

NOTES:

1. Pipe joints
Bell and spigot c.i. joints shall be made with dry braided jute and sulphur compound equal to "Mineralead". Flanged c.i. pipe joints shall be made with ring type gaskets equal to "Cranite", both sides coated with thread lubricant.
2. Pipe and fittings shall conform to the specifications set forth in the Bill of Material.
3. For manufacturers details of pumps refer to Fairbanks Morse & Co. TVA contract TV-K-41-21848 Dwg No's D-12288 and D-12289.

4. SYMBOLS:

- New lines
- - - Existing lines

5. Mark nos of pieces 97N105-1 to 97N105-29 are listed & purchased from Reference No WBM-24, Requisition No. 25964.
Mark nos 97N105-50 and above are listed on Bill of Material 97B1105.

REFERENCE DRAWINGS:
97B1105... Piping Bill of Material

Scale 1" = 20'

BACKWATER PROTECTION HARRIMAN, TENNESSEE			
PIPING WATERWORKS ADJUSTMENT GENERAL PLAN OF NEW & EXISTING LINES			
WATTS BAR PROJECT TENNESSEE VALLEY AUTHORITY DESIGN DEPARTMENT			
SUBMITTED	RECOMMENDED	APPROVED	
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
KNOXVILLE	10/21/40	3 M 3	97N105RE
RECORD DRAWING AS CONSTRUCTED			

COMPANION DRAWINGS: 97N106 & 97N107

DATE	BY	CHKD	APP'D
10/21/40	[Signature]	[Signature]	[Signature]

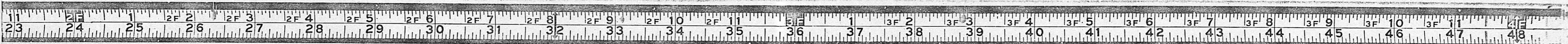


TVA 7870 (DES 2-40) TENNESSEE VALLEY AUTHORITY - DESIGN DEPARTMENT

MARK	QUANTITY	CLASS NO.	DESCRIPTION	REF. TO REQUEST NO.	ITEM	REQUEST NO.
97N105-			<u>Valves - Std. Flgd Gate - Double Disc - Non-Rising Stem - F&D. 125# Std. Crane No. 481 or equal.</u>			
-50	1		8"		1	WBM-28
-51	1		6"		2	do
			<u>Valves - Std. Flgd. Check - Tilting Disc Type. F&D. 125# Std. Equal to Chapman List No. 23 "Non-Slam".</u>			
-55	1		8"		3	WBM-28
-56	1		6"		4	do
			<u>Fittings - Std. Socrd. M.I. Galv. - Banded 150# W.S.P. 90° Ells</u>			
-58	2	G	3"		5	WBM-28
			<u>Fittings - Std. AWWA C.I. Class "D"</u>			
			<u>1/8" Bends - B & S</u>			
-60	1		10"		6	WBM-28
-61	1		6"		7	do
			<u>Reducers</u>			
-63	1		10" x 6" - Large end Bell		8	WBM-28
-64	1		10" x 6" - Small end Bell		9	do
			<u>Note - All Material listed on this B/M is for Raw Water Supplying Treatment Plant ex. as noted.</u>			
MADE F.S. 10-18-40			CHKD. RMG 10-21-40	SUP. RMG 10-21-40	INSPECTION	APP. P. 10/21
PIPING BILL OF MATERIAL						
BACK WATER PROTECTION PROJECT						
HARRIMAN, TENN.						
WATERWORKS ADJUSTMENT						
DWG. NOS. 97N105, 106 & 107						
KNOXVILLE, TENN. DATE 10-21-40						
SH. 1 OF 3 9M 97BM105						

