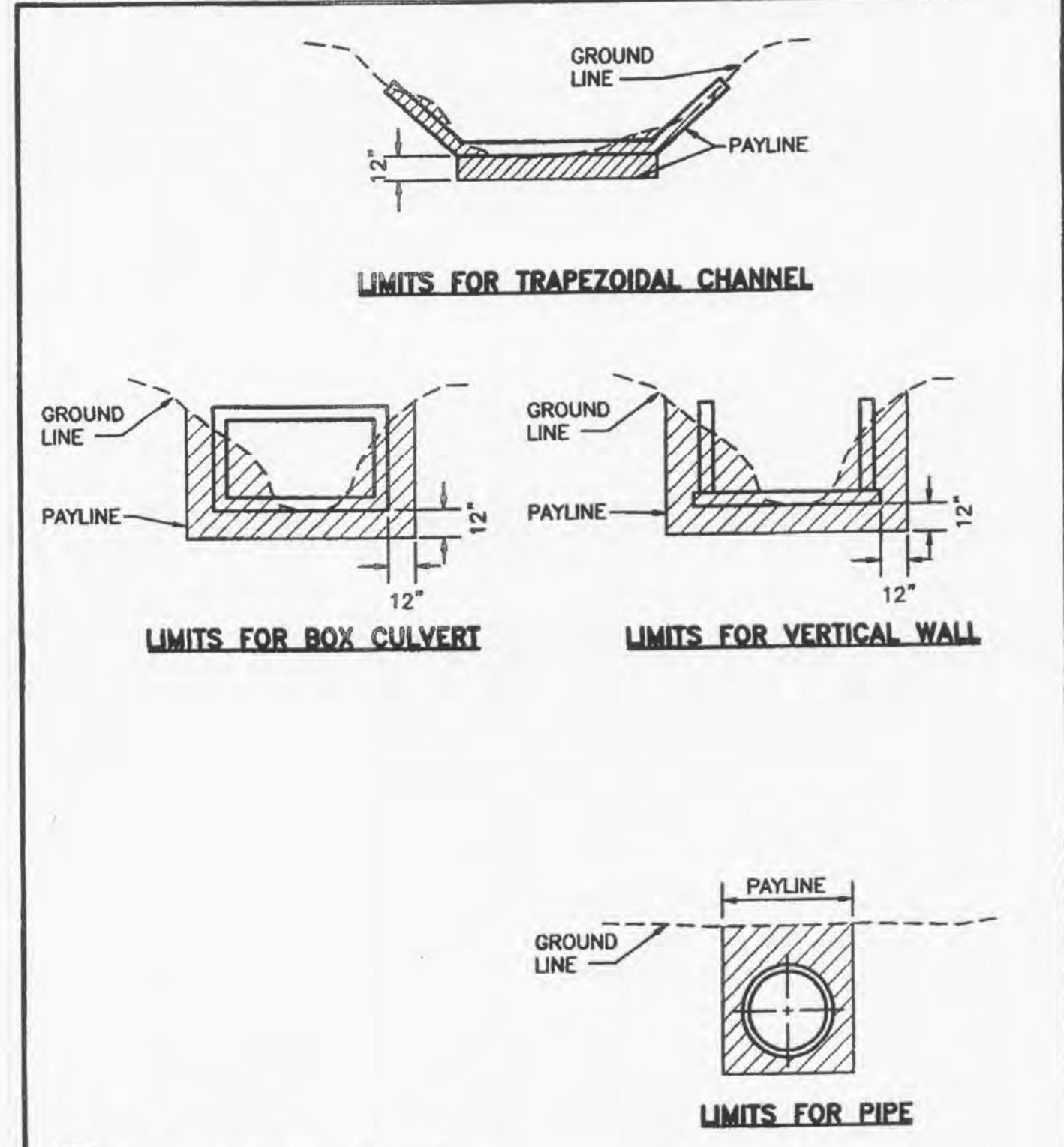


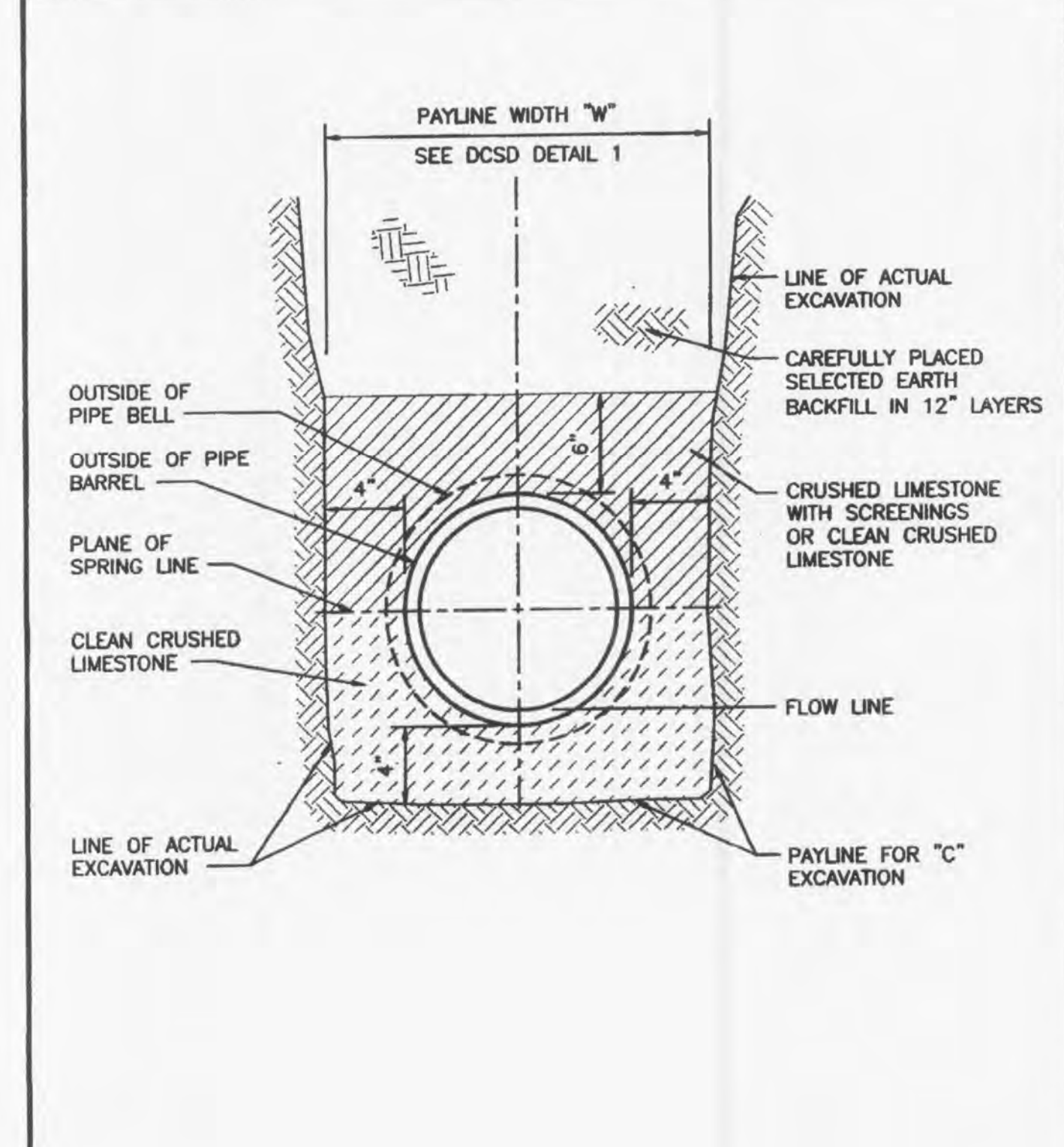
ISSUE	REMARKS/DATE
1	10-16-2012, INITIAL SUBMITTAL
2	11-29-2012, CITY COMMENTS
3	1-14-2013, CITY & DCSD COMMENTS
4	2-20-2013, CITY COMMENTS

ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
INSIDE DIAMETER OF PIPE (INCHES)	"W" PAYLINE WIDTH OF TRENCH (INCHES)	"W" PAYLINE WIDTH OF TRENCH (FEET)	PAY-VOLUMES CU. FT. PER FT. CONCRETE ENCASUREMENT	INSIDE DIAMETER OF PIPE (INCHES)	"W" PAYLINE WIDTH OF TRENCH (INCHES)	"W" PAYLINE WIDTH OF TRENCH (FEET)	PAY-VOLUMES CU. FT. PER FT. CONCRETE ENCASUREMENT
4	30	2.50	3.28				
6	30	2.50	3.59				
8	30	2.50	3.87				
10	30	2.50	4.09				
12	30	2.50	4.25				
15	36	3.00	5.55				
18	36	3.00	5.77	14 x 23	41	3.42	5.94
21	39	3.25	6.61				
24	42	3.50	7.39	19 x 30	49	4.08	7.68
27	45	3.75	8.18	22 x 34	53	4.42	8.61
30	49	4.08	9.30	24 x 38	58	4.83	9.70
33	53	4.42	10.53	27 x 42	62	5.17	10.71
36	56	4.67	11.43	29 x 45	66	5.50	11.72
39	DISCONTINUED			32 x 49	71	5.92	13.14
42	63	5.25	13.38	34 x 53	75	6.25	14.05
48	70	5.83	15.67	38 x 60	83	6.92	16.18
54	77	6.42	18.15	43 x 68	92	7.67	18.81
60	84	7.00	20.73	48 x 76	101	8.42	21.59
66	91	7.58	23.45	53 x 83	109	9.08	24.35
72	98	8.17	26.37	58 x 91	118	9.83	27.45
78	105	8.75	29.39	63 x 98	126	10.50	30.50
84	112	9.33	32.57	68 x 106	135	11.25	33.91
90	119	9.92	35.90	72 x 113	143	11.92	36.99
96	126	10.50	39.37	77 x 121	152	12.67	40.69
102	133	11.08	42.99	82 x 128	160	13.33	44.45
108	140	11.67	46.75	87 x 136	168	14.00	47.79
114	147	12.25	50.66	92 x 143	176	14.67	51.70
120	154	12.83	54.72	97 x 151	185	15.42	56.01
126	161	13.42	58.92				
132	168	14.00	63.27	106 x 166	202	16.83	64.48
144	182	15.17	72.40	116 x 180	218	18.17	73.59

