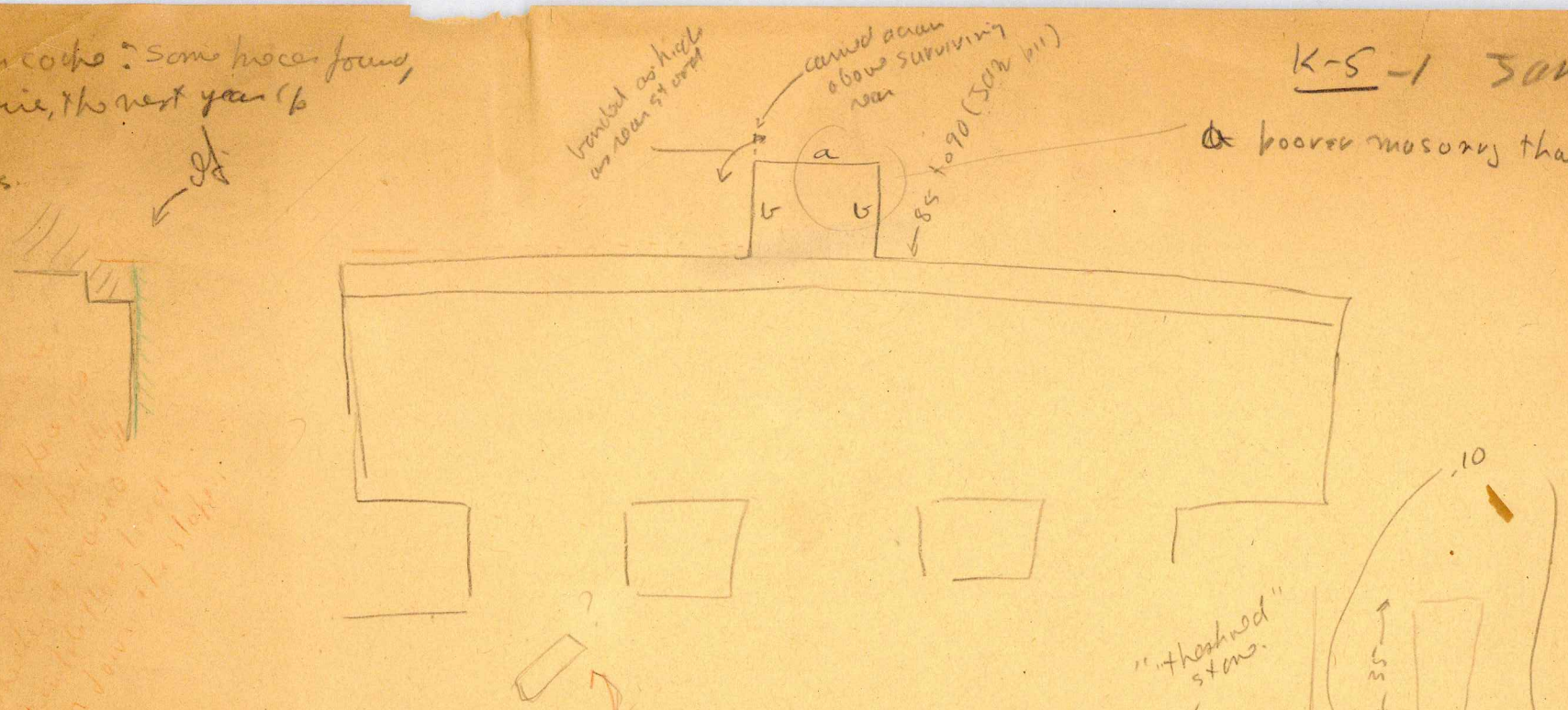
K 5 begins
Org. Notebook
March 24, 1931
I. K 59.

K-5-1 alter cache: some bone found, less in fire, the next year (b
included
Flints, obs.
+ shell.

K-5-1 Jan



b hoover masonry than b

Jan says outside altar found near right front entrance b11 (1 or 2)
b15 - he wrote in "right" afterward.
" " 3 room altars almost exactly below the K-5-1 niche. (b11)

" " - ash + sherds to nearly top of altar: few sherds elsewhere } - "degenerate" occupation?
- "large" stone but no roof slabs in this ash. (b12 - mainly thin block wall).

~~Near the base, Sonny~~

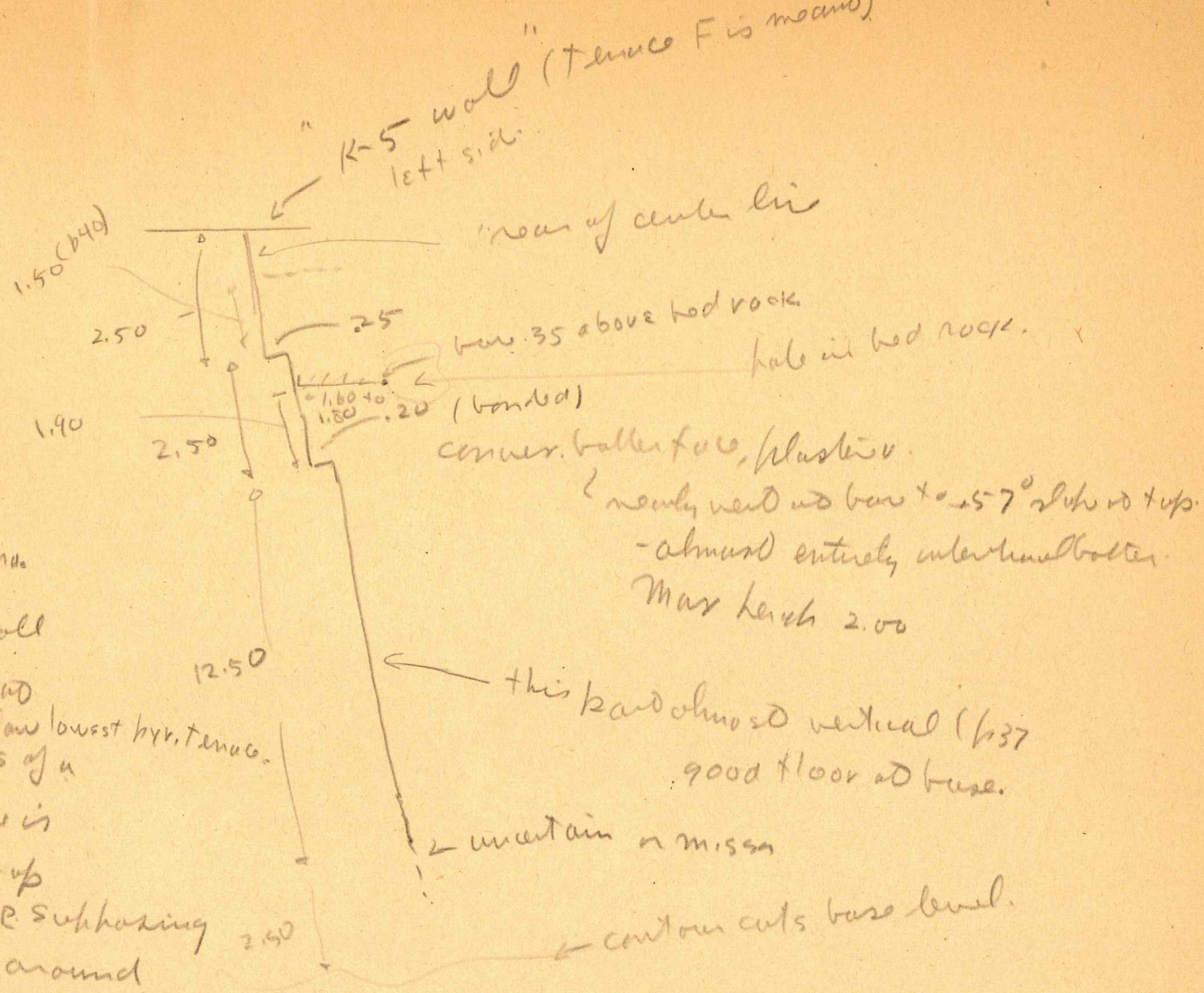
"Near the bottom of the niche but above the base of the col. altar some of the large building stones of the side walls projected into the niche, indicating that the niche was built for the col. altar.

- b12 - "although the majority of them continued even with the face of the wall.
- Ledge level about .35 below top of stone (altar) + 20 above its base.
- At the base of stone was an irregular level of stones + mortar covering the inferior rock-fill of the pyramid. The mortar floor showed clearly against the walls.

Jan.

P36 =

+37



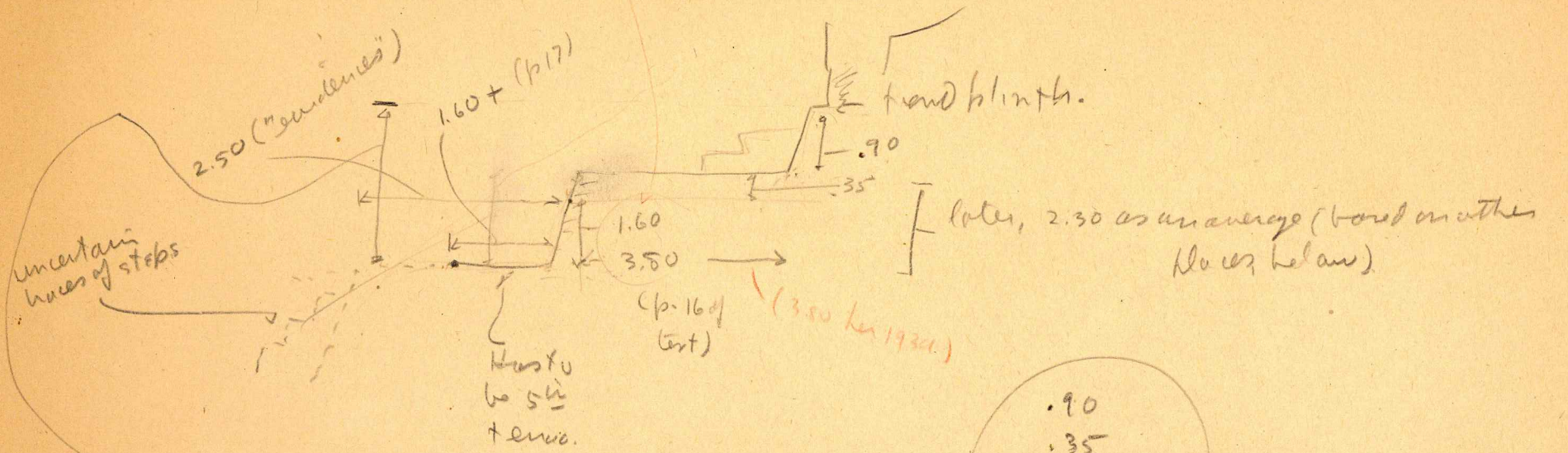
P 38 - Bull Pit.

- northeast of "long wall", + 00 base of Pyramid.

Bed rock 2.50 below top of pyr.

Jam has said base of long wall is on bedrock, its max height also. b39, bedrock top 2.50 below lowest pyr. Terrace. 2.00. Therefore when he shows of a Causeway from Pyramid, he is think of it as having its top at Basal terrace level (i.e. subtracting the basal terrace extended around b40 side).

12-5-1 JAN



.90
.35
1.60
2.85

Level 7 - h23

On the center of the terrace slip, about 3.00 below room floor. - consequently about on level of the 5th terrace.

Memorandum on 1933 operation
at K-5.

A late in the season attempt was made to locate the left (southeasterly) side wall of the front stairway, the plan being to follow it to the top, thus giving a cross-section of the front facade of the pyramid.

In this case the contours of debris were very unsatisfactory from the point of view of locating the stairway - that is, there was no well defined hump protruding at the front, the mound being more conical that pyramidal. This circumstanee should not be used to postulate absence of stairway, or anything else unusual, because the same condition obtained on J-3, where excavation later showed the expected stairway.

We started on the surface of the first (lowest)terrace, on which the stelae now lie and were surely once standing, at a point about 8 meters southeast of the front-rear axis of the mound, and drove a trench straight into the debris, following the level of the terrace floor, which was well indicated by building debris overlying small stone and "earth", though there was no plaster or real mortar remaining. The plan was to locate the retaining wall of the second terrace, then turn and follow toward the center until the corner formed by this wall with the supposed stairway wall should be reached. All experience elsewhere (J-3), R-3, O-13) taught that the lower portions of these walls should be in place.

