HORNADAY

0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00

20.00

10.00

14.50 14.62 15.20 14.35 15.25 15.50 14.85 14.71 14.64 15.98 19.57 16.13 16.35 16.33 16.58 18.25 18.32

El. Grade Stakes → 10.00 10.00

El. Creek Bottom → 8.16

Flow Line 8.08 9.70 10.25 10.64 11.65 12.05 12.61 13.08 12.71 12.95 13.22 13.18 12.90 13.82 14.06 14.48 14.95 15.11 17.27 17.00 17.45

6.50

Fall is 2.16" = .18'

Fall is .425' = 5

Clean open ditch as shown to proride clear outlet. Dotted line is present bottom of open ditch for 250' below header. Heavy line shows depth to which Contractor is required to clean. If greater distance is required to get required depth than here shown, ditch shall be cleaned for such greater distance without extra cost.

Creek crosses 1st time

Creek crosses Public road

Creek turns 90° to right 4+45 11.10

Creek turns 90° to right 4+75 11.85

Creek crosses 2nd time

Creek crosses Public road

5" Drain from West El. 9+00 10+00

5" Line Fence El. W. Road 10+25

Creek runs 86° to left 15+00 and crosses

1-8" + 1-6" Tiles to Outlet 15+00

8" Drain from N. to outlet 20' N from old drain 16+30

El. Flow Line → 7.00 7.18 7.36 7.54 7.72 7.90 8.08 8.26 8.44 8.62 8.80 8.98 9.16 9.34 9.52 9.70 10.13 10.56

Cu. Yds. Excavation

Depth Below Open Ditch bottom 1.68 2.10 2.44 2.52 2.705 3.006 2.89 2.905 3.129 3.10 3.93 3.93 4.04 4.37.83 4.135 4.34 4.416 4.53 4.0735 4.226 4.82 4.5345 4.227 4.20 4.89.79 4.33 4.375 4.0449 4.42 4.17 3.857 3.922 3.79 3.507 3.66 3.877 4.19 4.72 4.84 4.479 4.94 5.105 4.766 5.25 6.185 5.783 7.14 7.105 6.492 6.89

Average Cut between Stations below ditch bottom.

Station 3+50 — 39.07 — 39th Tile

Average Cut from flow line Below Stake

Depth Below Stake 3.00 5.16 7.32 7.24 7.26 7.46 7.66 7.245 6.83 7.04 7.35 7.385 7.005 6.59 6.28 5.97 6.005 6.04 6.36 6.68 8.605 10.53 8.75 6.67 6.98 7.01 6.91 6.84 6.81 6.8475 6.88 7.50 6.185 8.12 7.845 7.27

Station 0+00 1+00 2+00 4+00 6+00 8+00 10+00 12+00 14+00 16+00

HORNADAY DRAIN

CENTER TWP.

Hendricks Co Indiana

B.M. 14.85 N.W. Cor Gen. Culvert 100 ft. So. of Sta 0+00

15.75 Sta 16+30 Top of old 18" Drain

28.94 High point Stone adjoining line Fence post 6' No. of Sta 53+44

STANDARD PROFILE PLATE A 4 X 20
KEUFFEL & ESSER CO. NEW YORK

629

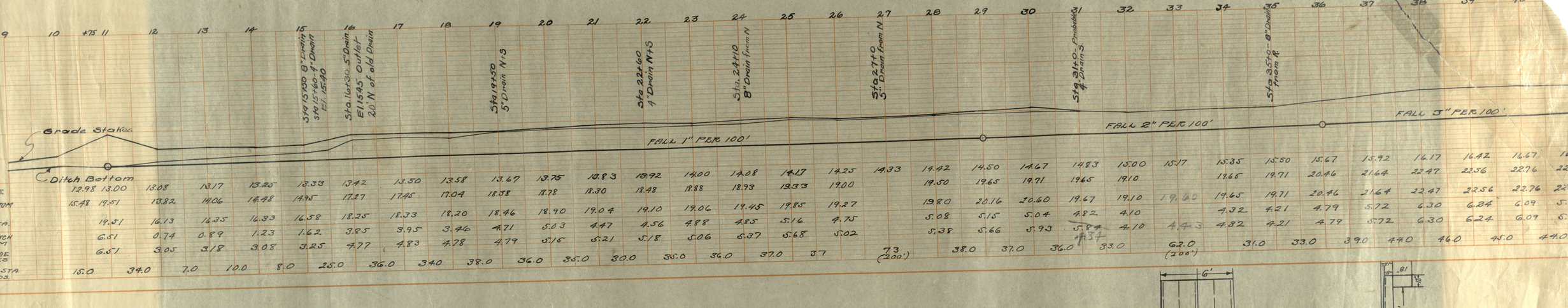
	7.485		6.465	59.83					
18+00	7.20		Station 3+50 To 18+00 – 24" Tile		11.00	Top El. old Drain 15.58 18+80		17.04	18.20
	7.205		6.585	58.16					
	7.21		7.13		11.25			18.38	18.46
	7.305		7.205	63.64		Creek Turns 45° To right. 1-5" Drain from No. 19+50 And 1-5" Drain From So. Covered Up.			
20+00	7.40		7.28		11.50			18.78	18.90
	7.345		6.915	61.08					
	7.29		6.55		11.75	Top Elv. old 18" Drain 6.28 20+90		18.30	19.04
	7.195		6.515	57.54					
22+00	7.10		6.48		12.00			18.48	19.10
	6.955		6.555	57.90		4" Drain Right & Left Covered Up 22+60			
	6.81		6.63		12.25			18.88	19.06
	6.38		6.53	57.68					
24+00	5.85		6.43 Station 18+00 To 24+00, – 20" Tile		12.50	Hole El. 17.70 Rail fence 18.98 No. & So.			19.45
	6.525		Station 24+00 To 53+44, – 18" Tile			8" Drain from No 24+10			
	7.10		6.505	48.18		5" Drain from left 24+60			
	6.685		6.58		12.75			19.38	19.85
26+00	6.27		6.29	46.58					
	6.285		6.00		13.00			19.00	19.27
			6.00	44.44					
28+00	6.30		6.00		13.25	5" Drain from No. 27+60			
	6.355		6.00	44.44					
	6.41		6.00		13.50			19.50	19.80
	6.585		5.95	44.07					
30+00	6.60		5.90		13.75			19.65	20.16
	5.551		5.805	42.99					
	5.42		5.71		14.00			19.71	20.60
	5.01		5.565	41.42					
32+00	4.60		5.42		14.25	31+00 Gentry wants 4" Drain To Go.			19.67
	4.625		5.01	37.11					
	4.65		4.60		14.50				19.10
	4.555		4.6125	34.16					
	4.46		4.625		14.75				
	4.71		4.6375	34.34		33+50 Gentry wants 5" Drain To Go.			
34+00	4.65		4.65		15.00				19.65
	4.555		4.555	33.74					
	4.46		4.46		15.25	8" Drain from Left Covered up 35+00			19.71
	4.71		4.71	34.88					
36+00	4.96		4.96		15.50				20.46
	5.425		5.425	40.18					
	5.89		5.89		15.75	Line fence Entry T. Williams. 26.85			21.64
	6.18		6.18	45.77					
38+00	6.47		6.47		16.00				22.47
	6.39		6.39	47.33					
	6.31		6.31		16.25				22.56
	6.285		6.285	46.55					
40+00	6.26		6.26		16.50				22.76
	6.135		6.135	45.44					
	6.00		6.00		16.75	possibly drain To Left 41+00			22.75
	5.725		5.725	42.40		Wire fence			
42+00	5.45		5.45		17.00	Lateral "A" bears to right.			22.45
	5.55		5.53	44.07					
	6.45		6.45		17.25				23.70
	6.50		6.50	48.14					

