

BRIDGE / MEMBER DATA

Structure I. D. HAM500

Material of Construction SS
 Year of Construction 1959
 Roadway Width 32.000
 Center to Center Truss 38.833
 Number of Spans 1
 Live Load Distribution Factor 2.5400

Comments:

Truss I. D. 1 Truss Type: THROUGH

Span Length: Span 1
191.333

Number of Panels: 8 Symmetry:

Panel No.	Panel Code	Panel Length	Sub-Divided Panel Length	Vertical Height	Sub-Divided Vertical
1	7	23.917	0.000	28.000	0.000
2	2	23.917	0.000	33.250	0.000
3	2	23.917	0.000	35.000	0.000
4	4	23.917	0.000	35.000	0.000
5	3	23.917	0.000	35.000	0.000
6	1	23.917	0.000	33.250	0.000
7	1	23.917	0.000	28.000	0.000
8	5	23.917	0.000	0.000	0.000

Superimposed Dead Load:

Uniform Dead Load
 (kips/ft)
 Loaded Chord Unloaded Chord
 0.355 0.000

Superimposed Dead Load:

Loaded Chord Dist.	Loaded Chord Load	Unloaded Chord Dist.	Unloaded Chord Load
0.000	28.160	0.000	0.000
23.917	62.790	0.000	0.000
47.833	52.440	0.000	0.000
71.750	54.970	0.000	0.000
95.667	53.790	0.000	0.000

119.583	54.970	0.000	0.000
143.500	52.440	0.000	0.000
167.417	62.790	0.000	0.000

Truss Members Selected:

L 0L 1
L 0U 1
U 1L 1
U 1U 2
L 1L 2
U 1L 2
U 2L 2
U 2U 3
L 2L 3
U 2L 3
U 3L 3
L 3L 4
U 3U 4
U 3L 4
L 3U 4
U 4L 4
L 4L 5
U 4U 5
L 4U 5
U 4L 5
U 5L 5
L 5L 6
U 5U 6
L 5U 6
U 6L 6
L 6L 7
U 6U 7
L 6U 7
U 7L 7
L 7L 8
U 7L 8

NOTE: All distances are shown in decimal feet, moments are shown in foot-kips, and shears are shown in kips. Section and section properties are shown as: in., in.**2, in.**3, and in.**4. Axial loads are shown in kips.

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. L 0L 1

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	14030.	17496.	17496.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
23.917	23.917	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
15.00	21.22	390.84	704.66	7.42	4.29	5.76

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
19.90	502.96	556.37	8.58

Truss influence line - loaded chord:

X ordinates:	0.000	23.917	191.333	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						
Y ordinates:	0.000	0.747	0.000	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						

Truss influence line - unloaded chord:

X ordinates:	0.000	23.917	191.333	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						
Y ordinates:	0.000	0.747	0.000	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

210.6 0.0

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	303.1	247.6	176.8	374.0
OPER	505.2	412.7	294.6	623.3
POST	505.2	412.7	294.6	623.3

Live Load Effect

Impact Factors: ten - .158 comp - .000

Rat. Typ.	Rat. Veh.	Truck Live w/imp.	Load Force w/o imp.	Loc. of Front Wheel	Lane Live w/imp.	Load Force w/o imp.	Loc. of Conc. Load
INV.	HS20	74.73 R	64.53	51.92	87.09	75.20	23.92
		0.00 R	0.00	0.00	0.00	0.00	0.00
OPER	HS20	74.73 R	64.53	51.92	87.09	75.20	23.92
		0.00 R	0.00	0.00	0.00	0.00	0.00
POST	2F1	32.32 R	27.91	33.92			
		0.00 R	0.00	0.00			
POST	3F1	49.01 R	42.32	37.92			
		0.00 R	0.00	0.00			
POST	4F1	56.84 R	49.08	41.92			
		0.00 R	0.00	0.00			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.03	HS 40.59	73.1
HS20	3.38	HS 67.65	121.8
2F1	9.11	0.00	136.7
3F1	6.01	0.00	138.2
4F1	5.18	0.00	139.9

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. L 0U 1

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	14277.	17804.	17804.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
36.823	36.823	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
25.78	41.21	2775.48	2144.43	21.40	8.21	7.21

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
41.21	2775.48	2144.43	21.40

Truss influence line - loaded chord:

X ordinates:	0.000	23.917	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-1.151	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	23.917	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-1.151	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

0.0 324.3

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	627.7	489.3	822.3	294.7
OPER	1046.1	815.6	1370.4	491.2
POST	1046.1	815.6	1370.4	491.2

Live Load Effect

Impact Factors: ten - .000 comp - .158

Rat. Typ.	Rat. Veh.	Truck w/imp.	Live Load w/o imp.	Force	Loc. of Front Wheel	Lane w/imp.	Live Load w/o imp.	Force	Loc. of Conc. Load
INV.	HS20	0.00 R	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		-115.06 R	-99.36	51.92		-147.63	-127.48	23.92	
OPER	HS20	0.00 R	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		-115.06 R	-99.36	51.92		-147.63	-127.48	23.92	
POST	2F1	0.00 R	0.00	0.00	0.00				
		-49.76 R	-42.97	33.92					
POST	3F1	0.00 R	0.00	0.00	0.00				
		-75.47 R	-65.17	37.92					
POST	4F1	0.00 R	0.00	0.00	0.00				
		-87.51 R	-75.57	41.92					

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.00	HS 39.93	71.9
HS20	3.33	HS 66.55	119.8
2F1	9.87	0.00	148.1
3F1	6.51	0.00	149.7
4F1	5.61	0.00	151.6

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. U 1L 1

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	5916.	7377.	7377.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
28.000	28.000	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
11.94	11.05	199.99	41.85	-0.80	4.25	1.95

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
10.65	302.98	29.15	-0.12

Truss influence line - loaded chord:

X ordinates:	0.000	0.000	23.917	47.833	191.333	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	191.333	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

71.3 0.0

Veh.	Axial Load Capacity Tension Compression	Available Capacity for LL+I Tension Compression
INV.	162.2 54.4	119.4 97.1
OPER	270.3 90.6	199.0 161.9
POST	270.3 90.6	199.0 161.9

Live Load Effect

Impact Factors: ten - .289 comp - .000

Rat. Typ.	Rat. Veh.	Truck Live Load Force w/imp.	Load Force w/o imp.	Loc. of Front Wheel	Lane Live Load Force w/imp.	Load Force w/o imp.	Loc. of Conc. Load
INV.	HS20	79.55 R	61.70	37.92	67.64	52.46	23.92
		0.00 R	0.00	0.00	0.00	0.00	0.00
OPER	HS20	79.55 R	61.70	37.92	67.64	52.46	23.92
		0.00 R	0.00	0.00	0.00	0.00	0.00
POST	2F1	42.28 R	32.79	33.92			
		0.00 R	0.00	0.00			
POST	3F1	62.45 R	48.44	33.92			
		0.00 R	0.00	0.00			
POST	4F1	69.25 L	53.71	9.92			
		0.00 R	0.00	0.00			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	1.50	HS 30.02	54.0
HS20	2.50	HS 50.03	90.1
2F1	4.71	0.00	70.6
3F1	3.19	0.00	73.3
4F1	2.87	0.00	77.6

