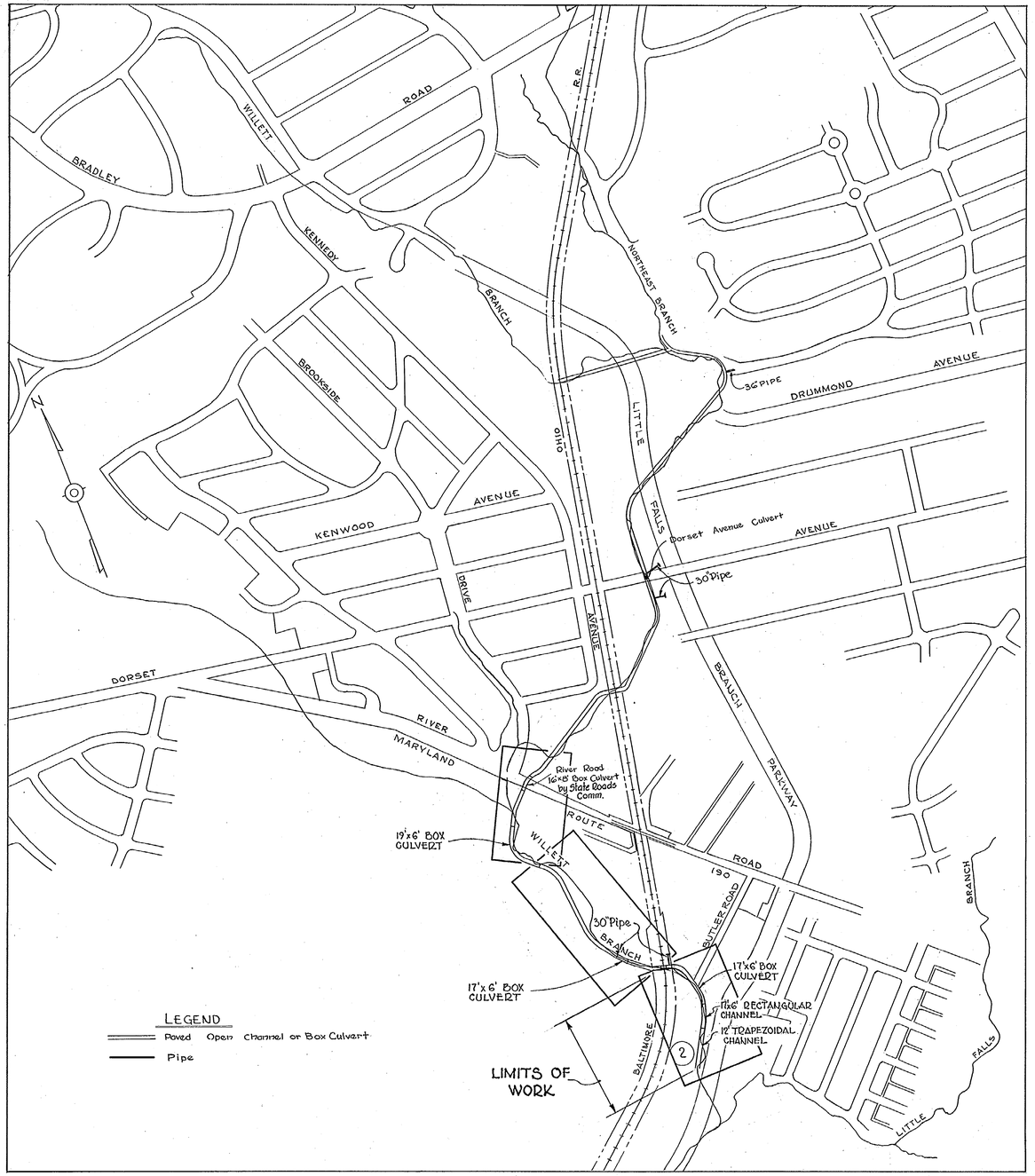
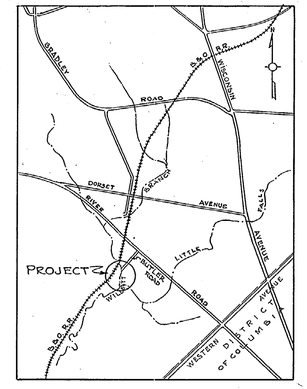
BENCH MARKS

