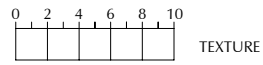


Elevation:
260 Meters
(853 Feet)

Centimeters

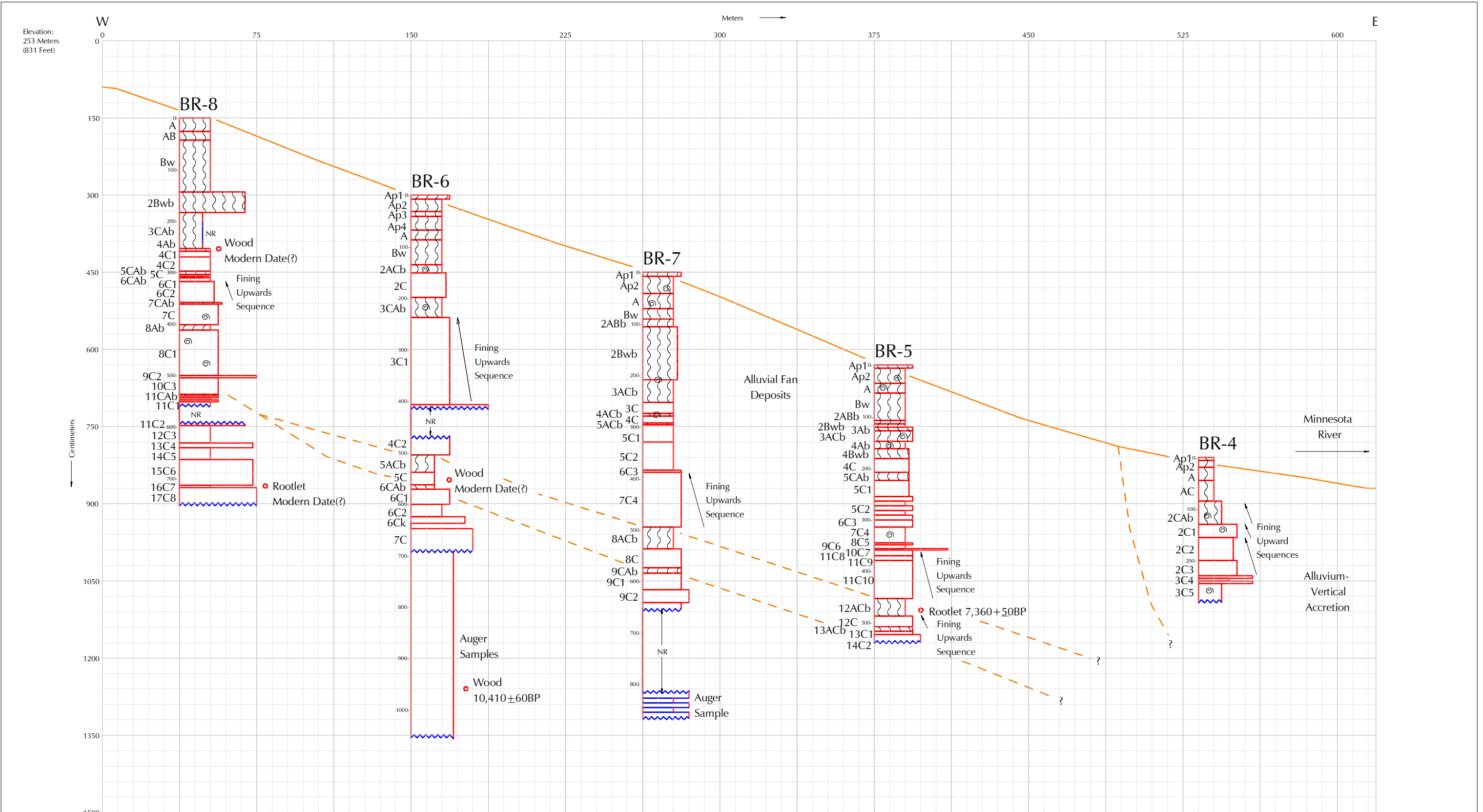


- 1 Clay or Sandy Clay
- 2 Silty Clay
- 3 Sandy Clay Loam, Silty Clay Loam, or Clay Loam
- 4 Silt Loam, Silt, Loam, or Peat
- 5 Sandy Loam
- 6 Loamy Sand
- 7 Very Fine to Fine Sand
- 8 Medium Sand
- 9 Coarse Sand
- 10 Gravel

LEGEND

	Solum		Peat/ Organic Soil		Textures (See Chart at Left)
	NR No Recovery		Plant Matter for C-14		Break for Graphic Representation
	Shells				

MINNESOTA DEPARTMENT OF TRANSPORTATION		
FIGURE E-1 SCHULTZ FAN-AREA 1 SECTION 4, T110N, R31W		
DEPARTMENT OF TRANSPORTATION UNITED STATES OF AMERICA	Scale: AS SHOWN Date: 9/97	By: JAM3

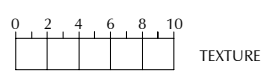


Elevation:
253 Meters
(831 Feet)

W 0 75 150 225 300 375 450 525 600 E

Centimeters

150
300
450
600
750
900
1050
1200
1350
1500



- 1 Clay or Sandy Clay
- 2 Silty Clay
- 3 Sandy Clay Loam, Silty Clay Loam, or Clay Loam
- 4 Silt Loam, Silt, Loam, or Peat
- 5 Sandy Loam
- 6 Loamy Sand
- 7 Very Fine to Fine Sand
- 8 Medium Sand
- 9 Coarse Sand
- 10 Gravel

LEGEND

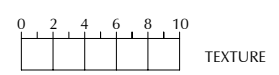
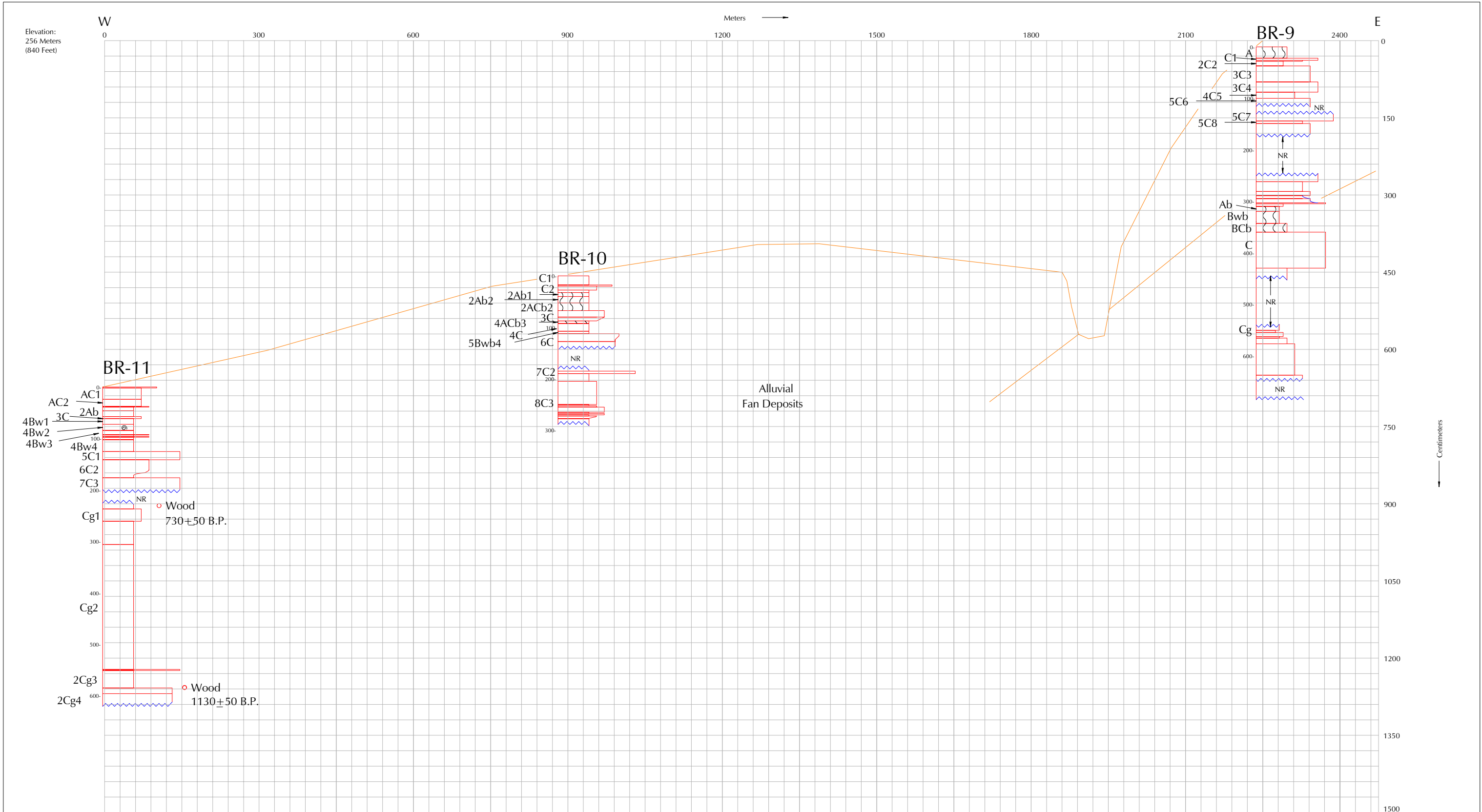
	Solum		Peat/ Organic Soil		Textures (See Chart at Left)
NR	No Recovery		Break for Graphic Representation		Shells
	Plant Matter for C-14				

MINNESOTA DEPARTMENT OF TRANSPORTATION

FIGURE E-2
VOGEL PROPERTY - ALLUVIAL FAN TRANSECT
SECTION 31, T111N, R31W

 DEPARTMENT OF TRANSPORTATION UNITED STATES OF AMERICA	Scale: AS SHOWN
	Date: 8/97

By: KEB



- 1 Clay or Sandy Clay
- 2 Silty Clay
- 3 Sandy Clay Loam, Silty Clay Loam, or Clay Loam
- 4 Silt Loam, Silt, Loam, or Peat
- 5 Sandy Loam
- 6 Loamy Sand
- 7 Very Fine to Fine Sand
- 8 Medium Sand
- 9 Coarse Sand
- 10 Gravel

