FLOOD DETENTION RESERVOIR NO. 13

468 - 76 - 245 - 81097 - 000 - 000 - 001

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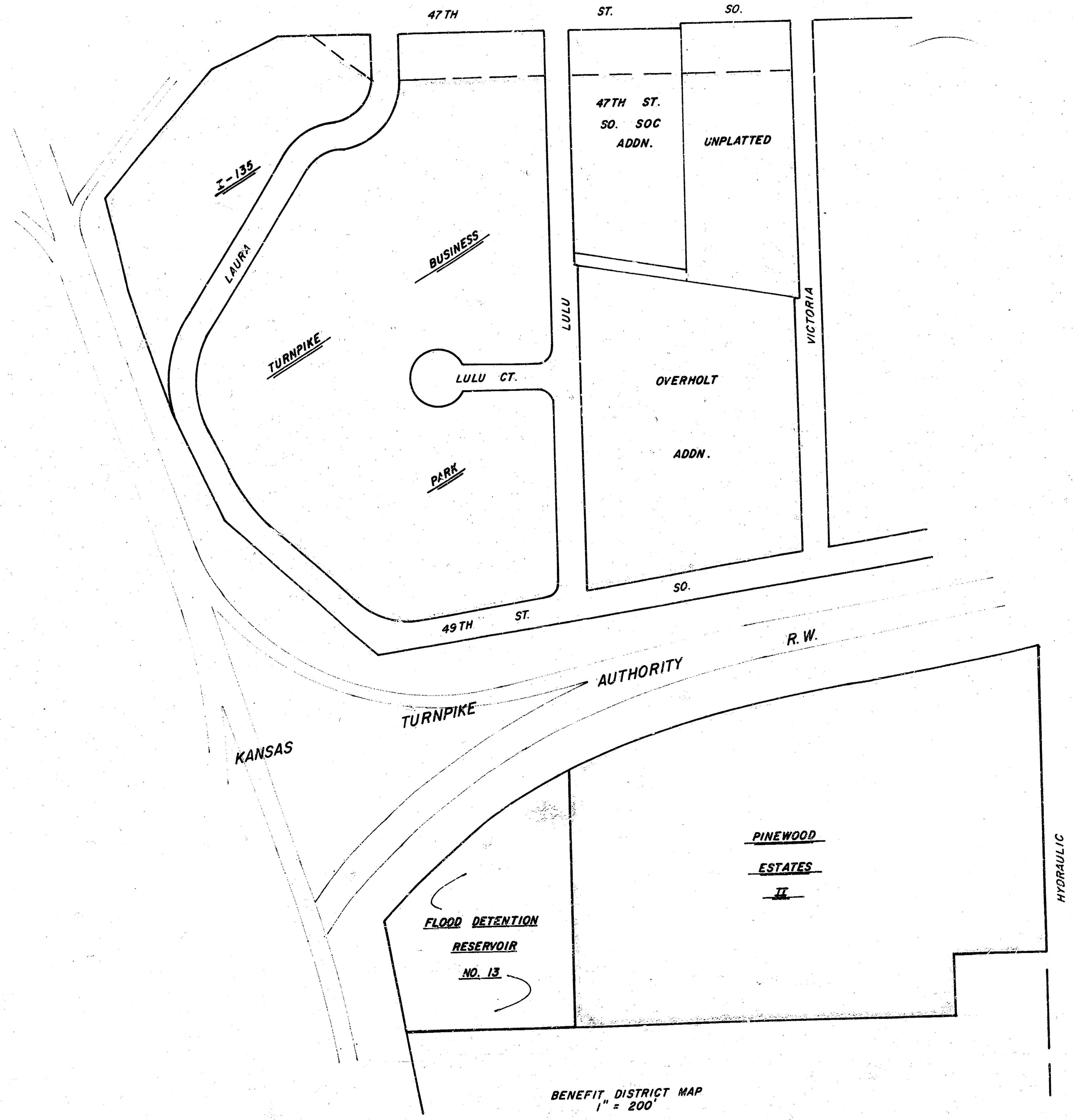
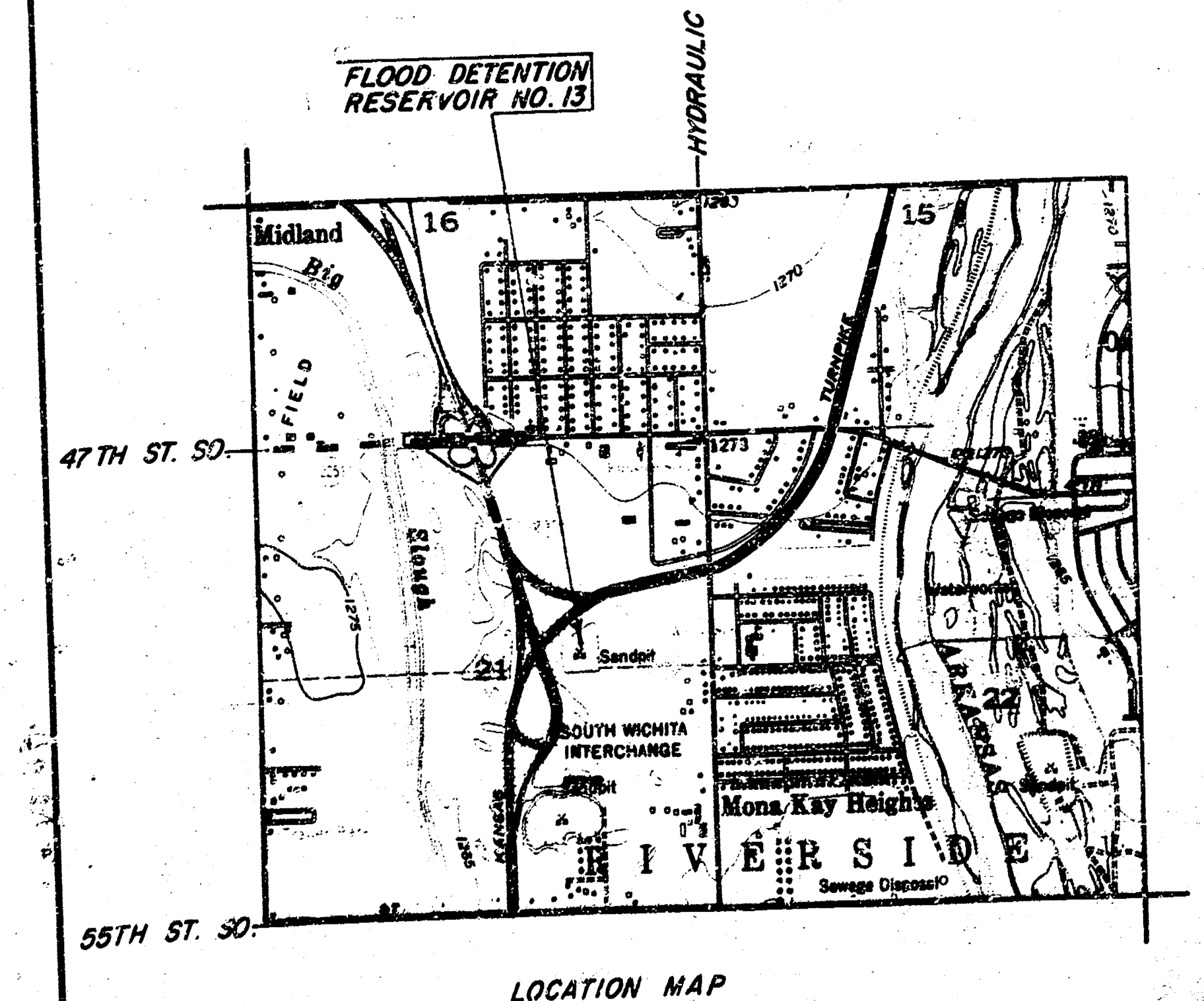


