstanding anything heretofore expressed in this Contract Municipality of Caguas hereby expressly and specifically represents and warrants to Contractor the following with respect to the environmental, health or safety conditions at the Project, including the building or other improvements therein, surface waters thereon, soil and groundwater thereunder, and ambient air.

Neither Municipality of Caguas, or any prior owner or any occupant at the grounds upon which the Project shall be constructed on has used, generated, manufactured, stored or disposed in, under or about the Project nor transported to or from the Project, any explosives, flammable or radioactive materials or "hazardous substances" or "hazardous wastes" as defined in the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") 42 USC §9601, or in the Resource. Conservation and Recovery Act of 1976 ("RCRA"), and subsequent amendments. 42 USC §6901, et seq.;

There exists no environmental liability on the Project at the present time and Municipality of Caguas after due inquiry, has neither knowledge of any potential environmental liability nor reason to suspect that potential liability may exist with respect to the Project.

There are no asbestos containing materials at/or within the structures, appurtenances and grounds upon which the Project shall be constructed on;

There are no PCB's; as defined in the Toxic Substances Control Act ("TSCA") of 1976 , 5 USC §2601M, et seq., as amended; in. under or about the Project;

There has been no litigation or administrative hearing or other action regarding environmental problems in or associated with the Project, other than those pertaining to the environmental permits process, except for those specifically included in the Contract Documents;

Neither Municipality of Caguas nor, to its knowledge after due inquiry, any prior owner or occupant of the Project, has ever received any directive, notice or correspondence from any federal or local regulatory agency with respect to environmental violations, problems or concerns in or associated with the Project except for those specifically set forth in the Contract Documents;

GENERAL CONDITIONS

There exists no adverse environmental conditions on and/or within the Project other than those specifically disclosed by Municipality of Caguas to Contractor herein and/or in the Contract Documents and others which are referenced to Specifically hereinbelow.

ARTICLE 4. -SCOPE OF WORK

Section 4.01- Intent of Contract Documents

1. The Contract Documents are intended to provide for all labor and material, equipment and others required for every element of the Work, all complete in every detail ready for operation, and finished in a neat, attractive, workmanlike and durable manner.
2. Small items essential to the attainment of this end which may have been omitted on the Construction Drawings and in the specifications shall be provided by the Contractor without charge in the same manner as if both were specifically included in the contract documents.

Section 4.02 -Performance Standards

Contractor shall use the optimum level of recognized industry standards accepted in the United States of America and in Puerto Rico to enabled Municipality of Caguas to meet the objective of the Work in this Project, including the optimum level of effort consistent With said standards so as to meet its own given estimates of costs, time schedule and the precision and accuracy of the data provided by Contractor in connection herewith.

Section 4.03 -General Guarantee

Contractor shall guarantee his Work for a period of one (1) year after Final Acceptance as indicated in the Certificate of Final Acceptance. If at any time within one (1) year after Final Acceptance it is found that any piece of equipment or item of Work does not comply with this guarantee. Contractor shall renew or replace if, or do whatever is necessary to remedy the fault. He shall, during the same period, repair promptly all breaks, failures or defects that develop in his Work as a result of faulty material or workmanship furnished by him.

Section 4.04 -Amending and Supplementing Contract Documents

Municipality of Caguas reserves the right to make, at any time during the progress of the Work" additions, deletions, and revisions to the Work or to modify the terms and conditions of the Contract Documents as necessary to satisfactorily complete the Work by a Change Order or Written Amendment. These additions, deletions and alterations shall not invalidate the contract nor release the Surety, and Contractor agrees to perform the Work as altered.

Section 4.05- Change Order / Extra Work Order

Without invalidating the Agreement and without notice to the surety, Municipality of Caguas may, at any time or from time to time, order additions, deletions, or revisions to the Work to satisfactorily complete the project by means of a Change Order or Extra Work Orders. Such orders shall be valid and ready for execution after written consent and approval by the authorized official. Contractor agrees to perform the Work as altered. The Work involved will be performed under the applicable conditions of Contract Documents, except as otherwise specially provided.

GENERAL CONDITIONS

If unit prices are not stated in the Proposal, the corresponding adjustments to the Contract Price resulting from a change in the Work shall be determined by mutual acceptance, between Municipality of Caguas and Contractor, of a lump sum properly itemized prior to the performance of the Work. If the parties can not agree on a lump sum amount, then Municipality of Caguas reserves the right to require Contractor to perform the change in the Work by force account as described in Section 4.15 -Force Account Work, to eliminate the change, or to perform the Work in other manner.

An Extra Work Order is a written order signed by the Owner or his representatives Authorizing a change in Work, adjustment in the Contract Sum and the Contract Time for services or work for which there is no applicable basis of payment, either direct or indirect, provided in the item or items exceed certain percentages. The percentages and the method to be followed for unit price adjustments shall be as follows:

1. Overruns of more than twenty five (25) percent of any major item or items shall require a negotiated unit price which shall be covered by a Supplemental Agreement. The original unit price shall apply to all work performed up to one hundred twenty five (125) percent of the original proposal quantity for the item, and the negotiated unit price shall apply only to the quantity of work performed in excess of said 125 percent. If a satisfactory negotiated price cannot be agreed upon for any item or items, the Owner reserves the right to require the Contractor to perform, the work by Force Account or to eliminate the increased quantity from the contract.
2. Underruns of more than twenty-five (25) percent of any major item or items shall require a negotiated unit price for the units of work finally performed which shall be covered by a Supplemental Agreement. The total quantity of work finally performed shall be paid, at the negotiated unit price, but in no case will the amount paid for the total quantity performed exceed seventy-five (75) percent of the original total for the item.
3. Overruns of a minor item to the extent that the amount of the item calculated at the original unit price, exceed. 6.25 percent of the original contract amount shall require a negotiated unit price which shall be covered by a Supplemental Agreement. The original unit price shall apply to all work performed in the item up to a value of 6.25 percent of the original contract amount and the negotiated unit price shall apply to the additional Work. If a satisfactory negotiated price cannot be agreed upon, the Owner reserves the right to require the Contractor to perform the work by force account or to eliminate the increased quantity from the Contract.

If the Contractor wishes to make a claim for an increase in the Contract Sum, he shall give the Engineer written notice thereof within twenty days after the occurrence of the event giving rise to such claim. This Notice shall be given by the Contractor before proceeding to execute the Work, except in an emergency endangering life of property. No such claim shall be

GENERAL CONDITIONS

valid unless so made. Any change in the Contract Sum resulting from such claim shall be authorized by Change Order or Extra Work Order.

The Owner shall have authority to order minor changes in the Work not involving an adjustment in the Contract Sum or an extension of the Contract time and not inconsistent with the intent of the Contract Documents. Such changes may be effected by Field Order or by other written order. Such changes shall be binding on the Owner and the Contractor. The Engineer may issue written, Field Orders covering minor changes in the Work without change in Contract Sum or Contract Time. The Contractor shall carry out such Field Orders promptly.

The effect of Change Orders on Contract Time shall be as indicated in Section 5.12 - Delays and Extensions of Contract Time, paragraph 1.e.

Section 4.06 -Written Amendment

Written Amendment is a written agreement modifying the Contract Documents, signed by Municipality of Caguas Contractor on or after the effective date of the Agreement. The Contract Price and the Contract Times can be changed by Written Amendment.

Section 4.07 -Local Hiring and Procurement

Contractor shall employ human resources, necessary technical assistance, materials, supplies and equipment within the municipality where the job shall be done. Contractor may use the assistance of other sources only when the before mentioned conditions cannot be obtained to Municipality of Caguas satisfaction.

Section 4.08 -Protection of Existing Structures

Special precautions shall be taken to insure the safety of water mains, gas mains, electric conduits, telephone conduits, sewers, storm water drains, culverts, highways, roads, buildings and other existing structures in and near excavations. Contractor shall repair at his own expense any damage to existing structures which results from his operations.

Section 4.09 -Project for Improvement to Existing Facilities

Work involving the improvements of existing facilities shall be scheduled by Contractor in such a way that it keeps the existing facilities at the site in operation as much as feasible during construction. This will minimize raw sewage by-passing in sanitary facilities.

Section 4.10- Subsurface Studies

Contractor shall form his own opinion of the character of the underground materials to be encountered and the conditions under which the Work will be performed based upon: an inspection of the site of the Work; making additional borings if necessary; doing his own interpretation of all test boring information; and making any other investigations as he may desire to undertake. Boring information provided in Construction Drawings and specifications is not be construed as an indication of prevailing conditions, outside of boring location. The contractor shall use his judgment or hire a consultant, at his cost, to obtain any additional information related to subsoil conditions. The logs of soundings, borings, rock cores and any other subsurface data if available is offered in good faith solely for the purpose of placing Contractor in receipt of all information available. Such reports and drawings are not Contract Documents. Contractor may not rely upon them to make any Claim against Municipality of Caguas Engineer, or any of Engineer's consultants.

Section 4.11 -Differing Subsurface or Physical Conditions

Contractor shall promptly and before the conditions are disturbed, give a written notice to of the following: 1) subsurface or latent physical conditions at the site differing materially from the indicated in the Contract or 2) unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the Work provided for in the Contract.

Upon written notification, Engineer will investigate the conditions, and if he determines that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any Work under the contract, an adjustment, excluding loss of anticipated profits, will be made and the contract modified in writing accordingly. Engineer will notify Contractor of his/her determination whether or not an adjustment of the contract is warranted. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Time if:

1. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Municipality of Caguas in respect to Contract Price and Contract Time by the submission of a Bid or becoming bound under a negotiated contract.
2. The existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the site and contiguous areas required by the Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment.
3. Contractor failed to give the prompt written notice to Municipality of Caguas indicating clearly the nature of the specific differing conditions. This prompt written notice to Municipality of Caguas must be provided before the conditions are disturbed and before the affected Work is disturbed.

Section 4.12 -Obstructions

1. Contractor shall make or arrange for any necessary removals or alterations of existing structures or other obstructions which may be encountered on or below the surface and which interfere with the Work to be done.
2. The alteration or relocating of water mains, gas lines, telephone and telegraph ducts, underground electrical conduits or duct, utility poles and similar public utility facilities which lay within the limits of the trenches will, in general, be done by the utility having jurisdiction. Contractor shall locate these obstructions and shall notify Engineer sufficiently in advance of his Work so that proper arrangements can be made for the necessary alterations or relocations. Municipality of Caguas shall not be responsible for any delays caused by Contractor due to his failure to notify Engineer sufficiently in advance of his Work or for any other delays due to the necessity of relocating or altering public utility facilities.
3. No underground structure of any type shall be changed, altered or relocated without prior written approval of Engineer and the authorities having jurisdiction.
4. Contractor shall bear the cost of altering, relocating and removing permanent or temporary obstructions of any kind, surface or underground, within the limits of the Work and shown on the Construction Drawings or mentioned in the specifications. Contractor shall also bear the cost of removing the existing surface structures and the obstacles discovered such as paved areas, streets, roads and highways, sidewalks, driveways, or other special surfacing structure and obstacles discovered or portions thereof, all of which have not been shown on the Construction Drawings, specifications or other Contract Documents. Contractor shall also bear the cost of removing obstructions removed, relayed or altered for convenience of Contractor including fences, catch basins, sewer and drains, guy wires, guard post, culverts, headwalls, and similar installations.
5. Contractor shall immediately notify Engineer in writing promptly thereafter, of any underground obstructions such as pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, encasements containing such facilities, other facilities and attachments uncovered or revealed at or contiguous to the site and not shown or indicated in the Contract Documents. Engineer will promptly investigate and determine the extent, if any, to which a change is required in the Contract Documents to reflect the consequences of the existing underground obstructions. Engineer will determine if the obstruction justifies an increase or decrease in the Contract Time or the Contract Price. Any adjustment in Contract Price will exclude loss of anticipated profits. Engineer will notify Contractor of his/her determination whether or not an adjustment of the contract is warranted. No contract adjustment that results in a benefit to Contractor will be allowed unless Contractor has provided the required written notice. Contractor shall be responsible for the safety and protection of the obstruction found during the investigation by Engineer and during the time required for modifying Construction Drawings and specifications and deliver them to Contractor, if any. No change in Contract Price or Contract Time will be made if Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Municipality of Caguas by the submission of a Bid or becoming

bound under a negotiated contract; or if the existence of such conditions could reasonably have been discovered or revealed as a result of any examination, investigations, exploration, test or study of the site and contiguous areas required by the Contract Documents to be conducted by or for Contractor prior to Contractor making such final commitment.

Section 4.13 -Contractor Environmental Responsibility

1. Contractor shall comply with all Federal and Puerto Rico Laws and Regulations controlling pollution of the environment including, but without limiting to the Puerto Rico Law of Environmental Public Policy, rules and regulations of the Puerto Rico Environmental Quality Board, rules and regulations of the Environmental Protection Agency (EPA), the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), the Clean Air Act, the Response Conservation and Liability Act, the Clean Water Act, and the Toxic Substance Control Act.
2. Contractor shall be responsible for the compliance with these Laws and Regulations by his employees, agents, Subcontractors and suppliers.
3. Contractor shall be the only entity responsible, at his own expense, in performing the Works necessary to comply with the permits, endorsements, approvals or renewals and shall pay all fees and charges incidental to the due and lawful prosecution of the Work. Contractor shall provide at his own expense all required notices, Construction Drawings, specifications, engineering and other profession certifications, inspections, reports, notifications and others required by private, Municipal, Puerto Rico and Federal entities for the lawful prosecution of the Work.
4. In cleaning the project's area from contaminants (wastes or substances of any nature, hazardous, non hazardous, or toxic) Contractor will certify that he complied with all state and federal Laws and Regulations
5. Contractor agrees to sign a certification, when the project is completed or the contract is liquidated, stating that he has left the project's area clean from contaminants, waste or substances of any nature, hazardous, non hazardous, or toxic.
6. The effectiveness of the Section 4.13 -Contractor Environmental Responsibility, and Section 4.14 - Hazardous Environmental Conditions at Site will survive the termination or cancellation of the contract.
7. Contractor shall restore disturbed areas to present or better conditions when construction is completed.

Section 4.14- Hazardous Environmental Conditions at Site

1. In case of Hazard Environmental Condition at the site which was considered during the preparation of Contract Documents. Contractor shall proceed as indicated in Contract Documents and in accordance with applicable Laws and Regulations.

GENERAL CONDITIONS

2. In case of a Hazardous Environmental Condition that was not considered during the preparation of the Contract Documents. Contractor shall immediately:

a. Secure or otherwise isolate such condition. The condition shall be treated with extraordinary caution.

b. Stop all Work in connection with such condition and in any area affected, except in an emergency as required by the Section 5.26- Emergencies.

c. Notify Engineer immediately and promptly thereafter confirm such notice in writing.

d. Engineer will evaluate the condition and decide the action to be taken in accordance with applicable Laws and Regulations and with Contract Documents. Possible courses of actions include removal and disposition outside o Municipality of Caguas property of the Hazardous Environmental Condition and remediation of the site in accordance with Federal and Puerto Rico Laws and Regulations; deletion from contract of the part of the Work affected by the Hazardous Environmental Condition. Change Orders, suspension of Work, voluntary termination of contract by Municipality of Caguas and others or a combination of these actions. The provisions of Section 4.11 – Differing Subsurface or Physical Conditions, and Section 4.12 -Obstructions, are not intended to apply to a Hazardous Environmental Condition uncovered or revealed at the site which was not shown or indicated in the Construction Drawings or specifications or identified in the Contract Documents to be within the scope of the Work.

e. Contractor shall proceed according to the instructions given by Engineer and in compliance with Federal and local Laws and Regulations.

f. Municipality of Caguas will reserve the right to do the necessary studies to corroborate that the project's area is clean from the Hazardous Environmental Condition.

g. In cleaning, disposition or remediation operations of a Hazardous Environmental Condition Contractor will certify they have complied with all state and federal Laws and Regulations. Contractor agrees to sign a certification, when the project is completed or the contract is liquidated, stating that he has left the project's area clean from contaminants, waste or substances of any nature, hazardous, non-hazardous, or toxic.

3. Contractor shall not be responsible for any Hazardous Environmental Conditions uncovered or revealed at the site which was not shown or indicated in Construction Drawings or specifications or identified in the Contract Documents to be within the scope of the Work.

4. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the site by Contractor, Subcontractors, suppliers or anyone else for whom Contractor is responsible. The Contract Time shall not be extended because of this situation. Contractor is responsible for requesting permissions, endorsements; submitting required Construction Drawings and specifications, engineering certifications, ional and other fees, and all other costs related to the removal and disposition outside of Municipality of Caguas property of

GENERAL CONDITIONS

the Hazardous Environmental Condition and remediation of the site in accordance with Federal and local Laws and Regulations and following instructions given by Engineer. Municipality of Caguas will reserve the right to do the necessary studies to corroborate that the project's area is clean from the Hazardous Environmental Condition or to take the necessary measures, including judicial, to force Contractor to correct the Hazardous Environmental Condition.

5. Contractor shall indemnify and hold harmless Municipality of Caguas to the fullest extent permitted by Laws and Regulations, from and against all claims, costs, losses, and damages, including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution cost, arising out or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this section shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

6. Municipality of Caguas shall indemnify and hold harmless Contractor and Subcontractors from and against all claims costs, losses, and damages, including but no limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs arising out of or relating to a Hazardous Environmental Conditions, provided that such Hazardous Environmental Condition:

- a. Was not shown or indicated in the Construction Drawings and specifications or identified in the Contract Documents to be included within the scope of the Work; and
- b. Was not created by Contractor or by anyone for whom Contractor is responsible.

Nothing in this section shall obligate Municipality of Caguas to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

Section 4.15- Force Account Work

Force account work shall be performed under the direct supervision of Engineer and will be compensated as follows:

1. Labor: For all labor and foremen directly employed on the specific operations, Contractor will receive the rate of wage agreed upon in writing before beginning Work for each and every hour that said labor and foremen are actually engaged in such Work. Contractor will also receive the actual cost paid to or on behalf of workmen by reason of subsistence and travel allowances, health and welfare benefits, pension fund benefits and other benefits when such amounts are required by collective bargaining agreement or other employment contract generally applicable to the classes of labor employed on the Work. To said costs and amount equal to 20 percent of the sum thereof will be added.

2. Materials: For all the materials accepted by Engineer and used in the Work, Contractor will receive the actual cost of such materials delivered to the Work, including transportation charges paid by him but exclusive of machinery rentals as hereinafter set forth. To said cost an amount equal to six-percent (6%) of the sum thereof will be added.

3. Equipment:

- a. A rent will be paid to Contractor for all equipment authorized by Engineer to be used on the force account work. The rental to be paid will be computed using an hourly rate which is 1/176 of the monthly rate listed in the Rental Rate Blue Book published by Dataquest of San Jose, California which is in effect at the time the equipment is used and adjusted as per the rate adjustment factor applicable to Puerto Rico.
- b. If monthly rates for the equipment to be used are not listed in the Rental Rate Blue Book, the hourly rental rate and operating costs to be paid will be negotiated with Contractor prior to its use.
- c. In the case of equipment rented by Contractor, Contractor will be paid for the actual rental rate of the equipment for the time that the equipment is assigned to the force account work but not to exceed the Blue Book rental rate computed as in paragraph "a" above.
- d. In the event that the required equipment is not at the project site and has to be moved in for exclusive use in the force account work, Contractor will be reimbursed for the actual cost of transporting the equipment to the site of the force account work and the return to its original location. If the equipment is moved out to other than the original location, the move-out cost shall not exceed the move-in cost.
- e. Rental will be paid for the time in hours that the equipment is exclusively assigned to the force account work conditioned as follows:
 - i. No more than 8 hours during a 24-hour period nor more than 40 hours during a one week period will be paid for unless Engineer orders in writing additional hours of operation.
 - ii. For equipment at the project -No rental will be paid for the time the equipment is inoperative due to breakdowns in excess of one day.
 - iii. For equipment moved in from outside the project the minimum rental to be paid for each day of assignment will be 8 hours except if Contractor uses such equipment in other work, in which case he will be paid only for the actual time the equipment is used in the force account work. No rental will be paid for the time the equipment is inoperative due to breakdowns in excess of one day.
 - iv. Stand by Equipment -Compensation for Equipment at Work site but not operating - The rental rates to be paid will be fifty percent (50%) of the computed rate indicated in Section 4.15- Force Account Work, paragraph 3.a.
- f. To compensate for all operating costs, exclusive of the equipment operators. Contractor will be paid for on the basis of the hourly operating cost rates listed in the Rental Rate Blue Book but only for the hours in which the equipment is in actual operation in the force account work. No operating costs will be paid when the equipment is idle. Equipment operators will be paid for as provided in paragraph 1 (titled Labor), above.

GENERAL CONDITIONS

g. Rental for equipment operated by its owner will be paid on the basis of the rates negotiated with the owner for the time that such equipment is directly assigned to the force account work. The rental rate shall include the cost of fuel, oil, lubrication, depreciation, repairs, storage, insurance and all other incidental costs including the wages of the operator.

h. To the rental rates specified in paragraphs (a) through (e) and (g) above, an amount equal to fifteen (15) percent will be added.

i. Prior to initiating the force account work, Engineer will notify Contractor of the equipment needed for the force account work and both parts shall agree in writing on the rental to be paid for such equipment on the basis of paragraphs (a) through (h) above. Except in emergencies, Engineer shall notify Contractor at least 72 hours in advance whenever any equipment on the project is needed for force account work. In the event that Contractor elects to use equipment of a higher rental rate than the equipment determined to be suitable for the Work, payment will be made at the rate applicable to the suitable equipment. The equipment actually used and the suitable equipment upon which the rental rate to be paid for is based will be recorded as part of the record for the force account work.

4. Tools: No allowance will be made for the use of small tools and manual equipment.

5. Insurance and Taxes: For workmen's compensation insurance premium, unemployment insurance contribution, social security taxes, any other employment taxes or fees required by law, property damage and liability insurance premiums, any additional payment and performance bond premiums and such other taxes as Contractor is required by law to pay on the force account work, Contractor will receive the actual cost. To said cost an amount equal to 10 percent will be added. Contractor shall furnish satisfactory evidence of the rate or rates paid for such insurance and taxes.

6. Superintendence and Miscellaneous: No additional allowance will be made for general superintendence, overhead or other costs for which no specific allowance is herein provided.

7. Engineer will prepare a daily report for each force account job in accordance with the established procedures. This report will detail all the labor, equipment, materials and incidentals used on the job and the Work accomplished. This daily report will be submitted to Contractor for his review and concurrence by signature thereon.

