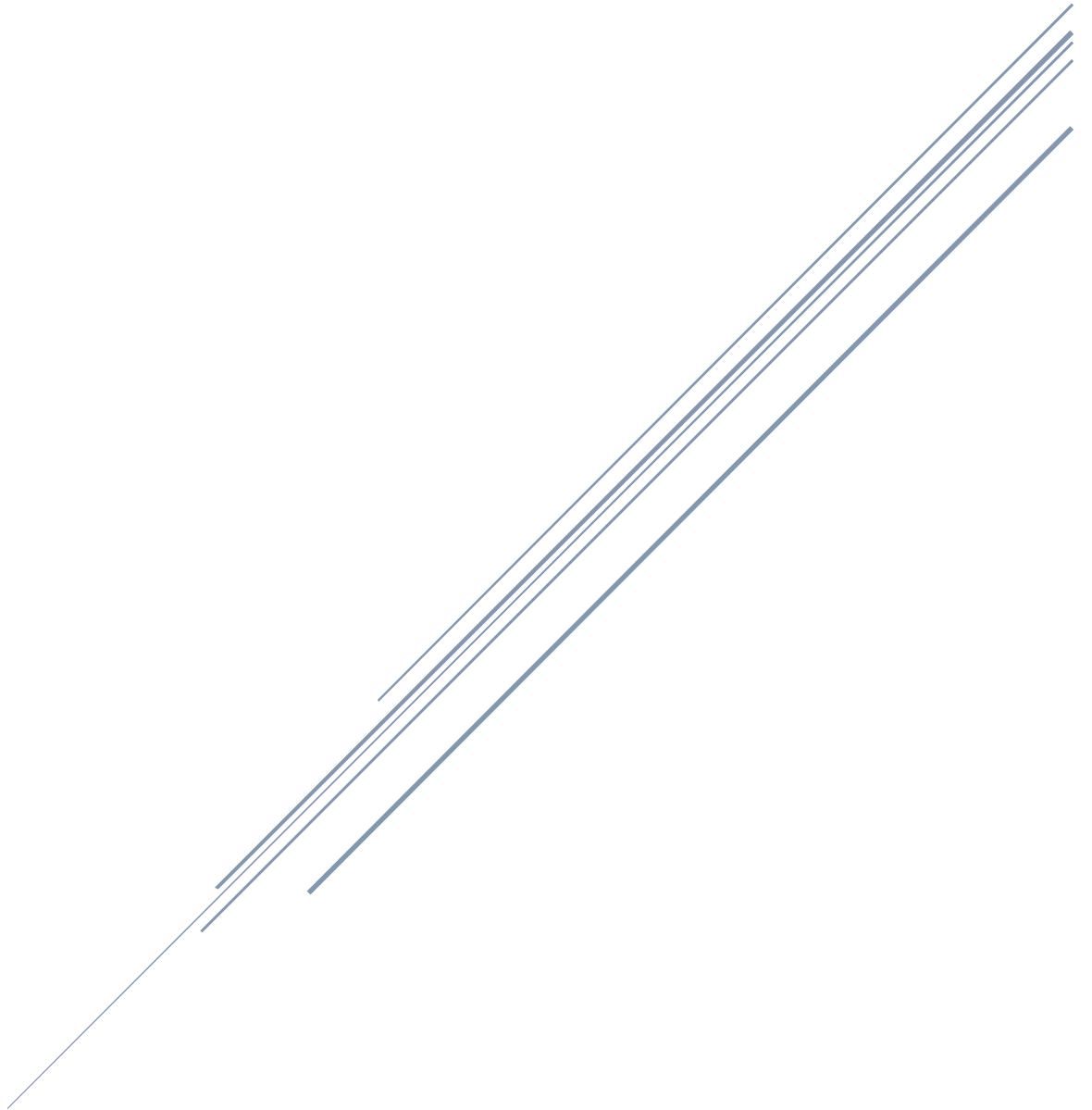


ISEC2076 - ASSIGNMENT 1

CPTED Physical Security Assessment



Identification Details

Survey Date:	October 5-9, 2022	Surveyor:	
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Facility Details

Site Name	TD Canada Trust Branch	Location	5236 St. Margaret's Bay Rd Upper Tantallon, Nova Scotia B3Z 0P4
Site Manager	Jeremy Zwicker	Contact Details	902-826-3106 ext. 250 jeremy.zwicker@td.com
Security Manager	Joe Public	Contact Details	999-999-9999 ext. 999 joe.public@securityjoe.com

Situation Outline

Description of site: Stand-alone single story brick building currently housing a branch of a Canadian bank in a rural community.

