Proposed changes to Site Plan Regulation 402-5.E "Driveway and Parking Lot Design and Construction Standards"" are shown via red ink: removal of existing language is shown via line strikes; additions are shown via underlining.

402-5.E "Driveway and Parking Lot Design and Construction Standards Circulation"

- 1. All proposed site plan driveways and parking lots shall meet the minimum standards of these regulations. The Board reserves the right to impose additional standards and construction criteria based on the size, location, and use of the proposed property.
- 2. The required design [driveway width, cross slope, depth of sub-base, base, and surface layers, shoulders, curbing, depth and location of utilities, drainage pipes and structures, etc.] shall be in conformance with City Specifications and Standards or as modified by the standards in E.3 below.
- 3. Pavement surfaces intended for Light Duty may be constructed with 6 inches of sub-base gravel, 6 inches of crushed gravel, 2 inches of base pavement and 1 inch of top course pavement.
- 4. As used above, Light Duty pavement is defined as any use where the primary traffic will be passenger vehicles with only occasional heavy delivery truck traffic. For example a typical box drugstore, small office condo building, or a restaurant. The Board does reserve the right to require and/or allow a combination of light duty pavement and regular pavement to be used on a site such as a typical grocery store with more regular truck traffic using designated access driveways and loading zones. The final decision on the use of light duty pavement on a site rests with the Board.
- 5. To assure proper drainage and for public safety, parking lot grades shall not be less than 1% or more than 5%, and the driveway grads shall not be less than 1% or greater than 8%, unless the latter percentage is specifically waived by the Board.
- 6. No driveway grade in excess of 3% shall be permitted within 200 feet of any intersection with collector or arterial streets. No grade in excess of 3% shall be permitted within 100 feet of any intersection within a subdivision. These requirements may be waived by the Planning Board where appropriate because of topographic conditions.
- 7. Driveway intersections and curves (vertical and horizontal) shall be designed as to permit adequate visibility for both pedestrian and vehicular traffic. The designs shall conform to standard and accepted engineering practices and must be approved by the Board's consulting engineer.

- 8. The placement of either the base or top courses of pavement shall be performed in conformance with City standards for materials, placement, weather conditions, temperatures, etc. A tack coat will be required before the placement of the top course, and the base course must be swept before the top course is installed, and shall be free of debris, sediments, etc. that would interfere with the installation and adhesion of the top course. All joints between proposed and existing pavement shall be cut to a clean, straight line and painted with bitumen prior to installing new pavement materials.
- 9. If the site design calls for the construction of any retaining walls, the Board reserves the right to require that the wall(s) be designed by a structural engineer. No rock/boulder retaining walls are allowed. Any wall must be built of materials intended to be used for that purpose.
- 10. For any driveway for which grades and elevations require the installation of a culvert to facilitate drainage and stormwater, the minimum culvert size allowed is 15 inches. All driveway culverts shall be designed and constructed in such a manner so as to prevent scouring or erosion of the drainage ditch or other adjacent grading. The design may include, but is not limited to, a headwall, with or without wing walls, flared ends stabilized with graded and seeded side slopes or trap rock, or other approved design by the Board.
- 11. The maintenance of all driveway culverts or any portions of the driveway itself, whether inside or outside of the ROW or unless so indicated in the approval documents for the subdivision, are the responsibility of the applicant, developer, initial property owner, or any successor in ownership.

PARKING AND CIRCULATION

(A) Number of Required Parking Spaces

The minimum number of designated off street parking spaces shall be provided on each site based upon the type of use, as shown in the table below.

Table of Parking Requirements

Minimum On-Site Parking Space Requirements		
Properties within the Downtown Revitalization District (DRD) Zoning Overlay District	Properties in all other Zone Districts	Other Standards / Notes:

Retail, Office,	No minimum.	3 spaces per	
Restaurant, or		1,000 gross	
Service Uses:	Maximum 16-space	square feet	
• Retail Establishment	Parking Lot for any	=======================================	
• Eating and Drinking	single tenant		
Establishments	<u>single tellant</u>		
• Service Establishment			
• Transportation Service			
• Office			
• Office, Medical			
• Office, Professional			
• Pharmacy			
Adult-Oriented			
<u>Establishments</u>			
• Bank			
Personal Services			
• Health Club			
Veterinarian			
• Kennel			
• Funeral Home			
• Laundry Establishment			
1 and 2			
 Printing Facility 			
• Yard Sale,			
Commercial			
Automobile Uses:	No minimum.	1.5 spaces per	
• Gas Station		<u>1,000 gross</u>	
• Vehicle Sales, New		square feet, plus	
• Vehicle Sales, Used		1 space per 15	
• Motor Vehicle		<u>exterior</u>	
Sales/Rental		sale/rental	
• Vehicle Service		display spaces,	
		plus 4 spaces	

