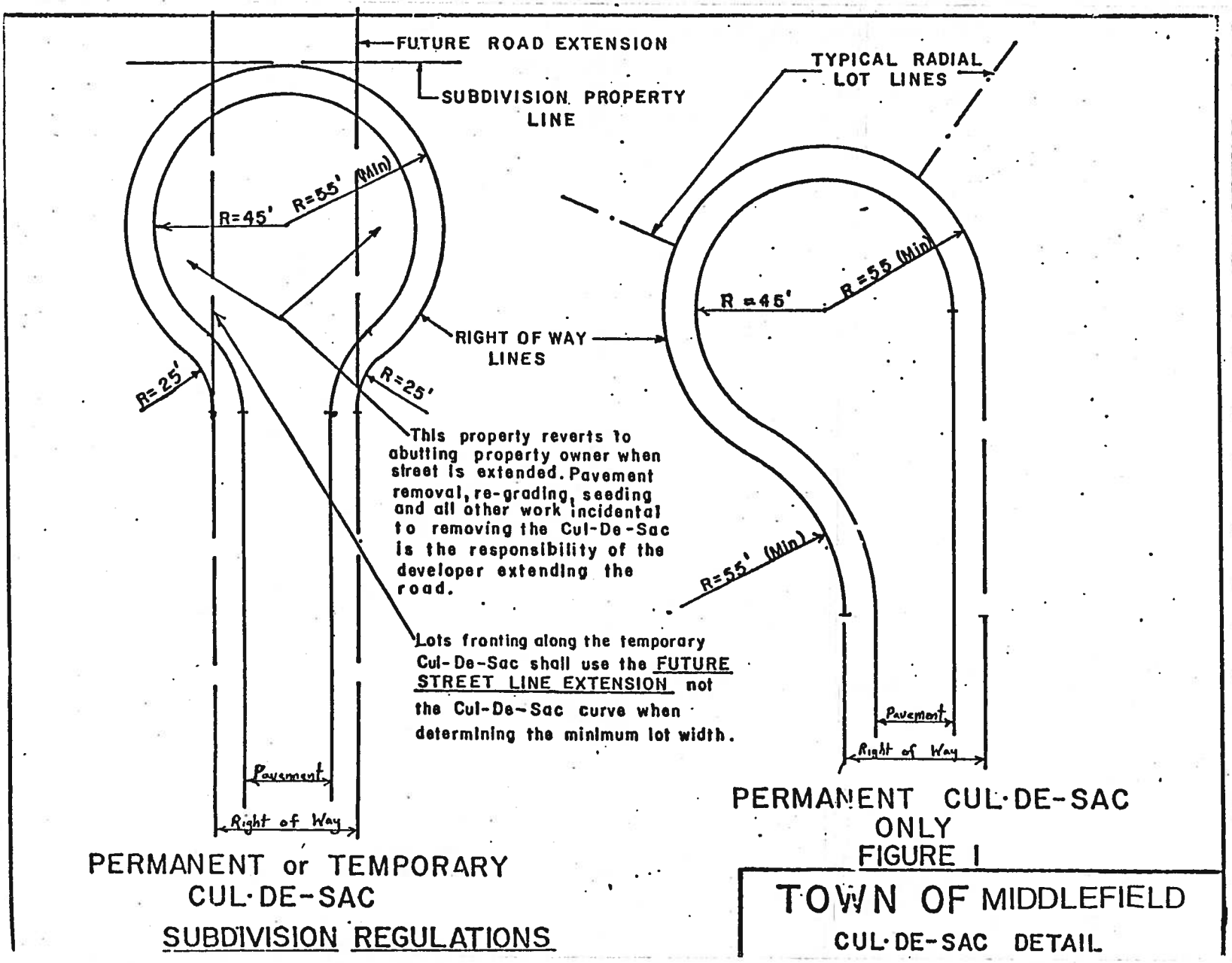

FUTURE ROAD EXTENSION
SUBDIVISION PROPERTY LINE
R=45'
R=55' (Min)
R=25'
R=25'
RIGHT OF WAY LINES
This property reverts to abutting property owner when street is extended. Pavement removal, re-grading, seeding and all other work incidental to removing the Cul-De-Sac is the responsibility of the developer extending the road.
Lots fronting along the temporary Cul-De-Sac shall use the FUTURE STREET LINE EXTENSION not the Cul-De-Sac curve when determining the minimum lot width.
Pavement
Right of Way
PERMANENT or TEMPORARY CUL-DE-SAC
SUBDIVISION REGULATIONS
TYPICAL RADIAL LOT LINES
R=45'
R=55 (Min)
R=55' (Min)
Pavement
Right of Way
PERMANENT CUL-DE-SAC ONLY
FIGURE I
TOWN OF MIDDLEFIELD
CUL-DE-SAC DETAIL

TOWN of MIDDLEFIELD, CONNECTICUT

Incorporated 1866

LEGAL NOTICE
TOWN OF MIDDLEFIELD
TOWN OF MIDDLEFIELD ORDINANCE

AN ORDINANCE CONCERNING THE ADOPTION OF A SCHEDULE OF FEES FOR THE PROCESSING OF LAND USE APPLICATIONS.

BE IT ORDAINED by the electors of the Town of Middlefield at a duly warned town meeting:

Section I - Pursuant to the provisions of S8-1C of the Connecticut General Statutes, there is hereby established the following schedule of fees for processing various land use applications:

(a) For an application to the Zoning Board of Appeals , $75.00

(b) For an application or amendment seeking site plan approval or the granting of a special permit $75.00, plus a sum, to be computed by the Town Engineer, equal to three per cent (3%) of the estimated cost of the public improvements required by the approving Commission or Board to be paid prior to the endorsement of the record map;

(c) For an application seeking a special permit for a multi-family complex, (this includes attached or detached dwellings on land in common ownership) the fee shall be $100.00 for each dwelling unit plus a sum, to be computed by the Town Engineer, equal to three per cent (3%) of the estimated cost of the public improvements required by the approving Commission or Board to be paid prior to the endorsement of the record map;

(d) For an application seeking approval of a subdivision plan, the minimum fee shall be $100.00 for each lot within the planned subdivision plus a sum, to be computed by the Town Engineer, equal to three per cent (3%) of the estimated cost of the public improvements required by the approving Commission or Board to be paid prior to the endorsement of the record map;

(e) For any other application to the Planning and Zoning Commission, $75.00;

Section II - "Public Improvements", for the purpose of this ordinance include, but are not limited to, the construction of new roads to be constructed to standards approved by the Planning and Zoning Commission, whether such roads are to be privately owned or conveyed to the Town, improvements to existing roads, storm drainage facilities, water and sewer lines, the planting of trees or other landscaping and the installation of retaining walls or other structures.

Section III - This ordinance shall take effect fifteen (15) days after publication in accordance with the General Statutes.

Dated in Middlefield, Connecticut, this 22nd day of March 1990

Lorraine Kaczenski

Lorraine Kaczenski
Acting Town Clerk

Please publish immediately. Send Affidavit to:
Town of Middlefield
P.O. Box 179
Middlefield, CT. 06455

ROAD AND DRAINAGE SPECIFICATIONS
OF THE
PLANNING AND ZONING COMMISSION
TOWN OF MIDDLEFIELD

1.1 GENERAL: Construction of pavement, drainage facilities, curbs, sidewalks and related work shall be carried out in accordance with the specifications of the Town of Middlefield and in all cases shall be constructed under the supervision of a competent, experienced and qualified supervisor. Persons performing such work shall grant access to the working site to any official, agency or commission of the Town of Middlefield have jurisdiction over streets, roads, developments or other improvements at any time during the work for purposes of examination or inspection for compliance with all applicable regulations and specifications. Persons performing the work shall also notify the First Selectman, or any agency of the Town of Middlefield having jurisdiction, when critical phases of the work are to be undertaken and when a part of the work is to be buried or otherwise rendered such that it can no longer be subjected to reasonable test, examination or inspection.

It is the intent of the regulations and these specifications to provide for materials and workmanship of good quality, properly integrated each part with all others, and of lasting value without undue maintenance effort or expense. In the event of the absence of specifications or regulations for an item of work, those performing such an item of work shall do so according to good standards consistent with accepted good practices.

It is also a requirement that, unless waived by the agency of the Town of Middlefield having jurisdiction, those performing work under these specifications all submit to the appropriate town agency original signed copies of certifications that materials incorporated in the work conform with the specifications.

It is a further requirement that those performing the work furnish, at its conclusion, a statement from a Connecticut Registered Professional Engineer attesting to its compliance with these specifications. This engineer shall be particularly qualified and experienced in the items of work attested to.

In the event of conflict between regulatory documents, the following will be the order of precedence: 1. Zoning and Subdivision Regulations of the Town of Middlefield, 2. Road and Drainage Specifications of the Town of Middlefield, 3. The Standards appended to the said specifications.

