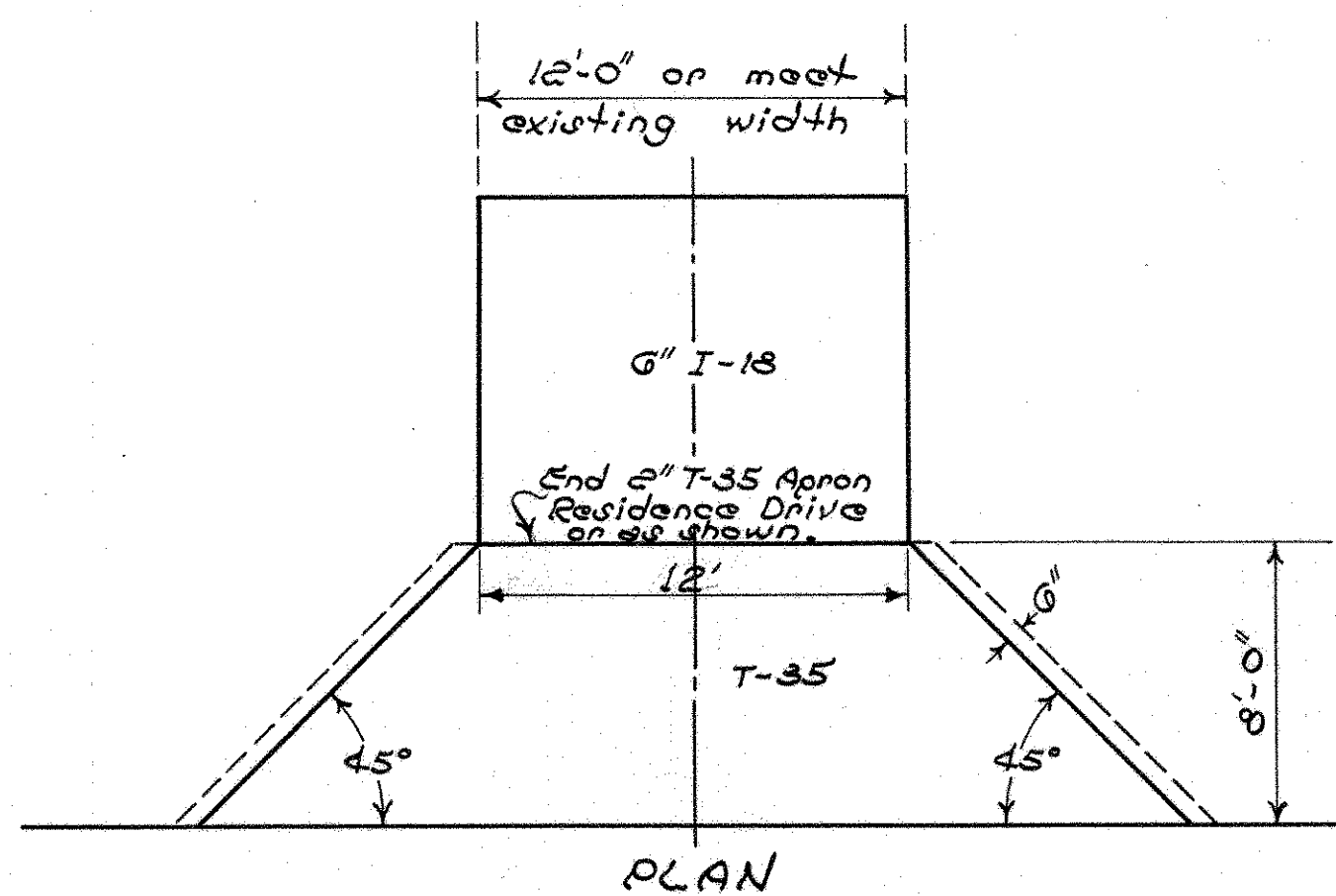


KN0~3~21.57

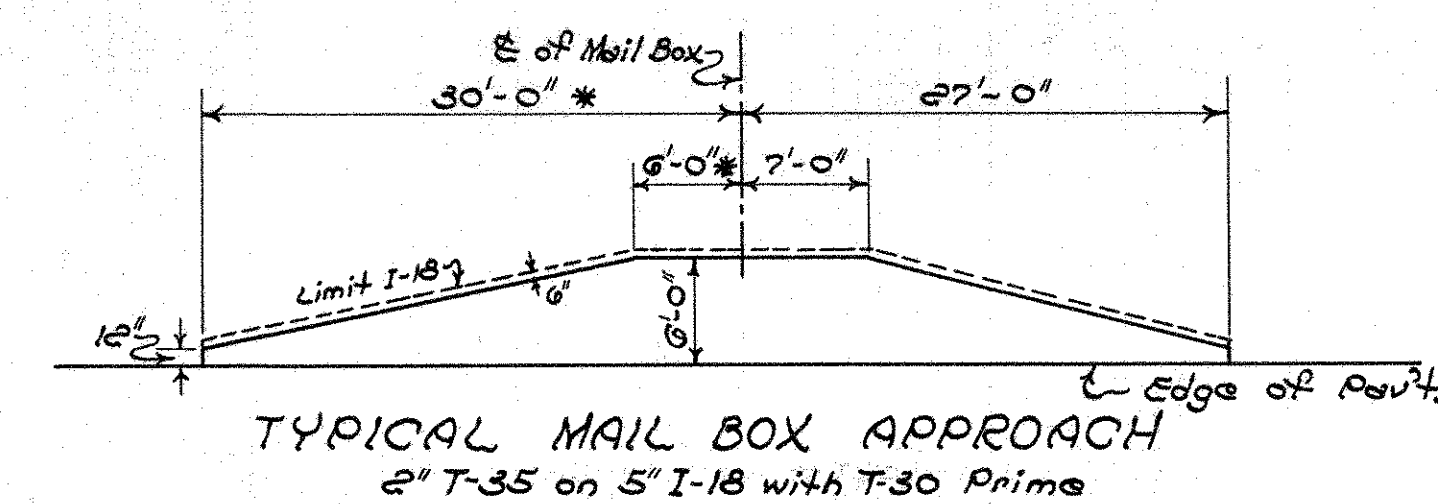
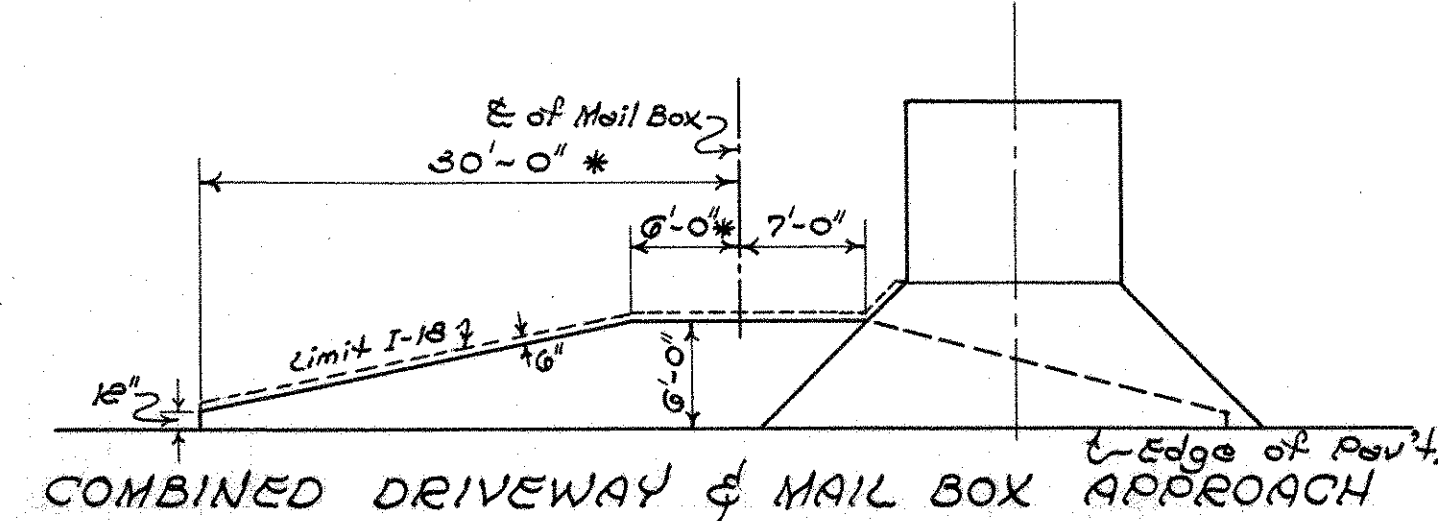


