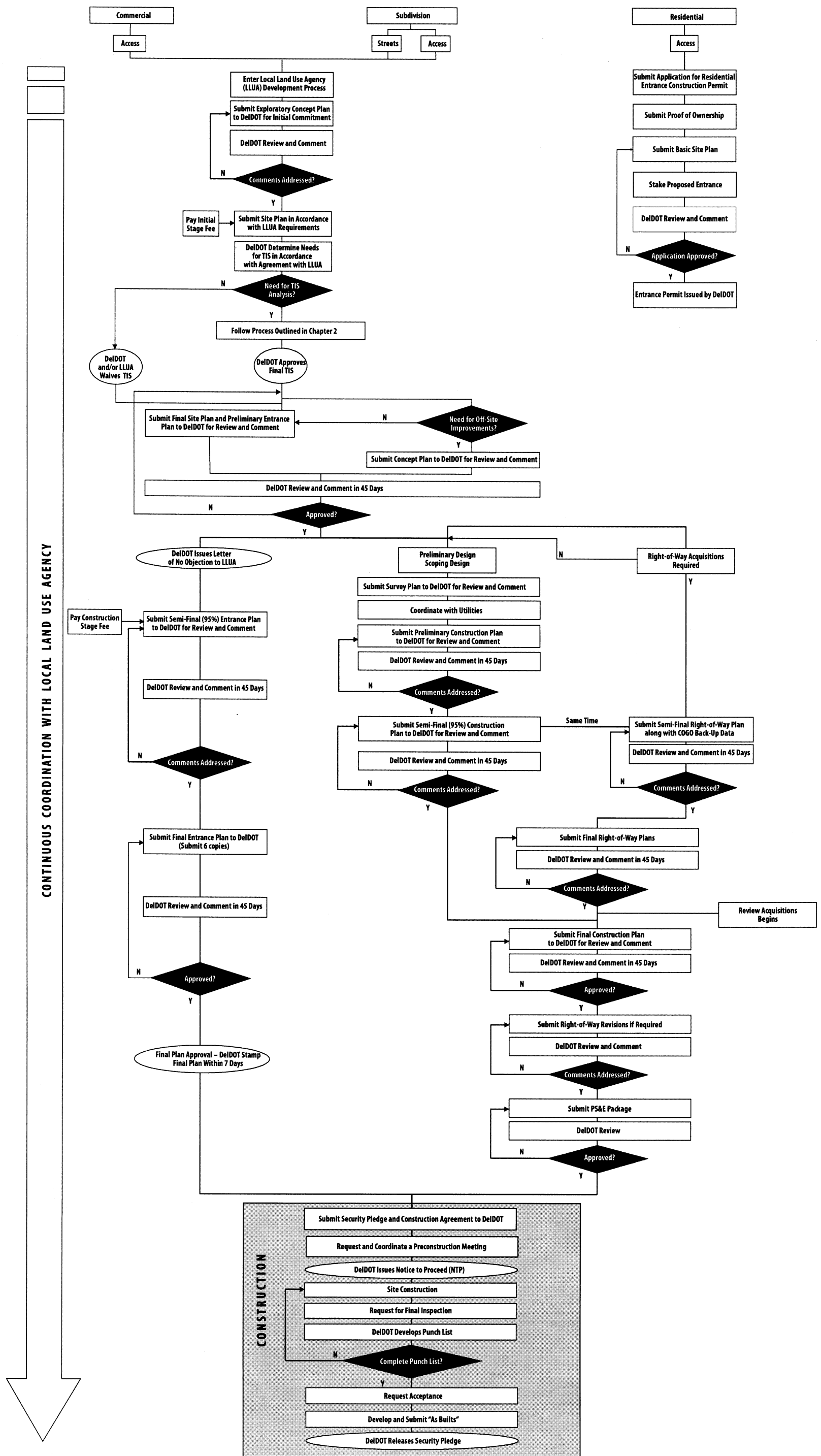


Figure 1-2 Land Development Process





UNIFIED DEVELOPMENT CODE

New Castle County

CHAPTER 40

ARTICLE 11

TRANSPORTATION IMPACT

DIVISION 40.11.000 PURPOSE

The purpose of this Article is to ensure that development occurs only where there are adequate transportation facilities in place, or programmed for construction. Transportation capacity is allocated to proposed land developments on a first come-first serve basis. The highway capacity shall be determined by a traffic impact study. No major land development or any rezoning shall be permitted if the proposed development exceeds the level of service standards set forth in this Article unless the traffic mitigation or the waiver provisions of this Article can be satisfied.

(Amended September 26, 2006 by Ordinance 06-060)

DIVISION 40.11.100 TRANSPORTATION CAPACITY

SECTION 40.11.110 TRANSPORTATION CAPACITY CALCULATION

The transportation capacity for a proposed development shall be based upon the available capacity as determined by a traffic impact study. The applicant shall follow the methodology set forth in this Article to determine the highway capacity of the site.

SECTION 40.11.120 NEED FOR TRAFFIC ANALYSIS

- A. If the Department and DelDOT find, based upon the information supplied pursuant to Section 40.31.112 (C) (2) and the standards set forth in this Section, that a proposed rezoning, subdivision, or land development could generate significant traffic impacts, the Department shall require the applicant to prepare and submit a traffic impact study to the Department and DelDOT. Significant impact shall be considered to exist and a traffic impact study required for a rezoning change or a major subdivision or land development if any of the following conditions exist.
1. The proposal exceeds the projected average daily traffic warrants provided in Table 1, Section 15 of DelDOT's Rules and Regulations for Subdivision Streets, as may be amended from time to time.
 2. The proposal is projected to generate more than fifty (50) peak hour trips, including trips that are diverted from existing traffic.
 3. The subject property is located near roadways segments and intersections, which are operating below the level of service specified in Section 40.11.210.
 4. The proposed development causes the total development within the area traffic analysis zone and the adjacent zones to exceed the totals in the WILMAPCO Metropolitan Transportation Plan.
 5. The proposed development will impact roadways that are not capable of providing adequate and safe circulation, or adequate stopping sight distances, or that contain other geometric

deficiencies that would result in safety problems if the development were built.

(Amended July 13, 2004 by Ordinance 04-059)

SECTION 40.11.121 TRAFFIC IMPACT STUDY WAIVER

If a traffic impact study was completed for a proposed change in zoning of the subject parcel or, if, in the opinion of the Department and DeIDOT, sufficient prior traffic studies of the area of influence have previously been conducted, the requirement for a new traffic study and the further evaluation of the level of service will be waived provided the Department finds:

- A. That the ordinance changing the zoning was adopted no more than three (3) years before the submission of the subdivision or land development application, that there has been no significant change in circumstances, and that the subdivision and land development activity within the area of influence are consistent with the size and type of development evaluated in the traffic impact study; or,
- B. The parcel is subject to deed restrictions requiring that the proposed subdivision or land development be phased to coincide with improvements to the transportation system, or phased by a reduced rate of build out, so long as the time frame set forth in the deed restrictions for completion of the development has not expired; or,
- C. The proposed project is within a transportation improvement district or similarly identified area, as identified by DeIDOT, and trip generation numbers provided for the proposed subdivision or land development, as approved by DeIDOT, do not significantly change the traffic assumptions upon which roadway improvements designed by or approved by DeIDOT for the district or area have been based. The applicant shall contribute to transportation improvement costs within the district or area based upon a formula to be developed by DeIDOT.

(Amended July 13, 2004 by Ordinance 04-059)

SECTION 40.11.122 SCOPING MEETING

Within fifteen (15) days after the Department or DeIDOT determine that a traffic impact study is necessary, the Department and DeIDOT shall meet with the applicant to establish the study area and all parameters. The area of influence will be based upon the anticipated site traffic as a percentage of traffic at an intersection. An area of influence shall be established by the Department and DeIDOT. Once established, no substantial modification to the study area and parameters shall be made by the applicant without the approval of the Department and DeIDOT. Such approval shall only be given if the applicant can demonstrate to the satisfaction of DeIDOT and the Department, that the data relied upon to determine the study area and parameters was flawed or otherwise inaccurate.

SECTION 40.11.124 AREA OF INFLUENCE

- A. The area of influence shall extend beyond the site entrance(s) to include further intersections to the extent that the projected site traffic (vehicle trip ends on an average weekday or weekend day, whichever is greater) exceeds:
 1. One (1) percent of the annual average daily traffic on the intersecting road if it is an arterial road,
 2. Five (5) percent of the annual average daily traffic on the intersecting road if it is a collector road, or
 3. Ten (10) percent of the annual average daily traffic on the intersecting road if it is a local road.
- B. Subsection A not withstanding, the following rules shall also apply:
 1. The study area shall always include the site entrances.

