



**NOTICE OF
SPECIAL MEETING OF THE PARKS AND RECREATION BOARD
REMOTE MEETING
1-888-475-4499
MEETING ID: 849 6158 9530
MONDAY, FEBRUARY 08, 2021, 6:00 PM**

AGENDA

In response to the coronavirus pandemic, effective March 16, 2020, Texas Governor Abbott suspended certain Open Meeting rules to allow meetings of government bodies that are accessible to the public to decrease large groups of people from assembling. The suspension temporarily removes the requirement that government officials and member of the public be physically present at a meeting location. [Remote Meeting Participation Information.](#)

Call to Order

Roll Call

Pledge of Allegiance to the U.S. And Texas Flags

Invocation

Items of Community Interest

Pursuant to Texas Government Code Section 551.0415 the Parks and Recreation Board may report on the following: expressions of thanks, congratulations, or condolence; an honorary or salutary recognition of an individual; a reminder about an upcoming event organized or sponsored by the governing body; and announcements involving an imminent threat to the public health and safety of people in the municipality or county that has arisen after the posting of the agenda.

Public Comment

This item allows the public an opportunity to address the Parks and Recreation Board. To comply with the provisions of the Open Meetings Act, the board cannot discuss or take action on items brought before them not posted on the agenda. Please complete a request if you wish to address the board, Comments will be limited to three minutes. Open Forum is for information only. No charges and/or complaints will be heard against any elected official, board member, the Town, or employee of the Town that are prohibited by law. Please submit a [Public Comment Form](#) at least five minutes prior to the meeting.

Reports

1. Town Council Liaison Report

Consent Agenda

Items on the Consent Agenda are considered to be self-explanatory and will be enacted with one motion. No separate discussion of these items will occur unless so requested by at least one member of the Parks and Recreation Board.

- [2.](#) October 2020 Meeting Minutes
- [3.](#) January 2021 Meeting Minutes
- [4.](#) October 2020 Financials
- [5.](#) November 2020 Financials
- [6.](#) December 2020 Financials
- [7.](#) January 2021 Financials

Regular Agenda

8. Consider and act on a date for The Great American Cleanup.
- [9.](#) Discussion regarding expansion of Sycamore Bend Road.
- [10.](#) Discussion regarding potential launch sites for the Denton County Paddle Trail in Hickory Creek Parks.
- [11.](#) Consider an act on a recommendation to replace the playground equipment at Arrowhead Park.
- [12.](#) Consider an act on a recommendation to add a compact fitness system at Point Vista Park.
13. Discussion regarding ongoing maintenance or repairs needed in the parks.

Adjournment

This facility is wheelchair accessible and accessible parking spaces are available. Requests for accommodations or interpretive services must be made 48 hours prior to the meeting. Please contact Town Hall at 940-497-2528 or by fax 940-497-3531 so that appropriate arrangements can be made.

I, Ashley Vinson, do hereby certify that this meeting notice was posted on the bulletin board at Town Hall, 1075 Ronald Reagan Avenue, Hickory Creek, Texas on February 5, 2021 at 9:00AM.



Ashley Vinson
Town of Hickory Creek

**REGULAR MEETING OF THE PARKS AND RECREATION BOARD
REMOTE MEETING
MONDAY, OCTOBER 19, 2020**

MINUTES

In response to the coronavirus pandemic, effective March 16, 2020, Texas Governor Abbott suspended certain Open Meeting rules to allow meetings of government bodies that are accessible to the public to decrease large groups of people from assembling. The suspension temporarily removes the requirement that government officials and members of the public be physically present at a meeting location.

Call to Order

Chairman Larkin called the meeting to order at 6:00 p.m.

Roll Call

The following members were present:

Vice Chariman Lisa Rowell

Member Kyle Knop

Chariman Mandy Larkin

Member Dinah Stults

Member Gwen Grimsley-McIntosh

The following members were absent:

Member Nicolas Wohr

Member Calin Giuroiu

Also in attendance were:

Chris Gordon, Town Council Liaison

Kristina Smith, Administrative Assistant

Pledge of Allegiance to the U.S. And Texas Flags

Chairman Larkin led the Pledge of Allegiance to the U.S. And Texas Flags.

Invocation

Vice Chairman Rowell led the invocation.

Items of Community Interest

There were no items of community interest.

Public Comment

John Grosskopf, 131 Oakwood Lane, congratulations to Dinah on her perseverance in the NWF. Mr. Grosskopf would like to address some safety concerns in regards to pedestrian safety. Bike sales are up 80% across the nation and the number of people out walking are also on a dramatic

Town of Hickory Creek Parks and Recreation Board

October 19, 2020

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rise. There are no designated pedestrian lanes in our town. Mr. Grosskopf urged the board to suggest to town council to create bike lanes in town and to remove obstructions and impediments on existing sidewalks. It would also be nice if the town would establish a wider sidewalk grid than some we currently have. Mr. Grosskopf meant to leave the board with lessons learned and a strategic document prepared with the board, that contains valuable thoughts and ideas for the board to review. Mr. Grosskopf and Mr. Pierre had spoken with the Mayor regarding his departure from the board. Mr. Grosskopf encouraged the board to double their efforts to improve our parks and recreational activities and improve the quality of life in our town. Development is accelerating, destroying habitat and wildlife, increasing traffic congestion while increasing environmental health and safety due to that growth. An important part of our future that is in your hands.

Reports

1. Town Council Liaison Report

The Lake Cities Trunk or Treat will be held October 30, 2020 from 5 p.m. to 7 p.m.

Consent Agenda

2. September 2020 Meeting Minutes

3. September 2020 Financials

Motion made by Chariman Larkin to approve consent agenda items 2-3, Seconded by Member Grimsley-McIntosh.

Voting Yea: Vice Chariman Rowell, Member Knop, Chariman Larkin, Member Stults, Member Grimsley-McIntosh. Motion passed unanimously.

Regular Agenda

4. Consider and act regarding implementation of a healing garden.

Discussion was held regarding the implementation of a healing garden. No action was taken.

5. Discussion regarding Great American Cleanup Event and Arbor Day Event.

Discussion was held regarding preparing bags with supplies for clean up participants to pick up at town hall during business hours. Board members will come to town hall to prepare supplies on Wednesday, November 4.

6. Consider and act on certification of town parks with the National Wildlife Federation (NWF).

Town of Hickory Creek Parks and Recreation Board

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Motion made by Chariman Larkin to approve the certification of town parks with the National Wildlife Federation in an amount not to exceed \$120, Seconded by Member Stults.

Voting Yea: Vice Chariman Rowell, Member Knop, Chariman Larkin, Member Stults, Member Grimsley-McIntosh. Motion passed unanimously.

7. Discussion regarding ongoing maintenance or repairs needed in the parks.

Discussion was held regarding the condition of the restrooms in Arrowhead and Point Vista Parks. Due to the recent high winds, the trash can lids had flown off. They were dangling on the side but not securing the trash inside. More cameras in the parks were suggested to ensure safety.

Adjournment

Motion made by Chariman Larkin to adjourn the meeting, Seconded by Member Knop.

Voting Yea: Vice Chariman Rowell, Member Knop, Chariman Larkin, Member Stults, Member Grimsley-McIntosh. Motion passed unanimously.

The meeting adjourned at 6:57 p.m.

Approved:

Attest:

Mandy Larkin, Chairman
Parks and Recreation Board

Kristina Smith, Administrative Assistant
Town of Hickory Creek

**SPECIAL MEETING OF THE PARKS AND RECREATION BOARD
PRATT FARM, WEST OF SYCAMORE BEND PAVILION, EAST OF PREMITIVE
CAMPING ENTRANCE, ENTER THROUGH NORTH GATE,
1301 SYCAMORE BEND RD, HICKORY CREEK, TEXAS 75065
MONDAY, JANUARY 11, 2021**

MINUTES

Call to Order

Chairman Larkin called the meeting to order at 4:35 p.m.

Roll Call

The following members were present:

Member Nicolas Wohr
Vice Chariman Lisa Rowell
Member Kyle Knop
Chariman Mandy Larkin
Member Dinah Stults

The following members were absent:

Member Calin Giuroiu
Member Gwen Grimsley-McIntosh

Also in attendance were:

John Smith, Town Administrator
Chris Gordon, Town Council Liaison, arrived at 4:37 p.m.
Jeffrey McSpedden, Public Works Director
Ashley Vinson, Administrative Assistant

Items of Community Interest

There were no items of community interest.

Public Comment

John Grosskopf, 131 Oakwood Lane, expressed concern regarding trails discovered near Arrowhead Park that show signs of mountain biking and vehicular traffic. Mr. Grosskopf requested the town place signs along trails. Mr. Grosskopf participated in the Lake Dallas Arbor Day Event and mentioned future collaboration with the Hickory Creek and Lake Dallas Parks and Recreations Board. Mr. Grosskopf was concerned about a special meeting being called.

Regular Agenda

1. Discussion regarding future implementation of Pratt Property.

John Smith, Town Administrator, gave a brief history of the Pratt Property, board members walked the property line, and discussed future plans to include: initial vegetation burn,

Town of Hickory Creek Parks and Recreation Board

January 11, 2021

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nature trails, playground area, wildflower garden, overlook tower, educational building, picnic areas, trailer parking, and an equestrian camping area.

Adjournment

Motion made by Member Wohr to adjourn the meeting, Seconded by Vice Chariman Rowell. Voting Yea: Member Wohr, Vice Chariman Rowell, Member Knop, Chariman Larkin, Member Stults. Motion passed unanimously.

The meeting adjourned at 5:37p.m.

Approved:

Attest:

Mandy Larkin, Chairman
Parks and Recreation Board

Ashley Vinson, Administrative Assistant
Town of Hickory Creek

2:58 AM

02/04/21

Accrual Basis

Town of Hickory Creek

Balance Sheet

As of October 31, 2020

	<u>Oct 31, 20</u>
ASSETS	
Current Assets	
Checking/Savings	
BOA - Parks and Recreation	127,915.31
Total Checking/Savings	<u>127,915.31</u>
Total Current Assets	<u>127,915.31</u>
TOTAL ASSETS	<u><u>127,915.31</u></u>
LIABILITIES & EQUITY	0.00

Town of Hickory Creek
Park and Recreation Budget vs. Actual
 October 2020

	Oct 20	Budget
Ordinary Income/Expense		
Income		
Miscellaneous Revenue		
4508 Annual Park Passes	291.35	20,000.00
4510 Arrowhead Park Fees	2,878.00	22,000.00
4516 Corp Parks Fund Reserve	0.00	36,500.00
4536 Point Vista Park Fees	1,069.00	6,500.00
4550 Sycamore Bend Fees	3,097.00	15,000.00
Total Miscellaneous Revenue	<u>7,335.35</u>	<u>100,000.00</u>
Total Income	<u>7,335.35</u>	<u>100,000.00</u>
Gross Profit	7,335.35	100,000.00
Expense		
Capital Outlay		
5022 Parks and Rec Improvements	0.00	0.00
Total Capital Outlay	0.00	0.00
Parks and Recreation		
5402 Events	0.00	1,000.00
5408 Tanglewood Park	193.19	1,500.00
5412 KHCB	0.00	500.00
5414 Tree City USA	0.00	1,500.00
Total Parks and Recreation	193.19	4,500.00
Parks Corps of Engineer		
5432 Arrowhead	1,642.78	60,000.00
5434 Harbor Grove	132.49	15,000.00
5436 Point Vista	1,388.87	5,000.00
5438 Sycamore Bend	1,538.91	20,000.00
Total Parks Corps of Engineer	<u>4,703.05</u>	<u>100,000.00</u>
Total Expense	<u>4,896.24</u>	<u>104,500.00</u>
Net Ordinary Income	<u>2,439.11</u>	<u>-4,500.00</u>
Net Income	<u><u>2,439.11</u></u>	<u><u>-4,500.00</u></u>

Town of Hickory Creek Park and Recreation Detail

Accrual Basis

October 2020

Type	Date	Name	Memo	Account	Amount
Deposit	10/05/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	275.00
Deposit	10/06/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	100.00
Deposit	10/07/2020	Deposit	Deposit	4550 Sycamore Bend Fees	625.00
Deposit	10/09/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	5.00
Deposit	10/13/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	360.00
Deposit	10/13/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	160.00
Deposit	10/14/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	55.00
Deposit	10/15/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	45.00
Deposit	10/19/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	190.00
Deposit	10/19/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	135.00
Deposit	10/19/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	90.00
Deposit	10/20/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	165.00
Deposit	10/21/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	25.00
Deposit	10/23/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	5.00
Deposit	10/23/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	55.00
Deposit	10/26/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	50.00
Deposit	10/27/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	230.00
Deposit	10/30/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	65.00
				4550 Sycamore Bend Fees	5.00
Total 4550 Sycamore Bend Fees					3,097.00
Total Miscellaneous Revenue					7,335.35
Total Income					7,335.35
Gross Profit					7,335.35
Expense					
Parks and Recreation					
5408 Tanglewood Park					
Check	10/05/2020	LCMUA DESUTILITY DD		5408 Tanglewood Park	181.00
Check	10/14/2020	HUDSON ENERGY SE DESDEBITDEBIT		5408 Tanglewood Park	12.19
Total 5408 Tanglewood Park					193.19
Total Parks and Recreation					193.19
Parks Corps of Engineer					
5432 Arrowhead					
Check	10/02/2020	MERCHANT SERVICE DESMERCH FEE		5432 Arrowhead	347.59
Check	10/07/2020	CHECKCARD 1006 GRAINGER		5432 Arrowhead	109.62
Check	10/14/2020	MiTech Services	Invoice 4016	5432 Arrowhead	1,140.00
Check	10/14/2020	HUDSON ENERGY SE DESDEBITDEBIT		5432 Arrowhead	38.57
Bill	10/27/2020	Verizon Wireless	Invoice# 9864627032	5432 Arrowhead	7.00
Total 5432 Arrowhead					1,642.78
5434 Harbor Grove					
Check	10/07/2020	CHECKCARD 1006 GRAINGER		5434 Harbor Grove	109.62
Check	10/14/2020	HUDSON ENERGY SE DESDEBITDEBIT		5434 Harbor Grove	22.87
Total 5434 Harbor Grove					132.49
5436 Point Vista					
Check	10/02/2020	MERCHANT SERVICE DESMERCH FEE		5436 Point Vista	84.29
Check	10/07/2020	CHECKCARD 1006 GRAINGER		5436 Point Vista	109.63
Check	10/14/2020	MiTech Services	Invoice 4016	5436 Point Vista	1,140.00
Check	10/14/2020	HUDSON ENERGY SE DESDEBITDEBIT		5436 Point Vista	47.95
Bill	10/27/2020	Verizon Wireless	Invoice# 9864627032	5436 Point Vista	7.00
Total 5436 Point Vista					1,388.87
5438 Sycamore Bend					
Check	10/02/2020	MERCHANT SERVICE DESMERCH FEE		5438 Sycamore Bend	211.18
Check	10/07/2020	CHECKCARD 1006 GRAINGER		5438 Sycamore Bend	109.63
Check	10/14/2020	MiTech Services	Invoice 4016	5438 Sycamore Bend	1,140.00
Check	10/14/2020	HUDSON ENERGY SE DESDEBITDEBIT		5438 Sycamore Bend	61.10
Bill	10/27/2020	Verizon Wireless	Invoice# 9864627032	5438 Sycamore Bend	7.00
Check	10/29/2020	James Grusendorf	Refund Paystation Overpayment	5438 Sycamore Bend	10.00
Total 5438 Sycamore Bend					1,538.91
Total Parks Corps of Engineer					4,703.05
Total Expense					4,896.24
Net Ordinary Income					2,439.11
Net Income					2,439.11

Town of Hickory Creek
Balance Sheet
As of November 30, 2020

	<u>Nov 30, 20</u>
ASSETS	
Current Assets	
Checking/Savings	
BOA - Parks and Recreation	136,992.02
Total Checking/Savings	<u>136,992.02</u>
Total Current Assets	<u>136,992.02</u>
TOTAL ASSETS	<u><u>136,992.02</u></u>
LIABILITIES & EQUITY	0.00

Town of Hickory Creek
Park and Recreation Budget vs. Actual
 October through November 2020

	<u>Oct - Nov 20</u>	<u>Budget</u>
Ordinary Income/Expense		
Income		
Miscellaneous Revenue		
4508 Annual Park Passes	716.35	20,000.00
4510 Arrowhead Park Fees	5,224.00	22,000.00
4516 Corp Parks Fund Reserve	0.00	36,500.00
4536 Point Vista Park Fees	1,980.00	6,500.00
4550 Sycamore Bend Fees	6,763.00	15,000.00
Total Miscellaneous Revenue	<u>14,683.35</u>	<u>100,000.00</u>
Total Income	<u>14,683.35</u>	<u>100,000.00</u>
Gross Profit	14,683.35	100,000.00
Expense		
Capital Outlay		
5022 Parks and Rec Improvements	0.00	0.00
Total Capital Outlay	0.00	0.00
Parks and Recreation		
5402 Events	0.00	1,000.00
5408 Tanglewood Park	349.76	1,500.00
5412 KHCB	0.00	500.00
5414 Tree City USA	0.00	1,500.00
Total Parks and Recreation	349.76	4,500.00
Parks Corps of Engineer		
5432 Arrowhead	2,268.93	60,000.00
5434 Harbor Grove	155.07	15,000.00
5436 Point Vista	1,723.69	5,000.00
5438 Sycamore Bend	6,466.68	20,000.00
Total Parks Corps of Engineer	<u>10,614.37</u>	<u>100,000.00</u>
Total Expense	<u>10,964.13</u>	<u>104,500.00</u>
Net Ordinary Income	<u>3,719.22</u>	<u>-4,500.00</u>
Net Income	<u><u>3,719.22</u></u>	<u><u>-4,500.00</u></u>

**Town of Hickory Creek
Park and Recreation Detail**

Type	Date	Name	Memo	Account	Amount
Deposit	11/12/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	25.00
Deposit	11/13/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	20.00
Deposit	11/16/2020	Deposit	Deposit	4550 Sycamore Bend Fees	525.00
Deposit	11/16/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	5.00
Deposit	11/16/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	60.00
Deposit	11/16/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	215.00
Deposit	11/17/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	75.00
Deposit	11/18/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	5.00
Deposit	11/19/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	5.00
Deposit	11/20/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	25.00
Deposit	11/23/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	40.00
Deposit	11/23/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	80.00
Deposit	11/23/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	125.00
Deposit	11/24/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	70.00
Deposit	11/25/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	65.00
Deposit	11/27/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	100.00
Deposit	11/27/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	20.00
Deposit	11/30/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	20.00
Deposit	11/30/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	65.00
Deposit	11/30/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	100.00
Deposit	11/30/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	55.00
Total 4550 Sycamore Bend Fees					3,666.00
Total Miscellaneous Revenue					7,348.00
Total Income					7,348.00
Gross Profit					7,348.00
Expense					
Parks and Recreation					
5408 Tanglewood Park					
Check	11/03/2020	LCMUA DESUTILITY DD		5408 Tanglewood Park	144.67
Check	11/12/2020	HUDSON ENERGY SE DESDEBITDEBIT		5408 Tanglewood Park	11.90
Total 5408 Tanglewood Park					156.57
Total Parks and Recreation					156.57
Parks Corps of Engineer					
5432 Arrowhead					
Check	11/02/2020	MERCHANT SERVICE DESMERCH FEE		5432 Arrowhead	158.83
Check	11/12/2020	HUDSON ENERGY SE DESDEBITDEBIT		5432 Arrowhead	35.94
Bill	11/13/2020	Ventek International	Invoice# 123802	5432 Arrowhead	213.73
Bill	11/13/2020	Ventek International	Invoice# 123785	5432 Arrowhead	210.65
Bill	11/20/2020	Verizon Wireless	Invoice# 9866727399	5432 Arrowhead	7.00
Total 5432 Arrowhead					626.15
5434 Harbor Grove					
Check	11/12/2020	HUDSON ENERGY SE DESDEBITDEBIT		5434 Harbor Grove	22.58
Total 5434 Harbor Grove					22.58
5436 Point Vista					
Check	11/02/2020	MERCHANT SERVICE DESMERCH FEE		5436 Point Vista	70.27
Check	11/12/2020	HUDSON ENERGY SE DESDEBITDEBIT		5436 Point Vista	46.90
Bill	11/13/2020	Ventek International	Invoice# 123785	5436 Point Vista	210.65
Bill	11/20/2020	Verizon Wireless	Invoice# 9866727399	5436 Point Vista	7.00
Total 5436 Point Vista					334.82
5438 Sycamore Bend					
Check	11/02/2020	MERCHANT SERVICE DESMERCH FEE		5438 Sycamore Bend	146.22
Paycheck	11/12/2020	Knight, Bradley D	Direct Deposit	5438 Sycamore Bend	264.06
Paycheck	11/12/2020	McSpedden, Jeffrey E	Direct Deposit	5438 Sycamore Bend	527.38
Paycheck	11/12/2020	Paterson, Robert A	Direct Deposit	5438 Sycamore Bend	156.42
Check	11/12/2020	HUDSON ENERGY SE DESDEBITDEBIT		5438 Sycamore Bend	56.00
Bill	11/13/2020	Texas First Rentals LLC	Contract # 1146520-0001	5438 Sycamore Bend	3,196.67
Bill	11/13/2020	Ventek International	Invoice# 123785	5438 Sycamore Bend	210.64
Bill	11/20/2020	Verizon Wireless	Invoice# 9866727399	5438 Sycamore Bend	7.00
Paycheck	11/25/2020	Knight, Bradley D	Direct Deposit	5438 Sycamore Bend	58.68
Paycheck	11/25/2020	McSpedden, Jeffrey E	Direct Deposit	5438 Sycamore Bend	121.70
Paycheck	11/25/2020	Paterson, Robert A	Direct Deposit	5438 Sycamore Bend	52.14
Bill	11/25/2020	Ventek International	Invoice# 124109	5438 Sycamore Bend	130.86
Total 5438 Sycamore Bend					4,927.77
Total Parks Corps of Engineer					5,911.32
Total Expense					6,067.89
Net Ordinary Income					1,280.11
Net Income					1,280.11

2:59 AM

02/04/21

Accrual Basis

Town of Hickory Creek
Balance Sheet
As of December 31, 2020

	<u>Dec 31, 20</u>
ASSETS	
Current Assets	
Checking/Savings	
BOA - Parks and Recreation	140,071.38
Total Checking/Savings	<u>140,071.38</u>
Total Current Assets	<u>140,071.38</u>
TOTAL ASSETS	<u><u>140,071.38</u></u>
LIABILITIES & EQUITY	0.00

Town of Hickory Creek
Park and Recreation Budget vs. Actual
 October through December 2020

	<u>Oct - Dec 20</u>	<u>Budget</u>
Ordinary Income/Expense		
Income		
Miscellaneous Revenue		
4508 Annual Park Passes	1,500.35	20,000.00
4510 Arrowhead Park Fees	6,249.00	22,000.00
4516 Corp Parks Fund Reserve	0.00	36,500.00
4536 Point Vista Park Fees	2,315.00	6,500.00
4550 Sycamore Bend Fees	8,288.00	15,000.00
Total Miscellaneous Revenue	<u>18,352.35</u>	<u>100,000.00</u>
Total Income	<u>18,352.35</u>	<u>100,000.00</u>
Gross Profit	18,352.35	100,000.00
Expense		
Capital Outlay		
5022 Parks and Rec Improvements	<u>0.00</u>	<u>0.00</u>
Total Capital Outlay	0.00	0.00
Parks and Recreation		
5402 Events	0.00	1,000.00
5408 Tanglewood Park	520.27	1,500.00
5412 KHCB	0.00	500.00
5414 Tree City USA	<u>0.00</u>	<u>1,500.00</u>
Total Parks and Recreation	520.27	4,500.00
Parks Corps of Engineer		
5432 Arrowhead	3,332.65	60,000.00
5434 Harbor Grove	238.73	15,000.00
5436 Point Vista	1,886.00	5,000.00
5438 Sycamore Bend	<u>6,732.18</u>	<u>20,000.00</u>
Total Parks Corps of Engineer	<u>12,189.56</u>	<u>100,000.00</u>
Total Expense	<u>12,709.83</u>	<u>104,500.00</u>
Net Ordinary Income	<u>5,642.52</u>	<u>-4,500.00</u>
Net Income	<u><u>5,642.52</u></u>	<u><u>-4,500.00</u></u>

Town of Hickory Creek Park and Recreation Detail

December 2020

Type	Date	Name	Memo	Account	Amount
Ordinary Income/Expense					
Income					
Miscellaneous Revenue					
4508 Annual Park Passes					
Deposit	12/09/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	100.00
Deposit	12/11/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	25.00
Deposit	12/14/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	77.25
Deposit	12/14/2020	Deposit	Deposit	4508 Annual Park Passes	125.00
Deposit	12/14/2020	Deposit	Deposit	4508 Annual Park Passes	75.00
Deposit	12/18/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	100.00
Deposit	12/21/2020	Deposit	Deposit	4508 Annual Park Passes	25.00
Deposit	12/21/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	25.75
Deposit	12/24/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	25.00
Deposit	12/28/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	206.00
Total 4508 Annual Park Passes					784.00
4510 Arrowhead Park Fees					
Deposit	12/02/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	5.00
Deposit	12/07/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	80.00
Deposit	12/07/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	35.00
Deposit	12/08/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	50.00
Deposit	12/08/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	10.00
Deposit	12/11/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	10.00
Deposit	12/14/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	40.00
Deposit	12/14/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	110.00
Deposit	12/14/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	15.00
Deposit	12/15/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	5.00
Deposit	12/21/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	55.00
Deposit	12/22/2020	Deposit	Deposit	4510 Arrowhead Park Fees	410.00
Deposit	12/23/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	45.00
Deposit	12/28/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	30.00
Deposit	12/28/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	10.00
Deposit	12/29/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	80.00
Deposit	12/29/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	15.00
Deposit	12/30/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	15.00
Deposit	12/31/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	5.00
Total 4510 Arrowhead Park Fees					1,025.00
4536 Point Vista Park Fees					
Deposit	12/07/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	5.00
Deposit	12/07/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	75.00
Deposit	12/07/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	25.00
Deposit	12/08/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	20.00
Deposit	12/10/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	10.00
Deposit	12/11/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	20.00
Deposit	12/14/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	25.00
Deposit	12/21/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	40.00
Deposit	12/22/2020	Deposit	Deposit	4536 Point Vista Park Fees	30.00
Deposit	12/22/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	10.00
Deposit	12/23/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	30.00
Deposit	12/24/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	10.00
Deposit	12/28/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	30.00
Deposit	12/30/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	10.00
Deposit	12/30/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	30.00
Total 4536 Point Vista Park Fees					335.00
4550 Sycamore Bend Fees					
Deposit	12/01/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	10.00
Deposit	12/01/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	55.00
Deposit	12/02/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	20.00
Deposit	12/03/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	10.00
Deposit	12/04/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	10.00
Deposit	12/04/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	10.00
Deposit	12/07/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	90.00
Deposit	12/07/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	5.00
Deposit	12/07/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	20.00
Deposit	12/10/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	5.00
Deposit	12/11/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	20.00
Deposit	12/14/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	30.00
Deposit	12/14/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	25.00
Deposit	12/14/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	70.00
Deposit	12/16/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	5.00
Deposit	12/16/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	15.00
Deposit	12/18/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	35.00
Deposit	12/21/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	70.00
Deposit	12/21/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	35.00
Deposit	12/21/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	40.00
Deposit	12/21/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	25.00
Deposit	12/22/2020	Deposit	Deposit	4550 Sycamore Bend Fees	600.00
Deposit	12/23/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	90.00
Deposit	12/24/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	40.00
Deposit	12/24/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	5.00
Deposit	12/28/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	100.00
Deposit	12/28/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	15.00
Deposit	12/28/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	5.00
Deposit	12/28/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	5.00
Deposit	12/29/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	50.00
Deposit	12/30/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	10.00

Town of Hickory Creek Park and Recreation Detail

Accrual Basis

December 2020

Type	Date	Name	Memo	Account	Amount
Total 4550 Sycamore Bend Fees					1,525.00
Total Miscellaneous Revenue					3,669.00
Total Income					3,669.00
Gross Profit					3,669.00
Expense					
Parks and Recreation					
5408 Tanglewood Park					
Check	12/02/2020	LCMUA DESUTILITY DD		5408 Tanglewood Park	170.51
Total 5408 Tanglewood Park					170.51
Total Parks and Recreation					170.51
Parks Corps of Engineer					
5432 Arrowhead					
Check	12/02/2020	MERCHANT SERVICE DESMERCH FEE		5432 Arrowhead	152.94
Check	12/15/2020	HUDSON ENERGY SE DESDEBITDEBIT		5432 Arrowhead	34.36
Bill	12/21/2020	B & G Chemical	Invoice: 4612	5432 Arrowhead	22.49
Deposit	12/22/2020	MERCHANT SERVICE DESMERCH DEP	Deposit	5432 Arrowhead	-25.00
Bill	12/28/2020	B & G Chemical	Invoice: 4620	5432 Arrowhead	34.98
Bill	12/28/2020	Ventek International	Invoice# 124684	5432 Arrowhead	836.95
Bill	12/28/2020	Verizon Wireless	Invoice# 9868841086	5432 Arrowhead	7.00
Total 5432 Arrowhead					1,063.72
5434 Harbor Grove					
Check	12/15/2020	HUDSON ENERGY SE DESDEBITDEBIT		5434 Harbor Grove	26.20
Bill	12/21/2020	B & G Chemical	Invoice: 4612	5434 Harbor Grove	22.49
Bill	12/28/2020	B & G Chemical	Invoice: 4620	5434 Harbor Grove	34.97
Total 5434 Harbor Grove					83.66
5436 Point Vista					
Check	12/02/2020	MERCHANT SERVICE DESMERCH FEE		5436 Point Vista	45.32
Check	12/15/2020	HUDSON ENERGY SE DESDEBITDEBIT		5436 Point Vista	52.54
Bill	12/21/2020	B & G Chemical	Invoice: 4612	5436 Point Vista	22.48
Bill	12/28/2020	B & G Chemical	Invoice: 4620	5436 Point Vista	34.97
Bill	12/28/2020	Verizon Wireless	Invoice# 9868841086	5436 Point Vista	7.00
Total 5436 Point Vista					162.31
5438 Sycamore Bend					
Check	12/02/2020	MERCHANT SERVICE DESMERCH FEE		5438 Sycamore Bend	116.38
Check	12/15/2020	HUDSON ENERGY SE DESDEBITDEBIT		5438 Sycamore Bend	60.03
Bill	12/21/2020	B & G Chemical	Invoice: 4612	5438 Sycamore Bend	22.49
Bill	12/21/2020	MiTech Services	Invoice: 4120	5438 Sycamore Bend	24.62
Bill	12/28/2020	B & G Chemical	Invoice: 4620	5438 Sycamore Bend	34.98
Bill	12/28/2020	Verizon Wireless	Invoice# 9868841086	5438 Sycamore Bend	7.00
Total 5438 Sycamore Bend					265.50
Total Parks Corps of Engineer					1,575.19
Total Expense					1,745.70
Net Ordinary Income					1,923.30
Net Income					1,923.30

Town of Hickory Creek
Balance Sheet
As of January 31, 2021

	<u>Jan 31, 21</u>
ASSETS	
Current Assets	
Checking/Savings	
BOA - Parks and Recreation	142,247.17
Total Checking/Savings	<u>142,247.17</u>
Total Current Assets	<u>142,247.17</u>
TOTAL ASSETS	<u><u>142,247.17</u></u>
LIABILITIES & EQUITY	0.00

Town of Hickory Creek
Park and Recreation Budget vs. Actual
 October 2020 through January 2021

	<u>Oct '20 - Jan 21</u>	<u>Budget</u>
Ordinary Income/Expense		
Income		
Miscellaneous Revenue		
4508 Annual Park Passes	3,302.60	20,000.00
4510 Arrowhead Park Fees	6,997.00	22,000.00
4516 Corp Parks Fund Reserve	0.00	36,500.00
4536 Point Vista Park Fees	2,545.75	6,500.00
4550 Sycamore Bend Fees	9,453.00	15,000.00
Total Miscellaneous Revenue	<u>22,298.35</u>	<u>100,000.00</u>
Total Income	<u>22,298.35</u>	<u>100,000.00</u>
Gross Profit	22,298.35	100,000.00
Expense		
Capital Outlay		
5022 Parks and Rec Improvements	0.00	0.00
Total Capital Outlay	0.00	0.00
Parks and Recreation		
5402 Events	0.00	1,000.00
5408 Tanglewood Park	692.34	1,500.00
5412 KHCB	275.00	500.00
5414 Tree City USA	0.00	1,500.00
Total Parks and Recreation	<u>967.34</u>	<u>4,500.00</u>
Parks Corps of Engineer		
5432 Arrowhead	4,447.77	60,000.00
5434 Harbor Grove	268.87	15,000.00
5436 Point Vista	2,954.66	5,000.00
5438 Sycamore Bend	7,998.20	20,000.00
Total Parks Corps of Engineer	<u>15,669.50</u>	<u>100,000.00</u>
Total Expense	<u>16,636.84</u>	<u>104,500.00</u>
Net Ordinary Income	<u>5,661.51</u>	<u>-4,500.00</u>
Net Income	<u><u>5,661.51</u></u>	<u><u>-4,500.00</u></u>

Town of Hickory Creek
Park and Recreation Detail

Accrual Basis

January 2021

Type	Date	Name	Memo	Account	Amount
Ordinary Income/Expense					
Income					
Miscellaneous Revenue					
4508 Annual Park Passes					
Deposit	01/04/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	25.00
Deposit	01/05/2021	Deposit	Deposit	4508 Annual Park Passes	200.00
Deposit	01/05/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	25.00
Deposit	01/06/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	25.00
Deposit	01/06/2021	Deposit	Deposit	4508 Annual Park Passes	50.00
Deposit	01/11/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	100.00
Deposit	01/12/2021	Deposit	Deposit	4508 Annual Park Passes	150.00
Deposit	01/12/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	100.00
Deposit	01/13/2021	Deposit	Deposit	4508 Annual Park Passes	50.00
Deposit	01/13/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	25.75
Deposit	01/15/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	200.00
Deposit	01/19/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	100.00
Deposit	01/19/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	100.00
Deposit	01/20/2021	Deposit	Deposit	4508 Annual Park Passes	75.00
Deposit	01/20/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	100.00
Deposit	01/21/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	51.50
Deposit	01/25/2021	Deposit	Deposit	4508 Annual Park Passes	25.00
Deposit	01/25/2021	Deposit	Deposit	4508 Annual Park Passes	100.00
Deposit	01/26/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	100.00
Deposit	01/26/2021	Deposit	Deposit	4508 Annual Park Passes	100.00
Deposit	01/27/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4508 Annual Park Passes	100.00
Total 4508 Annual Park Passes					1,802.25
4510 Arrowhead Park Fees					
Deposit	01/04/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	35.00
Deposit	01/04/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	30.00
Deposit	01/05/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	60.00
Deposit	01/07/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	40.00
Deposit	01/11/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	50.00
Deposit	01/15/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	20.00
Deposit	01/19/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	70.00
Deposit	01/19/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	20.00
Deposit	01/19/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	60.00
Deposit	01/20/2021	Deposit	Deposit	4510 Arrowhead Park Fees	233.00
Deposit	01/20/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	45.00
Deposit	01/20/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	25.00
Deposit	01/21/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	5.00
Check	01/22/2021	Rong Sao	Pay station Reimbursement	4510 Arrowhead Park Fees	-20.00
Deposit	01/25/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	30.00
Deposit	01/25/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	25.00
Deposit	01/25/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4510 Arrowhead Park Fees	20.00
Total 4510 Arrowhead Park Fees					748.00
4536 Point Vista Park Fees					
Deposit	01/05/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	20.00
Deposit	01/06/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	10.00
Deposit	01/11/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	5.00
Deposit	01/11/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	20.00
Deposit	01/12/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	5.00
Deposit	01/13/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	25.00
Deposit	01/13/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	5.00
Deposit	01/14/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	5.00
Deposit	01/15/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	25.75
Deposit	01/20/2021	Deposit	Deposit	4536 Point Vista Park Fees	10.00
Deposit	01/22/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	15.00
Deposit	01/22/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	5.00
Deposit	01/25/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	15.00
Deposit	01/25/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	15.00
Deposit	01/26/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	25.00
Deposit	01/26/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	10.00
Deposit	01/27/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	5.00
Deposit	01/29/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	5.00
Deposit	01/29/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4536 Point Vista Park Fees	5.00
Total 4536 Point Vista Park Fees					230.75
4550 Sycamore Bend Fees					
Deposit	01/04/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	180.00
Deposit	01/04/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	5.00
Deposit	01/04/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	15.00
Deposit	01/05/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	50.00
Deposit	01/06/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	25.00
Deposit	01/06/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	25.00
Deposit	01/07/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	45.00
Deposit	01/08/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	10.00
Deposit	01/11/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	30.00
Deposit	01/14/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	10.00
Deposit	01/14/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	30.00
Deposit	01/15/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	30.00
Deposit	01/15/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	10.00
Deposit	01/19/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	25.00
Deposit	01/19/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	25.00
Deposit	01/19/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	40.00
Deposit	01/20/2021	Deposit	Deposit	4550 Sycamore Bend Fees	30.00
Deposit	01/20/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	495.00
Deposit	01/21/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	70.00
Deposit	01/21/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	10.00
Deposit	01/27/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	20.00

Town of Hickory Creek
Park and Recreation Detail

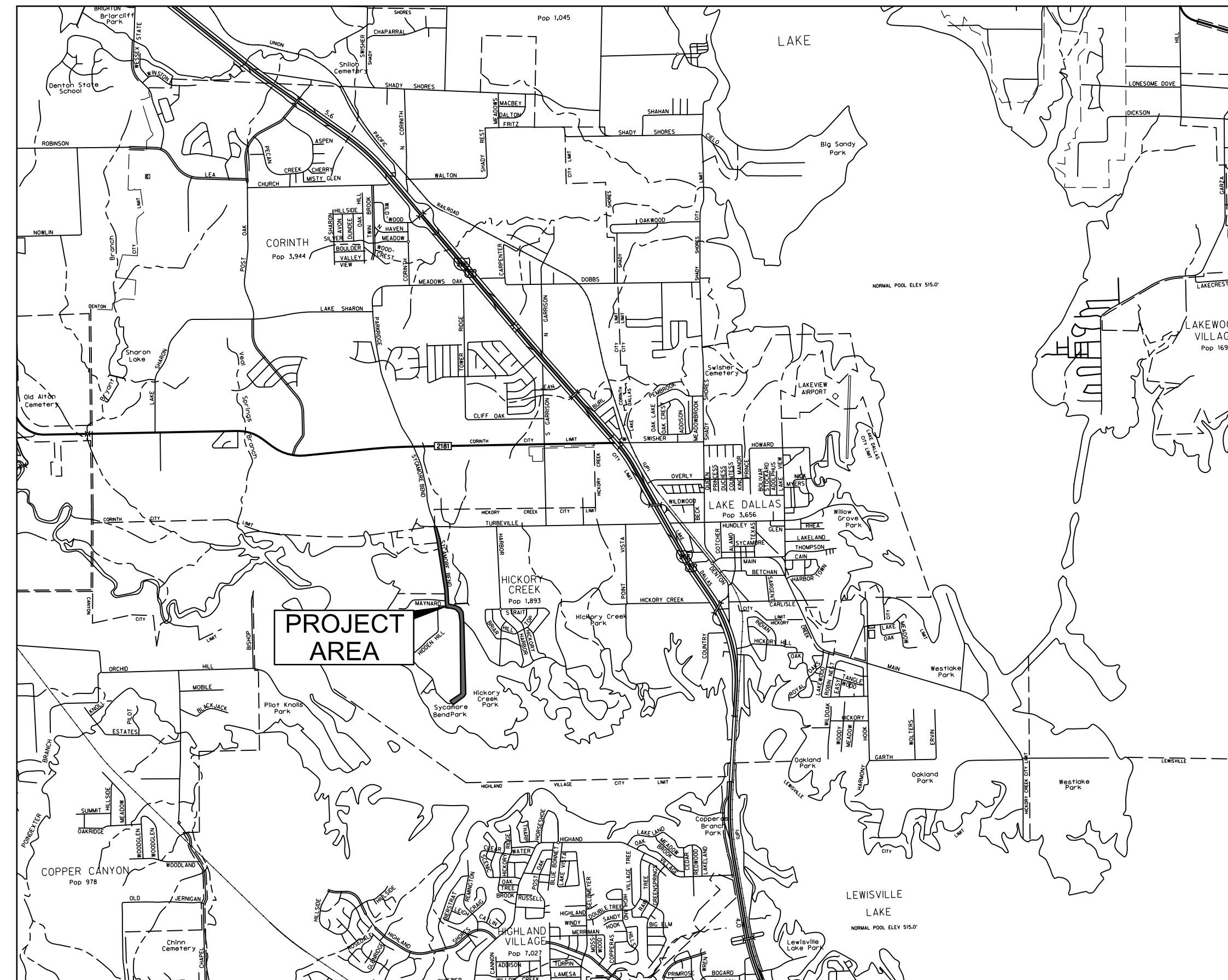
Accrual Basis

January 2021

Type	Date	Name	Memo	Account	Amount
Deposit	01/28/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	20.00
Deposit	01/28/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	15.00
Deposit	01/29/2021	MERCHANT SERVICE DESMERCH DEP	Deposit	4550 Sycamore Bend Fees	5.00
Total 4550 Sycamore Bend Fees					1,165.00
Total Miscellaneous Revenue					3,946.00
Total Income					3,946.00
Gross Profit					3,946.00
Expense					
Parks and Recreation					
5408 Tanglewood Park					
Check	01/11/2021	LCMUA DESUTILITY DD		5408 Tanglewood Park	160.02
Check	01/12/2021	HUDSON ENERGY SE DESDEBITDEBIT		5408 Tanglewood Park	12.05
Total 5408 Tanglewood Park					172.07
5412 KHCB					
Check	01/20/2021	Dinah Stults	Reimbursement for NWF Certification of Town P...	5412 KHCB	100.00
Check	01/28/2021	CHECKCARD 0127 KEEP TEXAS BEAUT		5412 KHCB	175.00
Total 5412 KHCB					275.00
Total Parks and Recreation					447.07
Parks Corps of Engineer					
5432 Arrowhead					
Check	01/04/2021	MERCHANT SERVICE DESMERCH FEE		5432 Arrowhead	77.90
Check	01/12/2021	HUDSON ENERGY SE DESDEBITDEBIT		5432 Arrowhead	32.88
Bill	01/15/2021	MiTech Services	Invoice: 4172	5432 Arrowhead	27.34
Bill	01/15/2021	Ventek International	Invoice# 125148	5432 Arrowhead	970.00
Bill	01/27/2021	Verizon Wireless	Invoice# 9870958234	5432 Arrowhead	7.00
Total 5432 Arrowhead					1,115.12
5434 Harbor Grove					
Check	01/12/2021	HUDSON ENERGY SE DESDEBITDEBIT		5434 Harbor Grove	30.14
Total 5434 Harbor Grove					30.14
5436 Point Vista					
Check	01/04/2021	MERCHANT SERVICE DESMERCH FEE		5436 Point Vista	35.97
Check	01/12/2021	HUDSON ENERGY SE DESDEBITDEBIT		5436 Point Vista	55.69
Bill	01/15/2021	Ventek International	Invoice# 125148	5436 Point Vista	970.00
Bill	01/27/2021	Verizon Wireless	Invoice# 9870958234	5436 Point Vista	7.00
Total 5436 Point Vista					1,068.66
5438 Sycamore Bend					
Check	01/04/2021	MERCHANT SERVICE DESMERCH FEE		5438 Sycamore Bend	69.39
Check	01/12/2021	HUDSON ENERGY SE DESDEBITDEBIT		5438 Sycamore Bend	59.48
Bill	01/15/2021	Ventek International	Invoice# 125148	5438 Sycamore Bend	970.00
Check	01/15/2021	CHECKCARD 0114 SOLAR ELECTRIC P		5438 Sycamore Bend	160.15
Bill	01/27/2021	Verizon Wireless	Invoice# 9870958234	5438 Sycamore Bend	7.00
Total 5438 Sycamore Bend					1,266.02
Total Parks Corps of Engineer					3,479.94
Total Expense					3,927.01
Net Ordinary Income					18.99
Net Income					18.99

CONSTRUCTION DOCUMENTS FOR TOWN OF HICKORY CREEK SYCAMORE BEND ROAD

60% DESIGN SUBMITTAL



TOWN OF HICKORY CREEK,
DENTON COUNTY, TX
JANUARY 2021



City close, lakeside living!

