Trapezoidal Channel Analysis

Project Info

American Excelsior Company®
Earth Science Division

5/6/19
PRS

User Input

Bed Manning's n-Value (Nc): .032

Left Manning's n-Value (Nl): .032

Right Manning's n-Value (Nr): .032

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

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

Bed Slope (S) [ft/ft]: 0.0095

Bottom Width (B) [ft]: 1

Design Discharge (Q) [ft³/sec]: 20.59

$Q_{10} = 0.35(7.04\ in/hr)(8.36\ Ac)$

$Q_{10} =$

Bend Coefficient (Kb): 1

Hydraulic Results

Depth [ft]: 1.43

Velocity [ft/sec]: 3.74

Froude: 0.727

Shear [lb/ft²]: 0.847

Project Information

Designers Name: Paul Stimpson

Designers Title: engineer

Designers Organization: LaBella

Project Name: Snow Camp

Project Number: 2190335

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

Project Segment: Existing 18" RCP to FES 2

Applications(s):

Project Description: Existing 18" RCP to FES 2 channel stabilization

Project Bid Date: --

Project Start Date: --

Trapezoidal Channel

Analysis Result

American Excelsior Company®
Earth Science Division

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	2.51	2.66	up to 36	Yes
AEC Premier Straw DN QM (White Net)	2.22	2.07	up to 3	Yes
AEC Premier Straw Double Net	2.22	2.07	up to 12	Yes
AEC Premier Straw Single Net	2.09	1.83	up to 12	Yes
AEC Premier Straw SN QM (White Net)	2.09	1.83	up to 3	Yes
AEC Premier Straw/Coconut	2.37	2.36	up to 24	Yes
Curlex Enforcer (Unvegetated)	3.02	3.84	Permanent	Yes
Curlex Enforcer (Vegetated)	5.3	11.8	Permanent	Yes
Curlex High Velocity (HV)	3.02	3.84	36+	Yes
Curlex I	2.22	2.07	up to 18	Yes
Curlex I CL	2.12	1.89	up to 15	Yes
Curlex I CL QuickMow (White Net)	2.12	1.89	up to 3	Yes
Curlex I QuickMow (White Net)	2.22	2.07	up to 3	Yes
Curlex II	2.51	2.66	up to 24	Yes
Curlex II .98	2.65	2.95	up to 30	N/A
Curlex II CL	2.25	2.13	up to 18	Yes
Curlex II CL QuickMow (White Net)	2.25	2.13	up to 3	Yes
Curlex II QuickMow (White Net)	2.51	2.66	up to 3	Yes
Use Curlex III	2.65	2.95	up to 36	Yes
Curlex NetFree	1.68	1.18	up to 18	Yes
Recyclex TRM (Unvegetated)	3.08	3.99	Permanent	Yes
Recyclex TRM (Vegetated)	5.56	13	Permanent	Yes
Recyclex TRM-V (Unvegetated)	3.05	3.92	Permanent	Yes
Recyclex TRM-V (Vegetated)	4.74	9.45	Permanent	Yes
TriNet Coconut (Unvegetated)	3	3.78	Permanent	N/A
TriNet Coconut (Vegetated)	5.81	14.2	Permanent	N/A
TriNet Curlex (Unvegetated)	3	3.78	Permanent	N/A
TriNet Curlex (Vegetated)	6.04	15.3	Permanent	N/A
TriNet Recyclex (Unvegetated)	3	3.78	Premanent	N/A
TriNet Recyclex (Vegetated)	6.27	16.5	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	3	3.78	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	5.3	11.8	Permanent	N/A

Trapezoidal Channel Analysis

Project Info

American Excelsior Company®
Earth Science Division

3/27/19

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]: 11.73

Q_{10}=3.704ac (0.45) (7.04 in/hr)

A < 1

Bend Coefficient (Kb): 1

Hydraulic Results

Depth [ft]: 0.655

Velocity [ft/sec]: 4.52

Froude: 1.2

Shear [lb/ft²]: 1.21

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): Alamance County, North Carolina

FES 1

Project Segment: [redacted] to 6+50

Applications(s):

Project Description:

