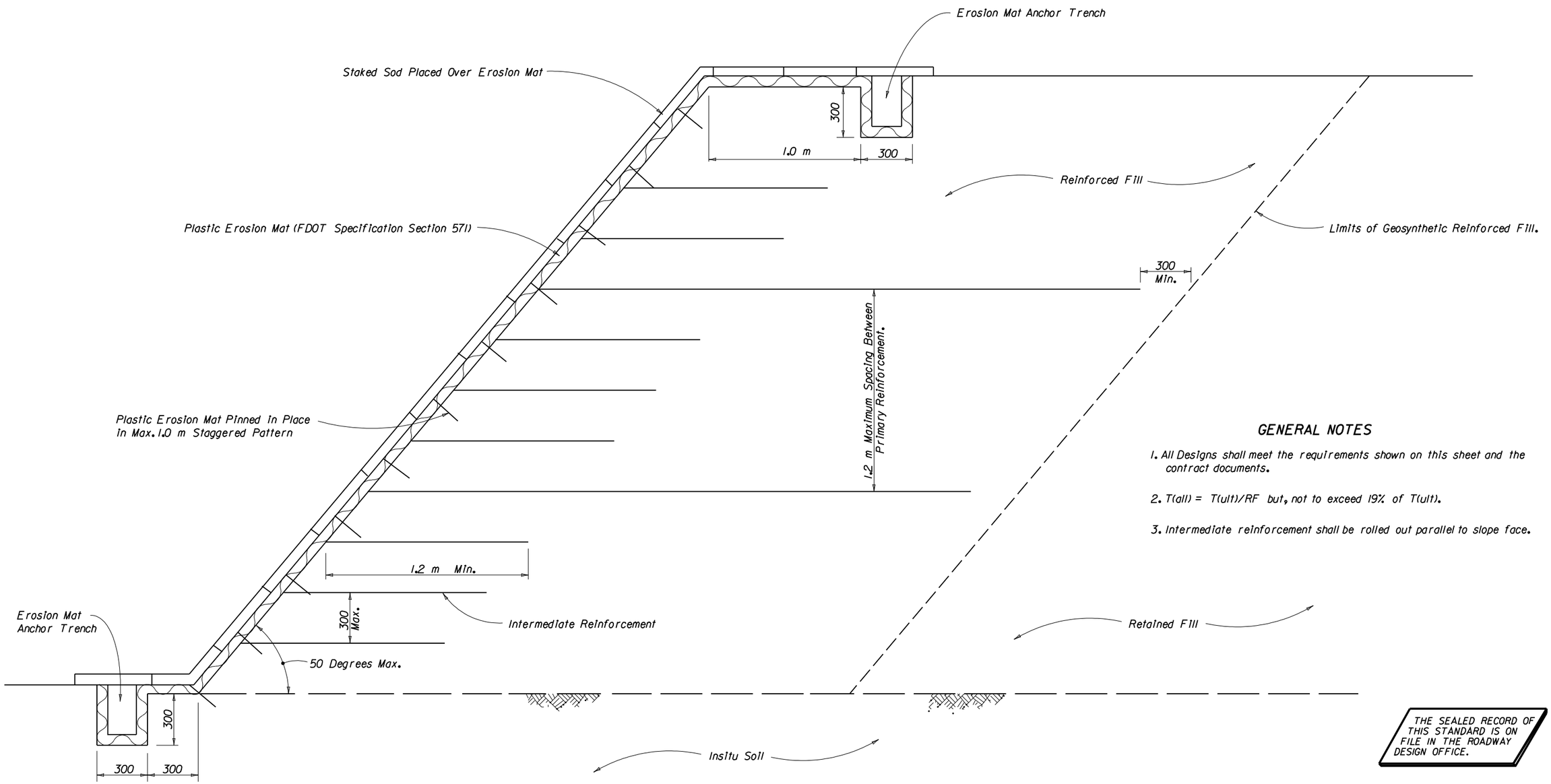
FINANCIAL PROJECT ID	STATE PROJ. NO.	SHEET NO.



GENERAL NOTES

1. All Designs shall meet the requirements shown on this sheet and the contract documents.
2. T(all) = T(ult)/RF but, not to exceed 19% of T(ult).
3. Intermediate reinforcement shall be rolled out parallel to slope face.

