

engineers planners surveyors



1230 belleview drive
lawrenceburg, in 47025
(812) 537-9064
fax (812) 537-9505

May 12, 1998

Mr. Greg Wilkens
Butler County Engineers Office
1921 Fairgrove Avenue
Hamilton, Ohio 45011

RE: Chesterwood retirement community - Phase II Site Plan

Dear Greg:

At the request of Jeff Wright, with Union Township, we are submitting a set of prints on the above-referenced project for review. If you have any questions, you may contact us at the above-referenced number.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark A. Rosenberger'.

Mark A. Rosenberger
Manager

cc: Dixon
File

Designed By: CHK
 Reviewed By:
 Date: 5-5-78
 Sheet:
 Job # 95-79

FORMULAE USED
 $Q_c = AC * I$ (required)
 $V_p = (1.486 / n) * R^{2/3} * S^{1/2}$
 $Q_c = A_p * V_p$
 $R = (\text{Pipe Dia.} / 4)$

STORM SEWER CALCULATIONS

AYER-BECKER ENGINEERS
 30 BELLEVIEW DRIVE
 LAWRENCEBURG, INDIANA 47025

LOCATION		TOPOGRAPHY				TIME				DESIGN			PIPE		REMARKS					
From	To	Area Number	Acres	"C" Value	"AC" for Area	"AC" Accumulate	To Inlet "T" (minutes)	In Pipe "Tp" (minutes)	Concentration "Tm" (minutes)	10 Intensity "I" (# Year Storm Sewer)	"Q" Required (c.f.s.)	Pipe Size (Inches)	"n" Value	Slope in %	Velocity (ft. / sec)	"Q" Provided (c.f.s.)	Length of Pipe (feet)	In Pipe "Tp" (minutes)	Inlet Invert	Outlet Invert
		0.60	0.95	0.51	0.51	0.51	10	-	10	5.15	2.63	12	0.015	0.80	3.51	2.76	125	0.6		
		0.03	0.50	0.02	0.53	0.53	10	0.6	10.6	5.06	2.68	12	0.015	0.80	3.51	2.76	14	0.7		
		0.28	0.85	0.24	0.24	0.24	10	-	10	5.15	1.24	12	0.015	0.53	2.86	2.25	114	0.7		
		0.20	0.85	0.17	0.41	0.41	10	0.7	10.7	5.04	1.07	12	0.015	0.53	2.86	2.25	70	0.7		
		0.43	0.85	0.37	0.78	0.78	10.7	0.7	10.8	5.03	3.92	15	0.015	0.53	3.32	4.07	52	0.3		
		0.75	0.85	0.21	0.21	0.21	10	-	10	5.15	1.08	12	0.015	0.50	2.78	2.18	95.2	0.7		
		0.79	0.85	0.67	0.88	0.88	10	0.7	10.7	5.04	4.43	12	0.015	0.85	4.41	5.19	112	0.6		
		0.96	0.50	0.48	0.48	0.48	15	-	15	4.47	2.15	12	0.015	0.50	2.78	2.18	103	0.6		
		0.19	0.85	0.17	1.57	1.57	15	0.6	15.6	4.40	6.91	18	0.015	1.05	5.28	9.33	165.7	0.6		
		1.47	0.85	1.25	2.78	2.78	15.6	0.6	16.2	4.34	12.07	24	0.015	0.50	4.41	13.97	177	0.3		
		0.37	0.85	0.31	0.31	0.31	10	-	10	5.15	1.60	12	0.015	0.50	2.78	2.18	58'	0.3		

DATE MAY 1992

BY CAR

CK'D. _____

BAYER & BECKER ENGINEERS
CIVIL ENGINEERS • SURVEYORS • PLANNERS

PROJECT 95-79

CHESTERWOOD PHASE TWO

PAGE NUMBER A.

SUBJECT 100 YEAR FLOOD ROUTE ALONG EAST SIDE OF BUILDING (IN BETWEEN BUILDING AND EX. MOUND)

@ INLET ALONG EAST PROPERTY LINE:

$$A = 0.96 \text{ ACRES}$$

$$C = 0.5$$

$$T_c = 15 \text{ MINUTES} \Rightarrow I_{100} = \frac{300}{T_c + 31}$$

$$I_{100} = \frac{300}{15 + 31}$$

$$I_{100} = 6.52$$

$$Q_{100} = C I_{100} A$$

$$Q_{100} = 0.5 \times 6.52 \times 0.96$$

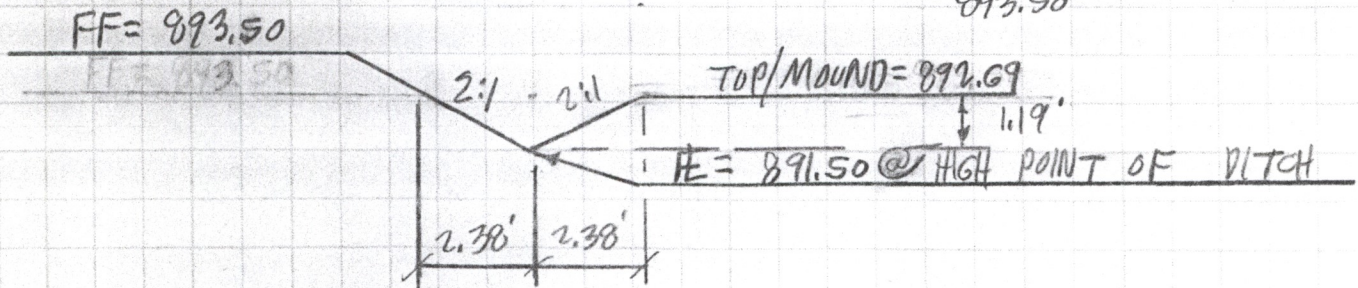
$$Q_{100} = 3.13 \text{ CFS}$$

Slope in prop. ditch in between Ex. Mounding Screen and Prop. Building along East Property Line: $(891.50 - 890.19) \div 192' = 0.68\%$

Assume Worst-Case Ditch:

No Bottom, 2:1 side slopes At Elev. 891.50 ;

NOTE: WATER WILL SPILL OVER MOUND BEFORE IT REACHES 893.50



DATE MAY 1978

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PROJECT 95-79
CHESTERWOOD PHASE TWO

PAGE NUMBER 8.

SUBJECT 100 YEAR FLOOD ROUTE ALONG EAST SIDE OF BUILDING (IN BETWEEN BUILDING AND EX. MOUND)

$$Q = \left(\frac{1.486}{0.04} \right) (2.83) \left(\frac{2.83}{5.32} \right)^{2/3} (0.0069)^{1/2}$$

$$Q = 5.69 \text{ CFS} > 3.13 \text{ CFS}$$

NOTE : THE 110' OF 12" @ 0.50% UNDER THE EAST SIDE OF THE BUILDING WILL PROVIDE AN OUTLET FOR THE COURTYARD DRAINAGE IF THE 165' OF 18" @ 1.05% IS BLOCKED THE FLOW WILL EXIT THROUGH THE 110' OF 12" @ 0.50% AND FLOW DOWN THE DITCH ALONG THE EAST PROPERTY LINE BEFORE IT REACHES ELEV. 893.50 IN THE COURTYARDS.

DATE MAY 1998BY CAR

CK'D. _____

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CIVIL ENGINEERS • SURVEYORS • PLANNERS

PROJECT 95-79CHESTERWOOD PHASE TWOPAGE NUMBER C.SUBJECT 100 YEAR FLOOD ROUTE ALONG EAST SIDE OF BUILDING (IN BETWEEN BUILDING AND EX. MOUND)

ASSUME ENTIRE EAST HALF OF BUILDING, INCLUDING COURTYARDS, IS GOING TO THIS DITCH ALSO.

$$\text{TOTAL ADDITIONAL DRAINAGE AREA} = (0.25 \text{ AC.} + 0.79 \text{ AC.} + 0.19 \text{ AC.} + 0.16 \text{ AC.} + 0.13 \text{ AC.} + 0.10 \text{ AC.} + 0.10 \text{ AC.}) = 1.72 \text{ Acres}$$

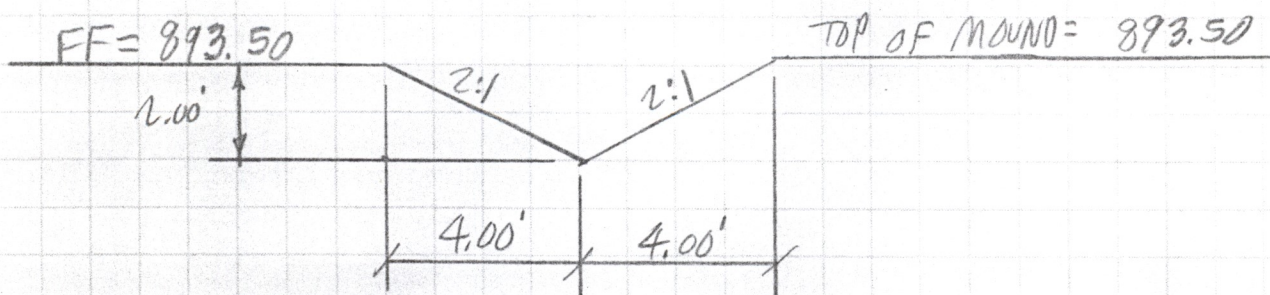
$$Q = C I A$$

$$Q_{100} = (0.5 \times 6.52 \times 0.96) + (0.85 \times 6.52 \times 1.72)$$

$$Q_{100} = 12.66 \text{ cfs}$$

SINCE WATER WILL SPILL OVER TOP OF MOUND WITHOUT FLOODING BUILDING IF MOUND IS LOWER THAN ELEV. 893.50, ASSUME TOP OF MOUND IS ALSO AT ELEV. 893.50:

CHECK THIS AT HP OF DITCH (CONSERVATIVE)



$$Q = \left(\frac{1.486}{0.04} \right) (8.00) \left(\frac{8.00}{8.95} \right)^{2/3} (0.0068)^{1/2} = 22.74 \text{ cfs} > 12.66 \text{ cfs}$$

DATE MAY 1993

BY CAR

CK'D. _____

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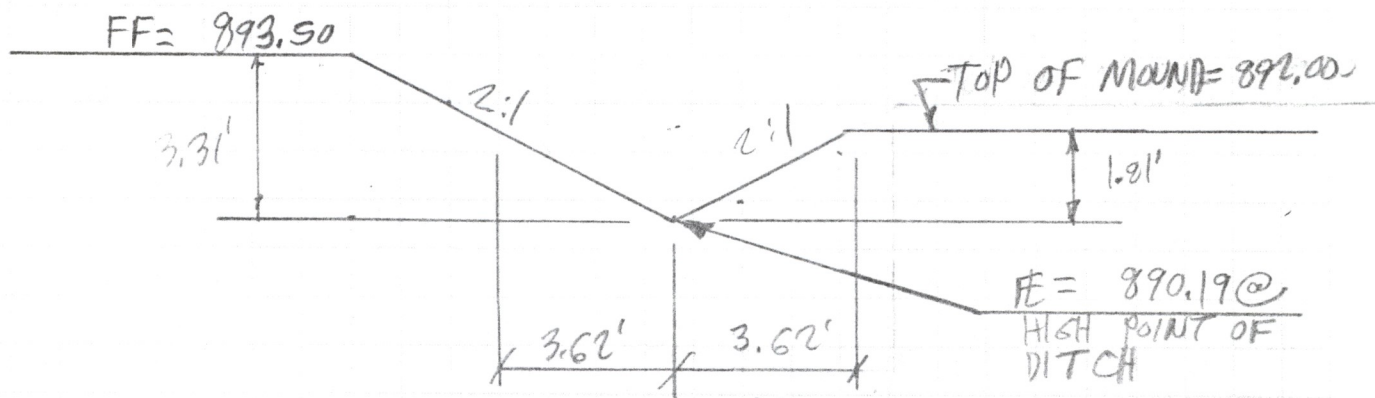
PROJECT 95-79
CHESTERWOOD PHASE TWO

PAGE NUMBER D.

SUBJECT 100 YEAR FLOOD ROUTE ALONG SOUTH SIDE OF BUILDING

$$\text{slope} = (890.19 - 888.79) \div 255' = 0.55\%$$

PROP. TOP OF
INLET ELEV.



$$Q = \left(\frac{1.486}{0.04} \right) (0.55) \left(\frac{6.55}{8.09} \right)^{2/3} (0.0055)^{1/2}$$

$$Q = 15.68 \text{ CFS} > 12.66 \text{ CFS}$$

THE 255' OF 30" @ 0.50% ALONG THE SOUTH END OF THE BUILDING WILL ALSO STORE PART OF THE 100 YEAR FLOW.

DATE MAY 1998

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PROJECT 95-79

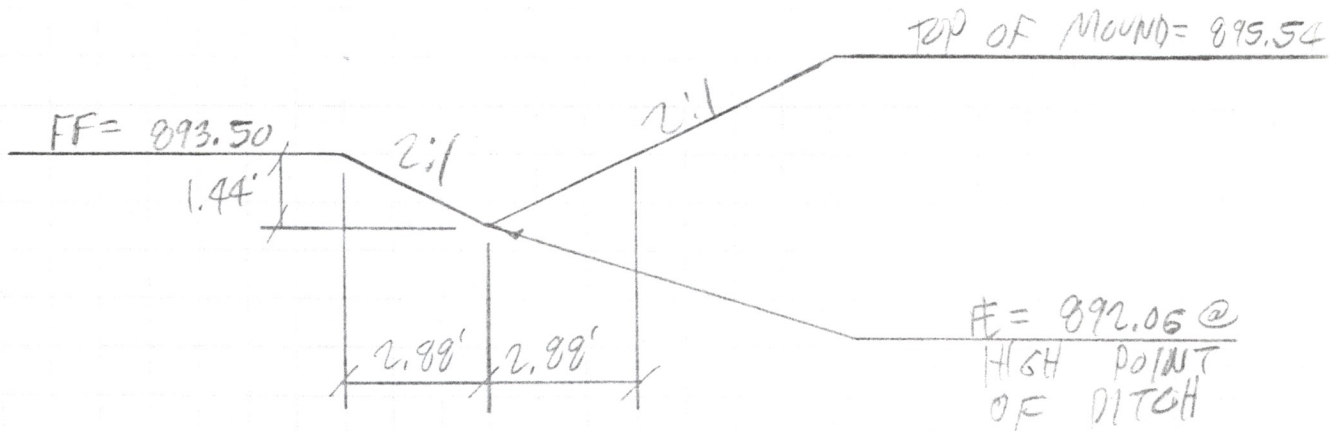
CHESTERWOOD PHASE TWO

PAGE NUMBER E

SUBJECT 100 YEAR FLOOD ROUTE ALONG NORTH SIDE OF BUILDING

$$\text{SLOPE OF DITCH} = (892.06 - 890.50) \div 312' = 0.50\%$$

CHECK 2:1 SIDE SLOPES:



$$Q = \left(\frac{1.486}{0.04} \right) \left(4.15 \right) \left(\frac{4.15}{6.44} \right)^{4/3} (0.005)^{1/2} = 8.13 \text{ CFS}$$

ASSUME HALF OF DRAINAGE GOES TO THIS DITCH FROM ENTIRE EAST HALF OF BUILDING, INCLUDING COURTYARDS = $(12.66 \text{ CFS} \div 2) = 6.33 \text{ CFS}$

ALSO ASSUME NORTH END OF BUILDING GOES TO THIS DITCH:

$$Q_{100} = C I_{100} A = 0.85 \times 6.52 \times 0.25 = 1.39 \text{ CFS}$$

$$8.13 \text{ CFS} > 7.72 \text{ CFS}$$

HAVE NOTE FOR PLANS:

DITCH SLOPES SHALL BE

NO STEEPER THAN 2:1.

DATE MAY 1993

BY CAR

CK'D. _____

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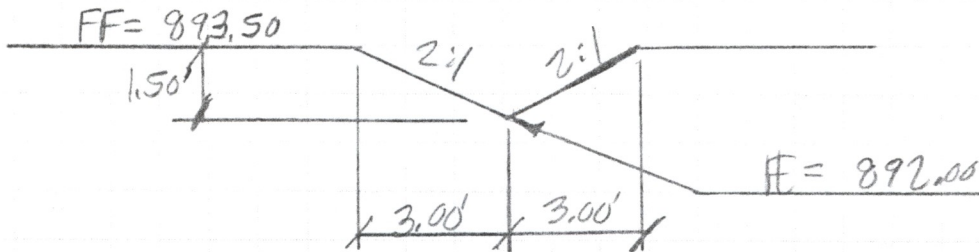
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PROJECT 95-79

CHESTERWOOD PHASE TWO

PAGE NUMBER F.

SUBJECT CHECK OF 100 YEAR FLOOD ROUTE ALONG EAST SIDE OF NORTH HALF OF BUILDING



SLOPE = 1.20%

$$Q = \left(\frac{1.486}{0.04} \right) (4.50) \left(\frac{4.50}{6.70} \right)^{4/3} (0.012)^{1/2} = 14.04 \text{ CFS}$$

ASSUME HALF OF BUILDING DRAINS TO THIS DITCH:

$$(12.66 \text{ CFS} \div 2) = 6.33 \text{ CFS}$$

ALSO ASSUME THE NORTH END OF THE BUILDING DRAINS TO THIS DITCH:

$$Q_{100} = C I_{100} A = 0.85 \times 6.52 \times 0.25 = 1.39 \text{ CFS}$$

TOTAL FLOW = 7.72 CFS

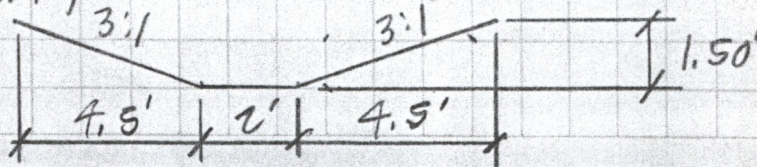
CAPACITY OF THIS DITCH = 14.04 CFS > 7.72 CFS

∴ OK

check 2' wide ditch bottom with 3:1 side slopes:

AREA = 9.75 SF.
WP = 11.49 ft

$$Q = \left(\frac{1.486}{0.04} \right) (9.75) \left(\frac{9.75}{11.49} \right)^{4/3} (0.012)^{1/2} = 35.56 \text{ CFS} >> 14.04 \text{ CFS}$$



DATE MAY 1978

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PROJECT 95-79

CHESTER WOOD PHASE TWO

PAGE NUMBER 11

SUBJECT PROPOSED STORM SEWER ALONG SOUTH SIDE OF BUILDING

$$A = 0.75 \text{ Acres}$$

$$C = 0.50$$

$$T_c = 15 \text{ minutes} : I_{10} = \frac{170}{15+23} = 4.48$$

$$Q_{10} = C I_{10} A = 0.50 \times 4.48 \times 0.75 = 1.68 \text{ CFS}$$

$$Q = \left(\frac{1.486}{0.015} \right) (0.785) (0.397) (0.005)^{1/2} = 2.18 \text{ CFS}$$

$$2.18 \text{ CFS} > 1.68 \text{ CFS}$$

$$Q_{100} = C I_{100} A = 0.50 \times \left(\frac{300}{15+31} \right) \times 0.75$$

$$Q_{100} = 2.45 \text{ CFS}$$

DATE MAY 1998

BY CAR

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PROJECT 95-79

CHESTERWOOD PHASE TWO

PAGE NUMBER iii.

SUBJECT PROPOSED STORM SEWER ALONG SOUTH SIDE OF BUILDING

An extra 255' of 30" pipe is on the site. see what detention volume capacity this pipe has.

$$\begin{array}{r}
 \text{Area of } 30'' \text{ pipe} = 4.909 \text{ S.F.} \\
 \text{Area of } 12'' \text{ pipe} = 0.785 \text{ S.F.} \\
 \hline
 4.124 \text{ S.F.} \times 255 \text{ feet} = 1052 \text{ C.F.}
 \end{array}$$

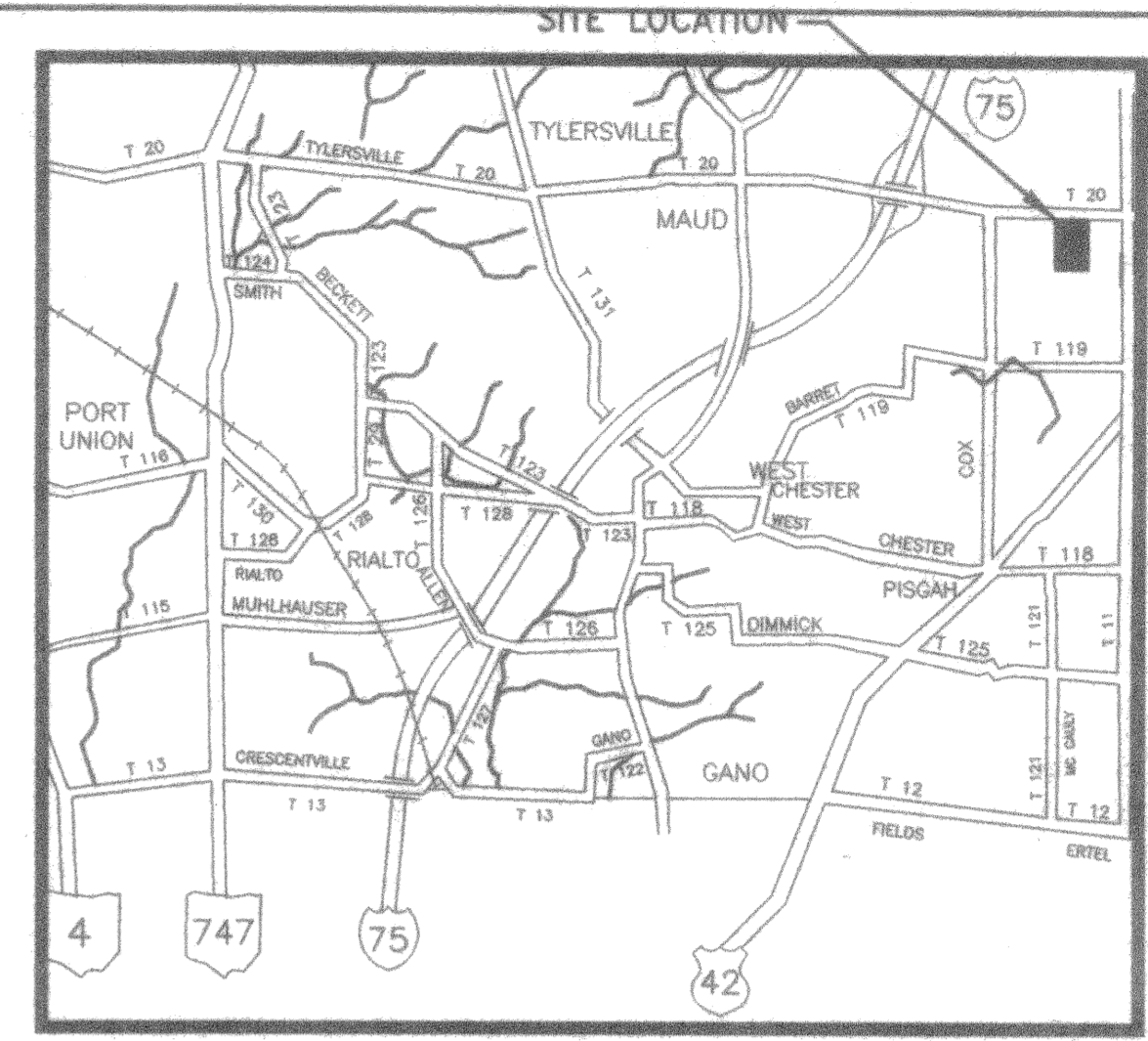
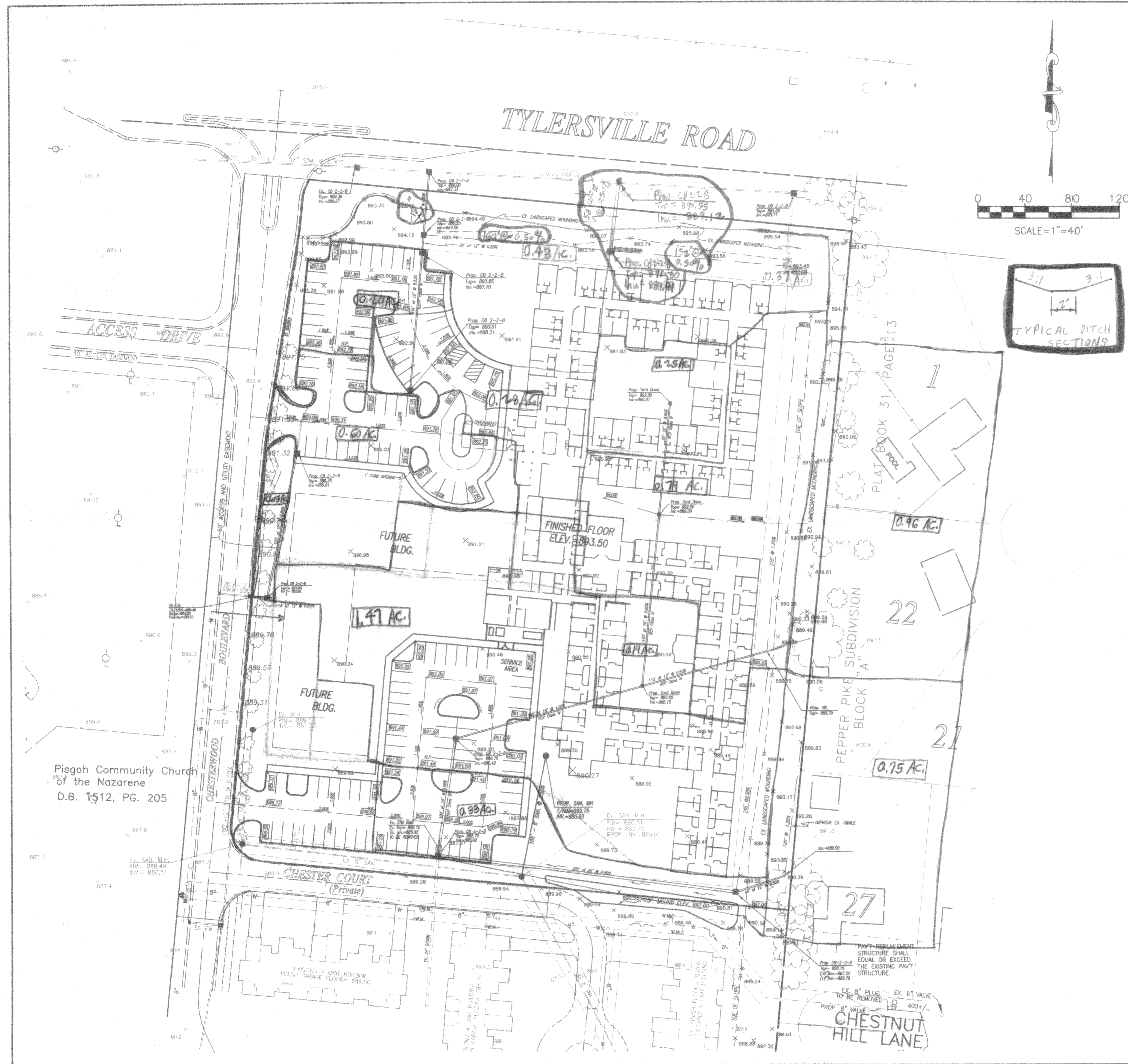
$255 \text{ LF} = 1051.795 > 1286 \text{ C.F.}$
 $44 \text{ LF} = 34.54$

$$\begin{array}{r}
 Q_{100} = 2.45 \text{ CFS} \\
 Q_{10} = 1.68 \text{ CFS} \\
 \hline
 0.77 \text{ CFS} \times 30 \text{ MIN.} \times 60 \text{ SEC/MIN.} = 1386 \text{ C.F.}
 \end{array}$$

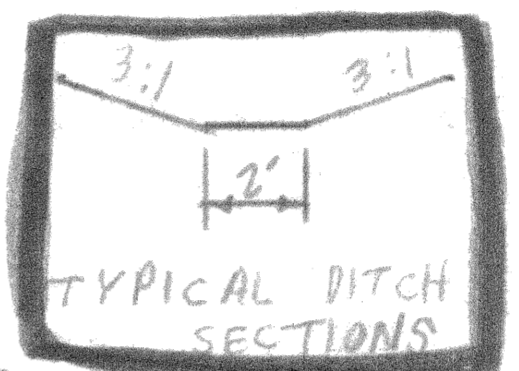
Calculate how long the 30" pipe will store the 0.77 CFS

$$1052 \text{ C.F.} \div 0.77 \text{ CFS} = 1367 \text{ SEC} = 22.8 \text{ MINUTES}$$

The 30" pipe will help store the 100 year flow.