2. If the site would have access on two (2) or more intersecting roads, the study shall include their intersections.
3. The study area shall not extend more than three (3) intersections beyond the site entrance(s) in any one (1) direction, unless it is determined by the Department or DelDOT that the proposed development would have a greater than normal impact upon the transportation system.
4. For the purposes of this section, average weekday vehicle trip ends generated by retail commercial uses shall be reduced by the following amounts to account for pass-by traffic.
 - a. Restaurants, forty (40) percent.
 - b. Convenience markets and service stations, sixty (60) percent.
 - c. Other retail uses, thirty (30) percent.
5. For uses that operate on an event basis, e.g., stadiums and arenas, the Department and DelDOT shall substitute professional judgement for subsection A in determining the area of influence.

(Amended March 12, 2002 by Ordinance 01-112)

SECTION 40.11.130 TRAFFIC IMPACT STUDY REQUIREMENTS

- A. A traffic impact study shall be prepared by individuals or firms that perform traffic engineering which shall be reviewed and sealed by a professional engineer. The content and format of the study shall be as prescribed by Section 15 of DelDOT's "Rules and Regulations for Subdivision Streets" or any amendments thereto, and include all of the following additional requirements:
 1. The anticipated trip generation of the land use including vehicle trips per day during the week and the weekend, and the a.m., p.m., and weekend peak hour trips generated by the proposed development.
 2. New traffic counts will be required for all intersections in the area of influence of the proposed development. If other traffic impact studies have been done in the area within one (1) year, the traffic counts from these traffic impact studies or other traffic counts may be used with the approval of the Department and DelDOT.
 3. Currently planned traffic mitigation programs and transportation improvements, including, without limitation, projects awarded or under construction, projects in DelDOT's CIP and their completion dates, and projects and corridor needs in the adopted WILMAPCO Metropolitan Transportation Plan.
 4. The projected peak hour level of service after the proposed development is completed, with and without traffic mitigation measures.
 5. A geometric assessment of any roadways or plan features identified as having deficiencies likely to result in potential safety or design problems, e.g., turning radii, access location.
 6. If the proposed rezoning, subdivision, or land development is in an area currently served by transit, or in a corridor where transit service is planned, the traffic analysis shall also identify:
 - a. The location of existing and planned transit routes, transit stations or bus stops, park and ride lots, and layover stations;
 - b. Significant passenger safety issues, such as crosswalks, highway lanes to be crossed, etc., and;
 - c. Needed passenger amenities, such as sidewalks or bus shelters.
 7. Future traffic shall be projected by the inclusion of trip generation from projects with recorded

- plans, projects with preliminary plan approval, projects having had a zoning change approved within a three (3) year prior period, and projects containing deed restrictions requiring phasing to coincide with improvements to the transportation system. Future traffic shall also be projected by the inclusion of trip generation based upon a growth factor for background traffic. The Department shall provide DelDOT a list of all plans, projects, and rezonings described above.
8. A statement indicating whether the peak hour level of service calculated for each road segment and intersection will exceed the acceptable level of service for the type of roadway segment and intersection pursuant to Section 40.11.210 .
 9. Recommendations regarding what, if any, trip reduction/transportation demand management (TDM) measures would be necessary to attain an acceptable level of service. If the report indicates that level of service will be exceeded, a Traffic Mitigation (TM) Agreement shall be submitted detailing the infrastructure improvements to be made.
 10. A statement signed by the applicant and referenced on the plan certifying that:
 - a. The project information in the study is true and correct;
 - b. The traffic analysis was conducted in accordance with the requirements of this Chapter.

Cross-reference should also be made to Section 40.11.230 of this Chapter for further specifics regarding TM Agreements.

(Amended November 28, 2000 by Ordinance 00-102; amended March 12, 2002 by Ordinance 01-112)

SECTION 40.11.140 DELDOT REPORT REQUIRED

- A. Upon receipt of a final traffic impact study, DelDOT shall have sixty (60) days to review the traffic impact study pursuant to this Article and submit written comments to the Department. DelDOT may request a thirty (30) day extension from the Department when the traffic impact study involves roadway segments or intersection within a hamlet or village. The review of the traffic impact study shall include the following:
 1. A statement indicating whether a traffic impact study was previously submitted and evaluated for the same or a substantially similar rezoning, subdivision, or land development application, and if so, the results of that evaluation including any recommended mitigation measures. The statement may also contain an evaluation and findings of any other concurrent TIS for applications in the immediate area;
 2. A statement assessing the ability of the existing and planned transportation system to support the proposed rezoning, subdivision, or land development;
 3. A statement describing the extent to which the proposed rezoning, subdivision, or land development is consistent with the adopted *WILMAPCO Metropolitan Transportation Plan*;
 4. A statement describing the extent to which the proposed rezoning, subdivision, or land development complies with applicable DelDOT standards or regulations for access and subdivision design, and with the standards in Section 40.11.210 ;
 5. A statement certifying the adequacy of the recommended traffic mitigation measures to bring the network back to the desired level of service in Section 40.11.210 .
- B. If DelDOT does not complete its review of the traffic impact study within the above provided time frame, the applicant shall have the option to request that the traffic impact study be reviewed by individuals or firms that perform traffic engineering that are approved by the Department. Such reviews shall be examined and sealed by a professional engineer also approved by the Department.

The applicant shall pay the cost of this review to the Department prior to submission of the final traffic impact study to the individual or firm by the Department. DelDOT shall accept the results of the review if the review is approved by the Department.

(Amended September 26, 2006 by Ordinance 06-060)

SECTION 40.11.150 SUBDIVISION OR LAND DEVELOPMENT TRAFFIC IMPACT STUDY PLAN APPROVAL

- A. Upon receipt of the traffic impact study and comments from DelDOT or individual or firm approved by the Department as provided in Section 40.11.140 B, the Department shall review the traffic impact study with regard to the following:
1. The accuracy, completeness, and thoroughness of the traffic impact study as well as whether the study was conducted in conformance to the study parameters set by the Department and DelDOT.
 2. DelDOT's comments and recommendations when DelDOT reviewed the traffic impact study.
 3. The level of service requirements of this Article.
 4. Appropriateness and adequacy of any proposed mitigation measures.
 5. Compatibility with regional and State transportation plans and nearby development proposals.
 6. Design principles and standards as described in this Chapter (e.g., inter-connectivity, transit/pedestrian accessibility and street design).
- B. Based upon the above criteria, the Department shall approve, approve with conditions or disapprove the traffic impact study. The Department shall approve the project when the traffic impact study demonstrates that acceptable levels of service will be maintained for roadway segments and intersections within the area of influence of the project as defined by Section 40.11.210 . The project shall not be approved if it will result in an unacceptable level of service for a roadway segments or intersection(s) within the area of influence of the project. If the study is not approved the applicant may take one (1) of the following actions:
1. The applicant may request permission to revise the proposed plan and traffic impact study to include additional traffic mitigation measures necessary to maintain acceptable levels of service within the project's area of influence. The proposed revisions shall be submitted by the applicant to the Department and DelDOT.
 2. The applicant may submit for approval an exploratory plan with a lower maximum intensity and density that does not exceed adequate levels of service, or submit for review and record (with approval) a declaration of restrictions that would prohibit development until such time as an adequate level of service can be achieved.
- C. If the traffic impact study is approved or approved with conditions for a major plan, the applicant may proceed with the exploratory plan review and a preliminary plan submission as provided in Article 31. The applicant and future owners shall provide educational materials and conduct informational programs with employees and/or residents regarding available modes of transportation. This may include, but is not limited to, the explanation and availability of bus and train schedules, information on Ride Share Delaware, location of bike paths, etc. A note regarding the owner's responsibility to provide alternate mode of travel education shall be added to the Record Plan.

(Amended November 28, 2000 by Ordinance 00-102; amended July 13, 2004 by Ordinance 04-059)

SECTION 40.11.155 REZONING TRAFFIC IMPACT STUDY PLAN APPROVAL

Rezoning applications. In addition to the provisions contained in Section 40.11.150 A above, the Department may request DelDOT's assistance in determining if the cumulative impact of proposed zoning changes for a given review period requires additional highway improvements or whether only a portion of the requested zoning changes for a review period can be supported. The Department may permit testimony and additional information to be submitted regarding any proposed mitigation. In considering a rezoning, the Department's and Planning Board's recommendations shall take into account the cumulative impact of the proposed rezonings, any mitigation proposed, and the factors that must be considered for rezonings set forth in Article 31 of this Chapter.

