form $V_1(N)$. ⌟

The class of $V_0(N) \subset G(2,4)$ may be determined as follows: let p be a generic point of $\mathbb{P}^3$, H a generic plane containing p. Then the restriction to H of the set of quadrics in N containing p is a pencil L of conics with p as one base point, and by argument 3 above, p will lie on exactly three lines of L. Thus

$$\#(V_0(N) \cdot \sigma_{2,1}) = 3$$

and hence

$$V_0(N) \sim 3\sigma_1 .$$

⌜Γ $\{ [x_0, x_1, x_2] \mid x_0 F_{\mu,\lambda}(p) + x_1 F_{\mu',\lambda'}(p) + x_2 F_{\mu'',\lambda''}(p) = 0 \}$ $= \mathbb{P}^1$. $\Rightarrow$ The set of quadrics in N containing p is a pencil. $\Rightarrow$ The base locus is an elliptic curve of degree, by the result on p746, since p is a generic point.

Let C be the elliptic curve containing p.

$\Rightarrow$ $\#(H \cap C) = 4$ since H is a generic hyperplane. $\Rightarrow$ The restriction to H of the set of quadrics in N containing p is a pencil L of conics with p as one base point.

L has four base points, $\{p, p_2, p_3, p_4\}$.

$\Rightarrow$ $p \in \overline{p\,p_2},\ \overline{p\,p_3},\ \overline{p\,p_4}$.