

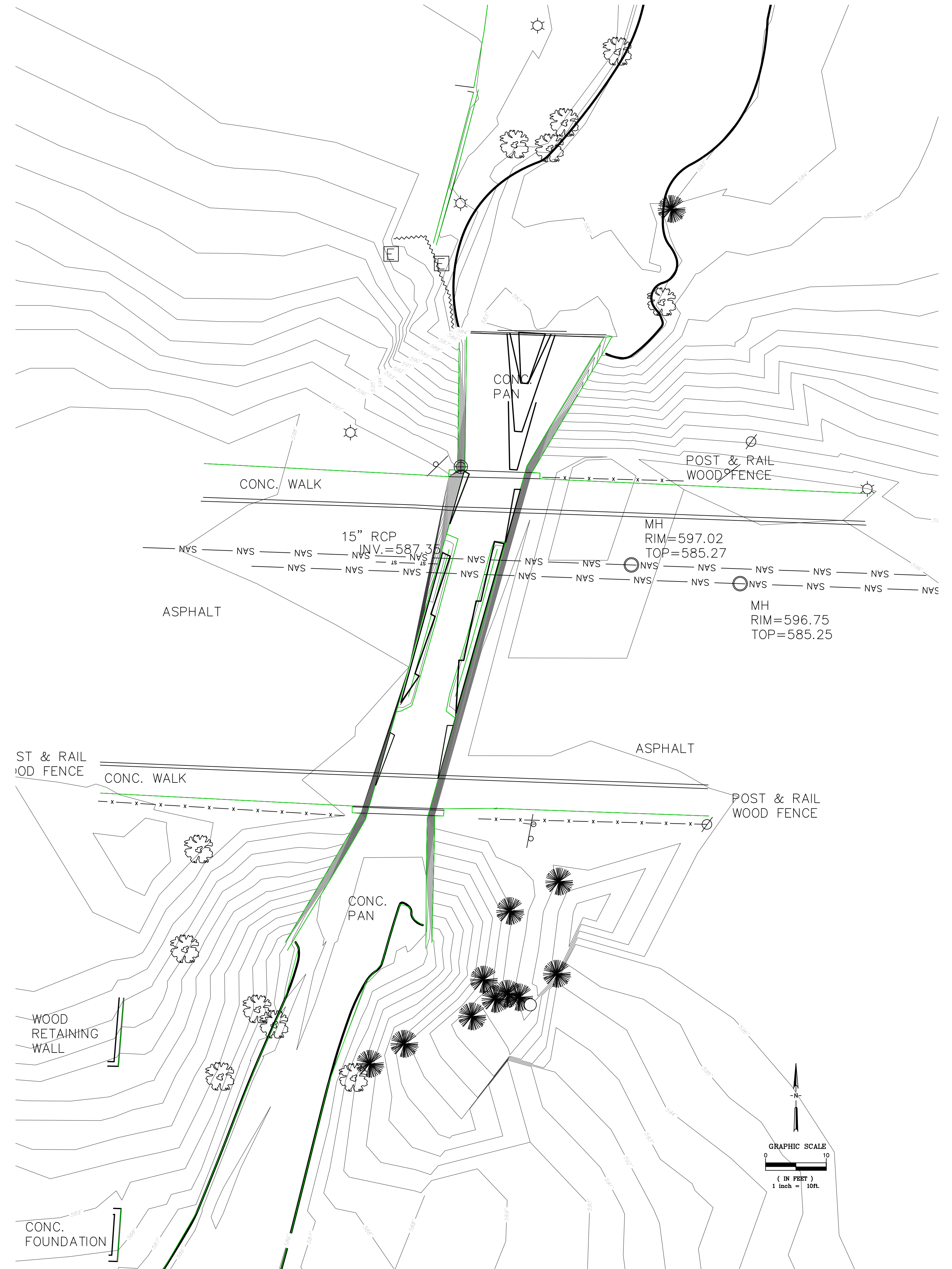
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STH 42 BOX CULVERT CONVERGING BAFFLES



CONVERGING BAFFLES DESIGN FEATURES

ALLOWS FISH PASSAGE THROUGH THE BOX CULVERT BY ALTERING THE DOWNSTREAM APRON AND CREATING CURRENT BREAKS WITHIN THE CULVERT. ALTERATIONS OF THE DOWNSTREAM APRON CONSIST OF CUTTING A TRENCH THROUGH THE APRON AND REPLACING THIS SECTION WITH THREE ELONGATED 6" STEPS. CONVERGING BAFFLES WILL BE CUT OUT OF THE EXISTING CONCRETE 'CURBS' ALONG THE INTERIOR OF THE BOX CULVERT WITH THE ADDITION OF APPROXIMATELY FOUR WOODEN BAFFLES ON THE DOWNSTREAM AND UPSTREAM END OF THE BOX CULVERT.