8. Engineer will prepare monthly reports to coincide with the partial payment periods until the force account work is completed. These reports will detail all the eligible force account costs for each period covered. Contractor shall be responsible for providing to Engineer all the necessary data and documents needed to compute the costs and complete these reports which are not readily available to Engineer, such as payroll data, materials invoices, equipment rental rates, transportation charges and insurance premiums. The monthly reports will be submitted to Contractor for his review and concurrence by signature thereon prior to reimbursing Contractor for the force account work.

9. The additional payments, based on the percentages stated above, shall constitute full compensation for all items of expense not specifically designated. The total payment made as provided above shall constitute full compensation for such Work.

Section 4.16- Cleaning Up

On or before the completion of the Work Contractor shall take down and remove any temporary structures which he may have erected, shall remove all construction equipment and excess materials and shall clean up rubbish and dispose of excess earth by spreading it at points mentioned in the specifications or where directed by the Engineer. Contractor, in general, shall leave the property in as good condition as he found it and shall leave his Work in a neat, attractive, workmanlike and finished condition. .

In the event that the Contractor fail to clean up the working areas and it's surroundings as schedule. Municipality of Caguas or it representative can subcontract this work at contractor expenses.

Section 4.17 -Indemnity

1. To the fullest extent permitted by Laws and Regulations. Contractor shall indemnify and hold Municipality of Caguas harmless from any liability or damages for property, including loss of, or bodily injury, including death, which may arise from Contractor's negligent action, or omission or willful misconduct under the Contract, to the proportion such negligent action or omission or willful misconduct contributed to the damages, injury or omission or willful misconduct by Contractor. This indemnity by Contractor to Municipality of Caguas also applies to negligent actions or omissions or willful misconduct under the Contract from u contractors and suppliers employed by Contractor.

2. Contractor shall defend any claim or suit brought against Municipality of Caguas based upon any such injury, death, loss or damage caused by Contractor's negligent action or omission or willful misconduct and shall pay all costs and expenses, including legal and consultant's fees and expenses, in connection with such claim or suit, provided that Municipality of Caguas shall give Contractor prompt notice of such claim or suit, and shall provide such reasonable assistance in connection therewith as Contractor may request.

3. To the fullest extent permitted by Laws and Regulations, Contractor hereby specifically releases, indemnifies, defends and holds-harmless Municipality of Caguas, its directors, officers, employees, agents and representatives from any and all liabilities, obligations, lawsuits, judgments, claims, demands, causes of action, damages, losses, costs and expenses of any kind arising from any violation by Contractor of any federal, state, local or municipal law, rule, regulation, ordinance and/or other governmental requirements that are related to the protection of the public, the employees' health and safety and the environment. This indemnity shall include, but shall not be limited to, any losses, costs and expenses of any kind incurred or suffered by Municipality of Caguas, including, but not limited to, any cost recovery claim, remedial response, investigation or cleanup costs under the U.S. Comprehensive Environmental Response Compensation and Liability Act, and its subsequent amendments; the Clean Air Act, as amended; the Resource Conservation and Recovery Act and its subsequent amendments; the Occupational Safety and Health Act; the Clean Water Act; the Toxic Substances Control Act and/or the Puerto Rico Environmental Policy Act and the regulations promulgated thereunder and/or any applicable environmental law. The indemnity of Contractor to Municipality of

Caguas specifically includes, but IS not or in any manner limited or restricted to, all liabilities, obligations, lawsuits, judgments, claims, demands, causes of actions, Change Orders, damages or costs resulting from any change in any Federal or Puerto Rico law, rule or regulation, the effective date of which is after the date of this Agreement., except as herein provided.

Section 4.18 -Press

If a member of the media or press or any citizen or group makes an inquiry, related to the operations or to the Project in general, Contractor shall respond providing the data and information that answers said inquiry in a polite, respectful, responsible and professional manner, provided however., that said information is not considered privileged or confidential for any purposes. Municipality of Caguas shall keep the media and press informed of the nature of any Work, such as, but not limited to repairs, maintenance work or construction, that is being performed by Contractor pursuant to the terms and obligations under this Contract and its impact in the services that Municipality of Caguas provides to its clients.

Section 4.19 -Traffic

1. Work must be scheduled by Contractor to maintain traffic on all roads and streets affected by the Work as directed by Engineer.
2. The Contractor shall provide, erect and maintain all necessary advance warning signs, barricades, suitable and sufficient lights, danger signals, signs, and other traffic control devices; shall provide a sufficient number of security persons and flag-persons, and shall take all necessary precautions for the protection of the Work and the safety of the public maintaining and safeguarding vehicular and pedestrian traffic. Contractor shall be responsible to comply with the requirements of Part VI of the "Manual de Dispositivos Uniformes para el Control del Transito en las Vias Públicas de Puerto Rico" known as: "Controles de Transito para Operaciones de Construcción y Conservación en Calles y Carreteras" as published by the Municipality of Caguas.
3. Traffic control shall be coordinated with the police and the Municipal and Government of Puerto Rico authorities.

Section 4.20 -Use of Explosives

1. When the use of explosives is necessary for the prosecution of the Work, Contractor shall comply with all Laws and Regulations concerning the storage., transportation., handling and detonation of explosives. Contractor shall exercise the utmost care with the explosives so as not to endanger life and property and he shall be responsible for any and all damages that may result from his use of explosives.
2. Prior to initiating the use of explosives, Contractor shall submit to Municipality of Caguas evidence of complying with the special insurance requirements that Municipality of Caguas requires when explosives are used.

GENERAL CONDITIONS

3. Blasting operations shall be conducted under the most careful and experienced supervision. Contractor shall keep the Engineer informed as to his drilling and blasting operations.
4. Contractor shall furnish and erect special signs to warn the public of his blasting operations. Such signs shall be placed at appropriate points within the project limits, shall be maintained so as to be clearly evident to the public during all critical periods of the blasting operations and, if blasting is by means of electric detonators, shall include a warning statement to have radio transmitters turned off.
5. Contractor shall notify each property owner and public utility company having structures in the proximity to the site of the work of his intention to use explosives. Such notice shall be given sufficiently in advance and shall comply with all Laws and Regulations of the authorities having jurisdiction.

Section 4.21- Trenching

In excavating trenches, Contractor may use such construction methods, as Engineer will approve. Where the use of trenching machine is permitted, Contractor shall, before starting work, obtain all available information as to the location of existing underground structures and shall plainly mark their location in advance of the excavation.

Engineer shall have the right at any time to order the discontinuance of the use of trenching machines, travelers or cableways if he decides that their use is unnecessarily and injuriously obstructing traffic, or damaging property, or is not for the best interest of those for whom the Work is being performed. .

The length of trench excavated ahead of the pipe laying, and the length of trench which may remain open at one time shall at all times be subject to the approval of Engineer. It shall at no time be greater than can properly be protected from caving. Whenever Construction Drawings specify a maximum permissible length of excavations., Contractor will comply with such length requirements.

Section 4.22 -Dewatering

All water encountered on excavation works shall be disposed by the Contractor in such manner as to not damage public or private property or create a nuisance or health menace. The Contractor shall furnish, install and operate pumps, pipes, appliances and equipment of sufficient capacity to keep all excavations and accesses free from water until backfilling work is done., unless otherwise authorized by Engineer. Water, if odorless and stable may be discharged into an existing storm drain., channel or street gutter unless desilting the water is necessary .In such case the Contractor shall provide all means necessary for the removal of the silt. All dewatering works shall be executed in accordance with the requirements of the Environmental Quality Board, Corps of Engineers and all concerned agencies.

Section 4.23- Lines and Grades

Engineer will lay out and mark upon the ground a sufficient number of controlling points to enable Contractor to stake out and tie in the necessary construction lines. He will also establish benchmarks in convenient locations near the site of the Work.

All subsidiary lines and grades shall be laid out by Contractor from references shown on the Construction Drawings or furnished by Engineer, subject to be checked by Engineer.

Contractor shall furnish all stakes and markers and shall furnish any common labor assistance that Engineer may require in laying out the Work and establishing benchmarks and in checking and measuring up the Work.

ARTICLE 5. - PROSECUTION OF WORK

Section 5.01 - Construction Plan and Progress Schedule

Contractor shall submit to Engineer, prior to or at the pre-construction conference, a detailed plan of construction with a progress schedule in bar-chart form, satisfactory to Engineer. The construction plan must be written in a very detailed form indicating how the Work will be done. Temporary storage areas to be used to pile excavated materials or selected backfill due to space limitation in the area of Work shall be selected and identified in this plan. Acceptable environmental mitigating procedures must also be incorporated into this plan.

The progress schedule shall show the proposed dates of commencement and completion of the principal items of Work including any milestones specified in the contract documents. The Contractor's progress schedule will be used to check on the progress of the Work. Contractor shall keep Municipality of Caguas informed of the progress of construction of the Project through monthly progress reports indicating progress in the principal items of Work. The reports will include an updated progress schedule in bar-chart form. The revised schedule must show how Contractor will finish the Work within the Contract Time or milestones. These revised schedules shall be subject to acceptance by Engineer. Failure by Contractor to submit the revised schedule shall be considered justification to withhold progress payments.

The revisions to a project schedule shall not result in changing Contract Time or milestones. Proposed adjustments to Contract Time shall be made by Change order or by Written Amendment in accordance with Contract Documents.

Section 5.02 - Contractor's Quality Control Plan

1. Prior to the pre-construction conference, Contractor shall submit a Contractor's Quality Control Plan (CQC Plan) for review and acceptance by Municipality of Caguas. The plan shall identify personnel. Procedures, instructions, records, and forms to be used in controlling the quality in the work.

2. The CQC Plan shall include as a minimum, the following:

- a. A description of the quality control organization, including a chart showing lines of authority.
- b. The name, qualifications, duties responsibilities, and authorities of each person assigned a CQC function.
- c. A copy of the letter to the CQC Manager signed by an authorized official of the firm, which describes the responsibilities and delegates the authorities of the CQC Manager, shall be furnished.
- d. Procedures for scheduling and managing submittal, including those of Subcontractor's offsite fabricators, suppliers, and purchasing agents.
- e. Control testing procedures for each specific test.
- f. Reporting procedures including proposed reporting formats.

GENERAL CONDITIONS

g. A list of the definable features of work. A definable feature of work is a task that is separate and distinct from other tasks and has separate control requirements.

Section 5.03 - Submittal Schedule

Contractor shall submit to Engineer, prior to or at the pre-construction conference, a preliminary schedule of all required submittals, Shop Drawings, samples, engineering technical data for fabricated materials and equipment specifications, and the times for submitting, reviewing and processing documents.

Section 5.04 - Price Breakdown

Contractor shall submit to Engineer, prior to or at the pre-construction conference, a unit price breakdown including quantities and prices of items which when added together equal the total price for lump sum items. This breakdown subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. This unit price breakdown should reflect actual cost of the items and should not be unbalanced. This breakdown will be used by Municipality of Caguas for the sole purpose of monthly payments.

If this contract includes unit price items, as indicated in the Proposal, the unit prices will serve as the basis for progress payment of these unit price items.

Until the price breakdown is approved by Engineer no certification for payment will be processed.

Section 5.05 - Safety Plan

Contractor shall submit to Municipality of Caguas, prior to or at the pre-construction conference, the safety plan for the project for examination and recommendations. This plan shall include the following: 1) safety and health at work; 2) traffic safety; 3) public safety, 4) safety in case of emergency or disaster, like floods and earthquakes.

Section 5.06 - Initial Acceptance of Schedules and Plans

The construction plan and the project schedule specified in Section 5.01 -, the Contractor's quality Control Plan specified Section 5.02 -, the Submittal Schedule specified in Section 5.03 -, the Price Breakdown specified in Section 5.04 -, and the Safety Plan specified in Section 5.05 -, will be reviewed by Engineer and shall be revised as he may require to insure the completion of the Work according to the Contract Documents. If the schedule s are not approved by Engineer" Contractor should promptly resubmit the schedules with the required corrections and adjustments. No certification for payment will be processed until these three schedules are approved.

The progress schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within any specified Milestones and the Contract Times. Such

GENERAL CONDITIONS

acceptance will not impose on Engineer responsibility for the progress schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefore.

Contractor's Submittal Schedule, including Shop Drawings, samples, materials and equipment specifications will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals, including a date schedule for all submittals.

Contractor's price breakdown will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work and complies with requirements herein.

Acceptance of the Contractor's Quality Control plan (CQC plan) is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during construction. Municipality of Caguas reserves the right to require Contractor to make changes in his CQC plan and operations necessary to obtain the quality specified. After acceptance of the CQC plan, Contractor shall notify Municipality of Caguas in writing of any proposed change. Proposed changes are subject to acceptance by Municipality of Caguas.

The safety plan will be acceptable to Engineer if it contains measures for complying with Laws and Regulations related to safety and if it covers the following areas: 1) safety and health at work; 2) traffic safety; 3) public safety, 4) safety on case of disaster (floods, earthquake, etc.).

Section 5.07 - Pre-construction Conference

1. Before Engineer submits a Notice to proceed with the Work, and within twenty (20) Days after the delivery of the Contract Documents to Municipality of Caguas, Engineer, Contractor, and Contractor's Superintendent shall attend a pre-construction conference to establish the administrative and construction procedures that will be followed during the Contract Time.
2. Before the pre-construction conference, Contractor shall submit a Quality Control Plan as specified in the section titled "Quality Control Plan".
3. At the conference the parties will start discussion directed to the understanding of the schedules submitted by Contractor in accordance with the Section 5.0] -, Section 5.02 -, Section 5.03 -, Section 5.04 -, and Section 5.05 -. The parties will also discuss procedures for handling Shop Drawings and other submittals, processing applications for payment, forms to be used by contractor, and maintaining required records, among others.

Section 5.08 - Contract Time

1. All time limits stated in the Contract Documents are of the essence of the contract. The time for completion of this project is **180** calendar days.
2. After the contract has been executed. Contractor will be formally notified by Engineer and/or its representatives to proceed with the Work or services provided in the contract. This Notice to Proceed will stipulate the Date of Commencement of the Work which is the date on which it is expected Contractor will begin construction and from which date Contract Time will be charged. Contract Time starts on the Date of Commencement of Work.
3. Contractor shall commence the Work, or caused the same to be commenced or proceeded with, in accordance with the schedule agreed upon by the parties not later than fifteen (15) Days from the Date of Commencement of the Work as indicated in the Notice to Proceed.
4. If no Notice to Proceed is formally sent to Contractor on or before thirty (30) Days after the effective date of the Agreement then the date of the Date of Commencement of Work will be thirty (30) Days after the effective date of the Agreement.
5. The Contract Time may only be changed by a Change order or by a Written Amendment. Contractor may claim an adjustment in the Contract Time, or Milestones, by a written notice submitted to Engineer.
6. Substantial Completion. When Contractor considers the entire Work ready for its intended use operational or beneficial occupancy, Contractor shall notify Engineer in writing that the entire Work is substantially complete and request the issue of a Certificate of Substantial Completion. Promptly thereafter, Engineer will make an inspection of the Work and will notify Contractor the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefore. If Engineer considers the Work substantially complete, Engineer will prepare and deliver to Contractor a Certificate indicating the date of Substantial Completion, with a list of items to be completed or corrected before final inspection.
7. Final Acceptance. Within ten (10) Days of receipt of written notice of completion from Contractor indicating that the Work is complete, Engineer will make a final inspection and testing, if applicable, and will notify Contractor of all instances in which his Work fails to comply with the Construction Drawings and specifications as well as any defects which the Engineer may discover. Contractor shall immediately rebuild, alter and restore the Work so that it will comply with the Construction Drawings and specifications and remedy any defects at their own cost and to the satisfaction of Engineer. Upon the completion of such alterations or repairs Engineer will issue a Certificate of Final Acceptance for Contractor's Work. The issuance of such Certificate of Final Acceptance by Engineer shall not prevent Municipality of Caguas from recovering damages at any subsequent time for Work to be found actually defective.

Section 5.09 - Liquidated Damages

Contractor and Owner recognize that Owner will suffer financial loss if the Work is not completed within the time(s) specified herein in this Article. The parties also recognize the delays, expense and difficulties involved in proving in a legal proceeding the actual loss suffered by Owner if the Work is not complete on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as penalty), Contractor shall pay owner the amount specified in ibis section.

1. Should Contractor, or the Surety in case of default, rail to reach Substantial Completion of the Work within the time period specified above in the section titled "Contract Time", as modified by a Change order or a Written Amendment, if any, a deduction of the amount stipulated in the table titled "'Schedule of Liquidated Damages'" in this section will be made for each and every calendar day that such Work remains uncompleted after date of Substantial Completion. This amount will be deducted from any money due or that mar become due to Contractor or their Surety under this Contract.

2. Should Contractor, or the Surety in case of default, has reached Substantial Completion but fails to reach Final Acceptance of the Work within the time period specified above in section titled "Final Acceptance", as modified by Change order or Written Amendment, if any, a deduction of the 25% of the amount stipulated in the table titled "Schedule of Liquidated Damages" in this section will be made for each and every calendar day that such Work remains uncompleted after the date of Final Acceptance. This amount will be deducted from any money due or that may become due to Contractor or their Surety under this Contract.

3. The amount stipulated in the table titled "Schedule of Liquidated Damages" in ibis section shall be considered and treated not as a penalty, but as fixed and agreed liquidated damages due Municipality of Caguas by Contractor, or by the Surety in case of default, by reason of public inconvenience, increase m the inspection and administrative cost to Municipality of Caguas, and other items which have caused an expenditure of public funds resulting from Contractor or Its Surety' s failure to complete the work within the time specified m the Agreement or as extended by written authorization from Municipality of Caguas.

4. The Amount agreed due to Municipality of Caguas by the Contractor for liquidated damages, to be retained by Municipality of Caguas from payments due or to become due to Contractor, for each calendar day of such delay is the following:

Schedule Of Liquidated Damages	
Original Contract Price	Amount of Liquidated Damages Per Day
Up \$ 25,000	\$150.00
over \$ 25,000 To \$ 50,000	\$250.00
over \$ 50,000 To \$ 100,000	\$350.00
over \$ 100,000 To \$ 500,000	\$450.00
over \$ 500,000 To \$1,000,000	\$550.00
over \$1,000,000 To \$2,000,000	\$600.00
over \$2,000,000	\$750.00 Plus \$100.00 for each additional million or fraction thereof

GENERAL CONDITIONS

5. Allowing Contractor to continue and finish the Work or any part thereof after the expiration of the Time of Completion shall in no way operate as waiver on the part of Municipality of Caguas of any of its rights under this contract.

6. If the fixed price of the contract increases by Change Orders, Amendments, or any other cause, the top amount imposed for liquidated damages will be the increased cost of the contract and that amount will be effective as soon as the increase is accepted.

7. If the Contract Time is extended after Contractor caused delays make Contractor liable for liquidated damages, the computation of the liquidated damages will not be affected by the extension of Contract Time. Liquidated damages will be calculated using the number of calendar days delayed before the time extension multiplied by the amount indicated above in the Schedule of Liquidated Damages.

8. If the Contract Price decreases, the amount used to calculate liquidated damages in the Schedule of Liquidated Damages will not decrease, and the amount corresponding to the original Contract Price will be maintained for calculating liquidated damages.

Section 5.10 - Subletting of Contract

1. Contractor shall have the right to subcontract specific parts or segments of the Work to any reputable firms selected by Contractor after obtaining Municipality of Caguas express written approval.

2. Any contract executed by Contractor for construction of the Project, or a portion thereof shall incorporate the applicable provisions, standards and requirements of the construction as set forth in the Contract Documents.

3. No assignment or transfer of the Contract, or of any money or moneys due or to become due thereunder, or any part of such Contract or of such moneys will be permitted, until and unless the same shall be approved by Municipality of Caguas.

4. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.

5. Contractor shall require all Subcontractors, suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.

Section 5.11- Prosecution

1. Contractor shall start work on the part of the Project designated in the Contract Documents or set forth in the approved progress schedule and the Work shall be conducted in such a manner and with sufficient materials, equipment and labor as considered necessary to insure its completion in accordance with the Contract Documents.

GENERAL CONDITIONS

2. Construction shall be performed in a good and workmanlike manner that shall comply with Construction Drawings and Specifications. Except as otherwise provided herein, the Work shall be performed at Contractor cost and expense.

3. Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby; however, Contractor shall not be liable to Municipality of Caguas or failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor knew or reasonably should have known thereof.

4. The rate of progress shall be compared with approved progress schedule as the work progresses. If Contractor falls significantly behind the approved schedule, he shall submit a revised schedule for completion of the Work within the Contract Time and modify his operations to provide such additional materials, equipment, labor and others necessary to meet the revised schedule.

5. Engineer may require Contractor to finish a section on which Work is in progress before Work is started on any additional section if the completion of such section is essential to public safety and/or convenience.

Section 5.12 - Delays and Extension of Contract Time

1. No extension of Contract Time will be allowed for any reason except as provided below:

a. If satisfactory fulfillment of the Agreement with authorized extensions and increases requires the performance of Work in greater quantities than those set forth in the proposal so that the total final payment is greater than the original Contract Price, then the Contract Time may be increased if justified as determined by Engineer based on the requirements of the approved progress schedule. For determining an extension to Contract Time, Engineer will use the project schedule reflecting the conditions of the project immediately prior to the point when Engineer recognized the need for an increase in the quantities over those set forth in the proposal.

b. In case of a total suspension of Work ordered by Municipality of Caguas not due to any fault of Contractor, the total number of calendar days during which Work was suspended will be added to the Contract Time if justified based on the requirements of the approved progress schedule as determined by Engineer. For determining an extension to Contract Time, Engineer will use the project schedule reflecting the conditions of the project immediately prior to the suspension of Work.

c. In case of partial suspension ordered by Municipality of Caguas not due to any fault of Contractor, the Contract Time may be extended if justified as determined by Engineer based on requirements of the approved progress schedule. For determining an extension to Contract Time, Engineer will use the project schedule reflecting the conditions of the project immediately prior to the partial suspension of the Work.

GENERAL CONDITIONS

d. In case of delays or interruptions or damages to Work in progress due to any Act of Municipality of Caguas in either its sovereign or contractual capacity; by any separate Contractor employed by Municipality of Caguas or by Force Majeure, Engineer will allow an extension of Contract Time if justified based on the requirements of the approved progress schedule. For determining an extension to Contract Time, Engineer will use the project schedule reflecting the conditions of the project immediately prior to the delays, interruptions or damages to the Work in progress.

e. In case of Change Orders or Written Amendment to the Agreement, their effect on the project schedule will be determined by Engineer based on the requirements of the approved progress schedule. For determining an extension to Contract Time, Engineer will use the project schedule reflecting the conditions of the project immediately prior to the Change order or Written Amendment.

