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May 18, 2023

Randall L. Capra
Town of Parker Community Development
18100 E. Woodman Drive
Parker, CO 80134

RE: Parker and Pine F1 L1: In-N-Out Burger
Formal Site Plan Application – 1st Submittal Review Comments – SP22-143
Fire & Life Safety

Plan Review Summary:

1st Formal Submittal	-	12/21/22
1st Review Comments	-	02/07/23
2nd Formal Submittal	-	04/26/23
2nd Review Comments	-	05/17/23

The Following letter summarizes our responses and plan changes made regarding your 2nd review comments for the Parker and Pine F1 L1, In-N-Out Burger Formal Site Plan Application. Our responses are shown below each comment in blue. In addition, a blue-line comment response has been provided with responses to the redlined plans.

1. The applicant shall be aware that no vertical construction on this site will be allowed until such time that curb gutter and first lift of asphalt are installed; a site inspection will be required to ensure that this requirement is made prior to allowing vertical construction to commence. *Note – This issue was satisfied by the applicant when reviewed through the SP21-126 submittal process.* ***Satisfied; applicant has acknowledged with the second submittal***

2. The applicant shall be aware that the access road hydrant distribution was not planned to address the suppression needs for all commercial properties within this subdivision; this site requires the addition of one hydrant (to be located at the s/w corner island of the building… as required per NFPA 24 Section 7.2.3… see the snap shot of the redlined fire hydrant location shown under item #4 below: *Note – This issue was satisfied by the applicant when reviewed through the SP21-126 submittal process.* ***Satisfied; applicant has acknowledged with the second submittal***

3. The submittal documents are incomplete, the required overall utility plan was not included with submittal package. When providing the package, ensure that the required Fire Life Safety signature block is provided in two locations; the locations are on the cover page and on the overall utility page. This signature block can be found at the end of this document. *Note – This issue was deferred by applicant by applicant when reviewed through the SP21-126 submittal process. The current utility drawings do contain the Fire Life Safety signature block though this block is provided in two locations on each of the required pages. Only one block will be stamped and signed.* ***Not satisfied; while the applicant has acknowledged the removal of the second block with the second submittal, the utility plans are still showing this block on other sheets… sheets such as WS3.0. Address this issue for all such sheets when resubmitting.***
Response: the duplicate signature block has been removed

4. Per the requirements of [21 IFC Section 503.1.1 Buildings and Facilities] approved fire apparatus access roads shall be provided for every facility, building, portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet of all portions of the facility and all portions of the exterior walls of the first story of the building as. measured by an approved route around the exterior of the building or facility (the building, as approximately 4,000 sf (or 40'x 100') cannot meet the requirement as measured from the center line of the fire apparatus as measured by an approved route from any point that a fire engine might park when responding to a call at this building).
   Response: Per previous discussions with Randy Capra, sufficient access information has been provided.

   Per the requirements of the code, the fire code official is allowed to increase the dimension of the 150 feet provided that the applicant meets Exception 1.1 of this section… "The building is equipped throughout with an approved automatic sprinkler suppression system installed in accordance with section 903.1.1, 903.1.2, or 903.3.1.3; a sprinkler suppression system will be required. The building is to be sprinklered per pre-application meeting discussions. *Note – This issue was satisfied by the applicant when reviewed through the SP21-126 submittal process.* ***Satisfied; applicant has acknowledged with the second submittal***

5. The applicant shall provide a room layout that (in advance of a plan set for the commercial building permit) to ensure that the riser room is sized appropriately. With regard to the fire sprinkler control valve room, ensure that the following is addressed:
   - Exterior access is required into the riser room with access into the building provided either adjacent to the riser room or through the riser room.
     Response: The riser room detail on Sheet WS1.0 identifies exterior access into the Riser Room as well as into the building.
   - The FACP will be required to be located on an interior wall in the fire sprinkler control valve room; ensure that the riser room is sized to accommodate the FACP and the riser. A three-foot clearance is required in front of the FACP as well as the sprinkler riser.
     Response: The riser room detail on Sheet WS1.0 identifies the FACP location, sprinkler riser location, and 3' clearance in front of both.
   - The underground shall enter the building and turn up no further than 24 inches from foundation wall; three feet of clearance is required in front of the fire riser with a minimum of 12" of clearance behind the riser and 18" to each side of the riser.
     Response: The riser room detail on Sheet WS1.0 identifies the clearances specified above.