(Amended November 28, 2000 by Ordinance 00-102)

DIVISION 40.11.200 ADEQUATE LEVEL OF SERVICE

SECTION 40.11.210 LEVEL OF SERVICE STANDARDS

- A. **North of the C & D Canal.** The minimum acceptable peak hour level of service to be achieved and maintained on all roadway segments and intersections within the area of influence of the proposal and located north of the C&D Canal shall be as follows.
1. **Sewer service areas.** Level of service D within any publicly sewered area, except that for roadway segments and intersections located within an existing developed area or designated infill area operating at an existing level of service E, the minimum acceptable peak hour level of service shall be E, provided that level of service D will be attained through transportation and/or transit projects currently under construction or for which contracts for construction have been awarded by DelDOT to ensure completion; or,
 2. **Outside sewer service areas.** The existing level of service with no roadway segments and intersections exceeding level of service C.
- B. **South of the C & D Canal.** The minimum acceptable peak hour level of service to be achieved and maintained on all roadway segments and intersections within the area of influence of the proposal and located south of the C&D Canal shall be as follows.
1. **Sewer service areas.** Level of service D within any identified sewer service area, except that for roadway segments and intersections located within a sewered area operating at an existing level of service E, the minimum acceptable peak hour level of service shall be E, provided that level of service D will be attained through transportation and/or transit projects currently under construction or for which contracts for construction have been awarded by DelDOT to ensure completion; or,
 2. **Outside sewer service areas.** The existing level of service with no roadway segments or intersection exceeding level of service C.
 - a. **Exception.** Applicants of subdivision plans being processed pursuant to Former Code provisions that have opted for three-quarter (3/4) acre lots pursuant to Section 40.22.360 (A)(2)(b), may meet the level of service standards applicable to the Sewer Service Area south of the C&D Canal as provided for in Section 40.11.210 (B)(1).

(Amended June 13, 2000 by Ordinance 00-024; amended March 12, 2002 by Ordinance 01-112)

SECTION 40.11.220 TRAFFIC MITIGATION MEASURES

- A. Traffic mitigation measures shall be required if the applicant proposes to develop at a density that would exceed the current levels of service as set forth in Section 40.11.210 . To be considered, traffic mitigation measures must result in an acceptable level of service and may include any one or all of the following:
1. A reduction in the proposed density or intensity of development;

2. The phasing of construction to coincide with the completion of programmed transportation construction projects which are identified in DelDOT's six (6) year capital improvements program;
 3. The construction of off-site highway improvements by the applicant.
- B. The specific mitigation measures shall be chosen based on their ability to achieve and maintain acceptable levels of service for roadway segments and intersections within the area of influence of the project. All proposed traffic mitigation measures approved by the Department shall be recorded in the form of a declaration of restrictions which must be submitted to the Department with all necessary recording fees. All deed restrictions shall be prepared by the applicant and approved by the Department and the Department of Law prior to final approval of a plan by the Department or the granting of a rezoning by County Council. The declaration of deed restrictions may contain a clause indicating that the restrictions do not become effective unless the proposed development is approved by County Council. No development for which mitigation is required shall be permitted until the approved mitigation is under construction or is under contract awarded by DelDOT. Zoning changes may only be approved if the needed mitigation project is part of that current year's capital budget.
- C. Traffic Mitigation (TM) Agreements shall be used by an applicant when an acceptable level of service cannot be reasonably achieved and when an applicant is unable to phase or reduce the density or intensity of the development proposal and unable to provide highway improvements to meet LOS standards. As part of the LOS waiver process, a TM Agreement shall be prepared and approved pursuant to Section 40.11.230 of this Chapter.

(Amended November 28, 2000 by Ordinance 00-102)

SECTION 40.11.230 LEVEL OF SERVICE (LOS) WAIVERS AND TRAFFIC MITIGATION (TM) AGREEMENTS

- A. **Level of service (LOS) waiver.** If the proposed development is located in a designated infill area, the Southern New Castle County Sewer Service Area, or existing developed area where there are existing roadway segments or intersections functioning at unacceptable levels of service, as defined by Section 40.11.210, the applicant may, in writing, request a Level of Service (LOS) Waiver. The applicant shall submit the LOS Waiver request, accompanied by a TM agreement to the New Castle County Department of Land Use. The submission shall include DelDOT's recommendation and comment and other application requirements and materials as set forth below and in Appendix 1 (3) (J).
1. The application consisting of a copy of the Traffic Mitigation Agreement and DelDOT's recommendation and comment. The applicant shall also forward a copy of this application to the Clerk of County Council, the district council member, and the President of County Council.
 2. A draft resolution for County Council's consideration that is to also be provided in electronic form.
 3. The applicable Departmental filing fee in accordance with Appendix 2.
 4. The applicable Recorder of Deeds filing fee in the event the application is granted (the check will be returned if the application is rejected).
 5. All current school taxes, county taxes and sewer service fees must be paid or not delinquent at the time of application.
 6. All other information and items as required by Section 40.11.230 of the Unified Development Code.

B. **Traffic mitigation (TM) agreement.** Every applicant who requests an LOS Waiver from New Castle County Council shall be required to enter into a TM Agreement with DeIDOT. In connection with the application to obtain an LOS Waiver, DeIDOT will coordinate its negotiations with the applicant in the preparation of a TM Agreement with the Department of Land Use. Every TM Agreement shall be executed by the applicant and DeIDOT. Each TM Agreement will typically contain the following:

1. Primary trip reduction measures that the applicant must implement in order to achieve quantitative trip reduction goals, which shall include at a minimum no more than eighty-five (85) employee vehicles per one hundred (100) employees arriving during the morning, peak traffic period or departing during the evening peak traffic period on any given day. A Trip Reduction Measures Selection Form is found in Appendix 6, Miscellaneous Items of the UDC, from which the applicant may select, on a case-by-case basis, the specific measures to be incorporated into the TM Agreement. This form shall not be considered to be an exhaustive list of potential measures.
2. Contingent trip reduction measures, some or all of which shall be utilized in the event that the primary measures fail to achieve the trip reduction goals.
3. A requirement that the applicant will pay the reasonable costs of a third-party consultant (retained and supervised by DeIDOT) to serve as an auditor. The Department of Land Use shall participate on the consultant selection committee. The third-party auditor will annually audit the applicant's progress on implementation of the specific TDM measures it has agreed to implement and the effectiveness of such measures in achieving trip reduction goals.
4. A requirement that the applicant will develop a budget of the total costs that the applicant expects to bear for the implementation of the TDM measures for the five (5) years following the issuance of the Certificate of Occupancy (CO), exclusive of the cost of the independent auditor. This budget shall be developed by the applicant and approved jointly by DeIDOT and the Department of Land Use prior to, and as a condition of, the issuance of a CO. DeIDOT shall retain the consultant by use of its normal consultant contract procedures, including but not limited to the use of an appropriate hourly-fee based method for compensation, as well as the normal DeIDOT limitations on profit, overhead, and chargeable fees.
5. A requirement that the applicant will secure the implementation of the TDM measures with a financial guarantee, deposited with and held by DeIDOT. The financial guarantee shall be provided by a bond, certified check, letter of credit, or other form of security in a manner and form approved by DeIDOT. The guarantee must be posted at the time the CO is issued, shall be in an amount equal to one hundred and fifty (150) percent of the total costs of implementing the TDM measures and shall remain in effect for five (5) years. For multi-phased projects such a financial guarantee shall be posted at the time that the CO is issued for each subsequent building. DeIDOT may also draw on the financial guarantee to pay for the cost of the auditor, should the applicant fail to make payment within a reasonable period of time. The amount otherwise drawn upon the financial guarantee shall be limited to an amount equal to the amount thus far unexpended by the applicant under the approved budget for such costs, up to the one hundred and fifty (150) percent limit.
6. In connection with an LOS Waiver, any other provision(s) that New Castle County Council adds or adopts as a condition of an LOS Waiver. The waiver thus will be conditioned on the applicant and DeIDOT accepting and agreeing to the provisions.

C. **LOS Waivers and TM Agreement Approval.**

1. After DeIDOT (in consultation with the Department) and the applicant have negotiated the TM Agreement, the applicant may submit a written request to County Council and the

