

September 19, 2023

Michael Naughton Fire Chief City of Leon Valley 6400 El Verde Road Leon Valley, TX. 78238

RE: Poss Landing Secondary Access

Dear Mr. Naughton:

In response to your letter dated September 18, 2023, we request an appeal to City Council on your interpretation of the IFC Sections D107.1 and D107.2 regarding the requirement for secondary access. The IFC allows for the fire official to determine the acceptability of streets stubs for future development as the source of secondary access to a project. We respectfully request that the City determine that the street stub-outs provided meet the intent of the fire code and thereby no additional secondary access is necessary and no home fire sprinkler systems are necessary. Concerning your letter and the requirement for a residential sprinkler system, we offer the following response to address your comments:

Comment 1 – "The IFC is clear where it states in Section D107.1 that single access public access road to the development requires automatic sprinkler systems be installed in each dwelling...The proposed secondary access road does not currently meet the remoteness minimum spacing as defined in the IFC, D107.2, by a couple hundred feet. This secondary fire access road is half the distance the IFC requires and would be unsafe to use for an extended time. I am concerned with the term "future development". When will that "future development" happen, and will that development provide the needed secondary fire access road? As the plans have been updated, the stub street on the east side of the property has been removed. So, the only viable secondary access will have to come from the west side property and not on either side...I am open to the possibility of a temporary secondary access road if there is an actual plan approved for the future development on an adjacent lot that clearly shows a fire access road. Future development does not provide for the required fire protection of the current development."

Response 1a – The IFC Section 107.1, when considered in its entirety, provides for an exception for future development. If future development could not serve as the secondary access for a project with more than 30 units then the exception would not have been written into the code in the first place. The code reads as follows:

Section 107.1 - Development of one or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with two separate and approved fire apparatus access roads.

Exceptions (summarized):

1. If you are over 30 units, a second road is not required if you sprinkle the homes.

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4122 POND HILL ROAD, STE 101 SAN ANTONIO, TEXAS 78231 PHONE: (210) 681-2951 CUDEENGINEERS.COM TBPE NO. 455 TBPLS NO. 10048500 2. The number of Units may not be increased (assuming no secondary access and no sprinklers are provided) unless fire apparatus access roads will connect with future development, as determined by the fire code official.

In other words, IFC section 107.1 provides for the option to defer secondary access to future development, but the IFC does not define "future development" as being future development within the subject property nor does it provide a schedule for the future development. Section 107 provides the fire code official with discretion on this exception to secondary access. The City of San Antonio determined that secondary access for single-family residential is only necessary after the 124th lot but street stubs to future developments in keeping with the future development exception of the IFC. It is prudent to find a reasonable balance between the risk of a rare fire event and the risk of everyday traffic issues caused by excessive access points to major thoroughfares like Huebner Road.

Response 1b – Regarding the secondary access options, there are several options we have explored with a priority placed on options that we can control and do not require an adjacent property owner. First, over a year ago we proposed access to Linklea Drive via the alley way in the rear of the project. However, the City did not want to accommodate a fire lane through the existing alley to Linklea Drive even though the fire lane we proposed met code. We also attempted to secure secondary access from either adjacent property owner, however neither property owner was willing to grant access until their plans are finalized. While we wait for the neighboring properties to develop, we offered the City temporary secondary access to Huebner Road as a short-term solution. The temporary secondary access is not required by code, nor does it strictly meet the remoteness requirement in IFC 107.2, but it is secondary access and it would mitigate the very remote possibility of the primary entrance being blocked during a fire event in the community. The temporary secondary access is a measure provided only to help assuage the City's concern over secondary access in the short term. Bear in mind that many developments don't have secondary access that meet the remoteness requirement in the code, including the elementary school next door.

Comment 2 – "From the very start of this project, during a City Council meeting, the developers were told of the sprinkler requirements. The developers acknowledged these requirements in public and during private meetings. Nothing has changed in this project that affects the need for sprinkles unless an approved secondary fire access road is developed.

