SOUTHERN NEVADA
HOME BUILDERS
ASSOCIATION
THOSE WHO BELONG....CARE

June 29, 2023

John Steinbeck, Fire Chief
Clark County
4701 W. Russell Road
Las Vegas, NV 89118

Re: SNHBA Response to Business Impact Questionnaire -- Proposed Amendments to Clark County Code Title 13, Chapter 13.04.115 -- Clark County Fire Prevention Bureau

Chief Steinbeck, and the Board of Clark County Commission,

The Southern Nevada Home Builders Association (SNHBA) is the oldest and largest local trade association representing the residential construction industry in the state of Nevada with over 90% of the residential market in Southern Nevada. Nationally, there are over 700 home builder associations (HBAs) in the nation. To our knowledge, SNHBA is the only HBA that has ever supported the implementation of mandatory residential fire sprinklers at either the state or local level. We did this in 2018 at the City of Las Vegas and are here again in Clark County to thank you for going through the appropriate process. We are grateful to be included in negotiations on the passage of this important life-safety measure, as it will increase the construction costs to a home.

NRS 278 requires a local government to conduct a cost-benefit analysis (CBA) in order to implement an ordinance that mandates the inclusion of a residential fire sprinkler system in the construction of a new home. We'd like to thank Chief Steinbeck and his team, especially Kelly Blackmon, Danny Horvat, and Wayne Dailey for their work in negotiating the items before you today.

Mitigating Measures outlined or missing in the Cost-Benefit Analysis

Outlined in the cost-benefit analysis (page 8 of the June 2023 draft) is a number of agreed upon negotiated mitigating factors, similar to a list negotiated with and adopted by the City of Las Vegas.

SNHBA would like to thank Clark County for delineating these items, and have provided additional comments in two separate sections below:

1. Red lettering as commentary back to items included in the CBA

    - Fire Chief agrees to allow an exemption from the new sprinkler requirements for projects with an approved tentative map within 180 days from the passage of the ordinance. We appreciate the inclusion of this request, as it allows for developers who are already in the entitlement process to continue through the process without the requirement to resubmit with fire sprinklers. We request that the effective date will be

put on the record at the hearing to provide certainty and clarity to our builders, as we are grappling with a number of different adoption and effective dates (including 2021 IECC, Title 30 rewrite, and more).

- Fire will commit to providing next-day sprinkler inspections for residential sprinklers.
- Fire will work to incorporate residential sprinklers into the Building Department standard plan process. We understand that technological and software challenges exist and that there may be some hiccups along the way. We look forward to continuing our dialogue both with the Building Department and the Fire Department on any process improvements that may be needed as projects are submitted over the next few years.
- Homebuilders requested a solution for ceiling heights greater than 24 feet. Fire included language in the ordinance which eliminates the need for an Alternate Means report every time there are high ceilings.
- Homebuilders requested an alternative to the minimum 10 psi safety factor. Fire included language in the ordinance which provides an acceptable alternative to the 10-psi safety factor. Want to thank CCFD for also including an exception which allows the connection of a flow switch activating the smoke alarms for situations where the safety factor cannot be met, providing relief for projects in low water pressure zones.
- Homebuilders requested relief from the existing code requirement regarding upgrading fire sprinklers in single-family homes. Fire included changes to the mitigation matrix so single-family homes will not be required to install NFPA 13R or NFPA 13 systems. Clarification: this was not a "requested relief" from existing code. It was a vital change for single-family attached homes only. SFA units utilize a continuous fire shaft-liner that runs from slab to roof deck. Utilities (including wire, pipes, chases, etc.) cannot penetrate or cross property lines. It is illegal to do so.

  13R fire sprinkler systems utilize a main line that feeds the entire building and must cross property lines. This disqualifies their use for a SFA home.

  In addition, a 13R system requires a public fire sprinkler riser room and monitored/tied together alarm systems that cover the entire building, neither of which are possible or permitted for SFA products.

  Lastly, a 13D system at today's costs is an average of $0.80 sf. A 13R system is roughly $6.00 sf. We appreciate the inclusion of this item but wanted to clarify as the CBA, at the time, did not reflect the roughly $15,000 increase should this item have been excluded/denied from the negotiations.
- Homebuilders requested a longer dead-end street length. Fire included language in the ordinance which extends the length of RTC turn-arounds to 600 feet where 500 feet was the previous limit.
- Homebuilders requested residential fire statistical data reporting. Fire will provide reports similar to what CLV provides to the homebuilders.
- Homebuilders requested a reduction in the requirements for secondary access. Upon researching this request, it was determined that Fire does not currently place limits regarding secondary access. Clarification: SNHBA's request was not a "reduction in

requirements for secondary access." Our request was to allow full-width crash gates to satisfy the secondary access requirements found in Title 30. The current *Adoption Draft* of the Title 30 rewrite requires a secondary access point for any community over 5 acres (sometimes as small as 30 lots).

