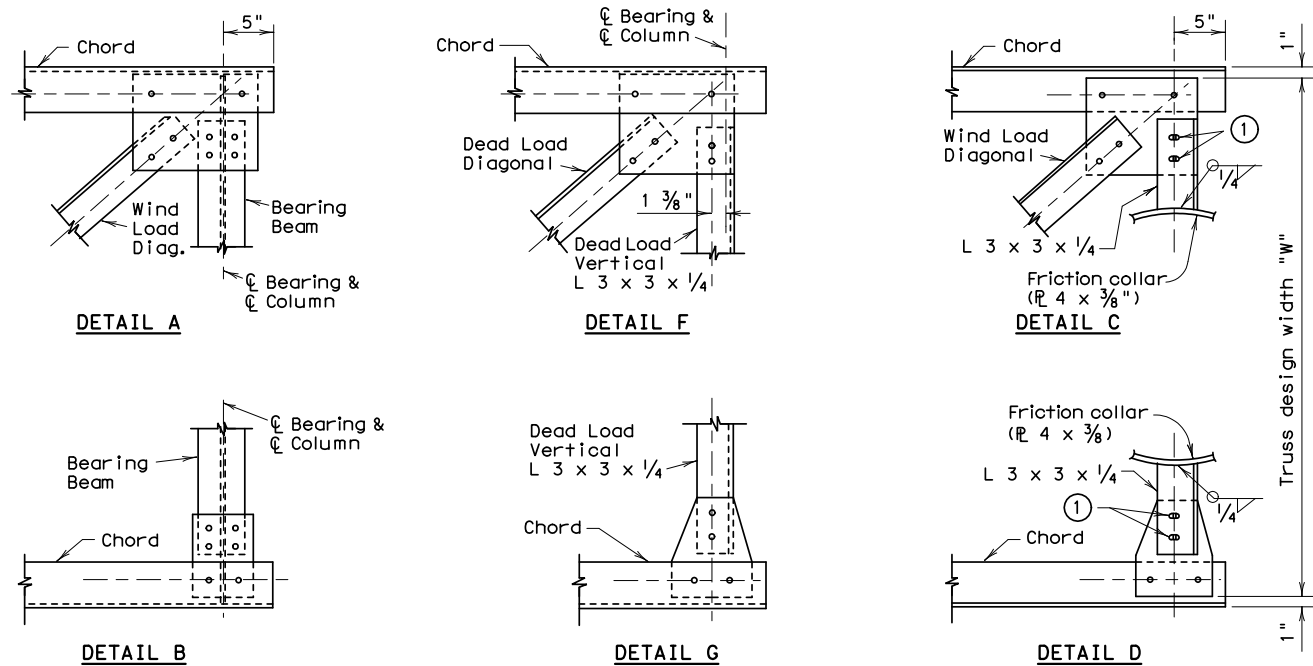
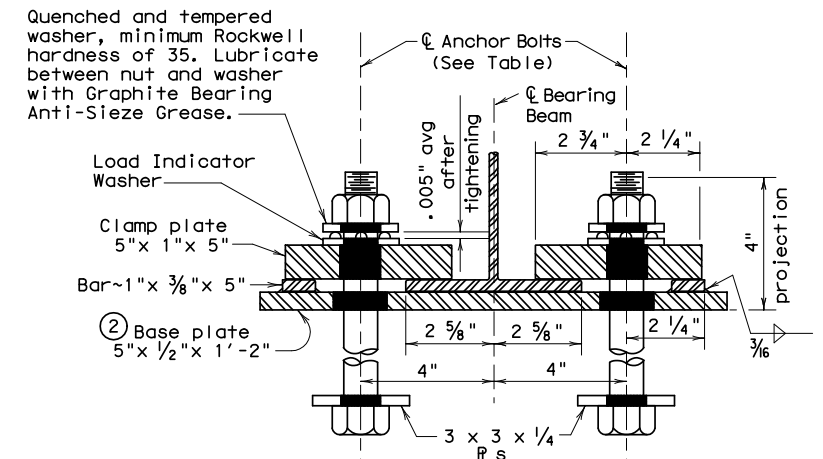
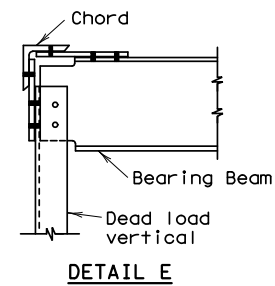