2. Extension to the Contract Time shall not be considered or allowed for the following reasons: 1. Delays due to Contractor, Subcontractors or suppliers.

b. Suspensions of Work ordered by Municipality of Caguas due to the fault of Contractor or his Subcontractors.

c. Unauthorized suspensions of Work by Contractor.

d. Delays or interruptions caused by reasonably predictable weather conditions including rainfall, windstorms, minor floods and other natural phenomena of normal intensity for the season and for the region where the project is located.

e. A Contractor's plea that insufficient time was specified in the Contract Documents.

3. All claims for extension of Contract Time shall be made in writing to Engineer not more than fifteen (15) Days after the occurrence of the delay; otherwise they shall not be considered, except when the cause for delay is directly attributable to the Owner. These claims shall include:

a. The circumstance as may be required by Engineer.

b. The operations alleged to have been delayed.

c. The calendar dates on which the operations were delayed.

d. The number of calendar days by which he is requesting the Substantial Completion Date and Final Acceptance Date to be extended.

Section 5.13 - Extended Overhead

1. Extended overhead includes both job (project) overhead cost and Contractor's Overhead Cost (also known as main-office overhead cost).

2. Contractor will make no claim for Extended Overhead Costs due to time extensions because of Force Majeure events.

GENERAL CONDITIONS

3. No Extended Overhead Cost will be paid to Contractor for unauthorized time extensions.
4. No Extended Overhead Cost shall be paid to Contractor for Work done by Force Account.
5. No Extended Overhead Costs will be paid to Contractor for approved time extensions resulting from Change Orders, from Acts of Municipality of Caguas, or from acts of separate contractors, which increase the original Contract Time stated in the Agreement, by less than or equal to fifty percent (50%) of the original Contract Time.
6. Extended Overhead Cost for time extensions due to Written Amendments to the Agreement shall be included in the sum agreed in the Written Amendment.
7. Contractor agrees that all Extended Overhead Costs for approved time extensions over fifty percent (50%) of the original Contract Time, resulting from Change Orders, from Acts of Municipality of Caguas from acts of separate contractor shall be paid at the following daily rate:

$$\text{Daily Overhead Rate} = \frac{3\% \times \text{Original Contract Price}}{1.5 \times \text{Original Contract Time in Calendar Days}}$$

The amount to be paid to Contractor for Extended Overhead Cost =

Daily Overhead Rate x [Time extensions in calendar days - (0.5 x Contract Time in calendar days)]

Section 5.14 - Force Majeure

If a Force Majeure event occurs which causes delays or a reasonable likelihood of delay in the achievement of the requirements of this Contract, Contractor shall immediately notify Municipality of Caguas, orally, and shall, within twenty four (24) hours, notify Municipality of Caguas in writing of the anticipated length and cause of delay, the measures taken or to be taken to minimize the delay, and the timetable by which Contractor intend to implement these measures.

The burden of proving that an event is beyond the control of Contractor shall remain on Contractor, within the 24 hours period mentioned before. A Force Majeure event shall excuse the timely performance by Contractor of any obligation indicated in the Contract Documents" but only to the extent indicated in Section 5.12 - Delays and Extensions of Contract Time, of the General Conditions, paragraph 1 d.

Section 5.15 - As-Built Drawings

Contractor shall maintain at his own expense two sets of Drawings, one of which must be in reproducible form in mylar paper, for the purpose of recording as-built conditions.

It shall be the responsibility of Contractor to mark each sheet of the non-reproducible set of drawings in red pencil and to record thereon, in a neat and current form, any and all accepted

GENERAL CONDITIONS

field changes and conditions as they may occur. A complete file of accepted field sketches, diagrams and other changes as may become necessary during Work progress shall also be maintained and attached to the non-reproducible set of Drawings. Prior to Final Acceptance, Contractor shall submit to Municipality of Caguas each sheet of the non-reproducible drawings with the accepted field changes and conditions, and an accepted field sketches and diagrams.

Upon approval by the Municipality of Caguas, Contractor shall record all field changes and conditions on the reproducible set of Drawings in mylar paper, and shall submit them to Municipality of Caguas. The Contractors construction Superintendent shall sign and certify each sheet as reflecting as-built conditions.

Section 5.16 - Photographs

Contractor shall take photographs along the route and/or the site of the project, prior to the commencement of the Work, and submit four copies of each photograph to Engineer.

During the execution of the Work, Contractor shall furnish Engineer, un-mounted photographs, 8" x 10", in quadruplicate every thirty (30) calendar days of those parts of the Work of sufficient importance to deserve it. As required by Engineer, a competent photographer must take the photographs from proper angles, to include as much of the Work done during the previous thirty (30) as possible. The title of the project" the part of it shown in the photograph, the town and the date shall be copied in printed letter, at the bottom of each copy.

Section 5.17- Records

Contractor shall keep separate maintenance records and books of account relating to Contractor's performance of their obligations under this Contract. Also, Contractor shall keep all records and reports required by applicable permits. All such record s and books of account shall be opened to audit and review by Municipality of Caguas.

Section 5.18 - Termination of Contractor's Responsibility

The Agreement shall be considered complete when all Work covered by the same has been completed on the part of Con tractor, when all said Work has been approved b Municipality of Caguas the final inspection made, the final liquidation examined and approved by the Operations Director, or his designee, and the final payment made and accepted by Con tractor. The date of final payment shall constitute the date of final completion and settlement and Con tractor will then be released from further obligation except for the warranties and guarantees required as indicated in Contract Documents, and except as provided in Article 10. - Legal Relations and Responsibility.

Section 5.19 - Voluntary Termination by Municipality of Caguas

This Agreement may be terminated by Municipality of Caguas at its convenience or without cause, upon thirty (30) Days prior written notice to Contractor, without any further payment except all payments due to Contractor up to the date of termination.

Section 5.20 - Contractor's Default

The occurrence of any of the following events, unless attributable to Force Majeure shall constitute a default by Contractor:

1. A breach or default by Contractor in the performance of its obligation under this Contract which breach or material default arises out of the fault, negligence or delay of Contractor and has not been cured within the period set forth hereof or action towards its cure has not been taken within the applicable grace period, if any;
2. The Project is abandoned by Contractor before all of the obligations of Contractor hereunder have been satisfied;
3. The failure of Contractor to pay the charges, fees and expenses of any and all of its Subcontractors and vendors providing him services or goods in connection with the services under this Contract; charges, fees and expenses which are included in Contractor's invoices to Municipality of Caguas.
4. The issuance by Contractor of an invoice for Work that has been already paid by Municipality of Caguas .
5. Contractor does not commence substantial work in the Project sixty (60) days after the Notice to Proceed. Substantial work shall be defined as substantial compliance with the approved construction plan and progress schedule submitted by Contractor as judged by Engineer. If the plan and schedule have not been submitted by the Contractor or have not been approved by Municipality of Caguas, then "substantial work" shall be judged by Municipality of Caguas based on Contractor's performance since the Date of Commencement of Work.

Section 5.21 - Municipality 's Remedies under Contractor's Default

Upon the occurrence and during the continuance of any default by Contractor, if such default is capable of being cured, and has, not been cured within the period set forth in Section 5.24 - Right to Cure Under Default, hereof, Municipality of Caguas may, by written notice to Contractor, declare this Contract to be in default. At any time after declaring this Contract to be in default. Municipality of Caguas may, in its sole discretion, do any one or more of the following:

1. Municipality of Caguas may withhold Contractor's monthly payment under this Contract until such time as the default is cured and/or may pay any portion due directly to whom such payment is due and shall thereafter be relieved of further liability to Contractor for that portion of Contractor's fee pertaining to such payment.
2. Grant to Contractor an additional period of time to cure the default;
3. Municipality of Caguas may contract with a third party to provide the services to be rendered by Contractor under this Contract without making additional payments to Contractor;

GENERAL CONDITIONS

4. In the event of any material default, terminate this Contract upon notice in writing to both, the insurance and/or bonding company, and to Contractor, and enter upon and take possession of the Project.

5. In the event that Municipality of Caguas enters and takes possession of the Project, the Project Manager and the Assistant Project Manager must remain in the Project for a period of ninety (90) Days in order to facilitate Municipality of Caguas an effective and efficient translation of the operation, maintenance and management efforts performed by Contractor.

6. In the event the Contract is terminated by Municipality of Caguas pursuant to any of the applicable provisions of this Article, Contractor shall not receive additional payments of any kind or form, except for the payment of outstanding invoices owed to Contractor, for services provided in accordance with the provisions of the Contract up to the termination date.

7. Municipality of Caguas may demand from Contractor, and Contractor shall reimburse Municipality of Caguas for all of the expenses incurred by Municipality of Caguas as a result of the default, including damages and expenses incurred before expiration of the period for curing the default set forth in Section 5.24 - Right to Cure under Default. The foregoing remedies shall be in addition to, and not in limitation of, all remedies available under controlling law specified in Section 2.04 - Governing Law.

Section 5.22 – Municipality’s Default

The occurrence of the following events, unless attributable to Force Majeure shall constitute a default by Municipality of Caguas to wit, a breach or default by Municipality of Caguas in the performance of any material obligation under this Contract which breach or default arises out of the fault, negligence, omission or delay of Municipality of Caguas and has not been cured or action towards its cure has not been taken within the period set forth in Section 5.24 - Right to Cure Under Default, hereof, or within an additional period of time provided to cure the default.

Section 5.23 - Contractor's Remedies Under Municipality’s Default

Upon the occurrence and during the continuance of any default by Municipality of Caguas if such default is capable of being cured and has not been cured within the period set forth in Section 5.24 - Right to Cure under Default, Contractor by written notice to Municipality of Caguas may declare this Contract to be in default. At any time after declaring the Contract to be in default, contractor shall do anyone or more of the following:

1. Grant an additional period of time to cure in writing default;
2. Continue to operate the Project in accordance with the terms of this Contract pending the implementation and completion of an appropriate remedy as provided herein, or in the absence thereof, as available at law or in equity based on any applicable legal theory;

Section 5.24 - Right to Cure under Default

Notwithstanding any other provisions herein, neither party shall be entitled to terminate the Contract or any other remedy, as a result of the occurrence of a Default, which is capable of being cured, unless it has:

1. Given prior written notice to the defaulting party specifying such event of default;
2. Specify in such notice that the defaulting party has a period of ten (10) Days from such notice to cure such default, unless the reason for the default is caused by a violation on the part of Contractor of any environmental law, permit, rule and/or regulation and such violation states the time that Contractor has to be in compliance thereof; and
3. Within such ten (10) Days period, or within the period for compliance that results from a violation of any law, rule or regulation, the defaulting party has not cured or taken action to cure said default.

Section 5.25 - No release of obligations due to default

Anything herein to the contrary notwithstanding, the exercise by a non-defaulting party of the remedies indicated in the Article titled "Prosecution of Work" shall not release the defaulting party from any of its obligations hereunder to the other party arising from or related to its failure to perform or observe any of the covenant terms and conditions of this Contract.

Section 5.26 - Emergencies

In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, special instructions or Change order will be issued.

ARTICLE 6. -SUBMITTALS

The Contractor shall make submittals as required by the specifications. The Engineer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections of the technical specifications. All units, including length, area, volume, time, mass, and others, used on all submittals shall be the same as those used in the Construction Drawings. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples, O&M manuals (including parts list); certifications; warranties; and other such required submittals.

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Adequate time, a minimum of 30 calendar days exclusive of mailing time, shall be allowed and shown on the submittal schedule for review and approval.

Contractor shall carefully control his procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved Submittal Schedule.

ARTICLE 7. -ENVIRONMENTAL PROTECTION AND RESTORATION

Section 7.01 -General

Environmental Protection and Restoration shall include those environmentally protective measures, procedures, and schedules, including restorative measures, which must be implemented during the construction in order to minimize potentially adverse impacts on the environment due to construction of the project.

In performing the specified Work, Contractor shall comply, at his own expense, with all regulations of the Puerto Rico Environmental Quality Board, Department of Natural and Environmental Resources and any other Federal, Puerto Rico or municipal agencies or municipalities having jurisdiction. Contractor shall submit, at his own expense, all required engineering certifications, plans, data, forms, and fees required by these agencies or municipalities.

Section 7.02 -Construction Procedures

1. In general, the construction procedures outlined herein shall be implemented to ensure minimum damage to the environment during construction.
2. All environmental guidelines established by the Puerto Rico Environmental Quality Board will be strictly enforced, and all construction procedures will meet environmental objectives and constraints specified herein, or in permits or directed by Engineer to protect natural resources of the area.
3. Engineer will not accept any construction method that violates any rules, regulations, guidelines or procedures established by Federal, Puerto Rico or municipal agencies having jurisdiction over the environmental effects of construction.

Section 7.03 -Prohibited Construction Procedures

The following construction procedures are prohibited;

1. Dumping of spoil material into any stream corridor, any wetlands, any surface or navigable waters or at locations not approved by Engineer.
2. Indiscriminate, arbitrary or capricious operation of equipment in any stream corridors, any wetland or any surface water;
3. Pumping of silt-laden water from trenches or other excavations into any surface waters. any stream corridor, or any wetland;
4. Damaging vegetation adjacent to or outside the area of work shown on the contract Construction Drawings. All construction operations must be confined within specified areas.

GENERAL CONDITIONS

5. Disposal of trees, brush and other debris in any stream corridor, any wetlands, and any surface water or at unspecified locations, except as approved by Engineer;
6. Permanent or unspecified alteration of the flow line of a stream or any water course. Open burning of construction project debris;
8. Disposal of tree trunks and roots, vegetation and sewer project debris in excavations;
9. Methods of dust control other than sweeping and wetting down. No chemicals are to be used.
10. Operation of machinery without adequate mufflers.

Section 7.04 -Access and Temporary Roads

1. The Contractor shall acquire at his own expense all temporary right of way necessary to perform his work..
2. Whenever possible, access and temporary roads shall be located and constructed to avoid critical environmental areas. Provisions will be made to regulate drainage, avoid erosion and minimize damage to vegetation.
3. Frequent fording of streams shall be avoided and wherever crossing cannot be avoided, temporary bridges shall be constructed.
4. After construction ends, all temporary roads will be returned to their original conditions.

Section 7.05 -Storage of Materials and Equipment

Logistical structures and storage areas shall not be located in water logged areas or marshlands. Where areas must be cleared for storage of materials or temporary structures. provisions shall be made for regulating drainage and controlling erosion.

Section 7.06 -Site and Access Clearing

1. Contractor shall confine all clearing operations to the Project's right of way, to that portion absolutely necessary and essential for construction and installation of the work.
2. In the vicinity of environmentally critical areas, the area cleared or otherwise used must be minimized to the fullest possible extent. All cleaning schedule shall be arranged to provide a minimum practical exposure of soils, in order to prevent erosion.
3. Before any excavation is begun, the topsoil shall be stripped and stockpiled separately from the rest of the excavated material. The topsoil shall be kept clean and free of objectionable foreign matter. and be replaced upon completion of the Work. Contractor shall furnish and spread topsoil wherever specified by Engineer.

Section 7.07 -Stockpiling Backfill Material

1. When excavating, Contractor shall separate suitable backfill material from unsuitable material for use as backfill.
2. In critical environmental areas, specially areas adjacent to stream corridors or steep slopes or marshlands, special attention shall be given to selecting stockpile areas and handling backfill in a manner that will minimize environmental damage.

Section 7.08 -Protection of Trees and Shrubs

1. Contractor shall make every effort not to damage common native trees and shrubs, other than those he is permitted to cut. No trees shall be cut without the permission of Engineer or other designated authority Contractor shall be aware and comply with applicable regulations from ARPE (Administracion de Reglamentos y Permisos) and other agencies.
2. Trees and shrubs to be preserved shall be marked by Contractor as directed by Engineer. Contractor shall take sufficient precaution to avoid injury to these trees by use of boards, burlap padding or other material.

Section 7.09 -Stream Crossing, Erosion, and Sediment Control

1. Disturbances of streambeds shall be kept to a minimum and the beds shall be returned as nearly as possible to its original condition. When crossing streams, Contractor shall prevent damage to natural vegetation. A buffer zone shall be maintained between the stream and the work areas along that stream.
2. Contractor shall use the necessary methods to minimize erosion, surface water crossing and drainage ways shall be protected by sandbagging, mulch, or the use of the jute or excelsior blankets. as conditions require. Methods of preventing erosion shall also include construction of berms, dikes, and other temporary and permanent structures. Erosion control methods shall be employed from site -clearing through the time of final restoration.
3. Care shall be taken to prevent or reduce to a minimum any pollution of streams from debris, sediment, or other material or damage from the operation of equipment and materials in stream corridors. Dikes or cofferdams required to facilitate construction in streams shall be erected so that stream flow will not be reduced excessively. Such dikes or cofferdams shall be erected of materials that will not contribute significantly to the turbidity or siltation of the stream.
4. Water used for working or processing, resulting from dewatering operations, or containing oils or sediments that will reduce the quality of the water in the stream, shall not be directly discharged to the stream. Such waters shall be diverted through a settling basin or filter before being discharged into the stream.
- 5: When constructing through wooded areas in the proximity of streams. the area disturbed shall be minimized in order to avoid undue damage.

Section 7.10- Construction in Vicinity of Slopes

Contractor shall provide special treatment in construction areas where slopes exceed 15 percent. Disturbance of vegetation shall be kept to a minimum to maintain stability and additional methods involving the use of water diversion berms, temporary stilling basin or jute or excavation blankets shall be employed as necessary to prevent erosion and siltation.

Section 7.11- Environmental Protection During Temporary Work Stoppages

1. In the event of any temporary stoppage; the Contractor shall take steps to prevent any temporary or permanent environmental damage to the area undergoing construction.
2. To prevent siltation of streams, Contractor shall provide for proper drainage and surface runoff regulation.
3. Disturbed areas shall be provided with a temporary cover such as mulch, jute, fibrous netting, or any other suitable material that will prevent erosion. No excavations shall be left open for protracted periods of time.

Section 7.12- Protection of Wetlands

Portions of the work that passes through the fringes of wetlands require special attention by Contractor. Contractor shall take precautions to maintain the integrity of wetlands including the following:

1. Width of the trenches shall be kept to a practicable minimum.
2. No spoil-excavated material shall be stockpiled on the side of the trenches.
3. No spoil-excavated material shall be dumped in the wetlands.

Section 7.13 -Erosion and Silt Control.

1. Surface water and water pumped from the dewatering systems shall be disposed of on the predetermined disposal ditches in such a way that will not cause erosion or damage to cut slopes. If the water is laden with silt, it shall be retained in holding basins before disposal to avoid the siltation.
2. Disposal of water from the dewatering and drainage system shall be arranged in such a manner as to avoid the ponding of water, unsightly conditions, hazards to public or damage to the environment.

Section 7.14- Dust and Noise Control

1. Contractor shall take every possible precaution to dampen the effect of noise and dust generated by the construction activity.
2. In residential areas, the dust shall be controlled by spraying water on the excavated areas; hauling away the spoil excavated soil not required for backfilling, using enclosed dump trucks for hauling the excavated material, covering the stored loose soil with polyethylene sheets to avoid the blowing by wind; putting temporary paving on the backfilled trenches to restrict spreading of dirt or by other methods approved by Engineer.
3. Noise will be minimized by selecting and using such construction equipment and methods that will generate the least amount of noise.
4. Contractor's vehicles and equipment shall be as to minimize noise to the greatest degree practicable. Noise levels shall conform to the latest OSHA standards and regulations of the Puerto Rico Environmental Quality Board. In no case will noise levels be permitted which interfere with the work of Municipality of Caguas or of others.

Section 7.15 -Restoration Procedures

In general, immediately after backfilling excavations, disturbed areas shall be prepared for restoration. Erosion control measures shall be used and final restoration undertaken as soon as an area is no longer needed for construction, stockpile or access.

All areas shall be restored to at least as good conditions as existed prior to construction activities. Special care shall be taken to eliminate depressions that could serve as mosquito pools.

In addition, Contractor shall be governed by the following special considerations for the restoration of disturbed areas:

1. Where select material will be used to backfill in areas where siltation may occur Contractor shall immediately implement a method to prevent erosion of this material. Acceptance of this method does not release Contractor from responsibility if erosion occurs. Any damage incurred by erosion of stockpiles shall be rectified, and erosion controls improved at Contractor's expense.
2. Excavated material shall be deposited on the upland side of the trench and backfilling shall proceed behind pipe Installations as rapidly as practicable. Excess excavation material shall be removed from the area each Day and disposed of in areas approved by Engineer.
3. As far as it is practicable. Contractor shall limit the operation of equipment on the streamside of the trench. Existing ground vegetation in these areas shall be left undisturbed to maintain a buffer zone between the construction operation and the watercourse. At the direction of the Engineer, hay bales shall be stacked along the stream banks in critical areas.

GENERAL CONDITIONS

4. No excavated material will be permitted to obstruct the flow of a stream or drainage ditch or to stand in the flood plain. Contractor shall use a method of excavation that will assure the removal of all excavated material from approved stockpile areas by the termination of each Workday.
5. During any dewatering operation, the discharge shall be as far from the stream as practical to allow settling of silt before backflow reaches the streambed. Discharge pipe or hose shall be moved often enough or, as directed by Engineer, to prevent silt buildup, erosion or damage to existing vegetation. Silt-free water may be discharged into the stream as directed by Engineer. When hydrogen sulfide is present, adequate means of reducing the hydrogen sulfide content of the discharge by methods of aeration shall be employed.
6. Where continual siltation occurs beyond initial start up, settlement basins shall be constructed at the direction of the Engineer.
7. Contractor shall arrange for disposal of all unsuitable, excess suitable material and trash resulting from excavating.

Section 7.16- Adverse Solid Ground and Groundwater Conditions

In construction areas where local soil conditions are adverse, containing relatively large amount of clayey material or having an unsuitable pH or other characteristics, Contractor shall provide a covering of topsoil, as specified by Engineer, sufficient to allow grass to become established.

Section 7.17- Slopes Restoration and Streams Banks

1. To prevent erosion, slopes along rights-of-way, especially those exceeding 15 percent and those in the vicinity of surface water crossings or drainage ways, shall be restored and protected following completion of construction.
2. Where determined necessary by Engineer, planting of grass, shrubs, or trees, rip-rapping, sodding, sandbagging or the use of jute, mulch, excelsior blankets or other procedures shall be followed.

Section 7.18 -Time of Restoration

Environmental restoration of all areas shall begin within seven (7) calendar days after backfilling, unless otherwise specified by Engineer, and shall be completed within thirty (30) calendar days from the time of backfill, unless otherwise specified by Engineer.

Section 7.19 -Restoration Materials

Materials used in the restoration work shall conform to the requirements of the specification contained in the Contract Documents.

