

|----- Beam Summary -----|

May 1, 2011 Texas Department of Transportation (TxDOT) Page 1
 PSTRS14 Win32 Prestressed Concrete Beam Design/Analysis Ver 4.2

PSF Highway Control- Coded
 No County No Section-Job by Date
 NUM1 BPS 05/1/2011
 90' & 120' SPANS, TX. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 2 DAYS

Span No.	Beam No.	Beam Type	Non-Std Pat	Tot No.	Size	Strands f's (ksi)	e,CL (in)	e,End (in)	Tot No. Draped or Debnd	To (in)
1&3	EXT	Tx40		42	1/2	270	13.50	8.17	8	36.5
1&3	INT	Tx40		42	1/2	270	13.50	8.17	8	36.5
2	EXT	Tx54		56	1/2	270	17.94	10.80	10	50.5
2	INT	Tx54		54	1/2	270	18.12	11.90	8	50.5

Span No.	Beam No.	f'ci (psi)	f'c (psi)	Design Stresses		Ult Mom Req'd (k-ft)	Camber (ft)	L-R or S-R
				Top (psi)	Bot (psi)			
1&3	EXT	5097	5097	2998	-3549	4486	0.304	L-R
1&3	INT	5133	5466	3072	-3647	4517	0.306	L-R
2	EXT	5447	5790	3778	-3857	7676	0.335	L-R
2	INT	5526	6981	3829	-3887	7494	0.333	L-R

Span No.	Beam No.	Loc	Compos Regn 1 (or Key)	Dead Load Deflections (ft)			O'Lay	Other	Total
				Slab	Compos Regn 2	Compos Regn 3			
1&3	EXT	1/4			-0.1404		-0.0120	-0.0072	-0.1596
				CL	-0.1970		-0.0169	-0.0101	-0.2240
1&3	INT	1/4			-0.1604		-0.0132	-0.0069	-0.1806
				CL	-0.2252		-0.0186	-0.0097	-0.2535
2	EXT	1/4			-0.2044		-0.0190	-0.0113	-0.2347
				CL	-0.2869		-0.0267	-0.0159	-0.3294
2	INT	1/4			-0.2336		-0.0209	-0.0109	-0.2653
				CL	-0.3278		-0.0293	-0.0153	-0.3724

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 PSTRS14 Win32 Prestressed Concrete Beam Design/Analysis Ver 4.2

PSF Highway Control- Coded
 No County No Section-Job by Date
 NUM1 BPS 05/1/2011
 90' & 120' SPANS, TX. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS

Span No.	Beam No.	Beam Type	Non-Std Pat	Tot No.	Size	Strands f's (ksi)	e,CL (in)	e,End (in)	Tot No. Draped or Debnd	To (in)
1&3	EXT	Tx40		44	1/2	270	13.33	8.24	8	36.5
1&3	INT	Tx40		44	1/2	270	13.33	8.24	8	36.5
2	EXT	Tx54		60	1/2	270	17.61	10.94	10	50.5
2	INT	Tx54		56	1/2	270	17.94	10.80	10	50.5

Span No.	Beam No.	f'ci (psi)	f'c (psi)	Design Stresses		Ult Mom Req'd (k-ft)	Camber (ft)	L-R or S-R
				Top (psi)	Bot (psi)			
1&3	EXT	5347	5347	3300	-3641	4486	0.254	L-R
1&3	INT	5386	5602	3296	-3730	4517	0.255	L-R
2	EXT	5847	5942	4108	-3946	7676	0.301	L-R
2	INT	5483	7149	4062	-3962	7494	0.272	L-R

Span No.	Beam No.	Loc	Compos Regn 1 (or Key)	Dead Load Deflections (ft)			O'Lay	Other	Total
				Slab	Compos Regn 2	Compos Regn 3			
1&3	EXT	1/4			-0.0784		-0.0081	-0.0048	-0.0913
				CL	-0.1100		-0.0114	-0.0068	-0.1282
1&3	INT	1/4			-0.0896		-0.0089	-0.0046	-0.1030
				CL	-0.1257		-0.0124	-0.0065	-0.1446
2	EXT	1/4			-0.1141		-0.0129	-0.0077	-0.1346
				CL	-0.1602		-0.0181	-0.0108	-0.1890
2	INT	1/4			-0.1304		-0.0140	-0.0073	-0.1518
				CL	-0.1830		-0.0197	-0.0103	-0.2130

PSTRS 14 SAMPLE OUTPUT OF LONG RESULTS FOR ACI 209 METHOD
(104 DAYS)

PSF Highway Control- Coded
 No County No Section-Job by Date
 NUM1 BPS 05/1/2011
 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 1

SPAN ID = 1&3 BEAM ID = EXT BEAM TYPE = Tx40

|----- Beam, Spec, and Strand Data (* denotes default) -----|

C/C Brng Length (ft)	= 88.00	Strand Size (in)	= 1/2
Beam Spacing (ft)	= 7.00	Strand Type	= 7-Wire *
Slab Thickness (in)	= 8.00		Lo-Rlx *
Composite Slab Width (in)	= 84.00	Strand Area (in2)	= 0.153 *
Haunch Width (in)	= 0.00 *	Strand Ult Strength (ksi)	= 270. *
Haunch Depth at CL (in)	= 0.00 *	E Prestress Steel (ksi)	= 28500. *
Relative Humidity (%)	= 65.	Live Loading	= HL93 *
Init Allow Tens Coeff	= 7.50 *	LL Dist Factor for Moment	= 0.585
Final Allow Tens Coeff	= 6.00 *	LL Dist Factor for shear	= 0.743
		LL Impact Factor	= 1.330 *
Dist CL to Hold-Down (ft)	= 5.00 *	Harped Strands/Row	= 2 *
t, Stress to Transfer (hr)	= 24 *		

|----- Cross Section and Material Properties (* denotes default) -----|

	Beam	Composite Slab	Composite Section
Area (in2)	669.0	486.1	1155.1
Depth (in)	40.00	8.00	48.00
Yb (in)	18.10	44.00	29.00
I (in4)	134990.0	2592.6	326440.9
Unit Wt (pcf)	150.0 *	150.0 *	
E (ksi)	5300.5	3834.3 *	
f'c (psi)		4000.0 *	

|----- Shear Data (* denotes default) -----|

Total Eff Web Width (in)	= 7.00 *	Total Stirrup Area (in2)	= 0.392 *
Number of Stirrup Legs	= 2 *	Stirrup Yield Str (ksi)	= 60.00 *
Stirrup Bar Size	= 4 *	Shear Specs = AASHTO LRFD & AASHTO 89	*

|----- Applied Loads -----|

Unif DL on Comp Sec, due to Overlay (klf) = 0.175
Unif DL on Comp Sec, except Overlay (klf) = 0.104

