

TOWN OF WETHERSFIELD



SUBDIVISION REGULATIONS

EFFECTIVE DATE MARCH 16, 1955

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TOWN OF WETHERSFIELD
SUBDIVISION REGULATIONS

History: Adopted by the Town Council of the Town of Wethersfield as Secs. 1001 through C.1.5 of Chapter 3-2 of the Code of 1972. Sections 143-2,143--4,143-6, 143-20 143-26D and 143-41 amended at time of adoption of Code; see Ch. 1, General Provisions, Art. II. Other amendments noted where applicable.)

ARTICLE I

§ 143-1. Purpose.

For the purpose of providing for orderly growth of the Town of Wethersfield and establishing standards for the design and construction of streets and improvements in new subdivisions and in accordance with the provisions of the General Statutes of the State of Connecticut, the Planning and Zoning Commission of the Town of Wethersfield hereby adopts the following regulations for the subdivision of land, to become effective July 8, 1966.

§ 143-2. Definitions.

For the purpose of interpretation and enforcement of these regulations, certain words contained herein shall be defined as follows:

COMMISSION - The Planning and Zoning Commission of the Town of Wethersfield.

ENGINEERING DIVISION - The Engineering Division of the Town of Wethersfield.

RESUBDIVISION - A change in a map of an approved or recorded subdivision or resubdivision if such change affects any street layout shown on such map or affects any area reserved thereon for public use or 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.

STREET - Includes and means streets, avenues, lanes or any right-of-way dedicated or used for the purpose of public travel and, for the purpose of these regulations, shall meet the minimum requirements set forth in § 143-6. (Amended 1-7-86)

SUBDIVIDER - The owner of record at the time of filing of an approved subdivision plan or the person holding an option to purchase such land or an agreement to purchase such land.

SUBDIVISION - The division of a tract or parcel of land into three (3) or more parts or lots made subsequent to the adoption of subdivision regulations for the purpose, whether immediate or future, of sale or building development expressly excluding development for municipal, conservation or agricultural purposes, and shall include resubdivision.

ARTICLE II
Requirements for Subdivision or Resubdivision

§ 143-3. Plan required.

No subdivision of land shall be made and no land in any subdivision shall be sold or offered for sale and no street or utility construction shall be started until a plan of subdivision, prepared in accordance with the requirements of these regulations, has been approved by the commission and has been filed in the office of the Town Clerk.

§ 143-4. Effect on streets.

In the case of subdivisions requiring construction of new streets, any existing street which provides either frontage to new lots or access to new streets shall meet the minimum standards established and defined in S 143-6. Where a subdivision requires expenditures by the town to improve existing streets to conform to minimum requirements, the Commission may disapprove such subdivision until the Town Council has approved such expenditures or until other provisions have been made to assure that such existing streets will be improved to the required minimum standards.

§ 143-5. Extension of public water.

The Commission shall require extension of public water to all subdivisions.

§ 143-6. Street specifications.

For the purpose of these regulations, streets shall meet the following minimum requirements:

- A. The layout of the street right-of-way shall have been approved by the Planning and Zoning Commission and shall have at least one (1) intersection with another town street or state highway.
- B. The street right-of-way shall have a minimum width of fifty (50) feet.(Amended 1-7-86)
- C. The street shall be one that is not under consideration for discontinuance or realignment by the authority having jurisdiction.
- D. The street alignment and grades shall be in harmony with existing and proposed streets and the pilot plan of development of the town and shall conform substantially to these regulations.
- E. Street construction (subbase and base courses) shall be sufficient to carry safely and adequately potential future traffic computed on the basis of land areas to be served and population density based on zoning requirements.
- F. Storm drainage disposal shall be adequate for present uses, and additional storm drainage created by new subdivisions shall not increase the town's obligation for additional storm drainage

disposal on existing streets or other private or public lands.

G. State highways shall be considered to meet the above standards.

H. No subdivision containing a provision for private streets shall be approved. (Amended 1-7-86)

§ 143-7. Land to be usable for building purposes. (Amended 1-30-78)

All land to be subdivided shall be, or shall be capable of being properly changed, in the judgment of the Commission, to such a character that it can be used for building purposes without danger to public health or safety or to the environment. Land subject to periodic flooding, poor drainage or other hazardous conditions shall not be subdivided. Land with inadequate capacity for sanitary sewage disposal shall not be subdivided unless connected to public sewers. Plans for the subdivision of land shall conform to all ordinances and regulations of the Town of Wethersfield, the town plan of development, as may be amended, the overall storm drainage plan of the town and all applicable state laws and regulations. (Amended 1-7-86)

§ 143-8. Sidewalks.

Provision shall be made for sidewalks in all subdivisions. Construction of sidewalks is required on the subdivision side of existing streets without sidewalks and on both sides of new subdivision streets, except that no sidewalk will be required on permanent dead end streets less than six hundred (600) feet in total length as measured from the street line of the intersecting street to the center of the cul-de-sac. (Amended 1-7-86)

§ 143-9. Water and drainage provisions.

A. All subdivisions shall make adequate provisions for water supply (both for domestic and for fire-fighting purposes), hydrants, stormwater and sanitary sewage disposal and required utilities and improvements. All utilities shall be installed underground. All underground utilities shall be installed within the right-of-way according to specifications outlined in these regulations and as shown on Drawings No. 1 and 2 of § 143-43. Conduits, wires, etc., for all underground utilities, whether for immediate or future use, shall be installed during the construction of the roadway.

B. In subdivisions to which underground utilities are to be furnished from a public source, all necessary mains, branch offsets to each lot and fire hydrants shall be installed by the subdivider, as approved by

the corporation or municipal department having jurisdiction, and to the satisfaction of the recognized authorities of the town and without expense to the town.

- C. An adequate subsurface stormwater drainage system for the entire subdivision area shall be provided, unless in the judgment of the Commission, the natural topography and/or easy access to natural watercourses makes storm drainage unnecessary. Storm drainage shall be carried to existing watercourses or connect to existing storm drains and shall conform to the town's overall storm drainage plans.

§ 143-10. Street lighting.

A complete street lighting system, including excavations, cable, poles and fixtures approved by the operating utility company, shall be installed without cost to the town. All costs relating to the installation of this system, including all energy charges incurred until the acceptance of the public utilities and improvements by the Town Council, shall be those of the developer. Street lights shall be energized prior to street acceptance where, in the opinion of the town, they are required for reasons of safety. The developer shall make arrangements with the utility company to have all street light costs charged at the overhead rate. (Amended 1-7-86)

§ 143-11. Erosion and sedimentation control.

An erosion and sedimentation control plan shall be provided as part of any application for subdivision where the disturbed area of development is more than one-half (1/2) acre. Such plan shall show proper measures to control erosion and reduce sedimentation as set forth in the Connecticut Guidelines for Soil and Erosion Control, published by the Connecticut Council on Soil and Water Conservation, January 1985, as may be amended, and the specific requirements of § 143-24. (Amended 1-7-86)

§ 143-12. Passive solar energy.

A plan of subdivision shall make provision for use of passive solar energy techniques or demonstrate that such techniques have been considered in the development of the plan. Site design techniques for passive solar energy use 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. (1-7-86)

§ 143-13. Sanitary sewage disposal

- A. The subdivider shall install a complete sanitary sewer system under the supervision of the Metropolitan District Commission.

- B. The subdivider shall install laterals from the sewer in the street to the street property line of each building lot.
- C. Any habitable buildings constructed in the subdivision shall have house connections installed and shall have such connections extended inside the building.

§ 143.14. Open space generally.

- A. Except as provided in § 143-15C, a subdivision of any tract or parcel of land containing ten (10) acres or more shall provide public open space for parks and playgrounds or for conservation, in places deemed proper by the Commission, at the proportionate rate of one (1) acre for twenty-five (25) families. Where a subdivision containing less than fifteen (15) acres of land is located less than one-half (1/2) mile from and readily accessible to public open space reserved for such purposes and where there are no brooks, streams or other natural features requiring preservation in open space, the Commission may waive this requirement.
- B. When only a part of such tract is to be developed immediately and the subdivision shall agree to dedicate an area of land in the undeveloped portion of such tract equal to the requirements for open space in the developed portion and shall grant to the town an option to accept such dedication when such undeveloped portion is hereafter subdivided, then the Commission may waive the requirements for immediate provisions of open space in a subdivision which is a part of a larger tract of land
- C. Such open spaces shall abut or have direct access to a public street through a right-of-way dedicated to public use. The right-of-way shall not be included in the required playground area, shall be at least fifteen (15) feet wide and shall be leveled off in a manner suitable for foot and vehicle traffic, with a maximum grade of twelve percent (12%).
- D. When a property line of a subdivision abuts an existing public open space, the Commission may require the new public open space lines to form a continuation of the existing area to provide a single large unified area.
- E. No required public open space shall abut any town boundary line of the Town of Wethersfield.
- F. Required public open space shall be contained in a rectangle whose average greatest dimension is not more than three (3) times its lesser dimension wherever possible.

- G. (1) Any subdivision or resubdivision application which requires a provision for public or private open space under the terms of this section shall contain a site improvement plan for such public or private open space, and such plan shall be subject to the approval of the Commission.
- (2) Except as otherwise permitted, in writing, by the Commission, there shall be no depositing, dumping or storage of waste or other natural or man-made materials, supplies or equipment on any subdivision land designated as open space. No work nor removal nor filling shall be done nor shall the existing natural characteristics of open space land be altered from its original condition until a site improvement plan, prepared by a competent professional person, shall have been approved by the Commission.
- (3) Land to be used as public or private open space shall be left in condition for the purpose intended. Undesirable growth and debris shall be removed from all such areas. Wooded and brook areas should be left natural, where appropriate. Open space shall be graded to properly dispose of surface water and shall be seeded in a manner directed by the Commission.
- (4) Any security deposit or bond for the completion of work shown on the public utilities and improvement plan shall also be available for completion of public or private open space requirements in the event of a default of performance by the subdivider or his successor.

§ 143-15. Open space in Special Residence Zones.

- A. In addition to land designated by the Commission as parks and playgrounds under § 143-14, a subdivision plan submitted under the Special Residence Zone shall provide additional land dedicated for parks and playgrounds, or conservation in places deemed proper by the Commission.
- B. The purposes of such open space are to provide, through the design and layout of streets, lots and open spaces:
- (1) Conservation and improvement of natural features and green areas, including areas along roads, the banks of rivers, streams and lakes and ridgetops to provide visual barriers to restrict urban sprawl.
- (2) Provision, in appropriate areas of population concentration, of areas of land for active recreational use.

- (3) Retention of fish and wildlife refuge areas and nature observation areas; protection of the quality of water bodies.
 - (4) Protection of natural drainage ways and floodwater retention areas.
 - (5) The provision of adequate controls to assure the permanence of open space use in areas so designated, through public acquisition or by easement or other suitable type of agreement.
- C. Such areas shall contain not less than ten percent (10%) of the gross area of the subdivision, and the proposed use thereof, whether public or private, shall be stipulated on the subdivision plan.
 - D. Such area, where approved by the Commission, may be retained in private ownership, in which case the use of the open space shall not be prohibited to any residents of the subdivision.
 - E. Where private ownership of open space may be approved by the Commission, such open space along watercourses and water bodies shall be subject to easements to the town to permit maintenance to preserve stormwater flow.
 - F. No single area required above shall contain less than one(1) acre except that where, in the judgment of the Commission, a smaller area is appropriate to a particular subdivision and provides for the most desirable subdivision of land.
 - G. No subdivision containing a provision for private open space shall be approved unless restrictive covenants burdening all the related land in the subdivision have been approved by the Commission, and the approved subdivision map shall not be released by the Commission for filing with the Town Clerk unless such approved restrictive covenants are filed simultaneously with the subdivision map and unless such restrictive covenants have priority over all other interests in the land not specifically excused by the Commission.
 - H. In order to verify that the restrictive covenants referred to in Subsection G are not subordinate to any unexcused encumbrances, the subdivider shall provide a certificate of title signed by an attorney and dated as of the date of filing of such restrictive covenants.

§ 143-16. Reserved strips.

No privately owned reserved strips will be permitted which control

access to land dedicated to public use or which may be so dedicated or which limit or control development potential of or access to private lands. (Amended 1-7-86)

§ 143-17. Natural features.

Due regard shall be given to the preservation and potential enhancement of existing natural features, large trees, scenic points and other assets of a community nature.

§ 143-18. Commission approval for certain lots.

Where the total of lots under separate ownership and lots occupied by buildings is greater than eighty percent (80%) of the original number of lots in a subdivision, no plan of resubdivision that results in a lot size substantially smaller than the typical lot originally established shall be approved except by a two-thirds (2/3) affirmative vote of the Commission.

A R T I C L E I I I
Procedures and Plan Requirements

§ 143-19. Subdivider to be familiar with regulations.

Before submitting a proposal for the subdivision of land, the subdivider shall familiarize himself with these regulations and with any existing or proposed plans of the Commission or other town authorities in the neighborhood of the land to be subdivided that will have an influence on the street and/or lot layout and the installation of utilities and storm drainage.

§ 143-20. Proposal to be submitted; application.

A proposal for the subdivision of land shall be submitted to the Commission at any regular meeting of the Commission and shall include all of the required information, maps, data, application and fees. The engineering division may receive, for the developer's convenience and for administration review as to completeness, an application for subdivision approval prior to the regular Commission meeting, provided that the date of submission shall be considered to be the next following regular meeting of the Commission or thirty-five (35) days after such submission, whichever is sooner.

§ 143-21. Application fee. (Amended 10-23-78)

The fee for each application shall be fifty dollars (\$50.00) or ten dollars (\$10.00) per lot, whichever sum is greater.

Editor's Note: Preliminary Study Section (Deleted 1-7-86)

§ 143-22. Subdivisions within inland wetlands (Amended 10-23-78)

An applicant with a subdivision involving land regulated as an inland wetland or watercourse shall file an application with the Wethersfield Inland Wetlands and Watercourses Commission within ten (10) days after filing such application with the Planning and Zoning Commission. The Planning and Zoning Commission shall give due consideration to any report filed with it by the Inland Wetlands and Watercourses Commission prior to rendering a decision on such application.

§ 143-23. Public hearing.

The Commission may hold a public hearing regarding any subdivision proposal if, in its judgment, the specific circumstances require such action. No plan of resubdivision shall be acted upon by the Commission without a public hearing.

§ 143-24. Erosion and sedimentation control. (Amended 1-7-86)

A plan for erosion and sedimentation control shall contain but not be limited to:

A. A narrative describing:

- (1) The development.
- (2) The schedule for grading and construction activities, including:
 - (a) The start and completion dates.
 - (b) The ~~sequence~~ of grading and construction activities.
 - (c) The sequence for installation and/or application of soil erosion and sediment control measures.
 - (d) The sequence for final stabilization of the project site.
- (3) The design criteria for proposed soil erosion and sediment control measures and stormwater management facilities.
- (4) The construction details for proposed soil erosion and sediment control measures and stormwater management facilities.
- (5) The installation and/or application procedures for proposed soil erosion and sediment control measures and stormwater management facilities.

(6) The operations and maintenance program for proposed soil erosion and sediment control measures and stormwater management facilities.

B. A Site Plan Map at a sufficient scale to show:

(1) The location of the proposed development and adjacent properties.

(2) The existing and proposed topography, including soil types, wetlands, watercourses and water bodies.

(3) The existing structures on the project site, if any.

(4) The proposed area alterations, including cleared, excavated, filled or graded areas and proposed structures, utilities, roads and, if applicable, new property lines.

(5) The location of and design details for all proposed soil erosion and sediment control measures and stormwater management facilities.

(6) The sequence of grading and construction activities.

(7) The sequence for installation and/or application of soil erosion and sediment control measures.

(8) The sequence for final stabilization of the development site.

C. Any other information deemed necessary and appropriate by the applicant or requested by the Commission or its designated agent.