TYPICAL DETAILS

KNO-3-2157



* Add 2 feet for each additional Mail Box.



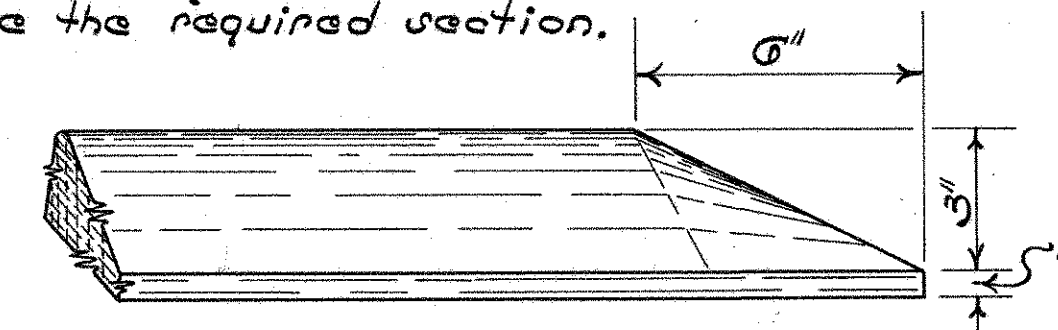
Add 2 ft. for each additional Mail Box. Where feasible mail box turn-outs shall be combined with residence drives as shown by dashed lines and the quantities adjusted by the Engineer.

MAIL BOX TURNOUT ~ (Separate from residence drives)				
Item	Description	Quant-Each	Est'd. No. Req'd.	Total
T-35	2" Asph. Conc.	1.4	17	23.8
I-18	5" Stab. Cr. Agg.	4	17	68
T-30	Bit. Prime Coat	5 Gals.	17	153
MAIL BOX TURNOUT ~ (Combined with residence drives)				
Item	Description	Quant-Each	Est'd. No. Req'd.	Total
T-35	2" Asph. Conc.	0.9	20	23.4
I-18	5" Stab. Cr. Agg.	3	20	78
T-30	Bit. Prime Coat	5 Gals.	20	130