BENEFIT DISTRICT MAP
1" = 200'



LOCATION MAP

GENERAL NOTES

Contractor shall co-ordinate construction with that of storm sewer No. 229.

Contractor shall be responsible for contacting the utility companies for locations.

Contractor shall be responsible for obtaining electricity usage at the pump station. Cost to be included in bid price of pump station.

Contractor shall be responsible for any irons moved or destroyed due to construction. A registered land surveyor or professional engineer shall be obtained to replace any irons.

The constractor shall be responsible for the construction permits and fees required by the Kansas Turnpike Authority. Permits may be obtained by calling the K.T.A. - 682-4537.

The wire fence along the K.T.A. shall be removed and replaced in good condition. Only the minimum amount of fence necessary shall be removed and replaced. The contractor shall provide temporary fence closing every night thru out the construction period.

The K.T.A. Right of Way shall be regraded to its original slope and elevation after construction is complete. These areas shall be fertilized, seeded and mulched.

The detention reservoir is to be cross-sectioned both before and after construction.

The 12" spigot end section shall be considered as incidental to the cost of the 12" R.C.P.

Contractor has access to the reservoir off Hydraulic thru Pinewood Estates II.plat.

Site Preparation bid shall include: grading & construction of the 10 foot service access road, any tree removal necessary for the access road or for the excavation and shaping of the reservoir side slope areas and the back-fill and compaction of fill areas.

Note!

by whom? Paid?

Excavation to be only cut on bottom or 18,003 CY?

CITY OF WICHITA, KS.

R. W. BRUGGEMAN —— DIRECTOR OF ENGINEERING

Revised 11-18-81

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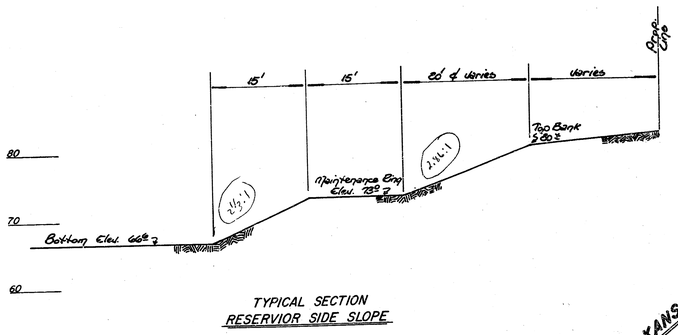
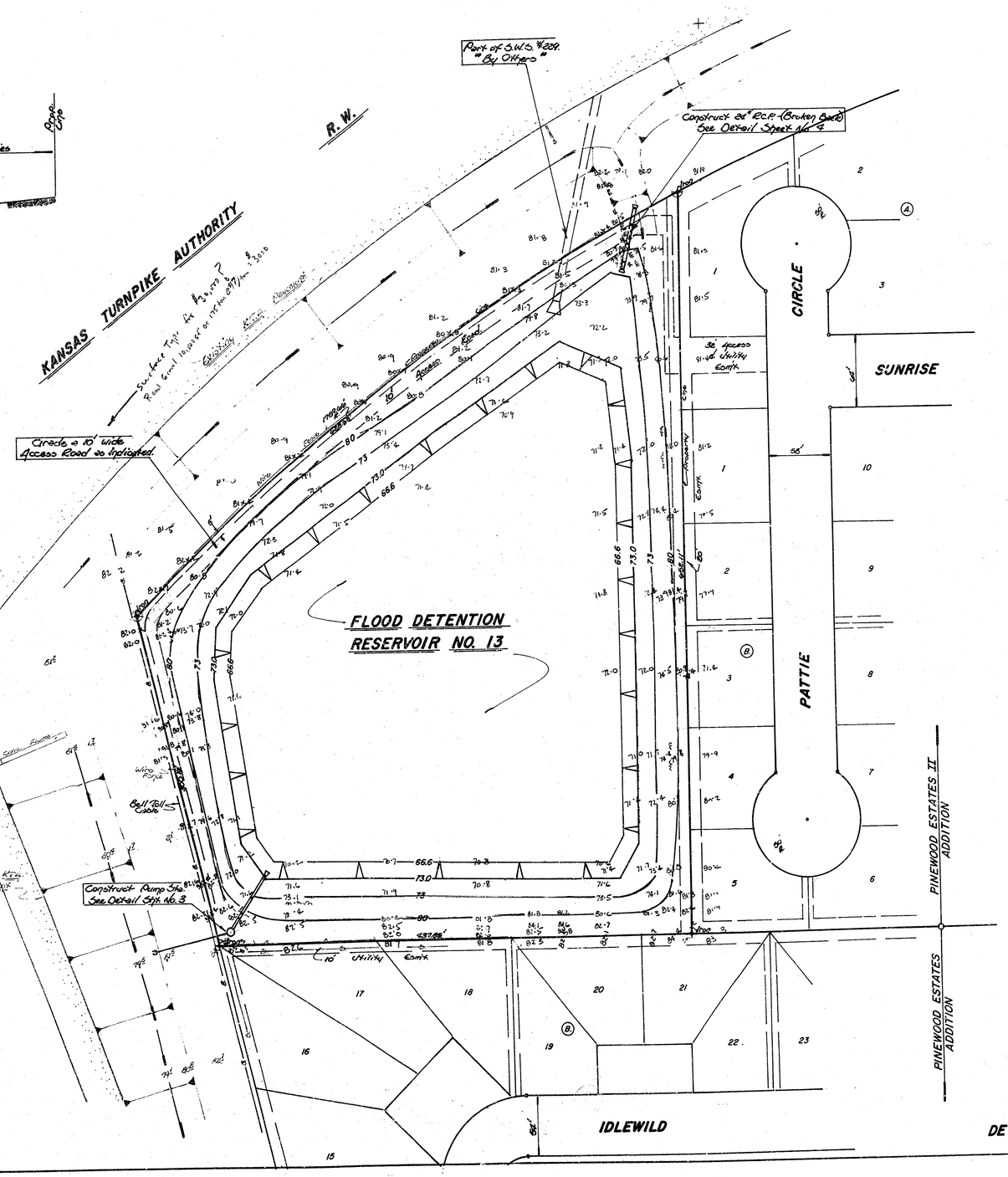
BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 • 330 LAURA • WICHITA, KANSAS 67211

