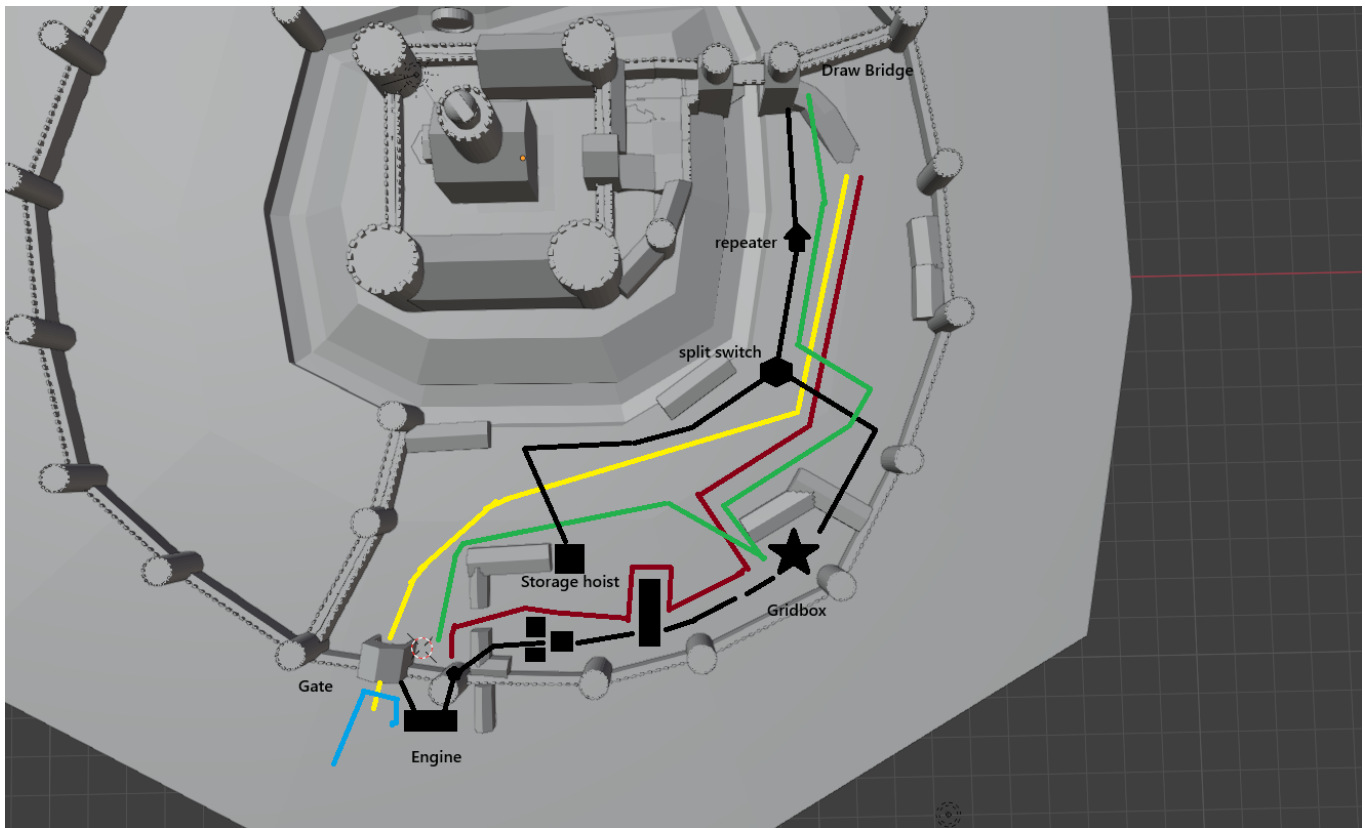


Level Design - Level 1 to 5

Level 1 - Outer Estate

Map



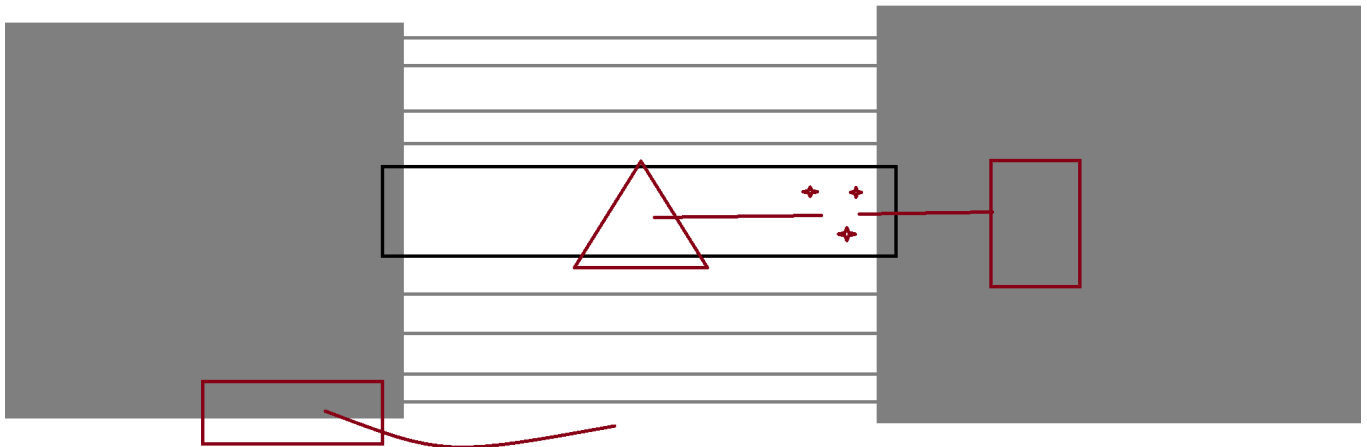
Z ~ Current Project ~/Circuit Chan/02. Gameplay/Level Design/00. Estate Ground/Level 1 Design.png

