

WETLAND & STREAM IMPACTS

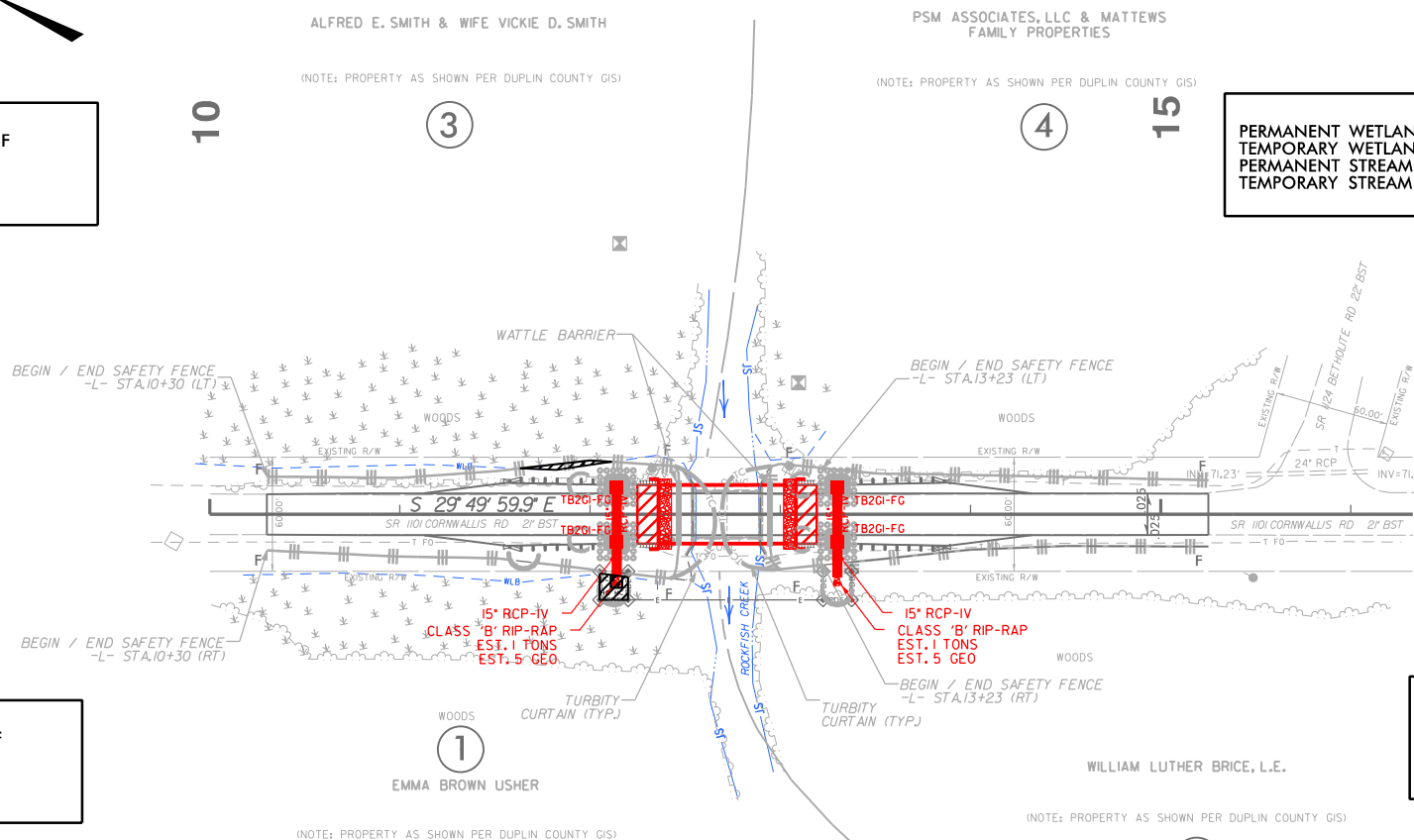
HNTB HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
17BP.3.R.31	4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

W2
PERMANENT WETLAND IMPACTS = <0.01 Ac /89 SF
TEMPORARY WETLAND IMPACTS = 0.0 Ac /0 SF
PERMANENT STREAM IMPACTS = 0 LF
TEMPORARY STREAM IMPACTS = 0 LF

