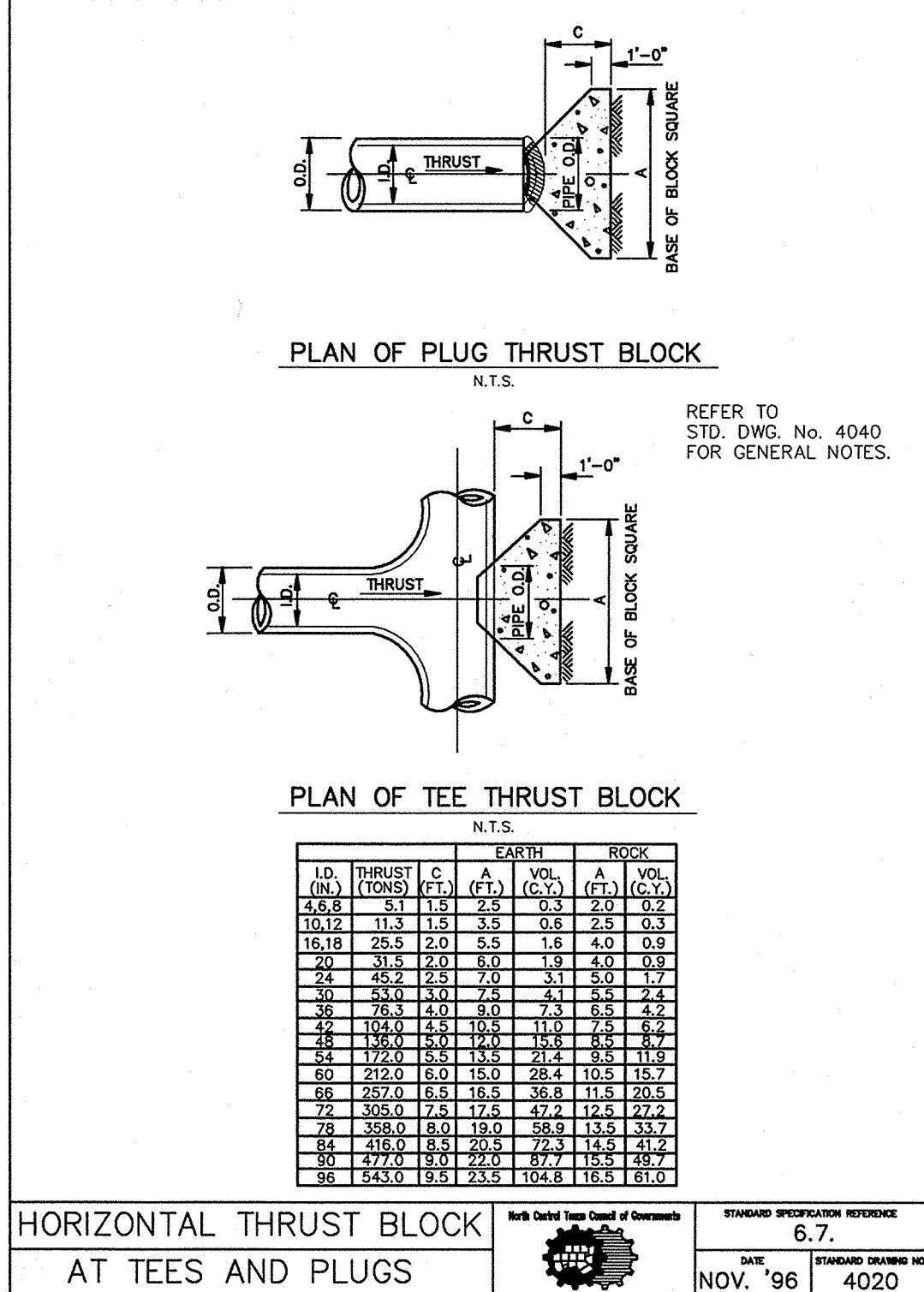
