

# RICOCHET | Game Overview



## RICOCHET

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2v2 Game Concept by Levi Stone Walker

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## Elevator Pitch

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"RICOCHET" is an alternative sports game where two teams, consisting of two players each, compete by scoring goals via throwing a disc that can bounce off of walls. The disc can be passed to players from the same team, or intercepted by the enemy team. The lane switching, fast paced, and close quarters gameplay of RICOCHET enforce replay-ability for all players.

## Concept

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### Overview

- **Genre:** Alt. Sports Game
- **Target audience:**
  - **Age:** 12-25
  - **Gender:** Male/Female/Non-binary
  - **Interests:** Fans of Rocket League, Disc Jam, live service games
- **Monetization:**
  - Freemium, with in-game micro-transactions / battle passes, live service
- **Platforms & system requirements:**
  - Steam (Windows, Mac), Nintendo Switch, PS4/PS5, Xbox Series X/S

### Theme & Setting

RICOCHET is mainly based in the urban setting of Olanna. Olanna is populated with city blocks, commercial buildings, apartments, vehicles, food stands, and more. The gameplay of RICOCHET capitalizes on this setting via the suspension of disbelief in having many objects to bounce the disc off of lying around the playable area. The theme is comprised (and sometimes even compromised) by large personalities competing in an adrenaline pumping alternative sports game filled with goofy yet memorable moments.

Learn more about the [Locations](#), [Story](#), and [Characters](#) of the game.

### Brand Identity

When conceptualizing a pitch for an idea, it is important to create an interesting and inviting **brand identity**. After brainstorming and solidifying the concept of RICOCHET, I began curating color palettes, fonts, and logos. I knew that this portion of RICOCHET's concept was the most integral contributing factor to its memorability.

Below is the official documentation of RICOCHET's brand identity.



