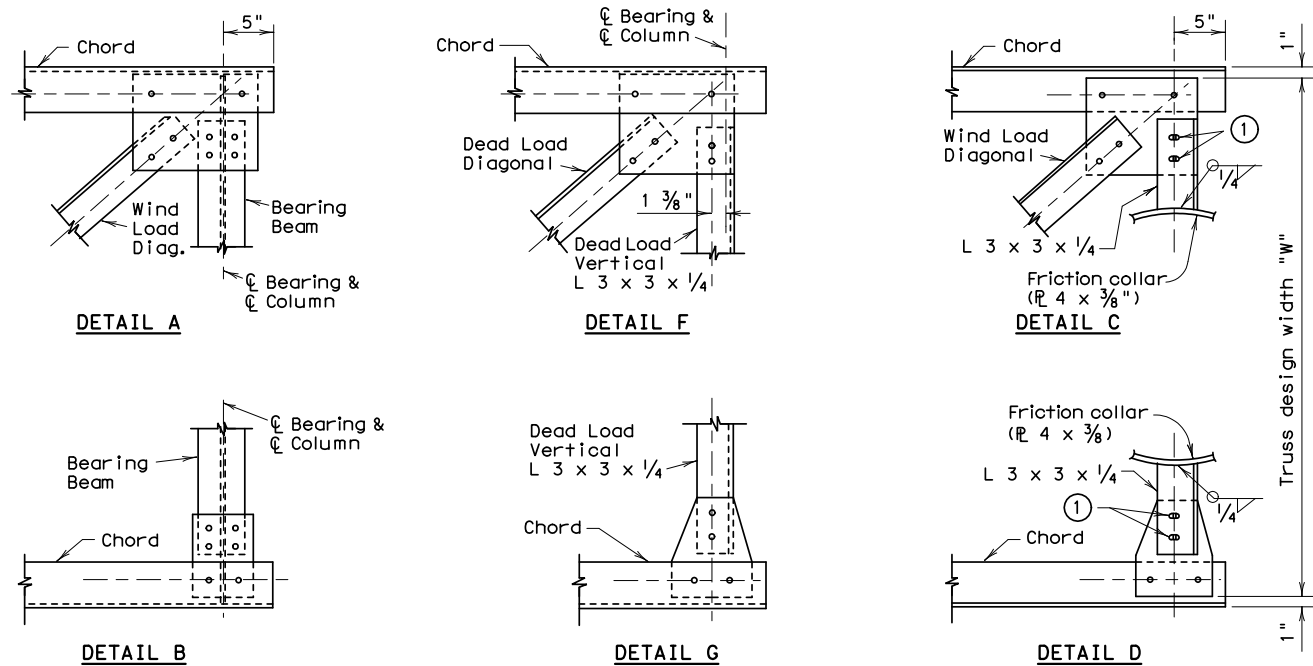
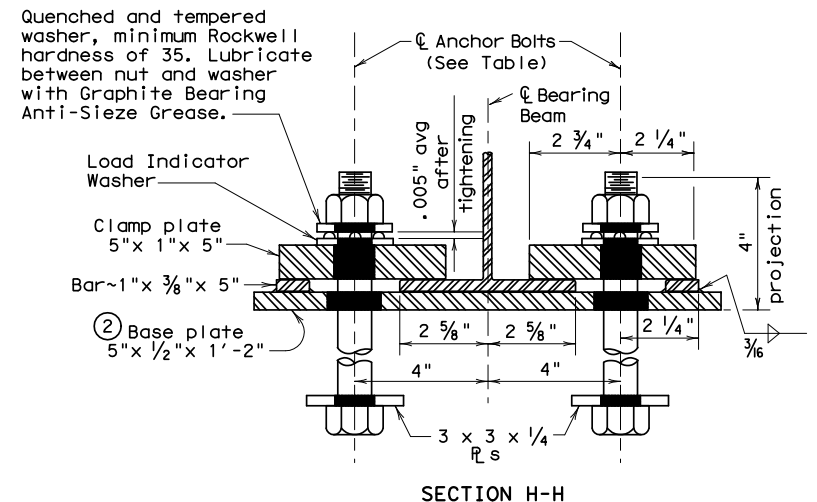
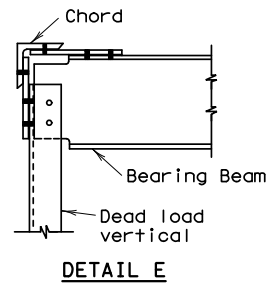


