

**LEGEND**

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

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NOTE: SEE PROJECT SPECIFICATIONS AND BID PROPOSAL FOR PLANNED QUANTITIES.

OTTAWA COUNTY ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

**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. OUPS member utilities will be contacted by calling oups (1-800-362-2764 or 811)
2. Each Limited Basis Participant and the Ohio Oil and Gas Producers Underground Protection Service (1-800-925-0988) will be contacted by the excavator using the telephone number provided.

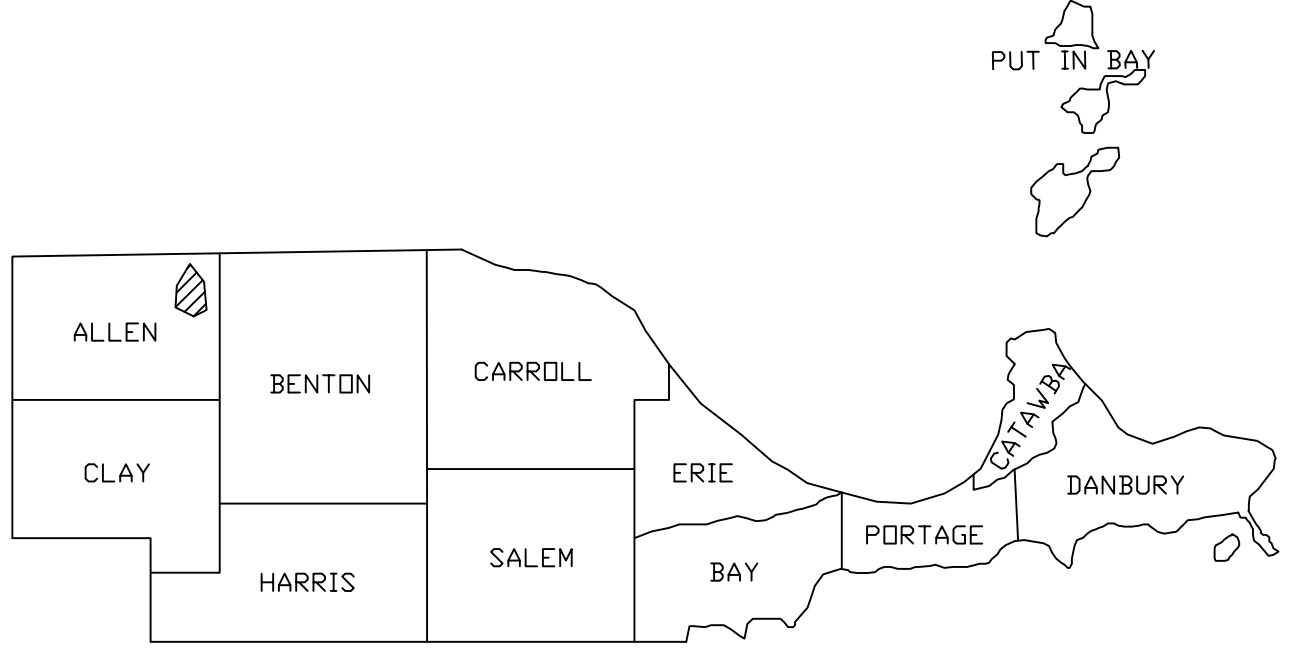
**2 WORKING DAYS - 2 CALLS BEFORE YOU DIG**

CALL TOLL FREE 800-362-2764 or 811

OHIO UTILITIES PROTECTION SERVICE

CALL TOLL FREE 800-925-0988

Ohio Oil and Gas Producers Underground Protection Service (OGPUPS)



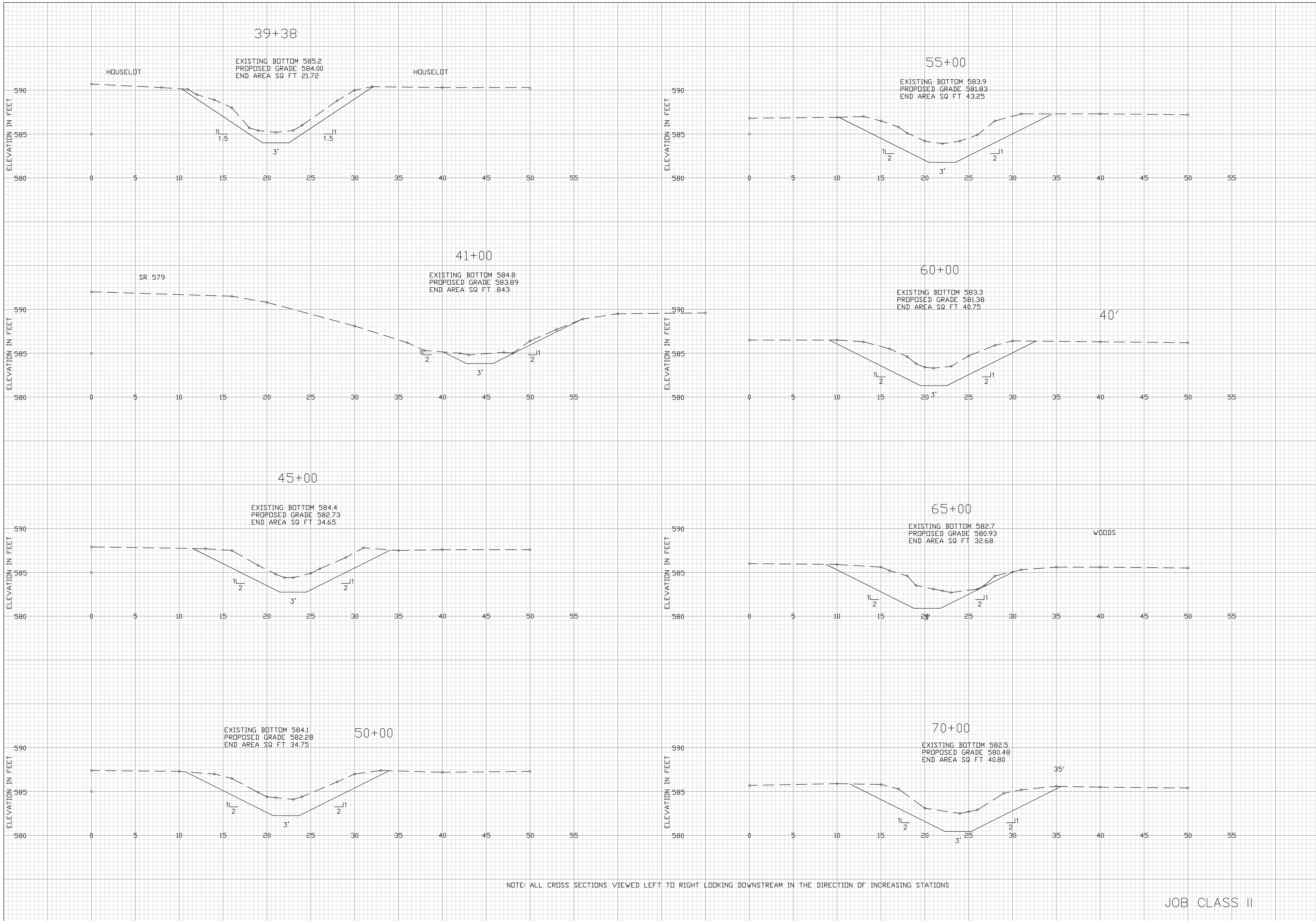
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Michael R. Gargac, Ottawa SWCD

