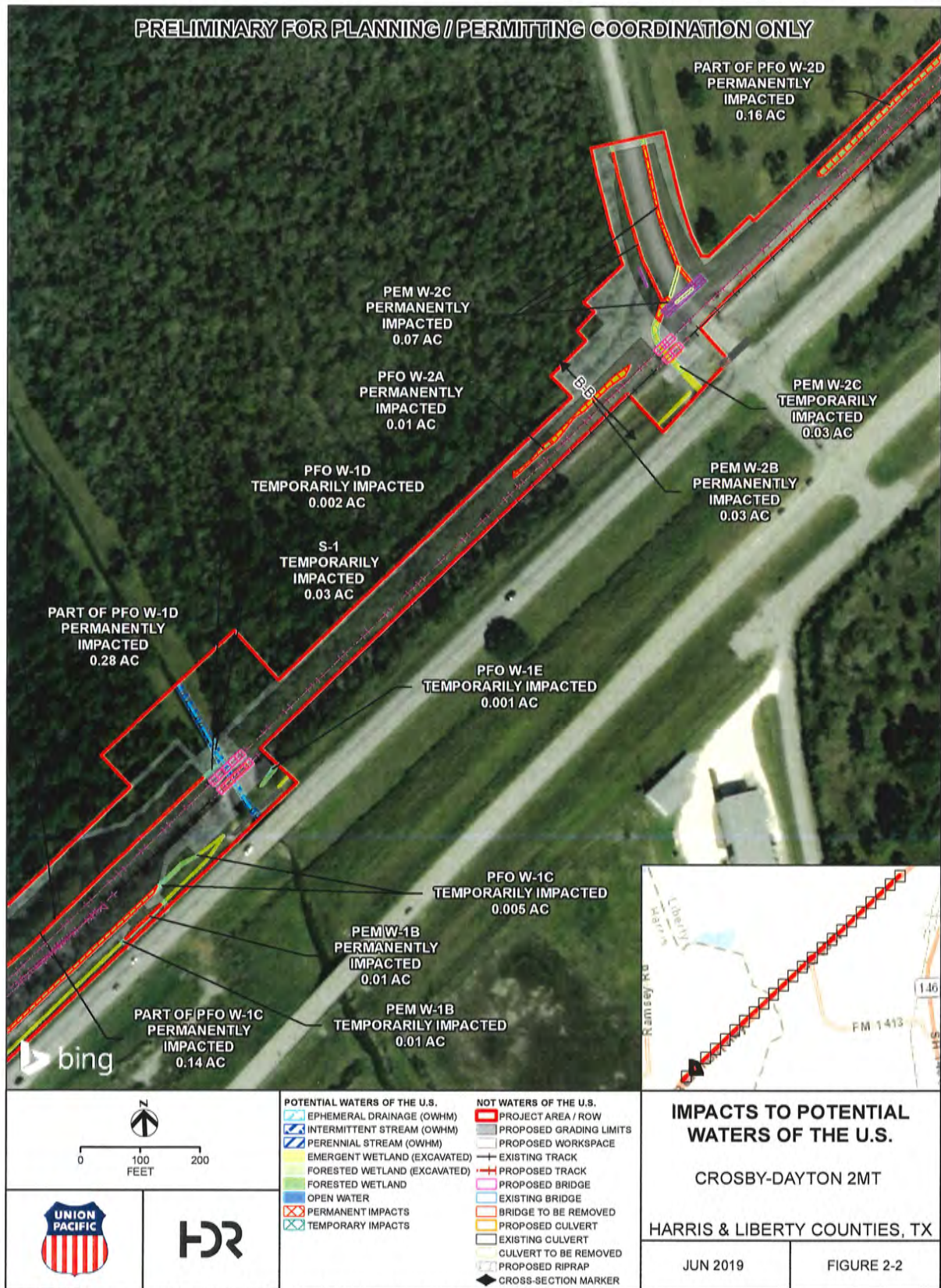




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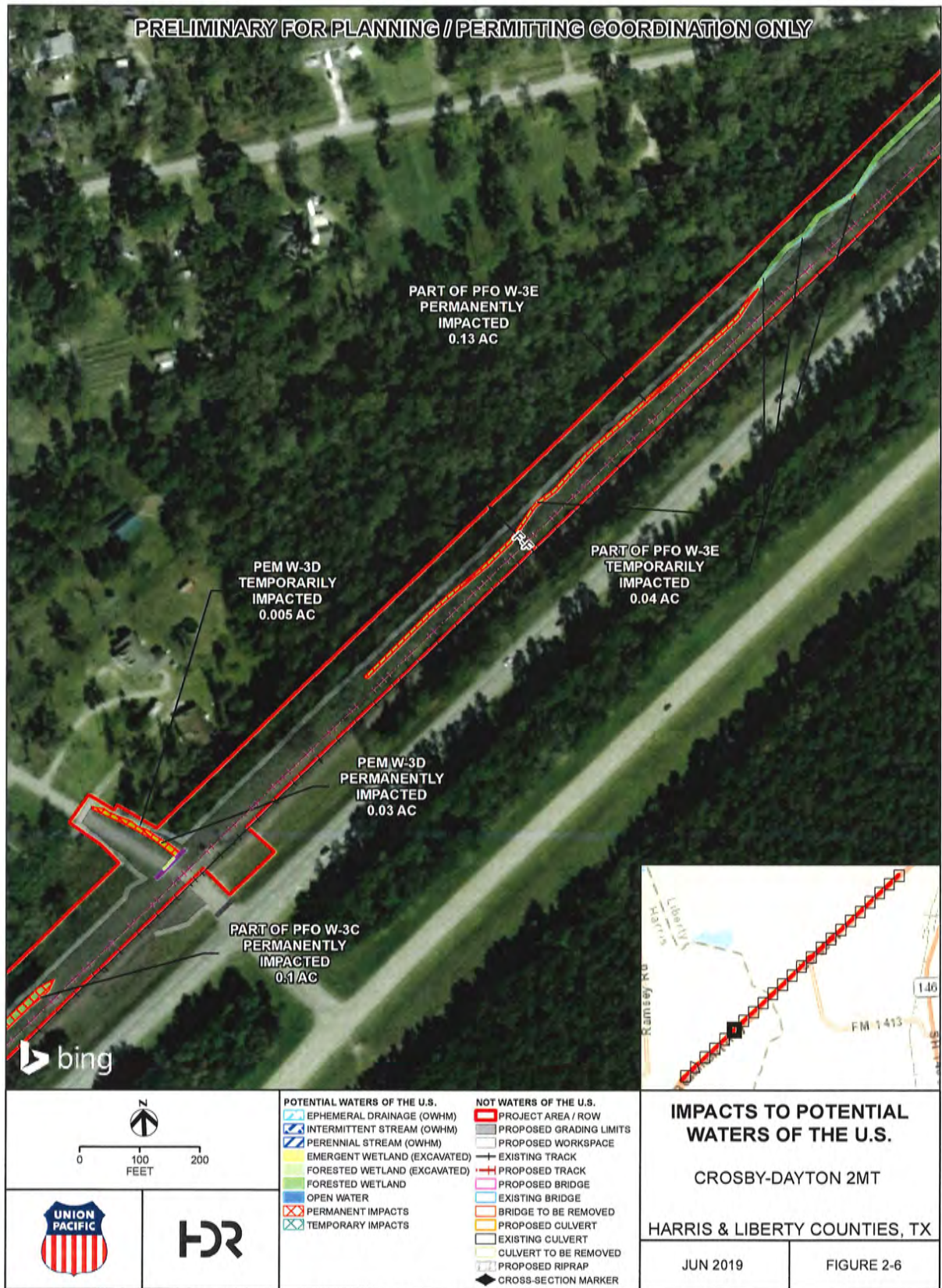
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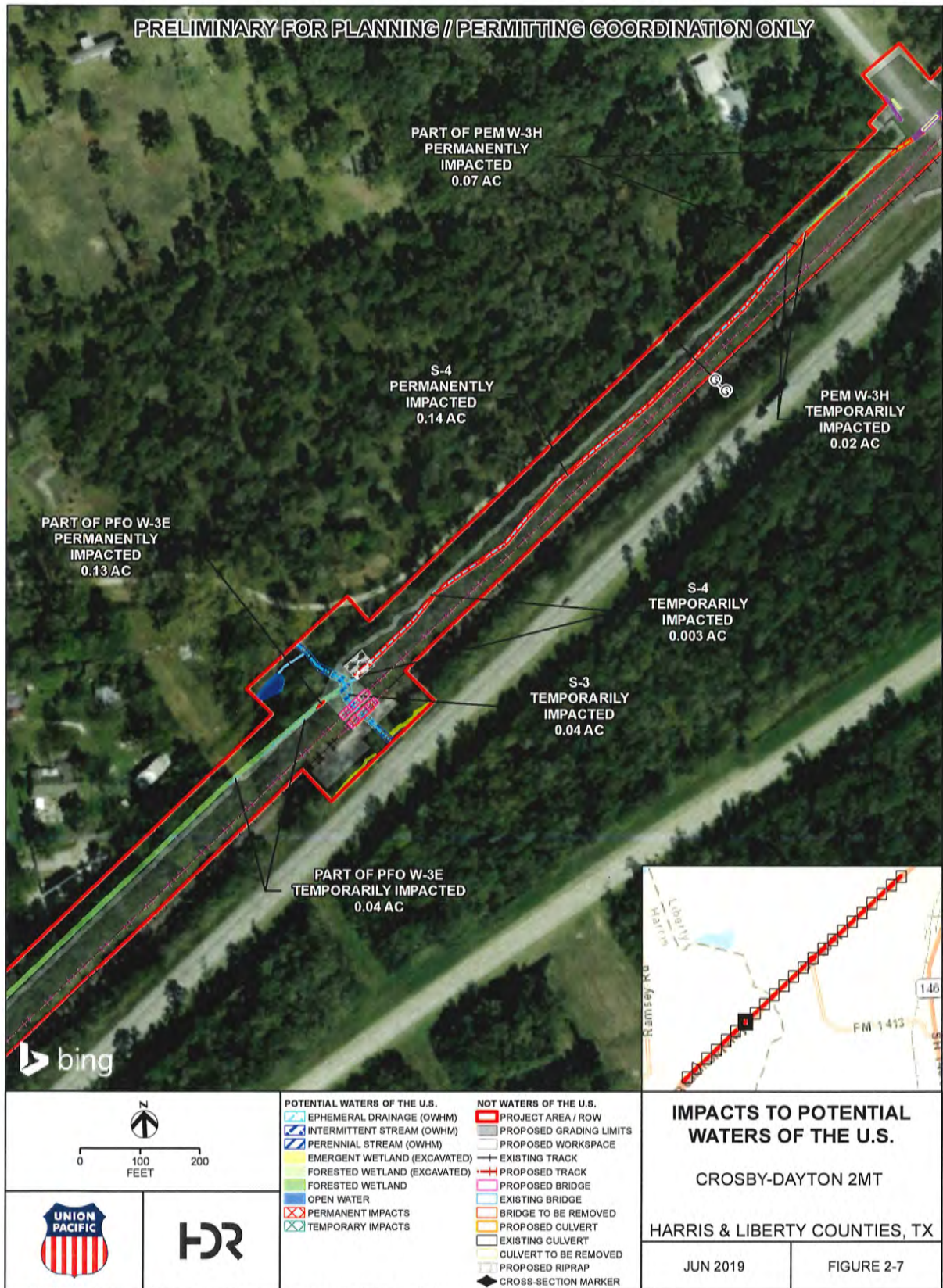