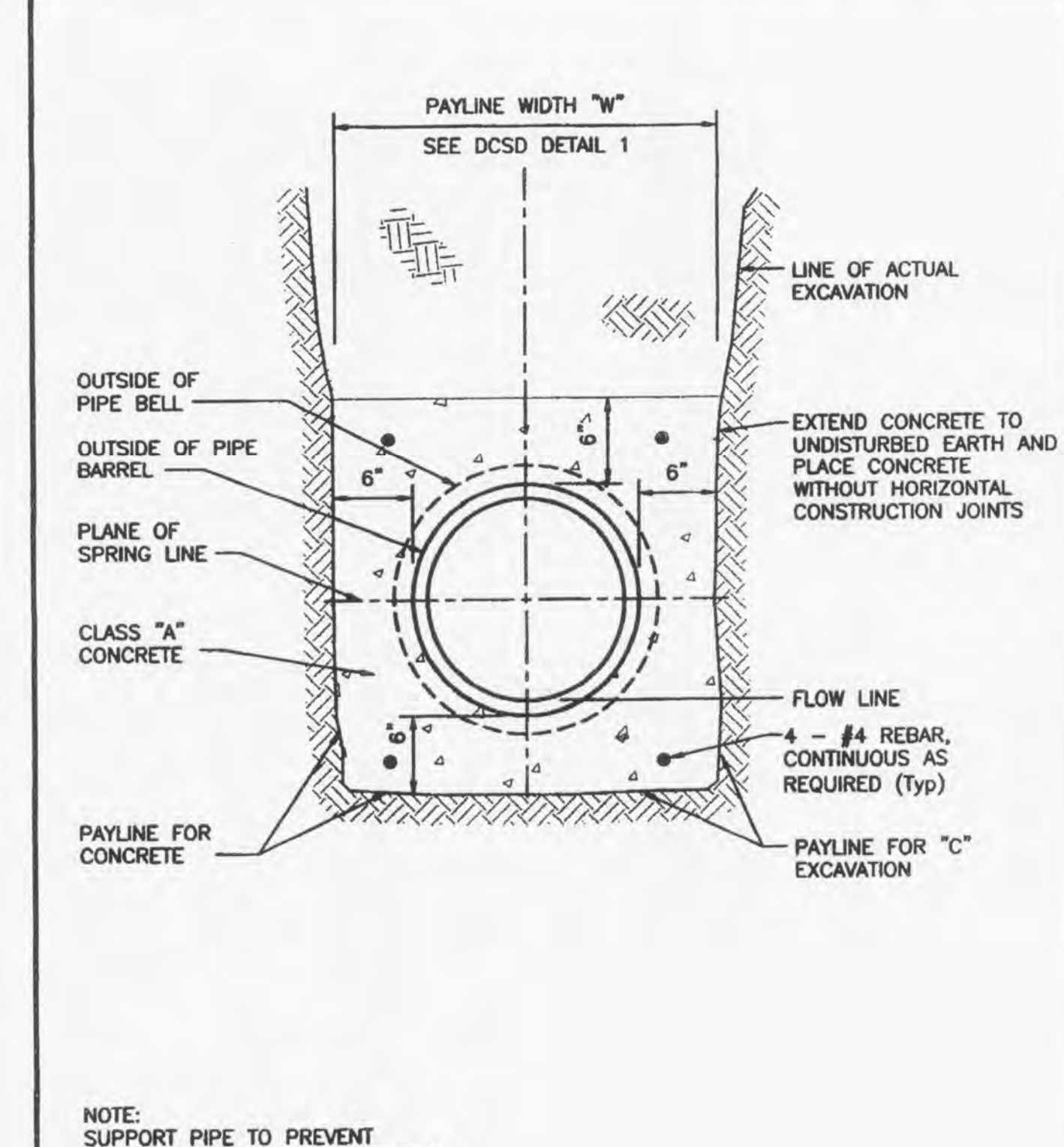
DUCKETT CREEK SANITARY DISTRICT
 PAYLINE WIDTHS OF TRENCH AND PAY-QUANTITIES OF CONCRETE
 Dwn By: BSM App By: KLA Detail No. 1
 Cld By: MDOB Date: 12-21-99