Dist from Bott (in)	=	36.50
Strands/Row at End	=	2
Strands/Row at CL	=	0

PSF Highway Control- Coded
 No County No Section-Job by Date
 NUM1 BPS 05/1/2011
 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 1

SPAN ID = 1&3 BEAM ID = EXT BEAM TYPE = Tx40

|----- Shear -----|

Span Location (ft) (10th Pt)	Stirrup Spacing (No. 4, Gr 60) (in)		Ultimate Horiz Shear Stress (Between Slab and Top of Girder) (psi)	
	AASHTO LRFD	AASHTO 89	AASHTO LRFD	
0.00 .000	9.3	****	145.2	
2.00 .023 (H/2)	9.3	6.3	139.5	
3.22 .037 (CPT)	9.3	6.6	136.0	
4.40 .050	9.7	7.5	132.8	
8.80 .100	11.4	11.5	120.8	
17.60 .200	17.8	13.7	98.0	
22.00 .250	23.6	12.1	87.1	
26.40 .300	24.0	12.4	76.5	
35.20 .400	24.0	15.5	56.2	
39.00 .443 (HD)	24.0	18.8	47.8	
42.33 .481 (REF)	24.0	21.4	41.1	
44.00 .500	24.0	21.4	37.7	

"H/2" denotes location at half of composite beam depth.
 "CPT" denotes critical shear location from beam end per LRFD 5.8.3.2
 "REF" denotes location at the larger distance of
 0.5(dv)(cot(theta)) or dv from mid-span.
 "HD" denotes location at hold-down point.

|----- General -----|

Ultimate Moment Required (k-ft) = 4486. @ due to loading
 Resistant Moment Required (k-ft) = 3504. due to 1.2 Mcr
 Ultimate Moment Provided (k-ft) = 5807. Under Reinforced Rect. Sect.

"@" Denotes controlling case

Concrete Strength Factor: Beta1 = 0.850
 Depth of Compressive Stress Block (in): a = 6.07

Stress in Strands at Ultimate (ksi) = 257.5

Maximum Camber (ft) = 0.254 upward is positive

Dead Load Deflection (ft)

	Slab	O'lay	Other	Total Defl
at 1/4 Point	-.0784	-.0081	-.0048	-.0913
at Midspan	-.1100	-.0114	-.0068	-.1282

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 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 1

SPAN ID = 1&3 BEAM ID = EXT BEAM TYPE = Tx40

|----- Summary of Maximum Unfactored Bending Moments (k-ft) -----|

Span Location (ft) (10th Pt)	Beam DL	Slab DL	Non-Comp DL	Total Non-Comp DL	Total Comp DL	LL+I	Total Load
0.00 .000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00 .023 (H/2)	59.9	60.2	0.0	120.1	24.0	129.8	274.0
3.22 .037 (CPT)	95.1	95.5	0.0	190.6	38.1	205.7	434.4
4.40 .050	128.2	128.7	0.0	256.9	51.4	276.9	585.2
8.80 .100	242.8	243.9	0.0	486.8	97.3	521.9	1106.0
17.60 .200	431.7	433.7	0.0	865.4	173.0	916.1	1954.6
22.00 .250	505.9	508.2	0.0	1014.1	202.8	1065.4	2282.3
26.40 .300	566.6	569.2	0.0	1135.8	227.1	1182.8	2545.8
35.20 .400	647.6	650.5	0.0	1298.1	259.5	1339.3	2897.0
39.00 .443 (HD)	665.9	668.8	0.0	1334.7	266.9	1371.3	2972.8
42.33 .481 (REF)	673.6	676.6	0.0	1350.2	270.0	1379.7	2999.8
44.00 .500	674.6	677.6	0.0	1352.2	270.4	1380.5	3003.0

|----- Summary of Maximum Unfactored Shears (kip) -----|

Span Location (ft) (10th Pt)	Beam DL	Slab DL	Non-Comp DL	Total Non-Comp DL	Total Comp DL	LL+I	Total Load
0.00 .000	30.7	30.8	0.0	61.5	12.3	84.5	158.3
2.00 .023 (H/2)	29.3	29.4	0.0	58.7	11.7	82.0	152.4
3.22 .037 (CPT)	28.4	28.5	0.0	57.0	11.4	80.4	148.8
4.40 .050	27.6	27.7	0.0	55.3	11.1	78.9	145.3
8.80 .100	24.5	24.6	0.0	49.2	9.8	73.2	132.2
17.60 .200	18.4	18.5	0.0	36.9	7.4	61.9	106.2
22.00 .250	15.3	15.4	0.0	30.7	6.1	56.3	93.2
26.40 .300	12.3	12.3	0.0	24.6	4.9	50.6	80.1
35.20 .400	6.1	6.2	0.0	12.3	2.5	39.3	54.1
39.00 .443 (HD)	3.5	3.5	0.0	7.0	1.4	34.5	42.8
42.33 .481 (REF)	1.2	1.2	0.0	2.3	0.5	30.2	33.0

44.00 .500

0.0

0.0

0.0

0.0

0.0

28.0

28.0

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 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 1