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. U 1U 2

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	15011.	18720.	18720.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
24.486	24.486	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
25.75	34.10	2388.22	1822.35	21.05	8.37	7.31

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
34.10	2388.22	1822.35	21.05

Truss influence line - loaded chord:

X ordinates:	0.000	47.833	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-1.105	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	47.833	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-1.105	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

0.0 306.6

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	519.4	425.7	703.3	241.8
OPER	865.6	709.5	1172.2	403.0
POST	865.6	709.5	1172.2	403.0

Live Load Effect

Impact Factors: ten - .000 comp - .158

Rat. Typ.	Rat. Veh.	Truck w/imp.	Live Load w/o imp.	Force w/o imp.	Loc. of Front Wheel	Lane w/imp.	Live Load w/o imp.	Force w/o imp.	Loc. of Conc. Load
INV.	HS20	0.00 R	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		-109.37 R	-94.44	75.83		-128.71	-111.15	47.83	
OPER	HS20	0.00 R	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		-109.37 R	-94.44	75.83		-128.71	-111.15	47.83	
POST	2F1	0.00 R	0.00	0.00	0.00				
		-47.61 R	-41.11	57.83					
POST	3F1	0.00 R	0.00	0.00	0.00				
		-72.06 R	-62.23	61.83					
POST	4F1	0.00 R	0.00	0.00	0.00				
		-83.38 R	-72.00	65.83					

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	1.88	HS 37.57	67.6
HS20	3.13	HS 62.62	112.7
2F1	8.47	0.00	127.0
3F1	5.59	0.00	128.6
4F1	4.83	0.00	130.5

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. L 1L 2

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	14057.	17530.	17530.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
23.917	23.917	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
15.00	22.50	421.86	743.54	7.50	4.33	5.75

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
21.38	507.10	595.25	8.68

Truss influence line - loaded chord:

X ordinates:	0.000	23.917	191.333	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						
Y ordinates:	0.000	0.747	0.000	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						

Truss influence line - unloaded chord:

X ordinates:	0.000	23.917	191.333	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						
Y ordinates:	0.000	0.747	0.000	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

210.6 0.0

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	325.6	263.0	199.2	389.4
OPER	542.6	438.4	332.0	649.1
POST	542.6	438.4	332.0	649.1

Live Load Effect

Impact Factors: ten - .158 comp - .000

Rat. Typ.	Rat. Veh.	Truck w/imp.	Live Load w/o imp.	Force w/o imp.	Loc. of Front Wheel	Lane w/imp.	Live Load w/o imp.	Force w/o imp.	Loc. of Conc. Load
INV.	HS20	74.73 R	64.53	51.92	87.09	75.20	23.92		
		0.00 R	0.00	0.00	0.00	0.00	0.00		
OPER	HS20	74.73 R	64.53	51.92	87.09	75.20	23.92		
		0.00 R	0.00	0.00	0.00	0.00	0.00		
POST	2F1	32.32 R	27.91	33.92					
		0.00 R	0.00	0.00					
POST	3F1	49.01 R	42.32	37.92					
		0.00 R	0.00	0.00					
POST	4F1	56.84 R	49.08	41.92					
		0.00 R	0.00	0.00					

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.29	HS 45.74	82.3
HS20	3.81	HS 76.23	137.2
2F1	10.27	0.00	154.1
3F1	6.77	0.00	155.8
4F1	5.84	0.00	157.7

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. U 1L 2

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	5684.	7088.	7088.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
36.824	36.824	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
12.19	17.00	475.00	107.00	0.00	5.29	2.51

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
16.99	659.28	75.85	0.91

Truss influence line - loaded chord:

X ordinates:	0.000	23.917	47.833	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-0.320	0.675	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	23.917	47.833	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-0.320	0.675	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

136.7 0.0

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	258.8	80.4	176.8	162.4
OPER	431.3	133.9	294.6	270.6
POST	431.3	133.9	294.6	270.6

Live Load Effect

Impact Factors: ten - .176 comp - .300

Rat. Typ.	Rat. Veh.	Truck Live w/imp.	Load Force w/o imp.	Loc. of Front Wheel	Lane Live w/imp.	Load Force w/o imp.	Loc. of Conc. Load
INV.	HS20	67.83 R	57.70	75.83	77.70	66.09	47.83
		-23.93 L	-18.40	-4.08	-19.09	-14.68	23.92
OPER	HS20	67.83 R	57.70	75.83	77.70	66.09	47.83
		-23.93 L	-18.40	-4.08	-19.09	-14.68	23.92
POST	2F1	29.53 R	25.12	57.83			
		-13.65 L	-10.50	13.92			
POST	3F1	44.69 R	38.02	61.83			
		-19.10 L	-14.69	9.92			
POST	4F1	51.71 R	43.99	65.83			
		-20.06 L	-15.43	5.92			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.28	HS 45.50	81.9
HS20	3.79	HS 75.83	136.5
2F1	9.98	0.00	149.7
3F1	6.59	0.00	151.6
4F1	5.70	0.00	153.8

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. U 2L 2

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	9640.	12022.	12022.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
33.250	33.250	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
12.12	18.79	514.61	173.40	-0.08	5.23	3.04

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
18.79	692.35	134.88	0.70

Truss influence line - loaded chord:

X ordinates:	0.000	47.833	71.750	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.487	-0.428	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	23.917	47.833	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.243	-0.513	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

0.0 43.0

Veh.	Axial Load Capacity Tension Compression	Available Capacity for LL+I Tension Compression
INV.	286.2 150.6	312.0 124.8
OPER	476.9 251.1	519.9 208.1
POST	476.9 251.1	519.9 208.1

Live Load Effect

Impact Factors: ten - .269 comp - .195

Rat. Typ.	Rat. Veh.	Truck Live Load Force w/imp.	Load Force w/o imp.	Loc. of Front Wheel	Lane Live Load Force w/imp.	Load Force w/o imp.	Loc. of Conc. Load
INV.	HS20	45.49 L	35.83	19.83	35.62	28.06	47.83
		-43.10 R	-36.05	99.75	-44.05	-36.85	71.75
OPER	HS20	45.49 L	35.83	19.83	35.62	28.06	47.83
		-43.10 R	-36.05	99.75	-44.05	-36.85	71.75
POST	2F1	21.91 L	17.26	37.83			
		-18.93 R	-15.84	81.75			
POST	3F1	32.23 L	25.39	33.83			
		-28.58 R	-23.91	85.75			
POST	4F1	36.08 L	28.42	29.83			
		-32.98 R	-27.58	89.75			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.83	HS 56.68	102.0
HS20	4.72	HS 94.46	170.0
2F1	10.99	0.00	164.8
3F1	7.28	0.00	167.4
4F1	6.31	0.00	170.4

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. U 2U 3

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	15016.	18726.	18726.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
23.981	23.981	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
25.84	38.03	2805.75	1967.05	20.02	8.59	7.19

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
38.03	2805.75	1967.05	20.02

Truss influence line - loaded chord:

X ordinates:	0.000	71.750	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-1.285	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	71.750	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-1.285	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D.

HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

0.0 355.8

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	579.2	474.9	792.7	261.4
OPER	965.4	791.6	1321.2	435.7
POST	965.4	791.6	1321.2	435.7

Live Load Effect

Impact Factors: ten - .000 comp - .158

Rat. Typ.	Rat. Veh.	Truck w/imp.	Live Load w/o imp.	Force Loc. of Front Wheel	Lane w/imp.	Live Load w/o imp.	Force Loc. of Conc. Load
INV.	HS20	0.00 R	0.00	0.00	0.00	0.00	0.00
		-126.01 L	-108.81	57.75	-149.69	-129.26	71.75
OPER	HS20	0.00 R	0.00	0.00	0.00	0.00	0.00
		-126.01 L	-108.81	57.75	-149.69	-129.26	71.75
POST	2F1	0.00 R	0.00	0.00			
		-55.10 R	-47.58	81.75			
POST	3F1	0.00 R	0.00	0.00			
		-83.23 R	-71.87	81.75			
POST	4F1	0.00 R	0.00	0.00			
		-97.01 R	-83.77	85.75			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	1.75	HS 34.93	62.9
HS20	2.91	HS 58.22	104.8
2F1	7.91	0.00	118.6
3F1	5.24	0.00	120.4
4F1	4.49	0.00	121.3

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. L 2L 3

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	14058.	17531.	17531.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
23.917	23.917	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
15.00	31.86	597.64	999.10	7.50	4.33	5.60

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
30.27	718.34	800.48	8.68

Truss influence line - loaded chord:

X ordinates:	0.000	47.833	191.333	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						
Y ordinates:	0.000	1.079	0.000	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						

Truss influence line - unloaded chord:

X ordinates:	0.000	47.833	191.333	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						
Y ordinates:	0.000	1.079	0.000	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

299.4 0.0

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	461.0	372.5	281.3	552.2
OPER	768.3	620.8	468.9	920.3
POST	768.3	620.8	468.9	920.3

Live Load Effect

Impact Factors: ten - .158 comp - .000

Rat. Typ.	Rat. Veh.	Truck w/imp.	Live Load w/o imp.	Force w/o imp.	Loc. of Front Wheel	Lane w/imp.	Live Load w/o imp.	Force w/o imp.	Loc. of Conc. Load
INV.	HS20	106.82 R	92.24	75.83	125.72	108.56	47.83		
		0.00 R	0.00	0.00	0.00	0.00	0.00		
OPER	HS20	106.82 R	92.24	75.83	125.72	108.56	47.83		
		0.00 R	0.00	0.00	0.00	0.00	0.00		
POST	2F1	46.50 R	40.15	57.83					
		0.00 R	0.00	0.00					
POST	3F1	70.39 R	60.78	61.83					
		0.00 R	0.00	0.00					
POST	4F1	81.44 R	70.33	65.83					
		0.00 R	0.00	0.00					

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.24	HS 44.76	80.6
HS20	3.73	HS 74.59	134.3
2F1	10.08	0.00	151.3
3F1	6.66	0.00	153.2
4F1	5.76	0.00	155.4

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. U 2L 3

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	4423.	5515.	5515.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
40.958	40.958	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
12.06	15.48	407.48	93.76	-0.10	5.13	2.46

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
15.48	572.26	79.57	0.80

Truss influence line - loaded chord:

X ordinates:	0.000	47.833	71.750	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-0.385	0.654	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	47.833	71.750	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-0.385	0.654	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

95.0 0.0

Veh.	Axial Load Capacity Tension Compression	Available Capacity for LL+I Tension Compression
INV.	235.7 56.9	178.7 113.9
OPER	392.8 94.9	297.8 189.9
POST	392.8 94.9	297.8 189.9

Live Load Effect

Impact Factors: ten - .193 comp - .275

Rat. Typ.	Rat. Veh.	Truck Live Load Force w/imp.	Load Force w/o imp.	Loc. of Front Wheel	Lane Live Load Force w/imp.	Load Force w/o imp.	Loc. of Conc. Load
INV.	HS20	65.79 R	55.17	99.75	68.47	57.42	71.75
		-36.13 L	-28.33	19.83	-27.52	-21.58	47.83
OPER	HS20	65.79 R	55.17	99.75	68.47	57.42	71.75
		-36.13 L	-28.33	19.83	-27.52	-21.58	47.83
POST	2F1	28.91 R	24.24	81.75			
		-17.40 L	-13.64	37.83			
POST	3F1	43.64 R	36.59	85.75			
		-25.60 L	-20.08	33.83			
POST	4F1	50.34 R	42.21	89.75			
		-28.66 L	-22.47	29.83			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.61	HS 52.20	94.0
HS20	4.35	HS 86.99	156.6
2F1	10.30	0.00	154.6
3F1	6.82	0.00	157.0
4F1	5.92	0.00	159.7

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. U 3L 3

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	9416.	11742.	11742.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
35.000	17.500	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
12.24	9.56	242.92	23.54	5.55	5.04	1.57

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
8.83	224.65	15.08	6.49

Truss influence line - loaded chord:

X ordinates:	0.000	71.750	95.667	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.469	-0.425	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	47.833	71.750	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.312	-0.531	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

0.0 13.7

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	134.5	74.8	142.7	66.6
OPER	224.1	124.7	237.8	111.1
POST	224.1	124.7	237.8	111.1

Live Load Effect

Impact Factors: ten - .239 comp - .215

Rat. Typ.	Rat. Veh.	Truck Live w/imp.	Load Force w/o imp.	Loc. of Front Wheel	Lane Live w/imp.	Load Force w/o imp.	Loc. of Conc. Load
INV.	HS20	46.19 L	37.29	43.75	39.07	31.54	71.75
		-42.63 R	-35.07	123.67	-39.53	-32.52	95.67
OPER	HS20	46.19 L	37.29	43.75	39.07	31.54	71.75
		-42.63 R	-35.07	123.67	-39.53	-32.52	95.67
POST	2F1	21.10 L	17.03	61.75			
		-19.00 R	-15.63	105.67			
POST	3F1	31.50 L	25.43	57.75			
		-28.56 R	-23.50	109.67			
POST	4F1	35.88 L	28.96	53.75			
		-32.79 R	-26.98	113.67			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	1.56	HS 31.26	56.3
HS20	2.61	HS 52.10	93.8
2F1	5.85	0.00	87.7
3F1	3.89	0.00	89.4
4F1	3.39	0.00	91.4

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. L 3L 4

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	14057.	17530.	17530.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
23.917	23.917	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
15.00	37.50	703.12	1139.26	7.50	4.33	5.51

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
35.62	845.19	913.36	8.68

Truss influence line - loaded chord:

X ordinates:	0.000	71.750	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	1.281	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	71.750	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	1.281	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D.

HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

354.9 0.0

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	542.6	438.4	329.7	651.4
OPER	904.3	730.7	549.4	1085.6
POST	904.3	730.7	549.4	1085.6

Live Load Effect

Impact Factors: ten - .158 comp - .000

Rat. Typ.	Rat. Veh.	Truck w/imp.	Live Load w/o imp.	Force w/o imp.	Loc. of Front Wheel	Lane w/imp.	Live Load w/o imp.	Force w/o imp.	Loc. of Conc. Load
INV.	HS20	125.67 L	108.52	57.75	149.29	128.92	71.75		
		0.00 R	0.00	0.00	0.00	0.00	0.00		
OPER	HS20	125.67 L	108.52	57.75	149.29	128.92	71.75		
		0.00 R	0.00	0.00	0.00	0.00	0.00		
POST	2F1	54.96 R	47.45	81.75					
		0.00 R	0.00	0.00					
POST	3F1	83.00 R	71.68	81.75					
		0.00 R	0.00	0.00					
POST	4F1	96.76 R	83.55	85.75					
		0.00 R	0.00	0.00					

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.21	HS 44.16	79.5
HS20	3.68	HS 73.60	132.5
2F1	10.00	0.00	150.0
3F1	6.62	0.00	152.2
4F1	5.68	0.00	153.3

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. U 3U 4

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	15022.	18734.	18734.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
23.917	23.917	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
25.78	41.21	2775.48	2144.43	21.40	8.21	7.21

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
41.21	2775.48	2144.43	21.40

Truss influence line - loaded chord:

X ordinates:	0.000	95.667	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-1.367	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	95.667	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-1.367	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

0.0 378.1

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	627.7	514.9	854.5	288.0
OPER	1046.1	858.1	1424.2	480.0
POST	1046.1	858.1	1424.2	480.0

Live Load Effect

Impact Factors: ten - .000 comp - .158

Rat. Typ.	Rat. Veh.	Truck w/imp.	Live Load w/o imp.	Force Loc. of Front Wheel	Lane w/imp.	Live Load w/o imp.	Force Loc. of Conc. Load
INV.	HS20	0.00 R	0.00	0.00	0.00	0.00	0.00
		-132.95 R	-114.81	109.67	-159.25	-137.51	95.67
OPER	HS20	0.00 R	0.00	0.00	0.00	0.00	0.00
		-132.95 R	-114.81	109.67	-159.25	-137.51	95.67
POST	2F1	0.00 R	0.00	0.00			
		-58.20 L	-50.26	85.67			
POST	3F1	0.00 R	0.00	0.00			
		-88.51 R	-76.43	105.67			
POST	4F1	0.00 R	0.00	0.00			
		-102.66 L	-88.65	81.67			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	1.81	HS 36.17	65.1
HS20	3.01	HS 60.29	108.5
2F1	8.25	0.00	123.7
3F1	5.42	0.00	124.7
4F1	4.68	0.00	126.2

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. U 3L 4

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	6622.	8258.	8258.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
42.391	21.196	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
12.24	10.49	278.14	25.49	6.12	5.15	1.56

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
9.91	253.85	17.03	7.09

Truss influence line - loaded chord:

X ordinates:	0.000	71.750	95.667	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-0.454	0.606	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	71.750	95.667	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-0.454	0.606	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

41.1 0.0

Veh.	Axial Load Capacity Tension Compression	Available Capacity for LL+I Tension Compression
INV.	150.9 0.0	126.2 0.0
OPER	251.5 0.0	210.3 0.0
POST	251.5 0.0	210.3 0.0

Live Load Effect

Impact Factors: ten - .213 comp - .000

Rat. Typ.	Rat. Veh.	Truck Live Load Force w/imp.	Load Force w/o imp.	Loc. of Front Wheel	Lane Live Load Force w/imp.	Load Force w/o imp.	Loc. of Conc. Load
INV.	HS20	60.64 R	49.97	123.67	56.91	46.90	95.67
		0.00 R	0.00	0.00	0.00	0.00	0.00
OPER	HS20	60.64 R	49.97	123.67	56.91	46.90	95.67
		0.00 R	0.00	0.00	0.00	0.00	0.00
POST	2F1	27.02 R	22.27	105.67			
		0.00 R	0.00	0.00			
POST	3F1	40.62 R	33.48	109.67			
		0.00 R	0.00	0.00			
POST	4F1	46.65 R	38.44	113.67			
		0.00 R	0.00	0.00			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.08	HS 41.62	74.9
HS20	3.47	HS 69.37	124.9
2F1	7.78	0.00	116.8
3F1	5.18	0.00	119.1
4F1	4.51	0.00	121.7

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. L 3U 4

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	6540.	8156.	8156.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
42.391	21.196	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
12.24	8.76	228.31	21.02	5.92	5.10	1.55

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
7.92	199.06	21.74	6.91

Truss influence line - loaded chord:

X ordinates:	0.000	71.750	95.667	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.454	-0.606	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	71.750	95.667	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.454	-0.606	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D.

HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

0.0 0.0

Veh.	Axial Load Capacity Tension Compression	Available Capacity for LL+I Tension Compression
INV.	120.6 0.0	120.6 0.0
OPER	201.0 0.0	201.0 0.0
POST	201.0 0.0	201.0 0.0

Live Load Effect

Impact Factors: ten - .242 comp - .000

Rat. Typ.	Rat. Veh.	Truck Live Load Force w/imp.	Load Force w/o imp.	Loc. of Front Wheel	Lane Live Load Force w/imp.	Load Force w/o imp.	Loc. of Conc. Load
INV.	HS20	44.86 L 0.00 R	36.13 0.00	43.75 0.00	37.41 0.00	30.13 0.00	71.75 0.00
OPER	HS20	44.86 L 0.00 R	36.13 0.00	43.75 0.00	37.41 0.00	30.13 0.00	71.75 0.00
POST	2F1	20.49 L 0.00 R	16.50 0.00	61.75 0.00			
POST	3F1	30.59 L 0.00 R	24.64 0.00	57.75 0.00			
POST	4F1	34.84 L 0.00 R	28.06 0.00	53.75 0.00			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.69	HS 53.76	96.8
HS20	4.48	HS 89.60	161.3
2F1	9.81	0.00	147.1
3F1	6.57	0.00	151.1
4F1	5.77	0.00	155.7

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. U 4L 4

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	9563.	11926.	11926.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
35.000	17.500	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
12.24	9.90	255.49	24.97	5.76	5.08	1.59

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
9.22	235.20	16.51	6.72

Truss influence line - loaded chord:

X ordinates:	0.000	191.333	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	71.750	1148.002	1435.002	2296.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.000	-1.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

-5.7 5.7

Veh.	Axial Load Capacity Tension Compression	Available Capacity for LL+I Tension Compression
INV.	140.4 78.7	143.8 75.3
OPER	234.0 131.2	239.7 125.5
POST	234.0 131.2	239.7 125.5