Project Bid Date: --

Project Start Date: --

Trapezoidal Channel

Analysis Result

American Excelsior Company®
Earth Science Division

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	1.83	1.86	up to 36	Yes
AEC Premier Straw DN QM (White Net)	1.61	1.45	up to 3	Yes
AEC Premier Straw Double Net	1.61	1.45	up to 12	Yes
AEC Premier Straw Single Net	1.52	1.28	up to 12	Yes
AEC Premier Straw SN QM (White Net)	1.52	1.28	up to 3	Yes
AEC Premier Straw/Coconut	1.72	1.65	up to 24	Yes
Curlex Enforcer (Unvegetated)	2.2	2.69	Permanent	Yes
Curlex Enforcer (Vegetated)	3.85	8.26	Permanent	Yes
Curlex High Velocity (HV)	2.2	2.69	36+	Yes
use Curlex I Curlex I	1.61	1.45	up to 18	Yes
Curlex I CL	1.54	1.32	up to 15	Yes
Curlex I CL QuickMow (White Net)	1.54	1.32	up to 3	Yes
Curlex I QuickMow (White Net)	1.61	1.45	up to 3	Yes
Curlex II	1.83	1.86	up to 24	Yes
Curlex II .98	1.93	2.07	up to 30	N/A
Curlex II CL	1.63	1.49	up to 18	Yes
Curlex II CL QuickMow (White Net)	1.63	1.49	up to 3	Yes
Curlex II QuickMow (White Net)	1.83	1.86	up to 3	Yes
Curlex III	1.93	2.07	up to 36	Yes
Curlex NetFree	1.22	0.826	up to 18	Yes
Recyclex TRM (Unvegetated)	2.24	2.79	Permanent	Yes
Recyclex TRM (Vegetated)	4.04	9.09	Permanent	Yes
Recyclex TRM-V (Unvegetated)	2.22	2.74	Permanent	Yes
Recyclex TRM-V (Vegetated)	3.44	6.61	Permanent	Yes
TriNet Coconut (Unvegetated)	2.18	2.64	Permanent	N/A
TriNet Coconut (Vegetated)	4.22	9.92	Permanent	N/A
TriNet Curlex (Unvegetated)	2.18	2.64	Permanent	N/A
TriNet Curlex (Vegetated)	4.39	10.7	Permanent	N/A
TriNet Recyclex (Unvegetated)	2.18	2.64	Premanent	N/A
TriNet Recyclex (Vegetated)	4.56	11.6	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	2.18	2.64	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	3.85	8.26	Permanent	N/A

American Excelsior Company®
Earth Science Division

Trapezoidal Channel Analysis

Project Info

3/27/19

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]: 0.0311

Bottom Width (B) [ft]: 2

Design Discharge (Q) [ft³/sec]: 3.168

Q_{10}= 1.0 Ac (0.45) (7.04 in/hr.)
A C I

Bend Coefficient (Kb): 1

Hydraulic Results

Depth [ft]: 0.333

Velocity [ft/sec]: 3.18

Froude: 1.12

Shear [lb/ft²]: 0.646

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): Alamance County, North Carolina

FES2
Project Segment: [redacted] to 6+50

Applications(s):

Project Description:

Project Bid Date: --

Project Start Date: --

Trapezoidal Channel

Analysis Result

American Excelsior Company®
Earth Science Division

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	2.32	3.48	up to 36	Yes
AEC Premier Straw DN QM (White Net)	2.05	2.71	up to 3	Yes
AEC Premier Straw Double Net	2.05	2.71	up to 12	Yes
AEC Premier Straw Single Net	1.93	2.4	up to 12	Yes
AEC Premier Straw SN QM (White Net)	1.93	2.4	up to 3	Yes
AEC Premier Straw/Coconut	2.19	3.1	up to 24	Yes
Curlex Enforcer (Unvegetated)	2.79	5.03	Permanent	Yes
Curlex Enforcer (Vegetated)	4.89	15.5	Permanent	Yes
Curlex High Velocity (HV)	2.79	5.03	36+	Yes
use Curlex I Curlex I	2.05	2.71	up to 18	Yes
Curlex I CL	1.96	2.48	up to 15	Yes
Curlex I CL QuickMow (White Net)	1.96	2.48	up to 3	Yes
Curlex I QuickMow (White Net)	2.05	2.71	up to 3	Yes
Curlex II	2.32	3.48	up to 24	Yes
Curlex II .98	2.44	3.87	up to 30	N/A
Curlex II CL	2.07	2.79	up to 18	Yes
Curlex II CL QuickMow (White Net)	2.07	2.79	up to 3	Yes
Curlex II QuickMow (White Net)	2.32	3.48	up to 3	Yes
Curlex III	2.44	3.87	up to 36	Yes
Curlex NetFree	1.55	1.55	up to 18	Yes
Recyclex TRM (Unvegetated)	2.84	5.23	Permanent	Yes
Recyclex TRM (Vegetated)	5.13	17	Permanent	Yes
Recyclex TRM-V (Unvegetated)	2.82	5.14	Permanent	Yes
Recyclex TRM-V (Vegetated)	4.37	12.4	Permanent	Yes
TriNet Coconut (Unvegetated)	2.77	4.95	Permanent	N/A
TriNet Coconut (Vegetated)	5.36	18.6	Permanent	N/A
TriNet Curlex (Unvegetated)	2.77	4.95	Permanent	N/A
TriNet Curlex (Vegetated)	5.58	20.1	Permanent	N/A
TriNet Recyclex (Unvegetated)	2.77	4.95	Premanent	N/A
TriNet Recyclex (Vegetated)	5.79	21.7	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	2.77	4.95	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	4.89	15.5	Permanent	N/A

Trapezoidal Channel Analysis

Project Info

American Excelsior Company®
Earth Science Division

3/27/19

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]: 0.0311

Bottom Width (B) [ft]: 2

Design Discharge (Q) [ft³/sec]: 3.104

Bend Coefficient (Kb): 1

Q_{10}=0.45 (0.98 Ac) (7.04 in/hr)