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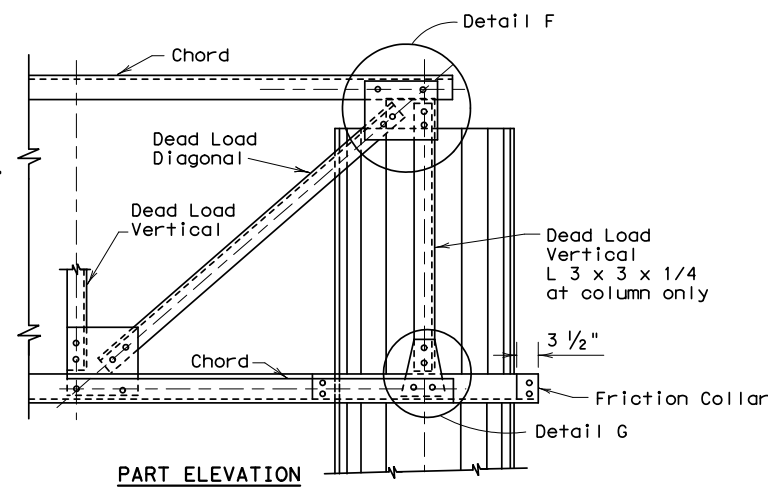
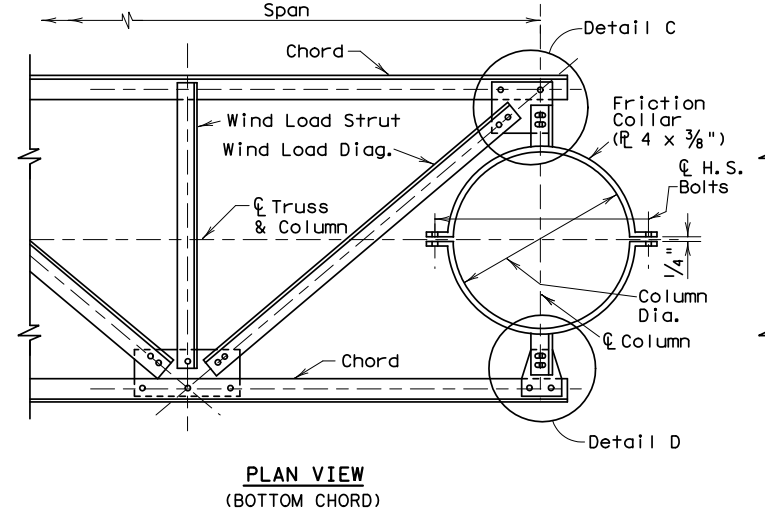
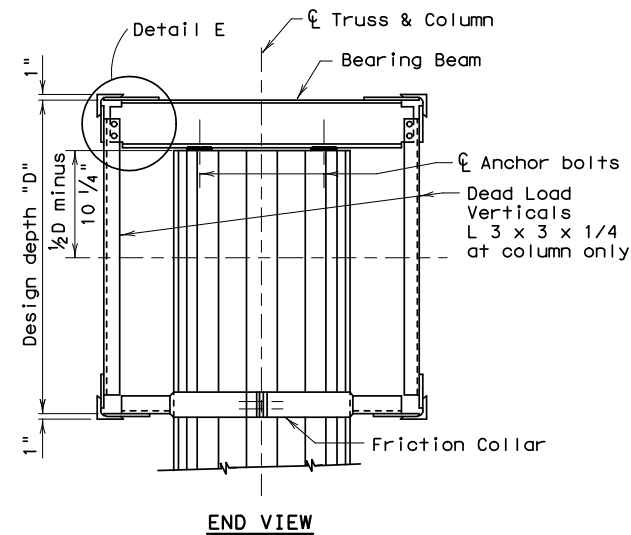
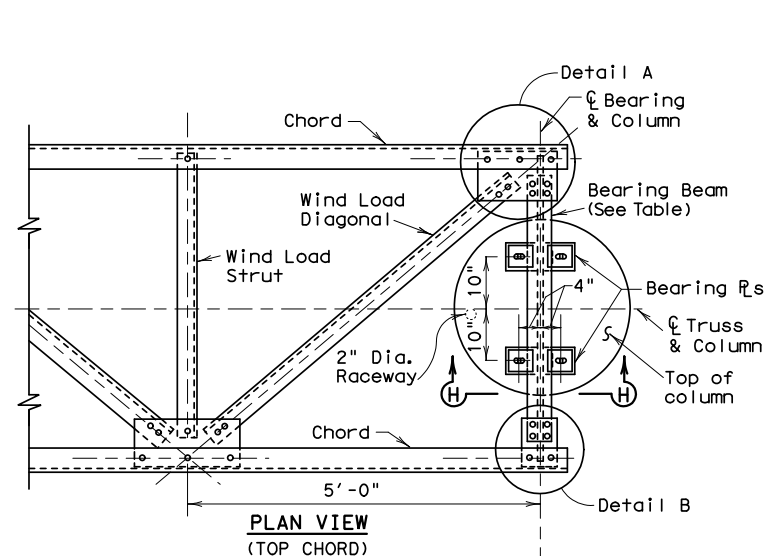
- ① Slotted holes in gusset plates only.
- ② Oversized Hole diameter = Anchor Bolt diameter + 1/2"



Note: When Bearing Beam is located off center, clamp plate may be turned as needed to give bearing area.