Instead of a mere terrace wall we ran into the left side of the mask.(For exact position see Parris plan).

This was completely covered by the debris except: the debris rested on a stratum of very dark humus, in which stone debris was parctically absent, which, xxxx lying on the terrace floor, and beginning about 1.50 meters out from the mask, xxxx increased gradually in depth until it reached the mask, where it was not less than 60 cms deep. The top of this deposit sloped down from the mask, an the deposit as a whole fulfilled all requirements of a wash from above, laid down before the stone walls of the pyramid or building began to disintegrate. The black color indicated plainly that vegetation flourished on this deposit as it grew, theclor being constant from top to bottom.

The only interpretation which occursto me is that this structure was allowed to fallto ruin, disintegrated stucco and mortar coming down first, before stone debris slid down the slope, and that the time interval between the two stages was sufficient for decaying vegetation to color the lower deposit. The mask therefore belongs to the latest building period; or there was a period of abandonment between building periods. Evidence of building after the lower deposit was laid down was entirely absent so far as our digging went. Since the position of the mask best harminizes with the supposition that the mask belongs to K-5-1st, this is almost certainly correct.

A disturbing factor: On the corresponding terrace of J-3, there was also an underlying wash, free from stone debris, which sloped up against the terrace wall at the rear.

But in that case the deposit was not black, but light gray in some places, light yellow in others. The interpreation therewas almost certainly correct, and the same - stucco and mortar went to pieces and disintegrated before the walls themselves began to crumble. But why in that case did not the vegetation turn it black? In that case also the deposit certainly came from the ~~xxxxx~~ ruin of the latest building period.

The mask of K-5 is constructed of good slab masonry, and projects about 40 cms from the wall against which it is placed, and which, on the simplest hypothesis, is the wall of the second terrace. The bottom of a second mask was found above and behind that on the ~~xxxxxxxxxx~~ first terrace. These masks, being essentialy masonry, ~~xxxx~~ possibly acted as butresses, and prevented the collapse of terrece walls a long time; while those on J-3, which hed no such support, perhaps went to pieces very much sooner, before vegetation could give the stucco deposit the same dark color. This is the only explanation of the difference which occurs to me as yet.

In the debris before the mask a great many fragments, undoubtedly from it and the one behind it on the thrid terrace (and possibly from others still higher up), were recovered. I am very much ashamed to say that I did not note whether these fragmenys were also found in the black deposit at the bottom, but almost certainly they were.

These have been placed on burlap on the second terrace, well toward the left (southeast), covered with earth and the whole then covered with a lattace of poles raised on low posts. There was no time to sort and study them, but they should be in good condition when uncovered. Fragments were in many cases substantial, and we should be able to reconstruct some details from them. Color seemed to be absent.

A number of fragments were found in the eye-socket. Some of these showed part of a sheroidal surface, cross-hatched with bold incised lines. In the eye-sockets, toward the front, are broken off stubs of stucco, three to each eye. Two are placed on the center axis of the eye, at top and bottom, and the third is in the outer side wall (see Parris drawing and photographs. It is plain therefore that some sort of device stood in each eye, but that it did not completely fill it, being supported within the socket at three points only. Apart from these stubbs, the plaster finish of the socket was smooth and unbroken. The curved shape of the some of the fragments suggests an eyeball (which is Maya art is oten decorated); the fact that it did not fill the socket but with considerable trouble was made to "float" within it, tends to negative the idea. Possibly the devive was intended to represent only the iris, surrounding shadows representing the whites. This of course is guessing. We may be able to find out more from the fragments. But that there was something in the eyes is quite certain.

Part of the scrolls at the right of the mouth appear in photographs and drawings. Part of this scroll work was in place on the other side, symetrical in design and position, but fell just before the camera clicked a few minutes after its discovery. An entirely symetrical arrangement may be assumed. Note that the mass of masonry on either side of the face proper is sufficient for three-element ear ornament.

positon on the second terrace give us the line of this wall as shown. The destruction was so great that a well-marked transtion from fallen debris to ~~fill~~ undisturbed fill could not be located. If the line shown is a fill wall, then the side stairway wall was placed against it, and fell on the dotted line in the drawing, the limit of excavation at terrace level. The only positive evidence for this is a couple of building blocks, superi posed and ~~xxx~~ level, indicated on the plan near the number "12". All this is extremly unsatisfactory. Efforts to trace the fill wall were carried up the pyramid nearly to the top, with negative results beyond the second terrace.

I find it difficult to believe that we can have a mask so well preserved as that of the first terrace, and yet have the ~~xxxx~~ lower parts of the junction of terrace and stairway walls completely gone. These corners have been preserved evyerwhere else that I know of, where similar conditions existed. Using this general conclusion (unsupported by enything seen in the dirt) I believe that the side stairway wall is still further toward the center and will be found preserved at the base, and that what I took for a fill wall is accidental. Failure to find the true wall preserved, is what caused the failure to get the section I was after (abetted by the slowing up due to the finding of the mask). I was unable to be present except for short periods duringthe day, which also slowed up the work. Had I been a little bolder and ripped through the supposed fill wall I would probably have located the side wall. Instead, I had my men working very slowly and carefully trying to pick up the probably non-existent fill wall at higher levels, inseatd of going right in to a known line. I allowed sufficient time to accomplish what I set out to do, had conditions been as elsewhere, and probably enough anyway, had I been able to put my mind to this one job. But conditions were different and I was very busy winding up other jobs and at the camp.

As to the plan of the pyramid, it is quite true that it may have been very complex, as at Uaxactun. If the mask actually protrudes to the front of the stairway, instead of nestling beside it, as at Uaxactun, the reason for my failure to find it is at once apparent. This would clear up everything which puzzles me now. I should have taken a photograph of our model of the Uaxactun building along. A beautiful illustration of the desirability of prompt publication and the nexessity for field men to know what has been found elsewhere. Possibly this would account also for the conical shape of the mound - the absence of a separate hump of debris for the stairway. Your hypothesis that the plan may be similar to Uaxactun adds great interest to the building: its complexity, and the greater amount of debris which it supposes on the stirway (pribably on all sides under that theory) makes it so much the more inadvisable to complete the excavation without plenty of men, and an expert draughtsman. In other worlds, it shouldn't be attempted on ~~xxxx~~ skeleton budget.

K-5-5d.

As already reported somewhere, I re-cleared the outside of the NEly corner of K-5-d. The plinth does not descend into the hearting. This is quite certain. See Phot. 33-150-9

Misc. Sculptured Stone No. 12.

A glyph-carved fragment; dimensions and position indicate it is a part of Lintel 7, though the position allows for the possibility that it comes from a central lintel, and there is no positive fit with the known fragments of Lintel 7. The fragment shows a plain border .085 m wide at the right, showing that it comes fromthe right side of a carved piece (facing the piece); Glyph blocks are about .055 me square. Remains of nine blocks, in double vertical column, with a small portion of non-glyphic area showing to the left. See scale skecth in L.S.Note Bock No. 2, and Photo 33-152. Thickness is .04, the same as that of odd fragment found with Lintel 7 orignally. This, like that, has scaled off from a thicker block. From what we know of Lintel 7, this piece can be restored at the right margin, somewhere above the recovered fragment of the lower right croner, which shows the same margin, a double-vertical column and the main design to the left. I believe the other ~~fragment~~ small fragment can be restored somewhere at the top. I made a skecth to scale to show what could be done withthat, but it is temporilly (I hope) misfiled. Scale drawing of M.S.S. #12 is in my N.B. Book under K-5.

Position found (as reported by careful workmen, Benjamin Aguirre): close to surface on the front slope, the point being about 3.10 higher than the first terrace floor (the terrace of the Sun-God mask) and about over the second "terrace" running back from the top of the Sun God mask to the bottom of that on the thrid terrace; and about 3.00 m southeast (left) of the front-rear axis of the mound. It was unquestionably on the way down from higher up the pyramid. It was almost exactly in front of ~~xxxxxxxxx~~ the left doorway of the K-5 temple. Its attribution to Lintel 7 is thus, with the factors enumerated above, is well supported as possibly without an actual fit.

The glyphs are weathered, though a few can probably be recognized. Morley might get confirmation for a reading based on the other fragments. If a suggested reading called for a secondary series running from a day 5 ? 12 ? those coefficients are almost certainly present on the fragment (first two complete blocks). See skecth.

Memo re K-5 to K-5-3d.

Chief: In looking at the sections of K-5 an idea strikes me and I set it down for my records, with a copy for you, although it not very profound and youvery likely have thought of it.

One of the definitions of "temple" is that a temple is small. A early temple at P.N., K-5-3d, is however, relatively quite large. Would one expect large temples to give place to smaller ones?

Although the width of a room possible with stone vaults is less than with wooden ones, the ~~length~~ possible length is not limited - just as large an effect was possible as seen from the front. The depth, with stone vaults, was also without limits as soon as double, triple or quadruple vaults were used, an expedient made use of here (O-13). A shift from wooden to stone ~~xx~~ roofs can hardly be the reason for smaller temples.

This leaves either a mere change in taste, or the desire for impressiveness by height overcoming that by size. It was comparatively easy to ~~xxxxxx~~ raise the height of an existing pyramid, providing the flat top was made smaller. This seems to be what occurred when K-5-1st was built. ~~xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx~~ It did not occur with R-3-1st (so far as front-rear section is concerned) but there the added height was slight. And rather than enlarge the whole pyramid the lowest one was retained ~~unchanged~~, the slope becoming steeper to keep the same flat area on top.

Assuming a limit to the steepness of a pyramid slope, it was much easier to raise it while shrinking the area at the top, (d) than to raise it and maintain the same area. (b)

This is merely an idea and possibly not worth much. It requires ~~xx~~ higher pyramids, not so much larger in ground coverage, at the expense of smaller temples.

No such tendency can be detected between K-5-3d and K-5-2nd, where the top area seems to have been maintained despite the added height. The terraces of K-5-3d are therefore very deeply buried (at a cost of a great deal of labor.) But between K-5-2nd and K-5-1st the area shrinks a great deal. The terraces of K-5-2nd should therefore be found not far behind those of K-5-1st, and they may even be identical (as were the lowest two in the cases of R-3-3d, 2nd and 1st.) There is a distinct possibility that the masks belonged originally with K-5-2nd, but remained exposed as part of K-5-1st.

Please return for my file yes Frenchie? K-5

We have a new applicant for Maya work, a nice kid of seventeen with lots of enthusiasm and sufficient s.a. Much like Virginia Beggs and up to our high standard of pulchritude. Wants to be a Maya archeologist. Enters as sophomore this fall and in the meantime will do assigned reading and volunteer work. With Peggy's permission I'll put her under your wing when you return.

I enclose a letter from Blom or Beyer. Don't know whether I should have opened it or not.

Have got routine cleaned up for the present and have got back again to revising my report on K-5. Have laid out all the plans in your room which Frank and Virginia are sharing now. Hope that with few interruptions I can finish it in a few weeks. In the first few pages I find some data I need on stelae 38 and 39, mainly 38. Dimensions of 38; number of glyphs on sides (only one side well preserved, two columns of 13 to 15 glyph-blocks, I think?); length of uncarved portion below lowest glyph,: average size of glyphs on both; etc. Get me if you can, positions of 38 and 39 regarding pyramid and set points on pyramid, possibly with reference to stucco mask. Are they on the broad terrace? Do they look as if they had fallen backwards and their bases approximately in original place? Is this on the broad lower terrace? How about this terrace? Is it noticeable at the left right (northwest) corner of pyramid? Did Fred take the height at the other (southeast) corner, and does the plaza floor rise to meet the level of the terrace at the northwest corner? If the stelae were not buried and in original position that would indicate that the plaza floor has not been raised by debris at this point. I don't suppose you will be able to do any superficial excavation to ascertain to which pyramid the masks belong.