1.- WSSC 17108 TP #3 N&W in north side 16" maple 70'± South of Little Falls Branch 250'± north west of end of court at Westridge Road Elev. 195.50
2.- WSSC #376 □ on Δ ledge west end of northeast wing wall of B.&O. R.R. Culvert about 850' north of River Road Elev. 250.670
3.- WSSC #378 ⊞ Northeast corner wall of B.&O. R.R. Culvert approx. 2850 ft. north of River Road and 2300' south of Bradley Road Elev. 276.139



LOCATION PLAN

SCALE: 1"=400'



VICINITY MAP

Scale: 1"=1/2 Mile

GENERAL NOTES

1.- All elevations shown are based on W.S.S.C. datum.
2.- All pipe, box culvert and channel elevations shown are invert elevations unless otherwise noted.
3.- Information concerning existing underground utilities is based on the most accurate data available. The contractor shall dig test pits well in advance of trenching to determine the exact location of the utilities. Where there is interference between the location of the existing utility and the proposed work, the existing utility shall be relocated by others as directed by the Engineer.
4.- The Commision will not acquire construction strips or R/W's or Easements other than those shown on the drawings.
5.- Deleted

6.- All excavated material not required for backfill or fill shall become the property of the Contractor and shall be removed from the site.
7.- All changes in channel bottom widths and depths shall be constant between the limits shown on the drawings.
8.- "Left" and "Right" terms are based on orientation looking upstream
9.- Paved channels and box culverts are shown thus:
Sodded channels are shown thus:
10. The contractor shall fill and grade the existing stream bed except where directed. Grading shall be done in such a manner as to insure positive drainage.
11. Approximate top of cut slopes are shown as: —C—C—C—
12. Approximate toe of fill slopes are shown as: —F—F—F—

CHECKED: [illegible]
EXAMINED: S

Contract No. 94-D

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	WASHINGTON SUBURBAN SANITARY COMMISSION April 11, 1961 DATE — Robert J. McLeod CHIEF ENGINEER	CONTRACT NO. 94-D	AUTHOR: STORM May 1, 1956; PROJECT; PART; JOB NO. 56DW10	LOCATION PLAN AND GENERAL NOTES	GLEN ECHO-CHEVY CHASE DISTRICT WILLETT BRANCH STORM DRAIN LITTLE FALLS BRANCH TO B.&O. R.R	DRAWING NO. 1 OF 4	SCALE AS SHOWN 56331 Y