W1
PERMANENT WETLAND IMPACTS = 0.0 Ac /0 SF
TEMPORARY WETLAND IMPACTS = 0.0 Ac /0 SF
PERMANENT STREAM IMPACTS = 0 LF
TEMPORARY STREAM IMPACTS = 0 LF

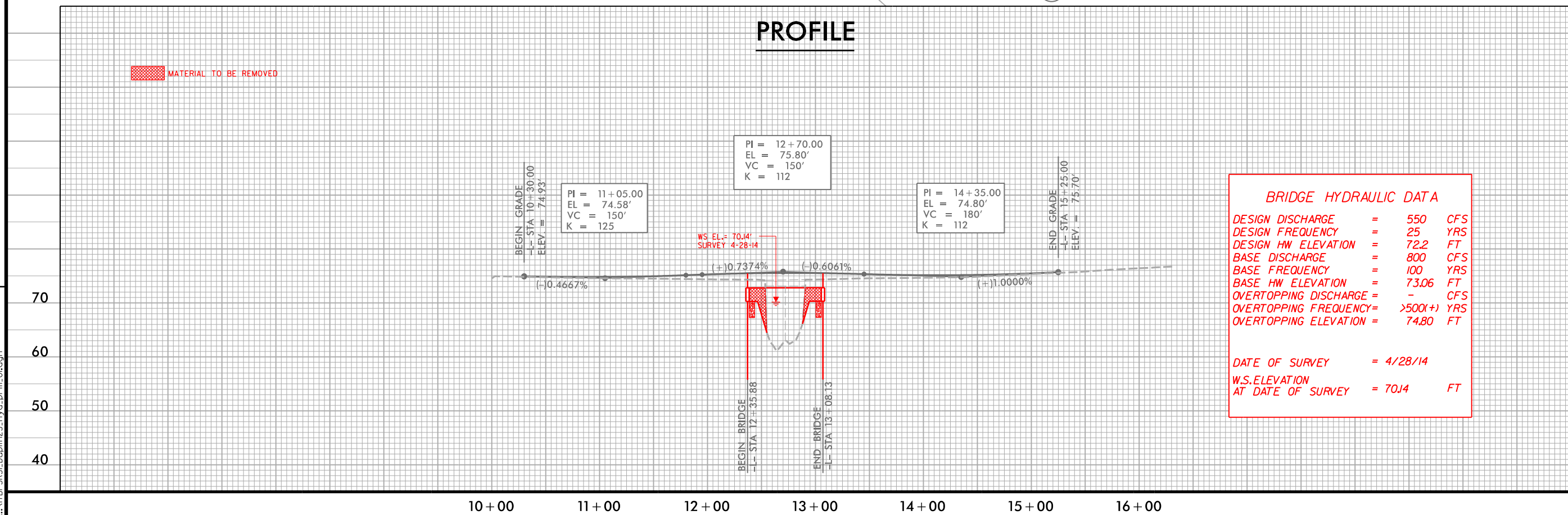
LEGEND
 DENOTES HAND CLEARING
 DENOTES FILL IN WETLAND



W3
PERMANENT WETLAND IMPACTS = <0.01 Ac /156 SF
TEMPORARY WETLAND IMPACTS = <0.01 Ac /37 SF
PERMANENT STREAM IMPACTS = 0 LF
TEMPORARY STREAM IMPACTS = 0 LF

W4
PERMANENT WETLAND IMPACTS = 0.0 Ac /0 SF
TEMPORARY WETLAND IMPACTS = 0.0 Ac /0 SF
PERMANENT STREAM IMPACTS = 0 LF
TEMPORARY STREAM IMPACTS = 0 LF

PROFILE



BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	=	550	CFS
DESIGN FREQUENCY	=	25	YRS
DESIGN HW ELEVATION	=	72.2	FT
BASE DISCHARGE	=	800	CFS
BASE FREQUENCY	=	100	YRS
BASE HW ELEVATION	=	73.06	FT
OVERTOPPING DISCHARGE	=	-	CFS
OVERTOPPING FREQUENCY	=	>500(+)	YRS
OVERTOPPING ELEVATION	=	74.80	FT
DATE OF SURVEY	=	4/28/14	
W.S.ELEVATION AT DATE OF SURVEY	=	70.14	FT