PRELIMINARY

STH 42 BOX CULVERT - IRREGULAR BAFFLES

5308 S. 12th Street
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NO.	DATE	DESCRIPTION	BY

FISH CREEK FISH PASSAGE
TOWN OF GIBRALTAR
HWY 42, FISH CREEK
DOOR COUNTY, WISCONSIN

SCALE
HOR. 1"=10'
VER. 1"=10'

DATE
05/07/2019

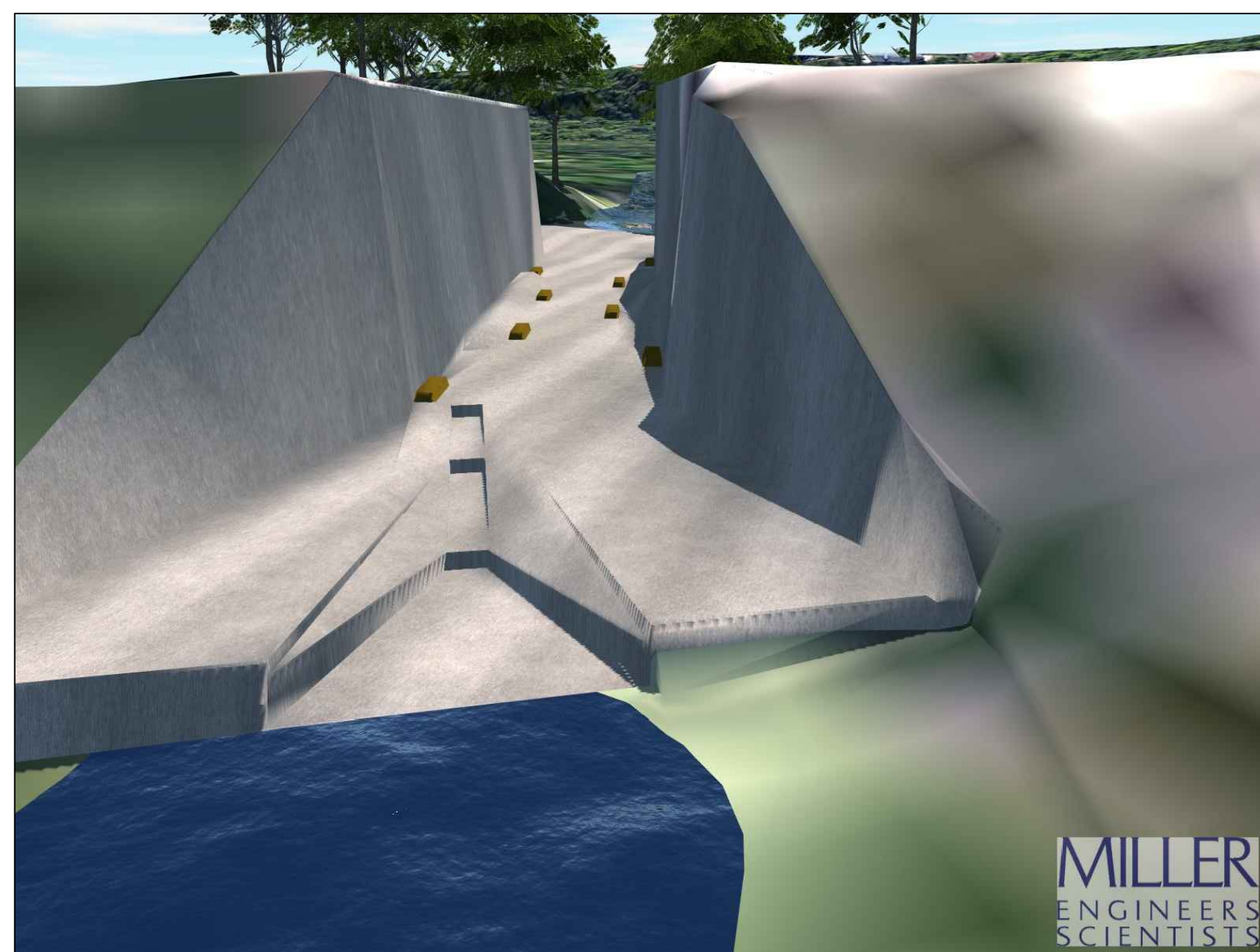
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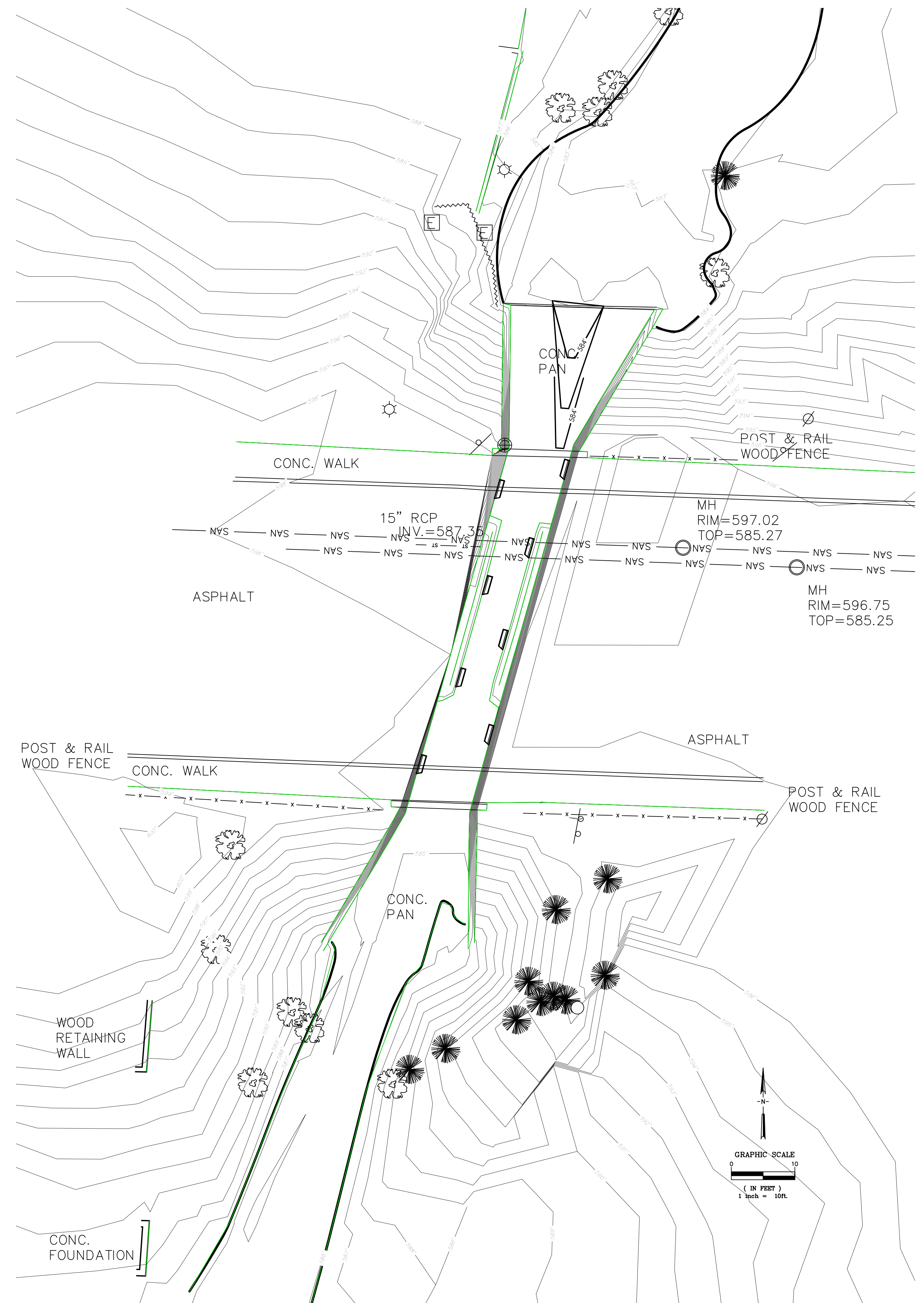
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SHEET
1 OF 1

