

Trapezoidal Channel Analysis

Project Info

User Input

Bed Manning's n-Value (Nc): 0.032

Right Manning's n-Value (Nr): 0.032

Left-Side Slope (Zl) [H:1V]: 3

Bottom Width (B) [ft]: 2

Bend Coefficient (Kb): 1

Left Manning's n-Value (Nl): 0.032

Right-Side Slope (Zr) [H:1V]: 3

Bed Slope (S) [ft/ft]: 0.029

Design Discharge (Q) [ft³/sec]: 7.05

Hydraulic Results

Depth [ft]: 0.513

Froude: 1.15

Velocity [ft/sec]: 3.89

Shear [lb/ft²]: 0.928

Project Information

Designers Name: Kevin Garton

Designers Organization: Engineering Consulting

Project Number: 2190335

Project Segment: Channel 1

Project Description: FES 2 to Sta. 6+50

Project Start Date: --

Designers Title: engineer

Project Name: Snow Camp Mine

Project Location (City, State): Snow Camp, North Carolina

Applications(s):

Project Bid Date: --

Trapezoidal Channel Analysis Result

Good	Better	Best
TriNet Coconut (Vegetated)	TriNet Curlex (Vegetated)	TriNet Recyclex (Vegetated)

Stability factors less than one are highlighted **RED** and mean the material is likely to fail if the calculated hydraulic conditions are encountered.

DOT Approvals for : North Carolina

Product Comparison Chart

Rolled Erosion Control Products	Velocity	Shear Stress	Functional Longevity (months)	DOT Approved (for channels)
AEC Premier Coconut	2.04	2.42	up to 36	Yes
AEC Premier Straw DN QM (White Net)	1.8	1.89	up to 3	Yes
AEC Premier Straw Double Net	1.8	1.89	up to 12	Yes
AEC Premier Straw Single Net	1.69	1.67	up to 12	Yes
AEC Premier Straw SN QM (White Net)	1.69	1.67	up to 3	Yes
AEC Premier Straw/Coconut	1.92	2.16	up to 24	Yes
Curlex Enforcer (Unvegetated)	2.45	3.5	Permanent	Yes
Curlex Enforcer (Vegetated)	4.3	10.8	Permanent	Yes
Curlex High Velocity (HV)	2.45	3.5	36+	Yes
Curlex I	1.8	1.89	up to 18	Yes
Curlex I CL	1.72	1.72	up to 15	Yes
Curlex I CL QuickMow (White Net)	1.72	1.72	up to 3	Yes
Curlex I QuickMow (White Net)	1.8	1.89	up to 3	Yes
Curlex II	2.04	2.42	up to 24	Yes
Curlex II .98	2.15	2.69	up to 30	N/A
Curlex II CL	1.82	1.94	up to 18	Yes
Curlex II CL QuickMow (White Net)	1.82	1.94	up to 3	Yes
Curlex II QuickMow (White Net)	2.04	2.42	up to 3	Yes
Curlex III	2.15	2.69	up to 36	Yes
Curlex NetFree	1.36	1.08	up to 18	Yes
Recyclex TRM (Unvegetated)	2.5	3.64	Permanent	Yes
Recyclex TRM (Vegetated)	4.51	11.9	Permanent	Yes
Recyclex TRM-V (Unvegetated)	2.48	3.58	Permanent	Yes
Recyclex TRM-V (Vegetated)	3.84	8.62	Permanent	Yes
TriNet Coconut (Unvegetated)	2.43	3.45	Permanent	N/A
TriNet Coconut (Vegetated)	4.71	12.9	Permanent	N/A
TriNet Curlex (Unvegetated)	2.43	3.45	Permanent	N/A
TriNet Curlex (Vegetated)	4.9	14	Permanent	N/A
TriNet Recyclex (Unvegetated)	2.43	3.45	Premanent	N/A
TriNet Recyclex (Vegetated)	5.08	15.1	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	2.43	3.45	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	4.3	10.8	Permanent	N/A

Jul 11th, 2019

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Channel 1



Trapezoidal Channel Analysis

Project Info

User Input

Bed Manning's n-Value (Nc): 0.032	Left Manning's n-Value (Nl): 0.032
Right Manning's n-Value (Nr): 0.032	Right-Side Slope (Zr) [H:1V]: 3
Left-Side Slope (Zl) [H:1V]: 3	Bed Slope (S) [ft/ft]: 0.0296
Bottom Width (B) [ft]: 2	Design Discharge (Q) [ft³/sec]: 12.66
Bend Coefficient (Kb): 1	

