



**PHYSICAL SECURITY SURVEY/SCREENING
OF
RIDGE LANE PEDESTRIAN CONNECTOR
RIDGE LANE NEIGHBORS GROUP
SAN FRANCISCO, CALIFORNIA 94103**

(Performed by Furlishous Wyatt, Jr. December 2013 – March 2014)

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN AUDIT

I. GENERAL STATEMENT:

December 12, 2013 – Walk through screening of Ridge Lane Pedestrian Connector was conducted at 6:00 p.m. (after dusk) with members of Ridge Lane Neighbors group, several TNT Police Officers from Ingleside Station, and Furlishous Wyatt, Jr. (SFSAFE). The walk began at the west end of Ridge Lane at intersection of Hawth Street/ Josiah Avenue, and ended at San Miguel Street east.

Note: Access to connector between San Miguel Street downhill to San Jose Avenue is blocked by a large tree at San Miguel Street (the group wants to extend connector to San Jose Avenue).

December 12, 2013 – After aforementioned Ridge Lane walk through screening, a Ridge Lane Neighbors meeting was conducted at the San Francisco Public Library Ingleside Branch from 7:00 p.m. to 8:30 p.m.

The following list of meeting attendees was taken from meeting minutes prepared by Ms. Patricia Ris.

Eric Maier,
Russell Deweese,
Mary Beth D'Alonzo,
Fayaz Rajani,
Warren Longmire,
Lynn,
Yuan, Patricia Ris (minutes),
Furlishous Wyatt (SFSAFE),
Sandra Zuniga (SFDPW),
Eric Lau (SFPD), and
Five officers from the Taraval TNT team (SFPD).

Meeting Decision: Attendees voted to have a survey on the entire stretch of Ridge Lane, from Hawth Street/Josiah Avenue to San Jose Avenue by an independent party. This process should take 30-60 days and is likely to be completed by February 2014. Furlishous Wyatt (SFSAFE) will need this survey to proceed with his recommendations.

March 12, 2014 – Furlishous Wyatt (SFSAFE) performed a walk through screening of Ridge Lane Pedestrian Connector at 10:30 a.m. (daytime) to check notes from initial nighttime screening conducted December 12, 2013. The daytime screening was conducted to view footpath in sunlight for a more detailed inspection, and to complete notes.

The concept of Crime Prevention through Environmental Design (C.P.T.E.D.) should be applied throughout the Ridge Lane Pedestrian Connector corridor.

CPTED is a proactive crime fighting technique in which the proper design and effective use of parks, open spaces, building(s) and surroundings lead to a reduction in crime as well as an improvement in the quality of life for citizens of the community. It is very important to realize CPTED principals reduce the opportunity for crime, however programs should be implemented to tackle the **ROOT CAUSE OF THE CRIMES** affecting the areas where the audits are performed. These steps go hand in hand to create a safe environment in which to live, work and play.

II. LOCATION/PROPERTY DESCRIPTION:

Ridge Lane Pedestrian Connector corridor is located in the San Francisco Police Department (SFPD) Ingleside District (Company H) crime statistics reporting area H-850, and is bordered by the following thoroughfares:

- Mt. Vernon Street – north
- Lakeview Street – south
- San Jose Avenue – east, and
- Josiah Avenue/Howth Street – west.

Note: The corridor is centrally located inside the above boundaries.

Special Note: When traveling from north to south on Howth Street from Mt. Vernon Avenue, Howth changes to Josiah Avenue at “S” curve intersecting Ridge Lane Pedestrian Connector at west end of corridor.

The pedestrian connector/footpath intersects the following streets, traveling east to west uphill:

- San Jose Avenue (dead-end, T-bone),
- San Miguel Street (dead-end at north side of footpath),
- Caine Avenue (cul-de-sac at south side of footpath),
- Majestic Avenue/Tara Street (traveling north to south, Tara Street changes to Majestic Avenue at “S” curve intersecting Ridge Lane Pedestrian Connector), and
- Josiah Avenue/Howth Street (dead-end, T-bone).

Special Note: A large tree, thought to be planted by a homeowner, blocks footpath access at San Miguel Street downhill to San Jose Avenue.

The entire footpath surface is unpaved and uneven, and travels downhill from Josiah Avenue/Howth Street to San Miguel Street at varying angles and degrees of slope in all directions. Note: Access from San Miguel Street downhill to San Jose Avenue is blocked as previously stated.

