

ATTACHMENT 1 - SPECIFICATIONS

A translation to Spanish will be given as a courtesy. If a discrepancy is found between the version in Spanish and the version in English, the version in English will prevail.

GENERAL DESCRIPTION OF THE PROJECT

The following are the main characteristics of the work to be executed at the Police facilities located in Pijaos, Tolima.

The work to be done consists of the refurbishing of one (1) 40-foot sea van land container and to provide the main power circuit branch to connect the container to an existing electrical distribution panel. The container measures 2.44 m wide x 2.44 m high x 12 m long and will be used to store arms and as an office.

The container is currently located in its intended location at the Police Training Center CENOP in Pijaos. Therefore, the transportation and placing of the container shall not be part of this scope, nor shall the concrete supports for the container.

The Contractor will perform the adaptation on site.

The Contractor shall verify the measures and become familiar with the terrain and the existing conditions before sending his quotation.

DIVISION 01 GENERAL REQUIREMENTS

1.1 Temporary Facilities

The Contractor shall submit a drawing with location of the storage facility, fencing of the project site and temporary services (water, energy, telephone, etc.) before starting the installation, for the prior approval of the Contracting Officer's Representative (COR). All the installations shall be removed by the Contractor with the approval of the COR when the works are finished. The site shall be left as it was found before the start of the project, with grass, sidewalks, etc. This removal, along with the installation, shall be quoted at a global price and shall be included in the total cost of the project.

Temporary Restrooms

The contractor shall provide portable restrooms for physiologic needs and personal cleaning of his personnel.

Provisional services

Should the final user provide the contractor with any service, this will be on an unconditional aid basis, and any temporary or permanent suspension of this service or fault therein will not entitle

the contractor to make any economic claim whatsoever and/or claim justification for delays or similar. The contractor should provide alternative means in these cases.

Site Security

The contractor shall provide security services for the work area and camps. Neither the contracting party nor the user will be responsible for paying for surveillance services or for items left on the site.

Provisional Fencing

The work site shall be completely isolated from zones or roads surrounding the same. Similarly, if a materials storage area is built, this shall be fenced off in the same manner. A fence will be built for this purpose, consisting of safety tape with wooden posts every two meters. While the works are in progress, the contractor shall ensure that the fence is maintained and repaired, so that it is always in suitable condition.

Food, transportation and lodging

The contractor is responsible for food, off-Base lodging and transportation for his personnel.

1.2 Cleaning and Debris removal

The contractor will employ personnel to clean daily the construction site and nearby zones. The prices for all items, without exception, include the costs of cleaning up, loading and removal of all materials resulting from the building work. The contractor will take these materials to an authorized dump, where the interests of the base, third parties and the environment will not be affected (the contractor must follow the parameters established in Resolution 541/94 and all subsequent modifications). Material from excavations will be deposited in such a way as to avoid blocking the entrance to the site at all times or occupying public roads while the material is being loaded into trucks for removal.

DIVISION 02 PRELIMINARY ACTIVITIES, SITE WORK

2.1 Main circuit branch canalization

The bidder shall supply and install a single tube PVC EB Electric type, gauge 1 ½", for connecting the existing circuit board with the container. The existing board has 12 circuits and is located approximately 40 m away from the container. The pipe shall be underground 60 cm from soil level. An underground warning tape shall be placed 30 cm from soil level.

The pipe shall be extended to a new junction box with dimensions 50 cm X 50 cm X 60 cm. This box shall also be supplied and installed by the awarded contractor. The piping continues from the new junction box to a new electrical box with a safety industrial receptacle, dual pole, twist lock type, which shall also be supplied and installed by the awarded vendor and which shall be placed 50 cm from soil level and canalized by a galvanic tube of one inch gauge.

The bidder shall include in his proposal all the civil work required for this item, such as material removal, refilling, channel construction, repainting, junction boxes and any extra work required for leaving the affected areas as originally found. The bidder shall use better qualities and

quantities in order to comply with construction codes, even if the existing locations do not currently comply.

DIVISION 03 CONCRETE: See Division 02

DIVISION 04 MASONRY: See Division 02

DIVISION 05 METALS

5.1 Repair and finishing of container walls and roof

Contractor shall check and repair internally and externally the modular container roof and walls, matching the existing materials and conditions of the container in order to guarantee that no water infiltrates the facility. This includes sealing the main door.