1.2 STREET CONSTRUCTION: Streets shall be designed in accordance with the Town of Middlefield Subdivision Regulations, the Town of Middlefield Standards and the following specifications:

1.2.1 Subgrade: All loam, trees and roots shall be removed, scraped and stripped to at least 15 inches below the proposed finish grade of pavement for the full width of the right-of-way. Soft spots, peat and organic material shall be excavated to good bottom and replaced with suitable fill material. Earth fills shall be compacted in six inch layers with approved equipment, floors of cuts shall be compacted similarly prior to further construction thereon. All fill that is placed to an elevation of less than three feet above water table at the time of filling shall consist of rock or free-draining soil.

1.2.2 Subbase: The subbase shall consist of broken rock, crushed stone, gravel, processed gravel, combined broken stone and sand, combined broken stone and screenings or combinations of these materials placed upon the subgrade and compacted by rolling with a ten ton roller and brought to true grade and cross section to support the subsequent courses of the pavement structure. Where the depth of subbase exceeds six inches, it shall be placed in courses not exceeding six inches in compacted thickness.

Broken Rock, crushed stone or gravel shall be of such size that 100% shall pass through a sieve having 5 inch square openings and at least 75% shall be retained on a sieve having 1/2 inch square openings. Filler material shall be sand, stone or gravel generally free from silt or clay particles and of minimum plasticity.

1.2.3 Sand Filled Stone or Processed Gravel Base: This base may be either crushed stone or crushed gravel filled at the site, or shall be processed gravel. When the filler is added at the site, the coarse material shall be spread uniformly on the subbase by spreader or stone box to the depth required for the ultimate compacted thickness. It shall then be compacted with an approved power roller weighing not less than ten tons until the stone is well keyed. Filler of sand or screenings shall then be applied in thin layers and worked into the voids with hand brooms or brooms attached to the roller, or both; water shall be applied from approved equipment delivering a flushing stream. Rolling and watering shall be continued until the voids in the coarse

material are filled and a slight wave of water and filler forms a grout in front of the roller wheels and until surplus water runs off the surface. Brooming may be required during watering and rolling to distribute the filler evenly. Excess filler shall be removed and the finished base course protected from traffic or activities that would prove harmful until covered by the next subsequent base course.

If processed gravel is used, the placing, spreading, rolling, wetting and brooming shall be carried out in the same manner as that specified for sand filled stone. Care shall be taken to avoid segregation of the materials in transporting and placing it on the subbase.

The Coarse Aggregate for sand filled base shall consist of broken stone or crushed gravel consisting of tough, durable fragments of rock of uniform quality and containing no more than 1% crusher dust by weight. It shall not contain more than 8% flat or elongated pieces whose length exceeds 5 times the maximum thickness on sizes retained on a 1-1/8" square opening sieve. Maximum allowable loss on abrasion shall be 40% when tested by the Los Angeles Rattler, A.A.S.H.O Method T-96.

The filler for either sand filled stone or processed gravel base shall be sand, stone or gravel consisting of tough, durable particles containing not more than 3% silt or crusher dust by weight. The portion passing the 100 mesh sieve shall not have sufficient plasticity to permit the performance of the plastic limit test A.A.S.H.O. Method T-90. The gradation for the filler shall be such that 100% shall pass the 5/8 inch sieve and not more than 70% retained on the No. 50 sieve.

Processed gravel base shall conform to the quality requirements for coarse aggregates specified for sand filled base, filler next above, and the combined mixture shall conform to the following gradation requirements:

Square Mesh Sieves	Percent Passing by Weight
Pass 2 1/4"	100
Pass 1-3/4"	95-100
Pass 3/4"	60-75
Pass 1/4"	25-45
Pass #40	10-25
Pass #100	3-12

1.2.4 Plant Mixed Bituminous Base: Plant mixed bituminous base shall be constructed upon sand filled stone or processed gravel base in conformity with the lines, grades, thickness and cross section shown on the appended standards.

The materials shall consist of coarse aggregate, fine aggregate and asphalt cement combined to meet the following composition limits by weight and other characteristics.

Coarse aggregate shall consist of a combination of the following sizes of broken stone conforming to the below listed gradations, -and shall be 65% 1 1/4" and 35% 1/2" stone; or 40% 2", 45% 3/4" and 15% 3/8" stone. With the approval of the agency of jurisdiction, other proportions will be permitted. The void content shall not exceed 45% for any combination and the maximum size of the aggregate shall not exceed two-thirds the depth of the course laid.

Fine aggregate shall be such that all sand will pass the #4 sieve; screenings shall conform to the gradations listed hereinafter.

The mix shall contain not less than 30% of the fine aggregate by weight of the total aggregate; the asphalt content shall be not less than 3.5% nor more than 6% of the total weight of the mixture; the temperature shall be so controlled that the temperature of the asphalt shall not exceed 325oF and that of the aggregate at the drier outlet shall be between 250oF and 325oF; the temperature of the mixture as it is dumped from the mixer shall be between 225oF and 300oF.

All aggregates and bitumen shall conform with the requirements for corresponding materials listed under bituminous concrete surface with respect to physical properties.

Plant requirements, delivery, placing and compaction shall be in conformance with all applicable corresponding specifications under bituminous concrete surface.

Gradation
Percent Passing by Weight

Square Mesh Sieves	2"	1 1/4"	3/4"	1/2"	3/8"	Screen-ings
2 1/2"	100					
2"	95-100					
1 1/2"	35-70	100				
1 1/4"	0-25	90-100				
1"	0-10	35-70	100			
3/4"		0-25	90-100	100		
1/2"		0-5	20-50	90-100	100	
3/8"			0-20	30-50	90-100	100
No. 4			0-5	0-8	0-20	
No. 8				0-3	0-5	60-100
No. 100					0-15	

1.2.5 Bituminous Concrete Surface: This shall consist of bituminous concrete wearing surface constructed upon the plant mixed bituminous base in conformity with the lines, grades, thickness and cross section shown on the appended standards.

The material for this work shall consist of coarse aggregate, fine aggregate, mineral filler if necessary, and asphalt cement, combined to meet the following composition limits by weight and other qualities:

Passing by Weight (Square Mesh Sieve)	Percent
Pass 1"	100
Pass 3/4"	87-100
Pass 1/2"	72-100
Pass 3/8"	60-90
Pass #4	40-60
Pass #10	25-44
Pass #20	17-37
Pass #40	12-31
Pass #80	8-18
Pass #200	2-8
Bitumen, %	5.5-8

The temperature shall be controlled so that the asphalt cement shall not exceed 325oF and the aggregate at the drier shall be between 280oF and 350oF depending on the moisture content of the

aggregate. The temperature of the mixture when dumped from the mixer shall be between 265oF and 325oF.

The asphalt cement shall conform to the requirements of A.A.S.H.O., M-20 penetration grade 85-100.

The coarse aggregate shall consist of clean, tough, durable fragments of broken stone or gravel of uniform quality. It shall contain not more than 1% crusher dust, sand, elongated or soft pieces; it shall be free from mud, dirt, organic or other deleterious substances. When gravel is used, at least 50% shall be crushed. When tested by means of the Los Angeles Rattler A.A.S.H.O. Method T-96. the loss shall not exceed 40%.

Fine aggregate shall consist of sand or a mixture of a minimum of 50% sand and a maximum of 50% stone screenings and shall be composed of clean, tough, rough surfaced and angular grains. Fine aggregate shall be limited to material, 95% of which passes a No.4 square opening sieve and not more than 8% passes a No. 200 sieve. The material shall be free from clay, loam or other harmful substances and the fraction passing the No. 100 sieve shall not have sufficient plasticity to be tested under the plastic limit test A.A.S.H.O. Method T-90.

The gradations listed for the materials combined in the bituminous concrete are acceptable ranges but do not relieve the requirement for a combination with minimum practicable void content.

The materials shall be mixed at a plant acceptable to the agency of jurisdiction of the Town of Middlefield, which plant shall be equipped, maintained and operated in such manner that quality control is acceptable, that uniformity is assured, and that compliance with these requirements may be substantiated. Any authorized officer or agent of the Town of Middlefield shall be granted access to the plant for purposes of examination and inspection.

The mixture shall be transported from the mixing plant to the working site in trucks having tight, clean bodies. Coating bodies with kerosene, fuel oil or gasoline is prohibited. Trucks shall be equipped with covers for the load and these shall be used according to weather requirements. The

mixture shall be delivered with no more than 15% loss of temperature during transport.

The mixture shall be placed only upon clean surfaces and, except for locations not accessible to such equipment, shall be placed with a self-powered paver capable of spreading the material uniformly and of maintaining control of depth within restrictive tolerances. This work shall not be performed in foggy or rainy weather or when the atmospheric temperature is below 40oF in the shade. Contact surfaces of curbs, drainage structures. etc. shall be painted with a thin coat of hot asphalt cement, emulsified asphalt or asphalt cement in naphtha just prior to placing bituminous concrete against them.