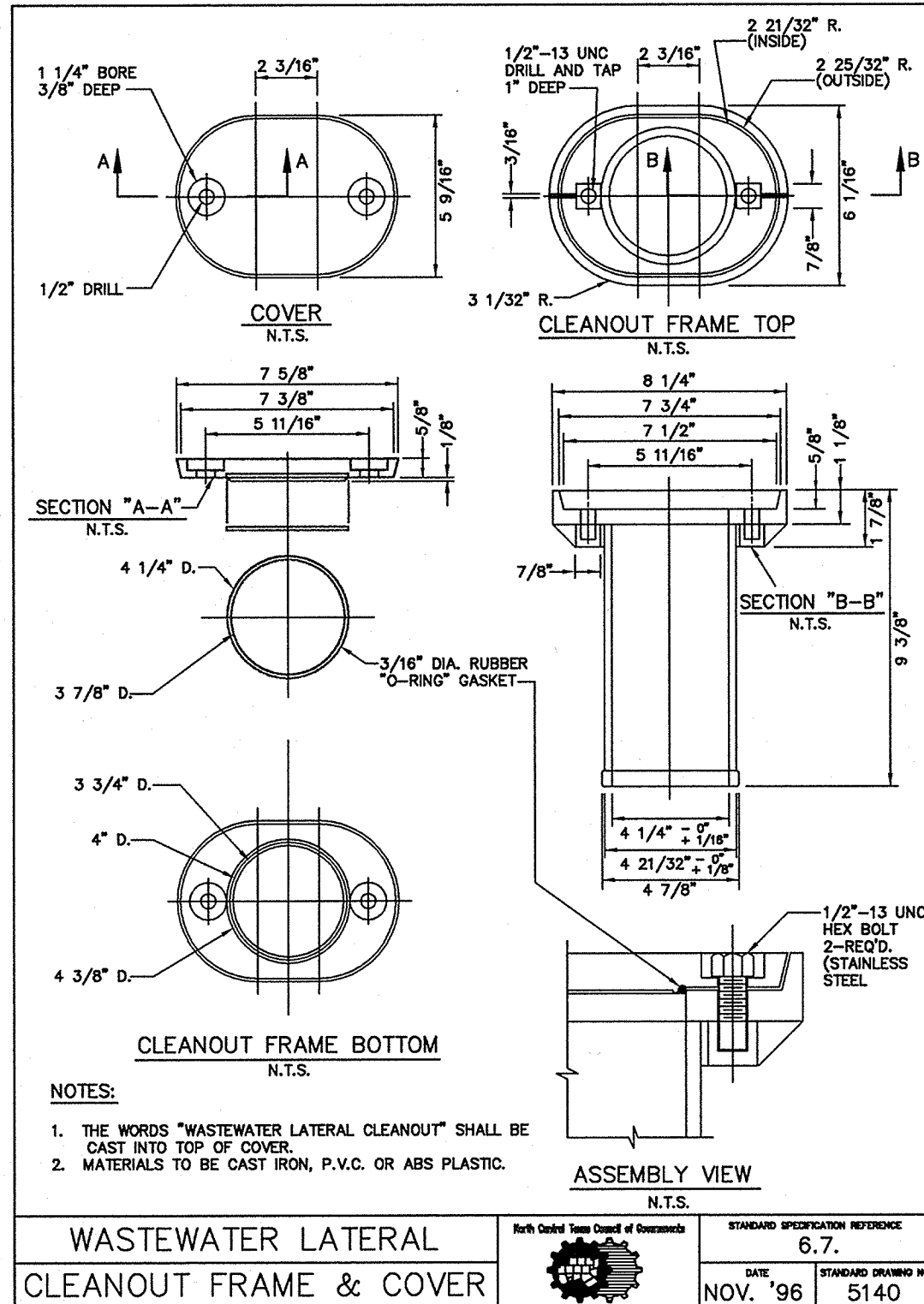