Hydraulic Results

Depth [ft]: 0.678	Velocity [ft/sec]: 4.63
Froude: 1.22	Shear [lb/ft²]: 1.25

Project Information

Designers Name: Kevin Garton	Designers Title: engineer
Designers Organization: Engineering Consulting	Project Name: Snow Camp Mine
Project Number: 2190335	Project Location (City, State): Snow Camp, North Carolina
Project Segment: Channel 2	Applications(s):
Project Description: FES 1 to Sta. 6 50	Project Bid Date: --
Project Start Date: --	

Trapezoidal Channel Analysis Result

Good	Better	Best
TriNet Coconut (Vegetated)	TriNet Curlex (Vegetated)	TriNet Recyclex (Vegetated)

Stability factors less than one are highlighted **RED** and mean the material is likely to fail if the calculated hydraulic conditions are encountered.

DOT Approvals for : North Carolina

Product Comparison Chart

Rolled Erosion Control Products	Velocity	Shear Stress	Functional Longevity (months)	DOT Approved (for channels)
AEC Premier Coconut	1.79	2	up to 36	Yes
AEC Premier Straw DN QM (White Net)	1.58	1	up to 3	Yes
AEC Premier Straw Double Net	1.58	1	up to 12	Yes
AEC Premier Straw Single Net	1.49	1.2	up to 12	Yes
AEC Premier Straw SN QM (White Net)	1.49	1.2	up to 3	Yes
AEC Premier Straw/Coconut	1.69	2	up to 24	Yes
Curlex Enforcer (Unvegetated)	2.16	3	Permanent	Yes
Curlex Enforcer (Vegetated)	3.78	10	Permanent	Yes
Curlex High Velocity (HV)	2.16	3	36+	Yes
Curlex I	1.58	1	up to 18	Yes
Curlex I CL	1.51	1.3	up to 15	Yes
Curlex I CL QuickMow (White Net)	1.51	1.3	up to 3	Yes
Curlex I QuickMow (White Net)	1.58	1	up to 3	Yes
Curlex II	1.79	2	up to 24	Yes
Curlex II .98	1.89	0	up to 30	N/A
Curlex II CL	1.6	1.4	up to 18	Yes
Curlex II CL QuickMow (White Net)	1.6	1.4	up to 3	Yes
Curlex II QuickMow (White Net)	1.79	2	up to 3	Yes
Curlex III	1.89	0	up to 36	Yes
Curlex NetFree	1.2	1	up to 18	Yes
Recyclex TRM (Unvegetated)	2.2	2.7	Permanent	Yes
Recyclex TRM (Vegetated)	3.97	9	Permanent	Yes
Recyclex TRM-V (Unvegetated)	2.18	2.66	Permanent	Yes
Recyclex TRM-V (Vegetated)	3.38	6	Permanent	Yes
TriNet Coconut (Unvegetated)	2.14	2.6	Permanent	N/A
TriNet Coconut (Vegetated)	4.14	10	Permanent	N/A
TriNet Curlex (Unvegetated)	2.14	2.6	Permanent	N/A
TriNet Curlex (Vegetated)	4.31	10	Permanent	N/A
TriNet Recyclex (Unvegetated)	2.14	2.6	Permanent	N/A
TriNet Recyclex (Vegetated)	4.47	11	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	2.14	2.6	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	3.78	10	Permanent	N/A

Trapezoidal Channel Analysis

Project Info



User Input

Bed Manning's n-Value (Nc): 0.032

Right Manning's n-Value (Nr): 0.032

Left-Side Slope (Zl) [H:1V]: 3

Bottom Width (B) [ft]: 2

Bend Coefficient (Kb): 1

Left Manning's n-Value (Nl): 0.032

Right-Side Slope (Zr) [H:1V]: 3

Bed Slope (S) [ft/ft]: 0.041

Design Discharge (Q) [ft³/sec]: 3.5

Hydraulic Results

Depth [ft]: 0.326

Froude: 1.28

Velocity [ft/sec]: 3.61

Shear [lb/ft²]: 0.834

Project Information

Designers Name: Kevin Garton

Designers Organization: Engineering Consulting

Project Number: 2190335

Project Segment: Channel 3

Project Description: Access Road (West Side) from Sta. 7+00 to 14+00

Project Start Date: --

Designers Title: engineer

Project Name: Snow Camp Mine

Project Location (City, State): Snow Camp, North Carolina

Applications(s):

7+00 to 14+00

Trapezoidal Channel Analysis Result

Good	Better	Best
TriNet Coconut (Vegetated)	TriNet Curlex (Vegetated)	TriNet Recyclex (Vegetated)

Stability factors less than one are highlighted **RED** and mean the material is likely to fail if the calculated hydraulic conditions are encountered.

