

## Administration and Inspection Activities for Steel Beam Guide Rail Systems

(As Specified in OPSS 721 and SSP 721S09)

### 721.01 SCOPE

This CAIS covers the construction administration and inspection requirements for Steel Beam Guide Rail (SBGR) as specified in OPSS 721, November ~~2015~~2025, as modified by SSP 721S09, April 2021.

### 721.02 REFERENCES

This CAIS refers to the following standards, specifications, or publications:

#### Ontario Provincial Standard Specifications, Construction:

OPSS 721      Steel Beam Guide Rail and Cable Guide Rail

#### MTO Standard Special Provisions

SSP 721S09      Amendment to OPSS 721 - Requirements for Steel Beam Guide Rail Systems

#### MTO Forms:

PH-CC-877      Certification of the Installation of Safety Items

### 721.03 DEFINITIONS - Not Used

### 721.04 DESIGN AND SUBMISSION REQUIREMENTS

#### 721.04.01 Submission Requirements

Administrative Activities:

1	-	At the commencement of the Contract, Check that the list of material sources submitted by the Contractor includes all SBGR types to be installed.	-
2	-	Check that the SBGR documentation submission detailing: a) the selection of SBGR types and location, including all applicable standard drawings, and b) the documentation certifying that supplied materials (wood and steel posts, rail panels, hardware, channel, sleeves and spacer tubes, offset blocks, and all proprietary components) meets the requirements specified in the Contract Documents and is received a minimum of 7 days prior to the first SBGR placement as specified.	-

3	-	Check that types and locations of SBGR systems detailed in the Contractors submission meet the types and locations as specified.	-
4	-	Check that copies of the installation instructions and manufacturer's specifications have been received prior to the installation of proprietary systems.	-

## **721.05 MATERIALS**

### **721.05.01 General**

Inspection Activities:

1	-	Check all supplied materials are from the list of material sources that was submitted by the Contractor at the commencement of the Contract.	25%
2	-	Check that all supplied non-proprietary SBGR components on both proprietary and non-proprietary systems are as specified.	25%
3	-	Check that all supplied proprietary SBGR components are according to the manufacturer's specifications.	25%
4	-	Check that SBGR rail panels to be installed at locations with radii less than 45 m are shop bent at the rail panel manufacturer's plant prior to hot dip galvanizing.	25%
5	-	Check that all preservative treated wood is identified with certification marks authorized by the Canadian Wood Preservative Bureau.	25%
6	-	Check that supplied retroreflective sheeting and colours are as specified.	25%

## **721.06 EQUIPMENT - Not Used**

### **721.07 CONSTRUCTION**

Inspection Activities:

1	-	Check that SBGR systems are erected at the specified location and offset.	25%
2	-	Check that SBGR posts are the specified length.	25%
3	-	Check that posts are installed vertical.	25%
4	-	Check that loose material in the bottom of the post hole is tamped or removed prior to placing the post.	25%
5	-	Check that backfill is properly tamped.	25%
6	-	Check if posts have cracks and splits.	25%
7	-	Check that posts are cut off correctly, chamfered and tops treated, and mounting height is correct.	25%
8	-	Check SBGR rail panels are installed at the specified mounting height.	25%

9	-	Check that base plated steel posts are installed as specified.	25%
10	-	Check that SBGR rail panels are lapped in the direction of adjacent traffic flow or as specified.	25%
11	-	Check that SBGR systems to be installed behind concrete curbs or concrete sidewalks are as specified.	25%
12	-	Check that all bolts, washers and nuts are placed and affixed securely to all plates, angles, posts and rail panels, as specified in the Contract Documents, or, for proprietary systems, according to the manufacturer's specifications.	25%
13	-	Check that reflectors are installed as specified.	25%
14	-	Check that Certification of the Installation of Safety Item forms are received from the Contractor in accordance with the Contract Documents.	25%
15	-	Check that adjustment of SBGR systems is carried out in accordance with the Contract Documents.	25%
16	-	Check that relocation of SBGR systems is carried out in accordance with the Contract Documents.	25%
17	-	Check that excess material is managed in accordance with the Contract Documents.	25%

#### **721.08 QUALITY ASSURANCE - Not Used**

#### **721.09 MEASUREMENT FOR PAYMENT**

Administrative Activities:

1	-	Measurement for payment shall be as specified.	-
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#### **721.10 BASIS OF PAYMENT**

Administrative Activities:

1	-	Check that PH-CC-877, where required, have been received prior to recommending payment.	-
2	-	Check that all documentation, including proof of installer certificates, have been received.	-
3	-	Basis of payment shall be as specified.	-

**WARRANT:** Always with OPSS 720, Construction Specification for Steel Beam Guide Rail and Cable Guide Rail.