

Left 4 Dead 2

Camp Hope - Level Design Document

Current Version: v0.3

Contents

1.0 Document Information	3
1.1 Version History.....	3
2.0 Level Information.....	4
2.1 Mission Metrics.....	4
2.2 Mission Location	4
2.3 Overview	4
2.4 Level Layout	5
2.5 Level Theme	5
2.5.1 Mission 1 Themes	5
2.5.2 Mission 2 Themes	6
2.5.2 Mission 3 Themes	6
2.6 WOW Moments	6
2.6.1 WOW Moment 1 – “Quarantine”	6
2.6.2 WOW Moment 2 – “Shafted”	7
2.6.3 WOW Moment 3 – “Rooftop”	7
2.6.4 WOW Moment 4 – “Station Assault”	7
2.7 Level Progression Diagrams	8
2.8 Mission Difficulty and Pacing	8
3.0 Actors	10
3.1 Players.....	10
3.2 Infected	10
3.3 Special	10
4.0 Possible Technical Limitations	11
4.1 Draw Distance	11
5.0 In-Depth 3D Layouts	12
5.1 Overview	12
5.2 Mission 1	12
5.3 Mission 2	17
5.4 Mission 3 - Finale	22

1.0 Document Information

Designer: Lee Beaver

1.1 Version History

v0.1 - Document created and Level Information added.

v0.2 - Added level walk through images.

v0.2 – Added level pacing diagram and breakdown.

2.0 Level Information

2.1 Mission Metrics

- Campaign split into 3 missions.
- I'm aiming for 20 minute completion time for the 1st 2 missions and a quicker more intense final mission that should take around 10 minutes.
- Majority of zombies in the first mission will represent general public, but from the 2nd mission onwards zombies will have a military look to them.
- There are several different themes in the level. The wooded area that the players start in, the general military base which includes general military buildings such as barracks, the installation under ground and the train station.

2.2 Mission Location

- Located at an undisclosed military base in the deep woods of Vermont.
- Base is nicknamed Camp Hope by the survivors.
- Level takes place mostly outdoors, but also inside military buildings and underground.
- Takes place early morning, level is lit by low light and manmade lights will be used sparingly to help guide the player through the level.
- Takes place during summer.

2.3 Overview

The survivors have been told to head to an undisclosed military camp in the woods of Vermont. The camp has been aptly nicknamed by other survivors as Camp Hope. The survivors are expecting to find a safe haven from the infected horde, however they quickly realise that this might not be the case.

The survivors arrive outside the camp on the river via a boat. The first task is to navigate the brief wooded area and find a way inside the camp. Once in they'll see the main building (objective) slightly in the distance across the base (foreshadowing).

The survivors will need to navigate through various parts of the front section of the camp in order to get to the main building. They'll be met by various obstacles such as locked gates, military vehicle pileup (with car alarms) and eventually making it to the front entrance. The survivors will quickly realise it's locked down and they will need to use the nearby sewer entrance to get in. Once in the base they'll take the elevator down to the secure area.

Upon arrival to the secure area the survivors will find the area empty of survivors and military personnel and not in a secure or safe looking state. Survivors will be prompted to activate the exit door in order to make a getaway. This will activate the panic event, the horde will pour in from the side rooms and the central containment unit located in the ceiling (and previously hidden from the survivors) will lower down revealing the glass container full of zombies.

Once the players survive the panic event they will head out the exit and into the safe room (check point). Inside the secure room and also in the safe room will be various messages suggesting they

should escape via the military train. Survivor's characters will also discuss this with dialog, to ensure players know what the next objective is.

The players leave the safe room at the start of the second mission and head to the elevator to make their escape. The elevator breaks down with the survivors still inside. The survivors are forced out the top of the elevator and must climb the elevator shaft, navigating the dangerous ledges and ladders whilst fighting off the infected. Once they reach the top they will find their way out of the main building and into the second part of the camp. As soon as they leave the main building they'll be able to look straight down the main street and see the train station in the distance. The path, of course, will be blocked.

On their way to the train station the survivors will need to overcome various obstacles and dangerous locations. One location being the camp site (where infected players and infected zombies can ambush from). The survivors will need to survive narrow corridors and moving in and out of buildings and roof tops with open platforms between them. All these areas pose a threat to the survival of the players due to the layout of the geometry and pathway.

Once the survivors make it through all the above they will reach the train station, which they will enter through a side door which leads them to the final safe room (check point).

The final mission takes place inside the train station; this area acts as the battle ground for the finale. The survivor's best bet for survival is to stay inside and on top of the central station building, which is where the radio, ammo and health is located. Survivors will be attacked from all sides and from the top and the bottom, they will need to work together in order to survive. Eventually the rescue train arrives and the survivors can escape.

2.4 Level Layout

The level layout has been created to ensure the players visit various different themes throughout the campaign. The themes are all logical and help support the narrative of the level, but offer enough variety to keep the players entertained.

The level has also been designed to make the most use of the level area by weaving players through the military camp. This not only keeps the amount of assets needed down but also ensures there are areas in the map for infected versus players to cause trouble to the survivors by pulling them back to past parts of the level. The design also makes use of environmental foreshadowing by showing players the objective destination in the distance.

2.5 Level Theme

Below is a brief overview of the visual themes for each section of the level; a more in depth breakdown can be found in the Visual Reference Document.

2.5.1 Mission 1 Themes

Mission 1 is broken down into 3 main themes, these are as follows:

Wooded Area

The players first arrive outside of the camp by boat. They land on a small dock in the wooded area just south of the camp. This area will feature dense forest and steep hills which help guide the players with inviting pathways through the wooded area. As it takes place during the summer the

ground should be mostly clear of leaves and the trees various shades of green. This section will be lit entirely by the morning light.

Camp Hope (front area)

The front area of Camp Hope will feature various military buildings, vehicles and objects (such as sandbags, containers etc). The ground will match that from the wooded area but with no leaves, just often travelled paths marked in the mud as well as asphalt roads. This section offers a little more manmade lighting than the wooded area which will be used to help guide the player. The front area is also enclosed by the barracks.

Secure Building

Once players enter the secure building they'll find a more metallic and clinical looking area. It will however be apparent that the area has been abandoned for sometime due to various environmental hints such as, many broken lights, rust and dirt decals, and props that have been smashed up or disrupted by the infected.

2.5.2 Mission 2 Themes

Mission 2 is also broken down into 3 main themes, these are as follows:

Elevator Shaft

The elevator shaft area will consist of very dark concrete textures and various metallic surfaces and textures for railings and ladders. The section will be lit by red emergency lights with several flashing to increase the tension and pace during this section. The area is going to be very close quarters, but will be slightly exaggerated than a normal elevator shaft to ensure players can still navigate it.

Camp Hope (back area)

The back area of Camp Hope features mostly military offices and buildings. The inside of these buildings will more closely resemble the urban buildings found in other L4D2 campaigns. The areas should be designed to suggest other survivors took this route and may even have resided up stairs and on the roof of many of the buildings.