STH 42 BOX CULVERT BLOCK BAFFLES



CONVERGING BAFFLES DESIGN FEATURES
 ALLOWS FISH PASSAGE THROUGH THE BOX CULVERT BY ALTERING THE
 DOWNSTREAM APRON AND PLACING BAFFLES WITHIN THE CULVERT.
 ALTERATIONS OF THE DOWNSTREAM APRON CONSIST OF CUTTING A TRENCH
 THROUGH THE APRON AND REPLACING THIS SECTION WITH THREE ELONGATED 6"
 STEPS. ALTERNATING TIMBER BAFFLES WILL BE INSTALLED WITHIN THE INTERIOR
 OF THE BOX CULVERT TO PROVIDE CURRENT BREAKS AND FISH "RESTING AREAS". A
 TOTAL OF EIGHT BAFFLES (FOUR ON EACH SIDE) ARE PROPOSED.



PRELIMINARY

STH 42 BOX CULVERT - BLOCK BAFFLE

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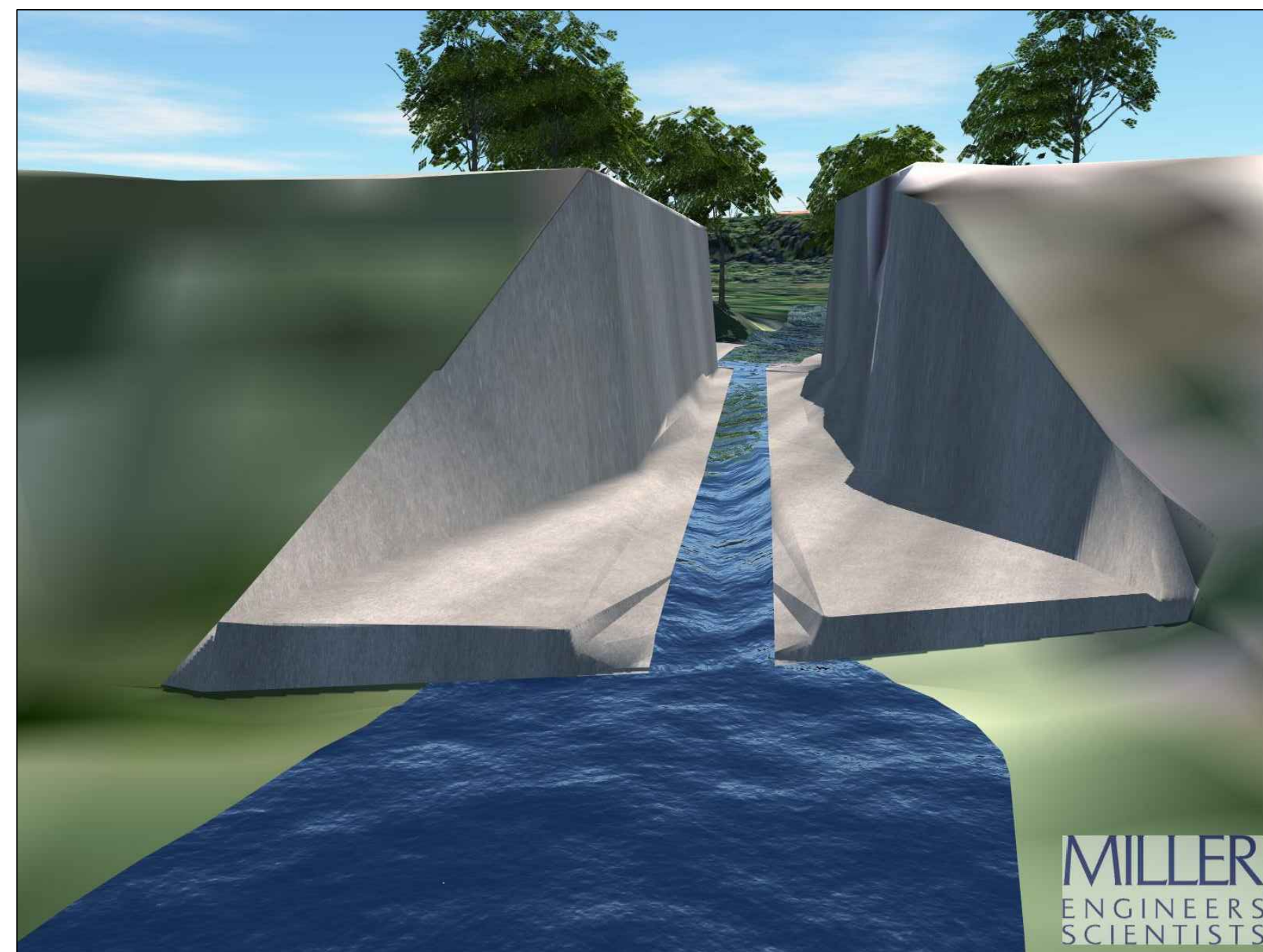
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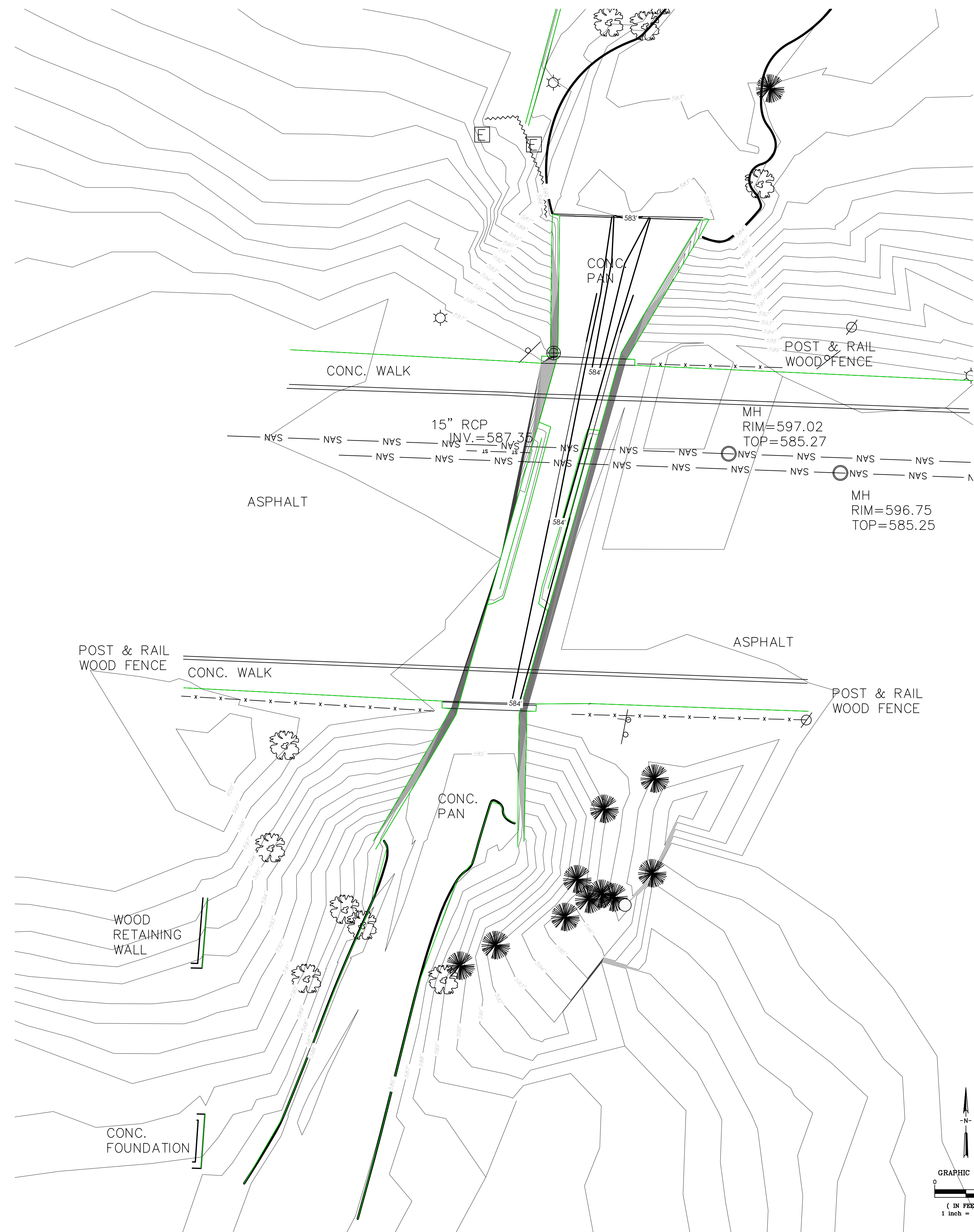
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STH 42 BOX CULVERT CHANNEL CUT