After spreading, and when sufficient set has taken place, the material shall be compacted by rolling consisting of initial, intermediate and final rolling. Initial rolling shall be with a minimum 10 ton tandem or three wheel steel roller. Intermediate rolling shall be with a self-propelled pneumatic tire roller with a uniform contact pressure from 60 to 90 pounds per square inch. Final rolling shall be a minimum ten ton steel wheel tandem roller. The officer or agency of the Town of Middlefield may, in cases of minor roadway sections, permit all rolling with a minimum 10 ton tandem steel wheel roller where anticipated traffic over the pavement may be expected to be relatively light. All places inaccessible to rollers shall be compacted with tamps. During rolling operations, ridges or depressions shall be corrected so as to achieve a smooth even surface.

If the sequence of paving is such that the bituminous concrete has cooled where other bituminous concrete is to be abutted, the cooled concrete shall be heated with an approved heater device to sufficient temperature to assure bond but not overheated so as to damage the material. The heating device shall be of the type that does not create a flame at the surface of the joint.

1.2.6 Slopes: Cut or fill sections beyond the right-of-way shall not exceed 1 on 2 except in rock cuts. Under particular soil conditions, however, slopes shall be made flatter for purposes of stability. All earth surfaces of slopes, and areas that have been disturbed shall be covered with a minimum of 4 inches of topsoil and seeded or planted to prevent

erosion and enhance the aesthetics of the area. For the assurance of proper sight distances, mounds or embankments shall be lowered at intersections. In the event these requirements involve slope rights, they shall be acquired by those performing the work.

1.2.7 Curbs: Bituminous Concrete Curbs shall be constructed, except as hereinafter provided, along all newly constructed streets in accordance with the standards of the Town of Middlefield. This shall consist of machine extruded bituminous curbing on pavement, this to be in general conformance with the material and method requirements for bituminous concrete surface. The gradation requirements, however, shall conform to the following:

Square Mesh Sieve	Percent Passing
Pass 1/2"	100
Pass 3/8"	85-100
Pass #4	62-87
Pass #10	38-63
Pass #20	26-46
Pass #40	15-35
Pass #80	8-18
Pass #200	4-9
Bitumen %	6-9

Concrete curbing shall be used instead of bituminous curbing at commercial or industrial locations. This shall consist of precast or cast-in-place concrete curbing conforming to the standards of the Town of Middlefield and shall be 1:2:3 Concrete, nominal maximum size coarse aggregate 3/4" and, by interground or admixture, shall have an entrained air content of not less than 5% nor more than 7%.

1.2.8 Sidewalks: Sidewalks shall be constructed of portland cement concrete on a gravel, processed gravel or sand filled base conforming substantially with 1.2.3 of these specifications; also, to the lines, dimensions and details in the standards of the Town of Middlefield. The concrete shall be the same, including the air entrainment, specified next before under 1.2.7 for concrete curbs, shall have joints at 12 foot intervals and equally spaced intermediate tooled transverse joints at 1/3 points in each slab.

1.3 DRAINAGE: Drainage shall be installed in accordance with the following requirements:

1.3.1 Pipe and Minor Structures: Sufficient pipe and drainage structures shall be installed to carry existing water courses and to drain expected or proposed roads and other developed areas which may be expected reasonably to drain to, over or from the proposed construction, at the time of the intended work or as much as twenty years thereafter, this last consideration to be as determined by the agent or commission of jurisdiction of the Town of Middlefield. This shall be done in accordance with the requirements for avoidance of soil erosion, proper regard for public health, public comfort and full consideration of public safety. Discharge over public or private lands shall be such as to not compromise the intent of land use appearing in other regulatory documents and shall, in no way, cause undue future maintenance to be thrust upon the Town of Middlefield or agencies thereof.

All drainage pipe shall be of such diameter as will be sufficient to carry storm water and sub-surface water from the proposed work when completed, but in no case less than 15" for storm drains.

For the purposes of determining the quantity of surface runoff the following factors may be used as minimum:

Quantity of Flow:

Q = Area in Acres (c) (R)

Rainfall Formula:

R = 170 divided by t + 23
(t = time of concentration)

Runoff Coefficient:

For less concentrated residential areas 0.25
For normally concentrated residential areas 0.35
For other than residential areas for business or commerce 0.65 to 0.95 according to circumstances

Sizing of pipes shall be in accordance with the foregoing; and, unless otherwise authorized, the pipe shall be Class IV Reinforced Concrete Pipe,

A.A.S.H.O. M-170. By permission or direction of the agency of jurisdiction, Bituminous Coated Corrugated Metal Pipe or Corrugated Aluminum Pipe may be substituted for Class IV Reinforced Concrete Pipe where grades, foundation conditions or other considerations make the use of concrete pipe impractical.

Pipe placed in wet areas or over rock shall be bedded in gravel or coarse sand.

Manholes complying with the standards of the Town of Middlefield shall be installed at each change of slope or alignment of pipe connecting thereto, at all junction points and at intervals of approximately 350 feet in continuous runs.

Catch Basins complying with the standards of the Town of Middlefield shall be installed so that surface water will be intercepted at intervals not exceeding 350 feet, so as to intercept water before it may reach intersections; and, in the case of grades over 5% or under 0.5% on the surface of the street, shall be spaced more closely.

Catch Basins for open areas, such as cul-de-sacs, shall be of a type without curb provisions, all in accordance with the standards of the Town of Middlefield.

Underdrains, or combination storm sewers and underdrains, shall be installed as shown on the standards where ground water is less than 3 feet below sand filled stone or processed gravel base and elsewhere as required to intercept water that could have harmful effect on any area. Underdrain pipe 8" or less in diameter shall be perforated asphalt coated corrugated metal, A.A.S.H.O. M-136. Slotted reinforced concrete pipe shall be used for combination storm sewers and underdrains unless otherwise permitted or directed due to gradient, settlement, or other conditions as determine by the agency of jurisdiction.

Ends of culverts shall be fitted with reinforced concrete flared ends except where culvert inlets or outlets are away from the street lines, in which case the agency of jurisdiction may permit, upon request, the use of slope paved inlets or outlets. Open or paved ditches shall be provided according to needs.

All drainage installations shall be made, as far as possible, during initial phases of the work so as to assure reasonable dryness during construction operations. All excavation and backfill operations shall be such as to assure stable construction, all joints at structures and in concrete pipe runs shall be sealed at least mortar tight and all backfills shall be of selected materials if that at the working location is not satisfactory.

1.3.2 Special Structures: Bridges, box culverts, retaining walls, deep manholes and other special structures shall be designed and constructed in accordance with good engineering practice, all subject to the approval of the agency of jurisdiction. Details of all special structures shall be submitted for review and approval of the agency of jurisdiction; such approval, however, will not relieve those performing the work of the responsibility for the adequacy, safety or success of the work concerned.

1.4 TRAFFIC AIDS AND REGULATORY SIGNING: In connection with any street construction, those performing the work shall furnish and install all required stop signs, dead end signs, caution signs and all necessary aids and regulatory devices, these to be satisfactory to the agency of jurisdiction and in conformance with the "Manual on Uniform Traffic Control Devices for Streets and Highways" prepared by the National Joint Committee on Uniform Traffic Control Devices.

1.5 STREET LIGHTING: When so ordered, those constructing new streets will be held responsible for illuminating provisions adequate for type of neighborhood in accordance with the procedures established by the utility. Any and all costs shall be borne by those performing the work until the street has been accepted by the Town of Middlefield.

1.6 MONUMENTS: All new streets shall be monumented accurately and sufficiently complete to allow for the ready determination of points along all highway lines. In general, monuments shall be placed at all points of tangency and points of curvature and elsewhere as required to permit seeing from one monument on a line to another on the same line.

1.7 STREET SIGNS: Street signs bearing street names shall be furnished and erected at all intersections resulting from the construction. These shall be oriented with, and bearing the names of the intersecting streets, two signs on one post for the intersections, the same on diagonal corners for cross intersections. Where the orientation of intersecting streets

is such that additional signs are needed to be understood readily, they shall be provided.

Street signs shall be baked enamel, finish on metal, complete with hardware and fittings, essentially tamper proof and mounted on minimum 2" I.D. galvanized pipe. Lettering, background, height of sign and appearance shall be similar to signs of the latest type installed by the Town of Middlefield.

1.8 LANDSCAPING: Except for cul-de-sacs, planting of anything but grass between the pavement and the highway lines will not be permitted. Any trees planted outside the highway lines shall be so positioned as to avoid conflict with utility lines. Species to be planted will be subject to the approval of the agency of jurisdiction and, when near sidewalks, shall not include evergreens or low branching trees. Diseased trees or those characteristically the cause of damage to sewers and drains shall not be planted. Existing trees along new streets conforming to the foregoing requirements may remain in place. Especially prohibited, however, is the planting, or allowing to remain in place, trees that would unduly restrict sight lines for traffic.

