Gergely Harcos has kindly passed on the following corrections:

Formula (16) as stated is incorrect. It should instead state
\[ \Psi_\Gamma(x + u) - \Psi_\Gamma(x) = u + O(u^{1/2}x^{1/2+\epsilon} + x^{1/2+\epsilon} + ux^{-1}). \]

The extra term \( x^{1/2+\epsilon} \) arises from (21) where \( u \) on the right hand side should be \( u + X \). Then the optimal \( V \) at the end of Section 5 becomes \( V = (u + X)X^{-1+2\theta} \), and this ensures \( V \geq 1 \) as well (which was assumed earlier). The additional term \( ux^{-1} \) comes from the \( O(x^{-1}) \) term in (21).

An alternative way to correct (16) is to suppose that \( k(u) \) is supported in \((x^{1/2}, Y)\), and to restrict (16) to \( x \geq u \geq x^{1/2} \).

As a result, formula (17) should instead state
\[ \Psi_\Gamma(x) = x + E(x; k) + O(Y^{1/2}x^{1/2+\epsilon} + x^{1/2+\epsilon} + Yx^{-1}) \]

With the choice of \( Y = x^{5/6-\theta/2} \), the additional error terms are smaller than originally-claimed error term, so the exponents in the main Theorem 1.1 are unaffected.