

1. General

The following improvements shall be required except where these Regulations specifically waives the requirement, or when the Commission waives the requirement by specific resolution: paved streets; curbs and sidewalks; water and fire hydrants; sanitary waste disposal; storm drainage; street signs; street lighting; street trees; properly graded lots.

2. Inspections

8.1A Routine Inspections:

1. All site improvements to be dedicated to the Town of East Hartford shall be inspected by the Town Construction Inspector to insure satisfactory completion.
2. In no case shall the installation of improvements be started until prior notification is given to the Town Construction Inspector. At least 24 hour notice shall be given to the Town Construction Inspector prior to any such start of construction so that a representative of the Town may be present at the time the work is to be done.
3. All required erosion and sedimentation control measures shall be in place prior to commencement of site development, unless otherwise permitted by the Town Engineer.

8.1B Final Inspection

A final inspection of all improvements, utilities and grading will be made to determine whether the work is satisfactory and in substantial agreement with the approved final plat drawings and the Town specification. The general condition of the site be required prior to any application to the Town for street acceptance.

8.2 Lots

8.2A No land adjacent to the subdivision shall be withheld by the subdivider who is not capable of satisfactory independent subdivision into lots of the size specified. Nor shall there be any fragment of a lot of remainder in the subdivision area of less size than specified for lot dimensions. Fragments and remainders must be incorporated into full size lots.

8.2B No lot, regardless of size, which is rendered useless for building due to utility easements, right-of-way, water courses, or topography, shall be shown as building lots on any subdivision. Such property shall be included in adjoining lots.

8.2C All lots shall have a minimum frontage and a minimum area as specified in the East Hartford Zoning Regulations. The minimum average depth of each lot shall be at least feet and no side line shall be less than 80 feet in length.

8.2D On lots located on the outside of sharp curves and cul-de-sacs the Commission may allow the frontage requirement to be applied at the building line instead of the street line.

8.2E On corner lots the lot dimensions may be determined from the point of intersection of the two street lines.

8.2F Side lines of lots shall, insofar as practicable, be either at right angles or radial to street lines unless the purpose of lot line orientation other than those mentioned is to secure greater solar access or protect or control thereof. Variations from this rule will be made only where it is impractical to do otherwise.

8.2G Subdivisions, which are not yet to be served by public sewers and/or public water supply, shall receive approval from the East Hartford Health Department. A minimum lot size of 15,000 square feet shall be required in a subdivision, which utilizes public water but not public sewer facilities. A minimum lot size of 20,000 square feet shall be required in a subdivision, which utilizes neither public water nor public sewer facilities. In addition, the Town Health Department shall require a greater lot size area than the above where soil conditions warrant such increase in lot size.

8.2H A minimum easement width of 20 feet shall be dedicated if required on the rear line of each lot for the use of public utilities, poles, pipes, and conduits, except where the Commission deems such easements impracticable or undesirable.

8.2I Corner lots, which are formed by the intersection of two streets, shall maintain a clear space area, which complies with Section 257 of Zoning Regulations.

8.2J Adequate space shall be provided on every lot, either in open area or the provision of a garage, to provide off-street parking as required by the Town of East Hartford Zoning Regulations.

8.3 Street

8.3A The street and highway layout shall conform to the Circulation System Plan of the Plan of Development. Streets should, in general, follow the contour of the land and should have a location and grade which preserves natural terrain, large isolated trees and desirable woods and other vegetation and which will enhance property values in the subdivision. When few natural constraints exist which limited street layout and location, such as, but not limited to, steep slopes and unsuitable soils, streets shall have an east-west orientation to the greatest extent possible with acceptable variations of 10* to the northwest and 25* to the southwest in order to provide for orientation of lots and buildings to the south, and thereby to encourage the use of solar energy systems.

8.3B New Streets

If deemed necessary by the Commission, all new streets shall, where the subdivision adjoins unsubdivided land susceptible to be subdivided, be carried to the boundaries of the tract proposed to be subdivided.

