Sample Technical Directive for a Family of Systems (FoS) Design

INTRODUCTION

The Sample Technical Directive is intended to provide the Source Selection Evaluators with information on the offerors' technical capabilities. This Sample Technical Directive is divided into three major Sections: I) introductory information, including the excerpt from the RFP (Section M), and threat information; II) hypothetical Military Installation Information; and III) the Government's partial solution to meet required Chemical, Biological, Radiological and Nuclear (CBRN) defense capabilities.

Based on the guidance provided in Section I, the offeror shall provide sufficient written details to clearly demonstrate their approach and implementation of a final solution based upon the Government's partial solution provided. The offerors shall include technical methodology and rationale along with their final design solutions. The focus of the threat in this Sample Technical Directive is against specifically identified critical military mission operations and not against the general population. As a result, the objective of the final solution should be focused on maintaining critical military mission operations, protecting mission essential personnel, and quickly restoring essential functions.

Section II describes a hypothetical military installation. This information includes an overview; descriptions of the existing infrastructure, critical mission, facilities, and personnel; physical and environmental information about the site and surrounding area; physical security information; and response information. The offerors will take the information provided in Section II into consideration when preparing their final solution.

Section III offers a partial solution to the chemical, biological, and radiological (CBRN) threats at the hypothetical military installation. Functional CBRN detectors, in use at the Installation, are shown on accompanying diagrams. The offeror will consider all elements of the partial solution in addressing the evaluation factors per Section M of the Request for Proposal. The final solution may modify, add, or delete components from the Government's partial solution (Section III).

Computationally based analysis using geo-physical modeling or simulation tools is not required in the formulation of the design solution. The offeror will develop their solution based on the information provided in this document. It is intended that no additional information will be provided by the Government to complete the design of the hypothetical Installation. In the event that the offeror believes that more information is required than is provided in this document, the offeror's response to this Sample Technical Directive should clearly state the additional information required to complete the final design and indicate the impact this missing information has on their proposed final solution.

I. INTRODUCTORY INFORMATION

A. EVALUATION FACTORS (Excerpted from the RFP, Section M)

The offeror will describe the following Elements:

1. Overall FoS effectiveness - Describe how the overall FoS preserves critical mission under all CBRN attacks and scenarios on military installations. Using the four attack scenarios as representative examples, show how detection, identification, warning, protection, and other response functions are combined to protect personnel, maintain mission-critical capability, and quickly resume mission-critical functions. Discuss alarm assessment, alarm communication and display, decision support, and concepts of operations. Use science-based principles to support the FoS final design. Use performance measures including probability of detection, time for active or passive protection, and response times.
2. Operational Analysis - Discuss the analytical process utilized to determine the FoS design. Compare your final FoS solution with the Sample Technical Directive Partial Solution to demonstrate FoS improvements. In addition, conduct a Sequence and Timing Description (OV-6c) per the latest DoD Architecture Framework.
3. Operation integration of FoS - Demonstrate the operational integration of the proposed FoS architecture with existing installation capabilities.
4. Technical Selection of FoS Components - Specify the rationale for the choice of COTS, GOTS, GFE, hardware, software, other analytical tools, and other response assets. Avoid use of proprietary installed components.
5. FoS System Design - Describe the detailed C4I design in accordance the latest DoD Architecture Framework guidance. Demonstrate FoS C4I architecture integration into the existing installation architecture to support mission continuity.
6. Mission recovery and restoration - Describe recovery operations to maintain mission-critical operations and restore essential installation mission functions.

B. THREAT

Because of the lack of definitive information related to the potential employment of Chemical, Biological, Radiological and Nuclear (CBRN) weapons and materials on a CONUS installation, JPMG has made several assumptions to support the development of the baseline operational scenarios utilized to develop the partial solution. These assumptions include the following:

- Attacks will be covert. Military-type attacks, such as artillery or missiles, against IPP installations or facilities are not expected nor planned.

- Attacks will be focused against critical military operations and facilities. The general population will not be the primary target.

- CBRN weapon systems are difficult to manufacture, weaponize and effectively deliver. Most likely attacks will be relatively small in size with limited contamination/hazard effects.

- The primary goal of an attack on a military base is to cause casualties. It is more likely that a non-persistent chemical agent will be used than a persistent.

- The IPP architecture should not be overly sensitive to variations in agent effects, a single biological agent scenario will provide required information.

- Sites that are located adjacent to hazardous chemical production.

- Already have plans in place to deal with unplanned releases at those sites.

- Radiological devices will most likely use surplus medical or industrial radiological sources, which are widely available, combined with explosives of some kind. Unless thoroughly shielded, these types of devices will have a significant radiological signature that can be detected.

- The JPMG does not view the employment of a nuclear device as a likely IPP threat.

- JPMG assumed an appropriate level of physical security that would prevent entry of quantities that would result in catastrophic events.

Hazard Areas

The attached diagrams show hazard contours for the four-benchmark threat scenarios. These scenarios were developed to support the development of the baseline sample installation protection plan. They are not intended to be all-inclusive, but do represent a reasonable and acceptable start point.

The biological, chemical weapon, and industrial chemical results were generated by the VLSTRACK model using default parameters in the VLSTRACK database. The radiological hazard was generated with the HPAC model using default parameters in its database. Numerous modeling assumptions were made regarding terrain type, wind speeds, atmospheric stability and other factors that, if varied, could result in significantly different outcomes. However, these depictions are useful for comparing the magnitudes of these threats. Note that, except for the biological benchmark, the hazard areas are relatively small. The contours show infectious dosages (for biological) and lethal dosages (for chemical weapon agents and industrial chemical) at 1%, 20%, 50%, and 95%. For the radiological benchmark, we show integrated exterior dose in cGy for values between 0.1 and 75. For reference, the Institute of Medicine's operational exposure guidance lists 0.1 cGy as "normal risk" and 75 cGy as slightly above "significant risk."

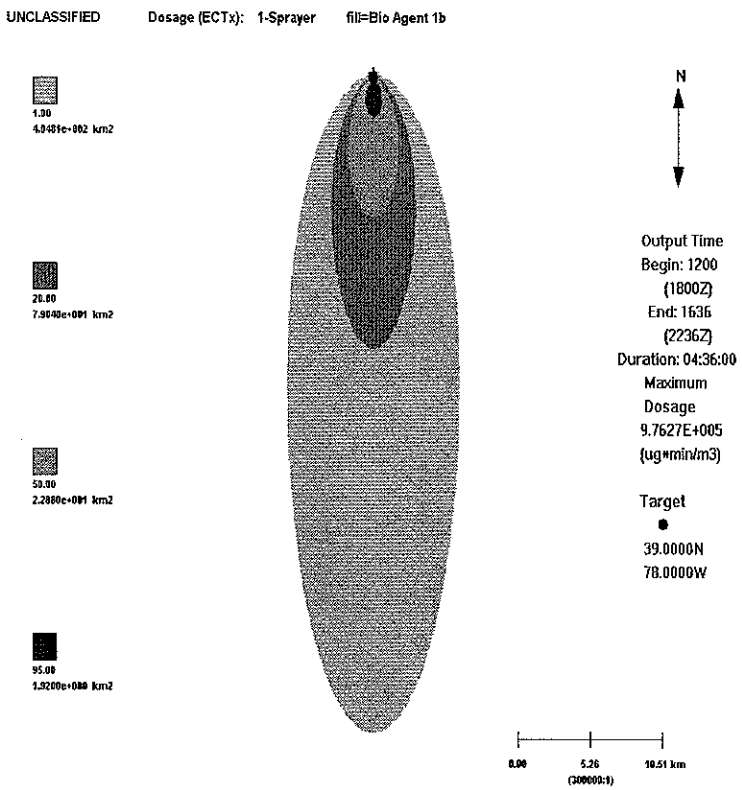
Biological Agent Scenarios

The key question regarding IPP biological detection relates to system density and placement. The Scenario is based on the use of a single 14-liter stationary sprayer attack using anthrax. A 14-liter commercial sprayer evaluated within the US program was found to be an effective method of dissemination. This type of system has been used in all previous biological detection analysis. The technology is easily transportable, mobile and commercially available

This scenario provides an acceptable basis for determining detector density and placement. A line release will cover such a broad area that the attack is generally indifferent to numbers of sensors (line sprayers challenge detector sensitivity, rather than detector spacing).