## Logo Versions



Primary

RICOCHET

Wordmark Only



Icon

## Colours



Primary

Hex #454545  
RGB rgb(69,69,69)  
CMYK 0 0 0 73  
Pantone 19-0201



Secondary

Hex #454545  
RGB rgb(69,69,69)  
CMYK 0 0 0 73  
Pantone 19-0201



Accent

Hex #454545  
RGB rgb(69,69,69)  
CMYK 0 0 0 73  
Pantone 19-0201



Background

Hex #F9E17E  
RGB rgb(249,225,126)  
CMYK 0 10 49 2  
Pantone 12-0738

## Brand Specifics

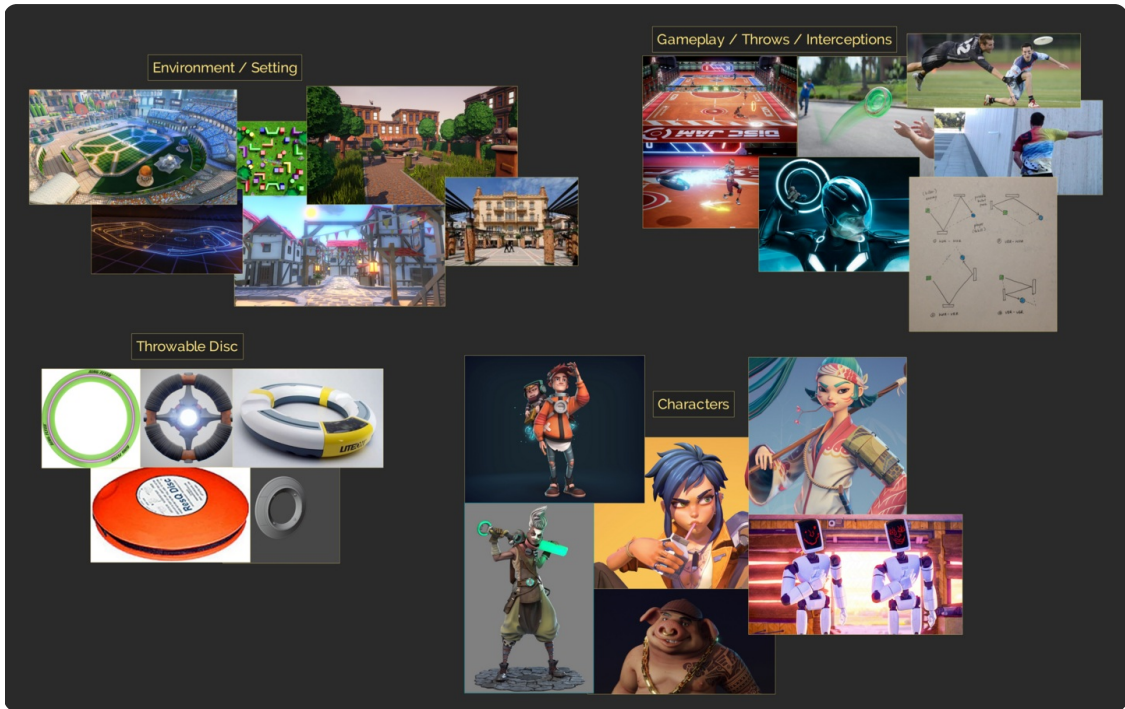
### —Official Typography—

**Typeface: Rowdies**  
**Font: Bold 700**

### —Official Hex Codes—

**RICOCHET Yellow: #F9E17E**  
**RICOCHET Gray: #454545**  
**RICOCHET Black: #0F0F0F**

# Mood Board (Themes / Concept / Inspiration)



# Gameplay

## Game Progression

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In RICOCHET, both teams share the goal of scoring the most points before the match time runs out. The match time is set at 6 minutes by default. Each scored goal is worth 1 point. Points are scored by ricocheting the disc into the goal; as such, no points can be scored by throwing the disc directly into the goal. The goal sites are equipped with large beveled edges on either side to allow close-up shots to be ricocheted into the goal.

After scoring a point, the game resets with the updated scoreboard and the clock is stopped. Both teams spawn back at their own respective goals. The disc spawns in the center of the map. After a short 3 second countdown, players will obtain control of their characters again. The clock will remain stopped until a player touches the centered disc, in which case the clock will resume.

[RicochetGameplayVisualizer.mp4](#)

## Objectives

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Two teams consisting of two players each score points by ricocheting a throwable disc against walls and between team mates to achieve victory.

RICOCHET is built upon 6 minute games; the clock stops upon a goal being scored. Players will respawn back at their own goals at this point, and the disc will spawn in the center of the map (inside the rotating bedlam impediment). The match timer begins counting down again upon the centered disc being picked up by a player.

- **Team Compositions (Playstyles)**
  - **Offensive**
    - 2 aggressors, no goalies; this leaves your team's goal unattended and undefended, yet gives way for incredibly aggressive and difficult-to-deal-with openings for the opposing team.
  - **Meta**
    - 1 aggressor, 1 goalie; this is the most balanced and reliable play method. Not only is it valuable to have someone stay back to defend your goal from potential shots being made, but having someone work with them in tandem out in the field to inform can be extremely beneficial.
  - **Defensive**
    - No aggressors, 2 goalies; this provides exponentially increased defense for your team. It is hard for the enemy team to make clear shots with two goalies. When your team has possession of the disc again, you can begin moving forward.



# RICOCHET

## Playstyle Variety Breakdown

Playstyles	Offense	Defense	Advantages & Disadvantages
1 <b>Meta Playstyle</b>	<b>x1</b> Aggressors	<b>x1</b> Goalies	<ul style="list-style-type: none"> <li>• Most balanced and reliable playstyle</li> <li>• Maximized map awareness</li> <li>• Outlined roles for team members</li> </ul>
2 <b>Offensive Playstyle</b>	<b>x2</b> Aggressors	<b>x0</b> Goalies	<ul style="list-style-type: none"> <li>• High risk, high reward gameplay</li> <li>• High skill ceiling, heavy focus on strategy</li> <li>• Leaves team goal unguarded</li> </ul>
3 <b>Defensive Playstyle</b>	<b>x0</b> Aggressors	<b>x2</b> Goalies	<ul style="list-style-type: none"> <li>• Low risk, low reward gameplay</li> <li>• Difficult for opponents to score</li> <li>• Situational necessity, or running out the clock</li> </ul>

Team compositions are intended to be switched in and out of on the fly during gameplay.

There are situations where two goalies will be entirely the right strategy, until you intercept or steal the disc and begin transitioning into a **Meta** or **Offensive** composition. On the other hand, a team might be playing in a **Meta** composition when their aggressor comes into possession of the disc close to their own goal. This could be a great opportunity for this team to switch into an **Offensive** composition. If the enemy team were to gain possession of the disc near their own goal, it might be smart to fall back and re-center back at the friendly goal in a **Defensive** composition.

