Tie Installation Specifications

General Information:

The RAILROAD shall have the right to make any subsequent changes in the nature of the Scope of Work for this Project, either before or after it commences, and such changes shall in no way affect or negate the obligations of this Contract. If such changes appreciably affect the cost of material to the SUPPLIER, it shall so notify the RAILROAD in writing before proceeding with the transportation of materials, and the cost shall be equitably adjusted by the RAILROAD.

The Contractor(s) is required to conduct a follow-up inspection of the quality of work at the end of each day. Contractor(s) will be responsible for immediate repairs to the following: broken joint bars, kinked rail, broken bond wires, down ties, broken rail, high spikes, etc.)

SKOL – Tie Installation Specifications:

SKOL Tie Installation Requirements:

Do not remove more ballast from ends of ties to be replaced or from cribs than is absolutely necessary.

Upon completion of tie renewals, disturbed ballast section should be immediately re-established by filling in the cribbing and the ends of the ties with displaced ballast to establish a safe walking path.

Surface and alignment of track should not be disturbed more than is necessary.

There should be sufficient adjacent ties properly spiked for every tie from which spikes and anchors have been removed. Where heavy tie renewals are required, renewals should be done in two or more passes, and sufficient time should be allowed between passes to ensure that the new ties are firmly embedded in the ballast.

Installation of spikes and rail anchors should be made immediately after new tie insertion.

Timber ties:

Work consisting of furnishing and installing new cross ties are to have anti-splitting devices applied and are to conform to AREMA Manual for Railway Engineering, Chapter 30, Part 3 – Solid Sawn Timber Ties, Grade 5 Ties.

Woods acceptable for ties shall be from Groups Ta, Tc, and Td of 1.1.6.4 of Chapter 30 of the AREMA Manual for Railway Engineering.

New track spikes must conform to the AREMA Manual for Railway Engineering, Chapter 5, Part 2, Track Spikes.

New rail anchors shall fit the rail section specified shall conform to AREMA Manual for Railway Engineering, Volume 1, Chapter 5, Part 7 – Rail Anchors.

Other OTM:

Track bolts and nuts shall conform to the AREMA Manual for Railway Engineering, Chapter 4, Part 3 – Joining of Rail.

Spring washers shall be 3/8" heavy duty carbon steel for the supplied bolts and shall conform to both the AREMA Manual for Railway Engineering, Chapter 4, Part 3 – Joining of Rail.

Railway company will determine size of tie to be used and type of timber acceptable.

Ties shall be placed in the track with the wide surface nearest the heart down and square to the line of the rail.

When necessary the ties must be adzed to get a full and even bearing for the tie plate. Excessive adzing must be avoided. All newly adzed surfaces shall be coated with an approved preservative.

Tie plates will be used under running rails on all tracks.

Tie plates should be free of dirt and foreign material when installed.

Care must be exercised to see that canted tie plates are applied so as to cant the rail inward.

Tie plates must be placed square with the rail and centered on the tie. Particular care must be given to see that the tie plate shoulders are never under the base of the rail and that the tie plates are well seated on the ties and the rail properly seated on the tie plate.

Ties shall be spiked with two rail-holding spikes on each rail and with additional rail-holding and plate-holding spikes as specified by the railway. Other railway approved fastening devices may be used.

All spikes shall be started and driven vertically and square with the rail. In no case shall the spikes be overdriven or straightened while being driven. No spikes shall be driven against the ends of joint bars.

Spikes on gage side of running rail are to be placed across from each other and spikes on the field side of the running rail are to be placed across from each other. The pattern to be held consistent.

Follow these requirements when installing and spacing ties. Unless otherwise noted, these requirements apply for all tie types.

Do not replace more than three consecutive cross or switch ties at one time.

Do not replace more than two consecutive cross or switch ties at one time if the rail temperature is at, above, or forecasted to be above, 90º for the Subdivision.

Do not replace more than 50 percent of the cross/switch ties in any rail length at one time.

All ties installed in the first pass have been:

Fully spiked, anchored or clipped depending on tie-type and requirements for location.

Installed with enough ballast to maintain proper surface and alignment.

Make an additional pass to install ties if required.

Tie Removal:

Shall incorporate the clean-up of all ties, including tie-butts and splintered ties; ties being removed shall be placed in an organized fashion at the edge of the ROW, at the nearest accessible crossing for easy recovery.

All OTM removed from the CWR Scope of Work will be discussed in detail at the Pre-Bid Meeting. The Removal Specifications regarding Rail and OTM will be based upon the SKOL's discretion.

All packaging materials i.e.: spike kegs, anchor bags, tie banding, pallets, etc., shall be placed at the nearest crossing separate of other material piles or otherwise properly discarded.