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U. S. COAST AND GEODETIC SURVEY,
O. H. Tittmann, Superintendent.

States: *Pa. - Md.*

SKETCHBOOK.

ABSTRACT OF CONTENTS:

*Mason and Dixon Line
from summit of Tonoloway Hill
(near Hancock) to eastern base
of Warrior Ridge, (about
17 miles.)*

(R. W. Blain)

1902

CHIEF OF PARTY:

W. C. Hodgkins

Vols.

Vol. 14

305'
51
2 14
4.28

J.

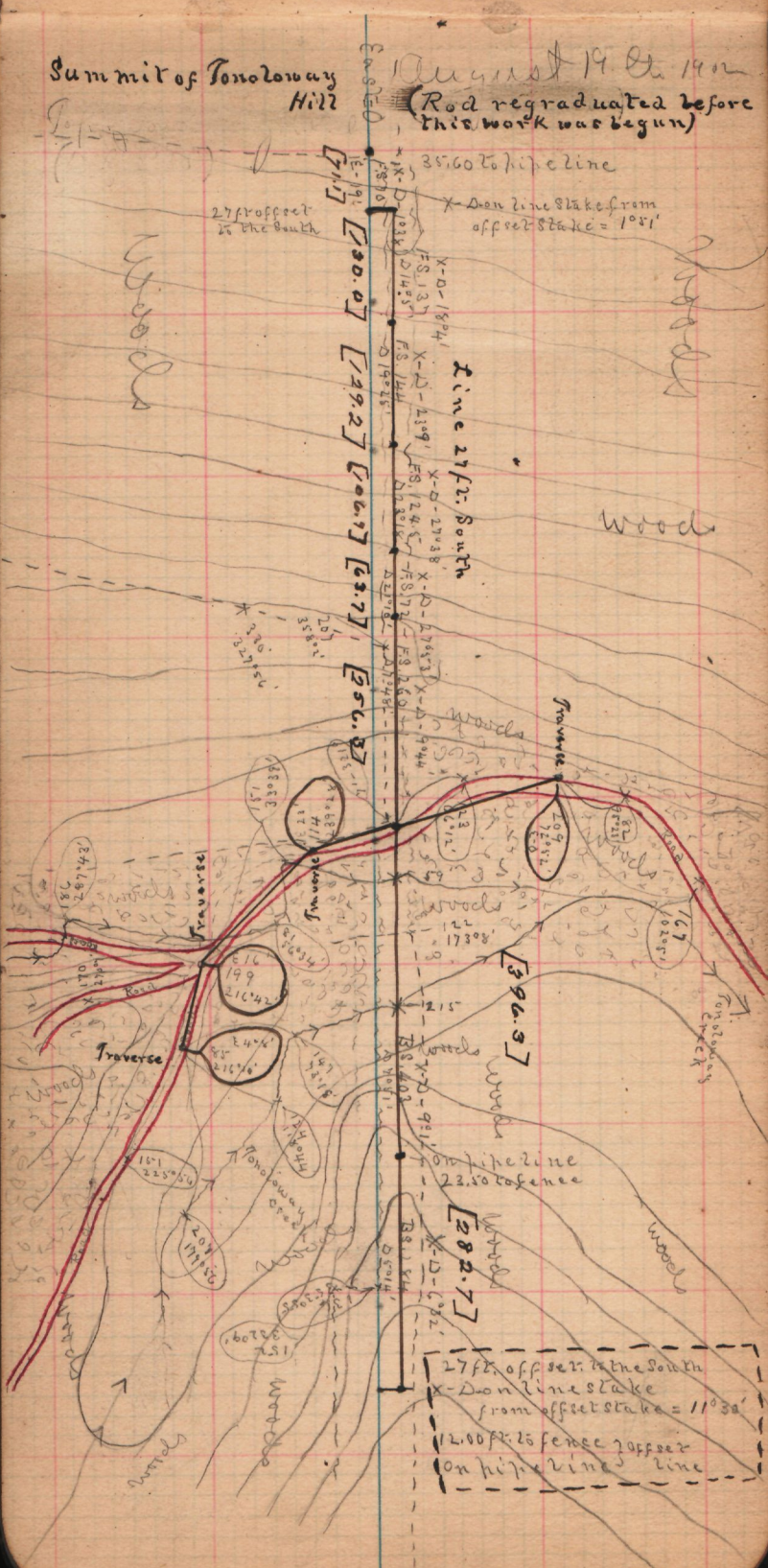
Summit of Tonoloway

1902

August 19. Oct. 1902
P. S. regraduated before

Summit of Tonoloway Hill

August 19th 1902
 (Rod regraduated before this work was begun)



27 ft. offset to the South

35.60 to pipeline
 X-Don line stake from offset stake = 1° 51'

Line 21 1/2 ft. South

woods

Traverse

[396.3]

[282.7]

27 ft. offset to the South
 X-Don line stake from offset stake = 11° 30'
 12.00 ft. to fence to offset on pipeline line

woods

woods

woods

woods

woods

[267.97]

[446.37]

[38.17]

[88.17]

[387.17]

[235.17]

[598.17]

BS. 267

BS. 446

FS. 137

FS. 187

BS. 33C

FS. 234

FS. 592

D. 139

D. 231

D. 141

D. 191

D. 148

E. 141

E. 24

193

302

263

152

202

202

202

1048

421

19

172.20 pipeline south
36.40 fence

26.60 pipeline
33.20 fence

No 130 m. h
37.60 ft.
86° 20' fm. west.

1600 to kite line } South
29.90 to fence

X-D-121

X-D-301

X-D-301

X-D-302

X-D-202

X-D-1048

X-D-421

X-E-19

180

134

150

134

180

134

150

134

180

134

150

134

180

134

150

134

180

134

150

134

180

134

150

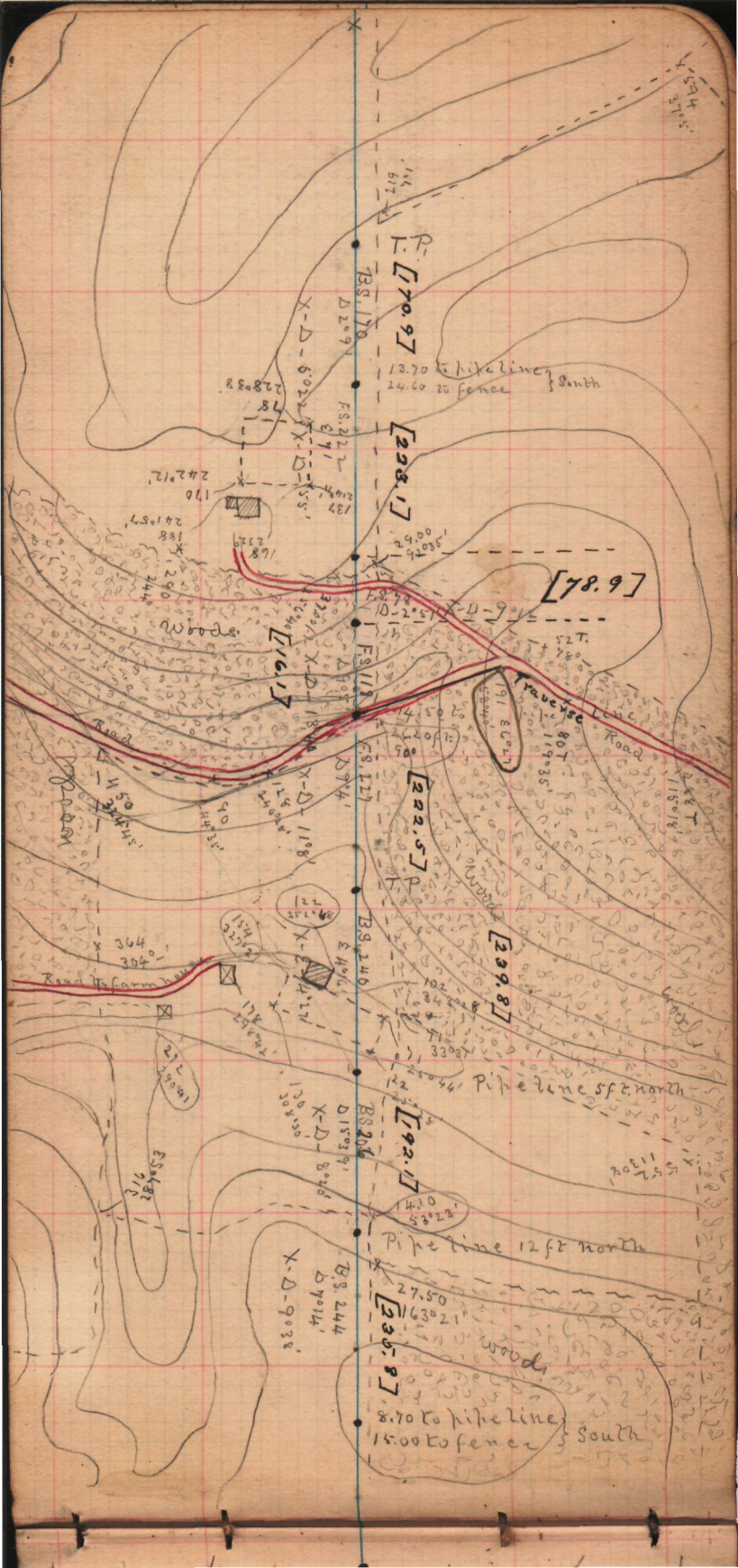
134

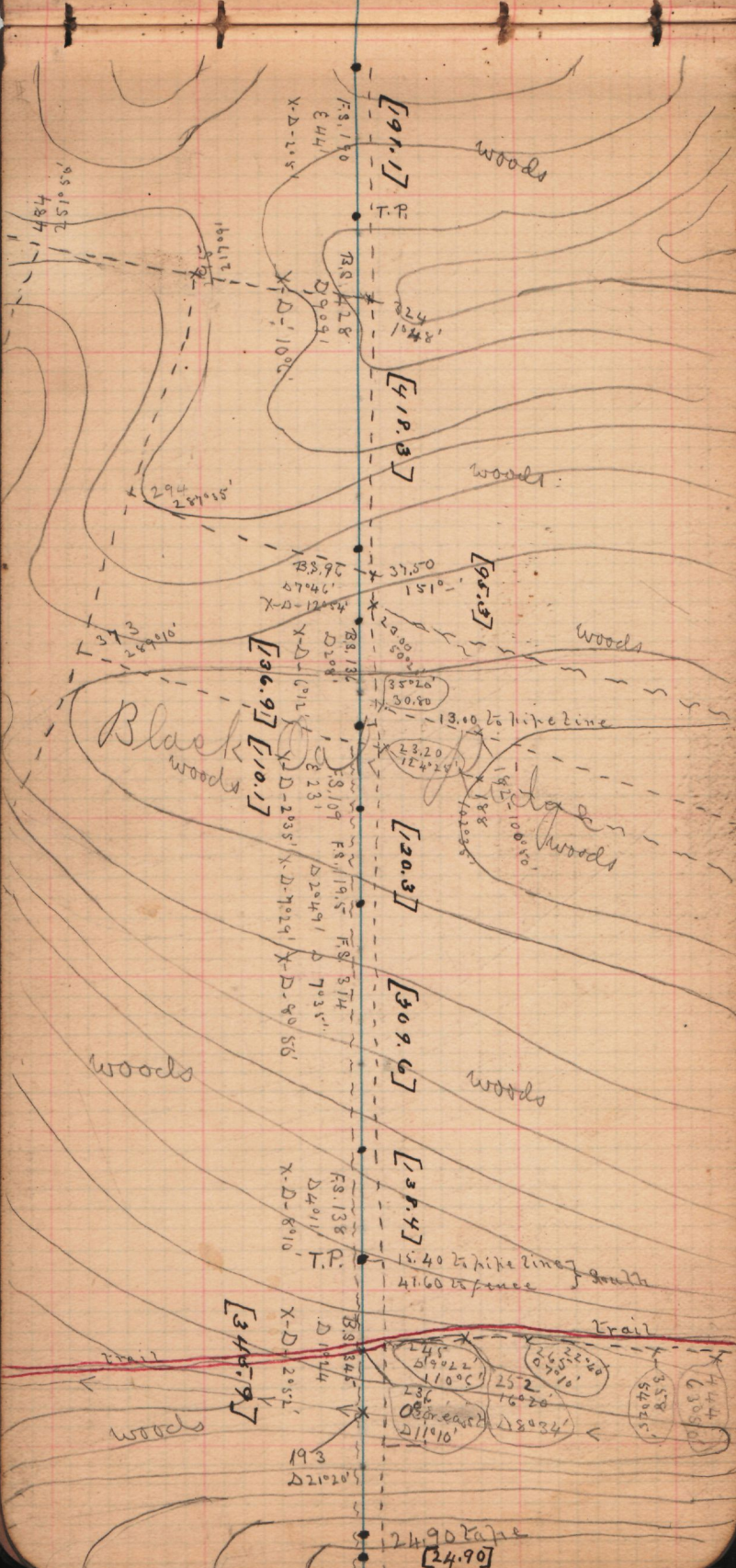
180

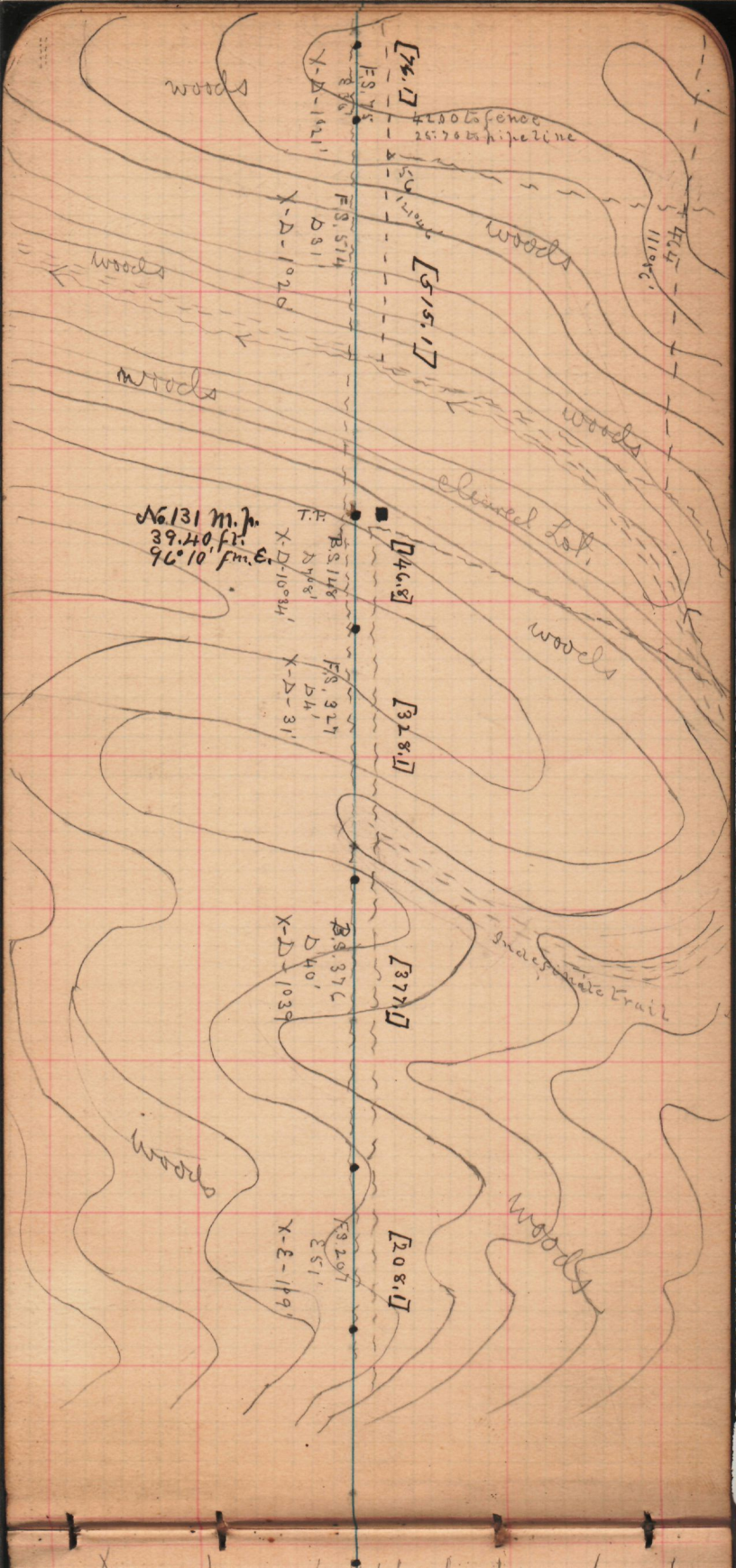
134

150

134







[72.1]

4200 ft fence
25765 pipeline

F.S. 75
D 81
X-D-1421'

[515.1]

F.S. 514
D 81

X-D-1020'

[46.8]

R.S. 148
D 768'

X-D-10034'

[328.1]

F.S. 327
D 41'

X-D-31'

[377.1]

R.S. 376
D 40'

X-D-1039'

[208.1]

R.S. 297
E 51'

X-E-1199'

N6131 m.p.
39.40 ft.
96°10' fm. E.

