

Chapter X

Land Subdivision Resolution

Middlesex County,

New Jersey

Incorporating Amendments and Additions through September 1, 2008

Chapter X

Land Subdivision Resolution

Middlesex County

New Jersey

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Middlesex County Planning Board Staff
Middlesex County Engineering Department

Officially adopted by the Middlesex County Board of Chosen Freeholders

December 30, 1969

Effective February 1, 1970

Amended September 21, 1972

Effective December 1, 1972

Second Printing, December 1972

Amended June 3, 1993

Effective July 1, 1993

Amended May 20, 1999

Effective July 5, 1999

Amended December 16, 2004

Effective February 1, 2005

Amended July 24, 2008

Effective September 1, 2008

Rescinded Effective September 1, 2008

Third Printing, February 1981

Fourth Printing, July 26, 1982

Fifth Printing, June 28, 2010

Table of Contents

Section	Heading	Page
10-1	Short Title	1
10-2	Purpose	1
10-3	Approving Agency	1
10-4	Definitions	2
10-5	Procedure	9
10-5.1	General	9
10-5.2	Performance Guarantees and Payments	11
10-5.3	Dedication of Road Rights-of-Way	13
10-5.4	Appeals	14
10-5.5	Submission of Sketch Plat	15
10-5.6	Submission of Preliminary Plat	15
10-5.7	Approval of County-Required Performance Guarantees or Installation of County-Required Improvements Prior to Submission of Final Plat	16
10-5.8	Submission of Final Plat	16
10-5.9	Release of Performance and Maintenance Guarantees	18
10-5.10	Records	18
10-5.11	Application, Inspection and Appeals Fees	19

Section	Heading	Page
10-6	Plat Details	20
10-6.1	Sketch Plat	20
10-6.2	Preliminary Plat	21
10-6.3	Final Plat	25
10-7	Design Standards	25
10-7.1	Subdivision Layout	25
10-7.2	Sidewalks	29
10-7.3	Minimum Pavement on County Roads	29
10-7.4	Curbs	30
10-7.5	Driveways	31
10-7.6	Access Restriction	32
10-7.7	Screen Planting	32
10-7.8	Conformance to Provisions of Traffic Control Plan	33
10-7.9	Drainage	33
10-7.10	Drainageways	41
10-7.11	Public Utilities	41
10-8	Standards and Criteria for Adjusting or Waiving Requirements	41
10-8.1	Provisions for Waiving or Adjusting Design or Improvement Standards	41
10-8.2	Provision for Waiving or Adjusting a Plat Detail Standard	43
10-8.3	Reconsideration of Decisions	43

Land Subdivision

Section	Heading	Page
10-8.4	Provision for Waiving Development Review Fees	43
10-9	Validity	44
10-10	Repeal of Conflicting Resolutions	44
10-11	Effective Date	44
Appendix A	Design Criteria	45
Appendix B	Coefficient of Runoff	46
Appendix C	Rainfall Intensity Duration Curves	47
Appendix D	Site Triangle Agreement	48
Appendix E	Minimum Driveway Standards	49
Appendix F	Pavement, Curb and Sidewalk Specifications	50
Appendix G	Procedural Flow Chart	53
Appendix H	Hydraulic Computation Table	56
Appendix J	Overland Flow - Time of Concentration	57
Appendix K	Flood Runoff Index Curves and 15 year Flood Estimates	58
Appendix L	Middlesex County Zone Map	59

Chapter X

Land Subdivision Resolution

10-1 Short Title

This resolution shall be known and may be cited as: "The Land Subdivision Resolution of the County of Middlesex, New Jersey."

10-2 Purpose

The purpose of this resolution shall be to establish procedures and standards for land subdivision within the County of Middlesex, New Jersey as provided by R.S. 40:27-6.2 et seq.

All Standards and recommendations of the County Engineer not provided for in this resolution shall be found in the office of the County Engineer. All such standards and recommendations are incorporated in this resolution by reference.

10-3 Approving Agency

This resolution shall be administered by the Planning Board of the County of Middlesex in accordance with Chapter 285 of the Laws of 1968. The County Planning Board shall by resolution vest its powers to review and approve subdivisions with Director of County Planning and a designated committee of members of the County Planning Board, all members of the Committee however to have one vote. Said Committee shall include the County Engineer or in his absence the Assistant County Engineer. A quorum of the Committee shall have the right to act in the name of the Committee. The quorum shall be composed of a majority of Committee members. There must be 3 affirmative votes to approve an application. The Director of County Planning, or in his absence the Acting Director, must attend all official meetings of the Committee and participate in voting. The Committee shall be composed of five members.

10-4 Definitions

The following definitions shall be used to clarify the terms of this resolution:

10-4.1 Abutting County Road

Any existing County Road, or a proposed County Road which is shown on an adopted County Master Plan or official County Map, which due to its location and width abuts or adjoins a lot or parcel of land submitted for the review and approval of the Middlesex County Planning Board in accordance with the standards set forth in this resolution.

10-4.2 Adequate Drainage

The existence or proposal for those drainage facilities of drainage easements in a drainage course leading to, along, or through a County road or through any drainageway, structure, pipe, culvert, or facility for which the County is responsible for the construction, maintenance or proper functioning, either within or exterior to a proposed subdivision including facilities of such location, size, design, construction or condition which will provide adequately for storm drainage; or which will when provided deter either flooding, erosion, silting or other damaging effect to a County road or County drainage structure; or reduce the threat of damage to private property as a result of storm drainage from, along, or through a County road or County drainage structure.

10-4.3 Applicant

Any individual, firm, association, syndicate, co-partnership, corporation, trust, or any other legal entity capable of commencing proceedings under the provisions of a municipal subdivision ordinance and this resolution to effect a subdivision of land for applicant or for another.

10-4.4 Bridge

A structure designed to carry a traveled way over a waterway or depression on a deck supported by abutments and intervening piers.

10-4.5 Building

Land Subdivision

A structure having a roof.

10-4.6 County Master Plan or "Master Plan"

A composite of the Master Plan for the physical development of the County, with the accompanying maps, plats, charts, and descriptive and explanatory matter adopted by the County Planning Board pursuant to Revised Statute 40:27-2.

10-4.7 Crosswalk

That part of a highway marked or unmarked which is used for the purpose of pedestrian crossing particularly at intersections, and which generally follow the logical extension and connections of the sidewalk areas.

10-4.8 Culvert

An enclosed conduit or duct through which a watercourse or drainage course is directed.

10-4.9 Drainage Basin

All that area of land that contributes storm water run-off to any given point along a brook, stream, watercourse, drainage facility, or easement.

10-4.10 Drainage Easement or Drainageway Right-of-Way

Assignable Rights-of-Way across lands to provide for the alignment and maintenance of drainage courses, installation of drainage facilities, enlargement of existing drainageways or for similar or related storm drainage purposes.

10-4.11 Drainage Facilities

Bridges, culverts, headwalls, curbs, gutters, inlets, catch basins, ditches, ground water recharge, detention or retention basins, pipes, pumps or related types of facilities to provide for the adequate handling of storm drainage.

10-4.12 Driveway

A private way laid out to give vehicular access from a public road to a lot.

County of Middlesex

10-4.13 Easement for County Road Purposes

An easement to the County for the purposed of installation of utilities, or for construction, reconstruction, widening, or improving a County road including the repair and maintenance of the County road and the construction, reconstruction or alteration of facilities related to the safety, convenience or carrying capacity of the County road including drainage facilities and traffic control devices and also for the purposes of maintaining a clear sight area.

10-4.14 Final Plat

A plat, map, chart, or a survey of lands drawn in accordance with the requirements of "the Map Filing Law" Chapter 141 P.L. 1960 for the purpose of filing same in the County Clerk's Office.

10-4.15 Inside Lane

The lane nearest the centerline of the traveled way of a road.

10-4.16 Inside Turning Radius

The innermost encroachment line of a vehicle's wheels when making a turning movement.

10-4.17 Lot

A designated parcel, tract, or area of land to be used, developed or built upon as a unit.

10-4.18 Maintenance Guarantee

A security to guarantee the maintenance and proper functioning of improvements installed by a developer for a period of two (2) years after release of a subdivider's performance guarantee with respect to such improvements.

10-4.19 Major Subdivision or Non-Exempt Subdivision

Any subdivision not classified as an exempt subdivision by the County Planning Board.

Land Subdivision

10-4.20 Minor Subdivision or Exempt Subdivision

An exempt subdivision is any subdivision containing less than four (4) lots and containing two acres or less and has not more than two hundred feet of frontage on or abutting a County Road.

10-4.21 Outside Lane

The lane nearest the curb or outer edge of the traveled way of the road.

10-4.22 Outside Swept Path

The outermost encroachment line of a vehicle when making a turning movement including any portion of the vehicle which overhangs beyond the wheelbase.

10-4.23 Owner

Any individual, firm, association, syndicate, co-partnership, corporation, trust, or any other legal entity having sufficient proprietary interest in land sought to be subdivided.

10-4.24 Performance Guarantee

A security to guarantee the fulfillment of improvements required by the County or municipality. Said security may include but is not limited to bond, mortgage, cash or any combination thereof.

10-4.25 Preliminary Plat Approval

The conferment of certain rights upon a subdivision application for a limited period of time as set by statute and prior to final action after specific elements of a preliminary subdivision plan have been agreed upon by the Subdivision Committee in order to preserve the integrity of the subdivision plan.

10-4.26 Preliminary Plat

The preliminary map indicating the proposed layout of the subdivision showing or being accompanied by all of the information required under Section 10-6.2 of this resolution.

County of Middlesex

10-4.27 Right-of-Way

The outer edge of County roadway property separating roadway property from abutting properties of others.

10-4.28 Setback Line

A line within any lot which is parallel to any street line between which and the street line no building or portion thereof may be erected except as provided in the local zoning ordinance.

10-4.29 Shoulder

That portion of the highway, exclusive of and bordering the traveled way designed for parking or for emergency use but not ordinarily to be used for vehicular travel.

10-4.30 Sidewalk Area

That portion of a highway intended for the use of pedestrians, between the curblineline of the outside edge of a shoulder, or if none, the outside edge of the traveled way and the adjacent Right-of-Way line.

10-4.31 Street

Means any street, avenue, boulevard, road, lane, parkway, viaduct, alley or other way which is in an existing state, county, or municipal roadway, or a street or way shown upon a plat heretofore approved pursuant to law or approved by official action as provided in R.S. 40:55-1.17 or a street or way on a plat duly filed and recorded in the office of the County Recording Officer prior to the appointment of a planning board and the grant to such board of the power to review plats, and includes the land between the street lines, whether improved or unimproved, and may comprise pavement, shoulders, gutters, sidewalks, parking areas and other areas within the street lines.

10-4.32 Structure

Anything constructed, assembled or erected, the use of which requires location on the ground or attachment to anything having location in or on the ground including billboards and signs and which include fences which are more than six feet high, tents, lunch wagons, trailers, dining cars or other cars or other structures on

Land Subdivision

wheels or other supports and used for business or living purposes and swimming pools.

10-4.33 Subdivision

The division of a lot, tract or parcel of land into two or more lots, tracts, parcels or other divisions of land for the purpose, whether immediate or future, of sale or building development. The following divisions, however, shall not be considered subdivisions within the meaning of this resolution, if no new streets, roads or easements of ingress or egress are created:

- A. Division of land for agricultural purposes where all resulting parcels are three acres or larger in size,
- B. Divisions of property by testamentary or intestate provisions, or
- C. Divisions of property under court order.

Subdivisions shall be shown by means of a plat. The term "subdivision" shall also include the term "Resubdivision". For the purpose of this definition, agricultural purposes means: Farming and related pursuits but not including the erection, alteration, enlargement, occupancy or use any building designed for or suitable for residential, commercial, or industrial occupancy.

Provided further the transfer of title to one or more adjoining lots, tracts or parcels of land, owned by the same person or persons, shall not constitute a subdivision of land when such lots, tracts or parcels all conform to the requirements of the municipal planning and zoning ordinances and regulations issued thereunder and are shown and designated as separate lots, tracts or parcels on the tax map or atlas of the municipality.

10-4.34 Subdivision Application

The application for approval of a subdivision pursuant to the "Municipal Planning Act" (1935) (P.L. 1953, C. 433) (C. 53-1) et seq. as amended and supplemented or an application for approval of a planned unit development pursuant to the "Municipal Planned Unit Development Act" (1967) (P.L. 1967, C. 61) (C. 40:55-54 et seq.) as amended and supplemented.

10-4.35 Subdivision Committee

A committee designated by the County Planning Board and vested with the power of said Board to review and approve applications for subdivisions in conjunction with the County Planning Director.

For the purposes of this resolution, the term Subdivision Committee as used in this resolution shall be construed to include the County Planning Director and the County Engineer, or in the absence of either or both their Assistants.