DOT Approvals for : North Carolina

Product Comparison Chart

Rolled Erosion Control Products	Velocity	Shear Stress	Functional Longevity (months)	DOT Approved (for channels)
AEC Premier Coconut	2.04	2.7	up to 36	Yes
AEC Premier Straw DN QM (White Net)	1.8	2.1	up to 3	Yes
AEC Premier Straw Double Net	1.8	2.1	up to 12	Yes
AEC Premier Straw Single Net	1.69	1.86	up to 12	Yes
AEC Premier Straw SN QM (White Net)	1.69	1.86	up to 3	Yes
AEC Premier Straw/Coconut	1.92	2.4	up to 24	Yes
Curlex Enforcer (Unvegetated)	2.45	3.9	Permanent	Yes
Curlex Enforcer (Vegetated)	4.29	12	Permanent	Yes
Curlex High Velocity (HV)	2.45	3.9	36+	Yes
Curlex I	1.8	2.1	up to 18	Yes
Curlex I CL	1.72	1.92	up to 15	Yes
Curlex I CL QuickMow (White Net)	1.72	1.92	up to 3	Yes
Curlex I QuickMow (White Net)	1.8	2.1	up to 3	Yes
Curlex II	2.04	2.7	up to 24	Yes
Curlex II .98	2.15	3	up to 30	N/A
Curlex II CL	1.82	2.16	up to 18	Yes
Curlex II CL QuickMow (White Net)	1.82	2.16	up to 3	Yes
Curlex II QuickMow (White Net)	2.04	2.7	up to 3	Yes
Curlex III	2.15	3	up to 36	Yes
Curlex NetFree	1.36	1.2	up to 18	Yes
Recyclex TRM (Unvegetated)	2.5	4.05	Permanent	Yes
Recyclex TRM (Vegetated)	4.5	13.2	Permanent	Yes
Recyclex TRM-V (Unvegetated)	2.47	3.98	Permanent	Yes
Recyclex TRM-V (Vegetated)	3.84	9.59	Permanent	Yes
TriNet Coconut (Unvegetated)	2.43	3.84	Permanent	N/A
TriNet Coconut (Vegetated)	4.7	14.4	Permanent	N/A
TriNet Curlex (Unvegetated)	2.43	3.84	Permanent	N/A
TriNet Curlex (Vegetated)	4.89	15.6	Permanent	N/A
TriNet Recyclex (Unvegetated)	2.43	3.84	Permanent	N/A
TriNet Recyclex (Vegetated)	5.08	16.8	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	2.43	3.84	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	4.29	12	Permanent	N/A



Trapezoidal Channel Analysis

Project Info



User Input

Bed Manning's n-Value (Nc): 0.032

Left Manning's n-Value (Nl): 0.032

Right Manning's n-Value (Nr): 0.032

Right-Side Slope (Zr) [H:1V]: 3

Left-Side Slope (Zl) [H:1V]: 3

Bed Slope (S) [ft/ft]: 0.0363

Bottom Width (B) [ft]: 2

Design Discharge (Q) [ft³/sec]: 5.12

Bend Coefficient (Kb): 1

Hydraulic Results

Depth [ft]: 0.41

Velocity [ft/sec]: 3.87

Froude: 1.25

Shear [lb/ft²]: 0.928

Project Information

Designers Name: Kevin Garton

Designers Title: engineer

Designers Organization: Engineering Consulting

Project Name: Snow Camp Mine

Project Number: 2190335

Project Location (City, State): Snow Camp, North Carolina

Project Segment: Channel 4

Applications(s):

Project Description: Access Road (East Side) from Sta. 8+00 to Sta. 8+150 Date: --

Project Start Date: --

8+50 to 14+00

Trapezoidal Channel Analysis Result

Good	Better	Best
TriNet Coconut (Vegetated)	TriNet Curlex (Vegetated)	TriNet Recyclax (Vegetated)

Stability factors less than one are highlighted **RED** and mean the material is likely to fail if the calculated hydraulic conditions are encountered.

