SECTION 7

THE GENERIC SITE AND ITS COMPONENTS

(Option – by client approval)

CONTENTS

1. General

The generic site for Light Vehicle Radiography inspection facility is intended for other Customs sites such as Begin terminal, Allenby terminals, Ashdod, and Haifa Ports, and/or any other location chosen by the Customs authorities. The facility shall be designed as a comprehensive unit as described in the previous sections with slight changes to the design and plans (described in this section), which comprise of the following main functions:

- Control and Operation system
- Radiography facility
- Site plot is fully developed, slight modifications are needed.
- Drawing No. 143-05-003-SH#4 shows the plans for the generic site and components.

1.1 The generic Light Vehicle Radiography Facility is a building site housing the conveyor, Radiography system, workers and personal of the Radiography Facility.

1.2 Site Command and Control components include:

- Entry/ Exit of vehicles to / from the site (roads, signs, etc).
- Entry/ Exit of pedestrians to / from the site (sidewalks, gates, wickets etc.).
- Safety and Security systems
- CCTV (as described throughout this tender)
- PA system
- Gates and barriers (as required)
- Traffic lights
- Traffic signs
- Road signs
- License plate reader

The LPR system will be tailored to every site according to the workflow in that site.

1.3 Radiography facility comprising of:

- The Radiography facility building for light vehicle X-Ray screening system,

- Building for the Radiography facility with shielding concrete walls with a roof and entrance and egress doors. The building also contains the Operators, Image analysts, supervisors and control positions.
- Service, Maintenance, Equipment Storage and Managerial functions.

For each optional generic site that will be ordered by the client, the service and maintenance contract shall be imposed. There may be changes to the working hours in the relevant site.

All the details of the Radiography system are described in section 5.

1.4 Office building comprising of operator's positions, Managerial functions, command and control functions as well as service, storage and maintenance areas.

All the details of the Building are per described in section's 6.

1.5 Site development, including:

- Roads and sidewalks
- Adjust the existing Parking areas for use of Light vehicles

1.6 Sustainable construction

1.7 Communication

1.8 Power/

The bidder will connect the site to the existing power and communication services, and which are provided by the Landlord.

1.9 Fire detection and extinguishing

The bidder will connect the site to the existing fire detection and extinguishing services, and which are provided by the Landlord.

1.10 Water and sewage

The bidder will connect the site to the existing water and sewage mains services which are provided by the Landlord.

1.11 The following sections presents a general description of the parts listed above, in accordance with the operational procedures described in section 3 and section 6.

1.12 Generally, it's emphasized that site design will present a direct and safe traffic from one sub area to the other (Entrance / Radiography / Pit / Exit, with none, or at least minimal, crossing of roads and it will allow rapid evacuation of the site in emergency situation (free passage from each area)

1.13 It’s emphasized that units' sizes (office area, etc.) described in the Annex are not compulsory there is possibility of extending the facility size.

1.14 The site shall also be connected to an existing remote office position in the existing site.

1.15 The site shall relate to the terminal's principal systems.

1.16 The bidder must take into consideration all aspects of the site’s needs of information/data security connections to computers and IT services in the terminal.

Note: At the PDR, the contractor will present for client's approval, the updated site & building design drawings according to Client's requirements.

2. Site's Command and Control system

2.1 General

2.1.1 Generally, Customs employees, visitors and vehicles for customs and security inspection will reach the site through the entrance area

2.1.2 Entrance of selected vehicles from the main road will be directed to the "pre-inspection" parking lot.

2.1.3 Exit from the Customs Inspection Site will be through Exit gate.

2.1.4 All the necessary information regarding the process of people and vehicles in the site are described in details in section 3 and will be tailored and connected to the site's existing command and control system.

2.2 Vehicle size to be inspected at radiography site.

2.2.1 Site design: entrance and exit lanes, as well as all traffic routes, radiography enclosure entrance, must take into account the following sizes of vehicles that enter the site, according to the required examinations types: radiography requires fitting of the traffic lanes into/out the site. The inspected vehicle shall be no more than 6 [m] long (<u>please note</u>: it is not the same size as in section 5).

3. Facilities Required

3.1 The following equipment will be installed in the parking lots:

3.1.1 Loudspeakers for the public announcement (PA) system. The PA will be combined with the site's Customs PA and terminal operators PA.

3.1.2 LPR cameras.

3.1.3 TV cameras surveying the parking lots; as part of safety and security CCTV system must be able to record and backup up to more than one (1) month of full operation and be able to manage an archive (the system should be identical to IAA system)

3.2 The area of the parking lots, including access and maneuvering space, should be constrained to the available area as planned in the Annex.

3.3 Emergency passages will be designated in order to let emergency vehicles enter and exit from each area in case of emergency or when traffic is blocked.

The entire site must contain all traffic road, safety and markings and signs and the related command and control signs.

4. Radiography facility

4.1 General

4.1.1 The entire Radiography facility is described in details in section 5 and applies to this section (section 7 with some modification which are defined here). The Radiography facility will comprise of the following parts, each described here and after:

4.1.2 Radiography conveyor

4.1.3 Radiography system, including system operation, service and storage rooms;

4.1.4 Technical rooms and electronic equipment section;

4.1.5 Offices,

4.1.6 Service rooms: Toilets; Shelter in accordance with IDF specifications.

4.2 Radiography Conveyor System

4.2.1 The fixed radiography conveyor system will be built according to safety standards and will include an enclosure with radiation shielding doors on each side (entrance and exit doors). All the subsystems as described in this tender.