§ 143-25. Plan to be certified; inspections.

A. Where an erosion and sedimentation control plan is required, no building permits may be issued and no site work may be started unless and until the erosion and sedimentation control plan is certified by the Inland Wetlands and Watercourses Commission of the Town of Wethersfield. Certification shall be based upon compliance with the principles, minimum standards and methods contained in the Connecticut Guidelines for Soil and Water Conservation, above, as judged appropriate by the Inland Wetlands and Watercourses Commission. That Commission may refer an erosion and sedimentation control plan to the Hartford County Soil and Water Conservation District for review prior to acting on a request for certification.

- B. Measures undertaken in accordance with a certified erosion and sedimentation control plan shall be inspected periodically during development to assure proper installation and maintenance. Failure to install or maintain control measures in a manner consistent with the certified plan shall be grounds for issuance of a cease and desist order applicable to those construction activities to which defective or deficient control measures pertain.

§ 143-26. Subdivision plan specifications.

- A. A subdivision plan shall contain all of the information required in § 143-41 of Article VI of the Engineering Division of the Town of Wethersfield, except that where all of a parcel of land on an existing street is subdivided into not more than three (3) lots, only the applicable data in § 143-41 of Article VI need be furnished.
- B. A subdivision plan shall be submitted in twenty (20) copies, blue-line paper prints drawn at a scale of one (1) inch equals forty (40) feet on the following sheet sizes: twenty-four by thirty-six (24 x 36) inches, twenty-four by eighteen (24 x 18) inches or eighteen by twelve (18 x 12) inches. Where more than one (1) sheet is required, a key map at a scale of one (1) inch equaling not more than two hundred (200) feet shall be included on each sheet, with the lots shown on the 40-scale map identified on the key map. (Amended 10-23-78)
- C. The subdivision plan shall be drawn in ink on .003-mil Mylar or a reproduction of equivalent quality. Two (2) copies shall be furnished to the Planning and Zoning Commission, at the subdivider's expense. Affixed to this plan shall be a transparent copy of the letters of approval from all commissions and boards acting on said subdivision. (Amended 10-23-78)
- D. Application for approval of a subdivision plan shall cover all of the land in a tract under one (1) ownership on the effective date of this regulation.

§ 143-27. Public improvement and utilities map.

A plan-profile map or maps shall be considered a part of the Subdivision Map and shall contain all of the information required in Article VI of the "Design and Construction Standards for Public Improvements" of the Engineering Division of the Town of Wethersfield. Elevations shall be based on an indicated bench mark referencing metropolitan district datum. Plans and profiles shall be drawn at a

scale of one (1) inch equals forty (40) feet horizontally and one (1) inch equals four (4) feet vertically. Said map shall be no longer than thirty-six (36) inches. The original shall be drawn in ink and a reproducible Mylar supplied to the town of equivalent quality at the subdivider's expense. (Amended 10-23-78)

§ 143-28. Drainage analysis maps. (Amended 1-7-86)

A drainage analysis map based on Coast and Geodetic Survey (CGS) datum showing the tributary watershed at a scale of one (1) inch equals two hundred (200) feet shall be furnished to the Engineering Division.

§ 143-29. Consideration and approval of plans.

- A. No subdivision proposal shall be approved until all the required plans, maps and data are complete to the satisfaction of the Commission and Engineering Division.
- B. The Commission shall approve, modify and approve or disapprove any subdivision application or maps and plans submitted therewith within sixty-five (65) days after the submission thereof, unless the applicant shall consent, in writing, to an extension of such time limit. The Commission shall include in its minutes the reasons for disapproval of a subdivision plan.
- C. Upon approval of a subdivision plan, the Chairman or Clerk shall sign the original linen or linens, and the Engineering Division will procure the necessary copies for the town at the subdivider's expense.

§ 143-30. Filing of approved plan. (Amended 10-23-78)(Amended 2-5-1991)

- A. Notice of the decision of the Planning and Zoning Commission concerning a subdivision application shall be sent to the applicant by certified mail within fifteen (15) days after the decision is rendered. Within thirty (30) days after the Planning and Zoning Commission approves a subdivision, the subdivider shall submit to the Engineering Division two (2) three-mil black line Mylar transparencies of the subdivision map with affixed transparencies of letters of approval of all town boards and commissions having rendered decisions on matters related to the subdivision and bearing a block for the endorsement and date of endorsement by the Chairman of the Planning and Zoning Commission. Failure of the subdivider to submit the two (2) Mylar transparencies of the approved subdivision map within thirty (30) days of the date of the Commission's approval shall cause such approval to become null and void.
- B. Upon receipt, the Engineering Division shall submit the Mylar transparencies for endorsement by the Chairman of the

Commission. The subdivision map shall be available to the applicant for filing as of the date of endorsement, subject to the fulfillment of the requirements of § 143-31, and shall be considered delivered as of the date of endorsement. As required by the Connecticut General Statutes, approved plans for subdivision must be placed on file in the office of the Town Clerk within ninety (90) days of the date the Mylar transparencies are endorsed by the Chairman of the Commission.

§ 143-31. Final Subdivision Map. (Amended 10-23-78)[Amended 2-5-1991]

The Engineering Division shall hold the endorsed Mylar transparencies of an approved plan of subdivision until the subdivider submits the following to the Engineering Division.

- A. A warranty deed covering all roads, easements, open space, etc., to the town.
- B. A certificate of title for the above.
- C. A letter stating that the subdivider acknowledges that although the town may record the deed and take legal title to the public utility improvements, the recording and acceptance of the deed will not constitute formal acceptance of these improvements, which acceptance can only be accomplished by action of the Town Council; the subdivider will accept a reconveyance of any conveyance if the town so elects at any time up to the time of formal acceptance of the improvements by the Town Council.
- D. A performance bond or bank book (including a signed withdrawal slip) if building permits are desired.
- E. An executed declaration of restrictions and covenants covering the private open space, if any, in a form acceptable to the Commission.
- F. If the subdivider chooses to proceed under § 143-34A of the subdivision regulations, he must also submit a covenant prohibiting the sale of any lots until proper surety is posted for that lot. Surety submitted must be approved by the Town Manager as well as the Commission.

§143-32. Submission to Town Attorney; signing by Commission Chairman.

- A. The Engineering Division will submit all the items mentioned in § 143-31 above to the Town Attorney for his review and approval. It is recommended that the subdivider's attorney contact the Town Attorney prior to drafting the above documents.

- B. Upon approval of the Town attorney of the items referred to in § 143-31, the engineering Division will release the endorsed Mylar transparencies to the subdivider for filing. (Amended 2-15-91)

§ 143-33. Time extensions. (Amended 10-23-78)

The Planning and Zoning Commission may extend the time for filing of plans for subdivision for two (2) additional periods of ninety (90) days, and the plans shall remain valid until the expiration of such extended time.

§ 143-34. Securities and bonds. (Amended 10-23-78) (6-26-00)

- A. The Commission, in order to assure the Town of the completion of all work and installations required by these regulations, the public utilities and improvements plan of subdivision, the public or private open space plan and the stipulations of any subdivision approval, may require any one (1) of the following methods for securing completion, or any reasonable combination of them:

- (1) The completion of all or a specified portion of such work and installation before any lot of a subdivision is sold and before any building permits are issued. Notice of any requirement under this subsection will be filed in the land records at the time the Subdivision Map is filed.
- (2) The deposit with the Finance Director of the town of cash or of a certified check in an amount to be specified by the Commission but in no event to exceed one hundred and ten percent (110%) of the cost of completing the required work and installations as estimated by the Engineering Division of the town.
- (3) An assessment method to be secured by lien against all the real property of the project or such parts as the Commission specifies. (Amended 6-26-00)

- B. The Planning and Zoning Commission shall refer the matter of security for completion of required work and installation to the Director of Public Works or his designee for his recommendation and/or comments.
- C. Each security provision in this Article shall make provision for a management fee to be paid to the Town of Wethersfield, which fee shall be ten percent (10%) of the cost of completing any required work or installation after default by the subdivider or his successor.
- D. The Commission shall specify with particularity in its minutes the details of any security requirements and shall specify the time or times within which such requirements are to be satisfied.
- E. A performance bond and any cash security deposit filed pursuant to these regulations shall not be released until the Engineering Division has certified completion of the public utilities improvements and applicable public or private open space improvements in substantial accordance with the requirements of the subdivision approval and the street or streets and public open space and any required easements have been legally accepted by the town. Application for release or reduction of the security deposit and performance bond shall be made to the Engineering Division for recommendation and/or advice. A reduction of any bond or cash security deposit will be allowed only if, after Engineering Division inspection, the Commission finds that the remaining security or bond is adequate to cover the then estimated cost of completion, plus ten percent (10%) of such cost. In no event shall security delivered to the town for completion of public improvements be reduced below twenty-five percent (25%) of the amount of the total cost of improvements, as shown on the cost estimate prepared by the Engineering Division, until acceptance of the road and all public improvements by the Town Council has been obtained. The decision on any application for a release or reduction of a security deposit or bond shall be made by the Commission.
- F. Upon acceptance of the public utility improvements and release of the bond by the Town Council, the subdivider will post a maintenance bond with the Town Manager to be in force for a period of one (1) year. The amount of the maintenance bond will be ten percent (10%) of the total cost of the public utilities and improvements, excluding sewer, water, gas, electricity, telephone and any other similar utility.
- G. The subdivider, if directed by the town, shall not install the two-inch dense graded bituminous concrete wearing course

until eighty percent (80%) of the approved lots have received certificates of occupancy.

- H. If the town so orders, the subdivider shall have the option of negotiating with the town for the purpose of having the town accept payment in lieu of placing the finished pavement. The town would then accept responsibility for the installation of this pavement.

A R T I C L E I V
Improvements and Modifications

§ 143-35. Streets.

- A. Proposed streets shall be appropriate to the topography and location and shall conform to the objectives of the plan of development and the Commission's tentative street layouts, where they are developed. Street patterns shall give due consideration to contours and nature features. Where required by the Commission, provision shall be made for the extension of the street pattern to abutting undeveloped property.
- B. Permanent dead end streets shall generally not exceed six hundred (600) feet in length as measured from the street line of the intersecting street to the center of the cul-de-sac. Permanent dead end streets shall terminate in one of the two following cul-de-sac types as proposed by the developer and shown on the subdivision/resubdivision application plan submittal: (Amended 1-7-86) (Amended 6-26-00)
 - (1) A cul-de-sac street with a turnaround right of way of not less than one hundred (100) feet in diameter without an island and providing a paved diameter of not less than eighty (80) feet wide.
 - (2) A cul-de-sac street with a turnaround right of way of not less than one hundred and ten (110) feet in diameter with an island of natural vegetation or landscaping in the center. The island shall be thirty (30) feet in diameter providing a paved circumferential lane not less than thirty five (35) feet wide.
- C. Temporary dead-end streets, where required by the Commission or where indicated on the plan, may exceed six hundred (600) feet in length but in general shall provide required street frontage for not more than twenty (20) dwellings. In such cases, the full width of the right-of-way to the subdivision property line shall be dedicated to the town, but the town will require only an easement to the segments to the turnaround outside the normal road right-of-way width.
- D. The easement on segments of the turnaround shall provide that the town or its agent may enter the property within such segments for the purpose of continuing and removing turn-around improvement

when the street is to be extended.

E. Extensions.

(1) When a street ending in a temporary cul-de-sac is to be extended as a continuance street, the subdivider constructing such street extension shall be responsible for and shall include in the bond all work related thereto, including:

(a) Removal outside of the final paved road right-of-way of all road materials and facilities not needed and replacement with earth loam and seeding as required.

(b) Extension of all utilities and improvements, including sidewalks, where required.

(c) Repair and replacement of any change on public or private property directly related to the removal of the cul-de-sac, in accordance with town standards and subject to the concurrence of the abutting property owner to the extent that his permission is needed to complete the cul-de-sac repair and replacement on this private property outside the temporary easement.

(2) The above work shall be completed within two (2) months from the date of notification by the Director of Public Works certifying that the existing cul-de-sac is no longer needed.

F. Where a street may now or in the future carry other than the neighborhood traffic and where shown on the plan of development and tentative overall street layouts, a right-of-way width greater than the required minimum may be required, and such requirements will be determined by the Commission during review of the preliminary plan. No street shall have a right-of-way with less than fifty (50) feet.

G. The subdivision plan and the public improvement and utility map of any proposed subdivision shall show all work required to connect and complete the improvements and utilities between proposed street pattern and any non-improved connecting street in any existing subdivision.

§ 143-36. Lot layout.

Layout of lots shall conform to modern standard practices and shall be appropriate for the intended construction. Corner lots shall have extra width to permit a front yard on each street, which will be required in all new subdivisions. Wherever possible, key lots shall be used at the narrow end of a block. Side lot lines shall generally be at right angles to straight street lines or radial to curved street lines.

Except in cases of unusual topography or property lines, through lots bounding on two (2) generally parallel streets will not be permitted.

§ 143-37. Planting of trees. (Amended 1-7-86)

All dead and diseased trees shall be removed from land to be dedicated to public use. Existing trees in land required for public open space, § 143-14 shall be preserved unless otherwise directed by the Commission. Existing trees on building lots shall be preserved whenever feasible.

§ 143-38. Construction specifications.

A. Streets.

(1) Streets shall be graded to the full width of the right-of-way.

(2) Streets or curbs, gutters and sidewalks, where required, shall be constructed in accordance with the best modern practice, as more fully described in Design and Construction Standards for Public Improvements of the Engineering Division of the Town of Wethersfield, which are included herein as § 143-42 and the materials shall meet the specifications of the State of Connecticut Department of Transportation.

B. All storm drainage lines and structures shall be constructed in accordance with the best modern practice, as more fully described in Design and Construction Standards for Public Improvements of the Engineering Division of the Town of Wethersfield, which are included herein as § 143-43, and materials shall meet the specifications of the State of Connecticut Department of Transportation.

C. Sanitary sewer and water installation shall be made in accordance with the standards and requirements of the Metropolitan District Commission.

D. Where a site grading plan is required by the Commission, land shall be brought to final grades shown, and lot grades exceeding five percent (5%) or subject to erosion shall be stabilized with an existing cover crop.

§ 143-39. Modification conditions. (Amended 10-23-78)

A. Where, in the Planning and Zoning Commission's judgment, the size of the subdivision or specific conditions of topography, property lines or proposals for development of adjoining properties create conditions limiting the most

effective subdivision of land, the Commission may waive or modify certain requirements under these regulations by a three-fourths (3/4) vote of all the members of the Commission, provided that the public interest and safety are not adversely affected and land in the subdivision can be more effectively subdivided. The Commission shall state upon its records the reason for which a waiver is granted in each case.

- B. Where conditions governing a subdivision or the time of year construction indicate, in the judgment of the Engineering Division, minor modifications in construction materials and techniques, the Engineering Division may modify specific construction requirements contained in § 143-41, 143-42 and 143-43 herein, in the interest of obtaining better work and/or materials, provided that such modifications shall not increase the scope of the work or conflict with the general purpose and intent of these regulations.

A R T I C L E V
Enforcement

§ 143-40. Enforcement.

These regulations shall be enforced under the provisions of any ordinance enacted in accordance with the General Statutes of Connecticut, Revision of 1958, as amended.

ARTICLE VI
Design and Construction Standards for Public Improvements

§ 143-41. Data required to be furnished for the subdivision of land.