DOT Approvals for : North Carolina

Product Comparison Chart

Rolled Erosion Control Products	Velocity	Shear Stress	Functional Longevity (months)	DOT Approved (for channels)
AEC Premier Coconut	1.97	2.42	up to 36	Yes
AEC Premier Straw DN QM (White Net)	1.74	1.89	up to 3	Yes
AEC Premier Straw Double Net	1.74	1.89	up to 12	Yes
AEC Premier Straw Single Net	1.64	1.67	up to 12	Yes
AEC Premier Straw SN QM (White Net)	1.64	1.67	up to 3	Yes
AEC Premier Straw/Coconut	1.86	2.16	up to 24	Yes
Curlex Enforcer (Unvegetated)	2.37	3.5	Permanent	Yes
Curlex Enforcer (Vegetated)	4.16	10.8	Permanent	Yes
Curlex High Velocity (HV)	2.37	3.5	36+	Yes
Curlex I	1.74	1.89	up to 18	Yes
Curlex I CL	1.66	1.72	up to 15	Yes
Curlex I CL QuickMow (White Net)	1.66	1.72	up to 3	Yes
Curlex I QuickMow (White Net)	1.74	1.89	up to 3	Yes
Curlex II	1.97	2.42	up to 24	Yes
Curlex II .98	2.08	2.69	up to 30	N/A
Curlex II CL	1.76	1.94	up to 18	Yes
Curlex II CL QuickMow (White Net)	1.76	1.94	up to 3	Yes
Curlex II QuickMow (White Net)	1.97	2.42	up to 3	Yes
Curlex III	2.08	2.69	up to 36	Yes
Curlex NetFree	1.32	1.08	up to 18	Yes
Recyclcx TRM (Unvegetated)	2.42	3.64	Permanent	Yes
Recyclcx TRM (Vegetated)	4.36	11.9	Permanent	Yes
Recyclcx TRM-V (Unvegetated)	2.4	3.58	Permanent	Yes
Recyclcx TRM-V (Vegetated)	3.72	8.62	Permanent	Yes
TriNet Coconut (Unvegetated)	2.35	3.45	Permanent	N/A
TriNet Coconut (Vegetated)	4.56	12.9	Permanent	N/A
TriNet Curlex (Unvegetated)	2.35	3.45	Permanent	N/A
TriNet Curlex (Vegetated)	4.74	14	Permanent	N/A
TriNet Recyclcx (Unvegetated)	2.35	3.45	Premanent	N/A
TriNet Recyclcx (Vegetated)	4.92	15.1	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	2.35	3.45	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	4.16	10.8	Permanent	N/A

Jul 11th, 2019

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Trapezoidal Channel Analysis

Project Info

User Input

Bed Manning's n-Value (Nc): 0.032

Right Manning's n-Value (Nr): 0.032

Left-Side Slope (Zl) [H:1V]: 3

Bottom Width (B) [ft]: 2

Bend Coefficient (Kb): 1

Left Manning's n-Value (Nl): 0.032

Right-Side Slope (Zr) [H:1V]: 3

Bed Slope (S) [ft/ft]: 0.1125

Design Discharge (Q) [ft³/sec]: 4.55



Hydraulic Results

Depth [ft]: 0.287

Froude: 2.08

Velocity [ft/sec]: 5.55

Shear [lb/ft²]: 2.01

Project Information

Designers Name: Kevin Garton

Designers Organization: Engineering Consulting

Project Number: 2190335

Project Segment: Channel 5

Project Description: Access Road (West Side) Sta. 18+50 Project Bid Date: --

Project Start Date: --

Designers Title: engineer

Project Name: Snow Camp Mine

Project Location (City, State): Snow Camp, North Carolina

Applications(s):

182010 SKimmer Co

Trapezoidal Channel Analysis Result

Good	Better	Best
TriNet Coconut (Vegetated)	TriNet Curlex (Vegetated)	TriNet Recyclax (Vegetated)

Stability factors less than one are highlighted **RED** and mean the material is likely to fail if the calculated hydraulic conditions are encountered.

