ENGLISH UNITS

ALL DIMENSIONS ARE IN INCHES, UNLESS OTHERWISE NOTED.

DESIGN NO.	POLE HEIGHT (feet)	BASE MOMENT AT YIELD (ft. kips)	TAPERED (NOTE 1) BASE DIA.	TAPERED (NOTE 1) MIN. WALL THICKNESS	TAPERED (NOTE 2) BASE DIA.	TAPERED (NOTE 2) MIN. WALL THICKNESS	TAPERED (NOTE 2) NO. OF SIDES	A 36 PIPE (NOTE 3) SECTION	DIA.	LENGTH (feet)	WALL THICKNESS	REDUCER TYPE *	API GRADE X52 PIPE (NOTE 4) SECTION	DIA.	LENGTH (feet)	WALL THICKNESS	REDUCER TYPE *	ANCHOR BASE BOLT CIRCLE	F	S	T	H	ANCHOR BOLT DIA.	LENGTH
1	20	39.5	7	.239	7	.239	NA	B	5	10	0.312	SCH.80	B	5	10	0.219	SCH.80	10	7 1/16	10 1/2	1 1/4	1 5/8	1 1/4	42
								A	6	10	0.500		A	6	10	0.312								
2	24	67.0	9	.239	9	.239	NA	B	6	12	0.375	SCH.80	B	6	12	0.250	SCH.40	12 1/2	8 1/8	12 3/4	1 1/2	1 7/8	1 1/2	54
								A	8	12	0.500		A	8	12	0.322								
3	26	83.4	10	.239	10	.239	NA	B	8	13	0.277	SCH.30	B	8	13	1.88	SCH.40	13 1/2	9 9/16	14 1/8	1 1/2	1 7/8	1 1/2	54
								A	10	13	0.365		A	10	13	0.250								
4	26	101.0	11	.239	11	.239	NA	B	8	13	0.312	SCH.40	B	8	13	0.203	SCH.40	15	10 5/8	15 5/8	2	2 1/8	1 3/4	84
								A	10	13	0.483		A	10	13	0.279								
5	30	121.0	12	.239	12	.239	NA	B	8	9	0.203	SCH.20	B	8	9	0.188	SCH.40	16	11 5/16	17	2	2 1/8	1 3/4	84
								C	10	10	0.307	SCH.30	C	10	10	0.203	SCH.40							
								A	12	11	0.375		A	12	11	0.250	SCH.40							
6	30	149.0	12	.299	12	.250	10	B	8	8	0.219	SCH.20	B	8	10	0.188	SCH.40	16	11 5/16	17	2	2 1/8	1 3/4	84
								C	10	10	0.365	SCH.40	C	10	10	0.279	SCH.40							
								A	12	12	0.500		A	12	10	0.312	SCH.40							
7	30	176.0	13	.299	13	.250	12	B	8	10	0.375	SCH.60	B	8	10	0.250	SCH.40	18	12 3/4	18 1/2	2	2 3/8	2	90
								C	10	10	0.500	SCH.60	C	10	10	0.344	SCH.40							
								A	12	10	0.562		A	12	10	0.375	SCH.40							
8	30	206.0	14	.299	15	.219	14	B	8	9	0.375	SCH.60	B	8	10	0.277	SCH.80	20	14 1/8	20 1/2	2	2 3/8	2	90
								C	10	10	0.562	SCH.80	C	10	10	0.438	SCH.80							
								A	12	11	0.688		A	12	10	0.438	SCH.80							
9	30	228.0	12	.478 (2 PLY)	14.75	.250	14	B	8	8	0.406	SCH.60	B	8	10	0.312	SCH.80	22	15 1/2	23	2 1/2	2 3/8	2	90
								C	10	10	0.594	SCH.80	C	10	10	0.438	SCH.80							
								A	12	12	0.750		A	12	10	0.500	SCH.80							
10	32	270.0	13	.478 (2 PLY)	16	.250	16	B	8	8	0.406	SCH.60	B	8	8	0.250	SCH.80	22	15 1/2	23	2 1/2	2 3/8	2 1/4	90
								C	10	11	0.719	SCH.100	C	10	12	0.500	SCH.80							
								A	12	13	1.000		A	12	12	0.562	SCH.80							
11	32	316.0	14	.478 (2 PLY)	15.50	.313	14	B	8	9	0.562	SCH.100	B	8	8	0.312	SCH.80	22	15 1/2	23	2 1/2	2 3/8	2 1/4	90
								C	10	11	1.000	SCH.40	C	10	12	0.594	SCH.80							
								A	12	12	1.125		A	12	12	0.688	SCH.80							
12	32	385.0	14	.598 (2 PLY)	17.25	.313	16	B	10	9	0.438	SCH.60	B	10	8	0.250	SCH.80	23 1/2	16 3/8	24 1/2	2 1/2	2 7/8	2 1/2	114
								C	12	11	0.750	SCH.100	C	12	12	0.500	SCH.80							
								A	14	12	1.094		A	14	12	0.688	SCH.80							

METRIC UNITS

ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.

* DIAMETER EQUAL TO ABUTTING PIPE.

