

BENCHMARKS

BM #1 CHISELED X ON SOUTHEAST CORNER OF WEIR ON DROP STRUCTURE, ON SOUTH SIDE OF TOUSSAINT EAST ROAD ON JOHN KOHLMAN FARM MSL 576.90

BM #2 SPIKE IN NORTH SIDE OF POWER POLE LOCATED APPROXIMATELY 50' EAST OF TURN IN DITCH AT KOHLMAN -HETRICK PROPERTY LINE AT STATION 12+55 MSL 578.32

BM #3 CHISELED X ON EAST END OF 36" RCP CULVERT OF HETRICK FARM LANE AT STATION 21+40 MSL 575.72

BM #4 CHISELED X ON NORTH END OF A 24" RCP ON NORTH SIDE OF TOUSSAINT EAST ROAD AT STATION 0+00 OF SIDE BRANCH A MSL 575.22

BM #5 CHISELED X ON WEST END OF 48" RCP CULVERT DEWITZ FARM LANE AT STATION 34+07 MSL 576.29

BM #6 CHISELED X ON EAST HEADWALL OF DEWITZ BOX CULVERT AT STA 34+82 MSL 576.55

BM #7 CHISELED X ON EAST END OF 60" EQUIVALENT ELLIPTICAL RCP UNDER APLING ROAD AT STATION 48+27 MSL 575.02

BM #8 CHISELED X ON WEST END OF 48" RCP USED FOR GRAVITY FLOW AT THE EXISTING PUMP SYSTEM APPROXIMATELY 600' EAST OF APLING ROAD AT STATION 54+00 MSL 574.15

BM #9 SPIKE IN NORTH SIDE OF POWER POLE ON SOUTH SIDE OF DITCH AT STATION 68+00 JUST WEST OF HEMMINGER FARM DRIVE MSL 577.37

BM #10 SPIKE IN THE SOUTHWEST SIDE OF A 36" DIAMETER COTTONWOOD TREE ON THE NORTH SIDE OF THE DITCH AT STATION 79+15 MSL 579.30

BM #11 SPIKE IN THE SOUTH SIDE OF A 30" DIAMETER COTTONWOOD TREE ON THE NORTH SIDE OF THE DITCH 50' WEST OF THE HEMMINGER BLAUSEY PROPERTY LINE AT STATION 83+90 MSL 579.03

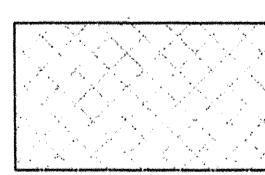
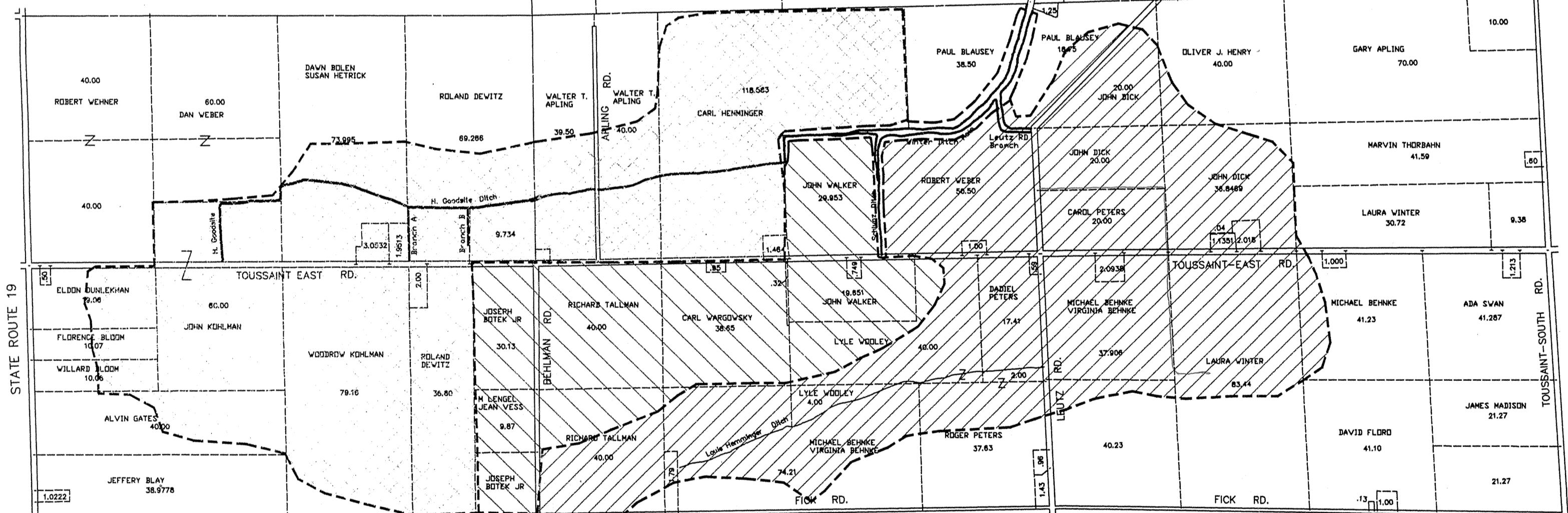
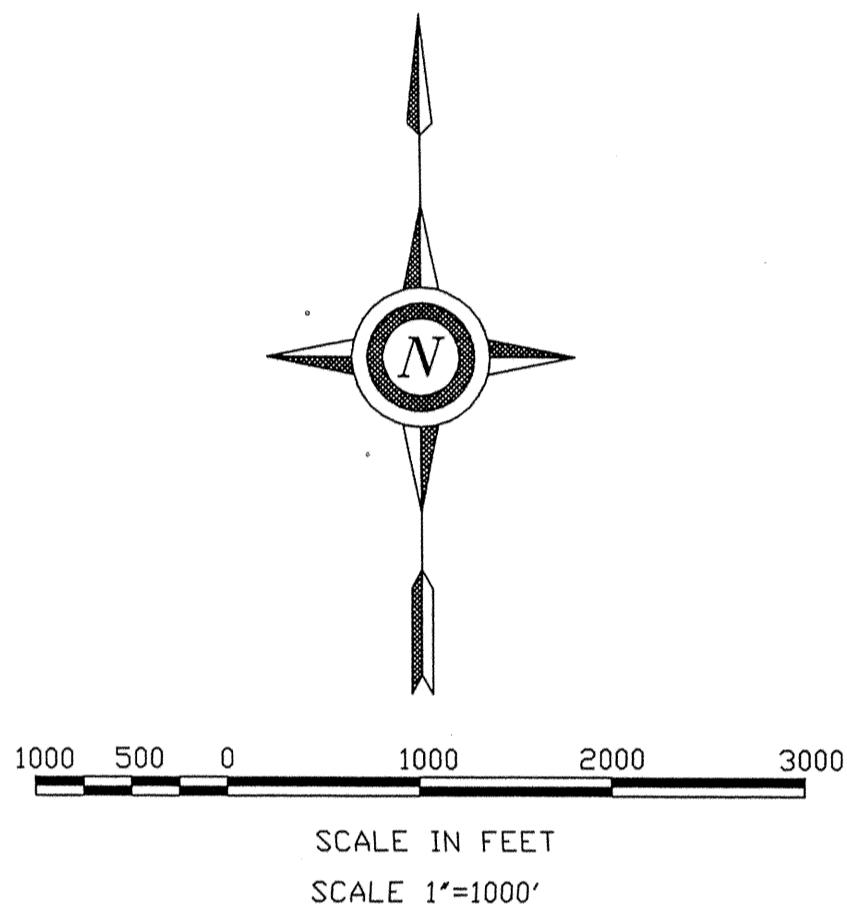
BM #12 CHISELED X ON CONCRETE HEADWALL ON THE NORTH SIDE OF PAUL BLAUSEY'S DRIVE AT STATION 105+36 MSL 578.01

BM #13 TOP OF 15" STEEL PIPE PUMP DISCHARGE, BEHIND FLOODGATE HINGE BRACKET, ON WEST SIDE OF SCHLUNZ DITCH ON JOHN WALKER PROPERTY APPROXIMATELY 1150' NORTH OF TOUSSAINT EAST ROAD MSL 575.16

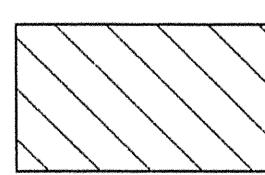
BM #14 CHISELED X ON TOP OF 36" RCP ON WEST SIDE OF SCHLUNZ DITCH STA 0+03 ON NORTH SIDE OF TOUSSAINT EAST ROAD MSL 574.06

BM #15 TOP OF WEST END OF 24" CMP ON WEST SIDE OF LEUTZ ROAD AT THE ROAD BEND AT STA 0+00 OF LEUTZ ROAD BRANCH DITCH MSL 574.52

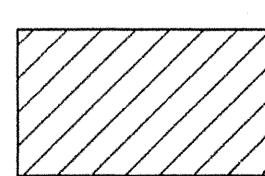
BM #16 RR SPIKE IN WEST SIDE OF POLE ON EAST SIDE OF LEUTZ RD 100' SOUTH OF STA 0+00 OF LEUTZ ROAD BRANCH DITCH MSL 577.45



GOOD SITE CHANNEL



SCHLUNZ BRANCH



LEUTZ RD BRANCH

SOILS

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. SLOPE IS 0 TO 2 PERCENT.

TOLEDO SILTY CLAY, PONDED - THIS DEEP, NEARLY LEVEL, VERY POORLY DRAINED SOIL IS IN LONG, NARROW CONCAVE AREAS ALONG DRAINAGEWAYS AND ON BROAD FLATS ON LAKE PLAINS. IT IS SUBJECT TO PONDING OF LONG DURATION. SLOPE IS 0 TO 2 PERCENT.

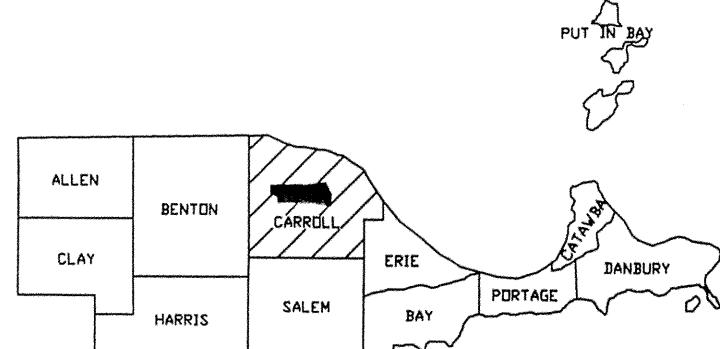
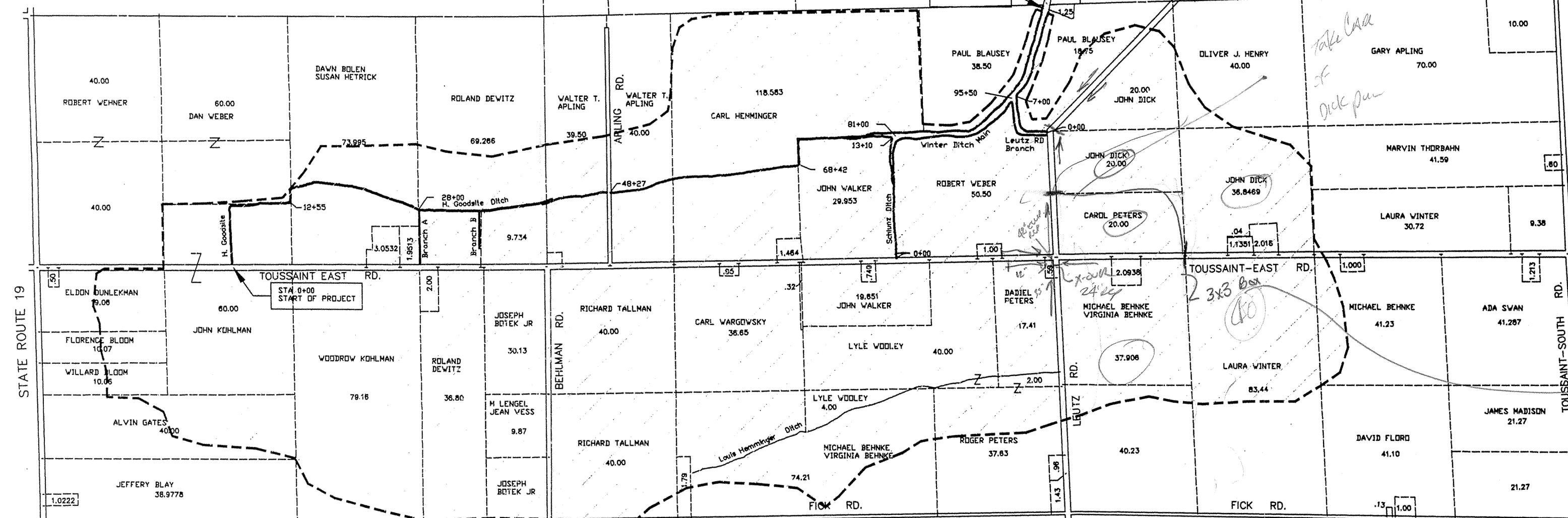
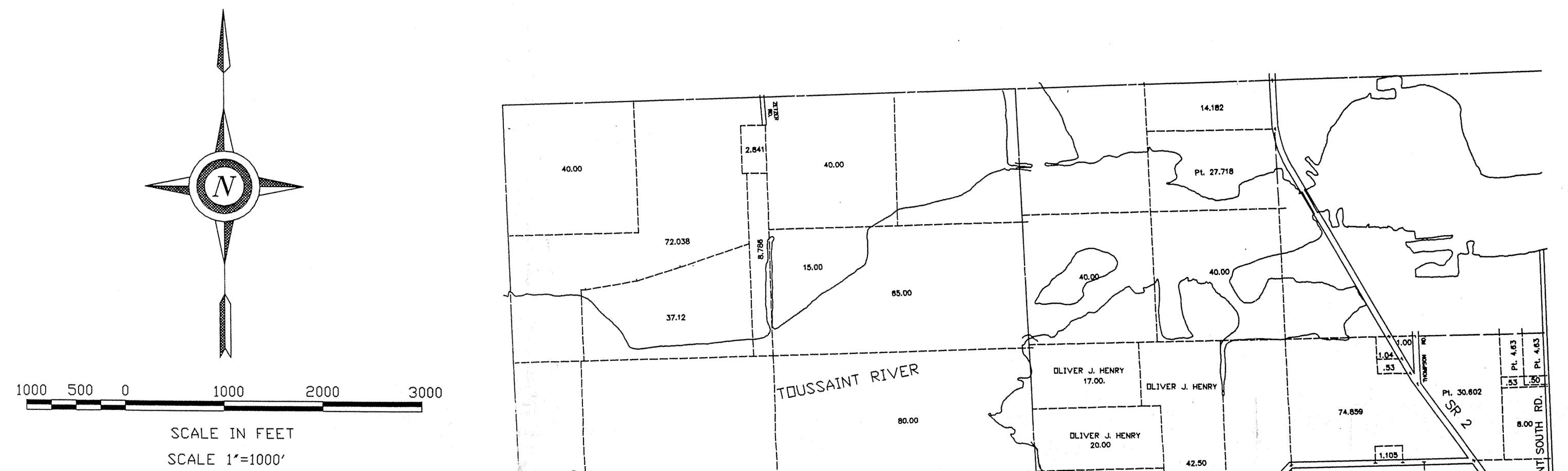
NAPPANEE SILTY CLAY LOAM - THIS DEEP, NEARLY LEVEL, SOMEWHAT POORLY DRAINED SOIL IS IN SLIGHT CONVEX RISES AND SIDE SLOPES ALONG DRAINAGEWAYS ON LAKE PLAINS. SLOPE IS 0 TO 3 PERCENT.

