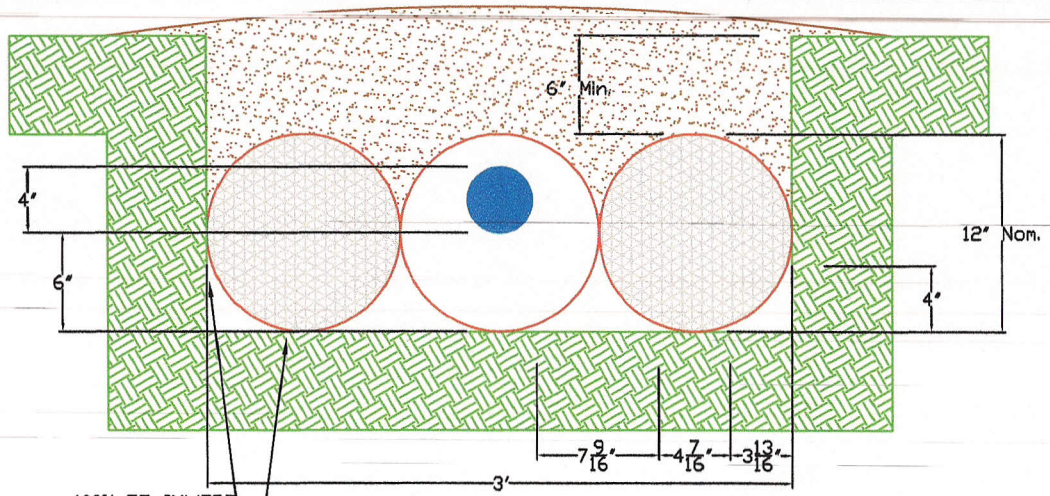


100% OF INVERT & SIDEWALL CONTACT AREA AVAILABLE FOR INFILTRATION

FTSG 123H-1OC

EQUIVALENT INFILTRATIVE SIZING AREA (EISA) CALCULATION

TRENCH WIDTH = 36 '

TRENCH WALL HGT = 12"

INVERT CONTACT INFILTRATIVE AREA
(x THREE LINES) = 12" X 3 = 36 '

SIDEWALL CONTACT INFILTRATIVE AREA
= 12" X 2 = 24'

SUMMATION OF TOTAL INFILTRATION AREA
= INVERT CONTACT + SIDEWALL CONTACT
= 36' + 24' = 60" = 5 FT PER L.F. OF PRODUCT

EISA = INFILTRATION ARA PER LINEAR FOOT x PRODUCT LENGTH

FOR FTSG 123H-1oc @ 5' LENGTH W/ GEOTEXTILE
EISA = 5' / L.F. x 5 L.F. = 25 SQ.FT.*
* NOTE: GEOTEXTILE REQUIRED FOR PRODUCT INSTALLATION

FOR FTSG 123H-1oc @ 5' LENGTH w/o GEOTEXTILE
EISA = N/A

STORAGE VOLUME CALCULATION

TRENCH WIDTH = 36 '
TRENCH WALL HGT = 12 '
GROSS TRENCH AREA = 36 ' x 12 ' / 144 SQ. IN PER SQ. FT = 3.00 SQ. FT

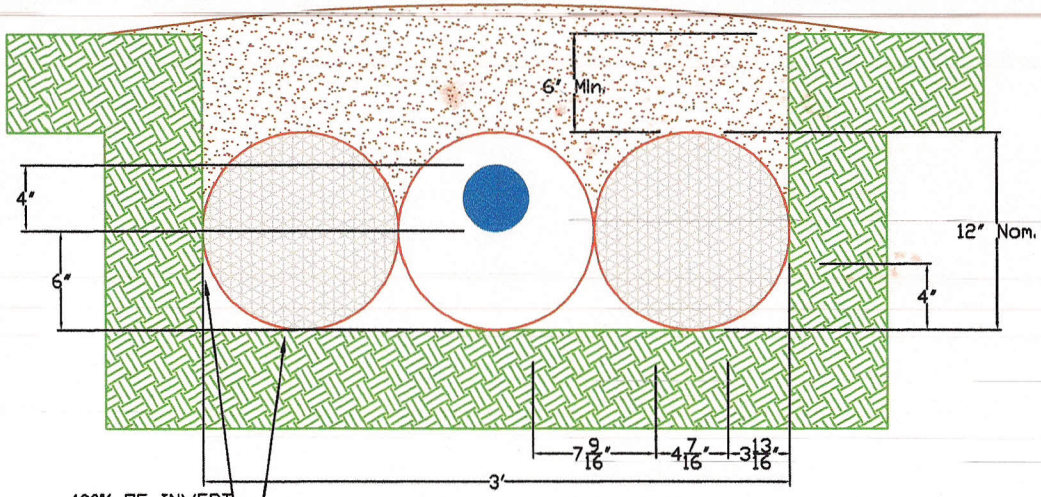
SOLIDS AREA OF ONE GEOSYNTHETIC CASING (verified in AutoCAD, Release 2002)
CASING W/O PIPE = AREA OF CASING x % SOLIDS IN CASING
= (113.10 SQ. IN x 0.419) / 144 SQ. IN PER SQ. FT = 0.33 SQ. FT