SPAN ID = 1&3 BEAM ID = EXT BEAM TYPE = Tx40

|-- Stresses in Extreme Fibers of BM due to Unfactored External Loads (psi) --|

Span Loc	Beam DL		Total Non-Comp DL		Total Comp DL		LL+I		Total Load	
	Top	Bot	Top	Bot	Top	Bot	Top	Bot	Top	Bot
	.000	0.	0.	0.	0.	0.	0.	0.	0.	0.
.023	117.	-96.	234.	-193.	10.	-26.	52.	-138.	296.	-357.
.037	185.	-153.	371.	-307.	15.	-41.	83.	-219.	470.	-567.
.050	250.	-206.	500.	-413.	21.	-55.	112.	-295.	633.	-763.
.100	473.	-391.	948.	-783.	39.	-104.	211.	-556.	1198.	-1443.
.200	840.	-695.	1685.	-1392.	70.	-184.	370.	-977.	2125.	-2554.
.250	985.	-814.	1974.	-1632.	82.	-216.	431.	-1136.	2487.	-2984.
.300	1103.	-912.	2211.	-1828.	92.	-242.	478.	-1261.	2781.	-3331.
.400	1261.	-1042.	2527.	-2089.	105.	-277.	542.	-1428.	3174.	-3793.
.443	1296.	-1071.	2598.	-2148.	108.	-284.	555.	-1462.	3261.	-3894.
.481	1311.	-1084.	2629.	-2173.	109.	-288.	558.	-1471.	3296.	-3931.
.500	1313.	-1085.	2632.	-2176.	109.	-288.	558.	-1472.	3300.	-3935.

|--- Stresses in Extreme Fibers of BM due to Unfactored Loads + PSTR (psi) ---|

Span Loc	Beam + Initial Prestress		Final Prestress		Beam + Final Prestress		Total DL + Final Prestress		Total Load + Final Prestress	
	Top	Bot	Top	Bot	Top	Bot	Top	Bot	Top	Bot
	.000	196.	3208.	159.	2613.	159.	2613.	159.	2613.	159.
.023	260.	3155.	117.	2648.	233.	2552.	360.	2429.	413.	2291.
.037	297.	3125.	91.	2669.	276.	2516.	477.	2322.	560.	2103.
.050	330.	3097.	66.	2690.	315.	2484.	587.	2222.	699.	1927.
.100	438.	3007.	-28.	2768.	445.	2377.	959.	1881.	1170.	1324.
.200	576.	2894.	-215.	2922.	625.	2228.	1539.	1346.	1910.	369.
.250	606.	2869.	-309.	3000.	676.	2186.	1747.	1152.	2178.	16.
.300	609.	2867.	-403.	3077.	701.	2166.	1900.	1008.	2379.	-253.
.400	536.	2927.	-590.	3232.	671.	2190.	2042.	867.	2584.	-561.

.443	473.	2979.	-671.	3299.	625.	2228.	2035.	867.	2590.	-595.
.481	488.	2967.	-671.	3299.	641.	2215.	2067.	839.	2625.	-632.
.500	490.	2965.	-671.	3299.	642.	2214.	2071.	835.	2629.	-637.

PSF Highway Control- Coded
 No County No Section-Job by Date
 NUM1 BPS 05/1/2011
 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 1

SPAN ID = 1&3 BEAM ID = EXT BEAM TYPE = Tx40

|----- Total Stresses in Composite Regions (psi) -----|

Span Loc	Slab	
	Top	Bot
.000	0.	0.
.023	107.	62.
.037	170.	99.
.050	229.	133.
.100	432.	250.
.200	761.	440.
.250	886.	513.
.300	985.	570.
.400	1117.	647.
.443	1144.	662.
.481	1152.	667.
.500	1153.	668.

|----- Prestress Losses (ksi) -----|

	SH	ELSH	CRC	CRS	Total
Initial		17.176		1.980	19.155
Final	7.250	17.176	24.754	3.998	53.178

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 PROB 1

SPAN ID = 1&3 BEAM ID = INT BEAM TYPE = Tx40

|----- Beam, Spec, and Strand Data (* denotes default) -----|

C/C Brng Length (ft)	= 88.00	Strand Size (in)	= 1/2
Beam Spacing (ft)	= 8.00	Strand Type	= 7-Wire *
Slab Thickness (in)	= 8.00		Lo-Rlx *
Composite Slab Width (in)	= 96.00	Strand Area (in2)	= 0.153 *
Haunch Width (in)	= 0.00 *	Strand Ult Strength (ksi)	= 270. *
Haunch Depth at CL (in)	= 0.00 *	E Prestress Steel (ksi)	= 28000. *
Relative Humidity (%)	= 65.	Live Loading	= HS20 *
Init Allow Tens Coeff	= 7.50 *	LL Dist Factor	= 0.643
Final Allow Tens Coeff	= 6.00 *	LL Impact Factor	= 1.235 *
		Harped Strands/Row	= 2 *
		Dist CL to Hold-Down (ft)	= 5.00 *

|----- Cross Section and Material Properties (* denotes default) -----|

	Beam	Composite Slab	Composite Section
Area (in2)	669.0	555.6	1224.6
Depth (in)	40.00	8.00	48.00
Yb (in)	18.10	44.00	29.85
I (in4)	134990.0	2962.9	341550.9
Unit Wt (pcf)	150.0 *	150.0 *	
E (ksi)	5300.5	3834.3 *	
f'c (psi)		4000.0 *	

|----- Shear Data (* denotes default) -----|

Total Eff Web Width (in)	= 7.00 *	Total Stirrup Area (in2)	= 0.392 *
Number of Stirrup Legs	= 2 *	Stirrup Yield Str (ksi)	= 60.00 *
Stirrup Bar Size	= 4 *	Shear Specs = AASHTO 89 & AASHTO 89	*

|----- Applied Loads -----|

Unif DL on Comp Sec, due to Overlay (klf) = 0.200
Unif DL on Comp Sec, except Overlay (klf) = 0.104

PSF Highway Control- Coded
 No County No Section-Job by Date
 NUM1 BPS 05/1/2011
 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 1

SPAN ID = 1&3 BEAM ID = INT BEAM TYPE = Tx40

|----- Beam Design -----|

--- General Notes ---

1- End final compression extreme, but not allowed to control.
 The final concrete strengths based on the AASHTO 95 specs.

--- Concrete ---		_____	Release	_____	_____	Final	_____
Prestress Loss (percent)	=		8.79			24.69	
		End	Hold-Down	CL	End		CL
Beam Top Stress (psi)	=	197.	467.	484.	163.		2611.
Beam Bot Stress (psi)	=	3232.	3009.	2995.	2669.		-360.
Conc Strength, Req'd. (psi)	=	5386.@	5015.	4992.			5602.@
Calculated Beam Stress at CL, due to Tot External Load (psi)						--Top =	3296.
						--Bot =	-3730.
Calculated Slab Stress at CL, due to Unfactored LL (psi)						--Top =	662.