W.O. 4881-2

CE 487-133 -1

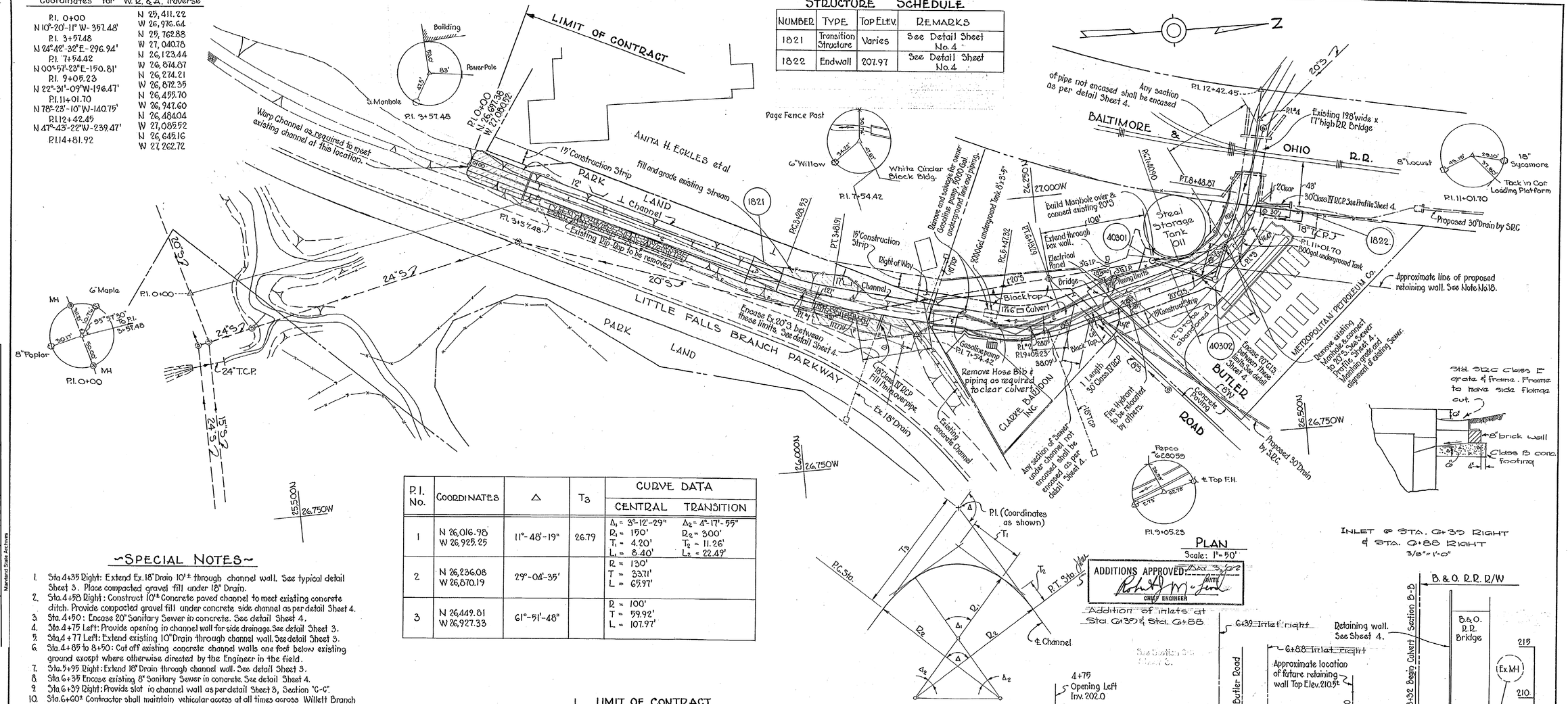
SD FILE NO. 134

Coordinates for W.R. & A. Traverse

P.I. 0+00	N 25,411.22
N 10°-20'-11" W- 357.48'	W 26,976.64
P.I. 3+57.48	N 25,762.88
N 24°-42'-32" E- 296.94'	W 27,040.78
P.I. 7+54.42	N 26,123.44
N 00°-57'-23" E- 190.81'	W 26,874.87
P.I. 9+05.23	N 26,274.21
N 22°-31'-09" W- 196.47'	W 26,872.35
P.I. 11+01.70	N 26,455.70
N 78°-23'-10" W- 140.75'	W 26,947.60
P.I. 12+42.45	N 26,484.04
N 47°-43'-22" W- 239.47'	W 27,085.92
P.I. 14+81.92	N 26,645.16
	W 27,262.72

STRUCTURE SCHEDULE

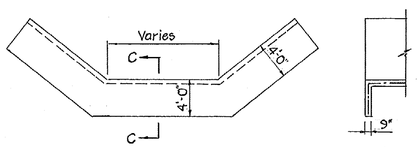
NUMBER	TYPE	TOP ELEV.	REMARKS
1821	Transition Structure	Varies	See Detail Sheet No. 4
1822	Endwall	207.97	See Detail Sheet No. 4



P.I. No.	COORDINATES	Δ	T_3	CURVE DATA CENTRAL	CURVE DATA TRANSITION
1	N 26,016.98 W 26,925.25	11°-48'-19"	26.79	Δ_1 = 3°-12'-29" R_1 = 150' T_1 = 4.20' L_1 = 8.40'	Δ_2 = 4°-17'-55" R_2 = 300' T_2 = 11.26' L_2 = 22.49'
2	N 26,236.08 W 26,870.19	29°-04'-35'		R = 130' T = 33.71' L = 65.97'	
3	N 26,449.81 W 26,927.33	61°-51'-48"		R = 100' T = 59.92' L = 107.97'	