Hydraulic Results

Depth [ft]: 0.329

Velocity [ft/sec]: 3.16

Froude: 1.12

Shear [lb/ft²]: 0.638

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): Alamance County, North Carolina

Project Segment: Access Road (West Side) 7+00 to ~~15+00~~ STA: 14+00

Applications(s):

Project Description:

Project Bid Date: --

Project Start Date: --

Trapezoidal Channel

Analysis Result

American Excelsior Company®
Earth Science Division

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	2.33	3.53	up to 36	Yes
AEC Premier Straw DN QM (White Net)	2.05	2.74	up to 3	Yes
AEC Premier Straw Double Net	2.05	2.74	up to 12	Yes
AEC Premier Straw Single Net	1.93	2.43	up to 12	Yes
AEC Premier Straw SN QM (White Net)	1.93	2.43	up to 3	Yes
AEC Premier Straw/Coconut	2.2	3.13	up to 24	Yes
Curlex Enforcer (Unvegetated)	2.8	5.09	Permanent	Yes
Curlex Enforcer (Vegetated)	4.91	15.7	Permanent	Yes
Curlex High Velocity (HV)	2.8	5.09	36+	Yes
use Curlex I	2.05	2.74	up to 18	Yes
Curlex I CL	1.96	2.51	up to 15	Yes
Curlex I CL QuickMow (White Net)	1.96	2.51	up to 3	Yes
Curlex I QuickMow (White Net)	2.05	2.74	up to 3	Yes
Curlex II	2.33	3.53	up to 24	Yes
Curlex II .98	2.46	3.92	up to 30	N/A
Curlex II CL	2.08	2.82	up to 18	Yes
Curlex II CL QuickMow (White Net)	2.08	2.82	up to 3	Yes
Curlex II QuickMow (White Net)	2.33	3.53	up to 3	Yes
Curlex III	2.46	3.92	up to 36	Yes
Curlex NetFree	1.55	1.57	up to 18	Yes
Recyclex TRM (Unvegetated)	2.85	5.3	Permanent	Yes
Recyclex TRM (Vegetated)	5.15	17.2	Permanent	Yes
Recyclex TRM-V (Unvegetated)	2.83	5.2	Permanent	Yes
Recyclex TRM-V (Vegetated)	4.39	12.5	Permanent	Yes
TriNet Coconut (Unvegetated)	2.78	5.02	Permanent	N/A
TriNet Coconut (Vegetated)	5.38	18.8	Permanent	N/A
TriNet Curlex (Unvegetated)	2.78	5.02	Permanent	N/A
TriNet Curlex (Vegetated)	5.6	20.4	Permanent	N/A
TriNet Recyclex (Unvegetated)	2.78	5.02	Premanent	N/A
TriNet Recyclex (Vegetated)	5.81	21.9	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	2.78	5.02	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	4.91	15.7	Permanent	N/A

Trapezoidal Channel Analysis

Project Info

American Excelsior Company®
Earth Science Division

3/27/19

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]: 0.0415

Bottom Width (B) [ft]: 2

Design Discharge (Q) [ft³/sec]: 4.498

Bend Coefficient (Kb): 1

Q_{10}=(0.45)(1.42 ac) (7.04 in/hr)

Hydraulic Results

Depth [ft]: 0.37

Velocity [ft/sec]: 3.9

Froude: 1.32

Shear [lb/ft²]: 0.959

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): Alamance County, North Carolina

Project Segment: Access Road (East Side) 8+50 to ~~15+00~~ STA. 14+00

Applications(s):

Project Description:

