

Lost Missions Exercise

Prior to class

Read the following pages excerpted from Bolton's *Texas in the Middle Eighteenth Century*, and accompanying materials.

The goal is to find the physical or actual locations of:

1. Missions:
 - Nuestra Señora de Candelaria
 - San Francisco Xavier
 - San Ildefonso
2. The Presidio
3. The dam
4. The irrigation ditch or canal

In order to do so, you will need to locate:

1. Rockdale
2. San Gabriel
3. Brushy Creek
4. Roads
5. Other cultural features

TEXAS IN THE MIDDLE EIGHTEENTH CENTURY

STUDIES IN SPANISH COLONIAL
HISTORY AND ADMINISTRATION

BY

HERBERT EUGENE BOLTON

originally published in 1915

PUBLISHED IN COOPERATION WITH
THE TEXAS STATE HISTORICAL ASSOCIATION



UNIVERSITY OF TEXAS PRESS, AUSTIN & LONDON

1970

CHAPTER I

THE DAWN OF HISTORY IN CENTRAL TEXAS

It is not generally known that the San Gabriel River, in central Texas, was once the seat of Franciscan missionary activity. Yet such is the case, and slender remains of the mission establishments are still to be seen in the valley of that stream. If one will drive nine miles northwest from Rockdale to the Kolb Settlement, and then turn westward up the river for about a mile, he will come to what has long been known in the neighborhood as "Ditch Valley Farm," a name, the present writer has discovered and established beyond doubt, which comes from the fact that through the farm once ran an *acequia*, or irrigating ditch, constructed in the year 1750 to serve three Spanish missions which had recently been founded there. In the river near by are still to be seen at low water the remains of what has long been known as the old "Rock Dam," whose origin, it is now clear, was the same as that of the ditch.

The remains of the *acequia*, as well as of the dam, are still to be seen in dim outline. Crossing the main highway near the western end of the farm is a shallow ditch leading toward the river. North of the road it is quite distinct, being some eight feet wide at the top and two or three feet deep in the middle. The land on this side of the road is uncultivated, and in the bed of the ditch are growing hackberry trees nearly a foot in diameter. About one hundred feet from the road the ditch terminates in a natural arroyo or gully, which leads eastward into the river about two hundred yards away. South of the road the ditch leads into cultivated fields, where it is soon lost;

p. 137

but forty rods to the southeast, where it crosses an unplowed lane, it is again distinct, and eighty rods farther away it can still be faintly traced across another lane.

In the bed of the river two hundred yards below the mouth of the arroyo the remains of the old "Rock Dam" are pointed out. They now consist of only a heap of large stones, stretching across the stream. A man fishing up the river at low water would certainly notice the stones, though he might not suspect that they are the remains of a dam. But the inhabitants of the neighborhood claim to remember when both ditch and dam were quite distinct—a claim fully supported by the long and commonly used names, "Rock Dam" and "Ditch Valley Farm." In the fields the *acequia* has been filled in by the plow, while most of the stones of the dam, I am told, have been hauled away and used for building purposes. Besides the ditch and the dam, tradition tells of the remains of old buildings of pre-American origin, once standing on Kolb's Hill, below Ditch Valley Farm.

Tradition ascribes the ditch, the dam, and the old buildings to the Spaniards, and neighborhood belief in the tradition is evidenced by perennial digging about the locality of the dam for pots of Spanish gold. But few or none have guessed, what is now established beyond question, that these archaeological remains are the vestiges of what were known in their day as the San Xavier missions.

~~1. *The obscurity of the history hitherto.*—The story of these missions is a little known chapter in the history of the labors of the Franciscan Fathers among the Indians northeast of the Rio Grande River. Writing a few years ago on "Some Obscure Points in the Mission Period" of the history of Texas, Dr. W. F. McCaleb said, with essential truth, "Though little is known of most of the eastern missions, still less is known of some others. Indeed, as to the three missions on the San Xavier River, no historian so far as the writer's information goes, save Bancroft.~~

~~the site chosen, asserting as a warning, that the petitioners had all come armed with French guns, and giving assurance that 'through this establishment of pueblos the malice of the Apache nation will be punished and the communication of the French nation will be prevented.'~~²²

4. *The tentative beginnings of a mission, January-April, 1746.*—Various items of rather fragmentary information enable us to record the circumstances and to establish the date of the actual beginnings of tentative missionary work at San Xavier, both of which matters have hitherto been undetermined.

True to his promise, at the coming of winter Fray Mariano went to meet the petitioners at the designated site, where we find him in January, 1746, accompanied by the *alférez* of the San Antonio garrison, a squad of soldiers, and some mission Indians (and, presumably, with oxen and agricultural implements) making preparations for the hoped-for missions.²³ Besides the original petitioners, he found at the site some of the Coco tribe, with whom he had communicated in the previous October. They assisted in the preparations, promised to enter the missions, and returned to their native haunts for their families.²⁴ A mission site was chosen on the south side of the San Xavier River, now the San Gabriel, a short distance above its junction with the Arroyo de las Animas, now Brushy Creek.²⁵ Sometime before April 13, evidently, Father Mariano wrote to his president at San Antonio that, since the good intentions of the Indians had proved constant, "he had founded a mission to attract them, on

²² Bustillo, *Memorial*, paragraph 1. For a summary of the *autos*, see Bustillo, *ibid.*; and for the petition of the College based on the *autos*, see an *expediente* in the Lamar Papers entitled *Ereccion de la Mision [Presidio] de S^a. Xavier*, 3, and Terreros to Mediavilla, June 23, 1746.

²³ Fray Mariano tells us this in a document dated April 13, 1746. See also documents dated June 10 and 11, 1746, in *Copia de Cartas del R. P. Guardⁿ*.

²⁴ See documents cited in notes 20 and 22, above.

²⁵ For the location of the site, see pp. 225-230.

the banks of the San Xavier,²⁶ in which enterprise he had spent all he possessed; that the place was most fertile, and its fields spacious and watered with good and plentiful water, that he had planted potatoes, and that though he had lost [them], he still had enough for another planting."²⁷ The mission was regarded as having been "founded," therefore, between January and April 13, 1746. Thus far, however, the founding seems to have consisted in little more than the selection of the site and the planting of crops. It had not yet been duly solemnized.

Before the middle of April, Fray Mariano returned to San Antonio, but he left some mission Indians from the latter place in charge, to plant and care for crops with which to support the prospective neophytes. When he departed he promised the assembled Indians that he would return with Spanish settlers and missionaries.²⁸

~~The injury to the missionary cause which the fathers frequently had to suffer at the hands of the military authorities is illustrated at this point by Father Mariano's experience with the Cocom tribe.²⁹ As some members of this tribe were returning~~

²⁶ Fray Mariano says that "many of them lacked even the leaves of the trees to cover their shame." Communication of April 16, 1746.