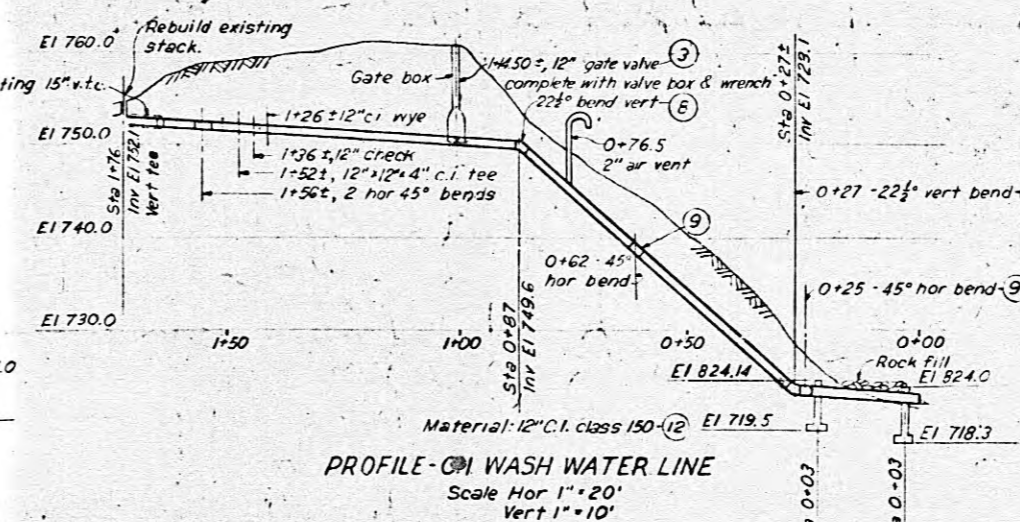
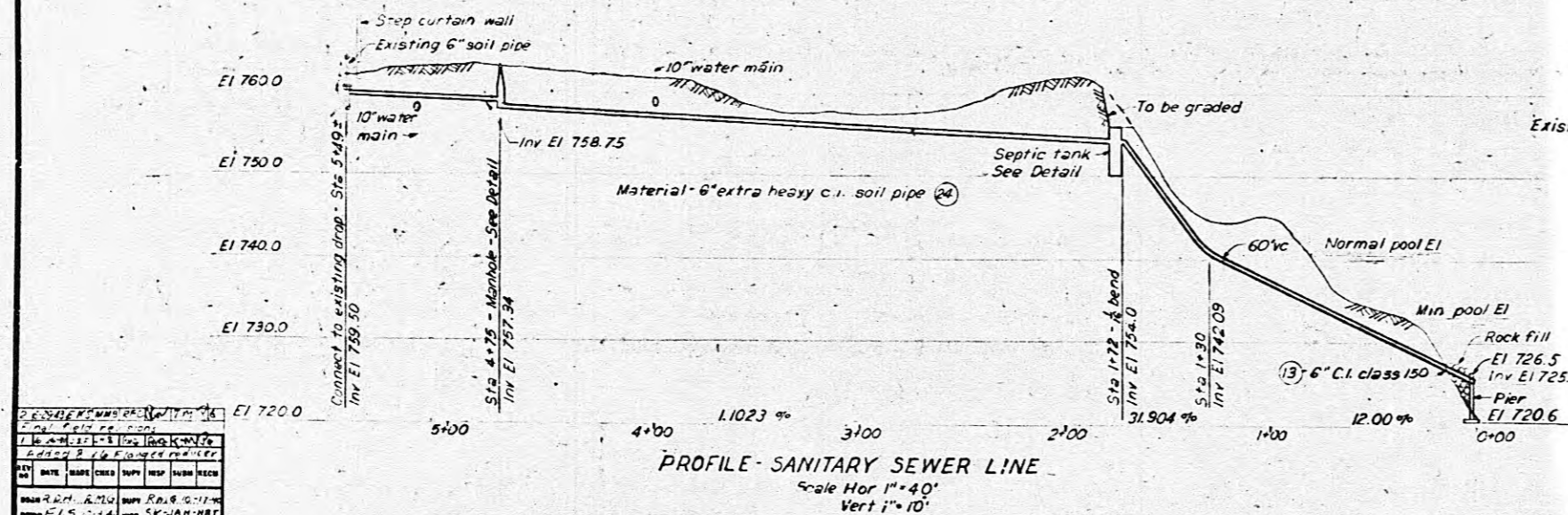
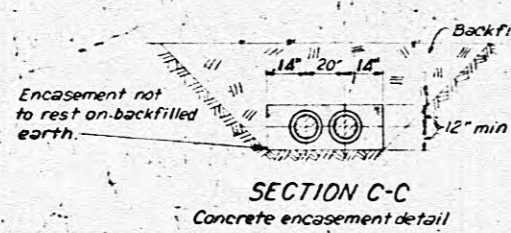