JOB CLASS II

UNDERGROUND UTILITIES AT EXCAVATION SITE						
OUPS I.D. # A309200753, A309200803		OGPUPS I.D. # 102030				
UTILITY INFORMATION		STATUS		OGUPS Member	OGUPS Limited Basis Participant	OGPUPS Member
Name	Address	Phone No.	No Reply			
Level 3 Comm	639 Oliver St Toledo OH 43609	419-244-1774	X	X		
Toledo Edison	300 Madison St Toledo OH 43652	1-800-995-0095		X		

NOTE: The excavator is liable for complying with excavation law under the O.R.C.

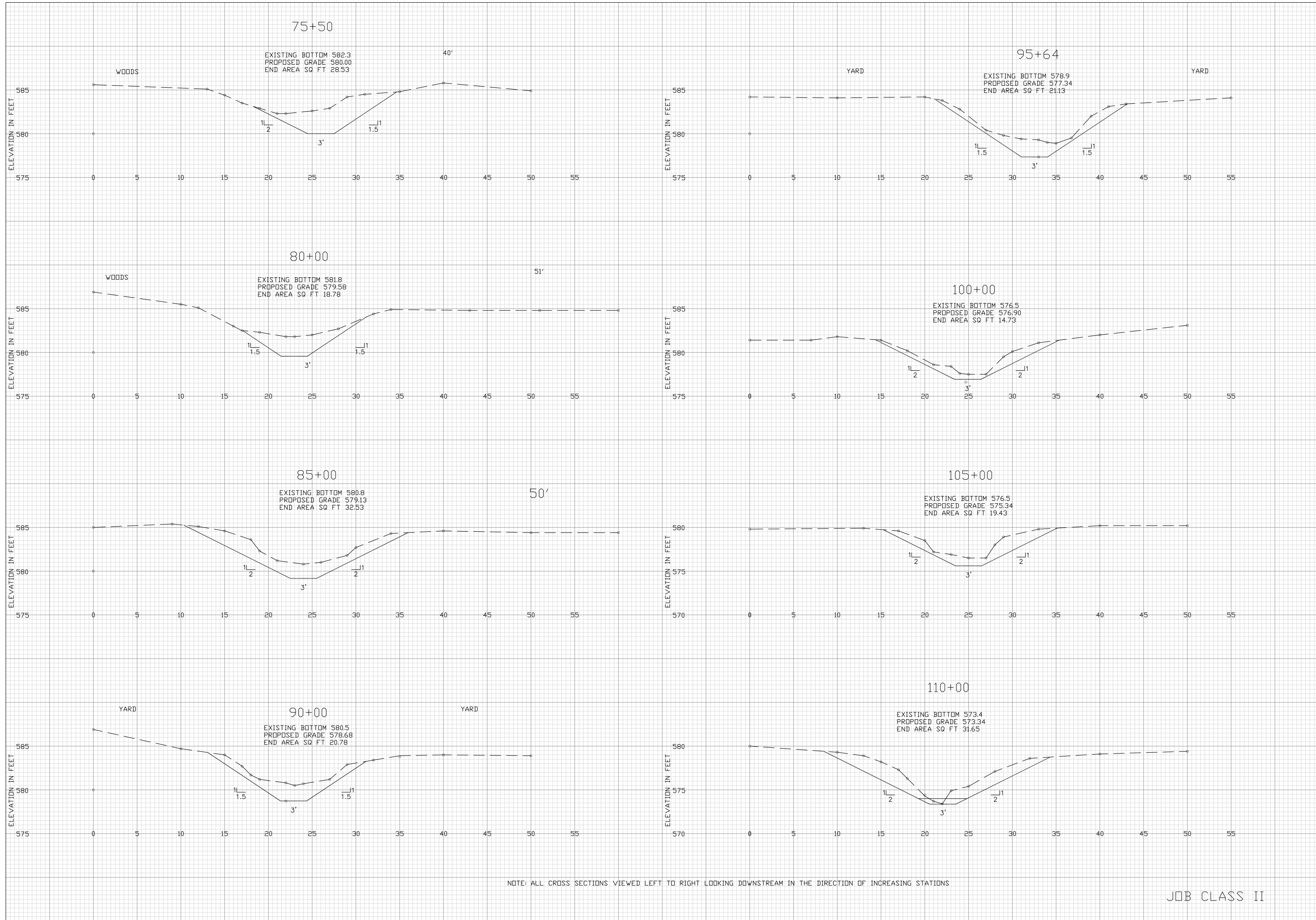
DRAWING NUMBER CAD FILE 1.D Sheet 1 of 8	LAU DITCH	DATE _____	DATE _____
	USDA - NATURAL RESOURCES CONSERVATION SERVICE	Designed MICHAEL GARGAC 3/2013	Approved _____
		Drawn MICHAEL GARGAC 3/2013	Title _____
		Checked _____	Construction Approved _____



DATE	8/20/12	Approved	_____
DATE	8/20/12	Title	_____
DATE	8/20/12	Const. Approved	_____
DATE	8/20/12	Title	_____
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Drawn	MINE GARGAC	Checked	_____

