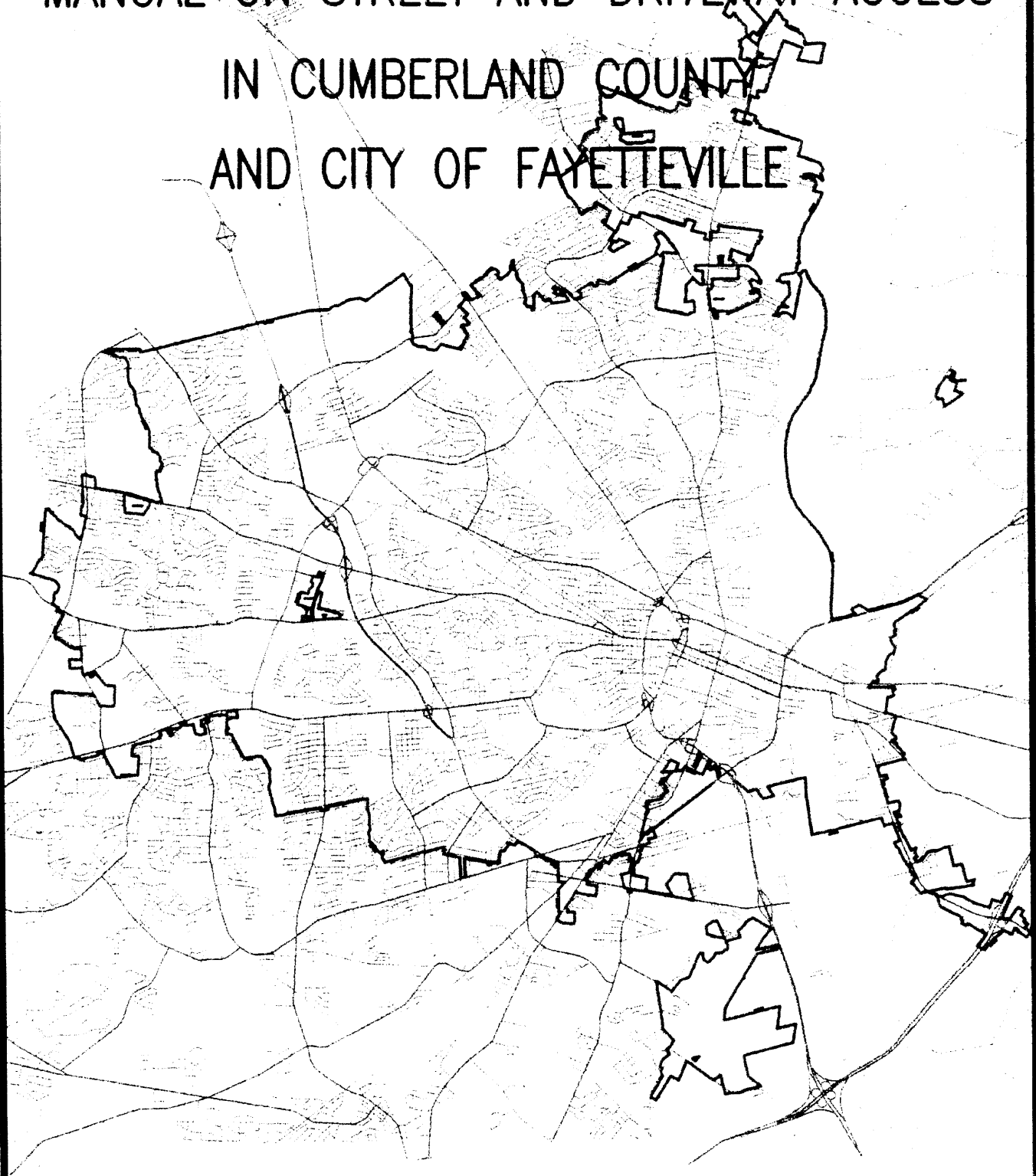


MANUAL ON STREET AND DRIVEWAY ACCESS
IN CUMBERLAND COUNTY
AND CITY OF FAYETTEVILLE



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I. Introduction

Cumberland County is an urbanized county. This refers to the large amount of urban-density development within the county that lies outside of municipal boundaries. Such large scale development within the county occurs mainly along major corridors of the thoroughfare system. This has resulted in congestion and greater potential for traffic accidents. Access along major and minor thoroughfares must be restricted in order to maintain the capability of the thoroughfare network to function properly.

