

Replacement of Waterproofing Membrane System damaged by the Contractor's operations shall be at no additional cost.

CONCRETE, STRUCTURAL

SECTION 702, BEGIN LINE 7, DELETE AND INSERT AS FOLLOWS:

702.02 ~~Classes of Concrete~~

The following ~~classes of~~ concrete shall be used where specified.

| Class of Concrete | A | B | C | |
|--------------------------------|------------------|------------------|------------------|------|
| Cement content in lbs/cu yd | 564 | 470 | 658 | 728 |
| Maximum water/cement ratio in | | | | |
| lbs of water per lbs of cement | 0.450 | 0.620 | 0.443 | 0.40 |

~~Unless specified otherwise, the concrete used shall be class A. When class A is specified, class C may be used as a substitution. When class B is specified, class A or class C may be used as a substitution.~~

~~Concrete in superstructure, integral bents, and railings shall be class C. Concrete in bent caps, unless poured integrally with the superstructure; pier caps; abutment caps; pier stems; abutment walls; mudwalls; columns; crashwalls; collision walls; and wingwalls, unless poured with integral end bents, shall be class A. Concrete in footings shall be class B.~~

SECTION 702, BEGIN LINE 34, DELETE:

~~For non-exposed concrete, Class B or Higher,~~

~~Size No. 8 904~~

SECTION 702, BEGIN LINE 72, DELETE AND INSERT AS FOLLOWS:

A CMDS shall be submitted ~~seven~~ 21 calendar days prior to production and be approved by the *Railroad and Engineer* except utilization of the Department provided spreadsheet

SECTION 702, BEGIN LINE 124, DELETE AND INSERT AS FOLLOWS:

~~Class C or Concrete~~ shall contain either a water-reducing admixture or a

SECTION 702, BEGIN LINE 132, DELETE AND INSERT AS FOLLOWS:

entraining cements will not be allowed in class ~~C~~ concrete.

SECTION 702, BEGIN LINE 143, DELETE:

~~If the contract requires stay-in-place metal forms for the bridge deck or if the Contractor elects to use such forms, the bridge deck concrete shall incorporate class AP coarse aggregate instead of class A.~~

SECTION 702, BEGIN LINE 1415, DELETE AND INSERT AS FOLLOWS:

| | |
|--|-----------------|
| Concrete, A, Substructure | CYS |
| Concrete, A, | |
| Superstructure..... | CYS |
| Concrete, B, Above Footings | CYS |
| Concrete, B, Footings | CYS |
| Concrete, Structural C, | CYS |
| use | |
| Concrete, Foundation Seal | CYS |
| Field Drilled Hole in Concrete | EACH |
| Grates, Basins, and Fittings, Cast Iron | EACH |

ANTI-GRAFFITI COAT

Description

This work shall consist of preparing surfaces and furnishing and applying anti-graffiti coating upon the exposed surfaces of the cut walls, concrete bridge railing, cast in place, precast, and walls in accordance with 105.03 as shown on the plans.

Materials

The anti-graffiti coating shall be sacrificial, clear, wax based emulsion type coating.

Construction Requirements

Prior to application, the Contractor shall verify compatibility with other materials, inspect all surfaces to be treated and correct all flaws in the substrate that would ultimately affect the performance or appearance of the anti-graffiti coating.

Surface preparation, method of application, application techniques, coating thickness, time of application, rate of application, temperature requirements for application and curing time for the anti-graffiti coating shall be in accordance with the requirements of the manufacturer and the applicable portions of 619.

The substrate and the newly coated surface shall be allowed to fully cure before application. Application shall be performed by an experienced applicator in accordance with the manufacturer's recommendations. The number of coats and coverage rates shall at no time be less than the manufacturers written requirements. Highly textured surfaces may require multiple coats, however the coating shall not be applied too thick which could negatively impact the appearance of the walls and railings.

Plants, vegetation and adjoining surfaces that are not to have anti-graffiti coating shall be protected from over-spray. All federal, state, and local environmental restrictions shall be satisfied.

Manufacture's current product data sheets, including installation and testing procedures shall be submitted for approval prior to installation.