REVISIONS

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
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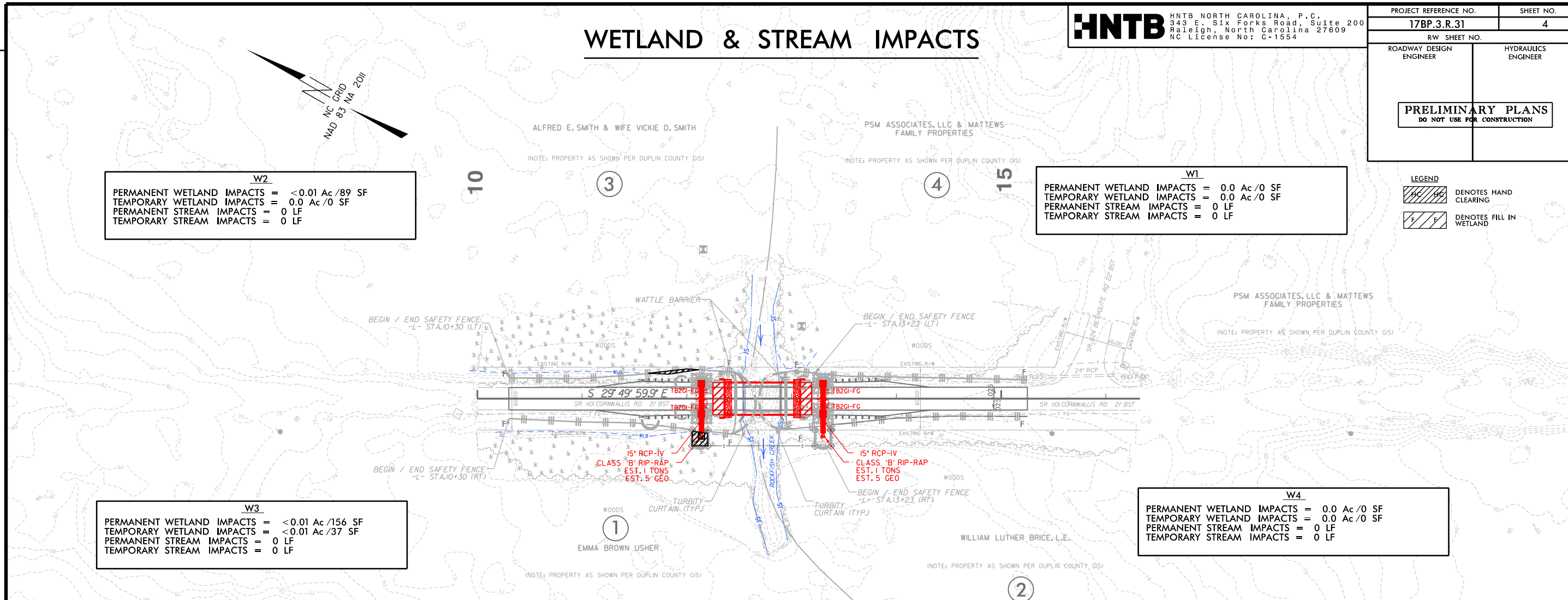
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 PERMANENT STREAM IMPACTS = 0 LF
 TEMPORARY STREAM IMPACTS = 0 LF

W1
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 TEMPORARY WETLAND IMPACTS = 0.0 Ac /0 SF
 PERMANENT STREAM IMPACTS = 0 LF
 TEMPORARY STREAM IMPACTS = 0 LF