- Department for an LOS Waiver which shall be accompanied by TM Agreement and DelDOT's comments and recommendations with regard to the TM Agreement.
2. The New Castle County Department of Land Use will review the LOS Waiver, TM Agreement and DelDOT's comments and recommendations and shall submit its written recommendation within (20) days to the Clerk of County Council, the sponsor, the sponsor's legislative aide, and the applicant. If the Department recommends changes to be made to the applicant's draft resolution, a substitute draft resolution shall accompany the Department's recommendation and shall be provided in electronic form to the sponsor's legislative aide. The Department shall consider the following when developing a recommendation:
 - a. The locations of the roadway segments and intersections that will have unacceptable levels of service and the relative effect construction of the subdivision or land development will have on the roadway segments and intersections;
 - b. The number and types of current and future constructed projects in the area of influence of the proposed development and the effect the projects had on the results of the traffic impact study;
 - c. The types of traffic mitigation measures or transportation improvements proposed by the applicant to reduce traffic congestion from the proposed development; The potential for transportation improvements that will result in the attainment of acceptable levels of service being included in future DelDOT capital improvement programs; and
 - d. The extent to which the proposed development represents the logical infilling or completion of an established land use pattern, offers the opportunity to advance affordable housing, economic development or other objectives of the Comprehensive Development Plan.
 3. Upon receipt of the Department's recommendation, County Council shall act on the LOS Waiver resolution, or any substitute resolution, at one of its next two (2) regularly scheduled public meetings. A simple majority or seven (7) votes shall be required to approve an LOS Waiver resolution receiving a favorable recommendation from the Department. A two-thirds (2/3) majority or nine (9) votes shall be required to approve an LOS Waiver resolution when the Department recommends disapproval.
 4. If County Council grants an LOS Waiver, it may approve the TM Agreement with or without conditions. If conditions or additional provisions are required, approval of the LOS Waiver will be contingent upon agreement to the conditions or additional provisions by DelDOT and the applicant, and execution of an amended TM Agreement including the conditions or additional provisions. The President of County Council shall sign the resolution granting such waiver on behalf of County Council.
 5. Upon approval by County Council, with or without modifications, the TM Agreement shall be incorporated into the grant of the LOS Waiver and shall be recorded by the Clerk of County Council in the New Castle County Office of the Recorder of Deeds at the cost of the applicant, as a deed restriction that runs with the land. All deed restrictions shall be prepared by the applicant and approved by the Departments of Land Use and Law prior to final approval. The applicant's final record plan shall indicate the instrument number where the deed restriction is recorded. A copy of the recorded TM Agreement and the LOS Waiver document shall be provided to the Department and the applicant. The applicant shall also provide WILMAPCO with a copy.
 6. As an additional condition of the grant of an LOS Waiver, the applicant shall post a financial

guarantee of its obligations under the TM agreement with DelDOT, as described in subsection (B)(5) above.

D. Employer Reports, Compliance Audits and Enforcement of trip reduction/ transportation demand management (TDM) measures.

1. **Compliance audits.** While the TDM measures are being implemented by the applicant in accordance with the TM Agreement:
 - a. DelDOT will retain a third-party consultant at the applicant's expense, pursuant to (B) (3) above, to serve as an independent auditor of the applicant's implementation of the TM Agreement; and
 - b. Beginning with the issuance of the CO for the first building, the applicant will, for two (2) years or until the independent auditor confirms that such measures have been fully implemented, whichever first occurs, provide to DelDOT and the Department semi-annual reports (beginning six (6) months after the CO is issued or earlier if required by DelDOT) on the progress of its implementation of the TDM measures in the TM Agreement. In connection with a multi-phase development, a new two-year period shall begin with the issuance of each CO; and
 - c. The independent auditor will provide the applicant, DelDOT, the Department and WILMAPCO annual audits on the progress of the applicant's implementation of the TDM measures in the TM Agreement and achievement of the trip reduction goals.
2. **Enforcement.** Should either DelDOT or New Castle County determine that the applicant has failed to make a good faith effort to implement, or to continue to implement, the TDM measures in the TM Agreement, one (1) or more of the following actions may be initiated or undertaken by either DelDOT or New Castle County. Before either DelDOT or New Castle County determines that the applicant has failed to make a good faith effort to implement, or to continue to implement, the TDM measures, and/or before any enforcement action is initiated or undertaken by either DelDOT or New Castle County, the applicant shall be afforded notice and an opportunity to be heard before the government or governmental department contemplating enforcement action. In the event that the applicant does not resolve the concerns raised by the government or governmental department contemplating enforcement action within sixty (60) days of notice, any of the following options may be utilized by the enforcing government or governmental department:
 - a. The imposition of fines;
 - b. DelDOT's drawing upon the financial guarantee that the applicant has posted with it, in order to carry out TDM measures within the area of influence of the applicant's project (if such guarantee has been imposed as a condition of the development). The amount drawn upon the financial guarantee shall be limited to an amount equal to the amount thus far unexpended by the applicant under the approved budget for such costs, up to the one hundred and fifty (150) percent limit;
 - c. Refusal to issue further building permits by New Castle County for any building(s) on the site for which the TDM measures were developed; and
 - d. Any and all other remedies available at law or in equity.
3. **Reduction of Financial Guarantee.** DelDOT may reduce the financial guarantee the applicant has posted with it, based on the implementation of TDM measures in the TM Agreement and/or progress toward trip reduction goals. In any event, the term of the financial guarantee posted with DelDOT shall not exceed five (5) years. The amount drawn upon the financial

- guarantee shall be limited to an amount equal to the amount thus far unexpended by the applicant under the approved budget for such costs, up to the one hundred and fifty (150) percent limit.
4. In addition to the remedies provided above, DelDOT shall monitor the attainment of trip reduction goals, based on annual reports of the independent auditor.
 - a. If the trip reduction goals have not been met by the applicant within one (1) year of the issuance of the CO, despite the implementation of the primary TDM measures, the applicant is required to implement one, some, or all of the contingent TDM measures, intended to achieve equivalent traffic mitigation, as set forth in the TM Agreement.
 - b. Should either DelDOT or New Castle County determine that the applicant has failed to achieve the trip reduction goals within three (3) years after issuance of the CO, the applicant shall appear before County Council to be heard as to why the applicant has not achieved the trip reduction goals. The applicant may work with DelDOT and the Department to develop a revised TM Agreement to be reviewed and approved by County Council. After the third year and unless and until the trip reduction goals contained in the applicant's plan have been achieved by the applicant, County Council may mandate that the Department refuse to issue further building permits, grant rezoning changes or any other land use regulatory changes or LOS Waivers relating to the particular site which is the subject of the TM Agreement, if such permits, changes, or waivers would allow alterations or additions to the building(s) at the site, which would result in increased employment at that site. In addition, DelDOT may refuse to grant additional exit/entrance permits for such site, unless and until the trip reduction goals have been achieved by the applicant.
 5. After five (5) consecutive years of attaining the goal(s) of the TM Agreement, annual audits no longer will be required. However, DelDOT reserves the right to perform an audit at DelDOT's expense at any time. If a change in any public policy, or the withdrawal or discontinuation of any governmental program, or other change in circumstance beyond the control of the applicant make impossible or impractical the implementation of primary or contingent TDM measure(s), the applicant shall, with the concurrence of DelDOT, substitute other measure(s) designed to achieve equivalent trip reductions, provided that:
 - a. The total costs of implementation of such substitute TDM measures will not exceed the original budgeted amount of the TDM measures replaced; and
 - b. Such substitution has been approved by County Council. In considering such requests, County Council shall request that DelDOT and the Department provide a recommendation on such requested changes, prior to action by County Council. In an instance where the creation of a new government program makes other TDM measures more desirable, an applicant may, according to the process described above, substitute TDM measures. In either instance, DelDOT and the Department shall provide their recommendations to County Council no later than sixty (60) days after the applicant has requested this action. Should there be a change in the use of the site which is the subject of the TDM measures or a change in the circumstances which resulted in the TM Agreement being required, County Council on the recommendations of DelDOT and the Department may amend or terminate said TDM requirements.

(Amended November 28, 2000 by Ordinance 00-102; amended June 12, 2001 by Ordinance No. 00-130; amended January 25, 2005 by Ordinance 04-154; amended September 26, 2006 by Ordinance 06-060)



UNIFIED DEVELOPMENT CODE

New Castle County

CHAPTER 40

ARTICLE 20

SUBDIVISION AND LAND DEVELOPMENT DESIGN PRINCIPLES

DIVISION 40.20.000 PURPOSE

This Article provides the principles for the layout and design of subdivisions and land developments. Adherence to the provisions of this Article assures new developments are consistent with the County's planned community character by ensuring:

- A. The plan contributes to the development of the County as a community and is properly integrated into the surrounding neighborhood.
- B. The plan preserves or enhances the character and the quality of the County and neighborhood.
- C. The street, road, and pedestrian system is created in a manner that is safe and provides the best overall layout for the community, as well as the individual development.
- D. Subdivision plans conform to public improvement plans of the State, the County and its cities and towns, such as through the proper provision of open space for recreation and other public use, and the convenient and proper location of sites for future schools, other public buildings, community facilities and shopping and industrial areas.
- E. Adequate water, sewer, stormwater systems, and other utilities are provided to serve the development without adversely impacting other portions of the system or properties.
- F. Developments are functional and internally safe to the greatest degree possible, without reducing the permitted density or increasing adverse impacts on the environment and adjoining properties.
- G. All requirements of this Code have been met.
- H. All subdivision plans are processed equitably according to the uniform procedures and standards delineated in the Code.

(Amended March 12, 2002 by Ordinance 01-112)

DIVISION 40.20.100 SUBDIVISION DESIGN

SECTION 40.20.110 GENERAL PLAN REVIEW STANDARDS

The Department shall review subdivision plans against the following design standards. The purpose is to evaluate the design -- more specifically, the manner in which uses, lots, drainage, and roads relate to the site and adjoining land. The purpose is not to review or modify the proposed use or intensity; these requirements shall be in accordance with the district in which the development is proposed. The Department may require that design modifications be made. The plan review standards are:

- A. Facilitate the conformance of subdivision plans with the public improvement plans of the County and of its cities and towns, such as the proper provision of open space for recreation and other public use,

and the convenient and proper location of sites for future schools, other public buildings, community facilities, shopping and industrial areas.

