

A.D. MARBLE

environmental·cultural·engineering

S.R. 2002, SECTION 000 OVER REYNOLDS RUN BRIDGE REPLACEMENT PROJECT LITTLE BRITAIN TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA MINIMIZATION MEASURES PROPOSED FOR THE KIRKS MILLS HISTORIC DISTRICT

INTRODUCTION

This is a supplemental document to the Determination of Effect memo prepared for the S.R. 2002, Section 000 over Reynolds Run Bridge Replacement Project (Project), located in Little Britain Township, Lancaster County, Pennsylvania, which was submitted in February 2016 for review and comment. The Determination of Effect memo, which includes a description of the proposed project, effects analysis, and pertinent figures and photographs, is available through ProjectPATH (www.paprojectpath.org).

HISTORIC RESOURCES

Kirks Mills Historic District

The Village of Kirks Mills Historic District (KMHD) was listed in the National Register of Historic Places in January 1978 under Criterion A in the area of commerce and Criterion C in the area of architecture. The KMHD encompasses a 210-acre parcel and includes a *circa*-1810 grist mill, eight residences, one farmstead, a school house, and a meeting house with an associated tenant house all dating from the late 18th century to the late 19th century. The period of significance dates from 1800-1899. In the vicinity of the project area, the KMHD includes three contributing structures: the *circa*-1810 grist mill, a *circa*-1815 log Swisser barn now converted to a residence, and an early 19th century brick dwelling. There is also a non-contributing mid-20th century ranch house.

MEASURES TO MINIMIZE EFFECTS TO KIRKS MILLS HISTORIC DISTRICT

After consultation with the State Historic Preservation Office (SHPO) and consulting parties that included email discussions, a Public Meeting on March 22, 2016, and a consulting party meeting on June 22, 2016, the following measures to minimize effects to the KMHD were developed.

An Employee Owned Company

A.D. MARBLE

environmental·cultural·engineering

Bridge Aesthetic Design

The February 2016 Determination of Effect memo initially proposed the use of the Base/Nominal bridge design for the Project (Figure 1). The Aesthetics Master Plan developed for the P3 Rapid Bridge Replacement Project states that optional additional treatments to replacement bridges on a case-by-case basis may be requested by a consulting party or if the setting warrants an enhanced design (Plenary Walsh Keystone Partners 2015). Following consultation with the consulting parties and the SHPO, the following enhancements were suggested. The overall bridge type and dimensions remain the same as those presented in the design as shown in Figure 2.

Form Liner

The aesthetic treatment for the bridge includes a stone form liner for the outside of the bridge parapets. The form liner treatment was discussed at the consulting party meeting in June using an example requested by the consulting parties (Photo 1). The form liner stone will be similar in pattern, color, and shape to the foundation stone of Kirks Mill and will be stained to match the stone and mortar found on the mill.

Tinting and Staining

The inside of the parapet, wingwalls, and abutments will be tinted to soften the appearance of the white concrete. The color will be chosen in consultation with the consulting parties and the SHPO from the palette of colors used to stain the parapet form liner. The inside of the parapet will be smooth, in accordance with the Aesthetics Manual, to meet requirements per the Pennsylvania Department of Transportation.

Inspection of Tail Race and Kirks Mill

A pre-construction inspection will be completed for the interior and exterior of the mill and tail race to determine their condition; a post-construction inspection will also be completed to ensure the mill and tail race incurred no damage from the construction activities. The pre-construction tail race inspection was completed on July 18, 2016, and the report was sent to the consulting parties and the SHPO on July 29, 2016. The pre-construction inspection of the mill will be

An Employee Owned Company

A.D. MARBLE

environmental·cultural·engineering

coordinated with the property owner. Reports for all inspections will be submitted to the consulting parties and State Historic Preservation Office (SHPO). Seismic monitoring will be undertaken during construction.

Treatment of Tail Race

To protect the tail race during construction, contractors will not be permitted to stage on the road over the tail race. A stipulation will be added to the construction contract for the staging requirements.

Guide Rail

The guide rail will be painted to soften the appearance of the guide rail. The color will be chosen in consultation with the consulting parties and SHPO.

CONCLUSION

Considering the measures to minimize project effects by providing a context sensitive design for the bridge and the guide rail suggested by the consulting parties, the provision for the inspection of the tail race and mill, seismic monitoring during construction, and the commitment to limit staging over the tail race during construction, the proposed project will have a *No Adverse Effect* on the Village of Kirks Mills Historic District.

An Employee Owned Company

A.D. MARBLE

environmental·cultural·engineering



Photograph 1: Looking east toward the intersection of S.R. 3014 (Lees Bridge Road) and Sand Hill Road, West Nottingham Township, Chester County. Consulting parties requested a design similar to the Lees Bridge Road bridge for the S.R. 2002 Reynolds Run replacement bridge. (Photograph: PennDOT Videolog 2014)

