

BOROUGH OF NAUGATUCK SUBDIVISION REGULATIONS



Effective April 1, 2011

Table of Contents
Subdivision Regulations
Borough of Naugatuck, Connecticut

Section 1 - General Provisions.....3

Section 2 – Definitions.....4

Section 3 – Application Requirements and Procedures.....8

Section 4 – Maps and Plans.....22

Section 5 – Design and Construction Standards.....30

Section 6 – Open Space.....60

Section 7 – Waivers.....65

Section 8 – Penalties.....66

Section 8 – Administrative Provisions.....66

SECTION 1 – GENERAL PROVISIONS

1.1 AUTHORITY

These regulations are adopted by the Borough of Naugatuck Planning Commission under the authority of the Connecticut General Statutes as amended.

1.2 PURPOSES

These Regulations are adopted for the following purposes:

- 1.2.1 To ensure that the land to be subdivided shall be of such character that it can be used for building purposes without danger to health or the public safety.
- 1.2.2 To ensure that proper provision has been made for water, drainage and sewerage.
- 1.2.3 To ensure that proper provision is made for protective flood control measures in areas contiguous to brooks, rivers or other bodies of water subject to flooding.
- 1.2.4 To ensure that proposed streets are in harmony with existing or proposed principal thoroughfares, especially in regard to safe intersections with such thoroughfares, and so arranged and of such width as to provide an adequate and convenient system for present and prospective traffic needs.
- 1.2.5 To provide that the Commission shall require the provision of open spaces, parks and playgrounds when, and in places, deemed proper by the Planning Commission.
- 1.2.6 To ensure that proper provision is made for any prospective project's soil erosion and sediment control.
- 1.2.7 To encourage energy efficient patterns of development and land use, the use of solar and other renewable forms of energy, and energy conservation.
- 1.2.8 To preserve the natural beauty and topography of the Borough and to ensure appropriate development with regard to these natural features.
- 1.2.9 To establish reasonable standards of design and procedures in order to further the orderly layout and use of land.

1.3 APPLICABILITY

- 1.3.1 Any subdivision or resubdivision of land within the Borough of Naugatuck shall conform to the requirements of these Regulations. No subdivision or resubdivision of land shall be made by any person, firm or corporation until a map for such subdivision or resubdivision has been submitted to and approved by the Borough Planning Commission and has been endorsed by the Commission and recorded in the Office of the Naugatuck Town Clerk.
- 1.3.2 The Commission shall have the authority to determine whether the existing division of land constitutes a subdivision or resubdivision under the provisions of these Regulations.

1.3.3 The Commission shall not be required to consider an application for subdivision approval while another application for subdivision approval of the same or substantially the same tract of land is pending before the Commission.

1.4 VALIDITY

If any section, paragraph, sentence, clause or phrase of these Regulations shall for any reason be held to be invalid or unconstitutional by a decree or decision of any court or competent jurisdiction, such decree or decision shall not affect or impair the validity of any other section or remaining portion of these Regulations.

1.5 RELATIONSHIP TO OTHER LAWS

Whenever restrictions or standards imposed by provisions of the Subdivision Regulations are in conflict with restrictions or standards imposed by provisions of any other governing law, rule, regulation, or private agreement, then, to the extent permitted by state and federal law, the more restrictive provisions shall govern. When one section of these Regulations imposes restrictions or standards greater than those of another section, the more restrictive provisions shall govern. To the extent that any time limit or requirement of these Regulations conflicts with the requirements of the Connecticut General Statutes, the Connecticut General Statutes shall prevail.

SECTION 2 – DEFINITIONS

2.1 GENERAL RULES OF CONSTRUCTION

In the construction of these Regulations, words and phrases shall be constructed according to the commonly approved usage of the language, except that technical words and phrases that have acquired a particular and appropriate meaning in law shall be construed accordingly. All words used in the present tense include the future tense; words used in the singular shall include the plural, and the plural singular; the word “shall” is mandatory and not directory, the word “may” is permissive.

2.2 DEFINITIONS

Except as otherwise defined in these Regulations or as the context might otherwise require, the following words are defined as follows:

AASHTO: American Association of State Highway and Transportation Officials.

Accessway: A private way for vehicular traffic serving not more than one (1) interior lot.

Adjacent Property Owners: Abutting property owners and property owners adjacent to the subject site but separated by a street, a right-of-way or a watercourse.

Applicant: The person, firm or corporation proposing a subdivision or resubdivision, either for themselves or as an agent for others. The word “applicant” shall include developer.

Aquifer: Water bearing rock or stratum of sufficient size to provide a source of water to the Borough.

ASTM: American Society of Testing and Materials.

Best Management Practices: Techniques that are effective practical ways for preventing or reducing pollution.

Borough: The Borough of Naugatuck, Connecticut.

Commission: The Borough of Naugatuck Planning Commission.

CT DOT: Connecticut Department of Transportation.

DEP: Department of Environmental Protection.

Driveway: A private way providing access to a public street

Driveway Approach: An area between the roadway of a public street and private property intended to provide access for vehicles from the roadway of a public street to a definite area of private property.

Driveway Apron: Portion of the driveway approach extending from the property side of the curb to the sidewalk section and lying between the end slopes of the driveway approach.

Easement: Legal authorization for use of a designated part of privately owned property by a person(s) other than the owner of said property.

Impervious Surfaces: A surface composed of any material that impedes or prevents natural infiltration of water into the soil. Impervious surfaces shall include but are not limited to eaves, roofs, (including overhangs), solid decks, driveways, patios, sidewalks, parking areas, tennis courts, concrete or asphalt streets, or compacted gravel surfaces. Slatted decks, porous paving with a runoff coefficient of less than twenty five (25) percent including grass pavers, ponds, streams, and other water surfaces, including the water area of swimming pools shall be considered to be pervious. Calculation of impervious surfaces for streets shall include the area compacted for pavements of gravel base.

Impervious Surface Ratio: The area of a lot that is covered by an impervious surface divided by the total area of the lot.

Improvement: Any change or alteration to the existing conditions of the subdivision site for the purpose of complying with these Regulations or rendering the site more suitable for development and/or habitation.

Infiltration: The process of percolating precipitation into the subsoil.

IWC: The Borough of Naugatuck Inland Wetlands Commission.

Lot: The unit or units into which land is divided with the intention of offering such units for sale, either as undeveloped or developed sites, regardless of how they are conveyed. Lot shall also mean parcel, site or any similar term which satisfies these Regulations.

Low Impact Development (LID): A site design strategy intended to maintain or replicate predevelopment hydrology through the use of small-scale controls integrated throughout the site to manage runoff as close to its source as possible.

Nonpoint Source Pollution: Pollution caused by diffuse sources that are not regulated as point sources and are normally associated with precipitation and runoff from the land.

NVHD: Naugatuck Valley Health District.

Ordinance 106: A Borough of Naugatuck ordinance which addresses minimum standards for fire protection.

Open Space: “Open Space” includes, but shall not be limited to land left in its natural, undisturbed state; land areas and facilities for non-commercial, non-profit recreation; and similar land areas for wildlife habitat, passive recreation, active recreation, ground water preservation, and the like.

Permeable Paving: Materials that are alternatives to conventional pavement surfaces and that are designed to increase infiltration and reduce stormwater runoff and pollutant loads.

Plan of Conservation and Development: A comprehensive plan for the future growth, protection and development of the Borough of Naugatuck (also known as the Plan of Development).

Passive Solar Energy Techniques: Site design techniques which maximize solar heat gain, minimize heat loss and provide thermal storage within a building during the heating season and minimize heat gain and provide for natural ventilation during the cooling season.

Rain Gardens/Biofiltration: A practice to manage and treat stormwater runoff by using a specially designed planting soil bed and planting materials to filter runoff stored in a shallow depression.

Reserve Strip: A privately owned strip of land which controls access to land dedicated, or to be dedicated, to public use.

Resubdivision: A change in a map of an approved or recorded subdivision if such change:

- a. Affects any street layout shown on such map,
- b. Affects any area reserved thereon for public use, or
- c. Diminishes the size of any lot shown thereon and creates an additional building lot, if any of the lots shown thereon have been conveyed after the approval or recording of such map.

Solar Access: The ability to allow sunlight to strike a solar collector.

Solar Collector: Any device or area that uses the sun’s energy to heat domestic water or to heat, cool or light a living space.

Special Project Review: When additional technical assistance provided by non-borough personnel is required to evaluate an application submitted in accordance with these Regulations

as a result of a finding by the Planning Commission that the project is of such nature as to require expertise not available to staff. The need for a Special Project Review will be based upon the finding that the nature and intensity of the development may have a significant impact on the natural resources of the Borough of Naugatuck.

Stormwater Management Plan: Plan describing the potential water quality and quantity impacts associated with a development project both during and after construction. It also identifies selected source controls and treatment practices to address those potential impacts, the engineering design of the treatment practices, and maintenance requirements for proper performance of the selected practices.

Stormwater Runoff: Aboveground water flow resulting from precipitation or snowmelt.

Stormwater Treatment Practice: Devices constructed for primary treatment, pretreatment, or supplemental treatment of stormwater.

Street: Public or private roads, streets, avenues, lanes, or any right-of-way which shall have at least one intersection with another street and be dedicated to or used for public travel or a proposed way shown on a recorded subdivision approved by the Commission.

Street Line: A line dividing a lot from the street right-of-way.

Street Right-of-Way: The area between property lines reserved for public traffic.

Street, Dead-End: A street which intersects with a through street at only one end.

Subdivision: The division of a tract or parcel of land into three or more parts or lots made subsequent to the adoption of subdivision regulations by the Commission, for the purpose, whether immediate or future, of sale or building development expressly excluding development for municipal, conservation or agricultural purpose. The word “subdivision” shall also include resubdivision.

Subdivision Completion: The completion of all public improvements which are required by these Regulations or by the Commission, including, but not limited to, streets, curbs, monuments, sidewalks, pathways, open space improvements, sanitary sewers, storm water management and storm conveyance systems, utilities, street lighting and signage, street trees, traffic control facilities and as-built drawings. Where surety has been provided to guarantee completion of improvements, subdivision completion shall typically mean the completion of all improvements which are covered by the surety and shall include improvements which may be required to address unanticipated field conditions which are encountered during construction.

Turnaround: A vehicular turnaround at the end of a dead-end street.

Watershed: The total upland and wetland area that drains to a wetland or watercourse. Smaller watersheds drain into the overall watershed for larger watercourses.

Water Quality Swales: Vegetated open channels designed to treat and attenuate the water quality volume and convey excess stormwater runoff.

Water Quality Volume: The volume of runoff generated by one inch of rainfall on a site.

Zoning Regulations: The Borough of Naugatuck Zoning Regulations.

SEDIMENT AND EROSION CONTROL DEFINITIONS

Certification: A signed, written, approval by the Naugatuck Borough Engineer and the Zoning Commission that a Sediment and Erosion Control Plan complies with the applicable requirements of these Regulations.

Disturbed Area: An area where the ground cover is or will be destroyed or removed leaving the land subject to accelerated erosion.

Erosion: The detachment and movement of soil or rock fragments by water, wind, ice or gravity.

Inspection: The periodic review of sediment and erosion control measures shown on the Certified Sediment and Erosion Control Plan.

Sediment: Solid material, either mineral or organic, that is in suspension, is transported or has been moved from the site of origin by erosion.

Soil: Any unconsolidated mineral or organic material of any origin.

Sediment and Erosion Control Plan: A scheme that minimizes soil erosion and sedimentation resulting from development and includes, but is not limited to, a map and narrative (also known as the Soil Erosion and Sedimentation Control Plan).

SECTION 3 – APPLICATION REQUIREMENTS AND PROCEDURE

3.1 INFORMAL APPLICATION REVIEW

Prior to submission of a formal application for approval of a subdivision or resubdivision the Applicant may submit a plan for an informal review by the Commission. If the plan is presented in preliminary rather than final form, any alterations or changes recommended by the Commission may be made more readily and economically by the applicant. Neither the plan submitted for the informal review nor the informal review by the Commission, however, shall be deemed to constitute any portion of the official and formal procedure of applying for and approving subdivisions or resubdivisions under the provisions of Charter 126 of the General Statutes of Connecticut. It is encouraged that those Applicants proposing a subdivision especially with ten (10) or more lots participate in this process.

3.1.1 Informal Plan

The plan submitted for informal review shall be considered an informal plan and should show sufficient information to allow the Commission to make a general planning review under the standards of these Regulations. It is recommended that the informal plan meet the standards for a Site Development Plan.

3.1.2 Review

When an informal plan is submitted, the Commission shall hold a discussion with the Applicant and may recommend any changes or improvements in the plan in order to

guide the Applicant in preparing maps and plans for formal application. Any discussion or opinions rendered in the informal review are advisory only and shall not be binding on the Borough staff or the potential applicant.

3.2 FORMAL APPLICATION REQUIREMENTS

In order to make a formal application for approval of a subdivision or resubdivision, the Applicant proposing the subdivision or resubdivision shall submit an application and maps, plans and documents as follows:

- 3.2.1 Application: An application for approval of a subdivision or resubdivision on forms prescribed by the Commission and signed by the Applicant or his lawful agent and signed by the owner or his lawful agent.
- 3.2.2 Maps and Plans: Ten (10) copies of maps, plans and documents as required in Section 4 of these Regulations or as required by the Commission.
- 3.2.3 Application Fee: An application fee payable to the Borough of Naugatuck in the appropriate amount. The application fee for a subdivision shall be set by ordinance of the Board of Mayor and Burgesses upon recommendation of the Planning Commission. A set fee schedule is available at the Borough Clerk's Office. The Commission may waive the application fee requirement for the resubmission of an application denied by the Commission within the previous ninety (90) days.
- 3.2.4 Engineering Report: An engineering report prepared by a Professional Engineer registered and licensed to conduct business in the State of Connecticut documenting the design of the storm water management system, road design, sediment and erosion control methods, soils investigation, earthwork volumes, and preliminary cost estimates including:
 - A. Drainage basin maps for existing and proposed watersheds and drainage patterns, including downstream runoff areas affected by the storm water runoff from the subdivision, and off-site areas that drain through the affected area.
 - B. A written narrative describing the methodology used to compute runoff rates, volumes, detention basins, and pipe sizes.
 - C. Soils investigations, test results, earthwork calculations, slope stabilization measures, dewatering designs, dam stability, or any other relevant information, as applicable.
 - D. Impacts on floodplains, aquifers, watersheds, greenways and natural features.
 - E. Investigation of adequate means to provide sanitary sewer disposal and water supply.
 - F. Traffic study, if necessary, and information on pedestrian links for sidewalks and bike paths, if applicable.

- G. Documentation of the design of special structures, and other relevant information required by the Engineering Department.
- H. A written narrative and supporting calculations describing the methodology used to manage Stormwater quality and to comply with the 2004 Connecticut Stormwater Quality Manual, as amended.

3.2.5 Other Approvals

- A. Inland Wetlands Permit: If a formal application involves land regulated as an inland wetland or watercourse, the Applicant shall have applied for and/or received an approval from the Inland Wetlands Commission in accordance with the Connecticut General Statutes.
- B. Sediment and Erosion Control Permit: If the total disturbed area of the proposed development is more than one half (½) acre, the Applicant shall have applied for and/or received a certification from the Borough Engineer and Zoning Commission that the Sediment and Erosion Control Plan complies with the Zoning Regulations.
- C. Water Pollution Control Board: When the subdivision is to be served by sanitary sewers, the Applicant shall have applied for and/or received an approval from, the Water Pollution Control Board.
- D. Naugatuck Valley Health District: When the subdivision is not served by sanitary sewers and/or by public water supply, a report from the Naugatuck Valley Health District shall be submitted indicating the acceptability of each lot for a private septic system and/or water supply.
- E. Naugatuck Police and Fire Commissions: With all subdivisions, the Planning Commission will refer the subdivision applications and plans to the Police Commission and Fire Commission for their review. The Applicant shall submit, with the subdivision application, the Police Commission application and application fee.
- F. Naugatuck Aquifer Protection Agency: If a formal application involves land regulated by the pursuant to CGS 22a-354a to §22a-354bb as amended, the Applicant shall have applied for and/or received an approval from the Aquifer Protection Commission.
- G. Connecticut Water Company: When the subdivision is to be served by public water supply, a report from the Connecticut Water Company shall be submitted indicating the availability of public water.

- 3.2.6 Connecticut State Highway Department Permit: Where a proposed road or storm drain joins with a State Highway, the Applicant shall obtain a permit for such connection from the Connecticut State Highway Department in accordance with the Connecticut General Statutes. The Applicant shall present a copy of such application for permit prior to the endorsement of the Record Subdivision Map and a final copy of the permit to the Building Official prior to the issuance of a building permit. Large projects may require a Major Generator Permit from the State Traffic Commission.