Job Class V

WINTER DITCH DRAINAGE IMPROVEMENT
CARROLL TOWNSHIP
SECTIONS 10, 11, 14, 15, 16
OTTAWA COUNTY OHIO

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

Date	Approved by
Designed MIKE GARGAC	7/98
Drawn MIKE GARGAC	7/98
Redlined	Sheet No. 2 Drawing No. 39-01-383-99-02
Checked P.W. Chester	4/99
	of 12



LEGEND

- ROAD
- RAILROAD
- WATERSHED BOUNDARY
- PROPERTY LINE
- FENCE
- STATION
- EXISTING WATERWAY
- ACRES DRAINED

10+00
20

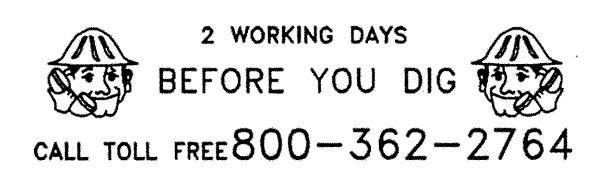
INDEX	
SHEET 1	LOCATION MAP, PLAN VIEW
SHEET 2	WATERSHED KEY, BM, SOIL
SHEET 3	PROFILE - GOOD SITE
SHEET 4	PROFILE - GOOD SITE, WINTER MAIN
SHEET 5	PROFILE - WINTER MAIN, BRANCHES
SHEET 6, 7, 8	CROSS-SECTIONS - GOOD SITE, WINTER MAIN
SHEET 9, 10	CROSS-SECTIONS - BRANCHES
SHEET 11	PUMP DETAILS
SHEET 12	TYPICAL DRAWINGS - OUTLET PIPE, CULVERT RIP RAP, BRUSH, SPoil, SEEDING

DESIGNER NOTIFICATION TO O.U.P.S.			
By: MIKE GARGAC		Date: 3-8-99	I.D. No. 308050066, 67, 68, 69
UTILITY		DUPS MEMBERSHIP	
NAME	ADDRESS	PHONE NO.	FULL <input checked="" type="checkbox"/> LIMITED BASIS <input type="checkbox"/>
GTE			X
TOLEDO EDISON			X
CARROLL WATER			X
FRONTIER CABLE		18003462288	X
OTTAWA CO ENG			X
LOCATION	REFERENCE ID NO		
0+00 - 104+80	308050066		
BRANCH A	308050067		
SCHLUNZ BRANCH	308050068		
LEUTZ RD BRANCH	308050069		

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.

- Member utilities will be contacted by calling oups (1-800-362-2764)
- Each Limited Basis Participant will be contacted by the excavator using the telephone number provided.



Robert Stumbaum 5/10/99

OTTAWA COUNTY ENGINEER

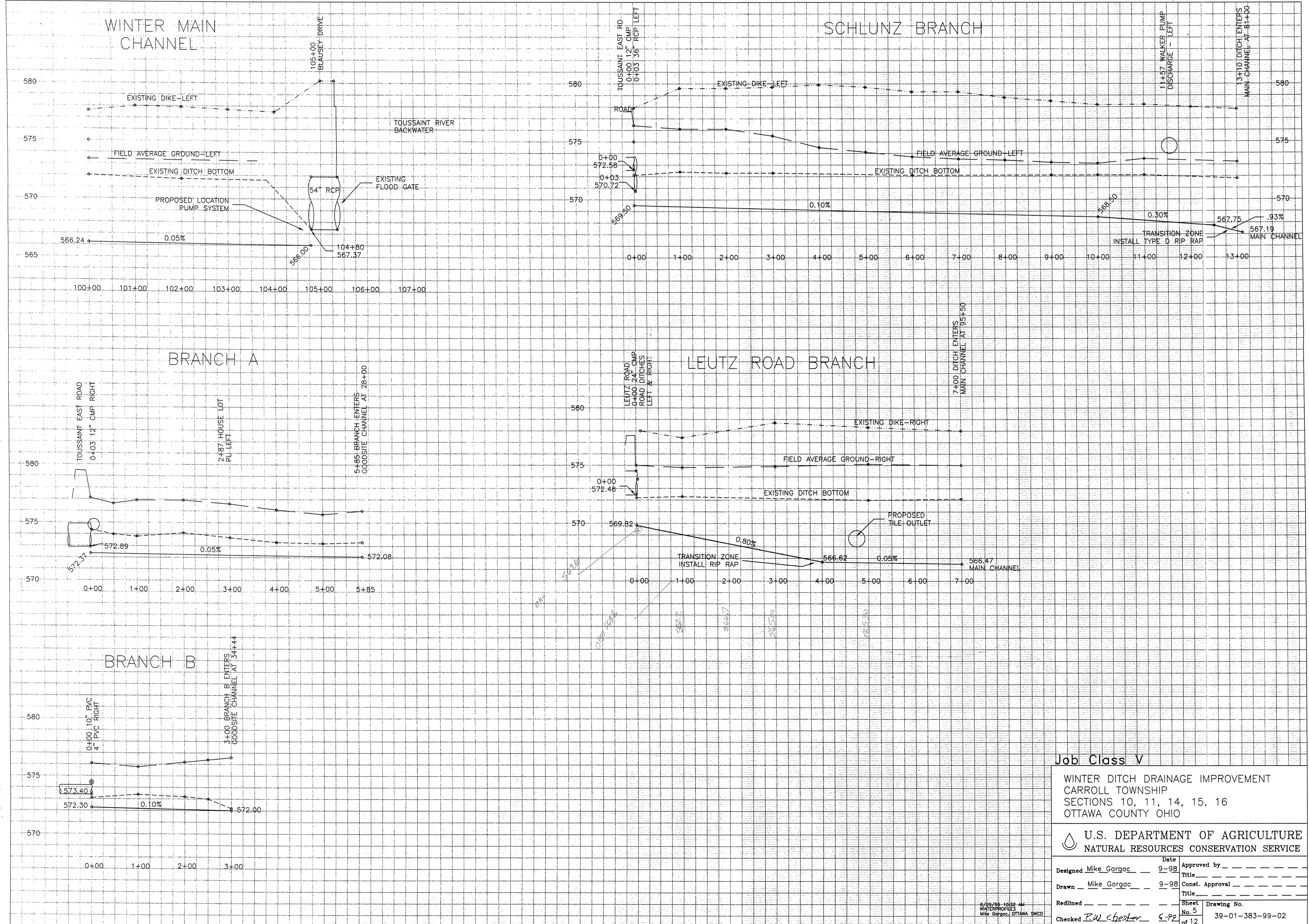
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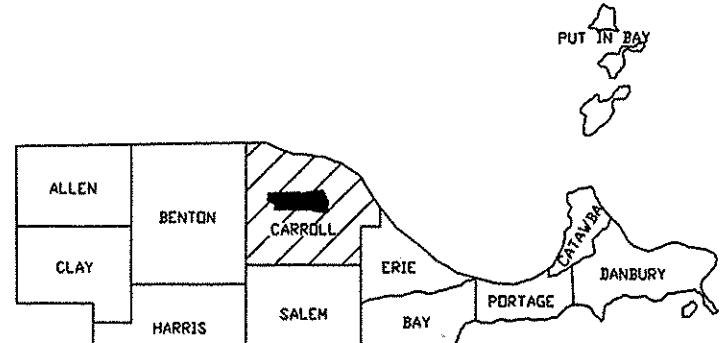
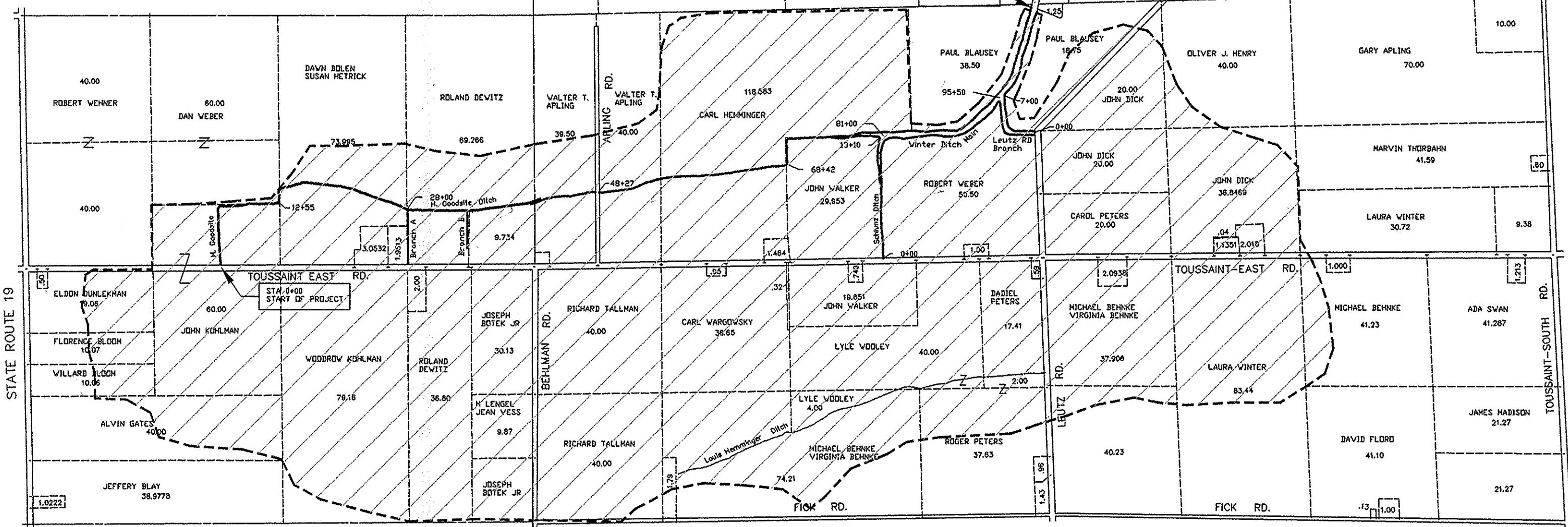
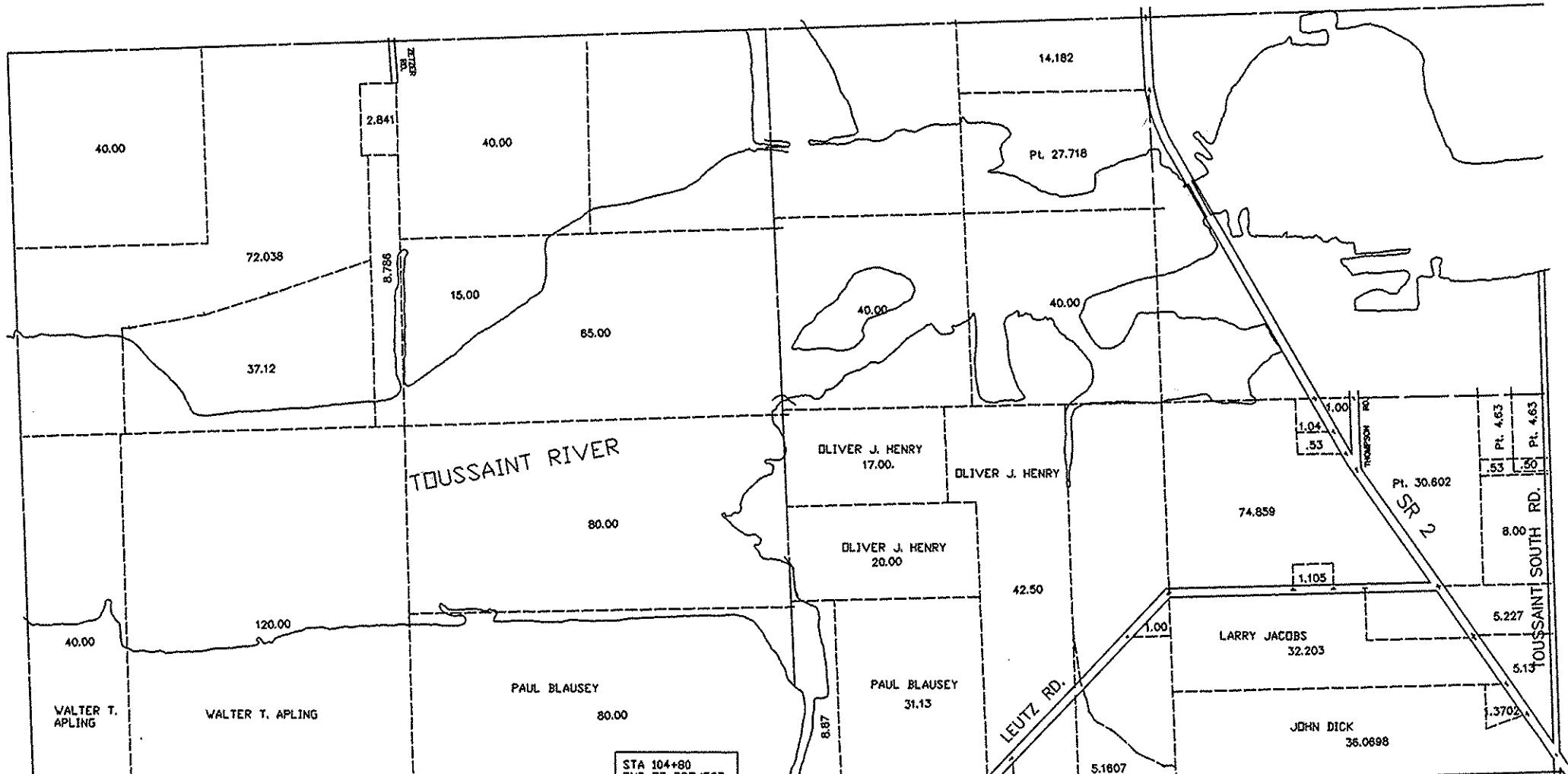
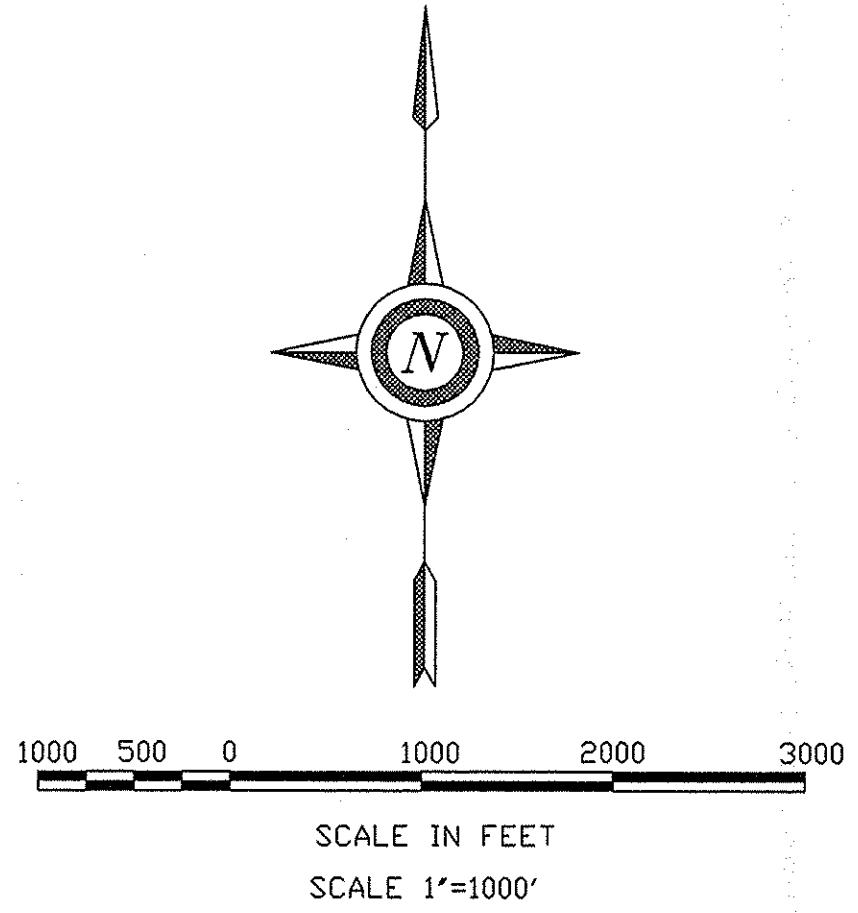
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WINTER DITCH DRAINAGE IMPROVEMENT
CARROLL TOWNSHIP
SECTIONS 10, 11, 14, 15, 16
OTTAWA COUNTY OHIO

