



Town of Parker Community Development Department  
Development Review Division  
Attention: **Julia Duncan**

Application Type: **Site Plan**  
Status: **First Referral**  
Application Name: Auburn Hills Centre L4 - Circle K- Gas and Convenience Store  
Case/AP#: **SP21-138**  
Referral Received: April 21, 2022  
Comments Due: May 19, 2022

Application Location: Southwest corner of Jordan Road and Mainstreet  
Review date: **April 21, 2022**  
Plan reviewer: **Randall L. Capra**, [rcapra@parkeronline.org](mailto:rcapra@parkeronline.org)  
Phone: 303.805.3169

**Narrative:** The applicant, Circle K, is proposing a Site Plan for a 5,200 sq. ft. convenience store and gas station. The site is located southwest of the intersection of Mainstreet and Jordan Road.

**Code Reference:** 2021 International Fire Code, 2018 International Building Code, 2020 NEC, and IFC code referenced NFPA Standards (*adopted codes valid through Dec 31, 2024*)

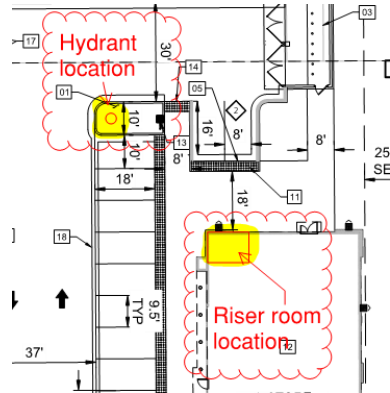
<b>TOWN OF PARKER - FIRE/LIFE SAFETY:</b>	<b>R REVIEWED FOR CODE COMPLIANCE; REVISIONS REQUIRED</b>
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- 1<sup>st</sup> Submittal – Reviewed April 21, 2022
- 2<sup>nd</sup> Submittal – Reviewed August 24, 2022 (*Comments in red, italicized font*)
- 3<sup>rd</sup> Submittal – Reviewed May 16, 2023 (**Comments in bold, red, italicized font**)
- 4<sup>th</sup> Submittal – (**Comments in bold, red, italicized font with a yellow highlight**)

**UNRESOLVED ISSUES/COMMENTS:** *The items noted below with a comment number (1, 2 etc.) are items that need to be corrected to show compliance with the applicable codes. Please provide a written response indicating where the corrections are made on the plans. This will speed up the second review process. **Not satisfied; applicant has not provided the required response to this letter. In not responding, the applicant further delays approval for this project. This project will need to now go to another review. When resubmitting, provide the required response letter as well as address all comments for each item not previously addressed!***

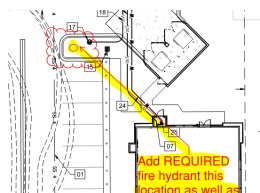
1. The applicant shall be aware that no vertical construction on this site will be allowed until such time that curb gutter and first lift of asphalt are installed; a site inspection will be required to ensure that this requirement is made prior to allowing vertical construction to commence. *Satisfied; applicant has noted, acknowledged, addressed with second submittal.*
2. The applicant shall be aware that the access road hydrant distribution was not planned to address the suppression needs for the commercial properties; this submittal is required to address the installation of one additional hydrant on site. The hydrant shall be located on the north side of the building (in the island) with a fire sprinkler control valve room to be located on the n/w corner of the building (see item number 3 below addressing the requirement to sprinkle the building); exterior access is required into the riser room. see the following with regard to hydrant location and riser room location: *Not satisfied; the applicant has noted that the "hydrant will be added to Landscape with the next submittal". This issue will not be satisfied until this issue is addressed. Note – while the riser room has been addressed, it does not appear to be sized to accommodate both the riser and the fire alarm control panel. The FACP is required to be located on an interior wall and be provided with three feet of clear space (as is an electrical panel). The riser is required to be located no further into the building than 24 inches and requires 18" of clearance on either side (same three feet of clearance noted for the FACP) and have 18 inches of clearance behind it. A preliminary floor plan of this room will be required during the site plan process to ensure that this issue is met. **Not satisfied; applicant has not provided the required response to this letter. In not responding, the applicant further delays approval for this project. This project will need to now go to another review. When resubmitting, provide the required response letter as well as address all comments for each item not***

**previously addressed! Satisfied; applicant has addressed with the fourth submittal. Information has been provided as required.**



3. 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 is a 155+ feet long and 50.56 feet wide and 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).