8.3C Reserved Strips

When required by the Commission the developer shall dedicate to the Town reserved strips for future street connections to adjoining property susceptible of being subdivided. Such reserve strips shall be included in an agreement by and between the Town of East Hartford and the developer. These strips shall have necessary radial intersections. Lots adjoining these strips shall be so laid out that access to the house or garage shall not be over the reserved strip.

1. When the adjoining property is subdivided the developer of said adjoining property shall be required to connect to and build the street over the reserved strip.

2. In the event that two adjoining subdivisions are developed at the same time, then each developer shall be required to build the portion of connecting street that falls within his subdivision boundary provided that neither portion of connecting street has received prior final acceptance by the Town Council.

3. Subdivisions abutting Arterial Highways or Arterials shall be designed so that the parcels or lots back up to these roads or a marginal access street is provided along the boundary line.

4. Minor streets shall be laid out so that their use for through traffic will be discouraged.

8.3D Half Streets

The dedication of half streets at the perimeter of a new subdivision is prohibited. If circumstances render this impracticable, adequate provision for the concurrent dedication of the remaining half of the street must be furnished by the subdivider. Where there exists a half street in an adjoining subdivision, the remaining half shall be provided by the proposed development.

8.3E Service Streets

Marginal access streets may be required along any street where direct access to properties fronting on said street shall be deemed a traffic hazard. Service streets in adjacent subdivisions shall be extended and continued into the proposed subdivision.

8.3F Slope Rights

Where new streets abut private property, the developer when in cut and fill shall obtain necessary slope rights, and these slope rights shall be shown on the final layout submission to the Commission. The developer shall investigate the effect of fills on adjacent private property within the slope right area. The developer shall provide the Town Engineer with evidence that no drainage problems or other problems will arise on adjacent property due to construction or fill operations.

8.3G No proposed street shall have right-of-way width of less than fifty (50) feet or a pavement width of less than thirty (30) feet. Sidewalks shall have a width of at least four (4) feet. Street right-of-way and roadway widths shall be no less for the various street designations than is shown on the following schedule:

Right- of-Way Designation Pavement

Arterial 80 Feet 54 Feet

Collector or Industrial 60 Feet 40 Feet

Minor 50 Feet 30 Feet Pedestrian

Walks 15-30 Feet 10-20 Feet

Where the Plan of Development of the Town of East Hartford, as amended, recommends wider streets than those indicated above, or where the Commission deems greater widths to be necessary, larger widths may be required to be shown on the subdivision plan than those specified above.

8.3H Block Dimensions

1. maximum length shall be 1200 feet maximum length shall be 600 feet

2. Minimum width shall relate to the zoning district requirements for yards and generally shall provide for two tiers of lots.

3. Special attention shall be given to blocks in industrial and business zones to provide for access to off-street parking and loading areas.

8.3I Cul-De-Sac Streets

1. Wherever a cul-de-sac street is adjacent to a tract to be subdivided, this street shall be so designed to be feasible of continuation in the adjacent tract. Except where near-future connections may be possible, dead-end or cul-de-sac streets shall not exceed 500 feet in length. Cul-de-sac streets shall be equipped with a turnaround, which has a minimum right-of-way radius of sixty (60) feet and a maximum pavement radius of fifty (50) feet. (See Plat #4).

2. Wherever a cul-de-sac is adjacent to a tract to be subdivided, the continuation of the street shall be platted within such adjacent tract.

3. Where there is a possibility of extension of a cul-de-sac, there shall be a notation on the record map stating that all segments of the turnaround outside the normal right-of-way shall be returned to the record owners of adjacent properties at such time as the turnaround is eliminated.

4. The street extension shall begin at the neck of the turnaround. The developer extending a street from a cul-de-sac shall be required to remove the existing pavement outside of the standard travel width, loam and seed said area in which pavement has been removed and install curbs and sidewalks in the original cul-de-sac area in accordance with Town requirements.