# City Square

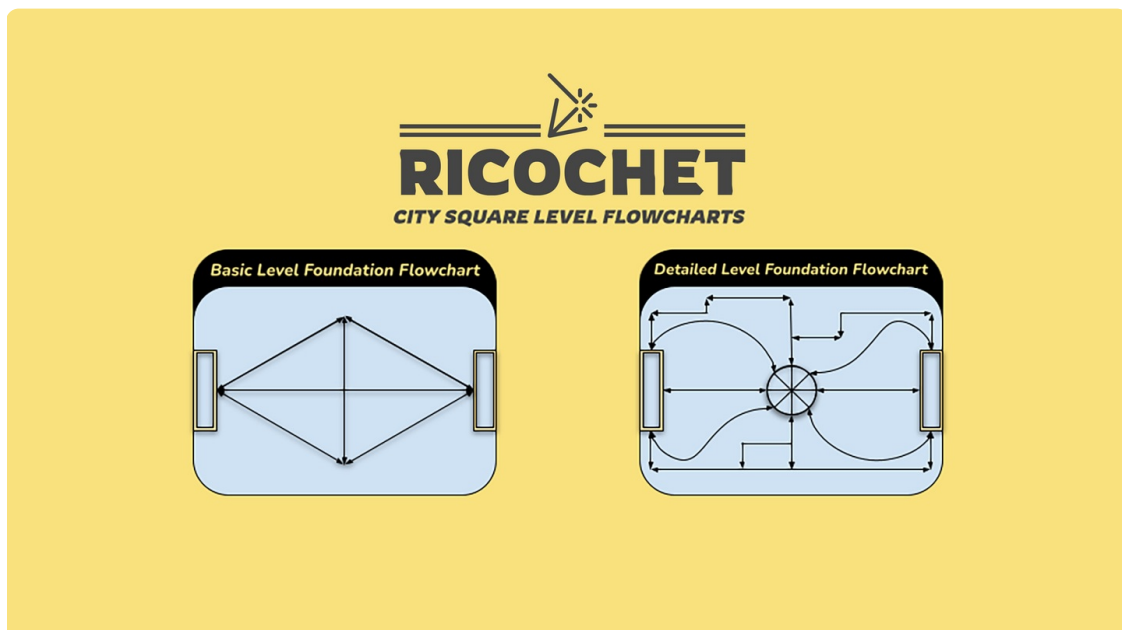
## Synopsis

A small city square, with a rotating art exhibit in the center of the square. Alley-ways and food carts cover the right side of the map, while the city park and all of it's amenities cover the left side. The center lane of the map is occupied by stonework and cars parked in the roundabout surrounding the rotating art exhibit. The environment is bustling, loud, and congested; an exhilarating concoction for a 2v2 game based on ricocheting discs between players and barriers.

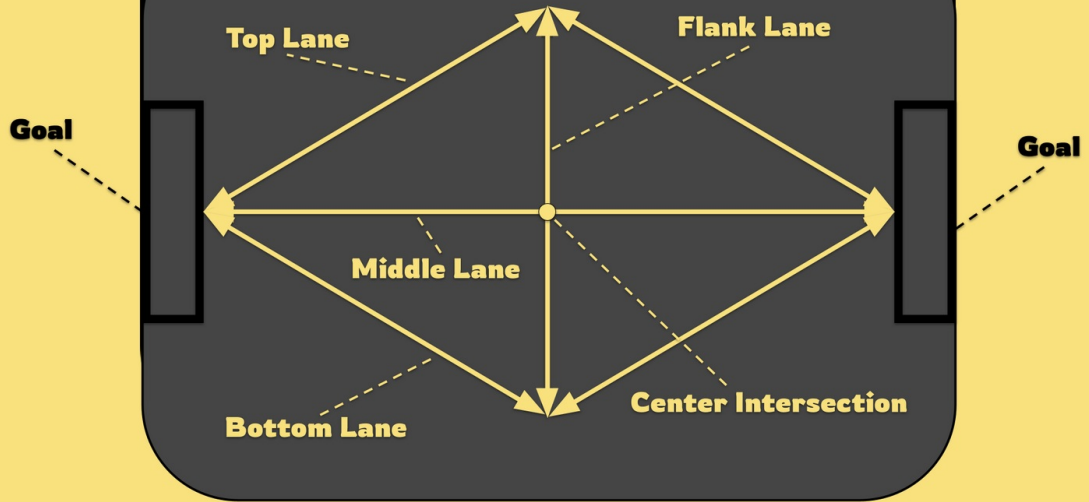
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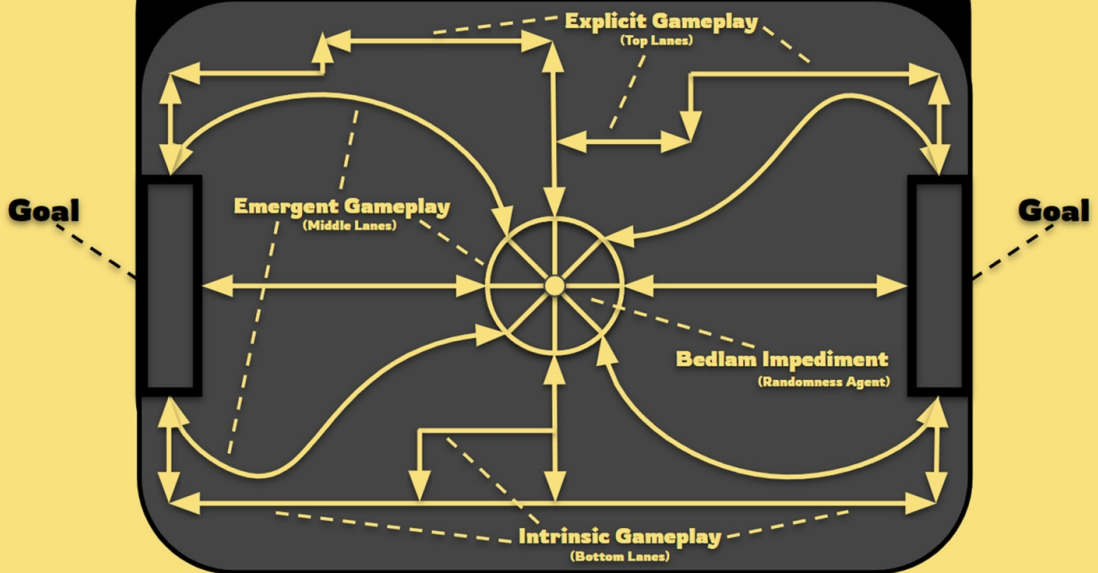
## Level Walkthrough and Flowcharts