Fall 3.25' = 3" per 100'

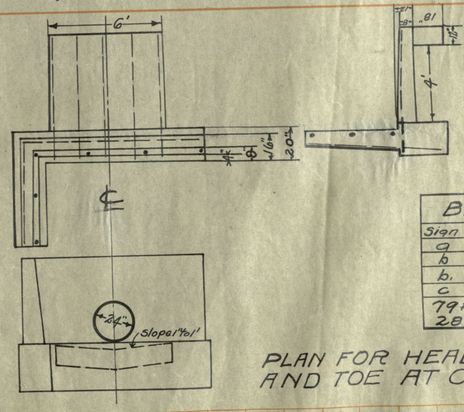
| | | |

CHARLES P. HORNADY ET AL DRAIN.
CENTER TWP. HENDRICKS CO., IND.
PROFILE SHOWING PROPOSED IMPROVEMENT BY TILING.

Sta. to Sta.	Size of Tile.	Size of Trench.
10+60 – 18+00	24"	30"
18+00 – 24+00	20"	24"
24+00 - 53+44	18"	24"
A0+00 - 4+00	12"	24"



	9	10	+75 11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
EL. OF TILE			12.98	13.00	13.08	13.17	13.25	13.33	13.42	13.50	13.58	13.67	13.75	13.83	13.92	14.00	14.08	14.17	14.25	14.33	14.42	14.50	14.67	14.83	15.00	15.17	15.35	15.50	15.67	15.92	16.17	16.42	16.67	16.9
EL. DITCH BOTTOM			15.48	15.51	13.82	14.06	14.48	14.95	17.27	17.45	17.04	18.38	18.78	18.30	18.48	18.88	18.93	19.33	19.00		19.50	19.65	19.71	19.65	19.10		19.65	19.71	20.46	21.64	22.47	22.56	22.76	22.7
EL. GRADE STA.				19.51	16.13	14.35	16.33	16.58	18.25	18.33	18.20	18.46	18.90	19.04	19.10	19.06	19.45	19.85	19.27		19.80	20.16	20.60	19.67	19.10	19.00	19.65	19.71	20.46	21.64	22.47	22.56	22.76	22.7
CUT BELOW DITCH BOTTOM				6.51	0.74	0.89	1.23	1.62	3.25	3.95	3.46	4.71	5.03	4.47	4.56	4.88	4.85	5.16	4.75		5.08	5.15	5.04	4.82	4.10		4.32	4.21	4.79	5.72	6.30	6.24	6.09	5.8
CUT BELOW GRADE STAKES				6.51	3.05	3.18	3.08	3.25	4.77	4.83	4.78	4.79	5.15	5.21	5.18	5.06	5.37	5.68	5.02		5.38	5.66	5.93	5.84	4.10		4.32	4.21	4.79	5.72	6.30	6.24	6.09	5.8
EXC. BETWEEN STA. CU. YDS.			15.0		34.0	7.0	10.0	8.0	25.0	36.0	34.0	38.0	36.0	35.0	30.0	35.0	36.0	37.0	37	73 (200')		38.0	37.0	36.0	33.0	62.0 (200')		31.0	33.0	39.0	44.0	46.0	45.0	44.0

