Hi, my name’s Mike Imwalle. I’m an archaeologist for the Santa Barbara Trust for Historic Preservation here at El Presidio de Santa Barbara State Historic Park. The Presidio is a fort, or military garrison, that was founded in what was then known as Alta California by Spain to protect the coast of California from foreign invaders such as Russia, England, and even the Americans. The presidios are part of an elaborate system of missions, presidios, and pueblos founded in Alta California. Eventually the Santa Barbara Presidio district came to include the territories of Mission San Buenaventura, Santa Barbara, San Fernando, La Purísima, and Santa Ynez Missions.

On April 21, 1782, approximately 45 soldiers arrived at the site of the Presidio de Santa Barbara with Captain Rivera, Lt. José Ortega, and Father Junipero Serra. When they came to the site, they encountered the Chumash Indians who inhabited the Santa Barbara Channel area. The Santa Barbara Presidio was founded on a gently sloping ridge that faced towards the anchorage, and it is important to remember when you visit the Presidio that it was founded more than four years before the Santa Barbara Mission, so these were truly the first European inhabitants of Santa Barbara.

VISITOR: Why was the Presidio built?

MIKE: The Presidio was built by order of King Carlos the Third. It was one of four presidios in Alta California, including San Diego, Monterey, San Francisco, and lastly Santa Barbara. They were built to serve as government centers, also as military centers. They were established to protect the missions up and down California, and also as trading posts for communities surrounding the missions. Now, why don’t we go take a look at how the Presidio was built?

El Presidio de Santa Barbara State Historic Park is a window to the past and a mirror to the present. Through more than forty years of ongoing archaeological research, the Presidio has developed interpretive museum displays, community programs, and ongoing education programs. Archaeological research has helped us define the Presidio by outlining the walls of the original fort, which were constructed on sandstone foundations that you can see surrounding us. We’ve also successfully identified dozens of important archaeological features, including walls, floors, wells, aqueducts, trash pits, and privies. In addition to discovering archaeological features that help us describe the buildings that the inhabitants lived in, we also find important information that helps us to understand how they lived and what type of things they had. Through archaeological and historical research, El Presidio continues to give us a glimpse of its rich, colorful history. Before me are the original foundations of the
adobe dwellings that were built to house the Presidio soldiers and their families. Prior to the construction of the adobe dwellings, soldiers and their families lived in temporary palisade, or palisados, structures that were characterized by vertical poles stuck in the ground. The vertical poles had smaller sticks woven in between them and were then plastered with mud. Typically they had thatched roofs. This series of post holes you see in front of you probably represent the earliest European settlement in Santa Barbara.

ARCHAEOLOGIST: Oh, look Mike, I’ve found some maiolica ceramics. I believe that’s the huejot zingo.

MIKE: Why don’t we walk over and take a look at how the adobes were actually constructed? As we mentioned before, the first structures that housed the Presidio soldiers were of a temporary nature called palisade construction. They were made from building materials that were not necessarily suitable for long range construction. They utilized materials like sycamores and alders that were available locally in the creeks. They were not particularly durable woods. Eventually all the palisade construction was replaced by adobe construction that formed a permanent adobe quadrangle like the structures that you see behind me.

VISITOR: What is adobe?

MIKE: Adobe is a term that is used to describe a type of building, a type of soil, and also a type of brick that is used in adobe construction. These are adobe bricks that you see before me, and we make them today the same way that they did over 200 years ago. We mix mud, which is a combination of sand, silt, and clay, with straw that acts as a binder, and then the mud is poured into a mold, like you see here. When the mold is full, it is removed and the adobe bricks are allowed to dry flat for about ten days. After they’re partially dried, they’re tilted up on their side so that they can get more air to help them dry more easily. These bricks are about 11 inches by 22 inches and weigh about 45 pounds. The Chumash Indians were paid by the Spanish soldiers to help them make bricks for the construction of the Presidio. They were paid a rate of one-and-a-half reales, which is a type of silver coin, and one almud of corn a day for their labor.