Puzzle 1 - Opening the Castle Gates

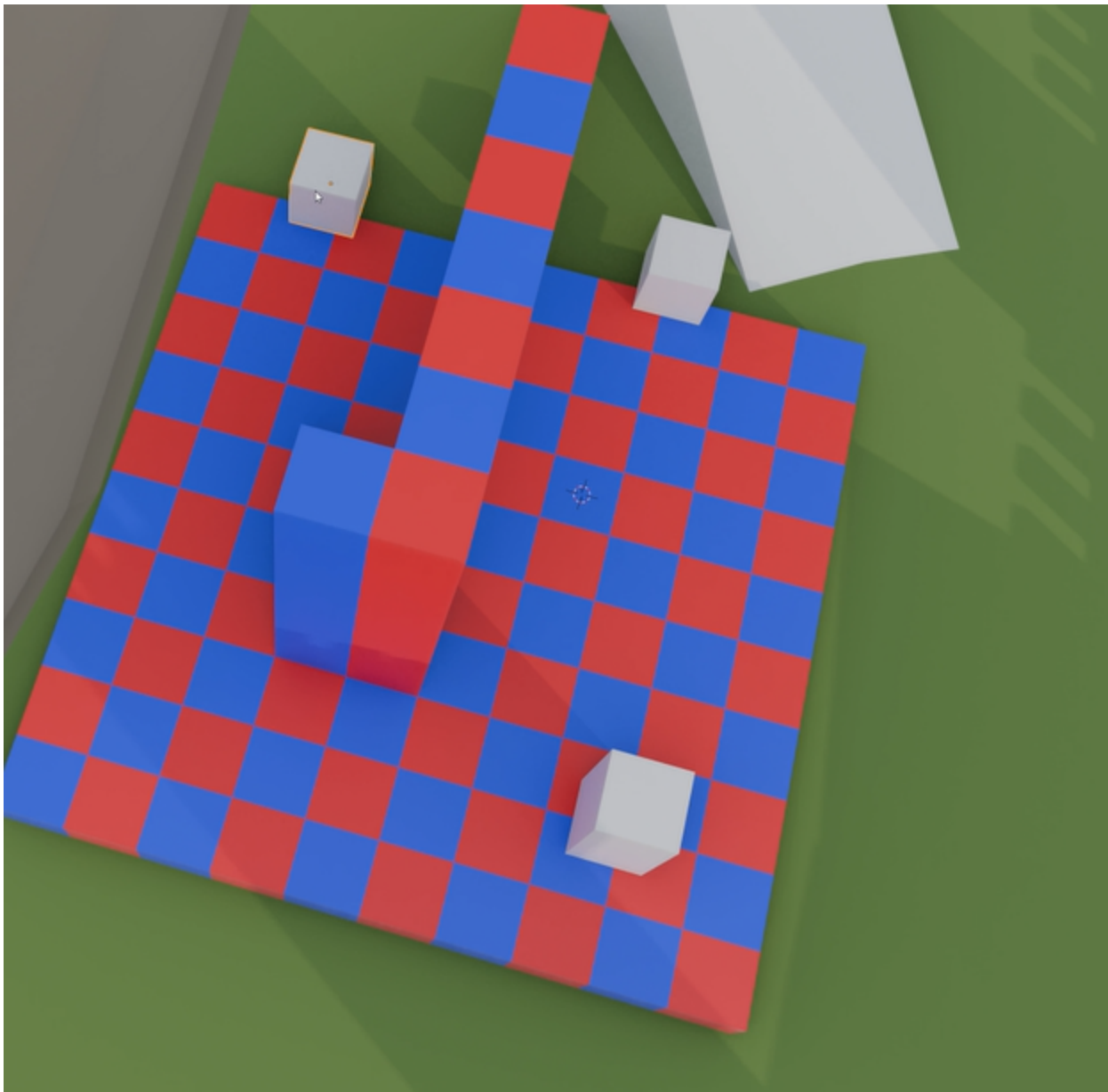
Narrative Setup

- AUDIO: There are noises of different birds chirping in the background, of gentle winds and of leaves rustling.
- VISUALS:
 - Then the black screen fades to you standing in front of large locked gates of the abandoned castle.
 - Locking mechanism

- Trees
- Driveway
- Castle observatory in the background
- A message box appears on the screen; It has a message from the town council welcoming you to the town, thanking you for taking the job. They also tell you about the checklist.



Pasted image 20250905213841.png



Pasted image 20250906230511.png

Gameplay

Teaching Objective: Power Flow

Puzzle Objective: Power the gate socket (one-way socket) by connecting it to a generator (pre-placed power source block).

Gameplay Steps:

- You can look around to find a way to get into the castle.
- First thing you will notice is the large locking mechanism.
 - A thick cable attaches the lock and a box.

- The box has a one way socket.
- You need to find something to connect to the socket.
 - You can roam around to look for something like this.
- You will find an old generator (pre placed power block) nearby
 - You would also find pieces of wire you can pickup and place so that it connects the locking mechanism to the gate.
 - Turning a lever on the generator would give energy to the gates and they will open with some trouble.

Narrative - Letters:

- If you fail to find the generator within 2 minutes of looking you will receive another message from the town council informing you about an old engine they found in the castle grounds and jury rigged to work with the socket outside and providing power to the outer estate grid of the castle.
