



H A L F - L I F E

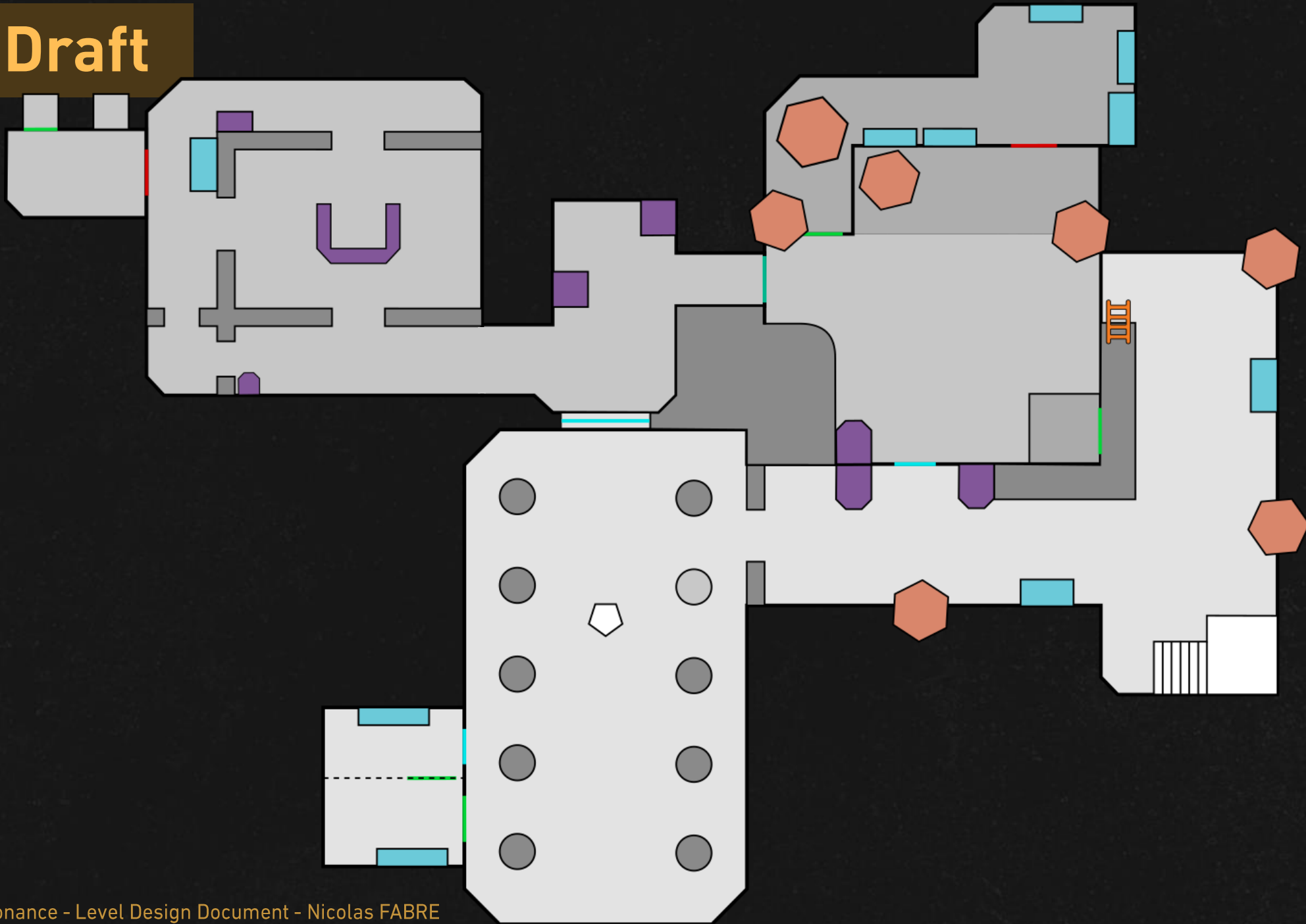
A L Y X

— R E S O N A N C E —

LEVEL DESIGN DOCUMENT

— Nicolas Fabre —

# Final Draft



# Intentions

## DESIGN GOALS

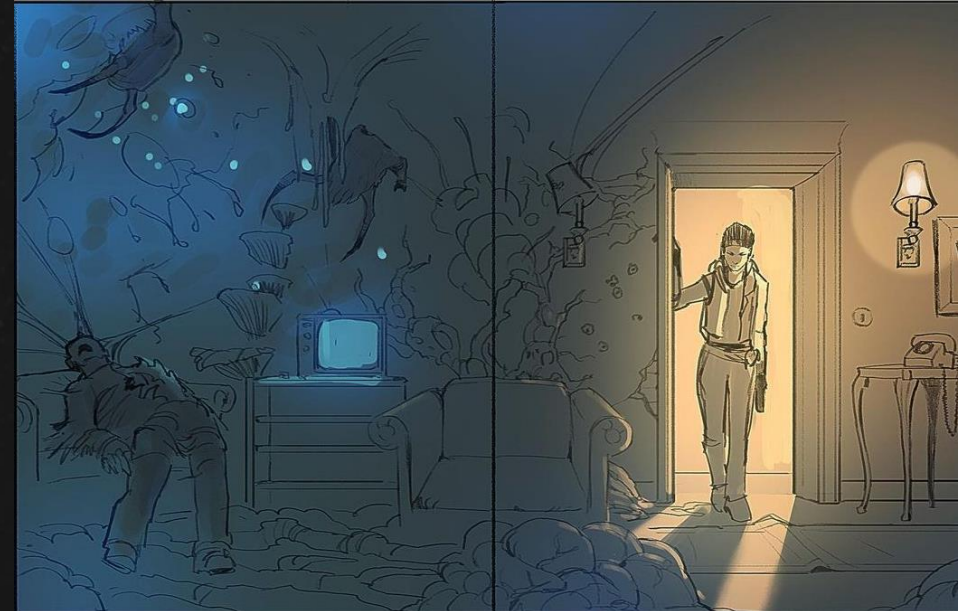
- **Navigation** in an **enclosed space**  
Alternates between indoors & outdoors
- **Re-accommodate** the player with the game's **combat** and **toner puzzles**
- **Crossfire** between two 'factions'
- **Storming** a Combine **outpost** alone  
Push-forward combat

## NARRATIVE

- Getting close to **capturing a human** foe working for the **Combine**
- **Unknowingly** falling into an **ambush**
- **Support** by **Trysha** over Alyx's **radio**

## ATMOSPHERE

- **Sanatorium** repurposed and **corrupted** by **Combine** machinery
- **Outside** area **infested** by **Antlion** hives
- Dilapidated, **haunting** care sections
- **Abandoned** wings infected by **Xen flora**



# Level Situation – Context & Scope

## CONTEXT

- **First level in Chapter 2: “The Shard”**
- **Story Objectives:**
  - **Breach** the Sanatorium and **eliminate** Combine opposition
  - **Capture** Helena Hahn alive
- **Abandoned Sanatorium** under Combine control  
Shard Sector is heavily protected by Overwatch forces

## SCOPE

- Time: 10-15 min
- Size: small

## CONSTRAINTS

- **Re-introduce** the **Shotgun**
- No allied NPCs in the scene

## CHAPTER 2 JOURNEY



- 1 **The Sanatorium**
- 2 **Radio Transmitter**
- 3 **Submarine Outpost**
- 4 **The Palace**
- 5 **Razor Train Hijack**