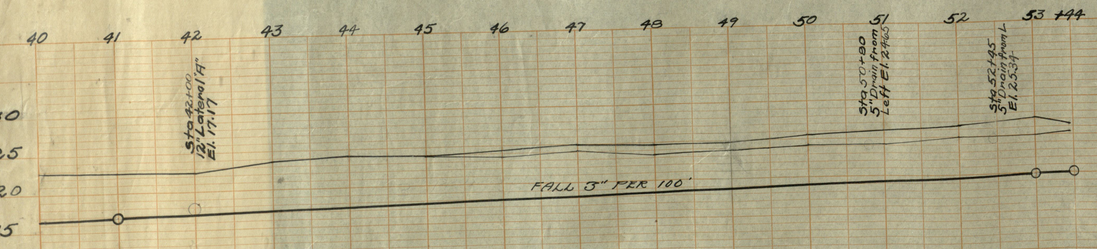


PLAN FOR HEADER WITH APRON AND TOE AT OUTLET SCALE 1/4"

Bill of Material				
Sign	No	Kind	Length	Spacing
a	3	½"	14'-6"	2'-6" c to c
b	4	½"	7'-2"	3'-0" c to c
b.	2	½"	7'-2"	2'-6" c to c
c	5	½"		

79 # Loose Steel – 5.6 Yds. Con
28 Bags Cement 7 Yds Gravel

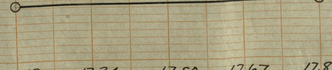
627



	40	41	42	43	44	45	46	47	48	49	50	51	52	53 +44
EL. OF TILE	16.67	16.92	17.17	17.42	17.67	17.92	18.17	18.42	18.67	18.92	19.17	19.42	1967	19.92 20.03
EL. DITCH BOTTOM	22.76	22.75	22.45	23.70	24.05	23.92	23.45	24.17	23.33	23.81	24.35	24.30	25.01	25.05 25.40
EL. GRADE STAKE	22.76	22.75	22.45	23.70	24.05	23.92	24.35	25.00	24.73	24.78	25.68	26.00	26.55	27.17 26.45
CUT BELOW DITCH BOTTOM	6.09	5.83	5.28	6.28	6.38	6.00	5.28	5.75	4.66	4.89	5.18	5.88	5.34	5.13 5.37
CUT BELOW GRADE STAKES	6.09	5.83	5.28	6.28	6.38	6.00	6.18	6.58	6.06	5.86	6.47	6.58	6.88	7.25 6.42
EXC. BETWEEN STA. CU. YDS.		44.0	41.0	43.0	46.0	48.0	42.0	41.0	39.0	35.0	37.0	33.0	34.0	39.0 33.0

A0+00 A1+00 A2+00 A3+00 A4+00

LATERAL "A"
FROM STA. 42+00



	17.17	17.34	17.50	17.67	17.84
	22.45	22.35	22.46	22.26	21.85
	22.45	22.35	22.46	22.26	21.85
	5.28	5.01	4.96	4.59	4.01
	5.28	5.01	4.96	4.59	4.01
	38.0	37.0	36.0	37.0	

EXCAVATION

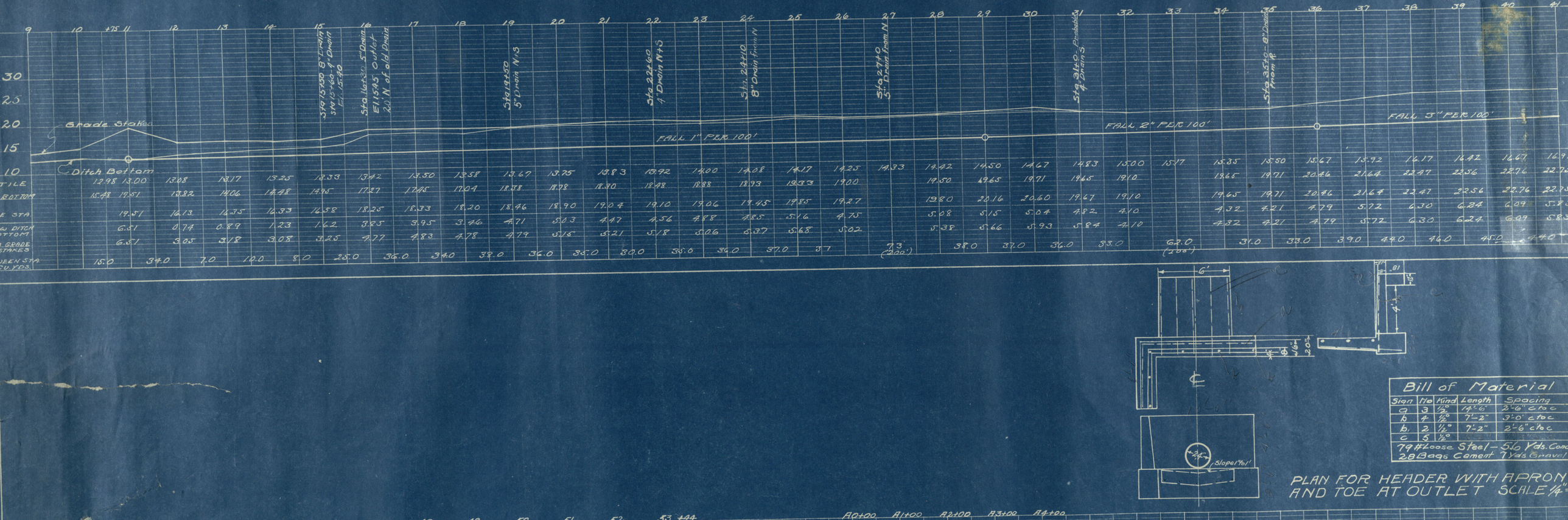
Main Ditch	1528.0 Cu. Yds.
Lateral "A"	148.0 "
Total	1676.0 "