²⁷ *Ereccion*, 5, is the authority for this assertion. It is quite clear that the letter referred to must have been written during Father Mariano's first stay at the San Xavier, which ended before April 13, for he was in San Antonio thenceforward till June 11. The facts stated above are referred to in a document written near Querétaro on June 28.

²⁸ Testimony concerning Cocos, April 13, 1746.

~~²⁹ In October, 1745, he had communicated with this tribe, who lived on the lower Colorado, through the Bidais. Just at this time Capt. Orobio Bazterra, of Bahia, was about to undertake his expedition to the lower Trinity to look for a rumored settlement of the French. The Bidais, hearing that the expedition was to be directed against the Cocos, sent a delegation to San Antonio in the middle of October, to ask Father Mariano to request Orobio not to harm the Cocos. He did so, and took occasion also to ask Orobio to take the Xaranames, who were living with the Cocos, back to their mission at Bahia. In order that the Cocos might not become entangled in the trouble likely to ensue, he sent to them a request that they should separate from the Xaranames. No doubt he also told them of the San Xavier mission project, for a number of them met him at San Xavier and agreed to enter the missions there. (Communication of April 16, 1746).~~

6

without baptism. The greatest victory of the zealous missionaries was the baptizing, on the death-bed, of a shaman "versed in the superstitions of the Texas."

The force of the epidemic over, the Indians returned to the missions, many of them still suffering with gangrenous sores. It was these Indians who were counted in the *padrón* of Mission San Ndefonso made in the following July by Músquiz.⁹

5. *Músquiz's survey, June-August, 1750.*—As we have seen, orders had been given that Músquiz should suspend his survey at San Xavier until a successor to Barrio should arrive; this order seems subsequently to have been countermanded, however, for Músquiz began his work in June, whereas Barrio's successor did not arrive till the next year. The report of the survey, still extant, is a document of thirty-six folios¹⁰ and gives us full details as to the location and other circumstances of the missions. Every step in the procedure was carefully written down and formally attested before witnesses. The record is so important and so interesting that it is drawn upon here at length.

On June 16 Músquiz was at San Antonio, where he called upon Captain Urrutia, asking him to nominate intelligent and experienced men to aid him in his work. They must be men without bias against either the governor or the missionaries. In view of Urrutia's former relations with the two hostile parties, it would seem that this was a difficult task to put upon him. He complied, however, and named one soldier and two citizens. They were Francisco Delgado, Gerónimo Flores, and Juan Diego de la Garza. The last two "inteligentes y practicos" could not sign their own names.¹¹ Before leaving San Antonio Músquiz called also upon Fray Mariano, asking him to be present at the

⁹ Arrievita, 328-329.

¹⁰ *Testimonio de diligencias, Executadas sobre los dos Rios de Sⁿ. Franco, Xavier y San Andres, y demas que dellas consta, prozesadas por mi Dⁿ. Jph. Joaquín de Ecay Muzquiz, por Comision del Exmo. Señor Virrey de esta Nueva España.*

¹¹ *Test. de diligencias, folio 1.*

Translated copy attached (p. 4-19)

survey; but instead of going himself Fray Mariano delegated Father Arricivita, minister at the mission San Ildefonso.¹²

By June 30 Músquiz had reached the San Xavier River settlement, for on that day, in an *exhorto* dated at Mission San Ildefonso, he notified Father Arricivita to be ready on the morrow to help begin the survey.¹³ Work was got actually under way on July 2, and began with administering to each of the commissioners an oath to perform his duty honestly and without bias.

The survey was begun at the junction of the San Xavier River and Arroyo de las Animas—the San Gabriel River and Brushy Creek of today. Between July 2 and July 6, surveys, or measurements, were made at five different points along the San Xavier. The first was made July 2, at the junction of the two streams; the second, on the same day, half a league above the junction; the third, next day, at Paso de los Apaches, a point about nine thousand varas, or some five miles, above the junction; the fourth, on July 5, at Santa Rosa de Viterbo, a crossing two leagues higher up; the fifth, on the next day, at Santa María de la Visitación, a point two leagues still higher up. This last place was estimated as being about seven leagues, or some eighteen miles, above the junction of the two streams. Descriptions were given of the lands adjacent to the river, on both sides above Mission San Francisco Xavier, and on the south side below that point.

From the report of the survey we learn with great precision the location of the three missions, which have completely passed from memory and whose material remains have almost disappeared. All of the missions and their fields were on the south side of the San Xavier River. Mission San Ildefonso was situated on a knoll or hill an eighth of a league from the junction. On the slope of the hill there were growing three fanegas of maize, beans, and chili, all of which were doing well,

¹² *Test. de diligencias*, folio 5; Fray Mariano's reply was dated June 20.

¹³ *Ibid*, folio 5.

though the season had been dry.¹⁴ Three fourths of a league, or some two miles, up the river above San Ildefonso, stood Mission San Francisco Xavier de Horcasitas, on a hill and surrounded by a fence or wall. Between this enclosure and the junction extended a great flat or plain, five thousand varas (about two and one-fourth miles) long, and one thousand eight hundred varas wide at Mission San Ildefonso.¹⁵

Above, that is up stream from Mission San Francisco Xavier, extended a plain twelve hundred varas long and three hundred varas wide, on which were growing three fanegas of maize belonging to the last-named mission. This plain was terminated at its lower end by the ridge on which stood Mission San Francisco Xavier, and at its upper end by another ridge or hill on which stood the third mission, Nuestra Señora de la Candelaria. Stretching up stream above this mission lay a great plain, or flat, nineteen hundred and sixty-one varas (about a mile) long and eight hundred varas wide, on which were planted, in front of the mission, three fanegas of maize. On the same plain, at a distance of sixteen hundred and sixty-one varas from Mission Candelaria, was established the garrison of forty-eight men who were guarding the missions. As was reasonable, it was established in the direction from which Apache attacks might be expected. Above the plain of Mission Candelaria, and separated from it only by an arroyo, was still another flat, or plain, one thousand varas long, three hundred and seventy-eight varas wide, and terminating a short distance below Paso de los Apaches.

Adjacent to Santa Rosa and Santa María similar plains were described on the south side of the river. Ample water was found at all points where measurements were made. The best opportunities for irrigating were encountered at Santa María and Santa Rosa; none were found at the junction or at the point of the second measurement.

¹⁴ *Test. de diligencias*, 8.

¹⁵ *Ibid.*, 7.

