

<u>SFT-SD-001</u>	<u>TYPICAL PAVING DETAIL</u>
<u>SFT-SD-002</u>	<u>SIDEWALK DETAILS</u>
<u>SFT-SD-003</u>	<u>MEDIUM AND DEEP SET CONCRETE CURB DETAILS</u>
<u>SFT-SD-004</u>	<u>PLAIN CEMENT CONCRETE CURB AND GUTTER</u>
<u>SFT-SD-005</u>	<u>PAVEMENT KEY WAY</u>
<u>SFT-SD-006</u>	<u>TEMPORARY CUL-DE-SAC DETAIL</u>
<u>SFT-SD-007</u>	<u>PERMANENT CUL-DE-SAC DETAIL</u>
<u>SFT-SD-008</u>	<u>TYPICAL UTILITY LOCATION SECTION</u>
<u>SFT-SD-009</u>	<u>PA D.O.T. TYPE "M" INLET</u>
<u>SFT-SD-010</u>	<u>TYPE "C" ALTERNATIVE PRECAST CONCRETE CATCH BASIN</u>
<u>SFT-SD-011</u>	<u>PLACEMENT OF INLETS</u>
<u>SFT-SD-012</u>	<u>TRENCH DRAIN</u>
<u>SFT-SD-013</u>	<u>HDPE SLOPED END SECTION DETAIL</u>
<u>SFT-SD-014</u>	<u>STANDARD END WALL 15" TO 30" PIPES</u>
<u>SFT-SD-015</u>	<u>CONCRETE END WALL FOR LARGER DIA. PIPE (36" - 72")</u>
<u>SFT-SD-016</u>	<u>TRENCHING AND BEDDING DETAIL</u>
<u>SFT-SD-017</u>	<u>TYPICAL DETAIL FOR REPAIR OF PAVED STREET OR ROADWAY OPENING</u>
<u>SFT-SD-018</u>	<u>RESTORATION OF PIPE TRENCH ALONG OR ACROSS HIGHWAYS WITH CONCRETE BASE</u>
<u>SFT-SD-019</u>	<u>CURB REPLACEMENT</u>
<u>SFT-SD-020</u>	<u>STREET OPENING RESTORATION PLANS</u>
<u>SFT-SD-021</u>	<u>STREET OPENING RESTORATION - MILL AND PAVE</u>
<u>SFT-SD-022</u>	<u>PRECAST CONCRETE MANHOLE FOR STORM SEWERS 6" TO 21"</u>
<u>SFT-SD-023</u>	<u>PRECAST CONCRETE MANHOLE FOR STORM SEWERS 24" TO 42"</u>
<u>SFT-SD-024</u>	<u>PRECAST CONCRETE MANHOLE (72" DIAMETER) (PIPE DIAMETER - 48" TO 54")</u>
<u>SFT-SD-025</u>	<u>ALTERNATE PRECAST CONCRETE MANHOLE FOR CONCRETE STORM SEWERS 48" AND OVER</u>
<u>SFT-SD-026</u>	<u>PRECAST CONCRETE MANHOLE FOR SEWERS 20" TO 33" (CAST-IN-PLACE BOTTOM)</u>
<u>SFT-SD-027</u>	<u>PRECAST CONCRETE MANHOLE FOR SEWERS 36" TO 42" (CAST-IN-PLACE BOTTOM)</u>
<u>SFT-SD-028</u>	<u>POLYPROPYLENE PLASTIC MANHOLE STEP</u>
<u>SFT-SD-029</u>	<u>CONCRETE ANCHORS FOR PVC & D.I. PIPE</u>
<u>SFT-SD-030</u>	<u>CONCRETE ANCHORS FOR HDPE PIPE</u>
<u>SFT-SD-031</u>	<u>MANHOLE COVER AND FRAME</u>
<u>SFT-SD-032</u>	<u>TYPICAL PARKING SPACE PAINT LINE DETAIL</u>
<u>SFT-SD-033</u>	<u>TYPICAL 60° PARKING SPACE PAINT LINE DETAIL</u>
<u>SFT-SD-034</u>	<u>CONCRETE DECK CURB, STANDARD CONCRETE CURB WEDGE CURB WITH WHEEL STOP</u>
<u>SFT-SD-035</u>	<u>REINFORCED CONCRETE WHEEL STOP</u>
<u>SFT-SD-036</u>	<u>BOLLARD</u>
<u>SFT-SD-037</u>	<u>DRIVEWAY SIGHT DISTANCE</u>

**SOUTH FAYETTE
TOWNSHIP**

**SOUTH FAYETTE TOWNSHIP
STANDARD DETAIL
INDEX**



GIBSON-THOMAS ENGINEERING CO.
1851 OLD FERRY HIGHWAY WESTFORD, PA 15389
PH: 724-733-4181 FAX: 724-733-4181

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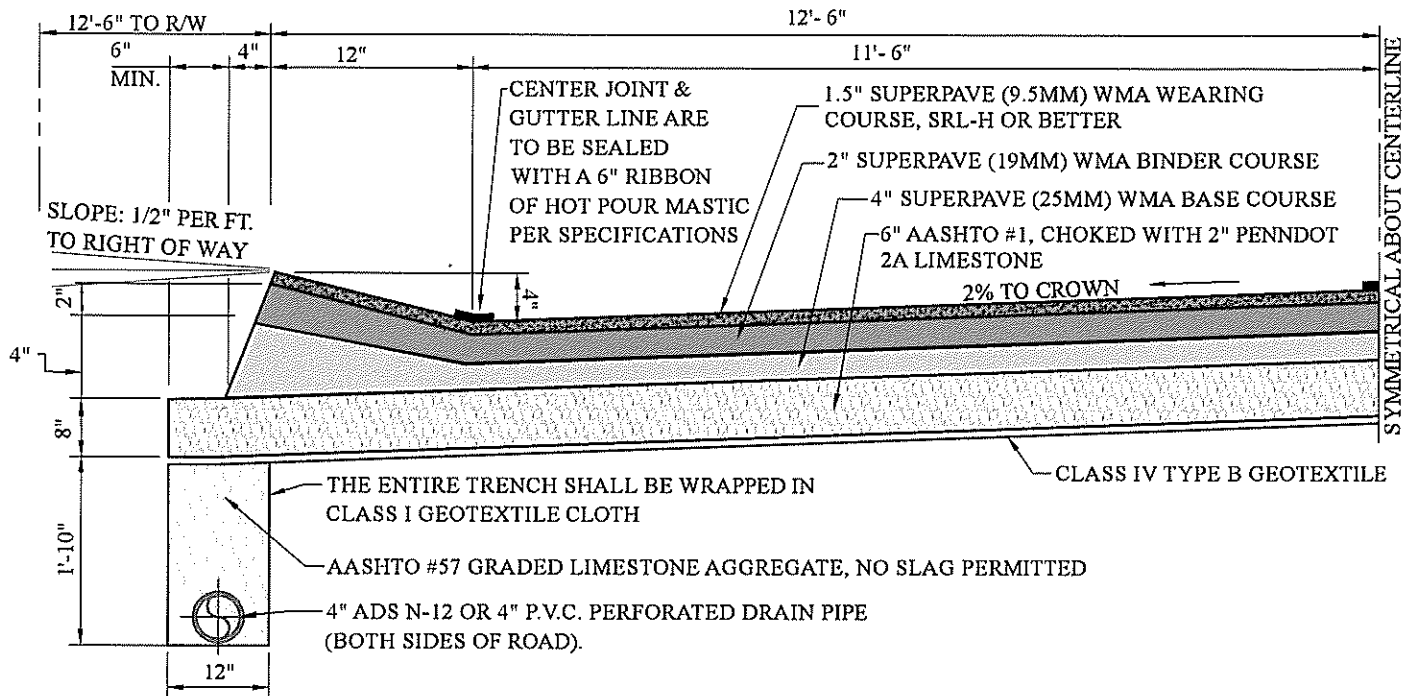
Adopted: JULY 2022

SFT-SD-INDEX 1

<u>SFT-SD-038</u>	<u>RESIDENTIAL AND MINIMUM USE DRIVEWAY GRADE REQUIREMENTS</u>
<u>SFT-SD-039</u>	<u>FORMULA SIGHT DISTANCE TABLE (PLUS AND NEGATIVE GRADES)</u>
<u>SFT-SD-040</u>	<u>TRENCH PLUG INSTALLATION</u>
<u>SFT-SD-041</u>	<u>STANDARD SILT FENCE (18" HIGH)</u>
<u>SFT-SD-042</u>	<u>STANDARD SILT FENCE (30" HIGH)</u>
<u>SFT-SD-043</u>	<u>SUPER SILT FENCE</u>
<u>SFT-SD-044</u>	<u>COMPOST FILTER SOCK</u>
<u>SFT-SD-045</u>	<u>FILTER BAG INLET PROTECTION - TYPE C INLET</u>
<u>SFT-SD-046</u>	<u>FILTER BAG INLET PROTECTION - TYPE M INLET</u>
<u>SFT-SD-047</u>	<u>SEED SPECIFICATION (PERMANENT)</u>
<u>SFT-SD-048</u>	<u>SEED SPECIFICATION (TEMPORARY)</u>
<u>SFT-SD-049</u>	<u>SEEDING SPECIFICATIONS (STEEP SLOPES)</u>
<u>SFT-SD-050</u>	<u>TEMPORARY SEEDING, E&S CONTROLS & UTILITY LINE REQUIREMENTS</u>
<u>SFT-SD-051</u>	<u>EROSION & SEDIMENTATION - MAINTENANCE SCHEDULE</u>
<u>SFT-SD-052</u>	<u>EARTHEN LEVEL SPREADER</u>
<u>SFT-SD-053</u>	<u>EROSION CONTROL BLANKET INSTALLATION</u>
<u>SFT-SD-054</u>	<u>PUMPED WATER FILTER BAG</u>
<u>SFT-SD-055</u>	<u>TRASH RACK WITH ANTI-VORTEX PLATE</u>
<u>SFT-SD-056</u>	<u>ROCK CONSTRUCTION ENTRANCE</u>
<u>SFT-SD-057</u>	<u>MANHOLE TO MANHOLE PUMP BYPASS AROUND</u>
<u>SFT-SD-058</u>	<u>GENERAL DETAILS AND GENERAL NOTES</u>

**SOUTH FAYETTE
TOWNSHIP**

**SOUTH FAYETTE TOWNSHIP
STANDARD DETAIL
INDEX**



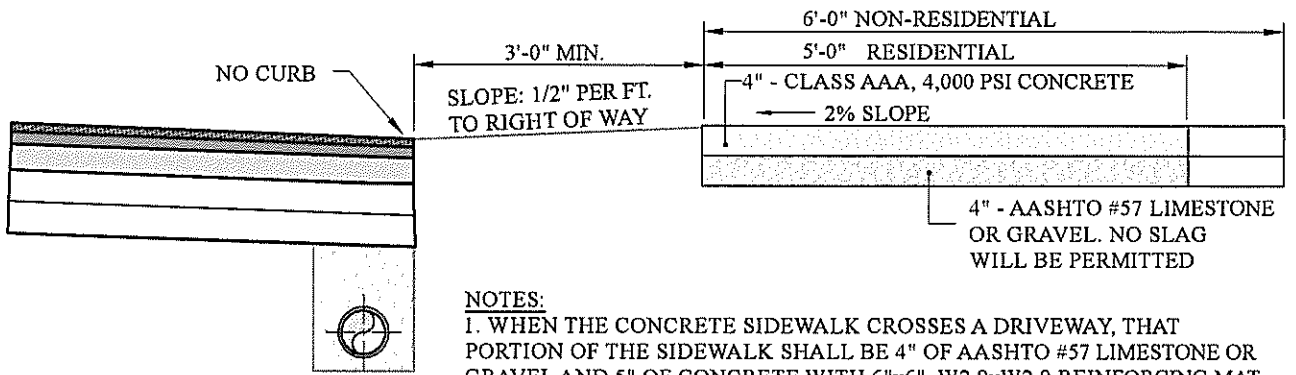
TYPICAL PAVEMENT SECTION

NOTES:

- CONTRACTOR SHALL COMPACT SUBGRADE TO 100% OF THE DETERMINED DRY MASS DENSITY. PROOF ROLL REGARD PRIOR TO PLACEMENT OF GEOTEXTILE
- STORM INLETS SHALL BE SET TO FINISH GRADE OF FINAL WEARING COURSE.
- FINAL WEARING COURSE SHALL BE PLACED 1 YEAR AFTER BINDER COURSE ON NEW DEVELOPMENTS, OR WHEN MAJORITY OF CONSTRUCTION HAS BEEN COMPLETED AND AS DIRECTED BY THE TOWNSHIP ENGINEER.
- ALL DEPTHS SHOWN ARE COMPACTED DEPTHS, ALL MATERIALS SHALL CONFORM TO PENNDOT PUBLICATION 408.
- COMPANIES PLACING ASPHALT MUST HAVE CURRENT PENNDOT PREQUALIFICATION
- CENTER JOINT AND GUTTER LINE ARE TO BE SEALED WITH A 6" RIBBON OF HOT POUR MASTIC PER SPECIFICATION.
- 4" SUPERPAVE (25MM) BINDER COURSE TO EXTEND TO BACK OF CURB LINE, MECHANICALLY COMPACTED PER SPECIFICATION.
- 4" REVEAL CURB TO BE CONSTRUCTED OF SUPERPAVE 19MM BINDER COURSE AND 9.5MM WEARING COURSE.
- NO SLAG WILL BE PERMITTED

SOUTH FAYETTE
TOWNSHIP

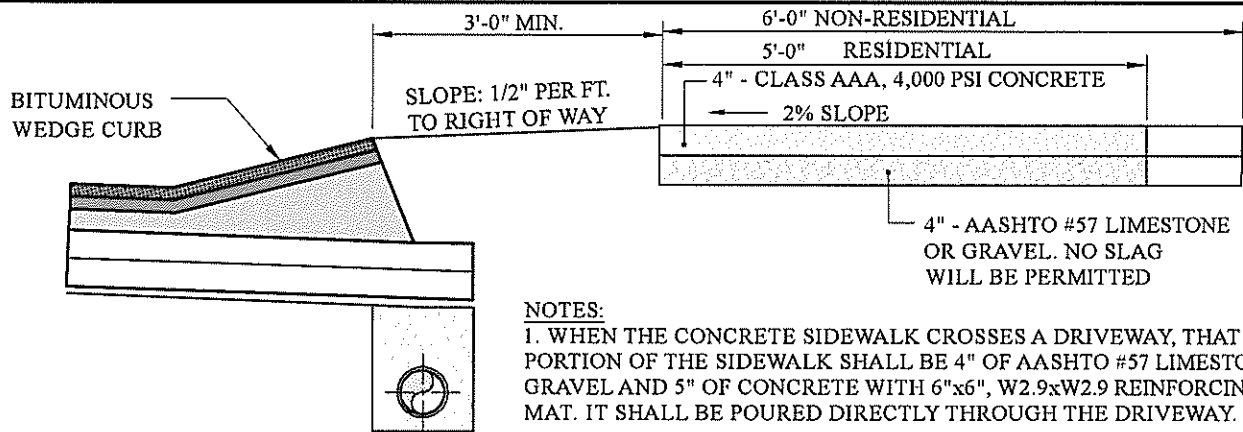
TYPICAL PAVING
DETAIL



NOTES:

1. WHEN THE CONCRETE SIDEWALK CROSSES A DRIVEWAY, THAT PORTION OF THE SIDEWALK SHALL BE 4" OF AASHTO #57 LIMESTONE OR GRAVEL AND 5" OF CONCRETE WITH 6"x6", W2.9xW2.9 REINFORCING MAT. IT SHALL BE POURED DIRECTLY THROUGH THE DRIVEWAY.
2. 3' - 0" GRASS AREA MUST BE INSTALLED UNLESS OTHERWISE APPROVED BY THE TOWNSHIP REPRESENTATIVE.

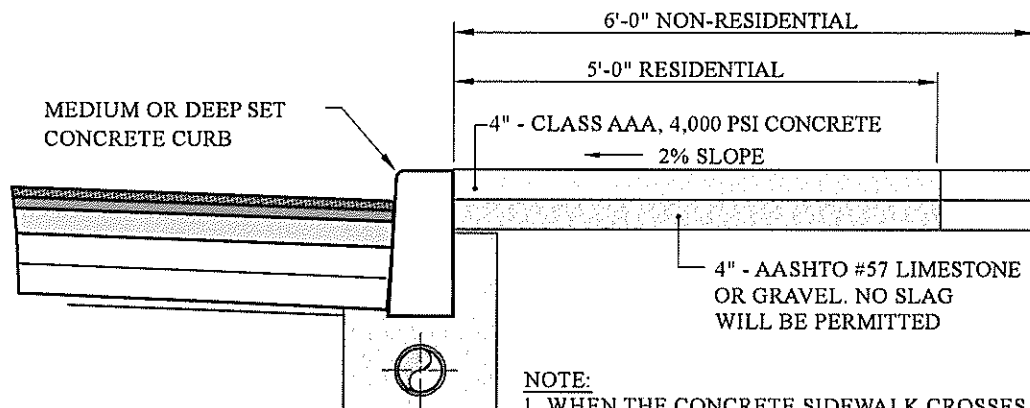
LOCAL RESIDENTIAL, COMMERCIAL OR INDUSTRIAL STREET, NO CURB



NOTES:

1. WHEN THE CONCRETE SIDEWALK CROSSES A DRIVEWAY, THAT PORTION OF THE SIDEWALK SHALL BE 4" OF AASHTO #57 LIMESTONE OR GRAVEL AND 5" OF CONCRETE WITH 6"x6", W2.9xW2.9 REINFORCING MAT. IT SHALL BE POURED DIRECTLY THROUGH THE DRIVEWAY.
2. 3' - 0" GRASS AREA MUST BE INSTALLED UNLESS OTHERWISE APPROVED BY THE TOWNSHIP REPRESENTATIVE.

LOCAL RESIDENTIAL, COMMERCIAL OR INDUSTRIAL STREET, ASPHALT CURB



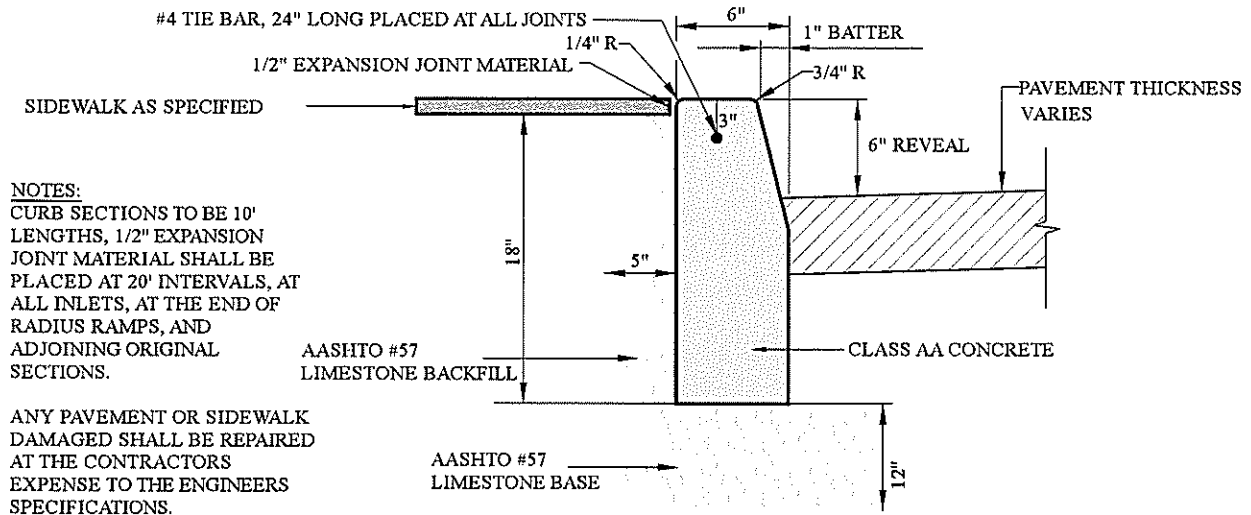
NOTE:

1. WHEN THE CONCRETE SIDEWALK CROSSES A DRIVEWAY, THAT PORTION OF THE SIDEWALK SHALL BE 4" OF AASHTO #57 LIMESTONE OR GRAVEL AND 5" OF CONCRETE WITH 6"x6", W2.9xW2.9 REINFORCING MAT. IT SHALL BE POURED DIRECTLY THROUGH THE DRIVEWAY.

LOCAL RESIDENTIAL, COMMERCIAL OR INDUSTRIAL STREET, CONCRETE CURB

**SOUTH FAYETTE
TOWNSHIP**

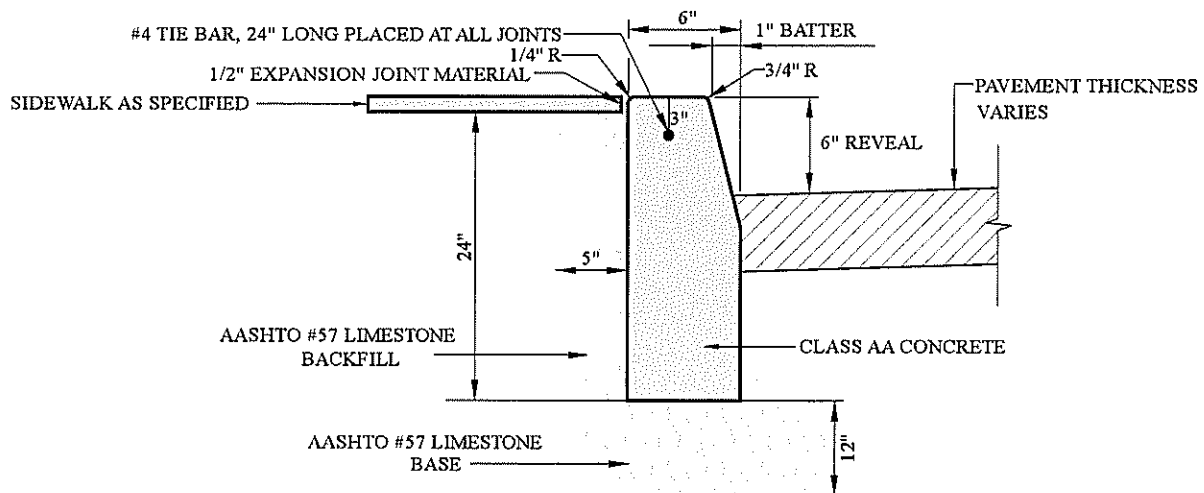
SIDEWALK DETAILS



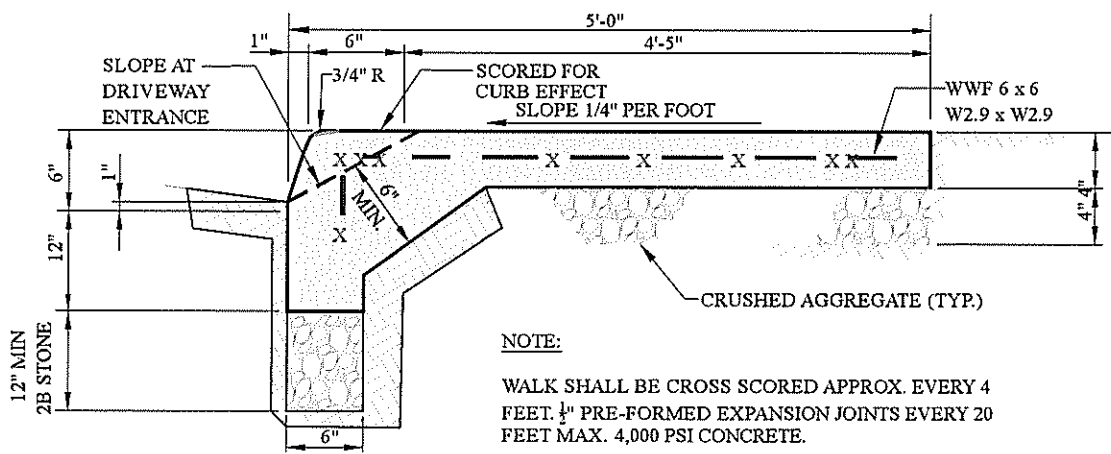
NOTES:
 CURB SECTIONS TO BE 10' LENGTHS, 1/2" EXPANSION JOINT MATERIAL SHALL BE PLACED AT 20' INTERVALS, AT ALL INLETS, AT THE END OF RADIUS RAMP, AND ADJOINING ORIGINAL SECTIONS.

ANY PAVEMENT OR SIDEWALK DAMAGED SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE TO THE ENGINEERS SPECIFICATIONS.

18" MEDIUM SET COMMERCIAL/INDUSTRIAL PUBLIC ROAD CONCRETE CURB DETAIL



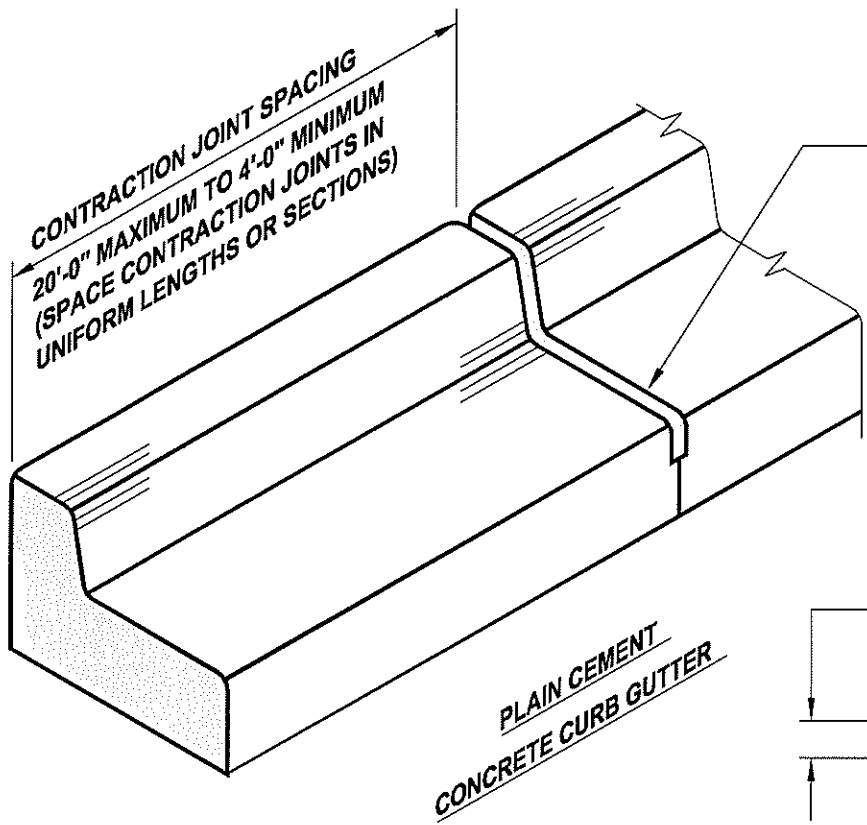
24" DEEP SET COMMERCIAL/INDUSTRIAL PUBLIC ROAD CONCRETE CURB DETAIL (WHEN DIRECTED BY TOWNSHIP ENGINEER)



TYPICAL INTEGRAL CURB AND SIDEWALK DETAIL

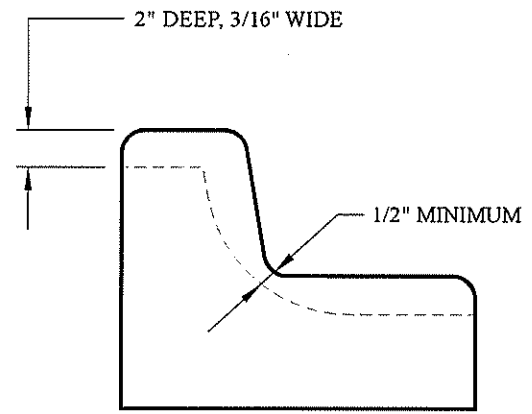
SOUTH FAYETTE TOWNSHIP

MEDIUM AND DEEP SET CONCRETE CURBS DETAILS

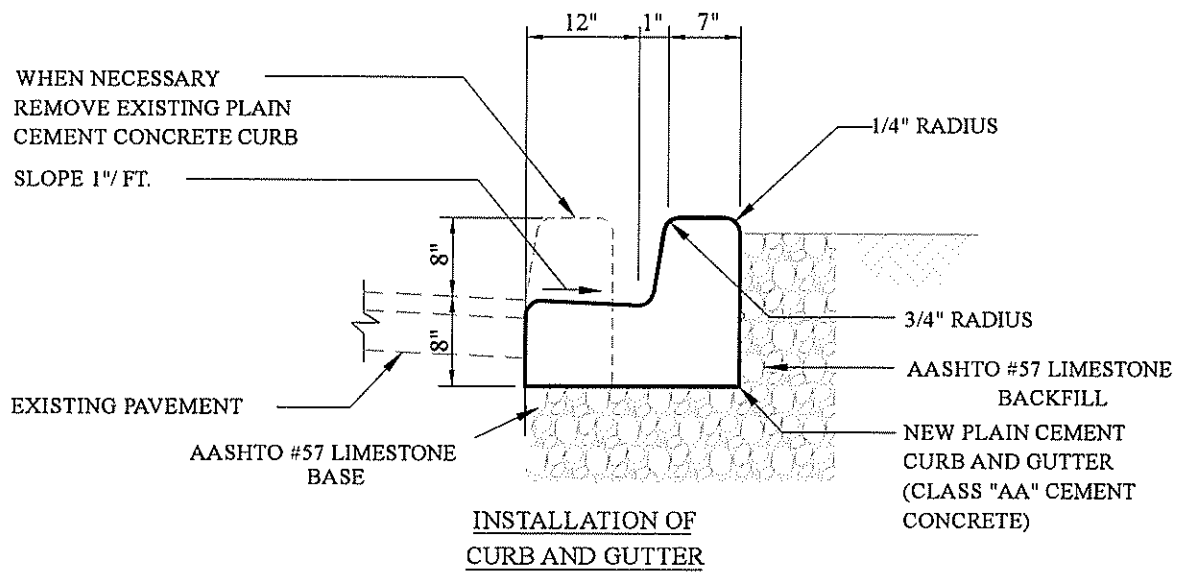


SEE CONTRACTION JOINT DETAIL THIS DRAWING.

