



Town of Parker Community Development Department
Development Review Division
Attention: **Carolyn Parkinson**

Application Type: **Site Plan**
Status: **First Referral**
Application Name: **Parker Auto Plaza F1 L1 B3 - Retail Preliminary Site Plan**
Case/AP#: **SP18-047**
Referral Received: June 7, 2018
Comments Due: July 8, 2018

Application Location: Generally located at the s/w corner of Parker Road and Pine Lane

Review date: **July 2, 2018 Responses March 11, 2020**
Plan reviewer: **Randall L. Capra, rcapra@parkeronline.org**
Phone: 303.805.3169

TOWN OF PARKER - FIRE/LIFE SAFETY:

R REVIEWED FOR CODE COMPLIANCE; REVISIONS REQUIRED

- 1st Submittal – Reviewed July 2, 2018
- 2nd Submittal – Reviewed December 28, 2018 (*Comments in red, italicized font*)
- 3rd Submittal – Reviewed December 02, 2019 (*Comments in bold, red, italicized font*)

Narrative: The applicant, EVT Parker Colorado, LLC is proposing to replat Lot 1, Block 3 of Parker Auto Plaza Filing 1 into 7 commercial lots. The site is located on the southwest corner of Parker Road and Pine Lane.

Code Reference: **2018 International Fire Code, 2018 International Building Code**

The applicant has noted that this is a “conceptual” plan and as such, a “conceptual” plan cannot be approved by FIRE LIFE SAFETY. Fire Life Safety will approve documents based upon what has been provided; at 30%, the documents must be accurate as shown... understanding that the site plan may change at a later date. Once the applicant has fully addressed all Fire Life Safety comments, based upon the documents provided, I will be able to sign off for Fire Life Safety.

UNRESOLVED ISSUES/COMMENTS

1. **The applicant is showing a dead-end road, that exceeds 150 feet, and is located on the west side of Lots 3 and 4. An approved turn-around is required for the south end of this access; address when resubmitting. Note – Access can be achieved with the Lot 7 site plan... this issue was discussed with the development team for the new Lot 7.**
 - a. **Applicant Response: Per discussions with Randy Capra, an AutoTurn analysis has been included in the resubmittal for the internal site roadway system. Individual lot fire access will be determined during the final site plan process for each individual lot.**
2. **The applicant has modified the plan once again and has created a two new lots on the west end (adjacent to Twenty Mile Road) and in doing so, has created a dead-end that exceeds 150 feet. An approved turn around is required for any dead-end that exceeds 150 feet, as required per 2018 IFC Section 503.1.1. At this time, access to Lot 6 cannot be evaluated due to lack of information.**
 - a. **Applicant Response: Per discussions with Randy Capra, an AutoTurn analysis has been included in the resubmittal for the internal private roadway system. Individual lot fire access will be determined during the final site plan process for each individual lot.**
3. **The previous Lot 6 had an identified use of that as of a hotel (that was located just west of the proposed car wash); access to this lot was to have been provided from both the east with a subsequent access point located to the north west of the building... access will be required for this site with the same configuration as previously required.**
 - a. **Applicant Response: Noted, access for the lot in question will provide access from both directions. Individual lot access will be reviewed during the lot’s final site plan process.**