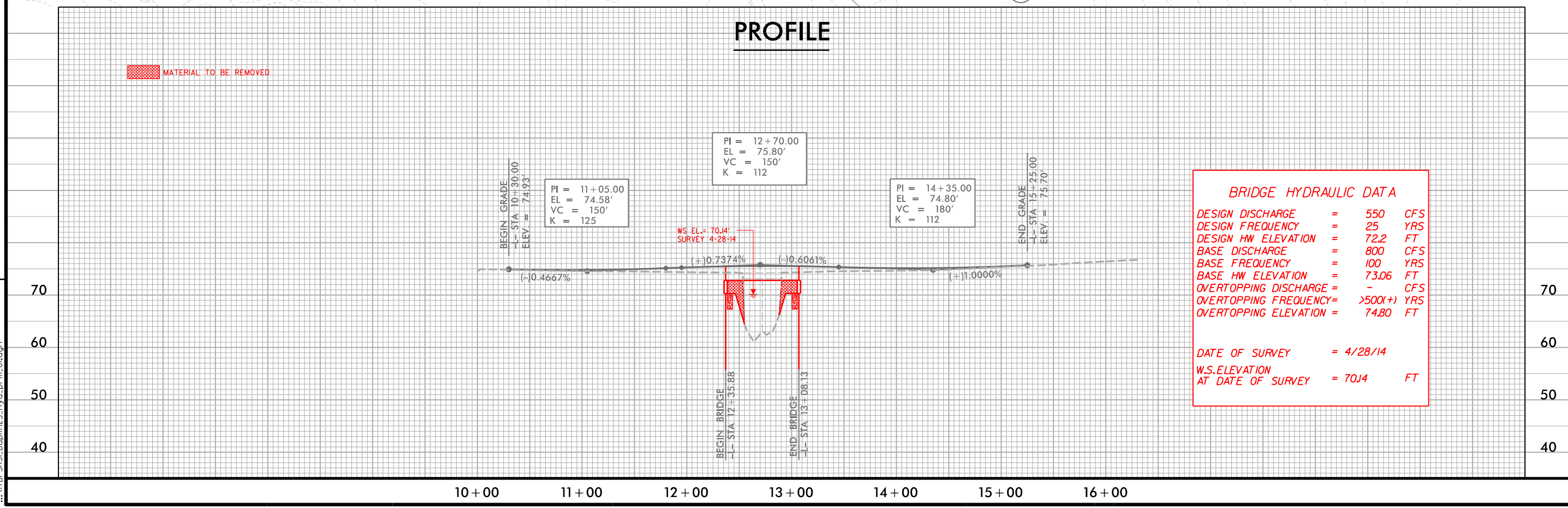
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 TEMPORARY WETLAND IMPACTS = <0.01 Ac /37 SF
 PERMANENT STREAM IMPACTS = 0 LF
 TEMPORARY STREAM IMPACTS = 0 LF

W4
 PERMANENT WETLAND IMPACTS = 0.0 Ac /0 SF
 TEMPORARY WETLAND IMPACTS = 0.0 Ac /0 SF
 PERMANENT STREAM IMPACTS = 0 LF
 TEMPORARY STREAM IMPACTS = 0 LF

LEGEND
 DENOTES HAND CLEARING
 DENOTES FILL IN WETLAND



PROFILE



BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE = 550 CFS
 DESIGN FREQUENCY = 25 YRS
 DESIGN HW ELEVATION = 72.2 FT
 BASE DISCHARGE = 800 CFS
 BASE FREQUENCY = 100 YRS
 BASE HW ELEVATION = 73.06 FT
 OVERTOPPING DISCHARGE = - CFS
 OVERTOPPING FREQUENCY = >500(+) YRS
 OVERTOPPING ELEVATION = 74.80 FT