T.P.

cleared lot

Inaccessible Trail

woods

woods

woods

woods

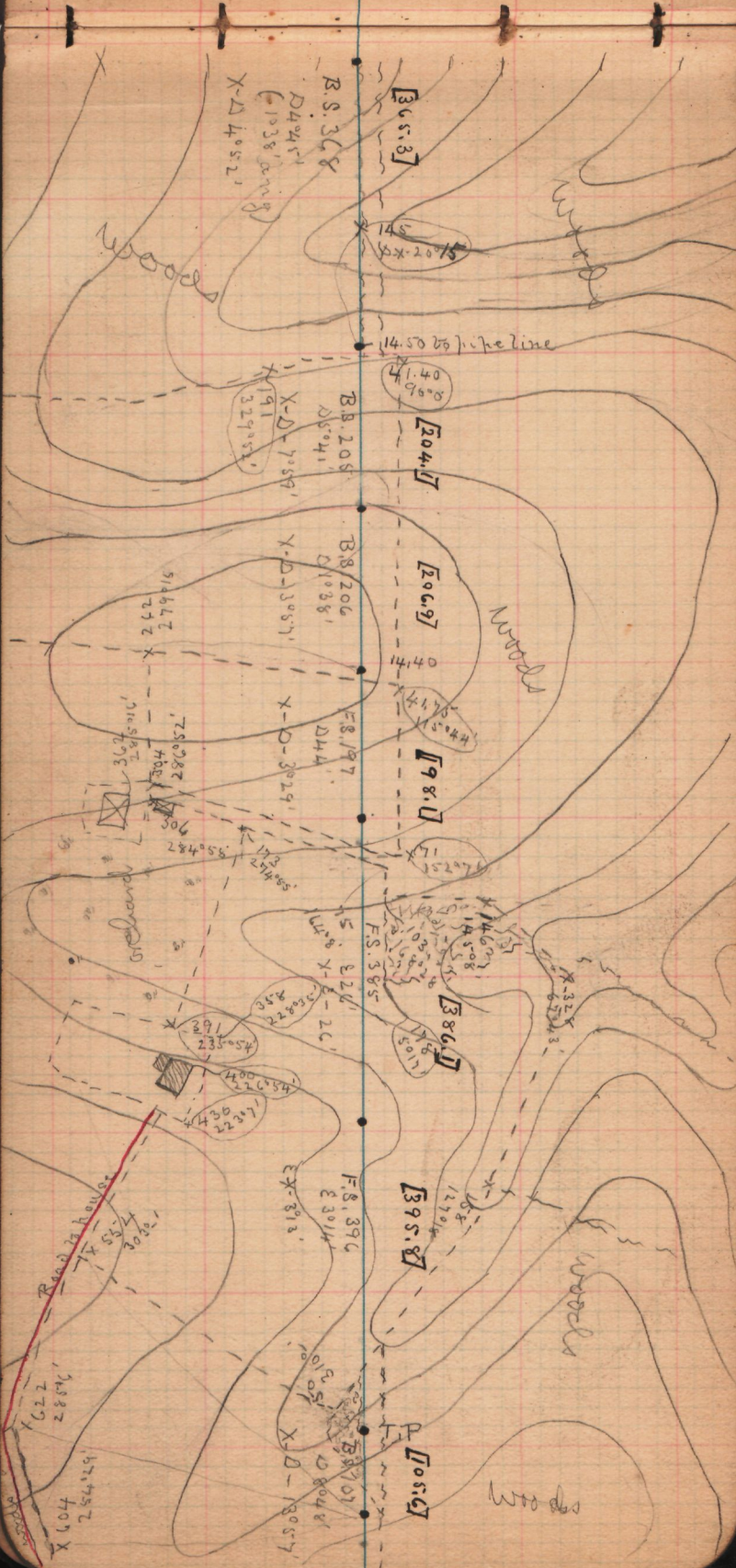
woods

woods

woods

woods

11192'



B.S. 368

D4 24' 1"
 (1038' bearing)
 X-D 405' 2'

[365.3]

145° 20' 5"

1450 60' pipeline

B.B. 208

D5 24' 1"
 X-D 705' 9'
 191
 329' 52'

[204.1]

B.B. 206

D1038'
 X-D 305' 7'

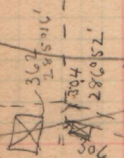
[206.9]

woods

F. 8. 197

D44'
 X-D 392' 9'

[198.0]



F.S. 385

E 22'
 X-E 26'
 115' 8' 11"

[386.1]

F. 8. 396

E 30' 14"
 EX-313

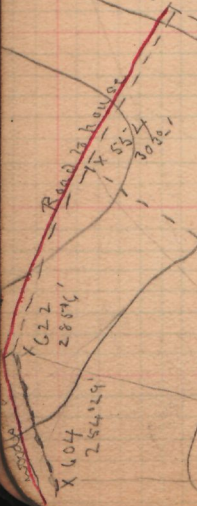
[395.8]

F. 1056

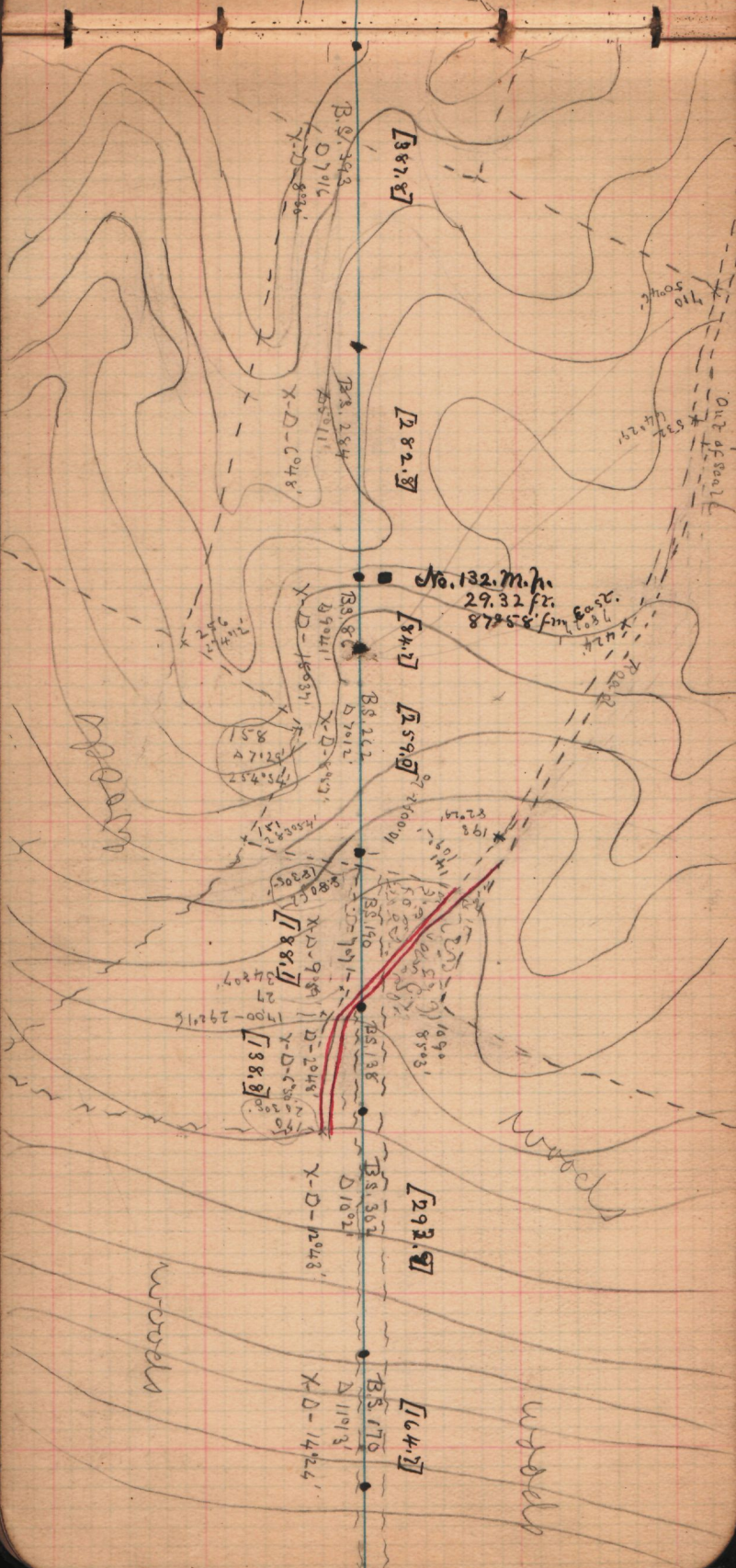
D804'
 X-D 1305' 7'

[1056.6]

woods



167' 75.7
 409' X



[387.87]

[282.87]

[84.7]

[259.87]

[88.7]

[88.8]

[293.87]

[64.7]

B.S. 293
D 7016

B.S. 284
D 5011

B.S. 86
D 7011

B.S. 262
D 7012

B.S. 190
D 7011

B.S. 138
D 2015

B.S. 362
D 1002

B.S. 170
D 11013

X-D-836

X-D-1048

X-D-10031

X-D-8000

X-D-938

X-D-1015

X-D-1298

X-D-1424

No. 132. m. h.
29.32 ft.
87858' fm. East

out of coal
532
1429

woods

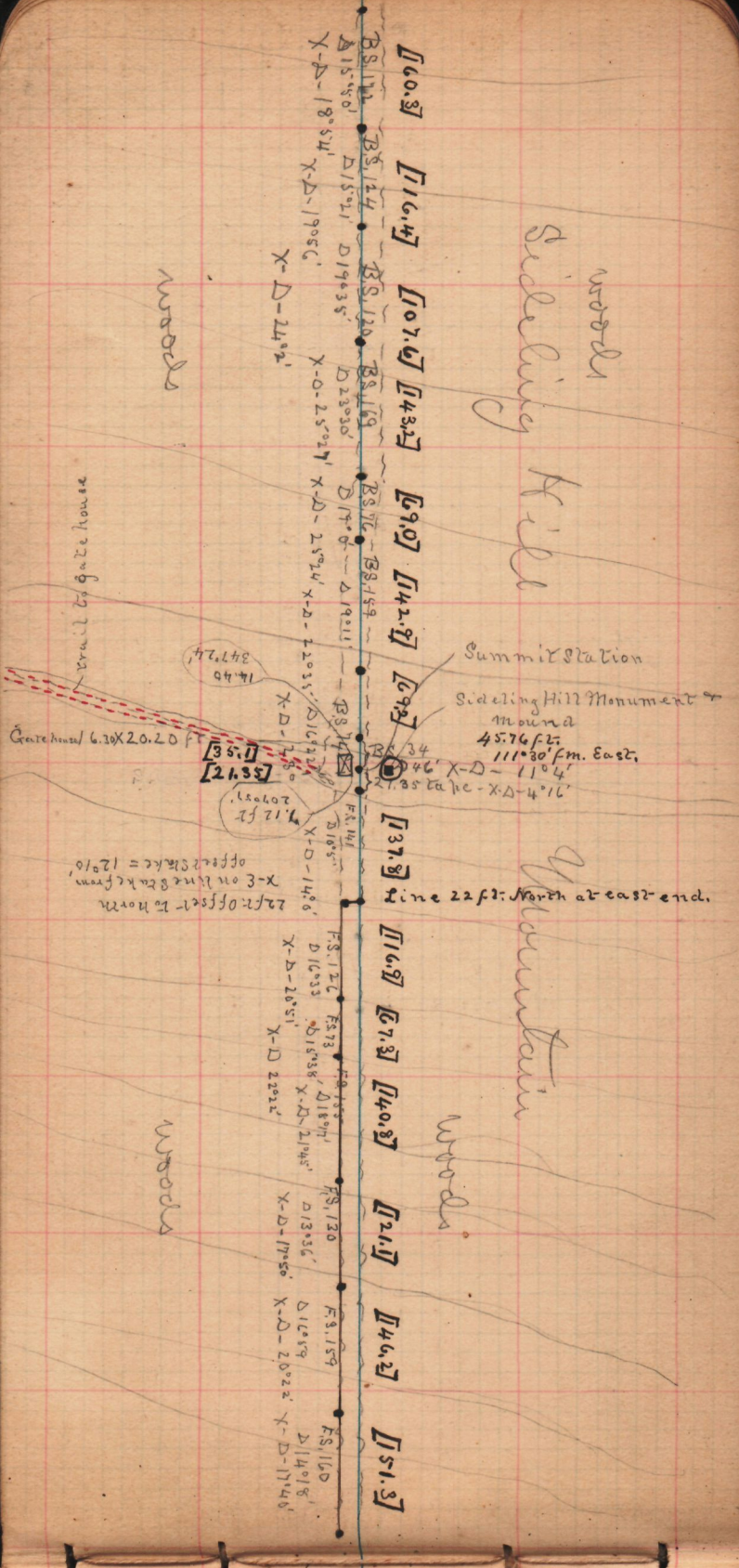
woods

woods

woods

woods
 Sideling Hill

Mountain



- [60.3]
- [16.4]
- [107.6]
- [43.2]
- [9.0]
- [42.8]
- [6.3]
- [37.8]
- [16.8]
- [67.3]
- [40.8]
- [21.1]
- [46.2]
- [51.3]

FS 114 D 15° 50' 18' 54' X-D-1905 C
 FS 124 D 15° 21' D 19° 35' X-D-24° 2'
 FS 120 D 23° 36' X-D-25° 21' 1' X-D-25° 24' X-D-22° 35'
 FS 119 D 17° 0' Δ 19° 11' X-D-22° 35' Δ 16° 12' 1'
 FS 116 D 19° 35' X-D-24° 2'
 FS 117 Δ 19° 11' X-D-22° 35'
 FS 114 D 18° 5' X-D-14° 6'
 FS 126 FS 73 FS 95 D 16° 33' Δ 18° 7' X-D-20° 51' X-D-22° 2'
 FS 130 D 13° 36' X-D-17° 50'
 FS 159 D 16° 59' X-D-20° 22'
 FS 160 D 14° 18' X-D-17° 46'

Summit Station
 Sideling Hill Monument & mound
 45.76 ft.
 111° 30' fm. East.
 X-D-11° 4'
 27.85 take X-D-4° 16'

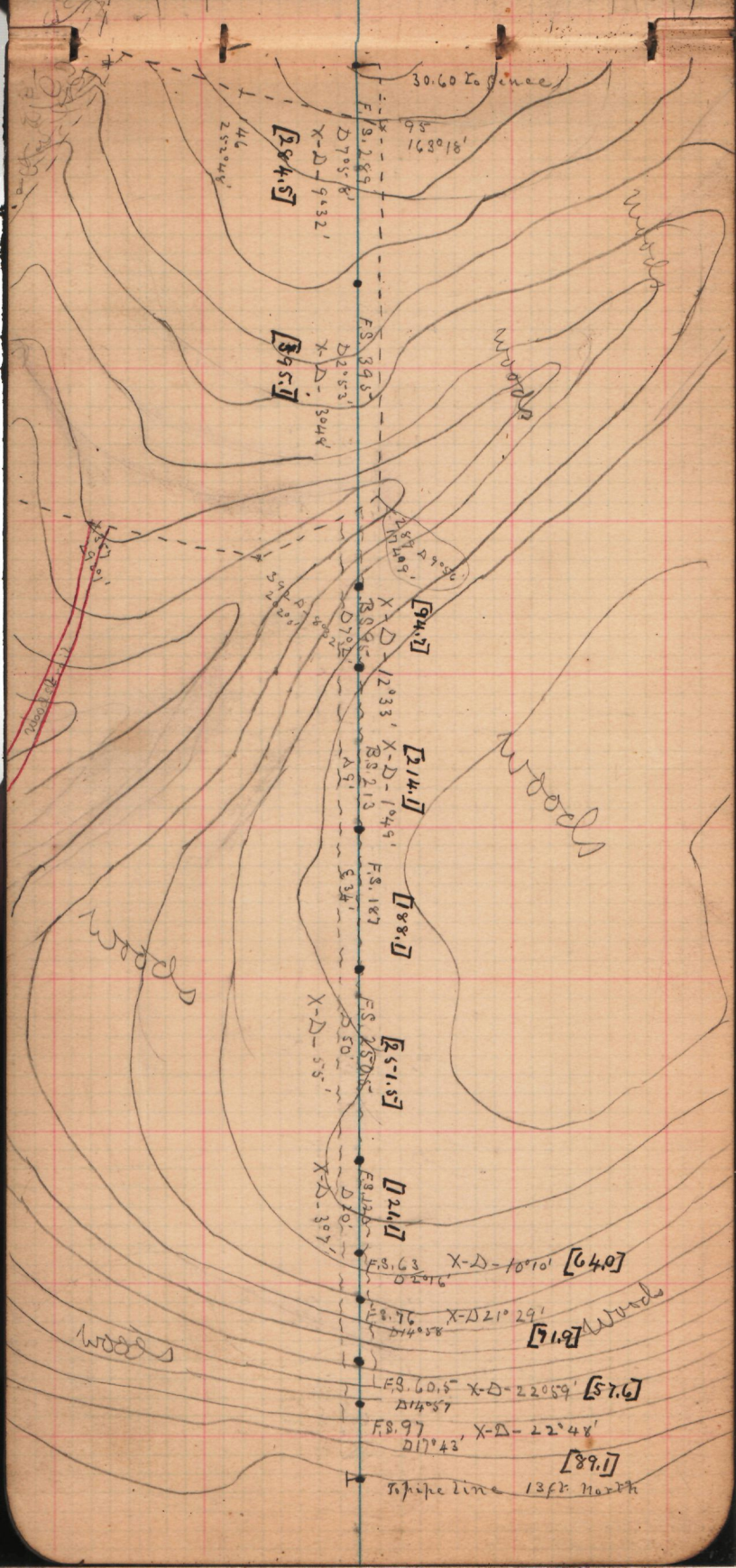
Gate house
 Garehual 6.30x20.20 ft
 347.24'
 14.40
 207.03
 9.12 ft
 22 ft. offset to north
 X-3 on line back from
 offset stake = 12° 10'

