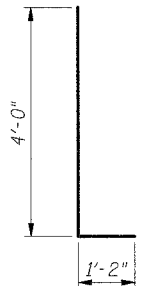
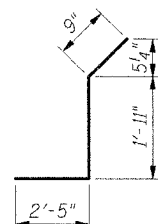


**BARS u3(E) thru u18(E)**

Bar	A
u3(E)	1'-3"
u4(E)	1'-4"
u5(E)	1'-5"
u6(E)	1'-6"
u7(E)	1'-7"
u8(E)	1'-8"
u9(E)	1'-9"
u10(E)	1'-10"
u11(E)	2'-1"
u12(E)	2'-3"
u13(E)	2'-6"
u14(E)	2'-9"
u15(E)	2'-11"
u16(E)	3'-2"
u17(E)	3'-5"
u18(E)	3'-8"



**BAR n2(E)**



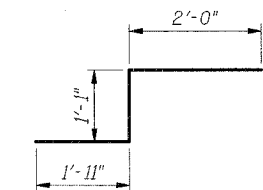
**BAR h11(E)**

**BAR LIST**

Bar	No.	Size	Length	Shape
h4(E)	15	5	37'-2"	---
h5(E)	26	5	26'-3"	---
h6(E)	5	4	36'-0"	---
h7(E)	10	4	26'-0"	---
h8(E)	14	5	5'-3"	---
h9(E)	14	5	5'-6"	---
h10(E)	10	4	5'-0"	---
h11(E)	12	5	5'-1"	---
h12(E)	4	4	4'-0"	---
h13(E)	14	5	5'-7"	---
h14(E)	4	4	3'-7"	---
h15(E)	4	5	26'-11"	---
h16(E)	13	5	43'-6"	---
h17(E)	10	4	23'-9"	---
h18(E)	8	4	22'-7"	---
h19(E)	19	5	18'-3"	---
h20(E)	29	5	21'-6"	---
h21(E)	12	5	45'-0"	---
h22(E)	3	5	46'-3"	---
h23(E)	9	4	18'-3"	---
h24(E)	13	5	14'-9"	---
h25(E)	9	4	14'-9"	---
h26(E)	10	5	13'-10"	---
h27(E)	3	4	13'-10"	---
h28(E)	3	5	2'-8"	---
h29(E)	3	4	2'-7"	---
h30(E)	6	5	3'-7"	---
h31(E)	3	4	3'-10"	---
h32(E)	14	4	21'-4"	---
h33(E)	3	4	4'-0"	---
h34(E)	2	5	23'-11"	---
h35(E)	1	4	5'-9"	---
h36(E)	2	5	17'-0"	---
h37(E)	2	4	7'-9"	---
h38(E)	3	5	7'-9"	---
h39(E)	2	4	15'-9"	---
h40(E)	3	5	15'-9"	---
h41(E)	3	5	23'-9"	---
h42(E)	3	4	35'-2"	---
h43(E)	6	5	35'-2"	---
n2(E)	177	7	5'-2"	---
n3(E)	38	7	7'-11"	---
n4(E)	60	6	4'-4"	---
n5(E)	28	8	8'-7"	---
n6(E)	29	7	5'-3"	---
n7(E)	12	7	7'-0"	---
n8(E)	16	6	6'-10"	---
n9(E)	28	5	4'-9"	---
p5(E)	4	5	6'-2"	---
p6(E)	52	5	9'-10"	---
p7(E)	4	5	5'-0"	---
p8(E)	8	5	6'-9"	---
p9(E)	4	5	4'-10"	---
p10(E)	4	5	17'-1"	---
p11(E)	4	5	31'-0"	---
p12(E)	4	5	8'-11"	---
t3	358	7	9'-0"	---
t4	40	7	9'-5"	---
t5	40	6	9'-5"	---
t6	46	8	10'-3"	---
t7	46	7	10'-3"	---
t8	19	7	8'-3"	---
t9	19	6	8'-3"	---
t10	16	5	6'-3"	---
t11	24	5	5'-3"	---
u3(E)	44	5	8'-0"	---
u4(E)	20	5	8'-1"	---
u5(E)	19	5	8'-2"	---
u6(E)	20	5	8'-3"	---
u7(E)	10	5	8'-4"	---
u8(E)	20	5	8'-5"	---
u9(E)	8	5	8'-6"	---
u10(E)	10	5	8'-7"	---

