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PVN OP 012 Excavation Report

Edward M. Schortman
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Operation 12

The approximately 8,000m² covered by Op.12 includes eight surface-visible constructions, most of which are clustered around a patio that is open on the northwest. Structure 1, on the southwest patio flank, is one of the largest platforms in the La Sierra North Cluster and was among the seven edifices excavated during the 1988 (Strs. 1, 3, 6, 7, 15, and 12-Sub7) and 1995 field seasons (Strs. 1 and 15). Operation 12 is bordered by Op. 55, 54, 16, 36, and 31 on the east, south, southwest, west, and north, respectively; these distinctions marking fairly arbitrary divisions of continuous settlement. The terrace summit here is more-or-less flat, the land rising gradually from south to north and west to east. Excavations within Op. 12 uncovered roughly 449m², the work being directed by M. Dall, C. Eaton, S. Kane, J. Miller, and T. L. Neff in 1988, C. Gevock-Delahaye and S. Escobar supervising the investigations during 1995.

Structure 1

Structure 1, one of the largest edifices in La Sierra's North Cluster, closes off the southwestern flank of Op. 12's patio. Structure 15 is 5.35m to the south while Structure 2 in adjoining Op. 36 is 8.5m to the north. The land on which Str. 1 was built is fairly level, dropping 0.14m over a distance of 17.56m west-to-east; the north-to-south ascent is of comparable magnitude. Investigation of Str. 1 was conducted as part of Subop. 12H, 83.3m² being cleared in the course of excavations conducted from January 30 through March 29, 1995. Digging was carried down to maximum depths of 1.32m below modern ground surface outside architecture and 0.94m beneath ground level into construction fill. This work revealed a single major building phase punctuated by at least one significant renovation; the remnants of at least three earlier edifices were also noted. All work on Str. 1 was directed by C. Gevock-Delahaye.

Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.1-6	F.1	MPRECL, LCLII
2	Str. 12-Sub1	U.1	-	-	LCLII
3	-	-	S.7	-	LCL II, III
4	Str. 12-Sub2 Str. 12-Sub3	U.2 U.3	-	-	LCLII, III
5	Str. 1-1st	U.4-25, 27-30,33	-	F.2	LCL II, III?

6	Str. 1-1st	U.26,31,32, 34	-	-	LCL III, II
7	-	-	S.8,9	F.3	-

Time Span 1

Natural deposition of S.1, a fine textured, hard-compacted, chestnut brown clay containing many small lime fragments, is the first activity attested to off Str. 1's western flank. Stratum 1 dips down 0.21-0.24m towards the center of its exposed 1.06m east-west extent and was revealed to a maximum thickness of 0.43m, its base lying beyond excavation limits. Inclusion of numerous carbon flecks within S.1 may hint at a human presence in the immediate vicinity when this layer was introduced, though this is not established. The above-noted depression (F.1) in S.1's upper surface measures roughly 1.06m across east-west, has gently sloping walls, and may have been purposefully excavated prior to the deposition of overlying S.3. There is a concentration of pottery sherds within the declivity's center, their orientations corresponding to the angle of the bordering "walls." Though not entirely convincing, the form and contents of F.1 tentatively suggest that it was a pit intended for use, or recycled, as a trash receptacle.

Stratum 2, a sandy, moderately soft-compacted, tan soil, occupies a comparable stratigraphic position east of Str. 1 to S.1's situation on the west. Exposed to a maximum thickness of only 0.19m (the base was not encountered), S.2 ascends 0.1m over its revealed 0.9m east-to-west extent. Stratum 2's upper surface is 0.36m lower than that of S.1 and the two are quite distinct; clearly there is much that we do not understand about soil changes in the 15.7m separating the two earth levels. No cultural material was retrieved from S.2, though the very small portion of this layer probed during excavation precludes any definitive pronouncements concerning the presence or absence of human settlement in the area when S.2 was deposited.

Overlying both S.1 and 2 is a fine-textured, soft-compacted, tan soil (S.3) distinguished by the large amount of carbon flecks it contains along with artifacts. Overall, S.3 appears to be the remains of a midden deposited across an extensive area east, west, and, possibly, under the eventual site of Str. 1's construction. On the east, S.3's upper surface undulates slightly over the 0.9m it was uncovered, ultimately dropping a scant 0.04m east-to-west; its western counterpart dips down 0.09-0.16m near the center of its 1.06m exposure, mirroring the general form of F.1, which it covers. Stratum 3's western manifestation is as much as 0.35m above its eastern expression, suggesting, perhaps, that the ground surface during TS.1 ascended this amount over 15.7m east-to-west. Stratum 3 blankets S.1 and 2 by 0.1-0.3m.

Stratum 4, a sandy, moderately soft-compacted, medium-gray soil containing both artifacts and carbon flecks, covers S.3 on the east by 0.06-0.22m. The layer's upper surface rises 0.14m over 0.9m east-to west, running up to and under U.1 in the latter direction. Stratum 6, a fine-textured, soft-compacted, tan soil covers S.3 on the west by 0.08-0.23m. Unlike its predecessor, S.6 maintains an even upper level across the 1.06m it was exposed. Stratum 5, a lens composed of a moderately coarse-textured, moderately hard compacted, yellowish-red soil, covers S.4 and serves as the foundation for at least the eastern portion of U.1. This level pinches out between S.4 and U.1 on the west, reaching its maximum revealed thickness of 0.09m at the eastern excavation margin. Stratum 5 has a moderately high artifact density, numerous sherds being found in this level. The contents and nature of S.3-6 suggest that they were

introduced during an interval of fairly intense human occupation in the immediate area. Most likely, they represent slight variations in trash deposits that accumulated over a protracted period.

Time Span 2

Unit 1, a cobble pavement measuring at least 1m north-south by 1.7m east-west, was encountered 0.28m below the base of Str. 1-1st's basal eastern step (U.27). This construction rests on S.4 and 5, consists of a single level of unmodified cobbles (0.04-0.12m thick, depending on the stone examined) and continues to an undetermined extent beyond excavation limits and westward beneath Str. 1-1st. The nature of the building of which U.1 was a component (Str. 12-Sub1), if it was not an extramural pavement, is not known. No sign of U.1 was encountered west of Str. 1, though several large sherds were found resting on the S.6/7 interface in this area. The aforementioned junction is 0.08m above U.1 and may represent an informal living surface onto which trash accumulated during TS.2.

Time Span 3

Stratum 7, a fine-textured, moderately hard compacted, tan soil, blankets U.1 by 0.18-0.41m and S.6 by 0.13-0.16m. On the west, S.7 ascends only 0.03m over its exposed 1.96m west-to-east extent while on the east, S.7 rises 0.17m across 1.65m east-to-west. Structure 1-1st's basal western facing rests atop S.7 while its easternmost basal step (U.27) intrudes 0.14m into that level. Artifacts are found dispersed throughout S.7, though there is a tendency for some to concentrate along the S.7/8 interface on the west. Sherds, in particular, were found lying flat on, and slightly below, this junction, implying that S.7's top was the living surface exposed during Str. 1-1st's primary period of use (TS.5 and 6). Recovery of tumbled architectural debris (F.3) along with some artifacts resting on, but not protruding into, S.7 on the east confirms the view that the top of this earth level was the ground surface above which Str. 1-1st was raised and onto which materials associated with that building fell.

Time Span 4

Two apparently unconnected edifices that rest at comparable elevations, and immediately underlie Str. 1-1st architecture, were built at this time (Strs. 12-Sub2 and 12-Sub3). All that was uncovered of the former is a Z-shaped cobble wall (U.2) lying 0.05-0.06m below the base of Str. 1-1st's southeast corner. Unit 2 was uncovered for a distance of 2.45m east-west lying 0.2-0.45m south of Str. 1-1st's southern facing (U.4). Unit 2 then turns and runs 1.3m north beneath the later edifice's southeast corner, before turning east for, minimally, 0.6m. The full dimensions of Str. 12-Sub2 were not determined nor can its nature and form be reconstructed with any certainty. It appears, however, that U.2 is part of a low cobble foundation for a surface-level building. Structure 12-Sub3, represented by U.3, is an entirely different construction. Unit 3 is a circular element with a diameter of 1.4m completely filled with densely packed cobbles. This entity projects as much as 0.7m north of Str. 1-1st's northern basal facing (U.5) and apparently continues southward under U.5. Both U.2 and 3 are set well up within S.7, postdating U.1 located at the base of that earth layer. Furthermore, the little space separating the above constructions from U.4 and 5 implies that the last two elements were built soon after Strs. 12-Sub2 and 12-Sub3 were abandoned. These stratigraphic relations either

place construction of the last two edifices in a period antedating the erection of Str. 1-1st in general (TS.5) or the additions to U.4 and 5 introduced during TS.6. For simplicity's sake, we have opted for the former interpretation, though the latter is also plausible. Both U.2 and 3 are fashioned of unmodified river cobbles set in a tan mud mortar. The naturally flatter aspects of these rocks were not consistently directed outwards.

Time Span 5

By the conclusion of TS.5, Str.1-1st was a substantial platform defined on all sides by vertical cobble facings 0.26-1.23m high. On the west, three poorly preserved cobble risers ascend 0.26m, 0.36m, and 0.37m towards the summit (U.24, 25, and 14, respectively) culminating in the 0.27m-high by 0.57m-thick wall that defines the summit's western margin (U.15). The terraces backing U.24, 25, and 14 are 1.19m, 1.16m, and 0.94m wide and were most likely surfaced with earth. Only limited portions of the northern and southern basal walls (U.5 and 4) were uncovered and we are not certain how many terraces intervened between them and the summit. The relatively great height of the southern facing (U.4 rises 1.03m) suggests that this flank was delimited by a single, steep ascent. Unit 5 (0.3m high) is succeeded by U.7 (ca. 0.3m high) 0.5m to the south; presumably at least one more terrace, equivalent to U.14 on the west, intervenes between U.7 and the summit.

The situation on the east is unclear. Unit 7 appears to have been the eastern basal facing, standing a reconstructed 1.23m high. This wall corners with the second ascending terrace on the north (noted above, also U.7) but extends only 0.45m south of the eastern stairs (see below) before turning to run 1.25m west. At its western terminus, U.7 intersects U.22, this much-disturbed wall possibly marking the southern continuation of the eastern basal facing (U.22 was traced for 1.45m south of its junction with U.7 before excavation ceased). Unit 21, a 0.61m-high by 0.65m-wide wall, intersects U.7 at a point 0.2m west of the latter's southeast corner and runs 3.6m south where it joins U.4. It is unknown whether U.21 superseded U.22, replacing the latter as the southern continuation of the eastern basal facing, or if the two elements functioned together from the start as parts of a terrace system.