B.M. 80.78 - 'a' cut in Top Cb. N. End RC. in Lot 19, Blk B., Pinewood Estates Addition.



TYPICAL SECTION
RESERVIOR SIDE SLOPE



Earthwork Quantities		
Excavation	=	12,001.8 C.Y.
+ 10 %	=	1,200.2 C.Y.
Total	=	13,202.0 C.Y.

DETENTION RESERVOIR PLAN

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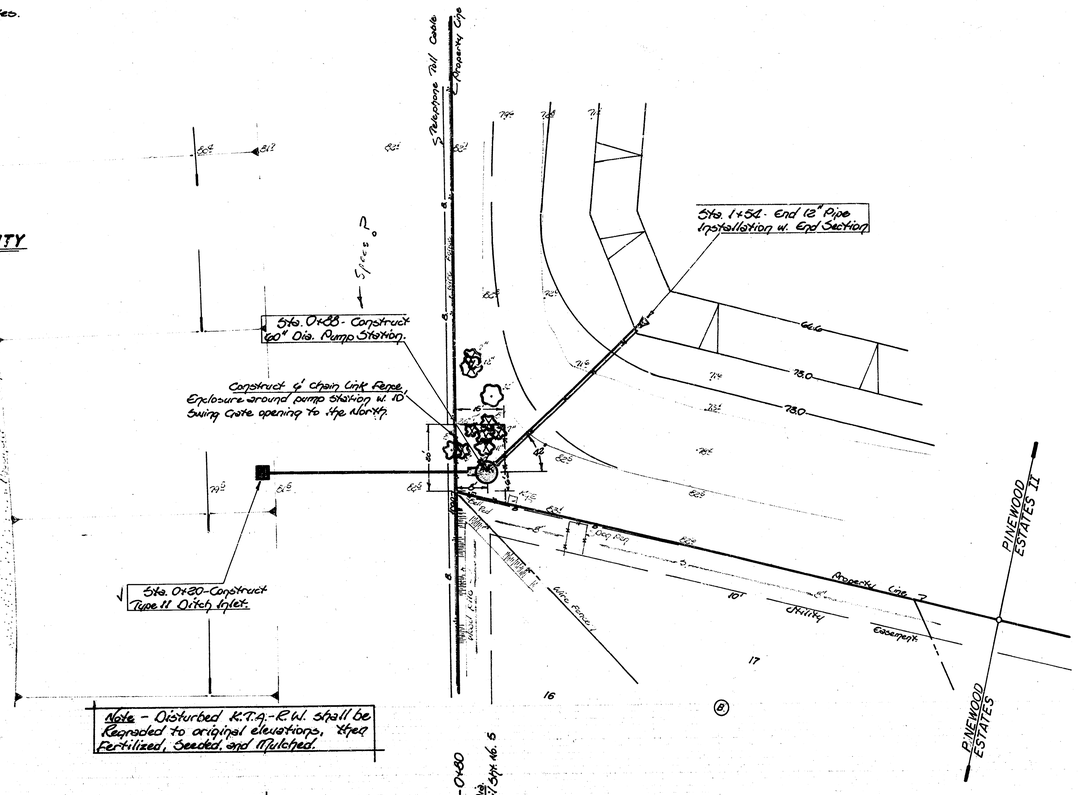
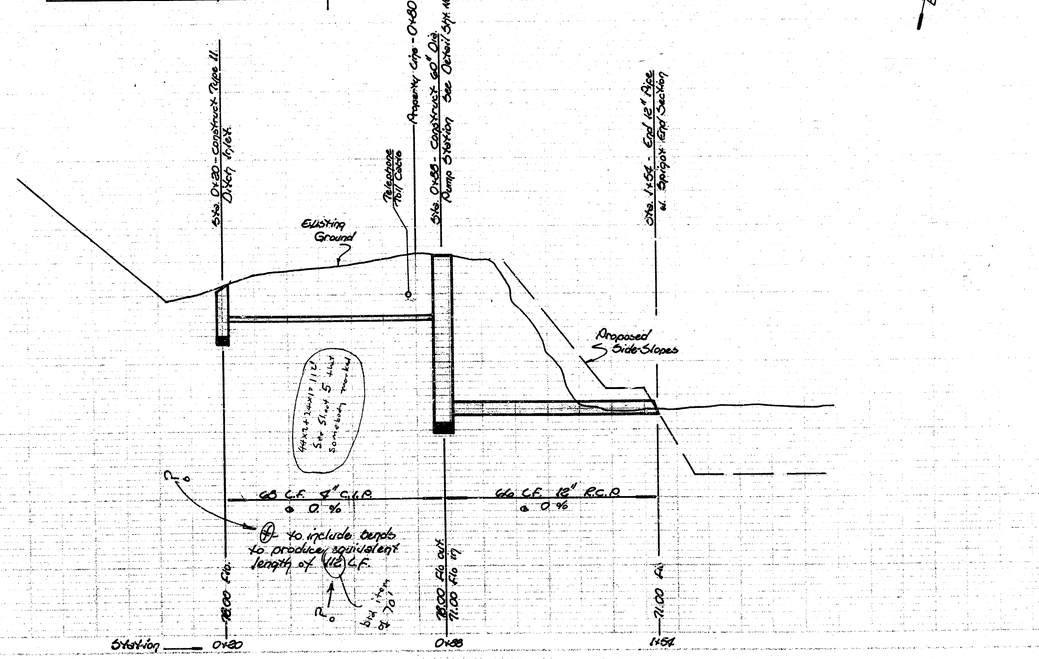
B.M. 80.73 'a' in Top Ob. N. End P.C. Lot 19, Blk. B. Pinewood Estates.

