## **ABSTRACT**

Christofer. Time Control at Girder Beam Productions with Using CPM and LoB Method (Case Study PT Adhi Karya (Persero) Precast Factory Sentul). Thesis, Jakarta: Civil Engineering, Faculty of Engineering, State University of Jakarta, February 2017.

This research is purpose to control time in Girder beam production using CPM (Crticial Path Method) and LoB (Line of Balance) to get maximum productions amount with time adaptibility precisely.

This research is using count method and management of secondary and primary data that illustrated to graphic and diagram. Case study at project of building the overpass LRT (Light Rail Transit), to productions girder beam at PT. Adhi Karya Factory Precast Sentul.

The result of this research shows that productions capability girder beam increase as much 21 unit girder beam per month with speed track 59,4286 unit per hour, balance delay is 42,3678%, line efficiency 42,267 with time cycle that using is 68,5 hours in first cycle, 69 hours in second cycle, 69 hours in third cycle, 69 hours in fourth cycle and having waiting time that happen to every turn of cycle is one hour. So that the result of research can declare is happen productions acceleration with using CPM (Critical Path Method) and LoB (Line of Balance) is 10 hour per month.

Keyword: Line of Balance, Critical Path Method, Production analysis.