DATE OF SURVEY = 4/28/14
 W.S.ELEVATION AT DATE OF SURVEY = 70.14 FT

REVISIONS

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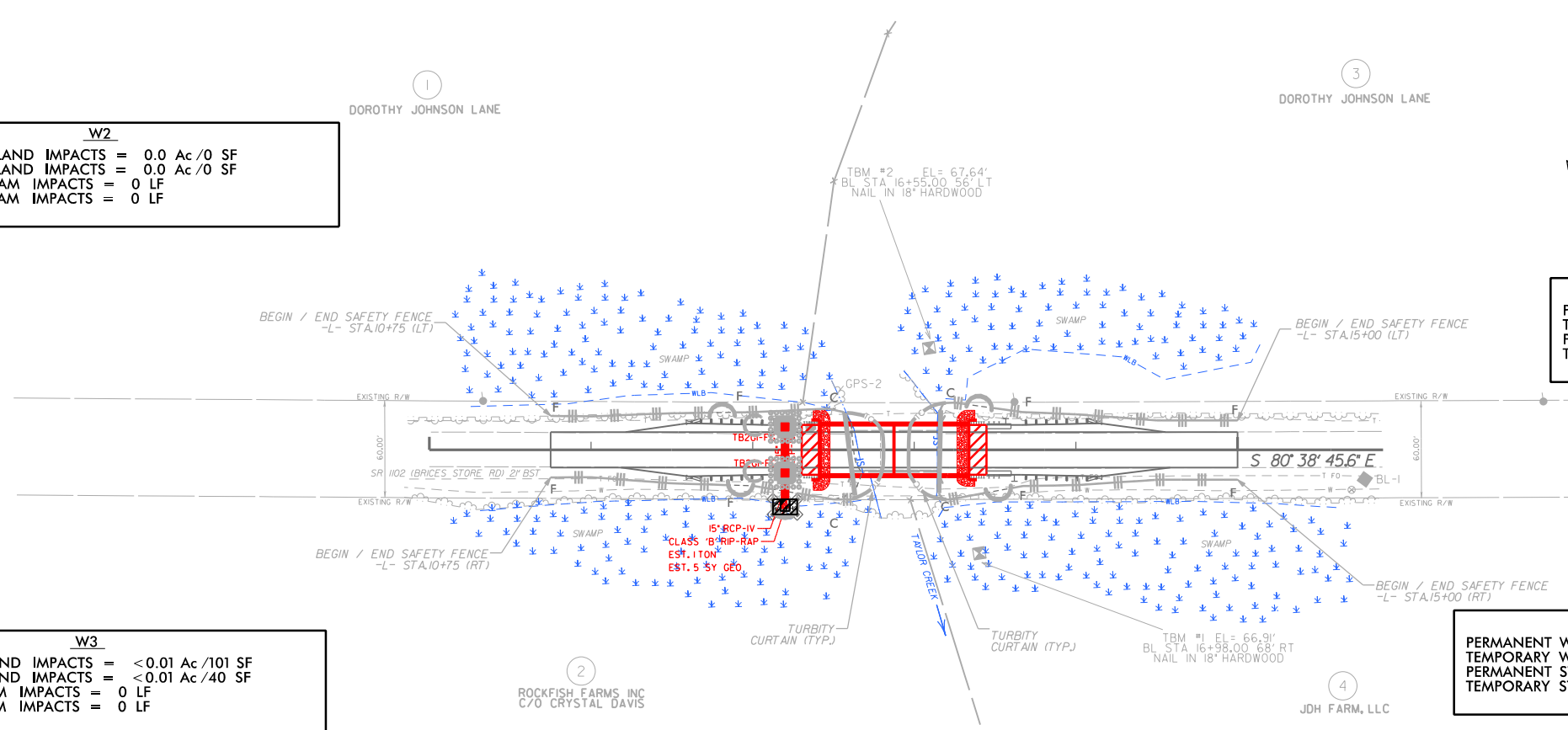
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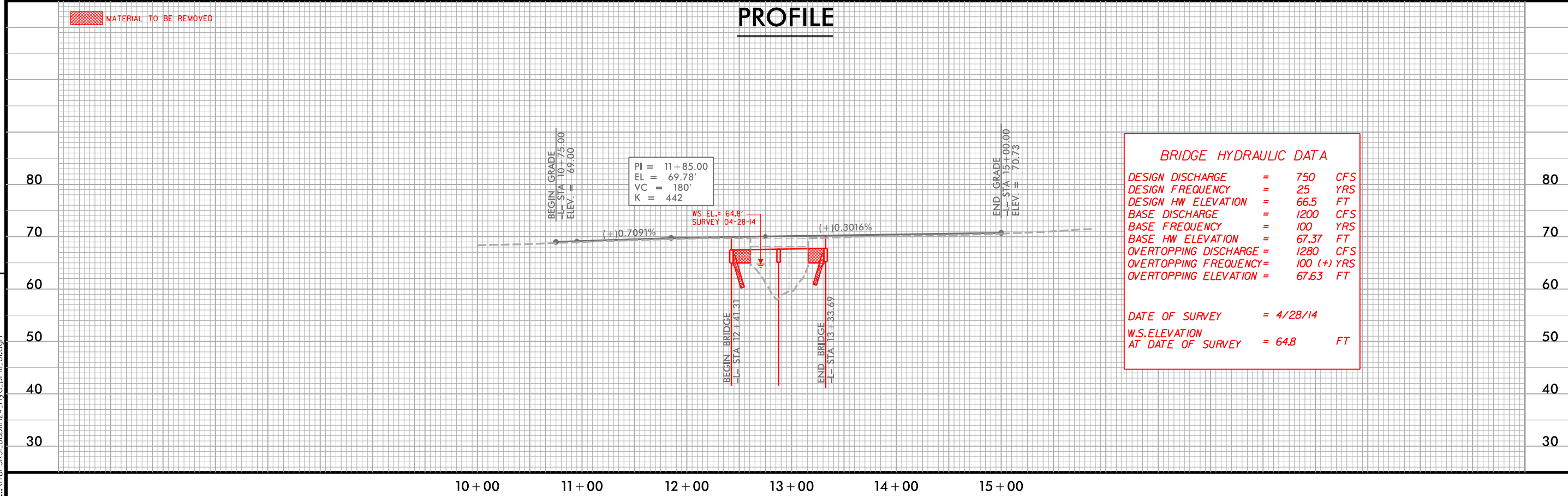
W3
PERMANENT WETLAND IMPACTS = <0.01 Ac /101 SF
TEMPORARY WETLAND IMPACTS = <0.01 Ac /40 SF
PERMANENT STREAM IMPACTS = 0 LF
TEMPORARY STREAM IMPACTS = 0 LF