The Policy on Street and Driveway Access to North Carolina's Highways (referred in this document as the NCDOT Driveway Manual) establishes the minimum requirements for the location, design and construction of street and driveway connections throughout the State. This Manual on Street and Driveway Access in Cumberland County contains more strict requirements for certain types of development than are given in the North Carolina Department of Transportation policy and it applies to developments occurring within the Fayetteville Transportation Planning Area. This manual contains only those requirements that are stricter than the NCDOT standards and is to be used as a companion document to the Policy on Street and Driveway Access to North Carolina's Highways, for that portion of Cumberland County within the Transportation Planning Area boundary. The requirements given in the NCDOT Policy on Street and Driveway Access to North Carolina's Highways apply to all circumstances not given in this manual. The more strict requirements are needed because of the vast amount of urbanized development taking place throughout the county. These provisions do not apply to driveways for individually owned single-family detached dwellings or duplexes. It is the intent of the approving authorities to gradually expand the enforcement of this manual to all of Cumberland County, to include other Municipalities. In the event that either this manual or any other manual referred to herein be amended, applicants for access permits shall comply with the more restrictive requirements.

II. General Requirements

All driveways shall be constructed in conformance with the construction plans and specifications approved by the approving authority(s). Enforcement of this manual will be the responsibility of the approving authority(s).

- A. **Driveway Angle.** Driveways shall be constructed at a 90 degree angle to the street unless approval for a different angle is granted by the approving authority.
- B. **One-way Driveways.** Refer to "Street and Driveway Access Design Criteria" Section A. Site Requirements, item 7. Circulation Pattern, and Figures 26A and 26B of the NCDOT Driveway Manual.
- C. **Driveway Location.** The choice of proper location for a driveway(s) must involve consideration of the amount of conflict, which can be expected both within the parking area and on the abutting street(s). One primary principle, which shall be followed, is to reduce the number of driveways to a practical minimum, thus providing fewer locations where conflicts may occur. Refer to Table 4 for the number and spacing of driveways. Refer to "Street and Driveway Access Design Criteria" Section A. Site Requirements, item 1. Location, of the NCDOT Driveway manual, for additional requirements.

- D. Adequate Space Beyond Driveway. Refer to "Street and Driveway Access Design Criteria" Section A. Site Requirements, item 5. Vehicle Storage Space, and item 7. Parking, of the NCDOT Driveway Manual, for additional requirements.

III. Driveway Types

All driveways within the jurisdiction of the municipalities or county shall be one of three types: Type I, Roll Curb Tie-In, as described below; Type II, Ramp-Type and Type III, Street-Type, as specified in Figure 22 and Figure 23 of the NCDOT Driveway Manual.

A. Type I. Driveways (Roll Curb Tie-In).

These type driveways will only be allowed on streets with roll-type curbing and only on Municipal Streets. The concrete or asphalt ties directly to the top of the curb without the necessity of a driveway ramp or curb returns. All requirements set forth by this Manual, regardless of driveway type, shall be met.

Drop Curb Driveways

Drop curb driveways are not accepted by the municipalities or county for new construction. There are a few streets within the urbanized area which had drop curb driveways installed when the streets were constructed. Existing drop curb driveways that are usable to the applicant will be allowed to remain.