GENERAL NOTES:

Design conforms to the 1975 AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals and Interim revisions thereto.
 All structural steel shall conform to ASTM A36.
 All parts, including anchor bolts, shall be galvanized after fabrication per Item 445, "Galvanizing".
 Details on this sheet are applicable for design wind heights between 15 and 30 feet.
 All connection bolts shall conform to ASTM A325 Type 1.
 After truss is aligned in its final position, anchor bolt nuts shall be tack welded to washer and washer tack welded to clamp plate. Galvanizing in welded area shall be repaired in accordance with Item 445, "Galvanizing".
 Anchor bolts and nuts for anchor bolts shall be "Alloy Steel" per Item 449 "Anchor Bolts".
 Anchor bolts shall be tightened per Item 449.
 Truss End Wind Struts are replaced by Bearing Beam on top and Friction Collar with L 3 x 3 x 1/4. on bottom. End Dead Load Verticals are replaced by L 3 x 3 x 1/4.
 Details and towers shown on standard drawing OSBT are not used with single column towers.
 For connection details not shown hereon see standard drawing OSBC.
 All concrete shall be Class C.
 All reinforcing steel shall conform to Item 440, "Reinforcing Steel".
 Details shown hereon are intended to be used with standard drawings "Overhead Sign Bridge Details" and OSBC. Details shown on standard drawing OSBC should be modified as shown on this drawing. When this drawing is used standard drawing OSBT is not required.



TRUSS END CONNECTION MODIFICATION DETAILS

SHEET 1 OF 2

Texas Department of Transportation
Traffic Operations Division

**OVERHEAD SIGN BRIDGE
TRUSS DETAILS
SINGLE COLUMN**

OSBC-SC-Z3

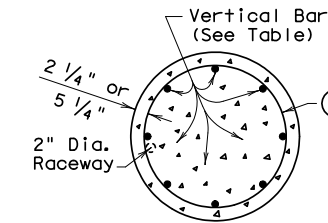
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ZONE 3 80 M.P.H. WIND

