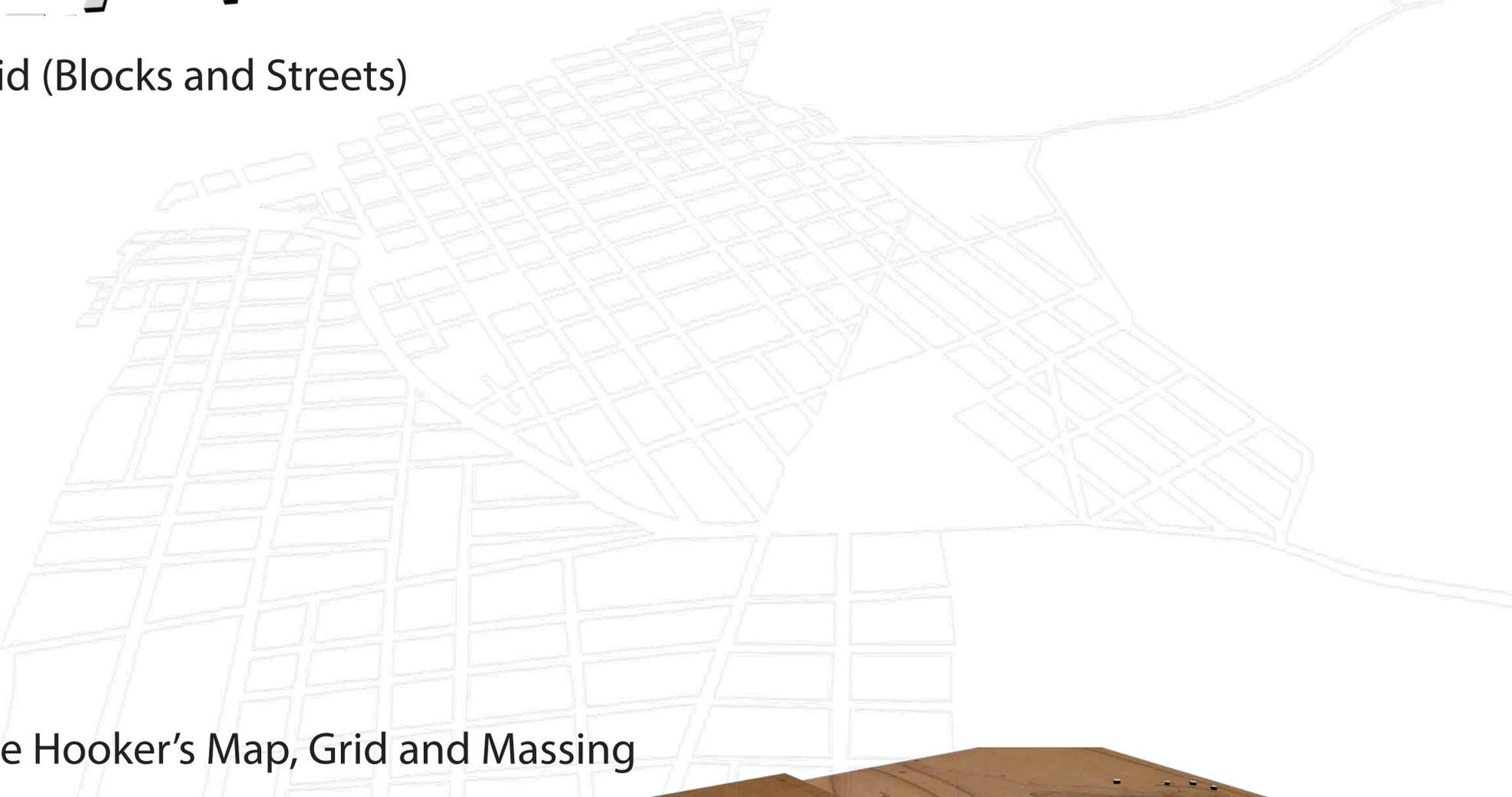


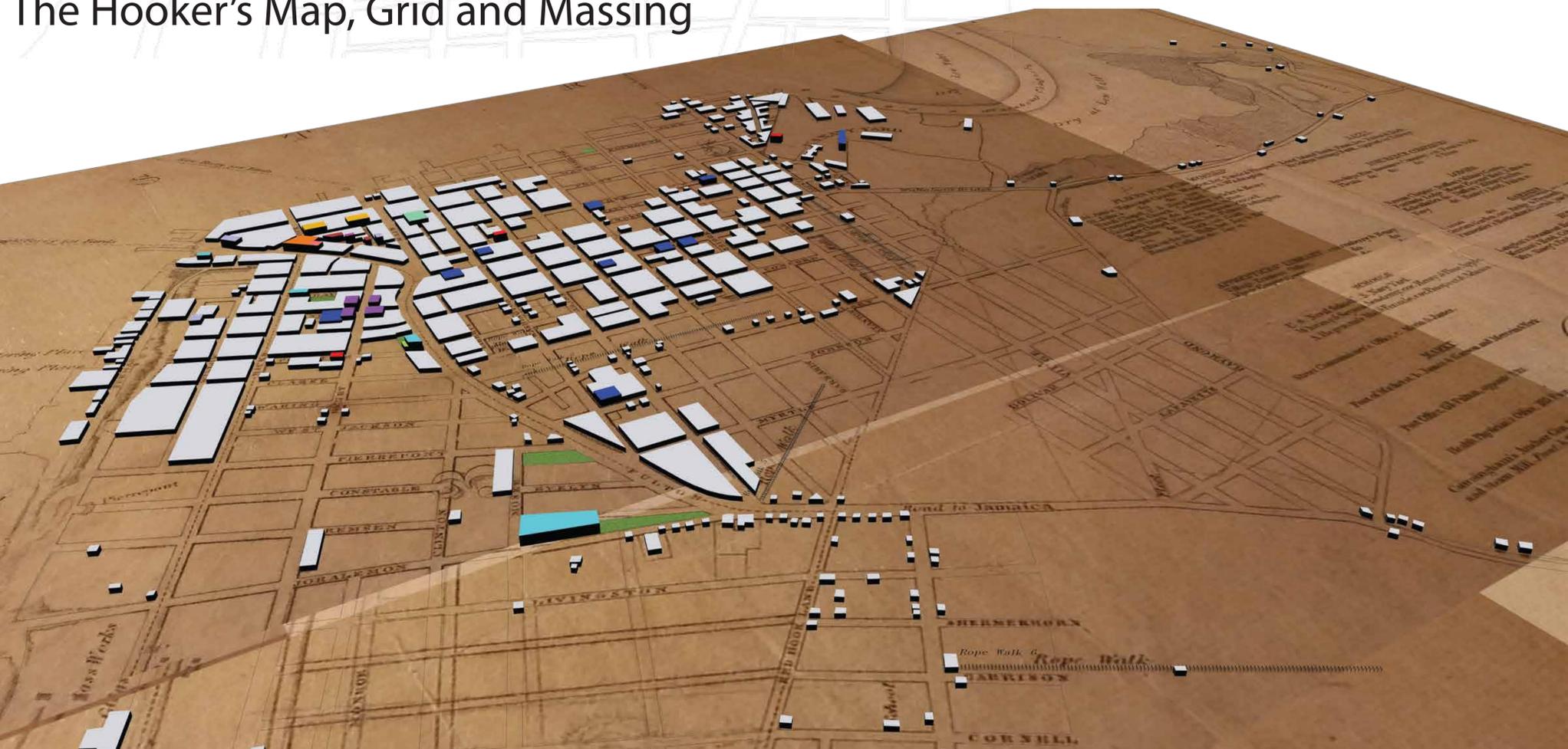
Marssing (Builded Area)



Grid (Blocks and Streets)