DOT Approvals for : North Carolina

Product Comparison Chart

Rolled Erosion Control Products	Velocity	Shear Stress	Functional Longevity (months)	DOT Approved (for channels)
AEC Premier Coconut	1.3	1.12	up to 36	Yes
AEC Premier Straw DN QM (White Net)	1.14	0.871	up to 3	Yes
AEC Premier Straw Double Net	1.14	0.871	up to 12	Yes
AEC Premier Straw Single Net	1.08	0.771	up to 12	Yes
AEC Premier Straw SN QM (White Net)	1.08	0.771	up to 3	Yes
AEC Premier Straw/Coconut	1.22	0.995	up to 24	Yes
Curlex Enforcer (Unvegetated)	1.56	1.62	Permanent	Yes
Curlex Enforcer (Vegetated)	2.73	4.98	Permanent	Yes
Curlex High Velocity (HV)	1.56	1.62	36+	Yes
Curlex I	1.14	0.871	up to 18	Yes
Curlex I CL	1.09	0.796	up to 15	Yes
Curlex I CL QuickMow (White Net)	1.09	0.796	up to 3	Yes
Curlex I QuickMow (White Net)	1.14	0.871	up to 3	Yes
Curlex II	1.3	1.12	up to 24	Yes
Curlex II .98	1.37	1.24	up to 30	N/A
Curlex II CL	1.16	0.896	up to 18	Yes
Curlex II CL QuickMow (White Net)	1.16	0.896	up to 3	Yes
Curlex II QuickMow (White Net)	1.3	1.12	up to 3	Yes
Curlex III	1.37	1.24	up to 36	Yes
Curlex NetFree	0.864	0.498	up to 18	Yes
Recyclex TRM (Unvegetated)	1.59	1.68	Permanent	Yes
Recyclex TRM (Vegetated)	2.87	5.47	Permanent	Yes
Recyclex TRM-V (Unvegetated)	1.57	1.65	Permanent	Yes
Recyclex TRM-V (Vegetated)	2.44	3.98	Permanent	Yes
TriNet Coconut (Unvegetated)	1.55	1.59	Permanent	N/A
TriNet Coconut (Vegetated)	2.99	5.97	Permanent	N/A
TriNet Curlex (Unvegetated)	1.55	1.59	Permanent	N/A
TriNet Curlex (Vegetated)	3.12	6.47	Permanent	N/A
TriNet Recyclex (Unvegetated)	1.55	1.59	Permanent	N/A
TriNet Recyclex (Vegetated)	3.23	6.97	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	1.55	1.59	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	2.73	4.98	Permanent	N/A

Trapezoidal Channel Analysis

Project Info



User Input

Bed Manning's n-Value (Nc): 0.032

Right Manning's n-Value (Nr): 0.032

Left-Side Slope (Zl) [H:1V]: 2

Bottom Width (B) [ft]: 3

Bend Coefficient (Kb): 1

Left Manning's n-Value (Nl): 0.032

Right-Side Slope (Zr) [H:1V]: 2

Bed Slope (S) [ft/ft]: 0.0693

Design Discharge (Q) [ft³/sec]: 13.64

Hydraulic Results

Depth [ft]: 0.517

Froude: 1.8

Velocity [ft/sec]: 6.54

Shear [lb/ft²]: 2.23

Project Information

Designers Name: Kevin Garton

Designers Organization: Engineering Consulting

Project Number: 2190335

Project Segment: Channel 6

Project Description: SK 8 to Stream Buffer

Project Start Date: --

Designers Title: engineer

Project Name: Snow Camp Mine

Project Location (City, State): Snow Camp, North Carolina

Applications(s):

Project Bid Date: --

Trapezoidal Channel Analysis Result

Good	Better	Best
TriNet Coconut (Vegetated)	TriNet Curlex (Vegetated)	TriNet Recyclax (Vegetated)

Stability factors less than one are highlighted **RED** and mean the material is likely to fail if the calculated hydraulic conditions are encountered.

