

Procurement and Installation of Inverter and Battery Systems

USAID Contract No. EPP-I-00-03-00008-00, Task Order 01, Sub-Activity 17: Improving Energy Services at Health Facilities in Haiti

January 21, 2009





Request for Quotations US0325-RFQ-2009-001 Procurement and Installation of Inverter and Battery Systems USAID Contract No. EPP-I-00-03-00008-00, Task Order 01, Sub-Activity 17: Improving Energy Services at Health Facilities in Haiti

Table of Contents

I.	Introd	luction	1
II.	Backg	1	
III.	Sourc	e Selection and Specifications	1
IV.	Quota	ation Format	1
V.	Techn	nical Guidelines and Conditions	2
VI.	Solici	tation Guidelines and Conditions	3
VII.	Subm	ission of Proposals	4
VIII.	Quest	tions	5
IX.	Terms	s of Payment	5
Χ.	Conte	ents of this Bid Package	5
APPE	ENDICES	s	
Appe	ndix A	Technical Specifications	A-1
Appe	ndix B	Bid Sheet	B-1
Appe	ndix C	Certifications of Business Size/Type and Source,	
		Origin & Nationality	C-1
Appendix D		Organizational Conflict of Interest Certification	D-1
Appendix E		dix E Representations and Certifications	
Appendix F		lix F Floor Plans and Electrical Drawings	
Appendix G		Alarm Schematic	G-1
Appe	ndix H	Photos	H-1
Appe	ndix I:	Supplemental Pricing for Modifications	
		in Fort-Liberté and Ouanaminthe	I-1
Appe	ndix J	Load Sheets	J-1
Appendix K		ix K Sample Purchase Order	

Request for Quotations US0325-RFQ-2009-001 Procurement and Installation of Inverter and Battery Systems USAID Contract No. EPP-I-00-03-00008-00, Task Order 04

I. Introduction

As part of USAID's foreign assistance to the Government of Haiti, PA Government Services Inc. (PA) hereby solicits bids from qualified suppliers of electric power installations to procure, deliver, install and commission inverter/battery systems in seven hospitals or clinics in the northern region of the country to improve the reliability of electricity for laboratories, examination rooms and data centers in these facilities.

II. Background

This work is to be done in the context of the USAID Haiti Powering Health project, with the objective of improving back-up power and overall power system reliability in Haitian medical facilities in a sustainable way, concentrating on battery / inverter systems. The project consists of pilot installations, development of installation and operating protocols, and training for electrical technicians and medical managers.

This RFQ focuses primarily on the installation of pilot or demonstration systems, which will provide the basis for developing installation and operating protocols.

III. Source Selection and Specifications

On behalf of USAID, PA will conduct source selection for subcontract award, make payments to selected vendors, and manage transfer and acceptance of the equipment to the counterpart hospitals or clinics. Awardees for listed components will be selected on the basis of their compliance with enclosed equipment specifications, delivery times and price. Bidders must provide quotes on components set forth in **Appendix A** (Technical Specifications). Electronic copies of PA's technical specifications are available upon request to facilitate the response process.

PA requests Bidders to review these specifications and each Bidder confirm to PA within 5 days whether it intends to submit a bid.

PA reserves the right to conduct discussions with selected Bidder(s) in order to identify the best value offer. Award of any resulting subcontract shall be made by PA on a best value basis, with evaluation of both proposed price as well as proposed services and implementation schedule.

IV. Quotation Format

In order to be qualified for this procurement, all Bidders are requested to provide the following information, and format their offering as follows:

- 1. Letter of transmittal, one page
- 2. Basic information on the Bidder, one page, containing:
 - a. Brief description of the firm which illustrates overall product line and capabilities to meet the terms of the solicitation

- b. Legal name of the firm, registered address and telephone number
- c. "Remit to" mailing address if different from registered address
- d. Name of authorized representative for this solicitation, with telephone number(s), mailing address and e-mail address
- e. Exceptions to the Solicitation Any exceptions to the solicitation, statement of work and flowdown requirements should be noted here
- 3. Technical Proposal a detailed description of the equipment being offered and any information relevant to meeting the technical specifications stated in **Appendix A**.
- 4. Cost Proposal a detailed cost proposal in U.S. Dollars should be submitted using the preformatted format in **Appendix B**, including any additional cost items that the Bidder wishes to propose.
- 5. Exceptions to the RFQ –In accordance with FAR 52.211, variations in the quantity or specified type of any item called for in this RFQ and described in your proposal will not be accepted unless the variation has been caused by conditions of loading, shipping, or packing. Any exceptions to the RFQ should be noted by the Bidder here.
- 6. Delivery/Installation Plan A brief overview of the bidder's plan for meeting the proposed delivery schedule to ensure that delivery is not delayed. PA requests that each bidder provide a detailed schedule specifying when each specified component will be delivered/installed.
- 7. Support Plan A general description as to how the Bidder may support the products once installed, including warranty service, etc. Bidder should propose a maintenance agreement based on the conditions specified in **Appendix A**.
- 8. Completed Representations & Certifications as requested in **Appendices C, D,** and **E**, and confirmation of your willingness to comply with PA's standard Terms and Conditions from USAID in **Appendix G**.

V. Technical Guidelines and Conditions

Bidders must comply with the following conditions which apply to the furnishing of all items noted in the *technical specifications*:

Offers/Quotes

PA would like to compare prices from all bidders and requires that RFQ responses cover the same items. Thus, please complete the tables provided in **Appendix B**. Prices are to be valid for 180 days, include all taxes (excluding VAT), and are include installation and commissioning. Bidders must provide a disaggregated budget of all prices in the identified categories. PA will not accept lump-sum totals as responses to any categories.

Locations

The equipment installations will be in the following clinics/hospitals:

Hopital de Belladere (lab, IT and night lighting)
Hopital de Hinche (lab, lighting in maternity and OR)
Hopital de Grande Rivière du Nord (lab, IT, area lighting)
Centre Medico-Social de Ouanaminthe (lab, IT)

Hopital de Fort Liberté (lab, IT)
Hopital Universitaire Justinien (lab 24-hour operation)
Centre de Sante de Borgne (lab, IT) off-grid PV application.

Source/Origin

All services and supplies provided must be of US or Haitian source, origin, and nationality, as defined by USAID regulations. In particular, the supplies must be substantially assembled in the USA or Haiti; and must be located in the USA or Haiti at the time of the order. The value of components imported from outside the USA or Haiti may not exceed 50% of the lowest export sale value of the equipment. The nationality of the supplier must also meet USAID regulations (i.e., US-registered entity). Further, supplies must not originate or be composed of any parts from any US Government-designated Foreign Policy Restricted Countries, as specified below. Bidder shall complete and sign the Source, Origin and Componentry Certification, and the Certification of Business Size/Type included in **Appendix D**. Quotations that do not include these certifications will not be considered.

Foreign Policy Restricted countries are currently defined by the US Government (22 CFR 228) as including: Cuba, Iran, Iraq, Laos, Libya, North Korea, and Syria.

Marking

The selected Bidder(s) will be responsible for marking the equipment with the USAID Emblem (clasped hands), as required by USAID regulations. PA will advise on marking requirements and provide the necessary materials.

Pricing

Bidder should quote separately recommended options, spares, and supplies not specifically addressed in the RFQ or the technical specifications in **Appendix A**. Bidder shall note any exceptions to the above and describe alternate proposals.

Documentation

Quoted prices should include two (2) copies of all operation and maintenance manuals, drawings, and certification documents.

VI. Solicitation Guidelines and Conditions

PA will select the Bidder(s) based on several criteria, to include price, qualifications/experience, and responsiveness of bidder's proposal.

Technical Compliance

Bidders are required to review and confirm specifications for each equipment component. Please ensure that your responses use plain language, are concise and unambiguous, are quantitative, and deliver full information. Bidders may volunteer additional information if it is useful to this process.

Implementation Schedule

PA would like this project to be completed as soon as possible, thus time is of the essence. Proposed implementation schedule will be a factor in the bid evaluation. PA will expect the Bidders to provide a narrative explanation of their proposed schedules.

Maximum Items Bid

As stated in Technical Guidelines and Conditions the Bidder must quote on all sites. Since Bidders are requested to price each site separately, they should also propose price discounts if awarded multiple sites.

Price Evaluation

PA will award subcontract(s) resulting from this solicitation to the responsible Bidder(s) whose proposal(s) will be deemed most advantageous to PA, price and other factors considered. Therefore, the Bidder's initial offer should contain the best terms from a price and technical standpoint. If determined to be necessary, PA reserves the right to conduct discussions with the selected Bidder(s). PA may reject any or all offers if such action is in the interest of PA or the public; accept other than the lowest offer; and waive informalities and minor irregularities in offers received.

Fixed Unit Pricing

PA expects bid prices to cover all costs and expenses that will be incurred towards full delivery, installation and commissioning of equipment, including labor, materials, transportation, travel and other expenses. PA will only consider accepting price changes or additional charges beyond a Bidder's quotation, if and only if PA modifies the quotation requirements in writing to all prospective Bidders.

Bidders' pricing must include any necessary customizations, or customization costs must be listed separately. Otherwise, PA will understand that there are no additional costs associated with those items. Bidders are encouraged to provide explanations/assumptions where necessary to help PA develop a better understanding of pricing.

Warranties

Bidder shall provide information on product warranty and availability of warranty service in Haiti. Bidder shall indicate exactly what is covered under the warranty (parts, labor, product replacement etc.). Bidders shall provide most favored warranty provisions.

Language

Bids must be submitted in English. Technical documentation may be included in French.

New Material Requirement

In accordance with Federal Acquisition Regulation (FAR) 52.211-5, "Material Requirements" all equipment provided under this solicitation will be composed of previously unused components. Used, reconditioned, or remanufactured supplies, or unused former Government surplus property, shall not be used unless the Bidder has explicitly proposed the use of such supplies, and PA's Director of Contracts has provided written authorization for their use.

Multiple Awards

PA may award all sites to one Bidder, multiple sites to one Bidder, or only one site to a given Bidder, depending on the bid evaluation.

VII. Submission of Proposals

All quotations are to be submitted by electronic mail to maggie.brunet@paconsulting.com no later than 10 pm GMT on February 4, 2009. Quotations received after this time will not be considered. Bidder's proposals should not contain any unnecessary promotional material or elaborate presentation formats (black and white is preferred). Bidder's standard technical specifications and product literature are preferred.

VIII. Questions

Technical inquiries and/or requests for clarification to this offering must be made in writing via e-mail to Maggie Brunet at maggie.brunet@paconsulting.com before close of business on Tuesday January 27. PA will provide answers by midday Friday, January 30. All questions and answers will be forwarded by PA to all participating bidders.

IX. Terms of Payment

Payment terms for the awarded Subcontract Agreement shall be net thirty (30) days after satisfactory completion of each delivery or milestone agreed upon and established in the resulting contract. Payment shall be made by PA Government Services Inc. (Arlington, VA) via check or electronic funds transfer/bank wire. No advance payments will be provided:

- Bidder may invoice PA the equipment cost upon equipment delivery
- Remaining payment schedule to be negotiated with the bidder
- Final payment of 15% upon PA acceptance of installation.

X. Contents of this Bid Package

Appendix A: Technical Specifications

General Specifications

Site-Specific Descriptions

Appendix B: Bid Sheet

Appendix C: Certifications of Business Size/Type and Source, Origin & Nationality

Appendix D: Organizational Conflict of Interest Certification

Appendix E: Representations and Certifications

Appendix F: Floor Plans and Electrical Drawings

Appendix G: Alarm Schematic

Appendix H: Photos

Appendix I: Supplemental Pricing for Modifications in Fort-Liberté and Ouanaminthe

Appendix J: Load Sheets (for background information only)

Appendix A: TECHNICAL SPECIFICATION

General Technical Specifications: Applicable to all Sites

Scope of Work:

General:

Contractor will provide and install all required equipment, conduit, wiring and connections to complete the scope of work as defined herein. Contract price includes all labor and materials, transportation, expenses, taxes, etc., to complete the project.

Contractor will be required to submit a package of information detailing the equipment to be provided and will not be released to purchase this equipment until approval is received from Owner. (See section on Submittals.)

Installation work will include:

Inverter Equipment:

- Installation of Outback inverters utilizing the FlexWare DC and AC boxes and mounting plates, mounted to plywood, which is mounted to the wall.
- All AC and DC circuit breakers will be included as part of the Outback Flexware System
- The Outback Flex Net DC monitoring system will be installed in the equipment enclosure.
- The Surge Protection adder, to be installed in the AC conduit adapter for each inverter, will be included. (FW-SP-ACA)
- Additional kilowatt meters for the AC IN and AC OUT feeders.
- Supplemental DC Smart charging may be required on some sites. Contractor will recommend appropriate equipment for this use.
- An alarm system will be installed that powers a horn and a light when the batteries are in need of charging, and before the low voltage disconnect takes over. These voltage values will be specified.

A sample Bill of Material for a typical Outback Power system consisting of three inverters would be:

Qty	Cat No.	Description
3	VFX3648	3600 Watt 48VDC Inverter / 45A Charger
3	FW SP ACA	AC Box and Surge Protector (required for all inverters)
3	DCA	DC Conduit entry adapter
1	FW1000DC	DC Enclosure Box
3	OBB-175-125DC-PNL	175A DC Panel Mounted Breaker – One per Inverter

1	FNDC	Monitoring Equipment
1	FWBBUS	Bus Adapter for Shunt
1	FW SBUS	Shunt Terminal Adapter
1	FW Shunt 500	Added Shunt for Monitoring System
1	FW1000 AC	AC Breaker Enclosure
1	FW IOB-Q- 120/240AC	By Pass Assembly Kit for up to four inverters – to include the AC IN and bypass breakers and bus bars
2	FW-MP	Mounting Plates
1	MATE	Computer / Monitor
1	Hub-10	Hub for connection to all equipment
1	RTS	Remote temperature sensor for batteries
Lot	AC Breakers	AC Output breakers as required for the loads, mounted on the din rails in the FW100AC box.

This listing is not meant to be a complete bill of material for any particular site, but to give the bidder an understanding of what parts are required for a complete system.

Programming of the Inverter System:

The Inverter system needs to be set up to match the batteries it is charging, and the level of protection (e.g. depth of discharge) that is required. PA Consulting will work with the successful contractor to develop the proper programming levels. This will depend a lot on the battery selected.

Alarm System:

An alarm system, consisting of a relay, timer, horn and light, will be provided by the bidder for each site. See a detailed schematic of the alarm system in the bid drawings. The horn and light should be installed where they can be visible and audible to the users of the system. The timer is used to silence the horn (but not turn off the light) after the operator has responded to the alarm and is taking appropriate action. A sign will be installed at the location of the horn and light indicating what it means when it goes off, and what action must be taken. The wording of this sign will be approved by PA Consulting.

Exact Equipment Locations:

The location of the Inverter / Battery equipment is shown generally on the drawings. Exact locations will be determined in a pre-construction walk through by the contractor, PA Consulting, and the responsible hospital person.

The Outback Flexware equipment will be installed on the Flexware mounting plates which will be installed on ¾" plywood. The plywood backboard will be sufficiently large, beyond the dimensions of the mounting plate, to accommodate wiring fasteners. Sufficient room will be allowed to the right of the DC box on all installations for the possible future addition of solar charge controller equipment.

Additionally, sufficient room will be allowed on the left side (AC side) of the box to accommodate the MATE and the alarm equipment.

Batteries:

- Installation of batteries on welded metal racks, painted, with wood shelves, generally installed in exterior, but secure areas, and able to be locked. Grill work on shelves will prevent theft of individual string cables.
- Homerun battery cables to be 2 sets of 4/0 (2-Positive and 2-Negative) not to exceed 10 feet in length. Paralleling cables shall be sized as required by the batteries, but no smaller than 2/0 and generally not to exceed 5 feet in length.
- The complete circuit from the positive bus to the negative bus should be equal in length for all circuits. This means that all paralleling cables need to be exactly the same length.
- Battery manufacturer and Ah rating can be as recommended by contractor, but must be Deep Cycle batteries. The maximum number of parallel strings is 4.
- Bidder is encouraged to offer base price and alternate pricing on different battery options. (e.g. liquid versus gel) All battery submissions are to be based on a 50% Depth of Discharge.
- Battery paralleling connections will be made on a common bus bar, and the main positive homerun will be fused.
- Bidder to supply warranty information for the batteries included in the bid. We are generally looking for the batteries to have a 7 year warranty.
- Bidder will complete an initial full charge of the batteries, and assure that all of the batteries' water levels are topped off following this charge. Sufficient distilled water will be included in this proposal to be left with the operator to last for the first 6 months of operation.

AC Wiring:

- AC IN wiring will be in EMT conduit and wire generally. AC OUT circuits will generally be 100% new and separate from any existing circuits. (with a few exceptions). The AC OUT circuits will be run in EMT conduit.
- The new outlets and conduit feeding the outlets will be identified completely differently from the main building circuits, by a different color paint and signage.

General Building Wiring:

- All wiring will be in conduit and wire except for the battery cables.
- Conduit systems will be installed completely before wire is pulled into them.
- All conduit will be fastened to junction boxes, panelboards, circuit breakers, etc. with approved conduit connectors.
- The conduit and wire installation will be in accordance with the 2008 National Electrical Code.

- Grounding will be in accordance with the 2008 National Electrical Code and a
 dedicated grounding system (5 Ohms or less) has to be installed in case of a no
 contact inverter system (no contact with the common ground)
- Proper junction boxes, elbows and fittings will be utilized.

Labeling and Signage:

All outlets on the systems will be labeled with manufacturer (engraved) nameplates or other professional labeling means. (no writing on the outlets or the walls.) There will be additional signage for instructions of use for the special wiring system installed in the rooms. There will be placards in the equipment room with the system design, and system instructions.

Location and Identification of Outlets:

Throughout these bid documents, an "outlet" is considered to be 1 – specification grade, duplex receptacle, grounding outlet.

Location:

The exact locations are not shown on the drawings, but sufficient information is on the drawings to determine the approximate locations, and quantities of required conduit and wire.

Final locations of all outlets and lighting circuits will be determined by a meeting on site between the contractor, PA Consulting, and the responsible hospital personnel (generally the administrator or the medical director.) These locations will be documented so avoid questions that might come up later.

Identification of Outlets:

All of the outlets on the system will be identified to be easily distinguished from the other outlets in the building. In addition to the markings on the conduit (different color) the outlets should be provided in a different color as well. Contractor can submit on what color is available, but generally, the color Orange is used in hospitals for special circuits, and these outlets are available, and recommended.