Live Load Effect

Impact Factors: ten - .213 comp - .242

Rat. Typ.	Rat. Veh.	Truck Live Load Force w/imp.	Load Force w/o imp.	Loc. of Front Wheel	Lane Live Load Force w/imp.	Load Force w/o imp.	Loc. of Conc. Load
INV.	HS20	50.06 R	41.26	123.67	46.99	38.73	95.67
		-37.03 L	-29.83	43.75	-30.89	-24.88	71.75
OPER	HS20	50.06 R	41.26	123.67	46.99	38.73	95.67
		-37.03 L	-29.83	43.75	-30.89	-24.88	71.75
POST	2F1	42.28 R	32.79	105.67			
		0.00 R	0.00	0.00			
POST	3F1	62.45 R	48.44	105.67			
		0.00 R	0.00	0.00			
POST	4F1	69.25 L	53.71	81.67			
		0.00 R	0.00	0.00			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.03	HS 40.67	73.2
HS20	3.39	HS 67.78	122.0
2F1	999.00	999.00	999.0
3F1	999.00	999.00	999.0
4F1	999.00	999.00	999.0

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. L 4L 5

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	14057.	17530.	17530.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
23.917	23.917	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
15.00	37.50	703.12	1139.26	7.50	4.33	5.51

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
35.62	845.19	913.36	8.68

Truss influence line - loaded chord:

X ordinates:	0.000	119.583	191.333	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						
Y ordinates:	0.000	1.281	0.000	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						

Truss influence line - unloaded chord:

X ordinates:	0.000	119.583	191.333	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						
Y ordinates:	0.000	1.281	0.000	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

354.9 0.0

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	542.6	438.4	329.7	651.4
OPER	904.3	730.7	549.4	1085.6
POST	904.3	730.7	549.4	1085.6

Live Load Effect

Impact Factors: ten - .158 comp - .000

Rat. Typ.	Rat. Veh.	Truck w/imp.	Live Load w/o imp.	Force Loc. of Front Wheel	Lane w/imp.	Live Load w/o imp.	Force Loc. of Conc. Load
INV.	HS20	125.67 R	108.52	133.58	149.29	128.92	119.58
		0.00 R	0.00	0.00	0.00	0.00	0.00
OPER	HS20	125.67 R	108.52	133.58	149.29	128.92	119.58
		0.00 R	0.00	0.00	0.00	0.00	0.00
POST	2F1	54.96 L	47.45	109.58			
		0.00 R	0.00	0.00			
POST	3F1	83.00 L	71.68	109.58			
		0.00 R	0.00	0.00			
POST	4F1	96.76 L	83.55	105.58			
		0.00 R	0.00	0.00			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.21	HS 44.16	79.5
HS20	3.68	HS 73.60	132.5
2F1	10.00	0.00	150.0
3F1	6.62	0.00	152.2
4F1	5.68	0.00	153.3

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. U 4U 5

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	15022.	18734.	18734.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
23.917	23.917	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
25.78	41.21	2775.48	2144.43	21.40	8.21	7.21

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
41.21	2775.48	2144.43	21.40

Truss influence line - loaded chord:

X ordinates:	0.000	95.667	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-1.367	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	95.667	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-1.367	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Structure I. D. HAM500 Rating Types and Vehicles

		INV.	OPER	POST	SPEC
		HS20	HS20	2F1	
Truss I. D.	1			3F1	
Truss Member I. D.	U 4U 5			4F1	

Axial Dead Load
Tension Compression

0.0 378.1

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	627.7	514.9	854.5	288.0
OPER	1046.1	858.1	1424.2	480.0
POST	1046.1	858.1	1424.2	480.0

Live Load Effect

Impact Factors: ten - .000 comp - .158

Rat. Typ.	Rat. Veh.	Truck w/imp.	Live Load w/o imp.	Force Loc. of Front Wheel	Lane w/imp.	Live Load w/o imp.	Force Loc. of Conc. Load
INV.	HS20	0.00 R	0.00	0.00	0.00	0.00	0.00
		-132.95 R	-114.81	109.67	-159.25	-137.51	95.67
OPER	HS20	0.00 R	0.00	0.00	0.00	0.00	0.00
		-132.95 R	-114.81	109.67	-159.25	-137.51	95.67
POST	2F1	0.00 R	0.00	0.00			
		-58.20 L	-50.26	85.67			
POST	3F1	0.00 R	0.00	0.00			
		-88.51 R	-76.43	105.67			
POST	4F1	0.00 R	0.00	0.00			
		-102.66 L	-88.65	81.67			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	1.81	HS 36.17	65.1
HS20	3.01	HS 60.29	108.5
2F1	8.25	0.00	123.7
3F1	5.42	0.00	124.7
4F1	4.68	0.00	126.2

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. L 4U 5

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	6593.	8222.	8222.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
42.391	21.196	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
12.24	10.31	271.08	24.93	6.01	5.13	1.56

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
9.69	248.08	16.47	6.98

Truss influence line - loaded chord:

X ordinates:	0.000	95.667	119.583	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.606	-0.454	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	95.667	119.583	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.606	-0.454	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

41.1 0.0

Veh.	Axial Load Capacity Tension	Compression	Available Capacity for LL+I Tension	Compression
INV.	147.6	0.0	122.9	0.0
OPER	246.0	0.0	204.9	0.0
POST	246.0	0.0	204.9	0.0

Live Load Effect

Impact Factors: ten - .213 comp - .000

Rat. Typ.	Rat. Veh.	Truck Live Load Force w/imp.	Load Force w/o imp.	Loc. of Front Wheel	Lane Live Load Force w/imp.	Load Force w/o imp.	Loc. of Conc. Load
INV.	HS20	60.64 L	49.97	67.67	56.91	46.90	95.67
		0.00 R	0.00	0.00	0.00	0.00	0.00
OPER	HS20	60.64 L	49.97	67.67	56.91	46.90	95.67
		0.00 R	0.00	0.00	0.00	0.00	0.00
POST	2F1	27.02 L	22.27	85.67			
		0.00 R	0.00	0.00			
POST	3F1	40.63 L	33.48	81.67			
		0.00 R	0.00	0.00			
POST	4F1	46.65 L	38.44	77.67			
		0.00 R	0.00	0.00			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.03	HS 40.54	73.0
HS20	3.38	HS 67.57	121.6
2F1	7.58	0.00	113.7
3F1	5.04	0.00	116.0
4F1	4.39	0.00	118.6

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. U 4L 5

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	6353.	7922.	7922.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
42.391	21.196	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
12.24	9.67	245.49	22.54	5.61	5.04	1.53

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
8.96	226.81	14.08	6.56

Truss influence line - loaded chord:

X ordinates:	0.000	95.667	119.583	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-0.606	0.454	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	95.667	119.583	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-0.606	0.454	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D.

HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

0.0 0.0

Veh.	Axial Load Capacity Tension	Compression	Available Capacity for LL+I Tension	Compression
INV.	136.5	0.0	136.5	0.0
OPER	227.5	0.0	227.5	0.0
POST	227.5	0.0	227.5	0.0

Live Load Effect

Impact Factors: ten - .242 comp - .000

Rat. Typ.	Rat. Veh.	Truck Live Load Force w/imp.	Load Force w/o imp.	Loc. of Front Wheel	Lane Live Load Force w/imp.	Load Force w/o imp.	Loc. of Conc. Load
INV.	HS20	44.86 R	36.13	147.58	37.41	30.13	119.58
		0.00 R	0.00	0.00	0.00	0.00	0.00
OPER	HS20	44.86 R	36.13	147.58	37.41	30.13	119.58
		0.00 R	0.00	0.00	0.00	0.00	0.00
POST	2F1	20.49 R	16.50	129.58			
		0.00 R	0.00	0.00			
POST	3F1	30.59 R	24.64	133.58			
		0.00 R	0.00	0.00			
POST	4F1	34.84 R	28.06	137.58			
		0.00 R	0.00	0.00			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	3.04	HS 60.87	109.6
HS20	5.07	HS101.44	182.6
2F1	11.11	0.00	166.6
3F1	7.44	0.00	171.1
4F1	6.53	0.00	176.3

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. U 5L 5

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	9530.	11885.	11885.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
35.000	17.500	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
12.24	9.82	252.80	24.65	5.71	5.07	1.58

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
9.13	232.96	16.19	6.67

Truss influence line - loaded chord:

X ordinates:	0.000	95.667	119.583	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-0.425	0.469	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	119.583	143.500	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-0.531	0.312	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Structure I. D. HAM500 Rating Types and Vehicles

		INV.	OPER	POST	SPEC
		HS20	HS20	2F1	
Truss I. D.	1			3F1	
Truss Member I. D.	U 5L 5			4F1	

Axial Dead Load
Tension Compression

0.0 13.7

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	139.1	77.8	147.3	69.6
OPER	231.9	129.7	245.5	116.1
POST	231.9	129.7	245.5	116.1

Live Load Effect

Impact Factors: ten - .239 comp - .215

Rat. Typ.	Rat. Veh.	Truck Live w/imp.	Load Force w/o imp.	Loc. of Front Wheel	Lane Live w/imp.	Load Force w/o imp.	Loc. of Conc. Load
INV.	HS20	46.19 R	37.29	147.58	39.07	31.54	119.58
		-42.63 L	-35.07	67.67	-39.53	-32.52	95.67
OPER	HS20	46.19 R	37.29	147.58	39.07	31.54	119.58
		-42.63 L	-35.07	67.67	-39.53	-32.52	95.67
POST	2F1	21.10 R	17.03	129.58			
		-19.00 L	-15.63	85.67			
POST	3F1	31.50 R	25.43	133.58			
		-28.56 L	-23.50	81.67			
POST	4F1	35.88 R	28.96	137.58			
		-32.79 L	-26.98	77.67			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	1.63	HS 32.68	58.8
HS20	2.72	HS 54.46	98.0
2F1	6.11	0.00	91.7
3F1	4.06	0.00	93.5
4F1	3.54	0.00	95.6

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. L 5L 6

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	14058.	17531.	17531.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
23.917	23.917	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
15.00	31.86	597.64	999.10	7.50	4.33	5.60

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
30.27	718.34	800.48	8.68

Truss influence line - loaded chord:

X ordinates:	0.000	143.500	191.333	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						
Y ordinates:	0.000	1.079	0.000	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						

Truss influence line - unloaded chord:

X ordinates:	0.000	143.500	191.333	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						
Y ordinates:	0.000	1.079	0.000	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

299.4 0.0

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	461.0	372.5	281.3	552.2
OPER	768.3	620.8	468.9	920.3
POST	768.3	620.8	468.9	920.3

Live Load Effect

Impact Factors: ten - .158 comp - .000

Rat. Typ.	Rat. Veh.	Truck w/imp.	Live Load w/o imp.	Force Loc. of Front Wheel	Lane w/imp.	Live Load w/o imp.	Force Loc. of Conc. Load
INV.	HS20	106.82 L	92.24	115.50	125.72	108.56	143.50
		0.00 R	0.00	0.00	0.00	0.00	0.00
OPER	HS20	106.82 L	92.24	115.50	125.72	108.56	143.50
		0.00 R	0.00	0.00	0.00	0.00	0.00
POST	2F1	46.50 L	40.15	133.50			
		0.00 R	0.00	0.00			
POST	3F1	70.39 L	60.78	129.50			
		0.00 R	0.00	0.00			
POST	4F1	81.44 L	70.33	125.50			
		0.00 R	0.00	0.00			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.24	HS 44.76	80.6
HS20	3.73	HS 74.59	134.3
2F1	10.08	0.00	151.3
3F1	6.66	0.00	153.2
4F1	5.76	0.00	155.4

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. U 5U 6

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	15016.	18726.	18726.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
23.981	23.981	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
25.84	38.03	2805.75	1967.05	20.02	8.59	7.19

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
38.03	2805.75	1967.05	20.02

Truss influence line - loaded chord:

X ordinates:	0.000	119.583	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-1.285	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	119.583	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-1.285	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

0.0 355.8

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	579.2	474.9	792.7	261.4
OPER	965.4	791.6	1321.2	435.7
POST	965.4	791.6	1321.2	435.7

Live Load Effect

Impact Factors: ten - .000 comp - .158

Rat. Typ.	Rat. Veh.	Truck w/imp.	Live Load w/o imp.	Force Loc. of Front Wheel	Lane w/imp.	Live Load w/o imp.	Force Loc. of Conc. Load
INV.	HS20	0.00 R	0.00	0.00	0.00	0.00	0.00
		-126.01 R	-108.81	133.58	-149.69	-129.26	119.58
OPER	HS20	0.00 R	0.00	0.00	0.00	0.00	0.00
		-126.01 R	-108.81	133.58	-149.69	-129.26	119.58
POST	2F1	0.00 R	0.00	0.00			
		-55.10 L	-47.58	109.58			
POST	3F1	0.00 R	0.00	0.00			
		-83.23 L	-71.87	109.58			
POST	4F1	0.00 R	0.00	0.00			
		-97.01 L	-83.77	105.58			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	1.75	HS 34.93	62.9
HS20	2.91	HS 58.22	104.8
2F1	7.91	0.00	118.6
3F1	5.24	0.00	120.4
4F1	4.49	0.00	121.3

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. L 5U 6

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	4489.	5598.	5598.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
40.958	40.958	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
12.06	15.36	424.98	94.47	0.00	5.26	2.48

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
15.36	587.15	66.48	0.90

Truss influence line - loaded chord:

X ordinates:	0.000	119.583	143.500	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.654	-0.385	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	119.583	143.500	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.654	-0.385	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

95.0 0.0

Veh.	Axial Load Capacity Tension	Compression	Available Capacity for LL+I Tension	Compression
INV.	234.0	57.4	177.0	114.3
OPER	389.9	95.6	294.9	190.6
POST	389.9	95.6	294.9	190.6

