

# John Soluri Preserve Bog Bridge Project

Presented by Ben Macaraeg  
Boy Scouts Troop 116 Ridgefield CT

# Introduction

## HI! I'm Ben Macaraeg!

- Senior at RHS
- Tuba player
- Aspiring engineer
- Life Scout in Boy Scout Troop 116 in Ridgefield
- Been in scouting since 2017
- Eagle project is now complete!



# Overview of proposal

- 300 ft of bog bridge needed replacing
- Current bog bridge was broken and rotting in many sections
- Eight sections were observed to be salvageable to make another smaller bridge
- Fallen trees were blocking the path
- Rains in the spring have caused erosion
- Exposed roots elsewhere on trail were a tripping hazard



# Bridge location





# State of the trail prior to project

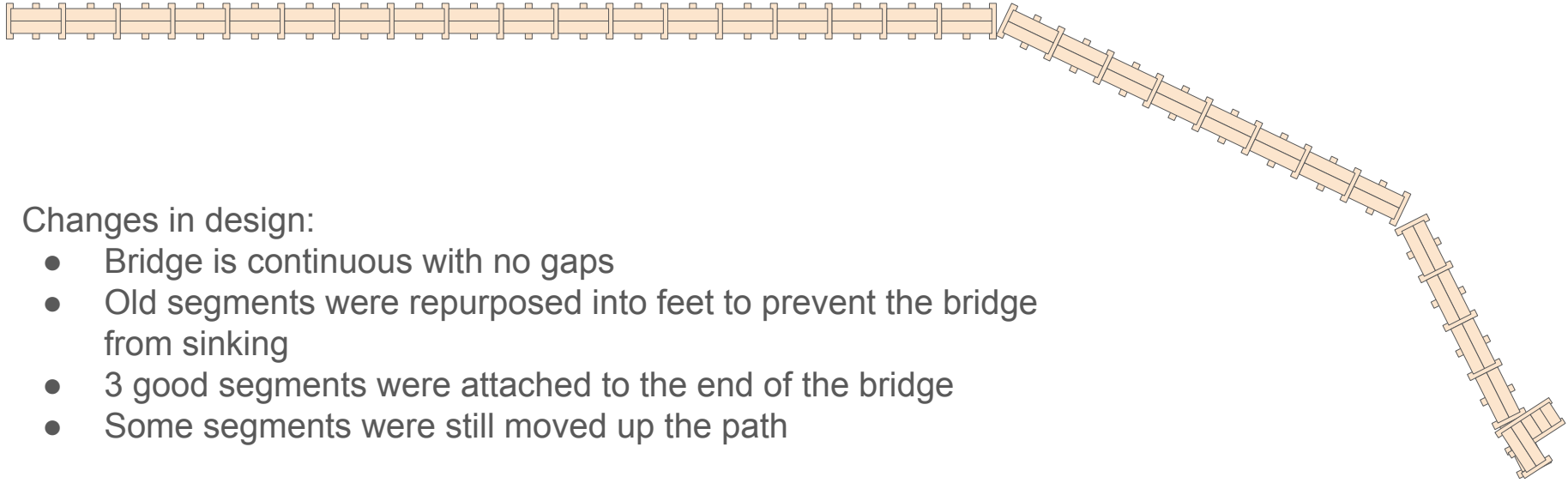


# Project Summary

- For my Eagle project, I lead a team of scouts, and parents to replace the bog bridge
- The old, damaged bridge was removed (Mr. Kearns took the old wood)
  - 3 segments were used to extend the main bridge
  - The rest were cut to make feet for the bridge to sit on
  - The 4x4s were handed over to Mr. Kearns and discarded
- The salvageable segments were moved up the trail to make a new bog bridge in a wet, less marshy area
  - 7 segments were moved up the trail to make a smaller bridge
- A fresh bridge was made and installed
  - Segments came together very well with few complications
- An extra bench was added
  - Bench was added to the end of the bridge



# Bridge overview



Changes in design:

- Bridge is continuous with no gaps
- Old segments were repurposed into feet to prevent the bridge from sinking
- 3 good segments were attached to the end of the bridge
- Some segments were still moved up the path