Project Bid Date: --

Project Start Date: --

Trapezoidal Channel

Analysis Result

American Excelsior Company®
Earth Science Division

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	1.92	2.35	up to 36	Yes
AEC Premier Straw DN QM (White Net)	1.7	1.82	up to 3	Yes
AEC Premier Straw Double Net	1.7	1.82	up to 12	Yes
AEC Premier Straw Single Net	1.6	1.62	up to 12	Yes
AEC Premier Straw SN QM (White Net)	1.6	1.62	up to 3	Yes
AEC Premier Straw/Coconut	1.81	2.09	up to 24	Yes
Curlex Enforcer (Unvegetated)	2.31	3.39	Permanent	Yes
Curlex Enforcer (Vegetated)	4.06	10.4	Permanent	Yes
Curlex High Velocity (HV)	2.31	3.39	36+	Yes
Curlex I	1.7	1.82	up to 18	Yes
Curlex I CL	1.62	1.67	up to 15	Yes
Curlex I CL QuickMow (White Net)	1.62	1.67	up to 3	Yes
Curlex I QuickMow (White Net)	1.7	1.82	up to 3	Yes
Curlex II	1.92	2.35	up to 24	Yes
Curlex II .98	2.03	2.61	up to 30	N/A
Curlex II CL	1.72	1.88	up to 18	Yes
Curlex II CL QuickMow (White Net)	1.72	1.88	up to 3	Yes
Curlex II QuickMow (White Net)	1.92	2.35	up to 3	Yes
Curlex III	2.03	2.61	up to 36	Yes
Curlex NetFree	1.28	1.04	up to 18	Yes
Recyclex TRM (Unvegetated)	2.36	3.52	Permanent	Yes
Recyclex TRM (Vegetated)	4.26	11.5	Permanent	Yes
Recyclex TRM-V (Unvegetated)	2.34	3.46	Permanent	Yes
Recyclex TRM-V (Vegetated)	3.63	8.34	Permanent	Yes
TriNet Coconut (Unvegetated)	2.3	3.34	Permanent	N/A
TriNet Coconut (Vegetated)	4.44	12.5	Permanent	N/A
TriNet Curlex (Unvegetated)	2.3	3.34	Permanent	N/A
TriNet Curlex (Vegetated)	4.63	13.6	Permanent	N/A
TriNet Recyclex (Unvegetated)	2.3	3.34	Premanent	N/A
TriNet Recyclex (Vegetated)	4.8	14.6	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	2.3	3.34	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	4.06	10.4	Permanent	N/A

Trapezoidal Channel Analysis

Project Info

American Excelsior Company®
Earth Science Division

4/19/19
ATC

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]: 0.1097

Design Discharge (Q) [ft³/sec]: 9.09

Q_{10} = (0.45)(7.04in/hr)(2.87 Ac)

Hydraulic Results

Depth [ft]: 0.414

Froude: 2.19

Velocity [ft/sec]: 6.78

Shear [lb/ft²]: 2.83

Project Information

Designers Name: Andrew Cheek

Designers Organization: LaBella

Project Number: 2190335

Project Segment: ACCESS ROAD (EAST SIDE) STA 14+00 to

Project Description: Stream Buffer

Project Start Date: --

Designers Title: engineer

Project Name: Snow Camp Mine

Project Location (City, State): Alamance County, North Carolina

Applications(s):

Project Bid Date: --

Trapezoidal Channel

Analysis Result

American Excelsior Company®
Earth Science Division

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	1.13	0.795	up to 36	Yes
AEC Premier Straw DN QM (White Net)	0.995	0.618	up to 3	Yes
AEC Premier Straw Double Net	0.995	0.618	up to 12	Yes
AEC Premier Straw Single Net	0.936	0.548	up to 12	Yes
AEC Premier Straw SN QM (White Net)	0.936	0.548	up to 3	Yes
AEC Premier Straw/Coconut	1.06	0.707	up to 24	Yes
Curlex Enforcer (Unvegetated)	1.36	1.15	Permanent	Yes
Curlex Enforcer (Vegetated)	2.38	3.53	Permanent	Yes
✓ USE Curlex High Velocity (HV)	1.36	1.15	36+	Yes
Curlex I	0.995	0.618	up to 18	Yes
Curlex I CL	0.951	0.565	up to 15	Yes
Curlex I CL QuickMow (White Net)	0.951	0.565	up to 3	Yes
Curlex I QuickMow (White Net)	0.995	0.618	up to 3	Yes
Curlex II	1.13	0.795	up to 24	Yes
Curlex II .98	1.19	0.883	up to 30	N/A
Curlex II CL	1.01	0.636	up to 18	Yes
Curlex II CL QuickMow (White Net)	1.01	0.636	up to 3	Yes
Curlex II QuickMow (White Net)	1.13	0.795	up to 3	Yes
Curlex III	1.19	0.883	up to 36	Yes
Curlex NetFree	0.752	0.353	up to 18	Yes
Recyclex TRM (Unvegetated)	1.38	1.19	Permanent	Yes
Recyclex TRM (Vegetated)	2.49	3.89	Permanent	Yes
Recyclex TRM-V (Unvegetated)	1.37	1.17	Permanent	Yes
Recyclex TRM-V (Vegetated)	2.13	2.83	Permanent	Yes
TriNet Coconut (Unvegetated)	1.35	1.13	Permanent	N/A
TriNet Coconut (Vegetated)	2.61	4.24	Permanent	N/A
TriNet Curlex (Unvegetated)	1.35	1.13	Permanent	N/A
TriNet Curlex (Vegetated)	2.71	4.59	Permanent	N/A
TriNet Recyclex (Unvegetated)	1.35	1.13	Premanent	N/A
TriNet Recyclex (Vegetated)	2.81	4.95	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	1.35	1.13	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	2.38	3.53	Permanent	N/A

Trapezoidal Channel Analysis

Project Info

American Excelsior Company®
Earth Science Division

4/19/19
ATC

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]: 0.0533

Bottom Width (B) [ft]: 2

Design Discharge (Q) [ft³/sec]: 6.40

Q_{10} = (0.45)(7.04in/hr)(2.02 Ac)