HALFF ASSOCIATES, INC.
TBPELS ENG. FIRM NO. F-312
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PREPARED BY, OR UNDER THE SUPERVISION OF:
KEVIN J. GRONWALDT 130871 1/13/2021
Name PE# Date



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PUBLIC WORKS
 TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

SHEET TITLE

SHEET
 INDEX



JANUARY
 2021

DATE

SHEET
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GENERAL CONSTRUCTION NOTES
PAVING GENERAL NOTES

1. All construction shall be in accordance with the standard specifications and details of the Town of Hickory Creek and the Fifth Edition of the 'Standard Specifications for Public Works Construction - North Central Texas' herein referred to as 'COG'. Copies may be obtained from the North Central Texas Council of Governments, 616 Six Flags Drive, Suite 200, Arlington, Texas 76005-5888.
 2. Subgrade preparation shall be in accordance with COG Item 301.
 3. Lime Stabilized subgrade shall be installed in accordance with COG Item 301.2. Lime shall be placed using the slurry method, to be mixed on-site and not trucked in. Refer to COG Item 301.2.1.1.
 4. The Contractor shall install supporting chairs for reinforcing steel on a one per square yard spacing in all concrete pavements. The chairs are to be plastic and installed as per COG Item 303.2.11.
 5. 20% (by weight) of the cement content may be replaced with Type C fly ash. Refer to COG Item 303.2.4.
 6. Concrete for all paving and curbs within Town of Hickory Creek shall have a minimum strength of 4,000 psi at 28 days for machine paved and 4,500 psi at 28 days for hand poured. The Town shall approve the concrete mix design in writing prior to use.
 7. Slump requirements for slip form paving shall be on average of three inches with a maximum of four inches; for hand formed paving it shall be an average of four inches with a maximum of five inches; and for sidewalk & other it shall be specified by the owner. Refer to COG Item 303.3.4.4.
 8. Curbs for concrete pavement shall be poured monolithically. Refer to COG Item 303.5.9.
 9. The Contractor shall use a liquid membrane-forming compound as per COG Item 303.2.13.1.1.
 10. Construction joints shall be used in all back-outs for driveways and inlets.
 11. Transverse joints shall be sawed on 15 foot centers for all pavement thicknesses. The concrete saw must be stationed on the job-site prior to placing the pavements. All joints shall be sawed within an eighteen (18) hour period from the time of the pour.
 12. Construction and longitudinal joints shall be placed in accordance with details. Saw joints to be 1/4 inch for each inch of pavement thickness.
 13. The Contractor shall submit a Jointing Plan, for review by the Town, prior to placing.
 14. Parkway, roadway ditches and adjacent disturbed areas for paving of roadways in undeveloped areas shall be seeded with Bermuda grass. Parkway and adjacent disturbed areas for paving of roadways in developed areas shall be block sodded with either Bermuda or St. Augustine to match the adjacent private property. Medians shall be block sodded. All sodding and seeding will be placed on four inches of topsoil. The Contractor is responsible for maintenance, including mowing and watering until vegetation is established at not less than 20 plants per square foot area, and until accepted by the Town.
- Unless stated otherwise in the Contract Documents, the Contractor is responsible for all testing. All final reports shall be turned in to the Town Inspector within five (5) working days. Failed samples must be reported to the Town Inspector immediately.
- a. The CONTRACTOR shall be responsible for notifying the Town Inspector at least 24 hours prior to any required testing.
 - b. Soil testing technicians shall provide written proof of having minimum of two (2) years of related field experience.
 - c. The CONTRACTOR shall coordinate all testing activities with the Town Inspector and shall facilitate required testing throughout the construction period. The Inspector shall be present during all testing.
 - d. The Town shall make final decision as to the validity of all testing results.
 - e. The CONTRACTOR shall be responsible for ensuring that materials to be tested are in compliance with all plans and specifications prior to testing. All materials found not to be in compliance with the plans and specifications before and after testing shall be removed and replaced at the CONTRACTOR'S expense.
 - f. All costs associated with the retesting of work that fails to meet the specifications required in the contract documents shall be borne by the CONTRACTOR. For Town projects retesting cost shall be withheld from pay requests submitted by the CONTRACTOR, this cost will be based on the Town's cost with no additional mark-up. A letter of acceptance will not be issued until all testing deficiencies are addressed and all related cost paid.
 - g. The Town Inspector shall be notified of concrete placement 24 hours in advance for steel and form inspection.
 - h. Subgrade Testing
 - 1). Samples shall be taken for all classifications of soils on site. Testing for sulfate presence and lime series tests shall be conducted for all samples prior to any stabilization. If sulfate content is greater than 2,000 ppm (parts per million), specific recommendation shall be made by geotechnical engineer for subgrade preparation and thicker pavement section to be approved by the Town. The use of lime or cement and the percent content shall comply with the Geotech Engineer recommendations. Additional geotechnical testing and recommendations may be required by Town as field conditions dictate. Atterberg Limits shall be determined on all Proctor samples.
 - 2). Gradations for lime treated subgrade shall be taken at intervals not exceeding 300 feet along road and must pass 100% through a 1 3/4" sieve and 60% through a No. 4 sieve according to NCTCOG Item 301.2.3.5.1.
- 3). Gradations for Portland cement treated subgrade shall be taken at intervals not exceeding 100 feet along road and must pass 100% through a 1" sieve and 80% through a No. 4 sieve according to NCTCOG Item 301.3.3.2.
 - 4). Lime subgrade shall be tested in accordance with NCTCOG Item 301.2.1.3. Tests will be performed by excavating deeper than lime treatment and administering a phenolphthalein indicator.
 - 5). Densities shall be taken on subgrade in accordance with the Wastewater General Notes 15.1.3 Mechanical Tamping and in accordance with NCTCOG Item 301.2.3.6 unless otherwise stated on the plans or in the specifications.
 - 6). All subgrade shall be visually 'proof rolled' after it is trimmed and prior to placement of steel.
 - 7). Densities shall be taken at least 72 hours before concrete placement (NCTCOG Item 303.5.1). If more than 72 hours elapse, densities must be retaken unless an approved emulsion sealant is used in accordance with NCTCOG Item 302.3.5.
 - 8). Locations for densities, gradations, and depth checks shall be at the discretion of the Inspector and shall be representative of the entire cross section of the subgrade.
 - 9). Subgrade failures shall be defined by Inspector or ENGINEER. Repair method will be discussed with Inspector or ENGINEER and approved prior to beginning repair work.
 - 10). Multiple tests may be required across width of right-of-way.
 - 11). For emulsion placement over subgrade refer to NCTCOG Item 302.3.5.2.
- 4). Forms shall not be removed from pavement, sidewalks, ramps, or retaining walls for 24 hours minimum, and shall not be backfilled less than 72 hours after concrete placement. Pavement shall have a minimum cure time of 7 days, but may be opened to traffic earlier at the discretion of the Inspector or ENGINEER only after review of compressive strength data. Temporary perpendicular crossings may be made after 72 hours by ramping soil over the new pavement at a depth of not less than 18-inches and a width of not less than 10-feet. Prior to grout wiping any concrete, CONTRACTOR shall demonstrate method of surface preparation to ensure adhesion of grout.
 - 5). All street pavement shall be cored to verify proper pavement thickness and strength prior to acceptance. Cores for strength and depth shall be 4-inches diameter and taken at intervals not exceeding 600 feet; cores for depth only shall be 2-inches diameter and shall be taken at intermediate intervals not exceeding 300-feet. Locations will be approved by the Town. Multiple cores may be required at each interval to represent entire cross section. All cores shall be taken at 28 days and results shall be correlated with the cylinder test results. Evaluation of cores will be in accordance with NCTCOG Item 303.8.2. All required pavement replacement shall be in full panel increments.
- J. Hot-Mix Asphalt Concrete Pavement Testing
- 1). Specifications shall follow COG Item 302 and conform to the TxDOT Standard for Hot-Mix Asphaltic Concrete.
 - 2). The asphaltic mixture shall be tested for oven burn off/gradation and stability.
 - 3). A relative density of not less than 92% will be required after final compaction of the in-place pavement section. The CONTRACTOR shall schedule the CMT Laboratory to come out in the field and establish a rolling pattern. The use of nuclear field density determinations shall not be accepted as the basis for acceptance with respect to density. The CONTRACTOR shall be responsible for assuring that the compaction of the asphaltic concrete in place will attain between 5% and 9% (five and nine percent) air voids. The CONTRACTOR'S responsibility for the required compaction includes the selection of rolling equipment and selection of rolling patterns to achieve the required compaction.
 - 4). HMAC mix temperature range at time of placement shall be between 260 degrees and 325 degrees. The asphaltic mixture shall not be placed when the air temperature is below 50 degrees but may be placed when the air temperature is above 40 degrees and rising, the temperature being taken in the shade and away from artificial heat.
- 5). In-place compaction control is required for all mixtures. Asphaltic concrete should be placed and compacted to contain not more than 9% (nine percent) nor less than 5% (five percent) air void unless otherwise indicated. The percent air voids will be calibrated using the maximum theoretical specific gravity of the mixture determined according to TxDOT Test Method Tex-227-F Roadway Specimen, which shall either be cores or sections of pavement, will be tested according to TxDOT Test Method Tex-207-F. The same specimen shall be used in determining both the theoretical density and field density.
 - 6). Prime coat will follow COG Items 302.7 and 302.9.6.1.
 - 7). Tack coat will follow COG Specifications Item 302.9.6.2.
 - 8). HMAC mix designs shall follow COG Item 302.9.3 and the grading tables included in this section. These mixtures will be in accordance with TxDOT Test Method Tex-204-F, design of Bituminous Mixtures.

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 KEVIN J. GRONWALDT 130871 1/13/2021
 Name PE# Date



PUBLIC WORKS
TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

SHEET TITLE

GENERAL NOTES
(SHEET 1 OF 2)



JANUARY
2021

DATE

SHEET
3

GENERAL CONSTRUCTION NOTES
STORM DRAIN GENERAL NOTES

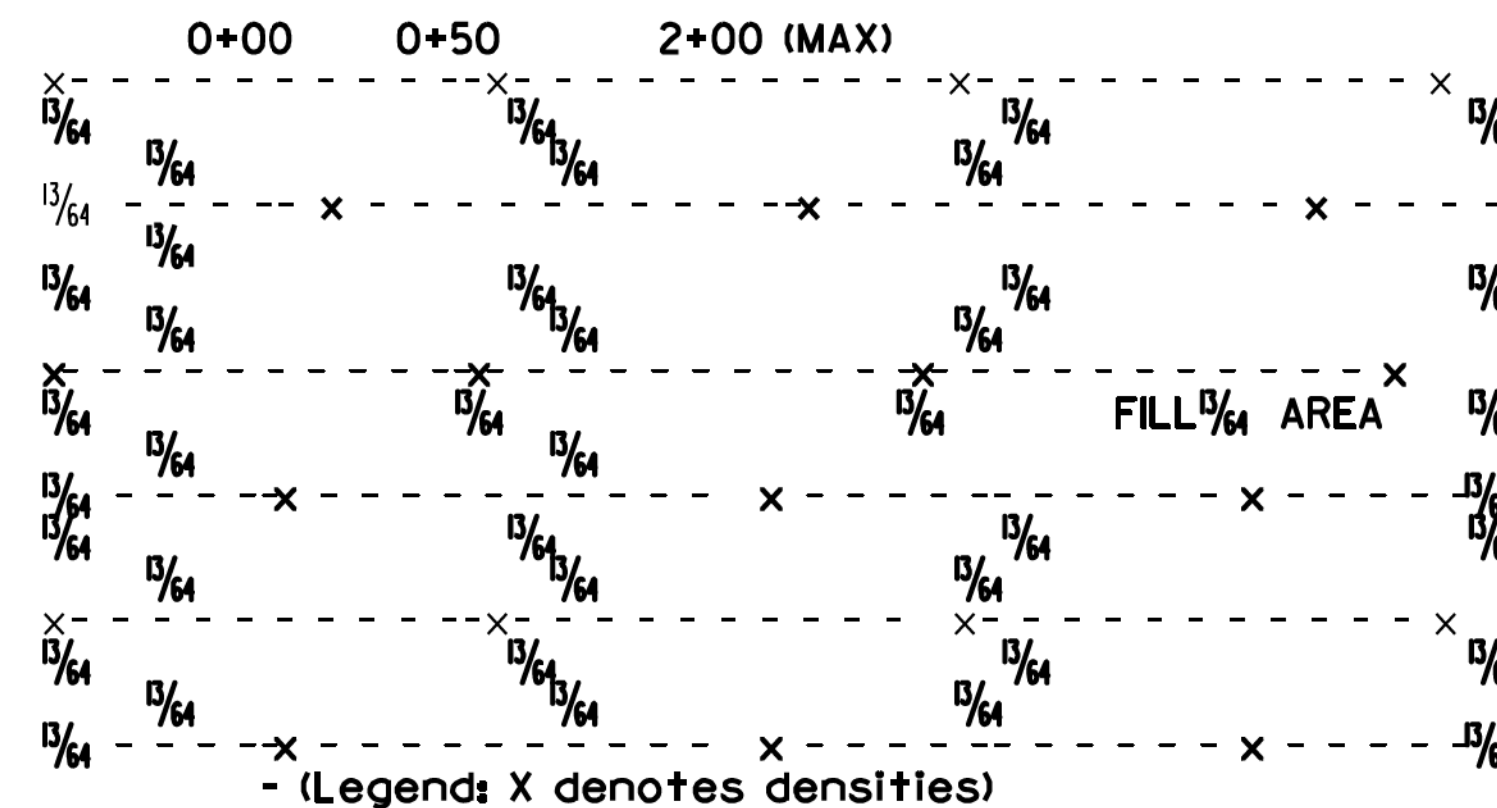
1. All construction shall be in accordance with the standard specifications of the Town of Hickory Creek and the Fifth Edition of the 'Standard Specifications for Public Works Construction - North g. Central Texas' herein referred to as 'COG' specifications. Copies may be obtained from the North Central Texas Council of Governments, 616 Six Flags Drive, Suite 200, Arlington, Texas 76005-5888. (817) 640- 3300.
2. Storm drain lines shall be installed per COG Item 508 specifications.
3. Only Reinforced Concrete Pipe (RCP) or Reinforced Concrete Box (RCB) is approved for use in public right-of-way or easements.
4. For pipes, embedment shall be per the Street Backfill & Repair detail on the Backfill / Embedment Standard Detail. For box culverts, embedment h. shall be per the Box Culvert Embedment detail on the Backfill / Embedment Standard Detail.

Note that Plowable backfill is only required below areas to be paved.
5. The CONTRACTOR shall seal all joints on closed conduits with Omni-Flex Joint seals, or equal; unless approved otherwise by the Town.
6. All concrete to be used in pre-cast products for reinforced concrete pipes or boxes shall come from plants certified by the National Pre-cast Concrete Association.
7. The CONTRACTOR shall use only pre-fabricated fittings on new construction projects. Field connections shall be made only to existing pipe with Town approval. The connection shall be a smooth connection and concrete wrapped on the outside and inside.
8. Concrete collars shall be constructed per the Concrete Collar Details on the Headwalls & Pipe Collars Standard Detail at all storm drain size and at grade changes or in curves where the joint is being pulled more than recommended by the manufacturer. Please refer to the details on the Headwalls & Pipe Collars Standard Detail and COG Item 508.3.4.1 specifications.
9. All inlets shall be poured in place. Precast inlets, junction boxes, manholes, and headwalls are not allowed without prior approval from Town Engineer.
10. Bottoms, tops, and variable height curb to be separate pours (3 pours) for curb inlets.
11. Curb inlet bottoms shall be poured prior to any paving.
12. Ring and cover on curb inlets to be located directly over the outlet pipe.
13. Concrete shall be made with a minimum of 5 sacks of cement and have a minimum compressive strength of 3,600 PSI at 28 days.
14. All reinforcing steel shall be new, neat, billet-steel per ASTM designation A-615, Grade 60, and shall be detailed and placed for ACI Manuals SP-88 and 318, latest additions. All reinforcing steel shall have minimum 15 inch lap splices, unless noted otherwise on the plans.
15. The CONTRACTOR shall use a liquid membrane-forming curing compound per COG Item 303.2.13.1.1.

16. All exposed surfaces shall have 3/4 -inch chamfer.
17. All closed conduits shall be Television Inspected.
18. The CONTRACTOR shall be responsible for notifying the Town Inspector at least 24 hours prior to any required testing.
 - a. Soil and material testing technicians shall provide written proof of having minimum of two (2) years of related field experience.
 - b. The CONTRACTOR shall coordinate all testing activities with the Town Inspector and shall facilitate required testing throughout the construction period. The Inspector shall be present during all testing.
 - c. The Town shall make final decision as to the validity of all testing results.
 - d. The CONTRACTOR shall be responsible for ensuring that materials to be tested are in compliance with all plans and specifications prior to testing. All materials found not to be in compliance with the plans and specifications before and after testing shall be removed and replaced at the CONTRACTOR'S expense.
 - e. All costs associated with the retesting of work that fails to meet the specifications required in the contract documents shall be borne by the CONTRACTOR. For Town projects, retesting cost shall be withheld from pay requests submitted by the CONTRACTOR, this cost will be based on the Town's cost with no additional mark-up. A letter of acceptance will not be issued until all testing deficiencies are addressed and all related cost paid.
 - f. The Town Inspector shall be notified of concrete placement 24 hours in advance for steel and form inspection.
 - g. One set of four cylinders (2-7 day, 2-28 day) for cast-in-place concrete shall be made for every day that concrete is placed (ASTM C-31). Air, slump, and temperature tests shall be taken for every set of cylinders made. Concrete with a temperature above 95 degrees will be rejected. Additional cylinders and or tests may be requested at the Inspector or ENGINEER'S discretion. Exterior forms shall not be removed for a minimum of 24 hours unless approved by Inspector or ENGINEER. Sulfate resistant concrete shall be used for all manholes.
 - h. Backfill and Density Testing
 - 1). All trenches shall be backfilled in accordance with standard details and mechanically compacted with approved vibratory methods in accordance with COG Item 504.5.3.2.1 and paragraph 3) below unless otherwise stated on the plans or in the specifications.

- 2). Densities shall conform to standard trench details, COG Item 504.5.3.2.1, and Paragraph 3) below unless otherwise stated on the plans or in the specifications. Proctor samples shall be taken for all classifications of soil on site. Atterberg Limits shall be determined on all Proctor samples. No 'potholing' will be allowed. Densities shall be taken on all storm drain laterals within the Right-of-Way and shall conform to Paragraph 3) below and COG Item 504.5.3.2.1, unless otherwise stated on the plans or in the specifications. Backfill adjacent to all structures shall be compacted manually and density tested on every lift.
 1. All ditch lines and bore pits shall be mechanically tamped.
 2. Backfill, other than select fill, may consist of onsite or off site inorganic soils and should be placed in loose lifts 6-inches - 8-inches in thickness (not to exceed 12-inches) and should be mechanically compacted to 98 percent of the maximum dry density as defined by ASTM D-698 (Standard Proctor) procedures under existing and proposed pavement, and to 95 percent standard proctor procedures elsewhere. The moisture content of the fill at the time of compaction shall be between minus 2% of optimum to four percentage points above the proctor optimum value.
 3. All backfill material to be select native material, 6' diameter clods and smaller, unless directed otherwise on the plans or in the specifications and to be mechanically tamped and density controlled as described in Paragraph b) above.
 4. Water Jetting is not permitted.
 5. Densities shall be taken every one (1) lift at staggered locations not to exceed 200 feet increments. Offset fifty (50') feet every other lift.
- 3). Mechanical Tamping of Backfill
 1. All ditch lines and bore pits shall be mechanically tamped.
 2. Backfill, other than select fill, may consist of onsite or off site inorganic soils and should be placed in loose lifts 6-inches - 8-inches in thickness (not to exceed 12-inches) and should be mechanically compacted to 98 percent of the maximum dry density as defined by ASTM D-698 (Standard Proctor) procedures under existing and proposed pavement, and to 95 percent standard proctor procedures elsewhere. The moisture content of the fill at the time of compaction shall be between minus 2% of optimum to four percentage points above the proctor optimum value.
 3. All backfill material to be select native material, 6' diameter clods and smaller, unless directed otherwise on the plans or in the specifications and to be mechanically tamped and density controlled as described in Paragraph b) above.
 4. Water Jetting is not permitted.
 5. Densities shall be taken every one (1) lift at staggered locations not to exceed 200 feet increments. Offset fifty (50') feet every other lift.

Densities may be taken at typical locations as shown below; also, densities will be taken at random locations and at the geotechnician's discretion.



UTILITY CONTACTS

COMPANY	CONTACT NAME	CONTACT
ATMOS ENERGY	RON HAYES	214-206-2813
CHARTER	GREG PIATT	817-298-3625
ENERGY TRANSFER	CELESTE WATERWALL	713-989-2831
CENTURYLINK	JIM TANKERSLEY	940-321-1920
ONCOR	ROBERT MARTINEZ	888-313-6862
GRANDE COMM	MICHAEL BOWDEN	MICHAEL.BOWDEN@MYGRANDE.COM
VERIZON/CYIENT	LARRY GUAY	940-765-6140
LCMUA	JEFF KNIGHT	940-497-2999

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 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

SHEET TITLE

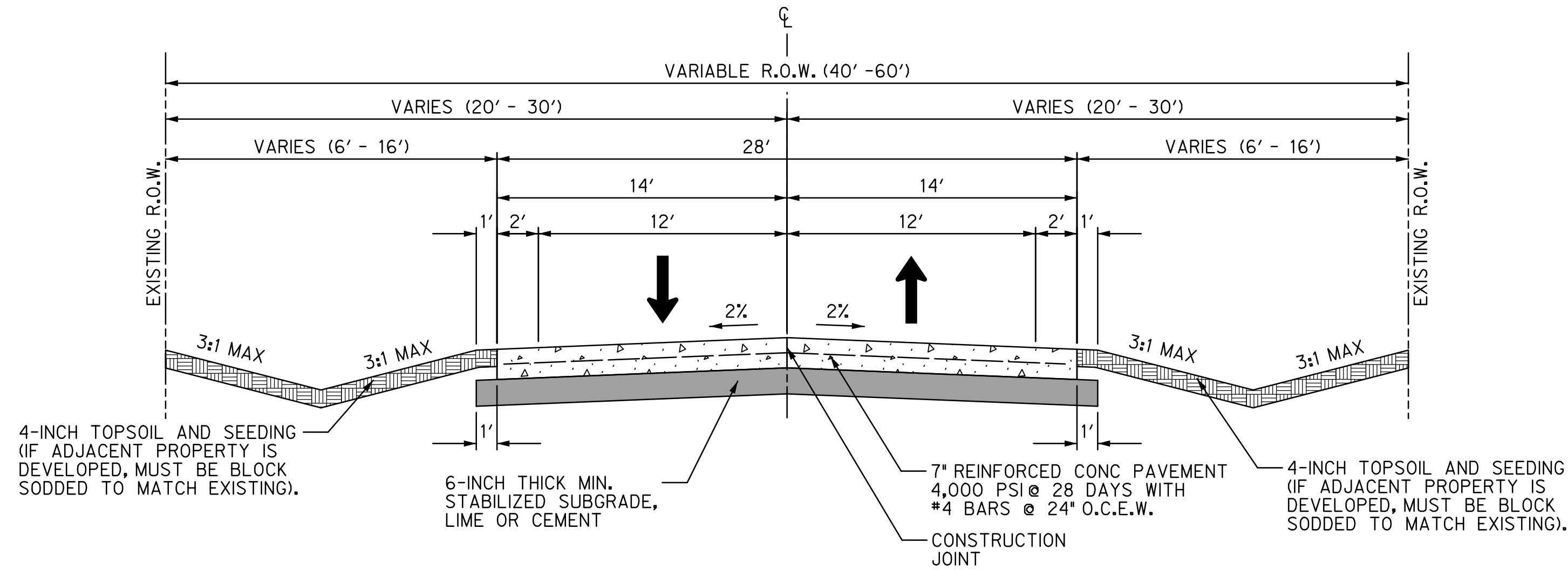
GENERAL NOTES
 (SHEET 1 OF 2)



JANUARY
 2021

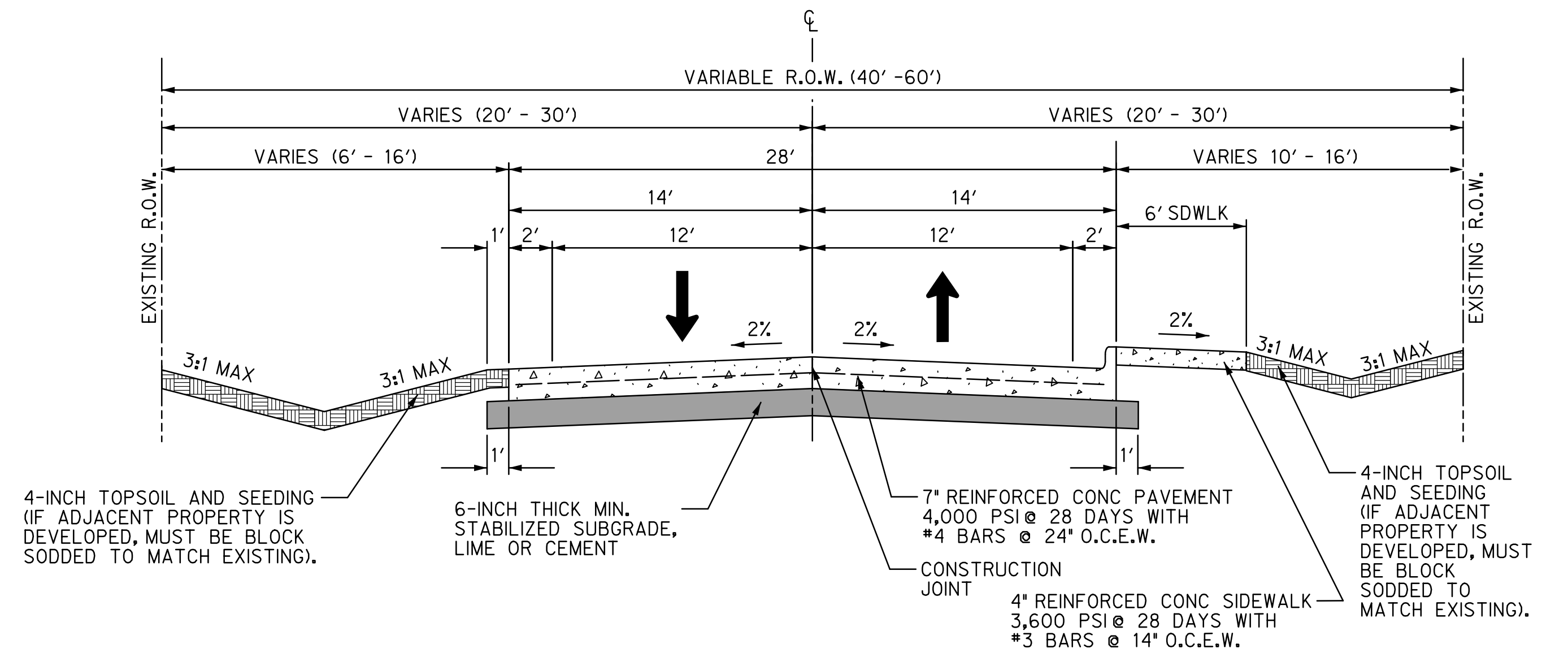
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SHEET
 4



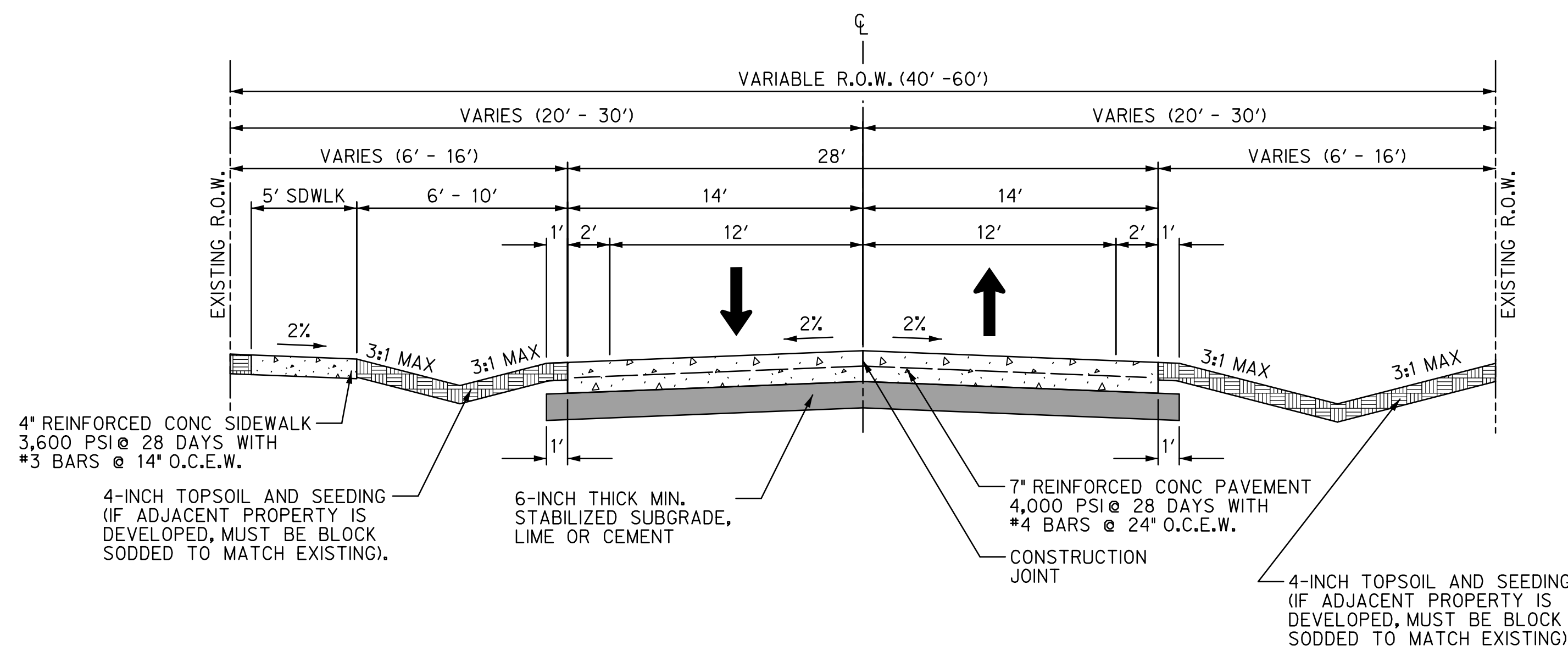
SYCAMORE BEND ROAD - TYPICAL SECTION
APPROXIMATE STATION RANGE: STA 1+00 TO 4+66.73

SCALE: H: 1"=5'
V: 1"=2'



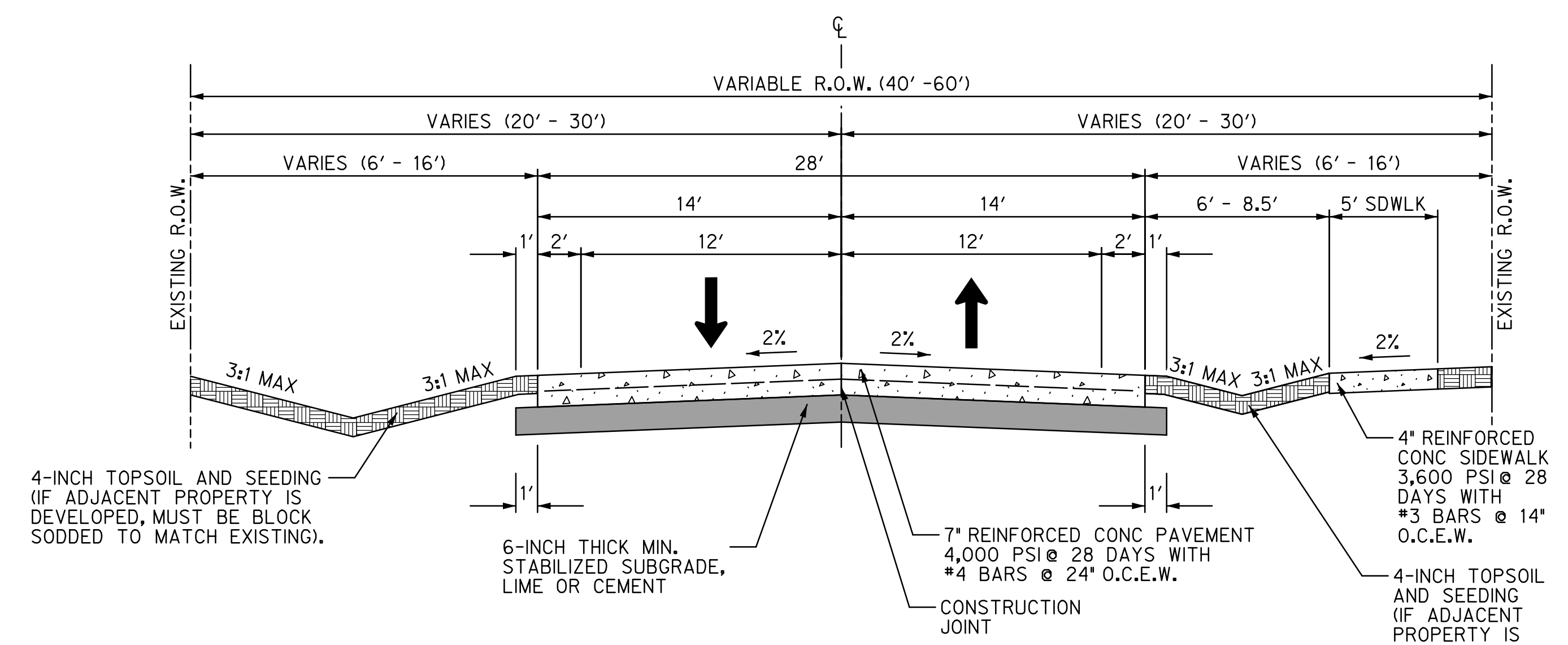
SYCAMORE BEND ROAD - TYPICAL SECTION
APPROXIMATE STATION RANGE: STA 33+87.82 TO 35+54.81

SCALE: H: 1"=5'
V: 1"=2'



SYCAMORE BEND ROAD - TYPICAL SECTION
APPROXIMATE STATION RANGE: STA 4+66.73 TO 32+87.82

SCALE: H: 1"=5'
V: 1"=2'



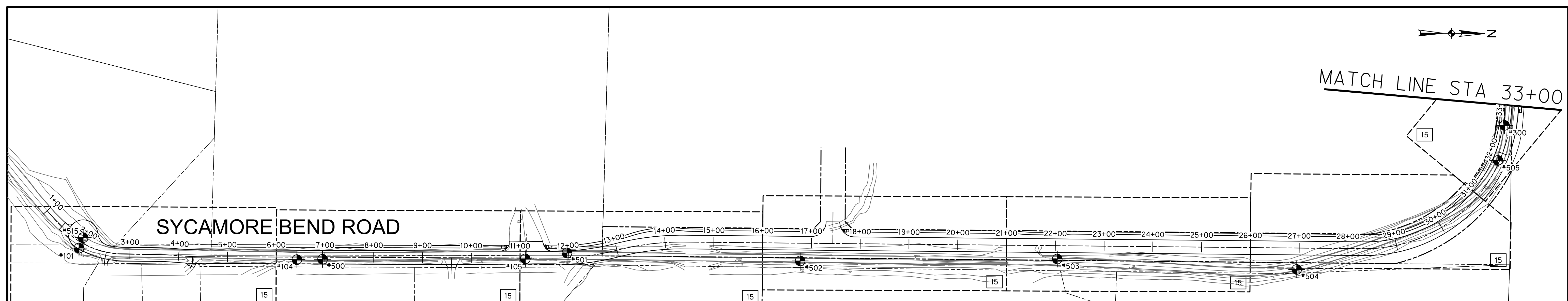
SYCAMORE BEND ROAD - TYPICAL SECTION
APPROXIMATE STATION RANGE: STA 35+54.81 TO 60+00

SCALE: H: 1"=5'
V: 1"=2'

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KEVIN J. GRONWALDT 130871 1/13/2021
Name PE# Date



MATCH LINE STA 33+00

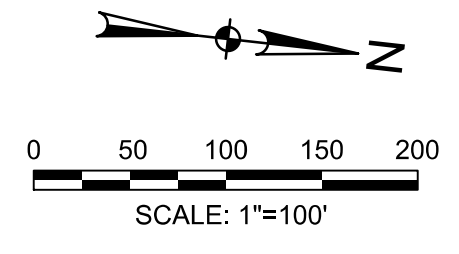
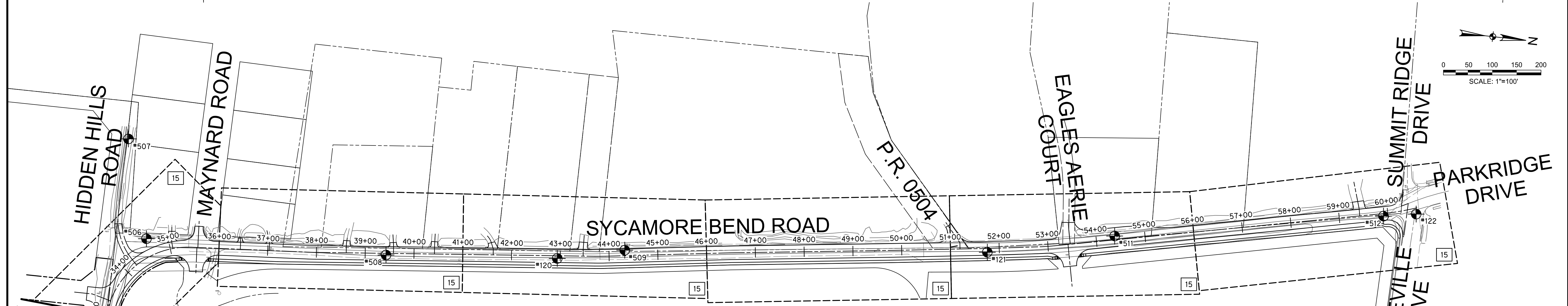


CENTERLINE COORDINATES

STATION	NORTHING	EASTING	DESCRIPTION
1+44.53	7089915.05	2410668.89	BEGIN SYCAMORE BEND
2+87.89	7090043.69	2410723.11	P.T.
3+55.36	7090111.16	2410723.16	P.C.
3+97.64	7090153.40	2410724.88	P.R.C.
4+43.99	7090199.70	2410726.58	P.T.
11+66.60	7090922.29	2410721.56	P.C.
13+01.15	7091055.28	2410703.65	P.R.C.
14+38.73	7091191.30	2410685.72	P.T.
28+32.90	7092585.47	2410683.99	P.C.
32+80.89	7092884.22	2410406.85	P.T.
33+01.62	7092885.80	2410386.18	P.C.
35+43.87	7093043.50	2410229.54	P.T.

CENTERLINE COORDINATES

STATION	NORTHING	EASTING	DESCRIPTION
37+82.97	7093282.02	2410212.93	P.C.
37+98.23	7093297.23	2410211.66	P.T.
43+70.95	7093867.18	2410155.44	P.C.
43+92.79	7093888.86	2410152.85	P.T.
46+47.56	7094141.17	2410117.42	P.I.
49+74.20	7094465.18	2410076.10	P.I.
51+73.23	7094662.46	2410049.74	P.I.
52+78.38	7094766.53	2410034.74	P.C.
53+13.70	7094801.29	2410028.54	P.T.
59+87.01	7095459.85	2409888.36	P.C.
60+40.65	7095511.66	2409874.56	END SYCAMORE BEND



CONTROL POINT COORDINATES

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
101	7089951.28	2410711.65	542.49	SMNSTP
104	7090398.25	2410730.42	549.68	SMNSTP
105	7090866.55	2410723.71	545.10	FIRTP4-RCH
120	7093790.97	2410168.48	567.90	FIRTP4-RCH
121	7094665.66	2410057.14	564.68	SMNWH
122	7095530.53	2409881.03	574.91	SMNWTP
300	7092870.77	2410428.29	557.37	SPK
500	7090450.85	2410729.08	549.53	SPKTP
501	7090951.78	2410710.68	542.80	SPKTP
502	7091429.92	2410721.76	540.75	SPKTP
503	7091956.92	2410712.06	532.21	SPKTP

CONTROL POINT COORDINATES

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
504	7092448.10	2410728.01	542.61	SPKTP
505	7092858.01	2410500.24	554.47	SPKTP
506	7092949.60	2410222.74	568.91	SPKTP
507	7092889.98	2410023.66	582.12	SPKTP
508	7093441.32	2410200.75	567.02	SPKTP
509	7093926.58	2410136.14	568.31	SPKTP
510	7094436.03	2410080.33	565.36	SPKTP
511	7094921.42	2409994.83	568.37	SPKTP
512	7095464.54	2409892.72	574.30	SPKTP
515	7089959.63	2410690.16	541.89	SPKTP

GRID TO SURFACE SCALE FACTOR: 1.00015063

LEGEND

- SHEET LIMITS
- CENTERLINE PAVING IMPROVEMENTS
- PAVING SHEET No.
- CONTROL POINT No.

HALFF ASSOCIATES, INC.
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 Name PE# Date



PUBLIC WORKS
 TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

SHEET TITLE

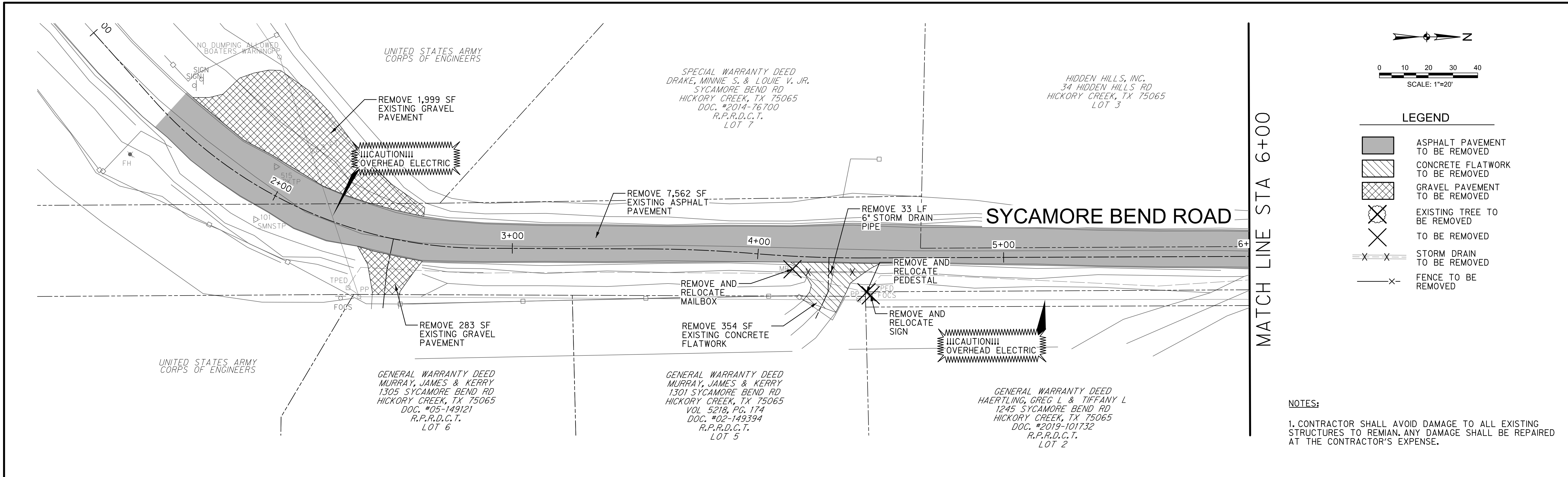
PROJECT
 LAYOUT



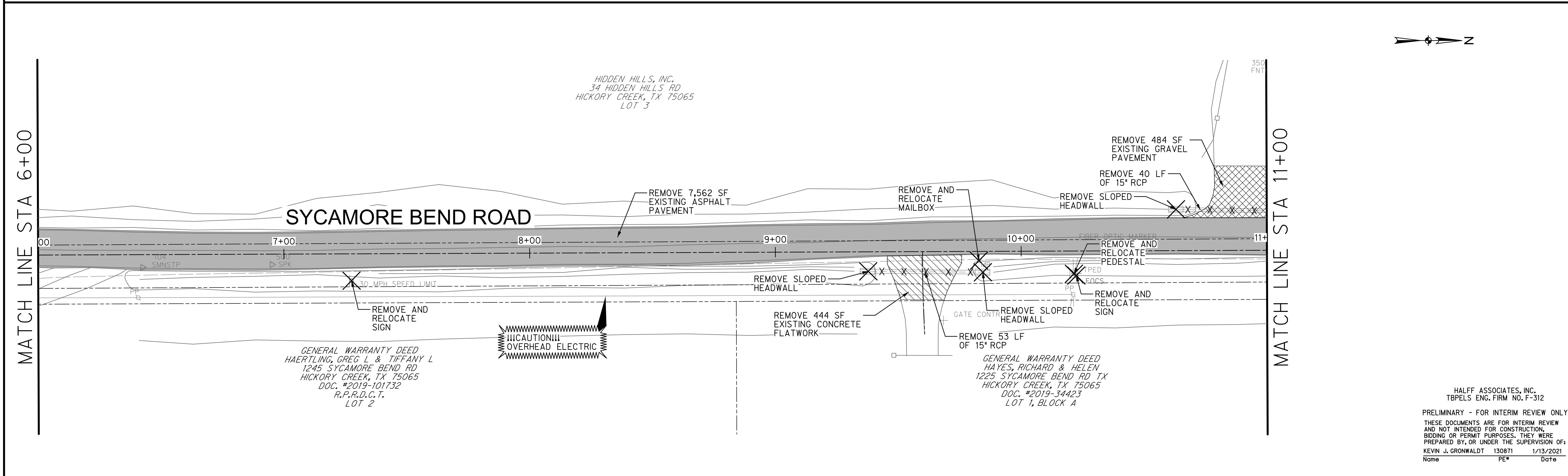
JANUARY
 2021

DATE

SHEET
 5



NOTES:
 1. CONTRACTOR SHALL AVOID DAMAGE TO ALL EXISTING STRUCTURES TO REMAIN. ANY DAMAGE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.



