This article is a continued version of the previous paper on the dual relation between MHV amplitudes and Wilson loops in planar $\mathcal{N} = 4$ super Yang-Mills theory at one-loop level, written by the same authors [1]. In this article, an off-shell continuation of the above duality is considered and new diagrammatic interpretations are proposed. A consequent change of interpretation for box functions that arise in MHV one-loop amplitudes is discussed. Applications of these results, in particular, to two-loop calculations and non-MHV cases are also considered.

References

[1] A. Gorsky and A. Zhiboedov, J. Phys. A **42**, 355214 (2009) [arXiv:0904.0381 [hep-th]].