A 0.25m-high by 1.2-1.3m-wide terrace fronts U.7 on the east. The original length of this element is unknown as its eastern facing (U.3) seems to have been truncated on the north during renovations conducted in TS.6; U.3 projects 0.5m north of the eastern stairs, stopping 2.3m shy of U.5 in this direction. South of the staircase, U.3's original line could be traced to its junction with the southern platform facing (U.4). Two cobble surfaces (U.19 and 20) are arranged in a north-south line within the area bounded by U.3, 4, the eastern stairs (U.18), and U.21. The northern component, U.19, covers 1.5m² and is bounded on the south by a low, 0.2m-wide cobble wall (U.23). Unit 20 encompasses 1.4m² and is delimited by U.3, 4, 21, and 23. Unit 4 is 1.05m wide in this area and may have doubled as a wall foundation and shelf on U.20's southern margin. Units 19 and 20 appear to have been parts of diminutive, stone-paved enclosures (Rooms 1 and 2, respectively) separated by a low cobble foundation (U.23) but open to the east overlooking U.3. The U.19 floor is set 0.1m above the U.20 pavement. Major modifications of the eastern terrace north of the stairs during TS.6 obliterated most traces of TS.5 construction here.

The eastern steps project 1.8m east of U.3, are 3.5m wide, and consist of at least five stone-faced risers (U.27, 28, 16, 6, and the upper portion of 7). The two lowest steps (U.27 and 28) are fashioned of cut blocks, the basal stones in each element set vertically and topped by flat-

laid slabs that form parts or all of the treads. The remaining three components are built using a mixture of cobbles and faced stones, all set horizontally. Stair heights range from 0.18-0.29m while treads are 0.34-1.32m across, the second step being widest (the tread backing U.28). Save for the basal component (U.27), the treads seem to have been earthen. The fill retained by U.6 is a mixture of small cobbles set in a brown earth matrix (U.33). From the basal to the third step, the staircase is flanked by walls fashioned of cut blocks on the north and south (U.30 and 29, respectively). At the highest (westernmost 0.93m) portion of U.29 and 30, the blocks are set in four courses, vertically set stones (the basal and third rows) alternating with horizontally laid rocks (the second and fourth courses). From the third step (U.16) west to U.7 the flanking walls are built primarily of unmodified river cobbles among which are interspersed a few masonry blocks (U.17 on the north and U.18 on the south). A *Spondylus* bivalve was cached on the approximate axis of the eastern stairs (F.2). Feature 2 rested directly on the U.1 pavement 0.29m below and directly underneath the base of the bottom-most step (U.27).

Backing U.7 on the west is a 0.51m-high cobble wall (U.8) that runs the 2.6m between this construction and the eastern summit wall (U.9); U.8 abuts both U.7 and 9. The 2.6m long space delimited by U.7-9 may have been a room built on the penultimate eastern landing below the summit. Though we are not certain that U.8's base was ever encountered, excavation reached depths sufficient to indicate that the floor of said enclosure would have been at least 0.23m below U.7's base. Either the floor of the putative compartment was sunk below terrace level or U.8 is a fill retaining wall designed to consolidate the platform's earth-and-stone hearting (included in U.33). Though the evidence is far from clear, the second interpretation makes the most sense at present. In that case, the surface backing U.7 would have been equal to the top of U.8.

Unit 9, marking the eastern summit margin, rises 0.55m above the putative surface of the eastern landing and measures 1.28m across. Unit 13 intersects U.9 and runs for a reconstructed 3.2m westward where it joins U.15, the western summit step-up. Standing 0.55m high, U.13 likely served as a foundation separating a southern enclosure (Room 3), defined by U.9, 11, 13, and 15, from what was probably at least one more compartment on the north (the southern enclosure was completely cleared while no excavation was conducted north of U.13). Room 3 covers 3x3.2m (measured across the center) and has a 1.9m-long (east-west) by 0.3m deep indentation set into the approximate center of U.11, the southern foundation. Most of the floor (2.3x2.5m) is covered with a cobble pavement (U.12) that stops 0.3m shy of U.15 and 0.2-0.7m short of U.11; the latter areas are surfaced with dirt. A 0.4-0.5m-wide by 0.42m-high stone-faced and -surfaced L-shaped bench (U.10) takes up the entire eastern wall (U.9) of the room (i.e., 2.7m long) and projects 0.7m westward along the northern foundation (U.13). As reconstructed, the Room 3 floor would have been ca. 0.85m below the top of U.9 and 0.36m below that of U.15. Stepping down into the enclosure from the east would, therefore, have been quite a challenge; possibly the bench, U.10, 0.43m lower than U.9's top, acted as a step facilitating passage.

Structure 1-1st, by the conclusion of TS.5, was a platform measuring 10.25x12.35m, rising 1.83m, and aligned roughly 79 degrees. The western flank was ascended by three stone-faced terraces, the north by at least two risers, while the south may have been faced by a single vertical ascent. Renovations to the eastern facade during TS.6 render all reconstructions of architectural form on this flank suspect. As best we can discern, the eastern facing (U.7) jogs westward for approximately 1.25m before heading south to intersect the southern basal wall. This step-back was shortened to 0.2m by the construction of U.21 which may have replaced U.22 as the southward continuation of the eastern facing. A 1.2-1.3m-wide, low, stone-faced terrace

fronts Str. 1-1st on the east. This construction supports two diminutive (1.4m² and 1.5m²), stone-floored cubicles, arranged in a north-south line, and separated from each other by a cobble footing. Both compartments are open to the east. A 1.25m-long by, roughly, 1.05m-wide shelf bounds the southernmost compartment (Room 2) on the south. Access to the summit was achieved by ascending a 3.5m-wide staircase that projects 1.8m east of the aforementioned terrace. A cache made up of a Spondylus bivalve was interred beneath the approximate center of the eastern stairs. The five stone-faced risers comprising the staircase give way, in turn, to a 2.6m-wide, earthen-floored landing. The summit lies west of this landing and contains, at least, two rooms the southern of which (Room 3) covers 9.1m². An L-shaped bench measuring 0.4-0.5m wide by 0.42m high stretches for 2.7m along Room 3's eastern foundation and projects 0.7m westward along the northern footing. Approximately 63% of Room 3 is paved with cobbles, though a narrow area of dirt (0.2-0.7m wide) borders the enclosure's western and southern margins.

Most extant construction is fashioned of unmodified river cobbles set so that their naturally flatter aspects are oriented outwards. As noted earlier, however, the walls bordering the eastern staircase where it protrudes beyond the limits of the eastern terrace (U.3) are made exclusively of masonry blocks set in alternating courses of vertically and horizontally laid stones (U.29 and 30). The same construction material and style characterizes the two lowest eastern risers (U.27 and 28). Horizontally laid, cut blocks are also found mixed with cobbles in U.9, 10, 11, 16, 17, and 24, though in these cases masonry is a minor building constituent. There is a tendency to set the larger cobbles in horizontal courses, filling in gaps around and between these rocks with chinking stones. In those elements fashioned exclusively with cut blocks, the stones are placed in clear courses and chinking pebbles are rare to absent. A brown mud mortar is used as a binding agent in TS.5 construction.

Time Span 6

During this interval, Str. 1-1st's eastern terrace was extended 1.7-1.9m eastward bringing it in line with the basal eastern stair (U.27). This feat was accomplished by the extension of U.4 and 5 beyond where they originally joined (or are presumed to have joined) the earlier eastern terrace facing (U.3). The addition is clearest on the south where a marked change in construction corresponds to the intersection of U.3 and 4. No comparable architectural disjunction was noted in U.5, though modification of the U.3 terrace north of the stairs seems to have been more severe than to the south and any construction shifts may have been obscured during the renovation process. Unit 32, a 0.3m-high by 0.6-0.7m-wide stone facing, replaces U.3 as the eastern terrace riser. Rooms 1 and 2 atop the eastern terrace survived the renovation intact. Immediately east of Room 2 is a cobble surface encompassing 1.3x1.2m (U.31) that is bounded by U.4 and 32 on the south and east, respectively. Unit 4 retains its considerable width (1.15m across) where it borders U.31, suggesting that the U.20/31 floor was delimited on the south by a construction that doubled as a shelf and wall foundation. The 1.2x1.35m space adjoining U.31 on the north and intervening between Room 1 and U.32 is surfaced with earth. The U.23 foundation that separates Rooms 1 and 2 was not extended eastward during TS.6, suggesting that these cubicles were not enlarged now. They did overlook, however, a 1.8-1.85m-wide expanse of the eastern terrace (including the width of U.32). The southern half of this expanse was paved with cobbles while the segment adjoining the eastern stairs was left as earth. The significance of this distinction remains unknown.

North of the stairs, an extensive L-shaped cobble construction (U.26) takes up most of the terrace surface. The principal stem of this figure runs 2.95m west from U.32 back to U.7 and is 1.7m wide (measured across the center, extending to U.5 on the north). The “foot” of the L intersects the eastern stair at U.17 on the south and is 0.85m wide by 1m long north-south. The unpaved area surrounded by U.26, 30, and 32 encompasses 1.15x1.45m. There is no clear evidence that U.26 was enclosed by footings; rather, the terrace north of the steps appears to have been open on the north and east. Unit 26 may be a bench separated from the eastern staircase by a small earthen-floored space.

Turning to the summit, it may well be that Room 3's floor level was elevated approximately 0.45m during TS.6. Evidence suggesting this interpretation consists of a dense packing of flat-laid cobbles set in a brown earth matrix (U.34) that buries the U.10 bench up to its summit and covers the U.12 floor. It is hard to account for the disposition and density of these rocks through such processes as post-abandonment collapse. Instead, U.34 appears to be a purposefully laid fill that not only raised Room 3's floor but dramatically changed the way in which interior space was used; no bench replaced U.10 in the enclosure's latest-known version.

Structure 1-1st retained its earlier height and orientation, though it now measured 10.25x14.15m. The dimensions of Room 3 on the summit were unchanged, though by raising the floor 0.45m, the builders removed all signs of the earlier L-shaped bench. Insofar as the latter construction played an integral role in the activities conducted within the summit compartment, its eradication in TS.6 implies a concomitant change in the functions the enclosure now served. The most significant changes were visited on the eastern terrace which was expanded approximately 1.8m eastward. This addition brought the terrace in line with the eastern steps, the latter no longer projecting from the platform's basal outline. The eastern terrace still supported two stone-paved cubicles south of the stairs (Rooms 1 and 2), though these now overlooked an earthen and cobble-paved surface, respectively. What may have been a 1.05-1.15m-wide by 2.35m-long stone-faced and -surfaced bench borders the terrace on the south. North of the steps an extensive L-shaped cobble floor covers ca. 5.9m² and is open to the north and east. The latter construction may have been a low bench facing south over an earthen-floored space (1.7m²) towards the eastern stairs. All architecture assigned to TS.6 is made of unmodified river cobbles placed so that their naturally flatter faces are directed outwards. A few cut blocks are found in U.32 but cobbles predominate in TS.6 architecture. The walls (U.32, U.4- and 5-east extensions) dating to this span are not high enough to recognize horizontal coursing. All rocks are set in a brown mud mortar.