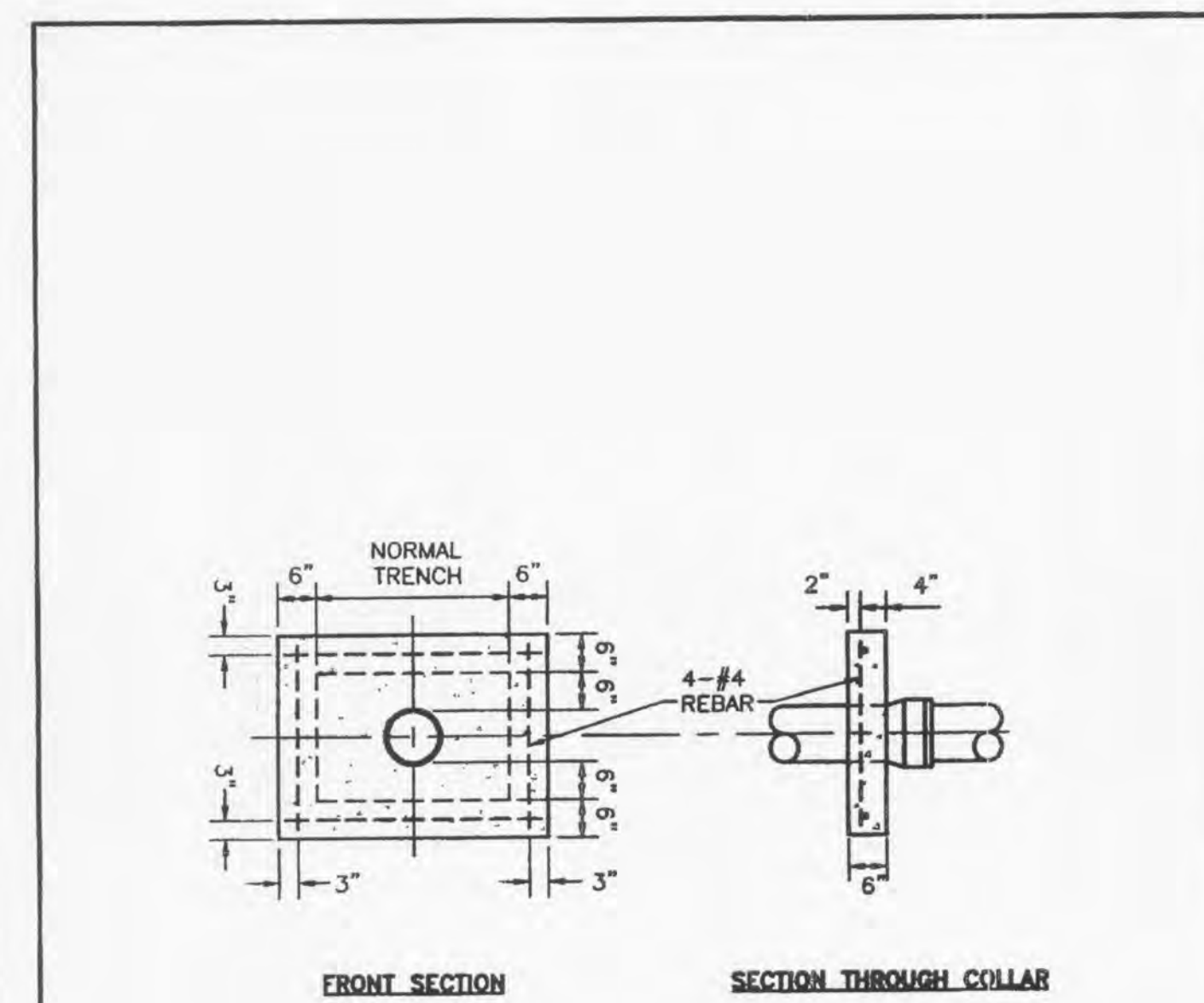
DUCKETT CREEK SANITARY DISTRICT
 PAYLINE LIMITS FOR EXCAVATION
 Dwn By: BSM App By: KLA Detail No. 2
 Cld By: MDOB Date: 12-21-99



