A HOUSING PROJECT FOR LARGE MAM

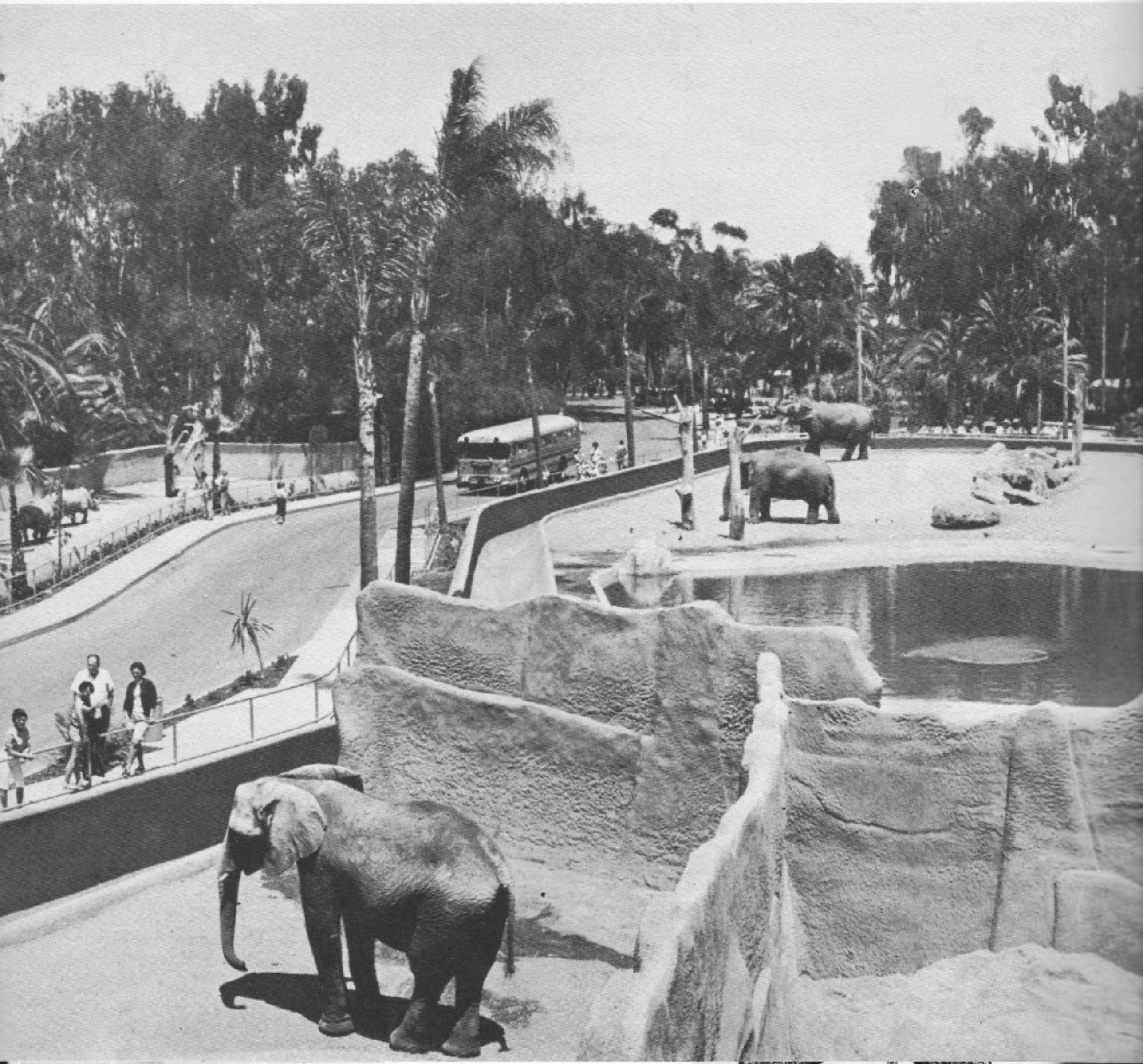
White Rhinoceros

Tombasan
and
Mandhla

Peaches (African)

Elephants

Lucki (Indian)
and
Maya (Indian)