# Level Situation – Charts

## COMBINE UNITS



### Grunt (x3)

**Weapons:** SMG | Grenades

**Weak Point:** Gas Canister

**Drops:** Pistol Ammo | Grenade | Health Pen



### Ordinal (x1)

**Weapons:** AR2 | Grenades | Manhack

**Weak Point:** N/A

**Drops:** Pistol Ammo | Grenade | Health Pen



### Charger (x1)

**Weapons:** Heavy Shotgun

**Weak Point:** N/A

**Drops:** SMG Ammo | Health Pen

## CREATURES



### Antlion (x5)

**Weapons:** Claws

**Weak Points:** Legs | Abdomen

**Drops:** N/A



### Antlion Spitter (x1)

**Weapons:** Acid Spit

**Weak Points:** Legs | Abdomen

**Drops:** N/A



### Zombie (x2)

**Weapons:** Claws

**Weak Point:** Bloater

**Drops:** Pistol Ammo | Health Pen

# Level Situation – Charts

## COLLECTABLES



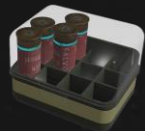
### Health Pen (3 min.)

Affected by Ammo Removal



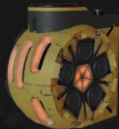
### Pistol Clips (5 min.)

Affected by Ammo Removal



### Shotgun Shells (8 min.)

Affected by Ammo Removal



### Grenades (2 min.)

Affected by Ammo Removal



### Resin (x10)

Player already has 10 on startup

## HAZARDS



### Explosive Jerrican (x1)

Can be grabbed by Gravity Gloves  
Can be held in one hand  
Cannot be deposited in Backpack



### Laser Tripmine (x5)

Can be Hacked  
Cannot be detached



### Manhack (x2)

Can be deployed by Ordinal  
Or placed directly in the level



### Turret (x2)

Immune to bullets  
Cannot be grabbed by Gravity Gloves  
Environmental only

# Level Situation – Character Metrics

## MAXIMUM MOVEMENT DISTANCES

- **Teleport Over Ground:** 208 units
- **Teleport Over Gap:** 144 units
- **Killing Fall Height:** 152 units
- **Vault | Teleport Up Height:** 48 units
- **Highest Grab Height:** 80 units

## COVER HEIGHTS

- **Full Cover:** 72 units
- **Crouch Cover (Low):** 56 units
- **Hunch Cover (Medium):** 64 units