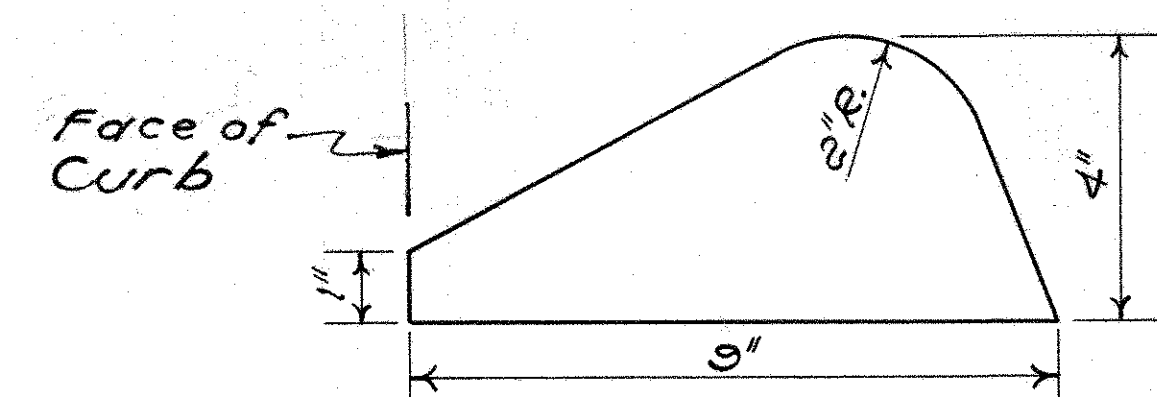
* 283 gals. to Table 4

DETAILS OF MAIL BOX APPROACH

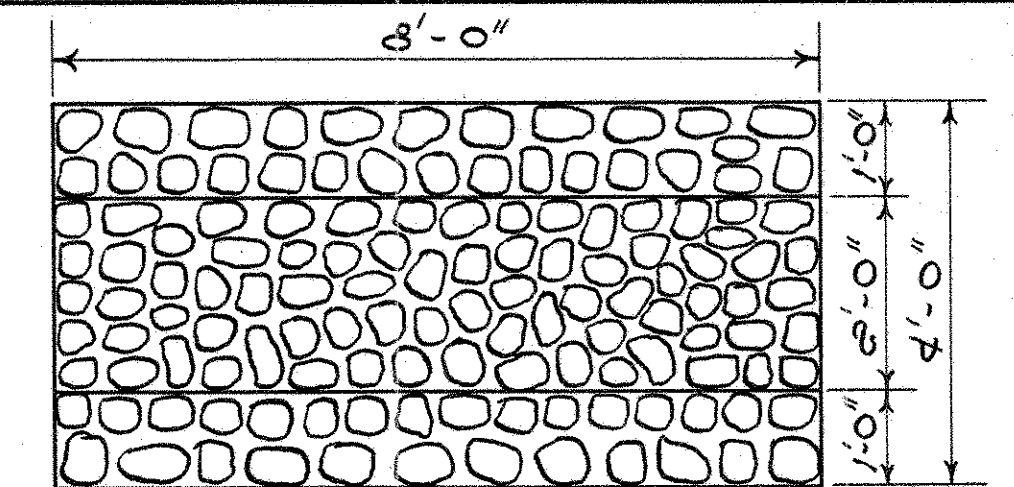
Note :- "CLEARWATER" mold for Stevens ~ Canfield automatic curbar or equivalent will produce the required section.



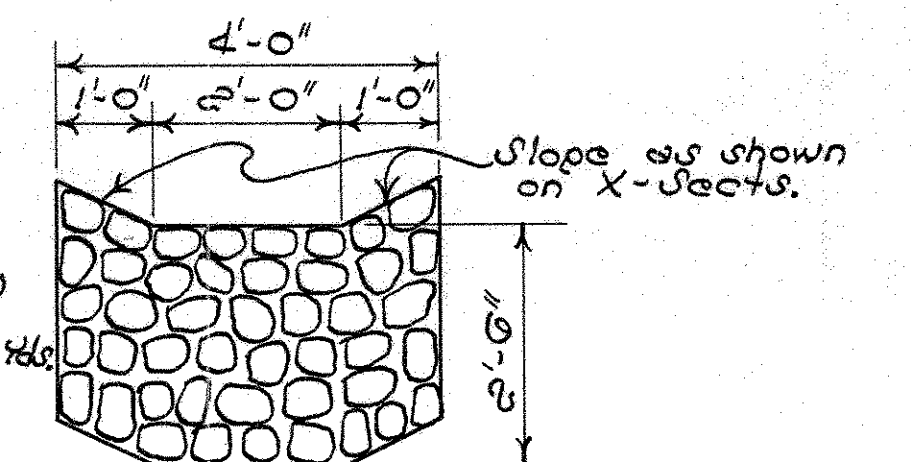
END CURB DETAIL



DETAIL I-112 4" ASPHALTIC CONCRETE CURB AS PER PLAN



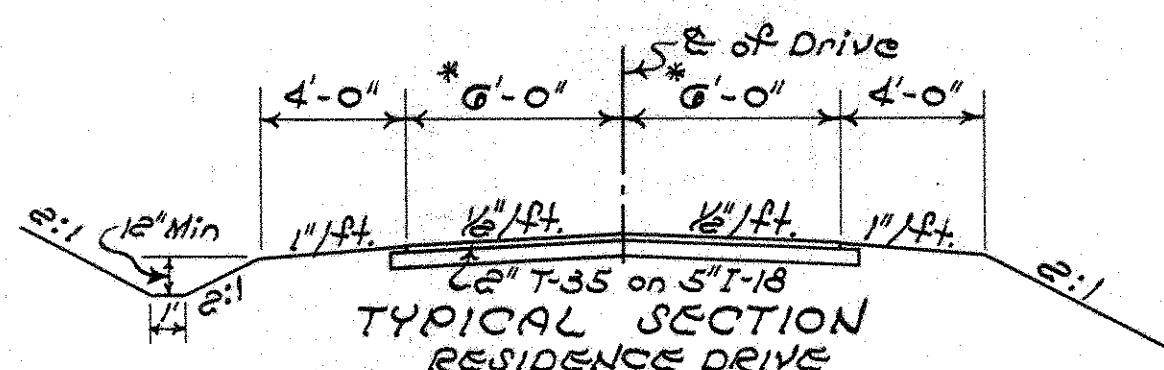
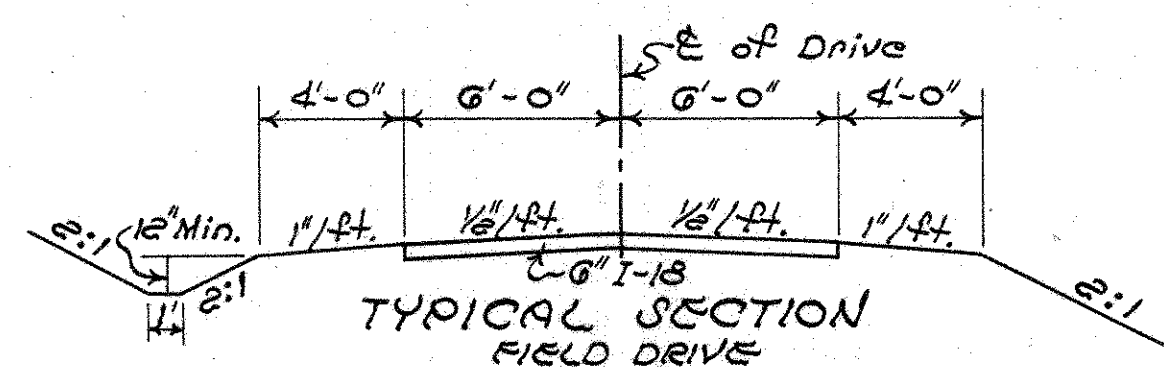
PLAN



END VIEW

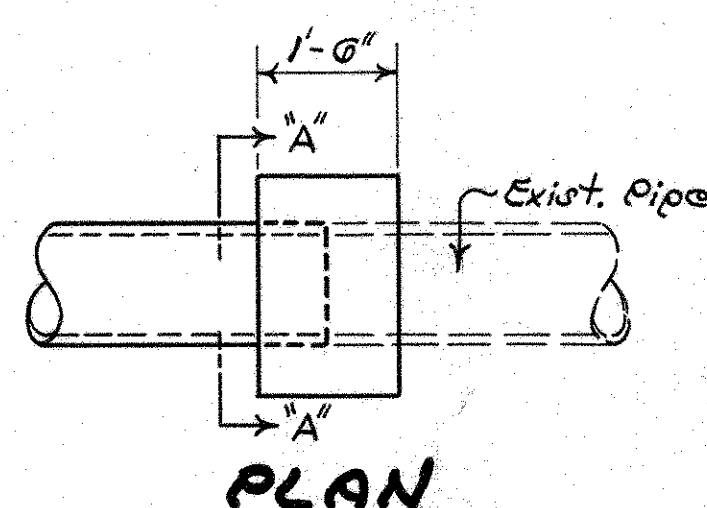
ESTIMATED QUANTITY
I-10 Dumped Rock 3 Cu. Yds.