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 Name PE# Date

GENERAL WARRANTY DEED
 SYCAMORE COVE-HICKORY CREEK LP
 SYCAMORE BEND RD
 HICKORY CREEK, TX 75065
 DOC# 2020-128176
 LOT 2

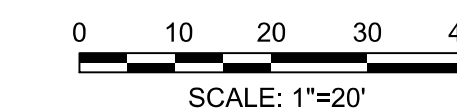
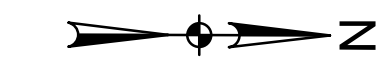
HIDDEN HILLS, INC.
 34 HIDDEN HILLS RD
 HICKORY CREEK, TX 75065
 LOT 3

GENERAL WARRANTY DEED
 HAYES, RICHARD & HELEN
 1225 SYCAMORE BEND RD TX
 HICKORY CREEK, TX 75065
 DOC. #2019-34423
 LOT 1, BLOCK A

MATCH LINE STA 11+00

MATCH LINE STA 16+00

SYCAMORE BEND ROAD



LEGEND

- ASPHALT PAVEMENT TO BE REMOVED
- CONCRETE FLATWORK TO BE REMOVED
- GRAVEL PAVEMENT TO BE REMOVED
- EXISTING TREE TO BE REMOVED
- TO BE REMOVED
- STORM DRAIN TO BE REMOVED
- FENCE TO BE REMOVED

NOTES:

1. CONTRACTOR SHALL AVOID DAMAGE TO ALL EXISTING STRUCTURES TO REMAIN. ANY DAMAGE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

MATCH LINE STA 16+00

MATCH LINE STA 21+00

SYCAMORE BEND ROAD



GENERAL WARRANTY DEED
 SYCAMORE COVE-HICKORY CREEK LP
 1501 LYNDON B JOHNSON FWY STE 300
 FARMERS BRANCH, TX
 DOC# 2020-128176
 LOT 2

GENERAL WARRANTY DEED
 SYCAMORE COVE-HICKORY CREEK LP
 1501 LYNDON B JOHNSON FWY STE 300
 FARMERS BRANCH, TX
 DOC# 2020-128176
 LOT 2

UNITED STATES ARMY
 CORPS OF ENGINEERS

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PUBLIC WORKS
 TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

SHEET TITLE

DEMOLITION PLAN
 STA 11+00 TO STA 21+00



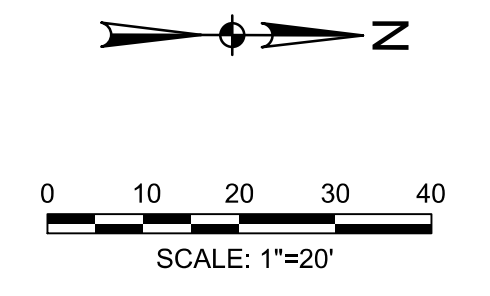
JANUARY
 2021

DATE

SHEET
 8

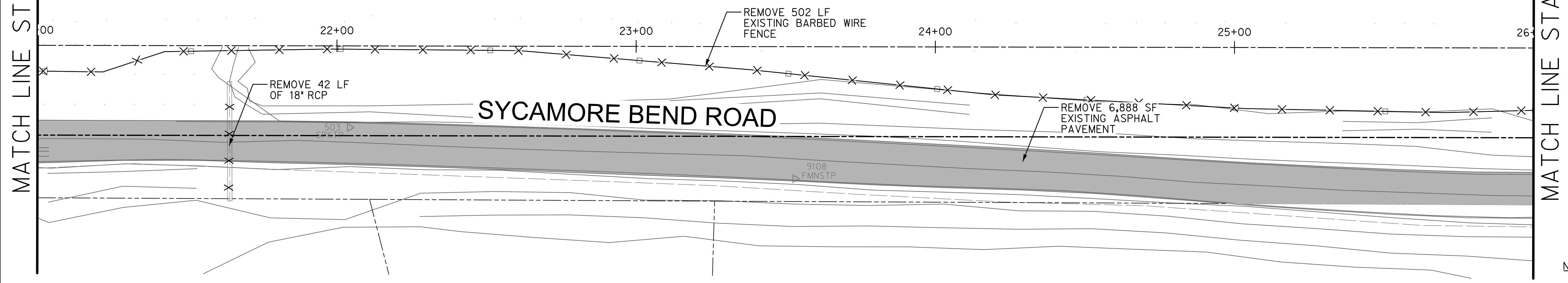
MATCH LINE STA 21+00

MATCH LINE STA 26+00



LEGEND

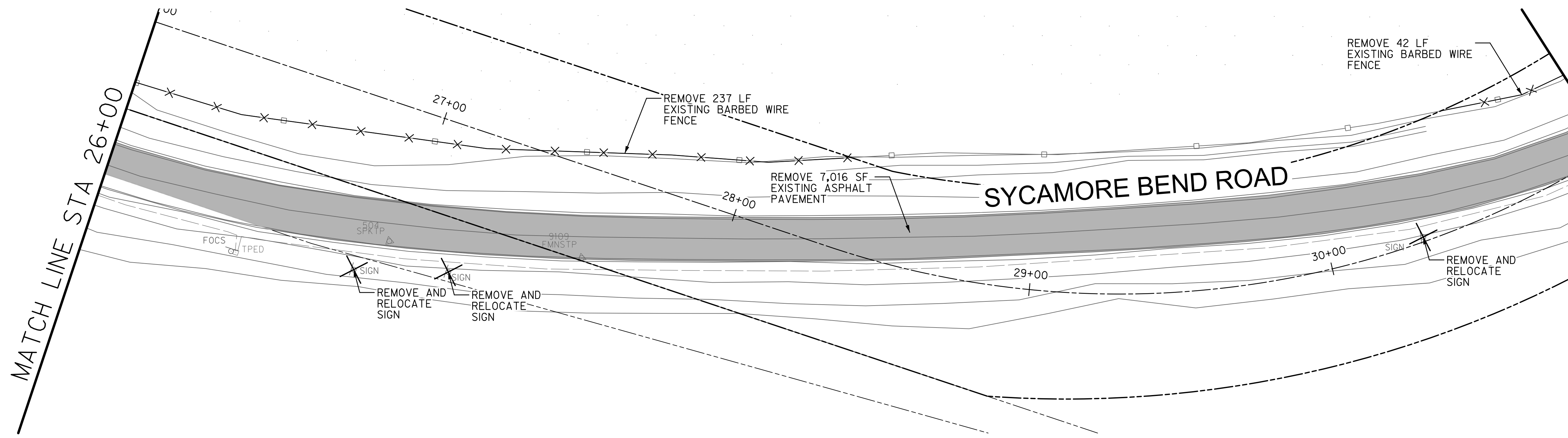
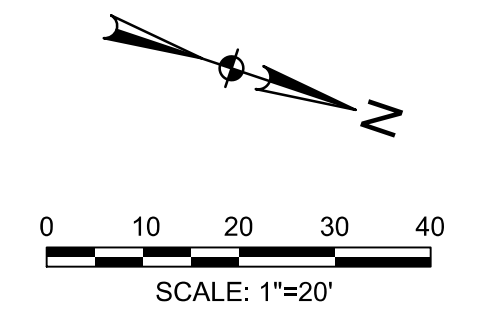
- ASPHALT PAVEMENT TO BE REMOVED
- CONCRETE FLATWORK TO BE REMOVED
- GRAVEL PAVEMENT TO BE REMOVED
- EXISTING TREE TO BE REMOVED
- TO BE REMOVED
- STORM DRAIN TO BE REMOVED
- FENCE TO BE REMOVED



NOTES:
 1. CONTRACTOR SHALL AVOID DAMAGE TO ALL EXISTING STRUCTURES TO REMAIN. ANY DAMAGE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

MATCH LINE STA 26+00

MATCH LINE STA 31+00



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PUBLIC WORKS
 TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

SHEET TITLE

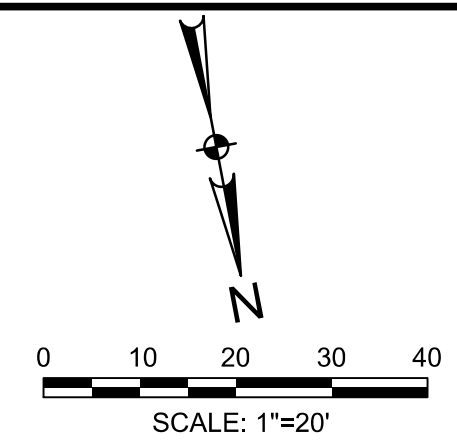
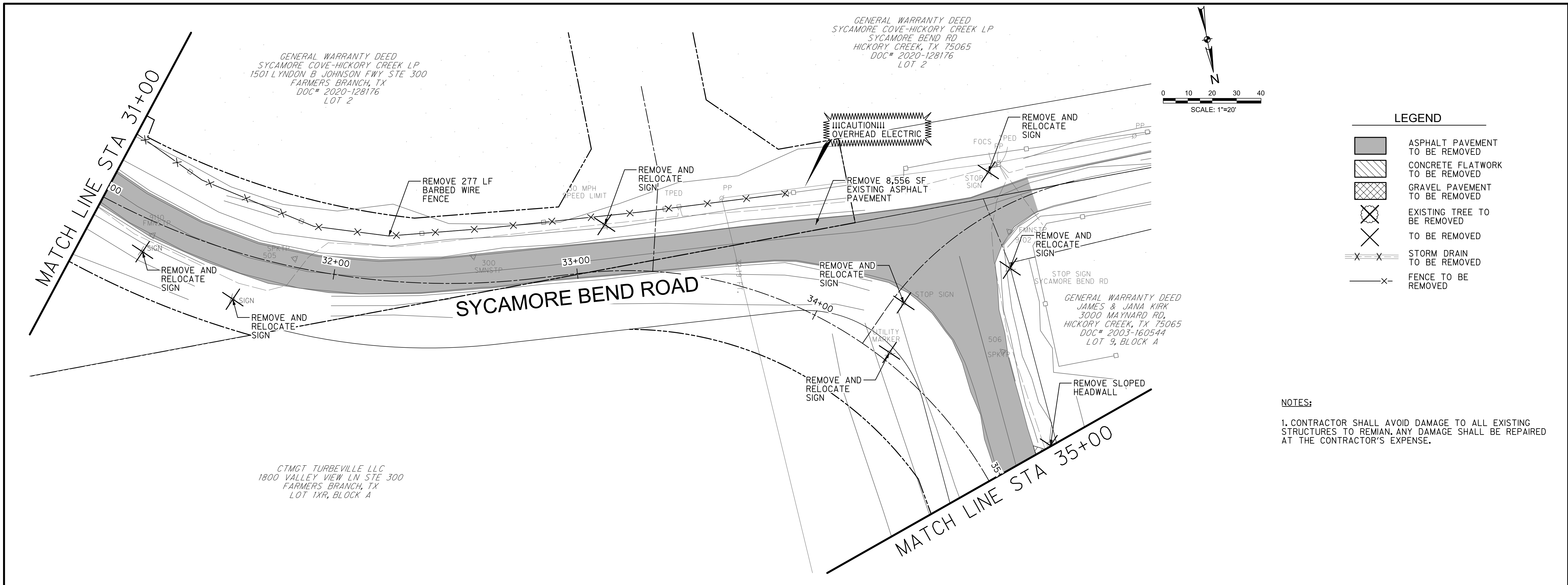
DEMOLITION PLAN
 STA 21+00 TO STA 31+00



JANUARY
 2021

DATE

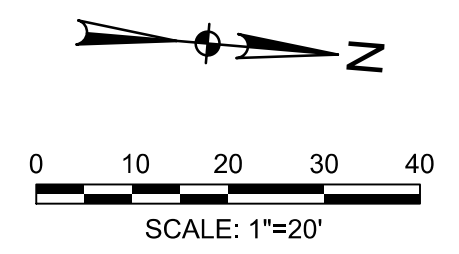
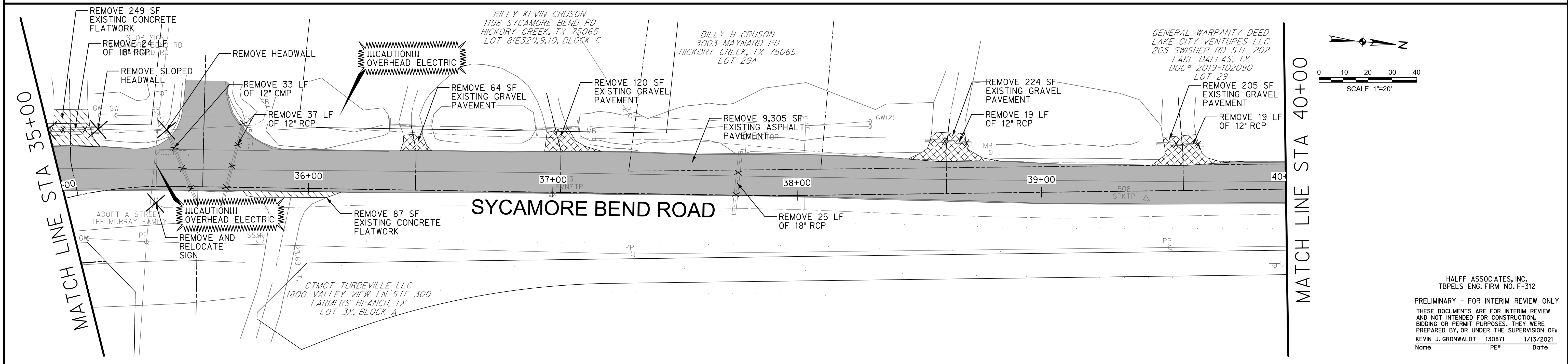
SHEET
 9



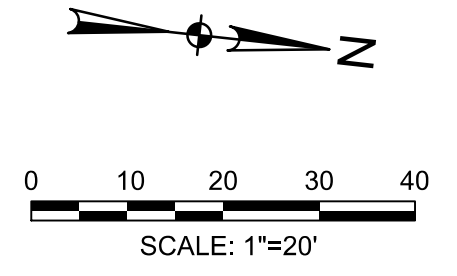
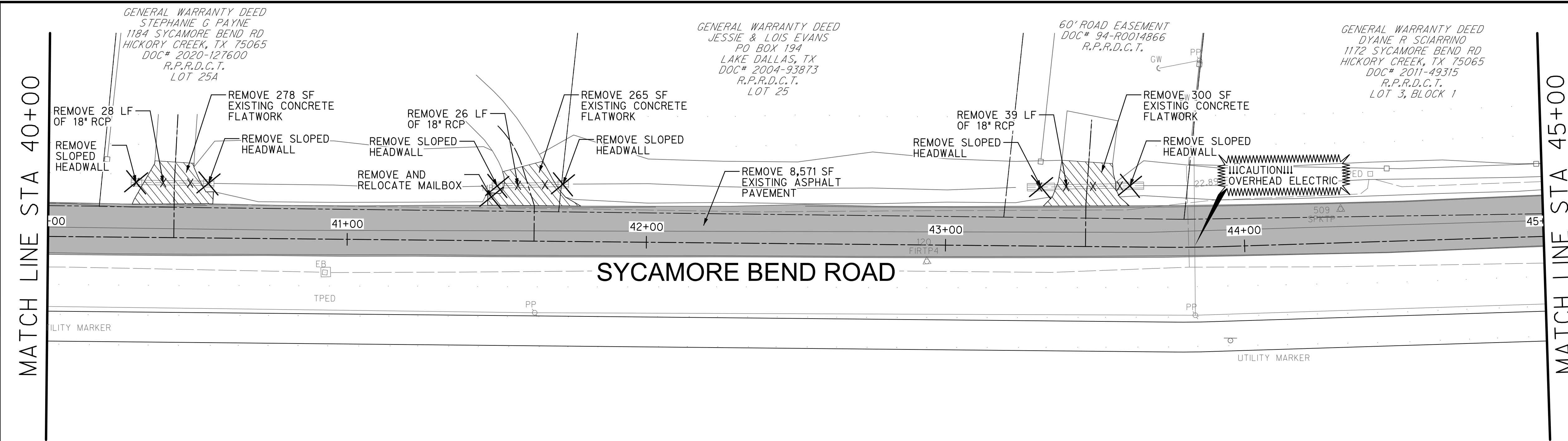
LEGEND

	ASPHALT PAVEMENT TO BE REMOVED
	CONCRETE FLATWORK TO BE REMOVED
	GRAVEL PAVEMENT TO BE REMOVED
	EXISTING TREE TO BE REMOVED
	TO BE REMOVED
	STORM DRAIN TO BE REMOVED
	FENCE TO BE REMOVED

NOTES:
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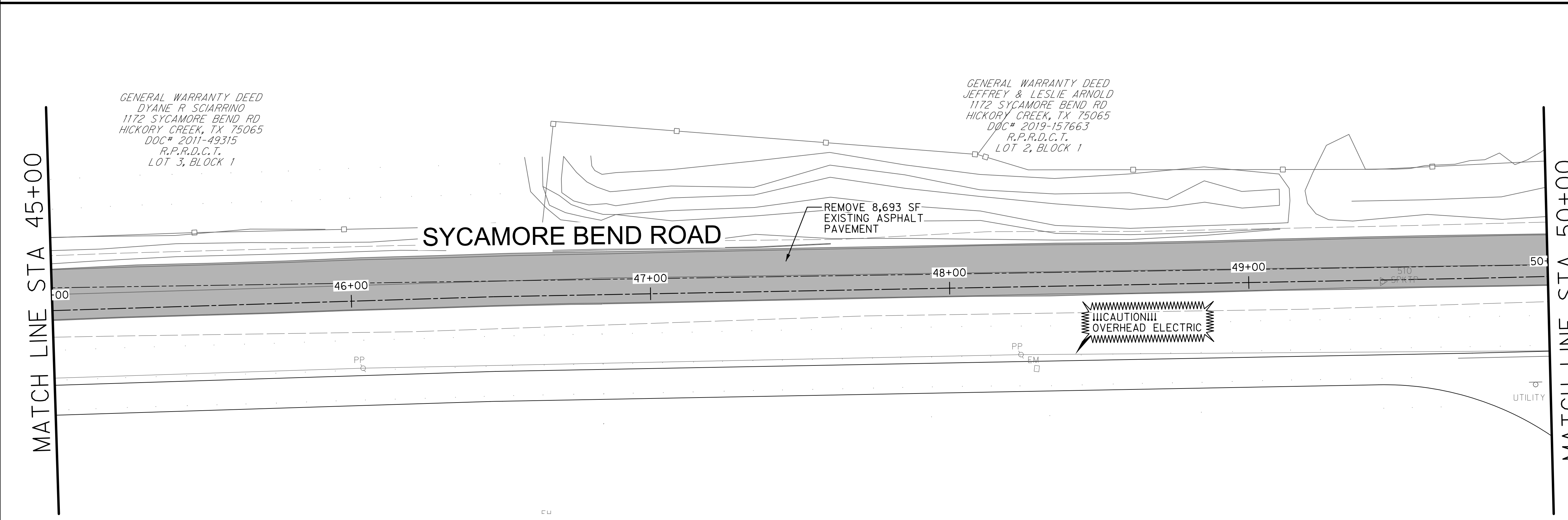
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 Name PE# Date



LEGEND

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	CONCRETE FLATWORK TO BE REMOVED
	GRAVEL PAVEMENT TO BE REMOVED
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PUBLIC WORKS
 TOWN OF HICKORY CREEK

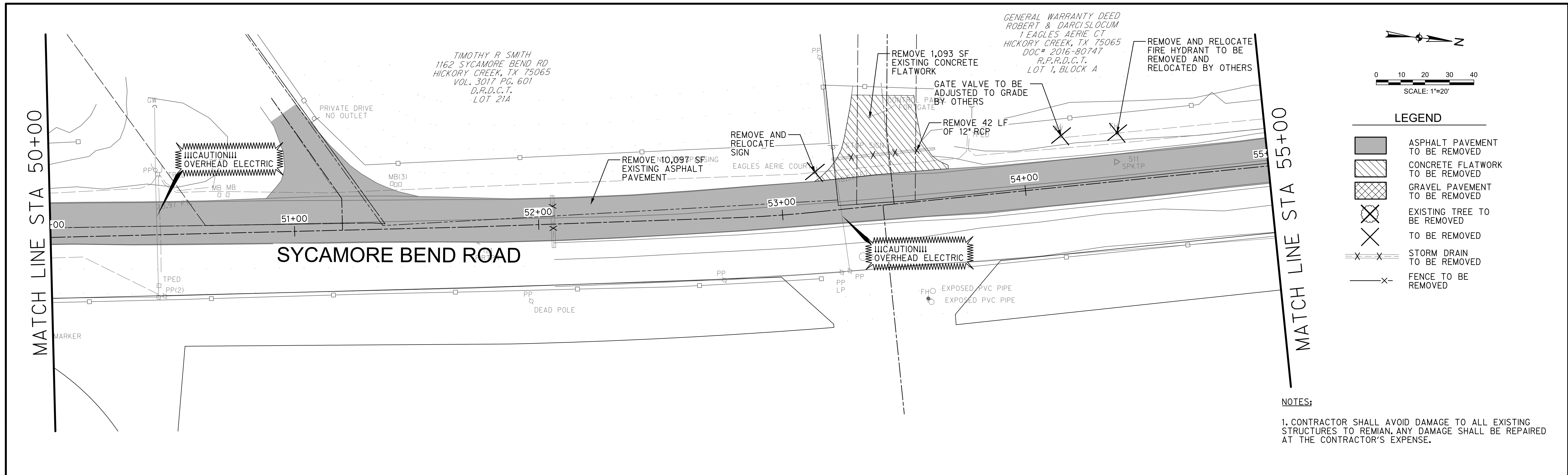
SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

DEMOLITION PLAN
 STA 40+00 TO STA 50+00

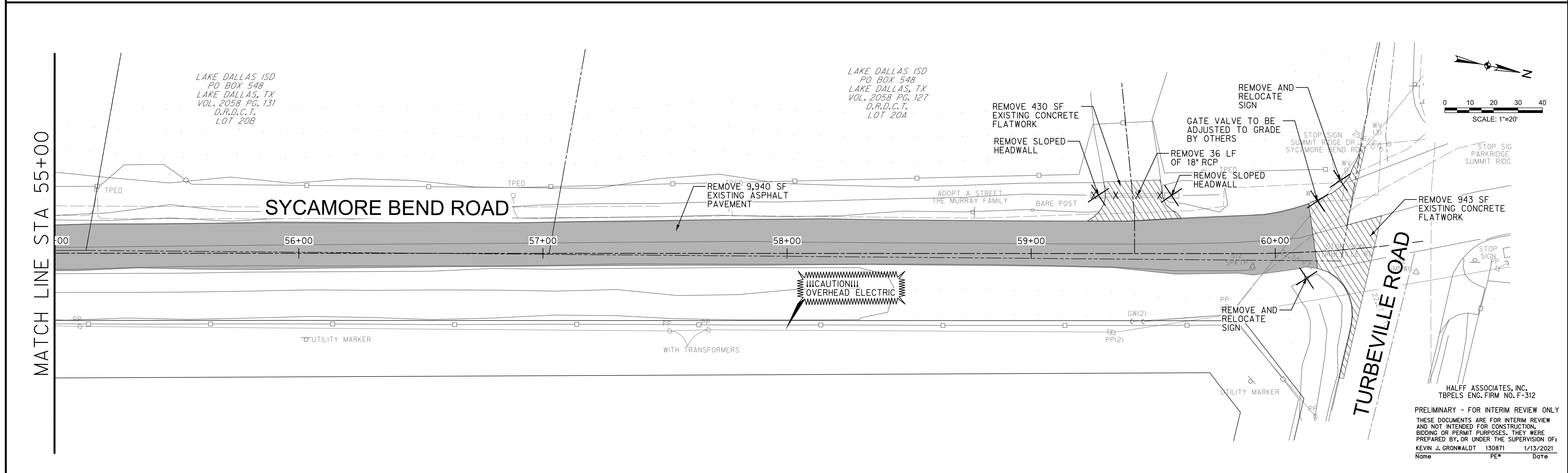


JANUARY
 2021

SHEET
 11

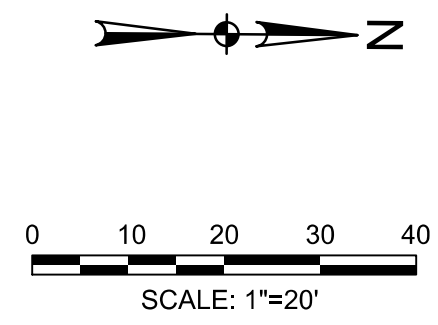
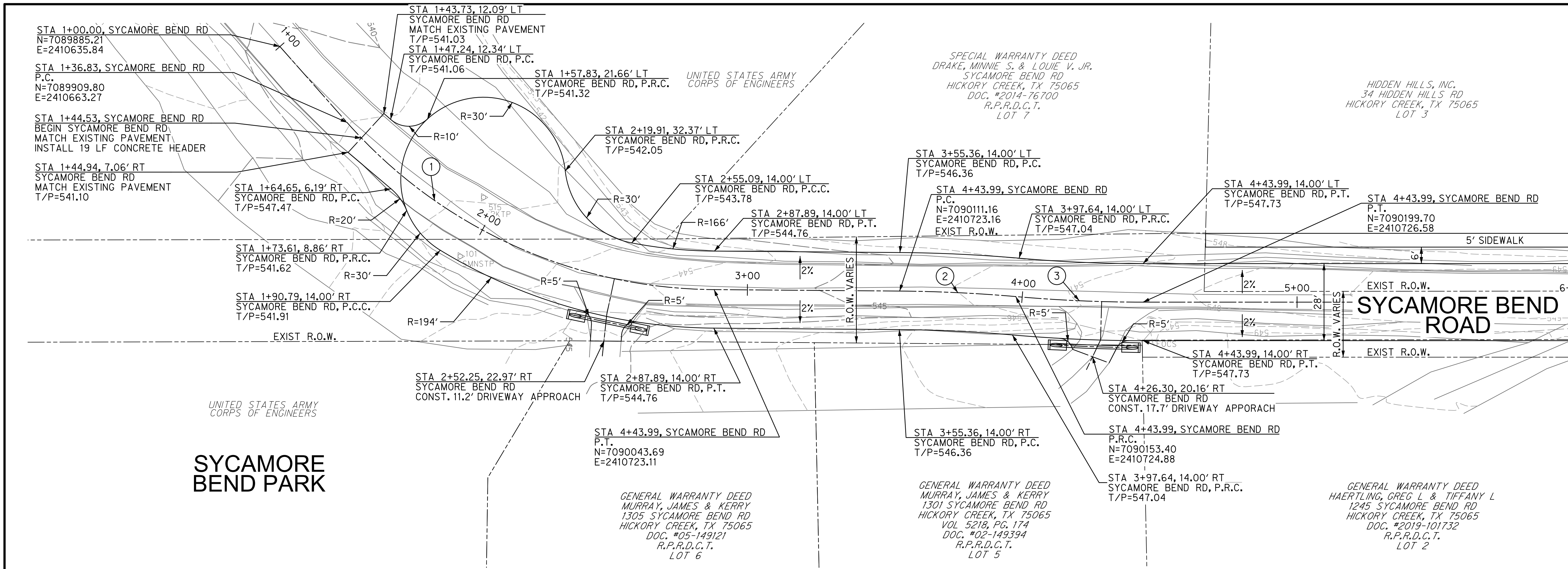


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 Name PE# Date

<p>HICKORY CREEK TX City-close, lakeside living!</p>	<p>PUBLIC WORKS TOWN OF HICKORY CREEK</p>	<p>SYCAMORE BEND ROAD FROM TURBEVILLE ROAD TO SYCAMORE BEND PARK</p>	<p>DEMOLITION PLAN STA 50+00 TO END</p>	<p>4000 FOSSIL CREEK BLVD FORT WORTH, TEXAS 76137-2797 TEL (817) 947-1422 FAX (817) 232-9784 TBPELS Engineering Firm #312</p>	<p>SHEET JANUARY 2021 12</p>
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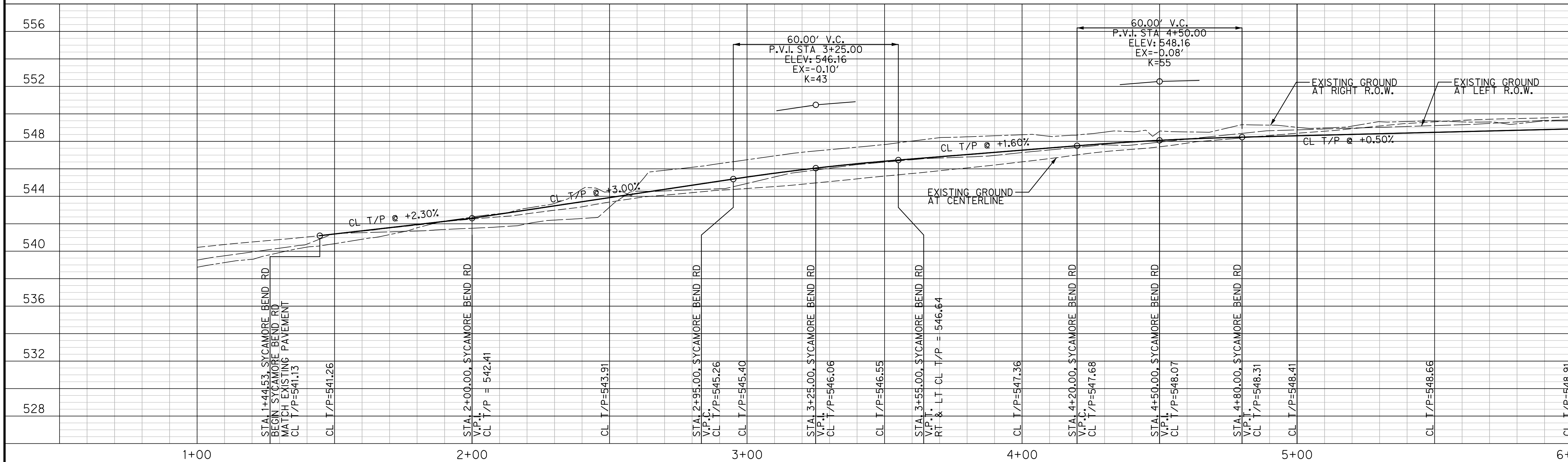


CURVE DATA

①	Δ=48° 4' 58"
	R=180'
	L=151.06'
	T=80.30'
②	Δ=4° 34' 16"
	R=530'
	L=42.28'
	T=21.15'
③	Δ=5° 00' 38"
	R=530'
	L=46.35'
	T=23.19'

MATCH LINE STA 6+00

SYCAMORE BEND ROAD



MATCH LINE STA 6+00

PROFILE SCALE
HORIZ. 1"=20'
VERT. 1"=4'

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Name PE# Date



PUBLIC WORKS
TOWN OF HICKORY CREEK

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

PAVING PLAN AND PROFILE
BEGIN TO STA 6+00



JANUARY
2021
SHEET
13

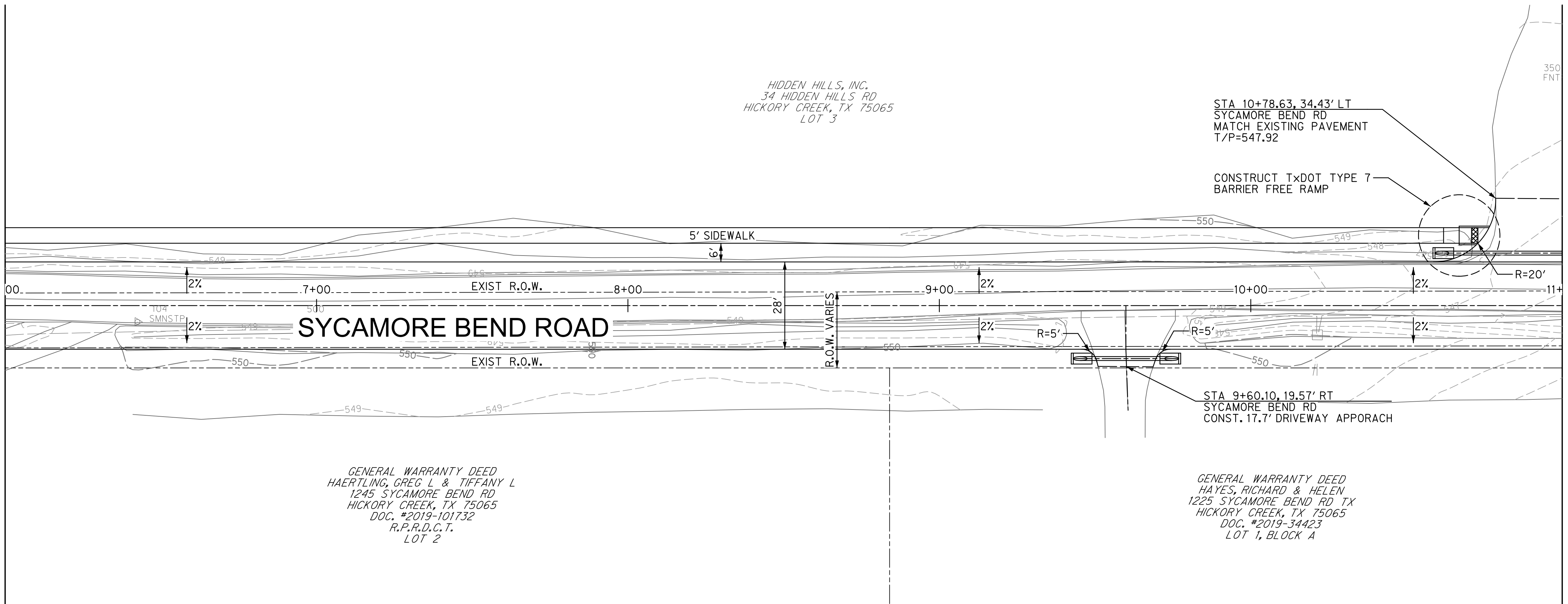
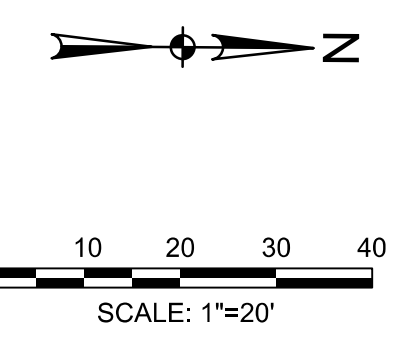
HIDDEN HILLS, INC.
34 HIDDEN HILLS RD
HICKORY CREEK, TX 75065
LOT 3

GENERAL WARRANTY DEED
HAERTLING, GREG L & TIFFANY L
1245 SYCAMORE BEND RD
HICKORY CREEK, TX 75065
DOC. #2019-101732
R.P.R.D.C.T.
LOT 2

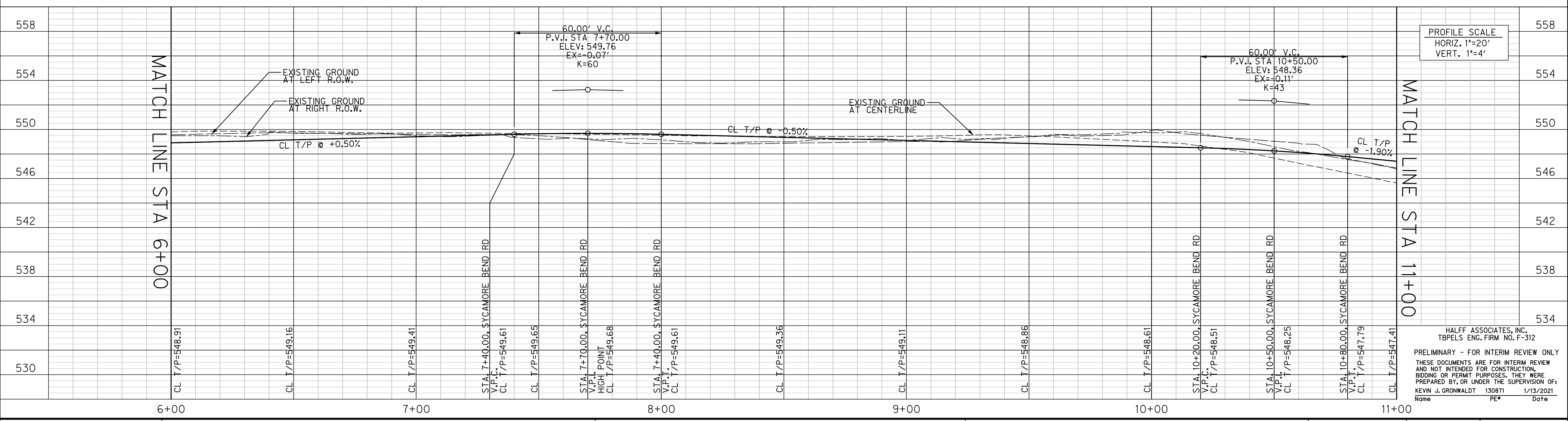
GENERAL WARRANTY DEED
HAYES, RICHARD & HELEN
1225 SYCAMORE BEND RD TX
HICKORY CREEK, TX 75065
DOC. #2019-34423
LOT 1, BLOCK A

MATCH LINE STA 6+00

MATCH LINE STA 11+00



SYCAMORE BEND ROAD



PROFILE SCALE
HORIZ. 1"=20'
VERT. 1"=4'

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PUBLIC WORKS
TOWN OF HICKORY CREEK

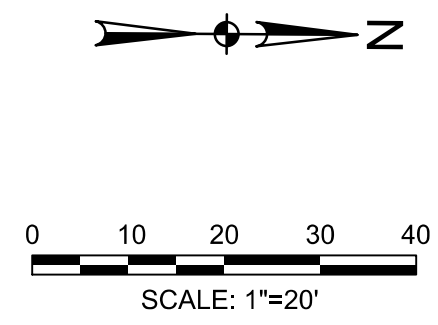
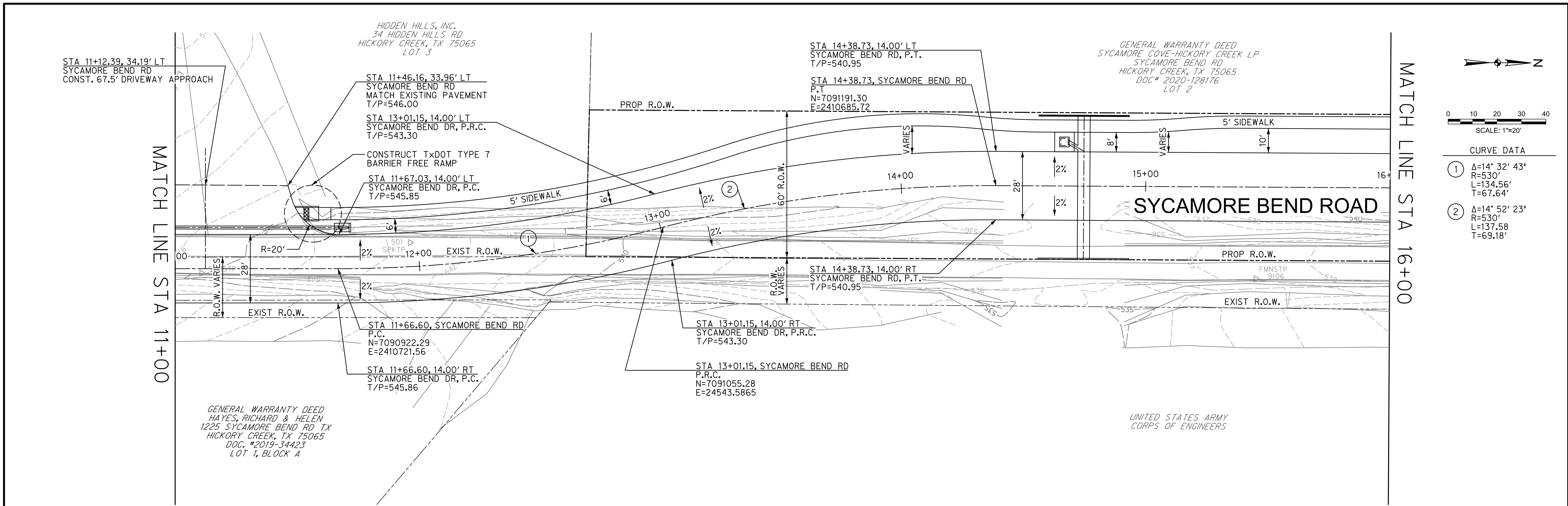
SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

PAVING PLAN AND PROFILE
STA 6+00 TO STA 11+00



JANUARY
2021

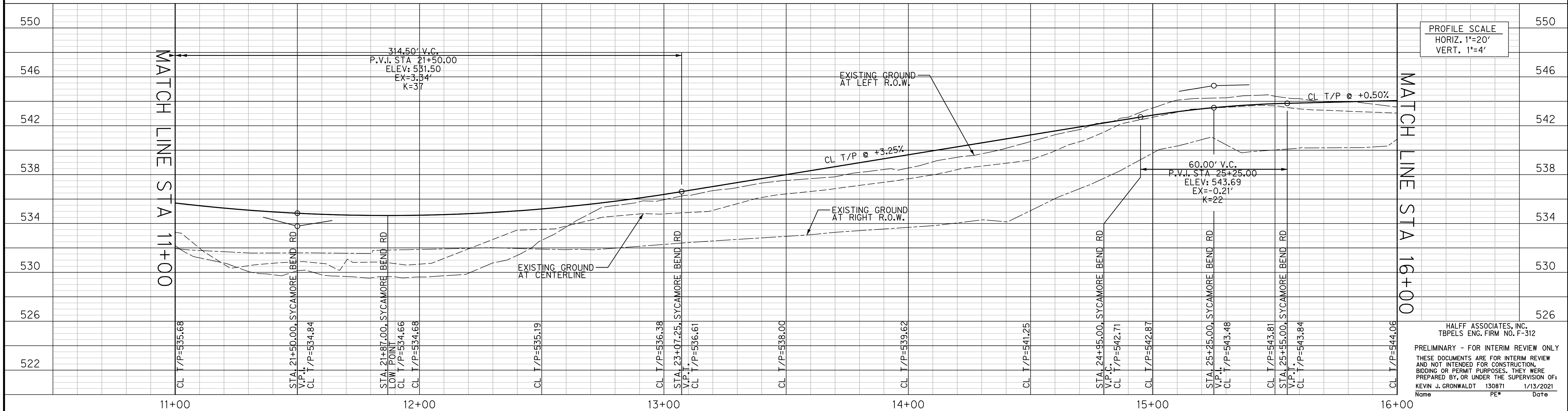
SHEET
14



CURVE DATA

①	Δ=14° 32' 43"
	R=530'
	L=134.56'
	T=67.64'
②	Δ=14° 52' 23"
	R=530'
	L=137.58'
	T=69.18'

SYCAMORE BEND ROAD



PROFILE SCALE
HORIZ. 1"=20'
VERT. 1"=4'



PUBLIC WORKS
TOWN OF HICKORY CREEK

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

PAVING PLAN AND PROFILE
STA 11+00 TO STA 16+00

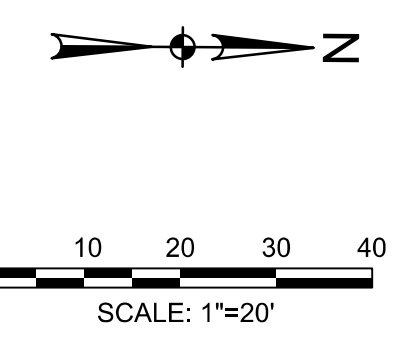
HALFF
4000 FOSSIL CREEK BLVD
FORT WORTH, TEXAS 76137-2797
TEL (817) 947-1422
FAX (817) 232-9784
TBPELS Engineering Firm #312

JANUARY 2021

SHEET 15

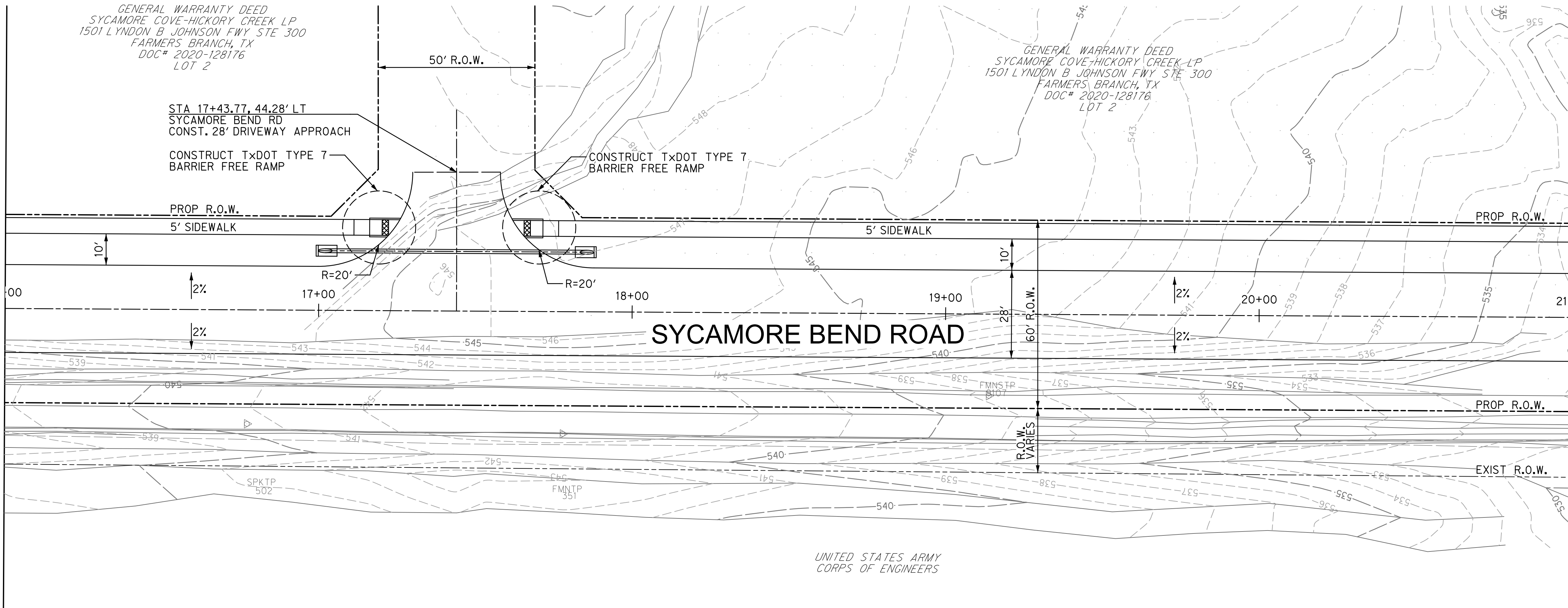
GENERAL WARRANTY DEED
 SYCAMORE COVE-HICKORY CREEK LP
 1501 LYNDON B JOHNSON FWY STE 300
 FARMERS BRANCH, TX
 DOC# 2020-128176
 LOT 2