Bend Coefficient (Kb): 1

Hydraulic Results

Depth [ft]: 0.417

Velocity [ft/sec]: 4.71

Froude: 1.51

Shear [lb/ft²]: 1.39

Project Information

Designers Name: Andrew Cheek

Designers Title: engineer

Designers Organization: LaBella

Project Name: Snow Camp Mine

Project Number: 2190335

Project Location (City, State): Alamance County, North Carolina

Project Segment: ACCESS ROAD (WEST SIDE)

Applications(s):

Project Description: STA 14+00 TO STREAM BUFFER

Project Bid Date: --

Project Start Date: --

Trapezoidal Channel

Analysis Result

American Excelsior Company®
Earth Science Division

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	1.63	1.62	up to 36	Yes
AEC Premier Straw DN QM (White Net)	1.43	1.26	up to 3	Yes
AEC Premier Straw Double Net	1.43	1.26	up to 12	Yes
AEC Premier Straw Single Net	1.35	1.12	up to 12	Yes
AEC Premier Straw SN QM (White Net)	1.35	1.12	up to 3	Yes
AEC Premier Straw/Coconut	1.53	1.44	up to 24	Yes
Curlex Enforcer (Unvegetated)	1.95	2.34	Permanent	Yes
Curlex Enforcer (Vegetated)	3.43	7.19	Permanent	Yes
Curlex High Velocity (HV)	1.95	2.34	36+	Yes
Curlex I	1.43	1.26	up to 18	Yes
Curlex I CL	1.37	1.15	up to 15	Yes
Curlex I CL QuickMow (White Net)	1.37	1.15	up to 3	Yes
Curlex I QuickMow (White Net)	1.43	1.26	up to 3	Yes
Curlex II	1.63	1.62	up to 24	Yes
Curlex II .98	1.71	1.8	up to 30	N/A
Curlex II CL	1.45	1.29	up to 18	Yes
Curlex II CL QuickMow (White Net)	1.45	1.29	up to 3	Yes
Curlex II QuickMow (White Net)	1.63	1.62	up to 3	Yes
Curlex III	1.71	1.8	up to 36	Yes
Curlex NetFree	1.08	0.719	up to 18	Yes
Recyclex TRM (Unvegetated)	1.99	2.43	Permanent	Yes
Recyclex TRM (Vegetated)	3.59	7.91	Permanent	Yes
Recyclex TRM-V (Unvegetated)	1.97	2.39	Permanent	Yes
Recyclex TRM-V (Vegetated)	3.07	5.76	Permanent	Yes
TriNet Coconut (Unvegetated)	1.94	2.3	Permanent	N/A
TriNet Coconut (Vegetated)	3.75	8.63	Permanent	N/A
TriNet Curlex (Unvegetated)	1.94	2.3	Permanent	N/A
TriNet Curlex (Vegetated)	3.91	9.35	Permanent	N/A
TriNet Recyclex (Unvegetated)	1.94	2.3	Premanent	N/A
TriNet Recyclex (Vegetated)	4.06	10.1	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	1.94	2.3	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	3.43	7.19	Permanent	N/A

Trapezoidal Channel Analysis

Project Info

American Excelsior Company®
Earth Science Division

4/19/19
ATC

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]: 0.1155

Bottom Width (B) [ft]: 2

Design Discharge (Q) [ft³/sec]: 6.56

Bend Coefficient (Kb): 1

Q_{10} = (0.45)(7.04in/hr)(2.07 Ac)

Hydraulic Results

Depth [ft]: 0.346

Velocity [ft/sec]: 6.25

Froude: 2.17

Shear [lb/ft²]: 2.49

Project Information

Designers Name: Andrew Cheek

Designers Title: engineer

Designers Organization: LaBella

Project Name: Snow Camp Mine

Project Number: 2190335

Project Location (City, State): Alamance County, North Carolina

Project Segment: ACCESS ROAD (EAST SIDE)

Applications(s):