4.2.2 Within the enclosure the required safety accessories will be installed, including cameras and video equipment as well as diverse sensors in order to assure safe operation at all times.

4.3 Equipment

4.3.1 The following will be installed at the entrance or inside (as per final plans) the enclosure:

4.3.1.1 Sensors and devices:

- Radiation safety devices and interlocks as described in section 5 in this document and as required by the Israeli Authorities.
- Safety devices (fire detectors, etc)
- Height detection sensor (safety means)

- PA – for system operator's instructions to drivers
- Vehicle ID (LPR)
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4.4 Radiography System Area – Technical area

4.4.1 The radiography facility will include the rooms and areas essential for the equipment comprising the system. This includes radiography tunnel for the dedicated screening equipment (source, detector array, etc.) and all additional systems, conveyor system, as well as storage, maintenance and service rooms, operators and analyzers room as defined by the Contractor and needed for a steady and efficient routine operation and service and maintenance of the whole system.

4.4.2 Technical rooms – this includes all rooms with electrical and communication equipment's, as per contractor's plan.

4.5 Operational area

4.5.1 Components

The Radiography area designated for screening operation and control is shown in the schematic drawing of that part.

The area comprises of the following types of workstations, each one designated for its specified functions:

a. Radiography system control station:

Two (2) Radiography System Operator workstation (WS) dedicated to the operation, control and supervision of the entire X-Ray screening process.

1. one (1) at the entrance of the radiography site (outdoor exterior wall)

2. one (1) operator station in the operator’s room

Image Analysis WS (three [3] units), two (2) used by the radiographic image analyzers and an Image Training WS (this WS will be located in the IAW room in the office building) one (1) at a remote location in the terminal site.

Total of 6 WS

4.5.2 The Building contains

a. Functional classification:
   1. System Operation room and outdoor operation position
   2. Image analysis and training area
   3. Technical rooms, rooms for Electronic equipment
   4. Service area, comprising:
      - Toilets
      - Shower
      - kitchenette
   5. Storage and maintenance rooms
   6. System technician office
   7. Shelter room (can serve as a utility room). (As required by the IDF, and Israeli Regulations)

b. Building characteristics
   1. Rigid construction using concrete building blocks, concrete foundations, etc.
   2. Finish, decoration, furnishing and wall coverings will be of a high standard.
   3. The building will be air-conditioned (except the radiography tunnel) – temperature regulated at each zone.
   4. One room (for example the team room) will be built to serve as a shelter in accordance to IDF rules.
   5. The following elements will be installed in the work positions and electronic rooms:
      a. Transparent partitions between the WS.
      b. Lighting units with louvers to prevent glare and reflection on computer screens.
      c. Adjustable lighting level separately adjusted according to area's function.

d. Shading devices for all outside windows.

4.6 Radiography System Operator Workstation

4.6.1 The workstation's configuration will enable the operator to perform all the necessary functions as described in the tender.

4.6.2 The System Operator position is located in operators'/IAW room and in a standing station. The connection to the enclosure is through the ground floor.

4.6.3 System operator's WS will comprise the elements that are described in section 5.

4.6.4 Radiography System Controls:

1. All controls required to operate the screening process will be installed on / within operator's desk.
2. The entire process will be displayed dynamically in a graphic form and in real time on screens to be set up on the front panel of the console.
3. Telephone - Smart extension
4. PA system

4.6.5 CCTV system (CCTV – R) control and display WS

1. This CCTV system, designed as part of radiography system's safety measures and based on fixed cameras installed at the entrance, the exit, corridor exit and along the length of the enclosure, will display the status of the various stages during the screening process, for example:
   - Opening of the shielding doors
   - Vehicle movement into the enclosure
   - Vehicles stopping at the required position
   - Driver leaving the vehicle
   - Closing of enclosure doors
   - Screening process: movement of the vehicle on the conveyor
   - Doors opening
   - Driver returns to vehicle
   - Exit of the vehicle

In addition, the CCTV system will display the entire volume of the radiography enclosure to ensure radiation safety (no one was left in the vehicle or the enclosure volume).

2. Switches, screens and supervisory equipment for the CCTV system will be installed on the front panel.
3. The CCTV must be able to record and backup up to more than one (1) month of full operation and be able to manage an archive.

4.7 Image Analysts' Workstation positions (IAW)

4.7.1 five (5) working positions for image analysis are defined including one additional infrastructure for Customs computer at each IAW location. As described in the section 5.

4.8 Operators main room additional equipment

The following devices will be installed in operators' room available and seen by everyone:

4.8.1 Large Screen, wall mounted, designated for display of radiography images generated at every IAW.

4.8.2 Display of the current radiation level (Geiger counter) in the room.

4.9 Technician room

4.9.1 Technician room will be used by the on-site technician and will enable him to perform all maintenance tasks.

4.9.2 The room will include:

a. Standard office set: writing desk, chair, etc.
b. Drawers and storage compartments
c. Telephone set
d. System diagnosis computer

4.10 General Services

4.10.1 The Radiography building is intended for use of six (6) workers but can be operated by one (1) worker.

4.10.2 Toilets

The toilet facilities, for men and women, will include:

a. Toilet cubicles.
b. Washing corner.
c. Personal lockers for 5 persons.
d. Lower cupboards

4.10.3 Utilities room (cupboards)

4.10.4 Kitchenette

4.11 The mandatory requirements in the generic site are to coordinate with the landlord's operation and request and submit all the necessary licenses and permits as mentioned throughout the tender. The bidder must comply to all requests as are in the entire tender document and are his responsibility and on his expense.

The rooms in the generic Radiography building are shown in Drawings No. 143-07-01-01.