Joint Driveways

Joint driveways should be used to limit the number of driveways along a corridor (refer to "Street and Driveway Access Design Criteria" Section B. Number and Arrangements of Driveways of the NCDOT Driveway manual) Landowners of adjacent property within the jurisdiction of the city may obtain a joint driveway permit from the City of Fayetteville; landowners of adjacent property within the jurisdiction of Hope Mills, Spring Lake or the county, may construct a joint driveway to service both properties through a written mutual agreement by both property owners. All joint driveways are subject to the following:

1. Where applicable, all requirements of the municipalities and county shall be met with the exception of the side clearance restriction, which shall not apply.
2. In the event the driveway does not conform with the municipalities and county requirements, the driveway shall be corrected to conform to these requirements by and at the expense of the applicant. Failure to do so, shall result in the approving authority closing such driveway until appropriate corrective action is completed.
3. If a joint driveway exists and the property owner(s) wish to discontinue its use as a joint driveway for whatever the reason, the driveway shall be closed in a manner approved by the approving authority and all costs will

be borne by the property owner(s). A separate permit will be required for the closing of a joint driveway and construction of any new driveways as a result of the closing.

4. Neither the City of Fayetteville nor Hope Mills, Spring Lake, or Cumberland County is responsible for future conveyance of joint driveways by future owners of property.

IV. Driveway Design Elements

- A. Sight Distance. Refer to "Street and Driveway Access Design Criteria" Section A. Site Requirements, item 2. Sight Distances of the NCDOT Driveway manual.
- B. Visibility. Refer to "Street and Driveway Access Design Criteria" Section A. Site Requirements, item 2. Sight Distances of the NCDOT Driveway manual.
- C. Storage Lanes. Refer to "Street and Driveway Access Design Criteria" Section A. Site Requirements, item 5. Vehicle Storage Space of the NCDOT Driveway Manual. The length of queuing lanes will be determined by the type, size and location of the development and the number of trips generated. All queuing lanes shall be measured from the right(s)-of-way line(s).

For shopping centers, a minimum storage of 200 feet shall be required before any crossing or left-turning conflicts can be allowed.

- D. Turn Lanes, Tapers, Deceleration Lanes.

1. Turn lanes, tapers, and/or deceleration lanes may be required by the approving authority where it is anticipated that the volume of traffic using the proposed driveway(s) or street(s) may significantly interfere with the flow of the traffic on the abutting public street. Refer to "Street and Driveway Access Design Criteria" Section G. Auxillary Lane Requirements, of the NCDOT Driveway Manual

Trip Generation Studies:

Trip generation studies will be performed by the approving authority in accordance with the standards in the latest edition of the Institute of Transportation Engineers Publication, Trip Generation, manual, to determine the projected needs for turn lanes.

Left and right turn lanes shall be constructed in accordance with the turn lane specifications given in Table 1. Refer to "Conditions and Limitations of Street and Driveway Access Permits" of the NCDOT Driveway Manual for information on turn lanes.

Table 1.

| Daily Traffic Volume Generated by Proposed Site | Turning Lanes |
|---|--|
| <199 | Not Required |
| 200-999 | Required based on: a) Existing ADT plus traffic volume generated by site with 4,000 ADT being threshold and/or b) Unsafe geometric conditions |
| >1000 | Required |

Pavement specifications for turn lanes on State primary roads and major and minor thoroughfares shall comply with the requirements as set forth by the approving authority. Pavement specifications for turn lanes on State secondary roads and all City streets that are not classified as major, minor thoroughfares or collector streets shall comply with those specifications as set forth by North Carolina Department of Transportation Policy on Subdivisions Streets.

E. Width of Driveway Approaches

- The width, in feet, of a driveway approach and curb radius shall be within the minimum and maximum limits as specified in Table 2.

Table 2.

| Land Use/Driveway Type | Driveway Width, Feet | | | |
|-----------------------------------|----------------------|------|---------|------|
| | One Way | | Two Way | |
| | Min. | Max. | Min. | Max. |
| Residential - Single Family | 14 | 24 | 20 | 36 |
| - Multi-Family | 14 | 24 | 20 | 36 |
| Commercial or Industrial | 14 | 24 | 20 | 36 |
| Service Station/Convenience Store | 14 | 24 | 20 | 50 |
| Private Street Entrance | 20 | 24 | 20 | 36 |

These values are based on edge of pavement dimensions including the width of gutter if a curb and gutter section is proposed. A trip generation analysis shall be performed to determine if additional driveway widths beyond 36 feet are necessary. All street type driveways shall be accessible to emergency apparatus, in accordance with the North Carolina building Code, Volume V, Chapter 6, Section 602.6.1.

