Hierarchy of Evidence in Rural Cadastral Surveying: Pushing the Boundaries at Carmel Lane, Baradine

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ABSTRACT

According to the well-established hierarchy of evidence for cadastral surveying in NSW, marks placed in Crown surveys lie only second to natural features. But what happens if a surveyor finds Crown marks from more than one survey, and the evidence from one survey differs considerably from another? What takes precedence, and where is the boundary? In order to show a boundary not agreeing with Crown marks, a surveyor must make extra sure they have conducted a complete search of the public record and of the available field evidence. This was the dilemma facing the author as he progressed through the definition of the boundaries involved in a 7 km rail corridor survey at Carmel Lane, west of Baradine in north-western NSW as part of the land acquisition and dedication process for the Narromine to Narrabri section of the Australian Rail Track Corporation (ARTC) Inland Rail Project between Brisbane and Melbourne. This presentation outlines the survey project, which received the 2023 Excellence in Surveying and Spatial Information (EISSI) award in the 'Rural Cadastral Surveying & Land Titling' category. The survey defined the land for the new rail corridor through five large rural portions and across the Baradine to Coonamble Road. Two plans of survey were to be prepared, along with a subdivision plan for the privately owned portions and an acquisition plan for where the rail corridor affected the road. Pre-survey analysis of the plan search revealed several concerns not only with the original 1895 surveys, but also with the differences between them and the subsequent surveys of 1912 and 1919. Searching for the original 1895 reference trees, corner marks and iron pipes was crucial to the correct definition of Carmel Lane, while reference to the original 1895 field notes was also required to investigate the concerns raised. Following a thorough search, several of the original pegs and reference trees were found in the field, providing the required evidence to move the boundary definition from a Crown survey. In the end, it was a combination of the surveyor's field ability and experience, along with the dogged determination to leave no stone unturned to re-establish the boundary and find the best or 'correct' result that ended solving the Carmel Lane problem.

KEYWORDS: Cadastral surveying, hierarchy of evidence, Crown marks, Inland Rail.