$$
\begin{bmatrix}
h_{k,1,0}(n) & h_{k,1,1}(n) & h_{k,1,2}(n) & 0 & 0 \\
h_{k,2,0}(n) & h_{k,2,1}(n) & h_{k,2,2}(n) & 0 & 0 \\
h_{k,3,0}(n) & h_{k,3,1}(n) & h_{k,3,2}(n) & 0 & 0 \\
h_{k,4,0}(n) & h_{k,4,1}(n) & h_{k,4,2}(n) & 0 & 0 \\
0 & h_{k,1,0}(n-1) & h_{k,1,1}(n-1) & h_{k,1,2}(n-1) & 0 \\
0 & h_{k,2,0}(n-1) & h_{k,2,1}(n-1) & h_{k,2,2}(n-1) & 0 \\
0 & h_{k,3,0}(n-1) & h_{k,3,1}(n-1) & h_{k,3,2}(n-1) & 0 \\
0 & h_{k,4,0}(n-1) & h_{k,4,1}(n-1) & h_{k,4,2}(n-1) & 0 \\
0 & 0 & h_{k,1,0}(n-2) & h_{k,1,1}(n-2) & h_{k,1,2}(n-2) \\
0 & 0 & h_{k,2,0}(n-2) & h_{k,2,1}(n-2) & h_{k,2,2}(n-2) \\
0 & 0 & h_{k,3,0}(n-2) & h_{k,3,1}(n-2) & h_{k,3,2}(n-2) \\
0 & 0 & h_{k,4,0}(n-2) & h_{k,4,1}(n-2) & h_{k,4,2}(n-2)
\end{bmatrix}_{12\times 5}
$$