- 3.2.7 Schedule of Maintenance of Improvements: The Applicant shall submit to the Commission, for its approval, a method of providing for the maintenance and repair of a private street, storm drainage and sanitary sewers that are installed on private property.
- 3.2.8 Open Space: The Applicant shall submit to the Commission, for approval, the intended method of dedication of land for open space and the method of providing for the maintenance of such land as required in Section 6 of these Regulations.
- 3.2.9 Easements and Deeds: The Applicant shall submit all easements, deeds and documents necessary to carry the subdivision plan into affect, including instruments proposed to be executed or delivered after approval.
- 3.2.10 Site Access Agreement: The Applicant shall submit written permission from the property owner permitting entrance by the Borough or agents or representatives onto the property for the purposes of inspecting the property and any proposed improvements, and installing the proposed and required improvements in the event of failure of the applicant to make such improvements or properly maintain them until the Borough has assumed responsibility for them.
- 3.2.11 Additional Requirements
- A. Additional Evidence: The Commission may require the submission of additional evidence to establish to the satisfaction of the Commission that the land to be subdivided is of such character that it can be used for building purposes without danger to health or the public safety and to establish that the proposed subdivision complies with these Regulations.
 - B. Field Staking: The Commission may require staking of proposed improvements for visual inspection.
 - C. Ordinance 106: The Applicant shall comply with Ordinance 106 (Fire Protection), if applicable.
 - D. Traffic Study: The Commission may require the submission of a traffic study where the volume of traffic expected to be generated from such subdivision may adversely affect the public safety, or where the proposed street layout may adversely affect the public safety.
 - E. Special Project Review and Technical Assistance: The Commission may require an Applicant, to conduct a special project review, when additional technical assistance provided by non-borough personnel is required to evaluate an application submitted in accordance with these Regulations as a result of a finding by the Planning Commission that the project is of such nature as to require expertise not available to staff.
 - F. The need for a Special Project Review will be based upon the finding that the nature and intensity of the development may have a significant impact on the natural resources of the Borough of Naugatuck.

1. The Commission may require an Applicant to conduct a special project review where additional technical assistance or technical evaluation for subdivisions proposing ten (10) or greater and a finding by the Commission that an outside consultant is required to be retained to represent the Borough's interests.
2. The Commission shall make the determination of the need for such technical assistance or evaluation, which will be coordinated by Borough staff.
3. The Applicant will be responsible for all reasonable, incurred costs. Said fees are to be estimated by the Borough Engineer and submitted in addition to all application fees and held until the application is completely processed. Thereafter, any residual funds pertaining to this assessment will be returned to the Applicant.
4. For the purpose of this special project review, an "outside consultant" means a professional who is not an employee of the Borough of Naugatuck, who will review all application requirements and related materials, to ensure adherence to Borough regulations and sound engineering principles. The Planning Commission shall maintain a list of qualified consultants who may be selected to review and evaluate proposals or plans submitted to the Commission.

3.3 FORMAL APPLICATION PROCEDURES

To the extent that any time limit or requirement of these Regulations conflict with the requirements of the Connecticut General Statutes, the Connecticut General Statutes shall prevail.

3.3.1 Application Receipt and Scheduling: All applications, maps, plans, documents and data required by these Regulations shall be submitted to the Borough of Naugatuck Land Use Office. No application shall be accepted or considered filed unless it complies in all respects with the requirements of Section 3.2 of these Regulations. The date of receipt of an application shall be the date of the next regularly scheduled meeting of the Commission immediately following the date of submission or thirty-five (35) days after such submission, whichever is sooner.

3.3.2 Referrals

- A. Referral to Regional Agency: When a subdivision is proposed, the area of which will include or abut land in an adjoining municipality, the Commission shall, at least thirty (30) days before approving the subdivision, submit a copy of the maps and plans to the appropriate regional planning agency or council of governments.
- B. Referral to Adjacent Municipality: The Commission shall notify the Clerk of an adjoining municipality within seven (7) days of receipt of an application, petition, request or plan, by certified mail, return receipt requested, of the pendency of any application, petition, request, or plan concerning any project on any site in which:

1. Any portion of the property affected by a decision of such planning commission is within five hundred feet of the boundary of the adjoining municipality; or
 2. A significant portion of the traffic to the completed project on the site will use streets within the adjoining municipality to enter or exit the site; or
 3. A significant portion of the sewer or water drainage from the project on the site will flow through and significantly impact the drainage or sewerage system within the adjoining municipality; or
 4. Water run-off from the improved site will impact streets or other municipal or private property within the adjoining municipality.
- C. General Referrals: To assist with its consideration of an application, the Commission may refer the application to any department, agency or official it deems appropriate, to review and comment upon those matters which are the concern or responsibility of such department, agency or official.

3.3.3 Hearing

The Commission may hold a Public Hearing regarding a subdivision application if, in its judgment, the circumstances require such action. The Commission shall hold a public hearing on any application for a resubdivision. Whether or not a Public Hearing is held, every applicant shall be afforded the opportunity to appear before the Commission to discuss the Application before final action by the Commission. Nothing herein precludes the participation in the proceedings from other interested parties at the discretion of the Commission and as required or allowed by law.

- A. If a public hearing is held, the Commission will:
1. Schedule the Public Hearing to commence within sixty five (65) days of the statutory date of receipt of the application.
 2. Submit legal notices by publication in a newspaper having a substantial circulation in the Borough at least twice, at interval of not less than two (2) days. The first not more than fifteen (15) days nor less than ten (10) days, and the last not less than two (2) days prior to the date of such hearing.
 3. Notify the Applicant by sending a copy of the legal notice by certified mail.
 4. Close the public hearing within thirty five (35) days of its commencement or with the approval of the applicant.
- B. If a public hearing is held, the Applicant shall notify adjacent property owners in the following manner:

1. Notices from the Applicant to the adjacent property owners shall be sent by certified mail at least ten (10) days prior to the Public Hearing. The Applicant shall obtain proof of mailing in the form of stamped certificates of mailing.
2. Prior to the start of the Commission's Public Hearing regarding the application, the Applicant shall submit:
 - a. The certificates of mailing.
 - b. A list of the property owners to whom the notices were sent.
 - c. A copy of the letter and any enclosures sent to the property owners.

3.3.4 Decision

- A. The Commission shall render its decision on the application for approval of a subdivision or resubdivision within sixty-five (65) days after the Public Hearing thereon or, if no public hearing is held, within sixty-five (65) days after the date of receipt of the application. The sixty-five (65) day time period for action may be extended by an additional sixty-five (65) days with the written permission of the Applicant.
- B. If the Commission requests the submission of additional information, the Commission may request such information be submitted seven (7) days prior to the close of the public hearing or in the case where no public hearing is held, seven (7) days prior to the end of the sixty-five (65) day period, or any extension thereafter.
- C. In approving, modifying and approving, or disapproving or denying an application or accompanying item, the Commission shall state in its records any conditions of approval, any modifications required or its reasons for a denial and the basis for its action.
- D. The Commission shall give notice of its decision to the Applicant by certified mail within fifteen (15) days after the decision has been rendered; notice of the Commission's decision shall also be published in the newspaper one (1) to fifteen (15) days after the decision has been rendered. In any case where such notice is not published within the fifteen (15) day period, the Applicant may provide for the publication of such notice within ten (10) days thereafter. Such notice shall be a simple statement that the application was approved, modified and approved, or denied, together with the date of such action.
- E. All approvals required by Section 3.2.4 of these Regulations shall be received by the Applicant and submitted to the Commission before the commission can render its decision on the application for approval of a subdivision or resubdivision.

- F. Extensions: The Applicant can request in writing an extension of the time frame for any of the steps, but the total of all extensions together cannot exceed sixty five (65) days.

3.4 FILING AND RECORDING OF APPROVED PLAN

3.4.1 Upon approval and within ninety (90) days from the expiration of the appeal period under Section 8-8 of the Connecticut General Statutes, or in the case of an appeal, within ninety (90) days of the termination of the appeal by dismissal, withdrawal or judgment in favor of the Applicant, the Applicant shall have the Record Subdivision Map endorsed by the Planning Commission and filed in the Town Clerk's office. It is necessary to allow at least ten (10) working days within the ninety (90) day period for the Town Planner and the Borough Engineer to review, and the Commission to sign, the Record Subdivision Map.

3.4.2 Prior to endorsement by the Planning Commission, the following action shall be taken by the Applicant if applicable to the particular subdivision:

- A. Conditions/modifications of approval shall be addressed.
- B. The Record Subdivision Map, supporting plans and documents shall be revised to conform to any modifications called for in the Commission's action.
- C. The Director of Health (NVHD) shall endorse the Record Subdivision Map.
- D. The Borough Engineer shall endorse the Record Subdivision Map.
- E. Easements and deeds required by these Regulations or the Planning Commission shall be presented, in executed form.
- F. A written statement from the Borough Engineer indicating completion of any subdivision improvements shall be submitted. In lieu of completion, the Applicant shall execute an agreement and file a letter of credit or other surety as approved by the Borough Attorney.
- G. A copy of the application for the Connecticut State Highway Department Permit shall be submitted.
- H. A Fee in Lieu (if required) for Open Space will be provided prior to the recording of the Record Subdivision Plan.
- I. Prior to the recording of the Record Subdivision Plan, all Naugatuck Inland Wetlands Development Fees and Regulated Area Fees if required will be paid to the Borough of Naugatuck, as well as any outstanding taxes, fees or charges for Borough services.

3.4.3 The Applicant shall submit the following maps and plans:

- A. Three (3) paper sets of the final plans (one (1) for Planning records and two (2) for Borough's Engineering Department records).

- B. Two (2) Record Subdivision Map Mylars® (polyester film or equivalent) for endorsement by the Planning Commission. The first Mylar® shall be filed in the Town Clerk's office. The second Mylar® shall be filed in the Assessor's office.
 - C. Electronic copies of all surveys, Maps and Plans shall be submitted to the Engineering Department in an Auto-CAD compatible format acceptable to the Borough Engineer.
- 3.4.4 The Commission may extend the time for such filing for two (2) additional periods of ninety (90) days and the approval shall remain valid until the expiration of such extended time.
- 3.4.5 Any subdivision or resubdivision map not so filed or recorded within the prescribed time or with the required signatures shall become null and void.
- 3.4.6 No changes, erasures, modifications or revisions shall be made in any Record Subdivision Map after approval has been given by the Commission and endorsed in writing on said map.
- 3.4.7 In the event that any Record Subdivision Map, when recorded, contains any changes not approved or required by the Commission, the Plan shall be considered erroneous, and the Commission may require that the surveyor or the Applicant file a corrected map, as approved, noting the reason for such filing.

3.5 COMPLETION OF IMPROVEMENTS AND SURETY

3.5.1 Time Period

- A. Subdivision Completion: The subdivision shall be complete within the Connecticut statutory time limit after the approval or, for a subdivision of land for a project consisting of four hundred (400) or more dwelling units, within ten (10) years.
- B. Extension: The Applicant may apply for and the Commission may grant one or more reasonable extensions of the time period for completion, provided that the time for all extensions shall not exceed ten (10) years from the date the subdivision was approved. The Applicant shall demonstrate, to the satisfaction of the Commission, good cause for the delay in the completion of the improvements. If the Commission grants an extension of the approval, the Commission may condition the approval on determination of the adequacy of the amount of the bond securing the actual completion of the work.
- C. Expiration: Expiration of the time period for completion shall result in the following:
 - 1. Automatic expiration of the approval of such plan provided that the Commission shall file notice on the land records of such expiration.

2. Prevention of conveyance of any additional lots in the subdivision by the Applicant or his/her successor in interest.
3. Requirements of a new application for subdivision approval of the subject land including a new application fee as well as a submission and review of all previous findings.

3.5.2 Surety Amount

- A. Letter of Credit or Other Surety: In lieu of completion of all or part of the required improvements, prior to endorsement of the Record Subdivision Map, the Applicant shall execute an agreement and file an irrevocable letter of credit or other method of surety approved by the Borough Attorney to guarantee completion of the required improvements.
- B. Form and Amount of Surety: The cost of all public improvements shall be estimated by the Applicant on forms provided by the Borough Engineer. The surety amount shall be equal to one hundred, fifteen (115) percent of the estimated cost of all public improvements. Public improvements include, but are not limited to, the following:
 1. The building of any roads per Borough specifications.
 2. The installation of drainage, water, sewer, utilities, sidewalks, trees and other required items.
 3. The estimated value of maintenance (such as sanding, snow plowing, and the cleaning of catch basins and drains) which may need to be performed on any roadway after said building lots are sold and before the road is accepted by the Borough.
 4. All sediment and erosion control measures.
- C. Calculation of Bond or Surety: The amount of the Performance Bond shall include:
 1. All improvements stated in 3.5.2.B above, plus any other requirements made as a condition for subdivision approval or depicted on the endorsed final subdivision plan and erosion and sediment control plan.
 2. Costs for the Borough to advertise, award and manage a contract for construction of the elements of the performance bond.
- D. Annual Review
 1. On an annual basis, the developer shall, at least sixty (60) days prior to the end of a “surety year” recompute the cost of the work remaining and review with the Borough Engineer. For all work that cannot be completed and accepted in the surety year, a new bond with surety shall be filed.

3.5.3 Phased Subdivision Bonding

- A. Definition: Phased Subdivision Bonding is a unique approach restricted to large subdivisions meeting specific qualifications.
- B. Qualification: To be eligible for consideration for Phased Subdivision Bonding, a proposed subdivision must:
 - 1. Comprise an area of fifty (50) acres or more.
 - 2. Include a total of ten (10) lots or more at completion.
- C. Additional requirements: The following are in addition to other requirements stated elsewhere within these regulations:
 - 1. Application: Phased Subdivision Bonding consideration must be requested at the time of the initial subdivision application. Requests for consideration of Phased Subdivision Bonding are prohibited after initiation of the application process or after Subdivision approval.
- D. Relationship of initial phase to completed Subdivision
 - 1. Each Phased Subdivision Bonding request must provide:
 - a Detailed description of each proposed phase.
 - b Municipal Improvements must support each phase of the Subdivision, except any Municipal Improvement required by, or necessary to support the completed Subdivision must be bonded in the initial Phase.
- E. Other Phases: The Commission may only approve completion of a Subdivision in phases provided that each phase is capable of independent existence without the completion of subsequent phases.
- F. Documentation
 - 1. All maps, plans, drawings, renderings and all other supporting documentation submitted in support of an application or requested by the Commission must be structured in strict alignment with the Phased Subdivision Bonding request.
 - 2. All reports and analyses and any other data submitted in support of the application for Phased Subdivision Bonding, or requested by the Commission shall clearly support both the individual phases and the completed subdivision.
 - 3. Site issues and Municipal Improvements determined by the Commission to affect Public Health and Safety are required to be corrected and

completed in accordance with a schedule directed by the Commission independent of the Applicant's phasing plan.

4. All documentation must be structured for cohesive integration of data associated with each phase of completion proposed in the application.
- G. Approval: Approval of a request for Phased Subdivision Bonding is solely at the discretion of the Commission. Prior to approving a request for Phases Subdivision Bonding the Commission must, by a vote in Public Hearing, find
1. Approval is solely in the interest of the Borough, and
 2. Such approval does not favor one Applicant of one Subdivision over another.
 3. The Commission may impose such stipulations upon the phases as it may deem necessary to assure the orderly development of the plan.

3.5.4 Release of Surety and Completion of Improvements

- A. Partial Release of Surety: The Commission may release a portion of any subdivision surety to the extent that a portion of the required subdivision improvements have been completed. The Commission shall retain twenty (20) percent of the surety until all of the improvements are complete. Progress as-builts must be submitted prior to partial release of surety. The value of the remaining work may be modified prior to partial release of surety.
- B. Release of Surety: Before release of any subdivision surety, or before the Commission endorses any subdivision map to permit filing with the Town Clerk when no surety has been posted, the following shall be completed by the Applicant if applicable to the particular subdivision:
1. All improvements shall have been satisfactorily completed and inspected by the Borough Engineer. The Borough Engineer shall submit a written statement that certifies that the improvements have been satisfactorily completed.
 2. The street (binder course of pavement) shall have been at least through one winter.
 3. All easements and deeds to the Borough shall have been submitted, if not previously provided. Title to such easements and deeds shall be unencumbered.
 4. All street signs, stop signs, and traffic control signs and devices shall have been completed by the Applicant and inspected and/or verified by the Police Commission. All hydrants and improvements required as part of the Fire Commission approval shall have been completed by the Applicant and inspected by the Fire Commission.