Feasibility: Costs to produce 14 liters (~2.1 kg) dry anthrax estimated to be $250,000 (*Minimum Resource for Biological Weapons Capability* (U), Enviro Control, Inc, 1976. SECRET. Updated to 2003 dollars)

Representative BWA Contours (note scale)



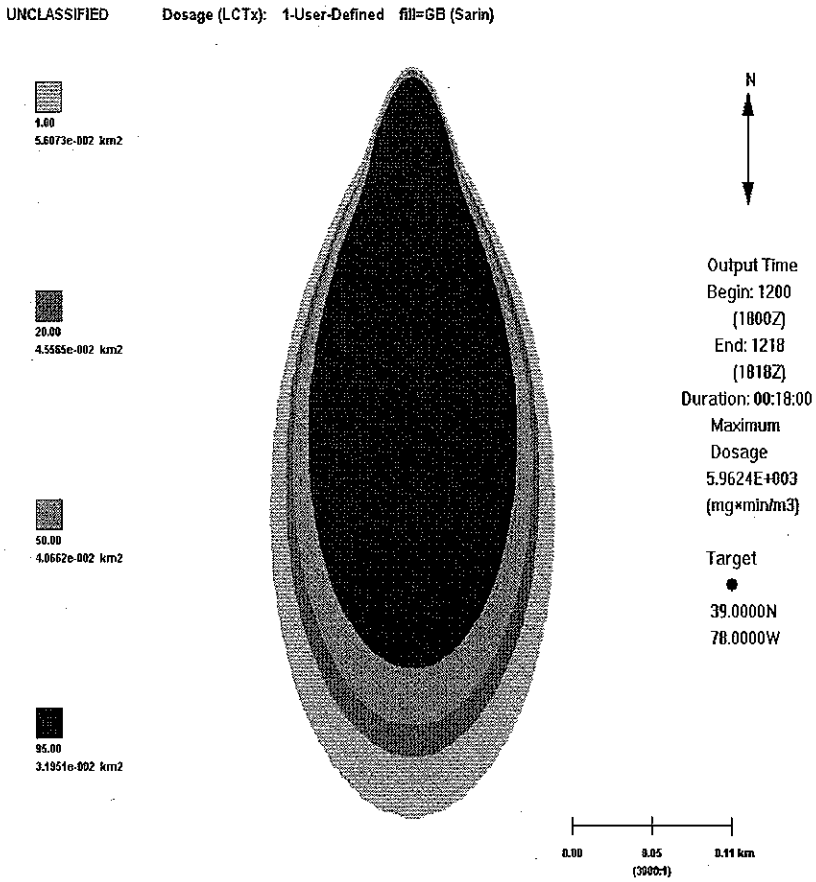
Chemical Weapon Agent Scenarios

Although chemical weapons agents are very hazardous, substantially more chemical agents are required than biological agents to produce an equivalent number of casualties. Chemical weapons can be more difficult to manufacture, weaponize and effectively release than biological agent. They have a more limited downwind distance and smaller hazard area. They must be more accurately placed than biological aerosols to achieve a significant effect at the intended target. This makes the use of large quantities required to support a long line source release unlikely. For this scenario IDA has estimated that no more than 100 liters of a chemical agent can be carried by a single passenger vehicle or van.

Non-persistent chemical agents are more likely to be employed than persistent agents. Non-persistent agents are designed to result in immediate casualties of the target population. Persistent agents are more difficult to manufacture, weaponize and release than non-persistent agents. Persistent agents are primarily terrain denial weapons and are less likely to kill personnel. Sarin (GB) is a non-persistent chemical agent and has been selected as the scenario benchmark. Sarin has been produced by at least one terrorist group and is among the best documented chemical agents outside of military circles. Several open source articles indicate several well-financed terrorist groups can produce Sarin.

Feasibility: Several authors have attempted to cost the production of Sarin. Although all agree that appropriate training is needed, the cost of materials is not an obstacle. A *Scientific American* article (11/5/01) estimates the cost of materials for 280 grams is $130.20, which scales to about $50,000 for 100 liters. Another report, downloaded from the Canadian Security Intelligence Center website (www.csis-scrs.gc.ca/eng/miscdocs/cbter_e.html) cites a 1986 estimate of $200,000 for 1000 kg of Sarin. Scaling down to 100 liters and up to 2003 dollars produces an estimate in the range of $34,000.

Representative CWA Contours (note scale)

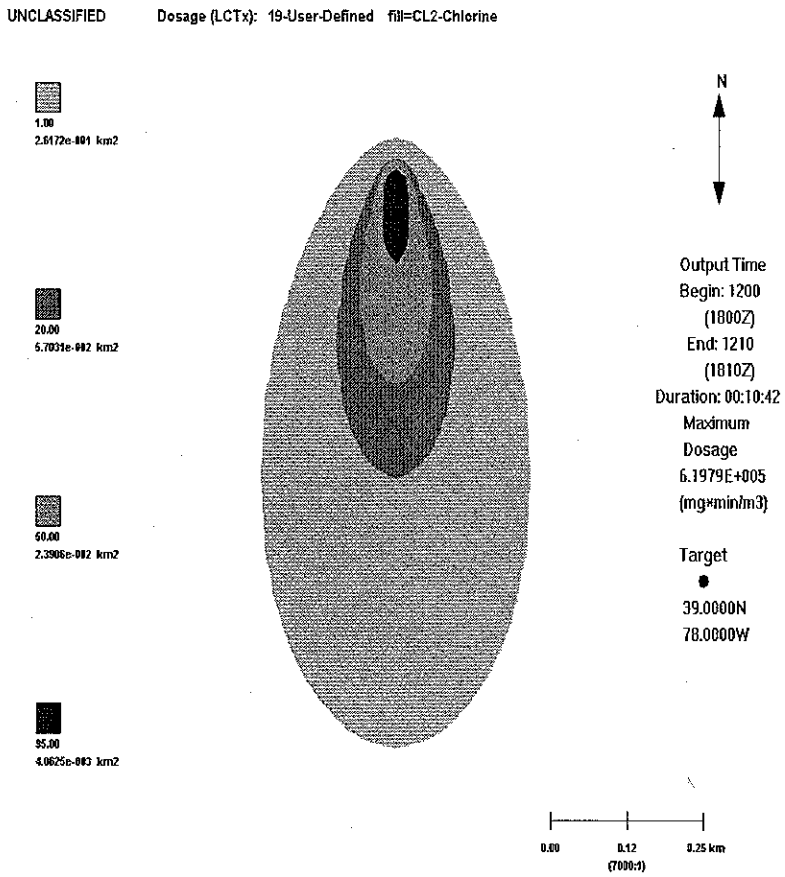


Toxic Industrial Chemical Scenario

There are over 2000 toxic industrial chemicals manufactured and transported around the country. Many of these materials pass through or near DoD installations daily. The JPMG has determined that a 5000 gal tanker truck is the most likely transportation method to transit in or near a military installation and represents the most likely threat. A single TIC was also identified to support analysis efforts. It was determined that Chlorine provided a suitable representative threat to a military installation. This agent threat is realistic, viable and adequate to determine our initial baseline capability. Because the possibilities for toxic chemical release are so broad, both in terms of identity of chemical and amount released, the program will have to conduct additional analysis at each installation to better determine the actual threat.

Feasibility: Unknown, but tankers appear to be widely available or chlorine trucks could be hijacked.