### Basic Level Foundation Flowchart

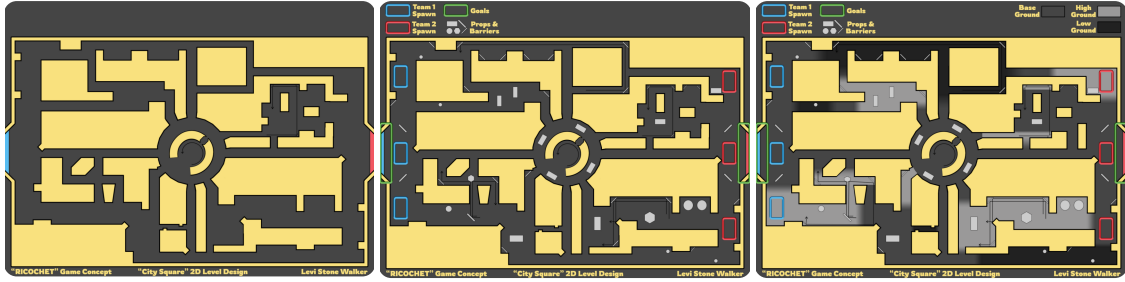


### Detailed Level Foundation Flowchart

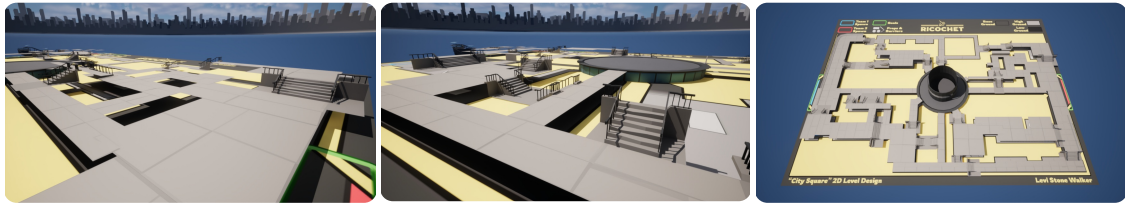




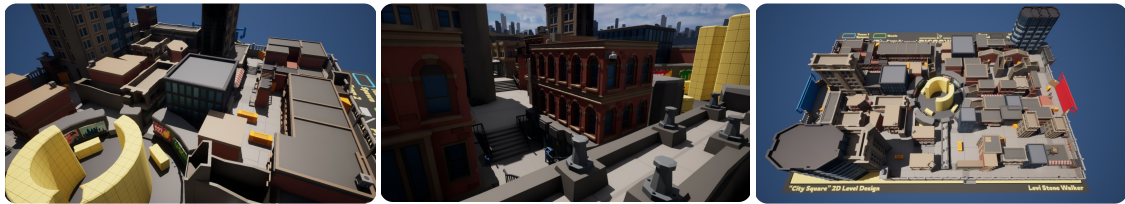
## Phases of Map Creation (2D Map Design)