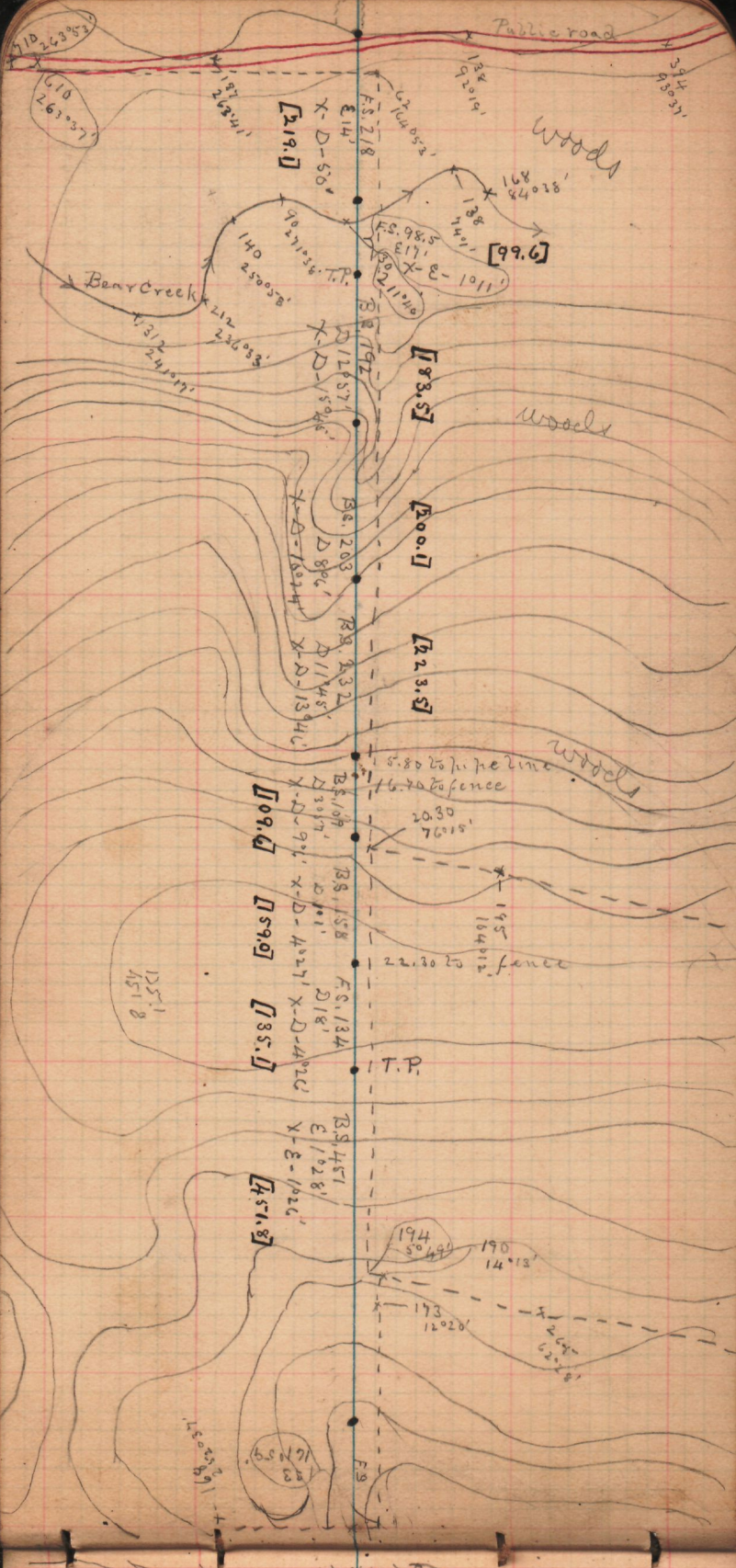
Line 22 ft. North at east end.

woods

woods

woods





Bushes

[338.6]

[242.4]

[245.7]

[210.3]

[77.6]

[38.6]

[77.3]

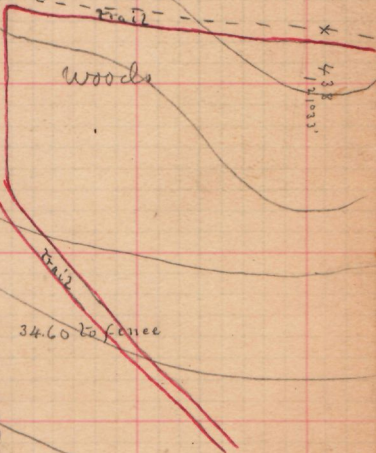
[71.8]

[63.5]

Scattered woods

Hoopengardner's Mound and monument
47.43 ft.
103° 3' from East

woods



338.6
242.4
245.7
210.3
103.1

550 to fire line
138.80 to fence

126° 24'

52° 11'

34.60 to fence

X-E-210°

X-D-194°

X-D-82° 31'

X-D-703°

X-D-9031'

X-D-544°

X-D-1071°

X-D-4024'

X-D-1071°

X-D-4024'

X-2-80° 52'

X-D-11031'

X-D-933°

R.S. 241.5

R.S. 449

R.S. 210

R.S. 765

R.S. 2.5

F.S. 174.5

F.S. 604

D-194°

D-703°

D-3081'

D-1291'

D-1071°

D-8026'

D-105°

338

32

47

52

111

1499'

172

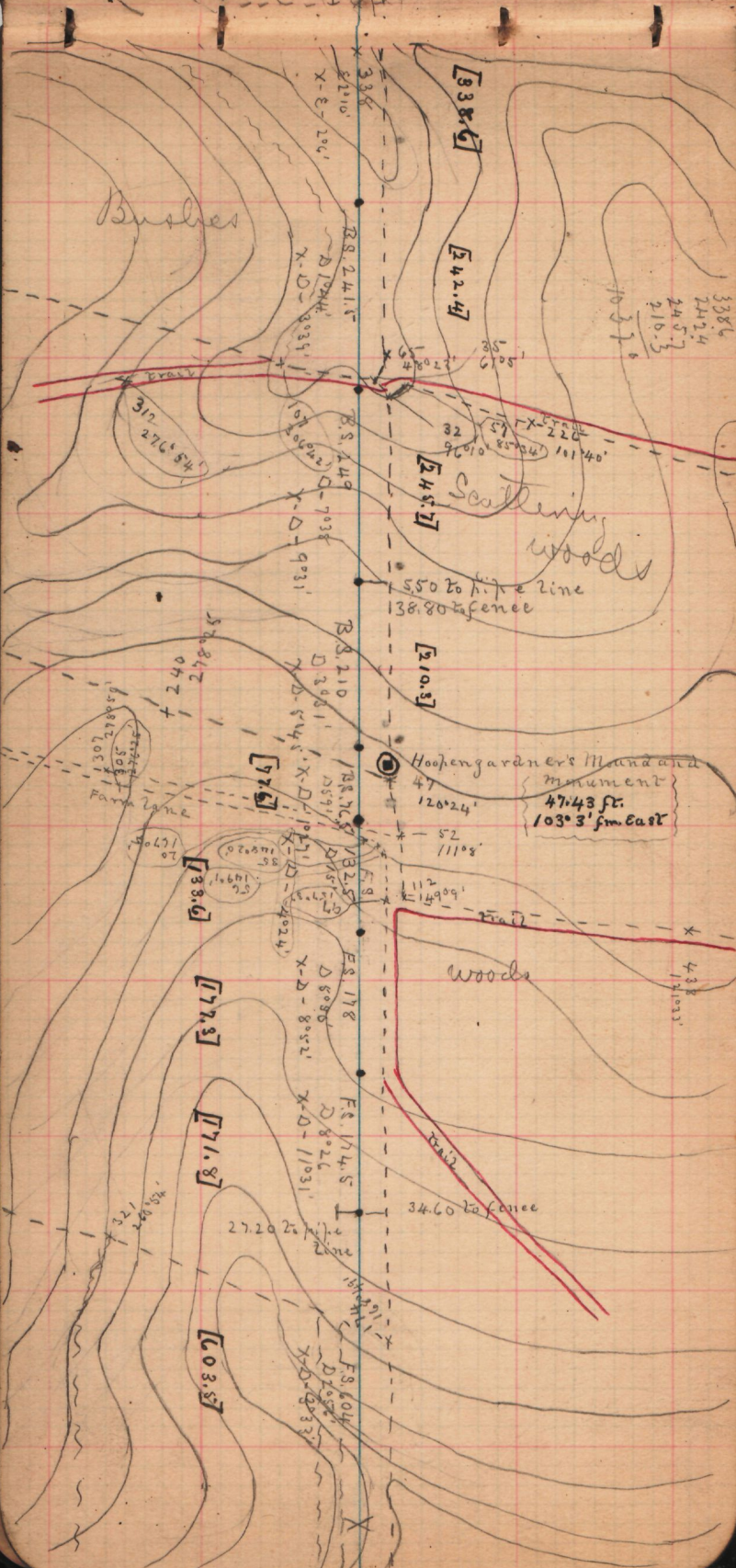
312
276.54

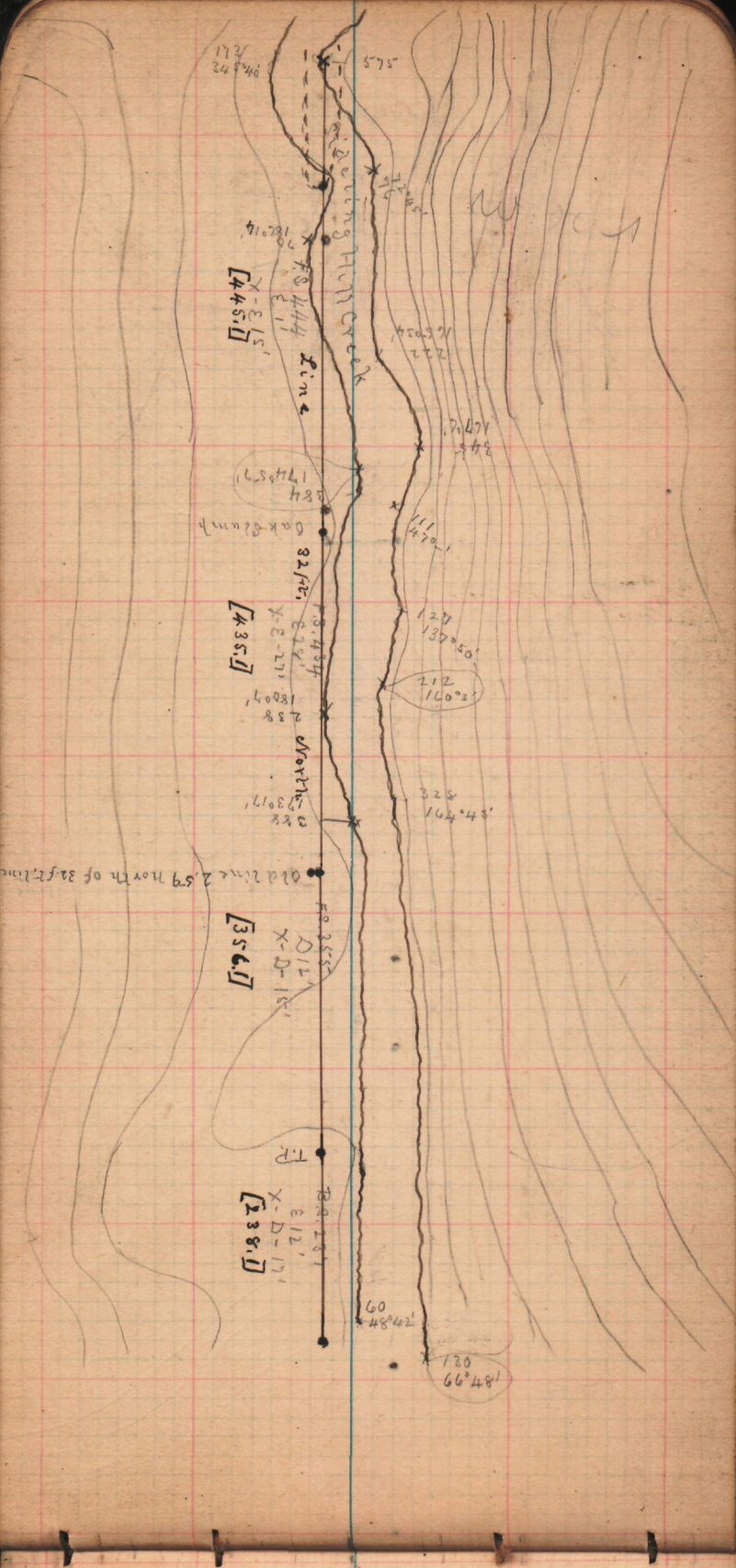
308
103

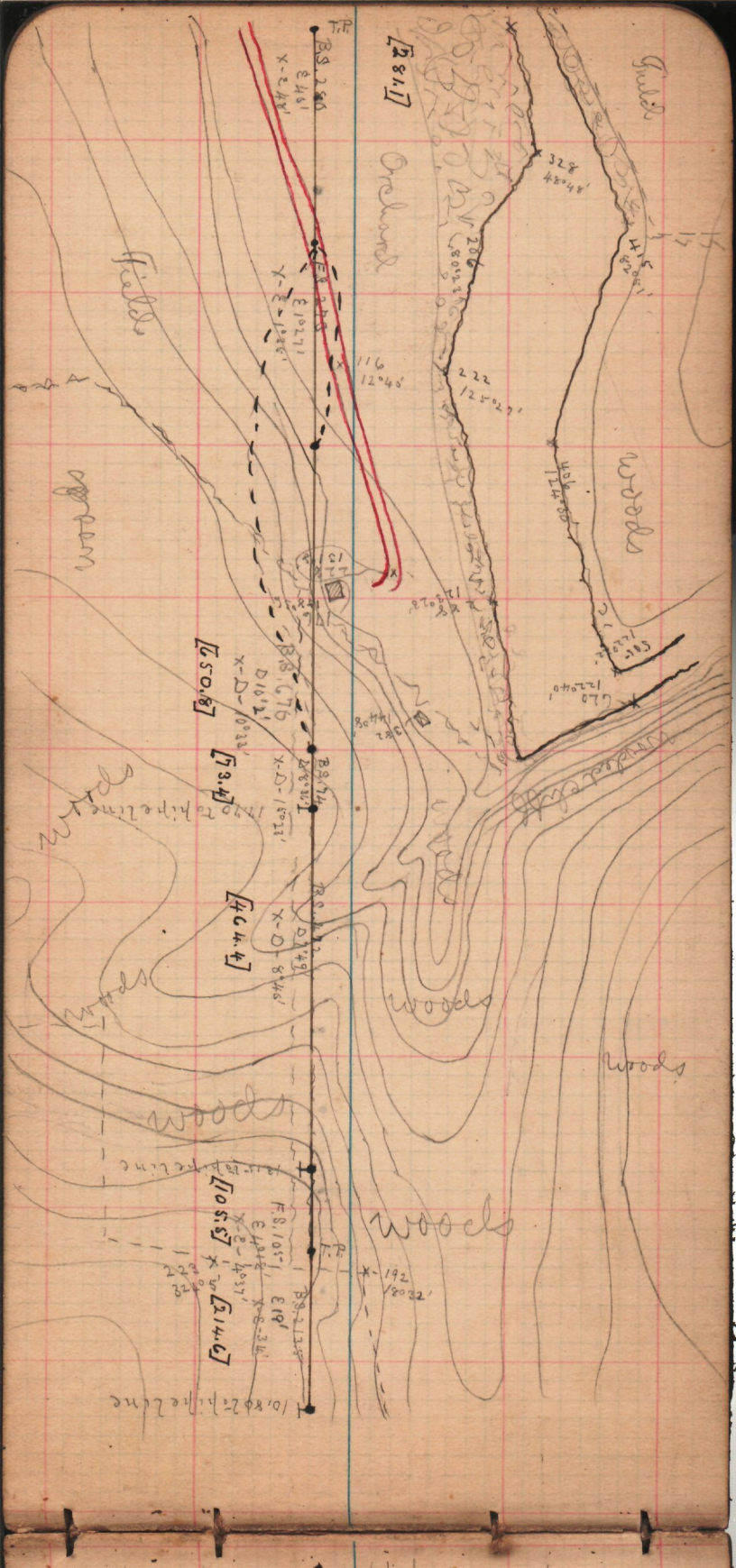
1499'

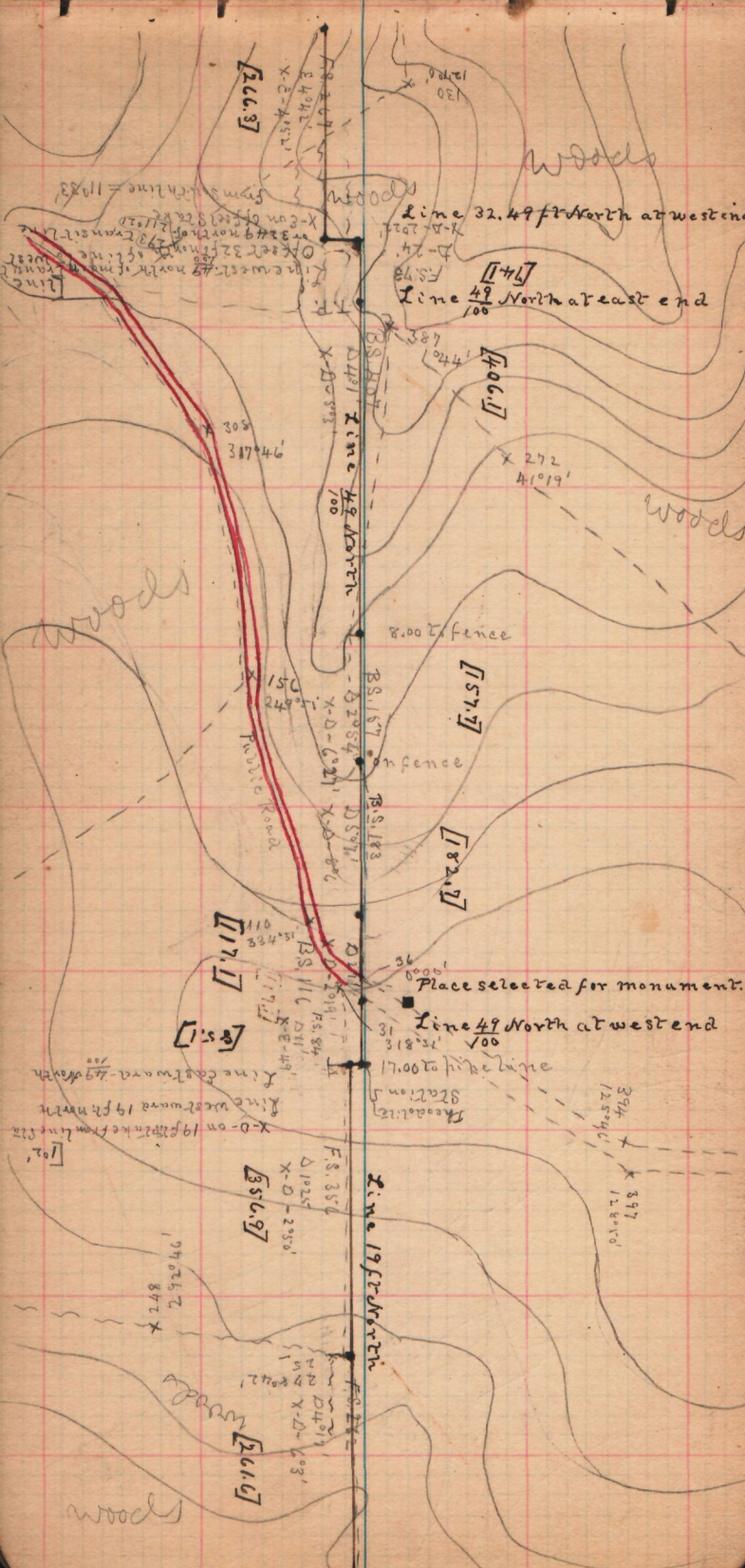
172

438
12103'









[26.3]

woods

Line 32.49 North at west end

Line 49 North at east end

[406]

woods

woods

[57.7]

[82.7]

Place selected for monument.