**1 Hammer unit = 1 inch = 2,54cm**



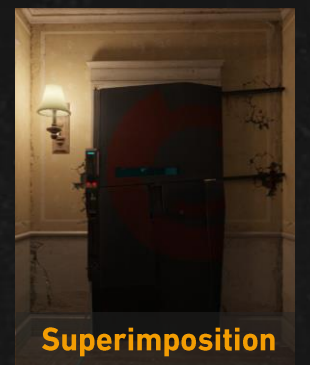
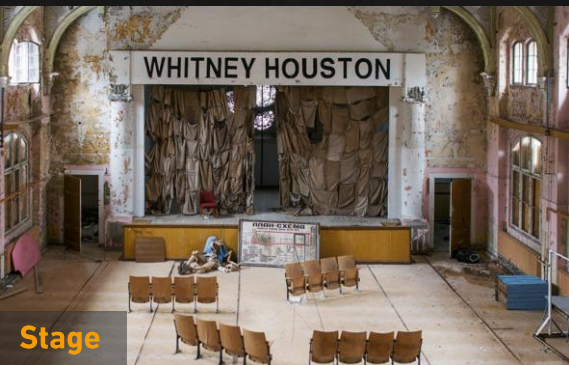
**183 Units (Default)**  
**Player Height Dependent**