4. This submittal does not provide for this requirement of the code. 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. **Not satisfied; the applicant has noted that the “hydrant will be added to Landscape with the next submittal”. This issue will not be satisfied until this issue is addressed. Note – while the riser room has been addressed, it does not appear to be sized to accommodate both the riser and the fire alarm control panel. The FACP is required to be located on an interior wall and be provided with three feet of clear space (as is an electrical panel. The riser is required to be located no further into the building than 24 inches and requires 18” of clearance on either side (same three feet of clearance noted for the FACP) and have 18 inches of clearance behind it. A preliminary floor plan of this room will be required during the site plan process to ensure that this issue is met. Not satisfied; applicant has not provided the required response to this letter. In not responding, the applicant further delays approval for this project. This project will need to now go to another review. When resubmitting, provide the required response letter as well as address all comments for each item not previously addressed! Not satisfied; applicant has shown a riser room location without showing how the room is to be laid out. The applicant shall provide a floor plan of the riser room that shows that the required clearances are met, that the FACP is located on an interior wall, and that there are no other utilities that will compete with the life safety systems that are required for this room. Note – the Utility drawings indicate that domestic is to be located in a room that does not appear to be large enough to accommodate the required equipment let alone the required clearances around and to the side of the FACP and the sprinkler riser. Much like a restroom, provide documentation that all clearances are met when resubmitting as the fourth submittal did not adequately address this issue.**



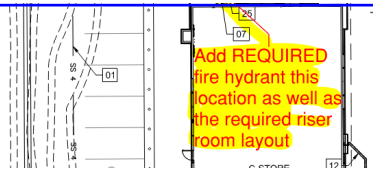
**Response:**

See sheet A1.2 for the Fire Riser Room with required clearance dimensions for the FACP and sprinkler riser. We also include an enlarged copy of Fire Riser Room with highlighted clearance dimension. This is to confirm that there are no other utilities inside the Fire Riser Room. Domestic line POC is inside the exterior wall and running above ceiling and to the Backroom. See sheet P1.1.2 for reference.

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: *Not satisfied; the applicant has provided a floor plan and while the riser room has been addressed, it does not appear to be sized to accommodate both the riser and the fire alarm control panel (I will reiterate here though the same comments are noted below). The FACP is required to be located on an interior wall and be provided with three feet of clear space (as is an electrical panel). The riser is required to be located no further into the building than 24 inches and requires 18" of clearance on either side (same three feet of clearance noted for the FACP) and have 18 inches of clearance behind it. A preliminary floor plan of this room will be required during the site plan process to ensure that this issue is met. **Not satisfied; applicant has not provided the required response to this letter. In not responding, the applicant further delays approval for this project. This project will need to now go to another review. When resubmitting, provide the required response letter as well as address all comments for each item not previously addressed! Not satisfied; applicant has shown a riser room location without showing how the room is to be laid out. The applicant shall provide a floor plan of the riser room that shows that the required clearances are met, that the FACP is located on an interior wall, and that there are no other utilities that will compete with the life safety systems that are required for this room. Note – the Utility drawings indicate that domestic is to be located in a room that does not appear to be large enough to accommodate the required equipment let alone the required clearances around and to the side of the FACP and the sprinkler riser. Much like a restroom, provide documentation that all clearances are met when resubmitting as the fourth submittal did not adequately address this issue.***

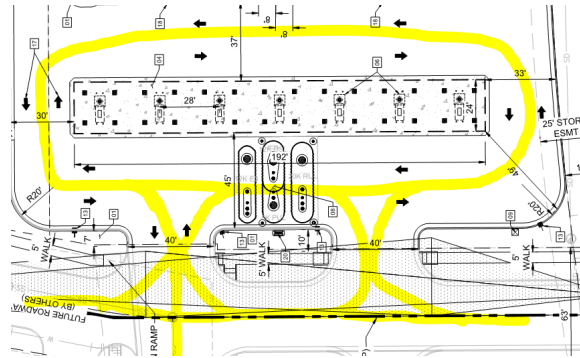
Response:

See sheet A1.2 for the Fire Riser Room with required clearance dimensions for the FACP and sprinkler riser. We also include an enlarged copy of Fire Riser Room with highlighted clearance dimension. This is to confirm that there are no other utilities inside the Fire Riser Room. Domestic line POC is inside the exterior wall and running above ceiling and to the Backroom. See sheet P1.1.2 for reference.



- 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. *Satisfied*
  - 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. *Not satisfied Not satisfied See response above.*
  - 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. *Not satisfied Not satisfied See enlarged fire riser room with clearance dimensions.*
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 noted/acknowledged/addressed with second submittal.*
7. 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. Satisfied; applicant has noted/acknowledged/addressed with second submittal.*
8. 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. This is applicable for the loop around the canopy

as well as for each entry. The access on each side of the canopy shall meet his requirement with no portion of the canopy encroaching into the required fire lane access road. See below for the areas required to be included in the auto turn analysis and address when resubmitting: *Satisfied; applicant has noted/acknowledged/addressed with second submittal.*



9. **Utility Plan Set:** The submittal package lacks the required 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 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. *Satisfied; applicant has noted/acknowledged/addressed with second submittal.*

