Cascade Cavern, Inc. P.O. Box 2100 Boerne, TX 78006

Boerne, TX 78006 Phone: (830) 755-8080 Mobile: (703) 785-7953

E-mail: LBKyle@CascadeCaverns.com

www.CascadeCaverns.com

March 18, 2023

Mr. Jeff Carroll, Director of Engineering CITY OF BOERNE 447 North Main Street Boerne, TX 78006

RE: Proposed 2023 Boerne Thoroughfare Plan

Dear Mr. Carroll:

I was out of town on March 6th so I watched the Boerne P&Z Commission meeting online and saw two of the former KCBFOTC commissioners inform you and the Board during public comments that their committee did NOT endorse a route through Cascade Caverns (it's labeled "KCBFOTC-recommended route" on the BTP map). So who takes responsibility for this route now? Even Jonathan Bean, the TxDOT official in charge of the Kendall Gateway Project, publicly rejected this route in 2018. And there are many others who have rejected this route as well (I have copies of their letters):

- Audubon Society of San Antonio (ASSA)
- Center for Biological Diversity (CFBD)
- Cow Creek Groundwater Control District (CCGCD)
- Greater Edwards Aquifer Alliance (GEAA)
- Kendall County Boerne Fair Oaks Transportation Committee (KCBFOTC)
- Kendall County Commissioner Gene Miertschin
- National Cave & Karst Research Institute (NCKRI)
- Texas Parks & Wildlife Dept. (TPWD)
- Texas Dept. of Transportation (TxDOT)
- Texas State Rep. Biedermann
- Texas State Sen. Campbell
- Texas Speleological Survey (TSS)
- Trinity Glenrose Groundwater Control District (TGGCD)

Apparently, someone at the COB or Kimley Horne doesn't understand the biological, geological and hydrological systems in play at the Cascade Caverns property (why is Chapter 8 of the Boerne UDC being disregarded?). For example, you probably don't know that the Cascade Sink (and Fissure Sink) lie beneath the City's proposed planning line (see attached maps). The Cascade Sink is at least 2,000 feet long and serves as the effective "storm drain" for the 1,500-acre Cascade Caverns Watershed. It is a bigger aquifer recharge feature than the Cavern. Upstream development (Regent Park, Southglen, etcetera) has already complicated the hydrodynamics of the recharge features. More impervious cover would just lead to more flooding and more rotting trees on the property. By the way, this flooding is already damaging Golden Cheeked Warbler habitat in the western part of the property (this has been documented by Zara Environmental).



Cascade Caverns, Inc. 226 Cascade Caverns Road Boerne, TX 78015 Phone: 830-755-8080 Fax: 830-755-2422 Fax

downunder@cascadecaverns.com www.cascadecaverns.com



Furthermore, the Edwards Aquifer Contributing Zone doesn't stop at the Bexar-Kendall County line as your P&Z presentation implied. It extends into a part of Southern Kendall County with three watersheds (Balcones, Cascade, Cibolo), the Middle Trinity Aquifer and the Lower Glen Rose karst (limestone) formation which spans and straddles the Bexar-Kendall County line. Dr. George Veni and others (esp. Cassi Crow and Allan Clark at the USGS) have been studying this zone for decades. As Dr. Veni suggests in multiple papers, there have been some studies that indicate the Trinity and Edwards aquifers have varying degrees of physical connection, although they are treated separately from a regulatory aspect. Also, the Edwards Aquifer Contributing Zone closely corresponds spatially with the outcrop of the Trinity Aquifer throughout the region, so often when speaking of the Contributing Zone, one is also referring to the area of the Trinity Aquifer. Take a particularly close look at the GAT and USGS Quadrangle maps for this area. It clearly shows the Lower Glen Rose Karst and Cibolo Creek "bridges" between Bexar-Kendall County and Edwards-Trinity Aquifers.

This planning line through Cascade Caverns must be removed from the proposed Boerne Thoroughfare Plan. If you have time, I suggest a tour of the Cascade property so you can see what is at stake. The Cathedral Room at the end of the Cascade Cavern is just a few hundred feet from this planning line. Vibrations from a multi-lane highway would certainly damage this world-renowned, natural wonder which is also Boerne's #1 tourist attraction not to mention the oldest.

Sincerel

Lance B. Kyle

President

Cascade Cavern, Inc.