
APPENDIX "?"INSTALLATION OF BAILEY/ACROW BRIDGE**DESCRIPTION**1.01 General

This Appendix shall apply to the supply and installation of the Bailey/Acrow bridge in conjunction with the Standard Specifications for Highway Construction and the applicable Bailey Uniflote handbook or Acrow Panel Bridging technical handbook, and as detailed on the Drawings.

1.02 Contractor's Site Representative

The Contractor's Site Representative shall be experienced with the supervision of handling, assembling and installing of Bailey/Acrow bridges and shall have the current Bailey Uniflote handbook or Acrow Panel Bridging technical handbook on site for reference.

1.03 Detailed Installation Procedure

The Contractor shall provide, in writing, a detailed installation procedure to the Ministry Representative for approval at least two weeks prior to the scheduled installation of the Bailey/Acrow bridge. Installation shall not commence without the Ministry's approval of the installation procedure.

The detailed installation procedure shall comply with the instructions and recommendations in the current Bailey Uniflote handbook or Acrow Panel Bridging technical handbook. The following items shall be addressed in the procedure, but not limited to as a minimum:

- Construction scheduling
- Contractor's Site Representative, manpower, and equipment.
- Site layout for storage, assembly, base plates/mudsills for roller locations, equipment and crane locations if applicable.
- Compaction of bearing soils, setting of alignment and elevations of base plates for roller locations.
- Launch configuration for the launch nose and the Bailey/Acrow bridge to be placed.
- Method and details of launch including load application points.
- Erection procedure if launching is not applicable.
- Applicable weights during launching or lifting.
- Jacking and/or final positioning of the Bailey/Acrow bridge.
- Blocking for stability during setting and resetting of jacks.

The Ministry's review of the installation procedure shall not relieve the Contractor of the responsibility for safety during the installation of the Bailey/Acrow bridge.

MATERIALS

2.01 Supply of Materials

The Ministry will supply all Bailey/Acrow components required for the final in-place bridge. The Ministry will loan to the Contractor the following components for the installation of the Bailey/Acrow bridge:

- Launching nose
- Tapered chords as required
- Launching roller bearings and base plates
- Launching links as required

The Bailey/Acrow components and the above components will be supplied at the designated Ministry storage yard(s) or from suppliers.

The Ministry will provide a written inventory of the above components prior to loading.

The Contractor shall sort, load, transport to site, and off load all components. All components loaned to the Contractor shall be banded or packaged by the Contractor to the acceptance of the Ministry Representative and returned to the Ministry designated storage yard.

The Contractor shall supply all timber fastening hardware including galvanized bolts, spikes, and lag screws plus the alkyd paint for the wheel guards. The Contractor shall supply dunnage for site storage and handling of the Acrow/Bailey components. Components shall not be stored or handled directly on the ground.

Timber for the deck and ballast walls shall be supplied as specified in accordance with Standard Specifications, Section 213.

2.02 Initial Component Inspection

At the time of supply, the Ministry Representative and the Contractor shall jointly inspect and record the Bailey/Acrow components included in the bridge and/or for launching. The Contractor shall be responsible for the repair or replacement of any components damaged following the inspection to the satisfaction of the Ministry Representative.

2.03 Launching Nose

The launching nose configuration and assembly shall be in accordance with the instructions in the Bailey/Acrow handbooks.

2.04 Handling and Assembly

The Contractor shall handle the components so that no damage occurs. Any damage to the component(s) shall be repaired or replaced with new component(s) by the Contractor. The

Ministry Representative shall inform the Contractor if damaged component(s) can be repaired or must be replaced.

CONSTRUCTION

3.01 Site Preparation

The Contractor shall prepare the site in conformance with:

- Applicable Bailey/Acrow handbooks
- Environmental regulations

The Contractor shall compact the bearing soils and set the alignment and the required elevations of the base plates for the roller and launching bearings to ensure stability.

3.02 Installation

The Contractor shall install the Acrow/Bailey bridge as specified in the installation procedure. During the launching operations, the Contractor's Site Representative shall monitor each launch roller bearing for settlement or other problems.

3.03 Jacking

The jacking down sequence shall be as specified by the Contractor in the detailed installation procedure and shall be supervised by the Contractor's Site Representative.

No vehicular traffic shall utilize the bridge until the bridge is set onto the Bailey/Acrow bearings.

3.04 Decking

Decking layout and installation shall be in accordance with the Special Provisions and Drawings. Unless otherwise altered due to constraints on adjacent bridging spans, the timber decking shall be Number 1 Douglas fir, laid heart side down, and consist of 5 pieces of 6 in. x 6 in. (S2E) cross ties per 8 longitudinal feet of deck, 4 in. x 10 in. (S1S2E) deck planks, 8 in. x 8 in. riser blocks and wheel guards. Fasteners shall be hot dipped galvanized. Decking spikes and/or lag screws shall be placed at 7 per 16 foot length of plank.

Timber wheel guards shall be painted yellow with two (2) coats of alkyd paint in accordance with the manufacturer's specifications.

3.05 Ballast Walls

The Contractor shall place the timber ballast walls as shown on the Drawings.

3.06 Cleaning

The Contractor shall ensure all Bailey/Acrow and steel decking components are clean at the completion of the contract. This shall include cleaning of road grit from transportation, dirt from handling and assembly plus the wood and dirt from deck installation. A thorough cleaning of the metal components shall be completed prior to the installation of the timber decking.

3.07 Substructure and Roadway Approaches

Substructure and roadway approaches shall be constructed as specified in the Special Provisions.

The Contractor shall be responsible for minor alterations to the substructure and/or roadway approaches to facilitate the placement of the Bailey/Acrow bridge.

The Contractor shall cleanup and regrade the work area(s) to the initial ground levels to the satisfaction of the Ministry Representative.

PAYMENT**4.01 Payment**

Payment for the Bailey/Acrow installation will be made at the lump sum price bid. Payment shall include the supply of materials, detailed installation procedure, inspections, site preparation, compaction of bearing soils, setting of alignment and elevations of base plates for roller locations, monitoring, minor alterations to the substructure and roadway approaches, installation of the bridge, cleaning and quality control.