Technical Information to be Submitted with Bid Documents:

Bill of Materials listing, for each site:

- All of the inverter equipment required for the site.
- The quantity, size, and manufacturer of the proposed batteries.

Manufacturer information on the Batteries to include:

- Data on cycle life versus depth of discharge.
- Manufacturer Warranty Information

Schedule Information:

Bidder shall include a narrative discussing the approach to the work. This shall include when the work could start and when one site could be completed. Additionally, the bidder should describe how it will manage more than one site, and how the award of multiple sites will affect the time of completion.

Technical Information to be submitted following contract award:

After the successful bidder is identified, the following additional technical information is to be submitted prior to the start of any work:

Catalog information for product approval on:

- Batteries, including warranty information
- Load Centers
- Double Throw Switches
- Safety Switches
- Duplex Outlets
- Lighting Outlets
- Lamps
- Conduit
- Wire

Layout Drawing to show:

- Conduit and Wire runs, showing junction boxes, and quantity of wires in each conduit.
- Locations of outlets (as determined in pre-construction meeting)
- Arrangement of main inverter / battery equipment.
- Plans for construction of battery racks for approval before fabrication.

Turn-Over Documentation and activities:

Contractor will prepare a properly bound binder (or binders) including the following:

- All of the Owner's Manuals that come with the equipment.
- Warranty and emergency contact information.
- Any special warranty information required for the individual pieces of equipment.
- Operation and Maintenance Instructions.
- As-Built drawing showing the actual installation that was completed.
- List of spare parts

Two copies of the above documentation will be provided to PA.

Owner training:

Contractor will conduct a full day of training for the hospital employees and management personnel that will include:

- Training for the administration / medical director personnel in what the system will do and what it will not do.
- Overview training in energy management to all staff who will operate the system.
- Detailed training of the operators responsible for system.
- Instructions in the need for record keeping.

Maintenance Agreement:

Contractor will provide pricing for an optional maintenance contract that may be executed between the hospital facility and the contractor. Maintenance contract would include, at a minimum:

- Monthly visits to the site; ensure log is there and available; sign log, review log for visits during the month
- · Check and fill batteries.
- · Provide equalization charge monthly.
- Record the past month's data from the Flex Net DC recorded, and from the KWhr log of the operator, put this information into a spread sheet format, and transmit monthly to PA Consulting.
- Monitor the loads that are connected to the system.
- Provide spot re-training for the users of the system.
- Interview the users for any problems they may have had during the month.
- Send 1-page summary report on visit and results to PA Consulting

Specific Site Descriptions

In A.1 through A.7 below.

A.1 HOPITAL DE HINCHE

HOPITAL de HINCHE is a major hospital in the Central Plains area. The scope of work for this site is to provide extended hours to the laboratory, the Operating Suite, and the Maternity / Delivery area.

Basic Equipment:

Inverters:

There will be a total of four inverters. Three will be connected to the AC IN and used as contact inverters. One will not be connected to the AC IN and will be a no-contact inverter for the circuits in the lab.

Batteries:

This site requires a 48V Battery bank of 900 to 1,000 Ah.

Equipment Location:

The Inverter and Batteries are to be installed in an equipment room that is being constructed by the staff at Hinche. This is on the corner of the Operating Suite.

AC IN Requirements:

The hospital staff at Hinch are working on an upgrade to their power distribution system that will extend larger feeders from the generator to the hospital, resulting in new cables, and a new AC Distribution Panel (or group of fused disconnect switches) on the outside wall of the maternity / delivery area. From that AC Distribution equipment, we will bring 4 – 60A circuits (two circuits on each of two Phases) to the Inverter cabinet. Only three of these circuits will be utilized at this time. This AC IN Feeder will be run on the exterior of the building in EMT conduit. This bidder is to include the cost of the breakers, or in the case of a wire way distribution system, two fused 60A 2P disconnect switches, in this bid.

AC OUT Requirements:

The equipment will feed loads in:

- The Laboratory
- The Operating Suite
- The Maternity Delivery Area

Laboratory:

The laboratory currently has an SW inverter, and batteries installed in the lab at this time(see photograph). These need to be removed, and returned to PA Consulting. The outlets are basically installed in a temporary manner, with surface cabling and surface mounted outlets.

There are two laboratory rooms. Each room will receive two circuits with 6 outlets each. Each room will receive one light fixture with a 22 w CFL lamp. There will be one additional dedicated circuit and outlet for an efficient refrigerator.

Additionally, the no-contact circuit will go to the lab where the CD4 equipment is, and feed 3 outlets there.

Operating Suite:

There are 3 Operating Rooms in the Operating Suite. Each Operating Suite will receive two outlets for (a) mobile lighting equipment, and (b) other special equipment such as anesthesia machine and/or electronic cutter.

There will be one circuit for the outlets in each operating room. (Total of 3 circuits for these outlets).

Another, fourth, circuit will feed the lighting throughout the operating suite. This will consist of 8 lampholders with 14 watt CF light bulbs.

Maternity Suite:

The maternity suite consists of a large delivery room and several preparation rooms. There will be a total of 3 circuits to the maternity suite. Two circuits will be for the equipment outlets, and one for lighting. There will be a total of 4 equipment outlets located in the maternity suite.

Security Lighting:

As an alternate proposal, install conduit, wire, outlets, and lamps for 12 security lights located around the existing walkway around the inner perimeter of the main hospital building. These lights will be approximately 30 feet on center, and will start at the area of the inverter panel.

Specific Site Requirements:

Please refer to the site plan for the approximate dimensions for the wiring homeruns. The building was built in 1948. Also – please refer to the photographs for information on existing structure.

All conduit will be installed above ground, fastened to the structure. The area between the Operating Suite and the Laboratory is an open courtyard, so we have shown the conduit going around the courtyard, fastened to the ceiling of the walkway.

A.2 HOPITAL DE BELLADÈRE:

HOPITAL de BELLADÈRE is a medium sized hospital on the border with the Dominican Republic. It has a high patient flow, and runs a 24 hour operation.

Basic Equipment:

Inverters:

There will be a total of three inverters. Two will be connected to the AC IN and used as contact inverters. One will not be connected to the AC IN and will be a no-contact inverter for the circuits in the lab.

Batteries:

This site requires a 48V Battery bank of 660 Ah. (Three strings of T-105 or equivalent battery bank.)

Equipment Location:

The Inverters and batteries are to be installed in an equipment room that used to be a second generator room, next to the existing generator room. The inverter equipment can go on the common wall with the main generator room, thus making the AC IN conductors very short.

AC IN Requirements:

The wiring from the output of the Generator to the hospital is currently in a high state of disarray. The hospital may correct this before we get there, so we are asking for a breakout price on the work to rework this equipment. The electrical equipment here will consist of a double throw switch (EDH / Generator) and then a wireway with the power wires, allowing for taps to separate fused disconnect switches for the various loads. One of these loads will be for the AC IN to the Inverter / Battery Equipment .

This work is detailed on the Sketch, Sheet 2 of 3 for the Belladere package of drawings.

AC OUT Requirements:

The equipment will feed loads in:

- The Laboratory
- The IT Area and Medical Director Office
- Miscellaneous Special Outlets and night security lighting.

<u>Laboratory:</u>

The laboratory will receive one circuit breaker load center for the contact outlets. There will be four circuits for the outlets and lighting in the laboratory. There will be 2 outlets each on 3 of the circuits (6 outlets) and 1 dedicated refrigerator outlet.

Additionally, there will be one no-contact circuit with three outlets, fed directly from a circuit breaker in the inverter panel room.

There is currently, an existing DR inverter and group of batteries in the surgery area across the hall from the lab. The equipment on this contract can be installed without disturbing this equipment.

IT Area and Medical Director's Office:

The IT area and the Medical Director's office are adjacent to one another.

In the IT area, there will be 2 circuits feeding 4 outlets and one light.

In the Medical director's area there will be 1 circuit feeding two outlets and one light.

Miscellaneous Special Purpose Outlets and Security / Night Lighting:

There will be 3 miscellaneous circuits. Contractor is to install, in six locations, generally wards and treatment areas, a special purpose outlet, and a light. The light will be 14W CFL. The special purpose outlet and the light will be on separate circuits. (One circuit can control all 6 lights and one circuit can control all 6 special purpose outlets.) The outlet will be located on the wall adjacent to the walkway with the light on the same wall, directly above it, to minimize the circuit distance to the walkway corridor.

The third miscellaneous circuit will be for 3 hallway lights at 22W CFL, and three exterior flood lights at 22W.

The IT and Misc load center will be located in the Medical Director's office to enable better control over the lighting and special purpose outlets.

Specific Site Requirements:

Please refer to the site plan for the approximate dimensions for the wiring homeruns. Also – please refer to the photographs for information on existing structure.

The conduit between the generator building with the inverter / battery equipment and the hospital will be installed underground and can be in PVC Schedule 40 conduit, with proper fittings.

The conduit should rise up on the outside of the Surgery building with a junction box. The circuits that continue to the Medical Director / IT / Special Purpose outlet panel can then continue underground.

The rest of the circuit wiring will be surface mounted in EMT conduit.

The exact locations of the special purpose outlets / lights will be decided by the medical director and PA Consulting. In general they will be in the wards (men, women, pediatrics) as well as the emergency room and other special treatment areas.

A.3 HOPITAL DE GRANDE RIVIÈRE DU NORD:

HOPITAL de GRANDE RIVIÈRE du NORD is a small hospital, open 24 hours a day, with a lab and inpatients.

Basic Equipment:

Inverters:

There will be a total of two inverters. They will be connected to the AC IN and used as contact inverters. This site will not have a no-contact inverter installed.

Batteries:

This site requires a 48V Battery bank of 660 Ah. (Three strings of T-105 or equivalent battery bank.)

Equipment Location:

The inverter is to be installed a room that is currently being used for storage and will be cleaned out before the start of this contract (the area that is to be used by the inverter will be cleaned out.) The inverter will be installed on a wall where there is currently a wooden shuttered opening. This contractor will be required to render this opening permanently closed, and install support materials across it to properly mount the inverter equipment.

The battery rack will go directly outside this wall in a locked cage.

AC IN Requirements:

The AC IN will come from existing equipment at the existing generator building. There are fused disconnect switches there in good condition. This contractor will tap into one of these switches, and install a new 60A 2P fused safety switch to feed the AC IN.

AC OUT Requirements:

The equipment will feed loads in:

- The Laboratory
- The IT Area
- Miscellaneous Special Outlets and night security lighting.

Laboratory:

The laboratory is currently wired with separate inverter only circuits fed from an old DR inverter system that apparently no longer exists. (This inverter system used to be located beneath the water tank near the generator building). We will backfeed the circuits in the laboratory with three new circuits from a new load center to be located in the walkway of the hospital. This contractor will check all of the circuit wiring in the existing outlets, and repull the cables if necessary to (a) insure proper grounding and (b) distribute the circuits properly. One of the three circuits is a dedicated circuit for the refrigerator outlet.

IT Area:

The IT Area is currently wired with circuits that used to be from the DR inverter equipment. This contractor will backfeed these existing circuits with one circuit from the new load center in the hall.

Miscellaneous Special Purpose Outlets and Security / Night Lighting:

There will be 2 miscellaneous circuits. Contractor is to install, in six locations, generally wards and treatment areas, a special purpose outlet. The outlet will be located on the wall adjacent to the walkway to minimize the circuit distance to the walkway corridor. These outlets will all be on one circuit that can be turned off at the load center.

The second miscellaneous outlet will backfeed the existing night lighting circuit, intercepting the circuit in the hallway just above the new load center location.

The new load center will be located in the hallway. It will have a lockable cover and will be the point of the control for the medical director.

Specific Site Requirements:

Please refer to the site plan for the approximate dimensions for the wiring homeruns. Also – please refer to the photographs for information on existing structure.

The conduit between the generator building with the 60A 2P safety switch, and the location of the inverter / battery equipment will be installed generally underground and can be in PVC Schedule 40 conduit, with proper fittings.

The feeder from the inverter equipment room to the new AC load center will be run in the walkway, in EMT conduit and wire.

The rest of the circuit wiring will be surface mounted in EMT conduit.

The exact locations of the special purpose outlets / lights will be decided by the medical director and PA Consulting. In general they will be in the wards (men, women, pediatrics) as well as the emergency room and other special treatment areas.

2 extra duplex receptacles has to be added tapping on the existing circuit to feed 2 computers in 2 rooms(not shown in the floor plan) across the hall way by the side of the Admin/VCT office (now powered by extension cord). This will require an extension of approximately 50 feet of EMT conduit, 2 junction boxes, 5 elbows and wires.

A.4 CENTRE MEDICO-SOCIAL DE OUANAMINTHE:

CENTRE MEDICO-SOCIAL DE OUANAMINTHE is a medium sized facility on the Dominican Republic border. There is a new ARV / IT suite of offices being installed at this time.

Basic Equipment:

Inverters:

There will be a total of three inverters. Two will be connected to the AC IN and used as contact inverters. One will be reserved for a no-contact inverter for certain lab circuits.

Batteries:

This site requires a 48V Battery bank of 660 Ah. (Three strings of T-105 or equivalent battery bank.)

Equipment Location:

The inverter will be installed in a room that is currently housing the main electrical equipment point of entry to the hospital (first point from the generator.) There are locations within this room to obtain the AC IN wiring. The batteries will be installed just outside the wall with the inverter equipment. There are some wooden cupboards where the inverter will be installed. Permission has been granted to remove the cupboards to install the inverters. The old, and mostly abandoned, inverter and battery equipment will be removed and turned over to PA Consulting.

AC IN Requirements:

The AC IN can be obtained from tapping the feeder to the main panel located in the inverter room, or by installing 2-60A c/b's in this same panel. The hospital is in the process of having the main power distribution system, and feeder from the generator replaced, but we have been informed that the location of the main panel will remain at this location. (See drawings.)

AC OUT Requirements:

The equipment will feed loads in:

- The Laboratory
- The IT / ARV Area.
- Back feed an existing inverter circuit for limited area night lighting.

Laboratory:

The laboratory will receive all new outlets and conduit. The circuits will be fed from the outside, with the circuits penetrating the exterior wall to feed the outlets. The AC distribution breaker space in the Outback Inverter equipment will be used as a load center, and no additional load centers are required. In the lab, there will be two circuits with four outlets each. Additionally, the no contact circuit will provide service to three outlets.

There will be an additional dedicated circuit to the refrigerator in the lab.

There will be a feed to one light in the middle of the lab, fed from one of the contact outlets.

IT Area:

There are 9 total rooms in the IT / ARV area. Each room will receive one 14W CFL light, one switch, and one receptacle. These can all be on the same circuit. The conduit and wire for this circuit will be run on the outside of the building, penetrating to the light fixture, and dropping down for the switch and the receptacle.

There will be 1 circuit for 4 of the rooms, and 1 circuit for the other 5 rooms.

Existing Night Lighting Circuit

There is an existing night lighting circuit that used to feed general area and ward lighting for night use. This circuit exists in the area of the new inverter / battery location.

Contractor is to inspect this circuit for integrity, and remove any improper wiring. Assure that the loads associated with this circuit do not exceed 2500 watthours and document what the circuit and lighting locations.

Specific Site Requirements:

Please refer to the site plan for the approximate dimensions for the wiring homeruns. Also – please refer to the photographs for information on existing structure.

All of the conduit and wiring will be run on the exterior of the buildings and penetrate the walls to feed the outlets. The AC IN conduit and wire will all be contained within the electrical equipment room.

There is a courtyard area to cross just after leaving the inverter room, towards the ARV office area. This conduit should be run underground in Schedule 40 PVC conduit.

The no-contact circuit wiring will be in separate conduit from the contact wiring.

A.5 HOPITAL DE FORT-LIBERTÉ:

HOPITAL de FORT-LIBERTÉ is a medium sized facility near the Dominican Republic border. There is a new ARV / IT suite of offices being installed at this time.

Basic Equipment:

Inverters:

There will be a total of three inverters. Two will be connected to the AC IN and used as contact inverters. One will be reserved for a no-contact inverter for certain lab circuits.

Batteries:

This site requires a 48V Battery bank of 660 Ah. (Three strings of T-105 or equivalent battery bank.)

Equipment Location:

The inverter will be installed in a room that is currently housing the main electrical equipment point of entry to the hospital (first point from the generator.) There are locations within this room to obtain the AC IN wiring. The batteries will be installed just outside the wall with the inverter equipment. The old, mostly inoperative inverter equipment and batteries will be removed (and turned over to PA consulting.)

AC IN Requirements:

The AC IN can be obtained from tapping the main feeder to the building located in the inverter room, or by installing 2-60A c/b's in the load center in this room. The hospital is in the process of having the main power distribution system, and feeder from the generator upgraded, but we have been informed that the location of the main panel will remain at this location. (See drawings.)

AC OUT Requirements:

The equipment will feed loads in:

- The Laboratory
- The IT / ARV Area.
- Back feed an existing inverter circuit for limited area night lighting.

Laboratory:

The laboratory will receive all new outlets and conduit. The circuits will be fed from the outside, with the circuits penetrating the exterior wall to feed the outlets. The AC distribution breaker space in the Outback Inverter equipment will be used as a load center, and no additional load centers are required. In the lab, there will be two circuits with four outlets each. Additionally, the no contact circuit will provide service to three outlets.

There will be an additional dedicated circuit to the refrigerator in the lab.

There will be a feed to one light in the middle of the lab, fed from one of the contact outlets.

IT Area:

There are 8 total rooms in the IT / ARV area. Each room will receive one 14W CFL light, one switch, and one receptacle. These can all be on the same circuit. The conduit and wire for this circuit will be run on the outside of the building, penetrating to the light fixture, and dropping down for the switch and the receptacle.

There will be 1 circuit for each set of 4 rooms.

Existing Night Lighting Circuit

There is an existing night lighting circuit that used to feed general area and ward lighting for night use. This circuit exists in the area of the new inverter / battery location.

Contractor is to inspect this circuit for integrity, and remove any improper wiring. Assure that the loads associated with this circuit do not exceed 2500 watthours and document what the circuit and lighting locations.

Specific Site Requirements:

Please refer to the site plan for the approximate dimensions for the wiring homeruns. Also – please refer to the photographs for information on existing structure.

All of the conduit and wiring will be run on the exterior of the buildings and penetrate the walls to feed the outlets. The AC IN conduit and wire will all be contained within the electrical equipment room.