Representative Chlorine Contours (note scale)

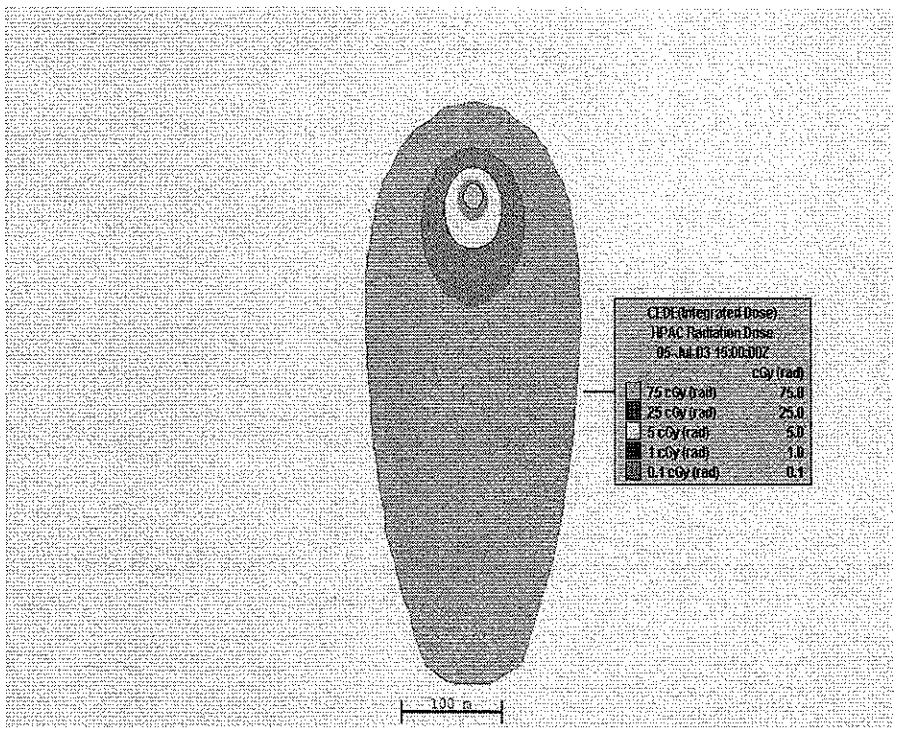


Radiological Materials

There are a variety of gamma emitting radioactive isotopes used for medical and industrial purposes. One of the longest-lived of such isotopes, and therefore perhaps more likely to be available on secondary or black markets is cesium-137. According to the EPA web site, it is used to sterilize food products, in industrial measurement devices, and for medical diagnosis and treatment. It is possible for terrorists to acquire this material from multiple sources. As little as 100 grams of this material (5000 Ci) would be required to construct an effective Radiological Dissemination Device (RDD). This type of device would be easily hidden and transported. This amount of radioactive material, along with a few sticks dynamite or equivalent amount of explosive, would fit into a typical drywall compound bucket.

Feasibility: Although the material is licensed, there is a gray market in used devices, especially in foreign countries. The NRC cites an incident in 1987 where a device was abandoned in a former Brazilian clinic, found by salvagers who dismantled it with resulting widespread contamination.

Representative Radiological Contours (note scale)



II. MILITARY INSTALLATION INFORMATION

A. OVERVIEW

The following description is intended to represent the results of a limited site survey. This information was utilized to develop the partial solution detailed in Section III. This information will serve as the basis of the development of the detailed installation protection plan.
The Military Installation is located near a medium-sized city in the United States. The installation covers 5,000 acres. A regional map of the Installation is shown in Figure 1. An overview of the Installation is shown in Figure 2. The Installation includes an emergency operations center, a maintenance area, a fire station, security headquarters, a hospital, and a secure area where the Installation's headquarters (HQ) command and control (C2) element is situated. Figure 3 is a more detailed view of the areas on this Installation that are pertinent to this Sample Technical Directive.

The installation provides flexible and responsive combat capability, autonomously or in concert with other forces. The goal of the C2 element is to monitor communications and provide rapid response capability in case of national emergencies. The element operates on a continuous basis (24 hours / 7 days per week) and is located in a secure area.

B. EXISTING INFRASTRUCTURE

The following list provides information about the existing Installation infrastructure that offerors might consider when evaluating the partial design solution and developing a final design solution.

1. There is a mix of VHF and UHF radios on the Installation. There is a mixture of digital and analog communications devices.
2. The telephone system is old and does not provide ISDN capability to all Installation facilities.
3. Cell phone coverage is adequate at the Southwest corner of the Installation but falls off rapidly towards the northeast corner of the Installation.
4. All Command and Control and Critical Mission Facilities have access to the hard-wired NIPRNET. Administrative computer systems are being upgraded with the Service's integrated network within the next year.
5. There is an old Intercom in the secure area complex.
6. There is an Emergency Operation Center (EOC), which is only manned during duty hours. The security watch commander is on duty 24/7, in building R-1.
7. There is no central Anti-terrorism/Force protection (AT/FP) command and control system.
8. Security force officers currently have 2 way radio communications, but there is no existing mass warning or alert capability inside buildings. There is no existing mass warning or alert capability for the Installation beyond phone and LAN connections to the office spaces inside most occupied buildings.

9. The SK-6 building HVAC system includes two air-handling units (AHU), which are roof mounted. Each has a capacity of 10,000 CFM. The SK-3 HVAC system includes one AHU with a capacity of 2,000 CFM, which is roof mounted. Both systems include ducted supplies with a common return plenum located above a false ceiling throughout the 1 story structure. The HVAC systems typically operate at 80% recirculation, but the fresh air fraction can vary between 10% and 30%. SK-6 building leak tests have shown that the structure is positively pressurized under all operating conditions provided that each AHU operates at 90% of capacity or greater. The SK-3 building is not positively pressurized.

C. CRITICAL MISSION

The HQ C2 element of this Installation is responsible for coordinating with the Joint Chiefs of Staff to ensure readiness and emergency response to any national crisis. The C2 element is responsible for coordinating assets from a number of CONUS based Military Installations to accomplish their mission. The C2 element is located in the Controlled Room of building SK-6 located inside the Secure Area (see Figure 4). The Controlled Room is 350 square meters in size (see figure 5). If this element is disabled, there will be communication and coordination gaps in our national defense posture.

In addition to the interior components of the C2 function, there is a critical exterior antenna array outside requiring 4 personnel in three eight-hour shifts, located in the maintenance control building, to operate and maintain 24/7. Required maintenance must be accomplished once per shift and takes 60 – 90 minutes to complete.

The EOC is located inside Building SK-3, room B-1. Room B-1 is 175 square meters in size (see figure 6). It is responsible for coordinating between First Responders and Emergency Responders both on site and off site. It is also responsible for coordinating with C2 element and Installation Command.

D. PERSONNEL

Mission Critical Personnel: The C2 element is comprised of 54 intelligence analysts and technicians, operating in three shifts of 18 personnel per shift. Of the 18 personnel per shift, 6 are military. Twelve people, 24/7, maintain the Antenna Array, of whom 7 are military. The EOC has 2 military personnel on duty during operational hours.

Installation Personnel: During normal operational hours the entire Installation population consists of 800 personnel, of whom 200 are military dependents. After hours there are 24 mission critical and 226 off duty military personnel and dependants. During non-operational hours all non-essential personnel leave the site for homes in the nearby city, with the exception of essential personnel and the security force. The security office consists of 72 civilian security personnel, operating in three shifts of 24 officers. During normal operational hours all intelligence critical personnel reside in the building inside of the secure area. During non-operational hours all non-essential personnel leave the site for homes in the nearby city, with the exception of essential personnel and the security force.

E. INSTALLATION PHYSICAL INFORMATION

This section presents the physical and environmental conditions at the Installation and the surrounding area.

Topography

The Installation is located on a flat plain.

Vegetation

Small shrubs and grass are the only vegetation that grows near and on the grounds.

Climate/Weather

Table 1 provides climatic and meteorological information for the Installation and the surrounding area.

Indoor Environmental Conditions

The interior conditions in the buildings at the Installation are described below.

Temperature: The temperature range inside the buildings in normal conditions ranges between 18 and 24 °C.