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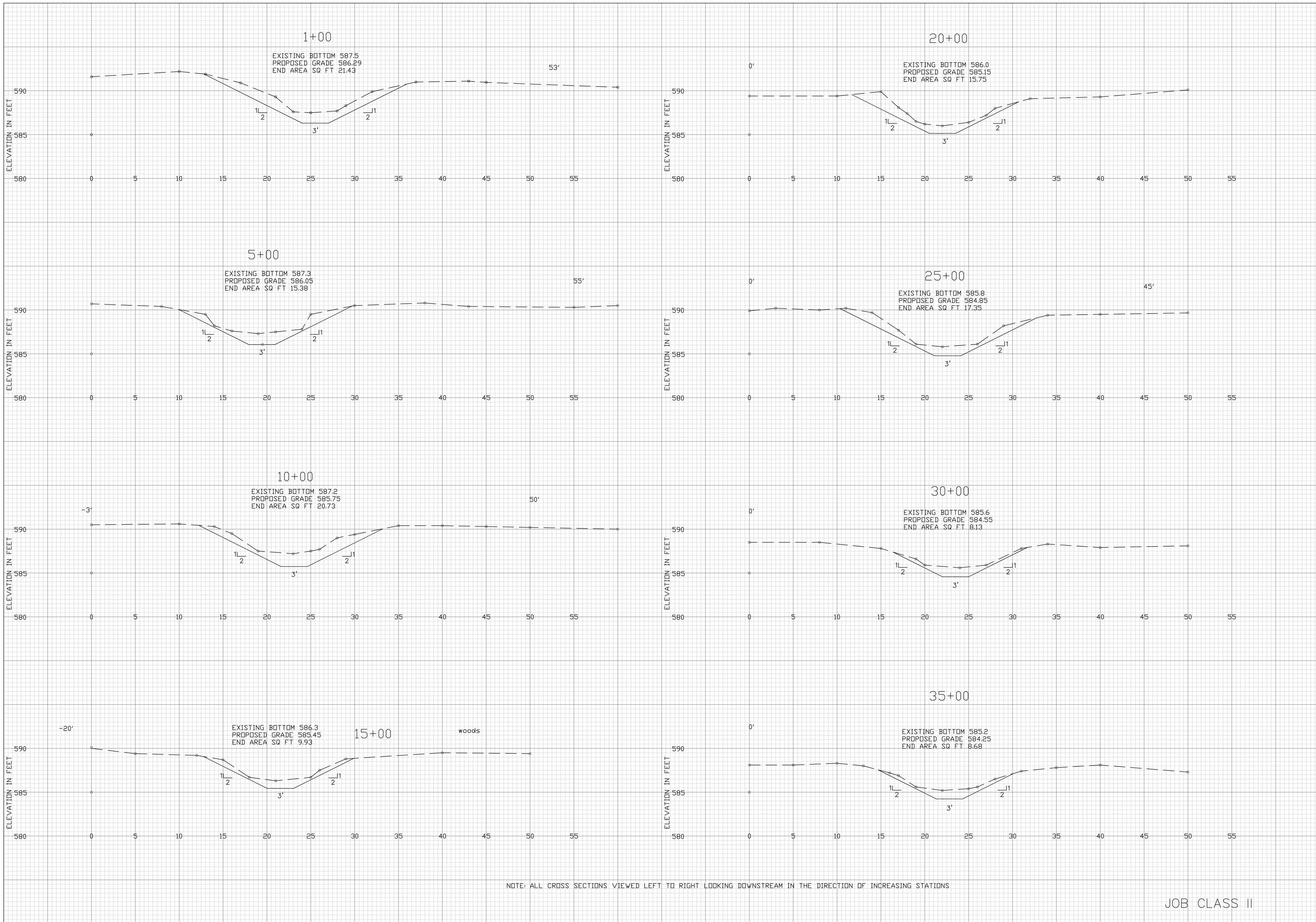


NOTE: ALL CROSS SECTIONS VIEWED LEFT TO RIGHT LOOKING DOWNSTREAM IN THE DIRECTION OF INCREASING STATIONS

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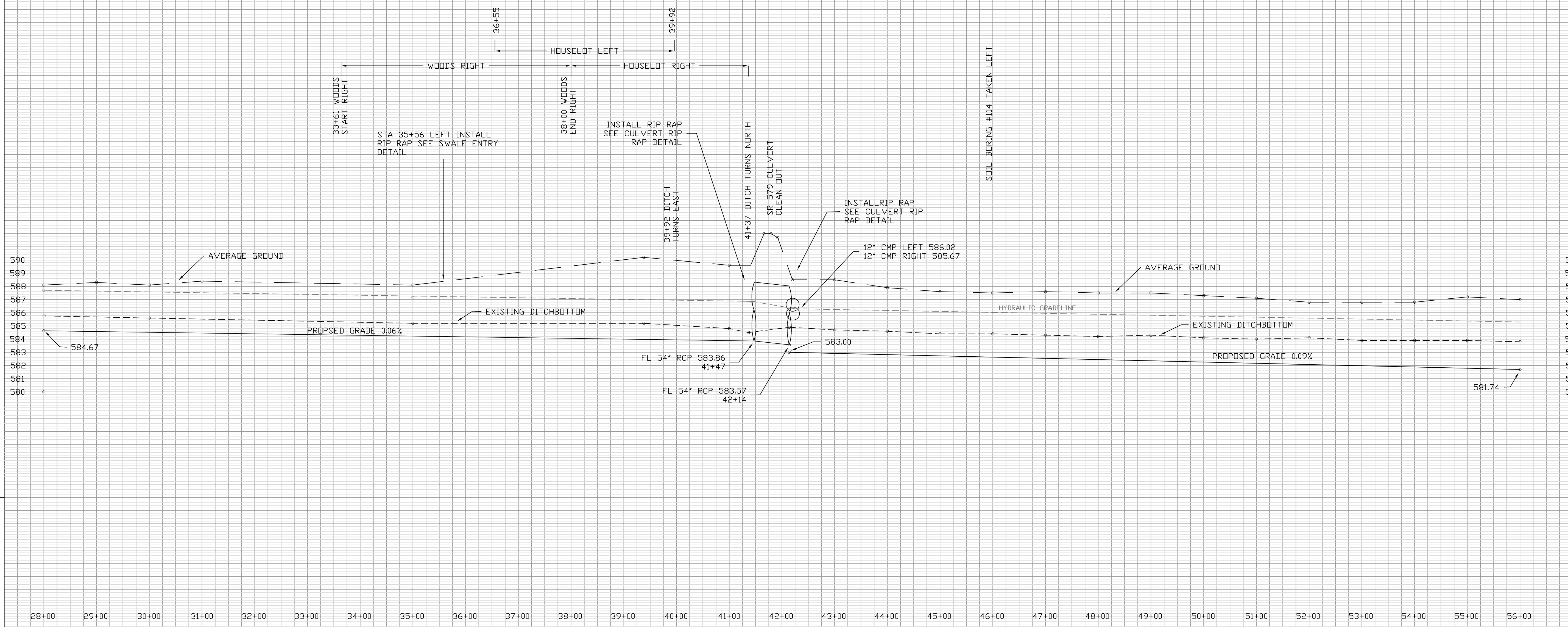
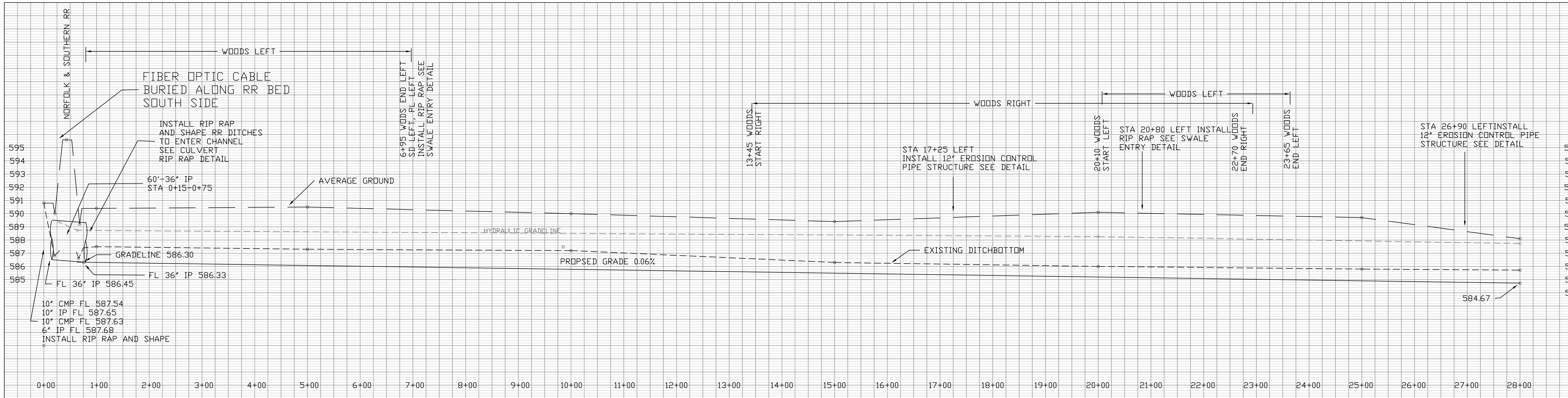
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NOTE: ALL CROSS SECTIONS VIEWED LEFT TO RIGHT LOOKING DOWNSTREAM IN THE DIRECTION OF INCREASING STATIONS