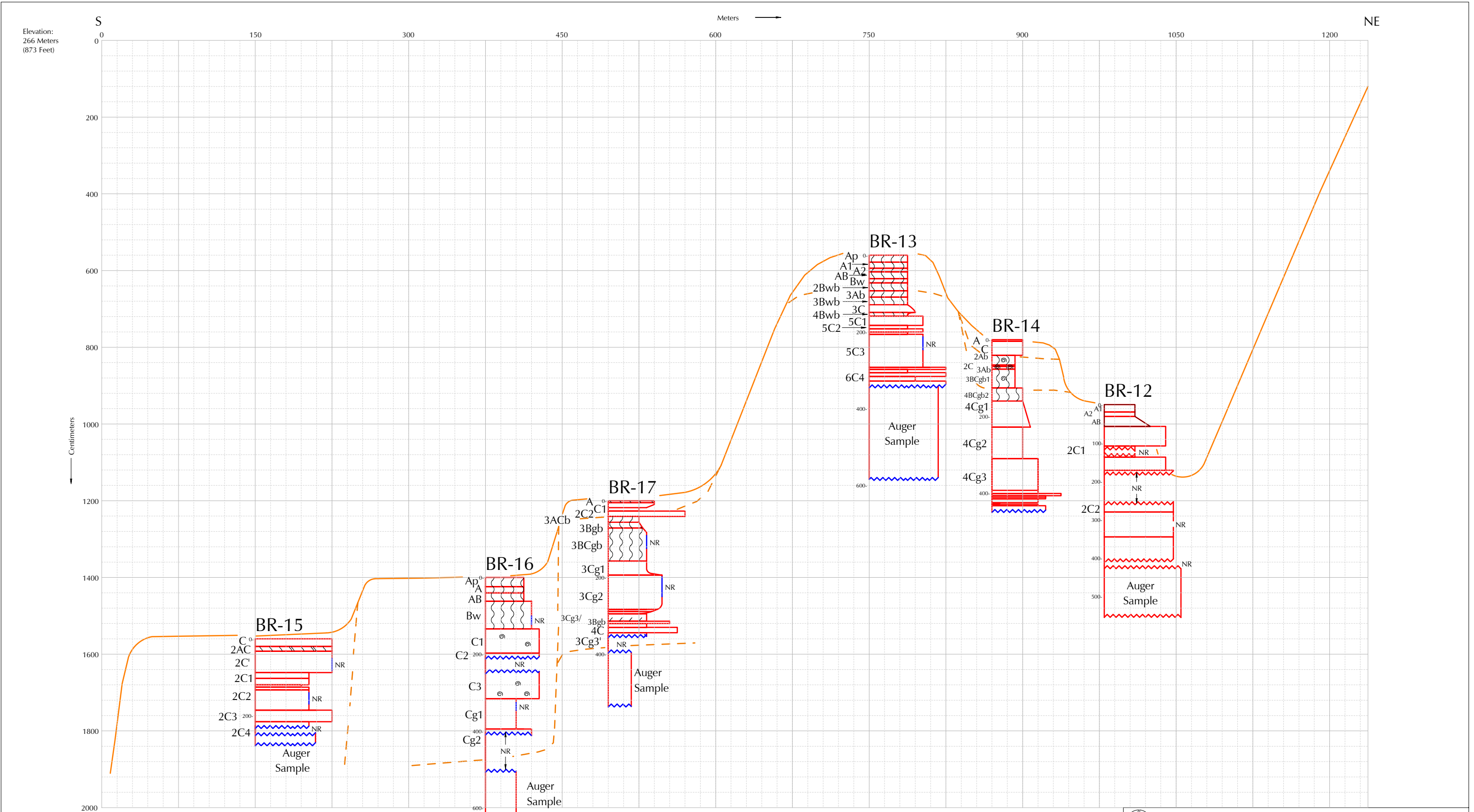
LEGEND

Solum	Peat/ Organic Soil	Textures (See Chart at Left)
NR No Recovery	Plant Matter for C-14	Break for Graphic Representation
Shells		

MINNESOTA DEPARTMENT OF TRANSPORTATION

FIGURE E-3
MINNESOTA RIVER VALLEY-
ALLUVIAL FAN TRANSECT
SECTION 4,T110N, R31W

DEPARTMENT OF TRANSPORTATION UNITED STATES OF AMERICA	Scale: AS SHOWN	
	Date: 9/97	By: JAM3



Elevation:
266 Meters
(873 Feet)

S
0
200
400
600
800
1000
1200
1400
1600
1800
2000

150 300 450 600 750 900 1050 1200

NE

Meters



TEXTURE

- 1 Clay or Sandy Clay
- 2 Silty Clay
- 3 Sandy Clay Loam, Silty Clay Loam, or Clay Loam
- 4 Silt Loam, Silt, Loam, or Peat
- 5 Sandy Loam
- 6 Loamy Sand
- 7 Very Fine to Fine Sand
- 8 Medium Sand
- 9 Coarse Sand
- 10 Gravel

LEGEND

- Solum
- NR No Recovery
- Plant Matter for C-14
- Peat/Organic Soil
- Textures (See Chart at Left)
- Break for Graphic Representation
- Shells

MINNESOTA DEPARTMENT OF TRANSPORTATION

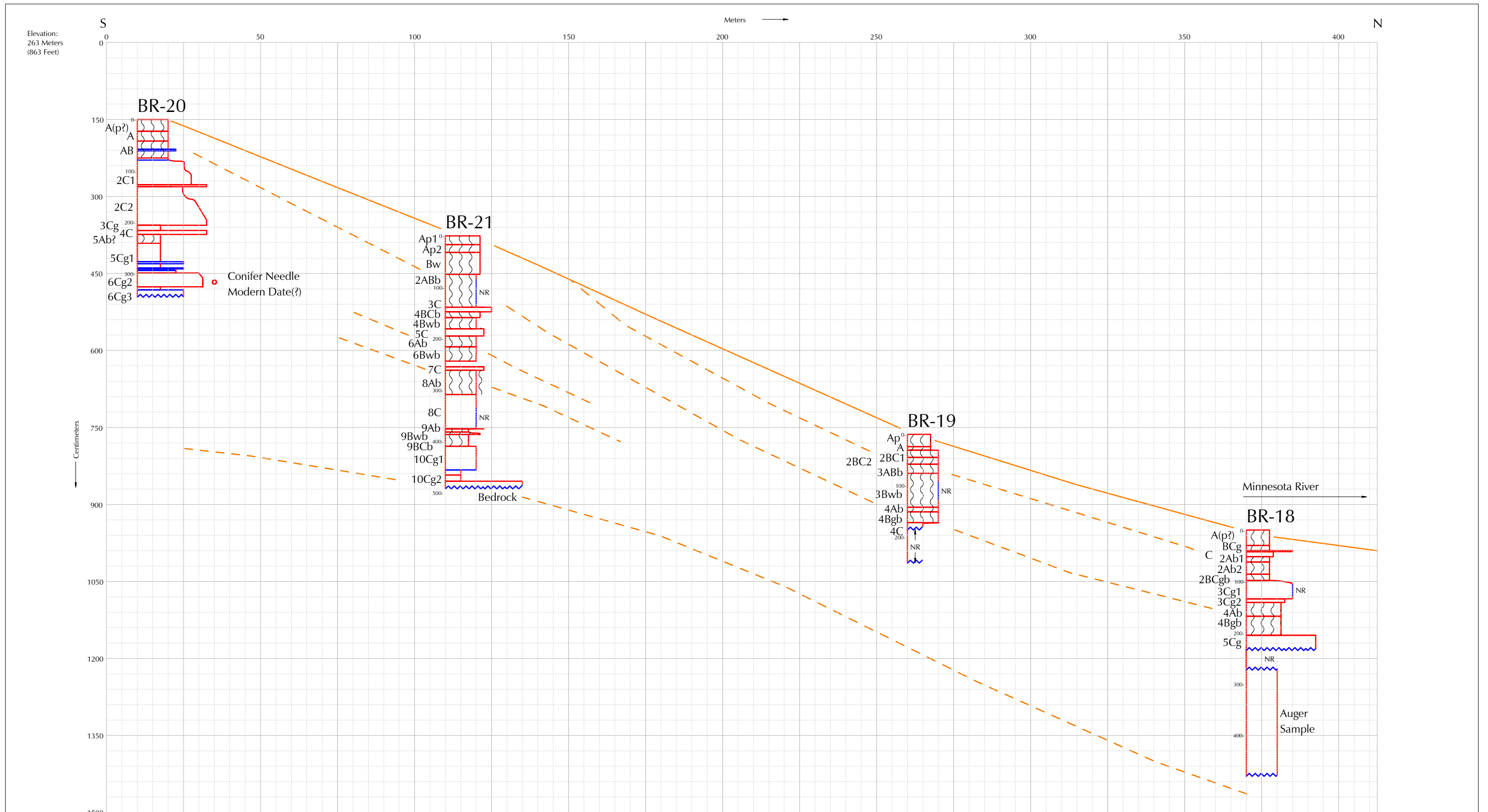
FIGURE E-4
FLANDRAU STATE PARK
SECTIONS 30&31, T110N, R30W

DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

Scale: AS SHOWN

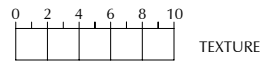
Date: 8/97

By: KEB



Elevation:
263 Meters
(863 Feet)

Centimeters



- 1 Clay or Sandy Clay
- 2 Silty Clay
- 3 Sandy Clay Loam, Silty Clay Loam, or Clay Loam
- 4 Silt Loam, Silt, Loam, or Peat
- 5 Sandy Loam
- 6 Loamy Sand
- 7 Very Fine to Fine Sand
- 8 Medium Sand
- 9 Coarse Sand
- 10 Gravel