No Employees:

10

No Contractors:

3

Operating Hours:

	Weekdays	Saturdays	Sundays
Opens:	9:00 a.m.	10:00 a.m.	closed
Closes:	6:00 p.m.	4:00 p.m.	

Special Openings/Restrictions: Closed on all Statutory Holidays

*format (Halkyn Consulting (n.d.))

Police Details:

Relevant Police Force: RCMP Tantallon Detachment

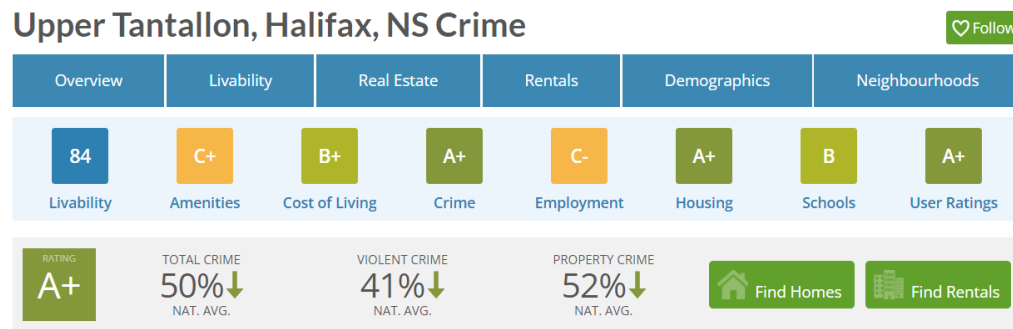
Local Station: 1 Eleanor Lane

Upper Tantallon, Nova Scotia B3Z 1H3

Telephone #: 902-244-7208

Crime Evaluation:

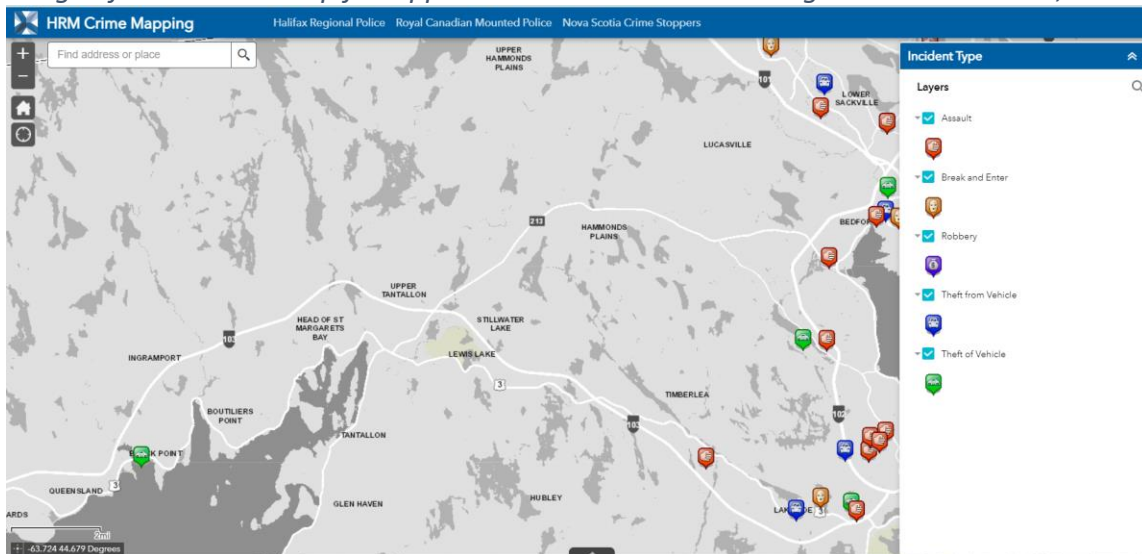
2020 crimes statistics for Upper Tantallon



Date & Last Updated: This data reflects 2020 and was released from [Statistics Canada](#).