VICINITY MAP
SCALE=N.T.S.



NOTE:
 (1) 18" MIN. VERTICAL CLEARANCE OD TO OD TO BE MAINTAINED BETWEEN WATER MAIN AND STORM AND SANITARY SEWERS AT CROSSOVERS.
 (2) LOWER WATER SERVICES AS NEEDED TO AVOID CONFLICTS WITH STORM WITH MIN. 4' COVER.
 (3) LOCATION OF ALL EXISTING UTILITIES TO BE DETERMINED IN THE FIELD PRIOR TO WORK BEGINNING.
 (4) 48 HOUR NOTICE TO BE PROVIDED TO PROPERTY OWNERS AFFECTED BY SHUTDOWN OF WATER MAIN.

EROSION CONTROL LEGEND

- 1 SEEDING AND MULCHING
- 2 SEEDING
- 3 PRESERVING EXISTING VEGETATION
- 4 STRAW BALE
- 5 SILT FENCE
- 6 SOIL PILES
- 7 TEMPORARY STREAM CROSSING
- 8 GRAVEL CURB INLET SEDIMENT FILTER
- 9 BLOCK & GRAVEL DROP INLET SEDIMENT FILTER
- 10 CAGIONS
- 11 STRAW BALE DROP INLET SEDIMENT FILTER
- 12 SOD DROP INLET SEDIMENT FILTER
- 13 GRAVEL & WIRE MESH DROP INLET SEDIMENT FILTER
- 14 BLOCK & GRAVEL CURB INLET SEDIMENT FILTER
- 15 SEDIMENT BASINS & DAMS
- 16 DIKES & SLOPE PROTECTION
- 17 ROLLED GRAVEL CURB INLET SED. FILTER (SEE SOIL EROSION & SEDIMENTATION CONTROL DETAIL SHEET) SHEET 6

"All sediment and erosion control measures must be visually inspected and the appropriate maintenance and repair actions taken whenever precipitation exceeds 1/2 inch in any 24 hour period."

SEDIMENTATION CONTROL NOTES

The project has been designed to control erosion and prevent damage to other property. All stripping, earthwork, and regrading shall be performed to minimize erosion. Natural vegetation shall be retained wherever possible. The proposed plan will allow almost all eroded materials to be retained on site.

All areas disturbed by the construction of the roadways, ditches and sedimentation basins shall be seeded. Payment will be by the number of square yards disturbed as per the grading plan.

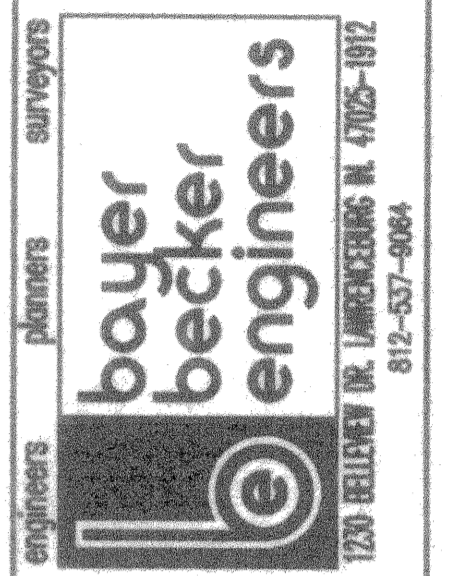
METHOD

Straw bales are to be utilized to create temporary dams to catch the silt. These are to be installed at points where the flow is concentrated.

Surface water is to be directed into these temporary silt basins by means of temporary swales and ditches.

As the installation of the storm sewer progress, stow bales are to be placed at the inlet and outlet of sewers to control the silt.

Payment for the above shall be included in items Excavation, Embankment.

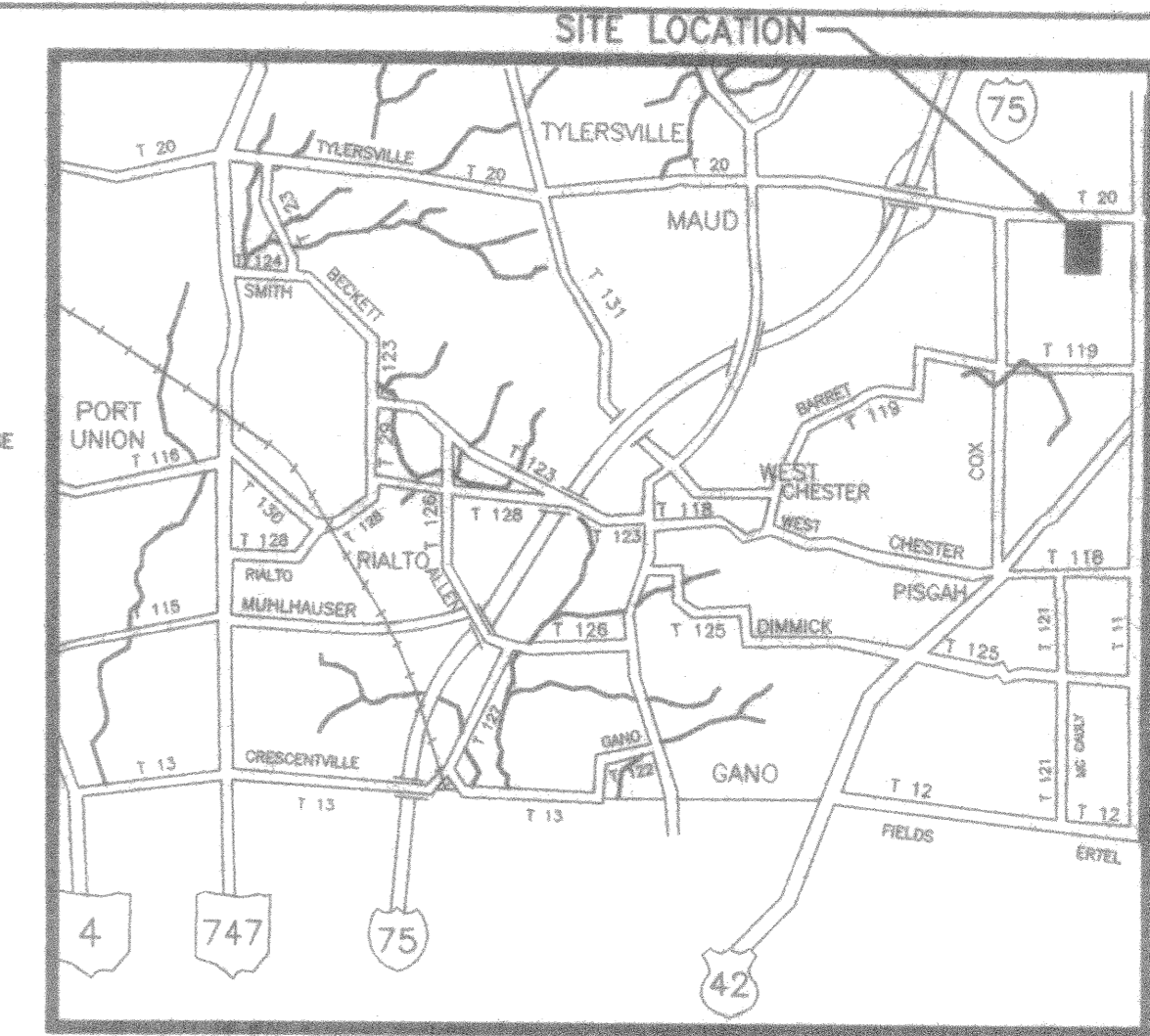


CHESTERWOOD HEALTHCARE FACILITY
 UNION TOWNSHIP BUTLER COUNTY OHIO
 TYLERSVILLE ROAD

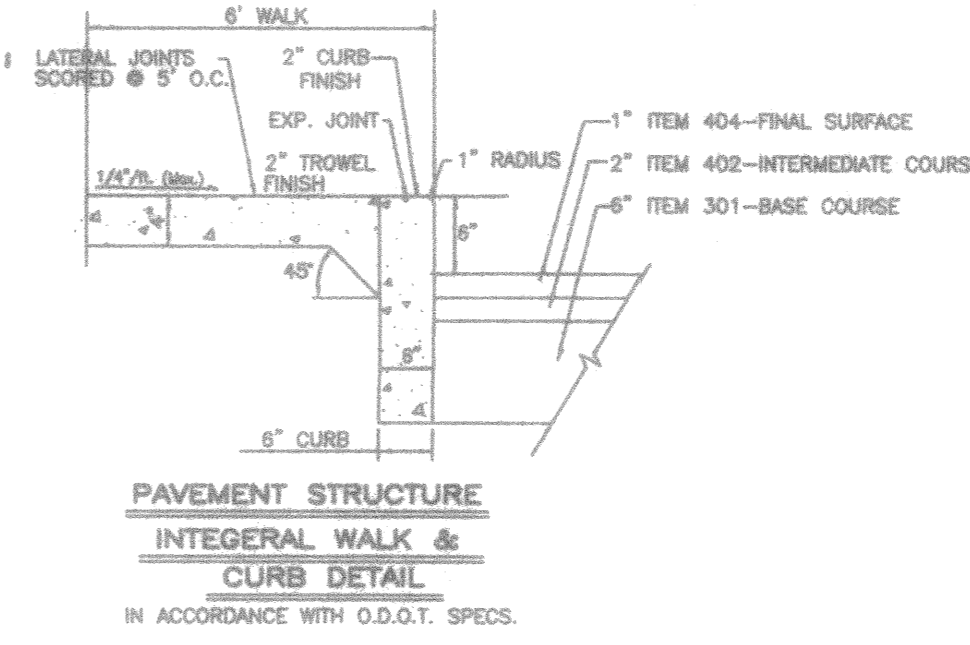
SITE PLAN

NO.	DATE	BY	ITEM
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

AutoCAD Drawing Name: 9579PH2.DWG
 DATE: 5/7/98



VICINITY MAP
SCALE=N.T.S.



$R=40.00'$
 $\Delta=26^{\circ}55'44''$
 $T=9.58'$
 $L=18.80'$

$S\ 05^{\circ}27'45''\ W$
 $22.53'$

$R=99.00'$
 $\Delta=03^{\circ}49'20''$
 $T=3.30'$
 $L=6.60'$

$R=29.00'$
 $\Delta=89^{\circ}50'22''$
 $T=28.92'$
 $L=45.47'$

TYLERSVILLE ROAD



GENERAL NOTES

- Item numbers refer to the Ohio Department of Transportation construction and material specifications, and all construction work shall be done according to said specifications of Butler County requirements and standards for subdivisions. When in conflict, the County requirements shall prevail.
- Items that pertain to underground utilities such as watermain pipe, sanitary sewer pipe, water valves and manhole frames and covers, etc., will remain under specifications of the utility serving the area. Storm sewers shall be designed and constructed in accordance with the requirements of the Butler County Engineer.
- All trenches within the right-of-way and 10' utility easement shall be compacted and backfilled in accordance with Item 203 and 603 in the state specifications.
- Developer shall be responsible for the installation of conduits for the full width of the public right-of-way at a depth of 36" for use by the electric, telephone and cable TV services. The location of the lines shall be coordinated with utility companies by the developer.
- All electrical transformers shall be located so that they do not interfere with the existing manholes or water main appurtenances.
- Water main materials, valves, fire hydrants, fittings and appurtenances and installation to be as per Butler County specifications using Class 53 Ductile Iron as per AWWA C-151 with 4' minimum cover.
- Sanitary sewer materials and installation to be as per Butler County specifications, using ABS 6" pipe, as per ASTM D-2751 with joint specification as per ASTM D-3212, using ABS composite 8" pipe, as per ASTM D-2680 with joint specifications as per ASTM D-2235.
- Minimum 10" horizontal, 18" vertical separation between Water Main and Sanitary and/or Storm Sewer.
- Storm sewer pipe to be A.D.S. N-12 plastic or equal unless otherwise noted on plans. Bedding to be first class. All sewers to be installed as per Butler County specifications.
- Roof drains, foundation drains, and other clean water connections to the sanitary sewer system are prohibited.
- All buildings to be served by the public sewer system shall be constructed so as to provide a minimum of four feet (4') of vertical separation between the public sanitary sewer, at the point of connection, and the lowest building level served by a gravity sewer connection. In addition, said building level shall be at least one foot (1') above the lowest point of free-overflow (non-sealed manhole cover) upstream of any treatment facility or wastewater pumping facility that receives the discharge from said building. Said minimum service levels shall be recorded on the "As Built" plans for the development which will be kept on file in the office of the Butler County Sanitary Engineer.
- Butler County Water and Sewer Department does not accept any responsibility for the relocation, repair, or replacement of any other utility installed within five (5) feet of the center line of any sanitary sewer main or water main.
- 18' Minimum vertical clearance to be maintained between water, storm and sanitary sewers at crossovers.
- Lower water services as needed to avoid conflicts with storm with a 4' min. cover.
- Location of all existing utilities to be determined in the field prior to work beginning.
- Proposed Catch Basins "B,C,D,G,H" shall be Squared up even with proposed curb when constructed.

INDEX TO SHEETS

Site and Utility Plan	1
Grading and Erosion (Control Plan)	2
Soil Erosion & Sedimentation Details	3

BENCHMARK

TOP OF CONC. MONUMENT #833 AT S.E. CORNER OF MCGINNIS PARK, COX RD. ELEV. = 882.78

OWNER/DEVELOPER

Chesterwood Village, Inc.
4195 Hamilton Mason Road
Indian Springs, Ohio 45011

UNDERGROUND UTILITIES
2 WORKING DAYS
BEFORE YOU DIG
Call 1-800-362-2764
UNIFIED UTILITY
PROTECTION SERVICE
NON MEMBERS
MUST BE CALLED DIRECTLY

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS
CB - 3A CATCH BASIN
CB - 3A (MOD.) CATCH BASIN
CB - 1 CATCH BASIN
CB 2-2-A CATCH BASIN
STD. MANHOLE 1A
HEADWALL HW-4



CHESTERWOOD HEALTHCARE FACILITY
UNION TOWNSHIP BUTLER COUNTY OHIO
TYLERSVILLE ROAD

SITE AND UTILITY PLAN

7	6	5	4	3	2	1
AutoCAD Drawing Name: 9579PH2.DWG						
DATE: 5/7/98						
PRELIMINARY SUBMITTAL TO TOWNSHIP						
5/12/98						

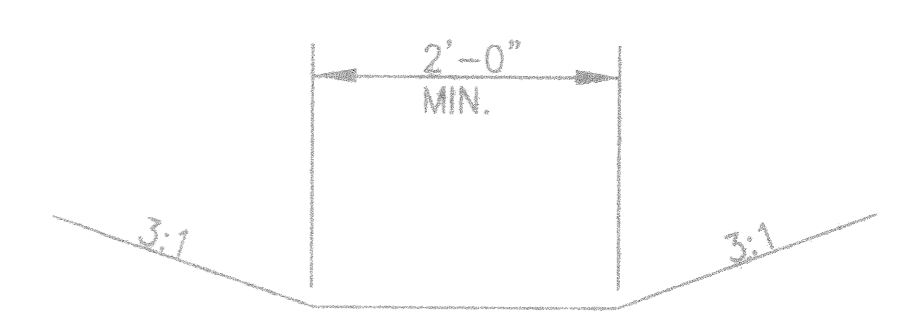
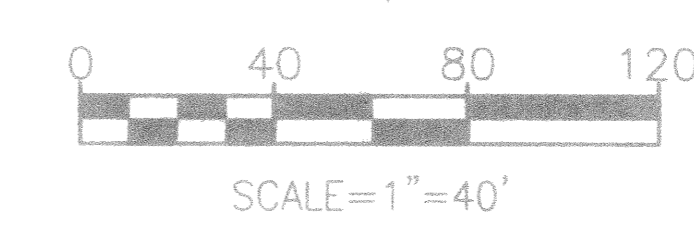
R=40.00'
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R=29.00'
Delta=89°50'22"
T=28.92'
L=45.47'

Pisgah Community Church
of the Nazarene
D.B. 1512, PG. 205

TYLERSVILLE ROAD



TYPICAL DITCH SECTION

EROSION CONTROL LEGEND

- ▲ SEEDING AND MULCHING
- ▲ SEEDING
- ▲ PRESERVING EXISTING VEGETATION
- ▲ STRAW BALE
- ▲ SILT FENCE
- ▲ SOIL PILES
- ▲ TEMPORARY STREAM CROSSING
- ▲ GRAVEL CURB INLET SEDIMENT FILTER
- ▲ BLOCK & GRAVEL DROP INLET SEDIMENT FILTER
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- ▲ BLOCK & GRAVEL CURB INLET SEDIMENT FILTER
- ▲ SEDIMENT BASINS & DAMS
- ▲ DIKES & SLOPE PROTECTION
- ▲ ROLLED GRAVEL CURB INLET SED. FILTER (SEE SOIL EROSION & SEDIMENTATION CONTROL DETAIL SHEET SHEET 6)

*All sediment and erosion control measures must be visually inspected and the appropriate maintenance and repair actions taken whenever precipitation exceeds 1/2 inch in any 24 hour period.

SEDIMENTATION CONTROL NOTES

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METHOD

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Payment for the above shall be included in Items Excavation, Embankment.

NOTE:

DITCHING ALONG THE EXISTING LANDSCAPED MOUNDING AND IN BETWEEN EXISTING COTTAGES AND MOUNDING SHALL BE PROPERLY GRADED AS TO INSURE NO PONDING AND TO HAVE POSITIVE RUNOFF AWAY FROM THE BUILDINGS! THIS MUST BE STRICTLY ADHERED TO!

NOTE:

Proposed grades shown are to the top of pavement and ditch grades. Add 6" for top of curb elevations.



engineers planners surveyors
bayer becker engineers
1220 BELLEVUE DR. LAMARCONSBURG, OH 43085-1972
612-537-9064

CHESTERWOOD HEALTHCARE FACILITY
UNION TOWNSHIP BUTLER COUNTY OHIO
TYLERSVILLE ROAD

GRADING AND EROSION CONTROL PLAN

7	6	5	4	3	2	1	ITEM	PRELIMINARY SUBMITTAL TO TOWNSHIP	5/12/98
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AutoCAD Drawing Name: 9579PH2.DWG
DATE: 5/7/98

GENERAL NOTES

EROSION AND SEDIMENT CONTROLS

Vegetative practices
Such practices may include: temporary seeding, permanent seeding, mulching, matting, sod stabilization, vegetative buffer strips, phasing and protection of trees. The contractor shall install appropriate vegetative practices on all disturbed areas within seven (7) days if they are to remain dormant (undisturbed) for more than forty-five (45) days. Permanent or temporary soil stabilization shall be applied to disturbed areas within seven (7) days after final grade is reached on any portion of the site.

Structural Practices

Structural practices shall be used to control erosion and trap sediment from all sites remaining disturbed for more than fourteen (14) days.

Timing

Control structures shall be functional throughout earth disturbing activity. Sediment ponds and perimeter sediment barriers shall be implemented as the first step of grading and within seven days from the start of grubbing. They shall continue to function until the upslope development area is restabilized.

Sediment Barriers

Sheet flow runoff from denuded areas shall be intercepted by sediment barriers. Sediment barriers, such as sediment fences or diversions direction runoff to settling facilities, shall protect adjacent properties and water resources from sediment transported by sheet flow.

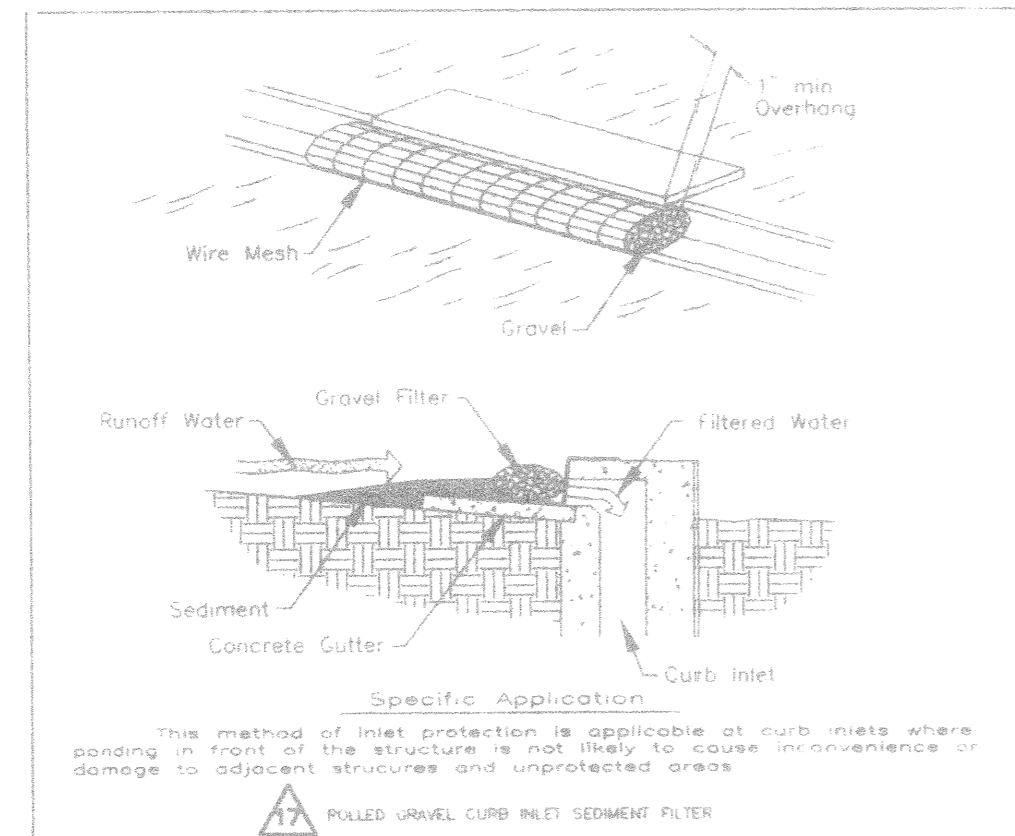
Erosion and sediment control practices used to satisfy the conditions of this plan shall meet the standards and specifications in the current edition of Water Management and Sediment Control in Urbanized Areas (Soil Conservation Service.)

Waste Disposal

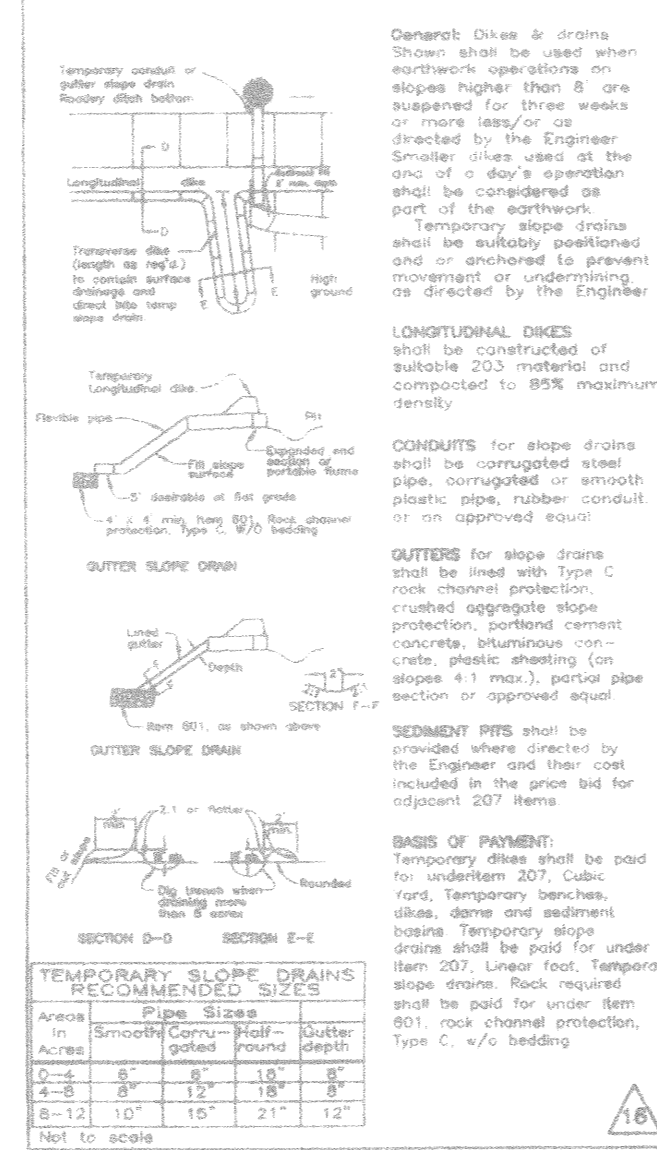
No solid or liquid waste, including building materials, shall be discharged in storm water runoff. Off-site vehicle tracking of sediments shall be minimized. The plan shall ensure and demonstrate compliance and applicable State or local waste disposal, sanitary sewer or septic system regulations.

Maintenance

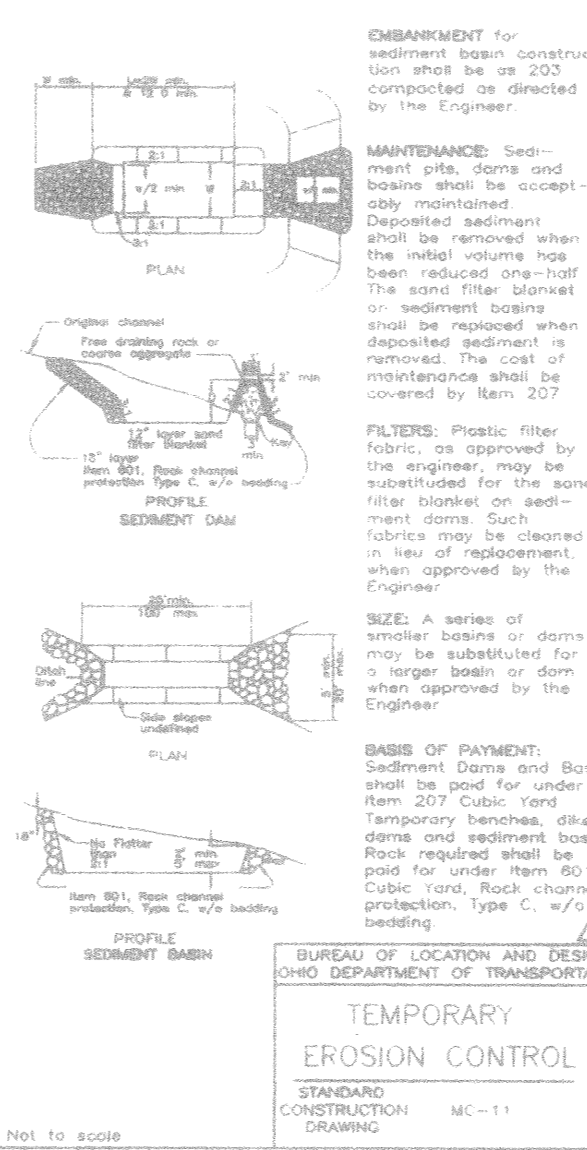
All temporary and permanent control practices shall be maintained and repaired as needed to assure continued performance at their intended function.