DOT Approvals for : North Carolina

Product Comparison Chart

Rolled Erosion Control Products	Velocity	Shear Stress	Functional Longevity (months)	DOT Approved (for channels)
AEC Premier Coconut	1.21	1.01	up to 36	Yes
AEC Premier Straw DN QM (White Net)	1.07	0.785	up to 3	Yes
AEC Premier Straw Double Net	1.07	0.785	up to 12	Yes
AEC Premier Straw Single Net	1.01	0.695	up to 12	Yes
AEC Premier Straw SN QM (White Net)	1.01	0.695	up to 3	Yes
AEC Premier Straw/Coconut	1.14	0.897	up to 24	Yes
Curlex Enforcer (Unvegetated)	1.46	1.46	Permanent	Yes
Curlex Enforcer (Vegetated)	2.56	4.48	Permanent	Yes
Curlex High Velocity (HV)	1.46	1.46	36+	Yes
Curlex I	1.07	0.785	up to 18	Yes
Curlex I CL	1.02	0.717	up to 15	Yes
Curlex I CL QuickMow (White Net)	1.02	0.717	up to 3	Yes
Curlex I QuickMow (White Net)	1.07	0.785	up to 3	Yes
Curlex II	1.21	1.01	up to 24	Yes
Curlex II .98	1.28	1.12	up to 30	N/A
Curlex II CL	1.09	0.807	up to 18	Yes
Curlex II CL QuickMow (White Net)	1.09	0.807	up to 3	Yes
Curlex II QuickMow (White Net)	1.21	1.01	up to 3	Yes
Curlex III	1.28	1.12	up to 36	Yes
Curlex NetFree	0.809	0.448	up to 18	Yes
Recyclex TRM (Unvegetated)	1.49	1.52	Permanent	Yes
Recyclex TRM (Vegetated)	2.68	4.93	Permanent	Yes
Recyclex TRM-V (Unvegetated)	1.47	1.49	Permanent	Yes
Recyclex TRM-V (Vegetated)	2.29	3.59	Permanent	Yes
TriNet Coconut (Unvegetated)	1.45	1.43	Permanent	N/A
TriNet Coconut (Vegetated)	2.8	5.38	Permanent	N/A
TriNet Curlex (Unvegetated)	1.45	1.43	Permanent	N/A
TriNet Curlex (Vegetated)	2.92	5.83	Permanent	N/A
TriNet Recyclex (Unvegetated)	1.45	1.43	Permanent	N/A
TriNet Recyclex (Vegetated)	3.03	6.28	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	1.45	1.43	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	2.56	4.48	Permanent	N/A

Trapezoidal Channel Analysis

Project Info



User Input

Bed Manning's n-Value (Nc): 0.032

Right Manning's n-Value (Nr): 0.032

Left-Side Slope (Zl) [H:1V]: 2

Bottom Width (B) [ft]: 1

Bend Coefficient (Kb): 1

Left Manning's n-Value (Nl): 0.032

Right-Side Slope (Zr) [H:1V]: 2

Bed Slope (S) [ft/ft]: 0.01

Design Discharge (Q) [ft³/sec]: 20.59

Hydraulic Results

Depth [ft]: 1.42

Froude: 0.741

Velocity [ft/sec]: 3.79

Shear [lb/ft²]: 0.884

Project Information

Designers Name: Kevin Garton

Designers Organization: Engineering Consulting

Project Number: 2190335

Project Segment: Channel 7

Project Description: Exist. 18" RCP to FES 2

Project Start Date: --

Designers Title: engineer

Project Name: Snow Camp Mine

Project Location (City, State): Snow Camp, North Carolina

Applications(s):

Project Bid Date: --

Trapezoidal Channel Analysis Result

Good	Better	Best
TriNet Coconut (Vegetated)	TriNet Curlex (Vegetated)	TriNet Recyclax (Vegetated)

Stability factors less than one are highlighted **RED** and mean the material is likely to fail if the calculated hydraulic conditions are encountered.

DOT Approvals for : North Carolina

Product Comparison Chart

Rolled Erosion Control Products	Velocity	Shear Stress	Functional Longevity (months)	DOT Approved (for channels)
AEC Premier Coconut	2.48	2.55	up to 36	Yes
AEC Premier Straw DN QM (White Net)	2.19	1.98	up to 3	Yes
AEC Premier Straw Double Net	2.19	1.98	up to 12	Yes
AEC Premier Straw Single Net	2.06	1.75	up to 12	Yes
AEC Premier Straw SN QM (White Net)	2.06	1.75	up to 3	Yes
AEC Premier Straw/Coconut	2.34	2.26	up to 24	Yes
Curlex Enforcer (Unvegetated)	2.98	3.68	Permanent	Yes
Curlex Enforcer (Vegetated)	5.22	11.3	Permanent	Yes
Curlex High Velocity (HV)	2.98	3.68	36+	Yes
Curlex I	2.19	1.98	up to 18	Yes
Curlex I CL	2.09	1.81	up to 15	Yes
Curlex I CL QuickMow (White Net)	2.09	1.81	up to 3	Yes
Curlex I QuickMow (White Net)	2.19	1.98	up to 3	Yes
Curlex II	2.48	2.55	up to 24	Yes
Curlex II .98	2.61	2.83	up to 30	N/A
Curlex II CL	2.22	2.04	up to 18	Yes
Curlex II CL QuickMow (White Net)	2.22	2.04	up to 3	Yes
Curlex II QuickMow (White Net)	2.48	2.55	up to 3	Yes
Curlex III	2.61	2.83	up to 36	Yes
Curlex NetFree	1.65	1.13	up to 18	Yes
Recyclex TRM (Unvegetated)	3.04	3.82	Permanent	Yes
Recyclex TRM (Vegetated)	5.48	12.4	Permanent	Yes
Recyclex TRM-V (Unvegetated)	3.01	3.76	Permanent	Yes
Recyclex TRM-V (Vegetated)	4.67	9.05	Permanent	Yes
TriNet Coconut (Unvegetated)	2.96	3.62	Permanent	N/A
TriNet Coconut (Vegetated)	5.72	13.6	Permanent	N/A
TriNet Curlex (Unvegetated)	2.96	3.62	Permanent	N/A
TriNet Curlex (Vegetated)	5.96	14.7	Permanent	N/A
TriNet Recyclex (Unvegetated)	2.96	3.62	Permanent	N/A
TriNet Recyclex (Vegetated)	6.18	15.8	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	2.96	3.62	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	5.22	11.3	Permanent	N/A