8.3J Intersections

1. No more than two streets shall intersect or meet at any one point.

2. The centerline of all streets entering an intersection shall pass through a single point.

3. Except where impracticable because of topography or other conditions, all streets shall join each other so that a for a distance of at least 10feet the street is at right angles to the street it joins. No street shall, however, intersect at less than a sixty (60) degree angle.

4. Grades approaching intersections shall not exceed five percent (5%) for a distance of not less than one hundred (100) feet from the center line of said intersection.

5. Intersections of minor streets, collector streets, and/or arterials shall be spaced a minimum of 25feet apart measured from the point of intersection of the centerlines.

6. Two streets intersection opposite sides of a third street are to have the same points of intersection or else their centerlines are to be separated by a minimum of 250 feet on a third street.

7. The subdivision plan shall be submitted to the State Highway Department if a proposed street in the subdivision intersects with a State Highway. State Highway Department approval shall be given in writing before the Commission shall give final subdivision approval.

8.3K Street Grades

Street grades shall be not more than eight percent (8%) or less than one-half of one percent, subject to applicable standards shown on plates continued in the Appendix of these Regulations.

8.3L Vertical Design Criteria

At all changes in grade in excess of 0.4 percent a vertical curve shall be provided. The minimum length of vertical curve required shall be that which will provide the minimum stopping sight distance as shown on the typical cross-section sheet for the particular class of street. The latest criteria of the America Association of State Highway Officials regarding the height of object and height of driver's eye shall be used in designing vertical curves.

8.3M Side Slopes

Streets in cut or fill shall be provided with slopes not steeper than two feet horizontal to one foot vertical, or the permanence of the street grade shall be otherwise provided to the satisfaction of the Commission.

8.3N Typical Cross Section and Standard Details

The following typical cross section and standard detail sheets are a part of these Regulations:

Plate No. Description

1 Typical Cross Section – Minor Street (Residential)

2 Typical Cross Section – Collector Street

3 Typical Cross Section – Industrial Street

4 Standard Detail - Cul-de-sac

5 Standard Detail - Curbing and Sidewalks

Design criteria and construction details shown on these plates shall be considered minimum design standards for the particular improvement.

8.3O Specification for Street Improvements

All construction details shown on the typical cross section and standards details made a part of these Regulations shall conform to Connecticut State Highway Department Standards Specifications for Roads, Bridges, and Incidental Construction; Form 812, 1980; as amended.

8.4 Sanitary Waste Disposal

8.4A Sanitary sewer system shall be installed in all subdivisions. Where connection of said required sanitary sewer to the Metropolitan District sewer system shall be adjudged by the Commission not feasible at the time of subdivision construction, the applicant shall be required to cap the installed sanitary sewer system in order to render it unusable until such time as said connection is possible and to install, in addition to said capped system, individual lot septic system for sewage disposal until such time as connection of the capped sewer system to the Metropolitan District sewer shall be feasible.

8.4B No such individual lot septic system for sewage disposal shall be considered by the Commission until the land area in question has been approved by the Town Health Department as suitable for said system. Percolation tests, duplicate field report, and Health Department report must be submitted with the preliminary layout.

8.4C As an alternative to the installation of said individual lot septic system, the applicant may request the permission of the Commission to connect the required subdivision sanitary sewer

system to a temporary sewerage treatment system, which treatment system must be approved by the East Hartford Health Department, State Health Department, the Metropolitan District Commission, and the Commission. Such temporary sewerage treatment system shall not be construed to mean a communal septic tank

8.4D When sanitary sewers are constructed prior to house construction or prior to sidewalk and pavement construction, the sanitary sewer house connector to serve each lot in the subdivision shall be installed to a point less than six (6) feet within the lot.

8.4E When a house is built in a subdivision containing the required capped sewer system, the house connection shall be extended to the house, a plumbing connection made to the sanitary drain, and the sanitary drain installed to a point at which the stack and building drain can be readily connected. At said point of connection the sanitary drain shall be capped to prevent its being used to convey sewage until sanitary sewer service becomes available. Said sanitary drain shall not be an obstruction in the basement and shall be arranged, wherever possible, so that the basement floor will not be disturbed when the building drain and stack are connected at some future date and the subdivision sewer system connected to the Metropolitan District sewer system.

