

# GILLIAM FARM

VIRGINIA POLLUTION ABATEMENT APPLICATION

FORM D

MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-VI BIOSOLIDS APPLICATION AGREEMENT

This biosolids application agreement is made on 10-20-08 between Glover D. Gilliam referred to here as "landowner", and Nutri-Blend, referred to here as the "Permittee".

Landowner is the owner of agricultural land shown on the map attached as Exhibit A and designated there as All ("landowner's land"). Permittee agrees to apply and landowner agrees to comply with certain permit requirements following application of biosolids on landowner's land in amounts and in a manner authorized by (VPA) (VPDES) permit number which is held by the Permittee.

Landowner acknowledges that the appropriate application of biosolids will be beneficial in providing fertilizer and soil conditioning to the property and consents to the application of biosolids on his property. Moreover, landowner acknowledges having been expressly advised that, in order to protect public health:

- 1. Public access to landowner's land upon which biosolids have been applied should be controlled for at least 30 days following any application of biosolids and no biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
2. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil, or 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation. Other food crops, feed crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
3. Following biosolids application to pasture or hayland sites, meat producing livestock should not be grazed or fed chopped foliage for 30 days and lactating dairy animals should be similarly restricted for a minimum of 60 days. Other animals should be restricted from grazing for 30 days;
4. Supplemental commercial fertilizer or manure applications should be coordinated with the biosolids applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia to be supplied to the landowner by the permittee at the time of application of biosolids to a specific permitted site;
5. Tobacco, because it has been shown to accumulate cadmium, should not be grown on landowner's land for three years following the application of biosolids borne cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).
6. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the permitting authority.

Permittee agrees to notify landowner or landowner designee of the proposed schedule for biosolids application and specifically prior to any particular application to landowner's land. This agreement may be terminated by either party upon written notice to the address specified below.

Landowner:

Glover D. Gilliam

804 993-2935

Mailing Address:

240 Angus Rd
Concord Va 24538

Permittee:

Mailing Address:

VIRGINIA POLLUTION ABATEMENT APPLICATION

FORM D

MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-VI BIOSOLIDS APPLICATION AGREEMENT

This biosolids application agreement is made on 10-20-08 between Dale Carwile referred to here as "landowner", and Nutri Blend, referred to here as the "Permittee".

Landowner is the owner of agricultural land shown on the map attached as Exhibit A and designated there as All ("landowner's land"). Permittee agrees to apply and landowner agrees to comply with certain permit requirements following application of biosolids on landowner's land in amounts and in a manner authorized by (VPA) (VPDES) permit number which is held by the Permittee.

Landowner acknowledges that the appropriate application of biosolids will be beneficial in providing fertilizer and soil conditioning to the property and consents to the application of biosolids on his property. Moreover, landowner acknowledges having been expressly advised that, in order to protect public health:

- 1. Public access to landowner's land upon which biosolids have been applied should be controlled for at least 30 days following any application of biosolids and no biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
2. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil, or 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation. Other food crops, feed crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
3. Following biosolids application to pasture or hayland sites, meat producing livestock should not be grazed or fed chopped foliage for 30 days and lactating dairy animals should be similarly restricted for a minimum of 60 days. Other animals should be restricted from grazing for 30 days;
4. Supplemental commercial fertilizer or manure applications should be coordinated with the biosolids applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia to be supplied to the landowner by the permittee at the time of application of biosolids to a specific permitted site;
5. Tobacco, because it has been shown to accumulate cadmium, should not be grown on landowner's land for three years following the application of biosolids borne cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).
6. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the permitting authority.

Permittee agrees to notify landowner or landowner designee of the proposed schedule for biosolids application and specifically prior to any particular application to landowner's land. This agreement may be terminated by either party upon written notice to the address specified below.

Landowner:

H. Dale Carwile

H. Dale Carwile

Permittee:

Mailing Address:

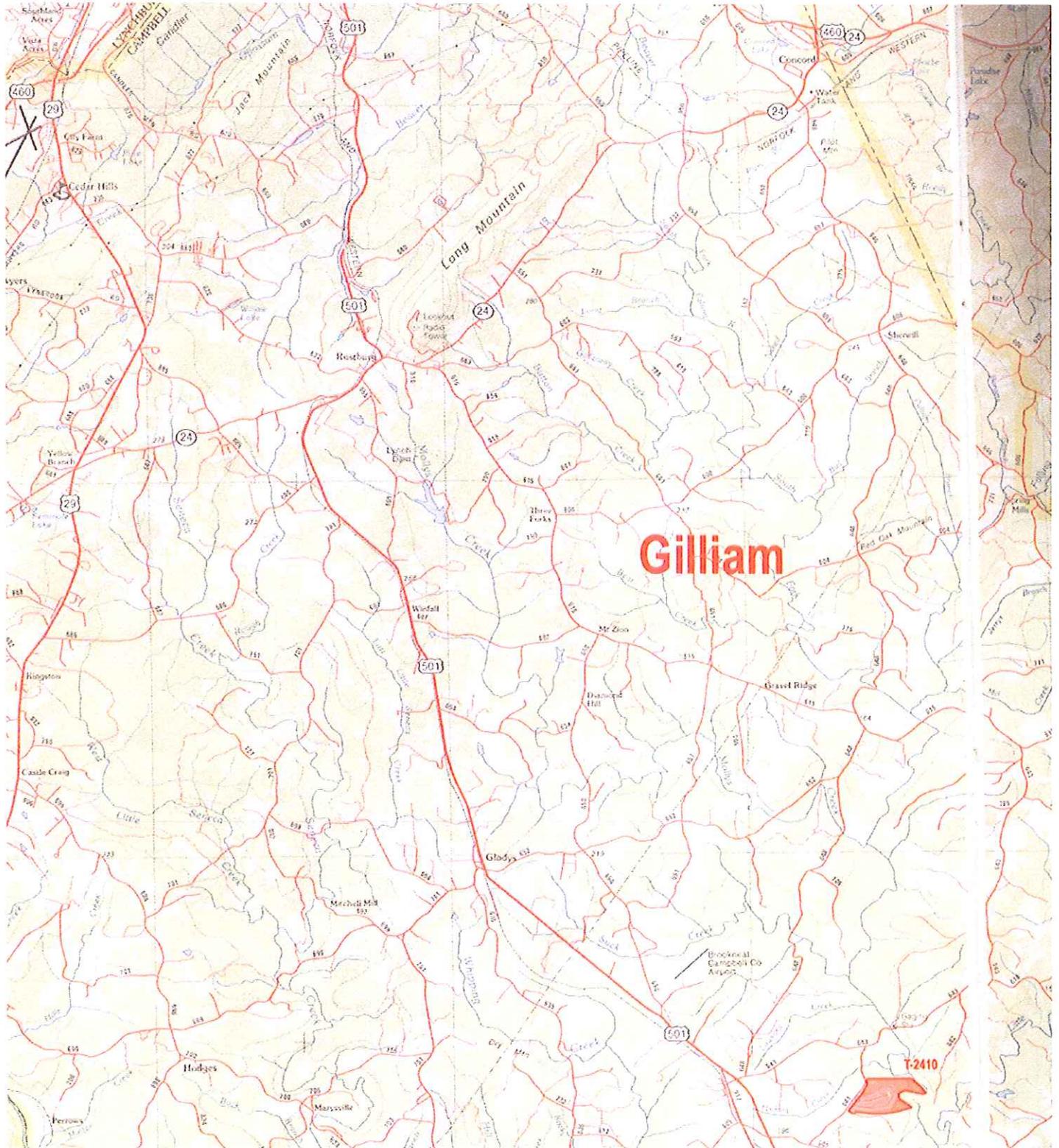
6070 Lewis Fork Rd.

Gladys, Va. 24554

Mailing Address:

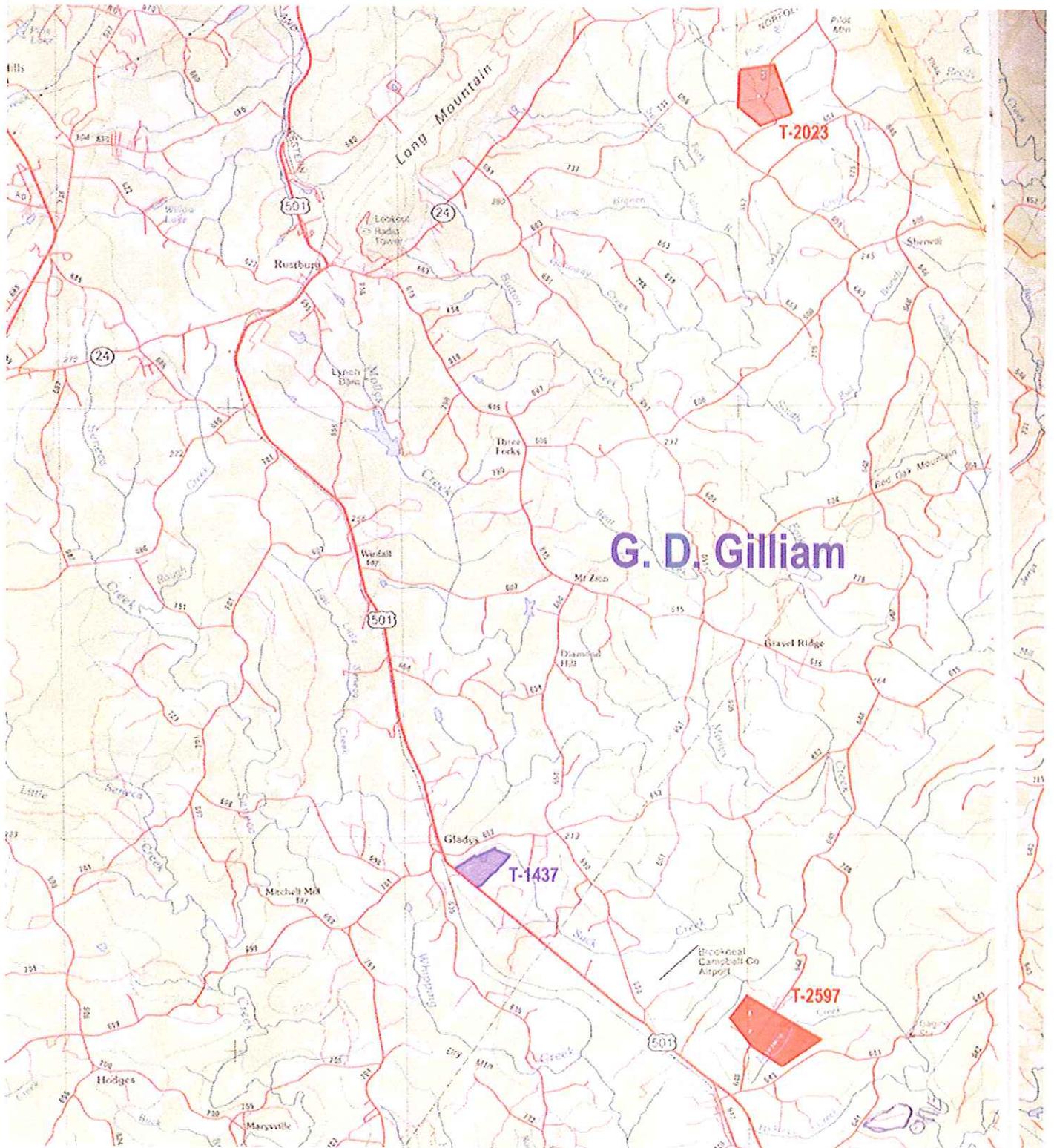
# Nutri Blend

BIOSOLIDS LAND APPLICATION



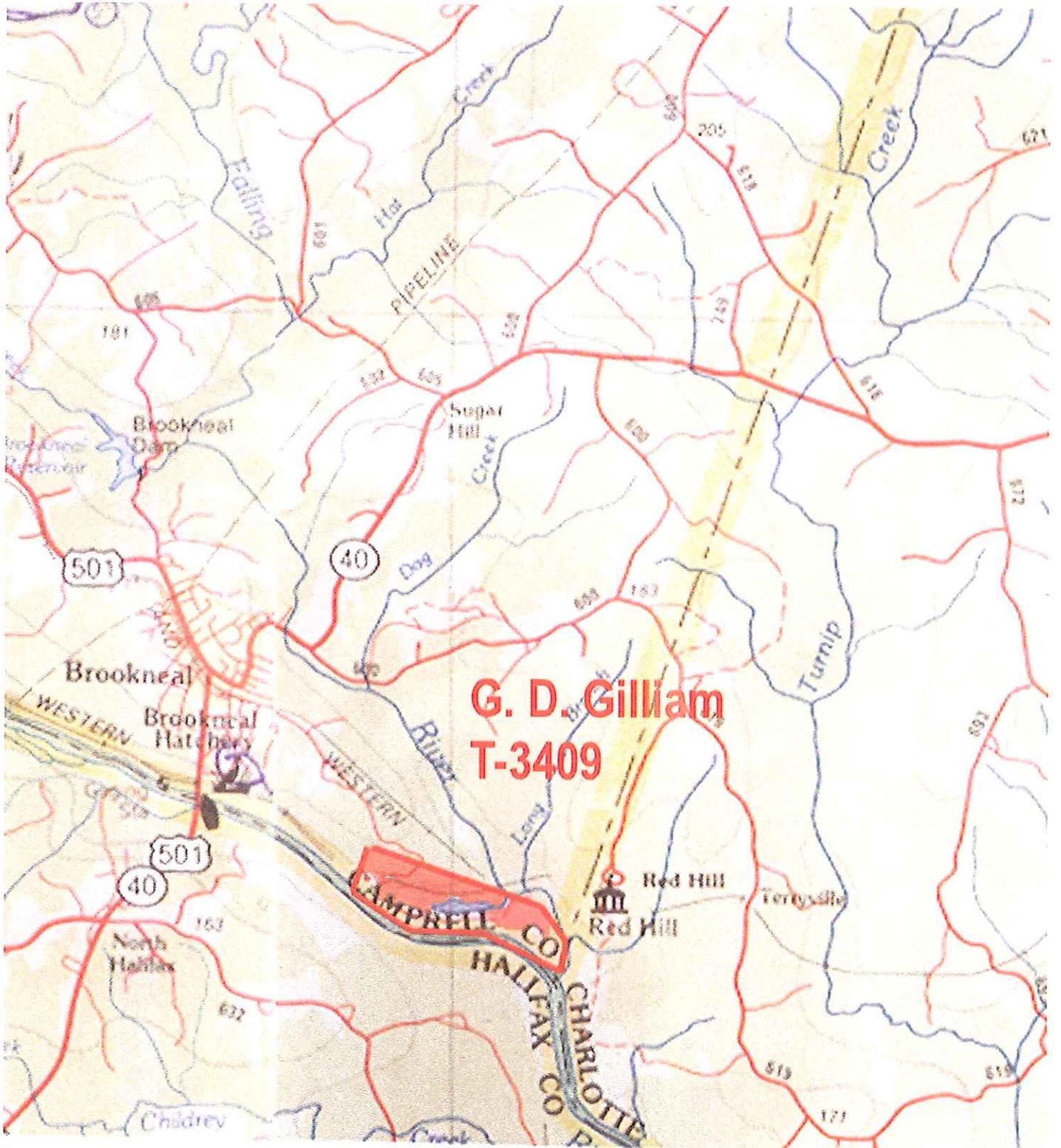
# NutriBlend

## BIOSOLIDS LAND APPLICATION



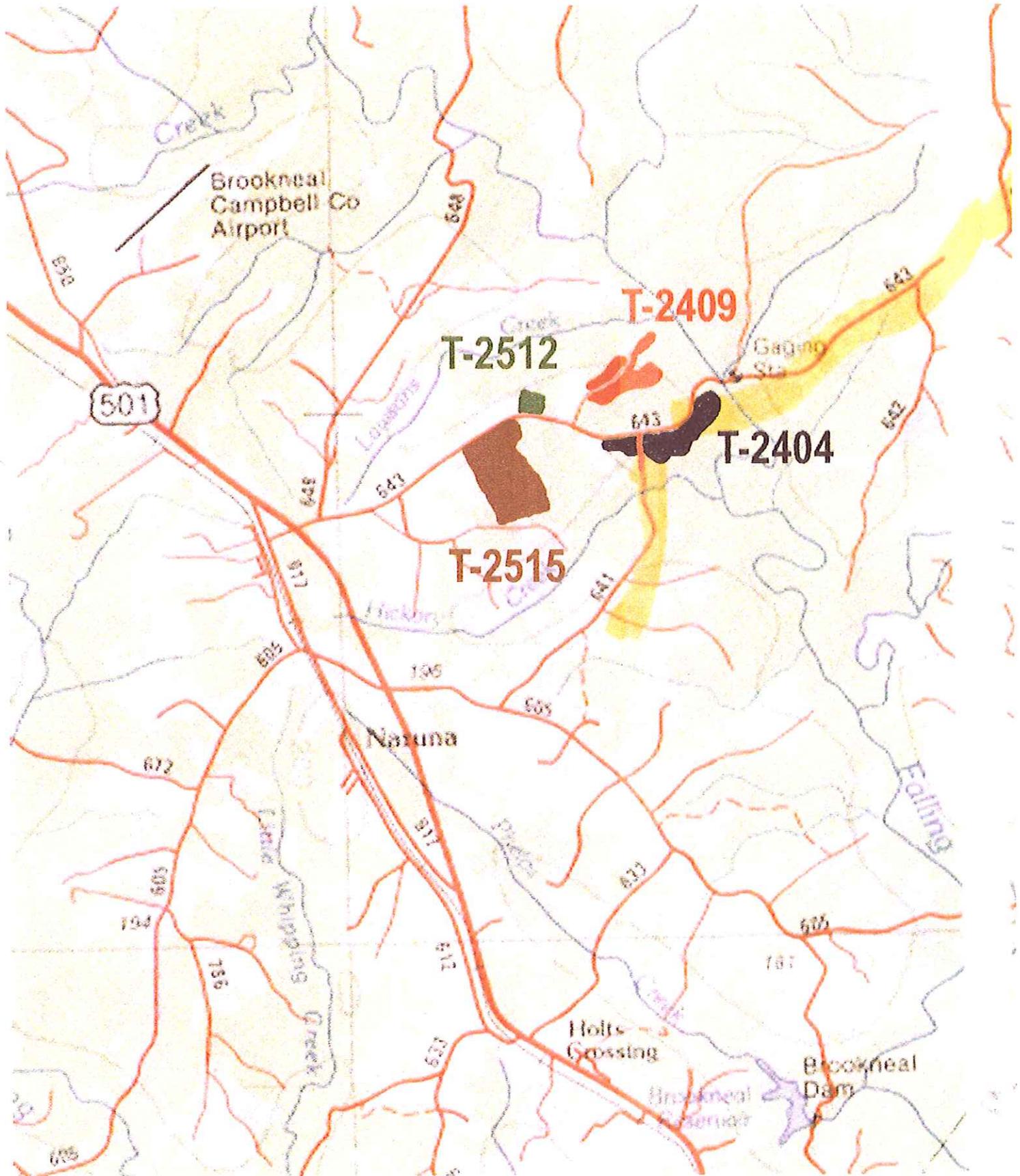
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## BIOSOLIDS LAND APPLICATION