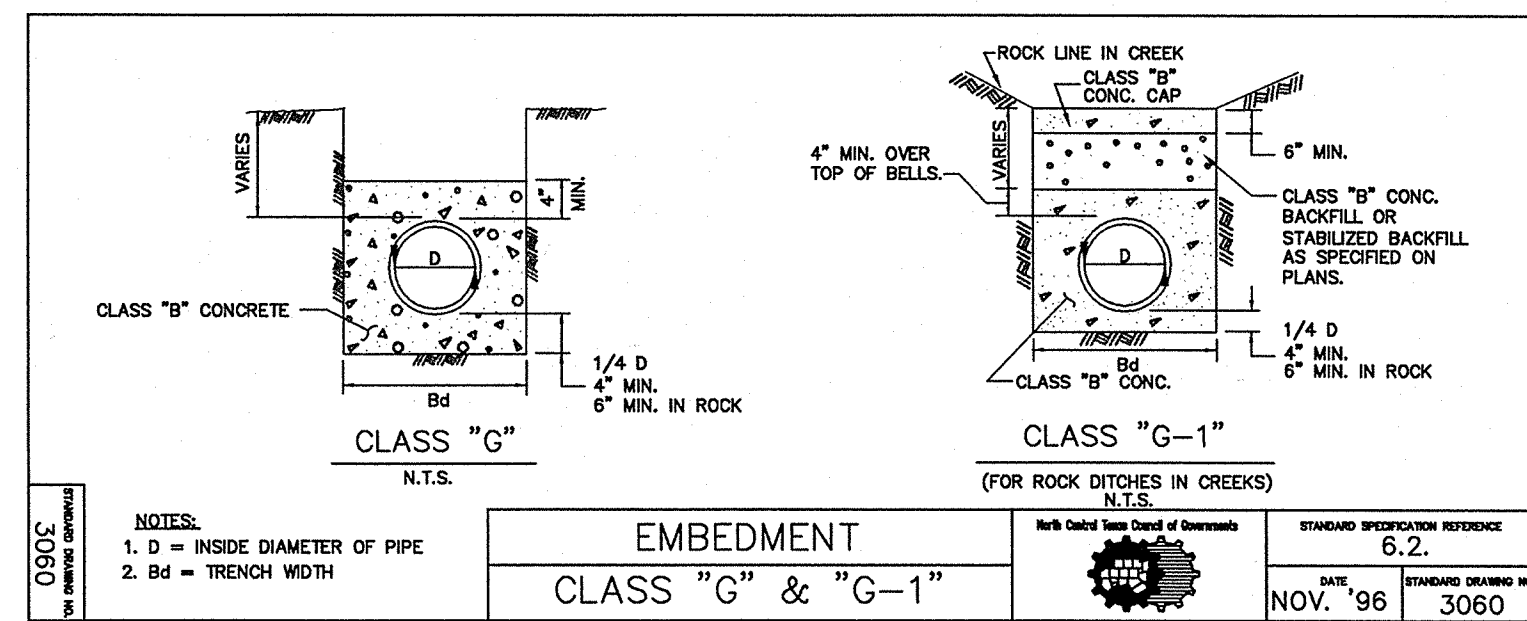
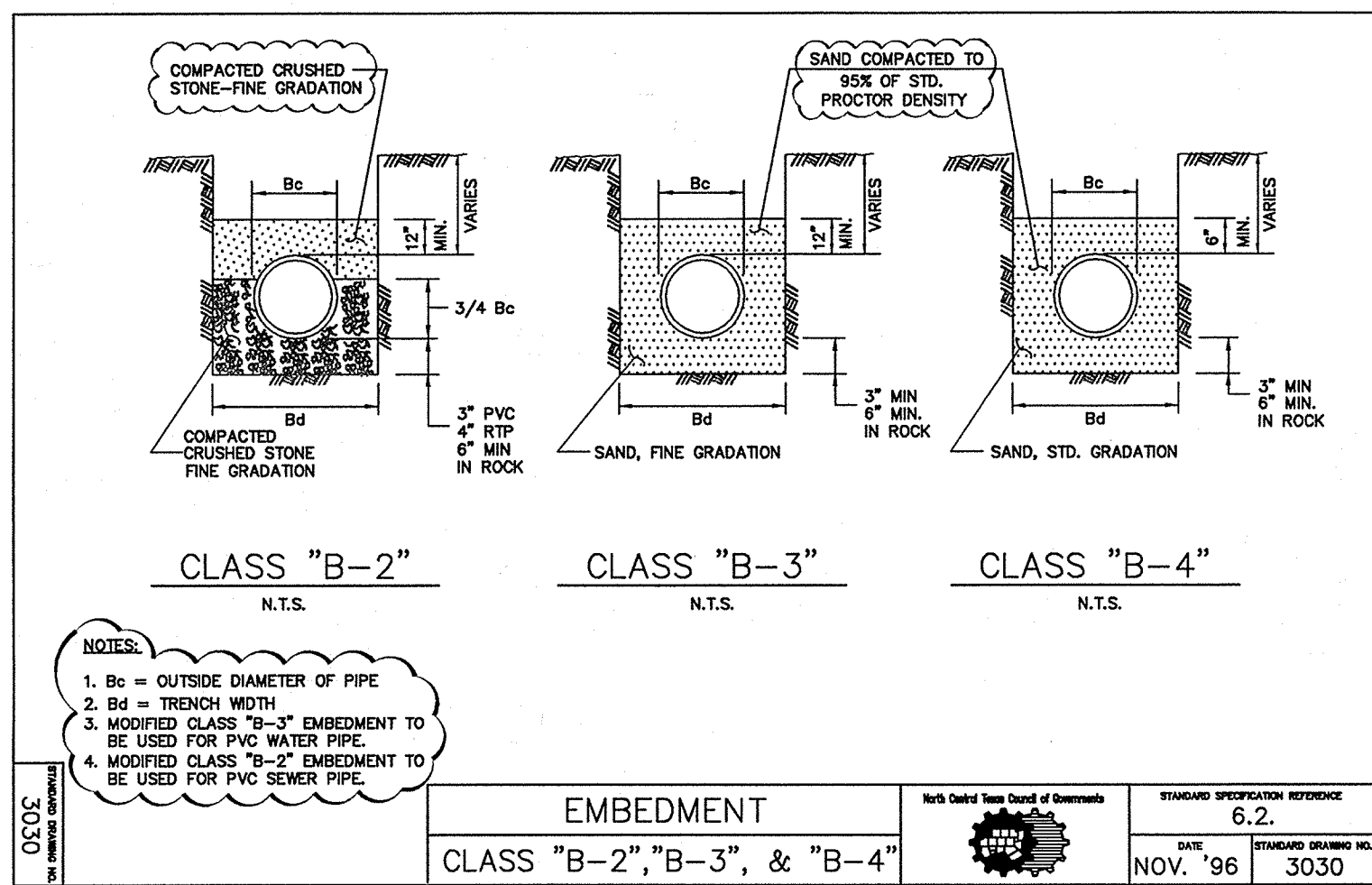