They are frequent reports in Science News Letter of finds at Monte Alban. Almost all skulls encountered this year artificially flattened and teeth filed, to points and other shapes, and inlaid with "small round disks of contrasting minerals". Sacrificial child victims, girls. Earl Morris found "two great carved altars", one 11 x 12 1/3 ft, 2 ft. thick. Human being, serpent motifs and glyphs, carved. Found at Quirigua while looking for a stela cist, covered by mud from river. Apparently not on legs.

Louise Cross says Fred is still in Campeche. We had a visit from Kidder's son a few days ago; he was in Venezuela and is interested in that region. Percy Madeira bought two beautiful pottery objects from Zapotec region, both showing Mixtec or Zapotec glyphs on them. Got a letter the other day from the President of the National Geographic asking me about that article, so I guess they will take it. The text is now being copied, but Witte hasn't got the photos made yet.

Guess that's all the news. I suppose you are sweating blood physically and mentally. The best of luck. Freddy is reading proof of her Alaska paper. No immediate chance of my getting off to Colombia. Love and regards to you, Peggy, John, Don Pancho et al. I'll have reprints of my article in the Pan-Am Bulletin in a few days and will send you some. Don't know yet if they printed any in Spanish or will send me any.

Affectionately,

Mason

1934 Notes on K-5 by L.S.Jr.
extracted from original notes.

Stela 39: Position - see sketch plan.

Glyph blocks, right side looking at it from front, left side of monument itself:

width of each glyph, 12 to 14 cms., height 27 cms.
width of space between blocks (i.e. on block and that above or below) is 2½ to 3 cms.

between block and front border (i.e. border on edge at front (now upper) face) is about 2 cms.

width of that border, on the edge, also about 2 cms.

Apparently glyphs extend to rear or (now) under side without border, as on Stela 38, since my sketch shows nothing of a border on this side - though I failed to positively mention this fact. Photo. should clear this up.

Two glyphs to a block.
Max. relief of glyphs, above channels, about 1½ cms.

Ditto, left side looking at sotne from front, right of the monument itself:

width of each block (i.3. comboned width of two glyphs) 22 to 24 cms. (This agrees with 12 to 14 cms for each glyph on the other side).

heights of two measured blocks, 26 cms each.

width of space between blocks and those above or below, 3 cms.

ditto between blocks and front edge border 3 cms.

width of said border, 4 to 6 cms (compared with 2 cms where measurable on other side).

Apparently no raised border on rear side of this edge, but a plain space about 3 cms wide. This is true at one point (not located with reference to height of stone); but lower down the border on rear of this edge appears - therefore its absence is due to irregularities of the stone, or exigencies of space.

Thickness of stone (front to rear faces) 34 cms where measured. Failed to show where this was.

Max. relief ofglyphs about .9 cms above and below channels or inter-glyoh spaces.

N.B. You didn't ask for the above details on this stone, but I took them under a misaprehension. Will serve for a check and comparison with Stela 38.

Stela 38

Average size of glyphs:

Left side (right looking at it from above, and presumably what was front:

height, 17 to 18 cms - quite consistent at .17,

width of glyphs: front column, quite consistent at .14; rear at .17.

The glyphs extend to front and rear edges, without borders.

width of chanels between blocks above and below, about .02 vertical

Did not measure a/channel between rows - probably there is none, as on Stela 39, though my sketch implies it. But the skecth was hasty. Check this with photos. - there is.

The blocks on this side are well defined on fragments 1, 3 and 4, and on 9 which I believe belongs here.

Thickness of stone, at base,.30 to .32

Length of plain butt, 70 cms. (on this side).

Right side

Very badly eroded on all fragments, induding 3, which I would put here.

No border apparent. One glyph block (the uppermost) is clearly about.18 high, in agreement with other side,

Thickness of stone,.30 at top of fragment 5 (about middle height of stela); also at base.

Length of plain butt 64 cms (differing from other side, because base of butt is not cut at right angle to sides.)

Face

Width of stone at base of butt, 1.22

Ditto at base of design, 1.28

Ditto at base of top curve, -approx, - is sum of pieces which fit fairly well - 1.78

Therefore this stone was slightly wedge-shaped, up to the curved top, with greatest width at top. See sketch for approximation of curve.

Data involving some doubt.

See sketch for fragment numbers.

Positive fits: Fragment 1 with 5; 4 with 8 and 8 with 7. This gives top and bottom. Prob. 6/4 also 5 + 6.

As set up by Morley, Fragemtn three is the only one

one on Stela's left side which is so eroded that glyph blocks are not apparent - clearly apparent - and on this fragment they are entirely gone. The arrangement leaves fragment 3 ~~hanging in the air (see photo)~~. without a fit.

All the fragments on the right side, in Morley's arrangement, are badly or completely weathered, like Frag, 2.

There is a large fragment which he left entirely out (lying about two meters to the southeast). This is well preserved as to block outlines, like those of the left side (apart from Fragment 2), is 60 cms on the side, ~~If x x x x x x x x x x x x x x x x~~ compared with .59 for Frag. 2. S It is clear that Morley's arrangement is incomplete, for it ignores this fragment, ~~and leaves a gap on the left side~~.

Frg. 9 belongs to the stela because: it lies close by with no other stelae near; and could not be fitted to Stela 39 (See photo).
It comes from a stela of the same size: glyph blocks (two rows are complete) are .17 high; the front glyphs (determined by clear remains of the carved face) are .14 to 15 cms wide, and the rear column 16 to 17 cms. wide, no borders.

And there are two other now formless broken masses of stone of a ~~x x x x~~ proper size to come from the missing upper center of the stone, lying close to Frag. 9.

I suggest: Shift Frag. 2 to right side and place Frag. 9 in its place, ~~If x x x x x x x x x x x x x~~ but above Frag. 3, assuming a gap between 9 and 3. This will join a ~~small~~ more than half portion of the tops of the blocks on the lower end of Frag. 9, to the ~~x x x x x x x x x~~ less than one-half complete lower portions of the blocks at the top of Frag. 1. Unfortunately I didn't measure these latter incomplete blocks individually. By computation from measurements taken there is a maximum of 5 cms (height) of the blocks on Frag. 1, ~~and my sketch indicates only a little of the x x x x x x x~~ blocks on Fragment. 3. ~~On the other hand,~~ If you put Frag, 9 on top of Frag. 1, the combined heights of the incomplete blocks on each fragment will be well under what they should be. This is important, as it confirms the existence of missing blocks on the left side. While not measured, my sketch indicates not more than 4 or 5 cms of the blocks at the bottom of Frag. 9.

while I measured 10 cms of remaining height of the

at the bottom

The general form of Fragment 9 (see skecth) would suggest it could be fitted directly on Frag. 1, but for reasons stated I doubt if this would be correct. There is nothing about its shape to indicate it could be fitted on the other (right) side.

The relief on the sculptured face of Frag. 9 is hardly conclusive. The real reason for putting it on the left side is its state of preservation; and for the same reason I want to shift Frag. 2 to the other side. Whichever we do: simply add Frag. 9 toeither side, or make the shift suggested, the total height of the glyph panels (and the stone as a whole) is increased. ~~The M rely arrangement can't be correct unless you allow both for missing and this large superfluous piece.~~

Heights

Glyph Panels: Fortunately the bottom and top chanels of the right (as well as left) side panels are clear.

If we make the sugested shifts we get the following minimum heights, by adding the lengths on the side of each fragment:

Left side			Right side		
Frag. 1	1.64	(not incl. plain butt)	Fra. 1	.14	(not incl. plain butt)
3	.27		5	1.10	
9	.60		2	.59	
4	.77	(to top glyphs only)	6	.35	
			7	.66	(to top of glyphs only)
	2.28			2.84	

The difference between thesetotals, in my reconstruction, is the minimum length of missing pieces on the left side, that is, 56 cms.

If we put Frag. 9 on the left side, as above, without shifting Frag, 2 in accordance with its state of preservation, we get a difference the other way:

Left side:	2.28	Right side	2.84	
plus Frag. No. 2	.59	minus Frag. 2	.59	
	2.87		2.25	

leaving a difference of 62 cms, which is no better.

If we leave it as Morley has it, disregarding Frag. 9, we have:

Left side:		Right Side	
Frag. 1	.64	Frag. 1	.14
2	.59	5	1.10
3	.27	6	.35
4	.77	7	.66
	2.27		2.25

This is close agreement, and probably Dr. Morley's reason for putting the eroded Frag. 2 among the relatively well preserved pieces of the left side. But it ignores Frag. 9. Further, the close agreement in measured lengths loses its force when you reflect that this calls for pretty good fits, which are absent on the left side, and I think, between Frags. 6 and 7. The matter of Morley's fit between Frags. 6 and 7 is crucial, as that between 5 and 6 looks O.K., and if we can't put Frag. 9 there (between 6 and 7) it belongs to an unknown monument. Unfortunately I find there is no full-face photo; but

our side view, and especially Morley's, indicate rather clearly that there is no real fit at the point in question.

I wonder if Morley ever saw Frag. 9? I don't find a photo of it in his series. Perhaps I should have photographed it and drawn it carefully. It is so near that it never occurred to me that it might be heretofore unknown. Perhaps you should check up with him on this.

Number of glyphs:

According to Morley's arrangment: On the left side 8 complete rows practically so, plus parts of two more, with the 59 completely eroded 59ccms. of Frag. 2 between them. Speaking in appoximations, we need about 12cms of glyph height to complete the broken off glyphs of Frag. 1, and 7 cms for those of Fragment 3. To this total(19cms) add 4 cms for the missing channels of these rows, and subtract the resulting 23 from 59 and get 46 cms to account for. We have ten rows and 36 blank cms. of column height. Add two rows and a channel between them, which requires about 36 cms. and you have 10 cms. which you don't know what to do with. But the fragments may have weathered down. Best estimate is 12 rows of glyphs, double column.

According to suggested rearrangement:

The same 8 complete or nearly complete rows as above, plus 3 more complete ones on Frag. 9; plus two sets of two incomplete rows, giving a minimum of 13 plus a supposed missing height of 56 cms (based on mimum of height of the other eroded side). The upper incomplete row of Frag. 3 is fitted theoretically to the lower of Frag. 9 That is, with the two complete rows on Frag. 9 leaves 11 rows accounted for, and a combined height of the other set of incomplete rows of 25 plus 4 cms (approximations), or 9 cms of remaining glyph surface to be added to the supposed 56 cms of missing surface, a total of 65 cms. From this take 8 cms to complete the partially present rows and also 4 cms for the channels at their respective tops and bottoms - 65 minus 12 equals 53 cms. So far, 11 rows accounted for. Add three rows, 51 cms. of height, and two channels between them, 4 cms more, and you get 55 cms., which is pretty close.
For this arrangement, there are a minimum of 14 rows, double column.

over.

According to suggested rearrangement:

Fragment 1; 3 complete rows plus about 5cms in height of another.

3: 10 cms of incomplete row (joinable theoretically at least to above, plus channel and 15 cms of another row. Total five rows.

Gap of 56 cms (based on min. height of other side) of which 2 cms is needed to complete top row of Frag. 3 and two more for channel above it, leaving net gap to be accounted for of 52 cms.

Fragment 9; About 4 cms of broken off row which we leave for the gap, plus two complete and a third nearly complete row. Total, 5 plus 3 or 8 rows.

Fragment 4 Four complete rows, total 8 plus 4 or 12 rows.

To the net gap of 52 cms add the bottom 4 cms of Frag. 9, which we passed over before, giving us 56 cms again. Add three rows for this, total height @ 17 of 51 cms. We allowed above for the channel under the lowest of these hypothetical rows, and that over the upper is in place on Frag. 9, above the small bit of glyph surfaces which we addedto the gap. There therfore remain only two channels to account for, or 4 cms more. Total height needed for the added glyphs and channesl is 51 plus 4 or 55 cms. against 56 cms gap based on minimum height of the other side. Total number horizontal rows, 15 , in double column, 30 glyphs to a side.

Note: Glyph heights are reliable, measuring 17 cms in seven measurable cases (includingn 2 on Frag. 9). The required height for 15 rows and 16 channels @ .27 and .02 is 2.87. If we add .02 to our measured height to bring the row at the first fracture (between Frag. 1 and 3) we get 2.86, within a centimeter of the theoretically required height. This is some evidence (plus absence of other known pieces of the edge) that 15 rows was the total.