FOR LARGE MAMMALS

By Robert E. Jarboe
SUPERINTENDENT, BUILDINGS & GROUNDS

Elephants

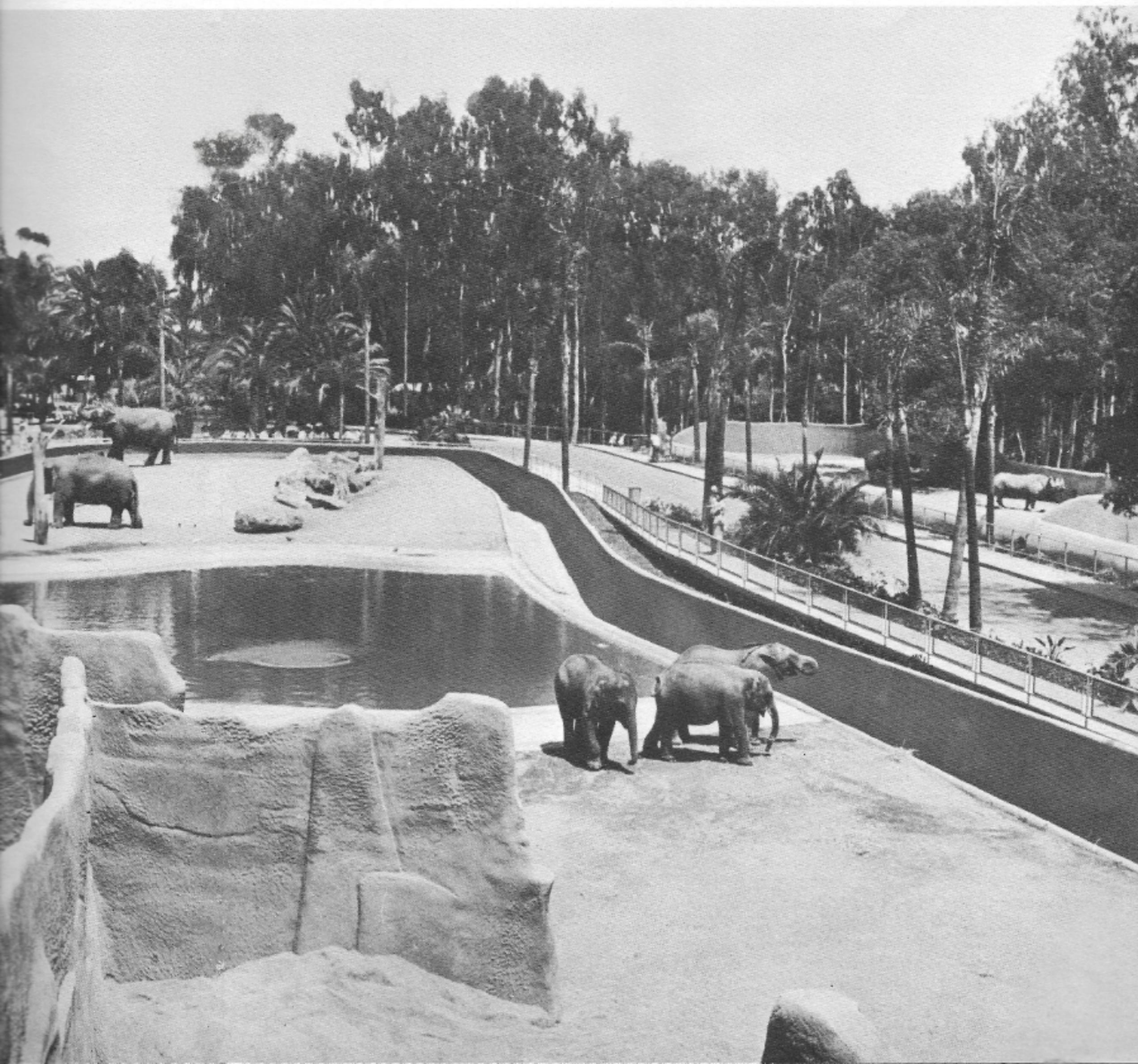
Lucki (Indian)
and
Maya (Indian)

Hatari (African)
Ellie (Indian)
Snooks (Indian)

Black Rhinoceros

Sally
and
Barney

Photo by Dick Snyder



Frolicking in their mud bath, our White Rhinoceroses can't know that they are among our most prized mammal exhibits – and that they are displayed at the zoo world's most modern and viewable enclosures for these huge beasts.