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Date 7/98
Approved by Mike Gargac
Title Area Engineer, April 12, 1999
Drawn MIKE GARGAC 7/98
Const. Approval
Redlined
Sheet No. 1 Drawing No. 39-01-383-99-02
Checked Mike Gargac 7/98 of 12





LEGEND

ROAD	
RAILROAD	
WATERSHED BOUNDARY	
PROPERTY LINE	
FENCE	
STATION	
EXISTING WATERWAY	
ACRES DRAINED	

10+00
20

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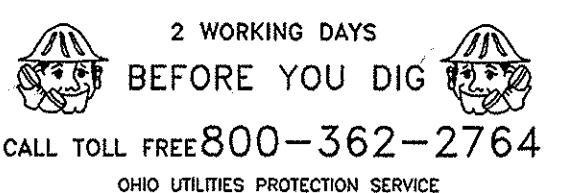
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By: MIKE GARGAC		Date: 3-8-99	I.D. No. 308050066, 67, 68, 69
UTILITY		OUPS MEMBERSHIP	
NAME	ADDRESS	PHONE NO.	FULL LIMITED BASIS
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CARROLL WATER			X
FRONTIER CABLE		18003462288	X
OTTAWA CO ENG			X
LOCATION	REFERENCE ID NO		
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5/10/99

OTTAWA COUNTY ENGINEER

DATE

Job Class V

WINTER DITCH DRAINAGE IMPROVEMENT
CARROLL TOWNSHIP
SECTIONS 10, 11, 14, 15, 16
OTTAWA COUNTY OHIO

U.S. DEPARTMENT OF AGRICULTURE
NATIONAL RESOURCES CONSERVATION SERVICE

Date _____
Designed MIKE GARGAC 7/98 Approved by *R.W. Chester*
Title _____ Area Engineer, April 12, 1999

Drawn MIKE GARGAC 7/98 Const. Approval _____
Title _____

Redlined _____ Sheet _____ Drawing No. _____
Checked *R.W. Chester* 4/99 No. 1 39-01-383-99-02
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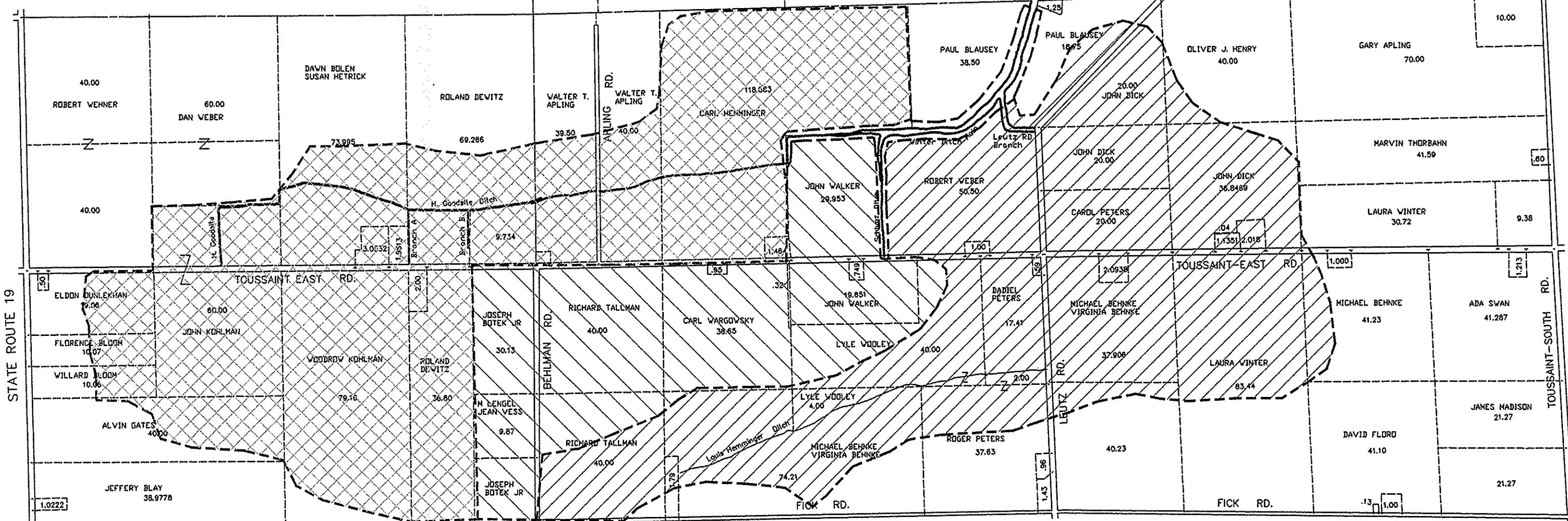
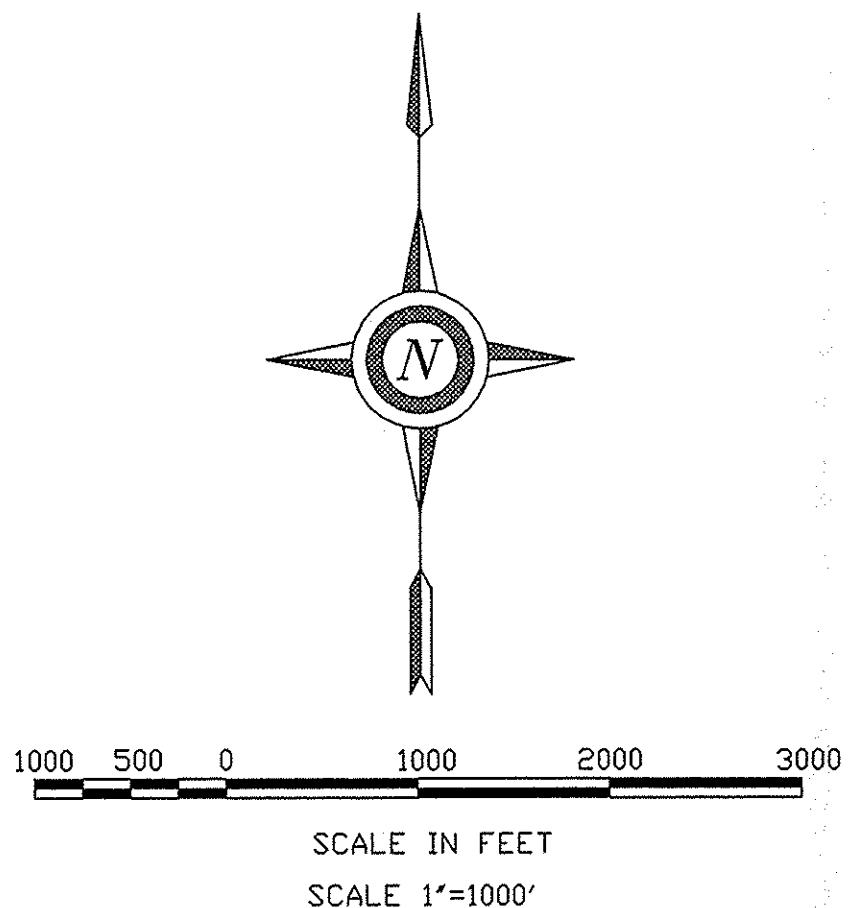
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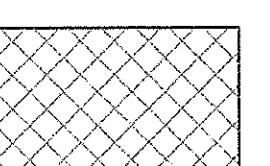
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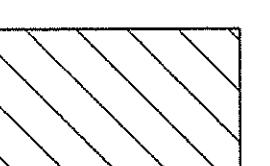
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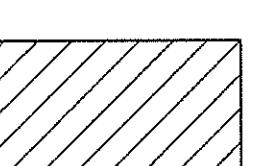
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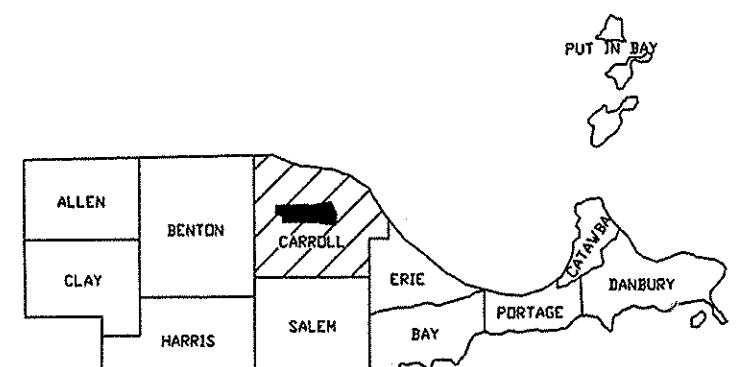
GOODSITE CHANNEL