5. An as-built survey(s) shall have been prepared and submitted in accordance with the Borough of Naugatuck Engineering Department's requirements.
6. The Applicant's land surveyor, licensed to practice in the State of Connecticut, shall certify the installation and precise location of monuments by noting such monuments and their location on the as-built plans and by signing and sealing the plans.
7. The Applicant shall submit to the Commission a letter requesting the Borough of Naugatuck's acceptance of all streets shown on the Record Subdivision Map, except such streets labeled as "private streets". Documentation for acceptance of such streets shall be in the form and with accompanying documents as approved by the Borough Attorney. Warranty deeds for new streets or right-of-way land must have been executed and delivered to the Borough Attorney with a copy to the Commission. Title to said roads shall be unencumbered.
8. The Planning Commission shall require a ten (10) percent maintenance bond to be held for a period of one (1) year following acceptance of street and other public improvements by the Board of Mayor and Burgesses.
9. Final release of surety shall be subject to the acceptance of any public street by the Board of Mayor and Burgesses.

3.5.5 Certificate of Occupancy: No Certificate of Occupancy shall be issued for any structure until the following has occurred:

- A. The street(s) has been at least paved with the binder course to its full width and length and curbing has been installed.
- B. Utilities have been installed in accordance with these Regulations.
- C. Sidewalks (if required) have been constructed up to and including the parcel for which the Certificate of Occupancy is requested.
- D. Monuments and pipes/pins have been installed as required by these Regulations.
- E. The lot grading has been reviewed with the Building Official and the Zoning Enforcement Officer and found to be acceptable.
- F. Street signs have been installed.

3.6 FAILURE TO COMPLETE IMPROVEMENTS

Where surety has been posted and required improvements have not been completed within the time required, the Commission may thereupon declare the developer to be in default and withdraw the total amount of surety from the surety account or letter of credit and proceed to complete the public improvements. All costs, fees, or other expenses the Borough may accrue in

completing the work shall be debited against the funds to be withdrawn to the extent permitted by law. If the surety or letter of credit is insufficient to pay for all costs to the Borough, the applicant or other responsible party shall remain liable for such costs in excess of the surety or letter of credit.

3.7 SUPERVISION AND INSPECTION OF IMPROVEMENTS

- 3.7.1 Construction of all required improvements shall be carried out under the supervision of the Borough Engineer and shall be subject to inspection and approval by the Borough Planning Commission and the Borough Engineer or their authorized agent.
- 3.7.2 Prior to construction operations, the developer and all contractors and all subcontractors shall meet with the Borough Engineer or representatives to review job conditions, advise the Borough of the construction methods and schedule and review the Borough of Naugatuck construction standards and specifications.
- 3.7.3 The Borough Engineer shall be notified prior to and during stages of construction which include, but are not limited to, the following:
 - A. Once the limits of improvement and clearing are staked and erosion control measures are installed, prior to clearing and grubbing operations.
 - B. The start of earthwork operations.
 - C. When rough grading is completed.
 - D. When drainage and all other utilities are installed, prior to backfilling.
 - E. Prior to construction of curbing to determine the necessity of under drains.
 - F. During construction of curbing.
 - G. During construction of street base courses.
 - H. During construction of bituminous concrete surface and binder courses.
 - I. During the placement of concrete for sidewalks.
 - J. During backfilling of pipes and structures.
 - K. When all improvements are complete.
- 3.7.4 The Commission may require the Applicant to hire a Professional Engineer to periodically inspect all construction and submit periodic reports (typically monthly during active construction periods) to the Borough Engineer that the work is progressing in accordance with the approved plans. The reports should note any changes due to field conditions, utility conflicts, problems, and resolutions. At the end of the project, the Professional Engineer shall submit a certification letter along with as-built surveys, prepared and signed by a Licensed Surveyor, to the Borough Engineer stating that the project was built in accordance with the approved plans and approved field changes.

- 3.7.5 The Commission and the Borough Engineer or their authorized agent shall have free access to the construction work at all times and shall be authorized to take material samples and cores as deemed necessary.
- 3.7.6 The Commission or the Borough Engineer may require the Applicant or other responsible party, at his own expense, to have material tests made by, and certified by, a professional engineer licensed to practice in the State of Connecticut or by a qualified laboratory or other person or agency acceptable to the Commission or the Borough Engineer.
- 3.7.7 Where unanticipated field conditions require additional construction techniques or an alternate construction sequence to protect the health or the public safety, the Borough Engineer or his authorized agent may require additional measures or an alternate construction sequence to mitigate the field condition. Failure to take corrective action may result in a cease and desist order, if applicable, or such other enforcement remedies permitted by law. Additionally, if the Borough is required to correct the unanticipated field condition so as to protect the health or public safety, all costs that the Borough may accrue shall be debited against the surety. If the surety or letter of credit is insufficient to pay for all costs to the Borough, the Applicant or other responsible party shall remain liable for such costs in excess of the surety or letter of credit.

3.8 SUBDIVISION MODIFICATIONS

Applications for subdivision modifications including, but not limited to, driveway relocation and major changes in final grades, which are necessitated by site conditions or which are deemed to be in the public interest, shall be made in the same manner as the original application; except the modifications which are found to be of minor nature or which do not materially alter the subdivision, may be authorized by the Town Planner with the concurrence of the Borough Engineer and the Zoning Enforcement Officer.

SECTION 4 – MAPS AND PLANS

4.1 GENERAL

The maps and plans required by these Regulations shall show the information and shall be prepared in accordance with the standards hereinafter specified.

- 4.1.1 All such maps and plans shall be prepared by and shall contain a live seal or stamp and signature of the design professional within whose area of expertise or professional discipline the document falls pursuant to the Connecticut General Statutes.
- 4.1.2 All surveys shall be prepared in accordance with the Regulations of Connecticut State Agencies, Sections 20-300b-1 through 20-300b-20; “Standards for Surveys and Maps in the State of Connecticut”, as adopted by the Connecticut Association of Land Surveyors. The A-2 standard for boundary information shall apply.
- 4.1.3 Plans shall be prepared on twenty four (24) inch x thirty six (36) inch sheets, unless otherwise approved by the Commission.

- 4.1.4 For multiple sheets, clearly drawn match lines referenced to a common identifiable point on each sheet shall be shown on all sheets and a key map shall be drawn on at least one plan of the entire plan set.
- 4.1.5 The plans shall have a horizontal scale of one (1) inch equals forty (40) feet, unless otherwise specified herein or approved by the Commission.
- 4.1.6 A north arrow shall be provided on the plans, if applicable.
- 4.1.7 A title block shall be provided on all plans and shall include the following information:
- A. Title of the subdivision, which shall not duplicate the title of any previous subdivision in the Borough of Naugatuck.
 - B. Name and address of the owner of the land to be subdivided; name and address of the applicant if different from the owner.
 - C. Borough and State.
 - D. Date and scale.
- 4.1.8 Every map, plan or other drawing submitted with, or in support of any Subdivision Application shall adhere to strict drawing identification and control throughout the entire span of the Subdivision development and construction. Such control requires as a minimum:
- A. Zone identification on each sheet of each drawing.
 - B. Consistent drawing and sheet numbering.
 - C. Detailed drawing revision control that identifies any change to any drawing by:
 - 1. Sheet and zone location.
 - 2. Date of change.
 - 3. Detailed notation of the nature and scope of each change.
 - 4. Reference if applicable, to revised analysis, calculation or other supporting Engineering or Regulatory document.
 - 5. Signature approval of Applicant's Engineer and/or other authorized agent, or required Specialist for each change.
 - D. Requirements for drawing revision
 - 1. Approval: Drawing revision or in-process drawing change is required to be filed with, and acknowledged by, the Borough Engineer prior to commencing any work or change to work covered by the Change Document.

2. Revision Schedule: All drawings, maps, and plans must be completely revised and updated once a year, or when all work is completed, if any changes or revisions have occurred within the year, whichever first occurs. Revision and updates must incorporate all in-process changes at the time of revision. Final as-built plans, maps and drawings must accurately reflect completed work, and incorporate all prior revisions and changes.

4.1.9 Document Control

- A. Scope: All Engineering Reports, Analyses, Calculations and any supporting design document shall employ strict Document Control that includes as a minimum:
 1. Document Identification: Each document shall contain a unique identification. This may be a Report Number or other suitable identifier.
 2. Document Revision Control: Each document required or submitted shall employ revision control that identifies each change to the document. Revision History pages shall be entered in the front of each document and shall identify revision date, page, and paragraph and line identification of the change - as appropriate, signature of Applicant's Engineer or other authorized agent for each change.
 3. Page Control: Each revised page, figure, calculation or other report attribute shall clearly identify each revision in a manner that documents the date and approval of the change.
 4. Schedule: Document revisions shall be prepared and approved by the appropriate applicant authority and submitted to the Borough Engineer for review and acknowledgement, prior to commencing any new work or revising any in-process activity.
 5. Revision Schedule: Documents shall be revised and submitted as changes occur and one complete set of revised Documents shall be submitted with Applicant's cover letter attesting to their accuracy, completeness, and applicability in conjunction with submittal of final as-built drawings, plans and maps.
 6. Field Revisions: Any field revisions or drawing change(s) shall be reviewed by the Applicant's Engineer or other authorized specialist for impact on supporting documents. If the change or field revision affects a supporting document, the document revision shall be submitted with the drawing change to the Borough Engineer for review and acknowledgement prior to commencing the work.

4.2 MASTER PLAN

Where all land proposed for development or land under ownership of an applicant is not included in the proposal, a Master Plan shall accompany each subdivision section submitted. This plan shall be a scale of not less than one (1) inch equals one hundred (100) feet. The plan shall show proposed rights-of-way, streets, lot layout and open space. The Commission may require additional information where any part of the proposed subdivision would be affected by development of another part. Sections in the proposed order of development shall be labeled with roman numerals, and each section shall be applied for and processed individually and sequentially unless otherwise approved by the Commission. The Applicant shall submit the Master Plan with each subdivision section application if the index map required under Section 4.3.10 does not have adequate detail.

4.3 RECORD SUBDIVISION MAP

The map for filing with the Town Clerk shall be clearly and legibly drawn and shall be prepared and filed in accordance with the regulations set forth by the Public Records Administrator of the State of Connecticut. The map shall show the following:

- 4.3.1 Existing and proposed property and street lines; adjoining property lines and street lines for a distance of one hundred (100) feet; and the names of all adjacent subdivisions and property owners from current Assessor's records; municipal boundary lines; zoning district boundary lines.
- 4.3.2 Existing and proposed wetlands, watercourses, ponds, shorelines, floodplain or flood boundaries.
- 4.3.3 Level A Map and Level B Map Aquifer Protection Areas and watershed areas or the notation that the site is, or is not, in these areas.
- 4.3.4 Easements and rights-of-way; the width, description and other necessary dimensions of easements and rights-of-way required to accurately define their location.
- 4.3.5 Proposed lots and lot numbers, existing and proposed open space; the square footage and acreage of all lots and open space and the total acreage of land included in the subdivision.
- 4.3.6 Existing permanent buildings and structures.
- 4.3.7 Dimensions on all lines in feet and decimals of a foot to the hundredth of a foot and all bearings or deflection angles on all straight lines and the central angle, radius arc length (including lengths of the sub-arcs) and tangent distance of all arcs. In addition; non-tangent curves (though discouraged) must also be annotated with the chord gearing and distance in place of the tangent distance.
- 4.3.8 Street rights-of-way, widening of street rights-of-way, width of existing and proposed rights-of-way and streets, existing and proposed street names.
- 4.3.9 Existing and proposed monuments and pipes, pins and drill holes.

- 4.3.10 Location map at a scale of one (1) inch eight hundred (800) feet showing the location of the subdivision in relation to existing roads in the Borough.
- 4.3.11 An index map (if the proposed subdivision is divided into sections or is of such size that more than one sheet is required) showing the entire subdivision with lots, lot numbers, streets, street names and delineation of areas covered by the section of the street.
- 4.3.12 Survey relationship of proposed streets to nearby monumented streets where practical.
- 4.3.13 The words “Sanitary Sewer Assessments and Connection Fees shall be assessed by the Water Pollution Control Board in accordance with its adopted regulations” if the subdivision contains existing or proposed sanitary sewers.
- 4.3.14 The words “The Borough shall not be responsible for the maintenance or repair of private streets” if the subdivision contains existing or proposed private streets.
- 4.3.15 If a private road is proposed, the words “If the Borough is requested to accept a private street as a public street, the private street shall be improved to comply with the Subdivision Regulations totally at the expense of the property owner or owners owning or abutting such private street. All such improvements shall be completed prior to a formal request for the Borough of Naugatuck to accept such street”.
- 4.3.16 The words “The development of any lot shall be in accordance with and shall meet all conditions/modifications of the Planning Commission approval”. The Commission may require that modifications/conditions of approval be listed on the final Record Subdivision Map.
- 4.3.17 Building setback lines with dimensions.
- 4.3.18 In the case of an open space subdivision, the notation that the plan follows the bulk requirements of an open space subdivision with the bulk requirements listed.
- 4.3.19 Special parcels with description of proposed action and use including a note where an offer of dedication is being made.
- 4.3.20 The words “Approved by the Borough Engineer” with a designated place for the signature of the Engineer and date of signing.
- 4.3.21 The words “Approved by the Director of Health” with a designated place for signing and date of signing.

4.3.22 The following signature block information:

I hereby certify that at a meeting on _____, the Borough of Naugatuck Planning Commission gave approval to this plan.

Chairman

Date Signed

In accordance with the Connecticut General Statutes, all work in connection with this subdivision shall be completed within five (5) years of the date of approval. The completion date shall be _____.

4.4 SITE DEVELOPMENT PLAN

The Site Development Plan shall show existing conditions and the proposed layout of lots, streets, and improvements for the proposed subdivision and all contiguous land of the applicant that may be subdivided in the future. The plan shall show at least the following information:

- 4.4.1 Existing and proposed property and street lines; adjoining property lines and street lines for a distance of one hundred (100) feet; and the names of all adjacent subdivisions and property owners from current Assessor's records; municipal boundary lines; and zoning district boundary lines.
- 4.4.2 Existing and proposed watercourses, wetlands, ponds, swamps, shorelines, floodplain or flood boundaries.
- 4.4.3 Level A Map and Level B Map Aquifer Protection Areas and watershed areas or the notation that the site is, or is not, within these areas.
- 4.4.4 Easements and rights-of-way; the width description and other necessary dimensions of easements and rights-of-way.
- 4.4.5 Existing contours at an interval not exceeding five (5) feet on steep land and not greater than two (2) feet on rolling land, based on field or aerial survey or other suitable sources and using the same bench mark as provided in Section 4.5.8.
- 4.4.6 Proposed lots and numbers.
- 4.4.7 Existing and proposed buildings and structures.
- 4.4.8 Principal wooded areas; existing trees over twelve (12) inches in caliper unless part of a wooded area; trees over twenty-four (24) inches in caliper in a wooded area (if the wooded area is proposed to be developed); tree lines; and other significant vegetation.
- 4.4.9 Any ledge outcrops and existing stone walls within the subdivision.
- 4.4.10 Approximate dimensions on all proposed property and street lines; approximate lot area, open space area, and the total acreage of land included in the subdivision.
- 4.4.11 Existing and proposed monuments and pipes, pins and drill holes.

- 4.4.12 Proposed improvements including streets, sidewalks, driveways, fence, guard rails, streetlights, walls and planting.
- 4.4.13 Existing and proposed utilities such as sanitary sewer, water lines, gas lines and electric lines including size, type, location and top of frame and invert elevations.
- 4.4.14 Proposed septic systems and reserve areas, locations of any test holes; location numbering and test date of all test pits, percolation tests and soil test results.
- 4.4.15 Proposed well locations.
- 4.4.16 Existing and proposed storm drains, catch basins, manholes, ditches, water courses, headwalls, drainage structures, detention basins including size, type, location and top of frame and invert elevations; the complete drainage system for the entire subdivision shall be shown, with appropriate development stages for each subdivision section, if applicable (this information can occur on the Site Development Plan or the Grading Plan). Also see Sections 5.8 and 5.9.
- 4.4.17 Zone designation of the parcel, a chart indication the bulk requirements of the district, and a notation indicating compliance.
- 4.4.18 Chart indicating lot compliance with the “Buildable Lot Standards” in the Zoning Regulations.