Line 49 North at west end

Line Eastward 49 North

Line Westward 19 North

X-D on 19 from line 12

[85.1]

[56.9]

Line 19 North

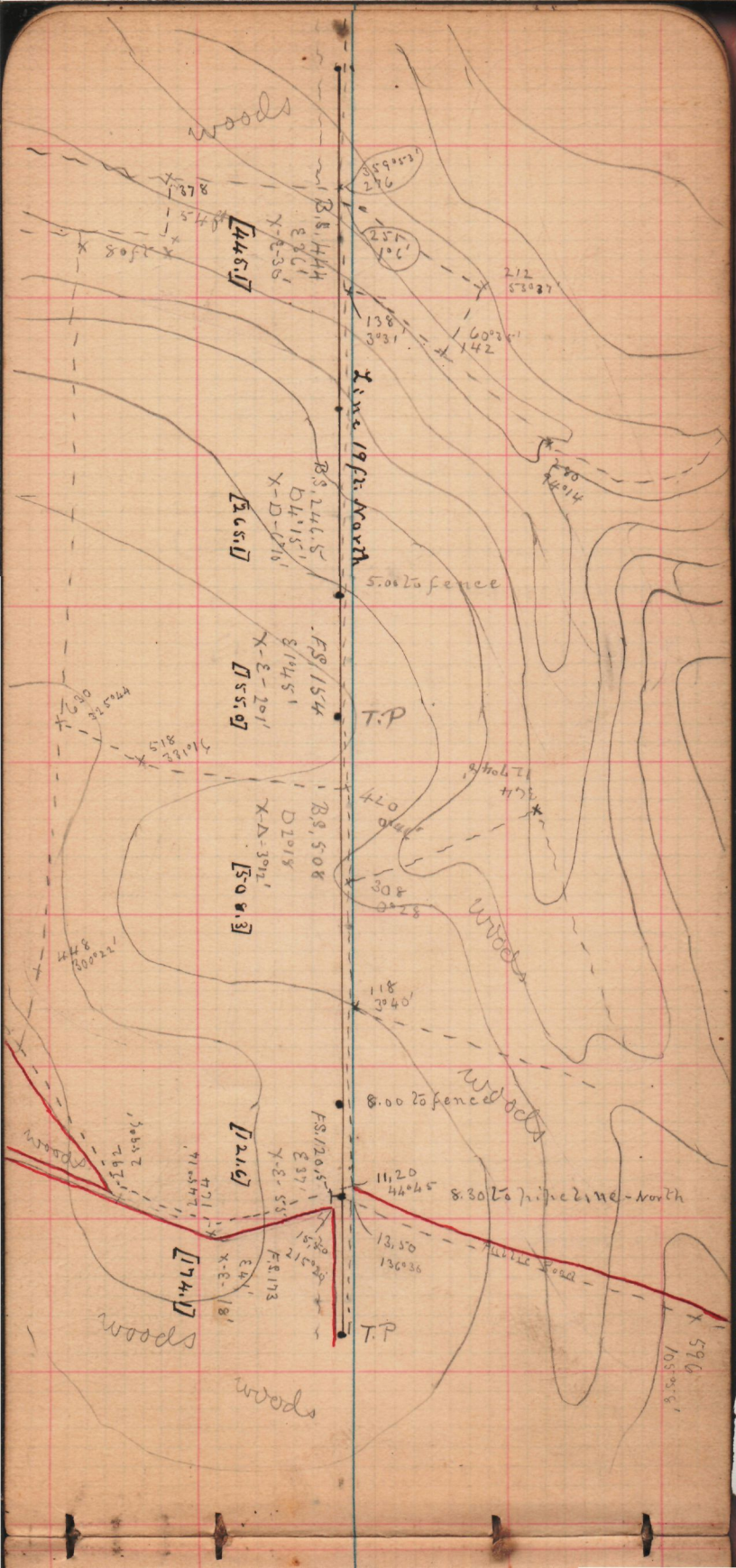
394
125°40'

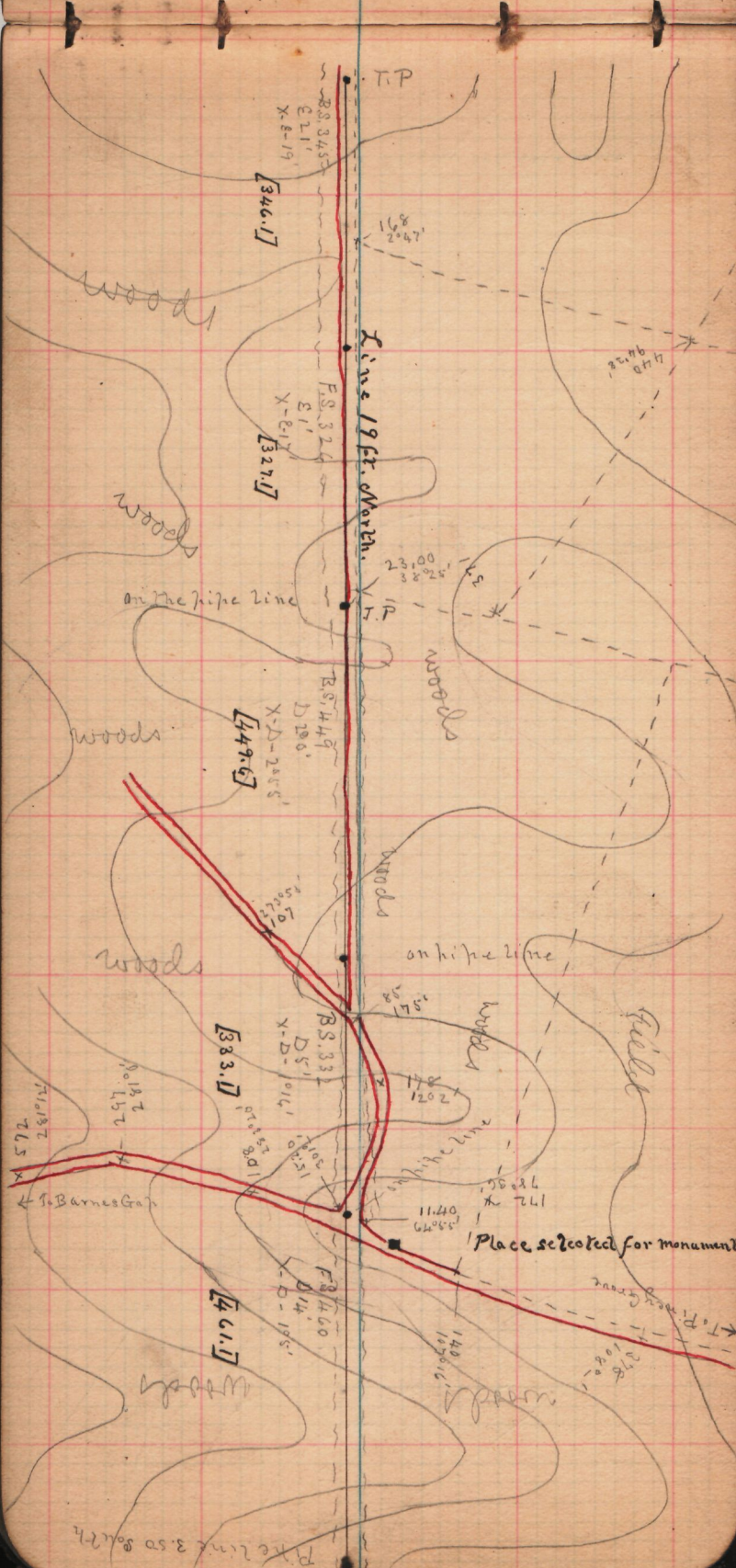
397
128°10'

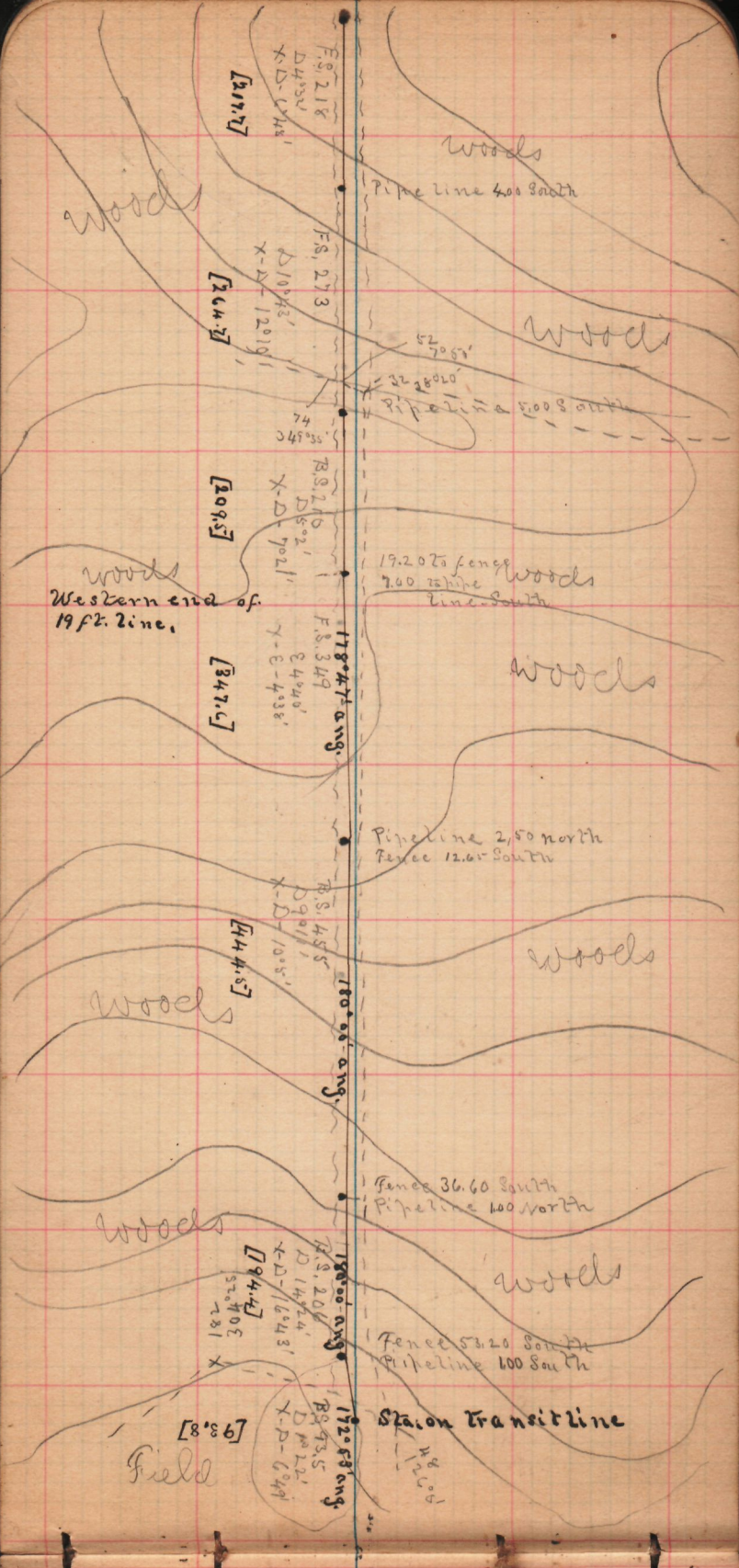
97°26'2
872

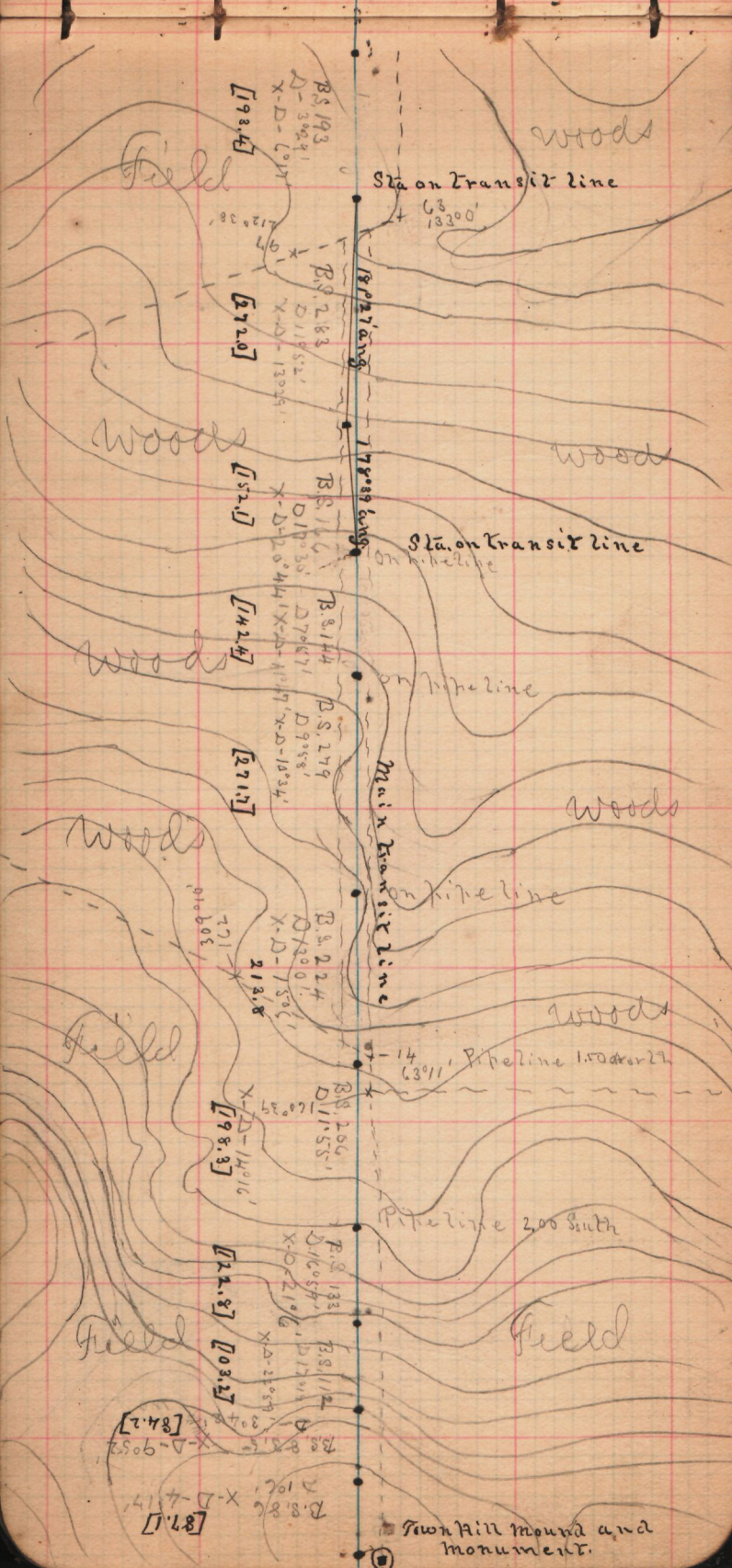
[61.7]

woods









B.S. 193
 D-30821
 X-D-6911
 [193.4]

Station Transit line

630
 1330

B.S. 283
 D-11052
 X-D-13024
 [172.0]

1892100

178089600

B.S. 166
 D-11035
 X-D-20441
 [152.1]

Station on pipeline

B.S. 144
 D-70871
 X-D-11119
 [142.4]

Main Transit Line

B.S. 279
 D-9098
 X-D-1834
 [271.7]