"@" Denotes controlling stress cases
 Load case PS + total DL controls final concrete strength

|----- Prestress Steel -----|

No. of Strands, Total = 44 No. of Draped Strands = 8
 Eccentricity at CL (in) = 13.33 Yb of Top 2 Draped Strands = 36.50
 Eccentricity at End (in) = 8.24

--- Strand Pattern ---

Dist from Bott (in)	=	2.50	4.50	6.50	8.50	30.50	32.50	34.50
Strands/Row at End	=	12	12	10	2	2	2	2
Strands/Row at CL	=	14	14	12	4	0	0	0

Dist from Bott (in)	=	36.50
Strands/Row at End	=	2
Strands/Row at CL	=	0

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 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 1

SPAN ID = 1&3 BEAM ID = INT BEAM TYPE = Tx40

|----- Shear -----|

Span Location		Stirrup Spacing		Ultimate Horiz Shear Stress
(ft)	(10th Pt)	(No. 4, Gr 60)	(in)	(Between Slab and Top of Girder)
		AASHTO 89	AASHTO 89	(psi)
				AASHTO 89
0.00	.000	12.2	12.2	136.7
2.00	.023 (H/2)	12.2	12.2	131.9
4.40	.050	17.2	17.2	126.1
8.80	.100	21.4	21.4	115.6
17.60	.200	21.4	21.4	94.5
22.00	.250	21.4	21.4	83.9
26.40	.300	21.4	21.4	73.4
35.20	.400	21.4	21.4	52.3
39.00	.443 (HD)	21.4	21.4	43.2
44.00	.500	21.4	21.4	31.2

"H/2" denotes location at half of composite beam depth.
 "HD" denotes location at hold-down point.

|----- General -----|

Ultimate Moment Required (k-ft) = 4517. @ due to loading
 Resistant Moment Required (k-ft) = 3569. due to 1.2 Mcr
 Ultimate Moment Provided (k-ft) = 5912. Under Reinforced Rect. Sect.

"@" Denotes controlling case

Concrete Strength Factor: Beta1 = 0.850
 Depth of Compressive Stress Block (in): a = 5.37
 Stress in Strands at Ultimate (ksi) = 260.3

Maximum Camber (ft) = 0.255 upward is positive

Dead Load Deflection (ft)

	Slab	O'lay	Other	Total Defl
at 1/4 Point	-.0896	-.0089	-.0046	-.1030
at Midspan	-.1257	-.0124	-.0065	-.1446

PSF Highway Control- Coded
 No County No Section-Job by Date
 NUM1 BPS 05/1/2011
 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 1

SPAN ID = 1&3 BEAM ID = INT BEAM TYPE = Tx40

|----- Summary of Maximum Unfactored Bending Moments (k-ft) -----|

Span Location (ft) (10th Pt)	Beam DL	Slab DL	Non-Comp DL	Total Non-Comp DL	Total Comp DL	LL+I	Total Load
0.00 .000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00 .023 (H/2)	59.9	68.8	0.0	128.7	26.2	99.6	254.5
4.40 .050	128.2	147.1	0.0	275.3	56.0	212.3	543.5
8.80 .100	242.8	278.8	0.0	521.6	106.0	399.4	1027.1
17.60 .200	431.7	495.6	0.0	927.3	188.5	698.2	1814.0
22.00 .250	505.9	580.8	0.0	1086.7	220.9	809.8	2117.5
26.40 .300	566.6	650.5	0.0	1217.1	247.4	896.3	2360.9
35.20 .400	647.6	743.4	0.0	1391.0	282.8	1011.7	2685.5
39.00 .443 (HD)	665.9	764.4	0.0	1430.3	290.8	1034.2	2755.2
44.00 .500	674.6	774.4	0.0	1449.0	294.6	1038.8	2782.4

|----- Summary of Maximum Unfactored Shears (kip) -----|

Span Location (ft) (10th Pt)	Beam DL	Slab DL	Non-Comp DL	Total Non-Comp DL	Total Comp DL	LL+I	Total Load
0.00 .000	30.7	35.2	0.0	65.9	13.4	51.1	130.4
2.00 .023 (H/2)	29.3	33.6	0.0	62.9	12.8	49.8	125.5
4.40 .050	27.6	31.7	0.0	59.3	12.1	48.2	119.6
8.80 .100	24.5	28.2	0.0	52.7	10.7	45.4	108.8
17.60 .200	18.4	21.1	0.0	39.5	8.0	39.7	87.2
22.00 .250	15.3	17.6	0.0	32.9	6.7	36.8	76.4
26.40 .300	12.3	14.1	0.0	26.3	5.4	34.0	65.7
35.20 .400	6.1	7.0	0.0	13.2	2.7	28.2	44.1
39.00 .443 (HD)	3.5	4.0	0.0	7.5	1.5	25.8	34.8
44.00 .500	0.0	0.0	0.0	0.0	0.0	22.5	22.5

PSF Highway Control- Coded
 No County No Section-Job by Date
 NUM1 BPS 05/1/2011
 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 1

SPAN ID = 1&3 BEAM ID = INT BEAM TYPE = Tx40

|-- Stresses in Extreme Fibers of BM due to Unfactored External Loads (psi) --|

Span Loc	Beam DL		Total Non-Comp DL		Total Comp DL		LL+I		Total Load	
	Top	Bot	Top	Bot	Top	Bot	Top	Bot	Top	Bot
	.000	0.	0.	0.	0.	0.	0.	0.	0.	0.
.023	117.	-96.	251.	-207.	9.	-27.	36.	-104.	295.	-339.
.050	250.	-206.	536.	-443.	20.	-59.	76.	-223.	632.	-724.
.100	473.	-391.	1016.	-839.	38.	-111.	142.	-419.	1196.	-1369.
.200	840.	-695.	1805.	-1492.	67.	-198.	249.	-732.	2122.	-2422.
.250	985.	-814.	2116.	-1749.	79.	-232.	289.	-849.	2483.	-2830.
.300	1103.	-912.	2370.	-1958.	88.	-259.	320.	-940.	2777.	-3158.
.400	1261.	-1042.	2708.	-2238.	101.	-297.	361.	-1061.	3170.	-3596.
.443	1296.	-1071.	2784.	-2301.	104.	-305.	369.	-1085.	3257.	-3691.
.500	1313.	-1085.	2821.	-2331.	105.	-309.	370.	-1089.	3296.	-3730.

