



## Appendix "C"



# The City of Babylon the Great

The **Location of the City of Babylon** is placed at an approximate longitude of 44°20'E and approximate latitude of 32°32'N. As previously stated, it lies approximately 55 miles south of Baghdad, Iraq (44°24'E, 33°20'N) with the Iraqi city of Al Hilla (population 215,000) located to the south of it's southern most border. Much of Al Hilla's early building was done with actual bricks salvaged from the ruins of Babylon. The present day ruins are home to four small villages that are actually built on the site; Anana, Kweiresh, Sinjar, and Jumjumma. The present day ruins are not much more than mounds of dirt and debris.



Map of Modern Iraq

Unfortunately, the **descriptions** we have **of the City of Babylon** are limited and sometimes questionable. The ruins give us a base for extrapolation on what the city looked like; however, as we will see it leaves much to the imagination. The best descriptions come from the ancient cuneiform texts and ancient historians. A famous Greek historian by the name “Herodotus” wrote much about the ancient city of Babylon, specifically during the time of the Neo-Babylonian period, or as some refer to it as the “Chaldean” period. Of the city, Herodotus wrote,

*“It lies in a great plain, and, each side being one hundred and twenty stades,”* (most experts translate stades as furlong) *“it is square. So the circumference of the city of Babylon is some four hundred and eight stades. Such is its bigness, and it is planned as no other city of which we know”* (*The History-Herodotus, translated by David Grene, Page 114, Book I, Section 178*).

Translating Herodotus’ measurements into modern day units would result in the city of Babylon being 15 miles in each direction (1 furlong = 1/8 mile), with a circumference of 60 miles and an area of 225 square miles. Even so, it would appear that Herodotus’ numbers are not of much use to us since modern day excavations have shown the city to be much smaller than he reported. It is supposed that Herodotus used such large numbers to convey an idea of grandeur rather than to report actual size of the city. Herodotus doesn’t appear to be the only historian to exaggerate the size of Babylon. Though Herodotus exaggerated many elements relative to Babylon’s size, his accounting is still considered fairly accurate and reliable. Several other authors have conveyed similar accounts, none of which appear to collaborate with each other. The famous author Aristotle even wrote, when referring to Babylon’s great size, that *“...at the time of the capture of Babylon, it was three days before a part of the city was aware of the fact”* (*Ancient Mesopotamia, A. Leo Oppenheim, page 140*).

Some theorize that Babylon’s sister city Borsippa and the area in between the two cities was measured in Herodotus’ accounting in the city’s size. It is possible that the area between the two cities was somewhat populated. This would explain Herodotus’ rather large accounting; however, this theory is speculative.

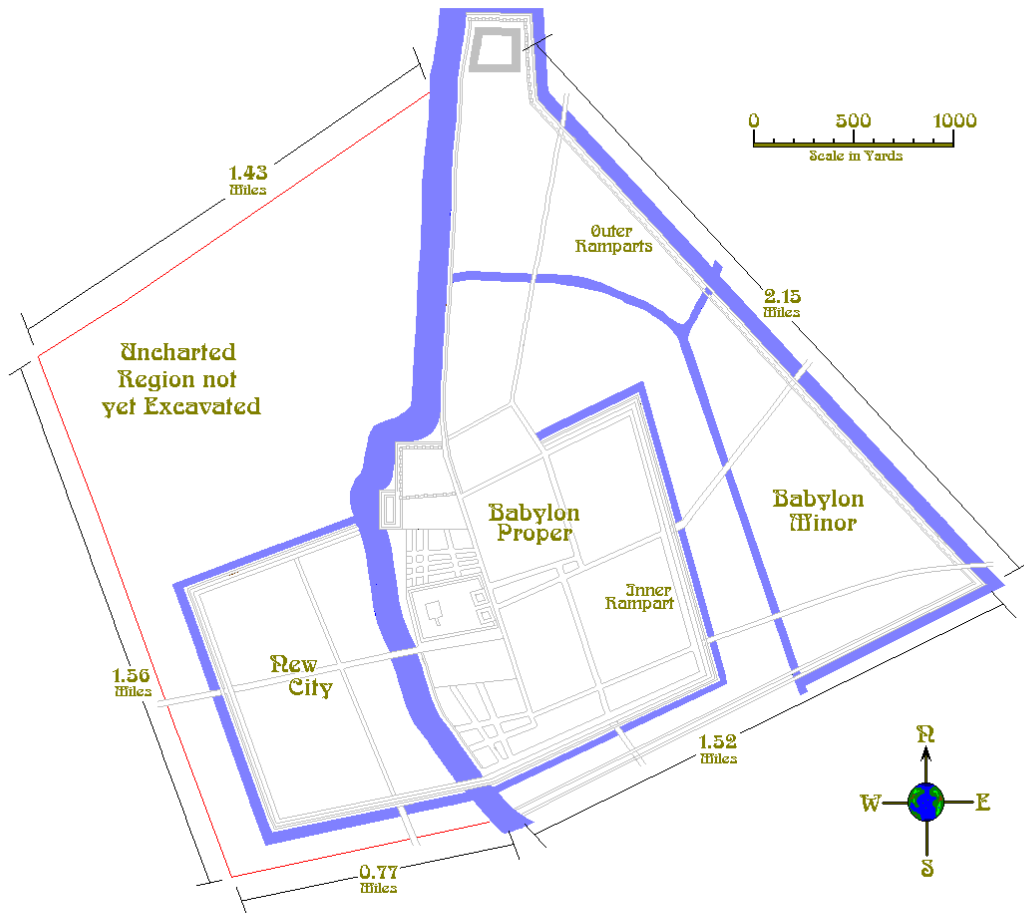
Even though Herodotus, and other historians, appears to have exaggerated the size of Babylon, modern day excavations have shown that the city was quite large in size relative to the cities of its time. A. Leo Oppenheim, who was one of the world’s foremost modern experts on ancient Mesopotamia wrote that the Babylon of the Neo-Babylonian period was undoubtedly the largest city in Mesopotamia, covering an area of approximately 2,500 acres (*Ancient Mesopotamia, A. Leo Oppenheim, page 140*). Such an area would represent approximately 3.9 square miles (1 acre = 43,560 square feet, 1 linear mile = 5,280 linear feet).

Taking modern day excavation data on the site of Babylon, a rough size can be developed for the site. Even though such an estimate is probably fairly close to Babylon’s actual size, it should be noted that some extrapolation of the data was done due to the poor conditions of the ruins and the lack of complete archeological work having been done. The city appears to be divided into two main parts; Babylon Proper, and

Babylon Minor. Babylon Proper lies central in the city, and is surrounded by a series of walls and defenses. Within Babylon Proper lies the Royal Palace, the Ziggurat, and much of the trade and commerce of the city. Babylon Proper also include what is referred to as the New City. Babylon Minor includes the outlying regions of the City Proper that were encompassed with an outer city wall during the Neo-Babylonian Empire. With reasonable surety, we can measure the northeast outer wall or boundary of Babylon as being approximately 2.15 miles in length. The remains of the northwest and southwest walls or boundaries are either deteriorated beyond recognition or undiscovered. The southern wall of the city is partially in tact, and measures at least 1.52 miles in length. The southern wall has been estimated to be 2.29 miles in length based off of evidence that the city extended at least that far. Most experts agree that the city was around twice the size of the area that the northeastern and southern outer ramparts encompassed. If that were true the area that Babylon (Proper and Minor) covered would have been approximately 4.8 square miles. In the drawing below, which shows that general layout of the city, a much more conservative estimate for the city's dimensions which would only amount to a total area of 3.45 square miles. One can see how Oppenheim's estimate of the city's area is quite feasible.

## The Dimensions of the City of Babylon

Based on Koldeway's archeological findings and the author's conjecture



One final note must be made when considering the size of the city. The city proper and minor only included the areas encompassed by city wall. If there was city beyond the walls, it has not been included in the estimates for the size of the city. With this simple fact one might even ask the question, “Could Herodotus have been right?” The answer is, without the knowledge of heaven, we might never know.

The once great city was covered with years of dust and rubble until in the year 1761, the Danish King, King Frederick the 5<sup>th</sup>, ordered the first expedition into Mesopotamia for excavation since the time of Babylon’s burial. After the Danish expedition several expeditions into Babylon itself followed. In 1811 C.J. Rich, 1850 Layard, 1852-1854 Oppert, and Rassam from 1878-1889. Finally, in 1899 the German archeologist R. Koldewey, his German team, and an addition of 200 to 250 diggers started a detailed excavation of Babylon that lasted until 1917. Their effort resulted in the majority of information that we have on Babylon to this day.

The city lied a midst the lushest **surroundings** in Mesopotamia, or the known world for that fact. The city is centered on a broad plain, which is sometimes referred to as a valley since the Zargos mountain range lie to the east and the high desert lies to the west. The climate is very dry, with summer temperatures often reaching 122° Fahrenheit (50° Celsius). Due to the dry hot weather, water is key to the survival of this area. The area, having very fertile soil, is made green and productive by the rivers Euphrates and Tigris and the tributaries thereof. The Historian Herodotus wrote of Babylonia’s fruitfulness and said,

*“For all the Babylonian country, as in the case of Egypt, is cut up with canals. The greatest of these can carry boats; it runs toward the southeast, from the Euphrates to the Tigris, on the banks of which was the city Nineveh. Of all the lands that we know, this is far the most fertile for Demeter’s”, meaning corn or grain, “crop. Other plants it grows not at all-neither fig tree nor vine nor olive. But for Demeter’s crop it is so fertile that it yields on the average two hundred-fold and, at its best, three hundred fold. The blades of wheat and barley are easily three inches wide; as for the millet and sesame, though I know very well the size of the plant there, I will not speak of it; for I am aware that, for those who have not gone to Babylon, even what I have said so far about the crops has encountered great disbelief. The people use no oil from the olive, but only from sesame. There are palm trees growing all over the plain, yielding fruit from which the people make bread, wine, and honey. They treat these trees like fig trees; in especial, they tie the fruit of those palm trees the Greeks call male to the date-bearing palm so that the fruit wasp, creeping into the dates, may cause them to ripen and the date may not fall to the ground. For the male plants do indeed carry in their fruit the fruit wasp, just as the wild fig trees do (The History-Herodotus, translated by David Grene, Page 121, Book I, Section 193).”*

The entire region of Babylon was considered for the most part desert; however with the aid of two great rivers, the Babylon Valley developed into a breadbasket. Though it did become agriculturally prosperous, it would seem somewhat unlikely that it would ever become a world power since it was void of almost all raw materials. The region was lacking in ore such as iron and copper which were essential to the advancing societies of the time. They lacked material of precious value like gold, silver, ivory, and precious woods. This created a real need for trade, and promoted the governing kingdoms of Babylon throughout the ages to engage in looting raids and invasions into surrounding regions that had access to such materials. Even wood, other than that from Palm Trees, was imported in.

The Babylonians became skilled farmers, utilizing irrigation and water management techniques that were advanced beyond their years. They learned to utilize the few resources that they had to the extent that their land became fertile and productive. They learned to utilize natural materials in the region. They learned to work with the date palm, making various items from its fruit.

The Babylonians learned to build using but mud, silt, and palm trees and at the same time creating great architectural feats. As we proceed to attempt to briefly describe the ancient city it will become evident that the Babylonians adapted well to the Mesopotamian Valley and made their capital city worthy of two of the seven wonders of the ancient world in spite of their raw material deficiencies.

In an attempt to gain an understanding of what the city of Babylon might have looked like, we will try to walk through the city, visualizing how the city might have appeared at the close of Nebuchadnezzar's glorious reign. We will start our tour some 20 miles north of Babylon. Most foreign travel into Babylon traveled on a wide dirt road that extended through and beyond present day Northern Iraq. As Babylon's outer most defense lied a rampart some 20 miles north of the city proper, which we refer to as the "Median Wall". This wall extended from the banks of the Euphrates River to the banks of the Tigris River, a length of almost 30 miles. According to excavations the wall was some 16 feet wide, and it is suspected that towers were incorporated periodically as additional defenses.

As one traveled down the main road to Babylon, and approached the Median wall, it is suspected that a large gold covered statue of Nebuchadnezzar stood beside the gate allowing entry into the district of Babylon. It is suspected that this district was the Dura district, though this fact has not yet been proven. We know based on Biblical data that a nine-story tall statue of Nebuchadnezzar was placed in the Dura district. Other experts place the Dura district in south, south-west Babylon. The Statue was a claim by Nebuchadnezzar that he was indeed the King of kings. Those entering Babylon would be required to bow down pay homage to the great king. Though it is speculated that foreign ambassadors and royalty were not expected to pay such respects, others were given the choice of bowing down or being put to death.

After bowing down to the statue, one was probably questioned by the royal guards as to ones business in Babylon before being granted permission to enter the district of the King. Of course once permission was granted, there was a small matter of the entrance tax. Babylonia wasn't as prosperous as it was without a system of profit for the King's

programs. Once the details were finalized, one was told that it was okay to proceed down the “**King’s Highway**”.

The broad road continued for miles through what is suspected to be farmland, dotted with small clusters of mud-brick houses and periodic military outposts. There are those who even speculate that the area might have been more densely populated, though there is no archeological evidence to support this theory.

As one approached the grand city of Babylon from the north following the King’s Highway that led through the Median wall and paralleled the great river Euphrates, Babylon’s splendor would begin to come into focus from the distance. As one drew

### Reconstruction of



### The Sacred Way

*Babylonia at any time (A History of Babylon: From the Foundation of the Monarchy to the Persian Conquest, Leonard W. King, AMS Press New York, pages 59-60). ”*

When traveling to the city of Babylon one might stop for a few moments at the mouth of the city and admire the ominous view. The view consisted of a huge moat encompassing the city with rampart directly behind it made up of multiple walls. To ones left stood a beautiful palace with two large stone hewn lions standing as sentinels of the city above the Palace. The lion was adopted at some point and time as the symbol for the city. The lion was the symbol of the goddess Ishtar, who was the goddess of war and love. After looking at the lions one might take a panoramic of the city. The city’s grandeur would begin to come into closer focus. The ziggurat, a seven stage, stepped pyramid protruded out of the city. One could also see beautifully lush gardens that appeared to be floating above an inner rampart of the city. It isn’t any wonder that the ancient historians spoke so magnificently of the city.

closer to the city, it would be apparent that one was on more than just the King’s Highway and entrance to the city. As one entered the city, the road became the most sacred road in Babylon. This road was known as the “**Processional Way**” or “**Sacred Way**”. It was probably one of the most spectacular sites in the city. It was sacred because of its use in a sacred Babylonian ceremony connecting the King with the city God Marduk (see **Appendix D, The Religion and Culture of Babylon**). “*It is possible that, in view of its sacred character, the use of the road was restricted to foot passengers and beasts of burden, except when the king and his retinue passed along it through the city. And in any case, not counting chariots of war and state, there was probably very little wheeled traffic in*

### Remains of a



### Stone Hewn Lion mauling a man

The impressive **moat of almost unbelievable size** was a substantial obstacle for invading armies and the main line of defense for the city. The moat system also served another crucial purpose; by diverting water from the swift Euphrates it slowed the river down through Babylon Proper allowing boat an easy docking in the city.