KANSAS TURNPIKE AUTHORITY

R. W.

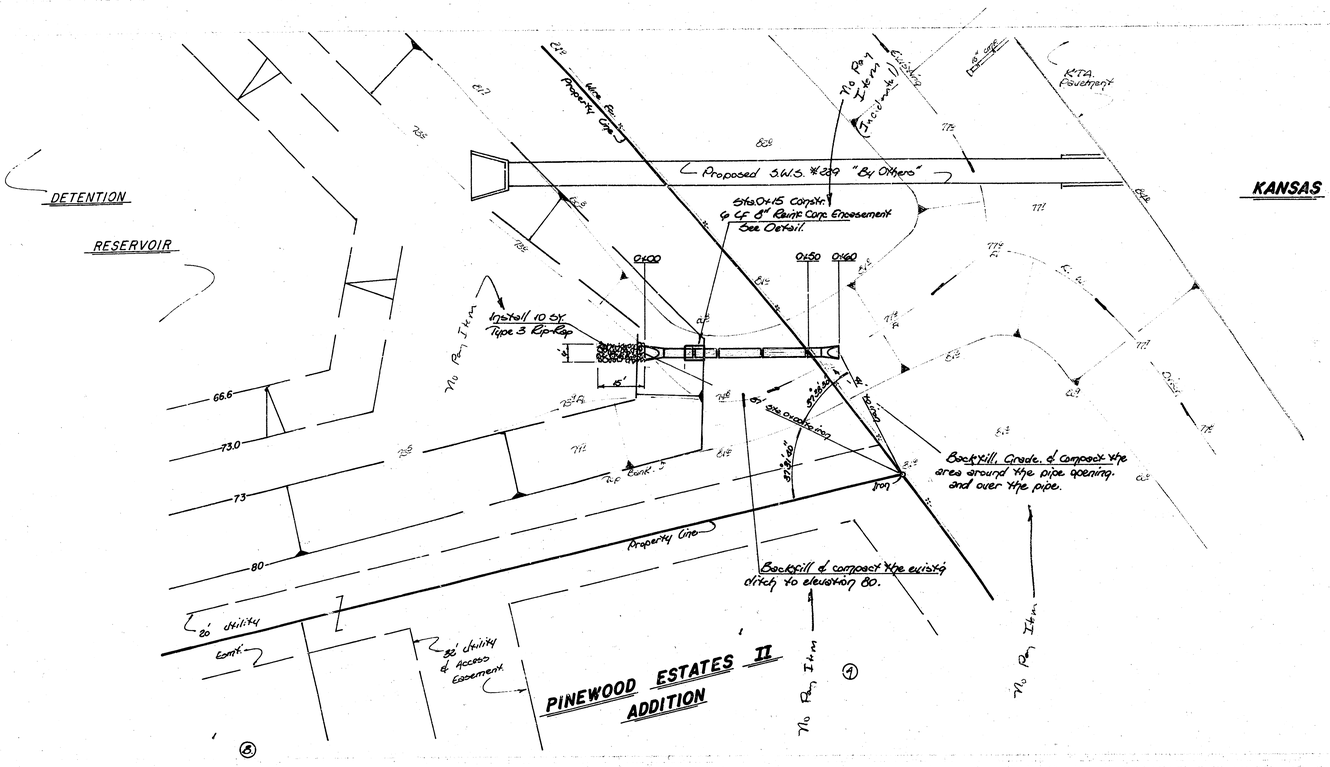


Scale: 1" = 20'
1" = 5' Vert.

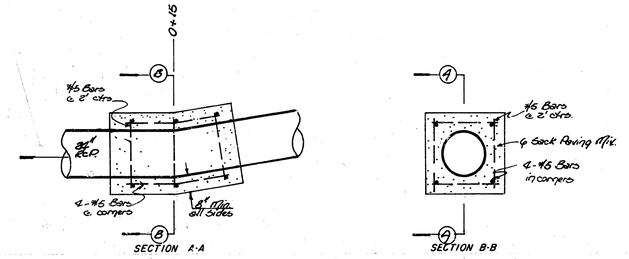


PUMP STATION PLAN-PROFILE 3/12

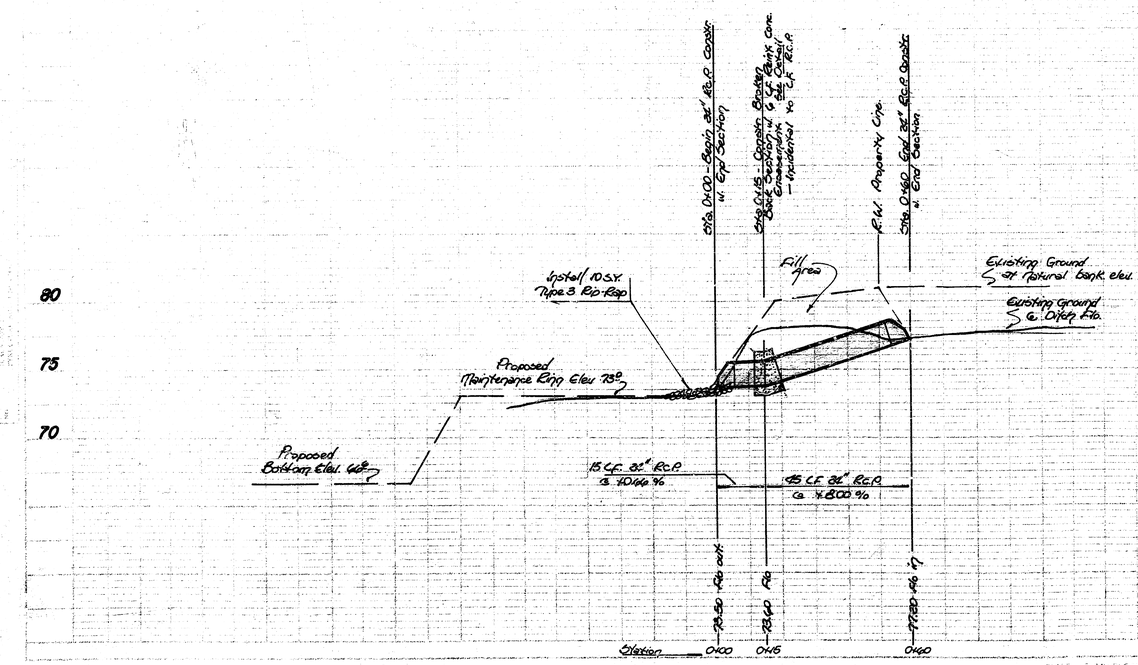
KANSAS TURNPIKE AUTHORITY
R. W.