8.4F Pending the uncapping and use of the sanitary drain, a relief vent shall be connected from the sanitary drain to the stack vent.

8.4G Two lots or less which are construed to be part of a subdivision shall not be subject to the "capped sewer" installation requirement as specified in Section 8.4A of these Regulations.

8.4H It shall be the responsibility of the subdivider to contact the Health Department, Town of East Hartford to prove that the lot area is adequate to permit the installation and operation of an individual sewage disposal system. Such proof shall consist of the approval of the Health Department after such tests as may be required. The subdivider shall provide the necessary equipment and labor for the making of the test. When Health Department approval is given subject to conditions, such conditions shall be noted on the record map.

8.4I In subdivisions that will have on-site sewerage disposal, no development shall take place unless the land demonstrates a satisfactory seepage rate and in the opinion of the Town Health Department, is free of conditions that would categorize the site as an area of special concern.

Disposal systems for areas of special concern shall merit particular investigation and special design, and meet the special requirements of this subsection. The following are determined to be areas of special concern:

1. A minimum soil percolation rate faster than one inch per minute, or
 - a. Slower than one inch in thirty minutes, or
 - b. Maximum ground water less than three feet below ground surface, or
 - c. Ledge rock less than five feet below ground surface, or
 - d. Soils with slopes exceeding twenty-five per cent, or
 - e. Consisting of soil types interpreted as having severe limitation for on-site sewage disposal by most recent edition of the National Cooperative Soil Survey of the Soil Conservation Service, or
 - f. Designated as wetland under the provisions of Section 22a-36 through 22a-45 of the Connecticut General Statutes, as amended.
 - g. Located within the drawdown area of an existing public water supply well with a withdrawal rate in excess of fifty gallons per minute, or within five hundred feet of land owned

by a public water supply utility and approved for a future wellsite by the Commissioner of Health Services.

2. In such areas of special concern, the local director of health may require investigation for maximum ground water level to be made between February 1 and May 31, or such other times when the ground water level is determined by the Commissioner of Health Services to be near its maximum level.

3. Plans for new subsurface system in areas of special concern shall:

a. Be prepared by a professional engineer registered in the State of Connecticut;

b. Include all pertinent information as to the basis of design, and soil conditions, test pit locations, ground water and ledge rock elevations, both original and finished surface contours and elevation, property lines, building locations, open water courses, ground and surface water drains, nearby wells and water service lines;

c. Demonstrate an ability to solve the particular difficulty or defect associated with the area of special concern and which caused its classification. The Commissioner or local director of health, as the case may be, may require a study of the capacity of the surrounding natural soil to absorb or disperse the expected volume of sewage effluent without overflow, breakout, or detrimental effect on ground or surface waters if in their opinion such may occur.

d. The plans for new subsurface disposal systems in areas of special concern shall be submitted to the local director of Health and the Commissioner of Health Service for a determination as to whether the requirements of the subsection have been met, except that such submission need not be made to the Commissioner of Health Services if the local director or authorized agent has been approved to review such plans by the Commissioner of Health Services in accordance with Section B 103e (b). All submissions to the Commissioner of Health Services shall be made at least 20 days prior to issuance of an approval to construct by the local director of health.

4. If application is made for the repair, alteration or extension of an existing subsurface disposal system in an area of special concern, the local director of health may require that the applicant comply with the requirement of Subdivision (3) if he determines that the contemplated repair, alteration or extension involves technical complexities which cannot reasonably be addressed by himself, his authorized agent or the system installer.

5. While a sewage disposal system in an area of special concern is under construction, the local director of health may require that the construction be supervised by a professional engineer registered in the State of Connecticut if in the opinion of the local director of health it is necessary to insure conformance to the plans approved or because of the difficulties likely to be encountered. The engineer shall make a record drawing of the sewage disposal system, as installed, which he shall submit to the local director of health prior to issuance of a discharge permit.