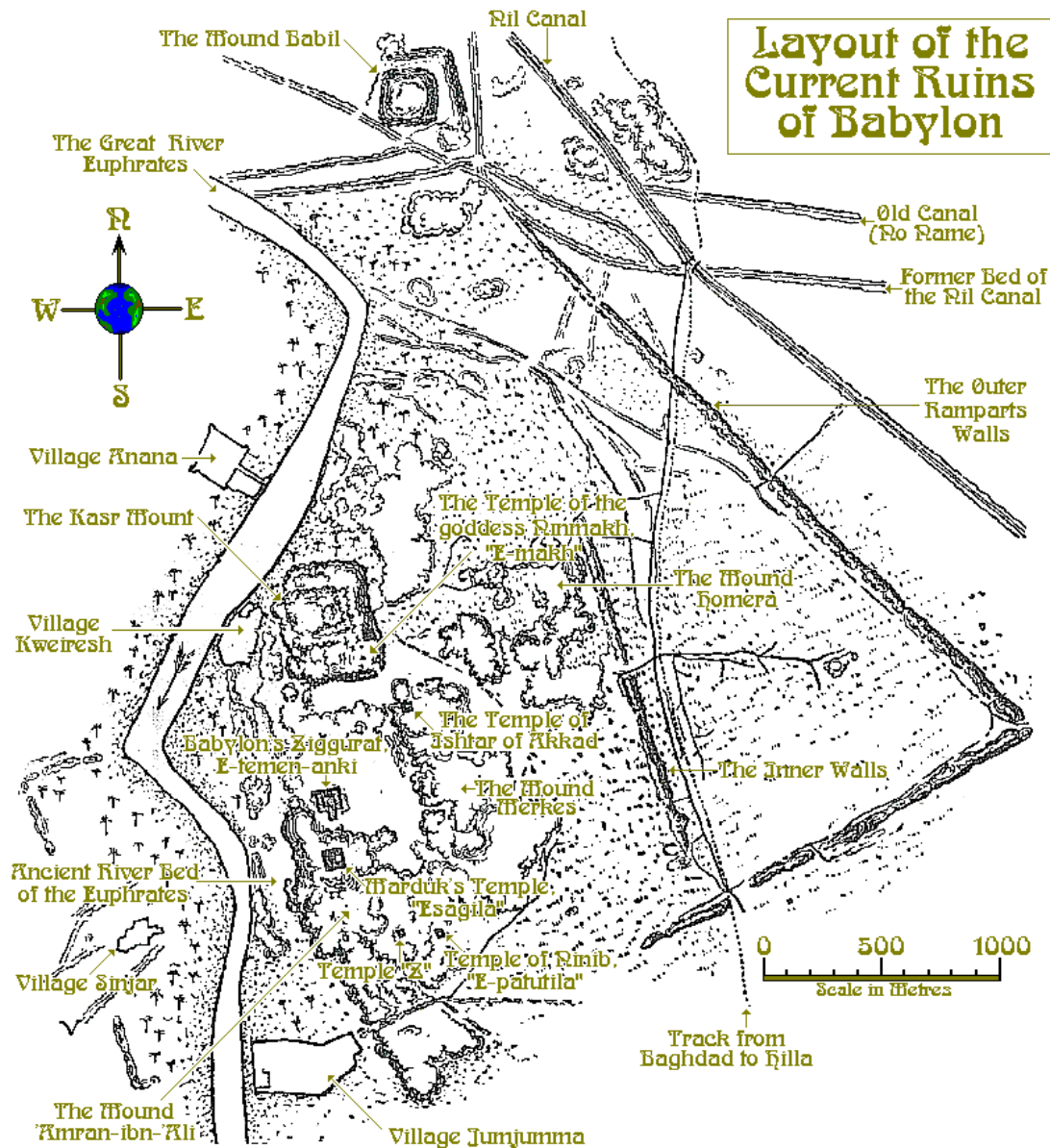
Upon closer inspection, the monstrous outer rampart became clearly two walls, and the huge moat appeared to hug the great rampart. The Greek author Herodotus was impressed by this great moat as he wrote,

*“First a ditch”, or moat “, broad and deep, full of water, runs around it”, Babylon, “and, after that a wall that is in thickness fifty royal cubits and in height two hundred. The royal cubit is greater by three fingers’ breadth than the ordinary cubit. I must explain also where the earth was used that was taken from the trench”, moat, “and how the wall was built. As they dug the trench; they made bricks of the mud that was carried out of the trenches; and when they had made enough of the bricks, they baked them in ovens. Then, using ho asphalt”, bitumen, “for cement and stuffing in mats of reeds at every thirty courses of bricks, they first built the banks of the trench and then the wall itself in the same manner. On top of the wall, along the edges, they built houses of a single room facing one another. A space was left between these houses big enough for a four-chariot to drive through. There were a hundred gates set in the circuit of the wall, all of bronze, and of bronze likewise the posts and the lintels” (The History-Herodotus, translated by David Grene, Page 114-115, Book I, Section 178-179).*

Due to the inseparable connection between the great walls of Babylon and the great moat, it is appropriate that the two be discussed together. It would appear that not only did the two work together in the defense of the city, but the walls were even built out of the material excavated from the moat. The excavated mud and silt were made into bricks for building material. In early Babylonian history the Bricks were merely sun-dried; however, in later years the bricks were fired in huge furnaces which produced a hardened baked brick.

At the mouth of the city, on the King’s Highway, one could see that the moat was approximately 300 feet wide. It is unsure that the outer rampart, that encompassed the city, continued down the left side of the King’s Highway (Processional Way), but it is sure that the beautiful river Euphrates flowed to ones right and was the source of water for the great moat to ones left.

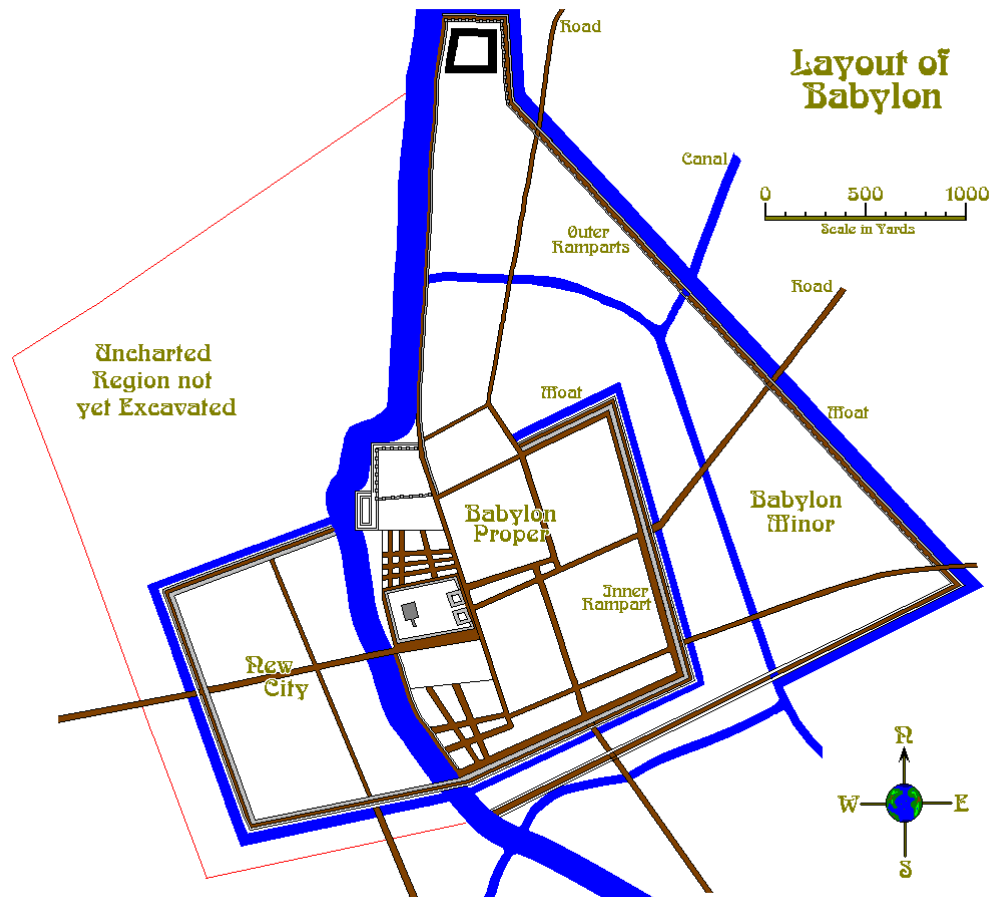
The **City Walls of Babylon** were so great and magnificent that they were classified by ancient historians as one of the seven wonders of the world, ranking with the pyramids, the statue of Zeus and several other great building feats of the past. Unlike the pyramids, the walls of Babylon have since crumbled to a state of almost unrecognizable rubble. Though archeologist have pieced together the basic layout of the walls, their actual appearance must be based on ancient writings and ones imagination.



The walls of Babylon formed a virtually impregnable defense, so strong and magnificent, that the inhabitants of Babylon felt a false sense of security at their eventual fall to Cyrus in 539 BC. The walls were built over a series of many Kings and Empires; however, they achieved their great power and splendor under King Nebuchadnezzar II. In their final stage, the city had an outer rampart that encompassed the city minor and an inner rampart that encompassed the city proper. The outer rampart was made up of three walls, an inner wall and an outer wall, lying behind an enormous moat with a third wall (which was not visible above ground) acting as a retaining wall protecting the other two walls from the water contained in the moat. One point of confusion with the walls is that the outer rampart has an outer and inner wall. This causes confusion in that when referring to the inner rampart, sometimes people refer to it as the inner wall and it is mistaken for the inner wall of the outer rampart. Similarly, sometimes people refer to the



outer rampart and the outer wall, and it is then mistaken for the outer wall of the inner rampart. Hereafter, the series of walls surrounding Babylon Minor (which were called *Imgur-Enlil* by the Babylonians) will be referred to as the outer rampart, and the series of walls surrounding Babylon Proper (which were called *Nemet-Enlil* by the Babylonians) will be referred to as the inner rampart. The following drawing illustrates the layout of the ramparts and moats of the city of Babylon.



The Babylonian scholar James G. MacQueen described the outer rampart as follows.

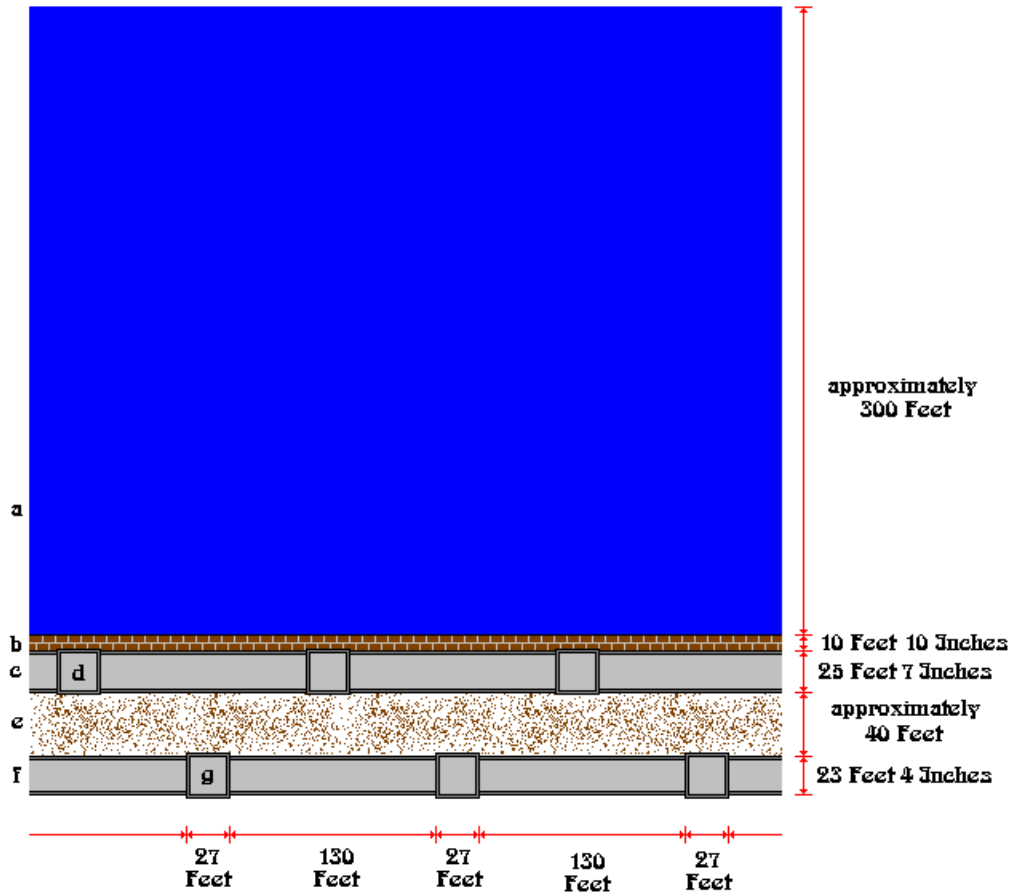
*“The outer rampart of the city was a complex construction. It consisted of an inner wall of unbaked brick 23 feet 4 inches thick, and an outer wall of baked brick 25 feet 7 inches thick. The space between these two walls, almost 40 feet wide, was filled with rubble; and immediately in front, and fitted to the outer wall beneath ground level, was another wall, 10 feet 10 inches thick and also of baked brick. This to protect the main rampart from damage by the waters of the moat which circled the town as an additional defense. The width of this moat is uncertain, but it may well have been over 300 feet. On top of the inner wall there were towers about*

27 feet wide at intervals of approximately 130 feet. These projected beyond the wall on either side. The outer wall also probably had towers, but all traces of these has now vanished. Between the two sets of towers a roadway about 37 feet wide was constructed on top of the rubble filling so that troops defending the city could be moved at speed to any part where danger threatened (Babylon, James G. MacQueen, Robert Hale Limited Publishing, Pages 159-160).”

MacQueen’s data appears to be based off of actual archeological data collected on the city of Babylon primarily by Dr. Koldeway. Dr. Koldeway was one of the world’s foremost experts on ancient Babylon. Based on MacQueen’s description and data of Babylon’s outer rampart, the following drawing can be composed.