Project Description: STA 18+50 TO STREAM BUFFER

Project Bid Date: --

Project Start Date: --

Trapezoidal Channel

Analysis Result

American
Excelsior
Company®
Earth Science Division

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	1.19	0.904	up to 36	Yes
AEC Premier Straw DN QM (White Net)	1.05	0.703	up to 3	Yes
AEC Premier Straw Double Net	1.05	0.703	up to 12	Yes
AEC Premier Straw Single Net	0.986	0.622	up to 12	Yes
AEC Premier Straw SN QM (White Net)	0.986	0.622	up to 3	Yes
AEC Premier Straw/Coconut	1.12	0.803	up to 24	Yes
Curlex Enforcer (Unvegetated)	1.43	1.31	Permanent	Yes
Curlex Enforcer (Vegetated)	2.5	4.02	Permanent	Yes
Curlex High Velocity (HV)	1.43	1.31	36+	Yes
Curlex I	1.05	0.703	up to 18	Yes
Curlex I CL	1	0.643	up to 15	Yes
Curlex I CL QuickMow (White Net)	1	0.643	up to 3	Yes
Curlex I QuickMow (White Net)	1.05	0.703	up to 3	Yes
Curlex II	1.19	0.904	up to 24	Yes
Curlex II .98	1.25	1	up to 30	N/A
Curlex II CL	1.06	0.723	up to 18	Yes
Curlex II CL QuickMow (White Net)	1.06	0.723	up to 3	Yes
Curlex II QuickMow (White Net)	1.19	0.904	up to 3	Yes
✓ Use Curlex III	1.25	1	up to 36	Yes
Curlex NetFree	0.792	0.402	up to 18	Yes
Recyclex TRM (Unvegetated)	1.46	1.36	Permanent	Yes
Recyclex TRM (Vegetated)	2.63	4.42	Permanent	Yes
Recyclex TRM-V (Unvegetated)	1.44	1.33	Permanent	Yes
Recyclex TRM-V (Vegetated)	2.24	3.21	Permanent	Yes
TriNet Coconut (Unvegetated)	1.42	1.29	Permanent	N/A
TriNet Coconut (Vegetated)	2.74	4.82	Permanent	N/A
TriNet Curlex (Unvegetated)	1.42	1.29	Permanent	N/A
TriNet Curlex (Vegetated)	2.85	5.22	Permanent	N/A
TriNet Recyclex (Unvegetated)	1.42	1.29	Premanent	N/A
TriNet Recyclex (Vegetated)	2.96	5.62	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	1.42	1.29	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	2.5	4.02	Permanent	N/A

Trapezoidal Channel Analysis

Project Info

American Excelsior Company®
Earth Science Division

3/27/19

User Input

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

Right Manning's n-Value (Nr): 0.05

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

Bottom Width (B) [ft]: 3

Bend Coefficient (Kb): 1

Left Manning's n-Value (Nl): 0.05

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

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

Design Discharge (Q) [ft^3/sec]: 11.98

Q_{10}=(0.35)(4.86 Ac)(7.04 in/hr)

Hydraulic Results

Depth [ft]: 0.544

Froude: 1.45

Velocity [ft/sec]: 5.38

Shear [lb/ft^2]: 2.35

Project Information

Designers Name: Kevin Garton

Designers Organization: Engineering Consulting

Project Number: 2190335

Project Segment: SK #8 to Stream Buffer

Project Description:

Project Start Date: --

Designers Title: engineer

Project Name: Snow Camp Mine

Project Location (City, State): Alamance County, North Carolina

Applications(s):

Project Bid Date: --

Trapezoidal Channel

Analysis Result

American Excelsior Company®
Earth Science Division

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	1.19	0.957	up to 36	Yes
AEC Premier Straw DN QM (White Net)	1.05	0.745	up to 3	Yes
AEC Premier Straw Double Net	1.05	0.745	up to 12	Yes
AEC Premier Straw Single Net	0.986	0.66	up to 12	Yes
AEC Premier Straw SN QM (White Net)	0.986	0.66	up to 3	Yes
AEC Premier Straw/Coconut	1.12	0.851	up to 24	Yes
Curlex Enforcer (Unvegetated)	1.43	1.38	Permanent	Yes
Curlex Enforcer (Vegetated)	2.51	4.26	Permanent	Yes
Curlex High Velocity (HV)	1.43	1.38	36+	Yes
Curlex I	1.05	0.745	up to 18	Yes
Curlex I CL	1	0.681	up to 15	Yes
Curlex I CL QuickMow (White Net)	1	0.681	up to 3	Yes
Curlex I QuickMow (White Net)	1.05	0.745	up to 3	Yes
Curlex II	1.19	0.957	up to 24	Yes
Curlex II .98	1.25	1.06	up to 30	N/A
Curlex II CL	1.06	0.766	up to 18	Yes
Curlex II CL QuickMow (White Net)	1.06	0.766	up to 3	Yes
Curlex II QuickMow (White Net)	1.19	0.957	up to 3	Yes
~~Curlex III~~	~~1.25~~	~~1.06~~	~~up to 36~~	~~Yes~~
Curlex NetFree	0.792	0.426	up to 18	Yes
Recyclex TRM (Unvegetated)	1.46	1.44	Permanent	Yes
Recyclex TRM (Vegetated)	2.63	4.68	Permanent	Yes
Recyclex TRM-V (Unvegetated)	1.44	1.41	Permanent	Yes
Recyclex TRM-V (Vegetated)	2.24	3.4	Permanent	Yes
TriNet Coconut (Unvegetated)	1.42	1.36	Permanent	N/A
TriNet Coconut (Vegetated)	2.74	5.11	Permanent	N/A
TriNet Curlex (Unvegetated)	1.42	1.36	Permanent	N/A
TriNet Curlex (Vegetated)	2.86	5.53	Permanent	N/A
TriNet Recyclex (Unvegetated)	1.42	1.36	Premanent	N/A
TriNet Recyclex (Vegetated)	2.96	5.96	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	1.42	1.36	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	2.51	4.26	Permanent	N/A