Response 2 – The developer understands the fire code and the City's position on sprinklers dating back to zoning approval. Even though the developer did not and still does not agree with the fire code interpretation the City has put forth, the developer has worked diligently to accommodate the City's request to provide either secondary access or fire sprinklers. What has changed since the zoning approval is the cost of development and home construction has increased substantially and therefore all projected costs are under scrutiny. The cost to provide fire sprinklers has doubled to \$10,000 per home since the project began. This cost along with the extra building requirements agreed to during zoning have added substantial costs to the project. The developer is not asking for relief on any requirements previously agreed too but it is reasonable to request the City to look at the necessity of fire sprinkler systems when the IFC allows for exceptions. Again, despite the exception in the IFC, and our disagreement with the City's property.

Comment 3 – "Your concerns about water damage and cost for repairs are the exact same as any homeowner bears for their water lines in general. Freezing pipes or leaks are no different or more costly than any other water line in a residence. According to the National Fire Protection Association "With proper

4122 POND HILL ROAD, STE 101 SAN ANTONIO, TEXAS 78231 installation, sprinklers will not freeze. NFPA 13D, Standard for the Installation of Sprinkler Systems in Oneand Two-Family Dwellings and Manufactured Homes, includes guidelines on proper insulation to prevent pipes from freezing."

Response 3 – Fire sprinklers do present additional risks for leaks. Fire sprinklers are overhead and designed to cover the whole house and all its contents whereas domestic plumbing comes up from the slab and through walls. Of course sprinklers should be installed to not leak or freeze just like sinks, water heaters and roofs but they all have a habit of leaking anyway. We are simply asking that the City consider that with fire sprinklers comes new issues like maintenance and inspection costs that homeowners have to bear. We do not design drainage within the project to a 100-year rain event because it has been determined that a 100-year rain event is statistically rare enough that it would be cost-prohibitive and unnecessary to design drainage structures to that standard. Likewise in the event of a fire, secondary access, but that access is only acceptable if it's a significant distance from the primary entrance. Why? In the situation that there is fire while both entry and exit lanes at our primary entrance are blocked and Huebner is also blocked.

Comment 4 – "My biggest concern is the safety and well-being of the residents of this development."

Response 4 – This is our concern as well, first and foremost without question. However, we are also concerned with the alternatives that would make this project viable without degrading health, safety, welfare, economics and all the other considerations that make a project work or not. We are concerned with more than just fire safety problems, such as traffic safety problems and drainage problems that often lead to traffic accidents. We are also concerned with trying to do what is best in the short and long term when considering all design elements of the project and neighboring development. What is most important is that we use the spirit and intent of the IFC to achieve the same desired outcome and apply it appropriately in real-world applications.

The code allows for discretion when considering the ultimate build-out of "future development". It is your prerogative to take the most conservative position possible which is 1. Fire services cannot access the community if a fire should happen if the entrance is blocked because the future development of adjacent properties will never occur and that secondary access that does not meet the letter of the remoteness condition in the IFC code provides no value.

Neighboring properties on either side of the Poss Landing have engaged the City for certain entitlements in preparation for development. All things considered, cross-access between projects and multiple access points spread out over a larger area is better than each site meeting secondary access on its own. As a stop gap measure, we propose adding a fire access only secondary entrance onto Huebner Road to mitigate any short-term concerns with secondary access until the neighboring projects come online. Although our proposed secondary access does not meet the Remoteness test in the Fire Code Section D107.2, the secondary access along with the stub-out to future development and the primary entrance split by a median when considered together achieves the intent of the fire code.

It is not our intention to create a health, safety or welfare concern but to only consider the full scope of development in and around this project as well as other design concerns such as everyday traffic safety and long-term risk born by the homeowners.

We appreciate your consideration in this matter. Please feel free to contact me with any questions you may have.

4122 POND HILL ROAD, STE 101 SAN ANTONIO, TEXAS 78231

Page 4 of 5

Sincerely, ude, PE loshua M President/CEO

Attachments: Exhibit – Poss Landing Secondary Access Option 1

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