

SUPPLEMENTAL SPECIFICATIONS  
INDIANA DEPARTMENT OF TRANSPORTATION  
1999 STANDARD SPECIFICATIONS

REVISION TO 1999 STANDARD SPECIFICATIONS

SECTION 702, BEGIN LINE 64, DELETE AND INSERT AS FOLLOWS:

The relative yield of the concrete shall be determined in accordance with ~~501.03(a)~~ 505. The concrete when produced shall provide a relative yield of  $1.00 \pm 0.02$ .

SECTION 702, BEGIN LINE 114, DELETE AND INSERT AS FOLLOWS:

All concrete shall have an air content of  $6.5\% \pm 1.5\%$  by volume. Air content shall be determined in accordance with ~~501.03(b)~~ 505. When fly ash is used, the first concrete

truck on the contract will be tested by the Department for complete compliance with plastic concrete requirements for air content, slump, and yield. If not in complete

SECTION 702, BEGIN LINE 517, DELETE AND INSERT AS FOLLOWS:

**702.12 Consistency.** Slump ~~shall will~~ be measured in accordance with ~~AASHTO T 119~~

~~as modified in 501.03(a)~~ 505 and shall be no less than 25 mm (1 in.) nor more than 100 mm (4 in.) except for concrete placed in foundation seals.

SECTION 702, BEGIN LINE 728, DELETE AND INSERT AS FOLLOWS:

The beams ~~shall will~~ be cured under the same conditions as the concrete which they

represent. Beams ~~shall will~~ be tested *for flexural strength* as simple beams with third point loading in accordance with ~~AASHTO T 97 as modified in 501.03(a)~~ 505.

SECTION 702, BEGIN LINE 1276, DELETE AND INSERT AS FOLLOWS:

Traffic, live loads, and backfill against wingwalls, spandrel walls, and abutments may be allowed when test beams indicate a flexural strength of ~~at least 3310~~ 3300 kPa (480 psi) *or greater*

for third point loading. Concrete pavement may be opened to traffic in accordance with ~~501.22~~ 502.18. Beams ~~shall will~~ be prepared and tested in accordance with 702.12(g). Before

traffic is permitted over a concrete structure built to be under fill, it shall be covered with ~~at least 230~~ 225 mm (9 in.) *or more* of earth or other suitable material, or otherwise protected. All

other structures shall be properly protected against impact or other damage.

SECTION 704, BEGIN LINE 80, DELETE AND INSERT AS FOLLOWS:

The finishing machine shall be in accordance with the applicable requirements of ~~501.04(c)~~ 507.04(b) except it shall have ~~at least~~ *a minimum of* one reciprocating non-vibrating screen. The weight

of the machine shall not cause undue deflection of the bridge members or falsework. The

SECTION 704, BEGIN LINE 101, DELETE AND INSERT AS FOLLOWS:

When a finishing machine is not required or used, as soon as the concrete is placed and consolidated it shall be struck-off to the specified cross section and grade by means of a steel template or other satisfactory metal clad implement having a minimum width of ~~at least 230~~ 225 mm (9 in.) or greater.

For all methods of striking off the surface, an excess of concrete shall be kept in front of the cutting edge at all times. The strike-off shall go over the entire area only for the number of times necessary to produce the required profile and cross section. In general, the strike-off process shall be in accordance with ~~501.15(a)~~ 504 except a vibrator on the strike-off will not be required.

SECTION 704, BEGIN LINE 129, DELETE AND INSERT AS FOLLOWS:

particles during the final checking and brooming. After final checking, the surface shall be tined in accordance with ~~Method 2 of 501.15(d)~~ 504.03, except the spacing of the tines shall be

22 mm, 19 mm, 19 mm, 25 mm, 19 mm, 19 mm, 29 mm (7/8 in., 3/4 in., 3/4 in., 1 in., 3/4 in., 3/4 in., 1 1/8 in.), and then repeated. If a new bridge deck is to be overlaid with

SECTION 704, BEGIN LINE 140, DELETE AND INSERT AS FOLLOWS:

Smoothness shall be in accordance with ~~501.16~~ 502.20. If, after the above requirements

have been met, portions of the floor are not entirely satisfactory, the removal and replacement of such portions may be ordered to secure a satisfactory floor. Such removal and replacement shall be done with no additional payment.

