

July 28, 2020

Gene Williams, PE
City of Lee's Summit
220 SE Green Street
Lee's Summit, MO 64063

RE: Osage 1st Plat, Pryor Road Improvements

Olsson No. A19-2339

Dear Mr. Williams:

We are responding to your comments dated June 29, 2020 and are submitting with this letter revised plans, as well as other required documents. Please find the original comments and our responses below.

If you have any questions or need additional information, please don't hesitate to contact me by phone at (320) 262-9581.

Sincerely,

Olsson

James Gallagher, PE

Engineering Review

- 1. Interim road standards require the extension of the standards to the plat boundary. According to the plans, the interim standards do not quite extend to the plat boundary, but rather, begin to transition to existing conditions prior to the plat boundary. It is our understanding the work to be performed by others on Pryor Rd. will terminate at Napa Valley Dr., and thus, a gap will remain from the point of transition, to the plat boundary.
 - The interim road standards have been extended to terminate at the curb return of Napa Valley Drive on the east side of Pryor Road and to the limits of the Stoney Creek improvements on the west side of Pryor Road, which is approximately 120 feet south of the plat boundary.

- 2. Guard rails may be necessary along the triple box culvert.
 - Per the AASHTO Roadside Design Guide (RDG) 3.4.2, using a traversable design on the culvert end treatments is considered preferable. According to the RDG, matching inlet/outlet of the pipe to the traversable foreslope is desirable because it results in a much smaller target for errant vehicles to hit. The 4:1 traversable slopes used along Pryor Road are maintained with the proposed Beveled Pipe End Treatments sloped at 4:1 as shown on the detail included in the plans. No other treatment is required for small pipe culverts and for cross-drainage structures to be applicable as small pipe culverts, it would have to be a single round pipe with a 36-inch diameter or less or multiple round pipes each with a 30-inch diameter or less, which applies to the existing triple 30-inch culvert pipes along Pryor Road.

Engineering Review

- 1. The interim road improvements need to be extended in full to the plat boundary and connect to the 6' paved shoulder improvements designed in association with Stoney Creek or submit/illustrate the other set of plans that show the improvements associated with Stoney Creek to the proposed Pryor Road widening and interim standard that fills the "gap".
 - The interim road standards have been extended to terminate at the curb return of Napa Valley Drive on the east side of Pryor Road and to the limits of the Stoney Creek improvements on the west side of Pryor Road, which is approximately 120 feet south of the plat boundary.
- 2. Engineer to verify and submit design information in support of the proposed culvert location/proximity to traffic along Pryor Road. Is the culver under Pryor Road and associated structures at grade beyond the area of conflict for roadside safety. The structure(s) must be located beyond the minimum clear zone.
 - Per the AASHTO Roadside Design Guide (RDG) 3.4.2, using a traversable design on the culvert end treatments is considered preferable. According to the RDG, matching inlet/outlet of the pipe to the traversable foreslope is desirable because it results in a much smaller target for errant vehicles to hit. The 4:1 traversable slopes used along Pryor Road are maintained with the proposed Beveled Pipe End Treatments sloped at 4:1 as shown on the detail included in the plans. No other treatment is required for small pipe culverts and for cross-drainage structures to be applicable as small pipe culverts, it would have to be a single round pipe with a 36-inch diameter or less or multiple round pipes each with a 30-inch diameter or less, which applies to the existing triple 30-inch culvert pipes along Pryor Road.