

General Comments: Reducing excess parking in current ordinances is beneficial in multiple ways, as is occurring in Pittsboro's UDO, because it can make new development or re-development more walkable. However, Chatham Park developers would also gain financially from more buildings and less parking per acre, by an increase in the development value of their holdings. Thus care needs to be taken that parking is adequate for the future residents with the least space, and clout, such as apartment renters.

The parking and loading section of the UDO is more detailed and probably more appropriate for Chatham Park than the sketchy requirements here.

Porous Paving: The impact of run-off from parking in such dense development could be greatly reduced if they would commit to a PDD-wide standard of porous paving for parking areas. (One example of this can be seen at the NC Botanical Garden in Chapel Hill.) Such paving is typically smooth enough for wheelchairs and strollers.

Unfortunately, neither the Master Plan nor these elements have any building standards, because outdoor patios for restaurants or common areas, in parks, or even at residences ought to be constructed with porous pavers, but it seems unclear where that requirement should go, though stormwater seems as good a place as any.

Porous paving for parking lots, patios, and even sidewalks would have the added benefit that they would reduce dangerous icing, including that from snow melting and refreezing under a snow surface.



Xeripave, a pervious paver, used with permeable pavers. Photo courtesy of Xeripave Super Pervious Pavers.

There are a lot of different varieties being used today. Pervious, permeable, and porous pavers/paving are not the same thing. More here: <http://stormwater.wef.org/2013/10/pervious-permeable-porous-pavers-really/>

Including porous paving throughout Chatham Park everywhere possible (i.e not streets or heavy vehicle travel or loading areas) would be a "sustainability" feature that would benefit the developer as well as helping to filter parking lot runoff.

For site plan review, the specific area that is porously paved could be given partial credit, no more than 25%, but not full credit in calculating paved/roofed area versus vegetated area. (Because in heavy storm events much of that water could still run off.)

Pittsboro UDO: Parking requirements are an area where the UDO and Chatham Park should be in closer agreement, see Section 5.4 (pdf pp. 122-145 of Module 2, accessible at http://www.pittsboroudo.com/sites/pittsboro.engagingplans.org/files/media/Pittsboro%20UDO%20Module%202_Review%20Draft.pdf)

For that reason I am not commenting on the specific C.Park parking schedules/tables for the most part.

Specific Comments:

(p.42 pdf p.43) Off street Parking and loading: "*Except as otherwise provided herein...*" This is not explained or referenced later.

Off street parking schedule A: In all cases an alternative can be proposed, "based on a parking study prepared by a North Carolina licensed design professional." A design professional seems the wrong person to calculate parking needs -- rather than merely design how those spaces are laid out -- surely this should be done by a qualified planner.

(p.51 pdf p.52) Off street parking schedule B: Parking spaces are supposed to be based on the square footage of indoor space, not number of employees, or use. This makes no sense though it's easier for a developer who plans to build on spec, then lease or sell, rather than selling a site to a company to own, build and use, or developing for specific tenants.

Yet on (p.52 pdf p.53) there is a reference to occupancy based parking requirements. It appears the applicant developer can pick and use whether to use occupancy or area as a basis for calculating parking spaces.

(p. 52 pdf 53) Off street parking for bicycles: "*In all cases, required off-street vehicle parking may be reduced by one (1) space for each two (2) off-street bicycle parking spaces provided above the required minimum number of off-street bicycle parking spaces.*"

This is too blanket a provision. Right now the condos for example don't provide two spaces per bedroom for commuting couples, and bike racks are most likely to be used for short trips (weather permitting), or temporary storage. While CPI may promote the notion of live-work-play in one place, tied housing went out with the mill village and for many years there will be CP residents car commuting to work, and CP employees car commuting in to work.

Future occupants of a one bedroom condo could require two vehicle spaces and shares in visitor parking, with or without bike racks. These standards will govern development before mass transit is available AND convenient and goes where people need to go without tripling journey time. Further on in these elements (pp. 103-106) it appears that parking requirements must assume no additional mass transit for many years.

(p.52 pdf p.53) "Up to ten percent of the required number of off-street vehicle parking spaces may be used and designated as electric vehicle (EV) charging stations." This language means that no more than one in ten spaces can be EV charging spots, but there is no requirement that there be any at all. Nor is this language specific to each site or off street parking area, and therefore could be averaged over the entire 7,000+ acre PDD.

Wouldn't it be better to change this requirement to ensure the following:

- a) a minimum number of off-street parkings to have designated and installed EV charging stations and spaces, for each off street parking area)
- b) installed underground infrastructure so that the number of those spaces can be expanded.

Charging spaces/stations should be provided for apartment buildings or condos that would lack the charging potential of a single family detached home.

In addition, parking lots are ideal locations for additional solar PV installations since they can provide summer shade and winter shelter, even when they are not providing direct power to EV charging stations as below.



An electric car charged at a solar power carport in Shanghai, China. Photograph: Imaginechina/REX/Shutterstock

(p.53 pdf p.54) Off Street Loading Requirements: Once again, loading requirements are based on square footage rather than use, even though one table is supposed to apply to "*industrial, office, institutional, business, and other uses that can be expected to regularly receive or deliver goods...*" (For a moment let's leave aside that it ought to be "receive, ship, or deliver goods.")

Such a blanket schedule for these broad categories of land use, seems totally inappropriate. An institutional building like a school or library may receive goods, but hardly on the scale of a grocery store or Walmart of the same size. The only rationale for this is if an awful lot of non-residential building is going to be thrown up with no designated uses or tenants in mind, let alone in hand.

(p.54 pdf p. 55) Surfacing [Vehicular Use Areas, off-street]: "*Each VUA shall be paved unless alternative materials are approved by the Planning Director.*" This means any of various types of porous or permeable paving materials or designs require special permission, when they should be the standard, with solid paving or gravel being the variants requiring this extra step.

(p.55 pdf p.56) The wording here requiring safe pedestrian connectivity between parked vehicles and buildings etc is far too vague. In addition there is no provision for the safe movement of pedestrians among parked, parking, and moving vehicles, who are not arriving at the site in a vehicle, but on foot.

Vehicle Stacking Areas: This appears to be the term for when vehicles are lined up at a drive-through facility or window (or for school pick up).

Mail Box Kiosk: These are curious requirements. A person with disabilities better not move to an area served by 13 or fewer mail boxes per kiosk, and surely these should require at least one parking space. Where is the USPS employee to park?! There is no standard set for where these kiosks should be located. While it may be assumed (p.56 pdf p.57) that residents of apartments, condos and townhouses can walk to the kiosk, there would still need to be a parking spot for USPS delivery.

(p.56 pdf p. 57) Use of Vehicular Use Areas: This is unacceptable language. If a VUA includes driveways, residents could not park their boat or camper, allow a guest to park their camper, or hold a garage sale! There is no definition of what constitutes long-term storage.

In addition, it's not uncommon for either groups of families or non-profits etc. to use parking lots that are empty on a Saturday morning to have a group yard sale. Such ridiculous restrictions would a serious annoyance in HOA or POA rules but they certain have no business in town standards for Chatham Park.