LEGEND

ID = INSIDE DIAMETER

OD = OUTSIDE DIAMETER

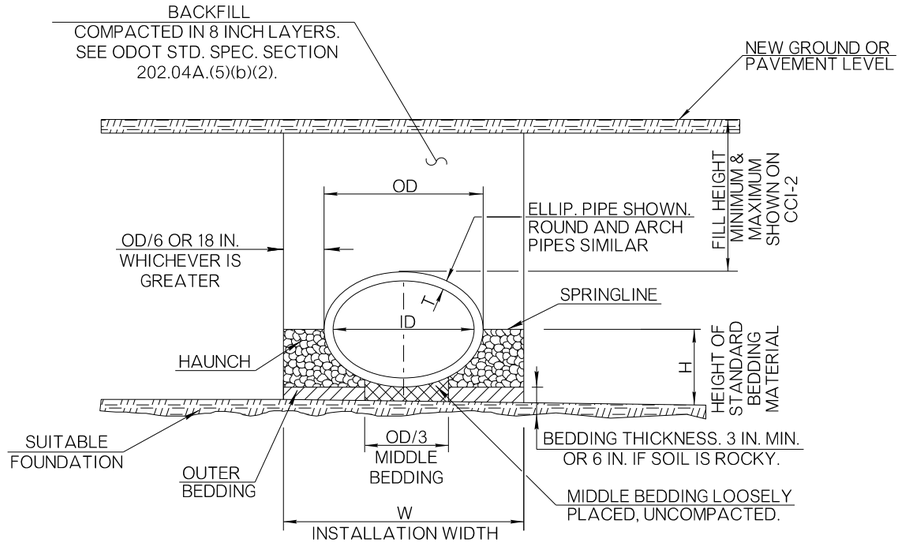
HAUNCH AREA, COMPACTED TO 95% MAXIMUM DENSITY ◓

SUITABLE FOUNDATION, FREE OF DEBRIS OR LOOSE SOIL

MIDDLE BEDDING LOOSELY PLACED, UNCOMPACTED

OUTER BEDDING, COMPACTED TO 95% MAXIMUM DENSITY ◓

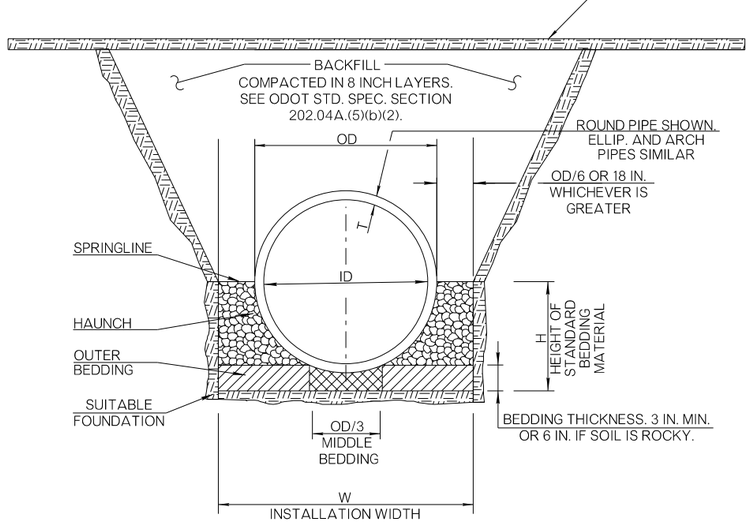
◓ SEE NOTE 14 ON STANDARD CCI-2



EMBANKMENT INSTALLATION
(INSTALLATION ON OR ABOVE EXISTING GROUND)

	CONDUIT SHAPE			DIST.
	ROUND	ARCH	ELLIPTICAL	G
FOR DIA. OR SPAN	UP TO 24"	UP TO 36"	UP TO 36"	12"
	25" TO 72"			D/2"
		37" TO 108"	37" TO 108"	D/3"
	OVER 73"	OVER 108"	OVER 108"	36"

MULTIPLE PIPE INSTALLATION



TRENCH INSTALLATION
(INSTALLATION BELOW EXISTING GROUND)

ALL GENERAL NOTES PERTAINING TO CONCRETE PIPE INSTALLATION ARE FOUND ON ROADWAY STANDARD CCI-2.

