Firstly equate the two expressions and then rearrange to find $\underline{\Sigma}_0$:

$$\underline{\mu}_w = \frac{1}{\sigma^2}\left(\frac{1}{\sigma^2}\underline{X}^T\underline{X} + \underline{\Sigma}_0^{-1}\right)^{-1}\underline{X}^T\underline{t}$$

$$\underline{\hat{w}} = \left(\underline{X}^T\underline{X} + N\lambda\underline{I}\right)^{-1}\underline{X}^T\underline{t}$$

$$\underline{\mu}_w = \underline{\hat{w}}$$

$$\frac{1}{\sigma^2}\left(\frac{1}{\sigma^2}\underline{X}^T\underline{X} + \underline{\Sigma}_0^{-1}\right)^{-1}\underline{X}^T\underline{t} = \left(\underline{X}^T\underline{X} + N\lambda\underline{I}\right)^{-1}\underline{X}^T\underline{t}$$

$$\frac{1}{\sigma^2}\left(\frac{1}{\sigma^2}\underline{X}^T\underline{X} + \underline{\Sigma}_0^{-1}\right)^{-1} = \left(\underline{X}^T\underline{X} + N\lambda\underline{I}\right)^{-1}$$

$$\frac{1}{\sigma^2}\left(\underline{X}^T\underline{X} + N\lambda\underline{I}\right) = \frac{1}{\sigma^2}\underline{X}^T\underline{X} + \underline{\Sigma}_0^{-1}$$

$$\frac{1}{\sigma^2}N\lambda\underline{I} = \underline{\Sigma}_0^{-1}$$

$$\therefore \quad \underline{\Sigma}_0 = \frac{\sigma^2}{N\lambda}\underline{I}$$