5.2 Pre-undulated mesh cage

The contractor shall supply and install a security cage in pre-undulated mesh gauge 8, ½” hole with a metallic frame around it in angle 2”x1/8”. The pre-undulated mesh shall include studs in between the frame horizontally as well as vertically in order to prevent the bending of the mesh. The height of the mesh shall be to the roof of the container. The contractor shall also supply and install a sliding door 0.90m x 2.10m of the same material and shall include hoops and pins to install two padlocks at the exterior side. Included in this requirement is non-corrosive paint and two coats of enamel grey color.

5.3 Metal grill, pre-undulated mesh, A/C, and exhaust fan supports

The contractor shall supply and install a metal bank-type safety grille on the outside of the existing windows, holes not larger than 0.10 m, painted with anti-corrosive paint and topcoat; and a pre-undulated mesh hole ½” in all windows with an additional frame.

5.4 Metal entrance door 1.0 m x 2.10 m

The contractor shall supply and install a 1.0 m width by 2.10 m height metal door sheet of minimum cal. 18 with metal frames in cold rolled caliber 18 and 4 hinges. The door shall be stable type, divided in the middle for public attention without allowing the access into the container. This item includes non-corrosive paint; two coats of finish paint.

The upper part shall include hoops and pins to install two padlocks at the interior side, one in the upper part and one lateral. The bottom part of the door shall include a high-security lock; against drill; against hook wrench; with three points lock and five codified keys; it also includes interior and exterior handles.

5.5 Door grill

Additionally a ½” inch square grill shall be installed in each door; with horizontal spacing of 0.10 m and vertical spacing of 0.20 m. In the middle of the grill door, a space will be left, as seen in the example below in order to supply and install an abatable shelf of 0.30 m x 0.75 m. This grill

shall have lock to the floor and in the upper part to put locks. The door shall be installed at the interior part of the container's entrance door. This door shall include a superimposed lock, 16 caliber with cylinder.



Example Grill door



Example A/C supports mesh protector

5.6 Over roof

The contractor shall supply and install a metal structure supported over the container; the contractor shall also supply and install the roof tiles architectural type, trapezoidal shape, covering all container and wings as shown on the plan. Roof shall be installed according to the manufacturer's instruction. The color will be selected by the COR.

5.7 Staircase and metallic platform

The contractor shall supply and install an extruded-mesh, wide metal staircase and platform painted with anti-corrosive paint and topcoat, for the container access. The staircase shall be 0.90 m wide. Its height shall be measured on-site. This item includes a 1.60 m platform.

DIVISION 06 WOOD AND PLASTICS

6.1 Repair and finish of container floor

The floor material (wood or metallic) shall remain in perfect conditions. Contractor shall change the damaged parts and seal all perimeter and joints in order to ensure there are no cracks which might allow leaks to develop. The floor should be perfectly leveled, so that the floor finish can be applied.

DIVISION 07 THERMAL AND MOISTURE PROTECTION

7.1 Supply and installation of thermal insulation

After the walls and roof part of the container has been repaired, contractor shall supply and install on the roof and on all the internal walls high-density injected (non flammable) polyurethane or similar material in sheets, 5 mm minimum thickness in order to guarantee adequate thermal and acoustic insulation.

DIVISION 08 FINISHES

8.1 Floor finish

The floor finish that is to be fitted will be an 'Emeflex' or 'Konker'-type heavy-duty rubber floor at least 4 mm thick. The contractor shall apply an insulating material and/or joint joining element between the floor and the finish, in order to guarantee stability and prevent the floor expanding or lifting due to changes of temperature.

8.2 Walls and ceiling finish

This item includes the supply and installation of a dry wall type Superboard or equivalent material anchored to floor and ceiling. The area to cover is all walls and ceiling.

8.3 External container paint

External paint shall be epoxy. First, a non-corrosive coat shall be applied, followed by two coats of epoxy or any other type of paint that is abrasion- and weather-resistant; minimum thickness of 5mils; same or similar color to the existing containers located in the area or color selected by the COR. Area to be painted is roof ceiling and all walls and bottom part of the container to avoid corrosion.