The no-contact circuit wiring will be in separate conduit from the contact wiring.

A.6 CENTRE DE SANTÉ DE BORGNE :

CENTRE de SANTÉ de BORGNE is a medium sized facility to the west of Cap Haitien, on the coast. There is a new ARV / IT suite of offices being installed at this time. More than any other site we have visited, they have a very difficult time obtaining diesel fuel for their generator, several times a year, due to the roads that become nearly impassable with rainy weather.

Basic Equipment:

Inverters:

There will be a total of three inverters. Two will be connected to the AC IN and used as contact inverters. One will be reserved for a no-contact inverter for certain lab circuits.

Batteries:

This site requires a 48V Battery bank of 660 Ah. (Three strings of T-105 or equivalent battery bank.)

Equipment Location:

The inverter will be installed in what is now a toilet room. This room is centrally located to the outgoing loads of the Laboratory and the ARV / IT area. The battery rack will go just outside this toilet room, in the courtyard, which is not accessible to the public.

AC IN Requirements:

The AC IN can be obtained from tapping the feeder to the main AC distribution panel at the end of the building near to the generator. (see drawing). The hospital is in the process of having the main power distribution system, and feeder from the generator upgraded, but we have been informed that the location of the main panel will remain at this location. (See drawings.)

There is a possibility that the hospital staff will install this AC IN feeder to the inverter room location for this contractor to intercept and continue into the inverter panel. Therefore, this AC IN work is priced separately.

It is acceptable to either install a fused safety switch tapped into the main feeder, or a 2P 60A Circuit breaker in the panel.

AC OUT Requirements:

The equipment will feed loads in:

- The Laboratory
- The IT / ARV Area.

Laboratory:

The hospital is planning on installing all of the new outlets, conduit, and wire in the laboratory, and bringing these circuits to a junction box location, directed by us, just outside the inverter / battery room. This contractor is to extend the circuits for the lab to these junction boxes. There will be one for the contact circuits and one for the nocontact circuits.

IT Area:

The hospital is planning on installing all of the new outlets, conduit, and wire in the IT / ARV area, and bringing these circuits to a junction box location, directed by us, just outside the inverter / battery room. This contractor is to extend the circuits for the IT areas to these junction boxes.

Specific Site Requirements:

Please refer to the site plan for the approximate dimensions for the wiring homeruns. Also – please refer to the photographs for information on existing structure.

The bulk of the conduit on this site is to run the AC IN feeder from the panel location to the inverter / battery room. This will be inside the hospital area, generally in the hallways and around the courtyard. This will be run overhead in EMT conduit.

The no-contact circuit wiring will be in separate conduit from the contact wiring.

Alternate Pricing on Solar Panel System:

Au Borgne is a candidate for a solar system for supplemental battery charging, since it is so difficult for fuel to reach the site many times during the year.

Therefore, we are requesting an alternate proposal to furnish and install an appropriately sized solar power system, to be mounted on the roof of the building. Additional equipment to include:

- 5,000 watts of solar panels, wired in multiple strings of 72V nominal.
- Two combiner boxes with fuses or circuit breakers for each string, and loads divided evenly between the two combiner boxes. Each combiner box to have its own homerun to a separate charge controller in the inverter / battery room.
- Two Outback FM80 charge controllers.
- Additional DC circuit breakers in DC Flexware box: 4 80Amp Breakers. (in and out for each charge controller).
- Cable run from solar array to inverter battery room to be in conduit, and sized for no more than 3% voltage drop.
- Solar Array racking to be bolted to the roof with appropriate fasteners, and strong enough to avoid wind problems. Racking should be built to inhibit theft of the panels.
- When going with the solar option, the battery bank will need to be increased. There is alternate pricing in the bid document for a fourth string of T-105 (or equivalent) batteries. This will be required when going with the solar option.

A.7 HOPITAL UNIVERSITAIRE JUSTINIEN:

HOPITAL UNIVERSITAIRE JUSTINIEN is the main hospital in Cap Haitien. This project will address only the laboratory in the HIV/AIDS department of the facility. This lab is open for business 24 hours per day. It generally will be provided with either EDH or generator power for about half of this time. The inverter / battery system is to carry it through the remaining (night time and early morning) hours.

Basic Equipment:

Inverters:

There will be a total of four inverters. Three will be connected to the AC IN and used as contact inverters. One will be reserved for a no-contact inverter for certain lab circuits.

Batteries:

This site requires a 48V Battery bank of 1200 to 1300 Ah.

Equipment Location:

The inverter will be installed in a room at the end of the lab

oratory wing (see drawings) where the current SW inverter is installed. The batteries will be installed on the outside of this wall, immediately behind the inverter. The full room is available to our work for the inverter and equipment installation.

AC IN Requirements:

There is a main AC load center feeding the building with 20 feet of the inverter equipment installation. Photos are included of this panel. Contractor can either install a 60A 3P safety switch adjacent to the panel and tap the main feeder, or 3 – 1P 60A circuit breakers in the panel.

AC OUT Requirements:

The equipment will feed loads in:

- Four laboratories
- Data entry office and lab chief office
- Area security lighting

Laboratories:

In general, all of the circuits will be installed in new raceway and will be new surface mounted outlets. However, in Lab 1 and in Lab 2 there are work station "islands" to which it would be difficult to install new conduit and new outlets. At these locations, it is acceptable to intercept the circuits feeding these outlets, remove the existing wire and

outlets, and install new wiring and outlets in the same locations, identifying these outlets as being on the inverter battery system.

The existing outlets that remain powered but not part of our system will be labeled as EDH outlets, and their power supplies will be re-connected to the existing EDH load center.

The HIV Lab will receive both contact and no-contact outlets. The no-contact outlets will be run in separate conduit systems from the contact outlets.

There are three refrigerators in the area. Each refrigerator will receive its own dedicated circuit.

Data Entry and Lab Chief Offices:

At the far end of the laboratory wing (see drawings) is an office for the data entry person, and above that, on the second floor, for the lab chief. Extend one general purpose circuit to feed a computer outlet and a light in each of these two offices.

Install a new light, switch, and outlet in each office, clearly marked as being on inverter power, and separate from the other outlets.

Security Lighting:

In addition to the two lights mentioned above in the offices, install circuiting, conduit, and wire for new light fixtures as follows: (all lights are to be 14W CFL Fluorescents)

- 2 in the hallway
- 2 in Lab 1
- 1 in Lab 2
- 1 in Lab 3
- 2 in HIV Lab
- 2 in Miscellaneous Rooms near HIV lab

Specific Site Requirements:

Please refer to the site plan for the approximate dimensions for the wiring homeruns. Also – please refer to the photographs for information on existing structure.

All of the work on this site is inside the laboratory of the HIV building, except for the installation of the batteries just outside the building. This installation will replace the existing SW installation with batteries. The old equipment will be turned over to PA Consulting.

The no-contact circuit wiring will be in separate conduit from the contact wiring.

Appendix B. Bid Sheet

 Bidder:
 Individual Name:
 Phone Number:

Site	No.	Description	Base	Alt
			Bid Amt	Bids
	A1	Inverter / Battery		
	4.2	Equipment		
	A2	AC IN Wiring	-	
	A3	AC Out Wiring	_	
HOPITAL de HINCHE	A-Base	Sub-total Base Bid:		
	A A + 4	Adder for Security		
	A-Alt-1	Lighting per scope of work.		
	A-Alt-2	WOIK.		
	A-Alt-3			
1	7171113			
I		Inverter / Battery		
	B1	Equipment		
	B2	AC IN Wiring		
	В3	AC Out Wiring	<u>-</u>	
HOPITAL de BELLADÈRE	B-Base	Sub-total Base Bid:	_	
	B-Alt-1	Increase Battery Bank to 880 Ah		
	B-Alt-2			
	B-Alt-3			
•	C1	Inverter / Battery		
	CI	Equipment		
HOPITAL de GRANDE RIVIÈRE du NORD	C2	AC IN Wiring	_	
	C3	AC Out Wiring	_	
	C-Base	Sub-total Base Bid:		

C-Alt-1 C-Alt-2 C-Alt-3 D1 D2 D3 D-Base D-Alt-1 D-Alt-2 D-Alt-3	Increase Battery Bank to 880 Ah Inverter / Battery Equipment AC IN Wiring AC Out Wiring Sub-total Base Bid: Increase Battery Bank to 880 Ah Inverter / Battery		Bids
C-Alt-2 C-Alt-3 D1 D2 D3 D-Base D-Alt-1 D-Alt-2 D-Alt-3	Inverter / Battery Equipment AC IN Wiring AC Out Wiring Sub-total Base Bid: Increase Battery Bank to 880 Ah	-	
D1 D2 D3 D-Base D-Alt-1 D-Alt-2 D-Alt-3	Equipment AC IN Wiring AC Out Wiring Sub-total Base Bid: Increase Battery Bank to 880 Ah	-	
D1 D2 D3 D-Base D-Alt-1 D-Alt-2 D-Alt-3	Equipment AC IN Wiring AC Out Wiring Sub-total Base Bid: Increase Battery Bank to 880 Ah	-	
D2 D3 D-Base D-Alt-1 D-Alt-2 D-Alt-3	Equipment AC IN Wiring AC Out Wiring Sub-total Base Bid: Increase Battery Bank to 880 Ah	-	
D2 D3 D-Base D-Alt-1 D-Alt-2 D-Alt-3	Equipment AC IN Wiring AC Out Wiring Sub-total Base Bid: Increase Battery Bank to 880 Ah	-	
D2 D3 D-Base D-Alt-1 D-Alt-2 D-Alt-3	Equipment AC IN Wiring AC Out Wiring Sub-total Base Bid: Increase Battery Bank to 880 Ah	-	
D2 D3 D-Base D-Alt-1 D-Alt-2 D-Alt-3	AC IN Wiring AC Out Wiring Sub-total Base Bid: Increase Battery Bank to 880 Ah	-	
D3 D-Base D-Alt-1 D-Alt-2 D-Alt-3	AC Out Wiring Sub-total Base Bid: Increase Battery Bank to 880 Ah	-	
D-Base D-Alt-1 D-Alt-2 D-Alt-3	Sub-total Base Bid: Increase Battery Bank to 880 Ah	_	
D-Alt-1 D-Alt-2 D-Alt-3	Increase Battery Bank to 880 Ah		
D-Alt-2 D-Alt-3	880 Ah		
D-Alt-3	Inverter / Battery		
	Inverter / Battery		
F1 !			
	Equipment		
E2	AC IN Wiring	_	
	_	-	
E-Base			
E-Alt-1	Increase Battery Bank to 880 Ah		
E-Alt-2			
E-Alt-3			
F1	Inverter / Battery		
	Equipment		
	•	-	
	-	_	
F-Base			
F-Alt-1	880 Ah		
F-Alt-2			
E VIT 3	system).		
r-AIT-3			
E E E	E2 E3 E-Base E-Alt-1 E-Alt-2 E-Alt-3 F1 F2 F3 F-Base	E1 Equipment E2 AC IN Wiring E3 AC Out Wiring E-Base Sub-total Base Bid: E-Alt-1 Increase Battery Bank to 880 Ah E-Alt-2 E-Alt-3 F1 Inverter / Battery Equipment F2 AC IN Wiring F3 AC Out Wiring F-Base Sub-total Base Bid: F-Alt-1 Increase Battery Bank to 880 Ah Add Solar Equipment F-Alt-2 per Scope of Work (5KW system).	E1 Equipment E2 AC IN Wiring E3 AC Out Wiring E-Base Sub-total Base Bid: E-Alt-1 Increase Battery Bank to 880 Ah E-Alt-2 E-Alt-3 F1 Inverter / Battery Equipment F2 AC IN Wiring F3 AC Out Wiring F-Base Sub-total Base Bid: F-Alt-1 Increase Battery Bank to 880 Ah Add Solar Equipment F-Alt-1 per Scope of Work (5KW system).

Site	No.	Description	Base Bid Amt	Alt
HOPITAL UNIVERSITAIRE JUSTINIEN	G1 G2 G3 G-Base G-Alt-1 G-Alt-2 G-Alt-3	Inverter / Battery Equipment AC IN Wiring AC Out Wiring Sub-total Base Bid:		Bids
Total Base Bids:			0	

Supplemental Pricing for Additional No-Contact Systems:This pricing is supplied to facilitate the possibility of converting some of the loads to no-contact loads.

H-1:	Provide and install one FX3648 inverter, complete with all accessories, mounting equipment DC breaker, and wiring.	
H-2:	Provide and install additional battery capacity, equivalent to one string of T-105 batteries, with all wiring and connections to inverter battery system.	
H-3:	Provide and install one smart charger able to complete three stage charging with a 30A DC 48V charging capacity.	
H-4:	Provide and install one smart charger able to complete three stage charging with a 50A DC 48V charging capacity.	
H-5	Provide and install one smart charger able to complete three stage charging with a 100A DC 48V charging capacity.	

Multiple Site Considerations:

Provide discount to above Base Bid pricing in the event that the bidder is awarded any two of the above sites.	
Provide discount to above Base Bid pricing in the event that the bidder is awarded any three of the above sites.	

Provide discount to above Base Bid pricing in the event that the bidder is awarded any four of the above sites.	
Provide discount to above Base Bid pricing in the event that the bidder is awarded any five of the above sites.	
Provide discount to above Base Bid pricing in the event that the bidder is awarded any six of the above sites.	
Provide discount to above Base Bid pricing in the event that the bidder is awarded all seven of the above sites.	

Appendix C Certifications of Business Size/Type and Source, Origin & Nationality

1.	Official	registered name:
2.	Official	registered address:
3.	Tax Sta	tus:
	The Bi	dder certifies that they are are not subject to U.S. taxation (please check one).
	If the B	idder is subject to U.S. taxation, please provide Taxpayer Identification Number:
		(one box per number or dash)
	TIN ma	nould be the same number the Bidder uses for reporting income tax and other returns. The ay be used by the US Government to collect and report on any delinquent amounts arising the Bidder's relationship with the Government (through PA), per 31 USC 7701(c)(3).
4.	Type of	organization:
	Size	
		Small business
		Large business
	Νι	mber of employees:
	Small	Business Administration Category (if applicable)
		Women-Owned Small Business
		Small Disadvantaged Business
		Veteran-Owned Small Business
		Service-Disabled Veteran-Owned Small Business
		HUB Zone Small Business
		Historically Black College or University / Minority Institution
		Alaska Native Corporation / Indian Tribe

		Da	ate of expiration of 8(a) certificate:
5.	Nati	iona	ality of the Bidder:
	This	s is	to certify that the above Bidder is:
			A corporation or partnership organized under the laws of (country or territory)
			An individual who is a citizen or legal resident of (country or territory)
			A joint venture or unincorporated association consisting entirely of individuals, partnerships or corporations. (If selected, please describe the citizenship or legal status of each individual, the legal status of each partnership and/or corporation, and the % of voting power of each.)
6.	Sou	ırce	, Origin, and Componentry of Goods and Commodities
	(i)		This is to certify that the Source (the country from which a commodity is to be shipped from) of the Equipment to be supplied under this Order is:
			name of country or countries
	(ii)		This is also to certify that the Origin (the country where goods are mined, grown, or produced through manufacturing, processing or substantial and major assembling of components) of the Equipment to be supplied under this Order is:
			name of country or countries
	(iii)		This further certifies that the Equipment to be provided by Bidder under this Order does not contain any Components originating in any of the U.S. State Department's list of Non-Free World countries (Cuba, Iran, Iraq, Laos, Libya, North Korea, and Syria). The Componentry of the Equipment to be supplied under this Order will originate in:
			name of country or countries
•	_	_	below, the Bidder certifies that the representations and certifications made, and information erein, are accurate, current and complete.
	Signa	atur	re: Date:
	Nam	e of	and title of authorized signature.

Appendix D Organizational Conflict of Interest Certification

1.	(a)	The Subcontractor represents that, to the best of its knowledge and belief, the award of this subcontract or the modification of an existing contract does \square or does not \square involve an organizational conflict of interest.
	(b)	The term "organizational conflict of interest" means that a relationship exists whereby a Contractor or a Subcontractor (including its chief executives, directors, proposed Consultant or Consultants) has interest which (A) may diminish its capacity to give impartial, technically sound, objective assistance and advice or may otherwise result in a biased work product, or (B) may result in an unfair competitive advantage. It does not include the normal flow of benefits from the performance of a contract.
	(c)	The term "Subcontractor" means any person which is a party to a contract with the United States of America.
2.	. If the Subcontractor indicates that there are organizational conflicts of interest in the "Organizational Conflicts of Interest Representation", the Subcontractor shall provide a statement which describes in a concise manner all relevant facts concerning any present or currant planned interest (financial, contractual, organizational, or otherwise) relating to the work to be performed in the proposed contract and bearing on whether the Subcontractor has a possible organizational conflict of interest with respect to being able to render impartial, technically sound, and objective assistance or advice, or being given an unfair competitive advantage. The Subcontractor may also provide relevant facts that show how its organizational structure and/or management systems limit its knowledge of possible organizational conflicts of interest relating to other divisions or sections of the organization and how that structure of system would eliminate or neutralize such organizational conflict.	
SIGNATURE:		RE:
NAME: _		
DAT	ΓE:	

Appendix E Representations and Certifications

Prior to award under a U.S. Government contract, the Bidder is required to complete the required certifications and representations when the subcontract award is expected to reach or exceed specific dollar thresholds as stated in the Federal Acquisition Regulation (FAR). Bidders must check the appropriate boxes, sign where indicated and return with their offer.

1. For contracts expected to exceed \$25,000

a. Non-Segregated Facilities

By the submission of this offer, the Bidder certifies that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained.

b. Drug-Free Workplace

The Bidder certifies and agrees, that with respect to all its employees to be employed under a contract resulting from this solicitation, it will--no later than 30 calendar days after contract award (unless a longer period is agreed to in writing):

- (1) Publish a statement notifying such employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the Bidder's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (2) Establish and ongoing drug-free awareness program to inform such employees about: (i) the dangers of drug abuse in the workplace, (ii) the Bidder's policy of maintaining a drug-free workplace, (iii) any available drug counseling, rehabilitation, and employee assistance programs, and (iv) the penalties that may be imposed upon employees for drug abuse violations occurring in the workplace.
- (3) Provide all employees engaged in performance of the contract with a copy of the statement required above.
- (4) Notify such employees in writing that as a condition of continued employment on the contract resulting from this solicitation, the employee will: (i) abide by the terms of statement, and (ii) notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than five (5) calendar days after such conviction
- (5) Notify PA in writing within ten (10) calendar days after receiving notice of a conviction from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee.
- (6) Within thirty (30) calendar days after receiving notice of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace: (i) take appropriate personnel action against such employee, up to and including termination, or (ii) require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.