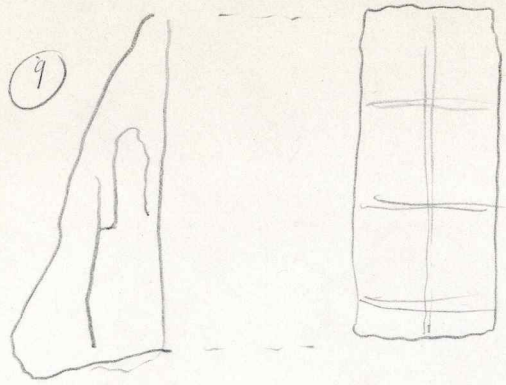
To the height of the glyph panels (2.86 my arrangement/ 2.27 Morley's) add about .60 for total height of sculptured portion: 3.46 or 2.85; and .64 to .70 for plain butt. Averaging latter, total length of stone was 4.13 according to me, 3.52 according to Morley.

Added note on shape: Assuming symetry, the measurments indicated on sketch will yield an approximation to the curve at the top; and the amount of deviation from vertical of each side, either for Mo ley's or my arrangement.

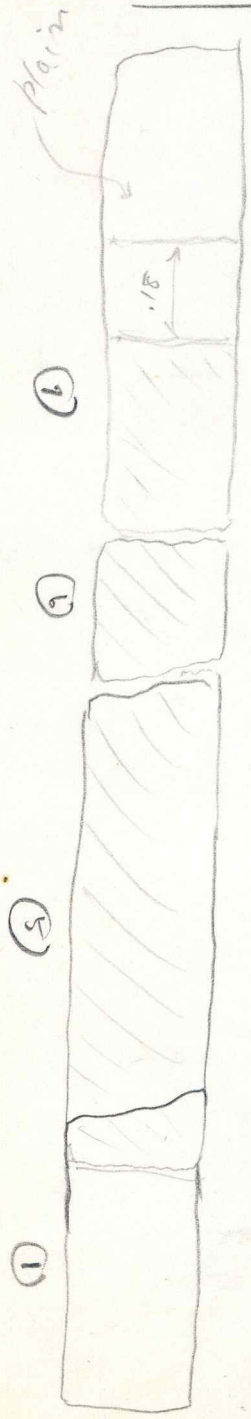
Stela 38

7

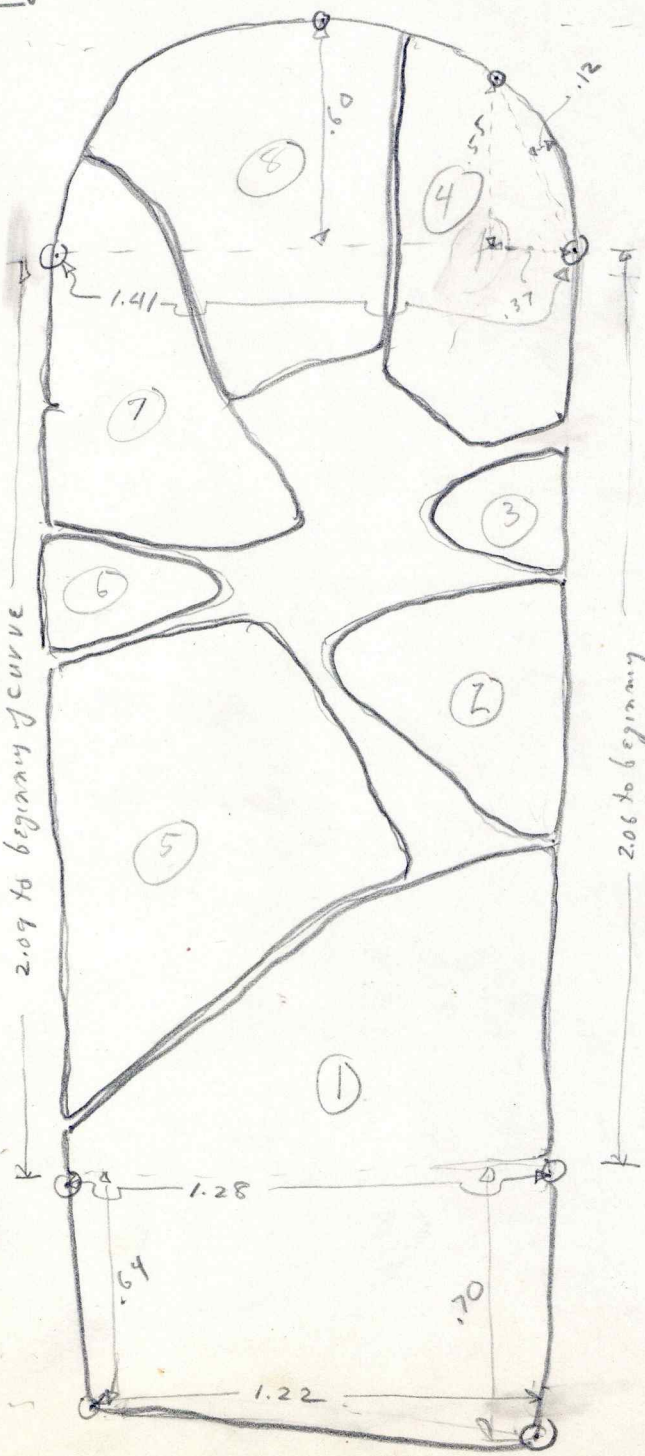
Left side acc to reconstruction of LS



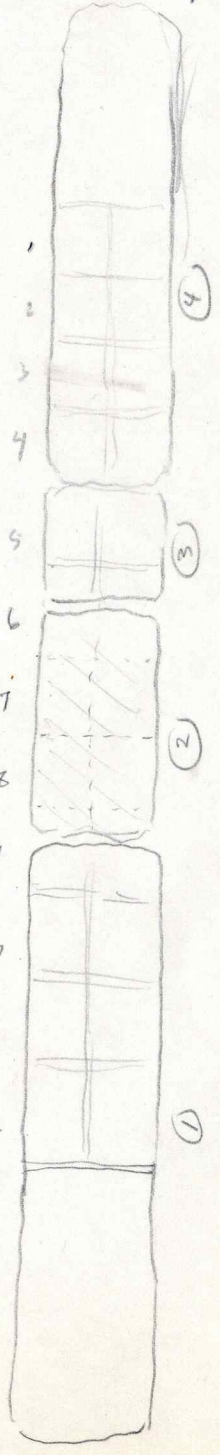
Rt. side
acc to Morley

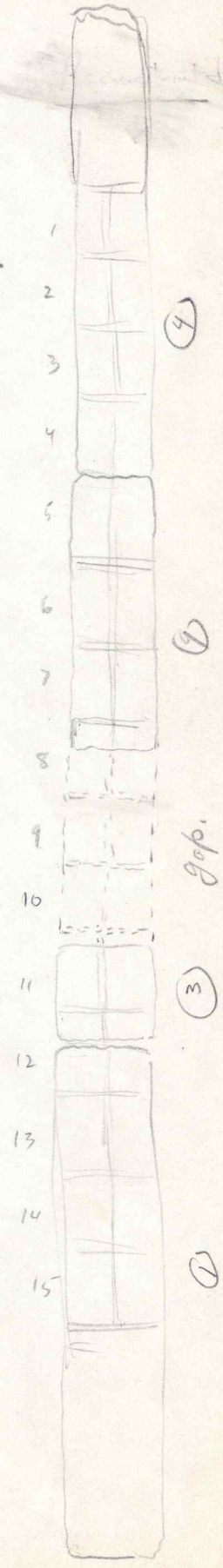


Face - acc to Morley.



Left side
acc. to Morley

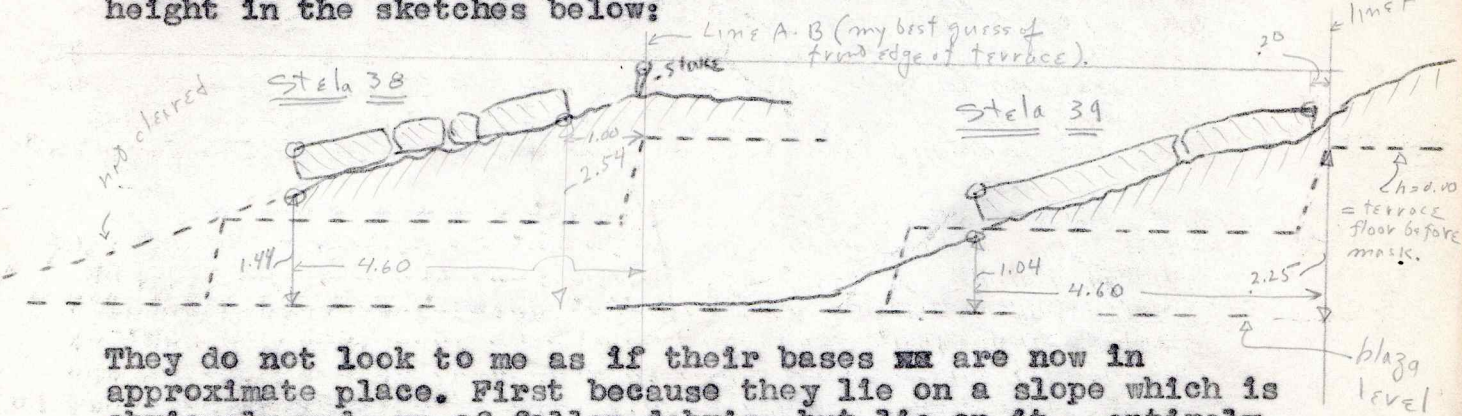




P^o^sition of stelae at pres^e^nt.

See my additions to Fred's original drawing.

T^h^ey are not now on the terrace; they are on the slope leading from it to the plaza level; certainly 39, and I believe also 38, have their lowest ends well above plaza level. T^h^is is from observation; now I will work out the levels and show this height in the sketches below:



They do not look to me as if their bases ~~xx~~ are now in approximate place. First because they lie on a slope which is obviously made up of fallen debris, but lie on it , entirely free; second because the bases are well above the plaza level and well below the terrace level. T^h^ey have I suppose been moved by Morley who should be able to tell us this from his diary. I can't believe he moved heavy stones upward in assembling - therefore I don't believe they stood on the plaza level. If they stood on the terrace, in a natural fall the bases couldn't get pointed toward the plaza, as they are.

Therefore, in turning for photographing, either Morley swung the bases down hill (which he might do to get a better full-face photo which he didn't take - and~~or~~ which he could be quieried); or he found them in each case at one side of the present location, bases headed more~~or~~ less toward plaza, at levels between plaza and terrace. ~~Thirdxiatenaziwazforzzzyz ixxzizdzdownx~~ For 39, this might have doccured by sliding down from somewhere onnthe stairway, or higher - but not for 38, far out to the right (NW) side.

My present guess: they were set on a subsidiary terrace, of considerable width, rising from plaza and lying against the terrace of the mask, which we now call the first terrace. The slope of the debris is extremely gradual in contrast with J-3 or J-4, for example, and so allows such an intrepation. This would allow for the stelae falling backward, bases to to front, but heights above plaza level. O^n^ the other hand, you didn't find such a lower terrace in your trenches. This was one of the first digs - could your men have gone through one without knowing it? Note that bases of each stela were measured to be same horizonatl distance from my appoximation of edge of Terrace 1.

Yes, the terrace (our"first"terrace) is noticeable at the northwest corner (right front); No the plaza floor does not rise to meet it. T^h^e steale probably were more or less buried before Morley examined them. Why not query him on this.

Note: F^r^ed's treatment of lower terrace slope won't do either at center of right side. T^h^e slope is too steep.

My measurement indicate disagreement with Fred as to selection of the right corer point; or a bad error which I am pretty sure I didn't make. Neither do I assume he has a bad error. Reason: when I selected my corner point, Jose pointed out that there was another corner, set back a bit and a little farther to the right. I noted his basis for this, though I figured it was probably due to the collapse of the end of the terrace. With insuffic net clearing, Fred could easily selected the inner xxxxxxx corner (whether a real one or due to collapse) as the true outer one, and we must query him on the amount of clearing donw here.

Apart from the fact that I did this job pretty carefully, with tape and plumb-bob, two factos support me: the resulting line is the same distance from the stelae bases; and it follows a clearly discernible xxxxxxxxxxxxxxxxxxxx edge to the slope to right of center, which I specially remarked in my notes at the time.