Time Span 7

Following abandonment, Str. 1-1st was blanketed by the natural deposition of S.8 and 9, moderately coarse-textured, hard compacted soils that are distinguished primarily by overlying S.9's darker brown hue and greater concentration of small roots. Together, S.8 and 9 accumulated to a maximum depth of 0.58m and covered all but the uppermost stones of TS.5 and 6 construction. Embedded within these earth levels is a variably dense concentration of stones tumbled from final phase architecture (F.3). Feature 3 is very dense where it overlies Str. 1-1st; traces of this debris are found for at least 1.5m east and 1.29m west of the platform. The concentration of debris declines rapidly in both directions.

Structure 6

Lying 1.7m north of Str. 7 and 29m southeast of Str. 1, Str. 6 closes off the southeast corner of the Op. 12 patio. The terrain surrounding Str. 6 is nearly flat, the ground rising no more than 0.02m over 9.5m southeast-to-northwest. Excavations here, conducted within Subops. 12B, C, and H, were restricted to a 1m-wide trench that cut completely across the building southeast-to-northwest, with clearing pursued on the northwest to expose the platform's northern and western basal corners. A total of ca. 21.5m² was dug in the course of this work, excavations being carried down to maximum depths of 1.7m below modern ground surface adjacent to construction on the northwest and 0.32m beneath ground level into architectural fill. Investigations revealed a complex stratigraphic sequence associated with the successive raising and abandonment of Str. 6 along with at least two edifices not visible on ground surface (Strs. 12-Sub5 and 12-Sub6). All work was overseen by S. Kane, P. Whooley, and L. T. Neff during the 1988 field season.

Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.1, 2	-	LCL I, II
2	Str. 6-2nd	U.1	-	-	LCL II
3	-	-	S.2, 3	-	LCL II
4	Str. 12-Sub5 Str. 12-Sub6	U.2 U.3	-	-	LCL II
5	-	-	S.3-8,11	-	LCL II
6	Str. 6-1st	U.4-9,11,12	-	-	LCL II?
7	Str. 6-1st	U.10	S.9	-	LCL II, III
8	-	-	S.10-12	F.1	-

Time Span 1

The first activity identified in the Str. 6 excavations is the deposition of S.1 and portions of S.2. The former, a fine-textured, very hard-compacted brown soil with a few included pebbles, was exposed to a maximum depth of 0.23m (the base lies beyond excavation limits). Stratum 1 rises 0.03-0.12m over 0.6m northwest-to-southeast towards the northwestern basal facing of Str. 6-2nd (U.1). The situation is somewhat different off the building's southwest side. Here S.1's deposition is interrupted by the introduction of S.2, a 0.02-0.03m-thick lens of fine-textured, hard-compacted, gray ash that underlies U.1 by 0.02-0.6m and pinches out 0.54m southwest of that construction. Following this break, deposition of S.1 is resumed, the soil

eventually accumulating up to 0.06m above S.2 below U.1's southwestern side. Stratum 1 here drops 0.07m over 0.54m southwest-to-northeast. A lens of moderately coarse-textured, soft-compacted, brown soil containing some pebbles is found embedded in S.1, 0.01m below the S.1/2 interface and 0.11m southwest of U.1. This lens, essentially identical to S.3 laid down in TS.3, is 0.28m long southwest-northeast and has a maximum thickness of 0.05m in its approximate center. Stratum 1 may have been deposited by natural means, though S.2 appears to be part of a sheet midden whose point(s) of origin lies somewhere in the immediate vicinity. Clearly, there was a human presence close by prior to the construction of Str. 6-2nd.

Time Span 2

Structure 6-2nd is represented solely by its northwest basal facing and first step-up towards the summit (all included in U.1). The former stands 0.35m high, whereas the step up, located 0.55m to the southeast, is 0.2m tall. Structure 6-1st's northwestern basal wall (U.4) rests directly on U.1 and it is possible that some of the latter's original height was truncated during the later building effort. There may have been at least one more, ca. 0.17m-high, ascent intervening between the first step-up and Str. 6-2nd's summit. Said putative riser is located 1.17m southeast of the U.1 northwest basal facing. Unit 1 steps in (to the northeast) 0.65m on the southwest, continuing thereafter for an undetermined distance to the southeast; the equivalent point on the northeast was not revealed so we cannot ascertain whether there is a comparable indentation here as well. Both U.1's lower and upper portions are paved with cobbles (also included in U.1).

Structure 6-2nd, therefore, is a stone-faced platform that stood at least 0.72m high and that was mounted by, minimally, two terraces, 0.2m and 0.17m high by 0.55m and 0.6m wide on the northwest. The edifice measures at least 4.8m northeast-southwest (the western corner was revealed, its northern counterpart obscured under later construction) and is aligned roughly 63 degrees. All facings and pavements are fashioned using unmodified river cobbles the naturally flatter aspects of which are directed outwards. The rocks are set in clear horizontal courses; larger stones are packed round with smaller cobbles that are not as diminutive as most chinking stones at Late and Terminal classic La Sierra. All rocks are set in a fine-textured brown mud mortar. The river-worn stones incorporated in U.1 were apparently selected for their distinctive blue and white colors, a predilection not manifest in later Str. 6 architecture. Rock sizes range from 0.04x0.06m to 0.23x0.25m.

Time Span 3

Continued deposition of S.2 covered most of U.1's northwestern margin, the ash lapping up and over the basal facing in some cases (but not accumulating to depths of more than 0.02m over the stones). Stratum 2 was not encountered above U.1 and S.1 on Str. 6-2nd's southwestern flank, suggesting that the ash derived from a localized source and was not broadcast on all sides of the edifice. One possible origin for this debris is Str. 6-2nd itself, S.2 sloping down 0.17-0.22m over 0.6m southeast-to-northwest away from U.1. Stratum 2, therefore, may result from a relatively brief interval during which Str. 6-2nd was still occupied but the lower terrace was no longer being kept clean. Subsequently, all of U.1 on the northwest was blanketed by S.3, a moderately coarse-textured, brown to dark brown soil that increases in

compactness with depth. Approximately 0.1m of S.3 was laid down in TS.3 after which there appears to have been a break in the depositional episode coincident with the construction and occupation of Strs. 12-Sub5 and 12-Sub6. Recovery of artifacts within S.3 points to human occupation in the area while this layer was being introduced.

Time Span 4

Structures 12-Sub5 and 12-Sub6 are represented by two seemingly unrelated cobble lines that were exposed off the southwest and northeast side of Str. 6-1st, ca. 6m apart. Unit 2 (Str. 12-Sub5) was exposed for 1.8m over which distance it is oriented approximately 144 degrees. With its base 0.13m above that of U.1, resting within S.3, U.2 clearly postdates Str. 6-2nd; the latter is a scant 0.1m to the northeast at its closest point. Unit 2 is 0.27m high. Unit 3 was traced for 2.4m from where it appears beneath U.8 of Str. 12-Sub7 on the northwest to excavation limits on the southeast. Unit 3 is 0.4-0.55m northeast of Str. 6-1st and is aligned ca. 145 degrees. It appears that U.3 occupies a comparable stratigraphic position to U.2, intermediate in time between Strs. 6-2nd and 6-1st. The full widths of neither wall were revealed. Most likely, Strs. 12-Sub5 and 12-Sub6 were surface level edifices delimited by cobble footings (U.2 and 3). Both walls were made of unmodified river cobbles placed in a single row and set in a brown mud mortar.

Time Span 5

Following abandonment of Strs. 12-Sub5 and 12-Sub6, deposition of S.3 resumed, eventually reaching a maximum thickness of 0.32m. Off Str. 6-1st's southwest flank, S.3 was subsequently covered by 0.02-0.07m of S.4, a fine-textured, soft-compacted, brown soil containing large quantities of bajareque, and 0.07-0.12m of S.5, a coarse-textured, hard-compacted tan soil incorporating numerous pebbles. Approximately 0.26m of U.1 may have remained exposed above S.5. The situation is somewhat different on the northwest. Here, S.4 appears as discontinuously distributed lenses that protrude 0.02-0.11m into S.3. Stratum 5 is not revealed everywhere on this flank; it covers S.3 and 4 by 0.02-0.21m near Str. 6-1st's western corner but is not identified further north along Str. 6-1st's northwestern facade nearer the northern exposed terminus of U.1. Here, S.3 and 4 are covered, for the most part, by 0.04-0.14m of S.7, a fine-textured, very hard-compacted brown soil. Stratum 7 pinches out 0.67m short (northwest) of Str. 6-1st's northwestern basal facing (U.4). The distance separating U.4 and S.7 is filled by S.3. Strata 6 and 8 are diminutive lenses that protrude to varying depths into S. 5 (S.6) and 7 (S.8). Stratum 8 is 0.85m northwest of U.4 and consists of a very hard-compacted, light tan-to-yellow soil with many included pebbles. This lens is 0.35m long and extends as much as 0.1m into S.7. Stratum 6 is a fine-textured, soft-compacted, gray ash layer the color of which darkens with increasing depth. This level stops 0.31m short (northwest) of U.10 and extends as much as 0.18m into underlying S.5. By the conclusion of TS.5, U.2 and, most likely, U.3 were buried and all but the uppermost 0.16m of U.1 on the southwest was covered.

The considerable quantities of cultural material embedded within these layers (especially S. 4 and 6) suggest, at the very least, a significant human occupation in the immediate vicinity while S.3-8 were being laid down. The material in question may have been the product of gradual debris accumulation on and around an abandoned edifice. Alternatively, S.3-8 might

represent purposefully deposited fill introduced to raise the living surface northwest of Str. 6 prior to initiating construction of the building's final version. Though we cannot distinguish between these possibilities with the data in hand, signs of efforts to elevate patio surfaces, often involving the introduction of large quantities of ash, were recorded in Op.31 to the north (Strs. 114, 115, and 116). It is plausible, though not established, therefore, that a comparable program of landscape modification occurred off Str. 6-1st's northwestern flank in TS.5.

No sign of such industry is attested to on the southeastern side. Here, at least 0.17m of S.11, a moderately coarse-textured, moderately hard-compacted brown soil, underlies Str. 6-1st architecture (U.9); S.11's base was not found off this platform flank. On the southwest and northwest, S.11 covers final-phase architecture, suggesting slightly different depositional histories for the two sides of Str. 6-1st, located a scant 7.85m apart.