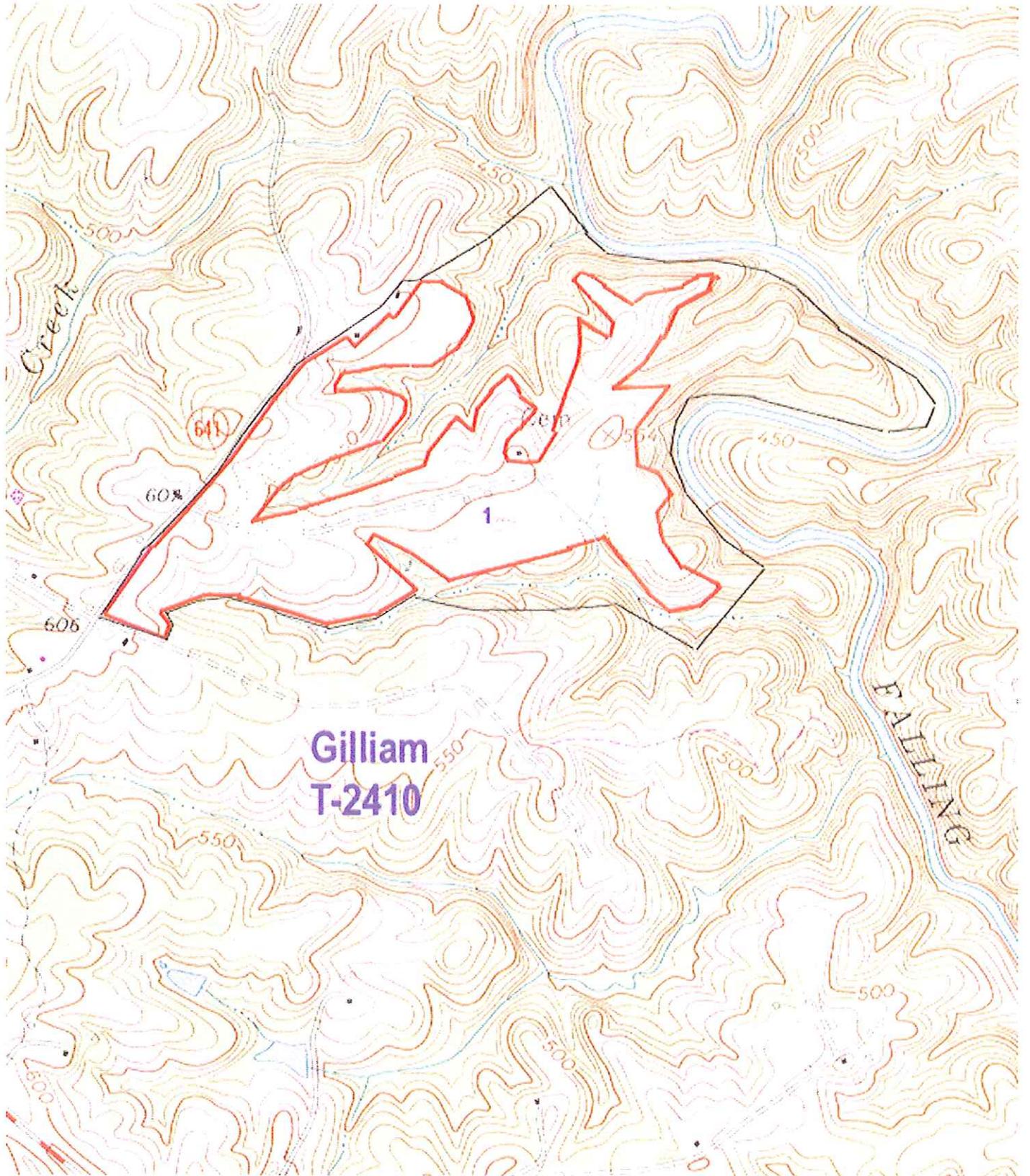
# Nutri Blend

## BIO SOLIDS LAND APPLICATION



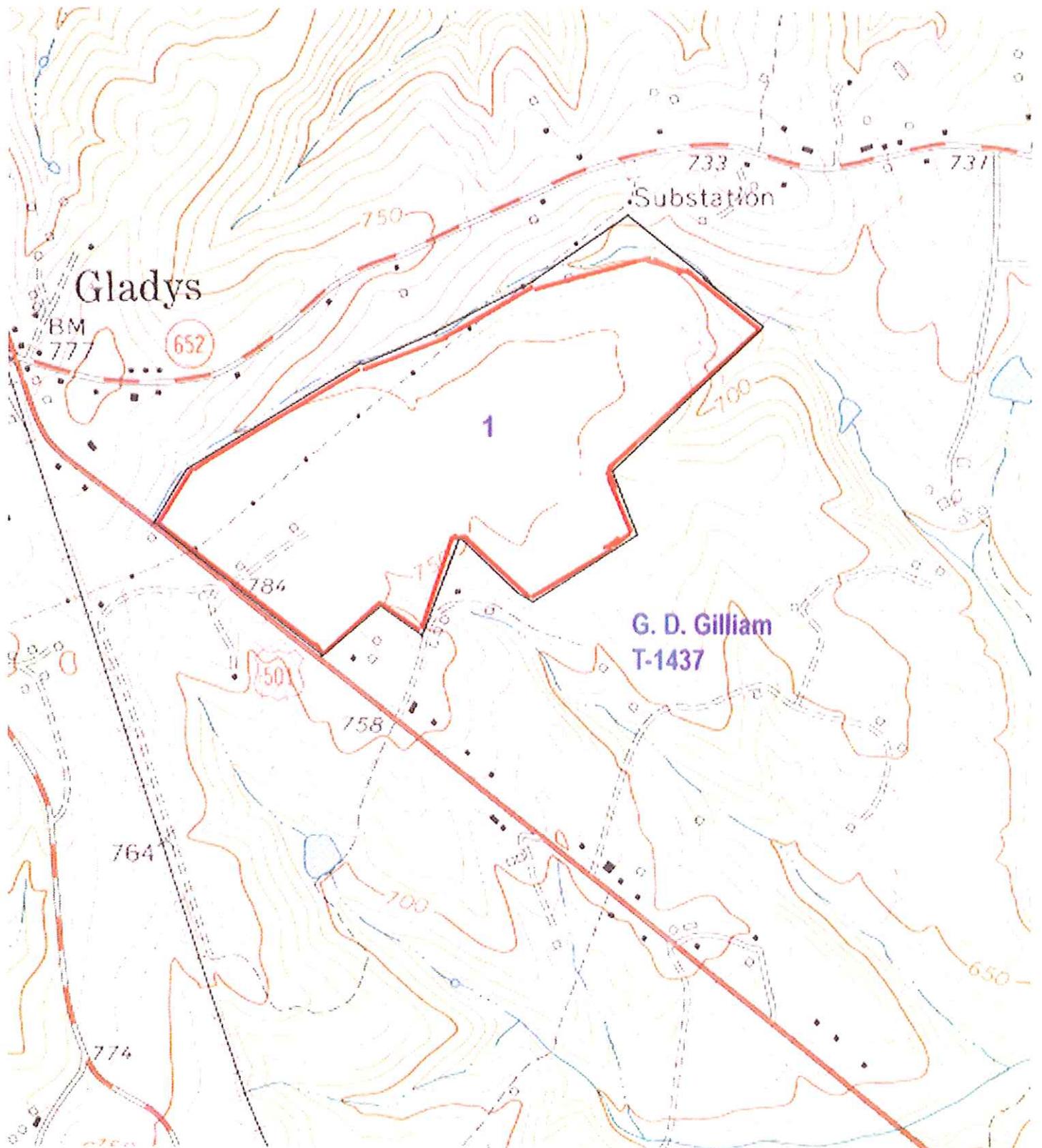
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BIOSOLIDS LAND APPLICATION



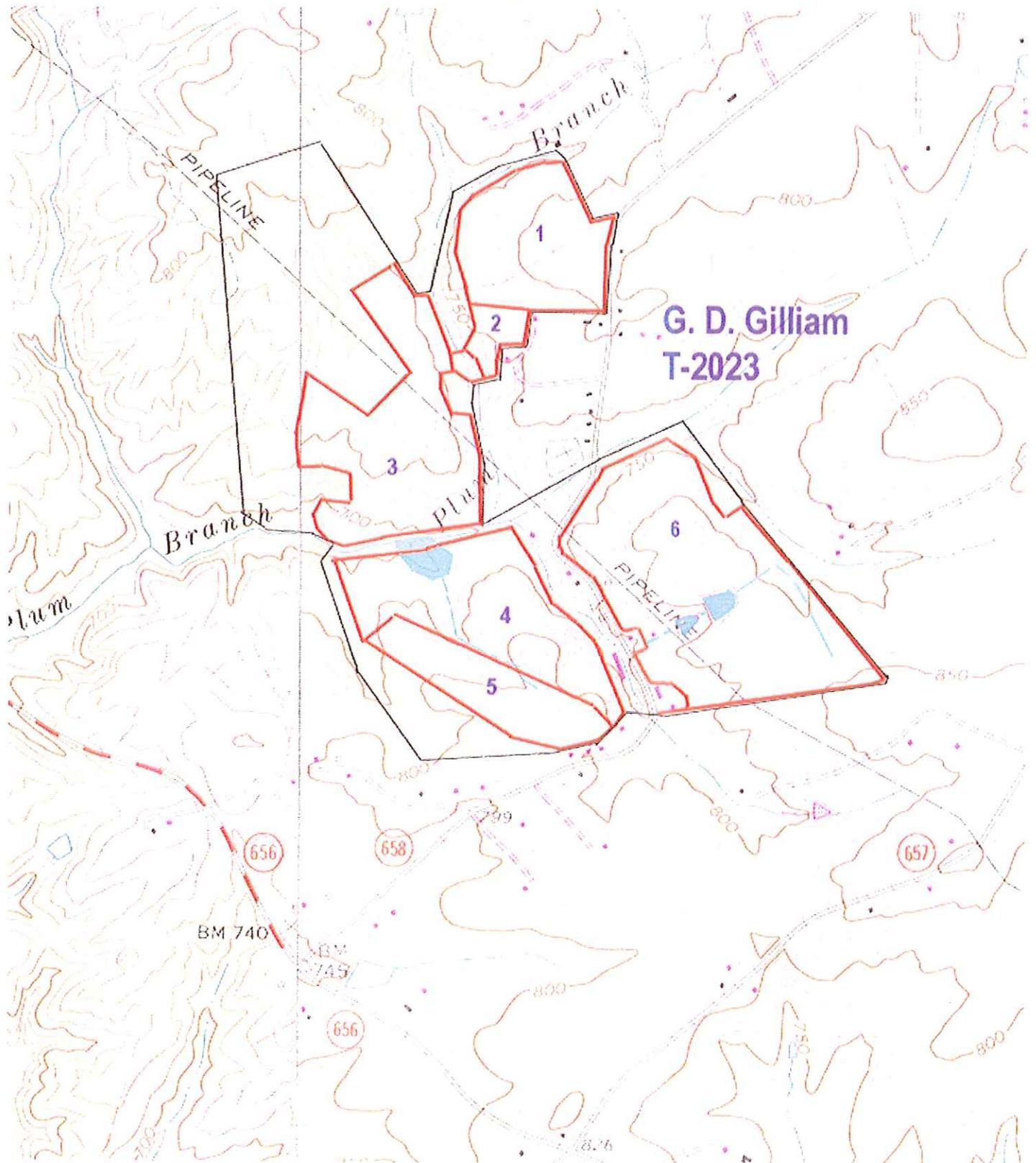
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BIOSOLIDS LAND APPLICATION