~SPECIAL NOTES~

1. Sta. 4+35 Right: Extend Ex. 18" Drain 10'± through channel wall. See typical detail Sheet 3. Place compacted gravel fill under 18" Drain.
2. Sta. 4+58 Right: Construct 10'± Concrete paved channel to meet existing concrete ditch. Provide compacted gravel fill under concrete side channel as per detail Sheet 4.
3. Sta. 4+50: Encase 20" Sanitary Sewer in concrete. See detail Sheet 4.
4. Sta. 4+75 Left: Provide opening in channel wall for side drainage. See detail Sheet 3.
5. Sta. 4+77 Left: Extend existing 10" Drain through channel wall. See detail Sheet 3.
6. Sta. 4+85 to 8+50: Cut off existing concrete channel walls one foot below existing ground except where otherwise directed by the Engineer in the field.
7. Sta. 5+95 Right: Extend 18" Drain through channel wall. See detail Sheet 3.
8. Sta. 6+35 Encase existing 8" Sanitary Sewer in concrete. See detail Sheet 4.
9. Sta. 6+39 Right: Provide slot in channel wall as per detail Sheet 3, Section "C-C".
10. Sta. 6+60± Contractor shall maintain vehicular access at all times across Willett Branch in the vicinity of Butler Road.
11. Sta. 6+95: Remove existing Butler Road Bridge.
12. Sta. 6+88 Right: Provide slot in channel wall as per detail Sheet 3, Section "C-C".
13. Sta. 7+50: Construct 20" Sanitary Sewer as per Plan and Profile.
14. Sta. 6+47 Right: Provide 1 length 30" Class IV RCP up @ 3.0% Brick shat pipe.
15. Sta. 8+00 Right: Remove and salvage for owner 800 gal. underground tank.
16. Sta. 8+33 Right: Extend 18" Drain through channel wall. See detail Sheet 3.
17. Sta. 8+38 Right: Provide opening for and construct 30" Class IV RCP as per Plan and Profile.
18. Sta. 7+70 Provide tie-in steel for proposed retaining wall as per detail Sheet 4. Property owner to stake out retaining wall prior to construction. Manhole 40301 location to be adjusted if necessary to be south of proposed retaining wall.
19. Sta. 6+95: Contractor shall pave full right of way of Butler Road on each side of Box Culvert in accordance with standard detail 57182-L to the limits shown on plan.



ELEVATION — SECTION "C-C"

CHANNEL CUT OFF WALL

Scale: 1/8" = 1'-0"

EXAMINED FOR	
WATER & SEWERS	4/4/61
R/W-REQ'D.	3/31/61
OTHER UTILITIES	3/22/61
	4/28/61

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

WASHINGTON SUBURBAN SANITARY COMMISSION
April 11, 1961 — DATE
CHIEF ENGINEER

CONTRACT NO. 94-D

	WATER	SEWER
AUTHOR		
PROJECT		
PART		
JOB NO.		

PLAN AND PROFILE

GLEN ECHO-CHEVY CHASE DISTRICT
WILLETT BRANCH STORM DRAIN
LITTLE FALLS BRANCH TO B.&O. R.R.