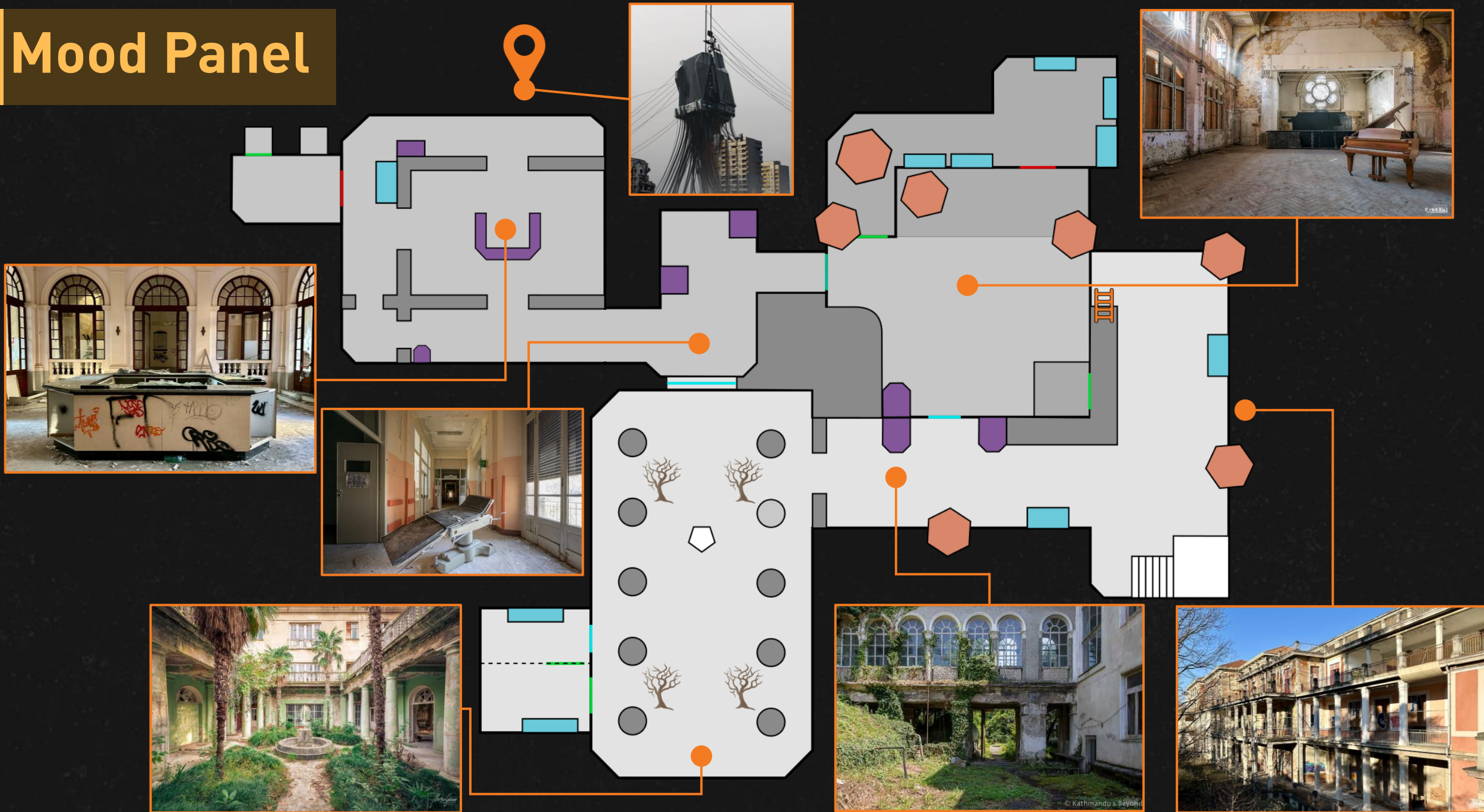
**Crouch Under Object: 40 Units**



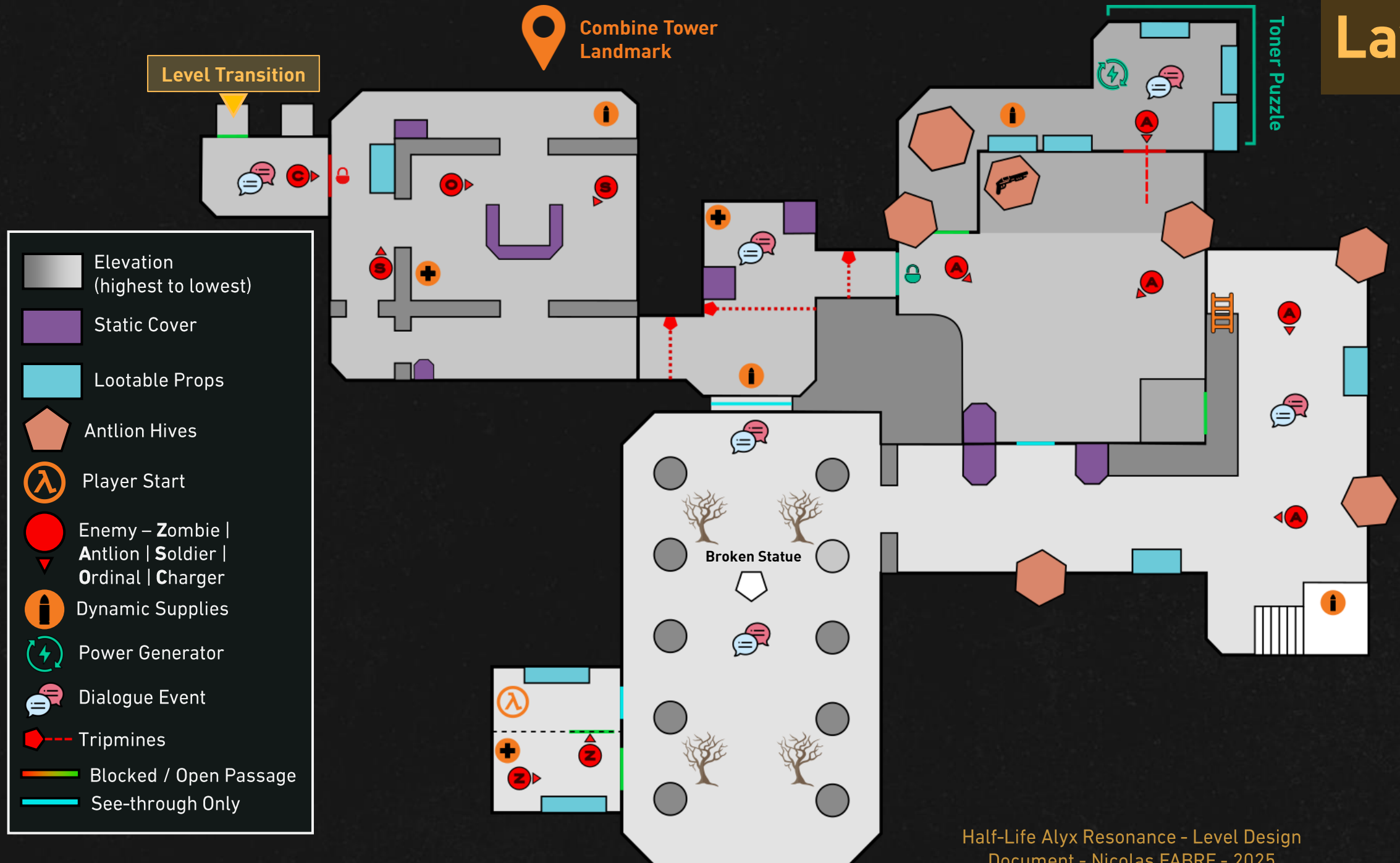
# Level Aesthetics



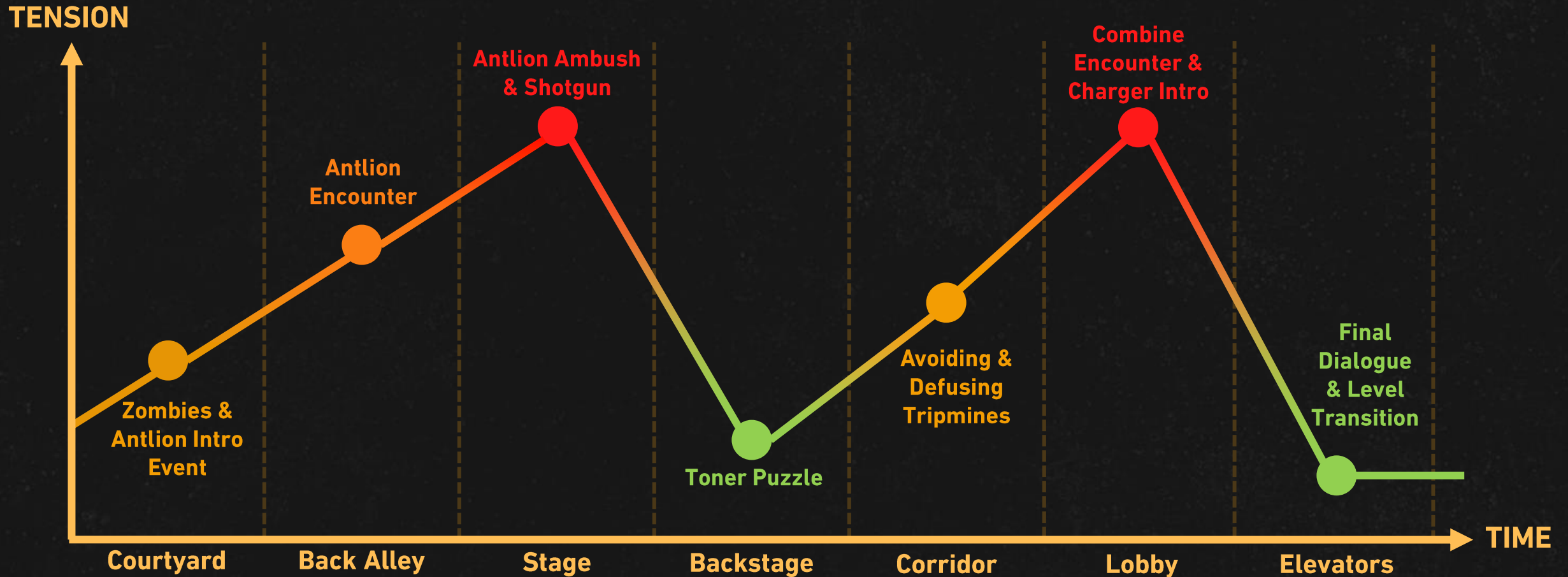
# Mood Panel



# Layout



# Pacing & Level Flow

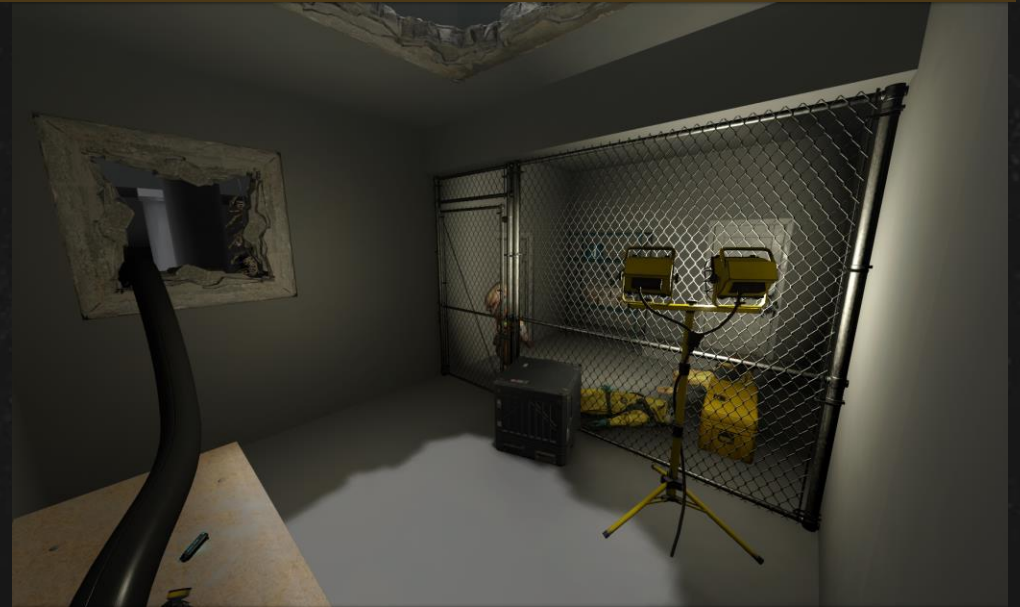


# Walkthrough – Quarantined Room

Alyx enters a small **dilapidated room** from a ruined building up above. The **exit is fenced off**, and a **Zombie** is bumping its head repeatedly against the **fence door**. She can see the **exit door**, a **shelf** and a **hazmat crate** behind the fence.

She finds **pistol ammo** and **resin** on a table near her as well as a large **cable going through the wall**, revealing a bit of the neighboring Courtyard and its stone pillars.

- The **fence door** is closed by a **padlock**. She can use her **pistol** to destroy it and open the door, but she'll have to **face** the bumping **Zombie** and a **sleeping** one waking up from the noise. Searching the shelf reveals **pistol ammo** and **resin**, along with a **health pen** in the hazmat crate.
- Alyx can also lift a **small crate** to get up to the cable hole's level and **climb through**, skipping the Zombie encounter and loot altogether. She can still open the door from the other side and access the room if she desires.



# Walkthrough – Courtyard

Alyx now finds herself in a **large courtyard** littered with **dead bodies** of soldiers and Antlion remains. She comments thinking back on the **deactivation** of **Combine security** measures that kept **Antlions** away.

