



# ADONIS COAST (KOH)



A TF2 MAP BY LAUREN PEARCE



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# High Level Design Overview

## Main Objectives

- To create an interconnect but not overwhelming layout.
- To create suitable routes and areas for each class, allowing their abilities to flourish but not be too overpowered.
- To make a sniper perch but not become a sniper's paradise.
- For the level layout to adequately guide the players towards the control point.
- For the control point to be the visual focal point of the level.
- Choke points are spread out adequately to not create too much tension in one area and detract from the main combat area.
- To have the levels core theme be cohesive and tie naturally into gameplay.

## Design Motivations and Inspirations

### Cover believability

The environment is inspired by the cohesive cover in games such as The Last of Us, where their cover blends more believably into the environment, rather than feeling narratively out of place. Examples are shown below:

#### Natural cover



This area is outside of the main combat zone and the cover blends into the believability of the map. Adding to the theme of excavation and destruction. But in Harvest, whilst I'm fine with the location of the

Here the furniture can be used as half cover and doesn't feel out of place at all. It perfectly fits the environment and makes for a more realistic improvised and frantic combat experience.

This cover doesn't feel questionably placed as it all fits into the apocalyptic worldbuilding and aesthetic. It narratively makes sense, as many cars have been abandoned and make obvious hard cover.



## **Satisfying jump routes**

I was also motivated by some of my personal enjoyments from playing TF2, especially jumping. Whilst playing Scout, I greatly enjoyed jumping across gaps, but playing as other characters was often underwhelming to me, as there were less satisfying jumping opportunities. Due to this, I attempted to give all classes the ability to jump over some gaps (but Scout the ability to double jump over two etc), which enabled more spaces to be tactical perches, whilst being relatively open.

## **Gears of War's level design**

Furthermore, Zi Peter's combat bowl article (2015) from his design analysis of Knock Knock level in Gears of War. Zi aptly stated the "larger space promotes more movement ... and allows for more interesting geometry to interact with". The combat bowl is laid out in such a way that the enemy front is easily digestible at a glance and the killzone is large enough to adequately separate the flanks. Furthermore, recuperation is a key element of this level as Zi mentioned, as near a flank route, there are pickups, which reward the player after engaging in tense combat, which is something I took inspiration from when placing my pick-ups also.

## **Cathedral Cave in New Zealand**



The natural wonder of the cave combined with my own added themes of excavation and modern-day piracy to try to create a fascinating and atmospheric game environment to play in.

## Overwatch – Nepal level's elevated areas



Above is an example of how Overwatch controls sightlines for snipers to usually be one lane.

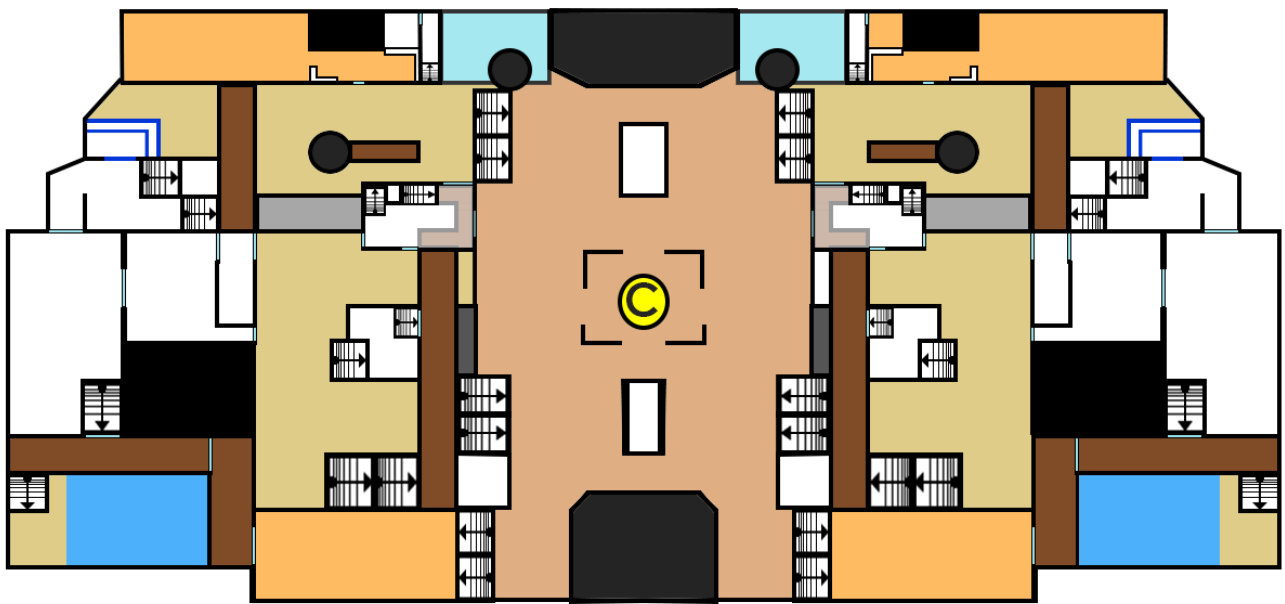
### Key Elements

- Jump route
- Nesting areas
- Sniper perch
- Demo-man gaps and pillars
- Soldier corners of rooms
- Water to stop pyros flames

- Sniper contest sightline
- Interconnected via plank to allow for an escape route

## Expected Player Experience

### Overview Map



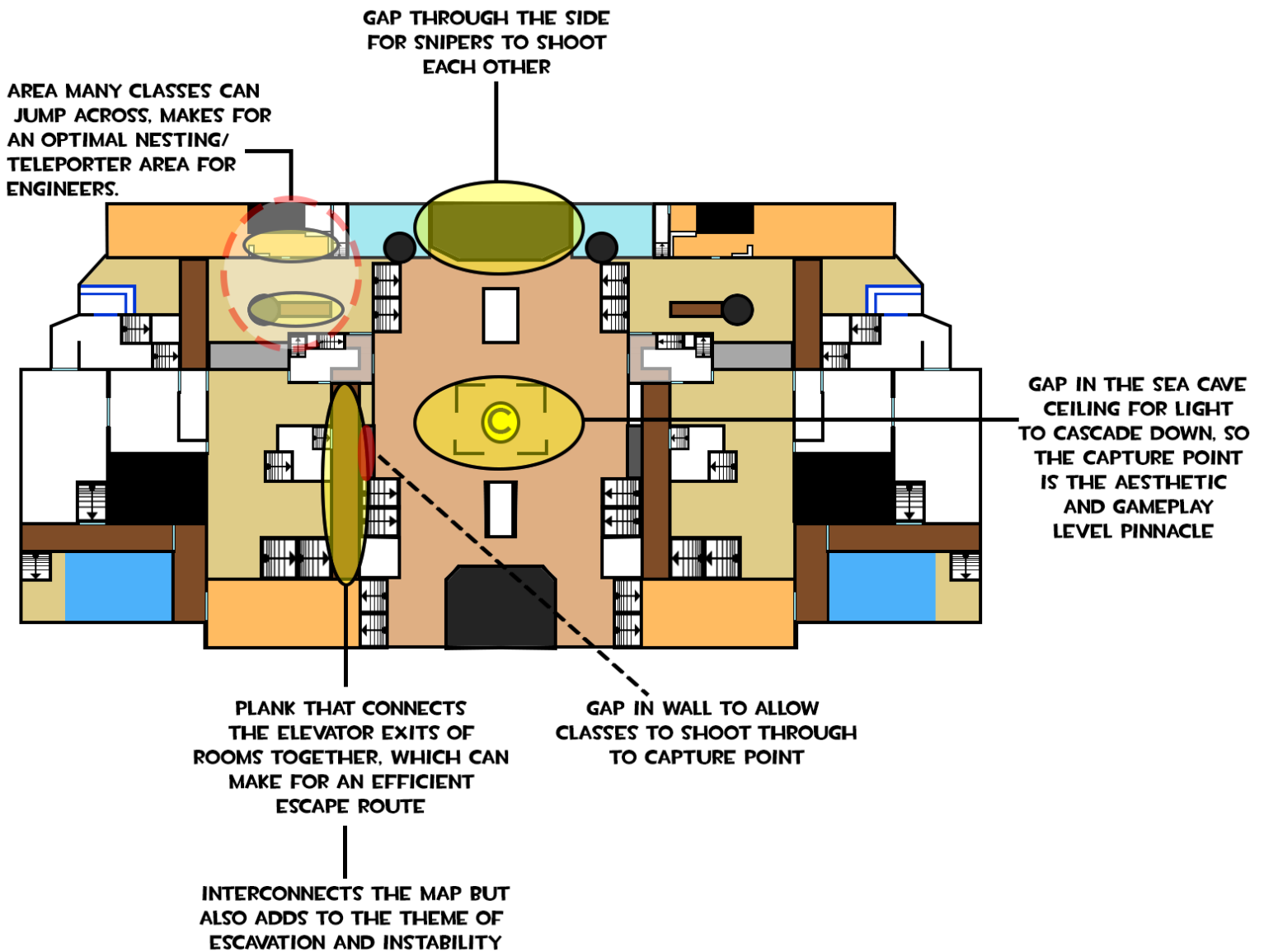
The map is a vertical push towards the capture point. There is an emphasis on verticality, to synergize with the satisfaction of the cave roof rising. The rising roof should decrease some of the tension and make the capture point a more tangible focal point of the level.

