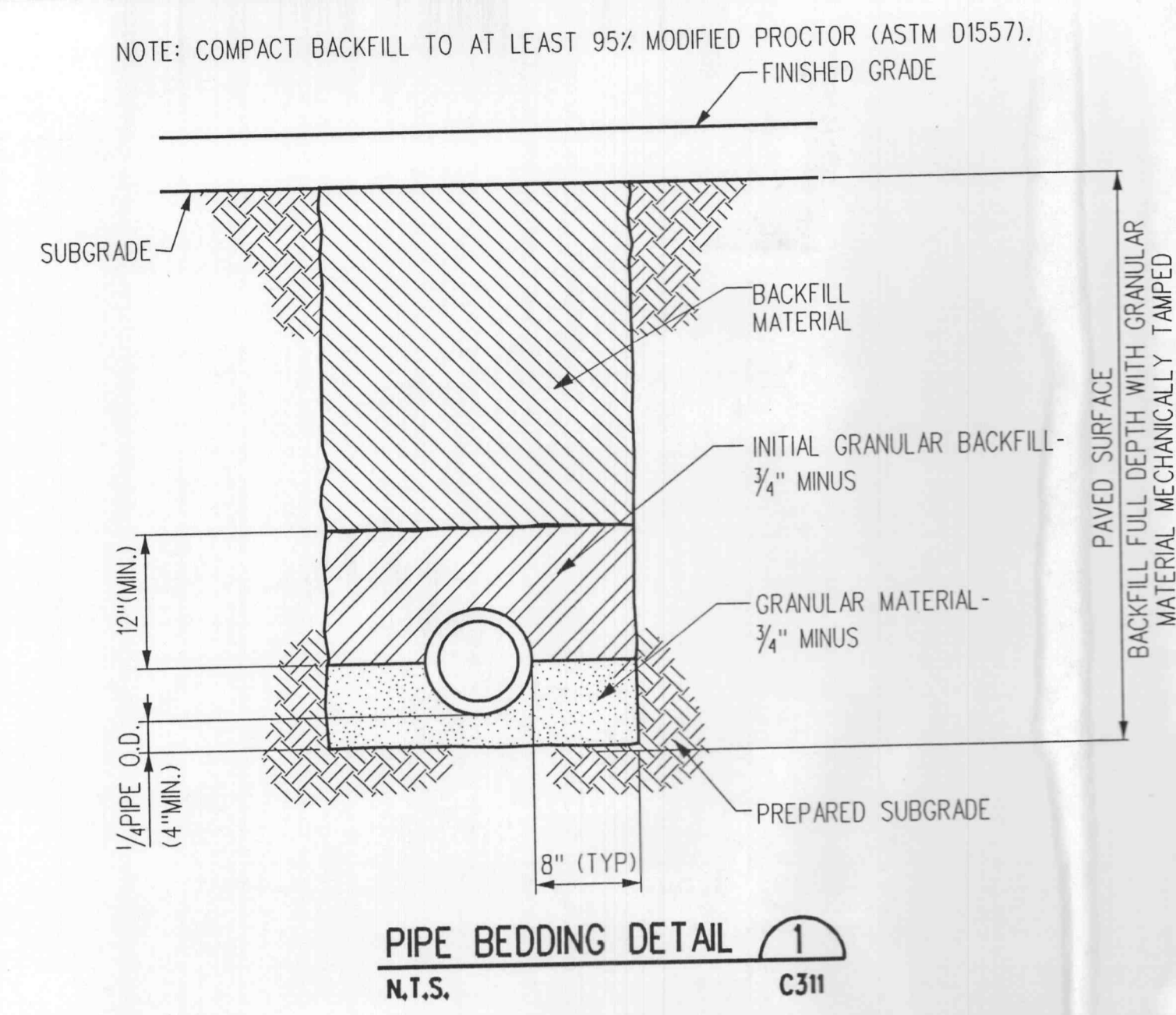