The Hooker's Map, Grid and Massing



Post Office



Health Physician



Markets



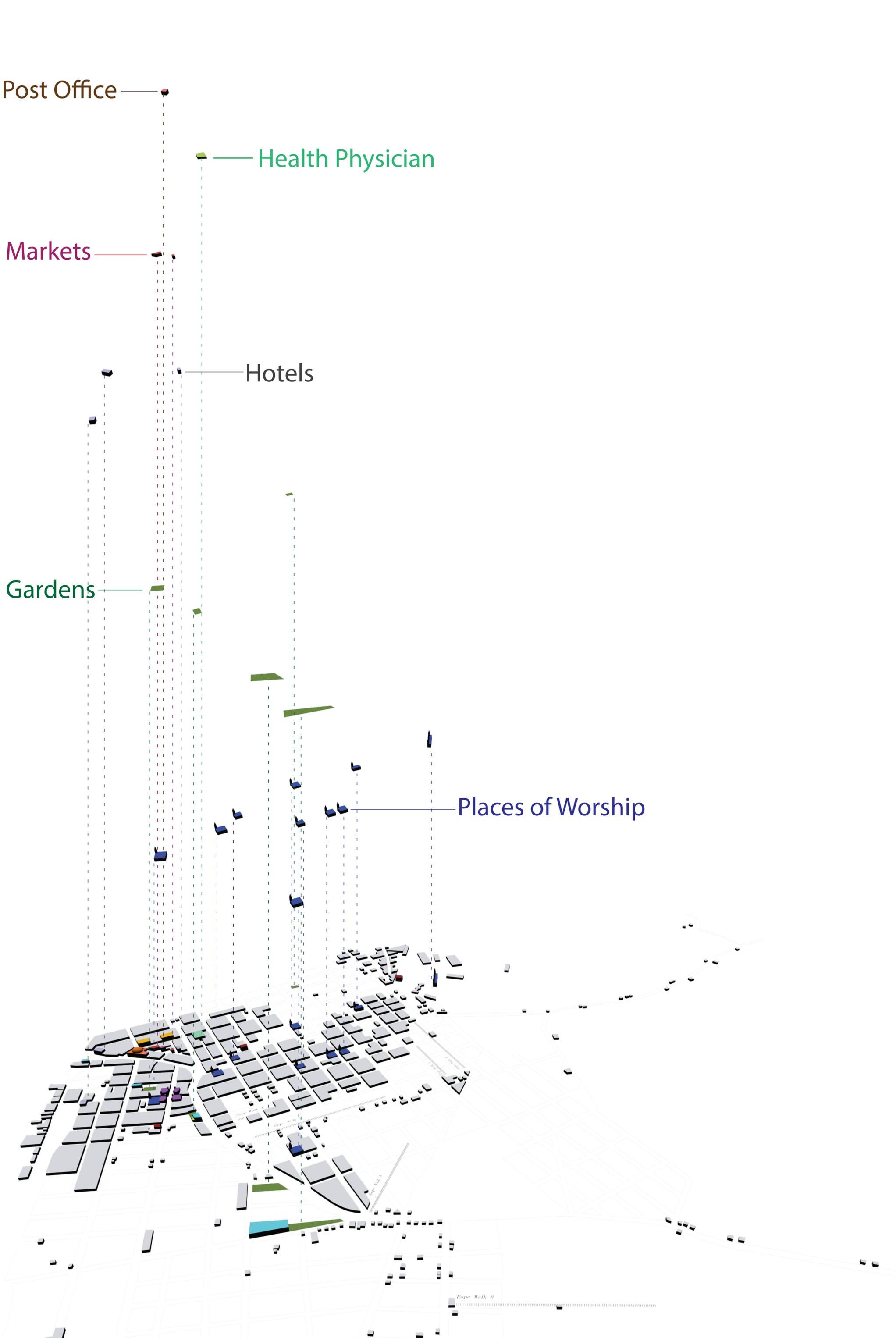
Hotels



Gardens



Places of Worship



Street Commissioner's Office

Banks

Gin Distillery and Steam Mill

Insurance

Apprentices

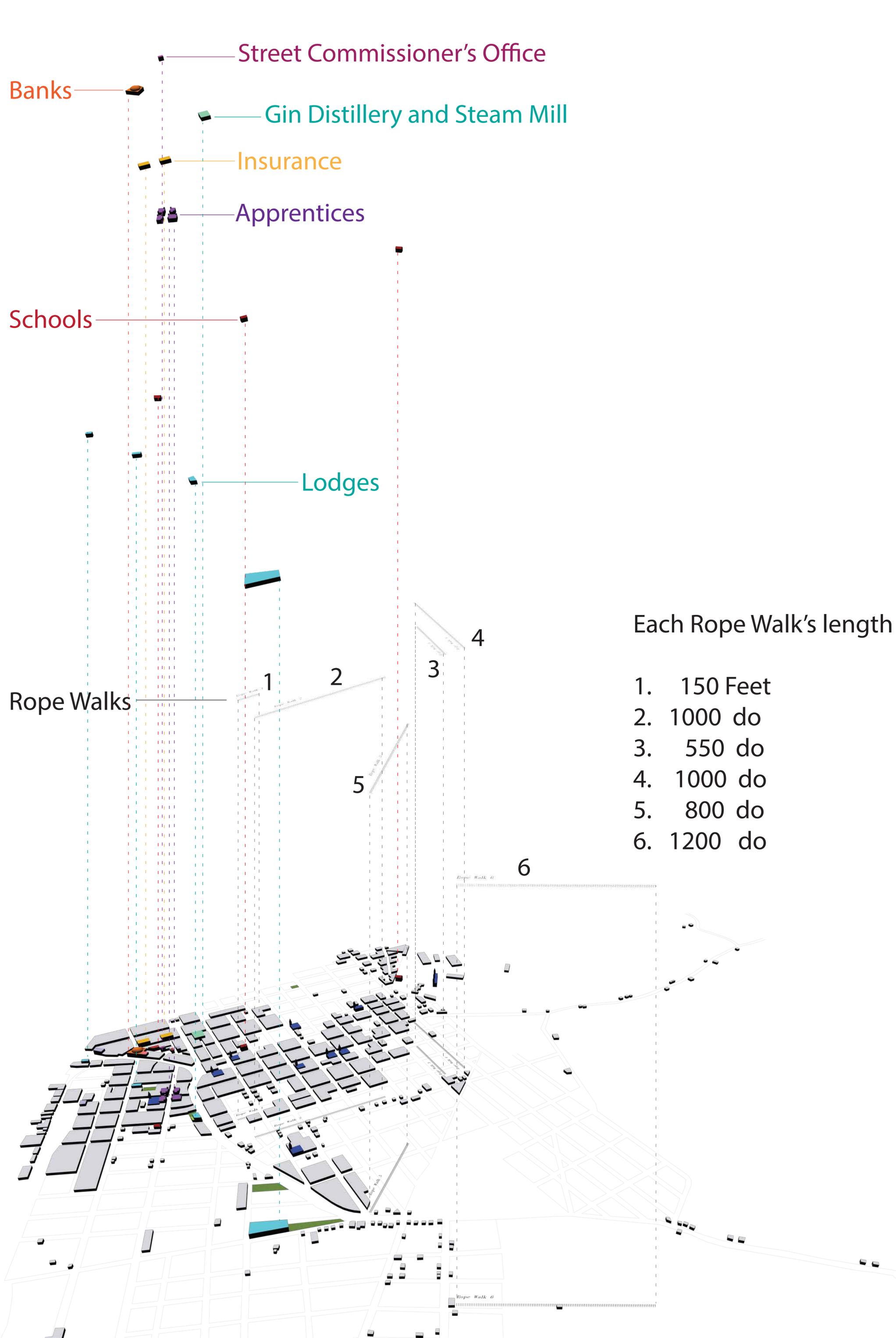
Schools

Lodges

Rope Walks

Each Rope Walk's length

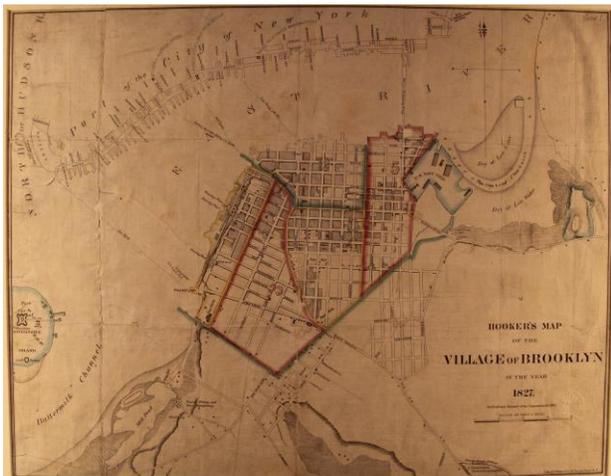
- 1. 150 Feet
- 2. 1000 do
- 3. 550 do
- 4. 1000 do
- 5. 800 do
- 6. 1200 do



Learning Places Spring 2016  
Aisel Omerbashi

## Final Research Project

My first idea for the final project was to analyze the Hooker's map that we got in contact from the library site visit at the NYPL (New York Public Library). I liked it so much so I wanted to do more research about that map and find out what everything in that map was showing by hatched areas, lines, shadows, etc. I started my research then and I found out that there was another pretty similar to the map that I wanted to do the research on. Both maps were made from the same mapmaker and in the same year in 1827, but the second one that I got in contact with at the BHS (Brooklyn Historical Society) had some of the information written on the side of it about the location of the public areas.