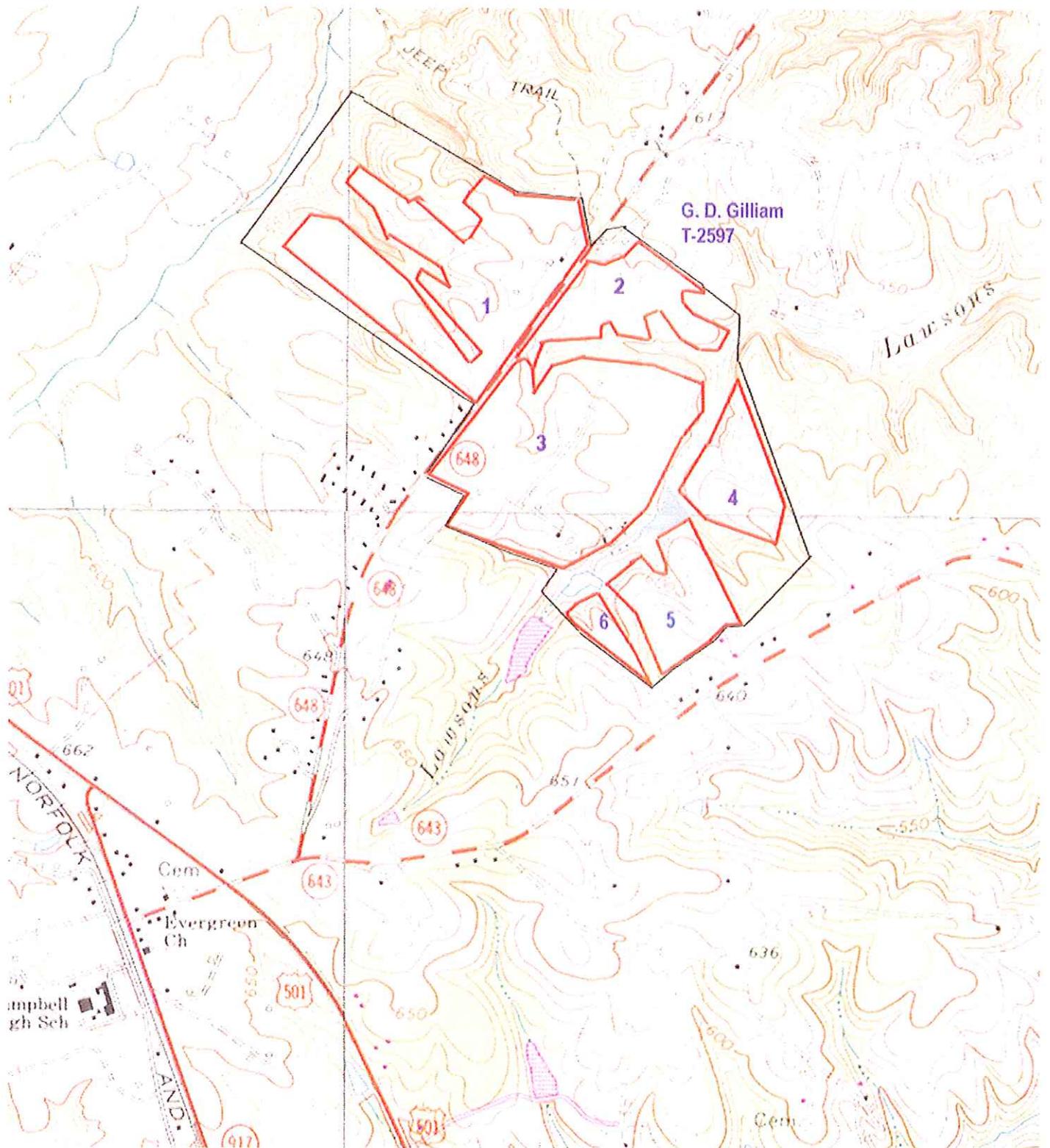
# Nutri Blend

## BIO SOLIDS LAND APPLICATION



# NutriBlend

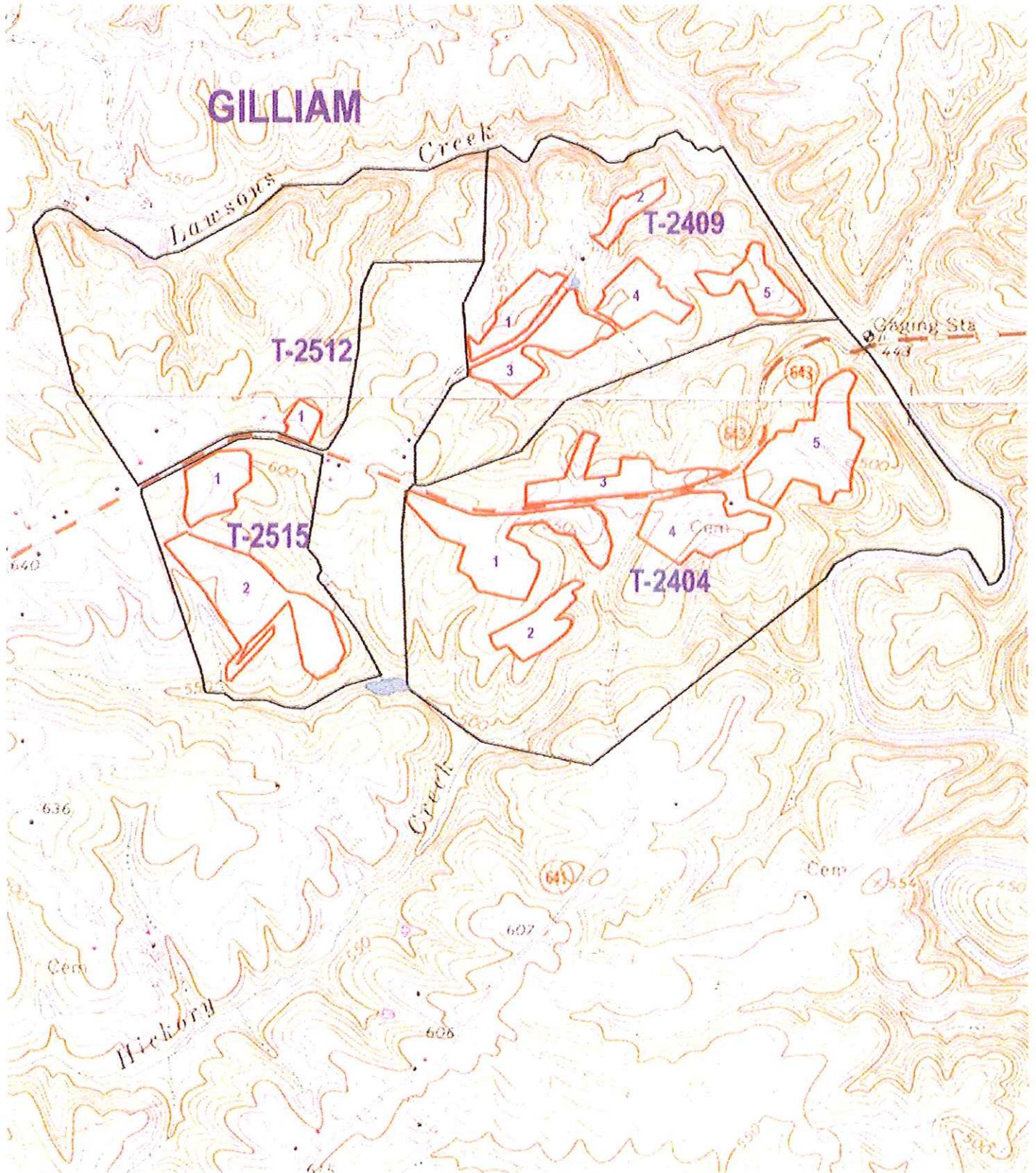
BIOSOLIDS LAND APPLICATION





# NutriBlend

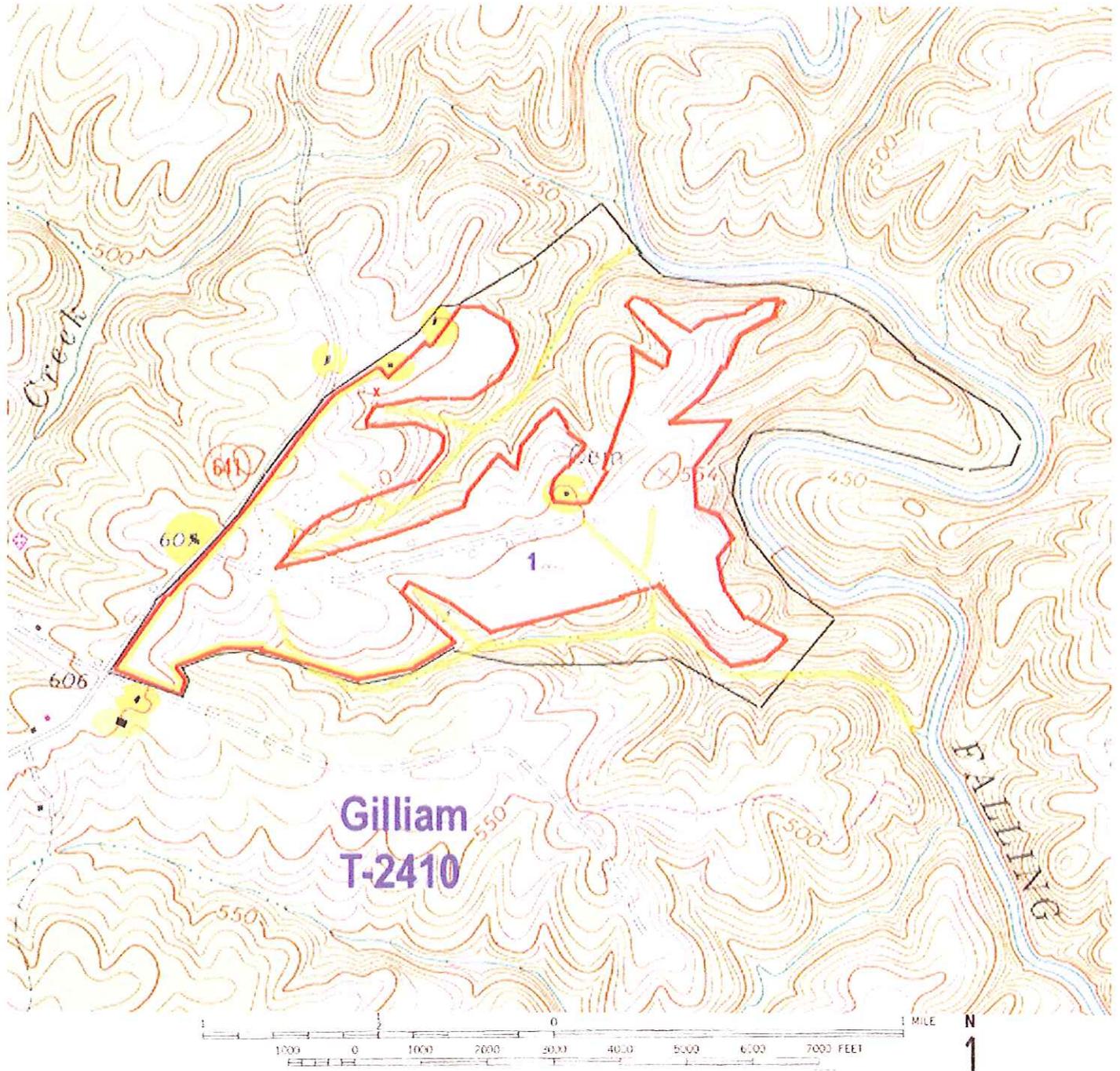
BIOSOLIDS LAND APPLICATION



**G. D. GILLIAM FARM  
TRACT T-2410**

# NutriBlend

## BIOSOLIDS LAND APPLICATION



- |                           |                     |               |
|---------------------------|---------------------|---------------|
| Buffer Area               | Road                | Property Line |
| Dwelling/Structure        | Intermittent stream | Water         |
| Field Coordinate Location | Undeveloped Road    | Wooded Area   |
|                           | Fence               | Rock Outcrop  |