On August 2 the exploration of the San Andrés River was begun, near the junction with the San Xavier at Paso de los Vidays. In this locality facilities for one mission were found. From here the surveying party continued up a stream for eleven leagues, but finding the country constantly rougher, made no measurements.¹⁶

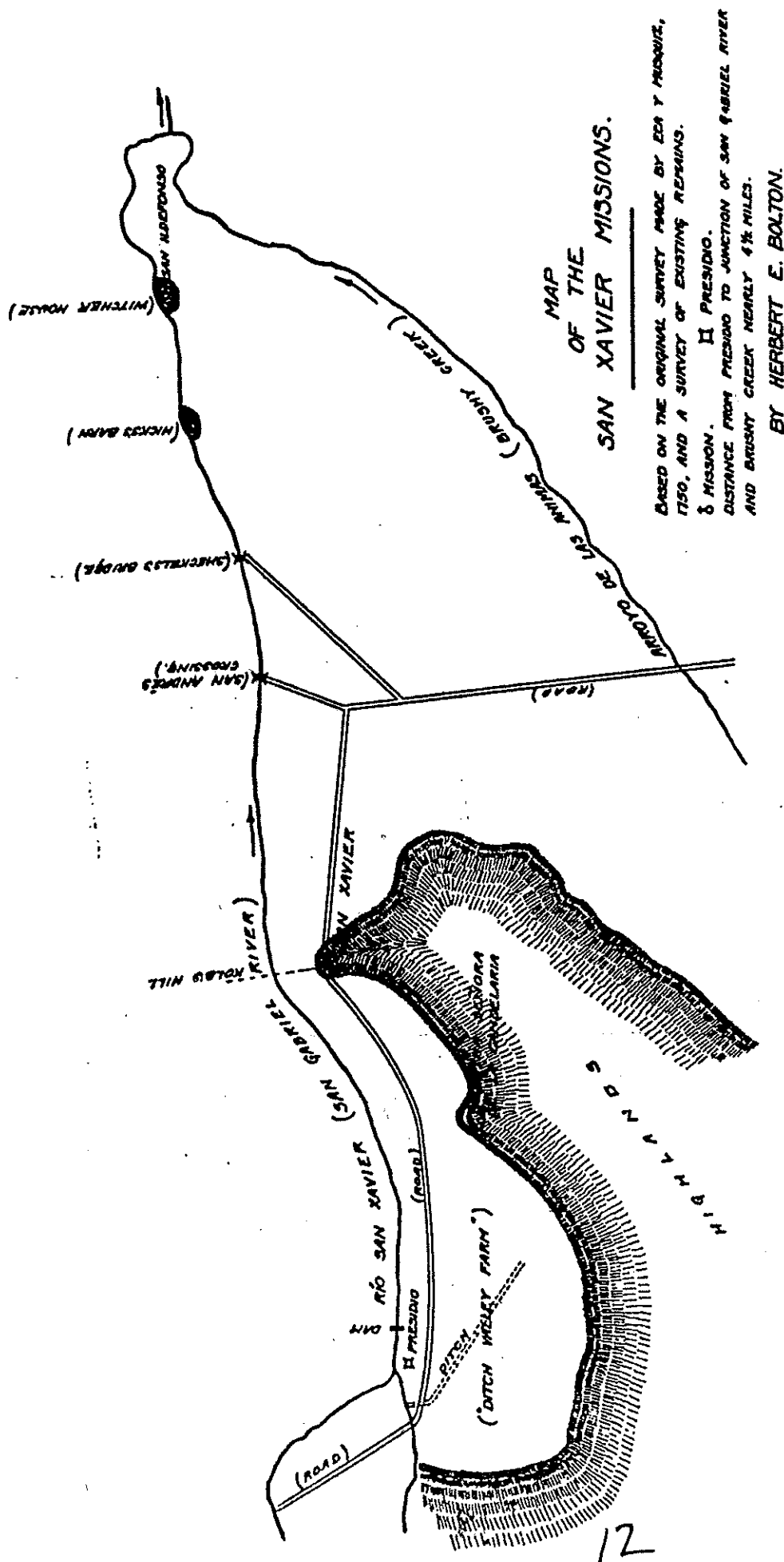
An item of interest in the report is the statement that from the crossing of Arroyo de las Animas (by the road, I suppose), to the junction, it was twelve leagues, or some thirty miles. This would place the ford anywhere from Rice's Crossing to Round Rock, presumably at the former place.

6. Topographical identification.—The present writer has three times explored the San Xavier between the junction of the San Gabriel River and Brushy Creek and a point nine miles above, twice before he discovered the report of Músquiz's survey, and the last time with a transcript of that document in hand. On the last occasion he was accompanied and assisted by Rev. Mr. Ander, then residing within a few miles of the historic spot. He was also given valuable assistance by other residents of the locality, especially after he succeeded with great difficulty in convincing them that his quest was not for hidden Spanish gold. Independent of archaeological evidences, which have already been mentioned, the principal points in the topography of the region described between the junction and Paso de los Apaches are clearly recognized by the explorer. For a distance of some two and one half miles above the junction of the streams the land between them consists of a great alluvial flat, whose width where it is traversed by the highway leading from Rockdale to the San Andrés Crossing is about a mile and a half. West of the highway the plain terminates in a steep-sloped highland, which extends to the westward parallel with the San Gabriel River and Brushy Creek and is bordered by the valleys of these

¹⁶ *Test. de diligencias*, 35-36.

two streams. The northernmost projection of the highland at its eastern end is that known as Kolb's Hill, on which now stand Kolb's residence and store. This hill or projecting ridge is clearly that on which stood Mission San Francisco Xavier, a conclusion which is borne out by other data than the survey. Westward of Kolb's Hill about three fourths of a mile is another projection of the highland known as Cemetery Hill. Between Kolb's Hill and Cemetery Hill extends a flat or plain which is clearly that described by Músquiz as the one on which were growing the crops of Mission San Xavier in 1750. Cemetery Hill was undoubtedly that on which mission Nuestra Señora de la Candelaria was situated. West of this hill extends a great level valley more than a mile in length, near whose western end lies what is known as Ditch Valley Farm. Near the eastern end of this valley, no doubt, were the fields of Mission Candelaria described by Músquiz. In the same valley, some three fourths of a mile from the mission, was situated the garrison. Near the northward turn of the road, beyond Ditch Valley Farm and just above the Old Rock Dam, a dry arroyo runs eastward into the San Gabriel. Up stream beyond this arroyo extends another flat which corresponds with that described by Músquiz as terminating, on its western end, near Paso de los Apaches. It is now covered with a magnificent forest growth.

The exact site of Mission San Ildefonso is not so easily determined, because of the timber growing above the junction of San Gabriel River and Brushy Creek. But there are two elevations above the junction, either of which might have been the site of the mission. The first of these is the site of the old Witcher house, which is about half a mile by direct line above the junction and therefore at a distance from the junction corresponding to that of Mission San Ildefonso. The distance to Brushy Creek at this point, however, is too small to fit the description. About a third of a mile west of the Witcher house is another elevation



on which stands (or stood in 1909) Hicks' barn. At this point the distance between the two streams is about three fourths of a mile, which corresponds well with the eighteen hundred varas given as the width of the plain opposite mission San Ildefonso. Hicks' barn, moreover, stands on a much more "likely" spot than the Witcher house. However, in point of distance from the junction, the Witcher house fits the description better than Hicks' barn. I have therefore indicated this as the probable site of Mission San Ildefonso. It may be slightly incorrect, but at most it cannot be more than a few hundred yards out of the way.¹⁷

p. 234

9. *The beginning of the acequia, October, 1750.*—While Músquiz and Arrievita were examining the site, Fray Mariano had been at San Antonio, co-operating in the effort to move the presidio of San Antonio to the Pedernales River, to protect the proposed Apache missions which Father Santa Ana was in Mexico struggling to promote.²⁵ But when he received a copy of the record made by Músquiz, he hurried to San Xavier to see if it were really true that the sites of Santa Rosa and Santa María were better than that where the missions were already established. Having made a personal examination, he concluded that such was not the case, and that the missions would better remain where they were.