Camp Site

The campsite is quite an open area of the level and as expected features a large amount of tents. The tents are to be styled off of military tents, with some being open and some being closed. The open tents serve as a great place for the infected to ambush players from.

2.5.2 Mission 3 Themes

Mission 3 consists of only one theme and that's the train station. I decided to theme the train station around what one would expect from a more civilian station but with environmental hints towards a military setting. This ensures players instantly recognise it as a train station.

2.6 WOW Moments

I am aiming to create 4 impressive WOW moments for this level and these are as follows:

2.6.1 WOW Moment 1 – “Quarantine”

The first WOW moment takes place when the survivors enter the secure area inside the main base. The survivors expect to find military personnel and other survivors but quickly realise no one is left but a few zombie stragglers. At this point they are prompted to activate the exit door in order to

leave the area. The door switch triggers the alarms and starts the panic event. Unlike other panic events, this one has a twist. Situated in the ceiling is a glass containment chamber, it won't be visible to the survivors at first, but upon the alarm sounding it will begin to lower to the floor. The survivors will quickly learn that the chamber is full of zombies which will break through the glass to attack the survivors. The survivors will be used to the usual panic events but the addition of the hidden containment chamber will create a unique experience that builds on the narrative of the level and the experience.

2.6.2 WOW Moment 2 – “Shafted”

The second WOW moment comes at the beginning of mission 2. The survivors attempt to return to the surface via the elevator, however just as it starts to move up the elevator breaks down forcing the survivors to escape through the top of the elevator. The survivors find themselves at the bottom of the elevator shaft (unique area) when the horde start attacking from above. The horde will climb down the elevator shaft and jump down on top the survivors who will need to dig in and take them out as they pile down the shaft. The extremely claustrophobic setting and the fact all the infected are attacking from above is something survivors haven't experience before and will create an intense experience for the survivors. Once the horde as been killed the survivors will need to climb up the shaft to escape the area. This requires them to climb ladders, traverse small ledges and make unlikely jumps, whilst also taking out any remaining infected. These two differing experiences together will ensure the survivors have a memorable experience.

2.6.3 WOW Moment 3 – “Rooftop”

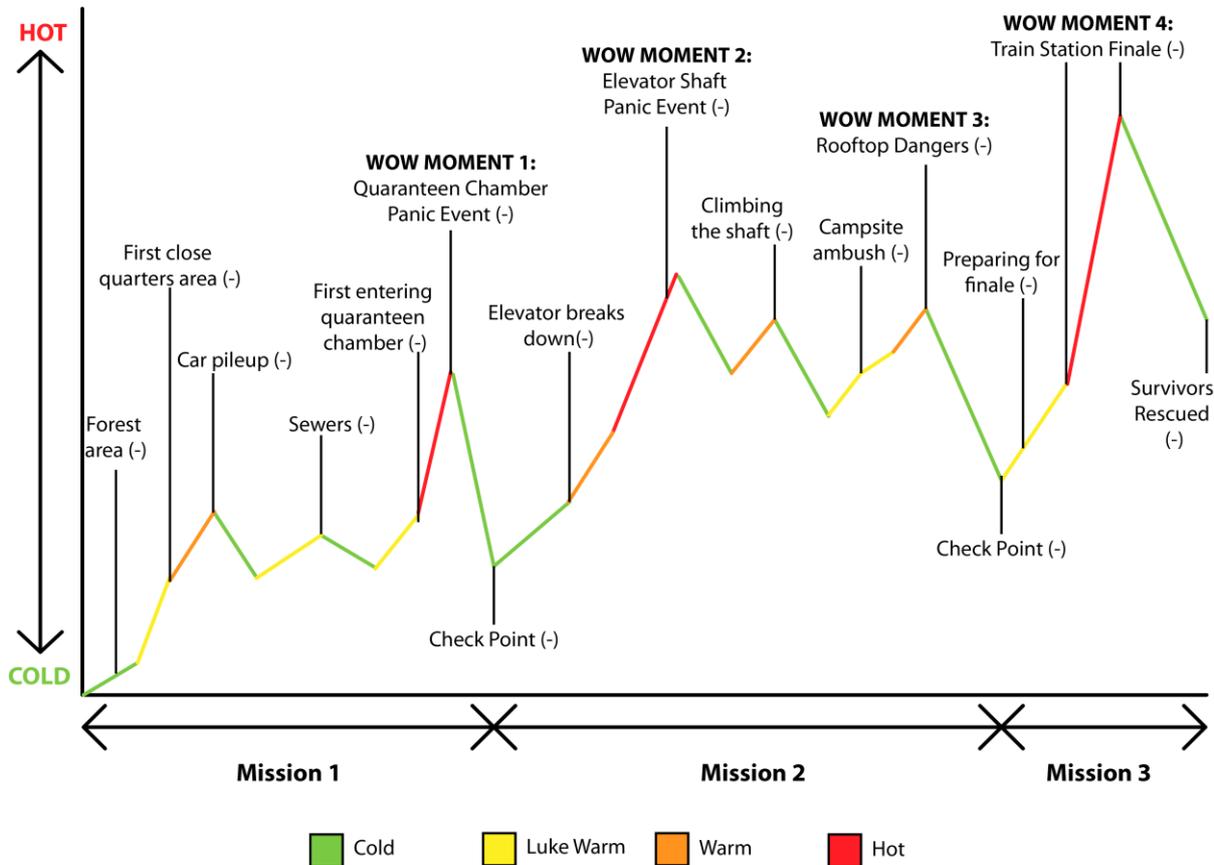
The third WOW moment is one that I hope will occur naturally and not from scripted events. The rooftop section in mission 2 has been designed to encourage infected specials to attack the players from below and cause a lot of trouble for the team of survivors (this is especially apparent when playing versus). The aim for this section is to really increase the danger and fear of the players but through the potential environmental traps alone and not from and scripted events. It appears right near the end of the second mission and with the train station in sight which helps give the players hope but also remind them that they're so close to finishing, but not quite. If players are pulled, or pushed from the rooftops or walkways they will need to back track in order to get back up. This is a great way to separate players from the pack and puts the team in difficult situations when deciding whether to carry on or help a teammate get back to the group. One prime example of this is when the players travel over the turned over lorry to make it across to the other rooftop. If the player is pulled or knocked off the wrong side they'll have to back track a large section of the map. I want players to be weary of this section and even fear it, as they'll learn how difficult it can be and it's all achieved through the design of the level.

2.6.4 WOW Moment 4 – “Station Assault”

The final WOW moment is the finale, which takes place in the train station. The train station is a grand indoor area that provides a visually stimulating area to look at, and also an interesting area to play in. The train station will keep the survivors on their toes by providing the director areas all around the central area to spawn zombies. This ensures the pace is kept frantic, as survivors need to cover all sides. There are also several different strategies that survivors can employ in order to survive the finale. Overall this WOW moment utilises a great play space, with intense game play along with impressive architecture to create a memorable finale.