10-4.36 Through Highway

Every highway or portion thereof at the entrances to which vehicular traffic from intersecting highways is required by law to stop before entering or crossing the same and when stop signs are erected as provided by law.

10-4.37 Traffic Control Device

A device whether manual, electrical, mechanical or stationary which directs the movement of pedestrian or vehicular traffic.

10-4.38 Traffic Control Plan for a County Road

A plan which is adopted by the County Planning Board as part of the County Master Plan and which delineates and describes the number, location, and methods of operation of traffic control structures, devices and regulations, the future installation and operation of which are deemed necessary to handle safely and adequately the present and future traffic and pedestrian flows on a County Road. Such traffic flow plan may be developed in conjunction with the plan for the widening of an existing County road or in conjunction with the plan for the construction of a new County road. Further, such plan shall be based upon estimates of future traffic flows developed in accordance with accepted traffic engineering and planning techniques.

10-4.39 Water Course

Any swale, stream, brook or river through which water flows ordinarily and frequently but not necessarily continuously. This definition includes water courses which have been artificially realigned or improved.

10-5 Procedure

10-5.1 General

Prior to classification and/or final approval by a municipal subdivision approval authority, each application for a subdivision of land within Middlesex County, other than an exempt subdivision, shall be submitted to the County Planning Board for review and classification. Such subdivision application shall be submitted by the applicant who shall attach a statement addressed to the County Planning Board certifying under oath that a true copy of the plat and application have been or is to be duly filed with the municipal official designated to receive subdivision applications.

Also, the appropriate fee as determined from the current adopted fee schedule, as posted in the Office of the Middlesex County Planning Board, must accompany the subdivision. Only checks are acceptable and must be made out to "Treasurer-Middlesex County". No subdivision shall be considered a formal subdivision until the appropriate fee, number of plats, and completed application form are submitted to the Planning Board staff.

Such subdivision application may be submitted to the County Planning Board by the municipal official designated to receive such applications on behalf of the municipal subdivision approval authority.

The municipal subdivision approval authority shall defer unconditional approval on a subdivision until receipt of the Subdivision Committee report thereon.

The County Planning Board staff shall review all applications submitted for County Planning Board review, approval, exemption, or classification and certify as to whether or not they conform to Sections 10-6.1, 10-6.2, or 10-6.3 of this resolution. Should such application or applications not comply with the above sections of this resolution they shall be rejected by the staff and returned to the applicant for proper compliance when such infractions materially interfere with the ability to evaluate properly said application.

Within 30 days from the receipt of a subdivision application by the County Planning Board, the Subdivision Committee shall notify the municipal subdivision approval authority by written report of its

County of Middlesex

action on said application except that in the case of sketch plats as defined by this resolution, the municipal subdivision approval authority shall be notified of the action within 16 days from the date of receipt of the sketch plat by the County Planning Board. The report of the Subdivision Committee on its actions shall set forth all conditions required for approval and, if approval is withheld or if the application is disapproved, all reasons for said disapproval or withholding shall be set forth. A copy of said report shall be transmitted to the applicant or his agent.

The Subdivision Committee may withhold approval of a subdivision if said proposed subdivision does not meet the approval standards set forth in this resolution.

All applicants have a right to appear before the Committee whenever the Committee acts on an application. Applicants may appear in person or by an attorney except that if applicant is a corporation the appearance must be by an attorney. It shall be the duty of the applicant to determine the time and place the Committee intends to act on an application.

If the Subdivision Committee fails to act on a subdivision application within the 30 day period, said subdivision application shall be deemed to have been approved by the Subdivision Committee. However, by mutual agreement between the Subdivision Committee and the municipal subdivision approving authority, with approval of the applicant or his agent, the 30-day period may be extended for an additional 30-day period, and any such extension shall so extend the time period within which a municipal subdivision approving authority shall be required by law to act thereon.

Should the Subdivision Committee fail to act within 30 days on any subdivision application and fail to receive an approved extension of time, the Secretary of the County Planning Board shall upon a written request of the applicant attest on the final plat to the failure of the Subdivision Committee to report within the required time period. Such attestation shall be sufficient authorization for further municipal action on the application and acceptance thereof for filing by the County Recording Officer.

Land Subdivision

10-5.2 Performance Guarantees and Payments

As a condition to the approval of a subdivision, the Subdivision Committee may require the applicant to submit a performance guarantee and, where deemed appropriate, a maintenance guarantee in a form approved by the County Counsel and in an amount determined by the County Engineer pursuant to statute to assure the installation and/or maintenance of those improvements that are required for Subdivision Committee approval. No maintenance guarantee shall exceed two years duration.

As provided by law the provisions of this Resolution do permit the Subdivision Committee to require a cash contribution to the County to cover the cost of the installation of offsite improvements and the approval of a subdivision application shall be further conditioned on the receipt of such contribution in the form of a certified check made payable to "Treasurer-Middlesex County."

Any monies or guarantees received by the County shall not duplicate bonds or other guarantees required by municipalities for municipal purposes. Any and all monies received by the County to insure performance and to meet the requirements established for subdivisions under this resolution shall be paid to the County Treasurer who shall provide a suitable depository therefore. Such funds shall be used only for County roads or other facilities for which they are deposited unless such projects are not initiated for a period of ten years, at which time said funds shall be transferred to the General Fund of the County.

The applicant shall assume all liabilities associated with the construction of required improvements until such time as improvements are accepted by the County.

"Clauses to be incorporated within performance bonds for Middlesex County"

In the event that Obligor(s) shall not perform pursuant to its obligations or conditions as set forth in the resolution of approval dated ____ and suit is commenced to enforce the obligation of Obligor(s), then an additional 10% shall be added to the amount then needed to complete the work as set forth above, which amount shall be deemed to be the increased costs and expenses of suit, administration fees and expenses and rise in costs.

County of Middlesex

The said Surety hereby stipulates and agrees that no modifications, omissions or additions in or to the terms of the said contract or in or to the plans or specifications therefore shall in anywise affect the obligation of said Surety on its bond.

In the further even that Obligor(s) shall default in performing any of the terms and conditions as set forth above, and after a 20 day written notice by the Obligee has been served upon the Obligor(s) notifying the Obligor(s) of said default, and in the even that said breach or default is not cured and shall continue, then and in the event Obligor(s) shall be immediately obliged to pay to Obligee all monies necessary for Obligee to complete all the remaining work as set forth above.

Said work required as herein before set forth shall be performed in accordance with the directions and subject to the approval of the Middlesex County Engineer.

Obligor(s) shall also be responsible for the payment by the contractor, and by all subcontractors, for all labor performed or materials, provisions, provender of other supplies, teams, fuels, oils, implements or machinery used or consumed in, upon, for or about the construction, erection, alteration or repair of such buildings, works or improvements.

If the Committee should permit cost contributions to be paid over a deferred period, interest at the prime rate shall be required. No deferred payment shall extend beyond the projected term of construction less 6 months. Default in any payment shall accelerate the unpaid principal and subject the applicant to any other available sanction.

Performance guarantee amounts shall be set by the County Engineering Department. The applicant shall provide 10% of the performance guarantee by certified check, and the balance either by certified check, surety bond, letter of credit or other means found acceptable to the County.

The performance guarantee inspection fee shall be deducted from the 10% portion of the performance guarantee and the balance returned to the applicant as provided for herein. The applicant must notify the Planning Board by filing a request form stating that the work required is complete and ready for inspection. Any re-

Land Subdivision

inspections performed as the result of unsatisfactory or incomplete work may require an additional fee in each instance.

The County Department in issuing road opening permits for developments acted upon by the Middlesex County Planning Board shall not require the duplication of a performance guarantee already required and accepted by the Middlesex County Planning Board. However, should the County Road Department upon inspection to return the performance guarantee determine that the construction within the County Right-of-Way was unsatisfactory and additional expenses are incurred by the County Road Department as a result of same, the County Road Department may upon presentation of an itemized list of said additional expenses request reimbursement from the 10% cash portion of the performance guarantee being held by the Middlesex County Planning Board. All such reimbursements shall be transferred to the County Road Department account by way of the County Comptroller.

10-5.3 Dedications of Road Right-of-Way

As a condition to the approval of a subdivision application, which affects a County road or roads, the Subdivision Committee shall require the dedication of Rights-of-Way to conform to the future Right-of-Way for an existing abutting County road or to conform in location and Right-of-Way width with any future road shown on the duly adopted County Master Plan or Official Map, provided however, dedication to be required shall be that portion of a Right-of-Way shown on a duly adopted Master Plan or Official Map: except that the Subdivision Committee may waive from dedication the following:

- A. Any area that exceeds 10 percent of the total land area encompassed by the subdivision.
- B. Any area which includes existing buildings.

On an existing road, the additional Right-of-Way shall be that portion of the site which abuts a County road and which lies between the existing Right-of-Way and the proposed future Right-of-Way line for the County Road as set forth in the County Master Plan adopted by the County Planning Board or as set forth on an official County map adopted by the Board of Chosen Freeholders.

10-5.4 Appeals

In the event an applicant for subdivision approval is aggrieved by a final action taken by the Subdivision Committee of the County Planning Board, said applicant may file an appeal in writing to the County Planning Board within ten days after the date of notice by certified mail of the said action.

All appellants must follow the following procedure in each appeal to either the Planning Board or the Board of Chosen Freeholders: In writing, and at least 5 days before the hearing in the appeal, set forth in detail each legal point on which reliance will be made in the appeal. Each point shall be documented by factual and legal bases with appropriate citations to establish each point. The appellant shall advise if a reporter or stenographer will be present. If a reporter or stenographer will be present, the County Planning Board or the Board of Chosen Freeholders, as the case may be, may require a copy of said transcript for its inspection. Appellant shall execute a consent that the time within which to render any decision shall be extended for a reasonable time after any transcript is made and received by the County Planning Board or Board of Chosen Freeholders. The appellant shall also set forth whether expert testimony shall be produced. If so, the experts shall be listed, together with their qualifications.

Any person aggrieved by the action of the County Planning Board in regard to an appeal may file a further appeal in writing to the Board of Chosen Freeholders within ten days after the date of notice by certified mail of such action. The County Planning Board or the Board of Chosen Freeholders to which an appeal is taken shall consider such an appeal at a regular or special public meeting within forty-five (45) days from the date of its filing.

Notice of said hearing shall be made to the applicant by certified mail at least ten days prior to the hearing and to such of the following officials as deemed appropriate for each specific case; the municipal clerk, municipal planning board, board of adjustment, building inspector, zoning officer, Board of Chosen Freeholders, and the County Planning Board. The board to which appeal is taken shall render a decision within thirty (30) days from the date of the hearing.

Land Subdivision

10-5.5 Submission of Sketch Plat

Within 16 days from time of receipt the Subdivision Committee shall cause the plat to be reviewed and analyzed and the classification shall be directed into one of the following categories:

- A. Exempt, as defined in 10-4.20, however no exempt subdivision is to be submitted to the Committee for classification, whether or not said subdivision is located on a County Road.
- B. If the subdivision either abuts a County Road; or, provides material drainage to a County Road or a County facility; or, is affected by a proposed road or drainageway shown on a duly adopted County Master Plan or Official Map; the subdivision shall be declared as requiring further Subdivision Committee approval and shall be required to be resubmitted as a preliminary plat and final plat in accordance with the provisions of this resolution prior to final action by the municipal subdivision approval authority.
- C. If it shall determine that the subdivision conforms to neither A. nor B. categories then it shall, be declared as being subject to Subdivision Committee review prior to approval, by a local municipal approval authority.

10-5.6 Submission of Preliminary Plat

Prior to approval by a municipal subdivision approval authority of a preliminary plat of a subdivision, four copies of such preliminary plat drawn in accordance with the provisions of Section 10-6.2 of this resolution plus a copy of the executed preliminary plat application form submitted to the municipality shall be submitted to the County Planning Board.

Upon receipt, the Director of County Planning shall immediately request the County Engineer to evaluate the subdivision in accordance with the engineering standards established in this resolution and provide a report on such evaluations containing recommendations for County requirements and the amount of performance guarantees, maintenance guarantees, payments in lieu of County road improvements and proportionate share of the cost and installation of offsite County drainage facilities.

County of Middlesex

Within time limits prescribed in Section 10-5.1 from receipt of the preliminary plat, the Subdivision Committee shall analyze the plat and take action on the preliminary plat application.

10-5.7 Approval of County-Required Performance Guarantees or Installation of County-Required Improvements Prior to Submission of Final Plat

Following approval or conditional approval of a preliminary plat, but prior to submission of a final plat, an applicant shall submit and obtain approvals of all performances guarantees; maintenance guarantees; payments in lieu of improvements to County roads; payments that represent a proportionate share for the cost and installation of offsite County road or drainage facilities; or easements or dedications as may have been specified by the Subdivision Committee in its preliminary plat approval.