LEGEND

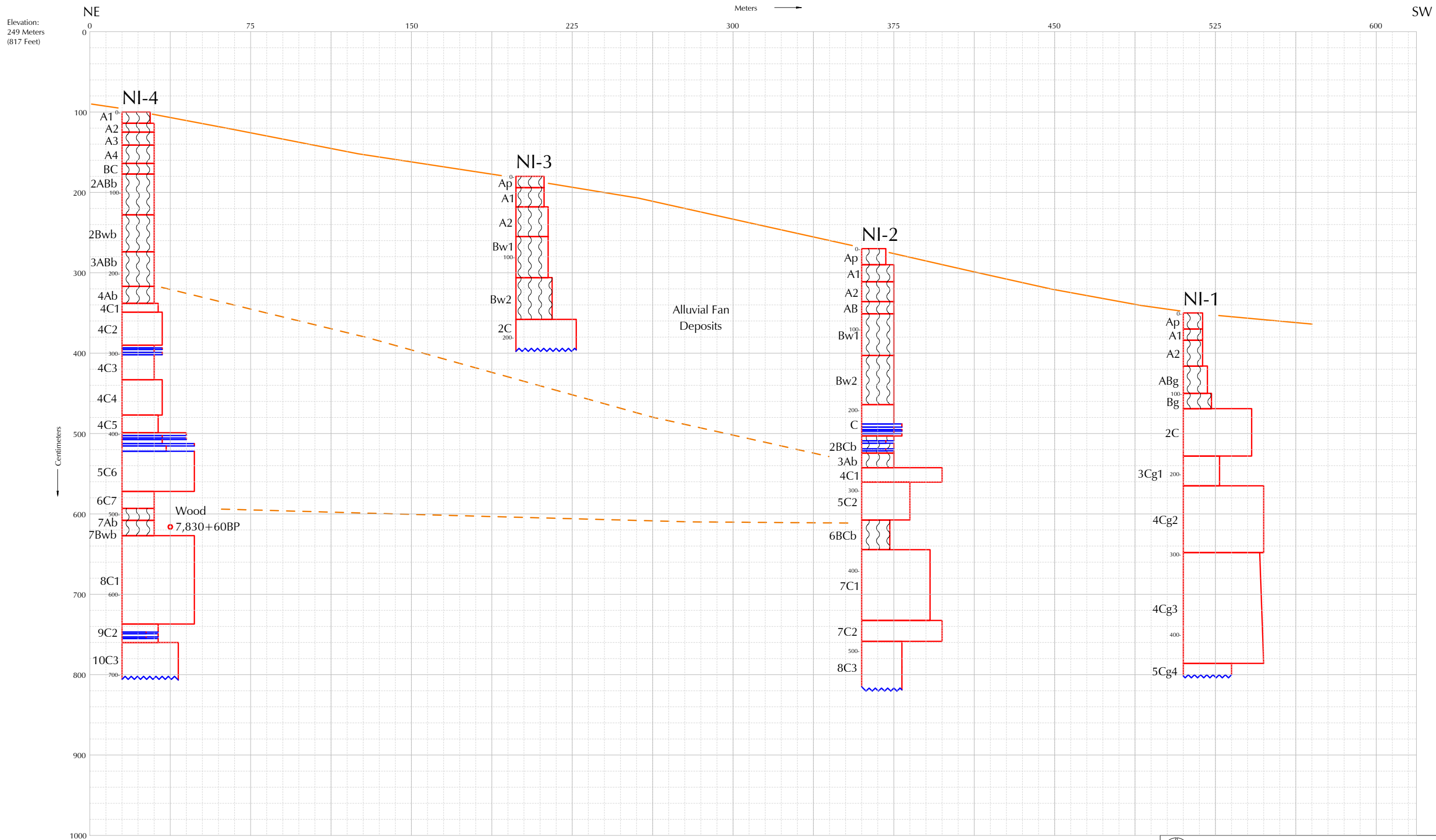
NR No Recovery		Shells

MINNESOTA DEPARTMENT OF TRANSPORTATION

FIGURE E-5

NELSON PROPERTY - ALLUVIAL FAN TRANSECT
SECTIONS 2&11, T109N, R30W

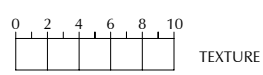
DEPARTMENT OF TRANSPORTATION UNITED STATES OF AMERICA	Scale: AS SHOWN Date: 8/97 By: KEB
--	--



Elevation:
249 Meters
(817 Feet)

NE 0 75 150 225 300 375 450 525 600 SW

Centimeters



- 1 Clay or Sandy Clay
- 2 Silty Clay
- 3 Sandy Clay Loam, Silty Clay Loam, or Clay Loam
- 4 Silt Loam, Silt, Loam, or Peat
- 5 Sandy Loam
- 6 Loamy Sand
- 7 Very Fine to Fine Sand
- 8 Medium Sand
- 9 Coarse Sand
- 10 Gravel

LEGEND

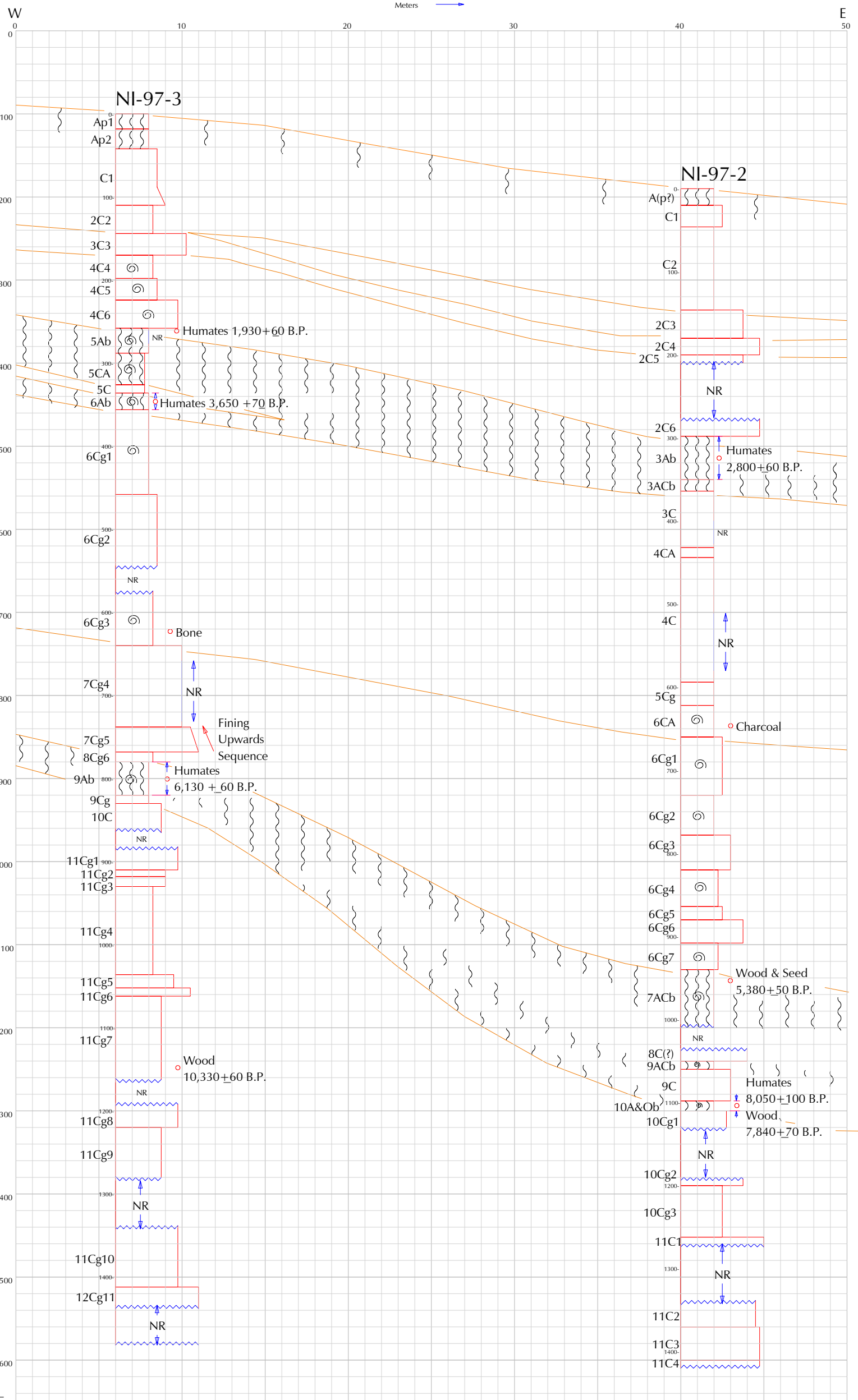
	Solum		Peat/ Organic Soil		Textures (See Chart at Left)
NR	No Recovery				Break for Graphic Representation
	Plant Matter for C-14				Shells

MINNESOTA DEPARTMENT OF TRANSPORTATION

FIGURE E-6
GRUBER ALLUVIAL FAN TRANSECT
SECTION 7, T110N, R30W

DEPARTMENT OF TRANSPORTATION UNITED STATES OF AMERICA	Scale: AS SHOWN	
	Date: 8/97	By: KEB

Elevation:
239 Meters
(784 Feet)



TEXTURE

- 1 Clay or Sandy Clay
- 2 Silty Clay
- 3 Sandy Clay Loam, Silty Clay Loam, or Clay Loam
- 4 Silt Loam, Silt, Loam, or Peat
- 5 Sandy Loam
- 6 Loamy Sand
- 7 Very Fine to Fine Sand
- 8 Medium Sand
- 9 Coarse Sand
- 10 Gravel



LEGEND

Solum	Peat	Textures (See Chart at Left)
NR No Recovery	Plant Matter for C-14	Break for Graphic Representation

MINNESOTA DEPARTMENT OF TRANSPORTATION

FIGURE E-7
T.H. 169 ALLUVIAL FAN
SECTION 24, T109N, R27W
(MODIFIED AFTER HUDAK, 1997)

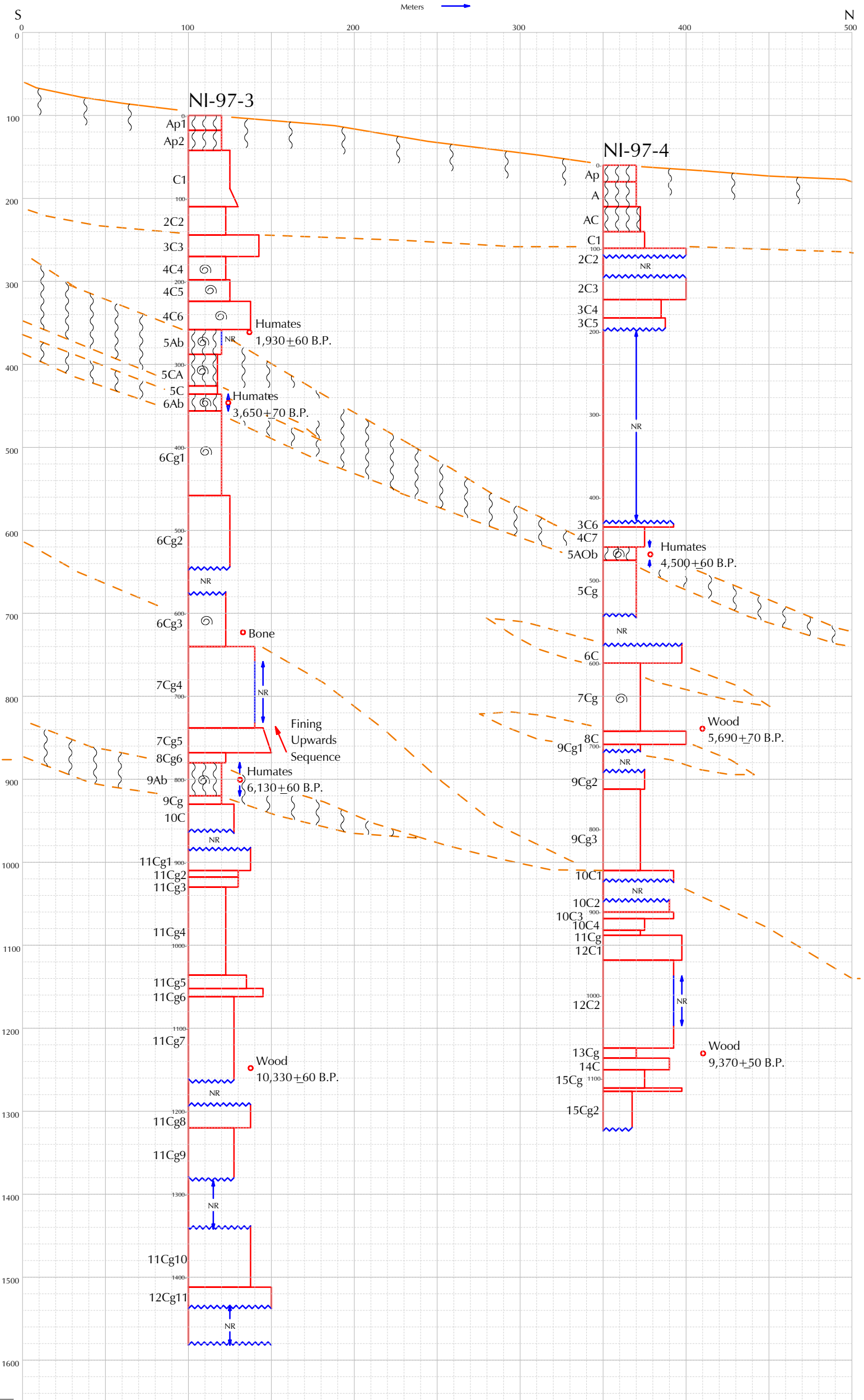
DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

