BRIDGE B

BRIDGE A

BRIDGE DECK REPAIR REFERENCE PHOTOS

SCALE: 1 1/2" = 1'-0"

BRIDGE DECK REPAIR NOTES

1. PREPARE A STRIP ALONG THE INTERFACE BETWEEN THE CONCRETE DECK AND THE FOUR BRIDGE GIRDERS.
   i. THE STRIP IS TO BE 5" HIGH AND THE LENGTH OF THE GIRDER = 50'-6".
   ii. THE STRIP IS TO BE PREPARED TO SOCIETY FOR PROTECTIVE COATINGS (SSPC) SP-10 STANDARDS.
   iii. THE STRIP IS TO BE PAINTED WITH A THREE COAT SYSTEM SUITABLE FOR EXTERIOR STEEL STRUCTURES:
      a. BASE COAT: AN INORGANIC ZINC RICH PRIMER.
      b. MID COAT: AN EPOXY MID COAT.
      c. TOP COAT: A URETHANE TOP COAT.
2. PREPARE THE EXISTING CONCRETE DECK:
   i. POWER WASH THE TOP OF THE DECK TO REMOVE ALL LOOSE MATERIAL.
   ii. CUT AND REMOVE ALL PROTRUDING STEEL REINFORCING BARS.
   iii. NEW SLAB REINFORCEMENT: #3 BARS @ 6" O.C. EACH DIRECTION. BARS SHALL BE SUPPORTED A MINIMUM OF 2-1/2" ABOVE EXISTING SLAB.
3. COAT THE CLEANED CONCRETE DECK WITH A BONDING AGENT SUCH AS SIKALIQUID WELD OR EQUAL. FOLLOW MANUFACTURER'S INSTRUCTIONS.
4. INSTALL A CONCRETE TOPPING:
   i. CONCRETE TOPPING SHALL BE 5" THICK +/- AND IS TO BE FIELD VERIFIED TO MATCH TOP OF EXISTING BUILDING ENTRANCE SLAB.
   ii. CONCRETE REQUIREMENTS:
      a. CONCRETE 28 DAY COMPRESSIVE STRENGTH TO BE 5,000 PSI.
      b. COARSE AGGREGATE TO BE NYSDOT 1A.
      c. MAXIMUM WATER CEMENT RATIO TO EQUAL 0.45.
      d. MAXIMUM SLUMP TO BE 4"
      e. MINIMUM AIR ENTRAINMENT TO BE 6%.
      f. CONCRETE TO BE REINFORCED WITH FORTA FERRO 2-1/4" FIBRILLATED POLYPROPYLENE FIBERS OR EQUAL AT A DOSAGE OF 7.5 POUNDS PER CUBIC YARD OF CONCRETE.
   iii. PROVIDE A CROWNED SURFACE AT FINISH TOP OF CONCRETE AND SLOPE TOWARDS EACH BRIDGE RAIL. CONCRETE TO HAVE A BROOM FINISH ORIENTED PERPENDICULAR TO THE STEEL BRIDGE GIRDERS.
   iv. CONCRETE TOPPING SHALL BE CURED FOR A MINIMUM OF 14 DAYS IN ACCORDANCE WITH ACI 308R-16 GUIDE TO EXTERNAL CURING OF CONCRETE. IMMEDIATELY AFTER PLACEMENT, PROTECT CONCRETE FROM PREMATURE DRYING, EXCESSIVE HOT OR COLD TEMPERATURE, AND MECHANICAL INJURY. MAINTAIN CONCRETE WITH MINIMAL MOISTURE LOSS AND AT RELATIVELY CONSTANT TEMPERATURE BY USE OF SATURATED BURLAP OR MOISTURE-RETAINING SHEET LAPPED NOT LESS THAN 3" AND SEALED WITH WATERPROOF TAPE.