CHANNEL CUT DESIGN FEATURES
 ALLOWS FISH PASSAGE BY ALTERING THE DOWNSTREAM APRON AND INTERIOR OF THE BOX CULVERT. ALTERATIONS CONSIST OF REMOVING CONCRETE FROM THE DOWNSTREAM APRON THROUGH THE BOX CULVERT AND REPLACING WITH A CONSTANT SLOPED CONCRETE CHANNEL.



PRELIMINARY
 STH 42 BOX CULVERT - CHANNEL CUT

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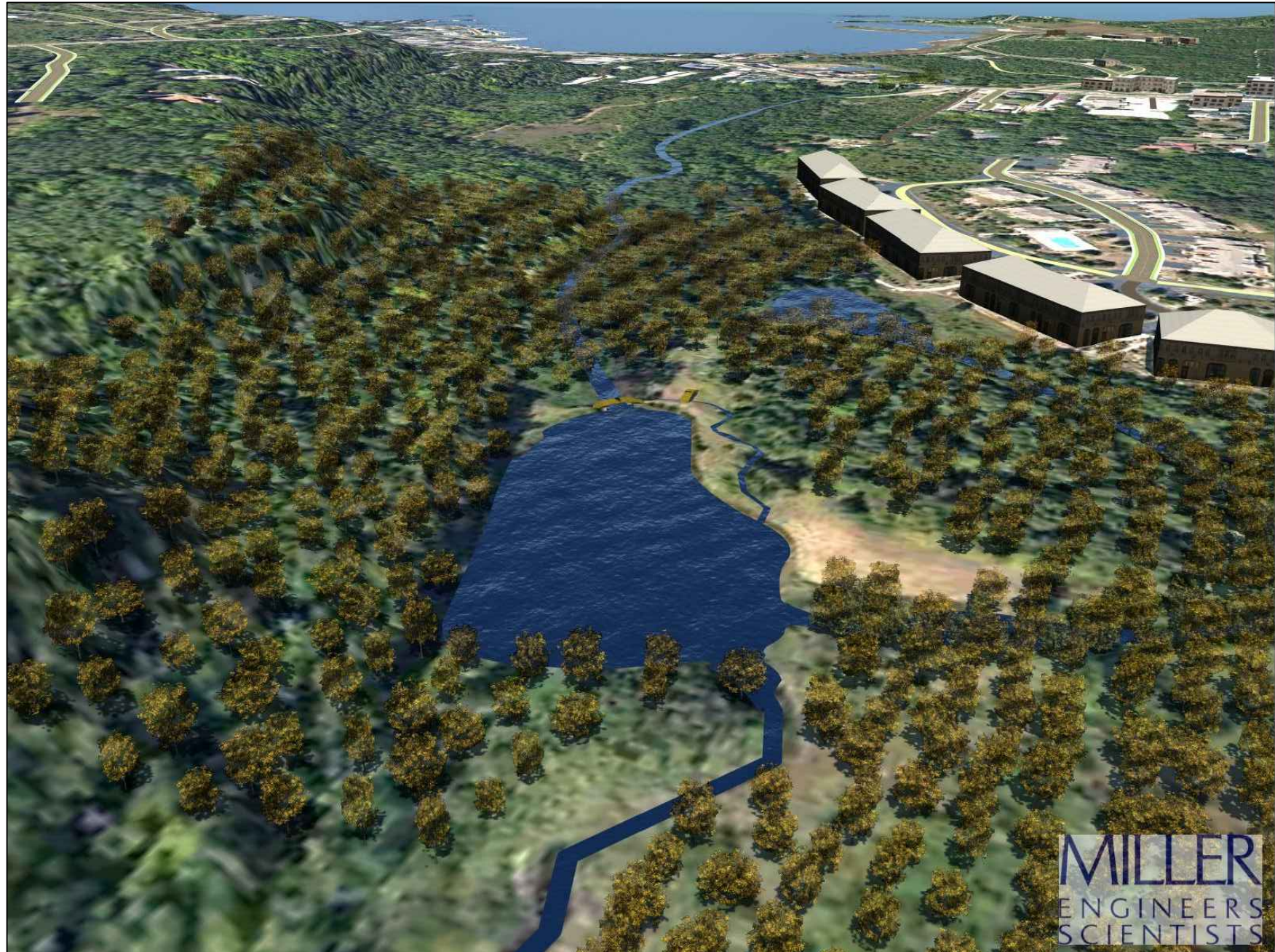
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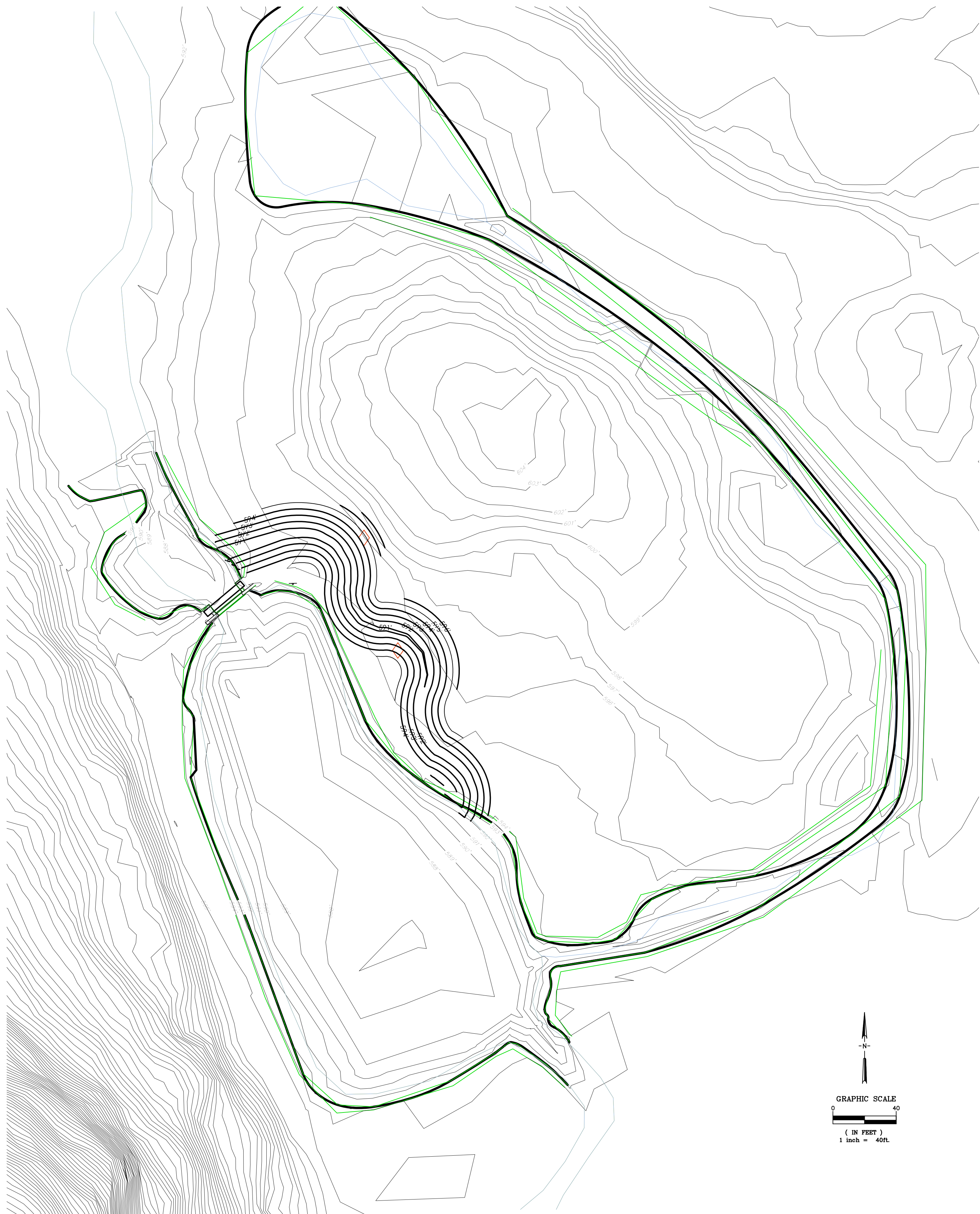
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HALF MILE DAM BYPASS MEANDER