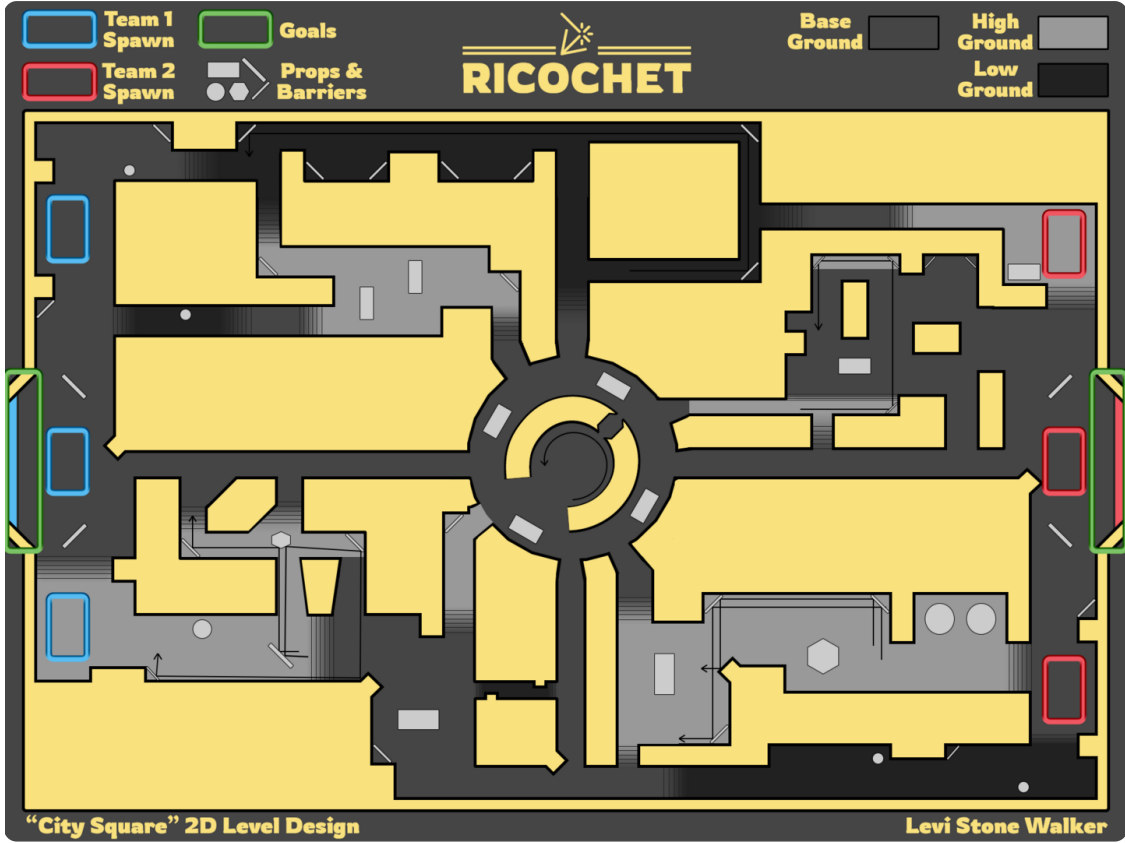
## Phases of Map Creation (Block-Out Pathing in UE5)