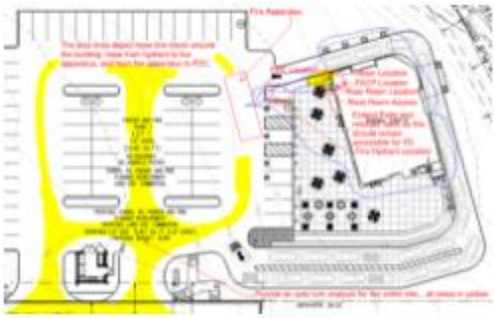
   Not satisfied; while the applicant has indicated that "a fire riser room has been added to the plans to show proper clearances and access as necessary", the applicant has not identified which plan set the detail has been provided on (as required in the directions at the beginning of this letter). I have checked the PWSD CE Plan Set, the INOB Site Plan Set, and the Town CD Plan set… finding nothing. To note, I did find the layout of what is to be located in the trash surround on multiple pages. When resubmitting, provide the required documentation addressing the issues as noted here and, in the instructions, above.
   Response: A fire riser room layout detail has been added to the bottom right corner of Sheet WS1.0 of the PWSD utility plan set to show proper clearance and access as necessary.

6. A sidewalk shall be extended to the riser room door as well as the FDC; a 5'x5' pad shall be provided in front of the FDC. Address this issue when resubmitting. ***Satisfied; applicant has acknowledged with the second submittal. Field verification will confirm this at time of construction.***

7. Utility Plan Set: The applicant shall provide a utility plan that identifies the locations of all utilities on the site (including natural gas and electricity). The overall utility plan shall identify the location of the required fire hydrant(s) and the required underground fire line UFL). The plan set shall identify the UFL on the plan (not just providing a note) while providing the length and diameter of the UFL (as measured from the T at the water main to the flange within the building. Address this issue on the plan set when resubmitting. Note – The UFL shall have its own tap; domestic water and the required fire hydrant shall have separate taps.
Response: Sheets WS1.0-Overall Utility Plan, and WS3.0 – Water Plan, of the PWSD CD set include the requested information. Please advise if additional information is required.

8. The Town of Parker requires that fire apparatus access roads meet the clear-width and weight-bearing standards of the jurisdiction in which the project is located. Roadways shall be designed to support the imposed weight of fire apparatus, 30-ton, two axle and 40-ton three, axle vehicles. An unimpeded clear width of 20-feet shall be maintained at all times (though Planning and Zoning requirements may require a minimum of 24 feet). Where building exceed 30 feet in height, a fire department access is required to be 26 feet in width. As such, any location where parked vehicles would obstruct this clear width requirement will require "NO PARKING – FIRE LANE" signage. This signage shall be red on white. Update design criteria has been provided at the end of this document; ensure compliance when resubmitting.
Response: Per previous discussions with Randy Capra, sufficient access information has been provided. Signage is provided as identified on Sheet SP1.0 of the Town CD plan set by schedule item #45.