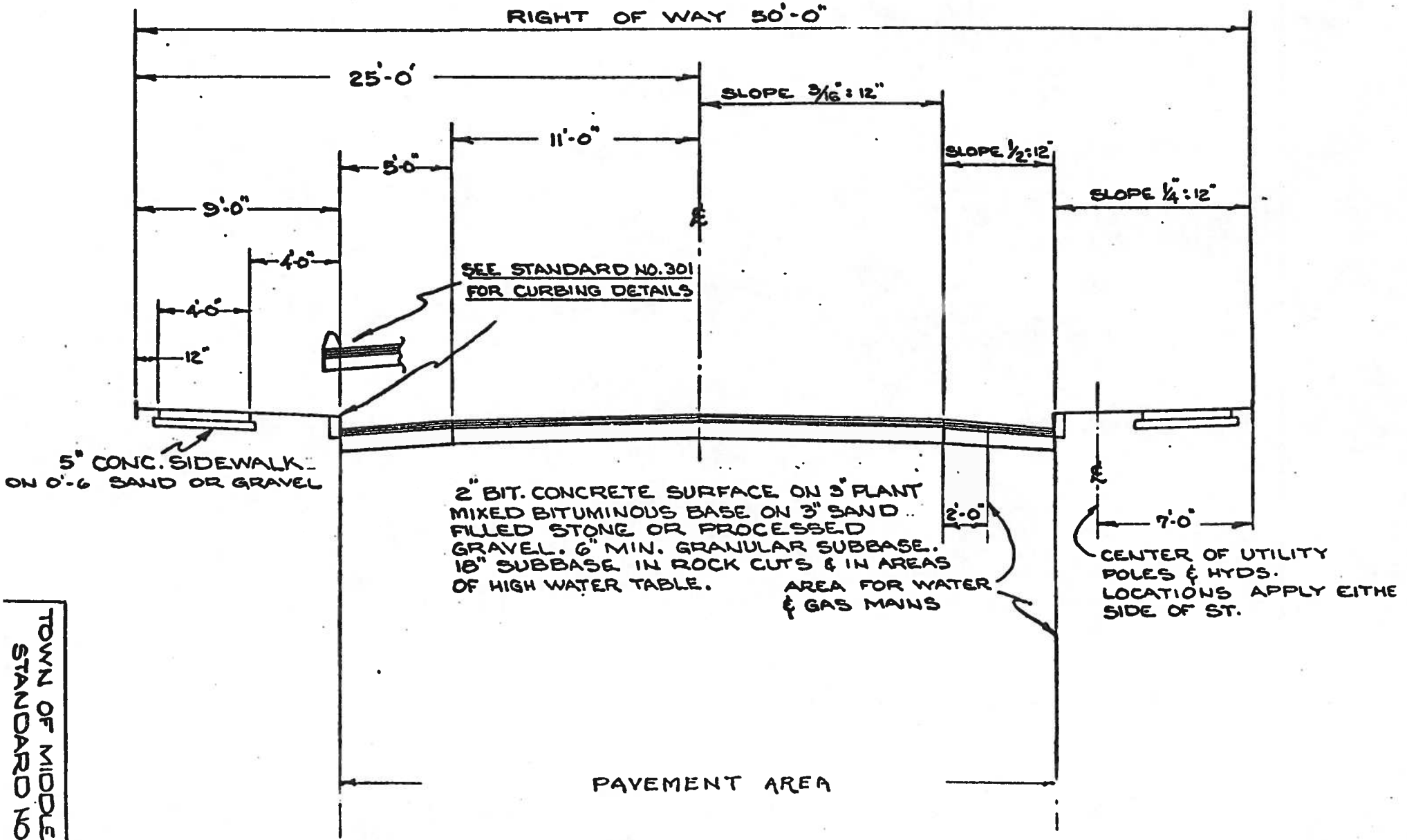
Cul-de-sacs, in all cases, shall be planted with low growing vegetation that will permit full vision at all points and so planted as to void any requirement for mowing, weeding or other forms of maintenance.

Loaming and Seeding, sufficient to establish a good stand of lawn grass, shall be performed for slopes and for those unpaved areas within the highway lines flanking the sidewalks.

* * * * *

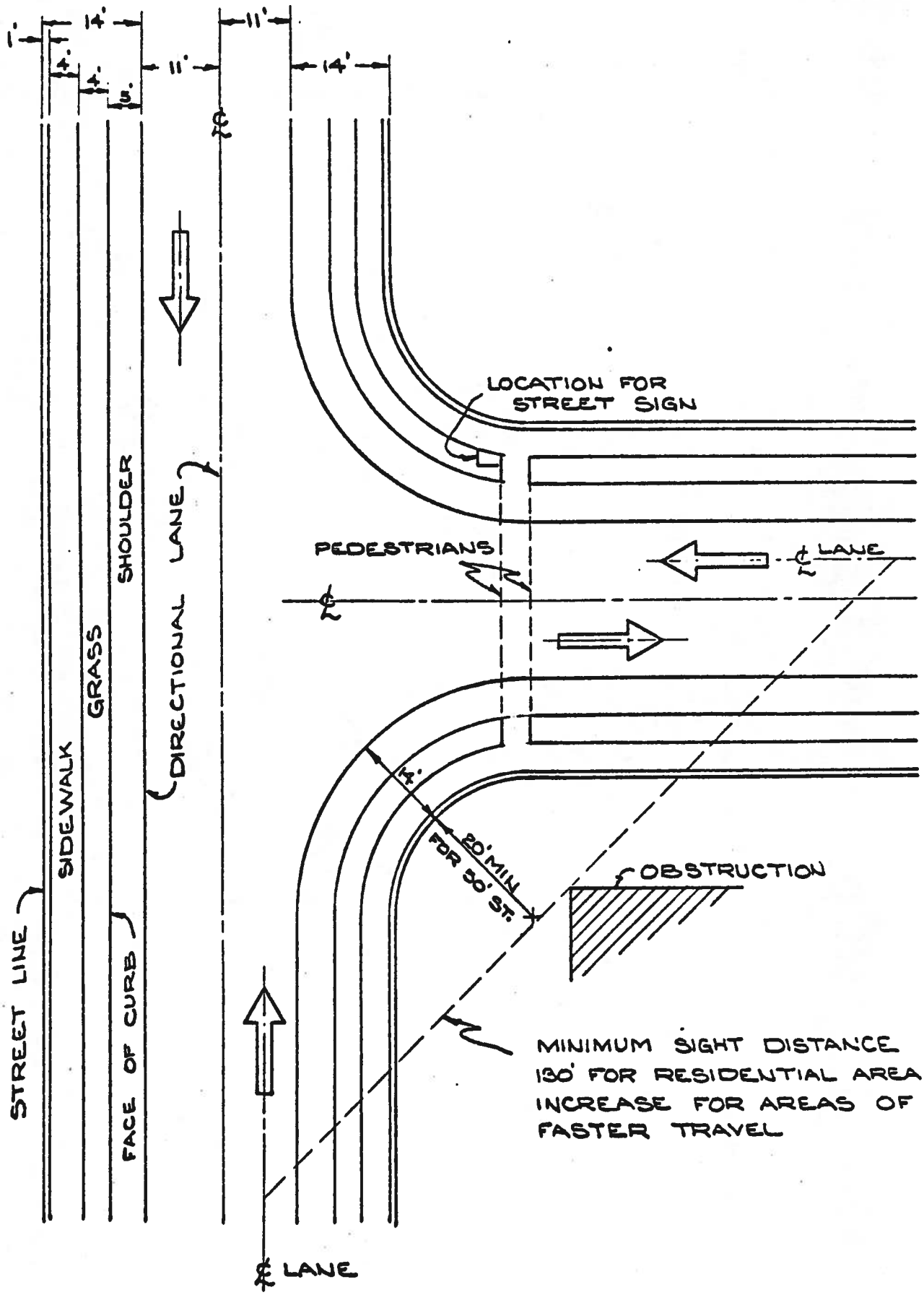
The foregoing Road and Drainage Specifications of the Town of Middlefield shall become effective February 13, 1964.