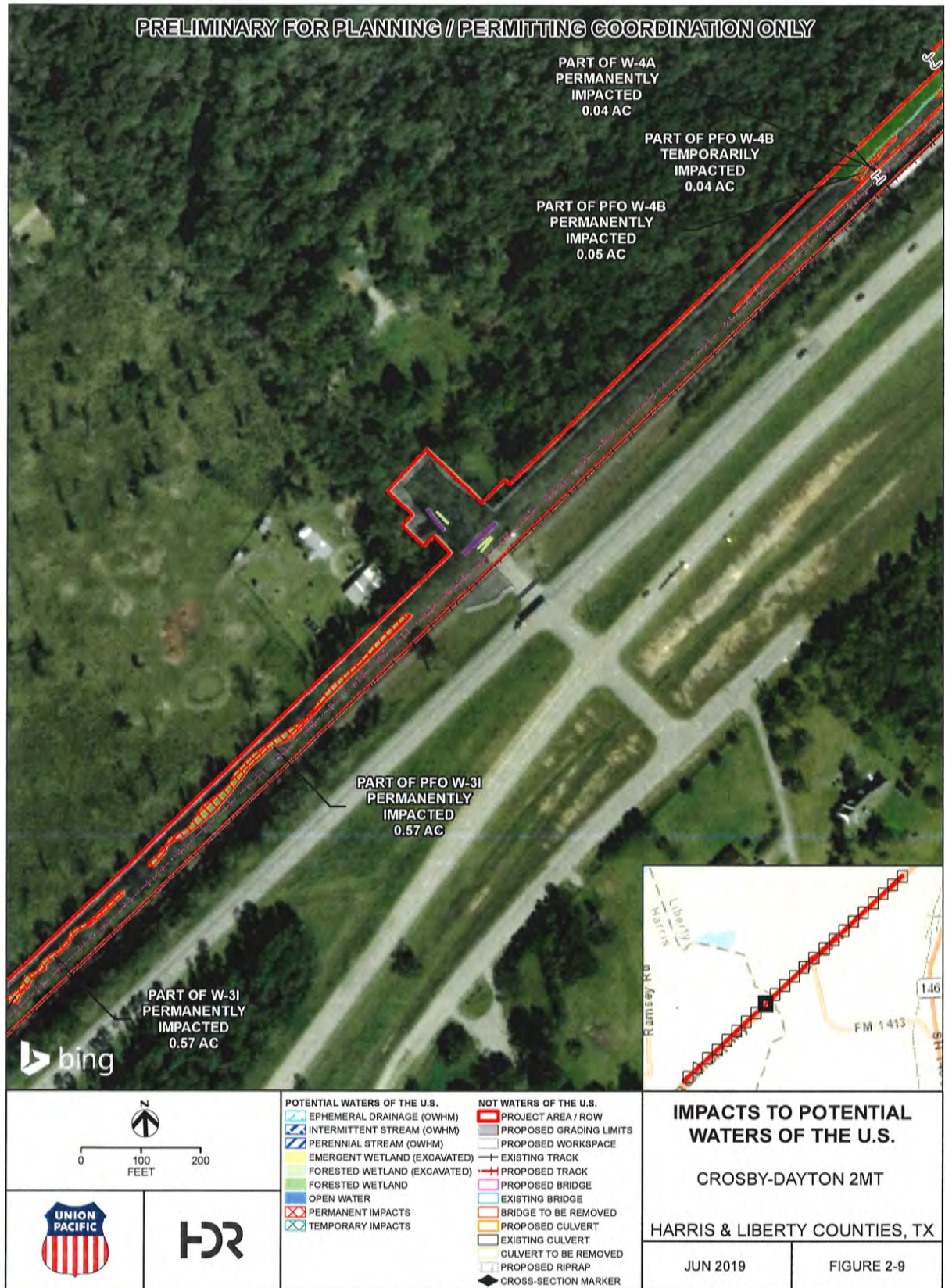
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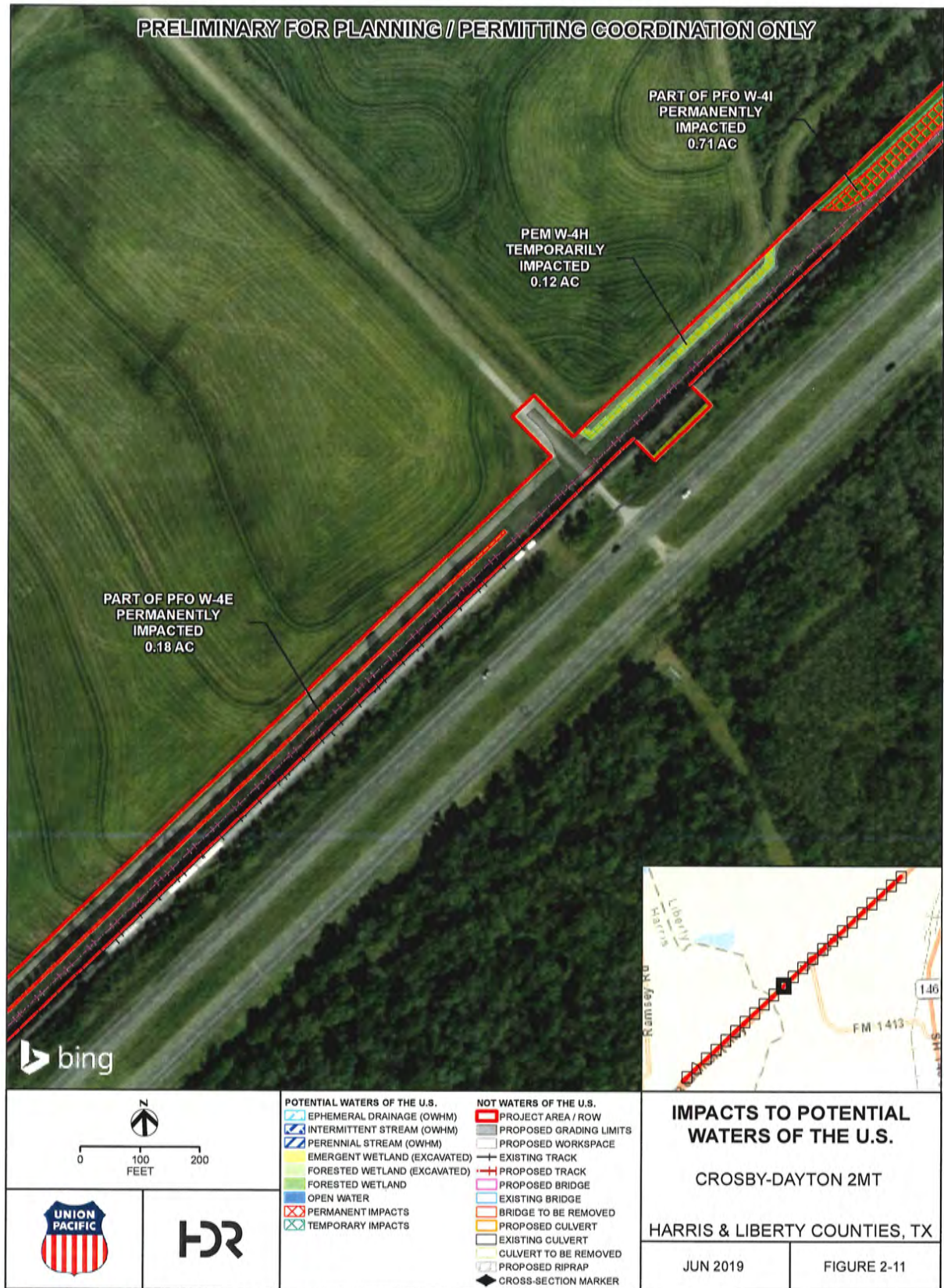


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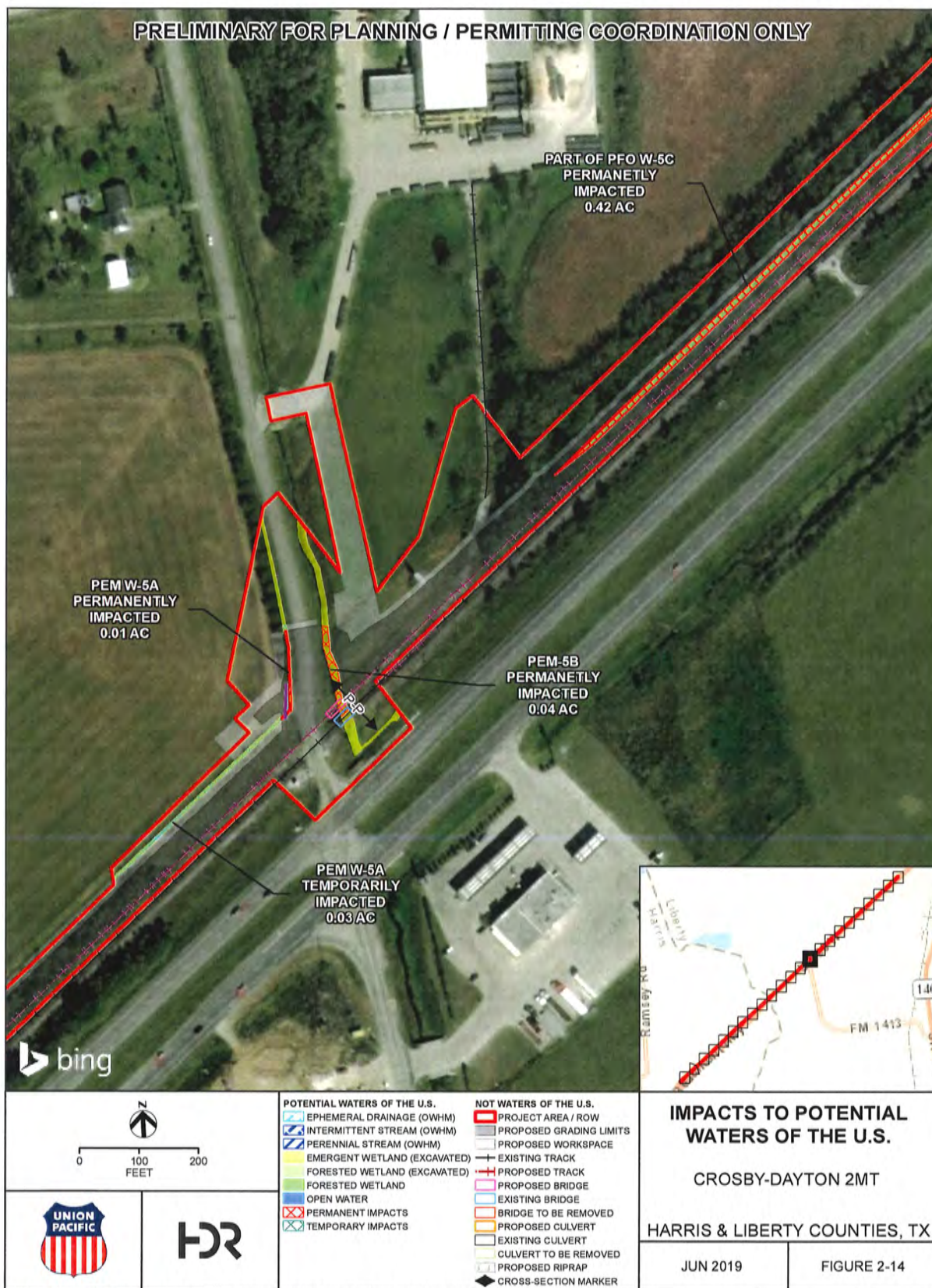




