

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

PROJECT NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
383	29R-T	McHENRY	88	60
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT-

CONTRACT NO. 62202

**SOUTH-EAST WALL**

Bar	No.	Size	Length (m)	Shape
h505(E)	146	# 15	9.64	---
h513(E)	56	# 15	8.93	---
h516(E)	44	# 15	5.22	---
h517(E)	14	# 15	9.08	---
h522(E)	4	# 15	1.97	---
h523(E)	18	# 15	1.72	---
h524(E)	18	# 15	1.48	---
h525(E)	32	# 15	7.00	---
h526(E)	24	# 15	4.10	---
h580(E)	6	# 15	6.64	---
h581(E)	4	# 15	1.69	---
h582(E)	4	# 15	1.47	---
h583(E)	6	# 15	1.26	---
u501(E)	321	# 15	0.82	---
v524(E)	12	# 15	5.65	---
v525(E)	17	# 15	10.07	---
v526(E)	31	# 15	9.44	---
v527(E)	31	# 15	8.77	---
v528(E)	31	# 15	8.06	---
v529(E)	31	# 15	7.39	---
v530(E)	31	# 15	6.92	---
v531(E)	31	# 15	6.53	---
v532(E)	31	# 15	6.16	---
v533(E)	15	# 15	6.39	---
v534(E)	31	# 15	4.52	---
v535(E)	31	# 15	3.01	---
v580(E)	12	# 15	4.85	---
v581(E)	4	# 15	1.99	---
v582(E)	4	# 15	2.19	---
Reinforcement Bars, Epoxy Coated			kg	8,270
Concrete Structures			m <sup>3</sup>	101.7
Pipe Underdrains for Structures 100mm			m <sup>3</sup>	8.1
Geocomposite Wall Drain			m <sup>2</sup>	292.7
Stud Shear Connectors			Each	960

**SOUTH-WEST WALL**

Bar	No.	Size	Length (m)	Shape
h505(E)	116	# 15	9.64	---
h510(E)	18	# 15	1.56	---
h511(E)	4	# 15	1.90	---
h512(E)	32	# 15	6.78	---
h513(E)	52	# 15	8.93	---
h514(E)	20	# 15	6.68	---
h515(E)	24	# 15	7.32	---
h516(E)	24	# 15	5.22	---
h517(E)	10	# 15	9.08	---
h530(E)	18	# 15	1.44	---
h570(E)	6	# 15	6.32	---
h571(E)	4	# 15	1.59	---
h572(E)	4	# 15	1.47	---
h573(E)	6	# 15	1.35	---
u501(E)	321	# 15	0.82	---
v506(E)	12	# 15	5.74	---
v508(E)	17	# 15	9.78	---
v510(E)	31	# 15	9.09	---
v511(E)	31	# 15	8.31	---
v512(E)	31	# 15	7.55	---
v513(E)	31	# 15	6.83	---
v514(E)	31	# 15	6.21	---
v515(E)	31	# 15	5.73	---
v516(E)	21	# 15	5.45	---
v517(E)	26	# 15	6.08	---
v518(E)	31	# 15	4.26	---
v519(E)	31	# 15	2.47	---
v570(E)	10	# 15	4.83	---
v571(E)	3	# 15	2.01	---
v572(E)	3	# 15	2.21	---
Reinforcement Bars, Epoxy Coated			kg	7,600
Concrete Structures			m <sup>3</sup>	94.9
Pipe Underdrains for Structures 100mm			m <sup>3</sup>	8.1
Geocomposite Wall Drain			m <sup>2</sup>	270.1
Stud Shear Connectors			Each	900

