

STORM DRAIN

CHICAGO AVE. TO BLAINE ST. AND EUCALYPTUS AVE.

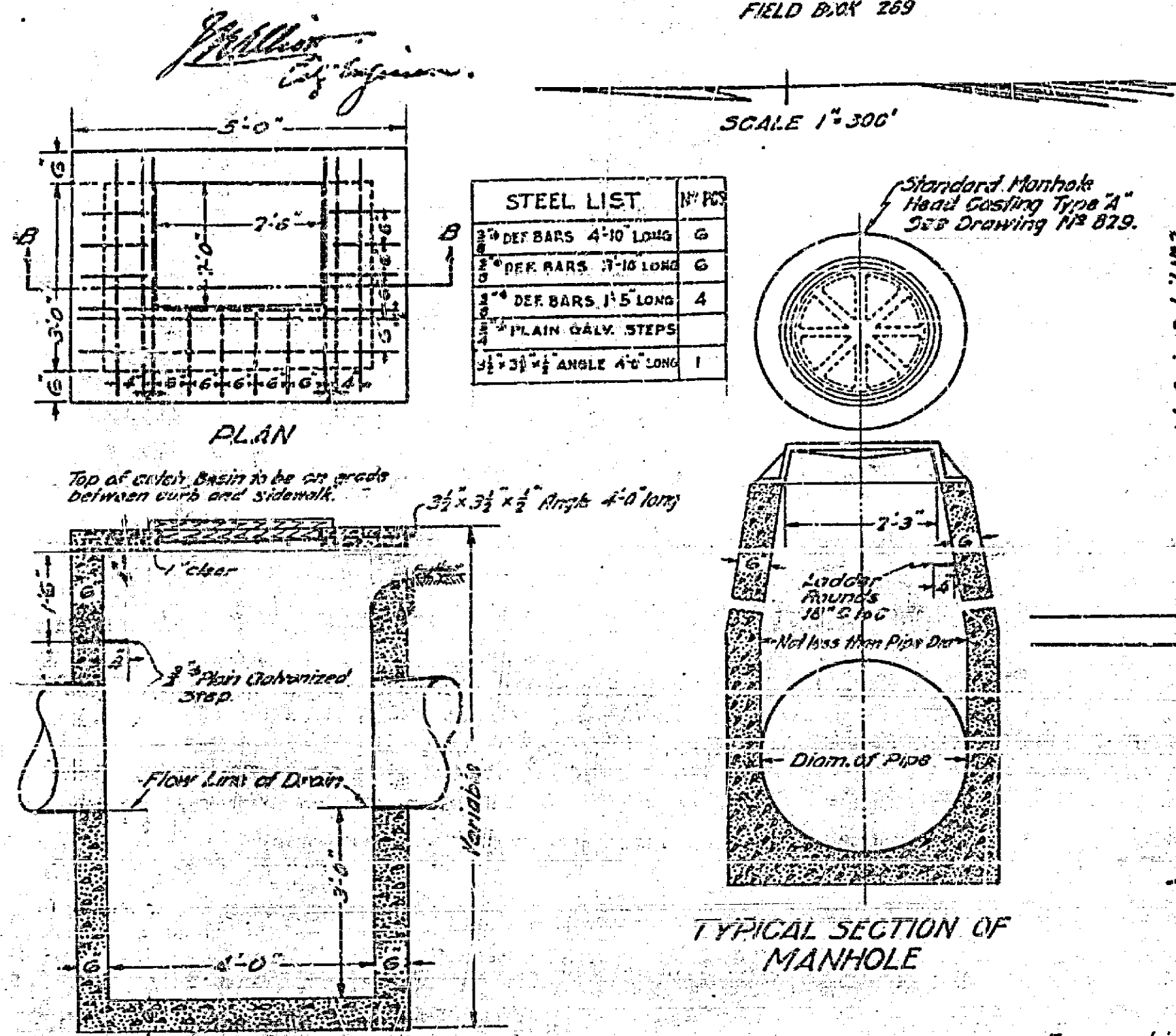
Constructed by Street Dept. 1933

ENGINEERING DEPT. CITY OF RIVERSIDE

SEPT. 1933

FIELD BOOK 269

Drawing Number	Sheet Number	Total Sheets	Books
328	1	3	269-272-50
Drawn	Checked	Approved	
W.B. Murray	A.N. Kelly		