(7) Make a good faith effort to maintain a drug-free workplace through implementation.

Representation: The Bidder represents that, except for full-time bona fide employees

c. Contingent Fee

working solely for the Bidder, the Bidder-
has has not employed or retained any person or company to solicit or obtain this contract; and

has has not paid or agreed to pay to any person or company employed or retained to solicit or obtain this contract any commission, percentage, brokerage, or other fee contingent upon or resulting from the award of this contract.

Agreement: The Bidder agrees to provide information relating to the above representation as requested by PA and, when either representation is answered affirmatively, to promptly submit to PA a completed Standard Form 119, "Statement of Contingent or Other Fees."

d. Debarment, Suspension, Proposed Debarment & Other Responsibility Matters

- (i) The Bidder certifies, to the best of its knowledge and belief, that it and its principals:
 - A) **are are not presently debarred**, suspended, proposed for debarment, or declared ineligible for the award of contracts by any U.S. Federal Government agency;
 - B) have \square have not \square within the three-year period preceding this certification, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and
 - C) are \square are not \square presently indicted for, or otherwise criminally or civilly charged by a governmental entity with commission of any of the offenses enumerated in subdivision (a)(1)(i)(B) of this provision.
- (ii) The Subcontractor, aside from the offenses enumerated in paragraphs A, B & C of this provision, has □ has not □ within the past three years, relative to tax, labor and employment, environmental, antitrust, or consumer protection laws:
 - A) been convicted of a Federal or state felony (or has any Federal or state felony indictments currently pending against them); or
 - B) had a Federal court judgment in a civil case brought by the United States rendered against them; or
 - C) had an adverse decision by a Federal administrative law judge, board, or commission indicating a willful violation of the law.

If the Subcontractor has responded affirmatively, the Subcontractor shall provide additional information if requested by the Contracting Officer; and

(iii)	The Subcontractor has \(\begin{align*} \text{has not} \(\begin{align*} \Delta \text{, within a three-year period preceding this} \end{align*} \)
	certification, had one or more contracts terminated for default by any U.S. Federal
	Government agency.

- (iv) Additional requirements and clarifications
 - A) This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.
 - B) The Bidder shall provide immediate written notice to PA if, at any time prior to contract award, the Bidder learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
 - C) A certification that any of the items above exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Bidder's responsibility. Failure of the Bidder to furnish a certification or provide such additional information as requested by PA may render the Bidder nonresponsible.
 - D) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a Bidder is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
 - E) The certifications above are a material representation of fact upon which reliance was placed when making award. If it is later determined that the Bidder knowingly rendered an erroneous certification, in addition to other remedies available to the Government, PA's Client may require PA to terminate the contract resulting from this solicitation for default.

By signature hereon, the submitter certifies that the Representations & Certifications, are accurate, current, and complete, and that the submitter is aware of the penalty prescribed in 18 U.S.C. 1001 for making false statements in offers.

Signature:			Date:	
Name of and	title of authorized signature:			

2. For contracts expected to exceed \$100,000

my knowledge and belief, each officer, employee, agent, representative, and consultant of _______ (name of Bidder) who has participated personally and substantially in the preparation or submission of this offer has certified that he or she is familiar with, and will comply with, the requirements of subsection 27(a) of the Act, as implemented in the FAR, and will report immediately to me any information concerning a violation or possible violation of the Act, as implemented in the FAR, pertaining to this procurement.

(3) Violations or possible violations:

(Continue on plain paper if necessary and label Certificate of Procurement Integrity -- Continuation Sheet. Enter "NONE" if none exists.)

(4) I further agree that, if awarded a contract under this solicitation, the certifications required by subsection 27(e)(1)(B) of the Act shall be maintained in accordance with paragraph (f) of this provision.

b. Payments to Influence Certain Federal Transactions

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts,

subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

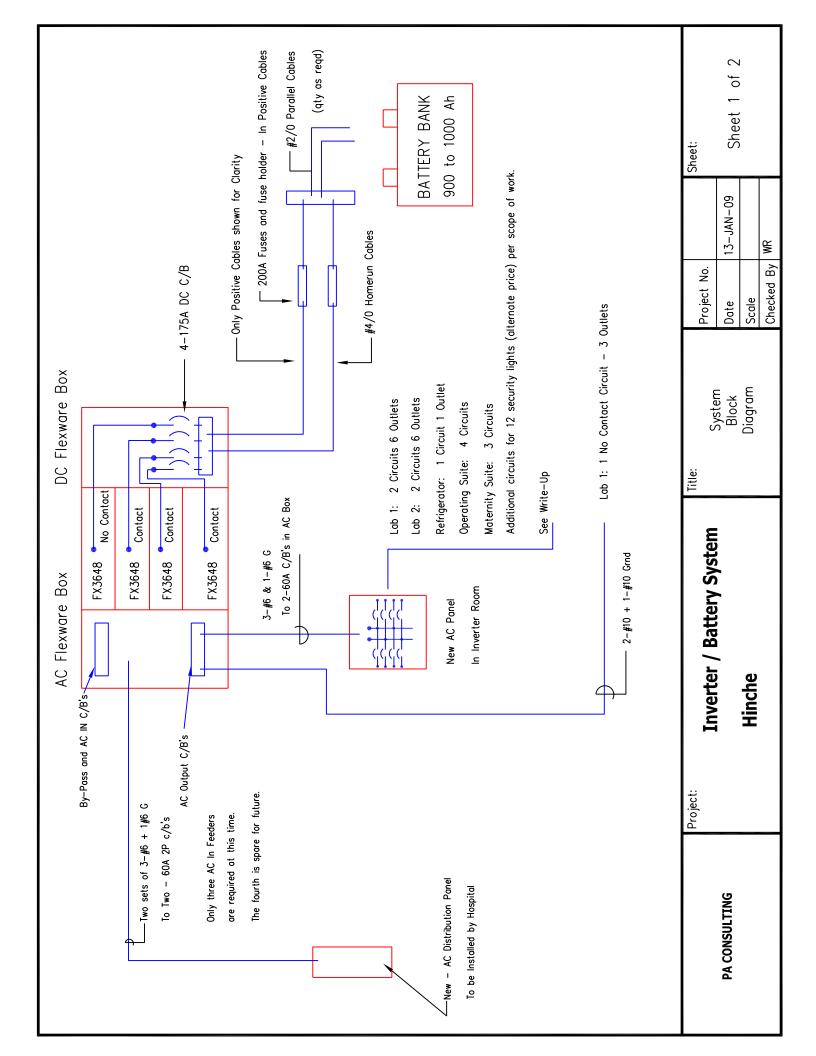
This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

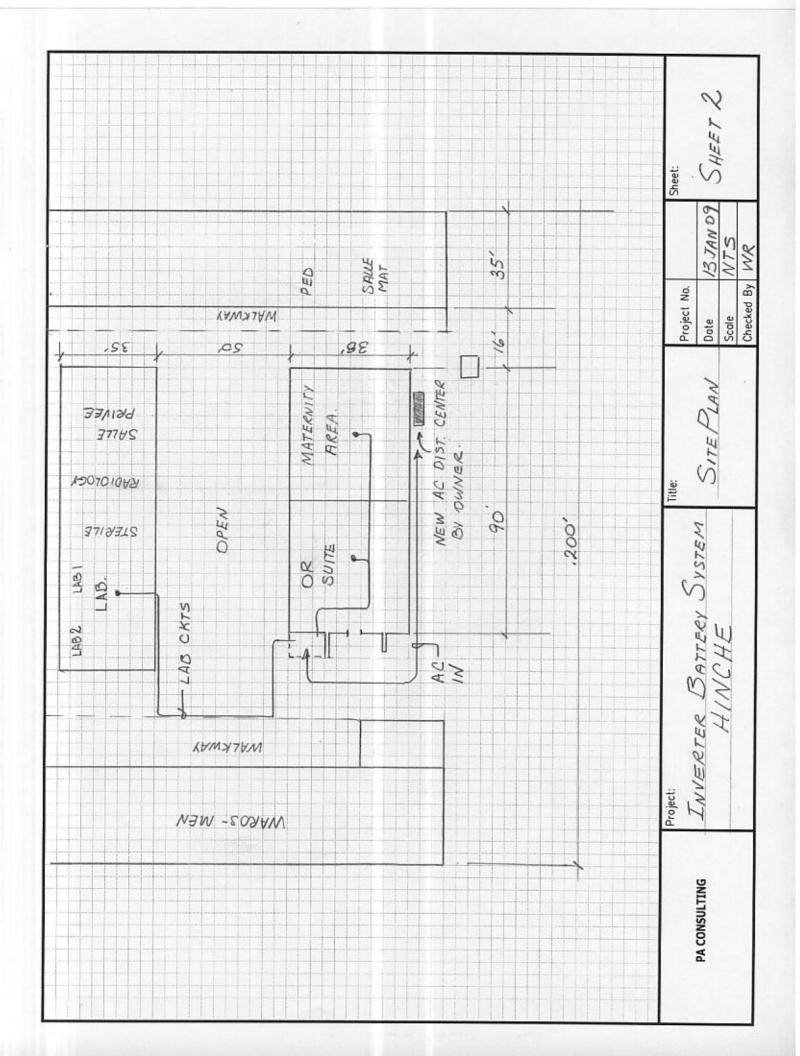
By signature hereon, the submitter certifies that the Representations & Certifications, are accurate, current, and complete, and that the submitter is aware of the penalty prescribed in 18 U.S.C. 1001 for making false statements in offers.

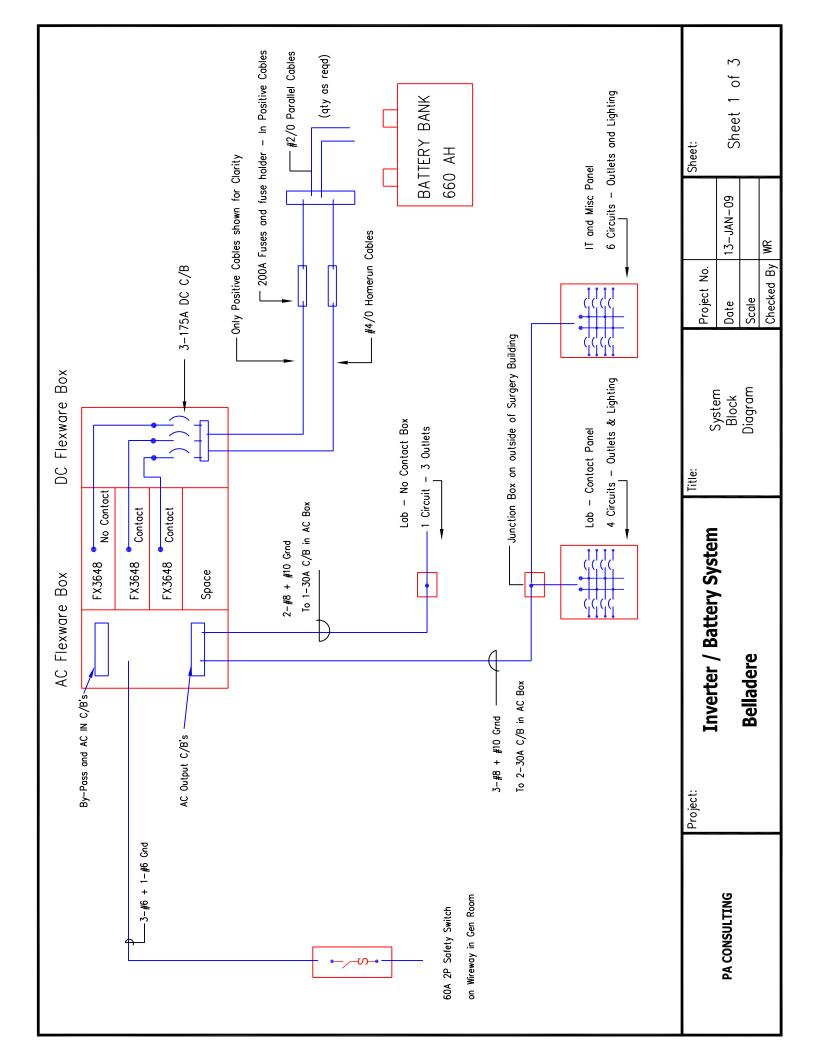
Signature:	Date:	
Name of and title of authorized signature:		

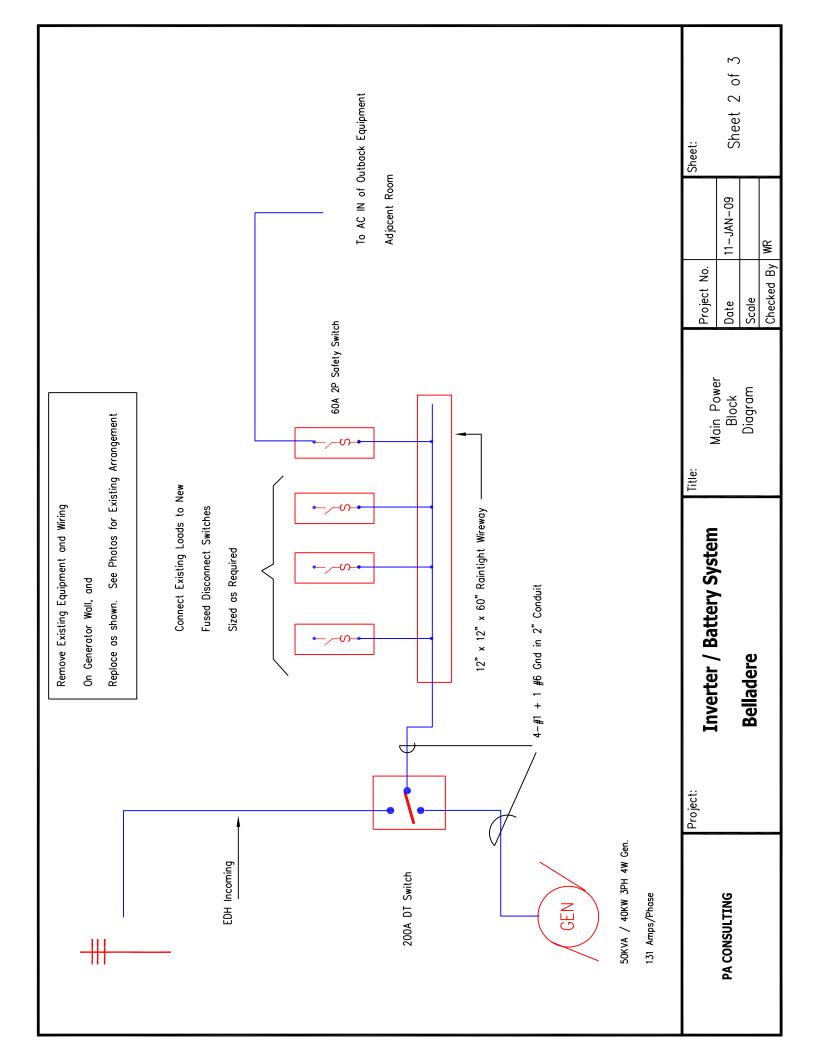


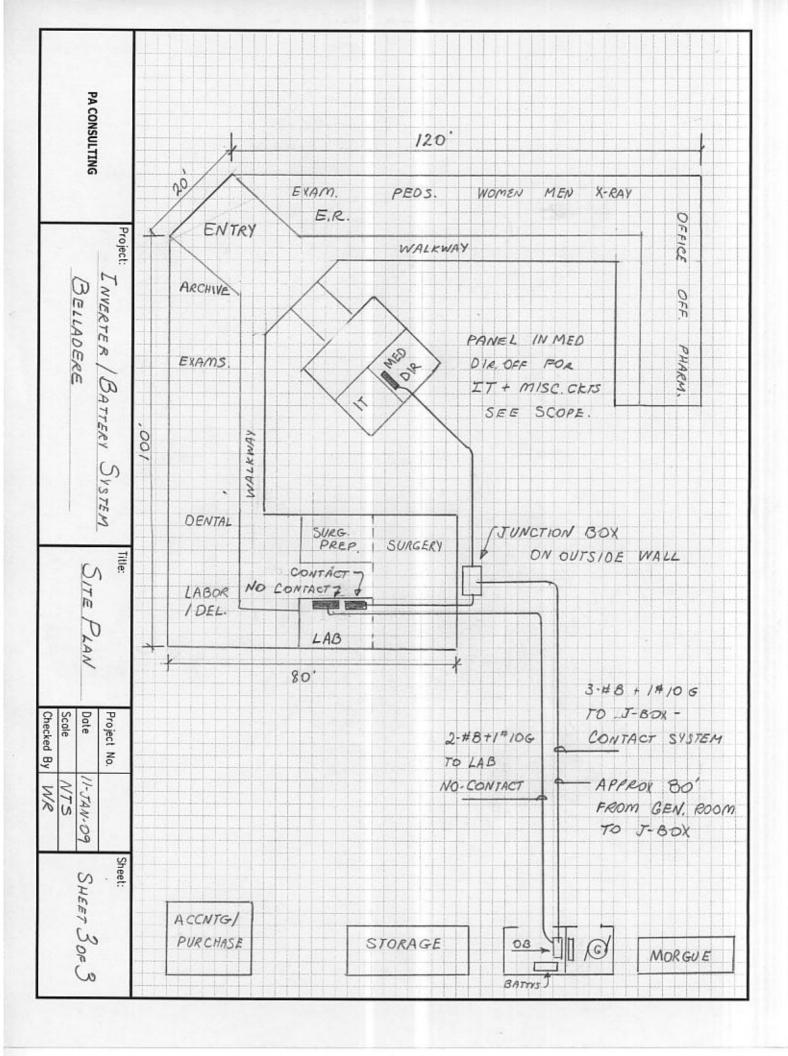
Appendix F Floor Plans and Electrical Drawings