|--- Stresses in Extreme Fibers of BM due to Unfactored Loads + PSTR (psi) ---|

Span Loc	Beam + Initial Prestress		Final Prestress		Beam + Final Prestress		Total DL + Final Prestress		Total Load + Final Prestress	
	Top	Bot	Top	Bot	Top	Bot	Top	Bot	Top	Bot
	.000	197.	3232.	163.	2669.	163.	2669.	163.	2669.	163.
.023	261.	3179.	119.	2704.	236.	2608.	379.	2470.	415.	2365.
.050	331.	3121.	67.	2748.	317.	2541.	623.	2246.	699.	2023.
.100	438.	3032.	-29.	2827.	444.	2436.	1025.	1876.	1167.	1457.
.200	574.	2920.	-220.	2985.	621.	2290.	1653.	1295.	1902.	563.
.250	603.	2896.	-316.	3064.	669.	2250.	1879.	1084.	2168.	234.
.300	605.	2894.	-411.	3143.	692.	2231.	2047.	925.	2366.	-15.
.400	531.	2956.	-603.	3301.	658.	2259.	2206.	766.	2567.	-295.
.443	467.	3009.	-685.	3369.	611.	2298.	2203.	763.	2572.	-322.
.500	484.	2995.	-685.	3369.	628.	2284.	2241.	729.	2611.	-360.

PSF Highway Control- Coded
 No County No Section-Job by Date
 NUM1 BPS 05/1/2011
 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 1

SPAN ID = 1&3 BEAM ID = INT BEAM TYPE = Tx40

|----- Total Stresses in Composite Regions (psi) -----|

Span Loc	Slab	
	Top	Bot
.000	0.	0.
.023	80.	45.
.050	171.	96.
.100	322.	180.
.200	565.	316.
.250	657.	368.
.300	729.	408.
.400	825.	462.
.443	845.	472.
.500	850.	475.

|----- Prestress Losses (ksi) -----|

	SH	ELSH	CRC	CRS	Total
Initial		16.939		0.870	17.809
Final	7.250	16.939	24.060	1.741	49.990

PSF Highway Control- Coded
 No County No Section-Job by Date
 NUM1 BPS 05/1/2011
 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 2

SPAN ID = 2 BEAM ID = EXT BEAM TYPE = Tx54

|----- Beam, Spec, and Strand Data (* denotes default) -----|

C/C Brng Length (ft)	= 118.00	Strand Size (in)	= 1/2
Beam Spacing (ft)	= 7.00	Strand Type	= 7-Wire *
Slab Thickness (in)	= 8.00		Lo-Rlx *
Composite Slab Width (in)	= 84.00	Strand Area (in2)	= 0.153 *
Haunch Width (in)	= 0.00 *	Strand Ult Strength (ksi)	= 270. *
Haunch Depth at CL (in)	= 0.00 *	E Prestress Steel (ksi)	= 28500. *
Relative Humidity (%)	= 65.	Live Loading	= HL93 *
Init Allow Tens Coeff	= 7.50 *	LL Dist Factor for Moment	= 0.579
Final Allow Tens Coeff	= 6.00 *	LL Dist Factor for shear	= 0.743
		LL Impact Factor	= 1.330 *
Dist CL to Hold-Down (ft)	= 5.90 *	Harped Strands/Row	= 2 *
t, Stress to Transfer (hr)	= 24 *		

|----- Cross Section and Material Properties (* denotes default) -----|

	Beam	Composite Slab	Composite Section
Area (in2)	817.0	486.1	1303.1
Depth (in)	54.00	8.00	62.00
Yb (in)	23.51	58.00	36.38
I (in4)	299740.0	2592.6	664876.9
Unit Wt (pcf)	150.0 *	150.0 *	
E (ksi)	5300.5	3834.3 *	
f'c (psi)		4000.0 *	

|----- Shear Data (* denotes default) -----|

Total Eff Web Width (in)	= 7.00 *	Total Stirrup Area (in2)	= 0.392 *
Number of Stirrup Legs	= 2 *	Stirrup Yield Str (ksi)	= 60.00 *
Stirrup Bar Size	= 4 *	Shear Specs = AASHTO LRFD & AASHTO 89	*

|----- Applied Loads -----|

Unif DL on Comp Sec, due to Overlay (klf) = 0.175

Unif DL on Comp Sec, except Overlay (klf) = 0.104

Dist from Bott (in)	=	46.50	48.50	50.50
Strands/Row at End	=	2	2	2
Strands/Row at CL	=	0	0	0

PSF Highway Control- Coded
 No County No Section-Job by Date
 NUM1 BPS 05/1/2011
 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 2

SPAN ID = 2 BEAM ID = EXT BEAM TYPE = Tx54

|----- Shear -----|

Span Location		Stirrup Spacing		Ultimate Horiz Shear Stress	
(ft)	(10th Pt)	(No. 4, Gr 60)	(in)	(Between Slab and Top of Girder)	(psi)
		AASHTO LRFD	AASHTO 89	AASHTO LRFD	
0.00	.000	11.0	****	127.0	
2.58	.022 (H/2)	11.0	8.3	122.1	
4.48	.038 (CPT)	11.0	9.0	118.6	
5.90	.050	11.4	10.8	116.0	
11.80	.100	12.0	21.4	105.3	
23.60	.200	22.0	17.1	84.9	
29.50	.250	24.0	14.5	75.2	
35.40	.300	24.0	14.7	65.7	
47.20	.400	24.0	18.6	47.7	
53.10	.450 (HD)	24.0	21.4	39.0	
56.74	.481 (REF)	24.0	21.4	34.1	
59.00	.500	24.0	21.4	31.0	

"H/2" denotes location at half of composite beam depth.
 "CPT" denotes critical shear location from beam end per LRFD 5.8.3.2
 "REF" denotes location at the larger distance of
 0.5(dv)(cot(theta)) or dv from mid-span.
 "HD" denotes location at hold-down point.

|----- General -----|

Ultimate Moment Required (k-ft) = 7676. @ due to loading
 Resistant Moment Required (k-ft) = 6165. due to 1.2 Mcr
 Ultimate Moment Provided (k-ft) = 10206. Under Reinforced Flgd. Sect.

