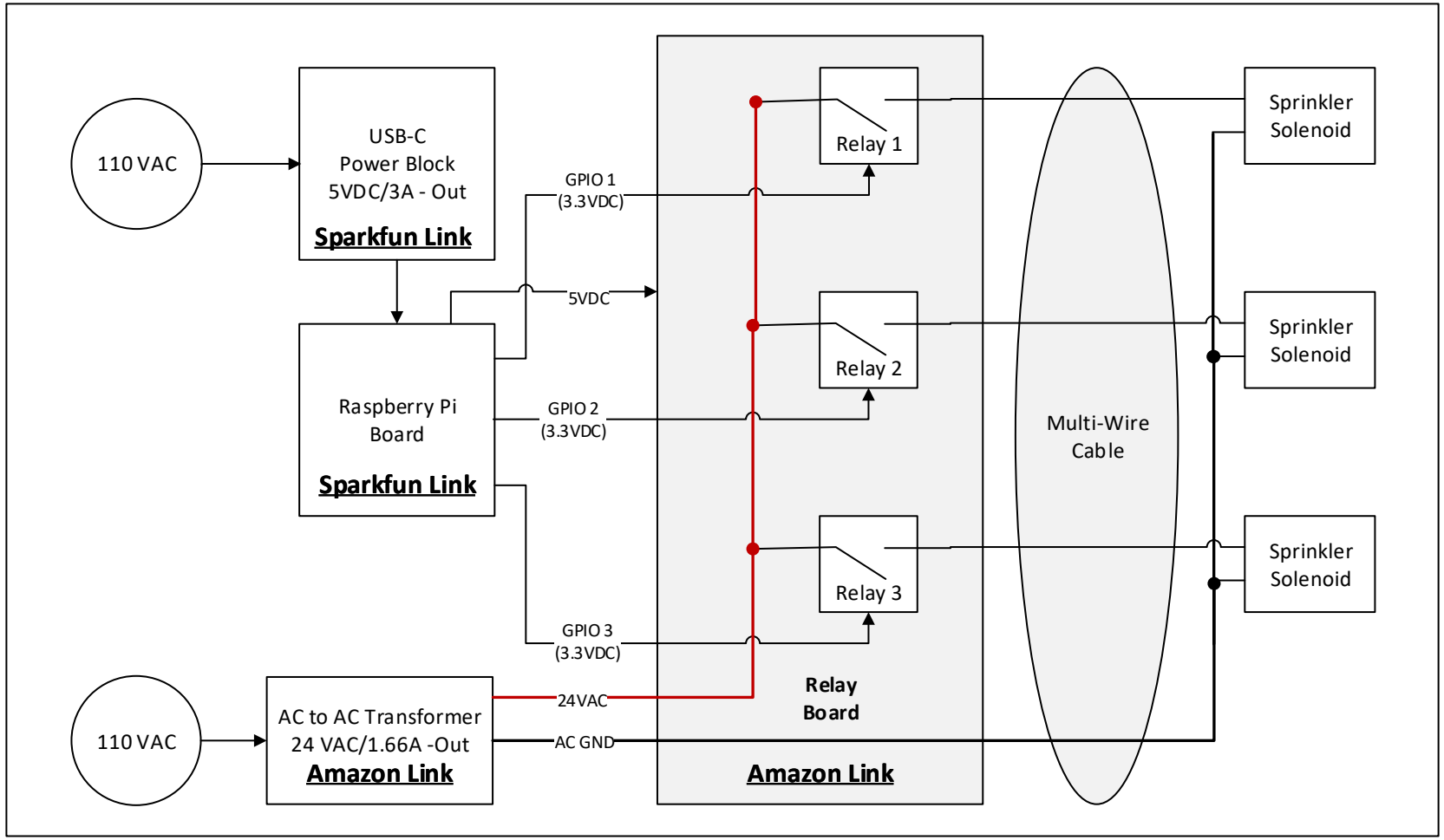
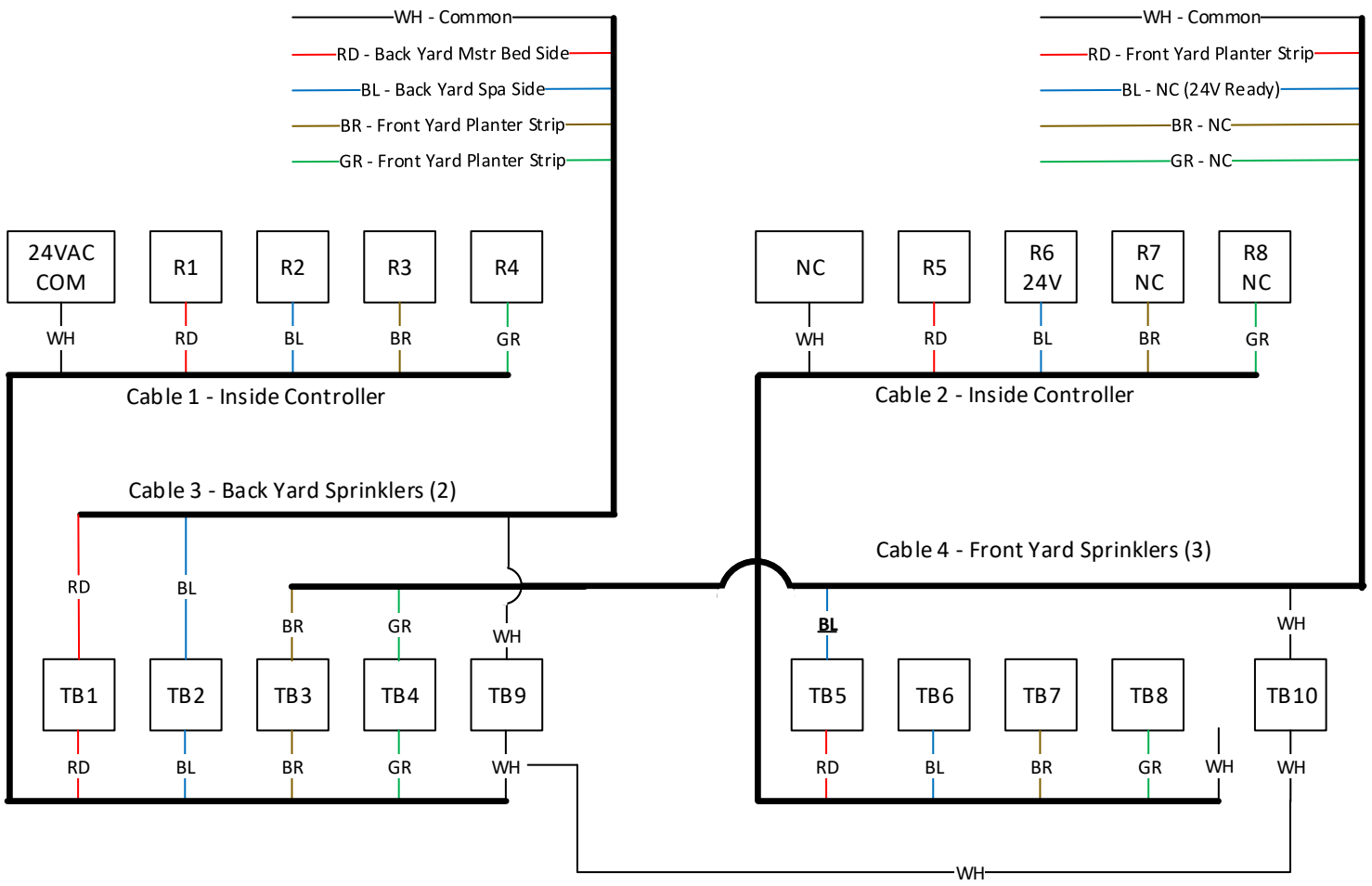