Prepared November 1963
by
Thomas H. Sellew, Jr.
Civil Engineer and Land Surveyor
Cromwell, Connecticut
(P.E. & L.S. #1832)



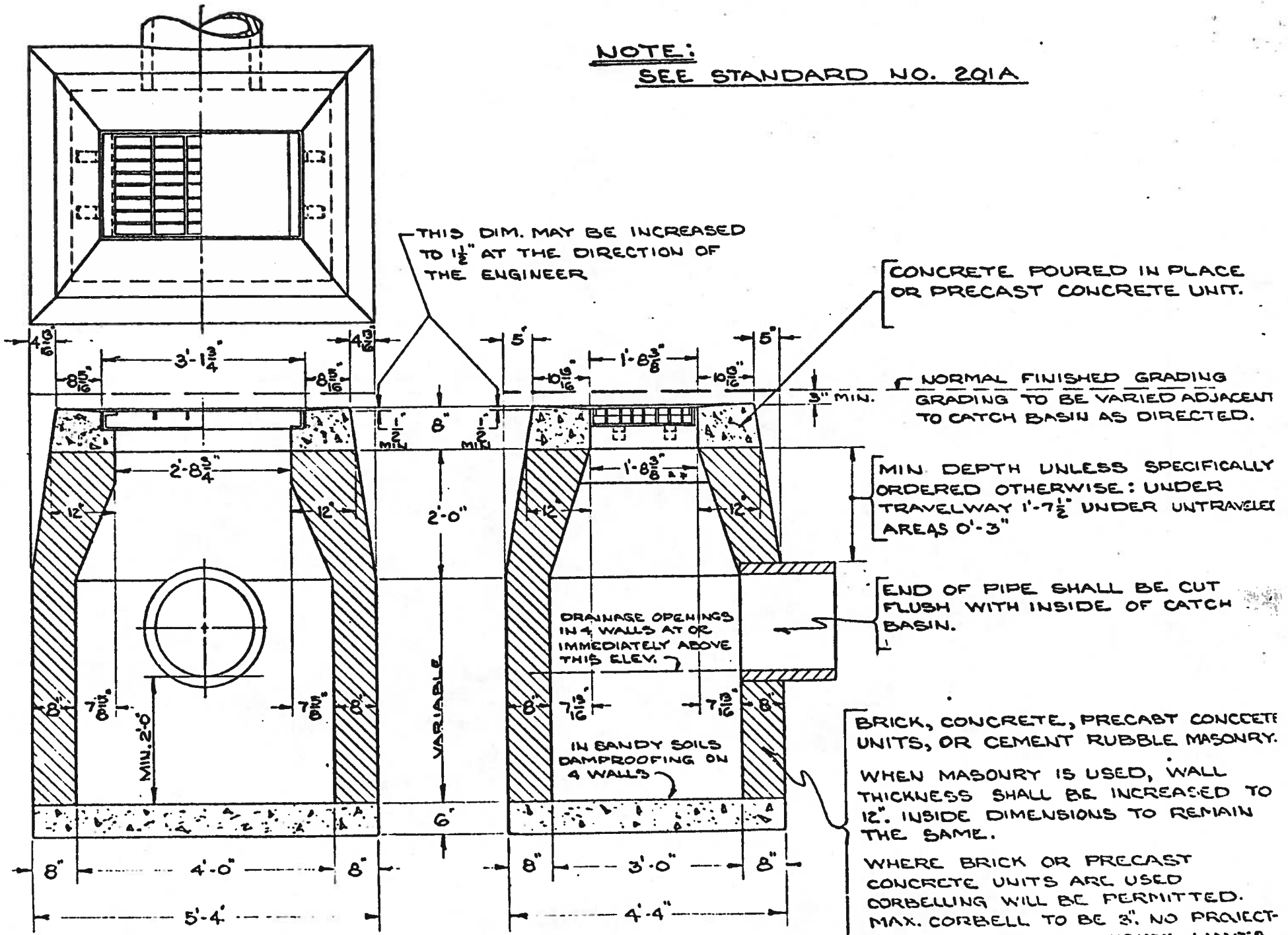
CROSS SECTION FOR STREET

TOWN OF MIDDLEFIELD
STANDARD NO. 101



STREET INTERSECTION

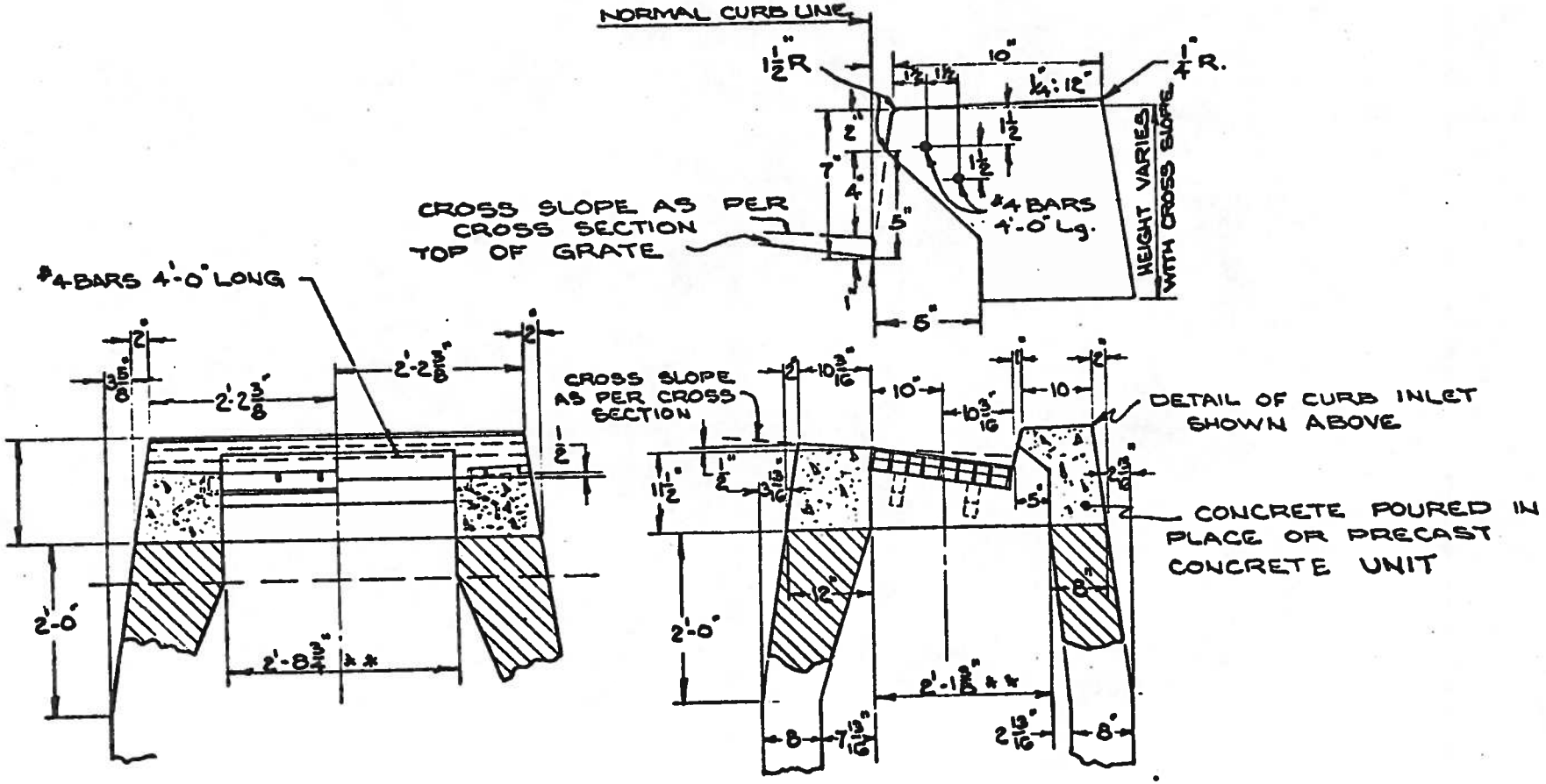
TOWN OF MIDDLEFIELD
STANDARD NO. 102



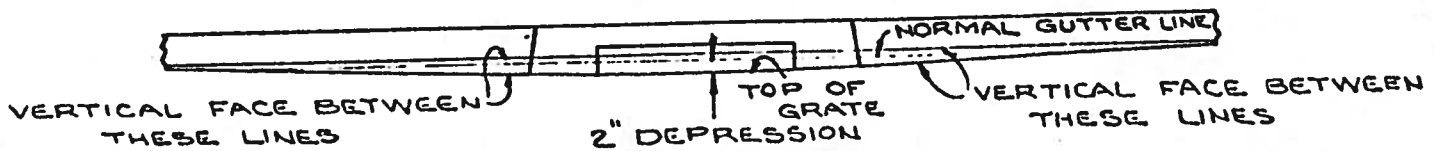
CATCH BASIN

TOWN OF MIDDLEFIELD
STANDARD NO. 201

DETAIL OF CURB INLET
TO BE USED WHEN CURB INLET
IS CONSTRUCTED IN A LINE OF CURBING