- B. The subdivision plan shall protect the site's natural resources as provided by this Code, with highest quality resource areas having the highest preservation priority. In addition to meeting minimum Code requirements, plans shall reflect sensitivity to such ecological factors as: preservation of vegetation including protecting existing trees from destruction, minimizing of cut-and-fill operations, avoidance of erosion and consequent siltation of streams and drainageways, and other pertinent conservation measures.
- C. The subdivision plan shall provide for well-proportioned and oriented lots that relate properly to roads and open space. An awkward and irrational pattern of lots and individual lot shapes is to be avoided. No remnants or landlocked spaces without access to the vehicular/pedestrian circulation system will ultimately remain.
- D. The plan shall promote the best design for the use of the property in relation to the development's function and adjoining portions of the neighborhood.
- E. All street and circulation patterns shall provide for the safe, efficient, and convenient movement of vehicular and pedestrian traffic. Vehicular travel lanes, pedestrian movement systems, and parking should be separated. Within the context of overall community development, the internal circulation system should promote and encourage the increased use of pedestrian and bicycle movement among residential, local shopping, schools, and other areas. Road connections shall seek to avoid external automobile trips through the employment of superblocks, stub streets, connecting open space, bicycle-pedestrian ways, and other design techniques and devices.
- F. The drainage and utilities shall be efficiently integrated into the design and shall avoid off-site impacts.
- G. The subdivision landscaping layout shall promote the district's qualities and character. Bufferyard landscaping shall be located to achieve the screening objectives and, where possible, enhance open space objectives beyond the minimum requirements.
- H. The standards shall be reviewed to determine if modulations in zoning or infrastructure design would assist in improving the development's quality or preserve natural resources while maintaining density.
- I. The design standards are intended to permit plan modifications to improve design, but not to require site density reduction. The design review shall focus on revising the site plan by altering roads, lots, landscaping, or other plan elements and locations, not by altering development intensity.

DIVISION 40.20.200 SUBDIVISION LAYOUT

The following sections provide guidance in laying out streets in a development. The community shall be designed with a system of major and minor streets creating blocks of land.

SECTION 40.20.210 BLOCKS

Standards for blocks in subdivisions shall be as follows:

- A. Where possible, blocks shall be laid out to have their short length abutting arterials, collectors, or the development's major road. The blocks should not in general exceed fifteen (15) lots in length as measured on one (1) side of the street. The length, width and shape of blocks should be determined with due regard to the provision of adequate sites for buildings of the type proposed, zoning requirements, topography, fire access, emergency service, and police protection.

- B. Blocks should be at minimum, such width as will provide two (2) tiers of lots, except where reverse frontage lots are located along an arterial or collector street or where such an arrangement is prevented by size, topographical conditions or other inherent site conditions of property, as determined by the Department.
- C. Blocks for commercial and industrial areas may vary from the elements of design contained in this Section if the nature of the use requires other treatment. In such cases, safe and convenient access to the street system shall be required. Space for off-street parking may also require similar access for employees and customers. Extension of streets and utilities should be provided as necessary.
- D. In the Traditional Neighborhood districts, hamlets, and villages, a grid or other formal system is desired in which open spaces are integrated into the block design. Exceptions would be made for green spaces along drainage or stream channels, or where other natural resources make the grid difficult or cost prohibitive. Alleys are considered desirable for these areas where lot sizes are less than twenty thousand (20,000) square feet in area.

SECTION 40.20.220 LOTS

Design standards for lots in subdivisions shall be as follows:

- A. Every lot shall have frontage along the right-of-way lines of a street.
- B. Reverse frontage residential lots should be avoided, except along arterial or collectors where aligning blocks to have side lot lines adjoining the main road is impractical or, as otherwise permitted by the Department, where it can be shown that other arrangements are necessary or desirable to relate building sites to the terrain or to provide better site utilization and building relationships.
- C. Sidelines of a lot should generally be set approximately at right angles or radial to street right-of-way lines, and rear lines should generally be approximately parallel to street lines. Acute angles or small projections should be avoided. However, different lot shapes will be permitted if they can be shown to be necessary or desirable to relate building sites to the terrain, open space, or if they provide better site utilization and building relationships.
- D. Lot lines shall follow County boundary lines rather than cross them, except where no other feasible method of development exists, as determined by the Department.
- E. In rural areas, lotting along existing roads should generally be such as to preserve the future developmental viability of interior lands by providing adequate road right-of-way access to the interior of properties.
- F. The arrangement of lots must reflect sensitivity to the natural features of a tract. Alternative development options, such as open space subdivision or planned developments, provide the design flexibility needed to reduce the intrusion of lot areas into wetlands, floodplains and other natural resources.
- G. Commercial and industrial lots should be designed to prevent any visually unattractive facility, such as loading platforms, material or refuse storage areas, mechanical equipment, and supply areas, from facing major streets or residential neighborhoods. Alley access or screening walls should be utilized to shield visually unattractive facilities.

(Amended March 12, 2002 by Ordinance 01-112)

SECTION 40.20.225 REQUIRED OPEN SPACE.

- A. Open space shall be required in all major residential developments. Ownership of open space shall be transferred to a maintenance organization or governmental body pursuant to the provisions contained in Article 27. Open space shall not be further developed and shall serve one (1) or more of

the following functional needs:

1. Protection and preservation of natural resources and sensitive site features;
2. Provision of active and passive recreation areas;
3. Greenways and trail corridors;
4. Wildlife habitats and migration corridors;
5. Stormwater management;
6. Preservation of historical and cultural resources;
7. Agricultural uses;
8. Viewshed and vista preservation, and;
9. Bufferyards and landscaped areas.

Uses permitted by Table 40.10.210 of this Chapter may be allowed when they compliment and enhance the above functional needs.

- B. All major residential subdivisions shall contain open space designated as community area open space. In designating community area open space or landscaped surfaces as part of a subdivision or land development plan, the following criteria and standards shall be adhered to by the applicant:
1. Open space shall be separate parcels of land exclusive of streets and residential lots.
 2. An existing principal dwelling unit and a maximum of one (1) existing out building, where such structures are deemed historically and/or architecturally significant by the Department, may be included within open space area.
 3. Except for recreation activities, open space shall be substantially free of structures and paved areas.
 4. Open space designated for recreation may contain parking areas and access drives accessory to the open space and other such complementary structures and improvements that are necessary and appropriate for the benefit of the residents utilizing the land for recreation purposes. Such land shall be distributed through the development to best serve the residents. Where the development is in phases, the Department may require each phase to have adequate open space.
 5. In subdivisions of thirty (30) dwelling units or more, an area or areas of useable open space shall be provided at a rate of one (1) acre per one hundred (100) dwellings units. Usable open space shall be centrally located, highly visible, and unconstrained by floodway areas, critical natural areas, wetlands or excessively forested areas. Additionally, the area shall be graded in such a manner to render it usable for active recreation purposes and shall not have slopes greater than five (5) percent. This provision does not require community area open space in addition to the requirements of this Chapter, but provides that a portion of the required open space shall be designed in such a way to render it usable for active recreation purposes.
 6. Open space shall be interconnected with open areas or greenways on abutting parcels wherever possible and may provide provisions for pedestrian pathways for general public use, to create linked pathway systems within the County, where appropriate.
 7. Open space may be used for stormwater management.
 8. A landscape plan/open space management plan specifying the landscaping/open space management requirements shall be required for all subdivisions involving the creation of

community area open space.

9. In subdivisions involving fifty (50) acres or more, designated open space shall be classified as natural resource area open space in addition to community area open space. Within these subdivisions both types of open space will be included on separate parcels and adhere to the following additional open space design standards:
 - a. Natural resource area open space shall generally be large tracts of contiguous land including protected resources.
 - b. Community area open space shall be smaller open space parcels not necessarily contiguous to the natural resource areas. Community area open space shall provide a benefit to residents of the subject subdivision and provide recreational opportunities.
 - c. The configuration and arrangement of all open space shall emphasize interconnectivity within the subdivision and with adjoining public or private open spaces. Narrow or fragmented small open spaces shall be avoided unless necessary for a practical function.
 - d. Natural resource area open space shall be contiguous to the greatest extent practicable within the subject subdivision and shall maximize the area in width to provide habitat linkages, enhance environmental resources and serve stormwater management functions. Fragmented natural resource area open space should be minimized to the greatest extent practicable to meet these standards.
 - e. The requirements of Section 40.20.225 (B) shall be met. However, in cases where community area open space cannot satisfy the requirements of Section 40.20.225 (B) (5), the substitution of passive recreational activities within natural resource open space areas shall be reviewed by the Department. Only those passive recreational uses permitted in Table 40.10.210 shall be considered for approval.
 - f. All areas required to be protected as resources per Table 40.10.010 shall be designated as natural resource area open space except when isolated resources exist and as approved by the Department.
 - g. A natural resource area management plan shall be submitted to the Department for review and approval prior to the recordation of all major residential subdivisions involving the creation of natural resource area open space.
10. In multi-family developments, the open space acreage requirements and design standards shall be provided except that the open space will be part of the developed parcel.