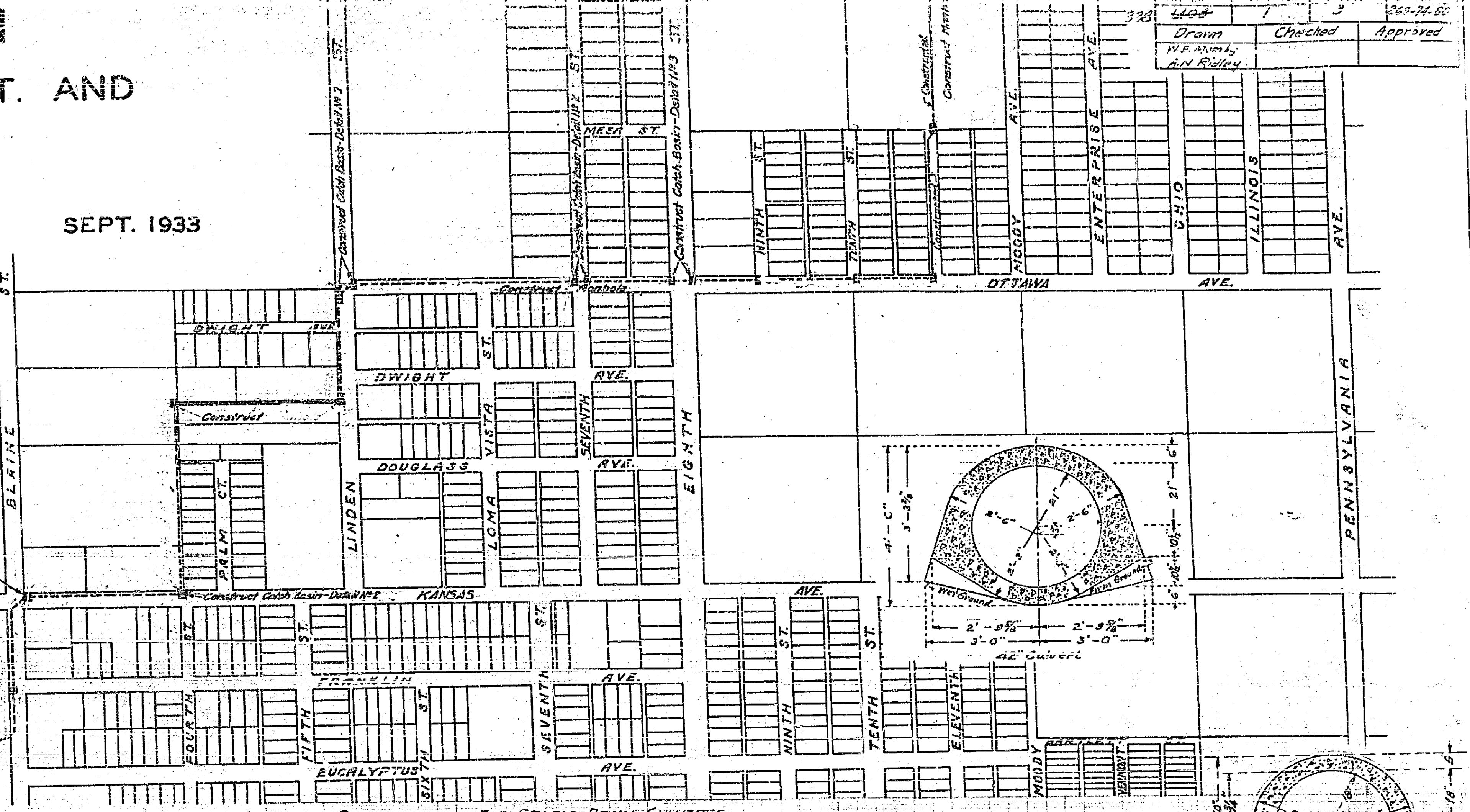