**NORTH-EAST WALL**

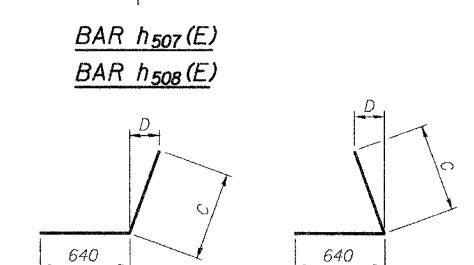
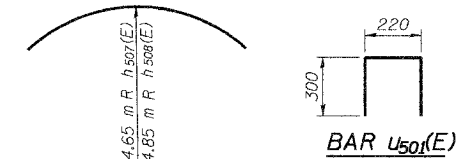
Bar	No.	Size	Length (m)	Shape
h505(E)	24	# 15	9.64	---
h515(E)	24	# 15	7.80	---
h518(E)	17	# 15	1.41	---
h519(E)	17	# 15	1.16	---
h520(E)	10	# 15	2.02	---
h521(E)	16	# 15	8.78	---
h560(E)	4	# 15	7.04	---
h561(E)	4	# 15	1.42	---
h562(E)	4	# 15	1.20	---
h563(E)	6	# 15	1.08	---
u501(E)	86	# 15	0.82	---
v520(E)	12	# 15	5.60	---
v521(E)	17	# 15	7.15	---
v522(E)	31	# 15	5.05	---
v523(E)	30	# 15	3.72	---
v560(E)	10	# 15	4.84	---
v561(E)	2	# 15	2.13	---
v562(E)	2	# 15	2.33	---
Reinforcement Bars, Epoxy Coated			kg	1,970
Concrete Structures			m <sup>3</sup>	22.5
Pipe Underdrains for Structures 100mm			m <sup>3</sup>	2.1
Geocomposite Wall Drain			m <sup>2</sup>	59.4
Stud Shear Connectors			Each	208

**NORTH-WEST WALL**

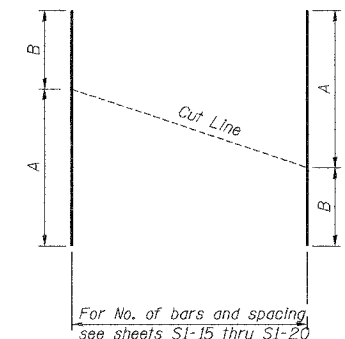
Bar	No.	Size	Length (m)	Shape
h501(E)	10	# 15	2.21	---
h502(E)	16	# 15	1.80	---
h503(E)	16	# 15	1.70	---
h504(E)	22	# 15	5.38	---
h505(E)	16	# 15	9.64	---
h506(E)	20	# 15	6.54	---
h507(E)	6	# 15	4.19	---
h508(E)	6	# 15	4.37	---
h509(E)	10	# 15	6.13	---
h550(E)	4	# 15	4.98	---
h551(E)	4	# 15	2.03	---
h552(E)	4	# 15	1.73	---
h553(E)	4	# 15	1.65	---
u501(E)	107	# 15	0.82	---
v501(E)	14	# 15	5.22	---
v502(E)	10	# 15	6.57	---
v503(E)	21	# 15	5.02	---
v504(E)	31	# 15	3.50	---
v505(E)	33	# 15	1.64	---
v550(E)	12	# 15	4.52	---
v551(E)	4	# 15	1.83	---
v552(E)	4	# 15	2.03	---
Reinforcement Bars, Epoxy Coated			kg	1,880
Concrete Structures			m <sup>3</sup>	23.9
Pipe Underdrains for Structures 100mm			m <sup>3</sup>	2.5
Geocomposite Wall Drain			m <sup>2</sup>	61.7
Stud Shear Connectors			Each	210