~~Curlex III on bottom of channel and rip rap side channels~~

Use class I RIP RAP 27" THICK

Use Cl. RipRap

✓

Trapezoidal Channel Analysis

Project Info

American Excelsior Company®
Earth Science Division

3/27/19

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]: 0.085

Bottom Width (B) [ft]: 2

Design Discharge (Q) [ft³/sec]: 1.83

Q_{10}=0.45(0.58 Ac)(7.04 in/hr)

Bend Coefficient (Kb): 1

Hydraulic Results

Depth [ft]: 0.187

Velocity [ft/sec]: 3.83

Froude: 1.72

Shear [lb/ft²]: 0.99

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): Alamance County, North Carolina

Project Segment: Access Road (East Side) 17+50 to ~~[illegible]~~ STA 20+00

Applications(s):

Project Description:

Project Bid Date: --

Project Start Date: --

Trapezoidal Channel

Analysis Result

American
Excelsior
Company®
Earth Science Division

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	1.75	2.27	up to 36	Yes
AEC Premier Straw DN QM (White Net)	1.54	1.77	up to 3	Yes
AEC Premier Straw Double Net	1.54	1.77	up to 12	Yes
AEC Premier Straw Single Net	1.45	1.57	up to 12	Yes
AEC Premier Straw SN QM (White Net)	1.45	1.57	up to 3	Yes
AEC Premier Straw/Coconut	1.65	2.02	up to 24	Yes
Curlex Enforcer (Unvegetated)	2.1	3.28	Permanent	Yes
Curlex Enforcer (Vegetated)	3.69	10.1	Permanent	Yes
Curlex High Velocity (HV)	2.1	3.28	36+	Yes
~~Curlex I~~	~~1.54~~	~~1.77~~	~~up to 18~~	~~Yes~~
Curlex I CL	1.47	1.62	up to 15	Yes
Curlex I CL QuickMow (White Net)	1.47	1.62	up to 3	Yes
Curlex I QuickMow (White Net)	1.54	1.77	up to 3	Yes
Curlex II	1.75	2.27	up to 24	Yes
Curlex II .98	1.84	2.53	up to 30	N/A
Curlex II CL	1.56	1.82	up to 18	Yes
Curlex II CL QuickMow (White Net)	1.56	1.82	up to 3	Yes
Curlex II QuickMow (White Net)	1.75	2.27	up to 3	Yes
use Curlex III	1.84	2.53	up to 36	Yes
Curlex NetFree	1.17	1.01	up to 18	Yes
Recyclex TRM (Unvegetated)	2.14	3.41	Permanent	Yes
Recyclex TRM (Vegetated)	3.87	11.1	Permanent	Yes
Recyclex TRM-V (Unvegetated)	2.12	3.35	Permanent	Yes
Recyclex TRM-V (Vegetated)	3.3	8.08	Permanent	Yes
TriNet Coconut (Unvegetated)	2.09	3.23	Permanent	N/A
TriNet Coconut (Vegetated)	4.04	12.1	Permanent	N/A
TriNet Curlex (Unvegetated)	2.09	3.23	Permanent	N/A
TriNet Curlex (Vegetated)	4.2	13.1	Permanent	N/A
TriNet Recyclex (Unvegetated)	2.09	3.23	Premanent	N/A
TriNet Recyclex (Vegetated)	4.36	14.1	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	2.09	3.23	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	3.69	10.1	Permanent	N/A

Trapezoidal Channel Analysis

Project Info

American Excelsior Company®
Earth Science Division

4/19/19
ATC

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]: 0.1144

Design Discharge (Q) [ft^3/sec]: 5.16

Q_{10} = (0.45)(7.04in/hr)(1.63 Ac)

Hydraulic Results

Depth [ft]: 0.303

Froude: 2.15

Velocity [ft/sec]: 5.86

Shear [lb/ft^2]: 2.16

Project Information

Designers Name: Andrew Cheek

Designers Organization: LaBella

Project Number: 2190335

Project Segment: ACCESS ROAD (WEST SIDE) FROM STREAM BUFFER TO STA 20+00

Project Description:

Project Start Date: --

Designers Title: engineer

Project Name: Snow Camp Mine

Project Location (City, State): Alamance County, North Carolina

Applications(s):