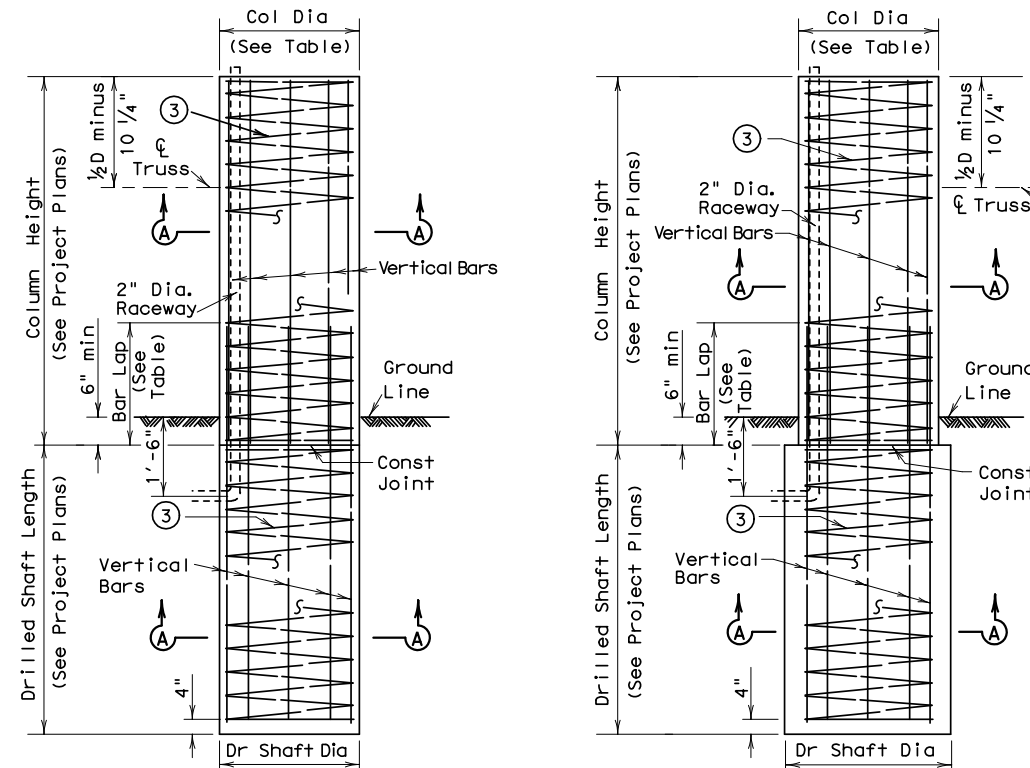
SPAN Ft.	REACTIONS			COLUMN BENDING MOMENTS (Kip-Ft.)																			Height
	D.L.	W.L.	Torque	14'	15'	16'	17'	18'	19'	20'	21'	22'	23'	24'	25'	26'	27'	28'	29'	30'	31'	32'	
40	2.66	6.56	9.21	103	110	117	123	130	136	143	150	156	163	170	176	183	190	197	203	210	217	223	30" Diameter Column
45	3.00	7.39	10.36	116	123	131	139	146	154	161	169	176	184	191	199	206	214	221	229	236	244	252	
50	3.46	8.22	11.52	129	137	146	154	162	171	179	188	196	204	213	221	230	238	246	255	263	271	280	
55	3.85	9.05	12.67	142	151	160	170	179	188	197	207	216	225	234	243	253	262	271	280	290	299	308	
60	4.20	9.88	13.82	155	165	175	185	195	205	215	225	236	246	256	266	276	286	296	306	316	326	336	
65	4.72	10.72	14.98	168	179	190	201	212	223	234	245	255	266	277	288	299	310	321	332	343	354	365	
70	5.16	11.56	16.96	182	194	206	217	229	241	253	265	276	288	300	312	324	335	347	359	371	383	394	
75	5.75	12.43	18.18	196	208	221	234	246	259	272	284	297	310	322	335	348	361	373	386	399	411	424	
80	6.26	13.28	19.39	209	223	236	250	263	277	290	304	317	331	344	358	372	385	399	412	426	439	453	
85	6.73	14.13	20.61	222	236	251	266	280	294	309	323	338	352	367	380	395	410	424	439	453	467	482	
90	7.38	14.99	21.82	236	251	266	282	297	312	328	343	358	373	389	404	419	435	450	465	481	496	511	
95	7.79	15.85	23.04	249	266	282	298	314	330	346	363	379	395	411	427	443	460	476	492	509	524	540	
100	8.63	16.76	24.26	264	281	298	315	332	349	366	383	400	417	435	452	469	486	503	520	537	554	571	
105	9.06	17.63	25.48	277	295	313	331	349	367	385	403	421	439	457	475	493	511	529	547	565	583	601	
110	9.86	18.50	26.69	291	310	329	347	366	385	404	423	442	461	480	498	517	536	555	574	593	612	631	
115	10.81	19.37	27.91	305	324	344	364	384	403	423	443	463	482	502	522	542	561	581	601	621	640	660	
120	11.57	20.26	30.56	320	341	361	382	403	423	444	465	485	506	527	547	568	589	609	630	651	671	692	
125	12.19	21.15	31.84	334	355	377	399	420	442	463	485	506	528	550	571	593	614	636	657	679	701	722	
130	13.10	22.09	33.11	349	372	394	416	439	461	484	506	529	551	574	596	619	641	664	687	709	732	754	
135	13.65	22.98	34.40	363	386	409	433	456	480	503	527	550	574	597	620	644	667	691	714	738	761	784	
140	14.74	23.88	35.68	377	401	425	450	474	498	523	547	572	596	620	645	669	693	718	742	766	791	815	
145	15.57	24.83	36.97	392	417	442	468	493	518	544	569	594	619	645	670	695	721	746	771	797	822	847	
150	17.23	25.86	38.26	408	434	460	487	513	539	566	592	619	645	671	698	724	750	777	803	830	856	882	
155	17.80	26.82	39.55	423	450	477	505	532	559	587	614	641	669	696	723	751	778	806	833	860	888	915	

COLUMN BARS		
BAR SIZE	BAR LAP	
	Gr 40	Gr 60
# 9	3'-10"	5'-8"
#10	4'-10"	7'-3"
#11	5'-11"	8'-11"



COLUMN & SHAFT SECTION A-A

For column and drilled shaft reinforcing steel see standard drawing OSBS-SC.
D.L. and W.L. reactions are in Kips.
Torque reactions are in Kip-Feet (Kip-Ft.).



COLUMN & SHAFT EQUAL SIZE

COLUMN & SHAFT UNEQUAL SIZE

③ #3 spiral at 6" pitch. Three flat turns top and one flat turn bottom. One flat turn top and bottom in Drilled shaft.

COLUMN AND DRILLED SHAFT DETAILS

NOTE: Use same diameter spiral for both column and drilled shaft.

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SHEET 2 OF 2



OVERHEAD SIGN BRIDGE TRUSS DETAILS SINGLE COLUMN

OSBC-SC-Z3

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