

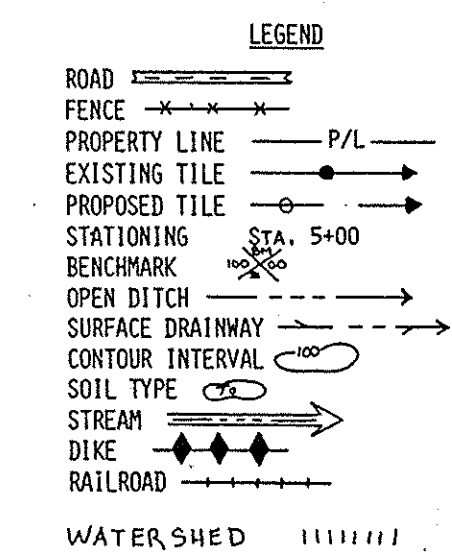
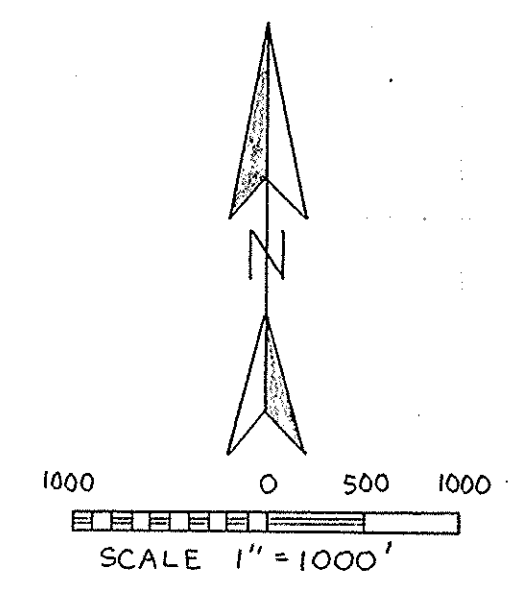
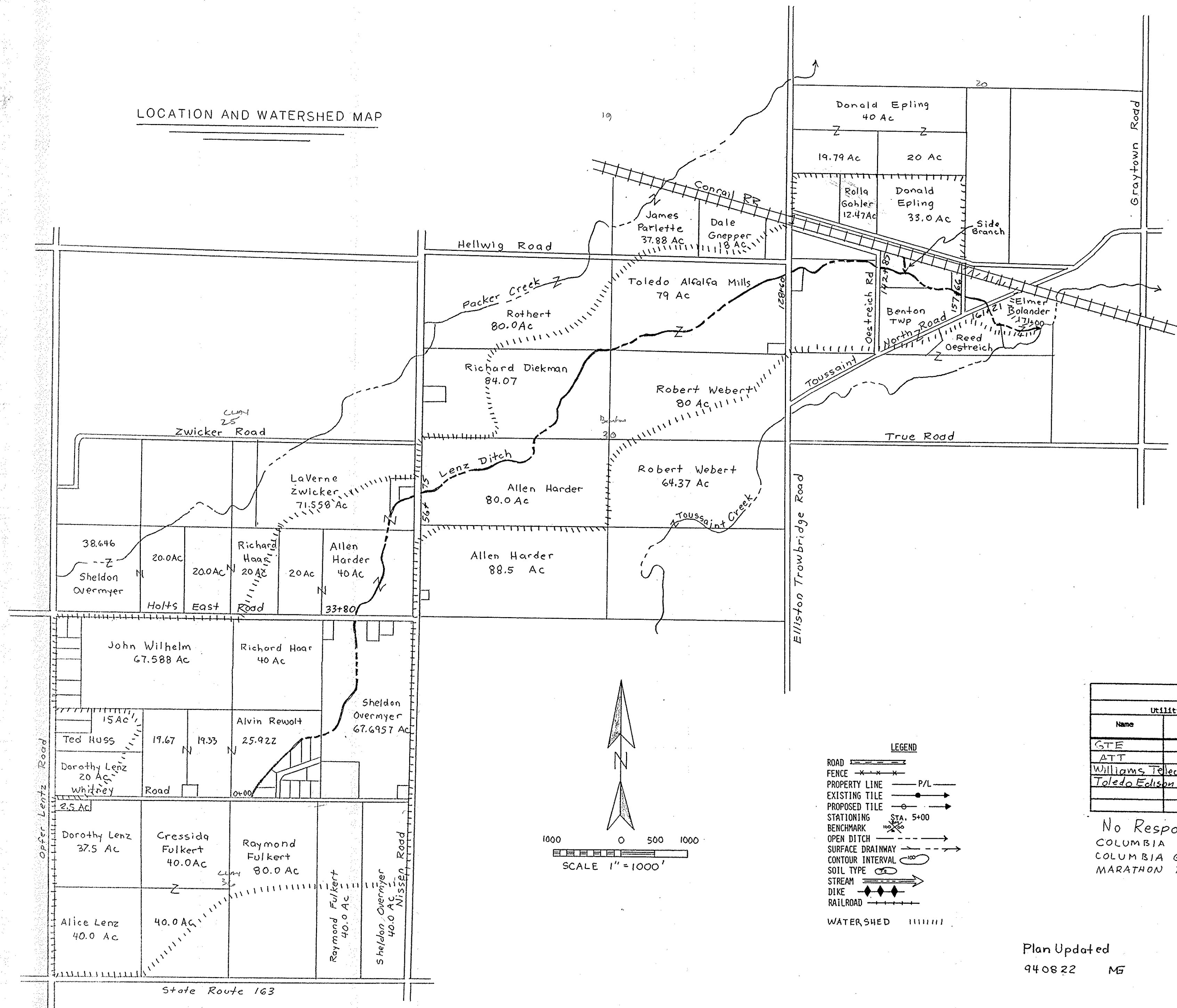
Ditch #
495

LENZ DITCH PLAN - INDEX

LENZ DITCH-SENATE BILL 160 PROJECT

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Profile Sta 135+00 - 171+00	6
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Cross Sections 0+50 - 45+00	7
Cross Sections 50+00 - 95+00	8
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Erosion Control Structure Detail	11

LOCATION AND WATERSHED MAP



Name	Address	Phone No.	Member OUPS	Limited Basis Participants
GTE			X	
ATT			X	
Williams Telegram			X	
Toledo Edison - Overhead Line				X

No Response Utilities
 COLUMBIA GAS
 COLUMBIA GAS TRANSMISSION 940118 MRG
 MARATHON PIPELINE ID# 118MLP10 & 118MLP11

NOTE TO EXCAVATOR
 Excavator must notify all utilities at least 48 hours and not more than 10 days prior to the planned commencement of excavation.
 1. Member utilities will be contacted by calling OUPS (1-800-362-2764).
 2. Each Limited Basis Participant and members of the Ohio Oil and Gas Association will be contacted by the excavator using the telephone number provided.

Plan Updated
 940822 MG

APPROVED BY: *John H. Papen* 3/31/94
 OTTAWA COUNTY ENGINEER

CONSTRUCTION APPROVED BY: _____
 JOB CLASS III

LENZ DITCH SB 160
 OUTLET DITCH IMPROVEMENT
 CLAY & BENTON TOWNSHIPS
 OTTAWA COUNTY OHIO

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	
Designed: Michael Gargac	Date: 12-93
Drawn: Michael Gargac	Title: Civil Engineering Tech
Traced: _____	Sheet: 1 of 11
Checked: <i>M. Gargac</i> 3/94	Drawing No.: 39-01-383-94-05

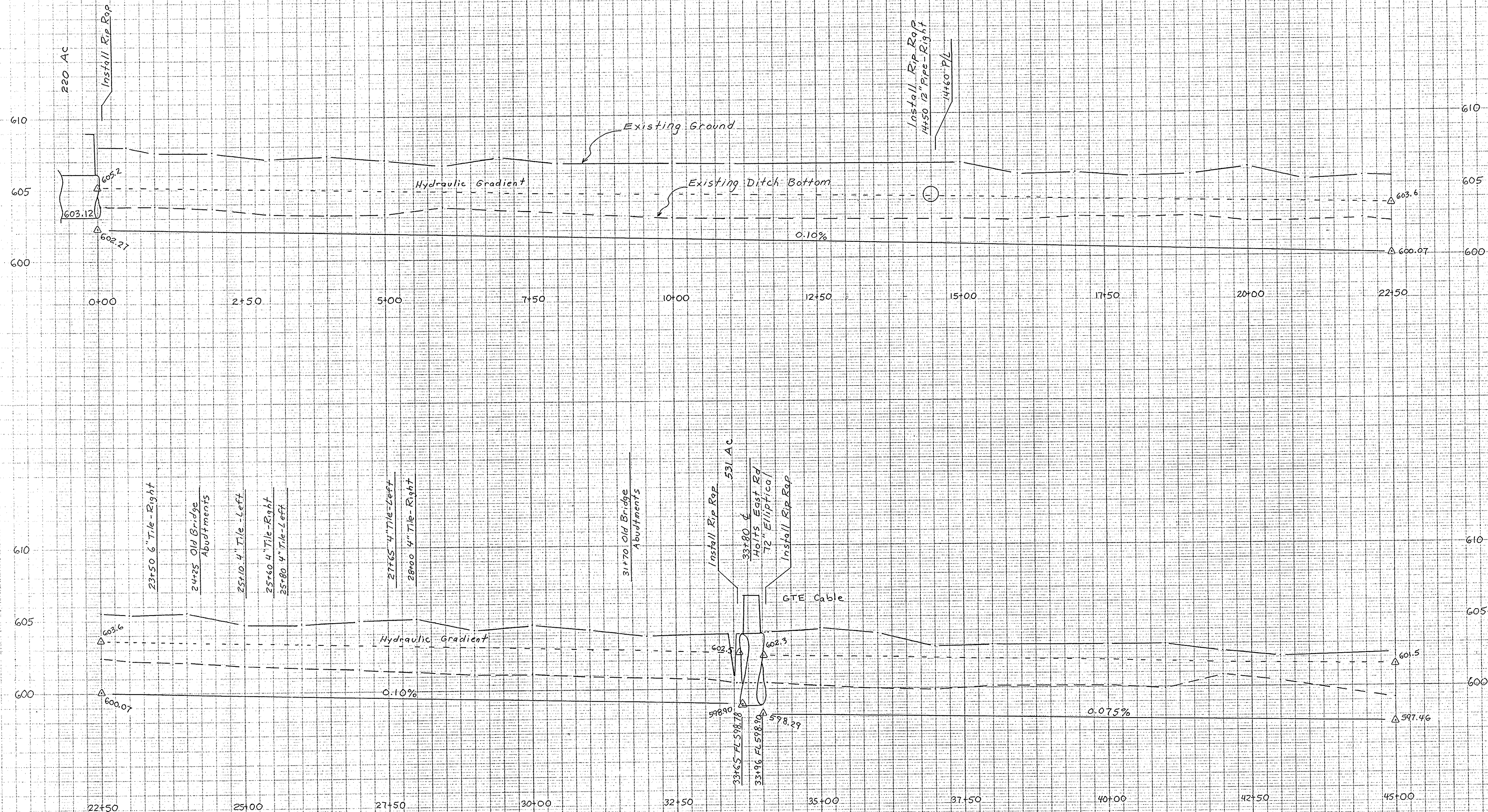
BENCHMARK DESCRIPTIONS

- B.M. #1 Chiseled "X" on east end of headwall on north side of Whitney Road at culvert at upper end of Lenz Ditch.
M.S.L. Elevation 607.74
- B.M. #2 Top of north end of 12" metal pipe on south side of Lenz Ditch at Station 14+50.
M.S.L. Elevation 604.86
- B.M. #3 Chiseled "X" on east end of headwall on north side of Holts East Road at Lenz Ditch.
M.S.L. Elevation 605.49
- B.M. #4 From the 1943 Lenz Ditch Plan. Chiseled "X" on center of headwall on box culvert on west side of Nissen Road on Lenz Ditch.
M.S.L. Elevation 602.54
- B.M. #5 Top of chiseled "X" on south end of concrete slab bridge on Lenz Ditch at Station 61+00.
M.S.L. Elevation 601.18
- B.M. #6 Top of horseshoe set in the east end of the south headwall of the lane crossing culvert on Richard Dickman farm.
M.S.L. Elevation 598.48
- B.M. #7 Spike in the south side of a 20" diameter oak tree on the south side of Lenz Ditch at Station 101+00.
M.S.L. Elevation 598.45
- B.M. #8 Chiseled "X" on southeast wingwall of culvert crossing on Toledo Alfalfa Mills farm.
M.S.L. Elevation 595.81
- B.M. #9 Chiseled "X" on headwall on north side of Lenz Ditch on west side of Elliston Trowbridge Road. Headwall is on the pipe entering Lenz Ditch from the north.
M.S.L. Elevation 593.77
- B.M. #10 From the 1943 Lenz Ditch Plan. Station 142+30 - Top of bell on west end of 48" cast iron pipe on west side of Oestreich Road at Lenz Ditch.
M.S.L. Elevation 592.35
- B.M. #11 Chiseled "X" on west end of 54" R/C pipe at James Street on Lenz Ditch.
M.S.L. Elevation 590.52
- B.M. #12 Chiseled "X" on north end of 60" R/C pipe under Toussaint North Road on Lenz Ditch.
M.S.L. Elevation 588.86
- B.M. #13 Chiseled "X" on east end of 54" R/C pipe for farm crossing on Elmer Bolander farm.
M.S.L. Elevation 588.47

SOILS DESCRIPTIONS

- Lf -- Lenawee silty clay loam This deep, nearly level, very poorly drained soil is on lake Plains. It is in irregularly shaped areas on flats and in long, narrow, concave areas. It is subject to ponding. Most areas range from 5 to 75 acres. Slope is 0 to 2 percent.
- Hy -- Hoytville silty clay loam This deep, nearly level, very poorly drained soil is on broad flats and in long, narrow, concave areas on lake plains. Most areas range from 5 to more than 100 acres. Slope is 0 to 2 percent.
- NpA -- Nappanee silty clay loam This deep, nearly level, somewhat poorly drained soil is on slight convex rises and side slopes along drainageways on lake plains. Most areas range from 4 to 75 acres.
- SbC2 -- St. Clair silty clay loam This deep, gently sloping and sloping, moderately drained soil is in long, narrow areas along streams on lake plains. Erosion has removed part of the original surface layer. The present surface layer contains subsoil material that has a higher clay content. Most areas range from 5 to 20 acres.
- Sh -- Shoals silt loam frequently flooded This deep, nearly level, somewhat poorly drained soil is in long, narrow areas on flood plains. It is subject to frequent flooding. Most areas range from 5 to 25 acres. The slope is 0 to 2 percent.
- To -- Toledo silty clay This deep, nearly level, very poorly drained soil is on broad flats and in long, narrow concave areas on lake plains. It is subject to ponding of short duration. Most areas range from 5 to more than 100 acres. Slope is 0 to 2 percent.
- Wa -- Wabasha silty clay, frequently flooded This deep, nearly level, very poorly drained soil is on flood plains. It is in long, narrow areas along small streams with a low gradient, and it is subject to frequent flooding. Most areas range from 5 to 50 acres. Slope is 0 to 2 percent.