Where physical improvements are to be constructed along, under, within or above a County road the applicant shall also prior to the submission of a final plat obtain a road opening permit from the Middlesex County Road Department in accordance with the applicable resolution of the Middlesex County Board of Chosen Freeholders adopted on December 16, 1965.

However, prior to submission of a final plat but in lieu of the submission of performance guarantees, the applicant may submit and request approval upon the presentation of evidence that all improvements for which performance guarantees had been required have been installed in accordance with designs and specifications required by the Subdivision Committee and approved by the County Engineer and have been inspected and approved in their completed form by the County Engineer.

10-5.8 Submission of Final Plat

Prior to approval by a municipal subdivision approval authority of a final plat of a subdivision the following shall be submitted to the County Planning Board:

- A. At least three paper prints of such final plat drawn in accordance with the provisions of Section 10-6.3 of this resolution plus a copy of the executed final application form submitted to the municipality.

Land Subdivision

- B. Certifications that the County has received and approved as to form and amount all performance guarantees, maintenance guarantees, payments in lieu of improvements to County roads or drainageways or payments that represent a proportionate share for the installation of offsite County road or drainage facilities.
- C. Certification from the County Engineer in lieu of the submission of performance guarantees that improvements have been installed and inspected in accordance with Section 10-5.7, and that the proper maintenance guarantees have been accepted.
- D. When required, proof that a road opening permit has been obtained by the applicant in accordance with Section 10-5.7 above.

Within the time limits prescribed in Section 10-5.1 from receipt of the final plat, the Subdivision Committee shall study and analyze the plat and take action on the final plat application. The Subdivision Committee shall notify the municipal approval authority by written report of its action.

If substantial revisions are incorporated in the final plat which affect or could affect County requirements, a revised preliminary plat shall be submitted to the County Planning Board for processing as a new preliminary plat. In the event the report to the municipal approval authority requires the submission of a revised preliminary plan, then, in that even the Subdivision Committee will act further on said final application within 30 days following the receipt by the County Planning Board of the revised preliminary plans. Tracings and cloth copies of final plats shall be presented to the Subdivision Committee after County and municipal approval and just prior to recording with the County Clerk's Office so that the action taken by the Subdivision Committee can be recorded on the tracing and cloth copy duplicate. The Director of County Planning or in his absence, an alternate staff member designated by the County Planning Board shall sign the plats. (Up to five working days may be required for this step.)

10-5.9 Release of Performance and/or Maintenance Guarantees

Upon application to return or release any performance or maintenance guarantee, the Subdivision Committee shall authorize such return or release after receiving the following:

- A. In the case of a performance guarantee,
 - 1) Certification from the County Engineer that all improvements required by this resolution have been inspected and found to be completed in accordance with the approved subdivision plan and approved construction standards; and,
 - 2) Certification from the Board of Chosen Freeholders that improvements to be retained within the County Right-of-Way are acceptable to that Board.
- B. In the case of a maintenance guarantee, certification from the County Engineer that all improvements covered by the guarantee have been inspected and found to be functioning properly in conformance with the standards and specifications of this resolution and terms and conditions of the maintenance guarantee.

An inspection fee for the release of a performance guarantee shall be deducted from the 10% cash portion of the performance guarantee submitted in accordance with the fee schedule provided herein.

10-5.10 Records

The Subdivision Committee shall maintain records of each sketch, preliminary, and final subdivision plat with accompanying information including a copy of the County Engineer's report. The Treasurer's office shall maintain a complete and cumulative report of the amount and purpose of all monies collected. When any drainage facility or other improvement or alteration is undertaken by the County of Middlesex, the record of monies collected shall be reviewed and if any contribution has been made toward the project under consideration said money shall be transferred and credited to it.

Land Subdivision

10-5.11 Application, Inspection and Appeals Fees

As directed by the Subdivision Committee, applicants shall pay those costs or fees required and directly caused by the processing of the application additionally including but not limited to stenographic costs on appeal, preparation of special studies.

A. Minor Subdivisions:

Sketch Plats:

\$300.00 + \$10.00 Per Acre (Revisions 33% of Original Fee)

B. Major Subdivisions:

Preliminary:

\$ 500.00 + \$20.00 Per Lot and \$ 20.00 Per Acre

(Revisions 33% of Original Fee)

Final:

\$ 500.00 + \$15.00 Per Lot and \$ 15.00 Per Acre

*All Revisions Require A New Submission per Sheet

C. Site Plan:

\$ 500.00 + \$0.15 Per Sq. Ft. of Proposed Bldg. Area Industrial and \$10.00 Per Proposed Parking Space Non-Industrial

(Revisions 33% of Original Fee)

D. Cap on Application Fees: \$20,000.00

E. Special Meeting: \$ 3,000.00

F. Release of Performance Guarantee:

<u>Amount of Guarantee</u>	<u>Fee</u>
\$ 0 - \$ 1,000	\$ 200.00
\$ 1,001 - \$ 10,000	\$ 250.00
\$ 10,001 - \$ 50,000	\$ 500.00
\$ 50,001 - \$100,000	\$ 750.00
\$100,001 - \$ And Up	\$ 1,000.00

* Additional Inspections Require an Additional Fee

G. Appeal Fee: \$ 150.00

10-6 Plat Details

10-6.1 Sketch Plat

A sketch plat submitted to the County Planning Board for action in accordance with Section 10-5.5 of this resolution shall be based on tax map information or some other similarly accurate base at a scale between 1 inch = 20 feet to 1 inch = 200 feet to enable the entire tract to be shown on one sheet and shall show or include the following information when they appear to fall within classification A. or C. of Section 10-5.5:

- A. A key map showing the entire subdivision and its relation to surrounding streets and highways within a ¼ mile radius.
- B. The identification of that portion which is to be subdivided or conveyed in relation to the entire tract and that portion which is to be retained.
- C. All existing buildings and structures within the tract to be subdivided and whether or not they will be retained or removed.
- D. The name of the owner and applicant and any and all adjoining property owned by the owner or applicant within 200 feet of the tract to be subdivided.
- E. The tax map sheet, block and lot numbers.
- F. All existing and proposed streets or roads within or adjoining the proposed subdivision with the existing and if appropriate future Right-of-Way widths clearly indicated.
- G. All proposed lot lines and lot lines to be eliminated by the proposed subdivision shall be clearly indicated.
- H. North arrow.
- I. Scale of the plat shall also show the graphic scale.
- J. Acreage of the entire tract and the area to be conveyed.
- K. The number of new lots created.

Land Subdivision

- L. Name and address of applicant, owner, subdivider and person preparing plat.
- M. The date map was prepared and any dates of revision.

The following additional information shall be shown or included when the application appears to fall within classification *B.* of Section 10-5.5:

- N. The approximate location, size and direction of flow of all streams, brooks, drainage structures and drainage ditches within the area to be subdivided or within 200 feet of the subdivision.
- O. The location and width of all existing and proposed utility easements in the area to be subdivided.
- P. The Right-of-Way for any existing or proposed road abutting or within said application shall be provided for in the design of the subdivision and shown in the proper location and at the width recommended by the County Master Plan or Official County Map.

10-6.2 Preliminary Plat

A preliminary subdivision plat submitted to the Subdivision Committee for review or for review and approval shall be drawn at a scale between 1"=20' and 1"=100' and shall show or include the following information:

- A. A key map showing the entire subdivision and the existing street pattern within ¼ mile of the tract to be subdivided and its relationship to the surrounding area.
- B. The name or title of the subdivision, the Municipal tax map sheet, block and lot number, date, revision date or dates if applicable, reference meridian and the written and graphic scale.
- C. The name and address of the subdivider and owner.
- D. The signature, address, license number and seal of the Land Surveyor and Professional Engineer who prepared the map.

County of Middlesex

- E. The acreage of tract to be subdivided to the nearest hundredth of an acre.
- F. The location of existing and proposed property lines, building setback lines from streets, existing buildings and structures with an indication of whether they will be retained or removed and the location and extent of wooded areas.
- G. The plat shall show or be accompanied by profiles and cross-sections of proposed streets within the subdivision and existing streets and highways abutting the subdivision and for 200 feet beyond the confines of the subdivision. The typical cross-section of streets shall clearly indicate the type and width of pavement and location of curb, location of sidewalks and shade tree planting strips. At intersections, any existing or required sight triangles and the radius of curb lines and property lines be clearly indicated.
- H. Contours at a maximum of two foot intervals. All contour lines shall be referenced to the New Jersey Geodetic Control Survey Datum.
- I. All existing water courses shall be shown and accompanied by the following information or data:
 - 1) When a brook or stream is proposed for alteration, improvement or relocation or when a drainage structure is proposed on a running stream, evidence of submission of the improvement to the New Jersey Division of Water Policy and Supply shall accompany the subdivision.
 - 2) Cross-section of water courses at an appropriate scale showing extent of flood plain (if defined), top of bank, normal water level and bottom elevations at the following locations:
 - a. At any point where a water course crosses a boundary of the subdivision.
 - b. At 50 foot intervals for a distance of 300 feet upstream and downstream of any proposed culvert or bridge within or abutting the subdivision.

Land Subdivision

- c. Immediately upstream and downstream of any point of juncture of two or more water courses.
 - d. At a maximum of 50 foot intervals along all water courses which run through or adjacent to the subdivision.
- 3) When ditches, streams, brooks, or water courses are to be altered, improved or relocated, the method of stabilizing slopes and measures to control erosion and siltation as well as typical ditch sections and profiles shall be shown on the plan or accompany it.
 - 4) The boundaries of the flood plains of all water courses within or adjacent to the subdivision if defined.
 - 5) Profile of stream bed within the tract in question and 300 feet upstream and downstream from proposed property limits of development.
- J. The total acreage upstream of the subdivision for the drainage basin for any water course running through or adjacent to a subdivision.
 - K. The total acres in the drainage basin of the nearest downstream County drainage structure and the acreage in the subdivision which drains to that structure.
 - L. The location and extent of drainage and conservation easements and stream encroachment lines.
 - M. The location, extent, and water level elevation of all existing or proposed lakes or ponds within or adjacent to the subdivision.
 - N. The preliminary plat shall show and be accompanied by plans and computations for any storm drainage systems including the following:
 - 1) Lines within and adjacent to the subdivision for a distance of 200 feet beyond the confines of the tract

Note : A map may be obtained from the County Engineer's Office showing the location and identification number of all County drainage facilities.

County of Middlesex

showing size and profile of the lines, direction of flow and the location of each manhole and inlet.

- 2) The location and extent of any ground water recharge basins, detention basins or other water conservation devices within or adjacent to the subdivision for a distance of 200 feet beyond the confines of the tract.
- O. The preliminary plat shall show and be accompanied by plans showing existing and proposed sanitary sewerage facilities serving the subdivision including the following:
- 1) Location, size, and slope of all sanitary sewer lines, pumping stations, and connections to existing facilities.
 - 2) Location of any proposed sanitary sewerage treatment plants.
- P. The preliminary plat shall show and be accompanied by plans showing the size and location of all proposed and existing water mains.
- Q. Identification of lands to be dedicated or reserved for public use.
- R. The location and profile of any other underground utilities in the vicinity of any proposed improvements and the easements to accommodate them shall be clearly indicated on the plan.
- S. The name of all adjoining property owners as disclosed by the most recent Municipal Tax Records.
- T. Then number of lots created.
- U. The number of dwelling units to be constructed within the confines of the application.

Note : After Preliminary Approval and prior to construction or consideration of the final plat, detailed plans and specifications including calculations for all proposed culverts and bridges under County jurisdiction or improvements to existing County culverts or bridges shall be submitted to the County Planning Board for review and approval by the County Engineer's office. The plans shall also be accompanied by the permit of the Division of Water Policy and Supply indicating their approval of the proposed facility or facilities.

Land Subdivision

- V. If multiple family, the number of offstreet parking spaces to be provided.

10-6.3 Final Plat

Any final subdivision plat submitted to the County Planning Board for action in accordance with Section 10-5.8 of this resolution shall conform to the following standards in presentation:

- A. At least three paper prints of a final plat shall be submitted to the County Planning Board accompanied by a copy of the completed final application form to the municipality for such final subdivision.
- B. The final plat must be drawn in conformance with the provisions of the Map Filing Law; Chapter 141 of the Laws of 1960.
- C. The final plat shall conform to all design details which formed the basis of the preliminary plat approval by the County Planning Board.

10-7 Design Standards

10-7.1 Subdivision Layout

Each subdivision subject to the County Planning Board approval shall be laid out to conform to the following design standards:

- A. RIGHT-OF-WAY FOR EXISTING COUNTY ROADS AND FUTURE ROADS SHOWN ON MASTER PLAN

The layout of a proposed subdivision shall be designed to conform to the future Right-of-Way width for an existing abutting County road or to conform in location and Right-of-Way width with any future road shown on a duly adopted County Master Plan or Official Map.