If the level were to be lit accurately, there would also be a contrast between the natural light which cascades down from the hole above the capture point, in comparison to the more industrial lighting of the cave system.

Due to the capture point also being the natural focal point, the map designed to create a rush towards the center, with all ramps leading to the main conflict point.

## Points of Interest

- Sniper Perch
- Scout water tunnel
- Control Point
- Support beam tunnel side
- Sniper counter cliff edge
- Scout jump to control point area



The **gap between the pillar**, that allows snipers to see one another, makes the snipers countered from multiple approaches and allows for a rewarding yet controlled, long sightline kill.

They can be flanked underneath, with stairs leading up to their perch, or with enemies utilizing the nearby planks.

I wanted to give snipers a designated area, to encourage teamwork, as players may also try to defend the sniper, and possibly place a turret nearby. However, too much emphasis on this area leads to other areas being more open, so players will have to adapt throughout the match.

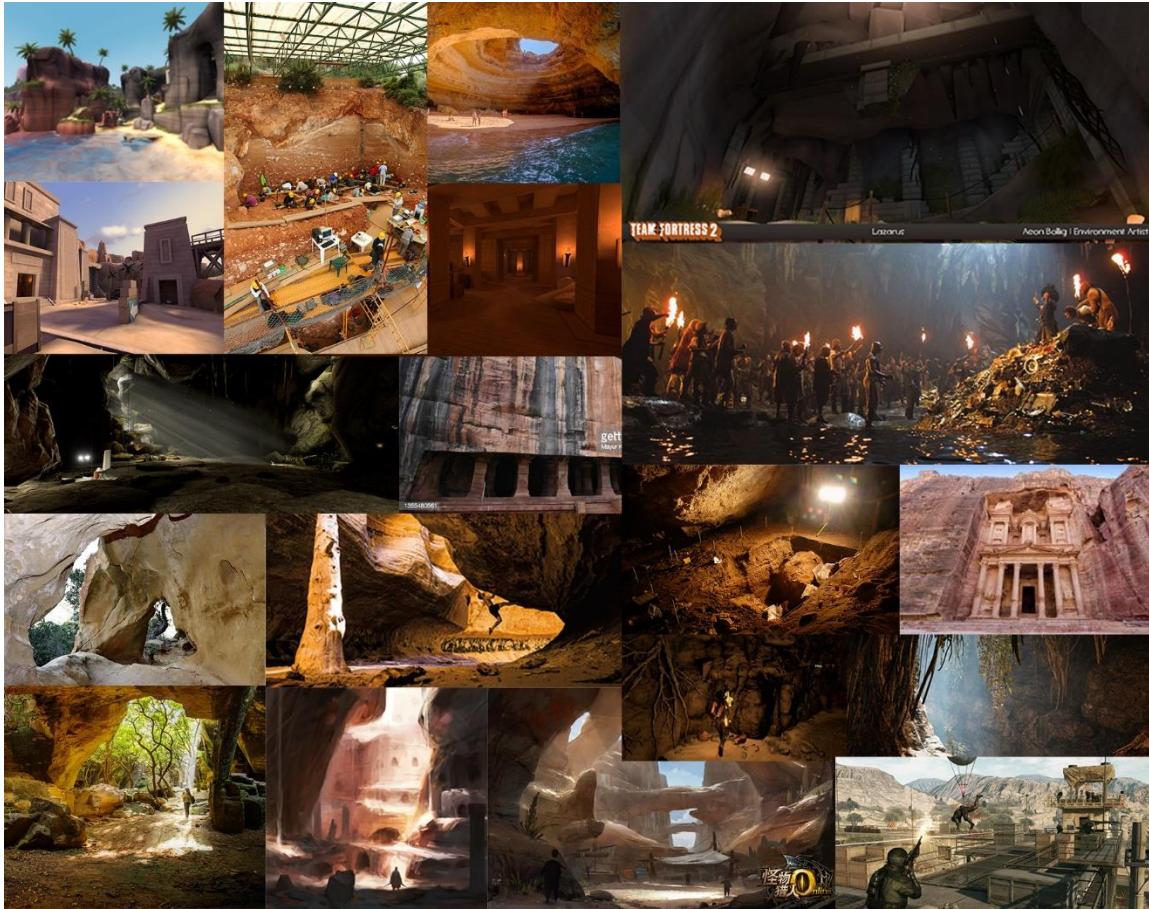
The **jumpable planks** can be utilized by any class and allows for them all to feel the satisfaction of parkour, however, scouts can double jump and make it even further across, to connect to the middle interconnecting plank. In addition, it adds to the aesthetic theme of a makeshift environment.

The **interconnecting** plank was an addition made from playtesting observations, to speed up the combat flow and allow players to adaptively change their entry point to the capture point area more easily and surprise the defensive team.

The **capture point** is the point at which the cave ceiling is at its most open and highest, hopefully relieving some of the tension before reaching it, making its capture more satisfying and freeing. I not only wanted it to be the gameplay focal point, but also the visual focal point of the level.



## Aesthetic (Look and Feel)



The level is set inside a giant sea cave, with light cascading down upon the central control point.

Steel beams hold up many fragile areas, as excavation has been taking place within the area, so there will also be old ruins and industrial lights shining on them in certain areas.

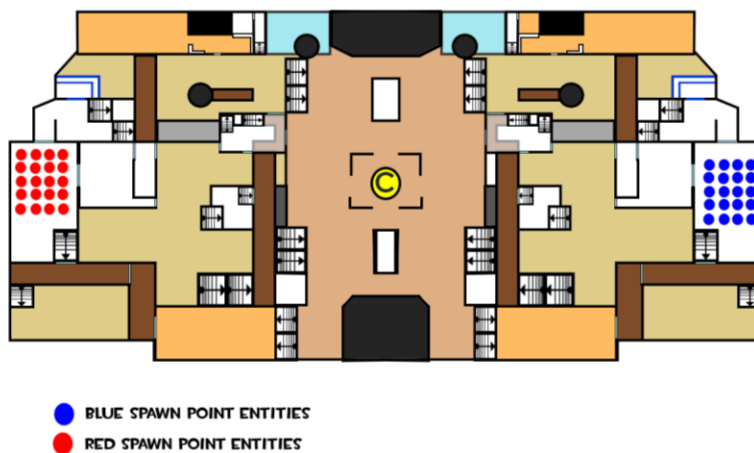
The vibrant lights will help guide the player, as they will control the natural light which drips down from the ceiling.

The tones of the level will be relatively muted, with red side being more natural (using wooden beams) and blue side opting for more unnatural structures (steel beams) etc.

## Lighting –

It will take place during daytime, with rays of light cascading down from giant gaps in the sea cave. In darker areas where there is less light, I will bring in industrial lighting for the theme of excavation to insinuate the archaeologists were trying to find their way around, or to point to a particularly important area.

## Spawn Placement Map



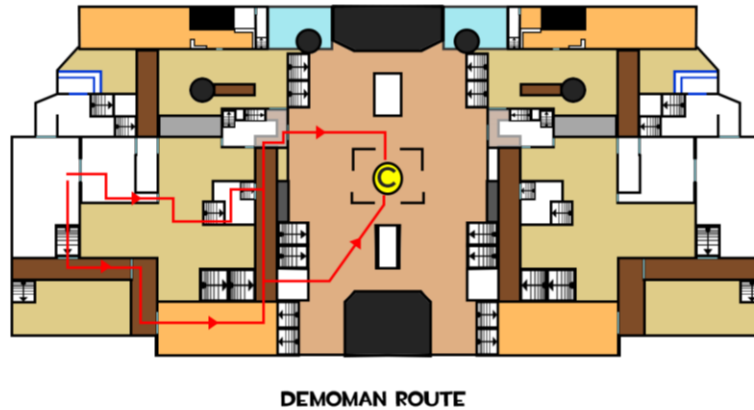
Players are spawned in a room with multiple exits, to lessen spawn camping.