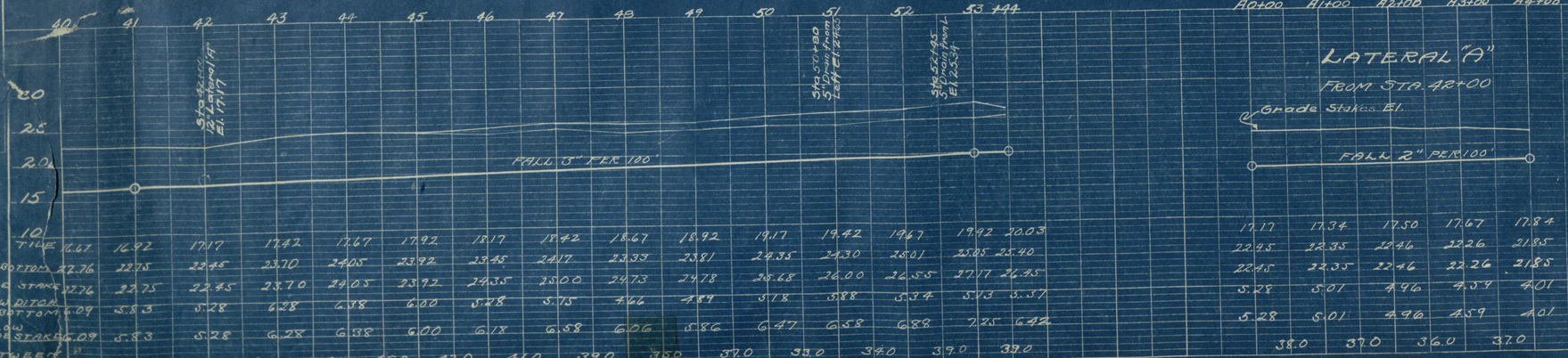
627

PLATE 2 - PLAN-PROFILE O. D. W. & R. E. STANDARD.
KEUFFEL & ESSER CO., NEW YORK.

CHARLES P. HORMADY ET AL DRAIN.
CENTER TWP. HENDRICKS CO., IND.
PROFILE SHOWING PROPOSED IMPROVEMENT BY TILING.

Sta. to Sta.	Size of Tile.	Size of Trench.
10+00 – 18+00	24"	30"
18+00 – 24+00	20"	24"
24+00 – 53+44	18"	24"
A0+00 – 4+00	12"	24"





PLAN FOR HEADER WITH APRON AND TOE AT OUTLET SCALE 1/4"

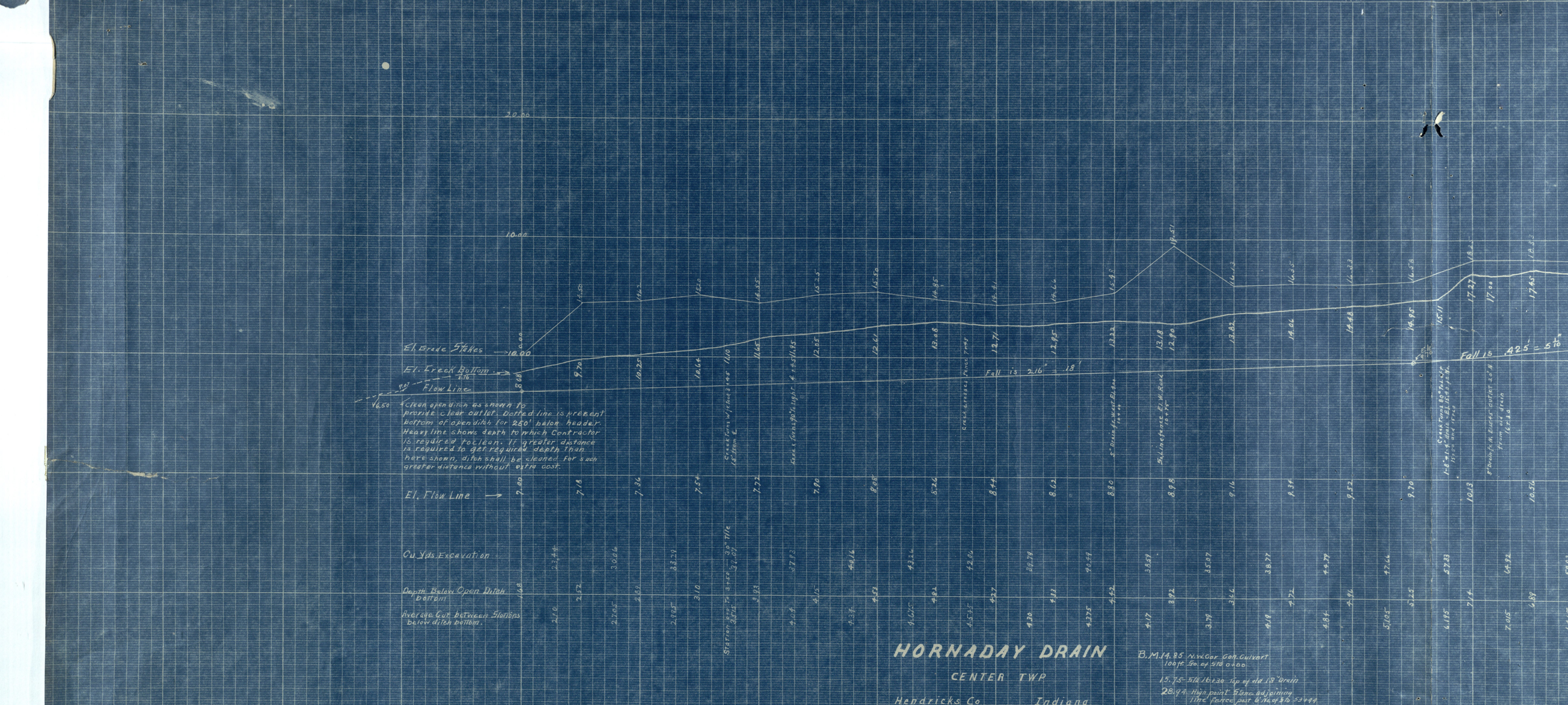
Bill of Material				
Sign	No	Kind	Length	Spacing
a	3	½"	14'-0"	2'-6" c to c
b	4	½"	7'-2"	3'-0" c to c
b.	2	½"	7'-2"	2'-6" c to c
c	5	½"		