GULLIVER in all his travels didn't meet a stranger assortment of inhabitants, with a greater variety of housing problems, than we have at the Zoo. Our "citizens" come in all sizes and shapes. Some require only a few feet of living space, while others must have homes into which we can, and do, drive trucks.

To accommodate our most prominent residents, weightwise, the most ambitious building project in Zoo history is nearing completion on our Large Mammal Mesa. Its scope has been captured for us by Photographer Dick Snyder from the roof of the new elephant house (pages 8-9). Construction included the conversion of all exhibits on the mesa into moated enclosures for world's largest land animals, the elephants and rhinoceroses.

Completed in rapid succession were exhibits for the White Rhinos, African and Indian Elephants, and the Black Rhinos.

Our mixed herd of elephants comprise two prime female Indian adults, with us since 1941, a teenaged African female, donated to the Zoo in 1953, and three youngsters formerly exhibited at the Children's Zoo, a female African and two female Indian Elephants.

The White Rhino exhibit is exceptional both for its long, narrow construction and the pair of young adults on display.

NATURAL APPEARANCE

Perhaps the outstanding "natural" elephant home outside their native habitats features our largest mammals in a compound the size of a football field. Frequently these pachyderms can be seen splashing in their 100,000-gallon swimming pool, or standing on a raised mound at the eastern end of their exhibit (a foot-to-eye view for spectators, affording spectacular camera shots.)

Sloping gently on two sides for easy access, the 30′ by 30′ mound is faced on the other two sides by huge blue granite rocks. Though it has a rugged, primeval appearance, this elevated area was *engineered* as carefully as any other part of the exhibit, being paved with concrete six inches thick which has been finished with a non-skid surface.

The over-all shape of the elephant compound is that of an irregular rectangle. Moat construction, without intervening wires or bars to spoil the scene, was pre-tested in our former elephant compound to assure its practicality as well as safety for both animals and spectators.