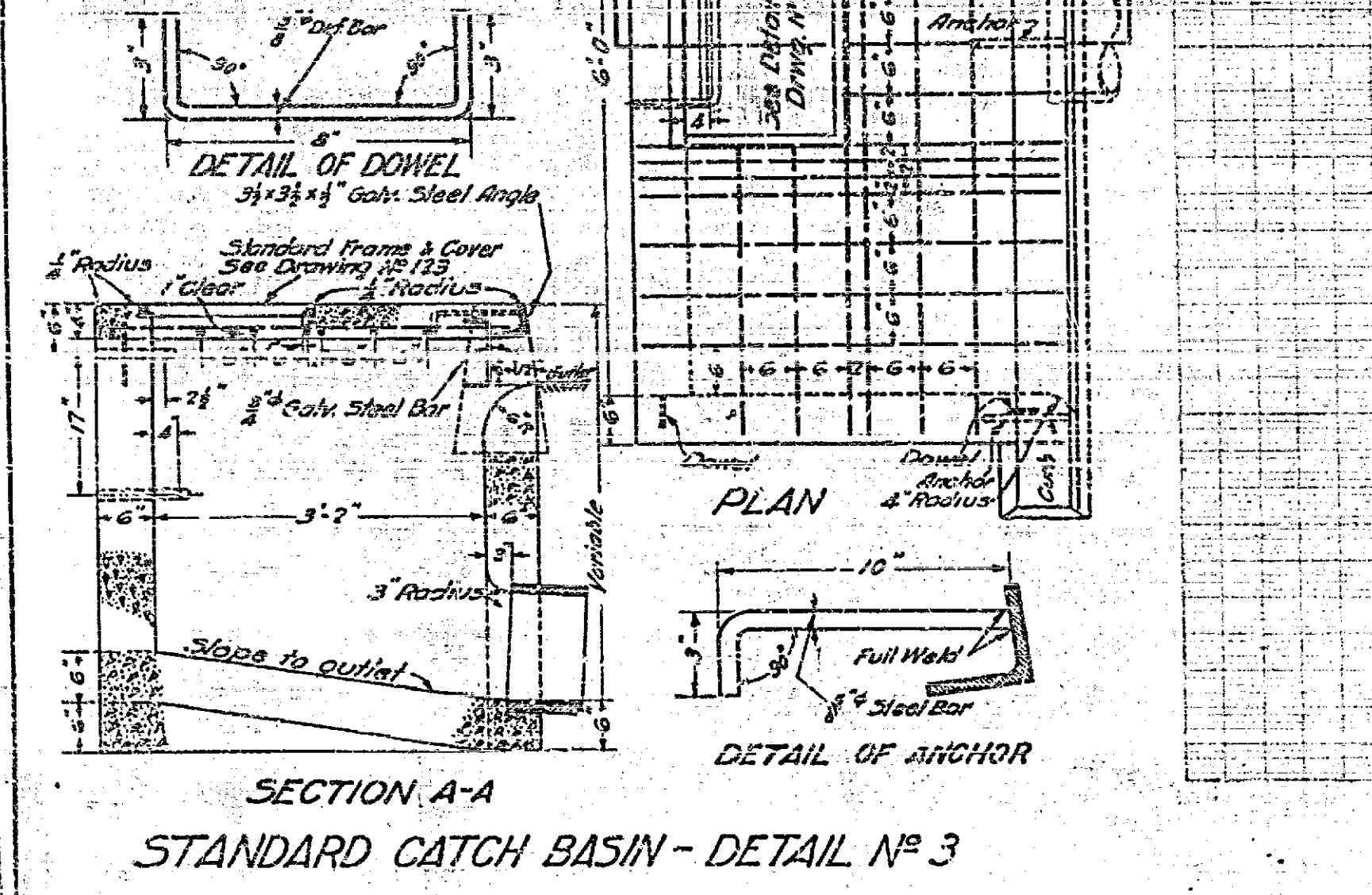


