

Design Standards Letter

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Section/Plan No.: None

Subject: Special Provisions Standard Drawings and Form SP-14

Body

ALL DIVISION, DISTRICT AND URBAN ENGINEERS AND CHIEF COUNSEL:

We are furnishing you herewith several copies of the following special provisions and standard drawings.

SPECIAL PROVISIONS

Highway Lighting. Transmitted with General Letter No. 42, 1965 was a revision to this subject dated November, 1965. We have subsequently revised pages 4, 7, and 8 and are requesting that you substitute these attached pages for the ones previously transmitted. Page four was revised to change the turn-on range of photoelectric cells from 1.0 to 6.0 foot-candles to 1.0 to 3.0 foot-candles. Page seven was revised to classify rock embankments as Class A Excavation with respect to Type II Trenching and Backfilling. Special effort should be made to properly classify the three types of trenching and backfilling on the plans to minimize the chances for change orders. Page eight was revised to delete the words "and the applicable sections of IPCEA S-61-402" from the last sentence of Section 70.23.1. Page eight was also revised to add the words "or Underwriters' Laboratory No. 83" to the first sentence of Section 70.23.1.3.

Traffic Signals. Section 71.11.3 on page 10 of this special provision has been revised to include Underwriter's Laboratory No. 83 Specification and to set out the requirements of the insulation.

High Density Plywood Signs. This is a new special provision setting out the requirements for temporary signs constructed of plywood.

Crevice Concrete. This is a new special provision covering the measurement and payment for concrete used to fill cavities or crevices occurring below plan footing elevation.

Structural Steel Construction. This special provision has been revised to require the contractor to furnish an acceptable manual torque wrench for checking bolting operations.

Field Laboratories. This special provision has been revised to better define the number of laboratories the contractor will have to furnish based on his operations.

All of the preceding special provisions will be effective with the December 9, 1965 letting with the exception of the Highway Lighting special provision which is effective with the November 4, 1965 letting.

STANDARD DRAWING

The following are new standard drawings designed especially for use in the St. Louis area, but may be used anywhere in the State with the approval of the respective affected utility company.

Specifically these drawings are intended for use as follows.

Standard Drawing 70.17. This drawing is intended for use with a small lighting installation, such as basic lighting at intersections, with circuit breakers and meter mounted on a utility company service pole. Photoelectric control and selector switches are mounted on the first lighting pole of each circuit. Only the current for signals is metered.

Standard Drawing 70.18. This drawing is similar to Standard Drawing 70.17, except that all control equipment is mounted on a State owned service pole.

Standard Drawing 70.19. This drawing is for a major lighting installation where 240 volt secondary power is supplied, which is not to be metered.

Standard Drawing 70.20. This drawing is the same as Standard Drawing 70.19, except that a metered 120/240 volt power supply for signals has been added.

Standard Drawing 70.21. This drawing is for a major lighting installation where 480 volt secondary power is supplied, which is not to be metered.

Standard Drawing 70.22. This drawing is for a 120/240 volt multiple circuit for signals and a 480 volt circuit for lighting with both circuits being metered.

A similarity of design will be noted between Drawings 70.19 through 70.22 and Drawings 70.12, 70.15, and 70.16, which were designed for use in the Kansas City area. The main difference is that a separately housed main disconnect switch is used in the Kansas City area, while a main circuit breaker housed in the control cabinet is used as a main disconnect switch in the St. Louis area. All of these Standard Drawings will be used for applicable projects, beginning with the December 9, 1965 letting.

A supply of revised Form SP-14, dated 12-1-65, is enclosed and is current with this transmittal.

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