Time Span 6

Structure 6-1st is a platform ascended by two low terraces on the southeast (U.8 and 9) but faced by steep ascents on the northwest and southwest (U.4; the northeastern flank was not sufficiently cleared to establish its form). The southeastern terraces are delimited by stone-faced risers 0.16m- (U.9) and 0.32m- (U.8) tall backed by treads surfaced with a mixture of earth and cobbles measuring 0.54m and 1.53m across. The second ascending terrace, U.8, ends at the low (0.07m high) stone step-up (U.7) to the summit. Unit 7 marks the southeastern edge of Room 1. This enclosure is paved over its exposed extent by a mixture of cobbles (primarily) and cut blocks set in earth (U.11) and covers 2.24m northwest-southeast (its northeast-southwest dimension was not revealed). Unit 6, a 0.24m-high cobble wall, defines Room 1's northwestern margin. Unit 5, located 0.8m northwest of U.6, was originally thought to be a ca. 0.4m-high riser for a terrace on Str. 6-1st's northwestern side. Reexamination of field records indicates, however, that U.5 and 6 are the northwestern and southeastern flanks of a single construction measuring 1.64m across. The naturally flatter aspects of U.6 are directed southeastward into Room 1 while the comparable vertical facets of U.5 look to the northwest. Between the two are stones set in a brown, moderately coarse-textured matrix whose flat-laid appearance contrasts markedly with the tilting attitudes of tumbled architectural debris included in F.1 (see below). Said rocks, therefore, are likely fill (U.12) contained by U.5 and 6. The upshot of this discussion is that Room 1 is bounded on the northwest by an unusually wide architectural element that most likely served as a bench (U.5, 6, and 12).

Structure 6-1st's northwestern facade is defined by U.4. Set directly on top of the elevated southeastern portion of U.1, U.4 ascends ca. 0.65m above that earlier entity and 0.62m above S.3 on the northwest. Unit 4 is equally tall where it delimits Str. 6-1st's southwestern flank but here it is set on a portion of U.1 that was still exposed 0.26m above S.5. This would have made the platform's southwestern facade slightly higher than its northwestern counterpart.

By the conclusion of TS.6, Str. 6-1st stood 0.5-0.65m high, measured 5x6.9m, and was aligned roughly 60 degrees. The building was ascended on the southeast by two low terraces that provided easy access to Room 1. The latter covers 2.24m northwest-southeast, is paved with stones, and bounded by a 0.24m-high, 1.64m-wide stone faced bench on the northwest. The northwestern and southwestern platform facings are defined by steep, vertical ascents set onto U.1. If the northeastern flank is similar to its northwestern and southwestern counterparts, then it would appear that Str. 6-1st's summit was reached from the southeast over the aforementioned terraces. This interpretation matches with the low summit step-up (U.7) on the

southeast that may have served as a threshold marking the entryway into Room 1; the northwestern bench probably blocked access to the enclosure from that side. All walls and floors are built, primarily, of unmodified river cobbles whose naturally flatter faces are directed outwards. In the steep northwestern and southwestern facings (U.4), the larger stones are placed in clear horizontal courses packed round with chinking stones. The much lower terraces and summit constructions (U.5-7) lack coursing. All rocks are bound together using a moderately coarse-textured, brown mud mortar.

Time Span 7

During this interval, Str. 6-1st was expanded 0.75 to 1.15m northwestward by the addition of U.10. Unit 10 is a 0.29m-high (above S.3 and 5) terrace appended onto U.4. Fully 0.29m of U.4 still rose above this addition. The introduction of U.10, therefore, created a 0.75-1.15m-wide by 0.29m-high terrace on the northwest, U.4 now marking the 0.29m-high step-up to the platform's summit. Structure 6-1st, during TS.7, thus encompassed 5x7.8m (the latter figure derived from a measurement across the building's center) but was otherwise unchanged. Like its predecessors, U.10 was fashioned using unmodified river cobbles the naturally flatter faces of which are directed outwards. The larger rocks are set in two horizontal courses that are packed round and underlain by chinking stones. A moderately coarse-textured brown earth mortar was used as a binding agent.

Stratum 9, a soft-compacted, dark brown soil mixed with ash and pebbles, is exposed in two discontinuous segments. One of its manifestations is as a 0.37m-long lens that intrudes 0.07m (maximum) into S.3, 0.1m northwest of U.4. The layer appears again off Str. 6-1st's southwestern flank where it overlies S.5 by 0.06-0.11m. The large quantity of ceramics recovered off the southwestern side and the ash mixed into the northwestern lens suggest that S.9 is the product of cultural activity; the stratigraphic position of both manifestations, near U.4's base tentatively indicates that the debris was generated by Str. 6-1st's occupants. Most likely, S.9-southwest was laid down near the end of the edifice's occupation, its included detritus not cleaned away prior to abandonment. Stratum 9-northwest, however, is buried by U.10 and so relates to events transpiring in TS.6 or just at the beginning of TS.7.

Time Span 8

Following Str. 6-1st's abandonment, the building was largely covered by the natural deposition of S.10-12. Stratum 10 is a moderately coarse-textured, moderately hard-compacted, tan soil that accumulated to depths of 0.14-0.18m over S.5 and 0.14-0.28m above S.7 off Str. 6-1st's northwestern flank. On the southwest, S.10 blankets S.9 by 0.09-0.18m. Stratum 10 on the northwest is increasingly orange near its base, this slight color shift apparently resulting from the inclusion of heavily eroded bajareque fragments. Carbon flecks and concentrations are also prevalent near the layer's interface with underlying S.5 and 7. Both carbon and bajareque probably represent cultural material eroding off Str. 6-1st early in the building's post-abandonment phase. No sign of S.10 was recorded off the platform's southeastern flank. Subsequently, S.10 and almost all final-phase architecture was buried by the introduction of S.11 and 12. These earth layers consist of moderately coarse-textured, moderately hard-compacted soils that are distinguished by the darker brown hue of overlying S.12 and the greater density of small roots in the latter. Strata 11 and 12 collected to total depths of 0.37-0.77m above S.10,

being deepest (0.67-0.77m) off Str. 6-1st's southwestern side. On the southeast, S.11 and 12 accumulate to 0.43-0.48m above the base of final-phase architecture (U.9). Architectural debris (F.1) fallen from Str. 6-1st is found in moderate densities across the building and extending for 1.44m southeast of Str. 6-1st and in light concentrations for 0.5m northwest of the edifice. Feature 1 rocks are more densely packed across the 0.72m exposed southwest of Str. 6-1st. Here, the architectural debris sits well up within S.11, 0.24m above the S.10/11 interface. This pattern suggests that the collapse of the southwestern facade occurred after S.10 and much of S.11 had already been laid down, perhaps following a relatively protracted interval. Feature 1 is found throughout S.11 on the southeast, down to the base of construction, and on the northwest, though it does not often intrude into S.10 in the latter area. The significance of this apparent differential rate of structure deterioration is not clear.

Structures 3 and 12-Sub7

A fragment of basal wall pertaining to a surface-invisible building was encountered beneath the more-or-less level patio surface immediately northwest of Str. 6 in the trench that cut across the latter edifice. Thinking that we had encountered a small construction intruded into the Op. 12 patio, we pursued the aforementioned trench northwestward in an effort to define the limits of the newly discovered building. Conundrum followed enigma as the work progressed and we found ourselves clearing more and more of the seemingly "empty" patio to make sense of each new unit that was exposed. Finally, after excavating 224m² (investigations pursued within a continuation of Subop. 12B) we were able to piece together a tolerably coherent account of building activities that spanned three construction phases, three structures undetected prior to excavation, and the western staircase of Str. 3 on the patio's eastern margin. Ultimately all four of these buildings coalesced into a single interconnected set of constructions that filled most of the Op. 12 patio. We had not reached the limits of linked architecture by the conclusion of the 1988 field season and it may well be that the entire patio was taken up with low but extensive platforms and related architectural elements. Digging was carried down to maximum depths of 1.32m below modern ground surface outside construction on the southeast (between Str.12-Sub7 and Str. 6) and 0.74m beneath ground level into architectural fill. Excavations were overseen by a wide array of people during the 1988 field season, M. Dall, T. L. Neff, E. Schortman, and P. Urban taking on most of the responsibility.

Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.1-8	-	LCLI, II
2	Str.12-Sub7-3rd	U.1-8	-	-	LCLII
3	-	-	S.10	-	LCLII
4	Str. 12-Sub7-2ndB	U.8-12,37	-	-	LCLII

	Str. 12-Sub7-2ndA	U.18-22	-	-	
5	Str.12-Sub7-1stB	U.13,14, 38,39	-	-	LCLII
6	Str. 12-Sub7-1stA Str.12-Sub7-1stC	U.23-26 U.15-17	-	-	LCLII
7	Str. 12-Sub7-1stB Str.12-Sub7-1stA Str. 3-1st	U.28-30 U.27,36 U.31-34	-	-	LCLII, III
8	-	-	S.10-12	F.1	-

Note: Because the three surface-invisible buildings uncovered in Subop. 12B northwest of Str. 6 were eventually linked into a single edifice, they are all glossed as Str.12-Sub7. To facilitate outlining their respective construction sequences, each member of the triad is designated by a letter (A, B, and C) following the structure number.

Time Span 1

Strata 1-8 are described under TS.1-5 of Str. 6. Suffice it to say here that no signs of construction contemporary with Strs. 6-2nd, 12-Sub5, and 12-Sub6 were encountered in the excavated segments of the patio.

Time Span 2

Discontinuous segments of Str. 12-Sub7-3rd were revealed in probes dug beneath the summit of its successors, Strs. 12-Sub7-2ndB and 12-Sub7-1stB. Based on these findings, the building appears to have been a platform bounded on all sides by basal cobble walls (U.1-4) that rise ca. 0.25-0.39m to the summit in a single ascent. Cobble foundations are found atop the earthen summit (U.5-7). Units 5 and 6 are L-shaped cobble lines that barely protrude (ca. 0.07m high) above the summit surface and are located 1.2-1.4m back (north) from the southeastern basal facing (U.4). Roughly 0.45m of U.6's northwest-to-southeast running segment was uncovered, the element then turning a right angle and continuing at least 0.5m to the northeast. Unit 5 is 0.65m northeast of U.6 and consists of two components; a, minimally, 0.5m-long line of rocks oriented southwest-northeast that corners on the northeast with a segment that runs, at least, 0.7m to the southeast. Unit 7 is a U-shaped cobble foundation open on the northwest. The arms of this entity are 0.5-0.65m wide and 1m (southwest), 2.1m (southeast), and 0.8m long (northeast). Unit 7 may have defined a room, or portion of a room, that covered minimally 1x1.1m. The architectural significance of U.5 and 6 is eminently obscure, though they may also be remnants of footings.

Structure 12-Sub7-3rd is a ca. 0.39m-high platform that encompasses roughly 5.3x5.3m (measured across the center) and is aligned approximately 323 degrees. The earthen summit supported a superstructure of uncertain form. Most likely the rooms in this building, one of which covers at least 1.1m², were delimited by low cobble foundations. Facings and footings

were made of unmodified river cobbles set in one to two horizontal courses packed round and underlain by chinking stones. The builders showed a predilection for choosing stones that are dark blue in color. The naturally flatter aspects of rocks are oriented outwards. All stones are set in a brown mud mortar. Based on stratigraphic relations observed in the 0.85-1.83m separating Strs. 6 and 12-Sub7-3rd, it seems that the latter was raised at about the same time as Str. 6-1st; its erection and use coeval with Str. 6's TS.6 and 7.