(Amended July 8, 2003 by Ordinance 03-045)

SECTION 40.20.230 STREETS

All new streets not intended to be private in nature and widened portions of all existing dedicated public rights-of-way shall be dedicated to public use, subject to final inspection and acceptance by DeIDOT. For local, collector or marginal access streets, construction and design of such streets or portions of streets shall be in accordance with the subdivision regulations of DeIDOT. For arterial streets, construction and design of such streets or portions of streets shall be in accordance with the standards of DeIDOT. Design standards for subdivision streets shall be as follows:

- A. **Arterial and collectors.** The location and function of proposed arterial and collector streets shall be coordinated with plans and proposals contained in the Comprehensive Development Plan, and the WILMAPCO and DeIDOT Transportation Plans, as appropriate, and shall be designed in relation to existing and planned streets, topographical conditions, planimetric features, public convenience, and safety, and in appropriate relation to the proposed uses of the land to be served by such streets.

- B. **Local streets.** Local streets shall be designed to discourage through traffic. However, developments within super blocks shall be interconnected to reduce loadings on arterials and collectors. Marginal access streets should be provided where necessary, based on proposed uses and loadings.
- C. **Nonresidential streets.** Streets in commercial and industrial areas should be laid out so as to accommodate truck traffic, especially with regard to curb radii, intersection design, etc.
- D. **Provision for widening.** Building setbacks and orientation, curb cut locations, connections to streets, and internal vehicular circulation patterns should be designed with full consideration for future rights-of-way, future right-of-way widenings, interchanges and intersections.
- E. **Parking.** Commercial, industrial, and multi-family parking lots shall be designed with due consideration for proper traffic flow and channelization.
- F. **Street connectors.** Subdivisions shall be connected to each other to provide reasonable access within a superblock. The street connections shall follow the local circulation plan (Section 40.21.111). Whenever a street interconnection is proposed and shown on a plan to be recorded, the following notification requirements shall apply:
1. The Developer and/or its assigns shall, during construction and before the first lot is sold, install a street sign to provide notice to potential purchasers of property along a proposed or planned interconnecting street that said interconnection is planned or proposed. Such signs shall be of a metal DeIDOT regulation street sign and shall be placed at the end of the stub street in the right-of-way. The sign shall indicate "Street Connection to Future Development." The sign shall also reference "New Castle County Department of Land Use" and the respective "instrument number" of the recorded plan depicting the interconnection. For projects where the interconnecting street is not constructed until future phases, the developer shall move the sign as necessary (to be determined by the Department of Land Use) to the end of the stub street as construction occurs. The sign shall be removed once the interconnection is made.
 2. The Developer and/or its assigns shall obtain written acknowledgment as a part of any agreement of sale from a prospective homebuyer as to awareness of the potential or planned street interconnection.
 3. The Developer and/or its assigns shall append a notification to every new deed in every new subdivision stating the name of the subdivision, the instrument number of the subdivision, and the name of every street in the subdivision for which a future interconnection is proposed or planned.
 4. The Developer and/or its assigns shall note on the record plan the planned or potential street interconnections and the aforementioned requirements to post signage, to obtain written acknowledgment of notice of the proposed connector street, and the requirement that the developer and/or its assigns furnish a copy of the record plan depicting the street interconnection(s) to every homebuyer in the subdivision.
 5. Failure to implement any action required by a record plan note shall be deemed to be a violation of the record plan, and shall be subject to all penalties and remedies contained in Division 40.31.900.
- G. **Private streets.** Private streets shall be permitted only in the SR and SE Districts, and in rural subdivisions (Article 24).
- H. **Marginal access streets.**
1. A distance of ten (10) feet is required between the back of the curb of any marginal access street and the right-of-way line of the parallel principal road. Where both marginal access streets and the principal road are located within a common right-of-way, this requirement

shall apply to the distance between pavement edges. If the principal road is an internal or collector street, the minimum distance between pavement edges shall be thirty (30) feet.

2. Other requirements for marginal access streets are provided in applicable portions of the subdivision regulations of DelDOT.

I. Alleys.

1. Alleys are prohibited in subdivisions of single-family detached residences, except in the TN district and in Hamlets or Villages in the S and SR districts.
2. Alleys may be permitted in other types of residential subdivisions, provided the subdivider produces evidence to the Department of their benefit for the community.
3. Where alleys are proposed in residential areas, they shall be at least twenty (20) feet wide and paved for a width of at least fifteen (15) feet.
4. Where required, alleys in commercial or industrial districts shall have a minimum paved width of twenty-two (22) feet and, where necessary, corners shall be rounded or cut back to permit safe use by large vehicles.

- J. Cul-de-sacs.** A cul-de-sac's length shall be dictated by the number of lots with street frontage. Cul-de-sacs shall not serve a total of more than sixteen (16) lots, except where topography, open space, or resource protection dictates. Lengths of six (6) to fourteen (14) lots are preferred.

- K. Intersections.** Where feasible, intersections shall be aligned with those in previously approved or completed developments.

- L. Transit passenger waiting shelters.** Transit passenger waiting shelters shall be permitted in all zoning districts subject to the following requirements:

1. A minimum required setback of one (1) foot from a curbline shall be maintained for all shelters.
2. Shelters on corner lots shall comply with clear sight distances.
3. Shelters to be located within a street right-of-way shall be approved by DelDOT.

(Amended September 22, 1998 by Ordinance 98-080; amended June 12, 2001 by Ordinance 01-009; amended September 26, 2006 by Ordinance 06-060)

SECTION 40.20.231 SUBDIVISION AND STREET NAMES

- A. Subdivision names, street names and street name signs for all subdivisions and public or private streets shall be in conformance with the regulations of DelDOT. When determining proper subdivision and street names for new roads in a subdivision or land development, the Department shall check with the County 911 staff, the post office in the City of Wilmington, and the post office nearest the street or road concerned, to determine that there is no conflict with the proposed names that would result in confusion in providing emergency services or in delivery of mail. The proposed subdivision and street names should be submitted with the preliminary plan.
- B. The naming of unnamed existing public and private streets and roads in the County outside of municipalities shall be effected by resolution of Council. Before such names are submitted, the Department shall assure that there is no duplication as provided in A above.
- C. A copy of all such resolutions adopted by Council shall be recorded by the Clerk of Council in the Office of the Recorder of Deeds in and for the County and indexed alphabetically by name. A copy of all such resolutions adopted by Council also shall be forwarded to the Department, DelDOT and the local post office.

- D. A common driveway or easement established for access purposes shall not be considered a street and shall not be eligible to be named.
- E. **Installation of street name signs.** To ensure that emergency vehicles can locate any new development, no certificate of occupancy shall be issued for a building located on any street until a street name sign for such street has been properly installed.

(Amended September 22, 1998 by Ordinance 98-080)

SECTION 40.20.240 LOT FRONTAGE

Lot frontage requirements shall reflect the subdivision or land development conditions. These standards are intended to provide a reasonable building envelope on each lot. The following guidelines govern lot configuration (see Section 40.26.210):

- A. Where a grid street system exists, the lots should be as close to rectangular as feasible.
- B. In curvilinear street patterns, irregular lot shapes will result. The construction envelope is where the minimum frontage is needed; therefore, the lot width may not be narrower than the minimum frontage at any point of intersection within the envelope. The developer may have envelopes more restrictive than the minimum yard setbacks.
- C. Where topography, natural resources, or property shape make normal lotting difficult, common drives, flag lots, or shared easements shall be considered.

SECTION 40.20.241 LOT LINES

While the County desires lot lines to be generally perpendicular or radial to the street, this provision should not lead to inefficiency in design, but rather require lots to be more than several percent larger than the district minimums. Lots with nonradial, nonperpendicular, or broken lot lines may be permitted where it leads to greater efficiency while still providing generally rectilinear building envelopes. More flexibility in this consideration shall be granted as lot sizes increase.

SECTION 40.20.242 EASEMENTS

Where required, all lots shall provide easements for sewer, water, drainage, gas, telephone, or cable TV necessary to serve the subdivision. Such easements shall be located in either street rights-of-way, alleys, side or rear yards. The following standards shall apply to easements:

- A. The utility easements shall be a minimum of twelve (12) feet wide. Easements which fall on shared side or rear lot lines shall be divided equally, requiring six (6) feet from each lot.
- B. Where attached housing types or patio lots are involved and yards are enclosed or very narrow, easements shall be placed in open space areas where maintenance will not disturb the enclosures.
- C. Drainage easements shall be placed on lots to convey surface water to storm sewers located on the street or in open spaces.
- D. The minimum lot size may include twelve (12) foot easements, except as provided in B above, or where open space is protected on the lot by an easement, or where public access easements are provided, the areas in the conservation easement shall be in addition to the minimum lot size in Tables 40.04.110 or Table 40.04.112.
- E. Surface drainage patterns shall be protected by easements or open space.
- F. If streets are intended to be dedicated to DelDOT, all DelDOT standards must be met.