Scale: AS SHOWN

Date: 8/98

By: DAT

Elevation:
239 Meters
(784 Feet)



Fluvial Deposits

Alluvial Fan Deposits

TEXTURE

- 1 Clay or Sandy Clay
- 2 Silty Clay
- 3 Sandy Clay Loam, Silty Clay Loam, or Clay Loam
- 4 Silt Loam, Silt, Loam, or Peat
- 5 Sandy Loam
- 6 Loamy Sand
- 7 Very Fine to Fine Sand
- 8 Medium Sand
- 9 Coarse Sand
- 10 Gravel



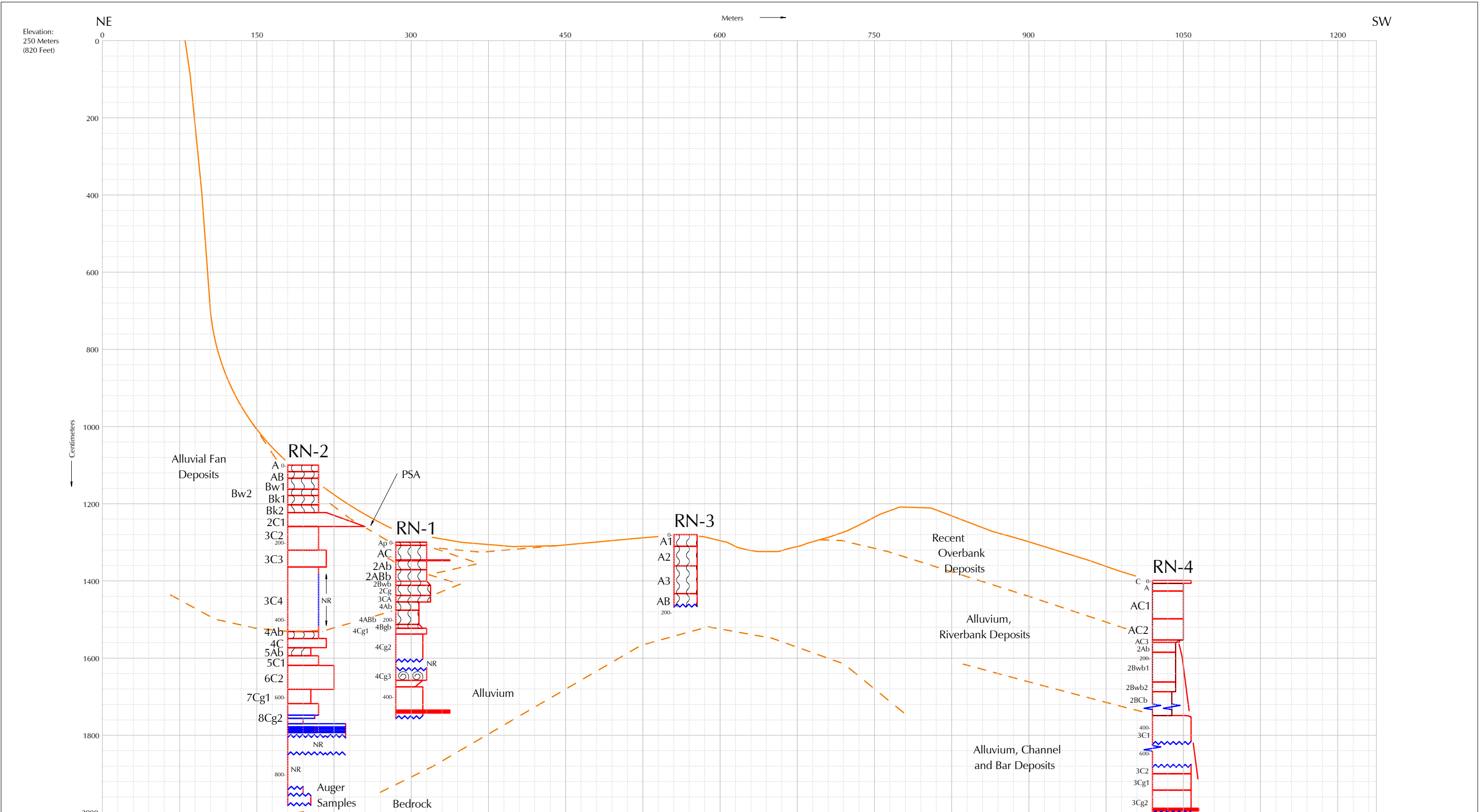
LEGEND

Solum	Peat	Textures (See Chart at Left)
No Recovery	Plant Matter for C-14	Break for Graphic Representation

MINNESOTA DEPARTMENT OF TRANSPORTATION

FIGURE E-8
T.H. 169 ALLUVIAL FAN
SECTION 24, T109N, R27W
(MODIFIED AFTER HUDAK, 1997)

DEPARTMENT OF TRANSPORTATION UNITED STATES OF AMERICA	Scale: AS SHOWN
Date: 8/98	By: DAT



Elevation:
250 Meters
(820 Feet)

NE

SW

Meters

Centimeters



TEXTURE

- 1 Clay or Sandy Clay
- 2 Silty Clay
- 3 Sandy Clay Loam, Silty Clay Loam, or Clay Loam
- 4 Silt Loam, Silt, Loam, or Peat
- 5 Sandy Loam
- 6 Loamy Sand
- 7 Very Fine to Fine Sand
- 8 Medium Sand
- 9 Coarse Sand
- 10 Gravel

LEGEND

- Solum
- Peat/Organic Soil
- Textures (See Chart at Left)
- Break for Graphic Representation
- Shells
- Plant Matter for C-14
- No Recovery

MINNESOTA DEPARTMENT OF TRANSPORTATION

FIGURE E-9
RENVILLE COUNTY PARK NUMBER 4
SECTION 34, T112N, R33W

DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

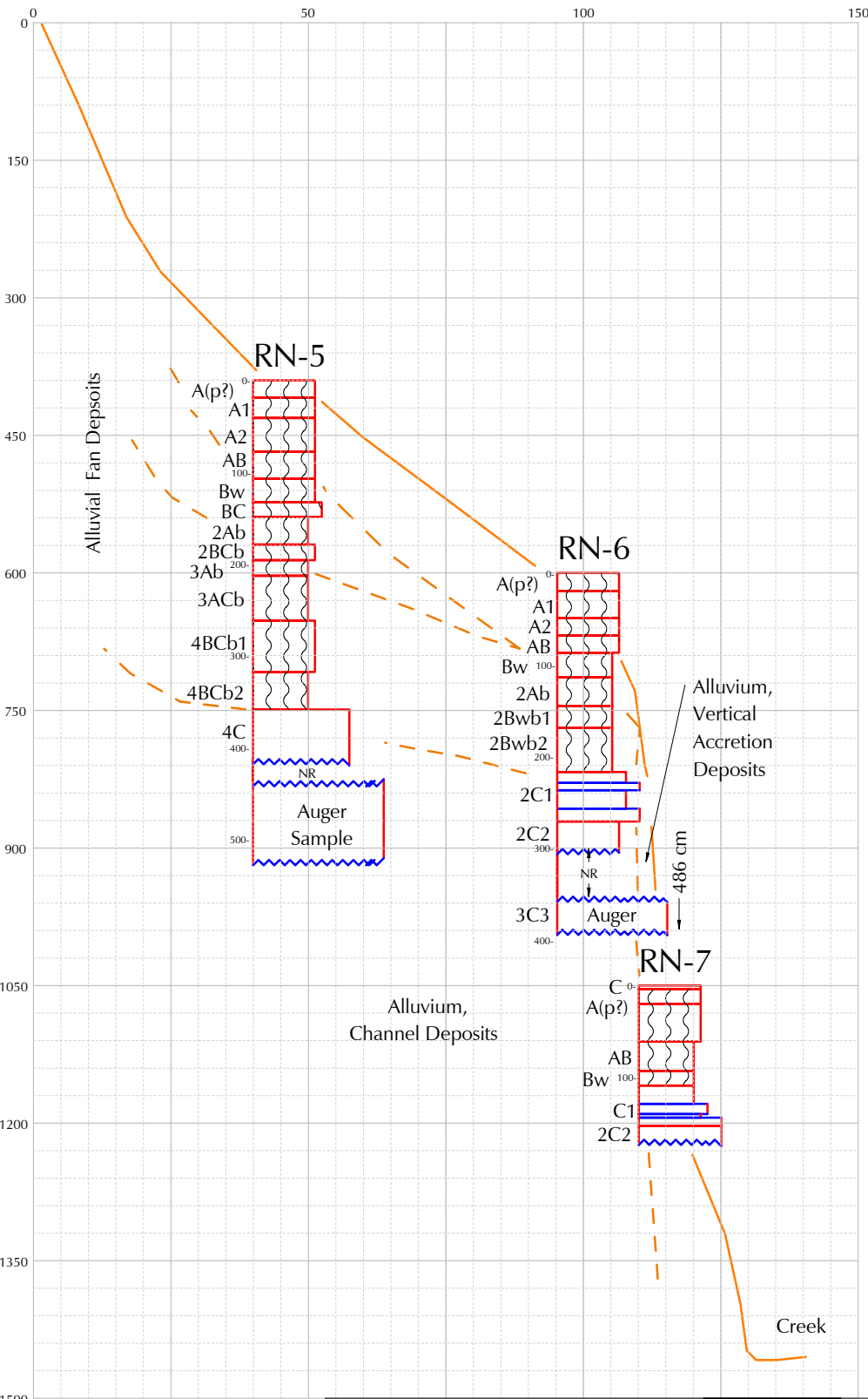
Scale: AS SHOWN
Date: 8/97
By: KEB

Elevation:
279 Meters
(915 Feet)

NE

Meters →

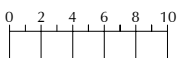
SW



Centimeters ↓

TEXTURE

- 1 Clay or Sandy Clay
- 2 Silty Clay
- 3 Silty Clay Loam, Clay Loam, or Sandy Clay Loam
- 4 Silt Loam, Silt, Loam, or Peat
- 5 Sandy Loam
- 6 Loamy Sand
- 7 Very Fine to Fine Sand
- 8 Medium Sand
- 9 Coarse Sand
- 10 Gravel



