

## ABSTRAK

**ARYA ARIS SULAIMAN, NPM 720511133** Perencanaan Pembangunan Gedung Lantai 2 Pondok Pesantren Tahfidz Al-qur'an Darul Huda Kecamatan Batang-Batang Kabupaten Sumenep. (Pembimbing: **DWI DESHARIYANTO, MT.**).

Pondok Pesantren Tahfidz Al-Qur'an Darul Huda di Kecamatan Batang-Batang dengan lokasi koordinat  $6^{\circ}57'00.4''$  lintang selatan dan  $114^{\circ}00'02.2''$  bujur timur. Dari hasil survey lokasi di peroleh fasilitas yang tersedia saat ini terbilang tidak layak dipergunakan untuk pemondokan.

Jenis penelitian yang digunakan adalah metode kuantitatif mengacu pada tata ruang gedung mengacu peraturan menteri pendidikan nasional nomor 24 tahun 2007 tentang sarana dan prasarana pendidikan umum, Desain awal (Pre elementary Design) untuk elemen struktur (SNI 2847:2019), Pembebanan berdasarkan PPPURG 1987 dan SNI 1726:2019, Analisa Struktur menggunakan aplikasi SAP 2000 V20.

Struktur atap menggunakan kayu jati dengan model atap pelana, perencanaan pelat lantai yaitu 12 cm. Dimensi balok (BA) yaitu 25 cm x 40 cm, dimensi balok (B1) yaitu 30 cm x 50, dimensi balok (B2) yaitu 25 cm x 40 cm, dimensi balok (B2) yaitu 25 cm x 40 cm, dimensi balok (B4) yaitu 35 cm x 40 cm, dimensi sloof (S) yaitu 25 cm x 35 cm, dan dimensi ring balok (RB) yaitu 30 cm x 40 cm. Kolom (K1) 50 cm x 50 cm dan kolom (K2) 45 cm x 45 cm. Pondasi foot plat (FP1) dimensi 135 cm x 135 cm dan pondasi foot plat (FP2) dimensi 100 cm x 100 cm. Anggaran biaya sebesar Rp 2.209.737.367,53. merupakan total anggaran biaya mulai dari persiapan sampai finishing.

Kata Kunci: perencanaan, gedung, struktur, biaya

## ABSTRACT

**ARYA ARIS SULAIMAN, NPM 720511133** Planning for the Construction of the 2nd Floor Building of the Tahfidz Al-Qur'an Darul Huda Islamic Boarding School, Batang-Batang District, Sumenep Regency. (Supervisors: **DWI DESHARIYANTO, MT.**).

The Darul Huda Al-Qur'an Memorization Boarding School in Batang-Batang District with coordinates 6°57'00.4" south latitude and 114°00'02.2" east longitude. From the results of the location survey, it was found that the facilities currently available are considered unsuitable for use as lodgings.

The type of research used is a quantitative method referring to the building layout referring to the regulation of the Minister of National Education Number 24 of 2007 concerning general education facilities and infrastructure, Initial Design (Preliminary Design) for structural elements (SNI 2847: 2019), Loading based on PPPURG 1987 and SNI 1726: 2019, Structural Analysis using the SAP 2000 V20 application.

The roof structure uses teak wood with a gable roof model, the floor plate planning is 12 cm. The dimensions of the beam (BA) are 25 cm x 40 cm, the dimensions of the beam (B1) are 30 cm x 50, the dimensions of the beam (B2) are 25 cm x 40 cm, the dimensions of the beam (B2) are 25 cm x 40 cm, the dimensions of the beam (B4) are 35 cm x 40 cm, the dimensions of the sloof (S) are 25 cm x 35 cm, and the dimensions of the ring beam (RB) are 30 cm x 40 cm. Column (K1) 50 cm x 50 cm and column (K2) 45 cm x 45 cm. The foot plate foundation (FP1) dimensions are 135 cm x 135 cm and the foot plate foundation (FP2) dimensions are 100 cm x 100 cm. The budget cost is Rp 2,209,737,367.53. is the total budget cost from preparation to finishing.

Keywords: planning, building, structure, cost