- B. LOT LAYOUT

The lot layout shall be designed to provide the least number of lots giving direct access to a County road.

Where a subdivision will have more than 600 feet of continuous frontage on an existing or proposed County

County of Middlesex

road, the lots nearest the County road shall be so laid out that access to them is gained via the interior street system of a subdivision or via an interior street or access way marginal to the County road. Where the subdivision has less than 600 feet of continuous frontage, lots may be permitted to front directly on the County road where it has been determined that conditions peculiar to the subdivision site prohibit the layout of interior or marginal access streets to give direct access to all lots nearest the County road.

C. STREET LAYOUT

The street layout shall be designed to provide the least number of interior streets giving direct access to a County road.

When the length of the subdivision frontage along a County road is 800 feet or less, only one new street from a subdivision will be permitted to connect with the County road. However, when the length of the subdivision frontage along the County road exceeds 800 feet, more than one street from the subdivision will be permitted at intervals of spacing of no less than 800 feet between proposed streets on the same side of the County road.

A new street from a subdivision shall be located in relation to existing and proposed intersecting streets on the opposite side of a County road in a way that best facilitates the existing and future flow of traffic on the County road. In general streets that connect with a County road shall be offset at least 150 feet between center lines from intersecting streets on the opposite side of such County road. However, where it is determined that the average daily traffic volume on a new street will exceed 8,000 vehicles per day, it may be required that such street be located to connect in a manner with an existing or proposed street on the opposite side of the County road.

D. ROAD INTERSECTIONS

- 1) Whenever two roads intersect and one or both roads is a County road, a sight triangle easement shall be laid out and dedicated as follows: The area bounded by the Right-of-Way lines and a straight line

Land Subdivision

connecting “sight points” on street center lines which are the following distances from the intersecting center lines.

- a. Where a State or Federally designated Highway intersects a County road overlapping sight triangles shall be required formed by 250 feet and 90 feet on each road.
 - b. Where a County road intersects another County road, a sight triangle measuring 250 feet on the road designated as a through street in the adopted “Through Street Resolution” of the County and 90 feet in the other;
 - c. Where a County road intersects a local street, a sight triangle shall be required measuring 250 feet on the County road from intersecting centerlines and 90 feet on the local street. An example of the easement agreement to be used may be found in appendix D of this resolution.
- 2) Streets or roads shall intersect an existing or proposed County road at a right angle wherever possible but in no case at an angle of less than 60 degrees as measured from the County road.
 - 3) Whenever a new road is to intersect with a County road, a radius of no less than twenty five (25) feet shall be provided between the Right-of-Way line of the new street and the Right-of-Way of the County road except that a greater radius may be required where it is determined that the existing or future traffic on the County road will exceed 8,000 vehicles per day or where the traffic generated by the subdivision will consist of trucks requiring greater radii.
 - 4) The minimum practical grade shall be maintained on streets connecting with a County road on the approaches to the intersection.

County of Middlesex

- 5) Special improvements shall be provided to facilitate large volumes of vehicular turning movements into and out of new streets intersecting County roads.

A deceleration lane for vehicles making right turns into a new street plus an acceleration lane for vehicles making right turns out of the new street shall be provided within the required shoulder area of that portion of the County road that is adjacent to the new intersection, when the new street is designed to serve in the future:

- a. A residential area that will accommodate 300 or more dwelling units;
- b. A subdivision for business or commercial uses that will contain more than 4 acres of land;
- c. A subdivision for industrial manufacturing, or warehousing uses that will contain more than 15 acres.

Each deceleration lane shall be at least 200 feet in length as measured from the center line of the new street and at least 13 feet in width as measured from the outside edge of the traveled way of the County road.

Each acceleration lane shall be at least 300 feet in length as measured from the center line of the new street and at least 13 feet in width as measured from the outside edge of the traveled way of the County road.

In instances where the subdivision will have insufficient frontage along the County road to accommodate the required length of the deceleration lane or the acceleration lane, the lane that cannot be accommodated may be substituted by a separate entrance driveway at least 18 feet in width and having an inside turning radius of at least 75 feet.

Land Subdivision

10-7.2 Sidewalks

A sidewalk shall be provided within the County road Right-of-Way if such is required by any zoning, subdivision, site planning, or other ordinances of the municipality in which the subdivision is to be located. In the absence of a municipal requirement, the County Planning Board may require the installation of a sidewalk in the County Right-of-Way where it finds that such will be needed to protect pedestrian flow while facilitating vehicular traffic on the County road.

If a sidewalk is required as a condition of approval under this resolution or is required by a municipality, such sidewalk shall be located in accordance with local specifications. In the absence of local specifications sidewalks shall:

- A. Be a minimum of five feet in width;
- B. Be constructed in accordance with the specifications of the County Engineer; and
- C. The outside edge shall be located one foot from the Right-of-Way line except in commercial areas where the sidewalk may extend up to the Right-of-Way line.

10-7.3 Minimum Pavement on County Roads

Along that portion of a County road that abuts a proposed subdivision, highway pavement of sufficient width shall be designed and installed to provide for:

- A. A continuation of the number of traveled lanes that exist on the road at the time of County preliminary subdivision application approval;
- B. A shoulder;
- C. An acceleration lane, deceleration lane, or other paved traffic lane that may be required to be installed in conjunction with the subdivision by other provisions of this resolution.

A traveled lane or any required acceleration, deceleration or other paved traffic lane shall be 13 feet in width and a shoulder shall be 13 feet in width unless because of special conditions peculiar to a

County of Middlesex

subdivision the Planning Board with the advice of the County Engineer shall specify other standards.

All pavement, shoulder, curbing and other structures on County roads shall be designed and installed in accordance with construction specifications and approvals of the County Engineer.

In addition, the County Planning Board shall require the subdivision applicant to contribute to the future widening and improvement of any County road the needs for which result from the total projected development of the immediate area of which the applicant's subdivision will be part and necessitated by an increase in traffic volumes, potential safety hazards or impediments to traffic flows caused by the subdivision.

In such case, the applicant will be required to contribute a proportionate share of the cost of such future widening and improvement, the proportionate share to be computed on the basis of the acreage of the designated immediate area plus 10% contingencies.

The immediate area shall be defined as the area encompassed by those whole traffic analysis zones (as defined by the duly adopted County Master Plan) any part of which front on the portion of the County road abutting the subdivision that is within one mile of the outer edges of the subdivision.

10-7.4 Curbs

Curbs along property fronting on a County road shall be planned and installed for each subdivision requiring County Planning Board approval in accordance with the following standards:

- A. Curbs shall be located to separate the required sidewalk area along the County road and that outer paved edge of the County road as required by the application of the standards contained in Section 10-7.3 of this resolution.
- B. The radius of curvature of curbs at intersections shall be thirty-five feet where a new street from the subdivision meets a County road and forty feet where two County roads intersect. However, a greater radius may be required in either case where it is determined that the existing or future traffic on the County road will exceed 8,000 vehicles per day or where the traffic generated by the subdivision will consist

Land Subdivision

of trucks requiring greater radii. The curb return shall extend as a minimum to the tangent point on the intersecting roadway.

- C. The construction design including grades of all curbing on a County road shall conform to standards of the County Engineer.

10-7.5 Driveways

Where subdivision lots for single family houses are permitted to front on County roads, the following standards shall be used for driveways from such lots:

- A. Driveways shall enter the County Road System as nearly as possible to 90 degrees and shall be provided by a suitable turn around area to avoid having to back vehicles out onto the County road. (Minimum standards may be found in Appendix E of this resolution.)
- B. Driveways shall be designed to allow for an inside turning radius of 18 feet and an outside swept path of 30 feet.
- C. Single lane driveways shall be a minimum width of 10 feet.
- D. A minimum 15 foot radius shall be used to connect the curb line with the side line of the driveway on both sides.
- E. Driveway grades shall not exceed 8% within the road Right-of-Way area.
- F. Where local zoning allows a portion of a single family residential dwelling to be used for any business purpose which requires the visiting upon the lot by vehicles other than those used by the residents of the dwelling, the driveway requirements as set forth below for other than single family residence shall govern.
- G. Lots used for other than single family dwellings shall adhere to the requirements for driveways as set forth in the Middlesex County Site Plan Review Resolution of the County of Middlesex, N.J.

10-7.6 Access Restriction

Wherever a lot is created along a County road which has been provided access by an interior street, the following statement shall be executed by the owner(s) and appear on the face of the final plat to be filed in the County Clerks Office:

As owner I hereby restrict all of the following lots (lot and block number) in that no owners, possessor, user, nor licensee, nor other persons have any right of direct vehicular ingress or egress with (name and number of County road) as shown on this plat; it being expressly intended that this restriction shall constitute a restriction which runs with the land and is for the benefit of the public and adjoining property owners, and shall be enforceable by the County Department of Highways and Bridges, the municipality and the adjoining property owners.

Signed _____

Witness _____

Witness _____

10-7.7 Screen Planting

Where a subdivision is designed so that lots adjacent to the County road front on an interior street, one of the following shall be provided to assure the maximum safety and welfare of the residents of the subdivision along the rear lot lines of all lots abutting the County road:

- A. Solid fencing at least five feet in height constructed of such permanent and maintenance-free materials as redwood, concrete block, aluminum, etc.
- B. A solid and continuous landscape screen consisting of massed evergreen and deciduous trees and shrubs as will produce within two growing seasons a solid screen at least five feet in height.

Land Subdivision

Such fencing or landscaping shall be of such design so as to block the passage of children to the road, screen direct headlight glare, and reduce the passage of noise from the highway uses.

10-7.8 Conformance to Provisions of Traffic Control Plan

In addition to the above requirements, the Planning Board may specify that a driveway or driveways or other subdivision design features shall conform in location and design to the provisions of an adopted Traffic Control Plan for the County road that abuts the site for which subdivision approval is sought and subject to compliance with the appropriate State agency.

10-7.9 Drainage

A. The County Planning Board shall require adequate drainage facilities and easements to be provided for the applicant in conjunction with a subdivision application that will cause storm water to drain either directly or indirectly to a County road or through any drainageway, structure, pipe, culvert or facility for which the County is responsible for the construction, maintenance or proper functioning. Such drainage shall be designed to handle all existing and future storm water to be generated.

1) On and/or through the subdivision; and

2) On and/or along such County road or roads as may abut the subdivision and which if not properly disposed will create potential safety hazards or impediments to traffic flows caused by the subdivision.

B. In addition, the County Planning Board shall require an applicant to contribute to the provision of adequate off-site County drainage facilities the needs for which will result from the total development of the drainage basin of which the applicant's subdivision is a part. In such case, the applicant will be required to contribute a proportionate share of the cost of such off-site facilities, such proportionate share to be computed on the basis of the acreage of the subdivision as related to the acreage of the total drainage basin involved plus 10% contingencies. Required drainage facilities shall include drainageway Rights-of-Way or

easements, bridges, culverts, pipes, drainageways, detention basins, recharge basins and other drainage structures as may be determined by the County Engineer to be necessary and appropriate to accomplish the foregoing purposes.

- C. In addition, the provisions for adequate drainage facilities shall include provision for widening an existing County bridge or lengthening an existing County culvert or other drainage facility on one or both sides of the stream and which facility is on a County road for which a future Right-of-Way width has been established on the duly adopted County Master Plan or Official Map. Where the proposed subdivision contains both sides of the stream and the County Engineer finds that the waterway area of the existing bridge or culvert is adequate both for present and future flows, the applicant shall be required to widen the County bridge to the proposed future width of pavement plus a ten foot sidewalk or lengthen the culvert to the full width of the proposed Right-of-Way.

However, the applicant for the proposed subdivision shall be permitted to provide a cash contribution to cover the cost as determined by the County Engineer using current competitive bid prices for the units involved, for the bridge widening or culvert lengthening when the existing bridge or culvert is deemed by the County Engineer to be inadequate in capacity to be widened or lengthened for structural or hydraulic reasons. In addition, where the subdivision application abuts only one side of a stream or waterway, the applicant shall be required to provide a cash contribution to cover only that portion of the cost of the bridge widening or culvert lengthening which is the proper share attributable to the subdivision.

D. General Design Criteria

- 1) Runoff for design of internal subdivision drainage systems shall be determined by the Rational Formula:

$$Q = ACi$$

Q = Peak discharge of watershed in cubic feet per second (cfs) due to storm given in Appendix A.

Land Subdivision

A = Area of watershed in acres.

C = Coefficient of runoff as given in Appendix B.

i = Intensity of rainfall in inches per hour based on a 15 minute time of concentration unless existing conditions permit a longer time of concentration.

Design criteria are outlined in Appendix A.

Concentration Time = time necessary for water at most remote portion of watershed to reach point of analysis. Concentration time can also be determined from Appendix J.