**GILLIAM FARM**  
**TRACT T-2410**  
**FIELD DATA SHEET**

Field	Total Acres	Net Acres	Soil Series	Productivity	
				Corn	Hay
1	140.6	130.0	CcB2* Cecil fine sandy loam, 2-6% slopes CcC2 Cecil fine sandy loam, 6-15% slopes ApC2 Appling fine sandy loam, 6-15% slopes CuB Cullen loam, 2-6% slopes TIC2 Tatum loam, 6-15% slopes	IVa	II
<b>SUM</b>	<b>140.6</b>	<b>130.0</b>			

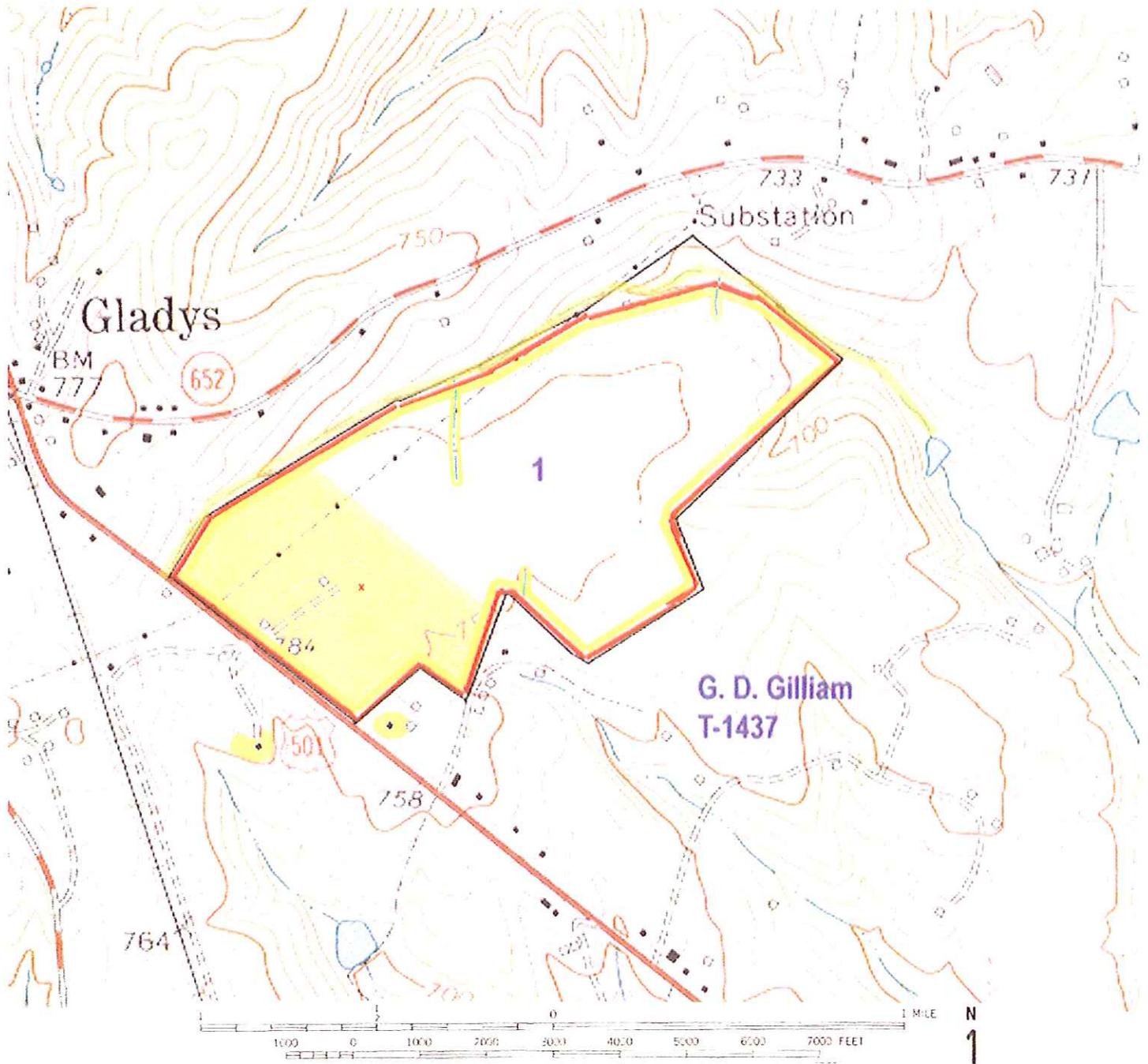
FIELD	LATITUDE	LONGITUDE
1	37°06.58	78°58.01



**GILLIAM, G.D. FARM**  
**T-1437**

# NutriBlend

## BIOSOLIDS LAND APPLICATION



- |   |   |   |
|---|---|---|
|  Buffer Area               |  Road                |  Property Line |
|  Dwelling/Structure        |  Intermittent stream |  Water         |
|  Field Coordinate Location |  Undeveloped Road    |  Wooded Area   |
|   |  Fence               |  Rock Outcrop  |



**GILLIAM FARM**  
**TRACT T-1437**  
**FIELD DATA SHEET**

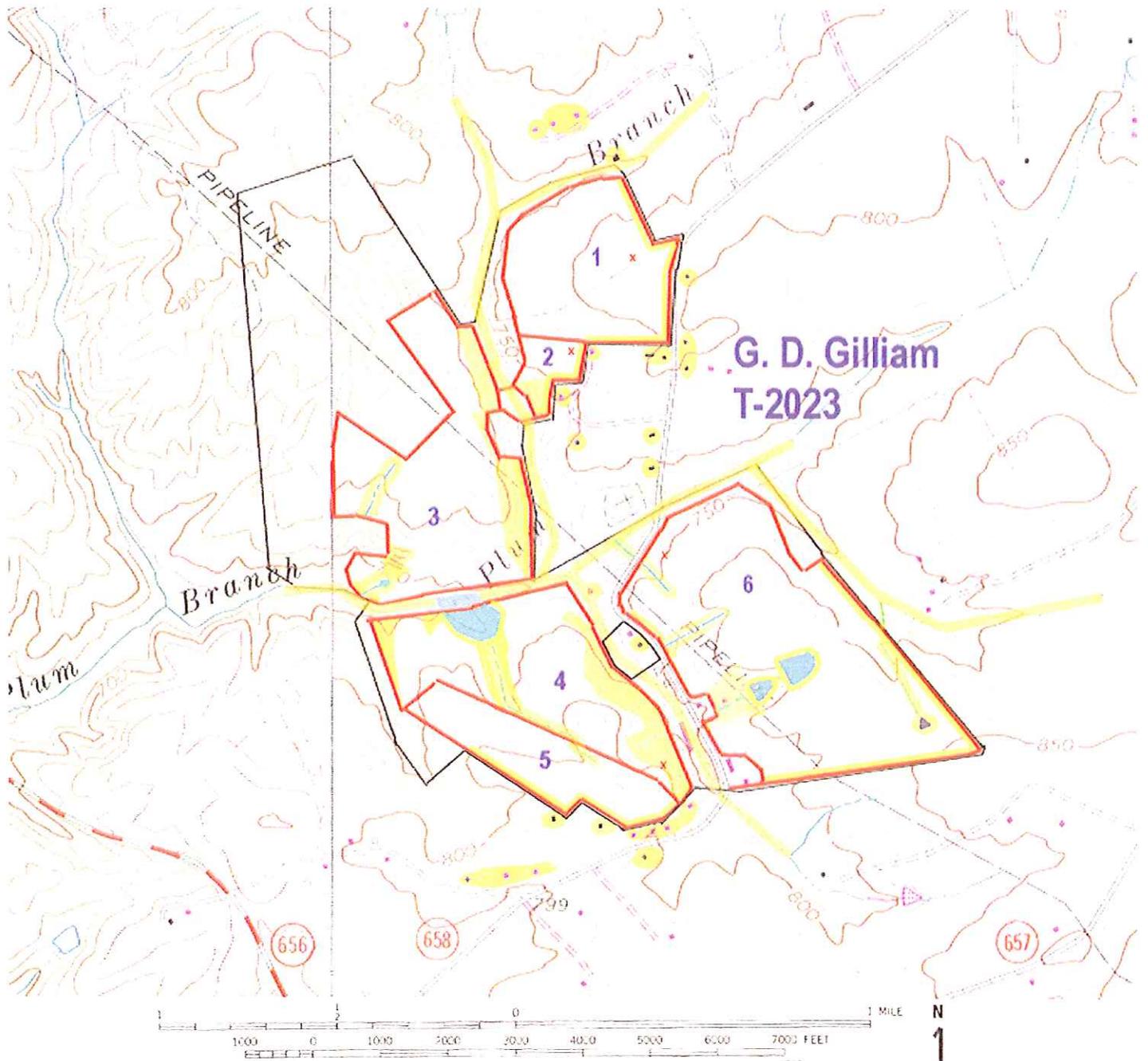
Field	Total Acres	Net Acres	Soil Series	Productivity	
				Corn	Hay
1	115.2	79.0	CcB2* Cecil fine sandy loam, 2-6% slopes CcC2 Cecil fine sandy loam, 6-15% slopes ApC2 Appling fine sandy loam, 6-15% slopes ApB Appling fine sandy loam, 2-6% slopes MpB Masada fine sandy loam ,2-6% slopes CuC2 Cullen loam, 6-15% slopes	IVa	II
<b>SUM</b>	<b>115.2</b>	<b>79.0</b>			

FIELD	LATITUDE	LONGITUDE
1	37°09.59	79°04.03

**GILLIAM, G.D. FARM**  
**T-2023**

# NutriBlend

## BIOSOLIDS LAND APPLICATION



- |                           |                     |               |
|---------------------------|---------------------|---------------|
| Buffer Area               | Road                | Property Line |
| Dwelling/Structure        | Intermittent stream | Water         |
| Field Coordinate Location | Undeveloped Road    | Wooded Area   |
| Spring                    | Fence               | Rock Outcrop  |