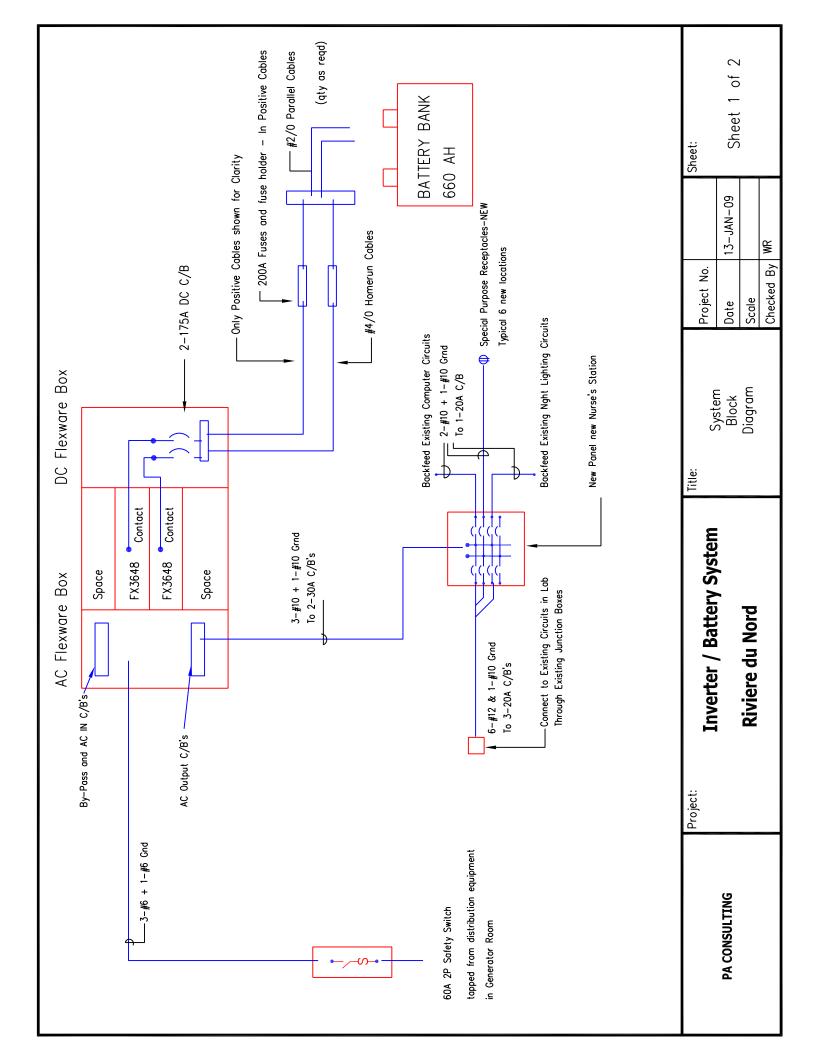


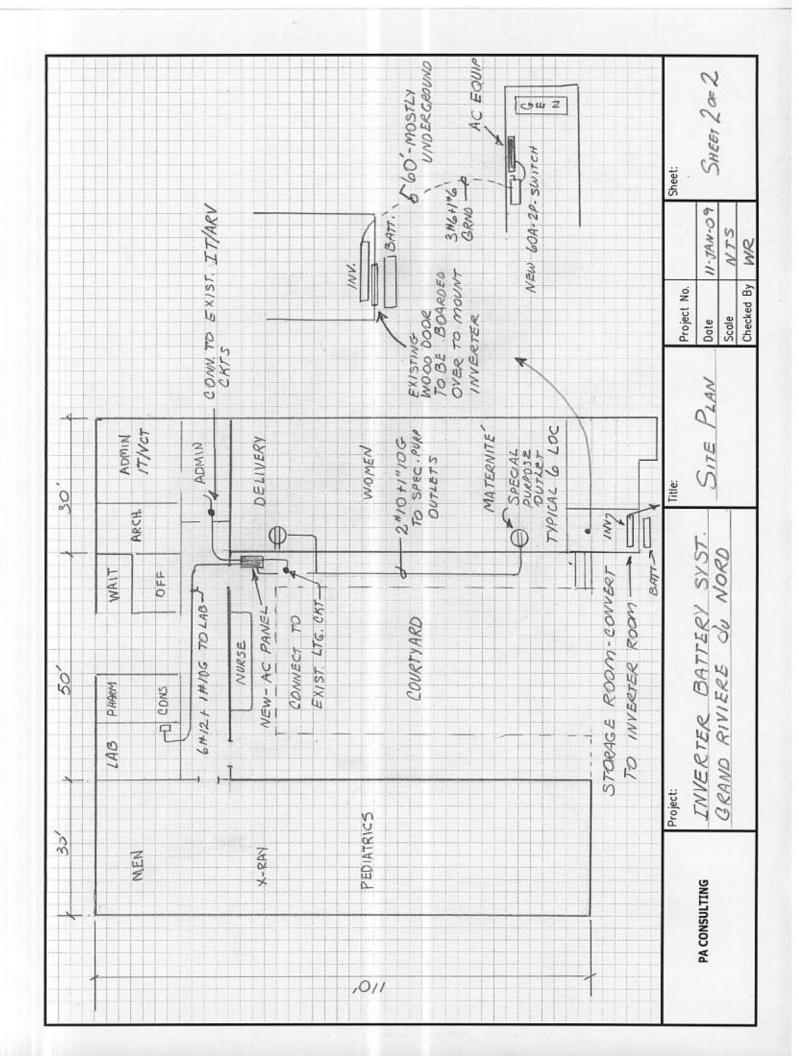


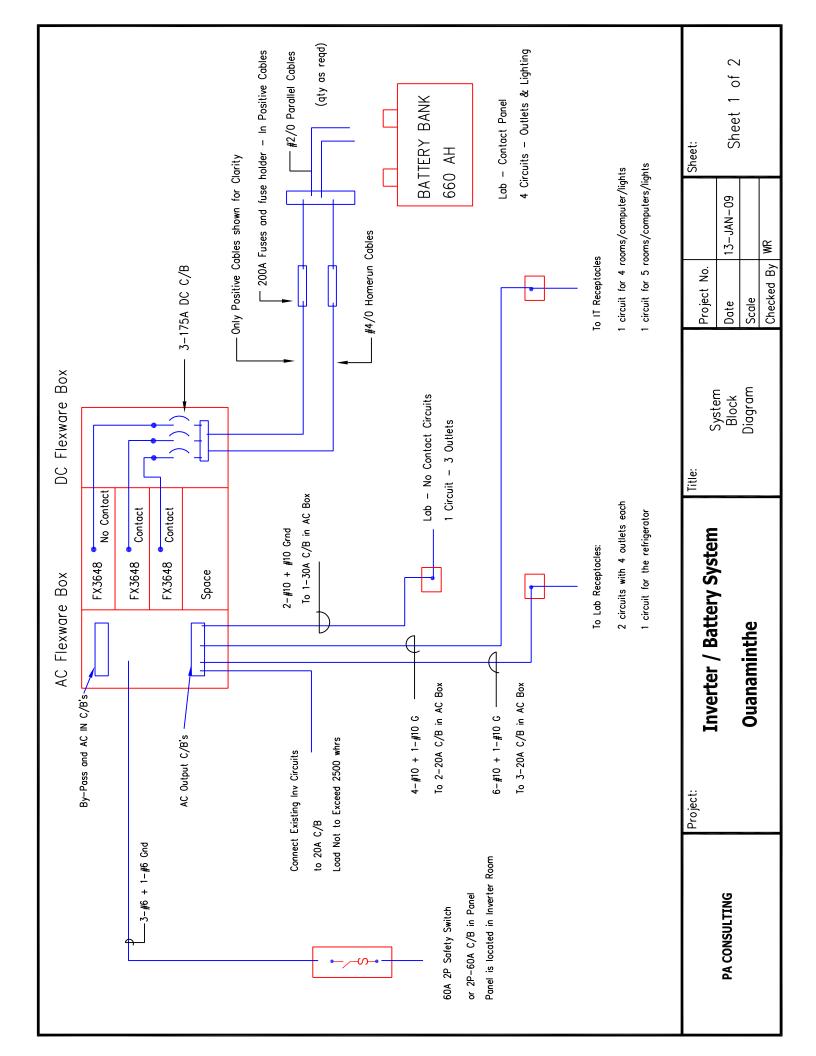


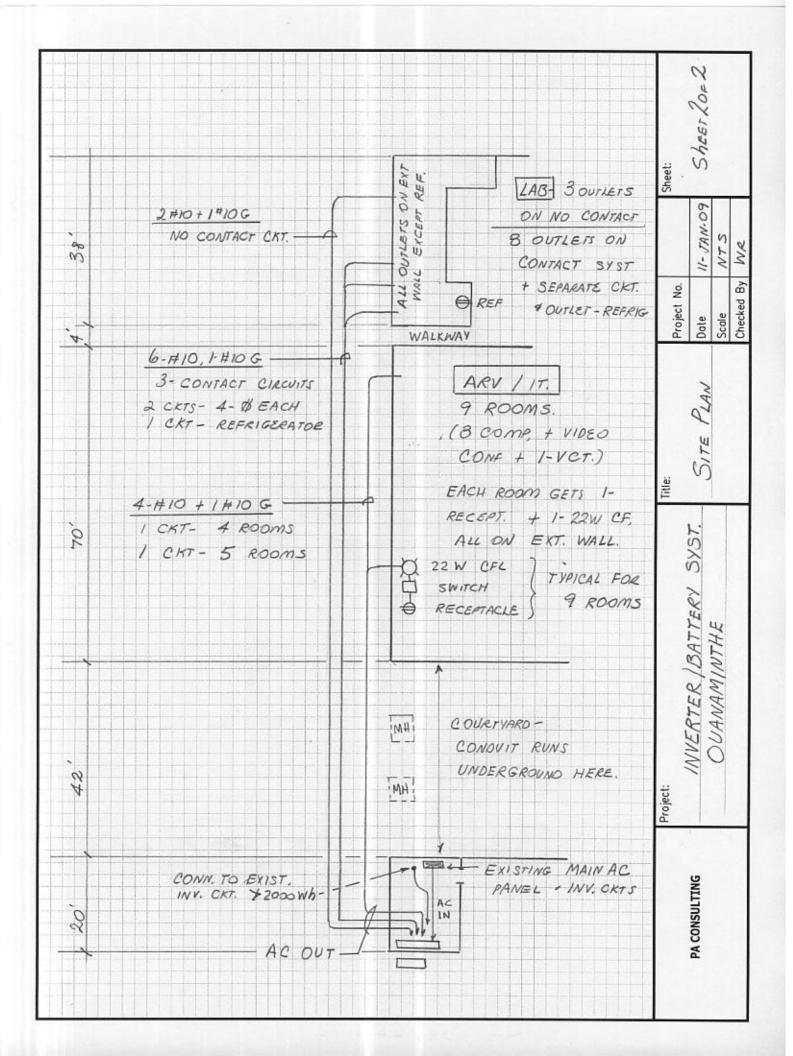


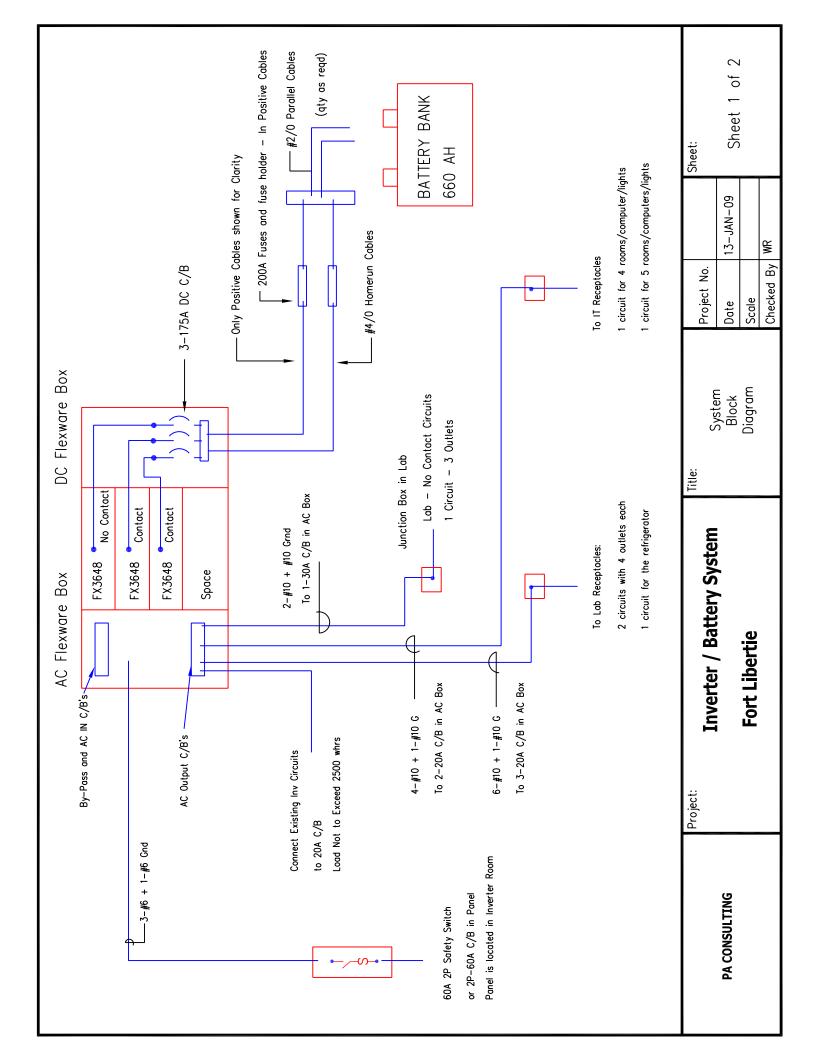


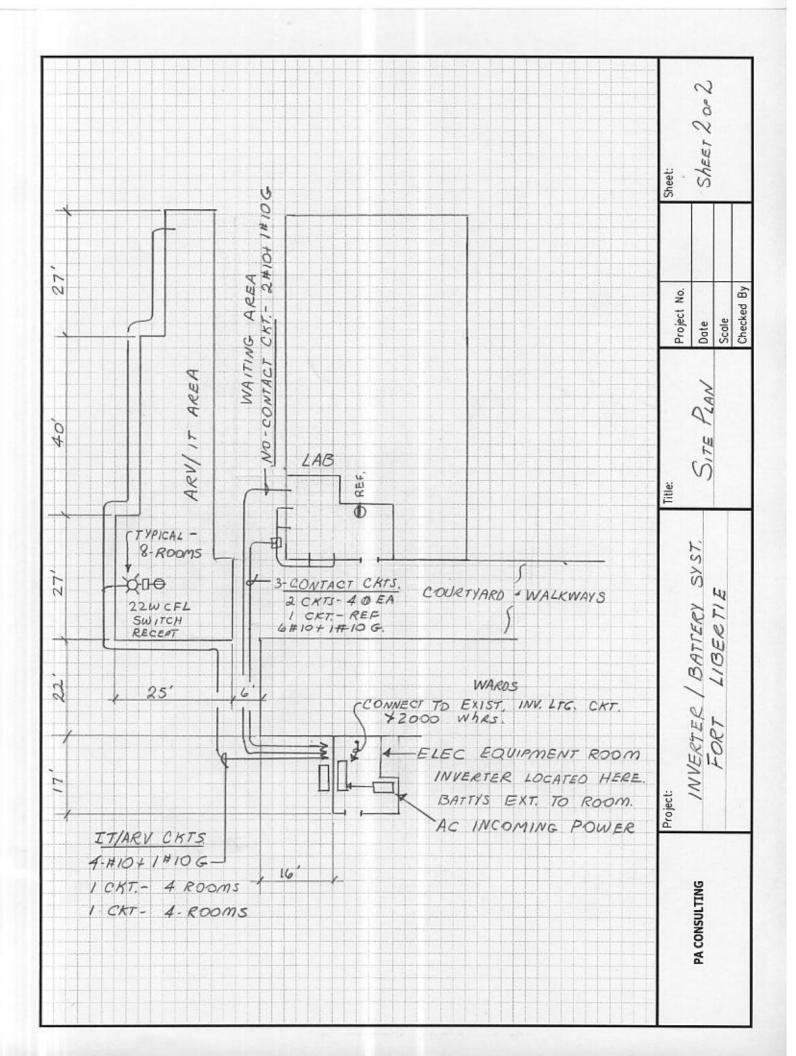






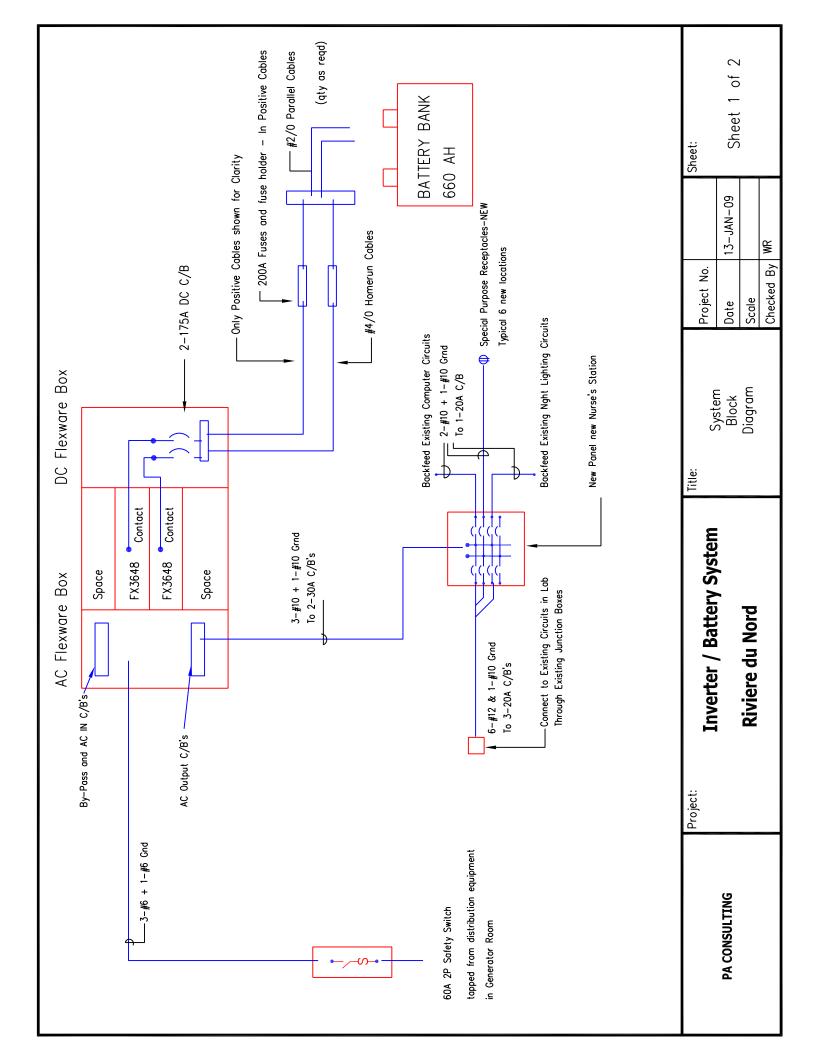


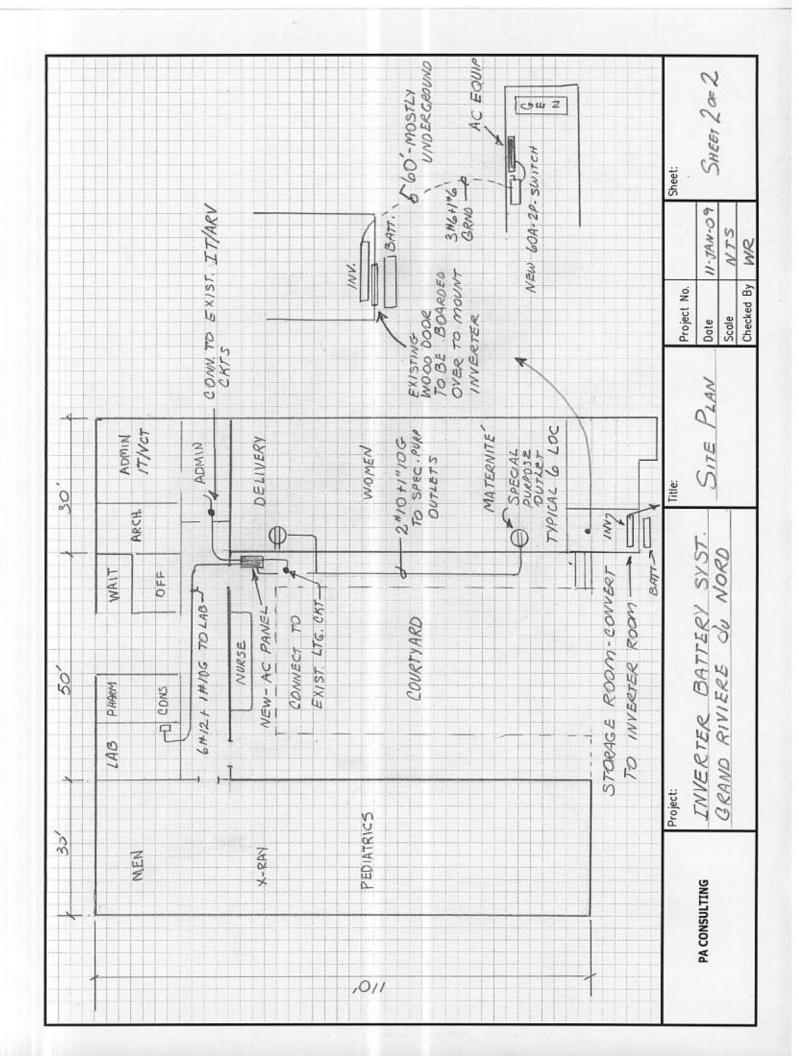


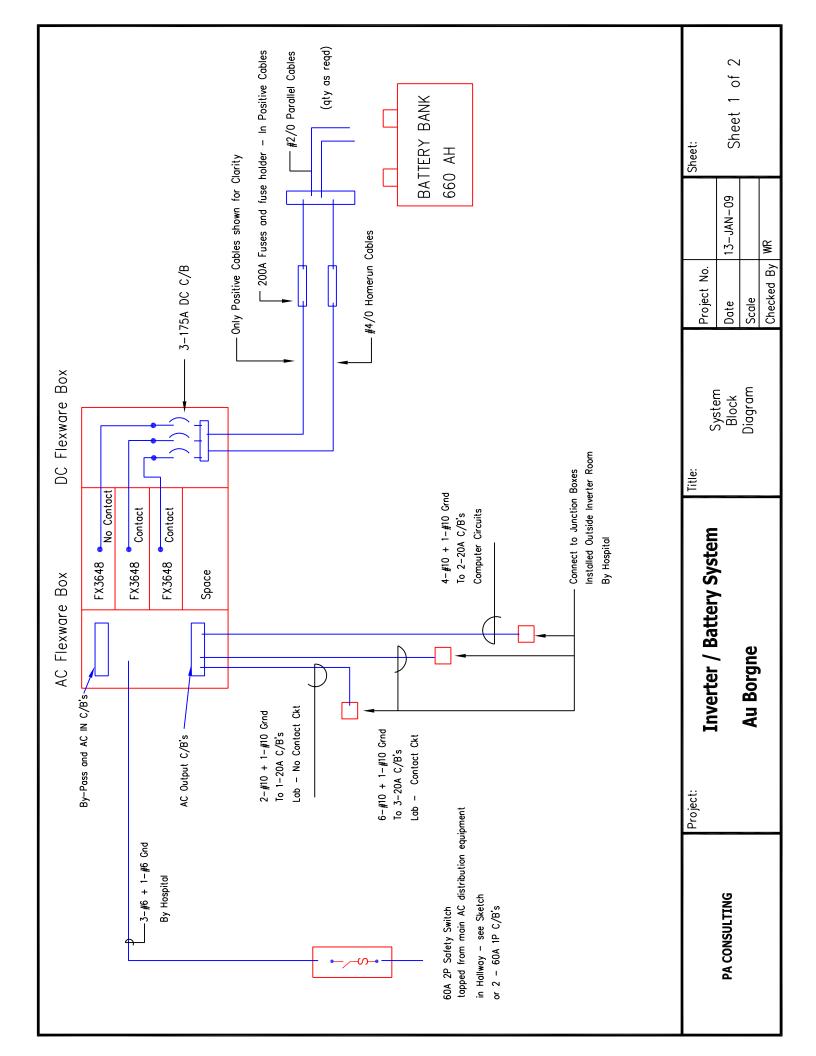


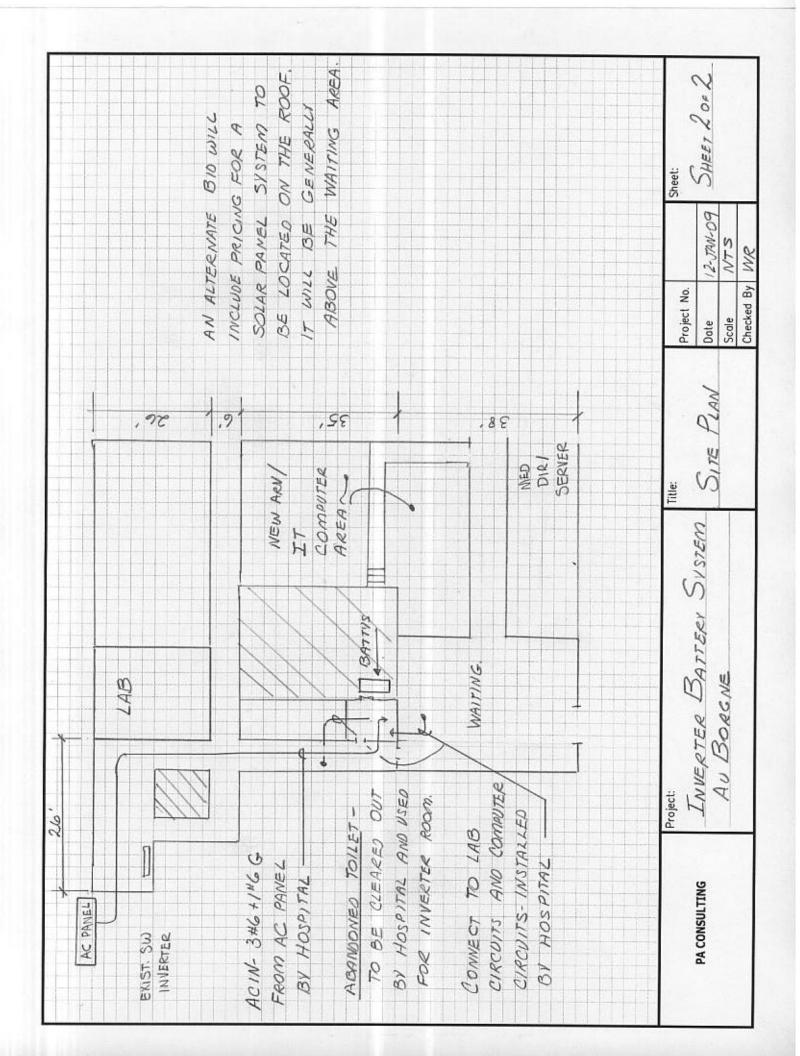


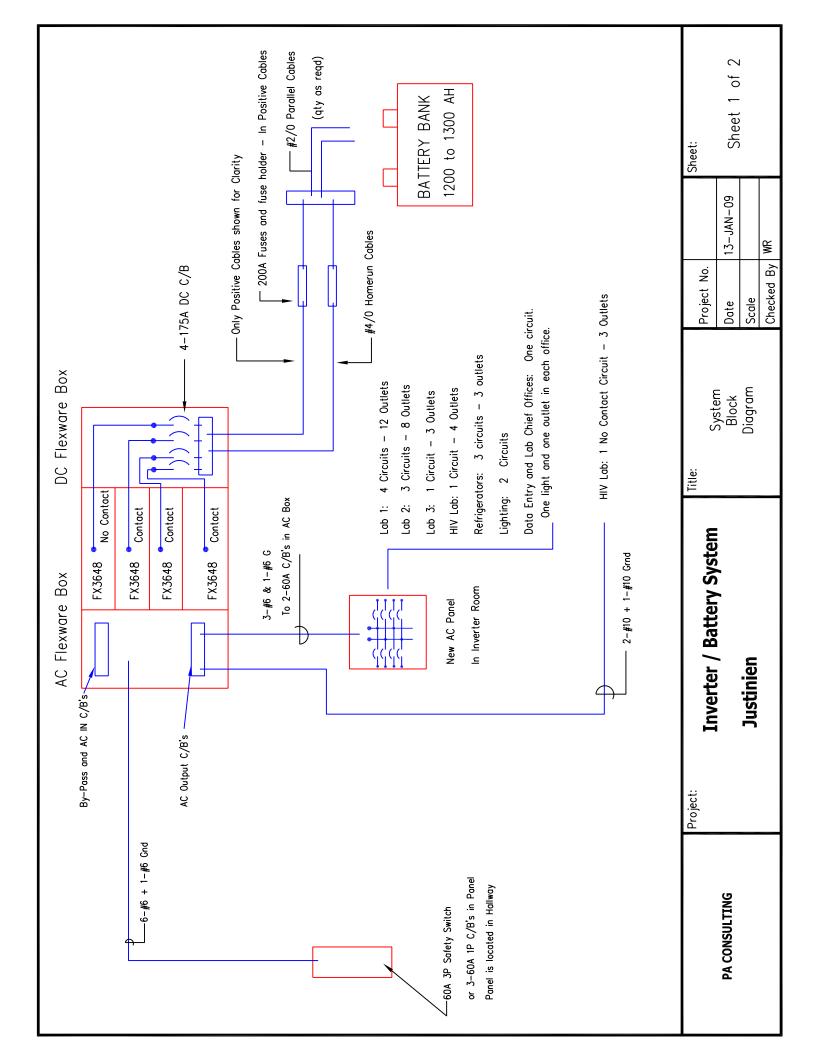
Appendix G Alarm Schematic

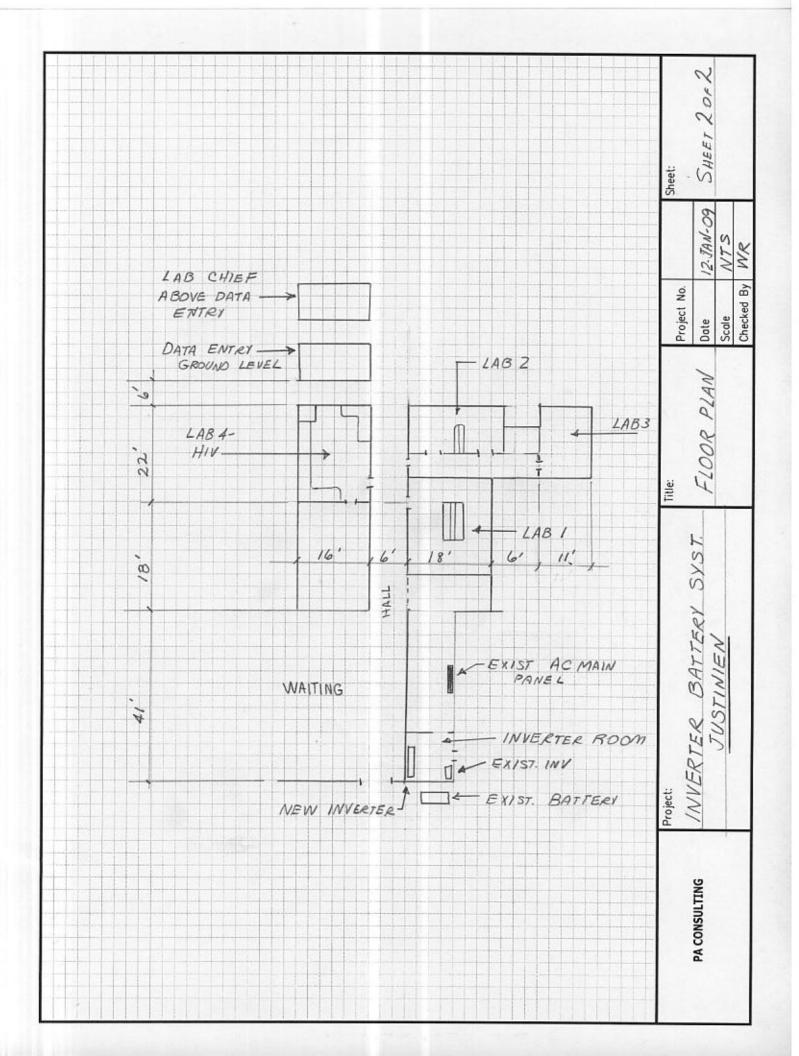