The walking surface is inconsistent; composed of dirt, rock, gravel, grass and shrubbery, and each section of footpath walking surface is slanted and sloped at varying angles and degrees presenting numerous trip/fall, slide/slip hazards.

III. LOCATION/PROPERTY CONCERNS AND PROBLEMS:

Concerns and problems effecting pedestrian connector include, but are not limited to:

- Assault and Battery
- Robbery

Additional concerns:

- Inadequate Lighting
- Ambush Points (bushes/shrubbery, recesses in fence lines and locations of structures and their alignment)

The four key concepts of C.P.T.E.D. are:

- 1. Access Control**
- 2. Surveillance**
- 3. Territorial Reinforcement**
- 4. Lighting**

ACCESS CONTROL:

Properly located entrances, exits, fencing, landscaping and lighting can direct both foot and motor vehicle traffic in ways that discourage crime.

Access Control: *Footpath is open to pedestrian access from Josiah Avenue/Howth Street (west) to San Miguel Street (east); however, access is blocked (by a tree between two separate residences) at San Miguel Street, restricting movement from San Miguel Street to San Jose Avenue.*

Note: *There is interest in opening/reopening footpath from San Miguel Street to San Jose Avenue. This action will require the removal of tree.*

Special Note: *Ridge Lane Neighbors group should decide what users will be allowed to access corridor. Will bicyclists, skaters, skateboards, etc. be permitted, and will the paved and/or landscaped surface (to be installed) support such travel. If the group decides to discourage bicyclists, skaters and skateboards, a cobblestone-like surface may be considered for installation, as an example.*

Remember: *American Disability Act (ADA) compliance (when considering footpath surface modification and user profile).*

SURVEILLANCE:

The three types of surveillance are:

1. **Natural**
2. **Organized**
3. **Mechanical**

Generally, *criminals* do not want to be seen. Placing physical features, activities and people in ways that maximize the ability to see what is going on discourages crime. Landscaping and lighting are two methods used to provide natural surveillance.

Natural Surveillance: *A number of houses along connector do have windows facing footpath (at various levels and angles of view), and most backyards have privacy fencing erected (non-see-through fencing) that limit natural surveillance opportunities.*

Although a number of homes have windows facing footpath, the view from those windows, in most instances, only give a limited view of corridor areas directly in front of those windows, and

this is especially true when windows are shut and drapes are closed (or when translucent panes are present).

Note: *Natural surveillance, for the most part, will be provided by footpath users, and possibly from homes located along corridor and at corridor intersections that have unobstructed views of pedestrian connector.*

Special Note: *All residents with privacy fencing along corridor should be encouraged and motivated to install CPTED fencing (fencing of the see-through variety) to promote natural surveillance. All fences and landscaping should be designed to eliminate areas of concealment (blind spots, recesses and possible ambush points).*

Organized Surveillance: *Ridge Lane Neighbors, especially those with homes along footpath, should be encouraged and motivated to keep a “watchful eye” on corridor area in their immediate vicinity whenever possible, and report all criminal and/or suspicious activity to Police.*

Note: *The formation of a SAFE Neighborhood Watch Group is highly recommended. Organizing a neighborhood watch will greatly assist not only Ridge Lane Neighbors, but all residents throughout neighborhood who actively participate in the watch program.*

Benefits of Neighborhood Watch Group:

- *Increase awareness of crime and public safety issues that impact you, your family and your neighbors.*
- *Meet your neighbors and establish a communication network.*
- *Work collectively to address crime and public safety concerns.*
- *Learn how to access resources that will support your crime prevention efforts.*
- *Reduce the risk of crime and victimization on your block and in your community.*
- *Working together, you can take action with the power and safety of numbers behind you.*
- *Get to know your neighbors and develop a more united, concerned and involved community.*

Neighborhood Watch Group members will learn:

- *How to observe and report criminal as well as suspicious activity to Police.*
- *How to provide adequate descriptions of persons of interest to Police.*
- *Personal and street safety strategies and techniques.*
- *Residential burglary prevention (Target Hardening).*
- *Auto boost and auto theft prevention.*

Mechanical Surveillance: No exterior close-circuit television (CCTV) cameras were observed during walk through screenings.

Note: The use of video surveillance is highly recommended for corridor. All residents with houses and/or backyards along corridor (on both sides) should be encouraged and motivated to install CCTV surveillance cameras.