My line for the front edge straightens out somewhat Fred's devi ation from the front line of the temple; but increases the deviation from the line of the mask. From point of view of probabilities here we are fairly even, though one would expect cock-eyedness in the mask terrace to be repeated below, which is what Fred has.

This difference does not affect materially the genrral positions of the stelae; Because I agree that my right xxxxx corner is short of the original one by two or three meters, I am in agreement with him that the total length of the terrace was about 40 meters; that Stela 39 is at the center; Stela 38 is about 14.50 to right of center.

(4.60 at the base)

If my lineis correct, both are now at the same distance forward of the edge of the terrace; if Fred is right, th base of 39 is about 6.00 and that of 38 7.00 meters forward of the edge.

That he didn't pay a great deal of attention to this terrace is certain from the fact that as he has it drawn the stelae bases would have to be at plaza level, and they are, by careful leveling, over a metter above it. I should add that there was plenty of bush over my corner, and I don't think it was mere light growth, either. I'm inclined to trust my line, as I had the whole terrace well cleared of bush. The left corner is very much worn down, but at that end I'm close to Fred, and taking his left and my right helps very little. The big point is that my line actually followed an obserable edge to the slope at the right, which I'm pretty sure was never cleared before - while this edge is not so clear at the left.

It worries me however, to have the mask at variance both with lines above (temple) and lines below (first terrace).

Heights of corners: The height of the corner at the southeast (left) where I put my stake was 50 below the terrace level as cleared before the mask; but it was clearly falling away here, and the surface of debris to the rear, in line with the mask but far out at thisend, was measured as 8 cms above the terrace level. At the other end it was about 45 cms above terrace floor level. Here the top of my stake was measured as 95 above; I measured the stake but can't find the

note. It was about 50 cms. The resultant figure of 45 cms agrees in general with heights for Stela 38, and the error here can be only a few centimeters.

We can made a possibly profitable comparison at Yaxchilan: out of 19 vaulted buildings at Yaxchilan, thethockest outer (or medial) wall is 1.38. This is on Structure 20, a single rage building on pyramoidal substructure. To be sure it had partition butrresses to help carry the load. But the load was enormous. Not only was there a roof comb (acc. to Maler). The vault itself rise 3.12 from spring to cap-stone, and more than 2.00 of debris lies above that at one end, a total of 5.12 fxu above the floor. Where the vault has fallen, the resulting debris depth, solid, is 4.00, The span is 2.67 against 2.15 for K-5. It seems to me that the enormously greater load indicated by a debris depth of 4.00 against about 1.50 for K-5, more than compensates for the presence of partition buttresses in the Yaxchilan building. Yet your figure for the K-5 rear wall is substantially thicker - .27 or 8 per cent.

There is one otherbuilding at Yaxhilan with a front wall 1.35 thick, therear not known. Thus also had a roof comb according to Maler. This has the buttress, but thereis a length of 5.75 between them. Here the vault height is not excessive - 1.75, and the span is comparable to K-5 (2.30). However, the building is a special thing - the only one I know of where thevault is built of beveled blocks instead of flat slabs. This may have affected the wall thickness. If not, the point is that your measurment is .30 more for K-5, a difference of 8 per cent.

The next thockest outer wall in the Yaxhilan series is one at 1.25 (with very high and therefore heavy roof, and comb acc. to Maler) after which we drop to 1.10 (Str. 33, with comb, very high and heavy vault, and span of 2.60); then to 1.05 (Str.23, with comb and a reasonably low vault). All these have the butresses inside, which of course have helped to keep down the wall thickess. But don't forget the loads on the thicker ones were a hell of a lot more than on K-5, or you would have fou d a lot more debris on the latter.

All outer wall thicknesses at Yaxchilan xxx except those xxxxxxxx considered above are 1.00 or less in thickness (out of my series, of course, but the series approaches completeness.

At Palenque I only have figures on 5 palaces (thickest wall is .92 for a 2.18 span) and the Temple of Inscriptions. There the comparison is pretty good - sxxxxxxxxxxxxxxx span of 2.04 and outer wall thickness of 1.16. But this is double-ranged, and there is a medial wall to carry the comb. No information on vault height.

From the above I believe your measurement of 1.65 is pretty well isolated in the region, and significant if correct.

Chief:

Note on wall thicknesses with refer nce to K-5.

(Calling estimated thickness of rear wall of O-12 as 1.20.)

	Front	Rear Temples	Difference (plus)	
J-29	1.25 to 1.30			
O-12	1.08	1.20(?)	.12(?)	rear
K-5	1.00	1.65	.65	rear
R-5	1.05	1.23	.18	rear
J-4	.95 or 1.10	.75	.20 or .35	front front

Check with me on wall thickness as of 1936. Have later data.

On Low platforms

F-3	.65	.75	.10	rear
F-4	.60	.75	.15	rear

Note: I use my measurement for front wall thickness of K-5 in the above. If I use your estimate, this becomes the only pier in the city - at least the only one in a vaulted building - which is thicker than wide. On J-29, the heaviest vaulted building, the pier is just about square - in all cases it isoblong, but with the long face in the facade, the shorter one forming the jamb. This I think confirms my measurement.

You will note that your measurement for the rear wall thickness of K-5 gives a much greater discreptancy with the front thickness than occurs in any other comparable building. Your measurement of rear with mine of front gives a difference of .65. In five other buildings, the greatest difference is ~~.20~~ in J-4. Here the two jambs of the same doorway differ in thickness. Between K-5 and J-4, your .65 of difference is to be compared with .35 for one end of the building, or only .20 for the other. The next greatest difference is .18 in R-5.

After looking at above I wonder if all these differences (excpet K-5) may not be non-significant - due to irregularity in laying out the plan, and afterward in following it in stone. If your measurement of the K-5 rear wall is correct, it is 42 cms thicker than any other free-standing wall in a vaulted building at the city. The next is the rear of R-5 (1.23) a difference of 13 per cent.

over

Listed 7.
Worley Hub at too fine for
Dental Series date 9.9.8.

Note edge of ~~front~~ flat from K-5-2
on line of edge of ~~front~~ line K-5-1st

Medial axis K-5-2d.
center of line K-5-3d.

3.170
3.347
1.41
2.82

T of of walls of K-5-3d flat + on
same level, indicating new or gate
height

1st

1st 1st 1st

~~Letter to Linton~~

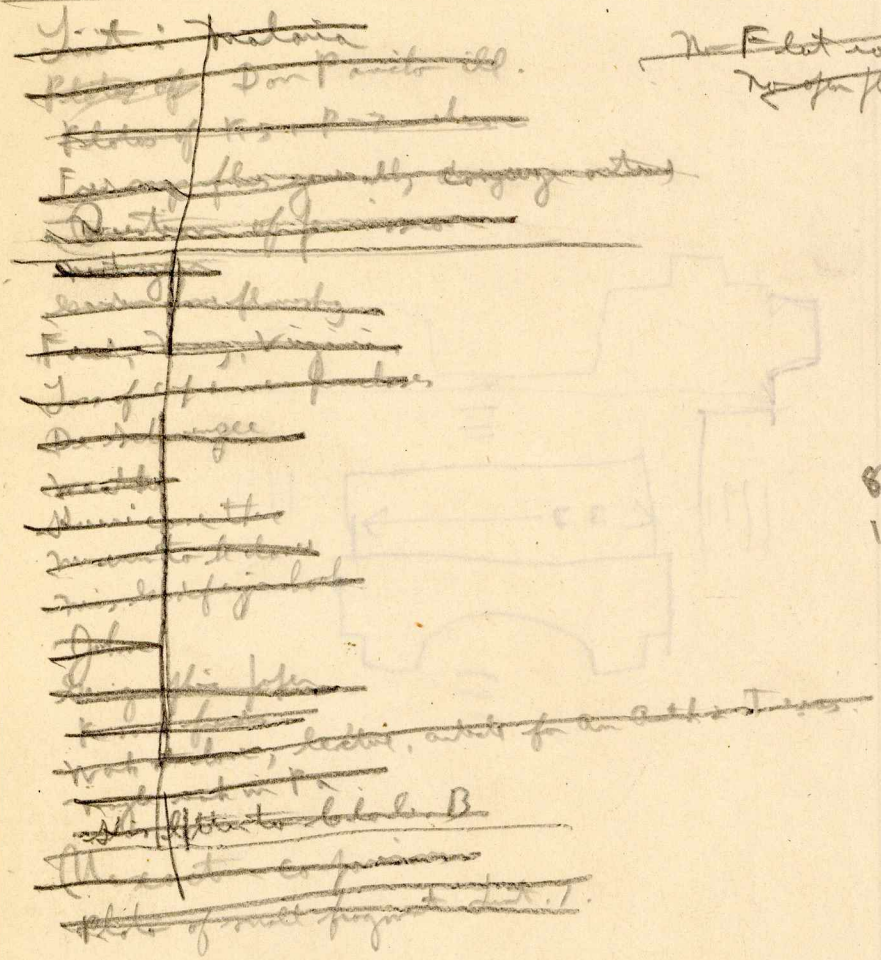
~~Ltr of 11-5-1st~~

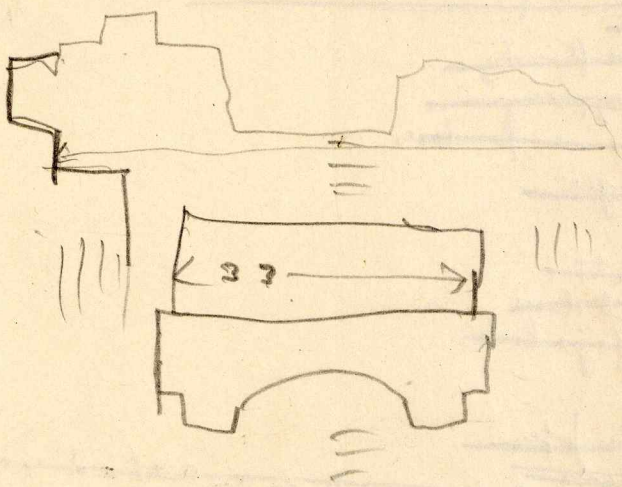
~~More observations on roads~~

Revise data on terrace of 11-5-2d

~~N Flat roofs?~~
~~Type platforms?~~

85 at crest
1.80 at sides.





$$\begin{array}{r} 2 \\ .3 \\ \hline 6 \end{array} \qquad \begin{array}{r} 20 \\ 12 \\ \hline 40\overline{)240} \\ \end{array} \quad 6 \text{ in}$$

From Lounge Year Book

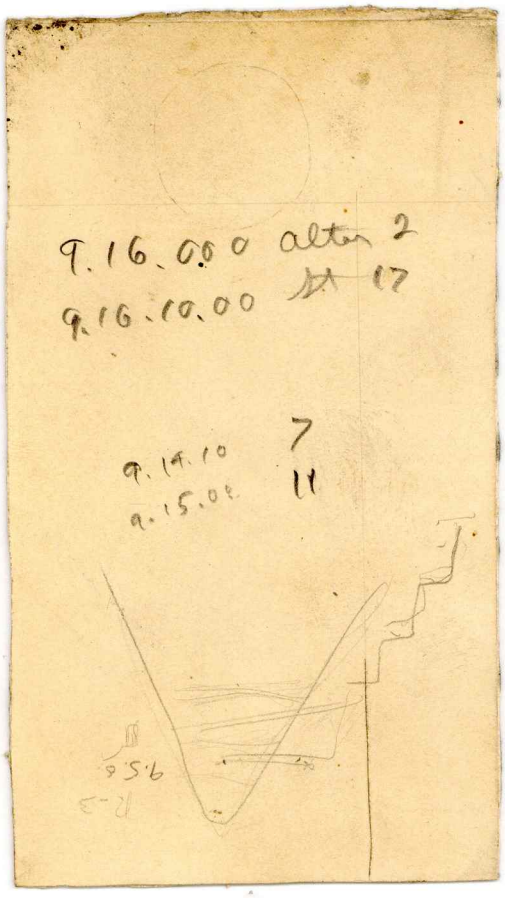
✓ 79 ft n + S.
✓ 76 " e + W.
25 ft high ✓

~~marks 8 ft square~~

Platform 4.5 ft high at front ✓
5.5 " " rear ✓

"area" at bot of stairway 33 ft n + S.
20 " e + W

Platform on the area


9.16.00 alter 2
9.16.10.00 17
9.14.10 7
9.15.01 11

Lintel 7. [illegible]
raven loader left
thick. Probably a
lintel

K-5 - [illegible] index 47

② 22 - 9.16.5
① 23 9.14.15 ?