Appendix H Photos



Existing Inverter inside lab.





GENSET room(left) and coming inverters room(right)



Walkway Right



Walkway left



Double Throws & Safety Switch



Receptacles in lab.



Hallway

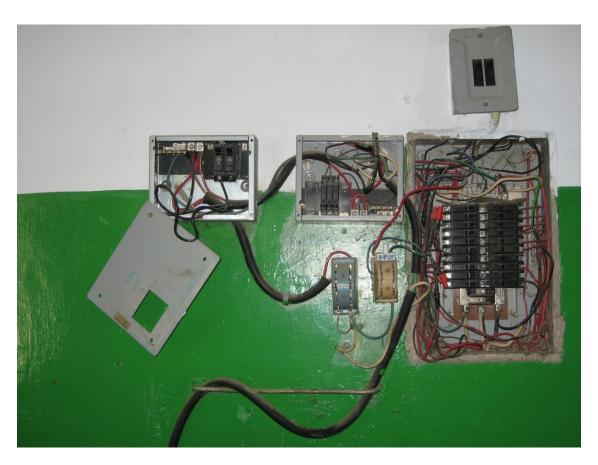
Centre medico-social de Ouanaminthe



Lab



Lab(see hallway through windows)



Distribution Panels



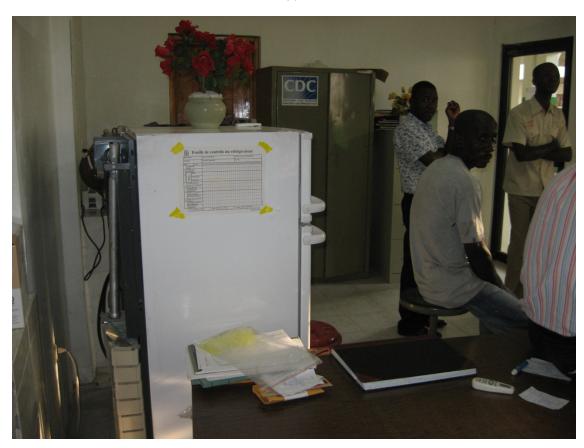
View of the inverter/batteries room from GENSET room



Hallway (ARV, 4 doors in the left)



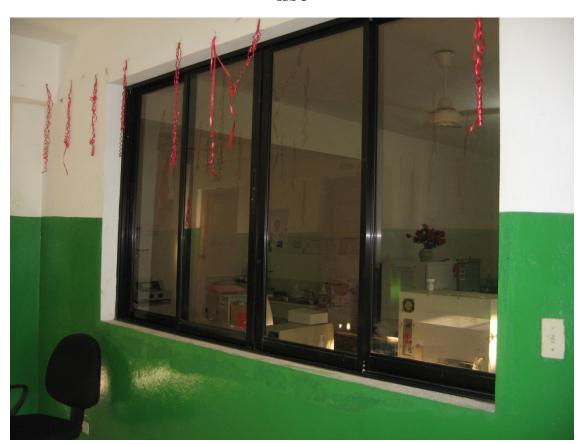
Lab 1



Lab 2 (refrig.)