The following design and construction standards are hereby adopted and made part of the subdivision regulations of the Town of Wethersfield:

- A. Subdivision plan. A subdivision plan shall be so designated in the title block and shall be prepared at a scale of one (1) inch equals forty (40) feet in accordance with Class A-2 requirements of the Code of Recommended Practice for Standards of Accuracy of Surveys and Maps by the Connecticut Association of Land Surveyors, Inc., and certified by a registered land surveyor in the State of Connecticut. The plan shall show two (2) coordinate ties referenced to the National Geodetic System and shall contain the following:

Editor's Note: Preliminary Study Section (Deleted 1-7-86)

- (1) The name of the owner or owners or assignee, subdivider, North point, scale of map and date and revised dates.
- (2) Boundaries of the subdivision from a boundary survey conforming to Class D, as set forth by the Connecticut Association of Land Surveyors, Inc.
- (3) Total acreage of the parcel to the nearest tenth of an acre.
- (4) Names of abutting property owners and property lines abutting the subdivision boundaries and proposed street names.
- (5) Indication of zones and zone boundary lines.
- (6) Topography, flow line of watercourses and existing structures and culverts.
- (7) Layout of existing and new streets, buildings and lots, public open spaces, easements and encroachment lines with approximate dimensions.
- (8) Proposals for furnishing improvements and utilities.
- (9) In land of difficult topography, where most of the lots are to be developed by the subdivider, a preliminary site grading plan may be required.
- (10) Where sewage disposal is proposed through septic tanks, seepage and groundwater tests shall be made to the satisfaction of the Director of Health, whose report thereon shall be submitted with the preliminary study.
- (11) Data on streets, as defined in § 143-2 above, shall be complete.
- (12) A key map at a scale of one (1) inch equaling not more than two hundred (200) feet shall show the street or streets giving access to the subdivision extending to the intersections of at least two (2) other streets.
- (13) Layout of streets to be constructed with accurate placement of merestones at all PT (point of tangency) and PC (point of curvature) points and within sight of the next nearest merestone. The merestone is to be set in accordance with Class A-2 of the Connecticut Association of Land Surveyor, Inc., and under the direction of a Connecticut registered land surveyor. Merestones shall be supplied by the Town of

Wethersfield at the developer's expense.

(14) Street names.

(15) All easements, rights-of-way and encroachment lines.

(16) building lines on all lots and side and rear yard lines on odd-shaped lots. On curved streets, the chord distance of the building line (front yard) shall be shown.

(17) When more than (1) sheet is required, a key map of the entire subdivision shall be included on each sheet.

B. The subdivider shall provide that all maps which show horizontal and vertical dimensions data and the design of street patterns and lot layouts and the staking of such data in the field shall be performed by a land surveyor registered in Connecticut, and such professional engineer shall:

(1) Supervise construction of all improvements and utilities shown on such plans; and

(2) Submit for approval to the Engineering Division an as-built drawing upon completion of all public improvements. This plan shall be on a .003-mil Mylar and certified by a Connecticut registered land surveyor. Certification shall show the public utility improvements in substantial agreement with the approved public utility improvement plans.

C. The public utilities and improvements plan shall contain:

(1) The name of the owner or owners or assignee, subdivider, North point, scale of map, and date and revised dates.

(2) Boundaries of the subdivision from a boundary survey conforming to Class D, as set forth by the Connecticut Association of Land Surveyors, Inc.

(3) Total acreage of the parcel to the nearest tenth of an acre.

(4) Names of abutting property owners and property lines abutting the subdivision boundaries and proposed street names.

(5) Indication of zones and zone boundary lines.

- (6) Topography, flow line of watercourses and existing structures and culverts.
- (7) Layout of existing and new streets, buildings and lots, public open spaces, easements and encroachment lines with approximate dimensions.
- (8) Proposals for furnishing improvements and utilities.
- (9) In land of difficult topography, where most of the lots are to be developed by the subdivider, a preliminary site grading plan may be required.
- (10) Where sewage disposal is proposed through septic tanks, seepage and groundwater tests shall be made to the satisfaction of the Director of Health, whose report thereon shall be submitted with the preliminary study.
- (11) Data on streets, as defined in § 143-2 above, shall be complete.
- (12) A key map at a scale of one (1) inch equaling not more than two hundred (200) feet shall show the street or streets giving access to the subdivision extending to the intersections of at least two (2) other streets.
- (13) Plan-profile map or maps showing all streets to be constructed with stations every fifty (50) feet, curve data with vertical curve stations every twenty-five (25) feet, widths of right-of-way paving and sidewalks where required. Where required, in the judgment of the Engineering Division, street intersections shall be developed at a larger scale, showing catch basins gutter, road center line, curb and sidewalk elevations.
- (14) Plan-profile maps may also show all utility lines, encroachment lines and all easements for utilities, drainage, walks and other rights-of-way with location, size and inverts of existing and new culverts or the entire drainage system, except for detail required in § 143-41C(13) above, may be shown on a separate map at a scale of one (1) inch equaling not more than forty (40) feet.
- (15) Drainage analysis map shall show the tributary watershed area and downstream area affected by runoff. Drainage computations shall consider the entire watershed area and criteria and computations used in determining pipe sizes shall be submitted in writing.

(16)When a site grading plan is required by the Commission, such plan shall become part of the public utilities and improvement plan.

§ 143-42. Construction of streets, curbs gutters and sidewalks.

- A. All streets shown on the public utilities and improvements plan shall be constructed in conformance with standard cross sections of the Engineering Division of the town.
- B. Streets grades at the center line shall not exceed seven percent (7%) for primary streets nor ten percent (10%) for residential streets. No street grades shall be less than one percent (1%) except in a specific case where the Engineering Division agrees that there is practical difficulty, in which case grades not less than five-tenths percent (0.5%) may be permitted.
- C. Street specifications. (Amended 1-7-86)
 - (1) Road pavements shall be constructed in accordance with specifications of the State of Connecticut Department of Transportation.
 - (2) Subbase gravel: Six (6) inches or more thick after compaction (if required by the engineering division).
 - (3) Base course: eight (8) inches processed stone applied in two (2) courses four (4) inches thick after compaction, well-keyed and dry-bound, and two (2) inches bituminous concrete binder.
 - (4) Surface: two (2) inches dense graded bituminous concrete pavement.
- D. Branch offsets for all underground services to be individual parcels shall be extended by the developer beyond the street right-of-way lines prior to installation of the bituminous surface course.
- E. Bituminous concrete curbs shall be constructed on both sides of all streets in accordance with the Design and Construction Standards for Public Improvements, Wethersfield, Connecticut. Wherever possible, curb cuts for driveways shall be formed as the bituminous lip is installed. (Amended 10-23-78)
- F. Gutters and shoulders shall be formed as a continuation of street paving, as shown on typical cross-section sheets.

- G. Sidewalks, where required, shall be portland cement concrete, as shown on the standard details of the Engineering division and in accordance with the sidewalk specifications of the Town of Wethersfield. Pedestrian access ramps are to be installed at all intersecting streets as shown on the detail typical intersection. Ramps are to be portland cement concrete and shall not have a slope greater than one (1) foot rise in twelve (12) feet, or eight and thirty-threehundredths percent (8.33%), unless otherwise specified.
- H. All of the area which is not covered by sidewalk or pavement within the street right-of-way shall be graded, loamed and seeded in conformance with Form 811 and amendments thereto of the Connecticut State Highway Department specifications.

§ 143-43. Construction of storm drainage lines and structures.

- A. A complete system of storm drainage shall be constructed in accordance with the best standard practice and in accordance with the typical standard details of the Engineering Division and the following design criteria:

- (1) Design storm (return frequency): (Amended 10-23-78)

- (a) Residential drainage systems:

- (1) Pipe design: ten-year storm.
- (2) Major ditches and channels: twenty-five year storm.
- (3) Positive flood relief without property damage: one-hundred-year storm.

- (b) Existing streams or their improvements:

- (1) Encroachment lines based on the 100 year floodplain.

- (2) Time of concentration shall be computed on the sum of overland flow time (sheet flow), plus time-in swales and gutters, plus time in pipes (pipes assumed flowing full), with minimum of ten (10) minutes to be used for storm sewer design.

- (3) Runoff factors:

- (a) Areas containing pavement, sidewalks and roofs: ninety percent (90%). Areas containing lawns and natural ground: fifteen percent (15%) to thirty percent (30%), depending on the slope of the ground.

- (b) Weighted runoff factors are to be used in drainage computations. Runoff factors for

adjacent undeveloped land are to be based on ultimate development of the land in accordance with existing zoning and the Table of Weight and Runoff Factors.

Table of Runoff Factors

Types of Terrain	Value C
Impervious surfaces	0.90-0.95
Steep barren surfaces	0.80-0.90
Rolling barren surfaces	0.60-0.80
Flat barren surfaces	0.50-0.70
Rolling meadow	0.40-.065
Deciduous timberland	0.35-0.60
Conifer timberland	0.25-0.50
Orchard	0.15-0.40
Rolling Farmland	0.15-0.40
Flat farmland	0.10-0.30

Types of Surface	Value C
Watertight surfaces such as roofs and pavements	0.70-0.90
Block pavements with open joints	0.50-0.70
Macadam pavements	0.25-0.60
Gravel surfaces	0.15-0.30
Parks, cultivated lands, lawns, etc., depending on slopes and character of soil	0.50-0.30
Wooded areas	0.01-0.20

(4) Design method: The Rational Method shall be used, where "Q" equals "Air."

B. Storm sewer design. (Amended 1-7-86)

(1) Minimum size pipe: fifteen (15) inches' diameter.

(2) Roughness coefficient:

(a) Reinforced concrete pipe:

[1] Twelve (12) inches through twenty-four (24) inches: n equals 0.015.

[2] Thirty (30) inches and larger: n equals 0.013.

(b) Asphalt-coated corrugated pipe:

[1] All sizes: n equals 0.021.

- (3) Minimum slope shall be sufficient to provide velocity of two (2) feet per second when flowing one-fourth (1/4) full:

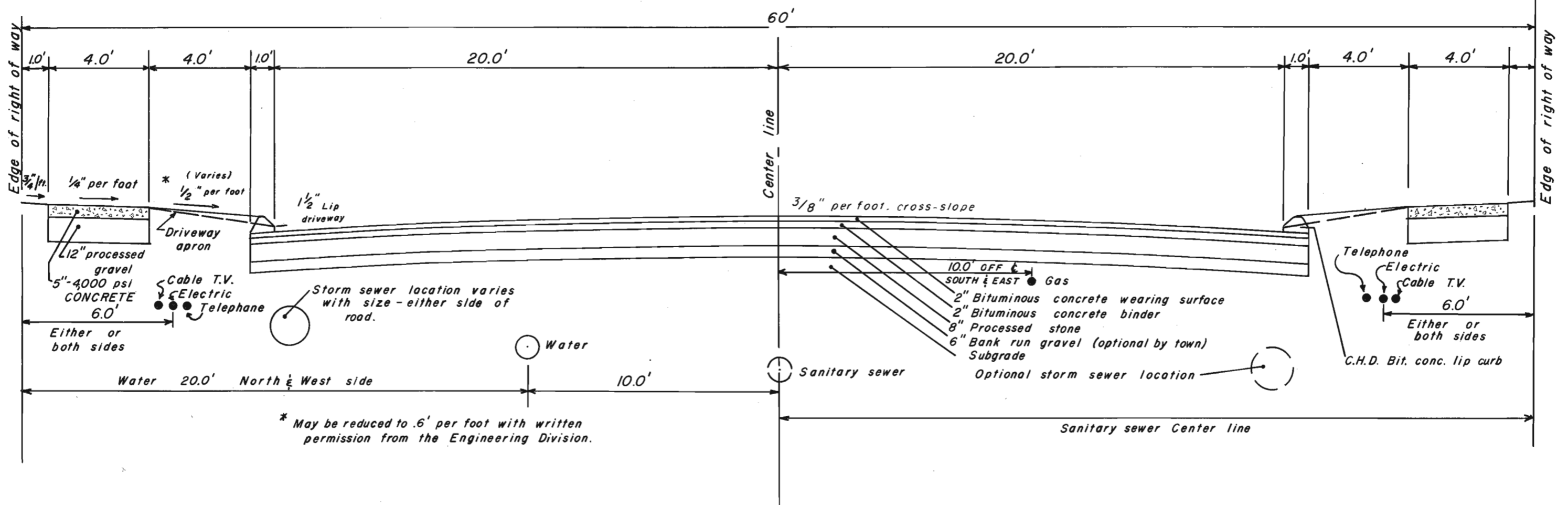
Size (inches)	RCP (n=0.015)	RCP (n=0.013)	RCP (n=0.021)
12	.0054		.011D
15	.0040		.0080
18	.0032		.0060
21	.0025		.0050
24	.0021		.0042
30		.0012	.0031
36		.00095	.0024
42		.00075	.0019
48		.00062	.0018
54		.00053	.0014
60		.00045	.0012
70		.00035	.00098

- (4) Maximum spacing of structures.

(a) On lines of diameters of thirty-six (36) inches or less: four hundred (400) feet.

(b) On lines of diameters of forty-two (42) inches and greater: five hundred (500) feet.

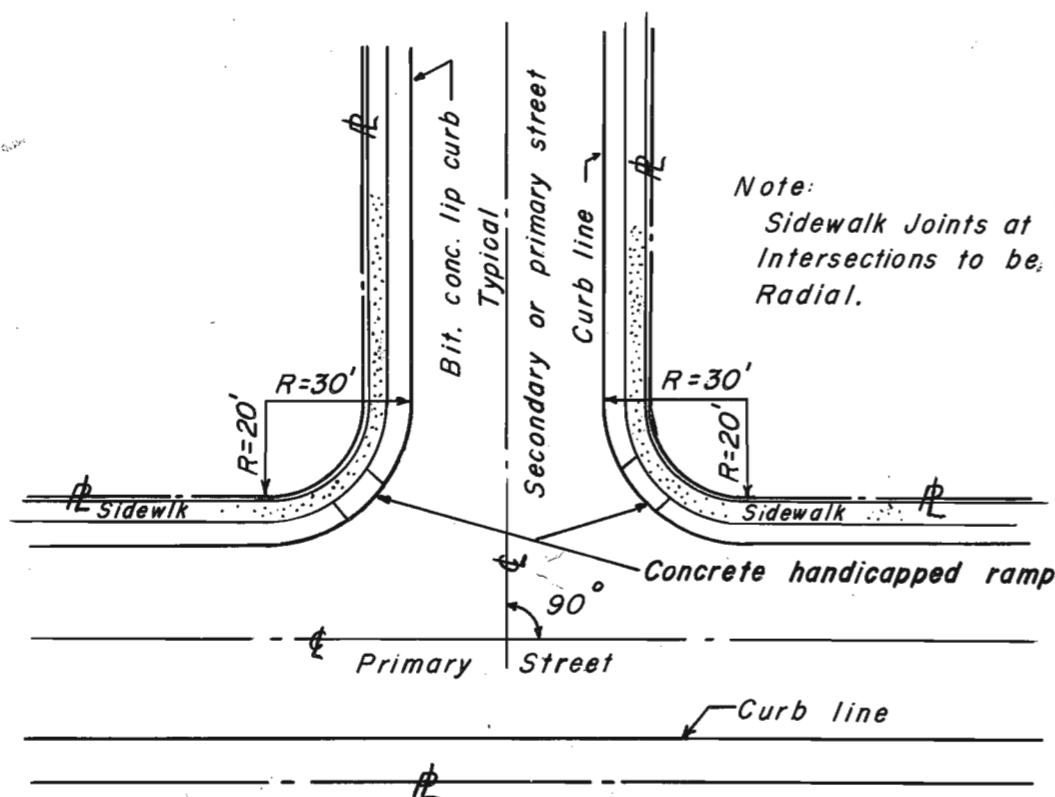
- (5) All reinforced concrete pipe (RCP) shall have gaskets. All trenches shall be covered with six-mil (.006 inch) polyethylene wrap.