4.5 GRADING PLAN

The grading plan shall show at least the following information:

- 4.5.1 All existing and proposed physical features including streets, driveways, buildings, sidewalks, vegetation, trees twelve (12) inches in caliper and larger unless part of a wooded area; trees over twenty-four (24) inches in caliper in a wooded area (if the wooded area is proposed to be developed); tree lines; preservation of site features especially vegetation.
- 4.5.2 Layout of existing and proposed lot lines and street lines.
- 4.5.3 Existing and proposed contours at an interval not exceeding two (2) feet based on field or aerial survey.
- 4.5.4 Spot elevations on both existing and proposed roads where there is a change in slope or direction.
- 4.5.5 Existing and proposed watercourses, wetlands, ponds, floodways, floodplains or flood boundaries and base flood elevations.
- 4.5.6 Existing and proposed buildings and structures.
- 4.5.7 Location of all test holes, test pits or borings.

- 4.5.8 Benchmarks and vertical datum shall be NAVD 1988 if available or NGVD 1929 if not, unless approved otherwise by the Borough Engineer.
- 4.5.9 Slope stabilization methods including retaining walls.
- 4.5.10 Interim grading and stockpile areas, particularly on multi-phase subdivisions.
- 4.5.11 Notation indicating the volume of earth material, in cubic yards, to be brought into, or taken off of the site. The Commission may require that the earthwork volume for the road be calculated separately. The Commission may also require that cut and fill volumes be calculated for various types of materials and for each phase of the project.
- 4.5.12 The words “The yard shall be graded away from the building foundation at two (2) percent, one quarter (1/4) inch per foot minimum for a horizontal distance of ten (10) feet minimum to ensure positive drainage away from buildings. The Developer shall review the lot grading and drainage with the Zoning Official prior to obtaining a Building Permit and a Certificate of Occupancy for any lot”.
- 4.5.13 In addition to the grading plan, the Commission may request the submission of cross section drawings covering the proposed road and area of excavation or filling.
- 4.5.14 A bold line indicating the limit of disturbance.
- 4.5.15 Grading plan shall bear the words “Approved by the Borough Engineer”: with a designated place for signing and date of signing.

4.6 SEDIMENT AND EROSION CONTROL PLAN

A Sediment and Erosion Control Plan shall be submitted with all subdivision applications. If the total disturbed area of the proposed development is more than one half (½) acre, the Applicant shall receive a certification from the Borough Engineer and Zoning Commission that the Sediment and Erosion Control Plan complies with the applicable requirements of the Naugatuck Zoning Regulations.

The following note shall be placed on the Sediment and Erosion Control plan.

“This Soil and Erosion plan has been reviewed by the Borough of Naugatuck Engineering Department, and when signed below, is certified to be in compliance with the applicable requirements of the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended. Certifications by the Borough Engineer or Commission do not relieve the owner, Applicant, contractor or interested party from the responsibility to maintain or increase soil and erosion control measures, as necessary. Other additional measures may be required by the Borough Engineer in order to maintain compliance with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.”

Signed: _____ Date: _____
Borough Engineer

Signed: _____ Date: _____
Naugatuck Zoning Commission

4.7 CONSTRUCTION PLANS

Construction drawings shall show at least the following information in accordance with good engineering practices and as appropriate for the particular subdivisions.

- 4.7.1 Plan and profile drawings of all proposed streets, storm drains, sanitary sewers, catch basins, manholes, ditches, watercourses, headwalls, gutters, curbs and other structures shall be drawn to a horizontal scale of one (1) inch equals forty (40) feet and a vertical scale of one (1) inch equal four (4) feet. Design of plans and profiles for streets and utilities shall be based on ground survey information.
- 4.7.2 For streets the following information shall be shown: the existing grades at the center line and both street lines and the proposed grade at the center line; spot elevations on proposed center lines at the beginning and end of all vertical curves, apex elevation, elevation at all even stations, percentage of grade on all tangents, street lines and edge and width of pavement, sample street cross section, stations on centerline at fifty (50) foot intervals and at all grade changes and centerline intersections. The centerline profiles of existing streets to which any of the proposed streets connect shall be depicted on the profile drawing for a distance of two hundred (200) foot from the beginning of the proposed road and the centerline profile shall also extend two hundred (200) foot beyond the end of the proposed road, except where the proposed road cannot be extended in the future.
- 4.7.3 Depth, invert, slope and size of pipes, ditches, culverts, manholes, catch basins, headwalls and watercourses, cross sections, and other requirements in accordance with Sections 5.8 and 5.9.
- 4.7.4 Approximate location of lot lines intersecting the street line, lot numbers and street names.
- 4.7.5 Details of streets, sidewalks, curbs, gutters, special structures and any other details necessary to illustrate that the proposed improvements comply with Borough standards.
- 4.7.6 Detail drawings of any bridges, box culverts, deep manholes and any other special structures.
- 4.7.7 Floodplain or flood boundaries and base flood elevation data within the subdivision area or its proximity.
- 4.7.8 All construction plans shall bear the words "Approved by the Borough Engineer" with a designated place for signing and date of signing.

SECTION 5 – DESIGN AND CONSTRUCTION STANDARDS

5.1 GENERAL

Subdivisions shall be designed in general conformity with the Naugatuck Plan of Conservation and Development, adopted by the Commission particularly in regard to streets, drainage systems, sanitary sewers, water supply and reservation of land for parks, playgrounds, recreation and open space. Proposed subdivision and resubdivisions including all related streets, drainage, utilities

and other improvements required by these Regulations shall be designed and constructed in accordance with the standards hereinafter specified and applicable ordinances and standards of the Borough of Naugatuck. Where a standard has not been established by the Borough of Naugatuck the Standard Specifications for Roads, Bridges and Incidental Construction of the State of Connecticut Department of Transportation, Form 814A, as amended, shall apply.

5.2 BUILDING LOTS

Proposed building lots shall be of such shape, size, location, topography and character that buildings can be reasonably constructed thereon and that they can be occupied and used for building purposes without danger to the health and safety of the occupants and the public. Any lot which is found to be unsuitable for occupancy and buildings by reason of water or flooding conditions, unsuitable soil, topography, ledge, rock or other conditions shall be combined with another contiguous lot that is suitable or shall be marked "This is not an approved lot at this time" on the Record Subdivision Map. The lot shall not be an approved building lot until necessary revisions or improvements to the lot have been made and approved by the Commission and a revised subdivision map has been submitted to and approved by the Commission. Proposed building lots shall be designed and arranged to make best use of the natural terrain, avoiding unnecessary grading, and to preserve natural features, substantial trees, woods and other plant materials.

5.2.1 Lot Size: Each lot shall conform to the Zoning Ordinance and Regulations for the Borough of Naugatuck. In addition, where the lot is not to be served by public water supply and/or sanitary sewers, each lot shall have sufficient area and suitable dimensions to provide ample space to accommodate a private water supply system and/or sewerage disposal system in accordance with good engineering practice and the applicable requirements of the Connecticut State Department of Health and the Naugatuck Valley Health District.

No parcels, reserve strips or other remnants of land of a size unsuitable for a building lot shall be left in any subdivision unless otherwise approved by the Commission. Any land area regardless of size, which does not conform to these or other applicable regulations or codes or is rendered useless for building according to sound practice shall be included in an adjoining conforming lot. Alternate methods of disposition for such land may be required or approved by the Commission. Restrictions may be applied to such land as deemed necessary by the Commission to protect the public health or safety.

5.2.2 Lot Numbers: All lots shall be numbered beginning with numeral "1" and shall continue consecutively throughout the entire subdivision with no omissions or duplications. No fractions or letters shall be used, unless necessary for clarity in a resubdivision. Adjoining subdivisions and sections of a subdivision having the same title shall not duplicate numbers used previously for the adjoining land. All lot numbers shall be conspicuous and noted on the map in the approximate center of the lots.

5.2.3 Lot Lines: In so far as practical, the side lines of all lots shall be at right angles to the street on which the lot faces or shall be radial to the street line, unless a variation of this provision would result in a better street or lot layout. It shall be the discretion of the Commission to refuse to permit property lines to cross any municipal boundary line, and in the event of such refusal, such municipal boundary line shall be made to constitute one of the lot lines.

5.2.4 Interior Lots and Accessways

- A. All accessways and interior lots shall conform to the requirements of the Zoning Regulations of the Borough of Naugatuck.
- B. Each interior lot shall have its own accessway. If approved by the Commission, interior lots may share a driveway. The use of common driveways is encouraged to minimize impervious coverage. Driveways shall meet the requirements of Section 5.4 "Driveways" unless otherwise specified under this Section. The applicant must document that the accessway can support a driveway."
- C. The driveway serving an interior lot shall be sixteen (16) feet in width. If the driveway exceeds two hundred (200) feet in length as measured from the street right-of-way, a pull-off area shall be provided as necessary based on sight distance. The driveway serving multiple interior lots shall be not less than sixteen (16) feet in width and shall be constructed with a processed aggregate base at least eight (8) inches in thickness on rolled subgrade. The Commission may require a paved driveway and additional drainage measures for interior drives if deemed necessary. Driveways to interior lots shall be designed and constructed to accommodate fire apparatus and other emergency equipment. All applications for interior lots shall detail the nature of proposed driveway construction including proposed location, width and building materials, and provision for emergency vehicles to turn around. Driveway plans must be reviewed and approved by the Borough Engineer and the Fire Commission.
- D. Lot arrangement shall be such that there will be no foreseeable difficulties, for reasons of topography or other conditions, in securing a building permit to build on such lot in compliance with the Regulations and Ordinances of the Borough and in providing driveway access to the building on such lot from an existing public street or a street approved by the Commission.
- E. For each such interior lot the Record Subdivision Map shall contain a notation restricting the use of such interior lot to single family residence.
- F. The Commission shall enter upon its records the reason or reasons why such interior lot is necessary and shall attach appropriate conditions, or require such guarantees as may be necessary to protect the public interest. The Commission may consider the following when reviewing interior lots.
 - 1. The land characteristics and physical site conditions make interior lots practical and desirable.
 - 2. The establishment of an interior lot would protect or preserve natural or man made features or resources which the Commission deems valuable.
 - 3. The development of interior lots would provide the most suitable use of the land considering such factors as drainage, configuration, accessibility, and topography.

4. There would not be an adverse impact as a result of multiple driveways on the proposed street, that accessibility for emergency vehicles would be adequate, and that the percentage of interior lots in the subdivision is appropriate.
 5. The interior lot would correct an existing problem where an existing property has been unintentionally land-locked without adequate frontage.
- G. Connection to public sanitary sewer and/or public water is required where an accessway, serving such interior lot, adjoins a street having such facilities.
- 5.2.5 Lot Grading: Lots shall be laid out so as to provide positive drainage away from all buildings. Drainage shall be designed so as to avoid concentration of storm water from each lot onto adjacent lots. The lots shall be graded to allow for safe driveways, reasonable yard areas (i.e. including a minimum yard area of eight hundred (800) square feet of five (5) percent or less grade) and adequate drainage, with minimal wetland impacts. The lots shall be graded to avoid concentrating runoff where there would be an adverse impact on septic systems, erodible slopes, and downhill properties.
- 5.2.6 Street Frontage: All building lots created by subdivision shall front on a publicly accepted street, a street bonded for public acceptance upon completion, or a private street conforming to or to be constructed to comply with the Subdivision Regulations and Borough standards.
- 5.2.7 Prior to the commencement of any site work on an approved building lot, the Applicant shall notify the Zoning Enforcement Officer, to ensure the installation of the required erosion and sedimentation controls.

5.3 STREET DESIGN

- 5.3.1 General: Proposed street design and construction shall conform to the latest edition of the Connecticut State Highway Design Manual Standards and to the latest edition of the manual on Uniform Traffic Control Devices (MUTCD), in addition to the Borough of Naugatuck Design Standards, and rights-of-way shall be planned in such a manner as to provide safe and convenient access to proposed lots and safe and convenient circulation for present and prospective traffic within the neighborhood in which the subdivision is located. In planning streets, due consideration shall be given to accomplishing an attractive layout and development of the land. Streets should in general follow the contour of the land and should have a location and grade which preserves the natural terrain, substantial trees, woods and other natural features. Cuts and fills in excess of fifteen (15) feet shall not be allowed without a detailed analysis of alternatives and Planning Commission approval. Streets should have an east-west orientation to the greatest extent possible in order to provide for orientation of buildings to the south and thereby encourage the use of solar energy techniques. Permanent dead-end streets shall be avoided unless connecting streets are impractical.
- 5.3.2 Street Classification and Design: All proposed streets in the subdivision and any existing street abutting the subdivision shall be classified by the Commission as one of the following:

- A. Local Street: All remaining roads are classified as local roads. This roadway classification contains the highest percentage of road mileage in Naugatuck and provides for the lowest level of through mobility, while affording the highest level of access to abutting land uses.
- B. Collector Street: Roads in this category collect traffic from local roads and connect with other collector roads and arterials. Collector roads also provide a high degree of access to abutting land uses and are designed and constructed to accommodate lower traffic volumes and speeds than arterials.
- C. Minor Arterial: This type of roadway typically carries a lower traffic volume than principal arterials and generally provides for a greater degree of access to abutting land uses.
- D. Principal Arterial: This roadway type connects major development and activity centers within Naugatuck to each other, to other communities and to the interstate highway system. Principal Arterial roads are typically higher type designs with higher design speeds, greater traffic carrying capacity and enhanced horizontal and vertical geometry. Principal Arterial roads in Naugatuck also provide access to adjacent land uses.
- E. Private Street: A street to serve abutting lots with arrangements made for private maintenance and repair. Upon request of the Applicant, the Commission may approve a proposed street as a permanent private street if the Commission finds that such a street will not impair the orderly development of the neighborhood, that there will be safe and convenient circulation for vehicles and pedestrians including emergency vehicles and that there will be suitable arrangements for maintenance and repair of the street. The street shall be constructed to the same standards as a Local Street.

5.3.3 Existing Street

- A. Access from an Existing Street: Subdivisions shall have frontage on, or access from, an existing street, which is suitably improved and paved. For the purposes of this Regulation, “ancient highways”, “paper streets” and the like shall not be considered an existing street. Where these streets are incorporated into a subdivision they shall be improved by the Applicant to Borough standards.
- B. Right-of-Way: Where a tract of land to be subdivided has frontage on an existing street, provision shall be made along such frontage for proper widening of the right-of-way of such street to fifty (50) feet or to a greater width depending upon the classification given such street by the Commission.
- C. Street Improvements: The Commission may require that the Applicant improve that segment of an existing street on which the lots have frontage, including, but not limited to, widening, sidewalks, traffic controls, installation of drainage, curbing, grading or tree removal.

5.3.4 Dead-end Streets

- A. Length: Residential dead-end streets shall not serve more than twenty (20) lots, or exceed one thousand (1,000) feet in length, (measured from the curb line of the intersecting street to the center of the cul-de-sac), whichever is the more restrictive requirement. Dead-end streets shall have a minimum roadway length of two hundred (200) feet (one hundred (100) feet of a road and one hundred (100) feet of cul-de-sac). Temporary dead-end streets, which may be projected into an adjoining property at some future date, may exceed one thousand (1,000) feet in length,, but shall not exceed a reasonable interim length for a safe and convenient vehicular access, including emergency vehicles, as determined by the Commission. If a dead-end street does not intersect with a through street, the Commission may require a secondary point of access into the site or other such measures as the Commission deems necessary to protect the public health or safety.
- B. Turnarounds: Dead-end streets shall terminate in a turnaround, whether permanent or temporary, with a minimum diameter of one hundred, ten (110) feet for the right-of-way (ROW) and a paved area with a minimum diameter of ninety (90) feet. Alternate shapes may be considered such as a teardrop shape and/or landscaped center islands to minimize impervious cover. Plans must be reviewed and approved by the Borough Engineer and the Fire Commission. Mountable curbs and/or paver shoulders may be incorporated to allow for safe maneuverability of emergency vehicles. A larger turnaround area may be required at the request of the Borough of Naugatuck Fire Commission. Turnarounds shall generally be designed to allow for extension of public streets in the future.
- C. Temporary Dead-End Streets: Land for a turnaround on a temporary dead-end street, which may at some future date be projected into adjoining property, shall include the notation "This is temporary dead-end street. Land outside the normal street right-of-way shall revert to abutters whenever the street is extended." The developer responsible for the development of the adjoining land shall be responsible for removing all segments and paved surface of the turnaround outside the normal right-of-way (ROW) and suitably grading and seeding the ground at such time as the road is extended.

