

ABSTRACT

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Now, many corporation try to be success with defending their existention. This case give many influence about quantity and quality from support's materials. One of them is sum of labors. This is make side problem, because they need the larger space to accomodate their labors. PT. Teras Nirwana Bali as owner ask to PT. PP Dirganeka as contractor and PT. Patroon Arsindo as consultant to built a new building to Cilandak office park. They have target to finish that building until March, 2011. Time for project is so late from planning time in contract. This case because there is problem for manage license for built the building in center government. This problem make project's scedule retreat until four month from planning's time. The building is built-up in area has wide 3393,2m² broadly 1788,77m². The building has 1 floor for basement and 14 floors for office room. Project's bugdet is Rp 12.400.000.000,00. Steps of job are built under structure and upper structure. In under structure there are foundation job and dewatering system. Dewatering system is needed because deep of graving for basement is deeper than from under ground water (UGW). Graving of basement in El.-4,0m and from Standard Penetration Test (SPT) ascertainable that location of UGW in El. -1,5m until El. -1,7m. Dewatering has fungtion to reduce soil water, so not disturb all construction in the graving area. This system has 3 kinds well, there are 2 hole deepwell point for pump of water for underground, 2 hole piezometer well for control condition underground because pumping by deepwell point, and 2 hole recharging well for refill UGW in outside area if occur problem because reduction over from planning. Use Hausmann's method, Thiem's method, and conventional formula ascertainable for detect capacity of water and dewatering well's pump for get reduction until El. -5,0m is used submersible pump with capacity 300 lt/minute.

Kata Kunci: Dewatering system , deepwell point, Hausmann's method, Thiem's method, and capacity of pump