CROSS SECTION

Design Criteria

Design speed 45 M.P.H.
 Stopping sight distance 300.0'
 Maximum grade 8.0 %
 Minimum grade 1.0 %
 Minimum ϵ Radius curve 500.0'



DETAIL
TYPICAL INTERSECTION

REVISIONS

NO.	DESCRIPTION	DATE APPROVED

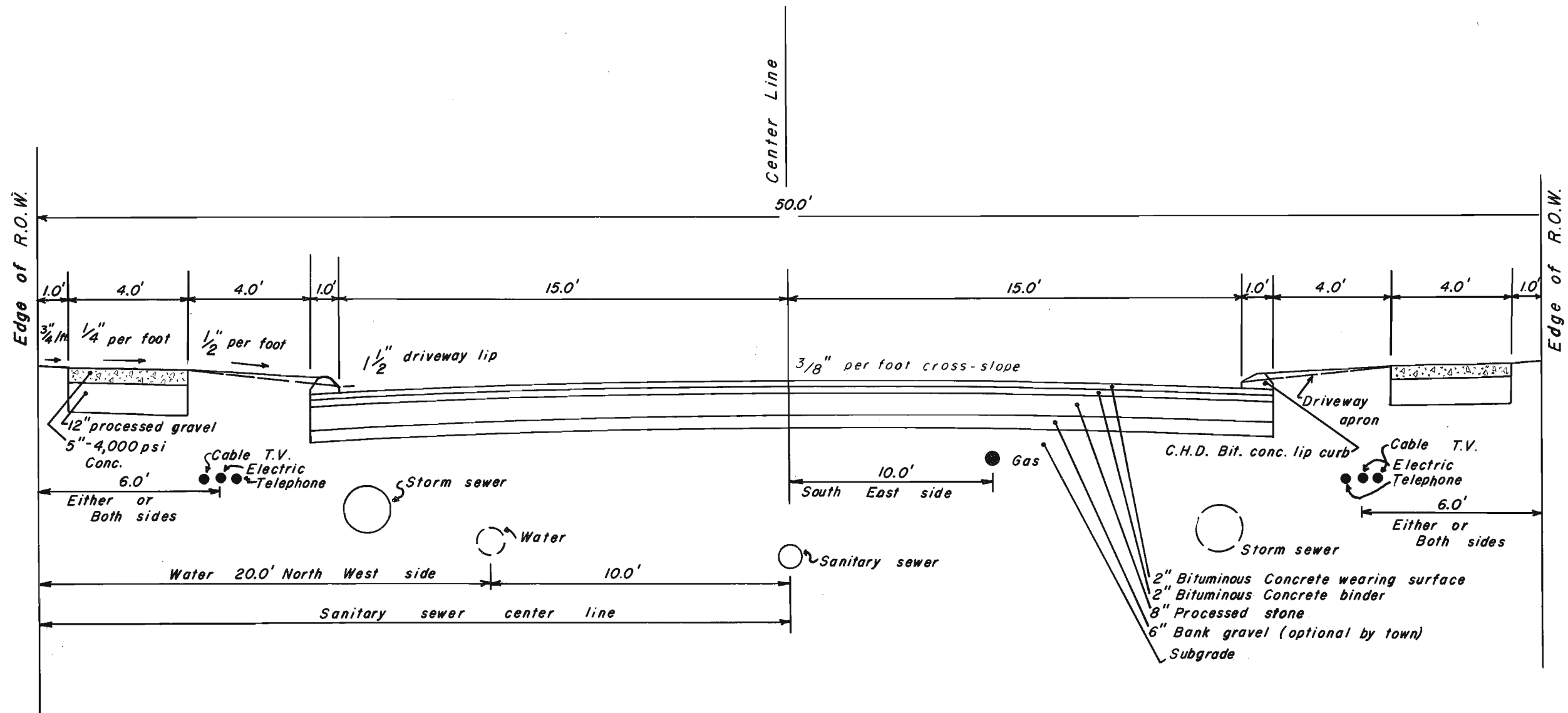
TOWN OF WETHERSFIELD CONN.

TYPICAL CROSS SECTION

PRIMARY STREET

PREPARED BY ENGINEERING DIVISION

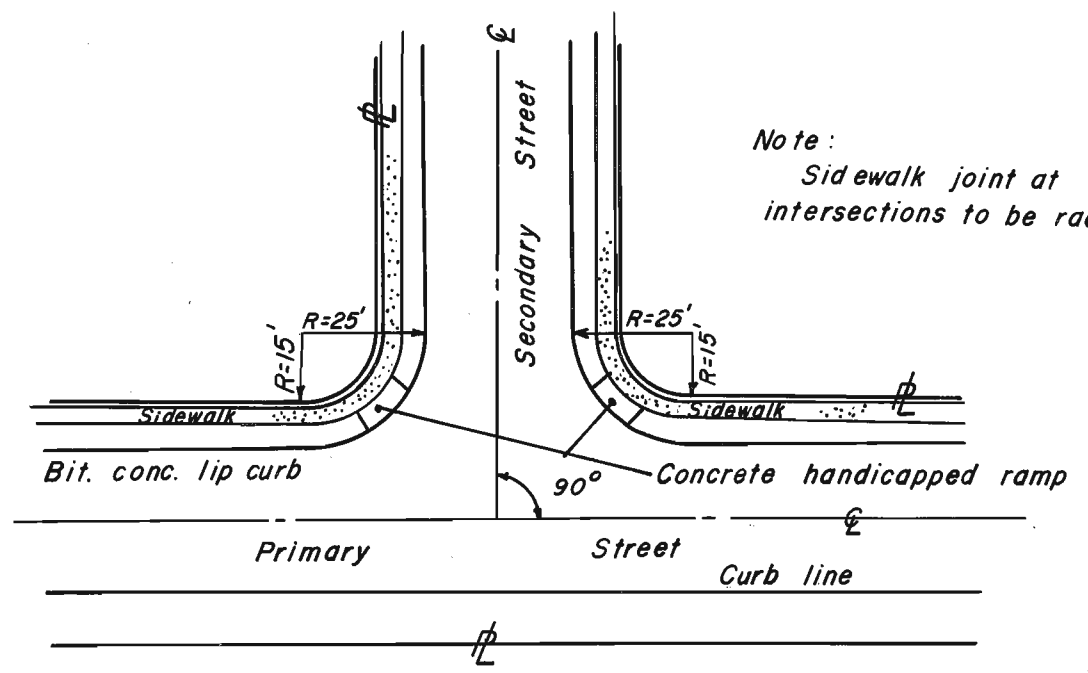
DATE JAN. 1975 M-1080 42-3



CROSS SECTION

DESIGN CRITERIA

- Design speed 35 M.P.H.
- Stopping sight distance 240.0'
- Maximum grade 10 %
- Minimum grade 1.0 %
- Min. ϵ Radius curve 250.00'



DETAIL
TYPICAL INTERSECTION

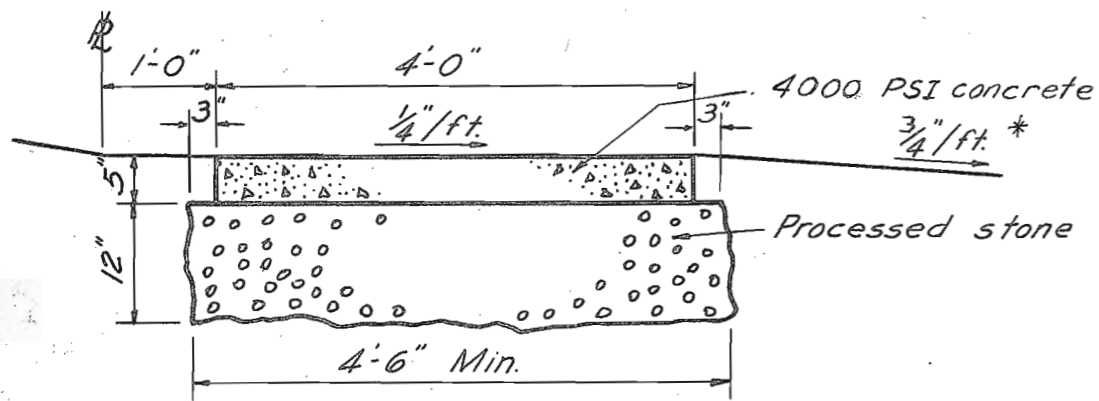
REVISIONS		
NO.	DESCRIPTION	DATE APPROVED

TOWN OF WETHERSFIELD, CONN.

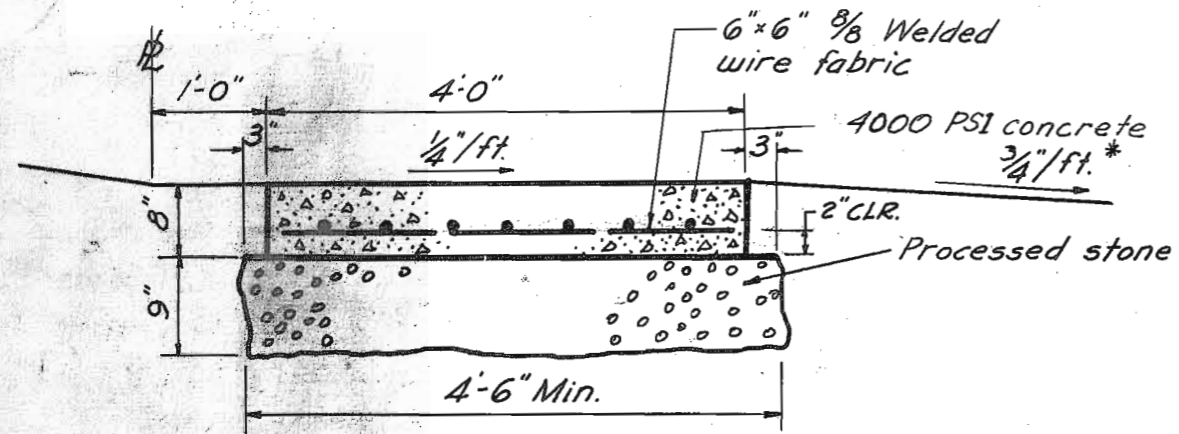
TYPICAL CROSS SECTION

SECONDARY STREET

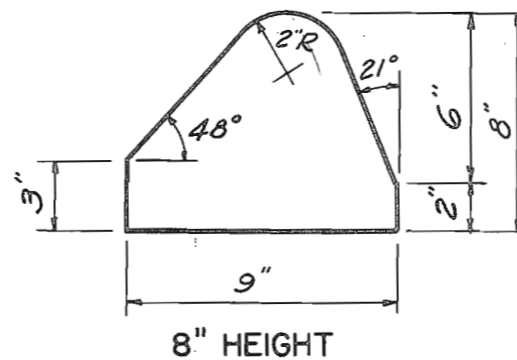
PREPARED BY ENGINEERING DIVISION
 DATE JAN. 1975 M-1080 42-3



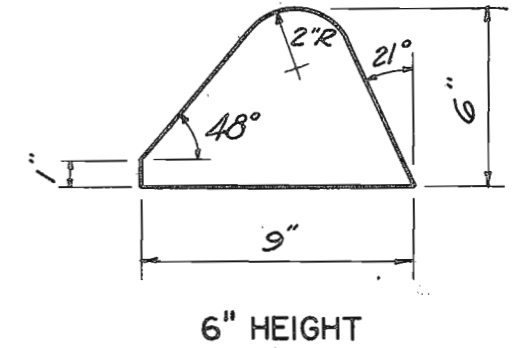
SECTION
5" THICK CONCRETE SIDEWALK



SECTION
8" THICK CONCRETE SIDEWALK



BITUMINOUS CONCRETE LIP CURBING



Notes:

Sidewalks.

1. For Sidewalk Treatment at Intersections see Primary & Secondary Street Typical Cross Section Sheets.
2. 8" thick sidewalk to be used at all driveway crossings, in commercial areas and in other areas as directed.
3. 1/2" Premoulded non-extendable Bituminous Joint material, & dowels to be installed on either side of all driveway crossings.
4. Tooled joint pattern to be varied as directed to conform to adjacent markings.

Curbing.

1. Bituminous Concrete Lip Curbing 6" height to be used when bituminous concrete surface is constructed initially. 8" height to be used when wearing surface is not installed initially.

* May be reduced to 1/2" per foot with written permission from the Engineering Div.

TOWN OF WETHERSFIELD, CONN.

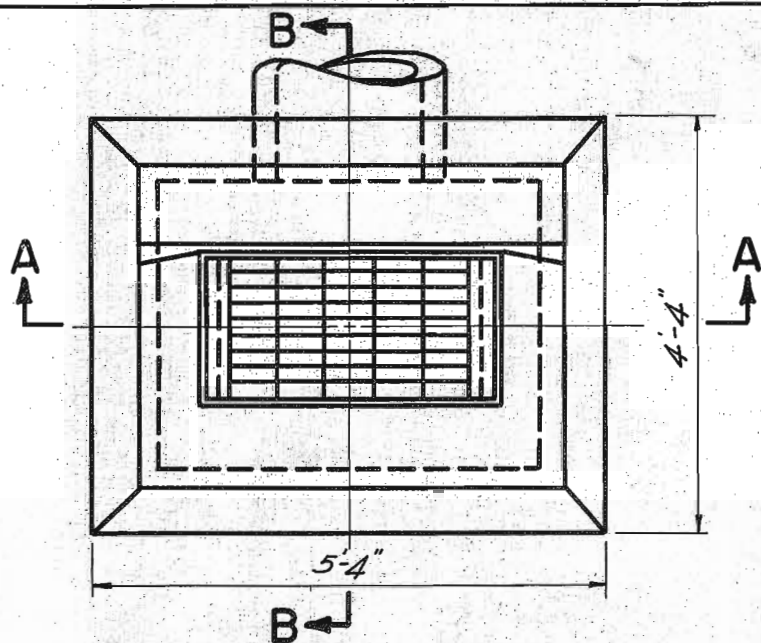
STANDARD DETAILS

CURBING AND SIDEWALKS

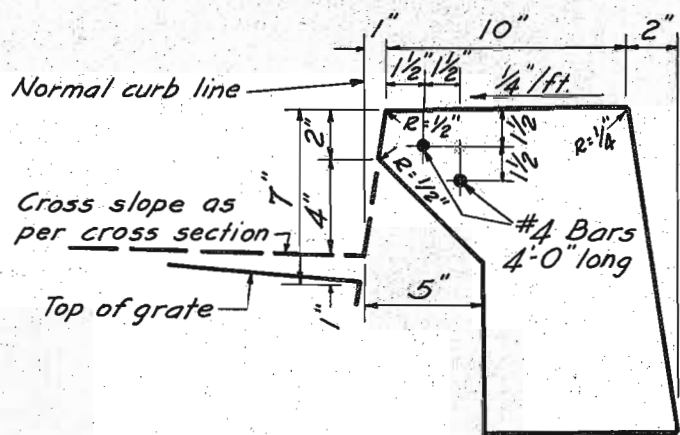
NO.	DESCRIPTION	DATE APPROVED
2	Numerous Changes	10-22-73
1	Eliminate Processed Gravel	7-1-66
REVISIONS		

PREPARED BY ENGINEERING DIVISION
DATE NOV. 1, 1973 M-1080 42-3

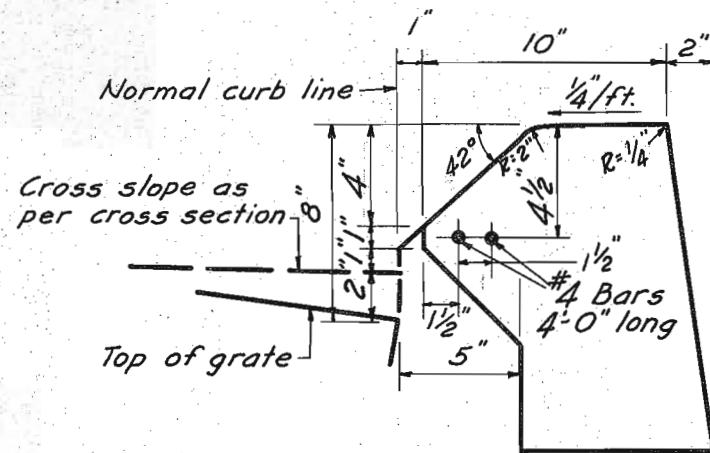
DWG. No. 3



PLAN

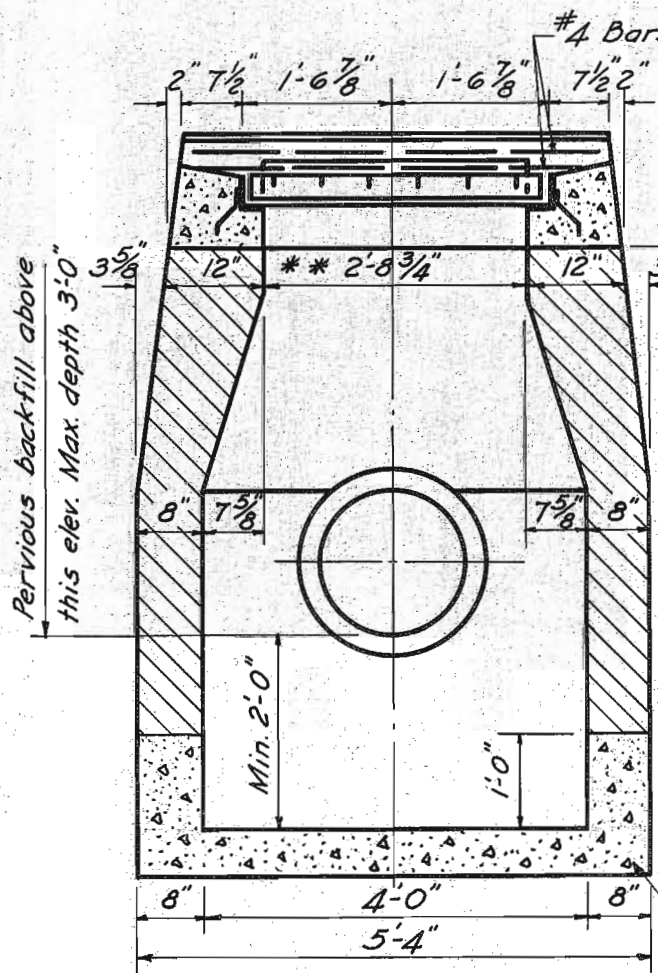


To be used for concrete or granite curbing.