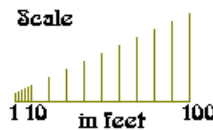
## The Walls of Babylon’s Outer Rampart

Drawing Based on MacQueen’s Description



**Legend**

- a - Float
- b - Below Surface Retaining Wall
- c - Outer Baked Brick Wall
- d - Towers, Questionable on Outer Wall
- e - Space Filled with Rubble
- f - Inner Unbaked Brick Wall
- g - Towers



There isn't too much controversy surrounding the outer ramparts size and layout. This is probably attributed to the fact that there was more left of the outer rampart than the inner, causing less room for speculation. Even so, there are still great differences of opinion. The great Greek historian Herodotus does cause some controversy as he exaggerated the size of the great rampart in an attempt to convey the grandeur of it. Even so, Herodotus was accurate in the general layout of the walls on respect to the city. He wrote,

*“Such, then, had been the building of the walls of Babylon. There are two divisions of the city, for the river called Euphrates divides it in the middle. It flows from Armenia - a great, deep, and swift stream - and it issues into the Red Sea. Each wall of the city has its ends brought right down to the river...This wall is the breastplate, but there is another wall inside it, not much weaker, though narrower, that also encircles the city” (The History-Herodotus, translated by David Grene, Page 1114-115, Book I, Section 180-181).*

Of the size of the outer rampart, Herodotus wrote that the wall was *“in thickness fifty royal cubits and in height two hundred. The royal cubit is greater by three fingers' breadth than the ordinary cubit” (The History - Herodotus, translated by David Grene, page 114)*. A standard cubit measures 18¼ inches, and by adding three finger breadths, a royal cubit is created measuring 20½ inches. Translating Herodotus' accounting of the size of the walls of Babylon into modern measurement results in a wall that is 335 feet high and 85 feet wide. Such magnificence prompted Herodotus to write that *“on top of the wall, along the edges, they built houses of a single room facing one another. A space left between these houses big enough for a four-horse chariot to drive through” (The History - Herodotus, translated by David Grene, page 114)*. Unfortunately, Herodotus' description of the great wall has some flaws when compared to archeological evidence.

Given the information presented on the outer rampart by a renowned source, it is interesting that an equally respectable source describes the same walls in such a different light. Leonard W. King wrote of the outer rampart and said,

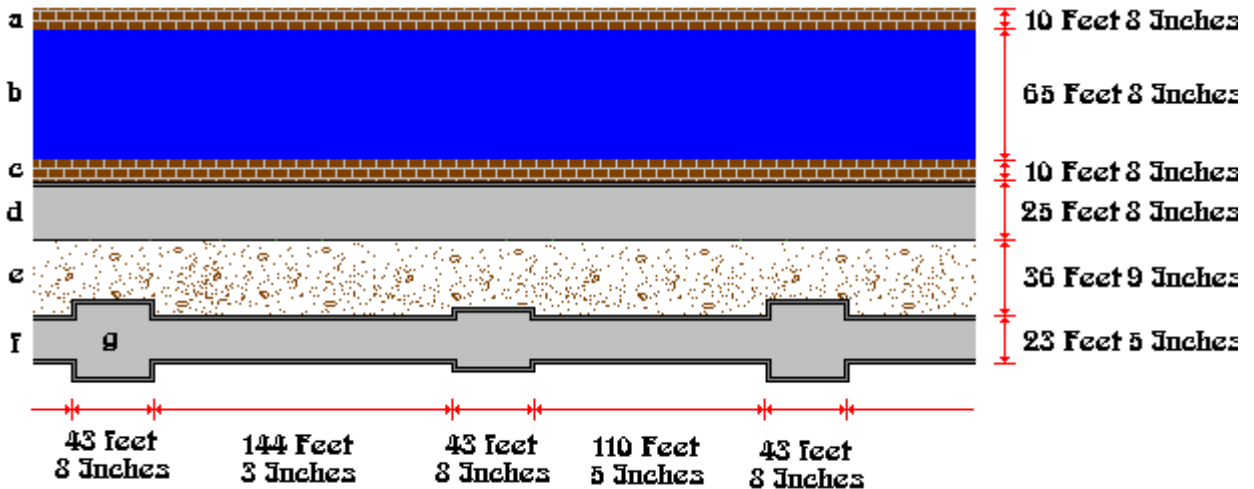
*“The excavators have not as yet devoted much attention to the city-wall, and, until more extensive digging has been carried out, it will not be possible to form a very detailed idea of the system of fortification. But enough has already been done to prove that the outer wall was a very massive structure, and consisted of two separate walls with the intermediate space filled in with rubble. The outer wall, or face, which bore the brunt of any attack and rose high above the moat encircling the city, was of burnt brick set in bitumen. It measured more than seven metres in thickness, and below ground-level was further protected from the waters of the moat by an additional wall, more than three metres in thickness, and, like it, constructed of burnt brick with bitumen as mortar. Behind the outer wall, at a distance of some twelve metres from it, was a*

second wall of nearly the same thickness... Only the bases of the towers have been preserved, so that any restoration of their upper structure must rest on pure conjecture. But as rubble still fills the space between the two walls of burnt and unburnt brick, it may be presumed that the filling was continued up to the crown of the outer wall. It is possible that the inner wall of crude brick was raised to a greater height and formed a curtain between each pair of towers. But even so, the clear space in front, consisting of the rubble filling and the burnt brick filled wall, formed a broad roadway nearly twenty metres in breadth, which extended right round the city along the top of the wall” (A History of Babylon: From the Foundation of the Monarchy to the Persian Conquest, Leonard W. King, AMS Press New York, page 26).

## The Walls of the Outer Rampart of Babylon

Drawing Based on Koldewey and Andrae's Description

in Leonard W. King's Book "A History of Babylon, from the Foundation of the Monarchy to the Persian Conquest"



### Legend

- a - Outer Hoat-Lining of Burnt Brick
- b - Hoat
- c - Inner Hoat-Lining of Burnt Brick
- d - Outer Wall of Burnt Brick
- e - Rubble Filled Space
- f - Inner Wall of Crude Brick
- g - Towers Built at Different Intervals

### Scale



It is appropriate to point out that King supports Herodotus' statement that a four-horse chariot could travel atop the walls. He wrote,

*“Even if smaller towers were built upon the outer edge, there would have been fully enough space to drive a team of four horses abreast along the wall, and in intervals between towers two such chariots might*

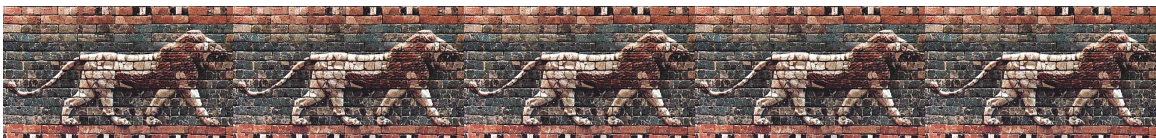
*easily have passed each other. It has been acutely noted that this design of the wall was not only of protection by reason of size, but was also of great strategic value; for it enabled the defence to move its forces with great speed from one point to another, wherever the attack at the moment might be pressed” (A History of Babylon: From the Foundation of the Monarchy to the Persian Conquest, Leonard W. King, AMS Press New York, page26).*

Given the controversy, it is difficult to say for sure what the dimensions of the outer rampart and moat really were, but we have a good general idea of their great size and layout. One can also ascertain the general use and purpose associated with them.

At the mouth of the city, standing behind the outer rampart, the “**Palace Babil**” or “**Summer Palace**” towered above one’s left behind a massive system of walls and an enormous moat. It is speculated that the Babil Palace was a spectacular and ominous building at the very mouth of the city; however, the current ruins and limited ancient records on the palace leave most of the palaces appearance to our imagination. Of the ruins, James G. MacQueen writes,

*“...At its northernmost corner, Nebuchadnezzar built another palace for summer use. As far as can be seen, it consisted of a series of courtyards with rooms opening off them, on a raised terrace about 60 feet high. The floor was of sandstone; each paving stone inscribed with the king’s name on its edge. Unfortunately not much more could be discovered about this building because most of it had been destroyed by systematic quarrying for bricks. Ancient Babylonian bricks have in fact proven admirable for building modern houses and even dams. The mound that is left is about 72 feet high, and its summit forms a rough square with side about 270 yards long. It is known locally as Babil and thus preserves unchanged the ancient name of the city” (Babylon, by James G. MacQueen, Robert Hale Limited, page 163).*

Along the way through Babylon Minor, the broad dirt road eventually became paved with large blocks of hewn limestone (3 feet 5 inches square) framed with large blocks of red and white marble (2 feet 2 inches square). As one proceeded on an upward grade almost one mile to the main entrance of Babylon Proper, the view of Babylon Minor was probably awesome, that is if the road was not entirely enclosed by walls. Whether or not a portion of wall from the outer rampart made the journey from the outer rampart to the cities inner rampart is questionable; however, a high wall did eventually



rise upon one’s right and left. The walls were made of baked brick with an enamel outer finishing of vibrant red and white. Cast upon the wall, in great detail, were over 120 lions, 60 on each side, that lined the wall in rows for at least 600 feet on both sides, until one

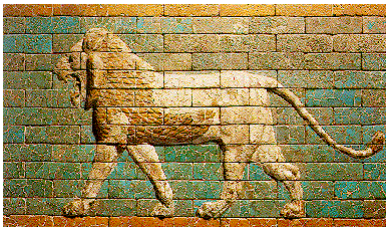
reached the famous Ishtar Gate. King describes this portion of the processional way as follows;

## The Lions of the Processional Way



*“The surface of each wall was broken up into panels by a series of slightly projecting towers, each panel probably containing two lions, while the plinth below the Lion frieze was decorated with rosettes. There appear to have been sixty lions along each wall. Some were in white enamel with yellow manes, and they stood against a light or dark blue ground. Leading as they did to the bulls and dragons of the gateway, we can realize in some degree the effect produced upon a stranger first entering the inner city of Babylon for the first time (A History of Babylon: From the Foundation of the Monarchy to the Persian Conquest, Leonard W. King, AMS Press New York, page59).”*

The lions faced the arriving visitor as to welcome him to the great city. Some of the lions were said to be cast on bright blue backgrounds with golden coats and red manes, while other lions were said to be white with yellow manes. The lions were 6 feet,



**The White Lion of Ishtar**

6 inches long in length.

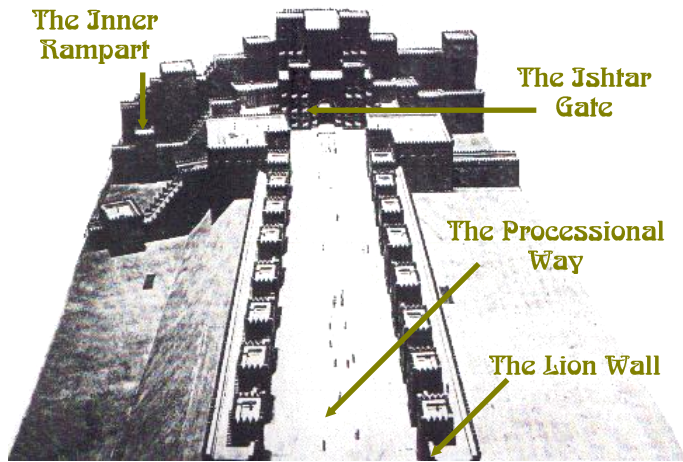
The lions are significant in regards to their symbolism of the city. Babylon was definitely a city of war. Throughout its long history it had repeatedly been the conqueror and



**The Yellow Lion of Ishtar**

the conquered. It was also a city of love, though some might rather classify it as a city of

lust and immorality, the city based much of its relationship with fellow citizens and the gods on sexual acts and customs. It is fitting that the lion wall led to the Ishtar Gate.



After passing by the mouth of the city, the incredible moat, the outer rampart and following the processional way through Babylon Minor the inner rampart became an object of focus. For that matter, with the slope of the processional way, the traveler would have been able to over look much of Babylon Minor, that is if the outer rampart didn't continue all the way down the left of the way. Babylon

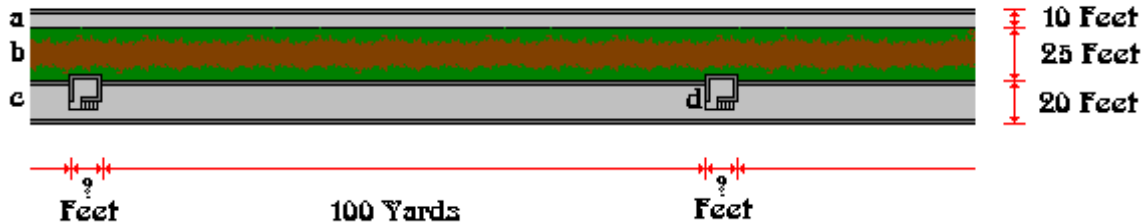
Minor is thought to have been well populated; however, no where near the density of Babylon Proper. Babylon Minor is thought to of had free land for farming and cattle. One might suggest that Babylon Minor was merely an enclosed country-side or rural outskirts; yet, there are those that suggest that Babylon Minor was as densely populated as Babylon Proper.

When evaluating the size of the inner ramparts, Herodotus makes no mention of their size. Only the fact that the inner ramparts (or walls as he refers to them) were narrower, but not much different in strength. Making matters even worse, modern excavations of the inner ramparts leave much to the imagination. Modern experts on the subject often differ in their evaluation of the archeological data. We will examine only one example in this work, but it should be noted that there are many theories and examples of the layout of the inner rampart. The following theory shows the inner rampart without moat; however, most experts show the inner rampart with a moat.

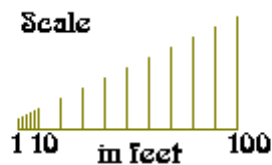
Based on Wellard's writings, the following drawing can be produced.

### The Inner Rampart of Babylon

*Drawing Based on Wellard's Description*



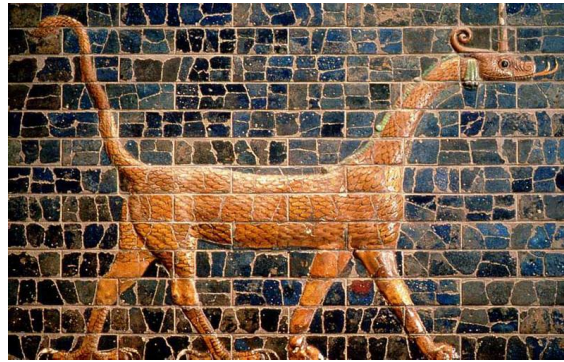
- Legend**
- a - Outer Defense Wall
  - b - Parade Ground
  - c - Inner Defense Wall
  - d - Watch Tower



James Wellard wrote of the inner wall and said,

*“We know that the walls enclosed the city in a double line of fortifications. The outer wall” (of the inner walls or rampart) “was about fifty feet high and ten feet wide. Inside this bastion the builders left a space of about twenty-five feet which probably served as a mustering point and parade ground for the troops manning the walls. In addition to the outer wall, the military engineers built an even thicker inner line of defense, a bastion some twenty feet in width, so that the outer wall of ten feet, the parade ground of twenty-five feet, and the inner wall of twenty feet gave a defense of about fifty-five feet and an estimated height of fifty feet. All along this huge defensive wall stood watch-towers at a distance of about 100 yards from each other. The circuit of the fortification was just under ten miles” (Babylon, James Wellard, Saturday Review Press, New York, pages 154-155).*

**The Ishtar Gate** was the main Gate of an estimated eight entry gates into Babylon Proper. Fittingly, it's baked brick towers and arches were covered with a blue enamel that once resembled the brilliance of the color of the sky. This was done to symbolize the fact that Babylon was the **“The Gate of Heaven”**. Like the wall leading up to it, the Ishtar gate had caste creatures adhered to its surface. The creatures consisted of bulls and dragons place one after the other over the surface of the great gate. The Bull was the symbol for the god Adad and the dragon was the symbol for the great city god of Babylon, Marduk.