Project Bid Date: --

Trapezoidal Channel

Analysis Result

American
Excelsior
Company®
Earth Science Division

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	1.24	1.04	up to 36	Yes
AEC Premier Straw DN QM (White Net)	1.09	0.81	up to 3	Yes
AEC Premier Straw Double Net	1.09	0.81	up to 12	Yes
AEC Premier Straw Single Net	1.03	0.718	up to 12	Yes
AEC Premier Straw SN QM (White Net)	1.03	0.718	up to 3	Yes
AEC Premier Straw/Coconut	1.17	0.926	up to 24	Yes
Curlex Enforcer (Unvegetated)	1.49	1.5	Permanent	Yes
Curlex Enforcer (Vegetated)	2.61	4.63	Permanent	Yes
Curlex High Velocity (HV)	1.49	1.5	36+	Yes
Curlex I	1.09	0.81	up to 18	Yes
Curlex I CL	1.04	0.741	up to 15	Yes
Curlex I CL QuickMow (White Net)	1.04	0.741	up to 3	Yes
Curlex I QuickMow (White Net)	1.09	0.81	up to 3	Yes
~~Curlex II~~	~~1.24~~	~~1.04~~	~~up to 24~~	~~Yes~~
Curlex II .98	1.31	1.16	up to 30	N/A
Curlex II CL	1.11	0.833	up to 18	Yes
Curlex II CL QuickMow (White Net)	1.11	0.833	up to 3	Yes
Curlex II QuickMow (White Net)	1.24	1.04	up to 3	Yes
USE Curlex III	1.31	1.16	up to 36	Yes OK
Curlex NetFree	0.826	0.463	up to 18	Yes
Recyclex TRM (Unvegetated)	1.52	1.56	Permanent	Yes
Recyclex TRM (Vegetated)	2.74	5.09	Permanent	Yes
Recyclex TRM-V (Unvegetated)	1.51	1.54	Permanent	Yes
Recyclex TRM-V (Vegetated)	2.34	3.7	Permanent	Yes
TriNet Coconut (Unvegetated)	1.48	1.48	Permanent	N/A
TriNet Coconut (Vegetated)	2.86	5.56	Permanent	N/A
TriNet Curlex (Unvegetated)	1.48	1.48	Permanent	N/A
TriNet Curlex (Vegetated)	2.98	6.02	Permanent	N/A
TriNet Recyclex (Unvegetated)	1.48	1.48	Premanent	N/A
TriNet Recyclex (Vegetated)	3.09	6.48	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	1.48	1.48	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	2.61	4.63	Permanent	N/A

Trapezoidal Channel Analysis

Project Info

American Excelsior Company®
Earth Science Division

User Input

3/27/19

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]: 2

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

Bed Slope (S) [ft/ft]: 0.015

Bottom Width (B) [ft]: 3

Design Discharge (Q) [ft³/sec]: 8.82

Bend Coefficient (Kb): 1

Q=0.35 (7.04 in/hr)(3.58 Ac)

Hydraulic Results

Depth [ft]: 0.619

Velocity [ft/sec]: 3.36

Froude: 0.855

Shear [lb/ft²]: 0.58

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): Alamance County, North Carolina

Project Segment: SK #11 to Outfall (Stream Buffer)

Applications(s):

Project Description:

Project Bid Date: --

Project Start Date: --

Trapezoidal Channel

Analysis Result

American Excelsior Company®
Earth Science Division

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	2.43	3.88	up to 36	Yes
AEC Premier Straw DN QM (White Net)	2.15	3.02	up to 3	Yes
AEC Premier Straw Double Net	2.15	3.02	up to 12	Yes
AEC Premier Straw Single Net	2.02	2.67	up to 12	Yes
AEC Premier Straw SN QM (White Net)	2.02	2.67	up to 3	Yes
AEC Premier Straw/Coconut	2.29	3.45	up to 24	Yes
Curlex Enforcer (Unvegetated)	2.93	5.6	Permanent	Yes
Curlex Enforcer (Vegetated)	5.13	17.2	Permanent	Yes
Curlex High Velocity (HV)	2.93	5.6	36+	Yes
Curlex I	2.15	3.02	up to 18	Yes
Curlex I CL	2.05	2.76	up to 15	Yes
Curlex I CL QuickMow (White Net)	2.05	2.76	up to 3	Yes
Curlex I QuickMow (White Net)	2.15	3.02	up to 3	Yes
Curlex II	2.43	3.88	up to 24	Yes
Curlex II .98	2.57	4.31	up to 30	N/A
Curlex II CL	2.18	3.1	up to 18	Yes
Curlex II CL QuickMow (White Net)	2.18	3.1	up to 3	Yes
Curlex II QuickMow (White Net)	2.43	3.88	up to 3	Yes
Curlex III	2.57	4.31	up to 36	Yes
Curlex NetFree	1.62	1.72	up to 18	Yes
Recyclex TRM (Unvegetated)	2.98	5.83	Permanent	Yes
Recyclex TRM (Vegetated)	5.38	19	Permanent	Yes
Recyclex TRM-V (Unvegetated)	2.96	5.72	Permanent	Yes
Recyclex TRM-V (Vegetated)	4.59	13.8	Permanent	Yes
TriNet Coconut (Unvegetated)	2.9	5.52	Permanent	N/A
TriNet Coconut (Vegetated)	5.62	20.7	Permanent	N/A
TriNet Curlex (Unvegetated)	2.9	5.52	Permanent	N/A
TriNet Curlex (Vegetated)	5.85	22.4	Permanent	N/A
TriNet Recyclex (Unvegetated)	2.9	5.52	Premanent	N/A
TriNet Recyclex (Vegetated)	6.07	24.1	Permanent	N/A
TriNet Straw/Coconut (Unvegetated)	2.9	5.52	Permanent	N/A
TriNet Straw/Coconut (Vegetated)	5.13	17.2	Permanent	N/A