CASING W/ PIPE = AREA OF CASING x % SOLIDS IN CASING - OPEN PIPE AREA
= [(113.10 SQ. IN x 0.419) - 12.56 / 144 SQ. IN PER SQ. FT = 0.24 SQ. FT

NET STORAGE VOLUME = GROSS TRENCH AREA - SOLIDS AREA OCUPIED BY GEOSYNTHETIC CASING MATERIALS
= GROSS TRENCH AREA - (AREA OF CASINGS W/O PIPE) - (AREA OF CASINGS W/ PIPE)
= 3.00 - (2 CASINGS x 0.33) - (1 CASING x 0.24) = 2.10 SQ. FT PER LINEAR FOOT OF TRENCH
= 2.10 CU. FT PER LIN. FT x 7.48 gal/CU.FT = 15.71 GAL. PER LIN. FT OF TRENCH

APPLY VOLUME REDUCTION OF 95% FOR COMPRESSION (see test results)
= 15.71 GAL. PER LIN. FT OF TRENCH x 0.95 = 14.92 GAL. PER LIN. FT OF TRENCH

FLOWTECH FTSG 123H-1 oc 5FT EISA CALCULATION	FLOWTECH EPS AGGREGATE EVAL HICKORY, NORTH CAROLINA	WW DRAWN BY	3148 PROJECT NUMBER
		BLB CHECKED BY	FIG # SHEET
Unifour	FOR: ICC TECHNOLOGIES, INC.	05/29/09 DATE	3148.EISA.DWG DRAWING NUMBER
2019 1st Avenue SW Hickory, North Carolina 28601 P.O. Box 2067 • Hickory, NC 28603 (P) 828.256.3000 (F) 828.256.6921 Engineering & Testing Laboratories, PC	The above plan was prepared from information provided by others. No scale or accuracy of information is implied. This plan is intended as approximate graphical representation of information contained in this analysis and report.	This drawing and the information it contains is the sole property of UNIFOUR ENGINEERING & TESTING LABORATORIES, PC for the exclusive use of ICC TECHNOLOGIES, INC. specific to this project only for the scope indicated in this document.	NOT TO SCALE



100% OF INVERT & SIDEWALL CONTACT AREA AVAILABLE FOR INFILTRATION

FTSG 123H-10C

EQUIVALENT INFILTRATIVE SIZING AREA (EISA) CALCULATION

TRENCH WIDTH = 36 "

TRENCH WALL HGT = 12"

INVERT CONTACT INFILTRATIVE AREA
(x THREE LINES) = 12" X 3 = 36 "

SIDEWALL CONTACT INFILTRATIVE AREA
= 12" X 2 = 24"

SUMMATION OF TOTAL INFILTRATION AREA
= INVERT CONTACT + SIDEWALL CONTACT
= 36" + 24" = 60" = 5 FT PER L.F. OF PRODUCT

EISA = INFILTRATION ARA PER LINEAR FOOT x PRODUCT LENGTH

FOR FTSG 123H-1oc @ 10' LENGTH W/ GEOTEXTILE
EISA = 5' / L.F. x 10 L.F. = 50 SQ.FT.*
* NOTE: GEOTEXTILE REQUIRED FOR PRODUCT INSTALLATION