DUMPED ROCK CHANNEL PROTECTION AT OUTLETS OF DRIVE PIPES

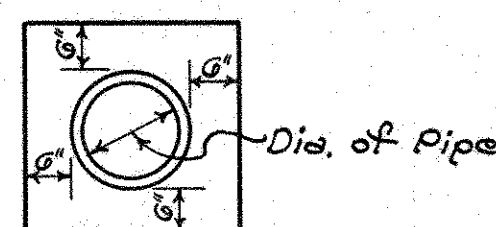


* 12" For Business Approach

TYPICAL DETAILS FOR DRIVES



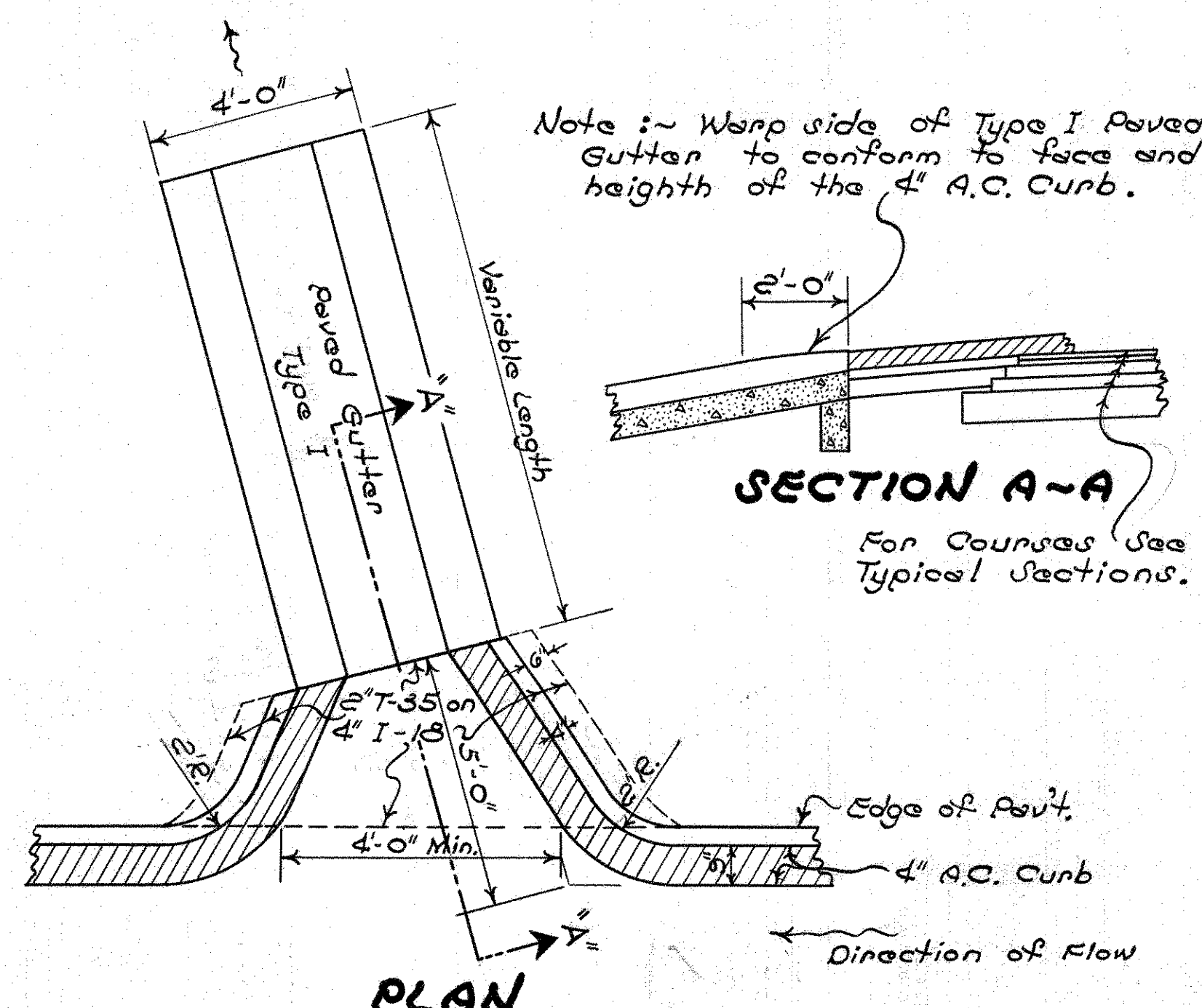
PLAN



SECTION A-A

Note :- For Estimated Quantities See Structure Detail.
Used where there is no Existing Headwall.

CONCRETE COLLAR DETAIL FOR EXTENSION OF EXISTING CULVERT



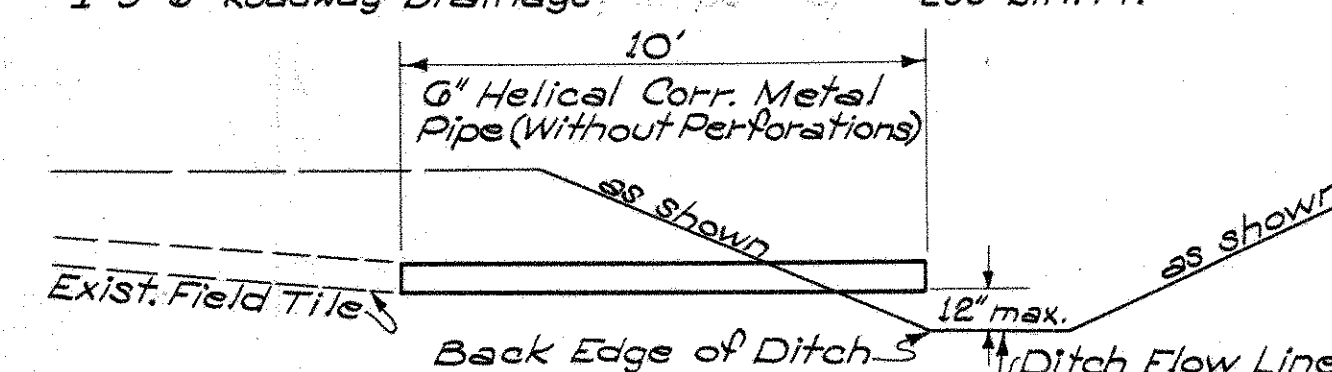
PLAN

TYPE III CURBED INLET

This Item shall consist of furnishing and placing 6" helical corrugated metal pipe M-G.4(h) outlets on existing field drains where they are intercepted by new construction. The installation shall be as shown in the detail with the outlet elevation being established by the Engineer at the time of construction.