PLAIN CEMENT CONCRETE CURB GUTTER

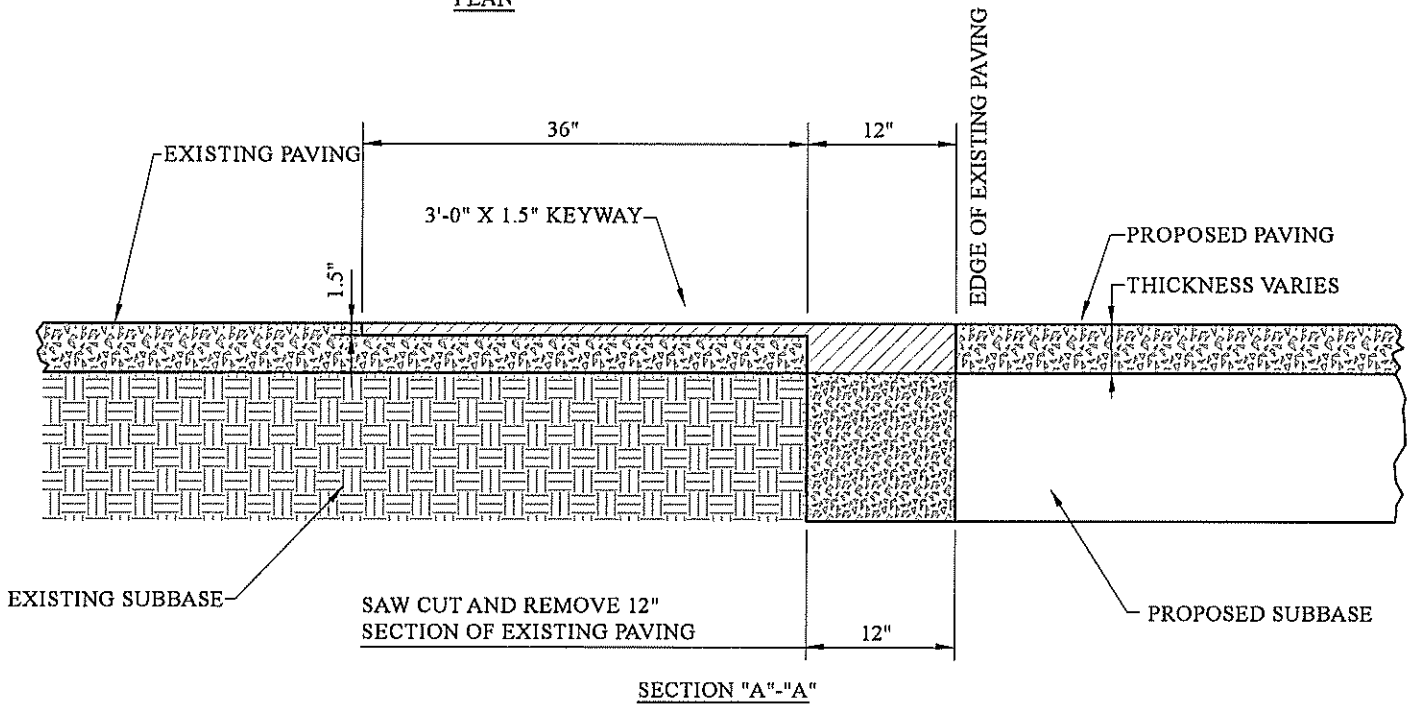
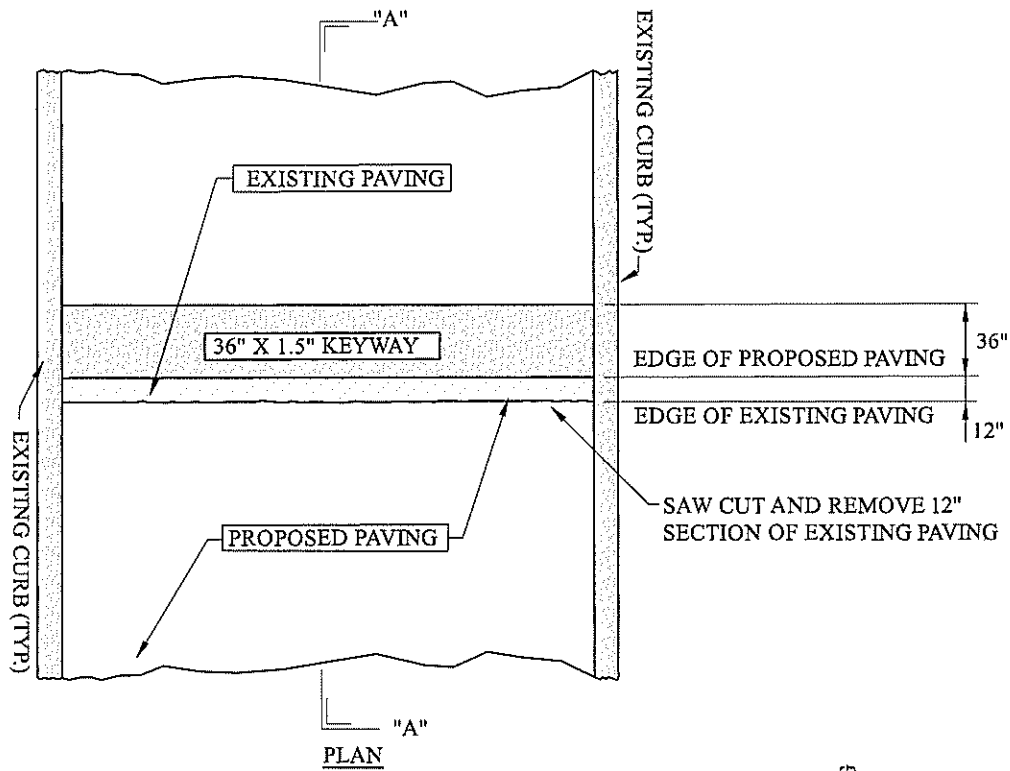


CONTRACTION JOINT DETAIL



SOUTH FAYETTE TOWNSHIP

PLAIN CEMENT CONCRETE CURB AND GUTTER



SOUTH FAYETTE
TOWNSHIP

PAVEMENT KEYWAY

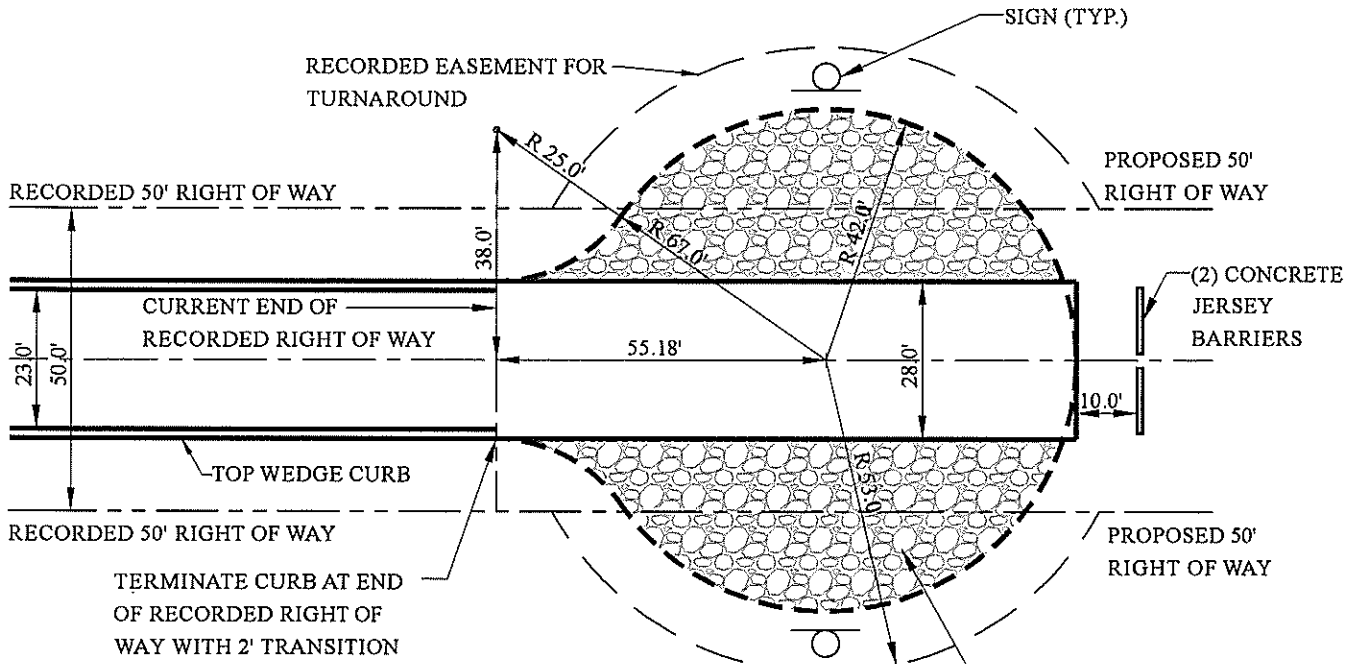


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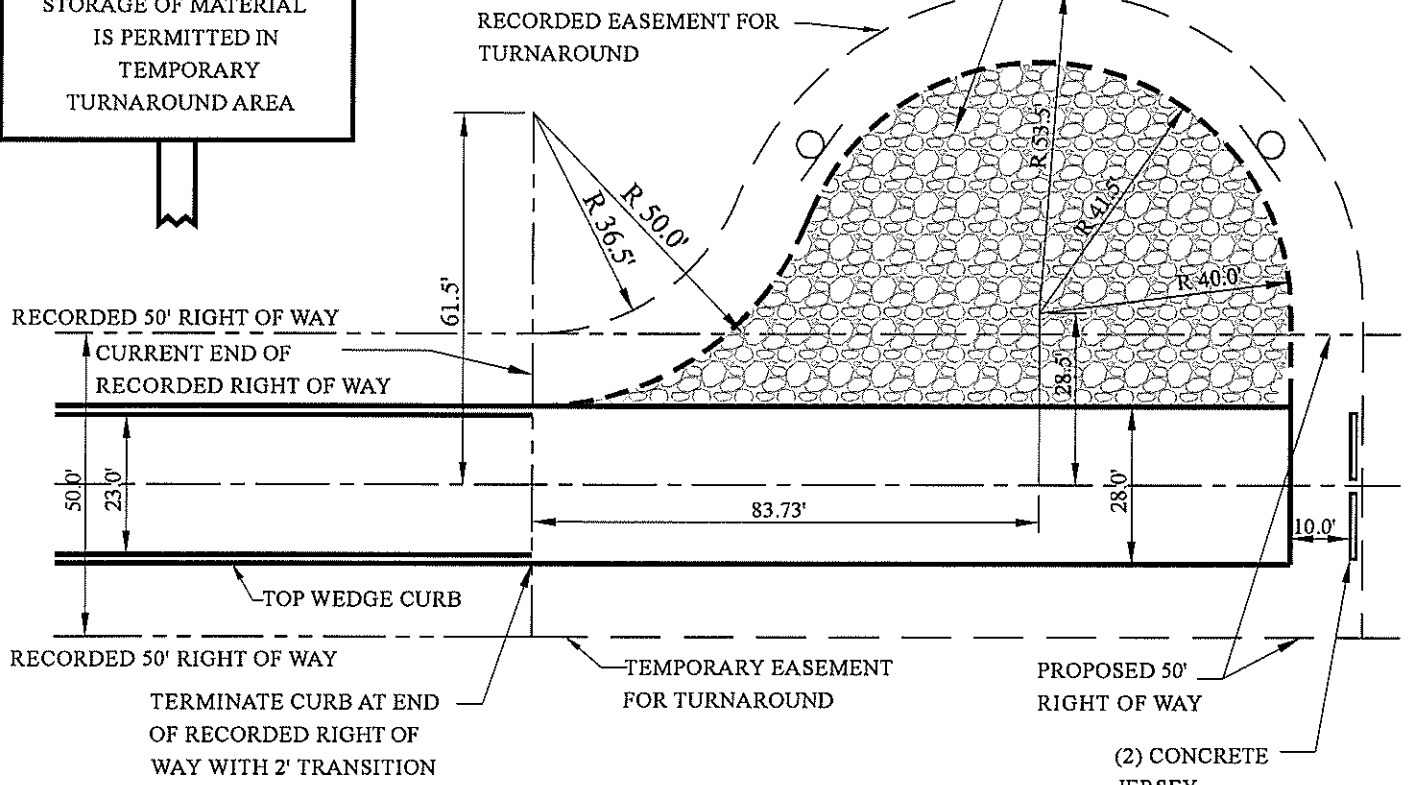
Adopted: JULY 2022

SFT-SD-005



ALTERNATE TEMPORARY CUL-DE-SAC

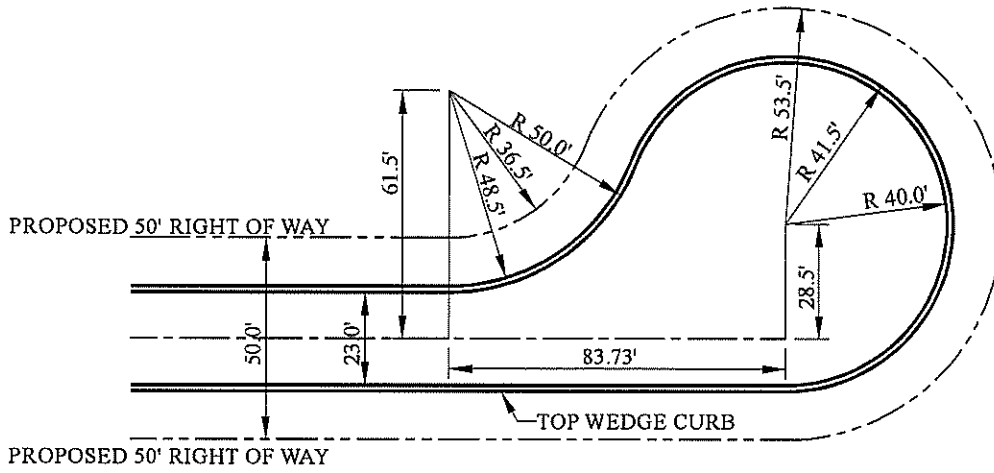
NO PARKING OR STORAGE OF MATERIAL IS PERMITTED IN TEMPORARY TURNAROUND AREA



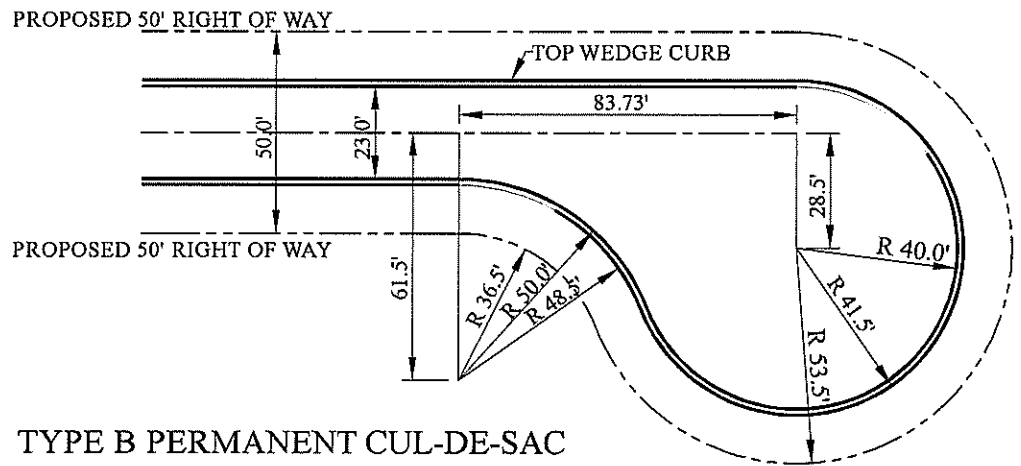
TEMPORARY CUL-DE-SAC

SOUTH FAYETTE TOWNSHIP

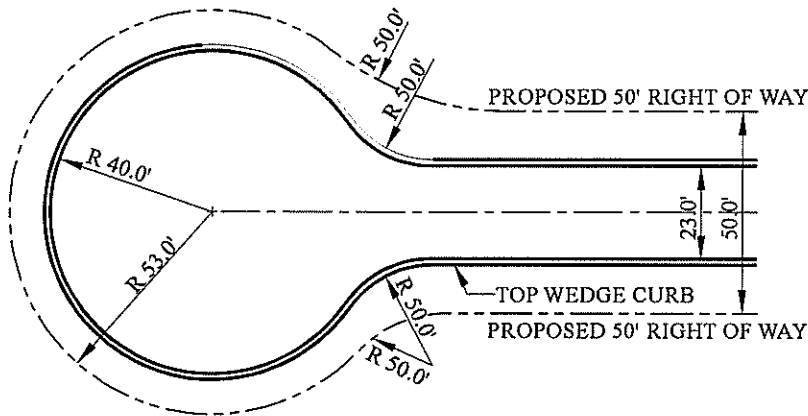
TEMPORARY CUL-DE-SAC DETAIL



TYPE A PERMANENT CUL-DE-SAC



TYPE B PERMANENT CUL-DE-SAC



TYPE C PERMANENT CUL-DE-SAC

SOUTH FAYETTE
TOWNSHIP

PERMANENT
CUL-DE-SAC DETAIL

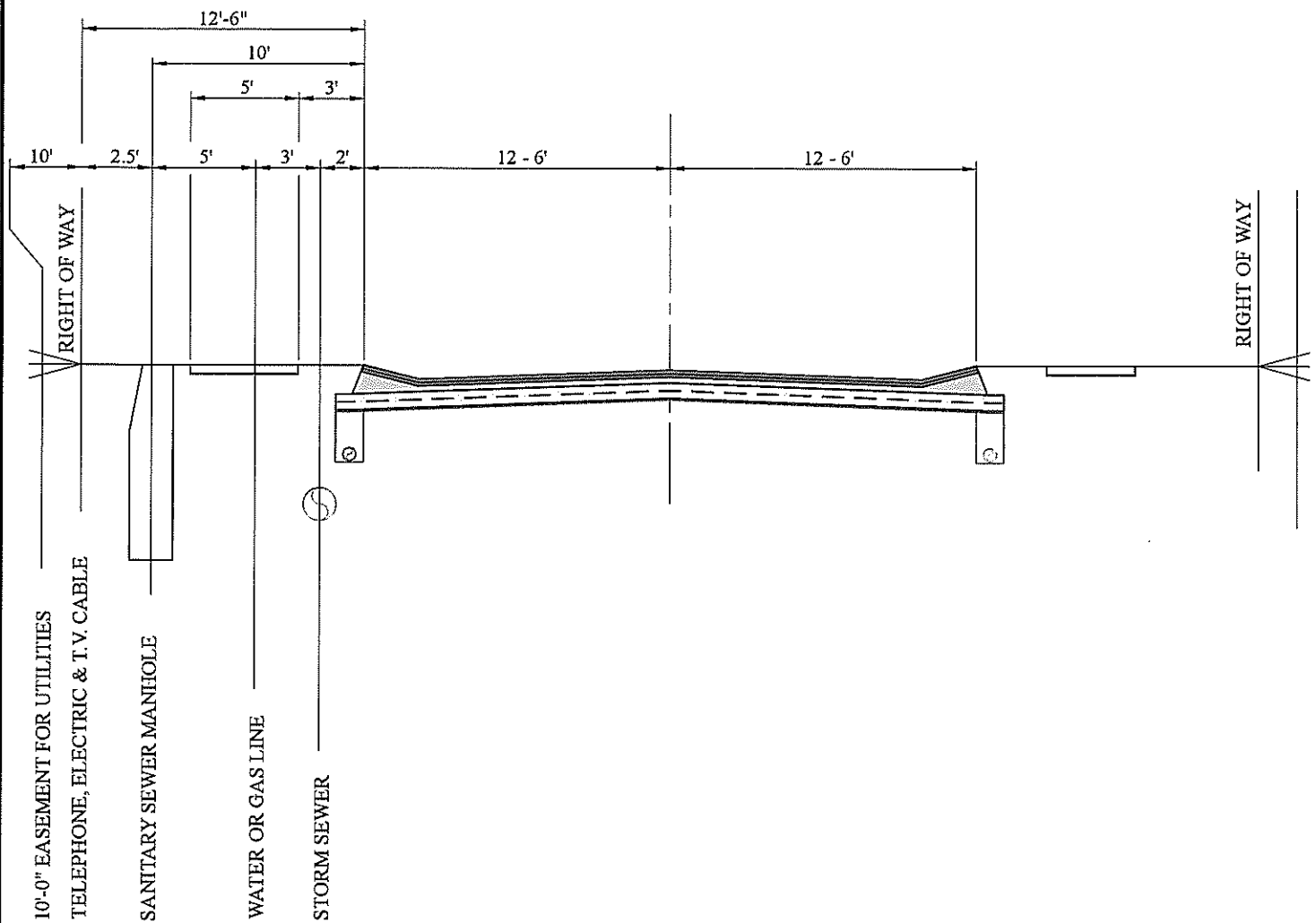


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SFT-SD-007



NOTES:

ALL UTILITIES CROSSING THE ROADWAY SHALL BE AT LEAST 3' DEEP WARNING TAPE PLACED PER UTILITY STANDARD AND FULLY BACKFILLED WITH PENNDOT 2A AGGREGATE AND SHALL BE INSPECTED BY THE TOWNSHIP.

THE MINIMUM DEPTH OF UTILITY LINES IS FROM THE FINISHED CENTERLINE GRADE.

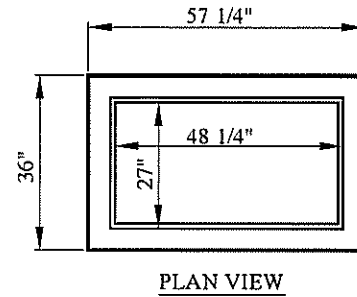
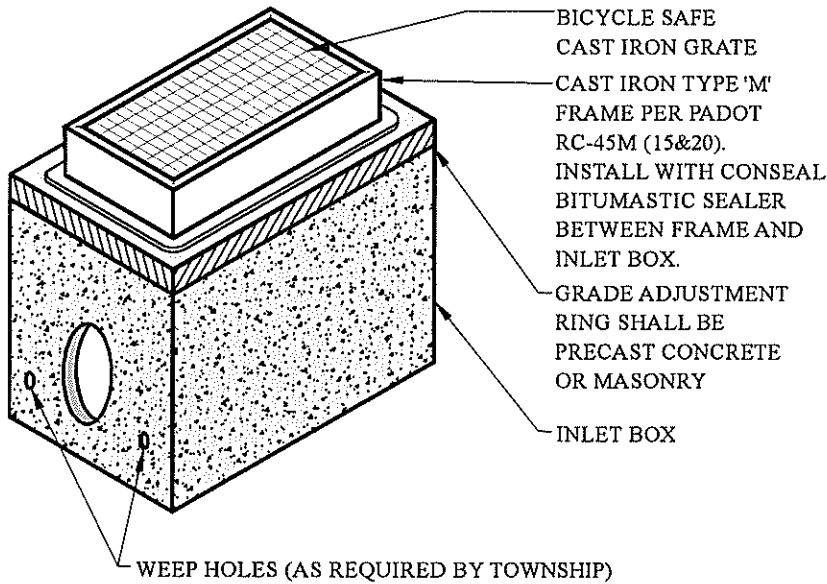
UPON COMPLETION OF CONSTRUCTION AN AS BUILT PLAN MUST BE SUBMITTED SHOWING ALL INSTALLED UTILITIES.

UTILITY LAYOUT APPLIES TO NEW DEVELOPMENT AND MAY NOT BE INDICATIVE OF EXISTING INFRASTRUCTURE.

SANITARY SEWER AND WATER LINE MUST BE ON OPPOSITE SIDES OF THE STREET.

**SOUTH FAYETTE
TOWNSHIP**

**TYPICAL UTILITY
LOCATION SECTION**



NOTE:
CONSTRUCT IN ACCORDANCE WITH THE REQUIREMENTS OF
PUBLICATION 408, SECTION 605, FOR INLET ASSEMBLIES.

NOTES:

WEEPHOLES AS REQUIRED.

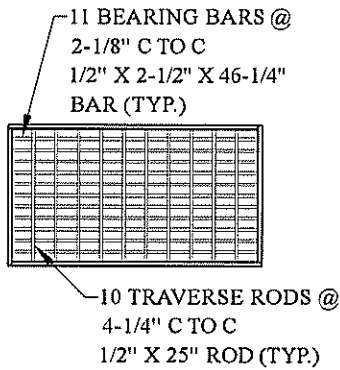
IN HEAVY TRAFFIC AREAS USE NEENAH
FOUNDRY FRAME AND GRATE R-3572A

IN RESIDENTIAL AREAS A BICYCLE SAFE
GRATE SHOWN SHALL BE SUBSTITUTED
IN THE TYPE M CAST IRON FRAME

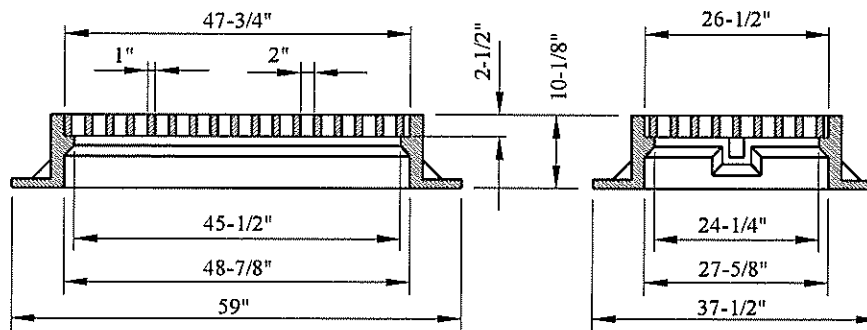
ALL INLETS SHALL BE IN ACCORDANCE
WITH SPECIFICATIONS SET FORTH IN
PENNDOT PUBLICATION 408 AND 72 FOR
PRECAST AND POURED IN PLACE INLETS.

CONCRETE INVERTS TO BE POURED TO
FLOW LINE.

ALL STRUCTURES AND INVERTS SHALL
BE POURED USING 4,000 PSI, 28-DAY
COMPRESSIVE STRENGTH CONCRETE.



BICYCLE SAFE GRATE



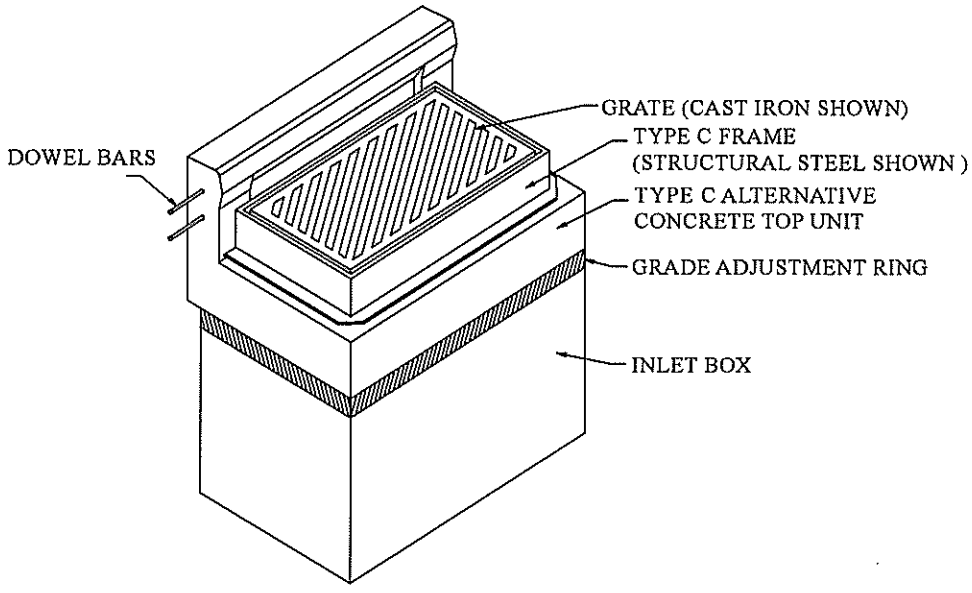
SECTION A-A

SECTION B-B

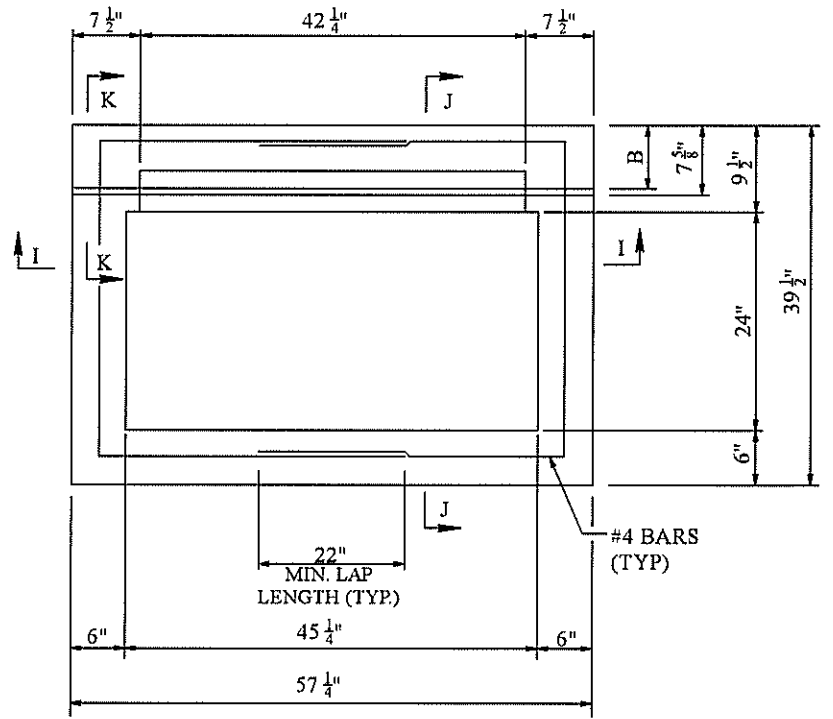
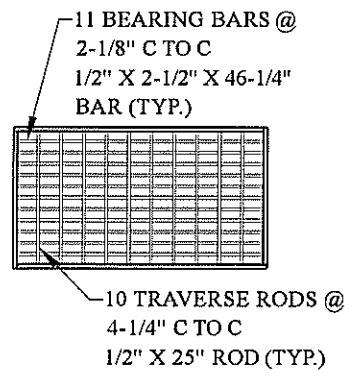
COMMERCIAL AND INDUSTRIAL DEVELOPMENT &
HEAVY TRAFFIC AREA
FRAME AND GRATE

SOUTH FAYETTE
TOWNSHIP

PA D.O.T. TYPE 'M' INLET



CONCRETE TOP UNIT - TYPE C ALTERNATE WITH TYPE C FRAME



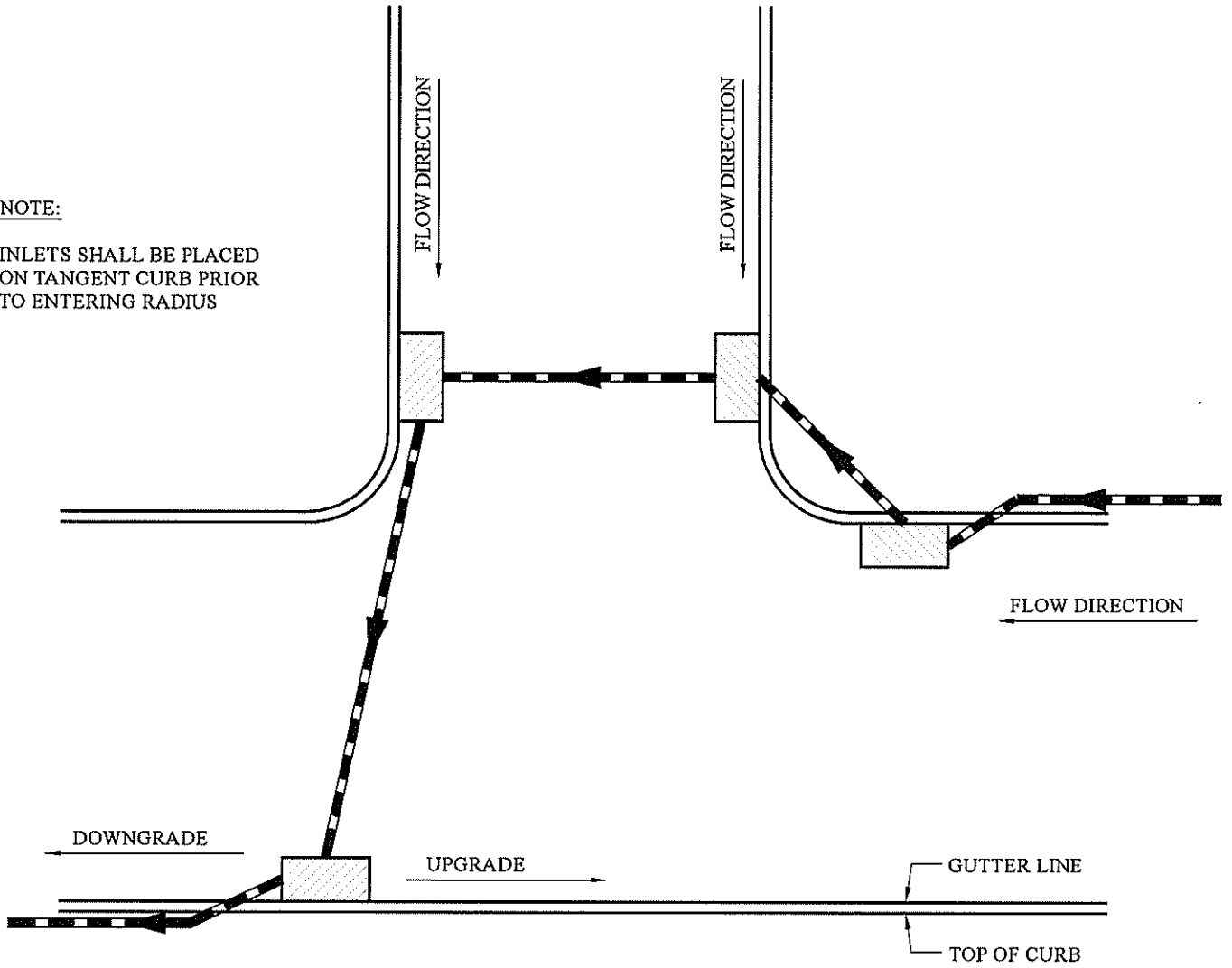
PLAN VIEW

**SOUTH FAYETTE
TOWNSHIP**

**TYPE "C" ALTERNATIVE PRECAST
CONCRETE CATCH BASIN**

NOTE:

INLETS SHALL BE PLACED ON TANGENT CURB PRIOR TO ENTERING RADIUS



SOUTH FAYETTE
TOWNSHIP

TYPICAL PLACEMENT
OF INLETS

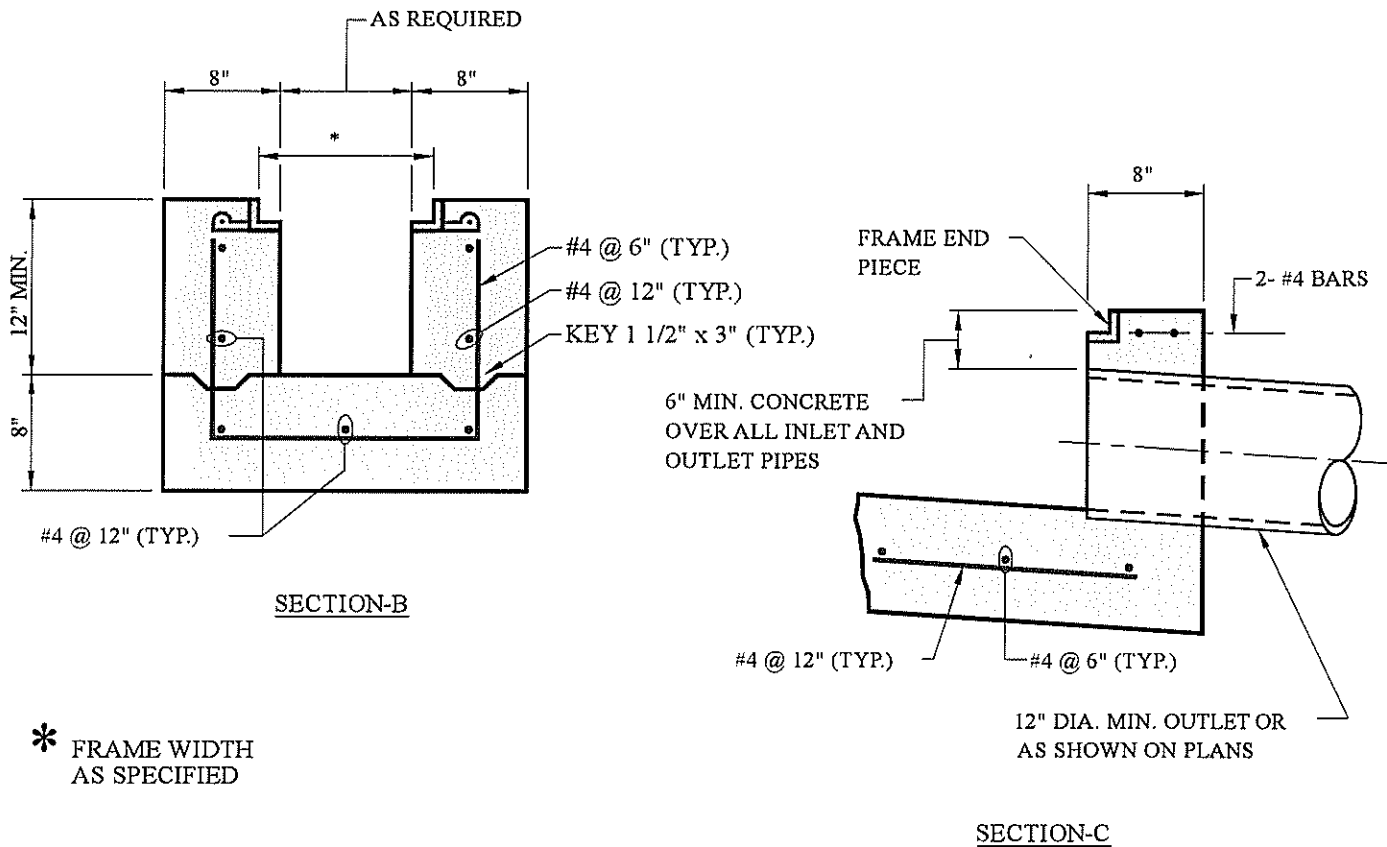
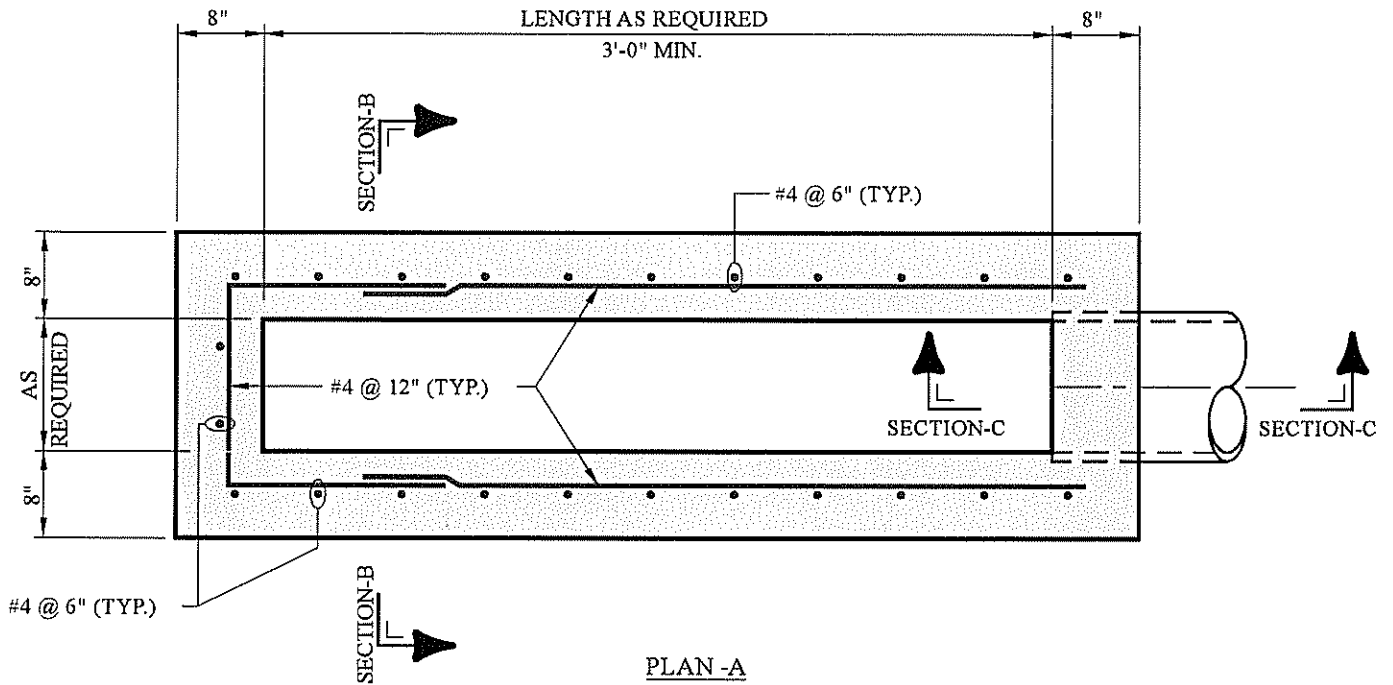


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SFT-SD-011



SOUTH FAYETTE
TOWNSHIP

TRENCH DRAIN



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Adopted: JULY 2022

SFT-SD-012

NOT FOR USE AS A HEADWALL OR STORM WATER COLLECTION DEVICE

NOTE:

THE INVERT OF THE PIPE AND THE END SECTION SHALL BE AT THE SAME ELEVATION. SLOPED END SECTION SHALL BE HIGH-DENSITY POLYETHYLENE CONFORMING WITH THE MINIMUM REQUIREMENTS OF CELL CLASSIFICATION 335400C AS DEFINED AND DESCRIBED IN ASTM D3350. EACH END SECTION SHALL HAVE A CARBON BLACK ADDITIVE FOR UV PROTECTION. MATERIAL SHALL BE 'HANCOR RESIN 8' OR APPROVED EQUAL.

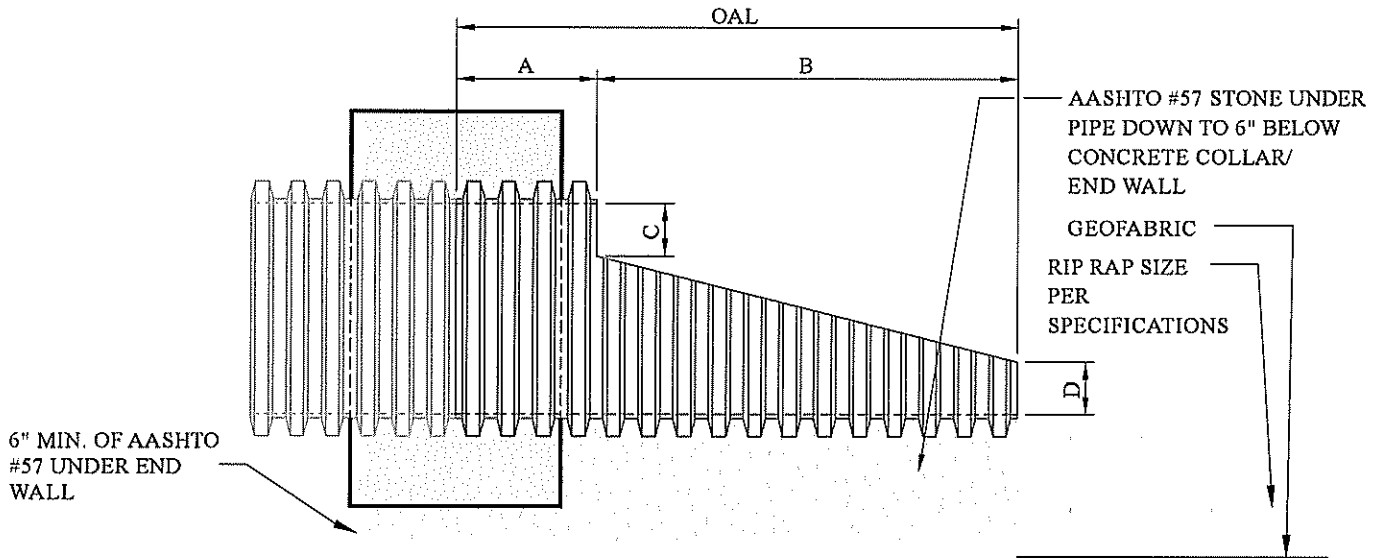
INSTALLATION:

INSTALLATION SHALL BE IN ACCORDANCE WITH THE PIPE MANUFACTURER'S INSTRUCTIONS.

PIPE DIA. (in.)	DIMENSIONS										
	SLOPE X:1			SLOPE 2:1		SLOPE 3:1		SLOPE 4:1		SLOPE 6:1	
	A* (in.)	C** (in.)	D (in.)	B (in.)	OAL (in.)	B (in.)	OAL (in.)	B (in.)	OAL (in.)	B (in.)	OAL (in.)
12	8	3	3	12	20	18	26	24	32	36	44
15	9.7	4	4	14.8	24.5	22	31.9	29.4	39.1	41.6	51.4
18	12	4.2	4	21	33	30	42	39	51	60	72

* THE 'A' LENGTH FOR 12"-18" IS 4 CORRUGATIONS

** THE 'C' DIMENSION VARIES SLIGHTLY FOR SOME DIAMETERS DEPENDING ON THE SLOPE



NOTE:

END SECTION SHALL BE INSTALLED WITH A CONCRETE COLLAR/EDGE TO SUPPORT AND CLOSE CORRUGATIONS PER 'PA DOT' SPECIFICATIONS.

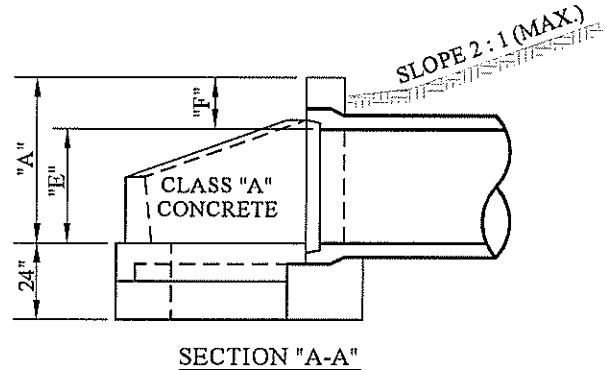
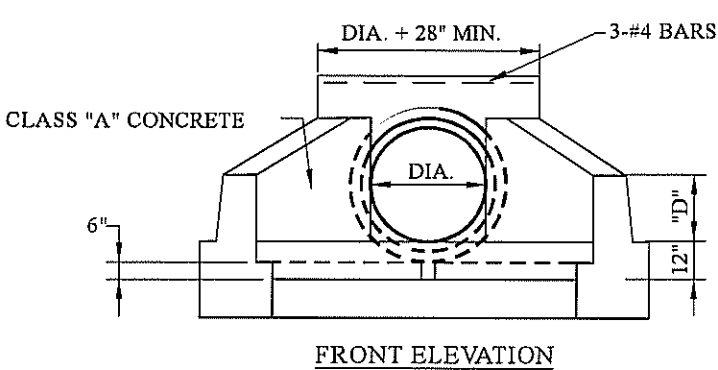
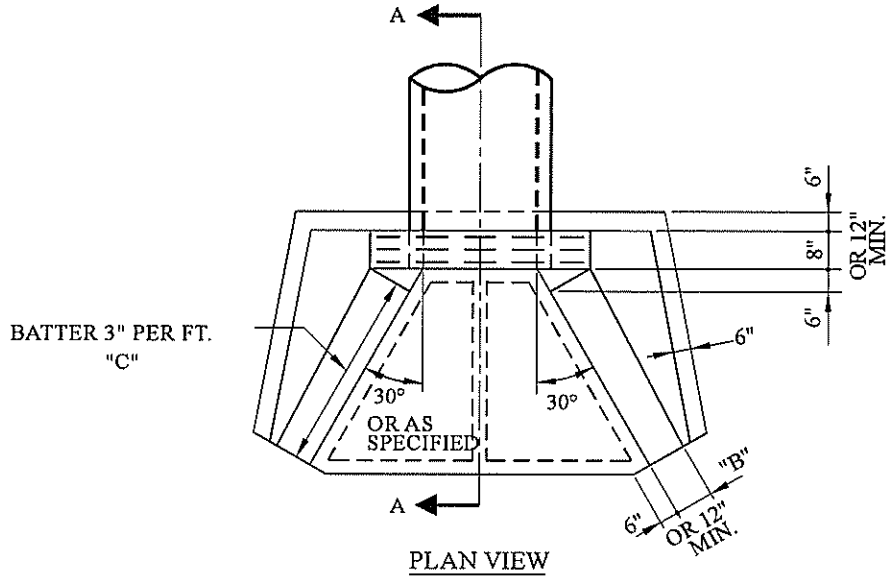
SOUTH FAYETTE
TOWNSHIP

HDPE SLOPED END SECTION
DETAIL

PIPE DIA.	A	B	C	D	E	F
15"	2'-6"	9"	2'-0"	12"	1'-9"	9"
18"	2'-6"	9"	2'-0"	12"	2'-0"	9"
24"	3'-3"	9"	2'-0"	12"	2'-6"	9"
30"	4'-0"	12"	2'-6"	15"	3'-0"	12"

NOTE:

SHOP DRAWINGS FOR ALL PRECAST HEADWALLS/ENDWALLS OR CONCRETE END SECTION MUST BE SUBMITTED FOR APPROVAL.



NOTE:

- RIP-RAP OR SOME OTHER FORM OF ENERGY DISSIPATION WILL BE REQUIRED AT TERMINATION OF DEVICE, REFER TO PA DEP EROSION AND SEDIMENTATION AND/OR SWM BMP MANUALS.
- PIPES LARGER THAN 30" TO BE DESIGNED BY AN ENGINEER - (SEE DETAIL - SFT - SD - 015) AND APPROVED BY TOWNSHIP ENGINEER.

**SOUTH FAYETTE
TOWNSHIP**

**STANDARD END WALL
15" TO 30" PIPES**

TABLE A
2:1 EMBANKMENT SLOPES

PIPE DIA.	SKEW $\text{D}_1 = 90^\circ$ TO 60° $q = 30^\circ$			SKEW $\text{D} = 55^\circ$ $q = 35^\circ$			SKEW $\text{D} = 50^\circ$ $q = 40^\circ$			SKEW $\text{D} = 45^\circ$ $q = 45^\circ$			SKEW $\text{D} = 40^\circ$ $q = 50^\circ$			SKEW $\text{D} = 30^\circ$ $q = 60^\circ$			SKEW $\text{D} = 20^\circ$ $q = 70^\circ$			SKEW $\text{D} = 10^\circ$ $q = 80^\circ$			X		
	d	L	Q	w1	L	Q	w1	L	Q	w1	L	Q	w1	L	Q	w1	L	Q	w1	L	Q	w1	L	Q	w1	w2	A
(in.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(in.)
36	5.8	0	4.6	6.0	.33	4.9	6.2	.5	5.2	6.5	.67	5.7	7.0	.75	6.2	8.3	1.33	8.0	11.1	1.75	11.7	19.6	5.0	23.0	4.6	12	
42	6.3	0	5.8	6.6	.33	6.1	6.9	.5	6.5	7.3	.67	7.1	7.8	.75	7.8	9.3	1.33	10.0	12.5	1.75	14.6	22.5	5.0	28.8	5.8	12	
48	6.9	0	6.9	7.2	.33	7.3	7.5	.5	7.8	8.0	.67	8.5	8.5	.75	9.4	10.3	1.33	12.0	14.0	1.75	17.5	25.3	5.0	34.6	6.9	12	
54	7.5	0	8.0	7.8	.33	8.5	8.2	.5	9.1	8.7	.67	9.9	9.3	.75	10.9	11.3	1.33	14.0	15.5	1.75	20.5	28.2	5.0	40.3	8.0	12	
60	8.1	0	9.2	8.4	.33	9.8	8.8	.5	10.4	9.4	.67	11.3	10.1	.75	12.5	12.3	1.33	16.0	16.9	1.75	23.4	31.1	5.0	46.0	9.2	15	
72	9.2	0	11.5	9.6	.33	12.2	10.1	.5	13.0	10.8	.67	14.1	11.7	.75	15.6	14.3	1.33	20.0	19.8	1.75	29.2	36.9	5.0	57.6	11.5	15	

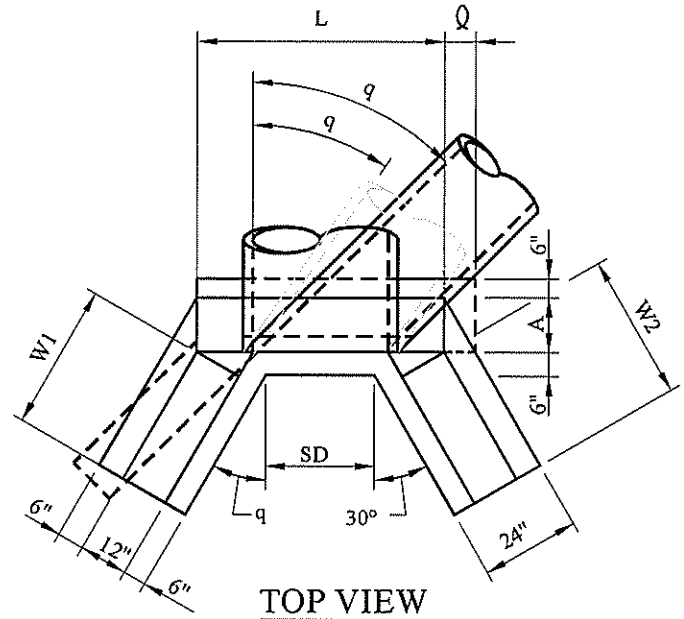
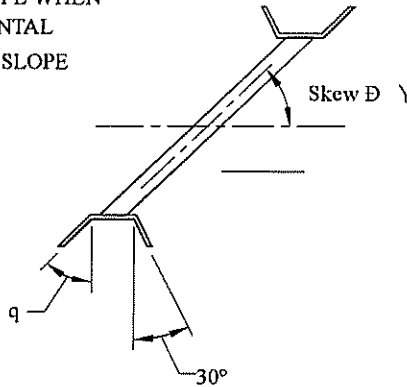
$$SD = \frac{d}{\cos q} = \frac{d}{\sin \text{Skew } \text{D}}$$

$$L = SD + 2.3 \text{ FT.}$$

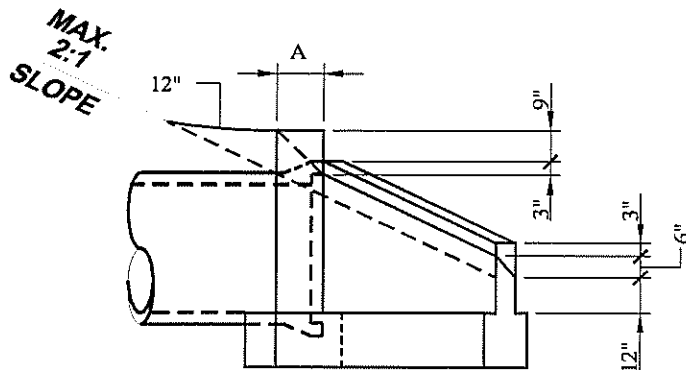
$$W1 = \frac{2d - 2'}{\cos q} \text{ (FOR 2:1 SLOPE)}$$

$$W1 = \frac{X}{\cos q} \text{ (d)-0.5 - } \frac{X}{X}$$

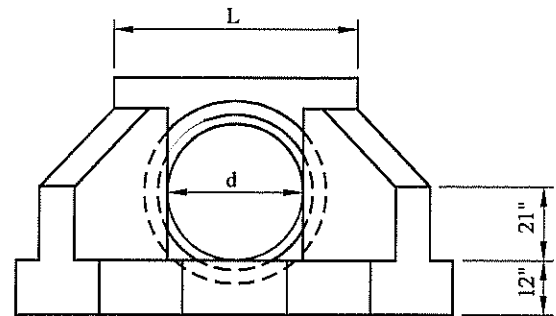
(FOR VARIABLE SLOPE WHEN 'X' EQUALS HORIZONTAL DIMENSION OF THE SLOPE DESIGNATION.)



TOP VIEW



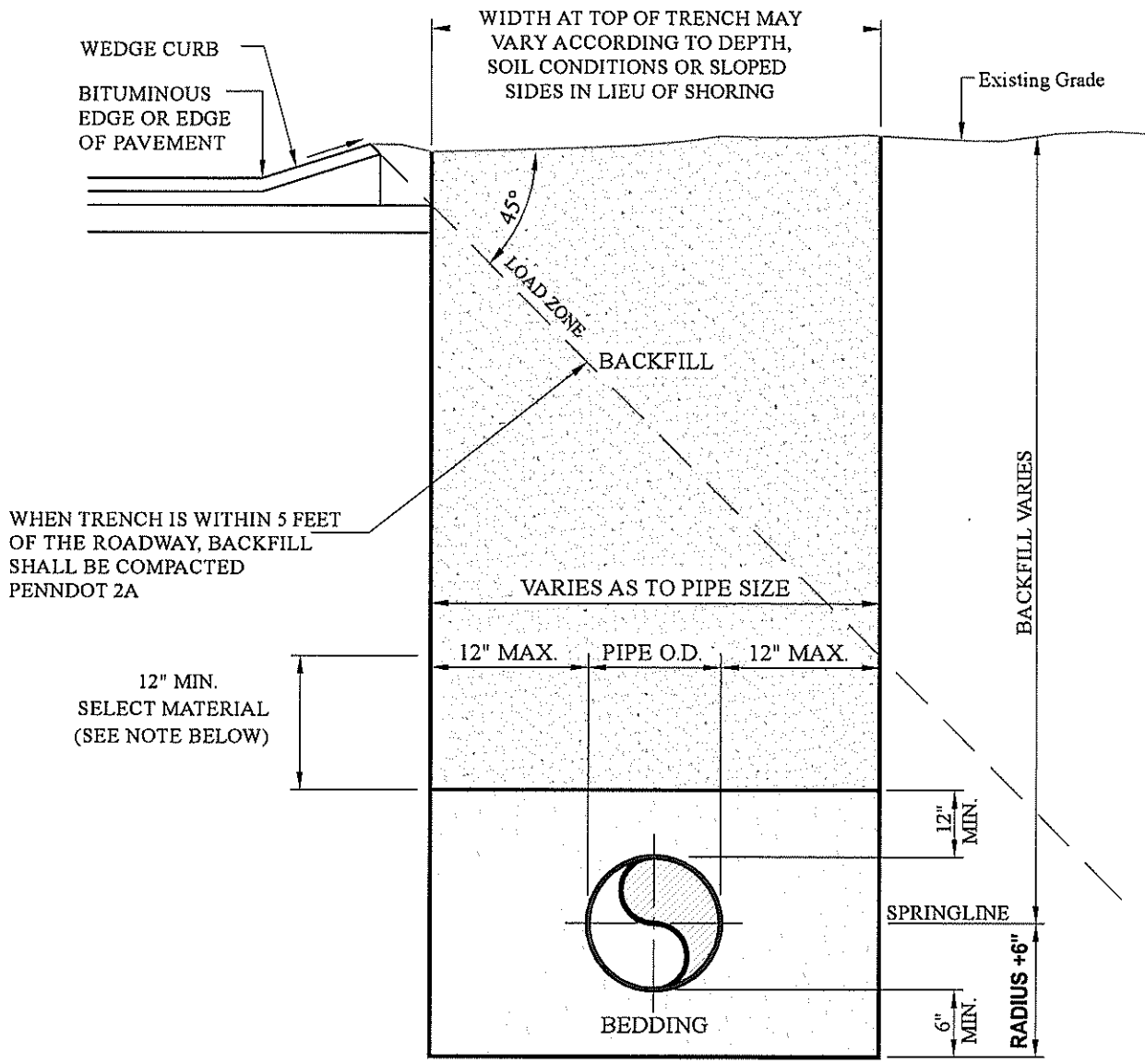
SIDE VIEW



END VIEW

**SOUTH FAYETTE
TOWNSHIP**

**CONCRETE END WALL
FOR LARGER DIA. PIPE
(36" - 72")**



WHEN TRENCH IS WITHIN 5 FEET OF THE ROADWAY, BACKFILL SHALL BE COMPACTED PENNDOT 2A

12" MIN. SELECT MATERIAL (SEE NOTE BELOW)

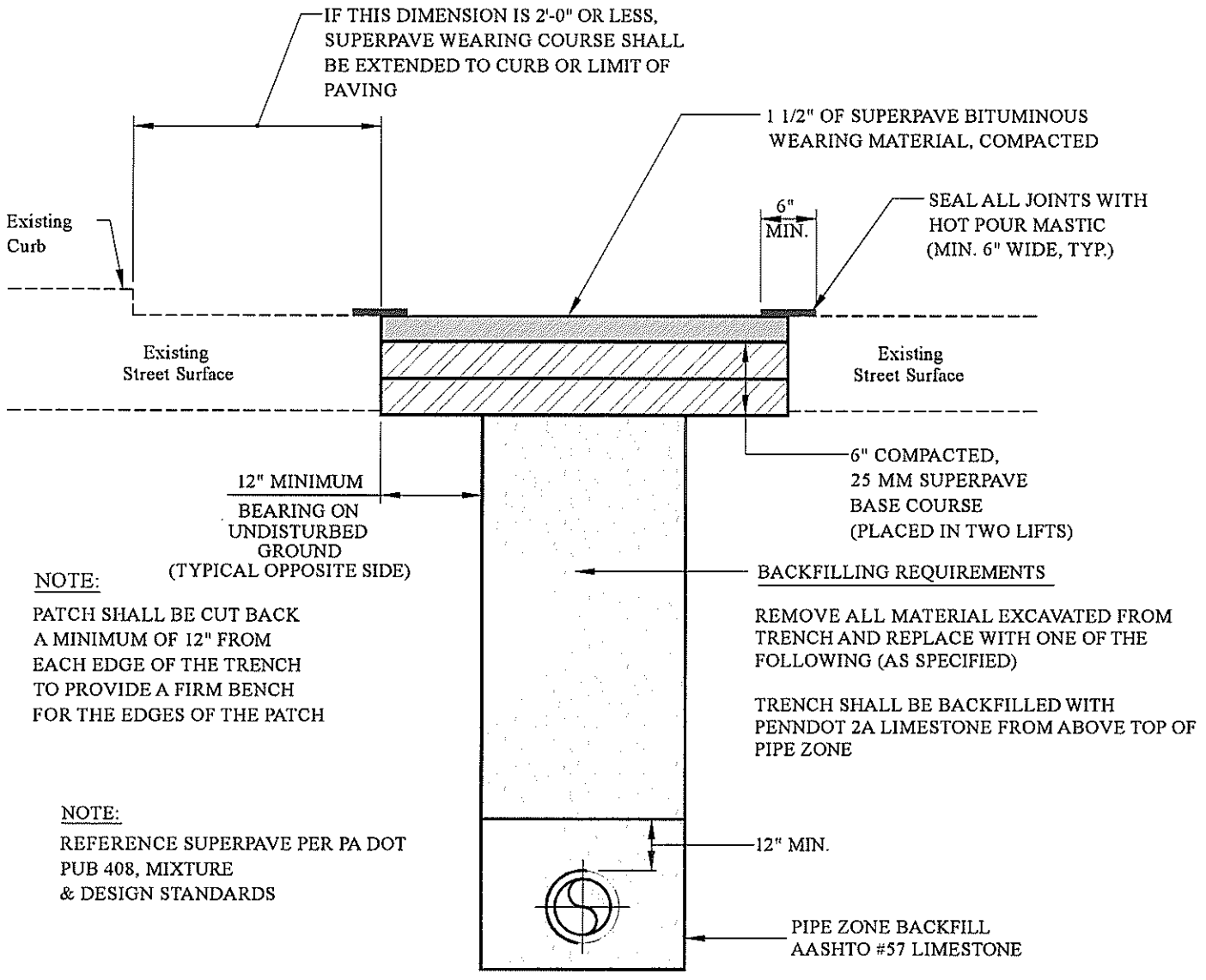
BEDDING: THE BEDDING SHALL HAVE A MINIMUM DEPTH OF SIX INCHES (6") BELOW ALL PIPES AND SHALL BE BACKFILLED WITH AASHTO #57, GRAVEL OR STONE TWELVE INCHES (12") BELOW ALL PIPE IN ROCK THEN EXTENDED UP TO 12" OVER PIPE

BACKFILL: ALL STREET, SIDEWALK, PARKING AREA CROSSINGS, OR AREA WITHIN 5' OF CURB LINE SHALL BE BACKFILLED AND COMPACTED TO SUBGRADE WITH COMPACTED PENNDOT 2A.

IN ALL OTHER TRENCH AREAS BACKFILL FROM (0'-6") ABOVE THE TOP OF THE PIPE; TO BE SELECTED MATERIAL (SELECTED MATERIALS IS FINELY DIVIDED MATERIAL FREE OF DEBRIS, ORGANIC MATERIAL AND STONES.), COMPACTED IN EIGHT INCH (8") LAYERS.

SOUTH FAYETTE TOWNSHIP

PIPE TRENCHING AND BEDDING DETAIL



NOTE:

DURING COLD WEATHER WHEN SUPERPAVE MATERIAL IS NOT AVAILABLE FROM THE ASPHALT PLANTS THE TRENCH SHALL BE BACKFILLED WITH BEDDING MATERIAL TO AN ELEVATION WITHIN 3" OF THE ROAD SURFACE. THE TRENCH SHALL THEN BE SURFACED WITH A TEMPORARY PATCH OF COLD PATCH MATERIAL. AS SOON AS THE ASPHALT PLANTS OPEN IN THE SPRING, THE CONTRACTOR SHALL REMOVE THE COLD PATCH MATERIAL AND SAW-CUT THE REQUIRED BENCHES AND THE SUPERPAVE MATERIAL SHALL THEN BE PLACED AND SEALED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE ON THE TEMPORARY PATCH AND SHALL KEEP A SMOOTH RIDING SURFACE ON THE STREET.

**SOUTH FAYETTE
TOWNSHIP**

**TYPICAL DETAIL FOR
REPAIR OF PAVED STREET
OR ROADWAY OPENING**



GIBSON-THOMAS ENGINEERING CO.
1131 OLD FERRY HIGHWAY WESPORTE, PA 15089
724-932-1131 FAX 724-932-8130

Not to Scale

Adopted: JULY 2022

SFT-SD-017

APPROVED TUBES OR CAPS
WITH MIN. 1/2" POSITIVE
CLEARANCE POCKET

BARs THIS SIDE TO BE
BONDLESS AND COATED
WITH APPROVED MATERIAL

INITIAL SAW CUT

#4 x 24" REINFORCING
BARS

DOWELS @ 12" O.C.
REFER TO ROADWAY
CONSTRUCTION
STANDARD RC-26

SEAL ALL JOINTS

SAW CUT

WEARING COURSE (1 1/2" MIN.)

BINDER COURSE (SHALL BE APPROX.
2 3/4", CONTRACTOR SHALL MEET
EXISTING DEPTH OF BINDER COURSE)

BASE COURSE (8" MIN.)

INITIAL SAW CUT

SAW CUT

EXISTING
BITUMINOUS
SURFACE

TACK COAT
ALL VERTICAL
SURFACES

NOTE:

ALL BITUMINOUS
PAVING MIXTURE WILL
BE HOT-MIXED WITHIN
ACCORDANCE TO
PUBLICATION 408

2"
(TYP.)
12"
MIN.

#4 BARS
@ 6" O.C.
#5 BARS
@ 5" O.C.

12"
MIN.

PENNDOT 2A LIMESTONE
OR AGGREGATE BACKFILL
MATERIAL COMPACTED
IN 8" LIFTS USING
APPROVED VIBRATORY
EQUIPMENT

EXCAVATION

NOTE:

ALL WORK ON STATE AND COUNTY ROADS SHALL
BE COMPLETED IN ACCORDANCE WITH THE
HIGHWAY OCCUPANCY PERMIT (HOP) AND ANY
REQUIREMENTS OF THE SUPERVISORY AGENCY.

WEARING COURSE:

SUPERPAVE MATERIAL IN ACCORDANCE WITH PUB. 408
DEPTH EQUAL TO EXISTING, 1 1/2" MIN.