Trapezoidal Channel Analysis

Project Info

User Input

Bed Manning's n-Value (Nc): 0.032

Right Manning's n-Value (Nr): 0.032

Left-Side Slope (Zl) [H:1V]: 2

Bottom Width (B) [ft]: 2

Bend Coefficient (Kb): 1

Left Manning's n-Value (Nl): 0.032

Right-Side Slope (Zr) [H:1V]: 2

Bed Slope (S) [ft/ft]: 0.0325

Design Discharge (Q) [ft³/sec]: 4.55

Hydraulic Results

Depth [ft]: 0.421

Froude: 1.17

Velocity [ft/sec]: 3.8

Shear [lb/ft²]: 0.855

Project Information

Designers Name: Kevin Garton

Designers Organization: Engineering Consulting

Project Number: 2190335

Project Segment: Channel 8

Project Description: Sta. 18+50 to Sta. 20+00

Project Start Date: --

Designers Title: engineer

Project Name: Snow Camp Mine

Project Location (City, State): Snow Camp, North Carolina

Applications(s):

Project Bid Date: --

Trapezoidal Channel Analysis Result



Good	Better	Best
TriNet Coconut (Vegetated)	TriNet Curlex (Vegetated)	TriNet Recyclex (Vegetated)

Stability factors less than one are highlighted **RED** and mean the material is likely to fail if the calculated hydraulic conditions are encountered.

DOT Approvals for : North Carolina

Product Comparison Chart

Rolled Erosion Control Products	Velocity	Shear Stress	Functional Longevity (months)	DOT Approved (for channels)
AEC Premier Coconut	2.02	2.63	up to 36	Yes
AEC Premier Straw DN QM (White Net)	1.78	2.05	up to 3	Yes
AEC Premier Straw Double Net	1.78	2.05	up to 12	Yes
AEC Premier Straw Single Net	1.68	1.81	up to 12	Yes
AEC Premier Straw SN QM (White Net)	1.68	1.81	up to 3	Yes
AEC Premier Straw/Coconut	1.9	2.34	up to 24	Yes
Curlex Enforcer (Unvegetated)	2.43	3.8	Permanent	Yes
Curlex Enforcer (Vegetated)	4.25	11.7	Permanent	Yes
Curlex High Velocity (HV)	2.43	3.8	36+	Yes
Curlex I	1.78	2.05	up to 18	Yes
Curlex I CL	1.7	1.87	up to 15	Yes
Curlex I CL QuickMow (White Net)	1.7	1.87	up to 3	Yes
Curlex I QuickMow (White Net)	1.78	2.05	up to 3	Yes
Curlex II	2.02	2.63	up to 24	Yes
Curlex II .98	2.13	2.92	up to 30	N/A
Curlex II CL	1.81	2.11	up to 18	Yes
Curlex II CL QuickMow (White Net)	1.81	2.11	up to 3	Yes
Curlex II QuickMow (White Net)	2.02	2.63	up to 3	Yes
Curlex III	2.13	2.92	up to 36	Yes
Curlex NetFree	1.35	1.17	up to 18	Yes
Recyclex TRM (Unvegetated)	2.47	3.95	Permanent	Yes
Recyclex TRM (Vegetated)	4.46	12.9	Permanent	Yes
Recyclex TRM-V (Unvegetated)	2.45	3.88	Permanent	Yes
Recyclex TRM-V (Vegetated)	3.81	9.36	Permanent	Yes
TriNet Coconut (Unvegetated)	2.41	3.74	Permanent	N/A
TriNet Coconut (Vegetated)	4.66	14	Permanent	N/A
TriNet Curlex (Unvegetated)	2.41	3.74	Permanent	N/A
TriNet Curlex (Vegetated)	4.85	15.2	Permanent	N/A
TriNet Recyclex (Unvegetated)	2.41	3.74	Permanent	N/A
TriNet Recyclex (Vegetated)	5.03	16.4	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	2.41	3.74	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	4.25	11.7	Permanent	N/A