BYPASS MEANDER DESIGN FEATURES
 ALLOWS FISH PASSAGE THROUGH A SMALL MEANDERING STREAM,
 APPROXIMATELY 300LF AROUND THE DAM. THE BYPASS MEANDER PROVIDES FISH
 PASSAGE WITHOUT ALTERATIONS TO THE DAM ITSELF.



PRELIMINARY
 HALF MILE DAM - FISH PASSAGE CONCEPT

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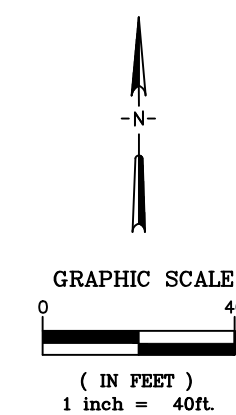
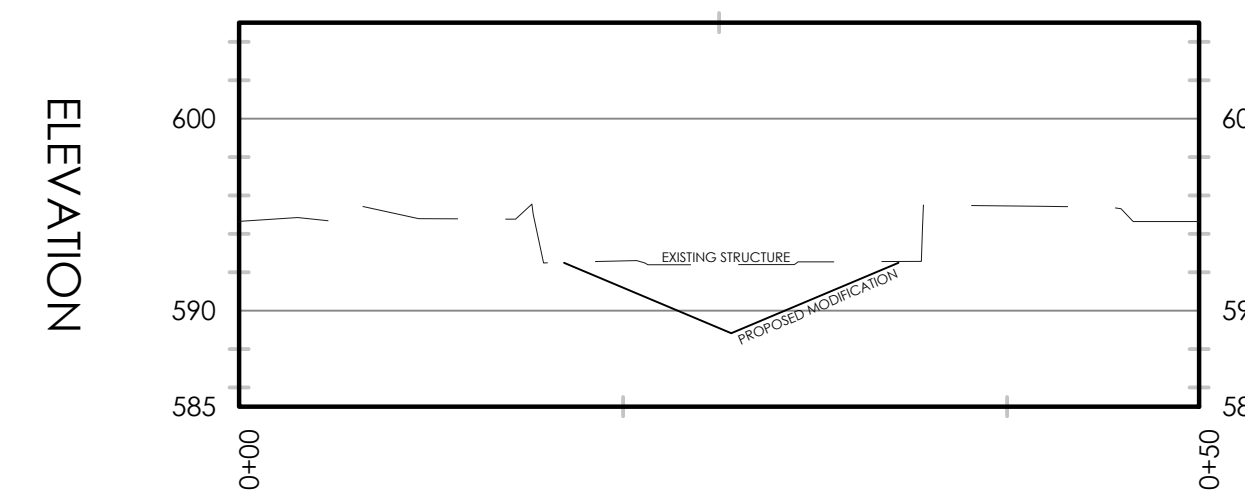
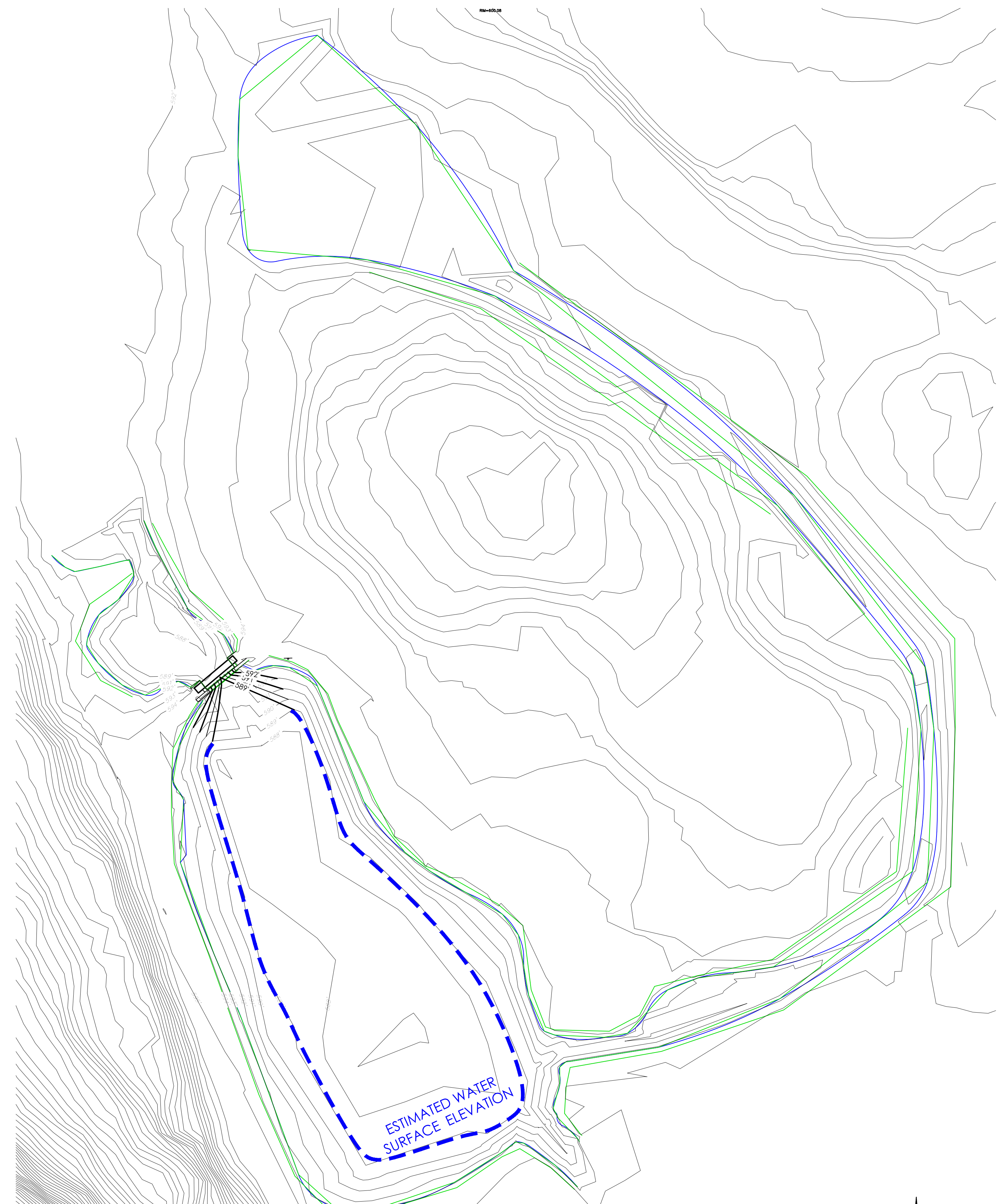
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HALF MILE DAM STRUCTURE MODIFICATIONS



STRUCTURE MODIFICATION - DESIGN FEATURES
 ALLOWS FISH PASSAGE THROUGH THE EXISTING DAM WITH MODIFICATION OF DAM STRUCTURE. ALTERATIONS CONSISTING OF SAW CUTTING A V-NOTCH IN THE CENTER OF THE DAM WHICH IS PRESENTLY A WEIR. THIS DESIGN OPTION ALLOWS FOR VARIABLE FLOW THROUGH THE DAM AS WELL AS MAINTAINING THE STRUCTURE. PONDING OF WATER BEHIND THE DAM IS STILL ANTICIPATED, HOWEVER THE SIZE OF THE POND WILL BE REDUCED.