Scale:
Plan – 1" = 20'
Profile – 1" = 20' Hor.
1" = 5' Vert.



REINFORCED CONCRETE ENCASEMENT DETAIL
* Incidental to C.F. RCP



PIPE ENTRANCE DETAIL

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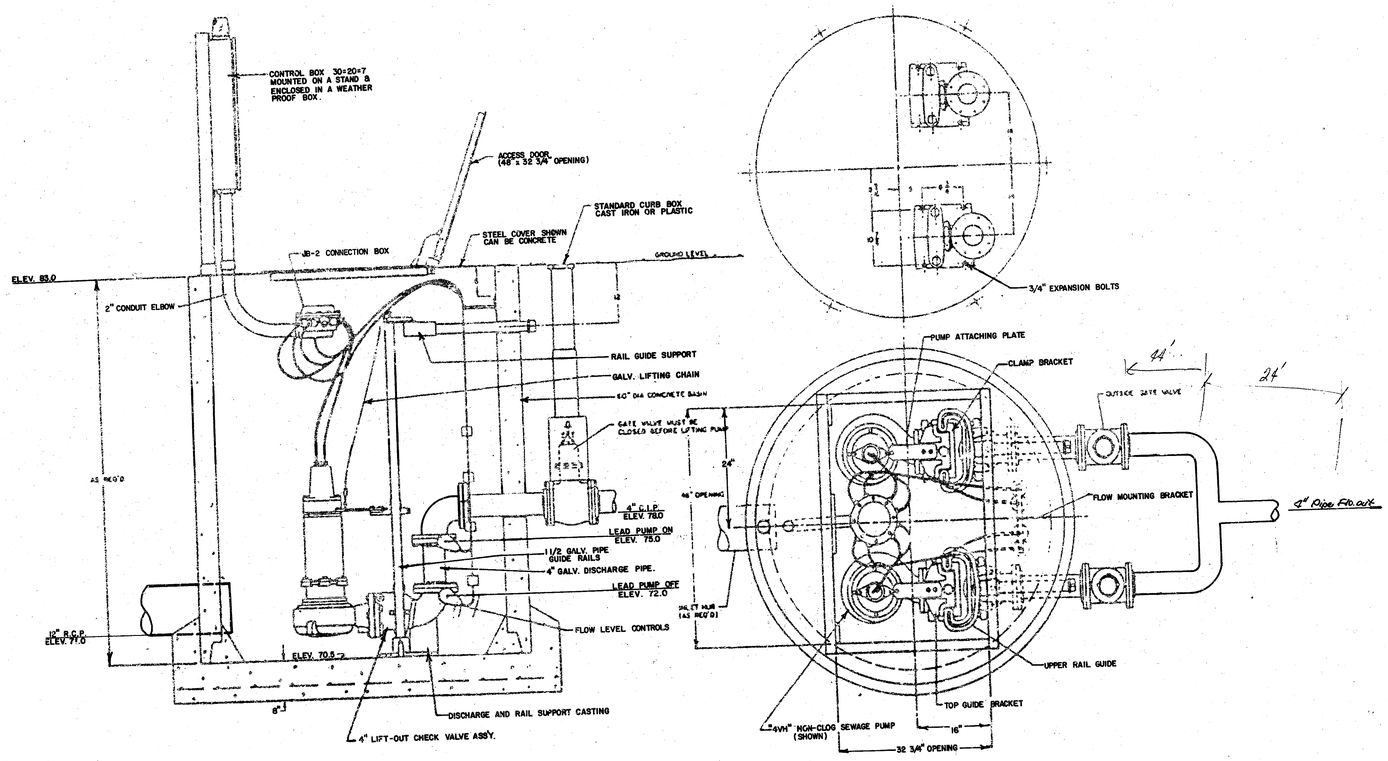
TYPICAL INSTALLATION 60" DIA. CONCRETE BASIN, DUPLEX



NOTE – THE PUMP STATION EQUIPMENT SHALL BE THE MEYERS CO. DESIGNED AND MANUFACTURED PUMPING SYSTEM. THE DUAL PUMPS SHALL BE THE V-SERIES PUMP (3 HP - 1760 R.P.M.)

PUMP STATION DETAIL

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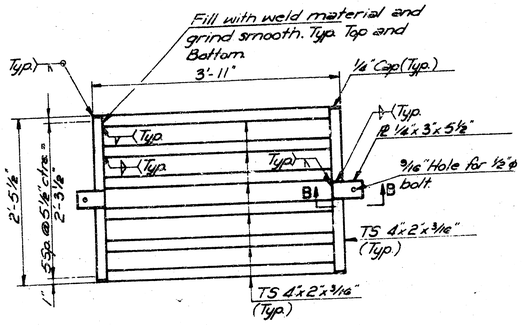
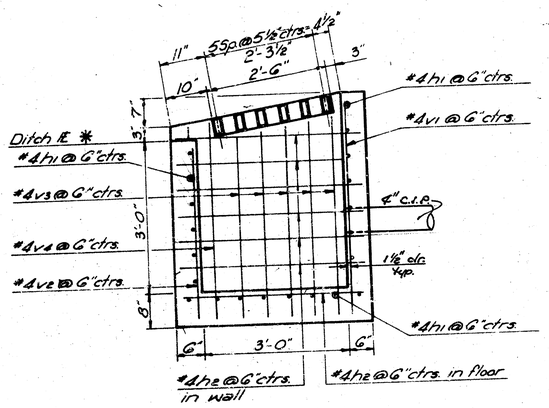
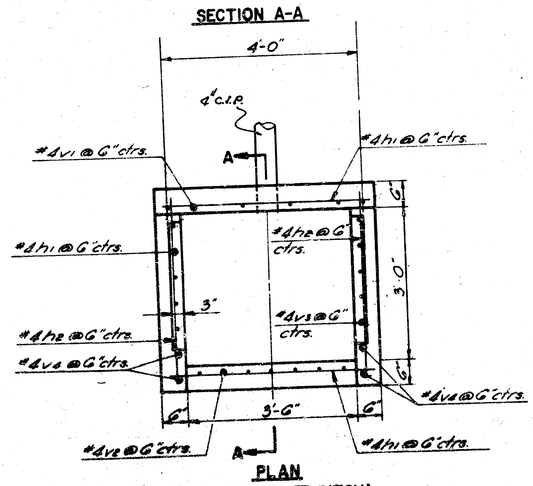


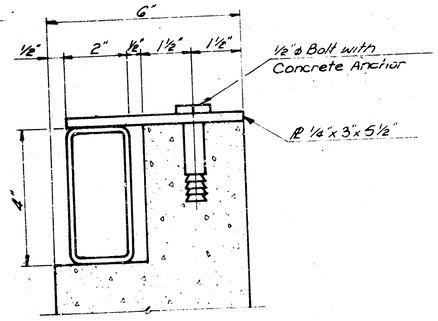
METAL GRATE PLAN
WT. 185 Lbs.