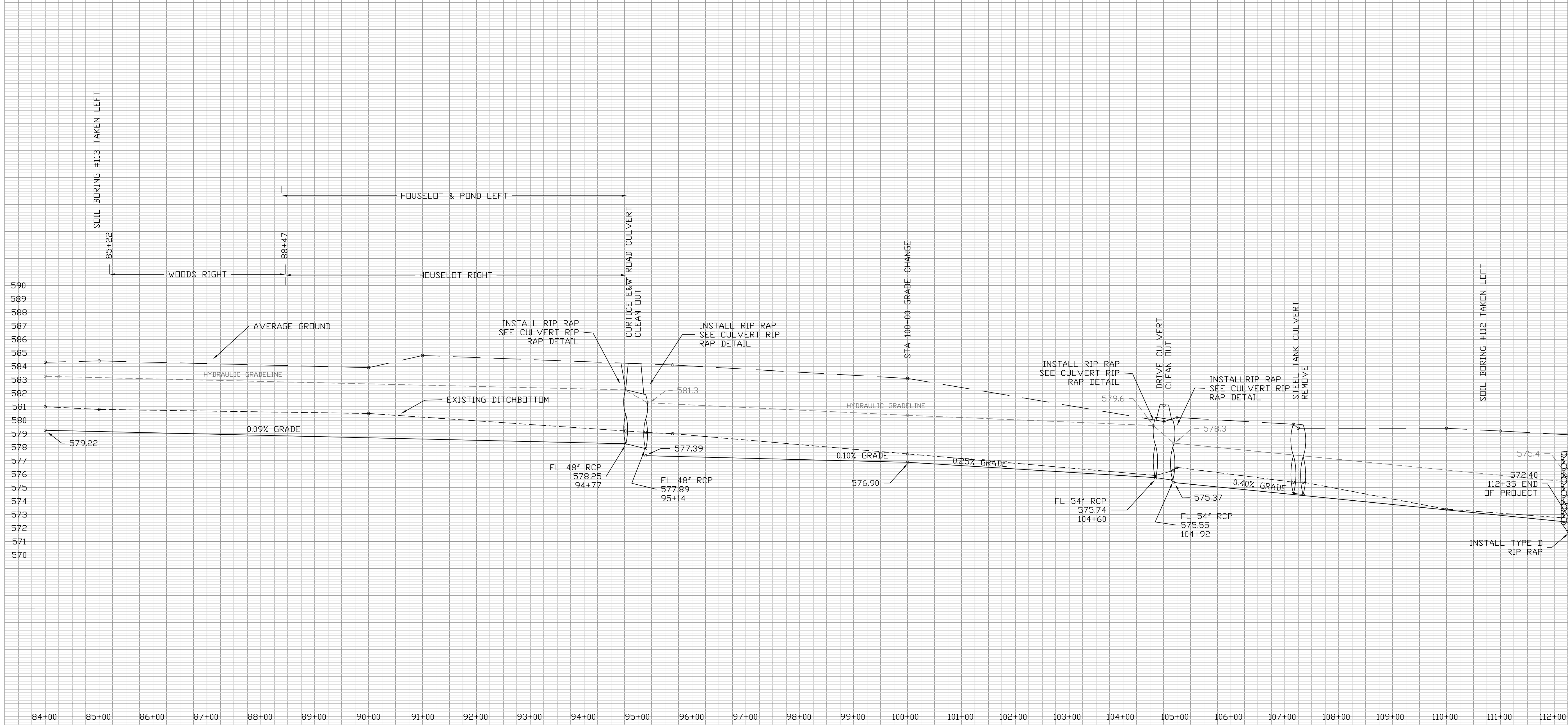
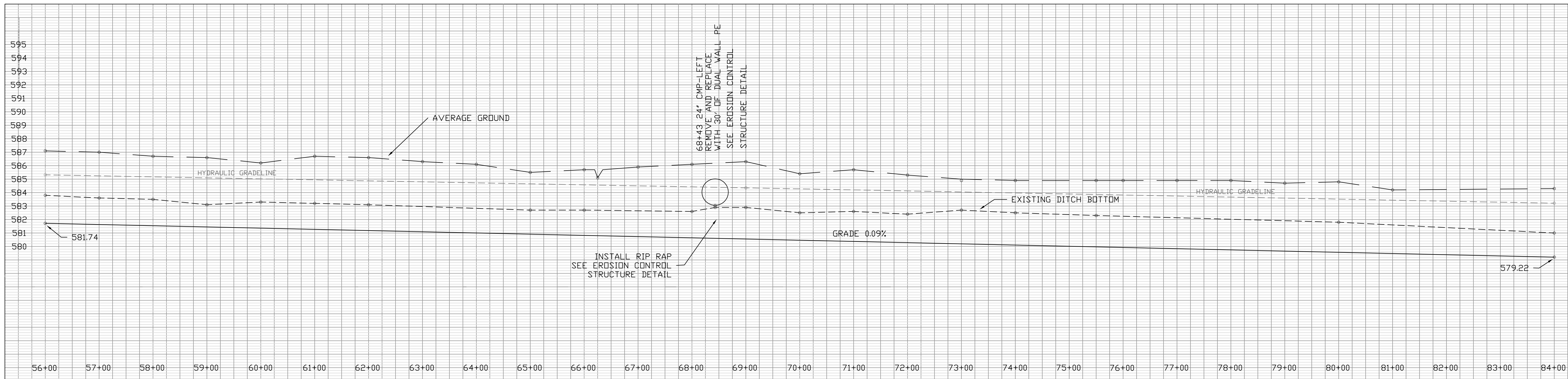
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