STEEL LIST

MATERIAL	QUANTITY
3" DEF BARS 4'-10" LONG	6
3" DEF BARS 3'-10" LONG	6
3" DEF BARS 1'-5" LONG	4
PLAIN GALV. STEPS	
3/8" x 3/8" ANGLE 4'-0" LONG	1

STEEL LIST

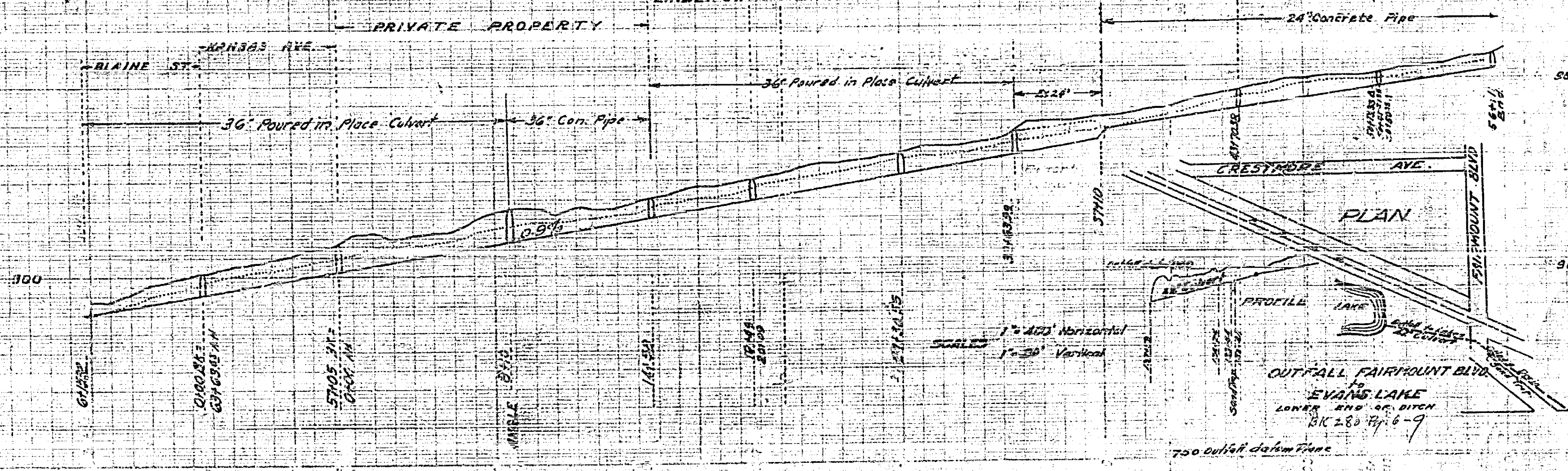
MATERIAL	QUANTITY
3" x 3" x 1/4" GALV. STEEL ANGLE	3
3" x 3" x 1/4" GALV. STEEL ANGLE	12
3" x 3" x 1/4" GALV. STEEL ANGLE	6
3" x 3" x 1/4" GALV. STEEL ANGLE	1
DOWELS	4
ANCHORS	3
FRAME & COVER SET	1
PLAIN GALV. STEPS	



SPECIFICATIONS FOR STORM DRAIN CULVERTS

Excavations to be made to construct all work shown on plan. Bottom of trenches shall be excavated true to form and shape of bottom of invert. All excavated material not required for backfilling to be removed from vicinity of work.

Where ground in which a structure is to be constructed is composed of soft or spongy material, said material shall be removed to such a depth, not exceeding two feet, so that the replacing thereof with gravel, tamped firm, and unyielding will provide a firm foundation. All foundations and subgrade for structures shall be made unyielding firm. All concrete structures shall be of the following mix: Cement - 1 sack, sand - 2 1/2 cu. ft., rock - 3 1/2 cu. ft. Water - 53 lbs. or 6 3/4 gals. - Concrete must be carefully placed in horizontal layers, tamped, formed, spaded and the face of the forms sufficiently topped with mauls until the concrete is free from voids, air, water or rock pockets. Layers of concrete shall not be topped off with washed sand but carried full thickness to the point of ending by using a tamping plate vertically and securely braced. Before placing fresh concrete on concrete which has set, the latter shall be washed clean and brushed with a thin layer of cement grout. No concrete shall be deposited under water and the excavation must be kept free from water by pumping or otherwise. All exposed concrete shall be protected from the sun and wind with wet burlap as soon as it can be placed upon the fresh concrete without marring the surface. After initial set the exposed concrete shall be covered with sand or dirt and kept wet continually for ten days. The whole structure shall be given an abundant sprinkling of water twice a day for ten days. Forms should be built according to plans. Forms shall be thoroughly wet and clean just before the concrete is placed. All forms shall be given a sufficient application of stainless oil so that the concrete will not adhere to the forms. Forms shall not be used that have become broken or deformed in any manner that would result in the deformation of the finished structure. Manholes shall be constructed as shown on plans. Inlets shall be built as shown on plans. All streets, alleys or rights of way where the surface over the trenches has been paved, shall after being backfilled and compacted, be repaved without delay in a workmanlike manner with like material and in the same manner as to repair the surface with the same class of pavement as was removed.