- 2) The sizing of conduit for the transmission of storm flow shall be determined by the use of the Manning Formula:

$$Q = a \times \frac{1.486}{n} \times R^{2/3} S^{1/2}$$

Q = Flow of conduit in cubic feet per second (cfs).

a = Cross-sectional area of water flow through conduit in square feet.

R = a/p (hydraulic radius) in feet

S = Slope, in feet/feet, fall/length

V = Average velocity of water in feet/second.

P = Wetted perimeter in feet.

n = Roughness coefficient (Appendix H).

- 3) General requirements and layout of systems
- a. Applicant must submit complete calculations for all designs.

County of Middlesex

- b. Plans must show horizontal alignments and profiles of all structures.
- c. Velocities: minimum - 2.5 fps, maximum - 8 fps.
- d. Manholes:
 - A. Change in alignment
 - B. 300 feet maximum
- e. Minimum pipe diameter: 12".
- f. Maximum inlet flow 6.0 cfs.
- g. Maximum inlet spacing 500 feet.
- h. Access manholes shall be spaced at 300 foot intervals (maximum) through Rights-of-Way and at sewer junctions where there are no catch basins.
- i. Access manholes shall be used at every change of horizontal alignment.
- j. Every street intersection shall have a minimum of two inlets. In general, inlets should be located so that no water will flow across a street or crosswalk in order to reach an inlet. This requires that inlets be placed in the high corners at intersections and at sufficiently frequent intervals that the gutters are not overloaded.
- k. Inlets and manholes shall be constructed in accordance with standards established by the County Engineer.
- l. Pipe used shall be circular reinforced concrete pipe Class III wall B unless otherwise directed by County Engineer and laid with not less than two (2) feet of cover over top of pipe.

Land Subdivision

- 4) Natural Streams. Where a subdivision incorporates within its bounds a stream considered to be in its natural state, the applicant must submit a properly executed application along with all other data required, to the N.J. Department of Environmental Protection, Division of Water Resources. Proof of this submission must be included at the time the subdivision is reviewed. If work is contemplated on the stream, i.e., piping, relocation, lining, widening, etc. design should be based on the "Flood Runoff Index Curves", see Appendix K. The municipality in which the subdivision is located will be used to determine which curve is applicable for that area. Appendix L shows Runoff Zones for Middlesex County. Locations in Runoff Zone A shall use the North Jersey Curve and Locations in Runoff Zone B shall use the Mean Curve. These Runoff Zones are based on the relative permeability of soils in the County.

On major streams within the County, flood hazard areas have been delineated and adopted by the Water Policy and Supply Council of the N.J. Department of Environmental Protection. Any proposed work on the delineated floodways of these streams will require a permit from the Division of Water Resources, N.J.D.E.P. On other major streams, where floodways have not been delineated, the County may require an encroachment line to be set on the stream based on a 100-year storm. No permanent structures will be permitted within this encroachment area.

- 5) Culverts and Bridges. The design of structures shall be in accordance with the "Standard Specifications for Highways Bridges" adopted by the American Association of State Highway and Transportation Officials, 17th Edition, 2005.
- a. The loading for structures shall be H20-44 as designated in the above captioned specifications.
 - b. Deck width of structure.

County of Middlesex

Culverts shall be constructed for the full width of the existing or proposed Right-of-Way as outlined in Section 10-7.9C.

Bridges shall be constructed for the total width of pavement, plus shoulder, plus two 10-foot sidewalk areas.

E. General Requirements.

- 1) All design must be approved by the County Engineer.
 - a. All plans and specifications must be submitted with complete hydraulic and structural calculations.
 - b. Applicant must submit proof of application to, or permit issued by Department of Environmental Protection, Division of Water Resources for proposed structure at the time the subdivision is reviewed.
- 2) Inspection, testing and final approval.
 - a. The County Engineer or his authorized representative will make necessary inspections to be facilitated by applicant. Applicant will take corrective action if directed by County Engineer.
 - b. The County Engineer may require that certain tests be made by a recognized testing laboratory at the cost of the applicant.
 - c. All structures must have final approval of the County Engineer.
 - d. All permits of the Division of Water Resources shall be secured before construction can begin.
- 3) Detention basins.
 - a. Storage capacity shall be determined by the method adopted by the U.S. Department of Commerce, Civil Aeronautic Administration.

Land Subdivision

Determination of Average Overall Coefficient of Imperviousness:

- b. % Roof and/or Pavement

$$\text{Area} \times 0.83 = C1$$

$$\% \text{ Park and/or Grass Area} \times 0.175 = C2$$

$$\text{Average Overall Imperviousness Coefficient} = C3$$

- c. To determine the maximum storage required, an analysis at $\frac{1}{2}$ hour intervals shall be made until a maximum condition is determined. A 100-year storm shall be used to determine the rainfall intensity for total flow of calculations.

$$\text{Total Flow} = \text{Area (acres)} \times \text{Rainfall Intensity} \times \text{Runoff Coefficient} \times \text{Conversion Factor.}$$

$$\text{Less Outflow} = \text{Storm Capacity} \times \text{Conversion Factor.}$$

$$\text{Net Storage Reg.} = (\text{Difference of total flow less outflow}).$$

$$\text{Area} = \text{Area being served by the detention basin in acres.}$$

$$\text{Rainfall Intensity} = \text{Intensity in inches per hour as determined from Appendix C.}$$

$$\text{Runoff Coefficient} = \text{Determined from Appendix B after first determining the Average Overall Coefficient of Imperviousness from paragraph 10-7.9-E-3-B above.}$$

$$\text{Stream Capacity} = \text{The Q of the drainage area prior to improvements using methods previously outlined in paragraph 10-7.9-D-1.}$$

- d. Dams for Detention Basins

A properly executed application shall be submitted to the N.J.D.E.P., Division of Water

Resources for proposed dams or repairs to existing dams along a stream. A permit shall be required before any construction can be undertaken on a proposed dam or for repairs to an existing dam. Proof of submission or permit will be required of the applicant at the time of submission for subdivision review. All standards and design criteria of the Division of Water Resources shall govern for any size dam. An environmental assessment may be required for certain dams. All dams will require inflow-outflow hydrographs and a statement assessing downstream damages, should the dam fail.

4) Erosion Control.

It will be the responsibility of the applicant to provide sound and workable designs for the control of erosion on cut slopes, fills, and in channels. The plans submitted should show all areas of potential erosion problems and should show the corrective design utilized to minimize erosional soil losses. All work undertaken shall conform to, "Soil Erosion and Sediment Control Standards" adopted June 12, 2008 by the New Jersey Department of Transportation. These standards cover procedures to be followed for the design of measures and treatment to prevent erosion including the following:

- a. Earth slopes
- b. Waterway and channels
- c. Erosion control structures
- d. Detention and sediment basins
- e. Preservation of existing vegetation
- f. Soil treatment
- g. Seed Bed preparation

Land Subdivision

- h. Seeding
- i. Mulching

10-7.10 Drainageways

As a condition to the approval of a subdivision application, the Subdivision Committee shall require the dedication of drainageways shown on a duly adopted County Master Plan or Official County Map where said drainageway lies partly or in their entirety within the boundaries of the proposed subdivision application.

10-7.11 Public Utilities

When improvements required by these design standards will result in existing utility poles, light standards, fire hydrants or above-ground utility structures to be within a driveway or a required paved area of the County road, the applicant shall be responsible for the relocation of same. At no time shall any newly paved area within the County Right-of-Way be utilized by the traveling public until such time as all utility structures are relocated.

All above-ground utility structures shall be located behind the curb line at locations approved by the County Engineer.

The relocation or extension of underground utilities such as gas, water or sewer lines may be required when necessary to secure compliance with the traffic safety and drainage provisions of this resolution.

10-8 Standards and Criteria for Adjusting or Waiving Requirements

10-8.1 Provisions for Waiving or Adjusting Design or Improvement Standards

- A. Where it is determined by the Subdivision Committee that a hardship to an applicant will result from the strict application of the design and improvement standards, the Subdivision Committee may by a majority vote (of the entire Subdivision Committee) waive or adjust individual design standards as follows:

County of Middlesex

- 1) In the case of an adjustment grant such adjustment if it affects only the method of achieving the levels of safety and convenience inherent in the standard,
- 2) In the case of a waiver grant such waiver if the desired levels of safety and convenience to be achieved by the application of the standard are still achieved in the Subdivision design.

The Subdivision Committee shall act to waive or adjust a design standard only after receipt of a petition for such action submitted by an applicant. Such petition shall state and describe in detail the nature of the hardship which forms the basis for requesting a waiver or adjustment.

B. For subdivisions of no more than six (6) lots, the Subdivision Committee may waive the requirements for the installation of shoulders or curbing or sidewalks as contained in Sections 10-7.2; 10-7.3; 10-7.4 under the following conditions:

- 1) Where such lots are to be used for single family residential buildings , or,
- 2) Where development to be located at a later date on such lots will be subject to the provisions of the County Site Plan Review Resolution.

C. For those subdivisions which have fallen into category B. as stated in Section 10-5.5, the requirements of this resolution pertaining to physical improvements and/or cash contributions and/or the submission of preliminary and/or final plats may be waived when any one of the following conditions exist:

- 1) Where the subdivision does not provide material drainage to a County road or facility as determined by the County Engineering Department.
- 2) Where the lots proposed on the application are to be used for single family residential buildings and the resultant lots created by the subdivision are of such size and nature as to prohibit the occupancy of more than one single family dwelling on each of the resultant lots.

Land Subdivision

- 3) Where the development to be located at a later date on such lot or lots which abut the County road will be subject to the provisions of the County Site Plan or Subdivision Resolutions.

The County Planning Board may enter into an agreement with the applicant in order to insure compliance with subsection 3) above, and/or The Committee shall have the right to require improvements in front of that portion of the subdivision that is conveyed or a portion thereof, and/or The Committee shall have the right to require improvements in front of that portion of the subdivision that is retained.

- D. Notwithstanding anything in this Resolution to the contrary, to the extent that benefits do not accrue to the subject matter of the application and detriments do not accrue to the public, relief may be granted from the terms and conditions of this Resolution.

10-8.2 Provision for Waiving or Adjusting a Plat Detail Standard

Where it is determined by the Director of County Planning that the strict application of the subdivision Plat Detail requirements will result in a hardship to the applicant, the Director of County Planning may on written request of the applicant waive or adjust such individual Plat Detail requirements if such waiver or adjustment affects only the method of presentation but not the required amount or scope of information.

10-8.3 Reconsideration of Decisions

The Committee shall have the right to reconsider its decisions provided:

- A. No reconsideration shall extend beyond the time that the Committee has the right to render decisions pursuant to law.
- B. Subsequent to the decision to be reconsidered, no intervening rights or vested rights have been established which could be prejudiced by a reconsideration.

10-8.4 Provision for Waiving Development Review Fees

Where it is determined by the Subdivision Review Committee that a hardship will result by the exaction of the review fees adopted by

the Board of Chosen Freeholders, or for other good cause, the Committee may waive all or part of said fees for the following:

- A. Public projects being financed through public funds; or
- B. Projects submitted by and for the sole use of a duly qualifying non-profit organization.

10-9 Validity

If any section, subsection, paragraph, clause, phrase or provision of this resolution shall be adjudged invalid or held unconstitutional such adjudications shall not affect the validity of this resolution as a whole or any part so adjudged to be invalid or unconstitutional.

10-10 Repeal of Conflicting Resolutions

All resolutions or parts of resolutions which are inconsistent with the provision of this resolution are hereby repealed to the extent of such inconsistency.

10-11 Effective Date

This amended resolution shall take effect December 1, 1972.

Land Subdivision

Appendix A

Design Criteria

Area (Ac.)	Maximum Time of Concentration (Minutes)	Design Freq. (Years)	Rainfall (Inches per hour)
Less than 250	30	10	2.15
250 to 800	45	15	2.40
Greater than 800	60	25	2.60

Source: Middlesex County Engineering Department May, 1969.