12 - 9.18.5
13 - 9.17.0
14 - 9.18.10 ?
15 - 9.17.15
16 - 9.16.15
17 - 9.16.10 ??
18 - 9.17.5 ?
19 - 9.17.10 ??
20 - 9.18.15 ???
21 - ?

5 de julio de 1934.

Doctor
Alfonso Caso,
Museo Nacional de Arqueología,
México, D. F.

Estimado Doctor Caso:

Rear tunnel office wall N-S-ext

370 from west rear wall N-S-ext

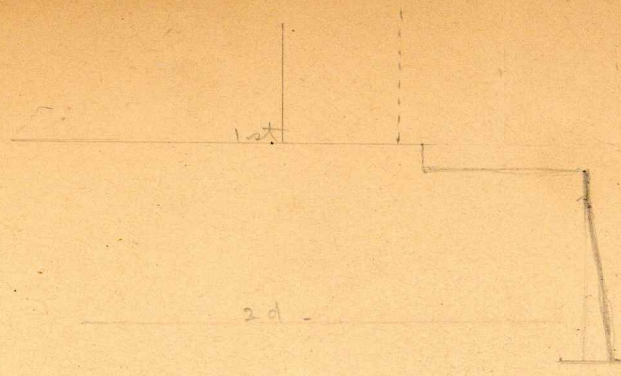
630 " " " fut " ---- (690)

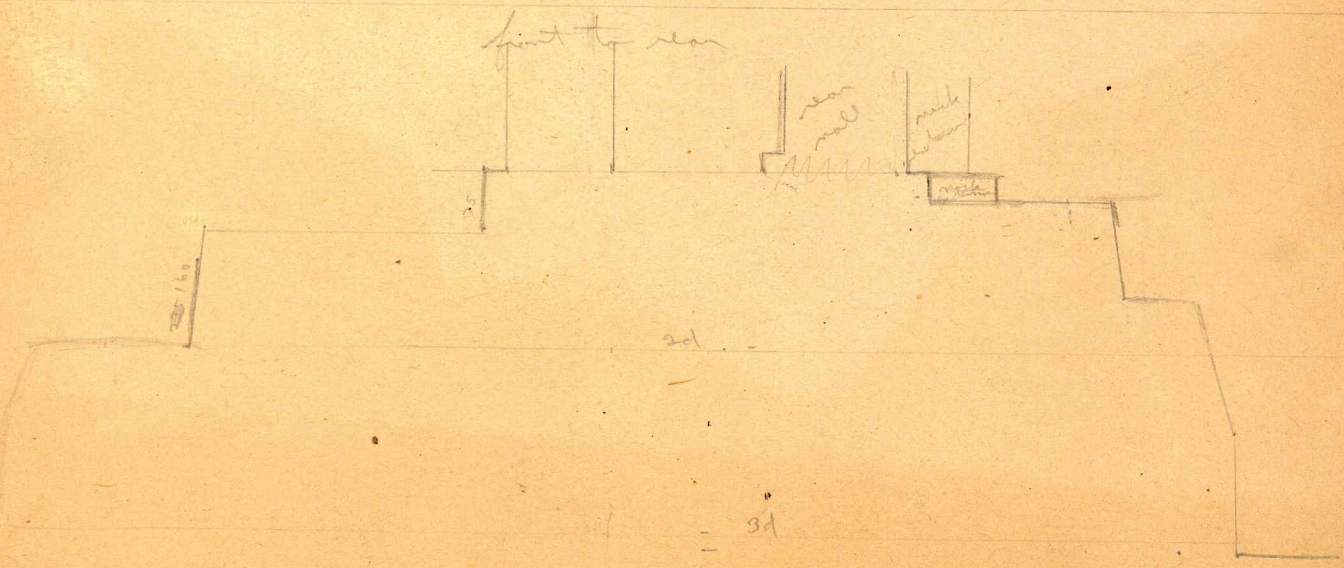
Co 2 m. wide.

1.60 below sill of office room

side to side

see p 52
wall 90-100 high
30 in bottom





220
165
275
630

Points for Jean

Mask height 17 m?

Base 53 X 47

Lowest terrace height 1.5 m at S. corn, blending with Platform behind at W. corner

Last read ft 8, 9, 17, ff.

Fred - why limited stucco work on lowest level further out than others.

Plinth wall of K-5-3d

Mason - revise Unit 7, ft. 23 -

enlarge gateway width

add N B. steps

Note correspondence in levels of mask terrace at front and my terrace at side. Note my reasons for thinking terrace belongs to K-5-2d. Look for mask for K-5-1st.

Consider connections of feature at left side.

FRED'S SURVEYING POINTS ON K-5 (old 42)

1, 2, 3, not recorded by me.

4, 5, 6, See other yellow sheet.

7. Front left (looking outwards) inner corner uppwr room, floor level. Direction from point 6 is S. 65 E. (my Buxton observations: 64 W. of N.)

8. Behind altar stone, floor of K-5-2d; level 0.12, 2.5 m. Direxction from point 6:N. 77.30 E.

9. Base of high terrace wall at rear. Figures 2.86 m below floor of K-5-2d.

Plans and figures in notebooks:

31/

Plans of K-5 in field notes

Stone in upper niche: 31/70, outline and section
~~triangular~~
Triangular feature in left wall 31/71 (no importance)

1932 notes

1/47. Vertical transverse sections, front to rear, front and rear of pyramid at top, with temple;)also K-5-2d and 3d

1/52 Surveying points 6 and 7

1/53 Rear of K-5-2d

1/64 Altar stone of K-5-2d

2/7 Rear of K-5-2d

2/8 Section of K-5-1, 2d and 3d.