BRIDGE DECK REPAIR KEYNOTE LEGEND (A#)

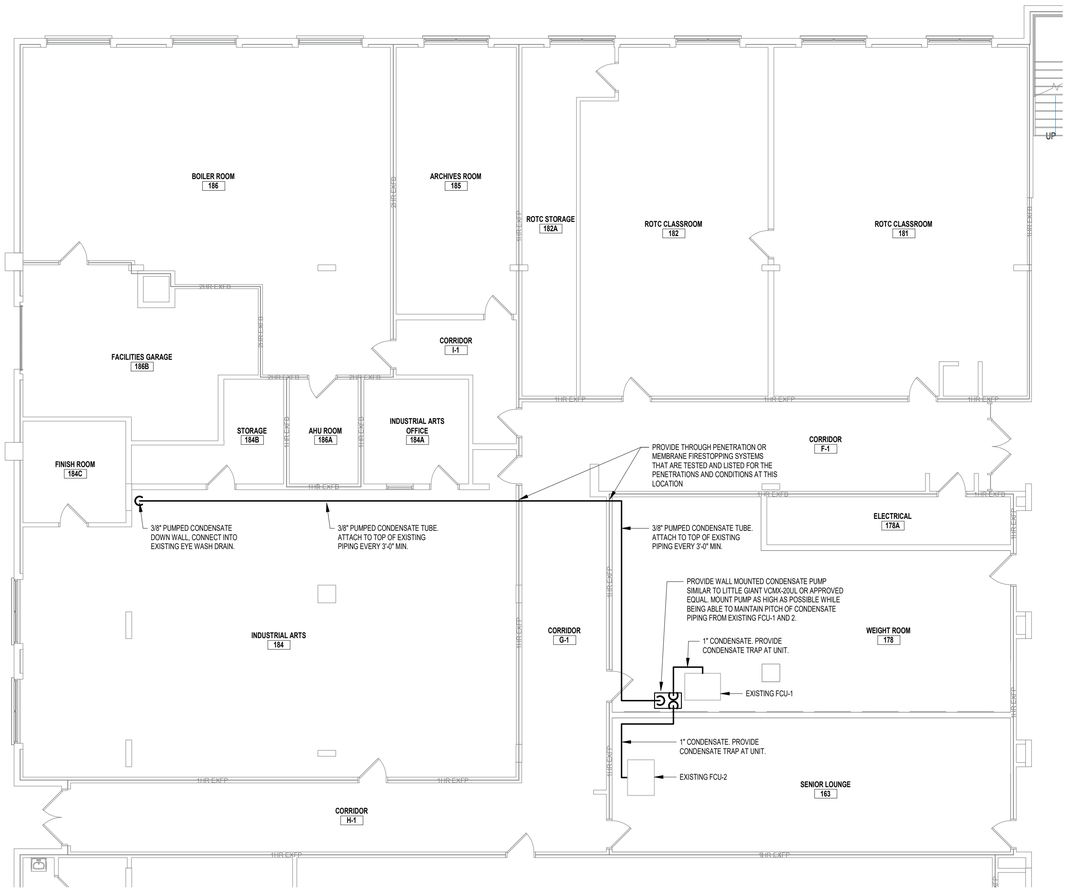
1 PREPARE BRIDGE DECK TO RECEIVE NEW CONCRETE TOPPING. SEE BRIDGE DECK REPAIR NOTES FOR MORE INFORMATION.

2 CONTRACTOR TO REMOVE EXISTING BLOCK, WOOD SLEEPERS AND PLYWOOD WALKING SURFACE AT THIS BRIDGE ONLY. REFER TO OWNER FOR SALVAGE OF MATERIALS PRIOR TO DISPOSAL. ALL MATERIALS ARE TO BE DISPOSED OF IN A SAFE AND LEGAL MANNER IF APPLICABLE.

3 CONTRACTOR IS TO REMOVE EXISTING ASPHALT AT WALKWAY/BRIDGE INTERSECTION TO ACCOMMODATE NEW CONCRETE SURFACE. FINISHED SURFACE ELEVATIONS NEED TO BE IDENTICAL ONCE COMPLETED.

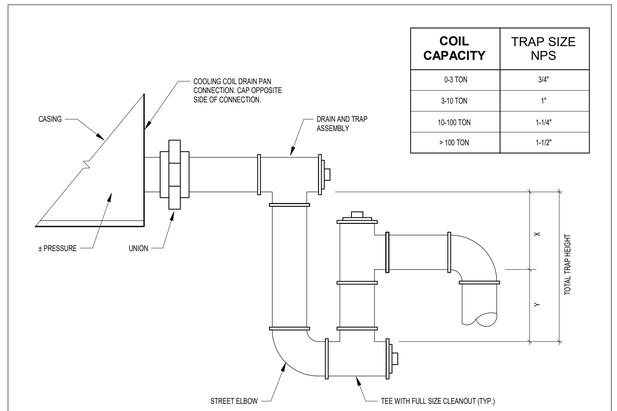
3 PARTIAL FLOOR PLAN - BRIDGE DECK REPAIR