4. The applicant shall see [18 IFC Section D106.3 Remoteness] where the code states that where two access points are required, the access shall be separated by ½ the diagonal of the lot. The east access is required and the n/e access can remain if the applicant so chooses. Address this issue when resubmitting. *Noted; the applicant has indicated that this lot is “conceptual” and has acknowledged the requirement noted above. The applicant shall address the issue fully when a more “concrete” plan is developed. The applicant shall address the issue fully when a more “concrete” plan is developed.*
 - a. *Applicant Response: Per discussions with Randy Capra, an AutoTurn analysis has been included in the resubmittal for the internal site roadway system. Individual lot fire access will be determined during the final site plan process for each individual lot.*
5. The hydrant distribution for the subdivision is not adequate; the applicant has shown the required fire hydrants at each entry point but has not addressed the fire hydrants internally. Fire hydrants must be addressed for the proposed internal roads as well as for the proposed lots (addressed with the site plan).
 - a. *Applicant Response: Per discussions with Randy Capra, additional hydrants have been included around the internal private roadways. Additional fire hydrants or building sprinklers may be required during the Final Site Plan review.*
6. 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. *The applicant has acknowledged the requirement noted above.*
 - a. *Applicant Response: Comment acknowledged.*
7. The applicant shall be aware that the Town of Parker will officially have adopted the 2018 ICC codes on January 1, 2019; any submittal documents made after January 1, 2019 shall comply with the 2018 ICC codes. Note – the Town of Parker officially adopted the 2017 NEC on January 1, 2018. *The applicant has acknowledged the requirement noted above. Since the last submittal, the Town of Parker has adopted the 2018 ICC codes. Ensure that this issue is addressed for all submittals.*
 - a. *Applicant Response: Comment acknowledged.*
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) as well as all private roads and private drives; NO PARKING – FIRE LANE signage is required for any portion of the access where the 20-foot clear width requirement cannot be met. *The applicant has acknowledged the requirement noted above stating that both the auto turn analysis and signage will be included with the final site plan submittal. Not satisfied; due to the continued modifications to this site, the applicant is required to submit an auto turn analysis for each submittal. Address this issue when resubmitting.*
 - a. *Applicant Response: Per discussions with Randy Capra, an AutoTurn analysis has been included in the resubmittal for the internal site roadway system. Individual lot fire access will be determined during the final site plan process for each individual lot. Refer to the attached AutoTurn exhibit for proposed NO PARKING – FIRE LANE signage locations.*
9. *The applicant has not provided an overall utility plan with the current proposal; the overall utility plan shall show the location and size of all waterlines, gas lines, and electrical lines. The plans shall also identify the underground fire line for each building as well as the size and the length. This information shall all be identified on the overall utility plan (one sheet). Hydrants will be evaluated once a new utility plan has been provided. The correct Fire Life Safety signature block shall be provided on the cover page and on the overall utility page. Address this issue when resubmitting.*
 - a. *Applicant Response: Per discussions with Randy Capra, individual lot fire access and underground fire lines will be determined during the final site plan process for each individual lot. Hydrant coverage will be determined during the final site plan process for each individual lot. Refer to the construction documents for the requested utility and private roadway hydrants information. Fire Life Safety signature blocks have been added to the cover page and overall utility plan in the construction document plans.*
10. 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 two axle and 40 ton three axle vehicles. An unimpeded clear width of 20 feet shall be maintained at all times. 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. *The applicant has acknowledged the requirement noted above.*

a. *Applicant Response: Comment acknowledged.*

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. *The applicant has acknowledged with current submittal*

a. *Applicant Response: Comment acknowledged.*

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. *The applicant has acknowledged with current submittal*

a. *Applicant Response: Comment acknowledged.*

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 13 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. *The applicant has acknowledged with current submittal*

a. *Applicant Response: Comment acknowledged.*

Underground Fire Line - Submittal Requirements

Reference: 2013 NFPA 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: [15 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.

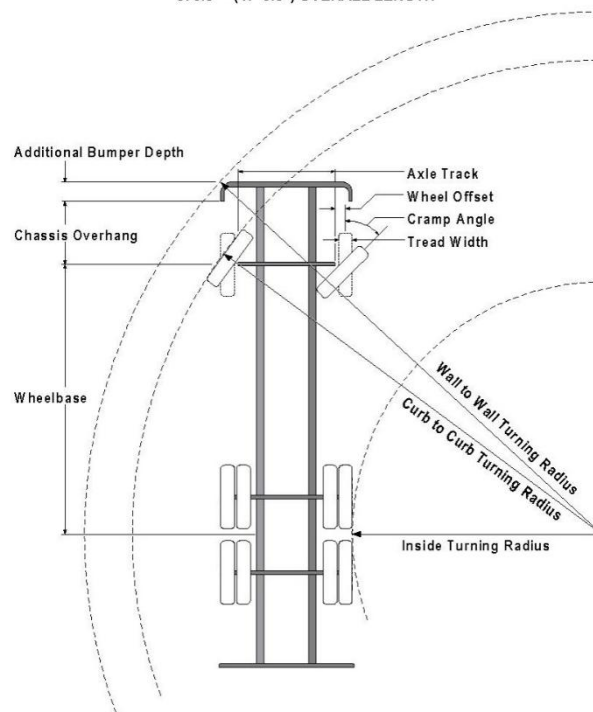
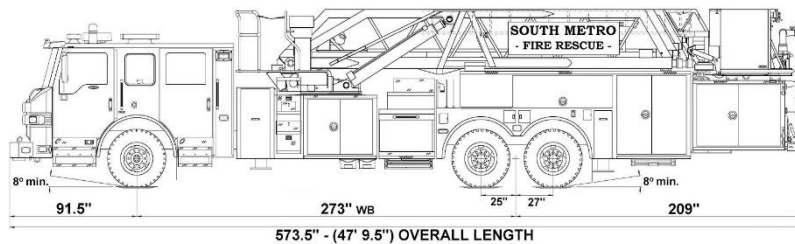
The following website for the Colorado Division of Fire Safety will provide registration instructions.

<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]

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.)