Section 7.20 -Pest and Rodent Control

1. Provide rodent and pest control as necessary to prevent infestation of construction or storage areas.
2. Employ methods and use materials, which will not adversely affect conditions at the site or on adjoining properties.

Section 7.21 -Mitigation Measures

The following mitigation measures are required to be implemented by the Contractor in order to avoid and/or mitigate the identified adverse impacts within this assessment for project of reference.

1. State Historic Preservation Office. If during construction any cultural resource is discovered, Contractor shall contact Municipality of Caguas and SHPO immediately for appropriate action according with Regulation 36 CFR, Part 800.11
2. US Department of Interior -Fish and Wildlife Services. During construction. if modifications are made to the project or additional information becomes available concerning listed species, a consultation should be made to the U.S. Fish and Wildlife Service.
3. Other Mitigation Measures.
 - A. All loaded vehicles used to transport construction materials, debris and/or soils for any construction operation shall be covered with a "toldo" while in movement to avoid dispersing of material particles into the area.
 - C. Necessary measures shall be taken to avoid substances such as oils, fuels or other chemical substances be washed by runoff waters and deposited into storm sewer system or other body of water.
 - D. If there is to result any discharge of runoff waters to any body of water resulting from any construction activity the US EPA shall be consulted to determine if the discharge will require a "NPDES" Permit in accordance with the Federal Code Regulation No. 40. Section 122.26 (b) (14) (x).
 - E. If septic tanks are going to be constructed for use during construction stage, the Program for Underground Injection Control of the PR Environmental Quality Board should be consulted.
 - F. The necessary noise control measures shall be taken during construction phase of this project to avoid that nearby residents be exposed to noise levels that could exceed the limits established by the "Reglamento para el Control de la Contaminación para Ruido".

GENERAL CONDITIONS

G. If required to perform the Work, Contractor shall obtain the permit from the Department of Natural Resources for incidental earth movement "Movimiento Incidental de la Corteza Terrestre".

H. Any damages to structures and facilities caused as result of the construction of the project shall be fixed as their original form.

I. Access and use of public highways shall be coordinated with the PR Department of Transportation and/or PR Highway Authority prior to and during construction stage.

J. Contractor shall comply with all regulations regarding seeding, cutting of trees and reforestation including regulations from the Administración de Reglamentos y Permisos (ARPE) and the Department of Natural and Environmental Resources.

ARTICLE 8. -CONTRACTOR'S PERSONNEL

Section 8.01- Superintendent

At all times during the progress of the Work, Contractor shall have on the project a competent Superintendent, who shall be a licensed engineer authorized to practice the profession in Puerto Rico with experience in the type of Work of the Project. Copies of all Construction Drawings and of the specifications shall be kept by the Superintendent at the site of the Work, ready for use at any time. Superintendent shall not be replaced without written notice to Engineer except under extraordinary circumstances. The Superintendent will be Contractor's representative at the site and shall have authority to act on behalf of Contractor. All Communications given to or received from Superintendent shall be binding on Contractor.

Section 8.02 - Skills and Conduct Required

All personnel employed in the Work shall have sufficient skill and experience to properly perform the Work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in the performance of such work and in the operation of the equipment and tools to perform it properly and satisfactory.

The Contractor shall, upon demand from Engineer, immediately discharge or remove any Superintendent, foreman or workman whom Engineer may deem incompetent or is disrespectful, intemperate, disorderly or otherwise objectionable. Likewise, Contractor at the written request from Engineer, shall make his Subcontractors or suppliers discharge or remove from the job employees that Engineer may deem incompetent, disrespectful, intemperate, disorderly or otherwise objectionable.

Section 8.03 -Qualifications of Labor

No person under the age of eighteen years or person whose age or physical conditions is such as to make his employment dangerous to his health or safety or to the health or safety of others shall be employed on the Work; provided, that this shall not operate against the employment of physically handicapped persons, otherwise employable, where such persons may be safely assigned to work which they can ably perform. No person currently serving sentence in a penal or correctional institution and no inmate of an institution for mental defects shall be employed on the project under this contract.

Section 8.04 -Affirmative Action Plan to Relieve Unemployment of Young Persons

According to Executive Order of the Governor of Puerto Rico No. 4385 of 1985, dated January 3., 1985; during the period of fulfillment of this contract, Contractor agrees to the following:

1. "The Contract shall not discriminate against any job candidate because of his youth. The Contractor shall implement an affirmative action plan to ensure that young employees and young job candidates are given equal job opportunities as well as the terms and conditions of the same. In this contract, "Youth" means any age between 16 and 29 years of age, inclusive. "Young

GENERAL CONDITIONS

person" means "belonging to youth". Said affirmative action shall include, not to be considered limited, the following: job matters, promotion, degrading, and transfer; contracting of employees and announcements concerning said contracts; job termination; wages and other remunerating forms and training or learning selection. The Contractor shall post notices, provided by the contracting official, stating the requirements of this clause on conspicuous places and accessible to employees and job aspirants.

2. "On every announcement or application for employees posted by the Contractor, or in his name, the Contractor shall state that every young qualified candidate shall be considered for the job.

3. "The Contractor shall send each labor syndicate or worker's representative with whom he has a collective bargaining agreement or other contract or agreement, a notice, provided by the agency contracting official, informing the syndicate or representative of the contractor's obligations under Article 202 of Executive Order 4385 of January 3, 1985, and shall post copies to the Notice on conspicuous places and accessible to employees and job aspirants.

4. "The Contractor shall fulfill all requirements of the Second Part of Executive Order No 4385 of January 3, 1985., and with all pertinent rules, regulations, and orders issued by the Secretary of Labor by virtue of said Executive Order, and shall permit access to its books, accounts and registers by the Contracting agency and Secretary of Labor in order to determine whether the contractor has fulfilled said rules., regulations and orders.

5. "If the contractor does not comply with Paragraphs 1 and 5 or with any of said rules, regulations or orders, this contract may be cancelled, or suspended completely or partially and the Contractor may be held incapable of contracting with the Government in the future in accordance with procedures authorized in Executive Order 4385 of January 3, 1985, and other sanctions may be imposed and other resources recurred to in accordance with said Executive Order, or with rules, regulations or orders issued by the Secretary of Labor or otherwise in accordance with the provision of the law.

6. "The Contractor shall include paragraphs 1 through 6 in every sub-contract or purchase order that is not exempt according to rules, regulations or orders of the Secretary of Labor issued in compliance with Article 204 of Executive Order No. 4385 of January 3, 1985, in order that said stipulations compel each sub-contractor or salesman. The Contractor shall act with respect to any sub-contract or purchase order, that is required by the Secretary of Labor to ensure fulfillment of the stipulations of said paragraphs, including sanctions due to non-fulfillment; Whenever; if the contractor is in, or is threatened with lawsuit against a sub-contractor or salesman due to such a requirement, the Contractor may request the Government of Puerto Rico to enter in said lawsuit to protect the interest of Puerto Rico".

Section 8.05- Minimum Wage Rates and Working Conditions

Minimum rates of pay shall not be less than those established in accordance with the applicable provisions of Puerto Rico and Federal minimum wages Laws and Regulations. Working hours, overtime pay, working conditions, and other regulations established pursuant to these Laws and Regulations shall be adhered to by Contractor. Contractor should contact both, the Federal and Puerto Rico Labor Departments for the latest requirements and information as to prevailing regulations, requirements, minimum wages, and other working conditions.

Contractor shall post at appropriate conspicuous places at the site of the project a schedule showing all determined minimum wage rates for the various classes of laborers and skilled labor to be engaged in Work on the Project and all deductions, if any, required by law to be made from unpaid wages actually earned by laborers and skilled laborers so engaged.

Contractor shall, at all times, pay at least the minimum wages prescribed by Laws and Regulations. Contractor shall pay during the life of the Contract, at his own expense, any salary increase due to increases in the minimum wage which may be put in effect by Laws and Regulations.

Section 8.06- Working Hours

Except as otherwise required for the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the site shall be performed during regular working hours, and Contractor will not permit overtime work or the performance of Work on Saturday, Sunday, or any legal holiday without Municipality of Caguas written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

The time limit for the execution of this Contract has been figured out on the basis that work on the premises will be carried out only during regular working week of eight (8) hours working day nor more than forty four (44) hours per week, and taking into consideration that all Sundays and legal holidays included within the said time limit. No work shall be performed on extra hours, Sundays or holidays, except in cases of emergency, or unless prior written permission has been granted by the Engineer. Work that is not expected to be completed in the course of the working day should not be started.

GENERAL CONDITIONS

It is understood that the legal holidays for this contract the following:

- New Year's Day
- Three King's Day
- Good Friday Labor Day
- U.S. Independency Day
- Commonwealth of Puerto Rico
- Constitution Day
- Thanksgiving Day
- Christmas Day

Section 8.07 -Payment of Employees

Contractor and each of his Subcontractors shall pay each of his employees engaged in Work on the project under this contract in full, in cash and not less often than once each week, less legally required deductions, provided, that when circumstances render payment in cash unfeasible or impracticable, payment by check may be effected upon consideration that funds are made available in a local bank and checks may be cashed without charge, trade requirements or inconveniences to the worker. Contractor is advised to be familiar with the Anti-kickback Regulations (29 CFR. Part 3) and be sure that all payroll deductions, if any, are those authorized by these regulations.

Section 8.08- Professional Licenses and Association Membership

All employees and personnel of Contractor, such as, but not limited to professional engineers, architects, surveyors, supervisors, craft, labor and other personnel necessary and required by Contractor to comply with the terms and obligations under this Contract, must be duly licensed, if so required by laws of Puerto Rico, and be a member in good standing of any association whose enacting law makes membership mandatory for the practice of said profession and/or craft in the Puerto Rico.

ARTICLE 9 -MATERIALS AND EQUIPMENT

Section 9.01- General Requirement

All materials and workmanship, except where otherwise specifically mentioned, shall be the best of their several kinds and subject to the approval of Engineer. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents.

Section 9.02 -Materials Manufactured in Puerto Rico

Act Number 109 of July 12, 1985 establishes the mandatory use of construction materials manufactured in Puerto Rico in all construction, reconstruction, repair, conservation and improvement projects done with public funds. Act 109 of July 12, 1985 also establishes penalties for non-compliance with this requirement. Contractor shall comply with Act 109 of July 12, 1985 when applicable.

Section 9.03 -Equipment with Diesel and Gasoline Engines

Once the equipment is installed, the start-up is completed and the equipment is accepted by Municipality of Caguas the Contractor shall fill to full capacity all fuel storage tanks and all fluids used by the engine. This requirement applies to all diesel and gasoline engines installed in the project including emergency power generators and others.

Section 9.04 -Inspections

1. All materials and equipment to be installed in the Project are subject to inspection, sampling, testing, re-testing and rejection by Engineer prior to acceptance of the Work.
2. Any Work in which untested and unaccepted materials and/or equipment are used without the approval of Engineer will be performed at Contractor's risk. Materials or equipment found to be unacceptable will not be paid for and, if directed by Engineer, shall be removed at Contractor's expense.
3. Unless otherwise indicated, the sampling of materials for testing will be performed by Engineer, his authorized representatives or by the Contractor under Engineer's supervision. Sampling by Contractor will be done when specified or by written permission from Engineer at Contractor's expense. When sampling is done by Contractor, the samples shall be taken using approved Contractor furnished sampling devices, under the supervision of Engineer, and at such times or intervals specified or as directed by Engineer.
4. When requested by Engineer, Contractor shall be responsible to require from the manufacturers or to obtain from the suppliers of raw material the issuance of a certification of materials. The certification shall include the source of the materials, the fulfillment of the specifications, and the reference to the project to which it applies.

GENERAL CONDITIONS

5. When a certification of a material or assembly is required by the specifications, each lot or such materials or assemblies delivered to the Work shall be accompanied by Certificate of Compliance in which the lot is clearly identified. .
6. Commercially manufactured products shall be accompanied by certificates initiated and signed by the manufacturer and, when required, supported by tests performed by the manufacturer.
8. Materials or assemblies used on the basis of Certificates of Compliance may be sampled and tested at any time and if found not to be in conformity with contract requirements will be subject to rejection whether in place or not. Removal of such rejected materials will be at Contractor's expense.

Section 9.05- Warranties and Guarantees

All warranties and guarantees specially called for by the Specifications shall expressly run to the benefit of Municipality of Caguas. If required by Engineer, Contractor shall furnish satisfactory evidence, including reports of required tests, as to the source, kind and quality of materials and equipment. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with the instructions of the applicable supplier, except as otherwise may be provided in the Contract Documents.

Section 9.06 -Storage

1. All materials, supplies, machinery or equipment, which may be damaged by exposure to the weather, shall be suitably protected to the satisfaction of Engineer. Contractor shall provide suitable weatherproof facilities, satisfactory to Engineer for the storage of Portland cement. Stored materials, even though approved before storage, may again be inspected at any time prior to or during their incorporation in the Work. Stored materials shall be located so as to facilitate their prompt inspection.
2. When authorized by Engineer, portions of the project site or the right-of-way may be used for storage purposes and for placing of Contractor's plant and equipment provided that they are located so as to not constitute a hazard to the public.
3. All temporary storage areas and plant sites shall be restored to their original condition by Contractor, at his expense in a manner acceptable to Engineer.

Section 9.07 -Contractor's Responsibility for Materials and Equipment

1. Contractor shall assume full responsibility for all supplies, materials and equipment required by him for the Work he contracts to do, whether furnished by him or by other parties, until the same shall have been installed and finally tested and accepted by Engineer. Contractor should, therefore, insure such property against loss or damage while stored at the site of the Work if he desires to secure protection against loss.

2. Contractor agrees to furnish Municipality of Caguas when requested, all documents pertaining to the materials and equipment used in the Work, such as invoices, bills of lading, cart check, and others.

Section 9.08 -Materials to be Furnished by Municipality

Contractor shall furnish all materials required to complete the Work, except those specified to be furnished by Municipality of Caguas. The handling and placing of these and all materials required to complete the Work shall be at contractor's expense.

Section 9.09- "Or Equal" Clause

Whenever a material, article or piece of equipment is identified on the Construction Drawings or in the specifications by reference to manufacturer's or vendors' names, trade-names, catalogue numbers, etc., it is intended merely to establish a standard. Some specifications include the phrase "or equal" or the phrase "or approved equal" indicating such situation. Any materials, article" or equipment of other manufacturers and vendors which will perform adequately the duties imposed by the general design will be considered equally acceptable provided the material, article, or equipment so proposed, is in the opinion of Engineer, of equal substance and function. Such material, article or equipment shall not be purchased or installed by Contractor without Engineer's written approval.

In addition, Contractor and the manufacturer's representative or vendor shall comply with the requirements of Section 9.11 -Equipment to be Furnished and/or Installed,' and Section 9.12 - Description of Equipment to be Submitted, of the General Conditions.

Section 9.10- Substitute Items

1. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "Or Equal" item under Section 9.09- "Or Equal Clause" above, it will be considered a proposed substitute item.

2. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefore. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.

3. The procedure for review by Engineer will be set forth below and as Engineer may decide is appropriate under the circumstances.

4. Contractor shall first make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application shall certify that the proposed substitute item will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified" and be suited to the same use as that specified. The application will state the extent, if any, to which the use of the

GENERAL CONDITIONS

proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time, whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents" or in the provisions of any other direct contract with Owner for work on the Project. to adapt the design to the proposed substitute item and whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute item from that specified will be identified in the application, and available engineering, sales, maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute items, including cost of redesign and claims of other contractors affected by any resulting change, all of which will be considered by Engineer in evaluating the proposed substitute item. Engineer may require Contractor to furnish additional data about the proposed substitute item.

5. Engineer will be allowed reasonable time within which to evaluate each proposal or submittal of substitute item. Engineer will be the sole judge of acceptability. No "Or Equal" or substitute will be ordered, installed or utilized until Engineer review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "Or Equal." Engineer will advise Contractor in writing of any negative determination.

6. Engineer will record the time required by Engineer and Engineers Consultant's in evaluating the substitute proposed or submitted by Contractor pursuant to paragraph 1 to 5 herein, and in making changes in the Contract Documents or in the provisions of any other direct contract with Municipality of Caguas for work related to the Project. Whether or not Engineer approves a substitute item so propose or submitted by Contractor, Contractor shall reimburse Municipality of Caguas or charges of Engineer and Engineer's Consultants for evaluating each proposed substitute.

7. Contractor shall provide all data in support of any proposed substitute or "Or Approved Equal" at Contractor's expense.

Section 9.11 -Equipment to be Furnished and/or Installed

Contractor shall furnish evidence in writing certifying that the manufacturer's representative or vendor is a company or legal entity in good standing, established under the laws of Puerto Rico, with a minimum of one (1) year experience in the business. The manufacturer's representative or vendor shall provide the guarantee required for the equipment to be furnished and/or installed. In addition, the manufacturer's representative of vendor shall have adequate facilities and personnel to provide a satisfactory service and maintenance.

Section 9.12 -Description of Equipment to be Submitted

1. Contractor shall furnish descriptive specifications, cuts and other information describing completely the type and quality of all equipment proposed to be furnished by him for installation in the Work.

2. Contractor shall furnish complete information upon the following items for approval of Engineer before fabrication and shipment:

GENERAL CONDITIONS

- a. The make of all the machinery and equipment.
- b. Individual and assembled weights of each unit of machinery and equipment. c. Speed of each unit of machinery and equipment.
- d. Characteristics, efficiency and brake horsepower of each equipment, at full, fractional and overloads under the full operating range of each unit, plotted as curves.

GENERAL CONDITIONS

e. Efficiency, power factor, weight, speed and heating guarantees of each motor.

f. Assembly and dimension drawings of each unit.

3. The data furnished on motors shall include the efficiency of the motors at one-half (1/2), three-quarters (3/4) and full rated horsepower output, and unity power factor, and the variation in torque, temperature rise, efficiency and horse power output at voltage of ten (10%) percent above and below rated voltage, and at a frequency of five (5%) percent above and below rated frequency. Complete information also shall be furnished for the basis of design of the electrical starting and control equipment.

The data submitted on pump units shall include grade of steel and diameter of all shafts, the diameters of all bearings, the weights of motor rotors. the complete motors, pump impeller assemblies, complete pumps, complete units, and the total shipping weights of each assembly.

Only machinery and equipment which has passed the experimental stage and which is in successful use, in units of a size equal to those required under this contract, will be acceptable.

All machinery furnished shall be of modern design and construction in every detail. All parts shall be of rugged construction, of ample strength and size for all stresses that may occur during fabrication, transportation, erection., and during continuous operation. They shall be designed to perform the work required of them easily without undue strain to any part, and should not cause hazards of any type.

The manufacturer of the equipment furnished shall be experienced in the design and construction thereof and shall have furnished equipment of the same type and of comparable capacity which has been in successful operation for a reasonable period of time. Upon request of Engineer, Contractor shall submit full evidence for the successful use of similar units, including location, capacities, type and date of installation and names of officials now in charge of operation.

Equipment shall be designed to fit the general dimensions shown on the Construction Drawings. Slight deviations from the dimensions shown will be permitted to fit manufacturer's standards.

Contractor shall furnish a complete set of standard and special wrenches, spanners, eyebolts and other tools necessary to disassemble or assemble the units and any other special tools required to service, repair and adjust the equipment furnished by him. Wrenches shall be of forged steel, case hardened and fully finished. The wrenches and tools shall be furnished in a metal toolbox, provided with a locking device and arranged for wall mounting, acceptable to Engineer.

A supply of oil, grease and other lubricants of proper quality .as recommended by the manufacturer, shall be furnished for each unit. Lubricants shall be furnished in the original, unopened containers, in sufficient quantity for at least three (3) full filling for each unit.

GENERAL CONDITIONS

Contractor shall, within forty-five (45) Days after the signing of the contract, submit to Engineer for approval or comments six (6) copies of complete, detailed, shop, working and erection drawings of the equipment he proposes to install at the project. The submittal will be considered for approval within the thirty (30) working days after the submittal has been received by the Electro Mechanical Section of Municipality of Caguas. Two (2) copies will be returned to Contractor with the approval and/or other comments.

Fabrication of equipment shall not be started until the written approval of Engineer has been received.

Contractor shall, at the time of shipment of the equipment, submit to Engineer six (6) copies of complete instruction for erection or installation, operation and maintenance of the pumping units furnished by him and of parts catalog. The instructions shall be complete in every detail and adequate for proper installation, operation, maintenance, lubrication, repair, dismantling and reassembling of equipment furnishing.

Contractor shall be responsible for any change in the design required for the construction of approved alternate equipment at no extra cost to Municipality of Caguas.

The performance of any alternate equipment approved by Municipality of Caguas shall be equal or better than the specified performance.

Section 9.13 -Operation and Maintenance Manual

The following requirements apply to projects including pumps and/or water treatment plant:

The Contractor shall prepare and submit to Municipality of Caguas for comments an operation and maintenance manual draft in English. The Contractor shall submit the draft no later than 50% of physical construction. Three copies of said draft shall be submitted to Municipality of Caguas. The Contractor shall incorporate the comments made by Municipality of Caguas and the comments made by the Agency funding the Project, and shall submit the new draft to Municipality of Caguas for approval. Contractor shall submit this draft before the project reaches 90% completion. After the draft of the Operation and Maintenance Manual is approved, the Contractor shall translate it to Spanish. Experiences obtained from the training sessions shall be incorporated in the operations and maintenance manual. A copy, both in Spanish and English, of the operation and maintenance manual, incorporating the experiences during the two-month training, shall be submitted to Municipality of Caguas for final approval. After receiving the final approval from Municipality of Caguas Contractor shall submit two copies, both in Spanish and English, of the approved final operations and maintenance manual in an appropriate loose-leaf binder with weatherproof hard cover for distribution among Municipality of Caguas.. This final version of the manual shall be submitted by Contractor not later than 30 days after training period.

GENERAL CONDITIONS

The following requirements apply to projects that do not include a water filtration and/or water treatment plant:

The Contractor shall prepare and submit to Municipality of Caguas for comments an operation and maintenance manual draft in English. The Contractor shall submit the draft no later than 50% of physical construction and the final no later than 90% completed. Three copies of said draft shall be submitted to Municipality of Caguas. The Contractor shall incorporate the comments made by Municipality of Caguas, and the comments made by the Funding Agency, and shall submit the new draft to Municipality of Caguas for approval. After the draft of the Operation and Maintenance Manual is approved, the Contractor shall translate it to Spanish. Contractor shall submit two copies, both in Spanish and English, of the approved final operations and maintenance manual in an appropriate loose-leaf binder with weatherproof hard cover, for distribution. The Contractor shall submit the final manual no later than 90% completion of the project.