The cost of uncovering the existing field tile and making the necessary connections shall be included in the unit price bid per lin. ft. for Item I-3 6" Roadway Drainage Outlet Pipe. Basis of payment shall be final measurement.

Estimated Quantity
I-3 6" Roadway Drainage 200 Lin. Ft.



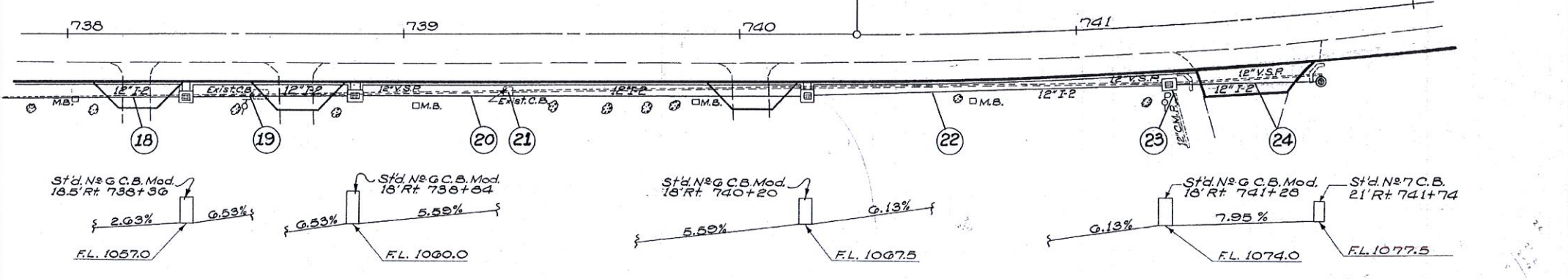
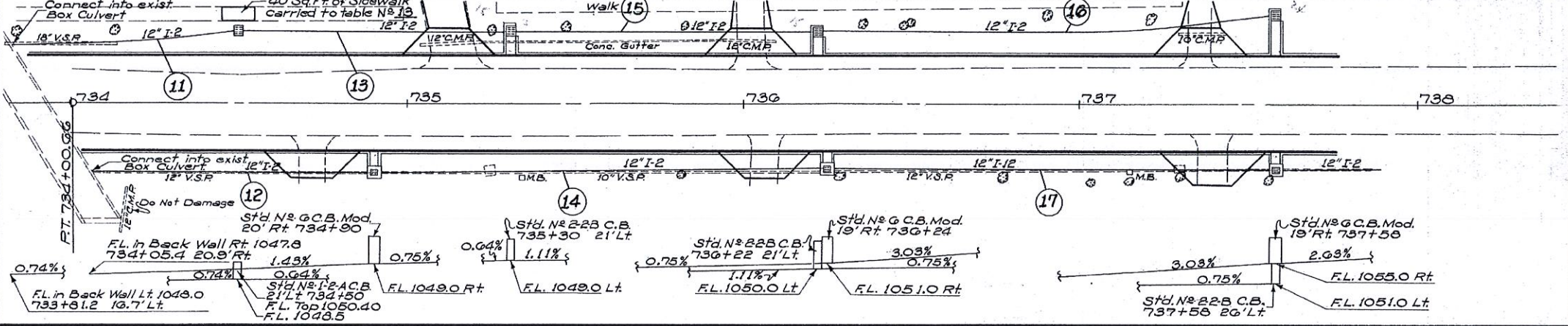
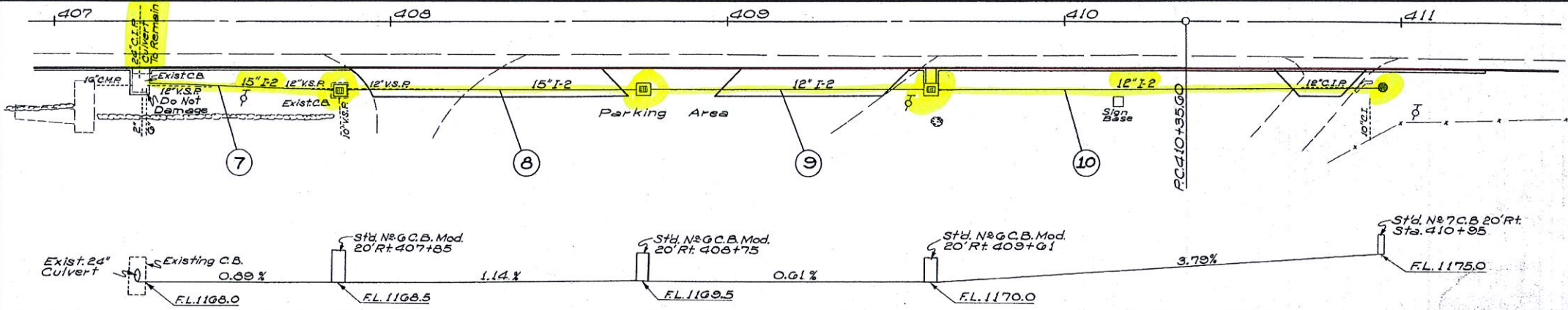
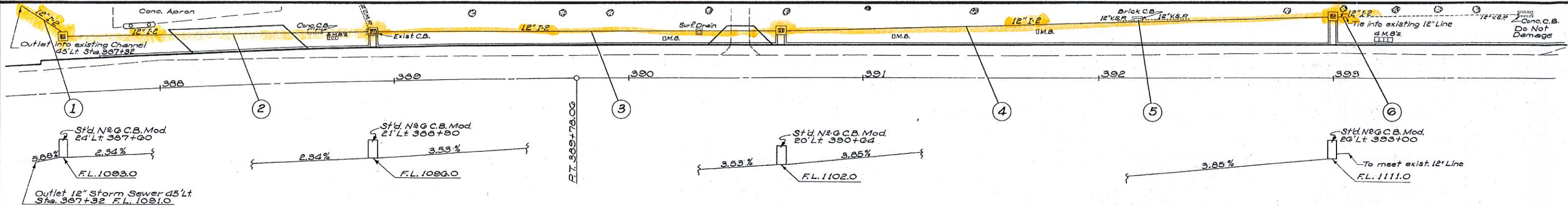
I-3 ROADWAY DRAINAGE OUTLET PIPE