		per service bay.	
Parking • Public Parking Facility • Commercial Parking Facility • Parking Lot	No minimum.		Commercial Parking Lots in the DRD Zone District subject to Special Use Permit Review. Parking Lots in the DRD Zone District in excess of 20 spaces per individual business subject to Special Use Permit.
Residential Uses • Dwelling Unit • Caretaker Apartment • Accessory Apartment • Accessory Dwelling Unit • Security Apartment • Residential Use, Senior Housing • Residential Use, Accessory Apartment	No minimum for up to 5 residences on a single parcel. Thereafter, .75 spaces per studio unit and 1 space per bedroom, with a maximum requirement of 2 spaces per residence.	Two parking spaces per unit.	For DRD District properties with more than 10 residences, the parking exemption shall apply to the 5 smallest units. Whenever 30 or more spaces are required for residential uses, for each 30 spaces there shall be one space must be fitted as an electric vehicle charging station.
Civic Uses: School, K-12 School, Other Public Gathering / School / Church Function Hall Assembly Hall Civic, Social, or Fraternal Club Theater House of Worship Emergency Services Conference Center	No minimum. Greater of 2 spaces per	Greater of 3 spaces per 1,000 gross square feet or .25 spaces per seat at maximum capacity or 2 spaces per classroom.	Parking for Emergency Services shall be established by the Planning Board.

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	square feet or .25 spaces per seat at		
	maximum capacity.	T	
Lodging Uses:	.5 spaces per	.75 spaces per	
Lodging Facility	individual unit (key)	<u>individual unit</u>	
• Hotel	plus 1 space per 1,000	(key) plus 1.5	
• Motel	gross square feet for	spaces per 1,000	
Bed & Breakfast	area dedicated to	gross square feet	
 Boarding House 	Eating and Drinking	for area	
	Establishments	dedicated to	
	serving the general	Eating and	
	public.	Drinking	
	No minimum for	Establishments	
	properties within the	serving the	
	DRD Zone District	general public.	
	fronting any of the	1	
	Central St. between		
	East Bow St & River		
	St.		
Industrial Uses:	1 space per 1,000	1 space per	
• Industry	gross square feet.	1,000 gross	
• Industry, Heavy	gross square room	square feet, plus	
• Industry, Light		3 spaces per	
• Industry, Recycling		1,000 gross	
• Junkyard		square feet for	
• Solid Waste Facility		area dedicated to	
• Tank Storage Facility		offices or retail	
• Truck Terminal		sales.	
• Laundry Establishment		<u> </u>	
<u>3</u>			
 Wholesale Operation 			
• Warehouse / Storage			
• Factory Retail			
• Research and			

Development Facility Trade Shop Utility, Power Generation Utility, Other			
Agricultural / Nursery / Animal Husbandry Uses • Farm • Farm, Growing of Crops • Roadside Farm Stand • Plant Nursery • Saw Mill • Saw Mill, Temporary • Stable • Stable, Commercial	3 spaces per 1,000 gross area dedicated to retail so minimum for all other as	ales. No	Processing facilities are defined as "Industrial Uses".
Hospital	1.5 spaces per 1,000 gross square feet. Plus 1 space per bed.		
Assisted Living Uses: • Senior Housing • Nursing Home • Assisted living Facility • Group Home • Halfway House	.5 spaces per bed.	.75 spaces per bed.	
 Day Care Uses: Day Care Center Day Care - Family Day Care Residence Adult Day Care Center 	.25 spaces per person cared for or a minimum of 1 space (whichever is greater) plus one space per employee.		

• Adult Day Care Home			
Recreational Uses: • Country Club	No minimum.	3 spaces per 1,000 gross	No minimum requirement applicable for publicly-owned
• Golf Course • Recreation, Indoor		square feet, plus .25 spaces per	recreation parks.
• Recreation, Outdoor		customer at	
• Recreation, Park		maximum capacity for	
		outdoor facilities and	
		spectator	
		accommodations	