DRAWING NO. 2 OF 4

SCALE AS SHOWN

207 NW 5.
60336
Y
18 NW 10-2
NW 2-3

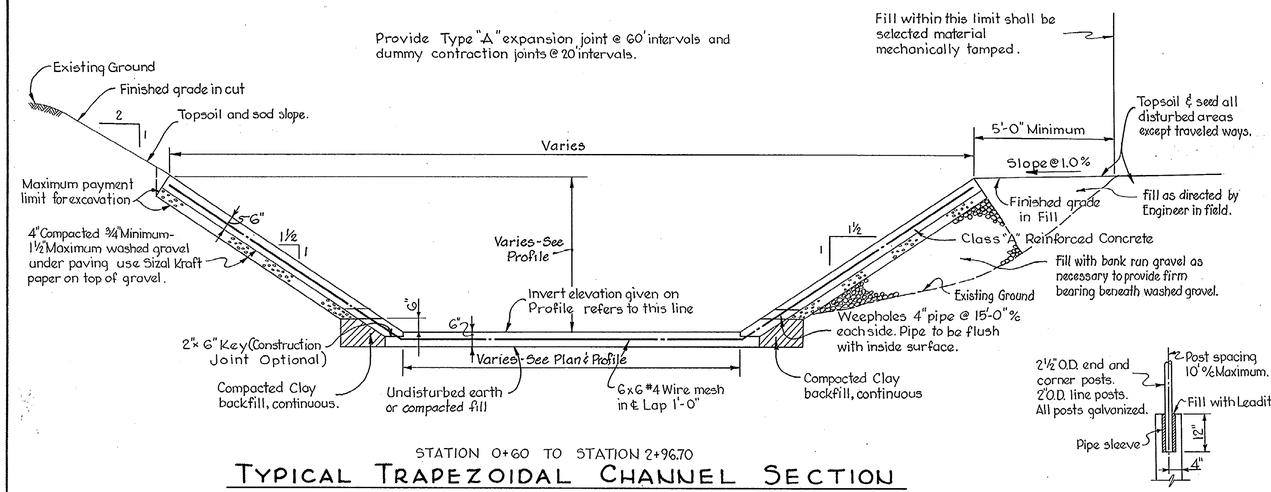
W.O. 4881-2

F.B. 1874, 1861, 1847

CE 087-133 v2

SD FILE NO. 134

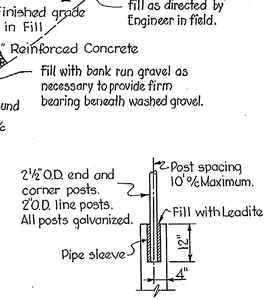
Construct Typical Rectangular Channel between the following stations:
3+28.53 to 4+80



STATION 0+60 TO STATION 2+96.70

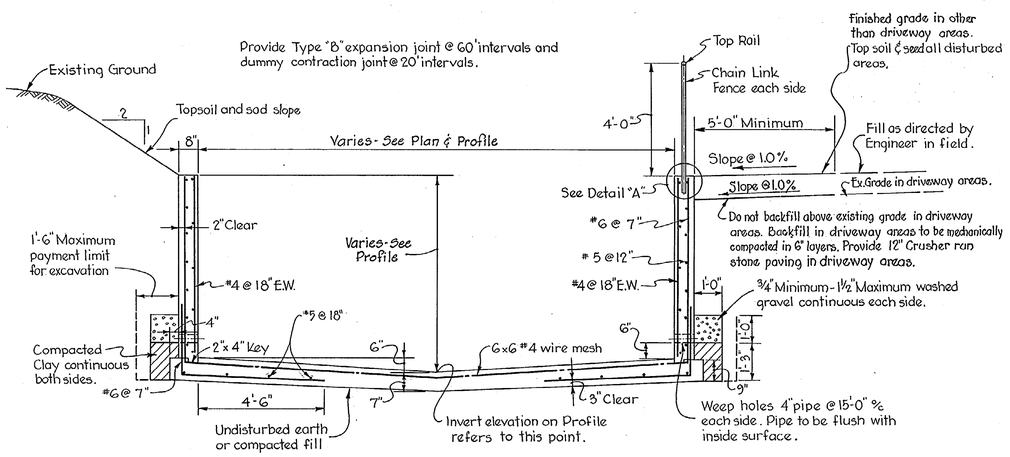
TYPICAL TRAPEZOIDAL CHANNEL SECTION

Scale: ⅜" = 1'-0"