Special Note: When the corridor is upgraded (paved, landscaped and well lighted), it will allow and encourage increased use, and with that increased use, the more surveillance is warranted (natural, organized and mechanical).

TERRITORIAL REINFORCEMENT:

Territorial reinforcement refers to people's sense of ownership.

In CPTED it refers to the development of areas or places where the user feels a strong sense of ownership. It is an umbrella concept, embodying all natural surveillance and access control principles.

Territorial Reinforcement: Ridge Lane Neighbors are actively involved in efforts to increase safety and security in the Ridge Lane Pedestrian Connector corridor, and are moving forward to garner support for footpath improvements.

Note: The ***usability*** of the corridor is directly related to feelings of ownership exemplified by residents in area through their involvement in maintenance, upkeep and care of this valued community amenity.

Ridge Lane Neighbors should also consider creating ***celebrated entrances*** at each corridor intersection to further emphasize ownership and community pride.

Special Note: All graffiti and/or other tags throughout corridor should be removed immediately.

LIGHTING:

Lighting has two (2) purposes within the CPTED model:

1. Lighting is used for illumination of human activity.
2. Lighting is used for security.

Visibility

- Lighting helps an individual observe their surroundings and respond to a potential threat.

- Pathways or pedestrian connectors must be illuminated to the point where faces of pedestrians can be observed.
- Poor lighting, whether too bright or not bright enough can diminish safety.
- The quality of lighting is just as important as the amount of lighting.

Lighting: *At present, footpath lighting is solely dependent, for the most part, on illumination emitted from street lights mounted near footpath access points at intersections, and backyard house lights of residences abutting corridor. Approximately three (3) houses along corridor have exterior light fixtures mounted to illuminate footpath in their vicinity.*

Note: *Corridor should be extensively well lighted during all hours of darkness to support safety. When installing exterior/outdoor light fixtures in residential areas, extreme care must be exercised to eliminate both light trespass and light pollution.*

Special Note: *Light up and/or modify all locations/places of concealment throughout corridor (light recessed areas, cut-back/trim overgrown vegetation, prune trees, etc.).*

IV. SAFETY AND SECURITY RECOMMENDATIONS:

Remember: One **theme** should be used throughout corridor. This action will exemplify ownership, uniformity and community pride.

Pavement should be carefully chosen to accommodate user profile, and may be intergraded into natural surroundings, surface and/or terrain, if desired.

Stairs/risers should be used as appropriate, and **ADA ramps and/or switch-backs** should be explored, if said access methods are required.

Good **lighting** is one of the best deterrents to crime. All doors and windows should be illuminated during all hours of darkness, as well as the corridor as a whole.

Use lighting that allows a human face to be observed up to 20 yards away. Light fixture should be mounted high up to prevent tampering and be protected via vandal-resistant housings.

When installing light fixtures, precautions should be taken to minimize the chances of vandalism. Polycarbonate or other vandal-resistant material should be used to protect the lamp

housing. The mounting and location of the fixture should be consistent with reducing the chance of tampering by a criminal or obstruction.

Protect light fixtures from vandalism, use:

- Unbreakable exterior
- Tamperproof hardware
- Non-corrosive design components
- Shock absorbing bracket design

Note: Light fixtures should be properly maintained and replaced when needed.

Remember: Lighting for pedestrian sidewalks and connectors should be sufficient to clearly identify a face up to 20 yards away.

Consider the use of **emergency call boxes** throughout the length of corridor.

Landscaping (bushes, shrubbery, trees, etc.) can either be an asset or a hindrance to criminals. Be sure to prune large trees so that their limbs don't provide rooftop access, second story access or backyard access over fences. Keep shrubs trimmed low throughout area. You don't want to provide concealment for a burglar, rapist, robber, etc.

CCTV surveillance (with recording capability) should be used throughout corridor.

CCTV SURVEILLANCE SYSTEMS

Note: The information listed below is specific to commercial/retail robbery prevention; however, the information can be applied to any location (both outdoors and indoors) where video surveillance is utilized and/or recommended.

Overview

- CCTV can deter or solve a crime.
- Basic set up and maintenance problems can reduce the effectiveness of many systems.
 1. Resolution – is it good enough for facial recognition.
 2. Camera position – are they positioned for clear view of suspect.
 3. Lighting – is it adequate to capture clear images both day and night.
 4. Image detail – is the recorder set up for best image detail.