STORM SEWER DETAILS OF AMITY AND JELLOWAY

FED. RD. DIVISION	STATE	PROJECT	TYPE FUND
2	OHIO		

KNO-3-21.57

13
212

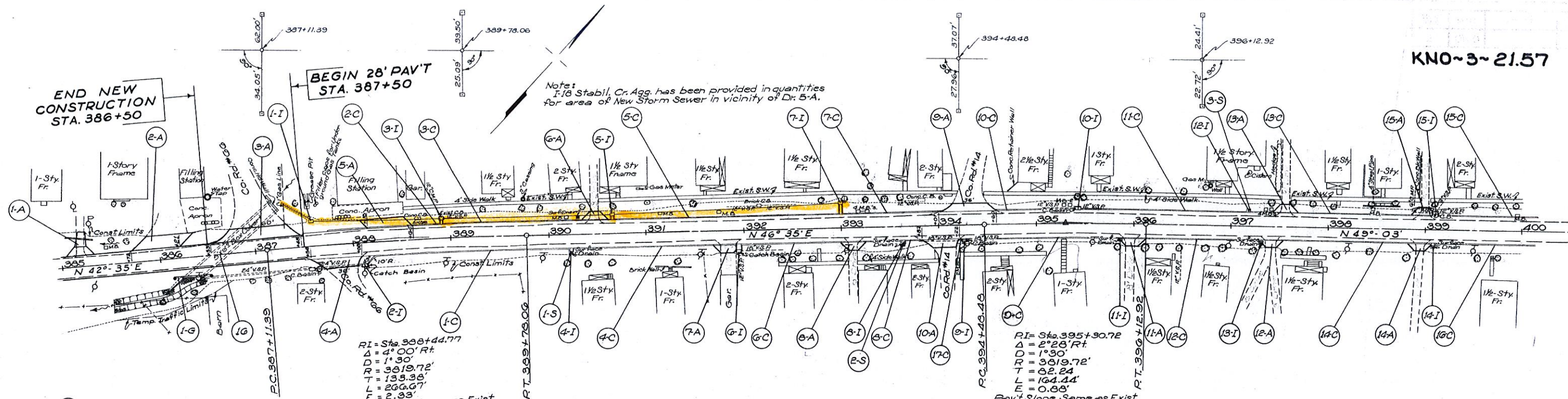


ESTIMATED QUANTITIES

Mark	Station		Side	I-2 Class 'A' Storm Sewer Under Pav't Lin. Ft.	I-6 Catch Basins Each	I-16 Catch Basins Abandoned
	From	To				
1	387+32	387+60	Lt.	34		
2	387+61	388+90	Lt.	128		
3	388+91	390+64	Lt.	170		
4	390+65	393+00	Lt.	234		
5	392+16	~	Lt.			
6	393+01	393+07	Lt.	6		
7	407+28	407+85	Rt.	56		
8	407+86	408+75	Rt.	88		
9	408+76	409+61	Rt.	84		
10	409+62	410+95	Rt.	132		
11	733+81.2	734+50	Lt.	68		
12	734+05.4	734+90	Rt.	84		
13	734+51	735+30	Lt.	78		
14	734+91	736+24	Rt.	132		
15	735+31	736+22	Lt.	90		
16	736+23	737+58	Lt.	134		
17	736+25	737+58	Rt.	132		
18	737+59	738+38	Rt.	76		
19	738+37	738+84	Rt.	46		
20	738+85	740+20	Rt.	134		
21	739+31	~	Rt.			
22	740+21	741+28	Rt.	106		
23	741+28	~	Rt.	4		
24	741+29	741+74	Rt.	44		
Totals				1916 144	2 3 14 1 2	

Items not specifically listed for removal within the limits of the new Storm Sewer construction shall be removed in accordance with Sec. E-2.05. Existing Surface Drains, House Drains, or other appurtenances except for Sanitary Drains shall be outletted into new system as provided for in the General Note, titled Location and Size of Existing Pipes. Extreme care shall be exercised during construction so as to avoid damage to any trees or other items adjacent to the area of work. For additional Details and Quantities not shown, see Plan Sheet

KNO-3-21.57



A DRIVES & APPROACHES

Mark	Station	Side	Type	Details on Sheet
1-A	385+17	Lt.	Resid.	90
2-A	386+00	Lt.	Bus.	91
3-A	387+00	Lt.	Co. Rd.	91
4-A	387+75	Rt.	Co. Rd.	91
5-A	388+40	Lt.	Bus.	91
6-A	390+47	Rt.	Resid.	91
7-A	391+84	Rt.	Resid.	91
8-A	393+11	Rt.	Resid.	91
9-A	394+30	Lt.	Co. Rd.	93
10-A	394+05	Rt.	Co. Rd.	93
11-A	395+96	Rt.	Resid.	91
12-A	397+42	Rt.	Resid.	91
13-A	397+56	Lt.	Resid.	91
14-A	398+96	Rt.	Resid.	91
15-A	398+99	Lt.	Resid.	91

I PAVEMENT INLETS

Mark	Station	Side	Type Pav't Inlet	T-35 4" Asphalt Conc. Sq. Yds.	I-18 4" Stabil. Cr. Agg. Sq. Yds.
1-I	387+00	Lt.	None		
2-I	388+10	Rt.	None		
3-I	388+90	Lt.	I	3.1	3.7
4-I	390+23	Rt.	II	5.7	7.3
5-I	390+64	Lt.	I	2.2	2.7
6-I	391+95	Rt.	II	4.6	6.1
7-I	393+00	Lt.	I	5.0	6.7
8-I	393+03	Rt.	II	2.1	2.9
9-I	394+27	Rt.	II	1.0	2.4
10-I	395+43	Lt.	II	1.9	2.8
11-I	395+86	Rt.	II	1.3	2.1
12-I	397+19	Lt.	II	1.3	1.8
13-I	397+31	Rt.	II	1.4	2.1
14-I	399+11	Rt.	II	1.0	1.6
15-I	399+10	Lt.	II	1.3	2.2
Totals				33.3	44.4*