ROUND CONCRETE PIPE

	PIPE DIAM. OR DESIGN EQUIV.	H STD BED MAT. ■	PIPE WALL THICKNESS T	CLEAR SPACE BETWEEN PIPES ●	SINGLE PIPE STANDARD TRENCHING W WIDTH ▲	SINGLE PIPE STANDARD TRENCHING STANDARD BEDDING MATERIAL ■	DOUBLE PIPE STANDARD TRENCHING W WIDTH ▲	DOUBLE PIPE STANDARD TRENCHING STANDARD BEDDING MATERIAL ■	TRIPLE PIPE STANDARD TRENCHING W WIDTH ▲	TRIPLE PIPE STANDARD TRENCHING STANDARD BEDDING MATERIAL ■
	IN.	FT.	FT.	IN.	FT.	CY/LF	FT.	CY/LF	FT.	CY/LF
ROUND PIPE	18	1.21	0.208	12.00	4.92	0.17	7.83	0.24	10.75	0.32
	24	1.50	0.250	15.00	5.50	0.21	9.25	0.33	13.00	0.45
	30	1.79	0.292	18.50	6.08	0.27	10.71	0.43	15.34	0.60
	36	2.08	0.333	22.00	6.67	0.32	12.17	0.55	17.66	0.78
	42	2.38	0.375	25.50	7.25	0.38	13.63	0.67	20.00	0.97
	48	2.67	0.417	29.00	7.83	0.43	15.09	0.81	22.34	1.19
	54	2.96	0.458	32.50	8.42	0.50	16.54	0.96	24.66	1.42
	60	3.25	0.500	36.00	9.00	0.56	18.00	1.12	27.00	1.68
	66	3.57	0.542	36.00	9.58	0.64	19.17	1.27	28.75	1.91
	72	3.88	0.583	36.00	10.17	0.71	20.33	1.43	30.50	2.14
	78	4.20	0.625	36.00	10.75	0.80	21.50	1.60	32.25	2.39
	84	4.51	0.667	36.00	11.33	0.88	22.67	1.77	34.00	2.65
	90	4.83	0.708	36.00	11.92	0.98	23.83	1.95	35.75	2.93
	96	5.15	0.750	36.00	12.67	1.10	25.17	2.17	37.50	3.21

ARCH CONCRETE PIPE

	ROUND EQUIV.	PIPE SPAN	PIPE HEIGHT	H STD BED MAT. ■	PIPE WALL THICKNESS T	CLEAR SPACE BETWEEN PIPES ●	SINGLE PIPE STANDARD TRENCHING WIDTH ▲	SINGLE PIPE STANDARD TRENCHING STANDARD BEDDING MATERIAL ■	DOUBLE PIPE STANDARD TRENCHING WIDTH ▲	DOUBLE PIPE STANDARD TRENCHING STANDARD BEDDING MATERIAL ■	TRIPLE PIPE STANDARD TRENCHING WIDTH ▲	TRIPLE PIPE STANDARD TRENCHING STANDARD BEDDING MATERIAL ■
	IN.	IN.	IN.	FT.	FT.	IN.	FT.	CY/LF	FT.	CY/LF	FT.	CY/LF
ARCH CONCRETE PIPE	18	22	13	0.96	0.208	12.00	5.25	0.19	8.50	0.27	11.75	0.37
	24	28	18	0.99	0.250	12.00	5.83	0.21	9.67	0.31	13.50	0.43
	30	36	22	1.18	0.292	12.00	6.58	0.29	11.17	0.42	15.75	0.58
	36	43	26	1.30	0.333	12.00	7.25	0.35	12.50	0.51	17.75	0.71
	42	51	31	1.46	0.375	17.25	8.00	0.43	14.44	0.65	20.88	0.93
	48	58	36	1.63	0.417	19.61	8.67	0.52	15.97	0.79	23.27	1.15
	54	65	40	1.81	0.458	21.97	9.33	0.62	17.50	0.95	25.66	1.39
	60	73	45	2.02	0.500	24.67	10.08	0.75	19.22	1.16	28.36	1.71
	72	88	54	2.35	0.583	29.72	11.50	1.00	22.48	1.58	33.45	2.34
	84	102	62	2.63	0.667	34.44	13.11	1.28	25.81	2.03	38.52	3.02
	90	115	72	3.15	0.708	36.00	14.67	1.71	28.67	2.64	42.67	3.92
	96	122	77	3.26	0.750	36.00	15.56	1.88	30.22	2.89	44.89	4.28