# Pictures during project



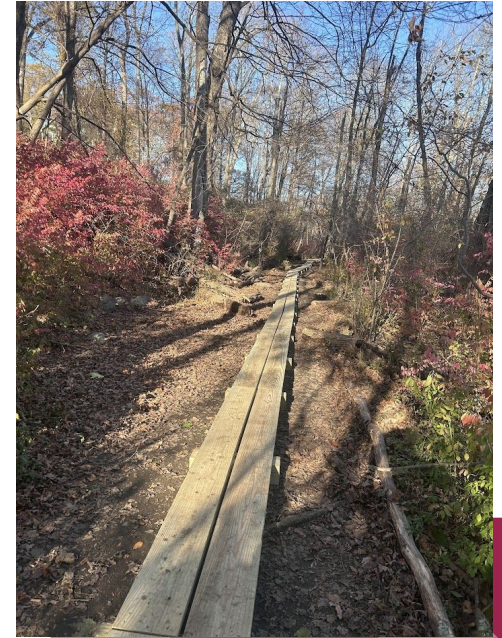
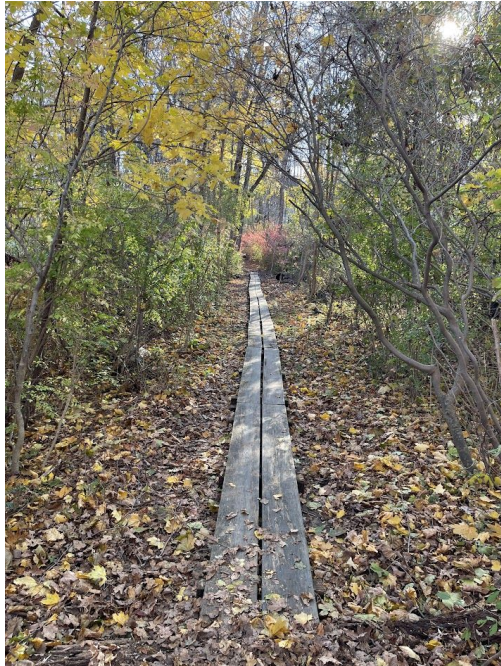


# Pictures during project



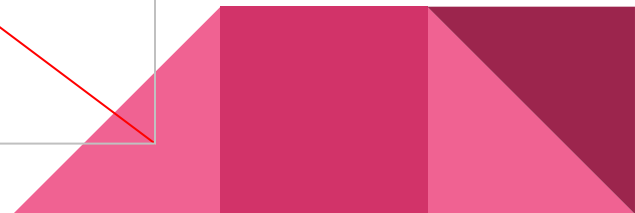
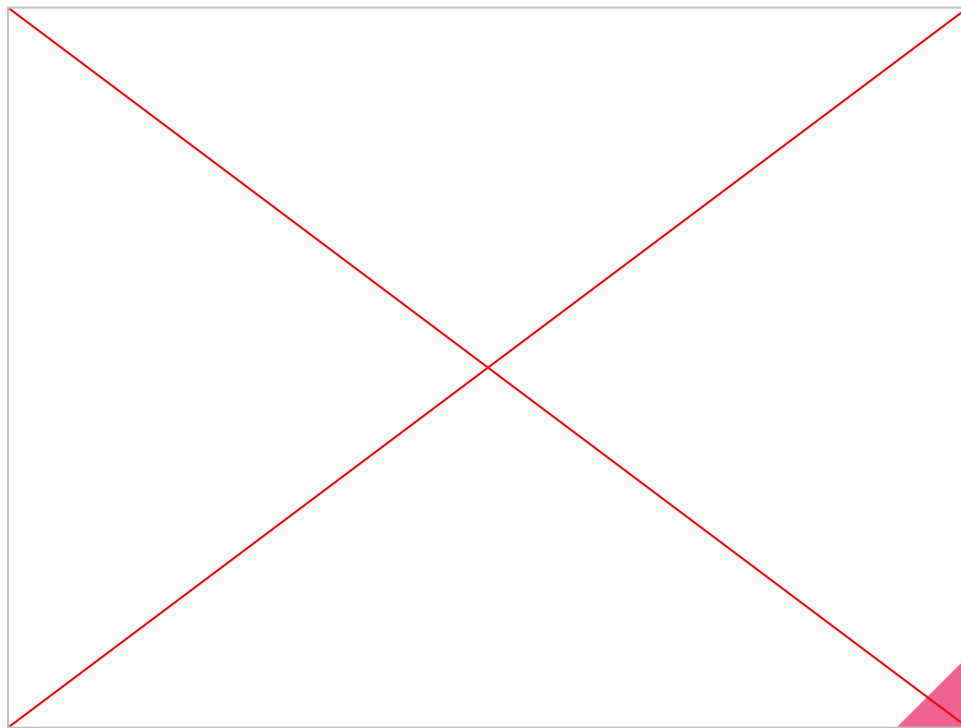


# Final Bridge



Repurposed bridge

# Final Bridge



# What I learned

## What went well:

- The bridge came together with few complications
- Work was complete in 4 shifts across 3 days
- Few complications with Fox Hill
- Tape went on well and made the bridge easy to walk on

## What was challenging:

- Wood was heavy to haul in
  - We asked a resident by the trail for permission to use their yard to transport wood
- Old segments were hard to haul out
  - Segments were repurposed into feet for the bridge





# Project Expenses

- My estimate for the expenses: \$2899.46
- Allotted budget: \$3000 + \$200 for grip tape (\$3200 total)
- Final costs: \$2899.46 + \$31.88 (nails) + \$233.64 (grip tape) = \$3164.98 (total)
- \$2899.46 charged to Ridgefield Supply and \$265.52 need to be reimbursed
- Mr. Kearns will be submitting separately for additional screws and disposal of the old wood (about \$55)



# Thank you for the support!

It was an honor to work with you all!

Feel free to ask any questions you may have!