**FIELD CUT BARS**

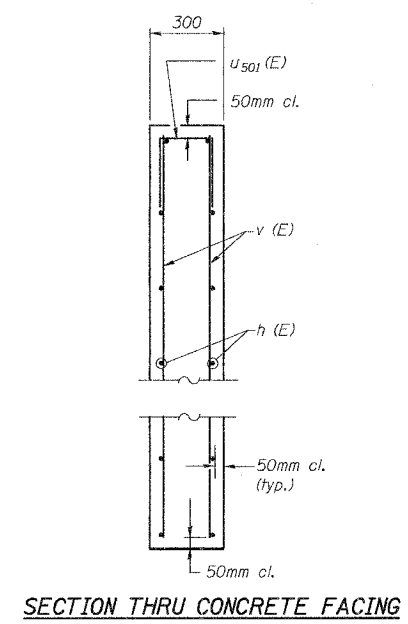
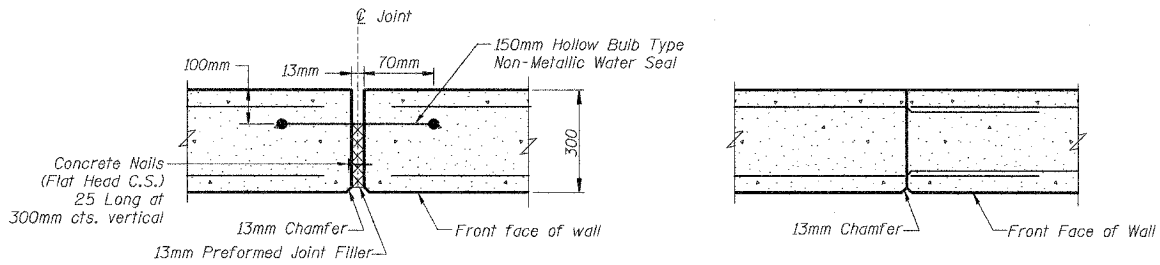
Bar	A (m)	B (m)
v502(E)	3.80	2.75
v503(E)	2.75	2.25
v504(E)	2.25	1.64
v508(E)	4.77	4.75
v510(E)	4.75	4.34
v511(E)	4.34	3.97
v512(E)	3.97	3.58
v513(E)	3.58	3.25
v514(E)	3.25	2.96
v515(E)	2.96	2.77
v516(E)	2.77	2.68
v517(E)	3.40	2.68
v518(E)	2.90	1.36
v519(E)	1.36	1.11
v521(E)	4.11	3.04
v522(E)	3.04	2.01
v523(E)	2.01	1.71
v524(E)	5.18	4.89
v525(E)	4.89	4.55
v527(E)	4.55	4.22
v528(E)	4.22	3.84
v529(E)	3.84	3.55
v530(E)	3.55	3.37
v531(E)	3.37	3.16
v532(E)	3.16	3.60
v533(E)	3.39	3.00
v534(E)	2.89	1.63
v535(E)	1.63	1.38



BAR	C	D
h502(E)	1.16 m	530
h503(E)	1.06 m	485
h504(E)	1.39 m	615
h505(E)	1.09 m	500
h510(E)	920	60
h530(E)	800	50
h571(E)	950	60
h572(E)	830	50
h516(E)	770	380
h519(E)	515	255
h561(E)	775	385
h562(E)	560	280
h523(E)	1.08 m	70
h524(E)	840	55
h581(E)	1.05 m	70
h582(E)	830	55



BAR	C	
h553(E)	1.35 m	
h559(E)	780	
h573(E)	1.05 m	
h583(E)	960	
BAR <th>C</th> <th>D</th>	C	D
v551(E)	360	830
v559(E)	360	1.030 m
v561(E)	660	830
v562(E)	660	1.030 m
v571(E)	460	910
v572(E)	460	1.110 m
v581(E)	460	890
v582(E)	460	1.090 m



- NOTES:**
- For Notes and Legend see sheet S1-3.
  - Reinforcement bars designated (E) shall be epoxy coated.

**CONCRETE FACING DETAILS**

U.S. 14 RETAINING WALLS  
AT MOKELER CREEK  
SECTION 29R-T  
McHENRY COUNTY  
STA. 0+647.90 TO STA. 0+982.78  
AT STRUCTURE NO. 056-007

Date: February, 2005    Scale: None

DESIGNED	J.S./R.A.
CHECKED	H.T./N.S.
DRAWN	J.S.
CHECKED	H.T./M.R.

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