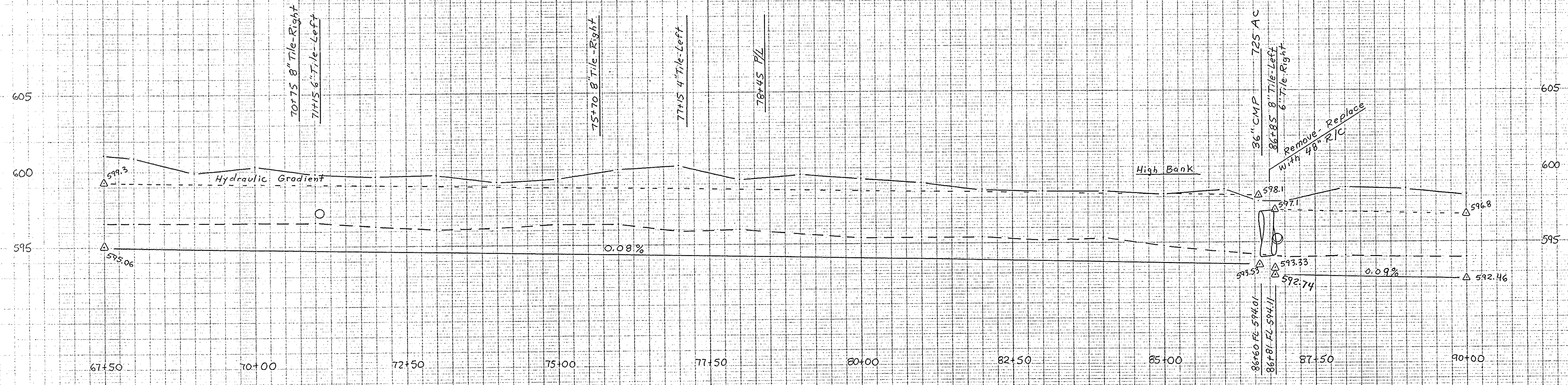
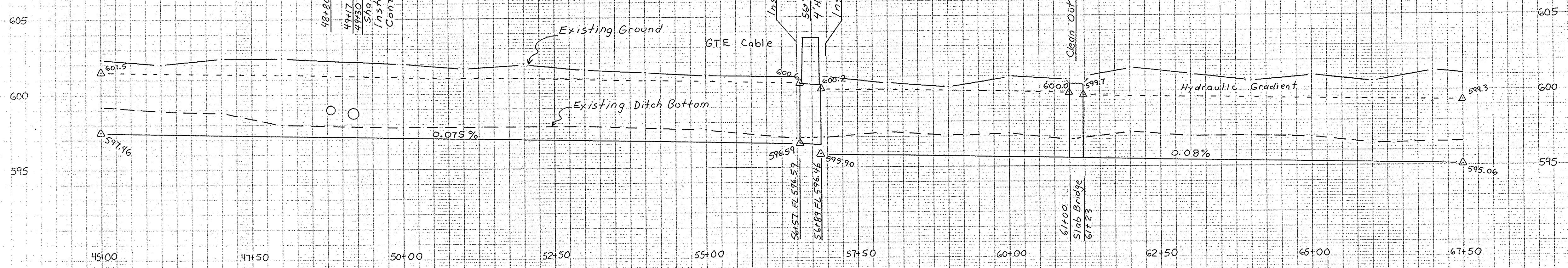
LENZ DITCH			
U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE			
Designed.....	Date	Approved by <i>[Signature]</i>	Title <i>C.E.S.</i>
Drawn.....	1-74	Title	
Traced.....	Sheet	Drawing No.	
Checked <i>MB</i>	7/94	No. 2	39-01-383-94-05
	of 11		



LENZ DITCH

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed <i>Michael Gargac</i>	Date 12/93	Approved <i>Angela J. Deam</i>
Drawn <i>Michael Gargac</i>	12/93	Title <i>C.E.</i>
Traced		Sheet No. 3
Checked <i>Michael Gargac</i>	3/94	Drawing No. 39-01-393-94-05



LENZ DITCH

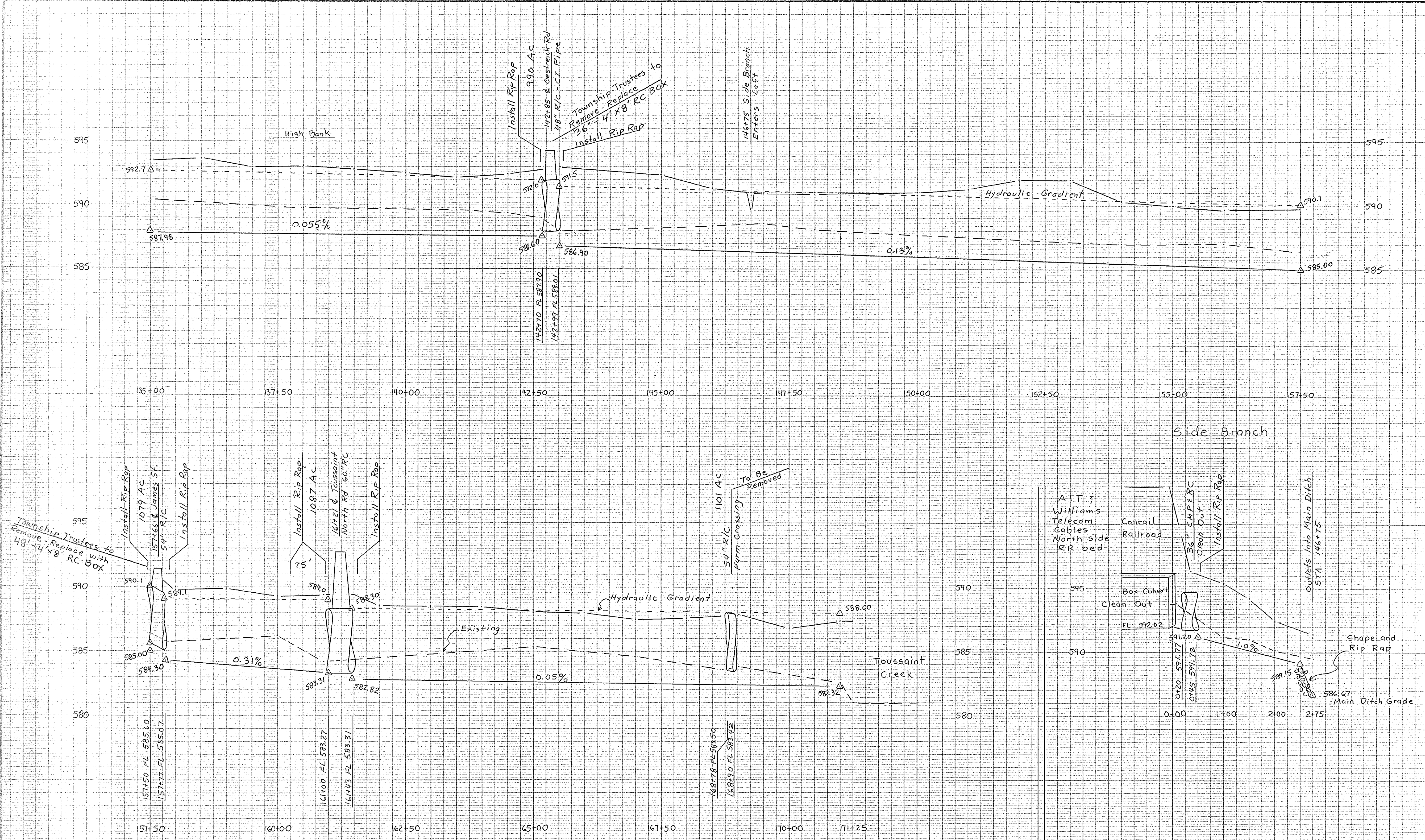
**U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE**

Designed <i>Michael Gargas</i> 12/93	Date 12/93	Approved <i>Wm. J. Sumner</i>
Drawn <i>Michael Gargas</i> 12/93	Title <i>C.E.D.</i>	
Traced	Sheet No. <i>4</i>	Drawing No. <i>39-01-383-94-05</i>
Checked <i>MB</i>	Date <i>3/94</i>	of <i>1</i>

SCS-ENG-316 (Rev. 6-75)



LENZ DITCH			
U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE			
Designed <i>Michael Gargac</i>	Date <i>12/93</i>	Approved by <i>[Signature]</i>	Title <i>C.E.</i>
Drawn <i>Michael Gargac</i>	Date <i>12/93</i>	Title	
Traced	Sheet	Drawing No.	
Checked <i>MJB</i>	Date <i>3/94</i>	No. <i>5</i>	39-01-383-94-05



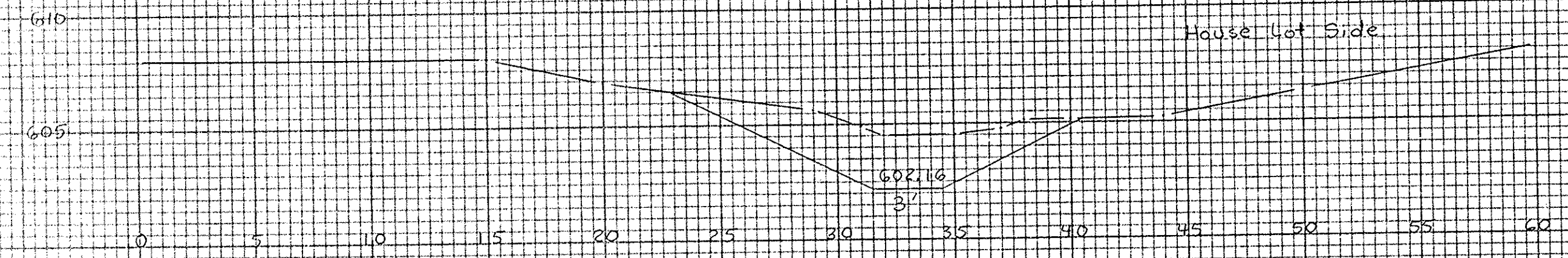
LENZ DITCH

**U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE**

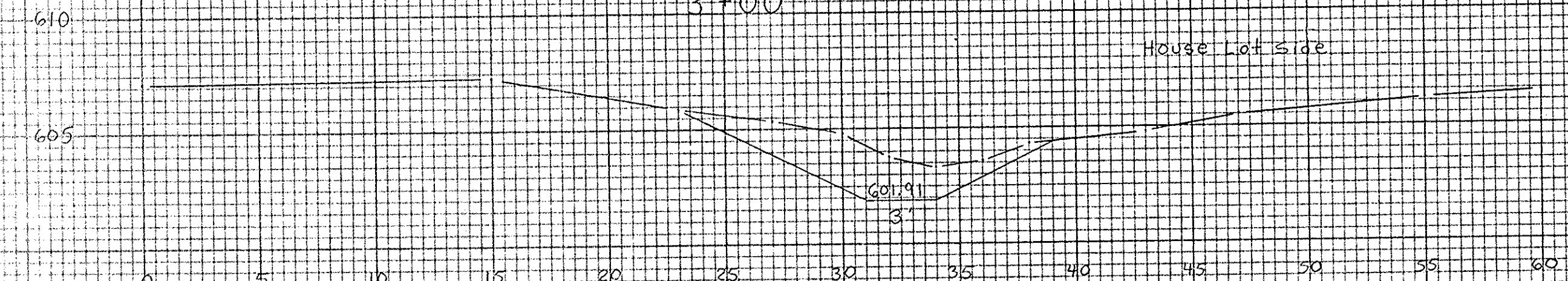
Designed <i>Michael Gargac</i> 12/93	Date 12/93
Drawn <i>Michael Gargac</i> 12/93	Approved <i>[Signature]</i>
Traced _____	Title _____
Checked <i>M.B.</i> 3/94	Sheet No. 6 of 11
	Drawing No. 39-01-383-94-05