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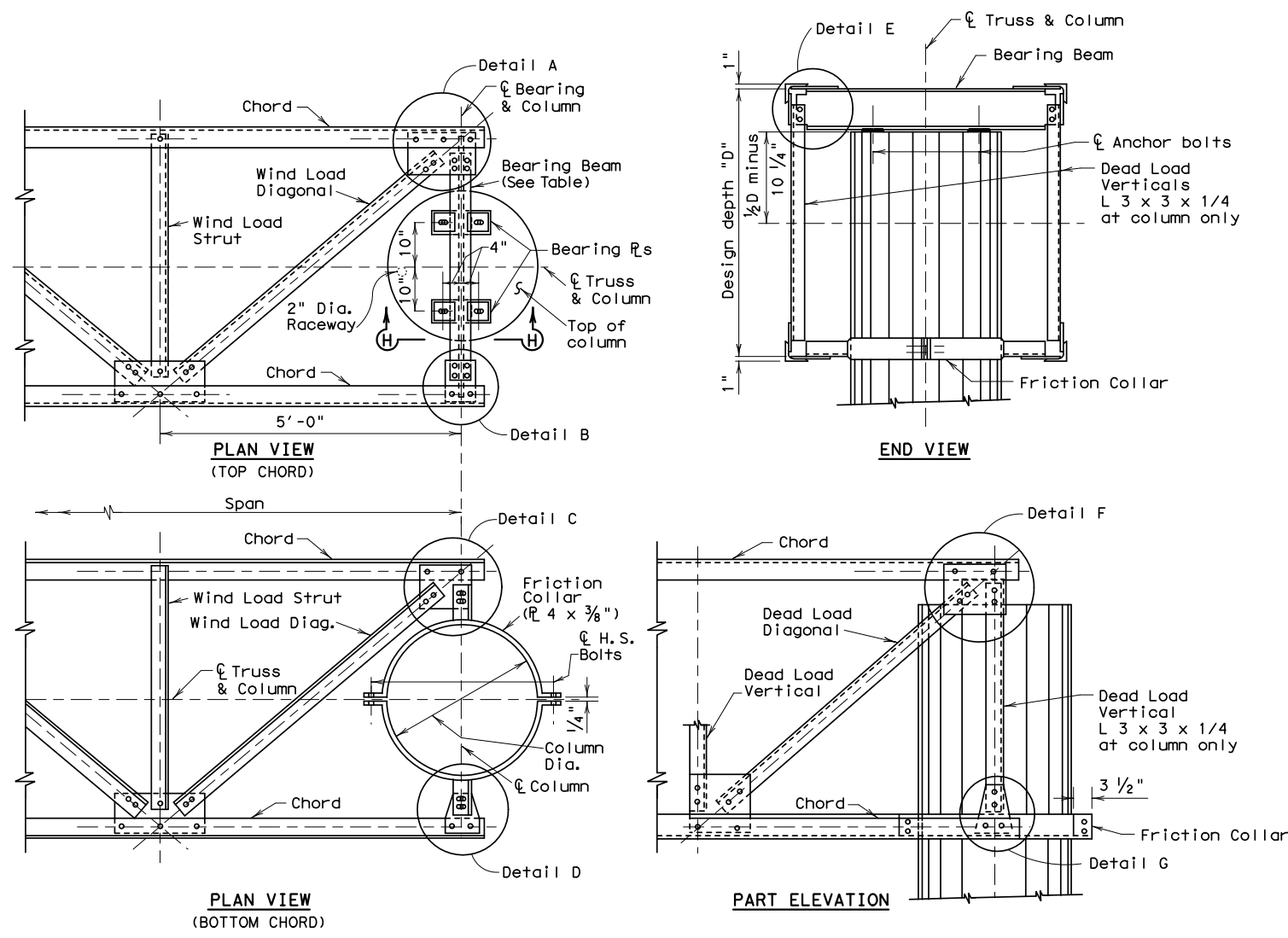
- ① Slotted holes in gusset plates only.
- ② Oversized Hole diameter = Anchor Bolt diameter + 1/2"