She approaches a ruined statue, crows flying away in the skies revealing the **Substation** towering the **Sanatorium** building she's facing. **Trysha radios Alyx**, signaling she's on the right track and reminding her to reach the Substation and **capture Dr. Helena Hahn**, her **main target** for the **Resistance**. Alyx can loot the dead Combine bodies to find a **grenade**.

Behind the statue is a semi-boarded **window** leading to a blue-tinted **corridor**. When nearing its perimeter, Alyx can hear a Combine **soldier calling for help**. She can then observe two **soldiers fighting** off an **Antlion** before retreating to a nearby room. A closed **Locker** can be seen, as several (yet) inactive **Tripmines** attached to the walls.

**Trysha** radios Alyx telling her the **building's well-guarded**, but with security measures now inactive she'll find a way in.

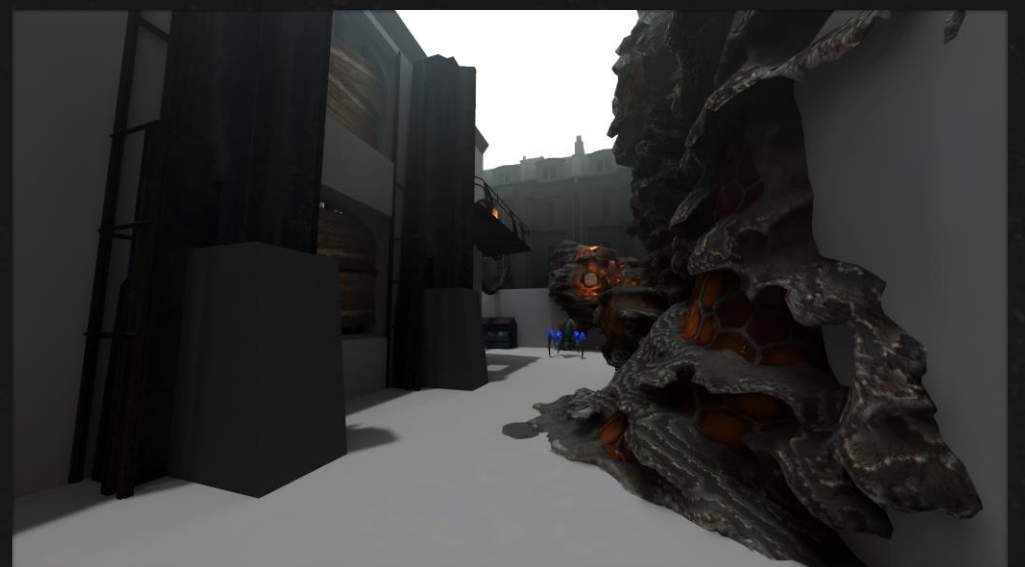


# Walkthrough – Archway to Back Alley

The only way forward is by an **archway** marked as a “**contaminated area**”. The archway reveals a **long corridor** infested by **Antlion hives**, as well as two **Combine pillars** supporting a **boarded-up building**.

Approaching the hive will alert an **Antlion Spitter** climbing out the hive. Alyx can find **cover** behind the **pillars**, advancing **in-between** the Spitter’s **shots** or shooting it by hitting its **weak spots**.

With the Spitter dead, she can observe her surroundings and see out of reach buildings covered by giant Antlion hives towering the alley. The **windows** of the building supported by pillars are **boarded up**, but if she really tries, she can **glimpse** a **deserted stage** area illuminated by nearby **Antlion nests**.

