

# GREY LOGS

CONSERVATION OF SERIOUSLY  
DETERIORATED LOGS

# THE ROAD TO HIGHLANDS





# GREY LOGS

## OVERLOOKING HIGHLANDS NC













# A BIT OF DETERIORATION









AND 2 AROUND THE CORNER





THE LOGS  
CANNOT BE  
REPAIRED IN PLACE

WE WILL FOLLOW THIS LOG





# OTHER LOGS





# LOG REMOVAL



THESE LOGS HAVE  
BEEN REMOVED.

TEMP. STUD &  
PLYWOOD INFILL



STUDY LOG





# LOG REMOVAL



STUDY LOG READY  
FOR REMOVAL



# LOG REMOVAL



STUDY LOG FROM THE END  
SHOWING THE CONDITION OF  
THE CORE



# CUSTOM TRAYS FOR EACH LOG





# TRANSPORT TO THE SHOP





# FACES ARE REMOVED





# FACES SOAKED IN TIMBOR SOLUTION





DRIED





# KEEPING IT GREY

TO KEEP THE LOGS GREY

IT IS NECESSARY TO PROTECT THE FACE DURING CONSOLIDATION.

SEVERAL MATERIALS WERE CONSIDERED, IE CYCLODUODECANE WAX ETC.  
BUT A REMOVABLE ACRYLIC EMULSION WAS CONSIDERED THE BEST CHANCE  
TO STOP THE BLEED THROUGH OF THE CONSOLIDANT  
WHICH WAS EXPECTED TO BE AN EPOXY.



# TESTING THE ACRYLICS



TWO DIFFERENT COMMERCIALY AVAILABLE ACRYLICS WERE TESTED AT EACH END OF A SAMPLE BEFORE APPLYING EPOXY TO THE REAR.



# TESTING THE ACRYLICS



EPOXY SPILLED ON THE FACE STAINED THE CENTER. BOTH ACRYLICS WHEN REMOVED WITH AMMONIA PROTECTED THE GREY. THE AREA ABOVE AND BELOW THE EPOXY STAIN HAD NO TREATMENT.

THE FUTURE FLOOR FINISH ON THE RIGHT SIDE WAS THE LEAST VISIBLE.

## ON SECOND THOUGHT

- WHY USE EPOXY?
- THE FACES WILL NOT BE STRUCTURAL.
- WOULD THE ACRYLIC ALONE BE STRONG ENOUGH?
  
- ACTUALLY YES.
- SO THE FACES WERE SOAKED IN FUTURE FLOOR FINISH AFTER DRYING FROM THE TIMBOR.



# SOAKING IN THE ACRYLIC AND ON THE DRYING RACK





## SOAKED FACE

EXTERIOR OF AN INTERIOR FACE  
BEING WASHED WITH AMMONIA TO  
REMOVE EXCESS ACRYLIC TO AVOID  
GLOSS

DARKNESS WAS DEFINITELY SCARY





SOME AREAS WERE COATED  
WITH A WHITE SCUM —  
POSSIBLY BORATE LEACHING  
AND INTERACTING WITH THE  
ACRYLIC.

IT ALSO CAME OFF WITH  
AMMONIA.



ACRYLIC BRUSH APPLIED AFTER  
DRYING TO INTERIOR OF THE  
FACE UNTIL NO MORE WOULD BE  
TAKEN UP



# FACE OF THE STUDY LOG AFTER CONSOLIDATION



ACTUALLY THIS IS THE INTERIOR  
OF THE FACE.

# PORTION OF THE FACE LET INTO THE NEW CORE





# SILICONE CAULK USED AS ADHESIVE



# CONTOUR OF END LET INTO THE CORE





# ASSEMBLED, ALIGNED AND CLAMPED



STILL GREY  
READY TO ATTACH THE INTERIOR TO THE OTHER  
FACE.





BEFORE



AFTER



# SOME FACES WERE MORE OF A PROBLEM



THIS ONE WAS SO WARPED IT HAD TO BE FLATTENED AFTER SOAKING BEFORE IT COULD BE CUT DOWN TO A FACE





CLAMPED TO A CORE  
TO DRY FLAT

EVEN SOME OF THE MOST CONTRARY COME  
AROUND





SOME WERE JUST MISSING PARTS  
OR SO THIN TO PRECLUDE REUSE IN THIS  
EXTERIOR APPLICATION

THIS HAD BEEN SALVAGED BY  
THE OWNER



PROBABLY THE WORST





# INLAYING THE SALVAGEABLE PARTS



# AND THE OTHER END









# SOME NEEDED A POULTICE TO REMOVE EXCESS ACRYLIC FROM THE FACE





SO WILL THEY GO BACK IN?



NOTE THE STEEL  
ROD ON THE 4X4  
POSTS  
SUPPORTING THE  
CORNER

FIRST LOG IN  
PLACE













BEFORE



AFTER









# LIME AND SAND CHINKING

CHINKING WAS PLACED ON GALVANIZED  
1/4IN MESH

GREY HAS BEEN TINTED WITH PIGMENT  
TO MATCH THE EXISTING PORTLAND  
CEMENT CHINKING WHICH WILL BE  
REPLACED IN THE FUTURE

BUFF CHINKING IS THE BASE COAT



# NEW LEASE ON LIFE





SOMETIMES IT TAKES THE ENCOURAGEMENT  
OF:

“YOU CAN’T DO  
THAT!”

# ACKNOWLEDGEMENTS

- JOHN LEE AND RICHARD WOLBERS PROVIDED MANY RECOMMENDATIONS, MUCH CONSULTATION, AND ENCOURAGEMENT.
- ROB WOOLDRIDGE PROVIDED CARPENTRY ASSISTANCE.
- THE MISTAKES ARE MY OWN.



SPECIAL THANKS TO MRS. NATHAN [KATHY]  
VANMETER HENDRICKS III WHO PROVIDED THE  
OPPORTUNITY AND FUNDING

FINIS

CHARLES A. PHILLIPS  
CAPARCH@CONSERVEARCHITECTURE.COM