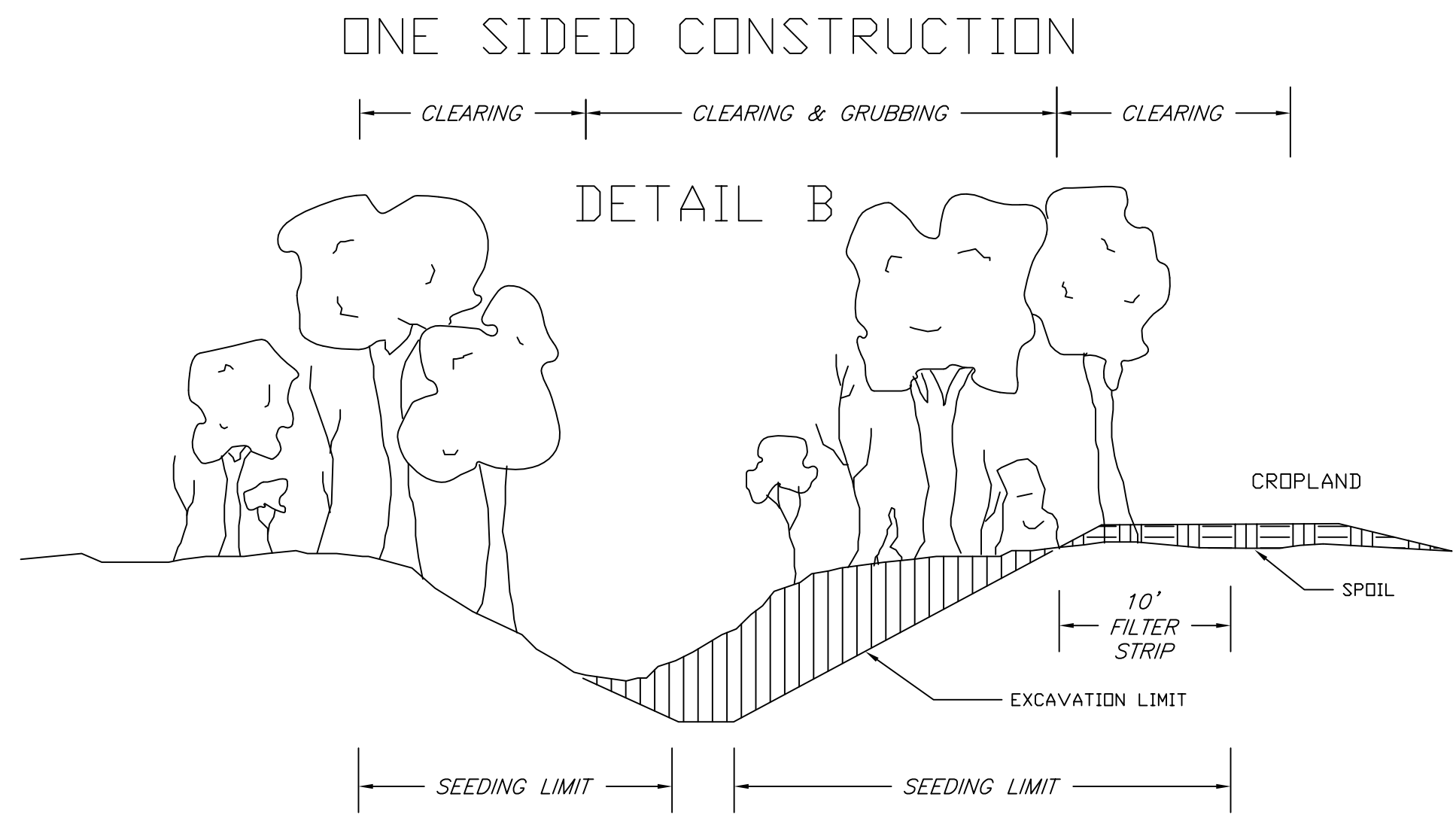
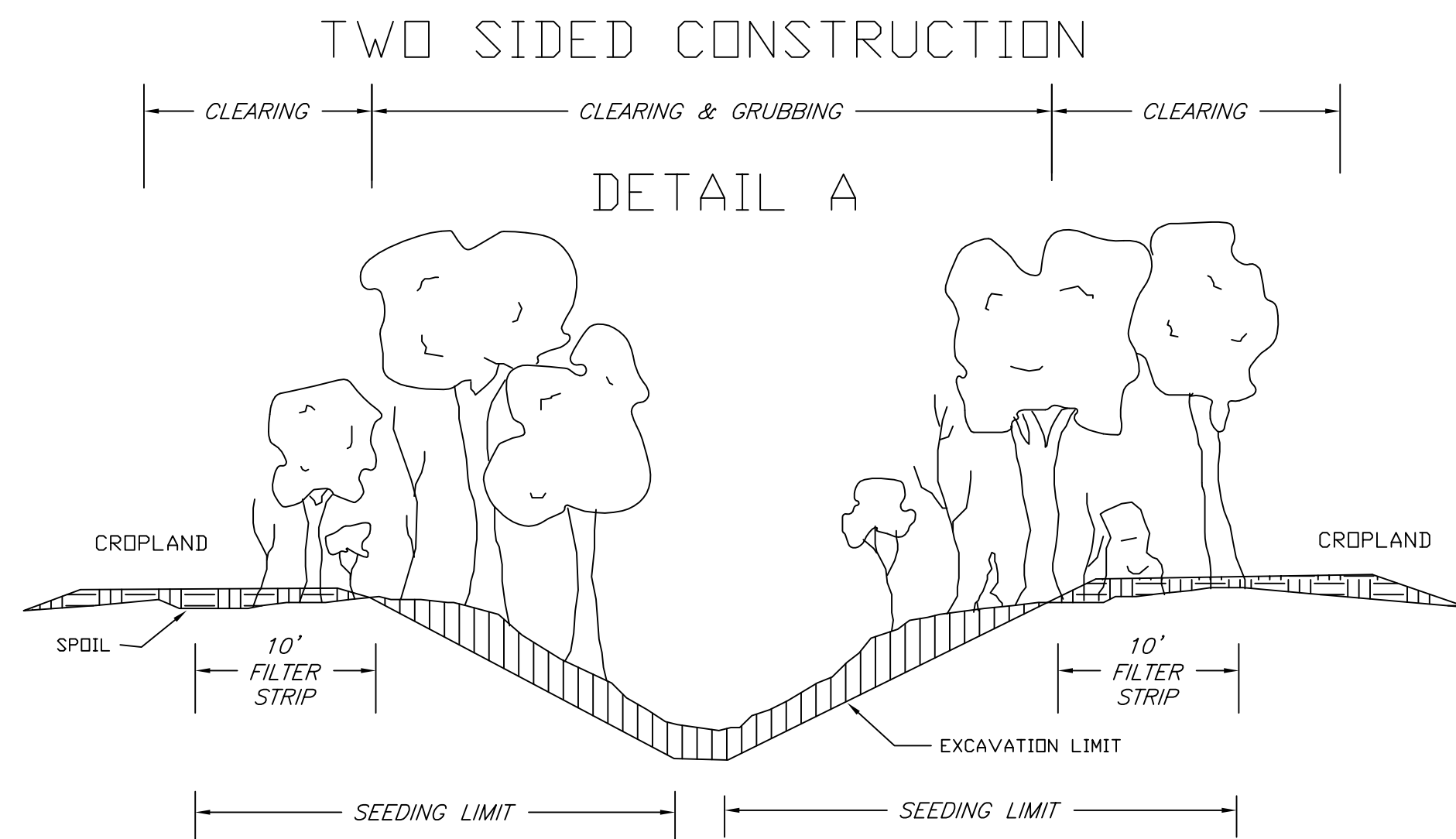
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