With the ground route being optimal for heavy, demo-man, and the side routes being utilized by scouts and snipers.

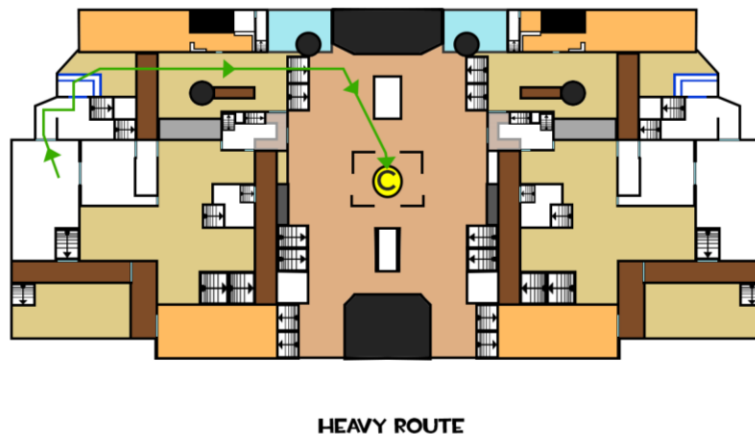
The multiple routes, leading to gameplay areas with features suited for each class, should help each player feel valued and catered for in the map.

## Pathway Maps

### Golden Paths



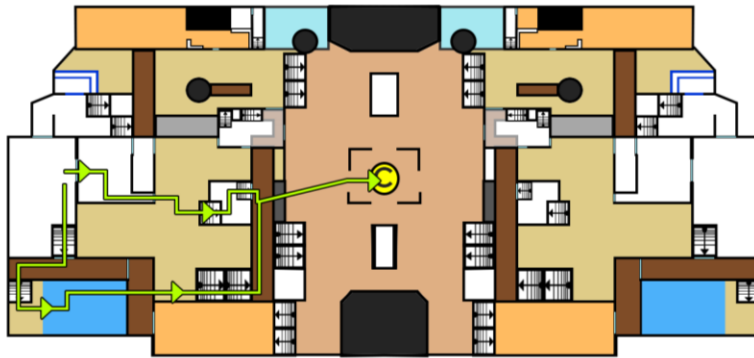
Due to Demoman utilizing frames to place sticky bombs and liking any medium/high sized walls to arch bombs over, this route bypasses a wall of sizeable height, with the goal still visible from below, yet the optimal position to arch is relatively exposed, for risk vs reward gameplay.



The heavy best suits this route as the carved outsides allow him to deal with any invaders that come along and generously shoot alongside. However, he can be countered by enemies utilizing the nearby buildings, so he isn't too powerful.

In addition, the ramp in that route leads directly to the final area before the control point, with cover ahead for them to utilize.

It is the most open route overall for them to utilize, which suits their wide sweeping heavy weapon.



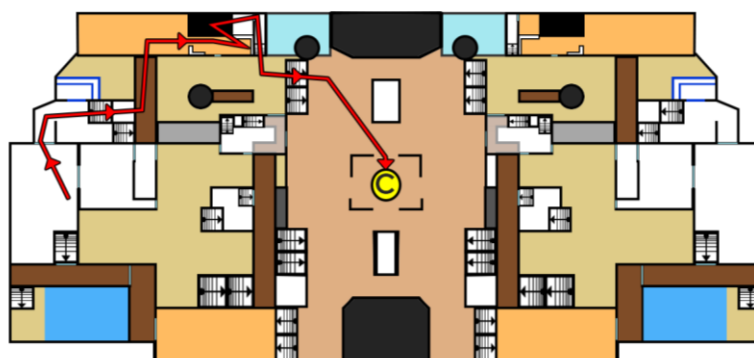
**SCOUT ROUTE**

There are multiple ways a scout could traverse to the control point, which are just as effective and utilize the interconnecting plank.

The bottom route, utilizes planks that only the scout can effectively double jump across that rest upon water. This leads directly to the bottom of the slope, covering them from potential fire.

The middle scout route is faster, however forces them into a tighter space, so would be a riskier but more rewarding decision to use. From the intersecting plank, they can then double jump into the next area for quick access to the control point.

It was vital for me to allow scouts fast access to the control point, so that the match could be more chaotic, and that class could be beneficial in changing the tides.

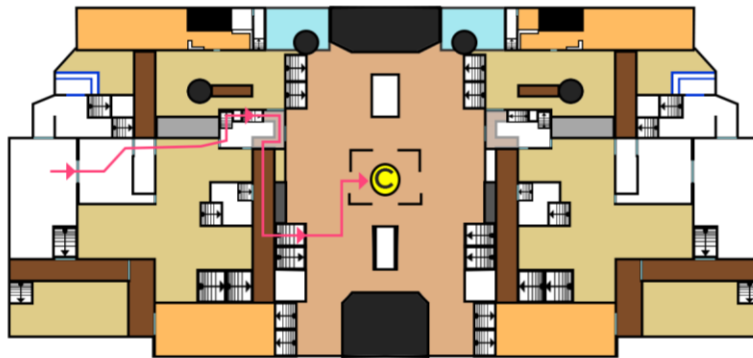


**SNIPER ROUTE**

The sniper route utilizes the sniper perch created, which allows them to see some of the enemies' heads in the zone outside of the control point, as well as corners to the entry of the control point. Furthermore, there is a cutout in the rock ahead, allowing them to

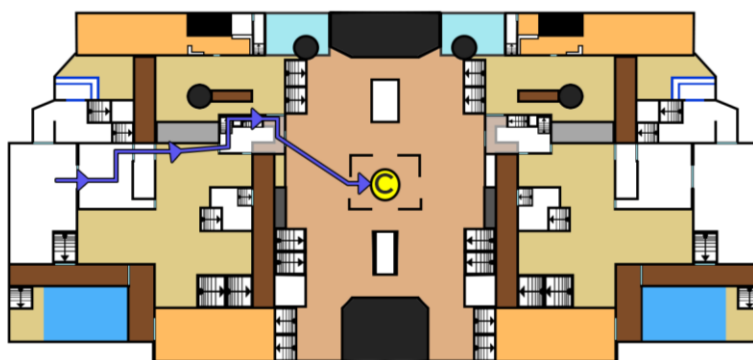
directly deal with the opposing team's sniper ahead, if they are also using their designated perch.

The perch has multiple routes to access for flanking the sniper if they are becoming too troublesome and can also be countered nicely by a heavy or demo-man from afar.



**SOLDIER ROUTE**

Soldier traverses on low ground and can utilize the first building to potentially rocket blast multiple enemies, by either aiming at the corner of the building's interior or the floor. Furthermore, as they then walk across the interconnected plank, they get a good view of the control point, and can attempt to push lightly back/destabilize it before entering.

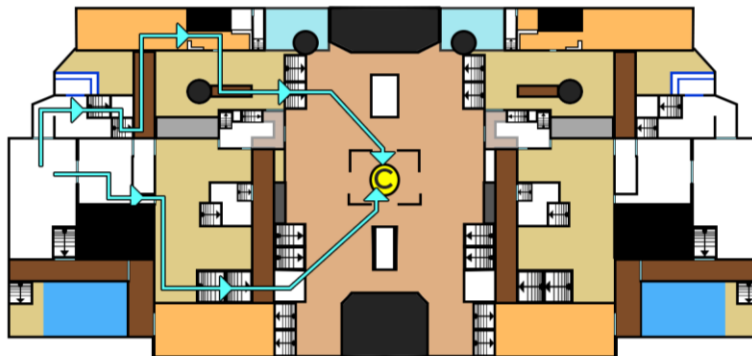


**SPY ROUTE**

Due to the spy's camouflage ability, the spy route needed to be relatively direct and fast, so they could make it to the point in time before it wears off. Even if they do



struggle to make it to the point in time, due to dealing with other enemies, the building nearby provides excellent corners to wait and recharge their camouflage ability at.