- 5.3.5 Street Extensions: The Commission may require that the arrangements of streets in a subdivision shall provide for the extension of existing streets and the future extension of proposed streets into abutting property not yet subdivided. Where a proposed subdivision street adjoins any land capable of being subdivided or where it appears that future extension of a proposed street is feasible, rights-of-way shall be provided to the boundary of the subdivision and deeded to the Borough. The Commission may require that the paved area be carried to the boundary of such undeveloped land. The Commission may require any plans or drawings necessary to establish that such extension is in harmony with the existing or proposed road system and adjacent properties. The Commission may require grading/sloping rights on lots which abut the unimproved portion of the street. Where a proposed subdivision abuts an approved subdivision containing a future right-of-way, the developer of the proposed subdivision shall, to the extent possible, construct the

street and all required improvements from the proposed subdivision street to the approved street in the existing subdivision.

5.3.6 Right-of-Way Width: Streets shall have the following minimum width of right-of-way according to their classification:

A.	Local Street	50 feet.
B.	Collector Street	50 feet.
C.	Minor Arterial	50-60 feet.
D.	Principal Arterial	60 feet
E.	Private Street	50 feet.

5.3.7 Width of Pavement: Streets shall be designed with the following width of pavement centered between the street lines:

A.	Local Street	30 feet.
B.	Collector Street	30 feet.
C.	Minor Arterial	36 feet.
D.	Principal Arterial	36 feet
E.	Private Street	30 feet.
F.	With permission of the Commission	≥ 24 feet

The commission retains the right to increase required width of pavement should it be deemed as necessary.

5.3.8 Vertical Design Criteria

A. Grade: The minimum longitude grade for any street shall be one (1) percent, except that a minimum grade from 0.5% to 1.0% may be established for one hundred (100) feet or less. The maximum grade for any street shall not exceed the following:

1.	Local and Collector Streets	10%
2.	Minor Arterial Street	5%
3.	Principal Arterial	5%
4.	Turnarounds	3%

- i. The Commission may permit a ten (10) percent grade on Commercial and Thoroughfare streets when it finds that the increase in grade is designed to protect outstanding topographic or physical features.
- ii. The Commission may require roads to be designed with horizontal and vertical alignment that would result in desirable grades that are less than the maximum allowed when such design would improve public safety and/or minimized earthwork on the proposed lots.

- B. Vertical Curves: All changes in grade shall be connected by vertical curves having the following minimum stopping sight distances and lengths.

<u>Street Designation</u>	<u>Stopping Sight Distance Min.</u>	<u>Length of Curve</u>
1. Local and Collector Streets	200 feet	100 feet
2. Minor Arterial Street	285 feet	120 feet
3. Principal Arterial Street	285 feet	120 feet
4. Private Street	200 feet	100 feet

5.3.9 Horizontal Design Criteria

- A. Horizontal Curves: Connecting curves between tangents shall be provided for all deflection angles in excess of five (5) degrees. Suitable tangents shall be provided between curves and the minimum radius of curvature at the centerline of streets shall be as follows.

1. Local and Collector Streets:	150 feet
2. Minor Arterial Street:	300 feet
3. Principal Arterial Street:	600 feet

5.3.10 Intersection:

- A. No more than two streets shall intersect at one point.
- B. Intersections shall be spaced not less than two hundred (200) feet apart (measured from the center line of the intersecting street to the centerline of the proposed street), except when, in the opinion of the Commission, conditions justify a variation from this requirement. The Commission may require a greater distance between street intersections.
- C. Streets shall intersect one another at, or as near to, a right angle as is practical. No intersections shall be at an angle of less than sixty (60) degrees.
- D. At street intersections, property line corners shall be rounded by an arc having a minimum radius of twenty five (25) feet. Curb or gutter radii may vary between twenty five (25) feet and forty (40) feet depending on street classification and required vehicle clearance.
- E. Where any street has a grade of four (4) percent or more within three hundred (300) feet of an intersection a transition area, having a maximum grade of two (2) percent shall be provided for a minimum of fifty (50) feet as measured from the right-of-way line of the street intersected.
- F. Intersections shall have a minimum sight distance of two hundred (200) feet in both directions for Local, Collector and Private Streets. For Minor and Principal Arterial Streets, a minimum sight distance of two hundred, eighty five (285) feet in both directions shall be provided. The Commission may require a sight line easement in these areas within the perimeter of the subdivision.

- G. There shall be adequate room within the right-of-way at intersections for placement and grading of sidewalks, handicap ramps, drainage, traffic controls, utility structures, and other necessary structures without conflicts or obstructions.
- 5.3.11 Cross Section: Street cross sections shall be designed with a 3/8" per foot (3.0%) cross pitch from the centerline to the curb. The curb shall be six (6) inches high. The sidewalk area shall be pitched toward the road with a cross pitch of 1/4" per foot (2%) for the sidewalk and a cross pitch of 1/4" to 1/2" (2-4%) per foot for the grassed shoulder. Alternate configurations may be acceptable depending on the slope of the road, etc. In particular, the use of curbless roadways shall be encouraged to provide for sheet flow of runoff onto grass shoulders where possible. The elimination of curbing shall be evaluated based on roadway slope, design speed, and projected traffic volume.
- 5.3.12 Curbs: On new roads, concrete curbing shall be installed along the edge of all street pavement except a temporary turnaround. If landscaped islands are to be used as part of a stormwater management scheme or roadway stormwater management is to be via sheetflow, then curbing may be eliminated. Where the pavement of a Commercial Street or Thoroughfare will be widened at some future date, the Planning Commission may deem the initial construction of curbs unnecessary along one or both edges of the pavement until the pavement is widened.
- A. Curbing installation shall be determined as follows:
1. When individual lot development occurs within a developed residential street, the type of curb required should be consistent with the predominant material currently existing on that street as determined by the Commission.
 2. When existing roadways and sidewalks are reconstructed on local residential streets, curbs should be replaced with the predominant curb type that currently exists within the neighborhood as determined by the Commission.
 3. On rural/scenic roads, the determination whether to install concrete curbs or alternate materials will be based upon such factors as the street grade, stormwater management considerations, natural features, and topography.
- 5.3.13 Street Names: Streets shall bear names which are appropriate to the character of the Borough and which do not duplicate or too closely approximate, in spelling or sound, existing street names in the Borough of Naugatuck or any adjoining municipality. All street names shall be subject to the approval of the Commission.
- 5.3.14 Street Signs: Street name signs shall be installed at all street intersections in locations approved by the Superintendent of Streets. Such signs shall be of a design and material used by the Borough of Naugatuck. Street signs shall be installed prior to issuance of a Certificate of Occupancy for any structure.
- 5.3.15 Traffic Control Device: The Developer shall be responsible for the cost and installation of any traffic control device deemed necessary by the Borough of Naugatuck Police

Department. Such traffic control devices shall meet the standards of the Manual for Uniform Traffic Control Devices (MUTCD) for Streets and Highways and the State Traffic Commission (STC) regulations. The Developer shall bond such required traffic control devices with all other public improvements.

- 5.3.16 **Street Trees:** In general, street trees shall be planted approximately fifty (50) feet apart on both sides of any street, subject to variations made necessary by driveways, street corners and walks, and shall be located within the street right-of-way. Trees may be planted within three (3) feet of the edge of the street pavement if approved by the Commission. Street trees shall be located so as to avoid shading solar collectors and other passive solar access systems. Trees shall be two and one half (2 ½) inch caliper or larger and shall have a minimum height of twelve (12) feet. They shall have a mature height of thirty five (35) feet or greater. The commission may allow deciduous trees with a mature height of less than thirty five (35) feet in areas where overhead utility lines or solar energy is of concern. Existing trees along the proposed street which conform to these requirements may be substituted for new trees at the discretion of the Commission. The developer shall leave not less than two naturally growing trees having a three (3) inch caliper or greater in the front yard of each lot or shall plant one tree for every fifty (50) feet of lot frontage or fraction thereof, but no less than two trees from the Suggested Street Tree List with three (3) inch caliper in the front yard of each lot. These shall be located a minimum of ten (10) feet from the street line to a maximum of thirty (30) feet from the street line. Straight rows and the use of only one variety are to be avoided, the intent being to create a natural mixture of appropriate species. New trees shall be guaranteed for two (2) season's growth by the developer.

A. STREET TREE LIST:

SMALL TREES (Less than or equal to 30')

<i>Acer tartaricum</i> ssp. <i>ginnala</i> 'Mozzam'	Mozzam Amur Maple
<i>Cercis canadensis</i>	Eastern Redbud
<i>Cornus mas</i>	Cornelian Cherry Dogwood
<i>Cotinus obovatus</i>	American Smoke Tree
<i>Crataegus crus-galli</i> var. <i>inermis</i>	Thornless Cockspur Hawthorn
<i>Crataegus punctata</i> var. <i>inermis</i> 'Ohio Pioneer'	Ohio Pioneer Dotted Hawthorn
<i>Koelreuteria paniculata</i>	Golden Rain Tree
<i>Pyrus fauriei</i> 'Westwood'	Korean Sun Pear
<i>Pyrus ussuriensis</i> 'Mountain Frost'	'Mountain Frost' Ussurian Pear
<i>Robinia pseudoacacia</i> 'Bessoniana'	Bessoniana Black Locust
<i>Sorbus intermedia</i>	Swedish Mountain Ash
<i>Sorbus x hybrida</i>	Oak-Leaf Mountain Ash
<i>Syringa reticulata</i>	Japanese Tree Lilac

LARGE TREES (Greater than 30')

<i>Acer platanoides</i>	Norway Maple
<i>Acer pseudoplatanus</i>	Sycamore Maple
<i>Aesculus x carnea</i> 'Briotii'	Briotti Red Horse Chestnut
<i>Celtis laevigata</i> 'All Seasons'	All Seasons Sugar Hackberry
<i>Celtis occidentalis</i> 'Prairie Pride'	Prairie Pride Common Hackberry

<i>Ginkgo biloba</i> (male) 'Golden Globe'	Golden Globe Ginkgo
<i>Gleditsia triacanthos</i> var. <i>inermis</i>	Thornless Common Honeylocust
<i>Gymnocladus dioicus</i> 'Espresso' (male)	Espresso Kentucky Coffee Tree
<i>Liquidambar styraciflua</i>	American Sweetgum
<i>Phellodendron amurense</i>	Amur Corktree
<i>Quercus acutissiuma</i>	Sawtooth Oak
<i>Quercus robur</i>	English Oak
<i>Quercus rubra</i>	Northern Red Oak
<i>Styphnolobium japonicum</i> 'Regent' or 'Princeton Upright'	Regent Japanese Pagodatree or Princeton Upright Japanese Pagoda Tree
<i>Taxodium distichum</i> 'Shawnee Brave'	Shawnee Brave Common Baldcypress
<i>Tilia tomentosa</i>	Silver Linden
<i>Ulmus Americana</i> 'Valley Forge'	Valley Forge American Elm
<i>Ulmus parvifolia</i>	Chinese Elm or Lacebark Elm
<i>Zelkova serrata</i>	Japanese Zelkova

5.3.17 Street Construction: All streets shall be constructed in accordance with the following standards and procedures:

- A. Cross Section: The entire width of the street right-of-way shall be graded in accordance with the cross section provided in Section 5.3.11. The sidewalk area between the edge of the pavement and right-of-way line shall be loamed with a minimum thickness of four (4) inch and seeded in accordance with these Regulations and Borough standards. The Commission or the Borough Engineer may require variation of this grading requirement in order to preserve substantial existing trees or other valuable site resources or to provide for alternative stormwater management methods.
- B. Pavement section thickness shall conform to the minimum compacted component thickness as follows:

Designation	Gravel Subbase	Processed Base Course	Bit. Conc. Binder Course Class II	Bit. Conc. Wearing Course Class I
Local and Collector Streets	8"	4"	2"	2"
Minor Arterial Street	8"	4"	2"	2"
Principal Arterial Street	8"	4"	2"	2"
Private Street	8"	4"	2"	2"

- C. Underdrains: The Borough Engineer may require the installation of underdrains within the right-of-way at the time of construction where necessary to protect the stability of the pavement subgrade and to provide protection from frost heaves.
- D. Subgrade Preparation and Compaction: All trees and roots shall be stripped to below the base course of the pavement and for the width of the pavement. The pavement subgrade area shall then be proof rolled with a minimum of six passes with a roller having a minimum dynamic force of fifteen thousand (15,000) pounds. All soft spots found during the proof rolling operations should be undercut and replaced with compacted gravel fill. All peat, loam, organic materials, soft clay, spongy soil, boulders, ledge and other unsuitable material shall be removed and replaced by material approved by the Borough Engineer. All fill that is placed to an elevation of less than three (3) feet above the water table at the time of filling, shall consist of broken or crushed rock or free draining soil meeting State Highway Department specifications. Where ledge rock is encountered, it shall be removed to a depth of one (1) foot below subgrade, and the area backfilled with gravel. Roadway embankments shall be constructed of suitable fill material deposited in successive layers not exceeding twelve (12) inches in depth. The subgrade shall be compacted by first distributing the haulings over the area, then by the use of this type of equipment, by power rollers having a static weight of at least ten (10) tons or by other mechanical means approved by the Borough Engineer. Compaction requirements for all soils shall be in accordance with ASTM maximum dry density as determined by ASTM D-1557. The in-place soil density shall be determined by ASTM – Standard Methods of Test for Density of Soil in Place by Nuclear Methods (shallow depth), designation D-2922 or by the Sand-Cone Method, designation D-1556. Testing frequency shall be a minimum of one compaction test for every ten thousand (10,000) square feet.

The degree of compaction shall be as follows:

<u>Areas</u>	<u>Minimum Degree of Compaction (Dry Density)</u>
1. Controlled Native Fill/Gravel Fill within 6 feet of pavement surfaces	95%
2. Controlled Native Fill or Gravel Fill deeper than 6 feet below pavements	92%
3. Pavement base courses	95%
4. Below sidewalk base courses	95%
5. Trench backfill outside of pavement areas	92%
6. Trench backfill beneath pavement areas	95%
7. All Fill outside of pavement bearing zones	92%
8. All fill in slope areas at or steeper than 10' Horizontal to 1' Vertical	92%

Rollers shall travel between 1.5 and 2.5 miles per hour (2 and 3.5 feet per second), while vibrating at a frequency between twenty (20) and thirty 30 cycles per second (Hz). In clay and silt material, "Sheepsfoot" or "Calfsfoot" rollers shall be used.

- E. Pavement Section Gravel Subbase Material: Upon the prepared roadway subgrade shall be spread a uniform pavement section gravel subbase course consisting of hard durable gravel, free from ice, snow, sand, clay, loam or other

deleterious materials uniformly blended, conforming to the requirements of the Connecticut Department of Transportation Form 814A, Section M.02.02-1 or M.02.02-2 (Grading A or C) and the following gradation:

Sieve Size	Percent Finer by Weight
3-1/2-inch	100
1-1/2-inch	55-100
¾-inch	25-60
No. 10	15-45
No. 100	0-10
No. 200	0-5

1. The roadway gravel subbase base course shall have a minimum depth after compaction of eight (8) inches. Prior to placing all surfacing material, the base course shall be approved by the Borough Engineer. The base course shall be thoroughly compacted as outlined in Section 5.3.17.D.

- F. Base Course: Upon the prepared roadway subbase course shall be spread a uniform pavement section base course consisting of hard durable processed aggregate, free from ice snow, sand, clay, loam or other deleterious materials uniformly blended, conforming to the requirements of the Connecticut Department of Transportation Form 814A, Section M.05.01 and the following gradation:

Sieve Size	Percent Finer by Weight
2-1/4 – inch	100
2-inch	90-100
¾-inch	50-75
¼-inch	25-45
No.40	5-20
No. 100	2-12
No. 200	0-5

1. At least seventy (70) percent of the materials on the one (1) inch sieve should have a fractured face.
2. The roadway base course shall have a minimum depth after compaction of four (4) inches. Prior to placing all surfacing material, the base course shall be approved by the Borough Engineer. The base course shall be thoroughly compacted as outlined in Section 5.3.17.D.

- G. Bituminous Concrete Base (Binder) Course: On the prepared and approved processed aggregate base course hot asphalt concrete base course pavement shall be laid in maximum lifts not exceeding two (2) inches in thickness. Bituminous Concrete Base (Binder) Course shall conform to Section M.04, Class 1, of the State of Connecticut Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction, Form 814A. The placement methods shall conform to Section 4.06, “Bituminous Concrete”, of the State of

Connecticut Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction, Form 814A.