Trapezoidal Channel Analysis

Project Info



User Input

Bed Manning's n-Value (Nc): 0.032

Right Manning's n-Value (Nr): 0.032

Left-Side Slope (Zl) [H:1V]: 2

Bottom Width (B) [ft]: 2

Bend Coefficient (Kb): 1

Left Manning's n-Value (Nl): 0.032

Right-Side Slope (Zr) [H:1V]: 2

Bed Slope (S) [ft/ft]: 0.035

Design Discharge (Q) [ft³/sec]: 5.81

Hydraulic Results

Depth [ft]: 0.469

Froude: 1.24

Velocity [ft/sec]: 4.21

Shear [lb/ft²]: 1.03

Project Information

Designers Name: Kevin Garton

Designers Organization: Engineering Consulting

Project Number: 2190335

Project Segment: Channel 9

Project Description: SK 7 to Sta. 20+00

Project Start Date: --

Designers Title: engineer

Project Name: Snow Camp Mine

Project Location (City, State): Snow Camp, North Carolina

Applications(s):

Project Bid Date: --

Trapezoidal Channel Analysis Result

Good	Better	Best
TriNet Coconut (Vegetated)	TriNet Curlex (Vegetated)	TriNet Recyclex (Vegetated)

Stability factors less than one are highlighted **RED** and mean the material is likely to fail if the calculated hydraulic conditions are encountered.

DOT Approvals for : North Carolina

Product Comparison Chart

Rolled Erosion Control Products	Velocity	Shear Stress	Functional Longevity (months)	DOT Approved (for channels)
AEC Premier Coconut	1.85	2.18	up to 36	Yes
AEC Premier Straw DN QM (White Net)	1.64	1.7	up to 3	Yes
AEC Premier Straw Double Net	1.64	1.7	up to 12	Yes
AEC Premier Straw Single Net	1.54	1.5	up to 12	Yes
AEC Premier Straw SN QM (White Net)	1.54	1.5	up to 3	Yes
AEC Premier Straw/Coconut	1.75	1.94	up to 24	Yes
Curlex Enforcer (Unvegetated)	2.23	3.16	Permanent	Yes
Curlex Enforcer (Vegetated)	3.91	9.71	Permanent	Yes
Curlex High Velocity (HV)	2.23	3.16	36+	Yes
Curlex I	1.64	1.7	up to 18	Yes
Curlex I CL	1.56	1.55	up to 15	Yes
Curlex I CL QuickMow (White Net)	1.56	1.55	up to 3	Yes
Curlex I QuickMow (White Net)	1.64	1.7	up to 3	Yes
Curlex II	1.85	2.18	up to 24	Yes
Curlex II .98	1.96	2.43	up to 30	N/A
Curlex II CL	1.66	1.75	up to 18	Yes
Curlex II CL QuickMow (White Net)	1.66	1.75	up to 3	Yes
Curlex II QuickMow (White Net)	1.85	2.18	up to 3	Yes
Curlex III	1.96	2.43	up to 36	Yes
Curlex NetFree	1.24	0.971	up to 18	Yes
Recyclex TRM (Unvegetated)	2.27	3.28	Permanent	Yes
Recyclex TRM (Vegetated)	4.1	10.7	Permanent	Yes
Recyclex TRM-V (Unvegetated)	2.25	3.22	Permanent	Yes
Recyclex TRM-V (Vegetated)	3.5	7.77	Permanent	Yes
TriNet Coconut (Unvegetated)	2.21	3.11	Permanent	N/A
TriNet Coconut (Vegetated)	4.28	11.7	Permanent	N/A
TriNet Curlex (Unvegetated)	2.21	3.11	Permanent	N/A
TriNet Curlex (Vegetated)	4.46	12.6	Permanent	N/A
TriNet Recyclex (Unvegetated)	2.21	3.11	Permanent	N/A
TriNet Recyclex (Vegetated)	4.63	13.6	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	2.21	3.11	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	3.91	9.71	Permanent	N/A