$\Rightarrow$ Let $\psi_1' = a_{11}\psi_1 + \cdots + a_{1m}\psi_m$

$$\vdots \qquad \vdots \qquad \vdots$$

$$\psi_{m-n+1}' = a_{m-n+1,1}\psi_1 + \cdots + a_{m-n+1,m}\psi_m .$$

Without loss of generality, suppose that
$\langle \psi_1', \psi_2', \cdots \psi_{m-n+1}', \psi_{m-n+2}, \cdots \psi_m \rangle = H^0(S, \Omega^2(L))$.

$$\begin{pmatrix} 0 & 0 & \cdots & 0 \\ \vdots & & & \\ 0 & 0 & \overbrace{\cdots}^{n} & 0 \\ \hline \psi_{m-n+2}(\tau_1), & \cdots & & \psi_{m-n+2}(\tau_n) \\ \vdots & \vdots & & \vdots \\ \psi_m(\tau_1), & \cdots & & \psi_m(\tau_n) \end{pmatrix} \begin{matrix} \\ \\ \\ \uparrow \\ (n-1) \\ \downarrow \end{matrix}$$

Given the following equation,

$$\begin{pmatrix} x_{11}, & x_{12}, & \cdots & x_{1n} \\ x_{21}, & x_{22}, & \cdots & x_{2n} \\ \vdots & \vdots & & \vdots \\ x_{n-1,1} & x_{n-1,2} & \cdots & x_{n-1,n} \end{pmatrix} \begin{pmatrix} b_1 \\ b_2 \\ \vdots \\ b_n \end{pmatrix} = \begin{pmatrix} 0 \\ 0 \\ \vdots \\ 0 \end{pmatrix},$$

, by the row operations,

$$\begin{pmatrix} x_{11}', & 0 & 0 & \cdots & 0 & x_{1n}' \\ 0, & x_{22}' & 0 & \cdots & 0 & x_{2n}' \\ \vdots & \vdots & \vdots & & & \\ 0 & 0 & 0 & \cdots & x_{n-1,n-1}', & x_{n-1,n}' \end{pmatrix} \begin{pmatrix} b_1 \\ b_2 \\ \vdots \\ b_n \end{pmatrix} = \begin{pmatrix} 0 \\ 0 \\ \vdots \\ 0 \end{pmatrix},$$

where $x_{ii}' \neq 0$, $x_{in}' \neq 0$ for all i, by the Cayley-Bacharach property.