9. The applicant shall provide an auto turn analysis indicating that apparatus can navigate all portions of this site (both sides of the gas canopy); NO PARKING – FIRE LANE signage is required for any portion of the access where the 20-foot clear width requirement cannot be met. *Note – This issue was being addressed by the applicant when reviewed through the SP21-126 submittal process; as this issue was not fully addressed at the time, this submittal should have included the auto-turn analysis that was prepared for SP21-126. Address this issue when resubmitting. The area shown in yellow indicates what was previously required in this analysis.* ***Satisfied; applicant has acknowledged/addressed with the second submittal.***



10. Anticipated deferred submittals for this project would include the following (as Applicable):
    Satisfied; applicant has acknowledged/addressed with the second submittal.
    - Underground Fire Line
    - Sprinkler Suppression
    - Underground Storage Tanks
    - CO2 Beverage System
    - Fire Alarm System
    - Radio Amplification System
    - Access Control

GENERAL COMMENTS (as applicable)

The below General Comments are Acknowledged.

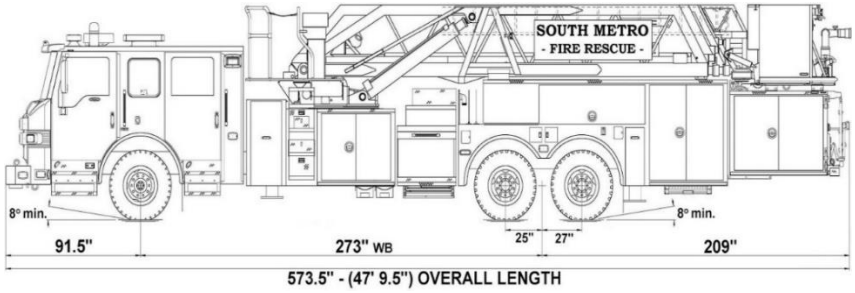
All engineering documents submitted to the Town of Parker shall bear the wet signature and seal of the engineer or architect in responsible charge of the design.

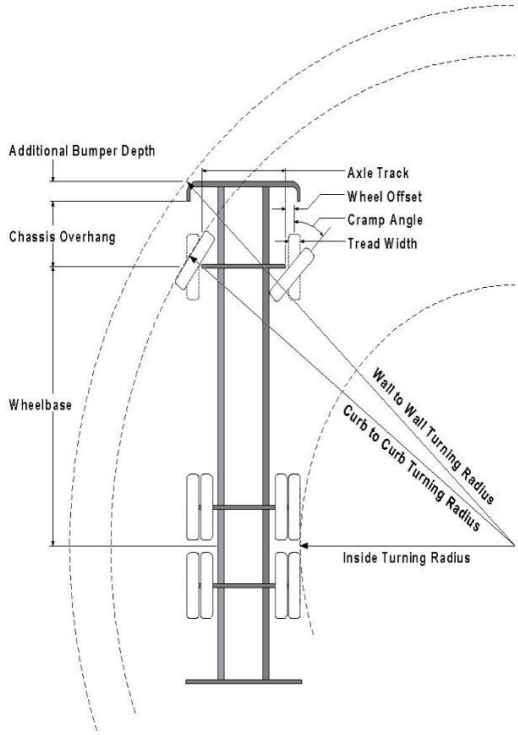
Water distribution and site access components shall be installed and in service prior to the construction of any portion of the structure, except by special permit issued by the Fire District.

Underground fire lines
When thrust blocks are used as part of the pipe restraint system, submitted plans for permit shall provide detailed documentation that the thrust blocks satisfy all requirements of 19 NFPA 24: 10.8.2, including specific thrust block dimensions and mathematical calculations for block dimensions per guidelines provided in Annex A.10.8.2.

FIRE ACCESS ROAD DESIGN CRITERIA

VEHICLE SPECIFICATIONS are provided for the largest apparatus in use by South Metro Fire Rescue. Fire Apparatus Access Roads shall be capable of accommodating this apparatus.