(areavibes, n.d.)

Image of HRM crime map for Upper Tantallon and surrounding areas. October 10, 2022



(Halifax, 2020)

NEIGHBOURHOOD

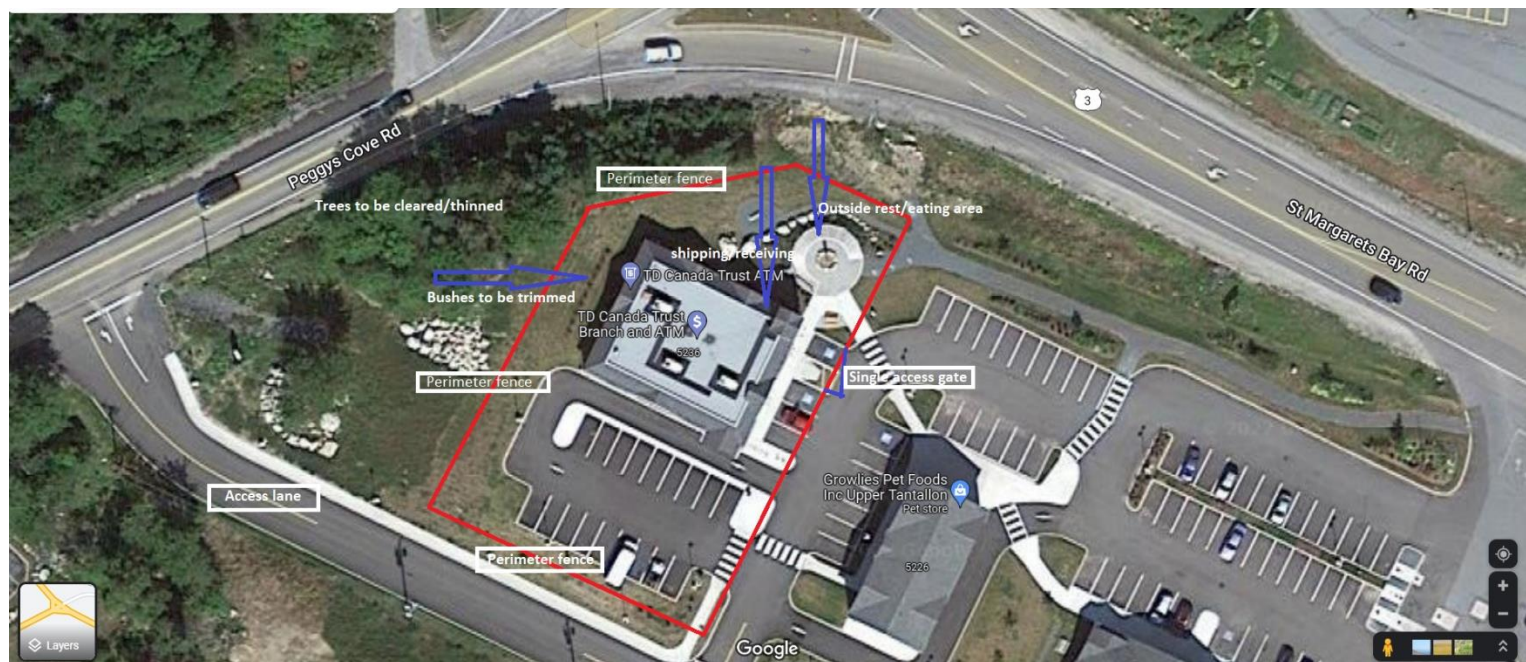
The site is in the suburban residential community of Upper Tantallon within the Halifax Regional Municipality. As of 2021, real estate prices in Upper Tantallon are higher (17%) than the Halifax average, with the majority being single family dwellings with the occasional townhouse. The median age is 39 years with 61% of residents having children under the age of 18. Married couples make up 83% of the population of Upper Tantallon with a household income 68% higher than the national average (Areavibes, n.d.)

The neighbourhood is not particularly pedestrian friendly, as the majority of business are spread across a large area. The area includes most everyday amenities, but for fine dining, nightlife or entertainment, residents will usually travel into the city. The majority of Upper Tantallon amenities and businesses close before or at 9:00 pm apart from a few fast-food restaurants and gas stations.