Section 9.14- Lead Content

Contractor shall abstain from utilizing pipes and fittings with a lead content greater than 8.0% and solders with a lead content greater than 0.2%, in all installation or repair of water supply systems, or any plumbing in a facility providing water for human consumption which is connected to a public water system, in accordance with the 1986 Amendments to the Safe Drinking Water Act. This prohibition does not apply to lead necessary for the repair of cast iron pipe joints.

Section 9.15 -AASHTO and Other Standards

1. Unless otherwise indicated, when a reference is made in the contract to a specification, standard, or test method adopted by the American Society for Testing and Materials (ASTM) or other recognized national association or entity, the reference shall mean the specification, standard, or test method which is in effect on the date of advertisement for bids.
2. No provision of any such standard, specification, manual or code, or any instruction of a supplier shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their Subcontractors, consultants, agents, or employees from those set forth in the Contract Documents, nor shall any such provision or instruction be effective to assign to Owner, Engineer, or any of Engineer Consultants, agents, or employees any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

GENERAL CONDITIONS

ARTICLE 10. -LEGAL RELATIONS AND RESPONSIBILITY

Section 10.01- Laws to be Observed

It is Contractor's responsibility to be fully informed of and comply at all times with all Laws and Regulations. Contractor shall indemnify Municipality of Caguas and its representatives against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by himself, his employees, his Subcontractors, his suppliers, his agents, or the employees of any of them.

Section 10.02 -Change in Law

Upon the occurrence or threat of occurrence of a Change in Law. Municipality of Caguas and Contractor may cooperate actively with each other as herein provided to remove or reduce It's effect by taking such judicial or other action which may be convenient, necessary or proper for such purposes. If notwithstanding, the foregoing actions such Change in Law occurs or persists, the parties shall negotiate diligently, reasonably and in good faith the modification or the termination of this Contract. This clause does not applies to a Change in Law related to minimum wage rates. If there is a Change in Law resulting in an increase of the minimum wage rate Contractor shall cover such increase in labor cost at his own expense.

Section 10.03- Permits, Licenses, Fees and Taxes

1. Contractor shall deliver to Municipality of Caguas, prior to starting with the Construction phase and at his own expense, the required amount of cancelled stamps of the College of Engineers and Surveyors, all necessary prelist, licenses and endorsements from the proper authorities including U.S.A. Federal. Government of Puerto Rico, Municipal and private companies with jurisdiction over the Work. Contractor shall give all notices required by Laws and Regulations, shall pay all fees and charges incidental to the due and lawful prosecution of the Work, and shall comply with all U.S.A. and Puerto Rico laws and regulations, and municipal ordinances relating thereto. Copies of all said stamps, permits, licenses, endorsements, notices, receipts and authorizations shall be filed with Municipality of Caguas through its approved representative.

2. It is the Contractor's responsibility, after receiving the final project cost estimate made after Engineer's Certificate of Final Acceptance, to pay the difference in all taxes, insurance and fees, including but not limited to those indicated in paragraph 1 above. This difference is based on the total final project cost as compared to the original estimate made at the start of the project.

3: Contractor will be responsible for the payment of excise taxes on taxable materials and/or equipment introduced in Puerto Rico to be used or installed in the Project.

4. During the execution of the Project, Contractor, at his own expense shall obtain, maintain and renew all the necessary permits, approvals, endorsements and authorizations of any kind required from the Government of Puerto Rico, the United States Governmental, Municipal Authorities, or

GENERAL CONDITIONS

other private or government agencies with jurisdiction over the Project, including but not limiting to the following:

- a. Land Erosion and Sediment Control Plan and Certification (Plan-CEST) from the Puerto Rico Environmental Quality Board (EQB). Contractor shall prepare the plan for the control of erosion and sedimentation applicable to this project, along with the required engineering certification in accordance with applicable Laws and Regulations. Contractor shall obtain the required permits from the EQB. Copy of the certified plan approved by the EQB shall be submitted to Engineer.
- b. Fugitive Dust from the Puerto Rico Environmental Quality Board.
- c. Disposal of Non-Hazardous Solid Material from the EQB, including obtaining the approval of the construction and/or operation of emission sources, and the approval for performing activities which produce solid waste.
- d. Incidental Earth Movement Permit from the Department of Natural and Environmental Resources.
- e. If there is to result any discharge of runoff waters to any body of water resulting from any Construction activity, the US EP A shall be consulted to determine if the discharge will required a National Pollutant Discharge Elimination Systems (NPDES) permit in accordance with Federal Code Regulation No. 40, Section 122.26 (b) (14) (x). Contractor shall comply with all applicable requirements.

If required by Laws and Regulations Contractor and Subcontractors shall submit for approval to the EPA a Pollution Prevention Plan (PPP) and implementation of Best Management Practices (BMPs) for the control of storm water pollution applicable to this project. A copy "Of this plan shall be submitted to Municipality of Caguas. This plan cover discharges of storm water runoff from Construction sites which disturb five (5) or more acres of land. After the storm water Pollution Prevention Plan is prepared and the necessary controls are installed, the Contractor and Subcontractor will be responsible for inspecting and maintaining them until Final Acceptance. The Contractor should have a professional engineer who will be responsible for periodically inspecting and certifying that the Pollution Prevention Plan has been properly installed. Said inspection will occur every seven (7) Days or within twenty four (24) hours of a storm of 0.5 inches or more in depth.

f. In the event that any emergency energy generator is to be used, an emission source permit (Permiso de Fuente de Emision, PFE) shall be obtained from the EQB for the installation and operation of the same.

g. If any hydrocarbon storage tank is to be installed the Water Quality Area of EQB shall be consulted. Contractor shall comply with applicable regulations and obtain required permits.

h. If septic tanks are going to be constructed for use during the construction stage, the program for Underground Injection Control of the Environmental Quality Board shall be

GENERAL CONDITIONS

consulted. Contractor shall comply, at his own expense, with applicable regulations and obtain required permits.

i. Other environmental clearances and approvals. Contractor shall consult the EQB, comply with applicable regulations and obtain required permits.

j. Permits for the relocation of utilities from each utility company affected.

k. Notification, coordination and complying with all regulations for excavation and demolition work which are required by the Center for the Coordination of Excavations and Demolitions (Centro de Coordinacion de Excavaciones y Demoliciones, CCED) of the Public Service Commission. Law 267 of September 11, 1998 created the CCED. Contractor shall delineate the area to be excavated or demolish and notify the CCED as required by the referenced Law and by regulations promulgated by the CCED. The notification shall not be made before ten {10} working days before the date of the actual excavation or demolition, and shall be made before the fourth working day before the actual excavation or demolition. The CCED will provide a control number in writing to Contractor as evidence of complying with the notification. The CCED will notify the operator of any structure, installation or underground system (Operator). The standard procedure is that the Operator(s) will mark the location of such structures and the approximate depth before the times to start the excavation or the demolition. The identification will be made by a color and identification system as indicated in CCED regulations. Contractor shall comply with tolerance margins and with the mechanisms for approaching to the installations that are acceptable and reasonable as indicated by the CCED in its regulations. Contractor shall notify CCED of any underground installation found during the excavation or demolition that was not marked or identified the Operators or that is outside the corridor identified by the Operators. Contractor shall call the Fire Department when Contractor identifies flammable material in the tanks or underground lines in the excavation or demolition. Any change in the date or time to start excavation shall be notified to the CCED. Contractor shall comply with the special provisions for emergencies in the referenced law and regulations, and shall immediately notify damages or suspicion of damages to the CCED and to the corresponding Operator. Only the Operator can conducts repairs to their property .The reference Law and the corresponding regulations contain exceptions and other important aspects. The Article titled "Standard Forms", of the Standard Instructions to Bidders, contains a facsimile of the form used provided by CCED for the notification of excavations or demolitions.

5. Contractor shall be the only entity responsible, at his own expense, in performing the Works necessary to comply with all permits, endorsements, approvals or renovations and shall pay all taxes, excise taxes, fees and penalties imposed on Contractor for not complying with Laws and Regulations, and charges incidental to the due and lawful prosecution of the Work. Contractor shall provide at his own expense all required notices, drawings, specifications, engineering and other professional certifications, and others, required by private, Municipal, Puerto Rico and Federal agencies to obtain required permits, approvals, renewals (if applicable) and others.

6. In the event that any Work to be performed by Contractor under the above mentioned permits, approvals, endorsements and authorizations is found to be unsatisfactory and is not approved by

GENERAL CONDITIONS

the aforementioned governmental authorities, and Contractor refuses to correct said deficiencies without due cause, then Municipality of Caguas or said governmental agencies may proceed with the corrective work. and the cost thereof shall be charged to Contractor and shall be withheld by Municipality of Caguas from any money due to Contractor under the subject construction contract.

7. According to the Executive Order from the Governor of Puerto Rico Number OE 1991-24, as amended, Contractor certifies and warrants that at the time of executing this contract Contractor has rendered his income tax statement during the five (5) years preceding this contract and does not owe taxes to the Government of Puerto Rico; or that Contractor is under a payment plan whose terms and conditions are being complied with. Contractor certifies and warrants that at the time of execution of this contract Contractor has paid all taxes to the Government including but not limited to income tax; excise tax; movable and real property taxes; all license taxes; taxes retained at the origin for payment of salaries and professional services; taxes retained in payment of interest, dividends or rents to individuals in relation to non resident corporations and partnerships; or taxes retained to residents in the payment of interests, dividends and other profit distributions; unemployment insurance or temporal incapacity and social security for drivers (the one that applies); and all other taxes and fees required by Laws and Regulations; or an installment payment plan has been agreed and Contractor is complying with its terms and conditions. It is recognized that these certifications are an essential condition of this contract and if these certifications are not totally or partially correct this will be sufficient cause for Municipality of Caguas to cancel this contract and Contractor will have to return to Municipality of Caguas all the monies received under this contract. The certification form is included in the Article titled "Standard Forms" of the Standard Instructions to Bidder.

8. According to the Executive Order from the Governor of Puerto Rico Number OE 1991-24, as amended by Executive Order 1992-52, in addition to certifications indicated in the paragraph above, Contractor shall submit a Certificate of Tax Debt (Certificado de Deuda Contributiva) and a Certification of Submittal of Tax Return (Certificado de Radicacion de Planilla), Model SC 2888, Appendix I, issued by the Internal Revenue Area of the Treasury Department of Puerto Rico, in which it is certified that the person submitted the income tax returns for the five years preceding the execution of this contract. Form 35-67 (Solicitud de Copia y/o Certificacion de Planillas), Appendix II, is the form used to request the certification. In addition, Contractor shall present a Certificate of Debt (Certificado de Deuda), Model SC 6096, Appendix III, issued by the Treasury Department of Puerto Rico, even when the Contractor has certified that he no tax debts. The certification for the concept of movable and real property (propiedad mueble e inmueble) will be requested by Contractor at the Municipal Revenue Collection Center (Centro de Recaudacion de Ingresos Municipales). The certification for the concept of the unemployment insurance, applicable temporal incapacity and drivers insurance shall be requested at the Department of Work and Human Resources. If Contractor is subject to a payment plan he shall present evidence of being up to date in payments. All certifications and documents in this and the previous paragraph above will form part of this contract.

9. Contractor will provide and make part of this Contract a certificate issued by the Treasury Department of Puerto Rico as to their taxpayer and tax status, and a certificate issued by the Treasury Department of Puerto Rico showing that he has filed the tax return during the five (5) years previous to this contract and has no tax debts pending with the Government of Puerto Rico,

GENERAL CONDITIONS

or an installment payment has been agreed and is complying with its terms and conditions. Contractor will also provide and make part of this Contract a certificate for the concept of movable and real property (propiedad mueble e inmueble) and a certificate for the unemployment insurance, temporal incapacity or drivers insurance, the one that applies, showing that Contractor has no debts pending with the Government of Puerto Rico, or an installment payment has been agreed and is complying with its terms and conditions. The certificate for movable and real property shall be issued by the Municipal Revenue Collection Center (Centro de Recaudo de Ingresos Municipales, CRIM). The certification for the concept of the unemployment insurance, temporal incapacity or drivers insurance, the one that applies, shall be requested at the Department of Work and Human Resources. If Contractor is subject to a payment plan he shall present evidence of being up to date in payments. It is recognized that these certificates are an essential condition of the present contract, and if the above certifications are not correct in all or in part this will be sufficient cause for the contracting party to terminate the contract and the contracted party shall reimburse the contracting party all the money received under this contract. It will be the responsibility of Contractor to notify, request and obtain similar certifications from their Subcontractors, as the ones required herein from Contractor.

Section 10.04- Patents and Copyrights

Contractor shall not employ any patented method of construction, any secret process, software with copyright, or furnish any appliance with a patented operation unless such method, process, software or appliance is owned or controlled by him or unless he has secured the right to its use. Contractor shall hold himself responsible for any claims made against Municipality of Caguas for any infringement of patents by the use of patented articles or the use of secret processes in the construction and completion of the Work. Municipality of Caguas shall be and hereby is authorized to deduct and retain out of the money's due or which may become due to Contractor a sum sufficient to cover all claims for damages arising from such infringement or use and to retain the same until the settlement of final disposition of such claims.

Section 10.05 -Fines

In the event that any penalties or fines or orders are assessed against or imposed upon Municipality of Caguas or Contractor arising out of Contractor failure to comply with any applicable Laws and Regulating the design and Construction of the Project, it shall be the sole responsibility of Contractor to pay said fines or penalties and comply with all orders so assessed and imposed by all courts, regulatory and administrative agencies at all levels including Municipal, Government of Puerto Rico and U.S.A. Federal.

Section 10.06- No Waiver of Legal Rights

1. Municipality of Caguas shall not be precluded or stopped by any measurement, estimate, or certificate made either before or after the completion and acceptance of the Work and payment therefore, from showing the true amount and character of the Work performed and materials furnished by Contractor, nor from showing that any such measurement, estimate or certificate is untrue and is incorrectly made, nor that the Work or materials do not in fact conform to the contract.

GENERAL CONDITIONS

2. Municipality of Caguas shall not be precluded or stopped, notwithstanding any such measurement, estimate or certificate and payment in accordance therewith, from recovering from Contractor or his sureties, or both, such damage as it may, nor any reason of his failure to comply with the terms of the contract. Neither the acceptance by Municipality of Caguas or any representative of Municipality of Caguas nor any payment for or acceptance of the whole or any part of the Work, nor any extension of time, nor any possession taken by Municipality of Caguas shall operate as a waiver of any portion of the contract or of any power herein reserved or of any right to damages.

3. A waiver by Municipality of Caguas of any breach of the contract shall not be held to be a waiver of any other or subsequent breach.

4. Contractor, without prejudice to the terms of the contract, shall be liable to Municipality of Caguas for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards as Municipality of Caguas rights under any warranty or guaranty.

Section 10.07- Health, Safety and Sanitary Provisions

1. Contractor shall conduct his Work with due regard to the safety of his employees and to the employees of Municipality of Caguas and Engineer, in conformity with current practice as set forth in the Manual of Prevention in Construction published by the Associated General Contractors of America and the publications of the National Safety Council, and as required by U.S.A. Federal, Government of Puerto Rico and Municipal Laws, regulations or ordinances.

2. Contractor shall comply with all applicable safety Laws and Regulations including, but not limited to. Occupational Safety and Health Act of 1970 (PL 91-596), Contract Work Hours and Safety Standards Act (PL-91-54), Federal OSHA standards 29 CFR 1910 and 10 CFR 1926, Act 16 of August 15, 1975 of Puerto Rico, and special regulations promulgated by the Secretary of Labor and Human Resources of Puerto Rico.

3. Contractor shall not require any worker to work in surroundings or under conditions that are unsanitary, hazardous or dangerous to his health or safety. He shall comply with all Federal, Puerto Rico and local laws, rules and regulations concerning construction safety and health standards and shall admit without delay any inspector from such health and safety agencies upon presentation of proper credentials.

4. Occupational Safety and Health Act of 1970. "Nothing in this Act shall be construed to supersede or in any manner affect any workman's compensation law or to enlarge or diminish or effect in any manner to the common law or statutory rights, duties, or liabilities of employers and employees under any law respect to injuries, diseases, or death of employees arising out of, or in the course of, employment.

5. Contractor shall designate a qualified and experienced safety representative at the site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

GENERAL CONDITIONS

6. Contractor shall submit a safety plan as indicated in Section 5.07 -Pre-construction Conference, paragraph 3.

7. Safety Scoreboard. Contractor is required to erect and/or maintain a safety Bulletin Board at a prominent location at job sites with data reflecting the overall job safety record on a current basis. This safety scoreboard shall be in place within five (5) calendar days after commencement of Work and shall be placed in an area at the job site conspicuous to all workers. The safety scoreboard shall indicate the number of Days on the job and the number of Days since a reportable lost-time personal injury or a material or equipment loss of \$1000.00 or greater. It shall contain the poster "Safety and Health Protection on the Job" and other postings required by the Occupational Safety and Health Office OSHO, Puerto Rico Department of Labor. It shall also contain additional safety literature and posters.

8. The Contractor shall provide sanitary conveniences for all employees on all parts of the Work. He shall take all precautions to insure that no nuisance is committed by his employees on the Work, and to insure the observance of all applicable sanitary regulations and requirements of Engineer.

9. Contractor shall be responsible for coordinating any exchange or material safety data sheets or other hazard communication information required to be made available or exchanged between or among employers at the site in accordance with Laws and Regulations.

7. Safety Bulletin Board. Contractor is required to erect and maintain a safety bulletin board at a prominent location at job sites containing the poster "Safety and Health Protection on the Job" and other requirements of the Occupational Safety and Health Office OSHO, Puerto Rico Department of Labor. It shall also contain additional safety literature and posters.

Section 10.08- Labor Laws and Regulations

Contractor shall comply with all the applicable Federal and Puerto Rico laws, rules and regulations concerning fair labor practices: including minimum wage, work hours, working conditions, equal employment opportunities, immigration non discrimination, age discrimination in employment, civil rights, drug-free workplace, employment of minors, disabilities, Vietnam Era Veterans and other labor related matters. Contractor must, at all times, pay at least the minimum wages prescribed by Laws. Contractor is not excused from paying, at his own expense, all higher minimum wages that may be put into effect by Laws and Regulations during the Contract Time.

Section 10.09- Archeological Material and Historical Monuments

I. Contractor shall instruct its employees and Subcontractors of the procedures to be followed should an archeological site be found at any time during the construction phase of the Project. Particular attention should be taken during the phase of earth movement in preparation for the actual construction.

2. Upon the occurrence of an archeological deposit or historical monument, the Contractor shall proceed as follows:

GENERAL CONDITIONS

- a. All Work which might affect such monument or deposit must be stopped immediately.
 - b. Contractor shall notify Municipality of Caguas the Institute of Culture of Puerto Rico, the Council for the Protection of the Archeological Patrimony of Puerto Rico ascribed to the Institute of Culture of Puerto Rico (Consejo para la Proteccion del Patrimonio Arqueologico Terrestre de Puerto Rico adscrito al Instituto de Cultura de Puerto Rico) (CPPATPR) and to the State Historical Preservation Office.
 - c. Contractor shall take all the precautions that Municipality of Caguas and the Institute of Culture considers necessary for the protection of the historical or archeological objects discovered.
3. If an Archeological Impact Statement or similar document is required, Municipality of Caguas may order the Contractor to prepare such Statement or document and Contractor shall prepare it in a diligent manner. Municipality of Caguas may elect to prepare such Statement or document through other means.
 4. If Municipality of Caguas orders Contractor to prepare the Archeological Impact Statement the party selected for the preparation of such Statement or document shall be experienced in its preparation, and shall be subject to the approval from Municipality of Caguas The Contractor shall be compensated for the Archeological Impact Statement through a Change Order or Written Amendment.
 5. Contractor agrees to provide any assistance needed for the preparation of the above mentioned Statement or document, including non-skilled labor assistance.
 6. The Contract Time shall be adjusted accordingly if justified as determined by Engineer based on the requirements of the approved progress schedule. For determining an extension to Contract Time, Engineer will use the project schedule reflecting the conditions of the project immediately prior to stopping Work due to the archeological or historical monument finding.
 7. In case that extra work is needed because of the archeological or historical monument finding, Engineer will decide if the extra work will be done by Contractor through a Change Order or if work will be done by other means.

GENERAL CONDITIONS

ARTICLE 11. -CONTROL OF WORK

Section 11.01 -Engineer

1. Engineer will represent Municipality of Caguas at all times with respect to all matters pertaining to the contract.
2. The performance expected from Contractor, and upon which Work will be evaluated by Engineer, will be those specified in the Contract Documents including any applicable manuals, standards, permits and procedures referenced and adopted in these documents.
3. The efforts by Contractor to correct any deficiency or violation of the performance of the contract as reported to Contractor by Engineer must be initiated by Contractor within twelve (12) hours of the notice or in the time mutually agreed by the parties or in the time recognized by industry standards accepted in the United States of America and in Puerto Rico.
4. Engineer shall have and Contractor must allow safe and reasonable access to all phases of the construction of the Project.
5. During the term of this Contract, Engineer will monitor the construction reports prepared by Contractor for compliance with this Contract. Contractor must give Engineer access to audit Contractor's accounting books and any other reports prepared by Contractor relative to the construction of the Project. The audit will be conducted in such a manner that it shall not unduly interfere with the construction of the Project.
6. Engineer shall have the right to schedule weekly meetings with the Project Manager in such a manner that they will not interfere with the effective and efficient construction of Project.
7. Engineer will decide all questions which may arise as to the quality and acceptability of materials and equipment furnished, and Work performed and as to the manner of performance and rate of progress of the Work; all questions which may arise as to the interpretation of the contract documents; all questions about the fulfillment of guarantees; and all questions as to the acceptable fulfillment of the contract on the part of Contractor.
8. Engineer will have the authority to suspend the Work wholly or in part due to the failure of Contractor to correct conditions that are unsafe for the workmen or the general public; for failure to carry out provisions of the contract; for failure to carry out orders; for such periods as he may deem necessary due to unsuitable weather for conditions considered unsuitable for the prosecution of the Work or for any other conditions or reason deemed to be in the public interest. Notice of such suspensions will be issued in writing.
9. Engineer shall monitor Contractor compliance with all applicable safety and health regulations at the Project and will notify Contractor of any violation of such standards. Contractor shall immediately correct the violation and inform Municipality of Caguas about all incidents related to the violation. This monitoring by Engineer in no way reduces the responsibility and liability of

GENERAL CONDITIONS

Contractor to comply with safety and health regulations. Neither Municipality of Caguas nor Engineer assumes liability related to safety and health in the Project due to this monitoring. Contractor is the sole responsible for safety and health in the Project.