SECTION A-A



PLAN
INLET (TYPE II DITCH)



SECTION B-B

Varies from 3'-5" to 3'-9" @ 1" increments

*V3 Cut 2 each length

REINFORCING STEEL FOR SPECIAL INLET TYPE II						
Bar	h1	h2	v1	v2	v3	v4
Number	21	21	9	7	10	4
Size	#4	#4	#4	#4	#4	#4
Length	4'-2	3'-8	4'-2	3'-1	*	3'-7

SUMMARY OF QUANTITIES FOR SPECIAL INLET TYPE II	
Class III Excavation	7 cu yds.
Class A Concrete (Misc.)	1.1 cu yds.
Reinforcing Steel	185 Lbs.
Structural Steel	185 Lbs.

GENERAL NOTES

All concrete shall be either Class A or Class A(AE) at the contractors option. Bevel all exposed edges with a 3/4" triangular moulding.

No deductions in concrete quantities shall be made for pipe openings.

No additions in concrete quantities shall be made for shaping floor of Inlets.

All dimensions relative to placement of reinforcing steel are to centerline of bars unless otherwise noted.

Structural Tubing shall conform to ASTM A501. All plates and angles shall conform to ASTM A36.

The Structural Steel Grate shall be painted either in the shop or in the field with one coat of zinc dust paint followed by two field coats of aluminum paints.

Weight shown per Grate is computed with no allowance for fillets, welds, or overruns.

The wall reinforcing steel in the Special Inlet Type II shall be bent or field cut to allow for installation of storm sewer pipe.

All welds shall be 5/16" fillet unless otherwise noted.