This is an on-going challenge in other jurisdictions in the Valley whose development code(s) do not provide certainty to the development community. Our builders have been allowed to use this full-width crash gate to satisfy secondary access requirements in communities over 200 units in other jurisdictions.

While building code and/or Title 13 may not require prescriptive secondary access requirements, Title 30 does. The inclusion of the allowance of a full-width crash gate to satisfy the secondary access provisions was a request for certainty, predictability, and transparency to the design community.

- Homebuilders requested an increase in required hydrant spacing. Fire pointed out that current code already allows increased spacing for sprinklered homes. We requested Title 13 reflect the increase in required hydrant spacing if a home is sprinklered. Fire determined that was not needed in Title 13 since it is found in Chapter 5 Appendices of base code. We are supportive of this request being withdrawn/removed.
- Homebuilders requested to use ¾" water meters. Fire pointed out that current code already allows this depending upon proving the hydraulic demand. We had concerns that the safety factor and static pressures, especially in hillside and infill development, could require a house to increase in meter size solely because of fire sprinklers. The cost difference between a ¾" meter and a 1" meter is over $7,500. This could have significantly impacted the cost of construction, and mitigation of these costs in the psi safety factor reduced our concern on water meter size.

  We are grateful for the permitted use of ¾" meters with a 1-inch angle stop and have confirmed with LVVWD that there is no need to amend UDACs for this allowance.
- Homebuilders requested to use narrower streets in areas with sprinklered homes. Fire denied this request and will remain with the current code requirements for street widths. We remain concerned that there was not a complete complex analysis on street widths' impacts to the overall house cost.
- Homebuilders requested to eliminate fees for residential fire sprinkler permitting. Fire denied this request; minimum fees will apply per the adopted fee schedule. Clarification: homebuilders requested fees did not increase for residential fire sprinklers, not that they would be "eliminated." Given that CCFD was already in the process of updating the fee schedule, we appreciate the changes that were made to the fee schedule and appreciate that the June 2023 CBA draft was updated to reflect the additional $90/lot cost for permits. Previous versions did not reflect this item.

2. Items that were agreed upon as part of the negotiations but not included in the June 2023 draft CBA or the Title 13 draft ordinance that SNHBA respectfully requests to be codified in the appropriate documentation:

- Elimination of epoxy inspection. Allow developers to utilize third-party certification. (Agreed upon by CCFD and CCBD, mirrored from CLV negotiations).
- Elimination of drywall nail inspections under circumstances outlined in CLV negotiations (agreed upon by CCFD and CCBD).
- Model homes are considered temporary commercial spaces and do not need commercial fire sprinkler systems.

Fundamental flaws in overall modeling and conclusion, subjecting CBA to legal vulnerability

While we greatly appreciate the individually-negotiated items included in the cost-benefit analysis, we remain concerned that there are a number of fundamental flaws within the cost-benefit analysis and that it could be subject to legal vulnerability if adopted by Clark County in its current form. Our concerns with the CBA are outlined below:

1. Many costs have not been delineated in the CBA.
2. The report extensively details life and safety benefits of sprinklers, claiming costs are not a metric. This largely disregards the cost component of a statutorily-required CBA.
3. The report asserts there will be no adverse effects on business, but that is not an appropriate suggestion for a CBA and is required by NRS 237.
4. The overall modeling relies on many inconsistencies and misapplications of economic and financial terms, resulting in an invalid analysis.

Additional details on each of the four above points:

1. Costs not outlined in the CBA:
    - The CBA identifies estimated costs of a 13D sprinkler system but neglects 13D enhanced systems, or the additional 50% head calculations for homes with ceilings over 24 feet.
    - The CBA does not outline SNHBA's request for one permit or to have CCFD check off on the building permit. Given software issues, builders will have increased administrative costs pulling separate building permits, mechanical electrical and plumbing permits, and then a separate fire permit. None of which are tied together or scheduling requested by the same point of contact during the construction process.
2. The report extensively details life and safety benefits of residential sprinkler installations, stating repeatedly: *"cost should not be the overriding a factor as to whether a municipality should or should not mandate residential fire sprinkler systems in all new home construction. Life and safety should be the overriding concerns."* However, these are not components of a cost-benefit analysis. The law is clear that a cost-benefit must be conducted (page 9).
    - Page 15, **"Cost is the wrong metric.":** The report is disregarding the cost component of the cost-benefit analysis.
    - Page 15: The report continually provides opinions without data or analysis to support its conclusion that there is a benefit to the community and the home buyer. Benefits to homebuilders and developers are not elements for consideration under the cost-benefit analysis requirement of SB 477. Second, the report merely

lists and describes potential benefits that may materialize pending future negotiation, and it does not attempt to enumerate or quantify how those potential incentives may benefit either homebuilders or homeowners.