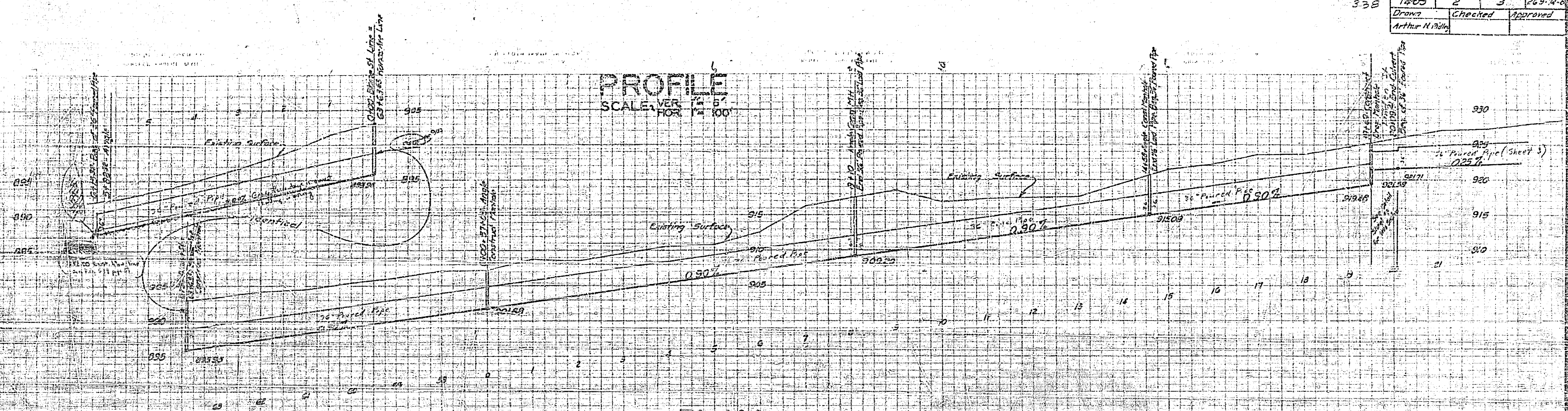


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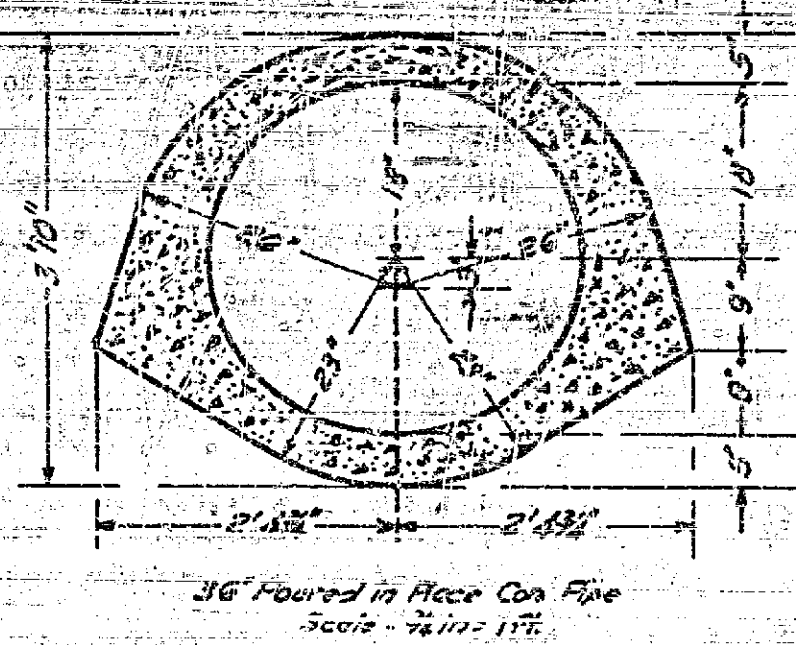
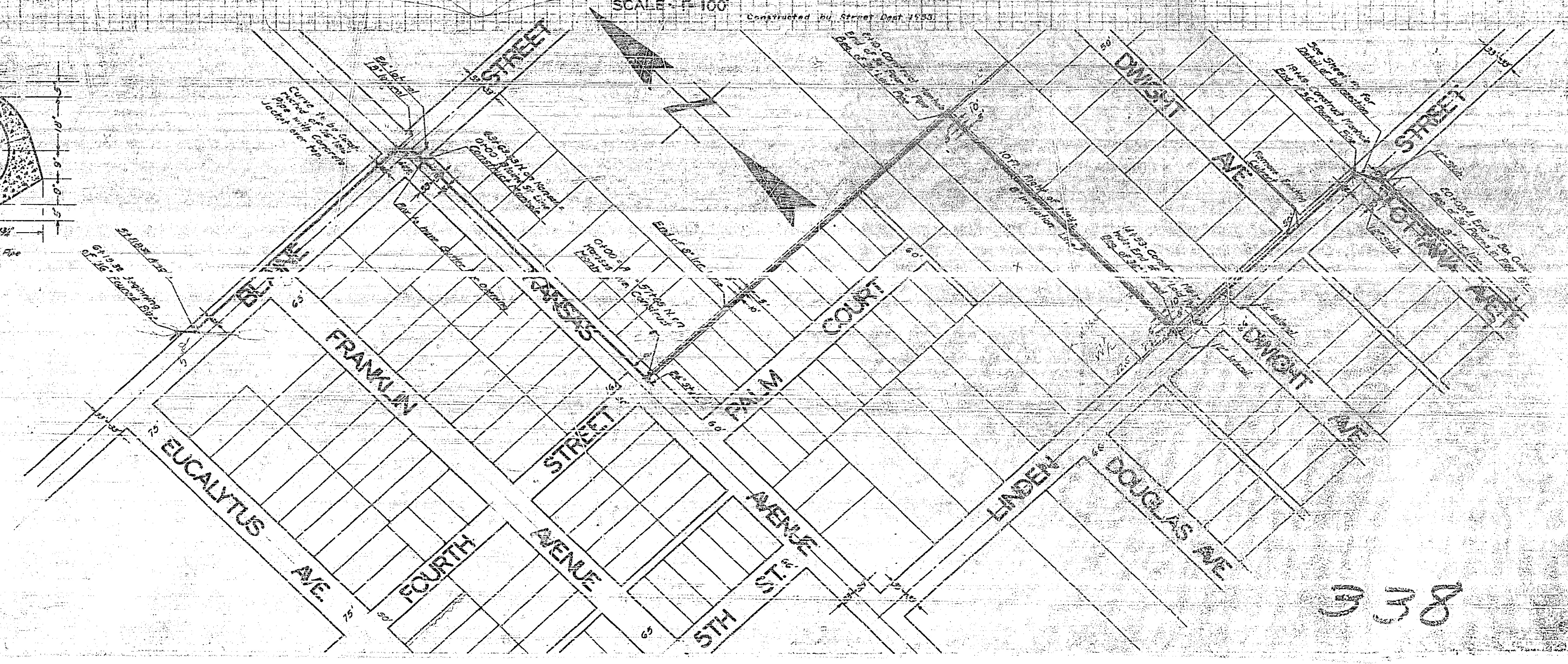
Ottawa Storm Drain			
Drawing Number	Sheet Number	Sheet	Book
1405	2	3	263-24
Drawn	Checked	Approved	
Arthur N. [unclear]			

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PROFILE
SCALE: VERT. 1" = 10'
HOR. 1" = 100'