2.7 Level Progression Diagrams

Pacing Progression Diagram



2.8 Mission Difficulty and Pacing

With all Left 4 Dead 2 maps the AI Director controls the majority of the difficulty with how it distributes zombies and when and where it uses special zombies. However, the difficulty can still be controlled in areas due to the layout of the geometry and tasks that the player must complete.

The first segment in the forest is quite open which gives players plenty of time to see the zombies coming and breaks them into the level (mostly Cold pace), the difficulty and pacing increases slightly when they enter the main base due to the more enclosed environment. This is especially apparent in the first building they enter where survivors will encounter zombies in close quarters (Luke Warm pacing). The first designer placed area is the military pile up of vehicles. The players find that a large number of vehicles were trying to escape the base but wound up stuck behind a crash involving several cars. Some of the vehicles are still in one piece and therefore their alarms are still intact. This area forces the players to be very careful with their shots as to not set off any alarms and alerting the horde (Warm pace).

The next crafted area is the short sewer system; this area is a "Narrow Flow" section as players can only take a linear path in a restricted area. Zombies will have areas to attack from above and around the players (Luke Warm pacing). Finally the player makes it to the quarantine area, which should be safe, they find it is not and activates a panic event (Hot pacing). The players make it to the safe house and end this mission.

The next mission opens up with a corridor to navigate that is fairly easy, with few surprises (Cold pacing). The players then enter the elevator section, the elevator breaks down (Warm pacing) which unexpectedly turns into a panic event. The design of the geometry also helps to increase the intensity and difficulty of the area; it is placed at the beginning of the mission so the players don't expect it to happen (Hot pacing). The players must then navigate the platforms up to the top of the shaft; any mistakes could result in the survivors falling down the shaft to their death (Warm pacing).

The next area is the campsite. There will be several tents that are open and purposely facing away from the players, this is a great place for the players to get ambushed by zombies and forces them to be cautious (Luke Warm pacing). It is also a good place for players to attack from in 'Versus' mode as players can hide in tents and attack the players from behind.

Another interesting area comes shortly after the camp site when the players are forced onto the roof tops of various military buildings. This is a great place for special infected to attack, especially the smoker as they can pull the players down into the infected horde below. As with the camp site this area is great for versus game play as it allows the infected players to attempt to force players off the roof, away from comrades and into the zombies below (Warm pacing). Players then make it to the final safe house before the finale.

The finale as with most levels is the pinnacle of the campaign and usually the final part of the level. Players enter the train station and call for the rescue train; whilst they wait they are relentlessly attacked by the horde and various specials (Very Hot pacing). This is the most difficult part of the whole campaign, by having the checkpoint so nearby it ensures that players can replay this section several times without having to grind through unnecessary areas of the level before getting to the finale. Once the players manage to board the rescue train the camera switches to a static camera as they watch the survivors successfully escape.

3.0 Actors

3.1 Players

- Model
 - Coach_SK
 - Ellis_SK
 - Nick_SK
 - Rochelle_SK
- Inventory
 - Empty
- Start Location
 - In the forest on a pier next to the river.
- Motives/Objectives
 - Find and enter the quarantine chamber.

3.2 Infected

- Model
 - Common_Civilian_SK
 - Common_Military_SK
- Start Location
 - Civilian - All missions
 - Military - 2nd mission onwards
- Motives/Objectives
 - To eliminate the survivors.

3.3 Special

- Model
 - Boomer_SK
 - Smoker_SK
 - Spitter_SK
 - Hunter_SK
 - Jockey_SK
 - Charger_SK
 - Witch_SK
 - Tank_SK
- Start Location
 - Spawned by the Director.
- Motives/Objectives
 - To eliminate the survivors.

4.0 Possible Technical Limitations

There are several possible limitations for this level, which are disclosed below.

4.1 Draw Distance

One area where care needs to be taken is in how far forward and back the players can see, or to put it another way, how much of mission 2 can players see from mission 1 and vice versa. Due to the layout of the camp, certain areas of each side of the secure building will be visible to both sides. Some solutions to this problem might be to change the materials used for the fencing between the two areas. If concrete blockades are used over chain link fences in certain areas this would help block a lot of visible assets from either side. Another solution is to ensure only parts of the building that are visible to be left in place, so if you can only see the top floor of the building then the rest can be deleted.

5.0 In-Depth 3D Layouts

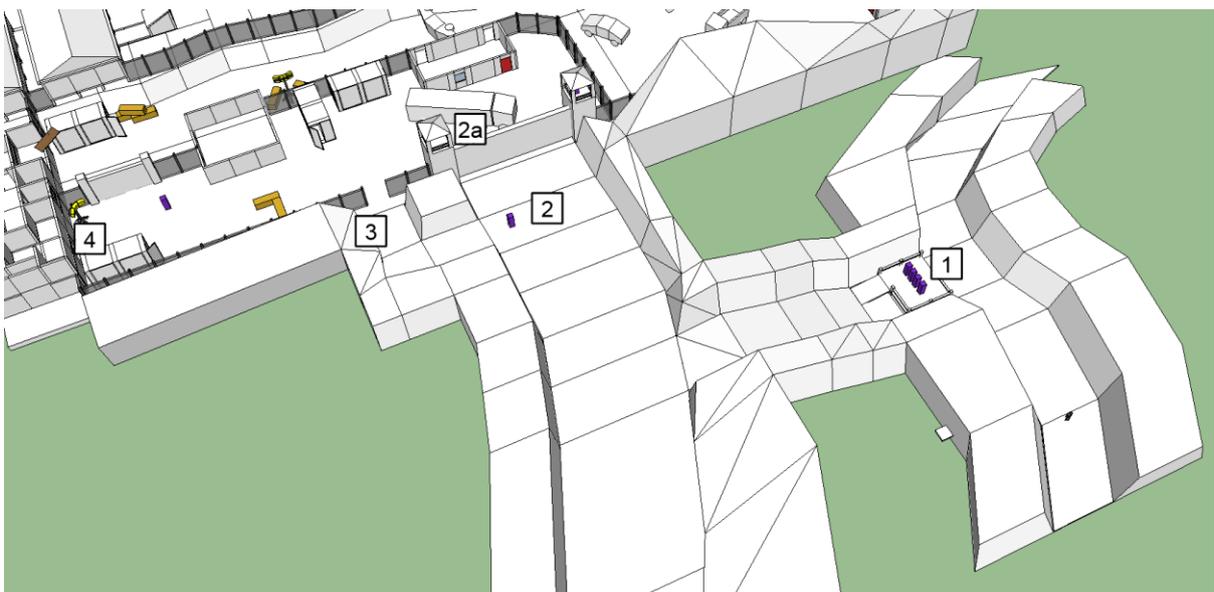
The layouts below show the path the survivors will take, obstacles they will encounter and any other important information in 3D Sketchup diagrams. They are meant as a quick mock up to show the flow of the level not the final look for buildings or objects.