- H. Bituminous Concrete Base Surface (Wearing) Course: On the prepared and approved bituminous base course, hot asphalt concrete surface course pavement shall be laid in maximum lifts not exceeding two (2) inches in thickness. Bituminous Concrete Base (Binder) Course shall conform to Section M.04, Class 2, of the State of Connecticut Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction, Form 814A. The placement methods shall conform to Section 4.06, "Bituminous Concrete", of the State of Connecticut Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction, Form 814A.
- I. Curbs: Curbing shall be constructed as follows:
1. Bituminous concrete curbing shall be machine formed and shall be constructed on the pavement, with a standard cross section approved by the Borough Engineer and having a height of seven (7) inches and a base width of approximately ten (10) inches. The material shall conform to the requirements of Section 8.15, "Bituminous Concrete Lip Curbing", of the State of Connecticut Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction, Forms 814A. The surface of the pavement, where the bituminous concrete curb is to be constructed, shall have been cleared of all loose and foreign material, shall be perfectly dry and shall be coated with an RC-2 tack coat or other approved bitumen just before placing the material. The material shall be properly compacted to the required cross-section by use of a suitable machine specifically designed for that purpose. After completion of the curbing, traffic shall be kept at a safe distance for a period of not less than twenty four (24) hours and until the curbing has set sufficiently to prevent injury to the work.
 2. Portland Cement concrete curbs shall be precast or cast in place concrete, constructed in a manner approved by the Borough Engineer. Curbs shall be six (6) inches wide at the top, nine (9) inches wide at the bottom and except at driveway cuts shall have a minimum depth of eighteen (18) inches, six (6) inches of which is exposed above the pavement. The concrete shall have a twenty eight day compressive strength of three thousand (3,000) pounds per square inch and shall conform to Section 8.11, "Concrete Curbing", of the State of Connecticut Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction, Form 814A for Class "C" concrete.
 3. The Commission may require the Applicant to reset or replace existing granite curb. New granite curb may be required in streets where the surrounding neighborhood contains granite curb.

- J. Guide Rails: Guide rails shall be installed along all streets where there will be:
1. An embankment with a side slope steeper than four (4) feet horizontal to one (1) foot vertical when the change in grade is a distance of less than twenty (20) feet from the face of the curb. At various other locations due to steep slopes, obstacles and/or other unforeseen conditions. Metal Beam Rail shall conform to Section 9.10, "Metal Beam Rail", of the State of Connecticut Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction, Form 814A.
 2. The Commission may require or accept alternative systems such as timber post and guide rail or post and cable systems.
- K. Construction Procedures: Line and grade stakes, benchmarks, and offset stakes, shall not be spaced more than fifty (50) feet apart and shall be set by a licensed land surveyor and maintained in good order during construction and until the construction is approved by the Borough Engineer. The Borough Engineer shall receive copies of shop drawings, material tests, inspection reports, meeting minutes, as-staked sketches, delivery tickets, field changes, progress as-built surveys, and other field information during construction. No street shall be opened or used for travel until it has been approved by the Borough Engineer. All water mains, sewers, pipe and other underground utility services shall be installed, tested and accepted by the representative utility companies or governing departments prior to placing the subbase and base courses. Catch basin tops shall be recessed to accept drainage before the wearing course of pavement is placed.
- L. Debris and Equipment: Prior to roadway acceptance, all large rocks, boulders, felled trees, stumps and brush shall be removed from the street right-of-way. All temporary structures, tools, equipment and waste material shall be removed from the street right-of-way upon completion of the work.

5.4 DRIVEWAYS

- 5.4.1 General Design Requirements: All off-street parking areas and driveways shall be designed including drainage and constructed to the borough engineering standards. The Commission may allow an alternate surface to be used for the parking area when such surface is designed to minimize stormwater runoff. In such situations, a maintenance plan for the surface must be approved by the Commission.
- 5.4.2 Subdivision lots: Lots shall have driveway access from the street to the garage, carport or parking place as specified herein. The driveways shall have a reasonably graded landing area at the parking place, a safe alignment to the road, and a level landing area at the right-of-way as specified herein and in accordance with Borough standards.
- 5.4.3 Common Driveways: No driveway shall service more than two (2) lots without the approval of the Commission. The Commission may require the provision of shared driveways and access where determined necessary or desirable to protect the public health, safety or welfare, or natural features.

- 5.4.4 Location: Driveways shall be located as far as possible from street intersections. No driveway shall have an access within thirty (30) feet of a street intersection as measured from the right-of-way line unless approved by the Commission. Driveways shall intersect the street at right angles when possible. At no time shall any driveway intersect the street at an angle of less than seventy five (75).
- 5.4.5 Sightlines: Sight lines from driveways onto adjacent public roads shall allow a driver to safely exit the driveway. A minimum of two hundred (200) feet sight distance is required in each direction.
- 5.4.6 Driveway Aprons: Driveway aprons within the Borough right-of-way shall be paved. The Commission may require that shared driveways, driveways with the potential for erosion, and driveways to interior lots be paved. Pavements may be bituminous asphalt, reinforced concrete, or special pavements of a design and material acceptable to the Commission and shall be constructed in accordance with Borough standards and with standards contained herein.
- 5.4.7 Travel Width: The minimum driveway width shall be no less than ten (10) feet. Driveway widths should not exceed twenty (20) feet in the right-of-way.
- 5.4.8 Grading: The slope of paved driveways shall not exceed fifteen (15) percent (ten (10) percent maximum preferred) as measured along the centerline of the driveway and shall have a maximum slope of five (5) percent within ten (10) feet of the right-of-way. Unpaved driveway slopes shall not exceed ten (10) percent (eight (8) percent maximum preferred). The right-of-way area shall be graded toward the street as specified herein and in accordance with Borough standards. The landing area at the parking place and/or the twenty (20) foot length of driveway in the front of the garage shall have a grade of not more than five (5) percent. Driveways shall be graded to prevent the drainage from creating icing problems, causing erosion, or impacting septic systems, wells or neighboring properties.
- 5.4.9 Loading Rates: All culverts and bridges located under a driveway shall be designed to carry H-20 or HS-20 live loads
- 5.4.10 Turning Radius: The minimum center turning radius for driveway curves shall be not less than thirty seven (37) feet. Based on driveway configuration, the Town Engineer may determine that a turning radius greater than thirty seven (37) feet is required for proper accessibility and safety.
- 5.4.11 Pull off Areas: Driveways longer than two hundred (200) feet shall include a pull-off area as necessary based on sight distance to accommodate emergency vehicles. The Maximum driveway at pull-off areas shall be sixteen (16) feet wide and a minimum of twenty five (25) feet long. The maximum distance between pull-off areas shall be two hundred, fifty (250) feet. A common driveway of sixteen (16) feet in width shall be deemed to have met the requirements of this section.
- 5.4.12 Prior to the creation of any driveway created within the entire subdivision property, the applicant shall construct and make functional all storm water drainage improvements.

5.5 SIDEWALKS AND PEDESTRIAN EASEMENTS

5.5.1 Sidewalks: Sidewalks shall be required on proposed or existing streets in all subdivisions as follows:

- A. Sidewalks shall be required on both sides of streets in subdivisions in all residential zones. For dead-end streets or those serving less than ten (10) residences, sidewalks on one side shall be allowed with approval from the Commission.
- B. On a cul-de-sac street(s), sidewalks will not be required around the circumference of the turnaround.

5.5.2 Sidewalk Waiver: It may not be prudent or practical to install sidewalks in all new developments approved. In these areas, a pedestrian path may be provided, but concrete curbs and concrete sidewalks may not be appropriate. A bituminous or stone dust pedestrian path may be more appropriate. Where a plan calls for sidewalk installation but where there is good cause not to install them at the time of the development, payment in lieu of installation may be requested of the Commission. Payment in lieu of installation may be approved by the Commission where one or more of the following conditions exist:

- A. Where the subdivision lots are not within legal walking distance of any school (as determined by the Connecticut State Department of Education).
- B. Where the subdivision lots are not within reasonable walking distance of a park, playground or other facilities used by the public.
- C. Where the public safety will not be materially affected.
- D. Where unusual physical or topographical conditions in conjunction with an absence of sidewalks in the immediate area make installation impractical.
- E. Where there are no other sidewalks within a reasonable distance of the area where the sidewalks would be required, creating locations in the system which are neither functional nor aesthetic.
- F. Where there are no sidewalks in the area or on the street where new walks would be otherwise required.
- G. Where there is no planned borough project that would fill in the gaps that exist in the sidewalk system on the street where the development is proposed.
- H. Where there are plans in the near term for major street reconstruction which would provide opportunities to fill gaps in the sidewalk system, and it would be better to construct the required sidewalks as part of the larger reconstruction project.

- I. A request to waive sidewalk installation must be submitted at, or prior to, the first Commission review of a subdivision application or at, or prior to, the Public Hearing (if applicable), which ever comes first.
- 5.5.3 The Commission may authorize the Applicant to pay a fee to the Borough. The Commission may refuse such fee if it so determines, in its sole discretion. In the event that such authorization is granted by the Commission, the following procedure shall be followed.
- A. When payment in lieu of installation is required, payments shall be in an amount based upon the prevailing costs of said improvements as determined by the Borough Engineer. If a substitute material for concrete curbing is required temporarily for good cause, the cost of the substitute material shall be deducted from the cost of the concrete, and the balance will constitute the payment in lieu of installation.
 - B. Payments in lieu of installation shall be deposited into a dedicated fund to be used solely for the installment of new sidewalks and curbs. A record of all property owners and properties subject to the payment in lieu of installation shall be kept by the Planning Department, and said property shall not be liable for any fee or assessment for the installation of sidewalks or curbs in front of their property in the future.
- 5.5.4 Pedestrian Easements: In areas where the proposed street system does not conform to a convenient pattern of pedestrian circulation, particularly in the vicinity of parks, schools, playgrounds or other public or semi-private places, the Commission may require the establishment of a minimum ten (10) foot easement for pedestrian ways, and may require the construction of a sidewalk within such easement.
- 5.5.5 Sidewalk Design and Construction: All sidewalks and walkways shall conform to Borough construction and design standards and as required herein. All sidewalks shall include ramps at all pedestrian crosswalks for the handicapped in accordance the Connecticut General Statutes and constructed to the current standards of the Americans with Disabilities Act (ADA).
- A. Sidewalks shall be a minimum of four (4) feet in width and shall be located within the street line with one edge being one (1) foot from the right-of-way line. All sidewalks shall be laid on six (6) inch bank run gravel base, watered and rolled to optimum moisture content and compacted prior to pouring.
 - B. The sidewalks shall be constructed of concrete four (4) inches thick with 6x6-6/7 wire mesh reinforcement in the middle of the slab. Where no wire mesh reinforcement is used, the thickness of the concrete shall be five (5) inches. The concrete shall have an ultimate twenty eight (28) day compressive strength of three thousand (3,000) pounds per square inch and have expansion joints with pre-molded fillers spaced not more than twenty five (25) feet apart and with suitable weakened plain joints every five (5) feet. The walk shall have a cross slope of one quarter (1/4) inch per foot, shall be poured in one pour and shall be finished with the use of a wood float.

- C. Sidewalks shall continue through driveway aprons unless otherwise approved by the Commission. At driveways the thickness shall be increased to six (6) inches with an eight (8) inch base and a 6 x 6-6/6 wire mesh reinforcement shall be placed in the middle of the slab.

5.6 MONUMENTS

Monuments shall be provided on both right-of-way lines of any street at all points of curvature, all points of tangency, all angle points and all other intermediate points as may be required by the Commission. Where not otherwise marked by monuments, all property corners and angles along the right-of-way and on each lot shall be marked with steel or iron pipes, pins or drill holes prior to obtaining a certificate of occupancy for that lot. Monuments shall be made of concrete, reinforced with four (4) steel rods, and shall be not less than seven (7) inches square by thirty six (36) inches in length with a suitably marked top. Monuments may also be marble or granite with a drill hole or bronze disk in the top, however such monuments need to have a ferrous metal rod or magnet installed along with the monuments to aid in recovery. Each monument shall be set in place after all street construction is completed, with the marked point set on the point of reference. Monuments shall be set flush with finished grade. Right-of-way monuments shall be set following substantial completion of the road and prior to street acceptance.

5.7 UTILITIES

- 5.7.1 Waiver of Underground Installation: Electric, telephone and cable systems shall be placed underground. Underground service connections to the front property line of each lot shall be installed before the street is paved. All underground utilities shall be marked with metallic detector tape and shown as the as-built survey(s) and plot plans.

The Commission may waive underground installation of such utilities in those portions of subdivisions abutting an existing street which does not have underground utilities or if it finds that safe underground installation is not feasible because of soil, ledge or water conditions or other natural or manmade conditions. The burden of proof shall be on the Applicant to illustrate that underground utility installation to serve all or part of a proposed subdivision is impractical. The following factors shall be considered in reviewing any waiver request:

- A. Recommendations or comments from the responsible utility company.
- B. The existing character of the subdivision location and potential impacts on adjacent property owners and the public's health, safety and welfare.
- C. Potential impacts on natural resources or other features such as trees, tree canopies, walls and landscaped areas.
- D. Physical constraints that will significantly affect the cost of providing underground service.
- E. The nature of the existing utility system and the need for and cost of extending distribution lines to serve the proposed subdivision.

5.7.2 Street Lighting: Street lights conforming to Borough standards shall be provided in the subdivision at the Applicant's sole expense and shall be provided at a minimum at every intersection. The Commission may require additional street lighting if it is determined that it is necessary for public safety.

5.7.3 Water Supply

- A. The applicant shall provide sufficient information to the Commission to establish that an adequate water supply is available to serve the domestic and fire protection needs of the proposed subdivision. This information may include written confirmation from the Connecticut Water Company, the Naugatuck Valley Health District and the Naugatuck Fire Commission. It may also include, but not be limited to, the submission of fire hydrant flow test data, water main analysis, well completion reports and hydro-geologic studies.
- B. Public water supply shall be provided to lots in any subdivision located within any area served by public water supply or when located within two hundred (200) feet of a public water supply in accordance with the Connecticut State Health Department or such a distance to the public water supply as to make extension economically feasible as determined by the Commission. The Commission may consider a variety of data in making that determination including; the long-term benefit to the community, the costs of providing alternative means of water supply for domestic use and fire protection, availability of adequate supply and pressure, and other applicable information.
- C. No subdivision using water supplied by a company incorporated on or after October 1, 1984 shall be approved by the Commission unless such company has been issued a certificate pursuant to Section 16-262m of the Connecticut General Statutes.
- D. Where public water is not required, a private well may be permitted for each lot, provided that each well can be designed, located and constructed in accordance with the requirements of the Borough of Naugatuck Ordinances and Regulations, the Public Health Code and the Naugatuck Valley Health District. Adequate water supply for fire protection shall be established in accordance with the Borough standards.

5.7.4 Sanitary Sewers: Sanitary sewers shall be provided to lots in any subdivision located within the sewer area of the Borough or within such a distance of existing sanitary sewers as to make extension of sewers economically feasible as determined by the Commission. Sanitary sewers shall be designed and constructed in accordance with the following standards.

- A. The sanitary sewer collection system shall be designed and constructed in accordance with the standards of the Water Pollution Control Board and Borough standards including, but not limited to, TR-16; Guides for the Design of Wastewater Treatment Works, by the New England Interstate Water Pollution Control Commission, 1980 or latest edition.

- B. Sanitary sewer pipe shall be polyvinyl chloride pipe (PVCP) with built-in rubber gasket joints, PVCP shall conform to ASTM 3034 (SDR35) with compression joints and appropriate fittings. PVCP shall be installed in accordance with ASTM-D2321 and manufacturer's recommended procedure.
- C. All pipes shall be laid on straight alignments and even grades using a pipe laser or other accurate method.
- D. Trench excavations shall comply with CFR29; Section 1926.650 (OSHA regulations for excavation safety). Boxes, sheeting, jacks, and sloping shall be used as appropriate.
- E. Pipe shall be backfilled and compacted in eight (8) inch lifts to 95% maximum dry density in accordance with the requirements of ASTM D1557 as shown on the details. The pipe shall be bedded on six (6) inch of $\frac{3}{4}$ " crushed stone. Provide an eight (8) to twelve (12) inch pipe foundation of $\frac{3}{4}$ " crushed stone in rock excavation. Trench bottom shall be stable in all areas including high groundwater areas. Initial backfill shall be eighteen (18) inches of sand over the top of the pipe, and the pipe shall be marked with metallic detector tape. Provide silt or clay water stops every one hundred (100) inches in groundwater areas.
- F. Sanitary sewers and forced mains shall have ten (10) inches minimum horizontal clearance to the water mains. Where sanitary sewers cross water lines, the water line shall be at least eighteen (18) inches above the sewer (clear distance between outside of pipes) while at the same time maintaining at least four and one half ($4\frac{1}{2}$) feet of cover over the water line. If the water line cannot be placed above the sanitary sewer or the vertical clearance is less than eighteen (18) inches, the sanitary sewer shall be encased with six (6) inches (all around) of Portland cement concrete for a distance of ten (10) feet on both sides of the crossing. Alternative methods of protecting water supplies may be used if approved by the Connecticut Water Company and Borough Engineer.
- G. Manholes shall be precast concrete, with rubber gaskets at joints, a waterproof exterior coating and waterproof rubber boots at pipe junctions. Invert shall be built of sewer brick and constructed to provide smooth transitions without clogging. Ladder rungs shall be either aluminum or jacketed steel and constructed with straight, safe alignment. Cast iron frame and covers shall read "sanitary sewer", be without ventilation holes, and be set on at least two, and no more than ten, courses of brick and mortar.
- H. Laterals shall be constructed to the same standards as sewer mains.