F. Number and Spacing of Driveway Approaches.

Except for single-family residential uses, driveways shall be allocated and spaced as outlined in Table 3., provided all other requirements of this article are met.

Table 3.

| Number of Driveways Permitted | Minimum Spacing Inside Edge to Inside Edge | Minimum Frontage Needed |
|--|--|-------------------------|
| [2] 1 + 1 Joint Driveway | 40' | 100' |
| [2] 1 + 1 Joint Driveway (Major Thoroughfare) | 100' | 200' |
| [3] 2 + 1 Joint Driveway | 100' | 300' |
| [3] 2 + 1 Joint Driveway (Major Thoroughfare) | 200' | 500' |

Where frontage is less than one hundred (100) feet, only one combined entrance and exit shall be permitted.

(Three is the maximum number of driveways permitted per parcel, tract or development to any street frontage, unless a showing of actual necessity is demonstrated by the applicant and approved by the approving authority.)

Other design standards shall conform to the requirements as described and illustrated in the NCDOT Driveway Manual.

Wheelchair Ramps. Wheelchair ramps shall meet the requirements of General Statute 136-44.14

V. Driveway Specifications

1. For projects within the jurisdiction of the City of Fayetteville, the contractor will notify the City Engineering Division 24 hours prior to any construction in the right-of-way. The Contractor can then set up an appointment to meet authorized staff at the site.

Any outparcels or excluded areas are to be served internally with no additional access points onto NCDOT Right-of-Way unless otherwise approved. The developer should convey this requirement in any lease or sell agreements.

Additional driveway specifications shall be met in accordance with the North Carolina Department of Transportation Standard Specifications for Roads and Structures, the North Carolina Department of Transportation Policy on Street And Driveway Access to North Carolina Highways, the North Carolina Department of Transportation Subdivision Roads Minimum Construction Standards and the North Carolina Department of Transportation Policies and Procedures for Accommodating Utilities on Highway Rights of Way.

VI. Definitions

In the interpretation of the Manual on Street and Driveway Access in Cumberland County, the word "shall" is to be interpreted as being mandatory. Where certain requirements in the design or construction of access provisions are described with the "shall" stipulation, it is mandatory that these requirements be met. The word "should" is to be interpreted as being the recommendation of the approving authority and, where indicated, denotes a factor or principle to be considered by the applicant before a permit is issued. The word "may" is to be interpreted as being a permissive condition. No requirement for design and application is intended.

The following words, for the purpose of this manual, shall have the following meanings ascribed to them.

Access - Ingress and egress to land fronting on a public street.

Approving Authority - For requests within the City of Fayetteville Corporate Limits, the City Engineering and Traffic Services Divisions, for streets under the jurisdiction of the City of Fayetteville; The City Engineering and Traffic Services Divisions jointly with The North Carolina Department of Transportation District Engineer Office, for state maintained roads For requests within the Corporate Limits of the Town of Hope Mills and the Town of Spring Lake, Town Managers and/or designated staff members, for streets under the jurisdiction of the Towns; Town Managers and/or designated staff members jointly with the North Carolina Department of Transportation District Engineer Office, for state maintained roads. For any other streets in unincorporated areas within the County, the North Carolina Department of Transportation District Engineer Office. The approving authority is responsible for the enforcement of this manual.

City - The City of Fayetteville.]

Collector Street - A street designated on the local Collector Street Plan Map as a collector.

Major thoroughfare - A street designated on the Fayetteville Urban Area Thoroughfare Plan Map as a major thoroughfare.

Minor thoroughfare - A street designated on the Fayetteville Urban Area Thoroughfare Plan Map as a minor thoroughfare.

Municipalities - City of Fayetteville, Town of Hope Mills and Town of Spring Lake.

NCDOT Engineer - An engineer from the North Carolina Department of Transportation Division 6 Office or District Office.

Side clearance - The distance measured along the frontage right-of-way line between the driveway edge of pavement and the property line of an adjacent lot.