6. In such areas of special concern, the Commissioner of Health Service or the local director of health who has been approved by the Commissioner to review engineering plans in areas of special concern pursuant to Section 19-13B 103e (b) may require a study of the capacity of the surrounding natural soil to absorb or disperse the expected breakout, or detrimental effect on ground or surface waters.

8.4J All required sanitary sewers shall be installed and constructed in accordance with the requirements of the Metropolitan District and the Town of East Hartford.

8.5 Storm Drainage

8.5A General Hydraulic Design Requirements

1. Storm drainage systems constructed under these Regulations shall provide for the proper drainage of the tributary area to the satisfaction of the Town engineer. The subdivider shall make provisions for the proper elimination of all stagnant water within the limits of the proposed subdivision.

The design of drainage facilities shall be undertaken with due consideration for the rights of the abutters and the responsibilities of the Town. Care shall be taken to minimize the impact upon adjacent properties. Water shall not be outletted into a natural depression without an adequate outlet unless proper rights for storage and/or provisions for adequate outlets have been secured. The course of storm runoff should be investigated to insure that the downstream and upstream owners are not affected by the proposed drainage facilities.

2. The design of drainage facilities should perpetuate existing drainage patterns. The diversion of storm runoff from one watershed or watercourse to another should be avoided wherever practical. Special studies will be required to substantiate the need of any diversion and to evaluate its impact.

3. Where drainage patterns are disturbed by collection, diversion, ponding, reduction, or increased stream velocities, the flow should be returned to the existing conditions as soon as possible.

4. Where culverts are in close proximity to each other, the backwater from the downstream culvert shall be considered in the design of the upstream culvert.

5. All culverts shall have approved inlet and outlet structures and erosion protection. Where the discharge velocities from the culverts exceed the maximum allowable for the channel lining, the designer shall provide scour protection.

6. Drainage facilities are intended for the collection and control of storm runoff. The discharge of sanitary or wastewater into closed systems or open channels shall be prohibited.

7. The capacity of the existing watercourses and drainage facilities downstream of the discharge of a drainage system shall be investigated. Where the facilities of the watercourse are inadequate to accommodate the design flows, such facilities must be upgraded or the rate or storm water runoff controlled so as not to exceed the rate from the area in its former state. A system for the storage and controlled rate of release with on-site detention shall be required.

8. The requirements of all Federal and State agencies shall be incorporated in the planning and design for all drainage facilities.

9. The following design information should be submitted either in a report form or included on the plans submitted for review.
 - a. The storm return frequency used to evaluate the design.
 - b. The hydraulic formulas used as the basis for the design
 - c. Provisions included for anticipated development within the watershed above the proposed drainage facility.
 - d. Reference graphs and/or charts used in the design which are not included in the reference for this manual.
 - e. The design criteria, procedures, and any pertinent information incorporated into the design.

8.5B Channel Rights-of-Way

A channel or brook right-of-way or easement of sufficient minimum width to include a 10-foot access strip in addition to the width of the channel or brook from bank top to bank top, shall be offered for dedication to the Town for drainage purposes. Channels shall be rip-rapped or paved when deemed necessary by the Commission.

8.5C Drainage Easements

1. Drainage easements, outside of street lines, shall be 20 feet wide centered on the storm drain. Easements for outlet pipes shall extend to a suitable existing storm drain or an adequate natural watercourse.
2. Easements may be required upstream of facilities to allow for the ponding of the design storm, downstream to include the boundary of the watercourse until pre-existing conditions are re-established, and for construction and maintenance purposes. The need for easements should be addressed in preliminary design to allow for proper evaluation and action.

8.5D Intersection Drainage

Where the development streets join existing town streets, the developer must provide drainage at intersection as necessary, or as directed by the Town Engineer.