*Earlier map without the key on it (NYPL)*



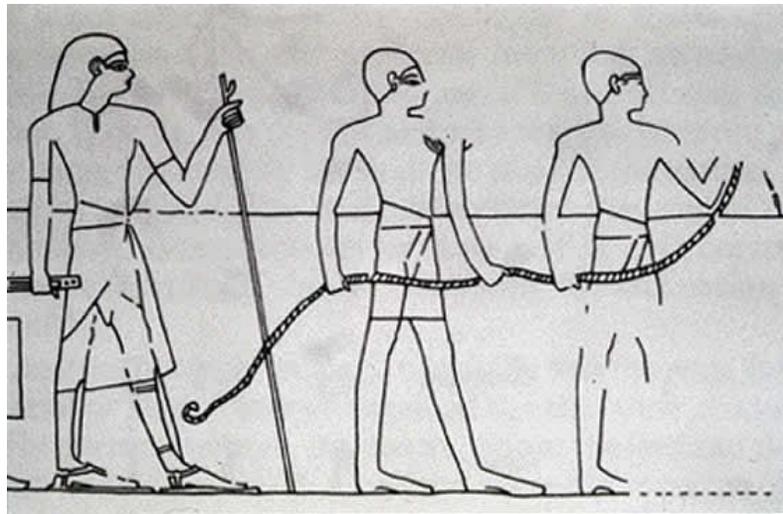
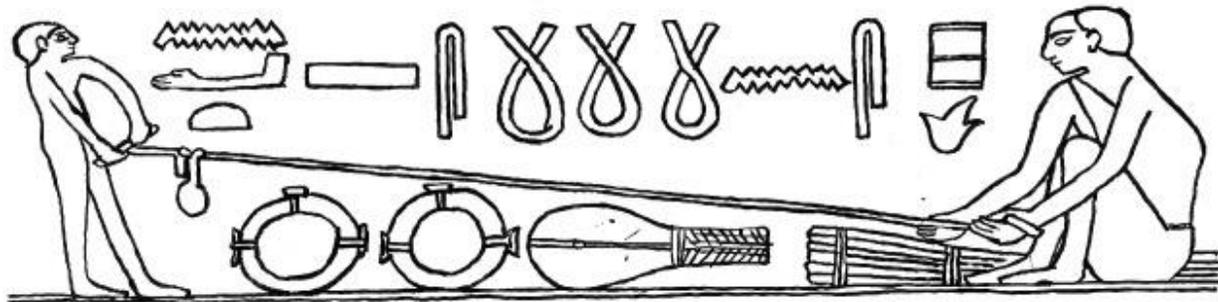
*Later map with the key on it (BHS)*

So since the second map had information on it I decided to work with the updated map. I decided to trace the Hooker's Map 1827 and layer differently all the places based on what Hooker has given us and based in their functionality as well. I decided to study the map three dimensionally and model it. I will also color code or color differentiate them and label them clearly. From looking deeper into the map I saw that there were six ropewalks in the map that Hooker did not include in the side information (the key). So in the beginning I didn't even know what ropewalk was and I decided to add some general information about it on my final project as well.

### Origins of Rope, Ropewalks and Ropewalk Machines

From my research I found out that the skill of rope maker's craft originally come from antiquity. Ropes at that time were either twisted by hand or braided. The simple hand twisting or braiding was improved in early Egyptian times by inventing a simple hand tools. The new invented

method was called Spinner. It worked well as long as you didn't want to make a very long rope. Indian Americans also used the Spinner method for their rope making. Rope walk it's another method of making rope. This Egyptian drawings from 1400 B.C. show men walking while making rope.



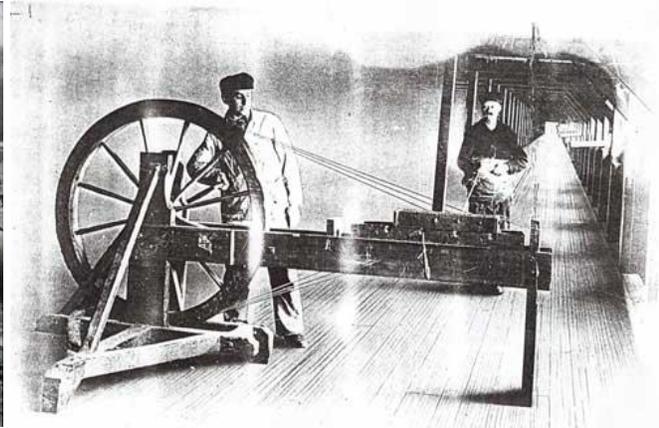
*Ancient Egyptian Culture made a considerable use of hemp but no examples of hemp ropes have been found in Egypt.*

