


 Made By SSM Date 9/29/2008 Job No. P402080073
 Checked By MSL Date 8/11/2009 Sheet No. 1
 Calculations For: HAM-50-0376L, Floor Beam Loads - 191'

*updated 8/11/2009 with STAAD output from "FLOOR BEAM REACTIONS 02(Spans 1 and 4) MSL2009-08-11.std/ani". Note that DL is due to stringer selfweight.
 **using STAAD output from "FLOOR BEAM REACTIONS 02(Spans 1 and 4) MSL2009-08-11.std/ani". Note that SDL is due to slab, haunch, diaphragm, and railing loads.
 Note that sum of DL and SDL in tables below is same as DL reaction obtained from original STAAD run for Spans 1 and 4 ("Span 1 Stringer DL.std/ani").

HS20 INV/OPR TRUCK/LANE SHEAR

Panel Point	FLOOR BEAM	S01				S02				S03				S04				S05			
		DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I
L0	B01	0.65	7.26	31.19	24.4	0.65	5.86	34.71	27.16	0.65	6.55	34.71	27.16	0.65	6.55	34.71	27.16	0.65	7.26	31.19	24.4
L1	B02	1.85	20.77	72.38	52.72	1.85	16.79	80.54	58.68	1.85	18.77	80.54	58.68	1.85	18.77	80.54	58.68	1.85	20.77	72.38	52.72
L2	B03	1.58	17.74	67.94	51.72	1.58	14.34	75.6	57.56	1.58	16.02	75.6	57.56	1.58	16.02	75.6	57.56	1.58	17.74	67.94	51.72
L3	B04	1.65	18.53	67.62	52.18	1.65	14.98	75.24	58.06	1.65	16.74	75.24	58.06	1.65	16.74	75.24	58.06	1.65	18.53	67.62	52.18
L4	B05	1.63	18.28	67.6	52.06	1.63	14.77	75.22	57.94	1.63	16.51	75.22	57.94	1.63	16.51	75.22	57.94	1.63	18.28	67.6	52.06
L5	B06	1.65	18.52	67.62	52.18	1.65	14.97	75.24	58.06	1.65	16.73	75.24	58.06	1.65	16.73	75.24	58.06	1.65	18.52	67.62	52.18
L6	B07	1.58	17.75	67.94	51.72	1.58	14.34	75.6	57.56	1.58	16.03	75.6	57.56	1.58	16.03	75.6	57.56	1.58	17.75	67.94	51.72
L7	B08	1.85	20.77	72.38	52.72	1.85	16.79	80.54	58.68	1.85	18.77	80.54	58.68	1.85	18.77	80.54	58.68	1.85	20.77	72.38	52.72
L8	B09	0.65	7.26	31.19	24.4	0.65	5.86	34.71	27.16	0.65	6.55	34.71	27.16	0.65	6.55	34.71	27.16	0.65	7.26	31.19	24.4

Losses (in.²)
 Span 1 Span 4
 P = 0.5 O = 2.0313
 N = 0.125 M = 0.625
 L = 0.25 K = 2.75
 F = 0.25

2F1 TRUCK/LANE SHEAR

Panel Point	FLOOR BEAM	S01				S02				S03				S04				S05			
		DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I
L0	B01	0.65	7.26	18.5		0.65	5.86	20.59		0.65	6.55	20.59		0.65	6.55	20.59		0.65	7.26	18.5	
L1	B02	1.85	20.77	39.88		1.85	16.79	44.38		1.85	18.77	44.38		1.85	18.77	44.38		1.85	20.77	39.88	
L2	B03	1.58	17.74	38.68		1.58	14.34	43.04		1.58	16.02	43.04		1.58	16.02	43.04		1.58	17.74	38.68	
L3	B04	1.65	18.53	38.58		1.65	14.98	42.94		1.65	16.74	42.94		1.65	16.74	42.94		1.65	18.53	38.58	
L4	B05	1.63	18.28	38.58		1.63	14.77	42.94		1.63	16.51	42.94		1.63	16.51	42.94		1.63	18.28	38.58	
L5	B06	1.65	18.52	38.58		1.65	14.97	42.94		1.65	16.73	42.94		1.65	16.73	42.94		1.65	18.52	38.58	
L6	B07	1.58	17.75	38.68		1.58	14.34	43.04		1.58	16.03	43.04		1.58	16.03	43.04		1.58	17.75	38.68	
L7	B08	1.85	20.77	39.88		1.85	16.79	44.38		1.85	18.77	44.38		1.85	18.77	44.38		1.85	20.77	39.88	
L8	B09	0.65	7.26	18.5		0.65	5.86	20.59		0.65	6.55	20.59		0.65	6.55	20.59		0.65	7.26	18.5	