GENERAL WARRANTY DEED
 SYCAMORE COVE-HICKORY CREEK LP
 1501 LYNDON B JOHNSON FWY STE 300
 FARMERS BRANCH, TX
 DOC# 2020-128176
 LOT 2

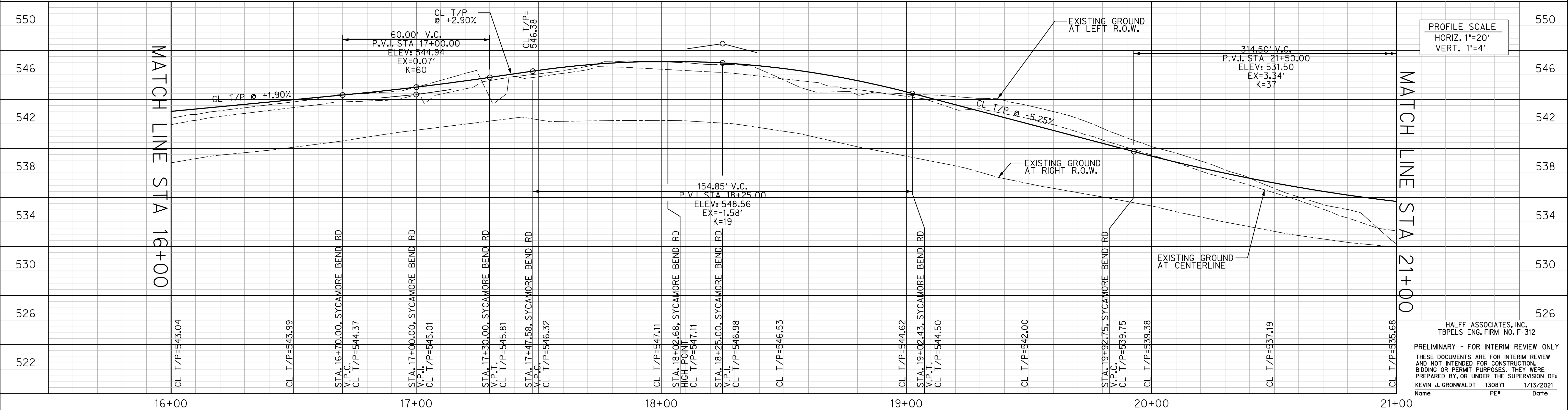


MATCH LINE STA 16+00

MATCH LINE STA 21+00



SYCAMORE BEND ROAD



PROFILE SCALE
 HORIZ. 1"=20'
 VERT. 1"=4'



PUBLIC WORKS
 TOWN OF HICKORY CREEK

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

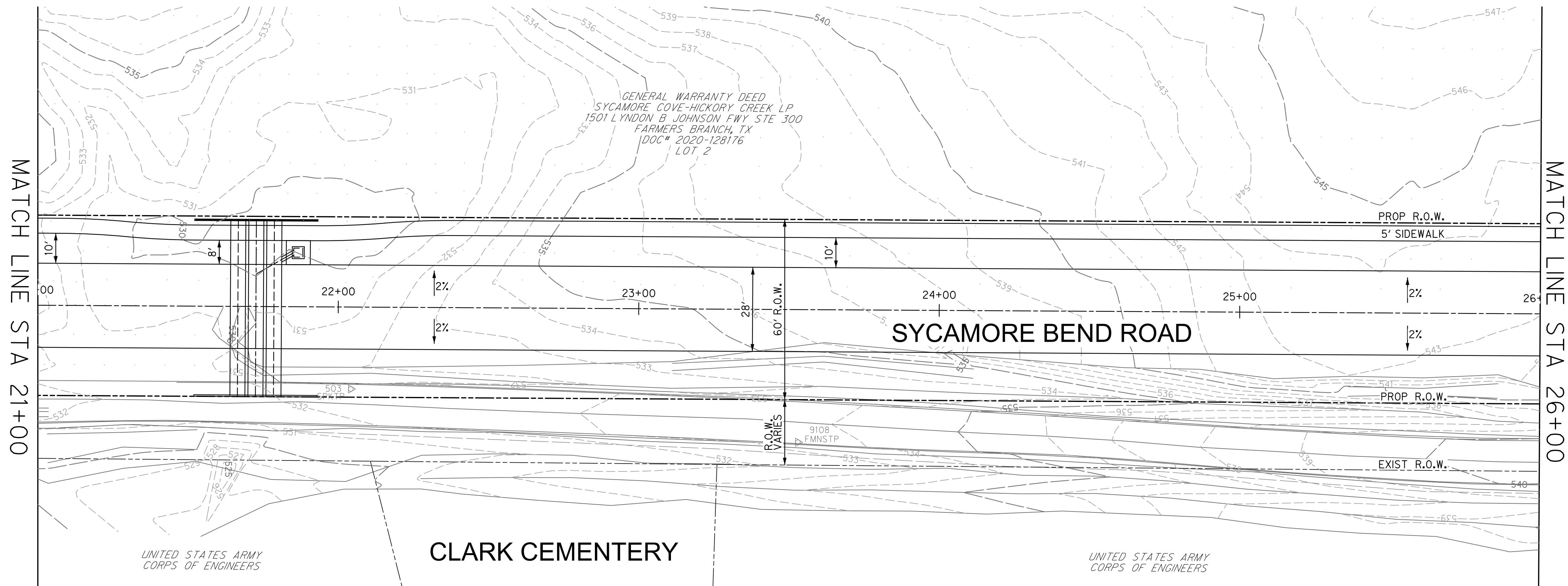
PAVING PLAN AND PROFILE
 STA 16+00 TO STA 21+00



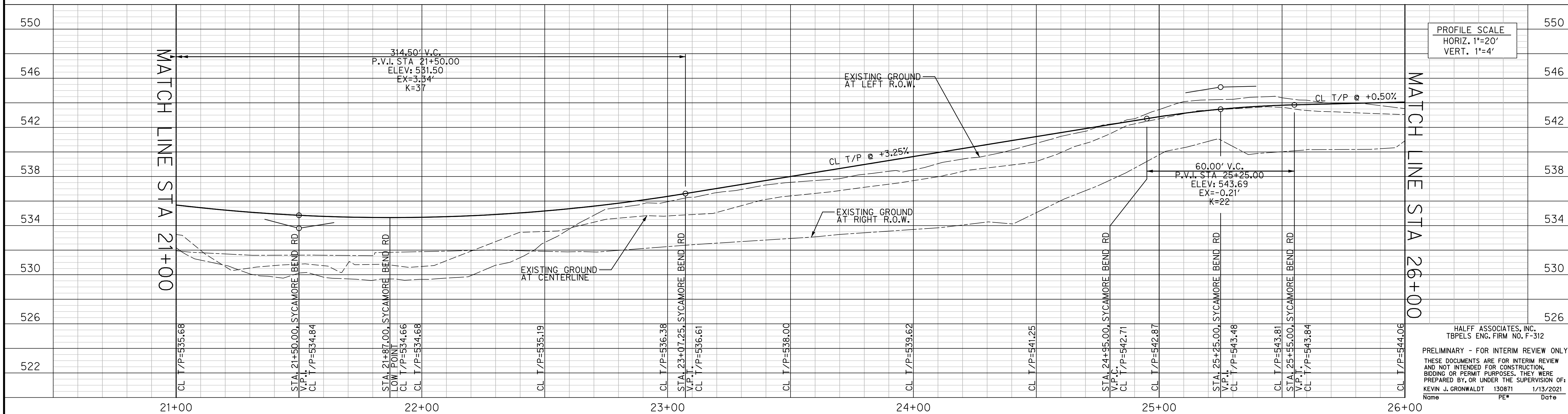
JANUARY
 2021

SHEET
 16

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 Name PE# Date



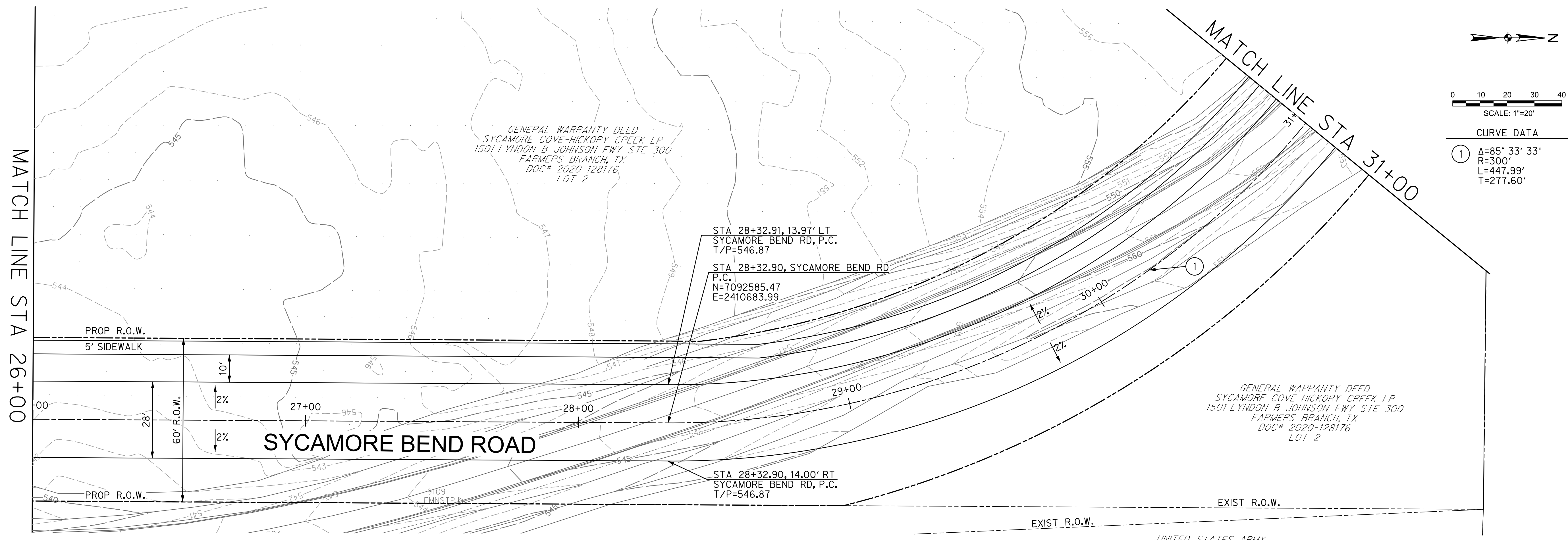
SYCAMORE BEND ROAD



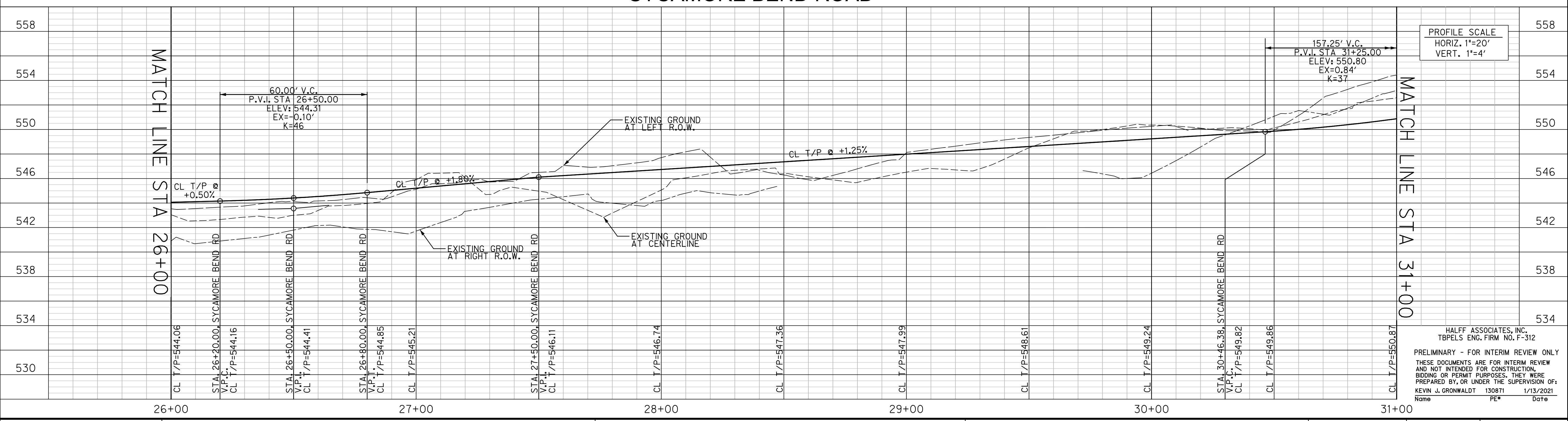
<p>HICKORY CREEK City-close, lakeside living!</p>	<p>PUBLIC WORKS TOWN OF HICKORY CREEK</p>	<p>SYCAMORE BEND ROAD FROM TURBEVILLE ROAD TO SYCAMORE BEND PARK</p>	<p>PAVING PLAN AND PROFILE STA 21+00 TO STA 26+00</p>	<p>HALFF 4000 FOSSIL CREEK BLVD FORT WORTH, TEXAS 76137-2797 TEL (817) 947-1422 FAX (817) 232-9784 TBPELS Engineering Firm #312</p>	<p>JANUARY 2021</p>	<p>SHEET 17</p>

PROFILE SCALE
HORIZ. 1"=20'
VERT. 1"=4'

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Name PE# Date



SYCAMORE BEND ROAD



PUBLIC WORKS
TOWN OF HICKORY CREEK

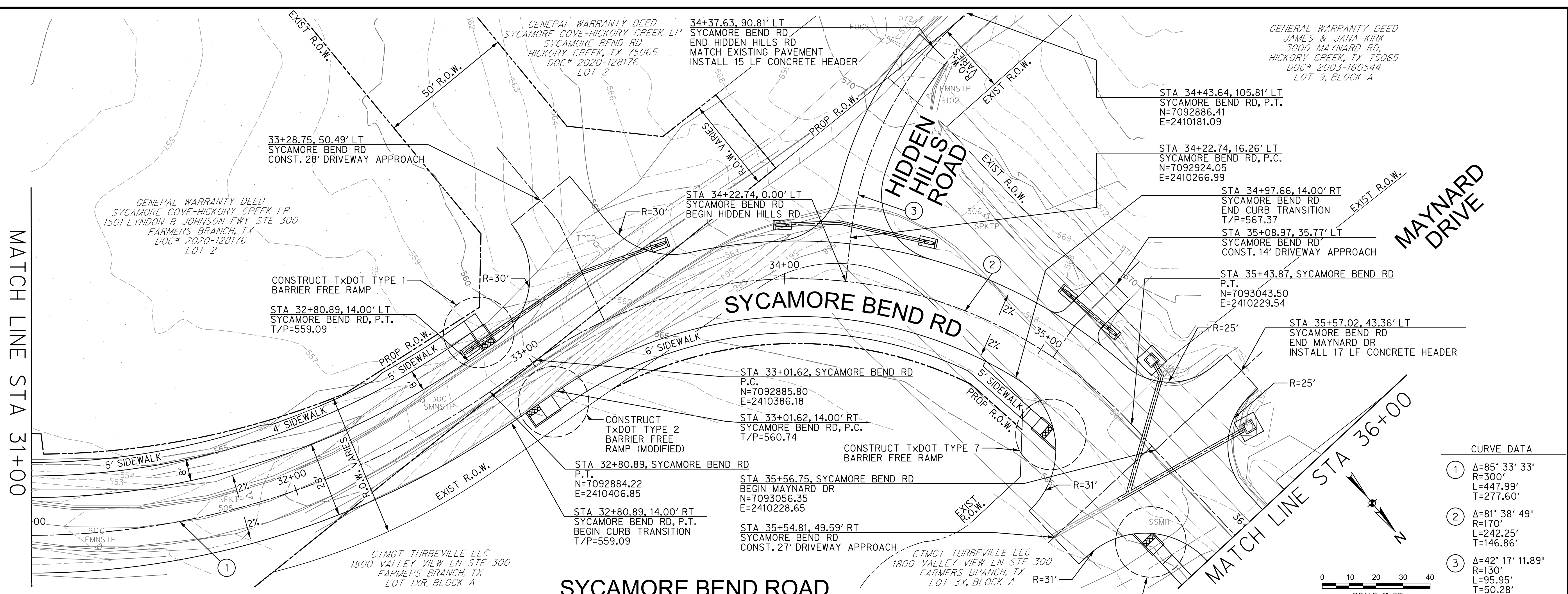
SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

PAVING PLAN AND PROFILE
STA 26+00 TO STA 31+00

HALFF
4000 FOSSIL CREEK BLVD
FORT WORTH, TEXAS 76137-2797
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FAX (817) 232-9784
TBPELS Engineering Firm #312

JANUARY 2021

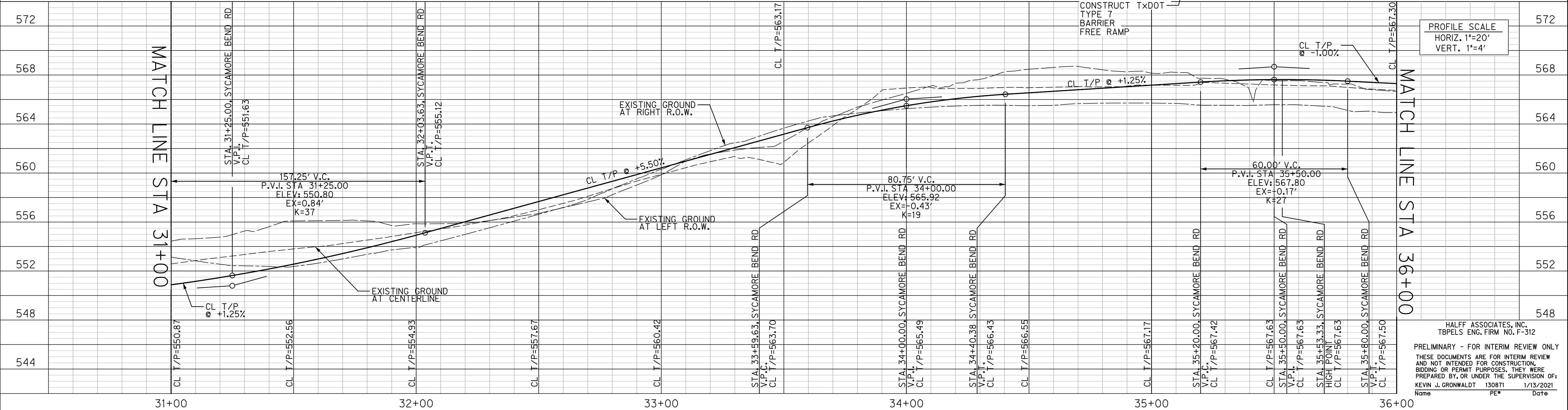
SHEET 18



CURVE DATA

①	Δ=85° 33' 33"
	R=300'
	L=447.99'
	T=277.60'
②	Δ=81° 38' 49"
	R=170'
	L=242.25'
	T=146.86'
③	Δ=42° 17' 11.89"
	R=130'
	L=95.95'
	T=50.28'

SYCAMORE BEND ROAD



PUBLIC WORKS
TOWN OF HICKORY CREEK

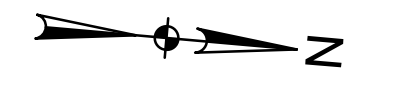
SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

PAVING PLAN AND PROFILE
 STA 31+00 TO STA 36+00

HALFF
 4000 FOSSIL CREEK BLVD
 FORT WORTH, TEXAS 76137-2797
 TEL: (817) 947-4422
 FAX: (817) 232-9784
 TBPELS Engineering Firm #312

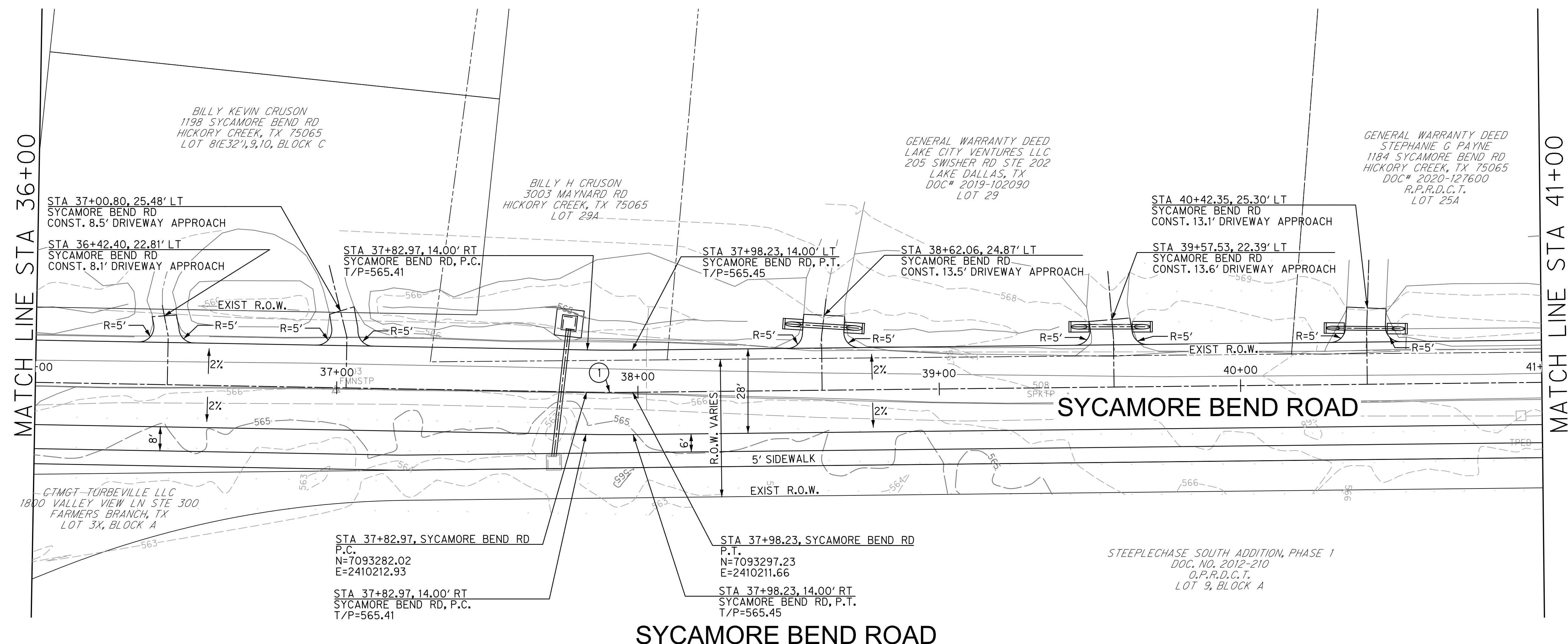
JANUARY 2021

SHEET 19

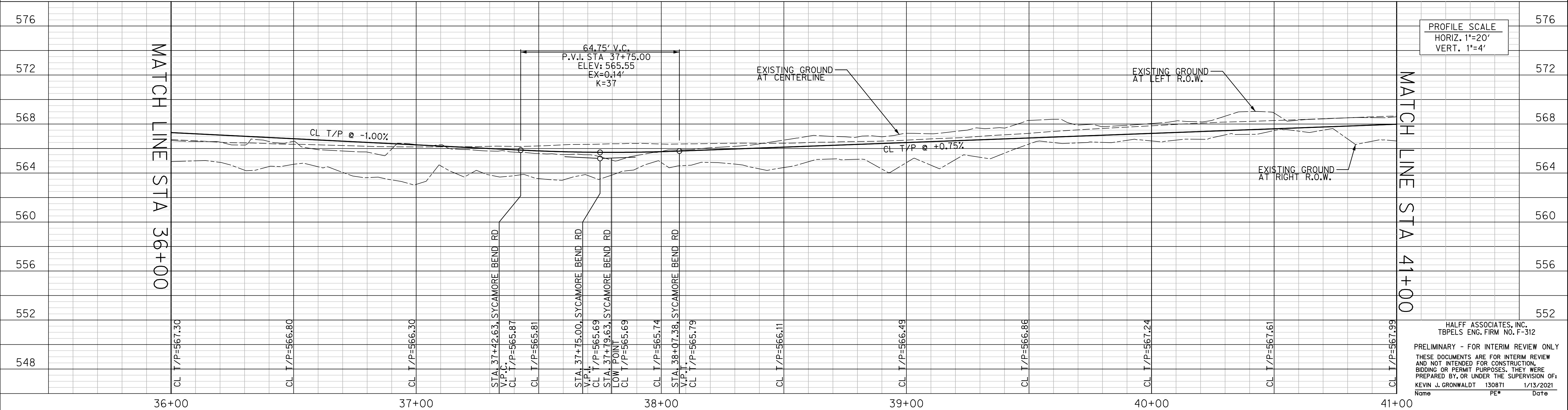


CURVE DATA

①	Δ=1° 38' 59"
	R=530'
	L=15.26'
	T=7.63'



SYCAMORE BEND ROAD



PROFILE SCALE
HORIZ. 1"=20'
VERT. 1"=4'

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PUBLIC WORKS
TOWN OF HICKORY CREEK

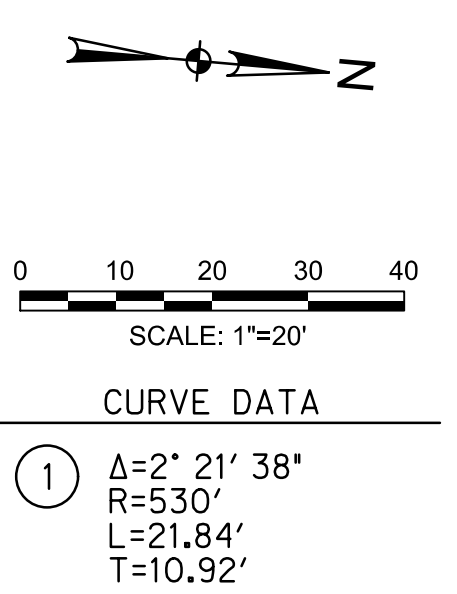
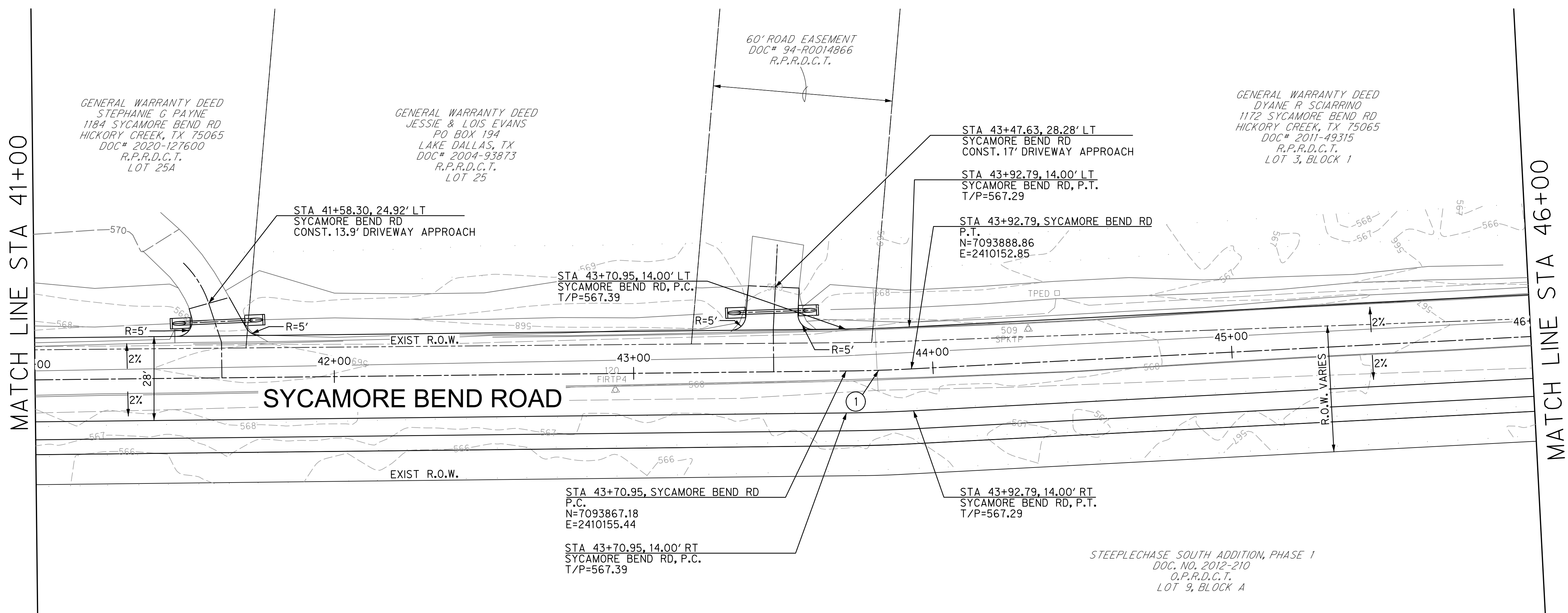
SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

PAVING PLAN AND PROFILE
STA 36+00 TO STA 41+00

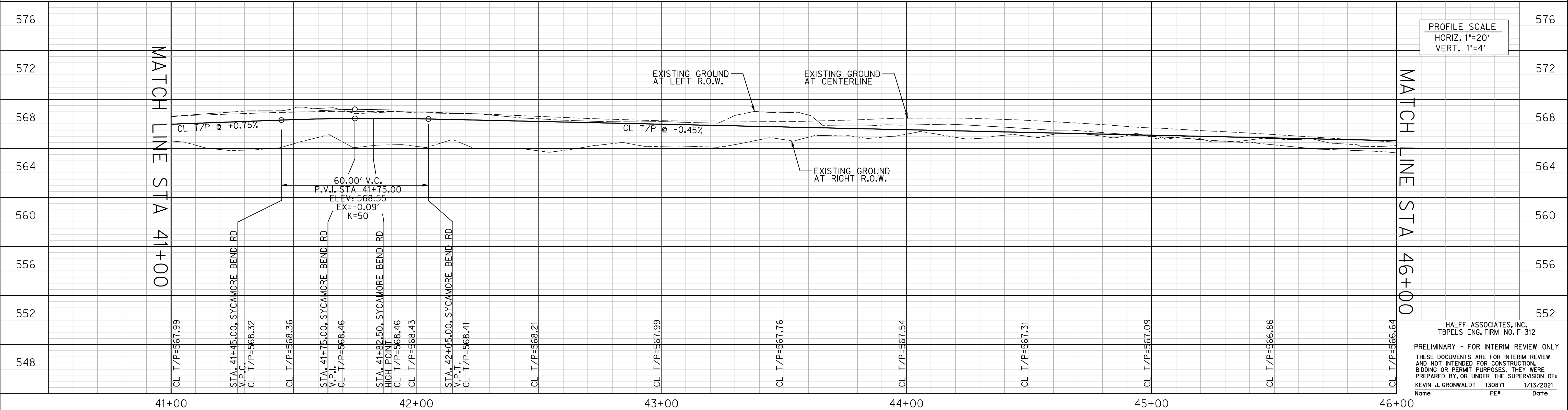


JANUARY
2021

SHEET
20



SYCAMORE BEND ROAD



PUBLIC WORKS
TOWN OF HICKORY CREEK

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

PAVING PLAN AND PROFILE
STA 41+00 TO STA 45+00

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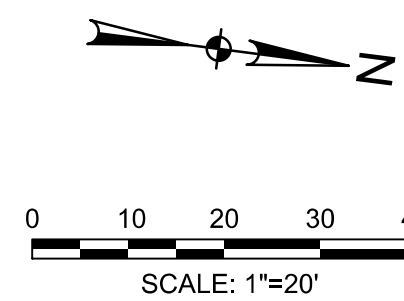
JANUARY 2021

SHEET 21

GENERAL WARRANTY DEED
 JEFFREY & LESLIE ARNOLD
 1172 SYCAMORE BEND RD
 HICKORY CREEK, TX 75065
 DOC# 2019-157663
 R.P.R.D.C.T.
 LOT 2, BLOCK 1

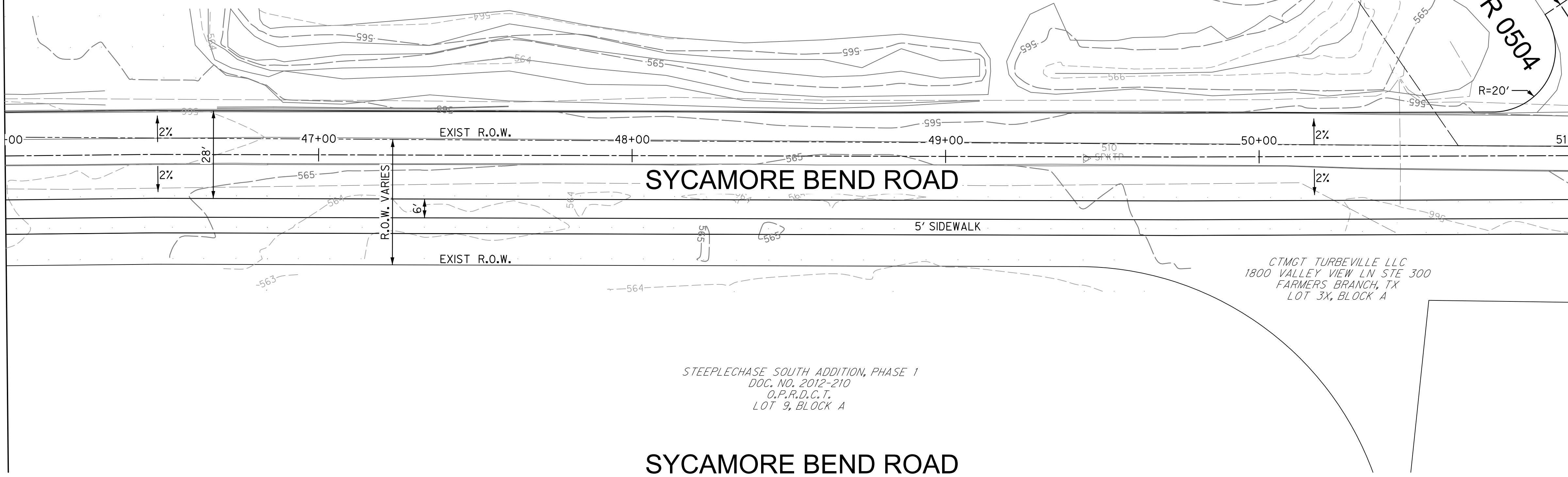
STA 50+96.19, 48.22' LT
 SYCAMORE BEND RD
 END PR 0504
 INSTALL 13 LF CONCRETE HEADER

60' ROAD EASEMENT
 DOCS# 2011-49315
 R.P.R.D.C.T.



MATCH LINE STA 46+00

MATCH LINE STA 51+00

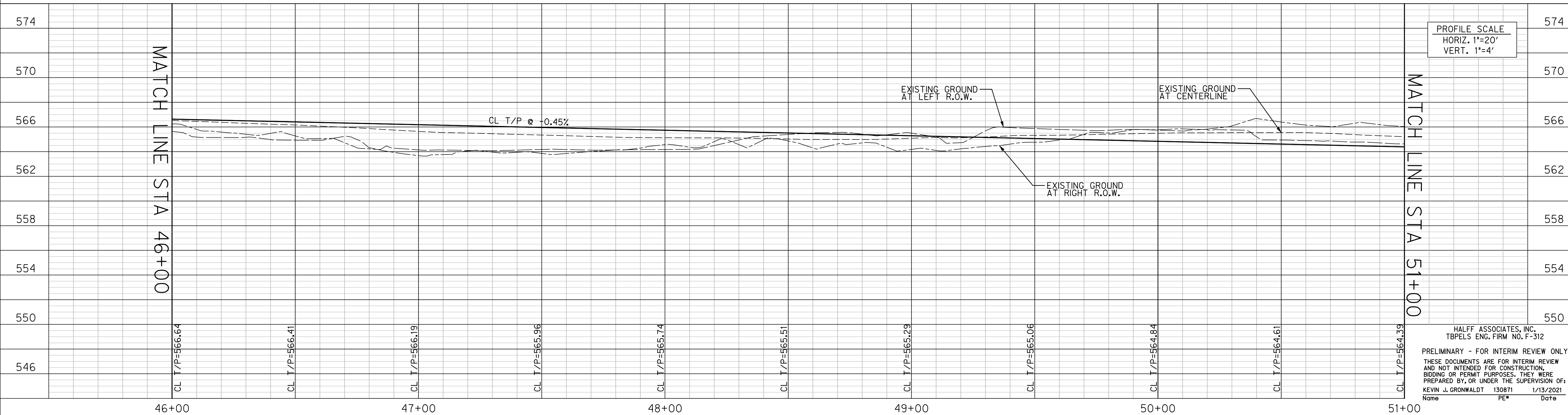


SYCAMORE BEND ROAD

SYCAMORE BEND ROAD

STEEPLECHASE SOUTH ADDITION, PHASE 1
 DOC. NO. 2012-210
 O.P.R.D.C.T.
 LOT 9, BLOCK A

CTMGT TURBEVILLE LLC
 1800 VALLEY VIEW LN STE 300
 FARMERS BRANCH, TX
 LOT 3X, BLOCK A



PROFILE SCALE
 HORIZ. 1"=20'
 VERT. 1"=4'

MATCH LINE STA 46+00

MATCH LINE STA 51+00

CL T/P=566.64	CL T/P=566.41	CL T/P=566.19	CL T/P=565.96	CL T/P=565.74	CL T/P=565.51	CL T/P=565.29	CL T/P=565.06	CL T/P=564.84	CL T/P=564.61	CL T/P=564.39
46+00	47+00	48+00	49+00	50+00	51+00					

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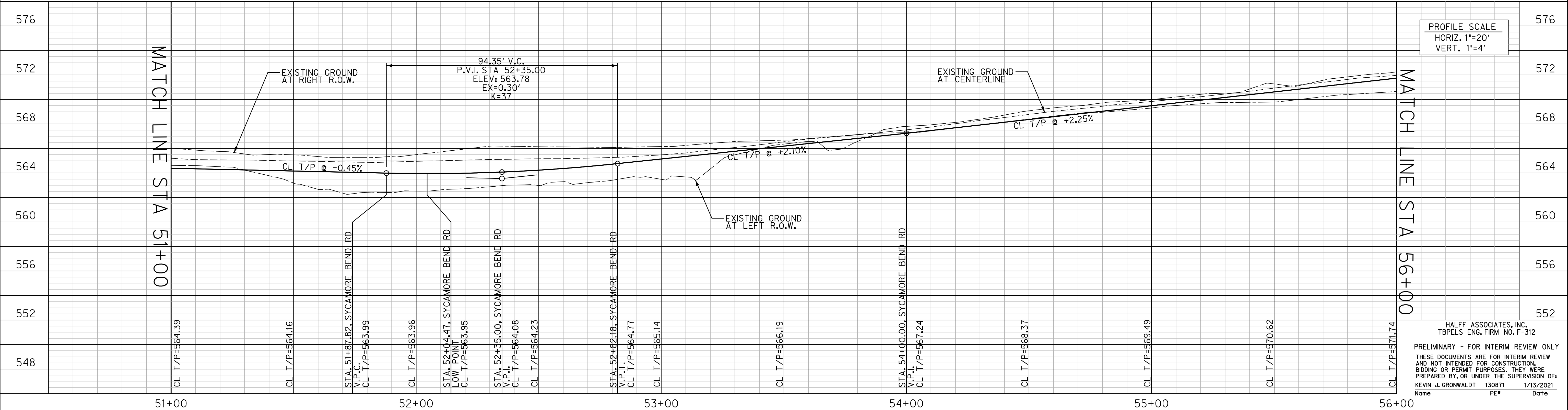
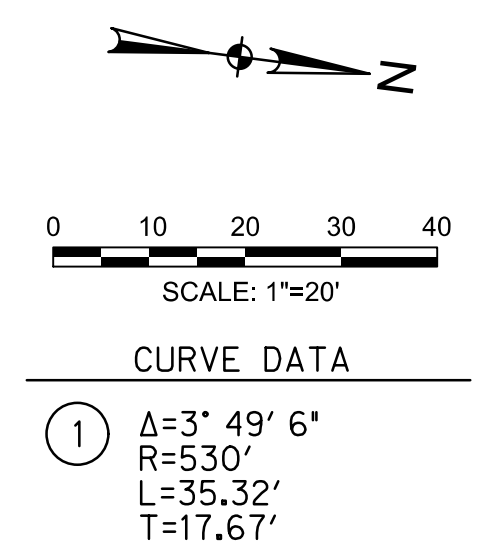
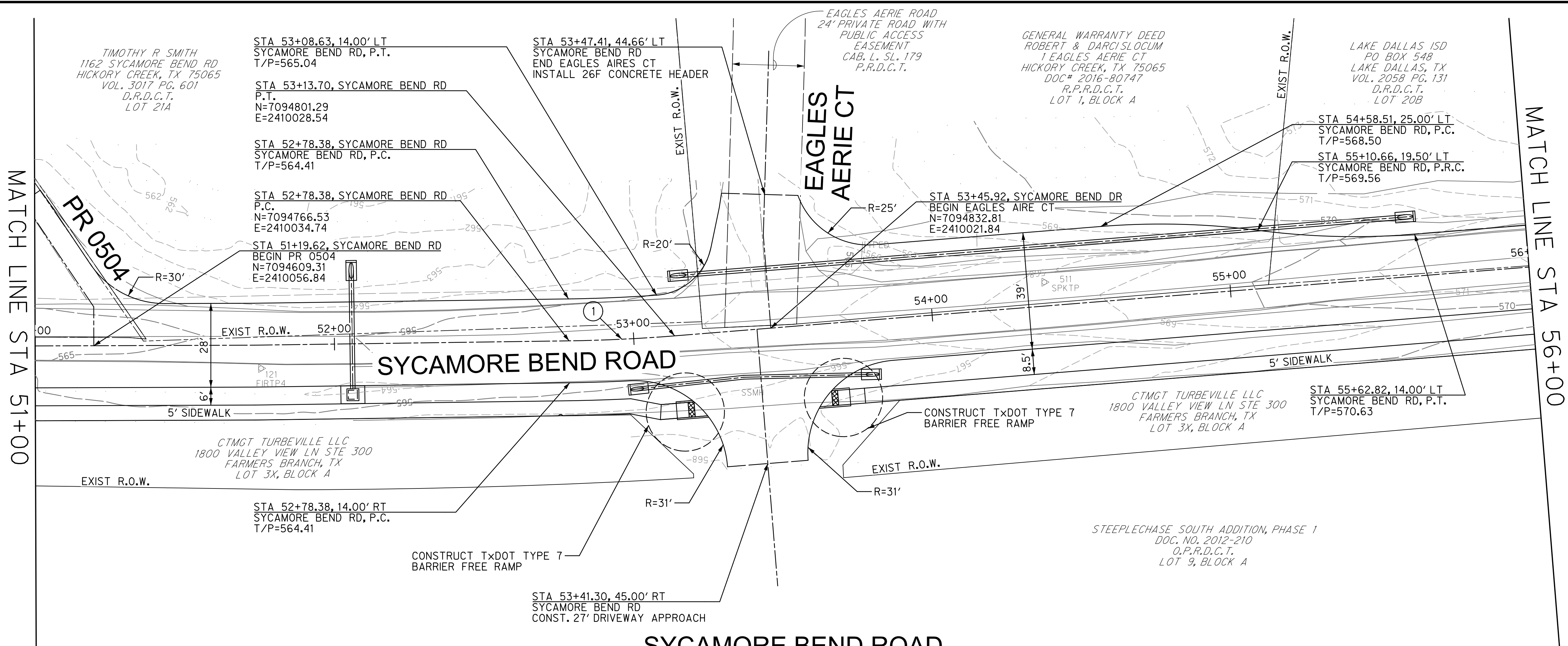
PUBLIC WORKS
TOWN OF HICKORY CREEK