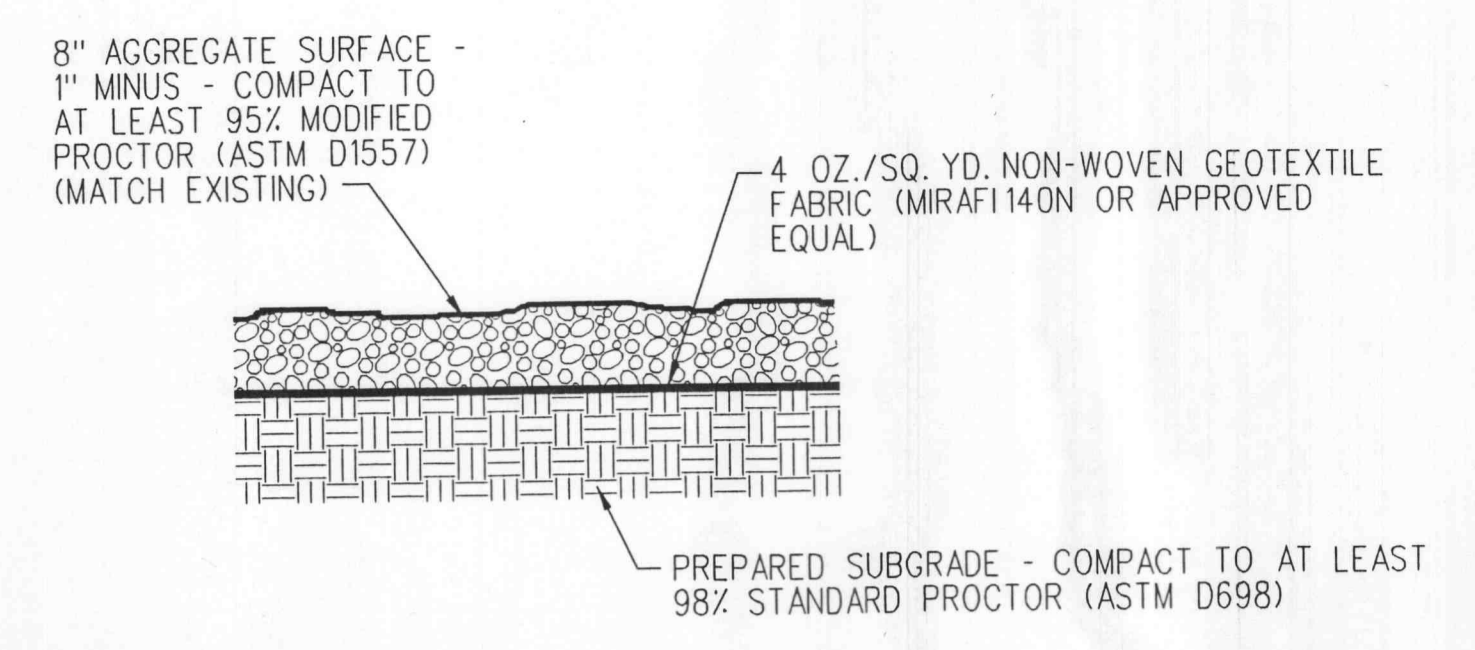