3F1 TRUCK/LANE SHEAR

Panel Point	FLOOR BEAM	S01				S02				S03				S04				S05			
		DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I
L0	B01	0.65	7.26	25.38		0.65	5.86	28.25		0.65	6.55	28.25		0.65	6.55	28.25		0.65	7.26	25.38	
L1	B02	1.85	20.77	57.02		1.85	16.79	63.44		1.85	18.77	63.44		1.85	18.77	63.44		1.85	20.77	57.02	
L2	B03	1.58	17.74	54.44		1.58	14.34	60.58		1.58	16.02	60.58		1.58	16.02	60.58		1.58	17.74	54.44	
L3	B04	1.65	18.53	54.26		1.65	14.98	60.38		1.65	16.74	60.38		1.65	16.74	60.38		1.65	18.53	54.26	
L4	B05	1.63	18.28	54.24		1.63	14.77	60.36		1.63	16.51	60.36		1.63	16.51	60.36		1.63	18.28	54.24	
L5	B06	1.65	18.52	54.26		1.65	14.97	60.38		1.65	16.73	60.38		1.65	16.73	60.38		1.65	18.52	54.26	
L6	B07	1.58	17.75	54.44		1.58	14.34	60.58		1.58	16.03	60.58		1.58	16.03	60.58		1.58	17.75	54.44	
L7	B08	1.85	20.77	57.02		1.85	16.79	63.44		1.85	18.77	63.44		1.85	18.77	63.44		1.85	20.77	57.02	
L8	B09	0.65	7.26	25.38		0.65	5.86	28.25		0.65	6.55	28.25		0.65	6.55	28.25		0.65	7.26	25.38	

4F1 TRUCK/LANE SHEAR

Panel Point	FLOOR BEAM	S01				S02				S03				S04				S05			
		DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I
L0	B01	0.65	7.26	26.15		0.65	5.86	29.1		0.65	6.55	29.1		0.65	6.55	29.1		0.65	7.26	26.15	
L1	B02	1.85	20.77	60.92		1.85	16.79	67.8		1.85	18.77	67.8		1.85	18.77	67.8		1.85	20.77	60.92	
L2	B03	1.58	17.74	57.28		1.58	14.34	63.76		1.58	16.02	63.76		1.58	16.02	63.76		1.58	17.74	57.28	
L3	B04	1.65	18.53	57.02		1.65	14.98	63.46		1.65	16.74	63.46		1.65	16.74	63.46		1.65	18.53	57.02	
L4	B05	1.63	18.28	57		1.63	14.77	63.44		1.63	16.51	63.44		1.63	16.51	63.44		1.63	18.28	57	
L5	B06	1.65	18.52	57.02		1.65	14.97	63.46		1.65	16.73	63.46		1.65	16.73	63.46		1.65	18.52	57.02	
L6	B07	1.58	17.75	57.28		1.58	14.34	63.76		1.58	16.03	63.76		1.58	16.03	63.76		1.58	17.75	57.28	
L7	B08	1.85	20.77	60.92		1.85	16.79	67.8		1.85	18.77	67.8		1.85	18.77	67.8		1.85	20.77	60.92	
L8	B09	0.65	7.26	26.15		0.65	5.86	29.1		0.65	6.55	29.1		0.65	6.55	29.1		0.65	7.26	26.15	

5C1 TRUCK/LANE SHEAR

Panel Point	FLOOR BEAM	S01				S02				S03				S04				S05			
		DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I	DL*	SDL**	LL+I	LANE+I
L0	B01	0.65	7.26	24.68		0.65	5.86	27.46		0.65	6.55	27.46		0.65	6.55	27.46		0.65	7.26	24.68	
L1	B02	1.85	20.77	54.26		1.85	16.79	60.38		1.85	18.77	60.38		1.85	18.77	60.38		1.85	20.77	54.26	
L2	B03	1.58	17.74	51.36		1.58	14.34	57.16		1.58	16.02	57.16		1.58	16.02	57.16		1.58	17.74	51.36	
L3	B04	1.65	18.53	51.16		1.65	14.98	56.94		1.65	16.74	56.94		1.65	16.74	56.94		1.65	18.53	51.16	
L4	B05	1.63	18.28	51.14		1.63	14.77	56.92		1.63	16.51	56.92		1.63	16.51	56.92		1.63	18.28	51.14	
L5	B06	1.65	18.52	51.16		1.65	14.97	56.94		1.65	16.73	56.94		1.65	16.73	56.94		1.65	18.52	51.16	
L6	B07	1.58	17.75	51.36		1.58	14.34	57.16		1.58	16.03	57.16		1.58	16.03	57.16		1.58	17.75	51.36	
L7	B08	1.85	20.77	54.26		1.85	16.79	60.38		1.85	18.77	60.38		1.85	18.77	60.38		1.85	20.77	54.26	
L8	B09	0.65	7.26	24.68		0.65	5.86	27.46		0.65	6.55	27.46		0.65	6.55	27.46		0.65	7.26	24.68	