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

PAVING PLAN AND PROFILE
 STA 46+00 TO STA 51+00



JANUARY
2021
SHEET
22



PUBLIC WORKS
TOWN OF HICKORY CREEK

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

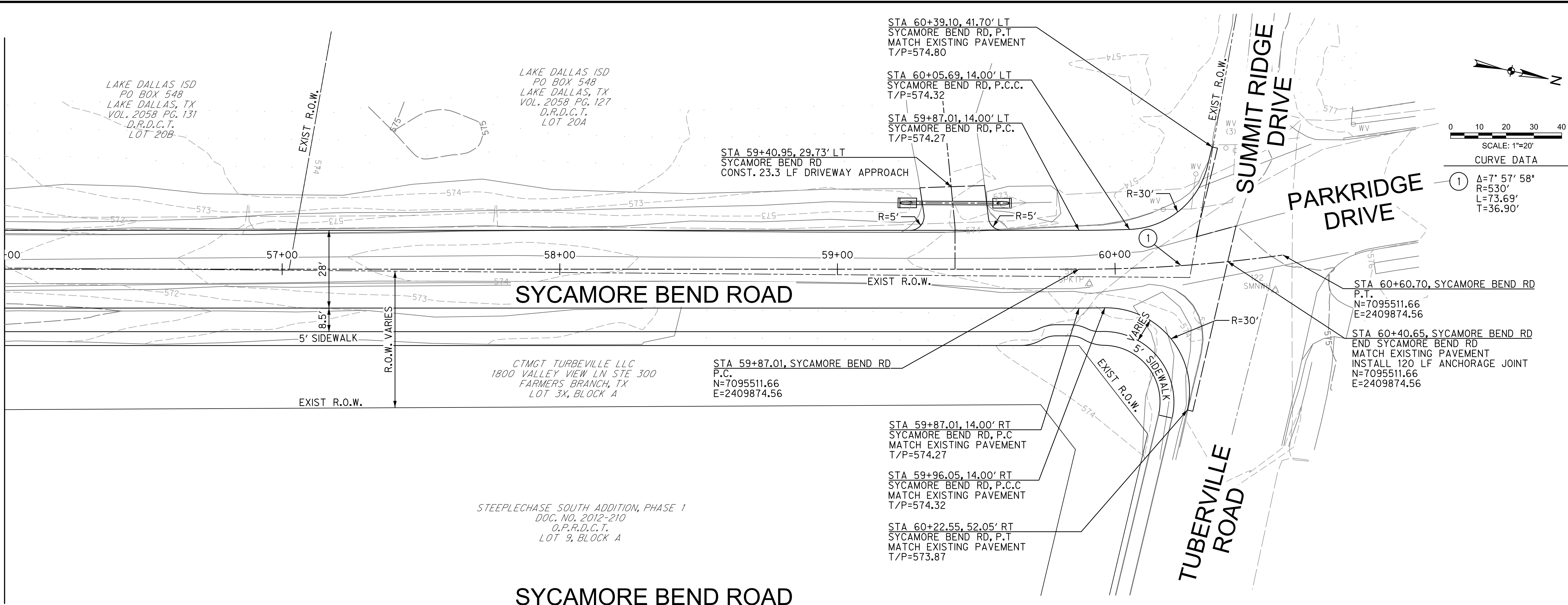
PAVING PLAN AND PROFILE
 STA 51+00 TO STA 56+00

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 FORT WORTH, TEXAS 76137-2797
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 FAX (817) 232-9784
 TBPELS Engineering Firm *312

JANUARY 2021

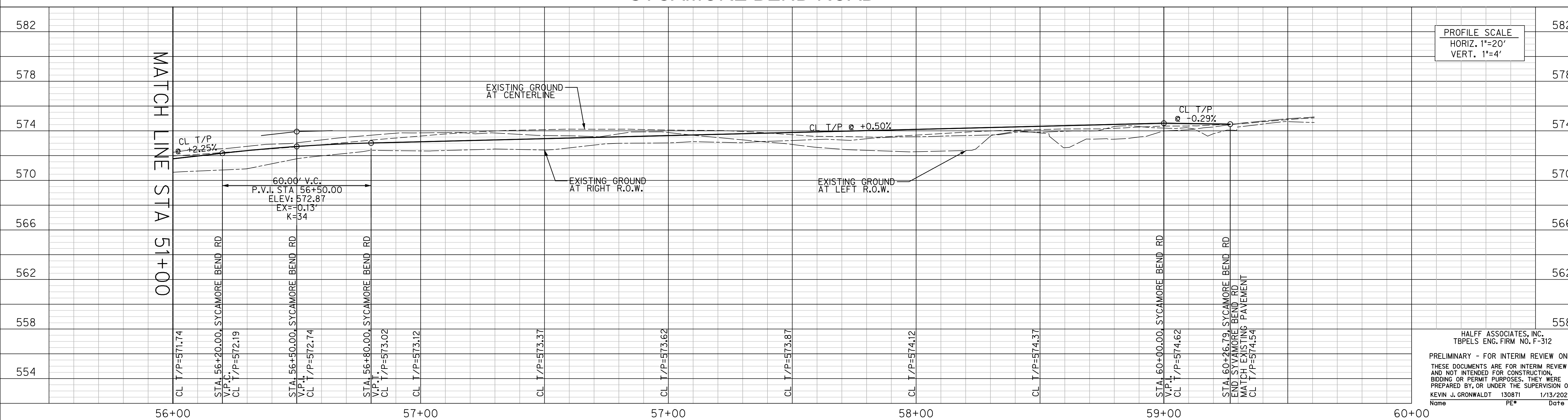
SHEET 23

MATCH LINE STA 56+00



CURVE DATA
 ① Δ=7' 57' 58"
 R=530'
 L=73.69'
 T=36.90'

SYCAMORE BEND ROAD



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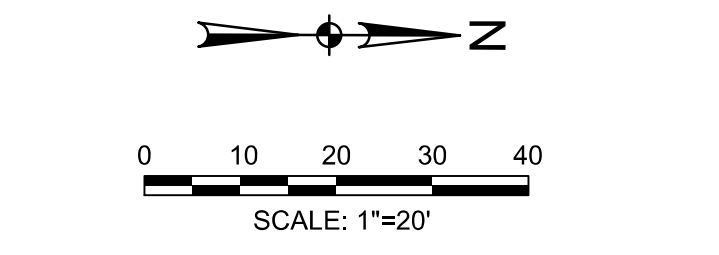
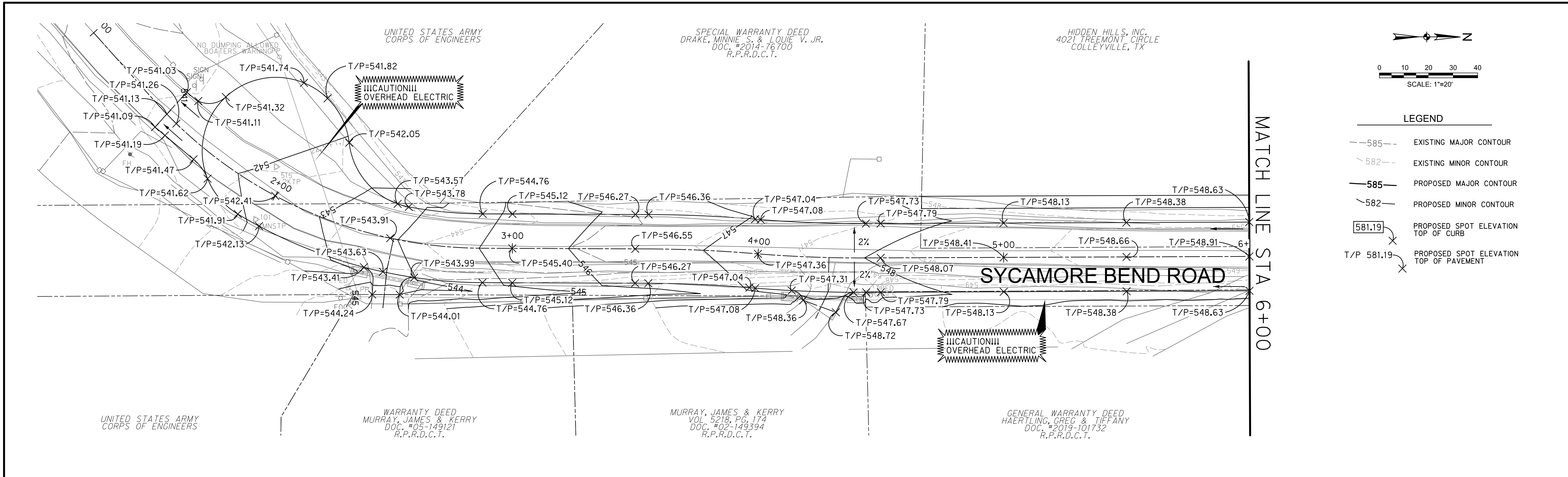


PUBLIC WORKS
 TOWN OF HICKORY CREEK

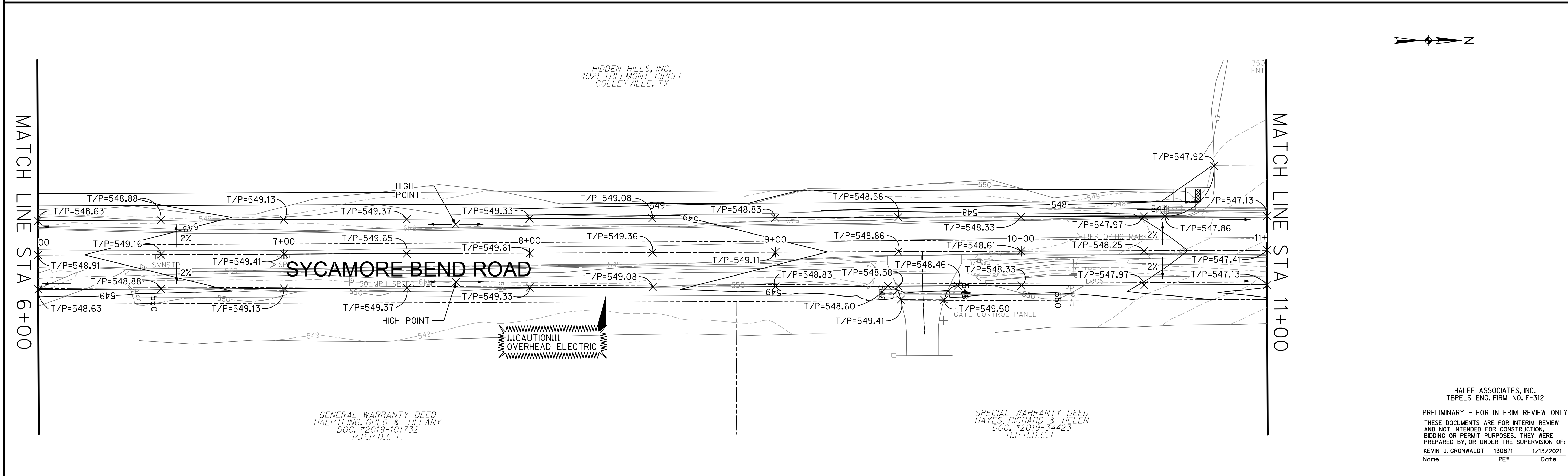
SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

PAVING PLAN AND PROFILE
 STA 56+00 TO END

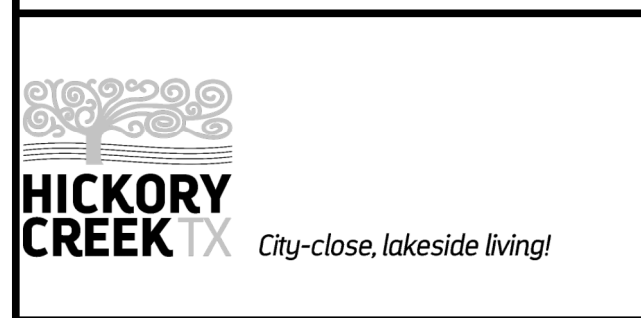
HALFF
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 FAX (817) 232-9784
 TBPELS Engineering Firm #312
 JANUARY 2021
 SHEET 24



- LEGEND**
- 585--- EXISTING MAJOR CONTOUR
 - 582--- EXISTING MINOR CONTOUR
 - 585— PROPOSED MAJOR CONTOUR
 - 582— PROPOSED MINOR CONTOUR
 - 581.19 PROPOSED SPOT ELEVATION TOP OF CURB
 - T/P 581.19 PROPOSED SPOT ELEVATION TOP OF PAVEMENT



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PUBLIC WORKS
TOWN OF HICKORY CREEK

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

GRADING PLAN
 BEGIN TO STA 11+00



JANUARY
2021

SHEET
25

GENERAL WARRANTY DEED
 SYCAMORE COVE-HICKORY CREEK LP
 SYCAMORE BEND RD
 HICKORY CREEK, TX 75065
 DOC# 2020-128176
 LOT 2

HIDDEN HILLS, INC.
 34 HIDDEN HILLS RD
 HICKORY CREEK, TX 75065
 LOT 3

GENERAL WARRANTY DEED
 HAYES, RICHARD & HELEN
 1225 SYCAMORE BEND RD TX
 HICKORY CREEK, TX 75065
 DOC. #2019-34423
 LOT 1, BLOCK A

UNITED STATES ARMY
 CORPS OF ENGINEERS



LEGEND

- 585- EXISTING MAJOR CONTOUR
- 582- EXISTING MINOR CONTOUR
- 585- PROPOSED MAJOR CONTOUR
- 582- PROPOSED MINOR CONTOUR
- [581.9] PROPOSED SPOT ELEVATION TOP OF CURB
- T/P 581.19 PROPOSED SPOT ELEVATION TOP OF PAVEMENT

MATCH LINE STA 11+00

MATCH LINE STA 16+00

MATCH LINE STA 16+00

MATCH LINE STA 21+00



GENERAL WARRANTY DEED
 SYCAMORE COVE-HICKORY CREEK LP
 1501 LYNDON B JOHNSON FWY STE 300
 FARMERS BRANCH, TX
 DOC# 2020-128176
 LOT 2

GENERAL WARRANTY DEED
 SYCAMORE COVE-HICKORY CREEK LP
 1501 LYNDON B JOHNSON FWY STE 300
 FARMERS BRANCH, TX
 DOC# 2020-128176
 LOT 2

UNITED STATES ARMY
 CORPS OF ENGINEERS

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PUBLIC WORKS
 TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

SHEET TITLE

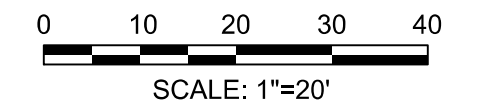
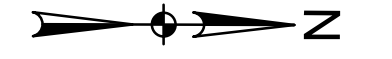
GRADING PLAN
 STA 11+00 TO STA 21+00



JANUARY
 2021

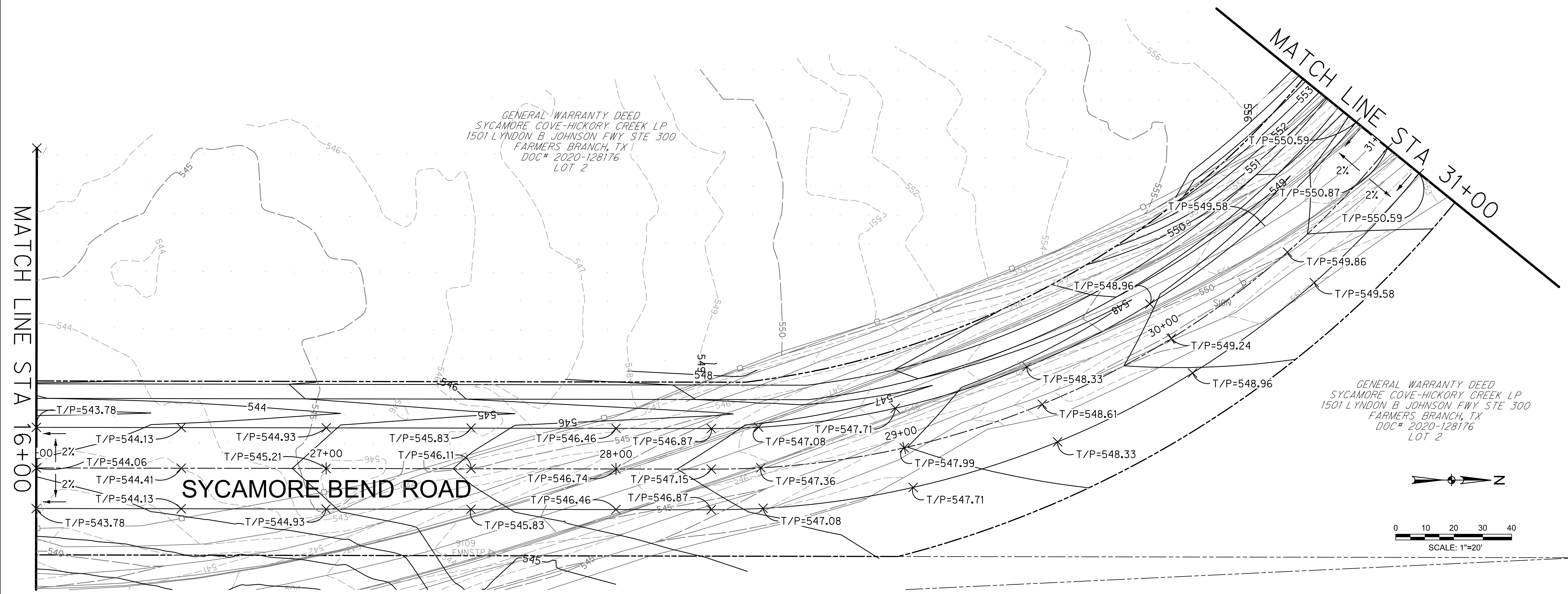
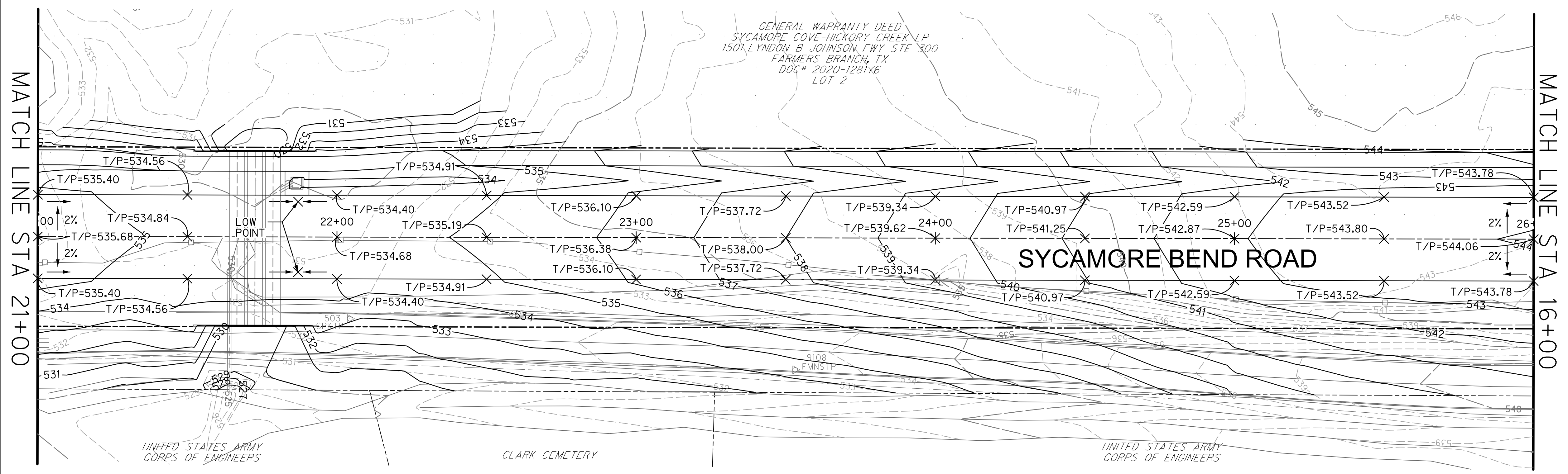
DATE

SHEET
 26



LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED SPOT ELEVATION TOP OF CURB
- PROPOSED SPOT ELEVATION TOP OF PAVEMENT



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PUBLIC WORKS
 TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

SHEET TITLE

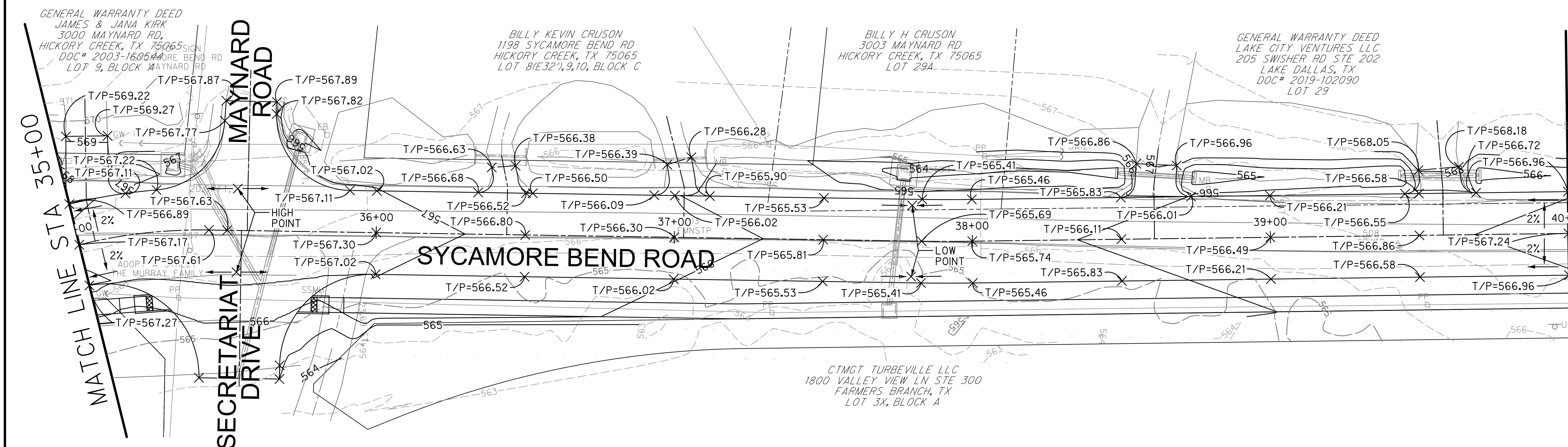
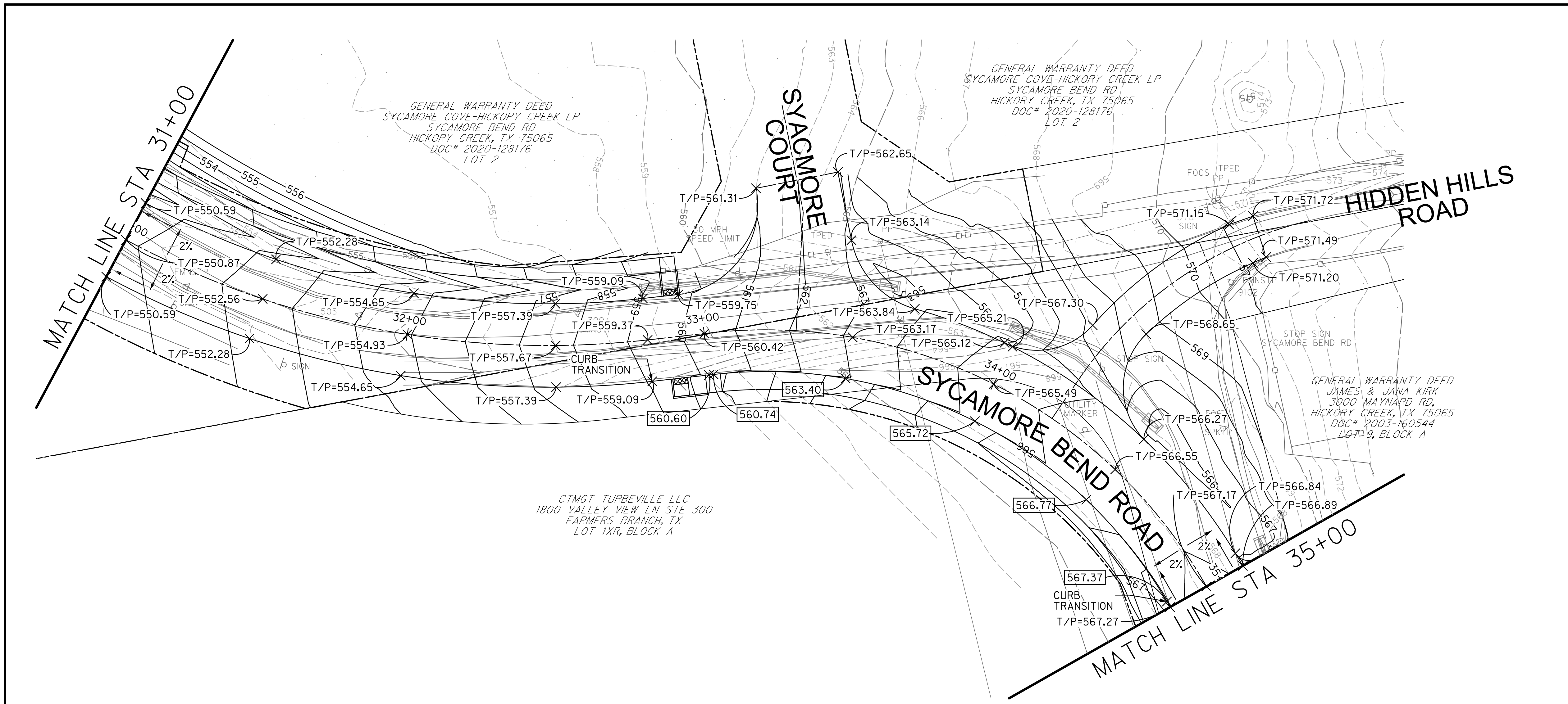
GRADING PLAN
 STA 21+00 TO STA 31+00



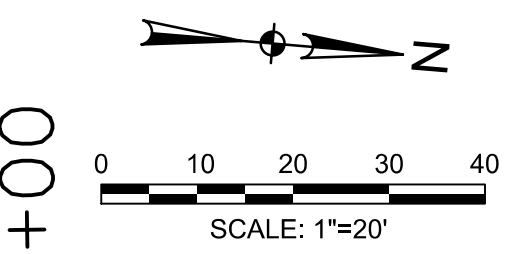
JANUARY
 2021

DATE

SHEET
 27



- LEGEND**
- 585--- EXISTING MAJOR CONTOUR
 - 582--- EXISTING MINOR CONTOUR
 - 585— PROPOSED MAJOR CONTOUR
 - 582— PROPOSED MINOR CONTOUR
 - 581.19 PROPOSED SPOT ELEVATION TOP OF CURB
 - T/P 581.19 PROPOSED SPOT ELEVATION TOP OF PAVEMENT



PUBLIC WORKS
TOWN OF HICKORY CREEK

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

GRADING PLAN
 STA 31+00 TO STA 40+00

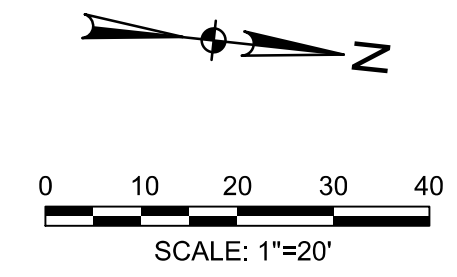
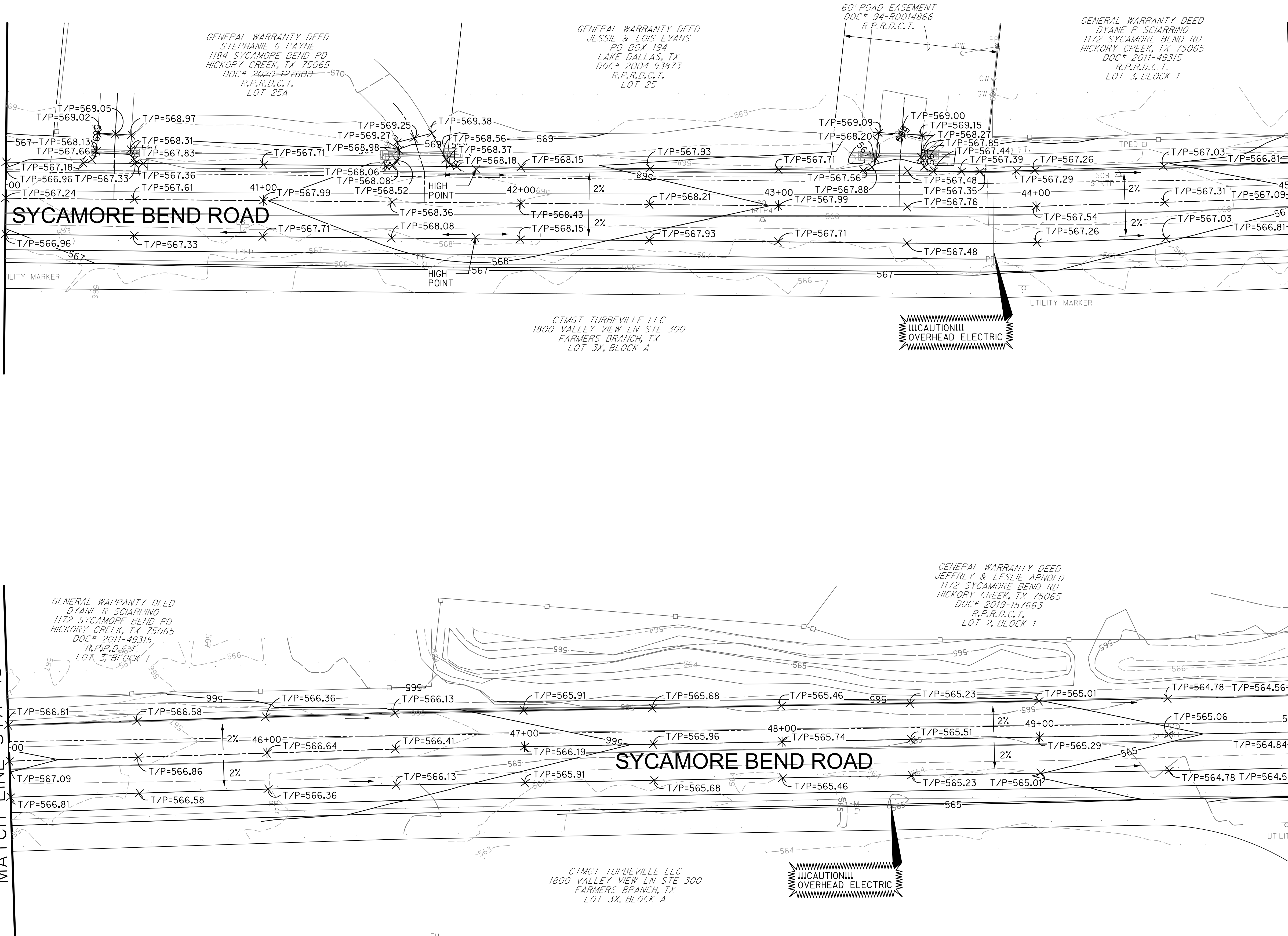
<p>4000 FOSSIL CREEK BLVD FORT WORTH, TEXAS 76137-2797 TEL (817) 947-4422 FAX (817) 232-9784 TBPELS Engineering Firm #312</p>	JANUARY 2021	SHEET 28
	Name: KEVIN J. GRONWALDT PE# 130871 Date: 1/13/2021	Date:

MATCH LINE STA 40+00

MATCH LINE STA 45+00

MATCH LINE STA 45+00

MATCH LINE STA 50+00



LEGEND

- 585--- EXISTING MAJOR CONTOUR
- 582--- EXISTING MINOR CONTOUR
- 585--- PROPOSED MAJOR CONTOUR
- 582--- PROPOSED MINOR CONTOUR
- [581.19] PROPOSED SPOT ELEVATION TOP OF CURB
- T/P 581.19 PROPOSED SPOT ELEVATION TOP OF PAVEMENT

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Name PE# Date



PUBLIC WORKS
TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

SHEET TITLE

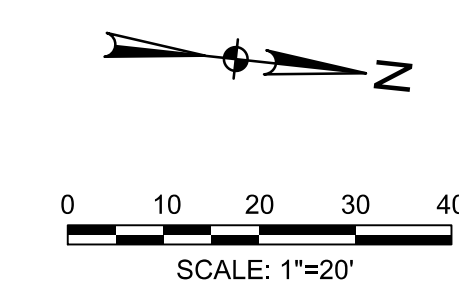
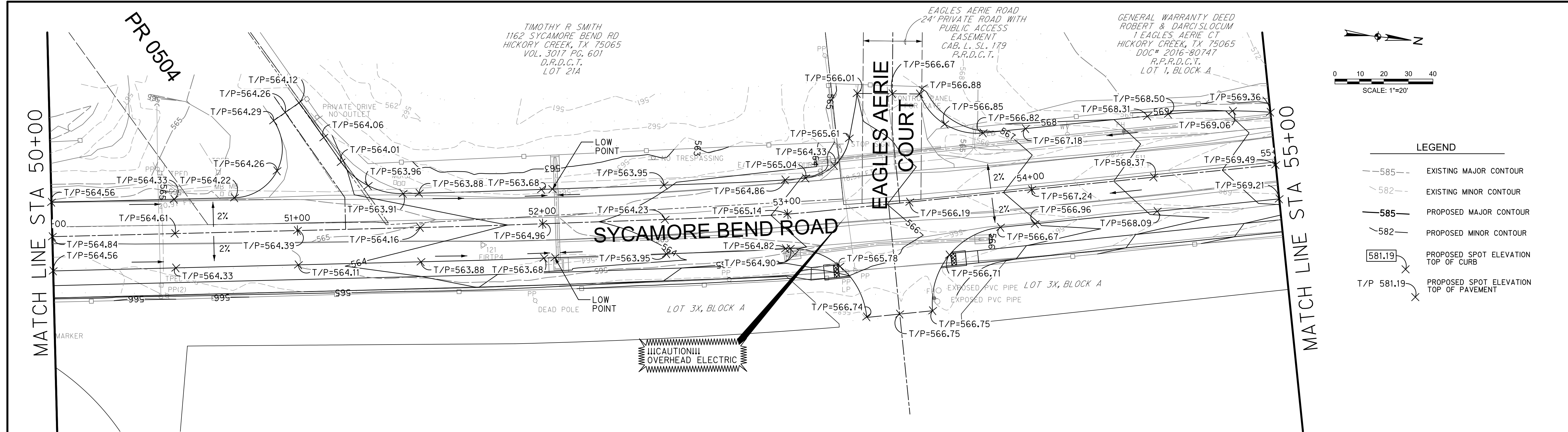
GRADING PLAN
STA 40+00 TO STA 50+00



JANUARY
2021

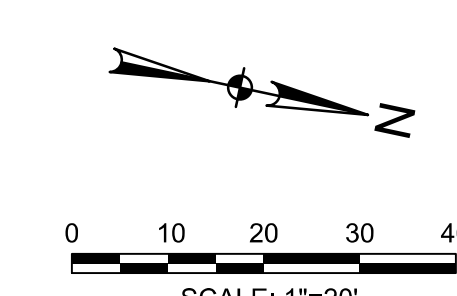
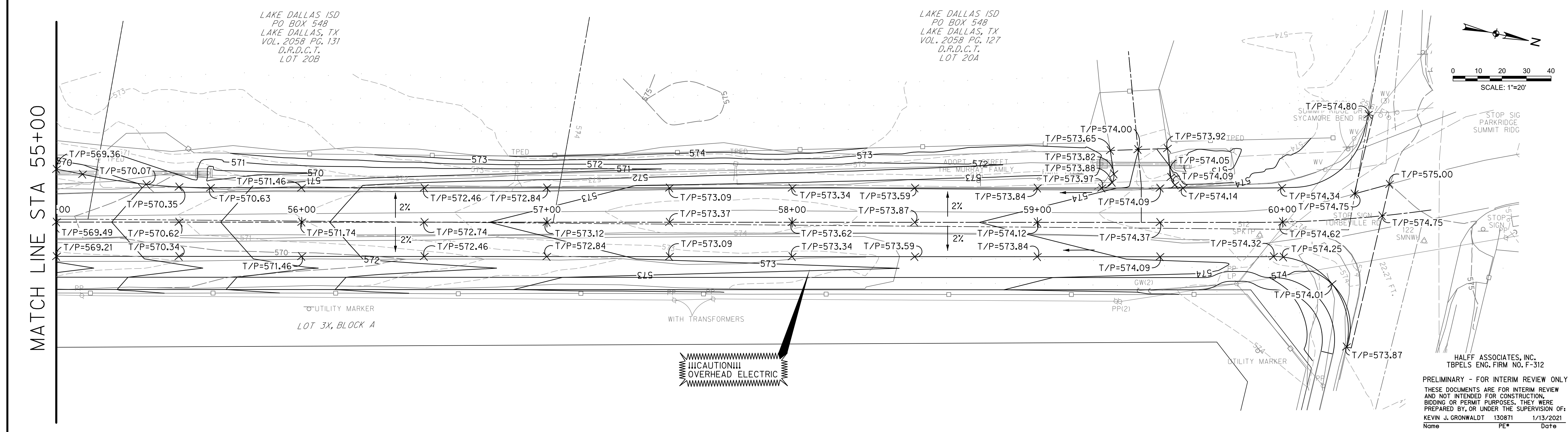
DATE

SHEET
29



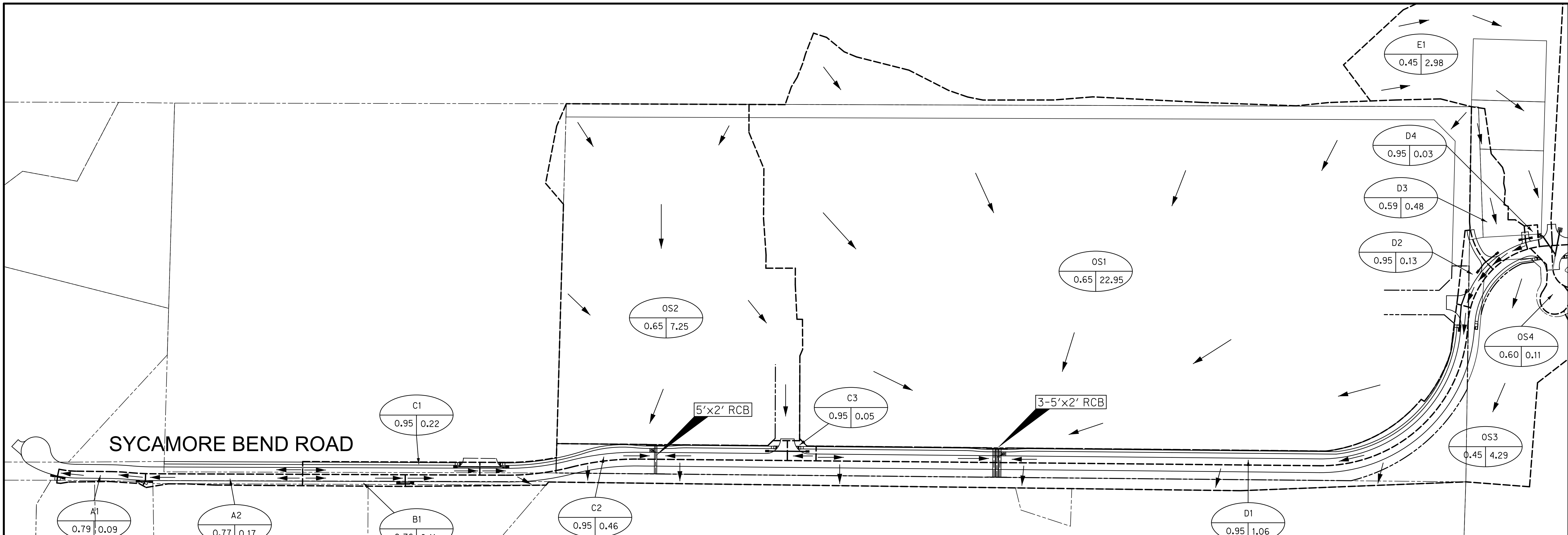
LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED SPOT ELEVATION TOP OF CURB
- PROPOSED SPOT ELEVATION TOP OF PAVEMENT