 - They inform you, that they could not figure out how to fix the mechanical-electric contraptions, and the system they rigged also failed in many places, so you will have to make use of the old engine and clockwork batteries (power block sources) until you are able to fix the mains grid inside the castle and the main source.
 - They will also inform you why the they kept the gate locked - to prevent delinquents from entering the castle grounds.
- If you don't fail, you will get the message after you open the locking mechanism.

Result: Gates open.

Puzzle 2 - Fixing the Grid Box

Narrative Setup:

- You step through the castle gates and into the overgrown grounds. The once-proud gardens are overrun with weeds, and debris lies scattered

everywhere.

- In the distance, the castle looms, but a raised drawbridge blocks the only way across the moat.
- A grid box near the wall flickers faintly, its cables torn and broken in several places.
- Journal Entry:
 - You take special notice of the damage around the gridlines connecting to the grid box near the castle walls.
 - The grid would have connected the castle grounds with the main power source inside, but you can't enter the castle until you get the drawbridge down and you can't get the drawbridge down until you get power.
 - You have to fix the grid box and grid cables, at least temporarily.

Puzzle 2a - Repairing the First Cable Break

Narrative Setup: Near the first section of the grid cables leading towards the main gate, there is a gap across the path.

Journal Entry: You can't source new cables, so you'll have to make do by what spare parts you find.

Teaching Objective: Repair broken lines with wire.

Clues: Searching nearby crates and tool piles reveals straight wire pieces (inventory pickups).

Gameplay Steps:

1. Inspect broken ends → "Cable Broken: Requires Repair."
2. Look for wire pieces
3. Place straight wire to bridge the gap.
4. Connection completes