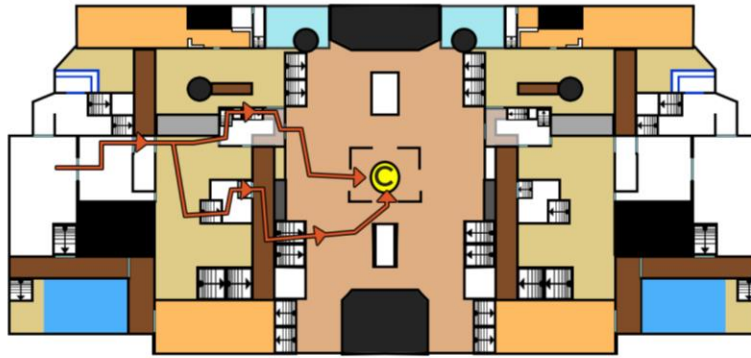


**ENGINEER ROUTE**

There are two main points to utilize turrets on the map, hence the two distinct paths on either side of the map.

The uppermost path allows the player to jump atop a carved tunnel area and place a turret to protect the left side of the capture point, and partially protects the sniper. However, the cover nearby stops it from being too powerful, and demo men can overcome them by arching bombs over etc.

The bottom utilizes another potential nesting ground, which unlike the top one, has an exposed back, so players from behind can easily deal with it also. It is unlikely for them to be utilized together, as they are surrounded by choke points so matches may favor certain ones usage more.

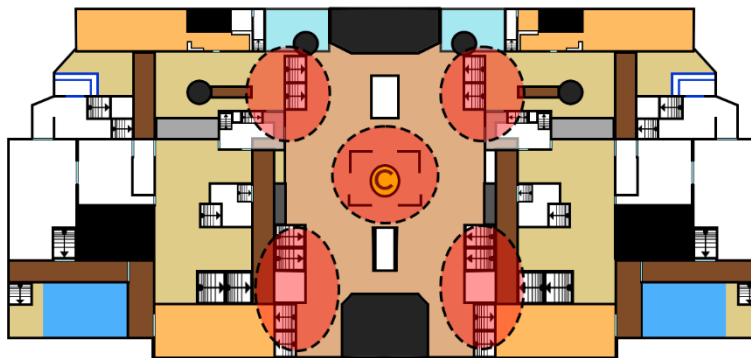


**PYRO ROUTE**

The pyro routes utilise tight spaces, as these are areas they usually excel in. However, straight after exiting the tight areas they are very exposed.

Furthermore, due to the map being relatively enclosed overall, there is water on the map for some players to get relief from this class outside of the tight indoor buildings.

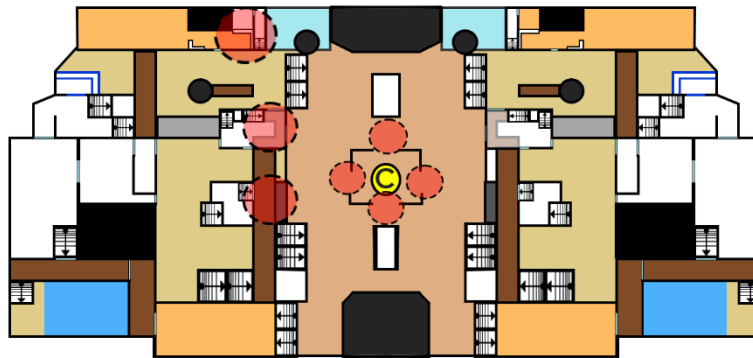
## Conflict Points



The core conflict points rest around entrances to the main open plane of the map, which encompasses the control point.

The ramps funnel the players into conflict points and aid in directionality.

## Choke points



Choke points are prevalent particularly where interior meets exterior or vice versa.

One being the sniper flank route, which drastically narrows players into a tight and tense underground space, for them to reach the open exterior sniper perch. This position can be key to effectively defending a capture point, so the flank route may be utilized by many classes throughout gameplay to deal with the sniper.

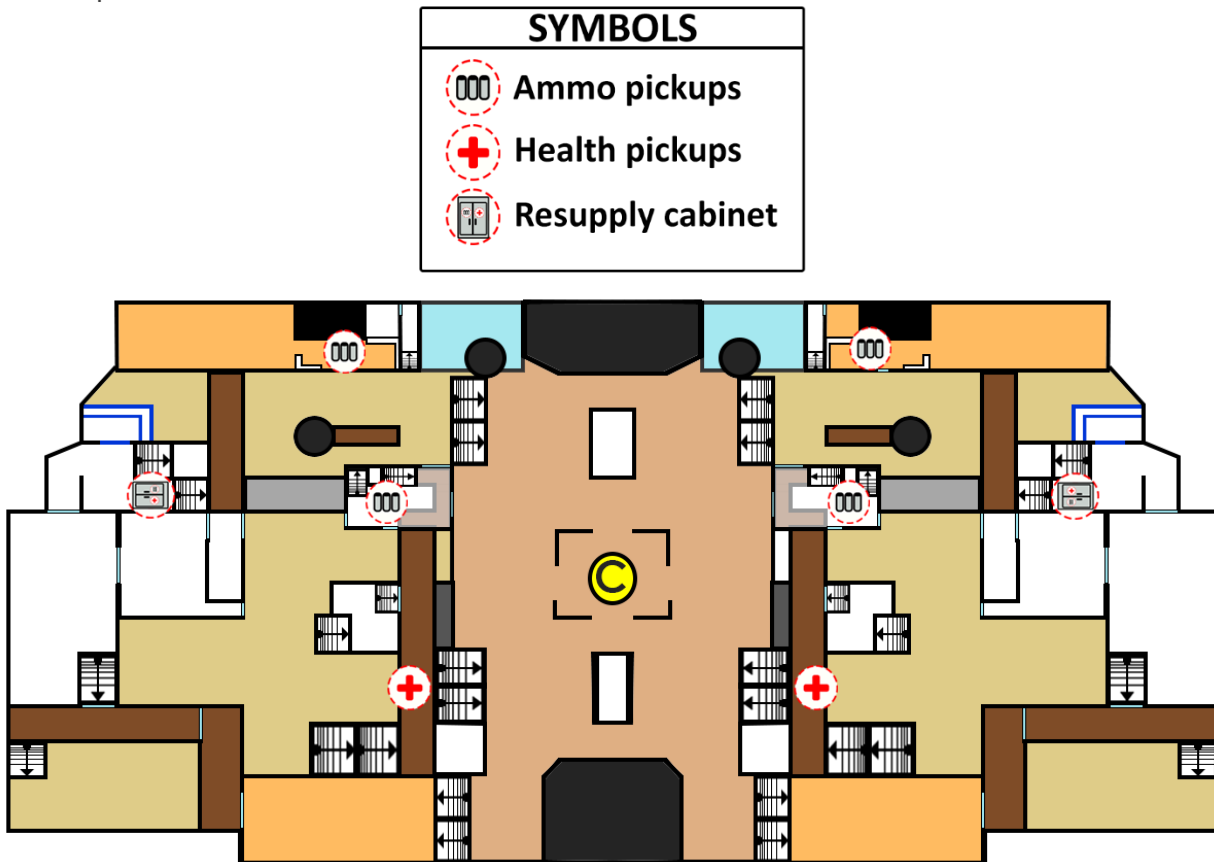
The choke point in the middle of the long interconnecting plank, is due to a sizeable cutout which can be utilized by the opposing team to shoot through.

## Level Pacing

### Rewards and Challenges

- Challenging double jump area for scouts who are familiar with the map to feel a sense of personal progression and mastery.
- Lockers for ammo in the home bases.
- Multiple cutouts in areas for players to utilize, which provide rewarding pacing variety to the gameplay loop .

## Pick Ups



Ammo pickups need to be close to the central killzone, so the players don't have to go out of their way too much to receive it. The ammo is placed in areas which players will likely utilize, from the sniper towers to the central connecting room which is a choke point of the level too.

The health packs are placed just behind another main chokepoint, to give players incentive to retreat from battle if they are becoming overwhelmed and allow them to gain the upper hand.

## Balance Considerations

### Expected Issues

- For Scouts to be able to avoid certain choke points.
- Directionality confusion.
- Engineer turret nests to provide either unfair advantage or not be effective enough.
- For soldiers to benefit unfairly from multiple exit points leading to the control point (due to their cramped nature).
- For Pyro's to be powerful in tighter areas.

## Testing Plan

Once I had the fundamental layout and working gameplay, I created a questionnaire on google forms and had a group of 6 playtesters, whilst I watched. Some even recorded their gameplay sessions for me, so I could analyse their footage. The playtesting revealed a few shortcomings with my design, such as forgetting certain cover placement and an oversight on some sightlines for snipers being particularly overpowered.