Time Span 3

Stratum 10 is described under Str. 6 within TS.8. It is unclear how much of S.10 was laid down during this interval. Deposition of at least a portion of the level during TS.3 is indicated by its identification underlying later construction to the northwest (e.g., beneath U.18 and 38). If the entirety of S.10 was introduced during TS.3, it would have completely covered Str. 12-Sub7-3rd and most, if not all, of Str. 6-1st's northwestern terrace (U.10). There is no strong reason to think that the latter was buried at this time, though Str. 12-Sub7-3rd may have been blanketed by this soil level. Subsequent architecture pertaining to Strs. 12-Sub7-2ndB and 12-Sub7-1stB, rests on S.10 above Str. 12-Sub7-3rd. Such a relationship implies that S.10 was laid over Str. 12-Sub7-3rd after TS.2 and prior to TS.4. Whether S.10 was introduced solely by natural means or was part of a fill unit intended to raise the Op.12 living surface is unclear.

Time Span 4

Structure 12-Sub7-2ndB was raised directly on top of Str. 12-Sub7-3rd, though it does not completely cover its predecessor (segments of Str. 12-Sub7-3rd's basal facings continued to protrude). These projections contribute to the notion that part of Str. 12-Sub7-3rd was obscured beneath S.10 prior to Str. 12-Sub7-2ndB's construction. The latter is a roughly rectangular platform ascended on each side by a single basal wall 0.21-0.31m high (U.8-11). The west, east, and south platform corners join at more-or-less right angles. The north junction, however, is entirely different. The northeastern facing (U.9) steps out 0.7m to the northeast 2.8m northwest of its intersection with U.8, the southeastern basal wall. Unit 9 then continues northwestward for 1.35m before assuming a radically different orientation, running at a steep northwest-southeast alignment for 2m before joining U.10, the northwestern facing. The reason for this change in direction is not obvious. Structure 12-Sub7-2ndB may have been built to fit in and amongst pre-existing edifices, its northern corner modified from rectilinear as an accommodation to extant architecture. Excavations were not pursued to any great degree north and east of Str. 12-Sub7-2ndB so we cannot affirm the existence of such putative earlier buildings. It should be noted, however, that the slanting portion of U.9 roughly parallels Str. 3-1st's staircase (U.31-34, see below); the two elements may have been mutually aligned to define an eastern passageway to Str. 12-Sub7. The only sign of superstructure construction is U.12, an L-shaped cobble line, flush with the earthen summit surface, that measures 0.65m (northwestern segment) by 1.05m (southwestern portion). As was the case with U.5 and 6 on Str. 12-Sub7-3rd, U.12 may well be the remnants of foundations that originally delimited a summit enclosure. The fill enclosed by U.8-11 is a moderately coarse-textured, hard-compacted, tan soil incorporating a few rocks (U.37).

Structure 12-Sub7-2ndB, therefore, is a 0.21-0.31m-high, stone-faced, earth-and-stone-filled platform that encompasses 5x8.2m (excluding the projection at the northern corner) and is

aligned roughly 61 degrees. The earthen summit is largely featureless, though fragments of what may have been stone foundations delimiting a room are located 1.45m southeast of and 3.2m southwest of the northwestern and northeastern basal walls (U.10 and 9, respectively).

Structure 12-Sub7-2ndA is a platform located 3.9m northwest of Str. 12-Sub7-2ndB. The former is bounded by a single 0.35-0.45m high basal wall on each flank (U.18-21; only the northwestern and southeastern ends of the southwestern basal facing [U.21] were uncovered leaving the bulk of this element unexcavated). The earthen-floored summit is featureless. A 0.2m-wide, low cobble wall (U.22) extends at least 0.8m northwest from the platform's northwestern facing (U.19). Unit 22 intersects U.19 at a point 0.9m southwest of the platform's northern corner and may have been the foundation for a surface-level building that originally adjoined Str. 12-Sub7-2ndA. Unit 38, a 0.45m-high cobble wall found 0.7m southwest from U.19, might be the back of an earlier version of the northeast facing (later replaced by U.19).

Overall, Str. 12-Sub7-2ndA is a 0.35-0.45m-high platform that covers 5.2x5.8m and is aligned approximately 336 degrees. No signs of a superstructure survive atop the earthen summit though a surface-level building may have been appended to the platform's northwestern facing. Structure 12-Sub7-2ndA most likely achieved its final form in several stages as suggested by the identification of a possible earlier version of the northeast basal wall.

Attribution of contemporaneity to Strs. 12-Sub7-2ndA and 12-Sub7-2ndB is tentative, based mostly on their subsequent expansion and coalescence into a single edifice. We cannot be certain that these two buildings were raised simultaneously, only that they both served as nodes for later construction whose enlargement was roughly coeval.

All walls and foundations on both Strs. 12-Sub7-2ndA and 12-Sub7-2ndB are made of river cobbles the naturally flatter aspects of which are oriented outwards. Coursing is variably attested to in basal facings, being most clearly represented in U.8, 18, and 20. Chinking stones are arranged around the larger rocks and all cobbles are set in a brown mud mortar.

Time Span 5

Structure 12-Sub7-B was enlarged considerably on the southwest and northwest during this interval through the raising of U.13 and 14. These 0.21-0.31m-high basal walls replaced and encased U.11 and 10, sufficiently modifying the building's size to warrant designation of a new construction phase (Str. 12-Sub7-1stB). Units 8 and 9 continue to define the platform's northeastern and southeastern flanks. Two rectilinear constructions defined by 0.25m-high cobble walls were created in the newly expanded northwestern summit. These entities are set against U.10 in a northeast-southwest line, separated by 0.3-0.35m, and measure 1.2x2.5m and 1.4x1.65m (the northeastern (U.39) and southwestern (U.38) entities, respectively). Neither U.39 nor 38 appear to be load-bearing foundations. Instead, they seem to define earthen-floored depressions sunk 0.25m below Str. 12-Sub7-1stB's summit (their floors set at levels roughly equivalent to reconstructed ancient ground surface). No constructed features were identified within these depressions. Unit 14, the northwestern facing, junctions with and is slightly overlain by Str. 3-1st's steps (U.31, in particular), but it is not clear where or how this wall joins the main body of Str. 12-Sub7-1stB. Further excavation east of Str.12-Sub7-1stB might resolve this issue; for the present, however, we infer that U.14 intersects the platform near the U.9/10 junction.

By the conclusion of TS.5, Str. 12-Sub7-1stB was a stone-faced platform that rose 0.21-0.31m high, was oriented ca. 61 degrees, and encompassed 7.2x9.3m. In addition to supporting

the room delimited by U.12, the earthen-floored summit also contained two rectilinear depressions set an inferred 0.25m below summit level. These entities covered 3m² and 2.3m², had earthen floors, and contained no extant constructions. Units 13, 14, 38, and 39 are built of unmodified river cobbles whose naturally flatter faces are directed outwards. The placement of larger rocks in clear horizontal courses is not obvious in any of these constructions. All stones are set in a brown mud mortar and chinking pebbles are placed in the interstices formed between the larger cobbles.

Time Span 6

Structure 12-Sub7-A underwent modifications during this interval that resulted in its lateral expansion on all flanks (now designated Str. 12-Sub7-1stA). The newly constructed basal facings (U.23-26) are 0.35-0.45m high and encase their predecessors. The southeastern facing (U.25) abuts Str. 12-Sub7-1stB's northwestern basal wall (U.14), thereby linking the two platforms into one continuous edifice. On the northeast, U.23 jogs out 0.3m to the northeast 5.75m southeast of its junction with the northwestern facing (U.24). Following this step-out, U.23 continues southeastward to join U.14 of Str. 12-Sub7-1stB. The foundation (U.22) for the putative surface-level building appended to Str.12-Sub7-2ndA's northwest side is now embedded within the fill backing U.24. No summit construction survived atop Str. 12-Sub7-1stA.

In all, Str.12-Sub7-1stA was 0.35-0.45m tall, aligned roughly 336 degrees, and encompassed 6.25x8m (not including the northeastern jog in U.23). The featureless earthen summit might well have constituted a single open space. Facings were constructed of unmodified river cobbles the naturally flatter facets of which face outwards. Horizontal coursing of the larger rocks is clearest in U.23 and 25. All of the stones are set in a brown mud mortar and chinking pebbles are packed around the more sizable cobbles.

Structure 12-Sub7-1stB was expanded now by the construction of what appears to have been a stone-lined pen against the platform's northwest face (Str. 12-Sub7-1stC). This element is defined on three sides by walls fashioned of cut stone blocks set on end (U.15-17) that stand ca. 0.4m high and abut Str. 12-Sub7-1stB's U.14. The rectilinear entity defined by U.14-17 measures 1.8-1.9m northwest-southeast by 3.3m northeast-southwest, is located 0.25m northeast of U.23 and 0.75m southwest of U.14's putative northern corner, and runs more-or-less parallel to the general orientation of Str. 12-Sub7-1stB (i.e., 61 degrees). The space bounded by U.14-17 measures roughly 1.6-1.7 x 3.1m across the interior. This area likely filled in with dirt and a few cobbles after abandonment. The construction style represented by U.15-17 is unique in the Str. 12-Sub7 complex, though the potential basin form may find a parallel in U.38 and 39 sunk into Str. 12-Sub7-1stB's summit. A brown mud mortar is used to hold together the U.15-17 blocks.

Time Span 7

During this interval, Strs. 12-Sub7-1stA and 12-Sub7-1stB were enlarged to the southwest by the addition of U.27, 29, and 30. These newly constructed basal facings replaced their antecedents (U.26 on Str. 12-Sub7-1stA and U.13 on Str. 12-Sub7-1stB), the remaining flanks of each platform being, as far as our excavations revealed, unchanged. Unit 28 fronts Str. 12-Sub7-1stA's southeastern basal wall (U.25) and was apparently raised to link the additions made to this building (U.27) with those appended to its southern counterpart (U.29 and 30).

Units 27-30 were probably not all made at the same time. The clearest evidence for sequential construction is seen in the relationship between U.29 and 30. The former was built first, its construction converting Str. 12-Sub7-1stB's southern corner into an inset measuring 0.7x1.5m. Unit 30 was then added to transform the inset into a continuous rounded corner, the only curved intersection of basal walls noted in the Str. 12-Sub7 complex. Structure 12-Sub7-1stA may also have been expanded on the northwest. Unit 36, 0.85m northwest of U.24, may be a remnant of this addition. More excavation would be needed to clarify whether the 1m-long (northeast-southwest) segment of U.36 exposed in Subop. 12B is part of a continuous basal wall that supersedes U.24 or the facing for another, more limited, construction, such as a projection.

Structures 12-Sub7-1stA and 12-Sub7-1stB maintained their earlier heights and orientations, the former now measuring 6.9x8m (without U.36, 6.9x8.85m including that element) and the latter 7.2x9.6m. These buildings, however, had ceased being distinct edifices in TS.6. They now formed part of a single construction that, maximally, encompassed 11.3x16.15m. What had been two separate buildings now appear as components of the same structure, the northwestern-most element (Str. 12-Sub7-1stA) offset 2.9m southwest from its southeastern analogue (Str. 12-Sub7-1stB).