5.8 STORM WATER MANAGEMENT GUIDELINES AND DRAINAGE DESIGN

A Stormwater Management Plan is required for all subdivision applications except when the Borough Engineer or his designee grants a waiver in writing, if the Applicant demonstrates that the stormwater goals and objectives have been met. The plan shall consist of information and reports showing the method for managing both stormwater quantity and quality.

- 5.8.1 In all districts, all stormwater management systems in new developments shall be designed, constructed, and maintained with Best Management Practice (BMP) to minimize runoff volumes, prevent flooding, reduce soil erosion, protect water quality, maintain or improve wildlife habitat, and contribute to the aesthetic values of the project.
- A. Design of the stormwater management system shall meet the following general standards:
1. Is consistent with the Borough of Naugatuck engineering standards.
 2. Provide water quality measures and pursue Low Impact Development techniques in accordance with the 2004 Connecticut Stormwater Quality Manual, as amended.
 3. Provide stormwater conveyance systems designed in accordance with the 2000 Connecticut Department of Transportation Drainage Manual; as amended.
 4. Be designed in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.
 5. Be based on environmentally sound site planning and engineering techniques.
 6. Include an Operations and Maintenance Plan in accordance with the most recent version of The Connecticut Stormwater Quality Manual (CTDEP); as amended. All stormwater BMPs shall be designed in a manner to minimize the need for maintenance and reduce the chances of failure.
 7. Final design of the detention pond is subject to the review of the Borough Engineer and may be subject to additional wetland permitting, as recommended by the Borough Engineer and Wetland Enforcement Officer.
 8. Be signed and sealed by a licensed professional engineer.
- B. All stormwater detention and conveyance structures shall be constructed to control the postdevelopment peak discharge rates from two (2), ten (10), twenty five (25), and one hundred (100) year storms to the corresponding predevelopment peak discharge rates unless it can be demonstrated that there will be no deleterious downstream effects from an increase in stormwater discharge flow. The impacts of increase in postdevelopment stormwater runoff volume must also be determined and mitigated. Potential impacts to receiving water bodies must be assessed and mitigated. Generally, detention in the upper part of a watershed will be required. The Borough Engineer shall determine if detention in the lower third of the watershed is necessary based on a watershed study.
- C. All stormwater conveyance systems shall be adequately sized for a twenty five (25) year storm event. The site plan shall include the location, invert elevations, pipe sizes, flow calculations, and other similar information as may be required by

the commission, borough engineering staff, or the commission's consulting engineering staff to properly evaluate the stormwater management plan for the site.

- D. Infiltration of stormwater shall be accommodated to the extent possible through nonstructural approaches such as limitation of land disturbance and grade changes, preservation of natural drainage patterns, retention of existing wetlands, and creation of planted islands, planted medians, and planted perimeter buffer strips. On sites where little traffic is anticipated, the commission may approve the use of pervious surface materials for all or part of a parking area when such paving is part of an overall drainage design which minimizes concentration of stormwater runoff. Where feasible, roof runoff shall be collected and reintroduced to the ground water table via infiltration devices where soils and water table depths may permit.
- E. For sites where low impact development methods are being used to provide for stormwater management, the post construction analysis can reflect this through modification of runoff curve numbers and times of concentration.
- F. A complete runoff hydrograph evaluation is required for all projects with the potential to increase runoff rates as determined by the Borough Engineer or his designee. Hydrograph evaluations shall be conducted for existing and anticipated land use conditions for storms with average return frequencies of two (2), five (5), ten (10), twenty five (25), fifty (50) and one hundred (100) year storms . Hydrologic evaluations shall be completed using NRCS or USACE methods using the following 24-hour rainfall amounts with a Type III distribution:

Storm Frequency (Year Storm)	Inches of Rainfall
2	3.4
5	4.4
10	5.1
25	6.3
50	7.5
100	8.7

These values are based on the 1997 study by the Department of Natural Resources Management and Engineering, University of Connecticut, documenting one hundred (100) years of rainfall data up through August 1996.

- G. Where the subdivision's storm drainage system is proposed to discharge into a borough storm drainage system, the developer shall make provisions to accommodate anticipated additional discharge in the event the borough system is not adequate. Necessary improvements to the borough system to accommodate the additional stormwater discharge shall be done at the expense of the developer.
- H. Provisions shall be made for all private stormwater drains such as footing drains and yard drains. The size and location of all private drains that are to be connected to the public stormwater drainage system shall be shown.

- I. Direct discharge of untreated stormwater to any natural wetland or water body is prohibited. Stormwater runoff discharged to wetlands must be diffused to nonerosive velocities prior to reaching any natural wetland based on calculations submitted with the application package. The applicant must demonstrate that any receiving wetlands or water bodies have sufficient holding capacity based on calculations submitted with the application package.
- J. The commission may send any or all information provided on anticipated stormwater flow patterns and volumes and proposed stormwater management systems to the Borough Engineer and/or other consulting professional or agency for review and advisory comment.

5.8.2 Peak Flow Attenuation:

- A. The discharge of storm water runoff from development sites must not cause adverse downstream conditions. Generally, detention in the upper part of a watershed will be required. Detention in the lower third of the watershed may not be required. A watershed study may be required to determine whether a detention system is necessary. The Borough Engineer shall review and approve all storm water management systems. Necessity of detention will be made by the Borough Engineer. When detention is required, storm water runoff must be controlled so that during and after development, the site will generate no greater peak flow than prior to development for a two (2), ten (10), twenty five (25), and one hundred (100) year “24-hour” storm. Detention basins are to be placed in upland areas. Detention basins in wetland areas may be allowed only with the approval of the Inland Wetlands Commission and with the review of the Borough Engineer.
- B. The techniques available to attenuate changes in peak flow rates include, but are not limited to the following:
 - 1. Limiting impervious coverage
 - 2. Maintaining or increasing travel times
 - 3. Groundwater recharge
 - 4. Preserving wetlands and natural depressions
 - 5. Preserving, restoring or establishing riverine buffers
 - 6. Storm water detention facilities
 - 7. Extending the time of concentration

5.8.3 Local Storm Water Management: The following measures shall be applied to individual lots or parcels of land where required by the Borough Engineer or his representative:

- A. Roof Runoff: When feasible and appropriate, roof runoff should be directed into infiltration systems sized to contain one inch of rooftop runoff from a ten (10) year storm or onto stable vegetated soils for at least fifty (50) feet to encourage infiltration and groundwater recharge. Excess roof runoff may be directed overland or to watercourses or storm drains via grass swales or perforated pipes.

- B. **Parking Lot Runoff:** Parking lots constructed over pervious soils (excessively and well drained as defined by the Soil Conservation Service) shall be designed to encourage groundwater recharge via the use of infiltrative systems sized to contain one inch of parking lot runoff from a ten (10) year storm. Parking lots with heavy usage or near water supply sources shall include measures to reduce the chance of groundwater contamination, including oil traps, sediment basins, vegetated filters, etc. prior to infiltration systems. The use of grass median strips and depressed islands are encouraged.
- C. **Driveway Runoff:** Where possible, residential driveways shall be graded to encourage runoff flow onto pervious areas such as grass lawns and woodlands rather than directly to catch basins or drainage systems.
- D. **Sheet Flow:** Runoff shall be designed into sheet flow across natural or artificially vegetated areas whenever possible.

5.8.4 **Storm Water Detention Facilities:** Storm water detention facilities to temporarily store excess runoff may be used to control peak flow rate and duration of downstream flows when coordinated with the runoff characteristics of the watershed in which they are located and the local site conditions. Detention facilities may include, but are not limited to Surface Detention Basins, Subsurface Detention Basins, Landscaped Depressions and Ponds.

- A. Any detention system dam whose failure could cause significant damage or loss of life may be regulated as a dam by DEP pursuant to Sections 22a-401 through 22a-409 of the General Statutes, as amended. The Applicant shall submit all detention basin designs to the DEP for a preliminary permit determination and copy the Borough Engineer on all correspondence.
- B. All detention facilities shall be analyzed with the hydrograph and storage routine techniques, such as NRCS TR-20 method. Smaller areas may be analyzed with other methods, such as TR-55 if approved by the Borough Engineer.
- C. The waters released from a detention facility shall not increase the peak flow rate at off-site downstream points unless they have adequate flow capacity.
- D. The "Connecticut Guidelines for Erosion and Sediment Control" (2002) as amended shall be required as a guide to construction details and materials. The minimum free board for the one hundred (100) year storm is one foot.
- E. An operation and maintenance schedule shall be prepared for every detention facility identifying responsibilities and items of routine maintenance and emergency operations in the event of a flood.
- F. An emergency discharge outlet shall be provided with a capacity equal to the discharge from a one hundred (100) year frequency flood, with routing computations.
- G. The procedure for computing the outflow from detention basins consists of the development of storm hydrographs and the routing of these hydrographs through

the detention basin. US Soil Conservation TR-20 or TR-55, HEC-1, Santa Barbara Urban Hydrograph, Modified Rational Method or other methods acceptable to the Borough Engineer may be used.

- H. The detention facilities may be designed as a multipurpose sedimentation basin for use during and after construction. All permanent detention facilities, if used during construction as sediment basins shall be thoroughly cleaned of all sediments and debris accumulated during construction, prior to placement into service.
- I. The design of a detention basin facility shall include the following data:
 - 1. Plan with a scale of not less than one (1) inch equals forty (40) foot showing proposed contours with a two (2)-foot interval.
 - 2. Details of the outlet.
 - 3. Inflow hydrograph with outflow hydrograph superimposed on it.
 - 4. Cross sections of the embankment and spillway.
 - 5. Inflow mass curve.
 - 6. Elevation – storage curve or table.
 - 7. Elevation – discharge curve or table.
 - 8. Flood-routing calculations.
 - 9. Written comments on the subsurface conditions relative to water table, ledge, and soil permeability.
 - 10. Materials used in construction of the facility.
 - 11. Methods employed to avoid clogging the discharge mechanism.
 - 12. Fencing for public safety.
 - 13. Proposed landscaping and vegetative measures used to stabilize slopes and bottom surfaces. Detention basins shall be designed with attractive landscaping to function as a public amenity as well as a functional storm water facility.
 - 14. A wetland habitat or wildflower seed mixture in place of grass seed along all non-lawn areas is encouraged.
 - 15. The designer will make note on the construction drawings that all detention areas are to be built and stabilized prior to any work beginning on the Storm Drainage System.

5.9 CLEARING, EROSION CONTROL, EARTHWORK AND EXCAVATION, SLOPES, RETAINING WALLS, SOIL PRESERVATION AND FINAL GRADING, SEEDING AND SODDING

5.9.1 Clearing and Erosion Control:

- A. Only the smallest practical area of land to be developed shall be exposed at any time during development.
- B. When land is exposed during development, the exposure shall be kept to the shortest practical period of time.
- C. Where necessary, temporary vegetative and/or mulching shall be used to protect areas exposed during development.
- D. Temporary diversion ditches, down-slope pipes, and culverts shall be used to channel run-off from construction areas to sediment control structures.
- E. Sediment basins, desilting basins, or silt traps shall be installed and maintained to remove sediment from run-off waters and from land undergoing development.
- F. Permanent vegetation and structures shall be installed as soon as practical in the development.
- G. Provisions shall be made to protect and maintain desirable landscape features by constructing barricades around selected trees and areas if they are within, or near to the construction area. This procedure should be completed before any grading or ditching operation commences.
- H. Phased clearing may be required within a subdivision, particularly on multi-phase projects.
- I. Residential developments shall be subdivided and improved in reasonable conformity to existing topography in order to minimize grading and cut and fill, and to retain, insofar as possible, the natural contours, limit stormwater runoff, and conserve the natural cover and soil. A land area with predevelopment topography exceeding twenty (20) percent slopes shall remain undisturbed in its natural state. No topsoil, sand, or gravel shall be removed from a residential subdivision for any other purpose than to meet construction needs for that particular subdivision or to meet any requirements of these Regulations.
- J. Prior to the commencement of any site clearing and pre-construction phase, applicant shall install appropriate tape or ribbon material to demarcate the edge of disturbance limits.

5.9.2 Earthwork and Excavation:

- A. Earthwork and excavation shall be in accordance with the Zoning Regulations and Borough standards.

- B. The burial of tree stumps, shrubs, and debris and construction materials shall be prohibited within the limits of the proposed subdivision. Stumps, construction debris, and other materials shall be legally disposed of offsite. The Engineering Department may require manifest tickets from trucks hauling material for disposal during construction to verify compliance with the Section.
- C. The disposal of boulders and large shot rock shall be in accordance with Borough standards to provide stable fill areas and prevent future sinkholes. Large boulders and rockfill areas shall be suitably placed with chinking layers to provide proper long-term stability and prevent settlement, subsidence, or sinkholes.

5.9.3 Slopes:

- A. Cut or fill sections beyond the sidewalk area shall not exceed a slope of two (2) feet horizontal to one (1) foot vertical, except in rock, or when stabilized by a retaining wall. Slopes steeper than of two (2) feet horizontal to one (1) foot vertical, shall require detailed stabilization methods which shall be reviewed by the Borough Engineer. The Borough Engineer may require a decrease in the amount of slope to whatever extent is necessary to maintain the stability of the bank under the particular soil conditions.
- B. The Borough Engineer may require the removal or lowering of embankments adjacent to street intersections in order to assure adequate sight distance at the intersections.
- C. No cut or fill sections beyond the sidewalk area shall extend into property outside the subdivision or property not owned by the Applicant unless appropriate slope rights are obtained; in the absence of such slope rights, appropriate retaining walls shall be constructed within the subdivision to prevent encroachment upon adjoining property.
- D. Soils information shall be provided for all construction within the right-of-way, lots, and off-site areas, if necessary, to verify the adequacy of the slope stabilization methods.
- E. The Borough Engineer or Building Inspector may require testing of any compacted fill areas, either within the right-of-way or on the building lots.
- F. Underdrains, cut-off trenches, footing drains, or other water controls may be required to control drainage, icing, or slope stability. Such drains shall be piped into a storm sewer or other outlet so that there is no negative impact to public safety or welfare. Footing and roof drains may not discharge to the gutter at the curb face.

- 5.9.4 Retaining Walls: Retaining walls and slope stabilization shall be permitted in accordance with the requirements of the Zoning Regulations, Connecticut Building Code, and Borough standards. The exposed wall surface shall be of a design and material which shall be in harmony with, and enhance the attractiveness of, the site and the surrounding area. The Commission may require landscaping at the top and the base of walls. The

Borough Engineer may require a design, inspection and construction certification by a Professional Engineer when the wall exceeds a height of three (3) feet and a fence or rail shall be provided along the top of the wall in accordance with applicable building codes.

- 5.9.5 Soil Preservation and Final Grading: In areas of those subdivisions where the grade is to be changed or natural vegetation seriously damaged, except that portion of the subdivision to be covered by buildings, structures, or included in driveways, streets, watercourses or rock formations, such areas shall be precovered with topsoil with an average depth of at least four (4) inches which depth shall contain no particles over two (2) inches in diameter. Topsoil shall not be removed from the subdivision until such areas are provided with at least four (4) inches of topsoil, which shall be stabilized by seeding or planting.
- 5.9.6 Seeding and Sod: In the same applicable areas as in the paragraph labeled “Soil Preservation and Final Grading”, such areas shall be subject to respreading of soil and appropriate seeding prior to release of the subdivision bond; except that the Applicant shall submit an agreement in writing signed by the developer and/or property owner with a copy to the Building Official, that respreading of soil and seeding of lawn will be done during the immediate following planting season and leave a cash escrow for performance as shall be determined by the Borough Engineer. Sod may be used to comply with any requirement of seeding set forth herein. In place of a permanent vegetative cover, a temporary vegetative cover may be additionally required by the Commission.
- 5.9.7 Protection of Site Resources: The natural features of a site shall be protected to the maximum extent possible and the felling of trees shall be kept to a minimum. The Commission may require: the preservation or enhancement of specific natural features with:
 - A. Conservation easements to ensure the long-term protection for such resources.
 - B. Dedication of open space to provide for public ownership of a significant resource.
 - C. The submission of additional plans that demonstrate the protection of such resources. The Borough may refuse the acceptance of the finished streets if the applicant does not conform to said additional plans for protection of natural features.
 - D. A bond relating to the preservation of natural features.