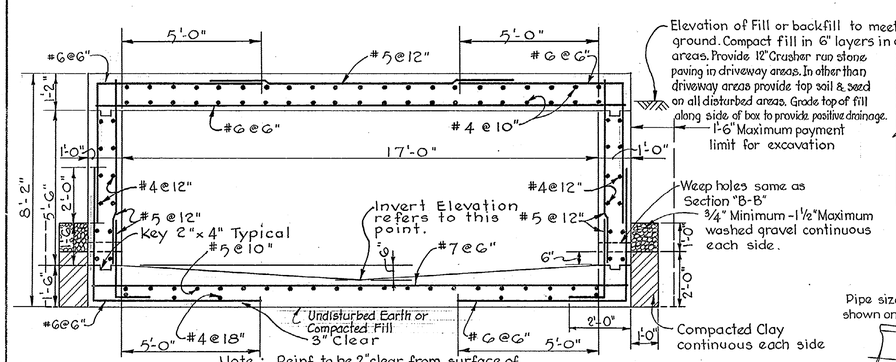
DETAIL "A"

Scale: ½" = 1'-0"



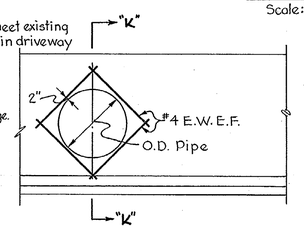
TYPICAL RECTANGULAR CHANNEL SECTION

Scale: ⅜" = 1'-0"

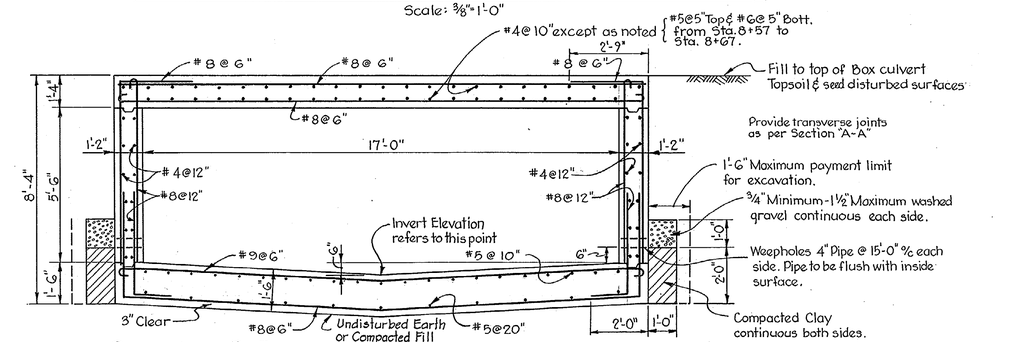


SECTION A - A FROM STA. 4+80 TO STA. 8+32 EXCEPT AS NOTED FOR SECT. C-C

Scale: ⅜" = 1'-0"



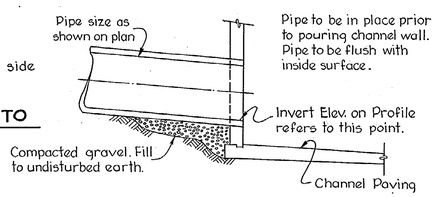
ELEVATION



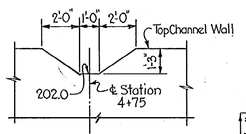
SECTION B-B FROM STA. 8+32 TO STA. 8+67

Scale: ⅜" = 1'-0"

Note: Where culvert curves place Reinf. Steel radially. Measure bar spacing at ℄ of Culvert for horizontal bars in top slab and bottom slab. Provide Type "B" expansion joint @ 60' intervals and dummy contraction joint @ 20' intervals.

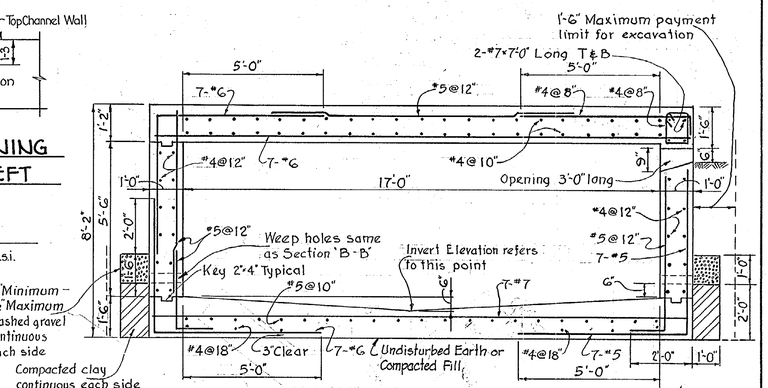


SECTION "K-K"