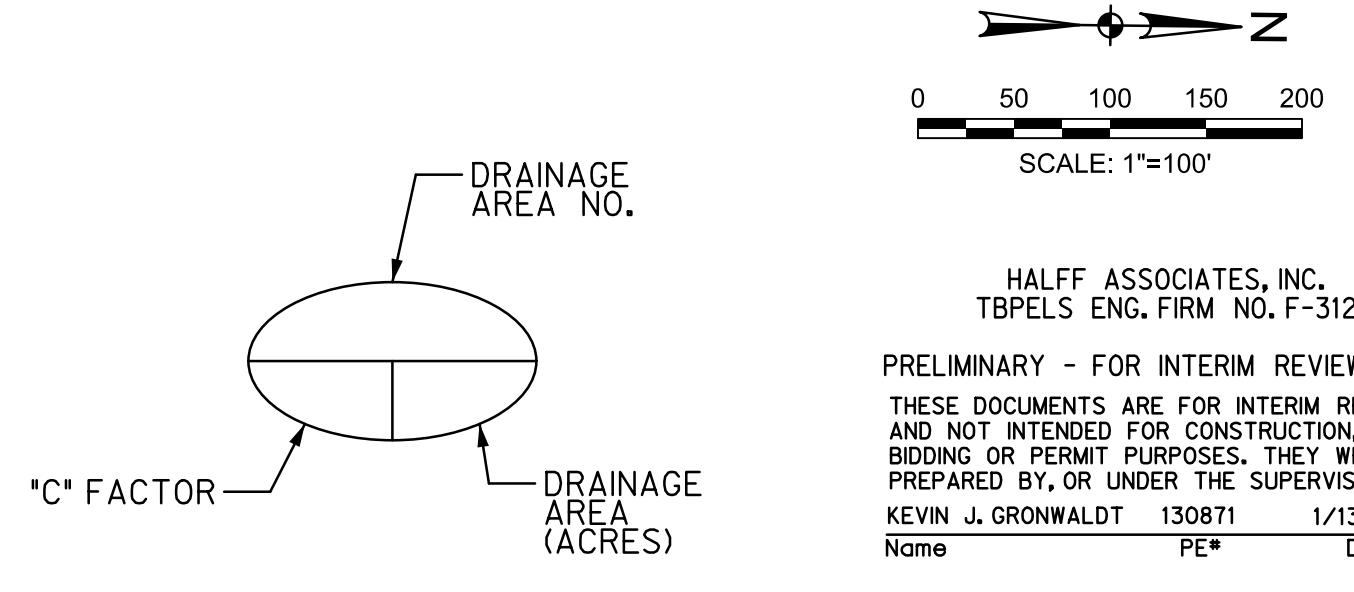


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 Name PE# Date

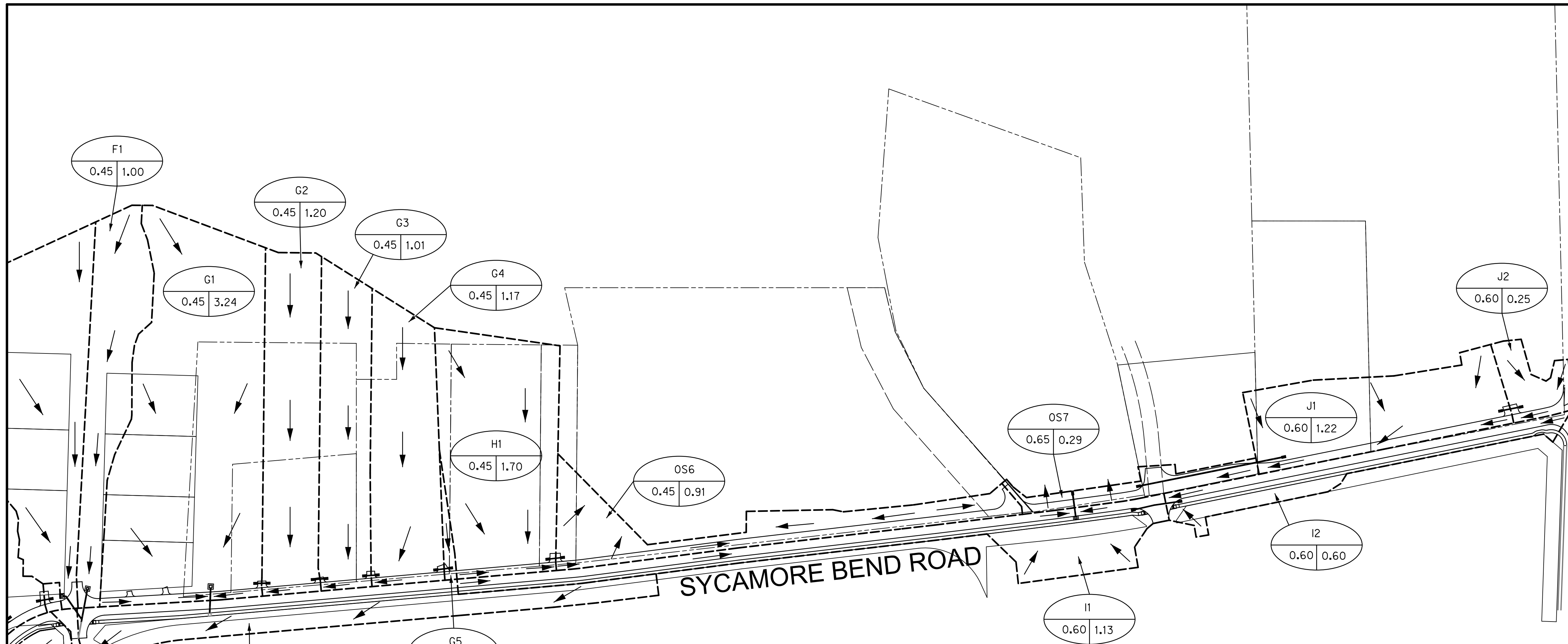
<p>HICKORY CREEK City-close, lakeside living!</p>	<p>PUBLIC WORKS TOWN OF HICKORY CREEK</p>	<p>SYCAMORE BEND ROAD FROM TURBEVILLE ROAD TO SYCAMORE BEND PARK</p>	<p>GRADING PLAN STA 50+00 TO END</p>	<p>HALFF 4000 FOSSIL CREEK BLVD FORT WORTH, TEXAS 76137-2797 TEL (817) 947-1422 FAX (817) 232-9784 TBPELS Engineering Firm #312</p>	<p>JANUARY 2021</p> <p>SHEET 30</p>
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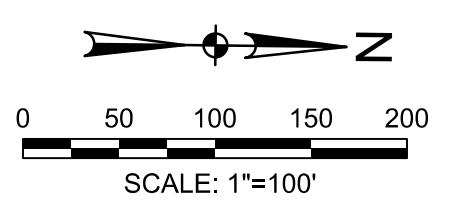
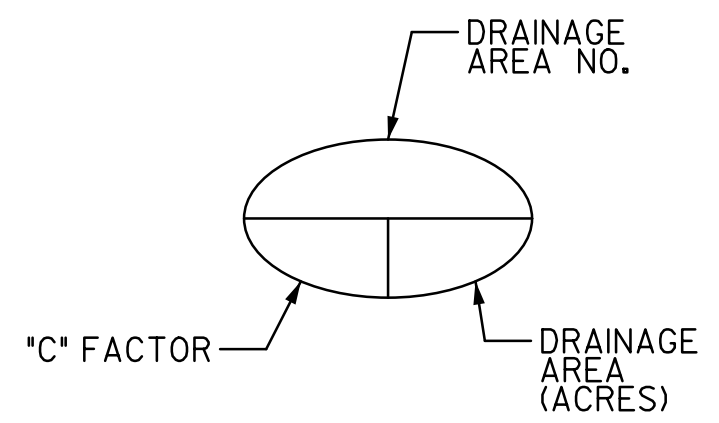
DRAINAGE AREA CALCULATIONS														NOTES
DRAINAGE AREA	AREA (ACRES)	*C*	*CA*	Tc (MIN)	I10 (IN/HR)	Q10 (CFS)	25 YR FREQ. FACTOR	I25 (IN/HR)	Q25 (CFS)	100 YR FREQ. FACTOR	I100 (IN/HR)	Q100 (CFS)		
A1	0.09	0.79	0.07	10	6.50	0.46	1.10	7.55	0.59	1.25	9.24	0.82	To Culvert 2+40	
A2	0.17	0.77	0.13	10	6.50	0.85	1.10	7.55	1.09	1.25	9.24	1.51	To Culvert 4+10	
B1	0.11	0.76	0.08	10	6.50	0.54	1.10	7.55	0.69	1.25	9.24	0.97	To Culvert 9+45	
C1	0.22	0.95	0.21	10	6.50	1.36	1.10	7.55	1.66	1.25	9.24	2.03	To Culvert 10+60	
C2	0.46	0.95	0.44	10	6.50	2.84	1.10	7.55	3.47	1.25	9.24	4.25	To Inlet 14+75	
C3	0.05	0.95	0.05	10	6.50	0.31	1.10	7.55	0.38	1.25	9.24	0.46	To Culvert 17+00	
D1	1.06	0.95	1.01	10	6.50	6.54	1.10	7.55	8.01	1.25	9.24	9.79	To Inlet 21+75	
D2	0.13	0.95	0.12	10	6.50	0.80	1.10	7.55	0.98	1.25	9.24	1.20	To Culvert 32+80	
D3	0.48	0.59	0.28	10	6.50	1.84	1.10	7.55	2.35	1.25	9.24	3.27	To Culvert 34+00	
D4	0.03	0.95	0.03	10	6.50	0.19	1.10	7.55	0.23	1.25	9.24	0.28	To Culvert 34+95	
E1	2.98	0.45	1.34	15	5.50	7.37	1.10	6.41	9.45	1.25	7.91	13.26	To Inlet 35+35	
F1	1.00	0.45	0.45	15	5.50	2.47	1.10	6.41	3.17	1.25	7.91	4.45	To Inlet 35+75	
G1	3.24	0.45	1.46	15	5.50	8.01	1.10	6.41	10.28	1.25	7.91	14.42	To Inlet 37+75	
G2	1.20	0.45	0.54	15	5.50	2.97	1.10	6.41	3.81	1.25	7.91	5.34	To Culvert 38+50	
G3	1.01	0.45	0.45	15	5.50	2.50	1.10	6.41	3.20	1.25	7.91	4.50	To Culvert 39+45	
G4	1.17	0.45	0.53	15	5.50	2.89	1.10	6.41	3.71	1.25	7.91	5.21	To Culvert 40+30	
G5	0.06	0.45	0.03	10	6.50	0.18	1.10	7.55	0.22	1.25	9.24	0.31	To Culvert 41+45	
H1	1.70	0.45	0.77	15	5.50	4.21	1.10	6.41	5.39	1.25	7.91	7.57	To Culvert 43+30	
I1	1.13	0.60	0.68	10	6.50	4.41	1.10	7.55	5.63	1.25	9.24	7.83	To Culvert 52+05	
I2	0.60	0.60	0.36	10	6.50	2.34	1.10	7.55	2.99	1.25	9.24	4.16	To Culvert 53+00	
J1	1.22	0.60	0.73	10	6.50	4.76	1.10	7.55	6.08	1.25	9.24	8.45	To Culvert 53+15	
J2	0.25	0.60	0.15	10	6.50	0.97	1.10	7.55	1.25	1.25	9.24	1.73	To Culvert 59+25	
OS1	22.95	0.65	14.92	15	5.50	82.01	1.10	6.41	105.17	1.25	7.91	147.53	To 3-5'x2' RCB Culvert	
OS2	7.25	0.65	4.71	15	5.50	25.91	1.10	6.41	33.22	1.25	7.91	46.61	To 5'x2' RCB Culvert	
OS3	4.29	0.45	1.93	10	6.50	12.55	1.10	7.55	16.04	1.25	9.24	22.29	Offsite	
OS4	0.11	0.60	0.07	10	6.50	0.43	1.10	7.55	0.55	1.25	9.24	0.76	Offsite	
OS5	1.19	0.60	0.71	10	6.50	4.64	1.10	7.55	5.93	1.25	9.24	8.24	Offsite	
OS6	0.91	0.45	0.41	10	6.50	2.66	1.10	7.55	3.40	1.25	9.24	4.73	Offsite	
OS7	0.29	0.65	0.19	10	6.50	1.23	1.10	7.55	1.57	1.25	9.24	2.18	Offsite	



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 KEVIN J. GRONWALDT 130871 1/13/2021
 Name PE# Date



DRAINAGE AREA CALCULATIONS													NOTES
DRAINAGE AREA	AREA (ACRES)	*C*	*CA*	Tc (MIN)	I10 (IN/HR)	Q10 (CFS)	25 YR FREQ. FACTOR	I25 (IN/HR)	Q25 (CFS)	100 YR FREQ. FACTOR	I100 (IN/HR)	Q100 (CFS)	
A1	0.09	0.79	0.07	10	6.50	0.46	1.10	7.55	0.59	1.25	9.24	0.82	To Culvert 2+40
A2	0.17	0.77	0.13	10	6.50	0.85	1.10	7.55	1.09	1.25	9.24	1.51	To Culvert 4+10
B1	0.11	0.76	0.08	10	6.50	0.54	1.10	7.55	0.69	1.25	9.24	0.97	To Culvert 9+45
C1	0.22	0.95	0.21	10	6.50	1.36	1.10	7.55	1.66	1.25	9.24	2.03	To Culvert 10+60
C2	0.46	0.95	0.44	10	6.50	2.84	1.10	7.55	3.47	1.25	9.24	4.25	To Inlet 14+75
C3	0.05	0.95	0.05	10	6.50	0.31	1.10	7.55	0.38	1.25	9.24	0.46	To Culvert 17+00
D1	1.06	0.95	1.01	10	6.50	6.54	1.10	7.55	8.01	1.25	9.24	9.79	To Inlet 21+75
D2	0.13	0.95	0.12	10	6.50	0.80	1.10	7.55	0.98	1.25	9.24	1.20	To Culvert 32+80
D3	0.48	0.59	0.28	10	6.50	1.84	1.10	7.55	2.35	1.25	9.24	3.27	To Culvert 34+00
D4	0.03	0.95	0.03	10	6.50	0.19	1.10	7.55	0.23	1.25	9.24	0.28	To Culvert 34+95
E1	2.98	0.45	1.34	15	5.50	7.37	1.10	6.41	9.45	1.25	7.91	13.26	To Inlet 35+35
F1	1.00	0.45	0.45	15	5.50	2.47	1.10	6.41	3.17	1.25	7.91	4.45	To Inlet 35+75
G1	3.24	0.45	1.46	15	5.50	8.01	1.10	6.41	10.28	1.25	7.91	14.42	To Inlet 37+75
G2	1.20	0.45	0.54	15	5.50	2.97	1.10	6.41	3.81	1.25	7.91	5.34	To Culvert 38+50
G3	1.01	0.45	0.45	15	5.50	2.50	1.10	6.41	3.20	1.25	7.91	4.50	To Culvert 39+45
G4	1.17	0.45	0.53	15	5.50	2.89	1.10	6.41	3.71	1.25	7.91	5.21	To Culvert 40+30
G5	0.06	0.45	0.03	10	6.50	0.18	1.10	7.55	0.22	1.25	9.24	0.31	To Culvert 41+45
H1	1.70	0.45	0.77	15	5.50	4.21	1.10	6.41	5.39	1.25	7.91	7.57	To Culvert 43+30
I1	1.13	0.60	0.68	10	6.50	4.41	1.10	7.55	5.63	1.25	9.24	7.83	To Culvert 52+05
I2	0.60	0.60	0.36	10	6.50	2.34	1.10	7.55	2.99	1.25	9.24	4.16	To Culvert 53+00
J1	1.22	0.60	0.73	10	6.50	4.76	1.10	7.55	6.08	1.25	9.24	8.45	To Culvert 53+15
J2	0.25	0.60	0.15	10	6.50	0.97	1.10	7.55	1.25	1.25	9.24	1.73	To Culvert 59+25
OS1	22.95	0.65	14.92	15	5.50	82.01	1.10	6.41	105.17	1.25	7.91	147.53	To 3'-5"x2' RCB Culvert
OS2	7.25	0.65	4.71	15	5.50	25.91	1.10	6.41	33.22	1.25	7.91	46.61	To 5'-x2' RCB Culvert
OS3	4.29	0.45	1.93	10	6.50	12.55	1.10	7.55	16.04	1.25	9.24	22.29	Offsite
OS4	0.11	0.60	0.07	10	6.50	0.43	1.10	7.55	0.55	1.25	9.24	0.76	Offsite
OS5	1.19	0.60	0.71	10	6.50	4.64	1.10	7.55	5.93	1.25	9.24	8.24	Offsite
OS6	0.91	0.45	0.41	10	6.50	2.66	1.10	7.55	3.40	1.25	9.24	4.73	Offsite
OS7	0.29	0.65	0.19	10	6.50	1.23	1.10	7.55	1.57	1.25	9.24	2.18	Offsite



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 Name PE# Date

100 YR "Y" INLET CALCULATIONS																		
INLET		D.A. NO.	D.A. ACRES	RUNOFF COEF. C	INTENSITY I IN/HR	FREQUENCY FACTOR Cf	DESIGN FLOOD YRS	Q CFS	CARRY OVER q CFS	TOTAL FLOW Qo CFS	"Y" INLET WEIR EQUATION						NOTES	SIZE
STATION	TYPE										Cd	d FT	Lr FT	La FT	Qo CFS	Q CFS		
"Y" Inlets																		
14+75	Y	C1-C3	0.73	0.95	9.24	1.25	100	6.7	0.00	6.7	2.25	0.67	5.51	12.00	0.00	6.7	SAG	3' X 3'
21+75	Y	D1-D4	1.70	0.85	9.24	1.25	100	15.7	0.00	15.7	2.25	0.73	11.19	12.00	0.00	15.7	SAG	3' X 3'
35+35	Y	E1	2.98	0.45	7.91	1.25	100	13.3	0.00	13.3	2.25	0.77	8.72	12.00	0.00	13.3	SAG	3' X 3'
35+75	Y	F1	1.00	0.45	7.91	1.25	100	4.5	0.00	4.5	2.25	0.58	4.48	12.00	0.00	4.5	SAG	3' X 3'
37+75	Y	G1-G5	6.68	0.45	7.91	1.25	100	29.7	0.00	29.7	2.25	0.88	16.01	16.00	0.00	29.7	SAG	4' X 4'
52+05	Y	I1-I2	1.73	0.60	9.24	1.25	100	12.0	0.00	12.0	2.25	0.59	11.76	12.00	0.00	12.0	SAG	3' X 3'

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PUBLIC WORKS
 TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

SHEET TITLE

INLET CALCULATIONS



JANUARY
 2021

DATE

SHEET
 33

100-YR HYDRAULIC COMPUTATIONS

Design Point	Downstream Location	Distance	Area Designation	Drainage Area						Rainfall Intensity				Design Flow			Design Conduit			Friction Loss		Hydraulic Grade Line			Velocity		Minor Loss					Ground/HGL Elev.		
				Drainage Area	Total Drainage Area "A"	Runoff Coefficient "C"	Frequency Factor	Incremental "CA"	Total "CA"	Inlet Time	Travel Time In Conduit	Time of Concentration	Rainfall Intensity	Total Discharge "Q"	Bypass Discharge	Inlet Discharge	Conduit Design Discharge	No. of Conduits	Span (Box Culvert)	Pipe Diameter (Culvert Rise)	Friction Slope "S"	Friction Loss	Downstream HGL Elevation	Upstream HGL Elevation	Design Point HGL Elevation	Downstream Velocity "V"	Upstream Velocity "V"	Downstream Velocity Head "V ² /2g	Upstream Velocity Head "V ² /2g	Minor Loss Coefficient "k"	k "V ² /2g	Total Minor Loss	Upstream ground elev	Elev. diff ground-HGL
sta	sta	feet		acres	acres					min	min	min	In/hr	In/hr	cfs	cfs	cfs		ft	In (ft)	ft/ft	ft		ft/ft	ft/ft	ft	ft		ft	ft				
CULVERT 2+40																																		
1+28.91	1+00.00	28.9	A1-A2	0.26	0.26	0.79	1.25	0.26	0.26		0.25	10.00	9.24	2.4	-	2.4	2.4	1	-	15	0.0013	0.039	544.47	544.51	544.61	1.93	0.00	0.06	0.00	0.20	0.00	0.10	545.26	0.65
CULVERT 4+10																																		
1+32.11	1+00.00	32.1	A2	0.17	0.17	0.77	1.25	0.16	0.16		0.43	10.00	9.24	1.5	-	1.5	1.5	1	-	15	0.0005	0.018	547.89	547.91	548.01	1.23	0.00	0.02	0.00	0.20	0.00	0.10	549.00	0.99
CULVERT 9+45																																		
1+00.00	1+33.81	33.8	B1	0.11	0.11	0.76	1.25	0.10	0.10		0.72	10.00	9.24	1.0	-	1.0	1.0	1	-	15	0.0002	0.008	548.48	548.49	548.59	0.79	0.00	0.01	0.00	0.20	0.00	0.10	549.80	1.21
CULVERT 10+60																																		
1+00.00	2+12.00	112.0	C1	0.22	0.22	0.95	1.25	0.22	0.22		1.13	10.00	9.24	2.0	-	2.0	2.0	1	-	15	0.0010	0.111	545.90	546.01	546.11	1.66	0.00	0.04	0.00	0.20	0.00	0.10	548.69	2.58
CULVERT 14+75																																		
1+00.00	1+14.75	14.8	OS2	7.25	7.25	0.65	1.25	5.89	5.89		0.05	15.00	7.91	46.6	-	46.6	46.6	1	5	2	0.0026	0.038	538.95	538.99	539.09	4.66	0.00	0.34	0.00	0.20	0.00	0.10	541.23	2.14
1+14.75	1+59.00	44.3	C1-C3	0.73	7.98	0.95	1.25	0.73	6.62		0.14	15.05	7.90	52.3	-	52.3	52.3	1	5	2	0.0033	0.145	538.55	538.70	538.95	5.23	4.66	0.42	0.34	0.60	0.20	0.25	540.87	1.92
LATERAL 14+75																																		
1+07.51	1+00.00	7.5	C1-C3	0.73	0.73	0.95	1.25	0.73	0.73		0.03	10.00	9.24	6.7	-	6.7	6.7	1	-	18	0.0041	0.031	538.70	538.73	539.01	3.82	0.00	0.23	0.00	1.25	0.00	0.28	540.86	1.85
CULVERT 17+00																																		
1+88.00	1+00.00	88.0	C3	0.05	0.05	0.95	1.25	0.05	0.05		3.90	10.00	9.24	0.5	-	0.5	0.5	1	-	15	0.0001	0.004	545.07	545.07	545.17	0.38	0.00	0.00	0.00	0.20	0.00	0.10	548.04	2.87
CULVERT 21+75																																		
1+00.00	1+18.22	18.2	OS1	22.95	22.95	0.65	1.25	18.65	18.65		0.06	15.00	7.91	147.5	-	147.5	147.5	3	5	2	0.0029	0.053	531.73	531.78	531.88	4.92	0.00	0.38	0.00	0.20	0.00	0.10	534.77	2.89
1+18.22	1+59.00	40.8	D1-D4	1.70	24.65	0.85	1.25	1.70	20.35		0.13	15.06	7.90	160.7	-	160.7	160.7	3	5	2	0.0034	0.140	531.32	531.46	531.73	5.36	4.92	0.45	0.38	0.60	0.23	0.27	534.47	2.74
LATERAL 21+75																																		
1+14.43	1+09.81	4.6	D1-D4	1.70	1.70	0.85	1.25	1.70	1.70		0.01	10.00	9.24	15.7	-	15.7	15.7	1	-	18	0.0224	0.103	531.46	531.56	533.10	8.89	0.00	1.23	0.00	1.25	0.00	1.53	534.42	1.32
CULVERT 32+80																																		
1+00.00	1+33.27	33.3	D2-D4	0.64	0.64	0.68	1.25	0.54	0.54		0.14	10.00	9.24	5.0	-	5.0	5.0	1	-	15	0.0061	0.201	560.62	560.82	560.92	4.10	0.00	0.26	0.00	0.20	0.00	0.10	564.82	3.90
1+33.27	1+86.50	53.2	BEND	-	0.64	-	1.25	0.00	0.54		0.22	10.14	9.20	5.0	-	5.0	5.0	1	-	15	0.0060	0.319	560.09	560.41	560.62	4.08	4.10	0.26	0.26	0.20	0.05	0.21	563.48	2.86
CULVERT 34+00																																		
1+60.28	1+23.94	36.3	D3-D4	0.51	0.51	0.61	1.25	0.39	0.39		0.21	10.00	9.24	3.6	-	3.6	3.6	1	-	15	0.0031	0.112	565.55	565.66	565.76	2.93	0.00	0.13	0.00	0.20	0.00	0.10	567.23	1.47
1+23.94	1+00.00	23.9	BEND	-	0.51	-	1.25	0.00	0.39		0.14	10.21	9.17	3.6	-	3.6	3.6	1	-	15	0.0030	0.073	565.37	565.44	565.55	2.91	2.93	0.13	0.13	0.20	0.03	0.10	566.71	1.16
CULVERT 34+95																																		
1+26.56	1+00.00	26.6	D4	0.03	0.03	0.95	1.25	0.03	0.03		1.96	10.00	9.24	0.3	-	0.3	0.3	1	-	15	0.0000	0.000	567.22	567.22	567.32	0.23	0.00	0.00	0.00	0.20	0.00	0.10	568.49	1.17

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 TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

SHEET TITLE

HYDRAULIC CALCULATIONS
 (SHEET 1 OF 2)



JANUARY
 2021

DATE

SHEET
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100-YR HYDRAULIC COMPUTATIONS

Design Point	Downstream Location	Distance	Area Designation	Drainage Area						Rainfall Intensity				Design Flow			Design Conduit			Friction Loss		Hydraulic Grade Line			Velocity		Minor Loss				Ground/HGL Elev.		
				Drainage Area	Total Drainage Area "A"	Runoff Coefficient "C"	Frequency Factor	Incremental "CA"	Total "CA"	Inlet Time	Travel Time in Conduit	Time of Concentration	Rainfall Intensity	Total Discharge "Q"	Bypass Discharge	Inlet Discharge	Conduit Design Discharge	No. of Conduits	Span (Box Culvert)	Pipe Diameter (Culvert Rise)	Friction Slope "S"	Friction Loss	Downstream HGL Elevation	Upstream HGL Elevation	Design Point HGL Elevation	Downstream Velocity (ft/sec)	Upstream Velocity (ft/sec)	Downstream Velocity Head (ft)	Upstream Velocity Head (ft)	Minor Loss Coefficient k	k W/Zg	Total Minor Loss	Upstream ground elev
sta	sta	feet		acres	acres					min	min	min	In/hr	In/hr	cfs	cfs	cfs	ft	In (ft)	ft/ft	ft				ft/sec	ft/sec	ft	ft		ft	ft		
LATERAL 35+35																																	
1+00.00	1+05.29	5.3	E1	2.98	2.98	0.45	1.25	1.68	1.68	0.01	15.00	7.91	13.3	-	13.3	13.3	1	-	18	0.0159	0.084	565.59	565.67	566.77	7.51	0.00	0.87	0.00	1.25	0.00	1.09	567.53	0.76
1+05.29	1+51.11	45.8	BEND	-	2.98	-	1.25	0.00	1.68	0.10	15.01	7.91	13.3	-	13.3	13.3	1	-	18	0.0159	0.730	564.29	565.02	565.59	7.50	7.51	0.87	0.87	0.35	0.31	0.57	566.91	1.32
LATERAL 35+75																																	
1+00.00	1+50.04	50.0	F1	1.00	1.00	0.45	1.25	0.56	0.56	0.33	15.00	7.91	4.5	-	4.5	4.5	1	-	18	0.0018	0.090	565.44	565.53	565.65	2.52	0.00	0.10	0.00	1.25	0.00	0.12	567.50	1.85
1+50.04	1+54.04	4.0	E1	2.98	3.98	0.45	1.25	1.68	2.24	0.01	15.33	7.84	17.6	-	17.6	17.6	1	-	18	0.0279	0.112	564.18	564.29	565.44	9.93	2.52	1.53	0.10	0.75	0.07	1.15	566.92	1.48
LATERAL 37+75																																	
1+00.00	1+42.59	42.6	G1-G5	6.68	6.68	0.45	1.25	3.76	3.76	0.08	15.00	7.91	29.7	-	29.7	29.7	1	-	24	0.0173	0.736	562.76	563.49	565.23	9.46	0.00	1.39	0.00	1.25	0.00	1.74	565.39	0.16
1+42.59	1+42.59	0.0	CNCT	-	6.68	-	1.25	0.00	3.76	0.00	15.08	7.90	29.7	-	29.7	29.7	1	-	24	0.0172	0.000	562.07	562.07	562.76	9.44	9.46	1.38	1.39	0.50	0.70	0.69	564.07	1.31
CULVERT 38+50																																	
1+25.71	1+00.00	25.7	G2-G5	3.44	3.44	0.45	1.25	1.94	1.94	0.05	15.00	7.91	15.3	-	15.3	15.3	1	-	18	0.0212	0.546	565.60	566.15	566.38	8.66	0.00	1.17	0.00	0.20	0.00	0.23	566.70	0.32
CULVERT 39+45																																	
1+26.33	1+00.00	26.3	G3-G5	2.24	2.24	0.45	1.25	1.26	1.26	0.08	15.00	7.91	10.0	-	10.0	10.0	1	-	18	0.0090	0.237	566.80	567.04	567.14	5.64	0.00	0.49	0.00	0.20	0.00	0.10	567.82	0.68
CULVERT 40+30																																	
1+26.26	1+00.00	26.3	G4-G5	1.23	1.23	0.45	1.25	0.69	0.69	0.10	15.00	7.91	5.5	-	5.5	5.5	1	-	15	0.0072	0.189	567.55	567.74	567.84	4.46	0.00	0.31	0.00	0.20	0.00	0.10	568.66	0.82
CULVERT 41+45																																	
1+30.24	1+00.00	30.2	G5	0.06	0.06	0.45	1.25	0.03	0.03	1.98	10.00	9.24	0.3	-	0.3	0.3	1	-	15	0.0000	0.001	568.47	568.47	568.57	0.25	0.00	0.00	0.00	0.20	0.00	0.10	569.52	0.95
CULVERT 43+30																																	
1+00.00	1+29.69	29.7	H1	1.70	1.70	0.45	1.25	0.96	0.96	0.08	15.00	7.91	7.6	-	7.6	7.6	1	-	15	0.0137	0.407	567.38	567.79	567.91	6.17	0.00	0.59	0.00	0.20	0.00	0.12	568.38	0.47
CULVERT 52+05																																	
1+37.00	1+00.00	37.0	I1-I2	1.73	1.73	0.60	1.25	1.30	1.30	0.09	10.00	9.24	12.0	-	12.0	12.0	1	-	18	0.0130	0.482	564.02	564.50	565.39	6.78	0.00	0.71	0.00	1.25	0.00	0.89	565.51	0.12
CULVERT 53+00																																	
1+83.37	1+38.07	45.3	I2	0.60	0.60	0.60	1.25	0.45	0.45	0.22	10.00	9.24	4.2	-	4.2	4.2	1	-	15	0.0041	0.188	565.70	565.88	565.98	3.39	0.00	0.18	0.00	0.20	0.00	0.10	567.73	1.75
1+38.07	1+00.00	38.1	BEND	-	0.60	-	1.25	0.00	0.45	0.19	10.22	9.17	4.1	-	4.1	4.1	1	-	15	0.0041	0.155	565.40	565.56	565.70	3.36	3.39	0.18	0.18	0.20	0.04	0.14	567.04	1.34
CULVERT 53+15																																	
3+49.12	1+00.00	249.1	J1-J2	1.47	1.47	0.60	1.25	1.10	1.10	0.72	10.00	9.24	10.2	-	10.2	10.2	1	-	18	0.0094	2.342	564.55	566.89	567.00	5.76	0.00	0.52	0.00	0.20	0.00	0.10	571.68	4.68
CULVERT 59+25																																	
1+39.47	1+00.00	39.5	J2	0.25	0.25	0.60	1.25	0.19	0.19	0.47	10.00	9.24	1.7	-	1.7	1.7	1	-	15	0.0007	0.028	573.26	573.29	573.39	1.41	0.00	0.03	0.00	0.20	0.00	0.10	574.46	1.07

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 KEVIN J. GRONWALDT 130871 1/13/2021
 Name PE# Date



PUBLIC WORKS
 TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

SHEET TITLE

HYDRAULIC CALCULATIONS
 (SHEET 2 OF 2)



JANUARY
 2021

DATE

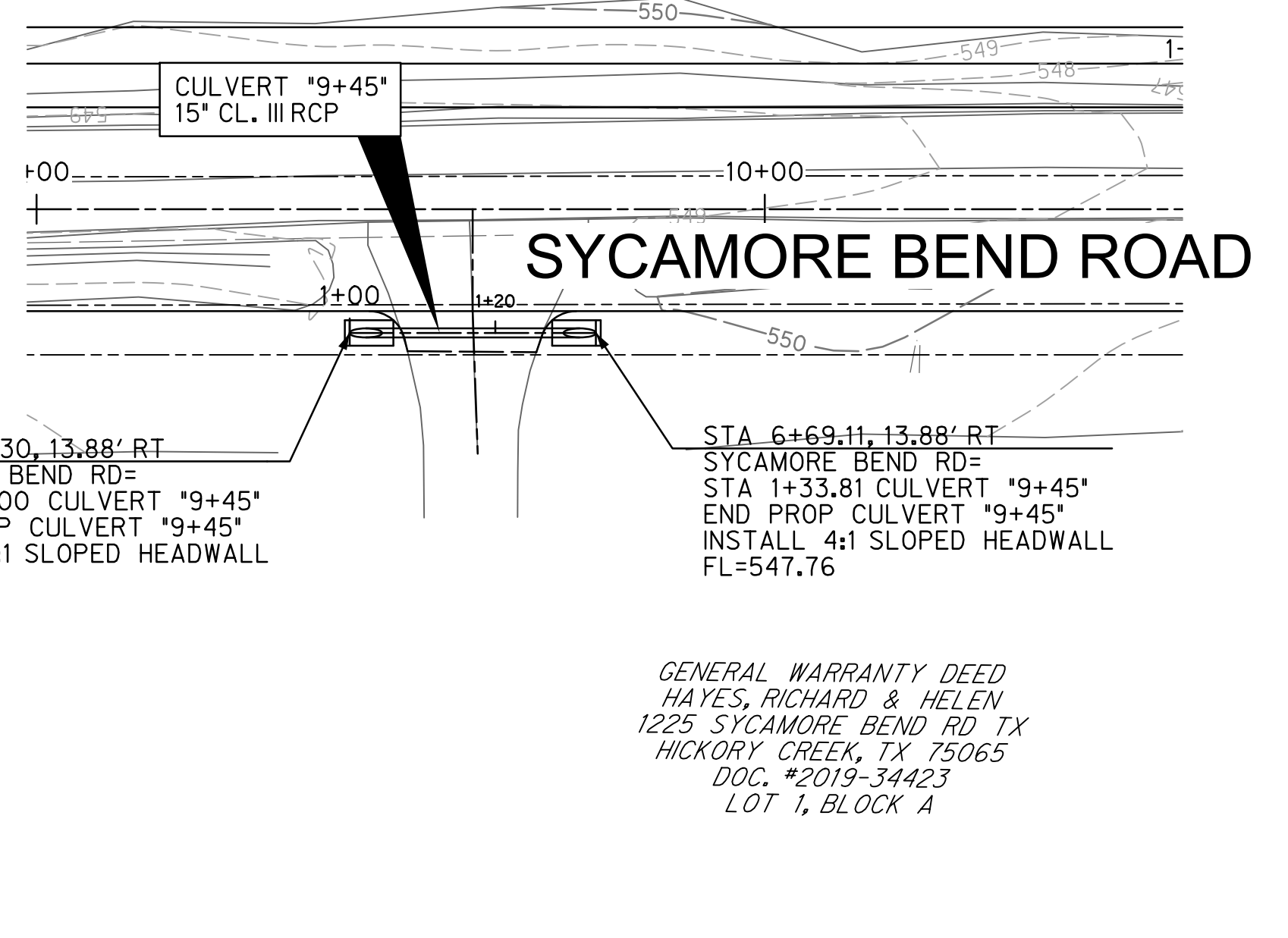
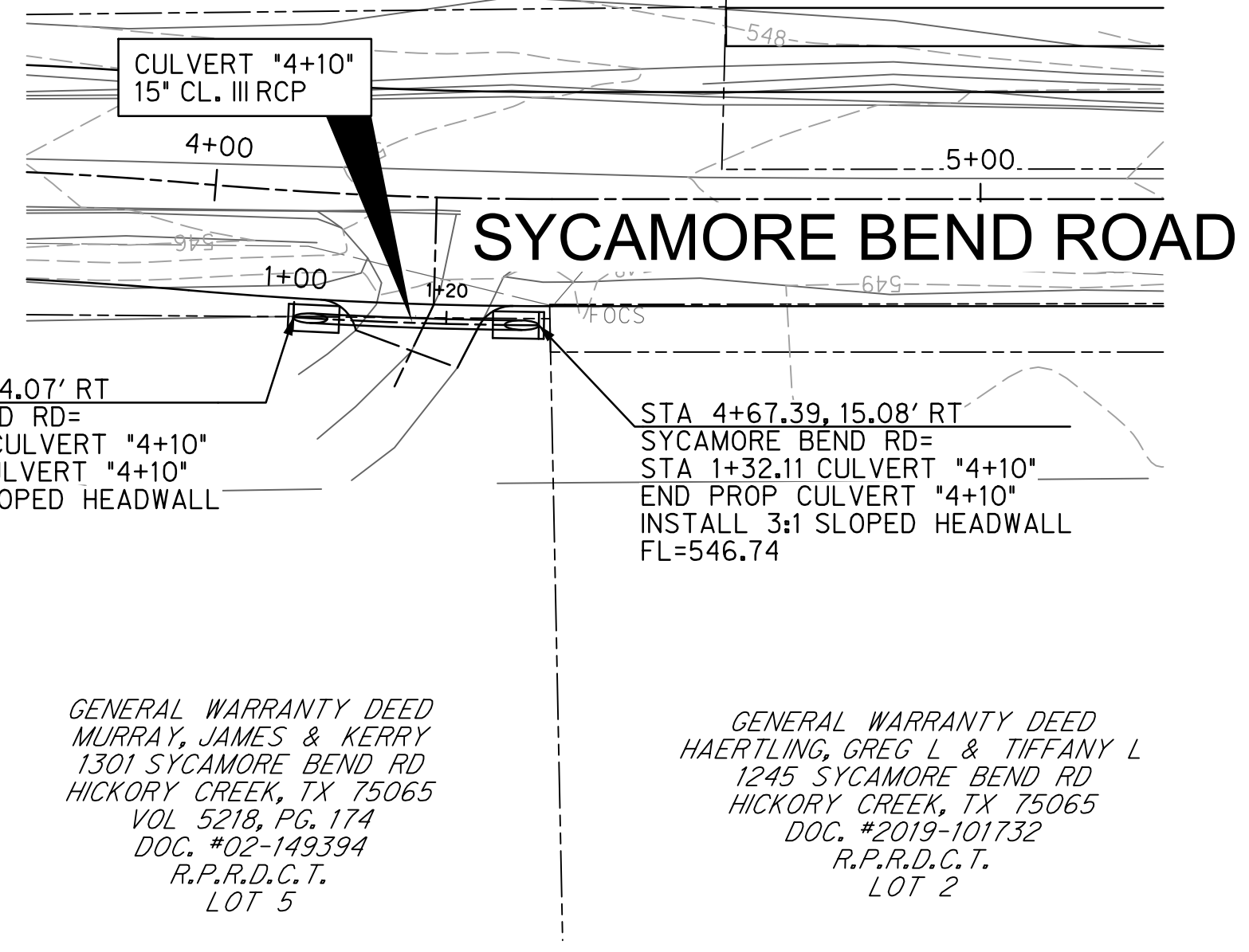
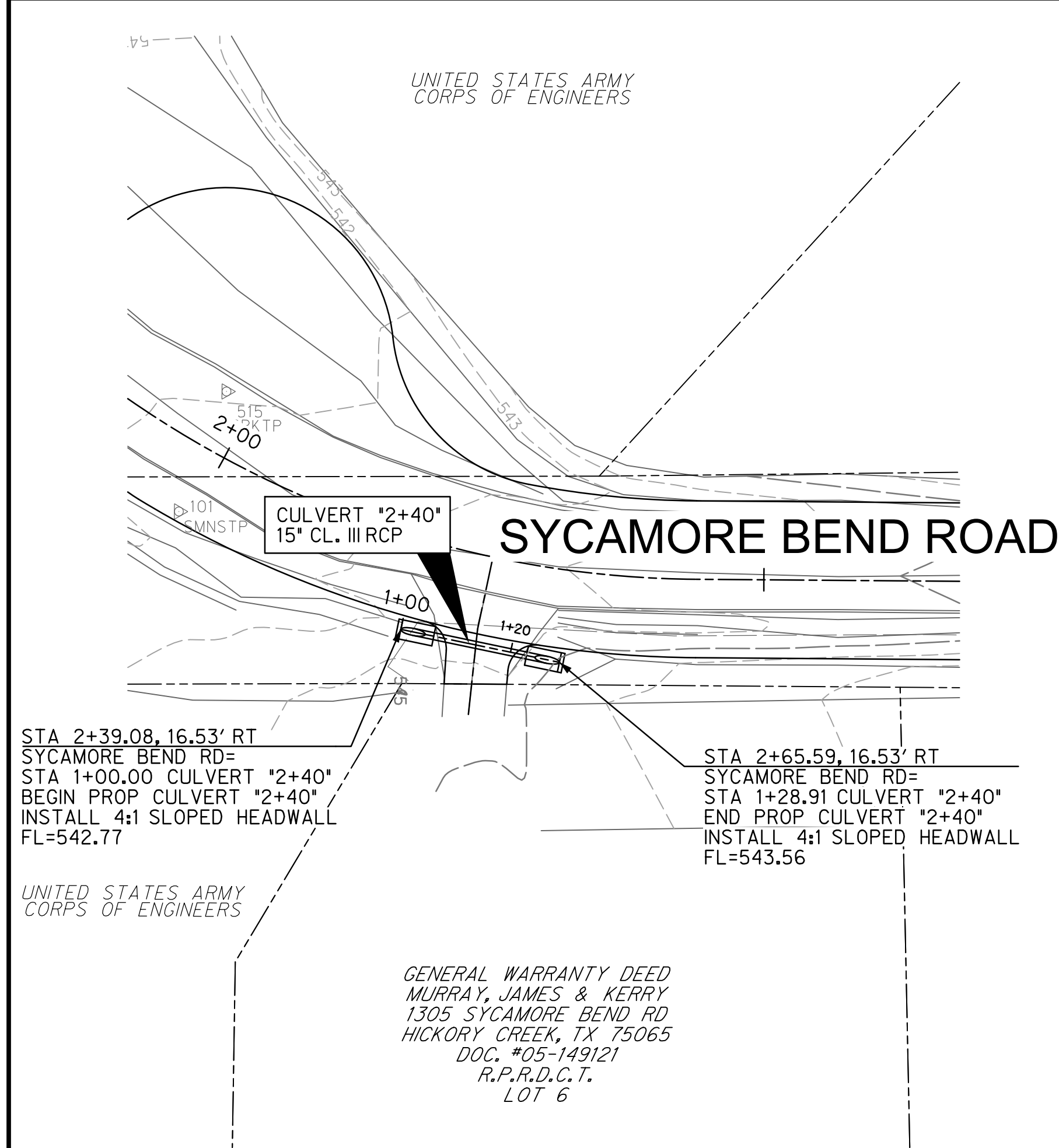
SHEET
 35

UNITED STATES ARMY
CORPS OF ENGINEERS

SPECIAL WARRANTY DEED
DRAKE, MINNIE S. & LOUIE V. JR.
SYCAMORE BEND RD
HICKORY CREEK, TX 75065
DOC. #2014-76700
R.P.R.D.C.T.
LOT 7

HIDDEN HILLS, INC.
34 HIDDEN HILLS RD
HICKORY CREEK, TX 75065
LOT 3

HIDDEN HILLS, INC.
34 HIDDEN HILLS RD
HICKORY CREEK, TX 75065
LOT 3



STA 2+39.08, 16.53' RT
SYCAMORE BEND RD=
STA 1+00.00 CULVERT *2+40*
BEGIN PROP CULVERT *2+40*
INSTALL 4:1 SLOPED HEADWALL
FL=542.77

STA 2+65.59, 16.53' RT
SYCAMORE BEND RD=
STA 1+28.91 CULVERT *2+40*
END PROP CULVERT *2+40*
INSTALL 4:1 SLOPED HEADWALL
FL=543.56

STA 4+35.52, 14.07' RT
SYCAMORE BEND RD=
STA 1+00.00 CULVERT *4+10*
BEGIN PROP CULVERT *4+10*
INSTALL 3:1 SLOPED HEADWALL
FL=546.74

STA 4+67.39, 15.08' RT
SYCAMORE BEND RD=
STA 1+32.11 CULVERT *4+10*
END PROP CULVERT *4+10*
INSTALL 3:1 SLOPED HEADWALL
FL=546.74

STA 6+35.30, 13.88' RT
SYCAMORE BEND RD=
STA 1+00.00 CULVERT *9+45*
BEGIN PROP CULVERT *9+45*
INSTALL 4:1 SLOPED HEADWALL
FL=547.92

STA 6+69.11, 13.88' RT
SYCAMORE BEND RD=
STA 1+33.81 CULVERT *9+45*
END PROP CULVERT *9+45*
INSTALL 4:1 SLOPED HEADWALL
FL=547.76

GENERAL WARRANTY DEED
MURRAY, JAMES & KERRY
1305 SYCAMORE BEND RD
HICKORY CREEK, TX 75065
DOC. #05-149121
R.P.R.D.C.T.
LOT 6

GENERAL WARRANTY DEED
MURRAY, JAMES & KERRY
1301 SYCAMORE BEND RD
HICKORY CREEK, TX 75065
VOL. 5218, PG. 174
DOC. #02-149394
R.P.R.D.C.T.
LOT 5

GENERAL WARRANTY DEED
HAERTLING, GREG L & TIFFANY L
1245 SYCAMORE BEND RD
HICKORY CREEK, TX 75065
DOC. #2019-101732
R.P.R.D.C.T.
LOT 2