Lab 3



Lab 4



Hallway (lab window right)



Walkways



Roof 1



Roof 2

Hopital Universitaire Justinien



Lab room # 1



Lab room # 4(facing entrance door)



Lab room # 4 (2refrig. on 22' wall)



Existing Inverter



Existing batteries & cage



Load center and existing inverter dist. Panel



Appendix I Supplemental Pricing for Modifications in Fort-Liberté and Ouanaminthe

Appendix I

Supplemental Pricing for Additional No-Contact Systems:

Bidders are requested to supply supplemental unit pricing on the Price Sheet for:

1. - CENTRE MEDICO-SOCIAL DE OUANAMINTHE

Moving all circuits to IT receptacles from contact to no contact (refer to sheet 1 of 2)

Note: additional smart charger and string of batteries maybe needed

2. - Hopital de Fort-Liberté

- a) Moving all circuits to IT receptacles from contact to no contact (refer to sheet 1 of 2) Note: additional smart charger and string of batteries maybe needed
- b) New circuits to feed walkways, rooms instead of connect. existing Inverter circuits (refer to sheet 1 of 2 revised and floor plan 1 & 2)

New circuits to feed walkway lamps and new receptacles

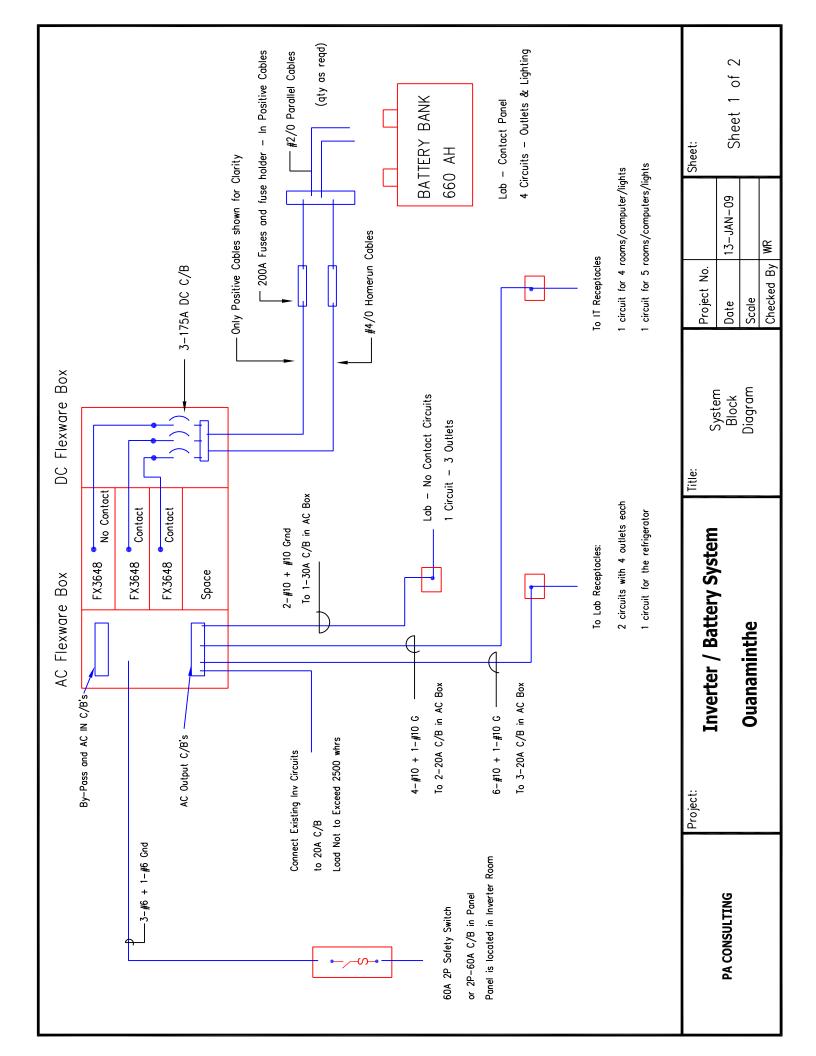
Walkways lamps 4 22W (switch on admin. Wall) 1 circuit

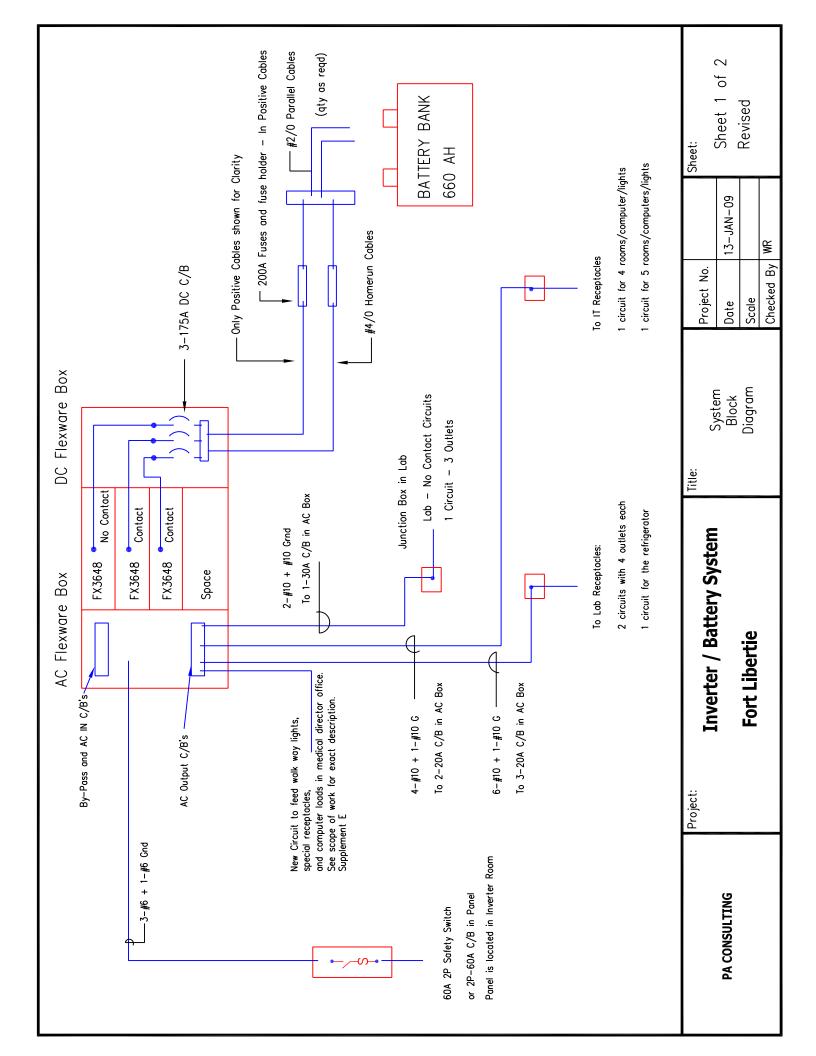
Wall mounted lamps11 14W (10 rooms from Maternity to depot + ER(Emergency Room), 1 circuit

Special receptacles 3 Duplex in Maternity, Pediatric and ER(Emergency Room)1 circuit

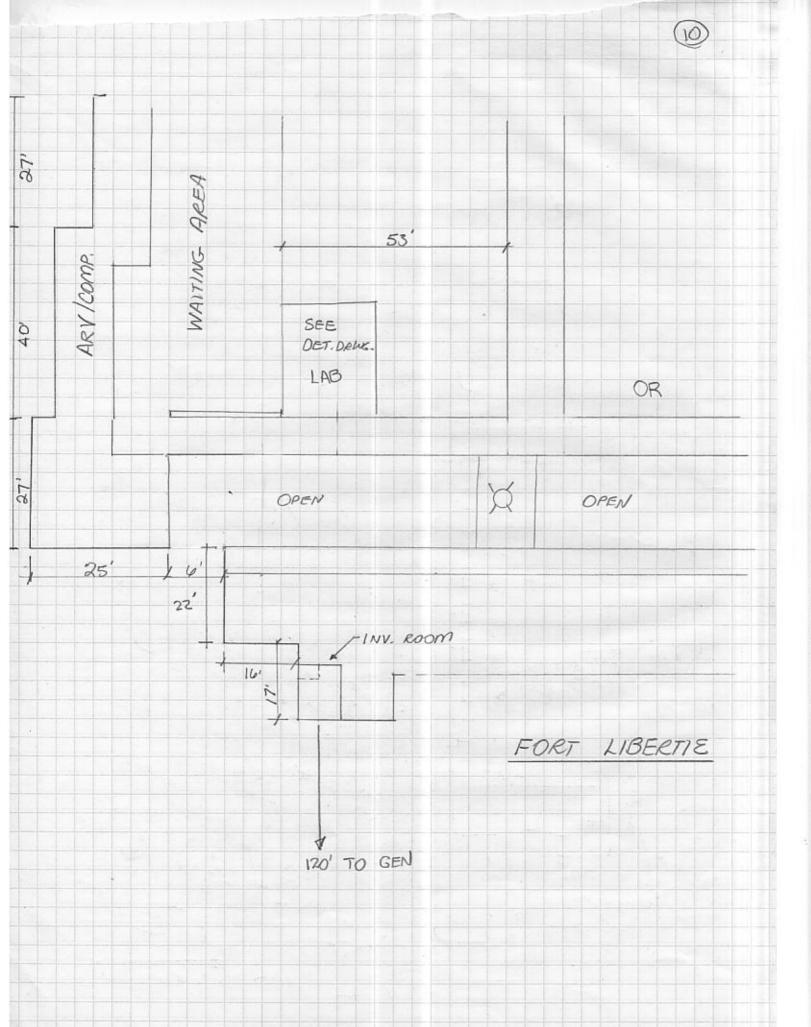
Wall mounted lamps 4 14W and receptacle 6 in Med. Dir. Office (2 and 2) admin. (2 and 4) 2 circuits

Note: special receptacle in ER may be same circuit as Lamp.





				LAB		53 '	
< by					COMM.		Project No Date 16-Jan-09 Scale NTS Checked by HK
o MAT) · Watts - 1 circ. ATRY (Center) - 1 Circ.		Open				40 "	Title: Floor plan
10 rooms(DEPOT to MAT) Each 1 wall mounted CF 14 Watts - 1 circ. Duplex receptacles In MAT & PEDIATRY (Center) - 1 Circ.	WALKWAY	Open	WALKWAY	O.R.	E. R. CF 14 W + Duplex Recep. 1 circuit	35.	Hopital de Fort Liberté
oferor				? Med . Dir.	ADMIN CONF	30' × 7'	Project:





Appendix J Load Sheets

Facility Name Existing Loads

HOPITAL de HINCHE

Area	QTY Load		Watts Each	No Co Loa	ıds	Contact Loads or or Grid		Total Conn
			Eacii	On	Off	On Off		Watts
								770000
Laboratory	2	Microscopes	35			6	2	70
j	1	Reflotron	70	3	1			70
	1	FacsCount	150	3	1			150
	1	Sysmex	100	3	1			100
	2	Centrifuge	200			6	2	400
	1	Computer	150			8	2	150
	1	Refrigerator - Elec	50			12	12	50
	1	Rotator	100			3	2	100
	1	UV Light	75			8	2	75
	4	Light	20			8	2	80
	1	Fan	75			8	2	75
								-
Operating Suite	8	CF Lights	14			4		112
	4	CF Lights	14				3	56
	3	Anisthesia Machine	50			2	2	150
	3	Electric Cutter	100			2	2	300
	3	Suction	250			4	2	750
	3	Mobile Lamp	150			6	2	450
NA - 4 - m - 24		051	44					-
Maternity	9	CF Lamps	14			6		126
	4	CF Lamps (night)	14				6	56
	1	Suction Pump	250			4	4	250
	1	Mobile Lamp	150			4	4	150
	1	Incubator (not on inv)						-
								-
Security Lighting	12	Cf Lamps	14				12	168
Security Lighting		conservative figure, can					12	100
	Very	conservative figure, carr		•				_
Future Loads	1		2000					2,000
								-
								_
								-
			1					-
								-
								-
Grand Totals								5,888

Area	QTY	Load	Watts		No Contact Loads		Contact Loads	
7 • •			Each		Generato			Total Conn
				On	Off	On	Off	Watts
Laboratory	2	Microscopes	35			6	1	70
·	1	Reflotron	70	3	1			70
	1	Facscount	150	3	1			150
	1	Sysmex	100	3	1			100
	2	Centrifuge	200			6	1	400
	1	Computer	150			8	1	150
	1	Refrigerator - Elec	50			12	12	50
	1	Rotator	100			4	1	100
	1	UV Light	75			8	2	75
	1	Light	20			8	2	20
	1	Fan	150			8	2	150
								-
IT Room								-
	4	Computers	150			8	2	600
	2	Printers	200			1	1	400
	2	Lights	22			8	2	44
	1	Satellite Modem	60			8	16	60
	1	Wireless Router	20			8	16	20
								-
Medical Director	1	Computer	150			6	2	150
	1	Printer	200			1	1	200
	2	Lights	22			4	2	44
								-
Hallway Lighting	3	CF Fluores	22				16	66
Room Lighting	10	Room Lights	14				6	140
Outside Lights	3	Wall Lights	22				16	66
		6 Special receptacles, 1	I being used at	the time				-
Special Receptacles	1	Special Purpose	200				2	200
								-
	1	Incubator	350	•			2	350
			Based or	n 15 secs.	every 10 i	minutwes.		-
				T	1		_	-
				ļ				-
				ļ				
			_					
				1			-	
								-
Grand Totals							I	2 675
Grand rotals								3,675

HOPITAL de GRANDE RIVIÈRE du NORD To be powered by/through Inverters

Area	QTY	Load	Watts	Loa	No Contact Loads		Contact Loads	
			Each	On	Generato Off	or or Grid	d Off	Conn
				On	I	On	Oli	Watts
Laboratory	2	Microscopes	35			6	2	70
Laboratory	2	Centrifuge	200			6	2	400
	1	Computer	150			8	2	150
	1	Refrigerator - Elec	50			8	16	50
	1	Rotator	100			4	2	100
	1	Light	20			8	2	20
	1	Fan	150			8	2	150
Future Equipment	•		100			Ť		-
IT Room								_
	6	Computers	150			8	2	900
	1	Printers	200			1	1	200
	3	Lights	22			8	2	66
	1	Satellite Modem	60			8	16	60
	1	Wireless Router	20			8	16	20
							-	
								-
								-
								-
								-
								_
Large Area Lights	7	CF Fluores	65				4	455
Miscellaneous Lights	35	Room Lights	14				4	490
								-
								-
Special Receptacles	1	Special Purpose	400				2	400
		This is 6 outlets, one be	ing used at a t	time.				-
								-
								-
								-
								-
	1							
	1							
	<u> </u>							-
0 17 / 1								-
Grand Totals								3,531

CENTRE MEDICO-SOCIAL DE OUANAMINTHE

Area	QTY	Load	Watts Each	No Co Loa	ds	Cont Loa or or Grid	ıds	Total Conn
				On	Off	On	Off	Watts
Laboratory	1	Spectronic	100			6	1	100
	1	Corning Heater	1043			2		1,043
	1	Water Bath	600			2		600
	1	Haematrokrit	90			6	1	90
	2	Ziprokrit	20			6	1	40
	2	Centrifuge	200			6	1	400
	1	Rotator	60			4	1	60
	1	Reflotron	70	6	1			70
	1	Point Care	200	6	1			200
	1	Centrifuge	300			4	1	300
	3	Microscopes	30			6	1	90
	1	Refrigerator (400kwhr/yr)	50			12	12	50
		Refrigerator is most import	ant.					_
	1	PC	150			8	1	150
	1	Light	65			6	2	65
		Sysmex(coming?)		1				-
				Pls. Refe	r to Supp	olement E		_
IT Room					1 _			_
	1	Satellite Modem	60	8	16			60
	1	Wireless Router	20	8	16			20
	1	Server	200	8	2			200
	9	PC	150	8	2			1,350
	4	Printer	100			8	1	400
	9	22W Lights	22	8	2			198
	0	Fans	75					-
	1	TV in Conference Room	200			8		200
	1			1				
	1							_
	 							_
	†							_
Grand Totals								5,686

HOPITAL de FORT-LIBERTÉ

Powered by/through Existing Inverters

Area	QTY Load	Watts						
			Eacn	On	Generato Off	On On	Off	Conn Watts
								130,000
Laboratory	1	Spectronic	100			6	1	100
	1	Corning Heater	1043			2		1,043
	1	Water Bath	600			2		600
	1	Haematrokrit	90			6	1	90
	2	Ziprokrit	20			6	1	40
	2	Centrifuge	200			6	1	400
	1	Rotator	60			4	1	60
	1	Reflotron	70	6	1			70
	1	Point Care	200	6	1			200
	1	Centrifuge	300			4	1	300
	3	Microscopes	30			6	1	90
	1	Refrigerator (400kwhr/yr)	50			12	12	50
		Refrigerator is most import	ant.					-
	1	PC	150			8	1	150
	1	Light	65			6	2	65
								-
								-
IT Room								-
	1	Satellite Modem	60			8	16	60
	1	Wireless Router	20			8	16	20
	1	Server	200			8	2	200
	9	PC	150			8	2	1,350
	4	Printer	100			8	1	400
	9	22W Lights	22			8	2	198
	0	Fans	75					-
	1	TV in Conference Room	200			8		200
								-
								-
								-
								_
Grand Totals								5,686

CENTRE de SANTÉ de BORGNE

Area	QTY	Load	Watts	No Contact Loads		Contact Loads		Total
			Each	On	Generato Off	or or Grid	Off	Conn Watts
				On	Oil	Oli	Oii	Walls
Laboratory	1	Spectronic	100			6	2	100
	1	Corning Heater	1043			2		1,043
	1	Water Bath	600			2		600
	1	Haematrokrit	90			6	2	90
	2	Ziprokrit	20			6	2	40
	2	Centrifuge	200			6	2	400
	1	Rotator	60			4	2	60
	1	Reflotron	70	6	1			70
	1	Point Care	200	6	1			200
	1	Centrifuge	300			4	2	300
	3	Microscopes	30			6	2	90
	1	Refrigerator (400kwhr/yr)	50			12	12	50
		Refrigerator is most import	ant.					-
	1	PC	150			8	1	150
	1	Light	65			6	2	65
								-
								-
IT Room								-
	1	Satellite Modem	60			8	16	60
	1	Wireless Router	20			8	16	20
	1	Server	200			8	2	200
	9	PC	150			8	2	1,350
	4	Printer	100			8	1	400
	9	22W Lights	22			8	2	198
	0	Fans	75					-
	1	TV in Conference Room	200			8		200
								-
								-
								-
								-
								-
								-
								-
								-
								-
				!				-
				-				
				-				
								-
Grand Totals					I			5,686
Granu Totals								5,000

HOPITAL UNIVERSITAIRE JUSTINIEN

Area	QTY	Load	Watts	No Contact Loads Generate		Contact Loads		Total Conn
			Each	On	Off	On On	Off	Watts
Laboratory(room 1)	2	Spectrometer	110			15	1	220
	1	Water Bath	600			15	1	600
	5	Centrifuge	110			15	2	550
	2	Microscopes	35			15	1	70
	1	Centrifuge (24 tubes)	312			15	2	312
Labo(room #2	2	" "	312			15	3	624
	6	Microscopes	35			15	3	210
Labo (Room # 3)	2	Microscopes	35			15	3	70
	1	Refrigerator	400			4	2	400
Labo (Room # 4)	3	Microscopes	35			15	3	105
(HIV)	1	incubator	252			12	6	252
	1	incubator	94			12	6	94
	1	Sysmex	230	8				230
	1	Spectrometer	110			15	2	110
	1	refloton	45	8				45
	2	Centrifuges	110			15	2	220
	1	Point Care	600	8				600
	1	Rotator	50			15	2	50
	1	Refrigerator	400			4	2	400
Lab (room 5)	1	Refrigerator(mixed)	400			4	2	400
Lab (room 6)	1	PC	150			15	2	150
secr. Office	1	PC	150			15	2	150
Dir. Office	1	PC	150			15	2	150
								-
Lighting								-
Hallway	2	CF	14				9	28
Lab 1	2	CF	14				9	28
Lab 2	1	CF	14				9	14
Lab 3	1	CF	14				9	14
HIV Lab	2	CF	14				9	28
Lab 5 and 6	2	CF	14				9	28
Offices	2	CF	14				3	28
								-
								-
								-
								-
								-
Grand Totals								6,180