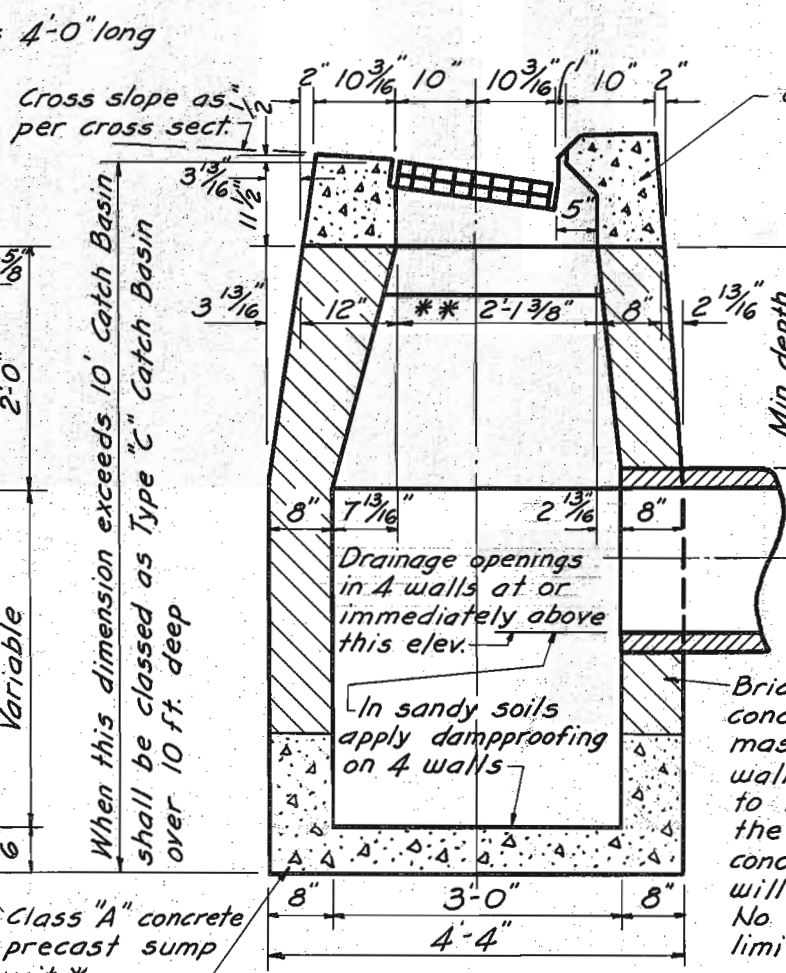


To be used for bituminous concrete lip curbing (machine formed) 6" or 8" high.

DETAILS OF CURB INLETS



SECTION A-A



SECTION B-B

Precast Unit Class "A" concrete

Min. depth unless specifically ordered otherwise: Under travelway 1'-7 1/2" Under untraveled areas 0'-3"

End of pipe shall be cut flush with inside of Catch Basin. Work to be included in the cost of Catch Basin

Brick, class "A" concrete, precast concrete units or cement rubble masonry. When masonry is used wall thickness shall be increased to 12". Inside dimensions to remain the same. Where brick or precast concrete units are used, corbelling will be permitted. Max corbel to be 3". No projection shall extend inside of limits noted by * *

Notes:

1. Where Type "C" Catch Basin is constructed in pavement area the normal cross slope of the gutter shall be varied to match cross slope of grate.
2. Walls of all Catch Basins over 10 ft. deep to be increased to 12" thickness. Inside dimensions to remain the same.
3. Precast concrete top supplied shall be approved by the Engineer before installation.
4. Catch Basin sumps shall be omitted if directed by the Engineer.
5. Where precast concrete unit is used for sump the top of the unit shall be at least 6" below the bottom of the pipe.

* Precast sump units shall be used on all Catch Basins except those not requiring sumps and those requiring 12" walls.

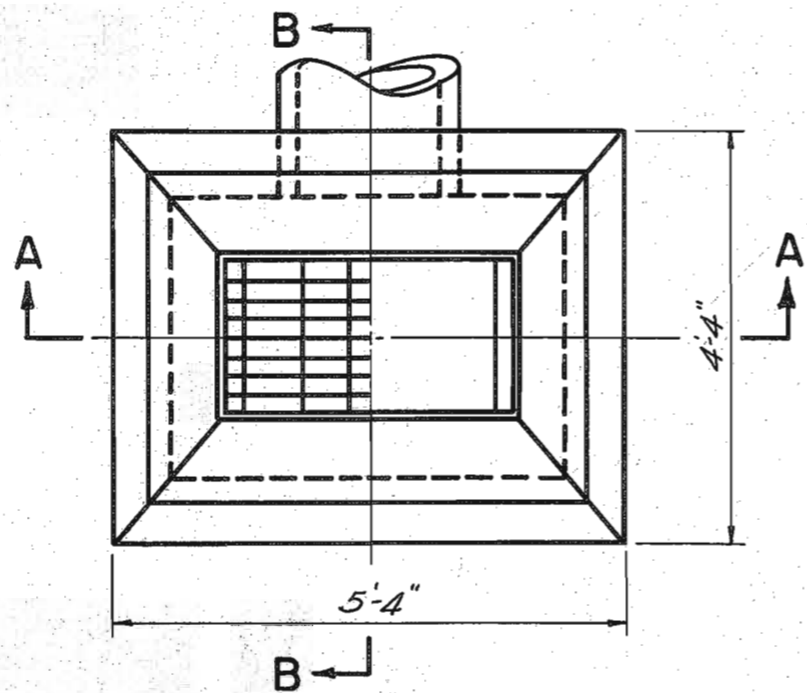
TOWN OF WETHERSFIELD, CONN.

STANDARD DETAIL

TYPE "C" CATCH BASIN

NO.	DESCRIPTION	DATE	APPROVED
REVISIONS			

PREPARED BY ENGINEERING DIVISION
DATE NOV. 1, 1973 M-1080 42-3



PLAN

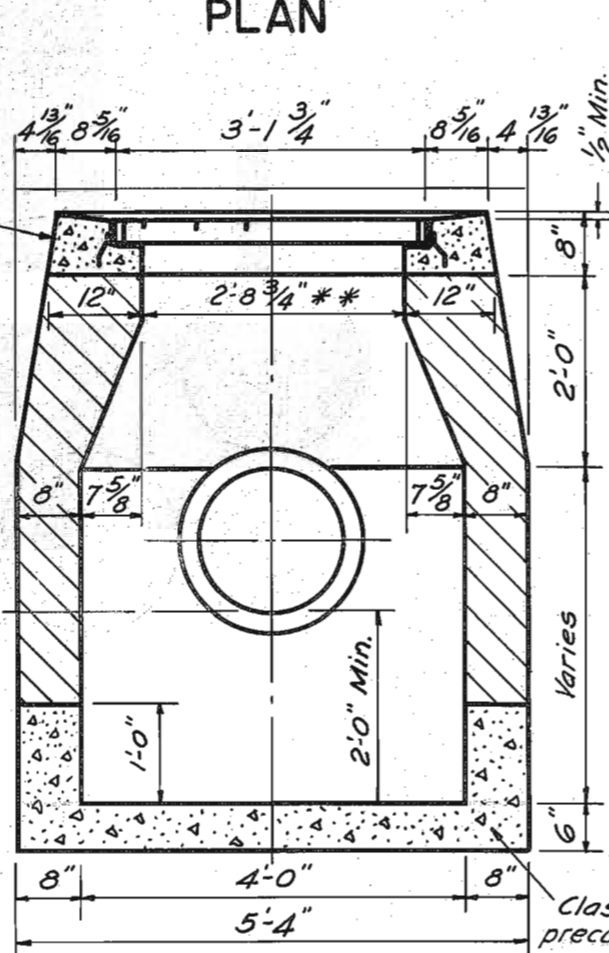
Notes:

1. Walls of all Catch Basins over 10ft. deep to be increased to 12" thickness. Inside dimensions to remain the same.
2. Precast concrete top supplied shall be approved by the Engineer before installation.
3. Catch Basin sumps shall be omitted if directed by the Engineer.
4. Where precast concrete unit is used for sump, the top of the unit shall be at least 6" below the bottom of the pipe.

* Precast Sump units shall be used on all Catch Basins except those not requiring sumps and those requiring 12" walls.

Class "A" concrete precast unit

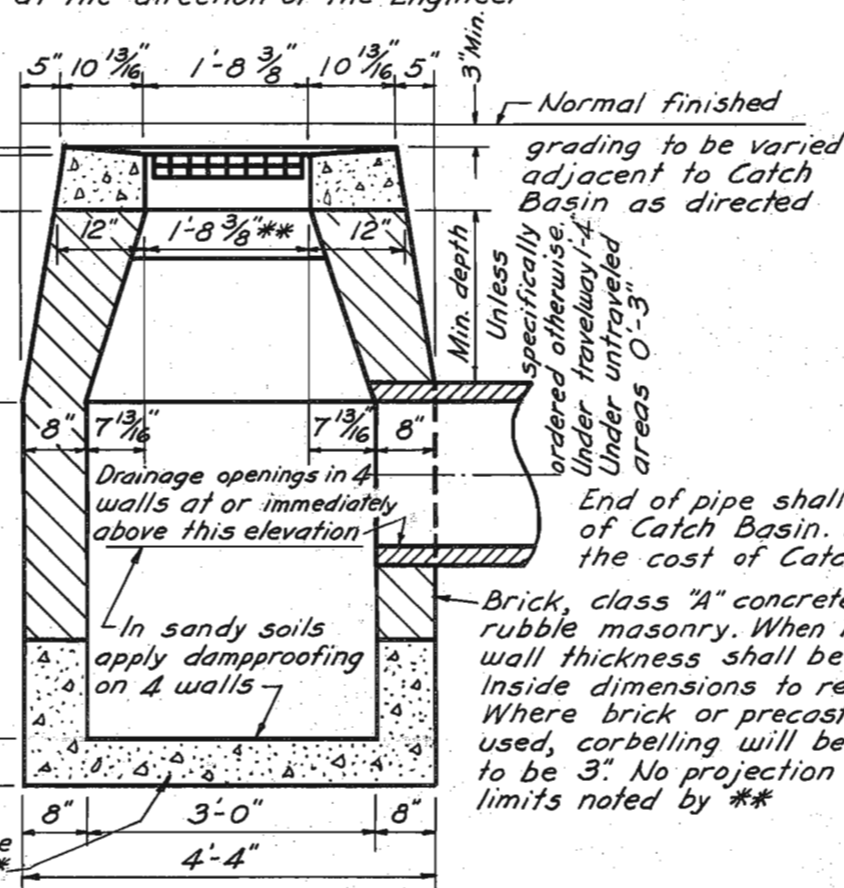
Pervious backfill above this elev. Max. depth 3'



SECTION A-A

This dimension may be increased to 1 1/2" at the direction of the Engineer

When this dimen. exceeds 10ft. Catch Basin shall be classed as Type "C-L" Catch Basin over 10 ft deep Variable



SECTION B-B

Normal finished grading to be varied adjacent to Catch Basin as directed
Min. depth Unless specifically ordered otherwise Under travelway 1'-4" Under untraveled areas 0'-3"

End of pipe shall be cut flush with inside of Catch Basin. Work to be included in the cost of Catch Basin.

Brick, class "A" concrete units, or cement rubble masonry. When masonry is used, wall thickness shall be increased to 12". Inside dimensions to remain the same. Where brick or precast concrete units are used, corbelling will be permitted. Max. corbel to be 3". No projection shall extend inside of limits noted by **

Class "A" concrete precast sump unit*

TOWN OF WETHERSFIELD, CONN.
STANDARD DETAIL
TYPE "C-L" CATCH BASIN

NO.	DESCRIPTION	DATE	APPROVED
REVISIONS			

PREPARED BY ENGINEERING DIVISION
DATE NOV. 1, 1973 M-1080 42-3

Campbell Foundry, Co #1202
manhole frame & cover
or approved equal

Walls shall be built of bricks, precast
concrete units or class "A" concrete
at the option of the contractor.
Brick or precast concrete units to be
laid in cement sand mortar 1:2 mix.
Joints to be not over 1/4" on inside face.
Corbel shall be limited to 3" per course.

Brick walls are to be plastered
outside with 1:2 cement mortar
1/2" thick. Bricks must be wet
when mortar is applied.