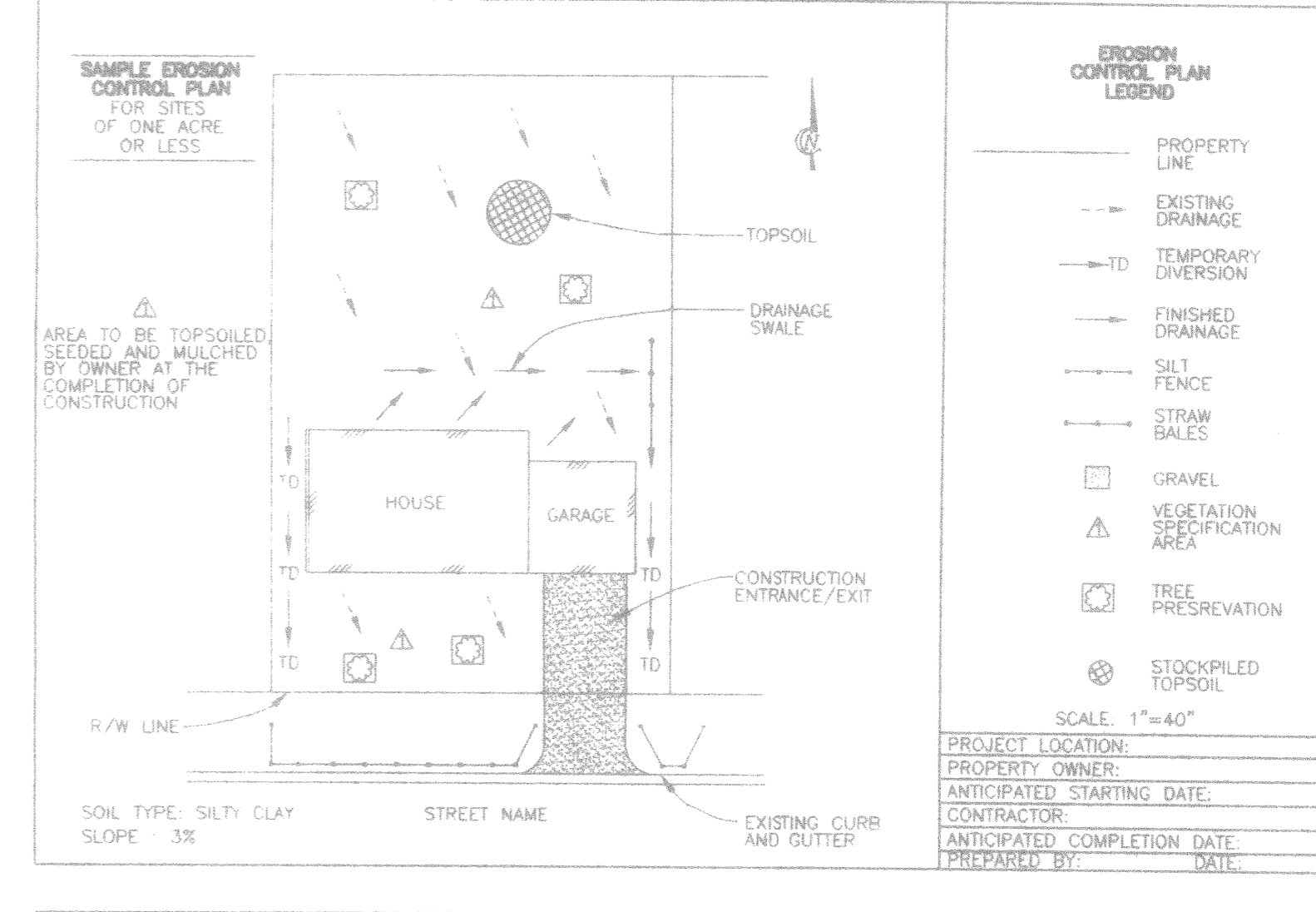
DIKES AND SLOPE PROTECTION



SEDIMENT BASINS & DAMS



EROSION CONTROL FOR SMALL SITES



- REVEGETATION**
Seed, sod or mulch bare soil as soon as possible.
- SEEDING AND MULCHING**
Spread 4 to 6 inches of topsoil.
Fertilize according to soil test (or apply 10 lb./1000 sq. ft. of 20-10-10 or 10-10-10 fertilizer.)
Seed with an appropriate mix for the site (see table.) Rake lightly to cover seed with 1/4" of soil. Roll lightly.
Mulch with straw (70-90 lb or one bale per 1000 sq. ft.)
Anchor mulch by punching 2 inches into the soil with a dull, weighted disk or by using netting or other measures on steep slopes, or windy areas. Water gently every day or two to keep soil moist. Less watering is needed once grass is 2 inches tall.
- SODDING** Spread 4 to 6 inches of topsoil.
Fertilize according to soil test (or apply 10 lb./1000 sq. ft. of 20-10-10 or 10-10-10 fertilizer.)
Lightly water the soil.
Lay sod, Tamp or roll lightly.
On slopes, lay sod starting at the bottom and work toward the top. Peg each piece down in several places.
Initial watering should wet soil 6 inches deep (or until water stands 1 inch deep in a straight-sided container.) Then water lightly every day or two for 2 weeks.

WARNING: Extra measures may be needed if your site:
- is within 300 feet of a stream or wetland
- is within 1000 feet of a lake
- is steep (slopes of 12% or more)
- receives runoff from 10,000 sq. ft. or more of adjacent land
- has more than one acre of disturbed ground

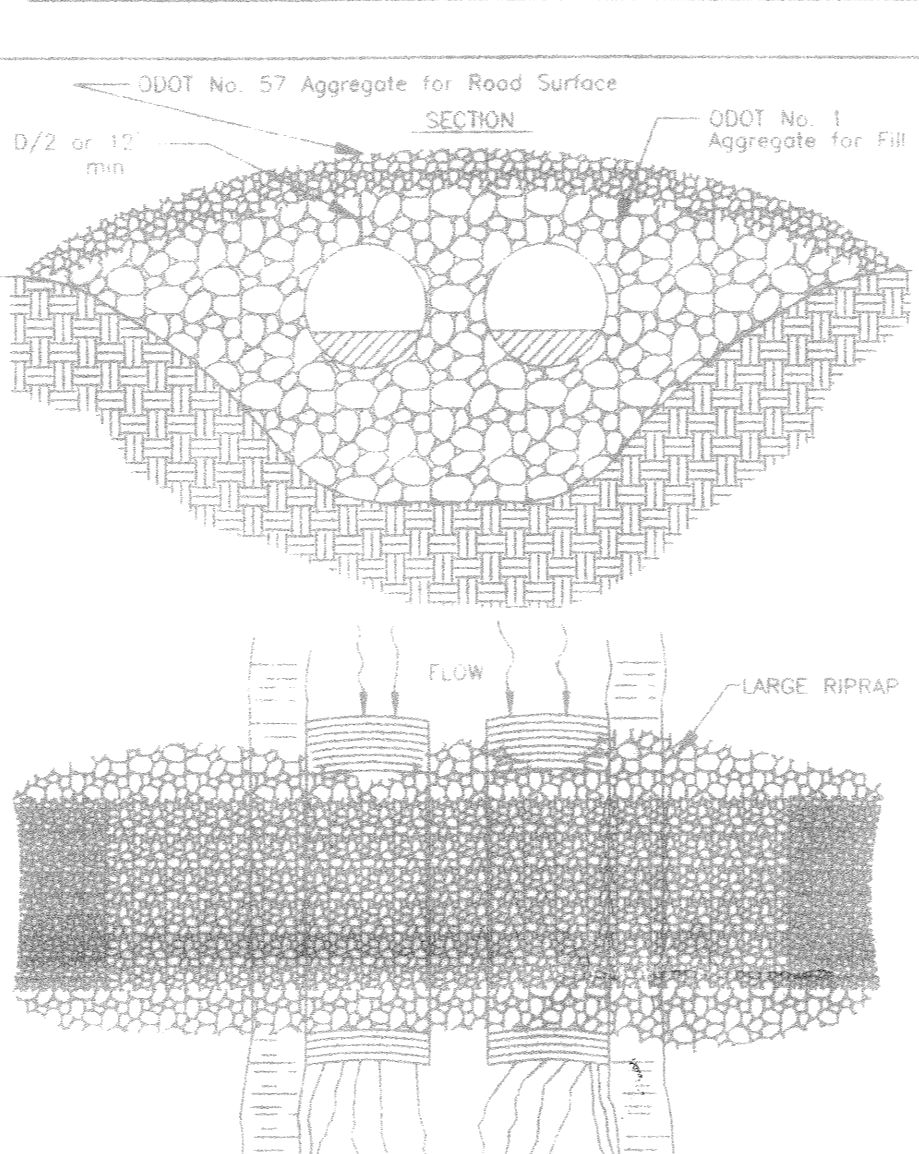
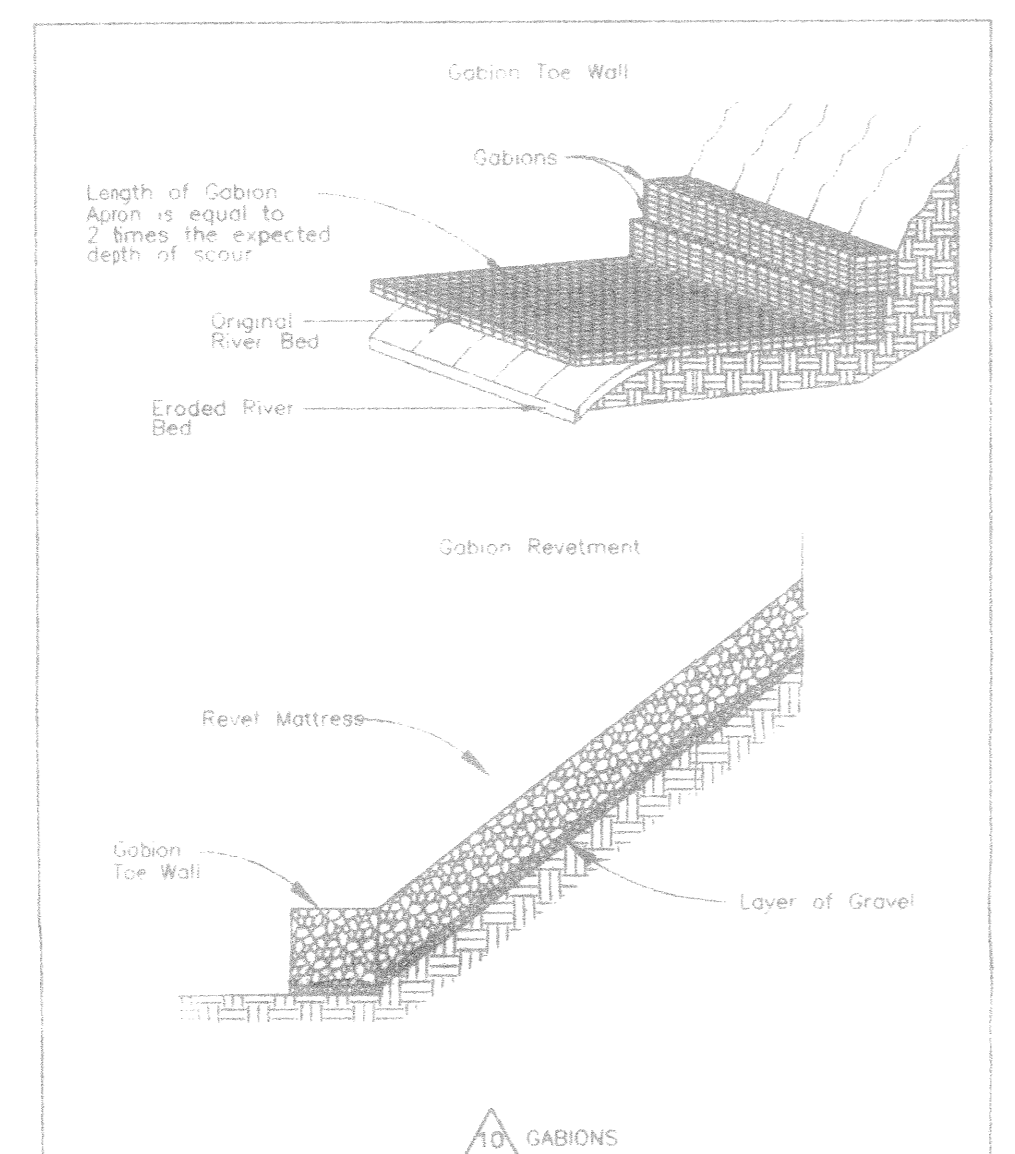
Typical Lawn Seed Mixtures

Grass	Sunny Site	Shady Site
Kentucky bluegrass	65%	15%
Fine fescue	20%	70%
Perennial ryegrass	15%	15%

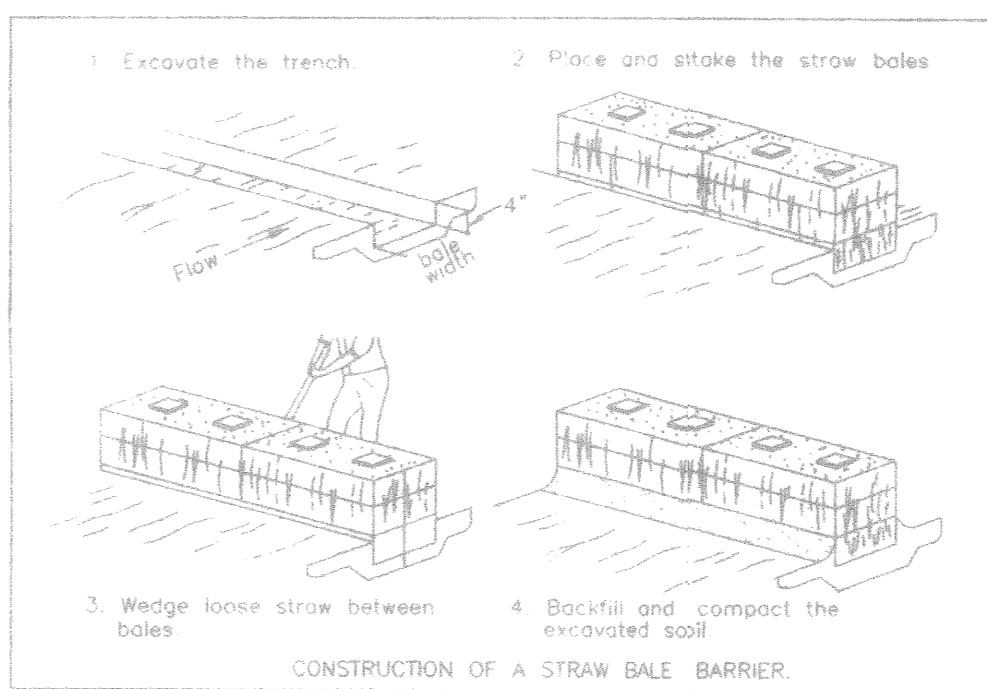
Seeding rate (lb./1000 sq. ft.)
3-4 4-5

If construction is completed after October 31, seeding or sodding may be delayed. Applying mulch or temporary seed (such as rye or winter wheat) is recommended if weather permits. Straw bale or silt fences must be maintained until final seeding or sodding is completed in spring March 15- May 31.

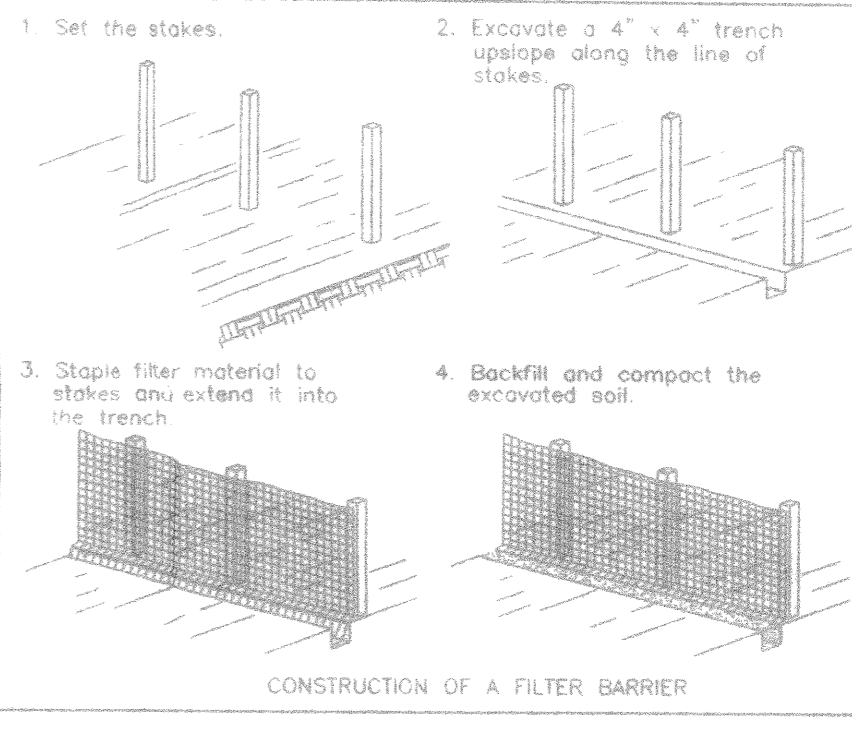
PRESERVING EXISTING VEGETATION
Wherever possible, preserve existing trees, shrubs, and other vegetation.
To prevent root damage, do not grade, place soil piles, or park vehicles near trees marked for preservation.
Place plastic mesh or snow fence barriers around trees to protect the area below their branches.



STRAW BALE DETAILS

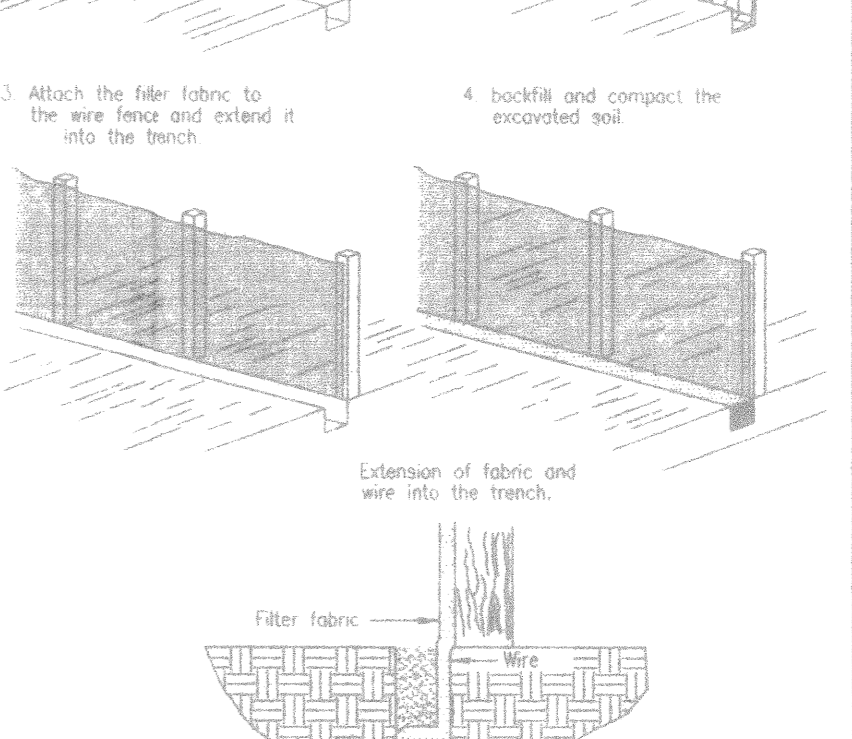
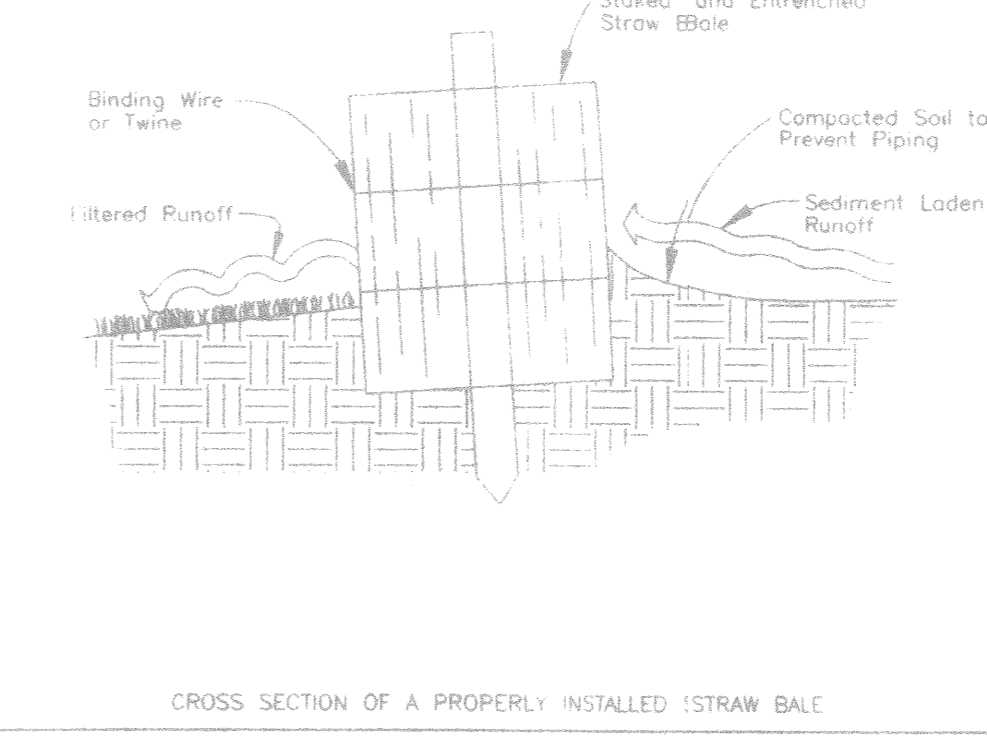
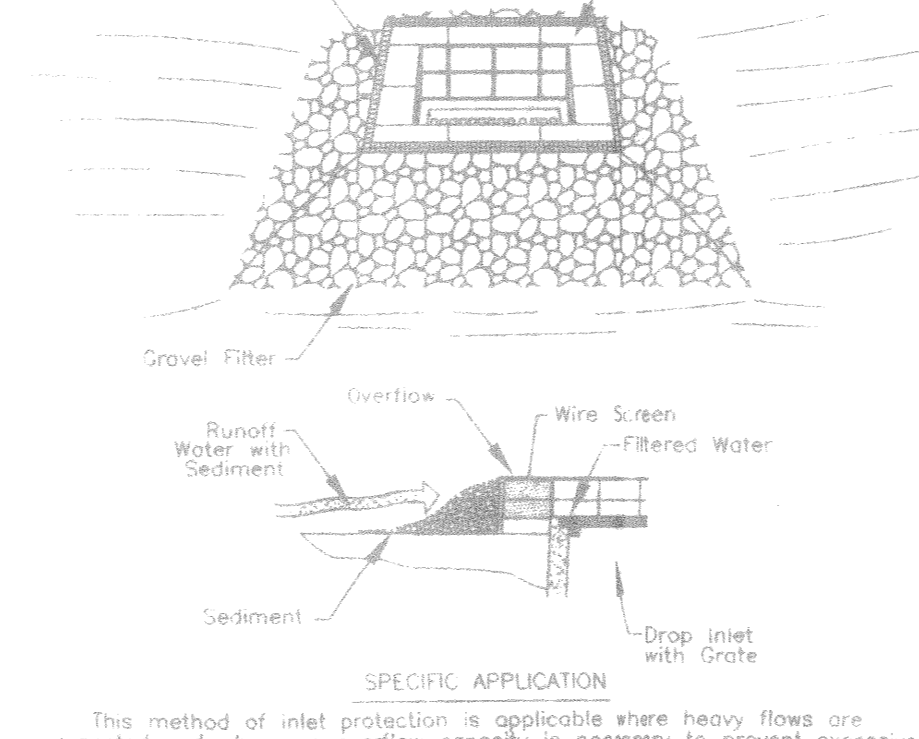
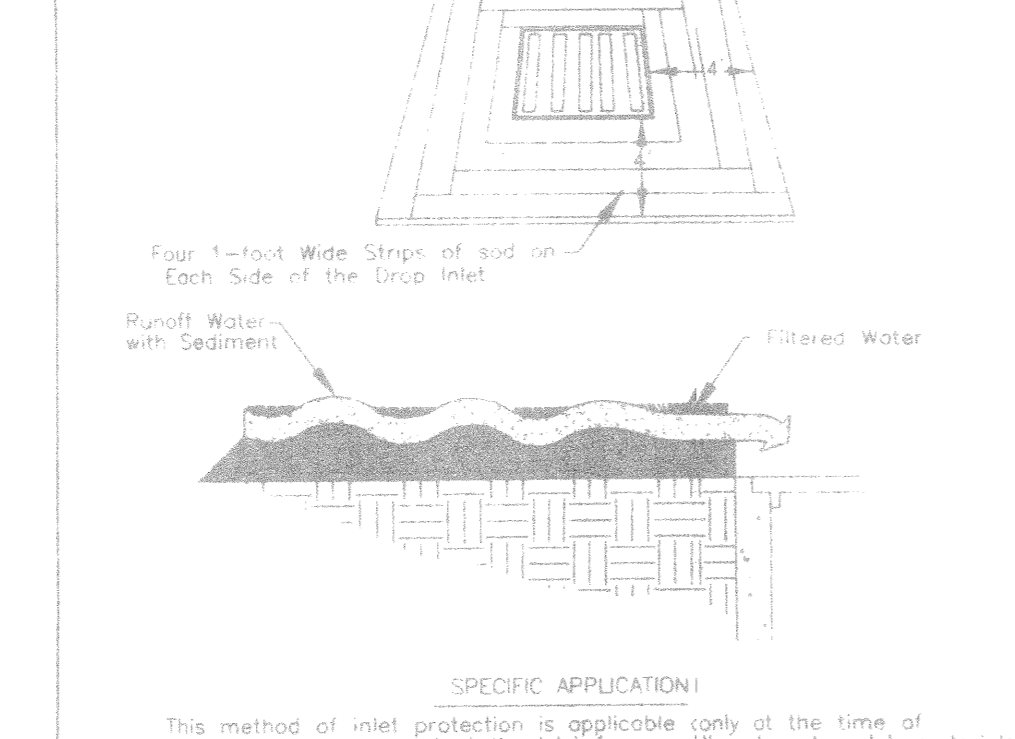
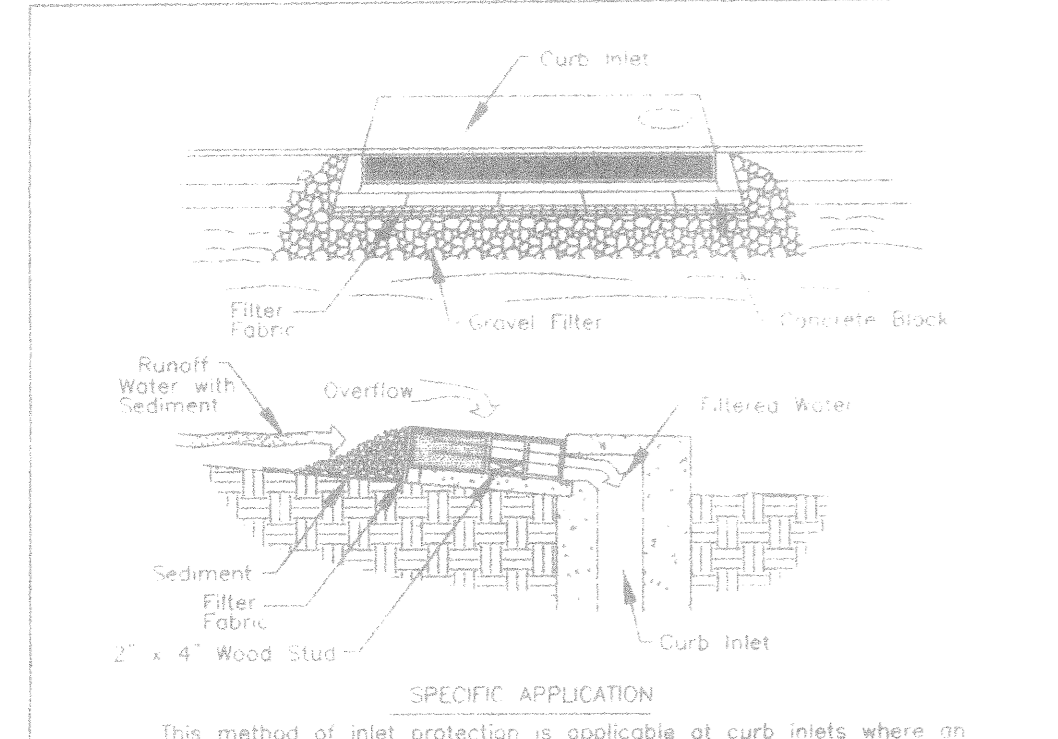
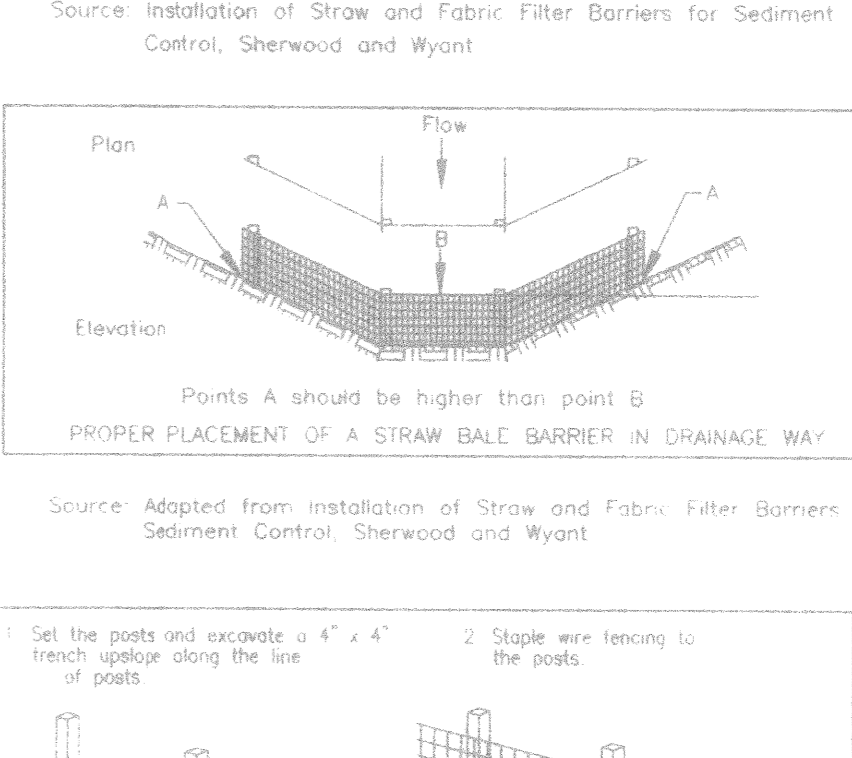
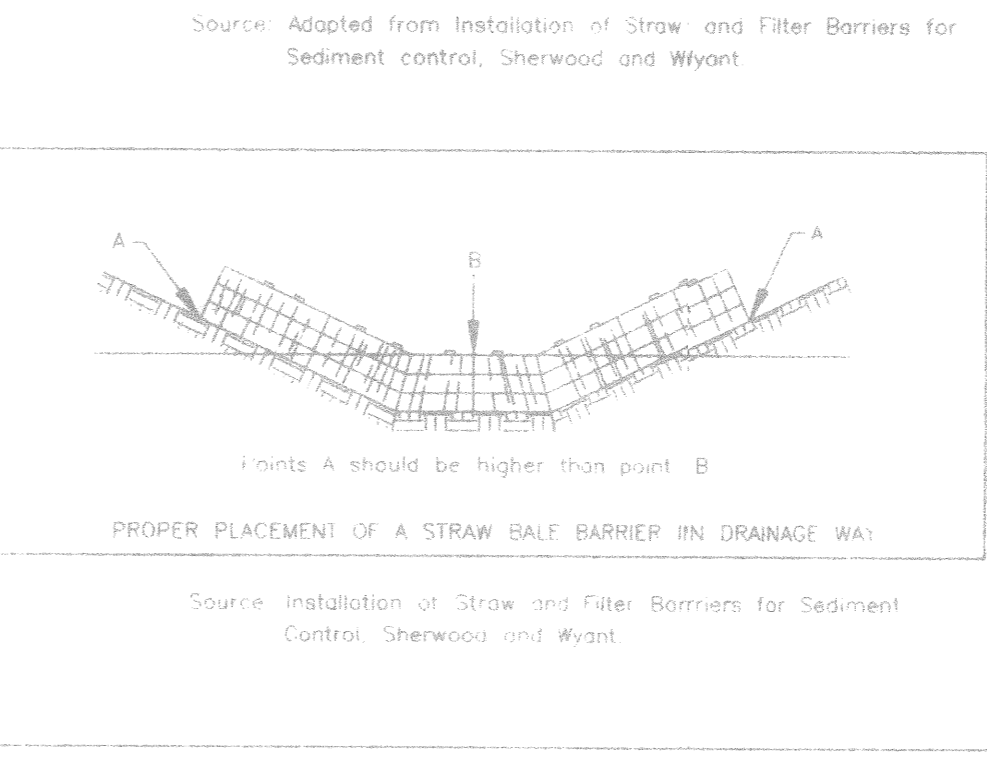
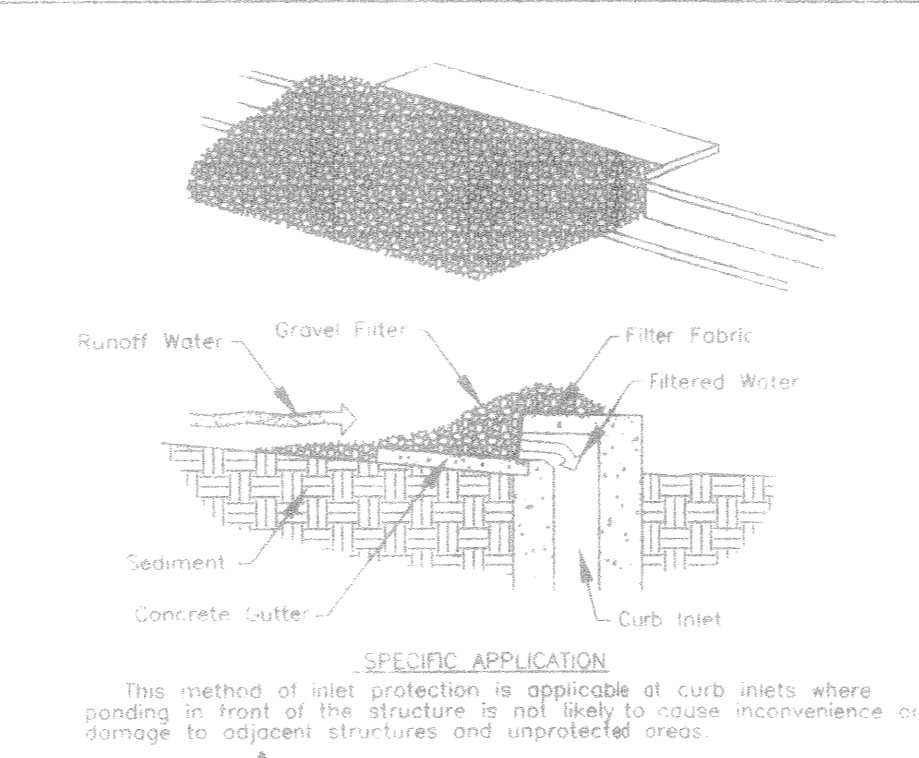
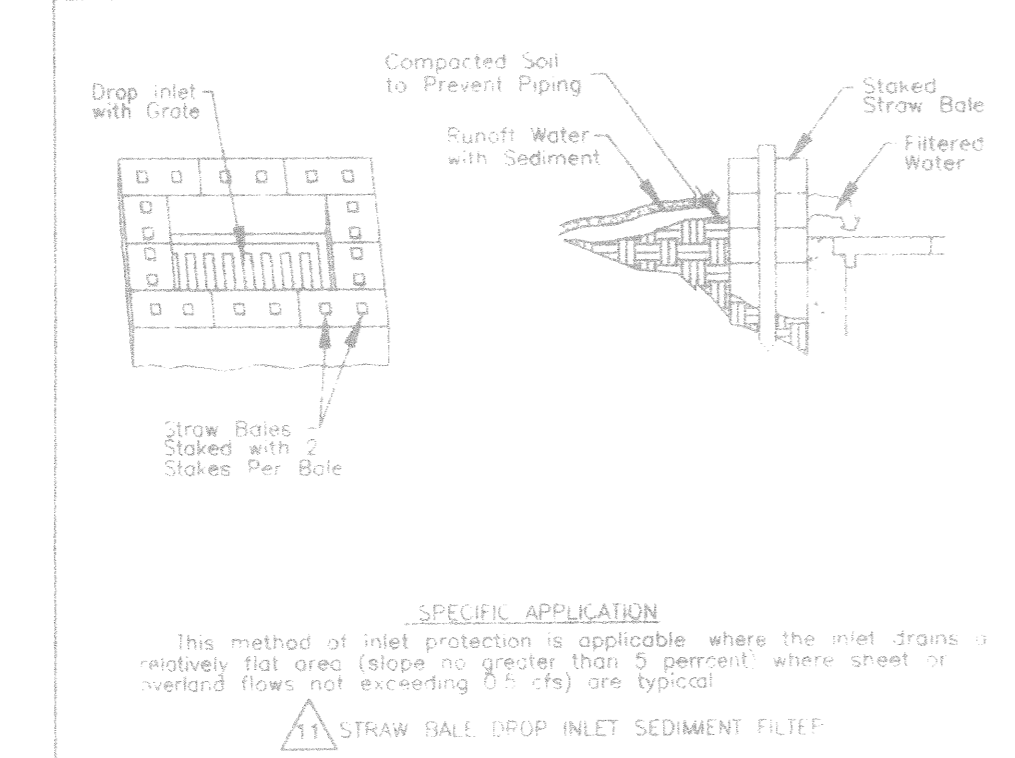
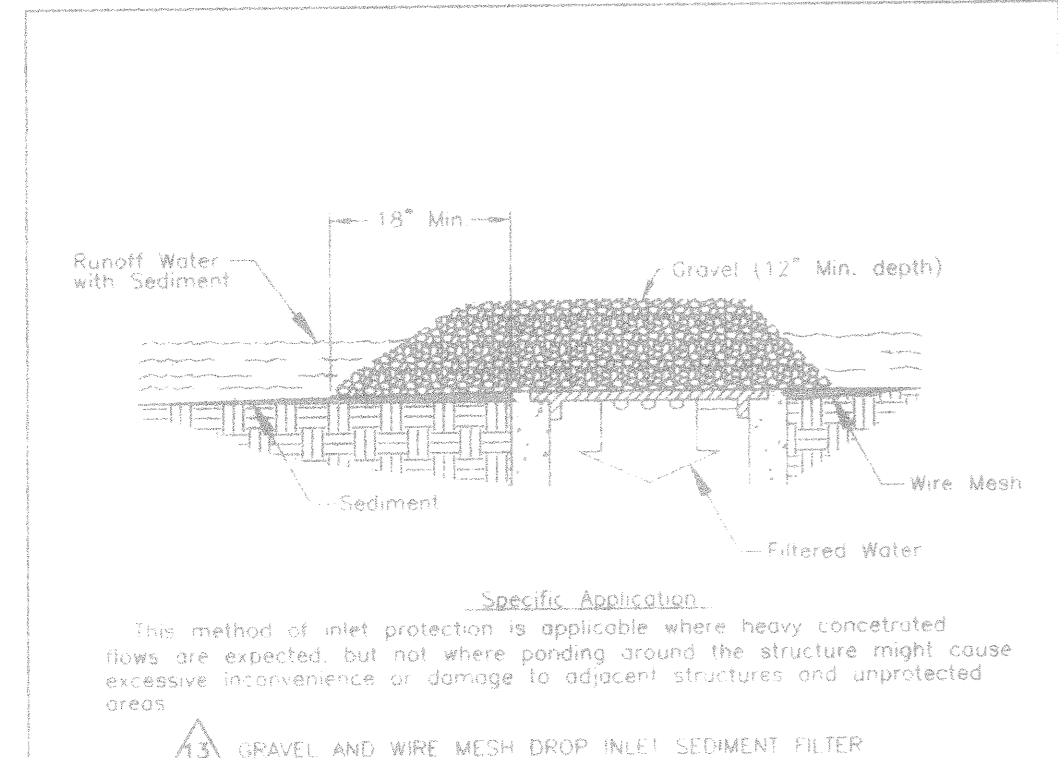