8.5E Private Drains

1. The Town Engineer, prior to installation shall approve the size and location of all private storm drains that cannot link to the Town storm drain system. The developer must file a waiver with the Director of Public Works. This waiver shall relieve the Town of East Hartford of any responsibility for damage resulting from any failure of the storm drainage system. This waiver shall be part of the deed so as to run with the property as to subsequent purchasers.
2. Rear yard drains and cellar or foundation drains that are connected to storm drainage systems must be shown on the final approved plan of the drainage systems.

8.5F Standard Detail

1. All storm drainage facilities constructed under these Regulations shall conform, wherever possible, to the following standards detail sheets:

<u>Plate No.</u>	<u>Description</u>
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6	Standard Detail Standard Detail
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2. Storm drains shall be designed to flow full.
3. Storm sewers shall have a minimum pitch of 0.5%. The Commission may grant variance from this requirement if storm sewers are designed with a minimum self-cleaning velocity of three (3) feet per second with full flowing pipes.
4. A minimum cover of two feet shall be provided for all storm drains.
5. A minimum base of three (3) inches of $\frac{3}{4}$ inch traprock shall be provided under all storm drains. If storm drains are installed in water, at least a six (6) inch base of $\frac{3}{4}$ inch traprock shall be provided up to a point six (6) inches above water level. Either one (1) inch traprock or washed gravel may be used from the base up to the required water level.
6. The area around the sewer barrel shall be tamped to a point at least one (1) foot above the pipe before backfilling is done with a bulldozer or other equipment. If the soil in the area is of clay or any other unsuitable material, the trench shall be backfilled with sharp sand or gravel. During winter construction all frost must be eliminated from the trench back-fill.
7. Reinforced concrete pipe shall be used for all storm drain systems constructed under these Regulations. The class of storm sewer pipe used shall conform to the requirements of the Connecticut State Highway Department Standard Specifications for Roads, Bridges, and Incidental Construction; Form 812, 1980, as amended.
8. All storm drain system outlets shall be terminated with an approved outlet structure and erosion protection.
9. The first catch basin in a storm drain system shall be located within 350 feet of the roadway highpoint. A drainage structure, either a catch basin or a manhole, shall be provided at 30-foot maximum intervals on all storm drains with exception of the first catch basin. A drainage structure shall also be placed at each change in horizontal direction, and at each junction point of two or more storm drains.
10. Underdrain outlets shall be connected to drainage structure whenever practical. When impractical, they shall be terminated with an approved endwall. At all underdrain outlets, a "free outlet" condition should be provided. The minimum pipe size for all storm drain systems constructed under these Regulations shall be 15-inch inside diameter.

8.5G Special Drainage Structures

Details of special or unusual drainage structures shall be submitted to the Town Engineer for review and approval before construction.

8.5H Specifications for Storm Drainage Improvements

All storm drainage construction shall conform to the requirements of the Connecticut State

Highway Department Standard Specifications for Roads, Bridges, and Incidental Construction; Form 812, 1980, as amended.

8.5I Drainage Design Formulae

1. Peak discharges for the design of storm drains shall be derived using the rational method where:

$$Q = ciA$$

Q = peak discharge in cubic feet per second

C = weighted runoff coefficient

I = rainfall intensity in inches per hour

A = gross area tributary to the drain under Design expressed in acres.

2. Design discharge for major channels and brooks may, with the concurrence of the Town Engineer, be based on a flood hydrograph or flood flow formula type of analysis.

3. Hydraulic designs shall be based on the Manning Formula:

$$Q = \frac{1,486r^2}{3s^{1/2}n}A$$

n = roughness coefficient

r = hydraulic radius

s = slope

A = wetted area of conduit

1. Inlet Design Criteria

2. Inlet on roadway grades shall be designed to intercept storm runoff while containing the design flows within acceptable roadway flood limits. The vertical or horizontal constraint that creates the least ponding or flooding shall govern. The vertical constraint shall be one inch below the top of curb and the horizontal constraint shall be the gutter widths as shown for the roadway classifications below:

Minor Street 10 feet

Collector Street 12 feet

Industrial Street 12 feet

3. The capacity of inlets located on continuous grades shall be determined by gutter flow analysis with the assumption that the water passing over the grate is intercepted. The analysis shall be performed utilizing the design aids provided in the Appendices (See Pages C-7 to C-10).