THE SEALED RECORD OF THIS STANDARD IS ON FILE IN THE ROADWAY DESIGN OFFICE.

GEOSYNTHETIC REINFORCED SOIL SLOPES

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

GEOSYNTHETIC REINFORCED SOILS

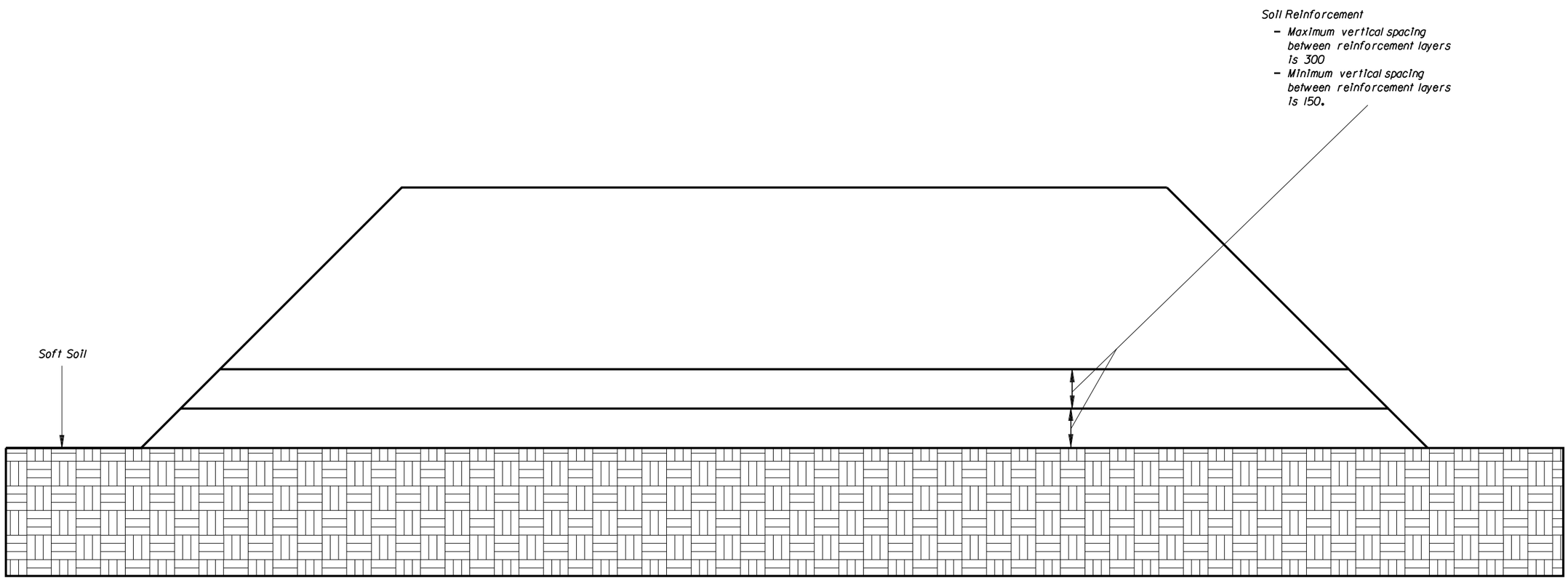
INTERIM STANDARD

WHEN INCLUDED IN THE PLANS THIS SHEET IS A SUPPLEMENT TO THE METRIC ROADWAY AND TRAFFIC DESIGN STANDARDS, BOOKLET DATED JANUARY 2000.

APPROVED BY
STATE GEOTECHNICAL ENGINEER

REVISION NO.	SHEET NO.	INDEX NO.
00	1 of 8	501

FINANCIAL PROJECT ID	STATE PROJ. NO.	SHEET NO.



THE SEALED RECORD OF THIS STANDARD IS ON FILE IN THE ROADWAY DESIGN OFFICE.