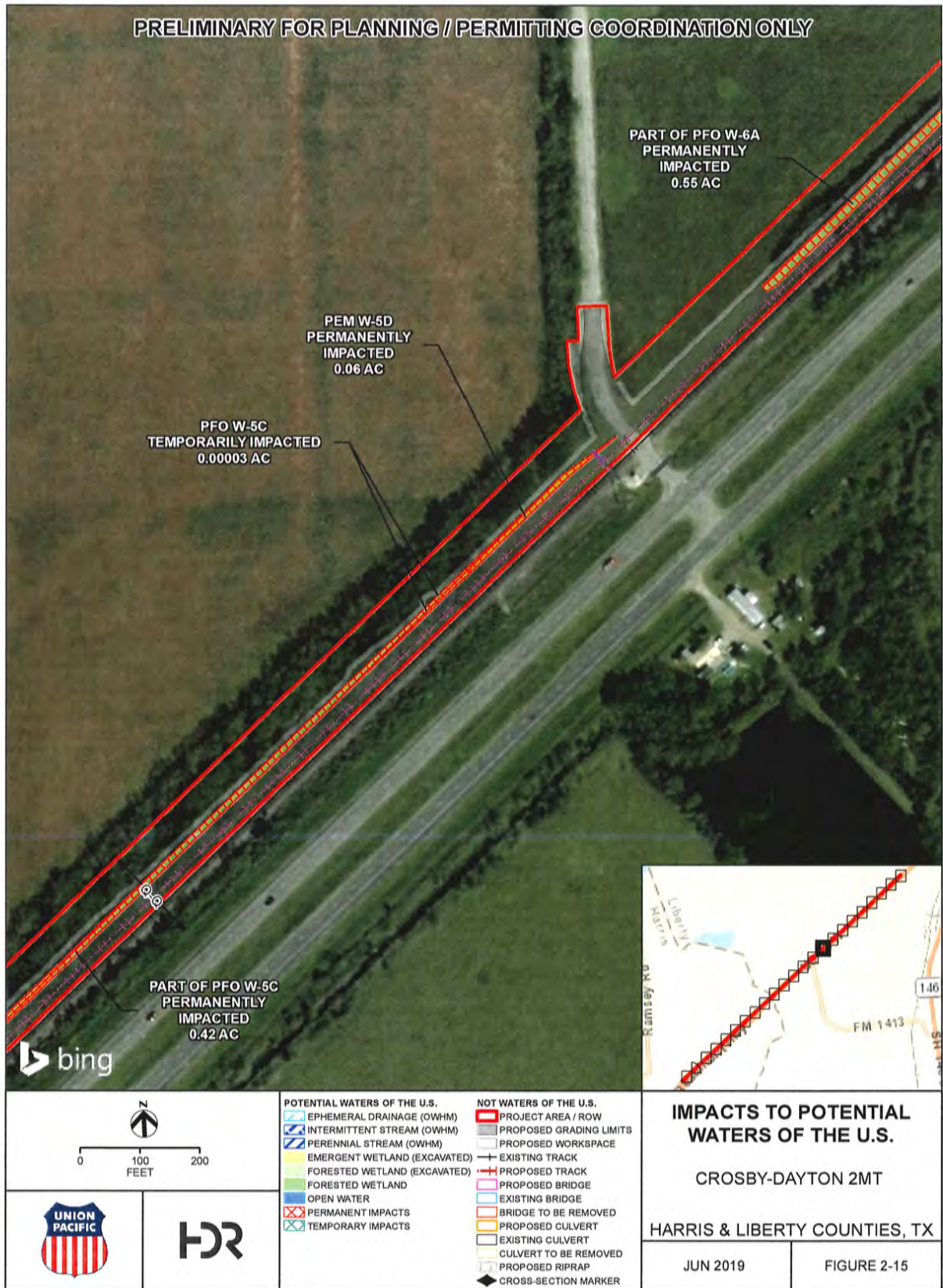




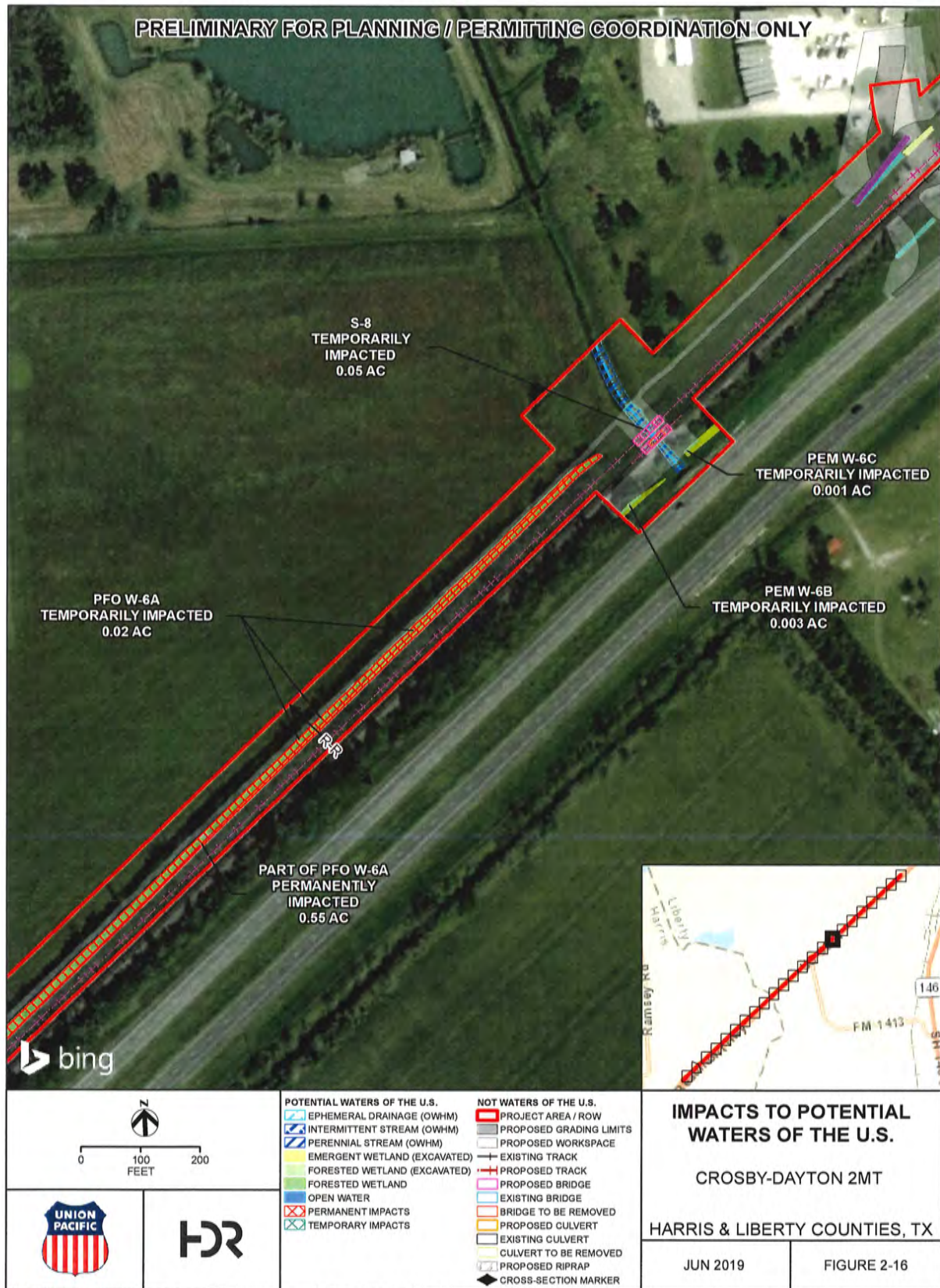
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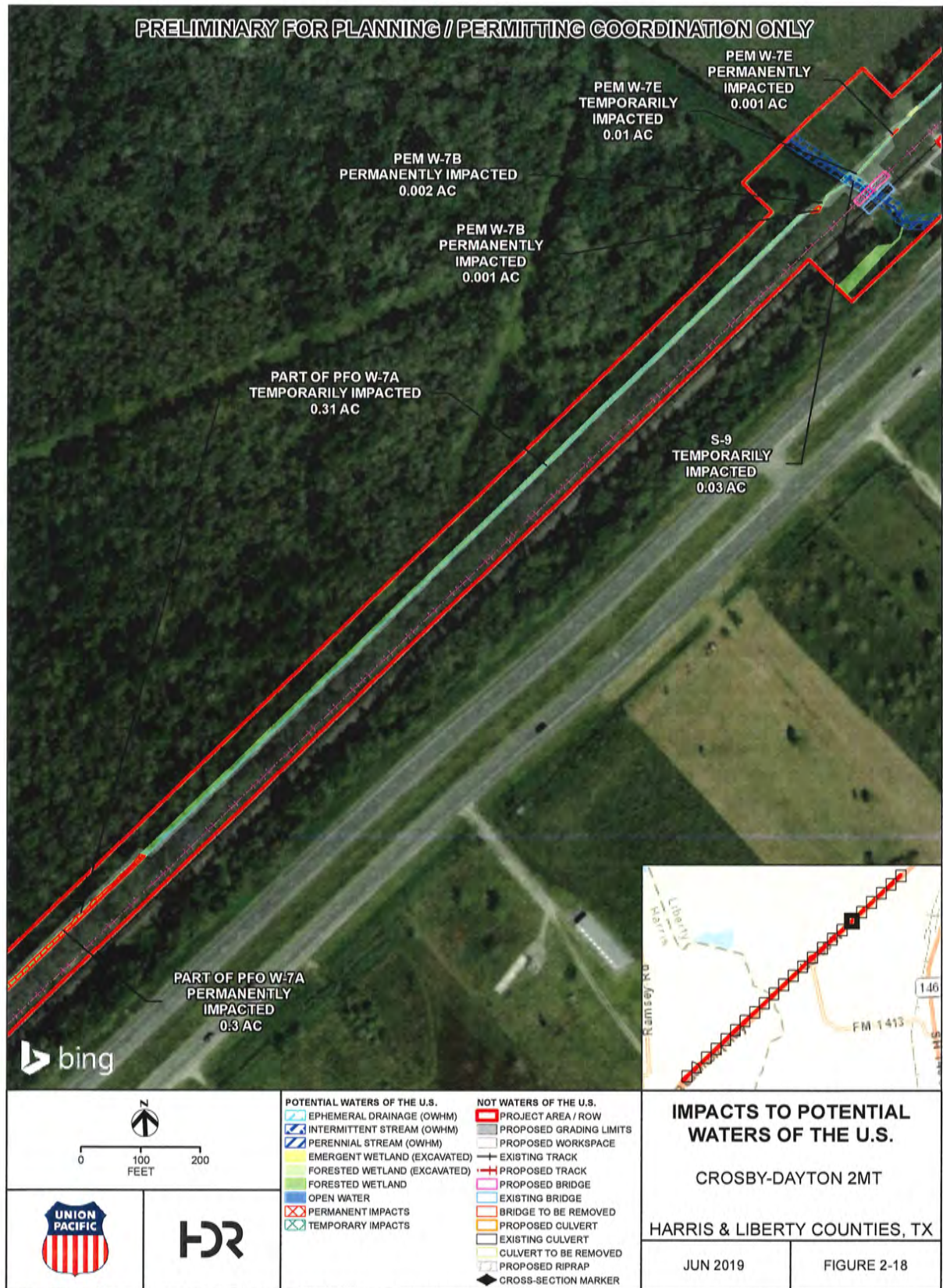




