

ABSTRACT

A construction method of a tunnel supporting structure provided along an inner wall surface of a tunnel includes: a framed-structure-unit arranging step (S135, S150) for arranging a framed structure unit (135) at a predetermined position; a base supporting structure forming step (S115, S120, S140, S145) for forming a base supporting structure (110, 120) along the inner wall surface of the tunnel; and an yielding-section forming step (S140, S155) for forming an yielding section (130) by spraying a concrete material to the framed structure unit (135) arranged at the predetermined position, wherein the predetermined position is a position at which the framed structure unit (135) is arranged so as to cross the base supporting structure (110, 120) in a tunnel radial direction.