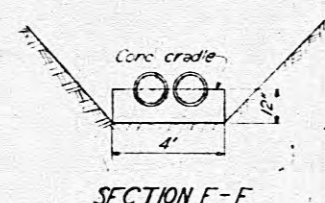
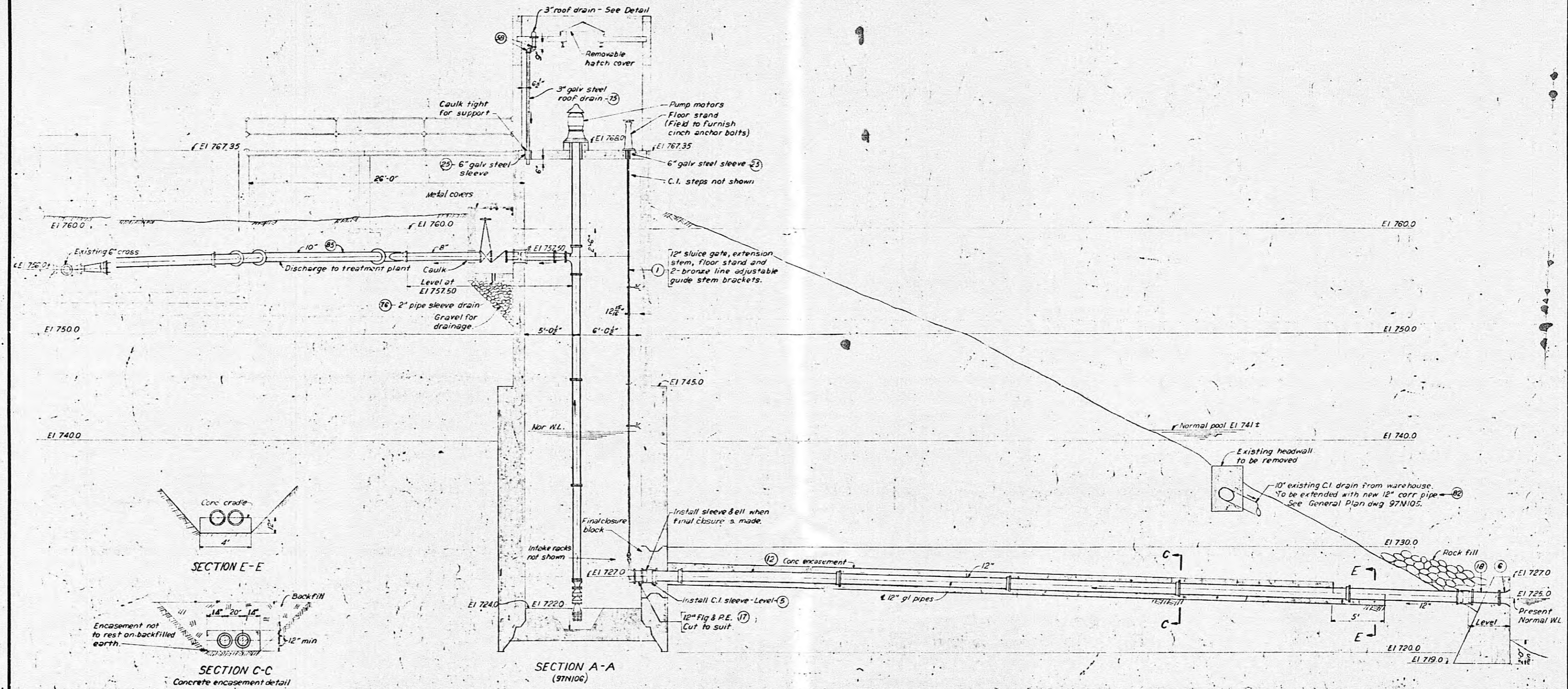
TVA 7870 (DES 2-40) TENNESSEE VALLEY AUTHORITY - DESIGN DEPARTMENT