GEOSYNTHETIC REINFORCED FOUNDATIONS CONSTRUCTED ON SOFT SOILS

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

GEOSYNTHETIC REINFORCED SOILS

INTERIM STANDARD

WHEN INCLUDED IN THE PLANS THIS SHEET IS A SUPPLEMENT TO THE METRIC ROADWAY AND TRAFFIC DESIGN STANDARDS, BOOKLET DATED JANUARY 2000.

APPROVED BY
STATE GEOTECHNICAL ENGINEER

REVISION NO.	SHEET NO.	INDEX NO.
00	2 of 8	501

FINANCIAL PROJECT ID	STATE PROJ. NO.	SHEET NO.

TABLE OF WOVEN GEOTEXTILE VALUES

PROPERTY		REQUIRED TEST METHOD	MIRAFI HP 370	MIRAFI HP 470	MIRAFI HP 570	MIRAFI HP 670	MIRAFI HP 770	MIRAFI HS 400	MIRAFI HS 600	MIRAFI HS 800	MIRAFI HS 1150
Permittivity (0.05 sec^{-1} Min.)		ASTM D 4491	0.52	0.20	0.40	0.50	0.23	0.026	0.32	0.20	0.32
UV Stability (Retained 50% Strength Min. @ 500 hr.)		ASTM D 4355	70%	70%	70%	70%	70%	70%	70%	70%	70%
Burst Strength (kPa)		GRI : GS1	5,516	8,274	8,274	8,274	8,274	—	—	—	—
Grab Strength (kN)		ASTM D 4632	1.78 x 1.11	1.69 x 1.56	2.11 x 1.96	2.89 x 2.00	2.67 x 2.45	—	—	—	—
A.O.S. (mm)		ASTM D 4751	0.6	0.85	0.6	0.85	0.6	0.3	0.85	0.85	0.0236
Tensile Strength (kN/m)		ASTM D 4595									
Machine Direction	Ultimate		47.3	52.5	70.1	93.7	105.1	70.1	105.1	140.1	201.1
	2% Ultimate		7.88	13.13	14.01	15.76	15.76	—	—	—	—
	5% Ultimate		19.79	26.27	35.03	39.40	43.78	15.76	29.77	52.54	70.05
Cross Direction	Ultimate		39.40	52.54	70.05	70.05	70.05	70.05	52.54	52.54	52.54
	2% Ultimate		7.88	17.51	19.26	17.51	19.26	—	—	—	—
	5% Ultimate		19.79	26.27	35.03	35.03	35.03	35.03	—	—	—
Strain @ Ultimate Tensile Strength (kN/m)		ASTM D 4595	14%	10%	10%	14%	12%	15%	15%	10%	12%
Secant Modulus @	2% strain		394	657	701	788	788	—	—	—	—
	5% strain		396	525	701	788	876	315	595	1051	1401
	10% strain		350	525	701	788	963	490	841	1401	1751
Seam Breaking Strength (kN/m)		ASTM D 4884	21.02	26.27	43.78	52.54	17.51	35.03	35.03	35.03	35.03
Puncture Resistance (kN)		ASTM D 4833	0.8	0.76	0.85	0.89	0.98	—	—	—	—
Tear Strength (kN)	Machine Direction	ASTM D 4833	0.8	0.58	0.8	1.11	1.11	—	—	—	—
	Cross Direction	ASTM D 4833	0.49	0.89	0.80	0.89	1.78	—	—	—	—
Soil- Geosynthetic Friction		GRI : GG5, GT7	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9
Creep Resistance-T_{creep} (kN/m)		ASTM D 5262	—	—	—	—	—	42.03	63.05	84.06	120.84
Creep Reduction Factor (T_{ult} / T_{creep})		GRI : GG3 & GT5	5.0	5.0	5.0	5.0	5.0	1.67	1.67	1.67	1.67
Installation Damage (RF_c)	Sand	GRI : GG4 & GT7	1.25	1.25	1.15	1.15	1.15	1.3	1.25	1.2	1.15
	Limestone		1.5	1.5	1.35	1.35	1.35	5	3.5	1.85	1.7
Durability (RF_d)	Chemical	ASTM D 5322	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
	Biological	ASTM D1987, D3083, G21 & G22	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Joint Strength (RF_j)	Mechanical	ASTM D 4595, GRI : GG4 & GT7	—	—	—	—	—	—	—	—	—
	Overlap	GRI : GG5 & GT6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Approved Application Usage			3	3	3	3	3	3	3	3	3