Crime rates are low in Upper Tantallon, as the above stats attest. The closest RCMP detachment is approximately 3 kilometres from the site.

Surrounding businesses are retail and services and, for the most part, close around 6:00 p.m. The site's closest neighbouring building is two-stories, with a retail pet food supply store occupying the bottom floor, and the top floor open for lease. The pet store opens at 10:00 am daily, and closes at 6:00 p.m. on weekdays, 5:00 p.m. on weekends. Customers of either the bank or pet food supply store park in generally the same lot, as designated parking areas provide convenient access to both buildings. Businesses in Upper Tantallon are well maintained, clean and the grounds landscaped. No vandalism or graffiti was noted.

Aerial view of site with suggested security upgrades



(Google, n.d.-a)

PERIMETER

Vulnerability:	Lack of security fencing around perimeter of site to strictly control and monitor pedestrian and vehicle access and egress
Solution:	1. Security Fencing Install security fencing around the entirety of the perimeter of the property. This fencing should be between 6 and 8 feet tall with 3 strands of barbed wire on the top with a monitored single access gate
Solution:	2. Single Access Gate Gate to have CCTV camera surveillance as well as digital swipe access card to open
Solution:	3. Clear Security Zone Create and maintain a cleared zone on the outside of this outermost security fence visible by CCTV cameras (see landscape)

Image of dense tree growth impeding visibility from road



(Google, n.d.-b)

Image of overgrown bushes on west side (back) of building



Image of rest/seating area located outside the northeast corner of building



Image of landscaping from south side view



LANDSCAPE

Vulnerability:	Dense and overgrown tree coverage along west side of site reducing visibility from busy main road along property boundary
Solution:	Thin the density of trees to increase observability as well as remove low tree branches to 8 feet from the ground
Vulnerability:	Several tall and overgrown bushes between site perimeter and back emergency door reducing visibility of security zone around building.
Solution:	Removal or trim bushes and maintain at 36 inches
Other:	No visible vandalism or garbage
Recommended:	Renew landscape/property maintenance contract with current providers

Situated near the northeast corner of the building, there is a dedicated outdoor rest area with seating as well as a picnic table. This area casually surrounded by a wood and rope barrier and is intended for public enjoyment and utilization. It provides a clear unobstructed view of the St. Margarets Bay Road as well as the northern side of the building and property, and a partial view of the front entrance and front parking area. There are two sidewalks leading to this area, one extending from the front of the building, and one from the front of the neighbouring business and the paved parking lot. In addition, there is also a groomed walking path from the St. Margarets Bay Rd. to the rest area.

Image of traffic flow and major roadways/access lane



(Google, n.d.-c)

TRAFFIC

Situated atop a gradual hilltop, the site is cornered by two main routes, Peggys Cove Road, and the St. Margarets Bay Road. Both roads have regular moderate traffic from early morning until late evening and light traffic from late evening until early morning hours. The north and east sides of the building/site can be seen from the St. Margarets Bay Road, while the view of the west side from the Peggys Cove Road is currently obstructed by dense tree growth as indicated above (Landscape).

The south side of the property is along a well-lit, lightly travelled access lane with sidewalk, off the Peggys Cove Road accessing the group of business nearby, running behind the business locations and their excess parking areas, ending at a similar lane adjacent to the Real Atlantic Superstore parking lot. It was observed that the public uses this lane during both daylight and evening hours to access these businesses during their open hours.

While the roads are the main routes through the area, the community is rural, and they consist of only two lanes. There is very limited public transportation, with the closest commuter bus stop approximately 3km away. The speed limit is 60 kph and is generally adhered to.

