

REINFORCED CONCRETE PIPE

D	H	R	S	SINGLE PIPE		DOUBLE PIPE		TRIPLE PIPE	
				G	CU.YDS.CONC. 2 ANCHORS	G	CU.YDS.CONC. 2 ANCHORS	G	CU.YDS.CONC. 2 ANCHORS
42"	3'-3	2'-7½"	6'-3	5'-3	2.5	11'-6	5.5	17'-9	8.6
48"	3'-5	2'-11	6'-10	5'-10	2.8	12'-8	6.2	19'-6	9.6
54"	3'-7	3'-2½"	7'-8	6'-5	3.2	14'-1	7.1	21'-9	11.1
60"	3'-9	3'-6	8'-6	7'-0	3.5	15'-6	8.0	24'-0	12.5
66"	3'-11	3'-9½"	9'-4	7'-7	3.9	16'-11	9.0	26'-3	14.1
72"	4'-1	4'-1	10'-2	8'-2	4.3	18'-4	10.0	28'-6	15.7
78"	4'-3	4'-4½"	11'-0	8'-9	4.7	19'-9	11.0	30'-9	17.3
84"	4'-5	4'-8	11'-10	9'-4	5.1	21'-2	12.1	33'-0	19.0
90"	4'-7	4'-11½"	12'-8	9'-11	5.5	22'-7	13.2	35'-3	20.8
96"	4'-9	5'-3	13'-6	10'-6	6.0	24'-0	14.3	37'-6	22.7
102"	4'-11	5'-6½"	14'-1	11'-1	6.4	25'-2	15.3	39'-3	24.2
108"	5'-1	5'-10	14'-8	11'-8	6.9	26'-4	16.3	41'-0	25.7
114"	5'-3	6'-1½"	15'-3	12'-3	7.4	27'-6	17.3	42'-9	27.3
120"	5'-5	6'-5	15'-10	12'-10	7.8	28'-8	18.4	44'-6	28.9
126"	5'-7	6'-8½"	16'-5	13'-5	8.3	29'-10	19.4	46'-3	30.5
132"	5'-9	7'-0	17'-0	14'-0	8.8	31'-0	20.5	48'-0	32.2
138"	5'-11	7'-3½"	17'-7	14'-7	9.4	32'-2	21.6	49'-9	33.9
144"	6'-1	7'-7	18'-2	15'-2	9.9	33'-4	22.8	51'-6	35.6

GENERAL NOTES

1. Refer to Standard Drawings E 715-SPCA-01 and E 715-SPCA-02 for single pipe anchor details.
2. Refer to Standard Drawings E 715-MPCA-01 and E 715-MPCA-02 for multiple pipe anchor details.

LEGEND

- D - Pipe diameter
H - Anchor height
R - Dimension from anchor edge to ϕ of pipe
S - Dimension between ϕ of adjacent pipes
G - Overall anchor length