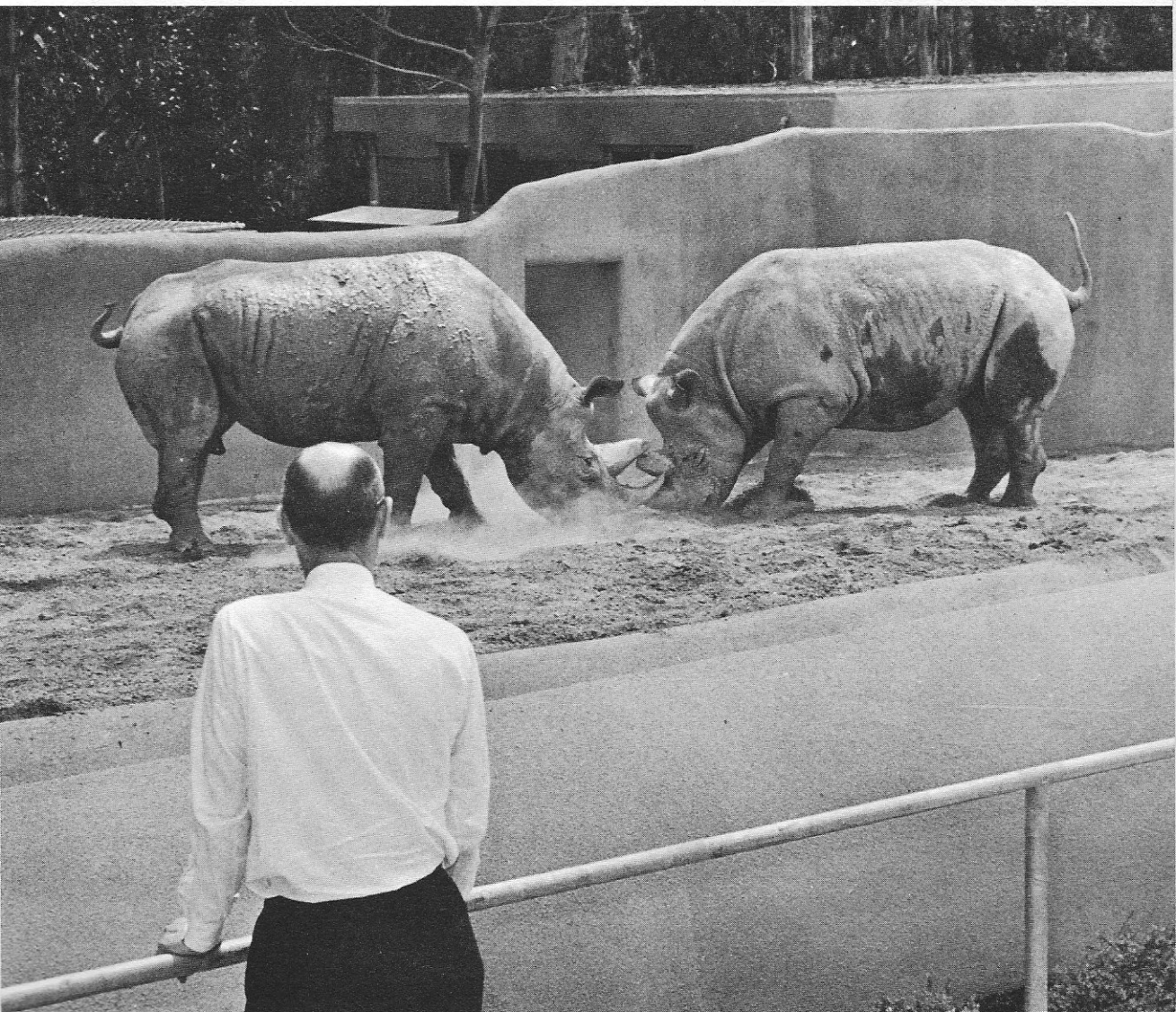
Moats are of reinforced concrete construction, nine feet wide by six feet deep, scientifically designed to prevent escape, and also to prevent injury should an elephant fall or be pushed into the moat. The outer moat wall rises 30 inches above the sidewalk.