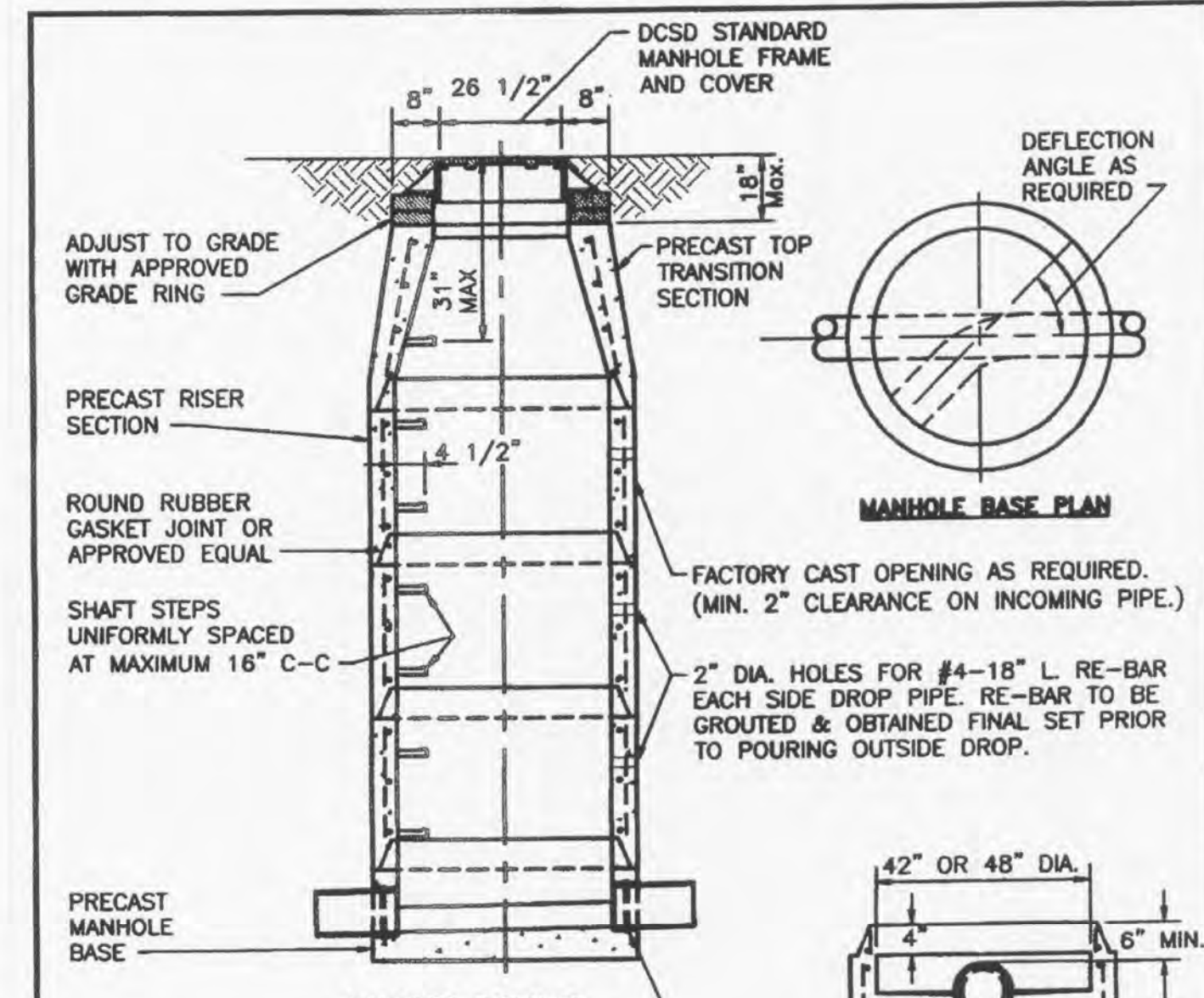
DUCKETT CREEK SANITARY DISTRICT
 PIPE BEDDING CLASS "C" (FOR ALL PIPE EXCEPT REINFORCED CONCRETE PIPE)
 Dwn By: BSM App By: KLA Detail No. 3
 Cld By: MDOB Date: 12-21-99