Sight distance - An unobstructed distance in both directions on all approaches at an intersection that allows the operator of a vehicle approaching an at grade intersection (including driveways) to have an unobstructed view of the entire intersection and sufficient lengths of the intersecting highway to permit control of the vehicle to avoid collisions.

RESIDENTIAL DRIVEWAY SPECIFICATIONS

1. The Contractor will notify the City Engineering Department 24 hours prior to any construction in the right-of-way. The Contractor can then set up an appointment to meet the Engineer at the site.
2. During construction, the Contractor will be required to maintain proper traffic control to ensure public safety.
3. When driveways are connected to a vertical curb, the entire curb and gutter section must be removed and replaced with a standard driveway apron.
4. All concrete poured on city right-of-way must have a minimum compressive strength of 3,000 psi.
5. The general driveway requirements are as follows:
 - a. The driveway will be a minimum of 5 feet from the adjoining property line.
 - b. The concrete will be a minimum of 5" thick.
 - c. The driveway will be a minimum of 12 feet wide and a maximum of 25 feet wide.
 - d. Expansion joint material will be placed at the right-of-way line and 4 feet inside the right-of-way.
 - e. The grade is set from the top of the curb and will be a minimum of 1/4" per foot and a maximum of 1/2" per foot. This is done to prevent bumper drag and street scarring.
6. No concrete shall be placed when the air temperature, at the location of the concreting operation in the shade (away from artificial heat) is below 35 degrees Fahrenheit.
7. The curing compound shall be Type 2, White Pigmented. The Type 1, Clear or Translucent, curing compound will not be allowed. All surfaces shall be kept moist prior to the application of the compound and shall be damp when the compound is applied. The rate shall not be less than 1 gallon per 150 square feet of area.
8. The concrete must cure for 3 days at a temperature above 35 degrees Fahrenheit. This can be done by covering the concrete with plastic or burlap for 3 days.
9. The Engineer reserves the right to add or delete any portion of these specifications to ensure proper construction methods.

Sec. 26-27. Tunneling Requirements.

When, in the course of excavating, etc., in any street or sidewalk, it is necessary to tunnel or bore under the surface of such streets or sidewalk, the tunneling or boring shall conform to the following standards:

The diameter of the hole to be bored shall not exceed the outside diameter of the pipe by more than 3 inches. When it becomes necessary to make an opening into any improved street surface, and it becomes necessary to excavate a greater area than the opening that has been cut in the improved surface, or if the sides of the excavation are allowed to cave in so that the area of the subgrade opening becomes greater than the area of the improved surfaces, the opening in the improved surface shall be enlarged to fit the opening of the subgrade. (Ord. of 2-23-59, Art III)

Sec. 26-28. Resurfacing Requirements.

After completion of the excavation, etc., any trench or opening in any street or sidewalk shall be carefully and thoroughly refilled in uniform 6 inch layers, using select materials of a type approved by the City Engineer, each layer being thoroughly tamped over its entire surface until a satisfactory consolidation of the refill material is secured. The material used in replacing the surface course shall be of the same type and thickness and equal in quality to that which was removed. (Ord. of 2-23-59, Art. IV; Ord. No. 1968-11. § 1, 5-13-68)

Sec. 26-30. Replacing Installations; Data on Installations.

Any person engaging in the excavation, etc., in any city street or sidewalk, at his expense, shall fully repair and replace any and all paving, curbing, guttering, utility lines, and other installations, structures, and improvements in such street or sidewalk that shall or may be necessarily, deliberately, or accidentally (whether with or without fault on the part of such person) moved, changed, damaged, or destroyed in the course of the work.

The City, through its City Engineer and other officers, agents, and employees, shall make available to such person all knowledge and data which the City has on existing paving, utilities, and other installations and structures in such street or sidewalk, but inability or failure to furnish any such or the furnishing of such which may prove to be incorrect, shall in no wise relieve such person from any responsibility under this article, the intent of the article being that such person must assume full responsibility for any and all damage and cost caused or occasioned by such work. (Ord. of 2-23-59, Art. VI)

ARTICLE II. EXCAVATIONS

Section 26-25. Permit Required.