This point determined, it was of first importance to open the irrigating ditches, in order, even in case of drought, to assure each Indian of a full stomach, "which," he said, "is the God to whom these miserable creatures pay the tribute of their hardest labor." With a view to determining the location and course of the ditch he several times examined the river, and concluded that the best opportunity for opening a channel was through the

²⁴ *Memorial del R. P. Viana.*

²⁵ *Memorial presentado por el R. P. Presidte. Fr. Mariano de los Dolores. September 17, 1750.*

arroyo near the garrison called by him San Francisco, since the arroyo itself would serve for a goodly portion of the ditch, which could be continued easily through the fields of Mission Candelaria to the neighborhood of all three pueblos. This one ditch, he concluded, would serve for all the missions, since it could be made to irrigate a stretch of untimbered land more than a league in length and half a league in breadth.²⁶

On October 12 he formally made known his plans to the missionaries, reminding them that since all were of one brotherhood and were working towards the same end, they should not object to the common use of a single irrigating plant. This done, he proceeded to order the ministers to be prepared to assist in the work on the fifteenth, each mission providing as many yokes of oxen as it might have, seven bars, fifteen picks, four axes, and one cauldron. In excess of the regular rations, which would be continued, each mission was asked to provide each week during the continuance of the work, a tierce, or half a mule load, of salt, six bulls for slaughter, two handfuls of tobacco, and whatever else was possible. Fray Mariano promised to provide for distribution each day a fanega, or two hundred pounds, of hominy. All of the *ladinos*, or instructed Indians, must be sure to be on hand, to assist in giving instruction to the *bozales* or untrained neophytes.²⁷ Since Fray Mariano had many other duties to attend to, both at San Xavier and at San Antonio, he appointed Father Ganzábal superintendent of the work, with the duty of assigning the tasks and taking care of the tools and supplies. To the order formal obedience was given on the same day by Fathers Ganzábal, of Mission San Ildefonso, Joseph Anda y Altamirano, of Mission San Xavier, and Acisclos Valverde and Bartolomé García, of Mission Candelaria. Father Ganzábal, in giving obedience, called Fray Mariano's attention to the fact

²⁶ Fray Mariano to the missionaries, October 17, 1750, in *Diligencias practicadas por el R. P. Presidte.*

²⁷ *Ibid.*

214

that though his mission was still without Indians, yet they might return, and he ought to be present in such an event to receive them.²⁸

All this extra food and tobacco was to be provided as a means of encouragement to the neophytes. But it could not be expected that mere coaxing would alone suffice. There must be a show of force as well. Accordingly, on October 14, Fray Mariano addressed the commander of the garrison, Francisco de la Cerda, calling for the assistance of the soldiers. He prefaced his request by a statement of the functions of mission garrisons. Their business, he said, was not merely to protect the neophytes from their enemies, but also to assist in disciplining the neophytes in civilized and Christian life, eradicating their heathen rites, "co-operating with the missionaries in everything, both in what relates to instruction in the doctrine and rudiments of the faith, and in their peculiar function of making them show due respect and veneration and of giving them practical direction, teaching them the necessary tasks and occupations, which they ought to follow in order to continue in the civilized and Christian life which they should observe." In all this the soldiers had failed up to the present, but, trusting in Músquiz's upright conduct, he assumed that appropriate orders had been left for giving proper assistance henceforth.

With this preface, Fray Mariano asked that one soldier be charged, during the work on the ditch, with caring for the tools, and another with looking after the oxen sent to work on the ditch and to haul stone for the dam. Cerda was asked to give orders that the horses of the Indians be kept under guard so that the Indians could not flee or wander away, taking care that no soldier be allowed to mount the horses and thus anger the Indians; to send to each mission daily "enough soldiers to cause respect," and to set the Indians at work at the proper time and

²⁸ Fray Mariano to the missionaries, Oct. 17, 1750.

keep them at it. The missionaries, he said, would provide all the attractions possible in the way of extra food, but coercion must be left to the soldiers, "since for the missionary fathers to assume the task would be to make themselves odious to the Indians, which is a serious impediment to their receiving the faith, and, besides, few would go, and there is risk that they would lose respect, because of their bad instruction up to the present." Cerda was asked to give orders that the soldiers keep guard by night to prevent nocturnal flights. When buffalo should appear in sight, soldiers must go with the Indians to pursue them, to insure the return of the Indians. Finally, the soldiers must be required to instruct the Indians in their work.²⁹

Such were the preparations for opening the irrigating ditch and building the dam. We have found no report of the execution of the plan, but since Father Mariano remained at San Xavier till November (he arrived at San Antonio on his return on November 11), and since both ditch and dam were made, we may fairly assume that their construction was begun at this time.³⁰ We know, on the other hand, that the work went slowly. for on January 22, 1752, that is, a year and more later, it was still unfinished. On that day Fray Mariano complained that since June, 1751, when Barrios y Jáuregui took away his seventeen soldiers, "no hand has been put, up to the present, on the dam and the acequia, which they were making with due preparation to gather this year the fruit of their past labor." Meanwhile, the frequent desertion of soldiers had lessened the available supply of help.³¹ In view of the calamities that befell the settlement early in 1752, it is doubtful if the ditch was ever wholly completed.

~~10. Barrios y Jáuregui and the missionaries.—The new governor was no less obnoxious to the missionaries than Barrio~~

²⁹ Fray Mariano to Francisco de la Cerda, October 14, 1750, *ibid.*

³⁰ *Memorias*, XXVIII, 118.

³¹ *Memorial del R. P. Viana.*

This is a faithful reproduction of a frontier document from the Archivo del Hidalgo de Parral. Legibility is frequently a serious problem owing to discoloration of the paper, oxidation of the chemicals in the ink, and deterioration of the page.

En real.

SELLO TERCERO, VN REAL, ANOS
DE MIL Y SEISCIENTOS Y OVAREN-
TA Y SIETE Y OVARENIA Y OCHO.

[Faint, mostly illegible handwritten text in Spanish, likely a notary record or legal document. The text is written in a cursive script typical of the 17th century.]

[Handwritten signatures and names, including 'Balthasar' and 'Miguel', in cursive script.]

This verso side of the same document demonstrates the use of outdated notary paper. In this instance the franking mark occurs on the reverse page of the document, and the document itself is dated thirty years later than the official seal (1647 vs. 1677).