It is worth noting during this build, I did not have water working as intended, which affected pyro's strength on this map and made the water scout jump shortcut, just a basic path.



## Questions:

### Adonis Coast Questionnaire

Feedback from TF2 King of the Hill map

4) How would you rate your overall enjoyment whilst playing this map? \*

1 2 3 4 5 6 7 8 9 10

Did not enjoy it at all ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Extremely enjoyed it

10) How did you find the map size? \*

☐ Too big

☐ Too small

☐ Perfect

☐ Other: \_\_\_\_\_

1) What class did you primarily play as? \*

☐ Scout

☐ Sniper

☐ Pyro

☐ Demoman

☐ Medic

☐ Heavy

☐ Soldier

☐ Spy

☐ Engineer

☐ Other: \_\_\_\_\_

5) Do you enjoy TF2 usually? \*

☐ Yes

☐ No

☐ Other: \_\_\_\_\_

11) Did you find there to be sufficient flank routes?

☐ Yes

☐ No

☐ Other: \_\_\_\_\_

2) Did the design of the map prompt you to mainly play as the class you chose? \*

☐ Yes

☐ No

6) How difficult was it to find your way to the capture point? \*

1 2 3 4 5 6 7 8 9 10

Extremely difficult ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Not difficult at all

7) Roughly how long did you play? \*

Time \_\_\_\_\_ : \_\_\_\_\_ AM \_\_\_\_\_

12) Are there any classes in particular, which you feel was unfairly powerful on this map? \*

☐ Yes

☐ No

☐ Other: \_\_\_\_\_

2 continued) if yes please state, if possible, why you think that is

Your answer \_\_\_\_\_

12.5) If answered yes to the previous question, please state which class/classes and explain as much as you can.

Your answer \_\_\_\_\_

3) How well do you feel the map is balanced? \*

1 2 3 4 5 6 7 8 9 10

Not balanced at all ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Perfectly balanced

8) Would you play this map again? \*

☐ Yes

☐ No

☐ Other: \_\_\_\_\_

9) Did you feel it took unnecessarily long to reach the capture point? \*

☐ Yes

☐ No

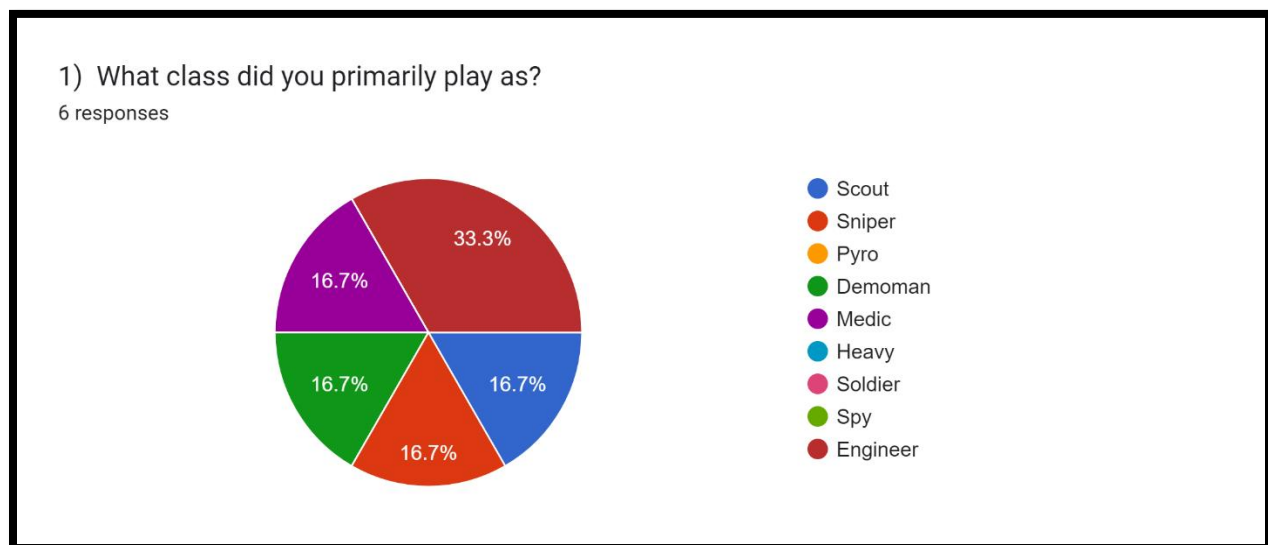
☐ Other: \_\_\_\_\_

13) Please leave any additional feedback here if you have any

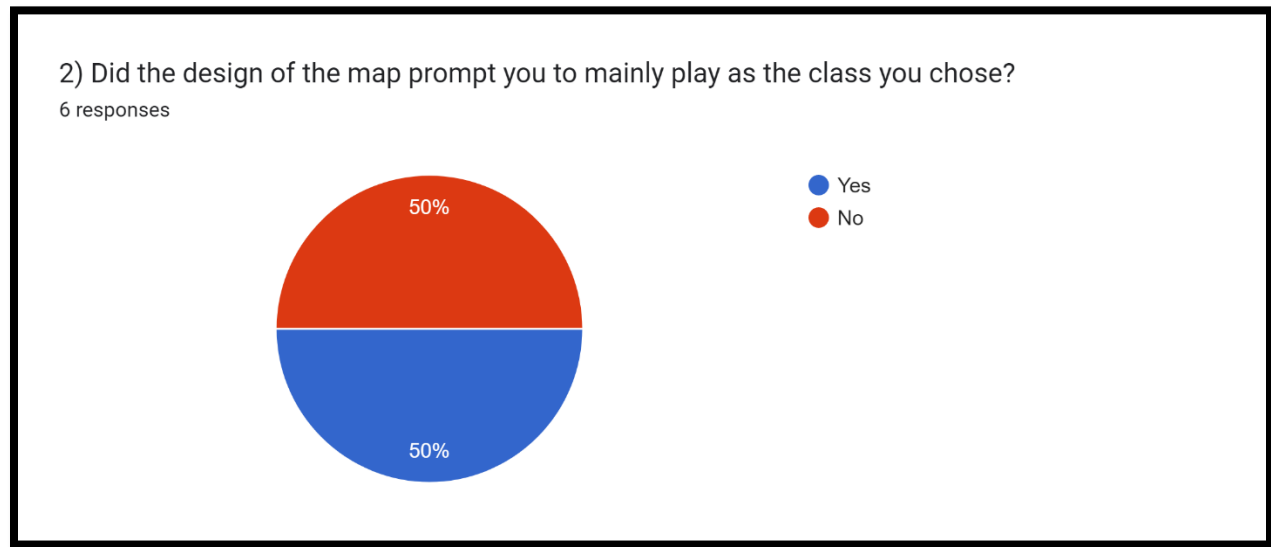
Your answer \_\_\_\_\_

Thank you for participating!  
I hope you enjoyed the map.

## Results and analysis:



The classes the players primarily played were varied considering only 6 people played. I was proud to see many enjoyed playing as engineer but was worried this was due to them being overpowered, but after questioning playtesters more in person and analysing, it was because they had fun in the jumping segments I designed, which made useful (as intended) nesting grounds for turrets.



This question, as many were designers, allowed me to see how well they could analyse the map being useful for each class whilst playing in a fast-paced environment. People who said no were likely subconsciously swayed to play as a certain character due to design. It's also possible that briefly loading the map, half the players saw opportunities in the design for certain classes, then the other half of the players just filled in the gap (by choosing different characters) to balance the gameplay.

2 continued) If yes please state, if possible, why you think that is  
3 responses

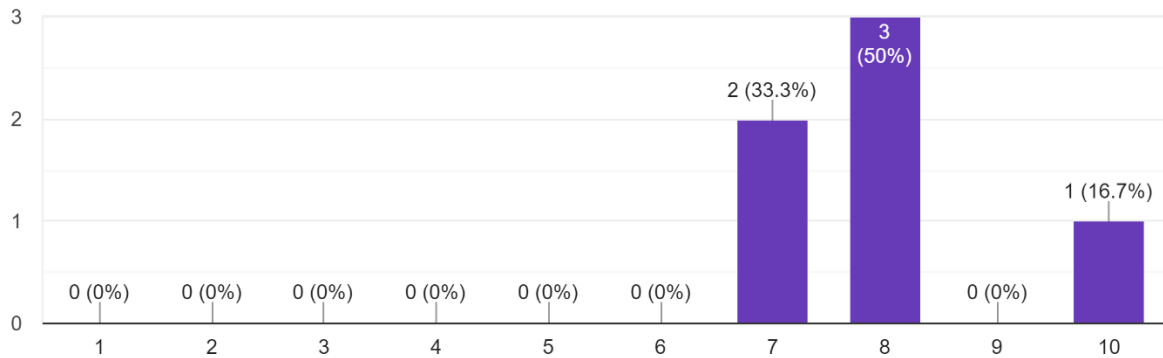
The map has a good amount of cover, this is very helpful for playing Medic.