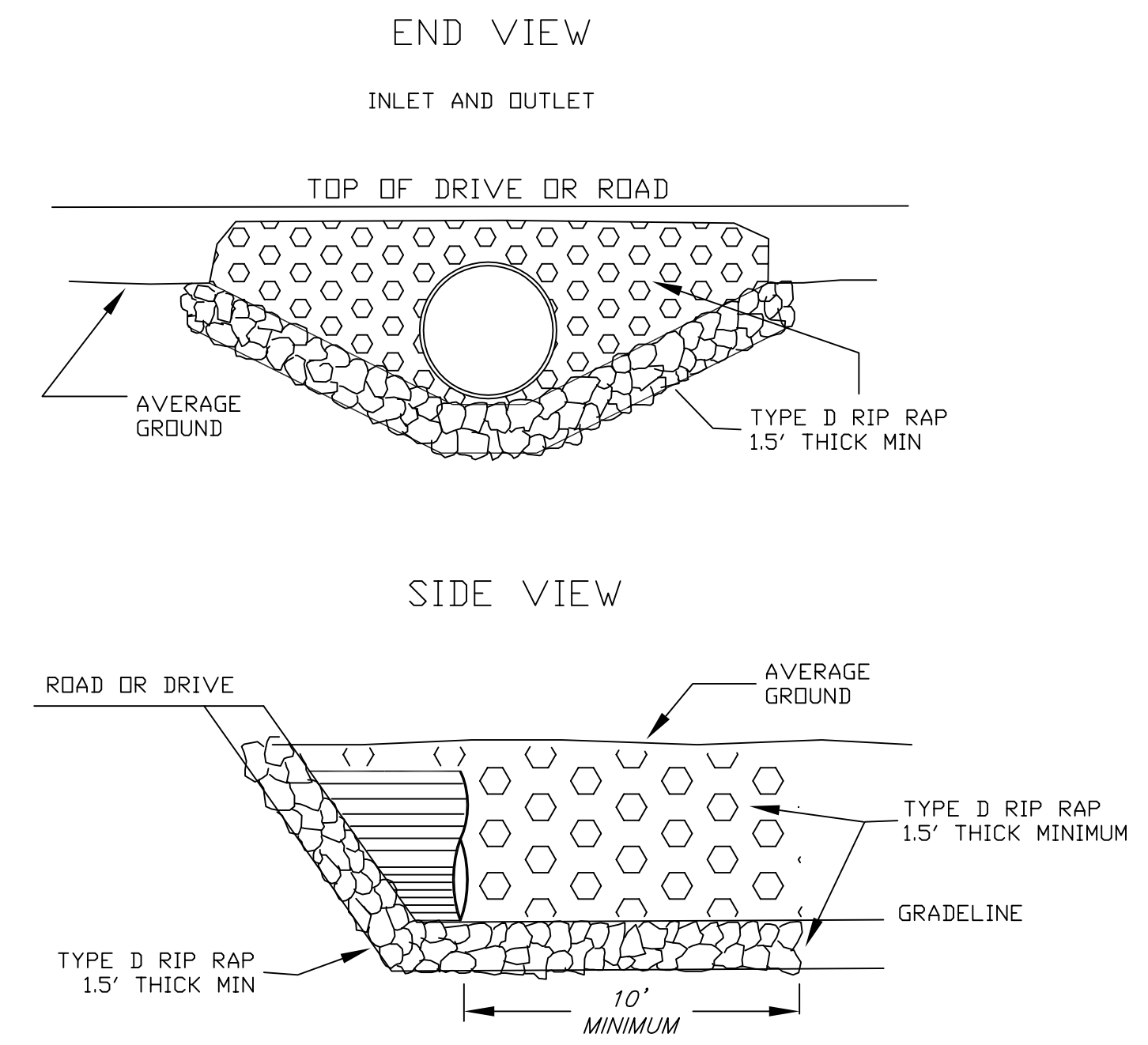
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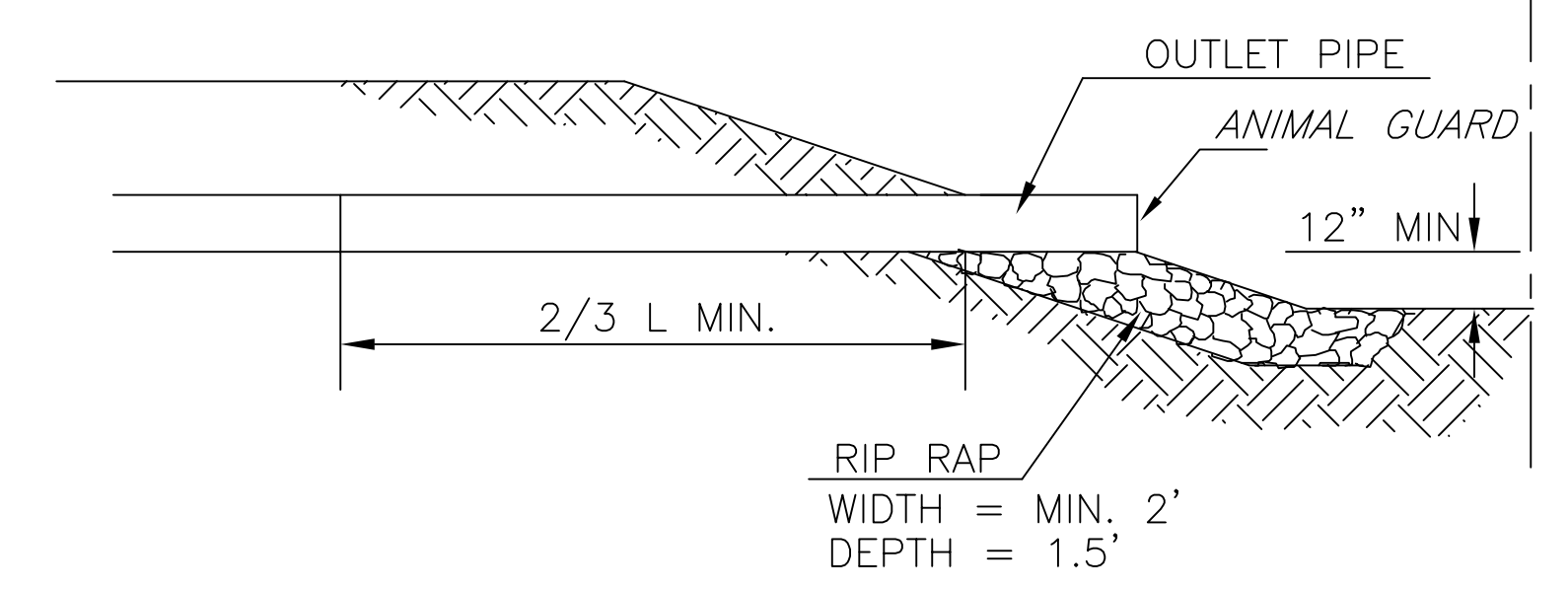