MARK	QUANTITY	CLASS NO.	DESCRIPTION	REF. TO REQUEST NO.	ITEM	REQUEST NO.
97N105-			<u>Fittings - Std. A.W.W.A. C.I. Class D (Cont from Sh. 1) Y-Branches</u>			
-67	1		10" x 10" x 8" B-5-B		10	WBM-28
			<u>Sleeves</u>			
-69	1		10" - 12" long		11	WBM-28
-70	2		6" - 15" long		12	do
			<u>Plugs</u>			
-73	1		6"		13	WBM-28
			<u>Fittings - 125# Std. C.I. Flgd - F&D - BIK. Reducers</u>			
-74	1		8" x 6" Concentric			C
			<u>Pipe - Std. Wt. Steel Galv. Random lengths thrd. with couplings.</u>			
-75	20 ft	G	3"		20	WBM-28
-76	20 ft	G	2"		21	do
			<u>Pipe - O.D. Black Steel - 1/4" thick - Plain ends</u>			
-79	2 ft		14"		22	WBM-28
			<u>Pipe - Corrugated Iron Culvert, Galvanized #16 USS Gage with connection bands.</u>			
-82	80 ft	G	12"		23	WBM-28
			<u>Pipe - Std. C.I. Bell & Spigot Class 150</u>			
-85	54 ft		10"		14	WBM-28
-86	12 ft		6"		15	do
MADE F.S. 10-18-40			CHKD. RMG 10-18-40	SUP. RMG 10-18-40	INSPECTION	APP. P. 10/21
PIPING BILL OF MATERIAL						
BACK WATER PROTECTION PROJECT						
HARRIMAN, TENN.						
Added Mkt. No. 79						
DWG. NOS. 97N105, 106 & 107						
KNOXVILLE, TENN. DATE 10-21-40						
SH. 2 R1 OF 3 9M 97BM105						