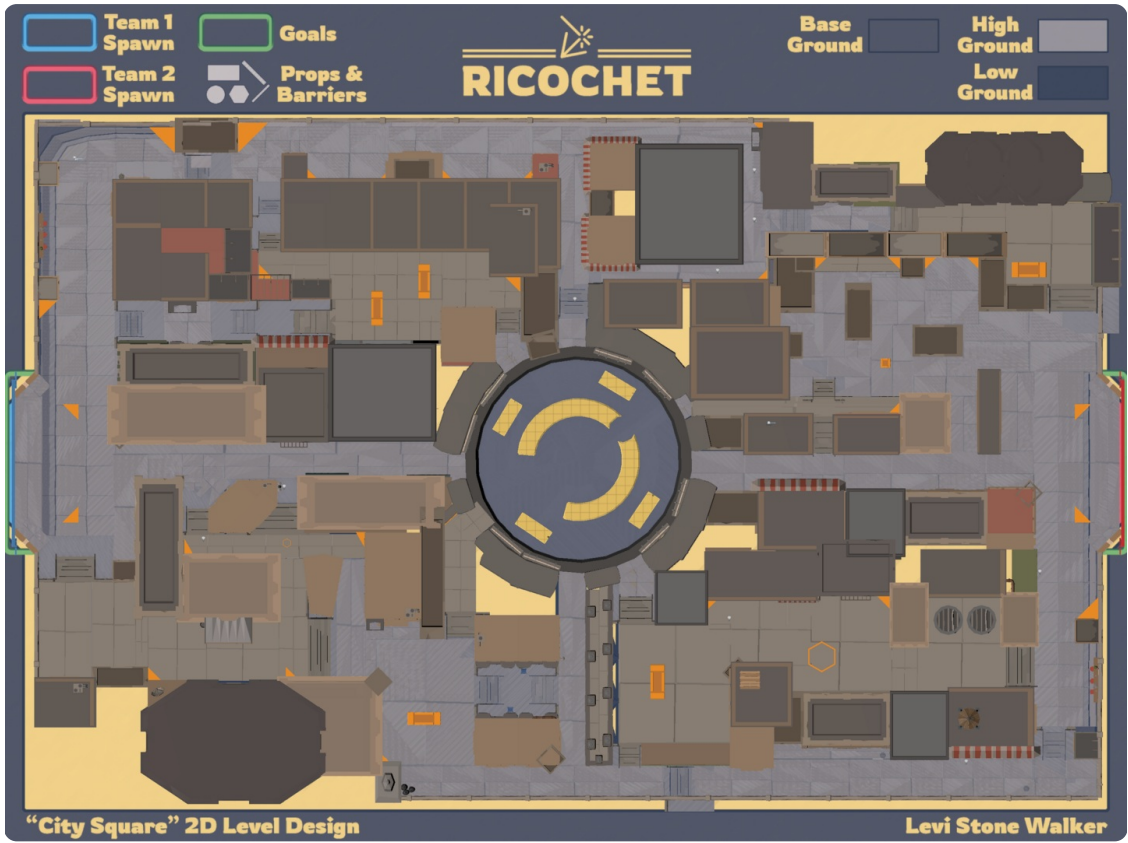
## Phases of Map Creation (Block-Out Set Dressing in UE5)



# 2D Map Overview of City Square



# 3D Map Overview of City Square

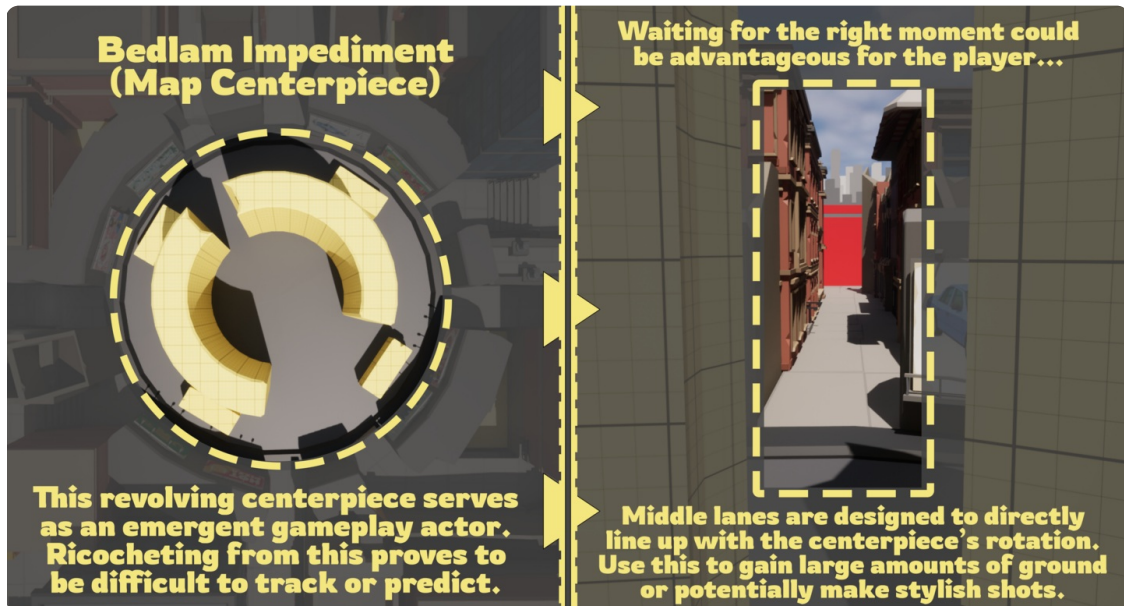


## Bedlam Impediment (Centerpiece Visualizer)

[CenterpieceAnimVisualizer.mp4](#)

The centerpiece of "City Square" acts as a critical trait of the playable area. Players can use this area in a multitude of different ways, including emergent and intrinsic playstyles.