5.1 Overview

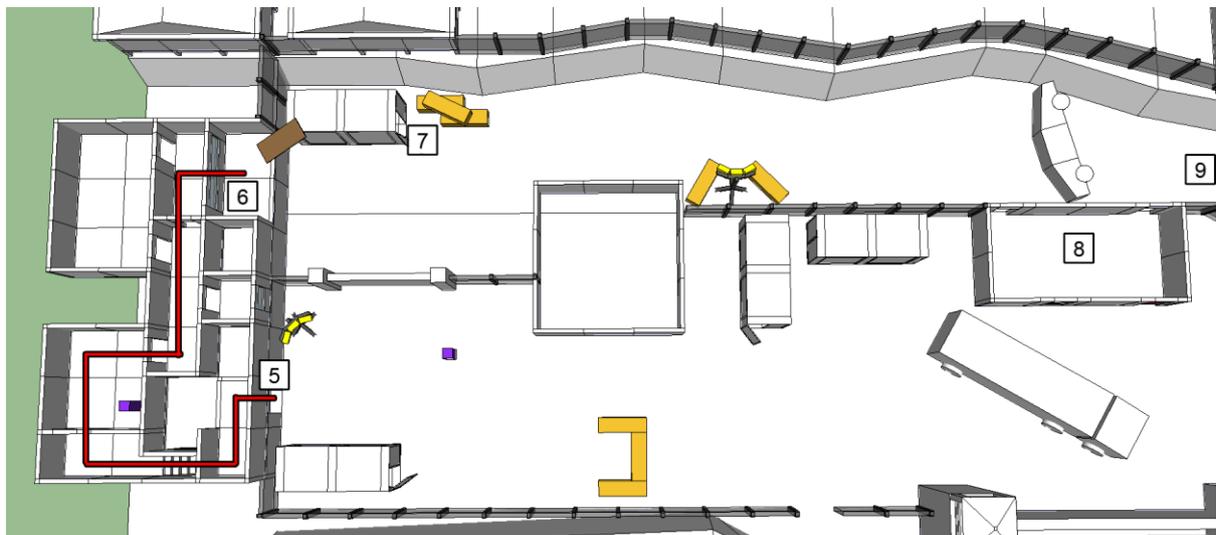
Below is an overview of the whole level, the smaller segment to the bottom left is the underground section which is found underneath the central building.



5.2 Mission 1

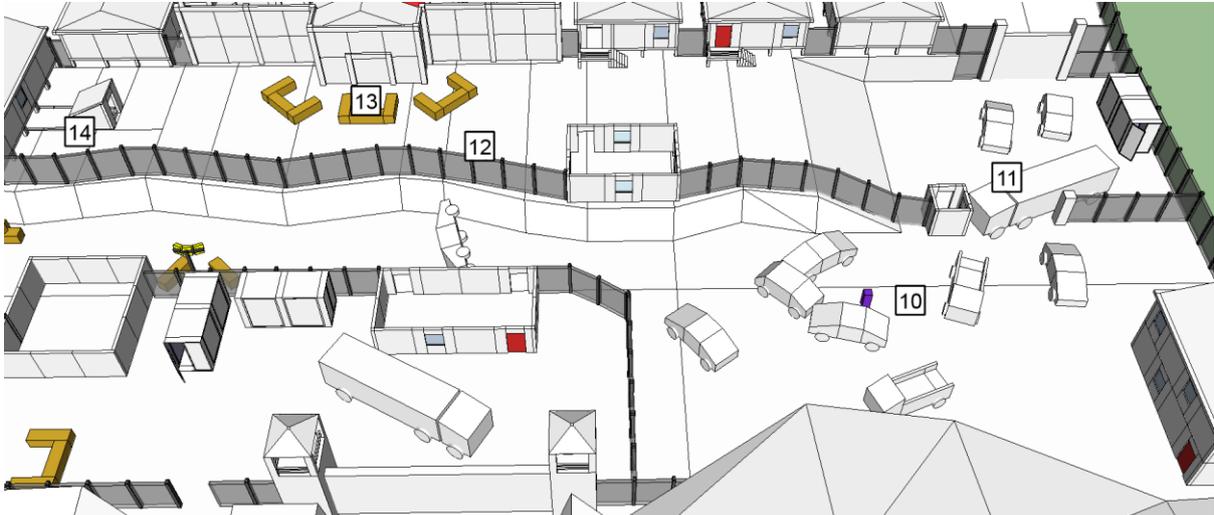


1. Survivors arrive by boat to the pier. When they spawn one of the characters will remind the survivors why they are there and mention they've been sent to locate the secure facility. This ensures the survivors know what their objective of this mission is. They spawn here and will be presented with the following items for their inventory:
 - a. Either a Shotgun or SMG
 - b. Medikit
 - c. Pain pills
2. Survivors head up the hill and along the road till they reach (2). There will be zombies spread along the path. The open nature of the area will ease the survivors in allowing them more time to deal with the zombies. At (2) they'll find the main gate is locked so they'll need to take a path through the hill to the left. Inside the lookout tower at (2a) a spotlight will be on and pointing towards the path through the hill to hint to the survivors that this is the way to go.
3. The survivors will find a broken section of the fence which leads them into the main compound. The survivors will be able to see the secure facility (objective) in the distance; it'll have a rashly made banner hanging up with Camp Hope written on it.
4. Survivors will navigate across the compound to (4) where they'll find the gate locked. They'll need to enter the building to get around the gate.