**GILLIAM FARM  
TRACT T-2023  
FIELD DATA SHEET**

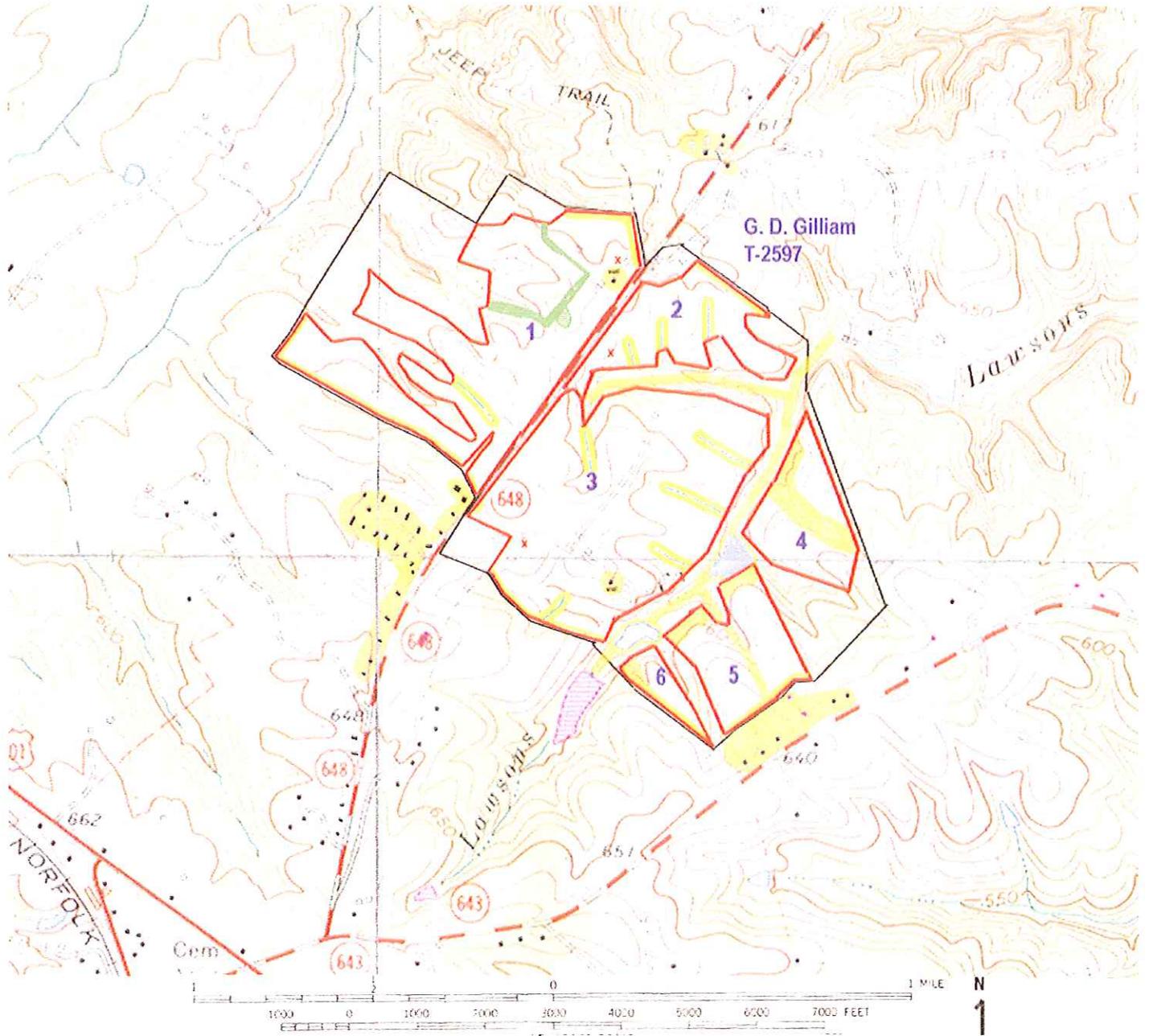
Field	Total Acres	Net Acres	Soil Series	Productivity	
				Corn	Hay
1	32.1	29.0	EnB* Enon fine sandy loam, 2-6% slopes EnC2 Enon fine sandy loam, 6-10% slopes IrB Iredell loam, 2-6% slopes	IVa	III
2	6.0	3.0	IrC2* Iredell loam 6-10% slopes WkD Wilkes loam, 6-15% slopes	V	IV
3	58.8	50.0	WkD* Wilkes loam, 6-15% slopes EnB Enon fine sandy loam, 2-6% slopes CxB3 Cullen clay loam, 2-6% slopes CxC3 Cullen clay loam, 6-15% slopes IrB Iredell loam, 2-6% slopes MzB2 Mecklenburg loam, 2-6% slopes Wd Wehadkee loam	V	IV
4	45.0	35.0	WkD* Wilkes loam, 6-15% slopes WkE Wilkes loam, 15-25% slopes MzC2 Meclenburg loam, 6-15% slopes CuB Cullen loam, 2-6% slopes CuE2 Cullen loam, 15-25% slopes BrE Brema loam, 15-25% slopes CxB3 Cullen clay loam, 2-6% slopes	V	IV
5	20.0	18.0	CuC2* Cullen loam, 6-15% slopes CuB Cullen loam, 2-6% slopes MaB2 Madison loam, 2-6% slopes CxB3 Cullen clay loam, 2-6% slopes	IIb	II
6	74.4	64.0	CuC2* Cullen loam, 6-15% slopes CuB Cullen loam, 2-6% slopes GeB2 Georgeville loam, 2-6% slopes TIB Tatum loam, 2-6% slopes TIC2 Tatum loam, 6-15% slopes MzC2 Meclenburg loam, 6-15% slopes CuE2 Cullen loam, 15-25% slopes WkD Wilkes loam, 6-15% slopes WkE Wilkes loam, 15-25% slopes McE Manteo channery loam, 15-25% slopes FIC2 Fluvanna fine sandy loam, 6-15% slopes	IIb	II
<b>SUM</b>	<b>236.3</b>	<b>199.0</b>			

FIELD	LATITUDE	LONGITUDE
1	37*18.97	78*59.51
2	37*18.87	78*59.59
4+5	37*18.29	78*59.41
6	37*18.61	78*59.47

**GILLIAM, G.D. FARM**  
**T-2597**

# NutriBlend

## BIOSOLIDS LAND APPLICATION



- |   |   |   |
|---|---|---|
|  Buffer Area               |  Road                |  Property Line |
|  Dwelling/Structure        |  Intermittent stream |  Water         |
|  Field Coordinate Location |  Undeveloped Road    |  Wooded Area   |
|   |  Fence               |  Rock Outcrop  |



**GILLIAM FARM  
TRACT T-2597  
FIELD DATA SHEET**

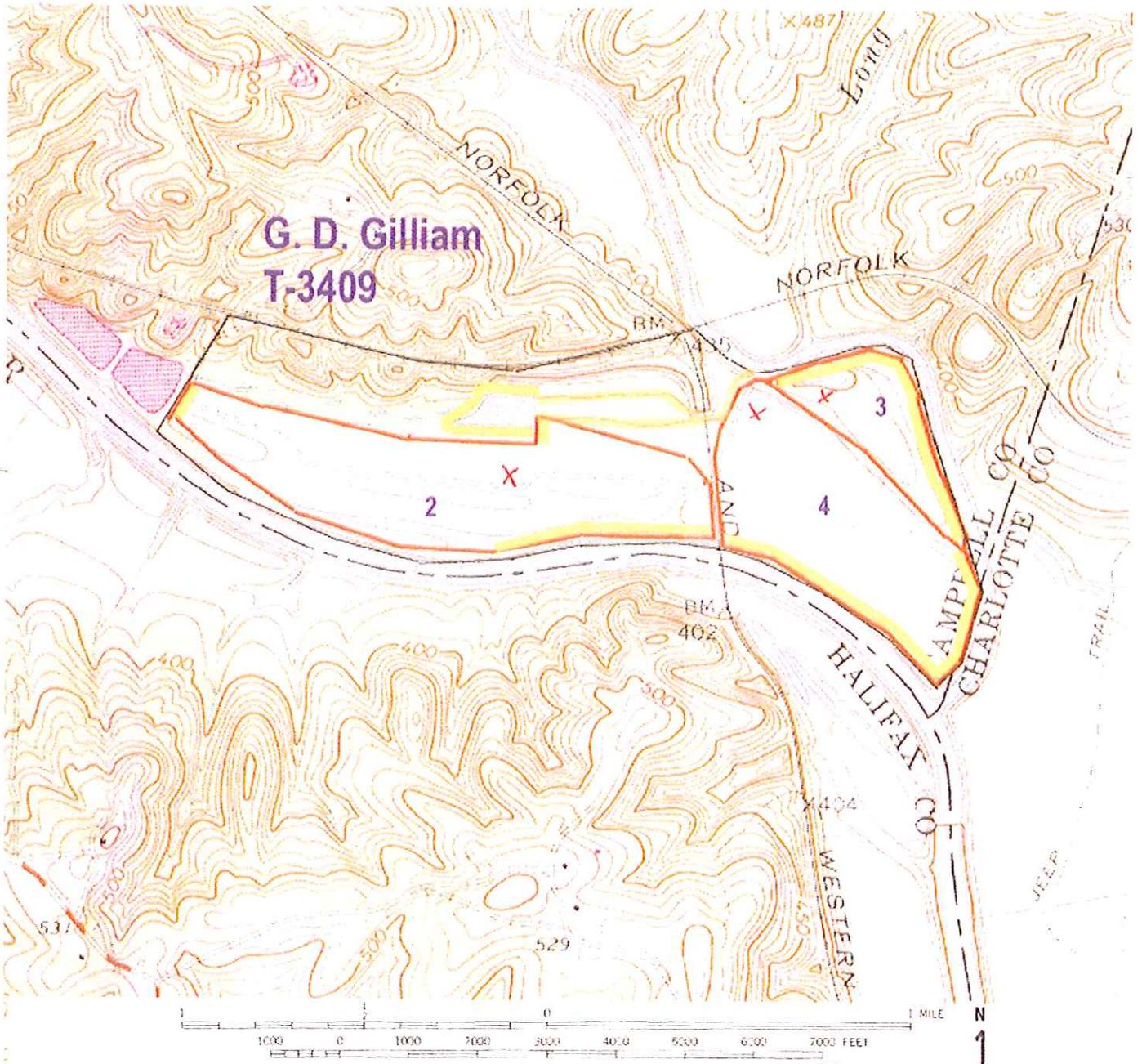
Field	Total Acres	Net Acres	Soil Series	Productivity	
				Corn	Hay
1	73.1	67.0	GeB2* Georgeville loam, 2-6% slopes TIC2 Tatum loam, 6-15% slopes NaC Nason loam, 6-15% slopes McE Mateo Channery loam, 15-25% slopes GeC2 Georgeville loam, 6-15% slopes MpB Masada fine sandy loam, 2-6% slopes	IVa	II
2	23.6	20.0	GeB2* Georgeville loam, 2-6% slopes GeC2 Georgeville loam, 6-15% slopes TIC2 Tatum loam, 6-15% slopes	IVa	II
3	81.5	72.5	GeB2* Georgeville loam, 2-6% slopes GeC2 Georgeville loam, 6-15% slopes MpC Masada fine sandy loam, 6-15% slopes TIC2 Tatum loam, 6-15% slopes TIE2 Tatum loam, 15-25% slopes	IVa	II
4	21.6	19.0	TIC2* Tatum loam, 6-15% slopes GeC2 Georgeville loam, 6-15% slopes CT Chewacla-Taccoa Complex McE Mateo Channery loam, 15-25% slopes TIE2 Tatum loam, 15-25% slopes	IVa	II
5	25.4	19.0	GeB2* Georgeville loam, 2-6% slopes GeC2 Georgeville loam, 6-15% slopes TIC2 Tatum loam, 6-15% slopes TIE2 Tatum loam, 15-25% slopes	IVa	II
6	4.5	2.8	GeB2* Georgeville loam, 2-6% slopes GeC2 Georgeville loam, 6-15% slopes TIE2 Tatum loam, 15-25% slopes	IVa	II
<b>SUM</b>	<b>229.7</b>	<b>200.3</b>			

