

DESCRIPTION	REVISIONS	DATE

GENERAL NOTES (CONT.)

**TENDON INSPECTION SPECIFICATIONS:**

**Locations:** The external tendon ducts which contain voids are indicated on the detail drawings. The Contractor shall verify the location and extent of the voids by sounding. After locating the tendon voids and inspecting the post-tensioning anchorages (in accordance with the Post-Tension Anchorage Specifications, this sheet), the Contractor shall drill into the tendons at each voided area for testing. The holes shall be drilled at locations for verifying air transfer and for remedial grouting. Pressurize the hole to 75 psi in order to determine if the void connects to other drilled holes along the tendon. This testing shall be performed in the presence of the Engineer. The Engineer may require the drilling of additional holes. Air transfer between two or more voids constitutes a continuous voided area and such a condition, as determined by the Engineer, shall be paid as one void location for remedial grouting.

The Contractor shall record and document their findings and provide this information to the Engineer. Upon completion of post-tension inspection, the Contractor shall prepare a complete report including correlated photographs. The report shall be submitted for review no more than 7 days after completing the inspection of all the tendons in a span. The report shall indicate the condition of any exposed tendons and the required repairs for the restoration of the grout. Unless approved by the Engineer, grouting repairs shall not begin until at least 24 hours after the submission of the report in each span.

The cost of all work associated with this specification shall be included in the contract unit price for "Repair Bridge Item, Type A".

**Sealing:** If remedial grouting is not necessary, the Contractor shall seal drilled inspection holes in accordance with the sealing note included with the Remedial Grouting Specifications. The cost of sealing shall be incidental to "Repair Bridge Item, Type A".

**POST-TENSION ANCHORAGE INSPECTION SPECIFICATIONS:**

**Anchorage Inspection:** At every tendon anchorage location, remove the waterproofing membrane and the pour-back from the anchor to expose the grout inlet or outlet. Remove the grout tube extension. Drill into the anchorage grout inlet or outlet at the anchorage, if possible, just sufficient to penetrate the inner surface of the trumpet or duct. Use extreme caution to avoid cutting any post-tensioning wire or strand. Take color photographs of the anchor plate and strands.

If a void is found in the tendon or anchorage, insert a borescope and determine the size of the voids. Take color photographs inside the trumpet area. Determine if the void connects to drilled holes along the tendon within 5 feet of the anchorage by using compressed air (40psi) to pressurize the void in the anchorage. The Contractor shall drill holes in the tendon within 5 feet of the diaphragm if none are present from the tendon inspection. This testing should be performed in the presence of the Engineer. One tendon void is defined as a continuous cavity, with air transfer, within a single tendon and/or anchorage. A single void will be considered one pay item for "Repair Bridge Item, Type C".

The Contractor shall record and document their findings and provide this information to the Engineer. Upon completion of post-tension anchorage inspection in each span, the Contractor shall prepare a complete report including correlated photographs. The report shall be submitted for review no more than 7 days after completing the inspection of all the anchorages in a span. The report shall indicate the condition of the anchorage and the required repairs for the restoration of the grout and the pour-backs. Unless approved by the Engineer, grouting repairs shall not begin until at least 24 hours after the submission of the report in each span.

The cost of all work associated with this specification shall be included in the contract unit price for "Repair Bridge Item, Type B".

**Sealing:** If remedial grouting is not necessary, the Contractor shall seal the grout inlet/outlet in accordance with the sealing note included with the Remedial Grouting Specifications (See Sheet 2). The cost of sealing shall be incidental to "Repair Bridge Item, Type B".

**ANCHORAGE PROTECTION REPLACEMENT SPECIFICATIONS:**

After removing all pour-back material and associated coal tar epoxy coating, clean and reconstruct the anchorage protection system in accordance with the 2009 Oklahoma Standard Specifications Section 517.04J. Contrary to the 2009 Oklahoma Standard Specifications, mechanically fasten a plastic grout cap over the anchor head. The Contractor may cut the exposed post-tensioning steel in accordance with the 2009 Oklahoma Standard Specifications Section 517.04G if necessary to fasten the plastic grout cap over the anchor head. The cost of all work associated with this specification shall be included in the contract unit price for "Repair Bridge Item, Type E".

DRAWN	IRM	2-13	<b>OKLAHOMA DEPARTMENT OF TRANSPORTATION</b> DELAWARE COUNTY
CHECKED	CRK	2-13	
APPROVED	DEM	2-13	
<b>URS</b>			GENERAL NOTES (SHEET 2 OF 2)
STATE JOB NO. 30223(04)			SHEET NO. 3