5.10 FLOOD HAZARD STANDARDS

- 5.10.1 Proposed subdivisions shall be consistent with the need to minimize flood damage.
- 5.10.2 Public utilities or facilities, such as, but not limited to, sanitary sewers, gas, electrical and water systems, shall be located and constructed to minimize flood damage.
- 5.10.3 Adequate storm drainage shall be provided to reduce exposure to flood damage.

- 5.10.4 Base flood elevation data shall be provided for all land proposed to be subdivided whether or not such data is available from the Federal Insurance Administration. The required detail and accuracy of said datum developed by the applicant shall be at the discretion of the Commission, which shall take into consideration the size and complexity of the development and the amount of land subject to flooding.

5.11 SOLAR ENERGY TECHNIQUES

- 5.11.1 The applicant shall demonstrate to the Commission that, in developing the subdivision plan, consideration has been given to passive solar energy techniques which would not significantly increase the cost of housing after tax credits subsidies and exemptions.
- 5.11.2 The site design techniques shall include, but not be limited to: house orientation; street and lot layout; vegetation; natural and man-made topographical features; and protection of solar access within the development.

5.12 LANDSCAPING STANDARDS

- 5.12.1 Landscaping shall be provided as part of subdivision design along streets, at subdivision entrances and within open space, and other areas if appropriate. It shall be conceived in a total pattern or theme throughout the site, integrating the various elements of site design, preserving and enhancing the particular identity of the site, and creating a pleasing site character.
- 5.12.2 A landscape plan prepared by a registered landscape architect shall be submitted with each subdivision application which contains five (5) or more lots and/or new road(s). The plan shall identify the existing tree line plus existing mature trees and proposed trees, shrubs, and ground covers; natural features such as rock outcroppings; and other landscaping elements. The plan shall show where they are or will be located and planting and/or construction details. Where existing plantings are to be retained, the Applicant shall include in the plans proposed methods of protecting them during construction.
- 5.12.3 The natural features of the site shall be preserved to the fullest extent, and the felling of trees shall be held to a minimum. Plans must show all trees of two (2) inch caliper or greater measured at four and one half (4 ½) feet from the ground within any existing borough right-of-way abutting the subdivision. Any tree removed in this area must be approved by the borough tree warden.
- 5.12.4 A waiver to this provision may be granted by the commission where it is demonstrated that subdivision landscaping is not practical or feasible, or where existing site vegetation to be preserved is sufficient to preclude the need for additional landscaping. If a waiver is granted, the subdivision plan must contain provisions for preservation of existing vegetation (where appropriate).
- 5.12.5 In residential subdivisions, besides the screening and street trees required, additional plantings or landscaping elements may be required throughout the subdivision where necessary for privacy or other reasons in accordance with the landscape plan approved by the commission. In nonresidential subdivisions, all disturbed areas of the site not occupied by buildings and other impervious surfaces shall be landscaped by the planting

of grass or other ground cover, shrubs, and trees as part of the landscape plan approved by the Commission.

- 5.12.6 Planting specifications: Deciduous trees shall have at least a two and one half (2 ½) inch caliper at planting. Size of evergreens and shrubs shall be allowed to vary depending on the setting and type of tree/shrub. All plant materials shall be of nursery stock quality, and all trees, shrubs, and ground covers shall be planted according to accepted horticultural standards. Dead and dying plants shall be replaced by the developer during the following planting season.

SECTION 6 – OPEN SPACE

6.1 DEDICATION OF LAND

- 6.1.1 For any subdivision, the Commission shall require the reservation of land for open space, parks, playgrounds, or other public purposes. This open space requirement may be met in the following ways:
- A. Dedication of land within the subdivision.
 - B. Dedication of land elsewhere in the Borough of Naugatuck
 - C. A fee-in-lieu of open space donation.
- 6.1.2 The Commission may require that up to ten (10) percent of the total area of a subdivision be set aside for open spaces, parks, and playground or recreation areas.
- 6.1.3 Such land shall be of such location, shape, topography and general character as to meet the purpose of these Regulations, as determined by the Commission. Unless otherwise approved by the Commission, the composition of the required open space or recreation lands in terms of wetlands, watercourses, steep slopes (naturally occurring slopes exceeding twenty five (25) percent in grade), and floodplains shall at a minimum be in direct proportionality to the parcel as a whole.
- 6.1.4 In determining the need for such land and reviewing the location and appropriateness of an area reserved for parks, playgrounds, open space or recreation area disposition, the Commission shall consider:
- A. The Naugatuck Plan of Conservation and Development's Open Space Plan, the Regional Plan of Conservation and Development, any reports or recommendations of State or Borough agencies pertaining to open space, and any plans adopted by the Park and Recreation Department.
 - B. The conservation and protection of wildlife and natural or scenic resources including lakes, ponds, rivers, streams, stream belts, floodplains, greenways, inland wetlands, aquifers, significant woodlands, stands of unique or scenic trees, particular trees of special size or unusual type, ridges, ravines, stone fences and walls, ledge outcroppings and other unusual physical features.
 - C. The protection of historic and archaeological sites.

- D. The meeting of neighborhood and/or community-wide recreational needs.
 - E. The presence, absence, or expansion of any existing open spaces, parks, playgrounds or recreation areas.
 - F. The protection or enhancement of the State Bridle Path and the Naugatuck State Forest.
 - G. The preservation of scenic areas.
- 6.1.5 The Commission may modify any application so as to designate open space in locations other than those proposed.
- 6.1.6 In determining the total land to be reserved as open space, the Commission may consider not only the tract or tracts of land to be immediately subdivided, but also any other adjacent tracts of land owned, controlled or under agreement to buy or option to buy by the Applicant. When the subdivision is proposed to be completed in phases or sections, the Applicant shall indicate the area of open space which will be a part of each subdivision section submitted.
- 6.1.7 When a subdivision abuts an existing open space, park, playground or recreational area, the Commission may require the property lines of such land form a continuation of the existing open space, park, playground or recreation area to provide a single unified area.

6.2 CONDITION OF OPEN SPACE

- 6.2.1 Land to be provided as open space shall be left in a natural state by the Applicant except for improvement or maintenance, as may be expressly permitted or required by the Commission. Open space areas shall not be graded, cleared, or used as a depository for brush stumps, earth, building materials, or debris.
- 6.2.2 The Commission may require that any land to be dedicated for recreational use be cleared of brush, trees and debris; be graded to properly dispose of surface water; be covered with topsoil to a depth of four inches (4) inches; be seeded with a grass seed; and be otherwise improved so that the land is left in a condition appropriate for the intended use.
- 6.2.3 Any such land shall front on, or have direct access to, a public street through a right-of-way dedicated to public use. The Commission may require that such land shall have adequate frontage or right-of-way width for the intended purposes. The Commission may also require that such land shall include an access roadway typically twenty four (24) inch wide, with an eight (8) inch processed aggregate base, with a grade of no more than ten (10) percent adequate parking, if required, or a graded pedestrian walkway.
- 6.2.4 When site improvements are required they shall be clearly shown on the Record Subdivision Map.
- 6.2.5 When improvements are required in areas regulated by the Inland Wetlands Commission, the following shall apply:

- A. When improvements are to be completed by the Borough, the Borough shall submit plans of the improvements to the Inland Wetlands Commission for review and approval.
 - B. When the improvements are to be completed by the Applicant as specified herein, the Applicant shall submit plans of the proposed improvements to the Inland Wetlands Commission.
- 6.2.6 To ensure proper protection of the open space or any required improvements, the Commission may require the Applicant to post a performance bond in an amount and with terms acceptable to the Commission.
- 6.2.7 The boundary lines of all open space shall be marked in the field by monuments where any such lines intersect any lot line, road or perimeter line within the proposed subdivision and at such other points as may be required by the Commission.

6.3 METHOD AND PROCEDURE OF DISPOSITION

- 6.3.1 Unless otherwise approved by the Commission, provision for permanent disposition of land shall be arranged no later than the filing of the Record Subdivision Map. All required improvements shall be completed prior to the occupancy of fifty (50) percent of the lots of the subdivision or subdivision section and the Commission may require final disposition at this time. Final disposition shall be completed prior to the request for road acceptance by the Borough and prior to release of the subdivision surety.
- 6.3.2 Proper provision for the permanent disposition and management of open space land shall be made by the Applicant and approved by the Commission. The following disposition methods may be used:
- A. Conveyance to the Borough of Naugatuck if approved by the Board of Mayor and Burgesses. The Commission may refer the subdivision application to the Parks Commission, Inland Wetlands Commission, Conservation Commission or any other commission, department, agency or official it deems appropriate for review and comment on the proposed open space to determine the appropriateness of the conveyance of the open space to the Borough of Naugatuck. The Planning Commission shall consider the needs of the Borough of Naugatuck in its determination.
 - B. Conveyance to the State of Connecticut.
 - C. Conveyance to a land trust or similar non-profit conservation organization.
 - D. Conveyance to a Homeowner's Association.
 - E. Conservation easements shall be in a form approved by the Commission, shall apply to locations which meet the requirements of this Section and shall run with the property in perpetuity.
 - F. Where the purposes of open space preservation can be achieved through permanent restrictions upon property, as distinct from fee ownership thereof, the

Commission may approve the use of conservation easements. Such easements shall be in a form approved by the Commission and the Borough Attorney.

- 6.3.3 The Applicant may designate in its application which of the foregoing entities is proposed to own the open space, but as part of the approval of such application the Commission may modify such designation.
- 6.3.4 The Commission shall determine the most appropriate method of disposition after considering, among other things, the relationship of the subject area(s) and its specific characteristics to the objectives cited herein.
- 6.3.5 In the event the Applicant desires to transfer to the Borough land for other municipal purposes such as future schools, firehouses, other municipal uses, the dedication provisions of this Regulation shall be complied with. The Commission may consider such a municipal dedication as a credit toward any open space disposition requirements, but may not require such dedication.
- 6.3.6 All warranty deeds for dedication of land to the Borough shall be held in escrow by the Commission to be recorded on the Borough Land Records upon acceptance by the Board of Mayor and Burgesses. In the event that acceptance is rejected by the Board of Mayor and Burgesses, the deed shall be returned and the Applicant shall return to the Commission for determination of an alternative means of preserving the open space.

6.4 PROPERTY OWNER'S ASSOCIATION

- 6.4.1 The Commission may, upon the request of the applicant, permit the ownership and maintenance of the open space to be transferred to an association of property owners. Such transfer shall be in accordance with standards established by the Commission to include, but not limited to the following:
 - A. Creation of the association or corporation prior to the sale of any lot.
 - B. Mandatory membership in the association by all original lot owners and any subsequent owner; Non-amendable by-laws or other restrictions which require the association to maintain the land reserved for open space, park, playground or recreational purposes, with power to assess all members for all necessary costs.
 - C. Provisions/restrictions which will be perpetual and binding on all future property owners, and which will not be affected by any change in land use.
 - D. The association or corporation shall have the power to assess and collect from each lot owner a specified share of costs, and, where necessary, provide reserves for the costs associated with maintenance, repair, upkeep and insurance of the open space.
 - E. Any deed of conveyance shall contain language providing the association with the right to obtain reimbursement for all costs it reasonably incurs, including attorney's fees, in any action to enforce its rights against any lot owner, in which the association is the prevailing party.

- F. Association documents shall provide that if maintenance or preservation of the dedication no longer complies with the provisions of the document, the Borough may take all necessary action to assure compliance and assess against the association all costs incurred by the Borough for such purposes.

6.4.2 Any conservation easements or other open space covenants or restrictions shall be subject to the approval of the Commission in form and content. After approval by the Borough Attorney and the Commission, said documents shall be filed by the Applicant in the Office of the Town Clerk.

6.5 FEES IN LIEU OF OPEN SPACE

6.5.1 The Commission may authorize the Applicant to pay a fee to the Borough or pay a fee to the Borough and transfer land to the Borough in lieu of any requirement to provide open spaces, parks, playgrounds or recreation areas. The Commission may refuse such fee if it determines, in its sole discretion, that there are acceptable areas on the subdivision which merit preservation by one of the methods set forth in these Regulations.

6.5.2 In the event that such authorization is granted by the Commission, the following procedure shall be followed:

- A. Such payment or combination of payment and the fair market value of land transferred shall be equal to not more than ten (10) percent of the fair market value of the land to be subdivided prior to the approval of the subdivision.
- B. The fair market value shall be determined by an appraiser jointly selected by the Commission and the Applicant. The fee of the appraiser shall be paid by the Applicant.
- C. A fraction of such payment, the numerator of which is one and the denominator of which is the number of approved lots in the subdivision, shall be made at the time of the sale of each approved lot in the subdivision and placed in a fund. Such fund shall be used solely for the purpose of preserving open space and the capital improvement of existing open space land, including the acquisition of land of open space or for recreational purposes.
- D. When fees are provided in lieu of open space land, the developer shall execute a consensual lien which shall be recorded on the Borough of Naugatuck Land Records. Partial releases shall be provided upon the tender of each fractional payment.

6.6 EXEMPTION

6.6.1 The open space requirement shall not apply if:

- A. The transfer of all land in a subdivision of less than five (5) lots is to a parent, child, brother, sister, grandparent, grandchild, aunt, uncle, or first cousin of the property owner for no consideration.

1. When a subdivision is to be exempted from any open space requirements because the land is to be transferred to a family member per Section 8-25 of the Connecticut General Statutes, then the following notice is to be added to Record Subdivision Map as part of the approval:
 - a. Notice: This subdivision has been exempted from the open space requirements for fees in lieu of open space upon the express condition that all lots in the subdivision will be transferred by the Applicant to persons who are the Applicant's parent, child, brother, sister, grandparent, grandchild, aunt, uncle or first cousin for no consideration. No portion of this subdivision shall be deemed a building lot until all of such transfers have been perfected.
 - b. The Planning Commission may require reasonable evidence of the relationship of the transferee to the transferor and the fact that the transfer was made for no consideration before any portion of this subdivision will be treated as a building lot.
- B. The subdivision is to contain affordable housing, as defined in Section 8-39a of the Connecticut General Statutes as amended, equal to twenty-five (25) percent or more of the total housing to be constructed in a subdivision.

SECTION 7 – WAIVERS

7.1 WAIVER OR REQUIRED IMPROVEMENTS

- 7.1.1 The Commission, upon written request by the Applicant, submitted with the original application may waive any requirement of these Regulations, or part thereof, by a three-quarter (3/4) vote of all the Commission members, when it finds that:
 - A. Conditions exist which affects the subject land and are not generally applicable to other lands in the area.
 - B. The granting of the waiver shall not have a significant adverse effect on adjacent property or on public health and safety.
 - C. The waiver shall not conflict with the Zoning Regulations or any other Borough, State or Federal Regulations, or have the effect of nullifying the intent or purpose of these Regulations or the Plan of Conservation and Development.
 - D. All of the following conditions may be considered by the Commission when granting a waiver:
 1. That the granting of the waiver will not detract from the value of the adjoining property.
 2. That strict enforcement of these Regulations would deprive the property owner of rights commonly shared by other owners of property in the area.

3. Strict adherence to the requirements of these regulations would result in the alteration or destruction of any environmentally sensitive area or a significant or unique natural feature, such as a large tree, a watercourse, a wetland or a rock formation.
4. Strict adherence to these Regulations would result in significant alteration of the natural land contour in a manner that would aggravate natural drainage or cause erosion and sedimentation problems that would be difficult to control or correct.
5. A subdivision design standard would impair maximum access to the sun for solar energy on one or more lots in the subdivision.

7.1.2 In granting any such waiver the Commission shall attach such conditions, or require such guarantees as may be necessary to protect the public interest and shall enter upon its record the reasons for which such waiver is granted.

SECTION 8 - PENALTIES

8.1 PENALTIES

Any Person, firm or corporation making any subdivision of land after the adoption of these Regulations without the approval of the Borough Planning Commission is subject to penalties provided in the Connecticut General Statutes as amended.

SECTION 9 – ADMINISTRATIVE PROVISIONS

9.1 ENFORCEMENT

The Commission shall designate an individual who shall serve as the Enforcement Officer for these Regulations as required by law. This Enforcement Officer shall be charged with the duty of preventing illegal subdivision of land and of securing compliance with the requirements imposed by the Commission on subdivisions of land approved for record.

9.2 INSPECTION

The Borough Engineer shall be charged with the inspection of the subdivision to ensure compliance with approved subdivision plans and to ensure compliance with certified sediment and erosion control plan and that erosion control measures and facilities are properly installed and maintained.