HORIZONTAL ELLIPTICAL CONCRETE PIPE

	ROUND EQUIV.	PIPE SPAN	PIPE HEIGHT	H STD BED MAT. ■	PIPE WALL THICKNESS T	CLEAR SPACE BETWEEN PIPES ●	SINGLE PIPE STANDARD WIDTH ▲	SINGLE PIPE STANDARD STANDARD BEDDING MATERIAL ■	DOUBLE PIPE STANDARD WIDTH ▲	DOUBLE PIPE STANDARD STANDARD BEDDING MATERIAL ■	TRIPLE PIPE STANDARD WIDTH ▲	TRIPLE PIPE STANDARD STANDARD BEDDING MATERIAL ■
	IN.	IN.	IN.	FT.	FT.	IN.	FT.	CY/LF	FT.	CY/LF	FT.	CY/LF
HORIZONTAL ELLIPTICAL CONCRETE PIPE	18	23	14	1.06	0.229	12.00	5.38	0.18	8.75	0.28	12.13	0.38
	24	30	19	1.31	0.271	12.00	6.04	0.23	10.08	0.37	14.13	0.50
	30	38	24	1.56	0.312	12.00	6.79	0.30	11.58	0.48	16.37	0.66
	36	45	29	1.83	0.375	12.00	7.50	0.37	13.00	0.61	18.50	0.85
	42	53	34	2.08	0.417	17.94	8.25	0.45	15.00	0.78	21.74	1.11
	48	60	38	2.29	0.458	20.31	8.92	0.52	16.52	0.92	24.13	1.33
	54	68	43	2.55	0.500	23.00	9.67	0.60	18.25	1.10	26.83	1.61
	60	76	48	2.83	0.542	25.69	10.42	0.71	19.98	1.33	29.53	1.96
	66	83	53	3.10	0.583	28.06	11.08	0.81	21.50	1.55	31.92	2.29
	72	91	58	3.38	0.625	30.75	11.83	0.94	23.23	1.82	34.63	2.71
	78	98	63	3.66	0.667	33.11	12.67	1.08	24.93	2.10	37.19	3.12
	84	106	68	3.94	0.708	35.81	13.67	1.25	26.90	2.44	40.13	3.63
	90	113	72	4.17	0.750	36.00	14.56	1.40	28.47	2.69	42.39	3.99
	96	121	77	4.45	0.792	36.00	15.56	1.60	30.22	3.04	44.89	4.49

▲ W, OR WIDTH OF TRENCHING IS BASED ON TRENCH INSTALLATION, WITH SPRINGLINE WIDTH OF THE GREATER OF OD/6 OR 18 INCHES.

● SEE MULTIPLE PIPE INSTALLATION TABLE.

■ VALUES SHOWN IN TABLES ARE BASED ON HEIGHT TO SPRINGLINE.

APPROVED BY
ROADWAY ENGINEER: _____ DATE: 12/20/2024

ROADWAY DESIGN DIVISION STANDARD

CONCRETE CULVERT INSTALLATION
(1 OF 2 SHEETS)

OKLAHOMA Transportation

2019 SPECIFICATIONS

CCI-1	0

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