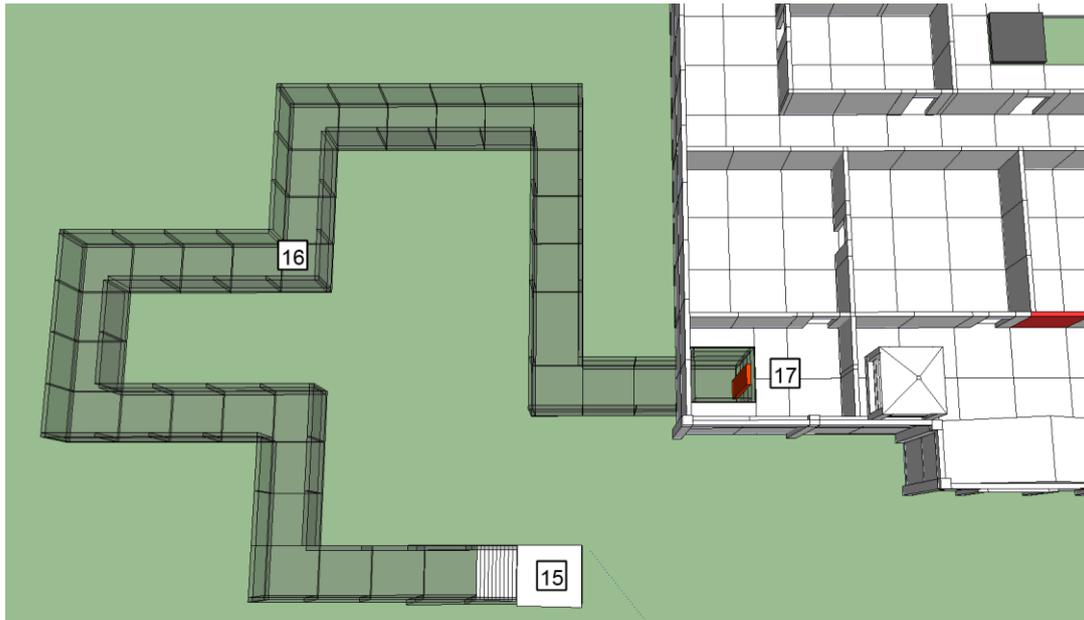


5. Survivors enter the building at (5) and navigate through the interior till they reach (6). This area is close quarters; a stark contrast to the previous sections, survivors' tensions will be up.
6. Here the survivors will need to break through the balcony window before climbing across to the container at (7).
7. Survivors will jump down from the container and make their way along the road. Survivors need to be careful as zombies, specials or players in versus mode could be hiding in the container.

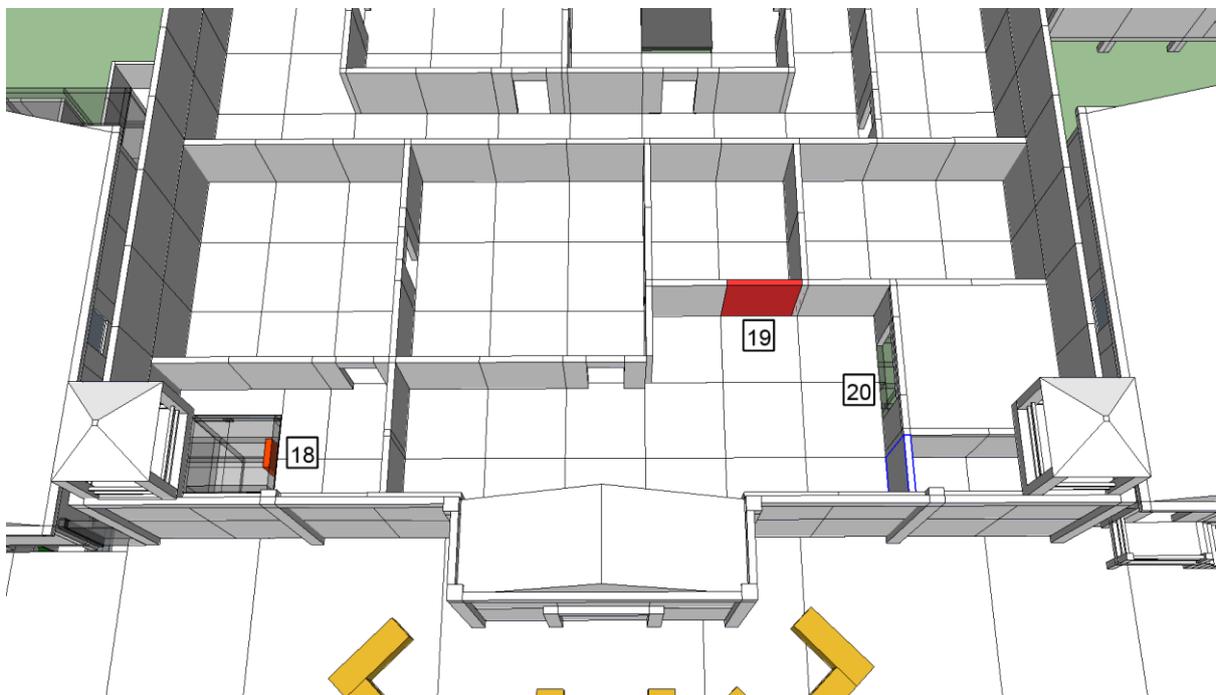
8. Here the survivors will find a car that's crashed whilst trying to evacuate the compound. The survivors will need to go around the car by passing through the interior of the building.
9. Survivors head towards the car pileup.



10. Survivors will need to be careful whilst navigating this area as the cars will all be alarmed. If they're not careful when taking out the zombies they'll end up setting off the horde.
11. The survivors will find their way blocked by a tanker that's toppled over and crashed into the check point. Survivors will need to climb over the tanker.
12. There will likely be more buildings along this section to ensure there are enough areas for zombies to spawn out of view from the survivors.
13. The survivors finally reach the main building but find it's locked. Survivors will find writing on the walls nearby talking about being overrun and to escape when they can, it won't specifically mention that the secure facility below is compromised but it starts the seed. If they look around they'll find some of the spotlights from the main building defences pointing and lighting up the sewer entrance.
14. Survivors enter the sewer system here which will take them inside the main building.



15. Survivors enter the sewers at (15) via a maintenance stair well.
16. The sewers will be narrow and very low lit, creating a claustrophobic atmosphere. Survivors will need to stick together to ensure they don't get pulled away from the group into the darkness.
17. Survivors will exit the sewers by a ladder and enter the main building via a broken vent cover.