Live Load Effect

Impact Factors: ten - .193 comp - .275

Rat. Typ.	Rat. Veh.	Truck Live Load Force w/imp.	Load Force w/o imp.	Loc. of Front Wheel	Lane Live Load Force w/imp.	Load Force w/o imp.	Loc. of Conc. Load
INV.	HS20	65.79 L	55.17	91.58	68.47	57.42	119.58
		-36.13 R	-28.33	171.50	-27.52	-21.58	143.50
OPER	HS20	65.79 L	55.17	91.58	68.47	57.42	119.58
		-36.13 R	-28.33	171.50	-27.52	-21.58	143.50
POST	2F1	28.91 L	24.24	109.58			
		-17.40 R	-13.64	153.50			
POST	3F1	43.64 L	36.59	105.58			
		-25.60 R	-20.08	157.50			
POST	4F1	50.34 L	42.21	101.58			
		-28.66 R	-22.47	161.50			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.58	HS 51.69	93.0
HS20	4.31	HS 86.15	155.1
2F1	10.20	0.00	153.1
3F1	6.76	0.00	155.5
4F1	5.86	0.00	158.2

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. U 6L 6

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	9563.	11925.	11925.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
33.250	33.250	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
12.12	19.10	533.00	174.00	0.00	5.28	3.02

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
19.10	708.48	135.48	0.77

Truss influence line - loaded chord:

X ordinates:	0.000	119.583	143.500	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-0.428	0.487	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	143.500	167.417	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-0.513	0.243	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

0.0 43.0

Veh.	Axial Load Capacity Tension	Compression	Available Capacity for LL+I Tension	Compression
INV.	290.9	151.9	316.7	126.1
OPER	484.8	253.2	527.9	210.2
POST	484.8	253.2	527.9	210.2

Live Load Effect

Impact Factors: ten - .269 comp - .195

Rat. Typ.	Rat. Veh.	Truck Live Load Force w/imp.	Load Force w/o imp.	Loc. of Front Wheel	Lane Live Load Force w/imp.	Load Force w/o imp.	Loc. of Conc. Load
INV.	HS20	45.48 R	35.83	171.50	29.34	23.11	143.50
		-43.10 L	-36.05	91.58	-38.86	-32.50	119.58
OPER	HS20	45.48 R	35.83	171.50	29.34	23.11	143.50
		-43.10 L	-36.05	91.58	-38.86	-32.50	119.58
POST	2F1	21.91 R	17.26	153.50			
		-18.93 L	-15.84	109.58			
POST	3F1	32.23 R	25.39	157.50			
		-28.58 L	-23.91	105.58			
POST	4F1	36.08 R	28.42	161.50			
		-32.98 L	-27.58	101.58			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.93	HS 58.52	105.3
HS20	4.88	HS 97.53	175.6
2F1	11.10	0.00	166.5
3F1	7.35	0.00	169.1
4F1	6.37	0.00	172.1

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. L 6L 7

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	14057.	17530.	17530.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
23.917	23.917	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
15.00	22.50	421.86	743.54	7.50	4.33	5.75

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
21.38	507.10	595.25	8.68

Truss influence line - loaded chord:

X ordinates:	0.000	167.417	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.747	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	167.417	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.747	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

210.6 0.0

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	325.6	263.0	199.2	389.4
OPER	542.6	438.4	332.0	649.1
POST	542.6	438.4	332.0	649.1

Live Load Effect

Impact Factors: ten - .158 comp - .000

Rat. Typ.	Rat. Veh.	Truck w/imp.	Live Load w/o imp.	Force Loc. of Front Wheel	Lane w/imp.	Live Load w/o imp.	Force Loc. of Conc. Load
INV.	HS20	74.73 L	64.53	139.42	87.09	75.20	167.42
		0.00 R	0.00	0.00	0.00	0.00	0.00
OPER	HS20	74.73 L	64.53	139.42	87.09	75.20	167.42
		0.00 R	0.00	0.00	0.00	0.00	0.00
POST	2F1	32.32 L	27.91	157.42			
		0.00 R	0.00	0.00			
POST	3F1	49.01 L	42.32	153.42			
		0.00 R	0.00	0.00			
POST	4F1	56.84 L	49.08	149.42			
		0.00 R	0.00	0.00			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.29	HS 45.74	82.3
HS20	3.81	HS 76.24	137.2
2F1	10.27	0.00	154.1
3F1	6.77	0.00	155.8
4F1	5.84	0.00	157.7

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. U 6U 7

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	15011.	18720.	18720.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
24.486	24.486	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
25.75	34.10	2388.22	1822.35	21.05	8.37	7.31

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
34.10	2388.22	1822.35	21.05

Truss influence line - loaded chord:

X ordinates:	0.000	143.500	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-1.105	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	143.500	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-1.105	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D.

HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

0.0 306.6

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	519.4	425.7	703.3	241.8
OPER	865.6	709.5	1172.2	403.0
POST	865.6	709.5	1172.2	403.0

Live Load Effect

Impact Factors: ten - .000 comp - .158

Rat. Typ.	Rat. Veh.	Truck w/imp.	Live Load w/o imp.	Force	Loc. of Front Wheel	Lane w/imp.	Live Load w/o imp.	Force	Loc. of Conc. Load
INV.	HS20	0.00 R	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		-109.37 L	-94.44	115.50	115.50	-128.71	-111.15	143.50	143.50
OPER	HS20	0.00 R	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		-109.37 L	-94.44	115.50	115.50	-128.71	-111.15	143.50	143.50
POST	2F1	0.00 R	0.00	0.00	0.00				
		-47.61 L	-41.11	133.50	133.50				
POST	3F1	0.00 R	0.00	0.00	0.00				
		-72.06 L	-62.23	129.50	129.50				
POST	4F1	0.00 R	0.00	0.00	0.00				
		-83.38 L	-72.00	125.50	125.50				

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	1.88	HS 37.57	67.6
HS20	3.13	HS 62.62	112.7
2F1	8.47	0.00	127.0
3F1	5.59	0.00	128.6
4F1	4.83	0.00	130.5

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. L 6U 7

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	5646.	7041.	7041.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
36.824	36.824	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
12.19	16.70	474.97	104.40	-0.01	5.33	2.50

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
16.64	653.43	73.25	0.89

Truss influence line - loaded chord:

X ordinates:	0.000	143.500	167.417	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.675	-0.320	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	143.500	167.417	191.333	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.675	-0.320	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

136.7 0.0

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	253.5	78.4	171.5	160.4
OPER	422.5	130.7	285.8	267.4
POST	422.5	130.7	285.8	267.4

Live Load Effect

Impact Factors: ten - .176 comp - .300

Rat. Typ.	Rat. Veh.	Truck Live w/imp.	Load Force w/o imp.	Loc. of Front Wheel	Lane Live w/imp.	Load Force w/o imp.	Loc. of Conc. Load
INV.	HS20	67.83 L	57.70	115.50	77.70	66.09	143.50
		-23.93 R	-18.40	195.42	-19.09	-14.68	167.42
OPER	HS20	67.83 L	57.70	115.50	77.70	66.09	143.50
		-23.93 R	-18.40	195.42	-19.09	-14.68	167.42
POST	2F1	29.53 L	25.12	133.50			
		-13.65 R	-10.50	177.42			
POST	3F1	44.69 L	38.02	129.50			
		-19.10 R	-14.69	181.42			
POST	4F1	51.71 L	43.99	125.50			
		-20.05 R	-15.43	185.42			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.21	HS 44.14	79.5
HS20	3.68	HS 73.57	132.4
2F1	9.68	0.00	145.2
3F1	6.39	0.00	147.1
4F1	5.53	0.00	149.2