4. Inlets situated in roadway sag curves or other depressed areas shall be designed utilizing the method aid design aid in Appendices (Hydraulic Capacity of Grate Inlet in a Sump from the Drainage of Highway Pavements," HEC No. 12, Department of Transportation, March, 1969).

Inlet with grates and without curb opening shall be designed with a 50% reduction in effective perimeter to provide for the possibility of debris disrupting the flow at the grate. The design of inlets with grates and curb openings shall utilize the entire perimeter.

8.5J Design Storm Criteria

All storm drainage facilities shall be designed based on the following storm return frequency criteria:

Residential Drainage Systems: Storm Sewers and Minor Ditches - 10-year storm. Major Ditches and Channels - 25-year storm.

Commercial Districts: All Drainage Facilities - 25-year storm.

Industrial Parks: All Drainage Facilities - 25-year storm.

8.5K Rainfall - Runoff Criteria

1. Rainfall intensities used for storm drainage design shall be taken from the Metropolitan District Commission "Rainfall Intensity – Duration Frequency Curves" for the Hartford rain gauge A set of the above Frequency Curves are available for examination in the office of the Town Engineer.
2. Time of concentration shall be derived for all storm drains constructed. Several valid criteria are in use. An acceptable criteria for time of concentration in a residential area is as follows: 10 minutes to gutter plus time to flow in gutter to first inlet plus time in the storm drains equals time of concentration.
3. Weighted runoff coefficients shall be derived based on the following criteria:
Areas containing Roads, .9
Roofs, Parking Lots, Sidewalks and Driveways
Areas containing Lawns and .15 to .4 (depending on the
Natural Ground slope of the ground).

8.5L Detention Basins

1. Detention basin are facilities for the on-site detention of storm water to control the rate of release of runoff so as not to exceed that from the drainage area in its former state.
2. Relief facilities shall be designed to minimize the possibility and effect of the flooding, including provision for suitable freeboard and emergency spillway and channel.
3. Detention basin shall be designed to drain completely
4. Detention basin should be constructed as first phase work and incorporate sedimentation and erosion controls to minimize impact of construction and adjacent watercourses.
5. Basins shall have an access road (minimum of ten (10) feet wide) to provide for maintenance vehicles. The access road (maximum 10% profile grade) may be on the upper

perimeter of the basin and/or ramped to the bottom (maximum 12.5% slope) as approved by the Town Engineer.

6. Detention basin should be designed in accordance with the procedure presented in Technical Release NO. 55, Soil Conservation Services, Department of Agriculture

7. Analysis shall be made for 10 year, 25 year, 5year, and 100 year return frequency storm using rainfall intensities show in the Appendices for the Hartford area.

8. Outlet structure(s) shall be so designed as to not exceed original flows during each of the design events

8.6 Street Signs

8.6A The developer shall provide and install corrosive resistance reflectorized street name signs, approximately 22 inches long and 4 ½ inches high, mounted in a criss-cross assembly. This assembly should be mounted on a 10-foot long galvanized pipe set in 2 feet of concrete flared or pinned to prevent rotation within the concrete.

8.6B Generally, one installation at each intersection will be sufficient, however, in certain congested areas the placement of two sets of street signs on diagonally opposite corners may be required at the discretion of the Commission. Dead end streets require a 2-way sign only.

8.6C Signs During Construction of a Subdivision

The developer shall erect and maintain at each terminus of each street as it is laid out a secure sign reading as follows:

"This is not a Public Road"

Signed:_____ Developer

The above required sign shall be at least 18 inches by inches in size with 2 inch block lettering and shall be maintained until the Town accepts the streets.