Units 27-30 are fashioned of unmodified river cobbles the flatter aspects of which are oriented outwards. Unit 30 appears to have been the most casually built of all constructions unearthed in the Str. 12-Sub7 complex, its constituent rocks being placed in an irregular fashion. A brown mud mortar was used as a binding agent in all walls erected during TS.7 and chinking stones are variably prevalent in the above units.

The Str. 3-1st western steps (U.31-34) overlap U.14, the basal step (U.31) resting on the northeastern margin of Str. 12-Sub7-1stB's summit. Unit 31 is made up of cobbles and is ca. 0.24m tall. The U.31 step is 0.8-1m wide, the tread backing the stone riser having an earth surface, and is succeeded by two risers fashioned of horizontally set cut blocks (U.32-33) succeeded by a fourth built with a combination of cobbles and flat-laid blocks (U.34). Units 32-34 are 0.12-0.22m high by ca. 0.3m wide (preservation of all steps, especially the upper three, is poor, rendering inferred heights and widths tentative). Overall, the U.31-34 steps rise a total of 0.73m, measure at least 2.5m north-south (the northern limit was not exposed), and are aligned roughly 356 degrees. The stratigraphic position of U.31, its base lying at least 0.26m above that of U.15 and overlapping extant architecture (U.14) strongly suggests that these steps are some of the last constructions raised in the Str. 12-Sub7 complex. Quite possibly, this staircase was erected to link Str.3-1st directly with the summits of Str. 12-Sub7-1stA/12-Sub7-1stB. The relatively high position of U.31 vis a vis U.15 implies that the vertically set slabs that comprise the latter only projected 0.15m above ground surface by TS.7. Whether this had been the case in TS.6 when those stones were put in place is not known. All U.31-34 steps are set in a brown mud mortar and the naturally flat faces of cobbles used in U.31 and 34 are directed outwards.

Time Span 8

After abandonment of the Str. 12-Sub7 complex, all of Str. 12-Sub7 and the Str. 3-1st steps were covered by the natural deposition of S.10-12 (described under Str.6, TS.8). As indicated earlier, the former edifice was so thoroughly obscured by soil introduced in TS.8 that it was not easily discernible on ground surface. Embedded in S.10-12 is a light concentration of rocks fallen from final-phase architecture (F.1). The paucity of stones found within F.1 hints at the relatively insubstantial nature of the superstructure that topped Strs. 12-Sub7-1stA and 12-

Sub7-1stB, a surmise supported by the scant evidence for stone foundations that might have supported bajareque walls on both buildings.

Structure 7

Structure 7, a substantial platform to which is attached a relatively low, western projection, lies on Op. 12's southeastern margin, immediately southeast of the patio defined by the remaining buildings. Structure 6 is 1.7m to the north while Str. 1 is 38m to the northwest. The land surrounding Str. 7 is relatively flat, rising only 0.14m over 9.95m north-to-south. Excavations with Subops. 12A, D, E, F, and G cleared roughly two-thirds of the platform's summit, exposure of the poorly preserved basal facings and the western projection being far more limited. Approximately 46m² were dug in the course of this work, excavations being pursued to maximum depths of 0.88m below modern ground surface outside construction and 0.34m beneath ground level into architectural fill. A single major building phase was recognized as a result of investigations directed by M. Dall, C. Eaton, and L. T. Neff during the 1988 field season.

Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.1	-	MPrecl, LCLI, II
2	Str. 7-1st	U.1-27,30-33	-	F.1	LCLII, III?
3	Str. 7-1st	U.28, 29, 34	S.1?	-	LCLII, III, EPC
4	-	-	S.2-3	F.2	-

Time Span 1

Deposition of S.1, a fine to moderately fine-textured, moderately hard-compacted, tan soil, is the first activity attested to in excavations conducted around Str. 7. Stratum 1 was exposed to a maximum thickness of 0.19m, its base lying beyond excavation limits, and rises ca. 0.12m across 9.95m north-to south. Recovery of artifacts, especially bajareque, from portions of this level underlying architecture point to a human presence in the area prior to construction of Str. 7-1st.

Time Span 2

Structure 7-1st consists of two segments: a roughly square platform onto the west side of which a lower, rectangular projection was appended. The former component is ascended on the

north, east, and south by two low risers in each case (U. 1 and 4 on the north, 0.19m and 0.2m high; U.2 and 3 on the south, 0.2m and 0.22m high; and U. 10 and 11 on the east, 0.43m and 0.24m high). Treads backing these risers are 0.5m to 2.1m wide, the most extensive example found backing the basal eastern terrace, U.10. There is no clear evidence that any of these surfaces were paved, though the U.10 tread might have been surfaced with a mixture of cobbles and cut blocks (F.1). The summit supported at least three rooms, two of which are arranged in a north-south line (Rooms 1 and 2) while the third (Room 3) lies immediately east of the southernmost compartment. All enclosures are delimited by low cobble foundations. Room 1, the southern compartment, is the most elaborate of the three. This entity measures 1.7x2.3m, contains stone-faced shelves in its northwest (U.20) and southeast corners (U.19), and was accessed through a 1.5m-wide by 1.3m-long entry corridor on the compartment's east side. Two pairs of small (0.25-0.3m by 0.4m) stone squares standing 0.25-0.35m tall (U.15/16 and U.17/18) are found within the corridor spaced 0.4-0.6m apart (the distance separating the dyads north-south) and 0.7-0.75m apart (the east-west distance between members of each pair). Units 15-18 probably functioned to channel traffic through the large eastern doorway. Unit 19, the southeastern shelf, bounds the entryway on the south, rises 0.4m above Room 1's earthen floor, and measures 0.8x1m. Its northwestern counterpart (U.20) was very poorly preserved, the inferred dimensions of this construction being 1x1.17m and 0.26m high. The foundations bordering Room 1 (U.7-9) are fairly substantial, standing 0.3-0.68m tall and measuring 0.32-0.84m across. The broadest of these elements, U.9, has a 0.2-0.3m-wide gap barely discernible running down the center of the footing between the outer and inner facings. The significance of this absence of stones is not clear, though it may be the remnants of a trench in which posts used to support the perishable upper wall were placed. No comparable gaps are noted in the other foundations nor do they seem wide enough to accommodate such an architectural feature. Possibly, U.9's relatively great width reflects its use as both wall foundation and bench/shelf, the putative trench marking the back of the ledge facing into Room 1. In that case, U.9 and 20 would together make an L-shaped bench the main stem of which consists of U.9 and is 2.3m long by 0.3m wide. Remnants of what may have been an earlier version of U.9 (U.31) project 0.3-0.5m east from beneath the western foundation into Room 1. Unit 31's northern half is covered by U.20 while its southern 1.13m may have been exposed throughout TS.2 and 3

The casual nature of U.19 and 20 construction (see below), coupled with the fact that they abut Room 1 walls and override earlier construction (U.31) may suggest that they were added relatively late in the building sequence. Their placement in TS.2 is, therefore, tentative. The interdigitation of U.19 with the U.16 stone block suggests that these two elements are contemporary and, insofar as U.16 is an integral part of the eastern Room 1 passageway, then U.19 is probably contemporary with the raising of that enclosure. Unit 20 is not so obviously tied to other elements of Room 1 construction; it may be that this vaguely defined entity was appended on to the U.31 shelf well after Room 1 was built, possibly as late as TS.3.

Room 1 faces east into what may have been another earthen-floored summit enclosure (Room 3) delimited by low (0.3-0.4m high) cobble foundations on the east (U.12) and south (U.13). A small stone block (U.14) located at the western edge of U.13 measures 0.34m high, 0.25m long east-west, and at least 0.1m wide north-south. Unit 14 may be functionally analogous to the entry features located further to the west (U.15-18), possibly marking a passageway into an unexcavated enclosure south of Unit 13. Room 3's northern foundation was not uncovered, the compartment measuring 1m east-west by, minimally, 0.8m north-south.

Room 2 lies immediately north of Room 1 and is bounded by broad (0.4-0.8m wide) but

low (roughly 0.25m tall) cobble foundations (U.5 and 6). Room 2 covers 1.2x2.1m (the western foundation is not clear), has an earthen floor, and lacks preserved built-in furniture.

Investigation of the western projection was limited to a 1m-wide trench dug north-south across the approximate center of this entity along with exposure of the element's western face. This work indicates that the projection was mounted by one low terrace each on the north and south. These ascents are delimited by 0.11m-high stone-faced risers (U.21 on the north, U.23 on the south) that are backed by 0.64m (north) and 1.66m (south) wide earthen terrace surfaces. The latter terminate in stone-faced ascents to the 5.06m-wide earthen summit. The northern step-up is barely discernible and probably stood ca. 0.38m high (U.22); its southern counterpart (U.24) is better preserved and stands 0.4m high. The fill packed in between U.22 and 24 consists of small to medium-size river cobbles set in a brown earth matrix (U.30). Units 32 and 33 are two low, 0.55m-wide, cobble foundations that extend at least 0.4m west from U.9 onto the projection's summit. Spaced 2.65m apart north-south, these elements are probably foundations delimiting rooms raised atop the western projection. Time did not permit further investigation of U.32 and 33 and we do not know the dimensions of the compartments they may have enclosed.

The projection's western facade is defined by U.25, a 4.75m-long (north-south) basal cobble wall to which was appended a shorter (3.4m long), 0.35m-wide terrace or step (U.26). Unit 26 is not centered on U.25, but is set slightly south of the basal wall's axis. Affixed to U.26, in turn, is a 0.45m-long (north-south) by 0.3m-wide cobble block (U.27). Unit 27 is 0.45m north of U.26's southern margin. Units 25-27 are all 0.1-0.12m tall and do not seem to mark a west-to-east progression of increasing heights as would be expected of steps. Lacking such a function, we are at a loss to specify what purposes U.26 and 27 might have served. Unit 25 lines up tolerably well with U.22 on the north, suggesting that these two elements originally joined to form the projection's northwest corner. How the terrace bounded by U.21 relates to U.26 is not known. Units 24 and 25 on the south, however, are not clearly related. This suggests that either: a.) the projection's southern facing (U.24) steps back to join U.25 at some undetermined point; b.) or we had not found the southern limit of U.25 when excavations drew to a close. Unit 23, the southernmost terrace riser, seems to be in line with U.2, its functional analogue on the eastern platform. Such mutual alignments imply, but do not establish, that the basal southern terraces of platform and projection were joined at some point in the construction sequence. Once again, we do not know how the southern terrace relates to the projection's western facing (U.25).