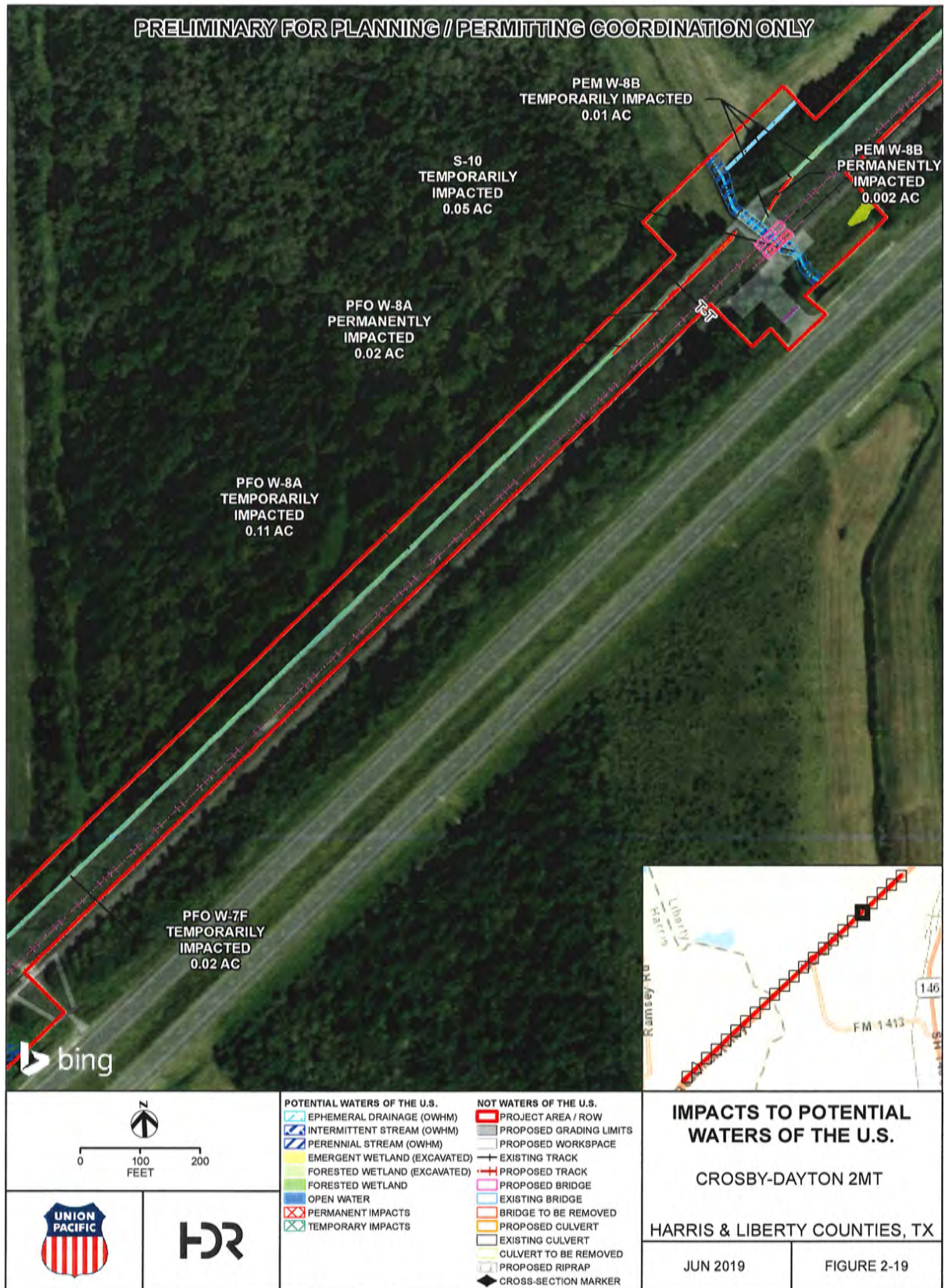


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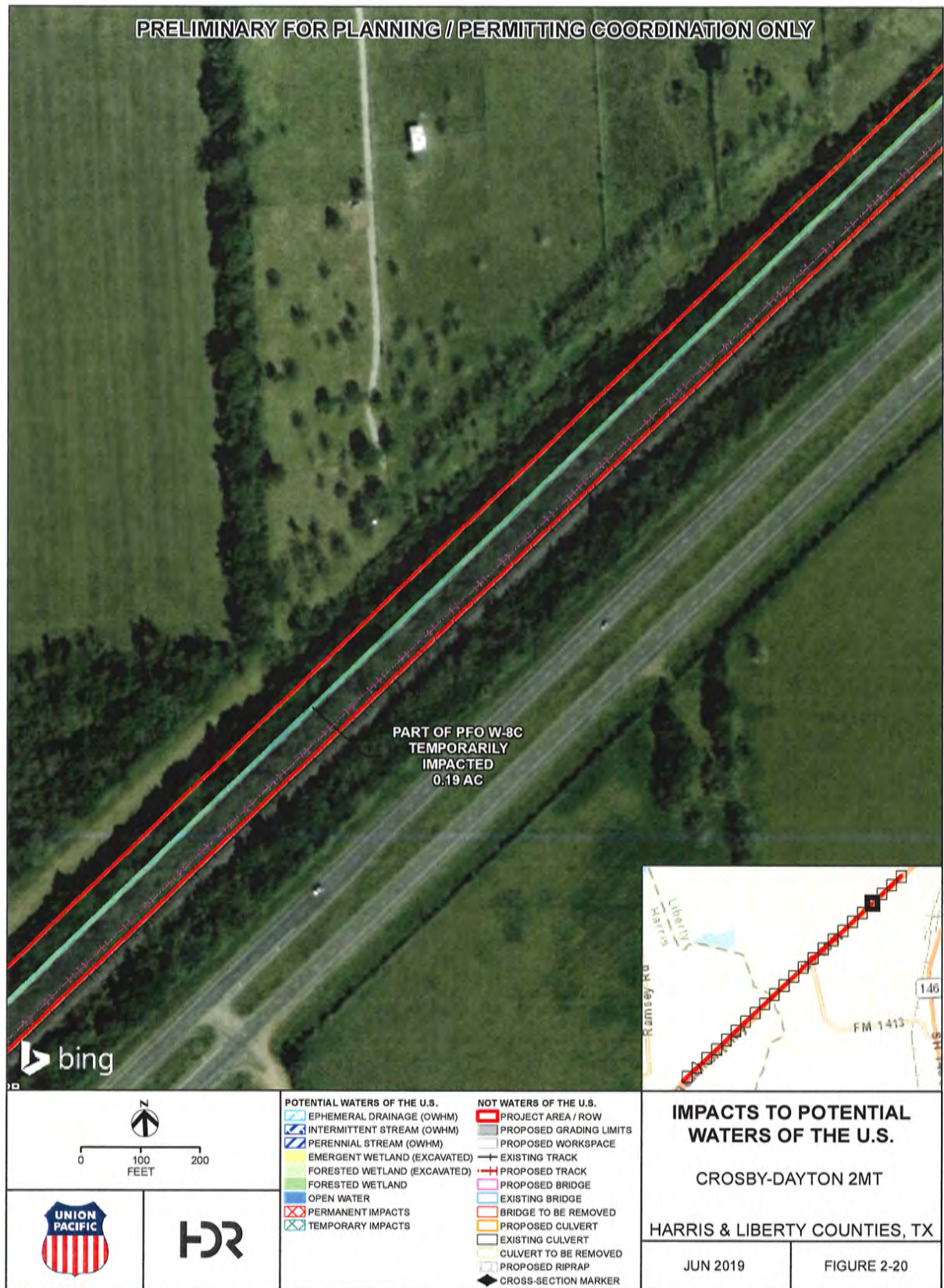






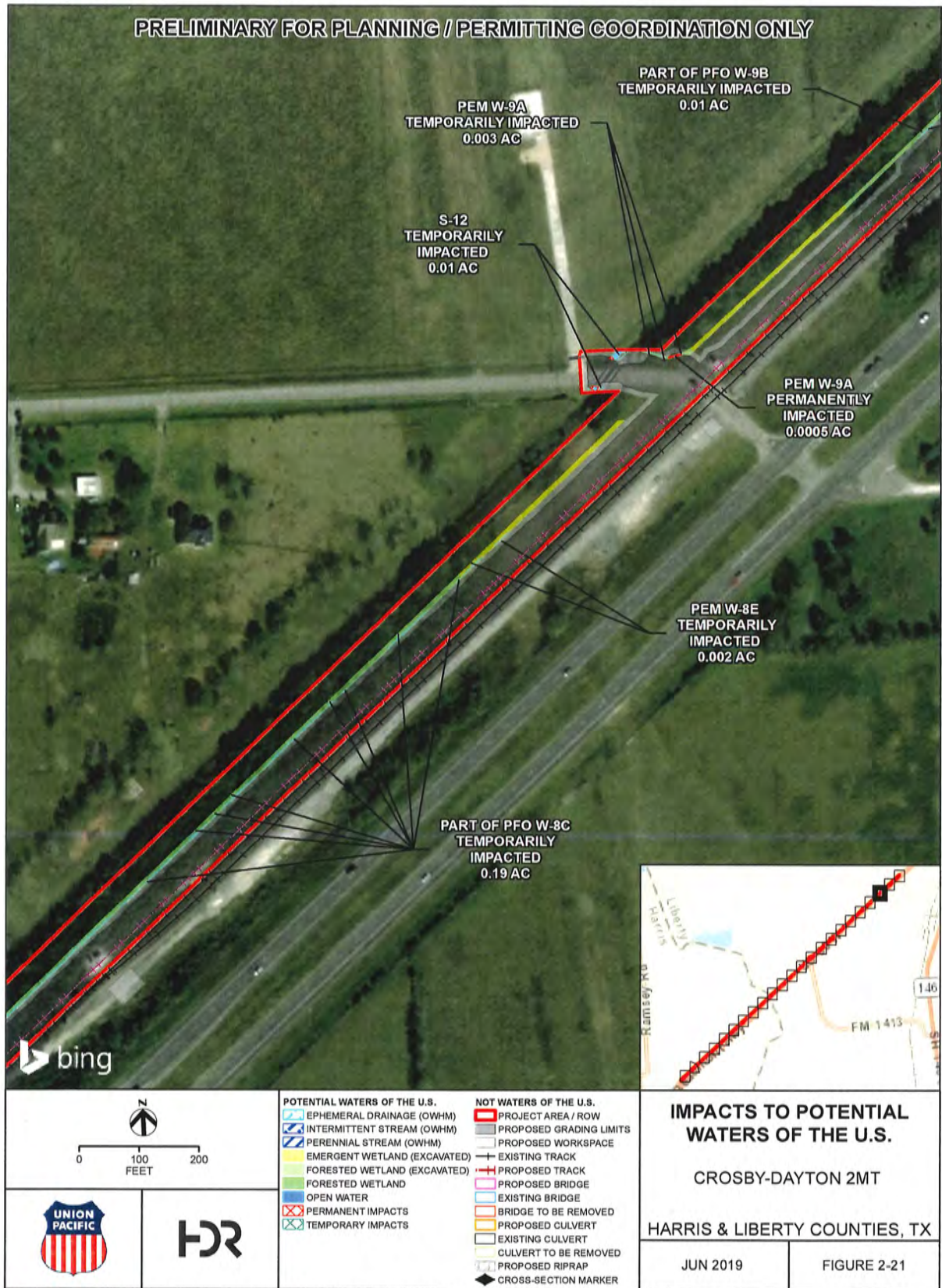


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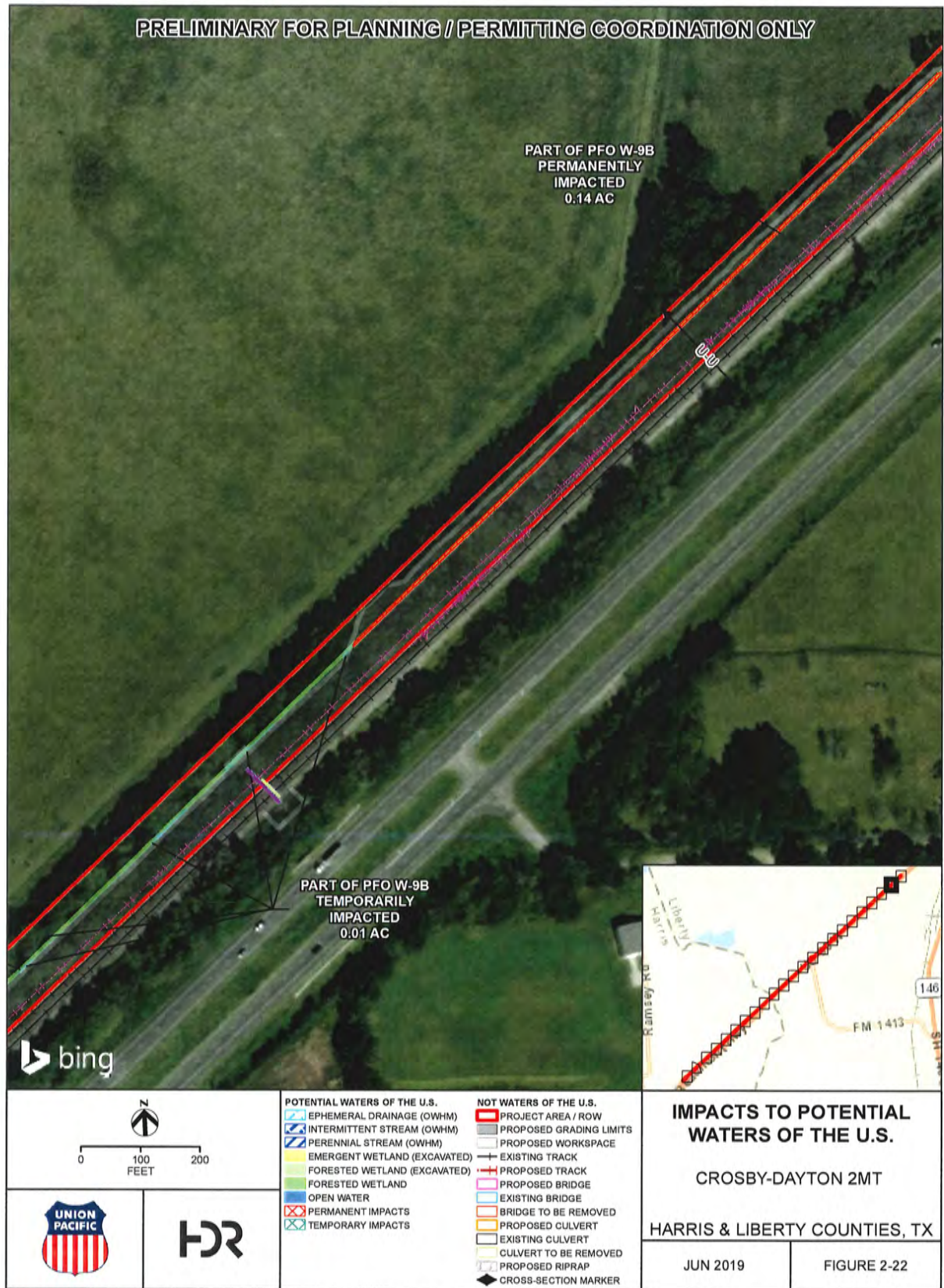