Approved Application Usage: 1 = Steepened Slopes
2 = Reinforcement of Foundations over Soft Soils
3 = Both Steepened Slopes & Reinforcement of Foundations over Soft Soils

APPROVED GEOSYNTHETIC PRODUCTS (WOVEN GEOTEXTILES) APPLICATION AND PROPERTIES

THE SEALED RECORD OF THIS STANDARD IS ON FILE IN THE ROADWAY DESIGN OFFICE.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

GEOSYNTHETIC REINFORCED SOILS

INTERIM STANDARD

WHEN INCLUDED IN THE PLANS THIS SHEET IS A SUPPLEMENT TO THE METRIC ROADWAY AND TRAFFIC DESIGN STANDARDS, BOOKLET DATED JANUARY 2000.

APPROVED BY
STATE GEOTECHNICAL ENGINEER

REVISION NO.	SHEET NO.	INDEX NO.
00	3 of 8	501

FINANCIAL PROJECT ID	STATE PROJ. NO.	SHEET NO.

TABLE OF WOVEN GEOTEXTILE VALUES

PROPERTY		REQUIRED TEST METHOD	MIRIFI HS 1400	MIRIFI HS 1715	MIRIFI HS 2400	MIRIFI HS 3000	MIRIFI HS 3600	AMOCO 2006	AMOCO 2016	AMOCO 2044	COMTRAC 70/70
Permittivity (0.05 sec^{-1} Min.)		ASTM D 4491	0.20	0.32	0.02	0.02	0.02	0.05	0.70	0.15	0.20
UV Stability (Retained 50% Strength Min. @ 500 hr.)		ASTM D 4355	70%	70%	70%	70%	70%	70%	70%	70%	70%
Burst Strength (kPa)		GRI : GS1	—	—	—	—	—	689.4	689.4	1034.1	—
Grab Strength (kN)		ASTM D 4632	—	—	—	—	—	1.40	1.40	2.67/2.23	—
A.O.S. (mm)		ASTM D 4751	0.85	0.85	0.30	0.30	0.30	0.42	0.42	0.60	0.85
Tensile Strength (kN/m)		ASTM D 4595									
Machine Direction	Ultimate		24.5.2	30.0.3	42.0.3	52.5.4	63.0.5	30.6	35.0	70.1	24.5.2
	2% Ultimate		—	—	—	—	—	2.3	4.0	6.7	—
	5% Ultimate		8.7.6	12.2.6	21.0.2	26.2.7	31.5.2	8.2	10.9	21.2	8.7.6
Cross Direction	Ultimate		5.2.5	5.2.5	5.2.5	5.2.5	5.2.5	30.6	35.0	70.1	5.2.5
	2% Ultimate		—	—	—	—	—	8.4	9.6	20.1	—
	5% Ultimate		—	—	—	—	—	16.1	20.5	38.0	—
Strain @ Ultimate Tensile Strength		ASTM D 4595	14%	14%	10%	10%	10%	8%	8%	8%	14%
Secant Modulus @ (kN/m)	2% strain		—	—	—	—	—	113.8	201.4	332.7	—
	5% strain		175.1.3	245.1.8	420.3.0	525.3.8	630.4.6	164.6	217.2	423.8	175.1.3
	10% strain		175.1.3	236.4.2	420.3.0	525.3.8	630.4.6	152.4	182.1	455.3	175.1.3
Seam Breaking Strength (kN/m)		ASTM D 4884	35.0	35.0	52.5	52.5	52.5	—	—	—	2,400
Puncture Resistance (kN)		ASTM D 4833	—	—	—	—	—	0.53	0.53	0.76	—
Tear Strength (kN)	Machine Direction	ASTM D 4833	—	—	—	—	—	0.53	0.53	1.11	—
	Cross Direction	ASTM D 4833	—	—	—	—	—	0.53	0.53	1.11	—
Soil- Geosynthetic Friction		GRI : GG5, GT7	0.9	0.9	0.9	0.9	0.9	0.65	0.65	0.65	0.9
Creep Resistance-T_{creep} (kN/m)		ASTM D 5262	147.1	180.2	252.2	315.2	315.2	8.8	10.0	20.0	—
Creep Reduction Factor (T_{ult} / T_{creep})		GRI : GG3 & GT5	1.67	1.67	1.67	1.67	1.67	3.5	3.5	3.5	1.67
Installation Damage (RF_c)	Sand	GRI : GG4 & GT7	1.15	1.15	1.1	1.1	1.1	1.10	1.05	1.05	1.15
	Limestone		1.5	1.35	1.25	1.25	1.25	1.20	1.20	1.10	1.5
Durability (RF_d)	Chemical	ASTM D 5322	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
	Biological	ASTM D1987, D3083, G21 & G22	1.0	1.0	1.0	1.0	1.0				1.0
Joint Strength (RF_j)	Mechanical	ASTM D 4595, GRI : GG4 & GT7	—	—	—	—	—	—	—	—	—
	Overlap	GRI : GG5 & GT6	1.0	1.0	1.0	1.0	1.0	1.2	1.2	1.2	1.0
Approved Application Usage			3	3	3	3	3	3	3	3	3

