The ASSOCIATE STEEL INSPECTOR examination is being given on a continuous Open basis.

This questionnaire is your entire examination and is designed to elicit a range of specific information regarding each candidate’s knowledge, abilities, and experience to effectively perform the duties relative to the classification(s). Candidates are responsible for reading all of the material provided prior to completing this questionnaire. Responses will be evaluated using predetermined rating criteria. In order to obtain a position on the eligible list, a minimum rating of 70% must be attained. Please answer questions completely since incomplete responses and omitted information cannot be considered and/or assumed. Resumes, letters of reference, and other materials will not be evaluated or considered as responses to items in the Supplemental Application Questionnaire. (NOTE: Failure to meet the minimum qualifications and/or to complete this questionnaire accurately will result in elimination from this examination.) Candidates who fail to follow the instructions and/or who solicit input or assistance from others to complete this questionnaire will be eliminated from the examination.

IT IS IMPORTANT THAT YOU RETAIN A COPY OF THIS SUPPLEMENTAL APPLICATION QUESTIONNAIRE FOR YOUR RECORDS. Caltrans will NOT provide you a copy of your supplemental application questionnaire.

THESE AFFIRMATION MUST BE COMPLETED
I hereby certify and understand that the information provided by me (without assistance from others) on this Supplemental Application Questionnaire is true and complete to the best of my knowledge and contains no willful misrepresentation or falsifications. I understand this information may be verified. I also understand that if it is discovered that I have made any false representations, I will be removed from the examination process, removed from the list resulting from the examination, may not be allowed to compete in future examinations for State employment, and may be subject to prosecution for misdemeanor or felony offenses under California law. Additionally, State employees may have adverse action taken against them up to and including dismissal.

SIGNATURE: ___________________________ DATE: __________
NAME (PRINT): ___________________________
EXAMINATION TITLE: ___________________________

The completed Supplemental Application Questionnaire can be mailed and/or personally hand delivered to:

Caltrans
Examination Services (MS 86)
P.O. Box 168036
Sacramento, CA 95816-8036

File in person: Caltrans
1727 30th Street, 1st Floor
Sacramento, CA 95816
(916) 227-7858

Facsimile (FAX) or electronically mailed (e-mailed) Supplemental Applications will not be accepted Failure to submit your Supplemental Application Questionnaire will result in elimination from the examination.
ASSOCIATE STEEL INSPECTOR – 6TRAC
Supplemental Application Questionnaire

Name:___________________________________ Date:____________________

PART I - EMPLOYMENT HISTORY

Instructions: Please describe your work experience as it relates to the ASSOCIATE STEEL INSPECTOR position. Begin with your most recent position. The EXPERIENCE CODE will be used in Part II to identify where you worked. You may include additional pages if necessary.

EXPERIENCE CODE A

Company / State Agency: ______________ Job Title: ______________________
Employer Location: City:_________________ State:_____________________
Dates of Employment: From:___________ To:_________________________
Supervisor:__________________________ Telephone Number:____________

EXPERIENCE CODE B

Company / State Agency: ______________ Job Title: ______________________
Employer Location: City:_________________ State:_____________________
Dates of Employment: From:___________ To:_________________________
Supervisor:__________________________ Telephone Number:____________

EXPERIENCE CODE C

Company / State Agency: ______________ Job Title: ______________________
Employer Location: City:_________________ State:_____________________
Dates of Employment: From:___________ To:_________________________
Supervisor:__________________________ Telephone Number:____________

EXPERIENCE CODE D

Company / State Agency: ______________ Job Title: ______________________
Employer Location: City:_________________ State:_____________________
Dates of Employment: From:___________ To:_________________________
Supervisor:__________________________ Telephone Number:____________
PART II - WORK EXPERIENCE

INSTRUCTIONS

Step 1: In the *Experience Code* column, use the codes from PART I of this questionnaire to indicate where you performed the activity and/or acquired the task or knowledge. You may list more than one code per item, if applicable.

Step 2: For each item listed on page 4 in rows “1” through “10,” place an “X” in the column that most accurately represents the experience you have and the amount of time your experience represents.