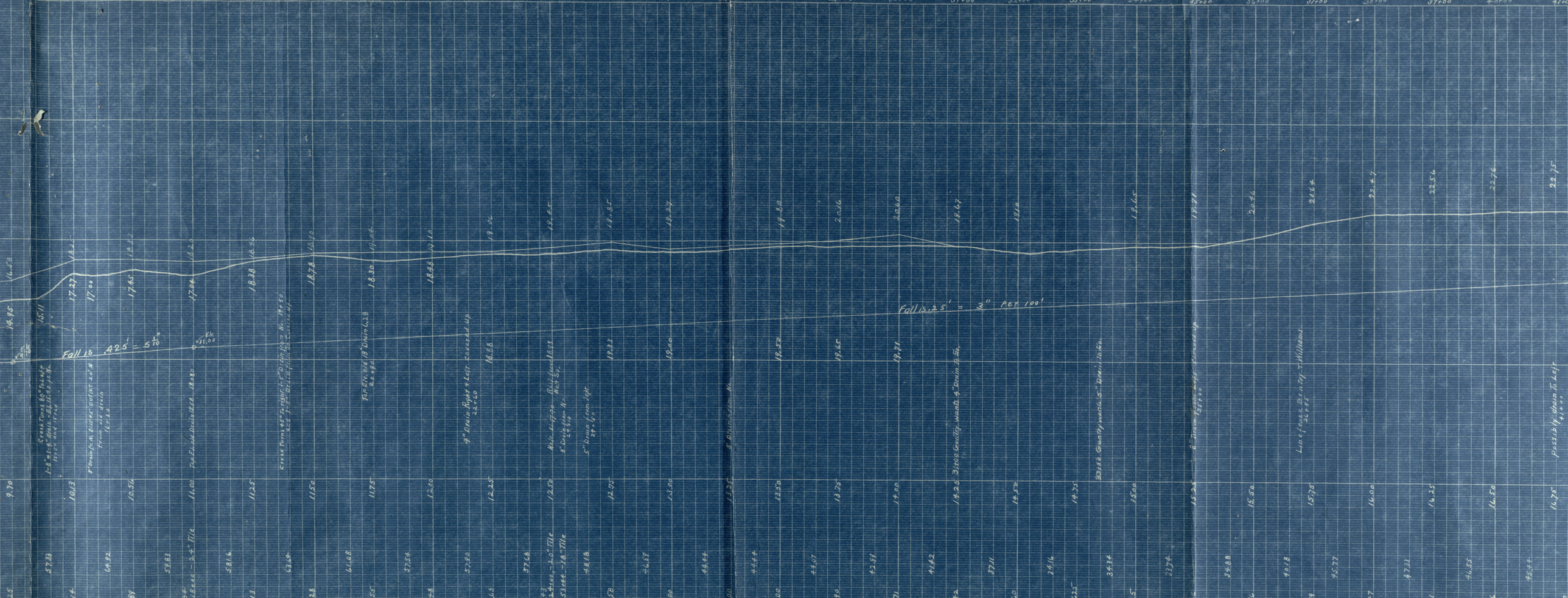
79# Loose Steel – 5.6 Yds. Conc
28 Bags Cement – 1 Yds Gravel

EXCAVATION

Main Ditch	1528.0 Cu Yds.
Lateral A"	148.0 "
Total	1676.0 " "

628


20.00
10.00
El. Grade Stakes → 10.00
El. Creek Bottom → 8.08
Flow Line
Clean open ditch as shown to provide clear outlet. Dotted line is present bottom of open ditch for 250' below header. Heavy line shows depth to which Contractor is required to clean. If greater distance is required to get required depth than here shown, ditch shall be cleaned for such greater distance without extra cost.
El. Flow Line →
Cu Yds Excavation
Depth Below Open Ditch Bottom
Average Cut between Stations Below ditch bottom.
Creek Flows W/about 3145 1100 Cfs from E
Creek Crossed by Gravel Rd 2145/185
Creek Crossed Fence 7445
Fall is 2.16" = 18'
Fall is .425 = 5 1/2"
5 Line Fence E of W. Road
5" Drain E of West Fence
Station 3+00 Top of Hill
Station 0+00
HORNADAY DRAIN
CENTER TWP
Hendricks Co. Indiana
B.M. 14.85 N.W. Cor Con. Culvert 100 ft So of STA 0+00
15.75 - 5 1/2 Lft 30 Top of old 18" Drain
28.94 High point Fence adjoining Line Fence past 6 1/2 of STA 53+44


Fall is 4.25' = 3" per 100'
Fall is 2.5' = 3" per 100'
Possibly drain to left


W.H Flathers
10A
Geo L. Christie
30A
Chas. P. Hornaday
80A
40A
J. W. Williams
80A
Morton O. Gentry
80A
James M. Cornsthwait
80A
C. E. Ellis
80A
Eliza. E. Hollingsworth
80A
Garry M. Wickmeyer
51½A
O. B Whyte
4A
Whyte
1½A
Leemon H. Trotter
104 A
SECTIONS 28 and 33
Township 15 N Range 1W
Hendricks County
Indiana