BINDER COURSE:

SUPERPAVE MATERIAL IN ACCORDANCE WITH PUB. 408
DEPTH EQUAL TO EXISTING, 2 3/4"

TACK COAT:

TACK COAT IN ACCORDANCE WITH PUB. 408

SOUTH FAYETTE
TOWNSHIP

RESTORATION OF PIPE TRENCH
ALONG OR ACROSS HIGHWAYS
WITH CONCRETE BASE

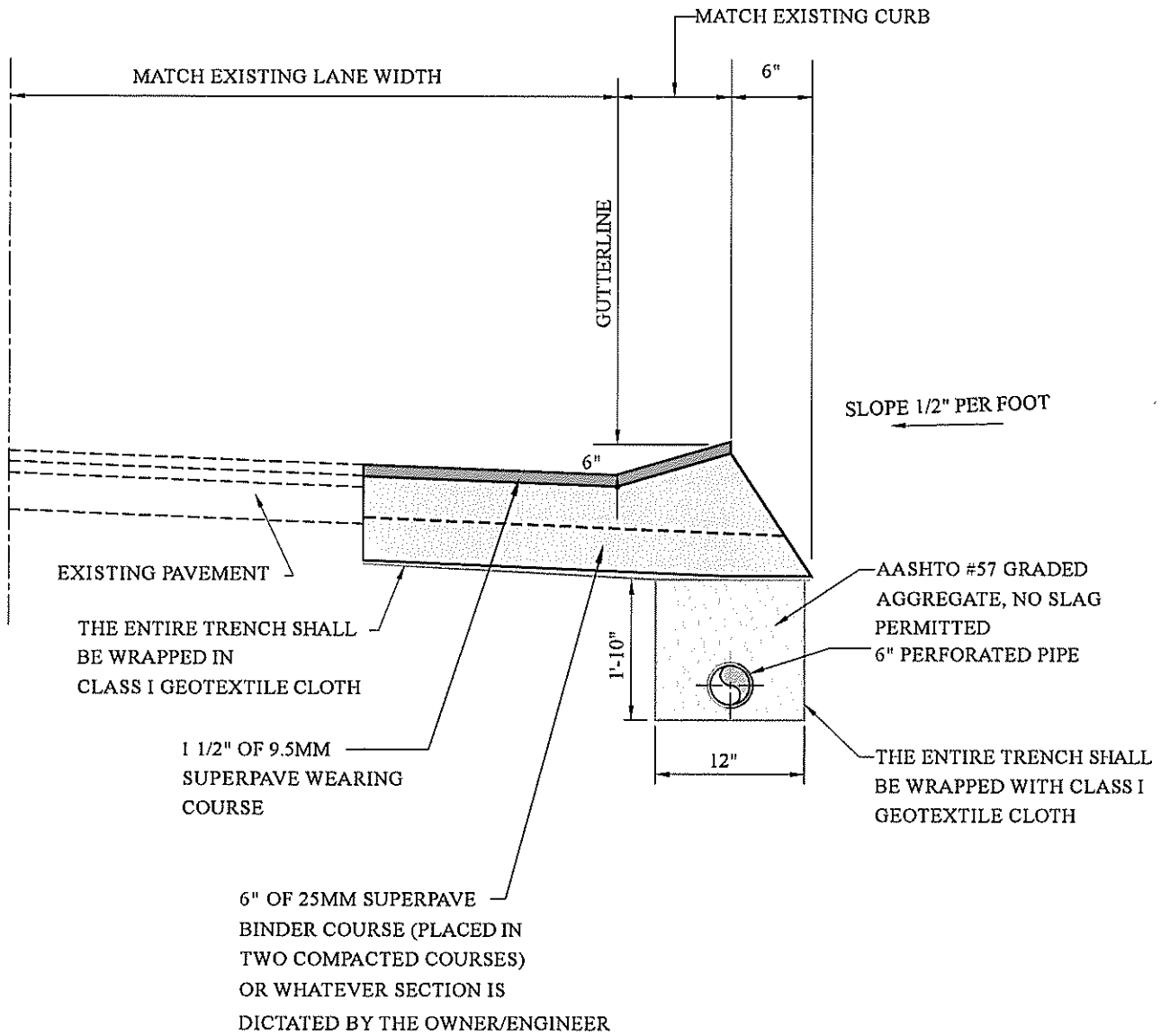


GIBSON-THOMAS ENGINEERING CO.
9931 OLD FERRY HIGHWAY WOLFORD, VA 22099
PH 754.933.1111 FAX 754.933.1139

Not to Scale

Adopted: JULY 2022

SFT-SD-018



NOTES:

- ALL AGGREGATE SIZES SHOWN ARE AASHTO NUMBERS UNLESS OTHERWISE NOTED
- ALL DEPTHS SHOWN ARE COMPACTED DEPTHS
- ALL MATERIALS SHALL CONFORM TO PENNDOT PUBLICATION 408.

**SOUTH FAYETTE
TOWNSHIP**

CURB REPLACEMENT

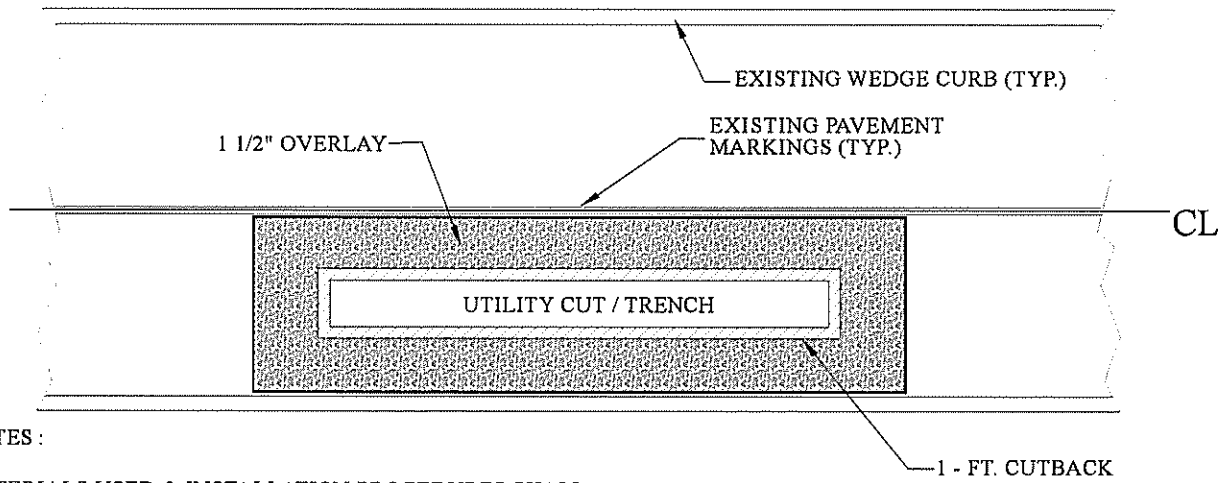


GIBSON-THOMAS ENGINEERING CO.
 1131 OLD TERRY HIGHWAY WILKESBORO, PA 17259
 PH 717-333-1111 FAX 717-333-8139

Not to Scale

Adopted: JULY 2022

SFT-SD-019

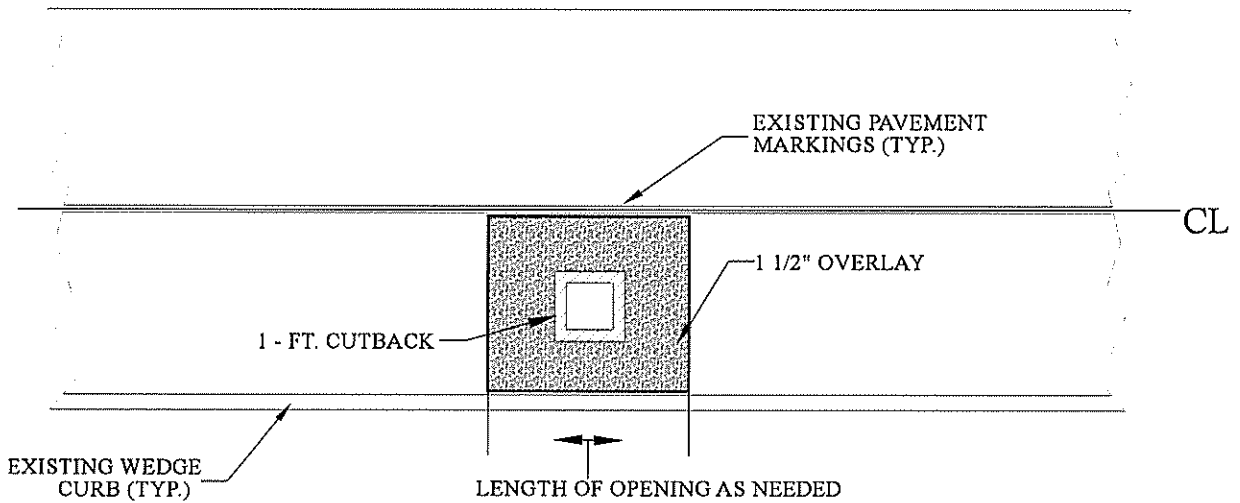


NOTES:

GENERAL NOTES :

1. ALL MATERIALS USED & INSTALLATION PROCEDURES SHALL CONFORM TO PENNDOT PUB. 408 MOST RECENT EDITION AND/OR APPLICABLE TOWNSHIP STANDARDS.
2. TWO (2) YEAR GUARANTEE REQUIRED FOR ALL PERMANENT RESTORATION (SEE MUNICIPAL ORDINANCE)
3. IN THE EVENT THAT THE REQUIRED CUTBACK ENCKROACHES ON A DISTANCE OF 1 FT FROM THE GUTTERLINE, THE CUTBACK MUST BE MINIMIZED TO REMAIN 1 FT AWAY FROM THE GUTTERLINE OR THE ENTIRE ROAD WIDTH, INCLUDING THE CURB MUST BE REPLACED.

LONGITUDINAL OPENINGS
(TYPICALLY FOR MAIN LINE INSTALLATIONS OR SECTIONAL REPLACEMENT)



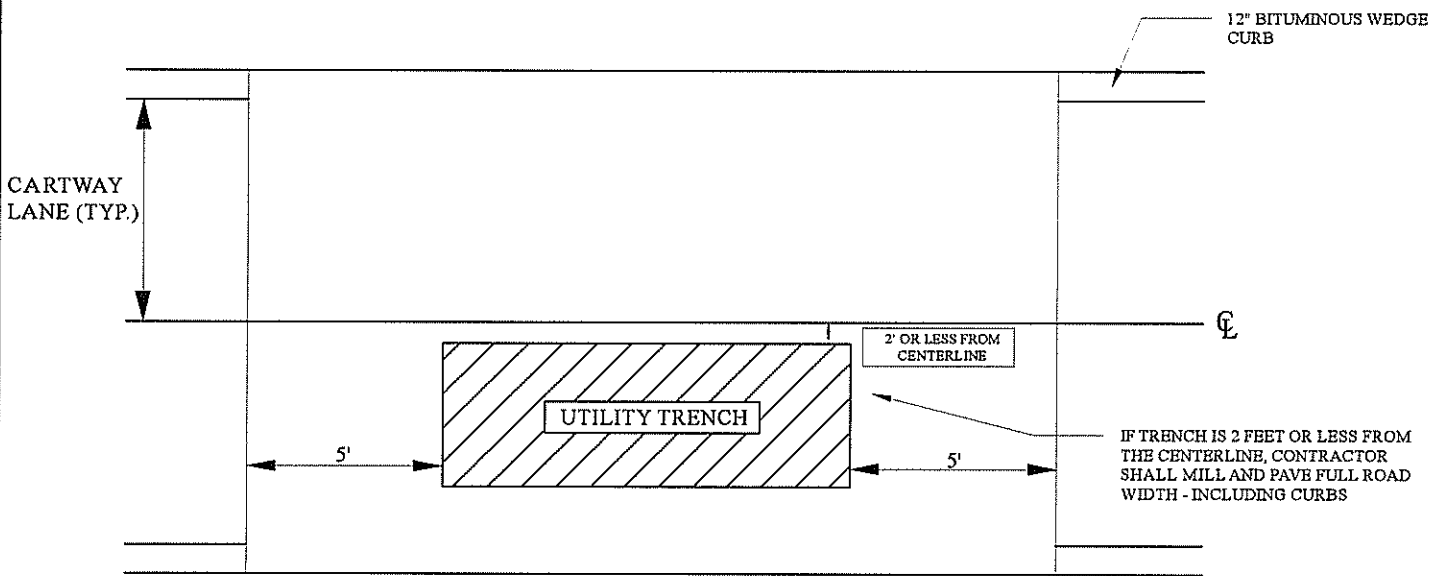
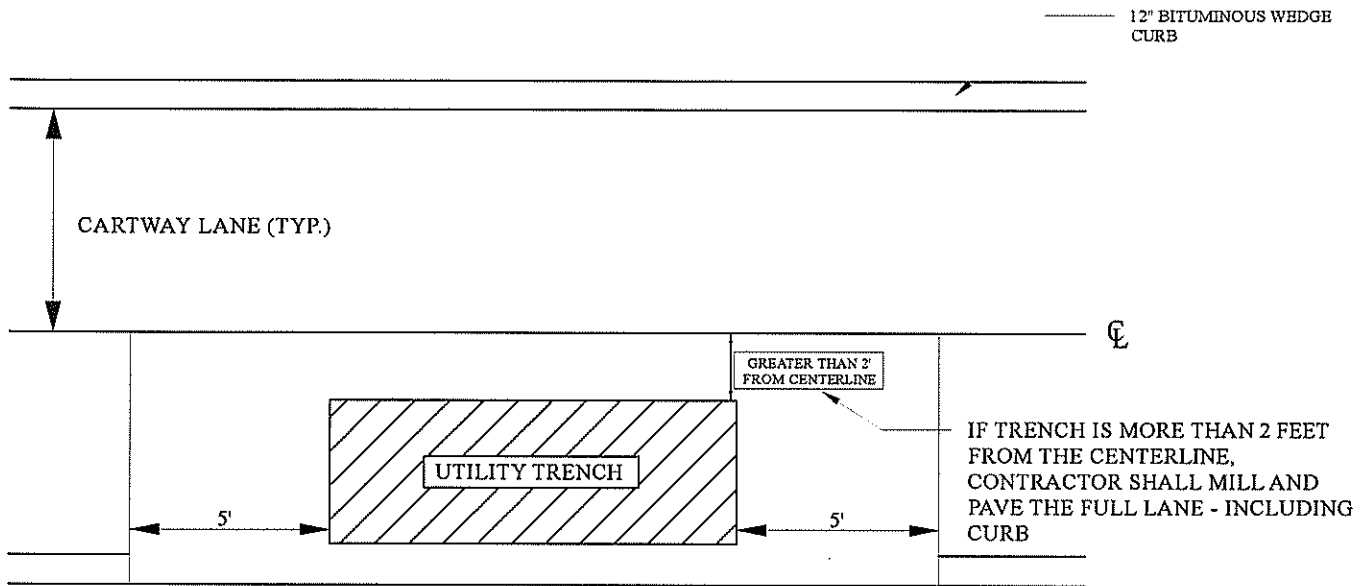
NOTES:

1. REGARDLESS OF PAVEMENT AGE, CUTBACK & 1 1/2" OVERLAY SHALL BE COMPLETED ON ALL SIDES OF EXCAVATION.
2. ALL PAVEMENT MARKINGS THAT ARE COVERED OR REMOVED SHALL BE RETURNED TO THEIR FORMER LOCATION.
3. IN THE EVENT THAT THE REQUIRED CUTBACK ENCKROACHES ON A DISTANCE OF 1 FT FROM THE GUTTERLINE, THE CUTBACK MUST BE MINIMIZED TO REMAIN 1 FT AWAY FROM THE GUTTERLINE.

TRANSVERSE OPENINGS
(TYPICALLY FOR SPOT REPAIRS OR SERVICE CONNECTIONS)

**SOUTH FAYETTE
TOWNSHIP**

STREET OPENING RESTORATION PLANS

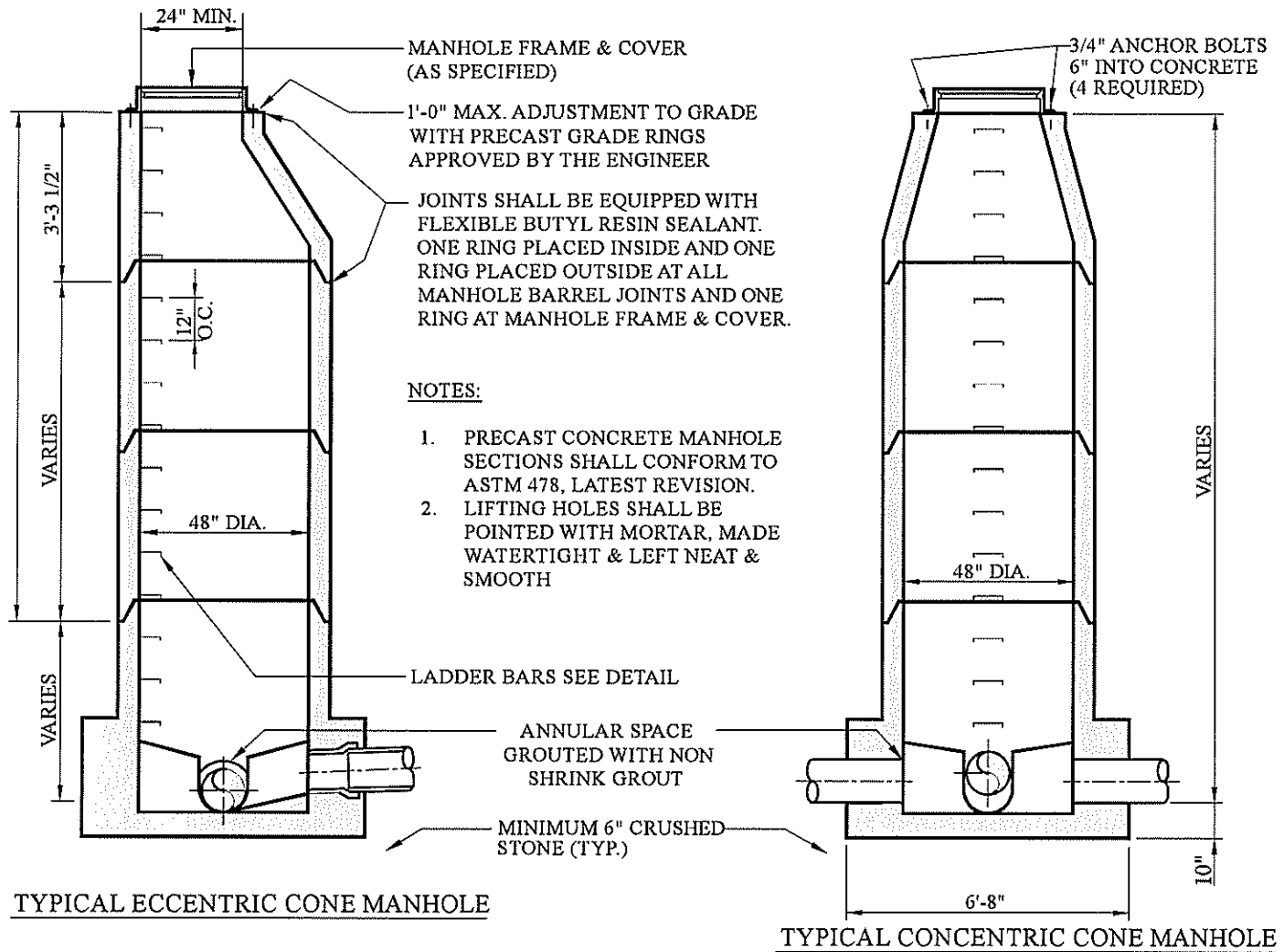


NOTES

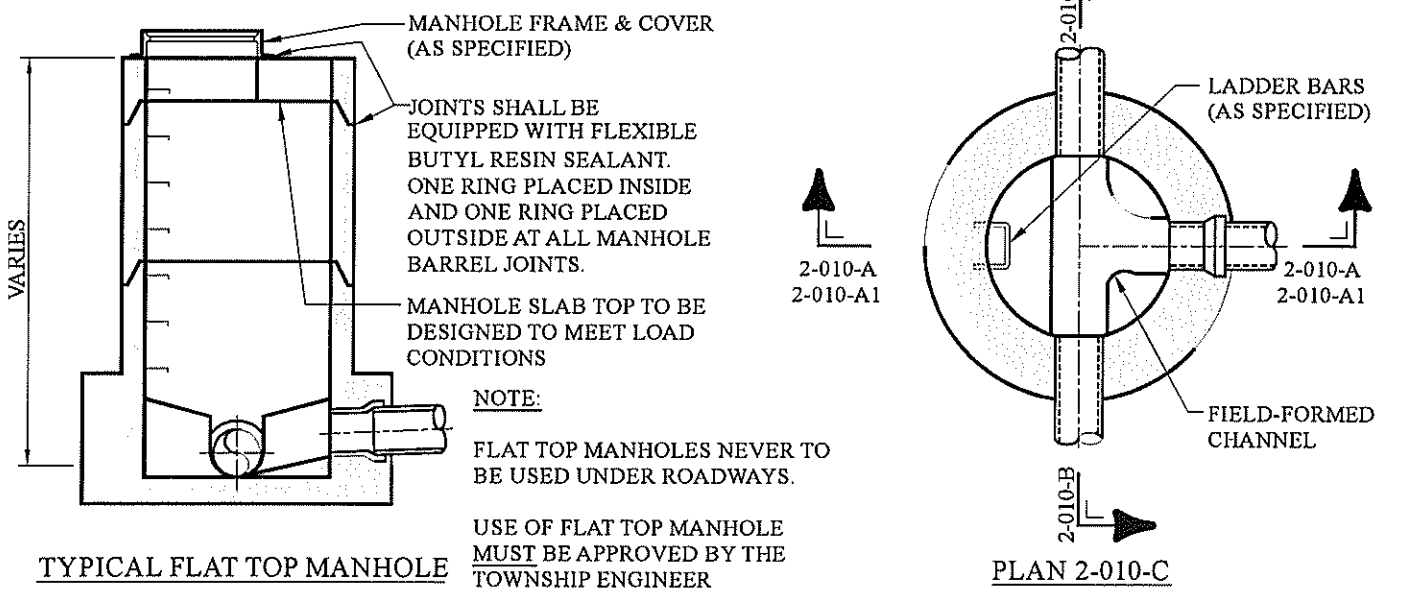
1. THIS REQUIREMENT ONLY APPLIES IF THE ROAD HAS BEEN PAVED WITHIN THE PAST 5 YEARS.
2. ALL PAVING SHALL BE COMPLETED PER THE APPROPRIATE TOWNSHIP DETAILS AND APPLICABLE REQUIREMENTS FROM PENNDOT PUB 213, LATEST EDITION.
3. UNDERDRAINS TO BE REINSTALLED WHERE EXISTING.
4. ALL BACKFILL REQUIREMENTS TO BE COMPLETED PER TOWNSHIP DETAILS.
5. SEAL ALL JOINTS AND GUTTERLINE WITH A MINIMUM 6" WIDE STRIP OF PG-64S-22.

**SOUTH FAYETTE
TOWNSHIP**

**STREET OPENING RESTORATION - MILL
AND PAVE**

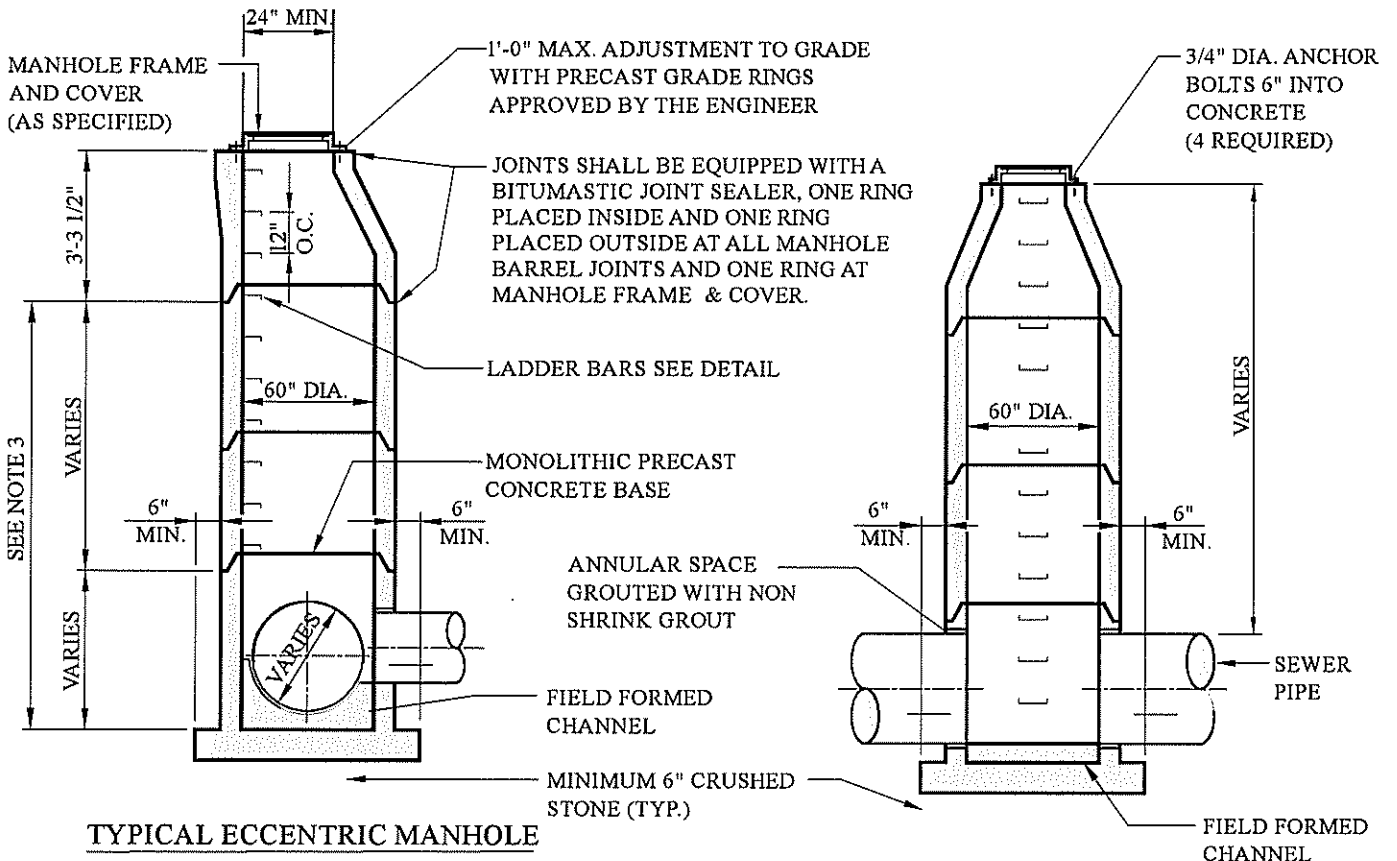


- NOTES:**
1. PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO ASTM 478, LATEST REVISION.
 2. LIFTING HOLES SHALL BE POINTED WITH MORTAR, MADE WATERTIGHT & LEFT NEAT & SMOOTH



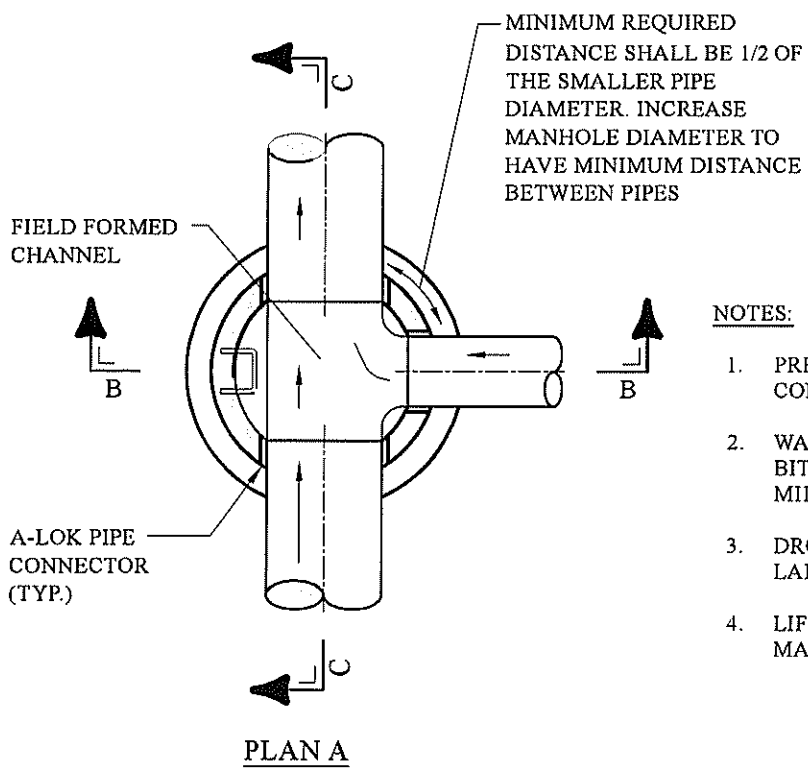
SOUTH FAYETTE TOWNSHIP

PRECAST CONCRETE MANHOLE FOR STORM SEWERS 6" TO 21"



TYPICAL ECCENTRIC MANHOLE

TYPICAL CONCENTRIC MANHOLE



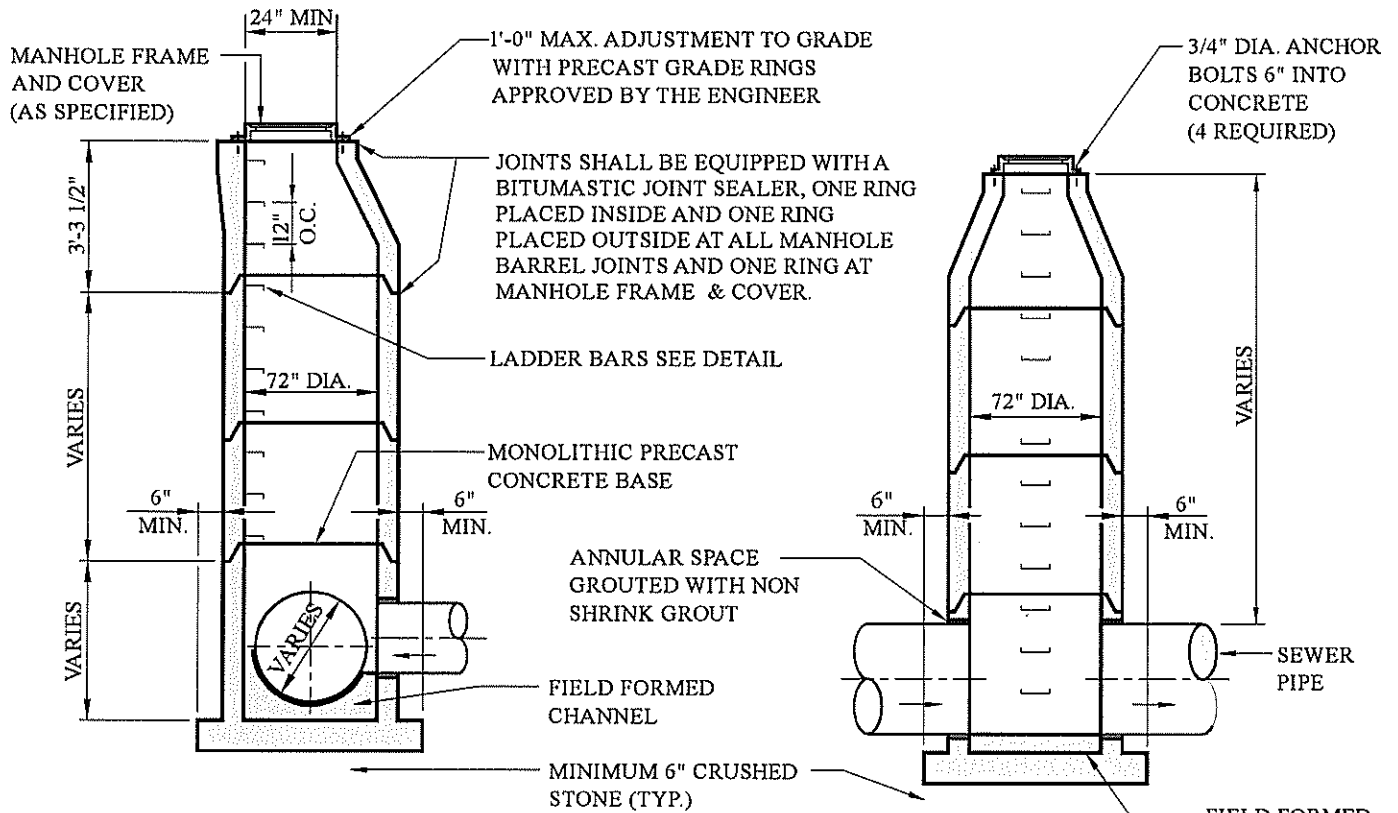
PLAN A

NOTES:

1. PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO ASTM C478, LATEST REVISION.
2. WATERPROOF EXTERIOR SURFACE WITH TWO COATS BITUMASTIC MATERIAL OR COAL TAR SOLUTION, 8 MILS PER COAT.
3. DROP CONNECTIONS ARE NOT PERMITTED FOR PIPES LARGER THAN 30" DIA.
4. LIFTING HOLES SHALL BE POINTED WITH MORTAR, MADE WATERTIGHT & LEFT NEAT & SMOOTH

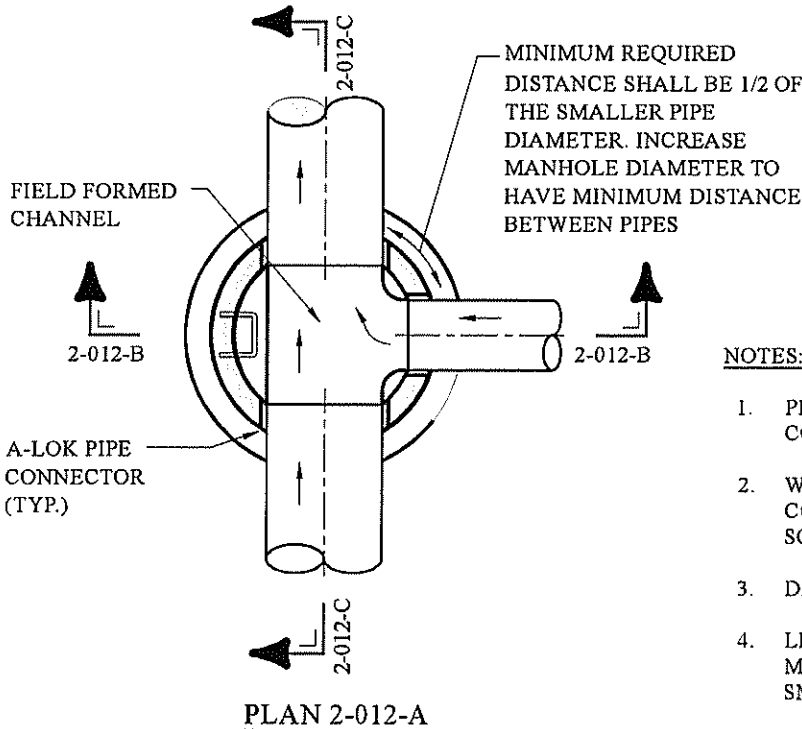
**SOUTH FAYETTE
TOWNSHIP**

**PRECAST CONCRETE MANHOLE
FOR STORM SEWERS 24"-42"**



TYPICAL ECCENTRIC MANHOLE

TYPICAL CONCENTRIC MANHOLE



NOTES:

1. PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO ASTM C478, LATEST REVISION.
2. WATERPROOF EXTERIOR SURFACE WITH TWO COATS BITUMASTIC MATERIAL OR COAL TAR SOLUTION, 8 MILS PER COAT.
3. DROP CONNECTIONS ARE NOT PERMITTED
4. LIFTING HOLES SHALL BE POINTED WITH MORTAR, MADE WATERTIGHT & LEFT NEAT & SMOOTH

**SOUTH FAYETTE
TOWNSHIP**

**PRECAST CONCRETE MANHOLE
(72 INCH DIAMETER)
(PIPE DIAMETER- 48" TO 54")**

3/4" DIA. ANCHOR BOLTS 6" INTO CONCRETE (4 REQUIRED)

24" MIN.