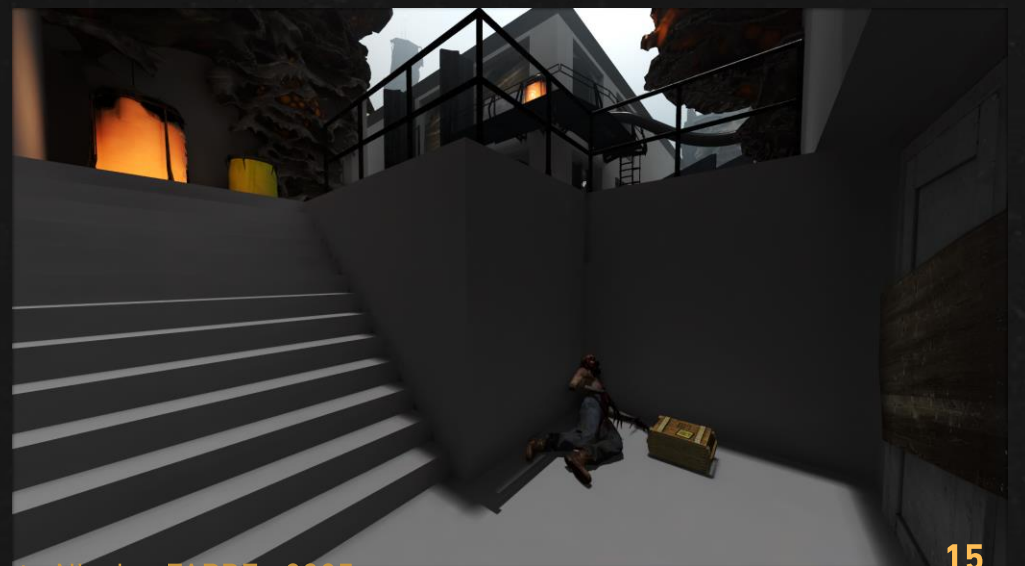
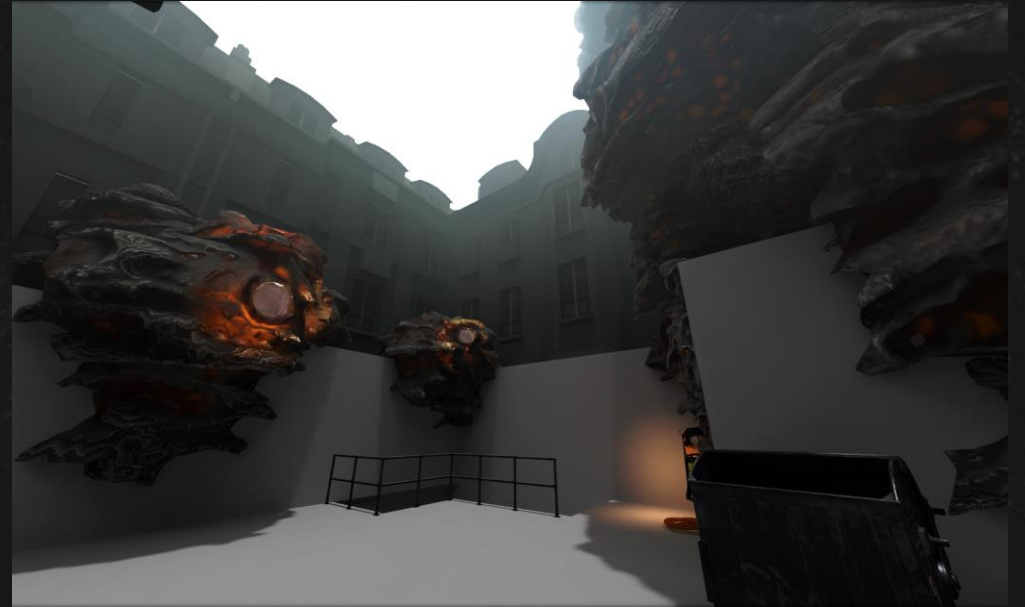


# Walkthrough – Back Alley Stairwell (Optional)

Immediately right is an **enclosure** with a small area marked by **metal railing**. Passing by the surrounding hives, Alyx can use the stairs leading to a **barred door**.

A **supply crate** can be found near a dead zombie. Turning back, Alyx can observe the **boarded-up building** surrounded by a high **metallic platform**, a **ladder** and a **giant cable** coming out from one of the surrounding buildings into this one from what looks like a possible **entry point**. The **Substation** still towers, far away.

Walking **back up** the stairs, she can also observe **another hive** near the ladder and a **mysterious figure observing** her from the sidelines before he walks away.



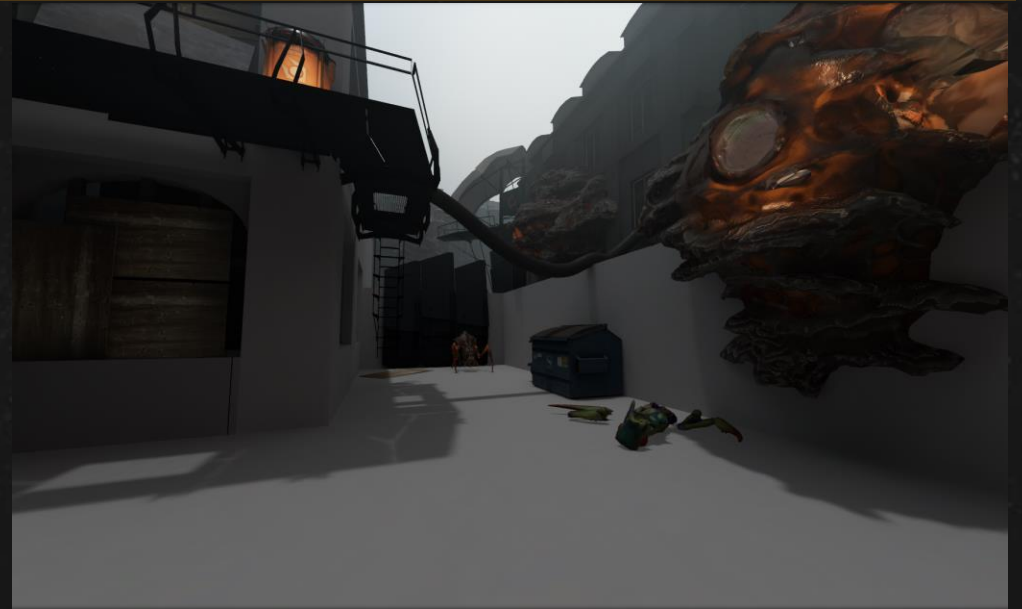
# Walkthrough – Back Alley Platform

As she approaches the **ladder**, Alyx is **attacked by an Antlion** coming down rushing from a nearby **nest**.