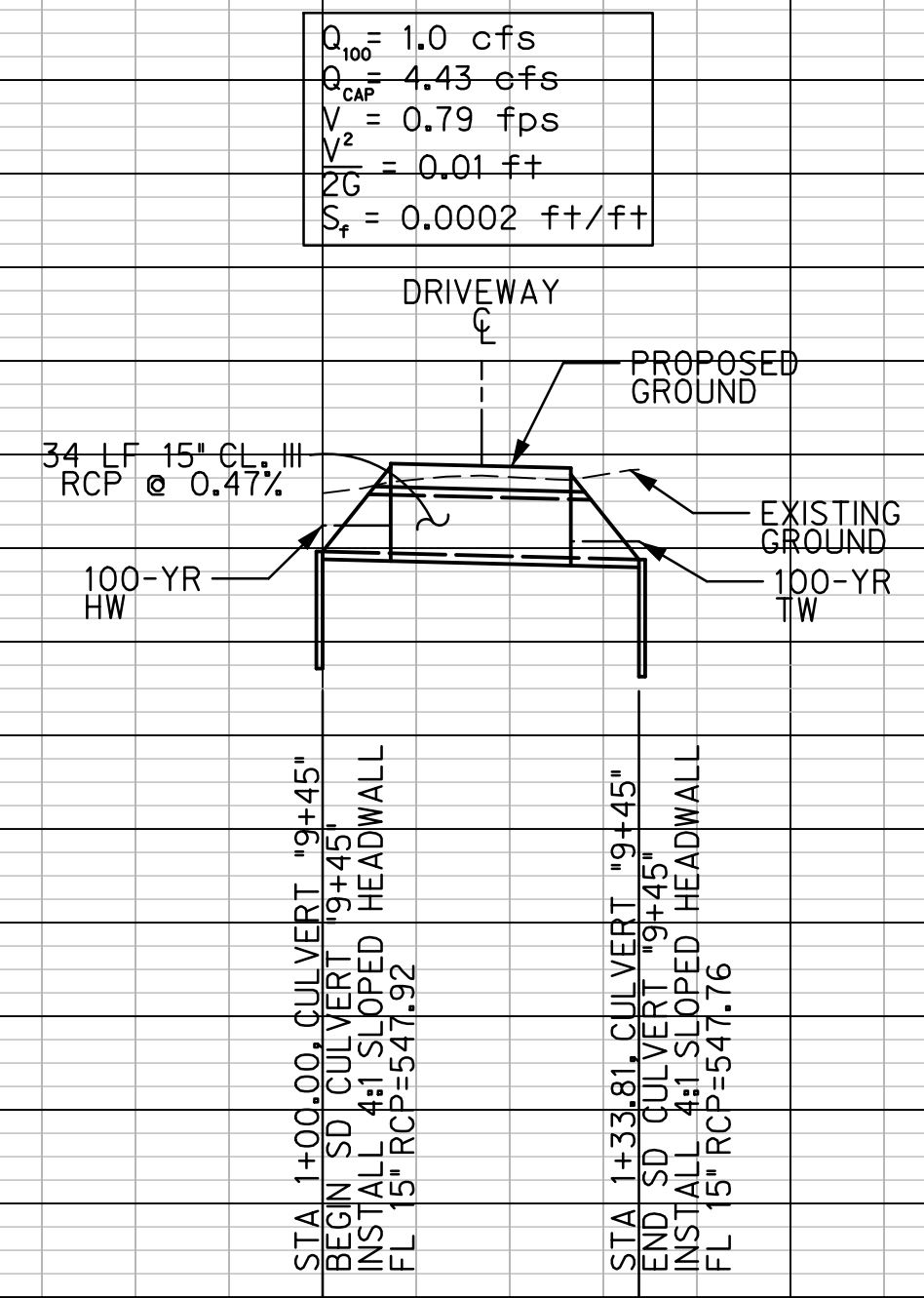
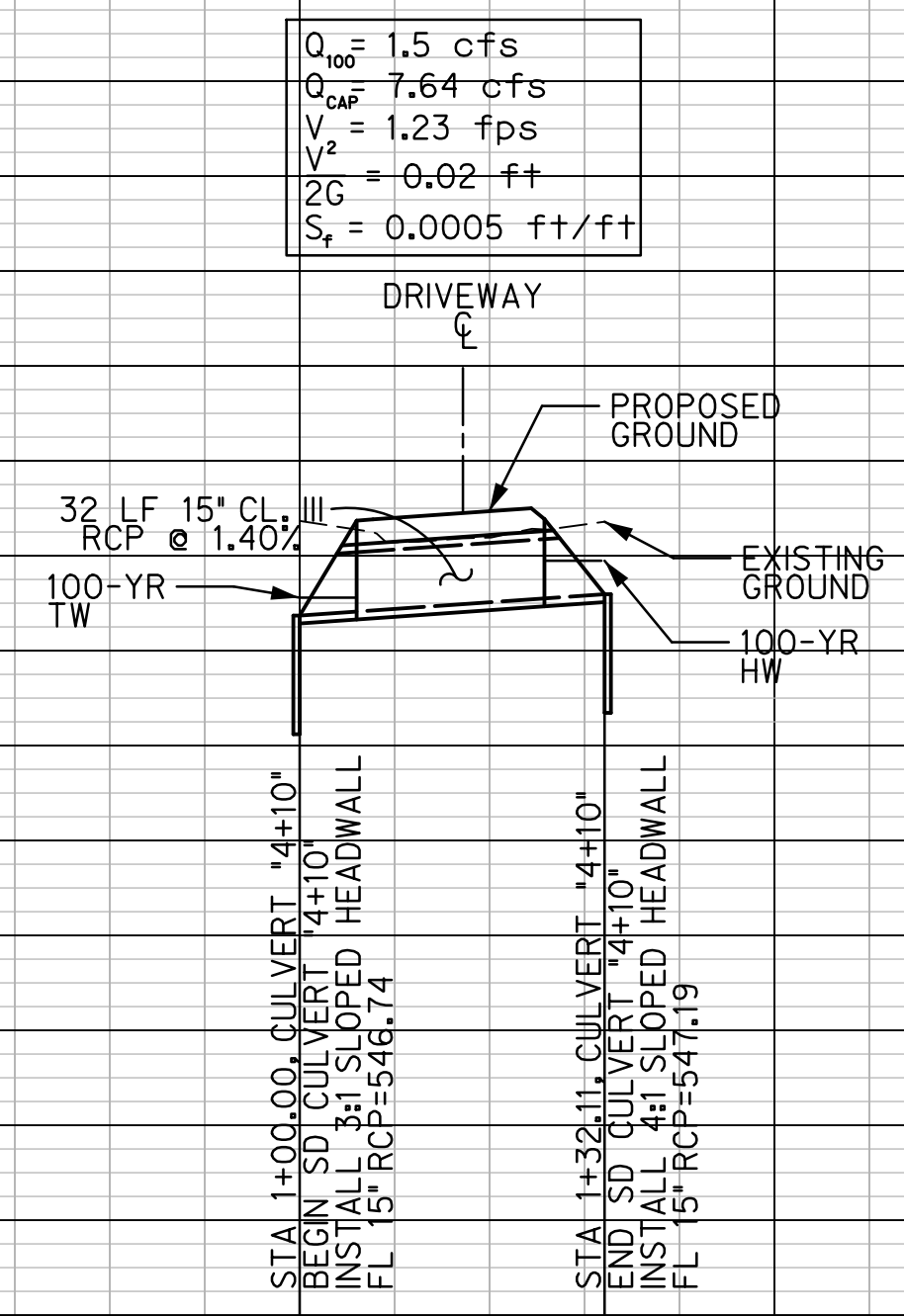
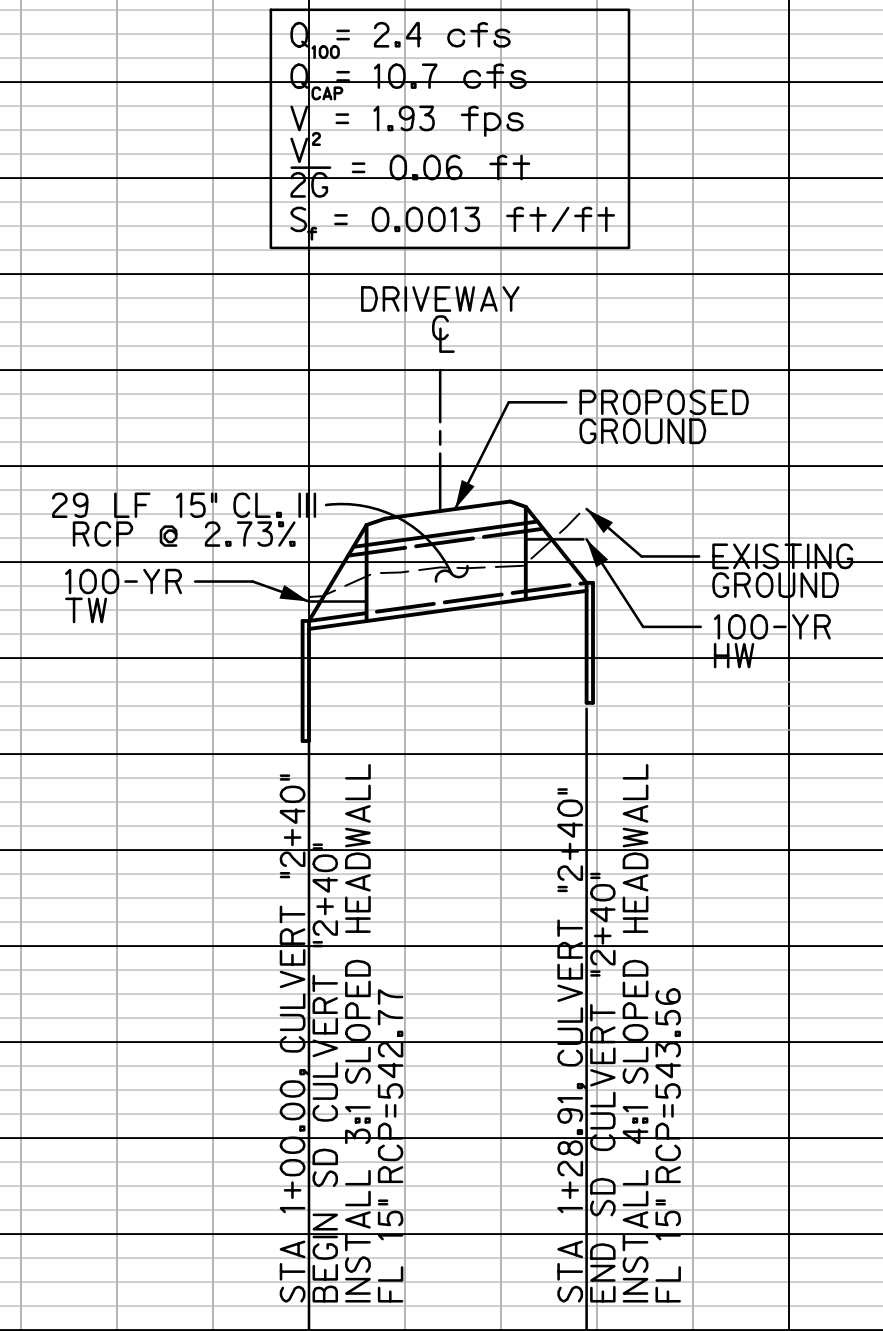
GENERAL WARRANTY DEED
HAYES, RICHARD & HELEN
1225 SYCAMORE BEND RD TX
HICKORY CREEK, TX 75065
DOC. #2019-34423
LOT 1, BLOCK A

CULVERT "2+40"

CULVERT "4+10"

CULVERT "9+45"

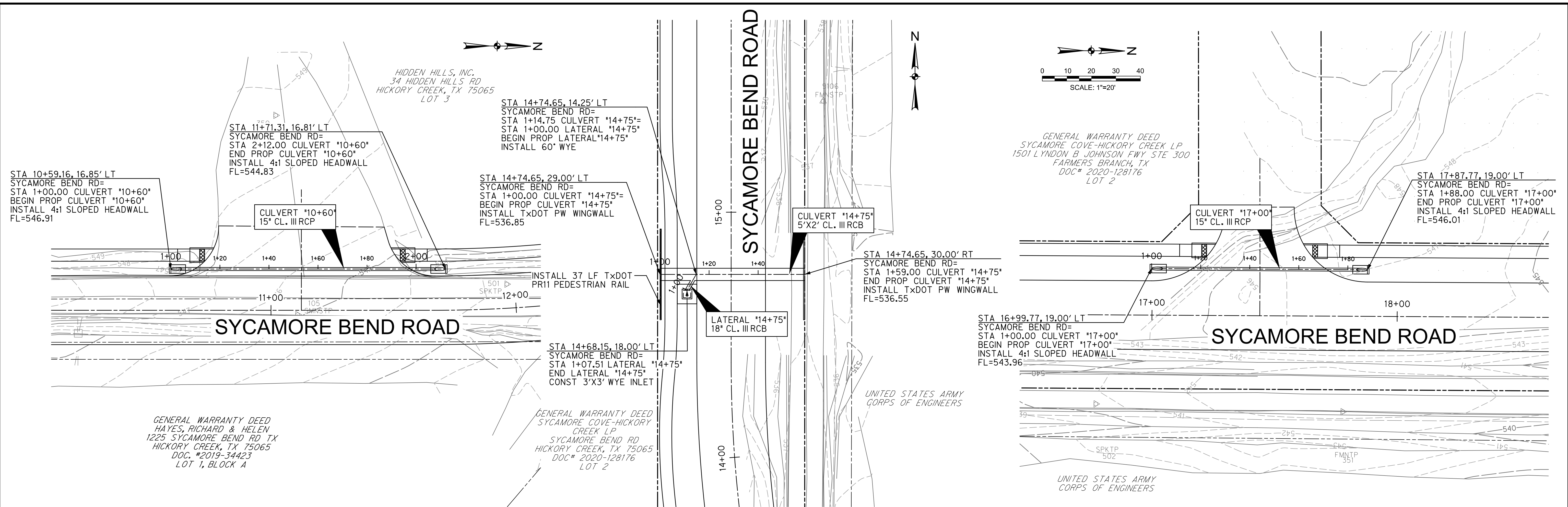
Station	Profile	Flow Data	Profile Scale
558			562
554	$Q_{100} = 2.4 \text{ cfs}$ $Q_{cnp} = 10.7 \text{ cfs}$ $V = 1.93 \text{ fps}$ $V^2 = 0.06 \text{ ft}$ $S_f = 0.0013 \text{ ft/ft}$	PROFILE SCALE HORIZ. 1"=20' VERT. 1"=4'	562
550			558
546			554
542			550
538			546
534			542
530			538
			534



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TBPELS ENG. FIRM NO. F-312

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KEVIN J. GRONWALDT 130871 1/13/2021
Name PE# Date

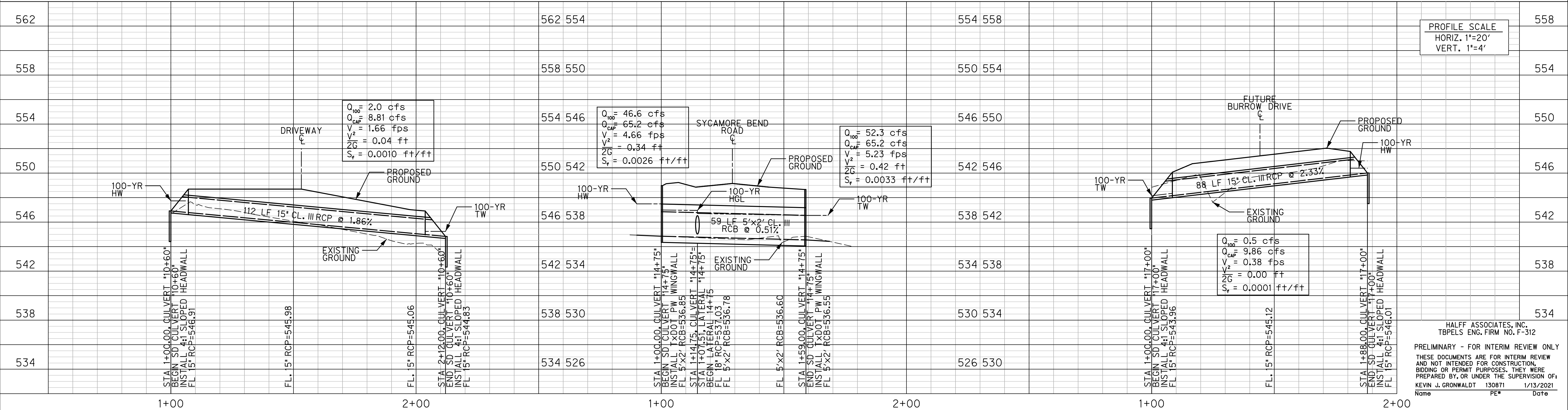
	<p>PUBLIC WORKS TOWN OF HICKORY CREEK</p>	<p>SYCAMORE BEND ROAD FROM TURBEVILLE ROAD TO SYCAMORE BEND PARK</p>	<p>CULVERT PLAN AND PROFILE STA 2+40, 4+10 & 9+45</p>		<p>JANUARY 2021</p>	<p>SHEET 36</p>



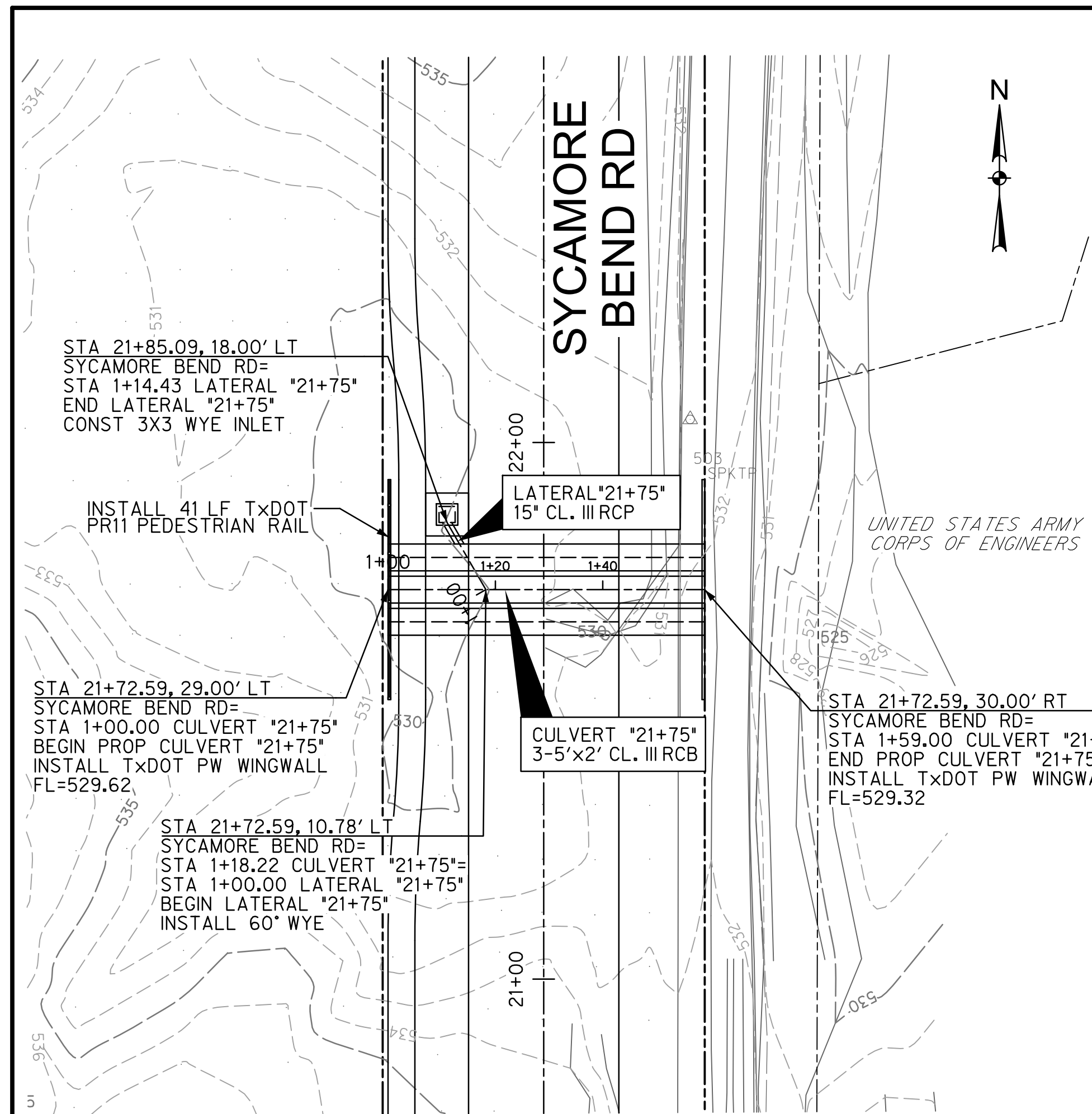
CULVERT "10+60"

CULVERT "14+75"

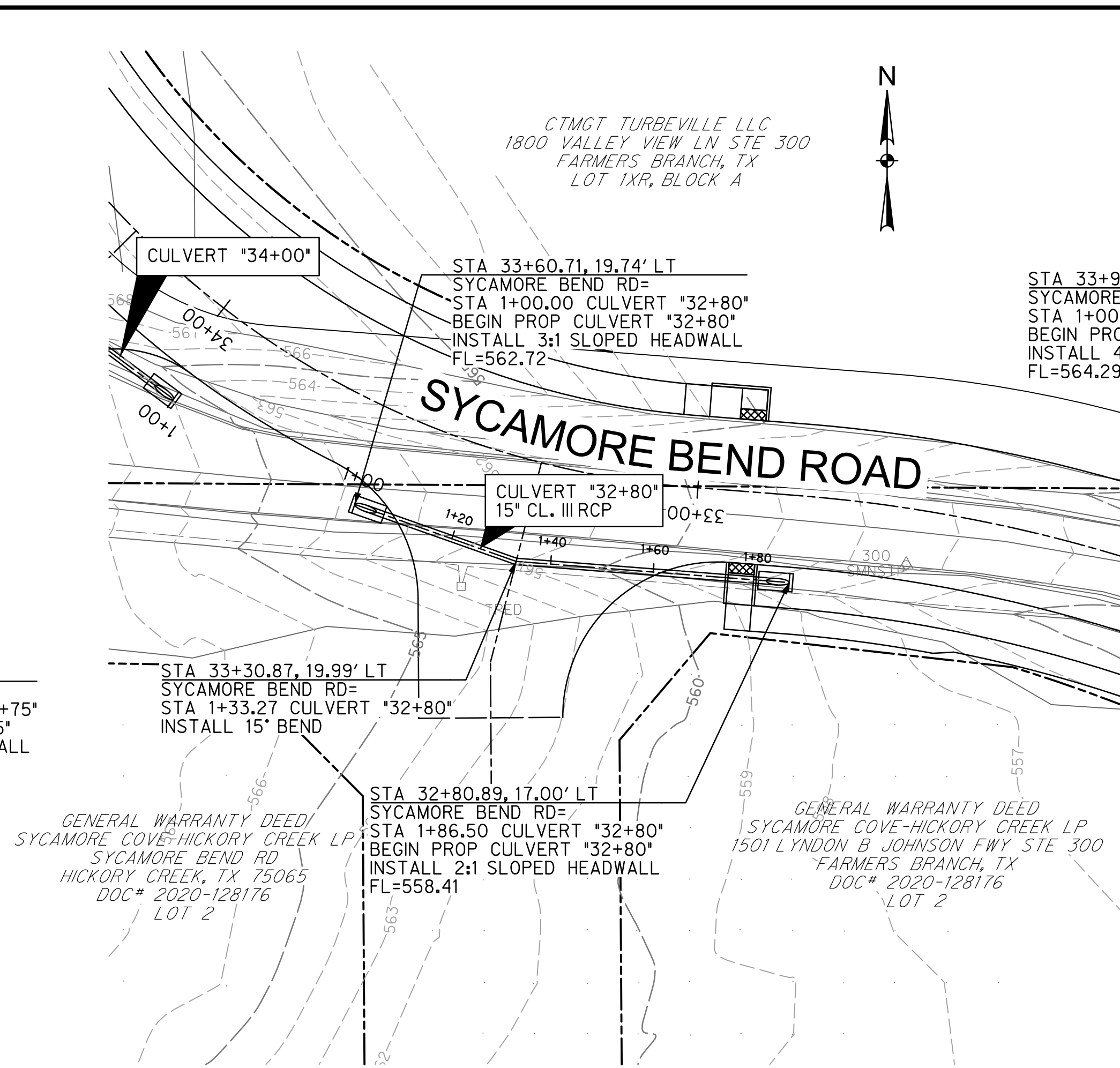
CULVERT "17+00"



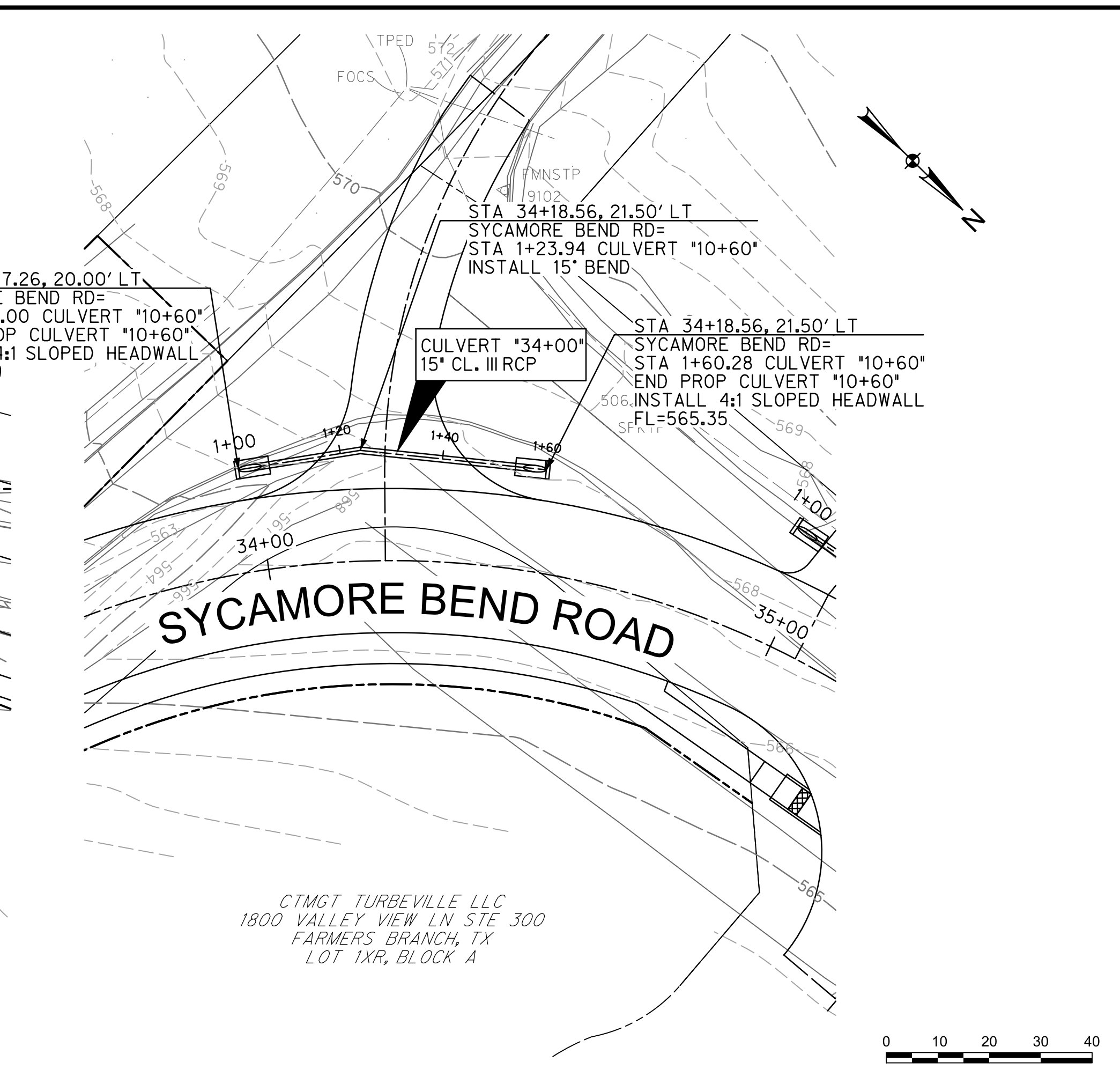
<p>HICKORY CREEK City-close, lakeside living!</p>	<p>PUBLIC WORKS TOWN OF HICKORY CREEK</p>	<p>SYCAMORE BEND ROAD FROM TURBEVILLE ROAD TO SYCAMORE BEND PARK</p>	<p>CULVERT PLAN AND PROFILE STA 10+60, 14+75 & 17+00</p>	<p>HALFF 4000 FOSSIL CREEK BLVD FORT WORTH, TEXAS 76137-2797 TEL (817) 847-4422 FAX (817) 232-9784 TBPELS Engineering Firm #312</p>	<p>JANUARY 2021</p>	<p>SHEET 37</p>



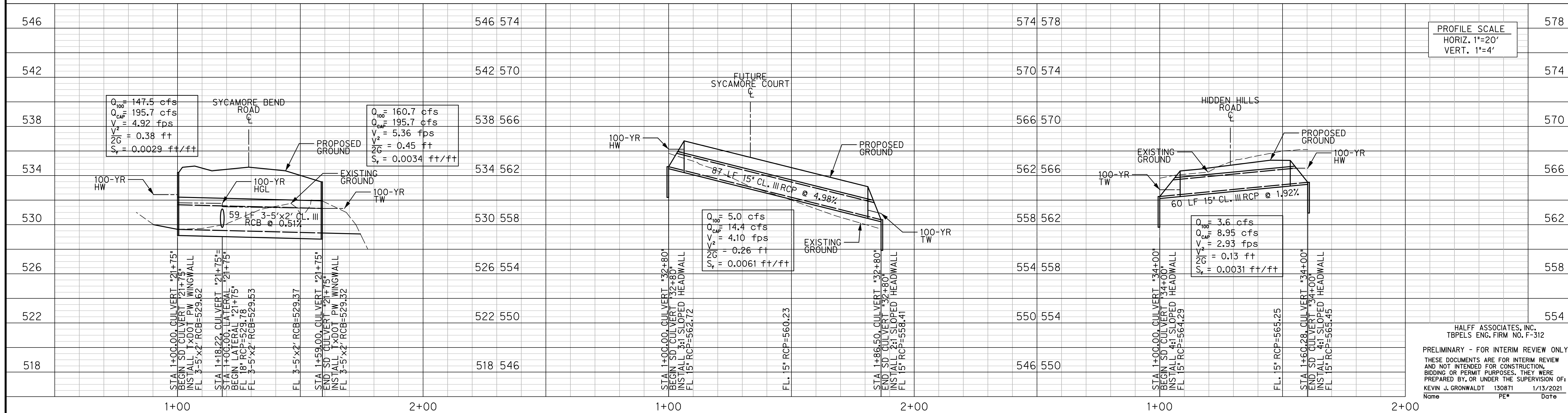
CULVERT "21+75"



CULVERT "32+80"



CULVERT "34+00"



PROFILE SCALE
HORIZ. 1"=20'
VERT. 1"=4'

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Name: KEVIN J. GRONWALDT 130871 1/13/2021
PE# _____ Date _____



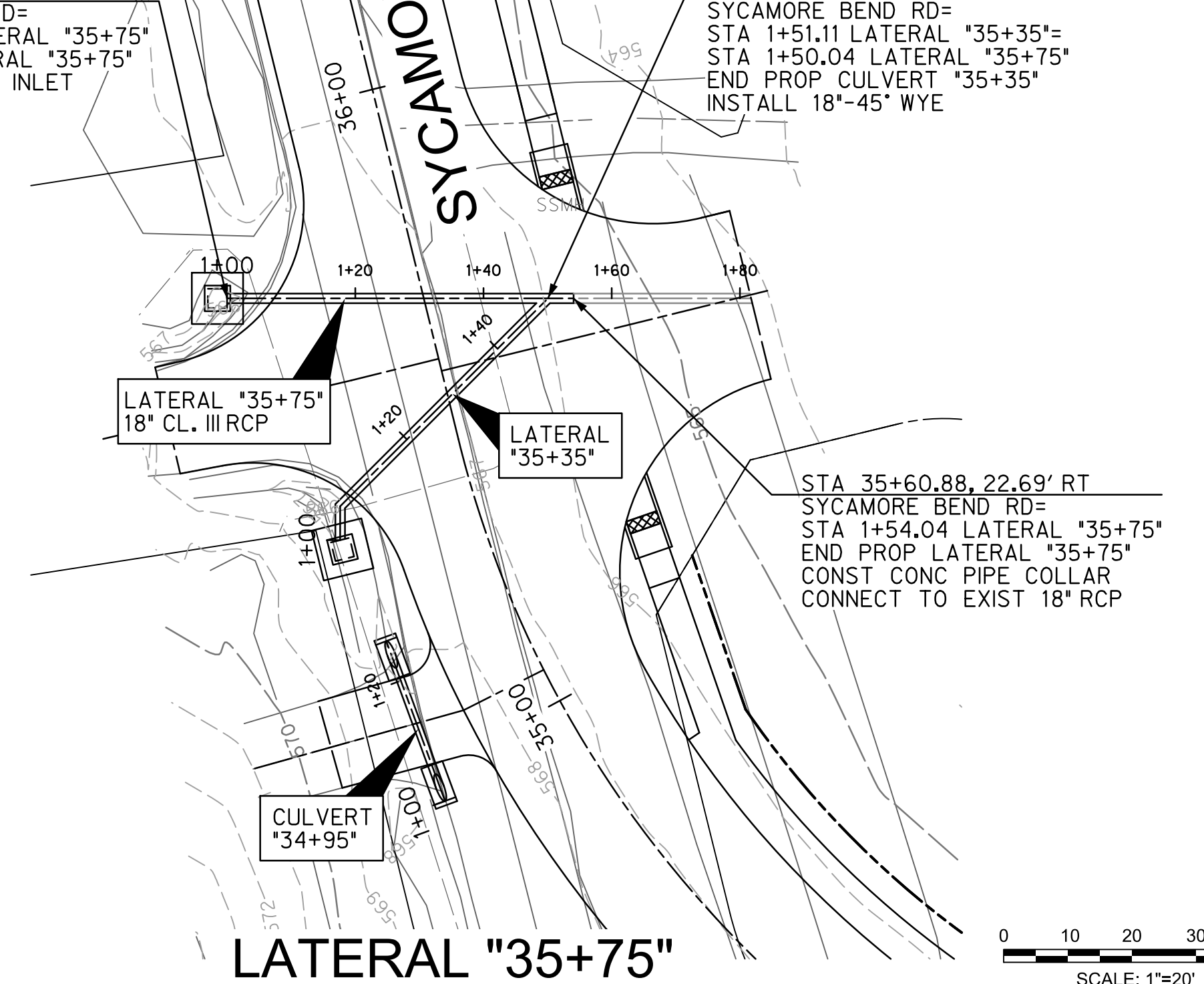
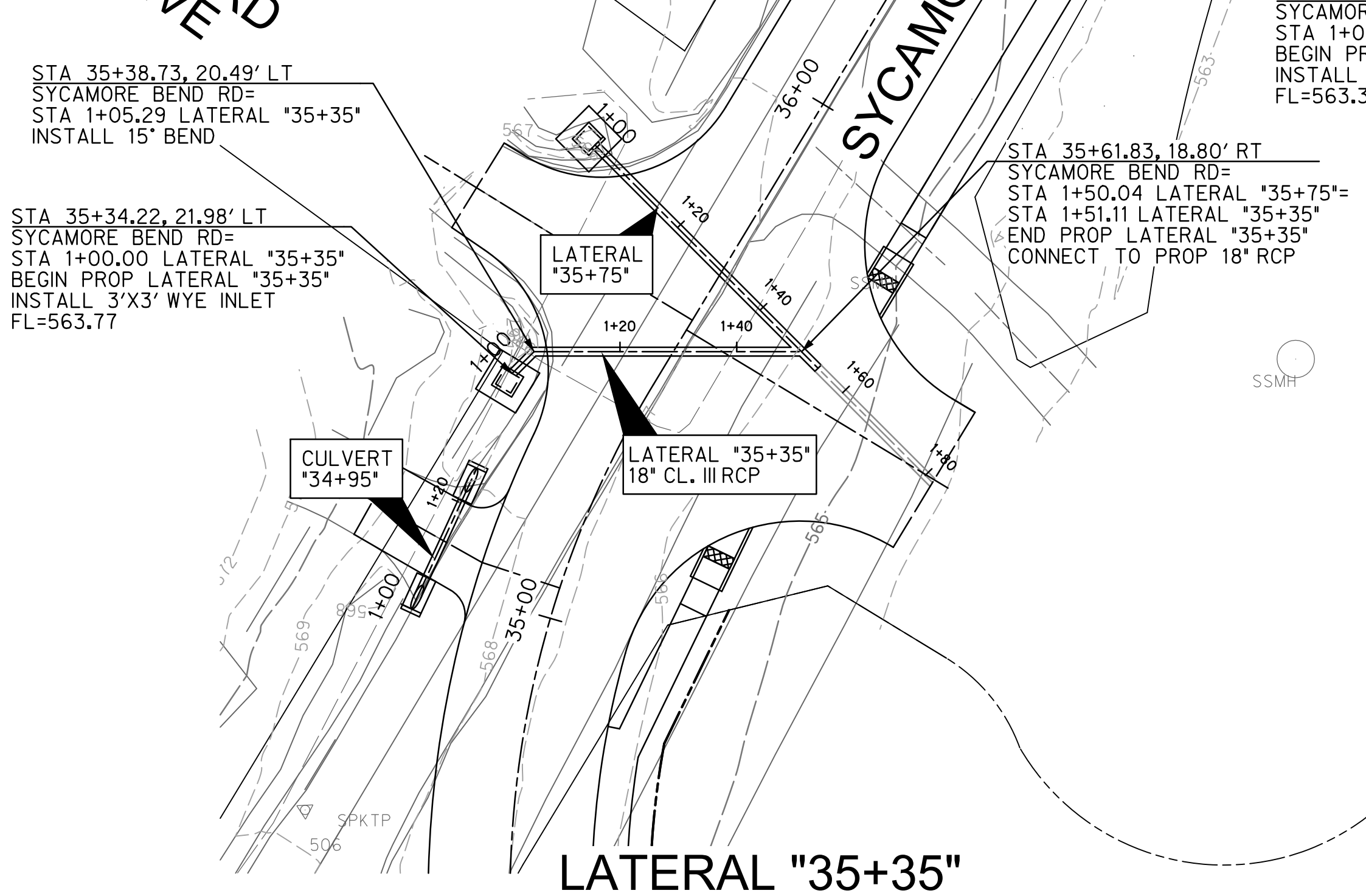
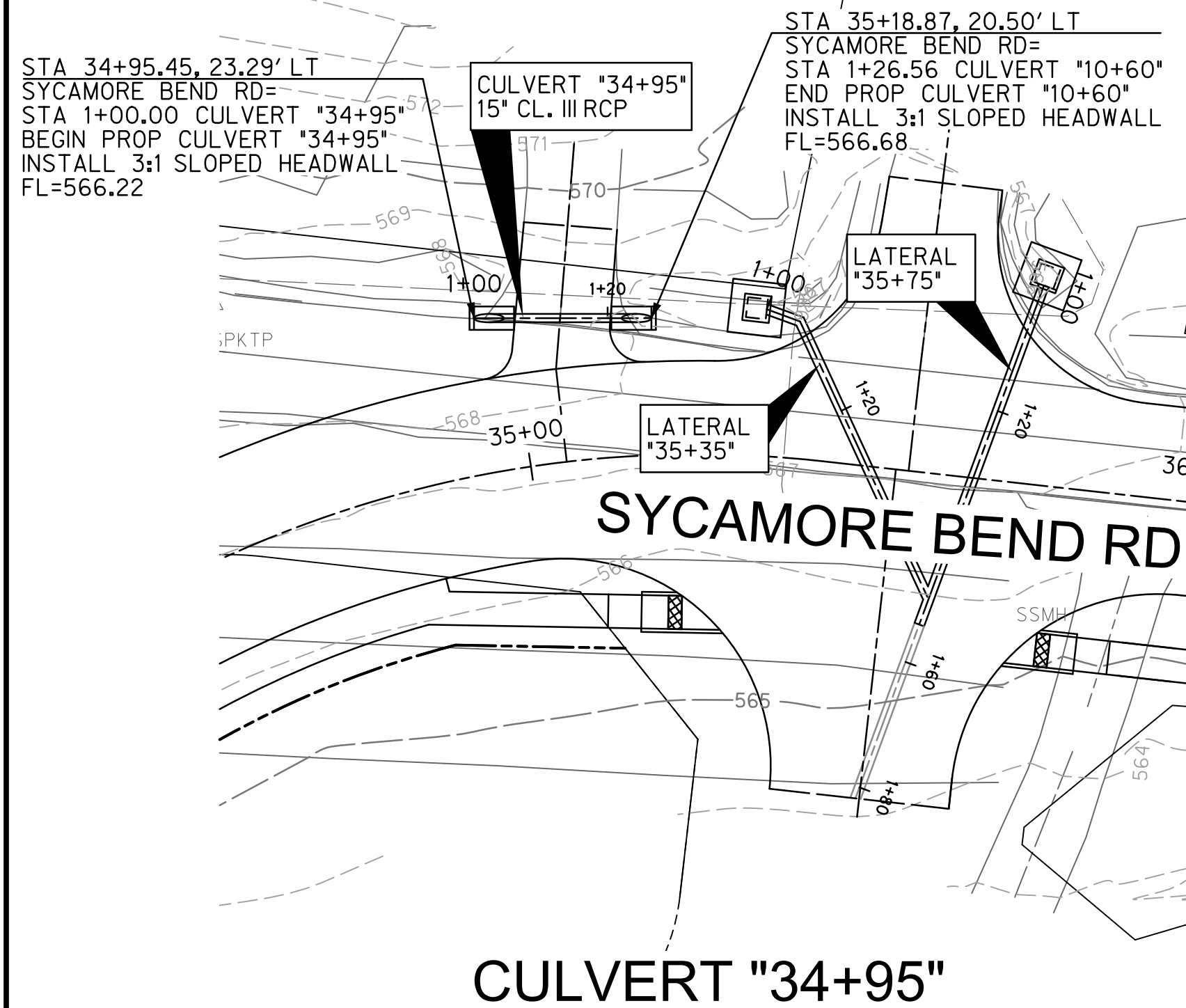
PUBLIC WORKS
TOWN OF HICKORY CREEK

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

CULVERT PLAN AND PROFILE
STA 21+75, 32+80 & 34+00

HALFF
4000 FOSSIL CREEK BLVD
FORT WORTH, TEXAS 76137-2797
TEL: (817) 847-4422
FAX: (817) 232-9784
TBPELS Engineering Firm #312
DATE: JANUARY 2021
SHEET 38

GENERAL WARRANTY DEED
 JAMES & JANA KIRK
 3000 MAYNARD RD,
 HICKORY CREEK, TX 75065
 DOC# 2003-160544
 LOT 9, BLOCK A



Station	Profile Description	Flow Data	Scale
582			582 578
578			578 574
574	$Q_{top} = 0.3 \text{ cfs}$ $Q_{cap} = 8.50 \text{ cfs}$ $V = 0.23 \text{ fps}$ $V_2 = 0.00 \text{ ft}$ $Z_G = 0.0000 \text{ ft/ft}$ $S_p = 0.0000 \text{ ft/ft}$	SYCAMORE BEND ROAD PROPOSED GROUND EXISTING GROUND 100-YR HW DRIVEWAY 27 LF 15" CL. III RCP @ 1.73%	574 570
570			570 566
566			566 562
562			562 558
558			558 554
554			554 550
578			578
574			574
570			570
566			566
562			562
558			558
554			554
550			550
578			578
574			574
570			570
566			566
562			562
558			558
554			554
550			550

PROFILE SCALE
 HORIZ. 1"=20'
 VERT. 1"=4'