### **The Dragon of Marduk**

The dragon symbolized the power and strength of Marduk. Of the bulls and dragons Leonard King wrote, *“The whole wall-surface of the gateway on its north side, both central towers and side wings, was decorated with alternate rows of bulls and dragons in brick relief, the rows ranged one above the other up the surface of walls and towers. The decoration is continued over the whole interior surface of the central gateways and may be traced along the southern front of the inner gate-house. The beast arranged in such a way that to any one entering the city they would appear as though advancing to meet him” (A History of*



### **The Bull of Adad**

*Babylon: From the Foundation of the Monarchy to the Persian Conquest, Leonard W. King, AMS Press New York, page54).*



The Ishtar Gate is one of the few remaining structures among the ruins that remains in a state of recognition, though some would argue that the gate is far from recognizable. The Gate was not only the main entrance to the city, but also the main defense and part of the royal palace.

### The Ishtar Gate

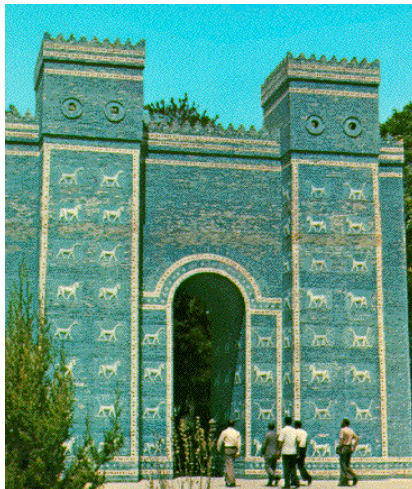
*"Its structure, when rebuilt by Nebuchadnezzar, was rather elaborate. It is a double gateway, consisting of two separate gate-houses, each with an outer and inner door. The reason for this is that the line of fortification is a double one, and each of its walls has a gateway of its own. But the gates are united into a single structure by means of short connecting walls, which complete the enclosure of the Gateway Court. Dr. Koldewey considers it probable that this court was roofed in, to protect the great pair of doors, which swung back into it, from the weather. But if so, the whole roofing of the gateway must have been at the same roof level; whereas the thick walls of the inner gate-house suggest that it and its arched doorways rose higher than the outer gateway (A History of Babylon: From the Foundation of the Monarchy to the Persian Conquest, Leonard W. King, AMS Press New York, page 52-53)."*



As Koldewey found in the late 1800's

Of this great structure, James G. MacQueen wrote,

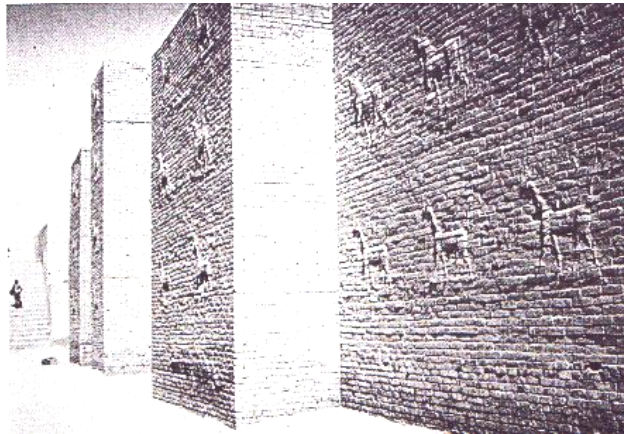
*"It consisted in fact of two gateways, one in each of the two walls of the inner defenses. Behind the outer facade lay a room across the space between the walls, and behind the second gateway, inside the inner wall, was a long chamber running back into the town. The outer gateway was flanked by twin battlements, and was probably All this was fairly the gate unusual. On the sides of the the faces of the two along the inner houses and the side were rows of dragons in The animals were way that they advancing towards traveler, for one the walls running north and south they faced the*



A Reconstruction of The Ishtar Gate

entrance, while on the walls at right angles to the road they faced inwards. As the gates were about 40 feet high, and each animal was 3 feet 6 inches tall, there were probably seven rows visible on the decorated walls. The animals were in yellow and white on a blue background, while at the pavement level was a band of rosettes with yellow centres. In all probability each row contained fifty-one animals, so that in the finished gateway as many as 357 animals may have been visible. Our knowledge of this decoration is due almost entirely to the fact that the level of the roadway was raised several times during Nebuchadnezzar's reign. The results is that there are no fewer than ten rows of animals beneath the stone road surface, and there are signs of older pavements between the sixth and seventh, and between the eighth and ninth rows. The six lowest rows of animal were probably never meant to be visible" (Babylon, pages 164-166).

### The Walls of the Ishtar Gate



As they appeared in 1979

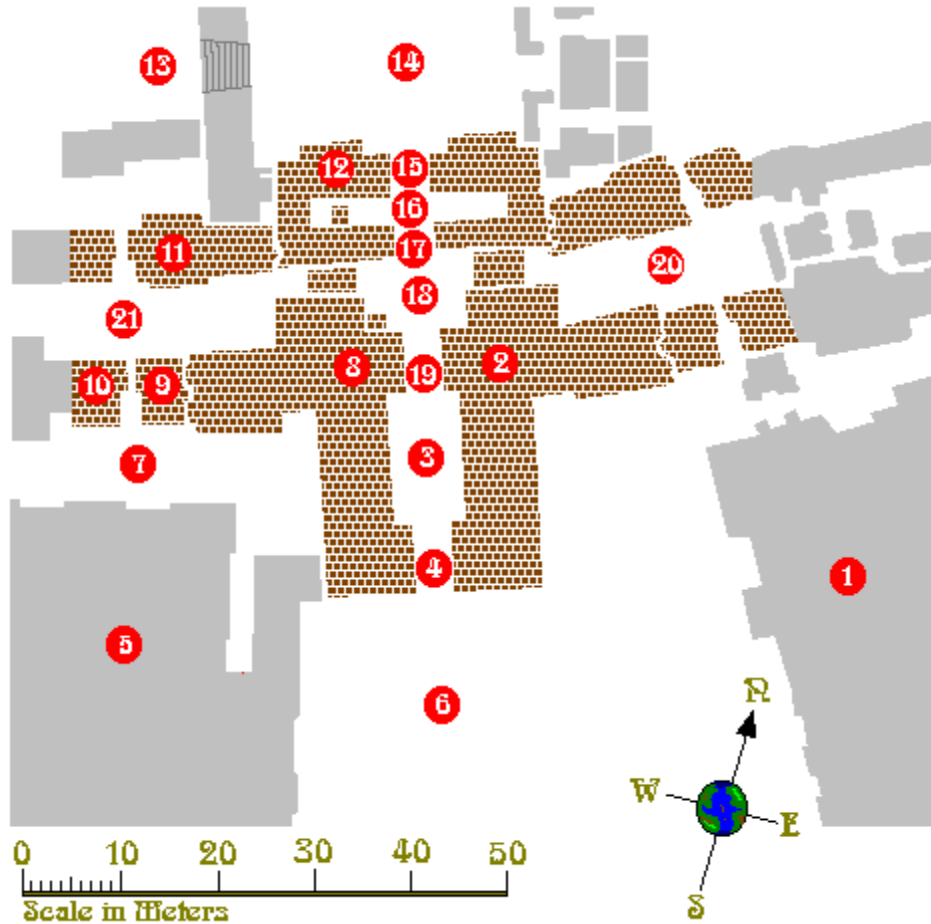
Even though the Ishtar Gate was the best preserved of the structures of Babylon, it's condition was far from mint. The remaining ruins of the Ishtar Gate are still impressive enough to inspire authors to write of their beauty and wonder. Leonard King wrote,

*"It will be noticed that along most of the walls running north and south the beasts face northwards, while on the transverse walls they face inwards towards the centre...It has been calculated that at least five hundred and seventy-five of these creatures were represented on the walls and towers of the gateway. Some of the walls, with their successive tiers of beasts, are still standing to a height of twelve metres. The two eastern towers of the outer gate-house are best preserved, and even in their present condition they convey some idea of the former magnificence of the building" (A History of Babylon: From the Foundation of the Monarchy to the Persian Conquest, Leonard W. King, AMS Press New York, page55).*

The current ruins of the gate left enough to allow experts to draft an accurate reconstruction of the gate. Using the collected archeological data, a layout of the gate can be drawn.

## The Ground Plan of the Ishtar Gate

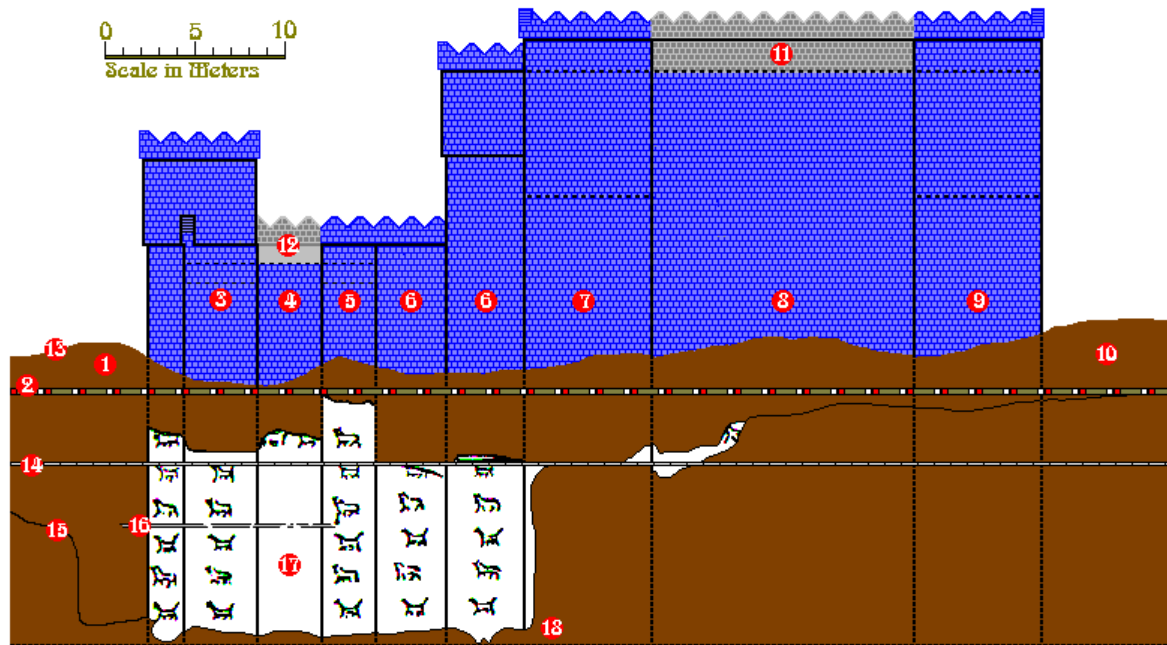
Based off of Koldewey's Archeological Data & Leonard W. King's Book, "A History of Babylon, From the Foundation of the Monarchy to the Persian Conquest"



Location Number	Legend	Location Number	Legend
1	Temple of the goddess Ninmakh	12	Outer Face of the Ishtar Gate
2	Large Supporting Wall of the Ishtar Gate	13	Steps leading down from the sacred way, to the River
3	The Gate of the Inner Wall	14	Sacred Way running through Babylon Minor
4	Southern Door of the Gate of the Inner Wall	15	Northern Door of the Gate of the Outer Wall
5	The North East Corner of the Royal Palace	16	Gate of the Outer Wall
6	The Sacred Way Entering Babylon Proper	17	Southern Door of the Gate of the Outer Wall
7	Breezeway Between the Royal Palace & Rampart	18	The Court between Gateways
8	Large Supporting Wall of the Ishtar Gate	19	Northern Door of the Gate of the Inner Wall
9	Inner Wall of the Inner Rampart	20	Space Between Inner and Outer East Walls
10	Inner Wall of the Inner Rampart	21	Space Between Inner and Outer West Walls
11	Outer wall of the Inner Rampart		

## The Cross Section of the Ishtar Gate

Based off of Koldewey's Archeological Data, Dr. Andrae's speculation &  
Leonard W. King's Book, "A History of Babylon,  
From the Foundation of the Monarchy to the Persian Conquest"



Location Number	Legend	Location Number	Legend
1	Sacred Way running through Babylon Minor	10	The Sacred Way Entering Babylon Proper
2	Level of Final or Nebuchadnezzar II's Pavement	11	Some believe the roof at this point was open for light
3	Northern Door of the Gate of the Outer Wall	12	Some believe the roof at this point was open for light
4	Gate of the Outer Wall	13	Ground level prior to excavation
5	Southern Door of the Gate of the Outer Wall	14	Level of the second pavement found
6	The Court between Gateways	15	Ground level after excavation
7	Northern Door of the Gate of the Inner Wall	16	Fragments of a third pavement
8	The Gate of the Inner Wall	17	Remains of the Ishtar Gate
9	Southern Door of the Gate of the Inner Wall	18	It is suspected that the remains continue even deeper

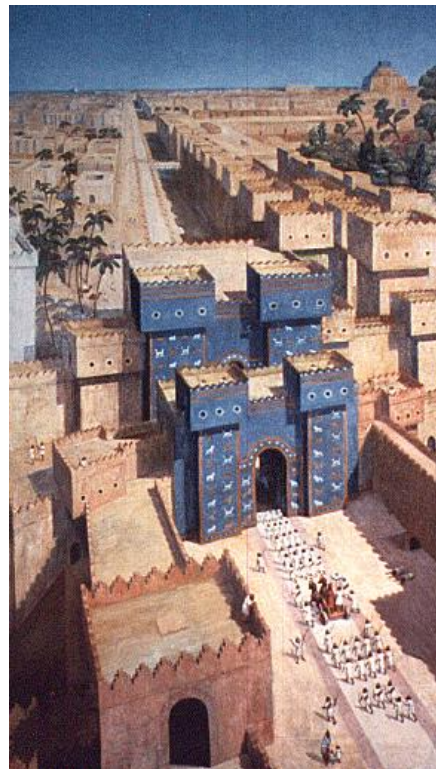
Apparently prior to Nebuchadnezzar's intensive remodeling of the Ishtar Gate it was far less beautiful and far more functional as a defense mechanism. King supports this claim by saying,

*“Before the Neo-Babylonian period the Ishtar Gate had defended the northern entrance to the city, and was probably a massive structure of unburnt brick without external decoration. But, with the building of the outer city-wall, it stood in the second line of defence. And as Nebuchadnezzar extended the fortifications of the Citadel itself upon the northern side, it lost still more of its strategic importance, and from its interior position became a fit subject for the decorator’s art. The whole course of the roadway through exterior defences he flanked with mighty walls, seven metres thick, extending from the gate northwards to the outermost wall and moat. Their great strength was dictated by the fact that, should an enemy penetrate the outer city-wall, he would have to pass between them, under the garrison’s fire, to reach the citadel-gate. But these, like the gate itself, formed a secondary or interior defence, and so, like it, were elaborately decorated. The side of each wall facing the roadway was adorned with long frieze of lions, in low relief and brilliantly enamelled, which were represented advancing southward towards the Ishtar Gate” (A History of Babylon: From the Foundation of the Monarchy to the Persian Conquest, Leonard W. King, AMS Press New York, page 58-59).*

Despite the seemingly ruined state of the Ishtar Gate, the remains have left enough for artists and archeologists alike to create some wonderful images of what the gate might have looked like.



