1142-20-85 **Jean Pierre Mutanguha*** (jpmutang@uark.edu). Hyperbolic Endomorphisms of Free Groups. We show that the fundamental group of a mapping torus of a graph immersion $f: \Gamma \to \Gamma$ is word-hyperbolic if and only if it has no Baumslag-Solitar subgroups. Bestvina-Feighn and Brinkmann studied the case when f is a homotopy equivalence; Kapovich and Gautero studied special types if π_1 -injective maps f; we extend these previous results to maps f that induce fully irreducible endomorphisms $f_*: F_n \to F_n$. (Received August 29, 2018)