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-Z2

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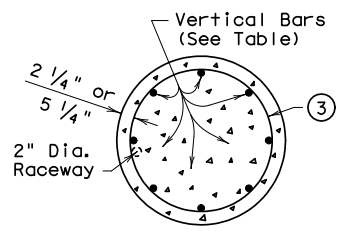
ZONE 2 90 M.P.H. WIND

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	2.74	8.31	9.96	129	137	146	154	163	171	179	188	196	205	213	222	230	239	247	256	264	273	281	30" Diameter Column					
45	3.08	9.36	11.21	145	154	164	174	183	193	202	212	221	231	240	250	259	269	279	288	298	307	317						
50	3.41	10.41	12.46	161	172	182	193	204	214	225	235	246	257	267	278	289	299	310	320	331	342	352						
55	3.90	11.46	13.70	177	189	201	212	224	236	247	259	271	283	294	306	318	329	341	353	364	376	388						
60	4.33	12.52	14.95	194	207	219	232	245	258	270	283	296	309	321	334	347	360	373	385	398	411	424						
65	4.81	13.57	16.19	210	224	238	251	265	279	293	309	321	335	348	362	376	390	404	418	431	445	459						
70	5.42	14.63	17.44	226	241	256	271	286	301	316	331	346	361	376	391	405	420	435	450	465	480	495						
75	5.84	15.70	18.69	243	259	275	291	307	323	339	355	371	387	403	419	435	451	467	483	499	515	531						
80	6.37	16.83	19.94	260	277	295	312	329	346	363	380	398	415	432	449	466	483	501	518	535	552	569						
85	7.01	17.91	21.19	277	295	313	332	350	368	387	405	423	441	460	478	496	514	533	551	569	588	606						
90	7.68	19.00	22.45	294	313	333	352	371	391	410	429	449	468	488	507	526	546	565	584	604	623	643						
95	8.15	20.09	23.70	311	331	352	372	393	413	434	454	475	495	516	536	556	577	597	618	638	659	679						
100	8.91	21.21	24.95	328	349	371	393	414	436	458	479	501	523	544	566	587	609	631	652	674	696	717						
105	9.53	22.43	26.21	347	369	392	415	438	461	484	507	530	552	575	598	621	644	667	690	713	735	758						
110	10.35	23.41	27.46	362	386	410	433	457	481	505	529	553	577	601	624	648	672	696	720	743	768	792						
115	11.32	24.59	28.72	380	405	430	455	480	505	530	555	581	606	631	656	681	706	731	756	781	806	831						
120	12.10	25.72	31.40	399	425	451	477	504	530	556	582	609	635	661	687	713	740	766	792	818	845	871						
125	12.60	26.83	32.71	416	443	471	498	525	553	580	607	635	662	690	717	744	772	799	826	854	881	908						
130	13.65	27.96	34.03	433	462	490	519	547	576	604	633	661	690	718	747	776	804	832	861	889	918	947						
135	14.23	29.08	35.34	451	480	510	540	569	599	629	658	688	718	747	777	807	836	866	896	925	955	985						
140	15.29	30.24	38.32	470	501	532	563	594	624	655	686	717	748	779	809	840	871	902	933	964	995	1025						
145	17.05	31.56	39.71	490	523	555	587	619	651	684	716	748	780	812	844	877	908	941	973	1005	1038	1070						
150	17.63	32.78	41.10	509	543	576	610	643	676	710	743	777	810	844	877	910	944	977	1011	1044	1077	1111						
155	19.05	34.00	42.49	528	563	597	632	667	701	736	771	805	840	875	909	944	979	1014	1048	1083	1118	1152						

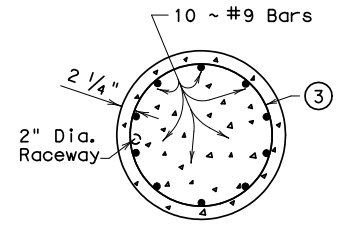
For column and drilled shaft reinforcing steel see standard drawing OSBS-SC. D.L. and W.L. reactions are in Kips. Torque reactions are in Kip-Feet (Kip-Ft.).

(4) Note: Maximum column size at Friction Collar is 36" Dia. See Transition Column Details.