Feedback: Audio: mechanical clunk as the wires stick in place

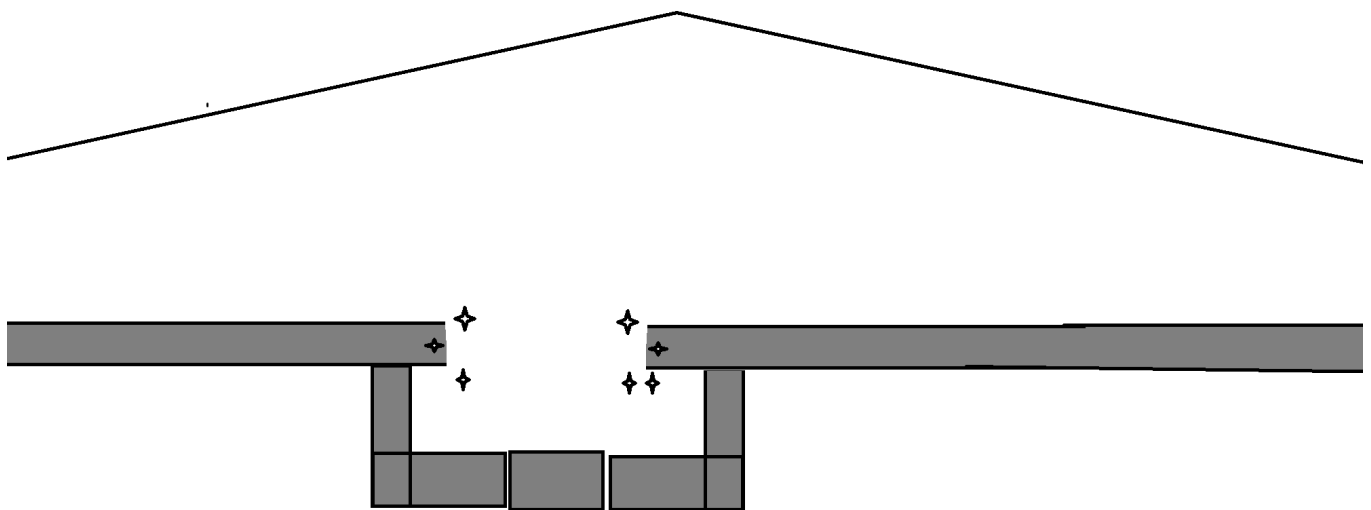
Result: First cable restored, power flow continues.

Puzzle 2b - Rerouting Around the Boulder

Narrative Setup: The next cable break is blocked by a huge stone/fallen statue/fallen pillar jutting out of the ground. Direct connection is impossible.

Clues: Player finds corner wire pieces near the collapsed garden wall.

Teaching Objective: Learn to reroute around static obstacles with corner wires.



~Image assets/wires.png

Gameplay Steps:

1. Attempt to connect → prompt warns “Path obstructed.”
2. Look around the collapsed garden wall for more pieces, find corner pieces.
3. Place corner wires around the boulder.
4. Complete the circuit.

Feedback: Audio: mechanical clunk as the wires stick in place

Result: Power bypasses the obstacle and continues toward the grid box.

Puzzle 2c - Complex Cable Repair

Narrative Setup: Another break runs across collapsed rubble, requiring multiple pieces in sequence.

Exploration: Searching through overgrowth reveals both straight and corner wires.

Teaching Objective: Chaining multiple wires to navigate complex terrain.

Gameplay Steps:

1. Player examines terrain → no single piece fits.
2. Look for more pieces.
3. Combine straight and corner wires in the correct order.
4. Final piece completes circuit.

Feedback: Audio: mechanical clunk as the wires stick in place

Result: Power reaches the grid box, but the guard house wall blocks the last stretch.

Puzzle 2d — Using the Pass-Through Socket

Narrative Setup:

- The guard house wall stands between the grid cables and the engine outside.
- On closer inspection, you notice paired sockets embedded in the wall.

Clue:

- Journal note nearby explains: “The Doctor built these pass-through sockets to carry power safely through the thick walls of the castle.”

Teaching Objective: Learn about pass-through sockets.

Gameplay Steps:

1. Examine the puzzle
2. Look for solution, find socket, find journal entry.
3. Connect repaired cable to input socket on one side.
4. Walk around → connect output socket on the other side to the grid box.
5. Power transfers through the wall.

Feedback:

- Audio: mechanical clunk.
- Visual: sparks flicker.

Result: Grid box is active, but must be routed correctly to operate the drawbridge.

Puzzle 3 - Lowering the Drawbridge

Narrative Setup:

- With the grid cables repaired, the Grid box is connected to the gridbox.
The next step of business is to:
 - Attach the grid box to the preplaced split switch
 - Attach split switch to the drawbridge
 - Use the grid box lever to switch on power
 - Route power away from storage hoist to the drawbridge
- The grid box connects to a shared split switch system. It can power either:
 - The supply hoist (a pulley used to lift crates into the guard tower).
 - The drawbridge winch (thick chains leading across the moat).
- The drawbridge socket displays: Required Input = 15 units.
- Current line only delivers 5 due to decay.

Teaching Objective: Combine split switch choice with exact power requirement and repeater use.

Also you have to place the repeater at the right position in between the split switch and the drawbridge. It can have too much power or too little power.

Gameplay Steps:

1. Connect grid box → split switch.
2. Flip the grid box on
3. Flip switch:
 - Wrong output (hoist): pulley rattles but nothing useful happens.
 - Right output (bridge): winch gears groan, socket lights up red → “Insufficient Power.”
4. Insert Repeater into the line.
5. Power restored to full 15 units.
6. Socket glows green, bridge lowers.

