

## **ABSTRACT**

### **TECHNICAL PLANNING OF METRO OFFICE SERVICES OF STATE PROPERTY AND AUCTION USING SAP 2000 PROGRAM**

*by*

**FRANS KUSUMA WIJAYA**

*The purpose of technical planning of Metro Office Services of the State Property and Auction (KPKNL) is to produce the structural design of reinforced concrete building with a rational structure meets the security requirements referred to PBI 1971, SK SNI 03-2847-2002, SK SNI 03-1726-2002, and PPIUG 1983.*

*The building of Metro Office Services and the State Property Auction consists of 5 floors with the use of reinforced concrete structures using powerful ultimate planned. This structure is planned in accordance with earthquake resistant zone in the region of the Metro City. Material specifications using quality concrete  $f'_c$  of 22.5 MPa, quality steel reinforcement  $f_y$  240 MPa for P12, and Reinforcement 400 MPa for D13.*

*Analysis of the structure using SAP 2000 version 14, take part 1 of the portal to the results of field analysis SAP2000 moment (M), normal (N), shear force (D) and axial to the self-weight, live load and earthquake. Then performed calculations on the structure of the plates, beams, columns, and foundations with manual analysis.*

**Keywords:** *buildings, concrete slabs, plates, beams, columns, foundations, SAP 2000*