2:1 Slopes

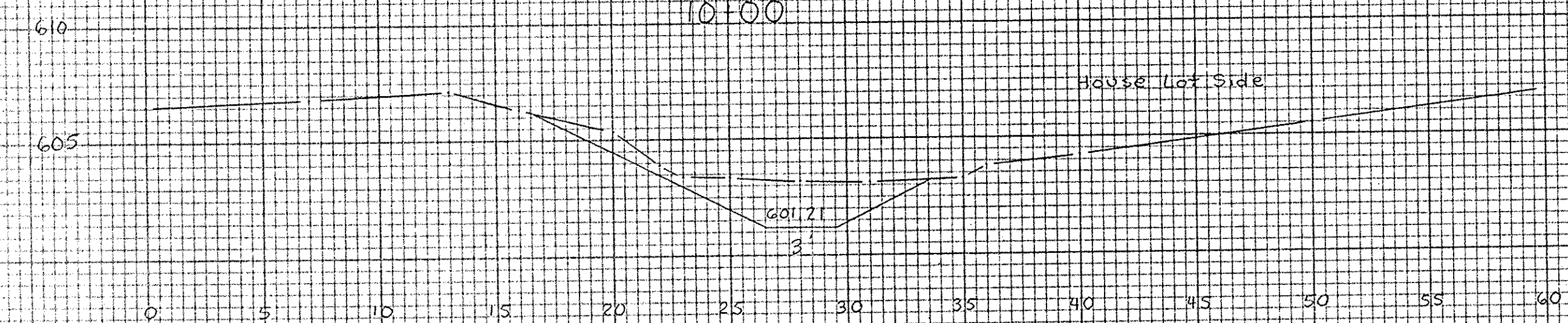
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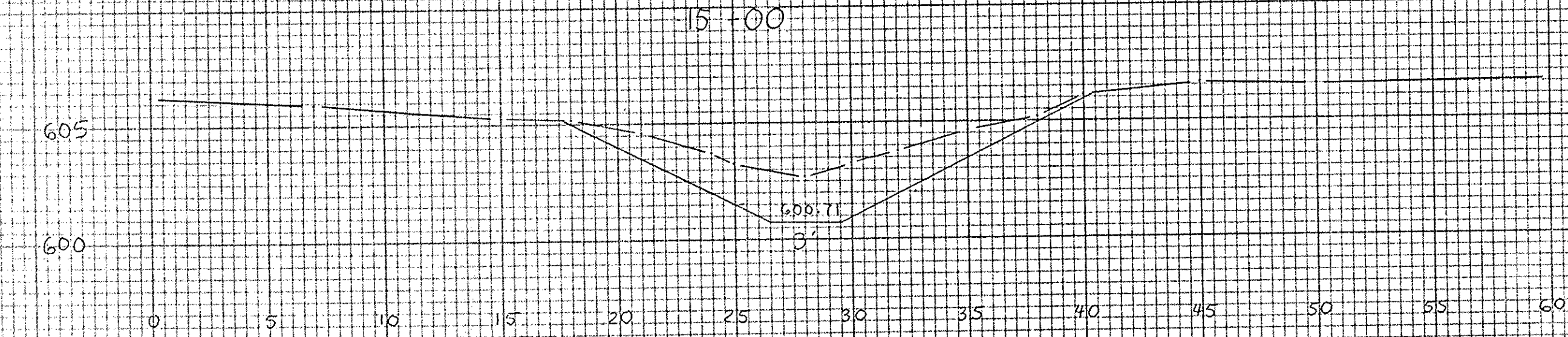
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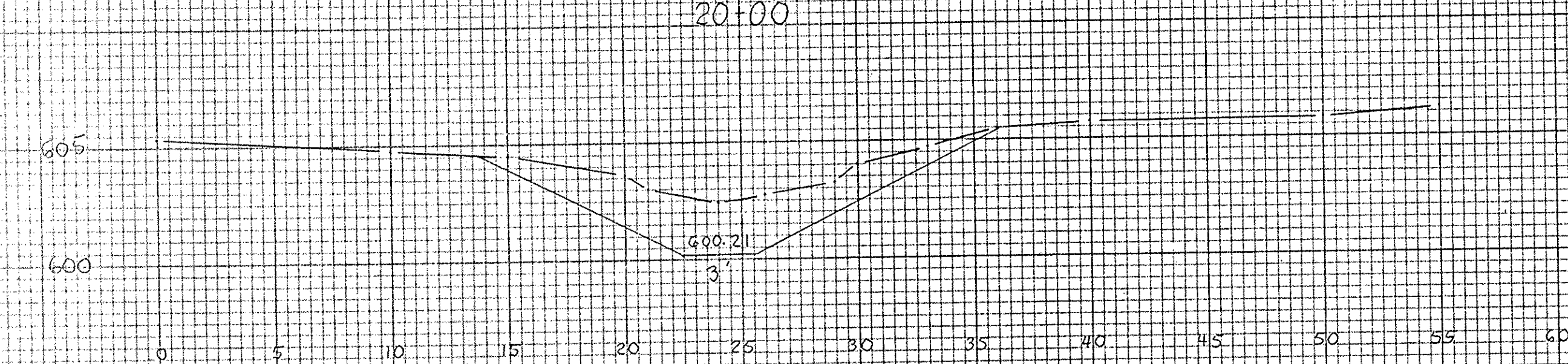
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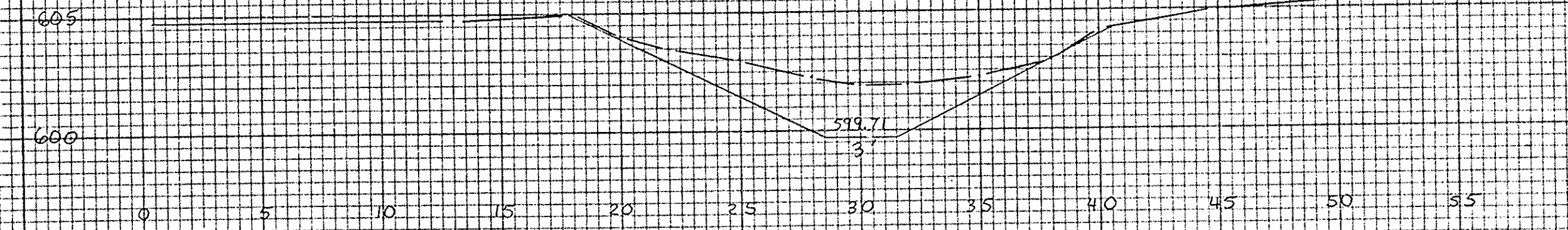
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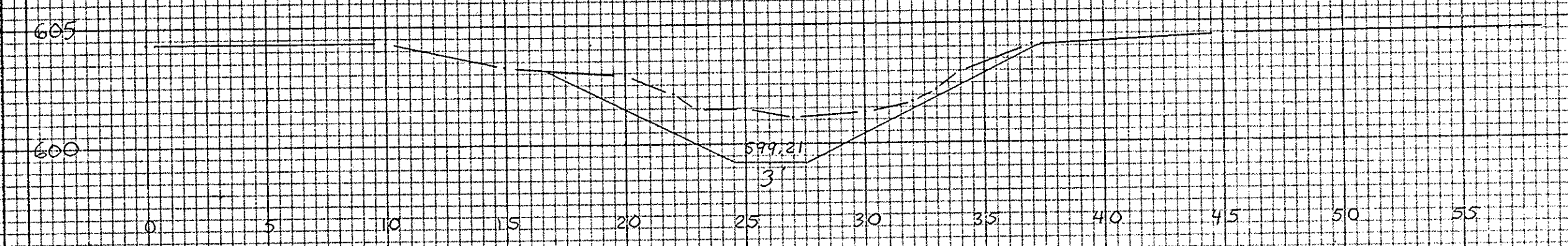
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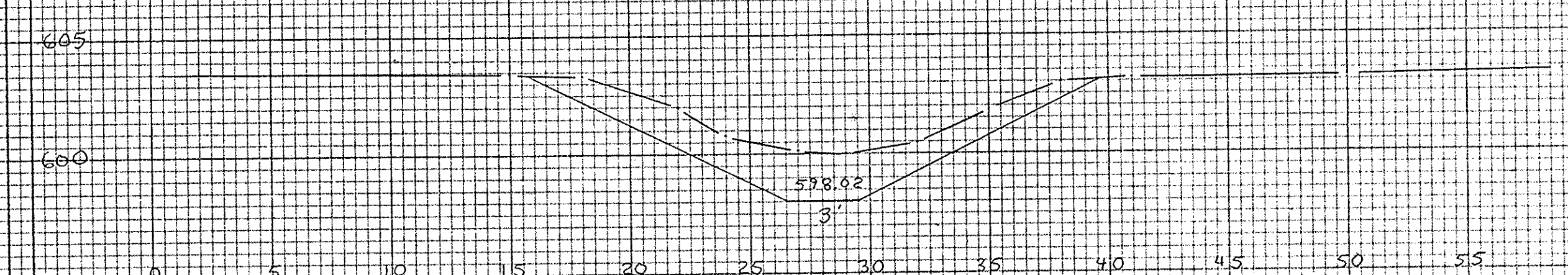
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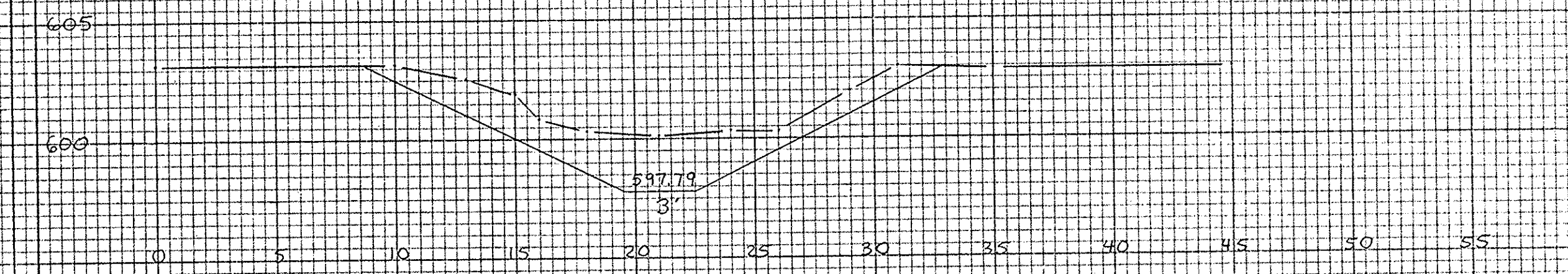
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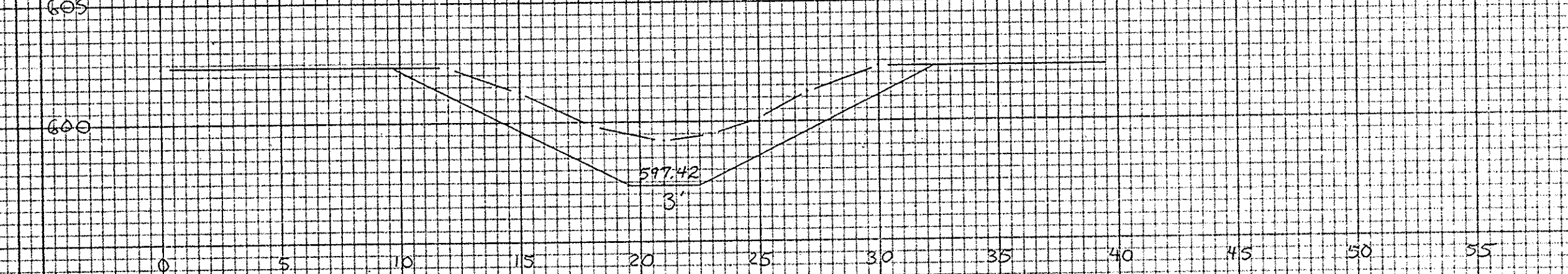
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40+00