After dealing with it, **Trysha** will comment on the Combine installations' omnipresence but **lack of security**. Alyx also can find **resin** inside a nearby garbage container.

The way behind the Antlion being **blocked by a barricade**, Alyx **climbs the ladder** and **follows the cable** to a large open window leading to the **building's interior**.

Getting over and **around the cable** she can also find a **supply crate** containing **pistol ammo** and observe the enormous hives covering up the building.



# Walkthrough – Stage Ambush

Coming down from the **window**, Alyx observes the **green cable** slithering over an **inaccessible balcony**. She is now standing in a large **communal room**, facing a **stage** with a **hanging corpse** stuck in a hive with a **weapon in his hand**.

A **closed metallic door** can be seen on the left, as well as a **semi-open one** with orange-tinted lighting and a **thin green cable connecting** to the metallic door coming out of it.

As Alyx reaches the **center** of the room, **two Antlions** come out of the glowing hives above. She must be quick to **cripple their legs** or she'll be surrounded. If she's fast enough, she can **circle around** them and finish them off by hitting their backs.

With the Antlions dealt with, she can freely explore but still **hears loud banging** and insect noises from afar.

She then heads for the **semi-open door** near the hanging corpse.



# Walkthrough – Hanging Shotgun

Behind the door is a **backstage area** **blocked off by a giant hive** lying in its center. The **thin cable** slithers behind the hive, suggesting there's **something behind**. A dead Combine soldier holds **pistol ammo** for her to find.

Alyx then heads on **stage** to reach the **hanging body** holding a **shotgun** and a few **shells**. As she grabs the weapon and loads it, she hears more **loud noises** from behind the stage.

The **noises grow louder**, and something bangs on the **wall** repeatedly until it **breaks**, revealing the **backstage area** and an **Antlion rushing** out to attack Alyx.

She quickly dispatches the Antlion with her Shotgun on such close range. She notices and grabs a **Combine Battery** as well as more **shells** and heads in the newly opened area.



# Walkthrough – Backstage

Entering the room, a **Combine Generator** lights up with the holographic display of a **Battery**. Alyx uses it to activate a nearby **electrical panel** with her **Multitool**.

A **small light** sparks and activates as she opens the panel and begins the **Toner Puzzle**, revealing **electrical currents** and **branches** with her Multitool.

The **Toner** takes her to **shelves** where she has to **remove items** preventing her from interacting, as well as a **file cabinet** and a **wardrobe** where she can loot to find **ammo**. Eventually the path gets around the **wardrobe** which is **too high** for her to reach.

Alyx turns around and finds a **small crate** she can place in front of the wardrobe to **climb up** and finish **connecting** the **Toner branches**. The whole path lights up and the **cable** on the floor **sparkles**. **Trysha** jokingly asks Alyx to also make her a **Multitool**.

She can also **explore** the back of the room and find **ammo** and **resin** hidden behind objects on **shelves**. The giant hive blocking the way from earlier is also here, the **connecting cable** now **active**.



# Walkthrough – Tripmine Corridor

After going back through the stage room, Alyx finds the **metallic door** connected to the thin cable now **open**. Behind it however is a **narrow corridor** with active **Tripmines** attached on the walls.

She can **crouch underneath** some of them but has to **defuse** at least one to progress further. She must **move slowly** and make sure she doesn't **fling objects** into the **Tripmines'** lasers.

She then hears **Combine radio** calls in a neighboring room with **Trysha** confirming she's **getting close** to their outpost and **Hahn**.

Alyx **recognizes** the **corridor** she saw soldiers fight in from the courtyard earlier. On a nearby wall is the **Locker** she noticed earlier containing a **Grub Vial** she can collect.

After avoiding most Tripmines, she finds **supplies** on a gurney and must **defuse** one final **Tripmine** to enter the next room as she hears more **Combine activity**.



# Walkthrough – Lobby Shootout

Alyx enters and sees **boarded-up windows** and **two entrances**. She can hear several **Combine soldiers** nearby. If she observes through the board gaps or leaning near the right entrance, she can see an **Ordinal** patrolling the inner room and a **Grunt** interacting with a console. **Another Grunt** patrols near the left entrance, often leaving his **back turned** as he walks away.

As long as she **stays low**, Alyx can **observe** and **plan her approach**. Whenever she engages or is spotted, the squad of three **soldiers form up** and will attempt to **corner her** or flush her out with **grenades** or **Manhacks**.

Using the **pistol** on **burst fire** mode is useful to engage from one end of a corridor to another but the **shotgun** can be very effective if she manages to catch a **soldier off-guard**. One Grunt also carries a **gas canister** to dispatch him quickly and if the **Ordinal dies**, the Grunt won't be as **effective** on their own.

When the entire squad is down, Alyx can use her **Grub Vial** to activate a **Health Station**, find **ammo** scattered around and even **resin**. However, after a few seconds an **alarm sounds off** and **reinforcements** are called in.



**THANK YOU  
FOR  
READING.**