See fn. 10, Bolton p. 224 (p. 4-6)

APPENDIX III

"Testimonio de Diligencias, Executadas sobre los dos Rios de San Francisco Xavier y San Andres, y demas que dellas consta, prozesadas por mi Dn. Joseph Joaquín de Eca y Musquiz por Comision del Exmo. Senor Virrey de Esta Nueva espana." San Francisco el Grande Archives, Vol. 19: 156-166; also in Archivo del Colegio de la Santa Cruz, 1750-1767 (Dunn Transcripts, 24-31), University of Texas Archives.

"On said day, month and year, I, said official, for the purpose of continuing this business, was on the banks of the San Xavier River at the junction with the arroyo called Las Animas, and at a distance of one-half of a quarter of a league from the Mission San Ildefonso, and there present were Francisco Delgado, Geronimo Flores, and Juan Diego de la Garza, appointed for being intelligent and practical. And accompanied by Father Fray Juan Domingo de Arricivieta, apostolic preacher and minister of the new order of San Ildefonso, we began our first measurement in the following manner: Officially:

Width of the stream	13 Varas
Depth at 1 Vara from edge	5 fingers
Depth at 2 Varas from edge	7 fingers
Depth at 3 Varas from edge	5 fingers
Depth at 4 Varas from edge	8 fingers
Depth at 9 Varas from edge	1/4 Vara and 1 finger
Depth at 10 Varas from edge	6 fingers

Depth at 11 Varas from edge	6 fingers
Depth at 12 Varas from edge	5 fingers
Depth at 13 Varas from edge	3 fingers
Width of stream bed	19 $\frac{2}{3}$ Varas

Though these measurements are not accurate because of the sandy and rocky bottom.

Height of east bank	9 Varas (The bank is loose dirt and is eroded by the floods.)
---------------------	---

Height of west bank	Was not measured as it sloped toward a range of hills from which originate the flows of water at some 160 Varas which is the distance to said hills.
---------------------	--

This measurement was made officially in order to establish the amount of water in the San Xavier to its junction with Las Animas, and not to apportion extraction of water since there are no land plats in this area for either side of the river.

In this manner, this business is terminated.

On said day, month and year, I, said official for the purpose of enacting the business at hand, and with the mentioned practical persons, and with said Reverend Fray Domingo de Arricivieta, proceeded upstream on said river to effect the present measurement of flow which I made in an official manner, and which was made at a distance of $\frac{1}{2}$ league from the first measurement and essentially was as follows:

Second measurement-Width of stream	10 Varas
------------------------------------	----------

Depth at 1 Vara from edge was	Deepening from edge to 5 fingers
Second Vara	7 fingers
Third Vara	1/4 Vara and 1 finger
Fourth Vara	1/3 Vara
Fifth Vara	1/3 Vara and 1 finger
Sixth Vara	1/2 Vara
Seventh Vara	1/2 Vara and 4 fingers
Eighth Vara	1/2 Vara and 2 fingers
Ninth Vara	1/4 Vara and 2 fingers
Tenth Vara	4 fingers

Width of river bed--27 $\frac{2}{3}$ Varas and the bottom is sand and small gravel without much firmness.

Height of the bank on the north of that side is 7 $\frac{1}{2}$ Varas and 2 fingers.

It is made up of loose and rolling earth.

Height of the bank on the south of this side is 8 Varas and is of the same character of the other side, and the river does not offer at this point any suitable spot for extracting water on either bank.

On the south bank here is a plain or level piece of ground which has been measured from the corner of the junction of the Arroyo Las Animas and the San Xavier River to the fence of the mission of the same name, to be 5000 Varas long and the measuring line has indicated that its width from the foot of the hill on which the Mission of San Ildefonso is located, continuing in a straight line to end at the obstruction which is the said river, was 1800 Varas, and this plain belongs to the Mission of San Ildefonso.

The mission has seeded on the slopes of said hill three fanegas beans, chiles, and lima beans and everything would have been of bountiful abundance if it had not been such a dry year.

Nevertheless, there is great hope of not losing all this as it is in the care of those from Xavier; this said mission being three quarters of a league from San Xavier.

The referred to plain lacks proper drainage for those times when the San Xavier River and the Arroyo de Las Animas are flooding, and though this is not noticeable at this moment, the evidence is in the piles of debris which have been left at the high water points.

On this note, these measurements of water flow and land survey are terminated.

On the San Xavier River at the crossing that is named the Apaches, on the 3rd of July of said year, I, said official, complying with the request of said Reverend Father, approached the said crossing accompanied by the practical persons who have been with me since I began this business of measuring the river's flow and surveying the flat lands on both sides of the river--all of this was examined in the following manner:

Third measurement at the request of Reverend Father Fray Juan Domingo de Arricivieta:

Width of the stream	16 Varas
Depth at first Vara from edge--	from nothing at edge to 1/4 Vara of depth less 2 fingers.
Depth at second Vara from edge--	1/4 plus 1 finger
Depth at third Vara	1/3 plus 2 fingers

Depth at fourth Vara	1/2 less 2 fingers
Depth at fifth Vara	1/2 Vara
Depth at sixth Vara	1/2 Vara less 1 finger
Depth at seventh Vara	1/3 Vara plus 3 fingers
Depth at eighth Vara	1/3 Vara plus 3 fingers
Depth at ninth Vara	1/3 Vara plus 3 fingers
Depth at tenth Vara	1/3 Vara plus 2 fingers
Depth at eleventh Vara	1/3 Vara plus 2 fingers
Depth at twelfth Vara	1/3 Vara plus 2 fingers
Depth at thirteenth Vara	1/3 Vara
Depth at fourteenth Vara	1/4 Vara plus 1 finger
Depth at fifteenth Vara	1/4 Vara less 1 finger
Depth at sixteenth Vara	3 fingers
Width of river bed	36 Varas

Bottom of river bed being sand and loose gravel.

Height of the south bank-12 1/2 Varas and the bank rises to the top of a hill which is made up of sediment deposited by floods and has no real firmness; and along this bank downstream there are five meadows.

The first one, because of its small size and unevenness, was not measured. Several hills separate this one from the second which was measured and found to be 1000 varas long and 378 varas wide, and dividing the land is a small arroyo continuing from which is the third meadow with a length of 1961 1/2 Varas and a width of 800 Varas. On this last plot is located the Mission of Our Lady of Candelaria on the top of a hill and very close by in front of it is a corn field on which are planted three fanegas of corn which, judging from its present appearance, there is hope

of harvesting a portion of it which proves that the lands are fertile and very good for all seeds.

On this mentioned terrain we find the site of the detachment which is intended to guard the three new missions at a distance of 1671 1/2 Varas from the one belonging to Our Lady of Candelaria.

The fourth plain was measured from the prior Mission to the hill where the Mission of San Francisco Xavier is located, and was 1200 Varas long and 300 Varas wide. On this plot and nearby are the fields of said Mission, where three fanegas of corn are planted; so I was told by the person in charge.