DIVISION 40.20.300 IMPROVEMENTS

To ensure all required improvements are completed, all subdivisions and land development plans shall be required to provide adequate surety for roads, utilities, drainage, stormwater management facilities, recharge basins, landscaping, open space completion, monuments, and other infrastructures and improvements shown on the record plan. Such surety shall be posted prior to the recording of a record plan. (See Division 40.31.800).

(Amended March 12, 2002 by Ordinance 01-112)

DIVISION 40.20.400 COVENANTS AND DEEDS

SECTION 40.20.410 PRIVATE RESTRICTIONS

The provisions of this Chapter are not intended to replace any deed restriction, covenant, easement, or any other private agreement on the use of land. All such restrictions shall be enforced by parties to the restriction. The County shall not enforce or become involved in the enforcement of private restrictions. The County shall only enforce provisions that are required by this Chapter or other provisions of the New Castle County Code. If a provision of any County Code is more restrictive than the private restriction, the County regulations shall prevail. Any provision that is contrary to the laws of the United States, Delaware, or New Castle County is hereby deemed to be unenforceable.

SECTION 40.20.420 PUBLIC EASEMENTS

During the planning of a property, the County may require the granting of a variety of easements on private property or lots. These easements may be for any of the following purposes: drainage, utilities, access to public utilities or drainage areas, and conservation easements. The County shall have the right to remove any encroachment, structures, landscaping, or any other improvements placed upon such public easements. The County may assess the cost of removing the illegal improvements against the landowner.

DIVISION 40.20.500 MAPPING AND MONUMENTS

SECTION 40.20.510 MAPPING CRITERIA

The following shall be used for mapping natural resources or other features of plans:

- A. Streams (perennial, intermittent, mapped, and unmapped) with identifiable banks and beds, lakes, ponds, and tidal wetlands are subject to the regulations of this resource.
- B. Initial identification of the watercourses/waterbodies shall be made using the U.S. Geological Survey quadrangle maps or more accurate information, as available. Field verification to determine evidence and location of channelized flow is required for a specific determination.
- C. Measurements for the boundary are to be made horizontally, perpendicular from the following reference points: top of bank of perennial streams; centerline of intermittent streams; mean water level of lakes, ponds, and tidal wetland; boundary of the floodplain and wetland as determined by this Division.
- D. Measurements shall be made at appropriate intervals perpendicular to these reference points so as to accurately reflect the character of the adjacent land.
- E. Boundaries that are dependent on elevation shall be based on on-site, one (1) foot contour intervals.
- F. The area within existing impervious area such as roadways, parking lots, structures, sidewalks, etc., shall not count towards the area of any natural resource.
- G. Measurements of forest area shall be made based on the exterior drip line of the trees.
- H. Final determination of the boundaries of the RBA district shall be made by the Department.

(Amended March 12, 2002 by Ordinance 01-112)

SECTION 40.20.520 MONUMENTS

Permanent stone or concrete monuments shall be accurately placed in the boundary (perimeter) of the property being subdivided at the intersection of all lines forming angles and at changes in directions of lines, except that when streams or other watercourses are property boundaries, monuments shall be offset and shall be connected with fully described tie lines and the stream boundary line shall include a plus or minus distance. The following rules shall apply:

- A. If an adjacent property owner refuses to permit a boundary (perimeter) monument to be placed or if a planting or structure obstructs the location where a boundary monument is to be placed, the monument may be offset and shall be connected with fully described tie lines.
- B. All streets shall be monumented along one right-of-way line at the following locations:
 - 1. At least one (1) monument at each street intersection.
 - 2. At changes in direction of street lines, excluding curb arcs at intersections.
 - 3. At each end of each curved street line, excluding curb arcs at intersection.
 - 4. An intermediate monument wherever topographical or other conditions make it impossible to sight between two (2) otherwise required monuments.
 - 5. At such other places along the line of streets as may be determined by the Department to be necessary so that any street may be readily defined in the future.
- C. The placement of all monuments shall be certified by a registered land surveyor. The scored point, marked by an indented cross in the top of the monument or a drill hole, not to exceed one-quarter (1/4) inch in diameter, shall coincide exactly with the point of intersection of the lines being monumented.
- D. Monuments shall be set with their top level at the finished grade of the surrounding ground except:
 - 1. Monuments placed within the lines of existing or proposed sidewalks shall be so located, preferably beneath the sidewalks, such that their tops will not be affected by lateral movement of the sidewalk.
 - 2. Where monuments are located beneath a sidewalk, proper access shall be provided for their use.
- E. Any monuments that are removed must be replaced by a registered land surveyor at the expense of the party removing them.
- F. One (1) permanent marker per lot shall be accurately placed so as to locate lot corners.
- G. The placement of monuments shall occur as follows:
 - 1. Nonresidential developments, institutional uses and multi-family dwellings.
 - a. Exterior perimeter monuments shall be set and certified by a registered land surveyor prior to the issuance of the first certificate of occupancy for a use subject to a record plan.
 - b. Interior street monuments for streets established by a record plan shall be set and certified by a registered land surveyor prior to the release of the road bond or other surety.
 - c. Permanent corner markers shall be set and certified by a registered land surveyor prior to the issuance of the certificate of occupancy for a lot which is established by a record plan

2. Residential subdivisions and land developments.
 - a. Exterior perimeter monuments shall be set and certified by a registered land surveyor prior to the issuance of more than seventy-five (75) percent of the building permits within a major subdivision.
 - b. Interior street monuments shall be set and certified by a registered land surveyor prior to the release of the road bond or other surety within a major subdivision.
 - c. Permanent corner markers shall be set and certified by a registered land surveyor prior to the issuance of the certificate of occupancy for each individual lot within any major or minor subdivision

H. Applicable escrow for monuments are calculated pursuant to the provisions of Division [40.31.800](#).

(Amended September 22, 1998 by Ordinance 98-080; amended March 12, 2002 by Ordinance 01-112)



UNIFIED DEVELOPMENT CODE

New Castle County

CHAPTER 40

ARTICLE 21

IMPROVEMENT AND DESIGN STANDARDS

DIVISION 40.21.000 PURPOSE

This Article provides the standards for street and access improvements by ensuring that (1) adequate municipal facilities are installed at the time of a project's development so that residents have adequate services to protect their health and safety; (2) the facilities will function efficiently and require minimum maintenance; and (3) developments are functional and internally safe to the greatest degree possible without reducing the permitted density and increasing adverse impacts on the environment and adjoining properties.

DIVISION 40.21.100 STREETS

This Division's standards apply to street and highway design and construction. All persons desiring to dedicate to public use private streets not included as part of a new subdivision or land development plan otherwise covered by this chapter are required to prepare and submit plans to the Department for review and approval, in accordance with the procedures listed in this Division. All streets and highways intended to be dedicated to the State must also meet all DelDOT standards.

SECTION 40.21.110 STREET DESIGN OBJECTIVES

Streets in a subdivision or land development shall be designed to achieve the following objectives:

- A. Integrate into the existing street pattern to address the area's future circulation needs.
- B. Provide a safe and convenient layout and design.
- C. Match the respective district's community character.
- D. Respect natural resources, topography, and drainage.

SECTION 40.21.111 LOCAL CIRCULATION PLANS

To minimize vehicular access points on arterial and collector roads, the Department and DelDOT may, when the first development occurs in an area, develop a local circulation plan. The local circulation plan shall identify desired collector or residential collectors within a superblock, areas for frontage-type roads or reverse frontage, and preferred intersection locations. The local circulation plan shall be based on property maps, zoning, and topographic and alignment information. All landowners shall conform to this plan in order to obtain subdivision approval. The following criteria shall be used in developing the local circulation plan:

- A. Collectors shall serve only the superblock and not provide alternative or cut-through routes for regional or subregional traffic. Where superblocks are too large, new arterial alignments may be designated.
- B. Where possible, collectors shall be located on the superblock's largest parcels.

- C. Parallel access shall be used where providing individual access to small parcels would create adverse safety conditions due to frequent access on arterials or collectors.
- D. Half streets and boundary streets shall be used sparingly and only where parcel size, shape, or configuration would result in inefficient development by requiring other types of street patterns.
- E. The Plan shall be sensitive to natural resources and topography.