### SAMPLE

<table>
<thead>
<tr>
<th>CODE</th>
<th>EXPERIENCE</th>
<th>AMOUNT OF TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>A &amp; C</td>
<td>I have had training, or experience with this task.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I have had training, but no application on the job related to this task.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I have performed this task on the job under normal supervision.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I have performed this task independently.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I possess less than three (3) years of experience.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I possess three (3) to four (4) years of experience.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I possess four (4) to five (5) years of experience.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I possess more than five (5) years of experience.</td>
<td></td>
</tr>
</tbody>
</table>

1. *(Sample Item)*
   Fabricating and erecting structural steel and manufacturing other related materials
   - A & C
   - X
   - X
## PART II—WORK EXPERIENCE

<table>
<thead>
<tr>
<th>Code</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I have had no training, or experience with this task.</td>
</tr>
<tr>
<td></td>
<td>I have had training, but no application on the job related to this task.</td>
</tr>
<tr>
<td></td>
<td>I have performed this task on the job under normal supervision.</td>
</tr>
<tr>
<td></td>
<td>I have performed this task independently.</td>
</tr>
<tr>
<td></td>
<td>I possess less than three (3) years of experience.</td>
</tr>
<tr>
<td></td>
<td>I possess three (3) to four (4) years of experience.</td>
</tr>
<tr>
<td></td>
<td>I possess four (4) to five (5) years of experience.</td>
</tr>
<tr>
<td></td>
<td>I possess more than five (5) years of experience.</td>
</tr>
</tbody>
</table>

**PRINT NAME:**

**INSTRUCTIONS:** In the *Experience Code* column, use the codes from PART I of this form to indicate where you performed the activity or task. You may list more than one code per item, if applicable.

Place an “X” in the column that most accurately represents the *Experience* you have and the *Amount of Time* your experience represents.

1. Fabricate and erect structural steel and manufacture other related materials
2. Perform nondestructive testing utilizing specific tools and equipment
3. Inspect various materials to ensure accordance to various standards and codes (e.g., Current American Society for Testing Materials)
4. Conduct and/or witness various tests on structural materials
5. Perform quality assurance of welded and bolted steel specimens
6. Perform mathematical calculations related to testing and acceptance of materials
7. Interpret fabrication plans and drawings to ensure constructability and weld ability
8. Prepare comprehensive reports pertaining to fabrication
9. Coordinate and work with project stakeholders vested in the fabrication process (e.g., contractors, resident engineers, suppliers)
10. Make recommendations for acceptance and rejection of work
PART III – NARRATIVE QUESTIONS

INSTRUCTIONS

This exam will require candidates to respond to pre-determined job-related questions in written format. It’s very important that you answer each question completely and thoroughly. YOU HAVE THE OPTION OF responding in “bullet format” or summarizing your response in “paragraph format”. You may also use a combination of both.

- Your response to each question should be on a separate page.
- Each page should include the name of the examination, your name, and date.
- Responses can be in bullet or paragraph format or a combination of both.

SAMPLE

PRINT NAME: ___________________ Date: __________

Question #1      Bullet format sample

- XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
- XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
- XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Question #2      Paragraph format sample

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Question #3      Combination of both formats

- XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
- XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
- XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
ASSOCIATE STEEL INSPECTOR – 6TRAC
Supplemental Application Questionnaire

PART III – NARRATIVE QUESTIONS

PRINT NAME: ____________________  Date: ____________

Question # 1

As an Associate Steel Inspector, you are required to identify all prequalified and/or code approved welding processes described in the American Welding Society welding code D1.1.

List each of the prequalified and/or code approved welding processes.
Question # 2

What are the critical parameters for prequalified complete joint penetration groves welds?
Question # 3

As an Associate Steel Inspector, you are required to employ safety standards on the job.

Specify and list the minimum Personal Protective Equipment (PPE) that you should utilize in the various conditions stated below?

- Fabrication Shop
- Elevated Construction Site
- Elevated Over Water
Question # 4

As an Associate Steel Inspector, you are inspecting a Complete Penetration Groove Weld on a one inch steel material with a double bevel. The owner affiliated with this material has requested full volumetric non-destructive testing to be performed.

List the various testing methods and any respective equipment necessary to carry out this request.
Question # 5

As an Associate Steel Inspector, you are required to review Welding Procedure Specifications (WPS) from contractors. Below is a Welding Procedure Specification (WPS) for Carbon Steel with various errors.

1. Identify each of the sections and sub-categories on the specification that are skewed and not compliant with general American Welding Society codes.