The fifth plot is the last one and ends the measurement, and this plot is the same one that was measured during the second part of this business and is the one which belongs to the Mission of San Ildefonso. For this reason there is no mention now of its dimensions.

Height of the opposite bank toward the north is 8 Varas and the bank is mostly sandy and with fine sands on a slope which is subject to flooding to a distance of 150 Varas, and then beyond to the Apache crossing and downstream to another river are three communal lowland farms which were measured and the first was 2000 Varas long and 500 Varas wide. It is separated from the second by a wooded section and creek, and the second is 600 Varas long and 261 wide. The third and last plain (farm) was 2400 Varas long and 340 Varas wide. This measurement ended in front of the San Xavier Mission, still on a northern course, and in this manner this business of measuring water and surveying land is terminated, all said lands being of very fertile earth and abundant in grass. And having gone on beyond the Apache crossing upstream, no flat lands were found,

only several hills and deep arroyos which, from the evidence of scattered flood debris, suffer heavily during the rainy season, all emptying into the aforementioned river, with much erosion of their banks from border to border. These hills being covered with various different trees which would be useful for all kinds of construction.

Here this business is closed.

On the 9th of said month and year, I, the aforementioned official, proceeded to comply with my orders from higher authorities, accompanied by those practical persons and with the consent of the previously mentioned Reverend Father, and also accompanied by witnesses, I proceeded on the upstream edges of the mentioned San Xavier River to determine officially its average flow. Having arrived at the spot which is named Santa Rosa de Vitervo where the measurements of water flow were to be initiated and at the same time establish the sizes of the river bottom meadows as before. This spot being two leagues distant from the previously measured spot.

Fourth measurement-crossing at Santa Rosa de Vitervo-officially:

One Vara from edge	Depth diminishing to edge is $\frac{1}{3}$ Vara and 1 finger.
Two Varas from edge	$\frac{1}{2}$ Vara and 3 fingers depth.
Three Varas from edge	$\frac{1}{3}$ Vara and 1 finger.
Nine Varas from edge	Nine fingers.
Ten Varas from edge	Five fingers.
Eleven Varas from edge	Five fingers then diminishing to edge.

Width of stream at this point 11 Varas.

Width of river bed at this point 18 1/2 Varas.

Height of east bank is 4 1/2 Varas and is composed of firm earth and from said bank for a distance of 30 Varas there is an area of small washes which appear to offer a good spot for the extraction of water since there is a meadow adjacent.

This meadow is downstream on said river and as measured is 800 Varas long and 331 Varas wide to the base of the range of hills. Measurement of this meadow ended at a large creek which divides it from the next meadow and which is shaped as follows: Length 100 Varas and width 450 Varas, both being free of washes. Height and make-up of the bank to the north is 3 1/2 Varas-hilly and sloping and washed by the floods to about 150 Varas from the bank as evidenced by the debris at the high water marks. There are no flat meadows in this direction, it being made up of hills and ravines which are suitable only for pasturing cattle, and since nothing more than that noted was found in this direction, this survey of water and land is ended with the help of the practical persons who did not sign here as they did not know how.

On said San Xavier River at the spot which I, as official, named Santa Maria de la Visitacion, on the 6th of July of 1750, in accordance with my instructions by superior order from the most Excellent Viceroy of this New Spain for the execution of this business, proceeded to said place of Santa Maria and was accompanied by the practical persons and by the said Reverend Father and witnesses which I have used. Distance of this spot being two leagues from Santa Rosa, the previous place.

This river measurement and survey to establish the size of the alluvial plains was initiated as follows:

Fifth measurement: Width of the stream 8 Varas.

At the first Vara and from the edge and diminishing back to the edge, the depth was 8 fingers.

Second Vara 1/4 Vara depth

Third Vara 1/4 Vara depth

Fourth Vara 1/3 Vara depth

Fifth Vara 1/2

Sixth Vara 1/4

Seventh Vara 5 fingers

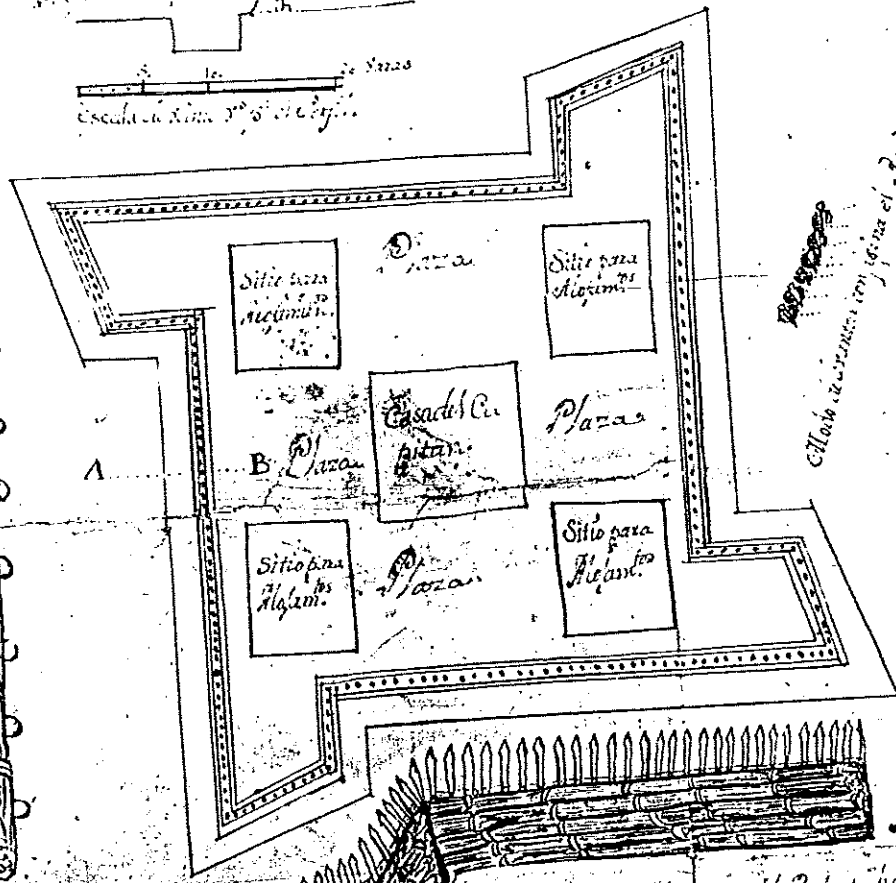
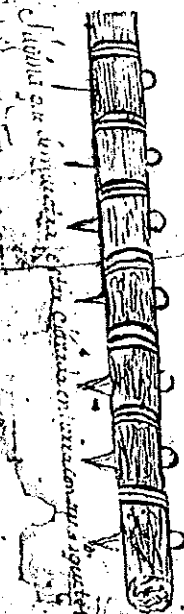
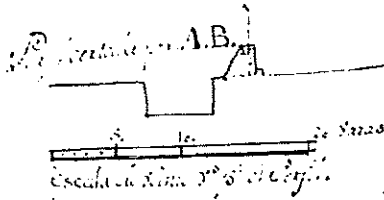
Eighth Vara 2 fingers