2/10 Rear wall of K-5-2d at center

2/17 Features at left base

2/25, 27 Left slope of pyramid

2/60 Section at left base

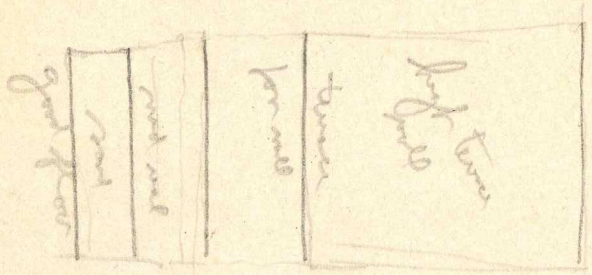
Loose leaf: Features at left base

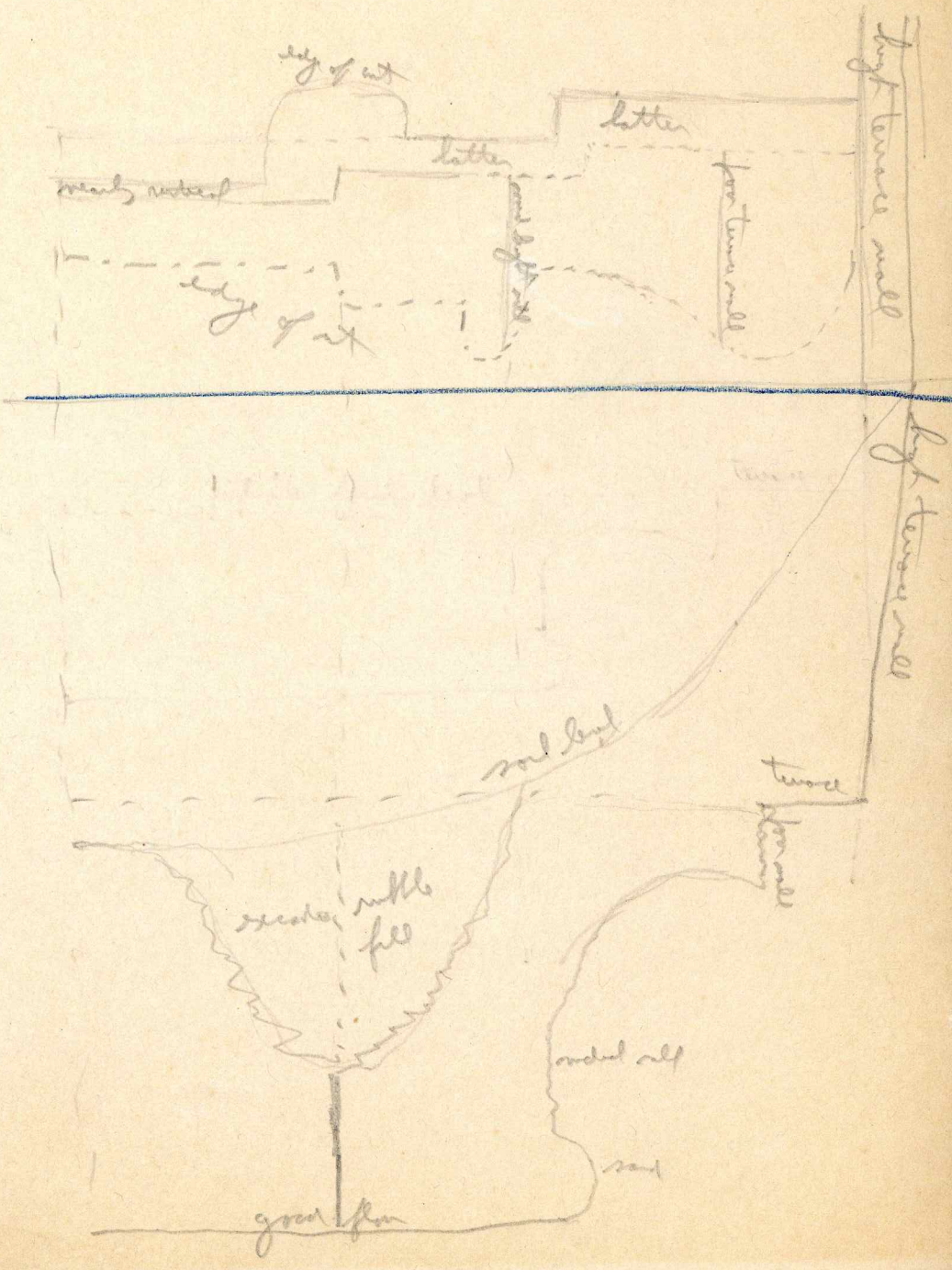
3/19 Plan of excavated area to date

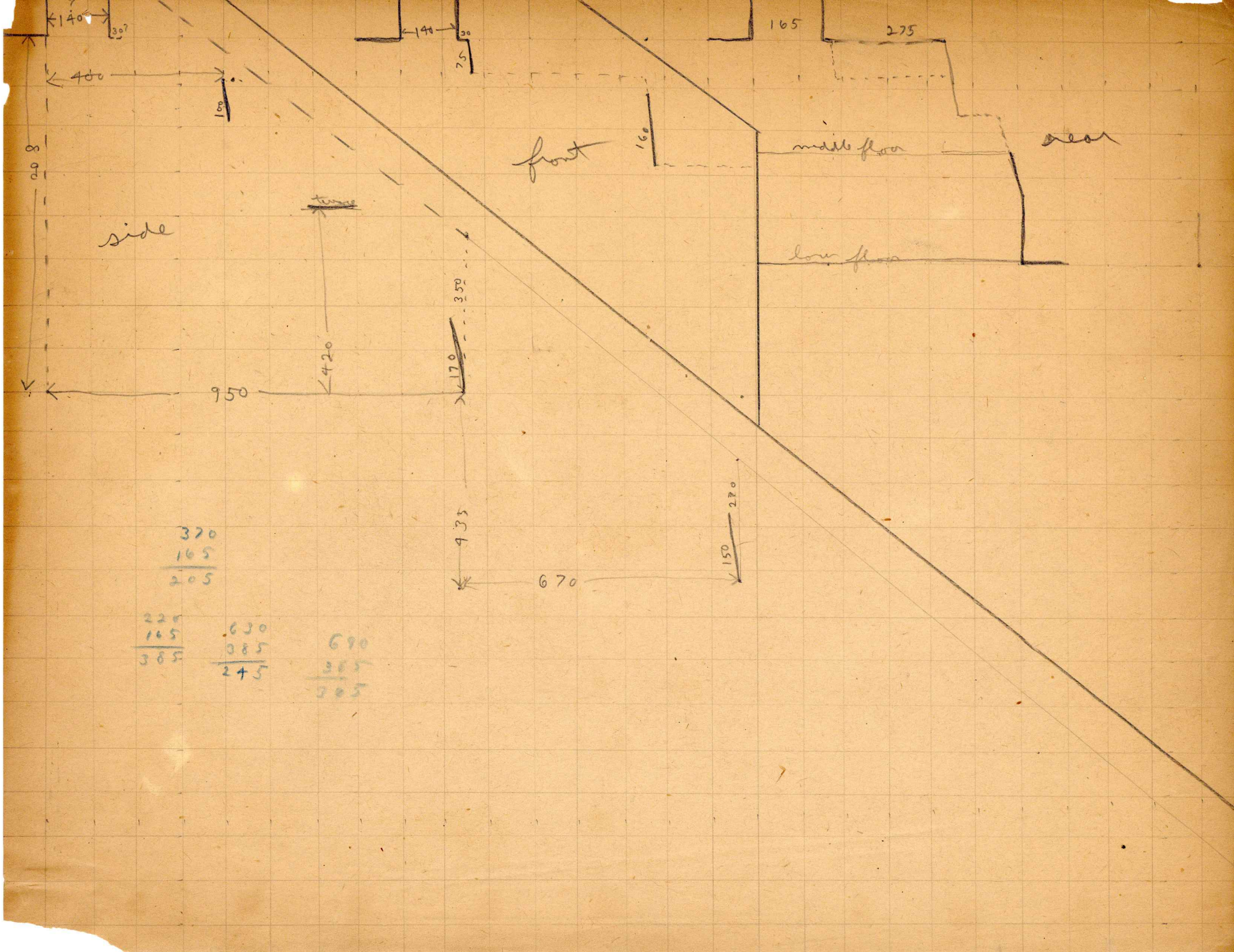
4/36 Plan of K-5-3d

4/38 Section of front wall and terraces of K-5-3d

5/21 Sketch of shell object found in cache in K-5-3d.







370
165
205

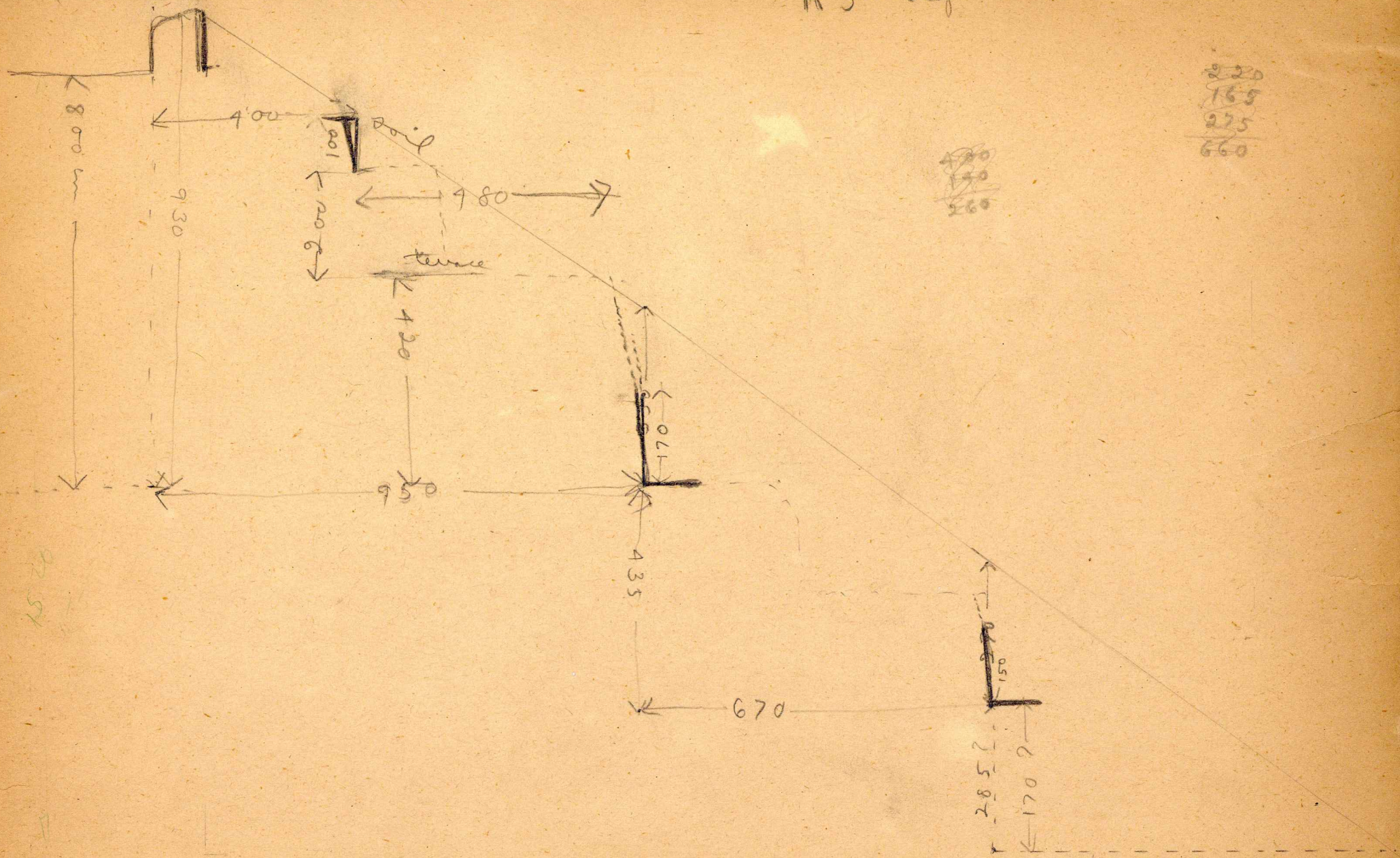
220
165
385

630
385
245

690
385
305

K 5 - left side

220
165
225
660

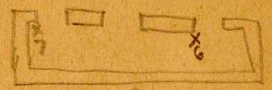


Surveying points:

4. Base of outer front terrace wall

5. Base of front plinth wall, in front of doorway

6. Floor of structure room at inner side of front pilaster.
left entrance, inner right (facing front) corner
of right axial pilaster



7. left inner front corner room, floor level

CARNEGIE INSTITUTION OF WASHINGTON

THE CHICHEN-ITZA PROJECT

DIVISION OF HISTORICAL RESEARCH

Laboratory of Anthropology,
Santa Fe, New Mexico.
July 19, 1934.

Dr. T. Alden Mason,
University Museum,
University of Pennsylvania,
Philadelphia, Pennsylvania.

Dear Alden:-

I am enclosing under separate cover your comments on K 5 at Piedras Negras. I think your statement well reasoned and logical.

I took the liberty of making a few comments in the margins, some in answer to your queries.

The evolution seems clear, though it is a pity that K-5-2nd, has to referent a retrograde, recessive feature.

The I. S. on Lintel 7 (9.9.8.8.0) is certainly not the contemporary date of that sculptured which I am inclined to assign to 9.12.10.0. when Stela 38 at the bottom was dedicated and indeed when I think Structure K-5-1 was put into formal use, i.e. dedicated.

Your stucco masks on K-5-2nd are to my mind, ethetically considered, far superior to those on E Vll-sub at Uaxactun, so much so that I believe they must date from after 9.10.0.0.0 and I would like to put them as late as 9.12.10.0.0 if possible.

Is there any possibility that these masks could have belonged to K-5-1 and that they were later (sometime after 9.12.10.0.0) covered up.

If I have my way E-Vll sub at Uaxactun will go back at lease to 9.2.0.0.0 (Stela 20) and possibly even to 8.16.0.0.0 (Stelae 18 and 19).

I have just received a long letter from Linton written on the steamer coming up. Please tell him I will answer it in a few days.

Unfortunately Gradle was not in Chicago when I was there but I will write him today and send Horrie a copy of my letter to him. Guess that is all for the present.

Best regards como siempre,

Sylvanus

CARNEGIE INSTITUTION OF WASHINGTON

DIVISION OF HISTORICAL RESEARCH

LOCK DRAWER 71
ANDOVER
MASSACHUSETTS

October 4, 1934.

Mr. J. Alden Mason
University Museum
University of Pennsylvania
Philadelphia, Pa.

Dear Mason:-

Harry Pollock has sent me your letter of September 27th and a carbon of his to you of October 2nd. I have all the Ricketson materials here, as Harry says, and I shall be glad to abstract from them the information you need. If what I shall send along in a few days isn't adequate, please be sure and let me know.

I have bumped up against a stone wall, or rather a financial vacuum in any attempt to get anything done about Peru. It looks like a hopeless case, for the present at least.

I note that Harry has suggested that you postpone completion of your paper until the appearance of Ricketson's. But I am sure I can give you all the dope you need now. We hope to get Rick's paper into press by the first of the year, but this may not be possible. Bob Smith's on Pyramid A-1 should, however, be certainly out by that time.

Very sincerely yours,

A. V. Kidder.

Enclosing the dope-sheets
A.V.K.

CARNEGIE INSTITUTION OF WASHINGTON

UAXACTUN PROJECT

DEPARTMENT OF HISTORICAL RESEARCH

Guatemala, August 13th 1934

Mr. Alden Mason
University Museum
University of Pennsylvania
Philadelphia
Penn.

Dear Mr. Mason:

Mr. Johnson forwarded me your letter to him of June 20th. Unfortunately I was in the hospital and unable to answer it.

The following are some measurements of Pyramid E-VII-Sub at Uaxactun.

Height to top of the higher rear platform 26 1/2 ft.

Basal dimensions: (a) east-west 76 feet. This is from the furthest point east to the furthest point west at floor level. That is the furthest extent of the lowest terrace on either side of the central stairways. The terrace projects beyond the stairway.

(b) North-south 79 feet taken from furthest extent of lowest terrace as in the east-west basal dimensions.

Dimensions of higher rear platform at top of pyramid through centre. East-west 12 feet. North-south 25 feet.

The platform one foot lower and east of the higher rear platform, through the centre north south 26 feet, east west 3 1/2 feet from east edge of high rear platform to edge of steps.

These measurements are taken from tracings of Mr. Pollock's original ground plan and cross-sections of Structure E V-II Sub.