WALL OPENING STA. 4+75 LEFT

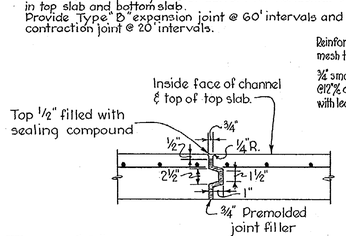
Scale: ¼" = 1'-0"



Note: Reinforcing Steel is for a 3' Long Section

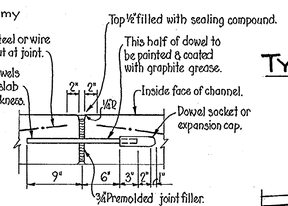
SECTION C-C - STA. 6+37.5 TO 6+40.5 & 6+86.5 TO 6+89.5

Scale: ⅜" = 1'-0"



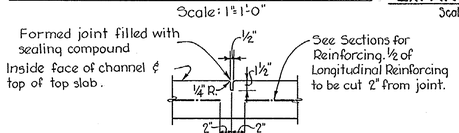
TYPE "B" EXPANSION JOINT

Scale: 1½" = 1'-0"



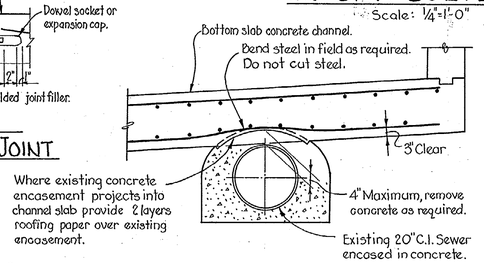
TYPE "A" EXPANSION JOINT

Scale: 1" = 1'-0"



TYPICAL DUMMY CONTRACTION JOINT

Scale: 1" = 1'-0"



PROJECTION OF EXISTING SEWER ENCASEMENT IN CHANNEL SLAB

Scale: ½" = 1'-0"

TYPICAL PIPE OPENING IN RECTANGULAR CHANNEL OR BOX CULVERT

Scale: ¼" = 1'-0"

GENERAL STRUCTURAL NOTES

1. All concrete for paving and structures shall be Class "A" - 3500 p.s.i.
2. All concrete for cradle and fill shall be Class "C" - 2000 p.s.i.
3. All exposed edges of concrete shall have a 1" - 45° chamfer.
4. Minimum concrete protection on reinforcing steel shall be 2" unless otherwise noted.
5. Expansion joints shall be as noted on section.
6. Where joints are specified they shall be provided across the full cross section.
7. Unformed exposed concrete surfaces shall have float finish.
8. Sisal Kraft paper shall be placed on ground or gravel bases prior to placing concrete paving and structures.

Contract No. 94-D

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	WASHINGTON SUBURBAN SANITARY COMMISSION — April 11, 1961 (DATE) — Robt J. McLeod (CHIEF ENGINEER)	CONTRACT NO. 94-D	AUTHOR / PROJECT / PART / JOB NO. (WATER, SEWER)	DETAILS	GLEN ECHO-CHEVY CHASE DISTRICT WILLETT BRANCH STORM DRAIN LITTLE FALLS BRANCH TO B. & O. R.R.