Height and make-up of the south bank of this channel of said river: 6 Varas, and is stone and clay on the lower 3 Varas and loose gravel on the upper 3 Varas, and along here is an apparent spot for extracting water which is just above some level places and sand banks, and there is even a small disconnected pool at a short distance which is filled during floods and which measures 339 Varas in length and 35 in width. In the pool there is an abundance of fish and alligators, and it is ringed by woods and is drained to the river through a rocky arroyo. The pool has a sort of semicircular shape, and in the crook of the river is a level place or horse pasture, rich in timber, which is 1236 Varas long and 600 Varas wide, and the earth is rich and good for any kind of planting and it is free of gullies and untouched by the floods. Which is also the good fortune of the first plain below that one which offers the place for extraction of water and which is

nearby the Santa Maria Crossing and is 1500 Varas long and 700 Varas wide, its earth being in good condition, as is the other plain or high [meadow] adjacent to it which including three or four low plains separated from each other by arroyos and one low hill, and [the high meadow] which bears some rock is 7100 Varas long and 2600 wide.

And although the practical persons did not determine for sure that a place for extracting water exists at this stop [place] since it is not at the high spot, but even those that are not they said are very easy in view of the short distance from the plains, the firmness of the edge, and that the bottom lends itself more than any other spot to the building of the dam since the bottom is stone and gravel so that in no way will the beasts [cattle] get mired, and because of the convenience of being able to obtain, from the selfsame river, timber for the fabrication of the wagons and other tools to transport rock--well the trees are so thick that one was measured and found to be 5 Varas thick and although the river's edge to the north is hilly and in its present condition due to the ravages of the river floods, but it is rooted with large diameter trees and is 12 Varas high and continuous for about 1/2 of a quarter of a league forming a long wood in which they saw many oaks, ash, walnut, poplar, white trees, and live oak..."

Plano de un Reducto en el Rio San Xavier, 1751



Nota. El hueco de las dos lineas es-
deben representarse el foso, q. tendra
tres varas de fondo, y abas 4. de an.
El q. se digue de la reuera, q. se defen-
da para levantar el Rinco.
Las dos lineas gruesas es el parapeto,
q. tendra dos varas de alto, y en-
tra de piedra la estructura.
Las dos lineas intermedias es la Rana
que es donde donde se hace fuego de
canele al pecho cubren.
Los puntos, q. estan sobre el parapeto
representan la Estrada.

Distancia y elevacion del frente del Reducto hecha
sin escala, y la Rana, o Rincos, se colocaran en el punto
que llamamos a proposito, facilitando el paso del foso con
unos Tablones de quitay por ~.

Escala de cincuenta varas
5. 10. 15. 20. 25. 30. 35. 40. 45. 50. varas.

To: Bill Doolittle & Eugene George
From: Elizabeth John
Re: Plan of San Xavier fortification
June 9, 1993

While this plan constitutes only an instruction rather than a report of work accomplished, there is every reason to believe that Felipe Rábago would have done his best to follow it. Hence, it should give a good idea of what might once have been attempted on the San Gabriel. I have not seen any other detailed drawing for such a wooden fortification, but absent contrary evidence, would guess that this style of construction might also have figured in the wooden presidio at Los Adaes and also in the initial wooden presidio at San Sabá, which Rábago subsequently replaced--at least in part--with stone construction. It might prove particularly useful to investigators of Los Adaes if they don't already have documentation more specific to that site.

Tracking this plan led to two thick expedientes on the San Xavier project, which afford a somewhat wider perspective--more complementary than contradictory--than the documents that Bolton found in Querétaro, AGN, and Béxar. One sees the debate over allocation of resources (military and missionary) across the whole frontier, from Sonora to Los Adaes. Particularly intriguing in light of our visit to Músquiz last year is the assessment of the situation at Valle de Santa Rosa, which was also thought to warrant a presidio--an issue that Bolton also touches upon from a different angle.

I refrained from ordering microfilm of the two expedientes, but I did ascertain that this legajo has been filmed and should thus be available from the Microfilm Center in Madrid with reasonable dispatch and economy. Obtaining a full-size photocopy of the plano would require dealing directly with AGI.

If Kathleen Gilmore doesn't already have these documents, this construction detail should be of interest to her vis-a-vis both San Xavier and San Saba, and she probably will know whether it would be useful to the Los Adaes project. Do you know the current status of Kathleen's investigations of San Xavier or of the projected county museum's dig for the presidio?

The two expedientes may be useful for the presidio volumes now in progress at DRSW; I'll draw them to their attention at the earliest opportunity.

I'll be glad to share the text explaining the plano as soon as it arrives.

Thanks for making me think about this episode again. It has yielded some intriguing data for my purposes as well as a broader look at the frontier from Sonora to Los Adaes.

ehj
30

file sanxavie.pre

AGI, Mapas y Planos, México, 602. Plano y perfil de un reducto para levantar en las margenes del río de San Xavier (provincia de Texas).

[text of plano as transcribed by eahj from photocopy in Sevilla, May 11, 1993]

Plano de un Reducto
cuios Flancos manifiestan

[left side, vertical label] Fagina que demuestra estar clavada en tierra con sus Piquetes

[bottom left] Nota. El Hueco de las dos lineas exteriores representa el fose, que tendrá tres varas de hondo y abajo 4 de ancho.
El que sigue es la retrata, que se deja para levantar el resinto. Las dos ligneas gruesas es el parapeto, que tendrá dos varas de alta, y ensima se pondrá la estacada.
Las dos ligneas interiores es la Banqueta desde donde se haze fuego estando el pecho cubierto.
Los puntos, que estan sobre el parapeto representan la estacada.

[bottom right] Vista y elevacion del frente del Reducto, hecha sin escala, y la Puerta, o Puertas, se colocorán en el frente que sea mas proposito, facilitando el paso del fooso con unos Tablonsillos de quita y pon [squiggle]

[Cross-indexing system at AGI leads investigator to the file whence the plan was extracted for filing in Mapas y Planos.]

This plan was originally folded into AGI, México 691, expediente 2, at ff. 193-195, four pages of closely written text headed "Explanation of Plano Para Construir un reducto de Fagina se observar a lo siguiente." Joseph de Gorraez certifies that this drawing and text concur with the originals that remain in the office of the "Gobierno & Guerra de este Reyno de mi cargo," May 11, 1751. It follows immediately the Fiscal's report on assignments of presidial captains, including that of provisional captain Don Phelipe de Rávago to build a new presidio on the banks of the Río San Xavier in Texas, adhering to the plano that is being turned over to him (copy of which forms part of this record).