Image of front of building



BUILDING

Vulnerability: Glass and steel frame front-entrance door

Solution: **Door replacement**
Solid steel front-entrance door

Vulnerability: No barrier for authentication or authorization control at building entrance

Solution: **Access Controls**

1. Digital security swipe card or biometric authentication and authorization to gain entry

2. Turnstile access control integrated with surveillance (CCTV and entrance security staff) will also aid to reduce tailgating

3. Security personnel stationed inside entrance

4. Visitor registration, escorting and ID badge, as per visitor policy, required and enforced for every visitor and contractor

Vulnerability: No warning signs posted (e.g., no trespassing or restricted area)

Solution: Post warning signs in conspicuous locations

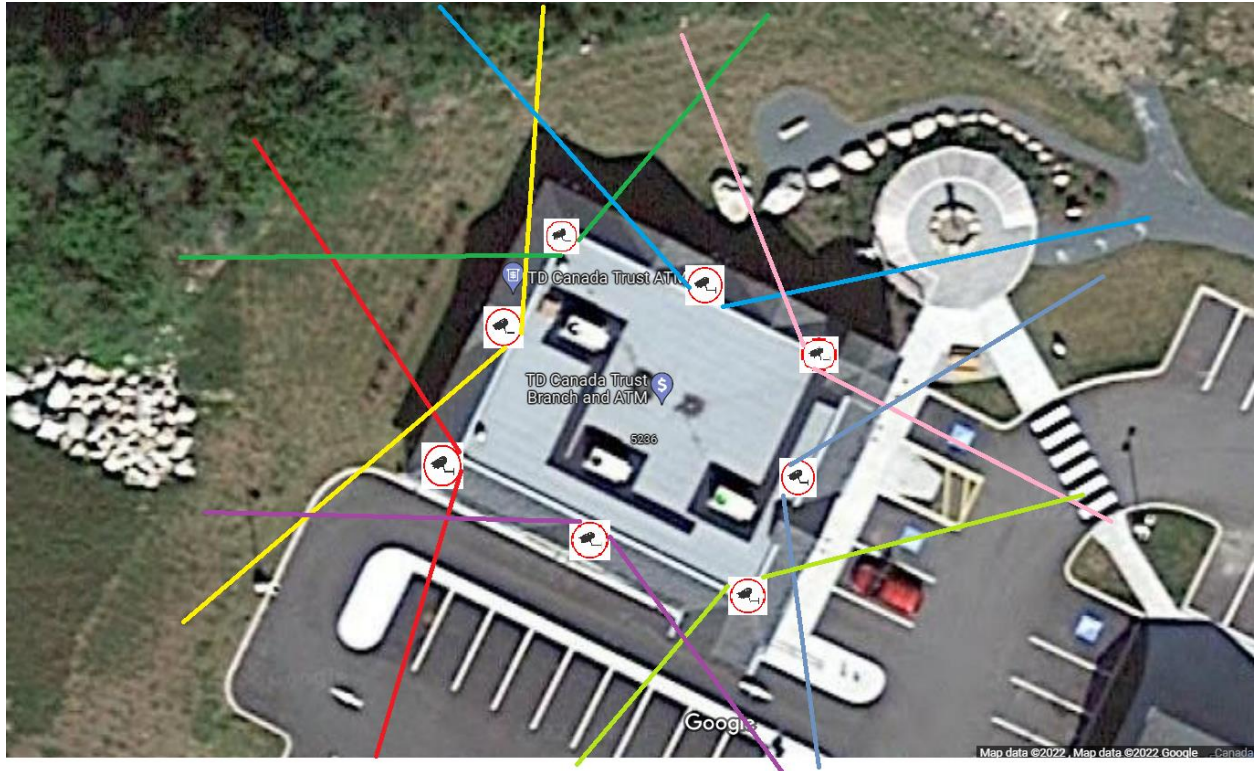
Vulnerability: Large glass windows to the left of main entrance door with only elevated walkway between front of building parking area

Solution: Install concrete bollards between front parking spaces and large windows to reduce the likelihood of a vehicle breaking through the glass windows

Other: Required secure shipping and receiving area

Solution: If a shipping and receiving is required, it is strongly suggested that this area be located near the northeast corner of the building. Along with a monitored CCTV camera, the natural surveillance provided by the unobstructed view from the well travelled St. Margarets Bay Road and the proximity to the rest/eating area will lend it to be the safest location for a potentially unsafe activity

Image of suggested CCTV camera placement on exterior



(Google, n.d.-a)