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. U 7L 7

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	5837.	7280.	7280.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
28.000	28.000	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
11.94	11.80	310.00	44.10	0.00	5.13	1.93

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
11.51	415.42	31.40	0.77

Truss influence line - loaded chord:

X ordinates:	0.000	143.500	167.417	191.334	191.333	0.000	0.000	0
.000	0.000	0.000						
Y ordinates:	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						

Truss influence line - unloaded chord:

X ordinates:	0.000	191.333	0.000	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						
Y ordinates:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
.000	0.000	0.000						

RATING REPORT

Structure I. D. HAM500 Rating Types and Vehicles

		INV.	OPER	POST	SPEC
		HS20	HS20	2F1	
Truss I. D.	1			3F1	
Truss Member I. D.	U 7L 7			4F1	

Axial Dead Load
Tension Compression

71.3 0.0

Veh.	Axial Load Capacity Tension Compression	Available Capacity for LL+I Tension Compression
INV.	175.3 57.3	132.5 100.1
OPER	292.2 95.5	220.9 166.8
POST	292.2 95.5	220.9 166.8

Live Load Effect

Impact Factors: ten - .289 comp - .000

Rat. Typ.	Rat. Veh.	Truck Live Load Force w/imp.	Load Force w/o imp.	Loc. of Front Wheel	Lane Live Load Force w/imp.	Load Force w/o imp.	Loc. of Conc. Load
INV.	HS20	79.55 L	61.70	153.42	54.54	42.30	167.42
		0.00 R	0.00	0.00	0.00	0.00	0.00
OPER	HS20	79.55 L	61.70	153.42	54.54	42.30	167.42
		0.00 R	0.00	0.00	0.00	0.00	0.00
POST	2F1	42.28 R	32.79	177.42			
		0.00 R	0.00	0.00			
POST	3F1	62.45 R	48.44	177.42			
		0.00 R	0.00	0.00			
POST	4F1	69.25 R	53.71	181.42			
		0.00 R	0.00	0.00			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	1.67	HS 33.32	60.0
HS20	2.78	HS 55.53	100.0
2F1	5.22	0.00	78.4
3F1	3.54	0.00	81.4
4F1	3.19	0.00	86.1

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. L 7L 8

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	14057.	17530.	17530.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
23.917	23.917	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
15.00	22.50	421.86	743.54	7.50	4.33	5.75

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
21.38	507.10	595.25	8.68

Truss influence line - loaded chord:

X ordinates:	0.000	167.417	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.747	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	167.417	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	0.747	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

210.6 0.0

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	325.6	263.0	199.2	389.4
OPER	542.6	438.4	332.0	649.1
POST	542.6	438.4	332.0	649.1

Live Load Effect

Impact Factors: ten - .158 comp - .000

Rat. Typ.	Rat. Veh.	Truck w/imp.	Live Load w/o imp.	Force Loc. of Front Wheel	Lane w/imp.	Live Load w/o imp.	Force Loc. of Conc. Load
INV.	HS20	74.73 L	64.53	139.42	87.09	75.20	167.42
		0.00 R	0.00	0.00	0.00	0.00	0.00
OPER	HS20	74.73 L	64.53	139.42	87.09	75.20	167.42
		0.00 R	0.00	0.00	0.00	0.00	0.00
POST	2F1	32.32 L	27.91	157.42			
		0.00 R	0.00	0.00			
POST	3F1	49.01 L	42.32	153.42			
		0.00 R	0.00	0.00			
POST	4F1	56.84 L	49.08	149.42			
		0.00 R	0.00	0.00			

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.29	HS 45.74	82.3
HS20	3.81	HS 76.24	137.2
2F1	10.27	0.00	154.1
3F1	6.77	0.00	155.8
4F1	5.84	0.00	157.7

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Truss Member I. D. U 7L 8

RATIO/Inv.	Allowable stress (fs) (psi)			
	Inventory	Operating	Posting	Special
Fy (tension)	18150.	24750.	24750.	0.
Fy (compression)	14277.	17804.	17804.	0.
Fy (ultimate)	33000.			

Member Properties:

Effective Length X (ft)	Effective Length Y (ft)	Eccentricity Y (in)	End Cond.	Batton
36.823	36.823	0.00	P	1.0

Gross Section Properties:

Height	Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy	Rx	Ry
25.78	41.21	2775.48	2144.43	21.40	8.21	7.21

Net Section Properties:

Area	Moment of Inertia Ix	Moment of Inertia Iy	Dy
41.21	2775.48	2144.43	21.40

Truss influence line - loaded chord:

X ordinates:	0.000	167.417	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-1.151	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

Truss influence line - unloaded chord:

X ordinates:	0.000	167.417	191.333	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							
Y ordinates:	0.000	-1.151	0.000	0.000	0.000	0.000	0.000	0
.000 0.000	0.000							

RATING REPORT

Rating Types and Vehicles

Structure I. D. HAM500

	INV.	OPER	POST	SPEC
	HS20	HS20	2F1	
Truss I. D.			3F1	
Truss Member I. D.			4F1	

Axial Dead Load
Tension Compression

0.0 324.3

Veh.	Axial Tension	Load Capacity Compression	Available Tension	Capacity for LL+I Compression
INV.	627.7	489.3	822.3	294.7
OPER	1046.1	815.6	1370.4	491.2
POST	1046.1	815.6	1370.4	491.2

Live Load Effect

Impact Factors: ten - .000 comp - .158

Rat. Typ.	Rat. Veh.	Truck w/imp.	Live Load w/o imp.	Force	Loc. of Front Wheel	Lane w/imp.	Live Load w/o imp.	Force	Loc. of Conc. Load
INV.	HS20	0.00 R	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		-115.06 L	-99.36	139.42		-147.63	-127.48	167.42	
OPER	HS20	0.00 R	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		-115.06 L	-99.36	139.42		-147.63	-127.48	167.42	
POST	2F1	0.00 R	0.00	0.00	0.00				
		-49.76 L	-42.97	157.42					
POST	3F1	0.00 R	0.00	0.00	0.00				
		-75.47 L	-65.17	153.42					
POST	4F1	0.00 R	0.00	0.00	0.00				
		-87.51 L	-75.57	149.42					

Veh.	Rating Factor	Axial Rating Value	Load Capacity (tons)
HS20	2.00	HS 39.93	71.9
HS20	3.33	HS 66.55	119.8
2F1	9.87	0.00	148.1
3F1	6.51	0.00	149.7
4F1	5.61	0.00	151.6