The adobe bricks were set on stone foundations like the ones that we saw on the northwest corner. Foundations were laid in a trench excavated into the ground. The stone was laid to a height of about one-foot above the ground, and from that point they started laying adobe blocks up to form the walls of the buildings. Timbers of pine were hauled down from the Santa Ynez Mountains to be used for ridge beams and rafters for the roof structures. They were cut into planks to make doors and window frames, and ceilings in the case of the officer’s quarters. Once the roof structure was constructed with the timbers, it was sheeted with sheets of cane called Arundo donax. Arundo donax is a type of cane similar to bamboo that was introduced to California by the Spanish for construction purposes. Once that cane sheething was put upon the roof structure, it was coated with a layer of mud for insulation and then it was capped with tejas, or fired clay roof tiles, like you see on the buildings behind me.

VISITOR: Where did they get the water for the adobe bricks?

MIKE: Why don’t we go take a look? You asked how they got water here to make the adobes. This row of stones you see in the ground here is actually a cap on top of the Presidio
aqueduct. The aqueduct was one of the first permanent structures that was built by the Presidio garrison. As part of the garrison built temporary palisade structures to house the soldiers and their families, most of the soldiers worked diligently on completing this aqueduct to carry water as a permanent source to the site of the Presidio. Water was crucial to mixing the adobe for the construction of the adobe structures. This aqueduct carried water from the approximate location of Mission Santa Barbara, more than a mile-and-a-half away from here. It's constructed of fired clay tiles on the bottom, or ladrillos, and it has walls of sandstone cobbles. It's lined with a hydraulic cement to make it waterproof. This channel is only four inches by four inches by four inches, but when it ran at only 25 percent capacity, or one-inch deep, over a 24-hour period, it could deliver more than 36,000 gallons of water to the Presidio. That water, as you can see here, runs right through this building, which was the residence of a commander, and eventually out into the Plaza de Armas where it flowed into a reservoir or fountain or lavandería or some kind of other holding facility where all the Presidio inhabitants could have access to fresh water. The location of that reservoir or water retention facility has never been found, but we are still looking for clues and the story continues to unfold.

Once the aqueduct was completed in 1784, Lt. Ortega, who was the first comandante of the Presidio, passed over the command of the Presidio to Felipe de Goicoechea, who oversaw the construction of all the adobe structures. The adobe quadrangle was approximately 400 feet on each side surrounding a central Plaza de Armas. Each side of the quadrangle had a different function. The first side contained warehouses and storehouses and corrals for the Presidio animals. The second side consisted primarily of housing for soldiers and their families. The third side contained the residences of the two officers, the comandante and alférez, or first lieutenant. There was a room for a visiting priest and the chapel. The fourth side of the Presidio also consisted of residences for their families. Why don’t we go take a look at the model of what the Presidio quadrangle looked like?

We have very good information about the chronology of construction based on correspondences from Comandante Goicoechea to Governor Fajés in Mexico. The quadrangle was built in the series of this first wing, which contains some barracks for soldiers, guardhouse and warehouses, along with corrals for the herds of Presidio horses. The second wing was all family housing, with a two-story observation tower; this provided them a view down to the anchorage. The third wing were the officers quarters, chapel, and additional family residences. Here you can see the cocina and dispensa behind the officers’ quarters. And the fourth side of the quadrangle was finished with family residences. This gives you an idea of the individual yard areas behind each house. You can also see the corner bastions that were located at the northwest and southeast corners of the quadrangle. The Presidio, when it was built, the adobe construction didn’t begin until 1784 when the aqueduct was completed. The first wing of the quadrangle was finished about 1785, second wing and third wing by 1786, and the last and fourth side of the quadrangle was completed in 1788. So they were able to build all the adobe structures that comprised the quadrangle in about five years.

This is the comandante’s quarters or comandancia. The comandancia was the household of the commander of the Presidio, Felipe de Goicoechea. His house originally consisted of an office, or oficina, which we are standing in; a salon, or vestibule, for entry into his house; a sala, or parlor; and a recámara, or bedroom. The oficina, where we are standing, would have been the administrative headquarters and military headquarters of the Presidio. In this room Goicoechea would have signed orders for his men, dispatched mail, written letters on the
progress of the construction of the Presidio that were sent on a regular basis to the Governor in Mexico. Now let’s take a look at the sala. This is the sala, or parlor, of the comandante. It would have been the most formal room in his house. In this room he would have entertained visiting dignitaries and guests. He entertained Captain George Vancouver here in 1793. Vancouver commented on the fine English china that he was served on. Goicoechea, we know from archaeological evidence, had plates and dishes in his household made of Mexican mayalica, but also of imported Chinese and English porcelain. The window and wall to the back of me were left unplastered to indicate that is not a historic wall, and this room was originally longer, but it was truncated by the street, when the street was constructed in 1870. In addition to having an office, a parlor, and a bedroom, the comandante also had his own kitchen and pantry, as did the alférez, or first lieutenant.