No person other than officers, agents and employees of the City or of the State of North Carolina, or officers, agents and employees of an agency or commission or division or department of the City or of the State of North Carolina, shall cut, dig, bore, tunnel, excavate, or otherwise disturb or change the surface or subsurface of any portion of the right-of-way of any public street or sidewalk in the City, for the purpose of laying, constructing, reconstructing, repairing, or maintaining gas lines, telephone lines, storm sewers, sanitary sewers, water lines, or other utility lines or devices, or rails, crossties, driveways, walkways, sidewalks, walks, or any other work or improvement, or for any purpose until after such person has:

1. **Application.** Made an application to be permitted to accomplish such purpose. Such application shall be directed to and filed with the City Engineer in three (3) original copies duly signed by such person.

As part of such application, there shall be filed with such application a construction plan showing, in all reasonable details, the location and elevation of all installations proposed to be constructed, reconstructed, repaired or maintained, and describing all work proposed to be done on or in such street or sidewalk.

2. **Bond.** Deposited with the City Engineer, a bond, having as surety thereon, a surety company authorized to do business in the State of North Carolina, in such amount as the City Engineer shall specify, conditioned that such person shall save the City, its officers, agents and employees, its commissions, agencies, divisions, and departments, harmless from any and all loss from injury or damage to anyone and anything caused by the work proposed to be done, and that such person shall satisfactorily complete the work, and at his expense, shall fully repair and replace any and all paving, curbing, guttering, utility lines, and other installations, structures, and improvements in such street or sidewalk; that shall be deliberately or accidentally (whether with or without fault on the part of such person) moved, changed, damaged, or destroyed in the course of the proposed work.
3. **Written Permit.** Received from the City Engineer a written permit to perform such work in such street or sidewalk. (Ord. of 2-23-59, Art. I)

Sec. 26-26. Trenching Requirements.

When, in the course of excavating, etc., in any street or sidewalk, it is necessary to dig a trench in such street or sidewalk, such trench shall be dug or made in a workmanlike manner and in suitable widths, and, when necessary to prevent caving, shall be braced in a manner to be approved by the City Engineer. (Ord. of 2-23-59, Art. II)

Cross references: Digging Sewer Trenches, § 23-10; Excavations with Respect to Plumbing Installations, §§ 23-11 and 23-12.

ARTICLE III. DRIVEWAYS

Section 26-35. Permit to Construct Required

- A. No person shall construct a driveway across any public sidewalk, walkway, or parkway or into any street, or cut any curb for such purpose, without having first applied for and obtained a permit from the city Engineer, which application shall show, among other things, the location, grade, dimensions, the construction or reconstruction in those areas designated in the City's adopted sidewalk plan, of the curbs and the purpose for which the driveway is desired. If the application complies with provisions of this section, the permit shall be issued.
- B. Where any new driveway is constructed or an existing driveway reconstructed, a City standard sidewalk shall be constructed along the entire length of the property served by said driveway. This requirement is to include all developments except single or duplex family dwelling units. (Code 1950, § 20-7; Ord. of 10-14-57, § 1; Ord. No. 1982-1, 1-11-82; Ord. No. 1982-15, 5-24-82).

Section 26-36. State Driveway Entrance Regulations Adopted By Reference.

That certain manual entitled "Manual on Driveway Entrance Regulations" adopted by the State Highway Commission of North Carolina by ordinance of said Commission on the 7th day of January, 1966, made effective by said Commission from and after 1 April 1966, three official copies of which are on file in the office of the City Engineer of the City of Fayetteville, North Carolina, to the extent that said manual pertains to all driveways in urban areas, is hereby adopted and made effective for all driveways within the City of Fayetteville, North Carolina, and each and all of the standards and requirements and regulations and provisions contained in said manual shall be applicable to said driveways, and said driveways shall conform to and with the same; and said manual, to the extent defined, is hereby adopted and incorporated herein by reference. (Ord. No. 1966-15, § 1, 7-25-66)

Section 26-27. Extension of Apron into Street

No driveway apron shall extend into the gutter area nor farther into the street than the face of the curb. (Code 1950, § 20-11)