CORRUGATED ALUMINUM ALLOY OR STEEL PIPE


D	H	R	S	SINGLE PIPE		DOUBLE PIPE		TRIPLE PIPE	
				G	CU.YDS.CONC. 2 ANCHORS	G	CU.YDS.CONC. 2 ANCHORS	G	CU.YDS.CONC. 2 ANCHORS
42"	2'-11	2'-4	5'-8	4'-8	2.1	10'-4	4.7	16'-0	7.3
48"	3'-1	2'-7	6'-2	5'-2	2.4	11'-4	5.3	17'-6	8.2
54"	3'-3	2'-10	6'-11	5'-8	2.7	12'-7	6.1	19'-6	9.5
60"	3'-4	3'-1	7'-8	6'-2	3.0	13'-10	6.7	21'-6	10.5
66"	3'-5	3'-4	8'-5	6'-8	3.2	15'-1	7.5	23'-6	11.6
72"	3'-7	3'-7	9'-2	7'-2	3.6	16'-4	8.3	25'-6	13.0
78"	3'-9	3'-10	9'-11	7'-8	3.9	17'-7	9.1	27'-6	14.4
84"	3'-10	4'-1	10'-8	8'-2	4.2	18'-10	9.9	29'-6	15.6
90"	3'-11	4'-4	11'-5	8'-8	4.5	20'-1	10.7	31'-6	16.8
96"	4'-1	4'-7	12'-2	9'-2	4.8	21'-4	11.6	33'-6	18.4
102"	4'-2	4'-10	12'-8	9'-8	5.1	22'-4	12.2	35'-0	19.3
108"	4'-4	5'-1	13'-2	10'-2	5.5	23'-4	13.0	36'-6	20.6
114"	4'-5	5'-4	13'-8	10'-8	5.8	24'-4	13.7	38'-0	21.6
120"	4'-7	5'-7	14'-2	11'-2	6.2	25'-4	14.6	39'-6	22.9
126"	4'-8	5'-10	14'-8	11'-8	6.5	26'-4	15.2	41'-0	23.9
132"	4'-10	6'-1	15'-2	12'-2	6.9	27'-4	16.1	42'-6	25.3
138"	4'-11	6'-4	15'-8	12'-8	7.3	28'-4	16.8	44'-0	26.4
144"	5'-1	6'-7	16'-2	13'-2	7.7	29'-4	17.8	45'-6	27.8

INDIANA DEPARTMENT OF TRANSPORTATION

**CONCRETE ANCHOR
TABLE**

JANUARY 1998

STANDARD DRAWING NO. **E 715-ANCH-01**

	DETAILS PLACED IN THIS FORMAT 11-15-99
	/s/ Anthony L. Uremovich 11-15-99 DESIGN STANDARDS ENGINEER DATE
/s/ Firooz Zandi 11-15-99 CHIEF HIGHWAY ENGINEER DATE	ORIGINALLY APPROVED 1-02-98

REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE

SPAN	RISE	H	R	S	SINGLE PIPE		DOUBLE PIPE		TRIPLE PIPE	
					G	CU.YDS.CONC., 2 ANCHORS	G	CU.YDS.CONC., 2 ANCHORS	G	CU.YDS.CONC., 2 ANCHORS
45"	29"	3'-0	2'-9	6'-6	5'-6	2.5	12'-0	5.5	18'-6	8.5
49"	32"	3'-1	2'-11½	6'-11	5'-11	2.7	12'-10	5.9	19'-9	9.2
53"	34"	3'-2	3'-1½	7'-6	6'-3	2.9	13'-9	6.4	21'-3	10.0
60"	38"	3'-3	3'-5½	8'-5	6'-11	3.2	13'-4	7.3	23'-9	11.3
68"	43"	3'-5	3'-10	9'-6	7'-8	3.6	17'-2	8.3	26'-8	13.0
76"	48"	3'-7	4'-2½	10'-7	8'-5	4.1	19'-0	9.4	29'-7	14.8
83"	53"	3'-8	4'-6½	11'-7	9'-1	4.5	20'-8	10.5	32'-3	16.5
91"	58"	3'-10	4'-11	12'-8	9'-10	4.9	22'-6	11.7	35'-2	18.4
98"	63"	4'-0	5'-3	13'-6	10'-6	5.3	24'-0	12.7	37'-6	20.1
106"	68"	4'-2	5'-7½	14'-3	11'-3	5.8	25'-6	13.7	39'-9	21.7
113"	72"	4'-3	5'-11½	14'-11	11'-11	6.2	26'-10	14.6	41'-9	23.0
121"	77"	4'-5	6'-4	15'-8	12'-8	6.7	28'-4	15.7	44'-0	24.6
128"	82"	4'-6	6'-8	16'-4	13'-4	7.2	29'-8	16.6	46'-0	26.1
136"	87"	4'-8	7'-0	17'-0	14'-0	7.6	31'-0	17.6	48'-0	27.6
143"	92"	4'-10	7'-4	17'-8	14'-8	8.1	32'-4	18.7	50'-0	29.2
151"	97"	5'-0	7'-8½	18'-5	15'-5	8.7	33'-10	19.9	52'-3	31.0
166"	106"	5'-3	8'-5	19'-10	16'-10	9.7	36'-8	22.0	56'-6	34.4
180"	116"	5'-6	9'-1	21'-2	18'-2	10.8	39'-4	24.3	60'-6	37.8

GENERAL NOTES

1. Refer to Standard Drawings E 715-SPCA-01 and E 715-SPCA-02 for single anchor details.
2. Refer to Standard Drawing E 715-MPCA-02 for multiple anchor details.