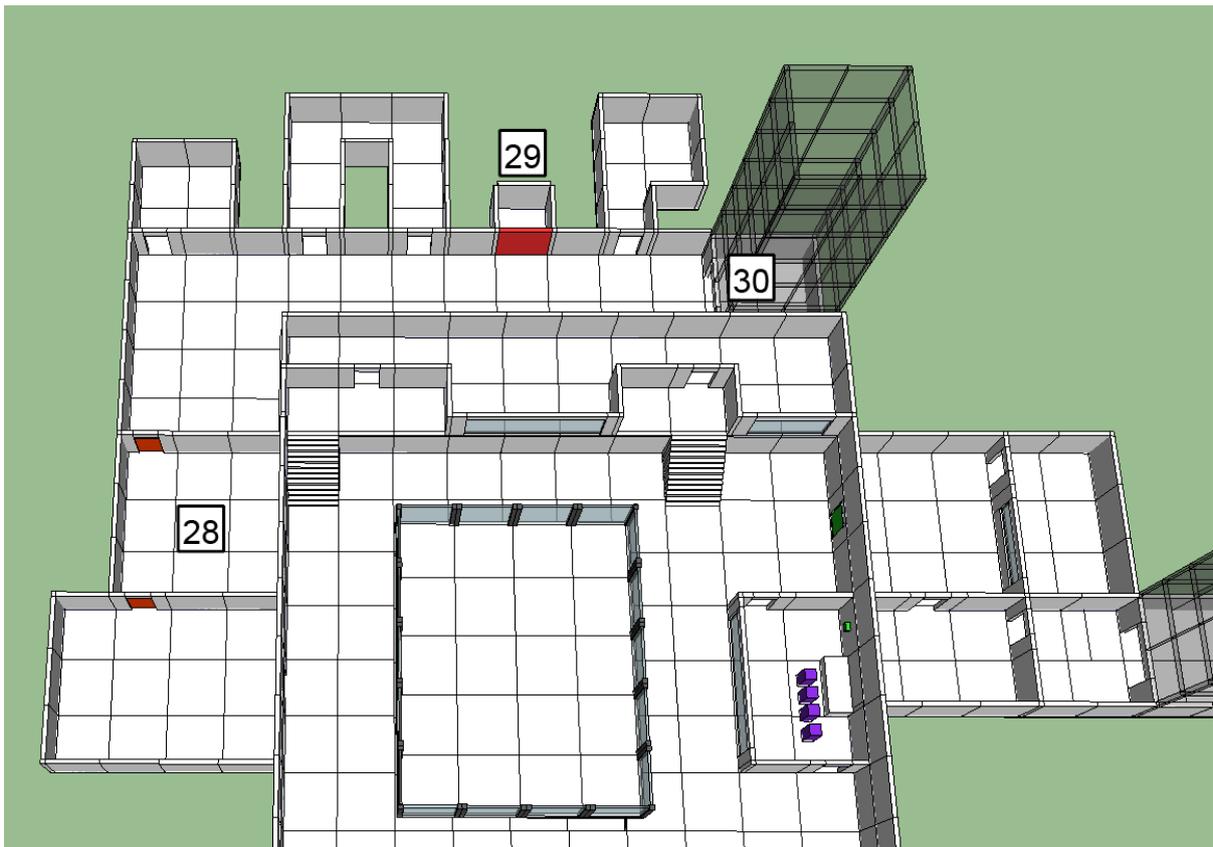
18. The survivors enter the main building via the broken vent from the sewers; they'll make their way past the locked entrance towards the elevator at (20).
19. The AI Director will be queried here, if he is angry (the survivors are doing well) zombies will spawn and break through the wall. If the director is not angry (the survivors are doing poorly) then nothing will happen here.

20. The survivors will call for the lift, once in they'll descend down to the secure facility.

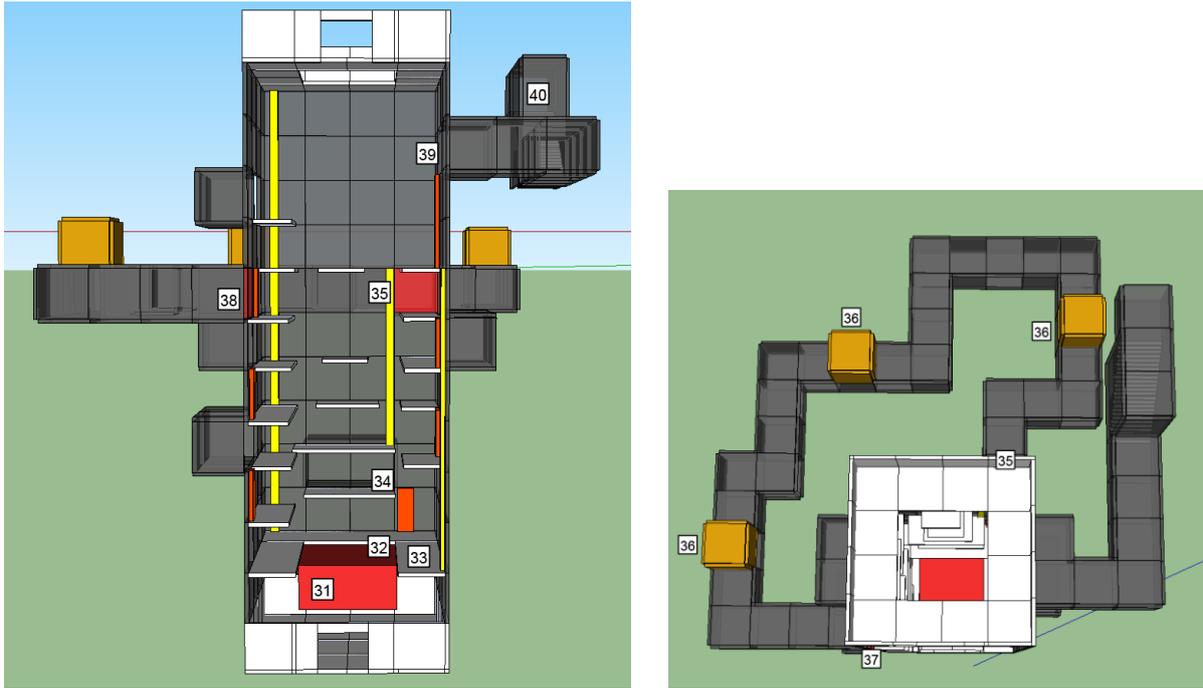


21. The survivors arrive at the secure facility via the lift.
22. The survivors will find the door (23) to the secure facility locked; they'll need to activate the door with the switch at (22). Survivors will find more text on the wall warning the survivors to keep out and stay away.
23. Upon entering the secure facility at (23), they find it's not full of survivors and the military but instead been overrun by zombies.
24. Text on the walls reveals that survivors escaped the facility and have headed to the train station. One of the characters may also verbally suggest they escape by the train station to ensure survivors know the next objective. The survivors activate the exit door by the button at (24).
25. Upon the exit door being activated the quarantine chamber previously hidden in the ceiling will lower down, revealing a swarm of zombies. A panic event is also activated to create a mini finale for this mission. The area around (24) will be marked as the "Battlestation" and zombies will spawn in specially created obscured areas around the room.
26. Once the panic event is over, the exit door will open at (26) allowing the survivors to escape.
27. The mission checkpoint (safe house) is located at (27), once in the level ends and mission 02 begins.