45+00



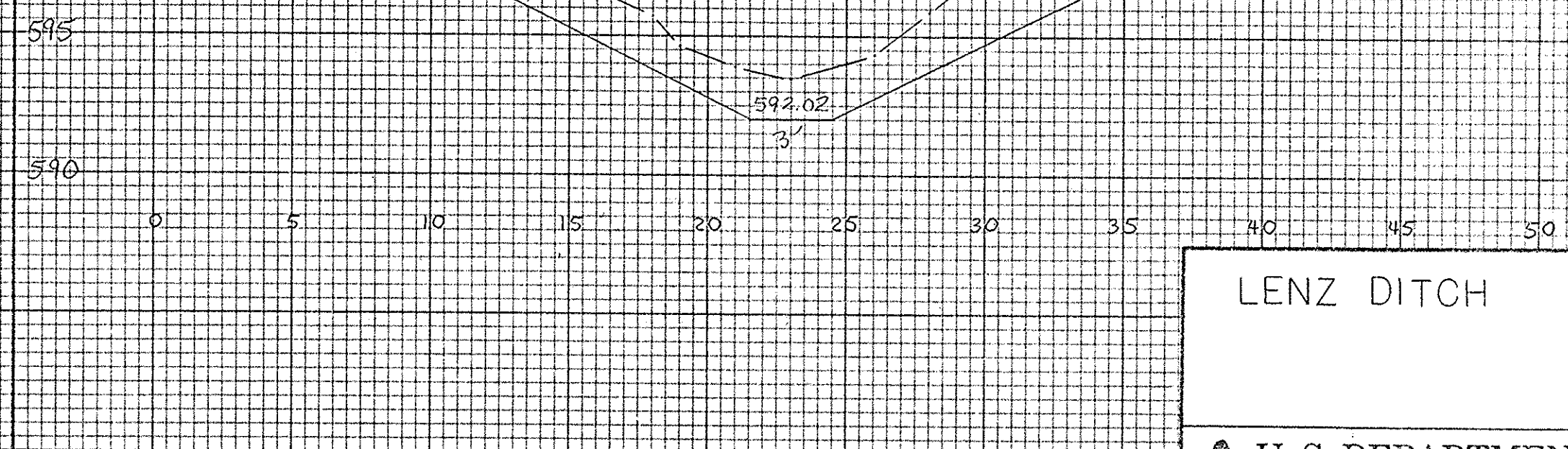
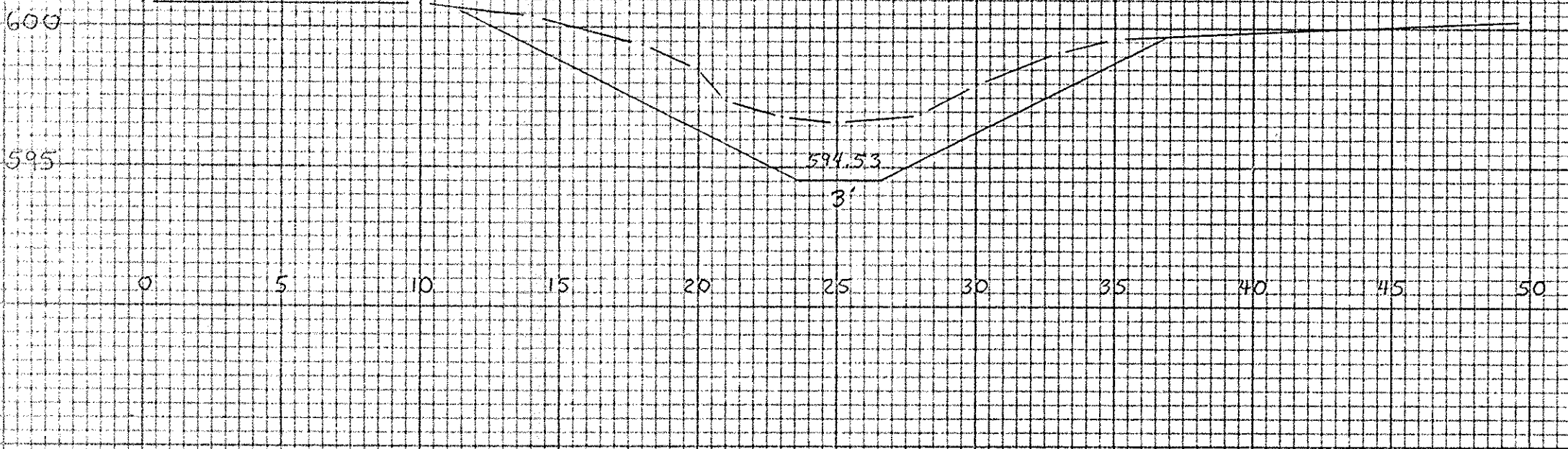
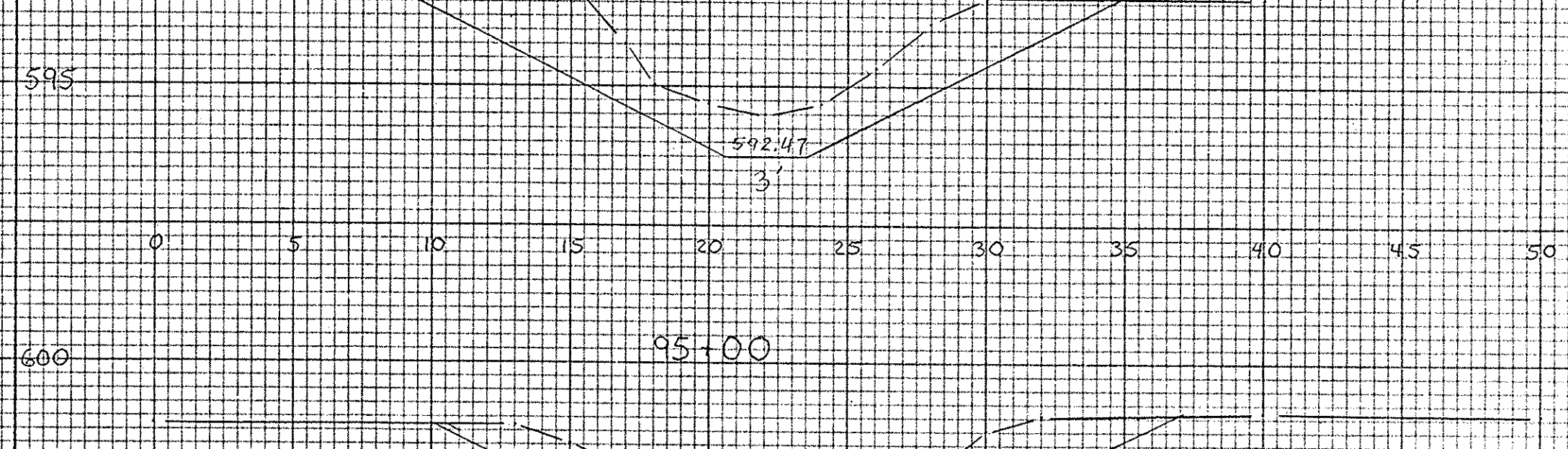
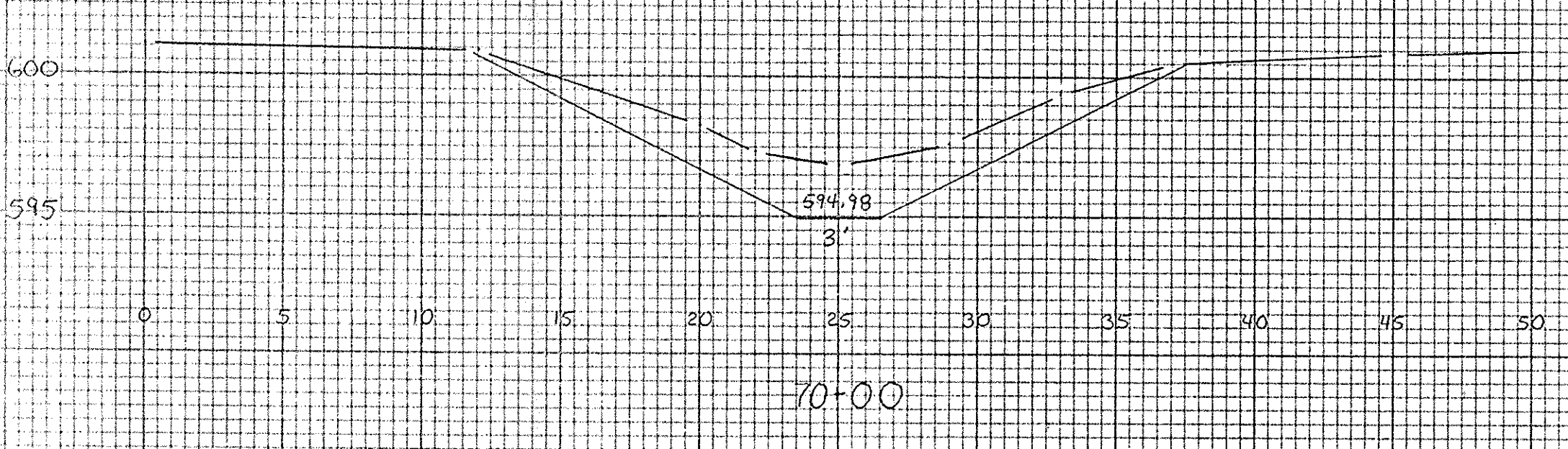
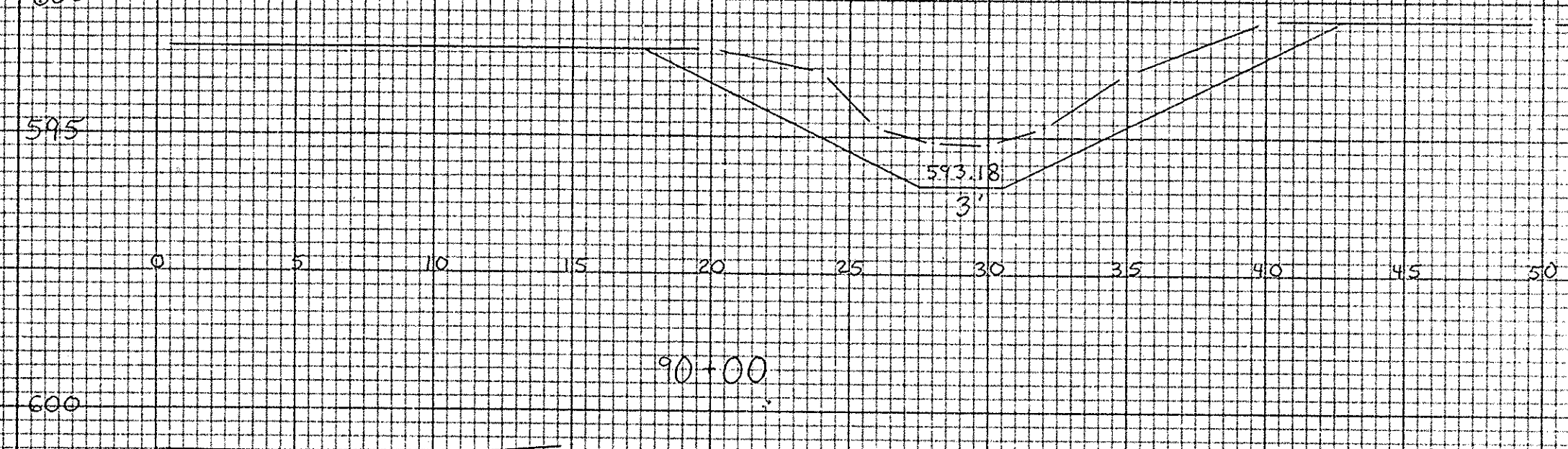
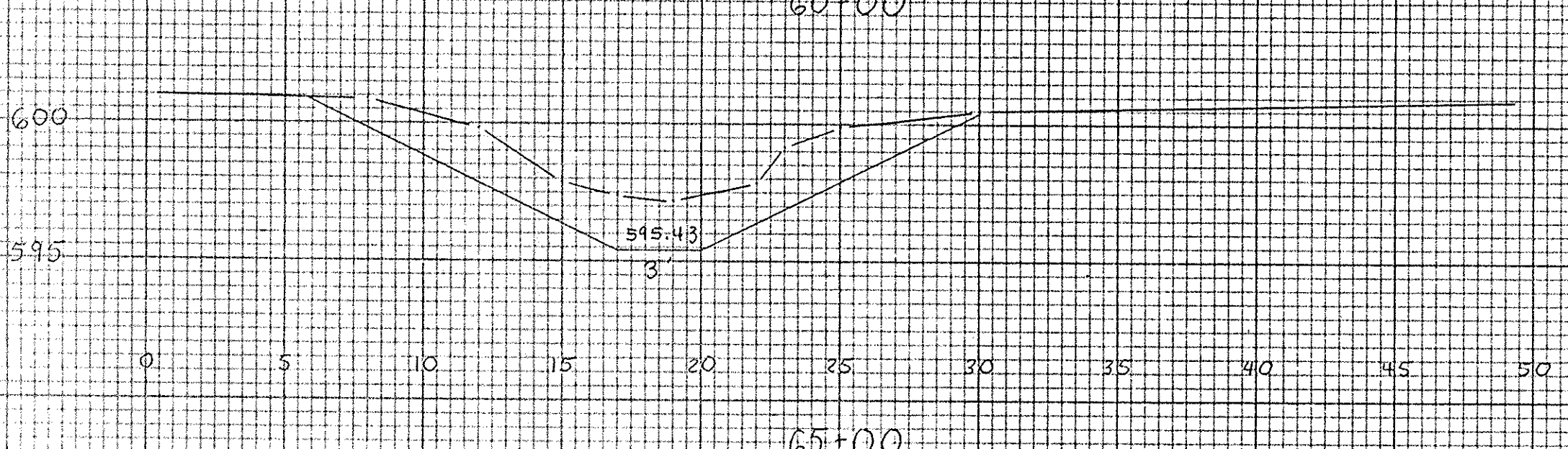
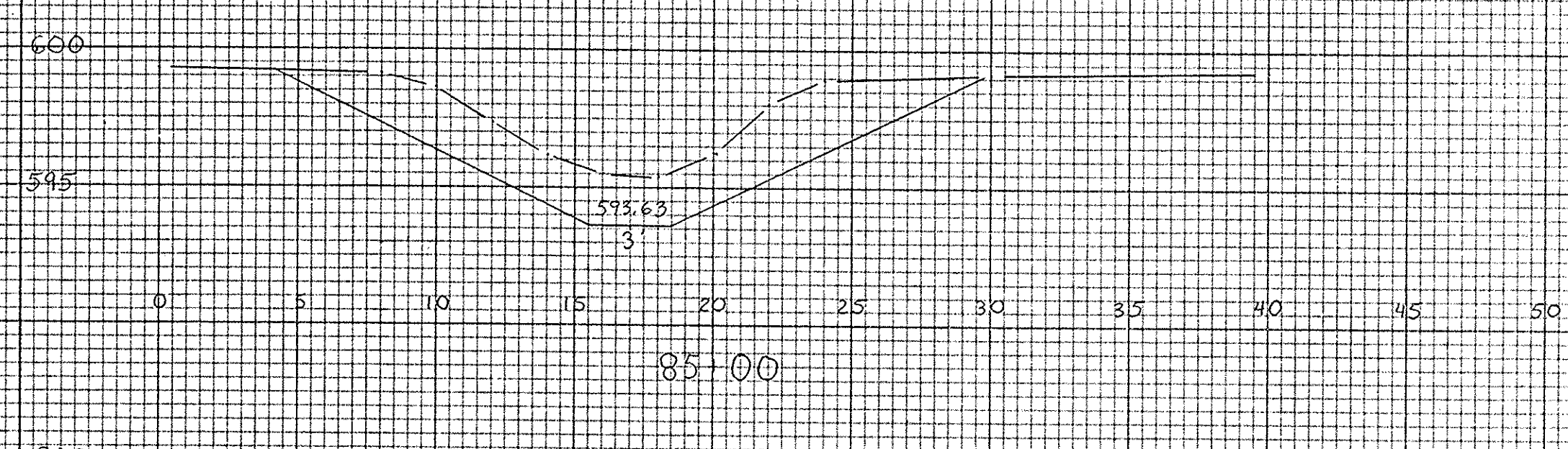
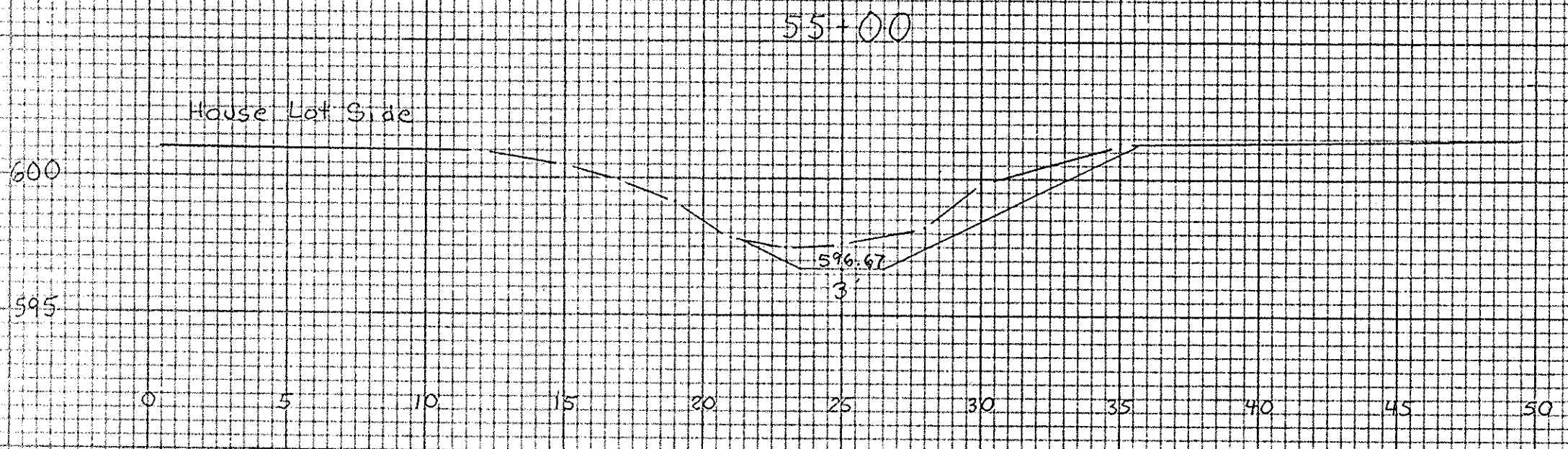
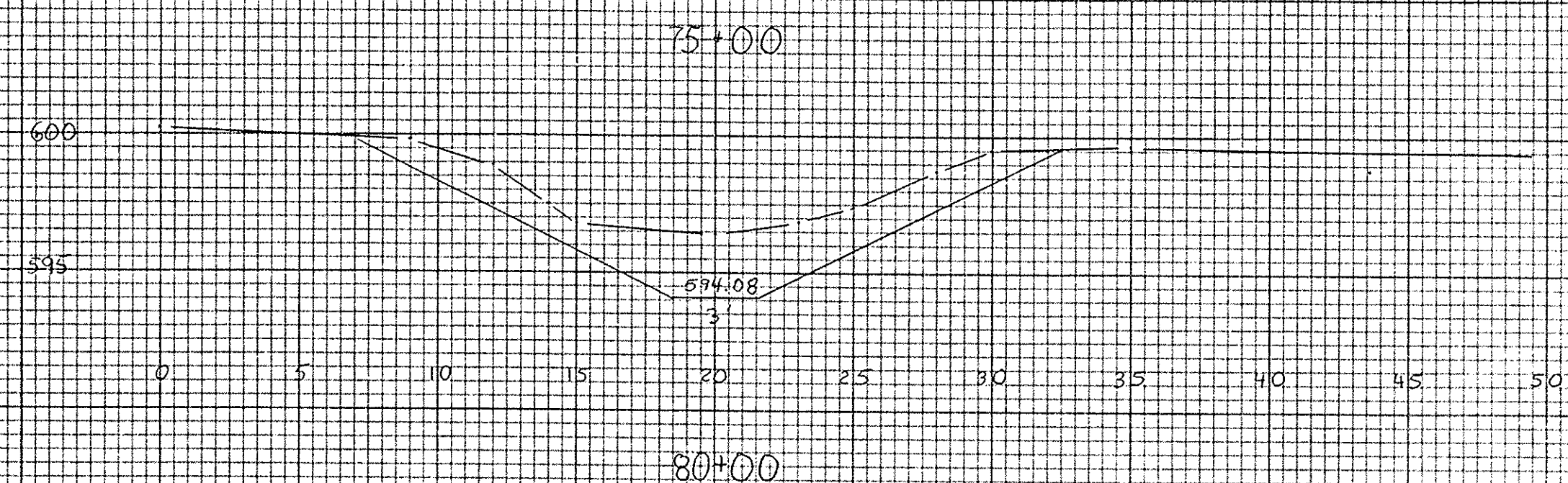
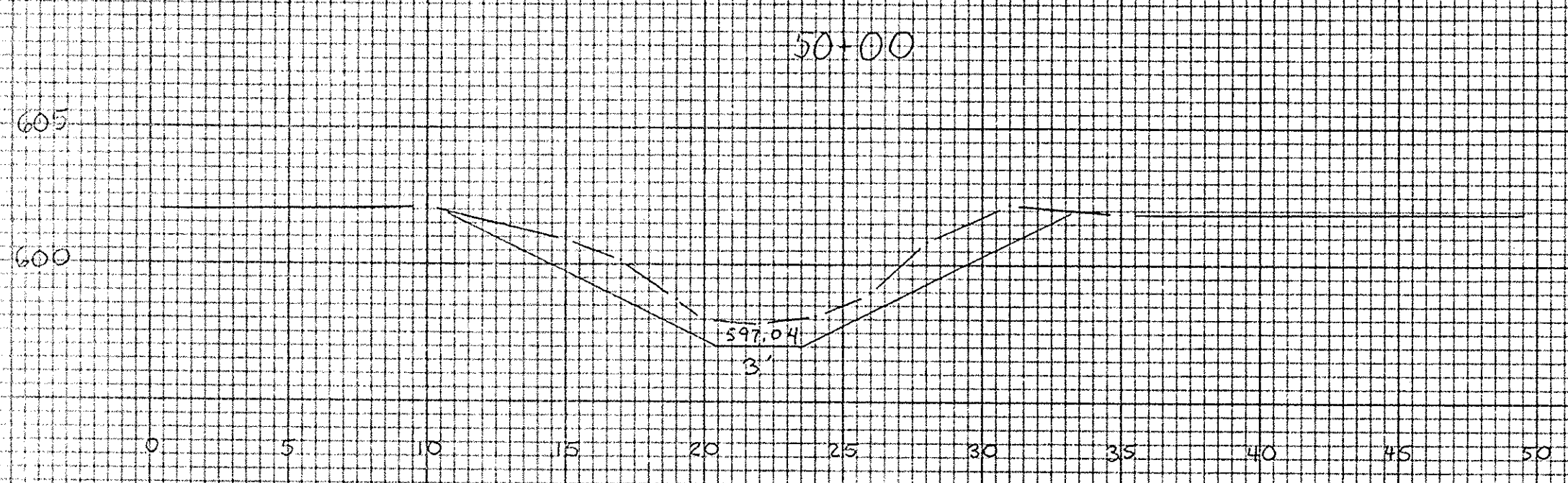
LENZ DITCH