The first walks were outdoor level spaces, often having posts at intervals to support long work as it was extended and there are 6 of them shown in the Hooker's Map. The ropewalking involved three steps: spinning the fibers, tarring them for waterproofing, and laying them out to dry. To make a single rope was needed the cooperation of three people. On each end of the rope machine was needed a person to manually rotate the wheels so they can be fully twisted, and the third one to keep the wires apart while they combine into one in order by using a tool called Top. In the earliest times the single end product rope was made out of two strengths of sisal, add later on the invention of three lines that turn into one was much more productive and much stronger. After In the end of the rotation process the length of the single rope would shorten to about the 7/10 of the previous length of the three strengths of sisal.

The wood construction for rope walks was highly flammable and they frequently burned down, causing the people that lived around them to complain and to ask for their relocation in the

country side. After a few fires the ropewalks were moved in safe areas but they still were using wood as the main building material. Later the ropewalks were roofed or completely enclosed and this structure was called a “ropewalk”. Its name came from the spinning process when the fiber were literally walked through the length of a structure and simultaneously twisted together, and also because there is a lot of walking up and down involved.

Alexander Parris was the architect of the ropewalk. His reputation as a major architect had been well established by the time he designed The Rope Walk. The new structures of ropewalk were build out of masonry stone, or brick. The inside of the building were still made out of wood. Between 1828 and 1850 were the years where the greatest building activity occurred which was also the most active period of shipbuilding. Throughout the Middle Ages rope was made using a mechanically assisted ropewalk method. A mechanized method based on the ropewalk is used extensively throughout the world. The machine which is called a rope jack, consists of three hooks connected mechanically with a gear or chain at one end, and a free spinning swivel at the other.



*Outdoor Rope Walks*



*Indoor Rope Walk*

The three swivels spin together to put twist in the strand. When the strands have enough twist, the rope is laid by allowing the swivel to spin freely. The length of the walk limits the length of rope that can be made without splicing. The longest rope walk existed in our site (as shown in the Hooker's map) was 1200 foot and when it was fully twisted ended up to 700 foot rope. The only ropewalk in the country that still exists as a museum is in Boston. In 1837 this ropewalk began production at the Charlestown Naval Shipyard, and remained in operation until 1971. This ropewalk provided rope for all the navy yards in the US for more the 100 years.

There is an original ropewalk from the Plymouth cordage company in the museum at Mystic Seaport. It was moved there in the 1950s when it became commercially unavailable, but ropewalk technology is still used to this day in many parts of the world.

### **YouTube video links that talk and shows how the Rope Walks was made:**

<https://www.youtube.com/watch?v=By8K5mKSwDA>

<https://www.youtube.com/watch?v=toyOKOi0DsM>

### **References**

<https://archive.org/stream/ropewalkincharle00bost#page/n1/mode/2up>

<http://patch.com/massachusetts/charlestown/the-ropewalk>

<http://thesixthborough.weebly.com/vinegar-hill-the-history-of-irishtown.html>

<http://www.brooklynhistory.org/blog/2014/02/03/map-of-the-month-february-2014/>

### **Here are some floor plan, sections and elevations.**

<http://www.loc.gov/pictures/search/?q=Drawing:%20ma1405&fi=number&op=PHRASE&va=exact&co%20=hh&st=gallery&sg%20=%20true>

### **Here is the first directory of the village of Brooklyn**

[https://books.google.com/books?id=eP9HAQAAMAAJ&pg=PA139&lpg=PA139&dq=brooklyn+in+1796+the+first+directory+of+the+village&source=bl&ots=bMcN2h\\_wiF&sig=r-TrU6pk3fwMpmW5WPm6FI0H5Q&hl=en&sa=X&ved=0ahUKEwjpwK76tPvMAhUs\\_IMKHRZDAXIQ6AEII DAB#v=onepage&q=brooklyn%20in%201796%20the%20first%20directory%20of%20the%20village&f=false](https://books.google.com/books?id=eP9HAQAAMAAJ&pg=PA139&lpg=PA139&dq=brooklyn+in+1796+the+first+directory+of+the+village&source=bl&ots=bMcN2h_wiF&sig=r-TrU6pk3fwMpmW5WPm6FI0H5Q&hl=en&sa=X&ved=0ahUKEwjpwK76tPvMAhUs_IMKHRZDAXIQ6AEII DAB#v=onepage&q=brooklyn%20in%201796%20the%20first%20directory%20of%20the%20village&f=false)