$\delta = 11.25^\circ$										$\delta = 22.50^\circ$									
EARTH					ROCK					EARTH					ROCK				
(L.D. (C))	(F) (T)	(THRUST) (TOWNS)	(A) (F) (T)	(B) (V) (C))	(A) (F) (T)	(B) (V) (C))	(A) (F) (T)	(B) (V) (C))	(L.D. (C))	(F) (T)	(THRUST) (TOWNS)	(A) (F) (T)	(B) (V) (C))	(A) (F) (T)	(B) (V) (C))	(A) (F) (T)	(B) (V) (C))		
10.14	0.4	2.2	2.5	1.0	0.1	0.1	0.1	0.1	4.6	2.0	2.0	2.0	0.1	0.1	0.1	0.1	0.1		
10.12	0.6	2.2	1.5	0.1	1.0	1.0	0.1	10.12	1.1	4.4	2.0	2.5	0.3	1.5	1.5	0.1	0.1		
16.18	0.8	5.0	2.0	2.5	0.3	1.5	0.2	16.18	1.6	9.9	3.0	3.5	0.6	2.0	2.5	0.3	0.3		
20	9.1	6.2	2.0	3.5	0.4	1.0	0.3	20	1.8	12.3	3.5	3.5	0.7	2.0	3.0	0.4	0.4		
24	1.1	8.9	3.0	3.5	0.5	1.5	3.0	24	2.2	17.7	4.0	4.5	1.0	3.0	3.5	0.5	0.5		
30	1.4	10.0	3.0	3.5	0.6	2.0	3.5	30	2.7	20.7	5.0	5.5	1.5	3.5	4.0	0.6	0.6		
36	1.7	15.0	3.5	4.5	0.9	2.0	3.5	36	3.2	29.6	5.5	6.0	2.0	4.0	4.5	0.8	0.8		
42	1.9	18.0	4.0	5.0	1.0	2.5	0.9	42	3.8	40.5	6.0	6.5	2.5	4.5	5.0	1.0	1.0		
48	2.2	26.6	4.5	6.0	2.0	3.5	6.0	1.1	48	4.4	52.9	8.0	7.0	5.7	4.5	6.0	2.8		
54	2.5	33.7	6.0	6.0	3.0	3.0	6.0	1.4	54	4.9	67.0	9.0	8.0	6.0	6.0	6.0	4.1		
60	2.7	41.6	6.0	7.0	3.8	3.0	7.0	1.8	60	5.5	82.7	9.5	9.0	10.6	6.0	7.5	5.3		
66	3.0	50.3	6.5	8.0	5.1	3.5	8.0	2.7	66	6.0	100.1	10.5	10.0	14.0	6.0	8.0	7.2		
72	3.3	59.9	7.0	8.0	6.3	4.0	8.0	3.3	72	6.6	118.1	11.0	11.0	17.6	7.5	8.0	8.1		
78	3.6	70.2	7.5	8.0	8.1	4.0	8.0	3.9	78	7.1	139.9	12.0	12.0	20.0	8.0	9.0	10.7		
84	4.0	81.6	8.0	8.0	9.0	4.5	8.0	4.6	84	7.6	169.3	13.0	12.5	22.2	8.5	9.5	12.7		
90	4.1	93.5	9.5	10.0	12.2	5.0	10.0	6.3	90	8.2	186.1	14.0	13.5	33.7	9.5	10.0	17.8		
96	4.1	106.4	10.0	11.0	15.0	5.0	11.0	7.4	96	8.7	210.7	15.0	14.5	43.2	10.5	11.0	21.6		

