

## **ABSTRACT**

### **LONG PLATFORM GUY-WIRE HANGING BASKET AND CONSTRUCTION METHOD FOR MAIN GIRDER SECTION**

A construction method for a main girder section based on a long platform guy-wire hanging basket. The method comprises the following steps: extending a load-bearing end of a load-bearing mechanism (1) out of a cast concrete section (2) to a set position and anchoring same; hoisting a precast anchor block (31) to the preset position above the load-bearing end, connecting the precast anchor block (31) and the load-bearing end by means of the anchoring part (32), and providing a shearing mechanism (4) between the cast concrete section (2) and the precast anchor block (31); and once a stay cable (5) is installed to a cable conduit (311) and tensioned, pouring concrete between the cast concrete segment (2) and the precast anchor block (31) to complete the pouring of the main girder section. The method solves the problems that: when the stay cable is connected to an arc-shaped head of the guy-wire hanging basket by using guy-wire rods, once main girder concrete is poured, tensioned and prestressed, the guy-wire rods need to be dismantled, and the cable force of the stay cable needs to be converted from the arc-shaped head to the concrete main girder, and during a "system conversion" process, there will be great instantaneous cable force, which can easily damage the structure. The method may reduce the number of guy-wires and increase the construction efficiency.

Fig. 3