SCHLUNZ BRANCH



LEUTZ RD BRANCH



SOILS

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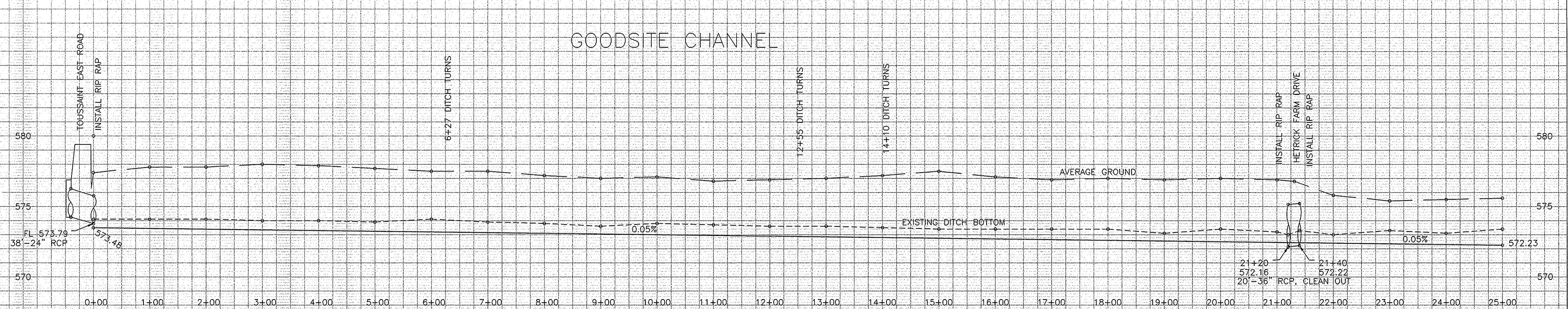
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Job Class V

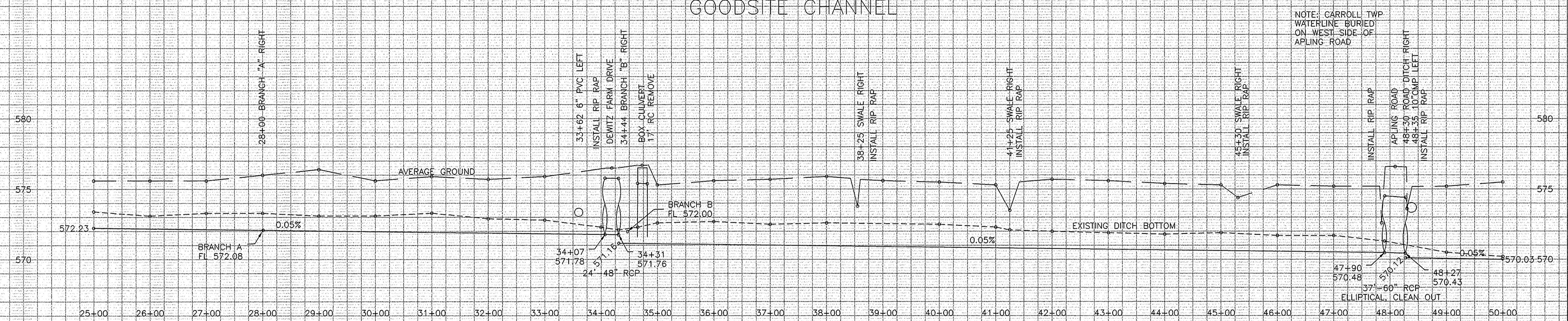
WINTER DITCH DRAINAGE IMPROVEMENT
CARROLL TOWNSHIP
SECTIONS 10, 11, 14, 15, 16
OTTAWA COUNTY OHIO

U.S. DEPARTMENT OF AGRICULTURE	
NATIONAL RESOURCES CONSERVATION SERVICE	
Date	Approved by
Designed MIKE GARGAC	7/98
Drawn MIKE GARGAC	7/98
Const. Approval	
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Checked P.W. Chester	4/99
of 12	

GOODSITE CHANNEL



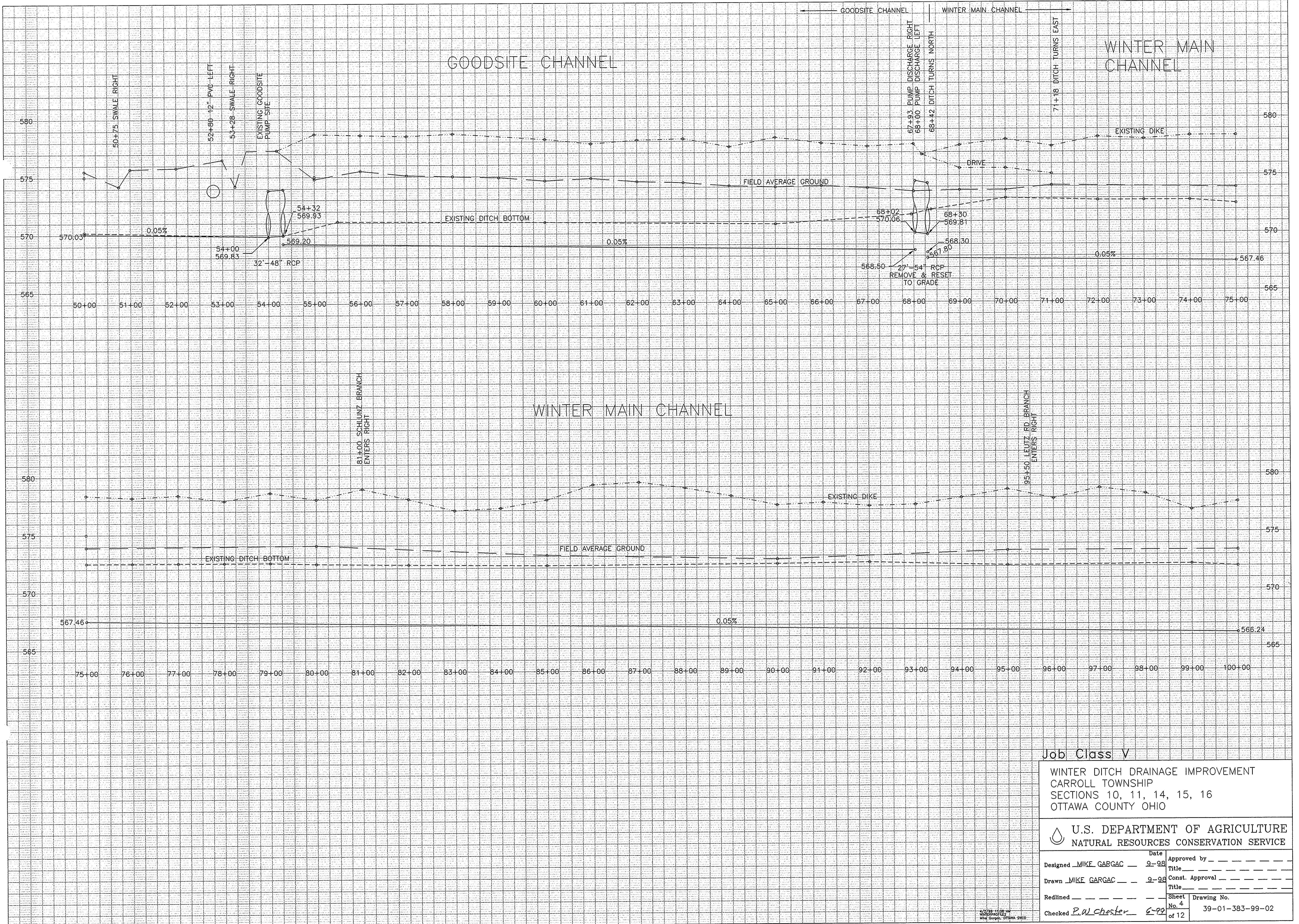
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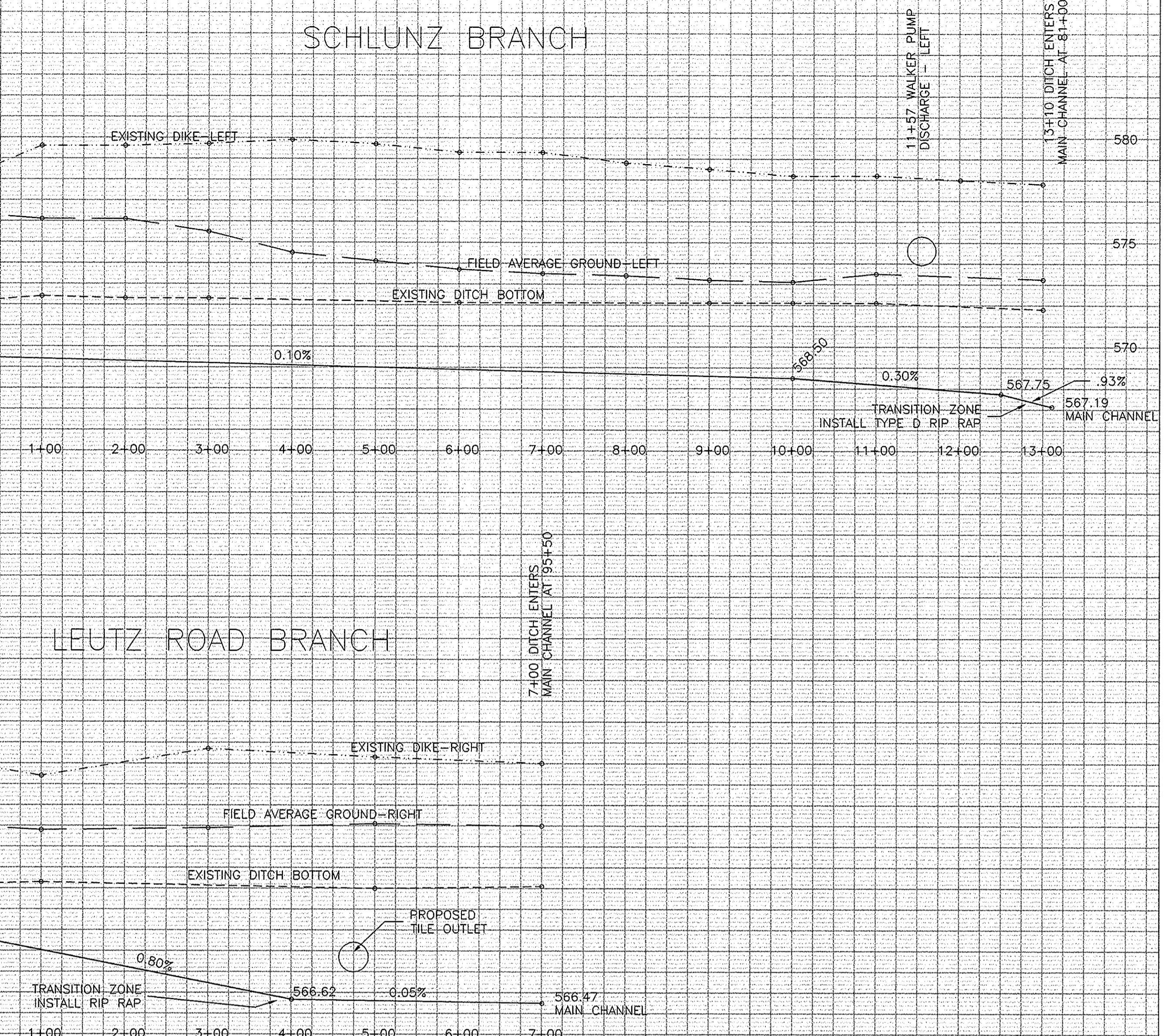
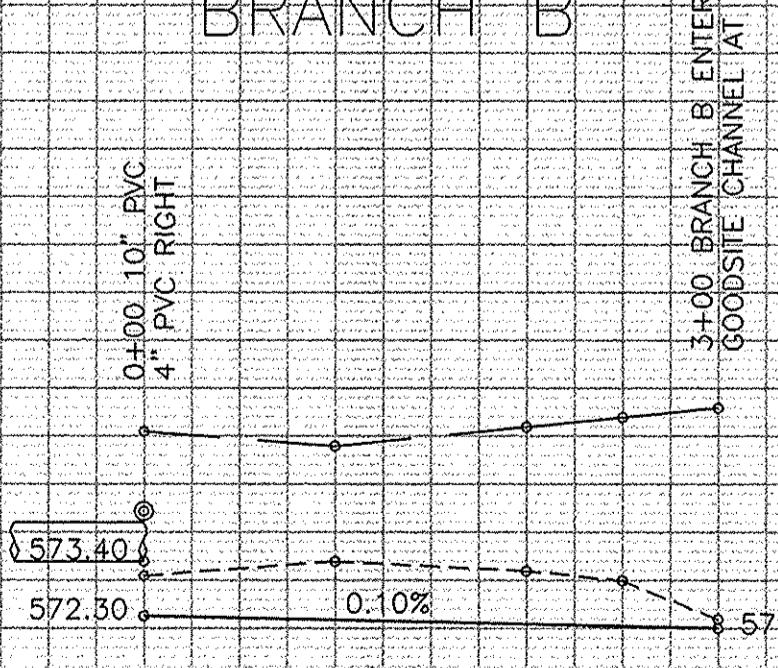
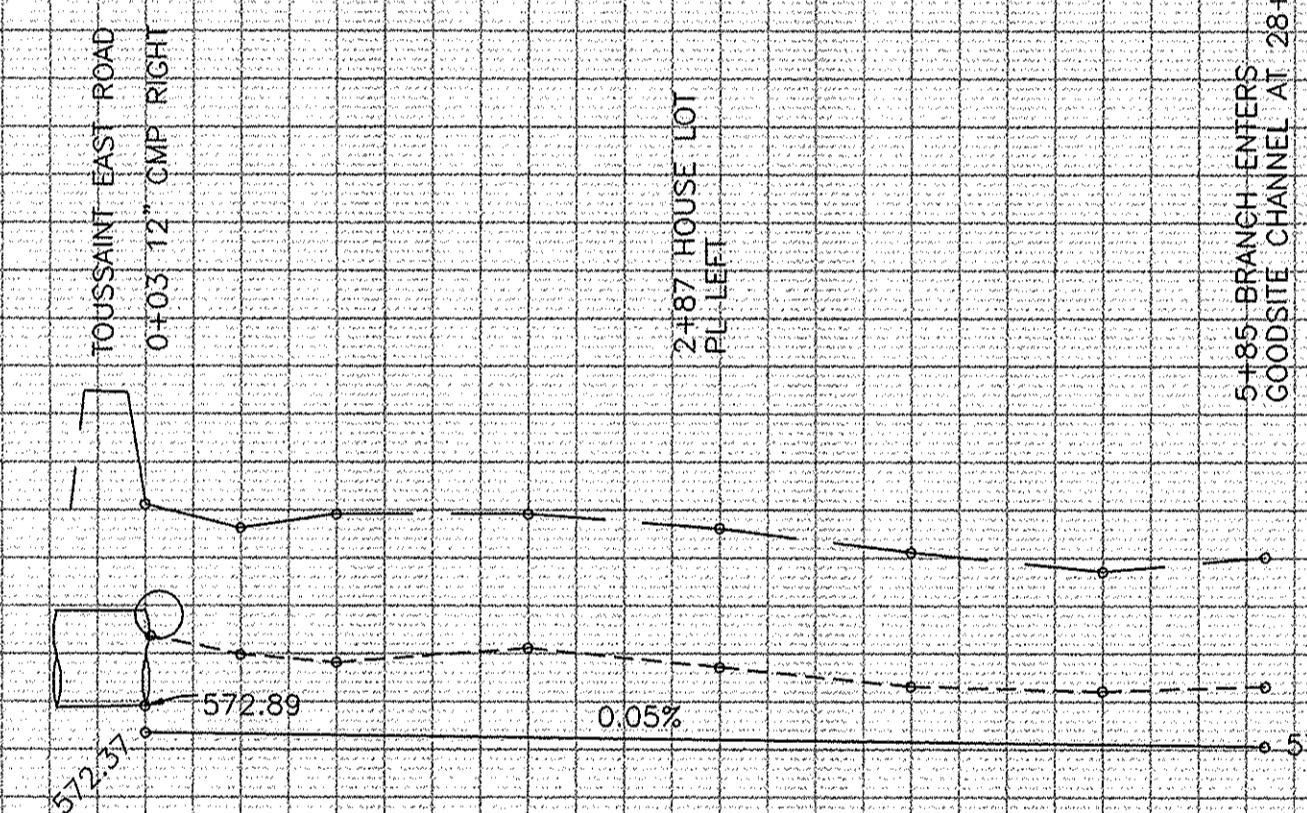
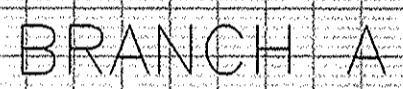
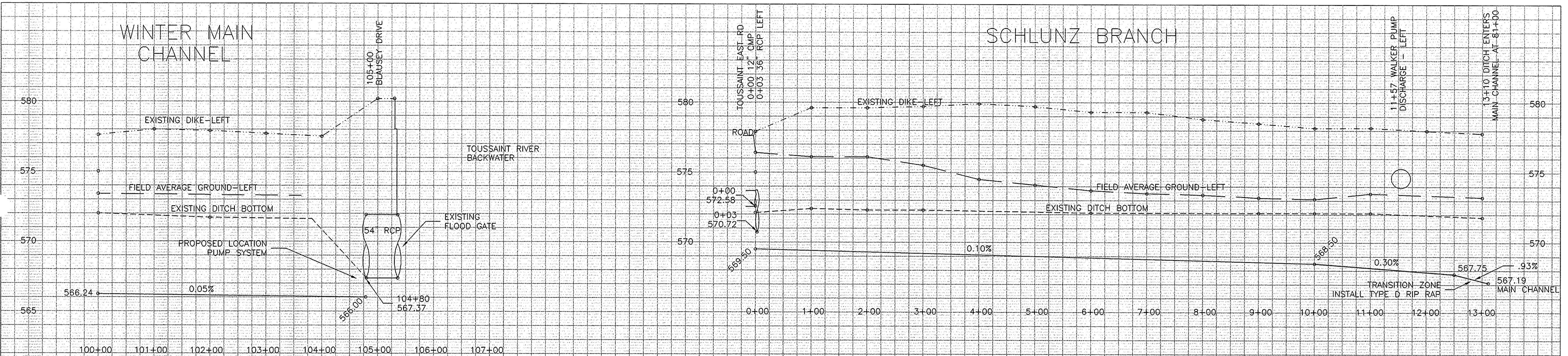