Relative Humidity: The relative humidity inside the buildings is 40 to 60 percent.

Table 1 Annual Weather Data

Month	Temperature °C							Degree days Base 18.3 °C		Precipitation in centimeters						Relative humidity %			
	Averages			Extremes						Water equivalent			Snow, ice pellets			Hour 05	Hour 11	Hour 17	Hour 23
	Daily maximum	Daily minimum	Monthly	Highest	Date	Lowest	Date	Heating	Cooling	Total	Greatest in 24 hours	Date	Total	Greatest in 24 hours	Date	(Local time)			
JAN	6.2	-5.3	0.5	13	12	-13	30	549	0	2.72	1.80	17-18	6.6	6.1	25	74	54	45	65
FEB	12.9	-2.8	5.1	23	14	-8	4	369	0	1.57	0.76	16-17	15.2	7.6	16	70	47	31	58
MAR	17.9	0.3	9.1	24	8	-6	5	283	0	0.36	0.18	28-29	Trace	Trace	14	59	32	25	48
APR	23.1	4.6	13.8	29	15	-4	13	134	3	0.61	0.28	9-10	1.3	1.3	3	53	25	17	37
MAY	25.8	9.3	17.6	32	6	2	11	56	37	6.30	2.16	20	2.5	2.5	3	62	34	28	48
JUN	31.7	14.2	22.9	39	28	7	9	6	149	2.59	2.06	8	0.0	0.0		54	27	22	41
JUL	35.6	18.3	27.0	41	14	12	2	0	273	2.03	1.52	16-17	0.0	0.0		52	28	22	40
AUG	32.7	17.3	25.1	38	2	13	20	0	212	3.89	1.98	9-10	0.0	0.0		60	35	25	44
SEP	30.7	14.1	22.4	38	5	8	16	13	138	1.02	0.51	14-15	0.0	0.0		56	32	24	44
OCT	25.6	7.1	16.4	33	5	-3	31	82	25	0.69	0.46	21	2.3	2.3	30	50	26	18	37
NOV	12.1	-2.2	5.0	22	4	-9	29	397	0	2.31	1.88	7-8	2.0	2.0	23	69	41	37	56
DEC	11.3	-5.1	3.2	17	3	-9	31	467	0	2.21	1.83	26-27	6.9	6.4	26-27	66	44	40	57
YEAR	22.2	5.8	14.0	41	JUL 14	-13	JAN 30	2356	838	26.29	2.16	MAY 20	36.8	7.6	FEB 16	60	35	28	48

Table 1 Annual Weather Data (continued)

Month	Wind					Percent of possible sunshine	Average sky cover, tenths, sunrise to sunset	Number of days									Average station pressure mb
	Resultant		Fastest observed 1-minute value					Sunrise to sunset					Temperature °C				
	Direction	Speed -km/hr	Average speed - km/hr	Speed - km/hr	Direction	Date		Clear	Partly cloudy	Cloudy	Precipitation .025 cm or more	Snow, ice pellets 2.5 cm or more	Thunderstorms	Heavy fog, visibility 0.4 km or less	Maximum 32° and above	Maximum 0° and below	Minimum 0° and below	Minimum -18° and below	Elev. 1620 meter
JAN	33	7.2	14.8	68	NW	22	58	5.7	11	6	14	6	1	0	2	0	3	26	0	836.4
FEB	33	5.1	13.7	51	NW	24	73	4.9	9	10	9	5	2	0	2	0	0	24	0	838.1
MAR	30	1.6	16.9	68	E	14	66	4.8	15	5	11	4	0	1	0	0	0	16	0	836.1
APR	27	3.1	17.1	58	N	30	70	4.5	13	9	8	3	0	1	1	0	0	6	0	835.1
MAY	22	2.3	15.8	58	E	23	68	5.3	9	13	9	11	1	5	0	0	0	0	0	836.1
JUN	14	3.7	15.6	61	E	23	79	3.4	17	8	5	6	0	5	0	19	0	0	0	839.8
JUL	09	3.7	14.6	61	E	15	79	4.2	14	11	6	5	0	4	0	27	0	0	0	840.2
AUG	14	5.1	14.0	76	SW	19	79	3.6	18	8	5	5	0	7	0	21	0	0	0	839.8
SEP	12	4.7	13.2	69	E	14	78	3.4	18	6	6	4	0	3	0	15	0	0	0	840.8
OCT	19	0.5	12.7	55	E	9	84	4.0	15	9	7	2	0	1	0	3	0	2	0	838.1
NOV	34	4.5	13.2	58	SW	4	75	3.6	16	9	5	4	0	0	0	0	0	23	0	839.1
DEC	02	3.2	11.4	56	E	26	80	3.8	17	7	7	4	1	0	0	0	0	30	0	841.5
YEAR	01	0.6	14.5	76	SW	AUG 19	74	4.3	172	101	92	59	5	27	5	85	3	127	0	838.4

F. PHYSICAL SECURITY INFORMATION

The following describes Installation entry and physical security at the secure area.

Security Information for Installation:

There are 3 main entry gates onto the Installation. Gate 1 is the main gate with two entrance lanes, and is the designated entry point for all commercial vehicles and operates 24/7. It is capable of processing all visitor vehicles from POVs up to and including tractor-trailers. Gates 2 and 3 handle authorized Installation personnel only and their personally owned vehicles (POVs). They are open only from 0600 to 2000 hours on weekdays. Gate 1 has a minimum of 2 Security Force personnel at all times. They check authorized vehicles for Installation sticker and government identification. Gates 2 and 3 have one security force officer member, who allows entry to authorized personnel. Visitors or those requiring authorization are directed to Gate 1, where there is a visitor control center, to complete required access authorization. Gate 4, located on the north side of the facility, is used only for maintenance activities.

Security Information for Critical Operations:

During normal operating hours, the secure area has three civilian security officers who are stationed at the front entrance. When the facility is closed, there are two officers on duty. Anyone entering the secure area must pass through the personnel portal. The EOC has three personnel, two civilians and one military, during regular duty hours. During off duty hours, there are two personnel, one civilian and one military.

G. RESPONSE INFORMATION

The primary response force for the Installation is the security force, with headquarters at R-1 (see Figure 3). Various security force officers are posted across the site. Other response organizations include fire departments and hospitals.

Security

The security office has 72 personnel that consist of 3 shifts of 24 officers. The security forces have 15 police cruisers. Each cruiser has a 2-way radio in the car.

Current Security CBR Response CONOPS requires the security officers to:

- Lock down all Installation gates.
- Set up an outer security perimeter in a contaminated environment.
- Preserve and protect the crime scene.
- Support the Incident Command System.

The security forces have MOAs with local and state law enforcement and have a good working relationship with federal law enforcement.

Fire Department

The fire department includes 2 trucks, 1 ambulance, and 12 firefighters during operational hours. During non-operational hours there are 6 firefighters. There is a 1-hour firefighter recall if needed. Firefighters have standard firefighting equipment and appropriate HAZMAT gear for operations. The ambulance has 2 paramedics. Firefighters are trained in HAZMAT removal and decontamination for TICs found on-site. There is an Memorandum of Agreement (MOA) between the fire department and the chemical plant in the event of a chemical incident offsite at the chemical plant, the plant has agreed to call the fire station and alert them of the incident. The fire station then relays this information via phone to the EOC. The Installation Fire Department (FD) also has a MOA with the off site FD to respond to major events on/off post. The off-site fire department has 5 trucks, 2 ambulances, 35 firefighters during operational hours, and 15 firefighters in non-operational hours. Firefighters have standard FF equipment and appropriate HAZMAT gear and are trained in HAZMAT operations. HAZMAT response capabilities include chemical and radiological survey and monitoring systems.

Hospitals

There is an on-site hospital that provides medical services to all Installation personnel and their dependents. Normal hours are 7 am–7 pm, Monday through Friday, and emergency room (ER) services all other times. The ER has 3 full-time doctors, 5 nurses, 1 technician, and 5 other personnel assigned. There are two ambulances, each with 3 crewmen, available on a 24/7 schedule. There is currently no stockpile of prophylaxis medications. Installation personnel are authorized to use off-site medical facilities if needed. There is a Memorandum of Understanding with the hospital located approximately 12 miles from the Installation, which can provide medical assistance if required. This hospital has 2 ambulances on duty 24/7.