SECTION 40.21.130 STREET STANDARDS

In addition to complying with all applicable DelDOT standards the following standards shall also apply:

- A. Evaluation of traffic impact shall be required; see Article 11.
- B. Where necessary, the developer shall provide acceleration/deceleration lanes along major roads, as determined by DelDOT, as well as right- and left-turn lanes and bypass lanes, depending on local conditions and the amount of traffic generated by the proposed development. Where such lanes are required, they shall be at the expense of the developer. Acceleration, deceleration, bypass, and right-turn lanes shall include space for bicycle lanes, as required by DelDOT.
- C. To ensure that adequate access for emergency vehicles is provided at all times, subdivisions or developments that contain three hundred (300) or more dwelling units shall be served by at least two (2) entrance streets located as remotely as possible from each other. Where site constraints prohibit the establishment of two (2) entrance streets, the Department, with the advice of the Office of the State Fire Marshal, may permit the subdivision or development to contain a single entrance street.
- D. Divided entrance streets having a landscaped median shall be provided in subdivisions or developments that contain one hundred and fifty (150) or more dwelling units. All landscaped areas within public street rights-of-way are subject to DelDOT approval.
- E. Individual residential lots shall not have driveways that permit direct vehicular access onto new arterial or collector streets intended to serve one hundred and fifty (150) or more dwelling units.

(Amended March 12, 2002 by Ordinance 01-112)

SECTION 40.21.131 SCHOOL BUS ACCESS

Residential subdivisions and land developments shall be designed with sufficient internal streets capable of accommodating school bus traffic. It is not necessary that all subdivision streets meet this requirement, and a system of safe, internal pedestrian pathways connecting homes to the designated school bus route is recommended to minimize the intrusion of the bus into the neighborhoods. The Department may waive this requirement where small size or the presence of nearby stops is adequate to serve the development.

- A. To facilitate access, the designated school bus route shall incorporate a system of circular or loop streets and/or accessways which are designed to avoid the need for the school bus to back-up. Where site constraints prohibit the establishment of a circular traffic pattern, a school bus turnaround must be provided at the terminus of the collector street and/or the terminus of the dead-end minor street.
- B. In subdivisions and land developments containing multiple dead-end streets and/or accessways, the location of turnaround facilities shall be determined by the Department with the advice of the local school district.
- C. The turnaround facility must be circular in design to permit the bus to maneuver through the turnaround without the need to back up.
- D. The paved cartway used by the bus to maneuver through the turnaround shall have a width of not less than fourteen (14) feet and an outside radius of not less than fifty (50) feet. The projection of parked vehicles into the minimum cartway standards shall be prohibited.

- E. All designated school bus turnaround facilities that are not designed to accommodate both buses and on-street parking shall have above-grade signs erected to identify the street or accessway as a "school bus turnaround," and the sign shall further state that "on-street parking is prohibited."

(Amended September 26, 2006 by Ordinance 06-060)

SECTION 40.21.140 PRIVATE ROADS

Private roads shall be permitted provided the following are met:

- A. It is County policy to encourage public dedication of streets in new subdivisions and to discourage provision of private streets in such subdivisions. However, in limited situations, the Department of Land Use may approve the use of private streets provided:
1. Public use of private streets shall be required; and
 2. The development is in the Suburban Estate District or Suburban Reserve District and is a single-family or open space subdivision; or
 3. Is a rural subdivision.
- B. Where appropriate, private street improvements shall meet the minimum standards for comparable public streets.
- C. A maintenance organization shall be created and shall be responsible for the maintenance of the private streets.

(Amended March 12, 2002 by Ordinance 01-112)

SECTION 40.21.141 CUL-DE-SACS

All cul-de-sacs shall be designed to permit vehicles to turn around without backing, except on private roads serving less than five (5) lots and shall meet DeIDOT standards.

(Amended March 12, 2002 by Ordinance 01-112)

SECTION 40.21.150 ACCESSWAY STANDARDS

Residential driveways on corner lots should generally be located at least forty (40) feet from the intersection of the right-of-way lines. Design guidelines for private driveways or accessways shall comply with DeIDOT standards for minimum width and curve radius.

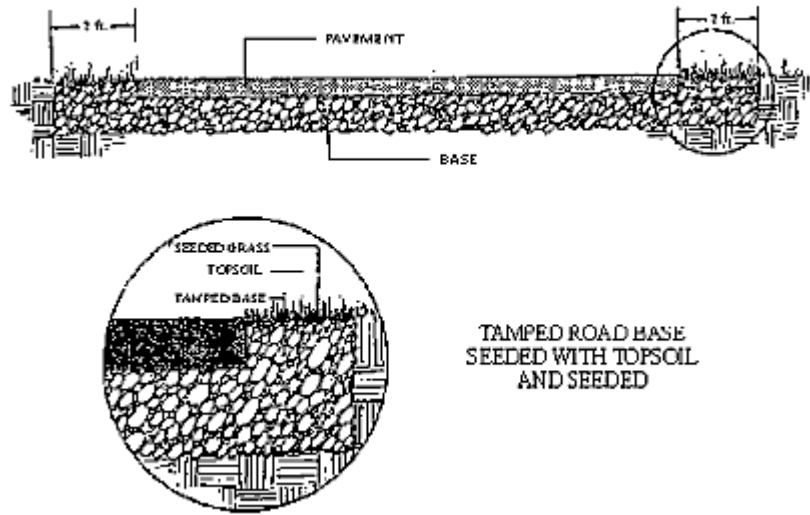
SECTION 40.21.160 IMPROVEMENTS

Highways, streets, and alleys shall be improved pursuant to DeIDOT standards.

SECTION 40.21.161 CURBS

Curbs shall be installed where required or to prevent erosion. The curbs shall be eliminated in areas where they will promote drainage over natural areas and pose no risk to buildings or homes. Where no curbs are provided, the aggregate base shall be extended two (2) feet beyond the edge of the cartway or pavement. The base shall be filled to the pavement level with aggregate, spread with topsoil, and seeded to provide a structure to support the pavement edge and eliminate damage from vehicles running off the pavement (see Figure 40.21.161). Curbs shall also meet DeIDOT standards if the roadway is intended to be dedicated to the State.

Figure 40.21.161 CURBLESS PAVEMENT DETAIL



SECTION 40.21.162 SIDEWALKS

- A. Subdivision and land developments shall contain sidewalks along both sides of the interior streets and accessways. Such interior sidewalks shall connect to existing or proposed sidewalks fronting their sites. The Department may grant a modification to permit a street or accessway to reduce the amount of sidewalk under the following conditions:
1. Construction of the sidewalk in the required location will cause a significant adverse environmental impact.
 2. Where lots are one (1) acre or larger, no sidewalks are generally required. However, total traffic volume on the roads shall be reviewed. Where peak hour traffic is expected to exceed two hundred forty (240) vehicles per hour, sidewalks or other pedestrian ways may be required.
- B. In the vicinity of schools and other public facilities, the Department may require sidewalks even where they would not be required by A above.
- C. The Department shall have the right to require additional sidewalks, bicycle/pedestrian ways where necessary to provide safe, direct, and otherwise adequate pedestrian access to surrounding neighborhoods, open spaces and public facilities.
- D. All required sidewalk and bicycle/pedestrian way locations and their construction details as specified by the Department shall be identified on the record plan. Where required, bicycle/pedestrian ways through open spaces shall be located such that they are not less than twenty (20) feet from the side or rear property line of an adjacent private lot.
- E. Where a public bus stop exists or is proposed, sidewalks may include a bus pad built at the request of and to the standards of the Delaware Transit Corporation.

(Amended March 12, 2002 by Ordinance 01-112)

SECTION 40.21.163 SIDEWALK CONSTRUCTION STANDARDS

- A. A minimum five (5) foot wide planting or landscape strip shall be provided between back of curb and front edge of sidewalk along all arterial and collector streets and where deemed appropriate by the Department. Sidewalks are to be constructed within the right-of-way of the street or in a permanent easement.

- B. Sidewalks shall be constructed of portland cement concrete. Other pedestrian ways and crosswalks may be of any suitable material approved by the Department.
- C. Sidewalks shall provide a minimum travelway width of five (5) feet, except that at overpasses or underpasses this may be reduced to four (4) feet. Sidewalks shall also include curb cuts for handicap accessibility.
- D. Where existing vegetation, topography, or other constraint dictates, the Department may require that sidewalks be located to protect resources or function in the best manner possible. This also could result in a larger right-of-way being required.
- E. Prior to issuance of a certificate of occupancy for a new dwelling unit or a building containing multiple dwelling units, the developer shall install the portion of the sidewalk identified on the record plan and located along the street or accessway abutting the dwelling unit or building.
- F. All sidewalks shall be constructed to DeIDOT standards if the roadway is intended to be dedicated to the State.

(Amended March 12, 2002 by Ordinance 01-112; amended October 22, 2002 by Ordinance 02-075)

DIVISION 40.21.200 ACCESS

Direct vehicular access to public roads and highways by individual uses shall be regulated by DeIDOT pursuant to its Access Management policy.