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed <i>Michael R. Gargas</i>	Date <i>12/93</i>	Approved <i>Paul F. Simon</i>
Drawn <i>Michael R. Gargas</i>	Date <i>11/93</i>	Title <i>C.E.C.</i>
Traced	Sheet	Drawing No.
Checked <i>MB</i>	No. <i>7</i>	39-01-383-94-05
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SCS-ENG-315 REV 8-79

2:1 Sideslopes



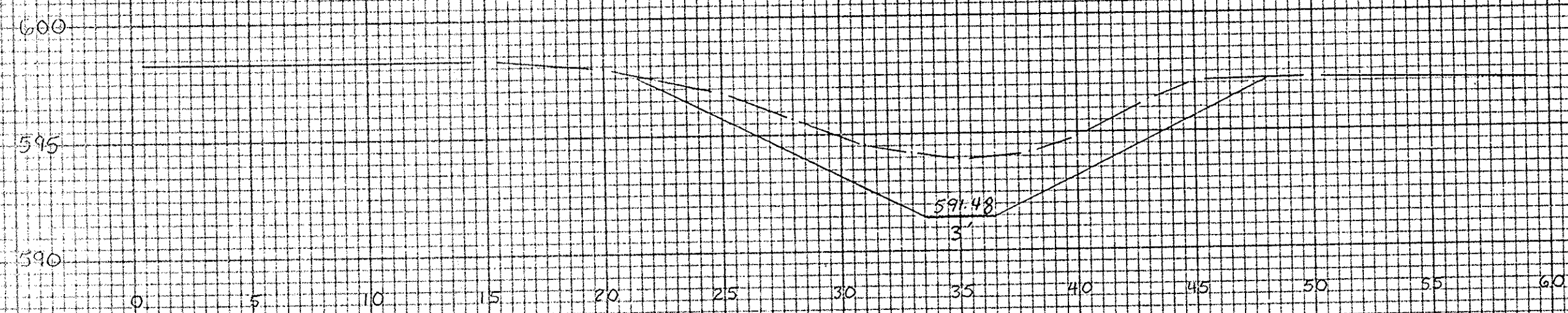
LENZ DITCH

U. S. DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE

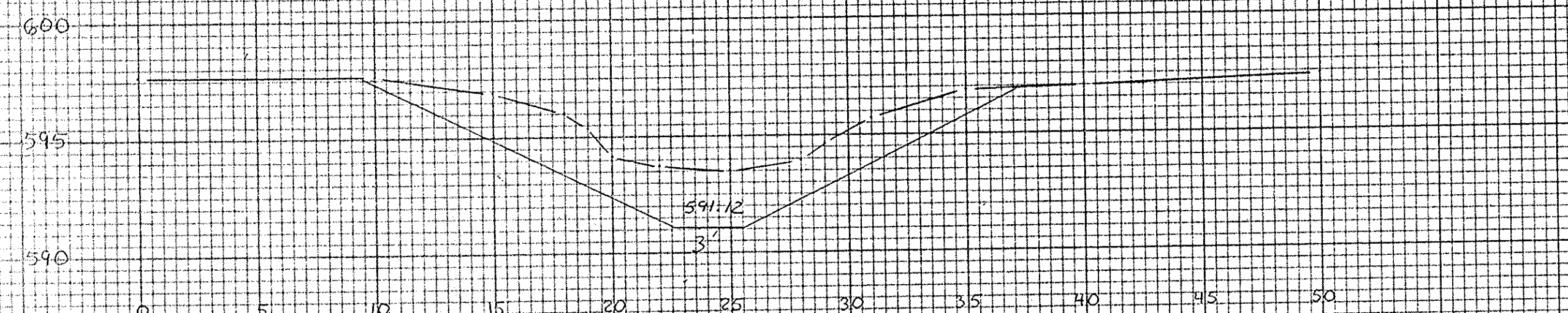
Designed <i>Michael R. Gargas</i> 12/93	Date	Approved by <i>Boyle J. Somers</i>
Drawn <i>Michael R. Gargas</i> 11/93	Title	<i>C.E.S.</i>
Traced	Sheet	Drawing No.
Checked <i>MB</i> 3/94	No. <i>8</i>	39-01-383-94-05