C CURBS

Mark	Station	Side	Type	*I-112 4" Asphalt Conc. Curb Lin. Ft.
1-C	388+13	390+21	Rt.	215
2-C	387+75	388+90	Lt.	123
3-C	388+33	390+63	Lt.	183
4-C	390+24	391+92	Rt.	176
5-C	390+66	392+98	Lt.	250
6-C	391+97	393+02	Rt.	177
7-C	393+01	394+01	Lt.	110
8-C	393+05	393+82	Rt.	20
9-C	394+31	395+85	Rt.	159
10-C	394+60	395+40	Lt.	87
11-C	395+46	397+17	Lt.	176
12-C	395+68	397+30	Rt.	147
13-C	397+21	399+07	Lt.	195
14-C	397+33	399+09	Rt.	180
15-C	399+13	400+00	Lt.	86
16-C	399+12	400+00	Rt.	89
17-C	394+22	394+25	Rt.	10
Totals				2383

WIDENING QUANTITIES

Station	Length 'A' Ft.	Width 'B' Ft.	Area 'A'x'B' ± 9 Sq. Yds.
From To	Side	Side	
386+50 387+50	77	4.0 4.5	342 385
387+50 400+00	1250	10.17 11.17	47.1 55.6
Totals			144.7 152.5

SURFACE QUANTITIES

Station	Calculations	T-35 1 1/2" Sq. Yds.
From To		
386+50 387+50	100 x 24 ± 9	266.7
387+50 400+00	1250 x 30.17 ± 9	4190.3
386+50	Surface on Structure	21.0
Totals		4478.0

SLOPE CORRECTION QUAN.

Station	Length	B-35 Wedge	B-119 Wedge	T-30 Prime	B-35 Crown	T-30 Teak
From To	Trans. Ft.	Cu. Yds.	Cu. Yds.	Sq. Yds.	Sq. Yds.	Sq. Yds.
1350 x 20 ± 9					3000	
1350 x 20 ± 9						3000

STRUCTURE 20' SPAN & UNDER

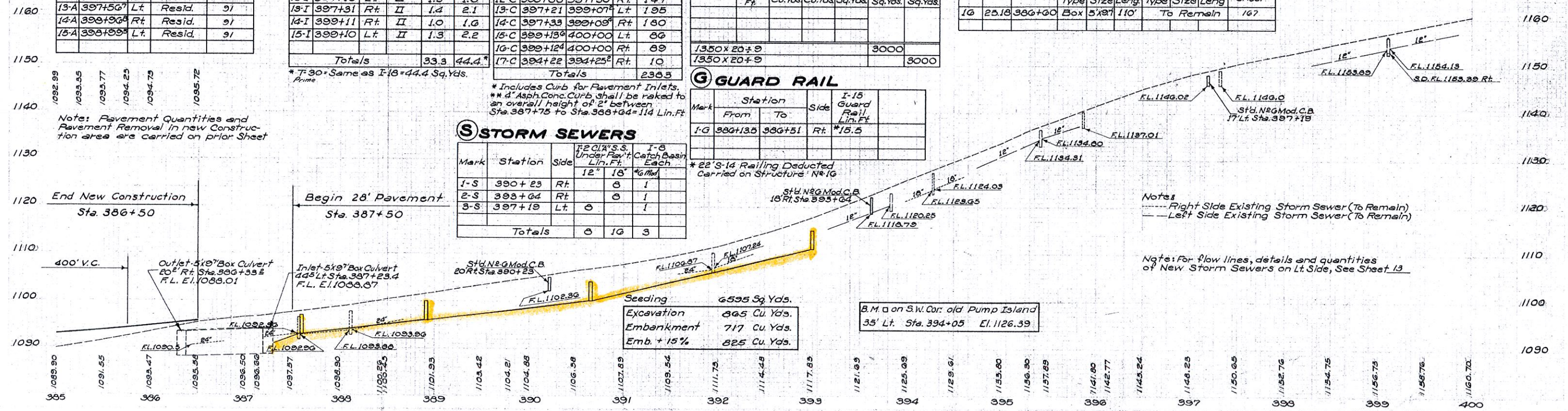
Str. No.	SLM	Station	Existing Type Size Leng.	Proposed Type Size Leng.	Details on Sheet
16	25.18	386+00	Box 5'x7' 110'	To Remain	167

G GUARD RAIL

Station	Side	I-15 Guard Rail Lin. Ft.
From To		
386+135 386+51	Rt.	15.5

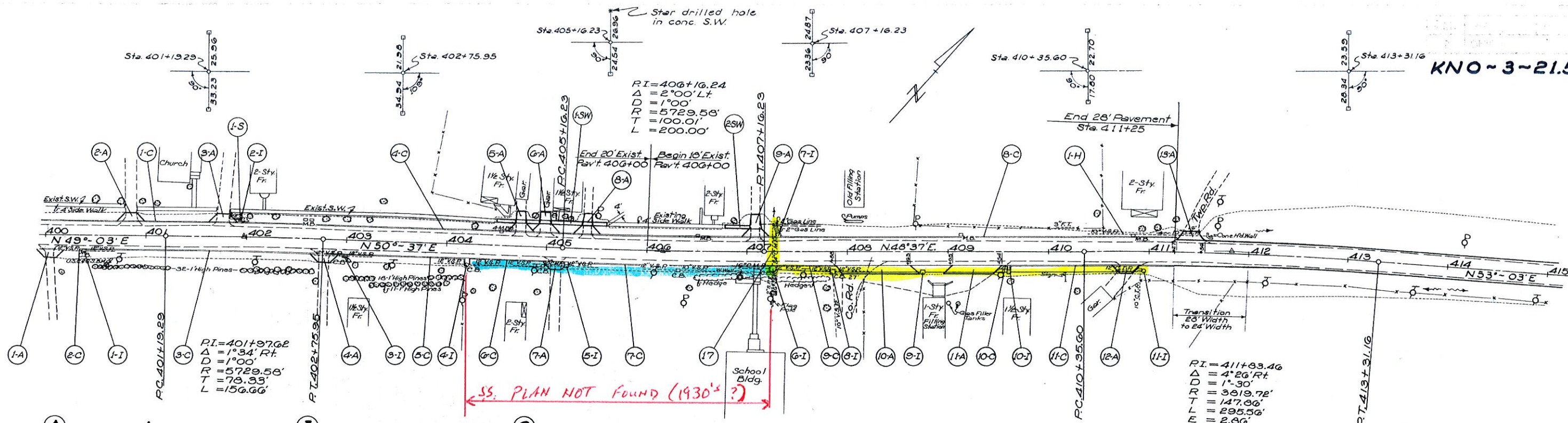
S STORM SEWERS

Mark	Station	Side	I-2 12" S.S. Under Pav't Lin. Ft.	I-8 Catch Basin Each
1-S	390+23	Rt.	0	1
2-S	393+04	Rt.	0	1
3-S	397+19	Lt.	0	1
Totals			0	3