**Above, Ruins of the Ishtar Gate  
Right, Proposed Picture of what the  
Ishtar Gate looked like**



One could imagine that passage through the Ishtar Gate was no small event. The gate was not only the main gate into Babylon Proper, but it was also part of the royal palace and the court house, which not only lied behind the gate but were actually physically connected (the court house would be the equivalent to a modern day country's capital building or hall of justice). This made the Ishtar Gate a key to the Babylonian defense system. The gate had several stations that were constantly manned by the Royal Guards. As one passed through the gate it is most probable that one was questioned as to the reason for entering the city proper. One could also imagine the halls of the gate adorned with money changers, and men of trade offering goods and money in exchange for foreign goods and treasures. The gate was undoubtedly a very busy place.

As one exited the Ishtar gate into Babylon Proper, a single wall similar in formation to that of the inner rampart continued down the road to ones right. Towering above the great wall was the grand palace of Nebuchadnezzar the II. The palace was called the “**Grand Citadel**” and was divided into the Northern and Southern Citadel. As grand and invincible as the great palace may have been, the currents remains of the great palace give all new meaning to the word ruins (see picture to right).



**The ruins of the Southern Citadel,  
Nebuchadnezzar's Royal Palace**

Though the ruins appear to be useless to us as far as gaining an understanding of the great palace, they are not as bad as they look. From the ruins we have gained a great understanding of the layout of the palace. Leonard King said, “*The Southern or chief Citadel was built on the mound now known as*

*the Kasr, and within it Nebuchadnezzar erected his principal palace, partly over an earlier building of his father Nabopolassar. The palace and citadel occupy the old city-square or centre of Babylon, which is referred to in the inscriptions as the irsit Babili, 'the Babil place'. Though far smaller in the extent of Nebuchadnezzar's citadel, we may conclude that the chief fortress of Babylon always stood upon this site....*” (*A History of Babylon: From the Foundation of the Monarchy to the Persian Conquest, Leonard W. King, AMS Press New York, page 28*).

The main entrance to the royal palace was just off of the processional way after one passed through the Ishtar Gate entering Babylon Proper. It is suspected that after passing through the palace entrance, one was greeted by a courtyard with side rooms filled with palace guards. Entry to the palace was probably granted only to those that had business there.

If one were granted permission of the Palace Guards to venture into the palace, one would find that the palace was built around a series of courtyards. The first courtyard

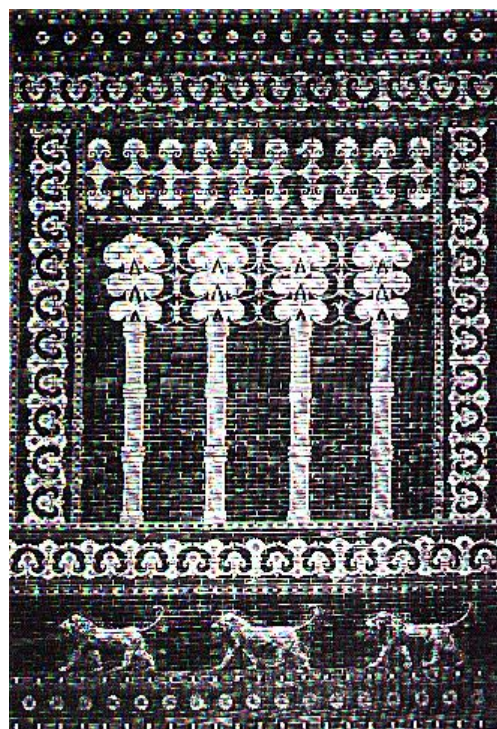
after the guards was surrounded by offices and apartments that opened into the courtyard. It is thought that this first courtyard was the administrative section of the palace.

The next courtyard was entered from the first courtyard through a large double gate that had rooms on each side of the gateway. It is suspected that this third courtyard was the Babylonian High Court. It was the court of justice, where Babylonian law was enforced and Nebuchadnezzar directed order in his Kingdom. *“The buildings on either side of the court may have been used by high court officials. There is a large reception room on the south side of the court, and passages lead to the private offices of the king on the south side of the third court. The main entrance to this court was by a larger and more imposing gateway with a staircase in one side-room which led to an upper storey or to the roof. The gateway was decorated, like the others, with lions in enamelled brick, and the courtyard was larger than the others, being 197 feet long and 180 feet wide. To the north were houses and offices, and to the south was the largest and most magnificent room in the palace, Nebuchadnezzar’s throne room, 170 feet long and 56 feet wide”* (Babylon, by James G. MacQueen, page 169).

Nebuchadnezzar’s throne-room was quite unique considering the culture typically called for the king’s throne room to strike fear into visitor’s hearts. The throne-room of the new Babylonian Empire was designed and decorated for beauty rather than power. One author wrote, *“The throne room was enormous (c. 52 by 17 metres) and seems to have been vaulted. In contrast with Assyrian palaces, no colossi of stone guarded the doors, no sculptured slabs or inscribed orthostats lined the walls. The only decoration – obviously intended to please the eye rather than inspire fear – consisted of animals, pseudo-column and floral designs in yellow, white, red and blue on panels of glazed bricks”* (Ancient Iraq, George Roux, page 394). To the right is an example of the beautiful wall murals that adorned the King’s throne-room.

Despite attempts by Nebuchadnezzar to make his throne-room a place of beauty, it would appear that the room was designed without the use of windows. This undoubtedly left the room dim and dreary with torch, candle or lamps to give light to the room. There doesn’t appear to be any light openings in the ceiling either. The walls were exceptionally thick to support a barrel-vaulted ceiling.

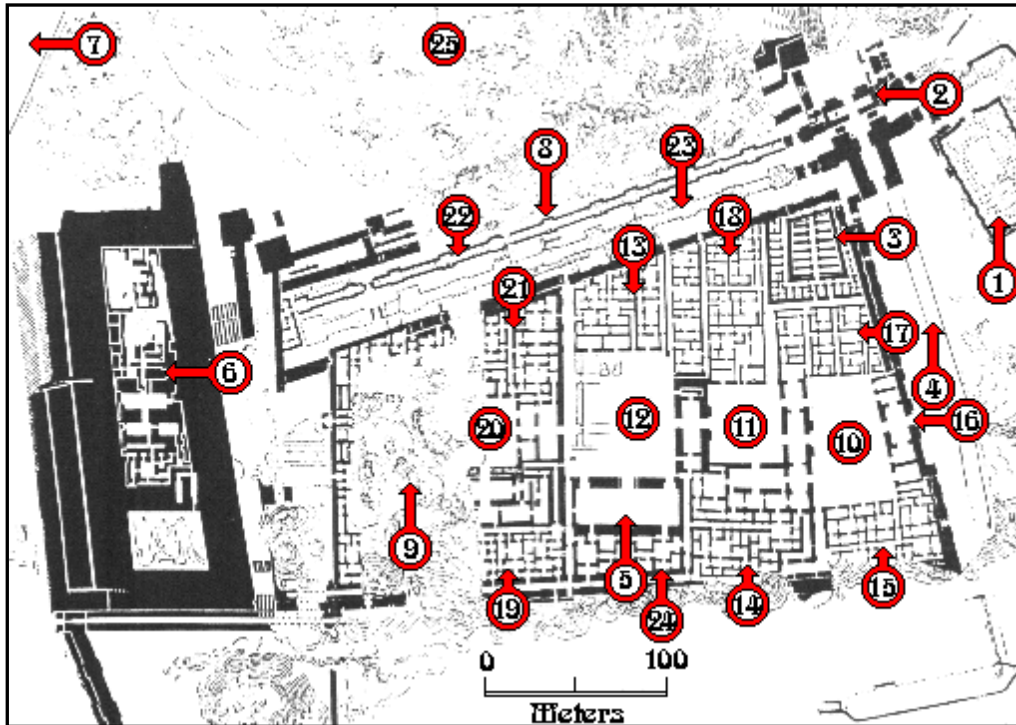
Wall Mural



In Nebuchadnezzar's Throne Room

## Proposed Layout of Nebuchadnezzar's Southern Citadel

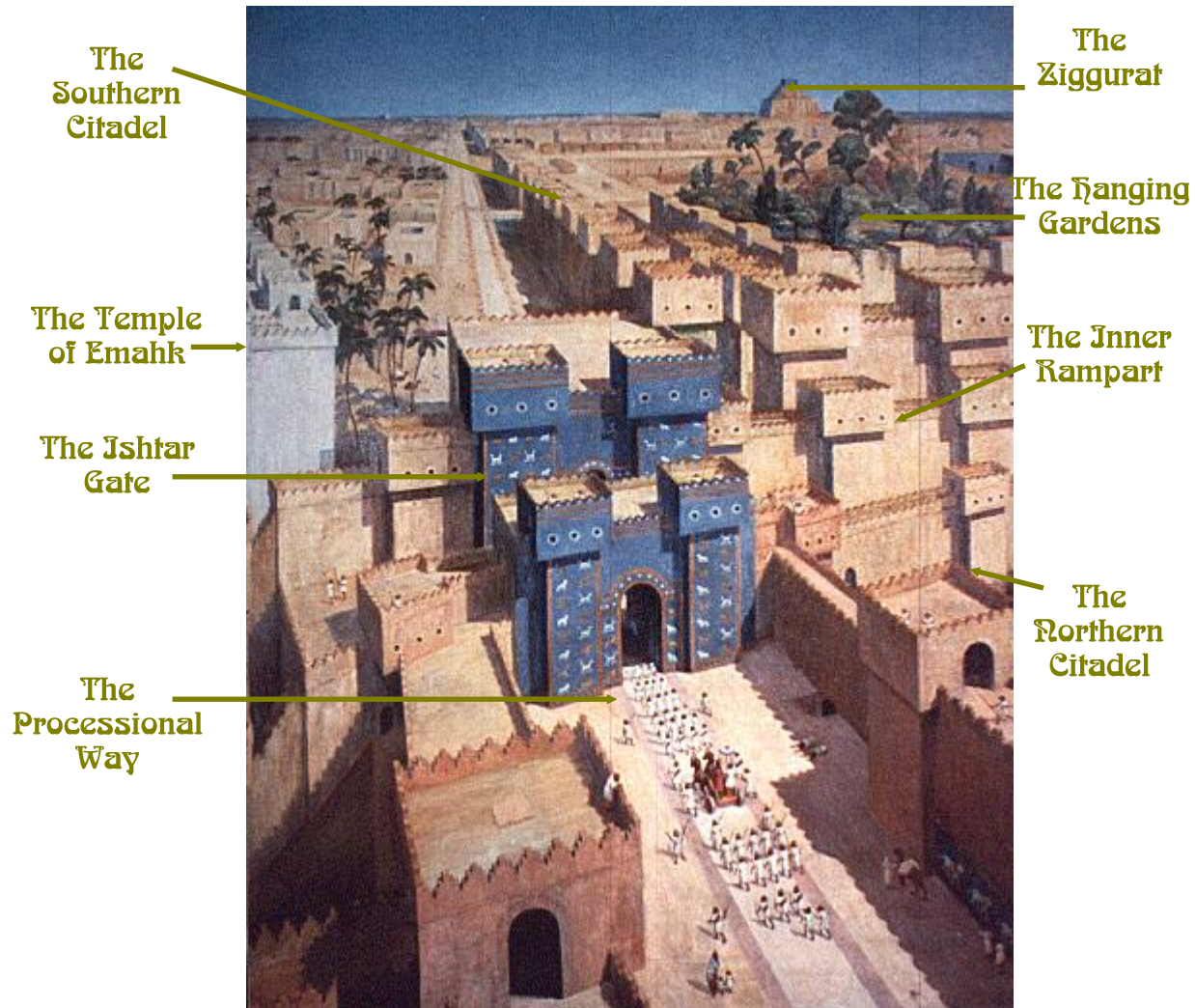
Theorized by Wiseman, D.J in his book  
Nebuchadrezzar and Babylon, The Schweich Lectures



Location Number	Legend	Location Number	Legend
1	The temple of Emah	14	Administrative offices and apartments
2	The Ishtar Gate	15	Palace guards offices and apartments
3	The Vaulted Building (Hanging Gardens ?)	16	The gateway and entrance to the palace
4	The Processional Way	17	Palace guards offices and apartments
5	The Throne Room	18	Administrative offices and apartments
6	The Western Out-look	19	Royal Living Quarters, Harem?
7	The River Euphrates	20	Courtyard
8	The Inner Rampart	21	Royal Living Quarters, Harem?
9	Ruins beyond recovery	22	Outer Wall of the Inner Rampart
10	The first courtyard, palace guards	23	Inner Wall of the Inner Rampart
11	The second courtyard, administrative	24	Thought to be Royal Bathrooms and Quarters
12	The third courtyard, court of justice	25	The Northern Citadel
13	Apartments and offices of court officials		



## Babylon the Great



Your average citizen or visitor to Babylon would not have been granted access to the royal palace, yet its beauty would not have escaped them. Standing on the processional way the palace would have been a wonderful sign of strength and glorious vision of majesty. Even more amazing would have been the apparently floating gardens that seemed to float above the palace roof. Given the culture and time period, many might have supposed the palace to have had magical powers. The enchanted Arabian Nights and the storybook legends of flying carpets and powerful sorcerers could have easily found setting here in Babylon's "Hanging Gardens".

Many of the ancient historians who wrote of Babylon wrote of an amazing architectural feat that they titled the Hanging Gardens. It was customary for kings of the millennia to have extensive gardens where

### κρεμαστος κητος

The Greek word used for Nebuchadnezzar's grand garden by the Greek Historian Berosus, translated literally as "Hanging Garden"

they collected and grew non-indigenous plant life. Like most things that Nebuchadnezzar did, the normal was far from acceptable.