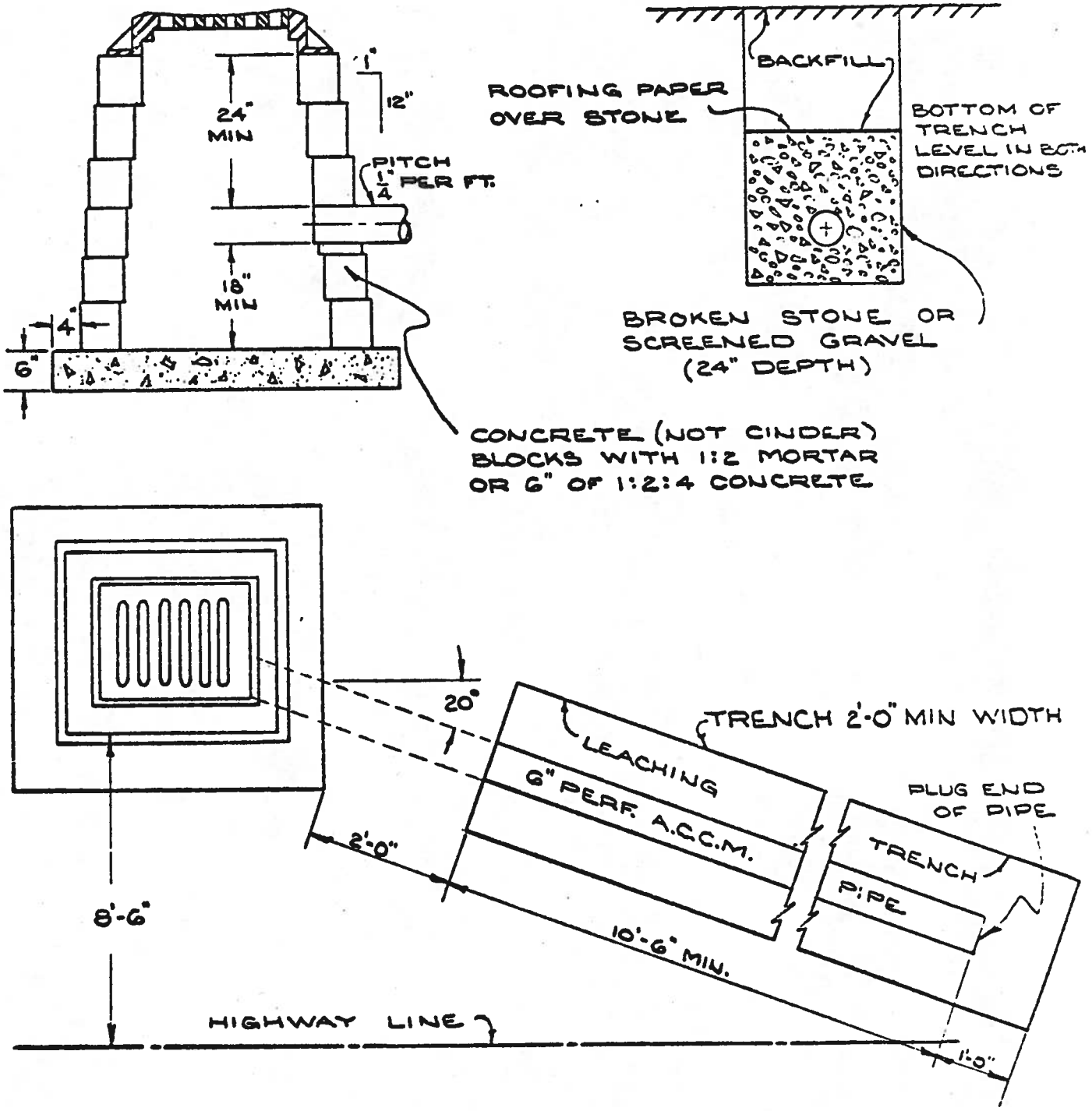
CATCH BASIN TOP FOR GUTTER INSTALLATION



DETAIL OF DEPRESSED GUTTER STRIP
FOR CATCH BASINS IN A LINE OF CURBING

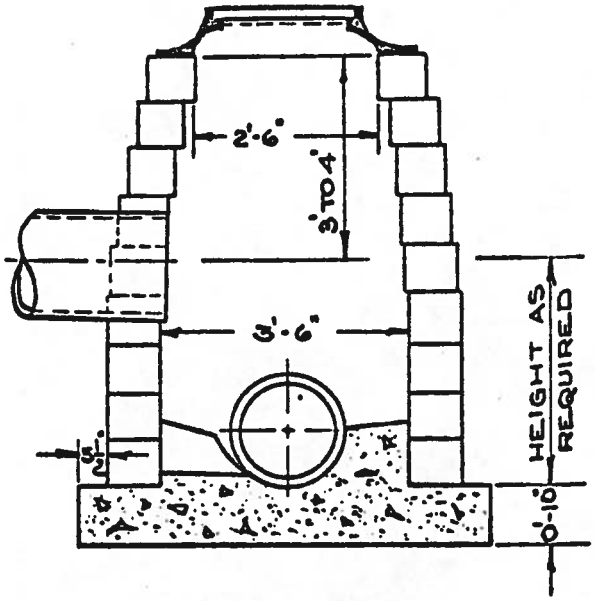
TOWN OF MIDDLEFIELD
STANDARD NO 201A

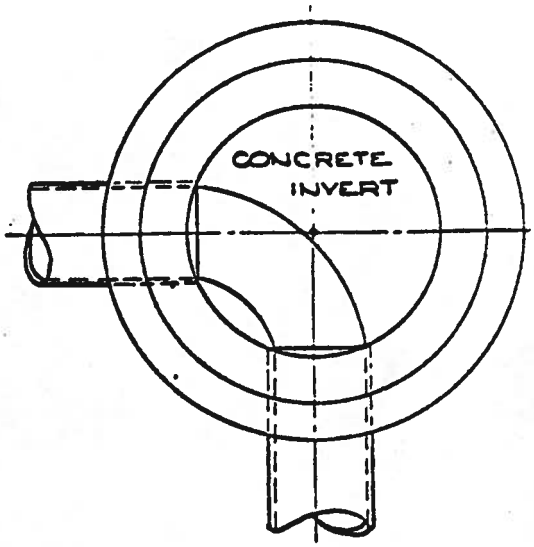
STANDARD MANUFACTURE GRAY IRON
OR CAST STEEL FRAME & GRATE - MIN
GRATE SIZE 20" x 24"



LEACHING BASIN

TOWN OF MIDDLEFIELD
STANDARD NO. 202





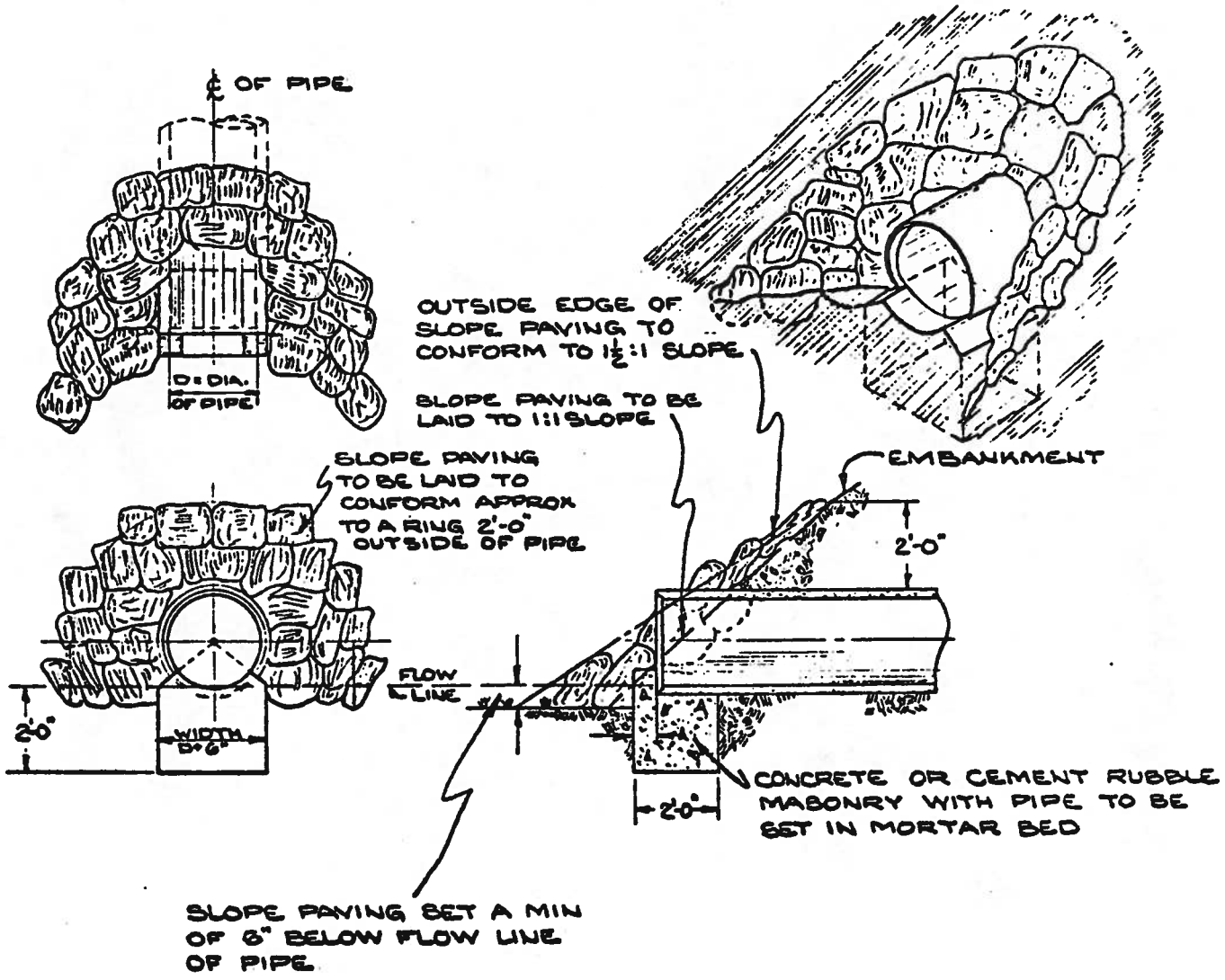
FRAME & COVER OF STANDARD MANUFACTURE, GRAY IRON OR CAST STEEL.