B.S. 224
 D-12001
 X-D-1506
 218.8

on pipeline

14
 63911 Pipeline 1.000 North

B.S. 206
 D-11155
 X-D-14016
 [198.3]

Pipeline 200 South

B.S. 133
 D-11054
 X-D-2106
 [121.8]

B.S. 112
 D-11701
 X-D-2109
 [103.2]

B.S. 88.5
 D-9052
 X-D-9052
 [84.2]

B.S. 86
 D-7106
 X-D-7114
 [87.1]

Town Hill mound and monument

woods

field

woods

wood

woods

woods

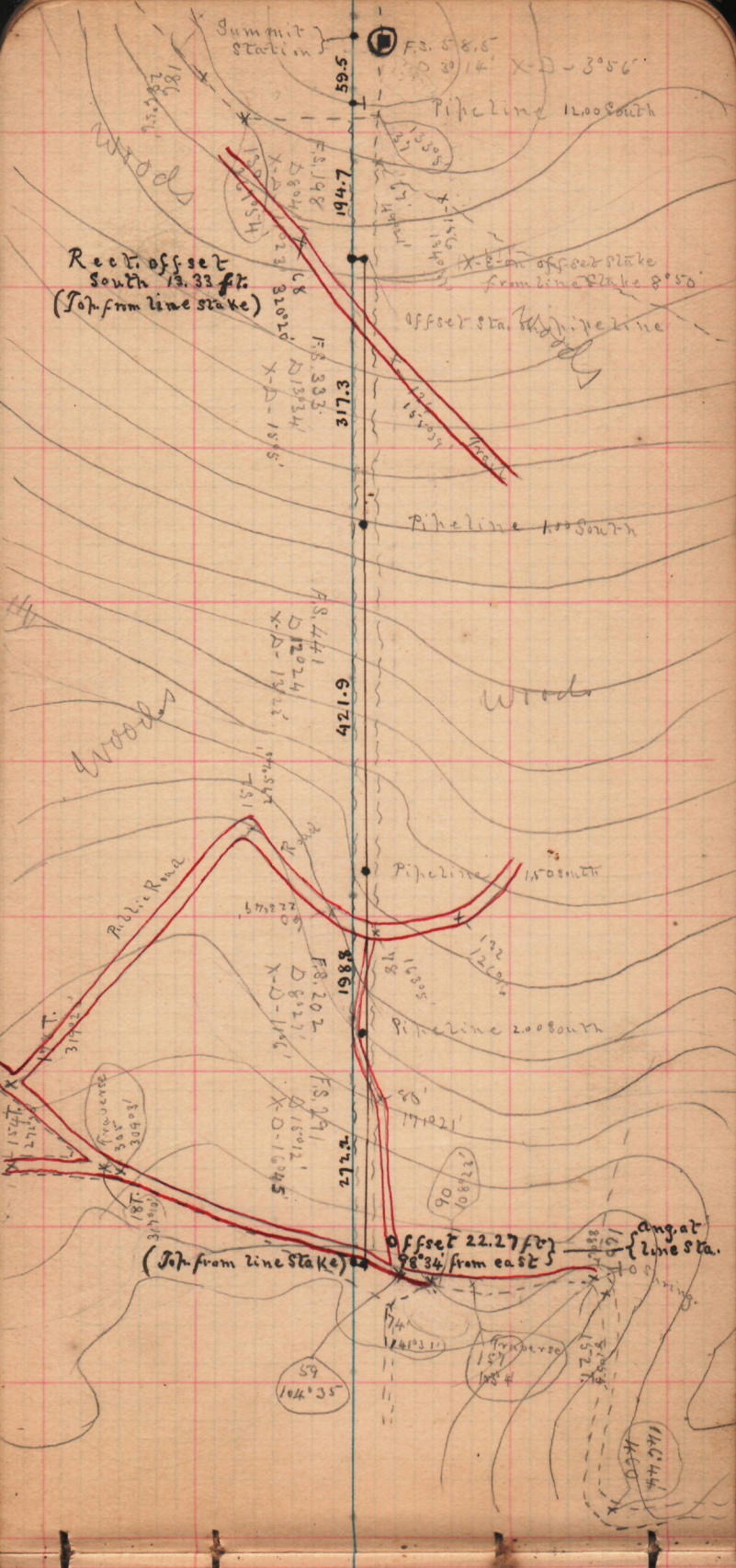
woods

woods

field

field

field



Summit Station

F. 3. 58.6

10 30 14' X-D-3°56'

Pipeline 1200 South

Woods

Rect. offset South 13.33 ft. (Top from line stake)

X-B on offset stake from line stake 8°50'

offset stake to pipeline

194.7

F.S. 108 86157

D. 11023 81010

F.S. 93 88854 X-D-15°5'

317.3

Pipeline 1100 South

421.9

F.S. 441 172024 X-D-13°22'

Woods

Woods

Public Road

Pipeline 1500 South

F.S. 202 70227 X-D-11°0'

198.8

Pipeline 2000 South

F.S. 291 16781 X-D-16°45'

272.2

(Top from line stake)

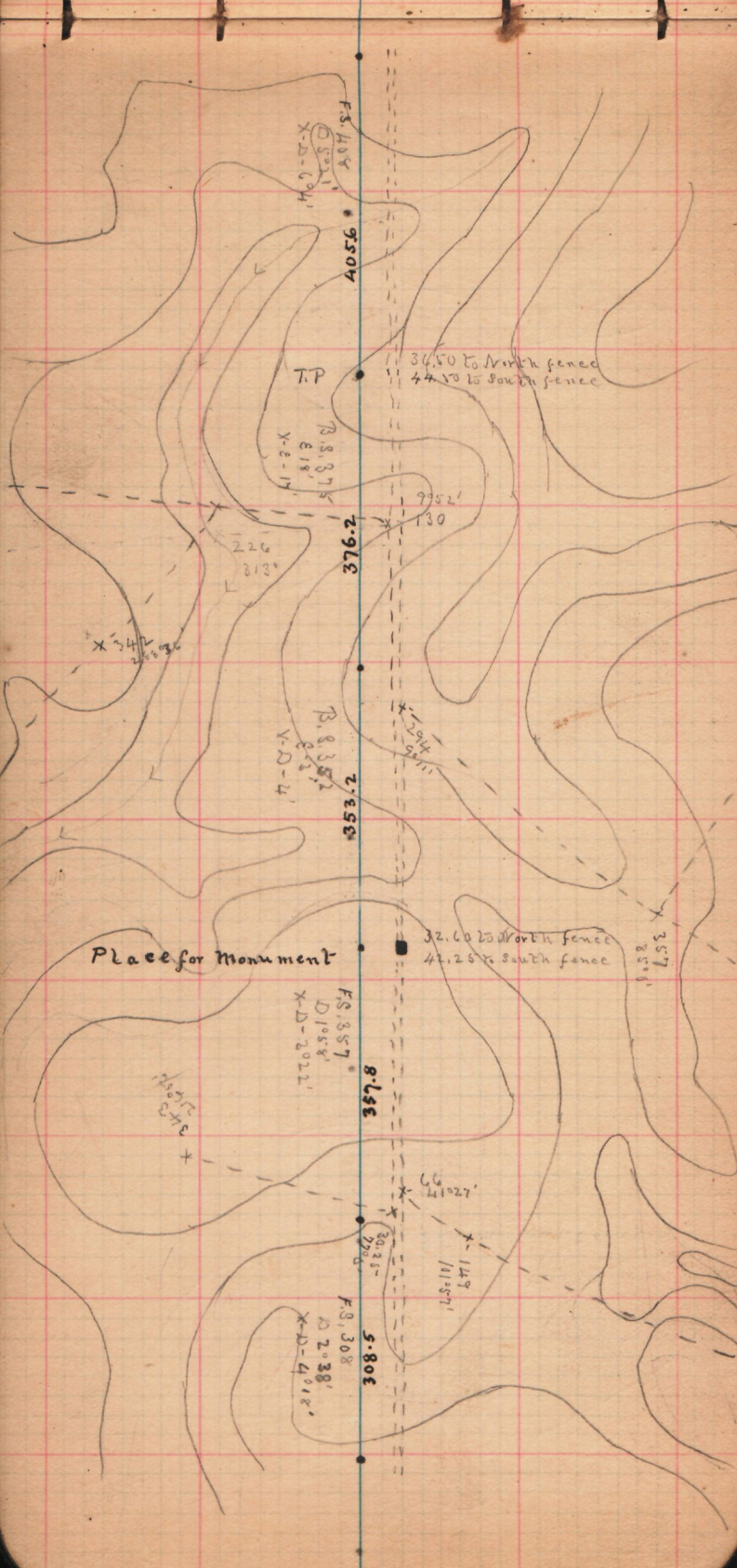
Offset 22.27 ft. 98°34' from east

Angat Line Sta.

59 104°35'

157 108°4'

11444 KED



FS. 404
 9504

X-D-604
 8501
 118'

TP

R. 837
 818'
 X-E-11

34.50 to North fence
 44.50 to South fence

376.2

226
 813'

9952'
 130

X-74
 263'

853.2
 2358

R. 835
 823'
 Y-D-4

294
 941'

Place for Monument

32.60 to North fence
 47.25 to South fence

FS. 857
 857.8

D. 1058'
 X-D-2022'

North
 474
 276

357
 850'

357.8

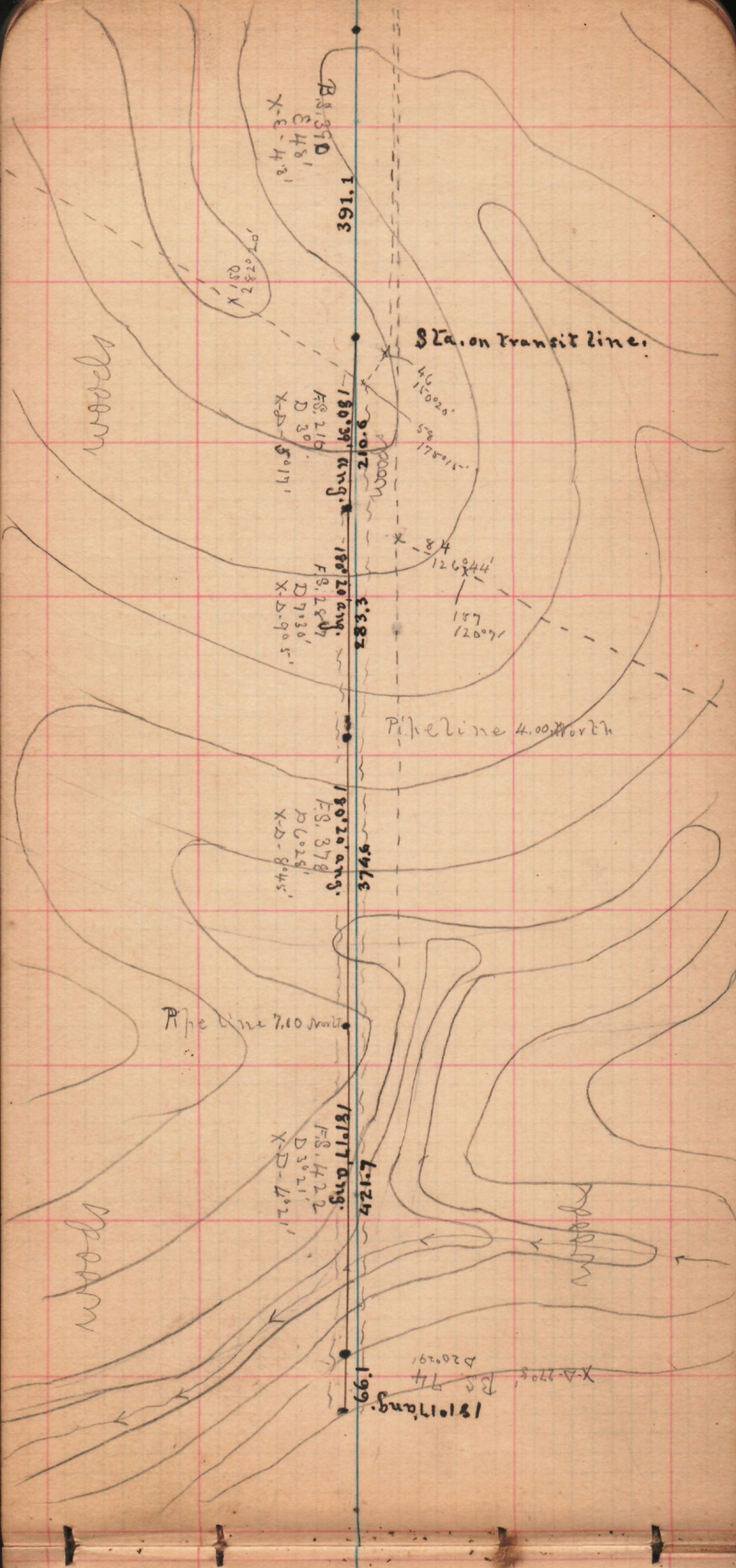
66
 41027'

FS. 308
 580.8

D. 2038'
 X-D-4018'

149
 11157'

580.8



420
337.020
388
312.56

Rect. offset 27.87 to North.

X-E on line stake from offset stake 3' 5"

Place for monument.

(Piney Ridge.)

(Top. from line stake) $90^{\circ} 57'$

Woods

Woods

Woods

Field

T.P.

Woods

Woods

X-O-1822'

B.S. 103

0.842
268
1.181
1.693
2.892
2.912
4.791
00.66

B.S. 247
D 133'

F.S. 88
E.S. 181
X-D-3' 23"

F.S. 86
D 8' 01"

F.S. 268
D 3' 30"

B.S. 248
D 12' 13"

B.S. 169
D 7' 24"

B.S. 103

X-D-4' 18"

X-D-7' 09"

X-D-5' 12"

X-D-14' 21"

X-D-10' 24"

X-D-18' 22"

28'
77' 04"
5' 11"
14' 00"

$90^{\circ} 57'$

wood

woods

Pipeline 850 North

Offset stake from line stake
83.04 ft. 5°17' from east

Offset stake from line stake
70.87 ft. 5°17' from east

Summit Green Ridge
Pipeline 935 North
Ang. in offset line
Offset stakes level

Top from South offset stake
(line stake)

wood

wood

wood

wood

B.S. 285
D 10933
X-D-1800'

859.2

B.S. 118.5
D 50211
X-D-1005'

L. 811

L. 6m

B.S. 148.5
D 8
X-D-200'

470.2

F.S. 207
D 3040
X-D-000'

525.1

F.S. 154
D 10921
X-D-15032'

354.2

F.S. 340
D 809
X-D-7922'

on P.L.

F.S. 389
D 10991
X-D-30151'

L. 638.7

18305
11

on P.L.

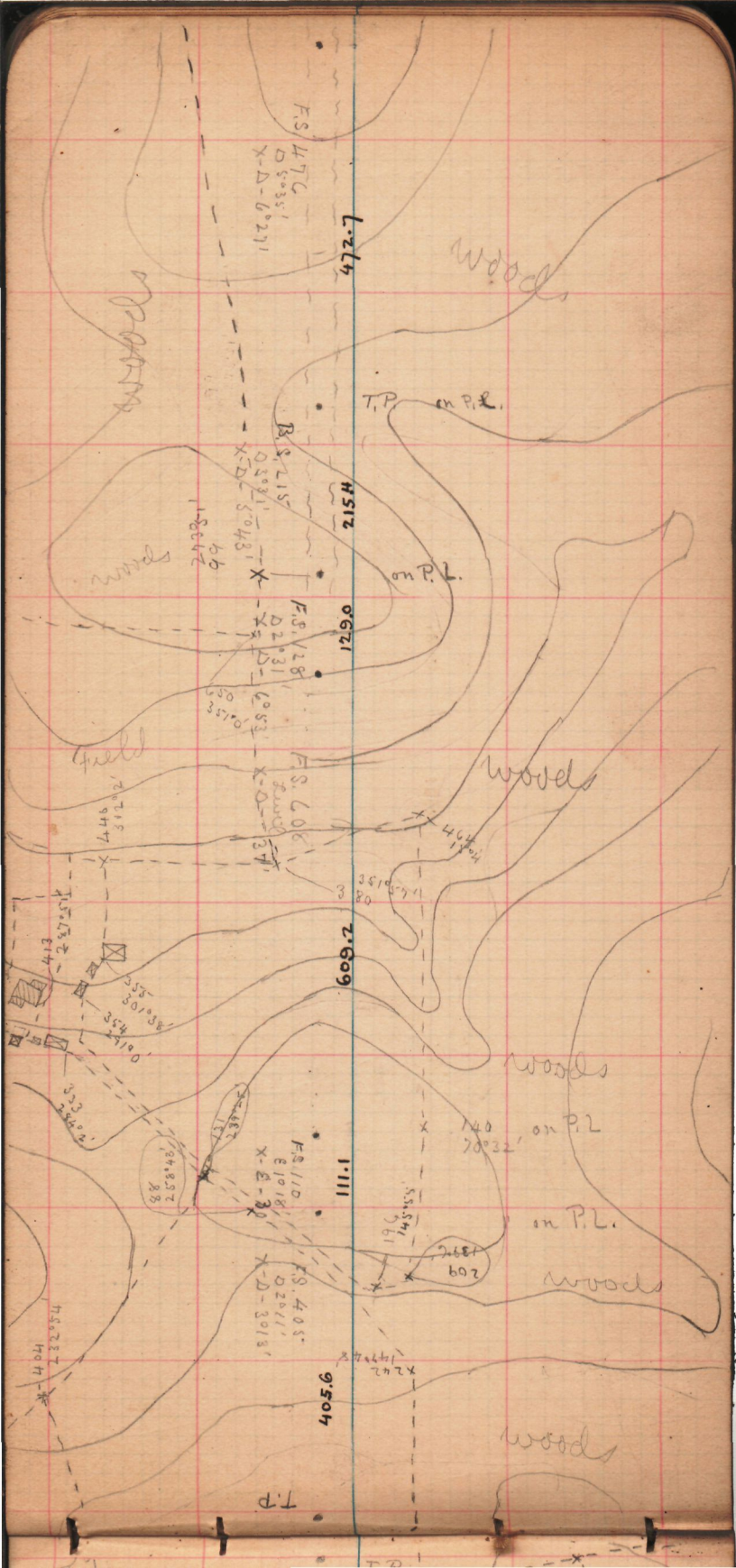
18305

X-108

185017

18305
11

wood



F.S. 47C
D 5035'
X-D-60271

472.7

woods

woods

T.P. on P.L.

