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# DRAWINGS AND DIMENSIONS:

- 1. DO NOT SCALE DRAWINGS FOR DIMENSIONS NOT GIVEN. 2. VERIFY ALL EXISTING FIELD CONDITIONS AND DIMENSIONS (INCLUDING MINIMUM VERTICAL CLEARANCE) PRIOR TO COMMENCING REPAIRS OR ORDERING ANY MATERIAL. NOTIFY ENGINEER OF ANY DISCREPANCIES FOUND. 3. ALL DIMENSIONS ARE IN FEET AND INCHES.

#### PROJECT SCOPE:

1. POLYESTER POLYMER CONCRETE (PPC) OVERLAY 2. SUPERSTRUCTURE CONCRETE REPAIRS 3. SUBSTRUCTURE CONCRETE REPAIRS 4. BEAM END EPOXY COATINGS 5. BEARINGS COATINGS 6. TOP OF PILE BENT CAP EPOXY COATING 7. GALVANIC METALIZING OF PILE BENT CAPS 8. GALVANIC CATHODIC PROTECTION PILE JACKETS 9. WATERLINE FOOTER PILE STRENGTHENING 10. FENDER REPAIRS

# ENVIRONMENT:

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SUPERSTRUCTURE: EXTREMELY AGGRESSIVE - COASTAL SUBSTRUCTURE: EXTREMELY AGGRESSIVE - COASTAL

# SITE CONDITIONS:

HABITAT BEYOND THE LIMITS OF CONSTRUCTION SHALL NOT BE DISTURBED.

# CONSTRUCTION OPERATIONS:

FOR IN-WATER WORK, INCLUDING THE USE OF A BARGE, ONLY IN AREAS OVER SUBMERGED AQUATIC VEGETATION (SAV) OR OTHER SUBMERGED PROTECTED RESOURCES TO OCCUR, ENSURE THERE IS SUFFICIENT CLEARANCE FROM THE BOTTOM OF THE BARGE SUCH THAT NO DAMAGE TO EXISTING SAV OR RESOURCES WILL OCCUR WITHIN THE CONSTRUCTION LIMITS. WHEN USING A BARGE DURING CONSTRUCTION, ROTATE OR MOVE THE LOCATION OF THE BARGE EVERY TEN TO FOURTEEN DAYS TO ALLOW SUNLIGHT TO REACH THE EXISTING SAV BENEATH THE DARGE EVERY TEN TO FOURTEEN DAYS TO ALLOW SUNLIGHT TO REACH THE EXISTING SAV BENEATH THE CONSTRUCTION HER SUML NOT MOVE THAT NO THE DAYS AND ALLOW SUNLIGHT TO REACH THE EXISTING SAV BENEATH THE BARGE. THE BARGE SHALL NOT MOVE BACK TO THE PREVIOUS LOCATION FOR A MINIMUM OF FOUR DAYS.

# CONCRETE CLASS:

SEE PROJECT SPECIAL PROVISIONS FOR PILE JACKET FILLER AND FURTHER DETAILS.

#### CONCRETE COVER:

1. CONCRETE COVER SHOWN IN THE PLANS DOES NOT INCLUDE PLACEMENT OR FABRICATION TOLERANCES UNLESS SHOWN AS "MINIMUM COVER." SEE NCDOT SPECIFICATIONS FOR ALLOWABLE REINFORCEMENT PLACEMENT TOLERANCES. 2. CONSTRUCTION JOINTS ARE PERMITTED ONLY AT LOCATIONS SPECIFIED IN THE PLANS. ADDITIONAL CONSTRUCTION JOINTS OR ALTERATIONS TO THOSE SHOWN REQUIRE THE ENGINEER'S APPROVAL.

#### CONCRETE FINISHES:

FINISH IN ACCORDANCE WITH THE NCDOT SPECIFICATIONS NOTED.MATCH EXISTING FINISH ON ALL EXPOSED EDGES UNLESS OTHERWISE NOTED.A CLASS 5 FINISH COATING SHALL BE APPLIED TO THE BEAM ENDS WHERE CONRETE REPAIRS HAVE BEEN PERFORMED,MATCHING THE COLOR OF SURROUNDING CONCRETE. REINFORCING STEEL:

1. ALL REINFORCING STEEL SHALL BE ASTM A615-96. GRADE 60. 2. ALL DIMENSIONS PERTAINING TO LOCATION OF REINFORCEMENT ARE TO CENTERLINE OF BARS EXCEPT WHERE THE CLEAR DIMENSION IS SHOWN TO FACE OF CONCRETE. 3. REINFORCEMENT DETAIL DIMENSIONS ARE OUT-TO-OUT OF BARS.