2:1 Sideslopes

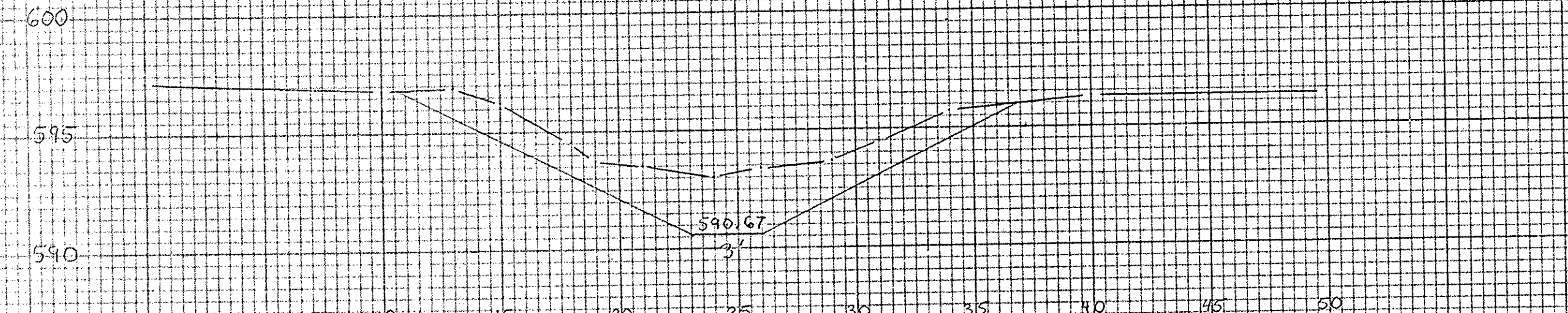
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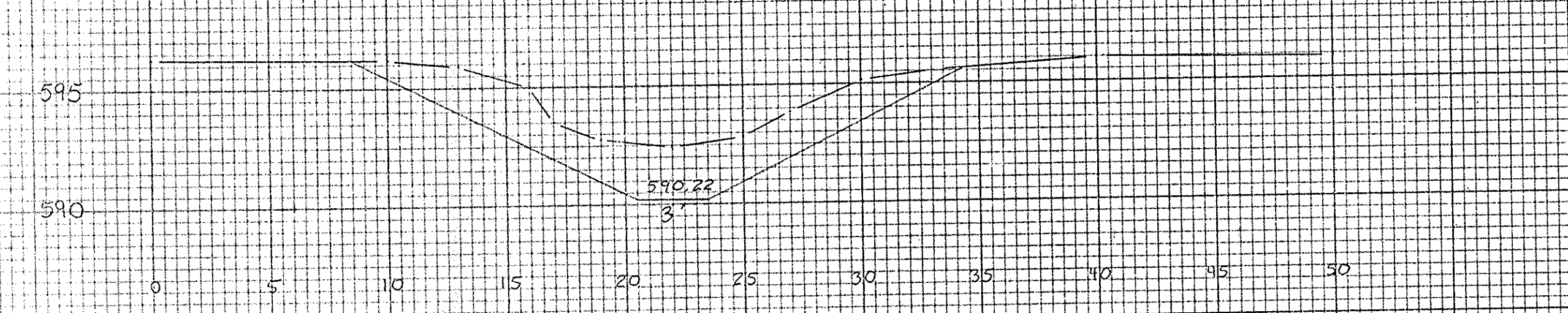
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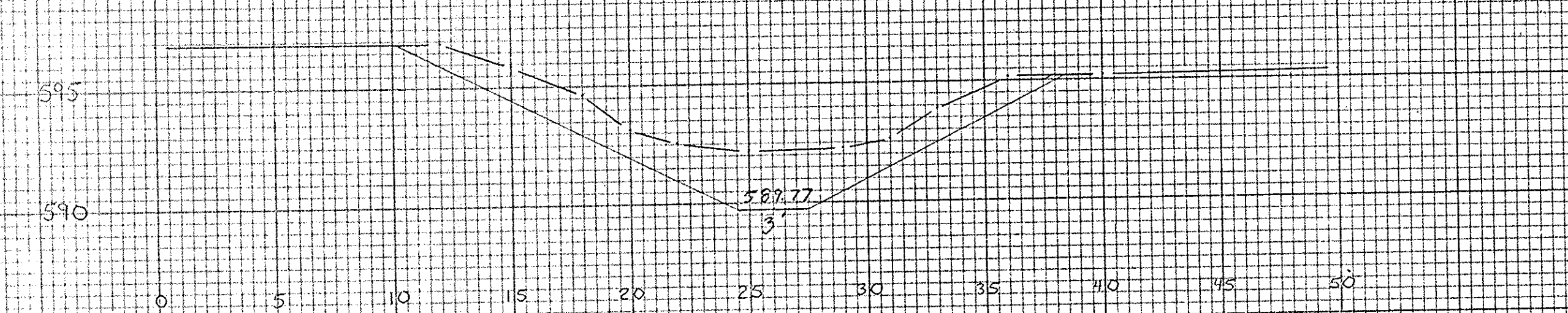
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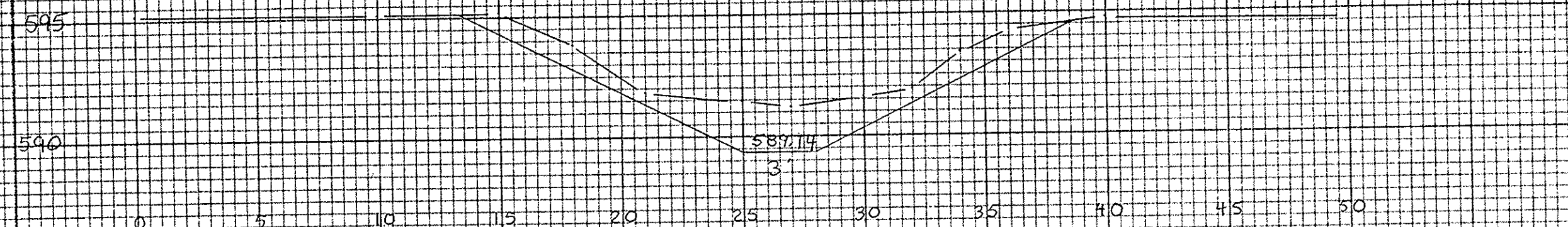
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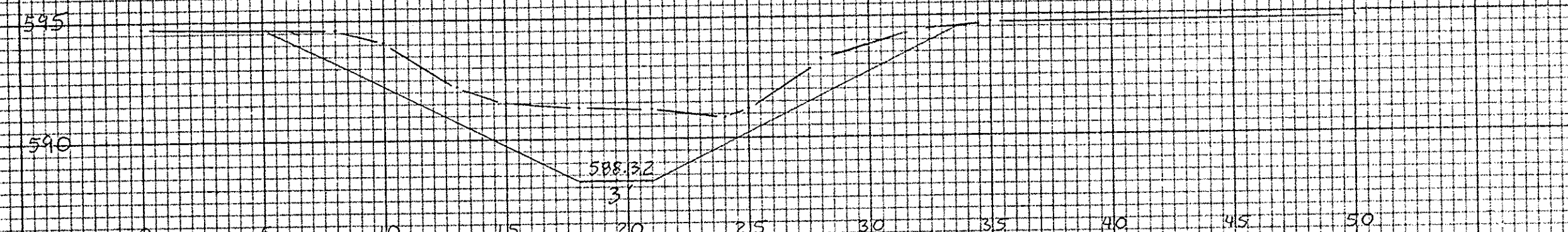
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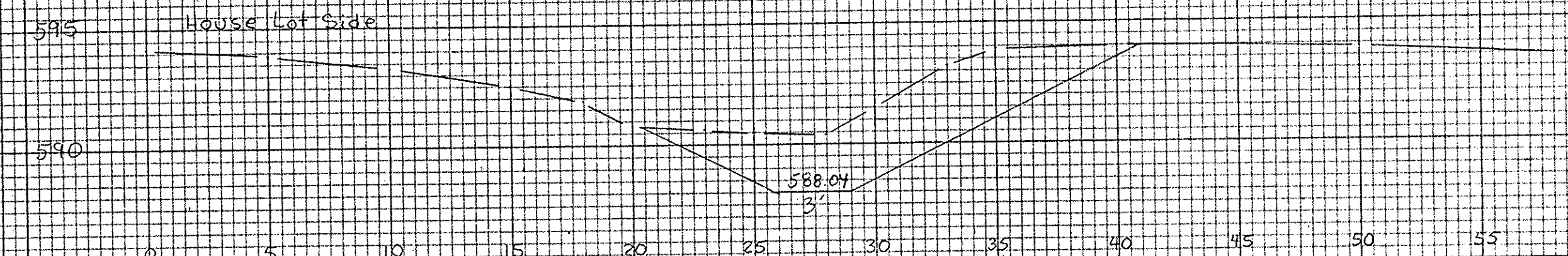
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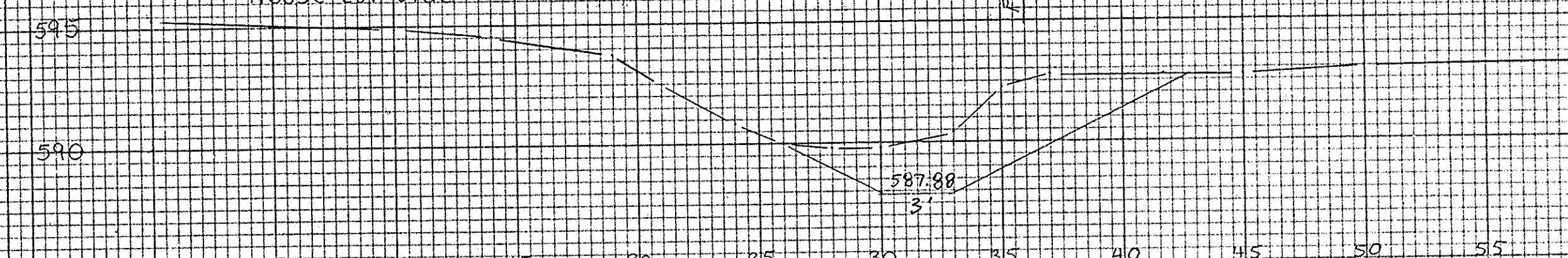
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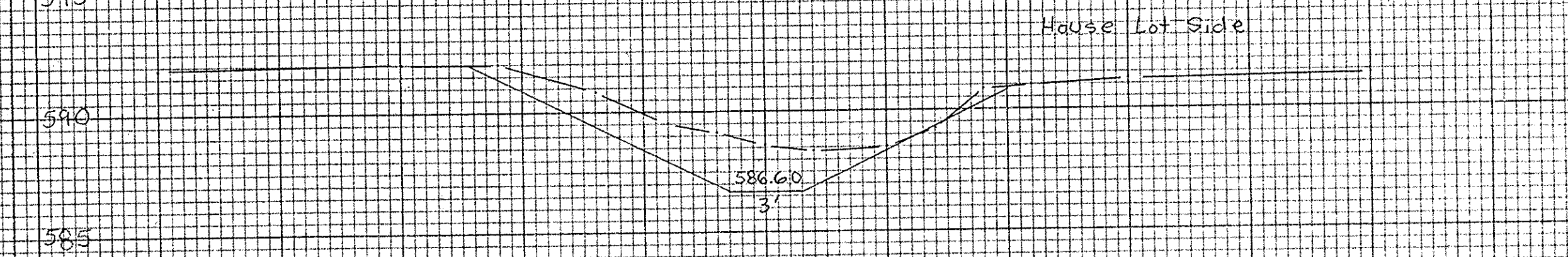
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138+00