Note – The UFL shall have its own tap; domestic water and the required fire hydrant shall have separate taps. *Not satisfied; applicant has indicated that the domestic is to be fed from the UFL; this will not be allowed. Work through this issue with the water district. Not satisfied; applicant has not provided the required response to this letter. In not responding, the applicant further delays approval for this project. This project will need to now go to another review. When resubmitting, provide the required response letter as well as address all comments for each item not previously addressed! Ensure that the UFL is clearly identified on the plan (not just the notes), show the length of the UFL, as measured from the “T” to the flange in the building, identify the diameter of the UFL, and show that domestic and the fire hydrant do not “share” the same line as the UFL. Not satisfied; the applicant has stated that the domestic and that the utility are required to share the same tap by PWSD. This is not accurate; PWSD supports two taps and NFPA 24 requires that the UFL be on its own line. As the applicant has not responded as required, this project will be placed back into revisions required. The applicant will address this issue as required. See a copy of the applicant’s comment below:*

Response:

The UFL is on its own line. The utility plans have reviewed and approved by PWSD.

10. **Utility Plan Set:** The applicant shall utilize the correct signature block for Fire Life Safety on the cover page of the utility documents as well as on the overall utility sheet. The applicant shall not use this signature block on any other pages within the document. This issue must be addressed when resubmitting. *Satisfied; applicant has noted/acknowledged/addressed with second submittal and the correct signature block has been provided.*

Note - An updated signature block has been created with regard to the utility drawing package; typically, this signature block is located on the cover sheet and the overall utility page of the water drawings. The signature block is noted later on in this document, address as applicable.

11. Should applicant be considering locating such items as propane cages, CO2 systems, ice machines, etc., the applicant should address these issues with the site plan as approval for these items is required with the site plan. Address this issue when resubmitting. *Satisfied; applicant has noted/acknowledged/addressed with second submittal.*
12. Anticipated deferred submittals for this project would include the following (as Applicable):
- Underground Fire Line
  - Sprinkler Suppression
  - Underground Storage Tanks

- CO2 Beverage System
- Fire Alarm System
- Radio Amplification System
- Access Control

**GENERAL COMMENTS (as applicable)**

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 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.

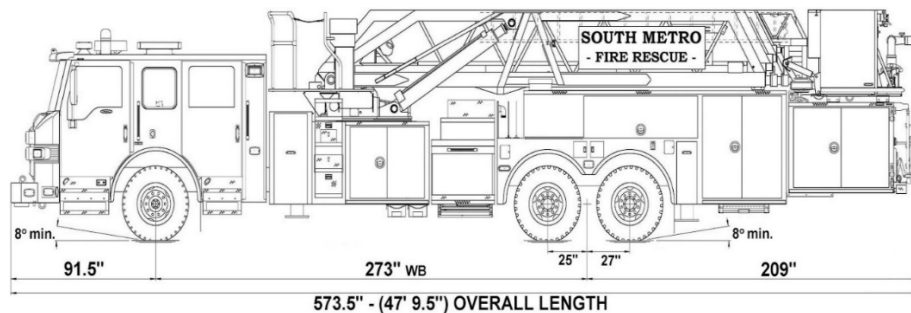
Fire Code Official or Designated Representative

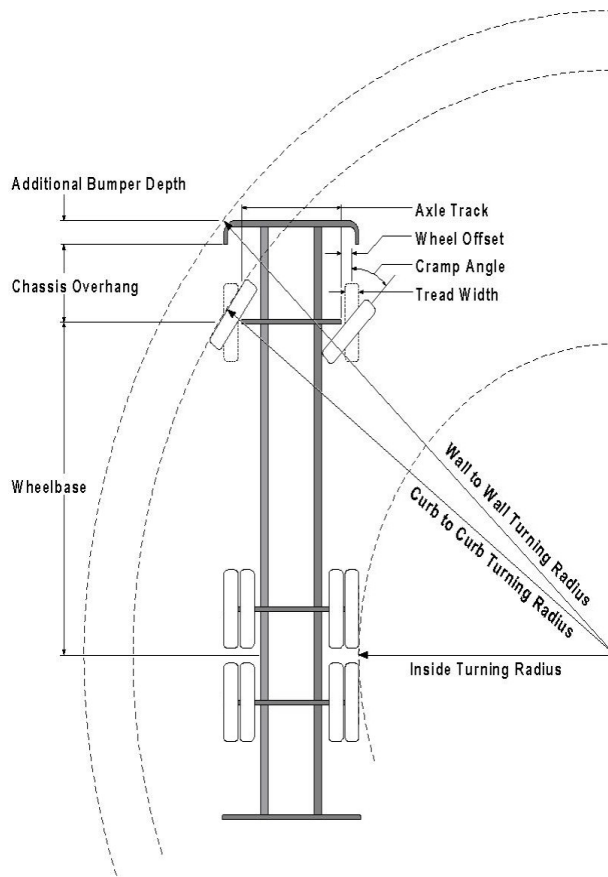
Date

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

**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.

# 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/SuppAppsProclnsp.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