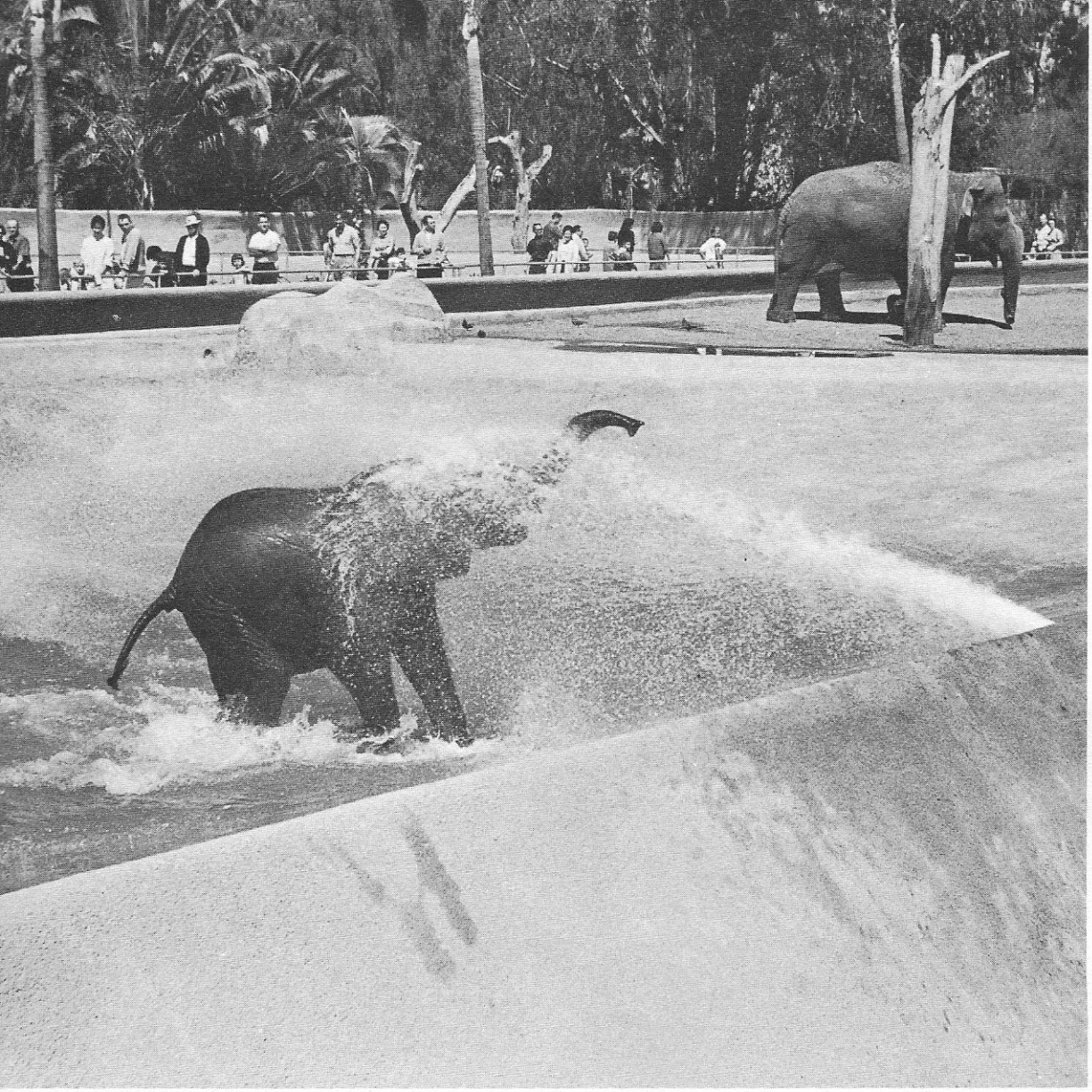
Other innovations in the compound are three large Canyon Oak rubbing posts, placed prominently in sight of visitors; a colored sidewalk which affords views from higher and lower levels at different places around the compound; and landscaping which includes stately palms, a small arched bridge, shrubbery, fountains and lily ponds.

Additional construction details which help assure comfort for the animals and good housekeeping are: *guard rails* of anodized aluminum, separating the walks from planted areas; *truck-sized doors*, giving access to retiring quarters and service yards for deposit and removal of materials; *wood blocks* rather than a harder substance on the elephant house floor, to help

Across the large mammal mesa from the White Rhinoceroses, the Black species almost daily engage in a friendly tussle of horns. When augmented very soon by the very rare Indian Rhinos, our colony will be one of the most complete in any zoo.

Photo courtesy San Diego Union





Elephants and water are synonymous in the minds of animal lovers, and our youngsters demonstrate why in their 100,000-gallon pool, just being refilled in this photograph.

relieve the great weight of the animals on their feet; and a four-inch layer of *asphaltic concrete,* which covers the entire exhibit area, and which in turn is hidden by a six-inch layer of natural-appearing *decomposed granulated granite.*

A paved road, twenty feet wide, surrounds the elephant compound and separates it from the rhino exhibits, permitting the best possible view from the guided tour buses.

BLACK AND WHITE RHINOS

There is a startling contrast between our former Black Rhinoceros enclosure and the two compounds which now house our Black and our White species. And these are the forerunners of other exhibits of completely new design for Rock Hyrax and the rare Indian Rhinos to be built this year in the same area. The former diminutive animals are the only living relatives of the ton-sized elephants.

Our visitors will recall the massive, barred concrete pens which formerly contained the Black Rhinos. Not only were they entirely unnecessary from the safety point of view, but their unsightly structural design also interfered with good viewing.

The new homes are designed to provide maximum comfort for the rhinos, while giving visitors an idea of their natural habitats. Bars and concrete post construction have been replaced by dry moats, providing unobstructed display of these impressive animals at close range. Because straight lines are not commonly found in nature, free form design is used throughout. Both rhino exhibits, one on the north side and the other on the south facing the elephant compound, have mud baths filled with a gooey brick clay. They also have been furnished with rubbing posts, like those in the elephant compound.