FIELD	LATITUDE	LONGITUDE
1	37°07.89	78°59.55
2	37°07.79	78°59.64
3	37°07.54	78°59.75

**GILLIAM, G.D. FARM**  
**T-3409**

# NutriBlend

## BIOSOLIDS LAND APPLICATION



- |   |   |   |
|---|---|---|
|  Buffer Area               |  Road                |  Property Line |
|  Dwelling/Structure        |  Intermittent stream |  Water         |
|  Field Coordinate Location |  Undeveloped Road    |  Wooded Area   |
|   |  Fence               |  Rock Outcrop  |



GILLIAM FARM  
TRACT T-3409  
FIELD DATA SHEET

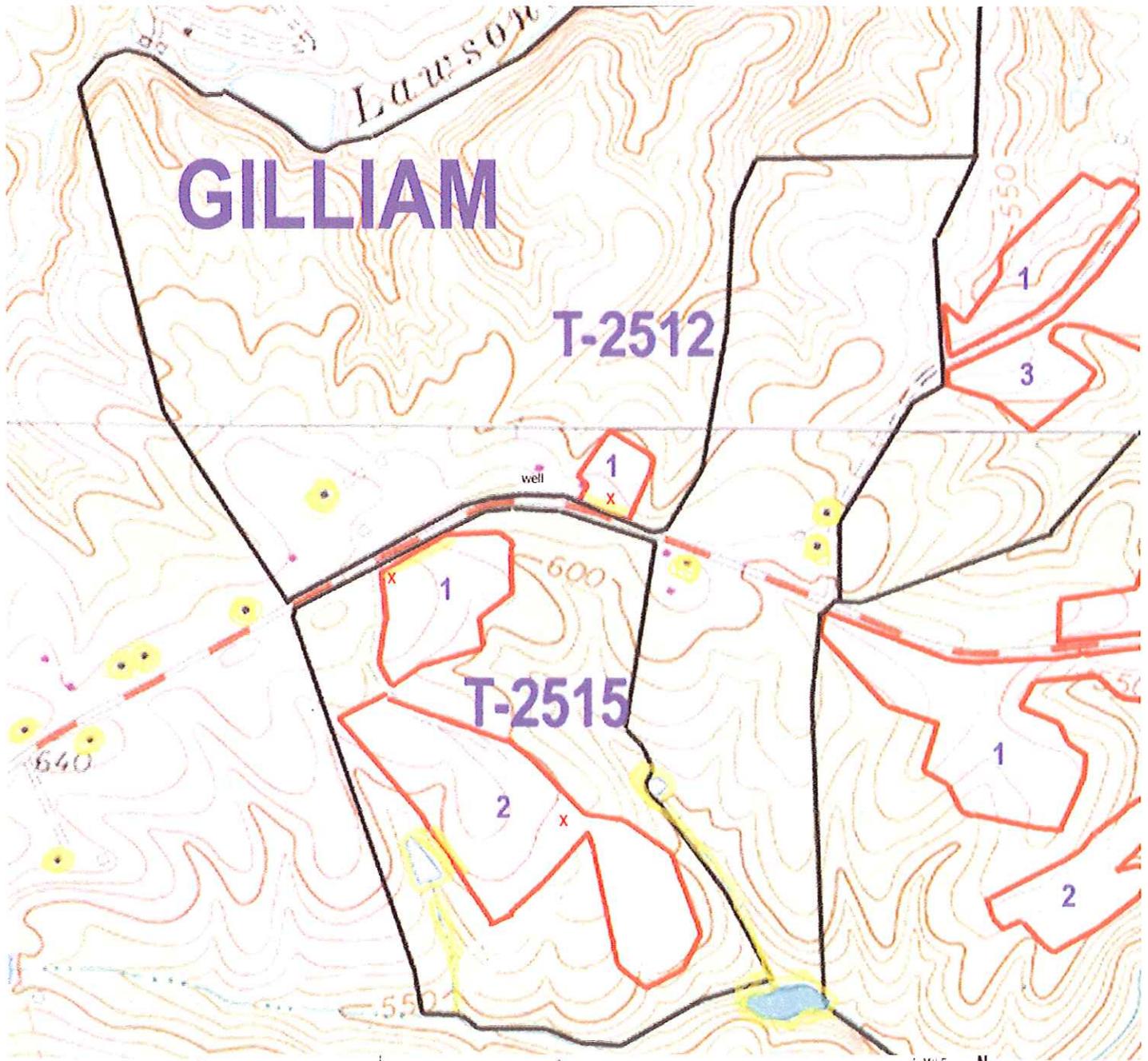
Field	Total Acres	Net Acres	Soil Series	Productivity	
				Corn	Hay
2	68.8	65.0	To* Toccoa fine sandy loam, 0-2% slopes Re Riverview loam, 0-2% slopes	V	NS
3	11.7	8.0	MsC2* Masada loam, 6-12% slope MsB2 Masada loam, 2-6% slopes	IIb	II
4	56.4	51.4	Re* Riverview loam, 0-2% slopes To Toccoa fine sandy loam, 0-2% slopes	IIa	I
<b>SUM</b>	<b>136.9</b>	<b>124.4</b>			

FIELD	LATITUDE	LONGITUDE
2	37*01.39	78*54.57
3	37*01.45	78*54.25
4	37*01.42	78*54.34

**GILLIAM FARM**  
**T-2512,T-2515,T-2404,T-2409**

# NutriBlend

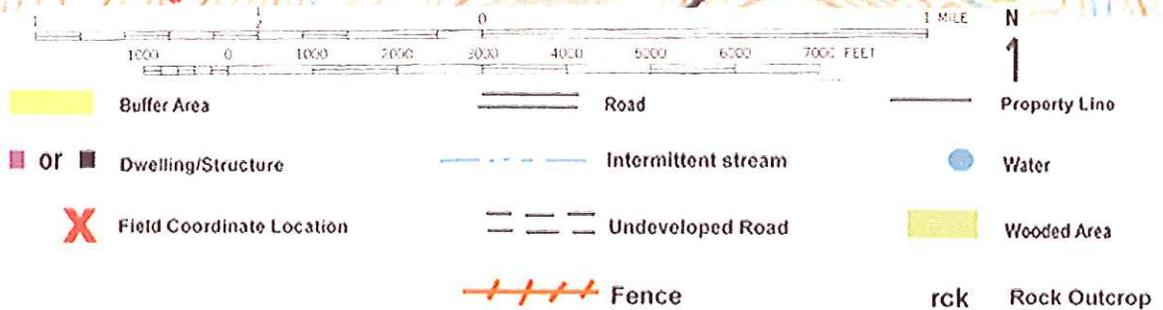
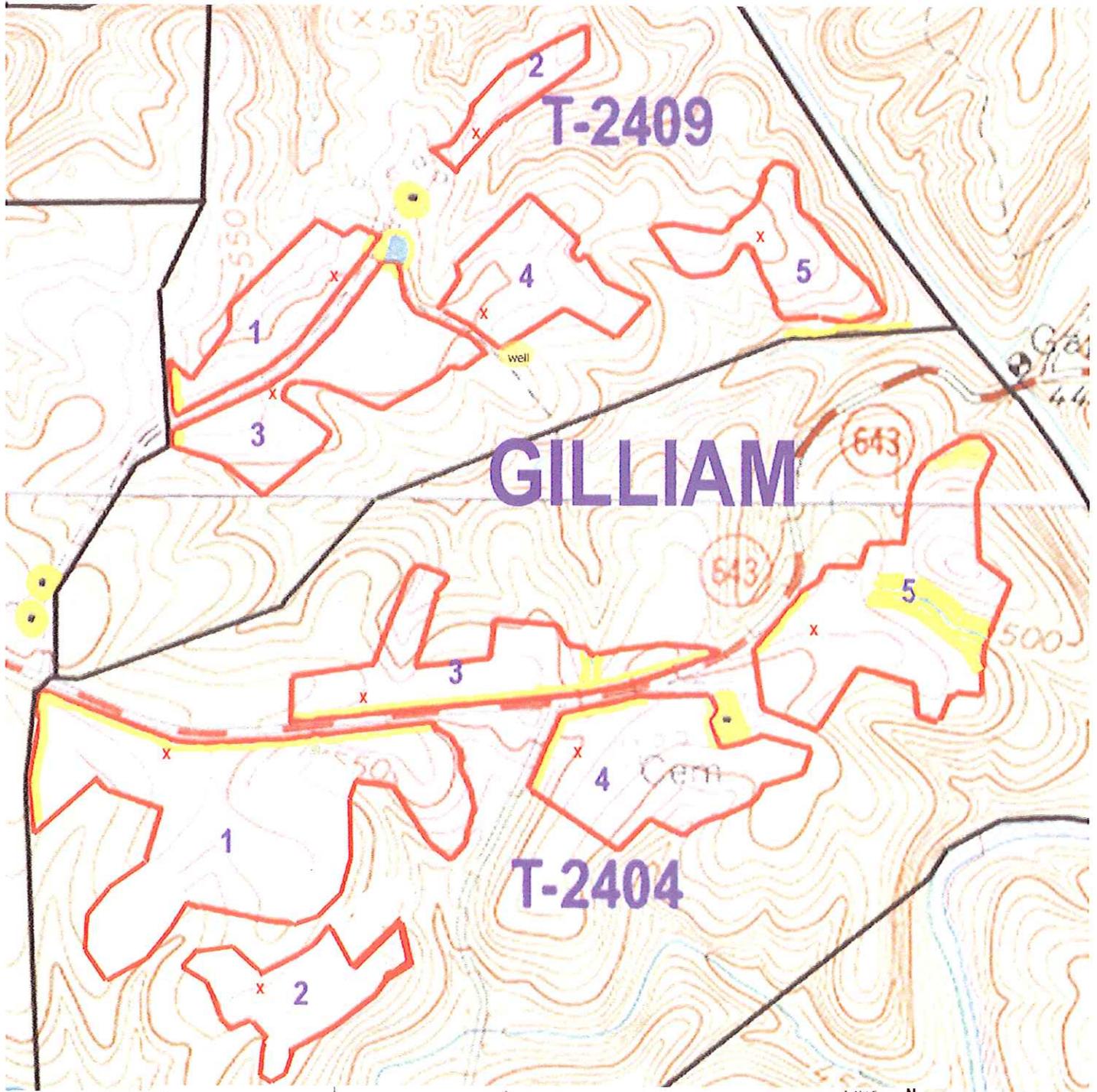
BIOSOLIDS LAND APPLICATION