SECTION 705, DELETE LINES 18 THROUGH 22.

SECTION 707, AFTER LINE 18, INSERT AS FOLLOWS:

*Concrete Sealers* ..... 909.09, 909.10

SECTION 707, BEGIN LINE 164, INSERT AS FOLLOWS:

class C concrete slab. *The Contractor shall redesign longitudinal reinforcing steel in the deck for negative moment over the interior supports.* Formwork is eliminated in the areas between the beams, but forms

SECTION 707, LINE 211, INSERT AS FOLLOWS:

placed. *The tops of all beams and the outside faces of the fascia beams shall be sealed with an approved concrete sealer in accordance with 709.*

SECTION 707, BEGIN LINE 348, DELETE AND INSERT AS FOLLOWS:

**707.10 Method of Measurement.** Precast or prestressed concrete structural members will be measured by the ~~number of members installed~~ *meter (linear foot) along the top of each member* or by the square meter (square foot) of ~~roadway top surface as specified of each member. No measurement will be made if payment is~~ *roadway top surface as specified of each member.* ~~on a lump sum basis.~~ Railing will be measured in accordance with 706.06 if specified as a pay item.

**707.11 Basis of Payment.** The accepted quantities of precast or prestressed concrete structural members will be paid for at the contract unit price per ~~each meter~~ (*linear foot*) or per square meter (square foot) for structural member, concrete, of the type and size specified.

SECTION 707, BEGIN LINE 367, DELETE AND INSERT AS FOLLOWS:

~~Structural Member, Concrete, \_\_\_\_\_, \_\_\_\_\_ ..... EACH m (LFT)~~

~~type       size  m2 (SFT)~~

~~Structural Members, Concrete,.....LS~~

SECTION 711, AFTER LINE 911, INSERT AS FOLLOWS:

*Stud shear connectors placed on new structural steel will not be measured. Stud shear connectors placed on existing structural steel will be measured by the number installed.*

SECTION 711, AFTER LINE 932, INSERT AS FOLLOWS:

*Stud shear connectors placed on existing structural steel will be paid for at the contract unit price per each, complete in place and accepted.*

SECTION 711, AFTER LINE 1005, INSERT AS FOLLOWS:

*Stud Shear Connectors*.....*EACH*

SECTION 711, AFTER LINE 1010, INSERT AS FOLLOWS:

*The cost of stud shear connectors placed on new structural steel will be included in the costs of structural steel.*

SECTION 713, BEGIN LINE 48, DELETE AND INSERT AS FOLLOWS:

Temporary pavement markings in accordance with ~~801.13~~ *801.10* shall be placed as shown on the plans. Delineators in accordance with 804 shall be placed as shown on the plans.

SECTION 713, BEGIN LINE 78, DELETE AND INSERT AS FOLLOWS:

per each of the type specified. Temporary pavement markings will be measured in accordance with ~~801.17~~ 801.15 . Seeding and sodding will be measured in accordance with

SECTION 713, BEGIN LINE 89, DELETE AND INSERT AS FOLLOWS:

for the type specified. Temporary pavement markings will be paid for in accordance with ~~801.18~~ 801.16.

SECTION 722, BEGIN LINE 58, DELETE AND INSERT AS FOLLOWS:

waiting period for the slump test. The air content test shall be in accordance with ~~501.03(b)~~ 505. Any concrete mixture which is not properly proportioned or does not conform to the specified slump ~~shall~~ *will* be rejected.

SECTION 722, BEGIN LINE 278, DELETE AND INSERT AS FOLLOWS:

damage. The finished surface shall be in accordance with ~~501.16~~ 504.03.

SECTION 722, BEGIN LINE 286, DELETE AND INSERT AS FOLLOWS:

surface or bringing coarse aggregate to the top. The grooves shall be in accordance with ~~501.15(d)2~~ 504.03. ~~However, until December 1, 1995, the spacing of the grooves, unless otherwise directed, may be 22.2 mm (7/8 in.), 19 mm (3/4 in.), 19 mm (3/4 in.), 25 mm (1 in.), 19 mm (3/4 in.), 19 mm (3/4 in.), 28.6 mm (1 1/8 in.), then repeat.~~ The grooves shall be terminated approximately ~~457~~ 450 mm (18 in.) from vertical faces such as curbs and concrete railing.