County of Middlesex

Appendix B

Coefficient of Runoff

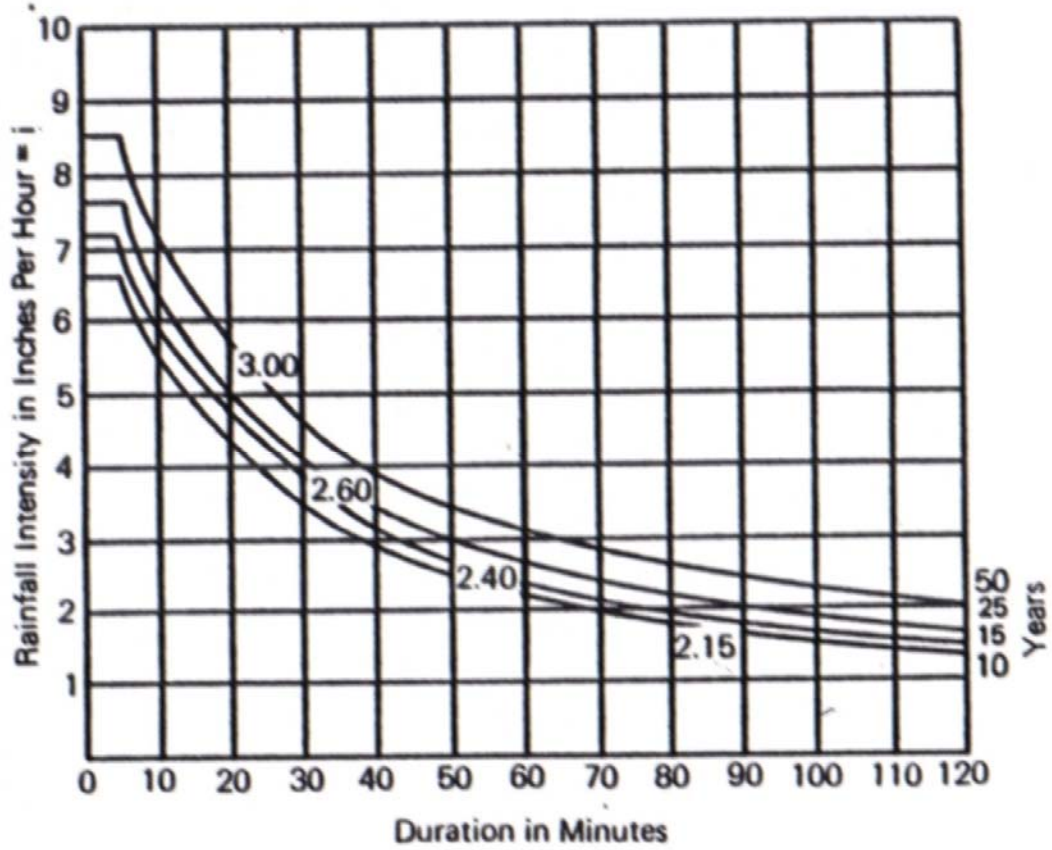
Land Use	Description	Coefficient
Residential	Individual Dwelling with Lot size: 20,000 Sq. Ft. or greater	0.40
Residential	Individual Dwelling with Lot size: less than 20,000 Sq. Ft.	0.50
Apartments		0.70
Commercial		0.85
Industrial		0.80
Undeveloped or Parks		0.25

Source: Middlesex County Engineering Department, May, 1969.

Land Subdivision

Appendix C

Rainfall Intensity Duration Curves



Source: Middlesex County Engineering Department, May, 1969.

County of Middlesex

Appendix D

SIGHT TRIANGLE AGREEMENT TO BE USED

This Agreement made this _____ day of _____, 19__ by and between _____, OWNERS of the land hereinafter referred to as the OWNER, and COUNTY OF MIDDLESEX, a municipal corporation of the State of New Jersey, hereinafter referred to as the COUNTY.

WHEREAS, it is in the interest of the general public and the welfare of the County of Middlesex that the lands hereinafter described shall be at all times retain as Open Space for the purpose of permitting the operators of vehicles, and pedestrians to see across said lands and to provide a clear view for oncoming vehicles or pedestrians from adjoining streets, roads or highways;

NOW, THEREFORE, in consideration of the sum of One (\$1.00) Dollar and other good and valuable consideration the Owner hereinabove referred to does hereby covenant, promise and agree and does hereby dedicate by easement the hereinafter described lands for the purposes as follows:

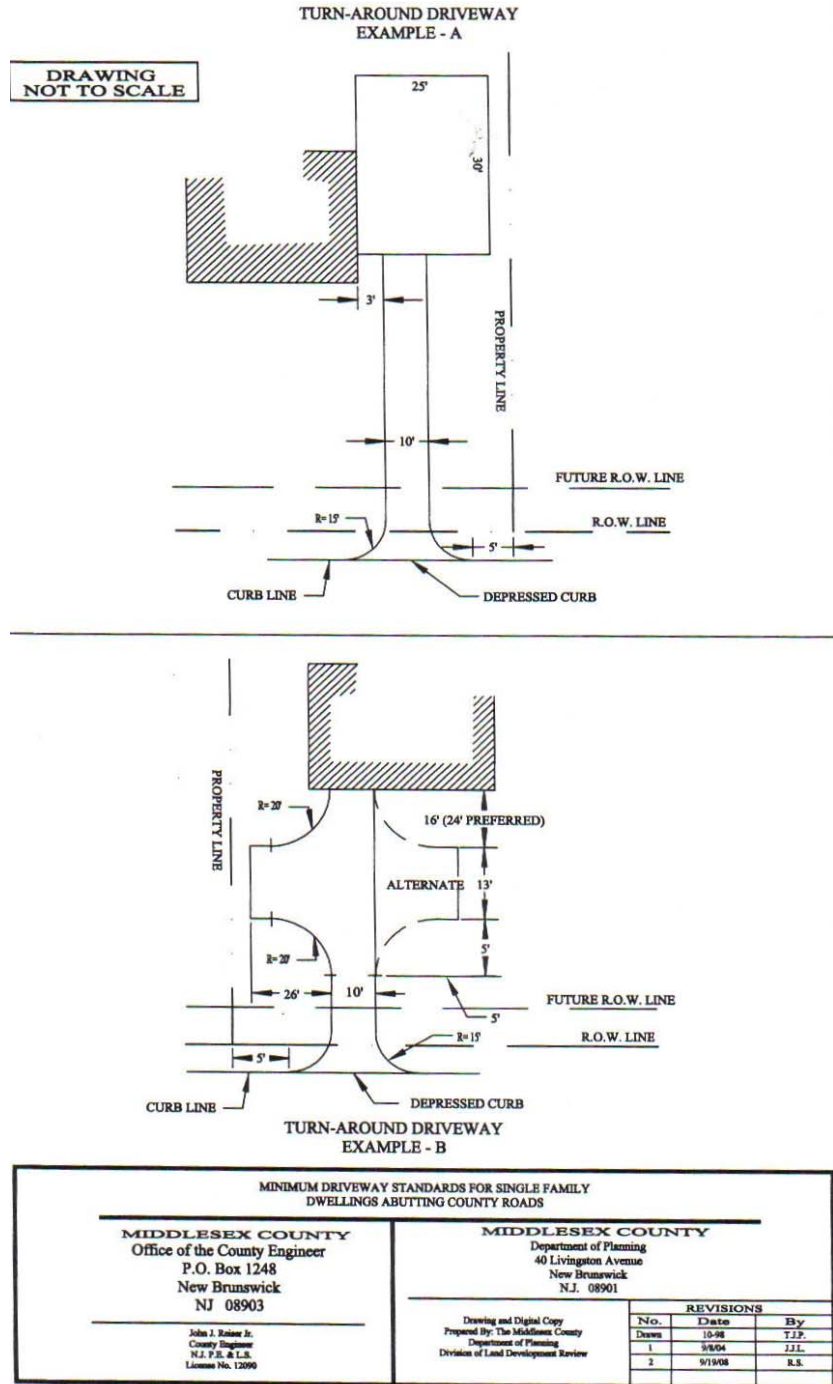
- 1) There shall not be erected at any time on said lands any building, structures or signs which may in any way interfere with the view or sight of operators of vehicles or pedestrians traversing the abutting streets, roads or highways. However, such varieties of ground cover or shrubs having an ultimate height of from two to 3.5 feet and that may easily be cared for by the County Road Department may be planted in the area designated below.
- 2) The County of Middlesex, its agents, representatives or employees may, but shall have no duty to enter upon and re-enter upon said lands hereinafter described for the purpose of establishing a clear sight or view for operators of vehicles or pedestrians traversing the abutting streets, roads or highways.
- 3) The lands affected by this Declaration are as follows:
Metes and Bounds Description, including Lot and Blocks
- 4) This Declaration shall run with the land and shall be perpetual.

SIGNATURES; the Owner/Applicant signs this Sight Triangle Agreement as of the date at the top of the first page.

Land Subdivision

Appendix E

Minimum Driveway Standards for Single Family Dwellings Abutting County Roads



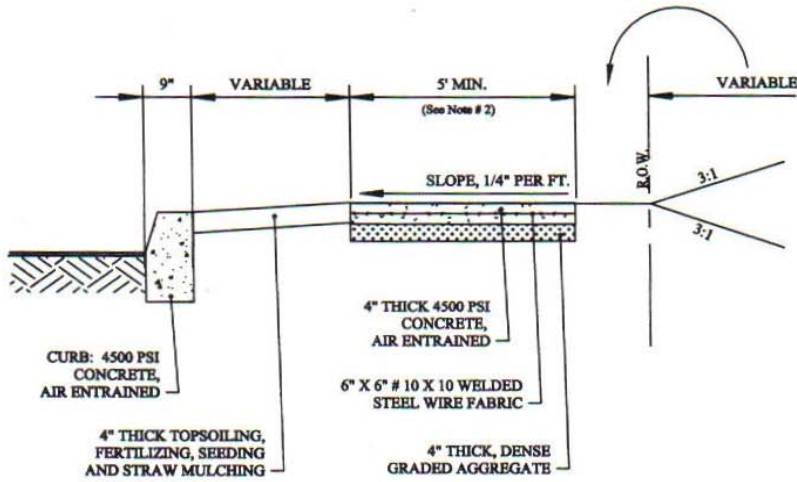
Source: Middlesex County Engineering Department, March, 2009.

County of Middlesex

Appendix F

Pavement, Curb and Sidewalk Specifications

**DRAWING
NOT TO SCALE**

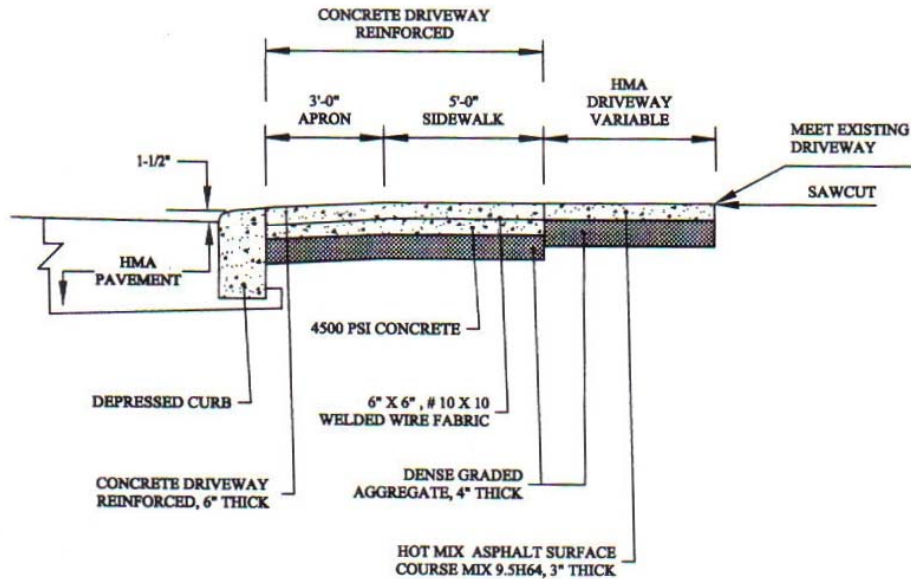
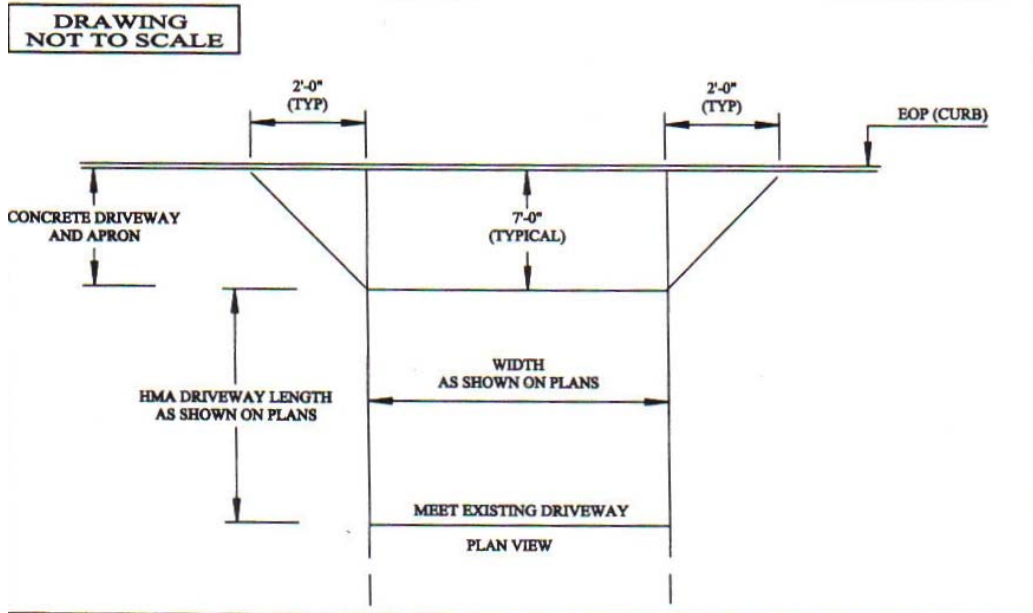


NOTE:

1. TRANSVERSE EXPANSION JOINTS, 1/2" WIDE, SHALL BE PROVIDED AT INTERVALS OF NOT MORE THAN 8' AND FILLED WITH PREFORMED BITUMINOUS CELLULAR TYPE JOINT FILLER. LONGITUDINAL JOINTS, 1/2" WIDE, SHALL BE PROVIDED BETWEEN CURBS AND ABUTTING SIDEWALKS, AND SHALL BE FILLED WITH PREFORMED BITUMINOUS TYPE JOINT FILLER. THE TOP OF ALL JOINT FILLER SHALL BE 1/2" BELOW THE TOP OF THE SIDEWALK AND FILLED WITH JOINT SEALER (SIKAFLEX-1A), OR AN APPROVED EQUAL.
2. SIDEWALK WIDTH SHALL BE 5'-0" MINIMUM UNLESS OTHERWISE NOTED ON THE APPROVED PLANS.
3. TYPE OF SEEDING SHALL MEET FREEHOLD SOIL CONSERVATION DISTRICT REQUIREMENTS.
4. THE COST OF THE EXPANSION JOINT, JOINT FILLER, WELDED STEEL WIRE FABRIC AND DENSE GRADED AGGREGATE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONCRETE SIDEWALK.