B.S. 215
D 5091'
X-D-50481

512

woods

on P.L.

F.S. 128
D 2031'
X-D-60531

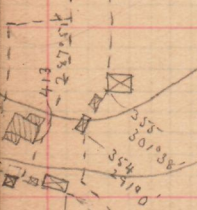
621

field

woods

F.S. 606
D 6053'
X-D-371

609.2



woods

on P.L.

F.S. 110
D 2018'
X-E-30

1111

140
20032

on P.L.

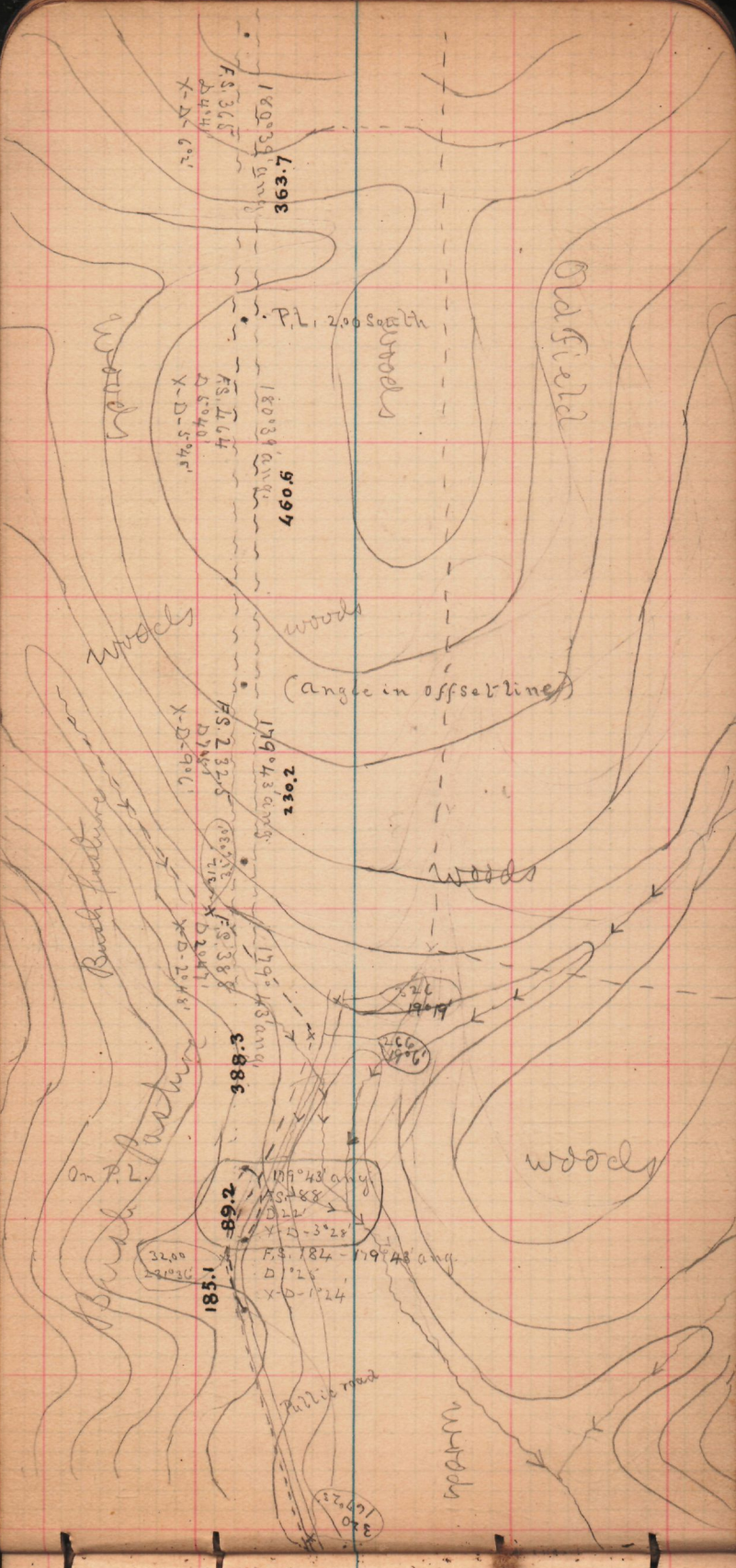
woods

F.S. 405
D 2011'
X-D-30131

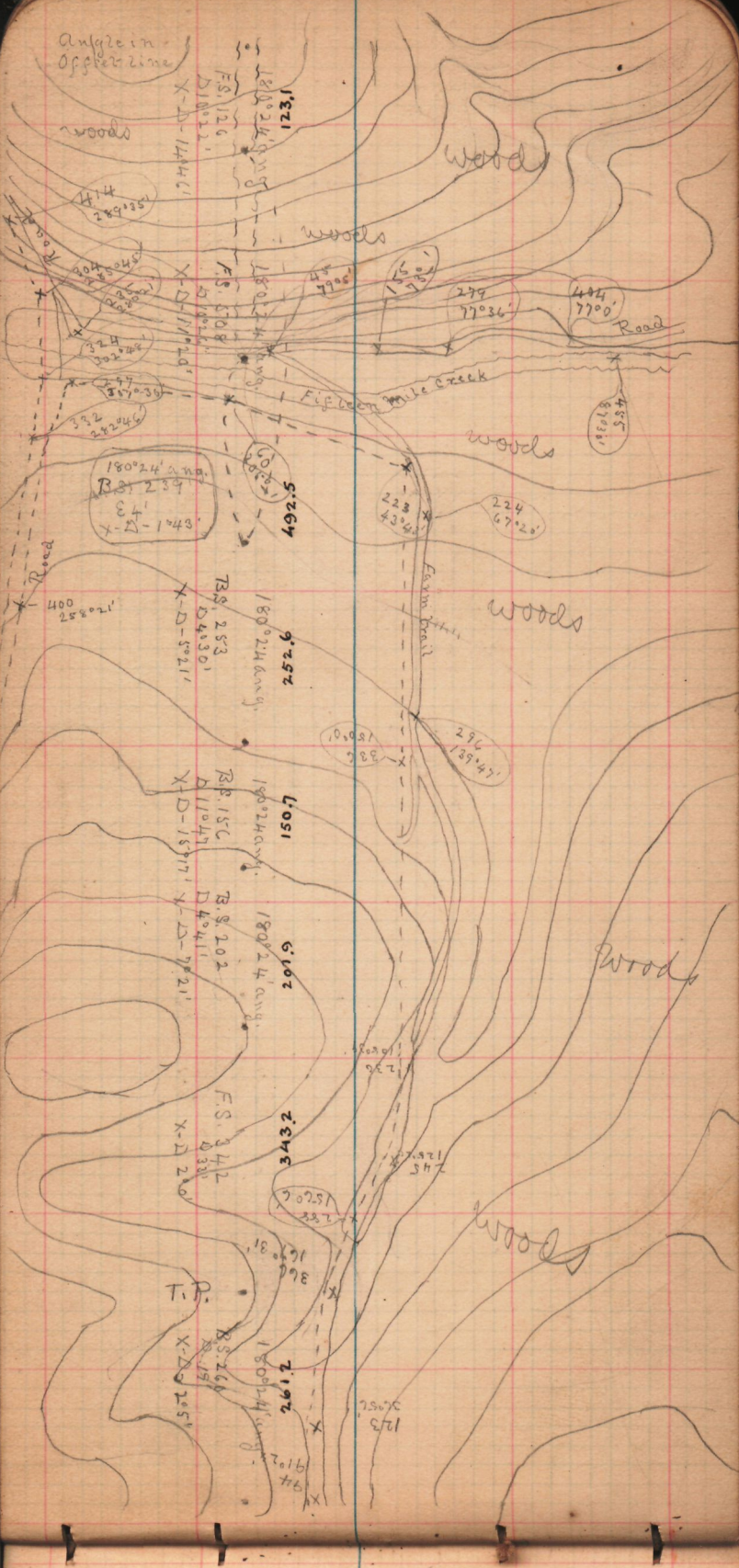
9504

woods

T.P.



Angle in
offset line



180° 24' ang.
F.S. 126
D 1022'
X-D-1446'

114
581.82

324
302.42

297
307.39

392
272.46

180° 24' ang.
B.P. 239
E 4'
X-D-1443'

492.5

739, 253
B.P. 150C
D 11047'
X-D-5021'

180° 24' ang.
925.2

180° 24' ang.
B.P. 15C
D 11047'
X-D-15717'

150.1

610.2

F.S. 242
D 330'
X-D-2200'

343.2

T.P.
B.S. 26A
D 1919'
X-D-2051'

261.2

910.2

wood

woods

444, 7700
77036
Road

Figs Creek

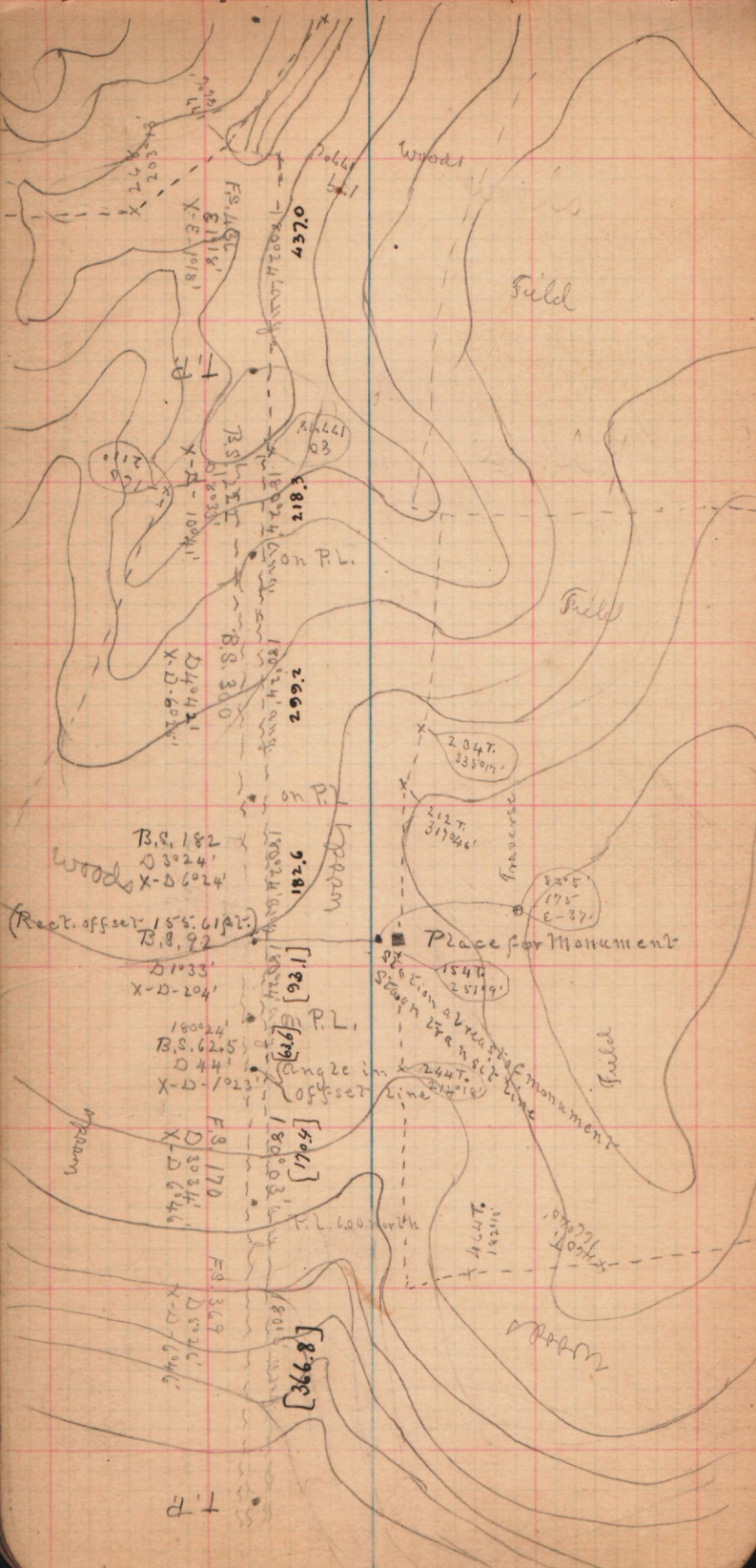
woods

woods

woods

woods

123



(Rect. offset 155.61 PL)

B.S. 92
D 1033'
X-D 204'

180°24'
B.S. 62.5
D 44'
X-D 1023'

F.S. 170
D 30°34'
X-D 6046'

F.S. 369
D 50°26'
X-D 6046'

[186]
[92]
[62]
[99]
[506]

P.L.
Change in
offset

180°03'
F.L. 600 north

[366.8]

Place for Monument

1544
25199'

244 T.
31716'

464 T.
18216'

82°5'
175'
E-37'

234 T.
33509'

212 T.
31746'

0754

1812

2992

9181

[186]

[92]

[506]

[366.8]

FS. 156
E 118'

B.S. 121
D 10041'

D 4042'
X-D 6016'

B.S. 182
D 30°24'
X-D 6024'

180°24'
B.S. 62.5
D 44'
X-D 1023'

F.S. 170
D 30°34'
X-D 6046'

F.S. 369
D 50°26'
X-D 6046'

F.T.

Dobbs

Wood

Field

Field

Woods

Woods

Woods

Traverse

Field

Woods

Section already of monument
along the n sec line

Line

P.L.

F.L. 600 north

Woods

F.T.

T.P.

FS. 695
87.20'

87469

X-2-2012

woods

woods

397
000

276
000

woods

woods

FS. 545
22.40'

87475

X-2-2015

P.L. 400 north

woods

FS. 260
27.10'

87492

X-2-171

woods

angle in
offset line

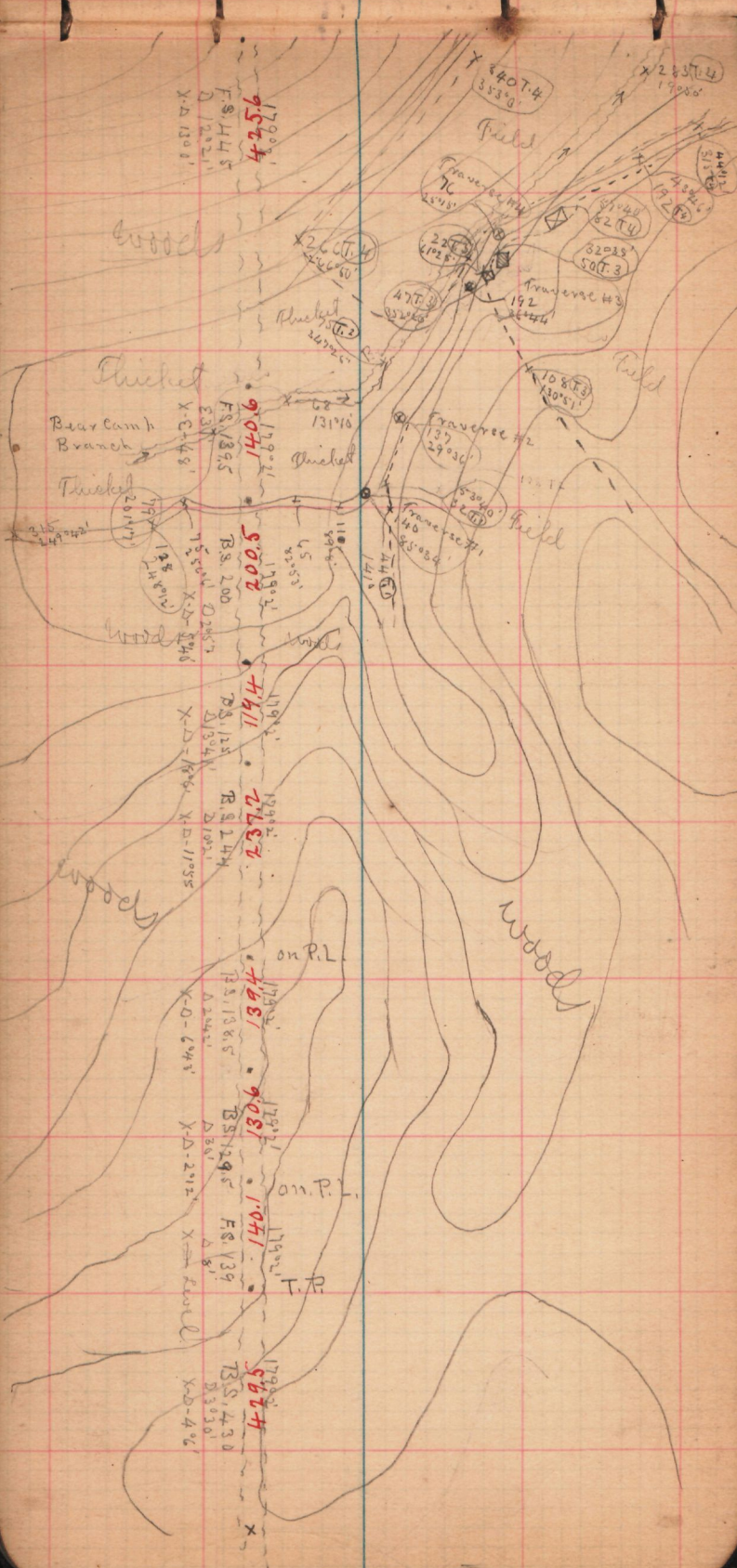
on P.L.