Textures

LEGEND

- Solum
- Plant Matter for C-14
- Shells
- Break for Graphic Representation
- Peat/Organic Soil
- No Recovery
- NR



MINNESOTA DEPARTMENT OF TRANSPORTATION

FIGURE E-10

RENVILLE COUNTY PARK - BEAVER FALLS
SECTION 21, T113N, R35W

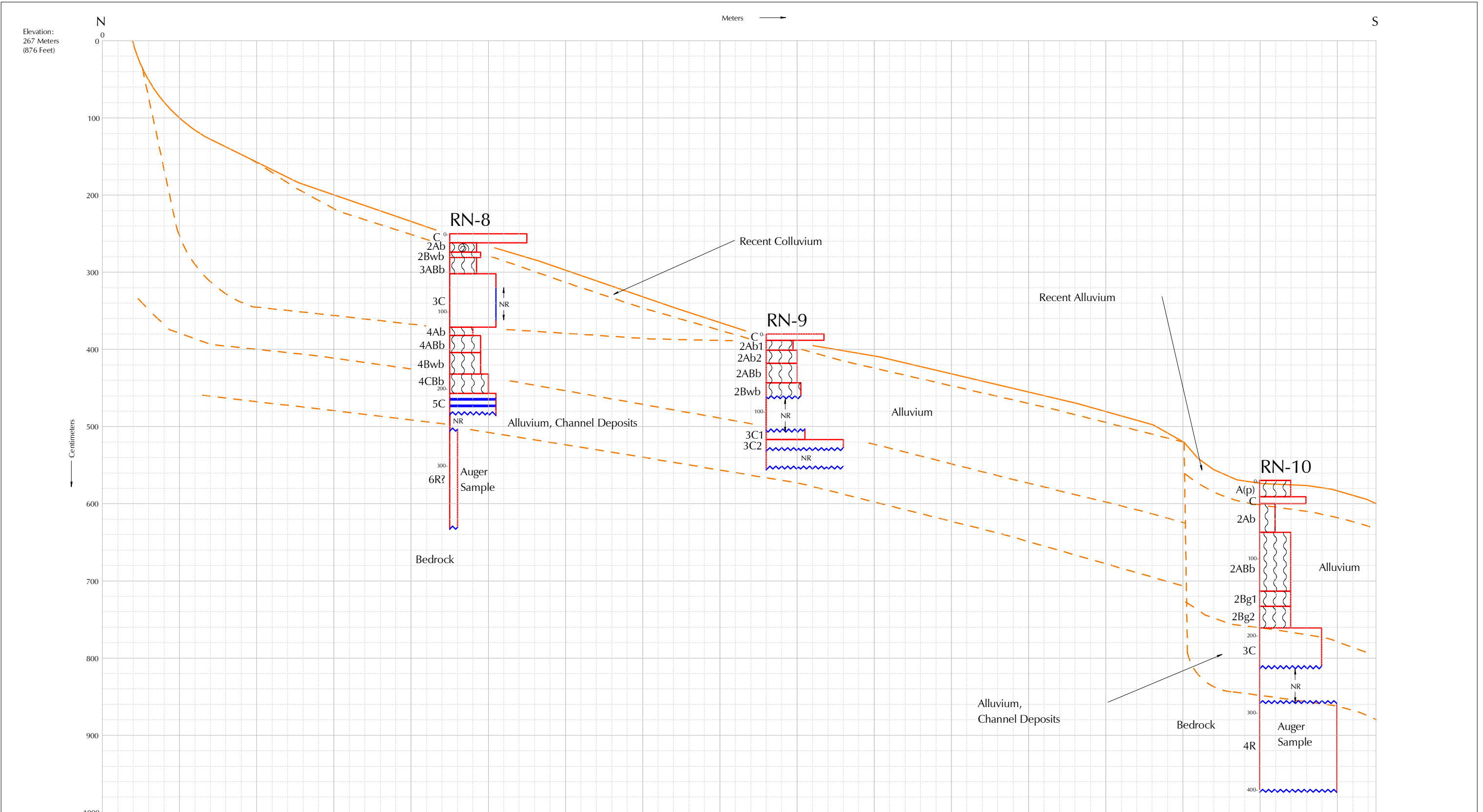


DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

Scale: AS SHOWN

Date: 8/97

By: KEB

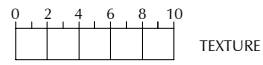


Elevation:
267 Meters
(876 Feet)

N
0
100
200
300
400
500
600
700
800
900
1000
Centimeters

Meters

S



- 1 Clay or Sandy Clay
- 2 Silty Clay
- 3 Sandy Clay Loam, Silty Clay Loam, or Clay Loam
- 4 Silt Loam, Silt, Loam, or Peat
- 5 Sandy Loam
- 6 Loamy Sand
- 7 Very Fine to Fine Sand
- 8 Medium Sand
- 9 Coarse Sand
- 10 Gravel

LEGEND

	Solum		Peat/ Organic Soil		Textures (See Chart at Left)
NR	No Recovery		Break for Graphic Representation		Shells
	Plant Matter for C-14				

MINNESOTA DEPARTMENT OF TRANSPORTATION

FIGURE E-11

RENVILLE COUNTY PARK - BEAVER FALLS
SECTION 21, T113N, R35W

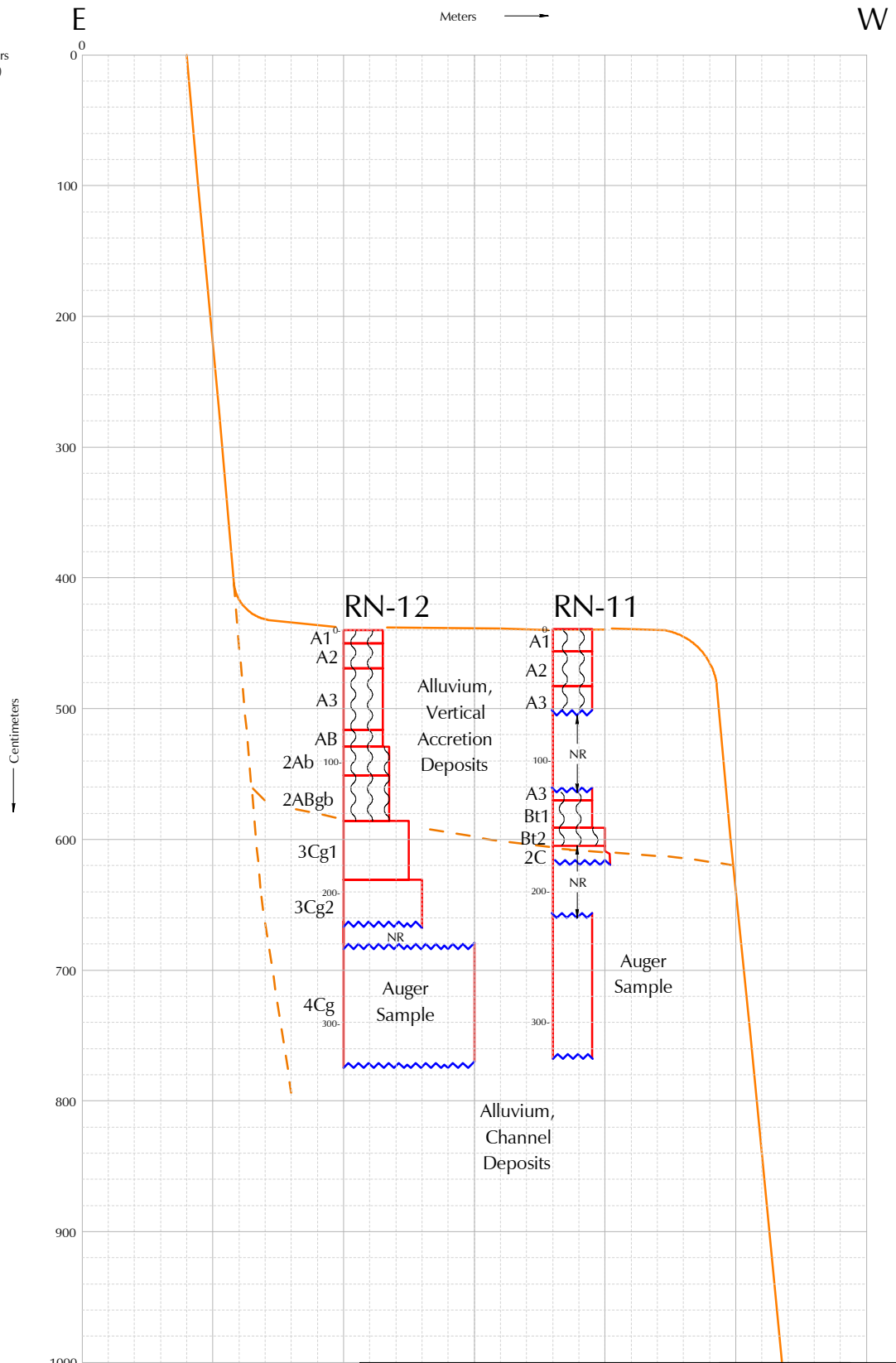
DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

Scale: AS SHOWN

Date: 8/97

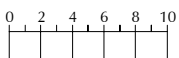
By: KEB

Elevation:
283 Meters
(928 Feet)



TEXTURE

- 1 Clay or Sandy Clay
- 2 Silty Clay
- 3 Silty Clay Loam, Clay Loam, or Sandy Clay Loam
- 4 Silt Loam, Silt, Loam, or Peat
- 5 Sandy Loam
- 6 Loamy Sand
- 7 Very Fine to Fine Sand
- 8 Medium Sand
- 9 Coarse Sand
- 10 Gravel



Textures

LEGEND

- Solum
- Plant Matter for C-14
- Shells
- Break for Graphic Representation
- Peat/Organic Soil
- No Recovery