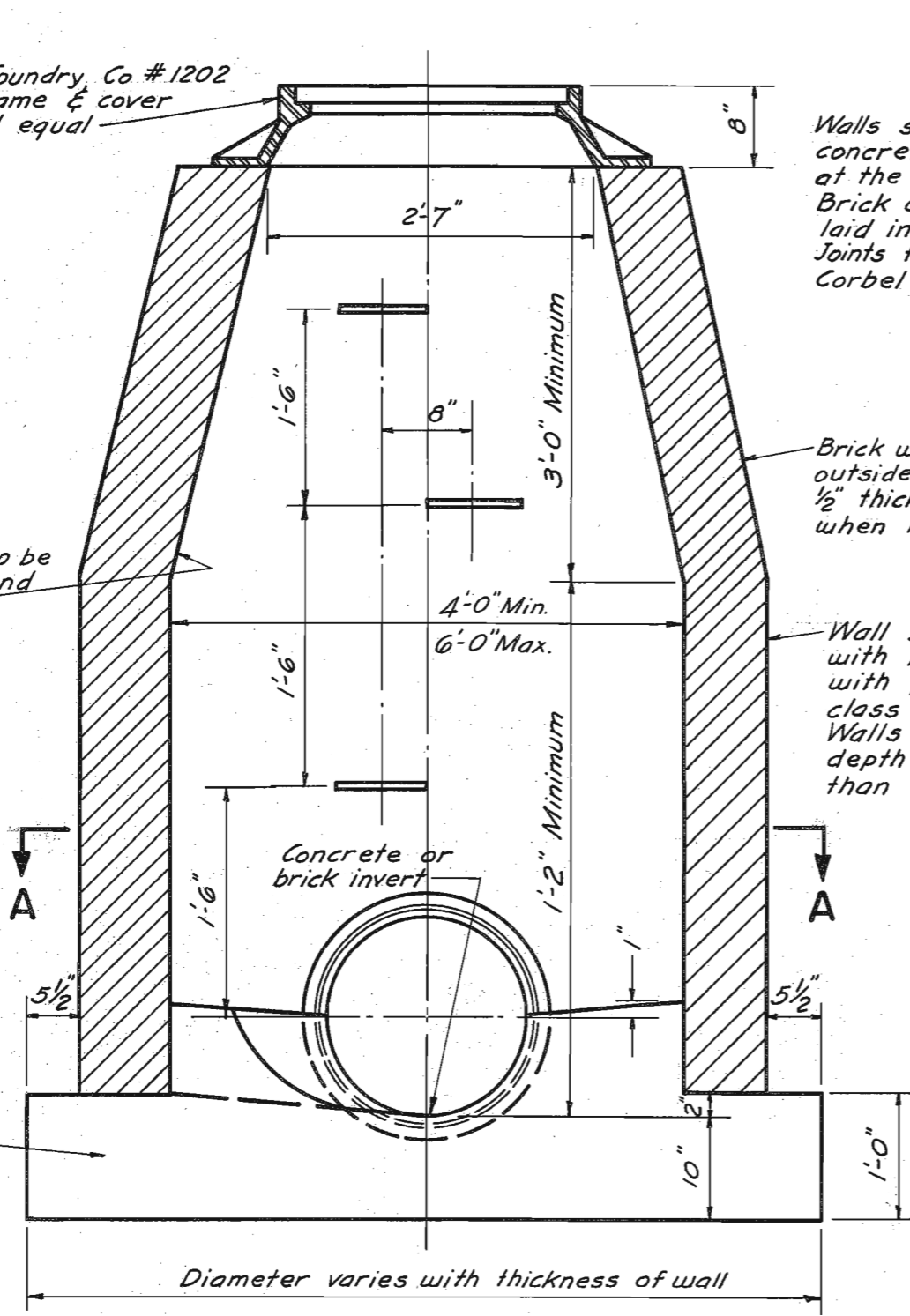
Wall shall be a minimum of 8"
with brick, and a minimum of 6"
with precast concrete units and
class "A" concrete.
Walls shall be 12" thick when
depth of manhole is greater
than 10 feet.

Note: All corners to be slightly rounded.
Castings shall be whole, sound, free
from holes and other defects.
All sides to be tapered 1/8".

Note:
End of pipes shall be cut
flush with inside wall
of manhole. Included in
cost of manhole.

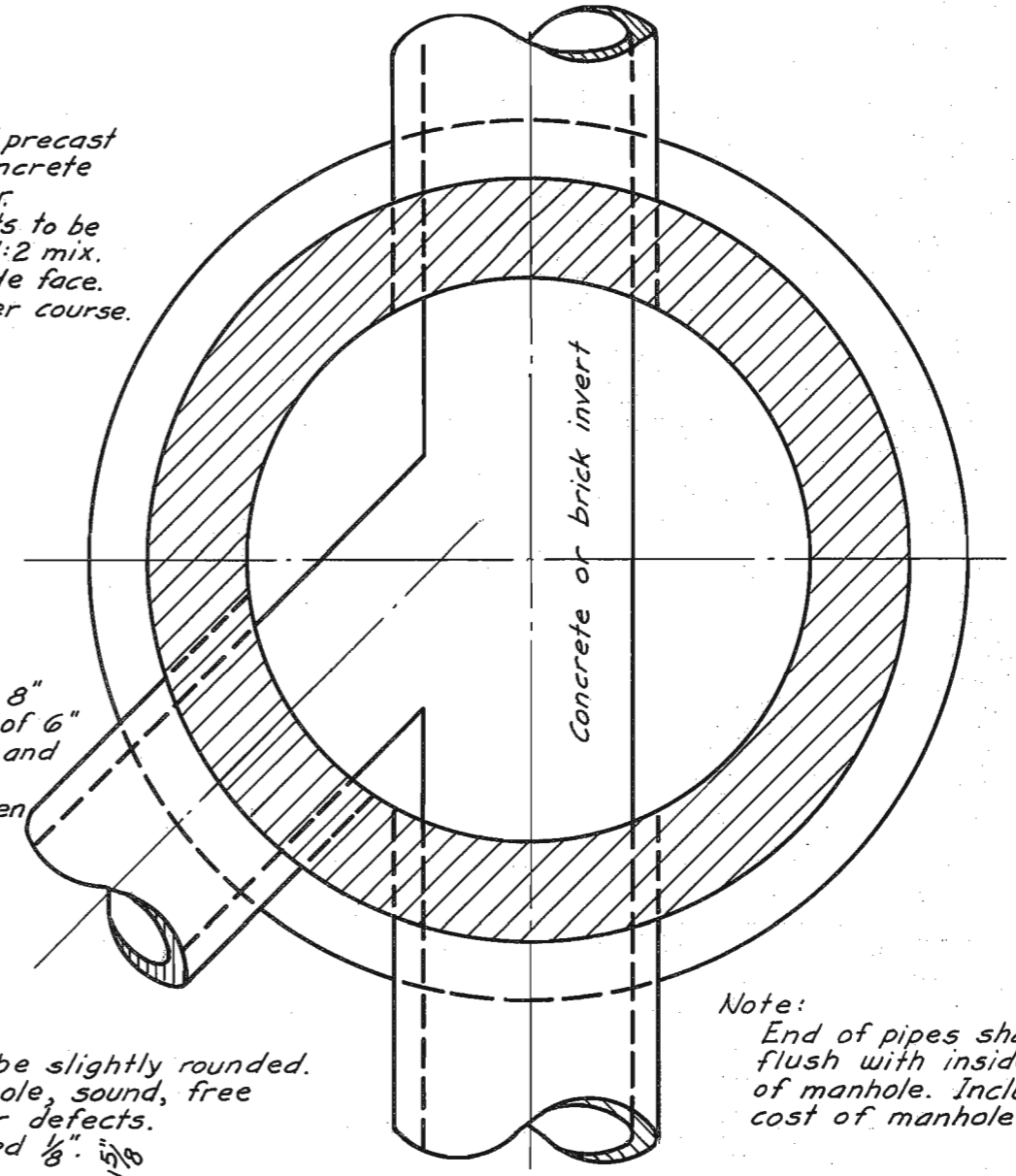
All joints are to be
pointed flush and
full.

Class "A" concrete



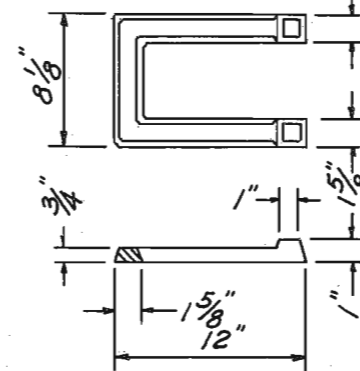
VERTICAL SECTION
MANHOLE

Note:
The maximum depth of a standard manhole shall
be 10 feet from top of manhole frame to bottom
of floor slab.
Manholes of depths greater than 10 feet will be
paid for as "Manhole over 10 feet deep."



SECTION A-A

I. D. Manhole	Max. pipe size no deflection
4'	36"
5'	48"
6'	54"



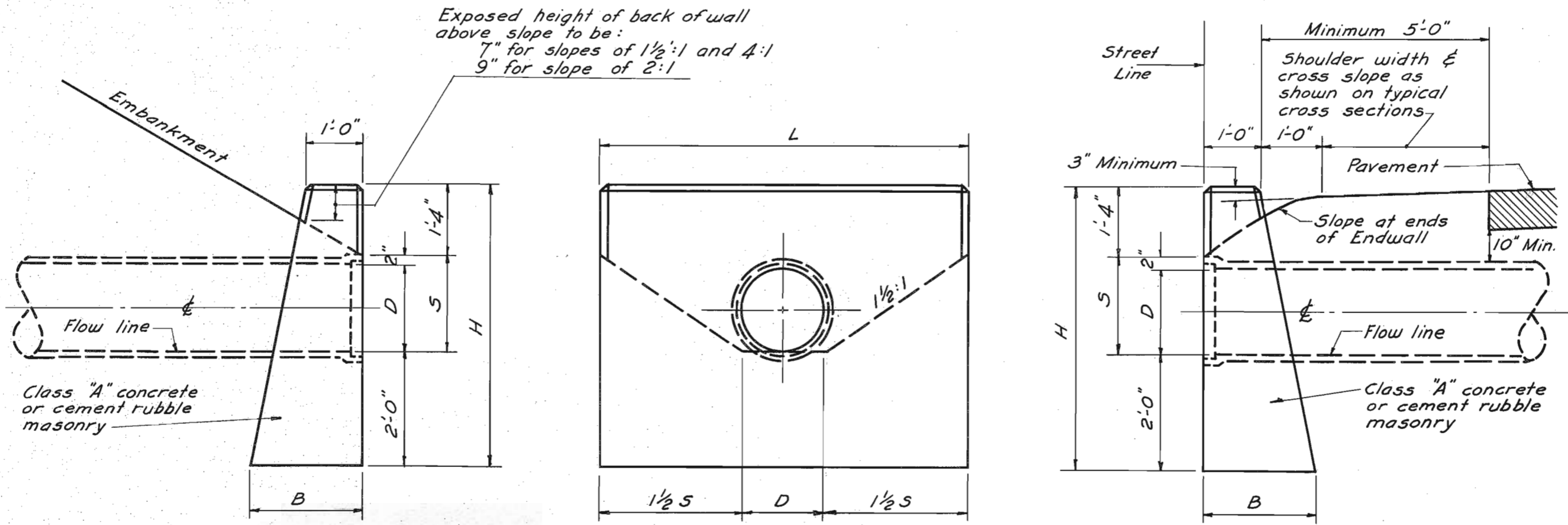
DETAIL OF LADDER RUNG

Material
Malleable Iron castings conforming to
A.S.T.M. specification A-47 grade 32510
or Gray Iron casting conforming to A.S.T.M.
specification A-48 class 25.

TOWN OF WETHERSFIELD, CONN.
STANDARD DETAIL

MANHOLE

NO.	DESCRIPTION	DATE	APPROVED	PREPARED BY	DATE	NO.
REVISIONS				ENGINEERING DIVISION	NOV. 1, 1973	M-1080



WALL AT FOOT OF SLOPE

FRONT ELEVATION

WALL AT SHOULDER

All edges of exposed surfaces to be chamfered one inch.

DIMENSIONS AND QUANTITIES FOR ONE END WALL BASED ON $S = D + 2"$						
D	S	H	L	BATTER	B	VOL.
ins.	ft. & ins.	ft. & ins.	ft. & ins.	ins./ft.	ft. & ins.	cu. yds.
12	1'-2"	4'-6"	4'-6"	2 1/2"	1'-11 1/4"	1.10
15	1'-5"	4'-9"	5'-6"	2 1/2"	1'-11 7/8"	1.45
18	1'-8"	5'-0"	6'-6"	2 1/2"	2'-0 1/2"	1.83
21	1'-11"	5'-3"	7'-6"	2 1/2"	2'-1 1/8"	2.26
24	2'-2"	5'-6"	8'-6"	2 1/2"	2'-1 3/4"	2.72
30	2'-8"	6'-0"	10'-6"	2 1/2"	2'-3"	3.79
36	3'-2"	6'-6"	12'-6"	3"	2'-7 1/2"	5.45
42	3'-8"	7'-0"	14'-6"	3"	2'-9"	6.40*
48	4'-2"	7'-6"	16'-6"	3"	2'-10 1/2"	8.00*

* Volume of pipe within Endwall has been deducted

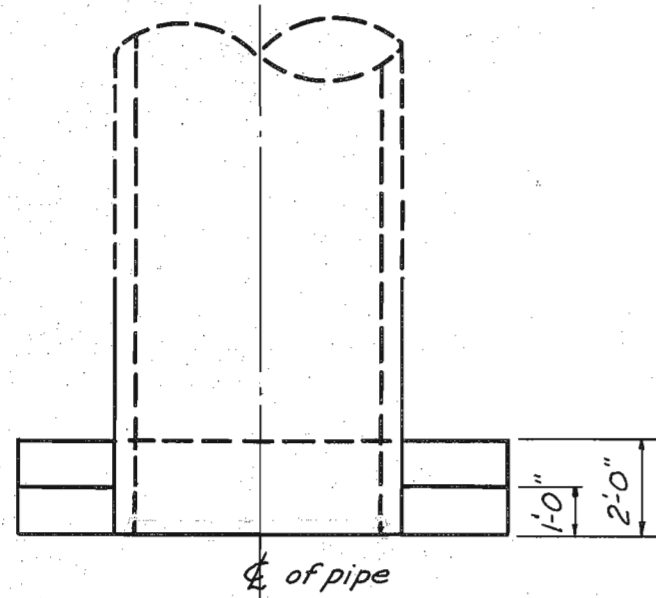
- H = TOTAL HEIGHT OF ENDWALL
- B = BASE
- D = INSIDE DIAMETER OF PIPE
- S = HEIGHT OF SLOPE ABOVE FLOW LINE AT FACE OF WALL - MINIMUM = $D + 2"$
- L = LENGTH OF WALL = $3S + D$

When one Endwall is to be used for two pipes, the dimensions of that Endwall shall conform to those required for the larger pipe, except the dimension "L" shall be increased by the outside diameter of the smaller pipe plus two feet.