When most people envision the famous Hanging Gardens of Babylon, they picture a series of terraces that towered above the City walls and were covered with lush vegetation. Pictures of tropical flowers and fruit trees of all sorts come to mind mingled with beautiful waterfalls and crystal pools of water. Many also envision the Garden also occupied with exotic animals and birds of all kinds. Probably the most surprising information that people learn about the Gardens is that they might have never really existed. There is no hard data that verify its existence. No ancient recordings make reference to the gardens. The only records we have of them come from ancient Greek historians who many feel never even saw Babylon, much less the Gardens. *“One scholar suggests that tradition has here confused Babylon and Nineveh, and that the real Hanging Gardens were in the latter capital (Peoples of the Past Babylonians, H.W.F. Saggs, page167).”*

On the other hand, there is a lot of evidence to support the claim that Babylon’s Hanging Gardens were a reality. Ancient authors/historians that wrote of the Hanging Gardens in Babylon – Herodotus, Strabo, Diodorus Siculus, Philo – all seem to collaborate the fact that the gardens existed with similar accounts of the gardens description. The Greek historian Diodorus said,

*“The approach to the Garden sloped like a hillside and the several parts of the structure rose from one another tier on tier... On all this, the earth had been piled...and was thickly planted with trees of every kind that, by their great size and other charm, gave pleasure to the beholder...The water machines raised the water in great abundance from the river, although no one outside could see it” (Diodorus Siculus).*

Similarly Strabo records of the Hanging Gardens,

*“The Garden is quadrangular, and each side is four plethra long. It consists of arched vaults which are located on checkered cube like foundations. The ascent of the uppermost terrace-roofs is made by a stairway...” (Strabo).*

Another Historian records,

*“The Hanging Garden has plants cultivated above ground level, and the roots of the trees are embedded in an upper terrace rather than the earth. The whole mass is supported on stone columns... Streams of water emerging from elevated sources flow down sloping channels... These waters irrigate the whole garden saturating the roots of plants and keeping the whole area moist. Hence the grass is permanently green and the leaves of trees grow firmly attached to supple branches... This is a work of art of royal luxury and its most striking feature is that the labor of*

*cultivation is suspended above the heads of the spectators” (Philo of Byzantium).*

In addition to the records of ancient historians and their uncanny similarities, there is also archeological data that support the ancient Historians claims.



### The Hanging Gardens

The Theorized Ruins

that the garden was actually hanging or floating in air.

There are many theories as to the location of the garden; however, there are two locations that have been accepted as highly probable locations for the garden. Typically, in kingdoms of the Babylonian era, kings would create lush beautiful gardens next to their palaces. Berosus recorded that the Hanging Gardens were indeed part of Nebuchadnezzar’s royal palace. *“The location of royal gardens was usually close to the king’s palace and, for privacy, had access through the double city walls, to larger parklands (Nebuchadnezzar and Babylon, The Schweich Lectures, Wiseman, D.J., page 56).”*

Probably the most accepted site for the Hanging Garden says that it was located *“in the north-east corner of the citadel, and was entered by a wide passage from the second court. The central core of the building was a strong wall forming an irregular rectangle roughly 140 feet by 100 feet, with fourteen cells inside, seven opening on either side of a central passage. A narrow corridor ran around this central building, flanked to the north and east by the outer wall of the palace, and on the south and west by further small rooms. These outer rooms were on the same level as the rest of the palace, but the central building was beneath ground level and was*



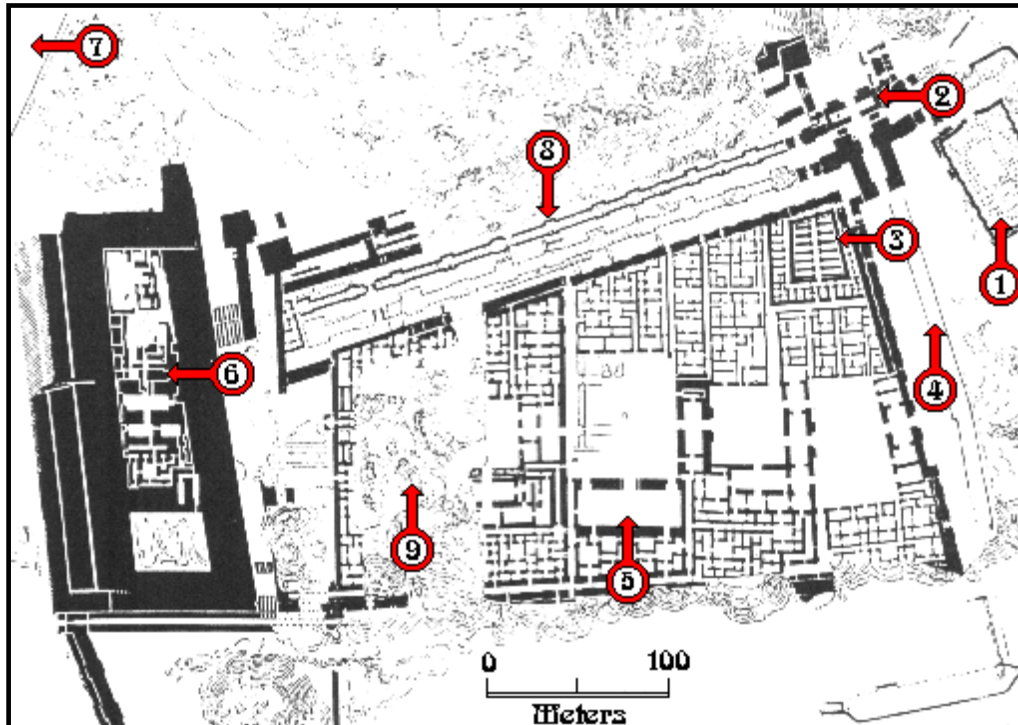
### The Hanging Gardens

Perspective #1 – Terraces built upon Terraces

reached by a brick stairway in one of the rooms on the southern side. Semicircular arches show that each chamber was roofed with a barrel-vault, and the whole structure was capable of supporting an enormous weight” (Babylon, MacQueen, James G., page 171). One can easily see how tempting it might have been to designate this vaulted structure as the mysterious Hanging Gardens. A map of the Palace ruins shows the proposed site as figure number three.

## Possible Location of the Hanging Gardens

Theorized by Wiseman, D.J in his book  
Nebuchadrezzar and Babylon, The Schweich Lectures



Number	Location
1	The Temple of E-mah
2	The Ishtar Gate
3	The Terraced Building, The Hanging Gardens ?
4	The Processional Way
5	Nebuchadnezzar's Throne
6	The Western Out-Look
7	The Euphrates River
8	The Inner Rampart
9	Ruins Beyond Recovery

Adding to the temptation of archeologists and historians alike in naming the vaulted structure in the northwest corner of the southern citadel “the Hanging Gardens”, a series of wells have been discovered that could have easily supplied the gardens with its enormous demands for water. Many authors have used this fact to support this theory. One author writes,

*“On this small hill, traces of wells have been discovered, which suggests that an endless chain of buckets was used to raise the water to the highest point of the terraces. The terraced construction, itself elevated by the siting of the gardens on the summit of a small hill, made the tops of the trees visible above the walls from a considerable distance, and this no doubt helped perpetuate the tradition of the ‘hanging gardens’ ” (Everyday Life in Babylon and Assyria, Georges Contenau, Page 109).*

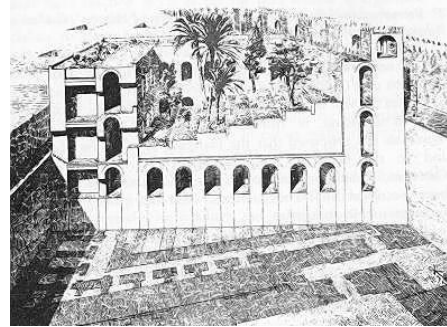
The well in itself, whether part of the Hanging Gardens or just a water system for the palace, was a wonder and architectural feat. Leonard King said that “*in one of the small chambers near the south-west corner of the outer fringe of rooms*” speaking of the spaces between that vaults that almost created small rooms, “*there is a very remarkable well. It consists of three adjoining shafts, a square one in the centre flanked by two of oblong shape. This arrangement, unique so far as the remains of ancient Babylon are concerned, may be most satisfactorily explained on the assumption that we here have the water-supply for a hydraulic machine, constructed on the principle of a chain pump. The buckets, attached to an endless chain-pump. The buckets, attached to an endless chain, would have passed up one of the outside wells, over a great wheel fixed above them, and, after emptying their water into a trough as they passed, would have descended the other outside well for refilling. The square well in the centre obviously served as an inspection-chamber, down which an engineer could descend to clean the well out, or to remove and obstruction. In modern contrivances of this sort, sometimes employed to-day in Babylonia to raise a continuous flow of water to the irrigation-trenches, the motion-power for turning the winch is supplied by horses or other animals moving round in a circle. In the Vaulted Building there would have been scarcely room for such an arrangement, and it is probable that gangs of slaves were employed to work a couple of heavy hand wenches*” (*A History of Babylon from the Foundation of the Monarchy to the Persian Conquest, King, Leonard W. Page 48*).



### The Hanging Gardens

Perspective #1 – Terraces built  
Up on Terraces

One can imagine excavators coming across an underground structure that consisted of 14 vaulted rooms with columns approximately 22 feet wide and in great amazement began to speculate as to why such a support structure was built. Then to further their dilemma, they came across a well that was apparently constructed in such a fashion as to supply a constant supply of water. Their imaginations must have run wild as they pictured the famous hanging gardens supported by the columns and the well providing feed water for waterfalls, pools, and irrigation. “*It was extremely tempting to see in this construction the understructure of roof gardens, the famous hanging gardens of Babylon’ described by classical authors and erected – so one legend tells us – by Nebuchadnezzar for the pleasure of his wife the Median princess Amytitis. Recent excavations there have yielded less romantic results: these rooms merely served as stores for administrative tablets (Ancient Iraq, George Roux, page 394).*”



### The Hanging Gardens

Perspective #2 – A Stair stepped  
Hill built upon a Terrace

Despite the fact that there are many who question this location as the original Hanging Gardens, it still remains the most plausible location for them. The ancient historians all spoke of tiers supporting the garden. They spoke of its approximate size and location. They spoke of the endless well and supply of water. All these facts point to the vaulted structure being the remains of the garden.

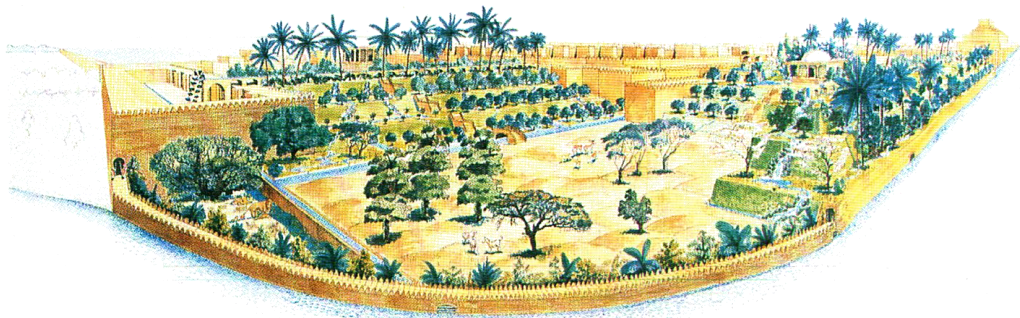
But what of the findings in the vaulted rooms? The tablets, the administrative records and other such items. MacQueen, a renowned author on Babylon, even when far as theorizing that the vaulted structure was a store room and that the columns were actually part of the inner rampart. He wrote,

*“There are two possible reconstructions of the upper part of the building. Perhaps the central core, designed as it was to support an enormous weight, was the base of a series of terraces from which the gardens hung, as it were, above the surrounding chambers and the palace wall. Or perhaps the vaulted roof of the subterranean chambers was covered with a thick layer of earth, and formed a garden court at ground-level, surrounded perhaps by a pillared colonnade with rooms opening on to it on the south and west. In either case the vaults would have been used as store-rooms or granaries, probably the latter, as tablets found in the staircase room deal with matters relating to grain weight” (Babylon, MacQueen, James G., page 172).*

Whether or not the vaulted structure is the site of the ancient garden, the question still stands, what did the garden look like. James Wellard describes the garden as follows.

*“The Garden was 100 feet long by 100 feet wide and built up in tiers so that it resembled a theatre. Vaults had been constructed under the ascending terraces which carried the entire weight of the planted garden; the uppermost vault, which was seventy-five feet high, was the highest part of the garden, which, at this point, was on the same level as the city walls. The roofs of the vaults which supported the garden were constructed of stone beams some sixteen feet long, and over these were laid first a layer of reeds set in thick tar, then two courses of baked brick bonded by cement, and finally a covering of lead to prevent the moisture in the soil penetrating the roof. On top of this roof enough topsoil was heaped to allow the biggest trees to take root. The earth was leveled off and thickly planted with every kind of tree (Babylon, Wellard, James, page156).”*

If the vaulted structure isn't the dismal remains of the Hanging Gardens, there is another site that merits mention. In fact, based on recent advances in translating ancient records, it appears to have more merit that the vaulted structure despite the similarities between ancient Greek historians and the vaulted structure. *“According to a cylinder inscription, between the Western Outwork and the northern palace Nebuchadrezzar ‘formed baked bricks into the likeness of a mountain and built a large step-terraced kummu (kummu gigunatim raba) structure as a royal abode for myself high up between*



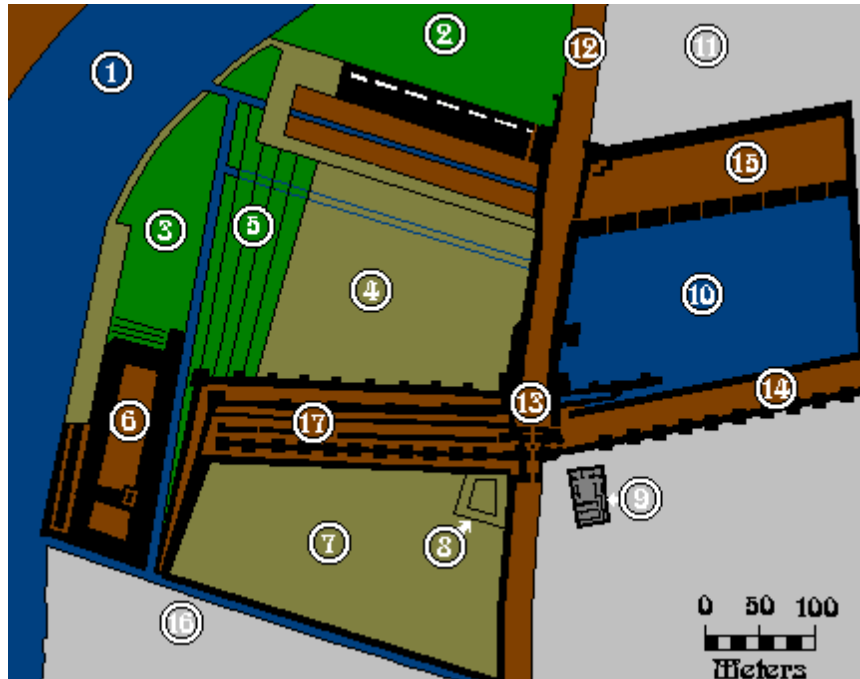
*the double walls of Babylon’. Such a structure, comparable to that of the ziggurat (of which gigunu/kukunnu is sometimes a synonym) could well have been interpreted as a ‘hanging garden’. The extension made by Nebuchadrezzar of a high-platform for the so-called Principal Citadel on which he built his ‘Northern Palace’ has not been excavated at the Western river-side.*