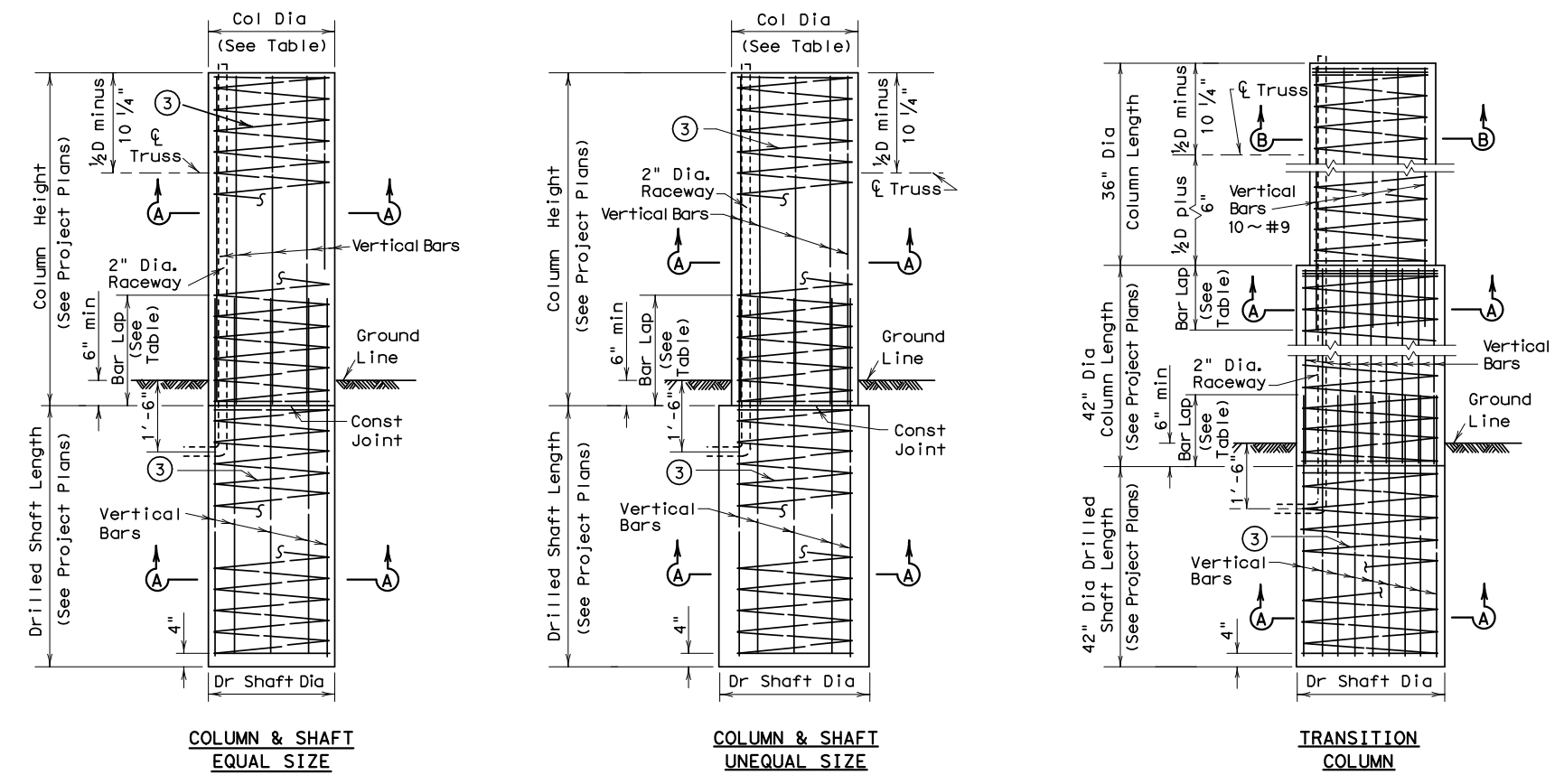
COLUMN BARS		
BAR SIZE	BAR LAP	
	Gr 40	Gr 60
# 9	3'-10"	5'-8"
#10	4'-10"	7'-3"
#11	5'-11"	8'-11"



COLUMN & SHAFT SECTION A-A



COLUMN SECTION B-B



(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.

SHEET 2 OF 2

Texas Department of Transportation
Traffic Operations Division

OVERHEAD SIGN BRIDGE
TRUSS DETAILS
SINGLE COLUMN

OSBC-SC-Z2

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