WALLS 8½" BRICK, 6" PRECAST UNITS OR 6" OF 1:2:4 CONCRETE. IF BRICK OR PRECAST UNITS ARE USED THEY SHALL BE LAID IN 1:2 CEMENT SAND MORTAR & OUTSIDE SHALL BE PLASTERED WITH ½" THICKNESS OF SAME MORTAR.

MAXIMUM JOINT ¼" AT INSIDE OF MANHOLE FOR BRICK OR PRECAST UNITS.

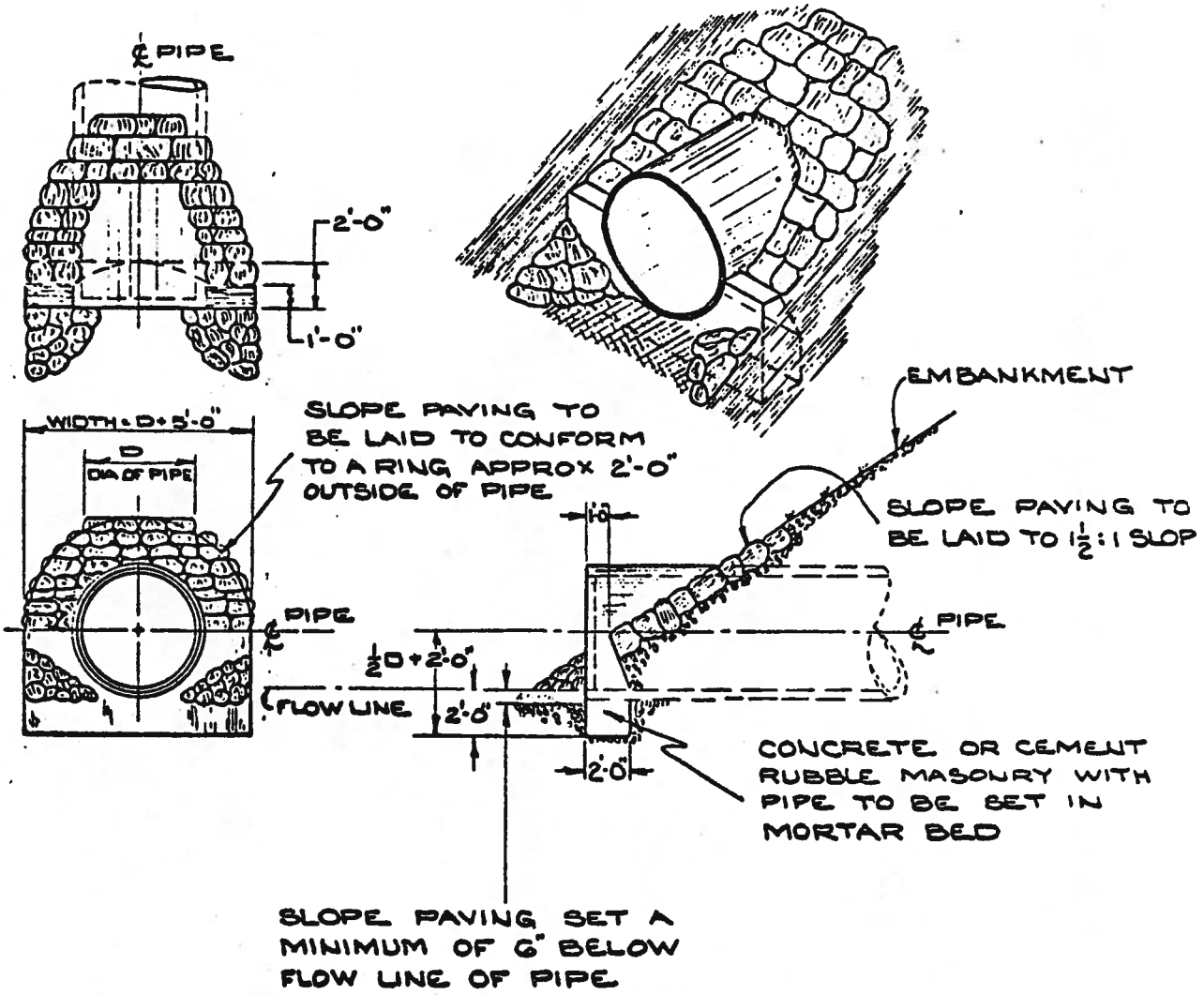
"MANHOLE"

TOWN OF MIDDLEFIELD
STANDARD NO. 203



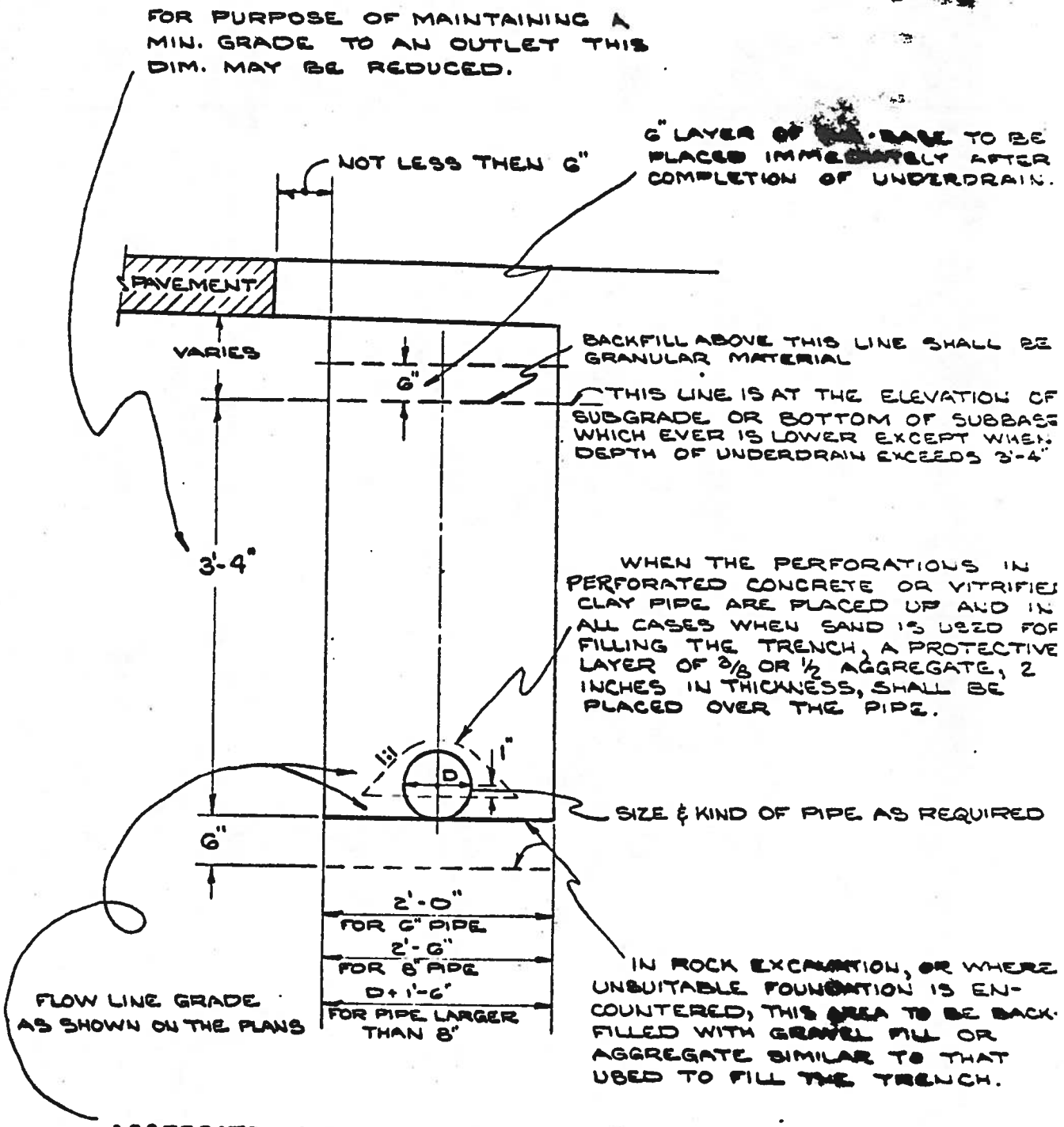
FOOTING & SLOPE PAVING FOR PIPES 15" TO 30" DIAMETER