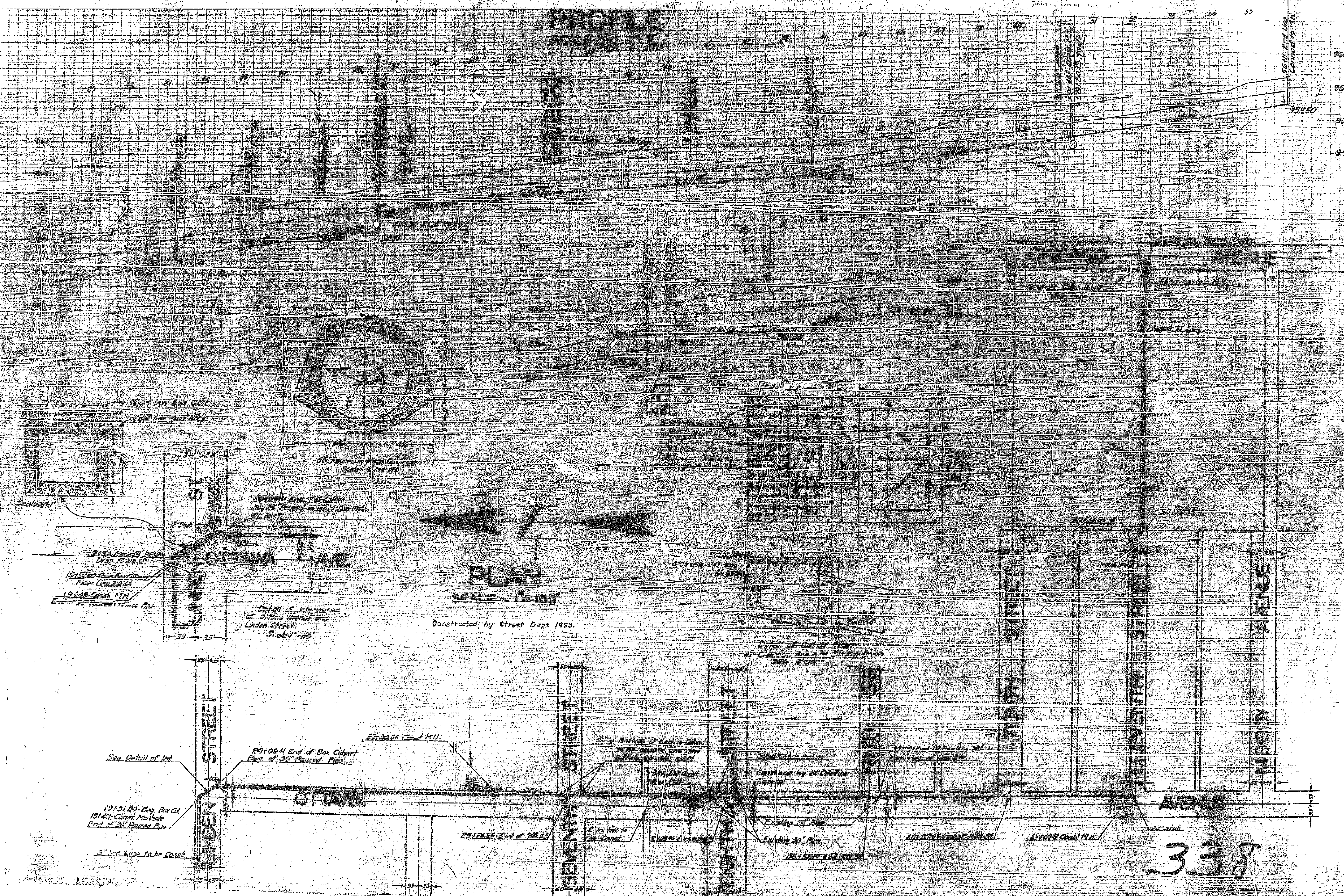
PLAN
SCALE: 1" = 100'



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Ottawa Storm Drain			
Drawing Number	Sheet Number	Total Sheets	Total Pages
14-02	3	3	269-74-80
Drawn By	Checked By	Approved By	
Arthur H. Riely			



PLAN
SCALE 1" = 100'

Constructed by Street Dept 1935.

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