Approved Application Usage: 1 = Steepened Slopes
2 = Reinforcement of Foundations over Soft Soils
3 = Both Steepened Slopes & Reinforcement of Foundations over Soft Soils

APPROVED GEOSYNTHETIC PRODUCTS (WOVEN GEOTEXTILES) APPLICATION AND PROPERTIES

THE SEALED RECORD OF THIS STANDARD IS ON FILE IN THE ROADWAY DESIGN OFFICE.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

GEOSYNTHETIC REINFORCED SOILS

INTERIM STANDARD

WHEN INCLUDED IN THE PLANS THIS SHEET IS A SUPPLEMENT TO THE METRIC ROADWAY AND TRAFFIC DESIGN STANDARDS, BOOKLET DATED JANUARY 2000.

APPROVED BY
STATE GEOTECHNICAL ENGINEER

REVISION NO.	SHEET NO.	INDEX NO.
00	4 of 8	501

FINANCIAL PROJECT ID	STATE PROJ. NO.	SHEET NO.

TABLE OF WOVEN GEOGRID VALUES

PROPERTY		REQUIRED TEST METHOD	MIRIFI MG 2XT	MIRIFI MG 3XT	MIRIFI MG 5XT (Matrex 30)	MIRIFI MG 7XT	MIRIFI MG 8XT	MIRIFI MG 10XT (Matrex 60)	MIRIFI MG 18XT (Matrex 90)	MIRIFI MG 20XT (Matrex 120)	MIRIFI MG 22XT (Matrex 180)	MIRIFI MG 24XT (Matrex 240)
UV Stability (Retained 50% Strength Min. @ 500 hr.)		ASTM D 4355	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Tensile Strength (kN/m)												
Machine Direction	Ultimate	ASTM D 4595	29.2	40.9	52.4	63.5	90.9	121.1	136.6	181.3	259.2	370.4
	2% Ultimate		—	—	—	—	—	—	—	—	—	—
	5% Ultimate		17.5	15.4	25.4	31.5	36.8	45.5	64.2	77.9	104.2	146.2
Cross Direction	Ultimate		29.2	—	—	—	—	—	—	—	—	—
	2% Ultimate		—	—	—	—	—	—	—	—	—	—
	5% Ultimate		—	—	—	—	—	—	—	—	—	—
Strain @ Ultimate Tensile Strength		ASTM D 4595	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Secant Modulus @ (kN/m)	2% strain		—	—	—	—	—	—	—	—	—	—
	5% strain		—	308.2	507.9	630.5	735.5	910.7	1295.9	1558.6	2084.0	2924.6
	10% strain		—	—	—	—	—	—	—	—	—	—
Junction Strength (kN/m)		GRI : GG2	—	—	—	—	—	—	—	—	—	—
Soil- Geosynthetic Friction		GRI : GG5, GT7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Creep Resistance-T_{creep} (kN/m)		ASTM D 5262	17.5	24.5	31.4	38.1	54.6	72.7	82.0	105.4	150.7	215.3
Creep Reduction Factor (T_{ult} / T_{creep})		GRI : GG3 & GT5	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67
Installation Damage (RF_c)	Sand	GRI : GG4 & GT7	1.25	1.20	1.15	1.15	1.15	1.1	1.1	1.1	1.1	1.1
	Limestone		Not Recommended	1.75	1.3	1.3	1.3	1.25	1.25	1.25	1.25	1.25
Durability (RF_d)	Chemical	ASTM D 5322	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
	Biological	ASTM D1987, D3083, G21 & G22	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Joint Strength (RF_j)	Mechanical	ASTM D 4595, GRI : GG4 & GT7	—	—	—	—	—	—	—	—	—	—
	Overlap	GRI : GG5 & GT6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Approved Application Usage			3	3	3	3	3	3	3	3	3	3

