

## **ITEM 10615.80 M - PIPE HANDRAIL**

### **DESCRIPTION**

The work shall consist of fabricating, furnishing, installing and anchoring galvanized steel pipe handrail at the locations indicated on the contract plans.

### **MATERIALS**

Materials used in this work shall meet the following requirements:

Rails & Posts (Pipe)

**ASTM A53**

Concrete (Anchorage)  
(If needed)

Portland cement concrete used for anchorages shall be Class A or C conforming to the requirements of Section 501 Portland Cement Concrete - General, except that requirements for automated batching shall not apply.

Acceptance of the railing system will be based on the manufacturer's certification of conformance to this specification, and the Engineer's inspection of the completed handrail.

### **CONSTRUCTION DETAILS**

The Contractor shall submit shop drawings of pipe handrail to the Engineer for approval.

Pipe handrail shall be installed in accordance with the details shown in the plans and the directions of the Engineer. The requirements of Subsections 568-3.01 A through G, shall apply.

### **METHOD OF MEASUREMENT**

This work will be measured by the number of linear meters of pipe handrail installed, measured along the centerline of top handrail center to center of end posts.

### **BASIS OF PAYMENT**

The unit price bid shall include the cost of all labor, equipment and materials necessary to complete the work. Any repairs made necessary by the Contractor's operations shall be done to the satisfaction of the Engineer at no additional cost to the State.