"@" Denotes controlling case

Concrete Strength Factor: Beta1 = 0.848
 Depth of Compressive Stress Block (in): a = 8.39

Stress in Strands at Ultimate (ksi) = 256.7

Maximum Camber (ft) = 0.301 upward is positive

Dead Load Deflection (ft)

	Slab	O'lay	Other	Total Defl
at 1/4 Point	-.1141	-.0129	-.0077	-.1346
at Midspan	-.1602	-.0181	-.0108	-.1890

PSF Highway Control- Coded
 No County No Section-Job by Date
 NUM1 BPS 05/1/2011
 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 2

SPAN ID = 2 BEAM ID = EXT BEAM TYPE = Tx54

|----- Summary of Maximum Unfactored Bending Moments (k-ft) -----|

Span Location (ft) (10th Pt)	Beam DL	Slab DL	Non-Comp DL	Total Non-Comp DL	Total Comp DL	LL+I	Total Load
0.00 .000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.58 .022 (H/2)	126.9	104.4	0.0	231.2	41.6	184.0	456.9
4.48 .038 (CPT)	216.3	177.9	0.0	394.3	71.0	313.5	778.8
5.90 .050	281.4	231.5	0.0	512.9	92.4	407.4	1012.7
11.80 .100	533.2	438.6	0.0	971.9	175.0	769.3	1916.1
23.60 .200	948.0	779.7	0.0	1727.7	311.1	1356.1	3394.9
29.50 .250	1110.9	913.8	0.0	2024.7	364.6	1581.1	3970.4
35.40 .300	1244.2	1023.4	0.0	2267.7	408.3	1760.4	4436.4
47.20 .400	1422.0	1169.6	0.0	2591.6	466.7	1999.6	5057.9
53.10 .450 (HD)	1466.4	1206.2	0.0	2672.6	481.3	2055.1	5209.0
56.74 .481 (REF)	1479.1	1216.6	0.0	2695.6	485.4	2066.6	5247.6
59.00 .500	1481.2	1218.3	0.0	2699.6	486.1	2067.5	5253.2

|----- Summary of Maximum Unfactored Shears (kip) -----|

Span Location (ft) (10th Pt)	Beam DL	Slab DL	Non-Comp DL	Total Non-Comp DL	Total Comp DL	LL+I	Total Load
0.00 .000	50.2	41.3	0.0	91.5	16.5	93.6	201.6
2.58 .022 (H/2)	48.0	39.5	0.0	87.5	15.8	90.8	194.1
4.48 .038 (CPT)	46.4	38.2	0.0	84.6	15.2	88.7	188.5
5.90 .050	45.2	37.2	0.0	82.4	14.8	87.2	184.4
11.80 .100	40.2	33.0	0.0	73.2	13.2	80.9	167.2
23.60 .200	30.1	24.8	0.0	54.9	9.9	68.1	132.9
29.50 .250	25.1	20.6	0.0	45.8	8.2	61.8	115.8
35.40 .300	20.1	16.5	0.0	36.6	6.6	55.4	98.6
47.20 .400	10.0	8.3	0.0	18.3	3.3	42.7	64.3
53.10 .450 (HD)	5.0	4.1	0.0	9.2	1.6	36.3	47.1
56.74 .481 (REF)	1.9	1.6	0.0	3.5	0.6	32.4	36.5

59.00 .500

0.0

0.0

0.0

0.0

0.0

29.9

29.9

PSF Highway Control- Coded
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 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 2

SPAN ID = 2 BEAM ID = EXT BEAM TYPE = Tx54

|-- Stresses in Extreme Fibers of BM due to Unfactored External Loads (psi) --|

Span Loc	Beam DL		Total Non-Comp DL		Total Comp DL		LL+I		Total Load	
	Top	Bot	Top	Bot	Top	Bot	Top	Bot	Top	Bot
	.000	0.	0.	0.	0.	0.	0.	0.	0.	0.
.022	155.	-119.	282.	-218.	13.	-27.	59.	-121.	354.	-366.
.038	264.	-204.	481.	-371.	23.	-47.	100.	-206.	604.	-624.
.050	344.	-265.	626.	-483.	29.	-61.	130.	-267.	785.	-811.
.100	651.	-502.	1186.	-915.	56.	-115.	245.	-505.	1487.	-1535.
.200	1157.	-892.	2109.	-1626.	99.	-204.	431.	-890.	2639.	-2721.
.250	1356.	-1046.	2471.	-1906.	116.	-239.	503.	-1038.	3090.	-3183.
.300	1519.	-1171.	2768.	-2134.	130.	-268.	560.	-1156.	3458.	-3558.
.400	1736.	-1338.	3163.	-2439.	148.	-306.	636.	-1313.	3948.	-4058.
.450	1790.	-1380.	3262.	-2515.	153.	-316.	654.	-1349.	4069.	-4181.
.481	1805.	-1392.	3290.	-2537.	154.	-319.	657.	-1357.	4102.	-4213.
.500	1808.	-1394.	3295.	-2541.	155.	-319.	658.	-1357.	4108.	-4217.

|--- Stresses in Extreme Fibers of BM due to Unfactored Loads + PSTR (psi) ---|

Span Loc	Beam + Initial Prestress		Final Prestress		Beam + Final Prestress		Total DL + Final Prestress		Total Load + Final Prestress	
	Top	Bot	Top	Bot	Top	Bot	Top	Bot	Top	Bot
	.000	187.	3508.	152.	2848.	152.	2848.	152.	2848.	152.
.022	286.	3432.	106.	2883.	261.	2764.	402.	2638.	460.	2517.
.038	354.	3379.	73.	2909.	337.	2705.	577.	2491.	677.	2285.
.050	403.	3341.	49.	2928.	392.	2663.	704.	2384.	834.	2117.
.100	584.	3202.	-55.	3007.	596.	2505.	1187.	1978.	1432.	1473.
.200	836.	3008.	-261.	3166.	896.	2274.	1947.	1336.	2379.	445.
.250	908.	2952.	-364.	3246.	992.	2200.	2224.	1101.	2727.	63.
.300	944.	2925.	-467.	3325.	1052.	2154.	2431.	923.	2991.	-233.
.400	907.	2953.	-673.	3484.	1063.	2146.	2639.	738.	3275.	-574.

.450	834.	3009.	-776.	3563.	1014.	2183.	2639.	732.	3293.	-617.
.481	850.	2997.	-776.	3563.	1029.	2171.	2669.	708.	3326.	-649.
.500	852.	2995.	-776.	3563.	1032.	2169.	2674.	703.	3332.	-654.