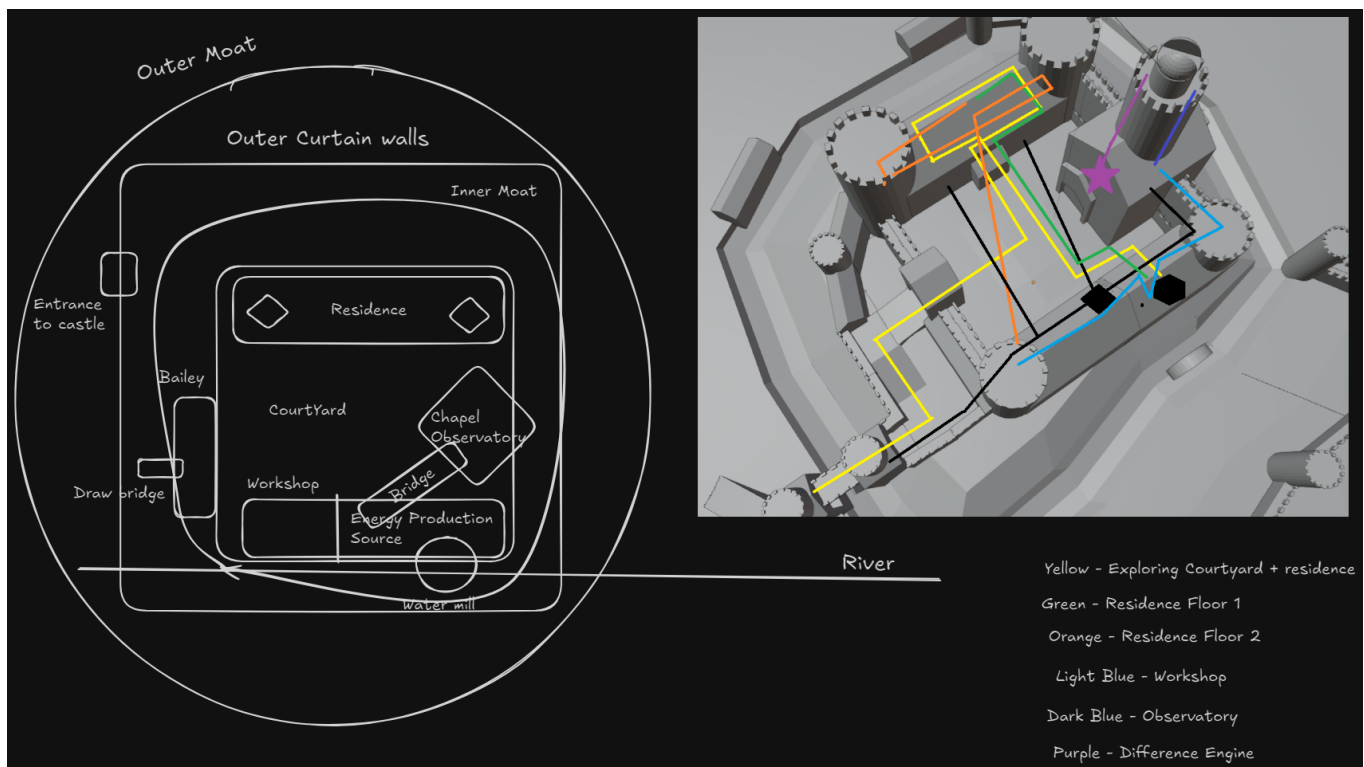
Feedback:

- Wrong choice (hoist): audio of chains squealing, journal update → “This doesn’t help.”
- Correct choice (bridge): with repeater, huge grinding sound as bridge chains unwind.
- Visual: drawbridge slowly lowers, dust falls, final crash as it lands across the moat.
- UI Dialog: “It works!”

Result: Player learns that:

- Circuits can split, but only one is correct.
- Power must match the socket’s requirement.
- Repeaters restore signal strength.
- The castle entrance is now open.