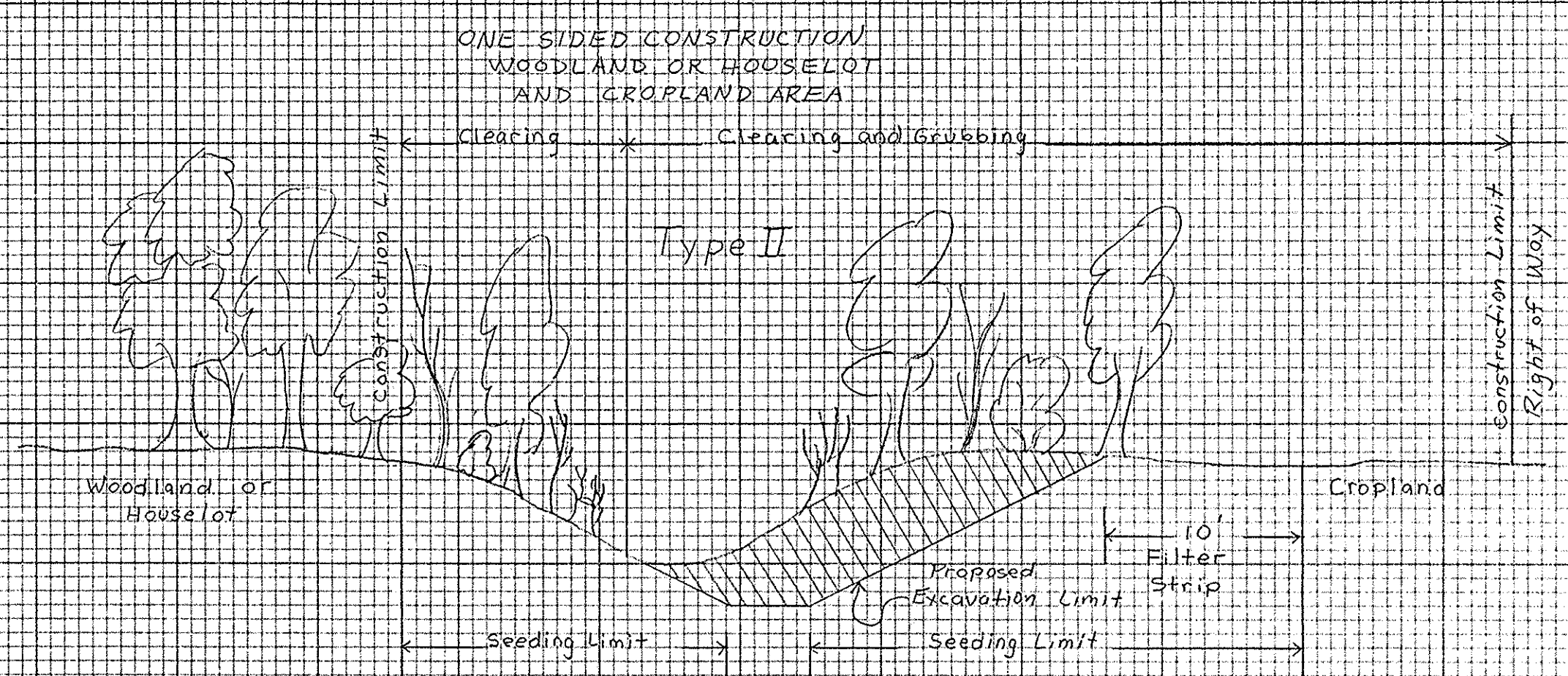
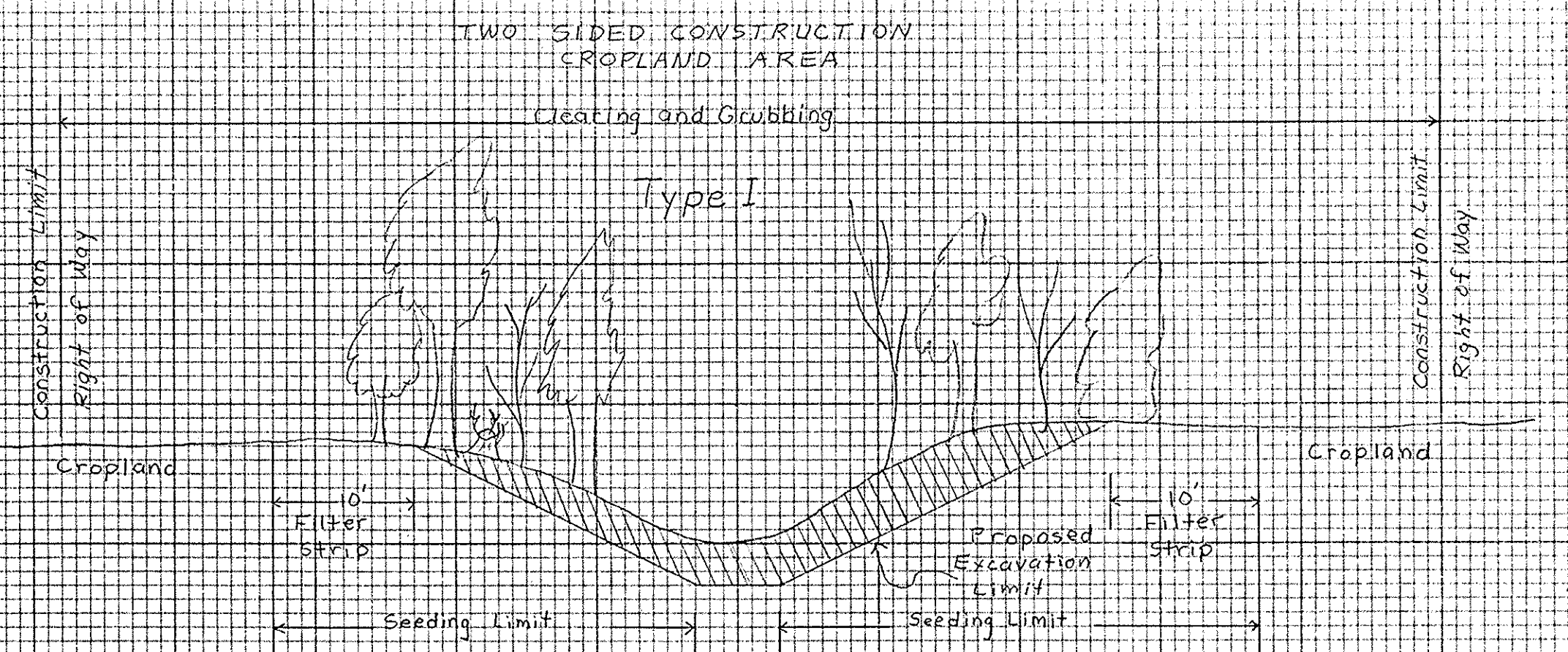
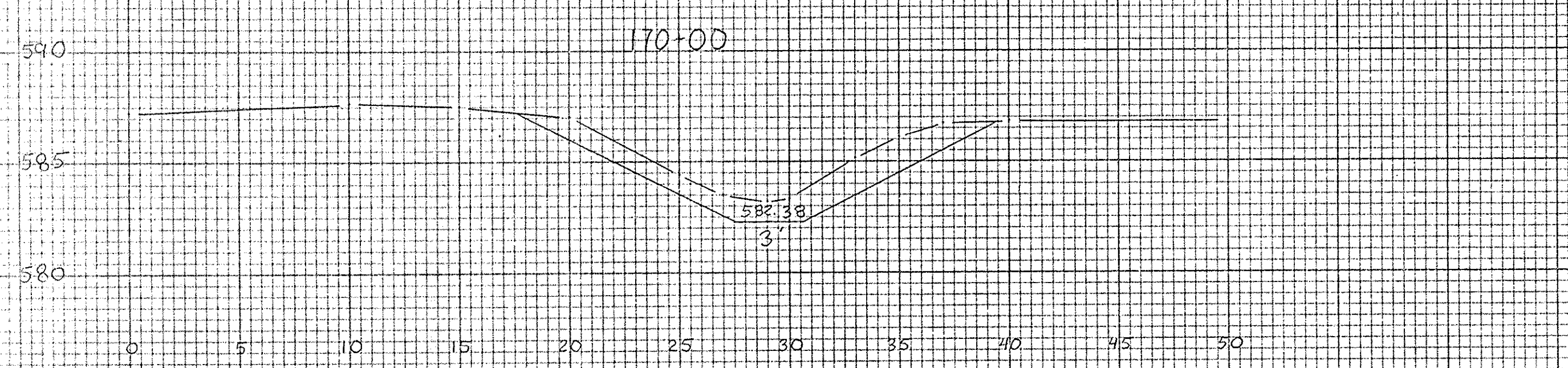
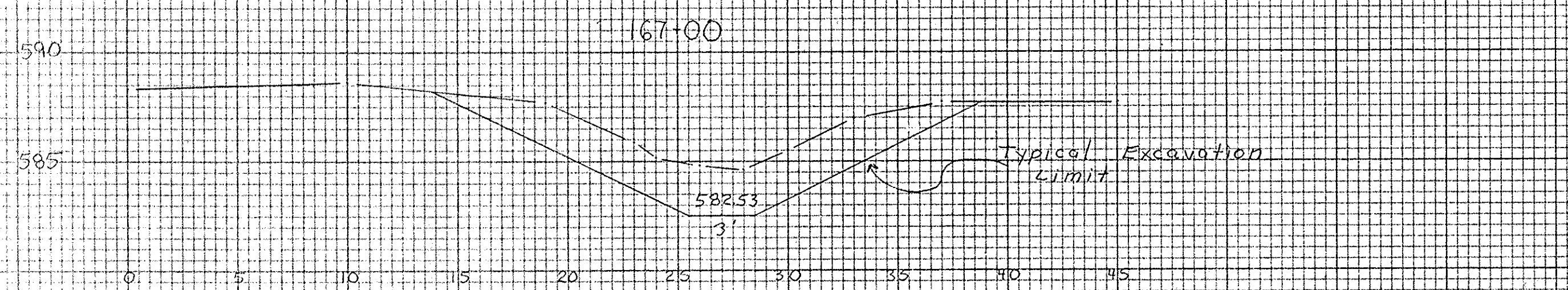
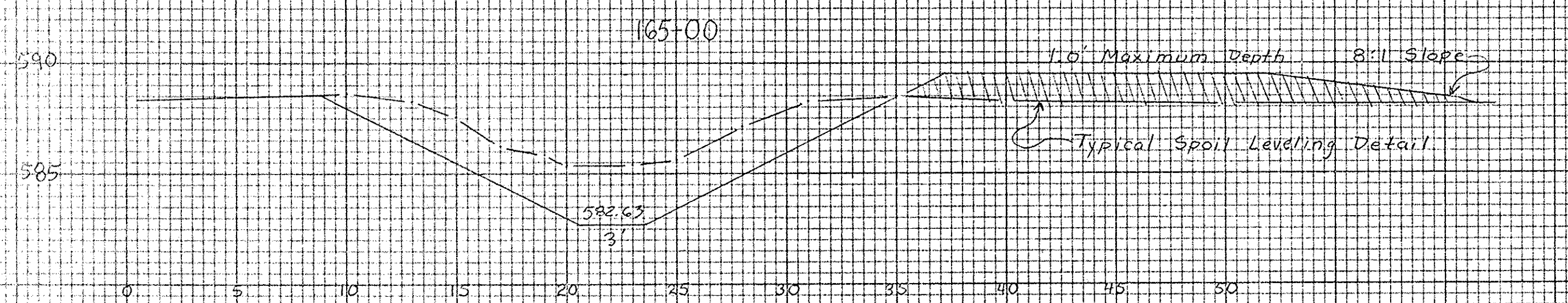
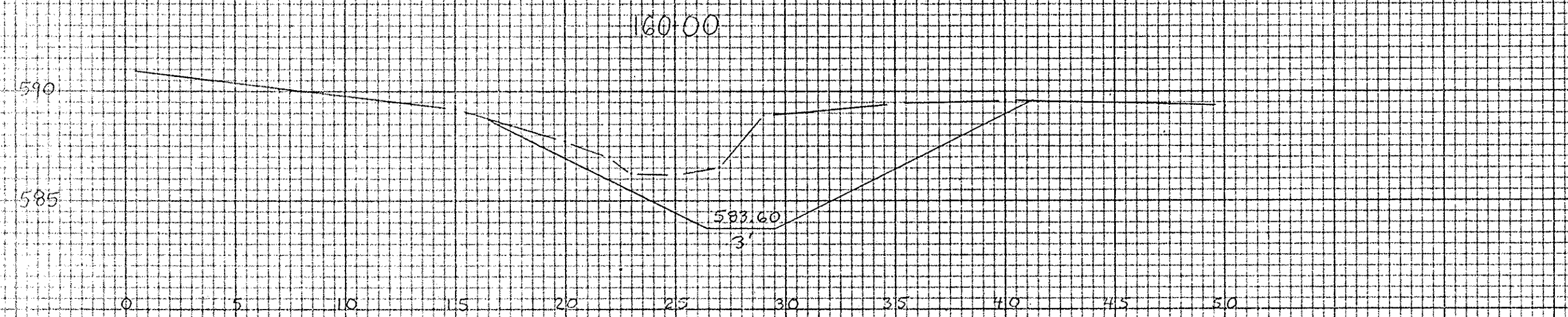
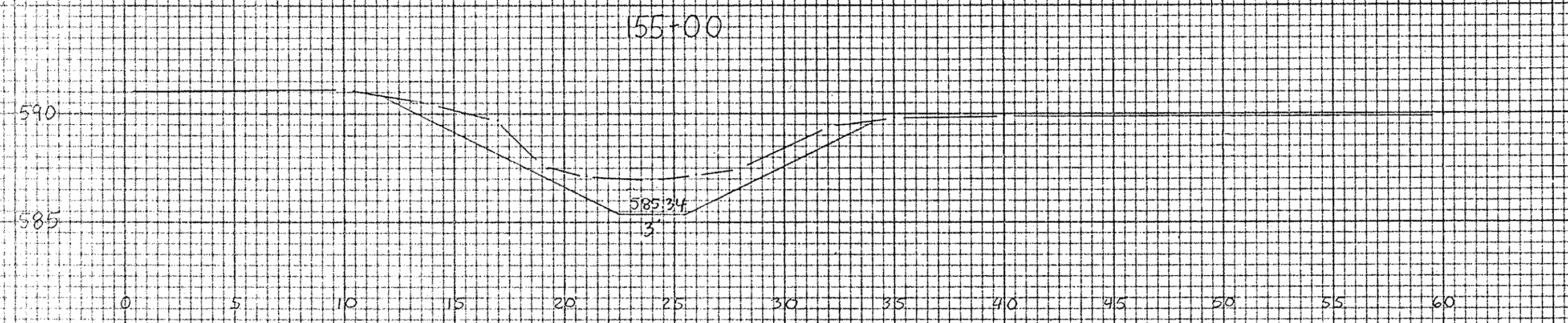
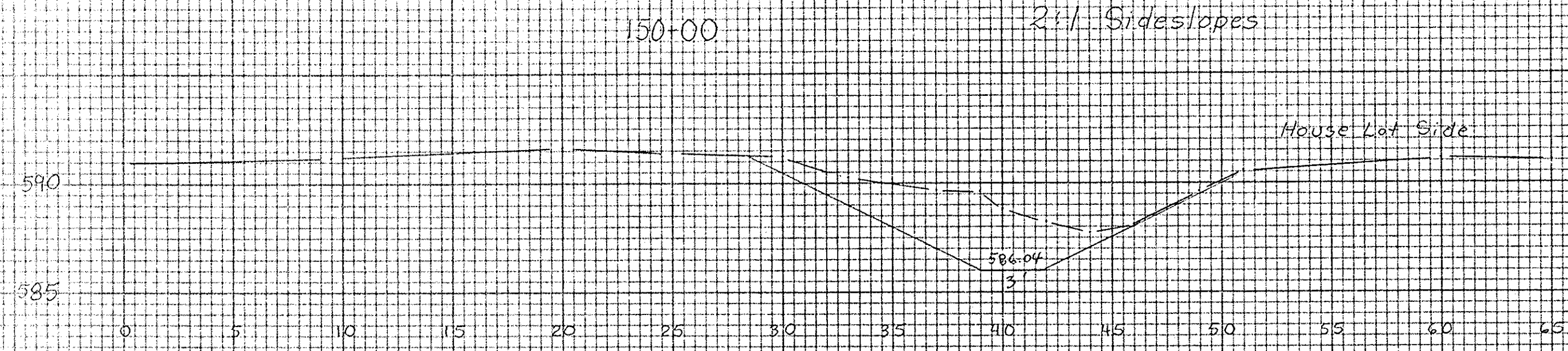
146+00



LENZ DITCH

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed <u>Michael R. Garga</u> 12/83	Date	Approved <u>[Signature]</u>
Drawn <u>Michael R. Garga</u> 11/93	Title <u>C.E.G.</u>	
Traced	Sheet No. <u>9</u>	Drawing No. <u>39-01-383-94-05</u>
Checked <u>MS</u>	of <u>11</u>	