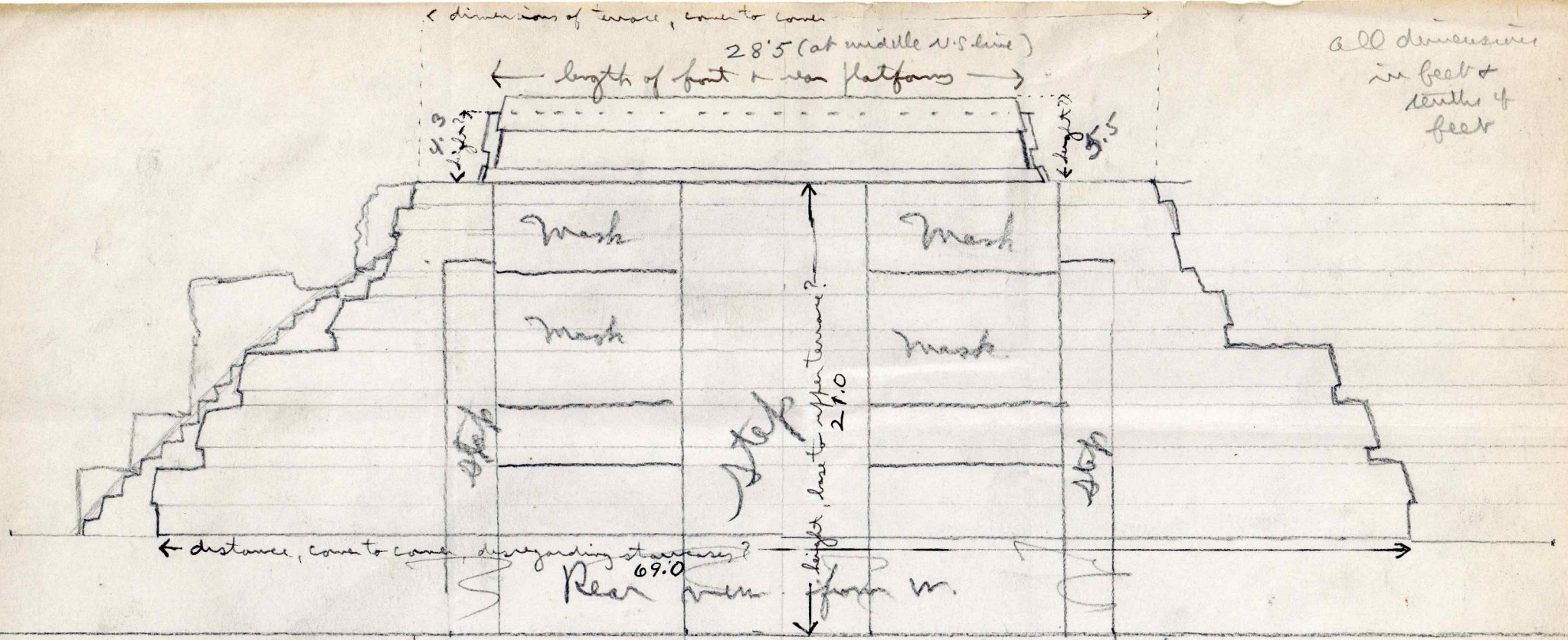
I hope this information will be of value. I am sure Mr. Guernsey could supply you with any additional information you may need.

I am sorry that there has been such a delay in your receiving this information and only hope it is not too late to be of service.

Sincerely yours.

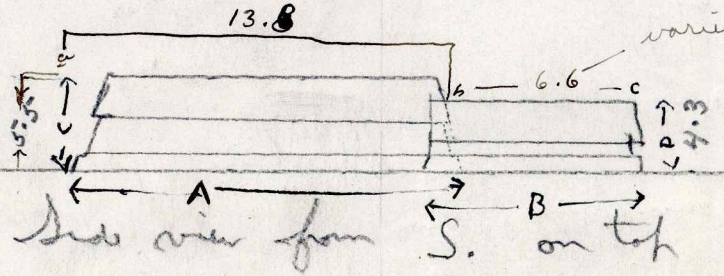
A. Ledyard Smith

A. Ledyard Smith



all dimensions in feet & tenths of feet

meas. I give is from a-b. There was no evidence that front platform was later addition - whole thing appears to have been built at one time



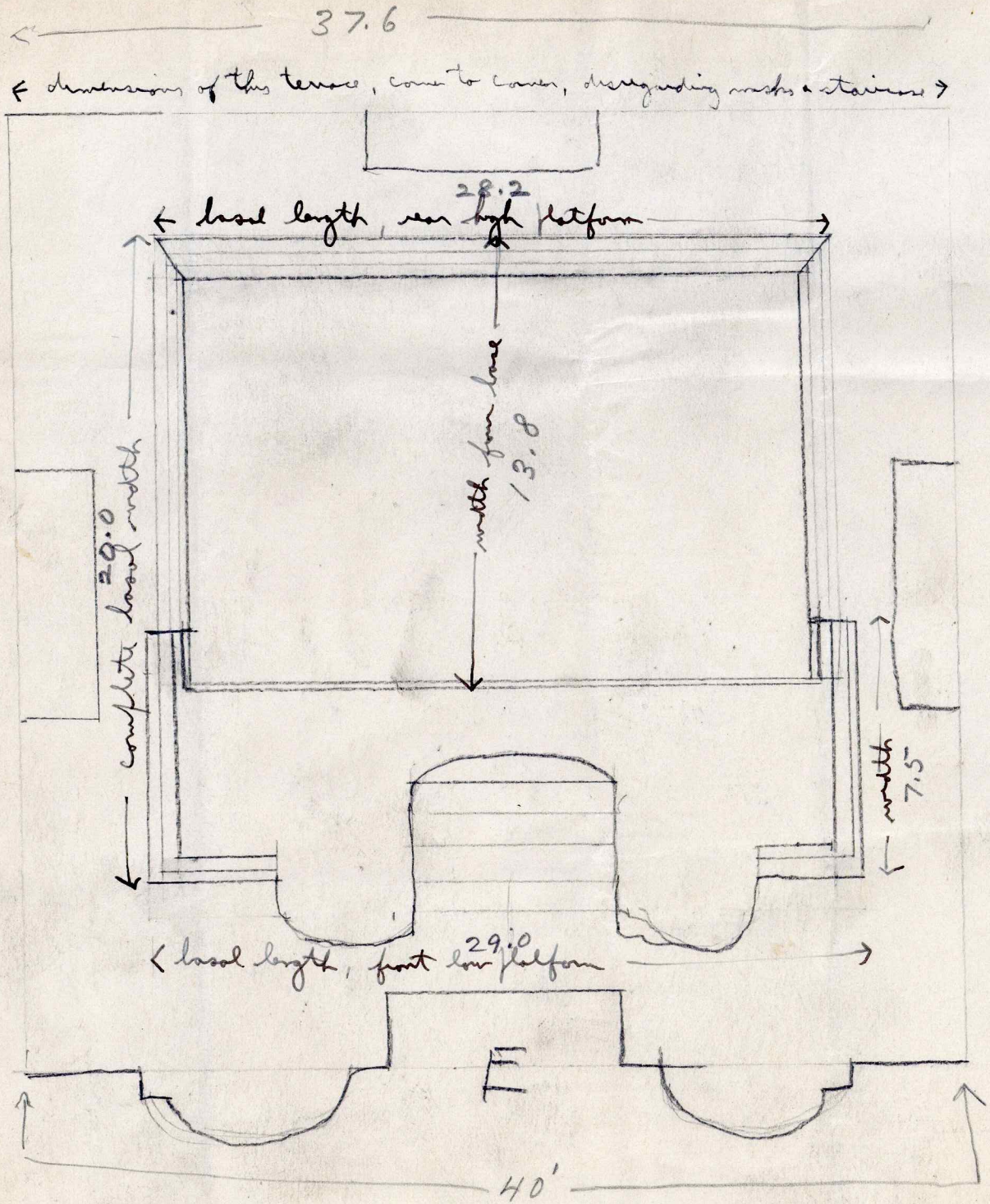
varies somewhat across the platform

A = width of higher rear platform at base to postulated original rear buried edge

B width of front platform

C height of rear platform

D height of front platform



Level of Observation ½ inch = 1 ft

Close model

3.6 3.84 6.96 - 7.2

rear section 4th 15 - 16 X 29 - 30

7.63 7.8 1.8 2.28

front " " 31.8 - 32.5 X 7.5 - 9.5

7.92 4.32 - 4.8

rear, shoulder line 33 X 18 - 20

8.76 2.16 2.76

front, line 36.5 X 9 - 11.5

3.72
99
12)148.80 (12.4 = 12'5"
12 16'
28 13 9'
24
48

Batten 1.75
24
700
350
4200 cm
16 1/2 "

7.08
40
12)28.32 0 (23.60
24
43
36
72
72

28.2
12
5640
282
40)3 38.4 (8.46
320
184
160
240

36

4.55
40
12)18200 (15.1 = 15' 1"
12
62
60
20
12

28" 3"
2' 9"
25 1/2

Rear section base

28.5 base x 13.8 + base

Top section model

Front section base

7.5 x 29.

Complete hood width 20 = 13.8
+ 7.5
21.3
− 1.3
20.00

Thompson-Ladd Pickle, Pyramid B.

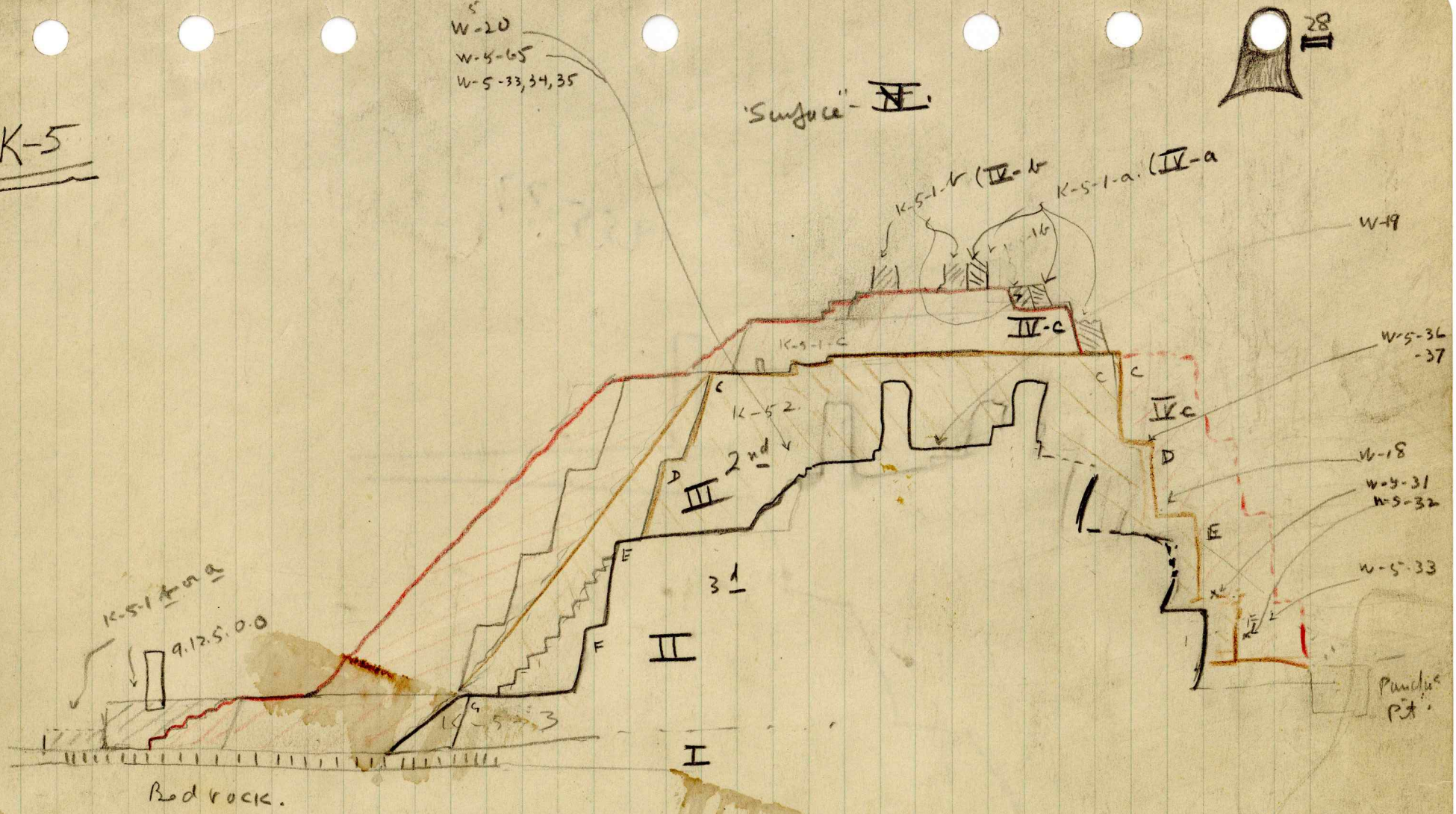
Wattle wall, stucco omit at jobs having stucco on floor, all flat roof stucco & stucco omits.

"Cover on unit size with stucco omits."

Laboratory, complex G. Wooden structure

3 ft. bent clay & sand ash, subs stucco, with inset of wood jobs on back

K-5


W-20
W-5-65
W-5-33, 34, 35
"Surface" - IV
K-5-1-b (IV-b
K-5-1-a (IV-a
K-5-1-c
W-19
W-5-36
-37
IV-c
K-5-2
2nd
III
W-18
W-5-31
W-5-32
W-5-33
3 1
K-5-1 a or a
9.12.5.0.0
II
K-5-3
I
Bedrock.
Puncha
Pit

955 ??