To the best of my knowledge the two above diagrams are both UV and IR divergent.
Some textbooks (like Peskin eqtn 7.19) introduce a photon (or gluon) mass μ to regulate an IR divergence giving

$$\int_0^1 dx(2m - x\not{p}) \ln\left(\frac{x\Lambda^2}{(1-x)m^2 + x\mu^2 - x(1-x)p^2}\right)$$

(This was done in PV regularization).
Firstly I am not sure if this integral can be done in Mathematica using
" Integrate[,]//Normal " but if it can then indeed we get some $\ln(\mu)$ which is divergent as $\mu \to 0$. Yet I have seen other sources like Schwartz (eqtn 18.12) or an MIT ocw lecture (for HQET self energy) dispense with the artificial mass which gives a UV divergence as before but an IR divergence is not apparent to me, if there is one. So I am not sure what is the purpose of an artificial mass.
Also I dont know why IR divergences have to be cancelled at the level of cross sections by adding in soft real emission diagrams. Can they not be subtracted off from the diagram itself ?