You should notice, while we’re in here, that the officer’s quarters typically were furnished with tile floors. They also had windows, which was not typical of a regular soldiers quarters, and they were furnished with plank ceilings. This is relatively luxurious compared to the more stark interiors of the family quarters, which we’ll take a look at. As I mentioned before, the two officers, the comandante and the alférez, or first lieutenant, each, in addition to their suite of rooms, had their own kitchen and pantry. This is the kitchen, or cocina, of the alférez, and in it we’ve reconstructed examples of several different Hispanic cooking features. This is an horno, typically called a beehive oven. It was used by lighting a fire with wood inside it. After that fire got very hot, they would come in and rake out the fuel and the coals and put bread inside the oven and close the door. The heat from the bricks of the fire would cook the bread. These are also located outside at various locations throughout the Presidio. This is a brasero, or a stove. It’s very similar to today’s stove, and, similarly, it was also heated by fire; of course they had no gas or electric. Typically they would take carbon, or charcoal, and use pieces of charcoal that were already burning, place it in this chamber, and then were able to heat pots directly sitting on these burner openings or on a trivet, depending on the type of temperature. They could use different height implements like this to get the pots closer or farther from the fire. This is an hornillo, and it’s simply a place to have an open fire that you could use a cumal to cook tortillas on. You could also take a tenedor, or fork, and poke chunks of meat and cook them right over the open fire inside. These are all types of cooking features that were typically used in early Spanish California.

We also see in here a couple other implements that would have been located in the kitchens of the alférez and the comandante. One is a thing that we call a filtro; it is literally a filter. It’s made from a porous type of stone called basalt. What they would do is bring water with a bucket in from the fountain or lavandería in the plaza, pour it into this filter, and slowly the stone becomes soaked with water, and over time that water would drip out into the jar below and collect clean drinking water. The pores of the stone would actually capture pieces of moss and sediment in the water and clean it for drinking purposes. Down below here there’s also several manos and metates that were used for grinding corn primarily. During the process of grinding that corn, the pores in this basalt would typically become full of corn meal and create a smooth surface. So, periodically, to maintain this they would take a brush and clean out the pores of the metate to create a rough surface, which would more effectively grind the corn into meal. Now these are typical of Mexican basalt, these were actually ordered by the soldiers for delivery on the supply ships. These are examples of Mexican metates that were actually delivered to the Presidio from Mexico. At the same time, the local Chumash were using sandstone manos and metates to grind acorns into acorn meal.
Now let’s take a look at a regular soldier’s quarters. We’ve taken a look at the officer’s quarters, let’s go take a look at a typical soldier. We talked about the configuration of the original officer’s quarters having a living room and bedroom and offices. This represents a single family’s residence. It is nine varas in length by five varas in width. A vara was a unit of measurement that the Spanish used to build. It’s approximately 33 inches. So it’s relatively close to a yard, or three feet. You’ll notice the stark contrast between the interior of this room and the sala of the comandancia for instance. The sala had a painted daido decoration on the wall. It had tile floors, and it had plank ceilings, and it was also furnished with several windows. The typical soldier’s family’s residence had one door to the plaza and one door to a rear yard that was enclosed by the outer defense wall. Each family had a yard corresponding to their residence. In those yards they could grow plants, have a small garden, raise small animals like chickens. Let’s go take a look outside at one. Each soldier’s family’s residence had a corresponding backyard area that was separated from the adjoining family’s residence by short adobe garden walls and enclosed on the back by the outer defensive wall.