#### DOWEL DETAIL:





GREATER.

2. NOTIFY THE ENGINEER OF ANY BROKEN BARS OR BARS WHICH ARE DETERMINED TO HAVE A SECTION LOSS OF 25% OR

3. INSTALL DOWELS IN ACCORDANCE WITH

NCDOT SPECIFICATIONS.

## DATUM:

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ALL ELEVATIONS REFER TO NGVD '29 UNLESS NOTED OTHERWISE.

#### LIMIT OF REPAIRS:

LIMITS OF REPAIRS PROVIDED IN THESE PLANS ARE BASED ON ESTIMATIONS FROM INFRARED SCANNING AND LIMITED FIELD WORK.THE EXTENT OF REPAIRS IS EXPECTED TO VARY DURING CONSTRUCTION. DUE TO TIME SINCE INSPECTION, DEFICIENCIES MAY HAVE DETERIORATED OR INCREASED IN NUMBER.NOTIFY THE ENGINEER OF SIGNIFICANT CHANGES.

# ADJACENT EDGE CONCRETE REPAIR:

WHEN PROPOSED CONCRETE REPAIRS (OR DETERMINED LOCATIONS) ARE ADJACENT TO A CORNER, REPAIR ON THE ADJACENT EDGE SHOULD BE ANTICIPATED AND REPAIRED IN ADDITION TO THE AREA SHOWN ON SUBSTRUCTURE CONCRETE REPAIR SHEETS, CONTRACTOR IS RESPONSIBLE FOR THIS REPAIR AT ALL BENTS REGARDLESS OF CALLOUT ON RESPECTIVE SHEET(S).

# FORMS CONSTRUCTION:

FORMS MUST BE SUPPORTED BY THE EXISTING STRUCTURE.FULL DEPTH COFFERDAMS WILL NOT BE ACCEPTED.THE CONTRACTOR SHALL SUBMIT DETAILED PLANS OF FORMS AND FALSEWORK TO BE USED FOR CONSTRUCTION OF THE PIER CONCRETE REPAIR.

DRAWN BY :	J. B. HANNA	DATE :	07-16
CHECKED BY :	S.L.CULLUM	DATE :	07-16
DESIGN ENGINEER	OF RECORD: S.L.CULLUM	DATE :	07-16

## WORK ON THE WATER

CONTACT THE US COAST GUARD (PORTSMOUTH) AT JAMES.I.ROUSSEAU@USCG.MIL, 30 DAYS PRIOR TO IN-WATER CONSTRUCTION ACTIVITES. THE THE CONTRACTOR SHALL LIMIT THE INSTALLATION OF THE JACKETS, CONTAINMENT, OR JACKING SYSTEM TO HALF OF THE CHANNEL SPAN AT A TIME IN ORDER TO REDUCE THE IMPACTS TO BOATERS. THE CONTRACTOR SHALL MONITOR VHF RADIO AND COMMUNICATE WITH MARINE TRAFFIC AS NECESSARY. CONTRACTOR SHALL MONITOR CHANNEL 16. THE CONTRACTOR SHALL NOTIFY AND/OR COORDINATE WITH THE COAST GUARDWHENEVER THE CONTRACTOR PLANS TO BE IN THE WATER FOR ANY

NAVIGABLE CHANNEL SHALL NOT BE BLOCKED DURING CONSTRUCTION.

PERIOD OF TIME.

# MARINE TRAFFIC:

MARINE TRAFFIC CONSTRUCTION SIGNS SHALL BE PLACED ON BOTH FACES OF EACH BRIDGE AT THE LOCATIONS WHERE WORK IS BEING PERFORMED. PLACEMENT OF THE SIGNS SHALL BE SUCH THAT THEY ARE CLEARLY VISIBLE TO THE APPROACHING MARINE TRAFFIC. BARGES LEFT IN WATER IN LOW-LIGHT CONDITIONS SHALL BE ILLUMINATED SO AS TO BE VISIBLE TO MARINE TRAFFIC.



#### INCIDENTAL ITEMS:

PAYMENT FOR ELECTRICAL WORK FOR THE PILE JACKETS SHALL BE INCIDENTAL TO THE COST OF THE INTEGRAL CATHODIC PROTECTION PILE JACKETS.

#### PILE JACKETS:

SHOULD HIGH WATER AFFECT PILE JACKET INSTALLATION, SUBMIT FOR ENGINEERS APPROVAL A DEWATERING PLAN OR ALTERNATIVE INSTALLATION METHOD SUITABLE FOR UNDERWATER USAGE.