(B) General Provisions Regarding Required Parking Spaces

- (1) Purpose. The purpose for setting a minimum required number of on-site parking spaces is to support the local economy by facilitating access to and within the City of Franklin, enhance access to living, employment, civic, social, and economic opportunities, eliminate or minimize inefficient and unsafe parking arrangements, and optimize use of public infrastructure, including on-street parking spaces.
- (2) Conflict with other regulations. Where any provisions in this section, Parking and Circulation, are also covered under other ordinances/regulations/laws the stricter provisions take precedence.
- (3) Changes in Use. When a proposed use on an established site requires more parking spaces than the existing use, additional parking spaces shall be provided to accommodate the proposed use. If it is not practical to create additional parking spaces for the new use, the Planning Board may reduce or waive up to 100% of the additional spaces pursuant to the regulations below.
- (4) Aggregate Requirement. Where multiple uses are shared within one facility or building, parking requirements shall be determined by adding the requirements for each individual use, such as for a retail sales business which also has spaces for office

- use and storage.
- (6) Use Restrictions. Required parking spaces shall not be used for any purposes (such as storage, display, etc.) other than vehicle parking unless specifically approved by the Planning Board.
- (7) Fractional Requirement. Where the sum of the parking space computations results in a fractional number, fractions of less than one-half (1/2) shall be waived and fractions of one-half (1/2) or more shall be counted as one space.
- (8) Similar Uses. The parking requirements for uses that do not fall within one of the categories in the list above shall be based upon the closest similar use as determined by the Planning Director.
- (9) Loading Areas. Off-street loading spaces shall not be counted to satisfy the off-street parking requirements.

(C) Reducing the Number of Required Parking Spaces

Through the special use permit process, the owner/applicant may request a reduction in the minimum number of required spaces. Such a request shall be accompanied with data on the number and size of the residential units, historic experience and evidence describing parking needs for similar mill redevelopment projects, lease language on limits on the numbers of vehicles per specific units, unique on-site or off-site conditions*, or other information or data deemed appropriate.

- *(1) Unique existing site conditions, such as an existing site layout, vegetation, water ways, geologic features, existing buildings, historic resources, access points, or other physical, operational, or legal impediments representing a practical difficulty (as opposed to a mere inconvenience) to achieving the prescribed number of parking spaces.
- In this circumstance, the Planning Board shall determine the maximum number of parking spaces which can be reasonably situated on the parcel, the necessary mitigation measures to be required of the applicant, and may waive the remaining required parking spaces up
 - a. Acceptable mitigation measures may include:
 - i. Capital or operational assistance to the pedestrian, bikeway, or transit system which may include developing onsite or off-site improvements.
 - ii. Implementation of transportation demand management techniques such as varied work schedules, carpooling incentives, unbundling parking from commercial leases, or similar measures.
 - iii. An agreement with a neighboring property regarding overflow parking. The agreement shall be perpetual or recurring and not be cancelable be either party.
 - iv. Designation of an overflow parking area on site, whether paved or not.

- v. Or, other mitigation measures the Planning Board believes will be reasonably successful in offsetting the parking demand and commensurate with the number of parking spaces waived.
- b. Accepted mitigation measures shall be documented in an enforceable Notice of Decision, in a form acceptable to the City Attorney, between the landowner and the City of Franklin binding the landowner's performance on all mitigation measures accepted in-lieu of on-site parking. The Notice of Decision, at a minimum, shall specify the capital and operational obligations of the landowner, enforcement procedures, cure procedures, and abilities to modify the Agreement.
- *(2) Off-site conditions that represent a practical advantage of the parcel's location and predict a lower reliance on the personal automobile to access the site.
 - a) Acceptable off-site conditions may include:
 - i. Presence of public transportation, pedestrian, or bicycle infrastructure located within 660 feet (1/8 mile) of the subject parcel.
 - ii. Presence of a Municipal Parking Facility located within 660 feet (1/8 mile) of the subject parcel.
 - iii. Presence of a Commercial Parking Facility located within 660 feet (1/8 mile) of the subject parcel.
 - iv. Presence of on-street parking located within 660 feet (1/8 mile) of the subject parcel.
 - v. Presence of off-site uses with counter-peak demand patterns conducive to shared parking. "Off-Site uses" can include separate tenants or uses within a single, multi-tenant property.
 - vi. Presence of other unique attributes of the parcel's location or context that represent a practical advantage to minimizing reliance on the personal automobile to access the parcel (such as close proximity to public transportation, bicycle/pedestrian ways that could be reasonably used for commuting, etc.)
 - b. Accepted off-site conditions shall be documented in an enforceable Notice of Decision.
 - c. There is to be no expectation on behalf of any development, or obligation on behalf of the City of Franklin, that the City of Franklin's municipal parking spaces are a viable bank of parking.

(D) Handicap Requirements

(1) All sites and parking lots shall follow the current Americans With Disabilities Act (ADA) standards.

