1. **Scope**

For applicability, refer to the *Supplemental Requirements for Fabricators of Steel Buildings*.

This exercise will demonstrate fabrication knowledge, skills, and capability to produce fabricated steel to the quality required for structural steel buildings.

2. **Document Requirements**

In addition to the required documents listed in the Supplemental Requirements, the fabricator shall have the following documents available for review during the site audit:

   a. Valid Welding Procedure Specifications (WPS) for all processes and positions to be used in the exercise, with supporting Procedure Qualification Record (PQR) if required, in compliance with AWS D1.1.
   b. Current Welder Performance Qualification Records for all processes and positions to be used in the exercise in compliance with AWS D1.1.
   c. Material Test Reports (MTRs) for materials used. (May be an example of an MTR.)
   d. Purchase orders for materials used. (May be an example of a P.O.)

3. **Welding**

All welding shall be in compliance with the latest edition of AWS D1.1. SMAW may be used for tack welding, however, FCAW or GMAW shall be used for fabrication. If GMAW-S is used, the PQR shall be in conformance with AWS D1.1 Clause 4.

4. **Bolting**

All bolted connections shall be snug tight unless otherwise noted.
5. Fabrication

Fabricate the following structural members as shown on the attached drawings:

- Column 1C1
- Column 2C1
- Beams 4B1 and 4B2
- Diagonal 11D1

Do not assemble the fabricated members. Refer to Table 1 for Fabrication, Inspection and Audit Activities.

6. Inspection

Qualifications of the Quality Control Inspector (QCI) shall be verifiable in compliance with AISC 360 Chapter N and AWS D1.1, Clause 6. Refer to Table 1 for visual inspection requirements.

7. General Requirements

a. During the site audit, the personnel responsible for and performing the work shall demonstrate understanding necessary for effective implementation of the requirements of the latest editions of the applicable codes and standards.

b. The auditor shall not perform any inspections, direct any work, or provide instruction. The auditor may request alternate sequences in agreement with the auditee to meet unforeseen on-site conditions.

c. The auditor is present to observe the process and the application of the requirements by the auditee.

d. All fabrication of the mock exercise shall be performed by the fabricator.
# TABLE 1 - Sequencing of Fabrication, Inspection, and Audit activities

<table>
<thead>
<tr>
<th>#</th>
<th>Fabrication Activity</th>
<th>Inspections Required</th>
<th>Audit Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fabricate Columns 1C1, 2C1, Beams 4B1, 4B2, and Diagonal 11D1.</td>
<td>In-process inspection shall be performed in compliance with the fabricator’s documented procedures.</td>
<td>The on-site auditor shall observe the completed fabrication. Witness of NDT is not required. Visual inspection reports shall be presented at the time of the audit.</td>
</tr>
<tr>
<td>2</td>
<td>Pre-installation verification (PIV) demonstration</td>
<td>PIV demonstration shall be performed in compliance with RCSC and the fabricator’s documented procedure.</td>
<td>The pre-installation verification demonstration shall be observed. The bolt installation method used in the demonstration is at the fabricator’s option.</td>
</tr>
</tbody>
</table>
| 3 | Assembly | None | The on-site auditor shall observe the assembly of columns, beams and diagonal bracing.  
NOTE: The end plate connection (Beam 4B1 to Column 2C1) shall be considered slip critical. Bolting at this connection shall conform to the installation method demonstrated in Step 2. |
| 4 | Final QC inspection | Final Inspection and documentation shall be in compliance with the fabricator’s documented procedures. | Final inspection reports shall be available for review prior to the conclusion of the audit. |
Provide stability support As needed.