Structure 7-1st's eastern platform is 0.78-0.96m high, measures 8.35x8.65m, and is aligned roughly 340 degrees. Two low risers ascend the building's northern, eastern, and southern flanks giving way to a summit the covers approximately 5.6x6.7m. Raised atop the platform are at least three earthen-floored rooms delimited by cobble foundations. The largest of these enclosures (Room 1) covers 3.9m², contains two stone-faced benches/shelves, the western one of which may have been L-shaped, and is entered through a formal passageway on the east in which are located four small stone blocks arranged in two pairs. The entry corridor encompasses 2m² and provides access to another compartment on the eastern summit (Room 3). Only a small portion of Room 3 was uncovered, though the identification of yet another stone block on the enclosure's western margin may signal an entrance to an undiscovered cubicle to the south. Room 2, north of Room 1, covers 2.5m² and lacks built-in furniture. The benches/shelves in Room 1 are 0.26 and 0.4m high, covering 0.8m² and 1.5m², respectively (assuming that the western example, U.20, was L-shaped, as discussed above). The western

projection is 0.5m high, covers 7.35x7.8m (the east-west dimension measured from U.25 to U.9), and is oriented approximately 352 degrees. One terrace flanks the projection on the north and south while the western side is mounted by three stone-faced units that increase in length from west to east. The 5.06m-wide earthen summit probably supported a complex of rooms defined by low cobble foundations; remnants of two footings were uncovered at the junction with the platform's western flank (U.9). The projection seems to have encountered the eastern platform 1.6m south of the latter's inferred northwest corner while on the south the projection may continue the line of the platform's basal riser.

All facings and foundations are built primarily of unmodified river cobbles the naturally flatter faces of which are oriented outwards. Cut blocks are incorporated within U.7, 11, 23, 25, and 27, one shaped stone, a fragment from a channel or trough, was included in U.26. Horizontal coursing of the larger rocks is variably represented, being clearest in U.8 and 9, far less evident in the other constructions, including the northern Room 1 wall, U.7. The U.19 and 20 benches/shelves boast the most casual architecture on Str. 7-1st, lacking clear coursing and having very few chinking stones. Elsewhere, chinking pebbles are found packed around the larger rocks in surviving constructions, though they are not equally prevalent in every case. A coarse-textured, brown soil is used as a binding agent in all walls and facings.

Time Span 3

The only architectural elements clearly assignable to this interval are U.28, 29, and 34 (but see the discussion of U.20, above). The first extends 1.2m north of U.21, the projection's northern basal terrace, and consists of cobbles set on end rising to a preserved height of ca. 0.2m. The relationship between U. 21 and 28 is unclear; the second element appears to rest at a level equivalent to the top of U.21, as though the latter was buried by continued deposition of S.1 and no longer in use when U.28 was added. Unit 28 was only exposed in the eastern wall of the trench that cut across the western projection and its width and relation to other architectural elements were not revealed.

Unit 29 is a 0.4m-wide by 1.6m-long cobble wall that abuts U.7, the northern Room 1 footing, and runs over U.5 and 6. This entity is ca. 0.45m high and probably served as a foundation in a final renovation of Room 2. Contemporary with U.29 is U.34, a 0.32m-high by ca. 0.5m-wide stone footing that also overruns U.6. Unit 34 is roughly 1.2m west of U.29 and may extend as far as 2.05m north of U.7 (the northernmost 1.1m of U.34 is very poorly preserved and it was almost impossible to distinguish architecture from tumbled debris in this area). Very tentatively, Room 2 now measured 1.2x2.05m, the earlier U.5 and 6 footings having been superseded by this addition. No built-in furniture was recorded within the final, earthen-floored version of Room 2.

All three construction units assigned to TS.3 are fashioned of unmodified river cobbles set in a coarse-textured, brown soil matrix. Construction of U. 28, 29, and 34 appears to be quite casual, there being no evidence of horizontal coursing of the larger rocks and chinking stones are sparingly employed. There is no strong tendency to direct the flatter aspects of rocks outward nor was any effort devoted to modifying the included stones to create vertical faces. No other significant modifications were noted on Str. 7-1st which otherwise retained its original size, form, and orientation.

Time Span 4

Following abandonment, Str. 7-1st was blanketed by the natural deposition of S.2 and 3, moderately coarse-textured, hard-compacted soils that are distinguished by overlying S.3's darker brown color and greater density of included roots. Together, these layers accumulated to depths of 0.51-0.71m and covered all but the uppermost segments of final-phase architecture. Moderate to very dense concentrations of tumbled architectural debris were found overlying Str. 7-1st's platform and for at least 0.98m south and 0.76m north of construction (F.2). Feature 2 was not nearly as prevalent off the platform's eastern flank where a light scattering of stones was found extending ca. 0.7m away from the edifice. Fallen stones were equally sparse off the northern, western, and southern sides of the western projection though F.2 increases to moderate densities above the projection's summit.

Structure 15

Structure 15 occupies the southern corner of the Op. 12 patio. Structure 1 is 5.35m to the north while Structure 120 in Operation 31 lies 102m distant in the same direction. The land surrounding Str. 15 is fairly level, ascending only 0.3m over 11.62m south-to-north. Investigations here were conducted within Subop. 12I, J, and K, fully 72m² being cleared in the course of completely revealing the building. Excavation was carried down to a maximum depth of 0.84m below modern ground surface outside construction (architectural fill was not probed) revealing two building phases. All work on Structure 15 was directed by S. Escobar.

Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.1	-	LCLII?
2	Str. 15-2nd	U.1-8	-	-	LCLII, III?
3	Str. 15-1st	U.9-17	S.2?	F.1,2	LCLIII, II, EPC
4	-	-	S.3-4	F.3	-

Time Span 1

A scant 0.05-0.06m of an ashy, artifact-rich soil flecked with carbon (S.1) was found underlying construction directly north and south of Str. 15-1st. This layer resembles strata predating final-phase constructions in the eastern portion of Op. 31. The latter were interpreted as debris purposefully introduced to raise the level of the ground surface, and S.1 may have been laid down as part of a comparable effort. Alternatively, S.1 may be a continuation of the ashy midden deposit uncovered 150m to the west/southwest during the excavation of Str. 16 (see Op. 16). Stratum 1 was not cleared to a sufficient extent, either vertically or horizontally, to

determine how it relates to these other deposits. All we can say at present is that the numerous artifacts contained in S.1 and its ash matrix point to a significant human presence in the area where Str. 15 would be erected over the following two time spans.

Time Span 2

Structure 15-2nd is a platform faced on all flanks by cobble walls (U.1, 2, 4, and 7) that ascend ca. 0.6m to the summit. Unit 3 is a 1.1-1.75m-wide by 0.54m-high stone-faced terrace that seems to have been added after the aforementioned facings were in place. This terrace is retained on the west by a northward continuation of U.2, and has two projections on the north (extending 0.3-0.7m from U.3's principal northern line) that give this flank a crenellated appearance. On the east, U.3 intersects the earlier northern facing (U.7) 0.85m shy of the latter's northeast corner with U.4, creating an inset corner measuring 0.85x1.25m. The summit contains two earthen-floored rooms flanking a central enclosure, all set in an east-west line. The middle compartment, designated Room 1, is surfaced with stone (U.5), covers ca. 7m², and has a 0.28m-high L-shaped, stone-faced bench (U.6) set against most of its northern, and part of its western, walls. Unit 6's largest segment runs 2.1m east-west and is 0.7m wide, a 0.75m-long by 0.5m-wide projection extends south from its western end. The U.5 pavement seems to be missing over a rectangular space encompassing 0.5x1.2m immediately in front (south) of the bench. Why dirt should replace stone in this sector is unknown. Unit 7 may have stood roughly 0.12m higher where it backed U.6 on the north than it did elsewhere along its east-west extent. Unit 7 also extends 1.4m southward, separating U.6 from the bench in neighboring Room 3 (U.8). These changes in U.7's construction may reflect an effort to shield who/whatever rested on U.6 from view.

Room 3, adjoining the central compartment on the west, measures 3.3m² and has a stone-faced bench measuring 1x1.4m that takes up most of its northern half (U.8). Like Room 2 on the east, Room 3's earthen floor is set slightly below the level of the U.5 pavement. Room 2, lying east of Room 1, is an L-shaped enclosure covering ca. 4m². The "L" is formed by the westward projection of U.4, the eastern platform facing, 0.9m into what would have been the compartment's northeast corner. This extension measures 1.4m north-south and may have served as a stone-faced bench or shelf.

By TS.2's conclusion, Str. 15-2nd was a 0.6m-high platform measuring 5.5x6.3m (including U.3) and aligned roughly 270 degrees, 30 minutes. The superstructure contained three rooms arranged in an east-west line. The central enclosure is paved with stones, covers 7m², and has a 0.28m-high L-shaped bench built against its northern wall. The neighboring compartments have earthen floors, encompass 3.3m² (Room 3) and 4m² (Room 2), and each contains a bench or shelf. All walls and floors are built of unmodified river cobbles set in a brown mud mortar. The naturally flatter aspects of these river-worn stones are oriented outwards. Rock sizes range from 0.07x0.1m to 0.42x0.58m.

Time Span 3

Construction during this span considerably expanded Str. 15 to the south, more modest extensions occurring along the other flanks. Structure 15-2nd became, therefore, the core of a significantly enlarged platform designated here as Str. 15-1st.

The southern face is now ascended via two steps, the basal riser measuring 0.2m high by

0.34m wide (U.10) while its successor (U.11) is 0.18m high. Unit 10 is axially located and runs 3.3m east-west; U.11 continues east and west of U.10, acting as Str. 15-1st's 0.38m-high southern basal facing. A stone pavement (U.12) covering roughly 4.2m² occupies the center of the southern addition, lined up with the U.10 step and the U.5 pavement of Str. 15-2nd's central enclosure (Room 1). Unit 12 runs back ca. 1.8m from U.11 where it terminates in a 0.51m-high step-up (U.13). Unit 13 is a 0.8m-wide cobble construction that spans all but the westernmost 1m of Str. 15-1st's southern flank and buries U.1. Bordering U.12 on the west and east are two earthen-floored rooms (Rooms 5 and 4, respectively). Room 5 is an irregularly shaped compartment that covers ca.1.8m² and contains no built-in furniture. Its eastern counterpart, Room 4, is the same size, has an earth floor, and lacks clear, preserved built-in features. Rooms 4 and 5 were probably entered through 0.65m-wide doorways in their southern walls flanking U.10. Such points of access are suggested by decreases in the height and thickness of U.11 at these points. The southern enclosures, therefore, were entered from ground surface. Rooms 1-3 remained open throughout this period and were not significantly modified by TS.3 construction (see the discussion of F.2, below).

Unit 9 is the new eastern basal facing raised during TS.3. This construction seals off its predecessor, U.4, and expands the platform 0.4m to the east. Extension of the edifice westward was a more complicated affair, at least three sequent additions being made before construction ceased. Unit 14, the first of these additions, runs in front (west) of U.2, beginning at the latter's southwest corner and continuing 5.6m northward where it defines the new western margin of the U.3 terrace. Subsequently, when the major southern addition was made (comprising U.10-13), a new western facing was added (U.15). Unit 15 joins with U.11 at the platform's southwest corner and runs northward in front of U.14 for 5.5m. This left the northernmost 2.4m of U.14 still exposed. Finally, a 1m-long addition (U.16) was appended onto U.15's northern terminus in front (west) of U.14. Unit 16 continues U.15's line further north, though 1.4m of U.14 on the north remained uncovered right to the end of occupation here. A cut block (F.1), apparently fractured but in place, was set into the terrace surface backing U.15 near the U.15/14 junction. Feature 1 resembles stones used as entry features elsewhere at La Sierra and throughout the Terminal Classic Naco valley. Its location on Str. 15-1st's western terrace may mark an ancient passageway into the superstructure. It is, nonetheless, odd that the F.1 stone is not embedded in U.12, in line with the U.10 and 11 steps. There may have been more than one way to enter Str. 15-1st's summit rooms, the steps and F.1 indicating two possibilities, or the cut block may have another significance here.