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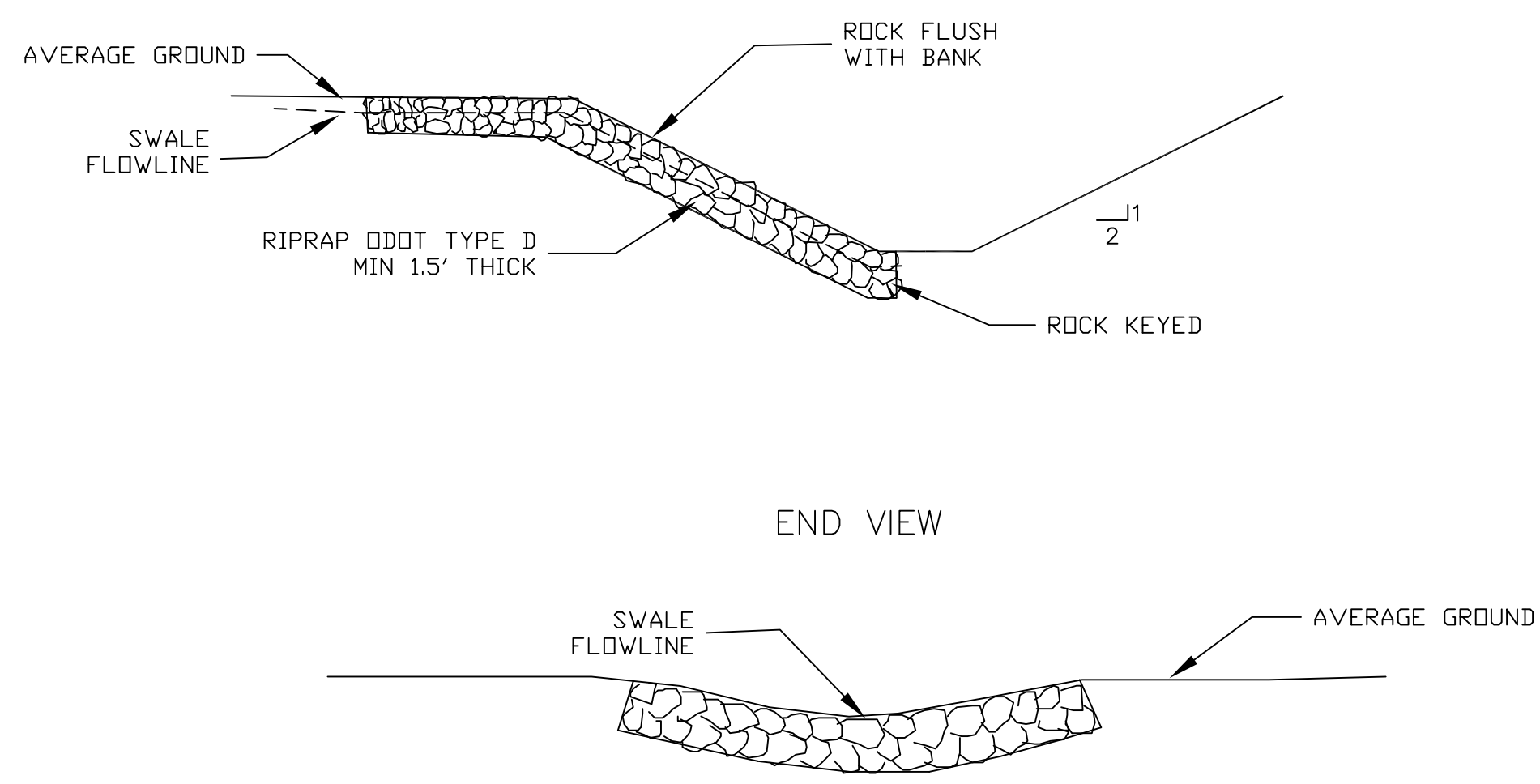
**CULVERT RIP RAP DETAIL**



