

expanded shale
concrete

facts[®]

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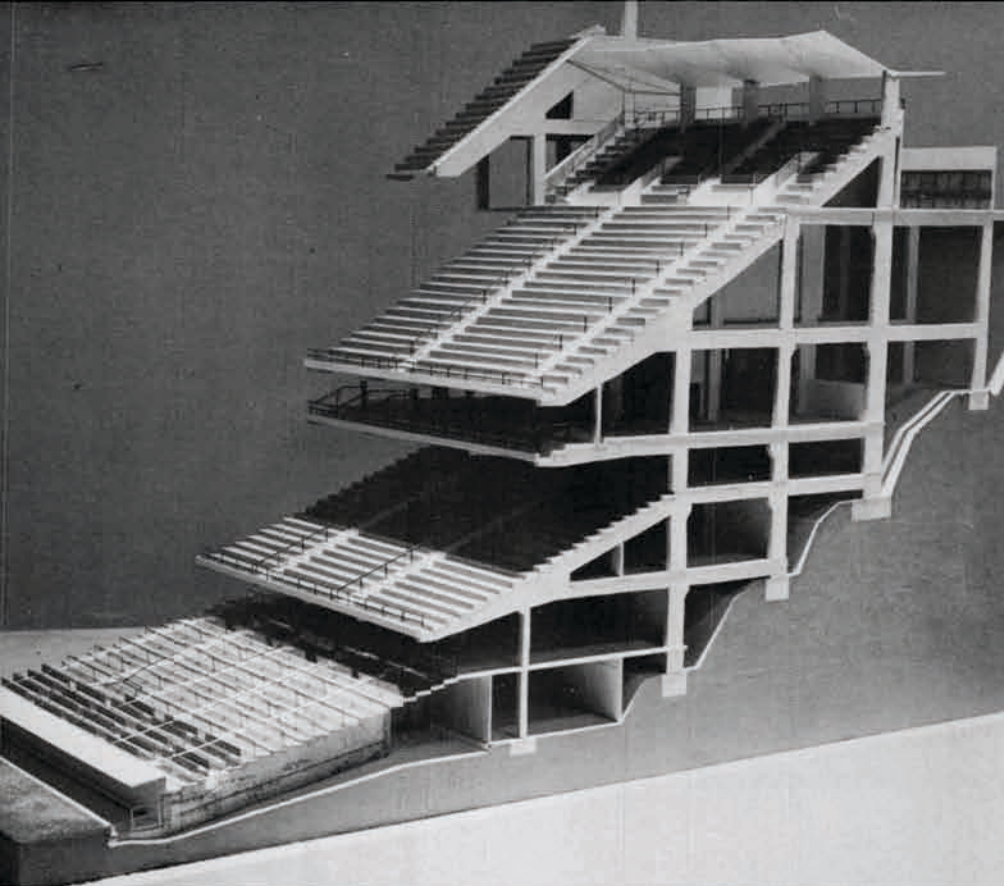
Journal

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Story and Pictures
pages 2 and 3

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Cut-a-way model of section of stadium showing tiered excavations into which the precast elements are combined to provide the huge multi-deck structure that will seat 54,000 fans.

**"Play Ball!" soon will be heard
in the new**

—LOS ANGELES DODGER BASEBALL STADIUM

Scheduled for completion before the start of the 1962 baseball season is the world's most modern baseball park — Dodger Stadium in Los Angeles, Calif. Bulldozers and other earth-moving equipment are busy excavating and filling one million cu. yd. of earth as this huge project starts taking shape.

There are a series of tiers built into the natural contours of the site which will provide Dodger fans with easy access to seating directly from adjacent parking areas at about the same levels. According to plans and specifications no fan will have to climb more than twenty rows in order to get to his seat.

After considering various types of building materials the engineering firm of Praeger-Kavanagh-Waterbury of New York City decided to use lightweight concrete. A

structural steel frame was considered at first but because of corrosion and costly maintenance upkeep it was eliminated. Two main factors affected the decision to use lightweight concrete in this huge structure — first, the reduction in dead weight led to reduced earthquake design stresses, and second, the high quality concrete practically eliminated continuous maintenance costs.

An expanded shale aggregate was selected for the structural lightweight concrete, with all concrete elements above the foundation being lightweight. Most of the structural members including floors, beams, columns and stairways are precast with conventional reinforcement at a casting yard near the site. When adequately cured the units are hoisted into place and connected to form the stadium proper. Approximately 17,200 cu. yd. of precast

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Cover Pic: Model of finished stadium in Chavez Ravine showing tiered parking areas adjacent to corresponding decks in the stadium. Note complete restaurant near right field from which game can be viewed while eating. Note also the hyperbolic paraboloid design for roofed areas over restaurant and stands.

Excavating and building up the tiers involves over 1 million cu. yd. of earth moving. Concrete column foundations and concrete backwalls are under construction.



concrete and 8700 cu. yd. of cast-in-place concrete will be used.

All of the lightweight expanded shale concrete was designed for an ultimate compressive strength of 3750 ps at 28 days with an air-dry unit weight not to exceed 100 pcf. This was achieved with a cement factor of 6.15 sacks per cu. yd. and the use of a water reducing admixture. The first 30 test cylinders taken at the jobsite averaged 4900 psi.

Engineer and Architect: Praeger-Kavanagh-Waterbury, New York, N. Y.

General Contractor: Vinnell Constructors, Los Angeles.

Ready-Mix Concrete: Consolidated Rock Products Co., Los Angeles.

Testing Laboratory: Raymond G. Osborne Laboratories, Los Angeles.

Rocklite expanded shale aggregate furnished by Rocklite Products, Ventura, Calif.



(Left) At a casting site near the stadium the various precast elements of lightweight concrete are being fabricated and stored while excavations and foundations are underway.

(Right) What appear to be stack-cast units are in fact wide stairway or seating sections with deep score marks on the underside for architectural effect.