W.H. Flathers 10A

Geo L. Christie 30A

Shocking 40A

Chas. P. Hornaday 80A

Hornaday 40A

J. W. Williams 80A

R. Hughes 60A

Morton O. Gentry 80A

James M. Cornsthwait 80A

C. E. Ellis 80A

Eliza E. Hollingsworth 80A

Garry M. Wickmeyer 51½A

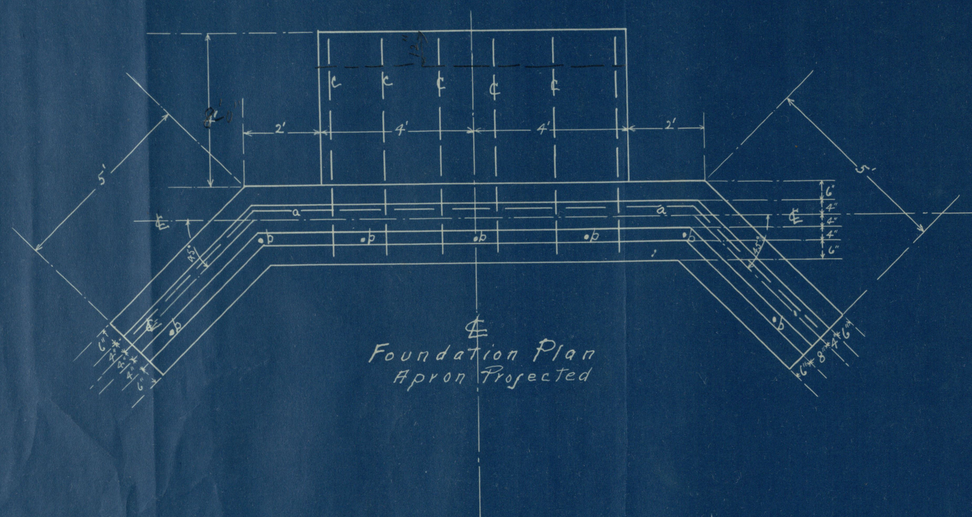
O. B. Whyte 4A

Whyte 1½A

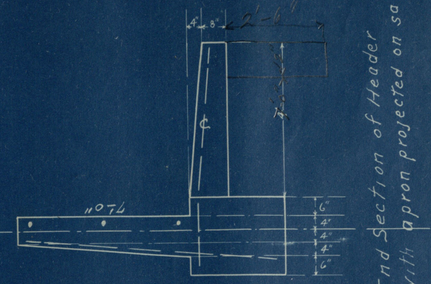
Leemon A. Trotter 104A

Shirley

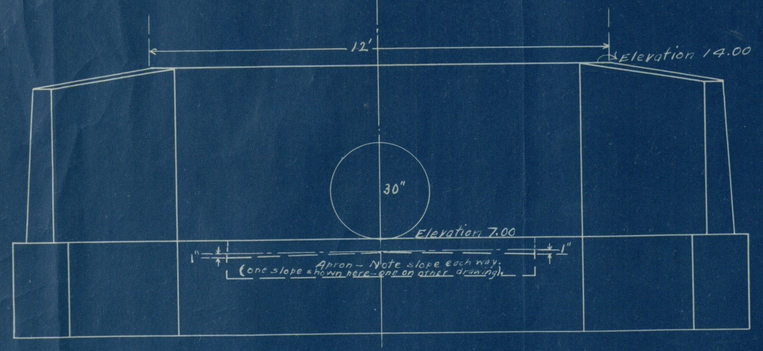
SECTIONS 28 and 33
Township 15N Range 1W
Hendricks County Indiana



℄ Foundation Plan
Apron Projected



End Section of Header
with apron projected on same plane.



Elevation on ℄ - Apron Shown.

Materials				
Sign	No.	Kind.	Length	Spacing
a	3	½ ○	23'-6"	21" C To C
b	7	½ ○	6'-6"	3'-0" C To C.
c	6	½ ○	5'-6"	1'-6" C To C.
100 # Steel. 1.25 cu yds Concrete				
60 Bags Cement.				

OUTLET HEADER
HORNADAY DRAIN
CENTER TWP.
Hendricks County Indiana
Scale ½" = 1'