- (2) Cast iron truncated domes (textured plates) to alert visually-impaired persons shall be installed at tip downs where sidewalks meet streets, driveways, and parking lots.
- (3) Tip downs are required on all sidewalks.

(E) Parking Lot Design

Except in the Downtown Revitalization District, unless stated otherwise, the following regulations do not apply to parking areas for one, two- and three-family residences where parking can be accommodated within the driveway; one-, two- and three-family residences also permit the stacking of parked vehicles per individual unit; but for residential structures with more than one unit, the vehicular parking for any one unit shall not block the ingress or egress of any vehicles of another unit.

(1) General Requirements

- (a) Within the Downtown Revitalization District parking lots must be located at the rear of principal buildings unless the Planning Board determines that placement at the rear is not practical, in which case parking lots may be located at the side of principal buildings set back at least as far as the front of the building or 15 feet whichever is greater.
- (b) Illumination: If any, shall be so arranged as to direct the light away from streets and away from adjoining properties, and no more than 0.5 foot candles on abutting residential lots/zone, and 1.0 foot-candles on abutting commercial/industrial lots/zone. Maximum fixture heights are 18-feet in the Downtown Redevelopment District and residential zoning districts, and 22-feet elsewhere. Maximum illuminance: Horizontal illuminance on the ground shall not exceed the following: 5 foot-candles in the Residential and Agricultural zoning districts, 10 foot-candles in the Special Downtown Revitalization District, and 15 foot-candles in the Business and Industrial districts
- (c) All parking spaces shall be demarcated with white or yellow traffic paint/marking of four (4) inch minimum line width.

 No demarcation is needed for uses where parking is best handled opportunistically if that approach will be safe and effective. This might apply, for example, to a self-storage facility or vehicle dealership.
- (d) Parking areas shall have a minimum grade of 0.5% and a maximum grade of 8%.
- (e) Channelizing/stacking space shall be provided at entrances into sites, exits out of sites, and other appropriate areas, such as drive through and order windows, in order to avoid undue vehicle queues in the public road or on site. For all establishments which offer service by drive-through facilities, by-pass lanes shall be provided.

- (f) The Planning Board may stipulate driveway and parking lot interconnection of adjoining parcels where it determines that such interconnection is practical, will enhance traffic movement and on site circulation, and will reduce the number of vehicles entering and exiting the street. Where an adjacent lot is vacant a stub out to the property line may be required to accommodate future connection. For shared driveways and parking lot/driveway connections cross-easements shall be recorded at the Registry of Deeds.
- (g) Each site shall have full internal vehicular circulation, with access from any location on the site to any other without need to use the adjacent street system. Parking areas shall be designed such that it is not necessary for vehicles to back into a public road.
- (h) Curbing, striping, islands, landscaping, traffic calming practices, signage (in accordance with current The Manual on Uniform Traffic Control Devices for Streets and Highways "MUTCD", or appropriate other means shall be provided as needed to control and direct traffic.
- (i) Fire lanes and emergency vehicle access into and through the site shall be provided as necessary.
- (j) All parking lots are to have an on-lot stormwater treatment and detention/retention system
- (k) Driveway Design: Refer to Chapter 149 "Driveways". All driveway 'throats' shall be at least 20 feet in width (except for parking aisles, as specified in the table, above). Any driveway wider than 24 feet must be justified based upon large traffic volumes, the need to accommodate oversized vehicles, or other considerations.

(2) Stall size

- (a) The standard parking stall, located perpendicular to the traffic aisle, shall be at least 9 feet wide and 18 feet long.

 Consideration can be made for smaller spaces designed and signed for use by "compact vehicles".
- (b) Parking stalls set at an angle to the traffic aisle shall be large enough to fully contain a rectangle measuring at least 9 feet in width and 18 feet in length.
- (c) Parking stalls oriented parallel to the traffic aisle (i.e. parallel parking spaces) shall be at least 8 feet wide and 22 feet long.
- (3) Width of Drive Aisle. The width for traffic/drive aisles shall be as follows:

Angle of parking stall To traffic aisle	Two way circulation - Minimum aisle width	One way circulation - Minimum aisle width
90 degrees	<u>24 feet</u>	<u>22 feet</u>
60 degrees	Not Permitted	<u>18 feet</u>
45 degrees	Not Permitted	<u>18 feet</u>

(4) One Way vs. Two Way Circulation. In most cases, the conventional parking layout with spaces situated perpendicular to the traffic aisle is preferred (middle column, above). However, there may be situations when a one way circulation pattern with angled parking spaces works better (right-hand column, above).