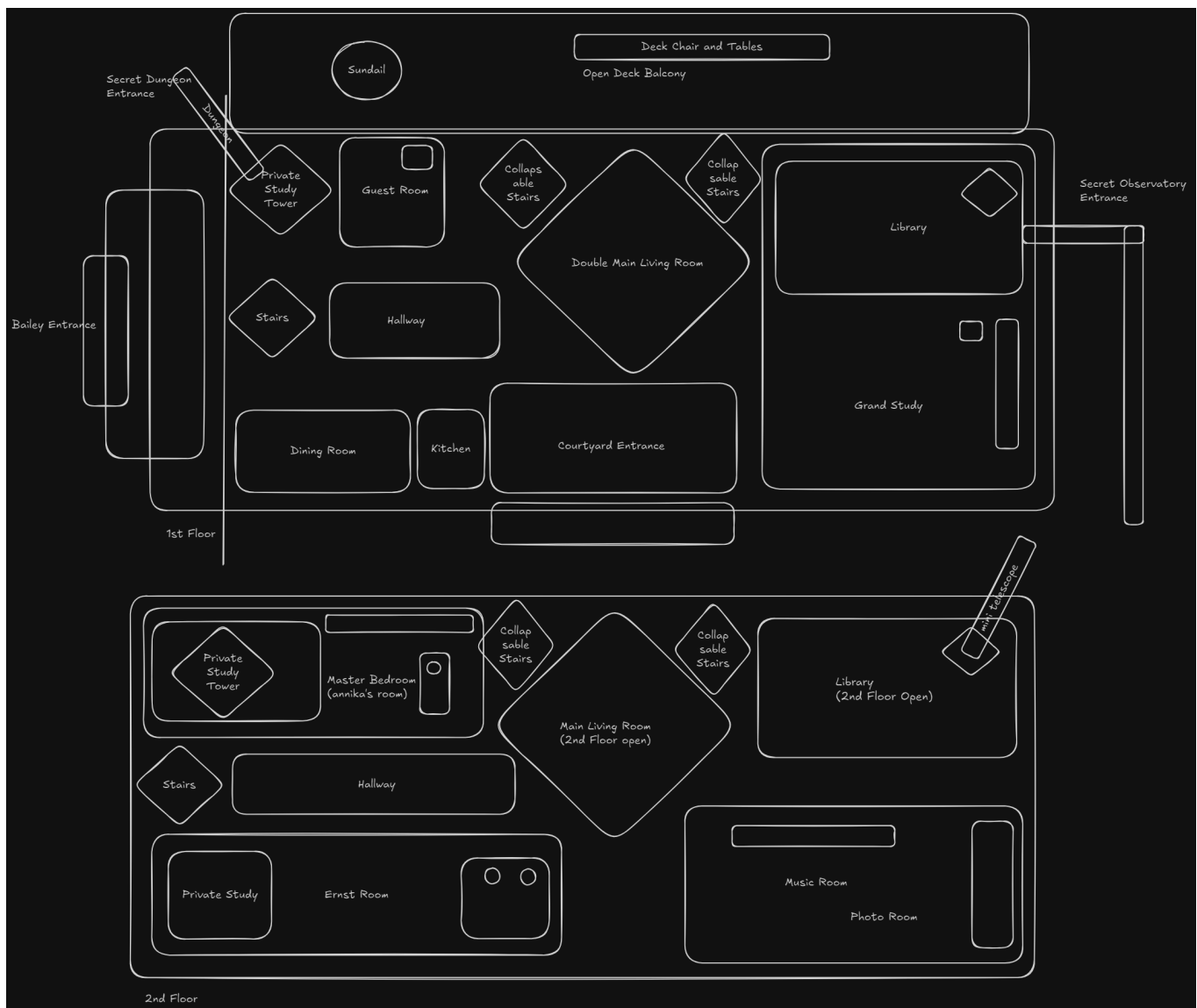
Level 2 to Level 5 Progression



Castle Layout.png

- Enter through the courtyard, the hub that connects all major areas.
- Step into the residence for an initial exploration and narrative setup.
- Follow the power lines to the water mill and complete a partial repair.
- Return to the courtyard to explore further as new paths open.
- Re-enter the residence and restore its internal systems.
- Unlock access to the workshop and bring it back online.
- Cross the bridge from the workshop to the observatory.
- Ascend the outer spiral stair to repair the observatory mechanisms.
- Gain the major astronomical clue about the castle's hidden purpose.
- Discover that the water mill must be fully restored to power the castle.
- Go back to restore the water mill
- Finally, descend into the Chapel, where the Difference Engine awaits as the endgame puzzle, unlocking the Map Room and revealing the mystery.

Level 2 Residence



Residence Layout.png

Will have a 1920s style ball room, or at least an opening.