The photo in the Texas State Archives is greatly reduced from the original size, which is a double folio. I saw only a photocopy, which is the same size and so clear that there was no basis for requesting the original. Economy dictated transcribing the text rather than ordering a photocopy of the original size. I did order photocopies of the four-page explanation of the plan, which should arrive in six weeks or so.

Dr. Elizabeth John
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
January 30, 1994

Dear Elizabeth:

Thanks so much for the plan for the San Xavier Presidio. This must be the plan that Felipe Rabago had in his hand when he went up and then back down the river looking for a suitable place to build it. As you probably remember the missionaries agreed to move one of the missions because it occupied the most suitable site for the presidio. Neither was the mission moved nor the Real Presidio built, because almost immediately the Captain was in trouble with the missionaries. The Captain did have the "qualified persons" measure the area to see if the dimensions would fit onto the site.

This plan should, indeed, give us an idea of what the wooden presidio at San Saba looked like. It was replaced with stone by our non-hero, Captain Felipe Rabago, not long after he took Parilla's place. We think it probable that he built the stone fort around the wooden one, but we really don't know.

As far as I am concerned, I am convinced that at least the church at the mission had a tile roof. Probably I should keep an open mind, 'Way back there when I working on the area, I called Leslie Simpson and he said that "teja" could be translated no other way.

Many prehistoric and aboriginal sites have been found in Menard County and surrounding area. It is very difficult to put an ethnic tag on these sites because there was so much blending of material culture, especially that which is preserved, that it is rare to find an item diagnostic of a particular group. Sometimes a particular "tool kit" might indicate a particular group, but it is risky. If you have any ideas-eg the Comanches chipped their arrow points in a distinctive fashion, let us know.

* I recently found that Grant Hall has a conflict at spring break, so the plan now is to continue at Menard at Easter. Grant will take a few days off. I will keep you informed.

Cordially,

Kathleen Gilmore

Kathleen Gilmore

* Good news from my point of view, since we may be away during Spring break.

GENERAL LAND OFFICE

TEXAS LAND MEASURE

Unit of measure: The vara = 33 1/4 inches; 36 varas = 100 feet.
 1900.8 varas = one mile = 5280 feet.
 5645.4 square varas = one acre = 4840 square yards = 43,560 square feet.
 One league = 5000.0 varas square = 4428.4 acres = 13,889 feet square.
 One labor = 1000.0 varas square = 177.1 acres = 2,778 feet square.
 1900.8 varas square = 640.0 acres = 5280 feet square.
 1344.0 varas square = 320.0 acres = 3733 feet square.
 950.4 varas square = 160.0 acres = 2640 feet square.

To reduce varas to feet —multiply by 100, then divide by 36.
 To reduce feet to varas —multiply by 36, then divide by 100.
 To reduce square varas to acres —multiply by 177, then divide by 1,000,000.
 To reduce square feet to acres —multiply by 23, then divide by 1,000,000.

U. S. LAND MEASURE

The Gunter chain = 66 feet.

GARRY MAURO, COMMISSIONER

THE SPANISH LAND LEAGUES USED IN NORTH AMERICA

Land league of 5,000 varas	Vara base (mm)	Modern equivalents	
		Kilometers	English statute miles
Castilian <i>legua legal</i>	835.00	4.1750	2.5943
Castilian <i>legua legal</i>	835.91	4.17955	2.5971
"Old" league of Burgos	847.96	4.2398	2.6345
Mexican "surveyor's league" (early colonial)	835.90	4.1795	2.5970
Yucatecan league (1671)	836.00	4.1800	2.5973
Mexican league (mid-1800s)	838.00	4.1900	2.6035
Mexican league (legal, 1823)	848.01	4.2401	2.6346
	848.36	4.2418	2.6357
Cuban league	848.00	4.2400	2.6346
	847.33	4.2367	2.6325
Florida (East) league	846.65	4.2332	2.6304
Texas league (early colonial)	834-835	4.1750 (835 mm)	2.5943
Texas league (late colonial)	837-839	4.1900 (838 mm)	2.6035
Texas league (1825)	848.36	4.2418	2.6357
Texas league (legal, 1919)	846.67	4.2333	2.6305
"Alta California" league	838.02	4.1902	2.6036
California and southwest United States league	838.03	4.1902	2.6036
Land league of 6,666.67 varas			
Castilian <i>legua común</i> (unofficial)	835.91	5.5727	3.4627

Table 3.7, Population of Texas Missions, 1731-1774.

Places and Dates of Existence or Establishment	1731 1739	1740 1749	1750 1759	1760 1769	1770 1774
M. S. A. de Valero 1718	184	311	328	275	126
M. Purísima Concepción 1731	120	207	247	207	178
M. San José 1720	49	220	281	350	*150
M. San Juan Capistrano 1731	66	163	265	203	198
M. S. F. de la Espada 1731	50	204	200	207	174
M. Espíritu Santo 1722	180	375	178	93	*50
M. Rosario 1754	X	X	400	101	*50
M. S. F. Xavier 1746-55	X	213	109	X	X
M. San Ildefonso 1748-52	X	239	0	X	X
M. Candelaria 1749-56	X	71	25	X	X
Totals	649	2,003	2,033	1,436	926

X = Mission was not established at that time. * = Estimates. Sources: See Tables 3.2-3.5.

Table 3.4, Populations of the San Xavier Missions, 1748-1757.

Missions and Dates of Existence	March 1749	July 1749	July 1750	Dec. 1751	1755	1757
San Francisco Xavier 1748- 1755/ Guadalupe 1756-1758	213	125	161	109	986	41
San Ildefonso 1748-1752	239	131	176	0	X	X
Candelaria 1749-1756	0	71	102	25	0	X
Totals	452	327	439	134	986	X

X = closed. Sources: 1749 -- TX1749-1; TX1749-2; 1750 -- XG1750-1; XG1750-2; XG1750-3; 1751 -- XG1751; 1755 -- XG1755; TX1755; 1757 -- XG1757.

Table 3.6, Estimated Population of Texas Presidios and Towns, 1731-1774.

Places Dates	1731 1740	1741 1747	1748 1750	1751 1755	1756 1762	1763 1768	1769 1771	1772 1774
E. Texas	300	400	460	450	500	550	600	120
Béxar	350	500	530	600	660	750	860	1,250
Bahía	200	225	225	250	300	325	350	425
Orcoqui.	X	X	X	X	90	100	105	X
Xavier	X	X	100	100	X	X	X	X
S. Sabá	X	X	X	X	350	350	350	X
Bucareli	X	X	X	X	X	X	X	350
Totals	850	1,125	1,315	1,400	1,900	2,075	2,265	2,145

X = The presidio or settlement was not established at that time. All of these numbers are estimates. Sources: See Table 3.1 and S1726; S1749; S1756; S1759; S1778; S1779; MAH1756; T3-T-2; T3-N-1.

Source: Tina Laural Meacham, *The Population of Spanish and Mexican Texas, 1716-1836* Unpublished doctoral dissertation, Department of History, University of Texas at Austin, 2000, pp. 128.