Approved Application Usage: 1 = Steepened Slopes
2 = Reinforcement of Foundations over Soft Soils
3 = Both Steepened Slopes & Reinforcement of Foundations over Soft Soils

APPROVED GEOSYNTHETIC PRODUCTS (WOVEN GEOGRIDS) APPLICATION AND PROPERTIES

THE SEALED RECORD OF THIS STANDARD IS ON FILE IN THE ROADWAY DESIGN OFFICE.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

GEOSYNTHETIC REINFORCED SOILS

INTERIM STANDARD

WHEN INCLUDED IN THE PLANS THIS SHEET IS A SUPPLEMENT TO THE METRIC ROADWAY AND TRAFFIC DESIGN STANDARDS, BOOKLET DATED JANUARY 2000.

APPROVED BY
STATE GEOTECHNICAL ENGINEER

REVISION NO.	SHEET NO.	INDEX NO.
00	5 of 8	501

FINANCIAL PROJECT ID	STATE PROJ. NO.	SHEET NO.

TABLE OF WOVEN GEOGRID VALUES

PROPERTY		REQUIRED TEST METHOD	SYNTEEN SF 20	SYNTEEN SF 35	SYNTEEN SF 40	SYNTEEN SF 50	SYNTEEN SF 55	SYNTEEN SF 80	SYNTEEN SF 110			
UV Stability (Retained 50% Strength Min. @ 500 hr.)		ASTM D 4355	70%	70%	70%	70%	70%	70%	70%			
Tensile Strength (kN/m)		ASTM D 4595										
Machine Direction	Ultimate		26.4	38.3	44.5	54.4	55.1	81.5	118.6			
	2% Ultimate		5.4	6.7	7.1	11.5	10.7	14.8	17.3			
	5% Ultimate		9.8	10.6	14.2	13.5	16.9	18.6	24.6			
Cross Direction	Ultimate		26.4	37.3	44.5	57.4	36.5	32.2	31.2			
	2% Ultimate		5.4	5.8	7.1	11.5	8.8	12.9	18.6			
	5% Ultimate		9.8	8.5	14.2	13.5	11.6	22.8	23.1			
Strain @ Ultimate Tensile Strength		ASTM D 4595	9.4%	14.1%	9.9%	14.2%	11.5%	14.2%	18.8%			
Secant Modulus @ (kN/m)	2% strain		269.9	337.3	356.2	577.2	537.0	741.5	865.4			
	5% strain		195.5	211.6	283.2	269.0	338.2	371.5	481.5			
	10% strain		221.9	222.3	322.4	269.0	396.0	553.3	399.6			
Junction Strength (kN/m)		GRI : GG2	—	—	—	—	—	—	—			
Soil- Geosynthetic Friction		GRI : GG5, GT7	0.8	0.8	0.8	0.8	0.8	0.8	0.8			
Creep Resistance-T_{creep} (kN/m)		ASTM D 5262	14.7	22.2	22.3	32.1	33.1	46.4	58.8			
Creep Reduction Factor (T_{ult} / T_{creep})		GRI : GG3 & GT5	1.80	1.72	2.00	1.70	1.67	1.75	2.02			
Installation Damage (RF_c)	Sand	GRI : GG4 & GT7	1.05	1.15	1.15	1.08	1.08	1.08	1.08			
	Limestone		1.75	1.70	1.60	1.55	1.55	1.55	1.35			
Durability (RF_d)	Chemical	ASTM D 5322	1.10	1.10	1.10	1.10	1.10	1.10	1.10			
	Biological	ASTM D1987, D3083, G21 & G22	1.10	1.10	1.10	1.10	1.10	1.10	1.10			
Joint Strength (RF_j)	Mechanical	ASTM D 4595, GRI : GG4 & GT7	—	—	—	—	—	—	—			
	Overlap	GRI : GG5 & GT6	1.10	1.10	1.10	1.10	1.10	1.10	1.10			
Approved Application Usage			3	3	3	3	3	3	3			