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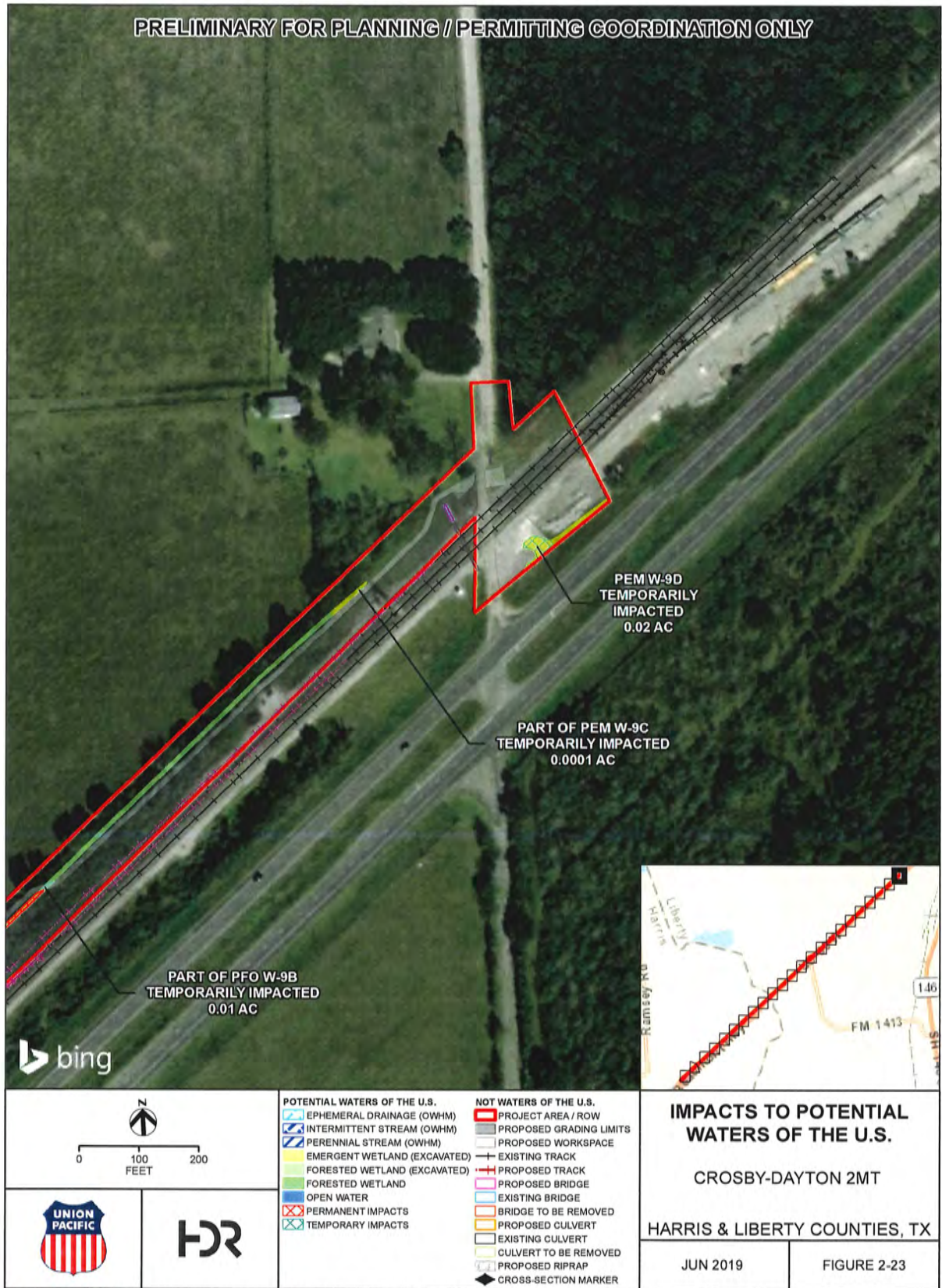




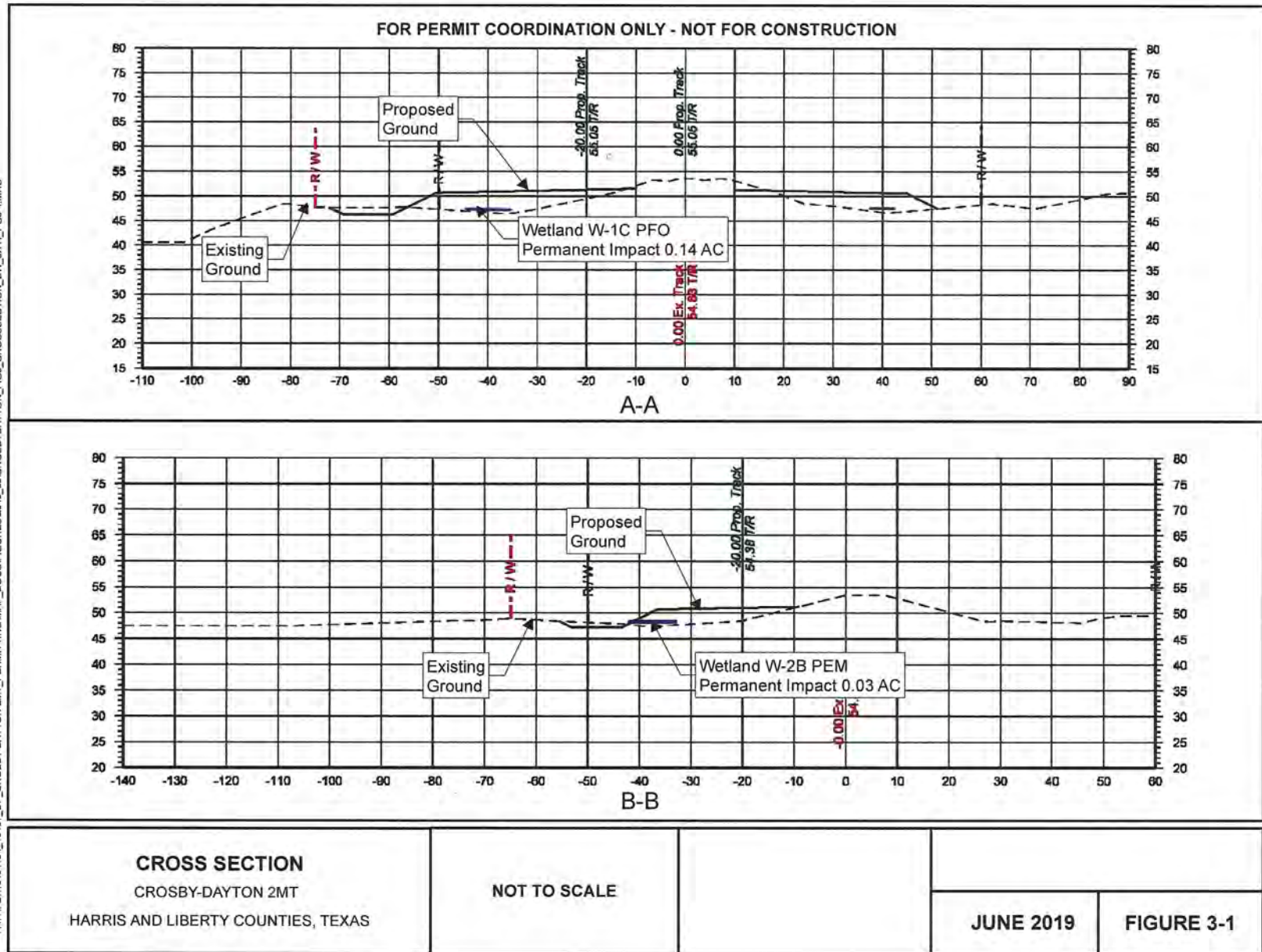


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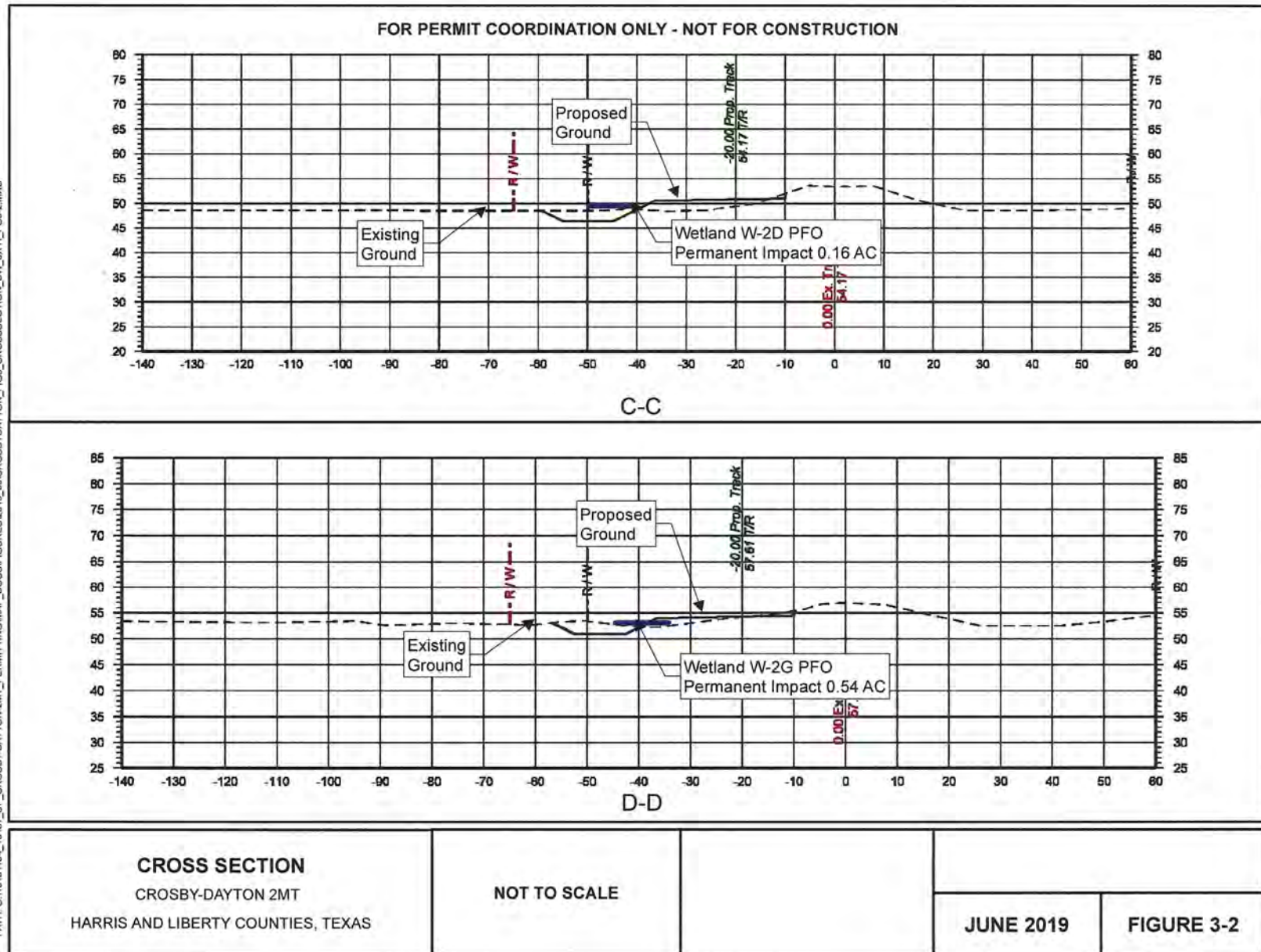