W4
PERMANENT WETLAND IMPACTS = 0.0 Ac /0 SF
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PERMANENT STREAM IMPACTS = 0 LF
TEMPORARY STREAM IMPACTS = 0 LF

LEGEND
 DENOTES HAND CLEARING
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PROFILE



BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	=	750 CFS
DESIGN FREQUENCY	=	25 YRS
DESIGN HW ELEVATION	=	66.5 FT
BASE DISCHARGE	=	1200 CFS
BASE FREQUENCY	=	100 YRS
BASE HW ELEVATION	=	67.37 FT
OVERTOPPING DISCHARGE	=	1280 CFS
OVERTOPPING FREQUENCY	=	100 (+) YRS
OVERTOPPING ELEVATION	=	67.63 FT
DATE OF SURVEY	=	4/28/14
W.S. ELEVATION AT DATE OF SURVEY	=	64.8 FT

REVISIONS

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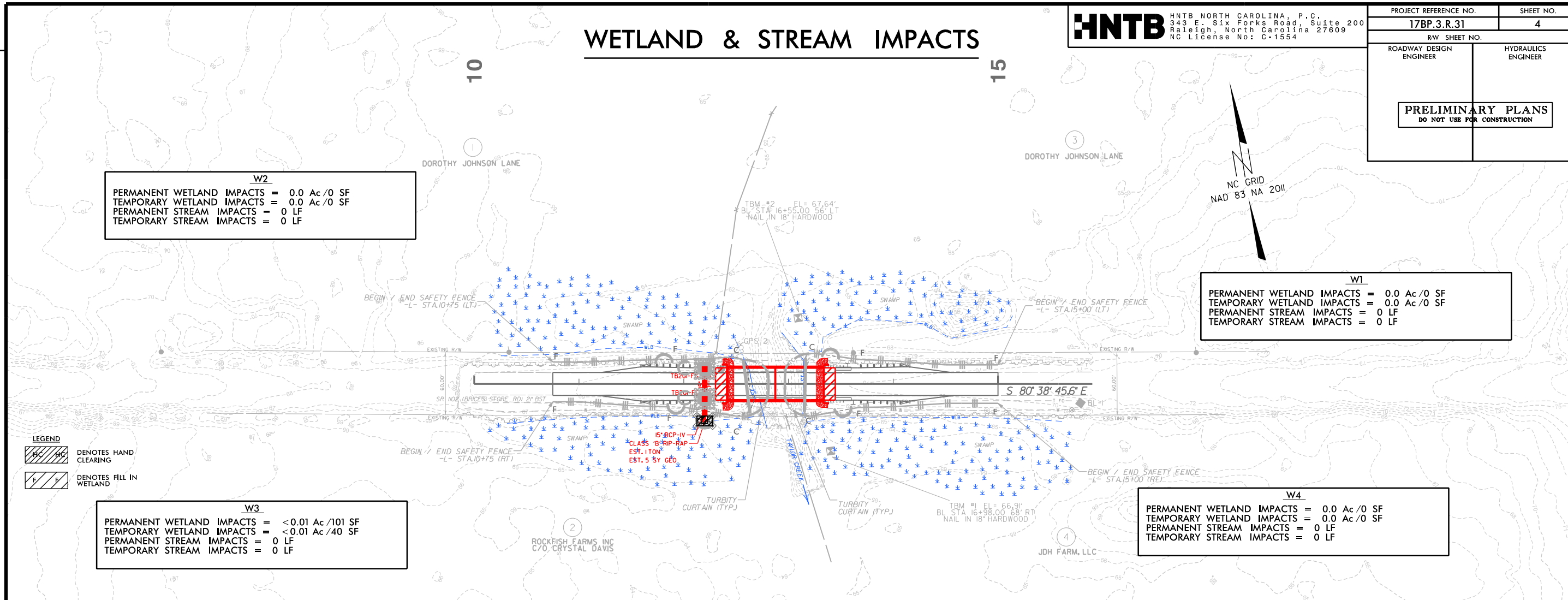
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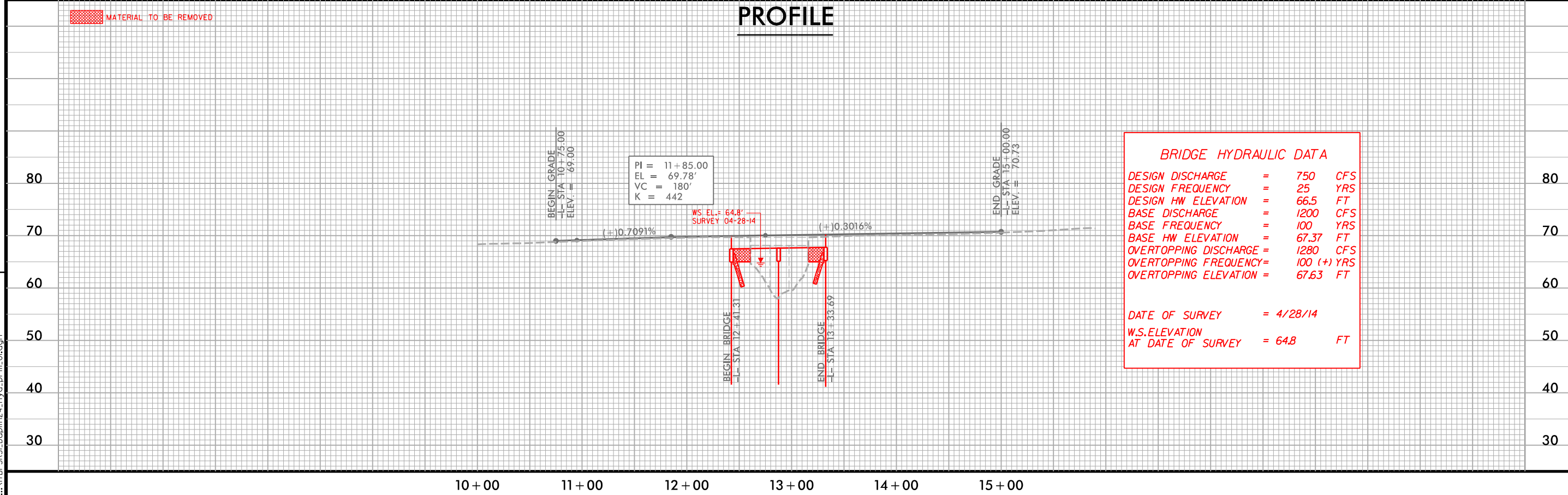
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OVERTOPPING DISCHARGE	=	1280	CFS
OVERTOPPING FREQUENCY	=	100 (+)	YRS
OVERTOPPING ELEVATION	=	67.63	FT
DATE OF SURVEY	=	4/28/14	
W.S. ELEVATION AT DATE OF SURVEY	=	64.8	FT

REVISIONS

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