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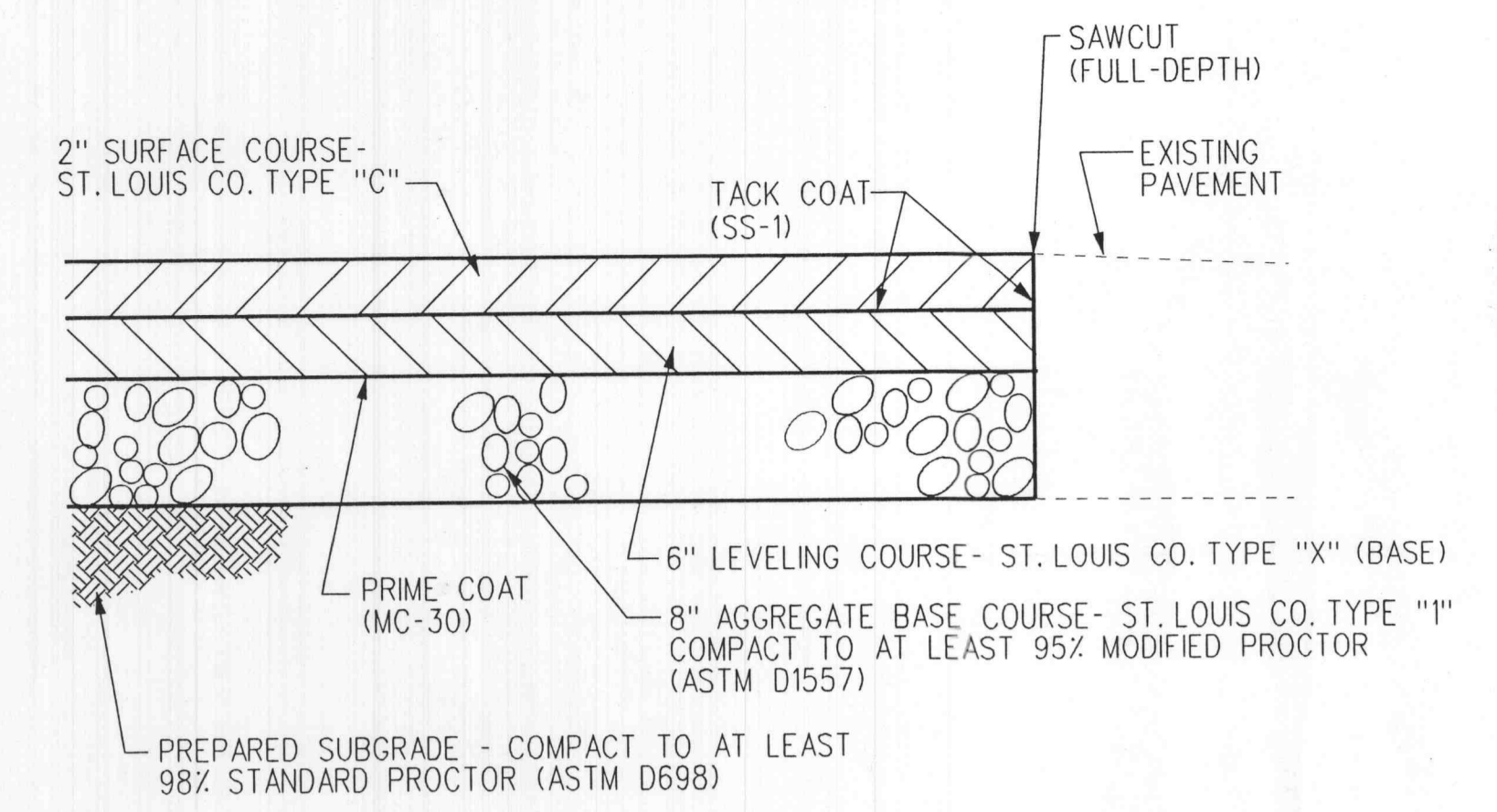
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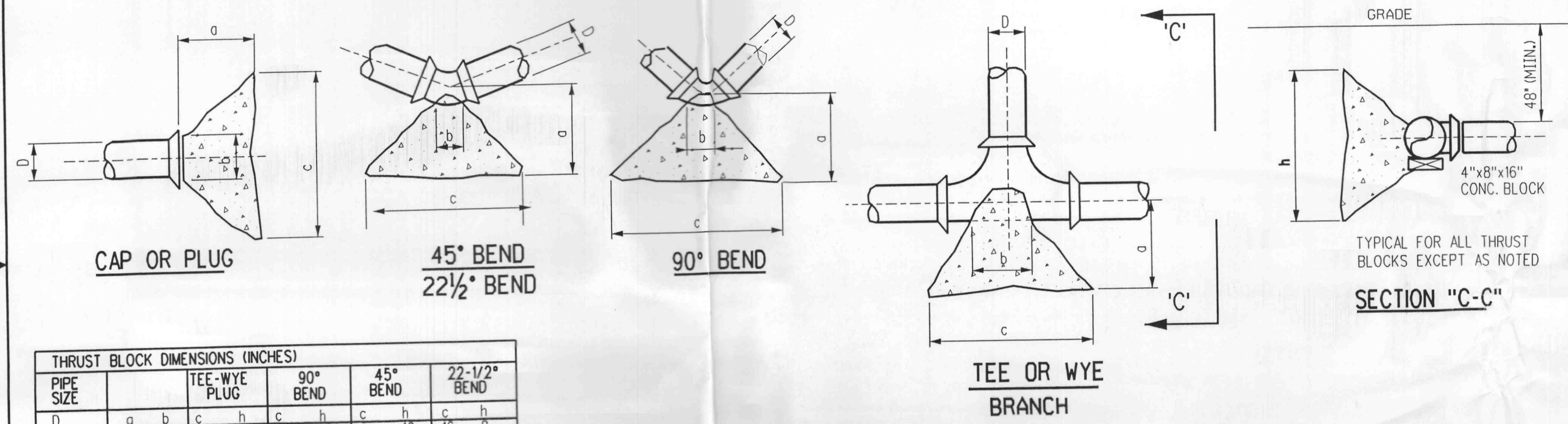
**PIPE BEDDING DETAIL 1**  
N.T.S. C311