FOR FTSG 123H-1oc @ 10' LENGTH w/o GEOTEXTILE
EISA = N/A

STORAGE VOLUME CALCULATION

TRENCH WIDTH = 36 "
TRENCH WALL HGT = 12 "
GROSS TRENCH AREA = 36 " x 12 " / 144 SQ. IN PER SQ. FT = 3.00 SQ. FT

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CASING W/ PIPE = AREA OF CASING x % SOLIDS IN CASING - OPEN PIPE AREA
= [(113.10 SQ. IN x 0.419) - 12.56 / 144 SQ. IN PER SQ. FT = 0.24 SQ. FT

NET STORAGE VOLUME = GROSS TRENCH AREA - SOLIDS AREA OCUPIED BY GEOSYNTHETIC CASING MATERIALS
= GROSS TRENCH AREA - (AREA OF CASINGS W/O PIPE) - (AREA OF CASINGS W/ PIPE)
= 3.00 - (2 CASINGS x 0.33) - (1 CASING x 0.24) = 2.10 SQ. FT PER LINEAR FOOT OF TRENCH
= 2.10 CU. FT PER LIN. FT x 7.48 gal/CU.FT = 15.71 GAL. PER LIN. FT OF TRENCH

APPLY VOLUME REDUCTION OF 95% FOR COMPRESSION (see test results)
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FLOWTECH FTSG 123H-1 oc 10FT EISA CALCULATION	FLOWTECH EPS AGGREGATE EVAL HICKORY, NORTH CAROLINA	WW DRAWN BY	3148 PROJECT NUMBER
		BLB CHECKED BY	FIG # SHEET
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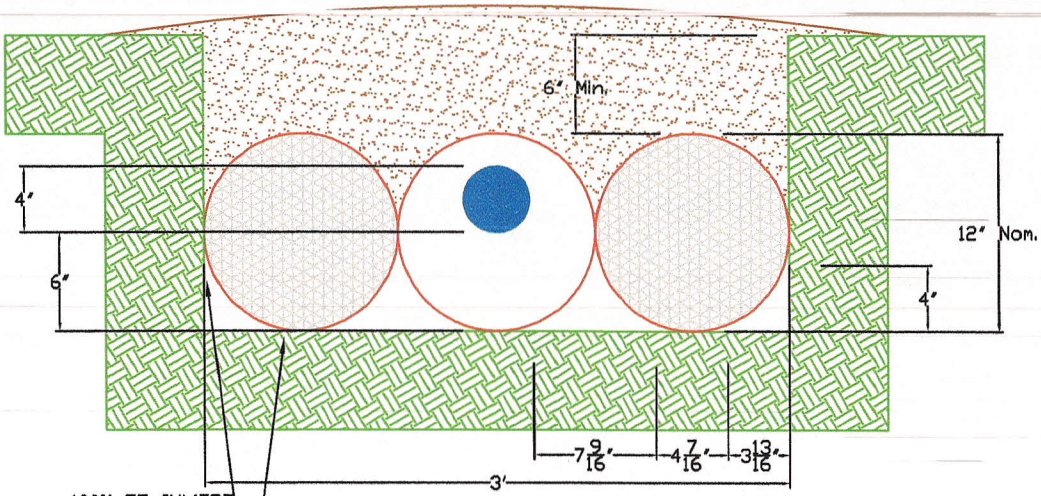

100% OF INVERT & SIDEWALL CONTACT AREA AVAILABLE FOR INFILTRATION

FTS 123H-10C

EQUIVALENT INFILTRATIVE SIZING AREA (EISA) CALCULATION

TRENCH WIDTH = 36 "

TRENCH WALL HGT = 12"

INVERT CONTACT INFILTRATIVE AREA
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SUMMATION OF TOTAL INFILTRATION AREA
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FOR FTS 123H-1oc @ 5' LENGTH W/ GEOTEXTILE
EISA = 5' / L.F. x 5 L.F. = 25 SQ.FT.*
* NOTE: GEOTEXTILE REQUIRED FOR PRODUCT INSTALLATION

FOR FTS 123H-1oc @ 5' LENGTH w/o GEOTEXTILE
EISA = N/A

STORAGE VOLUME CALCULATION

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CASING W/ PIPE = AREA OF CASING x % SOLIDS IN CASING - OPEN PIPE AREA
= [(113.10 SQ. IN x 0.419) - 12.56 / 144 SQ. IN PER SQ. FT = 0.24 SQ. FT