Vehicle Specifications
Length: 47’ 9.5”
Width: 8’ 5” - (10’ 1” mirror to mirror)
Height: 10’ 9”
Wheelbase: 273 in.
Design load: 80,000 pounds Inside Cramp Angle: 40° Axle Track: 83”
Wheel Offset: 5.3”
Tread Width: 13.5”
Turning Radii:
Inside Turn: 26 ft. 1 in. Curb to curb: 41 ft. 11 in. Wall to wall: 46 ft. 8 in.
Where objects are present adjacent to the fire apparatus access road, particularly on turns and turn arounds which require backing, a reasonable safety margin shall be provided to prevent potential damage to the property and to the fire apparatus.

PRIVATE ROADS that provide access to more than two dwellings or one or more commercial buildings shall be constructed to meet the roadway standards approved by the South Metro Fire Rescue Authority for fire apparatus access. Private roads that do not meet the roadway standard may be accepted provided that alternative methods and materials are incorporated into the subdivision that addresses the fire and life safety of the citizens.

FIRE CODE REVIEW BLOCK

All fire hydrants shall be installed according to water utility standards. The number and locations of the fire hydrants as shown on the Overall Utility Plan are correct as specified by the Town of Parker, Community Development Department.

Fire Code Official or Designated Representative Date

(NOTE – Underground Fire Line (UFL) submittal documents must meet the requirements of NFPA 24 when submitting for review.)

Underground Fire Line - Submittal Requirements

Reference: 2019NFPA 24 **Installation of Private Fire Service Mains and Their Appurtenances**

A separate permit is required and will be issued pending review of a detailed submittal which must include the following: [21 IFC 901.2]

4.1.1 Working plans shall be submitted for approval to the authority having jurisdiction before any equipment is installed or replaced.

4.1.2 Deviation from approved plans shall require permission of the authority having jurisdiction.

4.1.3 Working plans shall be drawn to an indicated scale on sheets of uniform size, with a plan of each floor as applicable, and shall include the following items that pertain to the design of the system:

(1) Name of owner
(2) Location, including street address
(3) Point of compass
(4) A graphic representation of the scale used on all plans
(5) Name and address of contractor
(6) Size and location of all water supplies
(7) The following items that pertain to private fire service mains:
(a) Size
(b) Length
(c) Location
(d) Material (ductile-iron, PVC., etc.)
(e) Point of connection to city main
(f) Sizes, types, and locations of valves, depth at which the top of the pipe is laid below grade
(g) Method of restraint (Meg-a-Lug or similar)

4.1.4 The working plan submittal shall include the manufacturer's installation instructions for any specially listed equipment, including descriptions, applications, and limitations for any devices, piping, or fittings. Submittals must include installation specifications for thrust blocks, corrosion protection, restraint system, bedding, detail of pipe under the building up to, and including, the flange. When it is intended that a different contractor will extend the fire line from a stopping point outside the building, to the inside flange, a second submittal and permit is required.

All tees, plugs, reducers, valves, and hydrant branches shall be restrained against movement by thrust blocks [10.8.2] or restrained joint systems [10.8.3]. When thrust blocks are used as part of the pipe restraint system, submitted plans shall provide detailed documentation that the thrust blocks satisfy all requirements of Section 10.8.2, including specific thrust block dimensions and mathematical calculations for block dimensions per guidelines provided in Annex A.10.8.2.

Any individual or company who physically works on or installs any part of a fire suppression system, including underground supply lines, from public water lines to system risers and backflow preventers, **must** be registered with the Colorado Division of Fire Safety. [Dept of Public Safety, Division

of Fire Safety, Fire Suppression Program 8 CCR 1507-11:3.1.2] Documentation of valid annual registration may be required with plan submittal.

The following website for the Colorado Division of Fire Safety will provide registration instructions.
http://dfs.state.co.us/SuppAppsProcInsp.htm
All submittals must display a wet stamp and original signature by a Colorado licensed professional engineer or NICET III, or higher, in fire suppression systems. [Dept of Public Safety, Division of Fire Safety, Fire Suppression Program 8 CCR 1507

Please feel free to reach out with any additional comments or questions you may have.

Sincerely,
GALLOWAY

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