Point was surrounded by buildings allowing for bombs to have a larger area of damage in a small space

I was able to find nice spots where I could place down turrets and teleports

### 3) How well do you feel the map is balanced?

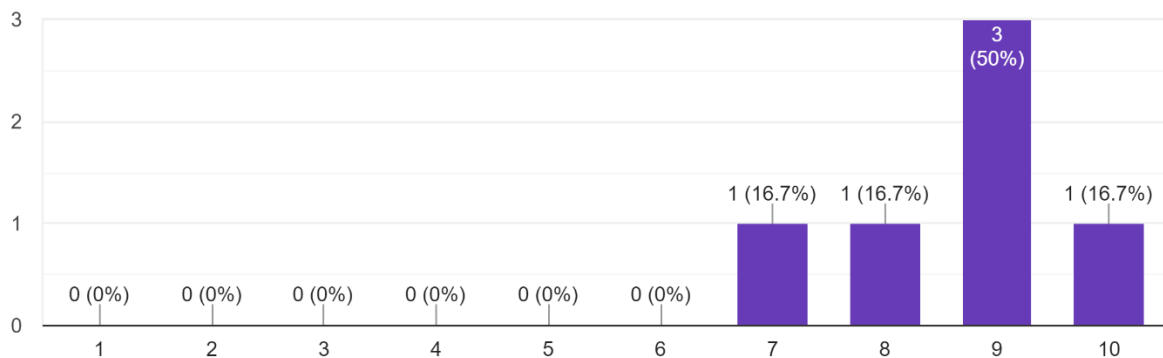
6 responses



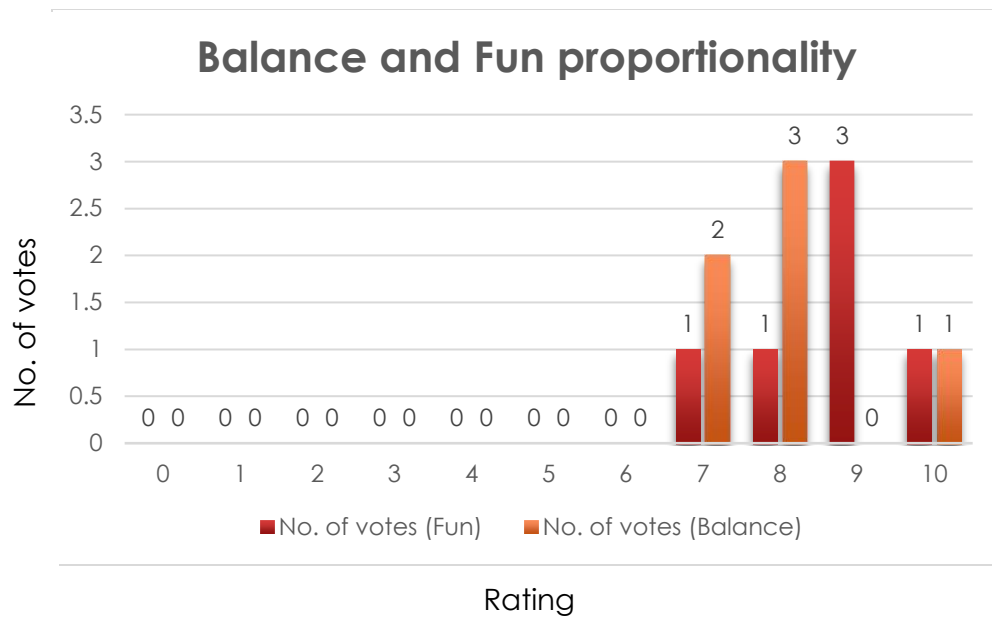
Despite some issues with pyro and sniper (which will be discussed later) players still on average thought the map was well balanced.

### 4) How would you rate your overall enjoyment whilst playing this map?

6 responses

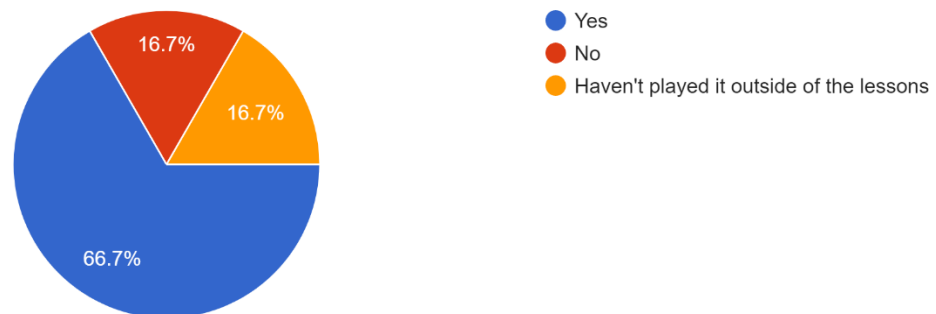


Unsurprisingly, the results of balance and enjoyment seem to be directly proportional. Hopefully, if retested with adjustments to balance, the average enjoyment would go up.



5) Do you enjoy TF2 usually?

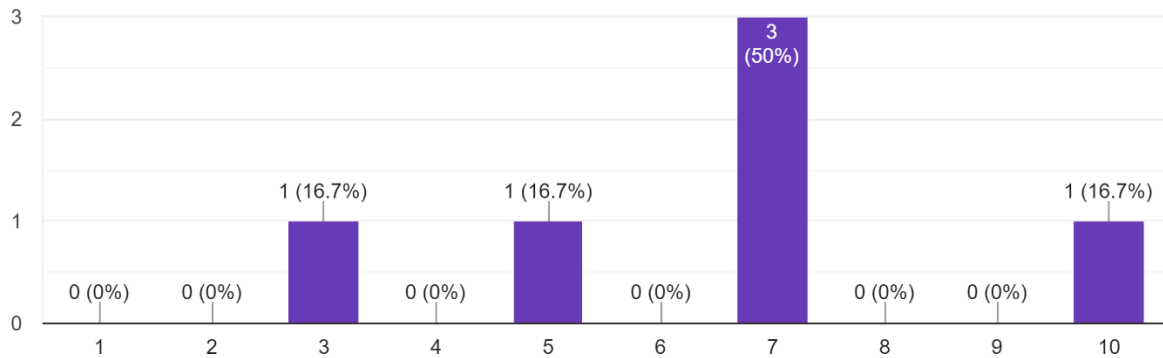
6 responses



This question was to discern how casual the player's enjoyment of the game was, so that I could analyse and better trust their understanding of gameplay and the map, as well as take that into account when analysing their overall enjoyment.

### 6) How difficult was it to find your way to the capture point?

6 responses

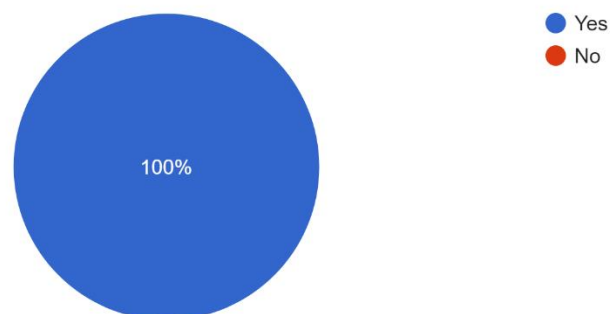


This was understandable, as when the playtest version was released, red and blue side not only looked identical in terms of texturing (when usually Blue side is more industrial, with red being more natural); there were also no signs to guide the player, which were planned for, just not yet implemented.

Hopefully, with their addition and improved texturing, players can navigate easier through the map.