This is a slightly different living arrangement that we’re looking at in this room. You see that there’s a fired clay tile, or ladrillo, floor. It’s a series of eight-inch tiles laid on a bed of mortar and then mortared together with lime mortar. This is a little bit atypical of a family residence because the tile floor is in here. Characteristically only the officers would have had tile floors, and we believe, through historical documentation, that we may have figured out why this room, that was a regular family’s residence, was eventually furnished with tile floors. The 1812 earthquake badly damaged the original comandancia. As a result, they moved the comandante into the quarters of the alférez, and we think, correspondingly, bumped the alférez down the row of family residences into this room. And because he was an officer, he was entitled to a tile floor, and here you see the tile floor that we think was installed for him moving into this residence.

There are several features in here that are of interest, including all these post holes that you see through the tiles that go down into the ground. There’s a row here; there’s another row of post holes perpendicular to that row. We’re not entirely certain what these post holes were for, but they could have served several purposes. They may have supported vertical poles that screened off part of the room for privacy. They may have supported poles that supported shelves. They may have supported cots. They may also have been used to temporarily support a sagging roof at one point. In this corner we have a low banco, or bench, of adobe. It is literally comprised of a row of adobes laying right on the tile floor. Now this could have supported a low hearth for cooking. It also may have just been used to elevate a low piece of furniture such as a chest.

We have a rendering here of what this room may have looked like when it was furnished for the alférez, or first lieutenant, and here you can see a depiction of the tile floor. You see a hearth for cooking over in this corner near the banco I just pointed out. You also see a series of posts running up and down the wall supporting cots. You also see that they utilized the rafters to hang shelves, and that there are a number of activities going on both inside and outside the residence. This depicts, again, a typical backyard with a fruit tree growing in the back, they’re apparently doing laundry. And this shows the outer defense wall with a rampart along it. This rampart was used for sentries to walk the perimeter of the outer defense wall around the fort.
You’re entering the sanctuary of the Presidio chapel. The Presidio chapel must have been a welcome place for the visitors of the Presidio. It was made to be very colorful and impressive, a stark contrast to the very plain exterior of the Presidio. This chapel served as a church for the community of the Presidio. It was the most prominent structure in the quadrangle of the entire Presidio. Originally it was approximately 60 feet long. In 1795 it was lengthened to its current length of about 120 feet. It was almost doubled in size. This chapel represents the first Christian church in Santa Barbara. It continued to serve as a parish church until 1857 when it was destroyed by the Fort Tejon earthquake. It was replaced by Our Lady of Sorrows Church that was founded over on the corner of State and Figuero Streets several blocks from here.

When the Presidio was first founded, it pre-dated Mission Santa Barbara, so the burial, marriage, and baptism records at Mission Santa Barbara that were kept by the friars actually started with the logging of burials that were conducted here at the Presidio. Approximately 51 individuals were buried in the Presidio chapel, beneath the floor, and this plaque commemorates some of those people. You’ll see that there’s a prominent list of names around Santa Barbara, like Codas, Carillos, Castillos. Most of the Hispanic street names that you recognize from around town originated with the names of Presidio soldiers and their families.

The chapel reconstruction was completed in 1985, after more than twenty years of ongoing archaeological research. Originally it would not have contained any pews. People who visited the church would have either sat on a few benches that were lined up around the perimeter of the church or more likely would have sat in the center of the sanctuary on woven grass mats. This church was primarily used by the soldiers and their families. The Christianized Chumash population celebrated Mass at the mission, and so it was a relatively small community that celebrated Mass here every day. The chapel was decorated with holy pictures of Our Lady of Guadalupe and Saint Barbara.

VISITOR: How did the Presidio get its name?

MIKE: The Presidio was named after the channel on which it was formed, the channel of Santa Barbara, which was named by a priest on the Vizcaíno voyage on December 4, 1602, the feast day of Our Lady of Saint Barbara. Through archaeological research and historical documentation, the history of the Presidio continues to come alive every day. In the future we’re installing core museum exhibits in the reconstructed buildings of the quadrangle that will reflect the history of the Chumash, Spanish, Mexican, American, Chinese, and Japanese communities that eventually occupied the Presidio neighborhood. It’s a living community. This chapel is used by the community for weddings, concerts, theatrical productions and continues to be a living part of the Santa Barbara community. Oh, I think that’s my cue to get back to work. I thank you for visiting with us today here at El Presidio de Santa Barbara State Historic Park, and I hope you can come back and visit us again soon.