WINTER DITCH DRAINAGE IMPROVEMENT
CARROLL TOWNSHIP
SECTIONS 10, 11, 14, 15, 16
OTTAWA COUNTY OHIO

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Date	Approved by
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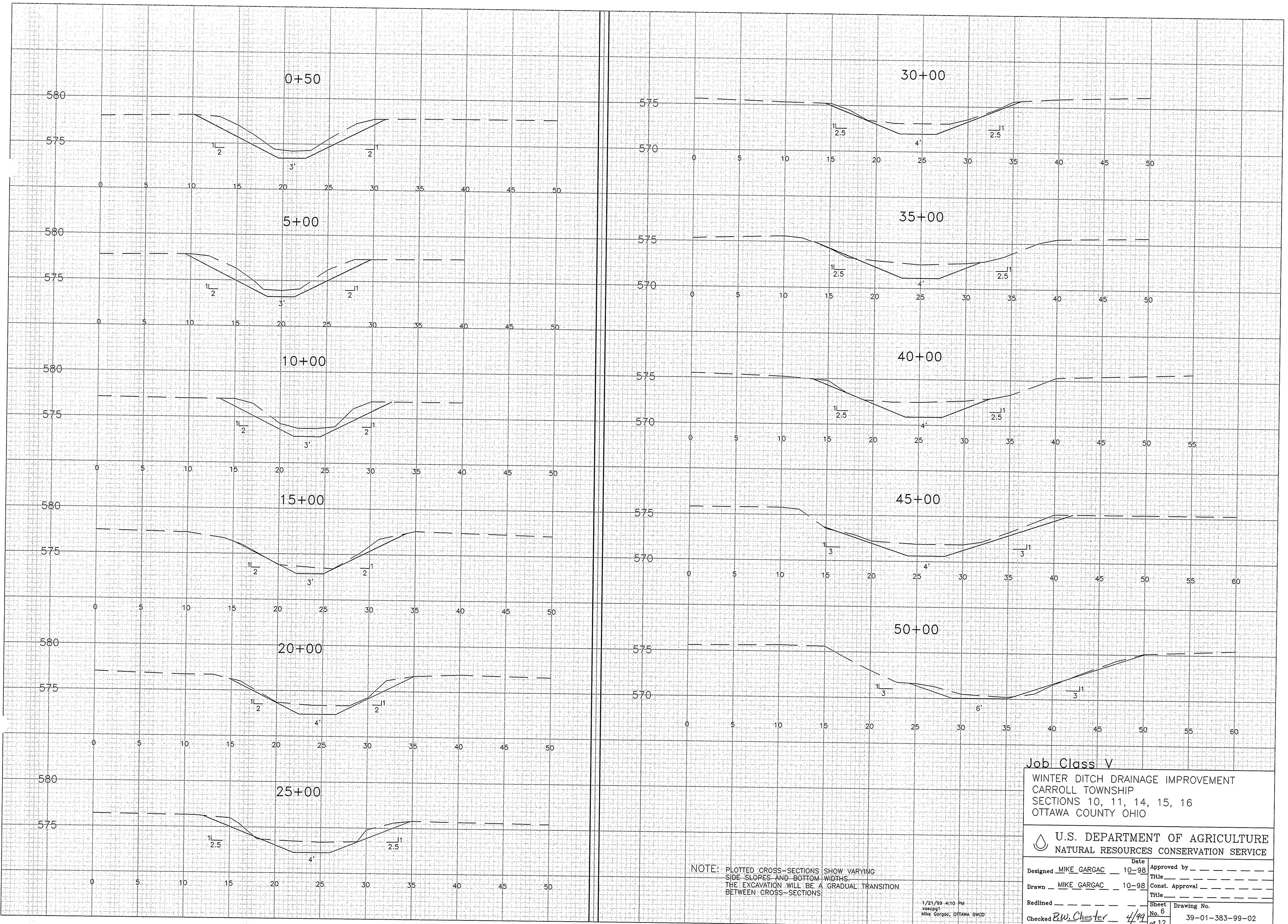


