

83 RAILINGS AND BARRIERS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This section shall apply to Midwest Guard Rail System used in the project.
- B. Section 83-2.02 “Midwest Guard Rail Systems” of the Standard Specifications for Midwest Guard Rail System.
- C. Refer to Section 81 “Miscellaneous Traffic Control Devices” of the Standard Specifications for Traffic Delineators.

PART 2 – SUBMITTALS

- A. Submittals Midwest Guard Rail System shall be per Section 83-2.02A(3) “Submittals” of the Standard Specifications.
- B. Submittals for Delineators shall be per Section 81-2.01C “Submittals” of the Caltrans Standard Specifications.
- C. Submittals for Reflectors shall conform to section 83-2.02, “Midwest Guardrail System” of the Caltrans Standard Specifications.

PART 3 – MATERIALS

3.01 DESCRIPTION

- A. Midwest Guard Rail System shall be with steel line post with plastic blocks in accordance with Section 83-2.02B, “Materials” of the Standard Specification and Caltrans Standard Plans A77P2 Type 11D layout or A77Q1 Type 12A Type 12A Layout or A77Q4 Type 12AA Layout.
- B. MGS Terminal System shall be in accordance with section 83-2.02B “Materials” of the Standard Specifications and Caltrans Standard Plans A77P2 and A77U5
- C. Traffic delineators shall be in accordance with Section 81-2.02 of the Standard Specifications and Caltrans Standard Plans A77N4
- D. Markers shall be in accordance with Section 83-1.02 of the Standard Specifications.
- E. Reflectors Shall be in accordance with section 83-2.02, “Midwest Guardrail System” of the Caltrans Standard Specifications and Caltrans Standard Plans A77N2

PART 4 – EXECUTION

4.01 CONSTRUCTION

- A. Midwest Guard Rail System shall be in accordance with Section 83-2.02(C), “Construction” of the Standard Specification.
- B. Delineators shall be in accordance with Section 81-2.03 of the Standard Specification.
- C. Guardrail Terminal Sections
 - 1. Construct terminal section at locations shown in accordance with Section 83-2.02C, “Construction” of the Standard Specifications. Terminal sections consists of posts,

railing, hardware, anchorage assembly, etc. necessary to construct the type of terminal section specified.

2. Where concrete anchors are installed, construct either cast-in-place or precast units. Do not connect the guardrail to cast-in-place anchors until the concrete has cured 7 days.

D. Guardrail Post

1. When pavement is within three (3) feet of the guardrail, set posts before placing the pavement.
2. Do not shorten guardrail posts unless the cut end is set in concrete per Caltrans "Traffic Safety Systems Guidance". Do not shorten posts in terminal sections.
3. Drive posts into pilot holes that are punched or drilled. The dimensions of the pilot hole shall not exceed the dimensions of the posts by more than 3 %". Set posts plumb, backfill and compact.
4. When longer posts are specified, do not use them in the terminal sections. Stamp the post length on the top of all wood posts. Re-stamp numbers disturbed during installation.
5. Alternate hole arrangements do not apply to posts in the anchorage assembly.

PART 5 – MEASUREMENT AND PAYMENT

- A. The contract lineal foot price paid for the "Midwest Guard Rail System" shall include, delineators, reflectors, etc. and full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for performing all the work involved as shown on the plans and as specified in these Special Provisions, the Standard Specifications, and as directed by the Engineer and no additional compensation will be allowed therefore. The length of the Midwest Guardrail System does not include the 25 feet of Terminal System.
- B. The contract unit price paid for the "Type SKT MGS Terminal System" shall include, delineators, reflectors, etc. and full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for performing all the work involved as shown on the plans and as specified in these Special Provisions, the Standard Specifications, and as directed by the Engineer and no additional compensation will be allowed therefore. The length of the Terminal System is 25 feet and separate from the MGS length.
- C. The contract unit price paid for the "Type SRT MGS Terminal System" shall include, delineators, reflectors, etc. and full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for performing all the work involved as shown on the plans and as specified in these Special Provisions, the Standard Specifications, and as directed by the Engineer and no additional compensation will be allowed therefore. The length of the Terminal System is 25 feet and separate from the MGS length.
- D. The contract unit price paid for the "MGS A77Q4 Structure Departure Terminal System" shall include, delineators, reflectors, etc. and full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for performing all the work involved as shown on the plans and as specified in these Special Provisions, the Standard Specifications, and as directed by the Engineer and no additional compensation will be

allowed therefore. The length of the Terminal System is 25 feet and separate from the MGS length.

- E. The contract unit price paid for the “MGS A77Q1 Structure Approach Terminal System” shall include, delineators, reflectors, etc. and full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for performing all the work involved as shown on the plans and as specified in these Special Provisions, the Standard Specifications, and as directed by the Engineer and no additional compensation will be allowed therefore. The length of the Terminal System is 25 feet and separate from the MGS length.
- F. The contract unit price paid for the “MGS A77T2 Buried Post End Anchor Terminal System” shall include, delineators, reflectors, etc. and full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for performing all the work involved as shown on the plans and as specified in these Special Provisions, the Standard Specifications, and as directed by the Engineer and no additional compensation will be allowed therefore. The length of the Terminal System is 25 feet and separate from the MGS length
- G. The contract unit price paid for “Replace Individual Rail Segment” shall include, delineators, reflectors, etc. and full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for performing all the work involved as shown on the plans and as specified in these Special Provisions, the Standard Specifications, and as directed by the Engineer and no additional compensation will be allowed therefore. Each rail element length is measured as the 12’-6” spliced interval installed.
- H. The contract unit price paid for “Replace Plastic Blocks Only” shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for performing all the work involved as shown on the plans and as specified in these Special Provisions, the Standard Specifications, and as directed by the Engineer and no additional compensation will be allowed therefore.