MINNESOTA DEPARTMENT OF TRANSPORTATION

FIGURE E-12

RENVILLE COUNTY PARK - BEAVER FALLS
SECTION 22, T113N, R35W

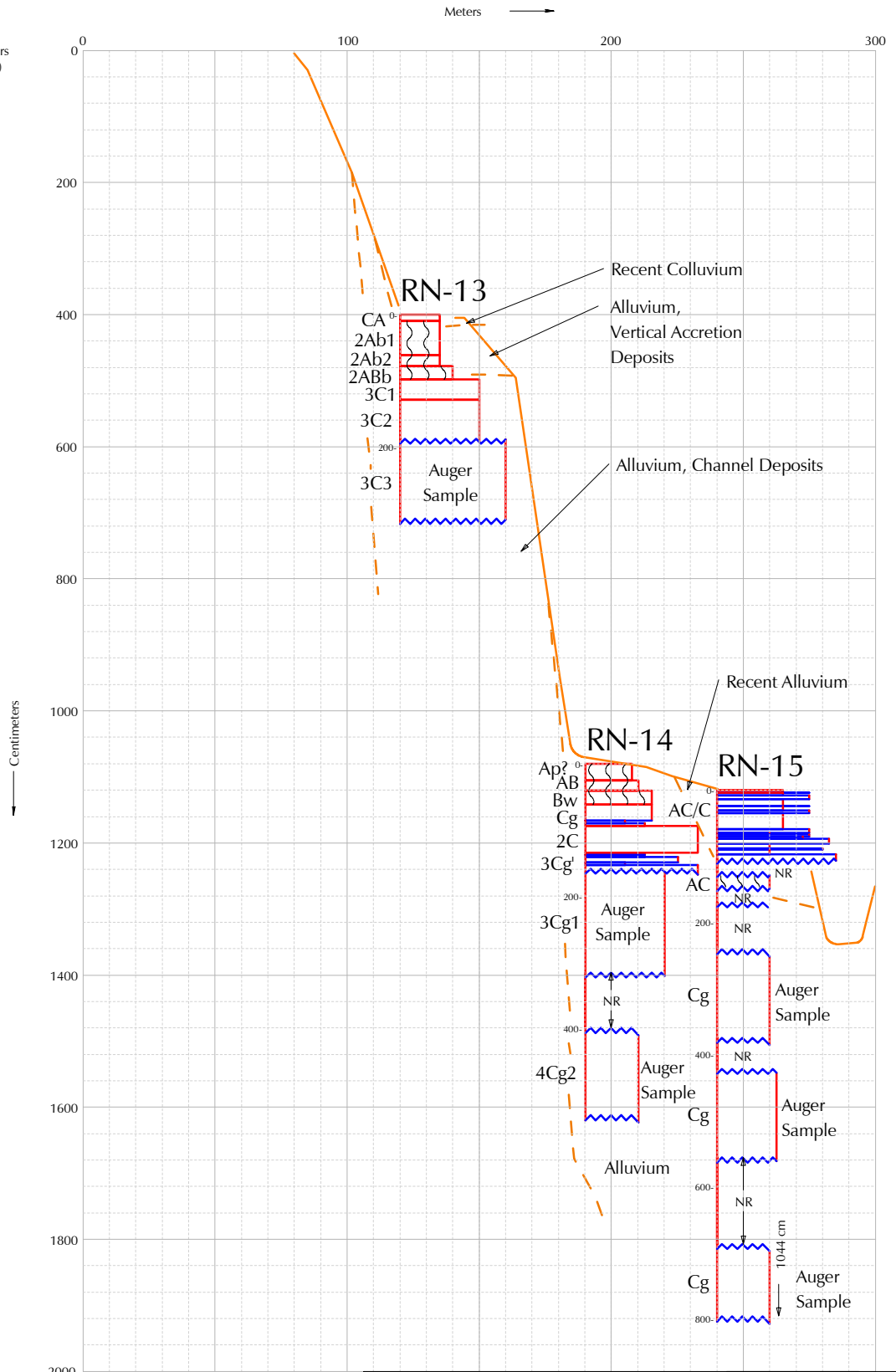
DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

Scale: AS SHOWN

Date: 8/97

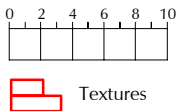
By: KEB

Elevation:
290 Meters
(951 Feet)



TEXTURE

- 1 Clay or Sandy Clay
- 2 Silty Clay
- 3 Silty Clay Loam, Clay Loam, or Sandy Clay Loam
- 4 Silt Loam, Silt, Loam, or Peat
- 5 Sandy Loam
- 6 Loamy Sand
- 7 Very Fine to Fine Sand
- 8 Medium Sand
- 9 Coarse Sand
- 10 Gravel



LEGEND

- Solum
- Peat/ Organic Soil
- NR No Recovery
- Plant Matter for C-14
- Shells
- Break for Graphic Representation



MINNESOTA DEPARTMENT OF TRANSPORTATION

FIGURE E-13

RENVILLE COUNTY PARK - BEAVER FALLS
SECTION 15, T113N, R35W



DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

Scale: AS SHOWN

Date: 8/97

By: KEB

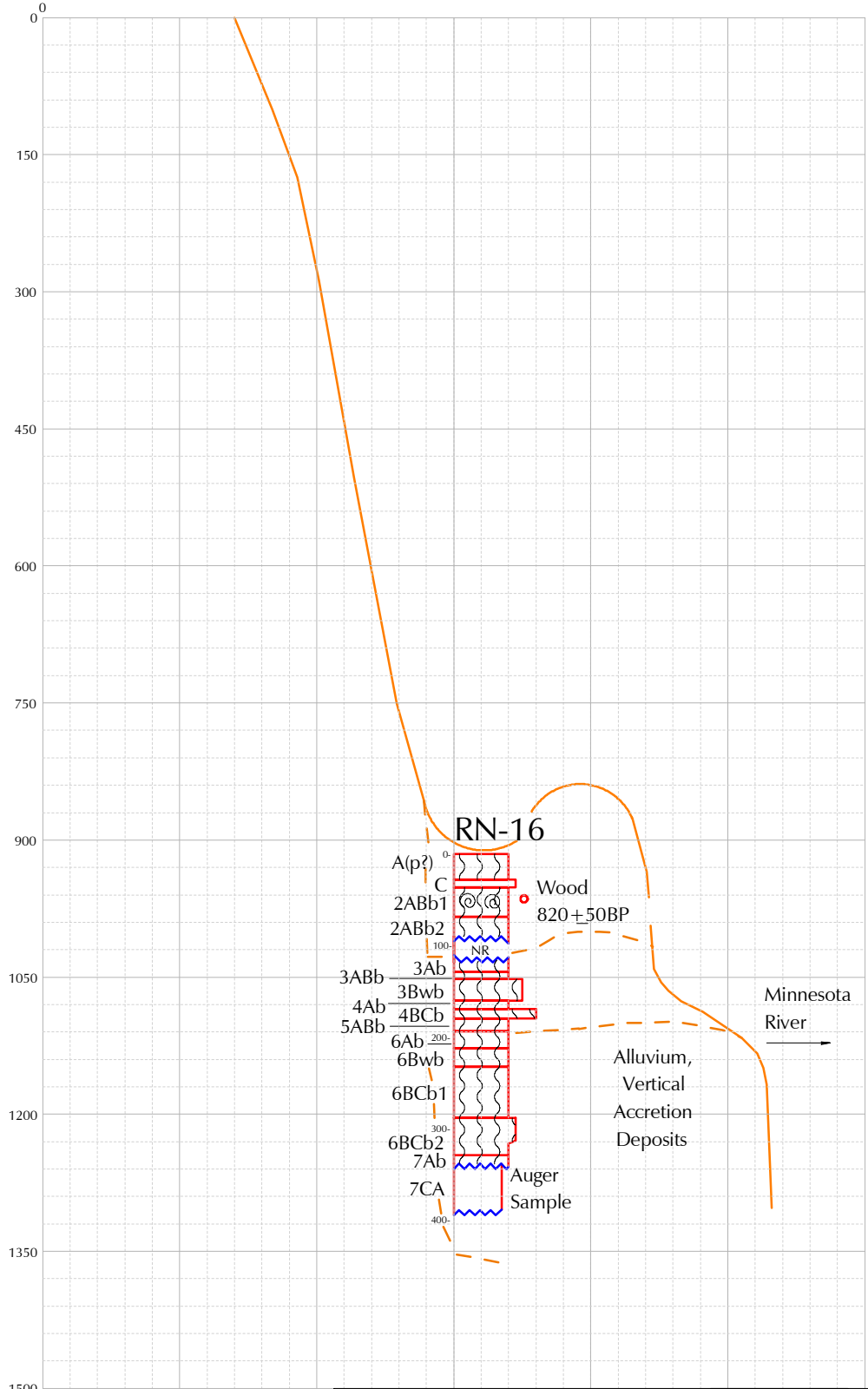
Elevation:
268 Meters
(879 Feet)

NE

Meters →

SW

Centimeters ↓



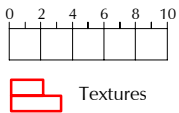
Minnesota River →

Alluvium,
Vertical
Accretion
Deposits

Auger
Sample

TEXTURE

- 1 Clay or Sandy Clay
- 2 Silty Clay
- 3 Silty Clay Loam, Clay Loam, or Sandy Clay Loam
- 4 Silt Loam, Silt, Loam, or Peat
- 5 Sandy Loam
- 6 Loamy Sand
- 7 Very Fine to Fine Sand
- 8 Medium Sand
- 9 Coarse Sand
- 10 Gravel



LEGEND

- Solum
- Peat/
Organic
Soil
- No Recovery
- Plant Matter for C-14
- Shells
- Break for Graphic
Representation



MINNESOTA DEPARTMENT OF TRANSPORTATION

FIGURE E-14

RENVILLE COUNTY PARK NUMBER 2
SECTION 19, T114N, R36W



DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

Scale: AS SHOWN

Date: 8/97

By: KEB

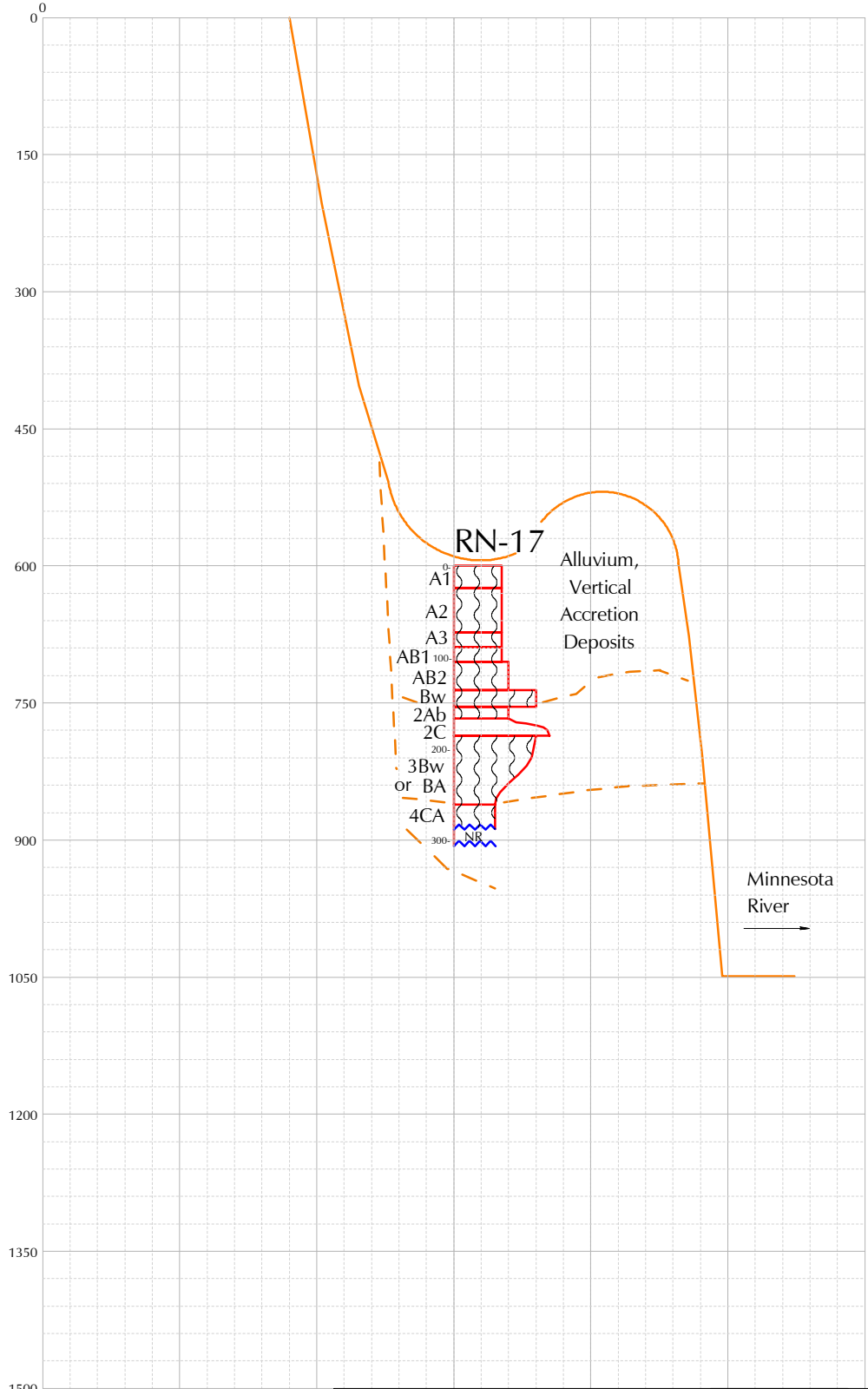
Elevation:
268 Meters
(879 Feet)