TYPE II OUTFLOW DITCH INLET DETAIL

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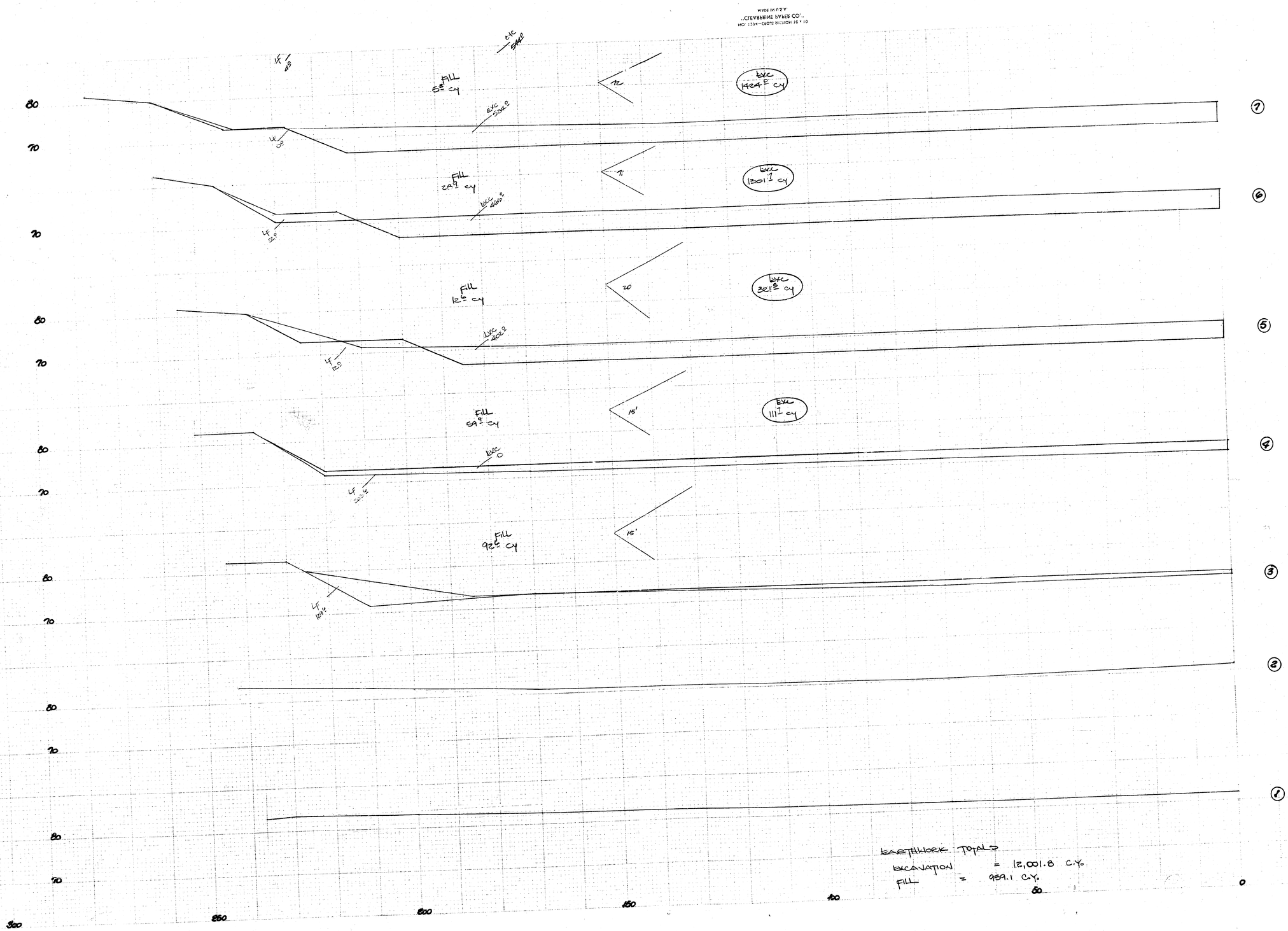
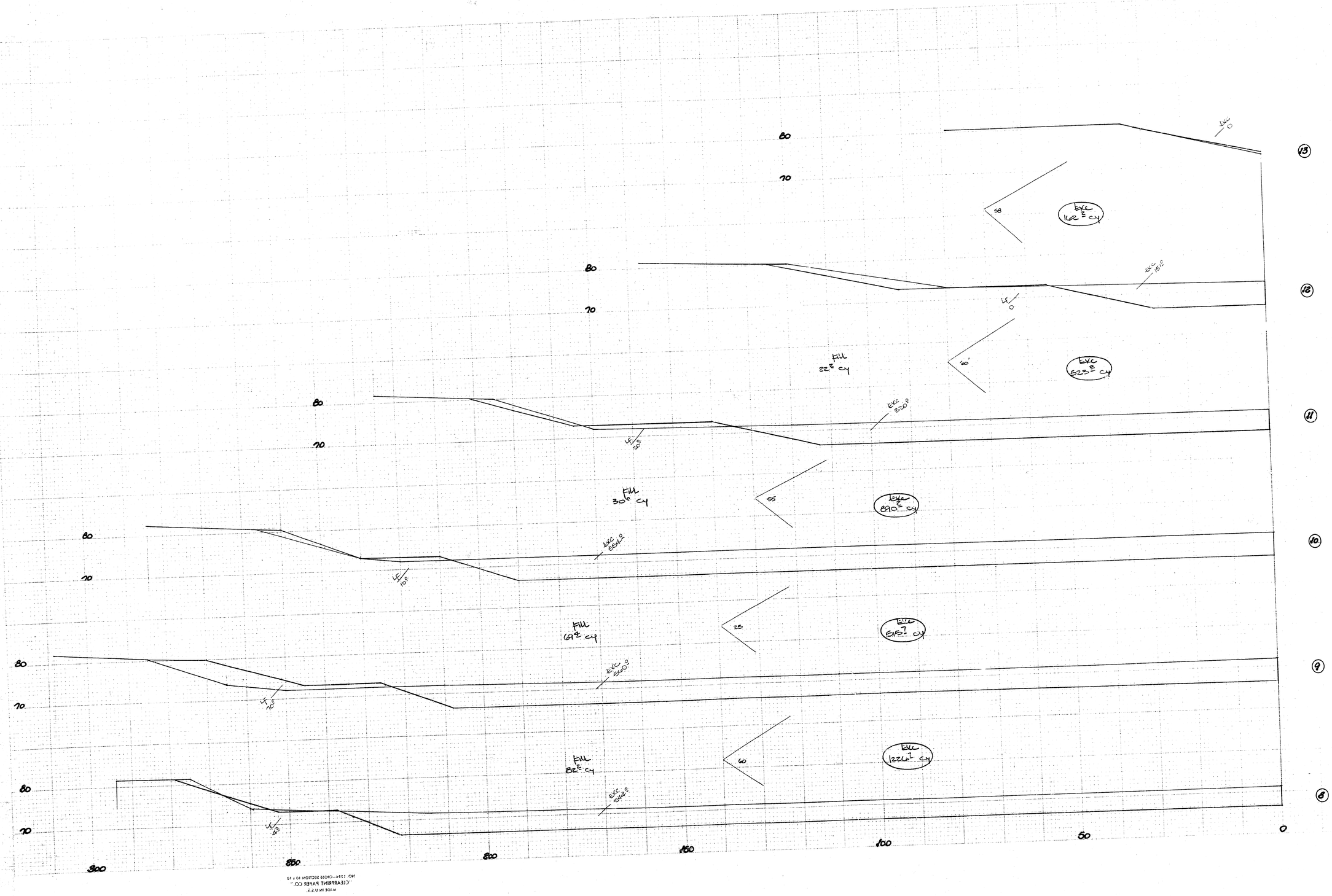
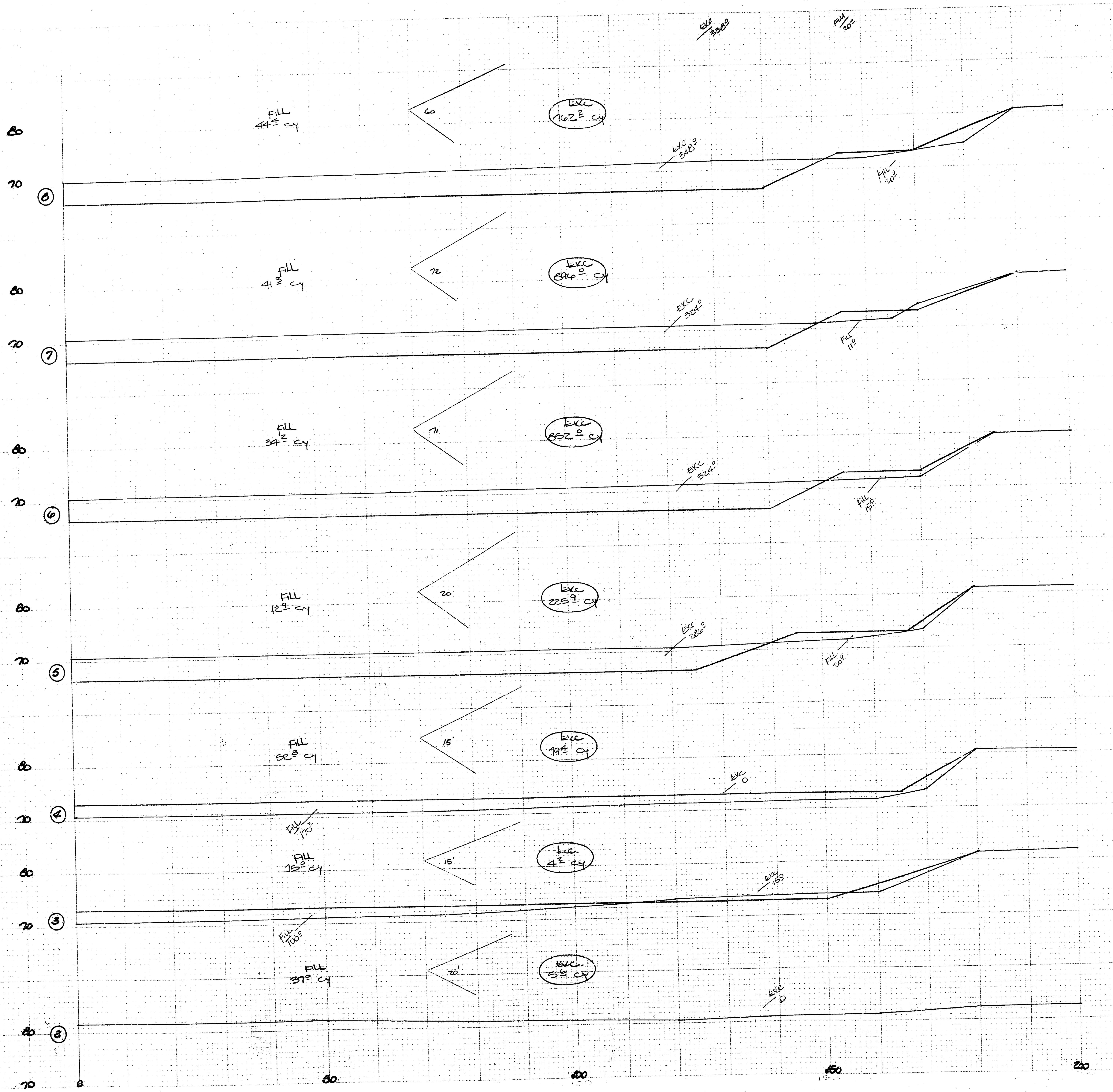
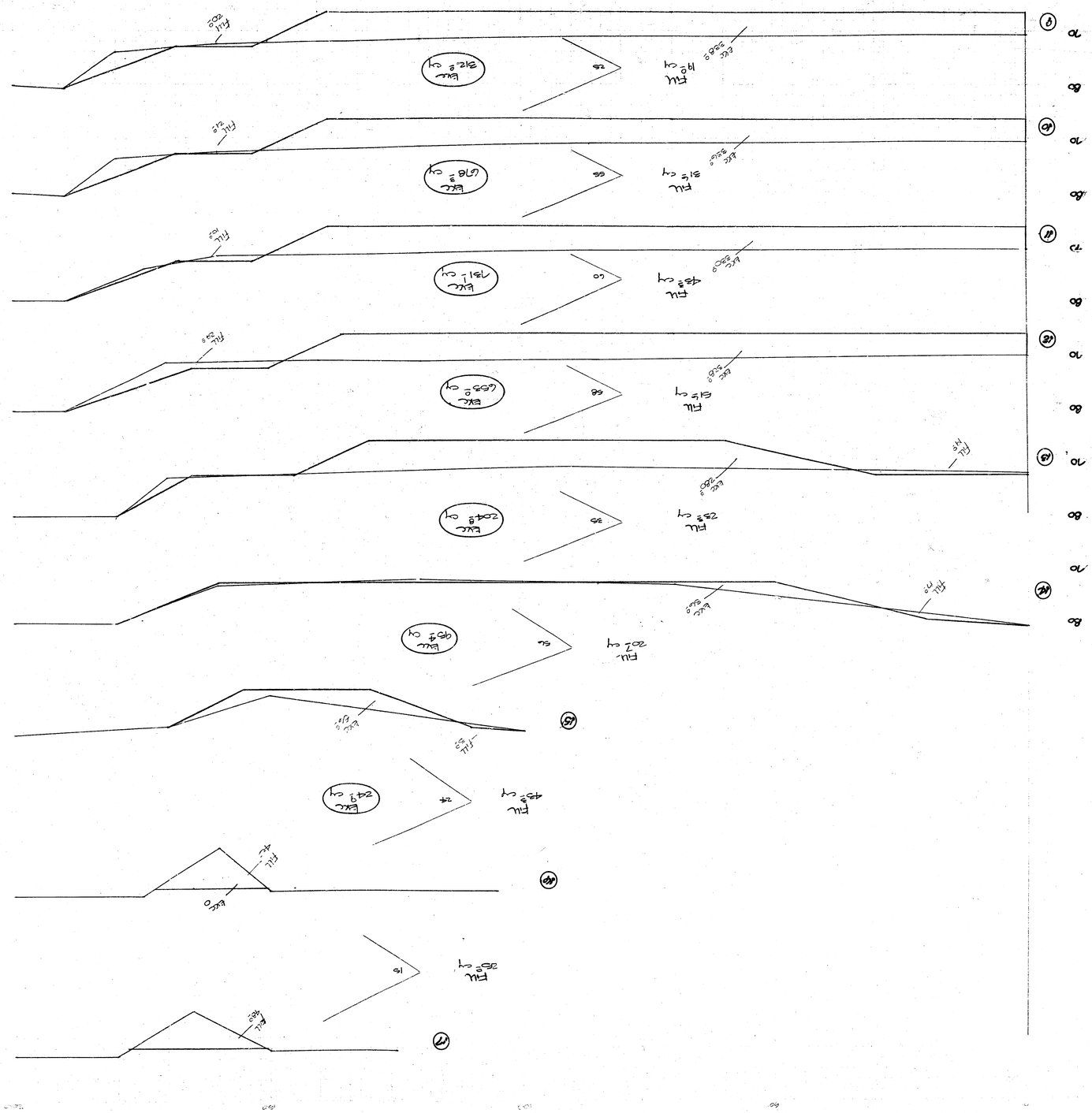