TOWN OF MIDDLEFIELD
STANDARD NO. 204



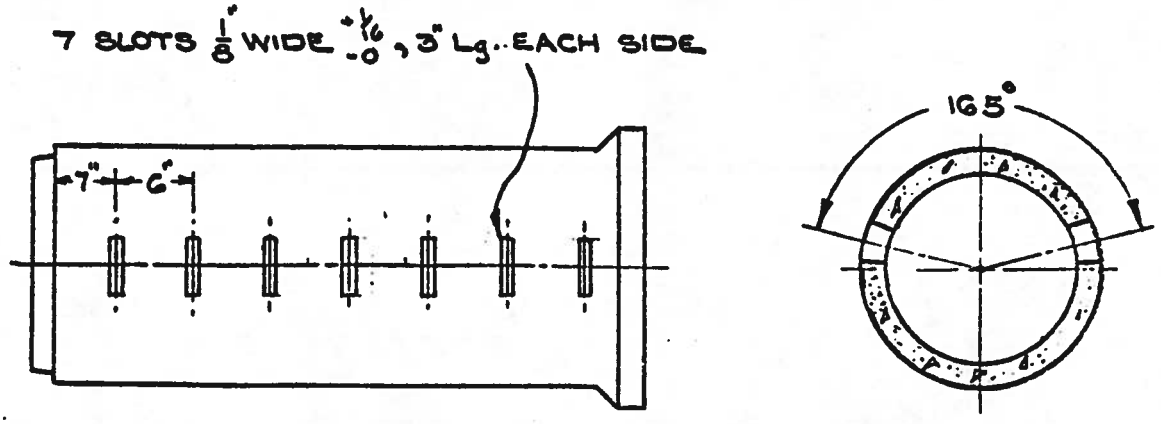
FOOTING & SLOPE PAVING FOR PIPES 36" TO 72" DIAMETER

TOWN OF MIDDLEFIE
STANDARD NO. 20



UNDERDRAIN

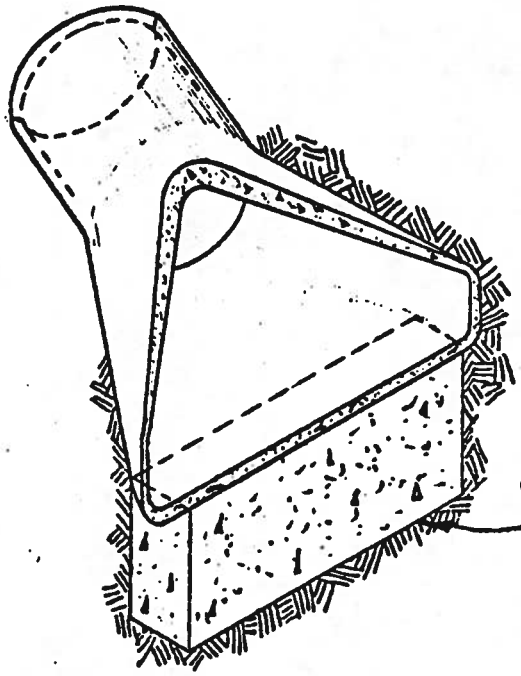
TOWN OF MIDDLEFIELD
STANDARD NO. 206



BACKFILL WITH WASHED SAND TO LIMITS CORRESPONDING TO UNDERDRAIN, STD. NO. 206

SLOTTED REINFORCED CONCRETE PIPE

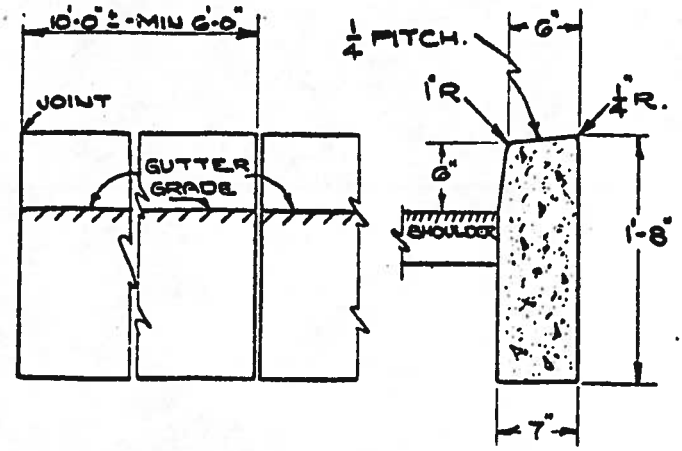
EQUAL TO CLASS IV R.C. PIPE



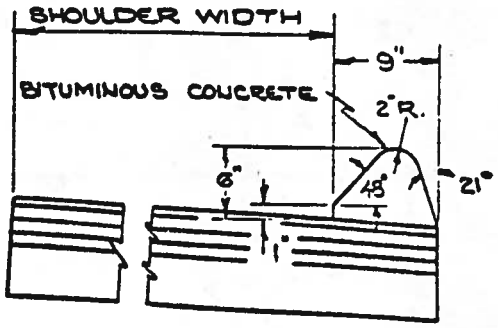
4000# CONCRETE - REINFORCING STEEL. AREA TO EQUAL THAT IN CONNECTING PIPE.

FLARED END FOR CULVERTS

TOWN OF MIDDLEFIELD
STANDARD NO. 207

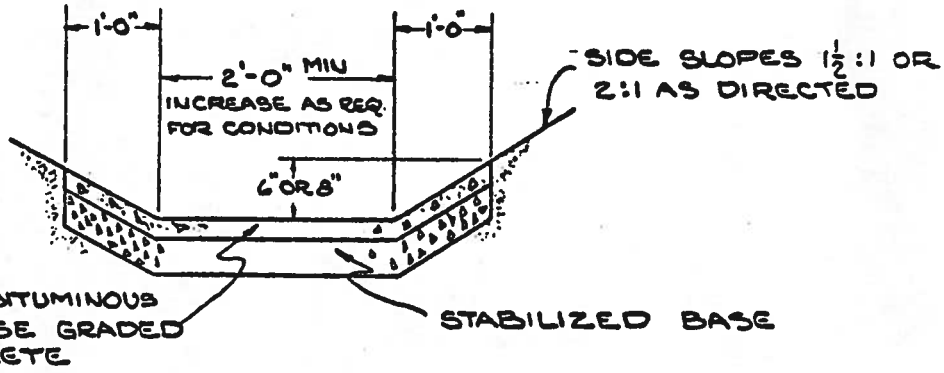


CEMENT CONCRETE CURB

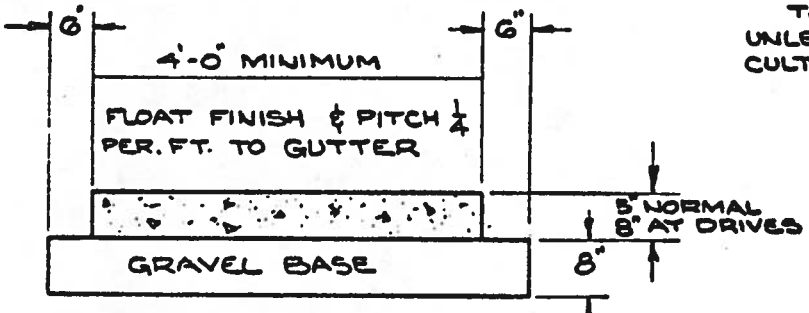


TO BE PLACED UPON BITUMINOUS SURFACES MINOR CHANGES IN CROSS SECTION MAY BE PERMITTED TO ALLOW USE OF AVAILABLE EXTRUDING EQUIPMENT

BITUMINOUS CONCRETE CURB



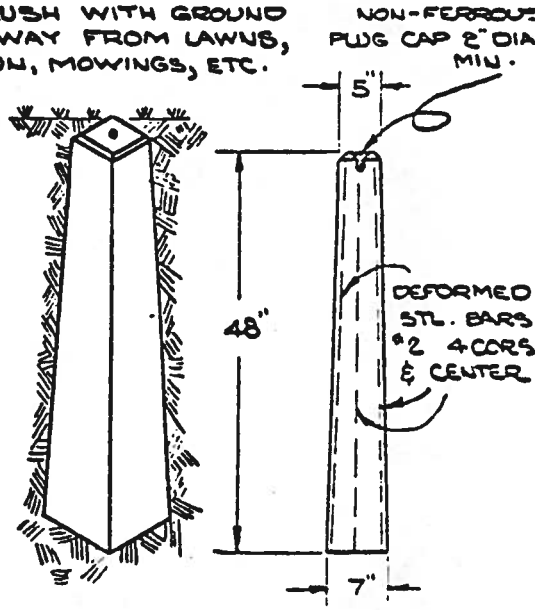
PAVED DITCH



TRANSVERSE JOINT AT APPROX. 12' SPACING WITH UNIFORMLY SPACED TRANSVERSE TOOLED GROVES TO DELINEATE ABOUT 4' BLOCKS. EDGING TOOL TO BE USED ALONG BOTH SIDES.

CEMENT CONC. SIDEWALK

TOP FLUSH WITH GROUND UNLESS AWAY FROM LAWNS, CULTIVATION, MOWINGS, ETC.



BOUNDARY MARKERS
(CEMENT CONCRETE)

MISCELLANEOUS DETAILS

TOWN OF MIDDLEFIELD
STANDARD NO. 301