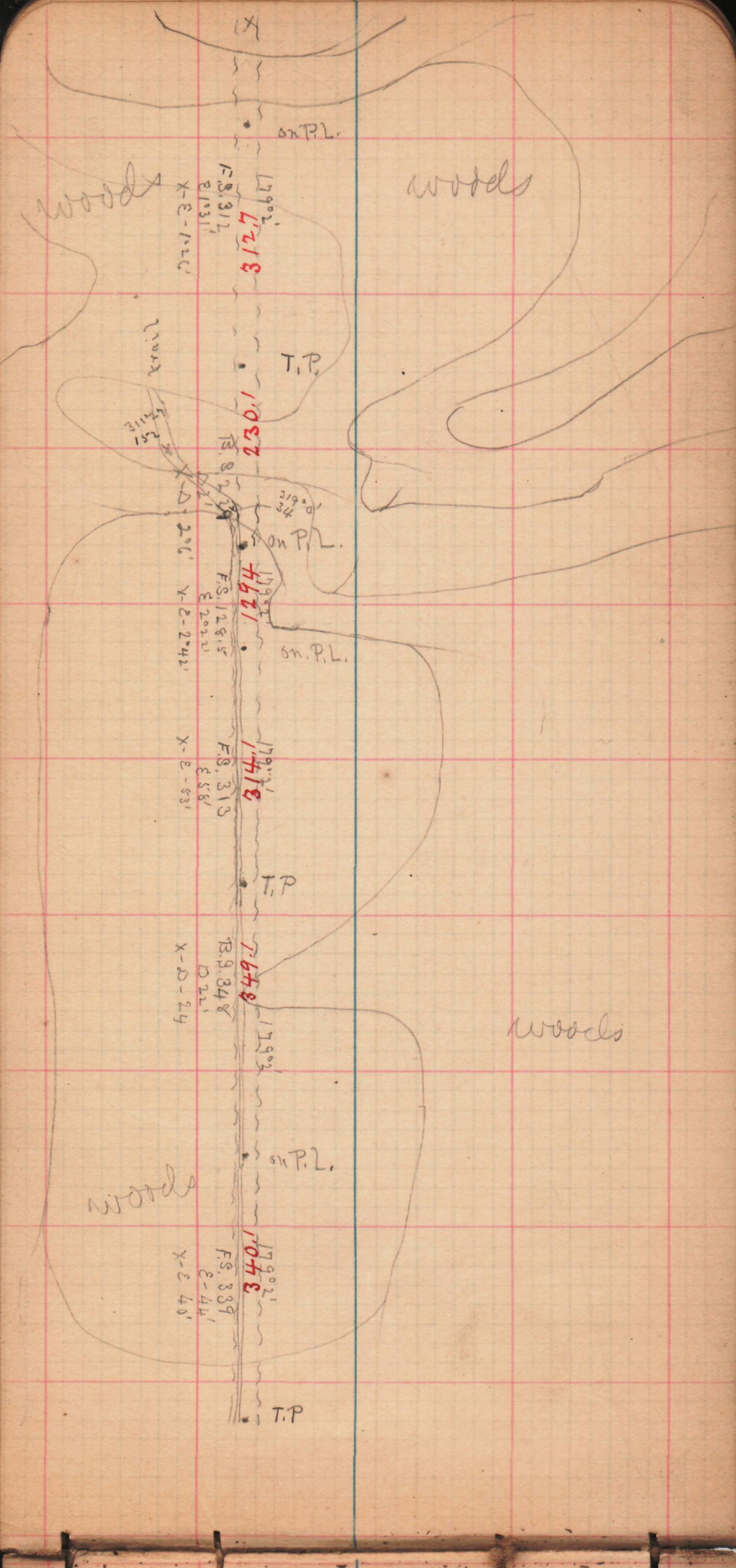
FS. 1245
27.10'

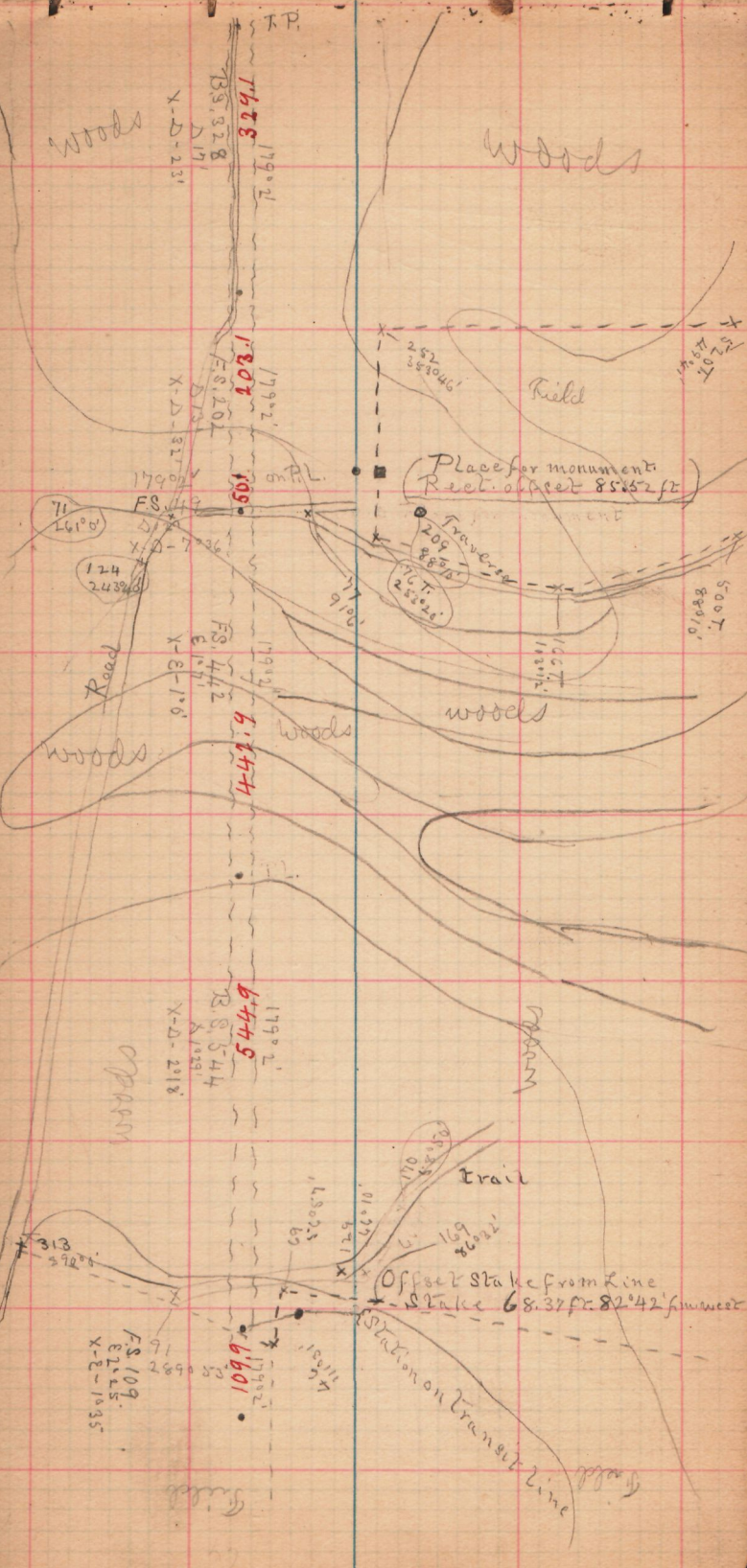
87476

X-2-3021

000







Woods

Woods

Field

Place for monument
Rect. offset 85.62 ft

Traverse

Road

Woods

Woods

Woods

Woods

Trail

Offset stake from line
Stake 68.37 ft $82^{\circ}42'$ from west

Station on Transit Line

Field

1790.2
FS 453
E 2789'
X 2155'

4529

Field

Field

1790.2
BS 186
D 1081
X-D-5018

1798

T.P.

woods

P.L. 800 north

724.45

1790.2
FS 84
D 52
X-D-2452

1798

2168

1790.2
FS 1391
D 1037'

woods

T.P.

woods

1790.2
BS 191
D 3053'

1798

33
3375'

48
43205'

42
4722'

angle in offset line

woods

1790.2
FS 144
E 1224'

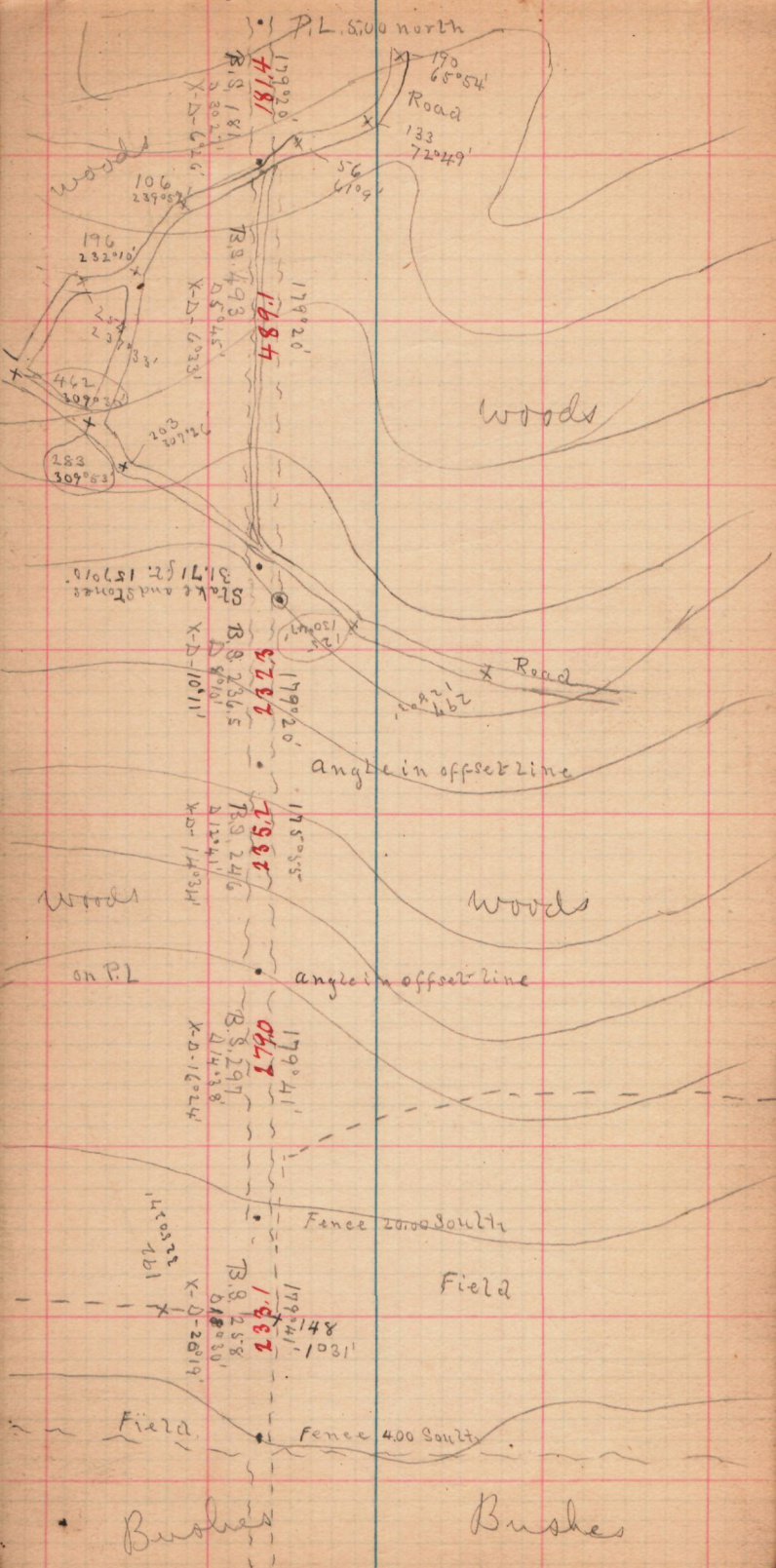
1798

2444

1790.2
X-D-1028'

woods

woods



Changed position of offset line on next page

Bushes

Bushes

7994.1
1941
029
139
0933
1747
682
141
9452
8423

RS. 165
D 20020'
X-D-23035'
RS. 164
D 191'
X-D-1129'
RS. 244
D 381'
X-E-361'
RS. 67
D 104'
X-D-512'
RS. 141
D 508'
X-D-9948'
RS. 264
D 11032'
X-D-13117'
RS. 81
D 8024'
X-D-10051'

PL
Fence 6.50 South

Reg. - Transit Line

Logenge on Ragged Mountain

woods

woods

PL 300 north
Fence 7.00 South

Ragged Mountain mound
and monument

woods

woods

Deflection point

Transit line

4.00 to P.L. - South
11.00 to fence - "

End-Transit line

7.00 South to P.L.
12.00 to fence

wood

woods

179011
179011



woods

woods

FS. 205
D 8° 57' 1"
X-D 11016'

FS. 243
D 9° 47' 1"
X-D - 9044'

on P.L.
Fence 6.50 South

angle in offset line

FS. 302
D 4° 54' 1"
X-D - 5947'

710802
961

woods

woods

FS. 225
D - 131'
X-D - 2019'

222
13408'

FS. 158
D 5° 44'
X-D - 9177'

angle in offset line

Beg. Transit line

B.S. 24
D 2° 29' 13"
X-D - 2224'

B.S. 79
D 1° 21' 17"
X-D - 8510'

Top station

1420 South to P.L.
2220 in 15 fence

Summit Polish Mountain
Place for monument
133° 20'

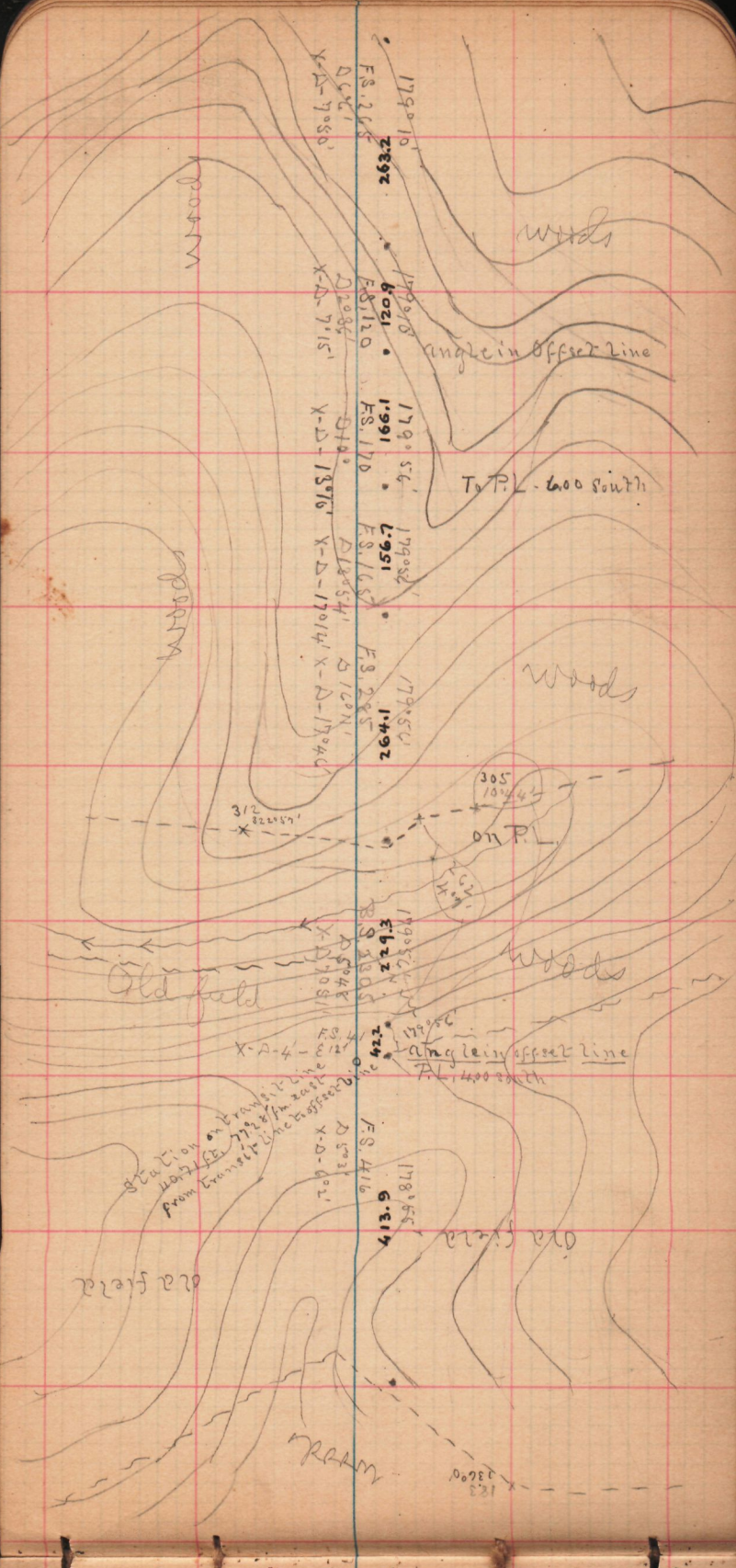
End Transit line

FS. 323
D 9° 02' 1"
X-D 10° 55'

P.L. 200 north.

angle in offset line

490
12.0054



1790 10
F.S. 215
263.92
D.C. 21
X-D-7080'

1790 8
F.S. 1120
120
D.C. 86
X-D-7015'

1790 5.6
F.S. 170
1991
D.C. 10
X-D-1876'

1790 2
F.S. 1657
1591
D.C. 54
X-D-17014' X-D-17040'
F.S. 1285
1790 5.4
1.442

3/2
22257'

305
102/44'
on P.L.

