We consider Banach spaces $Lip(K)$ of scalar-valued Lipschitz functions on compact metric spaces K. The little Lipschitz space $\ell ip(K)$ contains all Lipschitz functions satisfying an additional local flatness condition. For $K \subset \mathbb{R}^n$, equipped with the Eucledian Hölder metric, there exists an isomorphism $T : Lip(K) \rightarrow \ell^\infty$ which carries $\ell ip(K)$ onto c_0. Moreover $Lip(K)$ and $\ell ip(K)''$ are isometrically isomorphic for an even larger class of metric spaces. These well known results motivate further study of $Lip(K)$ and $\ell ip(K)$ with respect to their M-structure. For the case $K = ([0,1], |\cdot|^\alpha)$, $0 < \alpha < 1$, we present a subspace of $Lip(K)$ containing ℓ^∞, in which $\ell ip(K)$ is a proper M-ideal.