H. Administrative Data

For costing purposes of labor rates, utilize Huntsville, Alabama for development of personnel cost data.

Figure 1 Military Installation and Surrounding Area

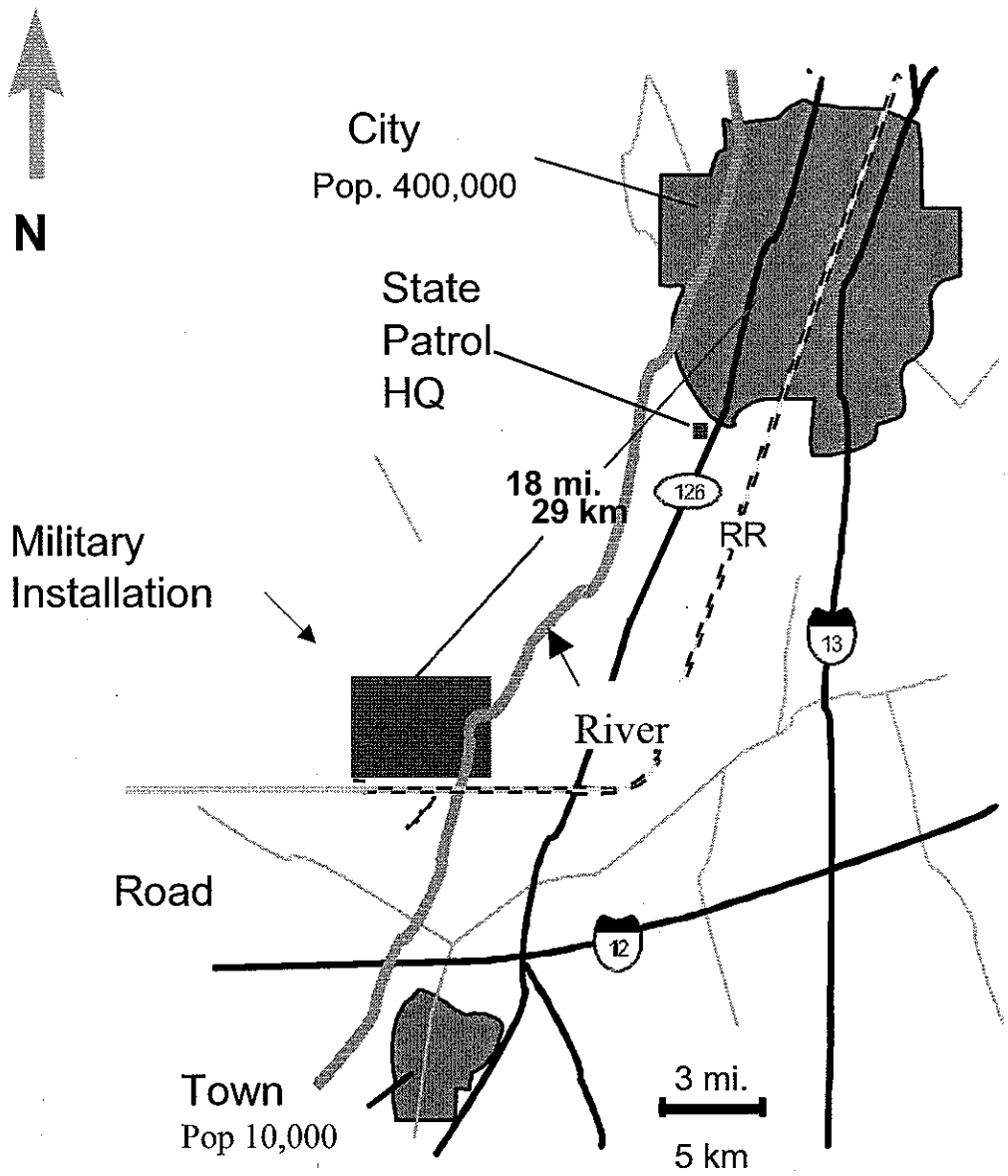


Figure 2 Overview of Military Installation