NE

Meters →

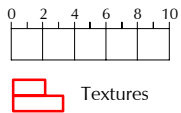
SW

Centimeters ↓



TEXTURE

- 1 Clay or Sandy Clay
- 2 Silty Clay
- 3 Silty Clay Loam, Clay Loam, or Sandy Clay Loam
- 4 Silt Loam, Silt, Loam, or Peat
- 5 Sandy Loam
- 6 Loamy Sand
- 7 Very Fine to Fine Sand
- 8 Medium Sand
- 9 Coarse Sand
- 10 Gravel



LEGEND

- Solum
- Peat/Organic Soil
- NR No Recovery
- Plant Matter for C-14
- Shells
- Break for Graphic Representation



MINNESOTA DEPARTMENT OF TRANSPORTATION

FIGURE E-15

RENVILLE COUNTY PARK NUMBER 2
SECTION 19, T114N, R36W



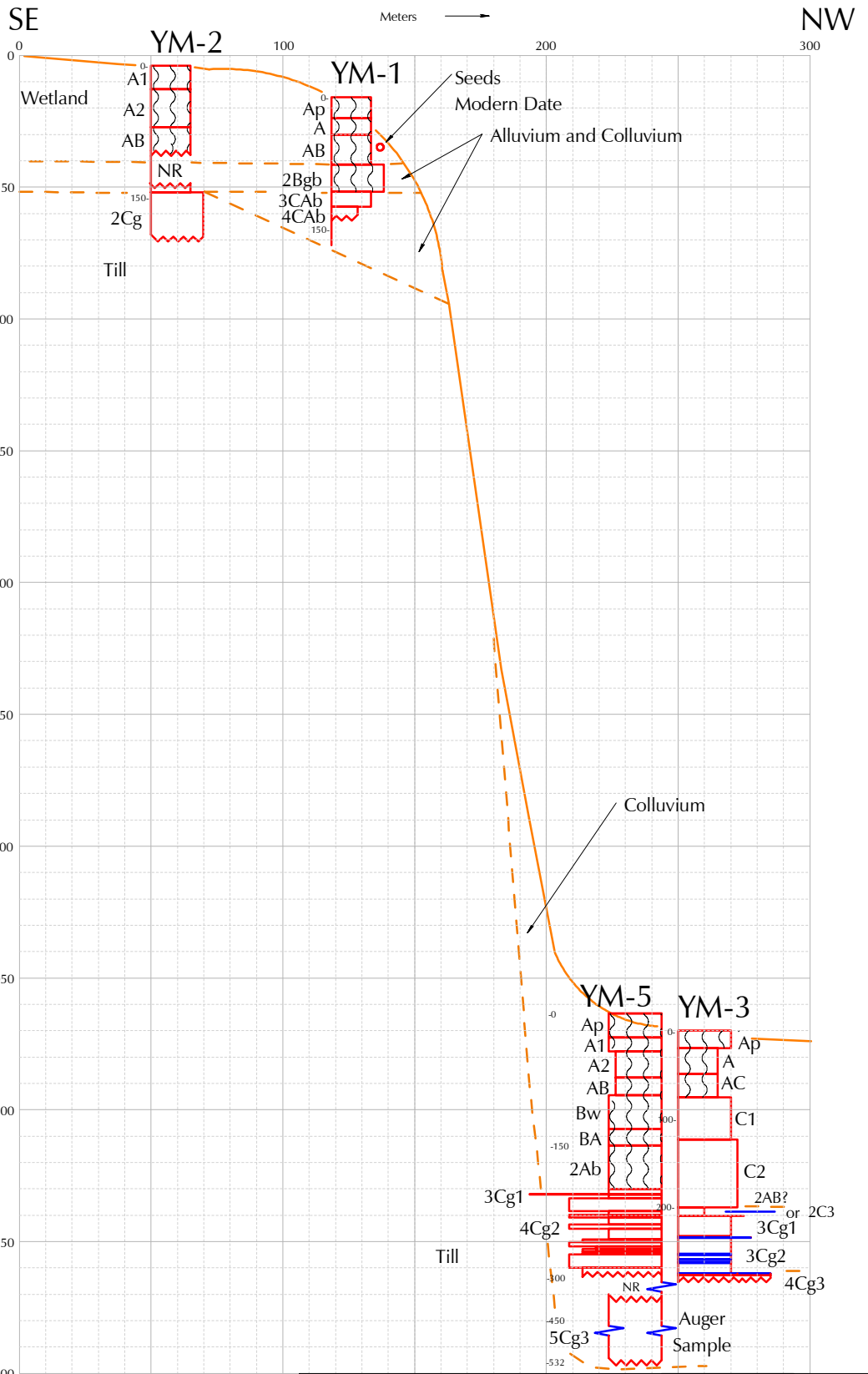
DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

Scale: AS SHOWN

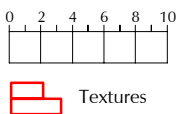
Date: 8/97

By: KEB

Elevation:
298 Meters
(978 Feet)



- TEXTURE**
- 1 Clay or Sandy Clay
 - 2 Silty Clay
 - 3 Silty Clay Loam, Clay Loam, or Sandy Clay Loam
 - 4 Silt Loam, Silt, Loam, or Peat
 - 5 Sandy Loam
 - 6 Loamy Sand
 - 7 Very Fine to Fine Sand
 - 8 Medium Sand
 - 9 Coarse Sand
 - 10 Gravel



- LEGEND**
- Solum
 - Peat/Organic Soil
 - No Recovery
 - Plant Matter for C-14
 - Shells
 - Break for Graphic Representation

MINNESOTA DEPARTMENT OF TRANSPORTATION

FIGURE E-16

HOMME PROPERTY - NEAR MINNESOTA RIVER
SECTION 34, T115N, R38W

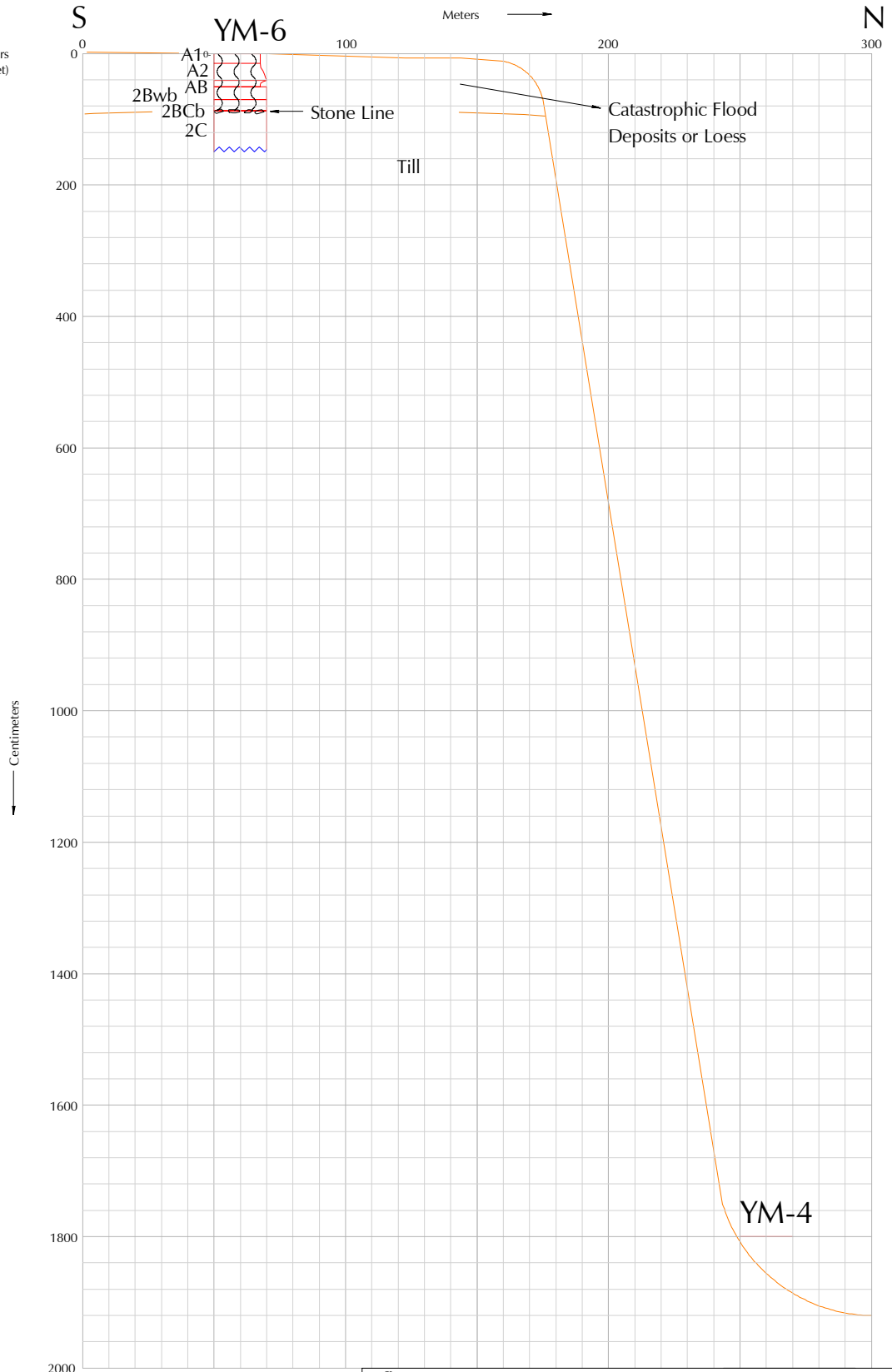
DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