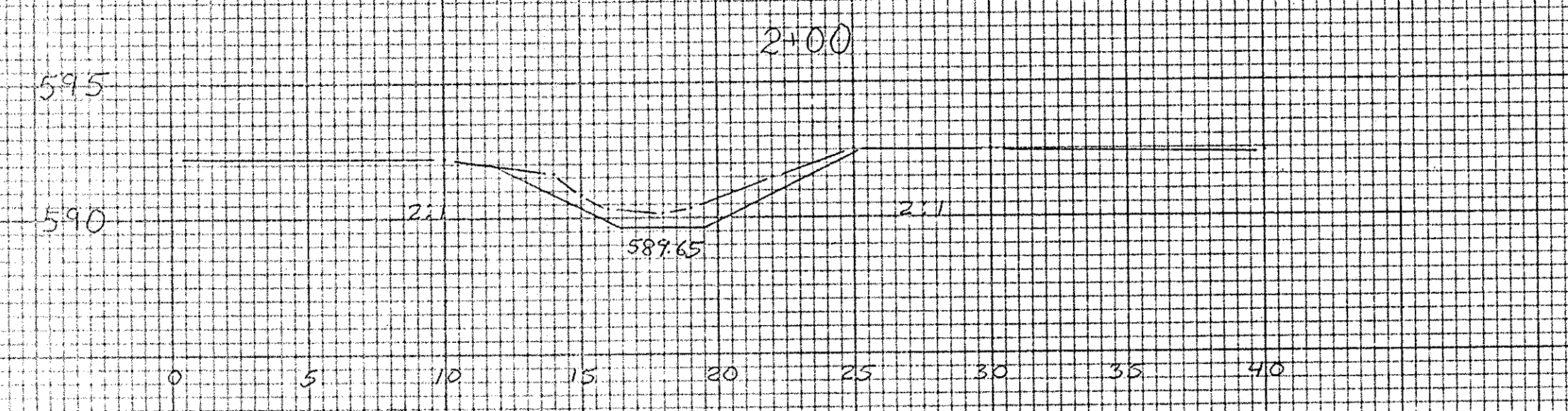
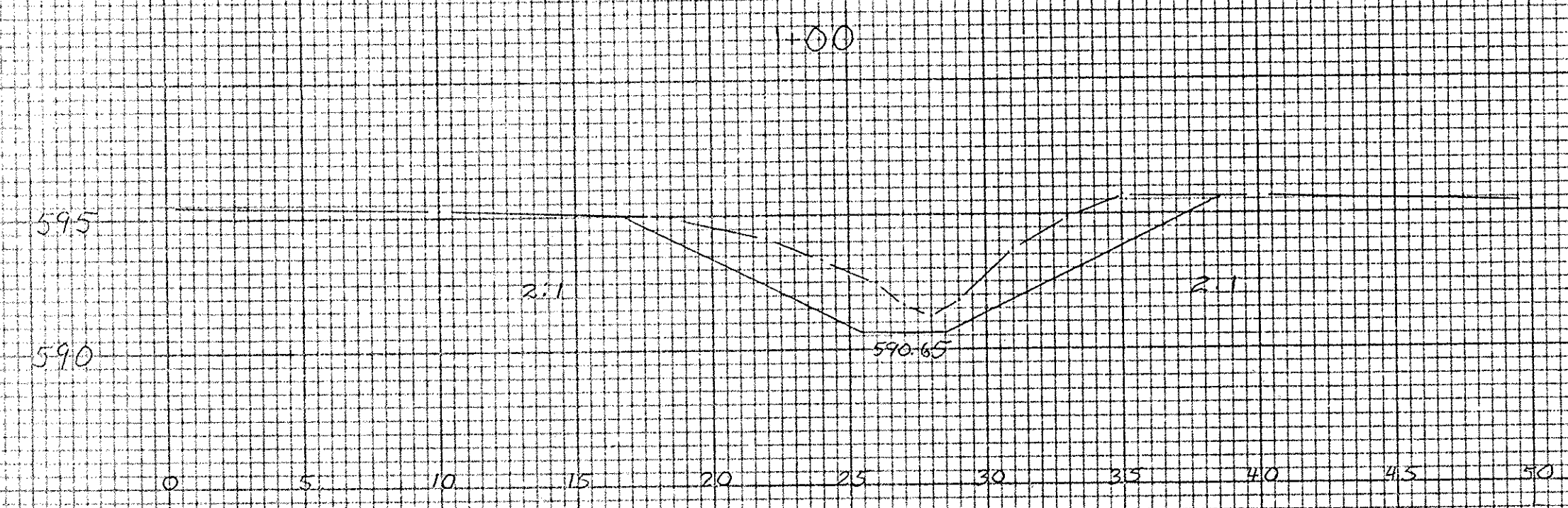
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	15+59 - 115+40	128+78 - 142+70
	15+77 - 14+00	142+99 - 151+50
	16+43 - 17+00	15+46 - 157+50

LENZ DITCH

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

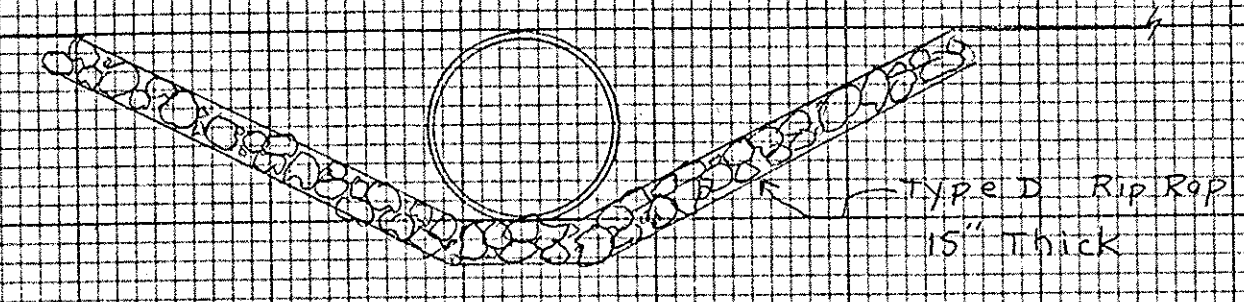
Designed: Michael R. Gargac 12/93 Date: 12/93
 Drawn: Michael R. Gargac 12/93 Title: C.E.S.
 Checked: MB 3/94 No. 10 of 11 Drawing No. 39-01-383-94-05

Side Branch

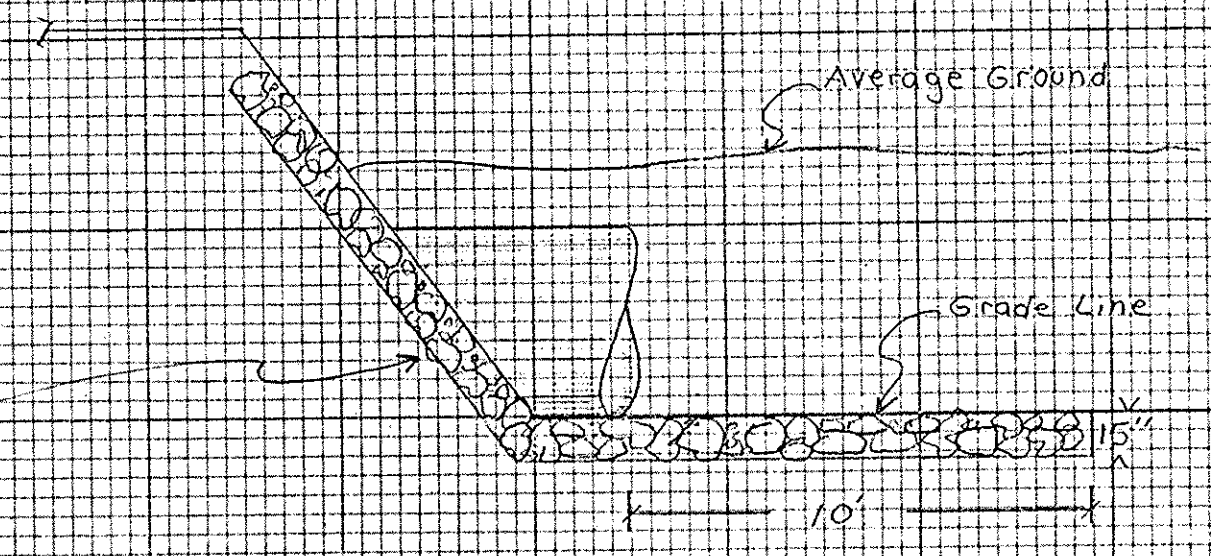


Collect Rip Rap Detail
Inlet and Outlet

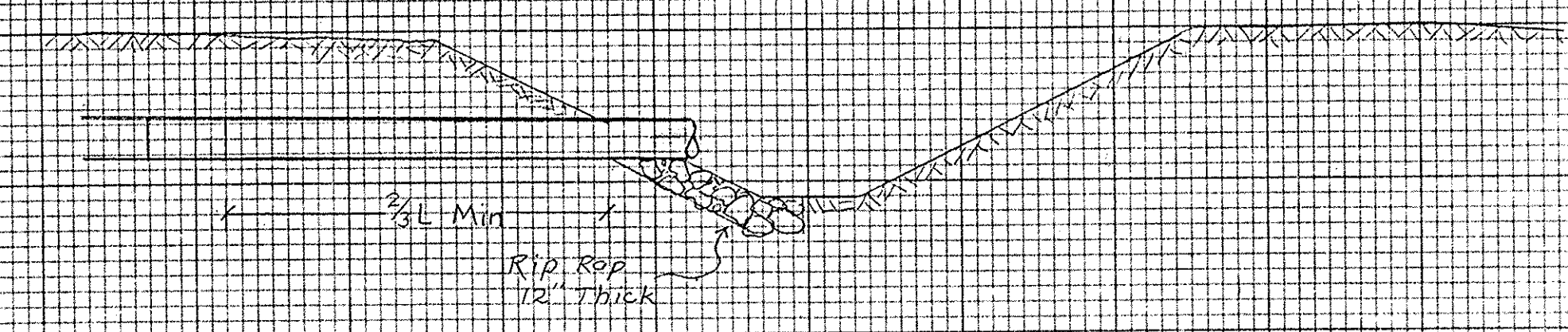
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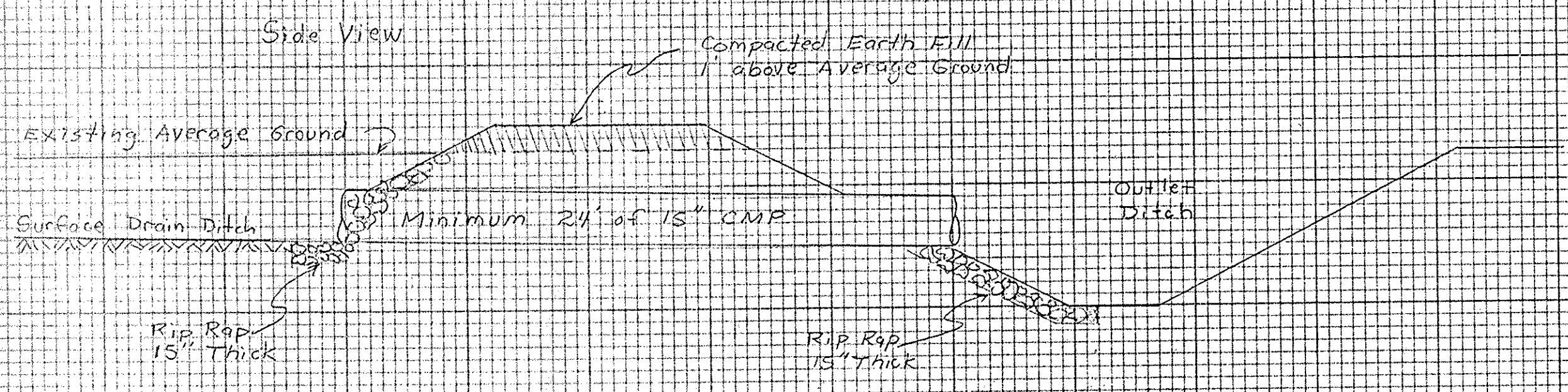
Side View



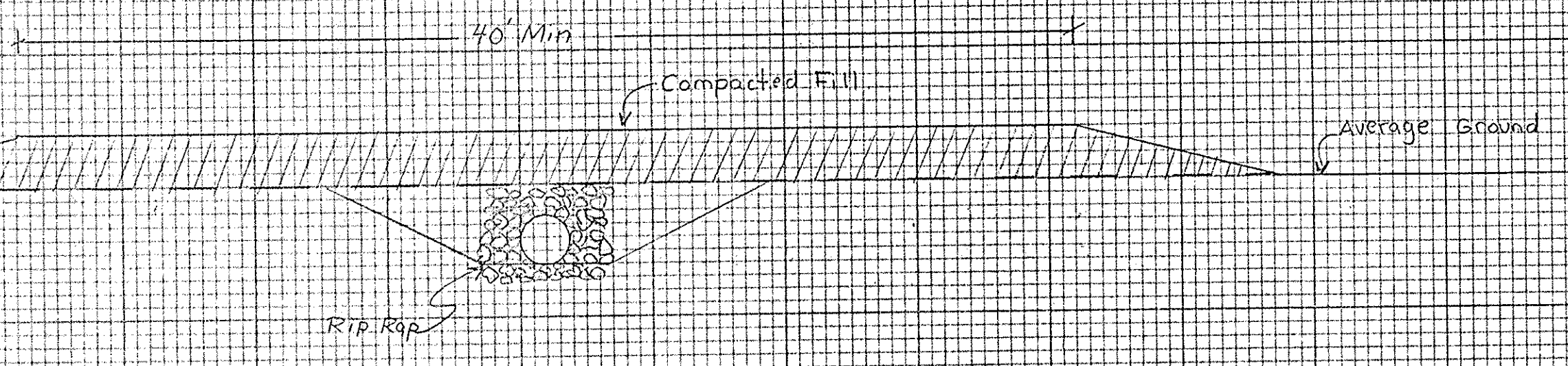
Tile Outlet Pipe Detail



Typical Erosion Control Structure Detail



Inlet End View



LENZ DITCH

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed Michael R. Gargac	Date 1-94	Approved [Signature]	Title C. E. S.
Drawn Michael R. Gargac	Date 1-94		
Traced		Sheet	Drawing No.
Checked MB	3/94	No. 1	of 11