LEGEND

- H - Anchor height
 R - Dimension from anchor edge to ϕ exterior pipe
 S - Dimension between ϕ of adjacent pipes
 G - Overall anchor length

CORRUGATED ALUMINUM ALLOY OR STEEL PIPE-ARCH

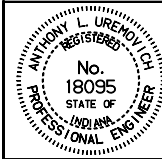
SPAN	RISE	H	R	S	SINGLE PIPE		DOUBLE PIPE		TRIPLE PIPE	
					G	CU.YDS.CONC., 2 ANCHORS	G	CU.YDS.CONC., 2 ANCHORS	G	CU.YDS.CONC., 2 ANCHORS
49"	33"	3'-0	2'-7	6'-3	5'-2	2.2	11'-5	4.9	17'-8	7.7
57"	38"	3'-1	2'-11	7'-3	5'-10	2.5	13'-1	5.7	20'-4	8.9
64"	43"	3'-3	3'-2½	8'-1	6'-5	2.8	14'-6	6.4	22'-7	10.1
71"	47"	3'-4	3'-6	9'-0	7'-0	3.0	16'-0	7.2	25'-0	11.3
77"	52"	3'-6	3'-9	9'-9	7'-6	3.3	17'-3	7.9	27'-0	12.5
83"	57"	3'-8	4'-0	10'-6	8'-0	3.5	18'-6	8.6	29'-0	13.6
60"	46"	3'-9	3'-1	7'-8	6'-2	2.9	13'-10	6.7	21'-6	10.5
66"	51"	3'-10	3'-4	8'-5	6'-8	3.1	15'-1	7.4	23'-6	11.6
73"	55"	4'-0	3'-7½	9'-4	7'-3	3.4	16'-7	8.3	25'-11	13.1
81"	59"	4'-2	3'-11½	10'-4	7'-11	3.7	18'-3	9.1	28'-7	14.5
87"	63"	4'-2	4'-2½	11'-1	8'-5	4.0	19'-6	9.8	30'-7	15.6
95"	67"	4'-4	4'-6½	12'-1	9'-1	4.3	21'-2	10.8	33'-3	17.2
103"	71"	4'-6	4'-10½	12'-9	9'-9	4.7	22'-6	11.6	35'-3	18.5
112"	75"	4'-8	5'-3	13'-6	10'-6	5.1	24'-0	12.5	37'-6	19.8
117"	79"	4'-9	5'-5½	13'-11	10'-11	5.3	24'-10	12.9	38'-9	20.6
128"	83"	5'-0	5'-11	14'-10	11'-10	5.8	26'-8	14.1	41'-6	22.4
137"	87"	5'-2	6'-3	15'-7	12'-7	6.1	28'-1	14.8	43'-8	23.5
142"	91"	5'-4	6'-6	16'-0	13'-0	6.5	29'-0	15.7	45'-0	24.9

INDIANA DEPARTMENT OF TRANSPORTATION

CONCRETE ANCHOR TABLES

JANUARY 1998

STANDARD DRAWING NO. E 715-ANCH-02

	DETAILS PLACED IN THIS FORMAT 11-15-99 /s/ Anthony L. Uremovich 11-15-99 DESIGN STANDARDS ENGINEER DATE /s/ Firooz Zandi 11-15-99 CHIEF HIGHWAY ENGINEER DATE DESIGN STANDARDS ENGINEER ORIGINALLY APPROVED 1-02-98
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