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To be completed by the inspector witnessing the contractor performing bolt verification testing.

<u>Notes:</u> The Construction Engineer, or their representative, witnesses this process. If assistance is needed, contact the Bureau of Bridges and Structures/Structure Construction Section.

The tension indicator must have been calibrated in the last 12 months.

File Naming Convention: 0570 SN-CS-JN Date.pdf

GENERAL INFORMATION						
MDOT ID	JOB NUMBER	CONTRACTOR			DATE	
CONSTRUCTION ENGINEER						
PROJECT DESCRIPTION						
EQUIPMENT						
BOLT TENSION INDICA	ATOR USED?				CALIBRATION DATE	
BOLT TENSIONING METHOD (impact, spud wrench, etc.)						
BOLT INFORMATION						
BOLT LENGTH	BOLT GRAD	E	WASHER GRADE	TENSIC	TENSIONING REQUIREMENTS	
BOLT DIAMETER NUT GRADE			COATING	See Section 707.03.E.6		
MANUFACTURER						
EMPLOYEE NAME			RESULTING LOAD		PASS/FAIL	
EMPLOYEE NAME			RESULTING LOAD		PASS/FAIL	
EMPLOYEE NAME			RESULTING LOAD	1	PASS/FAIL	
EMPLOYEE NAME		-	RESULTING LOAD		PASS/FAIL	
EMPLOYEE NAME			RESULTING LOAD	1	PASS/FAIL	
EMPLOYEE NAME			RESULTING LOAD	1	PASS/FAIL	
EMPLOYEE NAME			RESULTING LOAD		PASS/FAIL	
EMPLOYEE NAME		-	RESULTING LOAD		PASS/FAIL	
EMPLOYEE NAME			RESULTING LOAD		PASS/FAIL	
EMPLOYEE NAME			RESULTING LOAD	1	PASS/FAIL	
REMARKS			,			

Note: A representative sample of not less than three high strength bolt assemblies of each combination of diameter, length, grade, and lot to be used must be verified at the site of installation.

INSPECTOR COMPANY

## **BOLT VERIFICATION TESTING CHECKLIST**

## GENERAL TURN-OF-NUT BOLT VERIFICATION TESTING INFORMATION

Turn of nut pretensioning involves the following steps:

- 1) See the Structural Bolting Manual prior to conducting any bolt verification testing and contact <a href="mailto:MDOT-StructuralFabrication@Michigan.gov">MDOT-StructuralFabrication@Michigan.gov</a> with any questions.
- 2) Ensure that "tight iron" has been achieved prior to performing the snug tightening procedure. Tight iron is defined as no visible gaps between the nut, washer, and tensioning device.
- 3) Perform snug tightening procedure. Snug tight is defined as the tightness attained by a few impacts from an impact wrench or the full effort of a person using an ordinary spud wrench.
- 4) Match mark the bolts in accordance with the figure below.
- 5) Perform turn-of-nut tightening procedure and rotate to the prescribed rotation based on the length and diameter.
- 6) Record results and determine pass/fail based on table 707-5 Minimum Pre-Installation Bolt Tension Verification bolts.