REINFORCED CONCRETE SIDEWALK																					
<p style="text-align: center;">MIDDLESEX COUNTY Office of the County Engineer P.O. Box 1248 New Brunswick NJ 08903</p> <p style="text-align: center; font-size: small;">John J. Kalsner Jr. County Engineer N.J. P.E. & L.S. License No. 12090</p>	<p style="text-align: center;">MIDDLESEX COUNTY Department of Planning 40 Livingston Avenue New Brunswick N.J. 08901</p> <p style="text-align: center; font-size: small;">Drawing and Digital Copy Prepared By: The Middlesex County Department of Planning Division of Land Development Review</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3" style="text-align: center;">REVISIONS</th> </tr> <tr> <th style="text-align: center;">No.</th> <th style="text-align: center;">Date</th> <th style="text-align: center;">By</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">12/22/03</td> <td style="text-align: center;">J.J.L.</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">9/19/08</td> <td style="text-align: center;">R.S.</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		REVISIONS			No.	Date	By	1	12/22/03	J.J.L.	1	9/19/08	R.S.						
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Land Subdivision



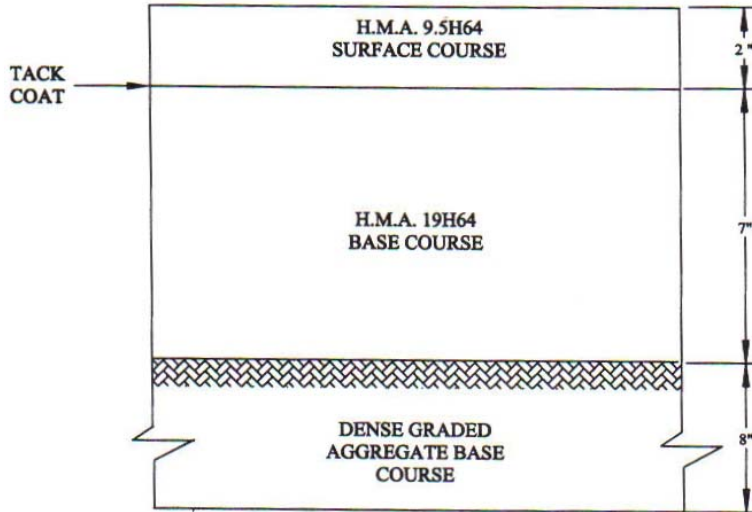
NOTE:

1. LENGTH AND WIDTH OF DRIVEWAY SHALL BE SHOWN ON THE PLANS OR AS DIRECTED.
2. MAINTAIN EXISTING DIRECTION OF STORM WATER FLOW ON THE DRIVEWAY.
3. PROVIDE TEMPORARY ACCESS DURING DRIVEWAY CONSTRUCTION.
4. DEPRESSED CURB SHALL BE CONSTRUCTED AS PER DEPRESSED CURB DETAIL.

HOT MIX ASPHALT TYPICAL DRIVEWAY SECTION ADJACENT TO REINFORCED CONCRETE SIDEWALK AND APRON																				
<p>MIDDLESEX COUNTY Office of the County Engineer P.O. Box 1248 New Brunswick NJ 08903</p> <p><small>John J. Reiner Jr. County Engineer N.J. P.E. & L.S. License No. 12090</small></p>	<p>MIDDLESEX COUNTY Department of Planning 40 Livingston Avenue New Brunswick N.J. 08901</p> <p><small>Drawing and Digital Copy Prepared By: The Middlesex County Department of Planning Division of Land Development Review</small></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">REVISIONS</th> </tr> <tr> <th>No.</th> <th>Date</th> <th>By</th> </tr> </thead> <tbody> <tr> <td>Draws</td> <td>12/22/03</td> <td>J.J.L.</td> </tr> <tr> <td>1</td> <td>9/19/08</td> <td>R.S.</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REVISIONS			No.	Date	By	Draws	12/22/03	J.J.L.	1	9/19/08	R.S.						
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1	9/19/08	R.S.																		

County of Middlesex

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NOT TO SCALE**



NOTE:

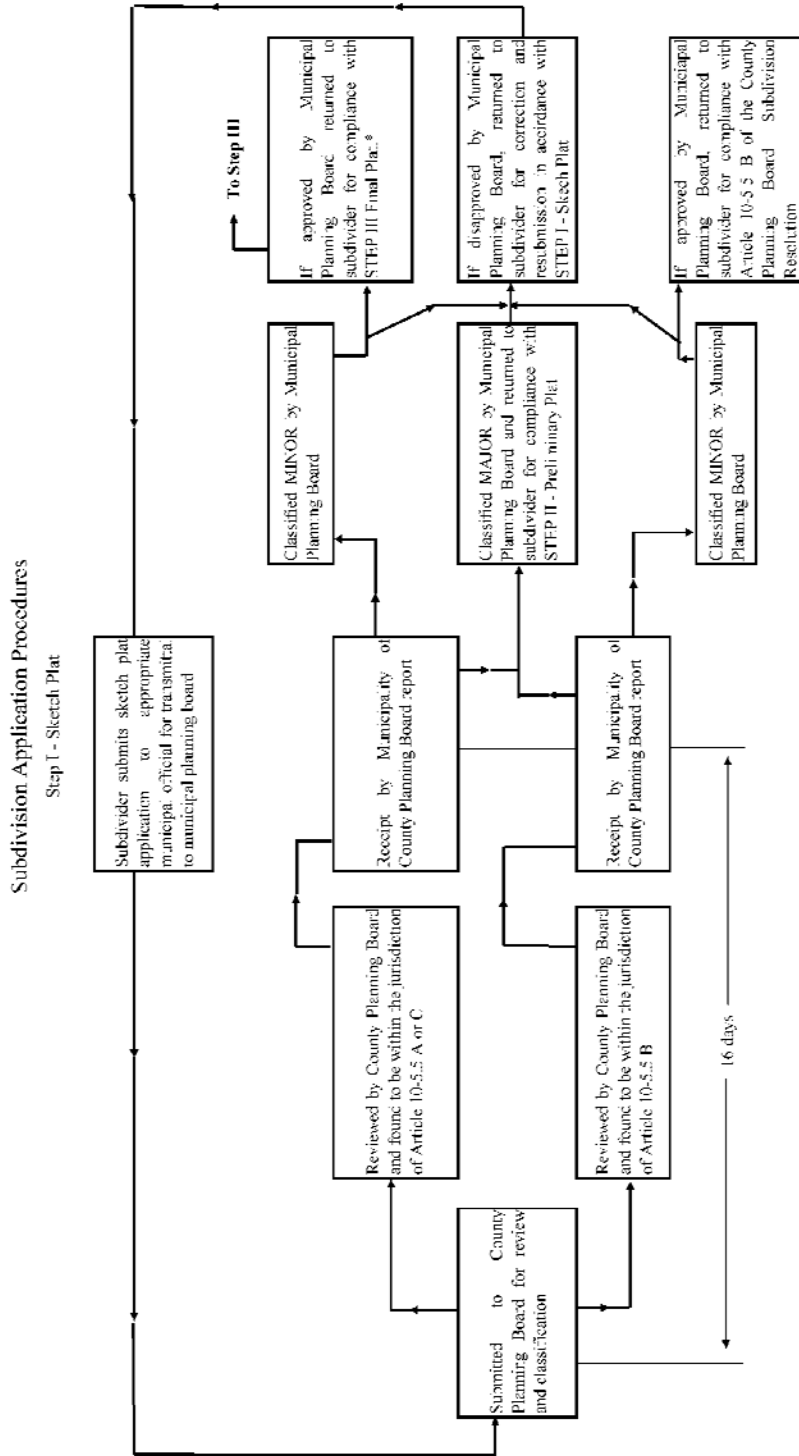
MIX NUMBERS ARE IN ACCORDANCE WITH NEW JERSEY DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

HOT MIX ASPHALT PAVEMENT DETAIL																					
<p>MIDDLESEX COUNTY Office of the County Engineer P.O. Box 1248 New Brunswick NJ 08903</p> <hr/> <p>John J. Raiser Jr. County Engineer N.J. P.E. & L.S. License No. 12090</p>	<p>MIDDLESEX COUNTY Department of Planning 40 Livingston Avenue New Brunswick N.J. 08901</p> <hr/> <p>Drawing and Digital Copy Prepared By: The Middlesex County Department of Planning Division of Land Development Review</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3" style="text-align: center;">REVISIONS</th> </tr> <tr> <th style="text-align: center;">No.</th> <th style="text-align: center;">Date</th> <th style="text-align: center;">By</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Down</td> <td style="text-align: center;">8/20/07</td> <td style="text-align: center;">J.L.</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">9/19/08</td> <td style="text-align: center;">R.S.</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		REVISIONS			No.	Date	By	Down	8/20/07	J.L.	1	9/19/08	R.S.						
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Down	8/20/07	J.L.																			
1	9/19/08	R.S.																			

Land Subdivision

Appendix G

Subdivision Application Procedures

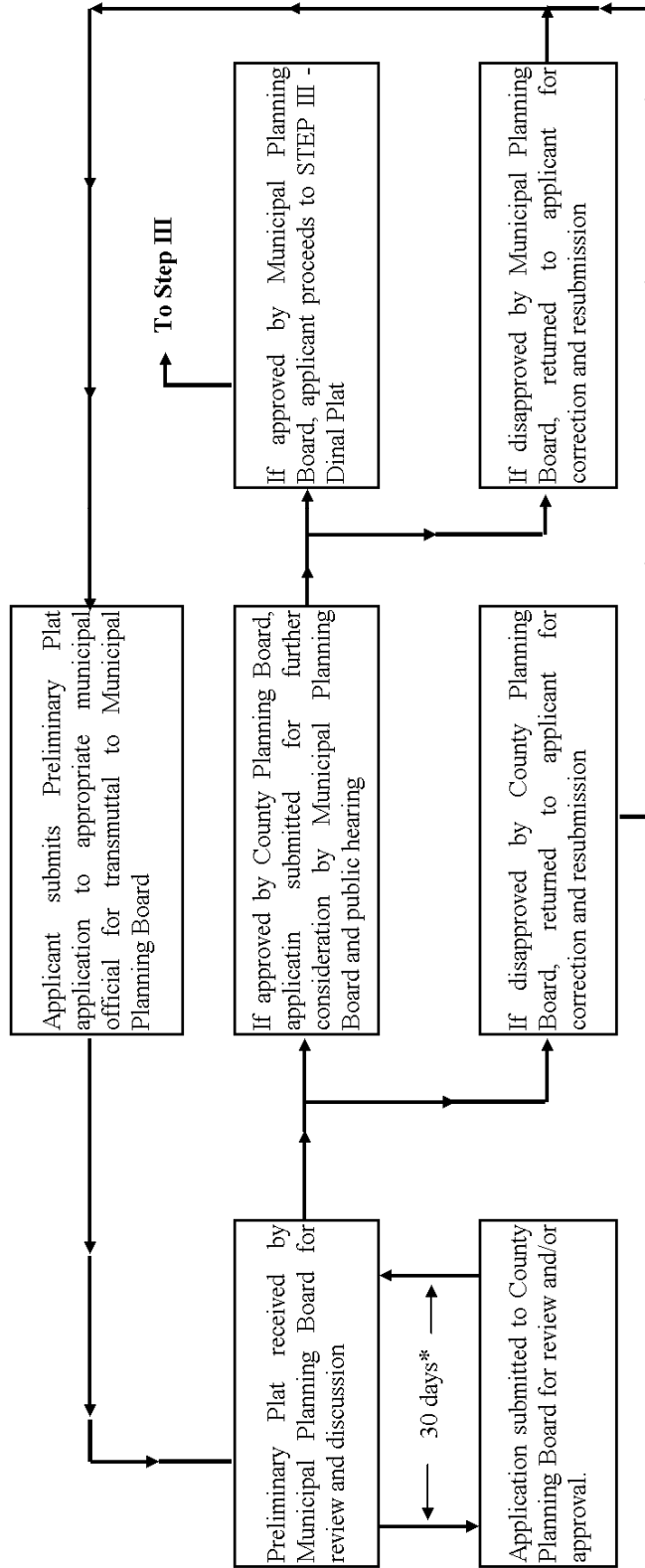


Where the municipal approval authority allows the applicant to file a deed in place of the plat with the County Clerk's Office, the mayor or planning board chairman and the municipal clerk shall certify the expiration on the deed or instrument, 46:55-1.14.