### 8) Would you play this map again?

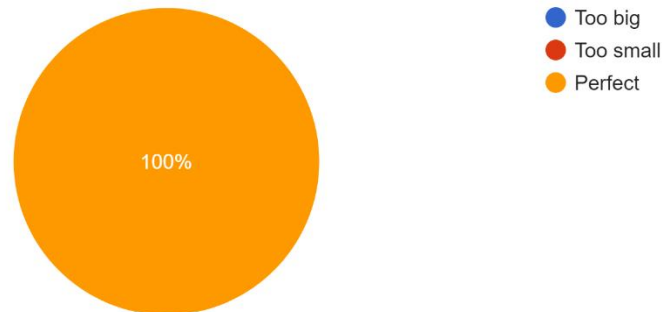
6 responses





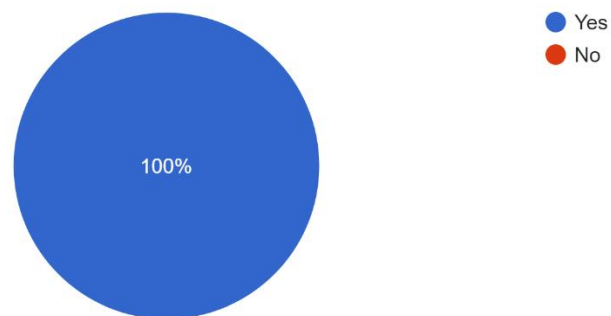
10) How did you find the map size?

6 responses



11) Did you find there to be sufficient flank routes?

6 responses



12) Are there any classes in particular, which you feel was unfairly powerful on this map?

6 responses



You can see the changes made as a result of players saying sniper was too overpowered below in the changelog section.

12.5) If answered yes to the previous question, please state which class/classes and explain as much as you can.

2 responses

Sniper

pyro- small corridors/paths make it powerful

As the pyro is quite powerful on this map, there is water to provide players with relief from their flames near the key combat zone.

13) Please leave any additional feedback here if you have any

1 response

Good sniping spot on left side (from spawn), can't see the whole control point but can see the heads of enemies on the point

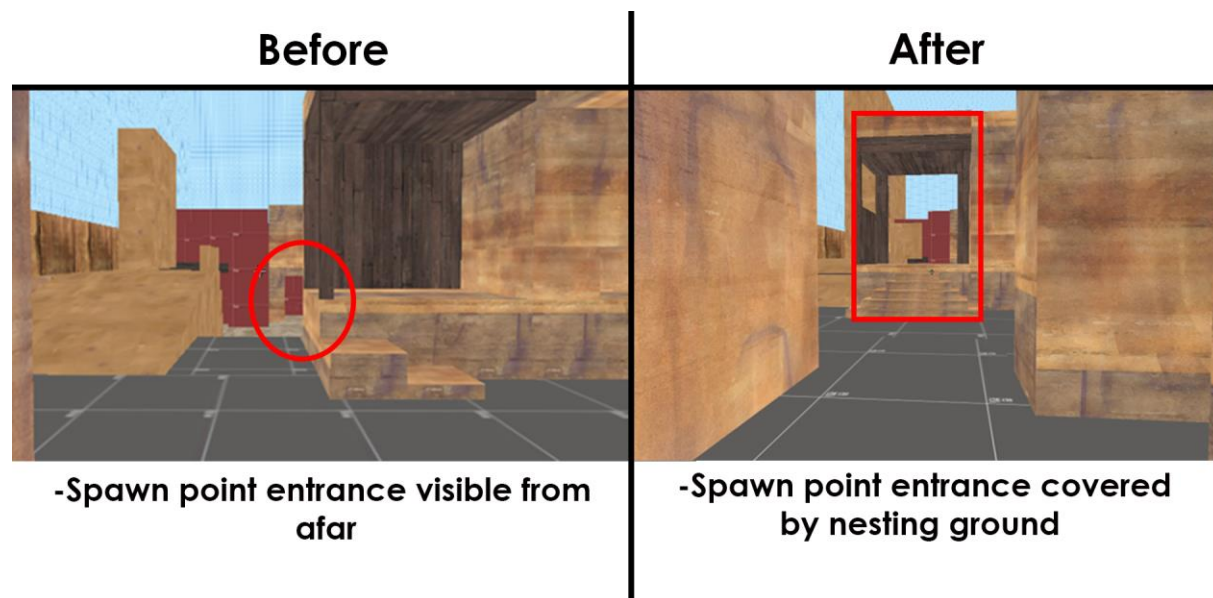
Hopefully with the sightline obstructions and water added (along with more accessible escape routes and slightly wider buildings) the pyro will be less overpowered making the map a more cohesive and balanced experience.

## Changes made as a result of playtesting

### Feedback from playtesting

Playtester report of spawn room visibility from afar. Unfair sightlines.

Changes made:



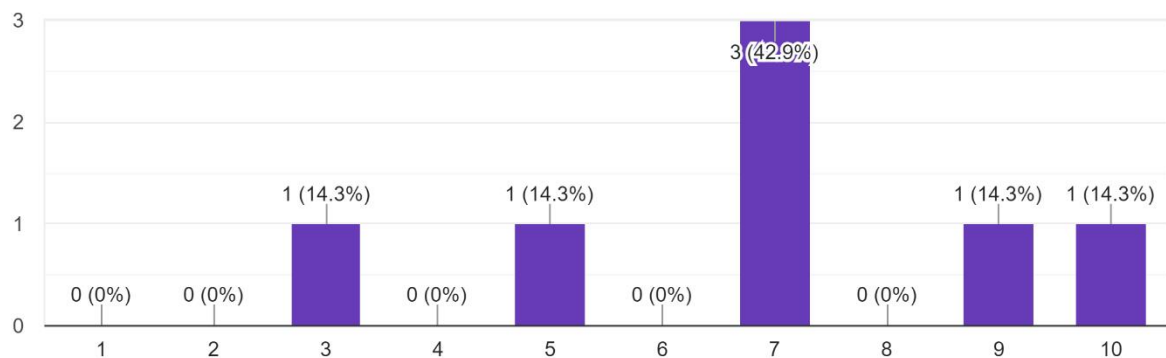
Moved the entry from spawn more to the left, covered by rock, and elevated the next area up and swapped the position of the sniper nest to be in the middle, with a ramp leading up to it.

This also meant the nesting area could act as better protection for the start area and also if not utilized, grants players a more surprising entry to use, as the ramp entry to the left of it has longer sightlines, making player utilization more obvious.

### Feedback from playtesting:

6) How difficult was it to find your way to the capture point?

7 responses



Due to the mixed answers, it was clear this was an area for improvement overall.

### Changes made due to this feedback:

To make direction clearer, signs were added throughout the cave system. The signs all point the player towards the capture point, as evidenced by the picture below:



Furthermore, I made each side more visually distinctive, with the cave rock and materials used on each side more recognizable and in following the familiar theme of industrial vs more natural.

### Observational Changes made from watching playtesters in person

These were changes made not as a direct result of the playtest form feedback, but instead from watching playtesters in person experiencing my map.

I added:





I further elevated the control point and added pillars. This was so certain building could flow nicely to the new level and need less aggressive slopes beforehand. In addition, there are more pillars for the attacking team to try and survive behind. But these pillars also add to the idea that cave system is weak and could crumble etc.

I made the map more interconnected, by extending this plank across for access to all buildings. Due to some long sightlines existing, this could act as the perfect escape route for many players to walk across. It could also increase the pace of the game and allow players to change their control entry point promptly in reaction to gameplay happening on the map.

## Mitigation Strategy

### Considerations before playtesting

#### Sniper Paradise –



As seen in the examples above, often in multiplayer games sniper locations only have a clear view of one path, to avoid them becoming too powerful and ruining the play experience for others. In addition, their location is often highly exposed, making sniping a heavily risk vs reward action.

I tried to implement something similar with the sniper perches whilst adding flank routes for spies, pyros, and scouts to access them if that player is proving to be particularly troublesome.

Furthermore, the main snipe points directly oppose one another, which not only creates satisfyingly long controlled sightlines for the snipers but means they can counter one another and be engaged in challenging and tactical combat.

### **Spawn camping –**

Multiple actions were taken to try to mitigate this problem, for one verticality was important from the main exit point to provide them with an immediate advantage if someone from the opposing side were to try to camp. In addition, there are multiple routes for players to choose from, so that if one location was being held down by an enemy, they could still make it to the main action on the map.

### **Scouts jumping abilities-**

The Scout, depending on the verticality and cramped layout of the level, can circumvent many obstacles and be quite troublesome.

Whilst self-testing Scout jumping routes, I discovered he was able to get onto many rooftops and entirely avoid chokepoints.

Adding additional vertical barriers and spacing out objects was a must to make their class fairer within my level.

### **Demoman's sticky-bombs –**

Demoman naturally loves large doorframes and high ceilings to arch his sticky-bombs over. Tight corridors without adequate room to steer can be aggravating. To attempt to counter this issue, many rooms have multiple exit routes in the event there are sticky bombs on the floor.