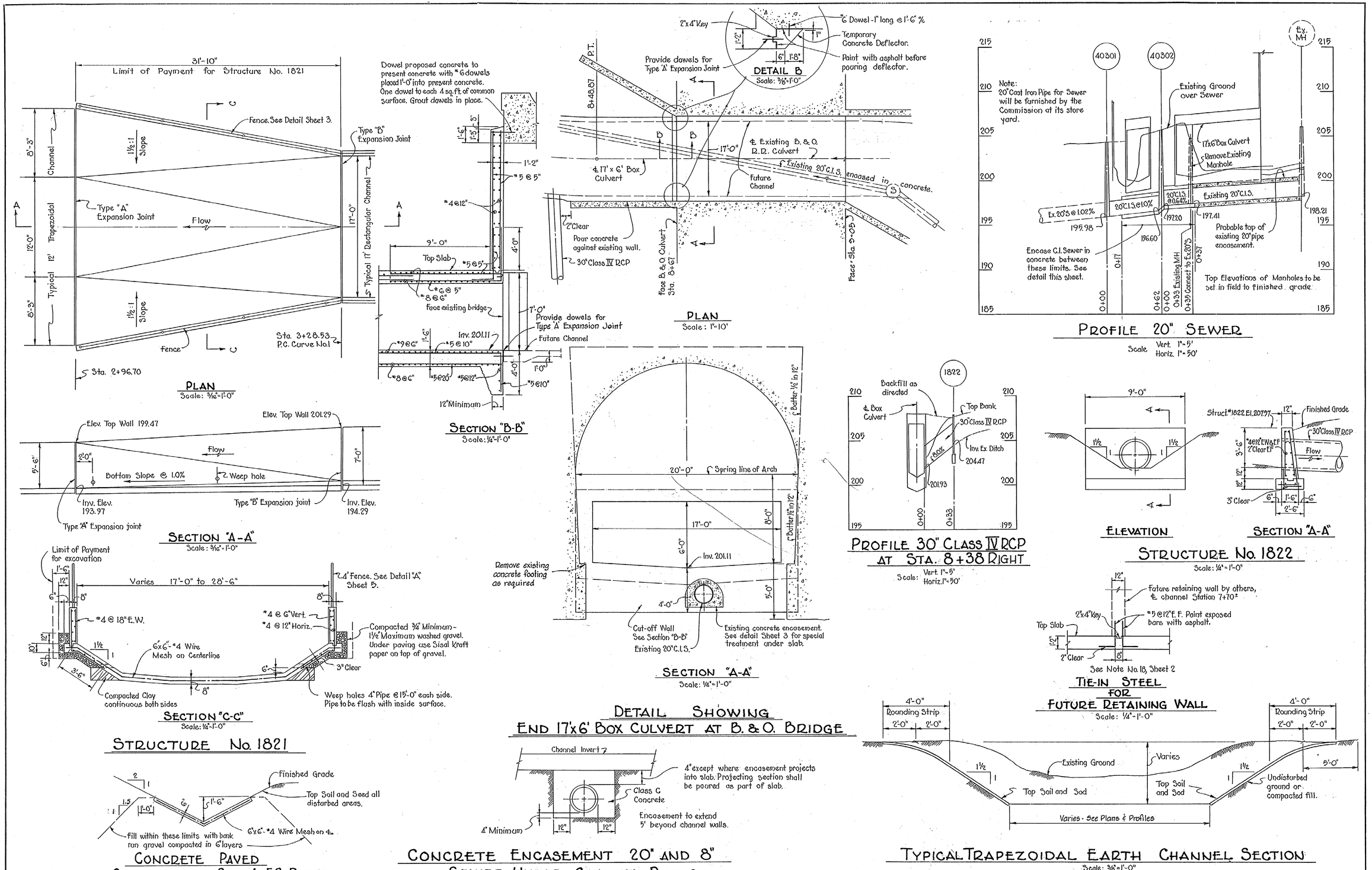
DRAWING	SCALE	
NO. 3 OF 4	AS SHOWN	60337 Y

W.O. 4881-2

CE 487-133-3

SD FILE NO. 134

Maryland State Archives



See General Structural Notes Drawing No 5

Contract No. 94-D

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	WASHINGTON SUBURBAN SANITARY COMMISSION April 11, 1961 (DATE) — Robert J. McLeod (CHIEF ENGINEER)	CONTRACT NO. 94-D	AUTHOR / PROJECT / PART / JOB NO. — WATER / SEWER	DETAILS	GLEN ECHO-CHEVY CHASE DISTRICT WILLETT BRANCH STORM DRAIN LITTLE FALLS BRANCH TO B.&O. R.R.	DRAWING NO. 4 OF 4 — SCALE AS SHOWN — 60338 Y

W.O. 4881-2

CE 487-133-4

SD FILE NO. 134