Scale: AS SHOWN

Date: 8/97

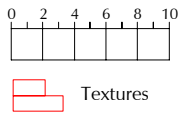
By: KEB

Elevation:
308 Meters
(1010 Feet)



TEXTURE

- 1 Clay or Sandy Clay
- 2 Silty Clay
- 3 Silty Clay Loam, Clay Loam, or Sandy Clay Loam
- 4 Silt Loam, Silt, Loam, or Peat
- 5 Sandy Loam
- 6 Loamy Sand
- 7 Very Fine to Fine Sand
- 8 Medium Sand
- 9 Coarse Sand
- 10 Gravel



LEGEND

- Solum
- Peat/
Organic
Soil
- NR No Recovery
- Plant Matter for C-14
- Shells
- Break for Graphic
Representation



MINNESOTA DEPARTMENT OF TRANSPORTATION

FIGURE E-17

HOMME PROPERTY - NEAR MINNESOTA RIVER
SECTION 34, T115N, R38W

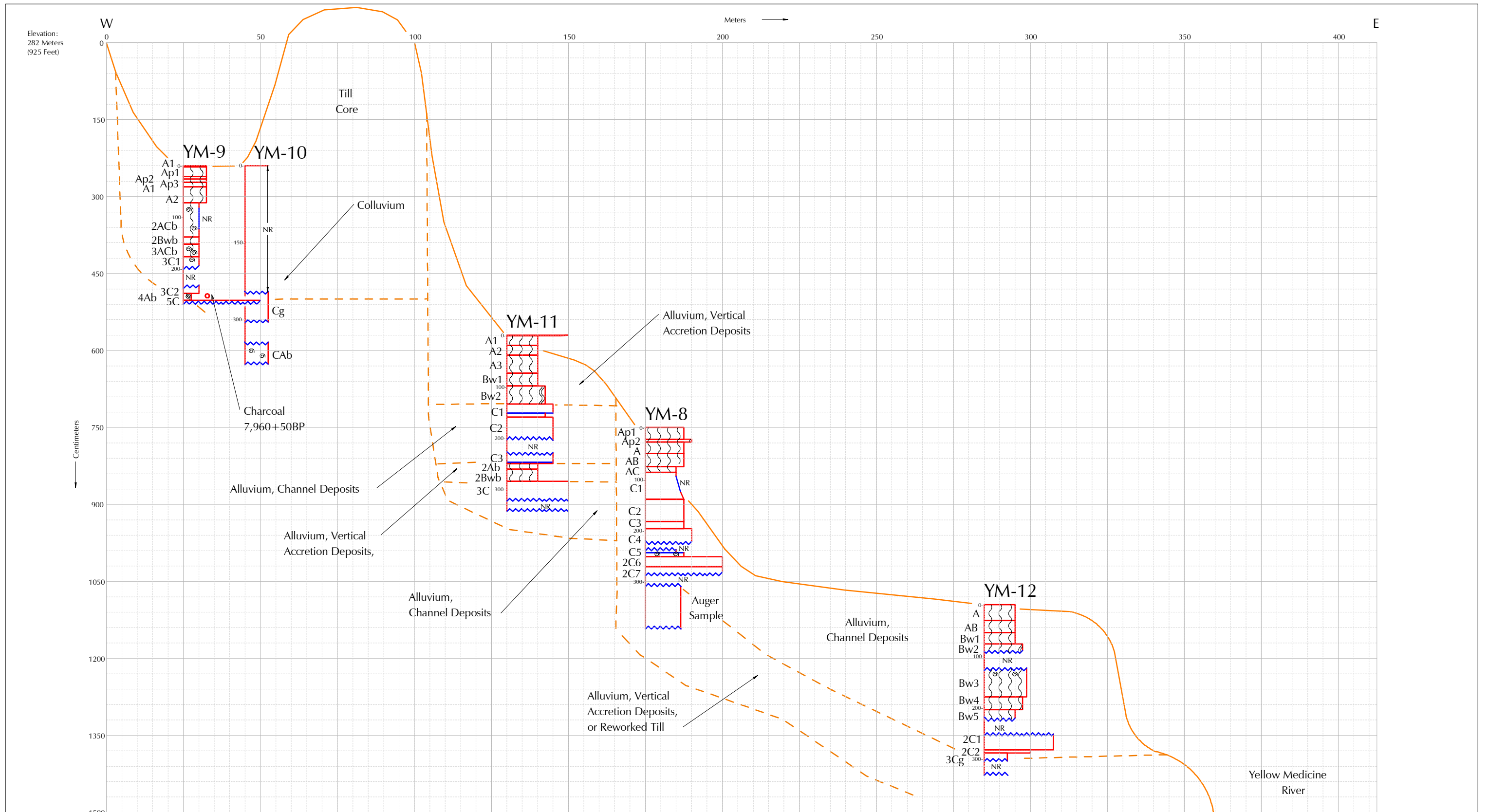


DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

Scale: AS SHOWN

Date: 8/97

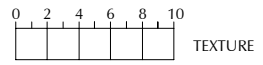
By: KEB



Elevation:
282 Meters
(925 Feet)

Meters

Centimeters



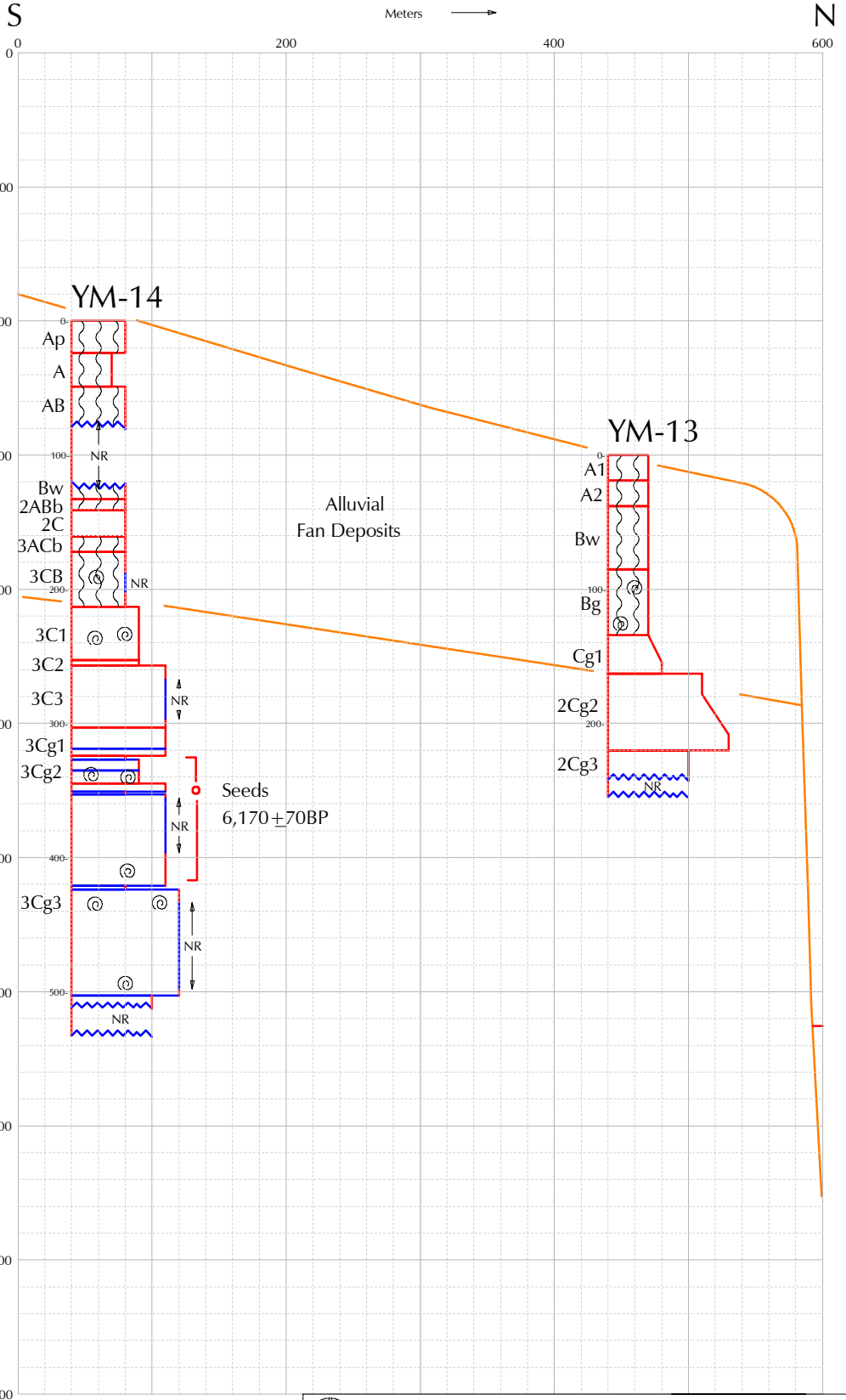
- 1 Clay or Sandy Clay
- 2 Silty Clay
- 3 Sandy Clay Loam, Silty Clay Loam, or Clay Loam
- 4 Silt Loam, Silt, Loam, or Peat
- 5 Sandy Loam
- 6 Loamy Sand
- 7 Very Fine to Fine Sand
- 8 Medium Sand
- 9 Coarse Sand
- 10 Gravel

LEGEND

	Solum		Peat/ Organic Soil		Textures (See Chart at Left)
	NR		No Recovery		Break for Graphic Representation
	Plant Matter for C-14				Shells

MINNESOTA DEPARTMENT OF TRANSPORTATION	
FIGURE E-18	
FINNESS PROPERTY - YELLOW MEDICINE RIVER SECTION 32, T115N, R38W	
DEPARTMENT OF TRANSPORTATION UNITED STATES OF AMERICA	Scale: AS SHOWN Date: 8/97 By: KEB

Elevation:
270 Meters
(886 Feet)



TEXTURE

- 1 Clay or Sandy Clay
- 2 Silty Clay
- 3 Silty Clay Loam, Clay Loam, or Sandy Clay Loam
- 4 Silt Loam, Silt, Loam, or Peat
- 5 Sandy Loam
- 6 Loamy Sand
- 7 Very Fine to Fine Sand
- 8 Medium Sand
- 9 Coarse Sand
- 10 Gravel



Textures

LEGEND

- Solum
- Peat/Organic Soil
- NR No Recovery
- Plant Matter for C-14
- Shells
- Break for Graphic Representation



MINNESOTA DEPARTMENT OF TRANSPORTATION

FIGURE E-19

UPPER SIOUX AGENCY STATE PARK
SECTION 28, T115N, R38W



DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

Scale: AS SHOWN

Date: 8/97

By: KEB