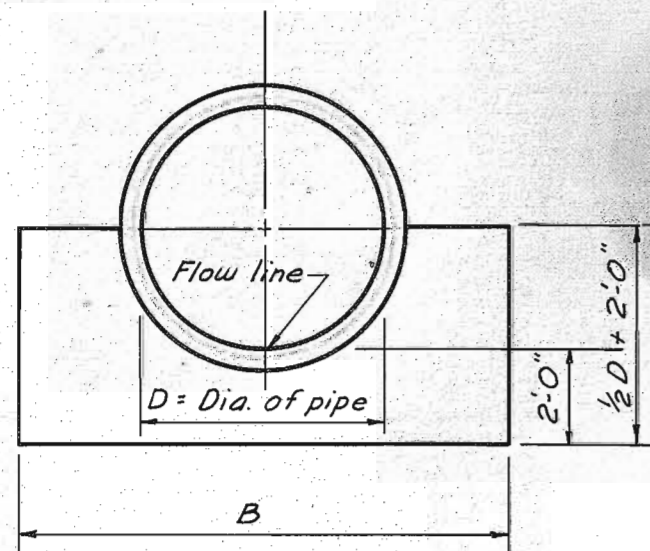
TOWN OF WETHERSFIELD, CONN.
STANDARD DETAIL
STANDARD ENDWALL

NO.	DESCRIPTION	DATE	APPROVED
REVISIONS			

PREPARED BY ENGINEERING DIVISION
DATE NOV. 1, 1973 M-1080 42-3



PLAN

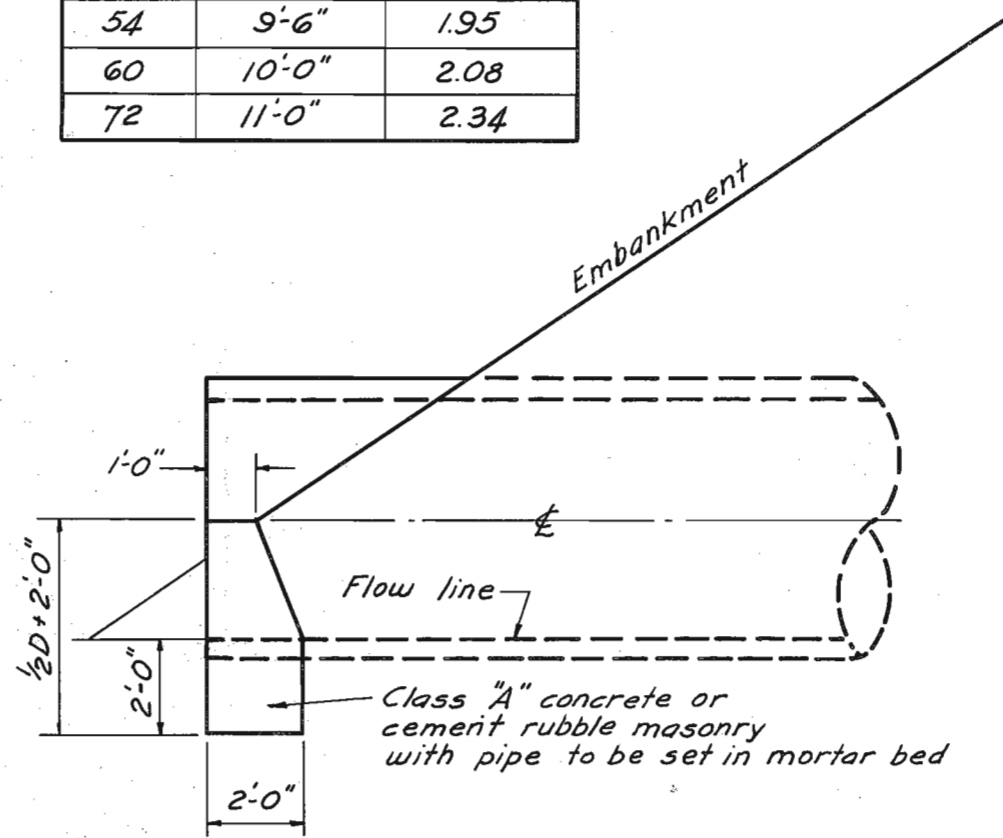


FRONT ELEVATION

TABULATION		
D	B	Volume of Endwall
ins.	Ft. & ins.	C.Y.
12	3'-0"	0.49
15	3'-9"	0.63
18	4'-6"	0.77
21	5'-3"	0.95
24	6'-0"	1.09
30	7'-6"	1.35
36	8'-0"	1.55
42	8'-6"	1.69
48	9'-0"	1.82
54	9'-6"	1.95
60	10'-0"	2.08
72	11'-0"	2.34

Notes:

1. When one Endwall is to be used for two pipes, the dimensions of that Endwall shall conform to those required for the larger pipe, except the dimension "B" shall be increased by the outside diameter of the smaller pipe plus two feet.
2. This Endwall shall be used only on outlet pipes where approved by the Engineer.



SIDE ELEVATION

TOWN OF WETHERSFIELD, CONN.

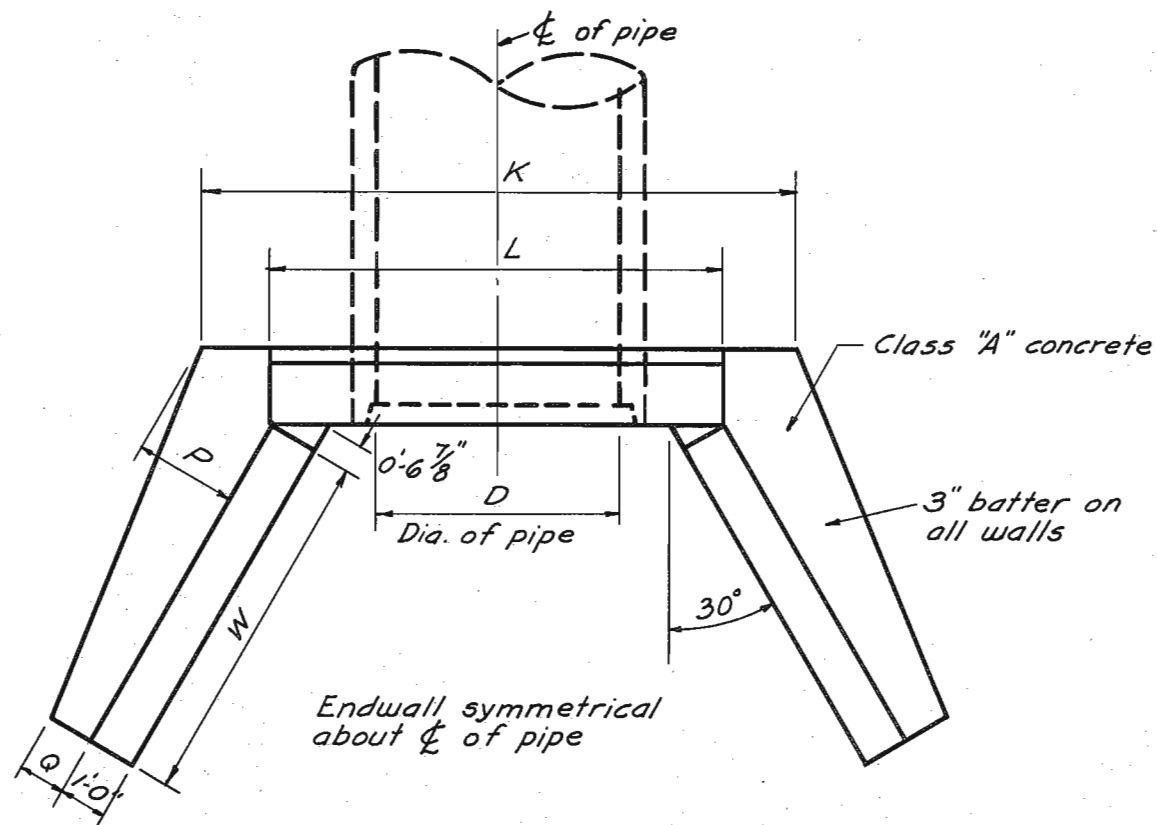
STANDARD DETAIL

FOOTING ENDWALL

NO.	DESCRIPTION	DATE	APPROVED
REVISIONS			

PREPARED BY ENGINEERING DIVISION

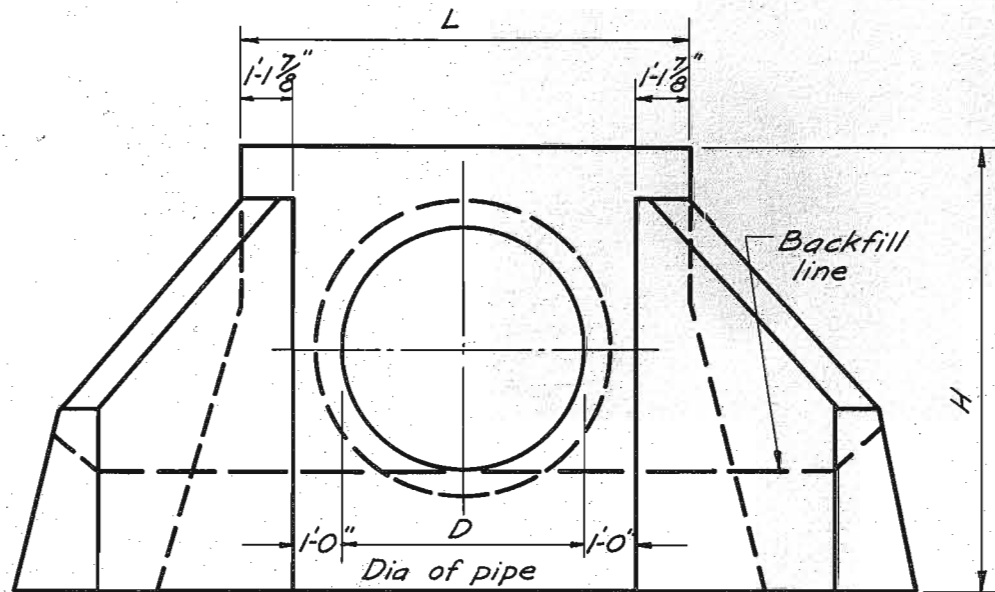
DATE NOV. 1, 1973 M-1080 42-3



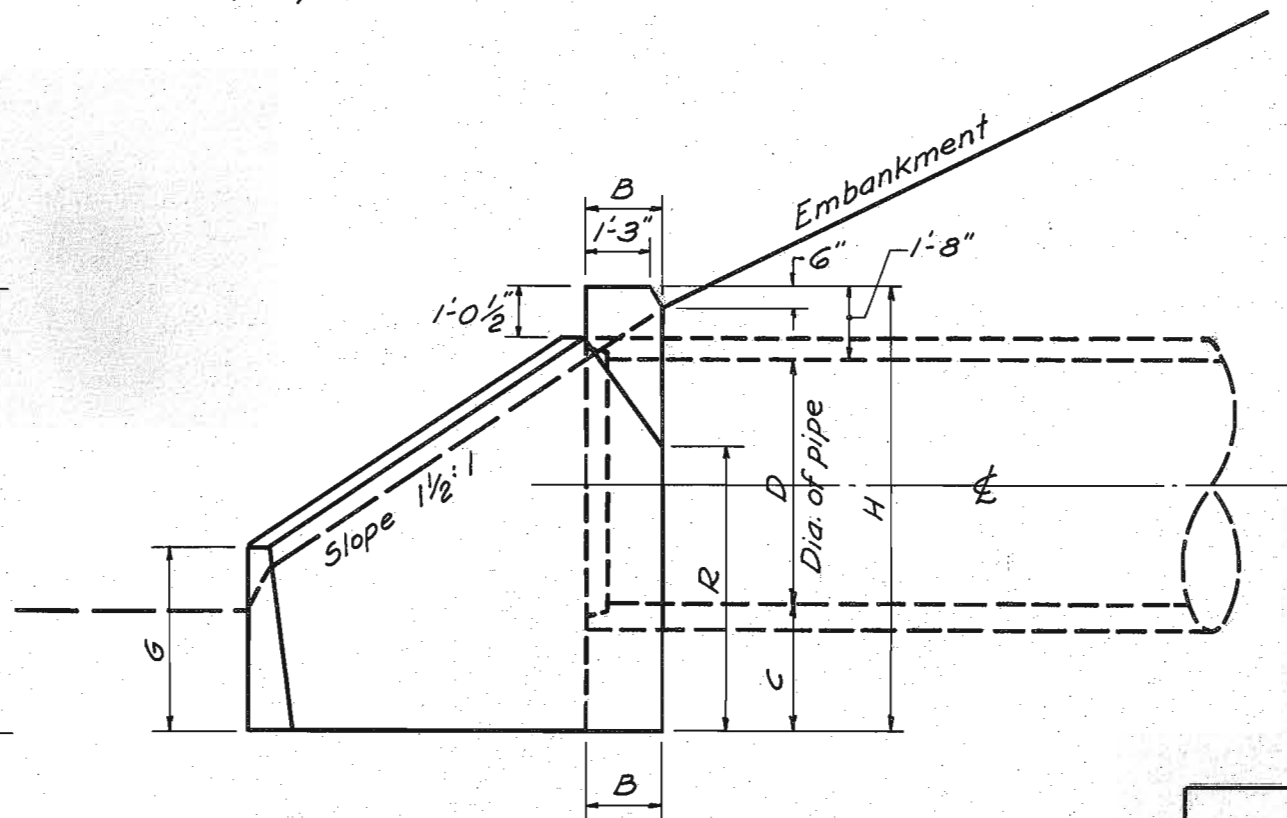
PLAN

DIMENSIONS AND QUANTITIES FOR ONE WING TYPE ENDWALL											
D	B	C	G	H	K	L	P	Q	R	W	VOL.
ins.	ft. & ins.	ft. & ins.	ft. & ins.	ft. & ins.	ft. & ins.	ft. & ins.	ft. & ins.	ft. & ins.	ft. & ins.	ft. & ins.	cu. yds.
36"	1'-6"	2'-0"	3'-3"	6'-8"	9'-1 1/2"	7'-3 3/4"	1'-4 7/8"	0'-9 3/4"	3'-4 7/8"	4'-1 3/8"	5.17
42"	1'-6"	2'-0"	3'-3"	7'-2"	9'-10 1/2"	7'-9 3/4"	1'-6 3/8"	0'-9 3/4"	3'-10 1/2"	4'-11 3/4"	5.75
48"	1'-7"	2'-6"	3'-9"	8'-2"	10'-10"	8'-3 3/4"	1'-9 3/8"	0'-11 1/4"	4'-9"	5'-10"	7.78
54"	1'-7"	2'-6"	3'-9"	8'-8"	11'-7 1/2"	8'-9 3/4"	1'-10 7/8"	0'-11 1/4"	5'-3"	6'-8 1/2"	8.51
60"	1'-7"	2'-6"	3'-9"	9'-2"	12'-4 1/2"	9'-3 3/4"	2'-0 3/8"	0'-11 1/4"	5'-9"	7'-7"	10.46
72"	1'-7"	2'-6"	3'-9"	10'-2"	13'-10 3/4"	10'-3 3/4"	2'-3 3/8"	0'-11 1/4"	6'-9"	9'-3 3/4"	13.56

When one Endwall is to be used for two pipes, the dimensions of the Endwall shall conform to those req'd. for the larger pipe, except the dimension "L" shall be increased by the outside diameter of the smaller pipe plus two feet.



FRONT ELEVATION



SIDE ELEVATION

TOWN OF WETHERSFIELD, CONN.

STANDARD DETAIL

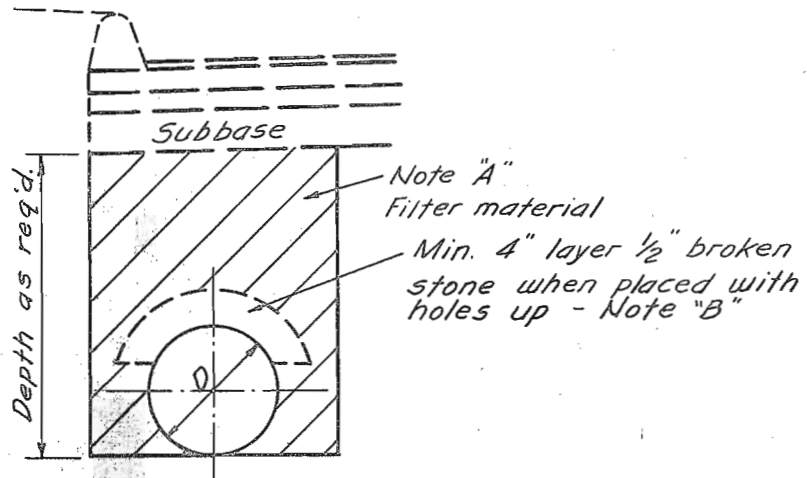
WING TYPE ENDWALL

NO.	DESCRIPTION	DATE	APPROVED
REVISIONS			

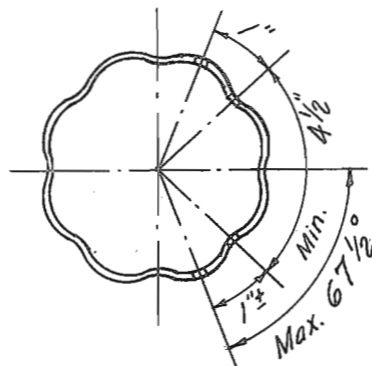
PREPARED BY ENGINEERING DIVISION

DATE NOV. 1, 1973

M-1080 42-3



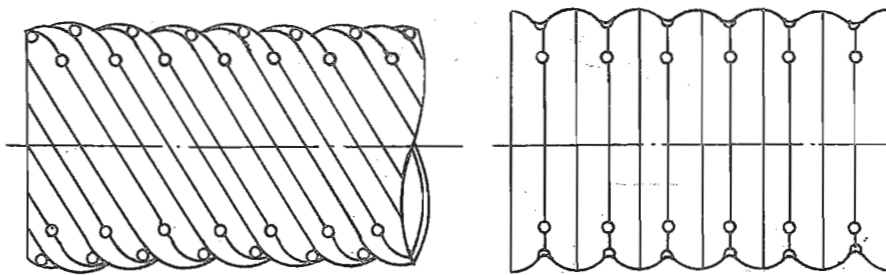
DETAIL COMBINATION DRAIN



END VIEW

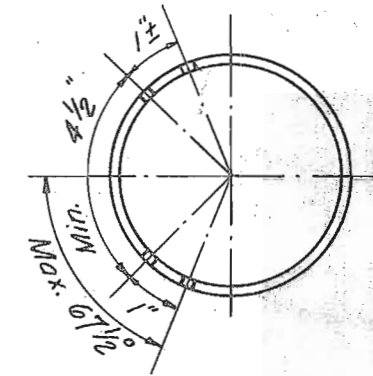
Perforations to be placed down unless otherwise specified or approved.