Approved Application Usage: 1 = Steepened Slopes
2 = Reinforcement of Foundations over Soft Soils
3 = Both Steepened Slopes & Reinforcement of Foundations over Soft Soils

APPROVED GEOSYNTHETIC PRODUCTS (WOVEN GEOGRIDS) APPLICATION AND PROPERTIES

THE SEALED RECORD OF THIS STANDARD IS ON FILE IN THE ROADWAY DESIGN OFFICE.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

GEOSYNTHETIC REINFORCED SOILS

INTERIM STANDARD

WHEN INCLUDED IN THE PLANS THIS SHEET IS A SUPPLEMENT TO THE METRIC ROADWAY AND TRAFFIC DESIGN STANDARDS, BOOKLET DATED JANUARY 2000.

APPROVED BY
STATE GEOTECHNICAL ENGINEER

REVISION NO.	SHEET NO.	INDEX NO.
00	6 of 8	501

FINANCIAL PROJECT ID	STATE PROJ. NO.	SHEET NO.

TABLE OF EXTRUDED GEOGRID VALUES

PROPERTY		REQUIRED TEST METHOD	TENSAR BX 4100	TENSAR BX 4120	TENSAR BX 4200	TENSAR BX 4220	TENSAR UX 900 HS	TENSAR UX 1100 HS	TENSAR UX 1400 HS	TENSAR UX 1500 HS	TENSAR UX 1600 HS	TENSAR UX 1700 HS
UV Stability (Retained 50% Strength Min. @ 500 hr.)		ASTM D 4355	——	90%	90%	90%	90%	90%	90%	90%	90%	90%
Tensile Strength (kN/m)		ASTM D 4595										
Machine Direction	Ultimate		12.6	12.6	18.5	18.5	54.0	54.0	64.2	100.7	131.3	157.6
	2% Ultimate		3.5	3.5	5.4	5.4	12.3	12.3	14.6	26.3	34.0	40.0
	5% Ultimate		7.0	7.0	10.3	10.3	21.0	21.0	29.2	54.0	64.9	78.8
Cross Direction	Ultimate		12.8	12.8	20.0	20.0	——	——	——	——	——	——
	2% Ultimate		4.4	4.4	7.3	7.3	——	——	——	——	——	——
	5% Ultimate		9.3	9.3	14.0	14.0	——	——	——	——	——	——
Strain @ Ultimate Tensile Strength		ASTM D 4595	——	——	——	——	10%	10%	10%	10%	10%	10%
Secant Modulus @ (kN/m)	2% strain		175.1	175.1	270.1	270.1	613.2	613.2	729.7	1313.3	1700.5	1999.5
	5% strain		140.0	140.0	205.7	217.5	420.3	420.3	583.8	1079.9	1298.9	1576.2
	10% strain		——	——	——	——	——	——	——	——	——	——
Junction Strength (kN/m)		GRI : GG2	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Soil- Geosynthetic Friction		GRI : GG5, GT7	——	0.90	0.95	0.95	0.462	0.462	0.462	0.462	0.462	0.462
Creep Resistance-T_{creep} (kN/m)		ASTM D 5262	3.6	3.6	6.1	6.1	13.1	19.7	27.0	40.9	54.0	67.9
Creep Reduction Factor (T_{ult} / T_{creep})		GRI : GG3 & GT5	3.5	3.5	3.27	3.27	4.12	3.65	2.381	2.46	2.43	2.33
Installation Damage (RF_c)	Sand	GRI : GG4 & GT7	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
	Limestone		1.43	1.43	1.35	1.35	1.25	1.25	1.20	1.20	1.20	1.20
Durability (RF_d)	Chemical	ASTM D 5322	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
	Biological	ASTM D1987, D3083, G21 & G22	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Joint Strength (RF_j)	Mechanical	ASTM D 4595, GRI : GG4 & GT7	——	——	——	——	1.0	1.0	1.0	1.0	1.0	1.0
	Overlap	GRI : GG5 & GT6	1.0	1.0	1.0	1.0	——	1.0	1.0	1.0	1.0	1.0
Approved Application Usage			3	3	3	3	3	3	3	3	3	3