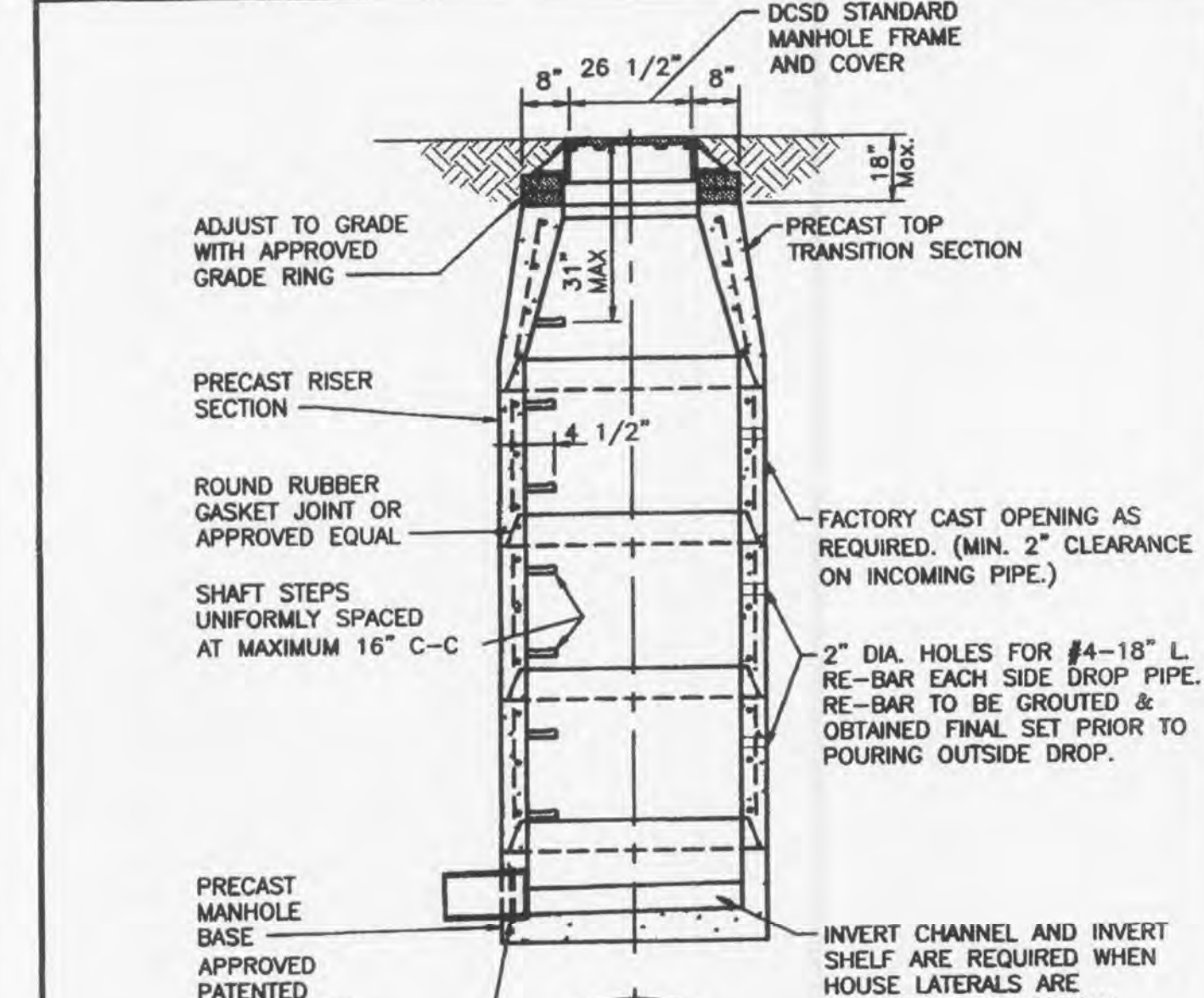
DUCKETT CREEK SANITARY DISTRICT
 TYPICAL CONCRETE ENCASUREMENT
 Dwn By: BSM App By: KLA Detail No. 4
 Cld By: MDOB Date: 12-21-99