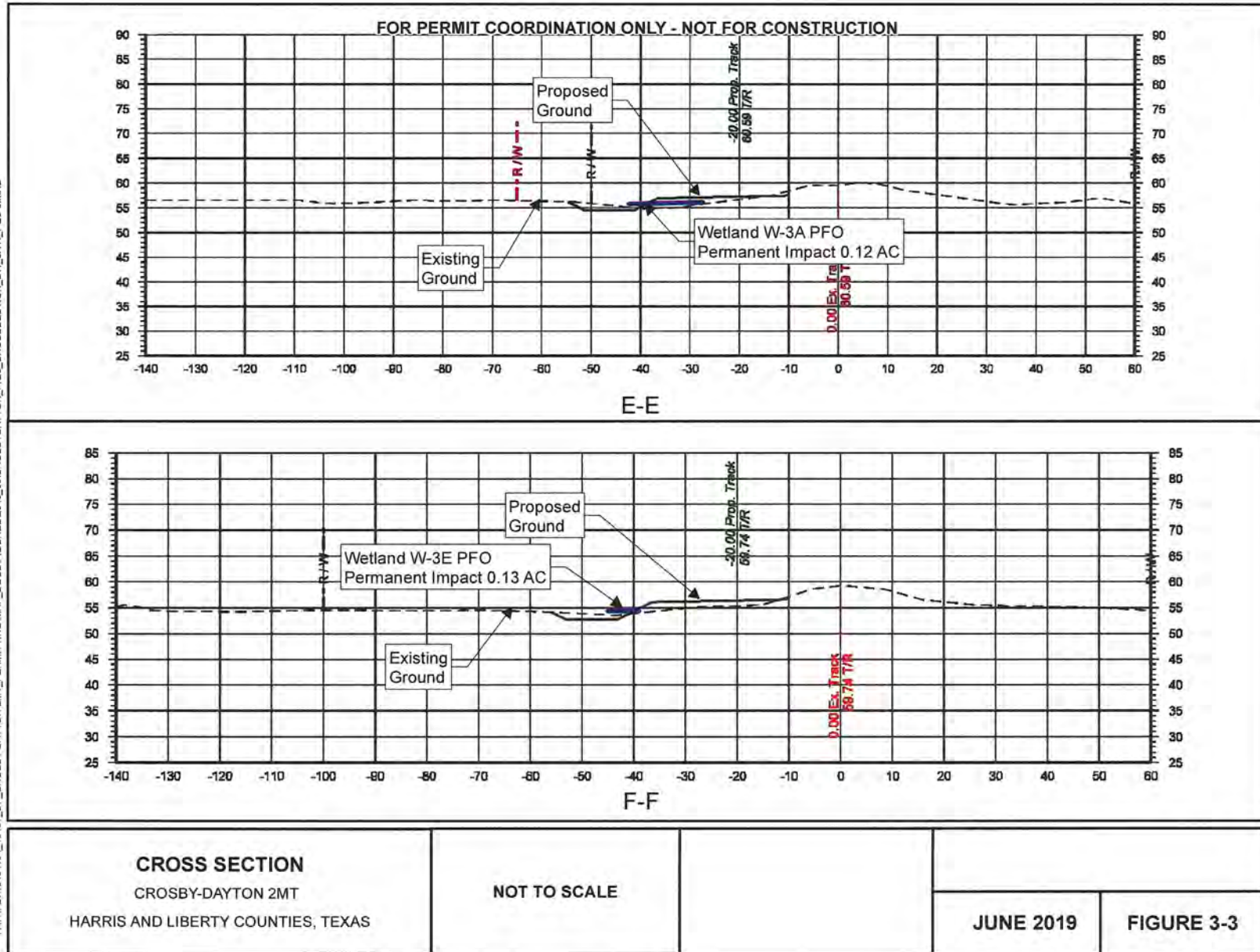


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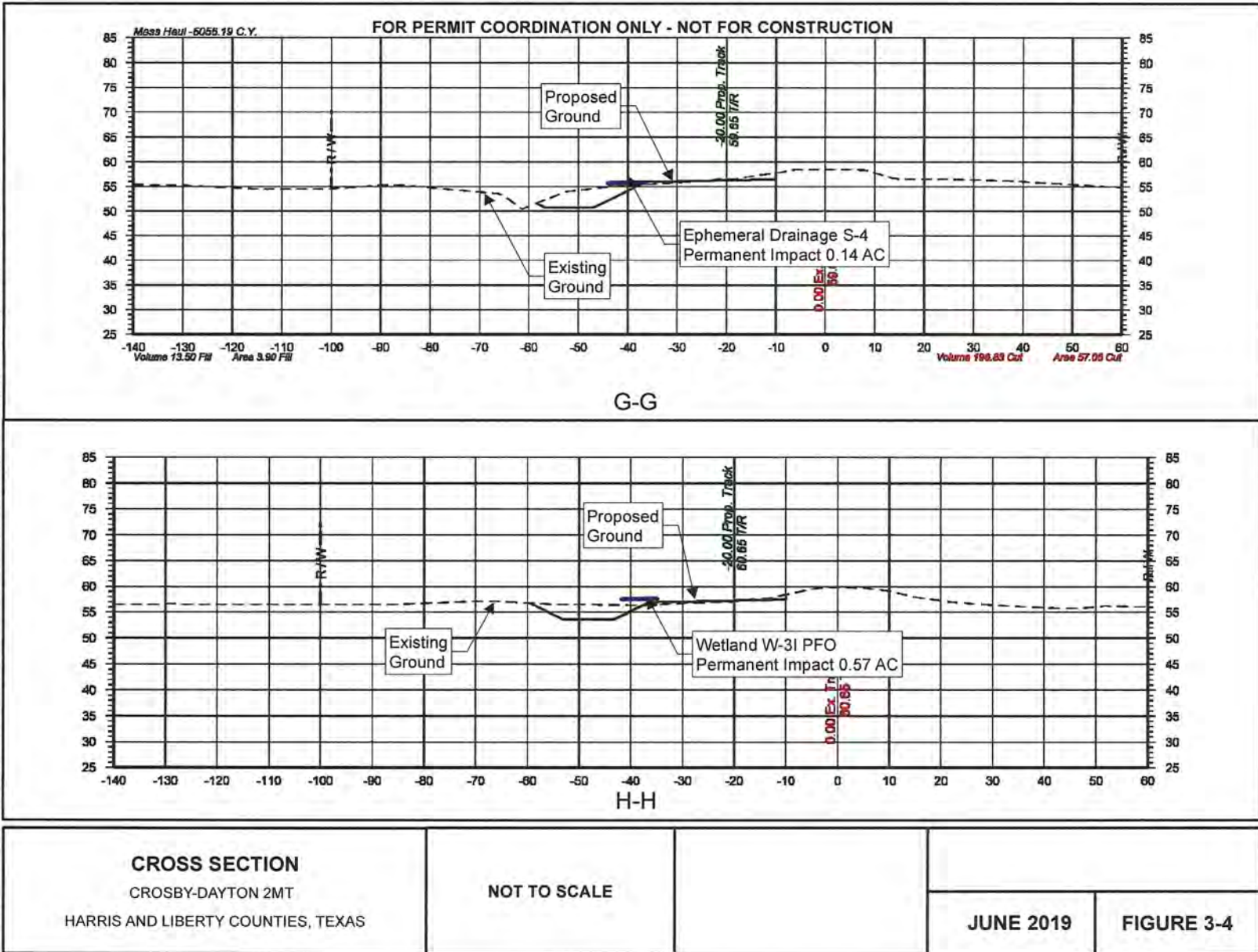
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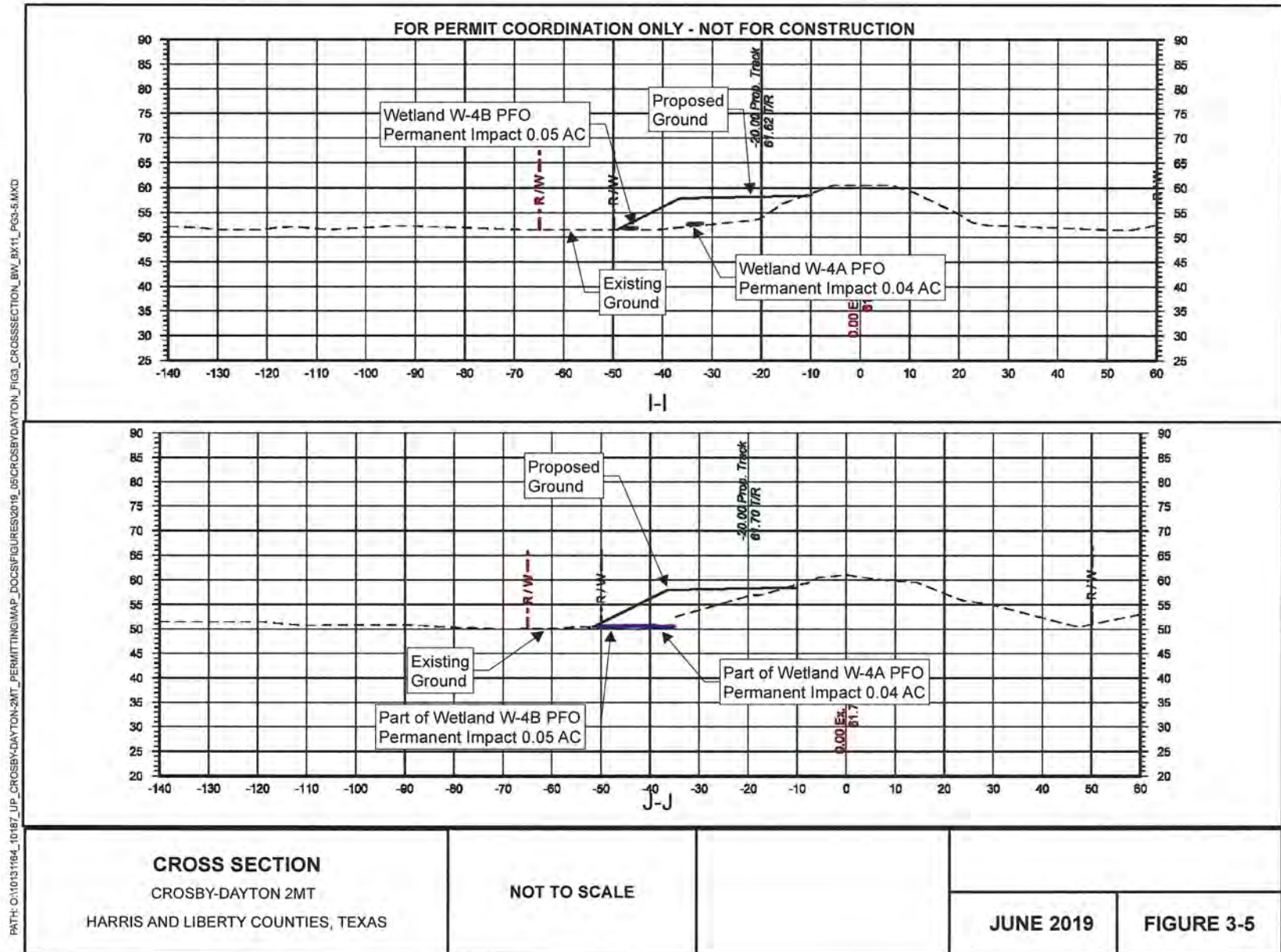
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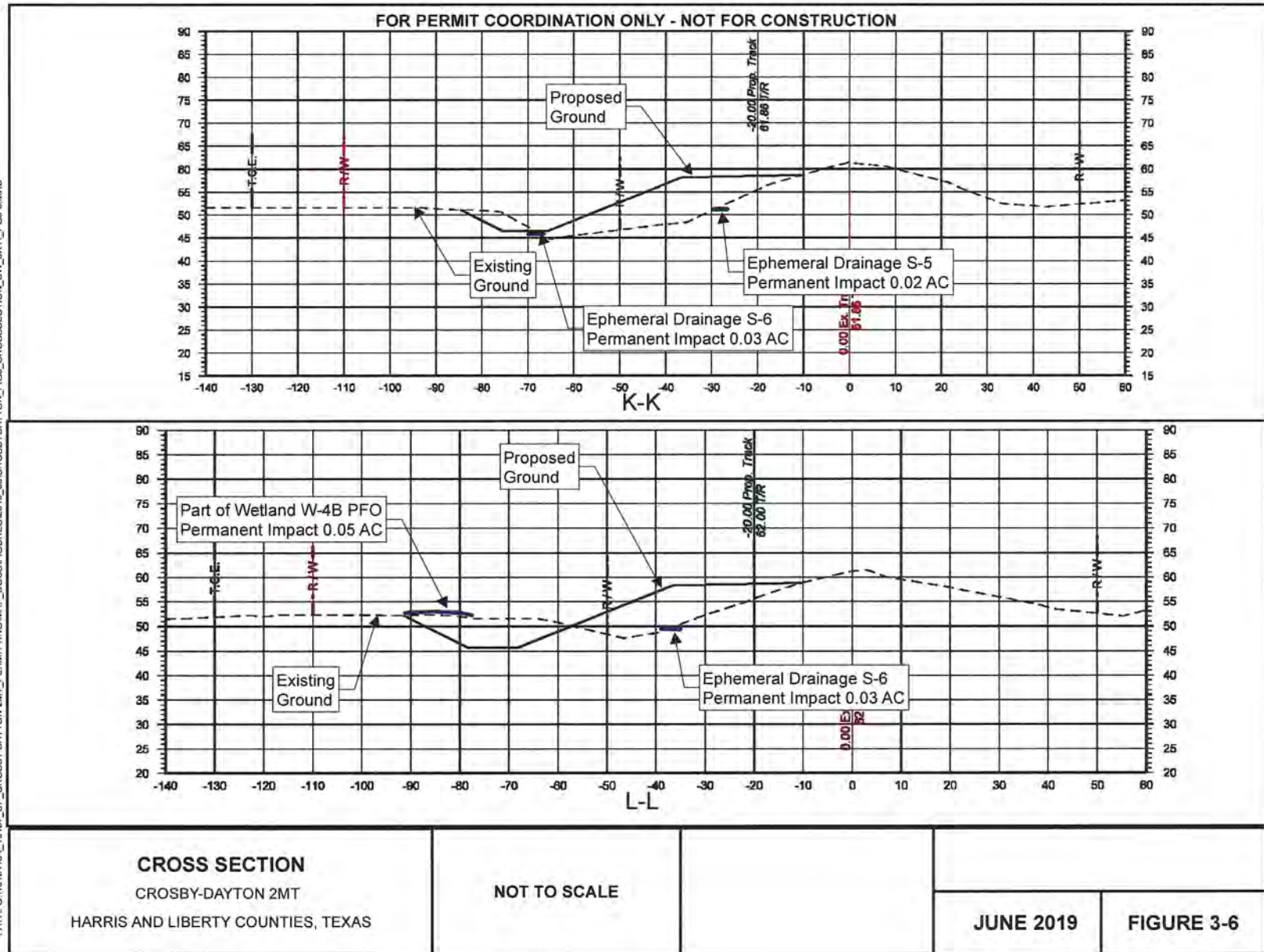