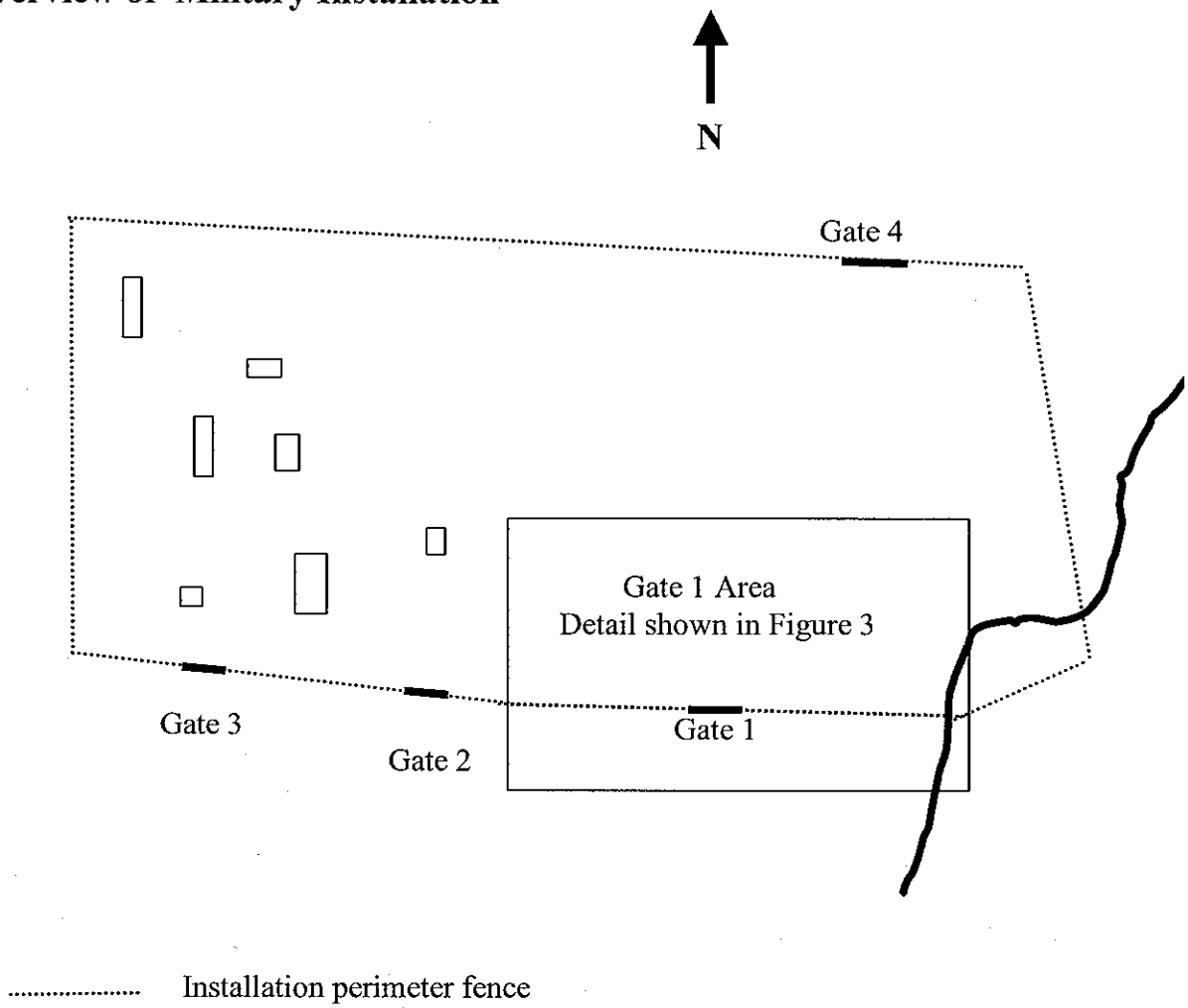
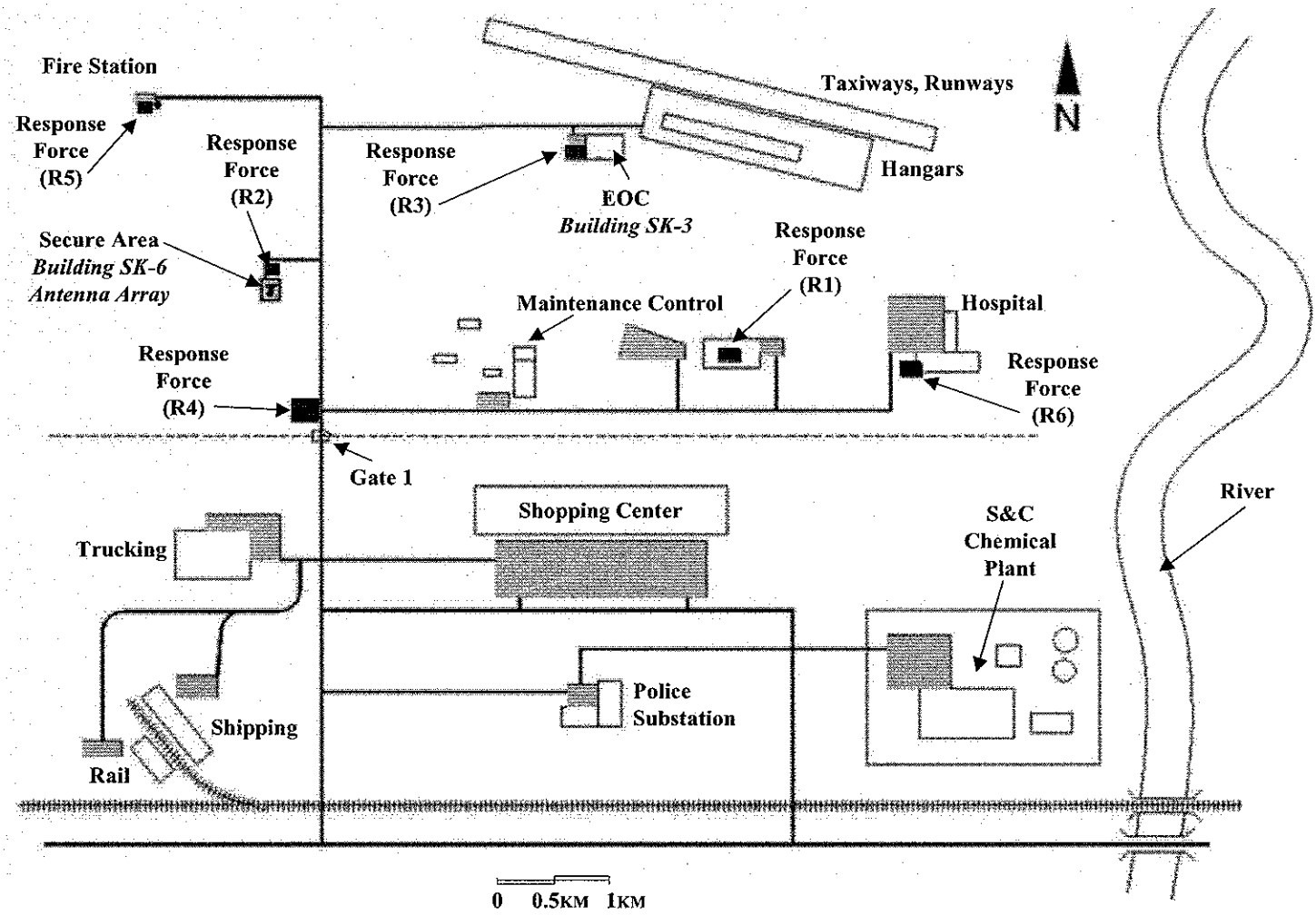


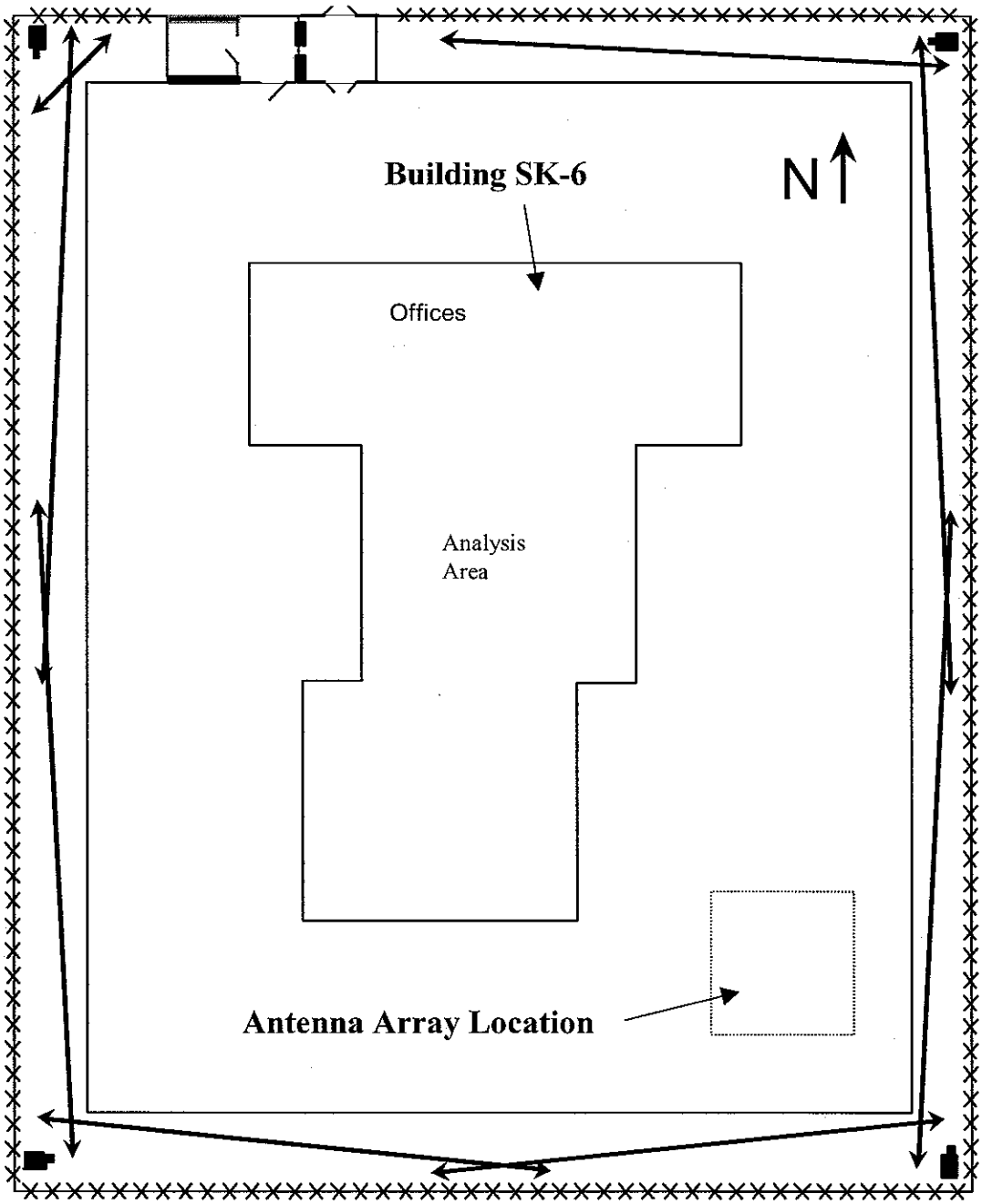
Figure 3 Military Installation Site Plan- Gate 1 Area Detail



- Parking Lots

- Response Force Stations (R1 is the Base Command Post)

