

9.30 INTAKES AND UTILITY ACCESSES

9.31 INTAKE CONSTRUCTION ON PAVING JOBS

Intake standards show a portion of a slab, or a portion of a curb and gutter unit, blocked out at time of construction, which is to be filled in later when intakes are built. Since intakes are usually sublet by the paving contractor, the question of including this insert section as a part of the intake has been brought up frequently.

When computing the quantity of pavement or linear feet of curb and gutter, designers consider all concrete work from back of curb to back of curb as pavement or as linear feet of curb and gutter.

No deduction is made for insert sections which are blocked out and then formed when an intake is built. These insert sections are blocked out to facilitate construction of intake. Other areas of pavement or curb and gutter may be blocked out to prevent slow-downs of the paving crew because of special shaping requirements. Insert sections and areas requiring special shaping will be paid for as part of the pavement or curb and gutter quantities.

9.32 BOX-OUTS FOR UTILITY ACCESSES

Standard Road Plans provide for boxing out utility accesses in pavement. It is preferred that fixtures falling entirely within a slab be adjusted to the design elevation prior to placing concrete. Clearance of ring below pavement grade is generally 12 mm (1/2 inch). Care must be taken during the paving process to avoid disturbance of the ring. A roll of concrete in front of the portion of the screed passing over the ring should be removed and used to pack it and prevent movement.

Box-out for utility accesses occurring in a form line should be three-sided, with the end sections at 60 degrees with the form and center section parallel with the form. All three sides should be about 300 mm (12 inches) from upper edge of the ring.

The ring should be set to the required grade and concreted in when the adjacent slab is being placed. Special procedures may be necessary when incorporating some old utility accesses into the new pavement, whether a box-out is used or not. Particular attention should be paid if the bearing support of the old structure is questionable.

9.33 BOX-OUTS ON SLIPFORM PAVING

Contractors, when slipforming urban projects, sometimes fill the inside area of box-outs for utility accesses and intakes with soil. This is to help keep the forms from moving and reduce the volume of concrete mix that is wasted during passage of paver over box-outs.

In some cases a box-out is filled to a greater height than the forms and soil becomes intermixed with concrete as the paver passes over these areas. This results in contaminated mix being incorporated in pavement. To insure that the concrete mix will not be contaminated, the height of fill inside box-out area should be 75 mm (3 inches) or more below top of the forms, or a sheet of plywood may be placed over the opening of box-out areas.

In some instances, when paving past a box-out, a longitudinal KT or a K joint is inadvertently constructed in the pavement edge. The longitudinal joint between the edge

of pavement and insert is to be a “B” joint. The purpose of this smooth joint is to permit the slab to move longitudinally without moving the insert and putting stresses on the intake.