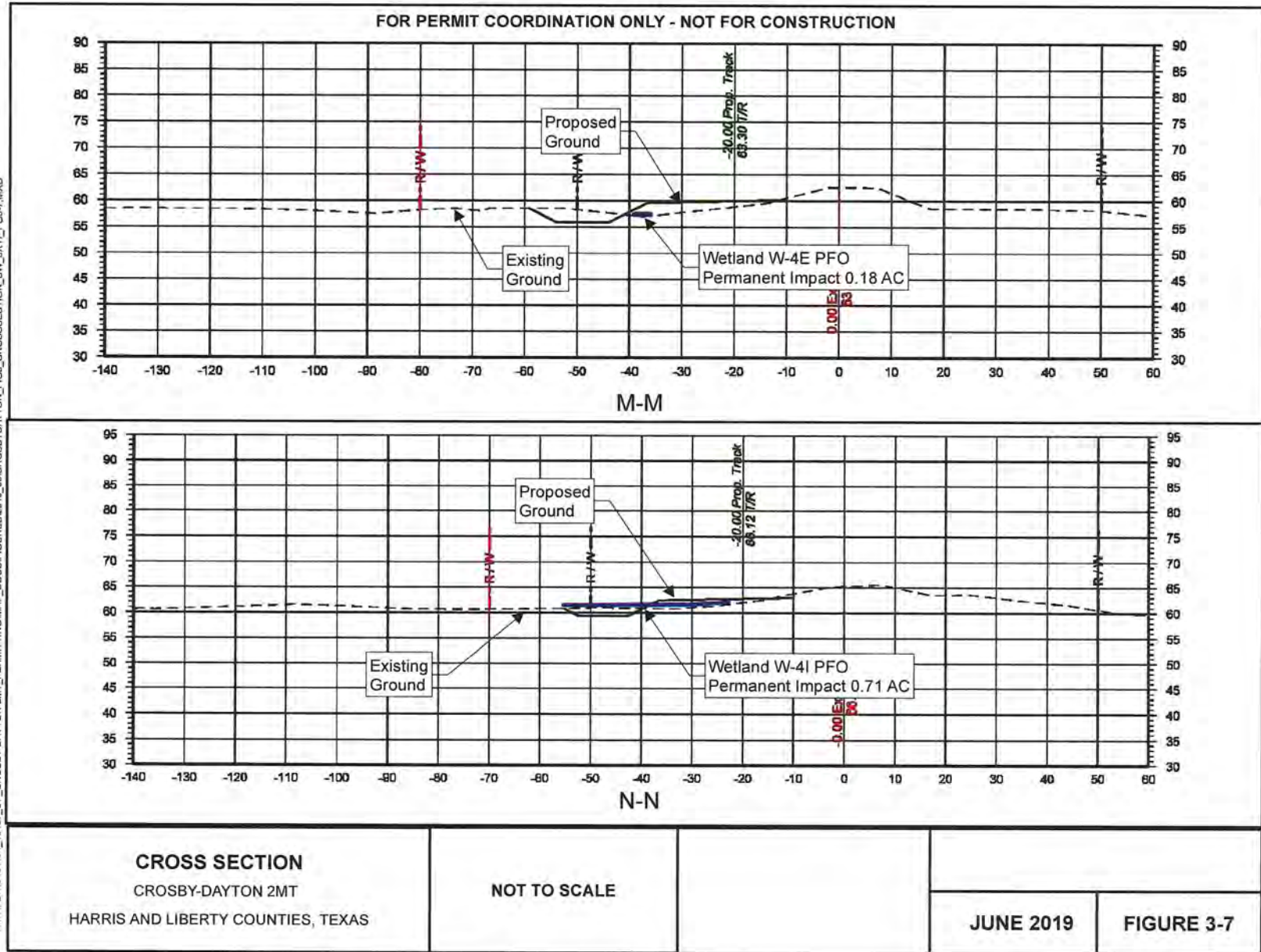
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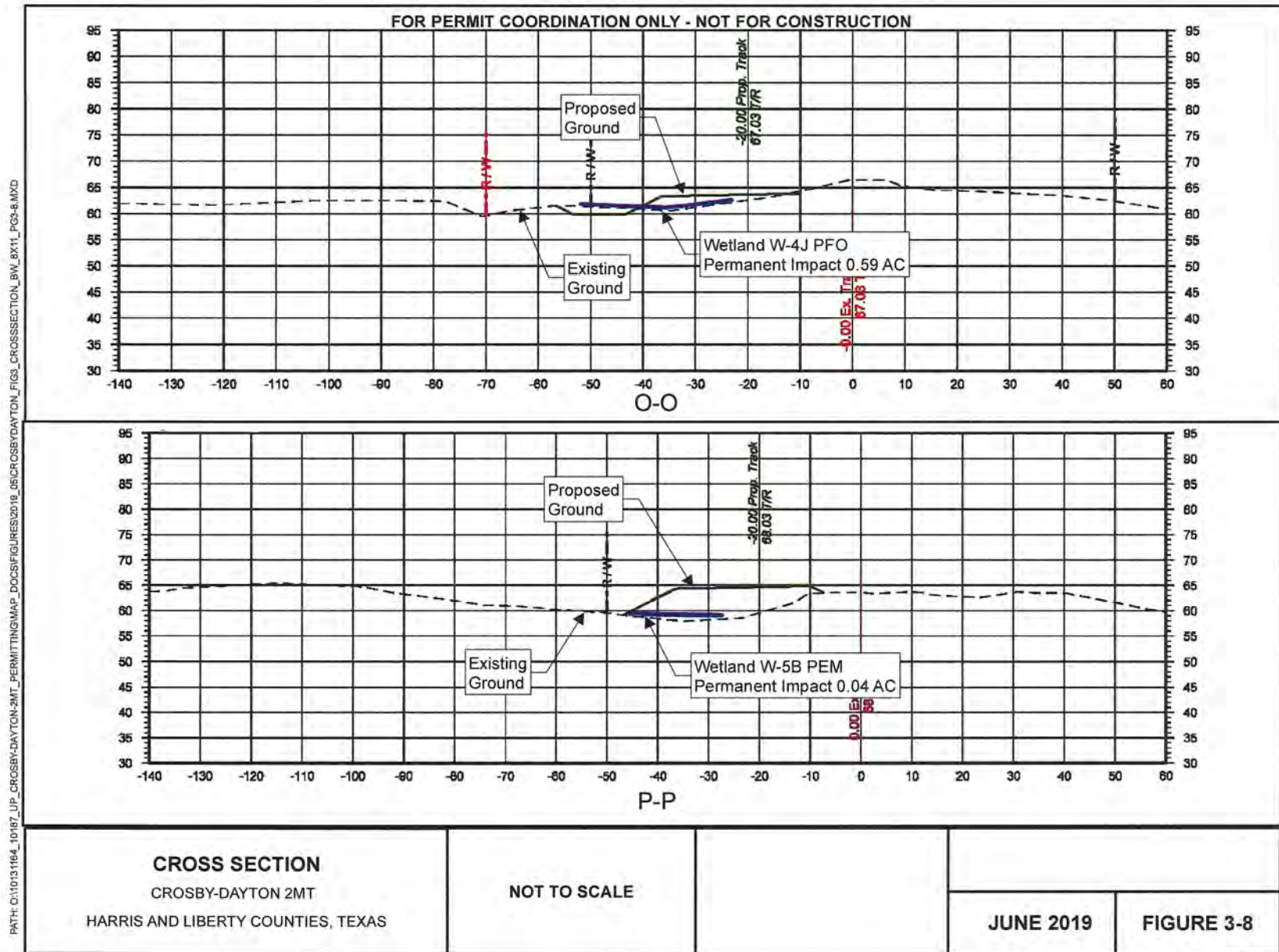
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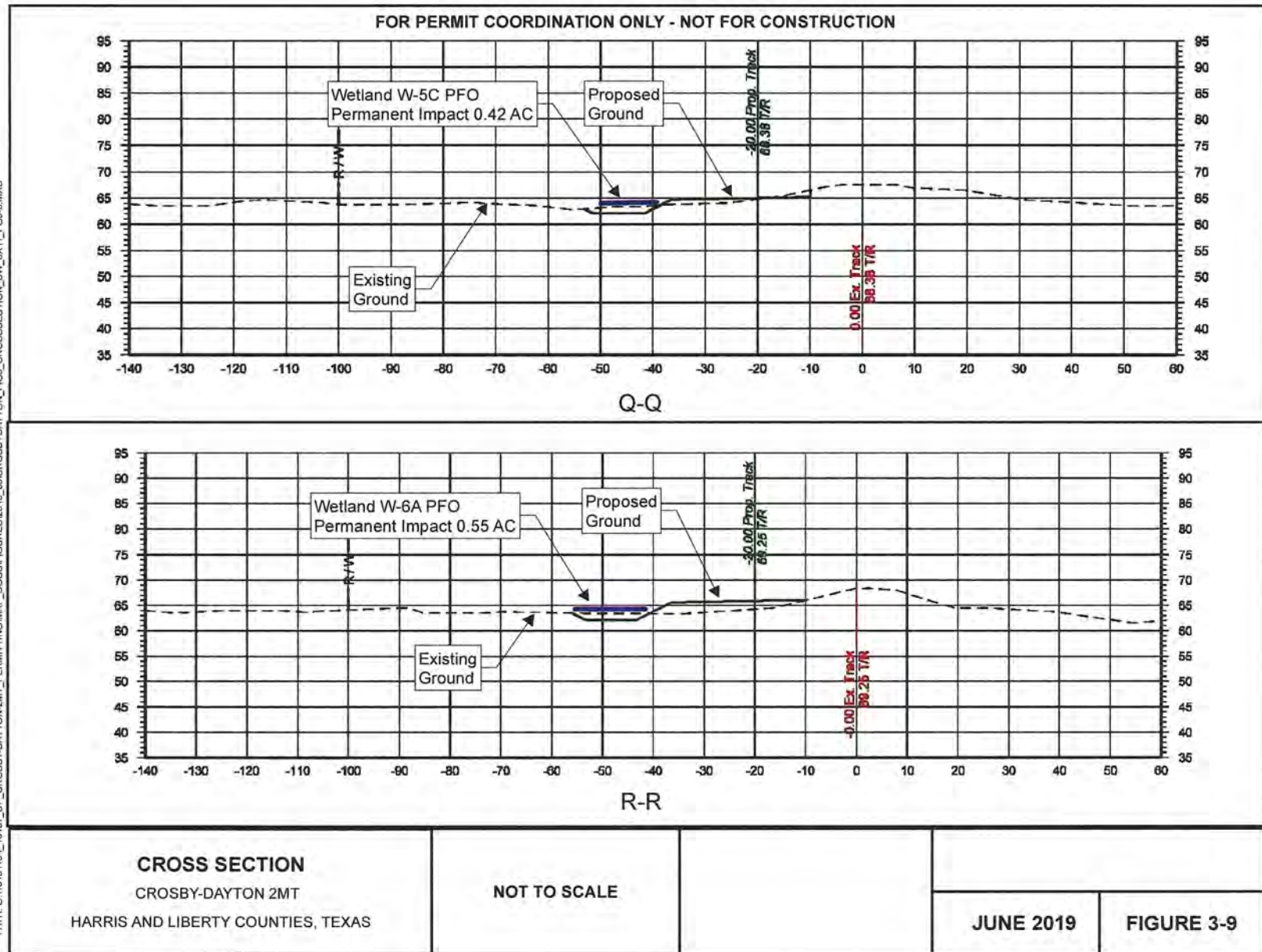




