

STONE FILLING SPECIFICATIONS

MATERIALS
 Stone filling shall consist of well graded stone placed as protective material on streambanks, in channels and elsewhere as required. This stone is to be of a hard durable character. Dimensions shall be such that stone fill shall consist of stones placed as nearly as practicable in the form of right rectangular prisms. At least fifty percent by weight of stones shall weigh an average of 20 pounds each, and the remainder of the stones shall weigh from 10 to 20 pounds each. The gradation of material furnished for use as stone filling will be accepted or rejected based on a visual examination of the material by the engineer.

BEDDING MATERIAL
 Bedding material shall be composed of crushed stone, crushed air-cooled blast furnace slag, or gravel, free of soft, non-durable particles, organic material, and thin or elongated particles in excess of those approved by the Engineer.

Bedding material shall meet the following gradation requirements:

Sieve Designation	Percent by Weight Passing
4 in.	100
1 1/2 in.	15 to 60
3/4 in.	0 to 25
No. 40	0 to 10

CONSTRUCTION DETAILS

The exposed surface on which back or channel protection is to be placed shall be free of brush, trees, stumps, and other objectionable material and shall be graded to a smooth surface. All soft or spongy material shall be removed to the depth shown on the plan or as directed by the Engineer and replaced with approved material.

Stone filling shall be placed in a manner that will produce a reasonably well-graded mass of stone with smaller stone fragments filling the space between the larger stones, so as to result in a minimum permeable percentage of voids. The final section of stone filling shall be in conformity with the lines, grades and thicknesses shown on the plan. Stone filling used for back or channel protection shall be placed to the full course thickness in one operation, unless otherwise directed by the Engineer and in such a manner that the underlying material will not be disturbed or worked into the layer of stone filling. Placement of stone upon finished bedding material shall be carefully controlled to avoid disruption and damage to the layer of bedding material. The stone shall be so placed and distributed that there will be no pockets of uniform size sections.

The desired distribution of the various sizes of stone throughout the mass shall be obtained by selective loading of the material at the various or other corners by controlled dumping of successive loads during final placing or by other methods of placement which will produce the specified results. Rearranging of individual stones by mechanical equipment or by hand shall be required to the extent necessary to secure the specified results.

Stone filling shall be placed on bedding material. The bedding material shall be placed on the prepared area to the full specified thickness of each layer in one operation, using methods which will not cause separation of particles either. Consolidation of bedding material by natural soils or other materials shall be prevented at all times. Bedding material that becomes contaminated shall be removed and replaced with uncontaminated bedding material.

NOTE: SEWER LINES ARE TO BE INSTALLED UNDER THE SUPERVISION OF A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER. ENGINEER SHALL SUBMIT A CERTIFICATE STATING THAT THE CONSTRUCTED FACILITIES HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS. CERTIFICATION MUST BE RECEIVED BY THE ALBANY COUNTY HEALTH DEPARTMENT WITHIN SIXTY (60) DAYS FROM THE COMPLETION OF CONSTRUCTION.

NOTE: WATER QUALITY-TYPE PIPE MATERIAL (D.I.P. OR PVC SDR 26) MUST BE UTILIZED FOR SANITARY AND STORM SEWERS IN AREAS WHERE A TEN FOOT HORIZONTAL OR 18" VERTICAL SEPARATION DISTANCE FROM WATER MAINS CANNOT BE MAINTAINED.

NOTE: ALL WATER MAINS ARE TO BE INSTALLED, DISINFECTED, AND TESTED IN ACCORDANCE WITH AWWA STANDARD C601 OR OTHER METHOD ACCEPTABLE TO THE ALBANY COUNTY HEALTH DEPARTMENT.

NOTES
 ALL CONSTRUCTION DISTURBANCES ON STATE OR PRIVATE LAND TO BE RESTORED BY CONTRACTOR

- GRADE OF GRAVITY SEWERS ARE CALCULATED BY THE FOLLOWING CRITERIA:
1. LENGTH OF PIPE RUN IS FROM CENTERLINE OF RESPECTIVE MANHOLES.
 2. PERCENT GRADE IS CALCULATED FROM CENTERLINE TO CENTERLINE OF RESPECTIVE MANHOLES.

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UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DOCUMENT IS A VIOLATION OF SECTION 2809 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW

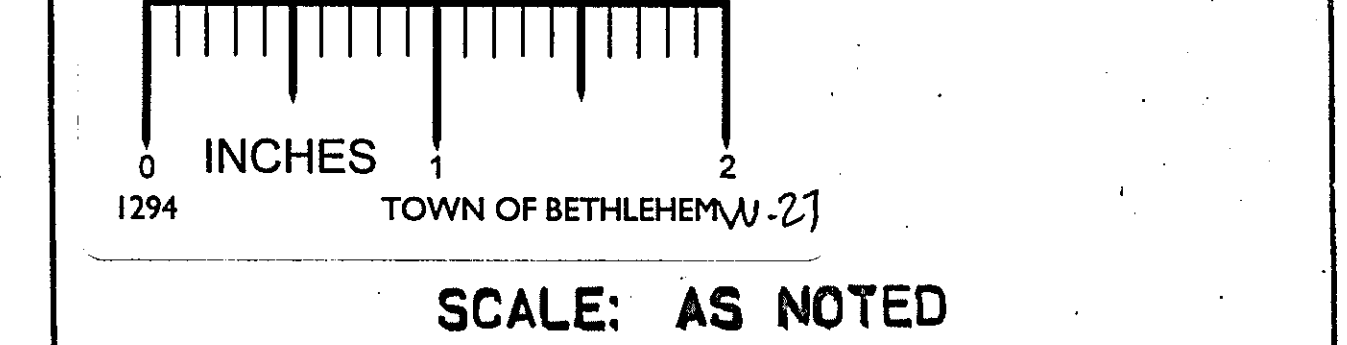
REVISIONS

DATE	BY	DESCRIPTION	SYMBOL
3/12/90	JB	FINAL REVISIONS	NONE
4/19/90	JB	DOH EDITS	NONE

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PROJ. ENG'R: JFB
 DRAWN BY: HLW
 ASSEMBLED BY: EJS
 CHECKED BY: JKF

REF. NO. 238645.020

SHEET TITLE: PROFILES- STORM SEWER OUTFALLS

DATE: JANUARY 1987 SHEET 20 OF 26