The Black Rhino enclosure is 250 feet long and consists of two units, the east unit being two-thirds larger than the west and containing a 12′ by 12′ mud pool in full "splashing view" of spectators. The floor of this unit is one foot above the sidewalk level, a feature which provides a startling visual impression of the huge beasts.

A six-foot-high back wall and nine-foot-wide dry moat contain these animals. The sloping five-foot-deep moat is designed to prevent escape and also injury, should the rhinos slide into it.

Retiring quarters in the elephant compound began to take shape in mid-spring. The Zoo's natural background of heavy foliage gives even this construction picture a haunting, wild look.

An experimental moat was tested for months at the old elephant enclosure before plans were approved for the new exhibit area. Below, Lucki seemed unperturbed when her house was torn down to make way for new retiring quarters. The imposing tile-roofed structure was a familiar sight to Zoo visitors for 25 years.

Photo courtesy San Diego Evening Tribune

A 36-inch curved front wall, Canyon Oak rubbing posts, metal railings, colored sidewalk, recessed drinking fountains for the animals, and appropriate plantings complete the Black Rhino exhibits.

The White Rhino enclosure is 240 feet long, in one unit. Construction details are similar to those for the Black Rhino exhibit, including the covering material on the enclosure floor, which is six inches of decomposed granulated granite over compacted earth.

Due for completion in early fall are the exhibits for Indian Rhino and the Rock Hyrax. This will round out construction on the large mammal mesa, which now is approached through a palm-grove rest and refreshment area featuring exhibits for the attractive Okapis and popular prairie dogs.

Fred E. Lewis

The Zoo has lost a good friend. The death on March 6, 1963, of Fred E. Lewis of Coal Island, British Columbia, ended a friendship lasting more than forty years.

In 1929, at the 12th Annual Meeting of the Zoological Society of San Diego, it was Fred Lewis who provided the entertainment. He showed two reels of motion pictures telling the story of Stranger, a baby elephant seal captured during a Lewis expedition to Mexican waters that year.

The 400-pound baby, named in honor of the collector's yacht, was only one in a long list of zoological rarities for which the San Diego Zoo could thank Mr. Lewis. As stated in ZOONOOZ of January, 1936, year after year he had been going "to the wild places where dealer and professional collectors cannot go" to bring back to the Zoo valuable and interesting specimens that could not be obtained otherwise.

Mr. Lewis, who amassed a fortune through real estate holdings in the Balboa and Newport areas, always made the expeditions at his own expense. Often costly modifications were necessary aboard his yacht, *The Stranger,* to ensure the safe and comfortable transportation of delicate wild animals. For the famous Baby Walrus Marie he had a seawater swimming pool built on board. For a group of flighty flamingos he designed cloth-lined cages with padded frames and flexible walls to keep them from injuring themselves during the long trip from their native haunts in South America.

In addition to planning suitable traveling quarters, Mr. Lewis often cared for the animals himself, helping them adjust to life in captivity and to strange new diets. Bales of "reindeer moss" were carried aboard *The Stranger* for two reindeer youngsters during their two-month voyage from the North. By the time they arrived in San Diego these star boarders had made the transition to the Zoo diet of hay and grain.

Even without reindeer the arrival of *The Stranger* and its adventuresome captain was always like Christmas at the Zoo. Tapirs, caimans, seals, tortoises, porcupines, otters, iguanas, monkeys and many birds – over three hundred creatures in all – found their way to our collection aboard *The Stranger.* In recognition of his contributions Fred E. Lewis was made an honorary vice-president of the Zoological Society in 1956.

Undoubtedly what pleased him most, however, were the Zoo's living testimonials to his skill as a collector and zoologist. Of these, several still are on display. The largest member of the Giant Tortoise herd, Speed, was one of his earliest donations, arriving at the Zoo in 1933. This elder Giant now weighs 526 pounds, but Speed's age remains his own secret. He may be at least 100. Since the Giant Tortoises probably are the longest lived animals in the world, Speed, or at least some member of his clan, could survive through generations of Zoo-goers, living memorials to the explorations, enthusiasm and generosity of Fred E. Lewis.