$\delta = 67.50^\circ$										$\delta = 90^\circ$									
EARTH					ROCK					EARTH					ROCK				
λ	θ	G	THRUST	θ	λ	θ	G	THRUST	θ	λ	θ	G	THRUST	θ	λ	θ	G	THRUST	θ
($^\circ$)	($^\circ$)	($^\circ$)	(TONS)	($^\circ$)	($^\circ$)	($^\circ$)	($^\circ$)	(TONS)	($^\circ$)	($^\circ$)	($^\circ$)	($^\circ$)	(TONS)	($^\circ$)	($^\circ$)	($^\circ$)	($^\circ$)	(TONS)	($^\circ$)
4.68	21	3.0	3.0	0.3	2.0	1.0	0.2	4.68											
10.12	31	12.6	5.5	2.5	0.8	3.5	2.0	0.4	10.12	4.0	16.0	6.5	2.5	1.0	3.5	2.5	0.5		
16.18	47	28.3	7.5	4.0	1.9	5.5	3.0	0.9	16.18	6.0	36.0	9.0	4.0	2.4	4.5	4.0	1.0		
20	52	34.9	9.0	4.0	2.3	5.5	3.5	1.2	20	6.6	44.0	10.0	4.5	3.1	6.0	4.5	1.5		
24	6.2	50.3	11.5	4.5	3.5	6.5	4.0	1.6	24	7.9	64.0	14.5	4.5	3.8	6.0	4.0	2.1		
30	7.6	59.9	12.0	5.0	4.8	7.5	4.0	2.2	30	8.5	72.0	15.0	5.0	4.5	6.0	4.0	3.3		
36	8.4	64.8	14.5	5.0	5.0	8.0	4.5	2.5	36	9.1	108.0	16.0	6.0	1.4	11.0	4.5	4.0		
42	10.9	115.5	17.0	12.8	11.0	5.5	6.3	4.2	42	13.9	147.0	21.0	7.0	17.8	14.0	5.5	6.7		
48	12.5	150.9	20.5	18.4	13.0	6.0	9.2	4.8	48	15.9	192.0	24.0	8.0	26.2	16.0	6.0	12.4		
54	14.0	191.0	21.5	8.0	26.0	10.5	12.9	5.4	54	17.5	243.0	27.0	9.0	36.1	16.0	7.0	18.1		
60	15.6	233.8	24.0	10.0	35.6	16.0	17.5	6.0	60	19.9	299.5	30.0	10.0	50.3	20.0	8.5	25.0		
66	17.1	285.3	26.0	11.0	46.0	18.0	23.0	6.6	66	21.8	362.8	33.0	11.0	68.2	22.0	8.5	32.5		
72	18.7	349.1	28.5	12.0	57.8	19.0	28.4	7.2	72	23.8	431.0	36.0	12.0	85.6	24.0	9.0	40.0		
78	20.3	415.5	30.5	13.0	69.0	20.0	33.0	7.8	78	25.3	503.0	38.0	13.0	102.0	26.0	9.5	47.5		
84	21.8	492.1	33.5	14.0	74.2	22.0	38.5	8.4	84	27.7	587.7	42.0	14.0	124.4	28.0	10.5	54.8		
90	23.3	530.5	35.5	15.0	114.4	24.5	11.0	9.0	90	29.0	674.6	45.0	15.0	164.3	30.0	11.5	61.2		
96	24.9	603.6	38.0	16.0	138.5	25.5	12.0	7.0	96	31.6	767.5	48.0	16.0	199.0	32.0	12.0	65.1		