8.4 Internal paint

The Superboard walls or equivalent walls shall be stucco and painted with acrylic paint Koraza type or equivalent, white color. The ceiling shall have stucco and paint, with white color vinyl.

DIVISION 09 DOORS AND WINDOWS: See Division 05 Metal Carpentry

DIVISION 10 SPECIALTIES: N/A

DIVISION 11 EQUIPMENT: N/A

DIVISION 12 FURNITURE: not included in this contract.

DIVISION 13 SPECIAL CONSTRUCTION: N/A

DIVISION 14 CONVEYING SYSTEM: N/A

DIVISION 15 MECHANICAL

15.1 Air Conditioning Units 18,000 BTU Window type

The bidder shall quote for supply and installation of two (2) window type air conditioning (AC) units for the container, with cooling capacity of 18,000 BTU per unit. The units shall contain their respective supports and anchor elements. The air conditioning units will be fitted at a height of 2.00 m above floor level measured to the top edge of the air conditioning unit.

The AC shall include the water drain system, piping type PVC. These water drain systems shall be designed in order to evacuate the water which is contained in the trays and prevent water to be blocked by dust and other elements.

15.2 Electric Extractor Fan

This item includes fitting an electric extractor fan, VENTILATION FAN MOD 676 – 684 for 110 cubic feet with the respective independent switch. This item includes the corresponding electrical outlet. This fan shall include a frame with ½-inch waved mesh.

15.3 Smoke detector

The contractor shall supply and install three smoke detectors with batteries. These shall be installed on the ceiling.

DIVISION 16 ELECTRICAL INSTALLATIONS

Electrical standards scope

Any electrical installation which is done by the contractor shall comply with the following electrical standards: NTC 2050 last upgrade and chapters 645, 210,215; NEC 250 last upgrade, NTC 3471/UL 67, EIA/TIA 607, EIA/TIA 568-569 last upgrade, ANSI/IEEE C62.41-C62.45, NEPA 780, NTC 4552, IEEE-80, IEEE-77 and RETIE last upgrade.

16.1 Low voltage works (LV)

The contractor shall quote for supply and installation an electrical main circuit, which shall feed the container. This new circuit shall be connected from the power circuit board, which is located approximately 40 m from the assigned area for the container. The new main circuit branch shall have a capacity of 10 KVA. The requested circuit branch shall be type dual-phase, two lines, neutral and ground, AWG THHN/THNW 2XNo6+1XNo6+1XNo8. The bidder shall quote two (2) main breakers, 2X50A each one, placing one unit in the container circuit board and the other one in the existing circuit board (Tablero de Distribución T2).

16.2 Electrical circuit board with breakers

The contractor shall use the two existing electrical circuit boards, certified under RETIE standards. These panels are located inside the container, at a height of approximately 1.40 m above the level of the container floor.

The contractor shall guarantee that the circuit board is grounded to a grounding master bus. It shall be labeled and shall have a single diagram and power distribution chart. Each circuit shall be identified by solid labels, fonts in white color and black for background.

16.3 120V Electric receptacle Points

The bidder shall quote for supply and installation of eight (8) receptacles for 15A/120V, double jack, grounding pin, hospital grade, duly labeled with a non-removable countersunk (low or high relief) plastic or metal label. The sockets should be connected throughout the circuit, and shall be uniformly distributed (or as shown on the plan). These sockets shall be fitted 0.30 m above floor level, unless otherwise stated on the plans.

Electrical cabling shall follow the color code for low tension connections (yellow, blue or red for phases, white for neutral and green for grounding). It shall be installed as follows: **phase “S” in yellow, phase “R” in blue, neutral in white or gray and grounding in green.** Every circuit connected to the new circuit board shall preserve the color of each phase.

16.4 220V Double-Phase Electrical receptacles

The bidder shall quote for supply and installation of two (2) industrial receptacles, double socket 220 V, with grounding pin, which shall be used for air conditioning units and the fan distributed as shown on the plan, placing them at a height of 2.00 m above floor level. These receptacles shall be duly marked with a non-removable countersunk (low relief) plastic or metal label, indicating the output voltage. The type of NEMA configuration for each receptacle shall depend on the conditions directly required by the manufacturer of the provided units.