PSF Highway Control- Coded
 No County No Section-Job by Date
 NUM1 BPS 05/1/2011
 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 2

SPAN ID = 2 BEAM ID = EXT BEAM TYPE = Tx54

|----- Total Stresses in Composite Regions (psi) -----|

Span Loc	Slab	
	Top	Bot
.000	0.	0.
.022	104.	72.
.038	178.	122.
.050	231.	159.
.100	437.	300.
.200	771.	530.
.250	900.	619.
.300	1003.	690.
.400	1141.	784.
.450	1173.	807.
.481	1180.	812.
.500	1181.	812.

|----- Prestress Losses (ksi) -----|

	SH	ELSH	CRC	CRS	Total
Initial		16.987		1.980	18.967
Final	7.250	16.987	25.273	3.990	53.500

PSF Highway Control- Coded
 No County No Section-Job by Date
 NUM1 BPS 05/1/2011
 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 2

SPAN ID = 2 BEAM ID = INT BEAM TYPE = Tx54

|----- Beam, Spec, and Strand Data (* denotes default) -----|

C/C Brng Length (ft)	= 118.00	Strand Size (in)	= 1/2
Beam Spacing (ft)	= 8.00	Strand Type	= 7-Wire *
Slab Thickness (in)	= 8.00		Lo-Rlx *
Composite Slab Width (in)	= 96.00	Strand Area (in2)	= 0.153 *
Haunch Width (in)	= 0.00 *	Strand Ult Strength (ksi)	= 270. *
Haunch Depth at CL (in)	= 0.00 *	E Prestress Steel (ksi)	= 28000. *
Relative Humidity (%)	= 65.	Live Loading	= HS20 *
Init Allow Tens Coeff	= 7.50 *	LL Dist Factor	= 0.636
Final Allow Tens Coeff	= 6.00 *	LL Impact Factor	= 1.206 *
		Harped Strands/Row	= 2 *
		Dist CL to Hold-Down (ft)	= 5.90 *

|----- Cross Section and Material Properties (* denotes default) -----|

	Beam	Composite Slab	Composite Section
Area (in2)	817.0	555.6	1372.6
Depth (in)	54.00	8.00	62.00
Yb (in)	23.51	58.00	37.47
I (in4)	299740.0	2962.9	696076.0
Unit Wt (pcf)	150.0 *	150.0 *	
E (ksi)	5300.5	3834.3 *	
f'c (psi)		4000.0 *	

|----- Shear Data (* denotes default) -----|

Total Eff Web Width (in)	= 7.00 *	Total Stirrup Area (in2)	= 0.392 *
Number of Stirrup Legs	= 2 *	Stirrup Yield Str (ksi)	= 60.00 *
Stirrup Bar Size	= 4 *	Shear Specs = AASHTO 89 & AASHTO 89	*

|----- Applied Loads -----|

Unif DL on Comp Sec, due to Overlay (klf) = 0.200
Unif DL on Comp Sec, except Overlay (klf) = 0.104

PSF Highway Control- Coded
 No County No Section-Job by Date
 NUM1 BPS 05/1/2011
 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 2

SPAN ID = 2 BEAM ID = INT BEAM TYPE = Tx54

|----- Beam Design -----|

The final concrete strengths based on the AASHTO 95 specs.

--- Concrete ---		_____	Release	_____	_____	Final	_____
Prestress Loss (percent)	=		8.44			23.34	
		End	Hold-Down	CL	End		CL
Beam Top Stress (psi)	=	200.	836.	854.	167.		3263.
Beam Bot Stress (psi)	=	3290.	2800.	2786.	2754.		-463.
Conc Strength, Req'd. (psi)	=	5483.@	4666.	4643.			7149.@
Calculated Beam Stress at CL, due to Tot External Load (psi)					--Top	=	4062.
					--Bot	=	-3962.
Calculated Slab Stress at CL, due to Unfactored LL (psi)					--Top	=	599.

"@" Denotes controlling stress cases
 Load case PS + total DL controls final concrete strength

|----- Prestress Steel -----|

No. of Strands, Total	=	56	No. of Draped Strands	=	10
Eccentricity at CL (in)	=	17.94	Yb of Top 2 Draped Strands	=	50.50
Eccentricity at End (in)	=	10.80			

--- Strand Pattern ---

Dist from Bott (in)	=	2.50	4.50	6.50	8.50	10.50	42.50	44.50
Strands/Row at End	=	12	12	12	10	0	2	2
Strands/Row at CL	=	14	14	14	12	2	0	0
Dist from Bott (in)	=	46.50	48.50	50.50				
Strands/Row at End	=	2	2	2				
Strands/Row at CL	=	0	0	0				

PSF Highway Control- Coded
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 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 2

SPAN ID = 2 BEAM ID = INT BEAM TYPE = Tx54

|----- Shear -----|

Span Location		Stirrup Spacing		Ultimate Horiz Shear Stress
(ft)	(10th Pt)	(No. 4, Gr 60)	(in)	(Between Slab and Top of Girder)
		AASHTO 89	AASHTO 89	(psi)
				AASHTO 89
0.00	.000	21.4	21.4	118.4
2.58	.022 (H/2)	21.4	21.4	114.2
5.90	.050	21.4	21.4	108.9
11.80	.100	21.4	21.4	99.3
23.60	.200	21.4	21.4	80.2
29.50	.250	21.4	21.4	70.7
35.40	.300	21.4	21.4	61.1
47.20	.400	21.4	21.4	42.0
53.10	.450 (HD)	21.4	21.4	32.5
59.00	.500	21.4	21.4	22.9

"H/2" denotes location at half of composite beam depth.
 "HD" denotes location at hold-down point.

|----- General -----|

Ultimate Moment Required (k-ft) = 7494. @ due to loading
 Resistant Moment Required (k-ft) = 6103. due to 1.2 Mcr
 Ultimate Moment Provided (k-ft) = 9847. Under Reinforced Rect. Sect.