PRELIMINARY

HALF MILE DAM- STRUCTURE MODIFICATION

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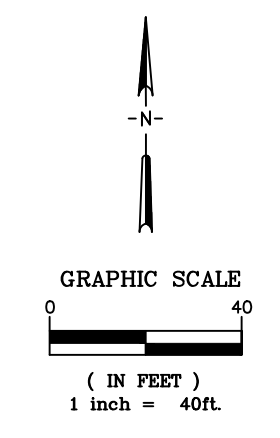
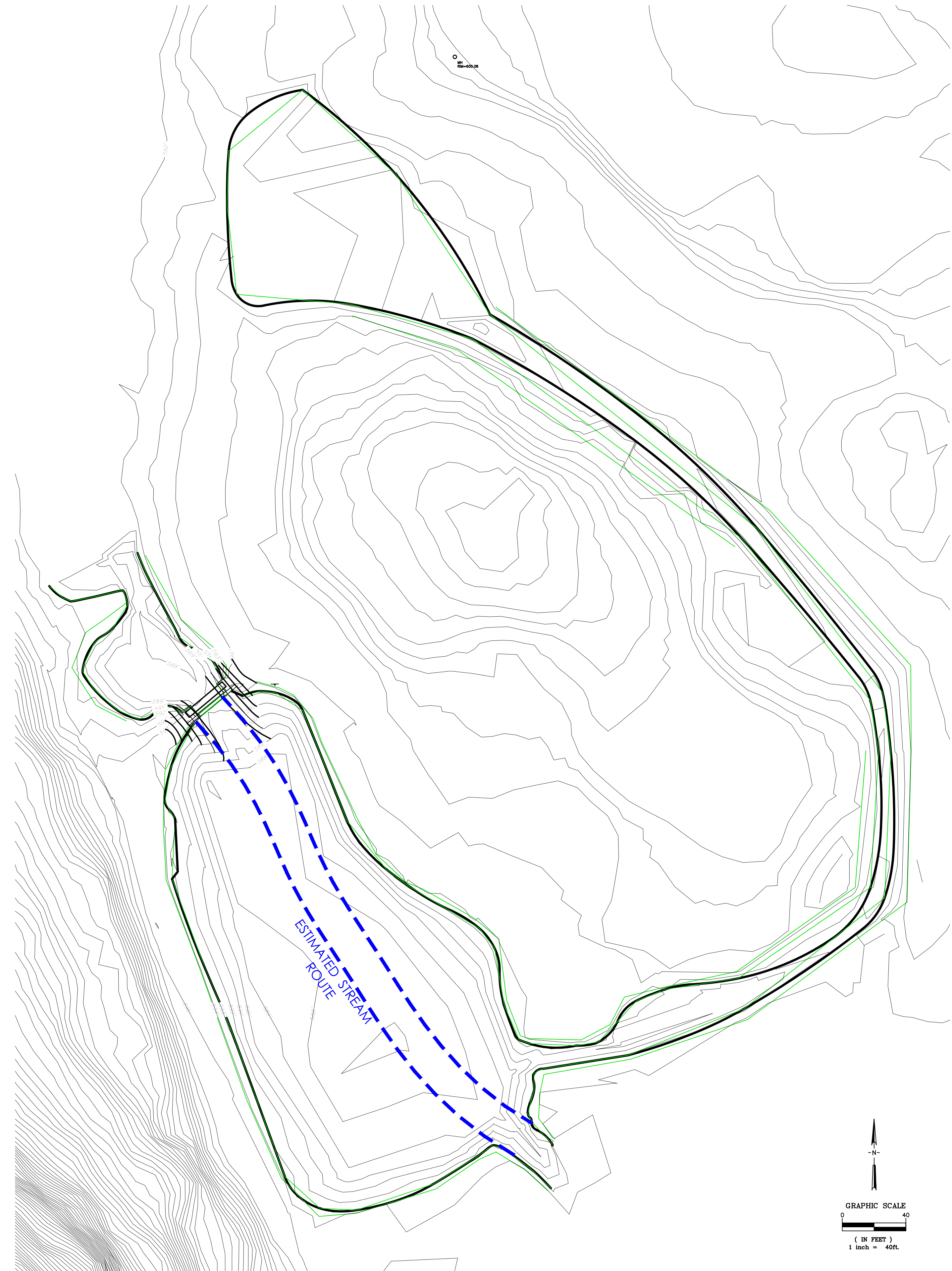
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HALF MILE DAM DAM REMOVAL



DAM REMOVAL - DESIGN FEATURES
 ALLOWS FISH PASSAGE BY COMPLETE DAM REMOVAL. THE POND WILL BE DRAINED AND THE STREAM IS EXPECTED TO NATURALLY REVERT BACK TO HISTORIC ROUTES.



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 HALF MILE DAM - DAM REMOVAL

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