16.5 Fluorescent Lamps

The bidder shall supply and install six (6) lamps, 2 x 32" fluorescent type including starting condenser, electronic ballast and factory-produced acrylic protector. These lamps shall be fitted inside the container. The item includes the lamps themselves, single receptacles 120V, wiring with jack and rubber conduit for low smoke emission, switches and fluorescent tubes (See plan). The switches shall be placed 120 cm above the floor. The bidder shall include in his/her offer the piping system required for the lamps and receptacles wiring, which shall be type PVC ½”, embedded in walls. The price shall also include accessories such as unions, connectors, and miscellaneous elements which are required for the canalization work.

16.6 Exterior lamp

The bidder shall supply and install one (1) exterior turtle type lamp with acrylic cover to be installed at the entrance of the container. The switches shall be placed 120 cm above the floor. The bidder shall include in his/her offer the piping system required for the lamps and receptacles wiring, which shall be type PVC ½”, embedded in walls. The price shall also include accessories such as unions, connectors, and miscellaneous elements which are required for the canalization work.

16.7 Grounding system

The bidder shall quote for supply and installation a grounding system, which shall be composed of electrodes, copper 99%, 5/8”, 240 cm each. These electrodes shall be connected through a bare wire type AWG caliber No.2. The electrodes shall conform and make a square of 4 m x 4 m. The grounding system shall have inspection cavities with physical dimensions of 0.3 m x 0.3 m and depth of 0.5 m, with covers which shall be labeled with a “T” letter. The covers shall be built in concrete and metallic frame for heavy traffic. The expected impedance value according to this configuration shall be 2Ω or lower; in case of a bigger value, the bidder shall include in his/her proposal the pricing for achieving a soil analysis, in order to adjust the current conditions for getting the expected impedance value.

The grounding electrodes and the grounding line (AWG No2) shall be exothermic welded. The grounding line shall be connected to a grounding master bus, which shall have the following dimensions: 10 mm thick, 50 mm width and 200 mm length. The master bus shall be a copper

bar, tin-plated, with a number of holes and separation each other according to NEMA standards. All the grounding lines shall have terminals in order to be screwed in the new master bus. The master bus shall be provided and installed by the awarded vendor; this device shall be placed inside of a crib. The crib shall have door and electrical insulators. The crib shall be fixed in one of the external walls of the shelter. The grounding crib shall be for outdoor application, type NEMA 2-3, special painting with treatment anti-corrosion. The grounding master bus shall receive the grounding line of the new electrical board, the existing electrical board and the shelter. The new grounding system shall be certified by fulfilling the follow standards:

- Official resistance value according to Standard IEEE 142-4.1.2
- Electrode Material according to Standard NEC 250-52-c (2)
- Pipe type Electrode Size according to Standard NEC 250-52-c (3)
- Distance between placed electrodes NEC 250-56
- Connections Quality NEC 250-70
- Grid Conductors Gauge NEC 250-50-(d)
- Ground Connector Gauge NEC 250-66
- Wires Quality NEC 250-50
- PT NEC Interconnection NEC 250-68
- Accessibility to Electrode NEC 250-68
- Main grounding bus bar EIA/ TIA 607-5.4
- Flowing current IEEE 1100 Table 4.3

16.8 Internal canalization

The contractor shall supply and install perimeter plastic raceway with middle divisor (multichannel); color is defined during project execution. Canalization shall have isolated grounding lines, which shall be directly connected to the grounding master bus, in accordance with EIA/TIA 607. The grounding lines shall be extended in a radial manner, avoiding loops. Channels shall be minimum 10 cm x 5 cm.

16.9 Industrial Connector

The segment between the new circuit board and the industrial receptacle shall be canalized by an American liquid-tight conduit, one-inch gauge, including fixing accessories and coupling as suggested by the manufacturer.

To arrive to the internal board, contractor shall supply and install at the exterior part a NEMA 12 industrial connector for outdoor use (complete box and pin plug with twist lock system). This connector will be located at a height of 1.80 m above the level of the finished floor of the container. The connection plug to the container should be of the box type, and the connection pin or cord of the pin type, in accordance with Standard NTC 2050, Article 551-46 a)1).