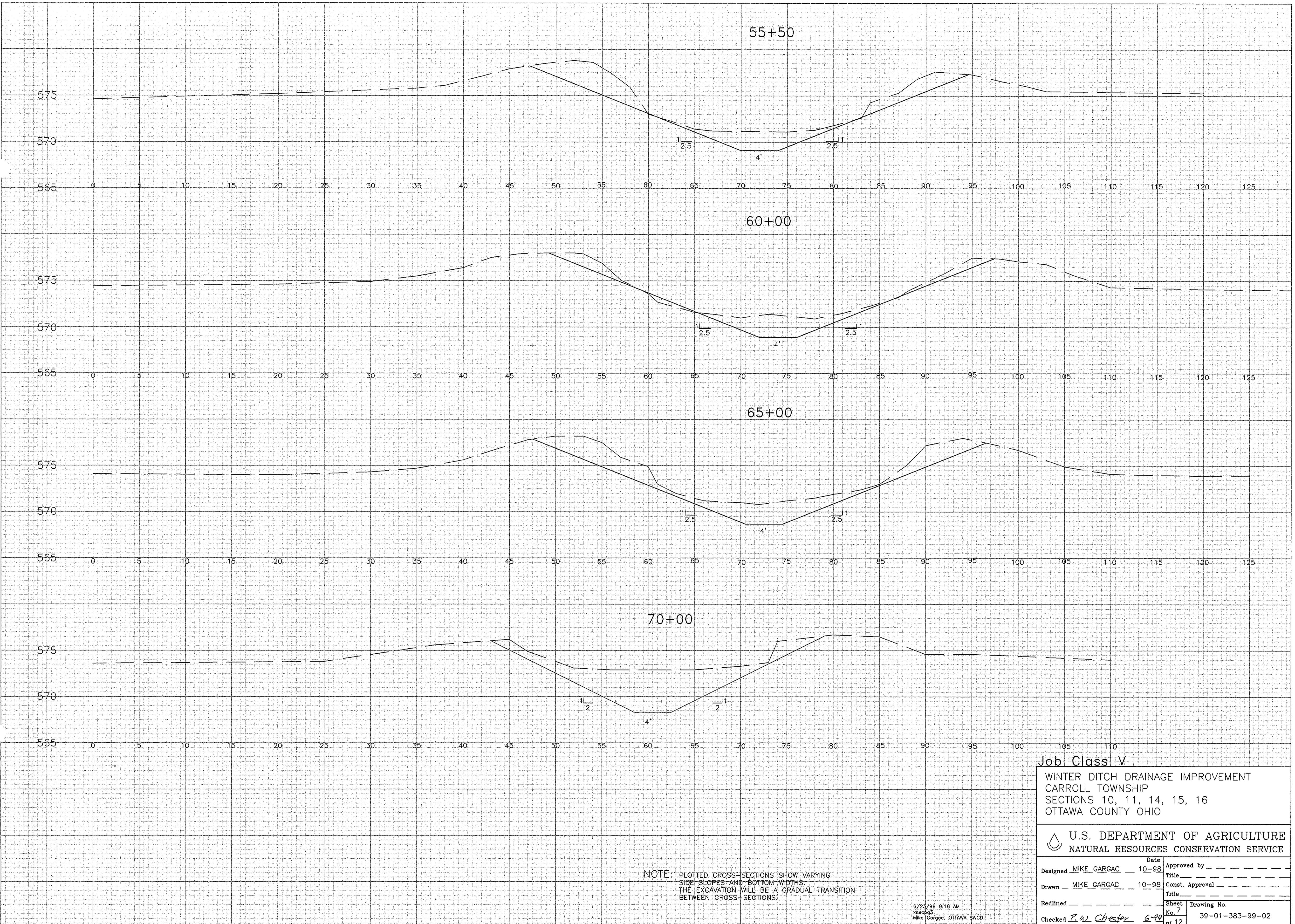


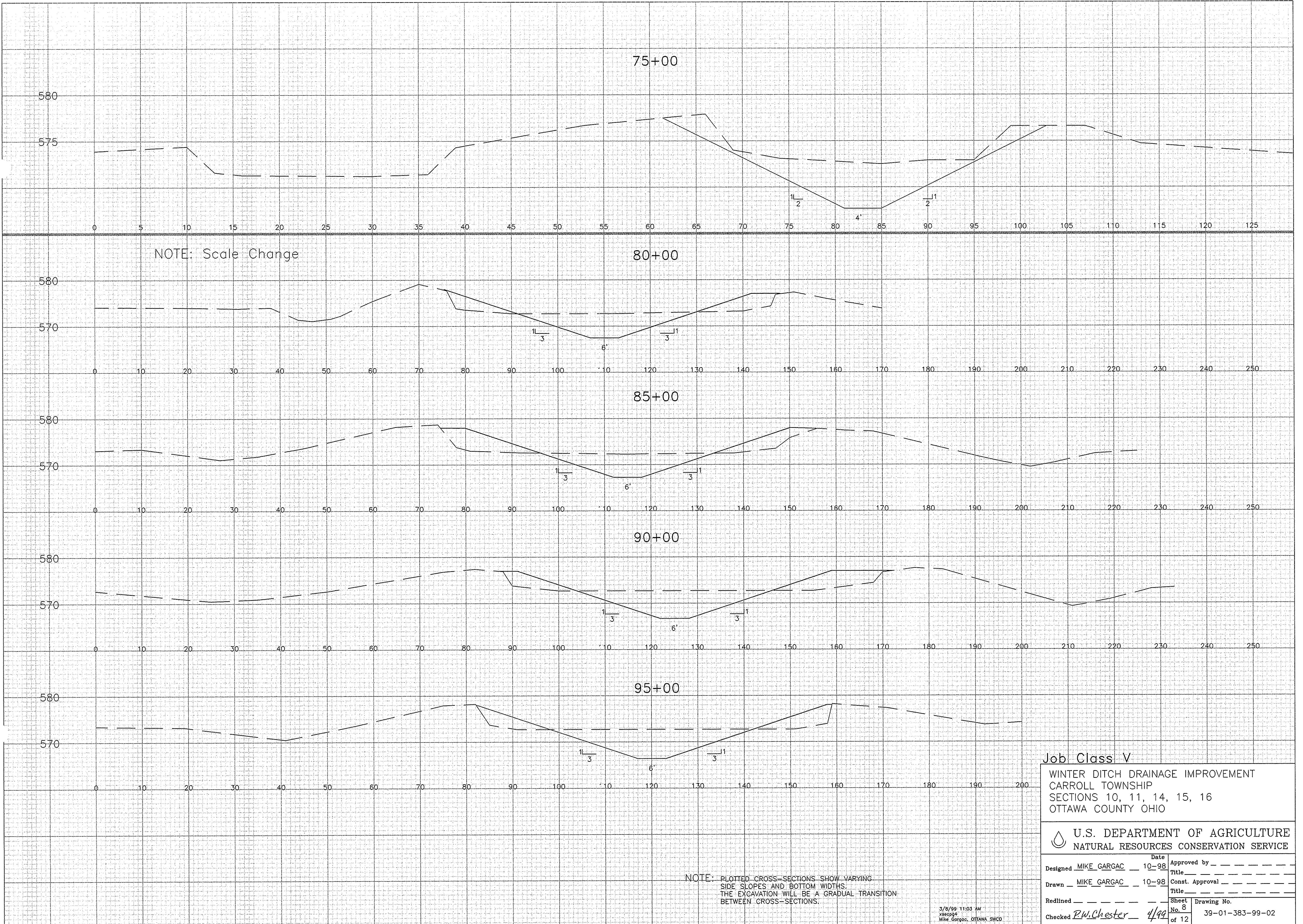
Job Class V

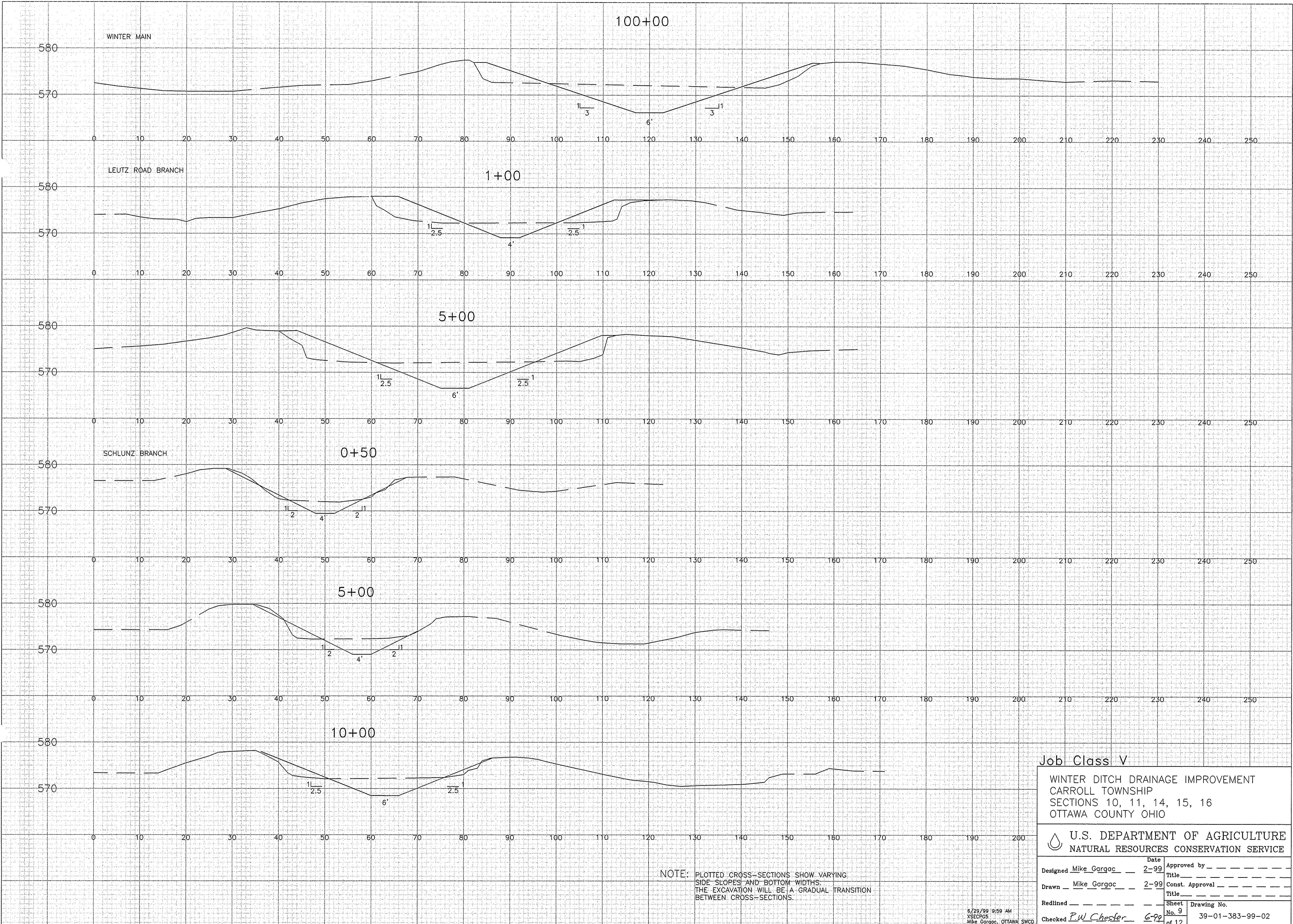
WINTER DITCH DRAINAGE IMPROVEMENT
CARROLL TOWNSHIP
SECTIONS 10, 11, 14, 15, 16
OTTAWA COUNTY OHIO

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE			
		Date	
Designed	<u>Mike Gargac</u>	<u>9-98</u>	Approved by _____
Drawn	<u>Mike Gargac</u>	<u>9-98</u>	Title _____ Const. Approval _____
Redlined	_____	_____	Title _____
Checked	<u>P.W. Chester</u>	<u>6-98</u>	Sheet _____ Drawing No. _____ No. 5 of 12 39-01-383-99-02









BRANCH A

580

0+50

1
2
3'

580

5+00

1
2
4'

580

BRANCH B

1+00

1
2
3'

580

575

580

575

580

575

580

575

575

570

575

570

575

570

575

570

575

570

575

570

Job Class V

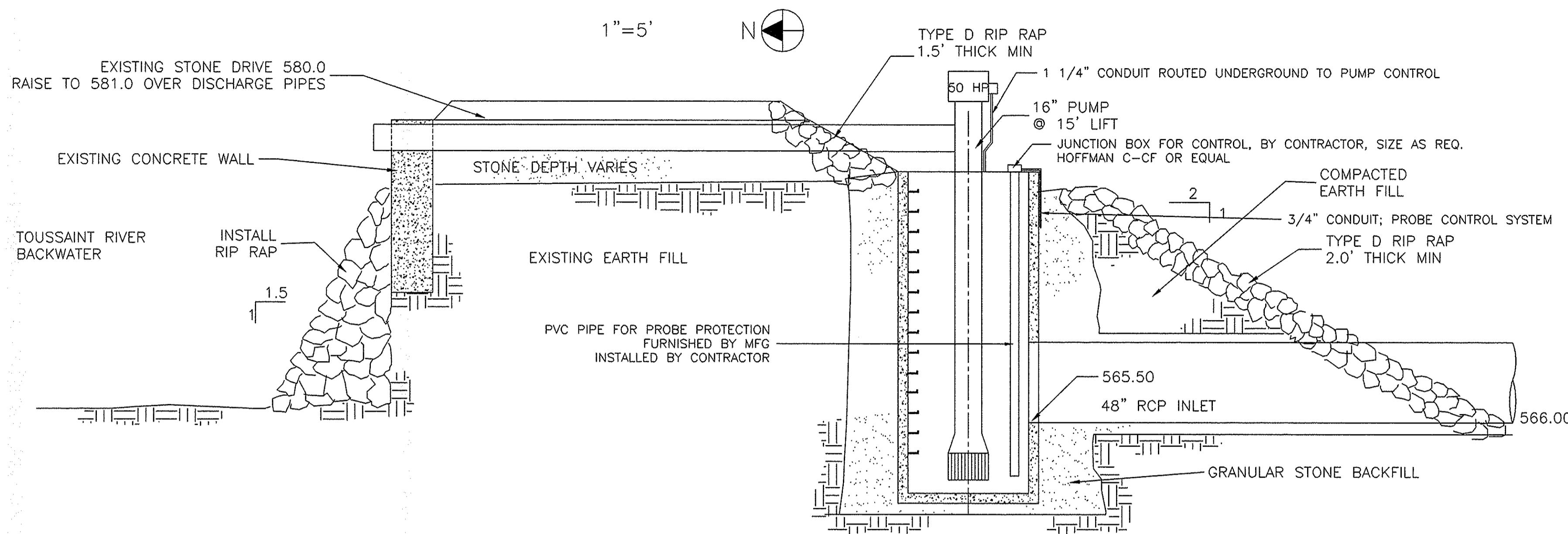
WINTER DITCH DRAINAGE IMPROVEMENT
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 OTTAWA COUNTY OHIO

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 NATURAL RESOURCES CONSERVATION SERVICE

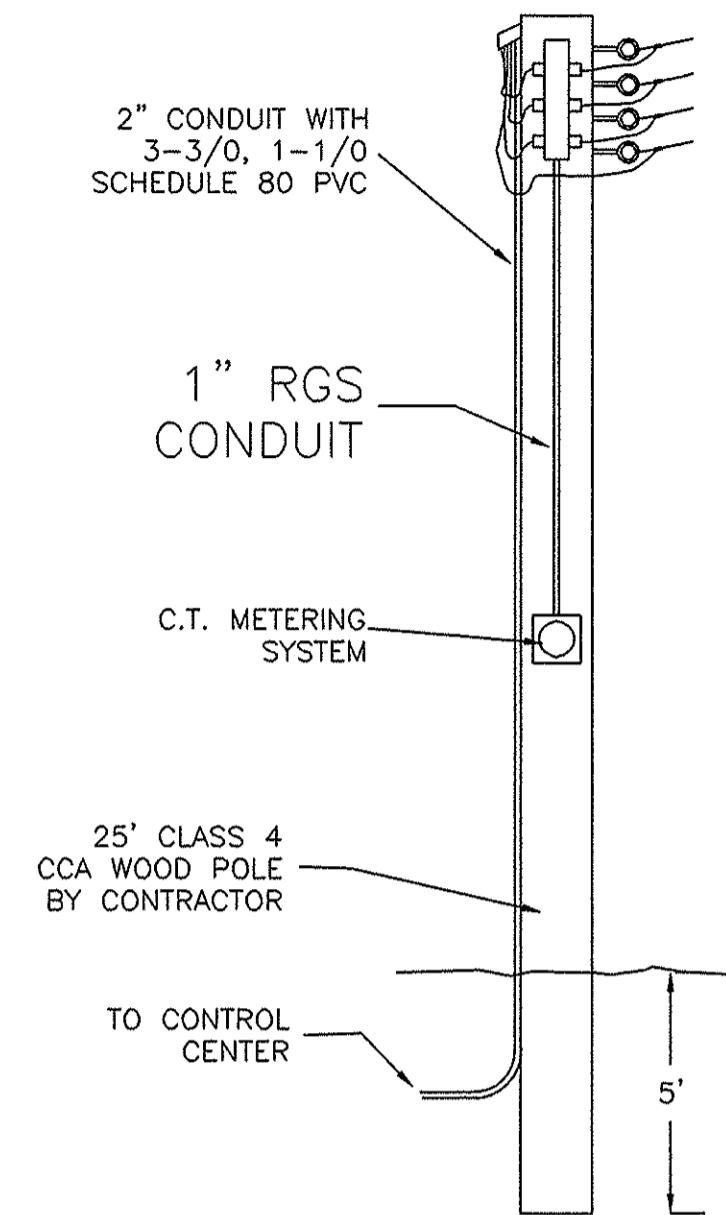
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Designed MIKE GARGAC 10-98	Title _____
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of 12	

NOTE: PLOTTED CROSS-SECTIONS SHOW VARYING
 SIDE SLOPES AND BOTTOM WIDTHS.
 THE EXCAVATION WILL BE A GRADUAL TRANSITION
 BETWEEN CROSS-SECTIONS.

