

Street Crossings Project

Class Project

G₁ is on

R₂ is on

Default

R₁

R₂

Y₁

Y₂

Default →

G₁

G₂

Drive

Walk

Button Press

Wait 3

G₁ off

Y₁ on

Wait 3

Y₁ off

R₁ on

Wait 1

R₂ off

G₂ on

Wait 10

~~Blink extra light~~

WP:
PIN#

26 ← Button₂

R₁ → 22

27 ← R₂

Y₁ → 23

28 ← Y₂

G₁ → 24

29 ← G₂

Y₂ Blink

G₂ Blink

Wait 5

G₂ off

Y₂ off

R₂ on

Wait 1

G₁ on

end

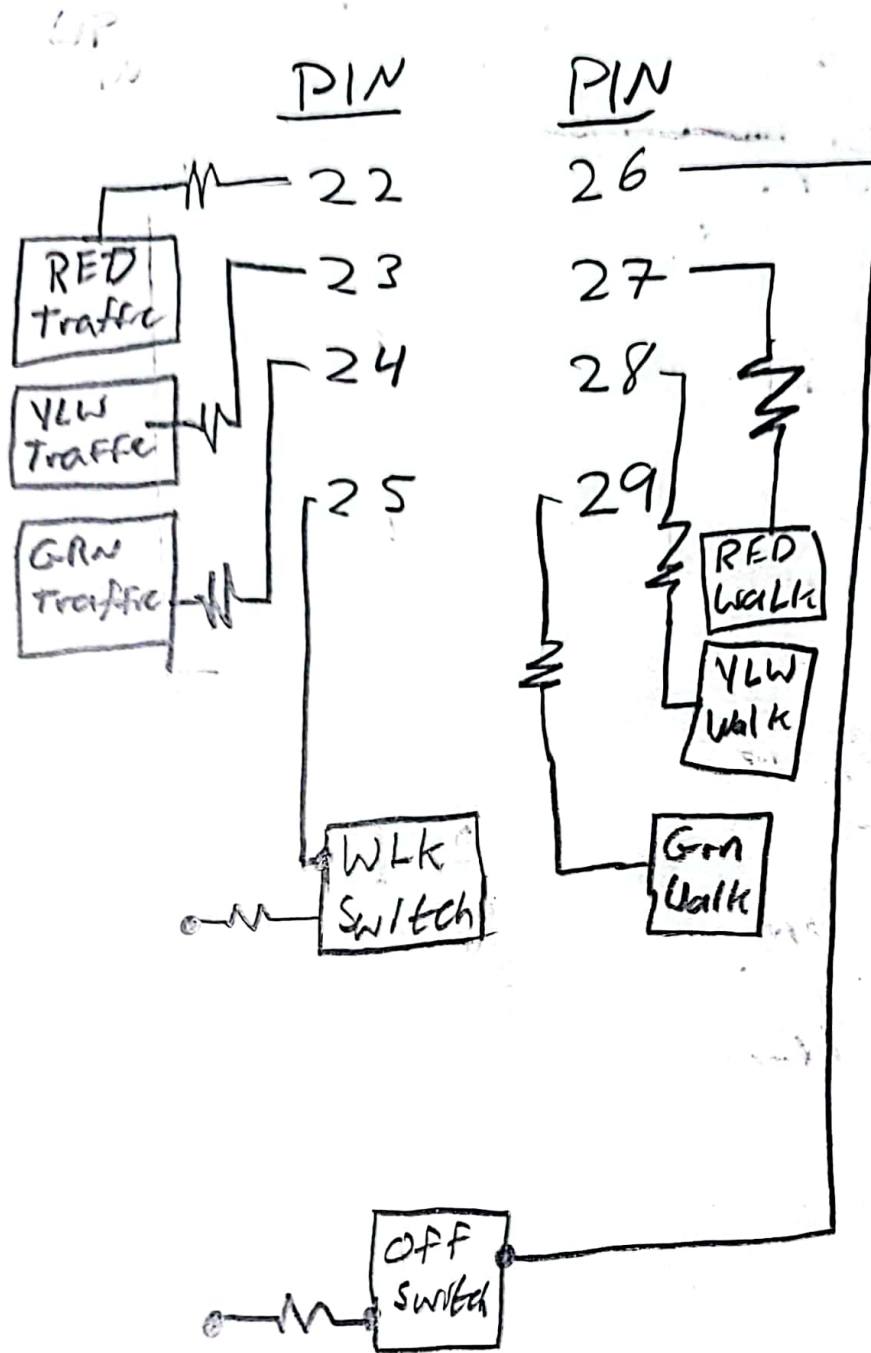
Button₁ → 25

Button₁ → walk

Button₂ → turn off

Project Hardware map

Notes: PIN# is WPIS#



Blink Loop

MOV r_, #0
name:
CMP r_, #MAX
Beq after_loop
add r_, #1

Blink
action

Ylw OFF
Grn OFF
Wait
Ylw ON
Grn ON
Wait

tail loop

State machine

OFF Button?

if yes, run turn off function

Walk Button?

run signal function

tail _

- with no
addressed
traffic
light features,
State is
Simply "on"
at default