"FIRM AND PROJECT INFORMATION "

Firm Information		NIT NUMBER:	
NAME	ADDRESS	TELEPHONE/FAX	E-MAIL ADDRESS

Owners, Partners and Principal Officer

NAME	POSITION	TELEPHONE	ENGLISH COMMUNICATION (Ability to understand, write and read)

Legal Representatives and backups

NAME	POSITION	TELEPHONE	ENGLISH COMMUNICATION (Ability to understand, write and read)

Project Director, Superintendent and key technical Personnel for this project

NAME	POSITION	TELEPHONE	ENGLISH COMMUNICATION (Ability to understand, write and read)

Subcontractors for this project (if it does not apply indicate it in the chart)

NAME	ACTIVITY TO PERFORM	% DEL PROJECT TOTAL	TELEPHONE	ADDRESS AND CITY

Suppliers for this project

NAME	MATERIALS TO SUPPLY	% DEL PROJECT TOTAL	TELEPHONE	ADDRESS AND CITY

Requirements of the Offeror and Owners/partners:

DESCRIPTION	YES	NO	NOTES
Has all licenses and permits required by local law to perform?(Chamber of Commerce, Merchandise Register, Professional Licenses, etc.)			
Meets local insurance requirements (Prestaciones Sociales, ICA, Sena, etc.)			
Has the ability to obtain a performance and guarantee bond and payment bond, or adequate performance security, such as irrevocable letters of credit or guarantees issued by a reputable financial institution. Include Information			
Has adverse criminal record?			
Has political or business affiliation which could be considered contrary to the interests of the United States.			

I certify that the information is accurate and verifiable

Signature of the Legal Representative _____

Date _____

Name of the Legal Representative _____

Id Number _____

Artículo 289 del Código Penal Colombiano: "El que falsifique documento privado que pueda servir de prueba, incurrirá, si lo usa, en prisión de uno (1) a seis (6) años."

"FIRM EXPERIENCE"

Indicate the experience of the firm in similar projects performed in the last ten (10) years. Include maximum 10 projects. **Do not include certifications or contract copies.** In the case we needed we will require it afterwards.

	1	2	3	4	5
NAME OF THE CLIENT (CONTRACTING PARTY)					
CLIENT ADDRESS					
CLIENT TELEPHONE NUMBER					
CLIENT POINT OF CONTACT					
CONTRACT NUMBER					
TYPE OF CONTRACT (* 1)					
NAME OF THE CONTRACT OR PROJECT					
PROJECT LOCATION					
PROJECT STARTING DATE					
PROJECT FINISH DATE					
WAS THE PROJECT FINISHED ON TIME (Explain if needed)					
SQUARE METERS OR UNITS (Indicate unit measurements)					
CONTRACT COST IN PESOS					
CONTRACT COST IN MONTHLY MINIMUM SALARIES					
INDICATE IF IN THIS PROJECT YOU WERE THE PRIME CONTRACTOR , SUBCONTRACTOR OR ASSOCIATE					
INDICATE THE PERCENTAGE OF PARTICIPATION OF YOUR FIRM IN THIS PROJECT					
BRIEF DESCRIPTION OF ACTIVITIES BEING PERFORMED					
COMPARISON OF THE WORK PERFORMED WITH THIS SOLICITATION (* 2)					
BRIEF DESCRIPTION OF TECHNICAL PROBLEMS ENCOUNTERED AND THE WAY THEY WERE SOLVED					
METHOD OF ACQUISITION (Public solicitation, private or non competed) award criteria					
COST/PRICE MANAGEMENT HISTORY (any cost overruns and under runs, and cost growth and changes)					
HAVE YOU HAD ANY CONTRACT TERMINATIONS IN THE LAST TEN (10) YEARS?					
REASONS FOR TERMINATIONS (for contractor convenience ó for default or other)					

(*1) Consulting, construction, design, work oversight, delegated administration If you are not a company explain if you were the superintendent, director or other.

(*2) En here you should indicate which activities performed are similar to the work being contracted.

I certify that the information is accurate and verifiable

Signature of the Legal Representative _____

Name of the Legal Representative _____

Date _____

Id Number _____

Artículo 289 del Código Penal Colombiano: "El que falsifique documento privado que pueda servir de prueba, incurrirá, si lo usa, en prisión de uno (1) a seis (6) años ."