SILT FENCE DETAILS



STRAW BALE OR SILT FENCE
Put up before any other work is done. Install on downslope side(s) of site with ends extended up slopeslope a short distance.
Place parallel to the contour of the land to allow water to pond behind fence.
Entrench 4 inches deep (see back page.)
Stake (2 stakes per bale OR 1 stake every 3 feet for silt fence).
Leave no gaps between bales or sections of silt fence. Inspect and repair once a week and after every 1/2 inch rain. Remove sediment if deposits reach half the fence or straw bale height.
Maintain until a lawn is established.

INLET PROTECTION DETAILS

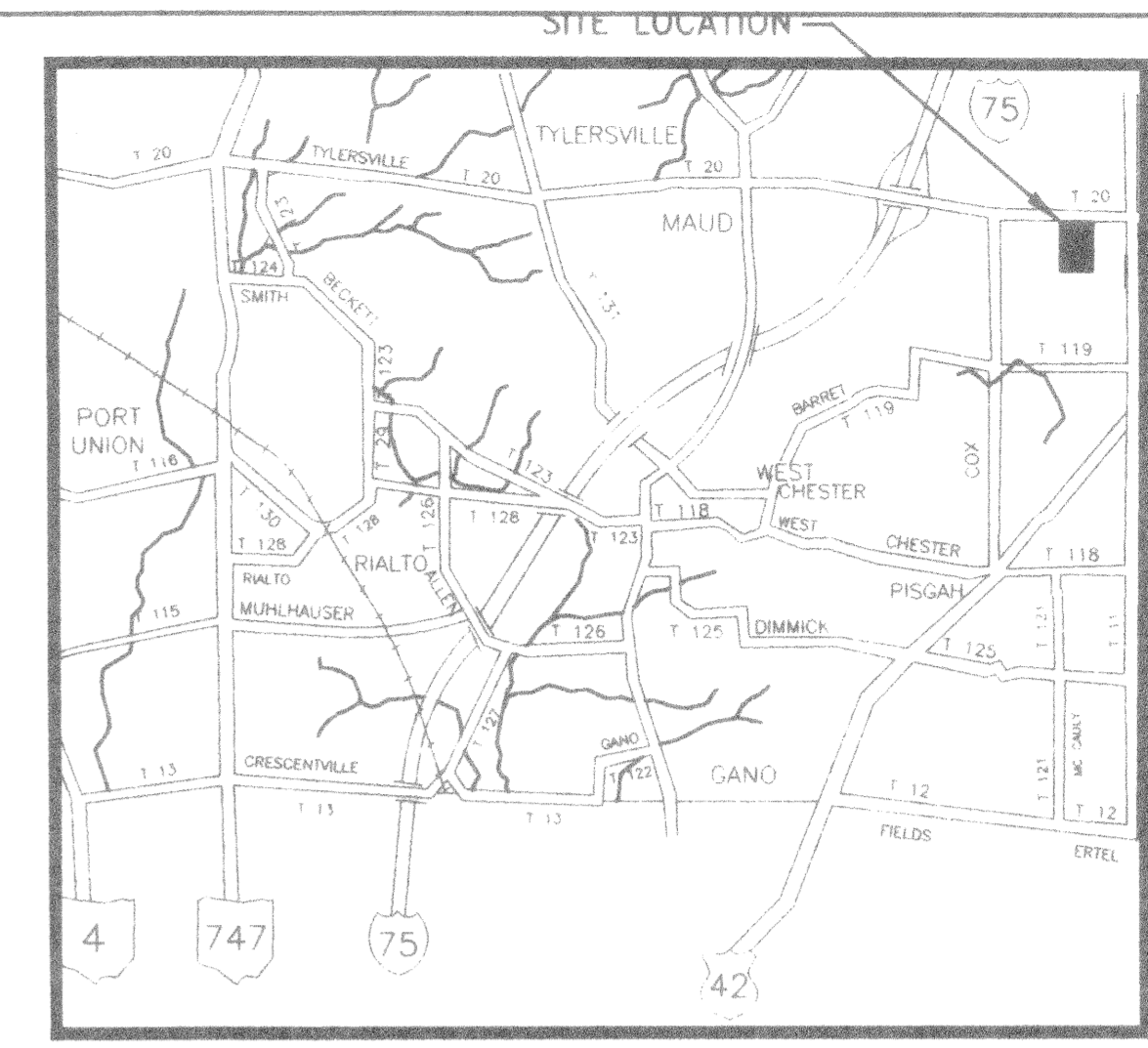
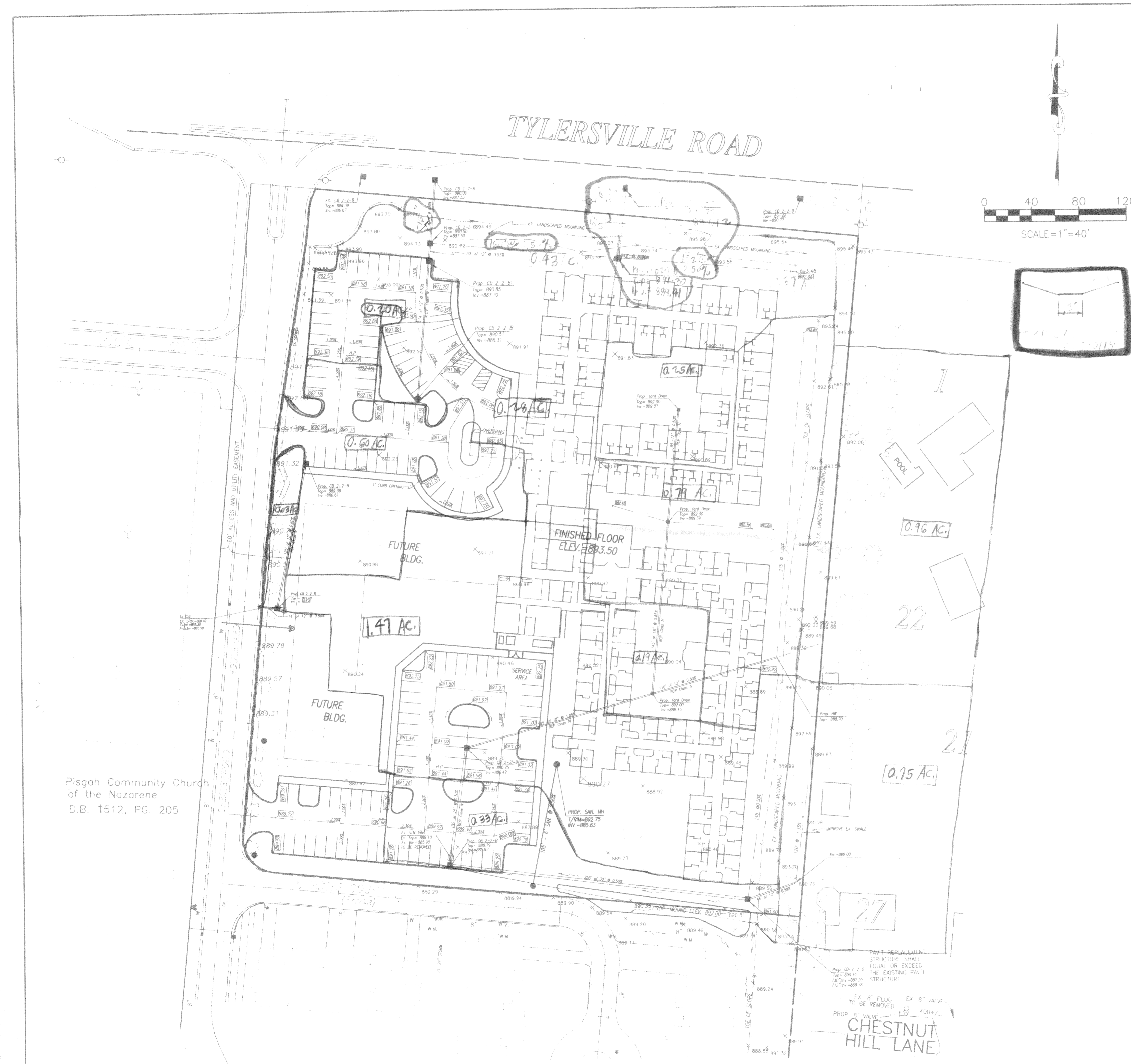


SOIL PILES
Located away from any downslope street, driveway, stream, lake, wetland, ditch or drainage way.
Temporary seed such as annual rye is recommended for topsoil piles.
Surround with straw bales or silt fence.

GRAVEL DRIVE
Install a single access drive using 3 to 5 inch aggregate over a geotextile material. Lay gravel 6 inches deep and 10 feet wide from the foundation to the street.
Use to prevent tracking dirt onto the road by all vehicles.
Maintain throughout construction until driveway is paved.
Park all construction vehicles on the street and off of the site.

SEDIMENT CLEANUP
By the end of each work day, sweep or scrape up soil tracked onto the road.
By the end of the next work day after a storm, clean up soil washed off-site, and check straw bales and silt fence for damage or sediment buildup.

DOWNSPOUT EXTENDERS
Not required, but highly recommended. Install as soon as gutters and downspouts are completed.
Route water to a grassed or paved area. Maintain until a lawn is established.



NOTE:
 (1) 18" MIN. VERTICAL CLEARANCE OD TO OD TO BE MAINTAINED BETWEEN WATER MAIN AND STORM AND SANITARY SEWERS AT CROSSOVERS.
 (2) LOWER WATER SERVICES AS NEEDED TO AVOID CONFLICTS WITH STORM WITH MIN. 4' COVER.
 (3) LOCATION OF ALL EXISTING UTILITIES TO BE DETERMINED IN THE FIELD PRIOR TO WORK BEGINNING.
 (4) 48 HOUR NOTICE TO BE PROVIDED TO PROPERTY OWNERS AFFECTED BY SHUTDOWN OF WATER MAIN.

- EROSION CONTROL LEGEND**
- 1 SEEDING AND MULCHING
 - 2 SEEDING
 - 3 PRESERVING EXISTING VEGETATION
 - 4 STRAW BALE
 - 5 SILT FENCE
 - 6 SOIL PILES
 - 7 TEMPORARY STREAM CROSSING
 - 8 GRAVEL CURB INLET SEDIMENT FILTER
 - 9 BLOCK & GRAVEL DROP INLET SEDIMENT FILTER
 - 10 CABIONS
 - 11 STRAW BALE DROP INLET SEDIMENT FILTER
 - 12 SOD DROP INLET SEDIMENT FILTER
 - 13 GRAVEL & WIRE MESH DROP INLET SEDIMENT FILTER
 - 14 BLOCK & GRAVEL CURB INLET SEDIMENT FILTER
 - 15 SEDIMENT BASINS & DAMS
 - 16 DIKES & SLOPE PROTECTION
 - 17 ROLLED GRAVEL CURB INLET SED. FILTER (SEE SOIL EROSION & SEDIMENTATION CONTROL DETAIL SHEET) SHEET 6
- *All sediment and erosion control measures must be visually inspected and the appropriate maintenance and repair actions taken whenever precipitation exceeds 1/2 inch in any 24 hour period.

SEDIMENTATION CONTROL NOTES

The project has been designed to control erosion and prevent damage to other property. All stripping, earthwork, and grading shall be performed to minimize erosion. Natural vegetation shall be retained wherever possible. The proposed plan will allow almost all eroded materials to be retained on site.

All areas disturbed by the construction of the roadways, ditches and sedimentation basins shall be seeded. Payment will be by the number of square yards disturbed as per the grading plan.

METHOD

Straw bales are to be utilized to create temporary dams to catch the silt. These are to be installed at points where the flow is concentrated.

Surface water is to be directed into these temporary silt basins by means of temporary swales and ditches.

As the installation of the storm sewer progress, straw bales are to be placed at the inlet and outlet of sewers to control the silt.

Payment for the above shall be included in items Excavation, Embankment.