5.3 Mission 2



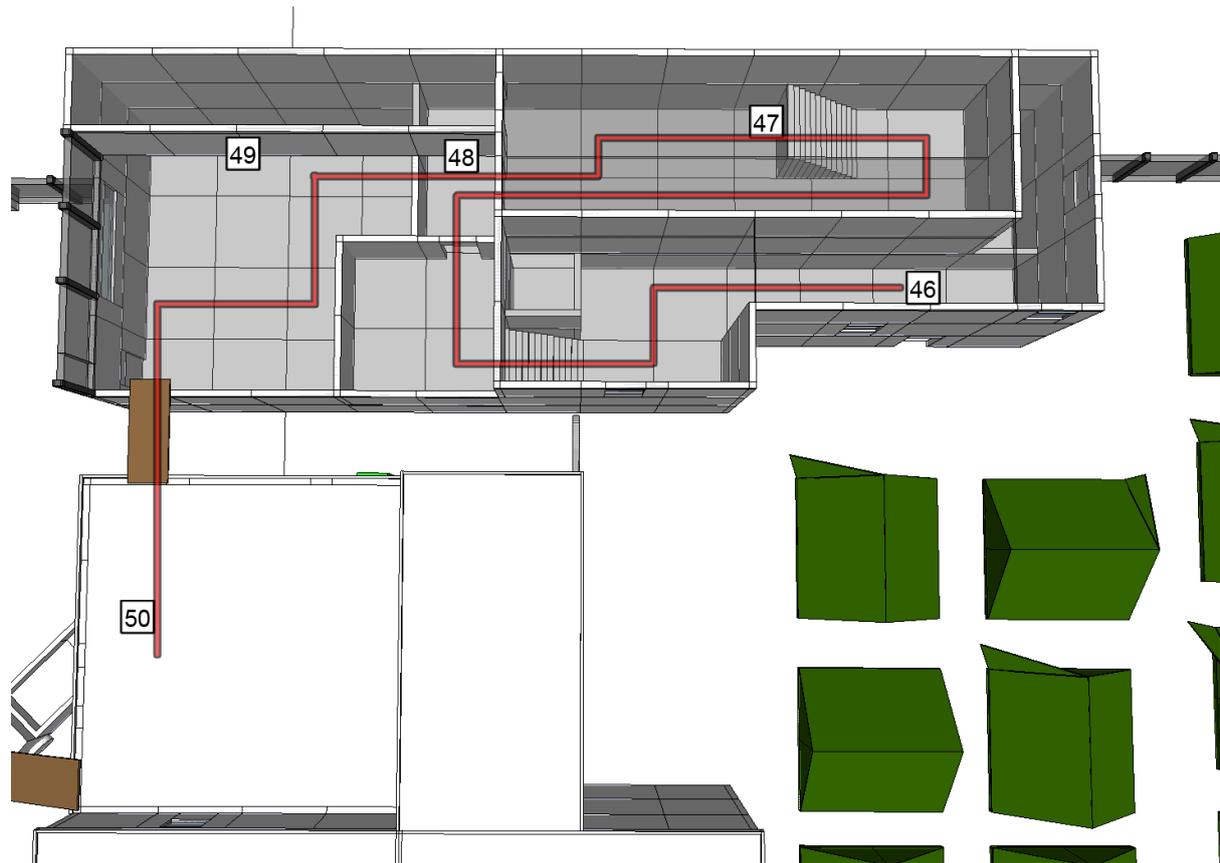
28. The survivors begin in the safe house from Mission 01. Text on the walls will suggest to the survivors to escape by the roofs, and find the train station to call for help. One of the characters again will verbally suggest finding safety on the rooftops and look for the train station to ensure they all know the objective. They can stock up on the following items here:
- Either a shotgun or SMG
 - Medikit each
 - 2 x pain pills
29. As the survivors navigate the corridor towards the elevator the wall at (29) will have the potential to break open and spawn zombies. This will be randomised to ensure replayability.
30. Survivors will enter the elevator here to go back up to the surface.



31. The elevator will start ascend but will quickly break down; alarms will go off to alert the survivors.
32. The survivors will need to exit the elevator via the ceiling emergency exit and climb onto the edge around the elevator shaft.
33. A panic event will begin. Survivors will need to work together to survive the onslaught of zombies attacking from above. Zombies will spawn in the out coves provided and use the platforms to jump down as well as the infected only ladders (yellow).
34. Once the panic event is over the survivors can start to ascend the elevator shaft using the ladders and carefully jumping across the platforms.
35. Once they reach (35), they'll realise they can't go any higher and they'll need to go through the vent system to make it across to the other side where the ladders continue upward. The vent shaft requires the survivors to crouch down to move through it.
36. The areas marked in yellow contain boomer spawners, an area to spawn and a vent cover. Upon begin triggered the boomer is spawned and the vent cover destroyed so the zombie can attack the players. Upon entering the vent shaft (35) one of the yellow areas is picked at random to be triggered by the survivors. This ensures that upon future play-throughs, survivors will be kept on their toes as they can't predict what will happen.
37. Survivors will reach the end of the vent shaft here.
38. Upon exiting the vent shaft survivors will be able to continue ascending the elevator shaft via the platforms and ladders.
39. Survivors can exit the elevator shaft by a maintenance door, which will lead to the maintenance stair well.
40. The survivors reach the surface and re-enter the back section of the main building.