EARTHWORK TOTALS
EXCAVATION = 12,001.8 C.Y.
FILL = 959.1 C.Y.





FILL 44.4 cy
60
EXC 762.2 cy
EXC 338.0
FILL 20.0
EXC 348.0
FILL 20.0
80
70
8
FILL 41.3 cy
72
EXC 894.0 cy
EXC 324.0
FILL 11.0
7
FILL 34.2 cy
71
EXC 852.0 cy
EXC 324.0
FILL 15.0
6
FILL 12.9 cy
20
EXC 225.9 cy
EXC 280.0
FILL 20.0
5
FILL 52.8 cy
15'
EXC 79.4 cy
EXC 0
4
FILL 170.0
FILL 75.0 cy
15'
EXC. 4.3 cy
EXC 15.0
3
FILL 100.0
FILL 37.0 cy
20'
EXC. 5.6 cy
EXC 0
2
0
50
100
150
200


0
50
100
150
200
Fill
Exc
Fill 25° cy
Exc 204° cy
35
Fill 22° cy
Exc 255° cy
55
Fill 43° cy
Exc 231° cy
60
Fill 48° cy
Exc 190° cy
75
Fill 19° cy
Exc 328° cy
80
Fill 20° cy
Exc 312° cy
75
Fill 43° cy
Exc 242° cy
24
Fill 20° cy
Exc 0
80
Fill 25° cy
Exc 0
15
Fill 46° cy
Exc 0
80

FLOOD DETENTION RESERVOIR No. 13

X-SECTIONS

SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

SHEET 1 OF 2

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