631

John E. Call 13 A | E. Mason 13 A

Walter G. Lange 40 A

Milton Templin 40 A

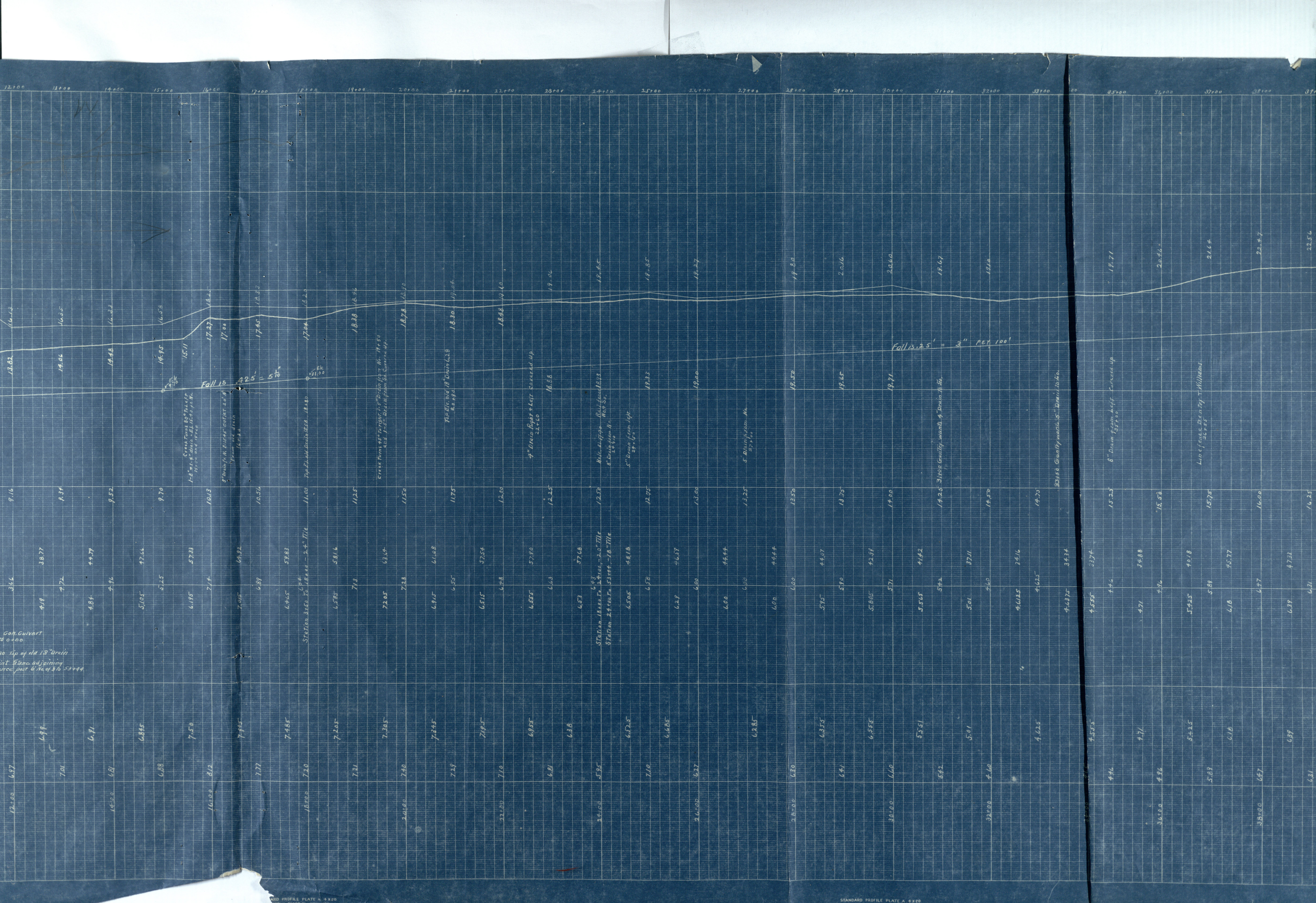
Henry Booher 40 A

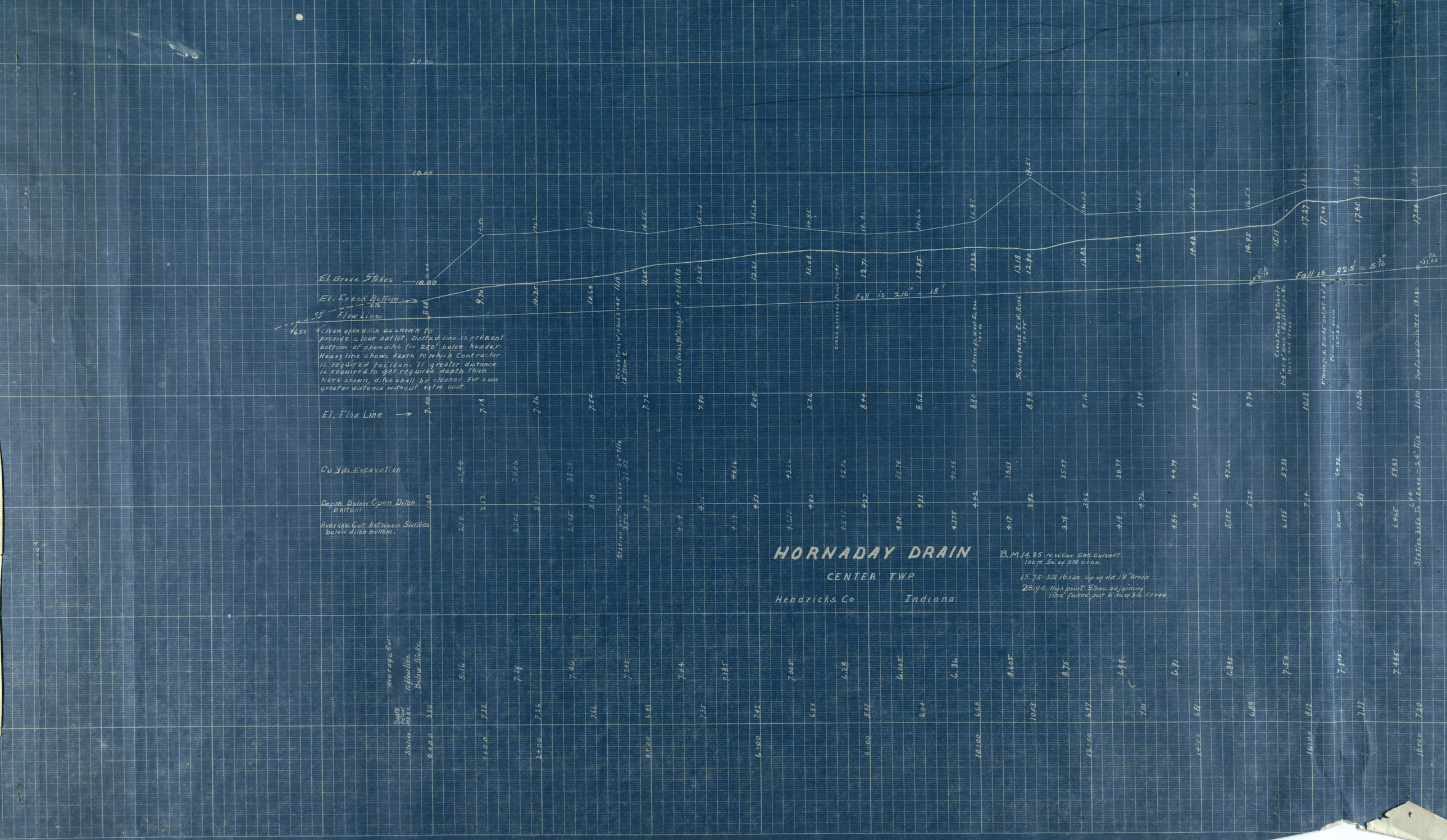
Wm Fowler 40 A

Fettic Bellers 40 A

6.26	6.26		16.50	22.76
6.135	6.135	45.44		
6.00	6.00		16.75	possibly drain to Left 41+00 22.75
5.725	5.725	42.40		Wire fence
5.45	5.45		17.00	Lateral "A" bears to right 22.45
5.85	5.85	44.07		
6.45	6.45		17.25	23.70
6.50	6.50	48.14		
6.55	6.55		17.50	24.05
6.36	6.36	47.11		
6.17	6.17		17.75	Creek bears to left about 40° 23.92 Line fence Falkners - Williams
6.26	5.81	43.03		
6.35	5.45		18.00	23.45 24.35
6.55	5.685	42.11		
6.75	5.92		18.25	24.17 25.00
6.48	5.37	39.77		
6.23	4.82		18.50	23.32 24.23
6.13	4.94	36.59		
6.03	5.06		18.75	23.81 24.78
6.355	5.205	38.55		
6.68	5.35		19.00	5" Drain from left El 23.65 24.38 25.68 50+80
6.715	5.20	38.51		
6.75	5.05		19.25	24.30 26.00
6.90	5.28	39.11		
7.05	5.51		19.50	25.01 24.55 Creek bears 45° To Right 52+15
7.235	5.405	40.03		5" Drain from left El 25.34 52+45
7.42	5.30		19.75	25.05 27.7
7.01	5.425	16.45		24.45
6.60	5.55			25.40
			20.00	BM Top of stone at fence post Sta 53+44 E 12896
5.45	5.45		17.00	22.45
5.275	5.275	34.18		
5.10	5.10		17.25	22.35
5.03	5.03	32.60		
4.96	4.96		17.50	Station A0 To A4 - 12" Tile 22.46
4.735	4.735	30.68		
4.51	4.51		17.75	22.26
4.18	4.18	27.09		
3.85	3.85		18.00	21.85

246.56 cu yds


Fall 15.425 = 5.76'
Fall 13.25' = 3" per 100'
Elk 4110
Elk 4100
Con. Culvert
Top of old 18" Drain
Point Elev. adjoining
Station Back 15+44 = 24 Mile
Station Back 16+88 = 26 Mile
Station Back 24+40 = 38 Mile
Station Back 25+44 = 40 Mile
Station Back 53+44 = 84 Mile
Creek Runs 80° Rt. of Ahead
Creek Runs 90° to right 5'-0" Ditch 100' No. 90°
Add Post Drain from 53 Channel up.
Air Elev. 100' 18" Drain 6.28
Air Elev. 100' 18" Drain 6.29
24" Drain Right & Left Screened up.
Note Right Add Post Drain
8" Drain from Right
5" Drain from Right
5" Drain from Mile