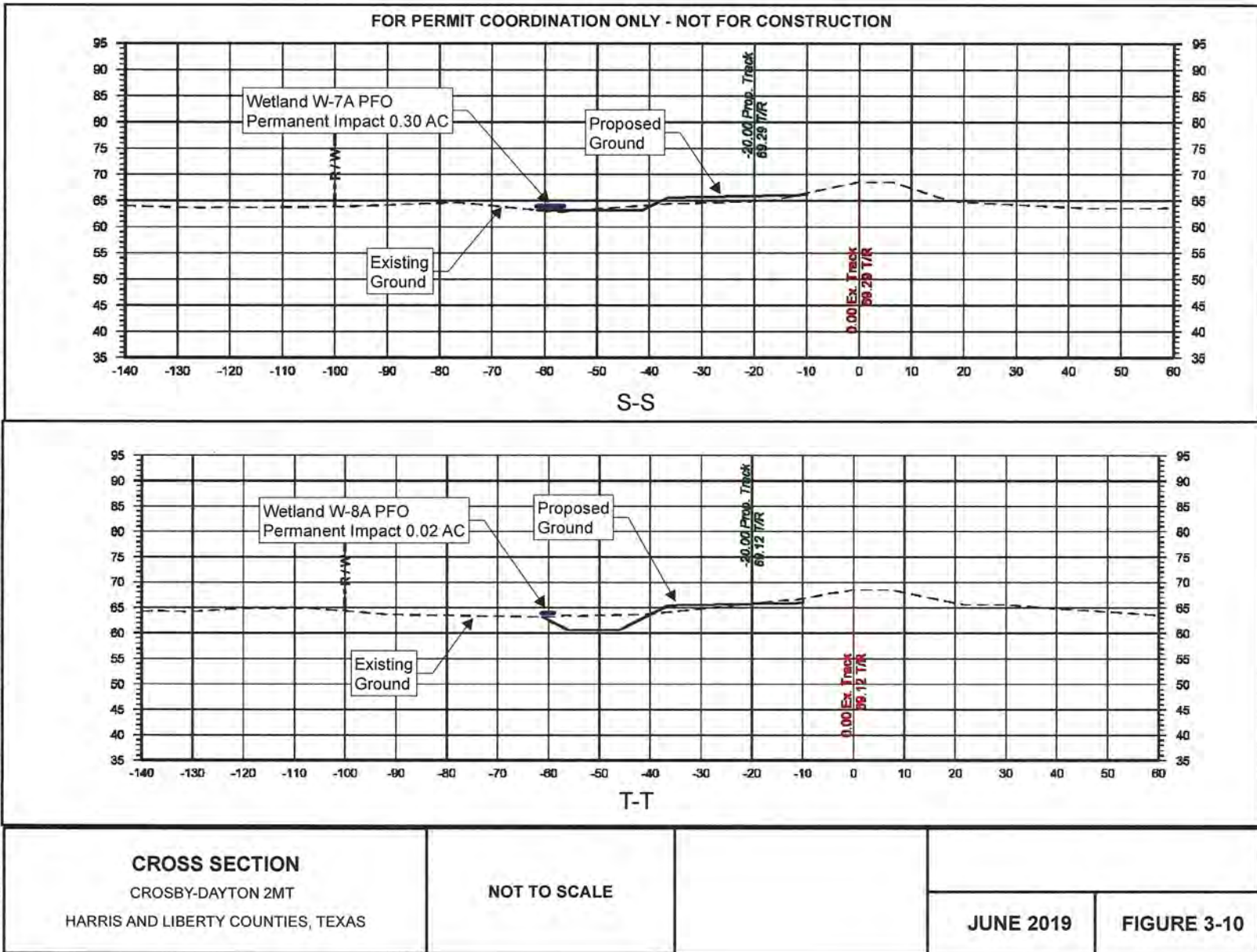
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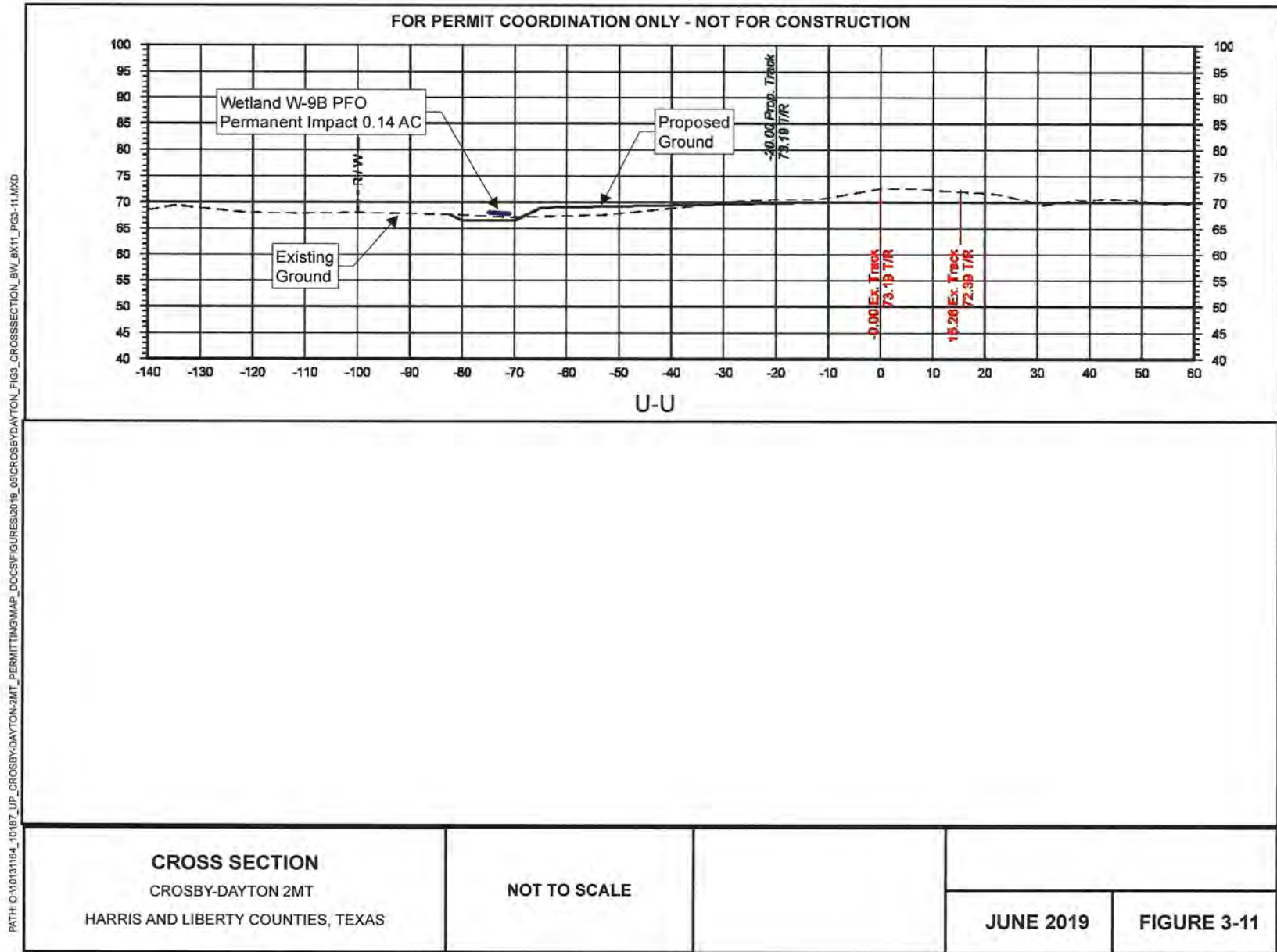




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not replace a natural tributary, but were the result of construction of the railroad for stormwater runoff and subsequent erosion.

The project study area includes swales and man-made, developed upland areas excavated to convey stormwater runoff from surrounding uplands which do not meet all three wetland criteria, nor do they qualify as waters with defined ordinary high water marks (OHWM). These upland areas occur along the existing railroad and roadways. Upland areas are above the OHWM elevation and outside the wetland boundary of the potential waters of the U.S. described in the section above.

The project area lies outside the Texas Coastal Zone, but with some areas along tributaries such as Cedar Bayou and the West Prong Old River within a FEMA designated floodplain. The project area occurs in both the Lower Trinity Watershed (HUC 12030203) and Trinity-San Jacinto Watershed (HUC 12040203). Cedar Bayou (S-7) and its tributaries, S-1 to S-6, as well as nearby wetlands are located within the Trinity-San Jacinto Watershed. The remaining streams and wetlands in the project area to the north of Cedar Bayou are within the Lower Trinity Watershed.

No sanctuaries and refuges or other special aquatic sites were identified within the project site.

## VIII. SUMMARY OF JURISDICTIONAL IMPACTS AND OTHER ENVIRONMENTAL EFFECTS

### Section 404 Jurisdictional Impacts

#### a) Permanent Impacts

The placement of compacted soil (subgrade), compacted gravel (subballast), and rock (ballast and riprap) material for the construction of the second main track will permanently impact 5.07 acres of palustrine forested wetland, 0.41 acre of palustrine emergent wetland, and 0.18 acre of stream / excavated drainage (**Table 2**).

#### b) Temporary Impacts

Temporary impacts will occur as a result of construction activities for access and staging. Temporary impacts are minimal and will be restored to pre-construction conditions following construction.

**Table 2. Summary of Jurisdictional Impacts\***

Resource Type	Existing Total Acres	Total Permanent Impact Acres	Total Temporary Impact Acres
Forested Wetland	7.31	5.07	0.95
Emergent Wetland	1.19	0.41	0.28
Stream / Excavated Drainage	0.93	0.18	0.35
<b>Totals</b>	<b>9.46</b>	<b>5.66</b>	<b>1.58</b>

\*Estimated impacts are based on the Proposed Design (see Attachment B) and Preliminary Jurisdictional Determination (see Attachments C and D)