Image of neighbouring business with outdoor seating for public use



SURVEILLANCE

Vulnerability:	No exterior surveillance cameras installed on building or property
Solution:	<ol style="list-style-type: none">1. Position digital CCTV cameras to cover the entirety of the perimeter of the building ensuring no blind spots2. Position digital CCTV camera at security fence gate to monitor both access and egress of the site3. Surveillance feeds should be monitored live 24 hours/day, 7 days/week by on site security personnel in secured location inside building to allow for immediate response4. Feed should be recorded off site and retained for a minimum of 31 days5. Post CCTV signs where clearly visible to anyone approaching site, including fence and gate, as well as any monitored interior areas

The building has multiple large windows on every side, providing clear views of most of the perimeter of the property during daylight hours from inside. Adequate lighting solutions and coverage will assist with visibility after dark. The surveillance provided by the public will also be improved by proper lighting and removal of excess foliage as recommended, as the site is located on an elevation from two main roadways and is accessible by vehicle to the public on all sides. Neighbouring business provides inviting outdoor seating for public use along with an unobstructed view of target site building, encouraging casual surveillance from community.

ALARM SYSTEMS AND SENSOR INTEGRATION

It is recommended that a sensor-based alarm system be installed to monitor and protect the perimeter as well as any doors and windows during hours they are not expected to be in regular use, i.e., overnight if solely occupied by security staff. The purpose of the alarm is to detect any intruders as well as notify both trespasser and security personnel via audible and/or visible notice of offence. The alarm ought to be continuously monitored by security staff on-site. An appropriate system will also reveal if there has been an attempt to modify or disable any alarm elements or sensors. Warning signs ought to be posted in conspicuous locations as a deterrent measure.

Image of evening lighting on east side (front) of building



Image of evening lighting on west side (back) of building. Current lighting not in use.



Image of lighting on access lane and south side parking



LIGHTING

- Vulnerability:** North, west, and south sides of building are not adequately lit for deterring or detecting unlawful activity. It was observed that lighting has been installed, but not in use
- Solution:**
1. Install lighting where coverage is inadequate for protection zones
 2. Assure placement of security lighting to be in such a position as to not result in silhouetting security personnel or create a glare which may be exploited
 3. Confirm currently installed lighting is in use during times of low natural light
 4. Protect lighting wiring from tampering or interference with security measures such as locking the electric meter box
 5. Ensure lighting remains in use during power outages or interruptions with a back-up power supply.

It was noted that the existing installed lighting on the north, south and west sides of the building were not being utilized. The east side (front) was appropriately lit, as was the parking area. The access lane located along the south/southwest was observed to have adequate illumination as well.

COMMUNICATIONS

Establishing an on-site communication network between security personnel is imperative to a comprehensive security framework. Effective equipment may include mobile phones and two-way radios and should also incorporate outside communication with local law enforcement through a dedicated line.

Security staff should maintain shift reports and logs to be completed every shift change or as policy dictates to be reviewed by incoming security personnel including, but not limited to, regular patrols of the perimeter, visitor logs and noteworthy incidents.

Layered Protection Model

An effective security framework is composed of layers starting from either the objective (what you are protecting) and working outward, considering the vulnerabilities and potential threats as you move outward towards the perimeter, or vice versa, working from the perimeter of the property towards your most sensitive area. Each layer will employ two or three differing methods of security at each level if it is to be functional.

Outer perimeter security could include barbed wire fences, gates, and locks, but can also be combined with natural control and territorial reinforcement. Natural access control uses the design of the landscape and building to speak to the public's intrinsic nature to follow the guidelines of entering and exiting a property that are offered. The idea behind natural access control is the perceived risk of not going unnoticed when moving against these natural access controls. Someone observed in an area outside of the norm for that property will likely get noticed and raise suspicion. Territorial reinforcement comes into play when those with legitimate authorization to be on a private property will notice those who they suspect do not.

Inner perimeter security refers to the exterior of the building itself which includes doors, windows, and walls. Access controls in this layer, such as locks and alarms, help to keep people out of unauthorized areas and control who enters the building.

Lastly, the inner spaces of the building, where the sensitive objectives or assets are usually found, is protected by interior security. Effective tools for securing this level are CCTV cameras and motion detectors as well as access control electronic authentication and authorization badges.

The suggestions and guidance offered in this report support the layered protection approach to comprehensive security.

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