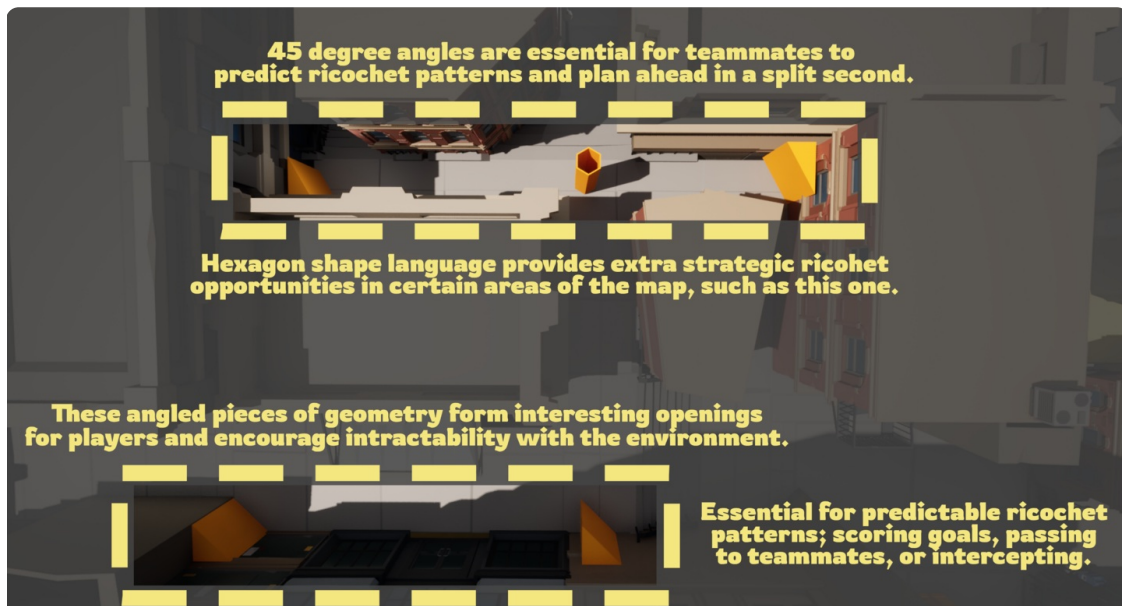
As the centerpiece rotates during gameplay, pay attention to the openings; players are given the opportunity to gain large amounts of ground or attempt ricocheted goals from a long distance.



## Shape Language

Shape language consists of more than a few things in game design. For the purposes of designing "City Square" we will be talking about how RICOCHET intends to direct players to opposing goals using shape language.

In the map "City Square", players spawn on either side of the playable area depending on what team they are on (blue or red). In this map exists a large number of 45 degree angles that allow 90 degree angle (true left and right) ricochets to be made. For a visual guide, see the first bounce of the disc in the animation under the [Gameplay](#) portion of this document. These angles help direct the player to streamlining lanes, as opposed to criss-crossing over the map. In the block-out of "City Square", these 45 degree angles are represented by bright yellow wedges. 45 degree angles are essential for team mates to predict ricochet patterns and plan ahead in a split second. These angled pieces of geometry form interesting openings for players and encourage intractability with the environment. If this map were to leave the block-out phase, these wedges could easily and believably be replicated by electrical boxes, wooden pallets, or urban signage.



Arches and city alleys found around the map work to encourage the players to switch lanes frequently and avoid being out of the action for too long. In the middle lane, the constantly-revolving-centerpiece is a guaranteed method of chaos for players, as it juxtaposes 90 degree angles with smooth and rounded curves. Ricochets performed here will be hard to track, especially depending on how many players are interacting in this space simultaneously. Read more about the middle lane's design philosophy in the [Lanes | Explicit, Intrinsic, and Emergent Gameplay](#) section below.

## Lanes | Explicit, Intrinsic, and Emergent Gameplay

RICOCHET's "City Square" is split into three main lanes with interconnectivity being encouraged by natural shape language that appears in the map design itself. These three lanes each harness a style of gameplay to accommodate all players and to also encourage strategy while progressing with your team mate. For contextual reasons, here is a short explanation of each style of gameplay "City Square" presents to players

1. **Emergent Gameplay** refers to complex situations in video games that emerge from the interaction of relatively simple game mechanics; **encourages experimentation.**
2. **Intrinsic Gameplay** refers to a person's internal drive to perform an action in the game purely because of the enjoyment they get from it; **encourages expertise.**
3. **Explicit Gameplay** refers to when a player can determine explicitly what to do in a situation presented to them in a game; **encourages simplicity.**

Now that we have that out of the way, let's dive into the different lanes in RICOCHET's "City Square" and how they offer different gameplay options for players.