Appendix K Sample Purchase Order

	di dilaco Ci aci		
SUBCONTRACTOR: ADDRESS: TELEPHONE NUMBER: FACSIMILE NUMBER:		4601 I Suite Arlingt Tel:	overnment Services Ind North Fairfax Drive 600 con, VA 22203 +1 571 227 9000 +1 571 227 9001
TYP BILATERAL AGREEMENT: The signature of an a in the space below. This Agreement shall not be in affixed their respective signatures to and original of th	effect until the authorized rep		
FIXED PRICE: EFFECTIVE I DELIVERY DATE: PLACE OF DELIVERY:	Оате:		
CLIENT: PRIME CONTRACT: PROJECT TITLE: PROJECT CODE: PA PROJECT MANAGER: PA CONTRACTS REPRESENTATIVE:			
	ies that they are: ot Government Affiliated on-Profit Organization	[] US \ [] Non	Small Business Noman Owned US ned/Operated
DESCRIPTION & PRICE OF SUPPLIES OR SE	RVICES		
The Subcontractor shall provide the supplies serprice specified, in strict accordance with the term			FIRM FIXED PRICE
AGREEMENT OF THE PARTIES The Subcontractor agrees to deliver/perform all support attached hereto for the all inclusive fixed price specification and in applicable provisions of the USAID Primary which are available upon request. It is understood by related to the provisions of the supplies/services specifications, insurance, delivery, etc., as well as any other communication support, etc.	ed above in accordance with e Contract under which this A the parties that the fixed prified above, including but not lier costs consistent with doi	the terms a agreement is ce above sh mited to traing business	and conditions set forth s assigned, excerpts of hall cover all expenses vel, reference material, s such as office rent,
n signing this Agreement, both parties agree to havir ncluded herein. In the event of a conflict between an and any other document (including those incorporated Order shall take precedence.	y of the terms and conditions	contained	in this Purchase Order
{Signature of Authorized Official}	For PA Governme	nt Service	es Inc.
{Print Name/Title/Date}	{Print Name/Title/I	Date}	



USAID EI2 PO - SUPPLIES (11/04)

CLAUSES INCORPORATED BY REFERENCE: This Agreement is issued under a US Government Prime Contract. Applicable clauses set forth below are incorporated by reference into this Agreement with the same force and effect as if it were set forth in full, unless the circumstances do not apply. A full copy of each clause may be obtained from PA (see cover). The terms FAR/AIDAR refer to the Federal Acquisition Regulation/USAID Acquisition Regulation as revised on the dates of this Agreement. The terms "Contractor," Government," and "Contracting Officer" as used in these clauses shall refer to the Subcontractor, PA/US Government (as appropriate), and the PA Contracts Manager, respectively. The Subcontractor shall not communicate issues hereunder directly to the US Government without the written consent/concurrence of the PA Government Services Inc. Contracts Representative.

THE FOLLOWING CLAUSES ARE INCORPORATED BY REFERENCE

Clause	FAR Cite	Clause	FAR Cite
Definitions (Dec 2001)	52.202-1	Child Labor - Cooperation with Authorities and	52.222-19
Gratuities (Apr 1984)	52.203-3	Remedies (Sep 2002)	
Covenant Against Contingent Fee (Apr 1984)	52.203-5	Inconsistency Between English Version and Translation of Contract (Feb 2000)	52.225-14
Anti-Kickback Procedures (Jul 1995)	52.203-7	Rights in Data – Special Works (Jun 1987)	52.227-17
Cancellation, Rescission and Recovery of	52.203-8	Rights in Data – Existing Works (Jun 1987)	52.227-18
Funds for Illegal or Improper Activity (Jan		Federal, State and Local Taxes (Apr 2003)	52.229-3
1997)		Limitation on Withholding of Payments	52.232-9
Price or Fee Adjustment for Illegal or	52.203-10	(Apr 1984)	
Improper Activity (Jan 1997)		Assignment of Claims (Jan 1986)	52.232-23
Audit and Records-Negotiation (Jun 1999)	52.215-2	Performance-Based Payments (Feb 2002)	52.232-32
Price Reduction for Defective Cost or Pricing	52.215-11	Disputes (Jul 2002)	52.233-1
Data (Oct 1997)		Penalties for Unallowable Costs (May 2001)	52.242-3
Price Reduction for Defective Cost or Pricing	52.215-11	Changes – Fixed Price (Aug 1987)	52.243-1
Data – Modifications (Oct 1997)		Changes – Fixed Price Alt. I (Apr 1984)	52.243-1
Subcontractor Cost or Pricing Data (Oct	52.215-12	Subcontracts (Aug 1998)	52.244-2
1997)		Limitation of Liability (Feb 1997)	52.246-23
Integrity of Unit Prices (Oct 1997)	52.215-14	Limitation of Liability – Services (Feb 1997)	52.246-25
Allowable Cost and Payment (Dec 2002)	52.216-7	Termination for Convenience of the Government	52.249-2
Utilization of Small Business Concerns	52.219-8	(Fixed Price) (Sep 1996)	
Limitations on Subcontracting (Dec 1996)	52.219-14	Default (Fixed Price Supply and Service)	52.249-8
	AIDAR		AIDAR
Security Requirements	752.204-2	Local Procurement (Feb 1997)	752.225-71
Organizational Conflicts of Interest	752.209-71	Federal, State, and Local Taxes	752.229-70
Discovered After Award (Jun 1993)		Title to and Care of Property (Apr 1984)	752.245-71
Language and Measurement (Jun 1992)	752.211-70	Conversion of U.S. Dollars to Local Currency (Apr	752.7010
Source, Origin, and Nationality Requirements	752.225-70	1984)	
(Feb 1997)		Approvals (Apr 1984)	752.7025

CONFLICTS, FISCAL AND OTHER GUIDELINES, LAWS AND REGULATIONS, GRATUTIES: In accepting/performing this Agreement, the Subcontractor certifies they: (i) will not engage, directly or indirectly, an any business or professional activities which would conflict with the work assigned hereunder; (ii) will comply with any applicable guidelines of USAID and shall at all times exercise such fiscal responsibility to the best interest of PA and USAID; (iii) will pass on any retail discounts obtained in the performance of this work; (iv) have provided all cost/pricing data incident to the determination of price to PA which is current, complete and accurate; (v) will comply with all applicable nationals, state regional and local laws and regulations; (vi) are not affiliated with any Government office or agency; and,(vii) have not offered, provided or promised any gift, payment or offer of anything of value to any official, employee or representative of PA or Government entity (both US and foreign) in association with this Agreement or PA's Prime Contract.



<u>OFFICIAL ORDER:</u> All Orders shall be issued on PA's Purchase Order Form, and signed by an authorized PA signatory to be valid. PA is under no obligation to accept Supplies or Services otherwise. The acknowledgment through signature (bilateral) or performance of the Order by the Subcontractor constitutes the Subcontractor's acceptance of the Order on these terms and conditions. No variation to an Order or these terms and conditions will be valid unless the variation is agreed in writing by an authorized PA signatory. The fixed price shown on the Agreement is the total price charge to PA.

INDEPENDENT RELATIONSHIP: Nothing in this Agreement shall be construed as creating anything more than an independent Contractor/Subcontractor, buyer/vendor relationship between PA and the Subcontractor.

SPECIFICATION: PA will not accept any changes made by the Subcontractor to the requirements or specification of the Services unless previously agreed in writing by an authorized PA signatory and where such change is not agreed by PA, the Subcontractor shall remain bound by these terms and conditions to the original requirements or specification.

TIME OF DELIVERY: Time is of essence for delivery of the Services under this Order. If a delivery date cannot be met, the Subcontractor shall promptly notify PA of the earliest date for delivery of the Services. Notwithstanding if the Subcontractor does not deliver the Services by the agreed delivery date, PA may cancel the Order, purchase similar Services from a third party and recover from the Subcontractor any excess costs incurred, (including expenses).

<u>WARRANTIES:</u> The Subcontractor warrants that all equipment to be provided to PA shall be free from defects in material or workmanship at the time of delivery. When return, correction, or replacement of equipment under warranty is required, transportation charges and responsibility for the equipment while in transit shall be borne solely by the Subcontractor. However, the Subcontractor's liability for transportation charges shall not exceed an amount equal to the cost of transportation by the usual commercial method of shipment between the place of delivery specified in the Order and the Subcontractor's facilities, and return.

Any equipment or parts thereof, corrected or furnished in replacement under this clause shall also be subject to the terms of this clause to the same extent as equipment initially delivered. The warranty, with respect to replacement equipment or parts thereof, shall be equal in duration to that of the original equipment, and shall run from the date of delivery of the replacement equipment.

NOTICE OF DEFECT: PA shall give written notice to the Subcontractor of any defects in material or workmanship as set forth in this clause within 45 days after discovery of the defect. Within a reasonable time after notice of any breach of the warranties specified in this clause, PA may exercise one or more of the following options:

- Screen the equipment and/or software grouped for warranty action under this clause at Subcontractor's expense and return all nonconforming software and/or equipment to the Subcontractor for correction or replacement.
- Return the equipment grouped for warranty action under this clause to the Subcontractor (irrespective of the f.o.b. point or the point of acceptance) for screening and correction or replacement.
- Require an equitable adjustment in the Agreement price for any group of equipment.

FOREIGN CORRUPT PRACTICES ACT

- a. Compliance With Laws: In the performance of its obligations under this Agreement, the Subcontractor, its Affiliates, officers, directors, agents and employees shall comply strictly with all applicable laws, regulations and orders of Host Country and other applicable jurisdictions. The Subcontractor hereby acknowledges and agrees that certain laws of the United States of America and Host country prohibit any person from making any payment of money or anything of value, directly or indirectly, to any government official, political party, or candidate for political office for the purpose of obtaining or retaining business. The Subcontractor hereby represents and warrants that, in the performance of its obligations hereunder, it has not made or offered to make, and will not make or offer to make, any such proscribed payment. The provisions of this Article shall survive termination or expiration of this Agreement for any reason.
- **b.** Audit Rights: Complete and accurate records shall be maintained in connection with this Agreement and all transactions related thereto and all such records shall be maintained for at least 24 months after the term of this contract PA and/or its duly authorized representatives shall have, during the term of the contract and for two years thereafter, the right to audit, examine, and make photocopies of all accounts, records, correspondence and all other documents, including but not limited to all labor hours and costs, material costs, subcontract costs, rental costs and other charges pertaining to the contract to verify the amounts claimed and to verify compliance with laws. This right to audit clause shall extend to transactions with third parties when the transactions are deemed by PA and/or its duly



authorized representatives to relate, actually or potentially, to performance under the contract and compliance with laws.

c. Indemnification: The Subcontractor shall, at its sole cost and expense, indemnify, protect, defend (with counsel chosen by PA) and hold PA, its successors, assigns, agents, employees, officers, directors and affiliate and subsidiary companies harmless from and against any and all claims, demands, losses, costs, expenses (including, without limitation, interest, penalties and actual attorneys' fees), obligations, proceedings, litigation, judgements, disbursements, causes of action, liabilities and damages of any kind or nature whatsoever, which may at any time be imposed upon, incurred by or asserted or awarded against PA, its successors, assigns, agents, employees, officers, directors, affiliated companies and/or subsidiary companies which arise: (i) from or out of the Subcontractor's actions and/or omissions relating to this Agreement; or (ii) from or out of any breach of any agreement, representation, warranty or indemnification made by the Subcontractor contained in this Agreement.

The Subcontractor, in signing this Agreement, hereby certifies that they are in compliance with this Article. In addition, upon the request of PA, the Subcontractor shall provide PA with a separate, written certificate evidencing compliance with this provision.

LIABILITY: The Subcontractor shall, at its sole cost and expense, indemnify, protect, defend (with counsel chosen by PA) and hold PA, its successors, assigns, agents, employees, officers, directors and affiliate and subsidiary companies harmless from and against any and all claims, demands, losses, costs, expenses (including, without limitation, interest, penalties and actual attorneys' fees), obligations, proceedings, litigation, judgements, disbursements, causes of action, liabilities and damages of any kind or nature whatsoever, which may at any time be imposed upon, incurred by or asserted or awarded against PA, its successors, assigns, agents, employees, officers, directors, affiliated companies and/or subsidiary companies which arise: (i) from or out of the Subcontractor's actions and/or omissions relating to this Agreement; or (ii) from or out of any breach of any agreement, representation, warranty or indemnification made by the Subcontractor contained in this Agreement.

PA's total liability for breach of contract negligence or statutory duty shall not exceed the value (excluding value added or other sales tax) of the Order. Neither party shall be liable to the other for consequential or indirect loss or damage (including without limitation loss of profits, lost business and loss of contracts) whatsoever suffered by the Subcontractor whether caused by PA's negligence or otherwise even if the other party has been advised of their likelihood.

<u>TITLE AND RISK:</u> Title to all information, data, software, documentation and intellectual property of any kind developed for the first time and/or delivered under this Agreement shall belong exclusively to PA as "Works for Hire". Such property already titled to the Subcontractor and delivered in whole or in part to PA under this Agreement shall remain the property of the Subcontractor provided PA shall receive a fully paid-up, non-exclusive, non-transferable (able to be sublicensed) license to use.

GOVERNING LAW: These Terms and Conditions of Purchase shall be construed and interpreted in accordance with the laws of the State of New York, United States of America.

<u>DISPUTES RESOLUTION:</u> Both parties shall make all reasonable efforts to settle any subsequent disputes on an amicable basis. In the event that agreement cannot be reached, then the facts of the dispute shall be submitted to the PA Officer in Charge for a final decision on the dispute within thirty (30) days, or longer reasonable period if notice is given to the Subcontractor. The Subcontractor shall comply with any decision of the PA Contracts Manager and proceed diligently with performance of any outstanding work under this Agreement, pending any legal action or proceeding relating to this Agreement or the dispute at issue.

Any legal action or proceeding with respect to the Agreement may be brought in the courts of the State of New York or of the United States of America for the Southern District of New York and, by execution and delivery of the Agreement, each Party hereby accepts for itself and in respect of its property, generally and unconditionally, the jurisdiction of the aforesaid courts. Each Party further irrevocably consents to the service of process out of any of the aforementioned courts in any action or proceeding by the mailing of copies thereof by guaranteed overnight courier to such Party at its address set forth in the Agreement, such service to become effective seven (7) business days after such mailing. Nothing in the Agreement shall affect the right of PA to serve process in any other manner permitted by law or to commence legal proceedings or otherwise proceed against the Client in any other jurisdiction. Each Party hereby irrevocably waives any objection which it may now or hereafter have to the laying of venue of any of the aforesaid actions or proceedings arising out of or in connection with the Agreement brought in the courts referred to above and hereby further irrevocably waives and agrees not to plead or claim in any such court that any such action or proceeding brought in any such court has been brought in an inconvenient forum.



<u>TERMINATION:</u> This Agreement may be terminated for any reason by PA providing 10 days advance, written notice to the Subcontractor and providing all outstanding debts and obligations have been fulfilled.

INVOICING AND PAYMENT: The Subcontractor shall submit their invoice to PA upon completion/delivery of all services and goods ordered. All invoices shall be submitted to: *PA Government Services Inc., Attn: Accounts Payable, 4601 North Fairfax Drive, Suite 600, Arlington, VA 22203,* along with:

- Subcontractor's name and address;
- Date and period covered by the invoice; and
- The Purchase Order number assigned by PA to this Agreement as well as the Project Code assigned on the Purchase Order cover page.

Any invoice or request not submitted to this address or in a manner other than that described herein shall constitute an improper invoice and shall not be reimbursed.

Each invoice must include a signed certification statement similar to that set forth below

"I certify that the amount invoiced represents charges that, to the best of my knowledge and belief, are both allowable and allocable; and have been properly incurred in the performance of the work/delivery of supplies specified, during the period specified herein."

Invoices shall be submitted in United States Dollars. PA shall make final payment only upon acceptance of all services and deliverables supplied in a complete and satisfactory manner by the Subcontractor.

<u>CONFIDENTIALITY:</u> The Subcontractor, its staff employees, agents, and advisers, undertake to keep confidential all and any information relating to the business of PA, together with PA's clients' confidential information obtained during the course of the Order and shall not disclose such information to any third party without PA's prior written consent. The Subcontractor shall not copy or disclose the information to any person other than persons who have a need to know and who are bound to a duty of confidentiality on the same terms as this Agreement. All information (including all copies) shall be returned to PA on demand or on completion of the Order (whichever is sooner) or be disposed of according to PA's written instruction.

<u>LICENSES:</u> If the performance of the Order requires PA to have any permit or license from any government or other authority or any other third party, either within or outside the US, the Agreement shall be conditional upon such a permit or license being available at the required time.

SEVERABILITY: The invalidity, illegality or unenforceability of the whole or part of a clause or term of this Agreement does not affect or impair the continuation in full force and effect of the remainder of this Agreement.

<u>WAIVER</u>: No delay or omission by PA in exercising any of its rights under the Agreement or under any applicable law shall be deemed a waiver of the exercise of such right or remedy or any other right of remedy.

FORCE MAJEURE: If either party is prevented, hindered or delayed from observing or performing their obligations under this Agreement by an act beyond our reasonable control the affected party will give notice to the other party and the parities shall agree a resolution to the act beyond reasonable control.

EXECUTIVE ORDER ON TERRORISM FINANCING: U.S. Executive Orders and U.S. law prohibit transactions with, and the provision of resources and support to, individuals and organizations associated with terrorism. It is the legal responsibility of the Subcontractor to ensure compliance with these Executive Orders and laws. For further information, please see: http://www.ustreas.gov/offices/enforcement/ofac/sanctions/terrorism.html

ENTIRE AGREEMENT: These terms and conditions supersede any previous oral or written agreements made between PA and the Subcontractor. PA will not be bound by any standard or printed terms of the Subcontractor in any of its documents unless specifically stated in writing.

END OF AGREEMENT