3. Page 13, "This cost benefit analyst [*sic*] study asserts that there will not be adverse effects associated with homebuilding if the Clark County Commissioners enact legislation [*sic*] to mandate the installation of residential fire sprinklers in all single-family residences."
    - NRS 237 requires the Board of County Commissioners to engage in a Business Impact and Public Notice process. It is inappropriate for a CBA to ascertain that there will be no adverse effects to the homebuilding industry.
    - Similarly, page 14 of the CBA suggests that Attachments 6a – c [*sic, should be Attachments 7a-c*] outlines "*There has been no substantial change in new housing permits being issued in Henderson and Las Vegas"* since those cities began requiring residential sprinkler installations that homebuilding activity has not been affect by those ordinances.

      The author suggests a similar ordinance in Clark County would not negatively affect homebuilding, which is an invalid conclusion given any number of other factors when it comes to home development activity (e.g., housing demand, land availability, building costs, etc.).
4. The report's primary analysis of benefits to homeowners who purchase a new home with a sprinkler system installed relies on attributing future home price appreciation to the sprinkler system alone, concluding on Page 7 "*residential fire sprinkler systems installed in new homes in Clark County will pay for themselves before the end of one (1) year of occupancy."*
    - The concept that future price appreciation – regardless if the homes have a fire sprinkler system – is expected to somehow create a benefit to homeowners and outweigh the cost of sprinklers is inappropriate.

      Had the author analyzed the price appreciation of homes with and without sprinklers and saw a difference in the rate of appreciation, that analysis may have been relevant. Nothing to indicate that the study evaluated the appreciation of homes with a sprinkler system against homes without a sprinkler system.

      Instead, the author's approach simply attributes 100% of a home's appreciation to an installed sprinkler system and completely disregards every other part and attribute of a home that contributes to its relative value, such as square footage, location and features.

      Further, the author provides that "*even ignoring home appreciation, today's inflation rate still means the sprinkler system cost is absorbed in the increased value of a home within a few months of purchase*" (page 7) but neglects to identify that the increased upfront cost to purchase the home at today's interest rate would price out thousands of Nevadans.
    - Attachments 2, 3, and 4:
        - **"Annual U.S. National Inflation: 4.93%":** The report's analysis uses the current inflation rate, which has stabilized since its increase to the highest

in four decades, to model home value appreciation over the next nine years. A 4.93 percent inflation rate over a nine-year period would be inconsistent with historical levels. During the 1980s (1980-1989), which included a period of double-digit inflation, inflation averaged 5.5 percent. Over the past nine years (including current levels), inflation has averaged 2.2 percent.

- **"New Home Appreciation Rate: 2.5%":** Does not outline this is a projection in a heated, regional market. The figure reflected is not reflective of historic levels.
- **"The Federal Discount Rate is: 0.25%":** The Federal Reserve has increased the Discount Window Primary Credit Rate (e.g. the Discount Rate) multiple times since March 2022 to bring the current rate to 5.25 percent.

  "Free Cash Flow (FCF): The report equates rising home value to free cash flow. Home price appreciation is not equivalent to profit or free cash flow. While rising home values result in greater equity value, that equity is not converted into cash value until the homeowner sells the property or completes a cash-out refinance. The report conflates and misapplies these two financial concepts.

- **Pages 20 through 26. Various modeling results.:** The report includes modeling results for several "Cost Benefit" scenarios.

  Several of the underlying assumptions (using peak-level values for inflation and home value appreciation and using an outdated Discount Rate) resulted in overstated benefits.

  The overstated modeling results also reflect the misapplication of home equity as free cash flow. This misapplication is compounded due to the models using cumulative year-to-year home value appreciation rather than incremental value in their benefits calculations.

In conclusion, while Clark County and SNHBA have endeavored to reach an agreement to mitigate fire sprinkler costs to homeowners through various efforts, such an agreement and this letter itself should not be construed as an endorsement of the methodology or conclusions of the cost-benefit analysis before you today because of the fundamental flaws outlined above.

Sincerely,

Nat Hodgson, CEO
Southern Nevada Home Builders Association