NET STORAGE VOLUME = GROSS TRENCH AREA - SOLIDS AREA OCUPIED BY GEOSYNTHETIC CASING MATERIALS
= GROSS TRENCH AREA - (AREA OF CASINGS W/O PIPE) - (AREA OF CASINGS W/ PIPE)
= 3.00 - (2 CASINGS x 0.33) - (1 CASING x 0.24) = 2.10 SQ. FT PER LINEAR FOOT OF TRENCH
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FLOWTECH FTS 123H-1 oc 5FT EISA CALCULATION	FLOWTECH EPS AGGREGATE EVAL HICKORY, NORTH CAROLINA	WW DRAWN BY	3148 PROJECT NUMBER
		BLB CHECKED BY	FIG # SHEET
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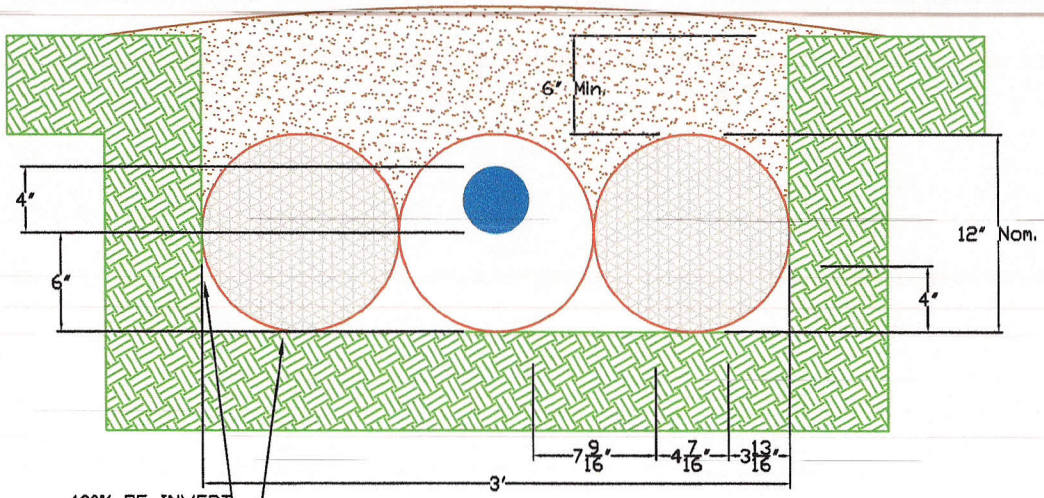

100% OF INVERT & SIDEWALL CONTACT AREA AVAILABLE FOR INFILTRATION

123H-10C

EQUIVALENT INFILTRATIVE SIZING AREA (EISA) CALCULATION

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TRENCH WALL HGT = 12"

INVERT CONTACT INFILTRATIVE AREA
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EISA = 5' / L.F. x 10 L.F. = 50 SQ.FT.*
* NOTE: GEOTEXTILE REQUIRED FOR PRODUCT INSTALLATION

FOR FTS 123H-1oc @ 10' LENGTH w/o GEOTEXTILE
EISA = N/A

STORAGE VOLUME CALCULATION

TRENCH WIDTH = 36 "
TRENCH WALL HGT = 12 "
GROSS TRENCH AREA = 36 " x 12 " / 144 SQ. IN PER SQ. FT = 3.00 SQ. FT

SOLIDS AREA OF ONE GEOSYNTHETIC CASING (verified in AutoCAD, Release 2002)

CASING W/O PIPE = AREA OF CASING x % SOLIDS IN CASING
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CASING W/ PIPE = AREA OF CASING x % SOLIDS IN CASING - OPEN PIPE AREA
= [(113.10 SQ. IN x 0.419) - 12.56 / 144 SQ. IN PER SQ. FT = 0.24 SQ. FT