Tower 1 - Annika's Private study

Rooms

1st Floor

- Guest Room
- Dining Room
- Kitchen
- Hallway
- Double Main Living Room

- Grand Study
- Library
- Courtyard Entrance
- Bailey Entrance
- Open Deck Balcony
- Special Entrances/Passages:
 - Secret Dungeon Entrance (near Private Study Tower)
 - Secret Observatory Entrance (through Library)
 - Collapsible Stairs (two locations, leading up)

2nd Floor

- Private Study Tower (upper floor)
- Master Bedroom (Annika's Room)
- Ernst Room
- Private Study
- Main Living Room (2nd Floor Open, overlooks the 1st floor)
- Library (2nd Floor Open)
- Music Room + Photo Room
- Special Entrances/Passages:
 - Collapsible Stairs (two locations, connected to 1st floor)
 - Secret Observatory Passage (upper entry from Library)

Possible Puzzles to explore in each level

1st Floor

- Metal Shutters
 - Heavy shutters block access to balcony windows, each tied to a small motor.
 - Lets sunlight into the room.
- Chandelier and Lighting System

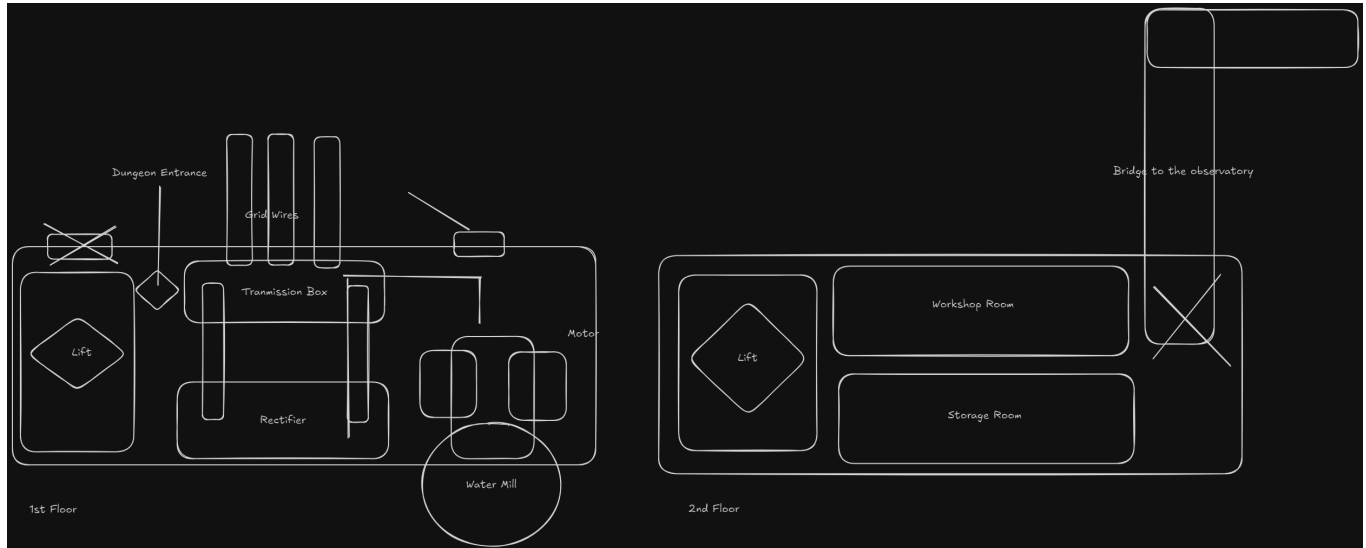
- A large chandelier with several bulbs, wired in parallel.
- Solving it reveals a hidden switch panel in the main hall.
- Giant Clock
 - A broken electrical pendulum and gear system.
 - Can use delay switches to route power to three different coils with the right timing.
 - Upon being restored, when the clock strikes a specific hour it could open a secret room (from the grand study)
- Collapsible Metal Spiral Staircase
 - They have a motorized locking system keeps the staircase collapsed. It Needs power routed correctly to unfold. They can jam if both plugs aren't powered properly.
 - Also uses invertors maybe.
 - They give access to the second floor.
- For Fun - A kitchen puzzle
 - A strange contraption with a motorized clamp.
 - Requires using a delay switch to apply force at the right moment. Too early or late and it fails.
 - Success opens a sealed jar with a key item inside, like a fuse, wire, or slide.

2nd Floor

- Slideshow Projector
 - In the music/photo room there is an old projector powered by a big arc bulb.
 - You can repair the bulb's circuit with the right amount of power to ignite it. It can also burn it out, player would have to be careful.
 - Once working, it projects a star map clue onto the Library wall.
- Lighting Mechanism
 - A rotating lamp with movable shutters.

- Delay switches can be used to align shadows with wall markings. The correct alignment opens a hidden wall compartment revealing narrative info.