10. Whenever the words "directed", "required", "permitted", or words of like import are used. it shall be understood that the direction, requirements or permission of Engineer is intended. Similarly, the words "approved", "acceptable", "satisfactory" or words of like import shall mean approved by, acceptable, or satisfactory to Engineer.

11. Additionally, Engineer will have the authority described in the Contract Documents.

Section 11.02 -Control of Installation

1. Contractor shall monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of the specified quality.

2. Contractor shall comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

3. Contractor shall comply fully with manufacturers' instructions, including installation steps in sequence. Should manufacturers' instructions conflict with Contract Documents, Contractor shall request clarification from Engineer before proceeding.

4. Contractor shall have the Work performed by qualified persons to produce workmanship of the specified quality.

Section 11.03- Contractor's Quality Control

1. Contractor shall submit to and obtain approval from Engineer of a Quality Control Plan as specified in the sections titled "Contractor's Quality Control Plan" and "Initial acceptance of Schedules and Plans".

2. Contractor is responsible for the quality of all materials and workmanship furnished in the construction of the project. In order to insure that all such materials and workmanship meet the contract requirements, Contractor shall provide his own quality control system and procedures including all personnel, equipment, supplies and facilities necessary to obtain samples, perform tests, evaluate test results and adequately control his Work.

2. The quality control system shall consist of plans, procedures, and the organization necessary to provide materials, equipment, workmanship, fabrication, construction and operations that comply with the requirements of the contract. The system shall cover construction both on site and offsite, and shall be keyed to the approved project schedule.

3. Contractor shall perform his own process control sampling, testing and inspection during all phases of the Work at a rate sufficient to assure that the Work conforms to the contract

GENERAL CONDITIONS

requirements. Contractor shall insure that all of the testing equipment to be used is properly calibrated and will meet the specifications applicable for the specified test procedures.

4. Contractor's quality control system shall be carried out at Contractor's expense.

5. Contractor shall be responsible, at Contractor's expense, for furnishing the necessary labor, technicians, equipment, materials and making, storing, curing the required samples and performing the tests required in the standard and supplementary specifications. All tests required by the specifications shall be subject to the Engineer's direction and supervision.

7. Contractor shall also be responsible for arranging and obtaining inspections, tests, certifications or approvals and paying all costs in connection therewith when Laws and Regulations of any public body having jurisdiction require any Work (or part thereof) to be inspected, tested, or approved by an employee or other representative of the public body, and shall furnish Engineer the required certificates of inspection or approvals. Examples of these, but not limited to, are the following:

- a. Design, implementation, inspection, and certification of all related fees for erosion control plans, inspections, permits, renewals (if required), and certifications required by public or private bodies having jurisdiction.

- b. Inspection and certification of the electrical works, including but not limited to electrical primary lines, electrical substation and metering equipment. This Certification must be done by a Licensed Electrical Engineer and shall be contracted and paid by Contractor. Certification must be done according to applicable Certification Law(s) and regulations.

GENERAL CONDITIONS

8. CQC Organization. Contractor shall identify an individual, titled CQC System Manager, within his organization at the construction site, who shall be responsible for overall management of CQC. The CQC System Manager shall report directly to Contractor's top management. and have the authority to act in all CQC matter for Contractor. The CQC System Manager shall be acceptable to DTOP; shall be employed only on this contract; and shall be physically on the project site during performance of all Work.

a. Personnel. A staff shall be maintained under the direction of the CQC System Manager to perform all CQC activities. The actual strength of the staff during any specific Work period may vary to cover Work phase needs, shifts, and rates of placement. Staff personnel shall be fully qualified by experience and technical training to perform their assigned responsibilities and shall be directly hired by and work for Contractor.

9. Control. CQC is the means by which Contractor assures himself that his construction complies with the requirements of Construction Drawings and specifications. The controls shall be adequate to cover all construction operations, including both onsite and offside fabrication, and will be keyed to the proposed construction sequence. The controls shall include at least three phases of inspection for all definable features of work as follows:

a. Preparatory inspection. This inspection shall be performed prior to beginning any work on any definable feature of work. It shall include a review of the contract requirements; a check to assure that all materials and equipment have been tested, submitted and approved; a check to assure that provisions have been made to provide required control testing; examination of the work area to ascertain that all preliminary work has been completed; and a physical examination of materials, equipment and sample work to assure that they conform to approved Shop Drawings or submittal data. and that all materials and equipment are on hand. Municipality of Caguas shall be notified at least twenty-four (24) hours in advance of beginning any of the required actions of the preparatory inspection. The results of the preparatory inspection actions shall be documented by separate minutes prepared by the CQC representative and attached to the daily CQC report. Subsequent to the preparatory inspection and prior to commencement of work, the Contractor shall instruct applicable workers as to the acceptable level of workmanship required in his CQC plan in order to meet contract specifications.

b. Initial inspection. The initial inspection shall be accomplished at the beginning of a definable feature of work. The initial inspection shall include a check and examination of the preliminary work and the quality of workmanship, a verification of full compliance with contract requirement" shall establish level of workmanship, resolve all differences, shall include a review of control testing for compliance with contract requirements, and shall check safety for compliance with hazard analysis. The work shall be inspected for use of defective or damages materials, omissions, and dimensional requirements. Municipality of Caguas shall be notified at least twenty-four (24) hours in advance of beginning the initial inspection. The initial inspection shall be made a matter of record and separate minutes of the initial inspection shall be prepared by the CQC representative and attached to the daily CQC report. The initial inspection shall be repeated for each new crew on site, or if acceptable standards of workmanship are not being met.

GENERAL CONDITIONS

c. Follow-up inspections. Daily follow-up inspections shall be performed to assure continuing compliance with contract requirements, including control testing, until completion of the particular feature of work. Such inspections shall be made a matter of record in the CQC documentation. Final follow-up inspections shall be conducted and all deficiencies corrected prior to the start of additional features of work.

10. Documentation. Contractor shall clearly document all inspections in writing. All reports and documentation shall be readily available to Engineer and to any Puerto Rico or Federal Agency who request information on the Project. A daily CQC report shall be prepared by Contractor detailing all quality control actions taken during the day including inspections, results, reports, documentation and other related information and data.

11. Inspection and tests at Production Sites. When it is feasible to do so, Contractor may do inspection and test of materials and equipment at the place of manufacture prior to shipment" and manufacturers furnishing materials and equipment shall afford the necessary facilities for such shop or mill inspection and test. Contractor shall obtain Engineer approval for doing inspections and test at production sites. These inspections shall be coordinated with Municipality of Caguas Quality Assurance Program.

Section 11.04- Inspection by Engineer

1. Engineer will appoint such Inspectors, as he may deem necessary to inspect all materials and workmanship and to see that the Work conforms to the specifications and Construction Drawings.

2. Inspectors are not authorized to alter or waive the provisions of the contract" to issue instructions contrary to the Construction Drawings and specifications, or to act as foreman for Contractor.

3. Contractor shall give Engineer timely notice of readiness of the Work for all inspections, test, or approvals.

4. Engineer shall have the authority to conduct any tests he feels is necessary in addition to the tests performed by Contractor. Contractor shall cooperate with Engineer or his representative in performing these tests.

5. The failure of the Inspectors to reject or condemn improper materials and workmanship shall not prevent Engineer from rejecting materials and workmanship found defective at any time prior to the Final Acceptance of the complete Work, nor shall it be considered as a waiver of any defects which may be discovered later, or as preventing Municipality of Caguas at any time subsequently from recovering damages for Work found to be defective.

6. In order to allow Engineer access to inspections at production sites, Contractor shall immediately, upon placing orders for materials and equipment, mail copies of such orders to Engineer, and shall afford ample time to enable Engineer to make the necessary arrangements to be present at the inspections made by Contractor at production site. In addition, Contractor shall make the necessary arrangements to allow Engineer to carry out additional tests Engineer may deem necessary, if any, prior to the shipment of materials and equipment covered by these

GENERAL CONDITIONS

orders. Engineer shall have full entry at all times to such parts of the plant as may concern the manufacture or production of the materials or equipment being furnished.

Section 11.05- Uncovering Work

If any Work is covered contrary to a request made by Engineer, if requested by Engineer it must be uncovered and replaced at Contractor's expense.

Section 11.06- Improper or Defective Work

Contractor shall correct at Contractor's expense any improper or defective Work or any damage done to the property of Municipality of Caguas or of others, within a reasonable time. The reasonableness of the time is to be determined by Engineer.

Failure on the part of Contractor to correct all improper or defective Work, or repair all damage to the property of others shall give Engineer authority to call on other parties to remedy the defects or to make the necessary repair of damages and to deduct the cost of such corrective Work from any amount due or to become due to Contractor. If amounts are due or are to become due to Contractor, the expense shall be billed to Contractor and Municipality of Caguas has all the rights to recover such monies.

Section 11.07- Removal of Unacceptable and Unauthorized Work

Contractor shall proceed to remove from the site all material and Work indicated by Engineer as unacceptable, improper, unauthorized or in any way failing to conform to the Contract Documents. The removals shall be made within forty-eight (48) hours after receiving written notice from Engineer. Contractor shall immediately repair any Work damaged by such removal.

Upon failure on the part of Contractor to comply with any order made by Engineer under the provisions of this article. Engineer will have the authority to cause unacceptable Work to be remedied or removed and replaced; unauthorized Work to be removed; and to deduct the cost of such corrective Work from any amount due or to become due to Contractor. If amount is due or is to become due to Contractor, the expense shall be billed to Contractor and Municipality of Caguas has all the rights to recover such amounts.

Section 11.08- Quality Assurance

Contractor, at his own expense, shall always comply with Municipality of Caguas Quality Assurance Program. Contractor shall provide all data, information and reports requested by Municipality of Caguas. Subject to above Municipality of Caguas may inspect the Work and its related installations, and perform all tests deemed necessary to insure Work conforms with the Contract documents, provided actions do not interfere unduly with the construction of the Project. Contractor shall assist Municipality of Caguas and Municipality of Caguas consultants in performing Quality Assurance inspections and tests.

GENERAL CONDITIONS

ARTICLE 12. -INVOICES AND PAYMENT

Section 12.01 -Payments

1. The original and four copies of the monthly request for payment shall be submitted to Engineer for checking and certification. The Proposal indicates which items of Work are under a lump-sum basis and which items are under a unit price basis.
2. The Contractor shall receive and accept compensation provided for in the contract as full payment for furnishing all materials and for performing all Work under the contract in a complete and acceptable manner; and for all risk, loss, damage, or expense of whatever character arising out of the nature of the Work, or the prosecution thereof, subject to the provisions of Section 10.06- No Waiver of Legal Rights.
3. The making of partial payments to Contractor shall not be construed as an acceptance on the part of Municipality of Caguas of any part of the Work done or material furnished under the contract, but only as payment on account.
4. Partial payments may be suspended when in the judgment of Engineer the Work has not proceeded according to the terms of the contract.
5. Monthly payments for ninety (90%) percent of the value of materials delivered,. materials in incorporated into the Work, and labor performed during the preceding calendar month shall be paid by Municipality of Caguas not later than thirty (30) calendar days after the payment request for such material and labor has been approved by Engineer .
6. Payments for materials delivered but not incorporated into the Work will be made. provided that the following conditions are satisfied:
 - a. The materials shall be received in a condition satisfactory for incorporation into the Work.
 - b. The materials shall be stored in such manner that they will not be damaged due to weather, construction operation or any other cause, and Contractor shall be absolutely responsible to Municipality of Caguas for any loss or damage to such material or equipment until the same have been f incorporated to the project and accepted by Engineer, Contractor, at his own expense, shall replace any materials lost or damaged.
7. After the initial payment request, Contractor shall include with all payment requests written proof of payment for materials delivered and materials incorporated into the work and certified by a Subcontractor, that were included in the previous request for payment paid by Municipality of Caguas. The written proof will consist of a Release of Debt in the form herewith included, duly complimented and certified by the supplier or Subcontractor. If Contractor fails to provide such evidence, or if the aggregate sum of the evidence provided does not add to fifty (50%) per cent of the value of materials delivered and Work performed by a Subcontractor Municipality of Caguas will retain payment from the following monthly payment due to Contractor, in an

GENERAL CONDITIONS

amount equal to the total value of the materials delivered and or Work certified by Subcontractor which were included in the previous request for payment paid by Municipality of Caguas.

8. Contractor shall also submit a certification to the effect that he has made payment for those invoices included in previous certifications and that have been paid to him by Municipality of Caguas including a release to Municipality of Caguas of any responsibility in respect to said invoices.

9. The remaining ten (10%) per cent of each monthly payment claimed will be retained by Municipality of Caguas and will be paid to Contractor together with any other payment due within thirty (30) Days Final Acceptance by Municipality of Caguas.

10. No reduction in retainage will be allowed as the project progress.

Section 12.02 -Payment for Lump Sum Items

1. Payment for Lump Sum Items will be based on the approved price breakdown submitted by Contractor, according to Section 5.04- Price Breakdown.

2. Monthly estimates shall be prepared in prescribed form by Contractor.

3. Payment for bonds shall only be made if Contractor submits written proof of payment for each corresponding bond. Written proof of payment consists of original evidence such as cancelled checks, money orders or a duly notarized document of cash.

Section 12.03 -Payment for Unit Price Items

1. Items to be paid on a unit price basis are clearly indicated in the Proposal.

2. Where the Proposal provide that all or part of the Work is to be paid on a unit price basis, initially the Contract Price will be deemed to include, for all unit price work, an amount equal to the sum of the unit price for each separately identified item of unit price work times the estimated quantity of each item as indicated in the Proposal. The estimated quantities of items of unit price work are not guaranteed and are solely for the purpose of comparison of bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of unit price work performed by Contractor will be made by Engineer. Payment for items on a unit price basis shall only be made for the actual quantities of each contract item performed and accepted in accordance with the contract documents.

3. Contractor shall submit a monthly request for payment with the actual quantities and classifications of unit price work determined by Engineer.

GENERAL CONDITIONS

4. If Municipality of Caguas included in the Proposal items to be paid on a unit price basis, then these items will be paid at the unit price proposed by Contractor In the Proposal, unless the actual quantity for an item show an increase of 10% over the quantity estimated and include by Municipality of Caguas in the Proposal. In this situation the unit price fro this item shall be negotiated with Municipality of Caguas. If the parties can not agree on a lump sum amount, then Municipality of Caguas reserves the right to require Contractor to perform the change in the Work by force account as described in Section 4.15 -Force Account Work, to eliminate the change, or to perform the Work in other manner.

5. Should item(s) of Work paid on unit price basis be found unnecessary by Engineer, Engineer may upon written order to Contractor eliminate such item(s). No allowance will be made for claims for loss of anticipated profits or loss of expected reimbursement for the elimination of any part of the Work.

6. To facilitate determination by Engineer of the quantities to be paid for. Contractor shall, whenever so requested, give Engineer access to the appropriate invoices, bills of lading and other pertinent information and shall give him any necessary assistance in weighing or measuring of such quantities.

Section 12.04- Payment for Force Account Work

The monthly payment request made by Contractor shall include the amounts corresponding to force account Work performed during the previous month. Payment for force account Work shall be based on Section 4.15- Force Account Work.

Section 12.05 -Payment for Partial Elimination of the Work

1. Contractor will be reimbursed for materials purchased and actual work performed prior to notification of the elimination of the items including transportation costs. In such case, the material paid shall become the property of Municipality of Caguas If the material is returnable to the vendor and if Engineer so directs, the material shall be returned and Contractor will be paid for the actual cost of charges made by the vendor for returning the material and for the actual cost of handling returned material.

2. No allowance will be made for claims for loss of anticipated profits or loss of expected reimbursement for the elimination of any part of the Work.

Section 12.06 -Withholding of Payments

Municipality of Caguas may withhold payment to Contractor on account of the failure of Contractor to fully comply with any requirement of the Contract including but not limited to the following:

1. If Contractor fails to meet and pay all of his just obligations outstanding for labor, materials or supplies at the time when and estimate for payment is due him;

GENERAL CONDITIONS

2. If any liens, claims or demands arising out of or in connection with the Work or its performance shall be outstanding at the time any payment be due or is likely to be made thereafter;
3. If any claims arising out of or in connection with Contractor's operations under this Contract. are made against Municipality of Caguas by any person other than the Contractor;
4. If in the opinion of Engineer, Contractor is not proceeding with the Work in accordance with the provisions of this Contract.

Municipality of Caguas shall have the right to withhold all payment, final or otherwise, and to withhold such sums as Municipality of Caguas and Engineer may deem ample to protect Municipality of Caguas against delay or loss and to insure the payment of just claims of third persons.

Section 12.07 -Final Payment

1. The acceptance by Contractor of the payment of invoice made after Engineer's Certificate of Final Acceptance for the Work, shall release Municipality of Caguas from all further claims or liabilities to Contractor of whatever nature, except for the remaining sum or sums of money withheld pursuant to other applicable provisions of the contract.
2. Before such final payment is made. Contractor shall furnish Municipality of Caguas consent of the surety to final payment; satisfactory evidence in the form of an affidavit to the effect that all pending claims for labor, materials, and equipment, and other have been paid; evidence that all premiums of the State Insurance Fund on the project pertaining to the Contract have been paid by Contractor; and a certification in the form of an affidavit to the effect that Contractor has left the Project's area free from contaminants, waste or substances of any nature, hazardous, non-hazardous, or toxic.

GENERAL CONDITIONS

ARTICLE 13. -INSURANCE AND BONDS

Section 13.01 -Policies

Prior to executing the Agreement, Contractor shall furnish and file with Municipality of Caguas and maintain at his sole expense in form satisfactory to and with sureties approved by Municipality of Caguas, bonds and policies of insurance covering all operations engaged in by the Contractor under contract, including the bonds and policies indicated herein. These policies and bonds must be maintained in full force and effect during the life of the Contract and thereafter, as provided in Contract Documents.

1. Performance Bond to guarantee the faithful performance of the contract, in an amount equal to one hundred per cent (100%) of the Contract Price. It must be issued in the prescribed form.

2. A separate Payment Bond including Labor Bond in an amount equal to one hundred per cent (100%) of the Contract Price. It must be issued in the prescribed form.

3. A separate and additional Payment Bond in an amount equal to 20% of the Contract Price, payable to the Secretary of Labor of Puerto Rico to guarantee payment to laborers and employees of Contractor as required by Act No. 111, approved June 22,1961.

4. Workmen's Compensation Insurance (Puerto Rico State Insurance Fund):

a. Contractor shall provide Workmen's Compensation Insurance as required by the "Workmen's Compensation Act". Contractor shall also be responsible for compliance with said "Workmen's Compensation Act" by all his Subcontractors, agents and invitees.

b. Contractor shall furnish Municipality of Caguas copy of the State Insurance Fund Policy showing the correct classification of all personnel engaged in the project to be performed. Contractor shall provide as evidenced by receipt of premium payment.

5. Comprehensive General Liability:

a. Contractor shall provide a Comprehensive General Liability Insurance Policy with bodily injury limits of not less than \$500,000 each occurrence and \$500,000 for property damage each occurrence. The following coverage parts are required to be included:

- i. Premises Operations
- ii. Owner's Protective Liability (Independent Contractor)
- iii. Contractual Liability
- iv. Completed Operations
- v. Products Completed Operations (should apply for Two (2) years after acceptance of Work)

GENERAL CONDITIONS

- vi. Personal Injury , Exclusion C Deleted
- vii. The XCU hazard (explosion, collapse and hazard underground). Before use of explosives Contractor will provide the coverage required by Municipality of Caguas.
- viii. Employer's Liability Insurance (Stop Gap) with minimum bodily injury limits of \$500,000 for each person and \$500,000 for each accident, covering against the liability imposed by Law upon Contractor as a result of bodily injury. by accident or disease, including death arising out of and in the course of employment, outside of and distinct from any claim under the State Insurance Fund Policy of the Government of Puerto Rico.

b. In addition, the insurance policy must include:

- i. An endorsement naming Municipality of Caguas as an equal but Additional Insured Interest.
- ii. The severability of interest clause must be included.
- iii. Completed Operations Hazards coverage is to be carried for a period of two (2) years after Municipality of Caguas deems all Work contracted for completed and accepted. This coverage should be uncancellable and prepaid.

6. Comprehensive Automobile Liability Insurance Policy:

Contractor shall provide a Comprehensive Automobile Liability Insurance Policy with bodily injury limits of not less than \$500,000 each person and \$500,000 each occurrence and property damage limits of not less than \$1,000,000 each occurrence. The policy shall include "owned, non-ownership & hired". vehicles on an automatic basis and Municipality of Caguas as additional insured.

7. Umbrella Policy :

Contractor shall provide an Umbrella Liability Policy. The limits of liability shall be not less than \$1,000,000.00. It must show Municipality of Caguas as additional insured.

8. Builder's Risk:

Contractor shall provide a Builder's Risk Policy at 100%. This policy will apply if the project contemplates construction of buildings or structures. The fire insurance policy must be written at 80% or higher coinsurance clause and shall include Municipality of Caguas as additional Insured. This policy applies to the construction of building or structures. The fire and standard extended coverage insurance (Builder's Risk Completed Value Form) shall provide protection at all times against loss by Municipality of Caguas and Contractor until Final Acceptance of the Work, in an amount not less than the completed value of all property .It must include the following:

- a. A Builder Risk Complete Value Form b. Extended Coverage Endorsement

GENERAL CONDITIONS

c. Vandalism and Malicious Mischief Endorsement

d. Earthquake. The Earthquake coverage must be written at 50% coinsurance.

Section 13.02- Hold Harmless Agreement (Broad Form)

The Hold Harmless Agreement must be signed by Contractor and by his Insurance Company. It shall be submitted using the form provided for this purpose in the contract documents.

Section 13.03- Non-Cancellation Clause

Regarding cancellation, all policies shall be endorsed as follows: "This policy will not be cancelled nor any changes made to it which change the name of the insured, without first giving sixty (60) Days notice in writing, to Insurance Officer of the Puerto Rico Aqueduct and Sewer Authority, P.O. Box 7066, Bo. Obrero Station, Santurce, P .R. 00916, as evidenced by receipt of registered letter".

Section 13.04 -Furnishing of Policies and Bonds

1. All required policies of insurance and bonds shall be in a form acceptable to Municipality of Caguas and shall be issued only by Insurance Companies authorized to do business in Puerto Rico according to Insurance Commission Regulations.

2. Contractor shall furnish one certified copy of each policy and original bond duly countersigned by an authorized officer, agent or branch manager in Puerto Rico prior to signing the contract.

3. The submitted policies and bonds must be accompanied with the attorney in fact license from the Insurance Commissioner to the person signing on behalf of the Company.

