MICHIGAN

DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

FOR

**ORNAMENTAL ALUMINUM FENCE**

MTP:BA 1 of 3 APPR:NAP:DMG:05-04-22

**a. Description.** This work consists of furnishing, manufacturing, and installing an ornamental aluminum fence and gates at the locations shown on the plans. Complete all work in accordance with the standard specifications, except as modified herein.

Furnish fence from one of the following manufacturers or approved equal:

Ultra Aluminum Mfg., Inc. Ameristar Fence Products

2124 Grand Commerce Drive 1555 North Mingo Road

Howell, MI 48855 Tulsa, OK 74116

(800) 656-4420 (800) 321-8724

[www.ultrafence.com](http://www.ultrafence.com) [www.ameristarfence.com](http://www.ameristarfence.com)

Ensure the furnished fence and all components are from one manufacturer.

**b. Materials.** Furnish concrete Grade 3000 or Grade 3500 for post footings in accordance with section 1004 of the Standard Specifications for Construction.

Ensure aluminum material for fence framework (i.e., tubular pickets, rails, and posts) is in accordance with *ASTM B221*. Ensure the aluminum extrusions for posts and rails (outer channels) are *Alloy and Temper Designation 6005-T5*. Ensure the aluminum extrusions for pickets and rail inner slide channels are *Alloy and Temper Designation 6063-T5*.

Hardware. Furnish stainless steel bolts, washers, nuts, and screws for assembly and installation of the fence panels in accordance with the manufacturer’s recommendations.

Ensure the furnished fence and all components are from one manufacturer and are designed to carry 0.015 kips per square foot wind load acting normal to the entire surface of the fence. This wind load need not be applied simultaneously with live load.

The various fence and gate components must be in accordance with the following dimensions:

|  |  |
| --- | --- |
| Components | Dimension or Feature |
| Aluminum Base Plates | as shown on the plans |
| Spacing Between Pickets | 4 inches maximum |
| Post Spacing | 72 inches on center |
| Height of Fencing | as shown on the plans |
| Height of Gate | same as adjacent fencing |
| Clear Width of Gate | as shown on plans |
| Color (Federal Standard 595, color # 17038) | Gloss Black |
| Finish | Powder Coated |

Submit fence and gate specifications, color samples and shop drawings (in PDF) to the Engineer for approval a minimum of 14 calendar days prior to ordering any materials. Do not order any materials until approval of specifications, color and shop drawings is received from the Engineer.

**c. Construction.** Construct the ornamental aluminum fence in accordance with subsection 808.03 of the Standard Specifications for Construction, as specified herein and as shown on the plans.

Field verify the location of all fence and gate components and dimensions prior to fabrication to ensure proper fit up.

Assemble and install fence and gate components in accordance with the manufacturer’s recommendations.

Encase posts in a concrete footing which must extend a minimum of 36 inches below finish grade or in accordance with manufacturer’s recommendations.

Install the fence and gates at locations shown on the plans.

Gates must have hardware allowing them to be locked in both the open and closed position.

Install expansion sleeves as recommended by the manufacturer.

Shop weld aluminum in accordance with *AWS D1.2* and as specified in the contract. Field welding is prohibited.

Repair any painted surface that has been damaged during shipping or assembly in accordance with the manufacturer’s recommendations.

Submit working drawings to the Engineer for review and approval, not less than 14 calendar days prior to fabrication.

Furnish manufacturer’s limited lifetime warranty that the ornamental railing system is free from defects in material and workmanship including cracking, peeling and chipping.

**d. Measurement and Payment.** The completed work, as described, will be measured and paid for at the contract unit price using the following pay items:

**Pay Item Pay Unit**

Fence, Ornamental Alum, \_\_ inch Foot

Fence Gate, Ornamental Alum, \_\_ foot Each

1. **Fence, Ornamental Alum, \_\_ inch** will be measured along the centerline of the fence. The price includes all appurtenances for furnishing, fabricating, and installing the **Fence, Ornamental Alum, \_\_ inch** complete and in place including concrete footings and all hardware required for erection.

2. **Fence Gate, Ornamental Alum, \_\_ foot** will be measured for each gate installed. The price includes all appurtenances for furnishing, fabricating, and installing the **Fence Gate, Ornamental Alum, \_\_ foot** complete and in place including concrete footings, hinges, locking mechanisms, and all hardware required for erection.