Relay Board: The GPIOs are 3.3V with max current of 16mA. The GPIOs don't actually control the relay but control a 5V (sourced from the RPi) signal that goes to and controls the relays, the diagram is a bit misleading. A relay closed relay draws 16mA on the 3.3V and 6mA on the 5V = 3.3*.016 + 5*.006 = 0.083W from the RPi board.

USB-C Pwr Block The power block can supply 3.0A at 5V = 15W. The RPi itself draws about 1.0A @5V = 5W and the 8 relay control signals will draw 8*0.083 = 0.66W. Total power draw from the 15W supply is 1.66W.

AC/AC Transformer The xformer can supply 1.66A at 24V = 39.8W. Solenoids draw 0.6A at turn-on and 0.2A at steady state. Solenoids draw 0.6A*24V = 14.4W at turn-on and 0.2A*24V = 4.8W at steady-state. Max solenoids that can be turned-on simultaneously 39.8/14.4 = 2.7.


WH - Common
RD - Back Yard Mstr Bed Side
BL - Back Yard Spa Side
BR - Front Yard Planter Strip
GR - Front Yard Planter Strip
24VAC COM
R1
R2
R3
R4
WH
RD
BL
BR
GR
Cable 1 - Inside Controller
WH - Common
RD - Front Yard Planter Strip
BL - NC (24V Ready)
BR - NC
GR - NC
NC
R5
R6 24V
R7 NC
R8 NC
WH
RD
BL
BR
GR
Cable 2 - Inside Controller
Cable 3 - Back Yard Sprinklers (2)
Cable 4 - Front Yard Sprinklers (3)
RD
BL
BR
GR
WH
BL
WH
TB1
TB2
TB3
TB4
TB9
TB5
TB6
TB7
TB8
TB10
RD
BL
BR
GR
WH
RD
BL
BR
GR
WH
WH
WH