MANHOLE FRAME AND COVER (AS SPECIFIED)

LADDER BARS

NOTE:

JOINTS IN VERTICAL SHAFT SHALL BE BITUMASTIC JOINT SEALANT APPROVED BY THE ENGINEER.

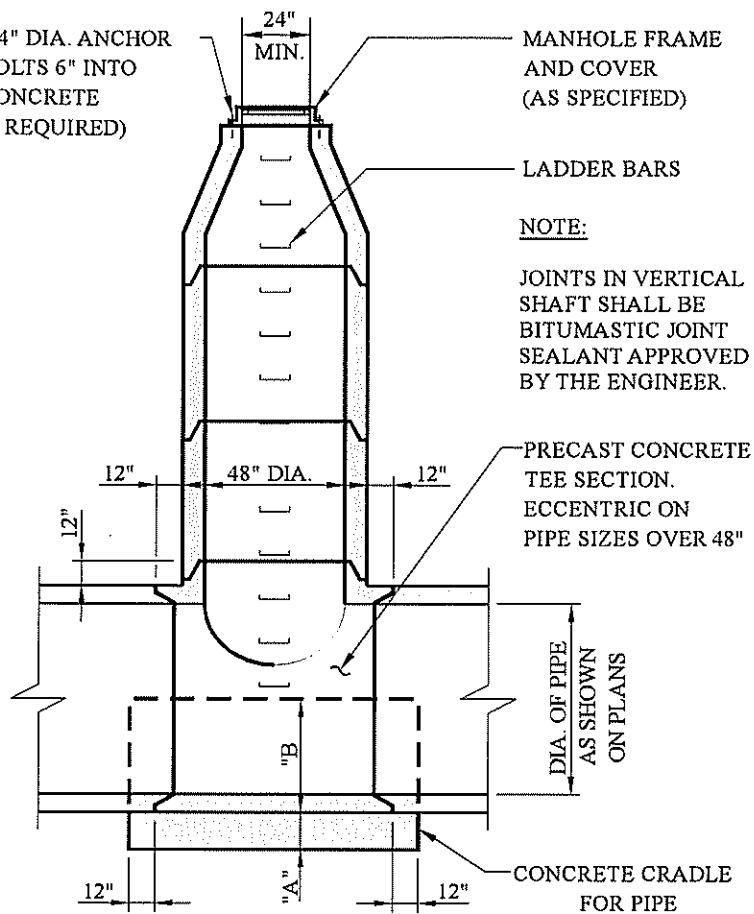
PRECAST CONCRETE TEE SECTION. ECCENTRIC ON PIPE SIZES OVER 48"

DIA. OF PIPE AS SHOWN ON PLANS

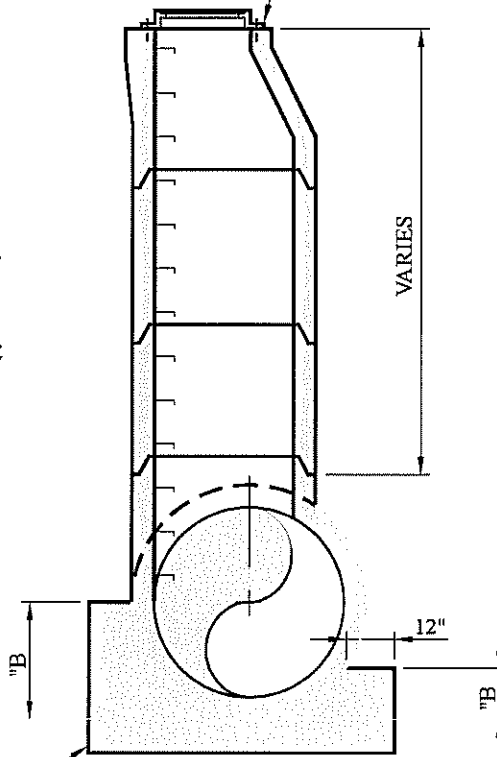
CONCRETE CRADLE FOR PIPE

1'-0" MAX. ADJUSTMENT TO GRADE WITH PRECAST GRADE RINGS APPROVED BY THE ENGINEER

VARIES



SECTION 2-016-A



SECTION 2-016-B

NOTES:

"A" 1/4" INSIDE DIA.

"B1" 1/4" OUTSIDE DIA.

"B2" 1/4" OUTSIDE DIA. OF PIPE GREATER THAN 48" PIPE

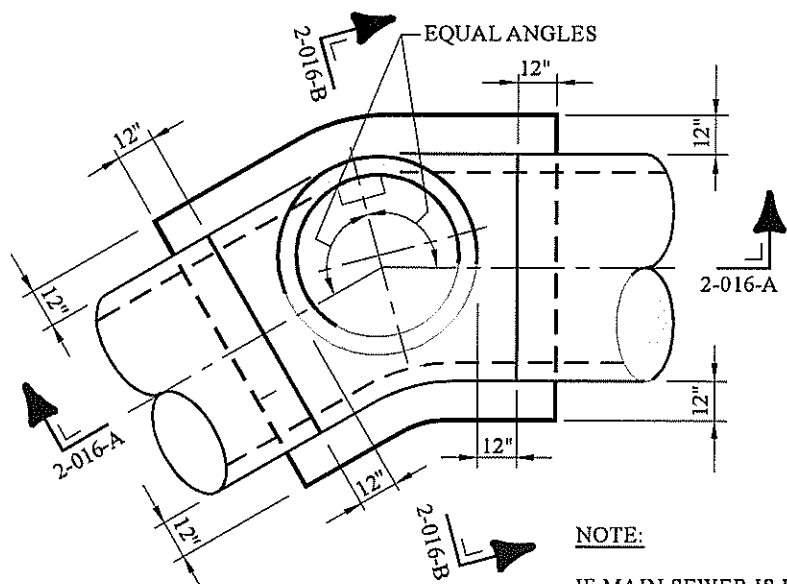
"B2" 1/4" OUTSIDE DIA. ON 48" PIPE

PIPE SCHEDULE ASTM DESIGN

TOP SECTION C-76-57 CLASS 3 VERTICAL SHAFT C-76-57 ALL DEPTHS

0' TO 15'-11" CLASS II
16' TO 30'-11" CLASS III
31' TO 100' CLASS IV } M.H. DEPTH

BOTTOM SECTION (ECCENTRIC TEE) C-76-57 CLASS IV ALL DEPTHS



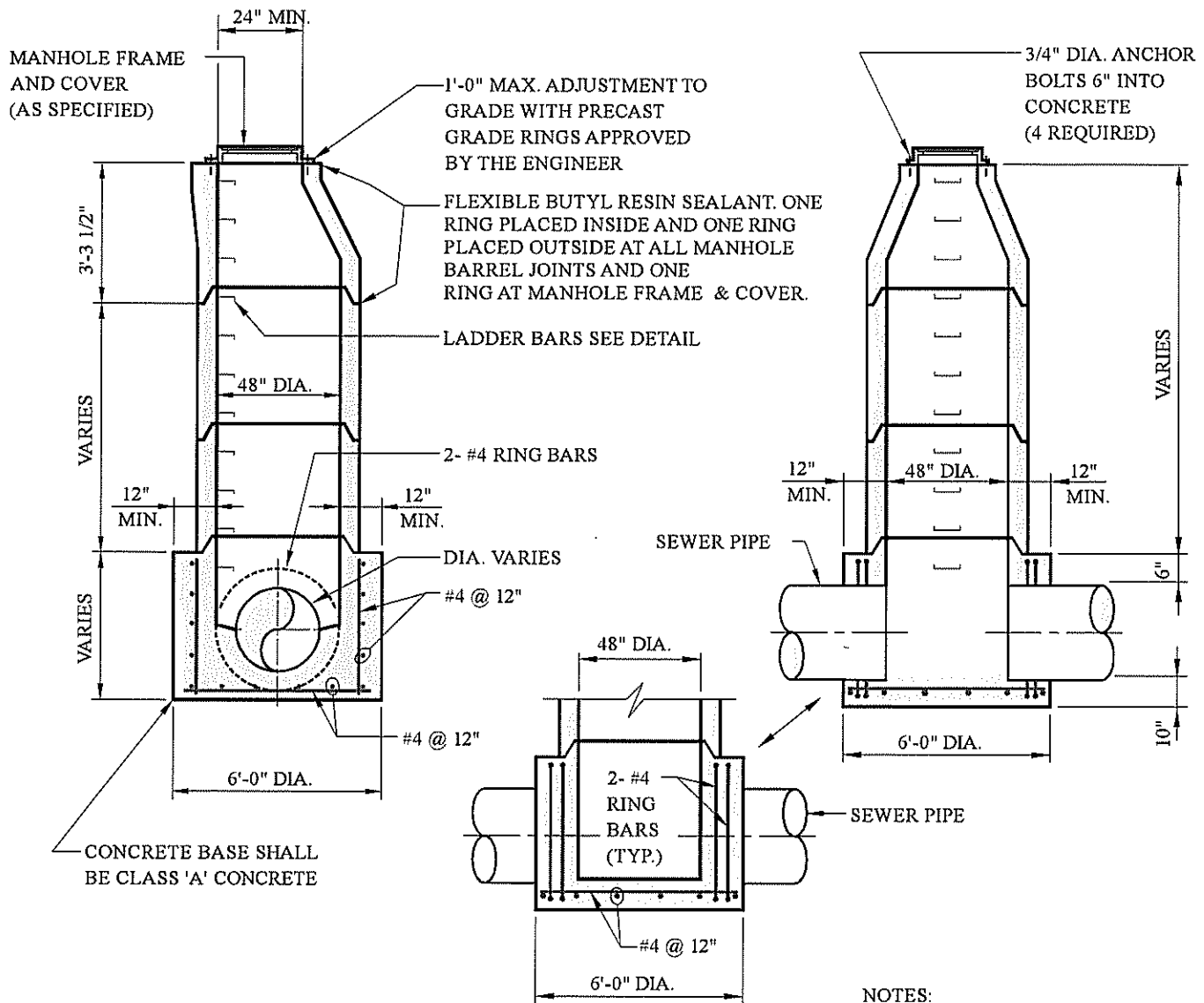
PLAN 2-016-C

NOTE:

IF MAIN SEWER IS REQUIRED TO RECEIVE PROTECTIVE COATING, VERTICAL MANHOLE SHAFT SHALL RECEIVE SAME LINING

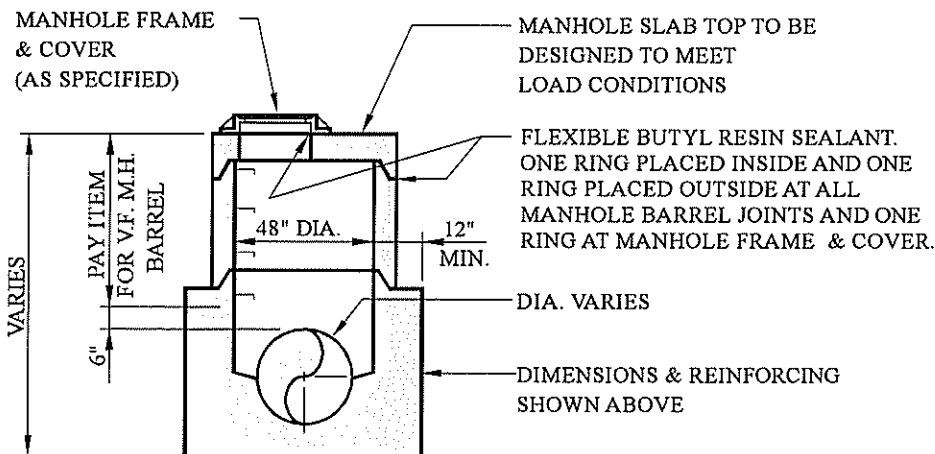
SOUTH FAYETTE TOWNSHIP

ALTERNATE PRECAST CONCRETE MANHOLE FOR CONCRETE STORM SEWERS 48" AND OVER



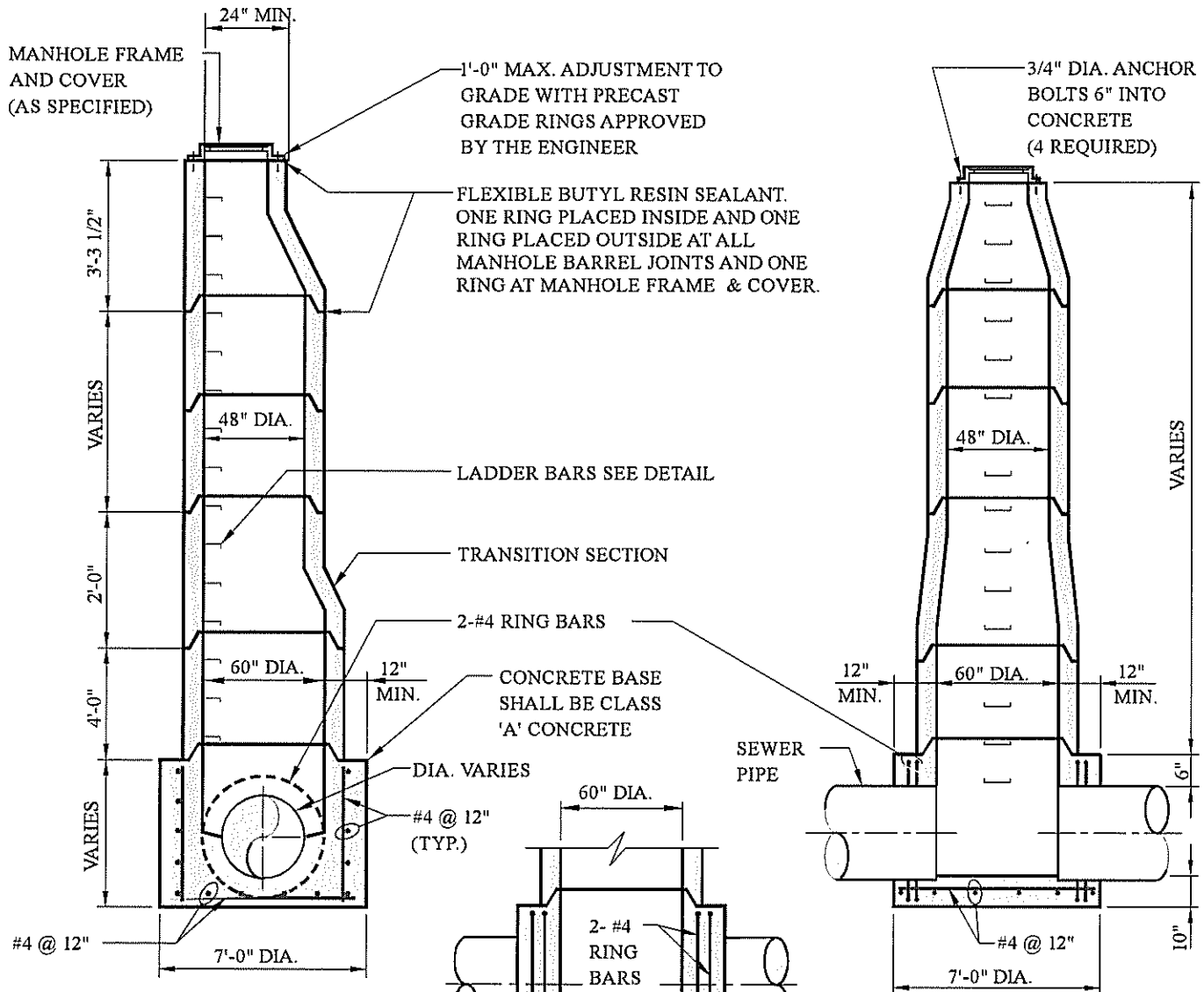
NOTES:

1. PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO ASTM C478, LATEST REVISION.
2. WATERPROOF EXTERIOR SURFACE WITH TWO COATS BITUMASTIC MATERIAL OR COAL TAR SOLUTION, 8 MILS PER COAT.
3. LIFTING HOLES SHALL BE POINTED WITH MORTAR, MADE WATERTIGHT & LEFT NEAT & SMOOTH



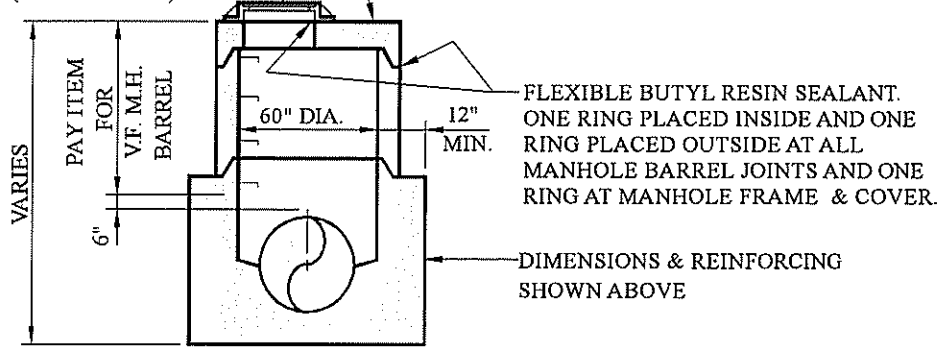
**SOUTH FAYETTE
TOWNSHIP**

**PRECAST CONCRETE MANHOLE
FOR SEWERS 20" TO 33"
(CAST-IN-PLACE BOTTOM)**



MANHOLE SLAB TOP TO BE DESIGNED TO MEET LOAD CONDITIONS

MANHOLE FRAME & COVER (AS SPECIFIED)

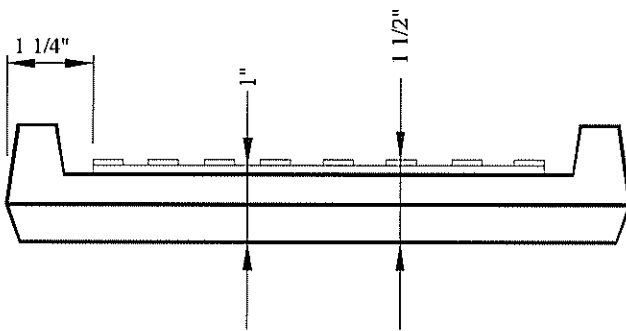
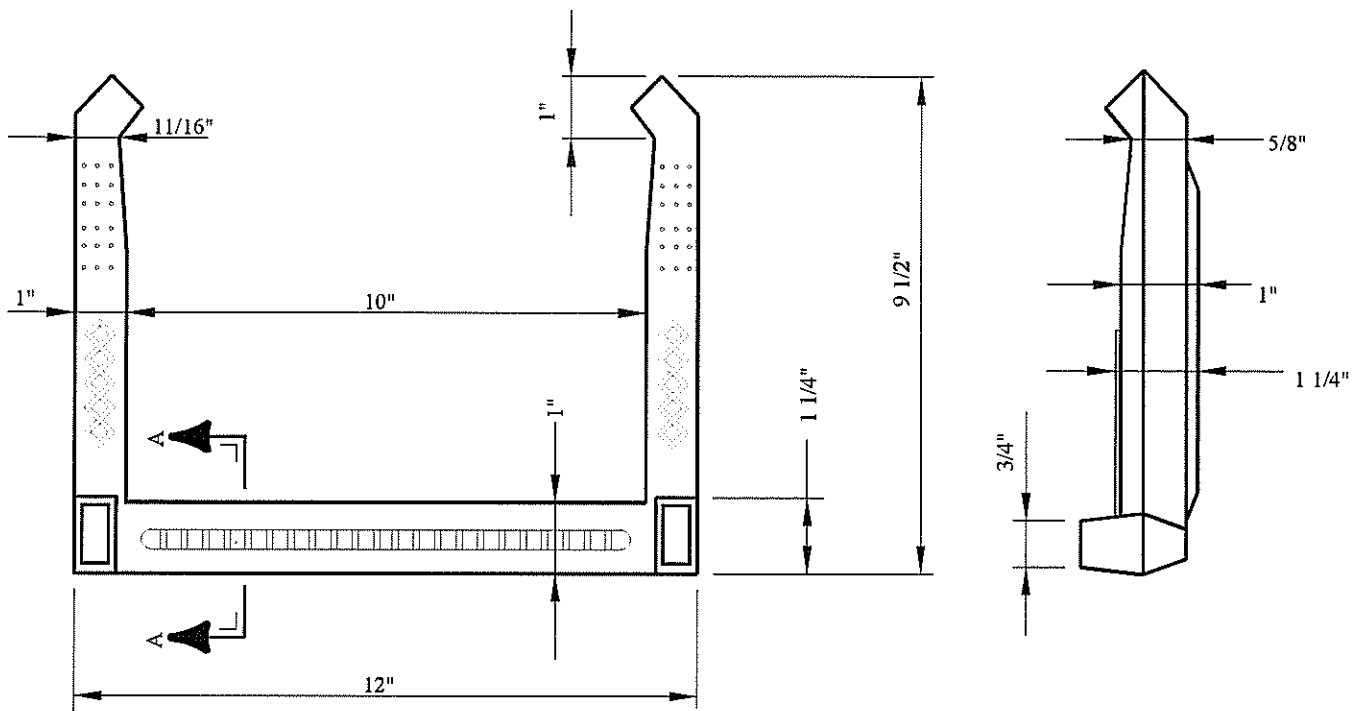


NOTES:

1. PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO ASTM C478, LATEST REVISION.
2. WATERPROOF EXTERIOR SURFACE WITH TWO COATS BITUMASTIC MATERIAL OR COAL TAR SOLUTION, 8 MILS PER COAT.
3. LIFTING HOLES SHALL BE POINTED WITH MORTAR, MADE WATERTIGHT & LEFT NEAT & SMOOTH

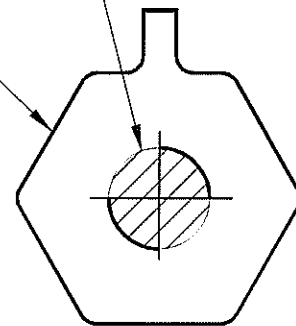
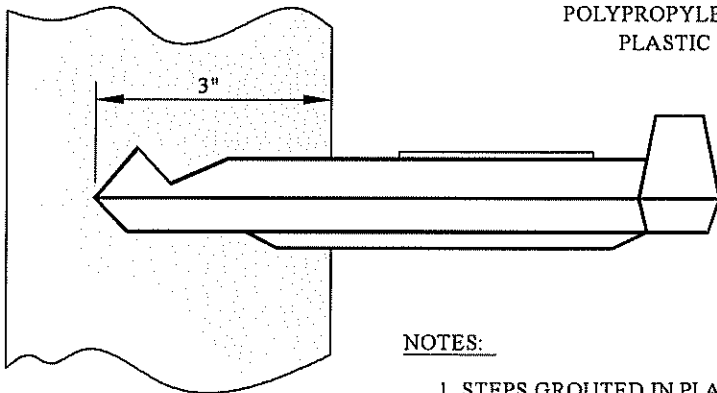
SOUTH FAYETTE TOWNSHIP

PRECAST CONCRETE MANHOLE FOR SEWERS 36" TO 42" (CAST-IN-PLACE BOTTOM)



NO. 3 GRADE 60 DEFORMED BAR

POLYPROPYLENE PLASTIC



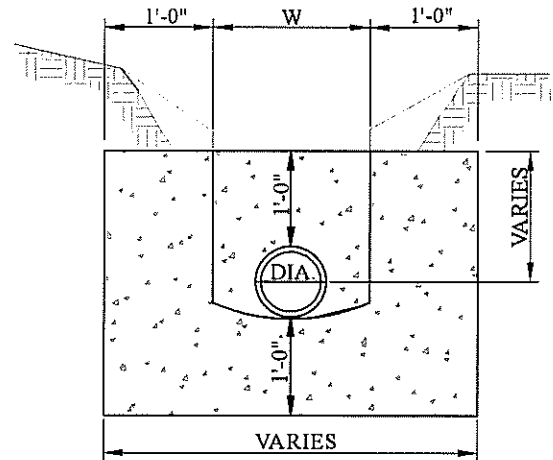
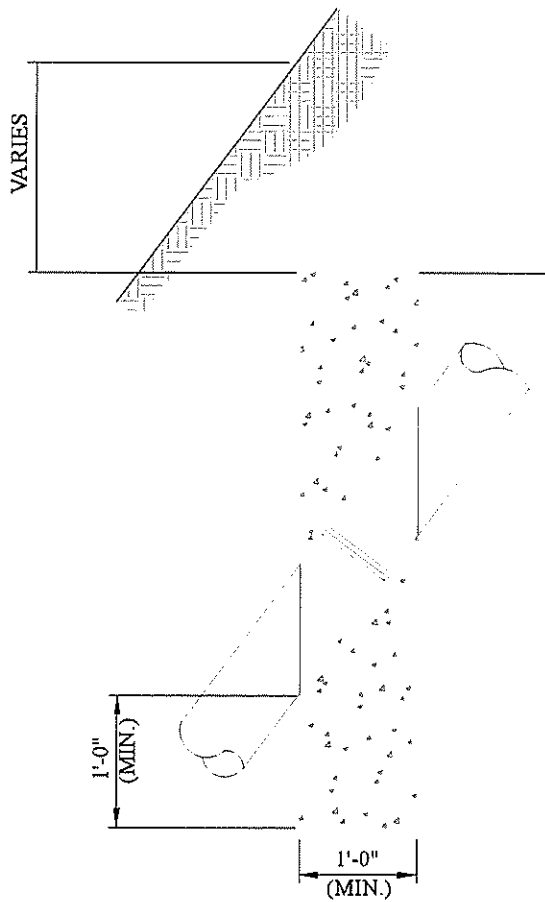
SECTION A

NOTES:

1. STEPS GROUTED IN PLACE
2. INSTALL STEPS ON 12" C.C

**SOUTH FAYETTE
TOWNSHIP**

**POLYPROPYLENE PLASTIC
MANHOLE STEP**



$$W = D + 16" \text{ (MIN.)}$$

CONCRETE SEWER ANCHORS

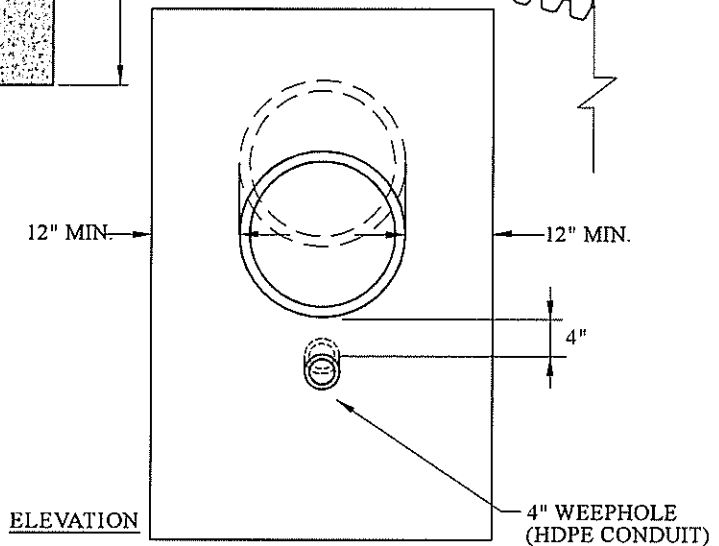
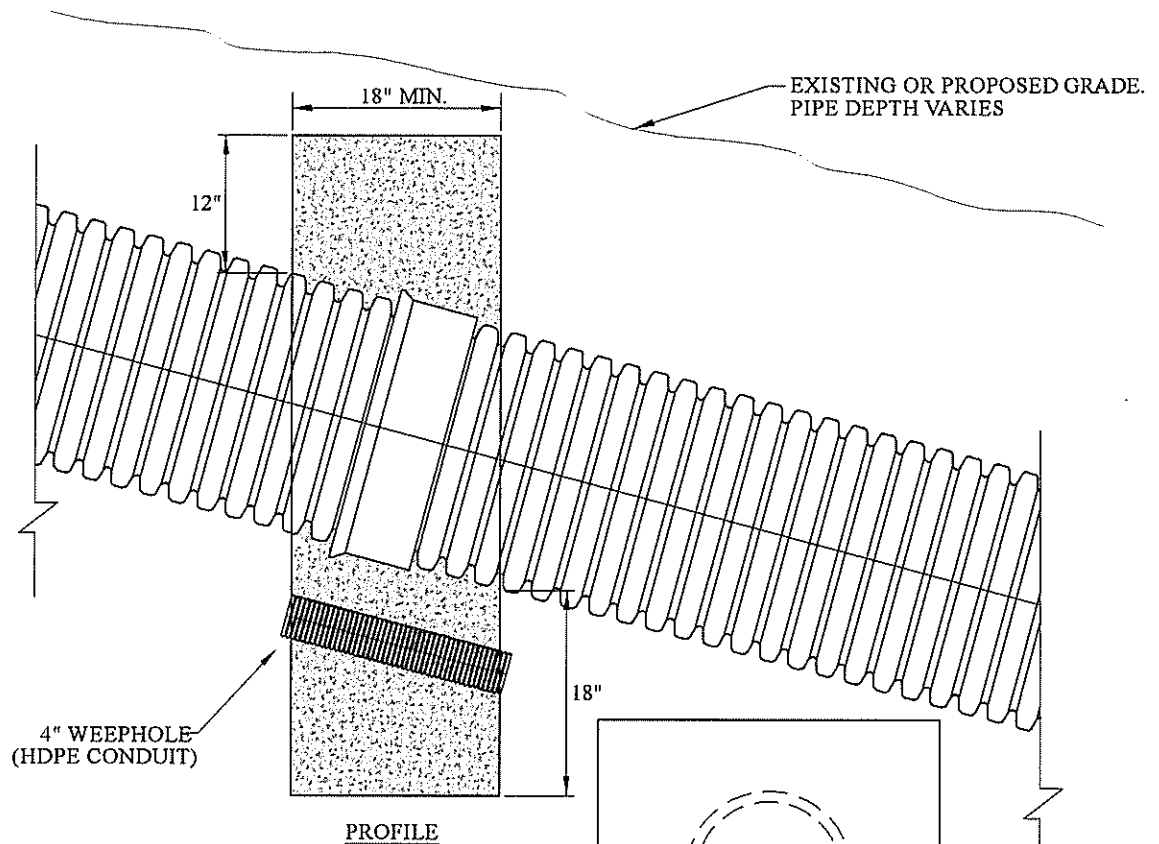
NOTE:

- 1) SEWERS ON 20% SLOPE OR GREATER SHALL BE ANCHORED WITH CONCRETE ANCHORS OR EQUAL, SPACED AS FOLLOWS:

NOT OVER 36 FEET CENTER-TO-CENTER ON GRADES 20% AND UP TO 35%
 NOT OVER 24 FEET CENTER-TO-CENTER ON GRADES 35% AND UP TO 50%
 NOT OVER 16 FEET CENTER-TO-CENTER ON GRADES 50% AND OVER

SOUTH FAYETTE
TOWNSHIP

CONCRETE ANCHORS
FOR PVC & D.I. PIPE



NOTES:

1. PIPE TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. SEE TYPICAL TRENCH DETAIL FOR HDPE PIPE.
2. ANCHORS SHALL BE PLACED AT EVERY JOINT.
3. VELOCITY REDUCTION METHODS SHALL BE TAKEN WHEN SLOPE CREATES VELOCITY GREATER THAN 20 FPS.
4. SEWERS ON 20% SLOPE OR GREATER SHALL BE ANCHORED WITH CONCRETE ANCHORS, SPACED AS FOLLOWS:

36 FEET CENTER-TO-CENTER FOR 20% < 35%
 24 FEET CENTER-TO-CENTER FOR 35% < 50%
 16 FEET CENTER-TO-CENTER FOR > 50%

**SOUTH FAYETTE
TOWNSHIP**

**CONCRETE ANCHORS
FOR HDPE PIPE**

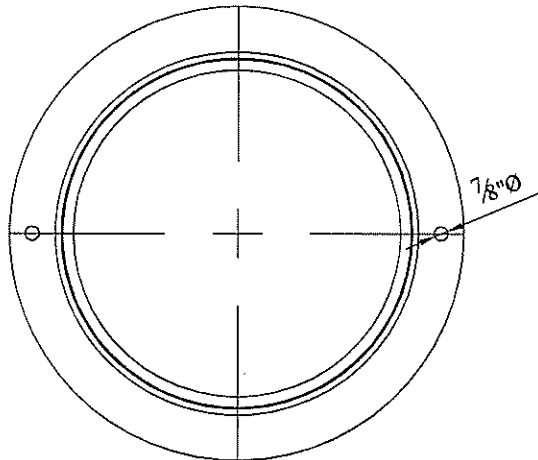


GIBSON-THOMAS ENGINEERING CO.
 931 OLD FERRY HIGHWAY WYOMING, PA 19380
 PH 324-933-8183 FAX 324-933-8187

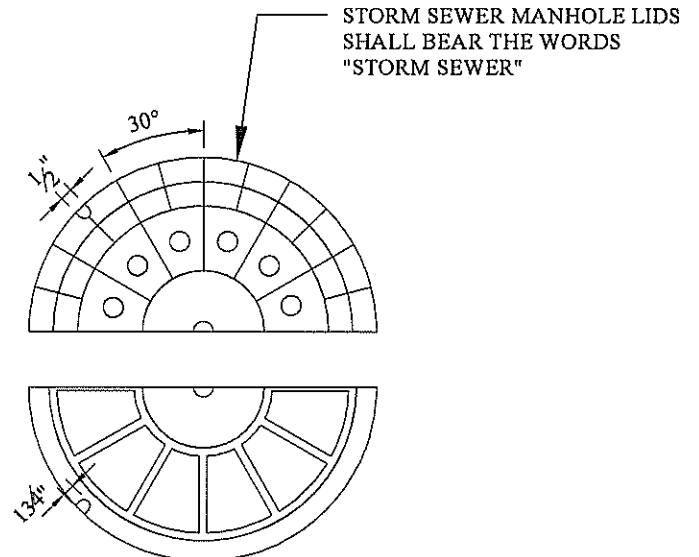
Not to Scale

Adopted: JULY 2022

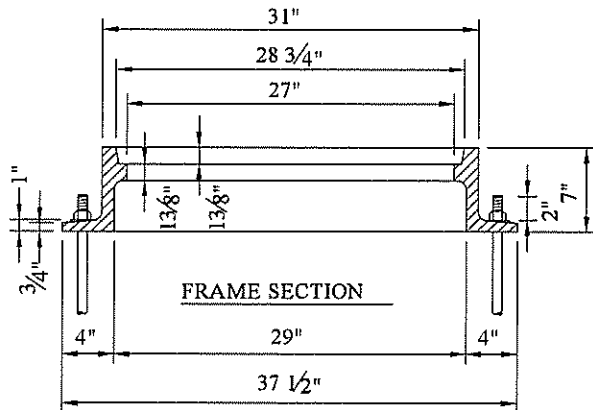
SFT-SD-030



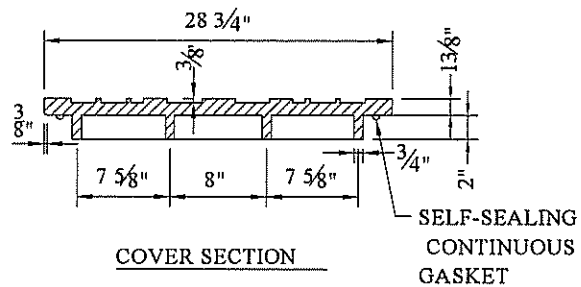
FRAME PLAN



COVER PLAN



FRAME SECTION



COVER SECTION

SELF-SEALING
CONTINUOUS
GASKET

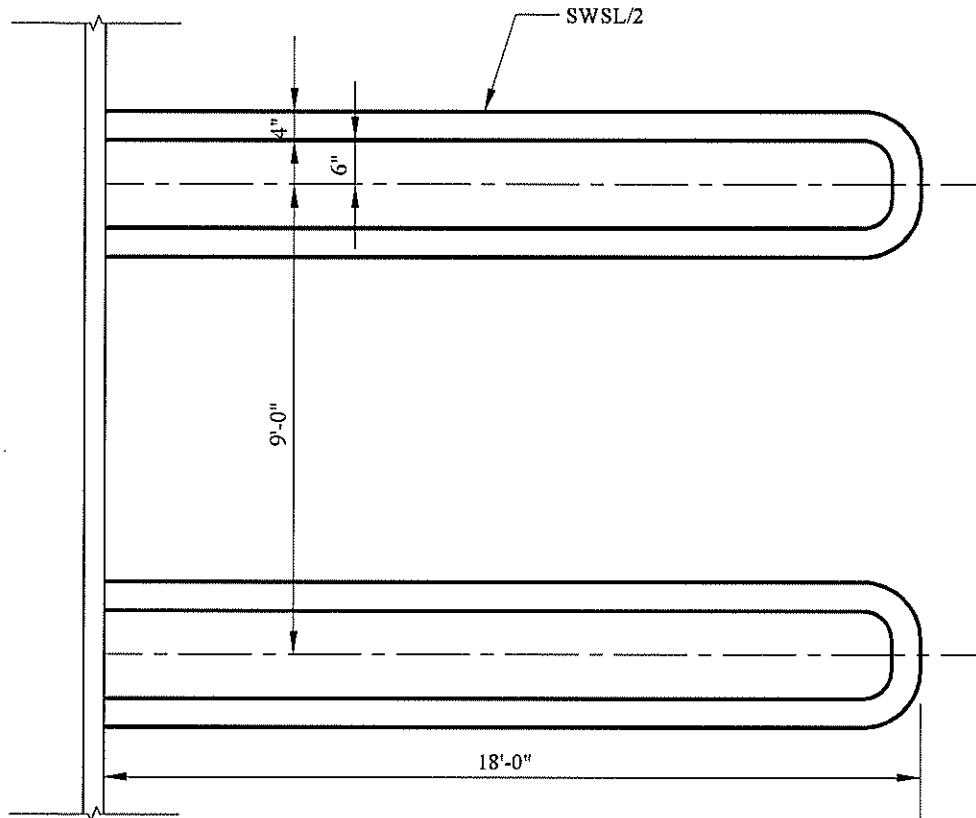
NOTE:

STANDARD MANHOLE, FRAME & COVER LOCATED IN STREETS SHALL BE NEEHAH FOUNDRY CO. FRAME R-1753-A AND SELF-SEALING SOLID LID OR APPROVED EQUAL.

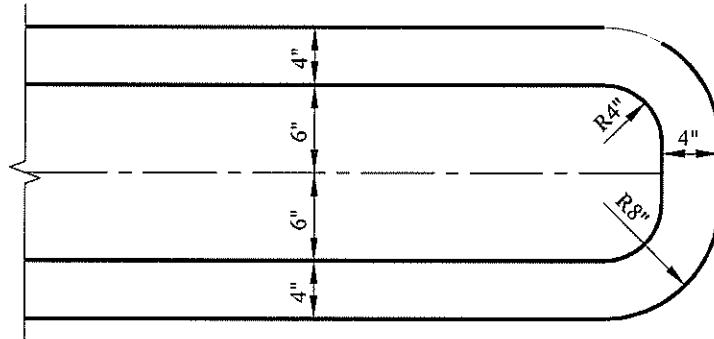
MANHOLE COVER AND FRAME

SOUTH FAYETTE
TOWNSHIP

MANHOLE COVER AND
FRAME



PAINTED LINES



PAINTED LINES DETAIL

SOUTH FAYETTE
TOWNSHIP

TYPICAL PARKING SPACE
PAINT LINE DETAIL

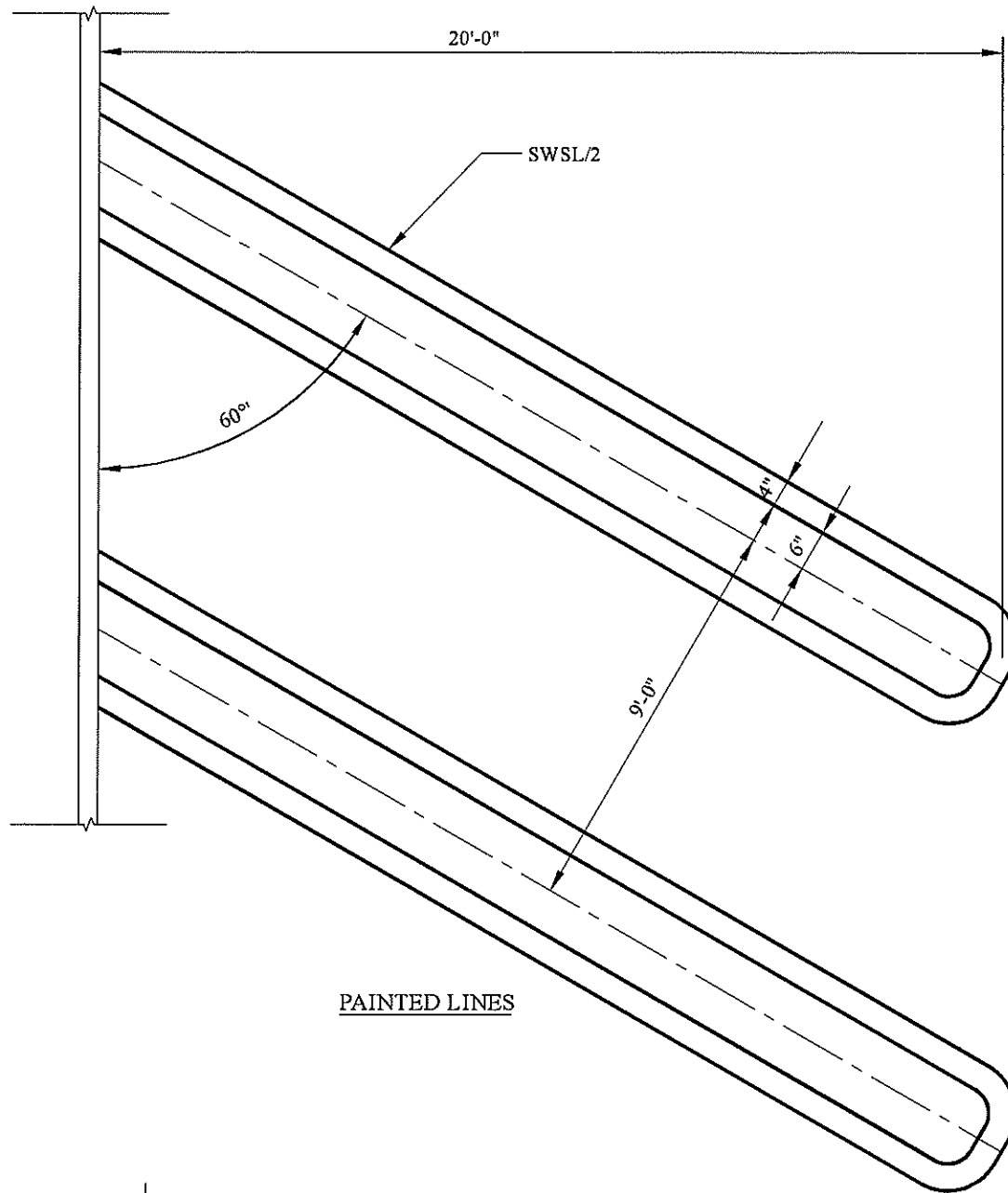


GIBSON-THOMAS ENGINEERING CO.
1551 OLD FERRY HIGHWAY WILKESBORO, PA 18399
TEL 717-935-1181 FAX 717-935-8100

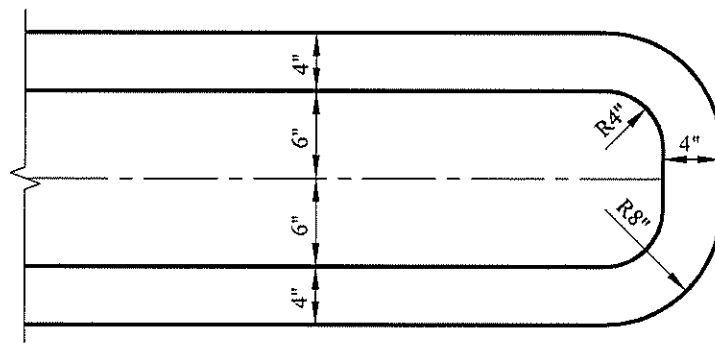
Not to Scale

Adopted: JULY 2022

SFT-SD-032



PAINTED LINES



PAINTED LINES DETAIL

SOUTH FAYETTE
TOWNSHIP

TYPICAL 60° PARKING
SPACE PAINT LINE DETAIL

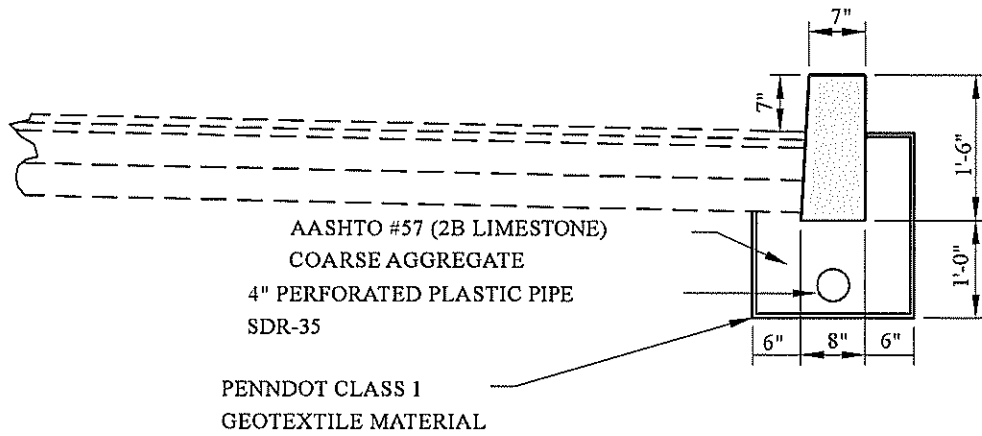


GIBSON-THOMAS ENGINEERING CO.
9751 OLD FERRY HIGHWAY WILKESBORO, PA 18380
PH 717-339-1115 FAX 717-339-3150

Not to Scale

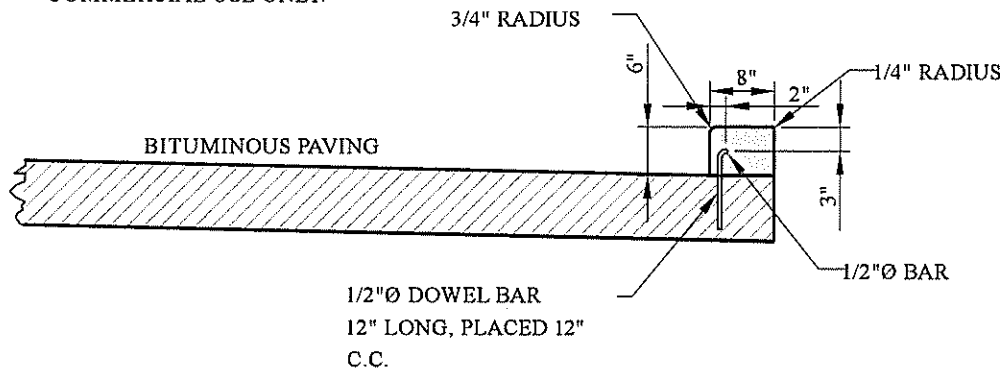
Adopted: JULY 2022

SFT-SD-033

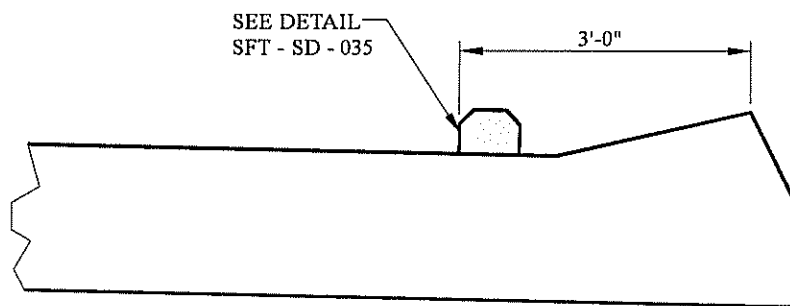


STANDARD CONCRETE CURB

NOTE:
CONCRETE DECK CURB MAY BE
SUBSTITUTED FOR DEEP CURB WHEN
APPROVED BY TOWNSHIP REVIEW FOR
COMMERCIAL USE ONLY.



CONCRETE DECK CURB

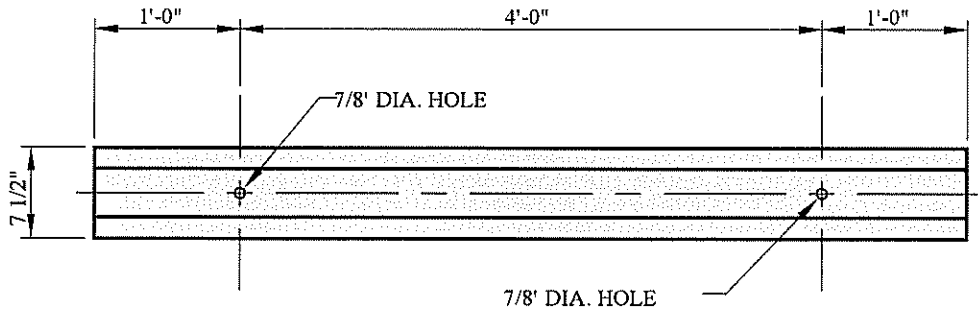


*CURB ONLY REQUIRED IF WITHIN REQUIREMENTS OF STORMWATER
MANAGEMENT REPORT

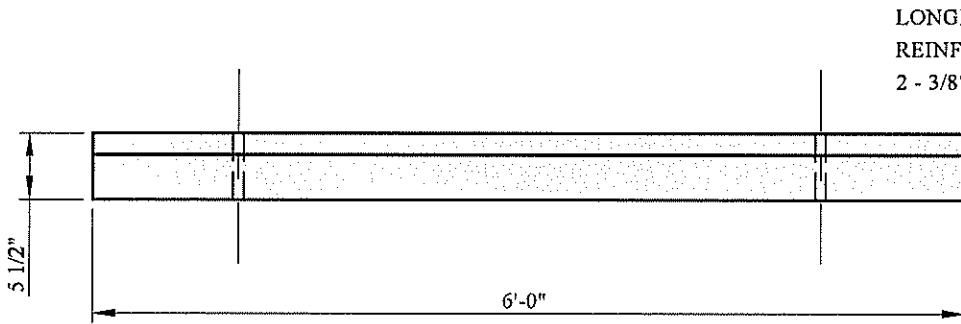
WEDGE CURB WITH WHEEL STOP

**SOUTH FAYETTE
TOWNSHIP**

**COMMERCIAL USE
STANDARD CONCRETE CURB,
CONCRETE DECK CURB,
WEDGE CURB WITH WHEEL STOP**

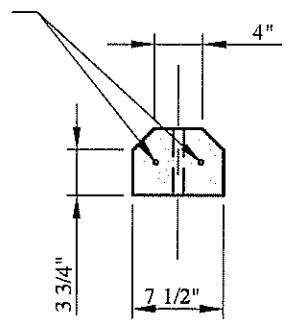


PLAN VIEW



ELEVATION

LONGITUDINAL
REINFORCEMENT
2 - 3/8" REBAR



ENDVIEW

NOTE:
RUBBERIZED CURB MAY BE SUBSTITUTED FOR
CONCRETE AT THE DISCRETION OF THE
TOWNSHIP ENGINEER.

SOUTH FAYETTE
TOWNSHIP

REINFORCED CONCRETE
WHEEL STOP

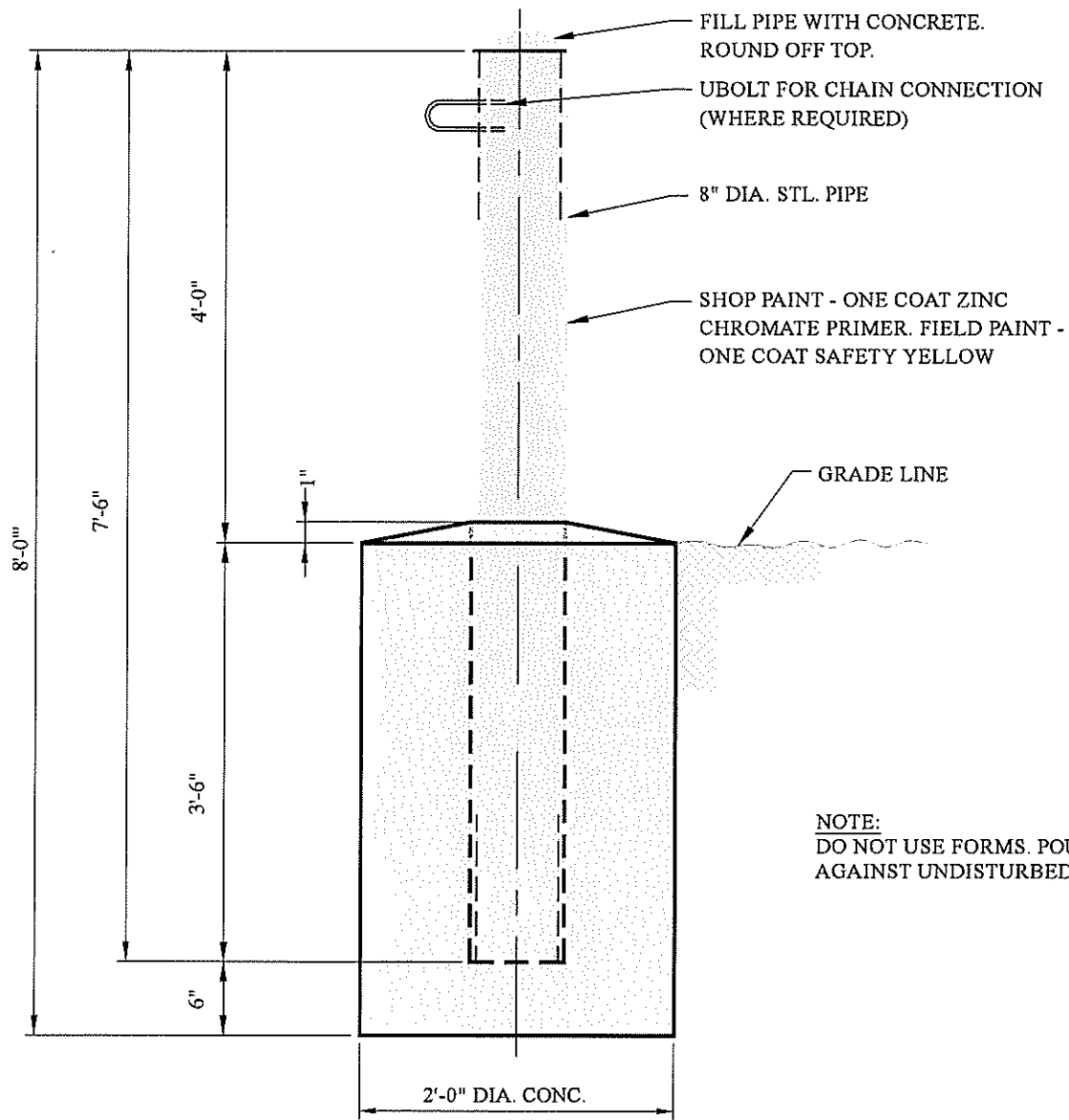


GIBSON-THOMAS ENGINEERING CO.
1031 OLD FERRY ROADWAY WINDSOR, PA 15092
PH 724-932-8118 FAX 724-932-8119

Not to Scale

Adopted: JULY 2022

SFT-SD-035



SOUTH FAYETTE
TOWNSHIP

BOLLARD

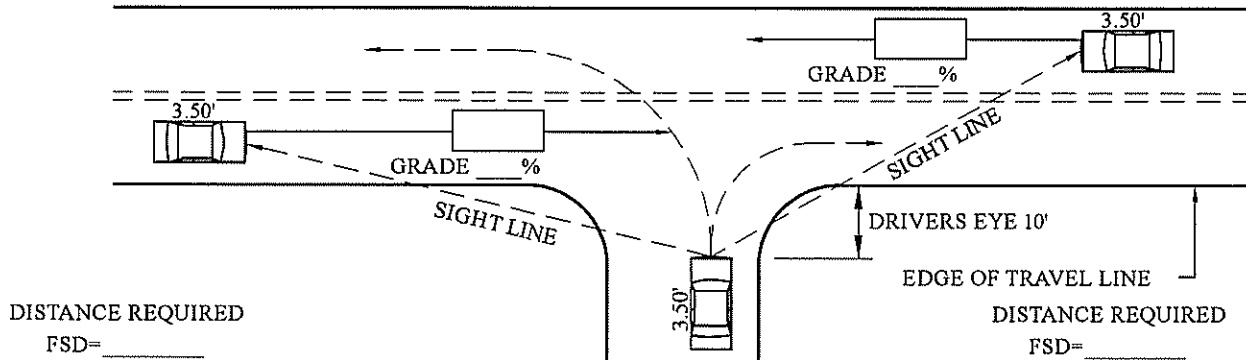


GIBSON-THOMAS ENGINEERING CO.
9931 OLD FERRY HIGHWAY WILKESBORO, PA 18393
PH 717-932-4115 FAX 717-932-4119

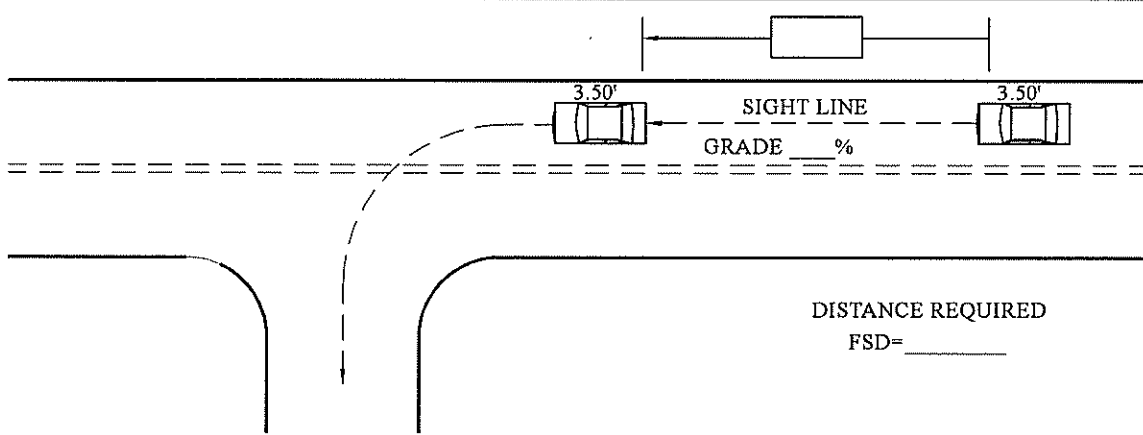
Not to Scale

Adopted: JULY 2022

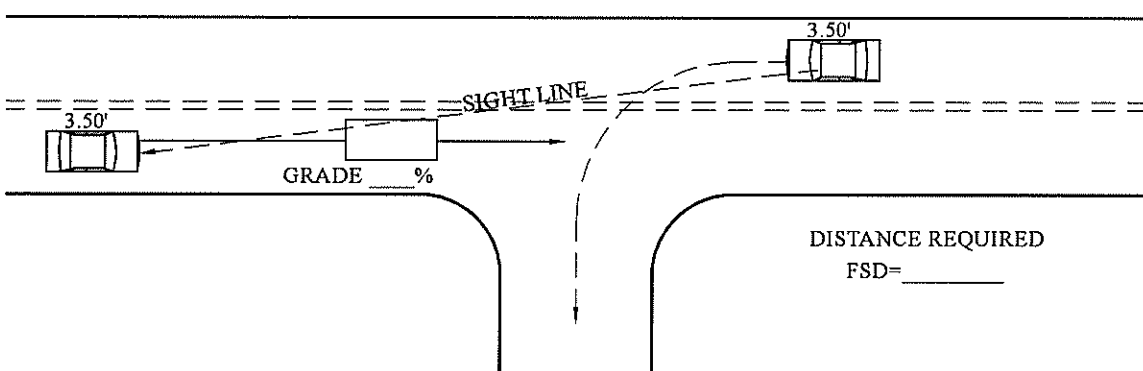
SFT-SD-036



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER AT A DRIVEWAY LOCATION CAN CONTINUOUSLY SEE ANOTHER VEHICLE APPROACHING ON THE ROADWAY.



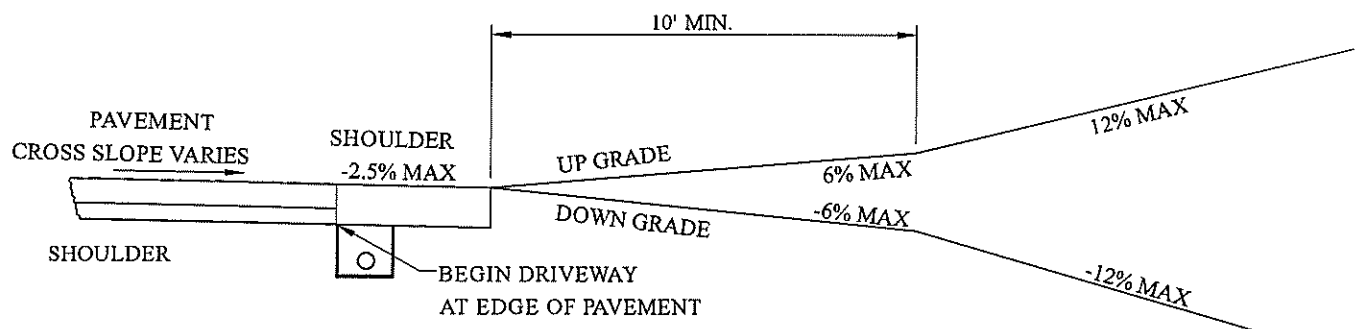
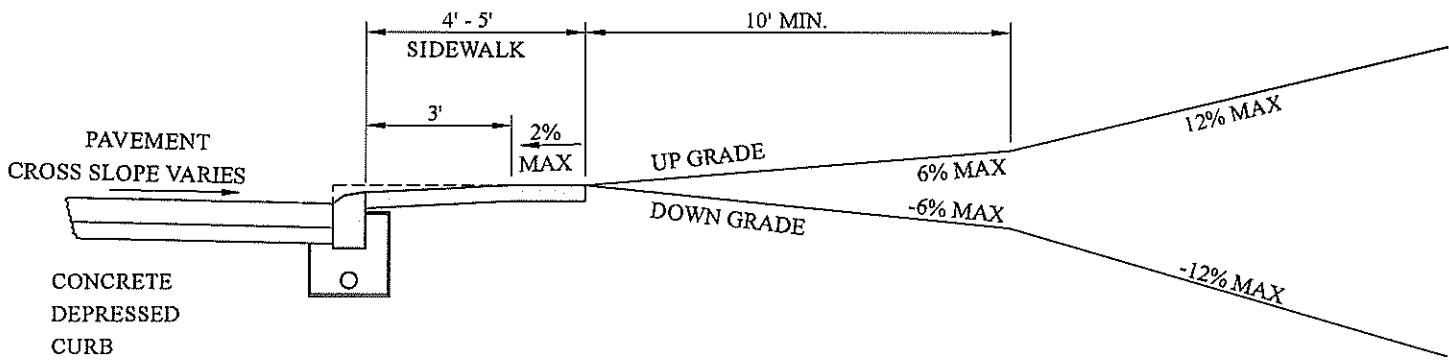
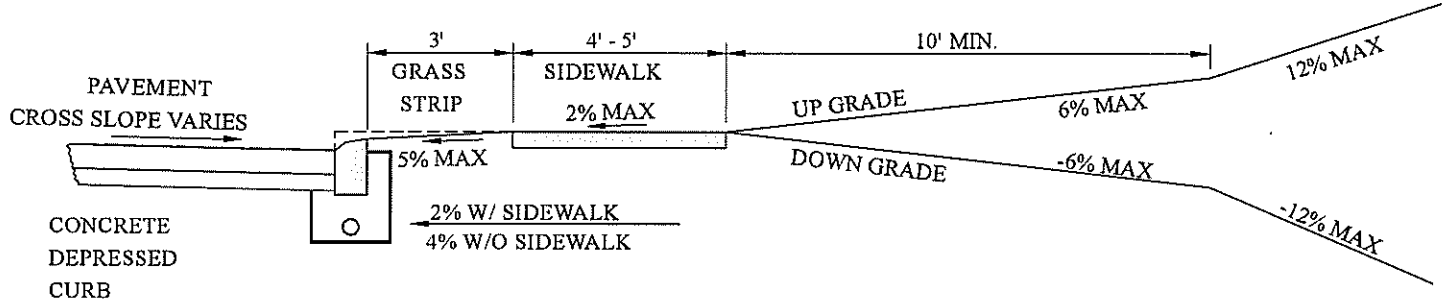
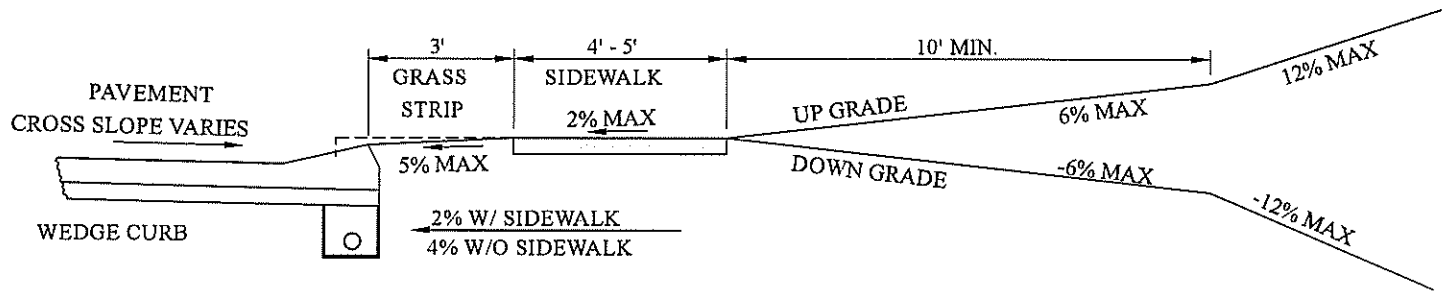
THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER ON THE ROADWAY CAN CONTINUOUSLY SEE THE REAR OF A VEHICLE WHICH IS LOCATED IN THE DRIVERS TRAVEL LANE AND WHICH IS POSITIONED TO MAKE A LEFT TURN INTO A DRIVEWAY.