2. Provide justification regarding your decisions.
ASSOCIATE STEEL INSPECTOR – 6TRAC
Supplemental Application Questionnaire

WELDING PROCEDURE SPECIFICATION (WPS)
PREQUALIFIED ☑ QUALIFIED BY TESTING ☐
or PROCEDURE QUALIFICATION RECORDS (PQR) Yes ☑
AASHTO/AWS D1.1 Qualification Type 5.12.1 ☐ – 5.12.2 ☑ – 5.12.4 ☐

Contractor/ Organization                   ABC Welding
Welding Process(es)                        FCAW-S
Type: Manual ☑ SemiAutomatic ☐ Tandem ☐ Parallel ☐

JOINT DESIGN USED
Single ☑ Double Weld ☒
Backing: Yes ☑ No ☐ Material Metal ☑
Root Opening V4 ☑ Root Face Dimension N/A
Groove Angle 65° ☑ Radius (J-U) N/A
Backgouging: Yes ☑ No ☐ Method N/A
Root Treatment N/A

BASE METALS
Material Spec. Metal ☑
Type or Grade GR.50 ☑
Thickness: Groove 1" ☑ Fillet N/A
Diameter (Pipe) N/A

FILLER METALS
AWS Specification A5.20 ☑
AWS Classification ER.310 ☑
Manufacturer Trade Name Hot Wire ☑

SHIELDING
Flux N/A ☑ Mfg. Trade Name Hot Wire ☑
Electrode Flux (Class) N/A ☑
Gas Composition 75% Argon 25% Co2 ☑
Flow Rate 45 CPM ☑ Gas Cup Size 5/16" N/A

IDENTIFICATION
Revision N/A Date 3/3/04 By TOL
Authorized by Tom ☑ Date 6/4/04
Supporting PQR No(s) N/A

POSITION
Position of Groove Flat ☑ Fillet ☐
Vertical Progression Up ☐ Down ☑

ELECTRICAL CHARACTERISTICS
Transfer Mode (GMAW): Globular ☑ Spray ☐
Current: AC ☐ DCEP ☐ DCEN ☑ Pulsed ☑
Electrical Stick Out N/A
Other N/A

TECHNIQUE
Stringer or Weave Bead Stringer ☑
Multi-pass or Single Pass (per side) Single ☑
Number of Electrodes 1 ☑
Electrode Spacing: Longitudinal N/A ☑
Lateral N/A ☑ Angle N/A ☑
Interpass Cleaning slag hammer & brush ☑

PREHEAT
Preheat Temp. Min. 32° N/A
Interpass Temp., Min. N/A
Interpass Temp., Max. N/A

POSTWELD HEAT TREATMENT
Temp. N/A ☑ Hold Time N/A ☑
Heating/Cooling Rate N/A ☑

HEAT INPUT
Calculated Heat Input Value: KJ/m N/A ☑ KJ/mm ☐
Max. Heat Input 14 ☑ Min. Heat Input 19 ☑

WELDING PROCEDURE

<table>
<thead>
<tr>
<th>Pass or Weld Layer(s)</th>
<th>Filler Metals</th>
<th>Current</th>
<th>Voltage</th>
<th>Travel Speed</th>
<th>Joint Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>FCAW 0.045</td>
<td>DCSP</td>
<td>180-220</td>
<td>25-30</td>
<td>TC-U4 A</td>
</tr>
</tbody>
</table>

Form C-2
Question # 6

As an Associate Steel Inspector, you are required to act as a State Representative to ensure completion of work on the jobsite. You are overseeing a jobsite with an approved Welding Procedure Schedule (WPS) for a Flux-cored Arc Welding (FCAW) e71t-1 in the 3G position, however, the machine for this process is down and lane closure must be picked up by tomorrow. The welder onsite is approved and qualified for Shielded Metal Arc Welder (SMAW) E7018 3G.

List the following steps you should take in order to ensure the work is code compliant and completed prior to lanes being opened.
PRINT NAME: ___________________  Date: ______________

Question # 7

As an Associate Steel Inspector, you are required to carry out various protocols and procedures during a structural materials inspection.

List the various protocols and procedures.
Question # 8

As an Associate Steel Inspector, you are required to identify various locations on a Weld Joint diagram.

Refer to the diagram below and identify each of the locations, numbered from 1-12.