Pisgah Community Church of the Nazarene
 D.B. 1512, PG. 205

engineers planners surveyors

bayer becker engineers

1230 BELLEVUE DR. LANCASTER, OHIO 43085-1972
 612-537-9004

CHESTERWOOD HEALTHCARE FACILITY
 UNION TOWNSHIP BUTLER COUNTY OHIO
 TYLERSVILLE ROAD

SITE PLAN

7	6	5	4	3	2	1	ITEM

AutoCAD Drawing Name: 9579PH2.DWG
 DATE: 5/7/98

DRAINAGE AREAS ONLY

GENERAL NOTES
EROSION AND SEDIMENT CONTROLS

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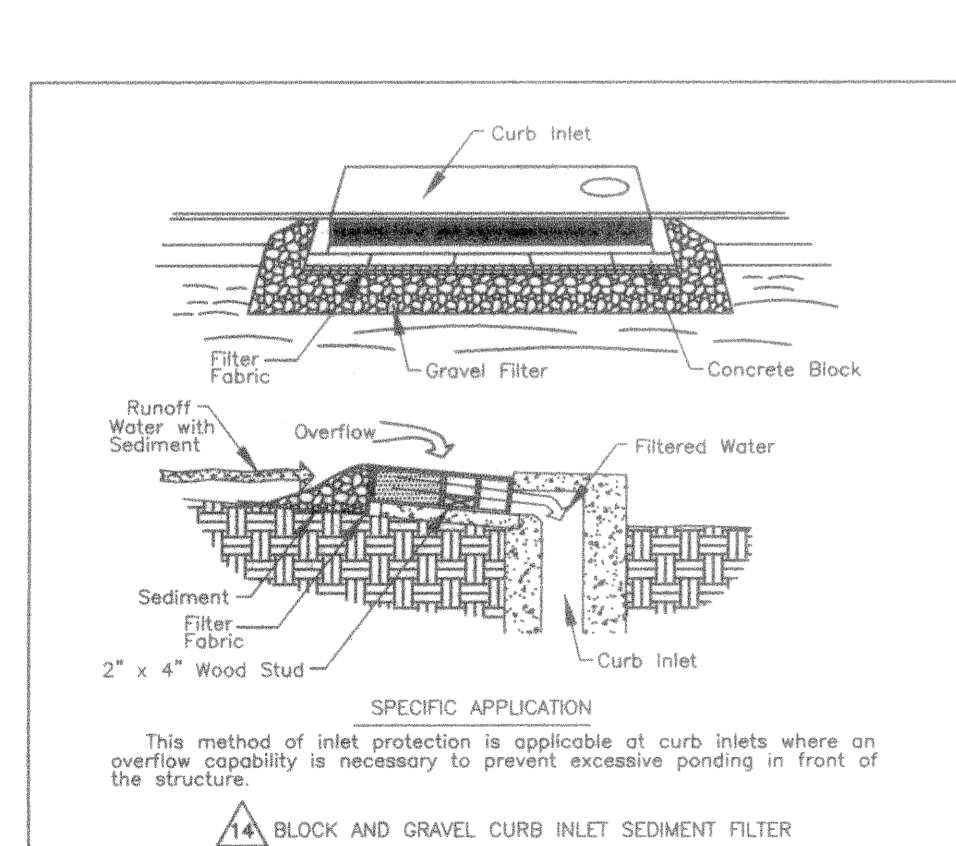
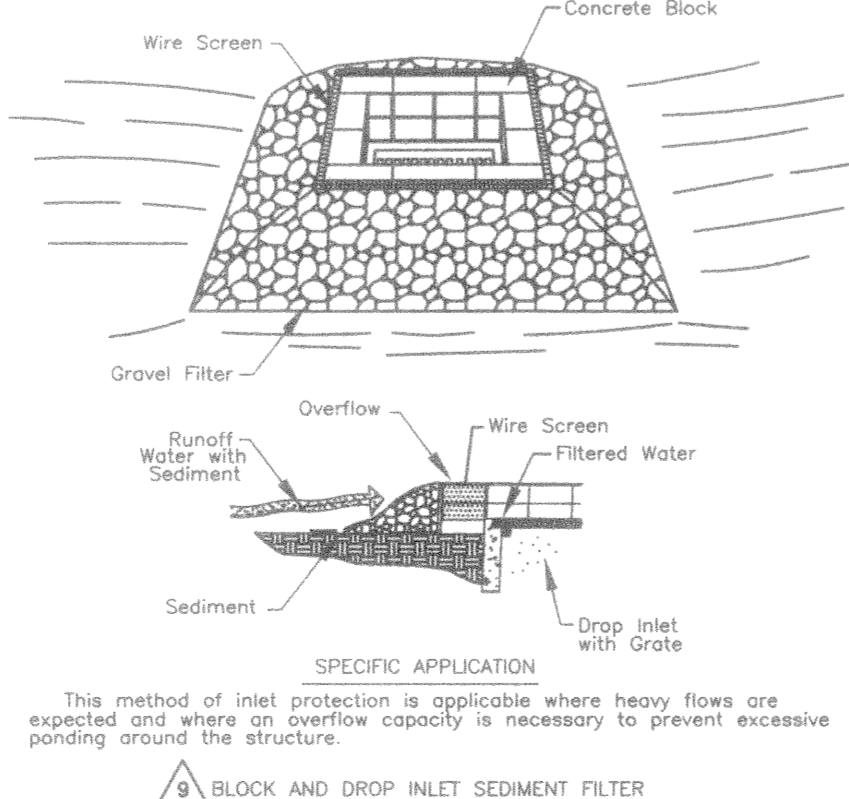
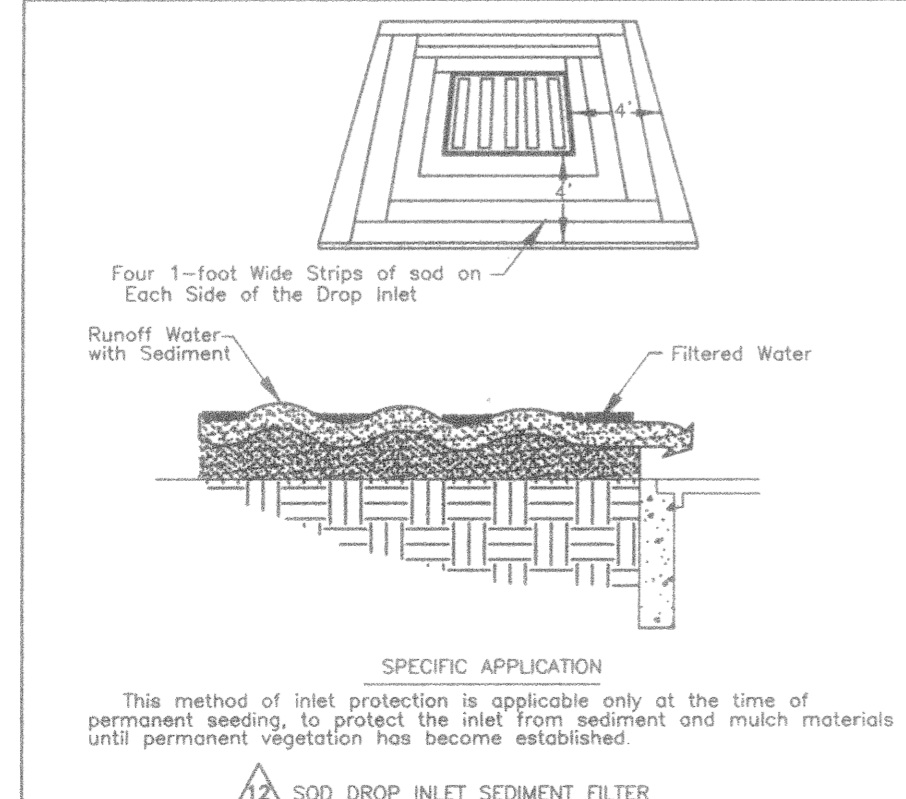
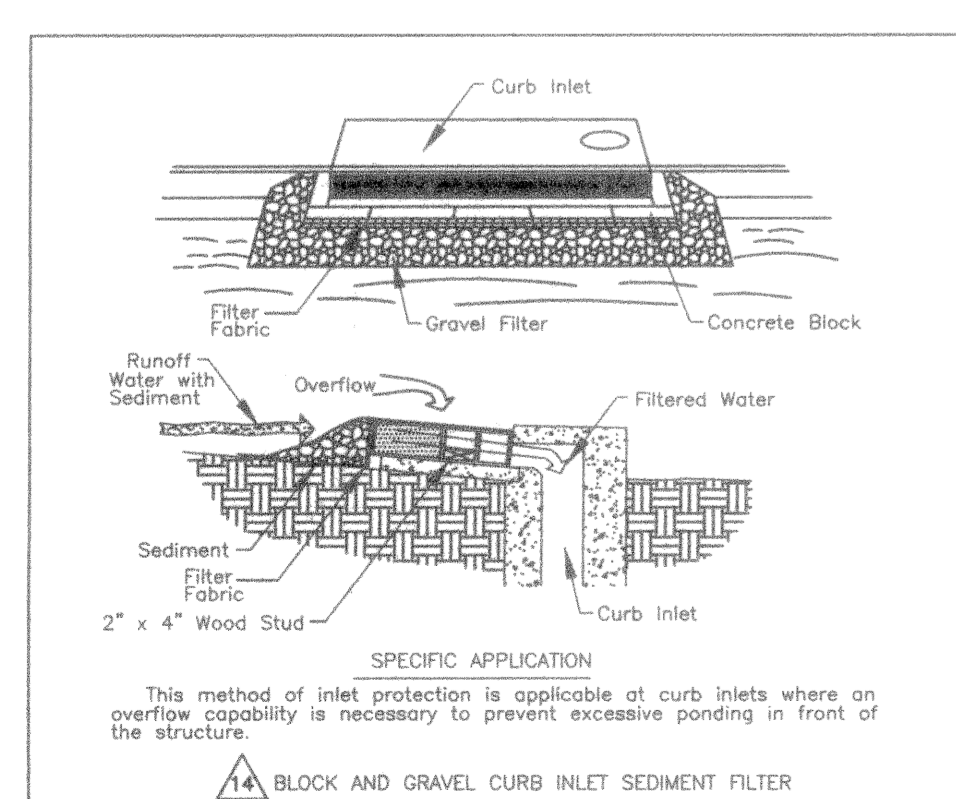
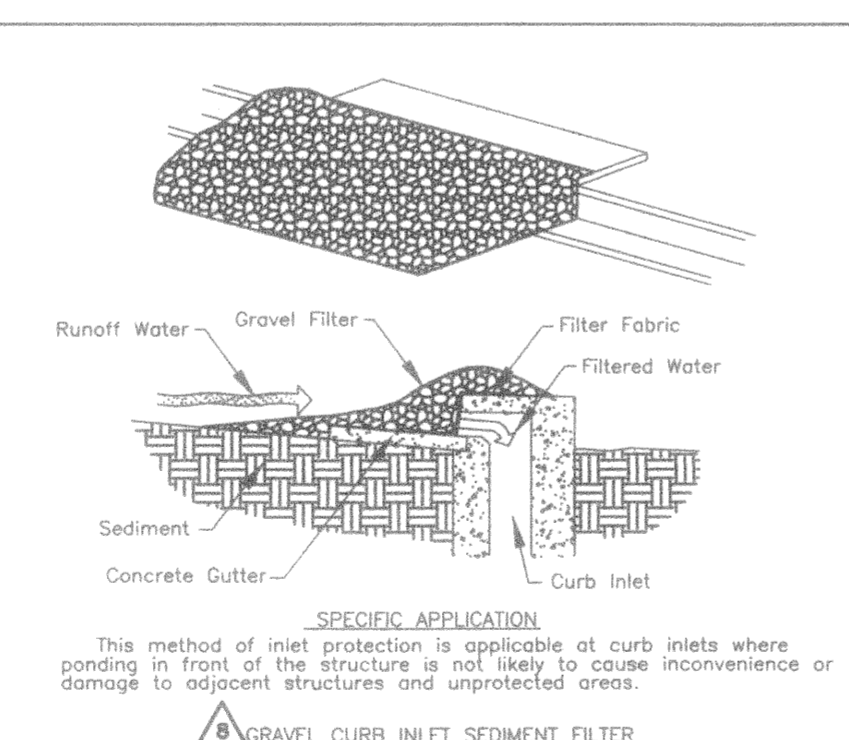
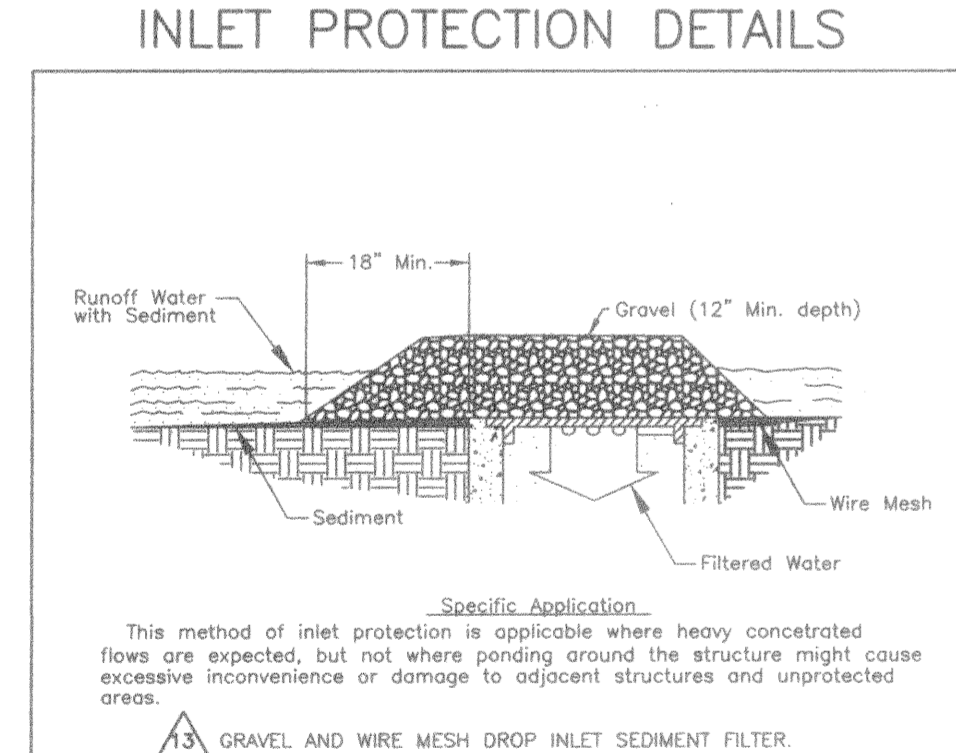
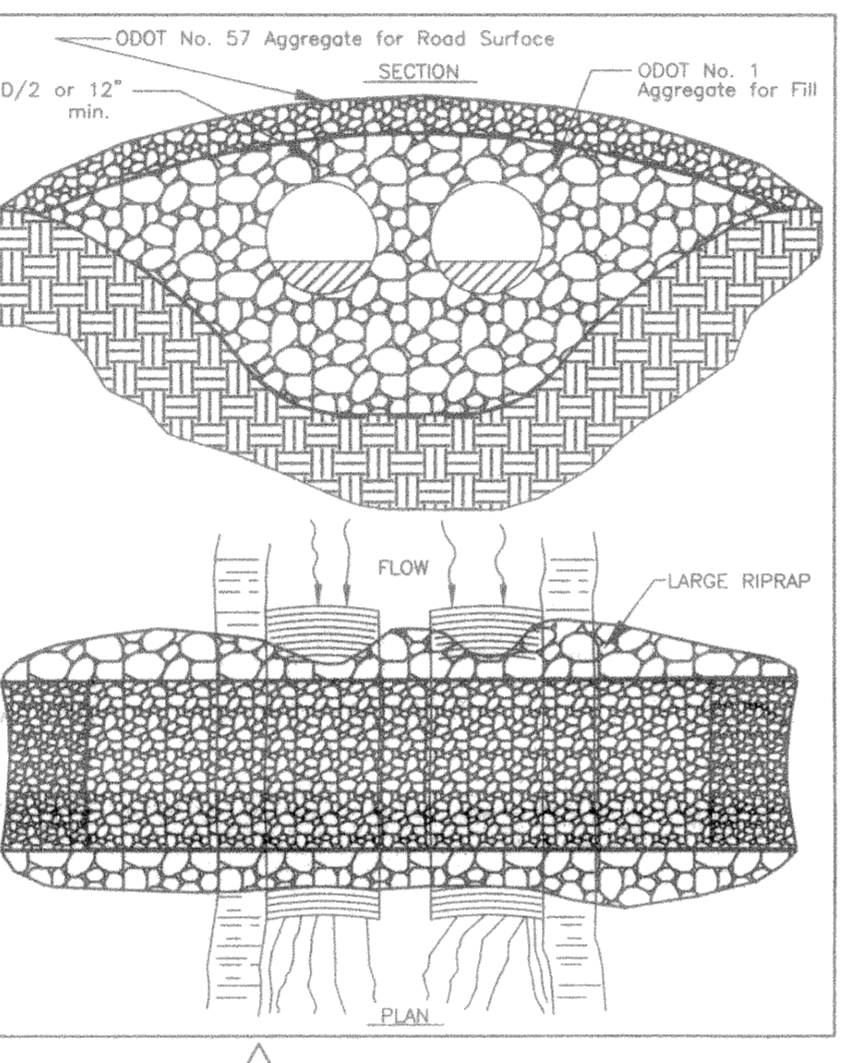
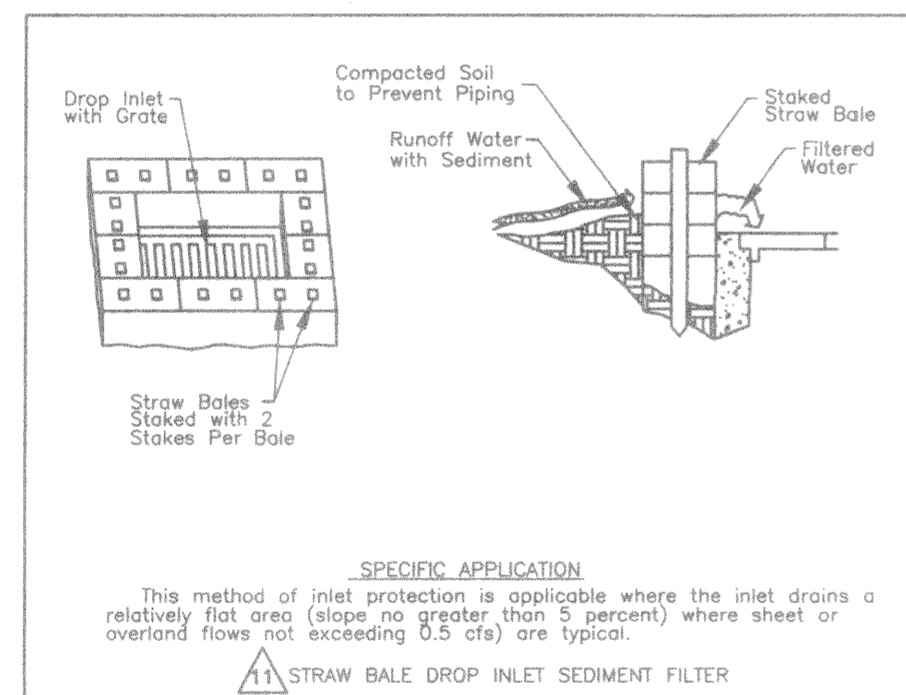
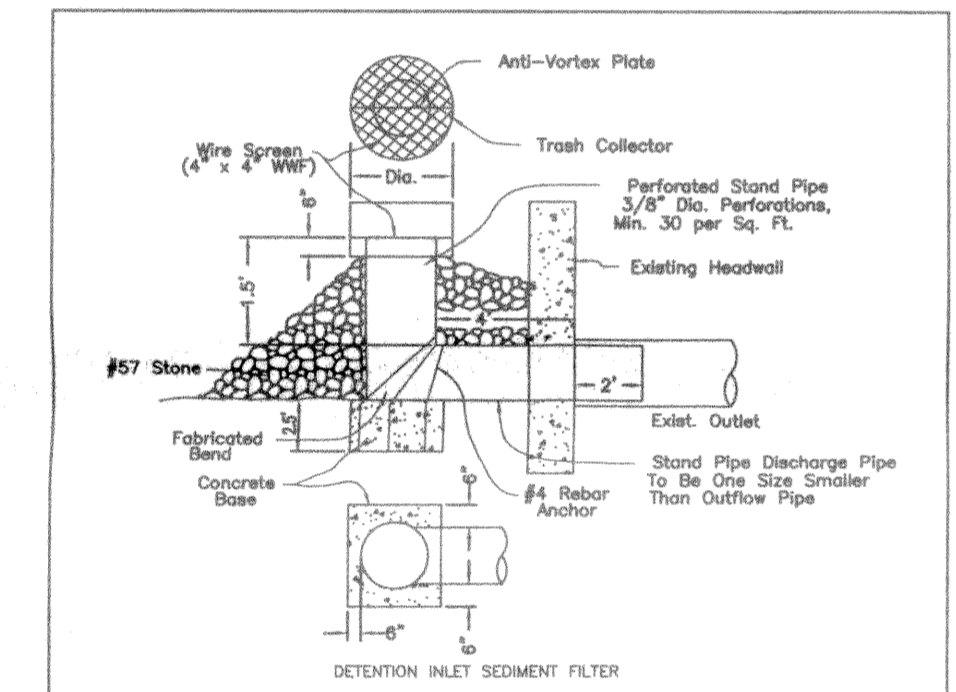
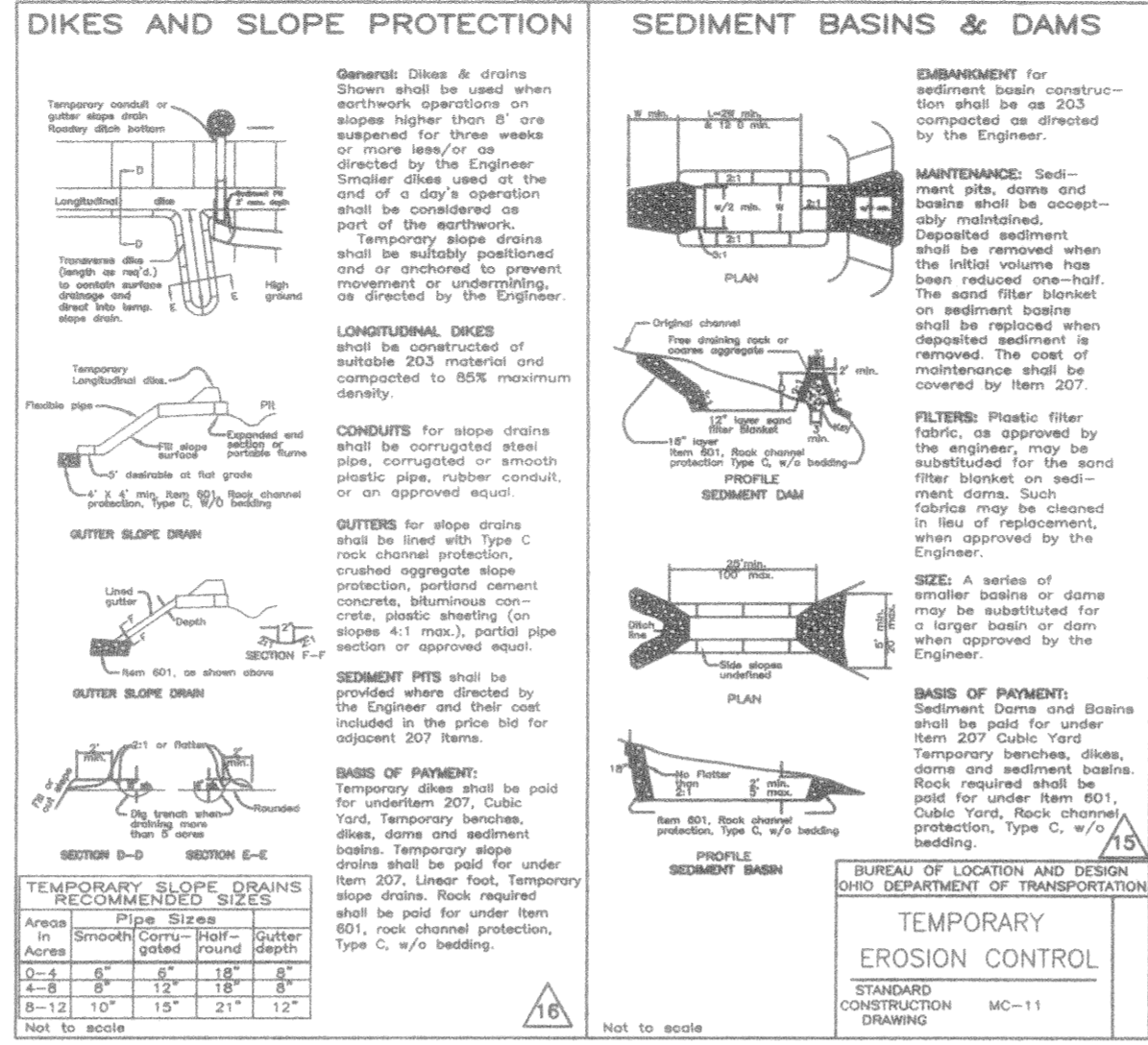
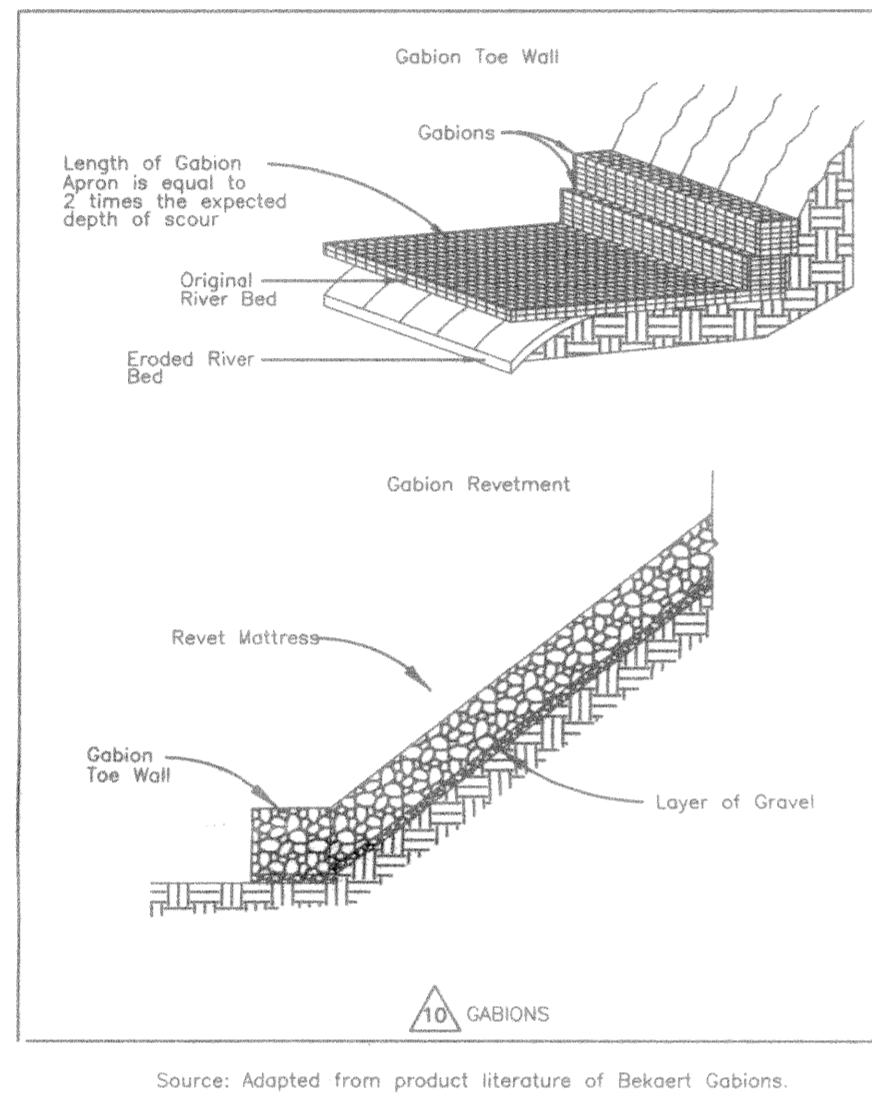
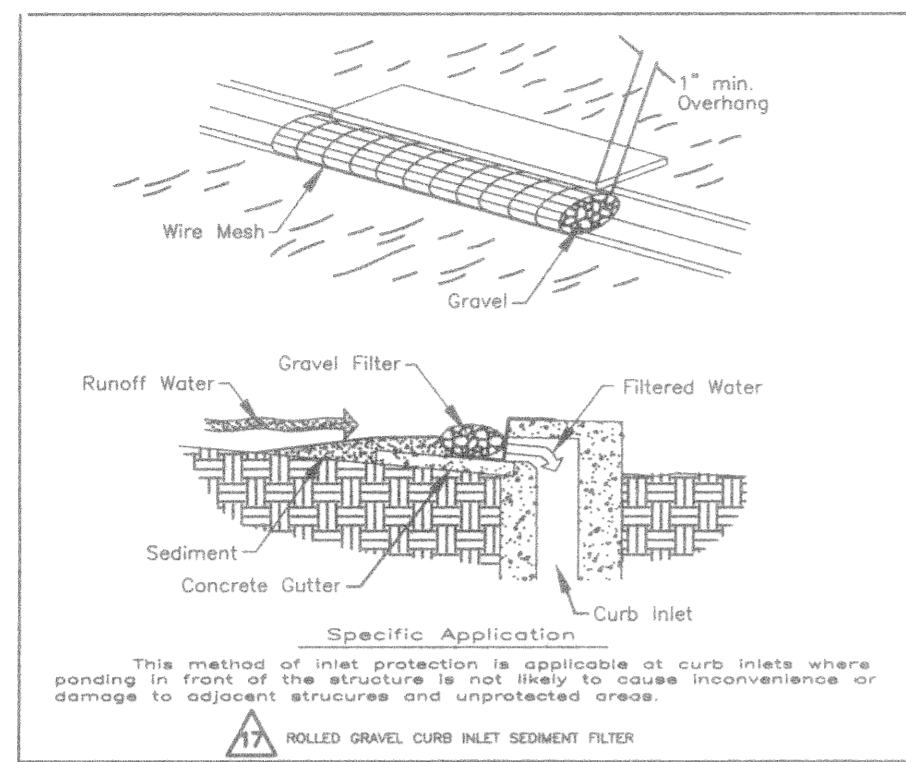
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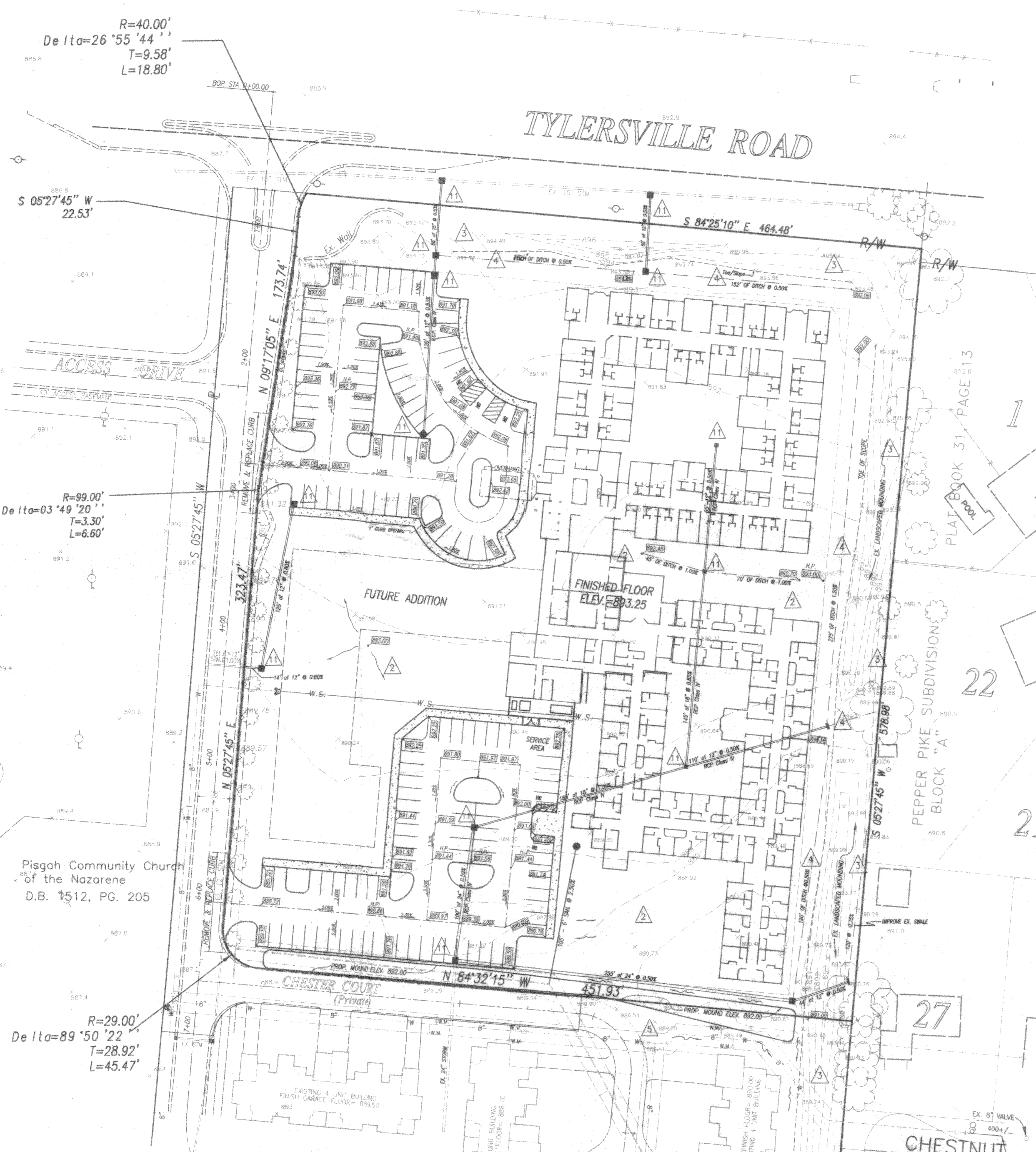