**The Hanging Gardens**  
Perspective #3 – A Hill built around  
a series of Terraces and Parks

*Beneath it was a system of underground canals used for water-supply and drainage. It is therefore possible that the royal gardens could have continued as terraces from the 'Northern Outwork' along the flank of this palace, which included the Museum, and have looked out over the parkland on the northern flank of the new palace (Nebuchadrezzar and Babylon, The Schweich Lectures, Wiseman, D.J., page 56-57)."*

## Possible Location of the Hanging Gardens

Theorized by Wiseman, D.J in his book  
Nebuchadrezzar and Babylon, The Schweich Lectures



Number	Location	Number	Location
1	The Euphrates River	10	Unknown, possibly a Reservoir
2	Parkland	11	Babylon Minor
3	Garden & Parkland	12	The Processional Way
4	Museum & Northern Palace	13	The Ishtar Gate
5	Terraces of the "Hanging Garden"	14	The Inner Rampart
6	The Western Out-Look	15	The Eastern Out-Look
7	Southern Palace	16	LibilHegal Canal
8	Terraced Structure	17	The Inner Rampart
9	Temple of E-mah		

According to Wiseman, who has been following the latest research and data from Babylonian research, the gardens were more of a terraced hill and parkland than a mountain of terraces. He also supports the theory that they existed next to the western outlook. *"The location of the 'Hanging Gardens' here proposed would accord both with the tradition and the practical convenience of such royal gardens as close to the private quarters of the palace and to the water supplies, with access to the city walls and egress to more extensive parklands outside them where wild animals, including lions, were kept.*



*There is, however, as yet, no direct reference to the latter texts from Babylon. Moreover, this proposed location is more appropriate than the usual supposition that the Hanging Gardens were above the so-called 'Vaulted Building', now known to have been store rooms with supporting buttresses for the Processional Way (Nebuchadrezzar and Babylon, The Schweich Lectures, Wiseman, D.J., page 57-59)."*

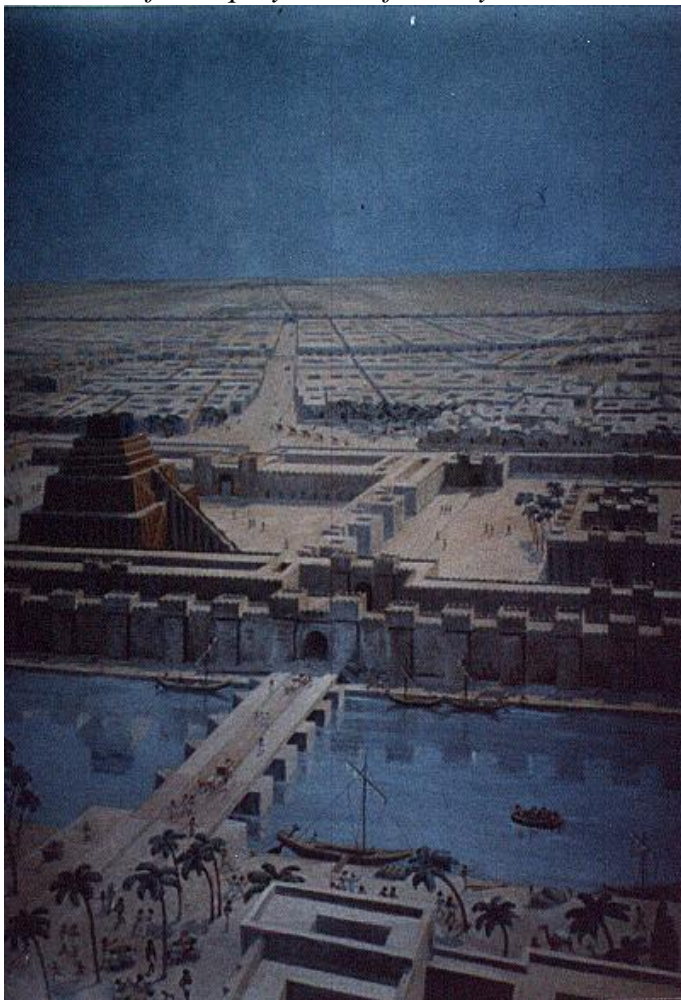
The proposed western outlook Hanging Garden site is more in line with what normal palace gardens would look like during Nebuchadnezzars era. Even so, the proposed layout would not have correlated with the grandiose descriptions given by ancient historians. The vaulted site in the minds of many gave justification to the fact that the Hanging Gardens were one of the seven wonders of the world. In either case, there are those that would dispel all of our visions of the Hanging Gardens. One author writes, "*Whichever alternative scheme we adopt, it must be confessed that the Hanging Gardens have not justified their reputation*" (*A History of Babylon from the Foundation of the Monarchy to the Persian Conquest, King, Leonard W. Page 49*).

Continuing our tour through Babylon Minor, if one wasn't in such breath taking awe by the royal palace and the Hanging Garden, the **Temple of E-Ṣah** might have caught ones eye. It lied across the processional way from the palace and immediately to ones left as one entered Babylon Proper through the Ishtar Gate. There were literally hundreds of temples, shrines, and religious structures throughout Babylon. More details about these structures and the religion of Babylon can be found in "**Appendix D – The Religion and Culture of Babylon**".

As one proceeded down the Processional Way and came to the end of the palace, a beautifully adorned bridge crossed the Libil Hegal Canal. The bridge was constructed such that the elevation of the sacred way did not change; however, it allowed one of the many canals of Babylon to pass through the road. Canals were an intricate strength to Babylons existence and defense system. It is proposed that certain canals were designated as sewage canals while others provided fresh water for consumption. Some have even gone as far as saying that Babylon had a sewer system that was highly advanced for its time. The canals were systematically designed throughout Babylon Proper and Babylon Minor. Unfortunately, most of their names have been lost through time.

As one crossed the Libil Hegal Canal Bridge, the housing structures of Babylon Proper became very evident. Immediately to ones right lied the section of Babylon called the Merkes. At this point one light ask, What was it like to **live in the City of Babylon** during the Neo-Babylonian period? What kind of conditions did the common folk live under? What were the customs associated with everyday life? The answers to these questions, for the most part, are lost with time; however, there are tidbits of information and clues that can help us understand the Babylonian way of life. Most of these questions will be answered in "**Appendix D – The Religion and Culture of Babylon**"; however, we will discuss the Babylonian living structures. The housing of Babylon was generally made from baked mud bricks laid on edge in a herring bone pattern. Buildings were flat roofed, with palm trunks for rafters, in filled with palm branches covered with clay. Some buildings, most especially official buildings such as temples, palace buildings and homes of the most predominant members of the society, included arches, vaults, buttresses, ceremonial entrances, pillars, stairs, drainage systems, and sometimes lavatories (People of the Past, Babylonians, by H.W.F. Saggs, University of Oklahoma

Press, page 43). The houses of the city were generally three and four stories, this style of high houses was probably encouraged by the fact that the Babylonians lived in constant fear of floods. The “Buildings ‘like mountains,’” were “designed to escape the floods of the plains” (*A History of Babylon: From the Foundation of the Monarchy to the Persian Conquest*, Leonard W. King, page19). “The builders of all periods were on the defensive, and not solely against human foes, for in that aspect they resembled other builders of antiquity. The foe they most dreaded was flood. Security against flood



conditioned the architect’s ideal: he aimed solely at height and mass (*A History of Babylon: From the Foundation of the Monarchy to the Persian Conquest*, Leonard W. King, page19).”

Despite their size, the housing was far from equal to that of modern day convenience. The “doors swung on pegs set in a hollow in a block of stone; the door hinge was unknown throughout Babylonian civilization” (*People of the Past, Babylonians*, by H.W.F. Saggs, page 43). The indoor toilet was as futuristic to the Babylonians as hover crafts to us. The walls and floors were mostly made of dirt. Even though some of the temples and palaces incorporated other materials, “Brick continued to be the main building material” (*A History of Babylon: From the Foundation of the Monarchy to the Persian Conquest*, Leonard W. King, page19). Such building blocks were not the hardened

bricks that we are used to but rather “Unburnt brick, with mud or clay for mortar”. The excavation of such a building style “necessitates a slower and more systematic process of examination. For unburnt brick becomes welded into a solid mass, scarcely to be distinguished from the surrounding soil, and the lines of a building in this material can only be recovered by complete excavation” (*A History of Babylon: From the Foundation of the Monarchy to the Persian Conquest*, Leonard W. King, page20).

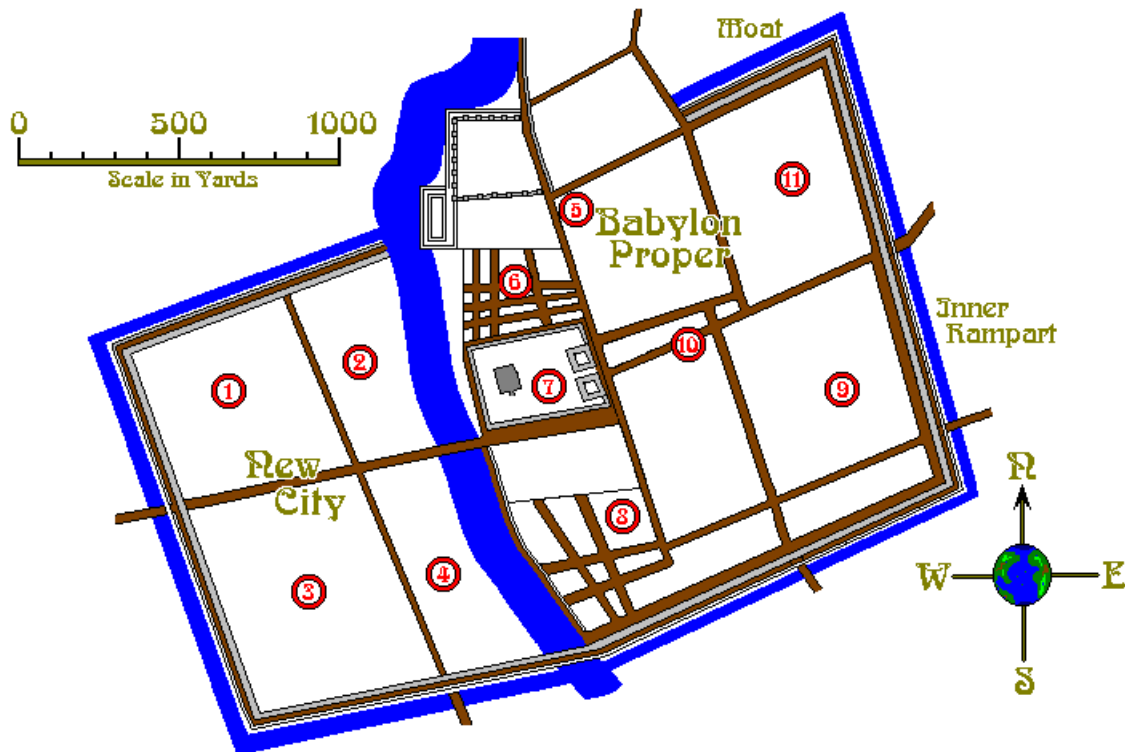
The houses were typically built around a courtyard that was open to the sky. This provided a natural source of light while providing privacy and protection. “The city itself is full of three- and four- storied houses, and the roads that cut through it are straight, including those that run crosswise to the river. A each road ends at the wall beside the river, small gates are set in it one gate for each alley-way. These gates are also of

bronze and also open on the river (The History – Herodotus, Translated by David Grene, Page 115, Book 1, Section 180).”

The City (Proper and Minor) was organized, planned, and built better than many cities of our time. Streets were built running north and south following the line of the river Euphrates, while cross streets were built for the most part at 90° angles forming organized intersections. Large streets were built for heavy traffic, while smaller streets were built forming residential streets and side streets. Due to the planned structure of the city, the larger streets became boundaries for districts or suburbs within the city. The City Proper was divided into the following districts; In the New City of Babylon Proper lied four districts according to surviving records. They were NUHAR.UD.KI, KUMAR, LUGALGIRRA, and TUBA. In East side of Babylon Proper lied six districts. They were KA.DINGIR.RA, ALU ESSU, KULLAB, ERIDU, DIN.TIR, and TE.E.KI.