**AGGREGATE PAVEMENT 2**  
N.T.S. C311



**ASPHALTIC CONCRETE PAVEMENT 3**  
N.T.S. C311



**THrust BLOCK - DETAILS 4**  
N.T.S. C311

PIPE SIZE	THRUST BLOCK DIMENSIONS (INCHES)									
	TEE-WYE PLUG		90° BEND		45° BEND		22-1/2° BEND			
D	a	b	c	h	c	h	c	h	c	h
4	14	4	26	13	30	15	24	12	16	8
6	22	6	36	18	44	22	32	16	24	12
8	29	8	50	25	58	29	42	21	30	15
10	37	10	62	31	74	37	55	27	40	20
12	44	12	74	37	88	44	55	33	46	23
14	52	14	86	43	103	52	76	38	54	27
16	58	15	96	49	118	58	86	43	60	30
18	66	16	112	56	134	66	96	49	70	35
20	74	18	124	62	148	74	109	55	78	39
24	88	22	130	74	173	88	131	65	93	47

REV.	BY	DESCRIPTION	DATE
97025			
207010-01	0	E DAVIS	ISSUED FOR CONSTRUCTION
			05/12/97

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STATE OF MISSOURI  
LEON W. SCHNUR  
REGISTERED PROFESSIONAL ENGINEER  
NUMBER E-17777

FRU-CON PROJECT NO. 207010-01  
FRU-CON ENGINEERING, INC.

15933 CLAYTON ROAD  
ST. LOUIS COUNTY  
BALLWIN, MISSOURI  
63011  
PHONE: (314) 391-6700  
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**MISCELLANEOUS CIVIL DETAILS**  
**FIRE WATER LINE EXTENSION**  
**300mm DIST. EXPR. LINE**

DRAWN BY	E. DAVIS	DATE	05/12/97	SCALE	AS NOTED	PLOT DATE	05/09/97
CHECKED BY	[Signature]	DATE	5/7/97				
PROJECT NO.	083	PLANT	16	SIZE	000.021	ZONE	C
						TYPE	NUMBER
							311
						REV.	0