Level 3 Workshop + Watermill



Workshop Layout.png

Rooms

1st Floor

- Lift
- Water Mill
- Rectifier
- Transmission Box
- Motor
- Grid Wires
- Dungeon Entrance

2nd Floor

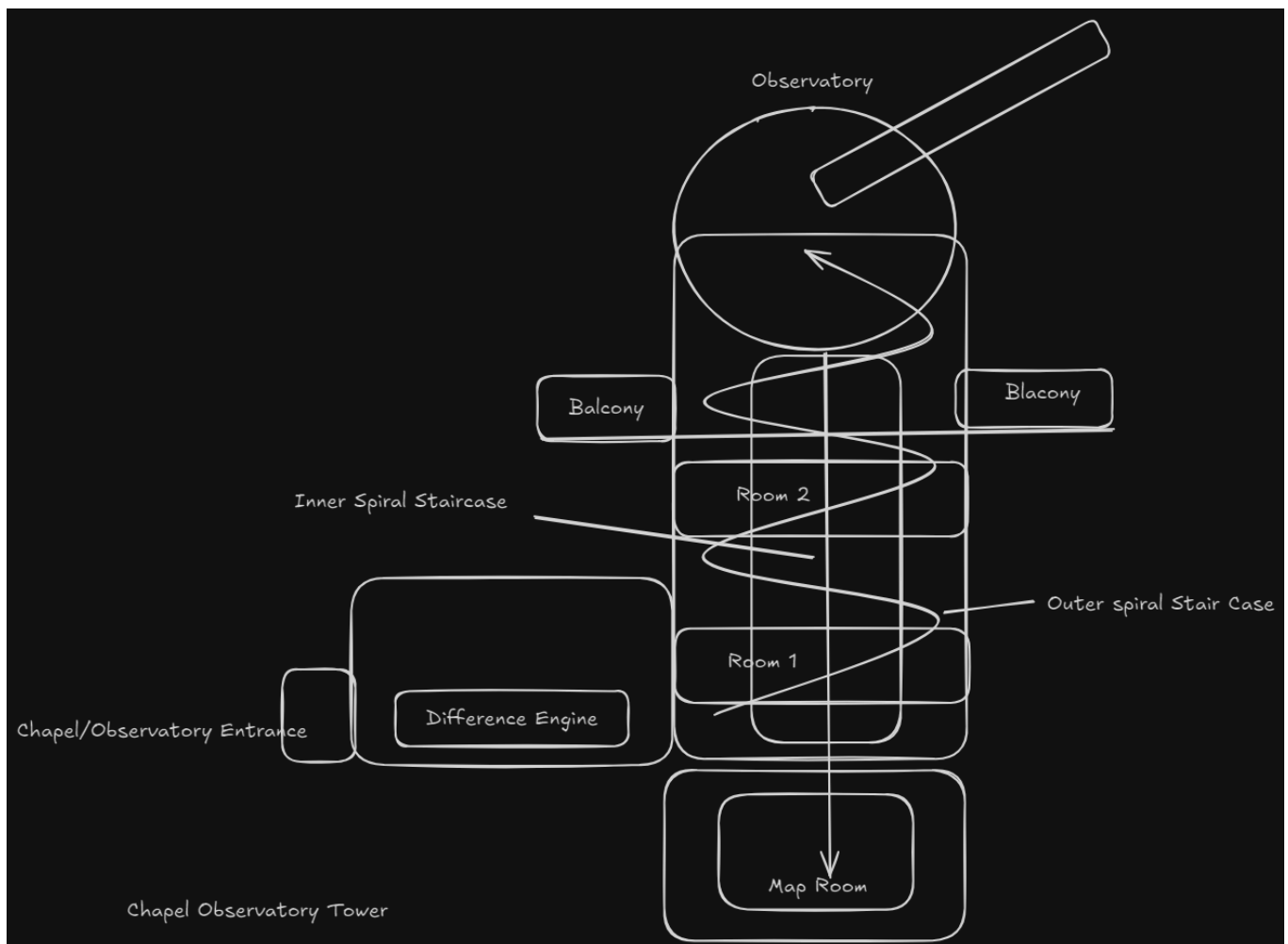
- Lift
- Workshop Room
- Storage Room

- Bridge to the Observatory

Possible Puzzles

- Electric Trap
 - Once you turn on the watermill, a current arc flows through in between the rectifier and the Transmission box blocking your way to the other side.
 - You can fix the system or changing the flow of the current to cross to the other side.
- Lift
 - Fixing the lift and using state blocs to travel up and down.

Level 5 Observatory / Chapel



Observatory Layout.png

Rooms

Ground Level

- Chapel / Observatory Entrance
- Difference Engine Room
- Map Room

Middle Levels

- Room 1 - Powe calibration room
 - batteries, capacitors
- Room 2 - Office room, small library
- Inner Spiral Staircase
- Outer Spiral Staircase
- Balconies (two sides)

Top Level

- Observatory (with telescope)

Possible Puzzles

- Moving the Observatory
- Difference Engine
- Rest of the associated complex machinery