DESIGN NO.	POLE HEIGHT (meters)	BASE MOMENT AT YIELD (kN-m)	TAPERED (NOTE 1) BASE DIA.	TAPERED (NOTE 1) MIN. WALL THICKNESS	TAPERED (NOTE 2) BASE DIA.	TAPERED (NOTE 2) MIN. WALL THICKNESS	TAPERED (NOTE 2) NO. OF SIDES	A 36 PIPE (NOTE 3) SECTION	DIA.	LENGTH (meters)	WALL THICKNESS	REDUCER TYPE *	API GRADE X52 PIPE (NOTE 4) SECTION	DIA.	LENGTH (meters)	WALL THICKNESS	REDUCER TYPE *	ANCHOR BASE BOLT CIRCLE	F	S	T	H	ANCHOR BOLT DIA.	LENGTH (meters)
1	6.1	53.6	178	6.07	178	6.07	NA	B	127	3.0	7.92	SCH.80	B	127	3.0	5.56	SCH.80	254	179	267	32	41	32	1.1
								A	152	3.0	12.70		A	152	3.0	7.92								
2	7.3	90.9	229	6.07	229	6.07	NA	B	152	3.7	9.53	SCH.80	B	152	3.7	6.35	SCH.40	318	225	324	38	48	38	1.4
								A	203	3.7	12.70		A	203	3.7	8.18								
3	7.9	113.1	254	6.07	254	6.07	NA	B	203	4.0	7.04	SCH.30	B	203	4.0	4.78	SCH.40	343	243	359	38	48	38	1.4
								A	254	4.0	9.27		A	254	4.0	6.35								
4	7.9	137.0	279	6.07	279	6.07	NA	B	203	4.0	7.92	SCH.40	B	203	4.0	5.16	SCH.40	381	270	397	51	54	44	2.1
								A	254	4.0	12.27		A	254	4.0	7.09								
5	9.1	164.1	305	6.07	305	6.07	NA	B	203	2.7	5.16	SCH.20	B	203	2.7	4.78	SCH.40	406	287	432	51	54	44	2.1
								C	254	3.0	7.80	SCH.30	C	254	3.0	5.16	SCH.40							
								A	305	3.4	9.53		A	305	3.4	6.35	SCH.40							
6	9.1	202.0	305	7.59	305	6.35	10	B	203	2.4	5.56	SCH.20	B	203	3.0	4.78	SCH.40	406	287	432	51	54	44	2.1
								C	254	3.0	9.27	SCH.40	C	254	3.0	7.09	SCH.40							
								A	305	3.7	12.70		A	305	3.0	7.92	SCH.40							
7	9.1	238.7	330	7.59	330	6.35	12	B	203	3.0	9.53	SCH.60	B	203	3.0	6.35	SCH.40	457	324	470	51	60	51	2.3
								C	254	3.0	12.70	SCH.60	C	254	3.0	8.74	SCH.40							
								A	305	3.0	14.27		A	305	3.0	9.53	SCH.40							
8	9.1	279.3	356	7.59	381	5.56	14	B	203	2.7	9.53	SCH.60	B	203	3.0	7.04	SCH.80	508	359	521	51	60	51	2.3
								C	254	3.0	14.27	SCH.80	C	254	3.0	11.13	SCH.80							
								A	305	3.4	17.48		A	305	3.0	11.13	SCH.80							
9	9.1	309.2	305	12.14 (2 PLY)	375	6.35	14	B	203	2.4	10.31	SCH.60	B	203	3.0	7.92	SCH.80	559	394	584	64	60	51	2.3
								C	254	3.0	15.09	SCH.80	C	254	3.0	11.13	SCH.80							
								A	305	3.7	19.05		A	305	3.0	12.70	SCH.80							
10	9.8	366.1	330	12.14 (2 PLY)	406	6.35	16	B	203	2.4	10.31	SCH.60	B	203	2.4	6.35	SCH.80	559	394	584	64	67	57	2.3
								C	254	3.4	18.26	SCH.100	C	254	3.7	12.70	SCH.80							
								A	305	4.0	25.40		A	305	3.7	14.27	SCH.80							
11	9.8	428.5	356	12.14 (2 PLY)	394	7.95	14	B	203	2.7	14.27	SCH.100	B	203	2.4	7.92	SCH.80	559	394	584	64	67	57	2.3
								C	254	3.4	25.40	SCH.40	C	254	3.7	15.09	SCH.80							
								A	305	3.7	28.58		A	305	3.7	17.48	SCH.80							
12	9.8	522.1	356	15.19 (2 PLY)	438	7.95	16	B	254	2.7	11.13	SCH.60	B	254	2.4	6.35	SCH.80	597	422	622	64	73	64	2.9
								C	305	3.4	19.05	SCH.100	C	305	3.7	12.70	SCH.80							
								A	356	3.7	27.79		A	356	3.7	17.48	SCH.80							

NOTES

1. Tapered tube shall be steel with a minimum of 55,000 PSI (379.2 MPa) yield stress after galvanizing.
2. Designs 1 thru 5 shall be ASTM A595M steel with a minimum of 55,000 PSI (379.2 MPa) yield strength after galvanizing. Designs 6 thru 12 shall be ASTM A572M grade 65 steel with a minimum of 65,000 PSI (447.8 MPa) yield strength after galvanizing.
3. Pipe shall be ASTM A36M steel with a minimum of 36,000 PSI (248.2 MPa) yield stress after galvanizing.
4. Pipe shall be grade X52 steel of the American Petroleum Institute standard 5LX, with a minimum of 52,000 PSI (358.2 MPa) yield stress after galvanizing.

STRAIN POLE DETAILS

5-01-00

OFFICE OF TRAFFIC ENGINEERING

TC-81.10