SCALE: 1/8" = 1'-0"



1 FIRST FLOOR PLAN - AREA B

SCALE: 1/8" = 1'-0"



NOTES:
1. "X" MUST BE 1-1/2" PLUS CASING STATICPRESSURE. MINIMUM 2".
2. "Y" MUST BE 1-1/2" MINUS CASING STATIC PRESSURE. MINIMUM 2".

EXAMPLE: CASING AT (-1") WG
X = 1-1/2" + (-1) = 1/2", USE 2"
Y = 1-1/2" - (-1) = 2-1/2"

2 CONDENSATE TRAP DETAIL

SCALE: 1/2" = 1'-0" (+/- PRESSURE)

SPECS

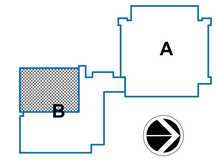
COOLING CONDENSATE REMOVAL PUMPS

A. MANUFACTURERS:
   1. LITTLE GIANT; MODEL VCMX-20UL
   2. SUBSTITUTIONS: SEE SECTION 01 6000 - PRODUCT REQUIREMENTS
B. CONSTRUCTION: COMMERCIAL GRADE, NONFERROUS PUMP WITH STAINLESS STEEL SHAFT, INTEGRAL DISCHARGE CHECK VALVE, INTEGRAL FLOAT SWITCH, SAFETY SWITCH, THERMOPLASTIC RESERVOIR, MOTOR ASSEMBLY, AND POWER CORD WITH GROUND. PROVIDE WITH WALL MOUNT BRACKET.
C. UL 778
D. PERFORMANCE:
   1. FLOW 60 GPH, AT 10 FEET HEAD.
   2. ELECTRICAL CHARACTERISTICS:
      a. 1/30 HP
      b. 120 VOLTS, SINGLE PHASE, 60 HZ, 1.5 FLA

SANITARY SEWER PIPING, ABOVE GRADE
A. PVC PIPE: ASTM D2729
   1. FITTINGS: PVC
   2. JOINTS: SOLVENT WELDED, WITH ASTM D2564 SOLVENT CEMENT.

PIPE HANGERS AND SUPPORTS
A. ALL PLUMBING PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH THE PLUMBING CODE OF NEW YORK STATE. HANGERS, ANCHORS, AND SUPPORTS SHALL SUPPORT THE PIPING AND THE CONTENTS OF THE PIPING. HANGERS AND STRAPPING SHALL BE OF APPROVED MATERIAL THAT WILL NOT PROMOTE GALVANTIC ACTION.
B. PLUMBING PIPING - DRAIN, WASTE AND VENT:
   1. CONFORM TO ASME B31.9.
   2. HANGERS FOR PIPE SIZES 1/2 TO 1-1/2 INCHES: MALLEABLE IRON, ADJUSTABLE SWIVEL, SPLIT RING.
   3. MULTIPLE OR TRAPEZE HANGERS: STEEL CHANNELS WITH WELDED SPACERS AND HANGER RODS.
   4. VERTICAL SUPPORTS: STEEL RISER CLAMP.
   5. FLOOR SUPPORT: CAST IRON ADJUSTABLE PIPE SADDLE, LOCK NUT, NIPPLE, FLOOR FLANGE, AND CONCRETE PIER OR STEEL SUPPORT.

KEY PLAN:



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BCA ARCHITECTS ENGINEERS

HIGHLAND FALLS ~ FORT MONTGOMERY HFFM

JAMES I. O'NEILL RENOVATION PROJECT
HIGHLAND FALLS - FORT MONTGOMERY CSD
JAMES I. O'NEILL HIGH SCHOOL
HIGHLAND FALLS - ORANGE COUNTY - STATE OF NEW YORK

REV	DATE	DESCRIPTION

DRAWN BY NPB	PROJECT NUMBER 2020-117
CHECKED BY JAS	DATE REBID 09.10.2021

PARTIAL FIRST & SECOND FLOOR PLAN - AREA B

SHEET NUMBER

A-102

AD1

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