5. Maintenance – are you maintaining your system properly so it can do its job when needed?

Capturing recognition quality images with the detail law enforcement needs to identify the people and events captured by the system are of utmost importance.

Set Up and Maintenance

- **Backlighting** – when sun is bright at doorway, images in front appear darker or even black. Use another light source inside to counteract backlight.
- **Low Frame Rate** – saves on drive space and gives better image quality, but you may not get an image at all (now you see him; now you don't).
- **Obstructions** – displays and other objects blocking view **should be eliminated**.
- **Focus Problems** – must check system regularly to prevent.

Most business owners think: I have cameras; I'm covered, they are not thinking of the image quality law enforcement needs.

Taking A Picture – capturing an image or capturing video data. The better the quality of the image, the more you can see, the more you can do with it.

There are all kinds of equipment for capturing images. Setting up the best CCTV system requires figuring out the best hardware business owners need.

Some hardware is no good, no matter what. Example: **WEB CAM** – blurry; out of focus, ok for Internet use but totally awful if you need quality video (not enough detail for recognition).

Camera Types:

- Analog
- Digital
- Black and White
- Color

All of these cameras use chips, the bigger the chip; the better the picture quality (bigger chips get better detail and offer more control of contrast between bright and dim areas).

Good Cameras – higher resolution, plenty dynamic range for superior capture technology (good cameras will have no problem keeping up with shifting conditions).

Minimum camera resolution should be **480 horizontal lines**.

Good cameras have **faster lenses** (allows more lighting), larger maximum **aperture** opening (lets more light into the focal point of the camera) and controls image brightness (allows brighter images in dim lighting) – the more lighting, the more depth of field (greater depth of field; the more of the scene is in focus).

Focal Length – some cameras zoom in and out while others have a fixed focal length. The type of cameras used depends on what your needs are.

Transaction Areas – anything at a transaction point (cash register, toll booth, etc.), the subject's head should fill at least 15% of the total image in the frame, giving the detail you need.

Lines of Sight – lines of sight are always critical, make sure there are no obstructions.

Site Plan – the right site plan is crucial (retail store blueprint or **diagram**). Key camera spots are at transaction points (cash registers and entry/exit points) – the more cameras, the better.

You want good camera **overlap** (you want multiple chances to capture good images). Extra coverage is also needed for aisles, restrooms and other key points.

Camera Height – placement is very important, make sure it is as close to eye-level as possible. Otherwise, you might lose out to a baseball cap. With a good site plan you can make sure you don't have any blind spots (you can toy around with camera positions, and do a test recording to see that you are getting what you want).

Interior Lighting – interior lighting can balance bright light from one direction (backlighting) by adding another light source from a different location (add a bank of lights). Example: Artificial lighting (**inside store**) for cameras may be good in the morning, but by noon, the sun (through a doorway or window) can blow the entire frame out (add lighting to fill in for afternoon sunlight). Adding more light from a different direction balances lighting, giving better camera clarity (if sunlight is shining through large windows you can tent windows or add screens or shades).

Exterior Lighting – if lights are on timers, you must adjust appropriate to seasonal changes (Fall/Winter: gets dark earlier. Spring/Summer: gets dark later).

Summary:

- Use high resolution cameras
- Control of right depth of field and contrast
- Put together a site plan with correct camera coverage, positioning, frames per second, frame size and lighting

By following the aforementioned three (3) points, you are more likely to get recognition quality recordings.

There are so many ways the system can fail:

- The wrong camera
- The right camera used the wrong way
- Not making the most of your site plan
- Not getting the most out of your recording equipment
- Insufficient training of staff that works with the gear

But when the system works, it can make all the difference.

Lastly, you may not be able to provide a tape (VCR) to law enforcement because most systems, now a day, are fully digital. You must go over the recording to make sure that the data/footage you want is there (it could be recorded over). You need to know how much footage to collect, and make sure you collect the native file from the proprietary player.

- Native File – the original form of a file (review both file formats – Native and AVI). The Native File format is the least compressed. Specific manufacturer's software is needed to play the Native File.
- DVR – uses compression (reduces detail).
- AVI (open file) – compressed even farther (image quality is reduced)

If San Francisco SAFE Inc. can be of further assistance, please call 673-SAFE or 553-1984.

Sincerely,

Furlishous Wyatt, Jr.
Business Security Specialist