NET STORAGE VOLUME = GROSS TRENCH AREA - SOLIDS AREA OCUPIED BY GEOSYNTHETIC CASING MATERIALS
= GROSS TRENCH AREA - (AREA OF CASINGS W/O PIPE) - (AREA OF CASINGS W/ PIPE)
= 3.00 - (2 CASINGS x 0.33) - (1 CASING x 0.24) = 2.10 SQ. FT PER LINEAR FOOT OF TRENCH
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APPLY VOLUME REDUCTION OF 95% FOR COMPRESSION (see test results)
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FLOWTECH FTS 123H-1 oc 10FT EISA CALCULATION	FLOWTECH EPS AGGREGATE EVAL HICKORY, NORTH CAROLINA	WW DRAWN BY	3148 PROJECT NUMBER
		BLB CHECKED BY	FIG # SHEET
Unifour	FOR: ICC TECHNOLOGIES, INC.	05/29/09 DATE	3148.EISA.DWG DRAWING NUMBER
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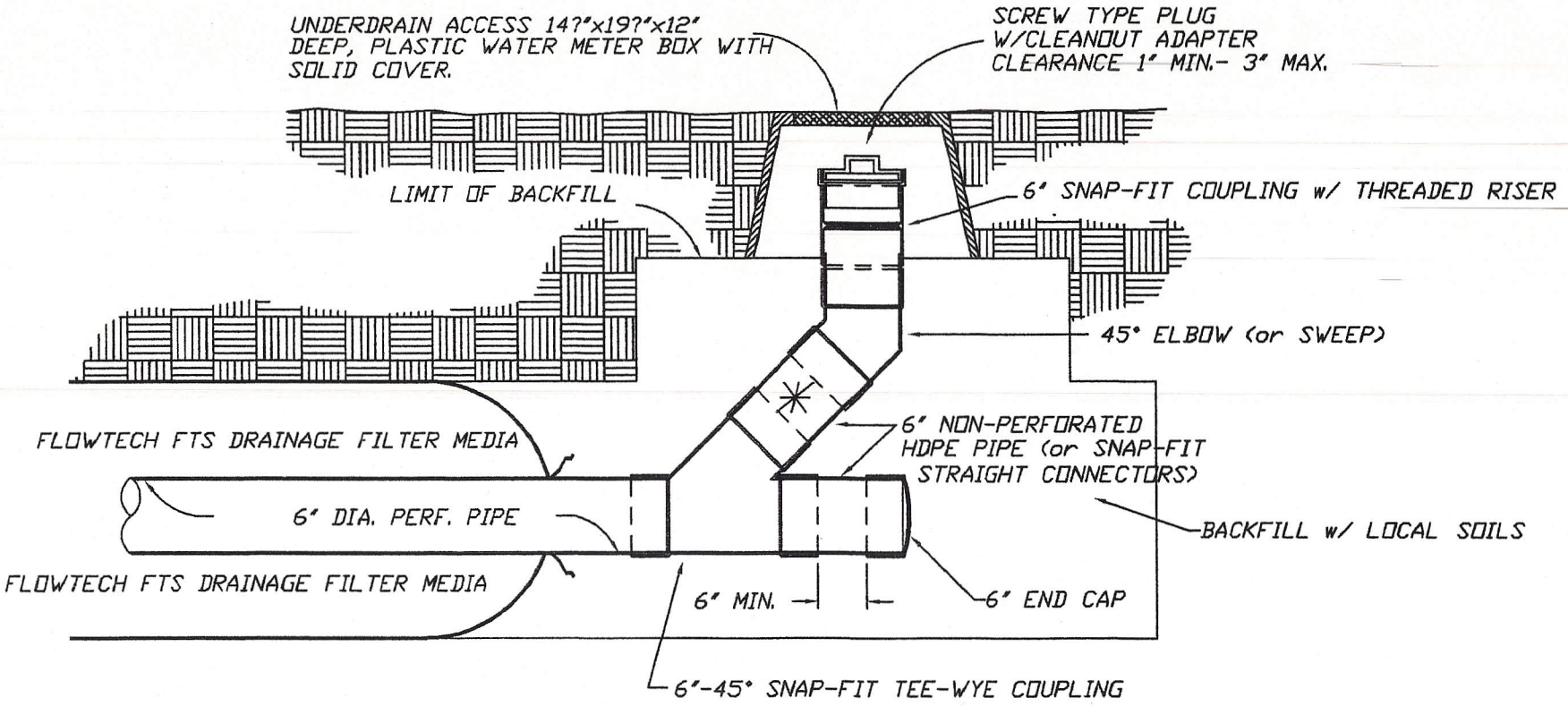

✳ COUPLING PIPE LENGTH TO BE FIELD ADJUSTED.

FLOWTECH END CLEANOUT INSTALLATION DETAIL	FLOWTECH EPS AGGREGATE EVAL HICKORY, NORTH CAROLINA	BLB DRAWN BY	3148 PROJECT NUMBER
		BLB CHECKED BY	FIG # SHEET
Unifour	FOR: ICC TECHNOLOGIES, INC.	06/22/09 DATE	3148.SI.DWG DRAWING NUMBER
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