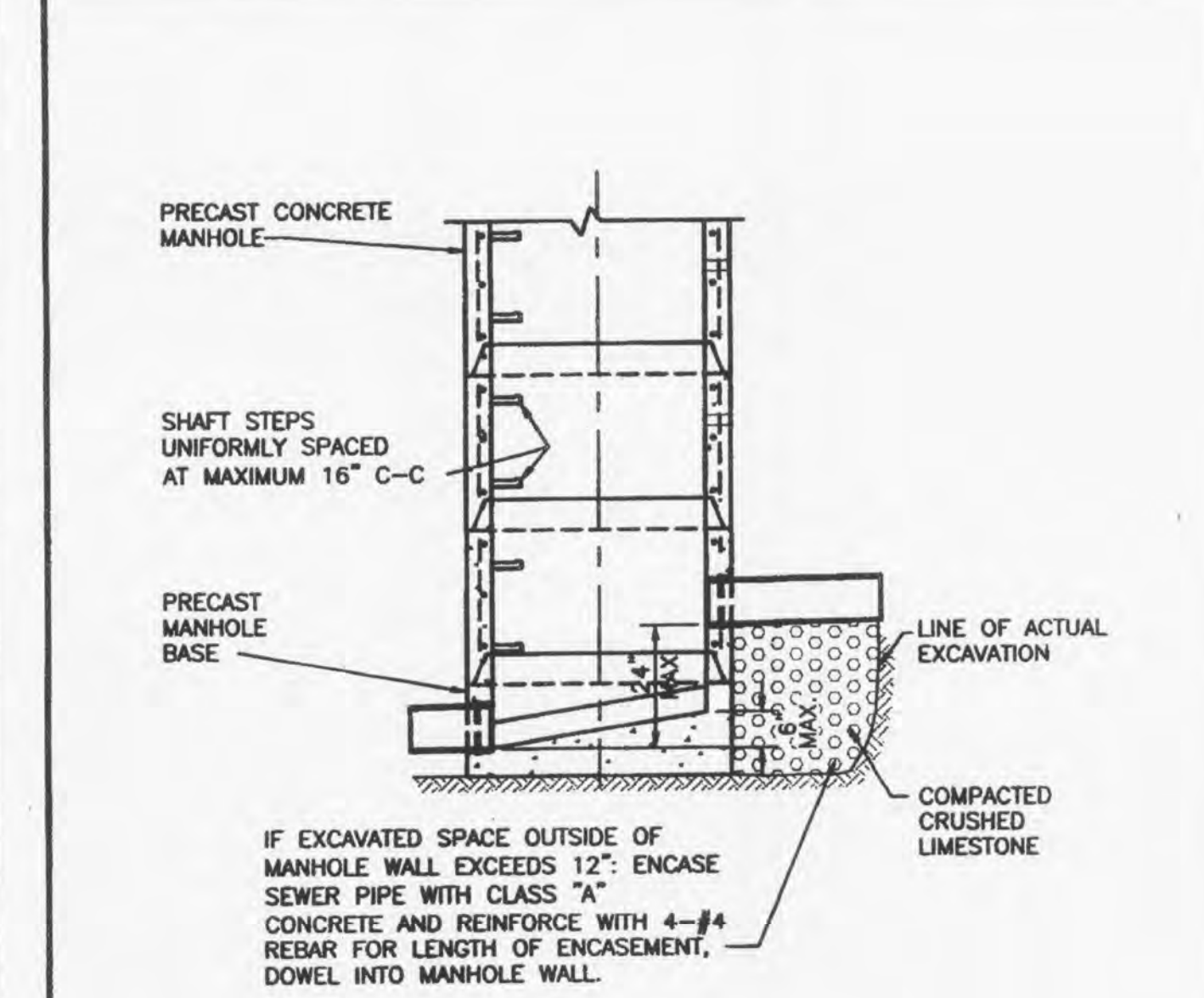
DUCKETT CREEK SANITARY DISTRICT
 CONCRETE ANTI-SLIP COLLAR FOR PVC PIPE ON PIPE SLOPES FROM 15% TO 50%
 Dwn By: BSM App By: KLA Detail No. 5
 Cld By: MDOB Date: 12-21-99



DUCKETT CREEK SANITARY DISTRICT
 PRE-CAST CONCRETE MANHOLE FOR SEWERS 8" THROUGH 18"
 Dwn By: BSM App By: KLA Detail No. 7
 Cld By: MDOB Date: 12-30-99



DUCKETT CREEK SANITARY DISTRICT
 TERMINAL MANHOLE FOR SEWERS 8" THROUGH 18"
 Dwn By: BSM App By: KLA Detail No. 8
 Cld By: MDOB Date: 01-03-00



DUCKETT CREEK SANITARY DISTRICT
 INSIDE FOULWATER DROP MANHOLE (SWEEP INVERT)
 Dwn By: BSM App By: KLA Detail No. 9
 Cld By: MDOB Date: 01-04-00

PROJECT TITLE
BOARDWALK GARDENS
 OF ALLON, MISSOURI

THE STERLING CO.
 ENGINEERS & SURVEYORS
 5055 New Baumgartner Road
 St. Louis, Missouri 63129
 Ph 314-487-0440 Fax 314-487-9944
 www.sterling-eng-sur.com
 Corporate Certificate of Authority #001348

Date: MICHAEL G. BOERING
 License No. E-28643
 Civil Engineer

MCBRIDE RED HAWK, LLC
 16091 SWINGLEY RIDGE ROAD, SUITE 300
 CHESTERFIELD, MISSOURI 63017
 PH: 636-537-2000
 Contact: Jeff Boland

P+Z No. 9831.34.09.01
 City No.
 Date: OCT.16, 2012
 Job No. 12-05-128

Page No. **DTL-4**