## The City Quarters or Districts of Babylon Proper

Based on references made in cuneiform script and research by D.J. Wiseman in his Book, “Nebuchadrezzar and Babylon - The Schweich Lectures”

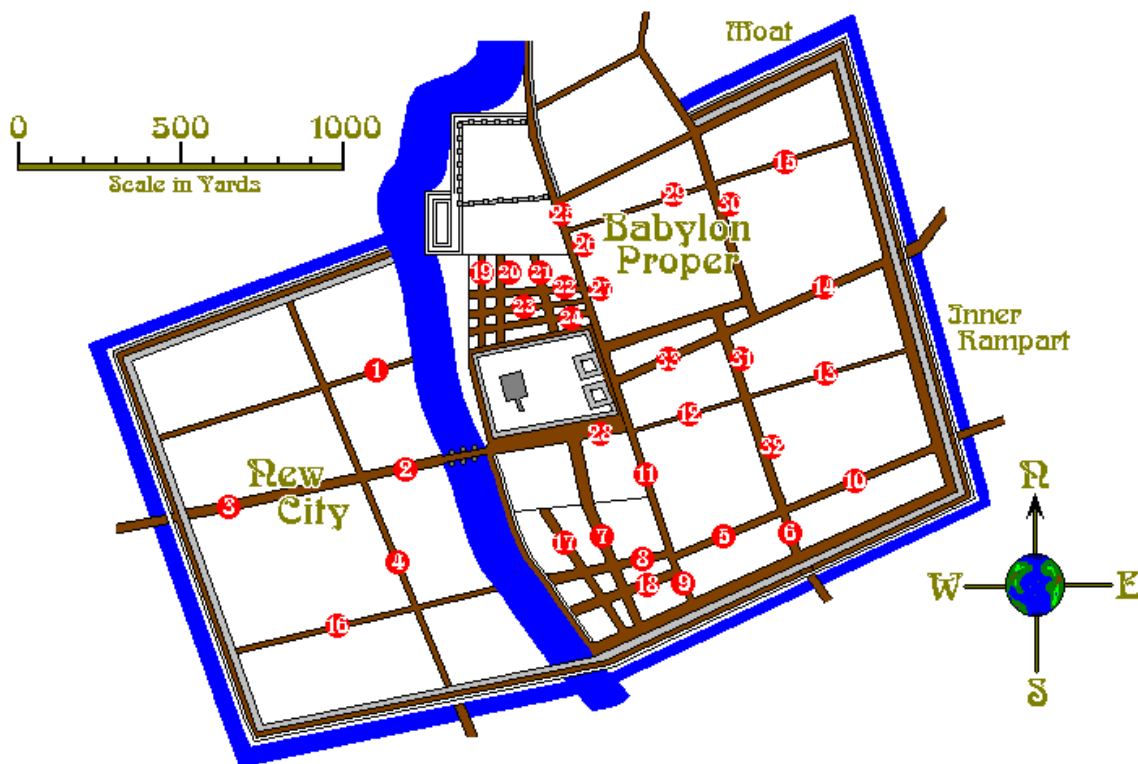


### Number Babylonian District Name

Number	Babylonian District Name
1	NUHAR.UD.K
2	LUGALGIRRA
3	KUMAR
4	TUBA
5	KA.DINGAR.RA
6	ALU ESSU
7	ERIDU
8	DIN.TIR (SU.AN.HA)
9	TE.E.KI
10	KULLAB
11	TE.E.KI

## The City Streets of Babylon Proper

Based on references from ancient script and research by D.J. Wiseman, "Nebuchadrezzar and Babylon - The Schweich Lectures"

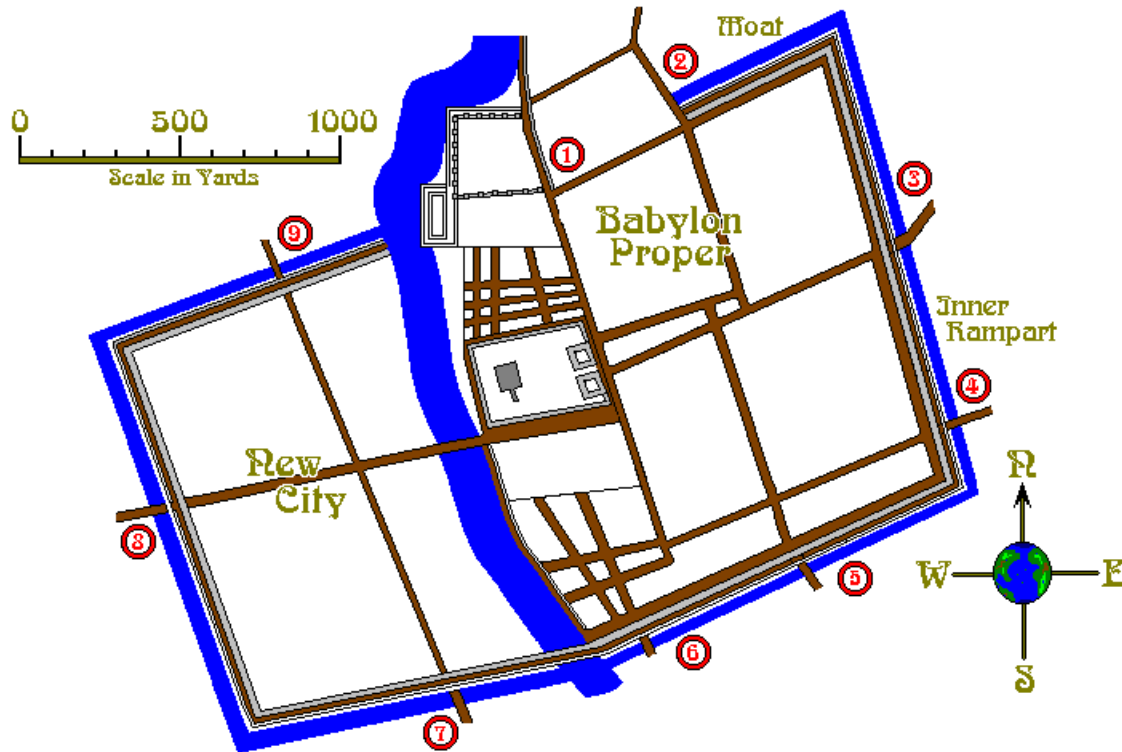


Number	Babylonian Street Name	English Translation
1	Me usu *	Bring down the water
2	Kurub lismeka	Pray and he will hear you
3	Adad zanin nisisu suq abul Adad	Adad, provider for his people, street of the Adad gate
4	Samas sulul ummanisu abul samas	Shamash, protector of his men, street of Shamash gate
5	Suq erbetti*	Crossroads
6	Unknown	Unknown
7	Nabu dayan nisesu suq abul Uras	Nabu, judge of his people, street of the Uras gate
8	Suq ili mastabba*	Gemini Street
9	Suq damiq-ilisu*	Street of Damiq-ilisu
10	Zababa muhalliq garis suq abul Zababa	Zababa, destroyer of his enemies, street of the Zababa gate
11	Suq sibitti*	Pleiades street
12	Isemu ana ruqu*	He listens to the distant one
13	Tassu karabi*	....greeting
14	Marduk re'I matisu suq abul gissu	Marduk, shephard of his country, street of the Gissu gate
15-24	Unknown	Unknown
25	Istar lamassi ummanisu suq abul istar	Ishtar, intercessor for her men (people) street of the Ishtar gate
26	Sula marduk	Highway of Marduk
27	Ay-ibur-sabu suqu rapsu	May the arrogant not flourish (Broad Street)
28	Suq hudda matsu	Make glad his country street
29	Iseme se asu	He will hear the one who seeks him
30	Sin mukin age belutisu suq abul Sin	Sin, establisher of his royal crown, street of the Sin gate
31	Suq erbetti*	Crossroads
32	Enlil mukin sarrutisu suq abul enlil	Enlil, establisher of his kingship, street of the Enlil gate
33	Ayu ilu ki Marduk	What god is like Marduk?

As one traveled the streets of Babylon, it might have been noted that the main streets were often named after gated. As previously stated, there were an estimated eight **Gates entering Babylon Proper** other than the famed Ishtar Gate. That gives us an estimated nine gates entering Babylon Proper. The name of the gates are as follows; Ishtar, Adad, Sin, Marduk, Enlil, Uras, Samas, Lugalgirra, and an unnamed gate whose road lead to Zababa.

## The City Gates of Babylon Proper

Based on references made in cuneiform script and research by D.J. Wiseman in his Book, "Nebuchadrezzar and Babylon - The Schweich Lectures"



### Number Name of the Gate of Babylon

Number	Name of the Gate of Babylon
1	ISHTAR GATE
2	SIN GATE
3	MARDUK GATE
4	ZABABA GATE
5	ENLIL GATE
6	URAS GATE
7	SAMAS GATE
8	ADAD GATE
9	LUGALGIRRA GATE

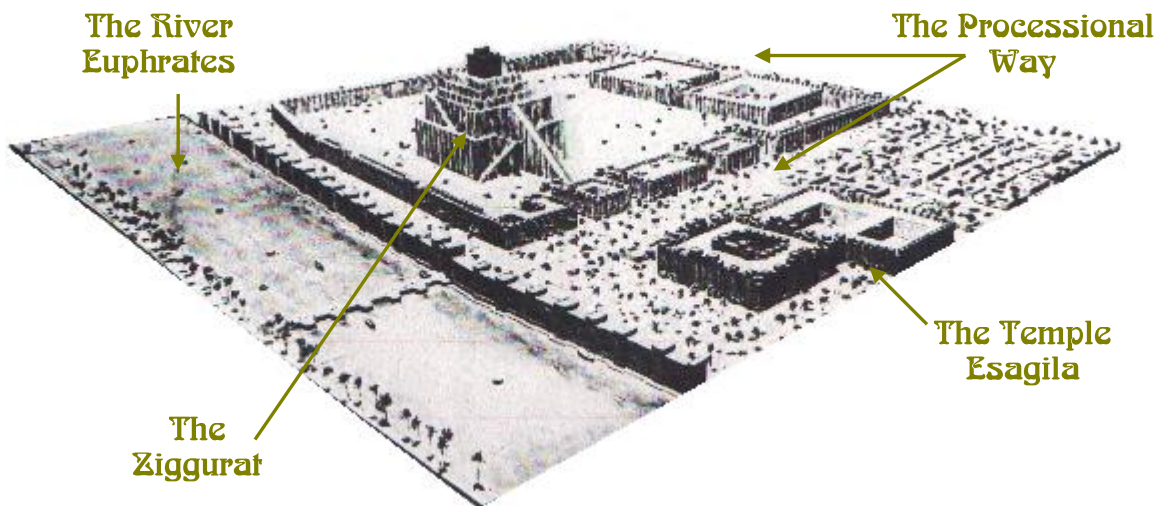


The single most noticeable structure in Babylon was probably that of the Ziggurat. About 500 yards down the processional way from the Ishtar gate one would look up to find oneself staring up at this great structure. This enormous stair stepped Pyramid was in fact a temple dedicated to the great Babylonian god Marduk, the City god of Babylon. It is said to be the rebuilt tower of Babel, and it acted as the center of Babylonian religious ceremonies. Its grounds

### The ziggurat

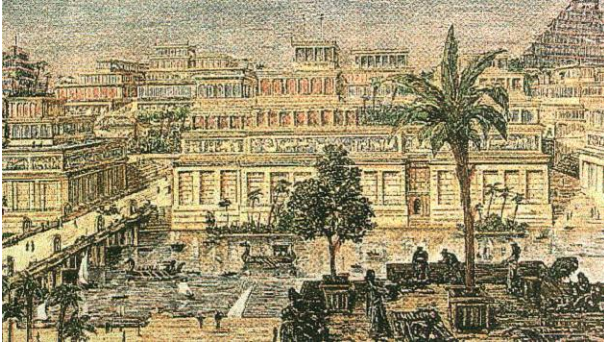
were protected by a large brick wall with housing for the priests and royal guards contained therein. More information regarding this sacred structure can be found in **“Appendix D – The Religion and Culture of Babylon”**.

After passing the ziggurat, the processional way actually turned right at a large intersection. After the turn, the main entrance to the ziggurat lied on the right hand side, and the entrance to a rather large temple lied to ones left. The temple on the left was called the temple of Marduk, “Esagila”.



The view down the road was a beautiful view of the Babylonian waterfront. **The City of Babylon was divided by water.** Splicing through the great city was a river even greater and more unpredictable than the city itself, which is called to this day, the Euphrates. Describing this unique feature of the Babylonian City, Herodotus wrote, *“There are two divisions of the city, for the river called Euphrates divides it in the middle. It flows from Armenia – a great, deep, and swift stream – and it issues into the*

Red Sea. Each wall of the city has its ends brought right down to the river, and from there they turn and, in the form of a dry wall of baked bricks, stretch along the banks of the river” (The History-Herodotus, Translated by David Grene, page 115, Book 1, Section 180 ).



### Babylon's Waterfront

Probably the greatest weakness and strength of the city of Babylon was the fact that the great river Euphrates divided the city. It was a weakness militarily since there was always the “possibility of an armada of enemy boats slipping past the river forts at night and so penetrating to the very heart of the city” (Babylon, James Wellard, pages 155). The strength of the river was economic. Trade was the strength of ancient Mesopotamian cities. Having the river Euphrates run through the middle of Babylon brought tremendous trade opportunities to the city. In fact, the city of Babylon would have never grown to greatness were it not that at the end of the third millennium the river Euphrates altered its course and set its new path through Babylon. The river “was the main highway for trade north to the kingdoms of Asia Minor and south to the land Sumer. The river at Babylon was spanned by a single stone bridge whose roadway of planks was withdrawn at night - to prevent robbers from crossing from the old town on the east bank to the new suburbs on the west bank, according to some commentators; but more probably to control the passage of smugglers’ cart bringing in untaxed supplies from the countryside” (Babylon, James Wellard, pages 154-155). Aside from the economic advantages of trade brought from the river, the river also benefited Babylon in that its main commodity was agriculture whose dependency on water made the river Euphrates the bloodline of the city.

The waterfront was obviously as central point in the city of Babylon. There was a constant flow of boats and foreign merchandise at the waterfront. Herodotus’ wrote, “The greatest wonder of all this region, after the city itself, I will now tell you: it is the boats that travel down the river to Babylon. They are circular in shape and made all of skins. They build them higher up, beyond Assyria, in Armenia, and they cut ribs of willow to make them. Then they stretch, over these, hides to cover them on the outside, like a kind of hull. They do not broaden the stern or narrow the prow but leave the boat round, like a shield. They fill the whole boat with straw, load it with freight, and launch it down stream, to travel the current. What the boats carry down mostly are palmwood casks full of wine. They are steered by two paddles, with two men standing upright in the boat; the one pulls his paddle toward him, the other thrusts his out. The boats are made, some in very large size, and some in small. The biggest of them are up to one hundred and twenty-five tons burden. In each boat there is a live donkey, and in the bigger boats more than one. When in their voyage they come to Babylon and dispose of their cargo, they auction off the ribs of willow from the boats and all the straw, and they pack up the skins on their donkeys and drive off to Armenia. For it is no way possible to travel upstream, because of the quickness of the current; that is why, also the boats are

made of skins instead of wood. When they have come back to Armenia, driving their donkeys, they make other boats again the same way” (*The History-Herodotus, Translated by David Grene, page 122, Book 1, Section 194*). One might imagine people coming from all over the region to trade, buy, and sell goods at the Babylon waterfront. One might picture crudely made stands set up one after the other. Some filled with fruits and vegetables, others with fine cloths and linens. It is possible that there were animals of all kind as well as wagons, carts, and boxes of raw materials and wares.

Unfortunately, our tour of the City of Babylon will end here. Not because there isn't any more splendor or beauty to be seen in the city, but because the rest of the city has either been lost over time due to natural erosion, or due to the fact that excavation efforts have not gone much further than the areas that have already been covered. There are isolated items here and there in the city that have been uncovered. These are primarily temples, some of which will be covered in **“Appendix D – The Religion and Culture of Babylon”**.

The Babylon of today is as desolate as a desert. It lies under meters of dirt and debris. The terrain is covered with tumbleweeds, scattered palm trees, and occasional rock formations. Only as a result of extensive excavation can the remains of Babylon be truly seen. Like great trenches and valleys, archeologists have dug out the masking dirt from Babylon and given us a picture of the once great city.

In conclusion, the following pictures are given to show the relatively recent condition of the ruins of Babylon.

### **The Kasr Mound, The Temple of Ninmakh, and the Ishtar Gate seen from the Northeast**



Picture from the Oriental Institute, University of Chicago



## The Kasr Mound

A view of the northeast end of the mound with the basalt lion on the elevation



Picture from the Oriental Institute, University of Chicago

## The Ishtar Gate Looking south from the Processional Way



Picture from the Oriental Institute, University of Chicago

**The Kasr Mound**  
**Looking south over the Processional Way**



Picture from the Oriental Institute, University of Chicago