- **The Top Lane**

- The top lane has the most explicit gameplay elements, so of course it also has the most wedges out of all the lanes. The explicit nature of the top lane can mostly be attributed to its comparably simple design layout. It encourages players to capitalize on the simple geometry provided by the lane to traverse easily to the opponents goal. However, due to it's simplistic nature, it also can be difficult to get past opponents due to there not being many escape or flank options. Simplicity is key in the top lane.

- **The Middle Lane**

- The middle lane encourages more emergent playstyles from players, as it grants access to both top and bottom portions of the map and their respective lanes. Players are naturally drawn to the center of the map through **shape language**, as the wedges all point the player to the center. The middle lane is also home to the [bedlam impediment](#), a chaos agent in the form of a spinning centerpiece for the map. This focal/choke point for players will serve as a gameplay randomizer, and quickly cause havoc for even the most seasoned players. Ricocheting off of 50 degree angle into a spinning cylindrical piece of architecture can prove to be rather hard to track, and can lead to unlikely scoring. Another important aspect of the middle lane and its bedlam impediment is that, as pictured and animated above, there are openings within the geometry of the asset. The asset is specifically designed to give small frame-decisive windows to players to try throwing the disc through the opening as it is spinning to obtain major ground down the opposing side's middle lane- possibly even scoring in the process.

- **The Bottom Lane**

- The bottom lane encourages intrinsic elements to be incorporated into any given player's playstyle. The bottom lane is specifically given more access to the middle lane than the top lane is for this very purpose. These connections between the bottom lane and middle lane are also more complex than other connections in the map. Attentive players will quickly notice the potential of the bottom lane and the strategies that can materialize due to its abundance of angled geometry and mix of ground levels. The connections to the middle lane are complex enough to allow players to not only flank opponents successfully, but lose them in the chase as well.



### **Top Lane: Explicit Gameplay**

- Most 45 degree angles for players to predict ricochet patterns
- Focus on simplicity in lane design, harmonizing new and seasoned players
- Obvious choke points, forced confrontation, no easy escape
- Aggressors will thrive here if undetected, and can make it across the map quickly
- Goalies should avoid this lane as it proves to be more difficult to return to their goal

### **Middle Lane: Emergent Gameplay**

- Grants access to top and bottom lanes, encouraging spread movement
- Bedlam impediment (spinning centerpiece) provides definitive emergent gameplay
- Shape language naturally guides players to center, gameplay randomizer
- Direct line of sight to both team goals
- Aggressors and Goalies alike will thrive here in high energy 2v2 ricochet bouts

### **Bottom Lane: Intrinsic Gameplay**

- Highest potential for high-level plays, perfect for unpredictable team plays
- More access to middle lane, gives strategic advantages to dual player action (flanks)
- Attentive players are rewarded by utilizing abundance of angled geometry
- Heavy mix of ground levels, easy to lose opponents in pursuit
- Goalies will find this lane to serve as a “jungle” to rotate in and out of



## Map Balancing

It is well worth noting that although the map seems asymmetrical at a glance, it also incorporates important symmetry where needed for a balanced map design. In order to create equal opportunities for both teams, lots of choices were made while designing "City Square". For instance, both teams have at least one spawn point on high ground. These spawn points in particular are mirrored on the map from one another. This also means the slight cover that extends around the other two spawn points are shared amongst both teams as well. This subtle form of mirroring also extends to other elements on the map. The top and bottom lanes both have one hard drop off from high ground to base ground when funneling into the center of the map, and they both have three fully functional entries and exits from the center as well.

The middle lane was intentionally made relatively the same for both teams, in order to enforce the concept of equal opportunity. The main differentiator being the red team's middle lane having access to the top lane, while the blue team's middle has access to the bottom lane. This was done in order to create side advantage and disadvantage when aggressors press the goalies in their own environments. Many more choices like these were made during the design process.

## Resources and Design Philosophies

- [Bobby Ross' Multiplayer Design Philosophy](#)
- [Bobby Ross' Arcade Shooter Philosophy](#)
- [Ernest Adams' article on Level Symmetry](#)
- [Willem Kranendonk's article on Level Design for Knockout City](#)
- [New York Film Academy's article on Level Design Tips](#)