In addition, another problem players may encounter, is not many satisfying areas to throw bombs through, so there are a few sneaky spaces to launch bombs within the level, for example the sniper perch,

### **Pyro's powerful flamethrower and low health-**

Pyro's can be particularly troublesome in tight spaces, so one of the main things I attempted to create in the game was a consistent height which player can fall from, without taking damage, to escape.

In addition, near a sniper flank route, there is a large body of water if another class attempts to flank and gets injured by their flames.

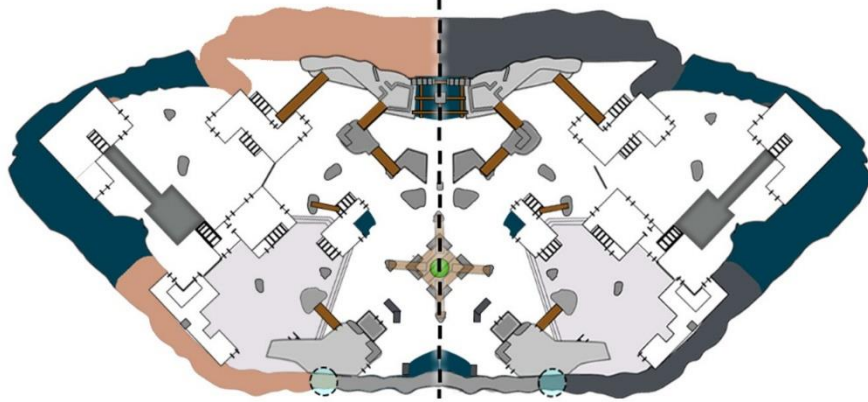
### **Heavy's slow speed-**

Due to the heavy's slow speed and being a high priority target, I feel if a level isn't designed properly, he can become a weak addition to the team and imbalance the defense and push and pull feel of the gameplay. To counter this, within sea cave there are wide spaces for the heavy to spray which are out of sniper's sightline and he has the most direct route towards the control point.

### **Map iteration:**

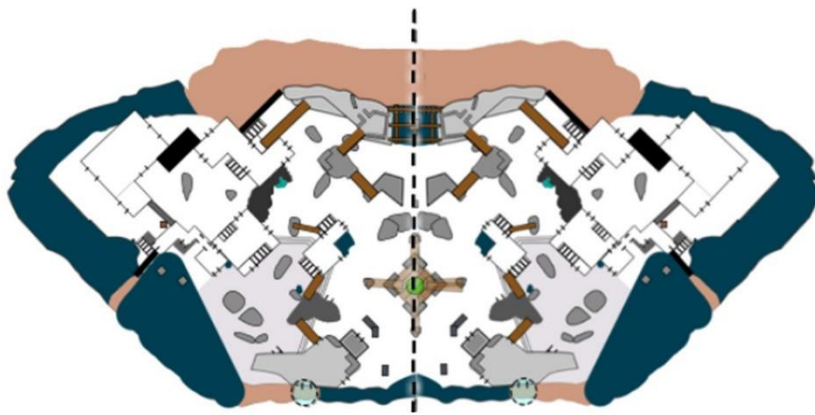
**V1**

**OLDER MAP**



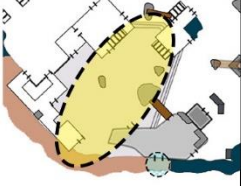

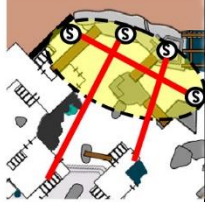



V2

**ITERATED MAP**



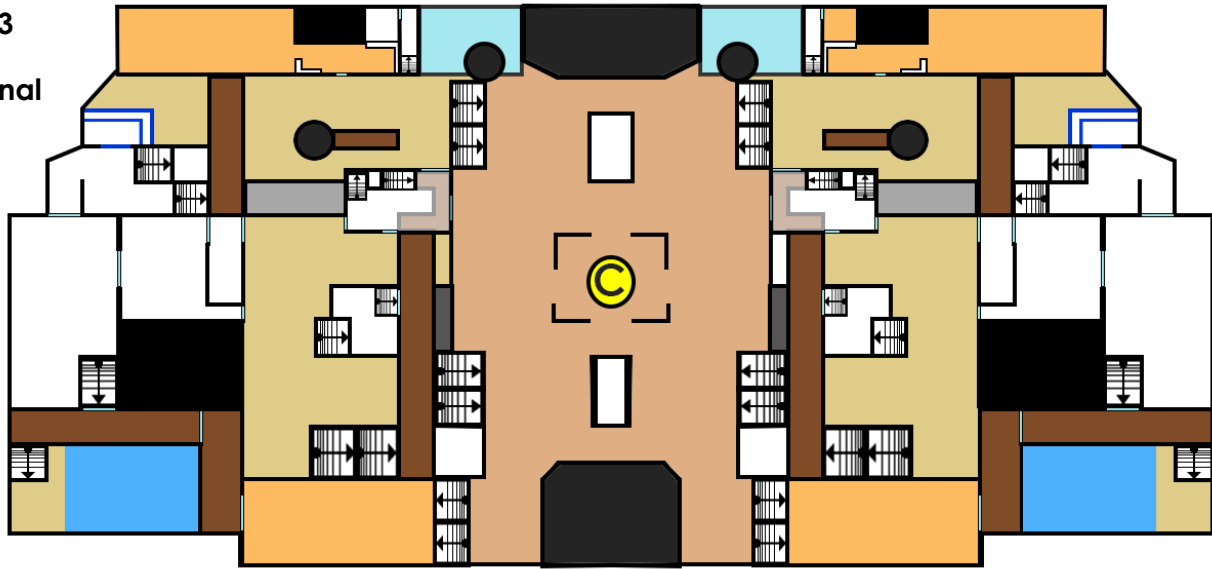
## DESIGN ITERATIONS

BEFORE IMAGE	POTENTIAL PROBLEM(S)	CHANGE(S) MADE	AFTER IMAGE
	<ul style="list-style-type: none"> <li>-LONG UNDERGROUND CORRIDOR COULD LEAD TO SPAWN CAMPING</li> <li>-SPAWN AREA TOO OPEN AND EASILY ACCESSIBLE WHICH COULD LEAD TO TOO MUCH COMBAT HAPPENING THERE</li> </ul>	<ul style="list-style-type: none"> <li>-REMOVED UNDERGROUND CORRIDOR</li> <li>-SEPARATED EACH PATH WITH AN EXTERIOR WALL TO MAKE THEM FEEL LESS INTERCONNECTED, AS THEN THE CHOICE OF EACH ROUTE DOESN'T FEEL AS DISTINCT</li> <li>-ADDED BALCONIES AND CRATES FOR SCOUTS TO ACCESS SHORTCUTS</li> </ul>	
	<ul style="list-style-type: none"> <li>-LEADS TO A VERY OPEN AREA WHICH COULD BECOME ITS OWN COMBAT AREA AND DETRACT FROM CENTRAL CONFLICT</li> <li>- VERY EXPOSED</li> </ul>	<ul style="list-style-type: none"> <li>-MORE COVER ADDED AND LARGE ROCKS TO BREAK UP THE AREA</li> <li>-REMOVED THE TUNNEL AND PLACED IT HIGHER UP LEADING IMMEDIATELY TO THE AREA, RATHER THAN CLOSE TO THE TUNNEL</li> </ul>	
	<ul style="list-style-type: none"> <li>-LARGE AND POTENTIALLY UNFORGIVING SNIPER SIGHTLINES IF POSITIONED WHERE THE S DOTS ARE</li> </ul>	<ul style="list-style-type: none"> <li>-ADDED SIGHTLINE OBSTRUCTIONS BUT STILL CONCERNED ABOUT THE ELEVATED AREAS BEING SNIPER PARADISE PERCHES. THESE WILL HAVE TO BE ADJUSTED DURING PLAYTESTING</li> </ul>	

The map above went through a lot of changes before then changing to the current, more simplified layout. The one above had too many potential sightline problems as well as too many choices for the player to take, which could lead to player choice paralysis and so much space away from the control point, that less combat may even happen there. This prompted me to take core aspects of the map I liked and make a new version.

V3

Final



From the old map I took the planks being strategically used to create interconnective and shortcuts, the use of water to negate pyros strength, a designated nesting area near a height advantaged area, opposing sniper perches, and water scout jump route.