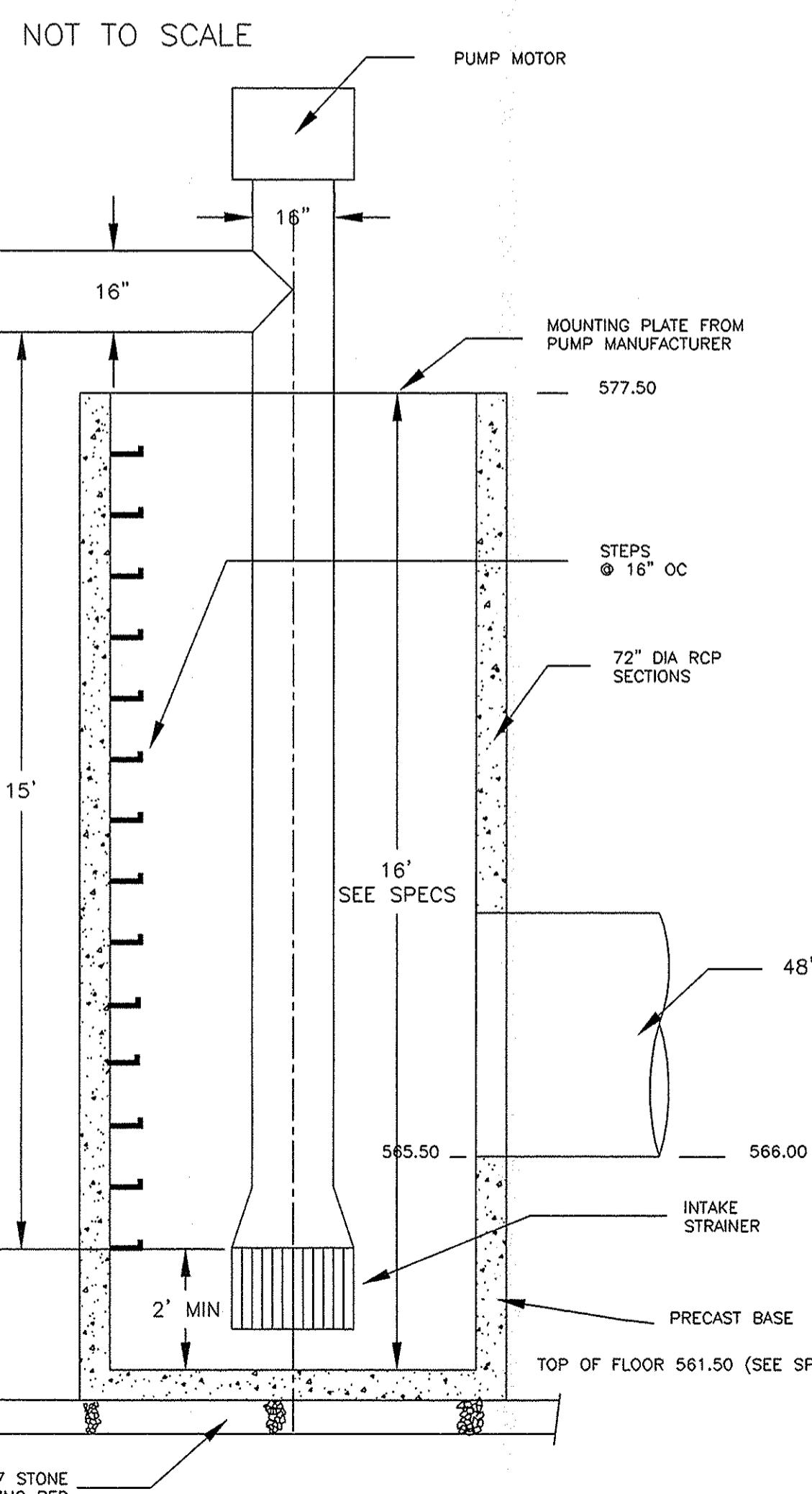
PROFILE VIEW



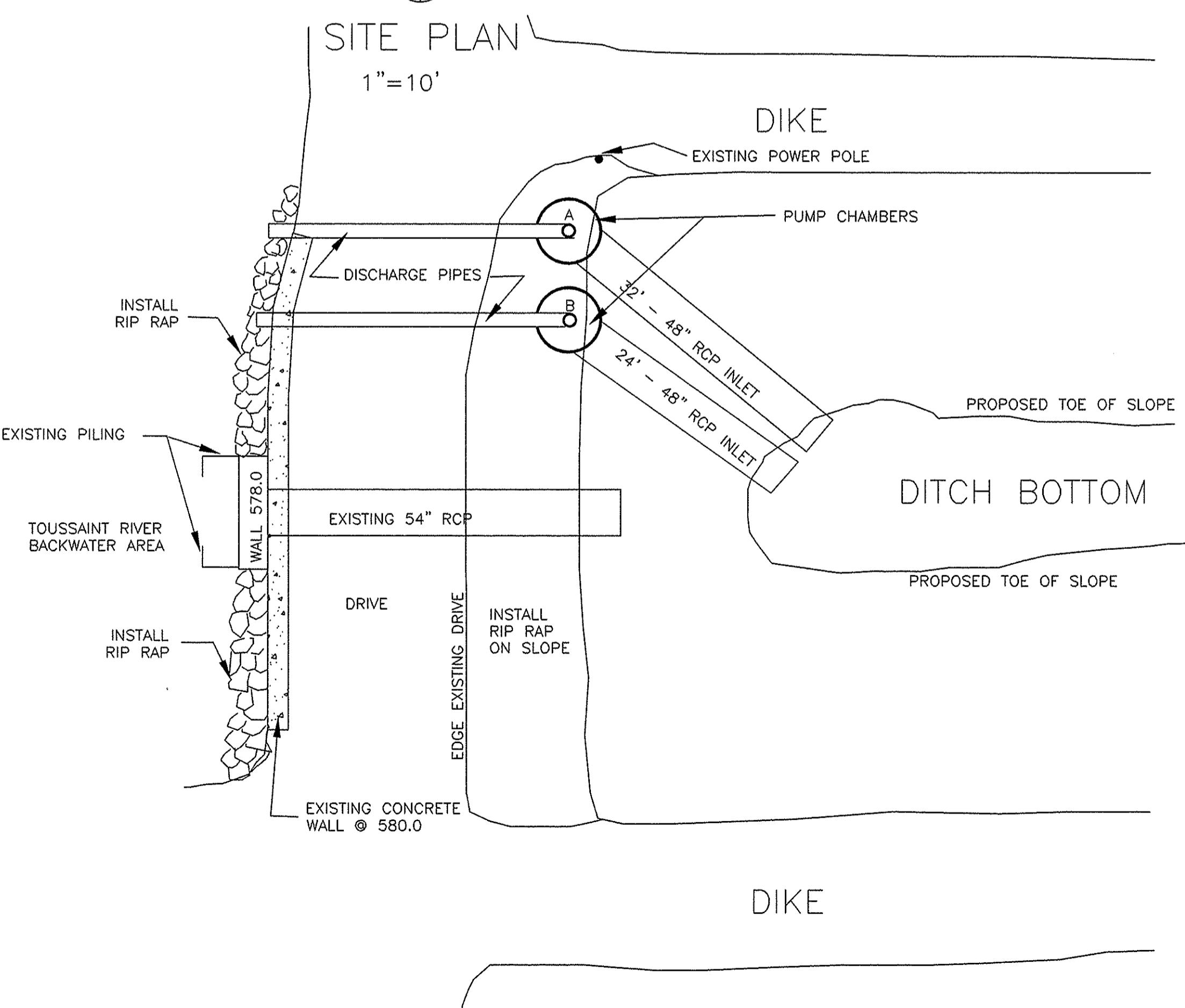
SERVICE POLE



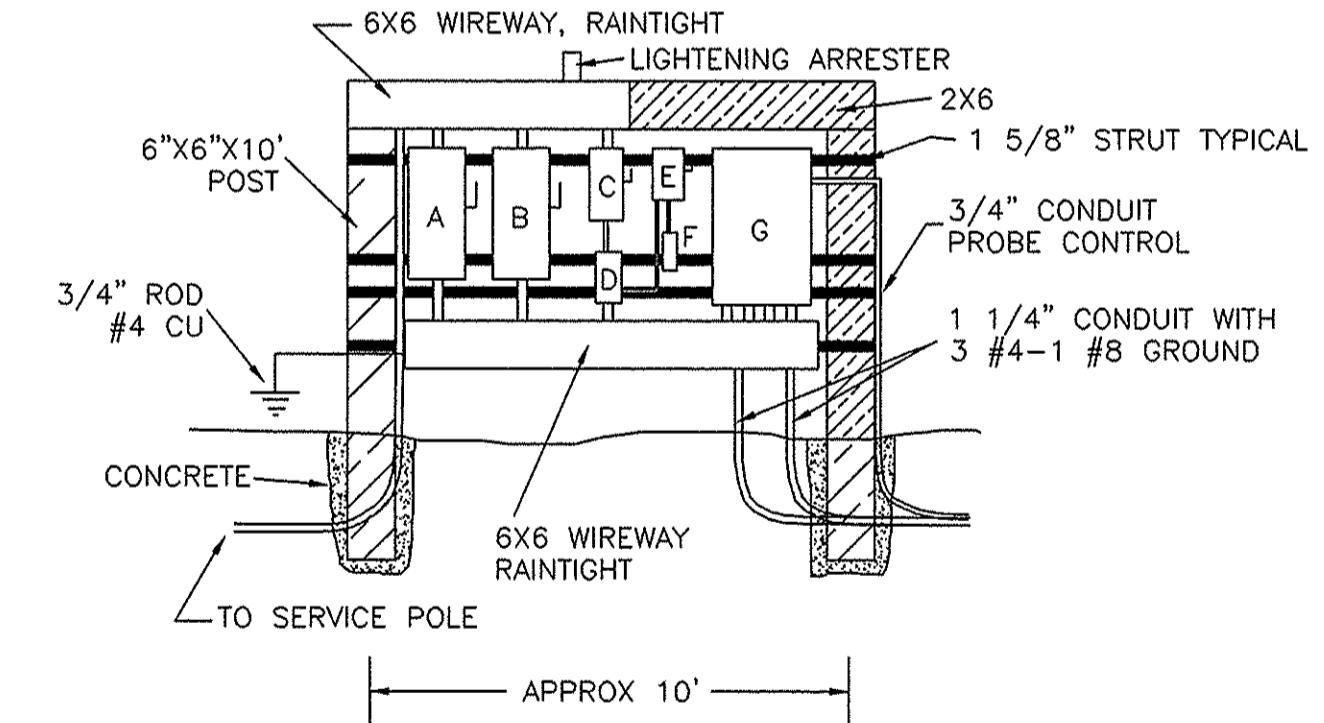
PUMP CHAMBER DETAIL



SITE PLAN



CONTROL CENTER



Job Class V

WINTER DITCH DRAINAGE IMPROVEMENT
CARROLL TOWNSHIP
SECTIONS 10, 11, 14, 15, 16
OTTAWA COUNTY OHIO

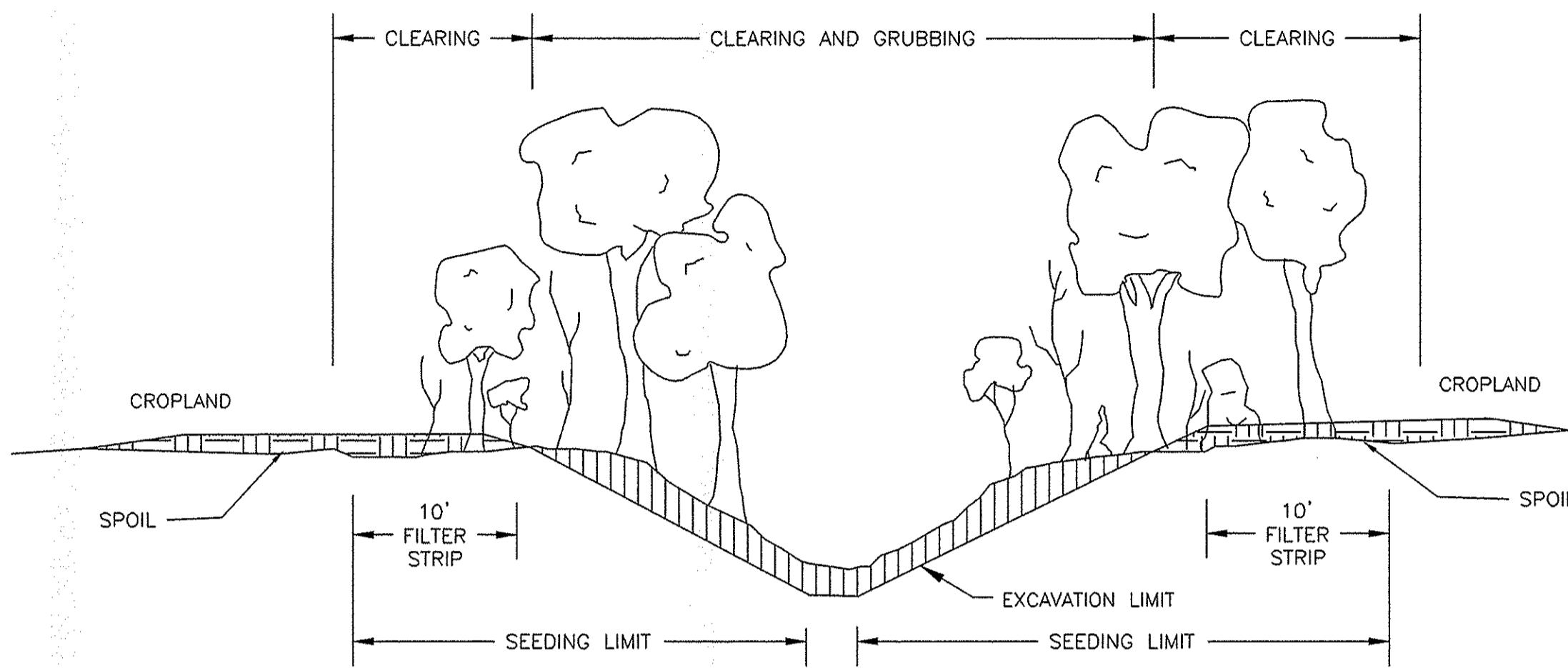
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Date	Approved by
Designed MIKE GARGAC	2-99
Drawn MIKE GARGAC	2-99
Redlined _____	Const. Approval _____
Checked Paul Chester	Title _____
6/18/98 10:53 AM PUMPSHEET Mike Gargac, OTTAWA SWCD	Sheet Drawing No. No. 11 39-01-383-99-02 of 12