4. If any of the policies fail to comply with Municipality of Caguas requirements, it is a capable reason for Municipality of Caguas to temporarily suspend the Works. This suspension will not involve the modification of Contract Time or Contract Price.

5. Work performed at any body of water or sea, such as work on an ocean outfall, requires particular .specifications to will be determined at Municipality of Caguas Insurance Office.

6. Municipality of Caguas reserves the right to require any changes of insurance or coverage which considers necessary and ask or revise policies renewals in this contract.

7. Bonds can be furnished in cash, coin of the United States of America; by certified checks payable to Municipality of Caguas by manager's check from a bank, money order from a bank or from the post office. Bonds can a so be issued by a bonding company classified according to the following classification scales included in the "Best Insurance Report".

FROM	UP TO	CLASSIFICATION
\$ 20,000.00	\$150,000.00	Class A V

GENERAL CONDITIONS

\$150,000.00	\$250,000.00	Class A VI
\$250,000.00	\$375,000.00	Class A VII
\$375,000.00	\$1,500,000.00	Class A VIII
\$1,500,000.00	\$10,000,000.00	Class AX
\$10,000,000.00	or more	Class AXI

Reinsurance will be accepted of at least 90% with the companies classified with the Class AXI in the Best Insurance Report and authorized to do business in Puerto Rico by the Insurance Commissioner office. If they are not authorized, they will need previous permit from the Insurance Commissioner.

The 10% of authorized retention can never extend the parameters above established as acceptable.

Independent insurance companies, notwithstanding if they are or not classified by the "Best Insurance Report", will not be accepted if they are subject to some immediate regulatory action and in accordance with the Nation Association of Insurance Commissioners, or that are subject of an impairment order issued by the Insurance Commissioner. The insurance companies will authorize Municipality of Caguas to obtain from the Insurance Commissioner's office the necessary information on said actions and on any impairment order that has been issued. They will also authorize us to obtain direct confirmation from the insurers. These bonds have to come accompanied with the following documents:

a. Power of Attorney from the insurance company to their representative to authorize the signing of the bonds.

b. License of the attorney issued by the Office of the Insurance Commissioner for Puerto Rico.

8. Bonds are subject to approval by Municipality of Caguas

9. In those cases where Federal regulations or disposition apply, these will prevail over any regulation here established.

10. The Contract Time for purpose of fixing the Substantial Completion Date and the Final Acceptance Date, default, and liquidated damages shall begin the Date of Commencement of Work indicated in the Notice to Proceed sent to Contractor, regardless of when performance and payment bonds and other required policies are executed.

11. No construction activities shall be started until the bonds are submitted and the contract executed.

12. Insurance Contract, No Waiver. Approval of the insurance contracts and bonds set forth in the Contract Documents shall not relieve Contractor, its Subcontractors, suppliers, consultants, etc, from liability.

GENERAL CONDITIONS

ARTICLE 14. -DISPUTES AND REMEDIES

Section 14.01- Disputes

All controversies, arguments, complaints, claims and disputes between Engineer and Contractor or any matter arising of or related to the execution of the Work or breach of Work must be brought to the attention of Municipality of Caguas for a reconsideration of the determination of Engineer in the following manner:

Step 1: Contractor must present the controversy, argument, complaint, claim and/or dispute, in writing by certified mail to the Chief Inspection Department within ten (10) working days after Engineer's determination on the matter.

Step 2: The Chief Inspection Department must resolve in writing the controversy, argument, complaints, claim, and dispute within ten (10) working days immediately after receiving by certified mail the Contractor's letter.

Step 3: In case the decision of the Chief Inspection Department is not satisfactory to Contractor or no response is received within five (5) working days after the stipulated ten (10) days period stated herein before in Step 2, Contractor must raise the controversy, claim, dispute, argument and or complain by certified mail to the Operations Director or the Director for Engineering who should make a determination within not more than ten (10) working days.

In case a special study is necessary to resolve a controversy, argument, complaint claim and/or dispute, Contractor or Municipality of Caguas representatives (Engineer, the Chief Inspection Department, the Director for Engineering or Operations Director to which the dispute/controversy have been referred to) will have thirty (30) calendar days to make such studies. Steps 1 or Step 2 as appropriate will be continued to its full extension after the thirty (30) days.

In the case the controversy, claim, dispute, argument and/or complaint is not resolved to the satisfaction of the parties in controversies, the Owner and or Contractors will abide by Section 14.02 - Remedies.

Contractor shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with Municipality of Caguas. No Work shall be delayed or postponed pending resolution of any disputes or disagreements or as Owner and Contractor may otherwise agree in writing.

Section 14.02 -Remedies

All controversies, claims, counter claims, disputes and any other matter in question between the Owner and Contractor arising out of or relating to this agreement or its breach and not resolved by the method indicated in the Section 14.01 -Disputes, will be decided by the General Court of Justice of Puerto Rico. The parties submit themselves to the courts of the Government of Puerto Rico, San Juan Part.

PART III:
COMPLEMENTARY CONDITIONS

Proyecto:

**REPARACIÓN DEL SISTEMA DE IMPERMEABILIZACIÓN DE TECHOS
DEL ESTADIO YLDEFONSO SOLÁ MORALES BO. PUEBLO, CAGUAS**

Especificaciones Complementarias

REPARACIÓN DEL SISTEMA DE IMPERMEABILIZACIÓN DE TECHOS DEL ESTADIO YLDEFONSO SOLÁ MORALES BO. PUEBLO, CAGUAS

Descripción General de Obras

El proyecto en referencia consiste en la reparación del sistema de impermeabilización de los techos del estadio. Estos techos incluyen: las gradas, el segundo nivel de las áreas de cabinas de prensa y transmisión, VIP y concesionario y los techos de las entradas principales. Estas áreas totalizan aproximadamente 54,300 pies cuadrados (pc). A continuación, un resumen de las obras que incluye la subasta:

1. Remoción y disposición de todo material aislante y sus componentes existentes.
2. Limpieza y reparación de bajantes y canaletas pluviales que puedan estar tapados o en mal estado. Se deben reemplazar las piezas dañadas y verificar que el sistema no esté obstruido, asegurándose que haya flujo hasta las salidas.
3. Instalación de nuevos paneles de aislamiento de uretano de 1" de grosor. El método de instalación será mediante fijación mecánica, con sus tornillos y chapas.
4. Se utilizará el sistema de impermeabilización de membranas termoplásticas reforzadas (equivalente a Flex Membrane 60 mils) o sistema de membrana asfáltica (equivalente a Danosa)
5. Instalación de todos los *flashings* y sistemas de anclajes para el producto, según las especificaciones del fabricante. Es importante tomar en cuenta las especificaciones de este para calcular su propuesta económica.
6. Para llevar a cabo la impermeabilización, el contratista será responsable de sustituir las planchas afectadas, igual a las planchas existentes.
7. Reponer planchas en un área de 4,000 pc aproximadamente. El contratista es responsable de cotejar el área a ser reparada usando el tipo de plancha existente.
8. **Estos trabajos se harán sin acceder a través del área de juego ni del *warning track*.** Los trabajos se realizarán desde el exterior del edificio (áreas de estacionamiento).
9. Es responsabilidad del contratista considerar la implementación de un plan de seguridad para sus empleados y cumplir con los requerimientos de OSHA.

1. Requerimientos Generales

- 1.1 Todos los licitadores leerán en su totalidad estas especificaciones y se asegurarán del cumplimiento de estas.
- 1.2 Todos los licitadores visitarán el lugar del trabajo y se cerciorarán mediante inspección ocular de todas las partidas a cotizar.
- 1.3 Se revisará toda partida que requiera medirse para cotizar por unidad, pies, metros o yardas (lineales, cuadradas o cúbicas).
- 1.4 El Contratista completará los documentos de contrato incluidos.
- 1.5 **Se someterá, además el desglose “Breakdown for payment” de las obras a realizarse. Es decir, descripción de obras, cantidades, unidades, precios unitarios y totales.**
- 1.6 El no cumplir con alguno de los Requerimientos Generales podría dar curso a la descalificación de la propuesta, de así considerarlo necesario el Municipio Autónomo de Caguas (MAC).
- 1.7 El MAC se reserva el derecho de rechazar cualquiera o todas las propuestas y/o adjudicar la solicitud de Propuesta bajo las condiciones más favorables para el MAC. También se reserva el derecho de cancelar la adjudicación de cualquier contrato, en cualquier momento, antes de la firma de los mismos, sin que medie responsabilidad alguna para el MAC.
- 1.8 Una vez sometida la propuesta, ningún licitador podrá retirarla dentro de un periodo de sesenta (60) días después de haberse abierto la misma.
- 1.9 Todos los trabajos serán inspeccionados por un representante autorizado del Municipio Autónomo de Caguas (MAC), el cual será denominado como “el Inspector” y que asegurará el cumplimiento y la calidad de los trabajos estipulados en los documentos de contrato.
- 1.10 Previo al comienzo de la construcción, el Contratista coordinará con el Inspector designado para el proyecto una reunión en el (los) sitio(s) para discutir asuntos relacionados a las medidas de seguridad y limpieza, breve discusión de los trabajos a realizarse, localización final de zapatas y cualquier otro detalle necesario para el comienzo de las obras.
- 1.11 El Contratista será responsable de proveer como parte de las obras y sin limitarse a, los materiales, la mano de obra, el equipo, las utilidades, seguros, impuestos y cualquier otro gasto o servicio para cumplir con los trabajos en contrato dentro del tiempo estipulado.
- 1.12 Todo atraso o interrupciones surgidas en el proyecto debido a condiciones climatológicas o por cualquier otro evento inevitable; que no sea por voluntad o negligencia del contratista, serán solicitados al Inspector del proyecto para extensión de tiempo al contrato inmediatamente ocurra el evento ya sea mediante llamada telefónica, correo electrónico o documento escrito.
- 1.13 Para la realización del proyecto se otorgarán **120 días calendario**. El Contratista pagará al Municipio **Cuatrocientos Cincuenta Dólares**

(\$450.00) diarios de daños líquidos por cada día de atraso en la entrega del proyecto.

- 1.14** De ser necesario trabajar sábados, domingos o días festivos, deberá notificarlo dentro de un periodo no menor de 48 horas al Inspector de la obra para su aprobación.
- 1.15** Será responsabilidad del Contratista verificar las medidas del plano contra las existentes en sitio y de haber discrepancias, deberá notificarlo inmediatamente.
- 1.16** Se someterán las literaturas (*submittals*) de todo producto y/o equipo a incorporarse en el proyecto para evaluación y aprobación del MAC, al momento de la firma del contrato.
- 1.17** El Contratista se asegurará de mantener control del polvo fugitivo y cumplir con la regulación del NPDES y obtener el permiso consolidado ambiental aplicable.
- 1.18** Será responsabilidad del Contratista reponer cualquier daño causado a las infraestructuras aledañas como cunetones o asfalto dañado, etc.
- 1.19** Se fotografearán todas las áreas del proyecto antes de ser impactadas.
- 1.20** Se acompañará cada Certificación de Pago con tres (3) “sets” de tres (3) fotografías 8” x 10” a colores debidamente identificadas: nombre del Proyecto, nombre del Contratista, número de Certificación, partida presentada.
- 1.21** De existir discrepancias entre este documento y el plano y/o especificaciones del diseñador (cuando aplique), prevalecerá el más restrictivo o el que decida el MAC.
- 1.22** Lo que no aparezca en plano o especificaciones se aclarará durante el proceso de construcción y de conllevar costos adicionales, los mismos serán negociados y formalizados a través de una Orden de Cambio y se cumplirá con lo requerido en el contrato previo al comienzo de los trabajos.
- 1.23** El Contratista instalará y mantendrá verjas y/o vallas de seguridad temporales para evitar la entrada de personas ajenas al área de trabajo.
- 1.24** Es responsabilidad del Contratista el proteger las excavaciones, no dejarlas abiertas durante la noche e instalar la debida rotulación de advertencia.
- 1.25** El Contratista cumplirá con todas las Reglas de Seguridad aplicables a los Proyectos de Construcción.
- 1.26** Se instalará un (1) rótulo de identificación del proyecto 8’ x 4’. Se distribuirá el arte correspondiente en la Reunión Pre-Construcción. La instalación del mismo será coordinada en el lugar de trabajo.
- 1.27** Se presentará un plan de trabajo al momento de la firma del contrato, el cual será revisado semanalmente de ser necesario realizarle enmiendas
- 1.28** Antes de comenzar un proyecto en una comunidad, se realizará una reunión con el líder comunitario para explicarle el alcance y duración de las obras y

requerir la cooperación de los residentes. La misma será coordinada por el MAC.

- 1.29** Todo material utilizado para llevar a cabo las obras tiene que estar libre de materiales tóxicos como asbesto y plomo. El contratista certificará el cumplimiento de este requisito.

2. Notas Generales

- 2.1** Los cambios de materiales o métodos necesarios para la demolición o construcción deberán ser presentados al representante designado del MAC y aprobados por éste.
- 2.2** Se realizará una reunión Pre-Subasta en la fecha señalada, la cual es compulsoria para poder participar en este proceso de licitar.
- 2.3** El Contratista instalará avisos de seguridad en el área de trabajo (*Peligro – Excavación Profunda - Ancho Reducido - Reduzca la Velocidad - Pare*, etc.) y utilizará abanderados cuando sea necesario.
- 2.4** El Contratista será responsable de tomar las medidas de seguridad correspondientes para prevenir cualquier tipo de accidentes dentro del área de trabajo. Se exigirá en todo momento el uso de casco, chaleco, calzado y cualquier otro equipo de seguridad. Cuando la operación y construcción produzca polvo fugitivo, se exigirá protección respiratoria y anteojos protectores. En los casos que se realiza algún movimiento de terreno, se instalarán pacas de heno en donde sea necesario según los requerimientos de La Junta de Calidad Ambiental (JCA).
- 2.5** El Contratista será responsable de recoger y disponer diariamente de la basura o escombros que se generen. Una vez se terminen los trabajos de demolición o construcción, el Contratista será responsable de dejar el área limpia y libre de escombros.
- 2.6** La fecha de comienzo del proyecto será el día siguiente a la firma del contrato o de acuerdo con la Orden de Proceder, según acuerdo con el representante del MAC. Se deberá agilizar el trámite de la documentación requerida para la firma del mismo.
- 2.7** Los trabajos serán realizados de manera consecutiva y la paralización de los mismos sin razón justificada por más de tres (3) días será considerada como abandono del proyecto (renuncia) y se podrá rescindir el contrato.
- 2.8** El contratista se asegurará de afectar lo mínimo posible el desarrollo comercial de los establecimientos y no interrumpirá el flujo vehicular o peatonal del área sin justificación.

- 2.9** El contratista deberá localizar la alineación y los elementos de toda utilidad soterrada previo a proceder con cualquier actividad que requiera excavación en el terreno, El Contratista deberá procurar y obtener el permiso de excavaciones que otorga la comisión de servicio público de P.R, para actividades que requieran excavaciones en vías / servidumbres públicas.

3. Aceptación del Trabajo

- 3.1** El Inspector tiene el derecho de rechazar las obras realizadas por estar defectuosas, deficientes o por no cumplir con los documentos de contrato. Estas serán corregidas de inmediato al costo del contratista.
- 3.2** Cualquier duda o discrepancia en las hojas de plano, detalles y/o especificaciones deberá ser llevada al Inspector antes de proceder con los trabajos. De proceder con las obras, el Inspector podrá ordenar corregir las mismas al costo del Contratista.
- 3.3** Antes de cubrir cualquier trabajo, el Inspector deberá aceptar el mismo. De haberse cubierto, el trabajo podrá ser descubierto si el Inspector así lo solicita, corregido de ser necesario y volver a cubrirse a costo del Contratista.
- 3.4** En trabajos de construcción y/o instalación de equipos, se proveerá una garantía por un término mínimo de un año a partir de la fecha de aceptación final o la provista por el fabricante o suplidor de equipos en exceso de un año.

--- Terminan Especificaciones Generales ---

PART IV:
TECHNICAL SPECIFICATIONS

SECTION 07526**MODIFIED BITUMEN SHEET ROOFING****PART 1 – GENERAL****1.01 SUMMARY**

- A. Roof Insulation
- B. Insulation Fasteners
- C. Base Sheet
- D. Modified Bitumen Interply Membrane
- E. Modified Bitumen Sheet Roofing
- F. Modified Bitumen Flashings
- G. Roof Accessories
- H. Walkways
- I. Surfacing

1.02 RELATED SECTIONS

- A. Division 6 Section Carpentry: Wood Nailers.
- B. Division 7 Section Flashing and Sheet Metal: Metal Counter Flashings.
- C. Division 7 Section Roof Specialties: Roof Hatches, Prefabricated Curbs.
- D. Division 7 Section Sealants: Caulks, Sealants.
- E. Division 15 Section Drainage and Vent Systems: Roof Drains.

1.03 REFERENCES

- A. ASTM-American Society for Testing and Material
- B. AWPB-American Wood Preservers' Bureau
- C. ASTM D41-Asphalt Primer Used in Roofing
- D. NRCA-National Roofing Contractors Association
- E. ASTM D2178-Asphalt Glass Felt Used in Roofing
- F. ASTM-D4601-Asphalt Glass Felt Used in Roofing
- G. ASTM D312-Asphalt Used in Roofing
- H. UL-Underwriters Laboratories, Fire Classification
- I. RIC/TIMA-The Roof Insulation Committee of the Thermal Insulation Manufacturers Association
- J. SMACNA-Sheet Metal and Air Conditioning Contractors National Association
- K. FS HH-1-1972/Gen-Insulation Board, Thermal, Faced, Polyisocyanurate
- L. FS HH-1-529b-Insulation Board, Thermal, Mineral Aggregate
- M. ASTM C726-Insulation Board, Fiberglass
- N. ASTM C728-Insulation Board, Perlite
- O. ASTM D1227-Asphalt Emulsion as a Roof Coating
- P. ASTM D1863-Mineral Aggregate
- Q. ASTM D2824-Aluminum Pigmented Asphalt Roof Coating

1.04 REGULATORY REQUIREMENTS

- A. UL Classification: Class A
- B. Factory Mutual (FM) System Classification:
 - 1. FM 1-225: RoofNav Assembly #: 227783-227774-0
and
- C. Additional Test Agencies & Building Code Requirements:

1.05 SUBMITTALS

- A. Submit product data for:
 - 1. base sheet
 - 2. modified bitumen interply membrane
 - 3. modified bitumen cap sheet
 - 4. asphalt
 - 5. insulation
 - 6. coverboard
 - 7. fastener and plate
- B. When materials are specified or a particular make or trade name is specified, it shall be indicative of a standard required. Bidder proposing substitutes shall submit the following in accordance with Section 01631:
 - 1. Written application with explanation of why it should be considered.
 - 2. Accredited testing laboratory certificate comparing substitute's physical/performance attributes to those specified.
 - 3. Smallest standard package of adhesive, coating, mastic, sealant, ply sheet, insulation, fastener(s) and flashing materials.
 - 4. Three job references available for inspection where substitutes were used under similar conditions.
- C. Only substitutions approved in writing by Owner prior to scheduled installation will be considered.

1.06 QUALITY ASSURANCE

- A. Manufacturer
 - i. Shall provide local Technical Sales Representative to make start-up inspection and in-progress site inspections at regular intervals.
 - ii. Shall provide final inspection of completed roofing system and issuance of the warranty.
- B. Contractor
 - i. Roofing contractor shall be a registered applicator by the manufacturer.
 - ii. Contractor shall retain a two (2) year workmanship warranty for the specified system within the manufacturers warranty.
 - iii. Strict adherence to the manufacturers most current published specifications are to be followed. Deviations must be approved in writing by the architect and manufacturer prior to installation.
- C. Designation of Responsible Personnel
- D. Walkover Inspection
 - i. Attendance: Representative of Owner/Architect, General Contractor, Roofing Contractor and Manufacturer's Technical Representative.
- E. Final Inspection
 - i. Will be scheduled by roofing contractor upon job completion.

- ii. Attendance: Representative of Owner/Architect, General Contractor, Roofing Contractor and Membrane Manufacturer's Technical Representative.
- iii. Minimum agenda:
 - 1. Walkover inspection.
 - 2. Identification of problems which may impede issuance of warranty.
 - 3. Creation of punch list.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Delivery of Materials.

- i. Deliver and store materials under provisions of Section 01600.
- ii. Deliver materials to job-site in new, dry, unopened and well marked containers showing product and manufacturer's name, production date and/or product code. All materials delivered shall be on pallets.
- iii. Deliver materials in sufficient quantity to allow continuity of work.

B. Storage of Materials.

- i. Storage of plies to be protected from water or extreme humidity.
- ii. Store all roll roof materials on end to prevent their becoming deformed/damaged. Discard rolls which have flattened, creased or otherwise damaged.
- iii. Place materials on pallets which are at least four (4) inches above the ground. Do not stack pallets.
- iv. Rooftop Storage: Disperse materials to avoid concentrated loading.
- v. Cover top and sides of all exterior stored materials with canvas tarpaulin (not polyethylene). Secure tarpaulin.

C. Material Handling.

- i. Handle plies and insulation to avoid bending, tearing or other damage during transportation and installation.
- ii. Material handling equipment shall be selected and operated so as not to damage existing construction or applied roofing. Do not operate or situate material handling equipment in location(s) that will hinder smooth flow of vehicular or pedestrian traffic.

D. Safety Requirements.

- i. All application, material handling and associated equipment shall conform to and be in conformance with OSHA safety requirements.
- ii. Comply with Federal, State, Local and Owner fire safety requirements.
- iii. Maintain fire extinguishers within easy access whenever power tools, roofing kettles or torches are being used.

1.08 ENVIRONMENTAL REQUIREMENTS

- a. Do not apply roofing membrane during inclement weather.
- b. Do not apply roofing membrane to damp or frozen substrates.
- B. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed during the same day.
- C. To assure good adhesion at the point of application, exercise care to maintain bitumen temperature of the roofing asphalt at the EVT designated on the asphalt carton.

1.09 WARRANTY

- A. Manufacturer shall provide: Ten (10) Workmanship and Materials Gold (Prorrated) warranty.
- B. Certified Roofing Contractor shall provide: Ten (10) complementary Workmanship and Materials warranty

PART 2 - PRODUCTS

2.01 SHEET MATERIALS

- A. Modified Bitumen Base Sheet: **Esterdan R36**
Modified Bitumen (SBS) base membrane with a polyester mat reinforcement, protected with a polyethylene film or silica sand. ASTM-D-6164-98 Type II Grade S
- B. Modified Bitumen Membrane: **Esterdan RM4**
SBS Modified Bitumen top membrane with a polyester mat reinforcement, finished with ceramic granules as top protection surface area and burn-off film or silica sand on the other side. ASTM-D-6164-98 Type II Grade G
- C. Flashing Membrane: (SBS) **Glasdan AL80-4**
Modified Bitumen flashing membrane with a fiberglass mat reinforcement, finished with aluminum clad top protection surface area and burn-off film on the other side. ASTM D-6298-98

2.02 BITUMINOUS MATERIAL

- A. Asphalt Primer: ASTM D41.
- B. Aluminum Coating: ASTM D2824.