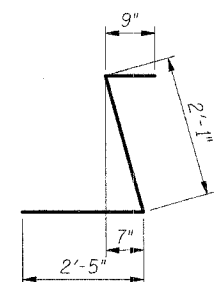
**BAR LIST**

Bar	No.	Size	Length	Shape
u11(E)	10	5	8'-0"	---
u12(E)	9	5	9'-0"	---
u13(E)	10	5	9'-3"	---
u14(E)	10	5	9'-6"	---
u15(E)	10	5	9'-8"	---
u16(E)	10	5	9'-11"	---
u17(E)	10	5	10'-2"	---
u18(E)	7	5	10'-5"	---
v4(E)	14	4	13'-0"	---
v5(E)	17	4	12'-9"	---
v6(E)	98	5	11'-7"	---
v7(E)	4	5	13'-1"	---
v8(E)	12	4	12'-2"	---
v9(E)	14	4	10'-11"	---
v10(E)	87	5	9'-6"	---
v11(E)	2	5	11'-1"	---
v12(E)	2	5	13'-10"	---
v13(E)	40	5	8'-3"	---
v14(E)	6	4	28'-1"	---
v15(E)	4	4	26'-2"	---
v16(E)	1	4	16'-1"	---
v17(E)	18	4	6'-10"	---
v18(E)	29	4	8'-10"	---
v19(E)	13	4	9'-10"	---
v20(E)	22	4	5'-9"	---
v21(E)	6	4	2'-9"	---
v22(E)	29	6	9'-3"	---
v23(E)	28	5	7'-6"	---
v24(E)	12	4	7'-6"	---
v25(E)	23	4	9'-0"	---
v26(E)	6	4	2'-6"	---
v27(E)	5	4	16'-6"	---
v28(E)	3	4	26'-4"	---
v29(E)	3	4	14'-3"	---
v30(E)	6	4	4'-1"	---
v31(E)	8	5	4'-6"	---
w3	20	5	37'-2"	---
w4	40	5	26'-11"	---
w5	32	5	5'-0"	---
w6	20	5	46'-10"	---
w7	20	5	43'-5"	---
w8	20	5	18'-3"	---
w9	20	5	14'-9"	---
w10	22	5	45'-6"	---
w11	30	5	11'-0"	---
w12	32	5	7'-6"	---

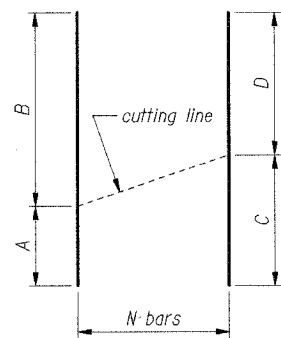


**BAR h10(E)**

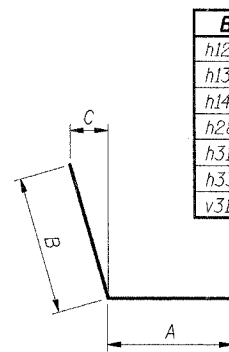
Bar	A	B	C	D	N
h34(E)	5'-9"	18'-2"	18'-2"	5'-9"	2
v14(E)	11'-8"	16'-5"	16'-5"	11'-8"	3
v15(E)	10'-1 1/2"	16'-0 1/2"	16'-0 1/2"	10'-1 1/2"	2
v28(E)	10'-9"	15'-7"	15'-7"	10'-9"	3



**BAR h8(E)**

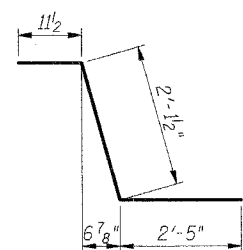


**BARS h34(E), v14(E) & v15(E)  
CUTTING DIAGRAM**



**BAR h12(E), h13(E), h14(E),  
h28(E), h31(E), h33(E) & v31(E)**

Bar	A	B	C
h12(E)	1'-11"	2'-1"	1'-8"
h13(E)	2'-5"	3'-2"	1'-9 1/2"
h14(E)	1'-11"	1'-8"	11 1/4"
h28(E)	2'-1"	7"	2"
h31(E)	3'-3"	7"	2"
h33(E)	3'-3"	9"	8 3/8"
v31(E)	3'-6"	1'-0"	8 1/2"



**BAR h9(E)**

Bar	A	B	C
h29(E)	7"	2'-0"	4"
h30(E)	7"	3'-0"	5"
n3(E)	10"	7'-2"	7"
n4(E)	8"	3'-8"	6"
n5(E)	11"	7'-8"	8"
n6(E)	10"	4'-5"	7"
n7(E)	10"	6'-2"	7"
n8(E)	8"	6'-2"	6"
n9(E)	7"	4'-2"	5"

**BARS h29(E), h30(E),  
n3(E) thru n9(E)**

**BILL OF MATERIALS**

Item	Unit	Total
Concrete Structures	Cu. Yd.	447.8
Reinforcement Bars	Lb	17210
Reinforcement Bars, Epoxy Coated	Lb	17880
Rock Excavation	Cu. Yd.	164.6
Structure Excavation	Cu. Yd.	1019
Geocomposite Wall Drain	Sq. Yd.	445.7
Porous Granular Embankment	Cu. Yd.	1468

**Notes:**

1. Reinforcement Bars designated (E) shall be epoxy coated.

SHT. S-21

REVISIONS	
NAME	DATE

VILLAGE OF NEW LENOX  
F.A.U. (0369) CEDAR ROAD OVER HICKORY CREEK  
WILL COUNTY  
**ABUTMENT DETAILS &  
BILL OF MATERIAL**

SCALE: NO SCALE  
DATE: 07/01/05

DRAWN BY: FZD  
CHECKED BY: KPS

**TENG**  
TENG & ASSOCIATES, INC.  
ENGINEERS/ARCHITECTS/PLANNERS  
265 N. MICHIGAN AVE. CHICAGO, IL 60610  
TELEPHONE: 312.644.8899