CHESTERWOOD HEALTHCARE FACILITY
 UNION TOWNSHIP BUTLER COUNTY OHIO
 TYLERSVILLE ROAD

EROSION CONTROL DETAILS

7	6	5	4	3	2	1	ITEM

AutoCAD Drawing Name: M00090.DWG
 DATE: 7/28/00
 2 OF 2



$R=40.00'$
 $\Delta = 26'55.44''$
 $T=9.58'$
 $L=18.80'$

$R=99.00'$
 $\Delta = 03'49.20''$
 $T=3.30'$
 $L=6.60'$

$R=29.00'$
 $\Delta = 89'50.22''$
 $T=28.92'$
 $L=45.47'$

Pisgah Community Church
of the Nazarene
D.B. 1512, PG. 205

TYPICAL DITCH SECTION

EROSION CONTROL LEGEND

- SEEDING AND MULCHING
- SEEDING
- PRESERVING EXISTING VEGETATION
- STRAW BALE
- SILT FENCE
- SOIL PILES
- TEMPORARY STREAM CROSSING
- GRAVEL CURB INLET SEDIMENT FILTER
- BLOCK & GRAVEL DROP INLET SEDIMENT FILTER
- CARBONS
- STRAW BALE DROP INLET SEDIMENT FILTER
- SOD DROP INLET SEDIMENT FILTER
- GRAVEL & WIRE MESH DROP INLET SEDIMENT FILTER
- BLOCK & GRAVEL CURB INLET SEDIMENT FILTER
- SEDIMENT BASINS & DAMS
- DIKES & SLOPE PROTECTION
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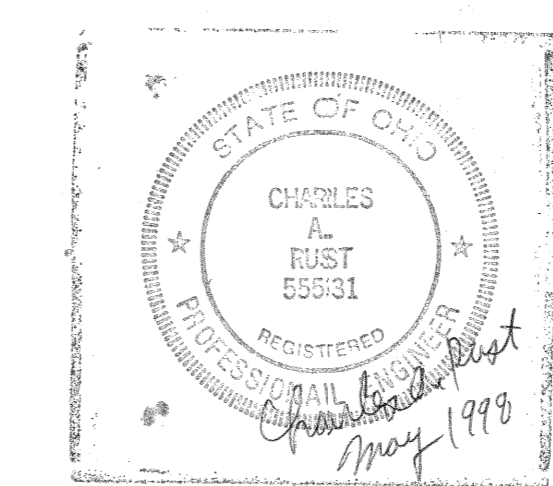
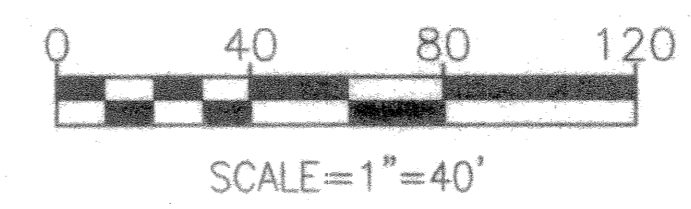
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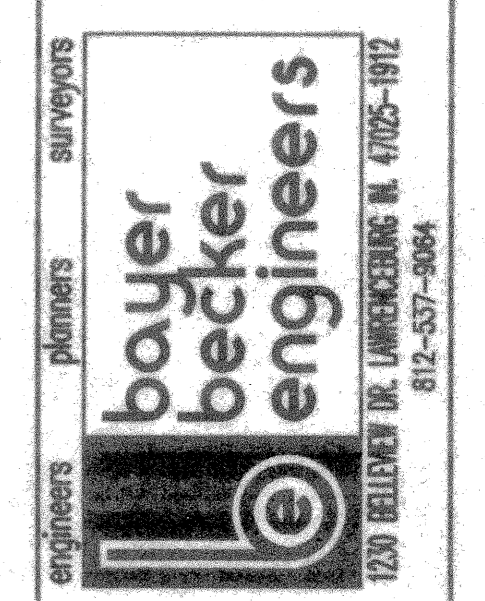
Proposed grades shown are to the top of pavement and ditch grades. Add 6" for top of curb elevations.

Note:
12"x18" "Reserved Parking" signs meeting ADA requirements shall be placed behind the walk at each handicapped space. Handicapped spaces shall be 8' feet wide, with an 5' wide aisle being between the spaces.



UNDERGROUND UTILITIES
2 EXISTING DITS
800-1-800-363-2394
NO. 1-800-363-2394
UTILITY LOCATING SERVICE
NON-EMERGENCY SERVICE BY PHONE ONLY

- Building fire protection system shall be per architect and building official. The shop drawings for the fire protection system (including the sprinkler pit) shall be submitted for approval of the building official before construction. All water mains shall be installed in accordance with NFPA 24, American Water Works Association and Butler Co. Water & Sewer Department Standards and specifications. The sprinkler system (including valve pit) and the fire department connection shall meet the requirements of the Fairfield Fire Department.
- Foundation and building drains shall not be connected to the roof drainage systems.
- All recommendations in the geotechnical report shall be followed, and geotechnical inspection is required.
- Besides meeting all local requirements, all construction and materials shall meet applicable state and federal requirements including OSHA requirements.
- A heavy duty (traffic bearing) grate and frame shall be used on the CB-2-2-B, and the concrete shall be formed to bear the grate.
- Knox box entry systems shall only be ordered through and approved by the Fire Code official.
- Fire lanes shall be as directed by the Fire Code official.
- All recommendation in "Rain Water and Land Development", second Edition, shall be followed by the contractor.
- A silt fence shall be placed down hill of all ground to be disturbed before any work begins.



CHESTERWOOD HEALTHCARE FACILITY
UNION TOWNSHIP BUTLER COUNTY OHIO
TYLERSVILLE ROAD

GRADING AND EROSION CONTROL PLAN

7	6	5	4	3	2	1
						REV. GRADES
						PRELIMINARY SUBMITTAL TO TOWNSHIP
						5/29/98
						5/12/98
AutoCAD Drawing Name: 9579PH2.DWG						
DATE: 5/7/98						
2 OF 3						

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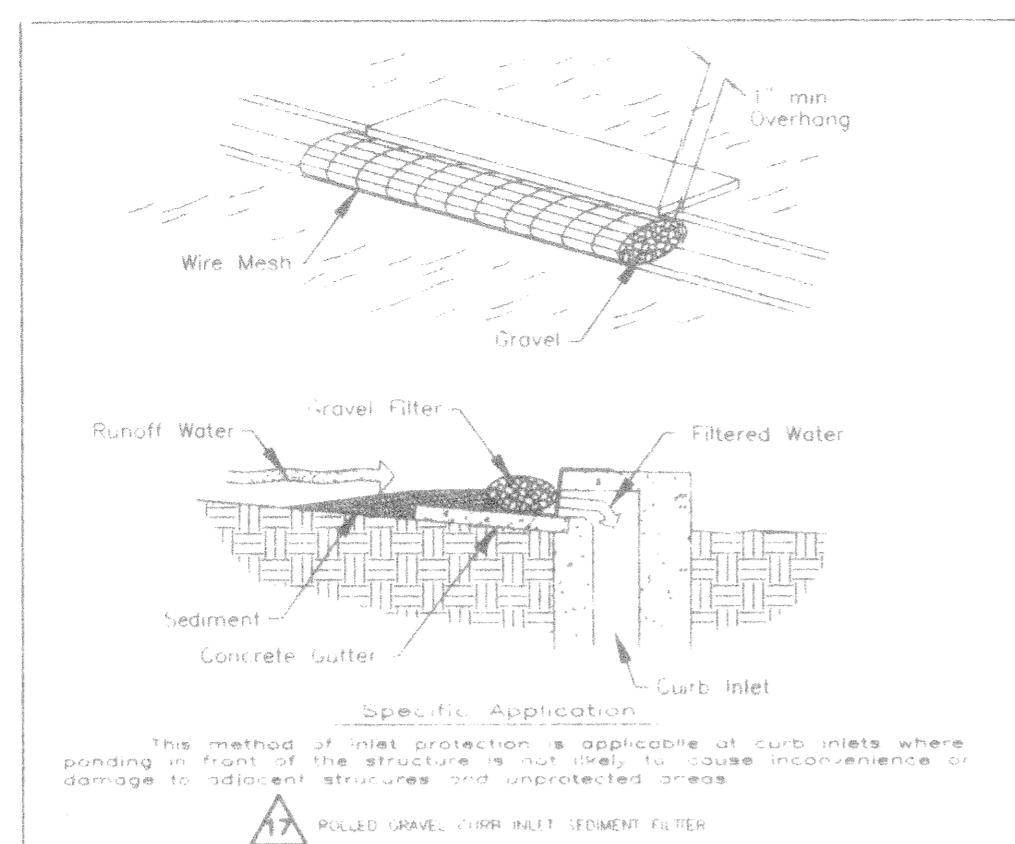
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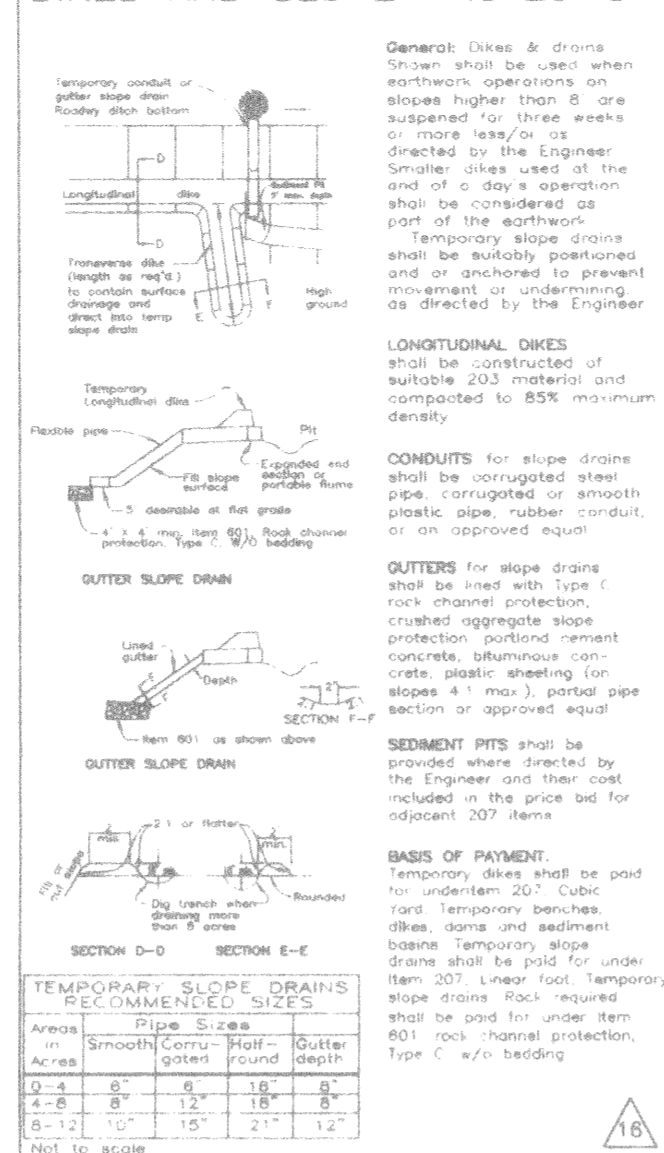
No solid or liquid waste, including building materials, shall be discharged in storm water runoff. Off-site vehicle tracking of sediments shall be minimized. The plan shall ensure and demonstrate compliance and applicable State of local waste disposal, sanitary sewer or septic system regulations.

Maintenance

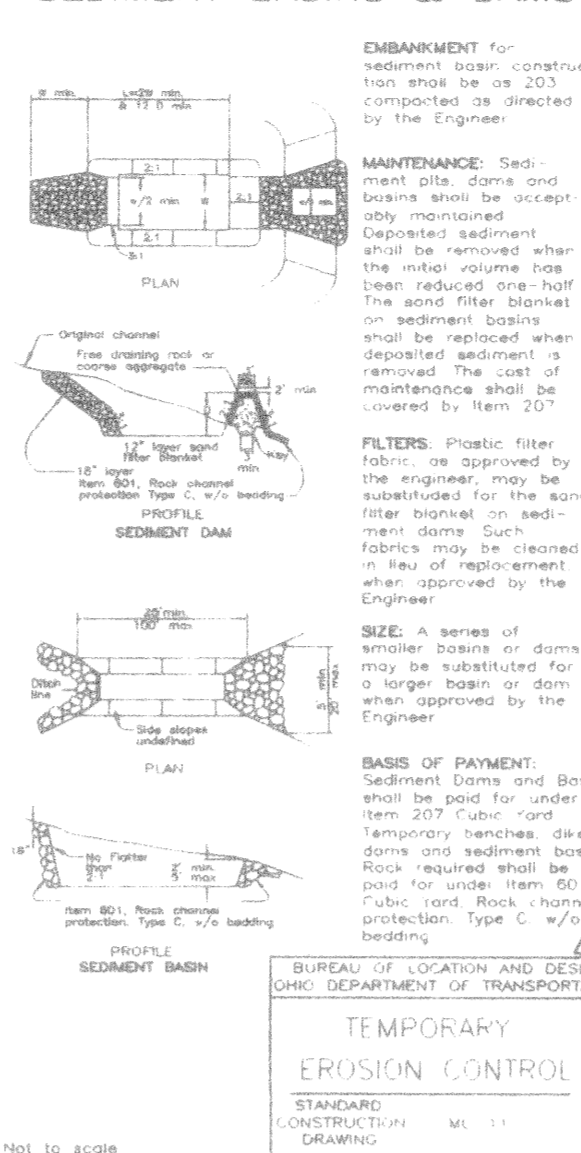
All temporary and permanent control practices shall be maintained and repaired as needed to assure continued performance of their intended function.



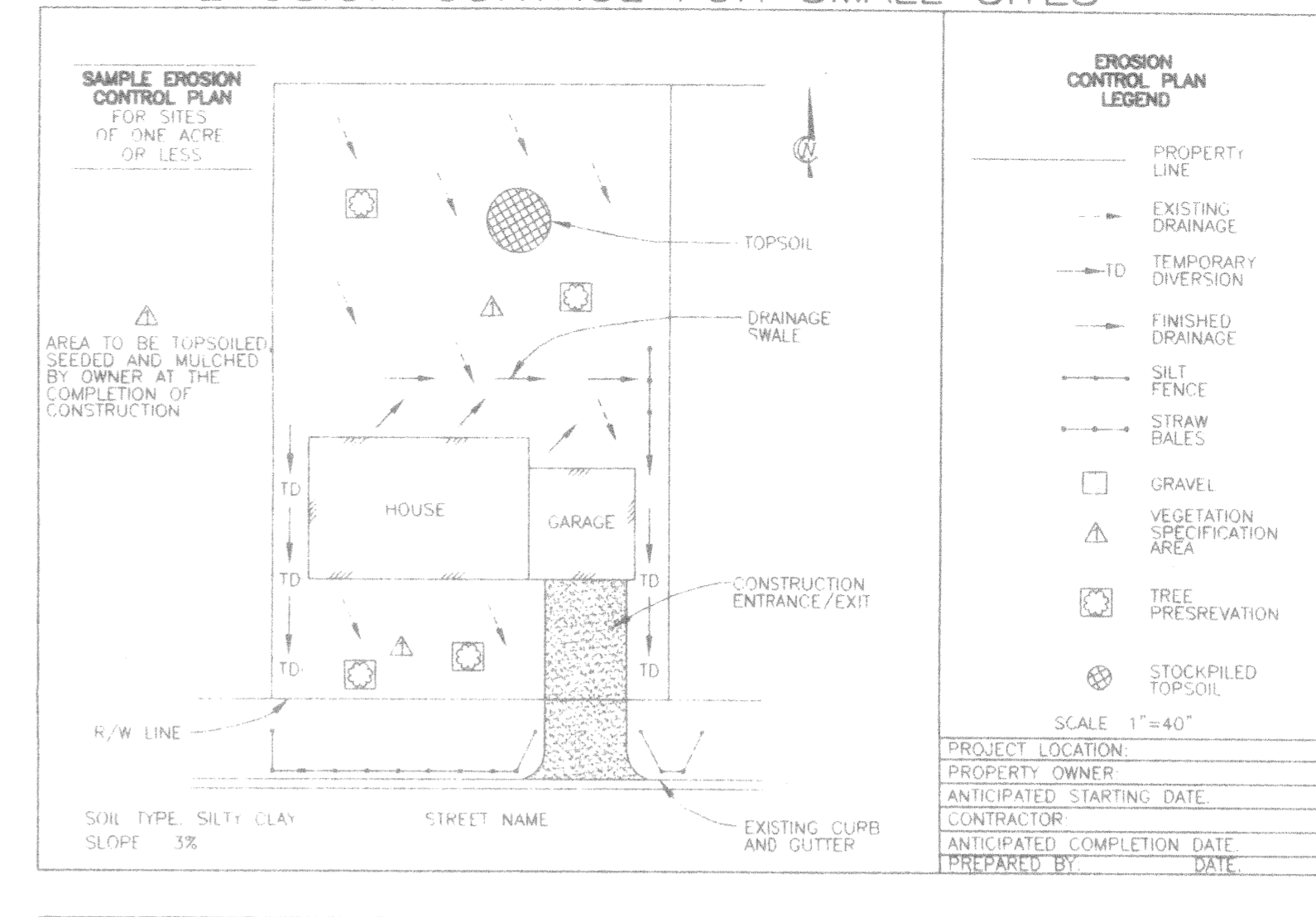
DIKES AND SLOPE PROTECTION



SEDIMENT BASINS & DAMS



EROSION CONTROL FOR SMALL SITES



WARNING! Extra measures may be needed if your site:

- is within 300 feet of a stream or wetland
- is within 1000 feet of a lake
- is steep (slopes of 12% or more)
- receives runoff from 10,000 sq. ft. or more of adjacent land
- Has more than an acre of disturbed ground

Typical Lawn Seed Mixtures

Grass	Sunny Site	Shady Site
Kentucky bluegrass	65%	15%
Fine fescue	20%	70%
Perennial ryegrass	15%	15%

Seeding rate: 3-4 lb./1000 sq. ft.
Seeding rate: 4-5 lb./1000 sq. ft.

REVEGETATION
Seed, sod or mulch bare soil as soon as possible.

SEEDING AND MULCHING
Spread 4 to 6 inches of topsoil. Fertilize according to soil test (or apply 10 lb./1000 sq. ft. of 20-10-10 or 10-10-10 fertilizer). Seed with an appropriate mix for the site (see table.) Rake lightly to cover seed with 1/4" of soil. Roll lightly. Mulch with straw (70-90 lb. or one bale per 1000 sq. ft.). Anchor mulch by punching 2 inches into the soil with a dull, weighted disk or by using netting or other measures on steep slopes, or windy areas. Water gently every day or two to keep soil moist. Less watering is needed once grass is 2 inches tall.

SODDING Spread 4 to 6 inches of topsoil. Fertilize according to soil test (or apply 10 lb./1000 sq. ft. of 20-10-10 or 10-10-10 fertilizer). Lightly water the soil. Lay sod Temp or roll lightly on slopes, lay sod starting at the bottom and work toward the top. Peg each piece down in several places. Initial watering should wet soil 6 inches deep (or until water stands 1 inch deep in a straight-sided container.) Then water lightly every day or two for 2 weeks.

if construction is completed after October 31, seeding or sodding may be delayed. Applying mulch or temporary seed (such as rye or winter wheat) is recommended if weather permits. Straw bale or silt fences must be maintained until final seeding or sodding is completed in Spring March 15- May 31.

PRESERVING EXISTING VEGETATION
Wherever possible, preserve existing trees, shrubs, and other vegetation. To prevent root damage, do not grade, place soil piles, or park vehicles near trees marked for preservation. Place plastic mesh or snow fence barriers around trees to protect the area below their branches.

STRAW BALE OR SILT FENCE
Put up before any other work is done. Install on downslope side(s) of site with ends extended up slopes a short distance. Place parallel to the contour of the land to allow water to pond behind fence. Entrench 4 inches deep (see back page.) Stake (2 stakes per bale OR 1 stake every 3 feet for silt fence). Leave no gaps between bales or sections of silt fence. Inspect and repair once a week, and after every 1/2 inch rain. Remove sediment if deposits reach half the fence or straw bale height. Maintain until a lawn is established.

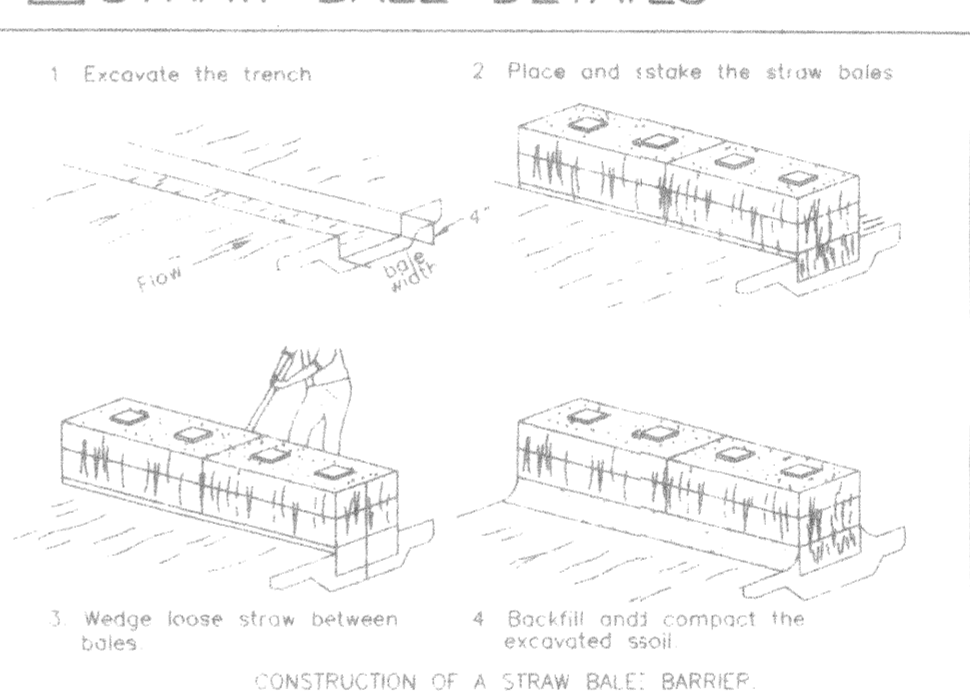
SOIL PILES
Located away from any downslope street, driveway, stream, lake, wetland, ditch or drainageway. Temporary seed such as annual rye is recommended for topsoil piles. Surround with straw bales or silt fence.

GRAVEL DRIVE
Install a single access drive using 3 to 5 inch aggregate over a geotextile material. Lay gravel 6 inches deep and 10 feet wide from the foundation to the street. Use to prevent tracking dirt onto the road by all vehicles. Maintain throughout construction until driveway is paved. Park all construction vehicles on the street and off of the site.

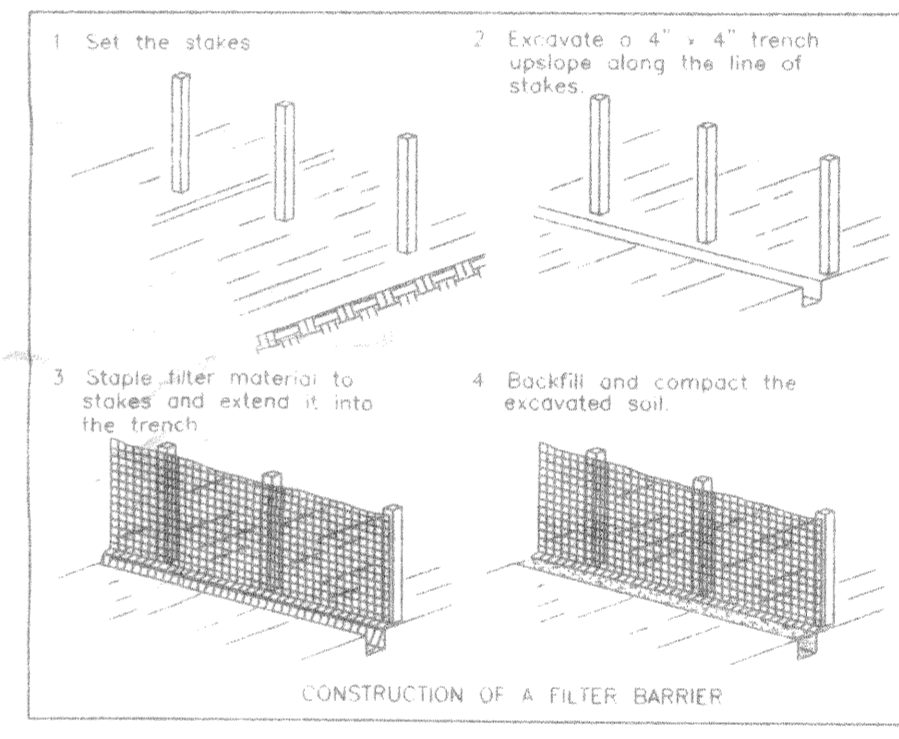
SEDIMENT CLEANUP
By the end of each work day, sweep or scrape up soil tracked onto the road. By the end of the next work day after a storm, clean up soil washed off-site, and check straw bales and silt fence for damage or sediment buildup.

DOWNSPOUT EXTENDERS
Not required, but highly recommended. Install as soon as gutters and downspouts are completed. Route water to a grassed or paved area. Maintain until a lawn is established.