Station Back 53+44 = 84 Mile
Station Back 57+00 = 89 Mile
8" Drain from Right
Lateral Drain by Williams
Station Back 57+00 = 89 Mile
STANDARD PROFILE PLATE A 9X20


El. Grade Stakes
El. Creek Bottom
Flow Line
Clean open ditch as shown to provide clear outlet. Dotted line is present bottom of open ditch for 250' below header. Heavy line shows depth to which Contractor is required to clean. If greater distance is required to get required depth than here shown, ditch shall be cleaned for such greater distance without extra cost.
El. Flow Line
Cu Yds. Excavation
Depth Below Open Ditch Bottom
Average Cut between Stations below ditch bottom.
Station and Ft. of 30" Tile
Fall is 2.16" = 1'
Fall 15 42.5' = 5 7/10"
HORNADAY DRAIN
CENTER TWP
Hendricks Co Indiana
B.M. 14.85 N.W. Cor Gen. Culvert 100 ft. So. of STA 0+00
15.75 - 5/8 I.B. 1.30 Top of old 18" Drain
28.94 High point Stone adjoining Tile fence post 6" No of STA 53+44

HORNADAY DRAIN

CENTER TWP

Hendricks Co Indiana

B.M. 14.85 N.W. Cor. Gen. Culvert 100 ft. So. of Sta 0+00

15.75 Sta 16+30 Top of old 18" drain

28.94 High point Stone adjoining line fence past 6' No. of Sta 53+44

El. Grade Stakes → 10.00

El. Creek Bottom → 8.68

Flow Line

Clean open ditch as shown to provide clear outlet. Dotted line is present bottom of open ditch for 250' below header. Heavy line shows depth to which Contractor is required to clean. If greater distance is required to get required depth than here shown, ditch shall be cleaned for such greater distance without extra cost.

Fall is 2.16" = .18'

Fall 15 .425' = 5"/0

El. Flow Line →

Cu Yds. Excavation

Depth Below Open Ditch Bottom

Average Cut between Stations below ditch bottom.

Average Cut between Stations below Flow Line

Station 3+42 To Station 5+22 = 3.0 Tile

Station 3+63 To 18+44 = 2.4" Tile

STANDARD PROFILE PLATE A 4 X 20
KEUFFEL & ESSER CO. NEW YORK

STANDARD PROFILE PLATE A 4 X 20
KEUFFEL & ESSER CO. NEW YORK