**OUTLET PIPE INSTALLATION**



**SWALE OR SIDE DITCH ENTRY**



BRUSH, SPOIL, & SEEDING DETAIL TABLE

CHANNEL	STATION	DETAIL
MAIN	0+00-0+30	A
	0+62-6+95	B WORK RIGHT
	6+95-13+45	A
	13+45-20+10	B WORK LEFT
	20+10-22+70	B WORK LEFT
	22+70-23+65	B WORK RIGHT
	23+65-33+61	A
	33+61-36+55	B WORK LEFT
	36+55-41+47	B WORK RIGHT
	42+14-65+00	A
	65+00-68+32	B WORK LEFT
	68+32-75+00	A
	75+00-80+65	B WORK RIGHT
	80+65-85+22	A
	85+22-88+47	B WORK LEFT
	88+47-94+77	A YARD BOTH SIDES
	95+14-97+45	A YARD BOTH SIDES
	97+45-100+00	B WORK LEFT
	100+00-105+00	A YARD BOTH SIDES
	105+00-112+35	A ALL SPOIL LEFT

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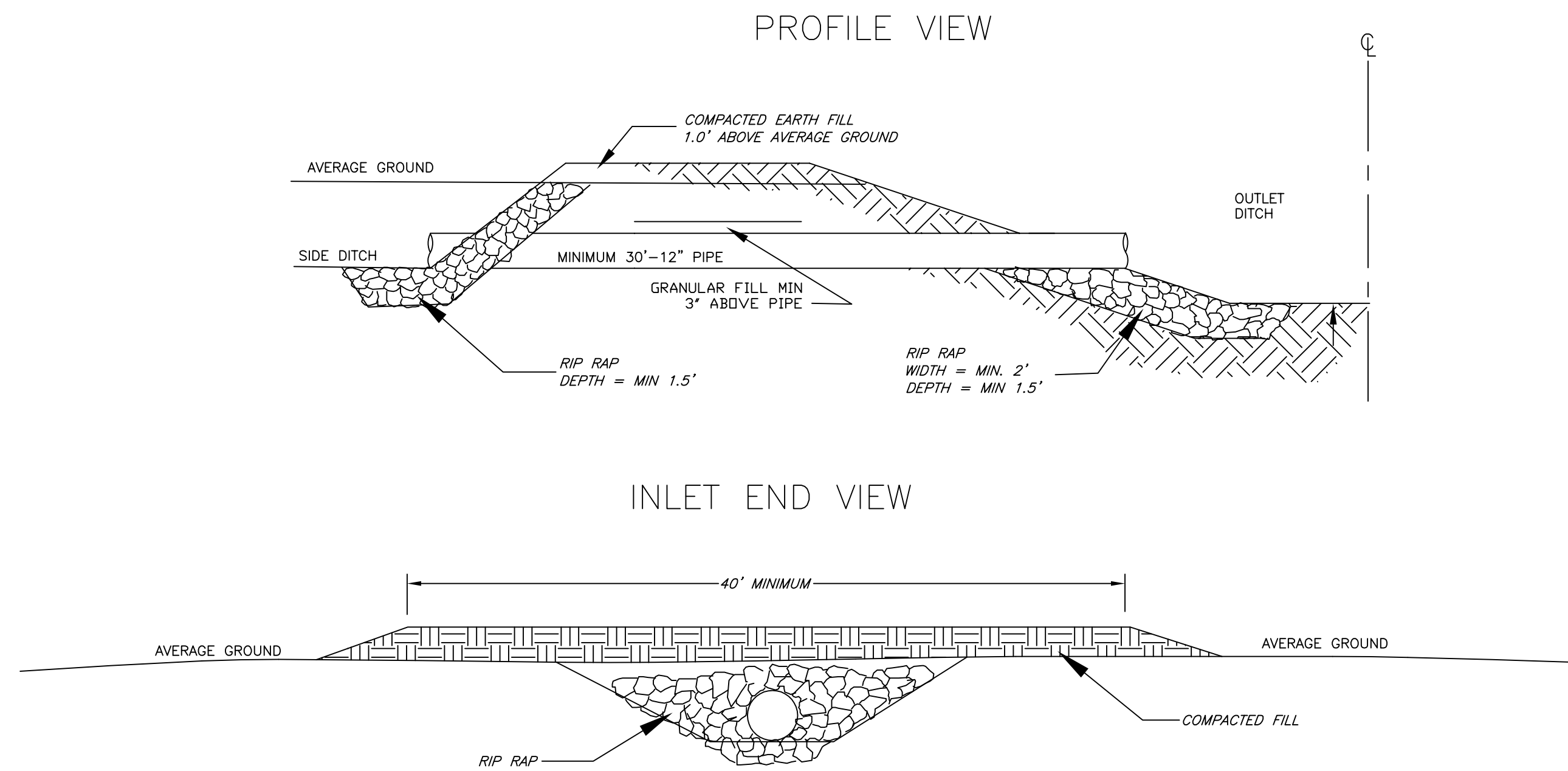
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Sheet 7 of 8

TYPICAL EROSION CONTROL PIPE STRUCTURE – DETAIL



BENCHMARKS

- ALL BMS AND TBM SET AT NAVD88 DATUM
- BM #1 Chiseled + on east end of 30" RCP drive culvert on south side of Walbridge Road 100' east of woods at 19570 West Walbridge Road, and approximately a half mile west of Nissen Road. 590.51
  - TBM #1 30d spike in west side of RR signal pole 25' east of Lau Ditch on north side of N&S RR. 591.78
  - BM #2 30d spike set in east side of 48" diameter oak tree on east side of ditch in southwest corner of woods at STA 13+45. 592.18
  - BM #3 30d spike set in west side of 32" diameter red oak 30' east of ditch at STA 33+61. 589.52
  - BM #4 Chiseled + on north end of 54" RCP on north side of SR 579 at Lau Ditch a half mile west of Nissen Road, STA 42+14. 588.48
  - BM #5 30d spike set in west side of oak tree in northwest corner of Soncrant woods on east side of ditch STA 68+32. 586.09
  - BM #6 Chiseled + on north end of 48" RCP on north side of Curtice East & West Road at Lau Ditch. 582.30
  - BM #7 Chiseled + On west end of 54" RCP drive culvert at STA 104+60. 580.75

SOILS MAP



SOILS DESCRIPTIONS

**NpA**—Nappanee silty clay loam. This deep, nearly level, somewhat poorly drained soil is on slight convexa rises and side slopes along drainageways on lake plains. Most areas range from 4 to 75 acres.

**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.

**Lc**—Latty 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. Most areas range from 5 to 100 acres. Slope is 0 to 2 percent.

**ScC2**—St. Clair silty clay loam. This deep, gently sloping and sloping moderately well 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.

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