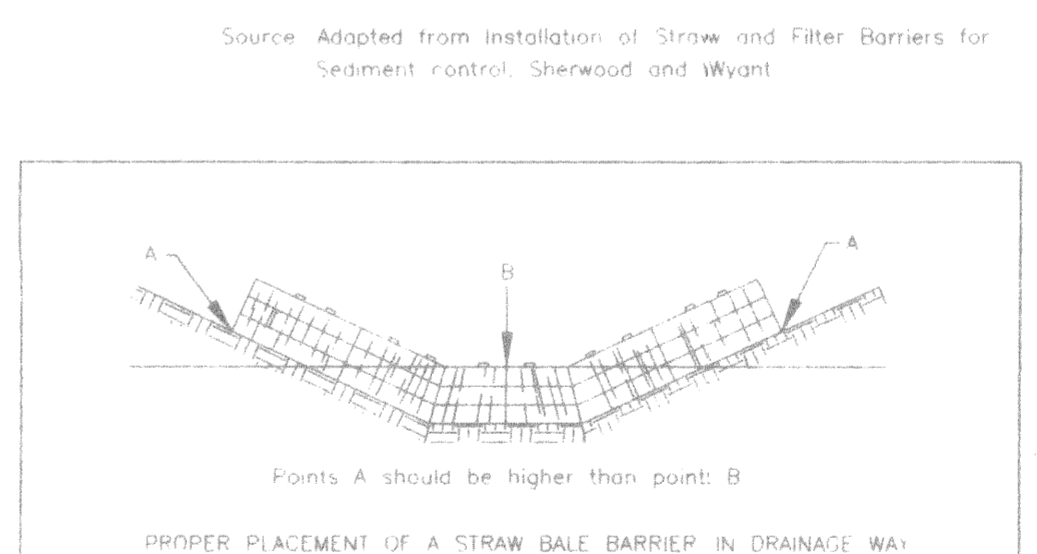
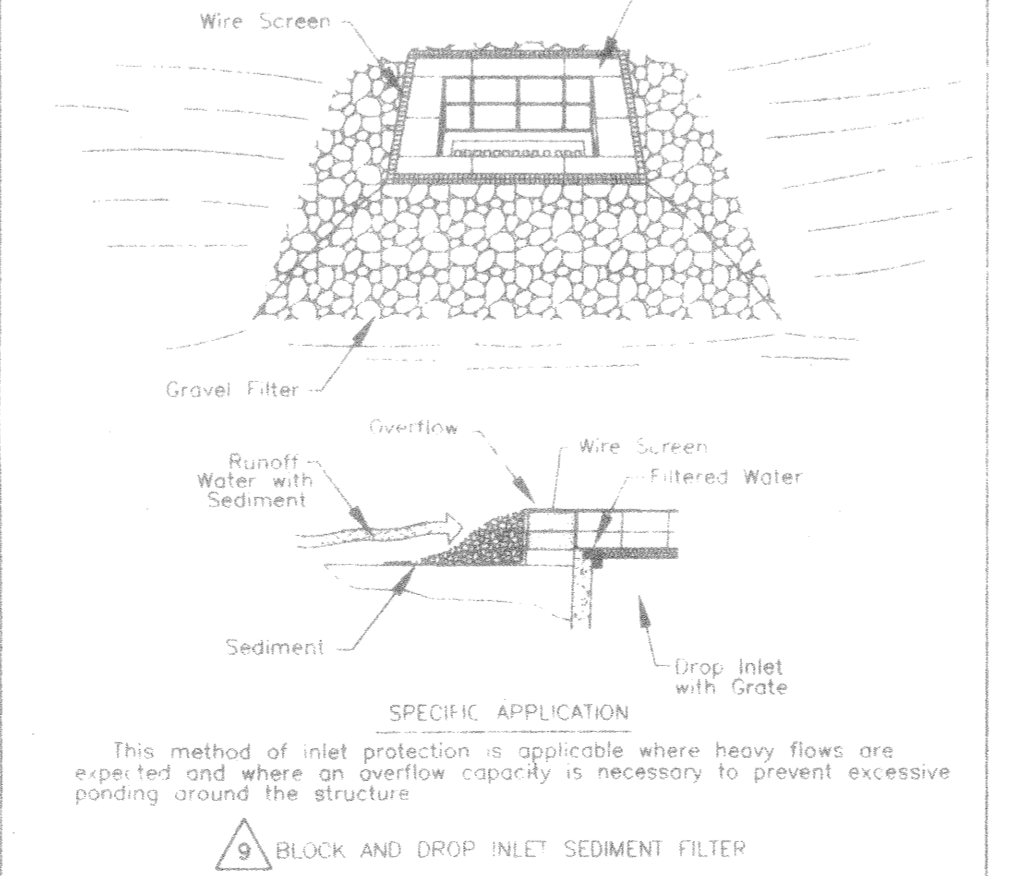
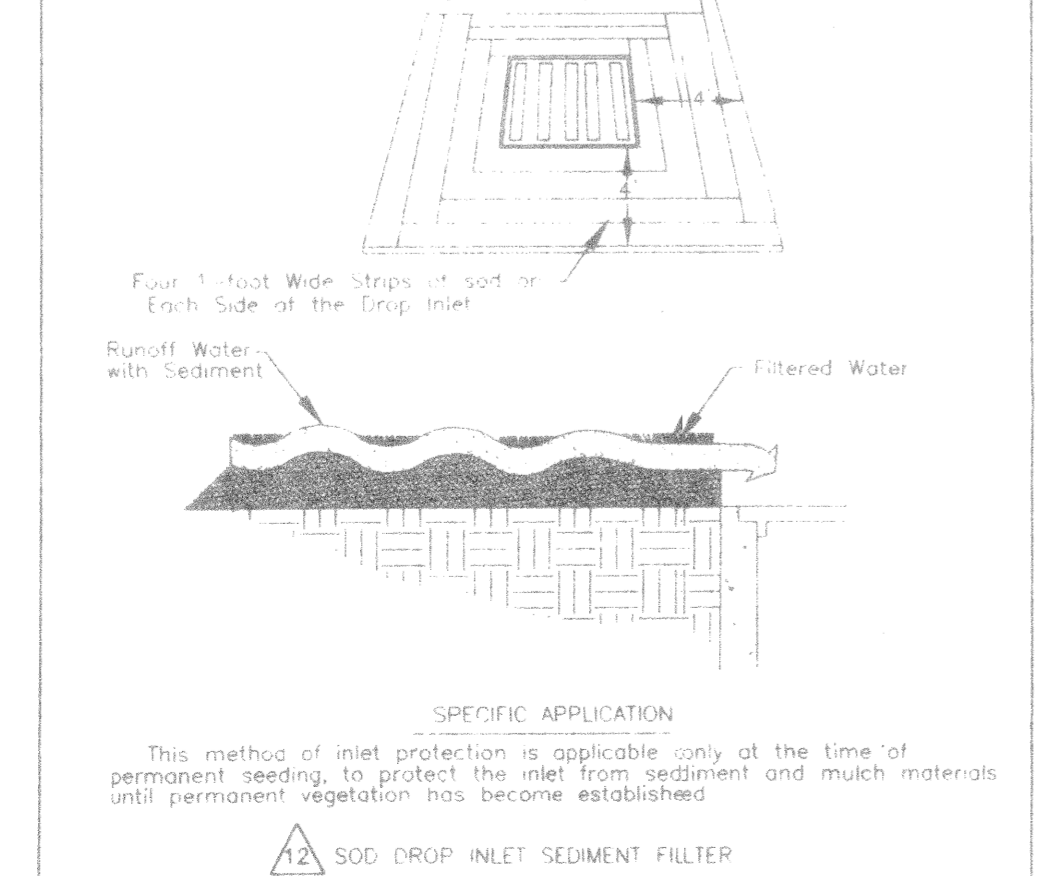
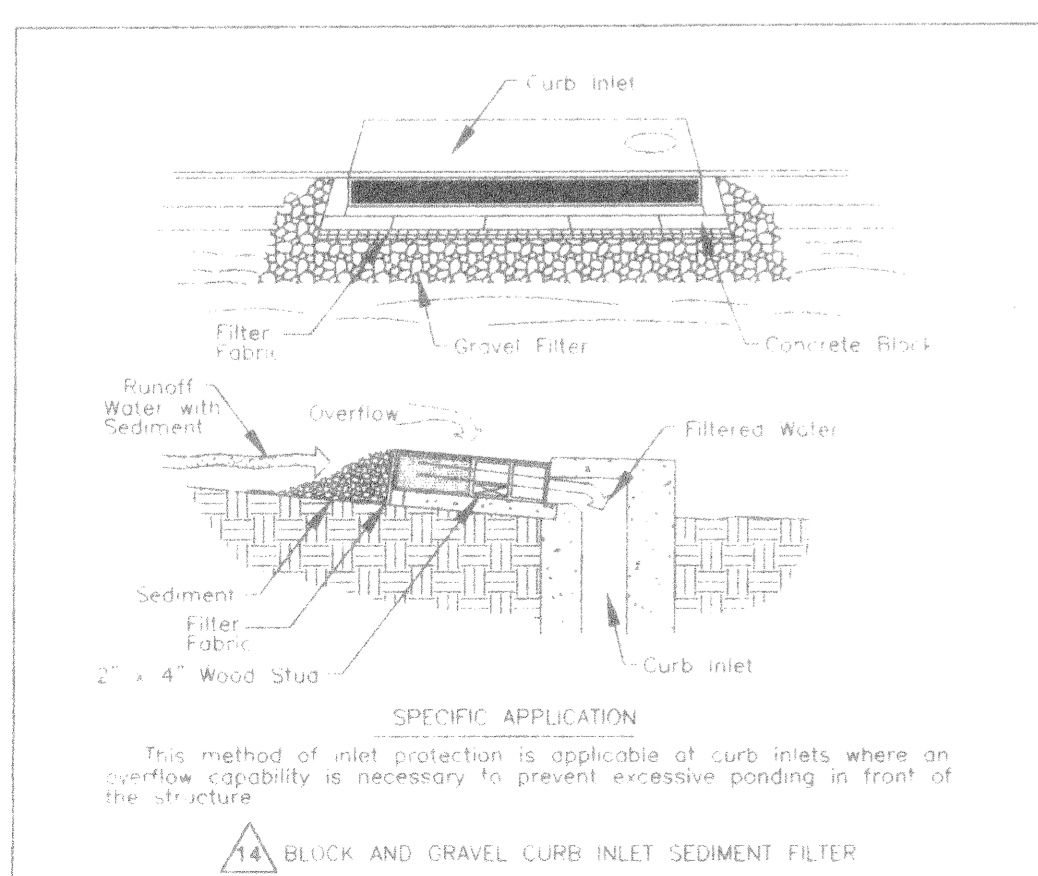
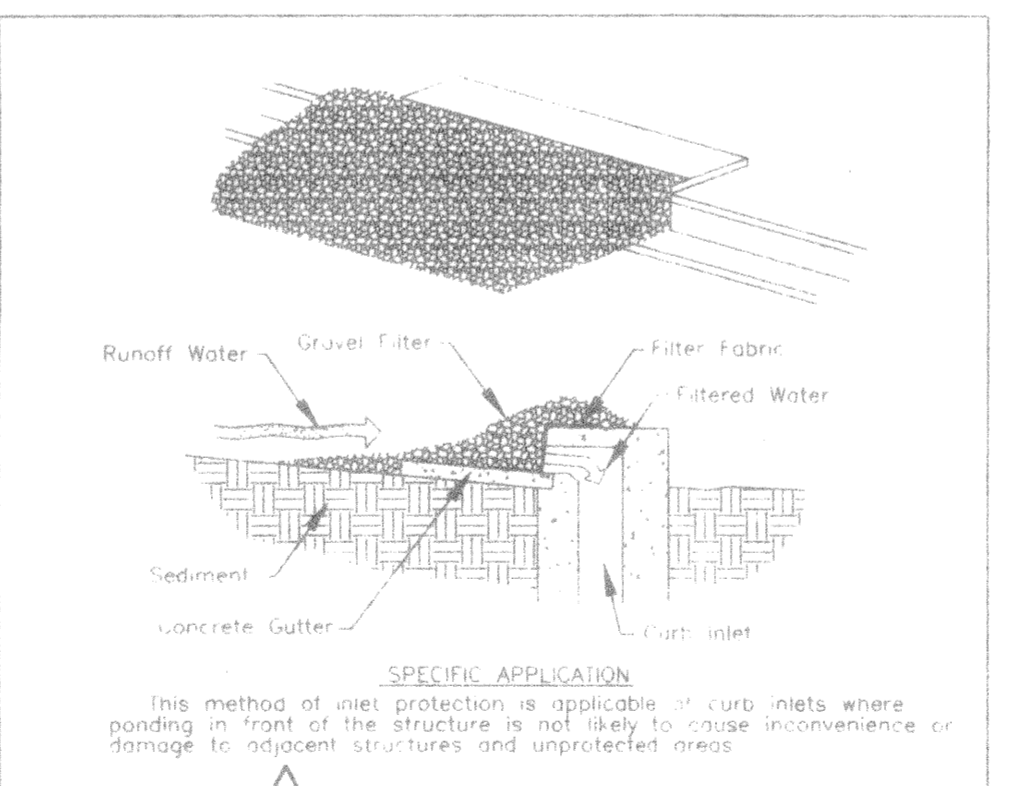
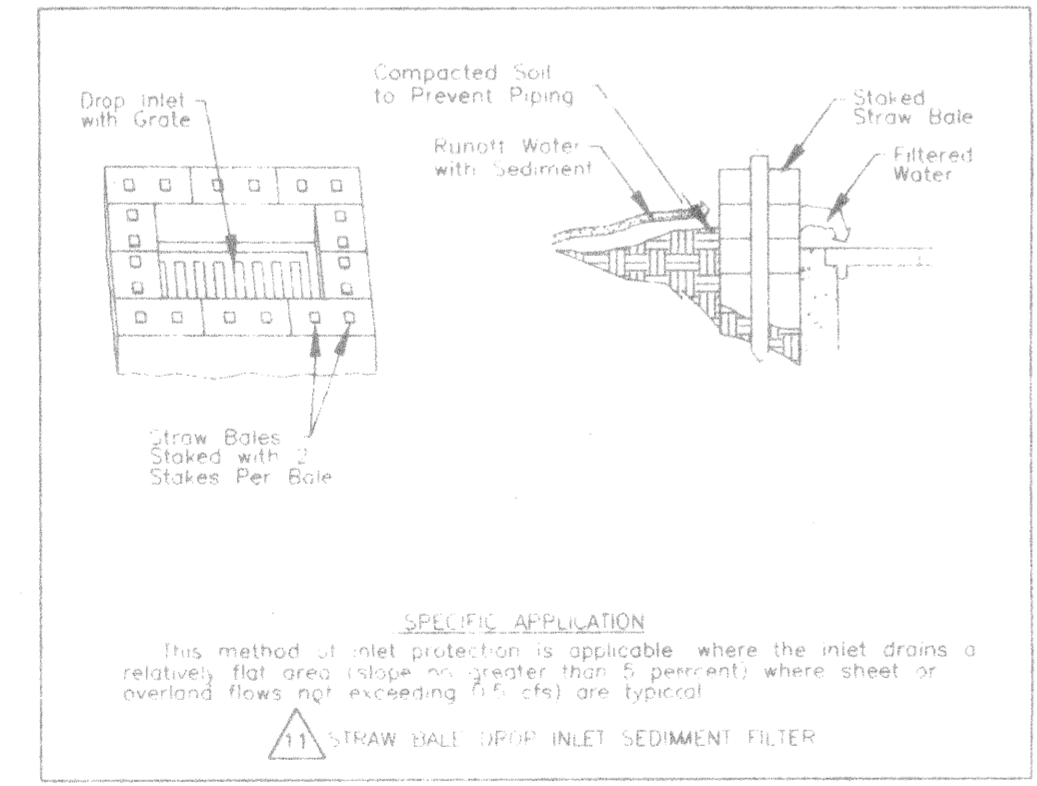
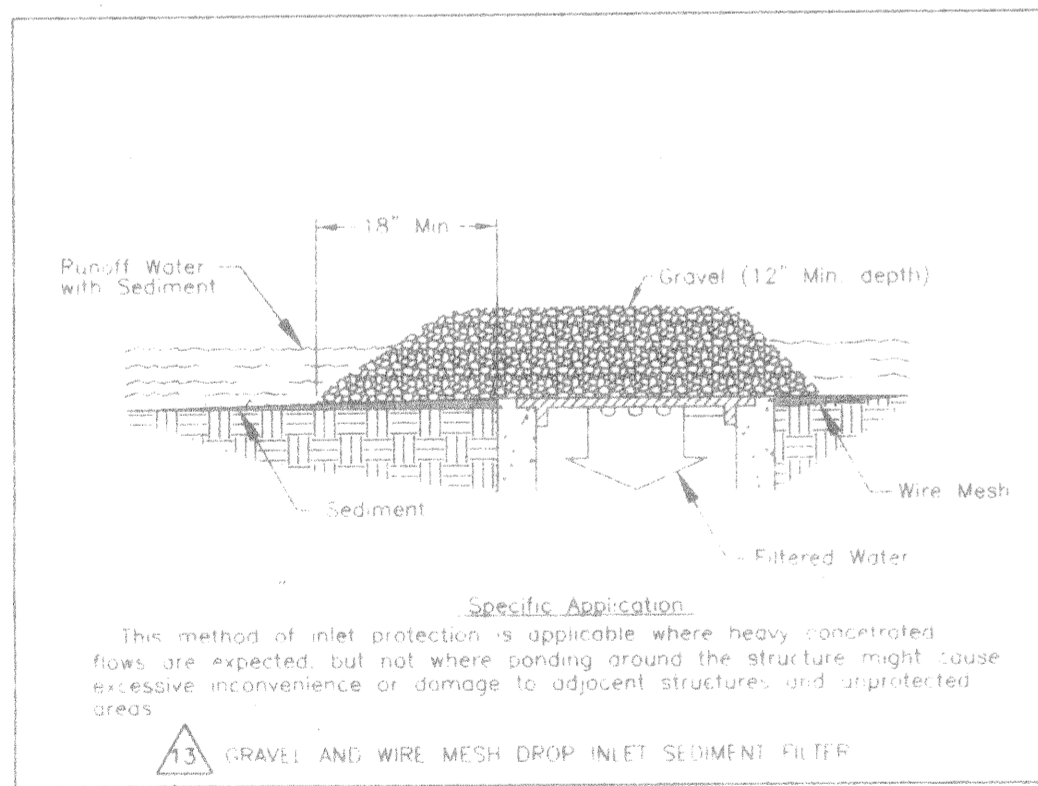
STRAW BALE DETAILS



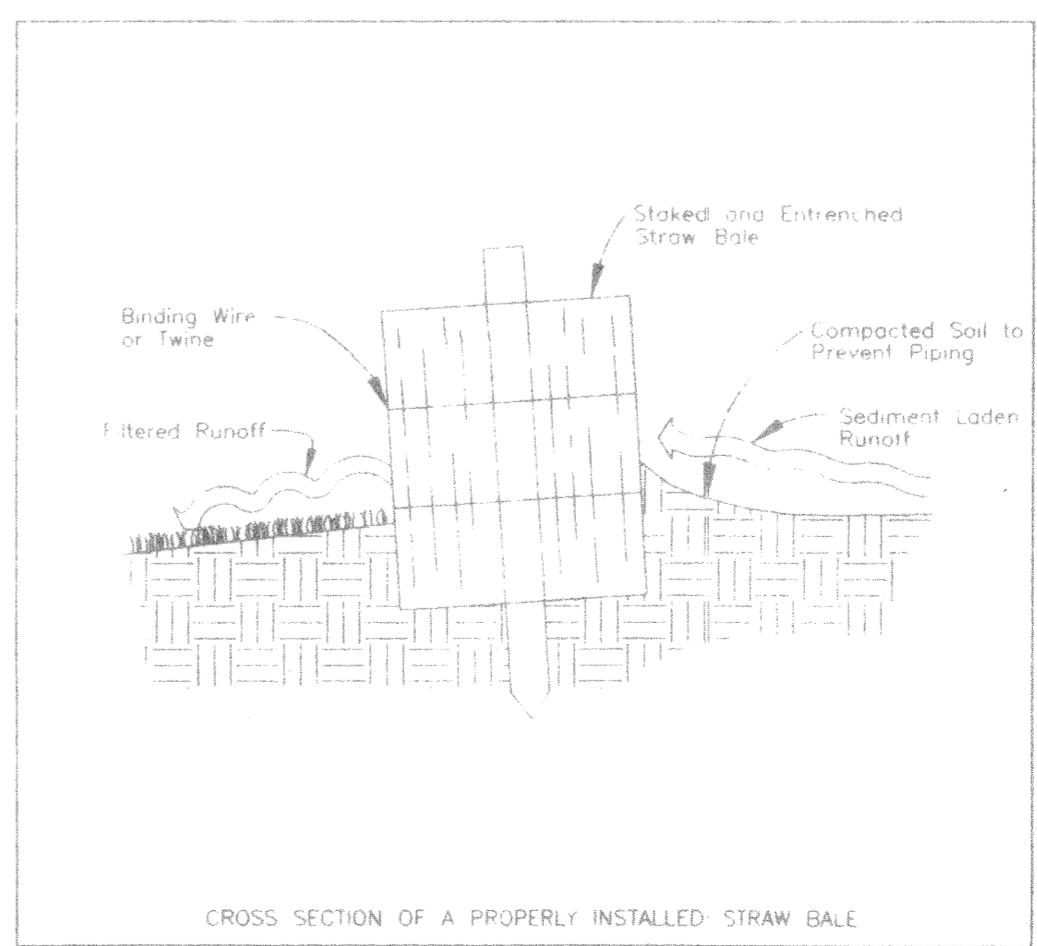
SILT FENCE DETAILS



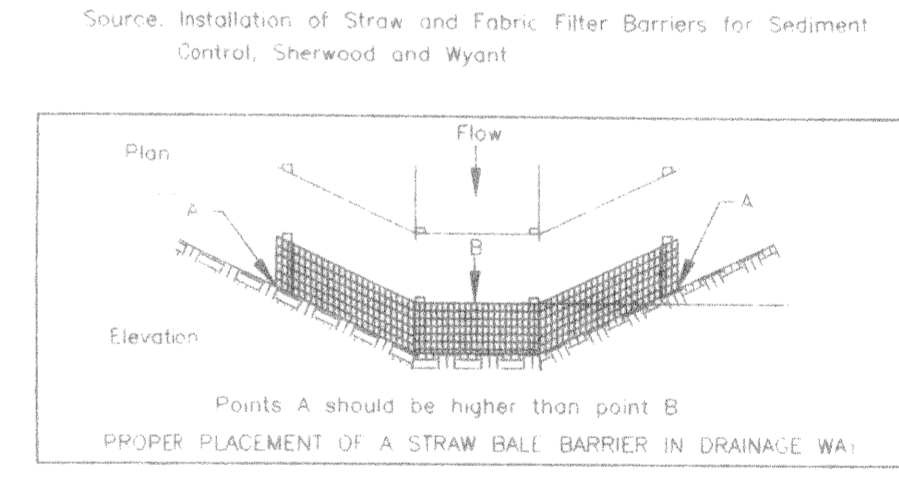
INLET PROTECTION DETAILS



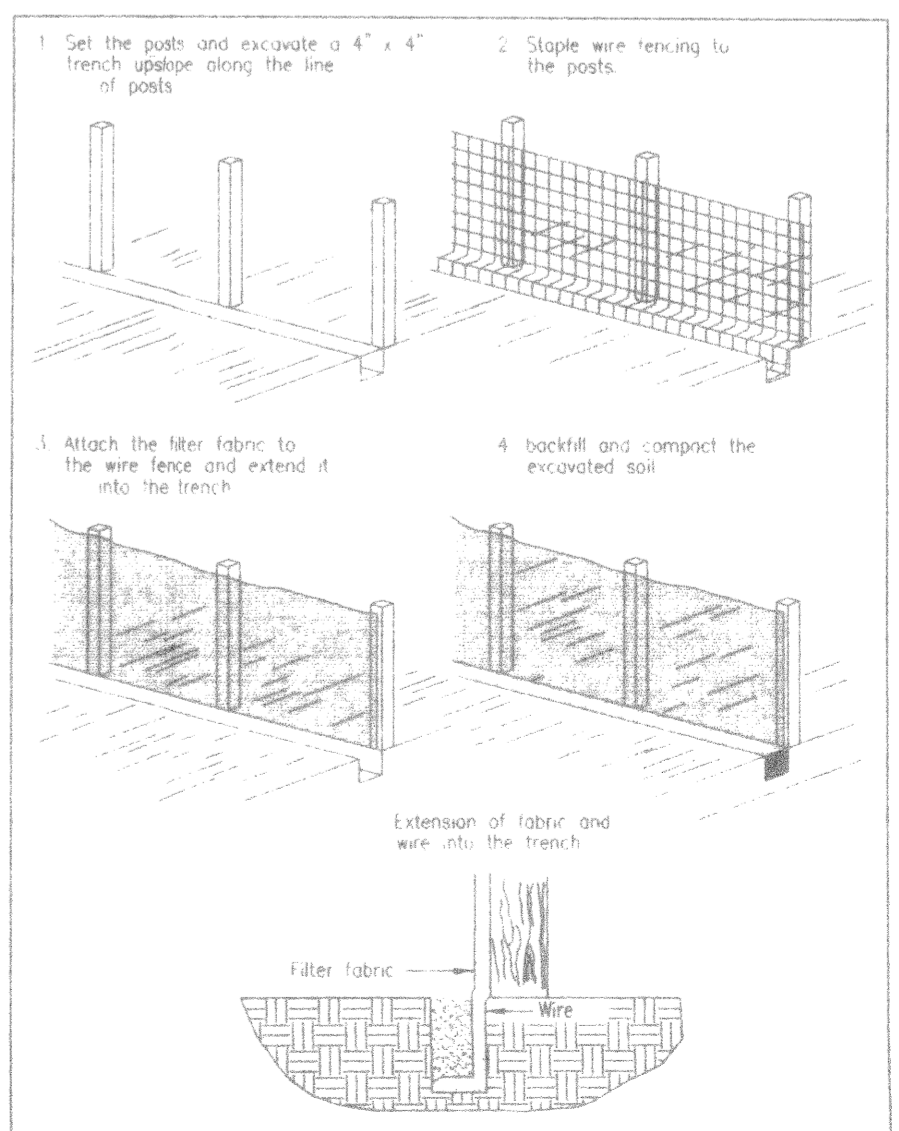
Source: Installation of Straw and Fabric Filter Barriers for Sediment Control, Sherwood and Wyant



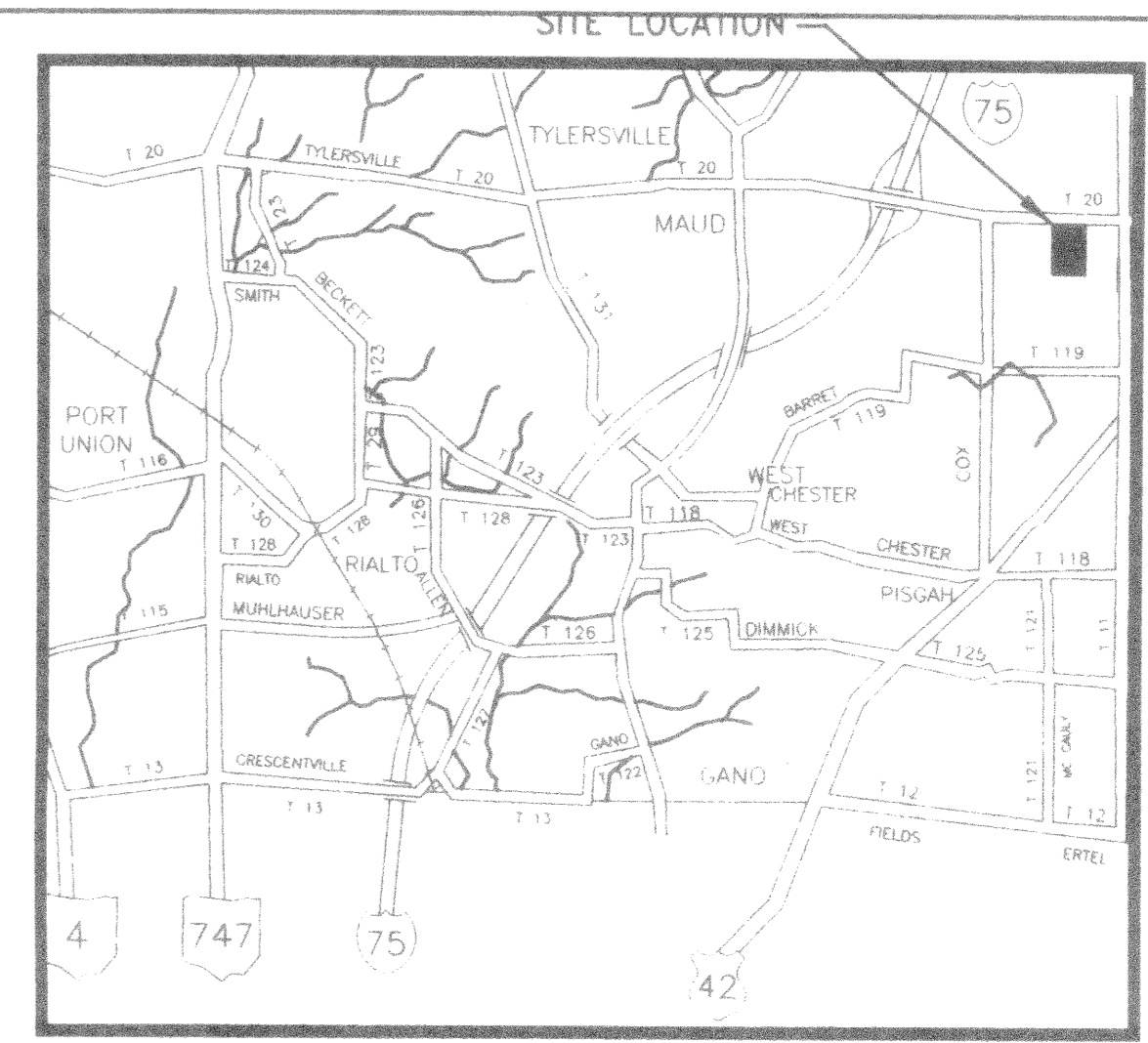
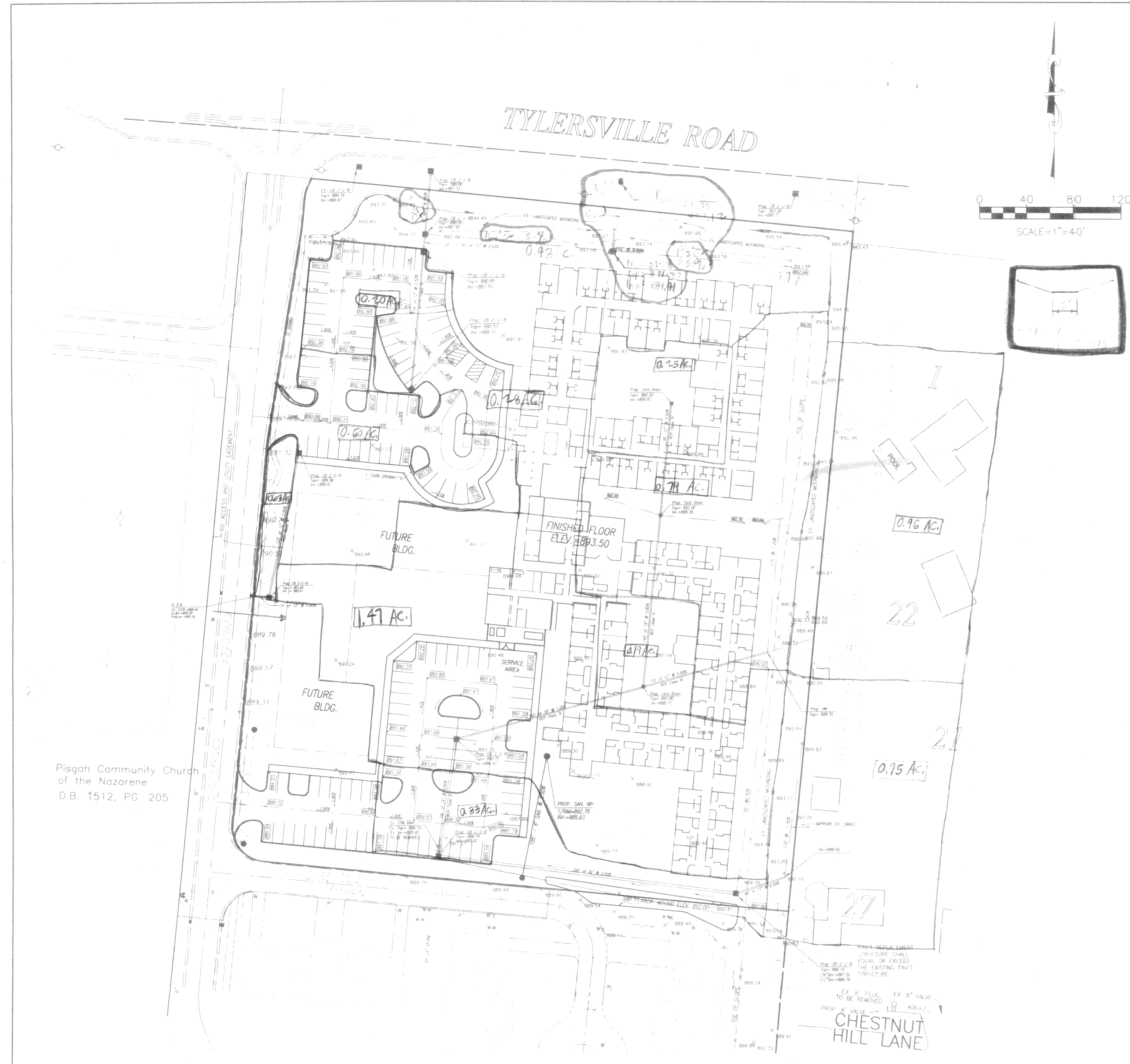
Source: Michigan Soil Erosion and Sediment Control Guidebook, 1975



Source: Installation of Straw and Fabric Filter Barriers for Sediment Control, Sherwood and Wyant



Source: Adapted from Installation of Straw and Fabric Filter Barriers for Sediment Control, Sherwood and Wyant



VICINITY MAP
SCALE=N.T.S.

