Understanding Transparent Latches

Part A Complete the truth table to describe the circuit below:

\[
\begin{array}{c|c|c}
A & B & Out \\
0 & 0 & 0 \\
1 & 0 & 1 \\
0 & 1 & 0 \\
1 & 1 & 1 \\
\end{array}
\]

Part B Now consider a transparent latch based on this circuit (show below). How many transistors are used in this implementation?

Part C Complete the timing diagram for the latch output based on the specified inputs.

Part D Design a latch using two 2-input OR gate, two 2-input NAND gates and two inverters. Be sure to label the signals In, Out, and Enable.