HORIZONTAL THRUST BLOCK AT PIPE BEND		STANDARD SPECIFICATION REFERENCE	
		DATE NOV. '96	STANDARD DRAWING 4010B

HORIZONTAL THRUST BLOCK AT PIPE BEND		STANDARD SPECIFICATION REFERENCE	
		DATE NOV. '96	STANDARD DRAWING 4010C

[illegible]

NOTES:

1. REFERENCE CITY OF ROCKWALL STANDARD DRAWINGS FOR ALL OTHER APPLICABLE DETAILS. REFERENCE CITY OF ROCKWALL AMENDMENTS TO THE NCTCOG STANDARD DRAWINGS (AS CLOUDED ON THE MODIFIED NCTCOG STANDARD DRAWINGS SHOWN ON THIS PAGE).
- 2.

DRAWING TITLE WATER AND SANITARY SEWER DETAILS		
BUILDING PERMIT REVIEW: ADA / TAS EAB # _____ A8804095 BID/PRICING SET: _____ 01-15-08 CONSTRUCTION SET: _____	SCALE: AS NOTED	DRAWING NO.
	DRAWN BY: _____ K.F.D.	C-14
	REVIEWED BY: _____ D.K.K.	
	ISSUE DATE: <u>12-21-07</u>	
		OF 15 DWGS.

RECORD DRAWING
THIS RECORD DRAWING HEREIN REFLECTS TO
THE BEST OF THE DESIGN ENGINEER'S
KNOWLEDGE, THE APPROXIMATE LOCATION OF
THE CONSTRUCTED WORK, USING
INFORMATION AS PROVIDED BY THE
CONTRACTORS AND SURVEYED GRADES.

C-14

OF **15** DWGS.

XREF 2436-WG
 DANEKER, KATIE 2/26/2008 4:58 PM
 G:\68237001-WALGREENS ROCKWALL\10CWATER AND SEWER DETAILS.DWG
 2/26/2008 1:56 PM
 LAST SAVED