CORRUGATED METAL UNDERDRAIN PIPE

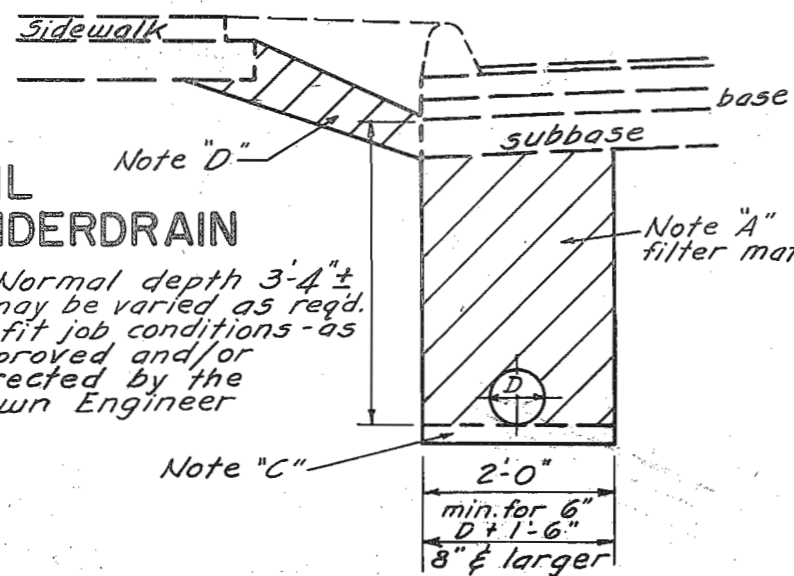


Minimum - 4 rows of 1/4" or 3/8" holes spaced as shown in spiral corrugated or corrugated metal pipe.

Note: Sketches shown above for metal under drain show spacing and number of perforations in 6" dia. pipe - For other diameters, holes will be in a similar relative position and spaced as shown in tabulation below. The min. diameter of 1/4 inch for the holes shall apply after asphalt coating.

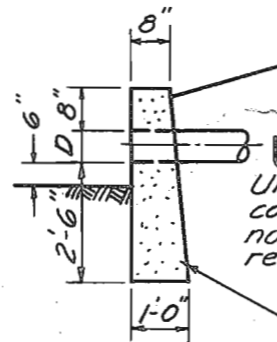


END VIEW



DETAIL STANDARD UNDERDRAIN

Normal depth 3'-4" ± may be varied as reqd. to fit job conditions - as approved and/or directed by the Town Engineer



DETAIL UNDERDRAIN OUTLET

Underdrain outlets to be constructed as detailed, using non-perforated pipe, where required and/or directed.

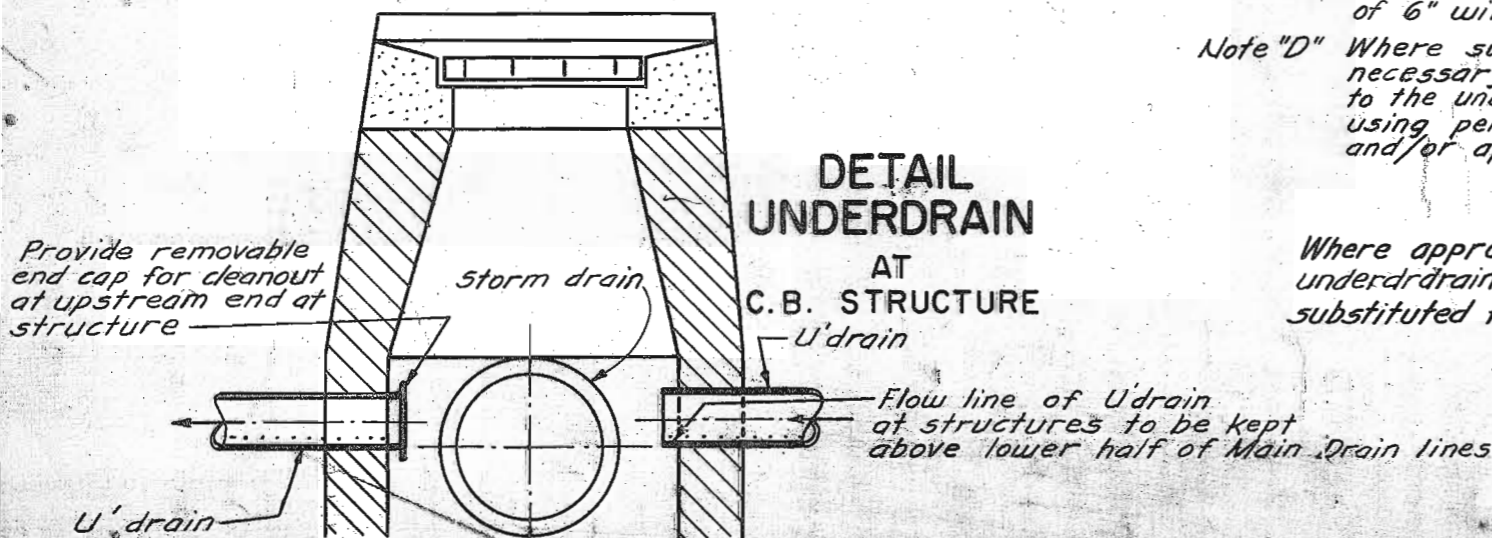
Class "A" concrete

PERFORATED A.C.C.M. PIPE PROPERTIES

Nominal internal diameter	Galvanized sheet gage number	Min. numbers of rows of perforations	Min. width of unperforated segment
6"	18	4	4 1/2"
8"	16	4	7"
10"	16	4	9"
12"	16	6	9 1/2"
15"	16	6	13"
18"	16	6	16 1/2"
21"	16	6	20"

General notes

- Note "A" Aggregate for filter backfill in trench shall be broken stone or screened gravel, unless concrete sand is ordered to be used.
- Note "B" Where an underdrain or combination drain is installed with holes up - a layer of 1/2" broken stone will be installed around and above the holes in all cases when sand filter is used, and/or when directed by the Town Engineer.
- Note "C" Where underdrain is installed with the holes down, the aggregate for the filter shall be placed to a depth of 3" true to line and grade to bed the pipe. A depth of 6" will apply in rock cut.
- Note "D" Where subdrainage of sidewalk base is necessary - a sufficient number of leak offs to the underdrain trench will be installed using pervious filter material - as directed and/or approved by the Town Engineer.



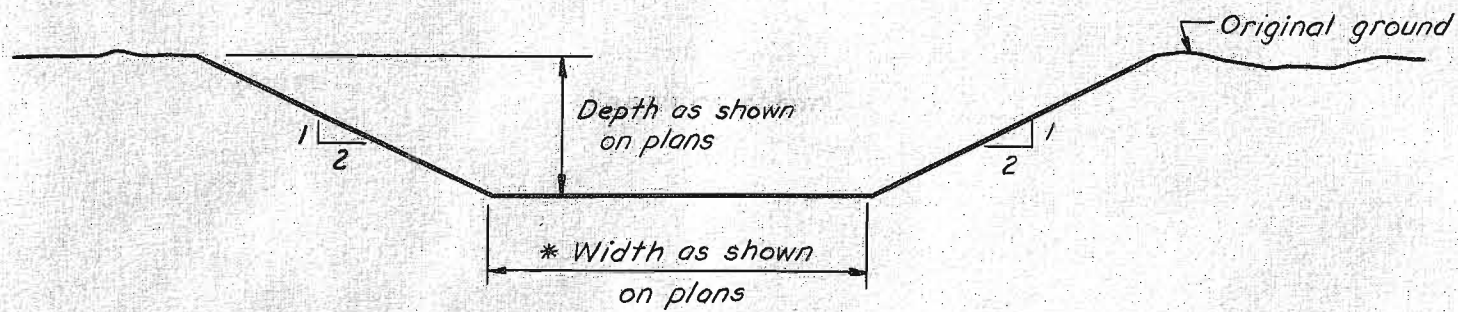
DETAIL UNDERDRAIN AT C.B. STRUCTURE

Where approved by the Town Engineer slotted concrete underdrain pipe or aluminum underdrain pipe may be substituted for the pipe detailed above.

NO.	DESCRIPTION	DATE	APPROVED
REVISIONS			

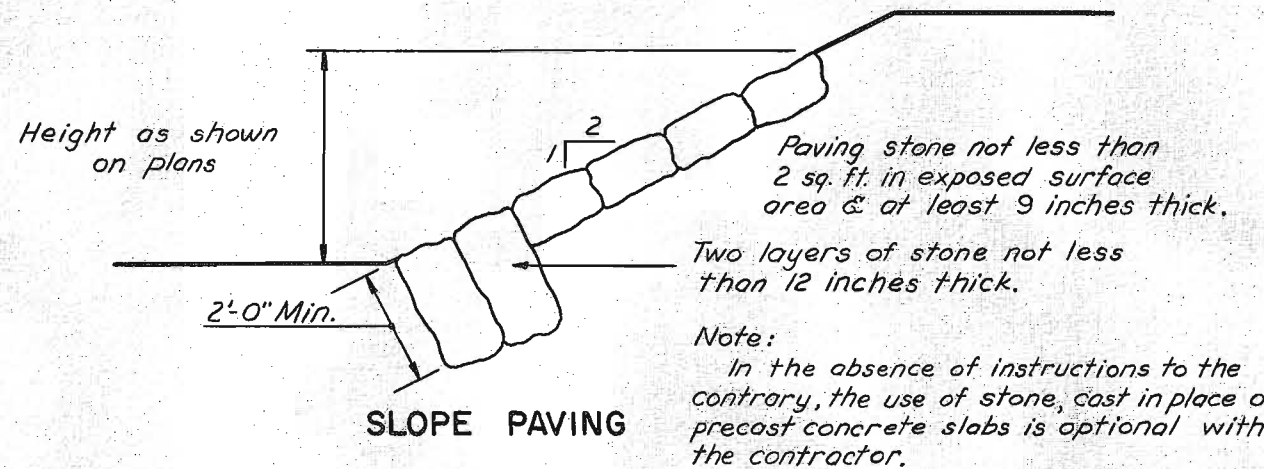
**TOWN OF WETHERSFIELD, CONN.
STANDARD DETAILS
UNDERDRAINS**

PREPARED BY **ENGINEERING DIVISION**
DATE **NOV. 1, 1973** M-1000 42-3

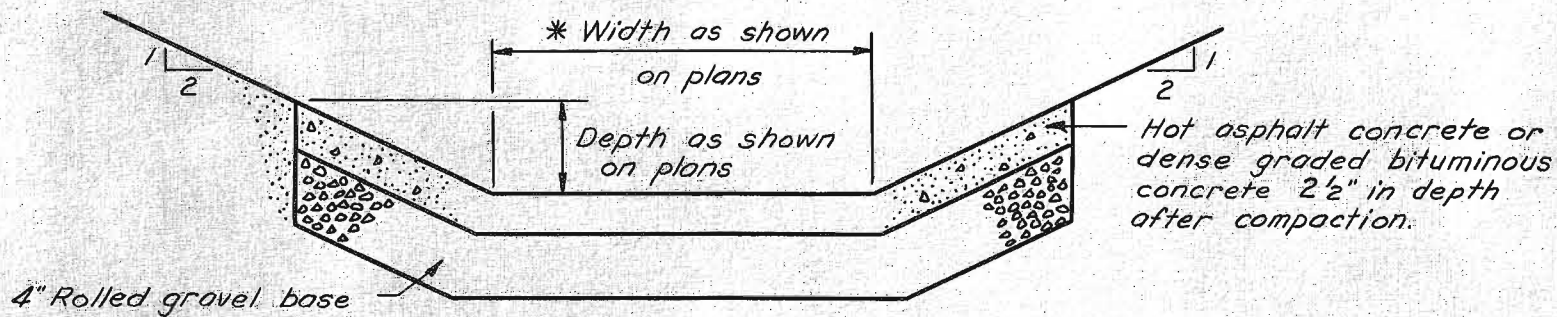


EARTH DITCH OR CHANNEL

* Shall be classed a channel when bottom width is equal to or greater than 4'-0"

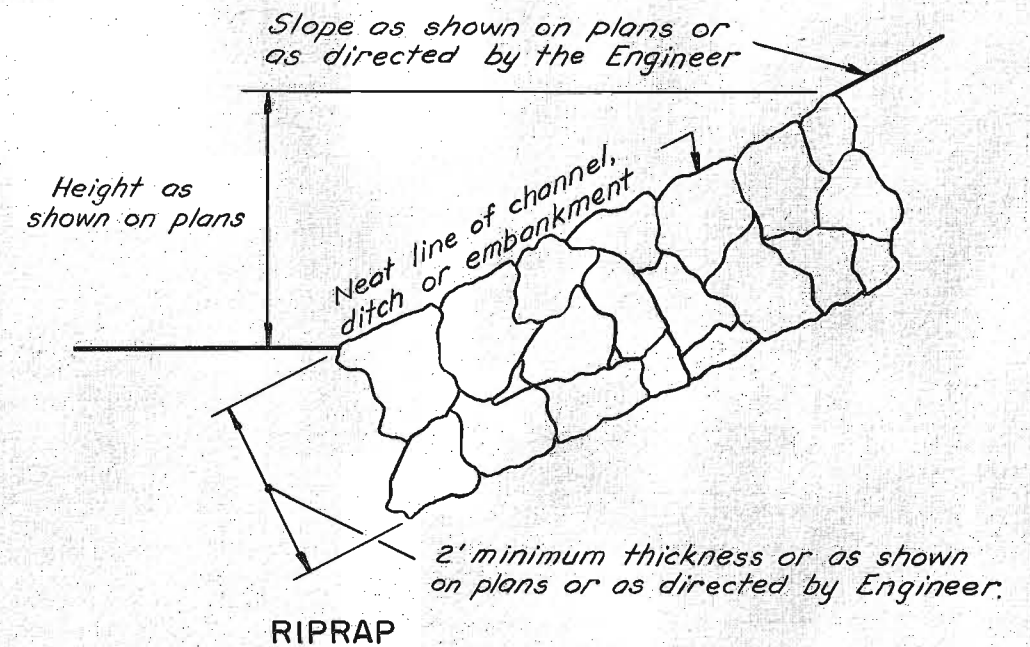


SLOPE PAVING



PAVED DITCH OR CHANNEL

* Shall be classed a channel when bottom width is equal to or greater than 4'-0"



RIPRAP

NO.	DESCRIPTION	DATE	APPROVED
REVISIONS			

TOWN OF WETHERSFIELD, CONN.
STANDARD DETAILS
DITCHES AND CHANNELS
SLOPE PROTECTION

PREPARED BY ENGINEERING DIVISION
DATE NOV. 1, 1973 M-1080 42-3