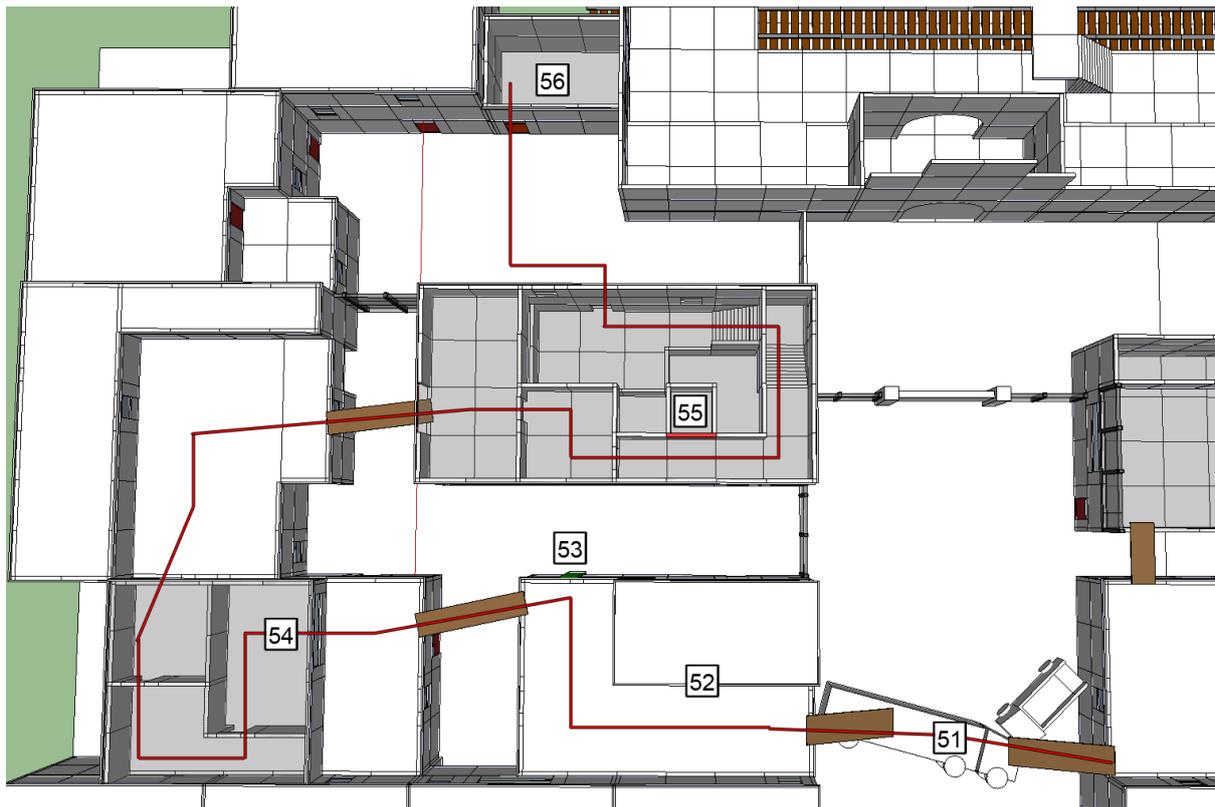


41. The survivors re-enter the main building via the maintenance stair well.
42. Upon exiting the building the survivors will see the crashed vehicles blocking the path and further in the distance they'll see the train station, this gives them a preview of where they're heading.
43. There will be a small arms and ammo cache located at (43) and potentially medikits depending on play tests.
44. At (44) the survivors enter the small camp site; the tents are arranged so some tent doors are open and facing towards the train station. This creates an area that is perfect for ambushing players in versus mode. In the normal co-op mode I'll query the director AI and use this to decide whether to spawn specials inside the tents and if so which ones.
45. Once the survivors make it through the campsite they enter one of the military office buildings.



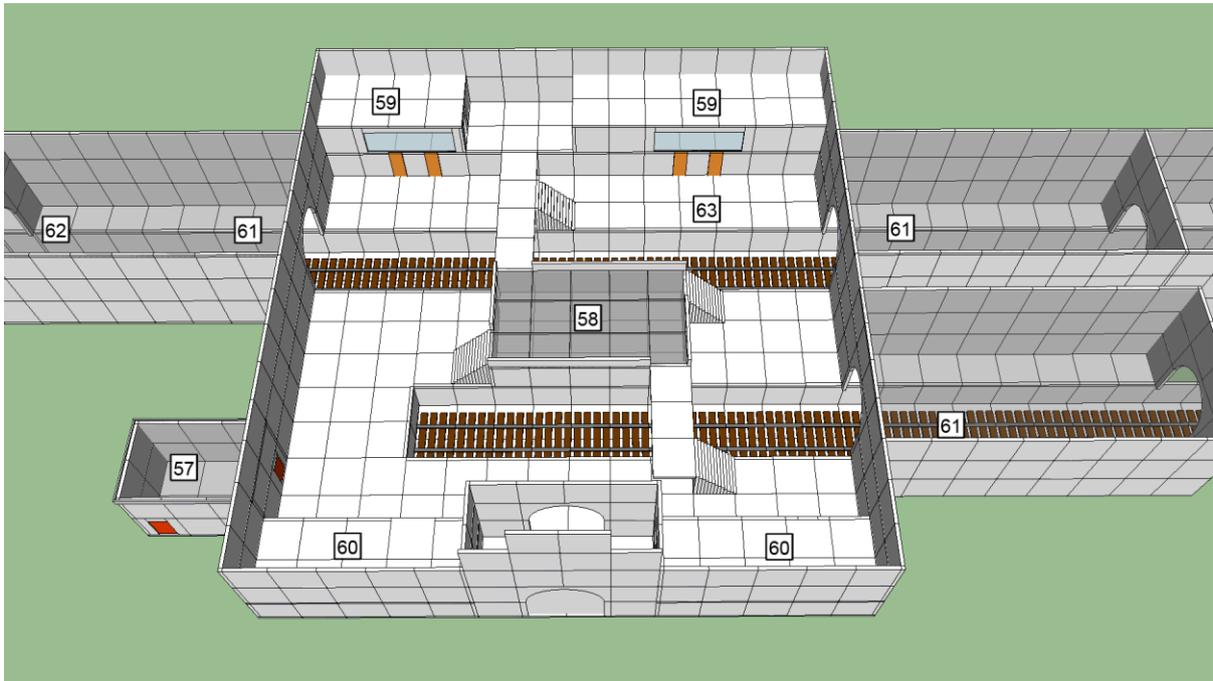
*The layout of the building will likely change to allow for more rooms for zombies to spawn in and give the building a realistic feel to the layout.

46. Moving inside the military office building takes the survivors into a claustrophobic atmosphere, a contrast to the open area of the campsite and road in the previous section.
47. Survivors navigate through the building, weaving down several corridors and up two storeys.
48. The survivors exit the building on the roof. This adds a bit of verticality to the level and also difficulty as survivors need to be careful not to fall off or get knocked off by specials.
49. Zombies will be able to spawn inside this part of the building and attack survivors through the windows.
50. Survivors need to cross the planks of wood bridging the gap between the two rooftops, this is a perfect place for versus players to attack.



51. The survivors must cross the crashed tanker and car; this leaves the survivors vulnerable to attacks. If they are knocked off or fall to the left side of the crossing they'll be forced to loop back around part of the level. This makes this section of the map perfect for versus mode ambushes.
52. As the survivors make it back up onto the roof tops they pass a section of the building which allows zombies and versus players to attack them through the windows.
53. If players fall down inside the section, they'll be able to climb back up via the marked ladder; it also allows zombies to climb up from the streets below.
54. Survivors will need to break into the building in order to get across to the rest of the rooftops. This ensures variety and entering and exiting portals creates chances for survivors to be split from the group.
55. The survivors make it across the final plank of wood and into the final military office. I'll query the AI director again here to decide based on how angry it is what to spawn above the survivors. The ceiling will break open revealing the zombies to attack them.
56. Survivors will finally reach the check point (safe house) next to the train station.

5.4 Mission 3 - Finale



57. The survivors spawn in the check point (safe house). They have the opportunity to pick up an SMG from the table in order to clear the finale area.
58. Here at (58) the survivors will find the hub of the finale; they'll be able to stock up on more powerful weapons and medikits. The survivors will find the radio inside for which to call for the rescue vehicle. The room is accessible by 2 doors either side of the staircases. This area will be the dominant strategic position due to the great visibility of the level and higher ground, it is however vulnerable from at least 4 directions. The survivors will have the following items available to pickup:
 - a. Autoshotgun
 - b. M4 Rifle
 - c. 4 x medikit
59. This area of the map will be mostly obscured from the survivors; the director AI will be able to use this place to spawn zombies. There will also be holes in the ceiling from which zombies will be able to spawn from. Zombies will be able to path along the bridge to the central point, or break through the windows and climb/jump down to the floor below.
60. At both points marked (60) there will be doorways leading to rooms underneath. These areas will again be obscured and make for suitable places for zombie spawn locations.
61. These areas along the train tunnels will be accessible to a certain extent by players and will make for great areas for zombie mob spawns and specials.
62. The rescue train will appear from here at (62) and will make its way towards (63).
63. The rescue vehicle (train) will pull up here and wait for the survivors to get on board. Once on board the camera will fade and switch to a static camera to watch the train leave to safety.