Approved Application Usage: 1 = Steepened Slopes
2 = Reinforcement of Foundations over Soft Soils
3 = Both Steepened Slopes & Reinforcement of Foundations over Soft Soils

APPROVED GEOSYNTHETIC PRODUCTS (EXTRUDED GEOGRID) APPLICATION AND PROPERTIES

THE SEALED RECORD OF THIS STANDARD IS ON FILE IN THE ROADWAY DESIGN OFFICE.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

GEOSYNTHETIC REINFORCED SOILS

INTERIM STANDARD

WHEN INCLUDED IN THE PLANS THIS SHEET IS A SUPPLEMENT TO THE METRIC ROADWAY AND TRAFFIC DESIGN STANDARDS, BOOKLET DATED JANUARY 2000.

APPROVED BY
STATE GEOTECHNICAL ENGINEER

	SHEET NO.	INDEX NO.
00	7 of 8	501

FINANCIAL PROJECT ID	STATE PROJ. NO.	SHEET NO.

TABLE OF EXTRUDED GEOGRID VALUES

PROPERTY		REQUIRED TEST METHOD	TENAX MS 220	TENAX MS 330								
UV Stability (Retained 50% Strength Min. @ 500 hr.)		ASTM D 4355	85%	85%								
Tensile Strength (kN/m)		ASTM D 4595										
Machine Direction	Ultimate		13.5	20.0								
	2% Ultimate		4.4	6.1								
	5% Ultimate		9.0	13.5								
Cross Direction	Ultimate		20.4	30.6								
	2% Ultimate		6.5	9.0								
	5% Ultimate		13.0	19.6								
Strain @ Ultimate Tensile Strength		ASTM D 4595	12%	12%								
Secant Modulus @ (kN/m)	2% strain		218.9	305.0								
	5% strain		179.9	270.0								
	10% strain		——	——								
Junction Strength (kN/m)		GRI : GG2	12.2	18.0								
Soil- Geosynthetic Friction		GRI : GG5, GT7	——	——								
Creep Resistance-T_{creep} (kN/m)		ASTM D 5262	——	——								
Creep Reduction Factor (T_{ult} / T_{creep})		GRI : GG3 & GT5	5.0	5.0								
Installation Damage (RF_c)	Sand	GRI : GG4 & GT7	3.0	3.0								
	Limestone		3.0	3.0								
Durability (RF_d)	Chemical	ASTM D 5322	2.0	2.0								
	Biological	ASTM D1987, D3083, G21 & G22										
Joint Strength (RF_j)	Mechanical	ASTM D 4595, GRI : GG4 & GT7	——	——								
	Overlap	GRI : GG5 & GT6	——	——								
Approved Application Usage			2	2								

Approved Application Usage: 1 = Steepened Slopes
2 = Reinforcement of Foundations over Soft Soils
3 = Both Steepened Slopes & Reinforcement of Foundations over Soft Soils

APPROVED GEOSYNTHETIC PRODUCTS (EXTRUDED GEOGRID) APPLICATION AND PROPERTIES

THE SEALED RECORD OF THIS STANDARD IS ON FILE IN THE ROADWAY DESIGN OFFICE.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

GEOSYNTHETIC REINFORCED SOILS

INTERIM STANDARD

WHEN INCLUDED IN THE PLANS THIS SHEET IS A SUPPLEMENT TO THE METRIC ROADWAY AND TRAFFIC DESIGN STANDARDS, BOOKLET DATED JANUARY 2000.

APPROVED BY
STATE GEOTECHNICAL ENGINEER

REVISION NO.	SHEET NO.	INDEX NO.
00	8 of 8	501