2.04 INSULATION

- A. Base/Single layer : Polyisocyanurate **2.5"**
- B. Tapered Insulation: Polyisocyanurate (*if required*)

2.05 RELATED MATERIALS

- A. Sealant: Chemlink M-1 or Novalink
- B. Cants: Perlite or Ploy-Iso, ASTM C 728, 4" face.
- C. Corrosion Resistant Fasteners: #15 Extra Heavy Duty (XHD) and 2-3/4" Barbed Plate (SXHD) by Olympic Fasteners
- D. Prefabricated Roof Hatches: Bilco, Milcor
- E. Traffic Surfacing: Walkway Pads.
- F. Penetrations Seal: Chem-Curb/E-Curb.
- G. Grease Containment System: Grease Guard.
- H. Roof Insulation Foam Adhesive: INSTA-STIK®, single component polyurethane adhesive dispensed from a portable pre-pressurized container by Danosa Caribbean, Inc.
- I. Roof Isulation Low-Rise Foam Adhesive: OlyBond®, two- component polyurethane adhesive applied with portable or traditional spray foam equipment, by Danosa Caribbean, Inc.

PART 3 - EXECUTION

3.01 EXAMINATION AND PROTECTION

A. Inspection

1. Verify installation conditions as satisfactory to receive work.
2. Do not install new roofing until all unsatisfactory conditions are corrected. Beginning work constitutes acceptance of conditions.
3. Check projections, curbs and deck for inadequate anchorage, foreign material, moisture, or unevenness that would prevent quality of execution of the new roofing system.

B. General Workmanship

1. Substrate: Free of foreign particles prior to laying roof membrane.
2. Phased application: Not permitted, all plies shall be completed each day.
3. Confine equipment, storage of materials, debris and the operations and movement of workers within the limits agreed upon for the project.
4. Where wheeled or other traffic over partially completed roofing is unavoidable, provide adequate exterior protection to the roof.
5. Discontinue to apply asphalt where uncharacteristic foaming of asphalt is noted.
6. Wrapper and package materials: Not to be included in roof system.
7. Bitumen heating: Use low burner flames during initial melt-down. Circulate bitumen after initial melt-down. Maximum bitumen temperature: Shall at no time exceed its flash point, and asphalt shall not be heated above its blowing temperature for more than four(4) hours. Apply asphalt at the point of application within +/- 25 F. of its labeled EVT.
8. All metal and masonry shall be asphalt primed before fully adhering flashing sheets.
9. Mechanical Fasteners: Seated firmly with fastener heads flush or below surface.
10. Do not use insulation that is warped or damaged.
11. Base flashing height is not less than eight (8) inches above finished surface.

C. Protection

1. Contractor shall be responsible for protection of property during course of work. Lawn, shrubbery, paved areas and building shall be protected from damage at no extra cost.
2. Roofing, flashing and insulation shall be installed and sealed in a watertight manner on same day of installation or upon the arrival of inclement weather.
3. At the end of each work day, partial installation shall be sealed with water stops along edges to prevent water entry.
4. At the start of each work day, drains within daily work area shall be plugged. Plugs are to be removed at end of each work day or before arrival of inclement weather.
5. Preparation work shall be limited to those areas that can be covered with installed roofing material on same day or before arrival of inclement weather.
6. Arrange work sequence to avoid use of newly constructed roofing for storage, walking surface and equipment movement. Move equipment and ground storage areas as work progresses.

D. Surface Preparation

1. Remove all existing roof membrane, insulation and flashings down to the deck and curbs
2. Verify structural integrity of the deck. Notify the Architect of any deck or curb deficiency.
3. Remove deteriorated or damaged wood blocking and install new treated wood blocking to match existing. See detail drawings.

3.02 THERMAL INSULATION

A. Do not use damaged or warped boards.

- B. The base layer or single layer of insulation shall be mechanically pre-secured (5 per 4'x8' board), to the deck using corrosion resistant Standard (#12) fasteners and plates, the length of which shall penetrate the deck 1".

3.03 ROOF MEMBRANE APPLICATION

1. Substrate must be suitable to receive and hold roof system materials.
2. Start the installation of all membrane plies at the low point of the roof.
3. Chalk line where necessary to assure proper alignment and head lap widths of membrane plies.
4. Install the fiberglass base sheet by mechanical attachment using appropriate fastener for the deck assembly. Fasteners shall be installed in accordance to the membrane manufacturer's base sheet fastener pattern.
5. Use half sheet widths as starter strip.
6. Overlap side laps two (2) inches and end laps four (4) inches. Stagger all end laps a minimum of twenty-four (24) inches.
7. The base sheet shall be laid smooth, free from air pockets, wrinkles, fishmouths or tears.

A. *Work Area Preparation:*

1. Adequate ventilation is required; enough ventilation such that personnel exposures to hazardous concentration of airborne contaminants are maintained at or below the allowable levels specified by OSHA or NIOSH.
 - a. Special care should be taken when torch welding is done in close or confined spaces due to possible concentration of contaminants and potential oxygen depletion. Appropriate precautions shall be observed. Use of mechanical ventilation to force air movement or use of approved respirators may be required.
2. All roof openings and edges should be protected or guarded in conformity with OSHA standards.
3. An awareness of other personnel in the torch welding area is mandatory, in tight quarters; only one (1) torch should be used.
4. The installer needs to have previously noted the locations of all pipes, curbs, or other roof top projections before working with torch welding.
5. Removal of combustible debris from the application area before the torch welding application begins is mandatory.

6. Appropriate precautions should be taken when torch welding in the proximity of gas pipe joints, HVAC coupling joints, or electrical service lines.
7. A base roofing ply shall cover all flammable materials (e.g. wood walls and wood fiber cant) before the torch welding application begins.
8. No torch welding shall be done unless the surrounding atmosphere is nonflammable and unless combustibles are moved away or properly protected from fire hazards.
9. Combustible materials which are present on a roof. Such as material wrappers, solvents, primers and roof cements shall be moved to a designated safe location.
10. Combustible materials which are present on a roof and are not movable shall be protected from fire hazards.
11. Combustible materials present on adjoining building surfaces (e.g. Shake shingles or wood siding) should be protected by covering with fire retardant blankets or a protective shield.
12. Sufficient fire extinguishing equipment shall be ready for use where torch welding roof work is being done. The fire extinguishing equipment should be portable fire extinguishers (Type ABC). In addition, buckets of sand and pails of water are advisable. Portable fire extinguishers shall be of the size and type required by local codes. A minimum of one 20 lbs. fire extinguisher per torch or torching machine should be on the roof at all times at the torching location. Special care shall be taken to check all fire extinguishers prior to and at the completion of the day's work to make sure they are full and operable

B. Application:

1. Start at the low point of the roof and progress to the high point. The membrane shall be installed perpendicular to the slope of the roof except when the slope exceeds 3" per foot. At vertical surfaces, abutting the roof, the membrane shall extend to the cant and must be heat welded to the underlying membrane previously installed.
 - a. On slopes of more than three inches per foot, the seams should run parallel to the slope of the roof.
2. All overlaps at the membrane seam shall be installed so as to have "up" slope laps over "down" slope laps.
3. Membranes shall never be applied by any method except with a propane torch or electric heat welding devices designed for application of modified bitumen.
 - a. Flammable and solvent-based material (e.g. plastic cement) should not be exposed to flame.
 - b. When re-roofing, wood and fiber cant strips are extremely flammable and should be removed or protected.
 - c. Restaurant and food service exhaust vents can contain grease (*Grease Guard* grease containment system is recommended for these areas). All intake fans should be shut off during application with special care taken to keep torches away from openings. Exhaust vents for laundromats in condominiums, apartments and other multiple tenant dwellings can contain lint and debris. Open flames should be kept clear of all vents.
4. Membranes must not be applied during adverse weather or without precautionary measures in temperatures below 40° F.
5. The coiled membrane shall be unrolled approximately 15 feet, aligned, then the propane torch flame applied to the exposed outer surface of the coiled

membrane until the bitumen reaches the proper application temperature, causing to develop a slight sheen. Care should be taken to avoid overheating which may result in damage to or improper adhesion of the membrane. The flame should be moved from side to side and up the lap edge while the membrane is slowly unrolled and adhered to the underlying surface. Subsequent shift of the roll shall be avoided after heating has begun. When complete, the remaining membrane shall be re-rolled and installed in the same manner. All end laps must be staggered so that no adjacent end laps coincide.

6. The end laps shall be lapped six inches (6"), and the side laps must be lapped four inches (4") A bitumen bleed-out approximately $\frac{1}{4}$ " to $\frac{1}{2}$ " must be obtained at all seam areas.
 - a. To ensure the proper $\frac{1}{2}$ " flow of bitumen at the seam areas, a roller may be used. The man using roller should follow behind the torchman no more than 4 feet nor less than 3 feet to be sure that membrane will be in condition to produce proper bleed-out.
7. The seam can be rolled with a hand roller or troweled with heated trowel. When one end is complete, re-roll the opposite end not yet torched, and install in the same manner.
8. All end laps should be staggered a minimum of 15 feet.
9. All LP-Gas cylinders shall be secured in a cylinder storage area at the end of each work day.
10. All crews shall make a safety check of all equipment and LP-Gas cylinders prior to, and at the completion of the day's work.
11. A fire watch shall be implemented on a daily basis after torch welding applications are completed. The job foreman or other designated personnel shall walk the area of application at the end of the day, checking for hot spots on the roof. A fire watch shall be conducted for a minimum of one hour after the last torch is shut off for the day.

C. *Seaming:*

1. The bleed out of bitumen is troweled to insure a complete seal and watertight integrity.
2. Proper troweling is achieved by using a heated trowel. The seam area and trowel should be heated simultaneously.
3. Use heated trowel to achieve a smooth and water tight seam at all overlaps.

3.04 FLASHINGS

A. Modified Bitumen Flashings:

1. Set perlite cant in elastomeric mastic or mechanically attach.
2. Install new roofing two inches minimum beyond top edge of cant.
3. Prime the wall surface with asphaltic primer.
4. Adhere flashing membrane completely to roofing membrane. Lap sheeting ends six (6) inches. Ensure complete bond without wrinkles or voids.
5. Membrane coverage - Sufficient so that after being installed, membrane will be eight (8) inches minimum up the parapet wall. It will extend at least six (6) inches beyond to e of the cant onto the roof surface.
6. Mechanically attach top of membrane using fasteners every eight (8) inches on center.
7. See detail drawings for individual flashing requirements.

3.05 DAILY WATERSTOP TIE-IN

A. End of day

1. Remove debris from top ply of felt along termination, width eighteen (18) inches.
2. Adhere twelve (12) and eighteen (18) inch wide ply sheets from exposed deck to applied roofing with a continuous 1/16" inch thick application of asphalt. Glaze cut-off asphalt or water cut-off mastic. Extend eighteen (18) inch wide felt three (3) inches on both sides of the twelve (12) inch felt.
3. Install "deadman" insulation filler at insulation staggers.

B. Beginning of next day's work

1. Remove temporary connection by cutting felts evenly along edge of existing roof system. Remove "deadman" insulation fillers.

3.06 FIELD QUALITY CONTROL

A. Repair of deficiencies

1. Installations or details noted as deficient during Final Inspection must be repaired and corrected by applicator.

3.05 CLEANING

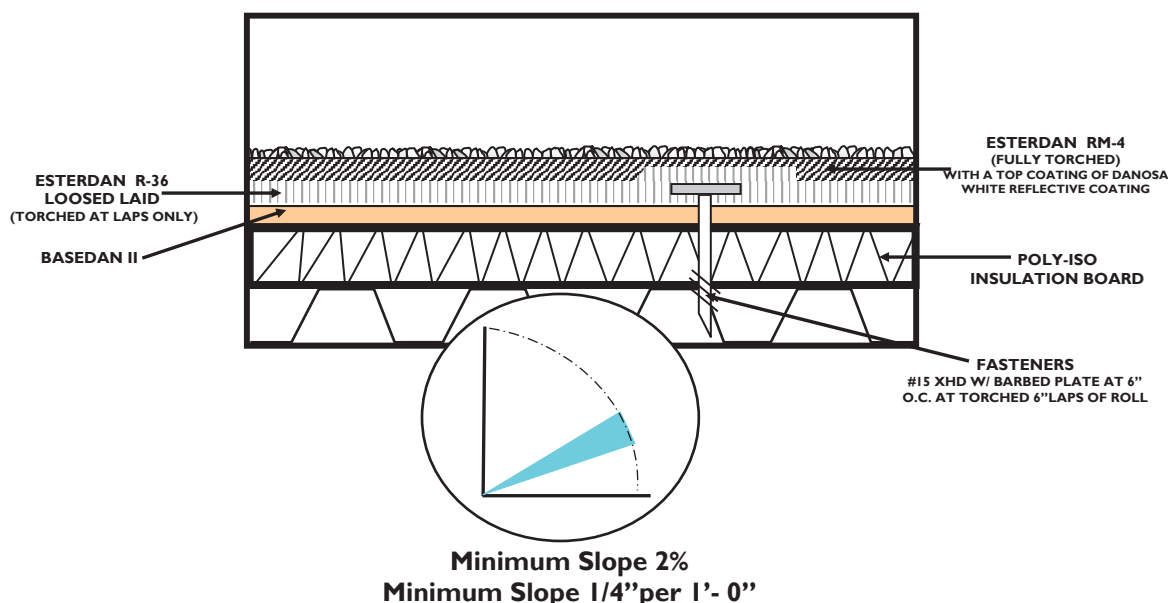
- A. Immediately upon job completion, roof membrane and flashing surfaces shall be cleaned of debris.
- B. Contractor shall be responsible for the cost of all clean-up procedures.

END OF SECTION

FM 1-225

Nailable Deck

INSULATED DECK



INSTALLATION PROCEDURE

- A. Place Poly-Iso rigid insulation boards loose laid or pre-secured.
- B. Over Poly-Iso place Base Dan II and install **Esterdan R-36** with #15 XHD Fasteners & Barbed Plates spaced 6" o.c. within 6" torched laps down to the deck. Plates to be primed with Danosa Primer (ASTM D-41). Torch laps only.
- C. Determine direction of roof drainage and the corresponding low points of the roof. In the installation of bituminous membranes, the direction of both ends and side laps shall be such that the direction of drainage will be over the laps.
- D. Proceed with the installation of the top membrane **Esterdan RM-4** (fully torched), heat fusing the entire surface to the lower membrane, **Esterdan R-36**.
- E. Revise the upper surface of the lapping joints with a heated rounded-nosed trowel. Precaution must be taken so that the seam of the base ply of **Esterdan R-36**, already adhered will lay in the middle of the width of the top layer, **Esterdan RM-4**.
- F. Retouch seams in the **Esterdan RM-4** applied with mineral granules to protect exposed asphalt during the seaming process.¹
- G. Apply Danosa White Reflective Coating (**Initial Reflectivity: 0.86 / Initial Emissivity: 0.91**) over the **Esterdan RM-4** already installed and sealed at the specified rate to comply with LEED requirements.

NOTES:

1. For detailed information and installation instructions, see Specifications 007526

Vents are required at a minimum of one (1) vent for every 1,000 square feet. Prior to the installation of the pressure release vent, core a hole through the roofing system down to where the vent will be placed in order to vent any moisture that may be trapped in the insulated deck

Revised Jan. 2011



danosa danosa danosa danosa danosa danosa danosa danosa danosa danosa

Lot. 29, Luchetti Industrial Complex, Bayamón, Puerto Rico 00961 * P O Box 13757 Santurce Station, San Juan, , Puerto Rico 00908-3757

Web-Site: www.danosapr.com E-Mail: sales@danosapr.com

Tel. (787) 785-4545 * Fax. (787) 787-3902* Toll-Free (877) 5DANOSA



FLEX 60 TPO PLUS ROOF MEMBRANE **(REINFORCED, THERMOPLASTIC POLYOLEFIN MEMBRANE)**

PRODUCT DESCRIPTION

Flex 60 TPO Plus polyester reinforced thermoplastic polyolefin (TPO) roofing membranes are designed for use in mechanically fastened and adhered roofing systems. The Flex 60 TPO Plus membrane is manufactured in widths of 5' and 10' for economical installations. Flex 60 TPO Plus membranes offer the proven weathering resistance of rubber (derived from its high ethylene propylene rubber content) combined with the thermoplastic properties of polypropylene. The combination results in a roofing membrane with hot air welded seams and the durability of EPDM roofing membranes. The Flex 60 TPO Plus membranes polyester reinforcement allows for structural movement with no splitting or cracking. The Flex 60 TPO Plus membrane is also highly impact and puncture resistant. The specially formulated membrane offers excellent resistance to solar UV and chemical exposure as well as remaining flexible in cold temperatures.

USE

Flex 60 TPO Plus membranes can be installed in new, re-roof (tear-off) and recover roof constructions. In recover construction, if the existing roof is structurally acceptable, the Flex roof system can save the cost of disposing of the original roof system. Flex 60 TPO Plus membranes can be installed directly over layers of approved roof board insulation. The membrane is secured to the deck using an approved fastening system utilizing methods that have been independently tested for wind uplift. The Flex 60 TPO Plus membranes are true thermoplastics, therefore all seams are sealed by the hot air welding method creating a seam as strong as the original membrane.

FEATURES

- Excellent low temperature impact resistance
- No Halogenated Flame Retardants
- Plasticizer Free - Chlorine Free
- Recyclable environmentally friendly product
- Chemically resistant to acids, bases and restaurant exhaust emissions
- Available in White, Gray or Tan
- White and Tan Flex 60 TPO Plus Membranes are LEED™ Qualified
- White and Tan Flex 60 TPO Plus Membranes are Energy Star® roof products

INSTALLATION

The roofing system must be installed by an authorized Flex Roofing Systems TPO applicator. The Flex applicator must inspect the area to be roofed to determine if the installation of a Flex Roof System is acceptable. The substrate must be clean, smooth, dry, free of flaws, debris and other irregularities. Follow Flex Specifications and NRCA recommendations for installation of wood nailers around perimeters and penetrations. Install approved insulation according to Flex's standard fastening requirements or applicable code, whichever is more stringent. The membrane is mechanically attached using the disk and fastener in the seam method. Fastener spacing increments are determined by the

projects specification criteria and or printed guide specifications. For adhered systems, the membrane is laminated to the appropriate substrate using Flex Bonding Adhesive. All seams are completed by the hot air welding method. Contact the Flex Technical Service Department for the specific design requirements and installation procedures for these two systems.

PHYSICAL PROPERTIES

<u>Property</u>	<u>Test Procedure</u>	<u>Specification</u>
Color		white, gray or tan
Roll Size		5'x100', 10'x100'
Weight		10'x100' roll = 322 lbs. 5'x100' roll = 162 lbs.
Thickness	ASTM D751	0.060"
Thickness over scrim	ASTM D751	0.0221"
Breaking Strength (lbf)	ASTM D751	305 x 290
Seam Strength (lbf)	ASTM D751	135
Elongation (min%)	ASTM D751	30%
Heat Aging	ASTM D573	100%
Heat Aging	ASTM D573	60 weeks
Tear Strength (lbf)	ASTM D751	75 x 130
Puncture Resistance	FTM 101C Method 2031	380 lb.
Cold Brittleness	ASTM D2137	-40° C Pass
Dimensional Change	ASTM D1204	0.4%
Water Absorption	ASTM D471	0.7%
Ozone Resistance	ASTM D1149	Pass
Weather Resistance	ASTM G155	>25,000 Kj/m ²
Permeance	ASTM E96	0.08 perms
Hydrostatic Resistance	ASTM D751	430 psi
Reflectivity (white)	ASTM C1549	0.76
Emissivity (white)	ASTM C1371	0.90
SRI (solar reflectance index)	ASTM E1980	94

Flex 60 TPO Plus membranes meet or exceed the requirements of ASTM 6878 Standard Specification for Thermoplastic Polyolefin (TPO) Based Sheet Roofing.

WARRANTY

The Flex 60 TPO Plus Roofing Membrane may receive the manufacturers standard five (5) year or optional ten (10) year, fifteen (15) year or twenty (20) year guarantee of watertightness.

PRESSURE BARS



Thermoplastic Single Ply and Multi-Ply Roofing Systems

800-969-0108 • 610-916-9501 (Fax)
2670 Leisz's Bridge Road, Suite 400, Leesport, PA 19533
e-mail: flexroof@cs.com • www.flexroofingsystems.com

PRODUCT DESCRIPTION

The Flex Termination Bar is designed to terminate single-ply membrane to parapet walls and other penetrations. A Flex Heavy Duty Fastener or Masonry Anchor should be used to secure the termination bar.

The Flex Termination Bar is made of extruded aluminum (6063 T6 alloy) with a mill finish. Oval holes that measure 1/4" x 3/8" are punched into each bar, with a standard spacing of 6", 8" or 12" on center (O.C.). Flex Termination Bar can be made to order with special hole spacing.

PHYSICAL DATA

Channel Bar **Cat. No. CHANB__ (06 08 12)**

Physical Data: Width: 1"
Thickness: .100
Leg Height: 1/4" Top & Bottom
Leg Angle: 90°
Shipping Weight: 76 lbs/tube

Lip Bar **Cat. No. LIPTB__ (06 08 12)**

Physical Data: Width: 3/4"
Thickness: .090
Lip Width: 3/16"
Lip Angle: 45°
Shipping Weight: 57 lbs/tube

Flat Bar **Cat. No. FLATB__ (06 08 12)**

Physical Data: Width: 1"
Thickness: .090
Shipping Weight: 57 lbs/tube

Heavy Flat Bar **Cat. No. FLATB_-18 (06 08 12)**

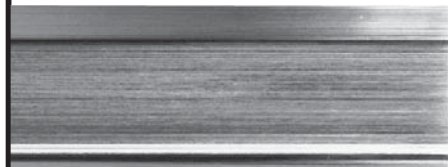
Physical Data: Width: 1"
Thickness: .125
Shipping Weight: 74 lbs/tube

Packaging: Each length of termination bar measures 10'.
There are 50 lengths of bar in each tube
(500' total). Pallet quantities equal 5,000'
(10 tubes).

TERMINATION BARS



Channel Bar



Lip Bar



Flat Bar



Heavy Flat Bar

