

November 25, 2015

Sheri Langenberger
Development Review Manager – Engineering
City of Fort Collins
281 North College Ave.
Fort Collins, CO 80521

*Re: Harmony & Strauss Cabin Convenience Shopping Center Subdivision Filing
No. 1 Variance Request – Minimum Utility Cover - LCUASS 12.2.2 and Use of PVC
Sleeves by Franchised and Private Utilities – LCUASS 12.2.5
TST Project No. 993.0004.00*

Dear Sheri:

We are hereby requesting a variance to the Larimer County Urban Area Street Standards (LCUASS) for minimum utility cover and for an un-sleeved private utility road crossing at the proposed Harmony & Strauss Cabin Convenience Shopping Center Subdivision Filing #1.

Current standard 12.2.2 of Larimer County Urban Area Street Standards (LCUASS) states that utilities shall be located a minimum of 2' below scarified subgrade elevation. We are requesting a variance to this standard due to site constraints. This situation involves an existing irrigation lateral that runs east from the Boxelder Ditch, just south of Harmony Road, to Harmony Gardens. As this lateral crosses under Strauss Cabin Road, the existing 15" irrigation culvert will need to be re-established as a part of the Strauss Cabin Road and Harmony Road intersection improvements. To maximize cover over this new irrigation culvert, the irrigation lateral between the Strauss Cabin Road crossing and Harmony Gardens has been lowered to a minimum slope, but this will not be enough to gain the required cover. Therefore, we are also requesting that in lieu of adding a sleeve to this private utility crossing, as required by LCUASS 12.2.5, we be allowed to use a ductile iron pipe (DIP) culvert with water tight joints. Utilizing DIP instead of a sleeved crossing will create 0.63' of additional cover over the crossing, but still results in a total of **2.3' from the top of pipe to finished grade**.

The final pavement design will be completed at a future date. Therefore the total cover from top of pipe to bottom of subgrade can't be determined exactly at this time. It is expected that the distance from the bottom of subgrade, to finished grade, will be greater than 0.3' so this pipe cover will not likely be in conformance with section 12.2.2 of LCUASS.

This variance request for less than 2' of cover to scarified subgrade, and for an un-sleeved crossing:

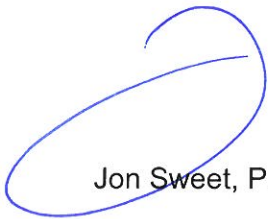
- is not expected to have a negative impact on capital, or maintenance cost requirements for the City, or property owners;
- is not anticipated to reduce the life of the proposed roadways; and
- is unlikely to be detrimental to the public health, safety/welfare, decreased sight distance, or have any effect on turning movements.

This variance will allow us to minimize the effect on the existing irrigation lateral while at the same time leaving enough cover to satisfy the City's concern surrounding uneven pavement settling. Following backfill and compaction standards can also help minimize pavement settling issues and special care will be taken for this culvert crossing during the construction process.

Thank you for your consideration in the approval of this variance request. If you have any questions, or require additional information, please do not hesitate to contact me directly.

Respectfully,

TST, INC. CONSULTING ENGINEERS



Jon Sweet, P.E.