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER OF A VEHICLE INTENDING TO MAKE A LEFT TURN INTO A DRIVEWAY CAN CONTINUOUSLY SEE A VEHICLE APPROACHING FROM THE OPPOSITE DIRECTION.

**SOUTH FAYETTE
TOWNSHIP**

**DRIVEWAY SIGHT
DISTANCE**



NOTE:

MAXIMUM GRADE CHANGE SHALL BE LIMITED TO ± 15% FOR ALL DRIVEWAYS.
 12% MINIMUM GRADE DOES NOT APPLY TO SINGLE FAMILY RESIDENTIAL DRIVEWAYS.

**SOUTH FAYETTE
 TOWNSHIP**

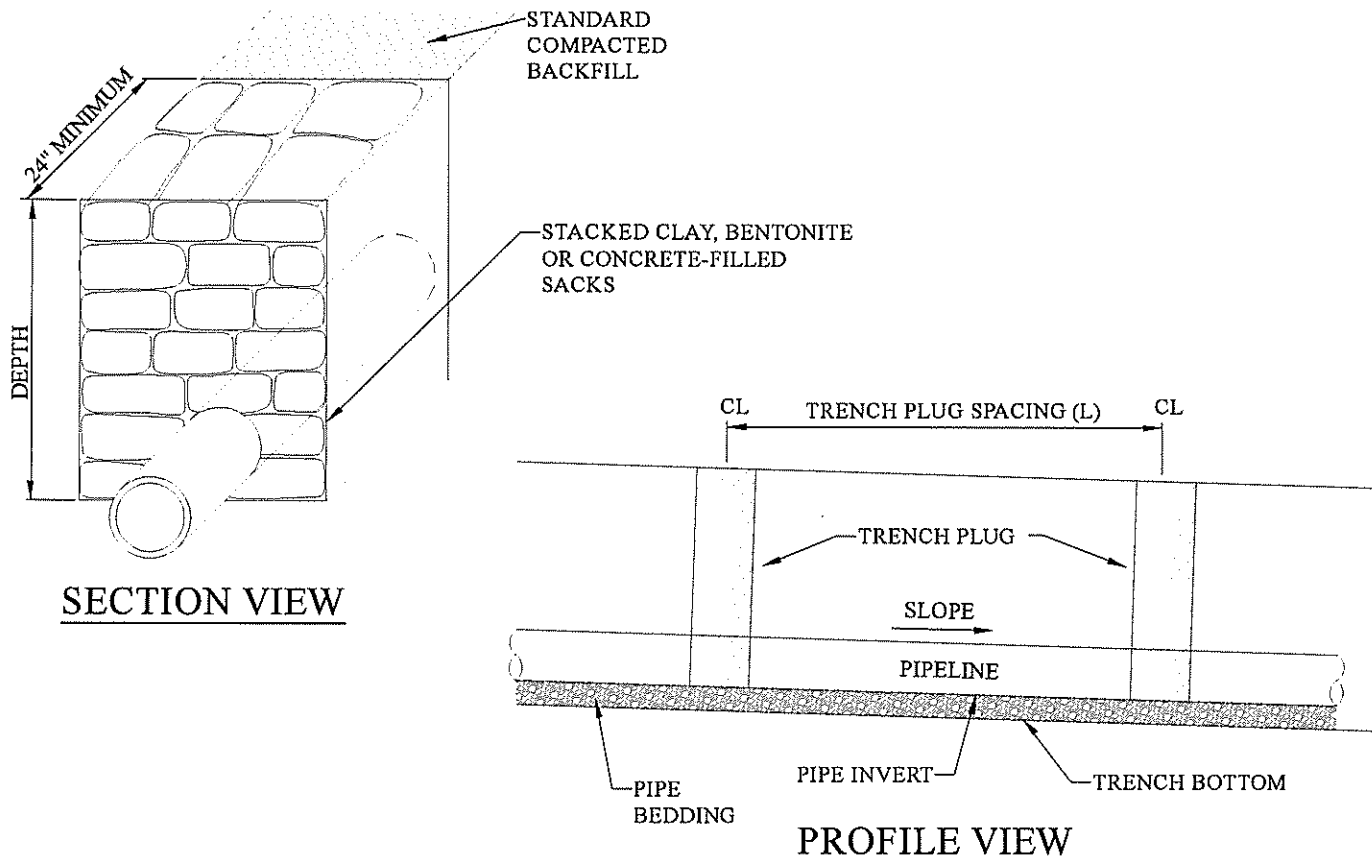
**RESIDENTIAL AND
 MINIMUM USE DRIVEWAY
 GRADE REQUIREMENTS**

SPEED (V) (MPH)	AVERAGE GRADE (G) (PERCENT)										
	USE POSITIVE GRADES WHEN APPROACHING VEHICLE IS TRAVELING UP GRADE.										
	0.0	+1.0	+2.0	+3.0	+4.0	+5.0	+6.0	+7.0	+8.0	+9.0	+10.0
25	147	145	144	143	142	140	139	138	137	136	135
30	196	194	191	189	187	185	183	182	180	178	177
35	249	245	242	239	236	233	231	228	226	224	221
40	314	309	304	299	295	291	287	284	280	277	274
45	383	376	370	364	358	353	348	343	339	334	330
50	462	453	444	436	429	422	415	409	403	397	392
55	538	527	517	508	499	490	482	475	468	461	454

SPEED (V) (MPH)	AVERAGE GRADE (G) (PERCENT)										
	USE NEGATIVE GRADES WHEN APPROACHING VEHICLE IS TRAVELING DOWN GRADE.										
	0.0	-1.0	-2.0	-3.0	-4.0	-5.0	-6.0	-7.0	-8.0	-9.0	-10.0
25	147	148	150	151	153	155	157	159	161	164	166
30	196	199	201	204	207	210	214	217	221	226	230
35	249	252	256	260	265	269	275	280	286	292	299
40	314	319	325	331	338	345	352	360	369	379	389
45	383	390	398	406	415	425	435	447	459	472	487
50	462	471	481	492	504	517	531	546	563	581	600
55	538	550	562	576	590	606	622	641	661	682	706

**SOUTH FAYETTE
TOWNSHIP**

**FORMULA SIGHT
DISTANCE TABLES**



MAXIMUM SPACING AND MATERIALS FOR TRENCH PLUGS

PA DEP EROSION CONTROL MANUAL TABLE 13.1

TRENCH SLOPE (%)	SPACING L (FT)	PLUG MATERIAL
< 5	1000	* CLAY, BENTONITE, OR CONCRETE FILLED SACKS
5 - 15	500	* CLAY, BENTONITE, OR CONCRETE FILLED SACKS
15 - 25	300	* CLAY, BENTONITE, OR CONCRETE FILLED SACKS
25 - 35	200	* CLAY, BENTONITE, OR CONCRETE FILLED SACKS
35 - 100	100	* CLAY, BENTONITE, OR CONCRETE FILLED SACKS
> 100	50	CEMENT BAGS (WETTED) OR MORTARED STONE

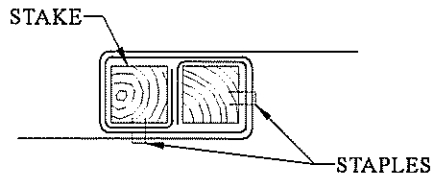
* TOPSOIL MAY NOT BE USED TO FILL SACKS

NOTE:

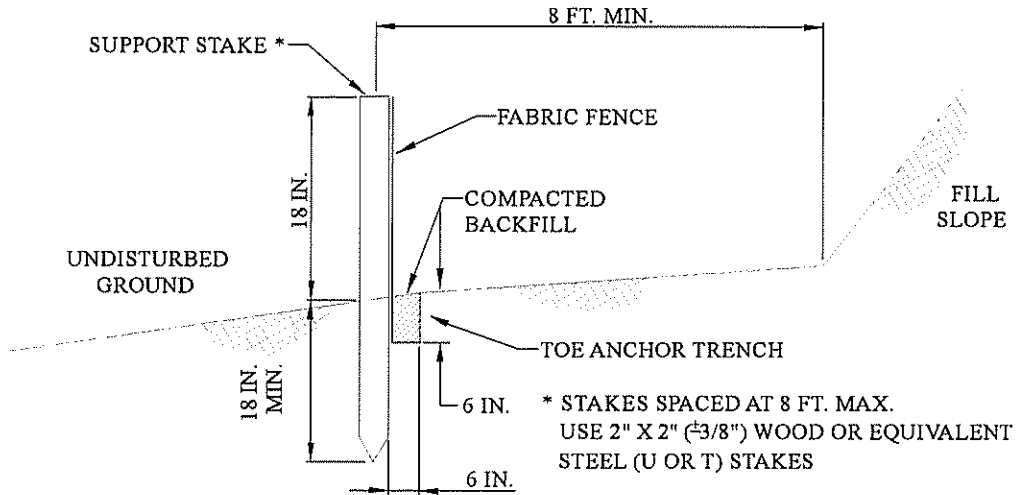
IMPERVIOUS TRENCH PLUGS ARE REQUIRED FOR ALL STREAM, RIVER, WETLAND, OR OTHER WATER BODY CROSSINGS.

**SOUTH FAYETTE
TOWNSHIP**

TRENCH PLUG INSTALLATION



JOINING FENCE SECTIONS



SECTION VIEW

NOTES:

- FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.
- FABRIC WIDTH SHALL BE 30 N. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES.
- SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.
- SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.
- ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET.
- FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

**SOUTH FAYETTE
TOWNSHIP**

STANDARD SILT FENCE (18" HIGH)

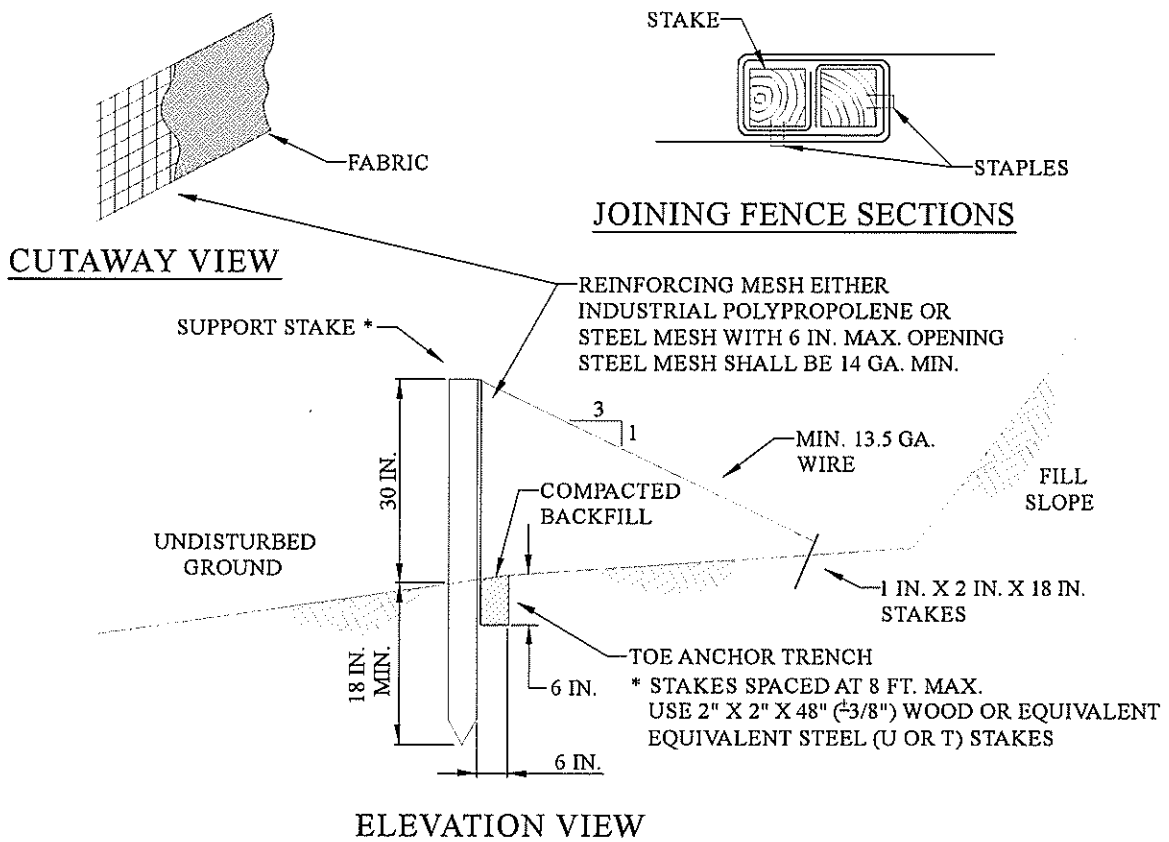


GIBSON-THOMAS ENGINEERING CO.
931 OLD FERRY HIGHWAY WEDFORD, PA 15090
PH 724-937-8139 FAX 724-937-8139

Not to Scale

Adopted: JULY 2022

SFT-SD-041



NOTES:

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

FABRIC WIDTH SHALL BE 42 IN. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES. AN 18 IN. SUPPORT STAKE SHALL BE DRIVEN 18 IN. MINIMUM INTO UNDISTURBED GROUND.

SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY PLACED WITH A ROCK FILTER OUTLET.

FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

**SOUTH FAYETTE
TOWNSHIP**

STANDARD SILT FENCE (30" HIGH)

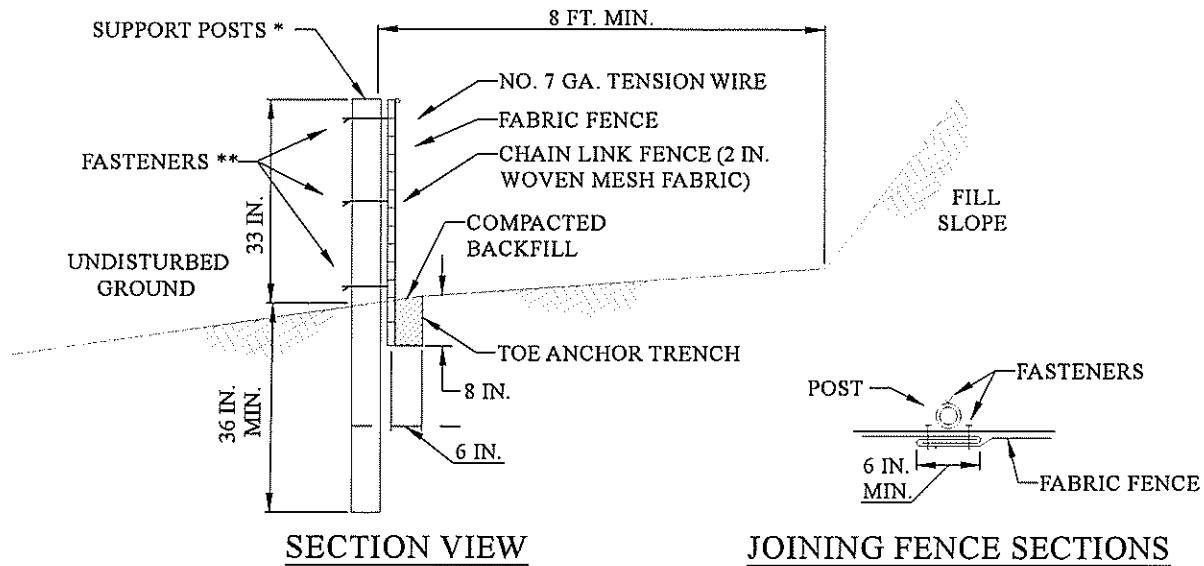


GIBSON-THOMAS ENGINEERING CO.
1931 OLD FERRY HIGHWAY WEDFORD, PA 15389
TEL: 724-937-8114 FAX: 724-937-8119

Not to Scale

Adopted: JULY 2022

SFT-SD-042



* POSTS SPACED AT 10 FT. MAX. USE 2-1/2 IN. DIA HEAVY DUTY GALVANIZED OR ALUMINUM POSTS.

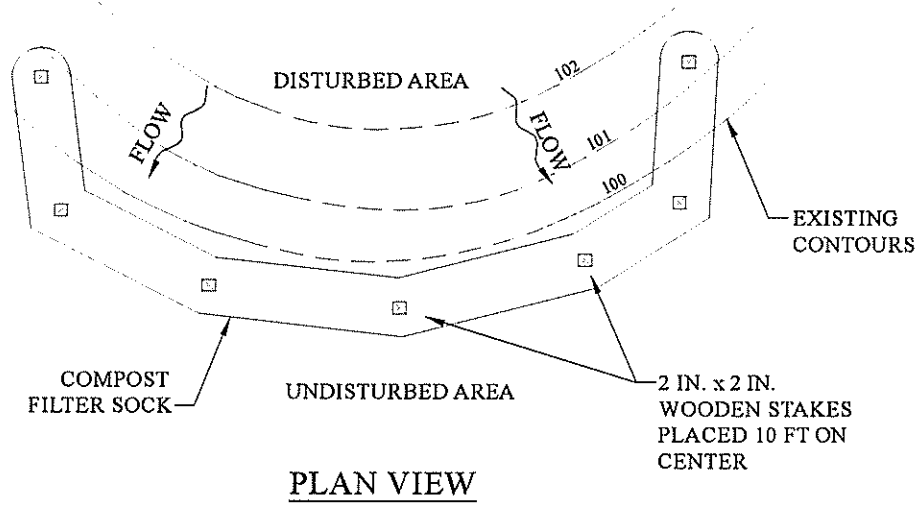
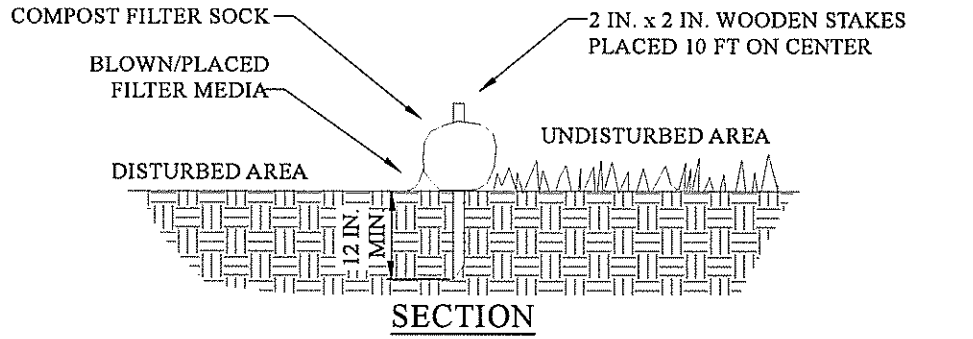
** CHAIN LINK TO POST FASTENERS SPACED AT 14 IN. MAX. USE NO. 9 GA. ALUMINUM WIRE OR NO. 9 GALVANIZED STEEL WIRE. FABRIC TO SHAIN FASTENERS SPACED AT 24 IN. MAX. ON CENTER.

NOTES:

- FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.
- FABRIC WIDTH SHALL BE 42 IN. MINIMUM.
- POSTS SHALL BE INSTALLED USING A POSTHOLE DRILL.
- CHAIN LINK SHALL BE GALVANIZED NO. 11.5 GA. STEEL WIRE WITH 2 - 1/4 IN. OPENING, NO. 11 GA. ALUMINUM COATED STEEL WIRE IN ACCORDANCE WITH ASTM-A-491, OR GALVANIZED NO. 9 GA. STEEL WIRE TOP AND BOTTOM WITH GALVANIZED NO. 11 GA. STEEL INTERMEDIATE WIRES. NO. 7 GAGE TENSION WIRE TO BE INSTALLED HORIZONTALLY THROUGH HOLES AT TOP AND BOTTOM OF CHAIN-LINK FENCE OR ATTACHED WITH HOG RINGS AT 5 FT MAX. CENTERS.
- SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.
- SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.
- FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

**SOUTH FAYETTE
TOWNSHIP**

SUPER SILT FENCE



NOTES:

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES $\frac{1}{2}$ THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

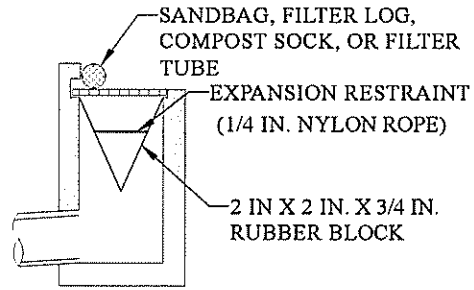
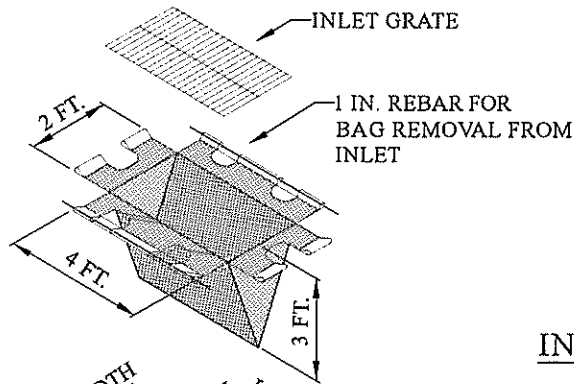
COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

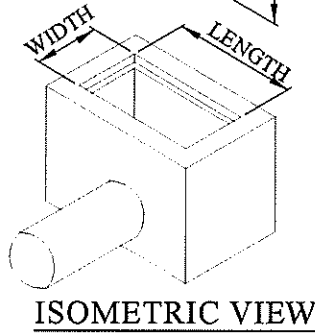
UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A OIL SUPPLEMENT.

**SOUTH FAYETTE
TOWNSHIP**

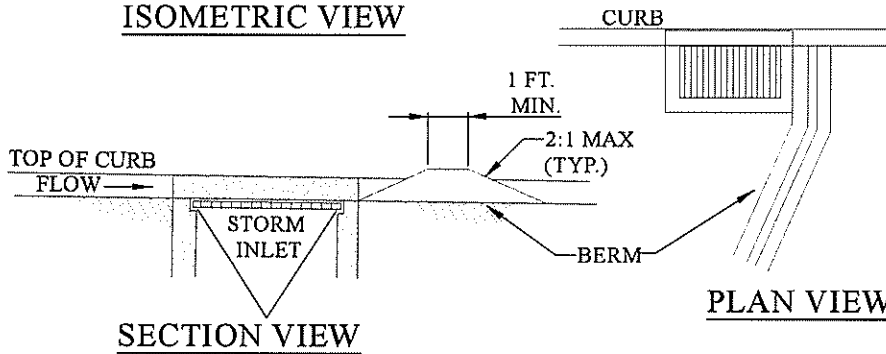
COMPOST FILTER SOCK



INSTALLATION DETAIL



ISOMETRIC VIEW



SECTION VIEW

PLAN VIEW

NOTES:

MAXIMUM DRAIN AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX (6) INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT

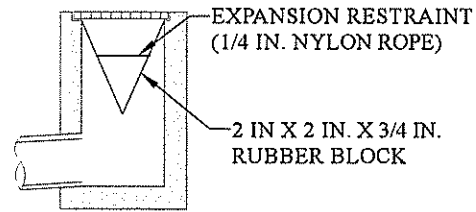
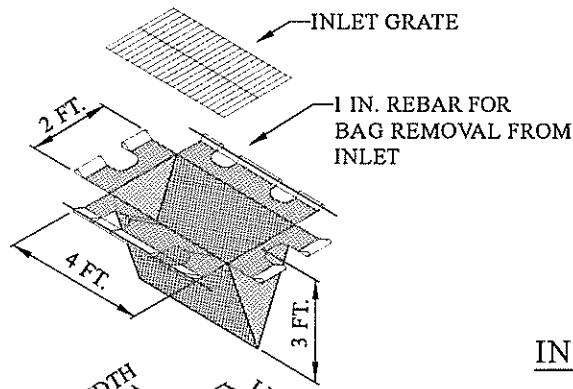
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

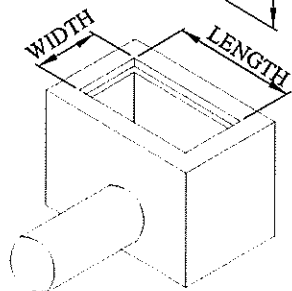
DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

**SOUTH FAYETTE
TOWNSHIP**

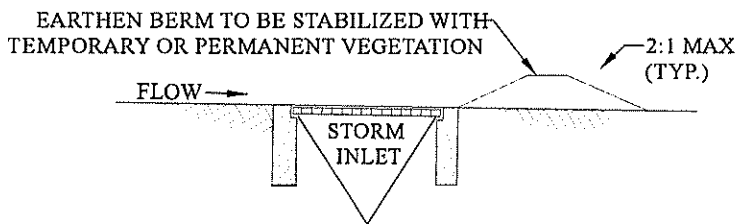
**FILTER BAG INLET PROTECTION -
TYPE C INLET**



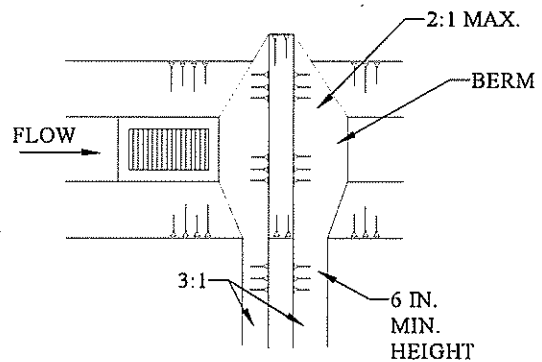
INSTALLATION DETAIL



ISOMETRIC VIEW



SECTION VIEW



PLAN VIEW

NOTES:

MAXIMUM DRAIN AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

**SOUTH FAYETTE
TOWNSHIP**

**FILTER BAG INLET PROTECTION -
TYPE M INLET**

PERMANENT SEEDING SPECIFICATIONS:

MATERIALS:

TOPSOIL 6" (MINIMUM) TOPSOIL SHALL BE REQUIRED ON ALL DISTURBED AREAS AFTER SITE HAS BEEN RECLAIMED / RESTORED..

LIMESTONE RAW, GROUND AGRICULTURAL LIMESTONE CONTAINING MORE THAN 90 PERCENT CALCIUM CARBONATES (ADJUST pH LEVELS TO 6.5 TO 7.0). APPLY AT A RATE OF 6 TON/AC (275 LB/ 1,000 SF), UNLESS OTHERWISE INDICATED BY SOIL TESTS.

COMMERCIAL FERTILIZER IN THE ABSENCE OF A SOIL TEST, USE 1000 LB/AC OF 10-20-20 (23 LB/1000 SF) MIXED INTO SEEDBED PRIOR TO SEEDING, OR IN A TANK WITH SEED WHEN HYDROSEEDING.

INOCULANT INOCULANT FOR TREATING LEGUMINOUS SEEDS SHALL BE A STANDARD COMMERCIAL PRODUCT CONSISTING OF A SUITABLE CARRIER CONTAINING A CULTURE OF NITROGEN FIXING BACTERIA SPECIFIC FOR SEEDS TO BE INOCULATED. INOCULANT SHALL NOT BE USED LATER THAN DATE INDICATED ON THE CONTAINER.

MULCH CLEAN OAT OR WHEAT STRAW SHALL BE FREE FROM MATURE SEED-BEARING STALKS OR ROOTS OF PROHIBITED OR NOXIOUS WEEDS AS DEFINED BY THE PENNSYLVANIA SEED ACT 1947. APPLY AT A RATE OF 139 POUNDS PER 1,000 SQUARE FEET (3 TONS PER ACRE). PRECAUTIONS SHALL BE TAKEN TO STABILIZE MULCH UNTIL THE VEGETATIVE COVER IS ESTABLISHED.

SEED MIXTURE SEED MIXTURE SHALL BEAR A GUARANTEED STATEMENT OF ANALYSIS AND SHALL BE COMPOSED OF THE FOLLOWING VARIETIES AND MIXED IN PROPORTIONS SPECIFIED.

<u>PERMANENT SEEDING MIXTURE (PENNDOT FORMULA 'B')</u>	<u>PROPORTION BY WEIGHT</u>	<u>MINIMUM PURITY</u>	<u>MINIMUM GERMINATION</u>
PERENNIAL RYEGRASS MIXTURE (LOLIUM PERENNE) -- A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL RYEGRASS COMPONENT.	20%	98%	90%
CREEPING RED FESCUE OR CHEWINGS FESCUE	30%	98%	85%
KENTUCKY BLUEGRASS MIXTURE (POA PRATENSIS) -- A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 25% OF THE TOTAL BLUEGRASS COMPONENT.	50%	98%	80%

PERMANENT SEEDING PREPARATION OF SEEDING PERMANENT SEEDING SHALL BE APPLIED AT A RATE OF 21 POUNDS PER 1,000 SQUARE YARDS.

GRADE AS NECESSARY TO BRING SUBGRADE TO A TRUE, SMOOTH SLOPE PARALLEL TO AND SIX (6) INCHES BELOW FINISHED GRADE. PLACE TOPSOIL OVER SPECIFIED AREAS TO A DEPTH SUFFICIENTLY GREATER THAN SIX (6) OR EIGHT (8) INCHES SO THAT AFTER SETTLEMENT AND LIGHT ROLLING, THE COMPLETE WORK WILL CONFORM TO LINES, GRADES, AND ELEVATIONS SHOWN.

FERTILIZER AND AGRICULTURAL LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE SOIL BY ROTOTILLING OR ANOTHER METHOD TO A MINIMUM DEPTH OF FOUR (4) INCHES. THE ENTIRE SURFACE SHALL THEN BE REGRADED AND ROLLED. AREAS TO BE SEEDED SHALL THEN BE LOOSENEED TO A DEPTH OF TWO (2) INCHES. SEEDING SHALL BE DONE IN TWO SEPARATE OPERATIONS. THE SECOND SEEDING SHALL BE DONE IMMEDIATELY AFTER THE FIRST AND AT RIGHT ANGLES TO THE FIRST SEEDING AND LIGHTLY RAKED INTO THE SOIL, MULCH SEEDED AREAS IMMEDIATELY AFTER SEEDING.

**SOUTH FAYETTE
TOWNSHIP**

**SEED SPECIFICATION
(PERMANENT)**



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Adopted: JULY 2022

SFT-SD-047

TEMPORARY SEEDING SPECIFICATIONS:

MATERIALS:

LIMESTONE RAW, GROUND AGRICULTURAL LIMESTONE CONTAINING MORE THAN 90 PERCENT CALCIUM CARBONATES (ADJUST pH LEVELS TO 6.5 TO 7.0). APPLY AT A RATE OF 2000 LB/AC, UNLESS OTHERWISE INDICATED BY SOIL TESTS.

COMMERCIAL FERTILIZER IN ABSENCE OF A SOIL TEST, USE 1000 LB/AC OF 10-20-20 (23 LB/1000 SF) MIXED INTO SEEDBED PRIOR TO SEEDING, OR IN A TANK WITH SEED WHEN HYDROSEEDING.

MULCH CLEAN OAT OR WHEAT STRAW SHALL BE FREE FROM MATURE SEED-BEARING STALKS OR ROOTS OF PROHIBITED OR NOXIOUS WEEDS AS DEFINED BY THE PENNSYLVANIA SEED ACT 1947. APPLY AT A RATE OF 3 TONS/AC (139 LBS/1000 SF). PRECAUTION SHALL BE TAKEN TO STABILIZE THE MULCH UNTIL THE VEGETATIVE COVER IS ESTABLISHED.

SEED MIXTURE SEED MIXTURE SHALL BEAR A GUARANTEED STATEMENT OF ANALYSIS AND SHALL BE COMPOSED OF THE FOLLOWING VARIETIES AND MIXED IN THE PROPORTIONS SPECIFIED.

<u>TEMPORARY SEED MIXTURE</u>	<u>PROPORTION BY WEIGHT</u>	<u>MINIMUM PURITY</u>	<u>MINIMUM GERMINATION</u>
RYEGRASS VAR. KENTUCKY	100%	98%	90%

THREE PERCENT REDTOP MAY BE ADDED TO THE LAWN MIXTURE ON SLOPE AREAS OR FOR LATE SPRING OR LATE FALL SEEDING.

SEEDING RATE TEMPORARY SEEDING SHALL BE APPLIED AT THE RATE OF TEN (10) POUNDS PER ONE THOUSAND (1,000) SQUARE YARDS.

NOTES ALL AREAS TO BE SEEDED SHALL BE LOOSENEED TO A DEPTH OF AT LEAST TWO INCHES BY MECHANICAL MEANS, OR AS APPROVED BY THE LANDSCAPE ARCHITECT.

MULCH SEEDED AREAS IMMEDIATELY AFTER SEEDING.

SEED ALL DISTURBED AREAS WITH THE TEMPORARY SEED MIXTURE EXCEPT THOSE AREAS SHOWN TO BE SEEDED WITH STEEP SLOPE MIXTURE, UNLESS OTHERWISE NOTED ON THE DRAWINGS.

**SOUTH FAYETTE
TOWNSHIP**

**SEED SPECIFICATION
(TEMPORARY)**



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STEEP SLOPE SEEDING SPECIFICATIONS:

(STEEP SLOPE MIX - SLOPES STEEPER THAN 3:1)

MATERIALS:

TOPSOIL 3" (MINIMUM) TOPSOIL SHALL BE REQUIRED ON SLOPES STEEPER THAN 3:1.

LIMESTONE RAW, GROUND AGRICULTURAL LIMESTONE CONTAINING MORE THAN 90 PERCENT CALCIUM CARBONATES (ADJUST pH LEVELS TO BETWEEN 6.5 TO 7.0). APPLY AT A RATE OF 6 TONS PER ACRE (275 POUNDS PER 1,000 SQUARE FEET), UNLESS INDICATED OTHERWISE BY SOIL TESTS.