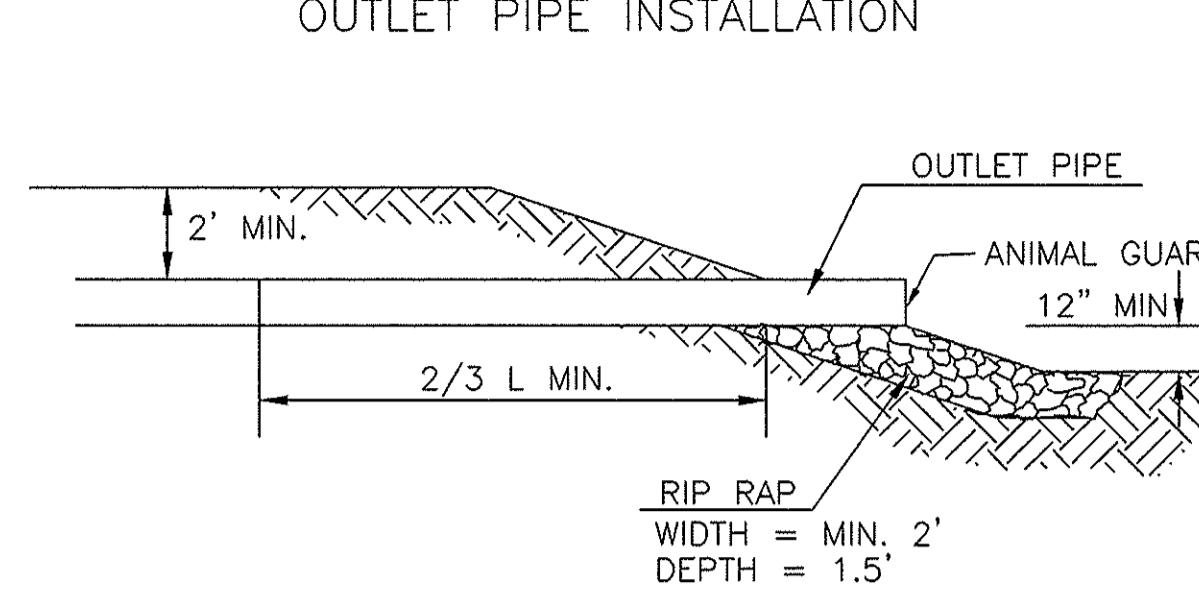
BRUSH, SPOIL & SEEDING DETAIL

DETAIL A

TWO SIDED CONSTRUCTION

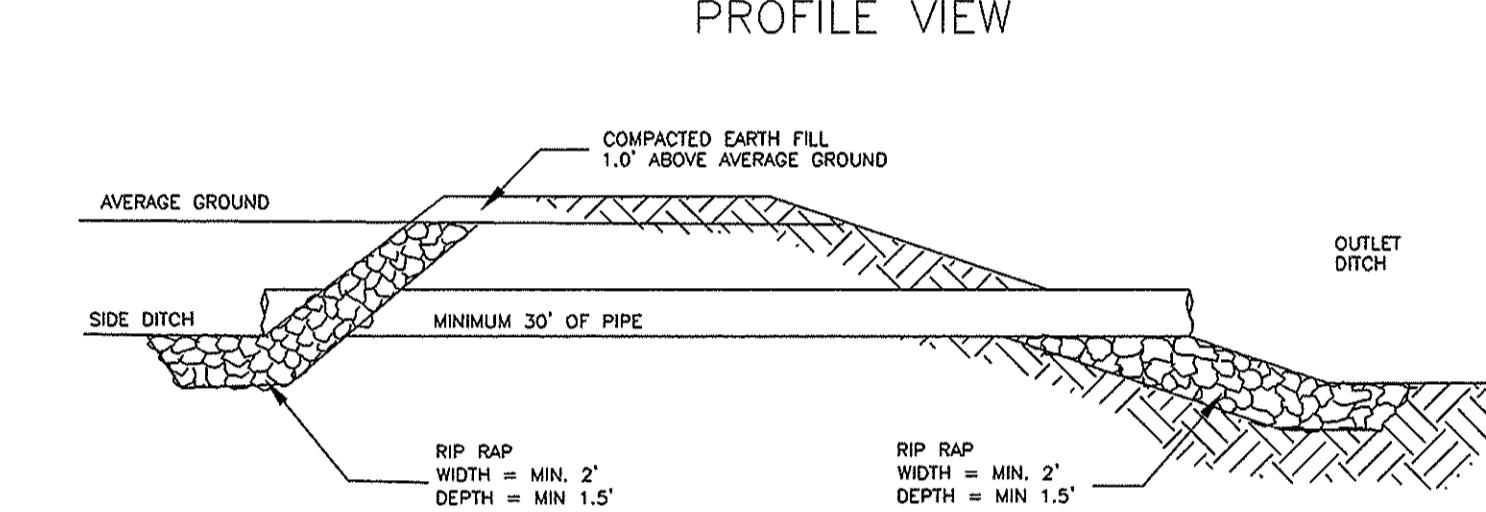


OUTLET PIPE INSTALLATION

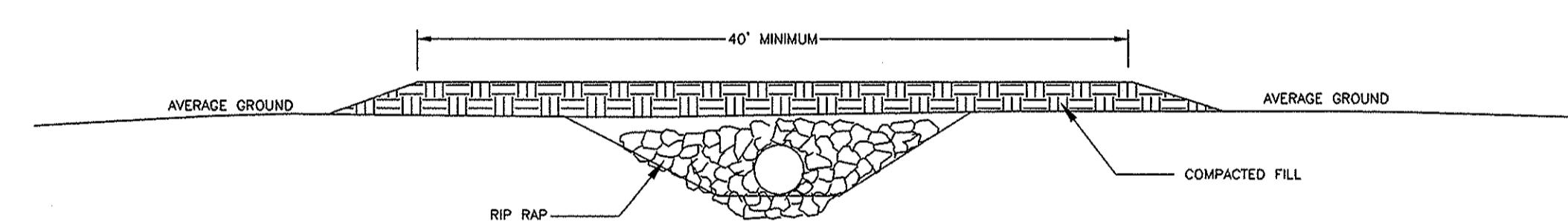


TYPICAL EROSION CONTROL STRUCTURE - DETAIL

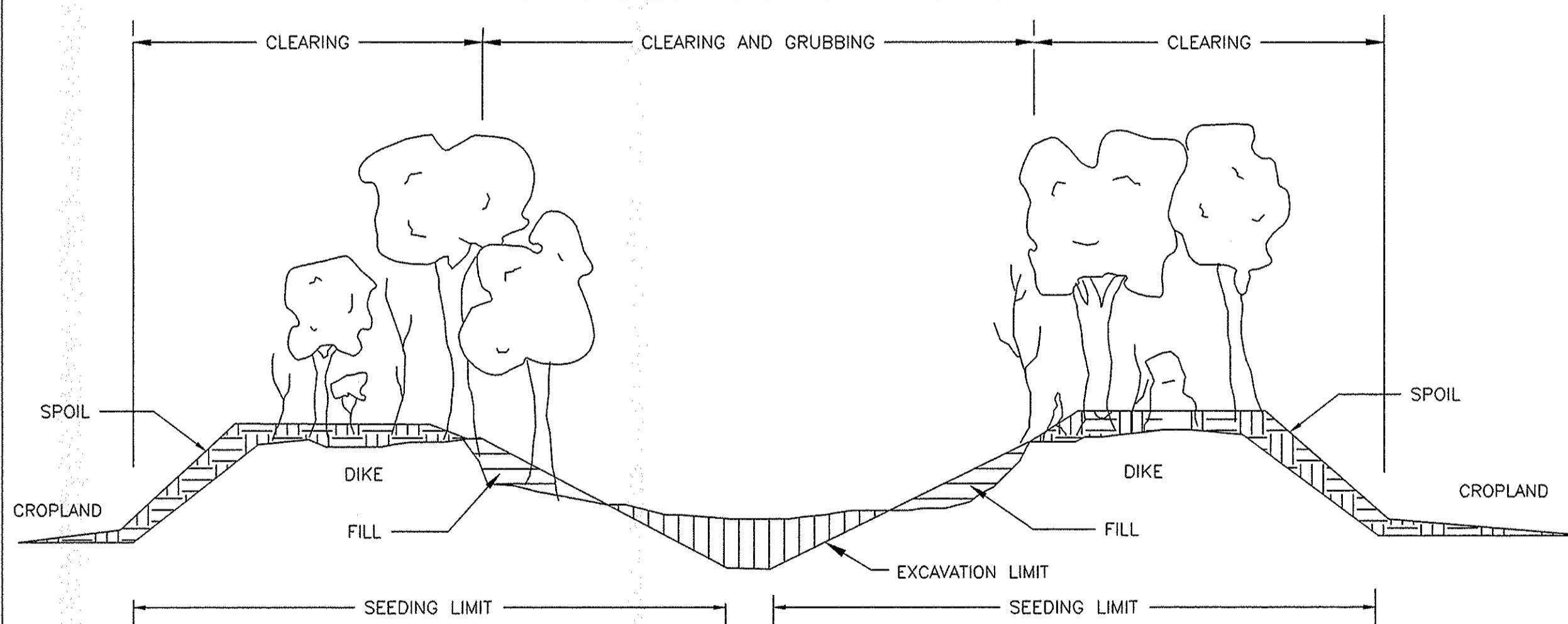
PROFILE VIEW



INLET END VIEW



DETAIL B TWO SIDED CONSTRUCTION



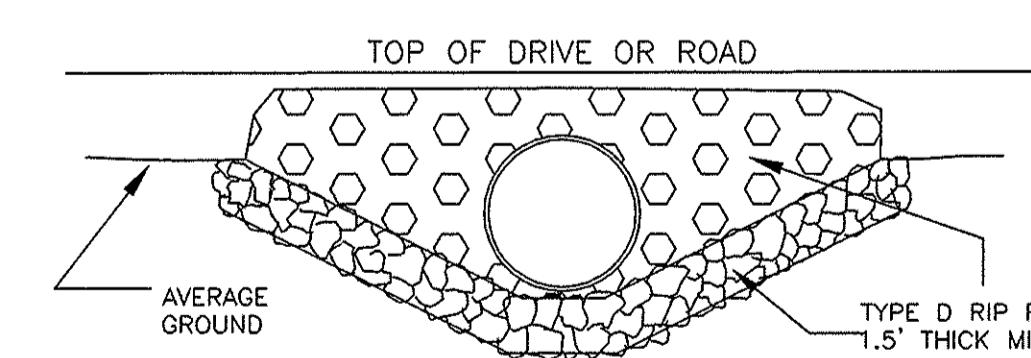
BRUSH, SPOIL, & SEEDING DETAIL TABLE

GOODSITE CHANNEL	STA 0+00 - 54+00	DETAIL A
GOODSITE CHANNEL	STA 54+00 - 68+30	DETAIL B
BRANCH A	STA 0+00 - 5+85	DETAIL A
BRANCH B	STA 0+00 - 3+00	DETAIL A
WINTER MAIN CHANNEL	STA 68+30 - 104+80	DETAIL B
SCHLUZ BRANCH	STA 0+00 - 13+10	DETAIL B
LEUTZ ROAD BRANCH	STA 0+00 - 7+00	DETAIL B

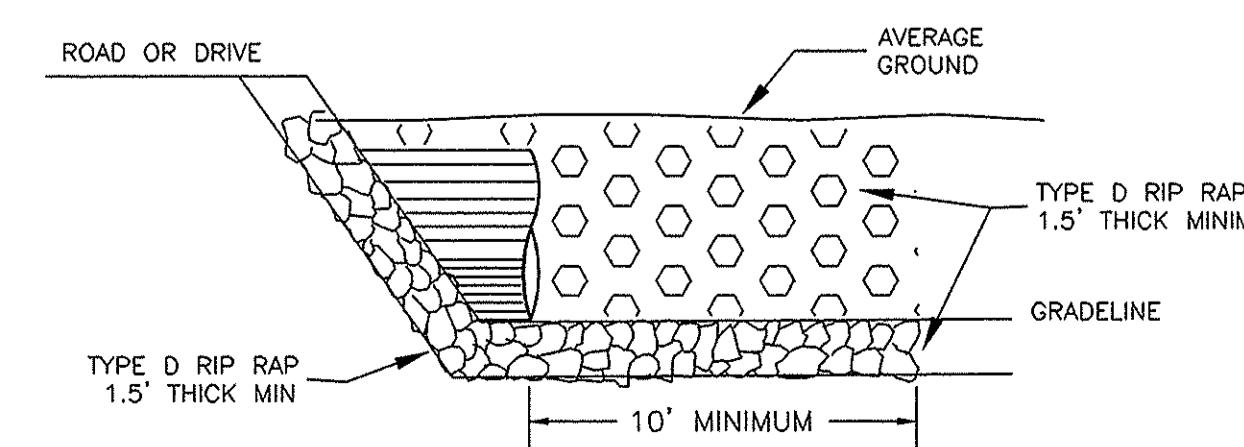
CULVERT RIP RAP DETAIL

END VIEW

INLET AND OUTLET



SIDE VIEW



Job Class

WINTER DITCH DRAINAGE IMPROVEMENT
CARROLL TOWNSHIP
SECTIONS 10, 11, 14, 15, 16
OTTAWA COUNTY OHIO

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Date _____
Designed MIKE GARGAC 1-99 Approved by _____
Title _____

Drawn MIKE GARGAC 1-99 Const. Approval _____
Title _____

Redlined _____ Sheet _____ Drawing No. _____
No. 12 _____ Drawing No. _____
Checked P. W. Chester 6/99 of 12 39-01-383-99-02