An Employee Owned Company

BASE AND NOMINAL LEVEL TYPICAL BRIDGE DESIGN



Conceptual Rendering of Typical Base and Nominal Level Bridge

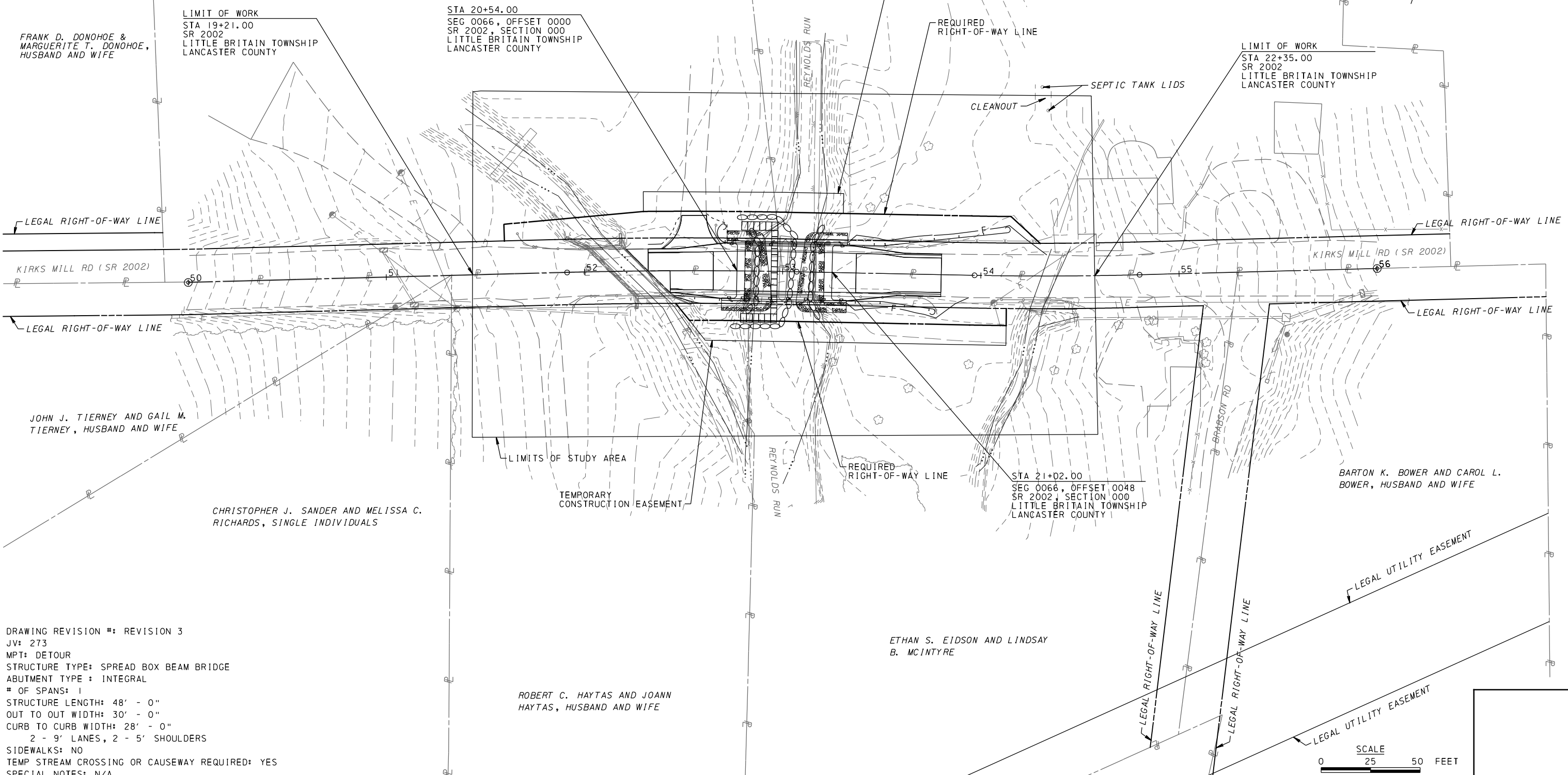
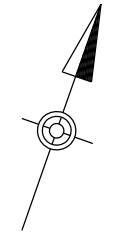
Figure 1: Context Sensitive Base/Nominal Design

Figure 2

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	LANCASTER	2002	000	1 OF 1
LITTLE BRITAIN TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

JOHN F. HEHER AND DORIS L. HEHER,
HUSBAND AND WIFE

KERRY G. O'MALLEY & KRISTINE E.
O'MALLEY, HUSBAND AND WIFE



USER: BPEPE | PLOT DRIVER: P:\mtdot\pdf\mtdot.plt | PLOT DATE: 09-22-2016 8:48:28 AM
 PATH: O:\CON\094634\00000000245595\6_0_CAD_BLM\6_2_Wrk_Tn_Progress\6_2_3_Ext\1611_Files\NEPA |
 FILE: RBRP-JV273-NEPA-01 | MODEL: Dwg | 10-21-2015

DRAWING REVISION #: REVISION 3
 JV: 273
 MPT: DETOUR
 STRUCTURE TYPE: SPREAD BOX BEAM BRIDGE
 ABUTMENT TYPE: INTEGRAL
 # OF SPANS: 1
 STRUCTURE LENGTH: 48' - 0"
 OUT TO OUT WIDTH: 30' - 0"
 CURB TO CURB WIDTH: 28' - 0"
 2 - 9' LANES, 2 - 5' SHOULDERS
 SIDEWALKS: NO
 TEMP STREAM CROSSING OR CAUSEWAY REQUIRED: YES
 SPECIAL NOTES: N/A

DES: --- | DWG: --- | CKD: ---