385+00 ~ 400+00

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A DRIVES & APPROACHES

Mark	Station	Side	Type	Details on Sheet
1-A	400+03.6	Rt	Resid.	94
2-A	400+05	Rt	Resid.	94
3-A	401+74.8	Lt	Resid.	94
4-A	402+77.9	Rt	Resid.	94
5-A	404+74.5	Lt	Resid.	95
6-A	404+98.8	Lt	Resid.	95
7-A	405+10	Rt	Resid.	94
8-A	405+40	Lt	Resid.	95
9-A	407+08	Lt	Resid.	96
10-A	408+10	Rt	Co.Rd.&App.	96
11-A	409+30	Rt	App.	96
12-A	410+95.8	Rt	Resid.	94
13-A	411+30	Lt	Twp. Rd.	97

I PAVEMENT INLETS

Mark	Station	Side	Type Pav't Inlet	7-35 2" x 36" Conc. Sq. Yds.	7-16 4" x 36" Gr. Agg. Sq. Yds.
1-I	400+40	Rt	II	1.4	2.3
2-I	401+94	Lt	II	1.0	1.7
3-I	403+00	Rt	II	1.4	2.3
4-I	404+22	Rt	II	3.9	5.1
5-I	405+20	Rt	II	3.5	4.7
6-I	407+25	Rt	II	2.2	3.4
7-I	407+32	Lt	III	1.8	2.2
8-I	407+85	Rt	None		
9-I	408+75	Rt	None		
10-I	409+61	Rt	I	2.8	3.3
11-I	410+25	Rt	None		
Totals				18.1	250.0

C CURBS

Mark	Station	Side	Type	1-12 4" Asphalt Conc. Curb Lin. Ft.
1-C	400+00	401+93.5	Lt	197
2-C	400+00	400+37.2	Rt	45
3-C	400+43	402+97.1	Rt	204
4-C	401+96.3	407+30	Lt	538
5-C	403+02.3	404+20.2	Rt	128
6-C	404+23.3	405+18.1	Rt	111
7-C	405+22.1	407+29	Rt	213
8-C	407+34	411+25	Lt	396
9-C	407+28.4	407+38	Rt	60
10-C	409+34	409+58.5	Rt	10
11-C	409+61.8	411+25	Rt	109
Totals				2131

WIDENING QUANTITIES

Widen- ing	Station		Length "A" Ft.	Width "B" Ft.				Area "A" X "B" ÷ 2 Sq. Yds.																
	From	To	Side	Side	Trans.	1/2 B-35	2/3 B-35	3/4 B-35	4/5 B-35	4/7-22	7/1-22	14/6-35	2/3 B-35	3/4 B-35	4/7-22	7/1-22	7-3							
L ₁ R ₁ S-1' S-1'	400+00	406+00	600				10.17	10.67	11.17			12.17	678	711	745		811	811						
L ₁ R ₁ S-1' S-1'	406+00	411+25	525					12.67	13.17			14.17		740	766		827	827						
L ₁ R ₁ S-1' S-1'	411+25	412+00		75				8.04		9.04	10.04			67		75	84	7						
L ₁ R ₁ S-1' S-1'	412+00	415+00	300					6.50		7.50	8.50			217		250	283	25						
Totals																		678	1755	1511	325	367	1038	1963

* Typical without Curb
Variable Width 24' to 27' 1"

STRUCTURE 20' SPAN & UNDER

Str. No.	SLM	Station	Existing	Proposed
17	25.57	407+25	P.C. 24' 51'	To Remain

H PIPE REMOVAL

Mark	Station	Side	E-12 Pipe Removed Lin. Ft.
1-H	410+39		120
Totals			120

S STORM SEWERS

Mark	Station	Side	1-20 12" S.S. Under Pav't Lin. Ft.	1-8 Catch Basin Each
1-S	401+84	Lt	4	1
Totals			4	1

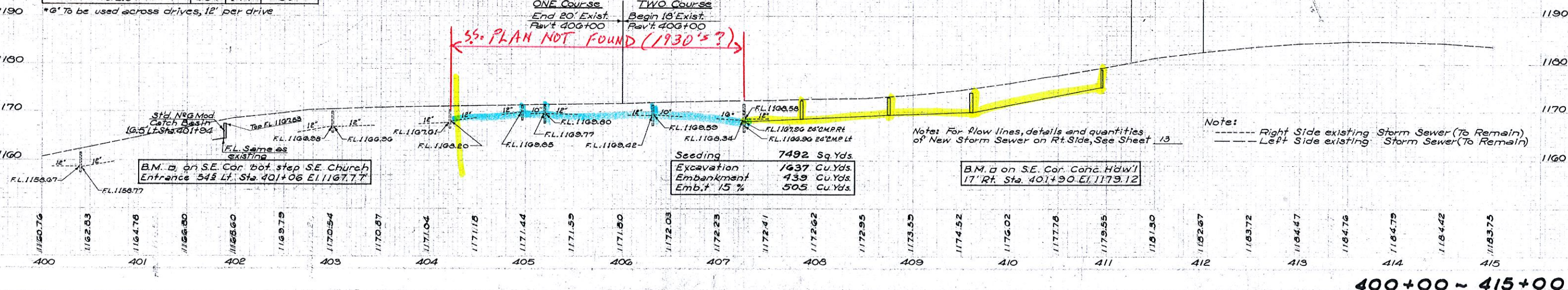
SW SIDEWALK

Mark	Station		Side	I-13 Sidewalk Sq. Ft.		E-8 Removal & Disposed Sq. Yds.
	From	To		4"	6"	
1-SW	404+50	405+60	L+	290	144	49
2-SW	406+75	407+02	L+	108		12
Totals				404	144	61

* 6" to be used across drives, 12' per drive

* 10 Lin. Ft. 14 Type I Paved Gutter, No Sod Strips
** 7-35 Same as 7-16 = 25.0 Sq. Yds.

SOD - ESTIMATED QUANTITY TYPE-I
Station From 402+00 To 407+00
155 Sq. Yds.
3' Sod to be placed on left back slope as indicated on X-sec. Sheets



Seeding	7492 Sq. Yds.
Excavation	1637 Cu. Yds.
Embankment	439 Cu. Yds.
Emb't 15 %	505 Cu. Yds.

B.M. on S.E. Cor. Conc. Hd'w'l
17' Rt. Sta. 401+90 E.L. 1179.12

Note: For flow lines, details and quantities of New Storm Sewer on Rt. Side, See Sheet 13
----- Right Side existing Storm Sewer (To Remain)
----- Left Side existing Storm Sewer (To Remain)

400+00 ~ 415+00