COMMERCIAL FERTILIZER IN THE ABSENCE OF A SOIL TEST, USE 1000 POUNDS 10-20-20 PER ACRE (23 POUNDS PER 1000 SQUARE FEET) MIXED INTO SEEDBED PRIOR TO SEEDING, OR IN A TANK WITH SEED WHEN HYDROSEEDING.

INOCULANT INOCULANT FOR TREATING LEGUMINOUS SEEDS SHALL BE A STANDARD COMMERCIAL PRODUCT CONSISTING OF A SUITABLE CARRIER CONTAINING A CULTURE OF NITROGEN FIXING BACTERIA SPECIFIC FOR SEEDS TO BE INOCULATED. INOCULANT SHALL NOT BE USED LATER THAN DATE INDICATED ON THE CONTAINER. IF A HYDRAULIC METHOD OF APPLICATION IS USED, INCREASE INOCULANT FOUR (4) TIMES NORMAL APPLICATION RATES.

MULCH CLEAN OAT OR WHEAT STRAW SHALL BE FREE FROM MATURE SEED-BEARING STALKS OR ROOTS OF PROHIBITED OF NOXIOUS WEEDS AS DEFINED BY THE PENNSYLVANIA SEED ACT OF 1947. APPLY AT A RATE OF 139 POUNDS PER 1,000 SQUARE FEET (3 TONS PER ACRE). PRECAUTIONS SHALL BE TAKEN TO STABILIZE MULCH UNTIL THE VEGETATIVE COVER IS ESTABLISHED. STRAW SHALL BE CRIMPED, TACIFIED, NETTED OR OTHERWISE ANCHORED.

SEED MIXTURE SEED MIXTURE SHALL BEAR A GUARANTEED STATEMENT OF ANALYSIS AND SHALL BE COMPOSED OF THE FOLLOWING VARIETIES AND MIXED IN PROPORTIONS SPECIFIED.

<u>STEEP SLOPE SEED MIXTURE (PENNDOT TYPE 'W')</u>	<u>PROPORTION BY WEIGHT</u>	<u>MINIMUM PURITY</u>	<u>MINIMUM GERMINATION</u>
TALL FESCUE (FESTUCA ARUNDINACEA VAR. KENTUCKY 31)	70.0%	98%	85%
BIRDSFOOT TREFOIL MIXTURE (LOTUS CORNICULATUS) -- A MIXTURE OF 1/2 VIKING AND 1/2 OF EITHER EMPIRE, NORCEN OR LEO.	20.0%	98%	80%*
REDTOP (ARGROSTIS ALBA)	10.0%	92%	80%

* MINIMUM 20% HARDSEED AND 60% NORMAL SPROUTS

SEEDING RATES STEEP SLOPE SEEDING SHALL BE APPLIED AT A RATE OF ELEVEN (11) POUNDS PER ONE THOUSAND (1,000) SQUARE YARDS.

ALL AREAS TO BE SEEDED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF AT LEAST THREE INCHES PARALLEL TO CONTOURS BY MECHANICAL MEANS AS APPROVED BY THE LANDSCAPE ARCHITECT. THE COMMERCIAL FERTILIZER AND AGRICULTURAL GROUND LIMESTONE MAY BE SPREAD EVENLY ON AREAS TO BE SEEDED PRIOR TO TILLAGE AND INCORPORATED INTO THE SOIL AT THE SAME TIME.

MULCH SEEDED AREAS IMMEDIATELY AFTER SEEDING.

SEEDING SEED ALL SLOPES STEEPER THAN 3:1 WITH STEEP SLOPE MIX UNLESS NOTED OTHERWISE ON THE DRAWINGS.

**SOUTH FAYETTE
TOWNSHIP**

**SEEDING SPECIFICATIONS
(STEEP SLOPES)**



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Adopted: JULY 2022

SFT-SD-049

TEMPORARY REVEGETATION:

1. IF PERMANENT SEED CANNOT BE APPLIED, THE DISTURBED AREA SHALL BE VEGETATED WITH TEMPORARY SEED
2. SEED MIXTURE SHALL BE 100% ANNUAL RYEGRASS
3. APPLICATION RATE OF 10 LBS. PER 1,000 SQUARE YARD OR AS RECOMMENDED BY LOCAL SEED SUPPLIER
4. APPLY MULCH AT A RATE OF 3 TONS PER ACRE
5. INSTALL ON DISTURBED AREAS WHICH WILL BE EXPOSED FOR MORE THAN 20 DAYS.

EROSION AND SEDIMENT CONTROL NOTES:

1. PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL INITIATE AND INSTALL ALL EROSION AND SEDIMENTATION CONTROL DEVICES IN ACCORDANCE WITH THE EROSION AND SEDIMENTATION CONTROL PLAN AND THE CONTRACT SPECIFICATIONS.
2. THE CONTRACTOR SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO PUBLIC ROADS. ALL MATERIALS DEPOSITED ONTO PUBLIC ROADS SHALL BE REMOVED IMMEDIATELY.
3. THE CONTRACTOR SHALL INSPECT DAILY AND MAINTAIN CONTINUOUSLY IN EFFECTIVE OPERATING CONDITION, ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIME AS PERMANENT STABILIZATION OF EXPOSED SOIL OCCURS.
4. WHEN PROPERTY IS BROUGHT TO FINISHED GRADE AND PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL, TEMPORARY SEED AND ANCHORED STRAW MULCH SHALL BE APPLIED TO DISTURBED AREAS. THE FINAL PERMANENT STABILIZATION OF SUCH PROPERTY SHALL BE APPLIED AS SOON AS GROUND AND WEATHER CONDITIONS ALLOW.
5. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED BY THE END OF THE WORK WEEK.
6. TEMPORARY CONTROL MEASURES SHALL NOT BE REMOVED UNTIL A UNIFORM 70% PERENNIAL VEGETATIVE COVER IS ACHIEVED OVER THE DISTURBED AREA.
7. CONTRACTOR SHALL REMOVE ALL EXCESS EXCAVATED SOIL AND CONSTRUCTION MATERIALS FROM THE SITE AND PROPERLY DISPOSE OF SAID MATERIALS.

UTILITY LINE INSTALLATION REQUIREMENTS:

1. ADVANCED CLEARING AND GRUBBING OPERATIONS FOR STRIP UTILITY LINE INSTALLATIONS SHALL BE LIMITED TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
2. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG INSTALLATIONS, AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
3. DAILY TRENCH EXCAVATION SHALL BE LIMITED TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION, AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
4. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING INTO A SILT BAG PRIOR TO PIPE PLACEMENT OR BACKFILLING OPERATIONS.
5. STREAMS, SWALES, DITCHES, CHANNELS, AND WATERWAYS MUST BE FLUMED PAST THE OPEN TRENCH AT THE TIME OF THE CROSSING
6. WORK THROUGH BMP'S SHOULD BE DONE DURING THE DAY PERIOD TO PROTECT DOWN STREAM AREAS.

**SOUTH FAYETTE
TOWNSHIP**

**TEMPORARY SEEDING, E&S CONTROLS
& UTILITY LINE REQUIREMENTS**



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SFT-SD-050

EROSION & SEDIMENTATION - MAINTENANCE SCHEDULE

CONTROL MEASURE	INSPECT	PROBLEMS TO LOOK FOR	POSSIBLE REMEDIES
VEGETATION	WEEKLY AND AFTER EVERY RUNOFF EVENT	SEDIMENT AT TOE OF SLOPE RILLS AND GULLIES FORMING BARE SOIL PATCHES	CHECK FOR TOP-OF-SLOPE DIVERSION AND INSTALL IF NEEDED. FILL RILLS AND REGRADE GULLIED SLOPES RESEED, FERTILIZE, AND MULCH BARE AREAS
ROCK CONSTRUCTION ENTRANCES	DAILY AND AFTER EVERY RUNOFF EVENT	SINK HOLES OR RUTS SEDIMENT ON PUBLIC ROADWAY	ADD ROCK TO BRING TO SPECIFIED DIMENSIONS SWEEP MATERIAL BACK TO PROJECT SITE. DO NOT WASH ROADWAY WITH WATER.
INLET PROTECTION	WEEKLY AND AFTER EVERY RUNOFF EVENT	SEDIMENT ACCUMULATION SEDIMENT ACCUMULATED IN INLET FILTER BAG TO 1/2 FULL RUNOFF ESCAPING AROUND BARRIER	REMOVE SEDIMENT AND DISPOSE ON SITE CLEAN AND/OR REPLACE BAG REBUILD BARRIER REPLACE BAG
CONCRETE WASHOUT AREA	DAILY	DAMAGED OR LEAKING WASHOUTS MATERIAL ACCUMULATION	REPAIR OR RESHAPE IMMEDIATELY. REMOVE MATERIAL WHEN 75% CAPACITY IS REACHED.
SLOPE BLANKET (IF NEEDED)	WEEKLY AND AFTER EVERY RUNOFF EVENT	LOSS OF PROTECTIVE LINING TORN/PUNCHED FABRIC	RESHAPE AS NECESSARY AND REPLACE FABRIC OVERLAP WITH CONTINUOUS PIECE OF MATTING. SECURELY ANCHOR WITH PROPER STAPLES
ROCK FILTER (IF NEEDED)	WEEKLY AND AFTER EVERY RUNOFF EVENT	CLOGGED FILTER STONE SEDIMENT ACCUMULATION	REPLACE REMOVE SEDIMENT WHEN LEVEL REACHES HALF OF FILTER HEIGHT

- ALL REPAIRS TO BE COMPLETED WITHIN 72 HOURS OF DISCOVERY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL TEMPORARY CONTROL MEASURES DURING CONSTRUCTION. ALL DEVICES SHOULD BE INSPECTED WEEKLY AND AFTER EVERY RUNOFF EVENT. IF DURING THESE INSPECTIONS, ANY DEVICE IS FOUND TO BE CLOGGED, DAMAGED, HALF-FULL OF SILT OR NOT FULLY OPERATIONAL, THE DEVICE(S) SHALL BE CLEANED OF ALL DEBRIS.
- UPON COMPLETION OF THE PROJECT, RECYCLING, OR DISPOSAL OF ALL TEMPORARY EROSION CONTROL MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONSTRUCTION WASTE INCLUDES, BUT IS NOT LIMITED TO, EXCESS SOIL MATERIALS, SILT REMOVED FROM EROSION CONTROL FACILITIES, EXCESS BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, AND OBSOLETE EROSION CONTROL MATERIALS (SILT FENCE, SILT SACKS, ETC.)
- SILT REMOVED FROM SEDIMENT CONTROL FACILITIES SHALL BE SPREAD ON THE TOPSOIL STOCKPILE, OR IN LAWN OR LANDSCAPE AREAS. OBSOLETE EROSION CONTROL MATERIALS AND EXCESS BUILDING MATERIALS MUST BE DISPOSED OF AT A PA DEP APPROVED SITE.

**SOUTH FAYETTE
TOWNSHIP**

**EROSION & SEDIMENTATION -
MAINTENANCE SCHEDULE**

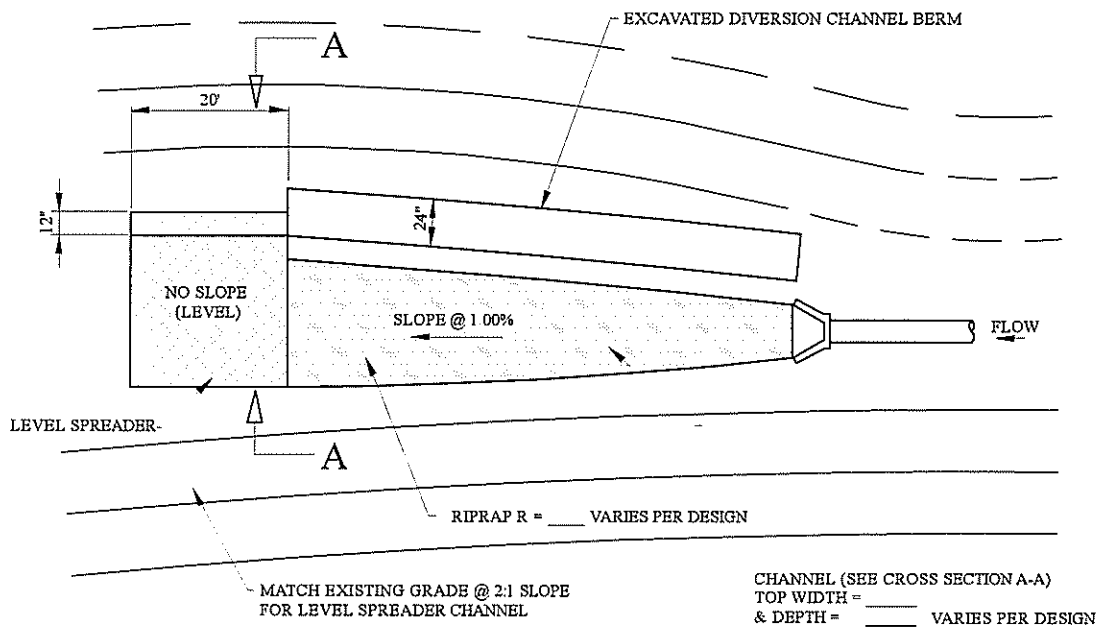


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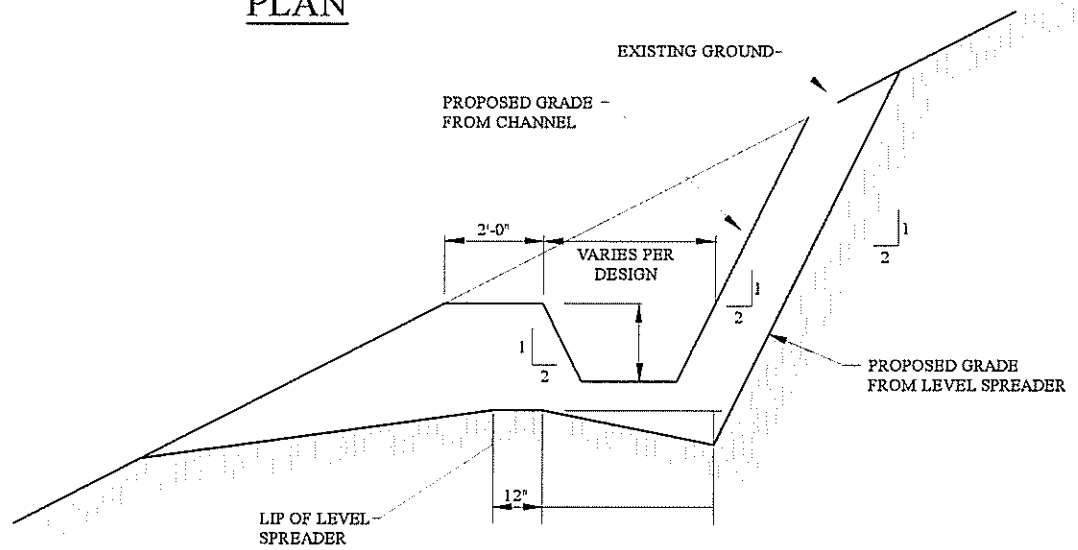
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Adopted: JULY 2022

SFT-SD-051



PLAN



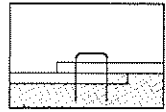
SECTION A-A

SOUTH FAYETTE
TOWNSHIP

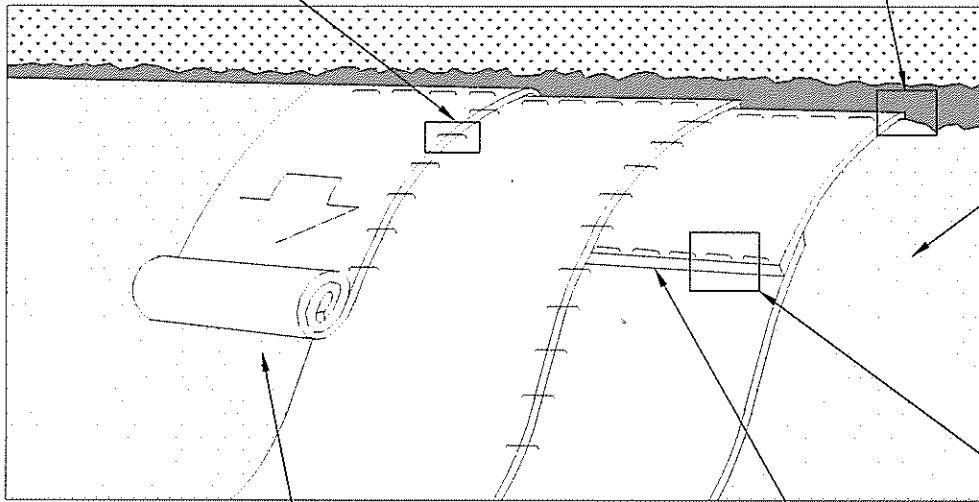
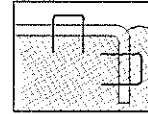
EARTHEN LEVEL SPREADER

BLANKET EDGES STAPLED AND OVERLAPPED (4 IN. MIN.)

INSTALL BEGINNING OF ROLL IN 6 IN. x 6 IN. ANCHOR TRENCH, STAPLE, BACKFILL AND COMPACT SOIL



STARTING AT TOP OF SLOPE, ROLL BLANKETS IN DIRECTION OF WATER FLOW



PREPARE SEED BED (INCLUDING APPLICATION OF LIME, FERTILIZER AND SEED) PRIOR TO BLANKET INSTALLATION



THE BLANKET SHOULD NOT BE STRETCHED; IT MUST MAINTAIN GOOD SOIL CONTACT

OVERLAP BLANKET ENDS 6 IN. MIN. WITH THE UPSLOPE BLANKET OVERLYING THE DOWNSLOPE BLANKET (SHINGLE STYLE). STAPLE SECURELY.

REFER TO MANUF. RECOMMENDED STAPLING PATTERN FOR STEEPNESS AND LENGTH OF SLOPE BEING BLANKETED

NOTES:

SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

SLOPE SURFACE SHALL BE FREE OF ROCKS, CLOUDS, STICKS, AND GRASS,

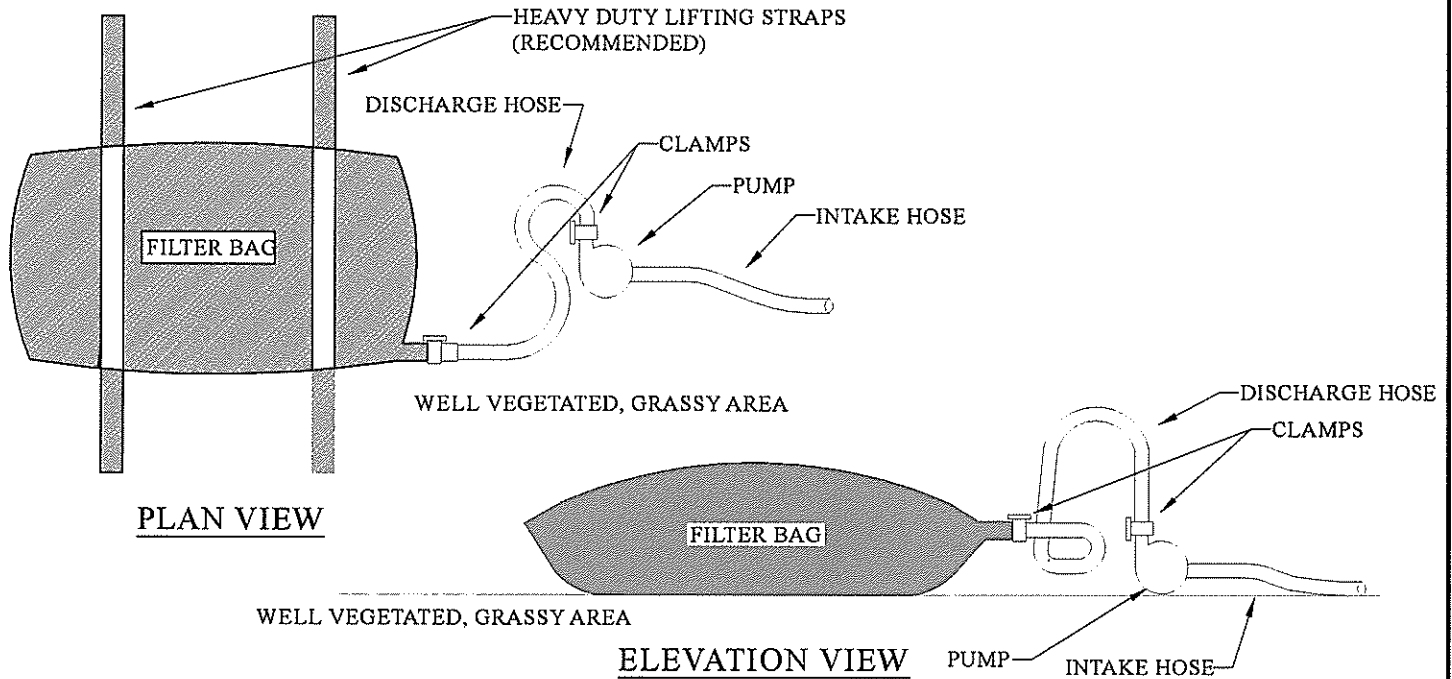
BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

**SOUTH FAYETTE
TOWNSHIP**

**EROSION CONTROL BLANKET
INSTALLATION**



NOTES:

LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME $\frac{1}{2}$ FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

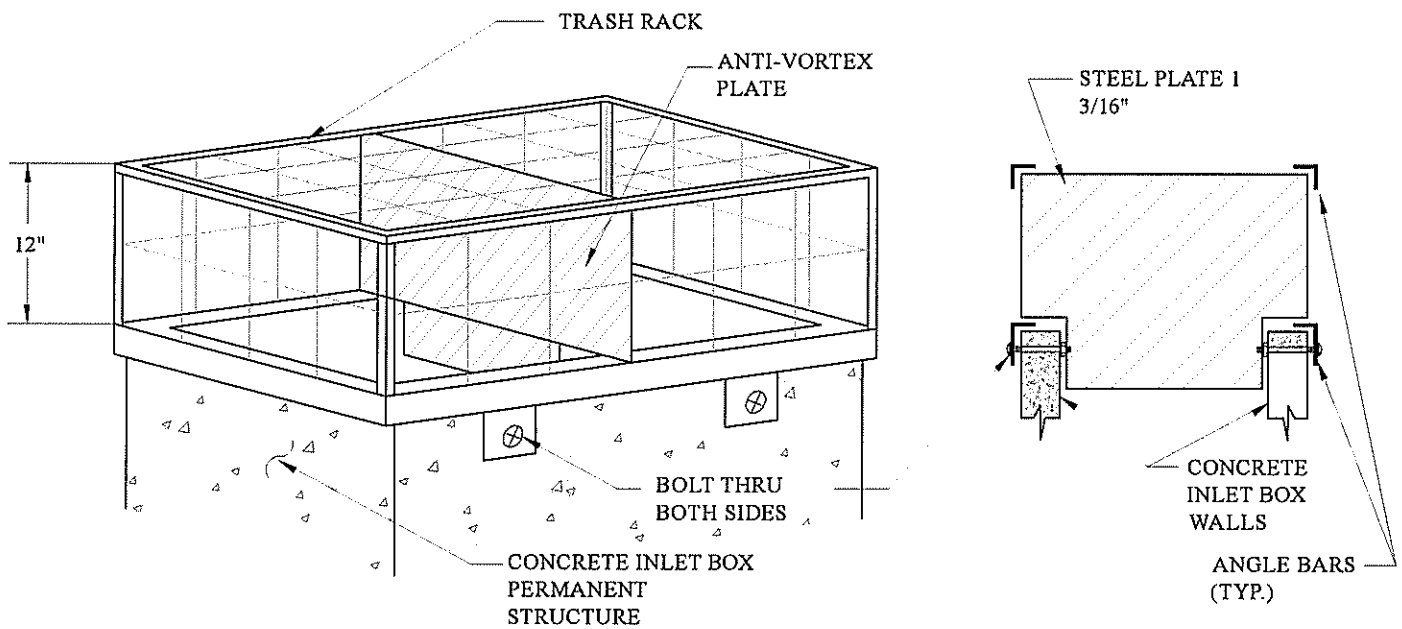
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR $\frac{1}{2}$ THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

**SOUTH FAYETTE
TOWNSHIP**

PUMPED WATER FILTER BAG



NOTES:

TRASH RACK COMPOSED OF 1" X 1/8" STEEL (TYP.) FITTED AROUND CONCRETE INLET BOX. WITH #4 BARS (TYP.) WELDED TO THE ANGLES AND AT EACH INTERSECTION OF THE BARS. #4 BARS SPACED 6" EACH WAY.

BOLT TRASH RACK TO THE PERMANENT STRUCTURE.

**SOUTH FAYETTE
TOWNSHIP**

**TRASH RACK WITH
ANTI-VORTEX PLATE**

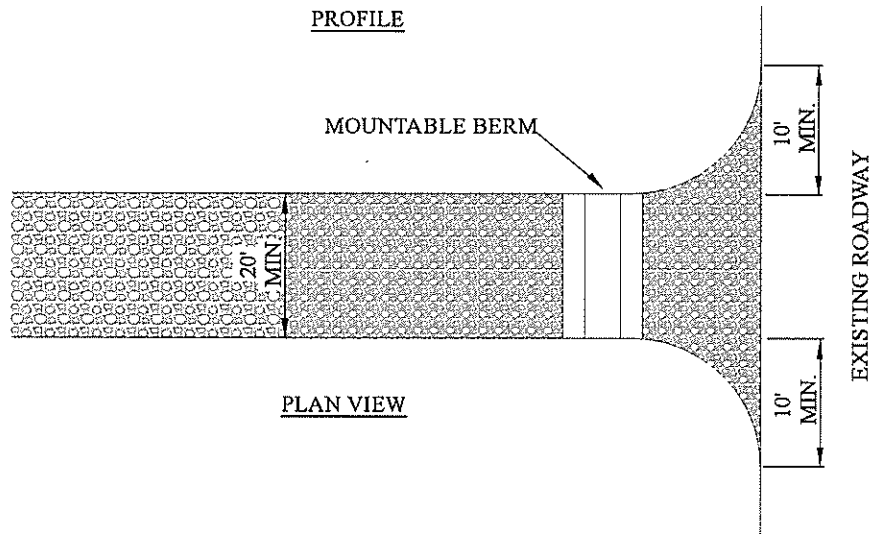
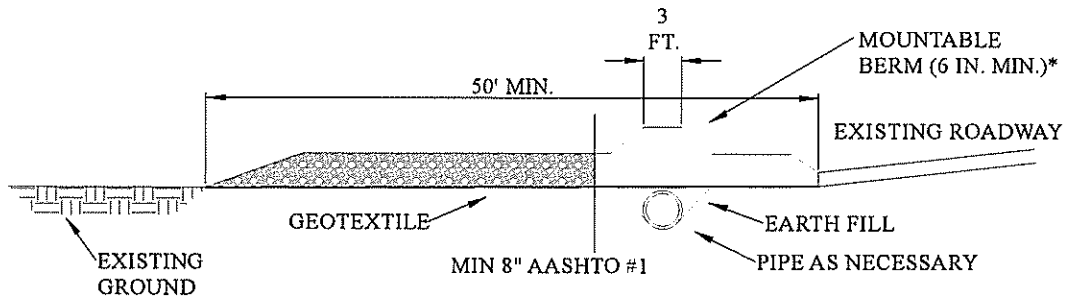


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Not to Scale

Adopted: JULY 2022

SFT-SD-055



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

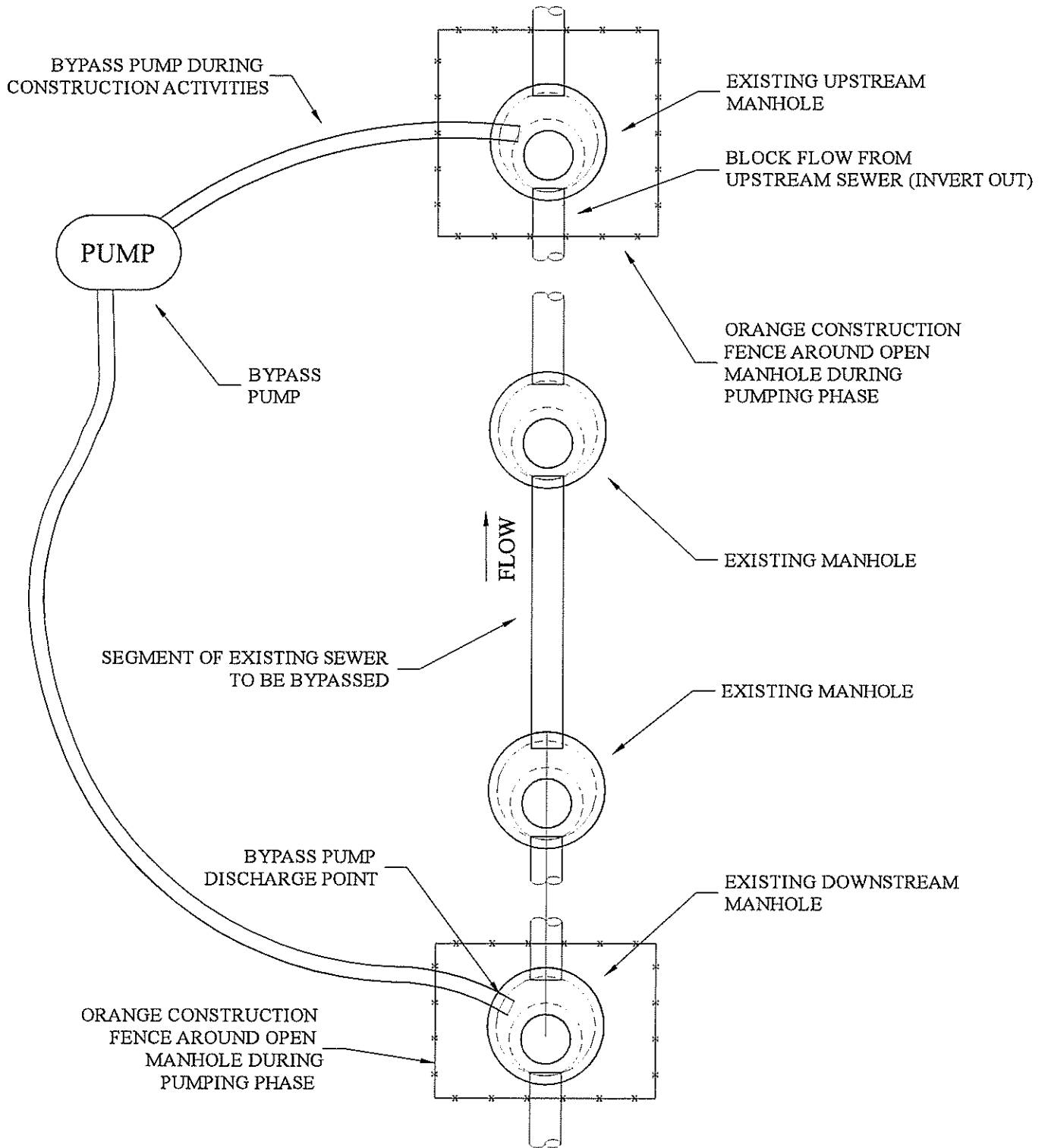
MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

**SOUTH FAYETTE
TOWNSHIP**

ROCK CONSTRUCTION ENTRANCE

NOTES:

1. CONSTRUCTION SHOULD OCCUR DURING TIMES OF LOW FLOW CONDITIONS.
2. APPROPRIATE E&S MEASURES SHALL BE EMPLOYED BEFORE, DURING, & AFTER INSTALLATION OF THE REPAIRS.
3. CONTRACTOR NOT TO LEAVE PUMP UNATTENDED.



**SOUTH FAYETTE
TOWNSHIP**

**MANHOLE TO MANHOLE PUMP
BYPASS AROUND**



GIBSON-THOMAS ENGINEERING CO.
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Not to Scale

Adopted: JULY 2022

SFT-SD-057

RC STANDARDS FOR ADA:

CAST IRON GRATE: PROVIDE ADA COMPLIANT GRATES WHERE PEDESTRIAN TRAFFIC IS ANTICIPATED, SUCH AS CURBED ROADWAYS IN URBAN AREAS ADJACENT TO SIDEWALKS. ALTERNATIVE ADA COMPLIANT GRADE DESIGNS REQUIRE A SHOP DRAWING, AS SPECIFIED IN NOTE 1 AND MUST CONFORM TO THE DIMENSIONAL REQUIREMENTS FOR PROPER INSTALLATION WITH THE CURRENT TOP UNITS.

GENERAL NOTES:

1. ALL ADA DESIGNS SHALL MEET PENNDOT REQUIREMENTS.
2. THE MOST STRINGENT REQUIREMENT SHALL APPLY WHEN THERE IS A DISCREPANCY IN THE DETAILS.
3. THE E & S DETAILS ARE TO BE USED AS A GUIDE ALL E & S REQUIREMENTS SHALL COMPLY WITH THE LATEST REQUIREMENTS OF THE GOVERNING AGENCY.
4. THE OWNER RESERVES THE RIGHT TO MAKE CHANGES TO THE DETAILS AT ANY TIME WHEN IT IS IN THE BEST INTEREST OF THE TOWNSHIP.
5. THE OWNER RESERVES THE RIGHT TO INSPECT SITES AT THEIR DISCRETION TO ENSURE COMPLIANCE

**SOUTH FAYETTE
TOWNSHIP**

**GENERAL DETAILS
AND GENERAL NOTES**



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