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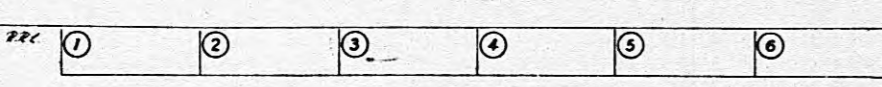


NO.	DESCRIPTION	DATE
1	AS SHOWN	
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For notes & reference drawings see 97N105

Scale 1/4"=1'-0"
Except as noted

BACKWATER PROTECTION HARRIMAN, TENNESSEE		
PIPING WATERWORKS ADJUSTMENT PUMPHOUSE, INTAKE, & PROFILES - SH 2		
WATTS BAR PROJECT TENNESSEE VALLEY AUTHORITY DESIGN DEPARTMENT		
SUBMITTED BY <i>John Allen</i>	RECOMMENDED BY <i>George E. Col</i>	APPROVED BY <i>W. H. Hagan</i>
KNOXVILLE	10/21/40	9 M 8 97N107
DRAWING AS CONSTRUCTED <i>W. H. Hagan</i> 7-18-43		



F.H.

TVA 7870 (DEC 2-40)

TENNESSEE VALLEY AUTHORITY - DESIGN DEPARTMENT

MARK	QUANTITY	CLASS NO.	DESCRIPTION	REF. TO REQUEST NO.	ITEM	REQUEST NO.
97N105-			Pipe - Std. Flgd C.I. Class B F & D 125" Std			
-90.	1 pc.		8" - 12'-0" long F. to F.	16	WBM-28	
-91.	1 pc.		6" - 12'-0" long F. to F.	17	do	
-93.	1 pc.		8" - 5'-0" long Flg. & Plain End	18	do	
-94.	1 pc.		6" - 5'-0" long Flg. & Plain End.	19	do	
			Floor Drain - Ex. Hy. C.I. Bell Trap, Female Bottom Thrd. Outlet - Claw A-2132 or equal.			
-96.	1	G	2" Drain	24	WBM-28	
			Roof Drain - C.I. Body "Dura-coated" female bott. thrd. outlet, complete with dome strainer, gravel stop & clamping ring. Zurn Fig. Z-125 or equal.			
-98.	1	G	3" Drain	25	WBM-28	
			Gaskets - Red rubber, ring type - 1/16" thick equal to "Cranite" - For 125" Std Flgd. Conns.			
-100	4		8" x 11"		C	
-101	*5		6" x 8 3/4"		C	
			Bolts - Am. Std. Steel Machine - Etc.			
-103	32		3/4" x 3 1/2" for 8" Flgd. Conns.		C	
-104	32 40		3/4" x 3" for 6" Flgd. Conns.		C	
			Joint Caulking Material, As Manufactured by Atlas Mineral Products Co. or equal			
-105	65 lbs.		Jute - 1/2" dry braided } For C.I. Bell & Spigot "Mineralead" } & C.I. Soil Pipe Hub & Spigot joints.		C	
-106	650 lbs					C

MADE F.S. 10-18-40	CHKD RMG 10-21-40	SUP RMG 10-21-40	INSP N.S.	APP P. 10/21	PIPING BILL OF MATERIAL
NO.	DATE	MADE	CHKD	APP	DESCRIPTION
1	6-25-71	J.B.E.	J.H.S.	P.P.	Increased Mkt. 101 and 104
REVISIONS					BACKWATER PROTECTION PROJECT HARRIMAN, TENN.
					DWG. NOS. 97N105, 106 & 107
					KNOXVILLE, TENN. DATE 10-21-40
					SH. 38 OF 3 9 M 8 97BM105

Maps & Engr. Records Section
Knoxville Listed J-812 11



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TVA 7970 (DEC 2-40)

TENNESSEE VALLEY AUTHORITY - DESIGN DEPARTMENT

MARK	QUANTITY	CLASS. NO.	DESCRIPTION	REF. TO REQUEST NO.	ITEM	REQUEST NO.
97N105-			Pipe - Std. Flgd C.I. Class B F & D 125" Std			
-90	1 pc.		8" - 12'-0" long F. to F.		16	WBM-28
-91	1 pc.		6" - 12'-0" long F. to F.		17	do
-93	1 pc.		8" - 5'-0" long Flg. & Plain End		18	do
-94	1 pc.		6" - 5'-0" long Flg. & Plain End.		19	do
			Floor Drain - Ex. Hy. C.I. Bell Trap, Female Bottom Thrd. Outlet - Claw A-2132 or equal.			
-96	1	G	2" Drain		24	WBM-28
			Roof Drain - C.I. Body "Dura-coated" female bott. thrd. outlet, complete with dome strainer, gravel stop & clamping ring. Zurn Fig. Z-125 or equal.			
-98	1	G	3" Drain		25	WBM-28
			Gaskets - Red rubber, ring type - 1/4" thick equal to Granite - For 125" Std Flgd. Conns.			
-100	4		8" x 11"			C
-101	*5		6" x 8 3/4"			C
			Bolts - Am. Std. Steel Machine - Etc.			
-103	32		3/4" x 3 1/2" for 8" Flgd. Conns.			C
-104	32		3/4" x 3" for 6" Flgd. Conns.			C
	40		Joint Caulking Material, As Manufactured by Atlas Mineral Products Co. or equal			
-105	65 lbs.		Jute - 1/2" dry braided			C
-106	650 lbs		"Minerallead" } For C.I. Bell & Spigot & C.I. Soil Pipe Hub & Spigot joints.			C

MADE F. S. 10-18-40	CHKD. RMG 10-21-40	SUP RMG 10-21-40	INSP N.H.	APP. P. 10/21	PIPING BILL OF MATERIAL
NO.	DATE	MADE	CHKD.	APP.	DESCRIPTION
1	6-25-41	J.C.F.	J.H.S.	R.P.	increased MK. 101 and 104
					BACKWATER PROTECTION PROJECT HARRIMAN, TENN.
					DWG. NOS. 97N105, 106 & 107
					KNOXVILLE, TENN. DATE 10-21-40
					SH. 39 OF 3 9 MB 97BM105

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