262
14'

1790 5.4
F.S. 2205
262
D.C. 48
X-D-17081'

X-D-4-102
D.C. 2
X-D-602'
F.S. 416
178 5.5
63.14

Station on transit
from Transit line affected
by 1/2" dip from east

ra fiera

WOOD

262
13'

WOOD

woods

angle in effect line

To P.L. - 600 South

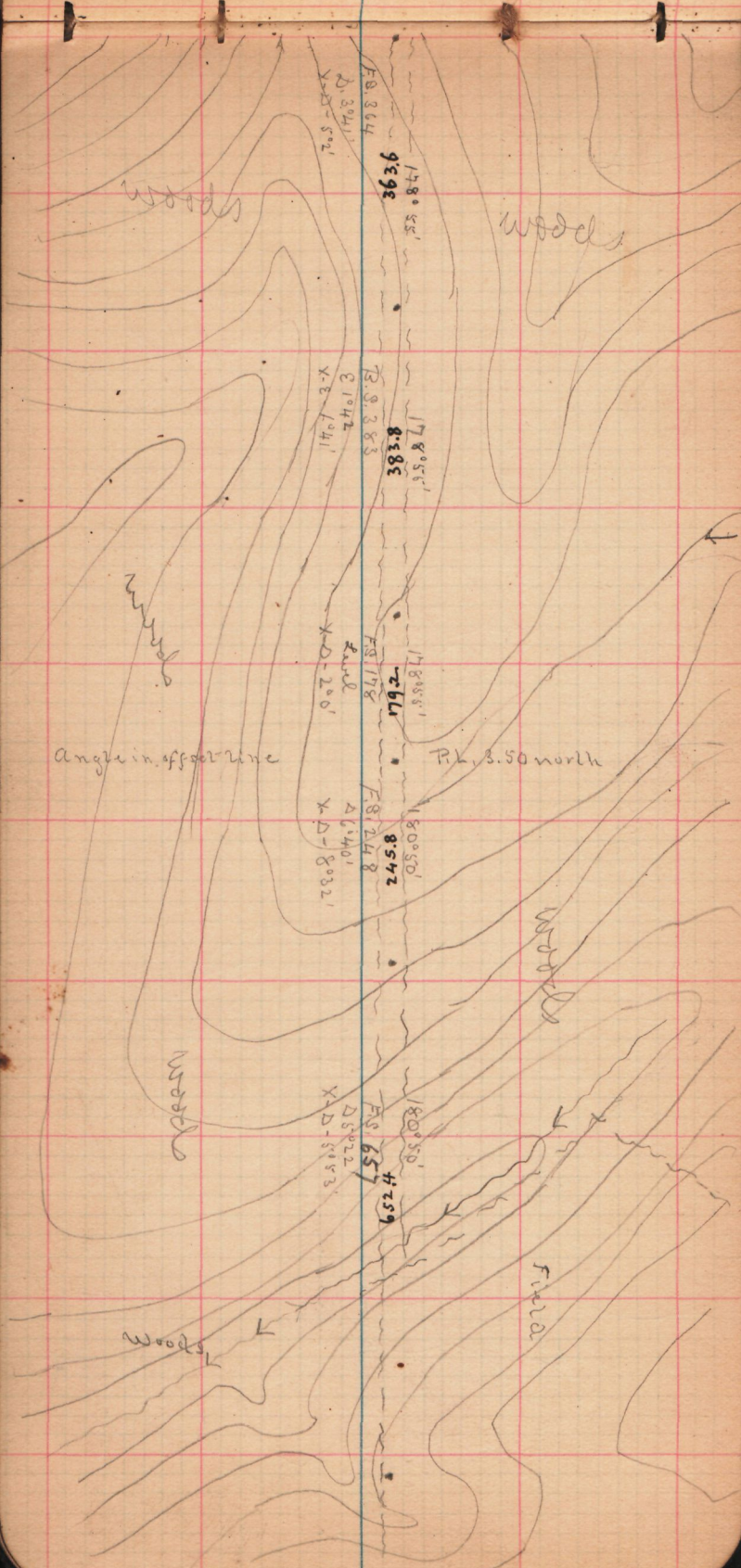
woods

woods

angle in effect line

To P.L. - 600 South

ra fiera



EO. 864
 Δ 89411
 X-D-5°2'

798.8
 363.6
 178°55'
 85.87

EO. 883
 Δ 10412
 170°41'

882.8
 383.8
 178°55'
 85.87

EO. 178
 Δ 10412
 X-D-2°0'

861.8
 179.2
 178°55'
 85.87

EO. 248
 Δ 64401
 X-D-8°32'

180°50'
 845.8
 245.8

EO. 657
 Δ 8022
 X-D-5°53'

180°50'
 425.9
 657

Angle in offset line

Pt. 3.50 north

woods

woods

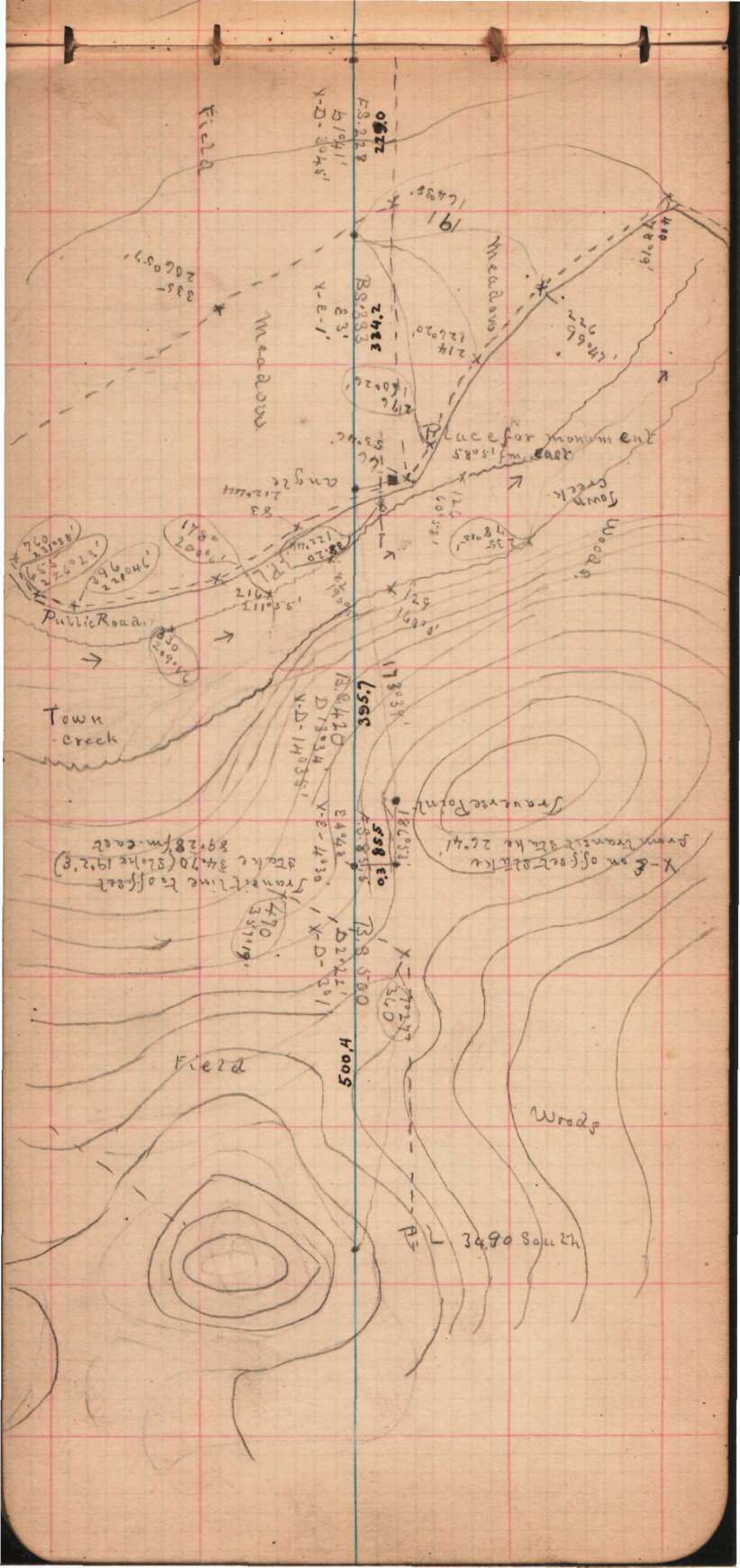
woods

woods

woods

woods

field



Field

Meadows

Meadows

Town Creek

Woods

Public Road

Town Creek

Field

Woods

3490 South

0.627
FS. 2228

H. 1941'
Y-D-3045'

2.483
RS. 833

83'
Y-E-1'

1.586
BS. 410

D. 7534
Y-D-14035'

5.58
EO

3448
Y-E-4030

13.8500
H. 005

D. 2221
Y-D-3011

2060.57
335

1780.881
2005

1709.62
1702.22
1705.55

1707.00
1707.00

344.70 (Stake 192.8)
89.28 m. east

470
35119

16488
191

12620
214

16026
276

120
60581

17303
17303

17808
17808

18053
18053

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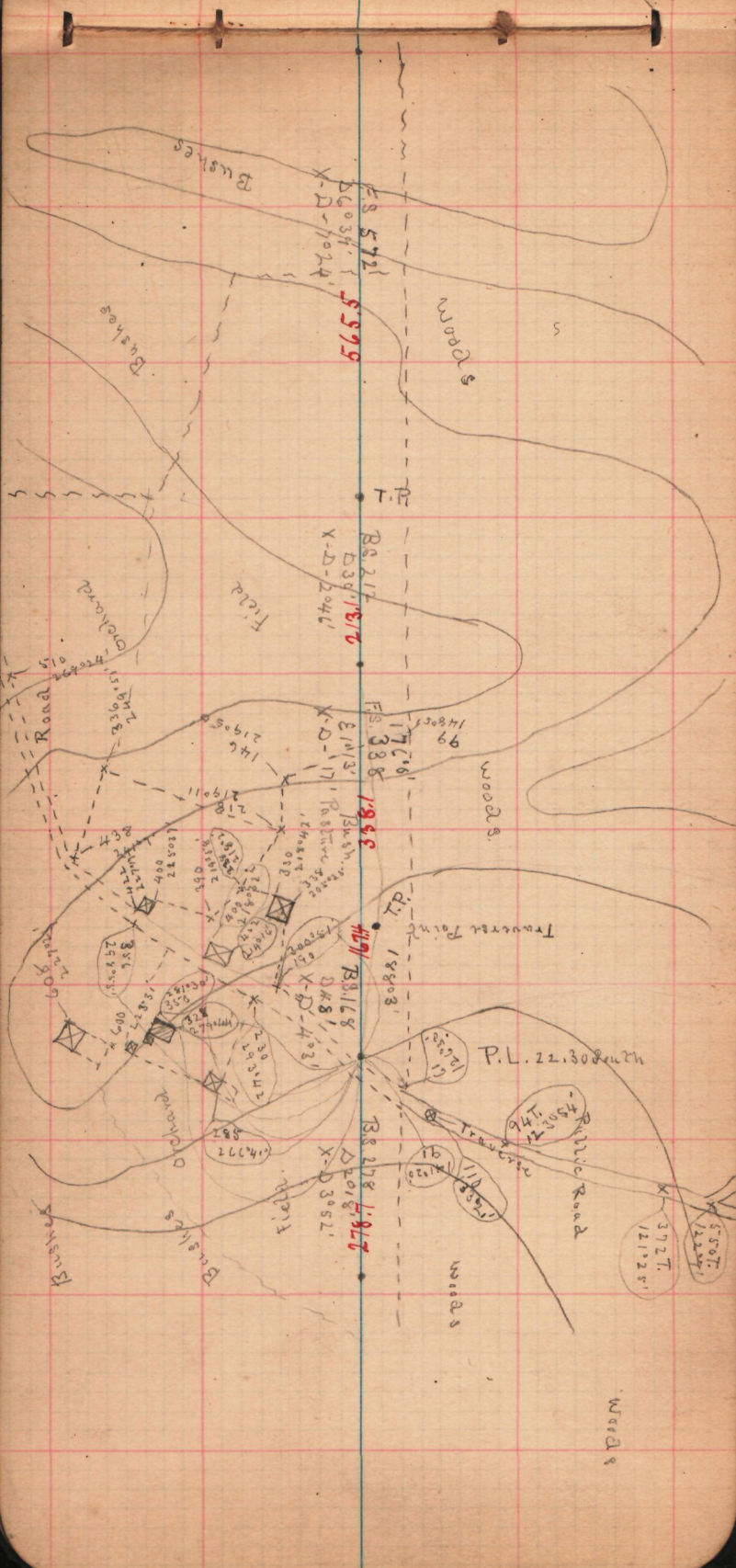
17303
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Place for monument
15085 m. east

Traverse Point
X-E on offset stake
from traverse stake 204'

3490 South



FS 5721
D 6034
X-D-1024

5799

P.T.

BS 217
D 3918
X-D-2046

1812

FP 388
E 1113
X-D-117

1846

P.T.
1812

BS 168
D 481
X-D-403

1812

BS 278
D 1018
X-D-3052

1812

Bushes

Bushes

Stream

Orchard

Field

Road

Woods

Traverse Point

P.L. 22.30 2m

Public Road

Bushes

Orchard

Woods

Woods

372 T
12125'

550 T
12201'

1505 T
146

11120
91

19853
355

15827
009

14177
587

15053
875

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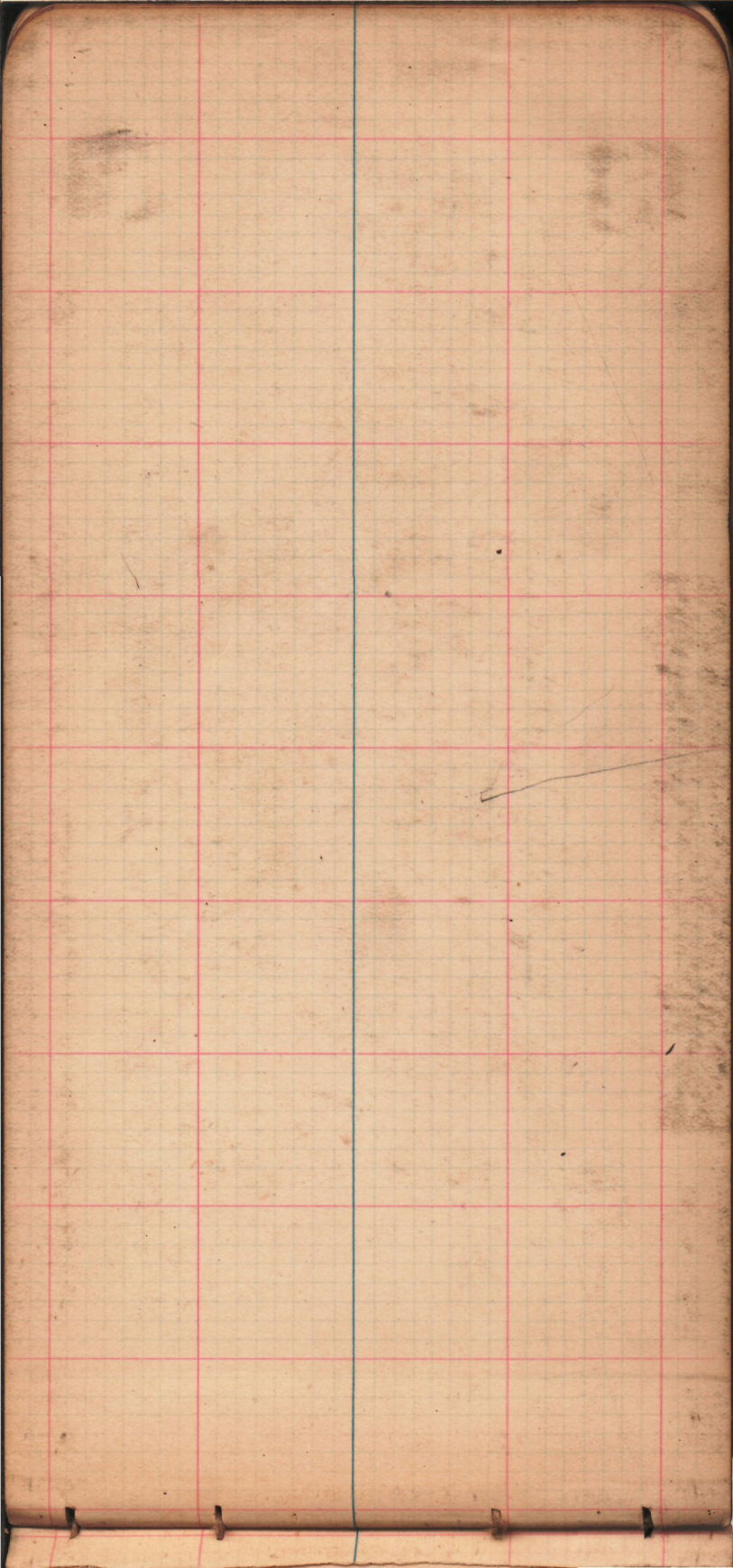
15053
875

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875



360

308°43'

51 17

392