- Buffer Area
- Road
- Property Line
- Dwelling/Structure
- Intermittent stream
- Water
- Field Coordinate Location
- Undeveloped Road
- Wooded Area
- Fence
- Rock Outcrop

# NutriBlend

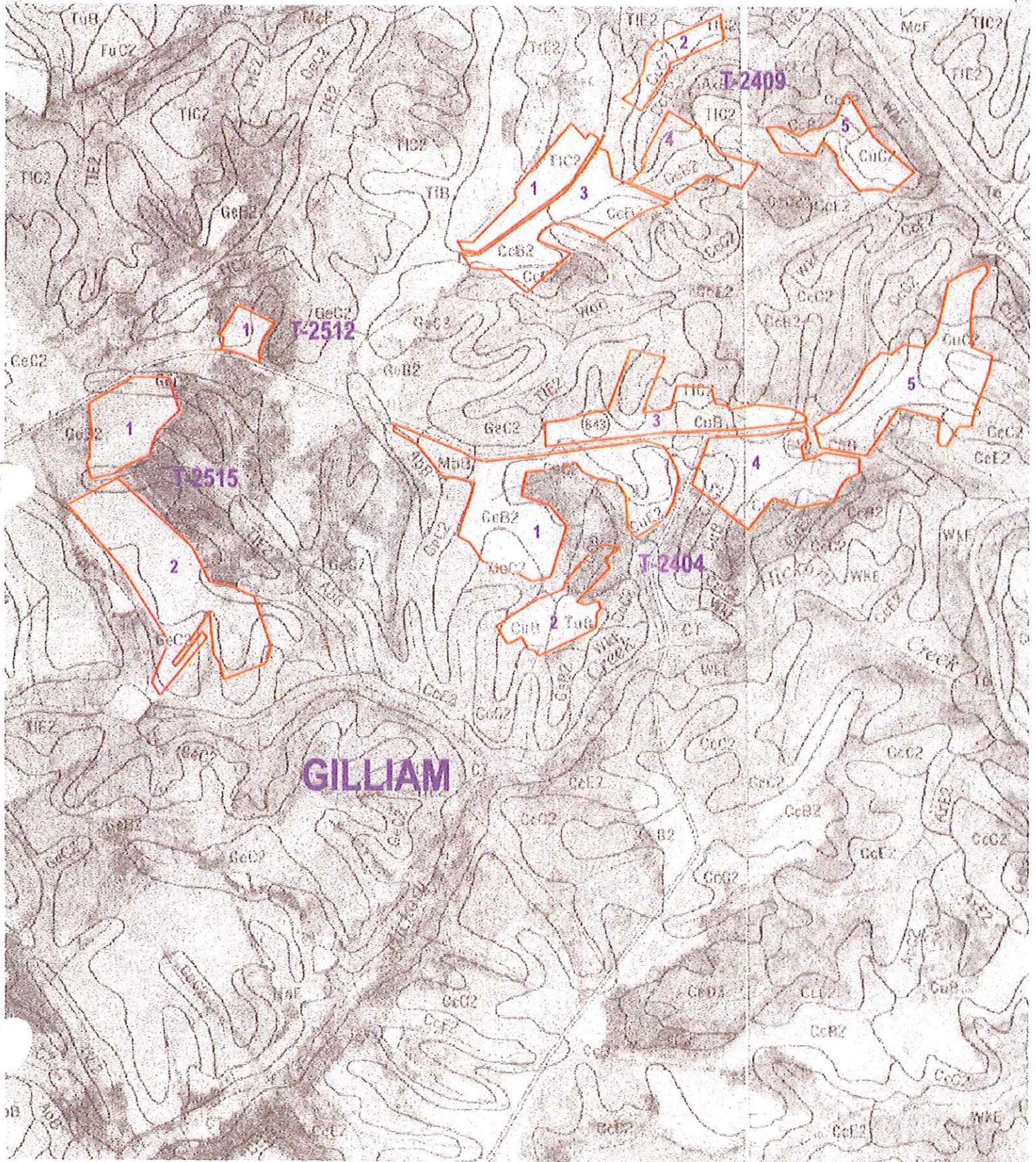
BIOSOLIDS LAND APPLICATION



# NutriBlend



## BIO SOLIDS LAND APPLICATION



**GILLIAM FARM**  
**TRACT T-2512**  
**FIELD DATA SHEET**

Field	Total Acres	Net Acres	Soil Series	Productivity	
				Corn	Hay
1	2.0	1.8	GeC2* Georgeville loam, 6-15% slopes GeB2 Georgeville loam, 2-6% slopes	IVa	II
<b>SUM</b>	<b>2.0</b>	<b>1.8</b>			

FIELD	LATITUDE	LONGITUDE
1	37°07.45	78°58.71

**GILLIAM FARM  
TRACT T-2515  
FIELD DATA SHEET**

Field	Total Acres	Net Acres	Soil Series	Productivity	
				Corn	Hay
1	8.0	7.8	GeB2* Georgeville loam, 2-6% slopes GeC2 Georgeville loam, 6-15% slopes	IVa	II
2	17.6	17.5	GeB2* Georgeville loam, 2-6% slopes GeC2 Georgeville loam, 6-15% slopes WoB Worsham soils, 0-4% slopes	IVa	II
<b>SUM</b>	<b>25.6</b>	<b>25.3</b>			

FIELD	LATITUDE	LONGITUDE
1	37°07.40	78°58.94
2	37°07.17	78°58.76

**GILLIAM FARM  
TRACT T-2404  
FIELD DATA SHEET**

Field	Total Acres	Net Acres	Soil Series	Productivity	
				Corn	Hay
1	19.0	18.6	GeB2* Georgeville loam, 2-6% slopes ApB Appling fine sandy loam, 2-6% slopes MpB Masada fine sandy loam, 2-6% slopes GeC2 Georgeville loam, 6-15% slopes CcC2 Cecil fine sandy loam, 6-15% slopes CuE2 Cullen loam, 15-25% slopes	IVa	II
2	7.1	7.1	CuB* Cullen loam, 2-6% slopes CcC2 Cecil fine sandy loam, 6-15% slopes TuB Turbeville fine sandy loam, 2-6% slopes GeC2 Georgeville loam, 6-15% slopes GeB2 Georgeville loam, 2-6% slopes CuC2 Cullen loam, 6-15% slopes	IIb	II
3	12.0	10.7	GeB2* Georgeville loam, 2-6% slopes GeC2 Georgeville loam, 6-15% slopes TIC2 Tatum loam, 6-15% slopes CuB Cullen loam, 2-6% slopes CcB2 Cecil fine sandy loam, 2-6% slopes TIE2 Tatum loam, 15-25% slopes	IVa	II
4	13.0	12.8	CuB* Cullen loam, 2-6% slopes GeC2 Georgeville loam, 6-15% slopes CcC2 Cecil fine sandy loam, 6-15% slopes CuE2 Cullen loam, 15-25% slopes CuC2 Cullen loam, 6-15% slopes	IIb	II
5	18.4	18.0	CuB* Cullen loam, 2-6% slopes CuC2 Cullen loam, 6-15% slopes CcE2 Cecil fine sandy loam, 15-25% slopes GeC2 Georgeville loam, 6-15% slopes	IIb	II
<b>SUM</b>	<b>69.5</b>	<b>67.2</b>			

FIELD	LATITUDE	LONGITUDE
1	37*07.33	78*58.31
2	37*07.15	78*58.29
3	37*07.35	78*58.19
4	37*07.35	78*57.97
5	37*07.40	78*57.77

**GILLIAM FARM  
TRACT T-2409  
FIELD DATA SHEET**

Field	Total Acres	Net Acres	Soil Series	Productivity	
				Corn	Hay
1	7.4	7.1	TIC2* Tatum loam, 6-15% slopes TIE2 Tatum loam, 15-25% slopes	IVa	II
2	1.7	1.7	CcC2* Cecil fine sandy loam, 6-15% slopes GeB2 Georgeville loam, 2-6% slopes TIE2 Tatum loam, 15-25% slopes TIC2 Tatum loam, 6-15% slopes CcE2 Cecil fine sandy loam, 15-25% slopes		
3	10.1	10.0	CcB2* Cecil fine sandy loam, 2-6% slopes CcC2 Cecil fine sandy loam, 6-15% slopes GeB2 Georgeville loam, 2-6% slopes CcE2 Cecil fine sandy loam, 15-25% slopes	IVa	II
4	5.5	5.5	GeB2* Georgeville loam, 2-6% slopes CcC2 Cecil fine sandy loam, 6-15% slopes TIC2 Tatum loam, 6-15% slopes CcE2 Cecil fine sandy loam, 15-25% slopes	IVa	II
5	6.4	6.3	CcE2 Cecil fine sandy loam, 15-25% slopes CcC2 Cecil fine sandy loam, 6-15% slopes CcB2 Cecil fine sandy loam, 2-6% slopes CuC2 Cullen loam, 6-15% slopes	IVa	II
<b>SUM</b>	<b>31.1</b>	<b>30.6</b>			

FIELD	LATITUDE	LONGITUDE
1	37*07.66	78*58.20
2	37*07.81	78*58.07
3	37*07.61	78*58.26
4	37*07.66	78*58.10
5	37*07.72	78*57.82