By-and-large, U.3 was not significantly modified during TS.3. The terrace was expanded 0.35m on the west by the addition of U.14, but no other significant changes were made. Construction of U.9 increased the dimensions of the northeast inset corner, that indentation now covering 1.25x1.25m, while a very shallow indentation measuring 0.35x1.45m is found on the northwest corner (formed by U.14 and 16) during TS.3. A surface-level room defined by low but variably broad stone foundations (0.4-1m across) was built partially overlapping U.3's northeast corner during TS.3 (U.17). The U.17 footings enclose a space 0.8m wide east-west and at least 0.6m long north-south (the northern margins of the enclosure were not revealed). Construction of U.17 may also have converted Str. 15-1st's inset northeast corner into a formal enclosure open on the east. Unit 17 extends 1.1m east of U.3's northeast corner, sealing off the inset's northern flank. The space thereby enclosed covers 1.1x1.2m.

Structure 15-1st now measures 7.5x7.9m (excluding U.10), stands 0.6-0.89m high, and retains the previous orientation of 270 degrees, 30 minutes. The building contains six distinct

spaces arranged in two parallel, east-west rows. In each line there is a central paved space (Room 1 and U.12) that, together, extend the full length of the summit from the southern steps to the U.6 bench. Flanking these formal floors are enclosures whose earthen living surfaces are set below the level of the pavements. The northern examples (Rooms 2 and 3) are fairly large (4m² and 3.3m²), contain small, stone-faced benches/shelves, and are elevated above ground surface. Their southern analogues are much smaller (1.8m² each), their floors set on ground surface, and lack extant constructions.

By the conclusion of TS.3, 0.4-0.7m-wide terraces border Str. 15-1st on the east and west, The 1.1-1.75m wide U.3 terrace was still exposed on the north, while the southern terrace, fronted by U.11, is 1.8m wide. The superstructure was accessed by means of a formal southern staircase, the basal step (U.10) of which protrudes 0.34m south of the southern basal facing (U.11). Access may also have been achieved by stepping up and onto the western terrace, this entryway marked by the distinct F.1 cut block. A surface-level building, perhaps containing no more than a single, diminutive room, was erected against Str. 15-1st's northern face sometime during TS.3. Construction of this edifice may have also served to transform the platform's inset northeast corner into a small compartment (1.3m²) open to the east.

Foundations, facings, and floors were all fashioned, primarily, from unmodified river cobbles set in a brown mud mortar. The naturally flatter faces of these rocks are directed outwards. In addition to the cut block comprising F.1, masonry was used together with cobbles in that portion of U.11 backing U.10. The latter step was built almost entirely of faced blocks. Some effort seems to have been made, therefore, to concentrate modified stones in Str. 15-1st's entryways. Rock sizes range from 0.12x0.12m to 0.54x0.74m (the latter being a cut block capping part of the U.10 step).

A fine-textured, moderately soft-compacted, tan clay (F.2) was found overlying parts of U.12, 5, and the terrace backing U.3 at thicknesses of 0.02-0.14m (thickest in the area immediately bordering U.6). Feature 2 may represent some element of superstructure architecture that eroded off prior to the general collapse of other construction elements that came to bury the clay (F.3). Alternatively, F.2 may be all that remains of clay originally used to floor the platform's rooms and terrace surfaces. If the latter is the case, then the U.6 bench would only have protruded 0.12m above Str. 15-1st's Room 1 floor. An identical soil was found burying the lower 0.15m of U.10 on Str. 15-1st's southern flank (S.2). The base of S.2 was not encountered. It may be that this clay occurs naturally in the area, providing a ready source of flooring/construction material. Given the similarities between S.2 and F.2, however, we cannot exclude the possibility that the former was introduced purposefully to create a formal earthen floor fronting Str. 15-1st's steps.

Time Span 4

Following abandonment, Structure 15-1st was almost completely blanketed by the deposition of S.3 and 4. These strata are both moderately coarse-textured, moderately hard-compacted soils that are distinguished solely by overlying S.4's darker brown color and greater concentration of small roots. Together, S.3 and 4 accumulated to thicknesses of as much as 0.73m, covering all but the highest portions of the building. The fragmentary remains of an individual interred in a flexed position and oriented southeast-northwest were set atop the earthen terrace surface backing U.3. The head is set against U.7's base, the rest of the body extending out 1.16m to the northwest. The interment's position, directly on the terrace, strongly

suggests that the individual was buried well after Str. 15-1st's abandonment when enough of S.3 and, possibly, 4 had accumulated to provide a sufficiently deep grave. No offerings accompanied the body nor did we locate the outlines of the burial pit.

A dense-to-moderately-dense concentration of fallen building stones (F.3) covers the summit and extends for at least 2.63m north and 0.54m south of surviving architecture (comparable levels and kinds of tumbled debris were observed east and west of the building, though their extents were not recorded). Feature 3 is densest on and immediately adjacent to the platform, the constituent stones becoming less common with increasing distance from the edifice.

Structure 109

Structure 109 is the central building in the line of three platforms that close off the south side of the Op. 12 patio. Structure 7-1st's west projection is 3.2m to the south (measured to U.21, see above) while Strs. 15 and 6 are roughly 11m and 3m to the west and east, respectively. Only a 1m-wide segment of Str. 109's southern basal facing or terrace was exposed in a northward extension of Subop. 12F/G, that trench being designed primarily to investigate Str. 7-1st's western projection. Consequently, only 1.94m² was cleared on and around Str. 109, digging being carried down to a maximum depth of 0.71m below modern ground surface adjacent to architecture (construction fill was not investigated). Despite the limited nature of these investigations, two construction phases were identified in the work overseen by M. Dall, C. Eaton, and L. T. Neff during 1988.

Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.1,2	-	LCLII?
2	Str. 12-Sub4	U.1	-	-	LCLII
3	Str. 109-1st	U.2	-	-	LCLII, III?
4	-	-	S.2-3	F.1	-

Time Span 1

Stratum 1, a fine-textured, hard-compacted tan soil (identical to the S.1 described under Str. 7, above), rises out of the base of excavation 0.61m south of Str. 109-1st's basal architecture (U.2). This layer ascends 0.26m over 1.2m before leveling out on the south near Str. 7-1st. Filling in the area between S.1 and the exposed architecture is the lower portion of S.2, a moderately coarse-textured, moderately hard-compacted, brown soil containing fairly large numbers of pebbles and artifacts. Stratum 2 does run beneath construction here. Recovery of artifacts from S.1 and 2 points to a human presence in the area prior to Str. 109-1st's erection.

Time Span 2

Structure 12-Sub4 is represented solely by a cobble wall (U.1) that is at least 0.2m wide and projects 1m south from underneath Str. 109-1st's southern basal terrace (U.2). Unit 1 is preserved to one rock (ca. 0.07m) high, is aligned roughly 340 degrees, and is built on and buried by S.2. The unmodified, river-worn stones comprising U.1 are set in a coarse-textured brown earth mortar. Though U.1 was almost certainly truncated by the construction of Str. 109-1st, it probably never rose much high and likely represents a footing from a surface-level edifice mostly buried under architecture associated with its successor.

Time Span 3

Structure 109-1st's southern basal wall/terrace (U.2) stands a reconstructed 0.2m high, is fashioned using a mix of unmodified river cobbles and cut stones, and is oriented approximately 70 degrees. The vertical faces of these stones are placed facing outwards to the south, a coarse-textured, brown mud mortar serving as a binding agent. A cobble surface may have backed U.2 on the north, though the 0.5m² of this area exposed in our excavations was insufficient to establish this point. Unit 2 rests directly on U.1.

Time Span 4

After falling out of use, Str. 109-1st was blanketed by renewed deposition of S.2 and the introduction of S.3. The latter overlies, and is nearly identical to, S.2, the layers being distinguished by S.3's darker brown hue and greater concentration of small roots. Together, S.2 and 3 cover S.1 to depths of 0.47-0.62m and blanket U.1 and 2. Embedded within S.2 and 3 are stones fallen from final-phase architecture (F.1). A moderately dense collection of this debris is found up to 1.49m south of U.2 as well as over the top of exposed architecture.

Chronological Summary

Scattered Middle Preclassic ceramics found in excavations near Strs. 1 and 7 point to use of the Op. 12 zone during the earliest recognized period of settlement in the Naco valley. Remains pertaining to this interval are sparse, mixed in with later material, and probably signal a fairly small-scale occupation. The next period attested to is Late Classic I, also represented by a few diagnostic ceramics intermixed with far more prevalent Late Classic II and III pottery sherds in deposits unearthed near Strs. 6, 7, and 12-Sub7. Settlement apparently remained insubstantial during this span. As was the case with the Middle Preclassic, no architecture is assignable to this span.

The pace and scope of settlement within Op. 12 increases markedly during Late Classic II. All investigated areas were occupied now and there is evidence of substantial construction dating to this interval at Strs. 1, 6, 109, and 12-Sub7. The trajectory maintains its ascent into the Late Classic II/III transition, significant architectural activity being attested to at the six investigated edifices. All but two of these buildings (Strs. 1-1st and 15-1st) achieved their final forms during Late Classic II/III. Significant use of Strs. 1-1st and 15-1st persisted into Late Classic III both undergoing major renovations during this period. The remaining four excavated buildings may have been abandoned by now; at least they were not seemingly modified during

Late Classic III. Early Postclassic occupation within Op. 12 is indicated by the recovery of a very few ceramics distinctive of the period at Str. 7; most likely, a very small remnant population continued to use surviving constructions but did not make noticeable changes to those edifices. The burial set atop Str. 15-1st's final-phase architecture supports this notion of late reuse of extant buildings, probably, in this case, after sufficient time had passed to allow the accumulation of soil over the platform. Unfortunately, this interment could not be dated. There is no evidence of Late Postclassic use of Op. 12.

Operation 12's settlement history, therefore, is characterized by gradual, slow growth in occupation extent and intensity from the Middle Preclassic through Late Classic I. The pace of change accelerates during Late Classic II and peaks in Late Classic II/III when all of the investigated structures were in use and had reached something approximating their final dimensions. Use of the area trailed off during Late Classic III, though Strs. 1-1st and 15-1st remained foci of significant occupation and construction. By the Early Postclassic, population had dwindled considerably and the entire area was most likely abandoned by the Late Postclassic.