8.7 Street Trees

8.7A Two shade and/or flowering trees shall be planted on the street frontage of all new lots, according to the following standards:

(1) Trees shall be planted subject to the location of driveways, cross streets and walks. Street trees shall be located in such a manner as to avoid shading the most southerly side of the proposed dwelling locations in order to secure and protect solar access.

(2) The diameter of trees shall be approximately three inches (measured three feet above grade) for shade trees and two inches (single stem, eight foot height) for flowering trees. Evergreen trees shall be seven feet in height.

(3) Trees shall be planted in such locations as to least interfere with overhead power lines.

(4) The size, kind and location of such trees shall be subject to the approval of the Town Tree Warden and shall be selected, taking into account their compatibility, with solar access objectives.

8.7B Planting Season

Unless otherwise shown on the plans or directed by the Town Engineer the planning seasons shall be those indicated below. No planting shall be done in frozen ground or when snow covers the ground, or the soil is otherwise in an unsatisfactory condition for planting.

Deciduous Material

Spring: March 1 - May 15 (inclusive)

Fall: October 1 - December 1 (inclusive) or until the ground freezes.

Evergreen Material

Spring: March 1 - June 1 (inclusive)

Fall: August 15 - October 1 (inclusive)

8.8 Regrading

8.8A It is policy of the Town of East Hartford to discourage massive regrading of subdivision sites where such earth-moving would cause extreme cut or fill for streets or house locations, stripping of natural ground cover, and destruction of worthwhile topographic features. To this end, subdivision layout should be designed to fit existing natural conditions of the site, insofar as such design is consistent with other standards for street and lot grades and drainage set forth in these Regulations.

8.8B Subdivision lots shall provide minimum yard areas having slope not steeper than 5 percent in grade as follows: extending 25 feet in front, 25 feet at the rear, and 10 feet on each side of the proposed house (subject to Section 8.8C) except where earth is bermed against the north face of the building to minimize the amount of exposed wall for the purpose of energy conservation.

8.8C Subdivision lots shall provide driveway access from the street to the garage, carport or parking place at a slope not exceeding eight (8) percent in grade.

8.8D No artificial slope steeper than 33 1/3 percent resulting from the regrading of the natural land shall be permitted at any location.

8.8E All regraded areas shall be covered with loam to a depth of six (6) inches and seeded.

8.8F The burial of tree stumps and shrubs that have been cleared from the land shall be prohibited within the limits of the proposed subdivision.

8.9 Additional Requirements

8.9A Street Bound Stones

Official East Hartford street bound stones shall be placed at all block corners, at angle points, and the points of curves in streets and at such intermediate points as may be necessary. The location of all monuments shall be indicated on the final subdivision plan to the satisfaction of the Town Engineer. The developer shall furnish bound stones. They must be installed and their accuracy certified by registered land surveyor.

8.9B Where a proposed subdivision of land occurs adjacent to a park site, school site, or public building, the Commission may require that an access to the site be shown as a condition for approval of the subdivision.

8.9C Pedestrian walks having a right-of-way not less than 10 feet wide shall be required where deemed essential to provide access to schools, playgrounds, or other community facilities.

8.9D Where property to be subdivided is next to, or includes a railroad right-of-way, special provisions may be required by the Commission for such things as road crossing, screening, and freight access in recognition of the relationship between the railroad and the subdivision.

8.9E Street Names

All existing street names shall be extended where proposed streets follow along their alignment. There shall be no duplication of existing street names nor shall there be a phonetic resemblance to the names of existing streets within the Town of East Hartford General rules for street names are as follow:

1. "Place" - A street one block long, a connecting link between two longer streets, or a cul-de-sac.
2. "Court, Crescent or Terrace" - A loop street which begins and ends on the same street and is not otherwise connected with other streets, or a cul-de-sac
3. "Lane, Street or Way" - Short residential streets which do not serve as collector streets.

"Avenue, Boulevard, Drive or Road" – Collector streets.