Figure 4 Building SK-6 Layout



microwave detection pattern

fence motion sensors

CCTV (fixed-position; no motion detection)

Figure 5 SK-6 Secure Area Interior Layout

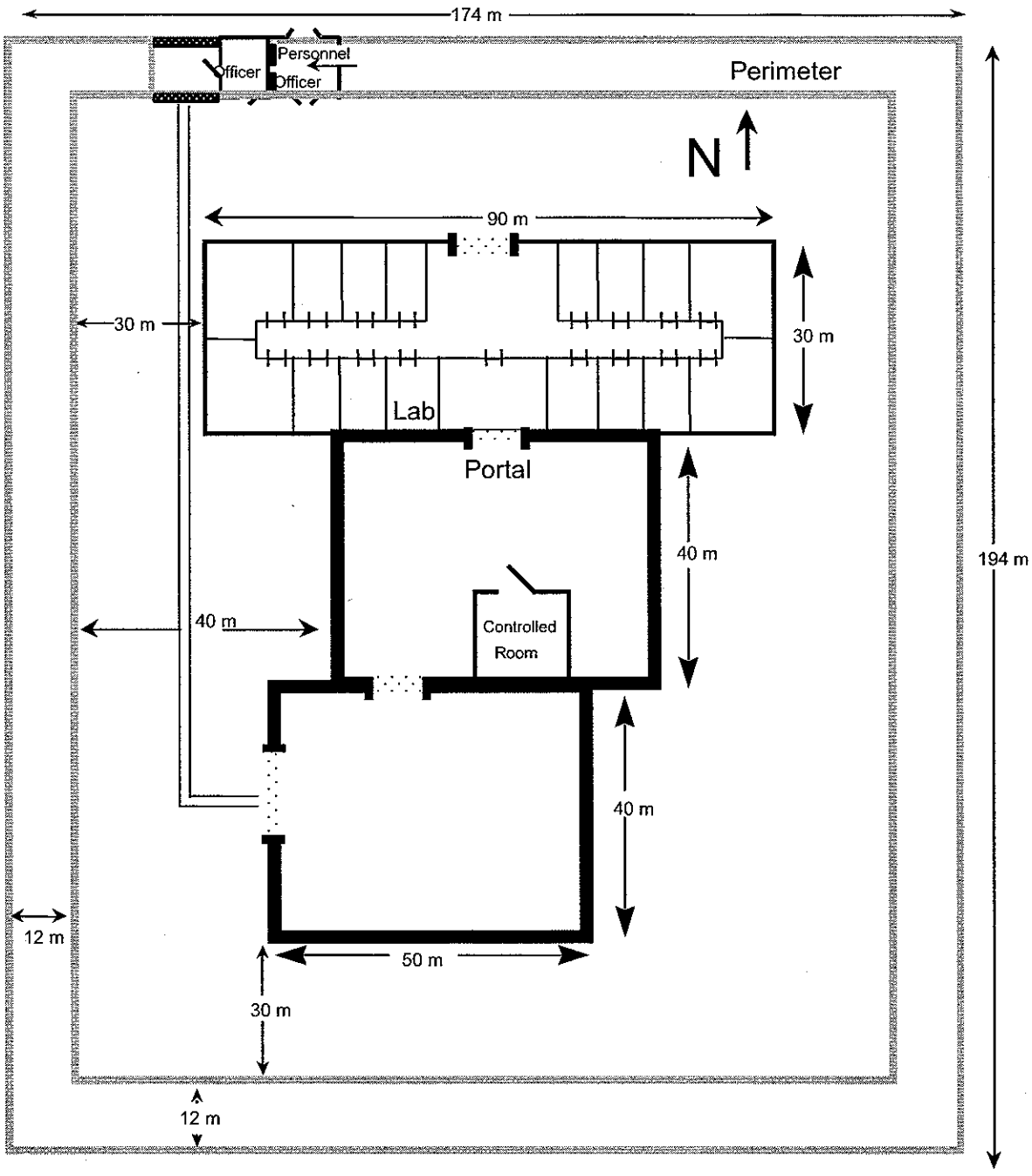
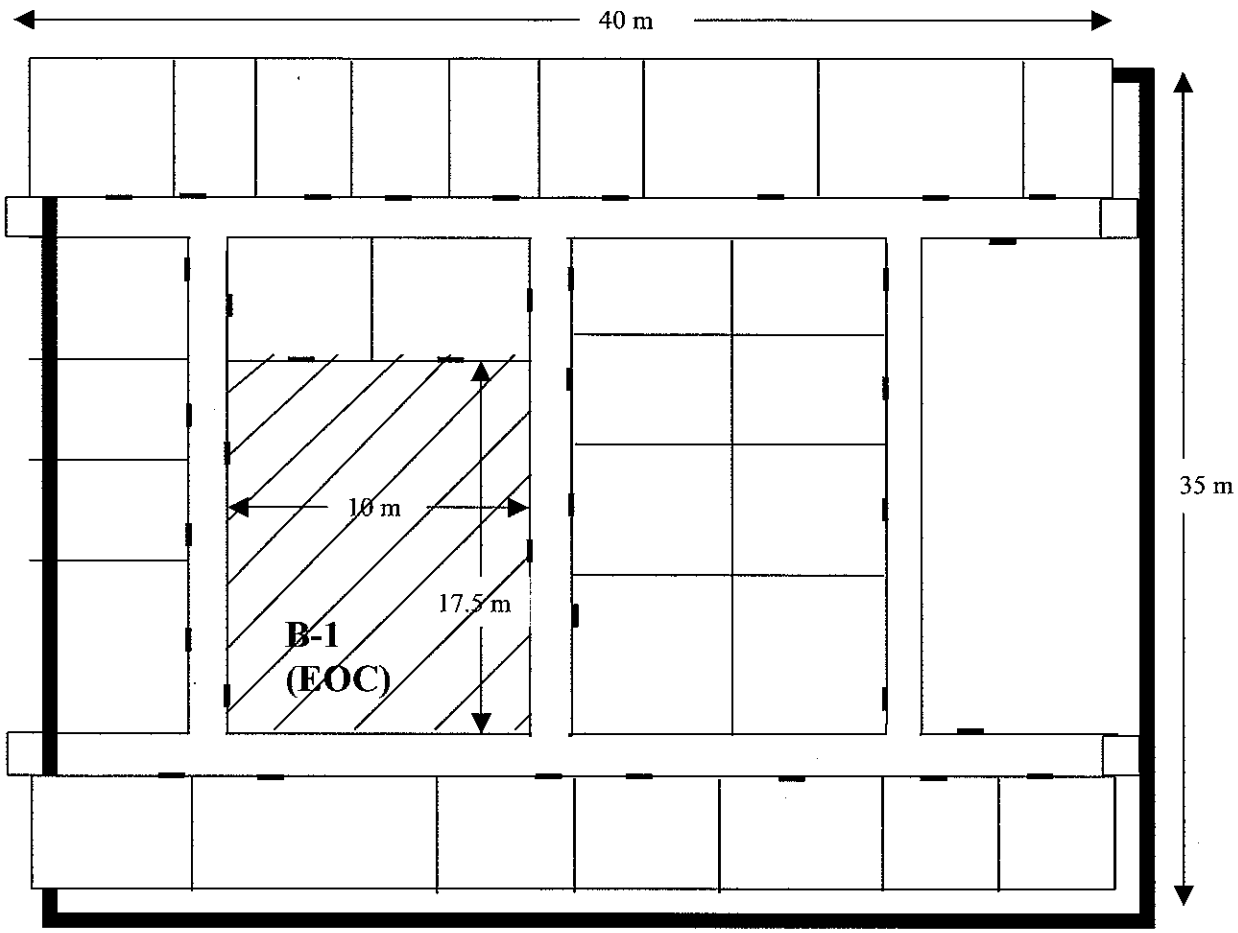
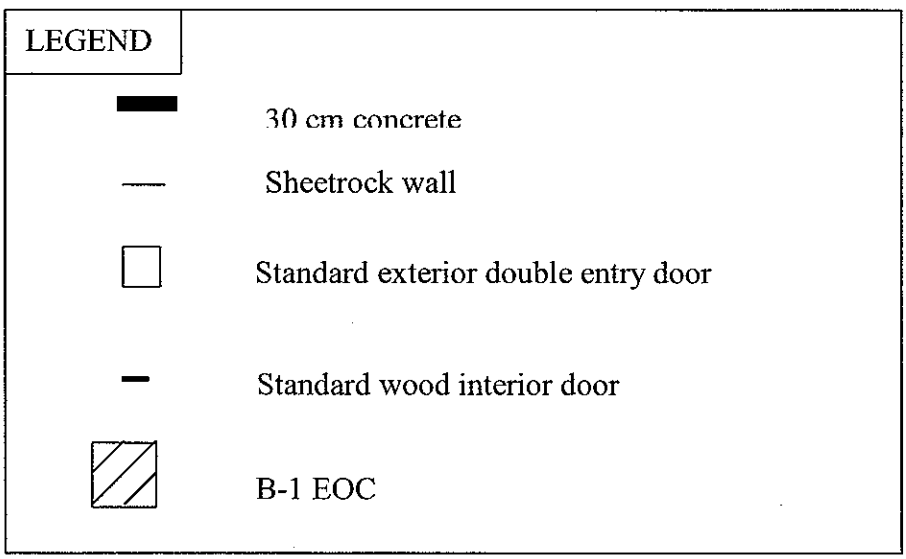