- NOTE:
- (1) 18" MIN. VERTICAL CLEARANCE OD TO OD TO BE MAINTAINED BETWEEN WATER MAIN AND STORM AND SANITARY SEWERS AT CROSSOVERS.
 - (2) LOWER WATER SERVICES AS NEEDED TO AVOID CONFLICTS WITH STORM WITH MIN. 4" COVER.
 - (3) LOCATION OF ALL EXISTING UTILITIES TO BE DETERMINED IN THE FIELD PRIOR TO WORK BEGINNING.
 - (4) 48 HOUR NOTICE TO BE PROVIDED TO PROPERTY OWNERS AFFECTED BY SHUTDOWN OF WATER MAIN.

- EROSION CONTROL LEGEND
- ▲ SEEDING AND MULCHING
 - ▲ SEEDING
 - ▲ PRESERVING EXISTING VEGETATION
 - ▲ STRAW BALE
 - ▲ SILT FENCE
 - ▲ SOIL PILES
 - ▲ TEMPORARY STREAM CROSSING
 - ▲ GRAVEL CURB INLET SEDIMENT FILTER
 - ▲ BLOCK & GRAVEL DROP INLET SEDIMENT FILTER
 - ▲ CABIONS
 - ▲ STRAW BALE DROP INLET SEDIMENT FILTER
 - ▲ SOD DROP INLET SEDIMENT FILTER
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 - ▲ SEDIMENT BASINS & DAMS
 - ▲ DIKES & SLOPE PROTECTION
 - ▲ ROLLED GRAVEL CURB INLET SED. FILTER (SEE SOIL EROSION & SEDIMENTATION CONTROL DETAIL SHEET SHEET 6)

*All sediment and erosion control measures must be visually inspected and the appropriate maintenance and repair actions taken whenever precipitation exceeds 1/2 inch in any 24 hour period.

SEDIMENTATION CONTROL NOTES

The project has been designed to control erosion and prevent damage to other property. All stripping, earthwork, and regrading shall be performed to minimize erosion. Natural vegetation shall be retained wherever possible. The proposed plan will allow almost all eroded materials to be retained on site.

All areas disturbed by the construction of the roadways, ditches and sedimentation basins shall be seeded. Payment will be by the number of square yards disturbed as per the grading plan.

METHOD

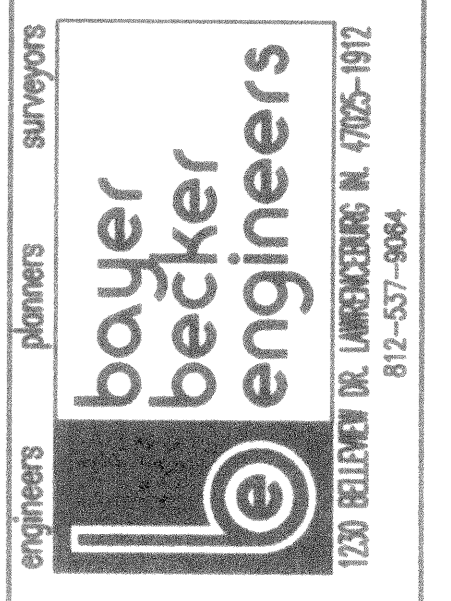
Straw bales are to be utilized to create temporary dams to catch the silt. These are to be installed at points where the flow is concentrated.

Surface water is to be directed into these temporary silt basins by means of temporary swales and ditches.

As the installation of the storm sewer progress, straw bales are to be placed at the inlet and outlet of sewers to control the silt.

Payment for the above shall be included in items Excavation, Embankment.

Pisgah Community Church of the Nazarene
D.B. 1512, PG. 205

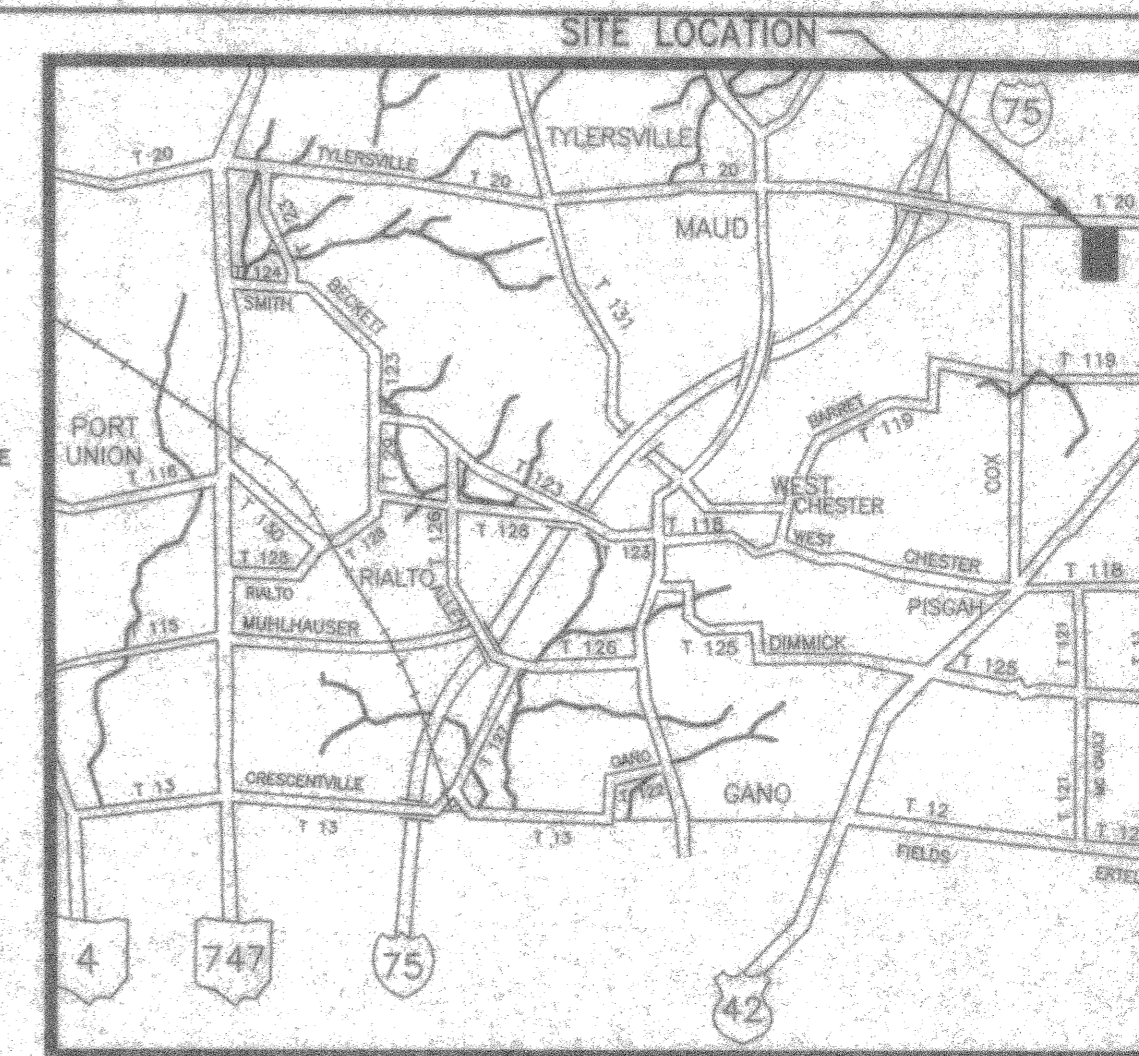


CHESTERWOOD HEALTHCARE FACILITY
UNION TOWNSHIP BUTLER COUNTY OHIO
TYLERSVILLE ROAD

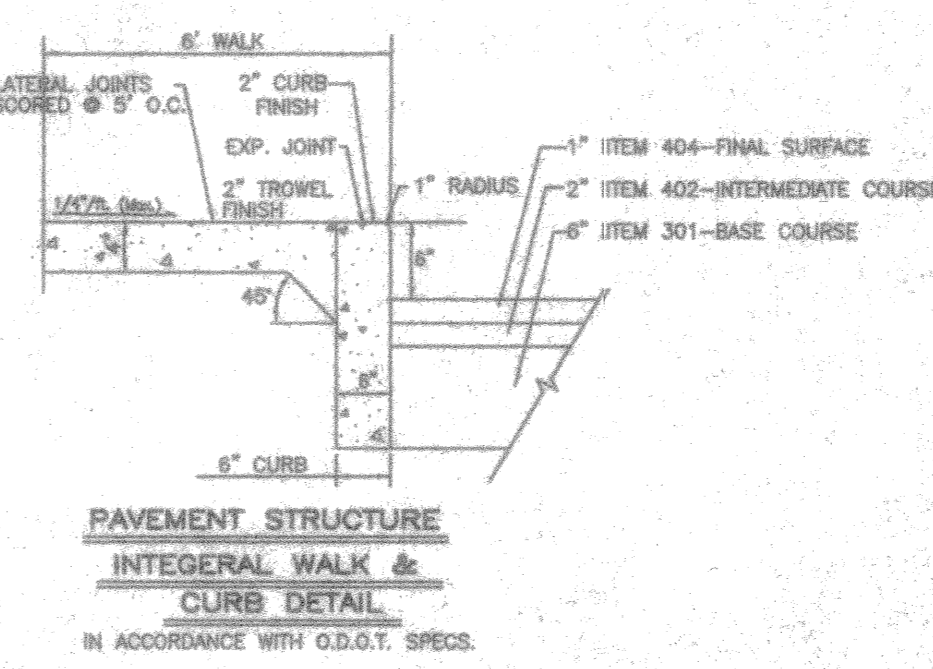
SITE PLAN

7	6	5	4	3	2	1	ITEM
							AutoCAD Drawing Name: 9579PH2.DWG DATE: 5/7/98

DRAINAGE AREAS ONLY

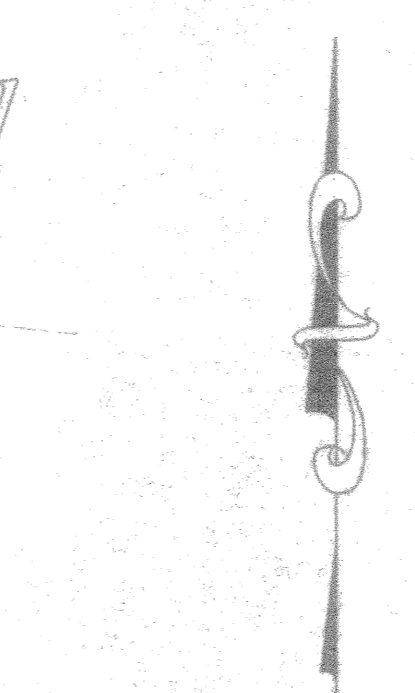
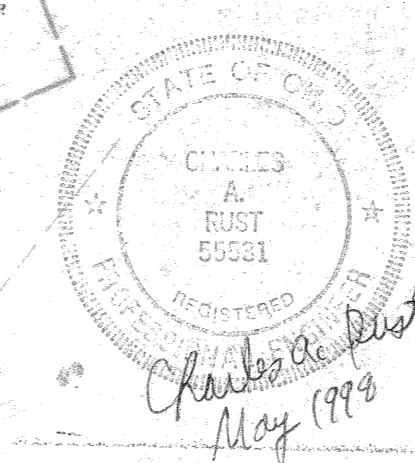


VICINITY MAP
SCALE=N.T.S.



GENERAL NOTES

- Item numbers refer to the Ohio Department of Transportation construction and material specifications, and all construction work shall be done according to said specifications of Butler County requirements and standards for subdivisions. When in conflict, the County requirements shall prevail.
- Items that pertain to underground utilities such as watermain pipe, sanitary sewer pipe, water valves and manhole frames and covers, etc., will remain under specifications of the utility serving the area. Storm sewers shall be designed and constructed in accordance with the requirements of the Butler County Engineer.
- All trenches within the right-of-way and 10' utility easement shall be compacted and backfilled in accordance with Item 203 and 603 in the state specifications.
- Developer shall be responsible for the installation of conduits for the full width of the public right-of-way at a depth of 36" for use by the electric, telephone and cable TV services. The location of the lines shall be coordinated with utility companies by the developer.
- All electrical transformers shall be located so that they do not interfere with the existing manholes or water main appurtenances.
- Water main materials, valves, fire hydrants, fittings and appurtenances and installation to be as per Butler County specifications using Class 53 Ductile Iron as per AWWA-C-151 with 4" minimum cover.
- Sanitary sewer materials and installation to be as per Butler County specifications, using ABS 6" pipe, as per ASTM D-2751 with joint specification as per ASTM D-3212, using ABS composite 8" pipe, as per ASTM D-2680 with joint specifications as per ASTM D-2235.
- Minimum 10" horizontal, 18" vertical separation between Water Main and Sanitary and/or Storm Sewer.
- Storm sewer pipe to be A.D.S. N-12 plastic or equal unless otherwise noted on plans. Bedding to be first class. All sewers to be installed as per Butler County specifications.
- Roof drains, foundation drains, and other clean water connections to the sanitary sewer system are prohibited.
- All buildings to be served by the public sewer system shall be constructed so as to provide a minimum of four feet (4') of vertical separation between the public sanitary sewer, at the point of connection, and the lowest building level served by a gravity sewer connection. In addition, said building level shall be at least one foot (1') above the lowest point of free-overflow (non-sealed manhole cover) upstream of any treatment facility or wastewater pumping facility that receives the discharge from said building. Said minimum service levels shall be recorded on the "As Built" plans for the development which will be kept on file in the office of the Butler County Sanitary Engineer.
- Butler County Water and Sewer Department does not accept any responsibility for the relocation, repair, or replacement of any other utility installed within five (5) feet of the center line of any sanitary sewer main or water main.
- 18" Minimum vertical clearance to be maintained between water, storm and sanitary sewers at crossovers.
- Lower water services as needed to avoid conflicts with storm with a 4' min. cover.
- Location of all existing utilities to be determined in the field prior to work beginning.
- Proposed Catch Basins "B,C,D,G,H" shall be Squared up even with proposed curb when constructed.



BENCHMARK
TOP OF CONC. MONUMENT #633 AT S.E. CORNER OF MCGINNIS PARK, COX RD. ELEV. = 882.78

OWNER/DEVELOPER
Chesterwood Village, Inc.
4195 Hamilton Mason Road
Indian Springs, Ohio 45011

INDEX TO SHEETS

- Site and Utility Plan 1
- Grading and Erosion Control Plan 2
- Soil Erosion & Sedimentation Details 3

UNDERGROUND UTILITIES
2 WORKING DAYS
BEFORE YOU DIG
Call 1-800-352-2764
UNLIMITED UTILITY PROTECTION SERVICE
NON MEMBERS
MUST BE CALLED DIRECTLY

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS
CB - 3A CATCH BASIN
CB - 3A (MOD.) CATCH BASIN
CB - 1 CATCH BASIN
CB 2-2-A CATCH BASIN
STD. MANHOLE 1A
HEADWALL HW-4

engineers planners surveys
bayer becker engineers
120 BELLEVUE LANE, BUTLER, OHIO 44514
937-537-0044

CHESTERWOOD HEALTHCARE FACILITY
UNION TOWNSHIP BUTLER COUNTY OHIO
TYLERSVILLE ROAD

SITE AND UTILITY PLAN

NO.	DATE	DESCRIPTION
1	5/7/98	PRELIMINARY SUBMITTAL TO TOWNSHIP

AutoCAD: 9579PH2.DWG
DATE: 5/7/98
1 OF 3

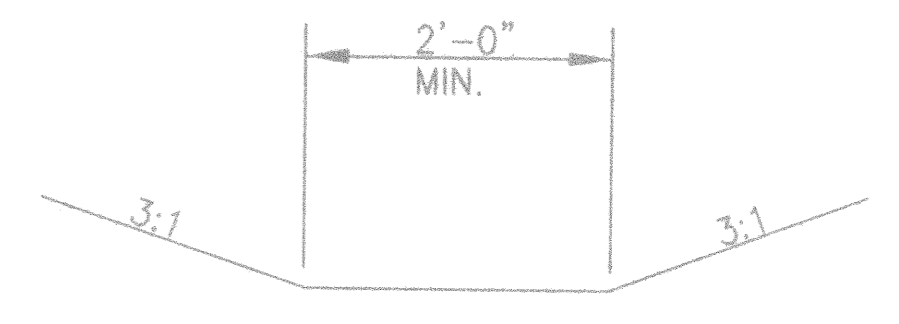
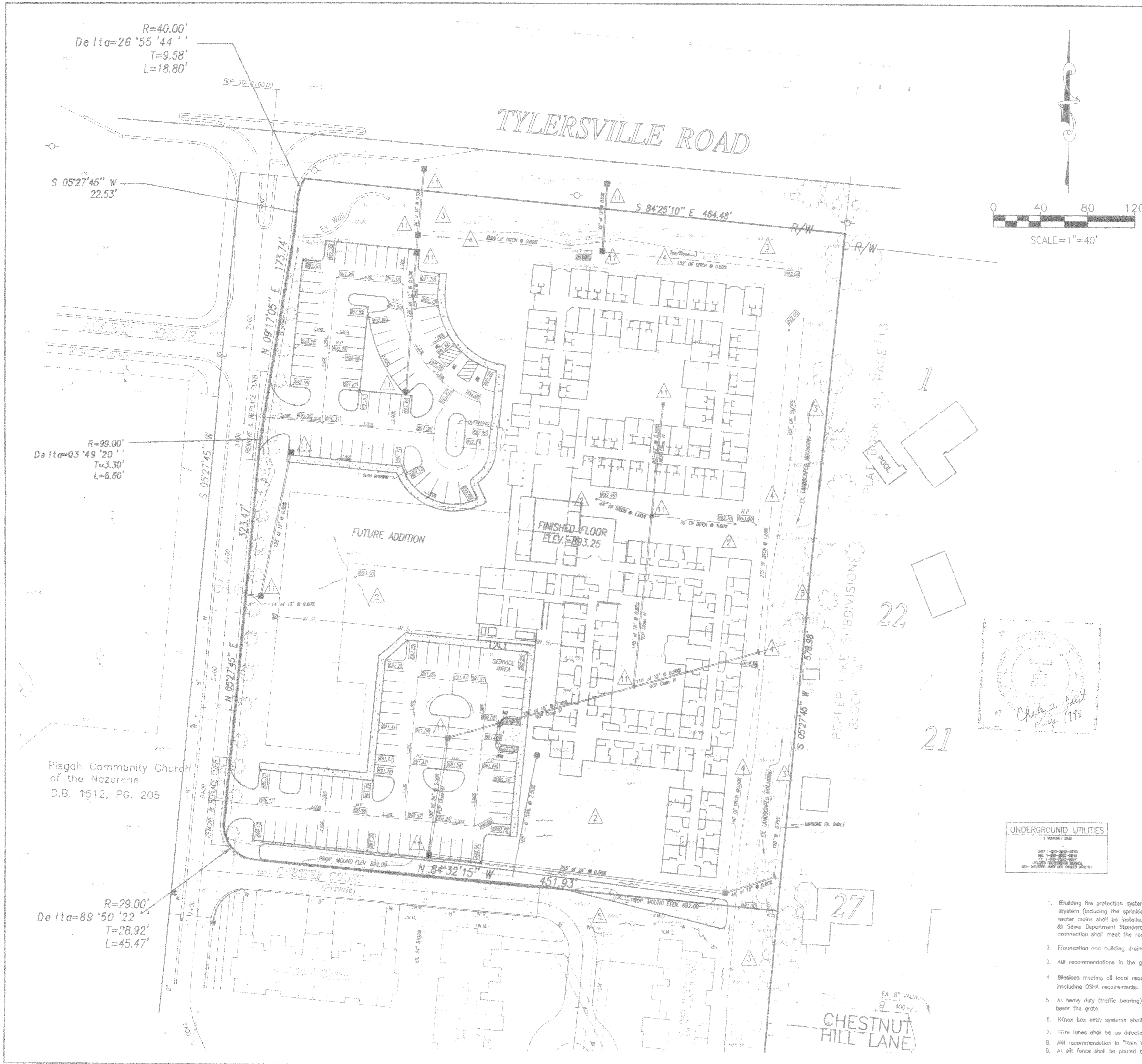


$R=40.00'$
 $\Delta=26'55''44''$
 $T=9.58'$
 $L=18.80'$

$R=99.00'$
 $\Delta=03'49''20''$
 $T=3.30'$
 $L=6.60'$

$R=29.00'$
 $\Delta=89'50''22''$
 $T=28.92'$
 $L=45.47'$

Pisgah Community Church
of the Nazarene
D.B. 1512, PG. 205



- EROSION CONTROL LEGEND**
- ▲ SEEDING AND MULCHING
 - ▲ SEEDING
 - ▲ PRESERVING EXISTING VEGETATION
 - ▲ STRAW BALE
 - ▲ SILT FENCE
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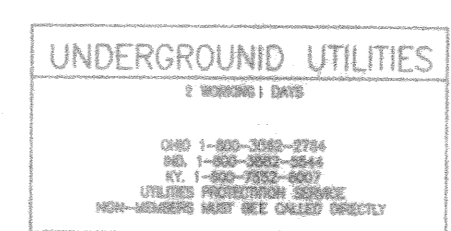
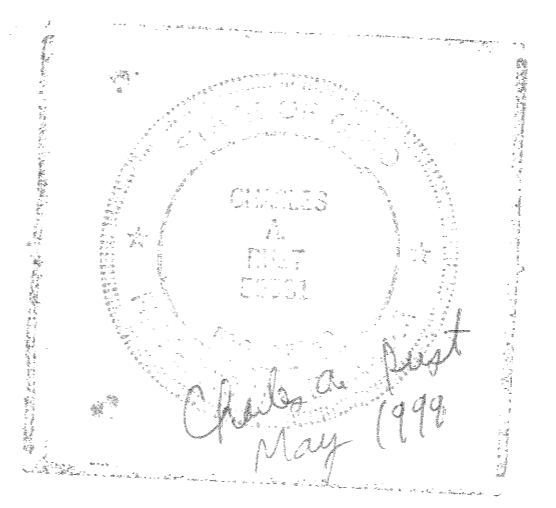
NOTE:

DITCHING ALONG THE EXISTING LANDSCAPED MOUNDING AND IN BETWEEN EXISTING COTTAGES AND MOUNDING SHALL BE PROPERLY GRADED AS TO INSURE NO PONDING AND TO HAVE POSITIVE RUNOFF AWAY FROM THE BUILDINGS! THIS MUST BE STRICTLY ADHERED TO!

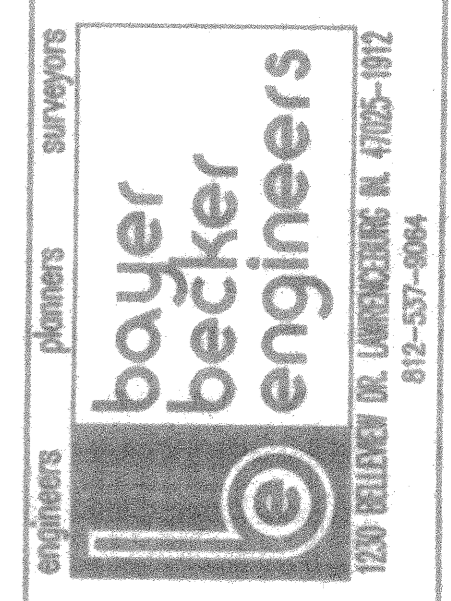
NOTE:

Proposed grades shown are to the top of pavement and ditch grades. Add 6" for top of curb elevations.

Note: 12"x18" "Reserved Parking" signs meeting ADA requirements shall be placed behind the walk at each handicapped space. Handicapped spaces shall be 8' feet wide, with an 5' wide aisle being between the spaces.



- Building fire protection system shall be per architect and building official. The shop drawings for the fire protection system (including the sprinkler pit) shall be submitted for approval of the building official before construction. All water mains shall be installed in accordance with NFPA 24, American Water Works Association and Butler Co. Water & Sewer Department Standards and specifications. The sprinkler system (including valve pit) and the fire department connection shall meet the requirements of the Fairfield Fire Department.
- Foundation and building drains shall not be connected to the roof drainage systems.
- All recommendations in the geotechnical report shall be followed, and geotechnical inspection is required.
- Besides meeting all local requirements, all construction and materials shall meet applicable state and federal requirements including OSHA requirements.
- A1 heavy duty (traffic bearing) grate and frame shall be used on the CB-2-2-B, and the concrete shall be formed to bear the grate.
- Knox box entry systems shall only be ordered through and approved by the Fire Code official.
- Fire lanes shall be as directed by the Fire Code official.
- All recommendation in "Rain Water and Land Development", second Edition, shall be followed by the contractor.
- A silt fence shall be placed down hill of all ground to be disturbed before any work begins.



CHESTERWOOD HEALTHCARE FACILITY
UNION TOWNSHIP BUTLER COUNTY OHIO
TYLERSVILLE ROAD

GRADING AND EROSION CONTROL PLAN

7	6	5	4	3	2	1	REV. GRADES	5/29/98	5/12/98
								PRELIMINARY SUBMITAL TO TOWNSHIP	
AutoCAD Drawing Name: 9579PH2.DWG									
DATE: 5/7/98									
2 OF 3									

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