"@" Denotes controlling case

Concrete Strength Factor: Beta1 = 0.850
 Depth of Compressive Stress Block (in): a = 6.84
 Stress in Strands at Ultimate (ksi) = 260.5

Maximum Camber (ft) = 0.272 upward is positive

Dead Load Deflection (ft)

	Slab	O'lay	Other	Total Defl
at 1/4 Point	-.1304	-.0140	-.0073	-.1518
at Midspan	-.1830	-.0197	-.0103	-.2130

PSF Highway Control- Coded
 No County No Section-Job by Date
 NUM1 BPS 05/1/2011
 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 2

SPAN ID = 2 BEAM ID = INT BEAM TYPE = Tx54

|----- Summary of Maximum Unfactored Bending Moments (k-ft) -----|

Span Location (ft) (10th Pt)	Beam DL	Slab DL	Non-Comp DL	Total Non-Comp DL	Total Comp DL	LL+I	Total Load
0.00 .000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.58 .022 (H/2)	126.9	119.3	0.0	246.1	45.4	128.2	419.7
5.90 .050	281.4	264.6	0.0	546.0	100.6	283.7	930.3
11.80 .100	533.2	501.3	0.0	1034.5	190.7	534.8	1760.0
23.60 .200	948.0	891.1	0.0	1839.1	339.0	939.4	3117.5
29.50 .250	1110.9	1044.3	0.0	2155.2	397.2	1092.8	3645.2
35.40 .300	1244.2	1169.6	0.0	2413.9	444.9	1213.6	4072.4
47.20 .400	1422.0	1336.7	0.0	2758.7	508.4	1374.7	4641.9
53.10 .450 (HD)	1466.4	1378.5	0.0	2844.9	524.3	1410.7	4779.9
59.00 .500	1481.2	1392.4	0.0	2873.6	529.6	1416.6	4819.9

|----- Summary of Maximum Unfactored Shears (kip) -----|

Span Location (ft) (10th Pt)	Beam DL	Slab DL	Non-Comp DL	Total Non-Comp DL	Total Comp DL	LL+I	Total Load
0.00 .000	50.2	47.2	0.0	97.4	18.0	50.8	166.2
2.58 .022 (H/2)	48.0	45.1	0.0	93.1	17.2	49.6	160.0
5.90 .050	45.2	42.5	0.0	87.7	16.2	48.1	151.9
11.80 .100	40.2	37.8	0.0	77.9	14.4	45.3	137.6
23.60 .200	30.1	28.3	0.0	58.4	10.8	39.8	109.0
29.50 .250	25.1	23.6	0.0	48.7	9.0	37.0	94.7
35.40 .300	20.1	18.9	0.0	39.0	7.2	34.3	80.4
47.20 .400	10.0	9.4	0.0	19.5	3.6	28.8	51.8
53.10 .450 (HD)	5.0	4.7	0.0	9.7	1.8	26.0	37.5
59.00 .500	0.0	0.0	0.0	0.0	0.0	23.2	23.2

PSF Highway Control- Coded
 No County No Section-Job by Date
 NUM1 BPS 05/1/2011
 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 2

SPAN ID = 2 BEAM ID = INT BEAM TYPE = Tx54

|-- Stresses in Extreme Fibers of BM due to Unfactored External Loads (psi) --|

Span Loc	Beam DL		Total Non-Comp DL		Total Comp DL		LL+I		Total Load	
	Top	Bot	Top	Bot	Top	Bot	Top	Bot	Top	Bot
	.000	0.	0.	0.	0.	0.	0.	0.	0.	0.
.022	155.	-119.	300.	-232.	13.	-29.	37.	-83.	350.	-344.
.050	344.	-265.	666.	-514.	29.	-65.	81.	-183.	776.	-762.
.100	651.	-502.	1263.	-974.	54.	-123.	152.	-345.	1470.	-1442.
.200	1157.	-892.	2245.	-1731.	97.	-219.	268.	-607.	2609.	-2557.
.250	1356.	-1046.	2631.	-2029.	113.	-257.	311.	-706.	3055.	-2991.
.300	1519.	-1171.	2946.	-2272.	127.	-287.	346.	-784.	3419.	-3343.
.400	1736.	-1338.	3367.	-2597.	145.	-328.	392.	-888.	3904.	-3813.
.450	1790.	-1380.	3473.	-2678.	149.	-339.	402.	-911.	4024.	-3928.
.500	1808.	-1394.	3508.	-2705.	151.	-342.	404.	-915.	4062.	-3962.

|--- Stresses in Extreme Fibers of BM due to Unfactored Loads + PSTR (psi) ---|

Span Loc	Beam + Initial Prestress		Final Prestress		Beam + Final Prestress		Total DL + Final Prestress		Total Load + Final Prestress	
	Top	Bot	Top	Bot	Top	Bot	Top	Bot	Top	Bot
	.000	200.	3290.	167.	2754.	167.	2754.	167.	2754.	167.
.022	299.	3214.	120.	2790.	275.	2671.	434.	2529.	470.	2447.
.050	415.	3124.	60.	2837.	404.	2572.	755.	2258.	836.	2075.
.100	594.	2986.	-47.	2920.	604.	2418.	1270.	1823.	1422.	1477.
.200	844.	2793.	-262.	3085.	895.	2193.	2079.	1135.	2347.	529.
.250	915.	2739.	-370.	3168.	987.	2123.	2374.	883.	2686.	177.
.300	949.	2712.	-477.	3251.	1042.	2080.	2596.	692.	2942.	-92.
.400	910.	2742.	-692.	3417.	1044.	2078.	2821.	492.	3212.	-396.
.450	836.	2800.	-799.	3499.	991.	2119.	2823.	483.	3225.	-428.
.500	854.	2786.	-799.	3499.	1009.	2105.	2860.	453.	3263.	-463.

PSF Highway Control- Coded
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 90' & 120' SPANS, TY. TX40 & TX. 54 BMS , DESIGN AASHTO LRFD ACI 104 DAYS
 PROB 2

SPAN ID = 2 BEAM ID = INT BEAM TYPE = Tx54

|----- Total Stresses in Composite Regions (psi) -----|

Span Loc	Slab	
	Top	Bot
.000	0.	0.
.022	73.	49.
.050	163.	110.
.100	307.	207.
.200	541.	364.
.250	630.	425.
.300	701.	473.
.400	796.	537.
.450	818.	551.
.500	823.	555.

|----- Prestress Losses (ksi) -----|

	SH	ELSH	CRC	CRS	Total
Initial		16.118		0.964	17.082
Final	7.250	16.118	21.971	1.927	47.266