Figure 6 SK-3 Building and Floor Plan





III. GOVERNMENT'S PARTIAL SOLUTION

A. CBRN CAPABILITY DESCRIPTION

The information provided in this section represents a minimal partial Installation protection solution. This information will be utilized to develop a more complete Installation protection plan.

Detection Systems: A combination of chemical, biological, and radiological detector systems will be deployed around and within the secure area and operated 24/7 to provide both detect-to-warn (chemical and radiological) and detect-to-treat (biological) detection capability. The location and identity of each detection system is indicated on the secure area and building site map provided in Figure 7. These include Chemical Detectors, bio-aerosol collection systems, and radiological detection systems. The chemical detectors are hard-wired to the operations computer-monitoring system located within the EOC and are connected to audible and visual alarms within the localized area of the sensor.

Collective Protection (CP): The Controlled Room located within building SK-6 and the EOC within building SK-3 will be protected from chemical warfare agents, biological agents and radiological particulates. In addition, the capacity and condition of the HVAC system will be augmented to provide positive pressurization of the CP protected locations.

Medical: The ESSENCE medical surveillance software will be accessible at the Installation hospital for Installation surveillance data. There is an agreement with the community hospital that they will send medical personnel to assist the Installation medical personnel. In addition, on-site medical treatments for chemical warfare agent exposure will be provided.

Individual Protective Equipment: All mission critical personnel and responders will be provided with appropriate IPE. Responders will be provided with Level A or Level B suits and Self Contained Breathing Apparatus (SCBA) as appropriate. All critical mission military personnel will be equipped with military issued protective masks and suits.

Decontamination: Personnel and area decontamination equipment is not provided in the Government's partial solution. The offeror is expected to provide a capability to support personnel, technical and limited terrain decontamination.

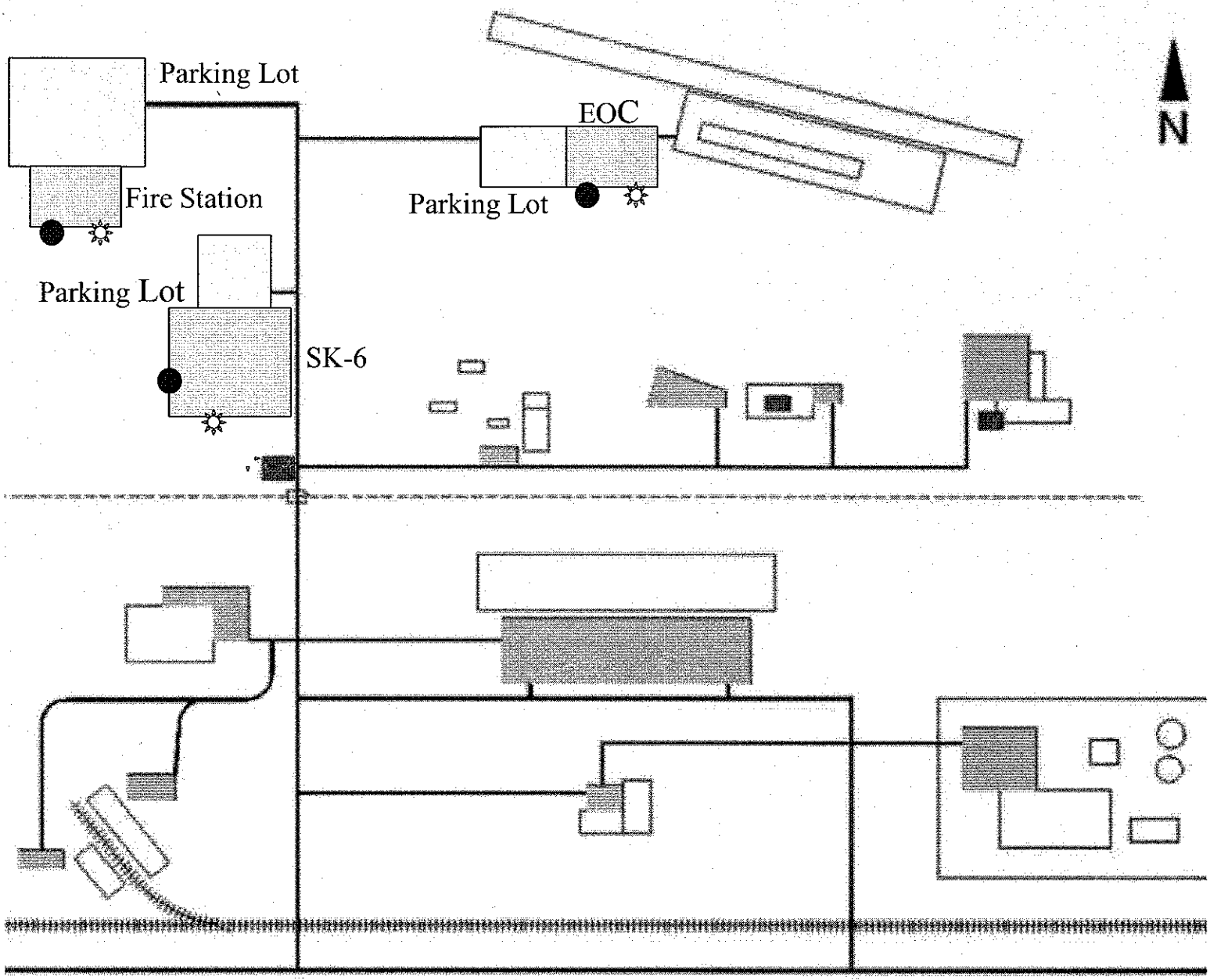
C4I: The base NIPRNET can support additional Guardian requirements. Response personnel (HAZMAT, Security and Medical) are notified of an incident by the EOC via telephone.

B. CONCEPT OF OPERATIONS

The following information represents the CONOPS for the Government's Partial Solution. This information will be utilized to support the development of a more complete concept of operation as required in Section M of the Request for Proposal.

- Alarm or 911 calls is received.
- Security dispatches officer.
- Security drives by incident site, sees sick people outside.
- Security notifies fire department.
- Fire department assesses scene, makes determination of potential terrorist incident.
- Fire department initiates emergency decontamination.
- Fire department initiates triage.
- Security department locks down all Installation gates.
- Security department sets up outer perimeter.
- Incident command is established.
- EOC notified via watch commander.
- EOC notifies Hospital.

Figure 7 Partial Site Plan with Detector Systems Locations



● Chemical Detector

☼ DFU

Note: Buildings Not to Scale