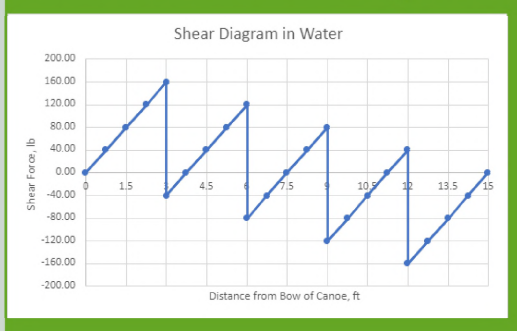
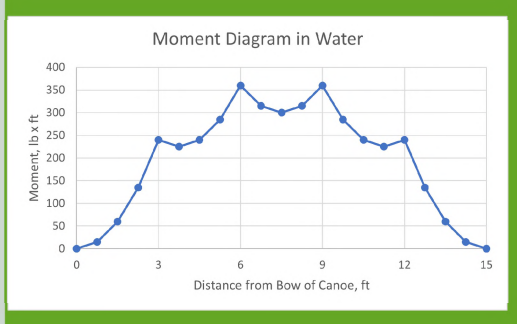
2022-2023 UVU CONCRETE CANOE
SANDBLASTER

Structural Analysis



Punching Shear
Demand: 50 lbs
Capacity: 113 lbs



Bending Stress
Compression: 19.85 psi
Tension: 43.68 psi

Concrete Mix Design

Design Parameters:
Compressive Strength
Color of Sandstone
Less Dense than Water
Workability for Mold





Mold Construction, Casting, and Curing



3 in. High-Density Foam
Secured with Dowels
Lined with Plastic

15 People, 8 hours
Groups to Mix, Cast, and Prepare Cross Section



Burlap for Wet Cure
Cure Time of 28 Days



Patching and Sanding



Covered Exposed Reinforcement
Filled in Unattractive Folds
Sanded Patches and Abrupt Edges

FINAL RESULTS



Length: 15 ft
Width: 30 in
Height: 16 in
Weight: 185 lbs
Dry Density: 62 pcf

Passed Swamp Test Without Bulkheads
4th Place for Men's Slalom - 4:53

Seniors: Ben Edwards, Johnathan Jones, Seth Lawrence
Juniors: Bradan Penrod