(F) Pavement Structure

- (1) All parking areas and travel ways shall be surfaced with asphalt, concrete, paving stones, or other material(s) that will provide reasonable protection against potholes, erosion, and dust, and will not be subject to damage from snow plowing. However, crushed stone, gravel, grass pavers, and other methods may be appropriate for developments which generate little parking and traffic, developments in rural or outlying areas, and low usage overflow parking areas.
- (2) All parking areas and travel ways that are paved with asphalt shall have a structural section with these minimum specifications:
 - 1 inch top "wearing" course,
 - 2 inch base "binder" course,
 - 6 inch bank run gravel, and
 - 6 inch crushed gravel.
- (3) Loam or yielding material shall be removed to a depth of at least 20 inches below final grade and muck shall be removed to a depth of at least 36 inches below finish grade, and replaced with gravel. Given that these are privately maintained areas the Planning Board may adjust these standards appropriately on an individual basis.

(G) Curbing

(1) Curbing or other means of articulation may be required within the site to facilitate traffic circulation, direct drainage, and protect

landscaping.

- (2) Curbing shall have a 6-inch vertical reveal. Sloped curbing shall also have a 6-inch vertical reveal and it shall be set at a 45 degree angle unless otherwise approved by the Planning Board. Where curbing forms the edge of a sidewalk, the curb shall be vertical or sloped.
 - a) Granite curbing is required in the Downtown Redevelopment District.
 - b) Where concrete curbing is used, it may be either cast-in-place or pre-cast. It should: have a minimum strength of 2,500 psi; be at least 18 inches in depth; and be at least 5 inches in width.
 - c) Where asphalt (bituminous) curbing is used, a tack coat of bituminous material should be placed on the pavement for the width of the curb before placing the curb.
- (3) Any curbing placed within or along the street right of way shall be vertical or sloped granite curbing, as specified by the Planning Board. Placement of curbing within the street right of way may be appropriate in order to articulate turning radii at the entrance, direct stormwater, protect sidewalks, reinforce road structure, continue existing curbing, or perform other functions.

(H) Landscaping

- (1) For the purpose of mitigating the visual impact of parking lots and driveways from the road and abutting properties, providing shade, stormwater mitigation, and snow storage, 10-foot wide (minimum) front and side landscaping buffers are required.
- (2) All off-street parking areas shall be screened from the public right-of-way to provide at least 50% vertical opacity on average up to a height of 3-1/2 feet above grade, excluding areas that would impact vehicular site distance. A combination of plantings, mounds, berms, walls, and fences may be used to provide this screening. This screening will often in conjunction with the front buffer. Use of a slightly elevated berm is encouraged to provide additional screening of cars and paved areas.
- (3) Landscaping should be used to delineate vehicular and pedestrian circulation patterns within parking lots and throughout the site.
- (4) Trees should be distributed throughout the parking lot as evenly as practical, in order to provide optimal canopy coverage and shading.
- (5) A landscaping peninsula shall be placed at the end of each parking row (such a peninsula is also referred to as an "end cap"), in

line with the adjoining parking spaces, measuring at least the same dimensions as the adjoining parking spaces, wherever the row of parking spaces is adjacent to a perpendicular travel way. Each peninsula shall be planted with one shade tree, or one ornamental tree if use of a shade tree is not practical, for lack of space for roots. Where two peninsulas back up to one another, there may be space for only one ornamental tree (rather than a shade tree) near the tip of each peninsula.

- (6) There shall be no more than four continuous parallel parking rows on the interior of the parking lot (i.e. parking rows along the perimeter of the parking lot are not situated on the interior) without installation of a landscaped median separating those parking rows from any additional parking rows. The landscaped median shall be at least 8 feet wide and shall be parallel to and run the same length as the adjacent parking rows; the median may be required to house a 5-foot wide walk way depending upon the intensity and size of the use.
- (7) The landscaped median, referred to above, when included, shall be planted with evergreen shrubbery and at least one ornamental or shade tree for every 50 linear feet of the median. The landscape median shall be planted with sufficient trees and shrubs in order that, at maturity (defined herein to be 5 years from installation), at least 25% of the area of the median, as looked down upon from above, would be covered by the canopies/crowns of the trees and shrubs.
- (8) Shade and/or ornamental trees shall be planted in and around the parking lot in order that no spot on the parking lot is situated further than 75 feet from the center of the trunk of a shade or ornamental tree.
- (9) These required landscaping areas are encouraged to also double as Low Impact Development stormwater treatment areas.