Note: Any minor subdivision plat to be filed with the Middlesex County Clerk's Office must be prepared in accordance with Chapter 41P, 196C.

County of Middlesex

Subdivision Application Procedures
Step II - Preliminary Plat

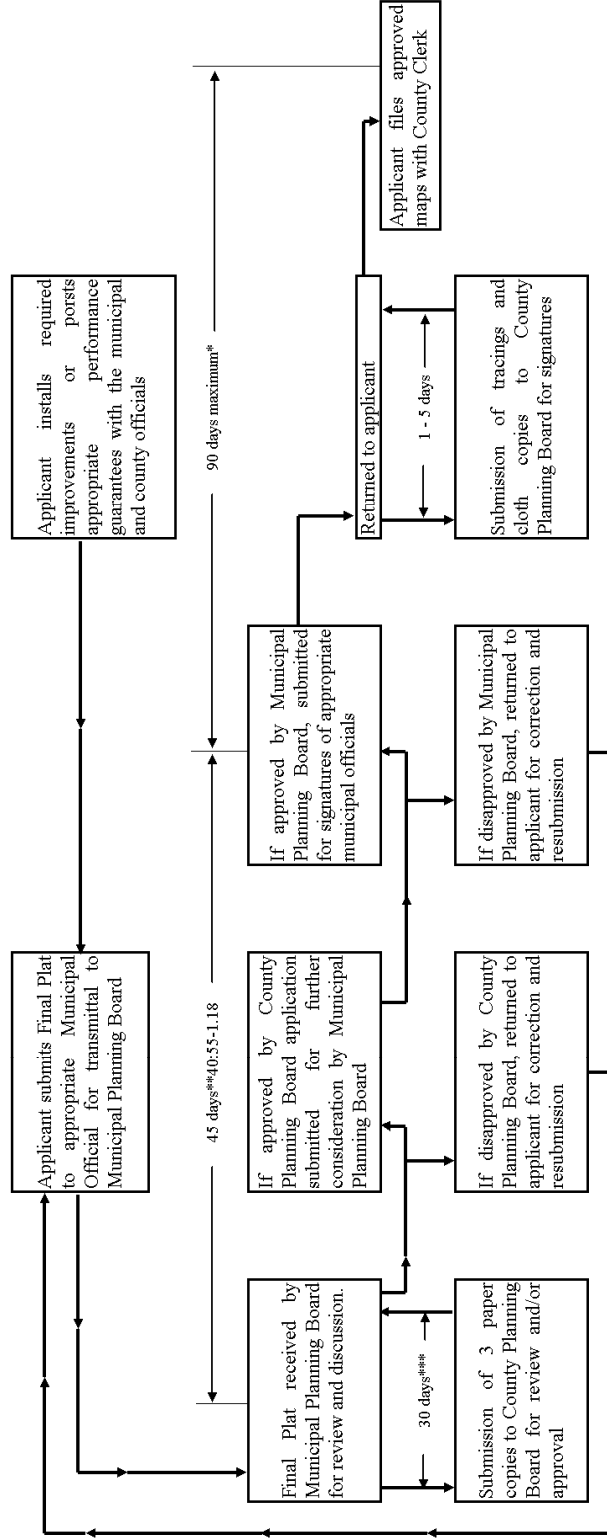


*Unless by mutual agreement between the County Planning Board and Municipal Approving Authority with approval of the applicant, the 30 day period shall be extended for an additional 30 day period and any such extension shall so extend the time within which a Municipal Approving Authority shall be required by law to act thereon Source L. 1968. C 205. 40:27-63

Note: Any minor subdivision plat to be filed within the Middlesex County Clerk's Office must be prepared in accordance with Chapter 141.PL.1960

Land Subdivision

Subdivision Application Procedures Step III - Final Plat



Note: Any minor subdivision plat to be filed with the Middlesex County Clerk's Office must be prepared in accordance with Chapter 141, PL 1960

*May be extended additional 90 days but not more than 90 days. 40:55-1.18

**Or within such further time as the applying party may agree to 40:55-1.18

***Unless by mutual agreement between the County Planning Board and Municipal Approving Authority with approval of the applicant, the 30 day period shall be extended for an additional 30 day period and any such extension shall so extend the time within which a Municipal Approving Authority shall be required by law to act thereon Source L. 1968. C 205.40:27-63

County of Middlesex

Appendix H

Hydraulic Computation Table

n = Roughness coefficient

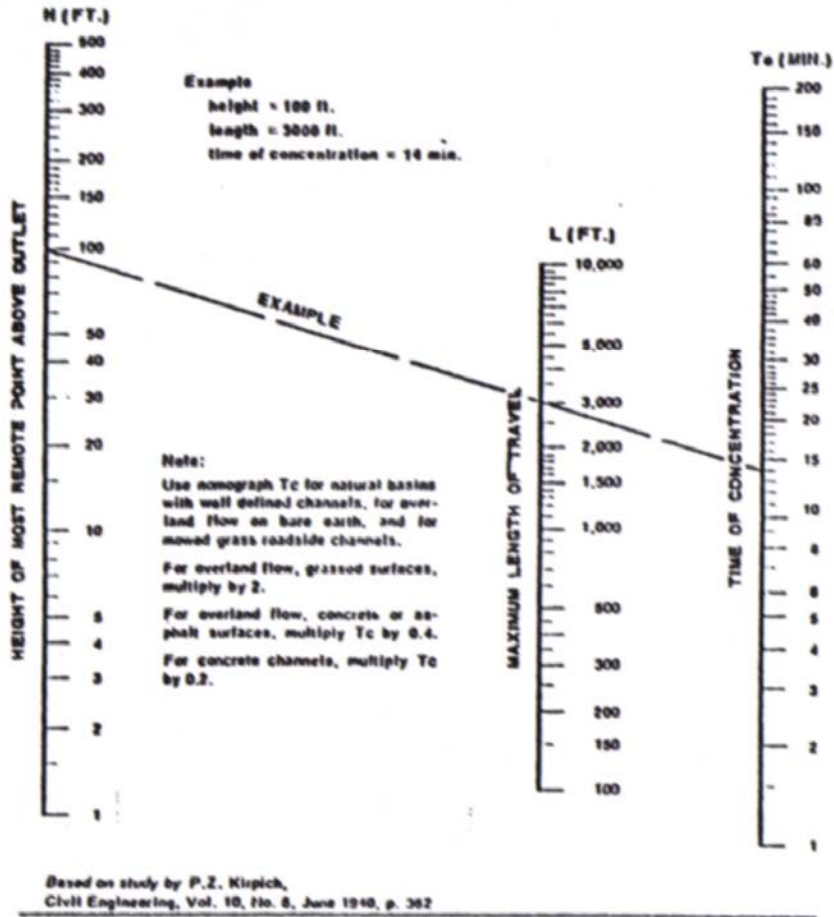
Surface	Condition			
	Best	Good	Fair	Bad
Uncoated cast-iron pipe.	0.012	0.013	0.014	0.015
Coated cast-iron pipe.	0.011	0.012*	0.013*	
Vitrified sewer pipe.	{0.010 0.011}	0.013*	0.015	0.017
Cement-mortar surfaces.	0.011	0.012	0.013	0.015
Concrete pipe.	0.012	0.013	0.015	0.016
Concrete-lined channels.	0.012	0.014	0.016	0.018
Canals and ditches:				
Earth, straight and uniform.	0.017	0.020	0.0225*	0.025
Rock cuts, smooth and uniform.	0.025	0.030	0.033*	0.035
Rock cuts, jagged and irregular.	0.035	0.040	0.045	
Winding sluggish canals.	0.0225	0.025*	0.0275	0.030
Dredged earth channels.	0.025	0.0275*	0.030	0.033
Canals with rough stony beds, weeds on earth banks.	0.025	0.030	0.035*	0.040
Earth bottom, rubble sides.	0.028	0.030	0.033*	0.035

* Values commonly used in designing.

Land Subdivision

Appendix J

Overland Flow - Time of Concentration

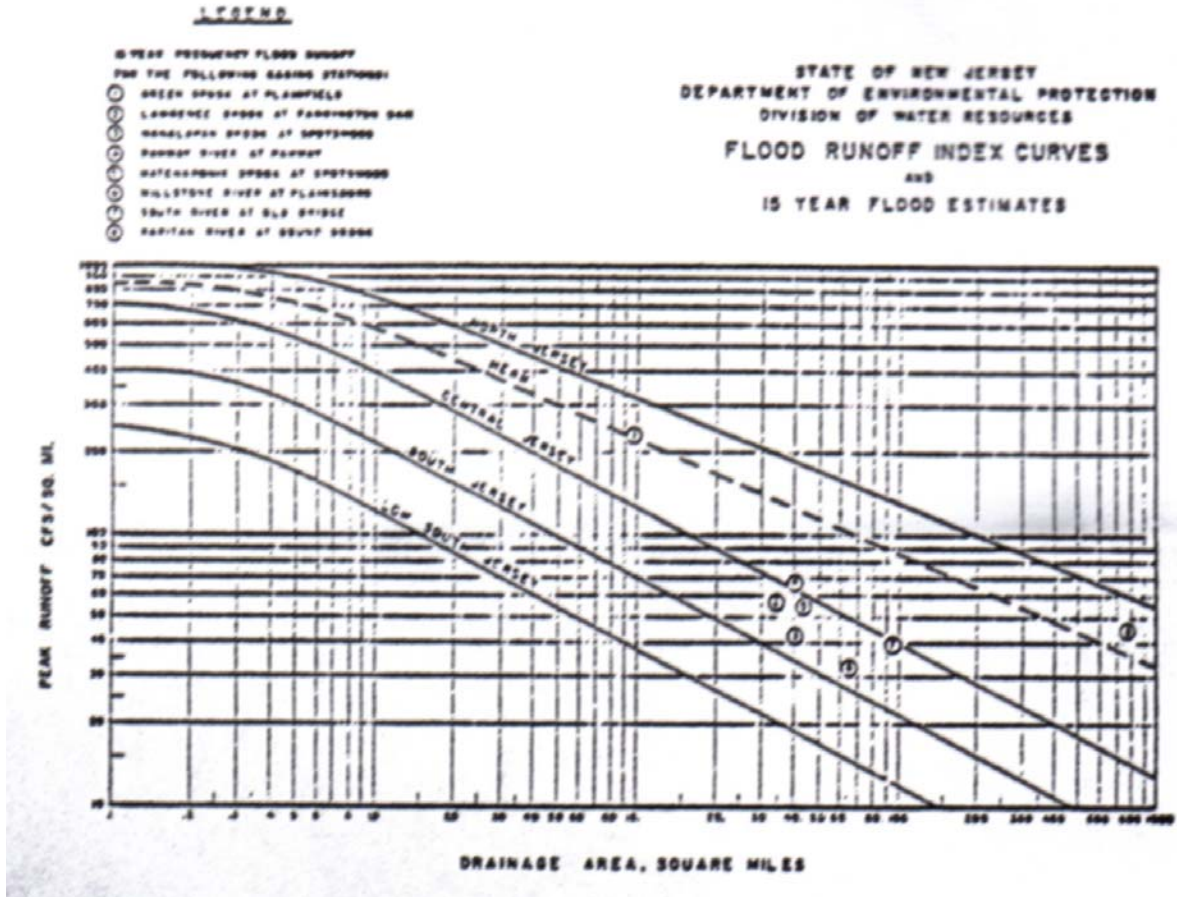


OVERLAND FLOW - TIME OF CONCENTRATION

County of Middlesex

Appendix K

Flood Runoff Index Curves and 15 year Flood Estimates



Land Subdivision

Appendix L

Middlesex County Zone Map