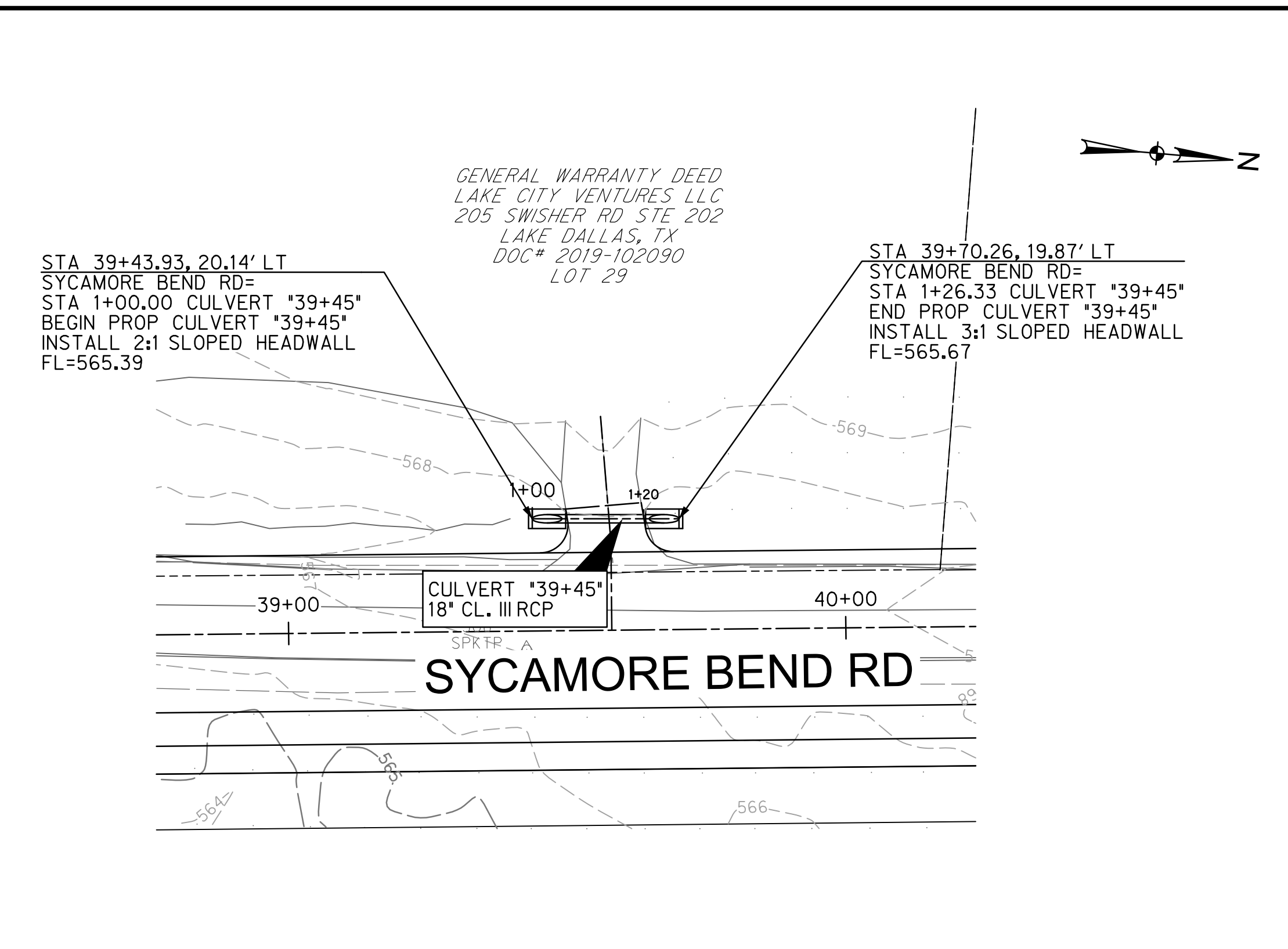
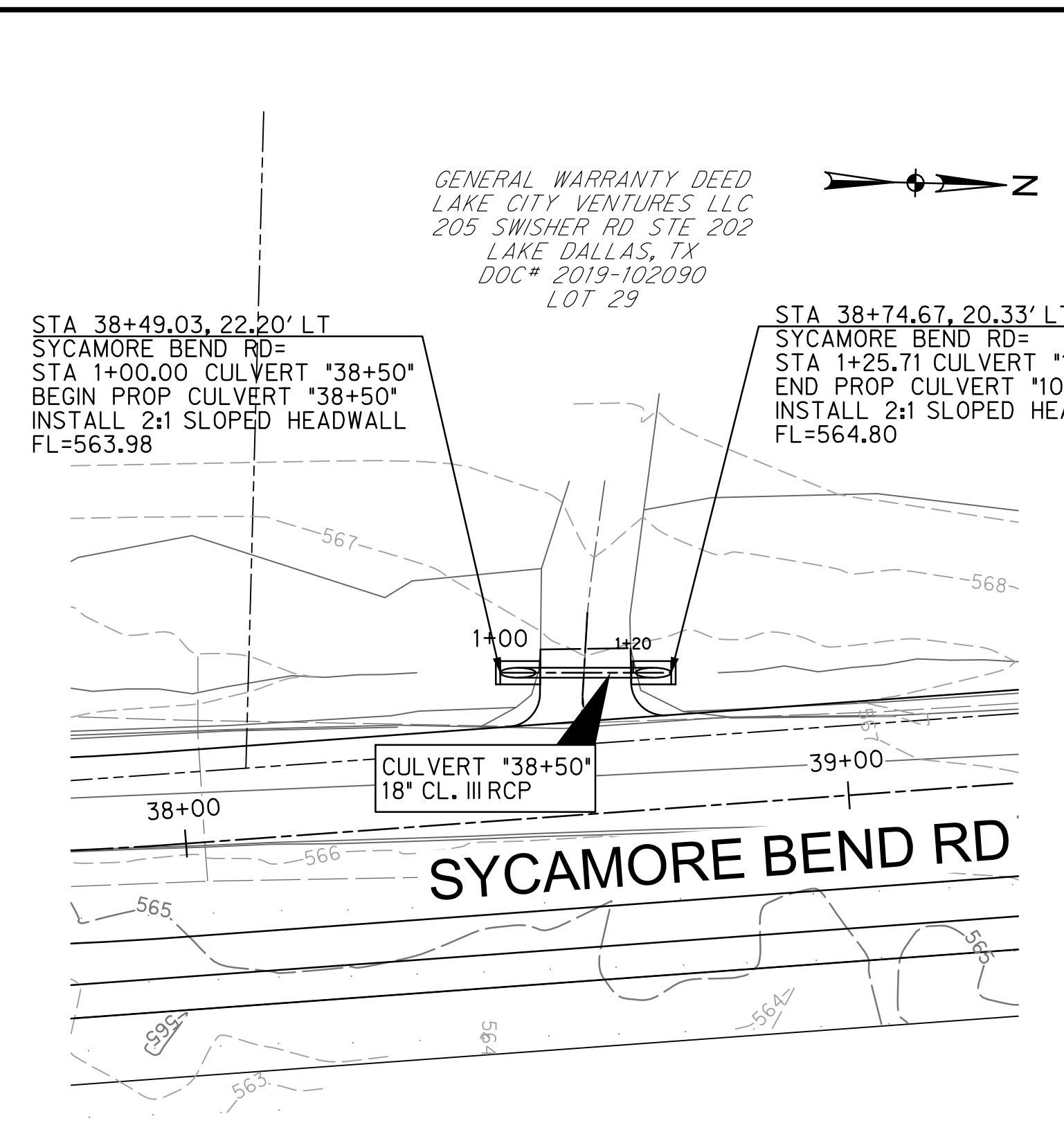
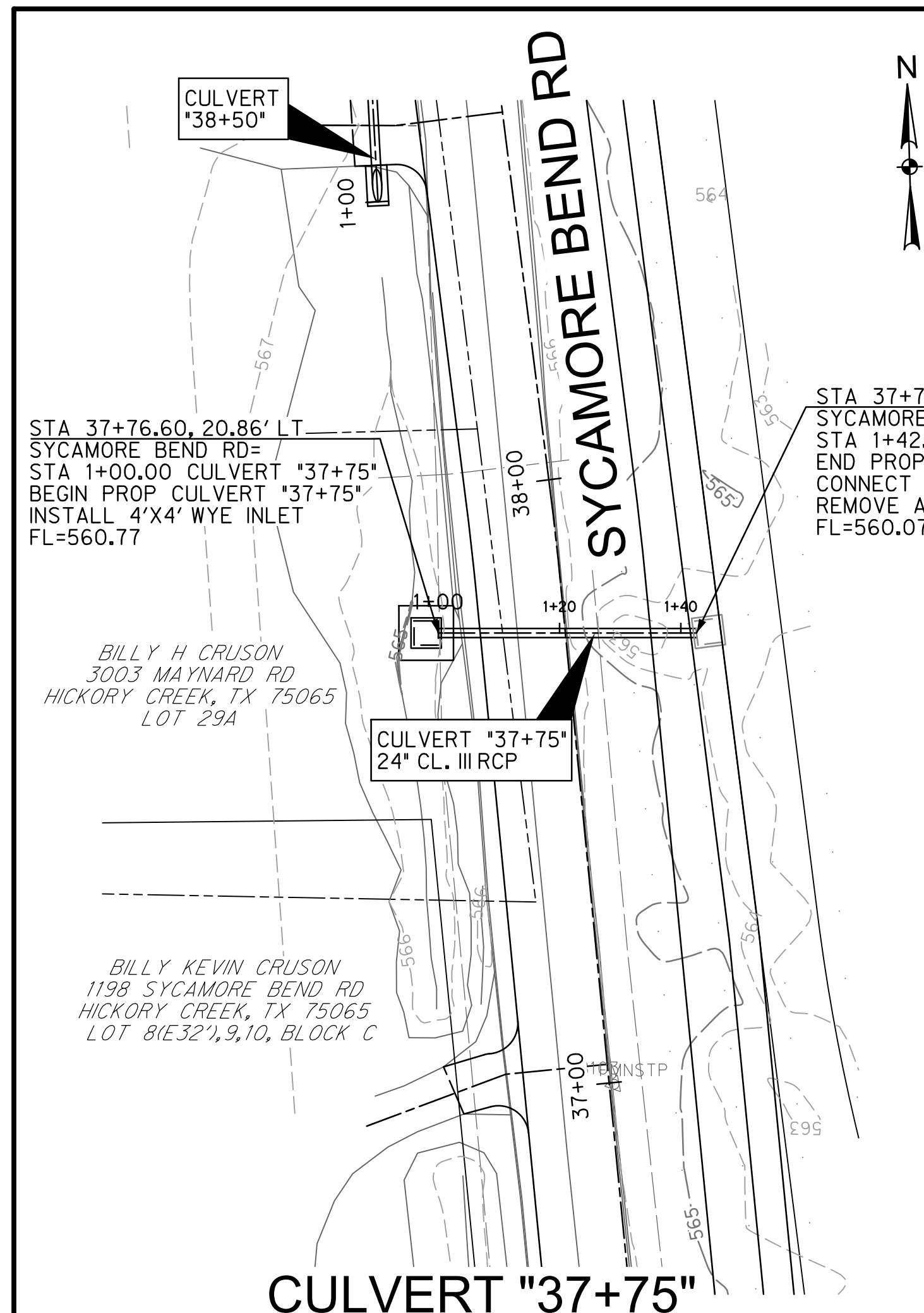
$Q_{top} = 0.3 \text{ cfs}$
 $Q_{cap} = 8.50 \text{ cfs}$
 $V = 0.23 \text{ fps}$
 $V_2 = 0.00 \text{ ft}$
 $Z_G = 0.0000 \text{ ft/ft}$
 $S_p = 0.0000 \text{ ft/ft}$

$Q_{top} = 13.3 \text{ cfs}$
 $Q_{cap} = 15.0 \text{ cfs}$
 $V = 7.51 \text{ fps}$
 $V_2 = 0.87 \text{ ft}$
 $Z_G = 0.0159 \text{ ft/ft}$
 $S_p = 0.0159 \text{ ft/ft}$

$Q_{top} = 4.5 \text{ cfs}$
 $Q_{cap} = 11.2 \text{ cfs}$
 $V = 2.52 \text{ fps}$
 $V_2 = 0.10 \text{ ft}$
 $Z_G = 0.0018 \text{ ft/ft}$
 $S_p = 0.0018 \text{ ft/ft}$

$Q_{top} = 17.6 \text{ cfs}$
 $Q_{cap} = 11.2 \text{ cfs}$
 $V = 9.93 \text{ fps}$
 $V_2 = 1.53 \text{ ft}$
 $Z_G = 1.53 \text{ ft}$
 $S_p = 0.0279 \text{ ft/ft}$

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 KEVIN J. GRONWALDT 130871 1/13/2021
 Name PE# Date



578				578				578	580			PROFILE SCALE HORIZ. 1"=20' VERT. 1"=4'	580
574				574				574	576				576
570				570				570	572			572	
566				566				566	568			568	
562				562					562	564			564
558				558				558	560			560	
554				554				554	556			556	
550				550				550	552			552	
	1+00		2+00		1+00		2+00		1+00		2+00		



**PUBLIC WORKS
TOWN OF HICKORY CREEK**

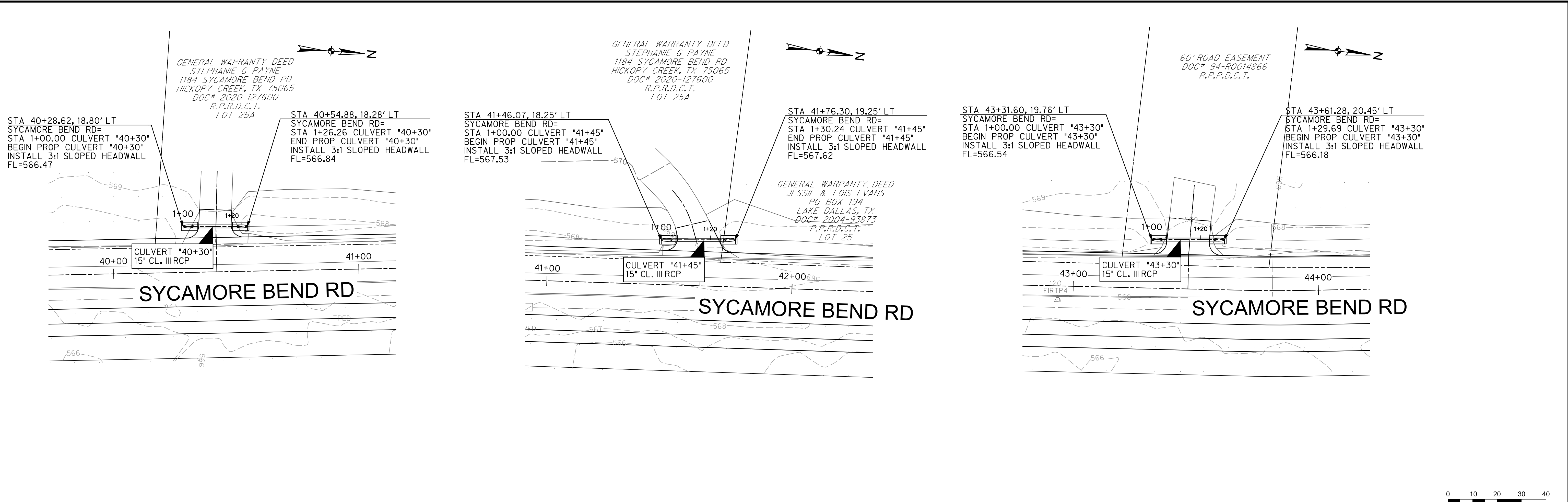
**SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK**

**CULVERT PLAN AND PROFILE
STA 37+75, 38+50 & 39+45**

HALFF
4000 FOSSIL CREEK BLVD
FORT WORTH, TEXAS 76137-2797
TEL (817) 847-4422
FAX (817) 232-9764
TBPELS Engineering Firm #312

**JANUARY
2021**

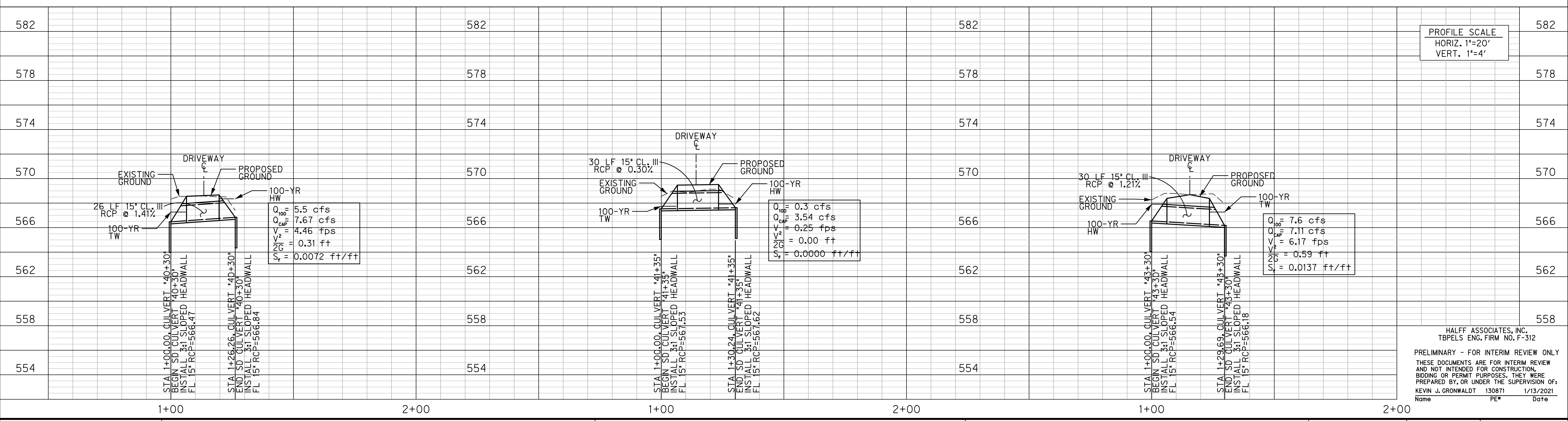
**SHEET
40**



CULVERT "40+30"

CULVERT "41+45"

CULVERT "43+30"



1+00

2+00

1+00

2+00

1+00

2+00



PUBLIC WORKS
TOWN OF HICKORY CREEK

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

CULVERT PLAN AND PROFILE
STA 40+30, 41+45 & 43+30



JANUARY
2021

SHEET
41

STA 52+05.92, 27.16' LT
SYCAMORE BEND RD=
STA 0+94.84 CULVERT '52+05'
BEGIN PROP CULVERT '52+05'
INSTALL 3:1 SLOPED HEADWALL
FL=562.52

STA 52+05.92, 15.00' RT
SYCAMORE BEND RD=
STA 1+37.00 CULVERT '52+05'
END PROP CULVERT '52+05'
INSTALL 3'X3' WYE INLET
FL=562.74

CULVERT '52+05'
18" CL. III RCP

CULVERT "52+05"

STA 52+98.06, 17.00' RT
SYCAMORE BEND RD=
STA 1+00.00 CULVERT '53+00'
BEGIN PROP CULVERT '53+00'
INSTALL 3:1 SLOPED HEADWALL
FL=564.40

STA 53+35.61, 15.64' RT
SYCAMORE BEND RD=
STA 1+38.07 CULVERT '53+00'
DEFLECT 5' RT

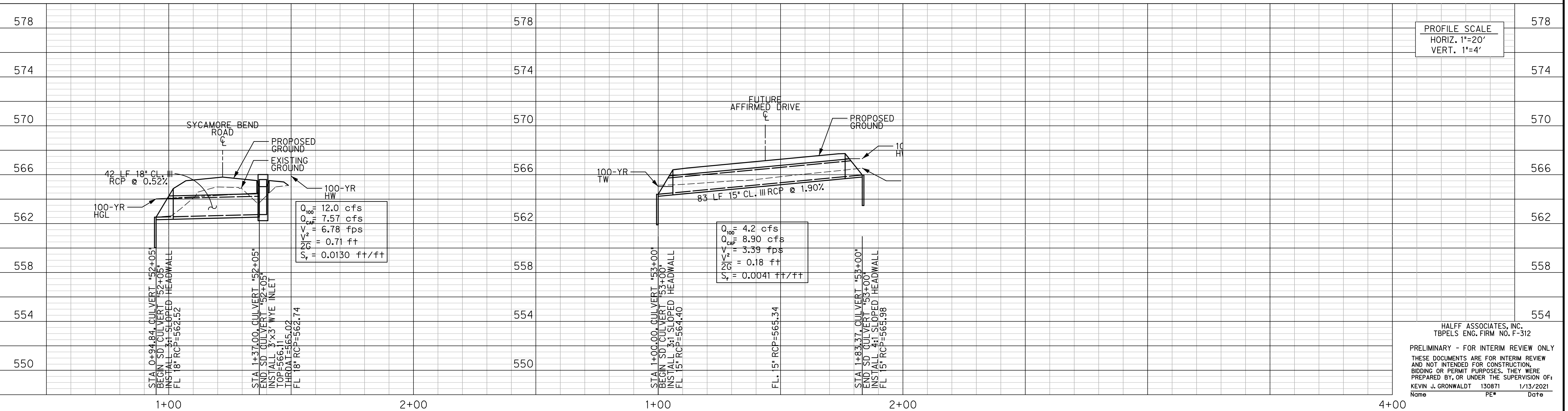
CULVERT '53+00'
15" CL. III RCP

CULVERT "53+00"

EAGLES AERIE ROAD
24' PRIVATE ROAD WITH
PUBLIC ACCESS
EASEMENT
CAB: L. SL. 179
P&R, D.C.T.

CULVERT '53+15'

STA 53+80.84, 18.25' RT
SYCAMORE BEND RD=
STA 1+83.37 CULVERT '53+00'
END PROP CULVERT '53+00'
INSTALL 3:1 SLOPED HEADWALL
FL=565.98



PROFILE SCALE
HORIZ. 1"=20'
VERT. 1"=4'

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PREPARED BY, OR UNDER THE SUPERVISION OF:
KEVIN J. GRONWALDT 130871 1/13/2021
Name PE Date



PUBLIC WORKS
TOWN OF HICKORY CREEK

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

CULVERT PLAN AND PROFILE
STA 52+05 & 53+00



JANUARY
2021

SHEET
42

STA 53+13.70, 20.00' LT
 SYCAMORE BEND RD=
 STA 1+00.00 CULVERT '53+15'
 BEGIN PROP CULVERT '53+15'
 INSTALL 3:1 SLOPED HEADWALL
 FL=563.28

EAGLES AERIE ROAD
 24' PRIVATE ROAD WITH
 PUBLIC ACCESS
 EASEMENT
 CAB. L. SL. 179
 P.R.D.C.T.

GENERAL WARRANTY DEED
 ROBERT & DARCI SLOCUM
 1 EAGLES AERIE CT
 HICKORY CREEK, TX 75065
 DOC# 2016-80747
 R.P.R.D.C.T.
 LOT 1, BLOCK A

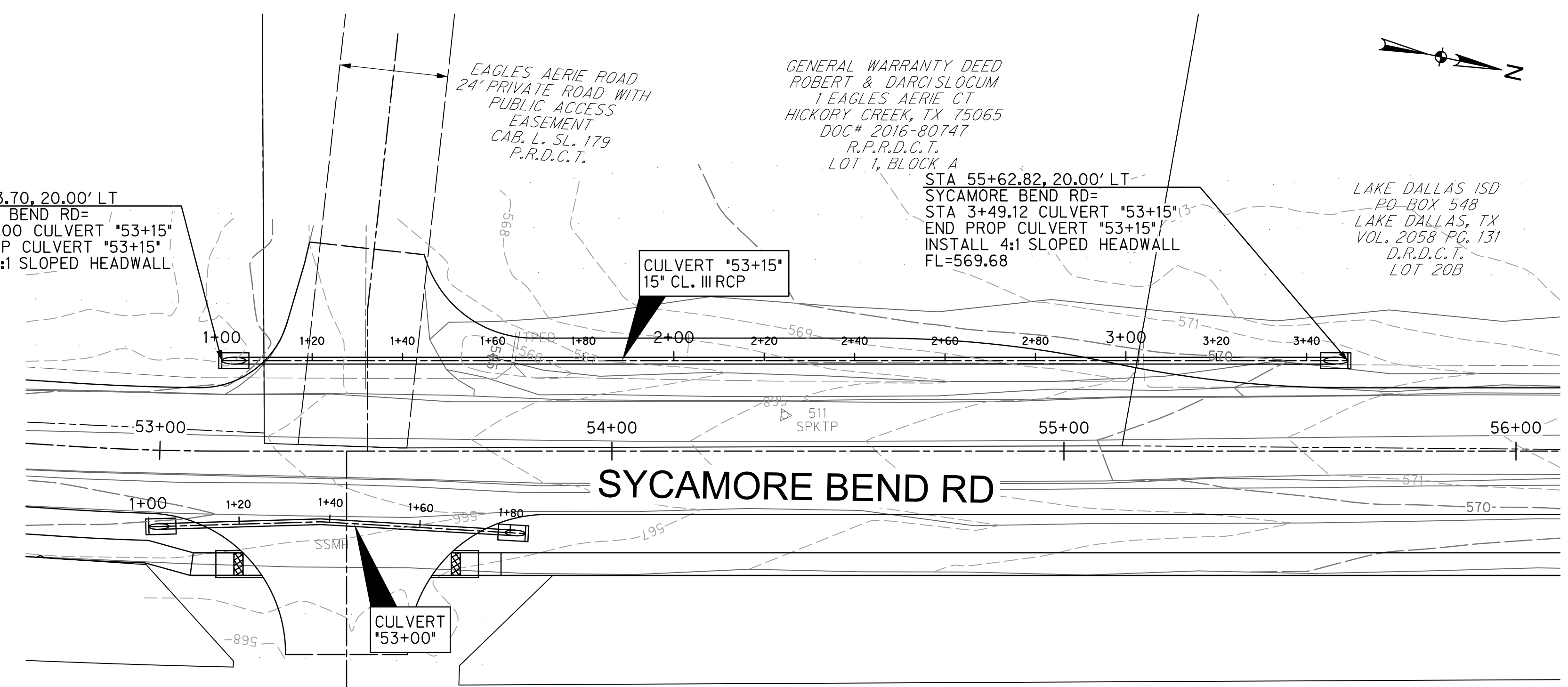
STA 55+62.82, 20.00' LT
 SYCAMORE BEND RD=
 STA 3+49.12 CULVERT '53+15'
 END PROP CULVERT '53+15'
 INSTALL 4:1 SLOPED HEADWALL
 FL=569.68

LAKE DALLAS ISD
 PO BOX 548
 LAKE DALLAS, TX
 VOL. 2058 PG. 131
 D.R.D.C.T.
 LOT 20B

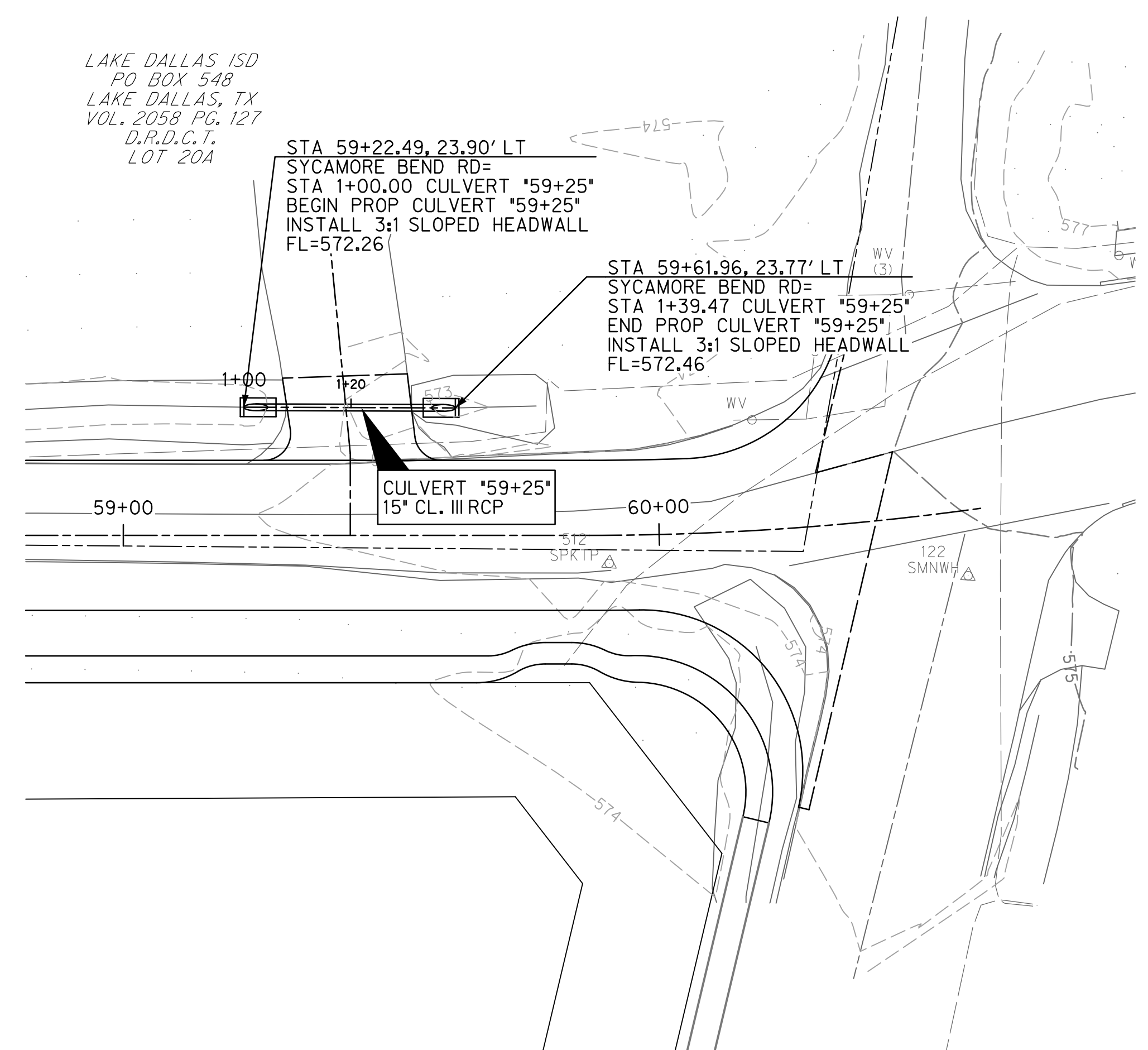
LAKE DALLAS ISD
 PO BOX 548
 LAKE DALLAS, TX
 VOL. 2058 PG. 127
 D.R.D.C.T.
 LOT 20A

STA 59+22.49, 23.90' LT
 SYCAMORE BEND RD=
 STA 1+00.00 CULVERT '59+25'
 BEGIN PROP CULVERT '59+25'
 INSTALL 3:1 SLOPED HEADWALL
 FL=572.26

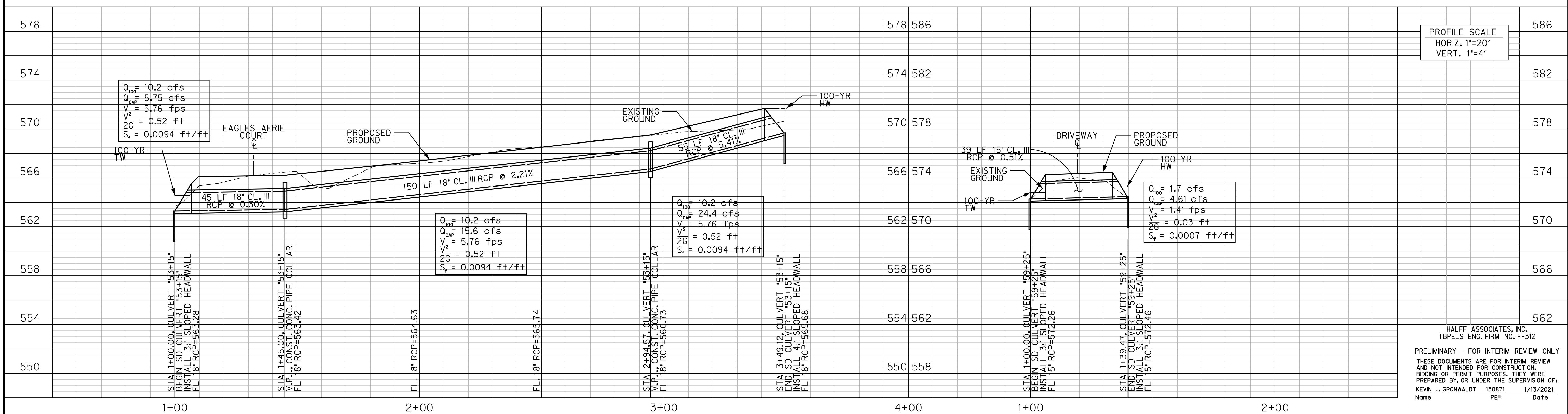
STA 59+61.96, 23.77' LT
 SYCAMORE BEND RD=
 STA 1+39.47 CULVERT '59+25'
 END PROP CULVERT '59+25'
 INSTALL 3:1 SLOPED HEADWALL
 FL=572.46



CULVERT "53+15"



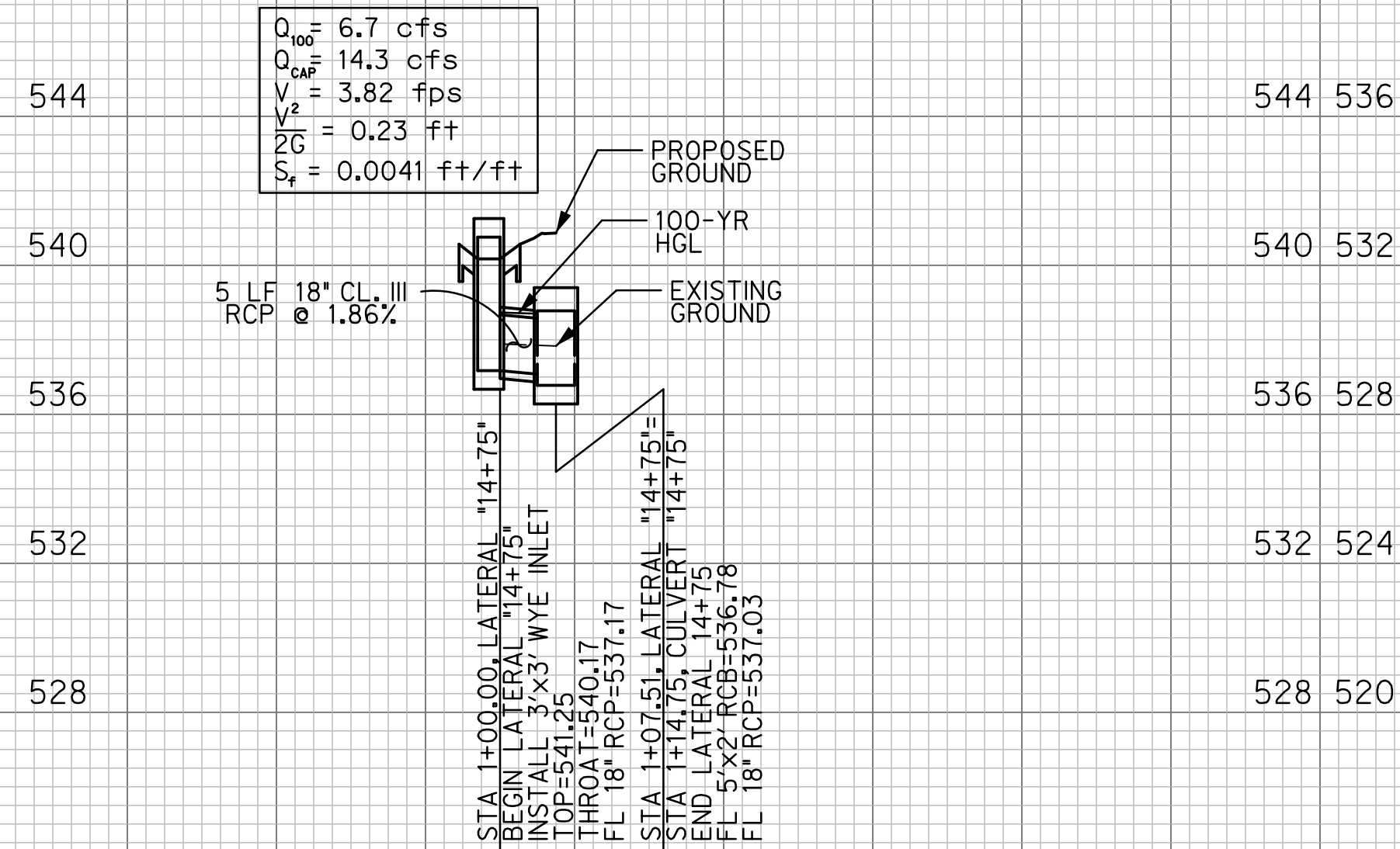
CULVERT "59+25"



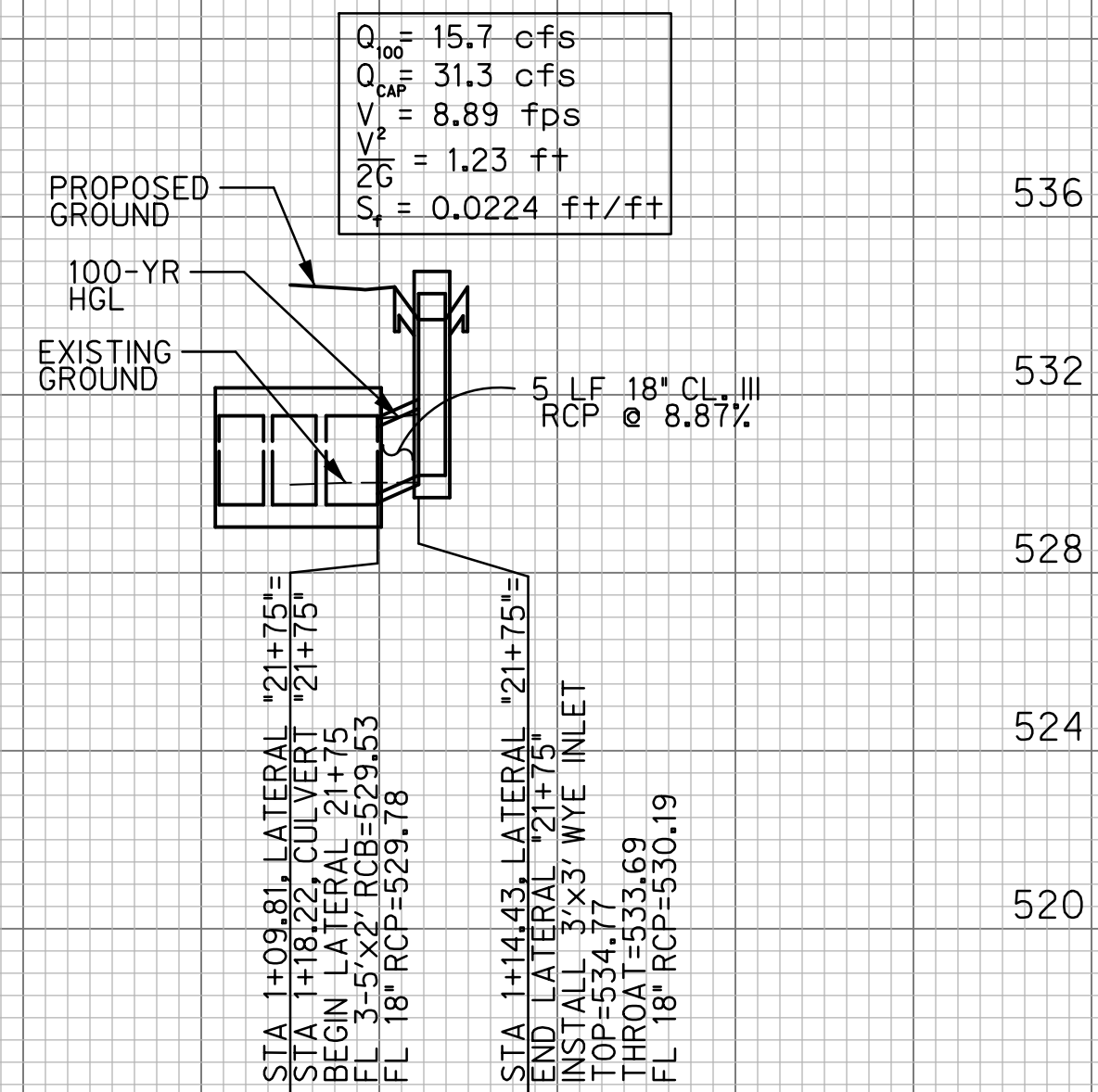
<p>HICKORY CREEK TX City-close, lakeside living!</p>	<p>PUBLIC WORKS TOWN OF HICKORY CREEK</p>	<p>SYCAMORE BEND ROAD FROM TURBEVILLE ROAD TO SYCAMORE BEND PARK</p>	<p>CULVERT PLAN AND PROFILE STA 53+15 & 59+25</p>	<p>4000 FOSSIL CREEK BLVD FORT WORTH, TEXAS 76137-2797 TEL (817) 847-4422 FAX (817) 232-9784 TBPELS Engineering Firm #312</p>	<p>JANUARY 2021</p>	<p>SHEET 43</p>

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 KEVIN J. GRONWALDT 130871 1/13/2021
 Name PE# Date

PROFILE SCALE
 HORIZ. 1"=20'
 VERT. 1"=4'

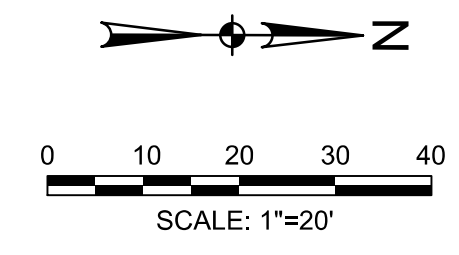
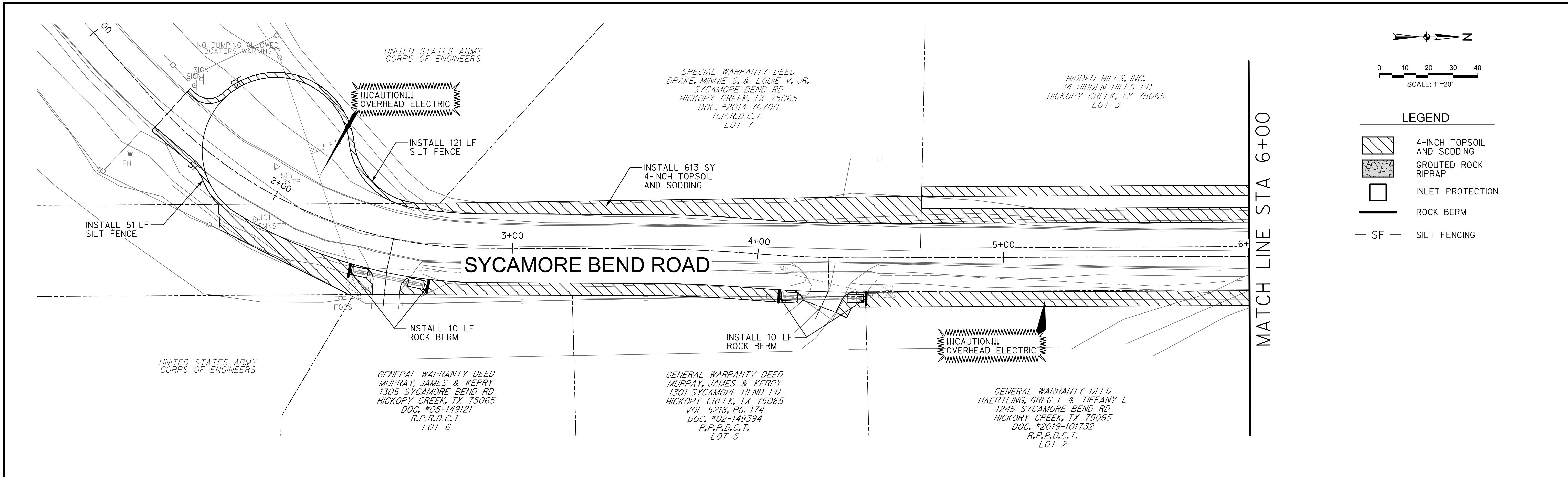


LATERAL "14+75"

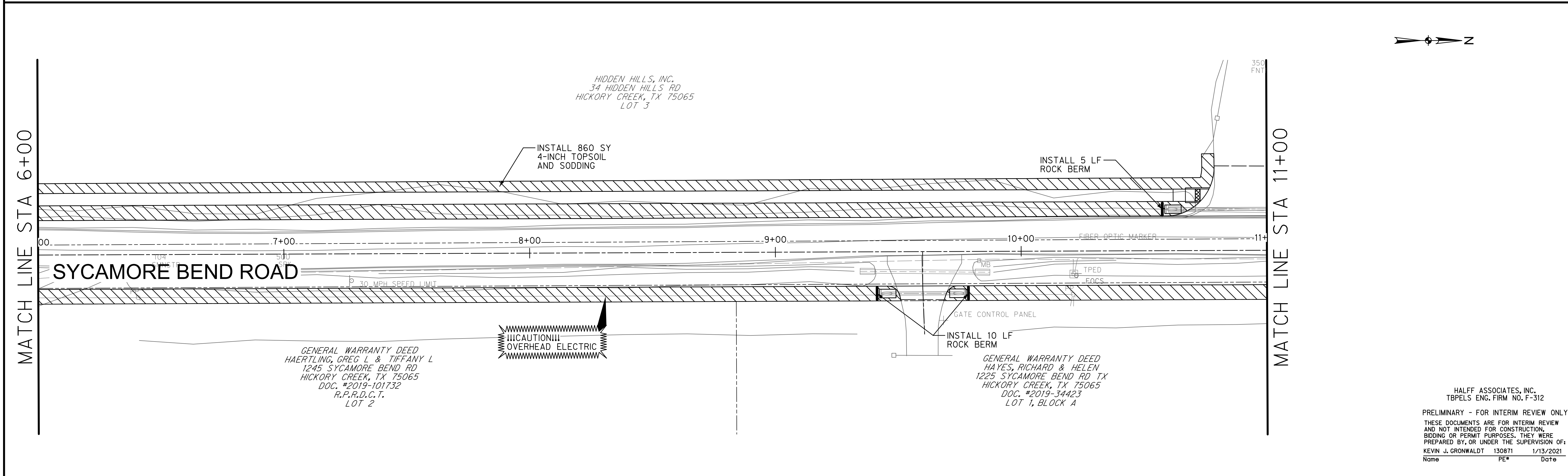


LATERAL "21+75"

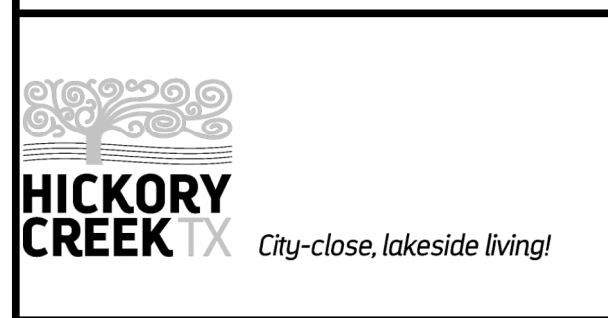
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 Name PE# Date



- LEGEND**
- 4-INCH TOPSOIL AND SODDING
 - GROUTED ROCK RIPRAP
 - INLET PROTECTION
 - ROCK BERM
 - SILT FENCING



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PUBLIC WORKS
TOWN OF HICKORY CREEK

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

EROSION CONTROL PLAN
 BEGIN TO STA 11+00



JANUARY
2021

SHEET
45

GENERAL WARRANTY DEED
 SYCAMORE COVE-HICKORY CREEK LP
 SYCAMORE BEND RD
 HICKORY CREEK, TX 75065
 DOC# 2020-128176
 LOT 2

HIDDEN HILLS, INC.
 34 HIDDEN HILLS RD
 HICKORY CREEK, TX 75065
 LOT 3

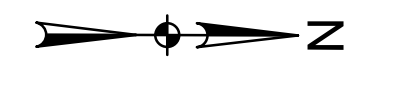
GENERAL WARRANTY DEED
 HAYES, RICHARD & HELEN
 1225 SYCAMORE BEND RD TX
 HICKORY CREEK, TX 75065
 DOC. #2019-34423
 LOT 1, BLOCK A

GENERAL WARRANTY DEED
 SYCAMORE COVE-HICKORY CREEK LP
 1501 LYNDON B JOHNSON FWY STE 300
 FARMERS BRANCH, TX
 DOC# 2020-128176
 LOT 2

GENERAL WARRANTY DEED
 SYCAMORE COVE-HICKORY CREEK LP
 1501 LYNDON B JOHNSON FWY STE 300
 FARMERS BRANCH, TX
 DOC# 2020-128176
 LOT 2

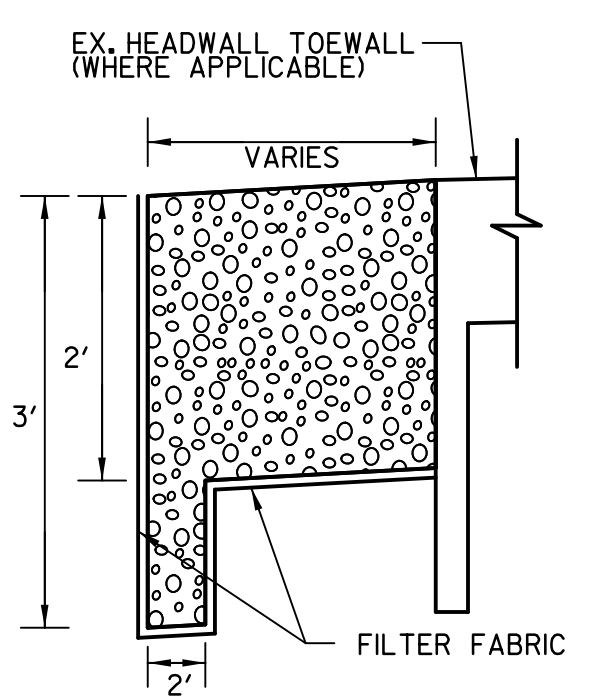
UNITED STATES ARMY
 CORPS OF ENGINEERS

UNITED STATES ARMY
 CORPS OF ENGINEERS



LEGEND

- 4-INCH TOPSOIL AND SODDING
- GROUTED ROCK RIPRAP
- INLET PROTECTION
- ROCK BERM
- SILT FENCING



24" GROUTED ROCK RIPRAP DETAIL

- NOTES
1. CONTRACTOR TO PLACE FILTER FABRIC AND SLURRY MATERIALS PRIOR TO PLACING ROCK TO PROVIDE A SOLID BASE.
 2. TOE WALL SHALL EXTEND ALONG PERIMETER OF INSTALLATION.

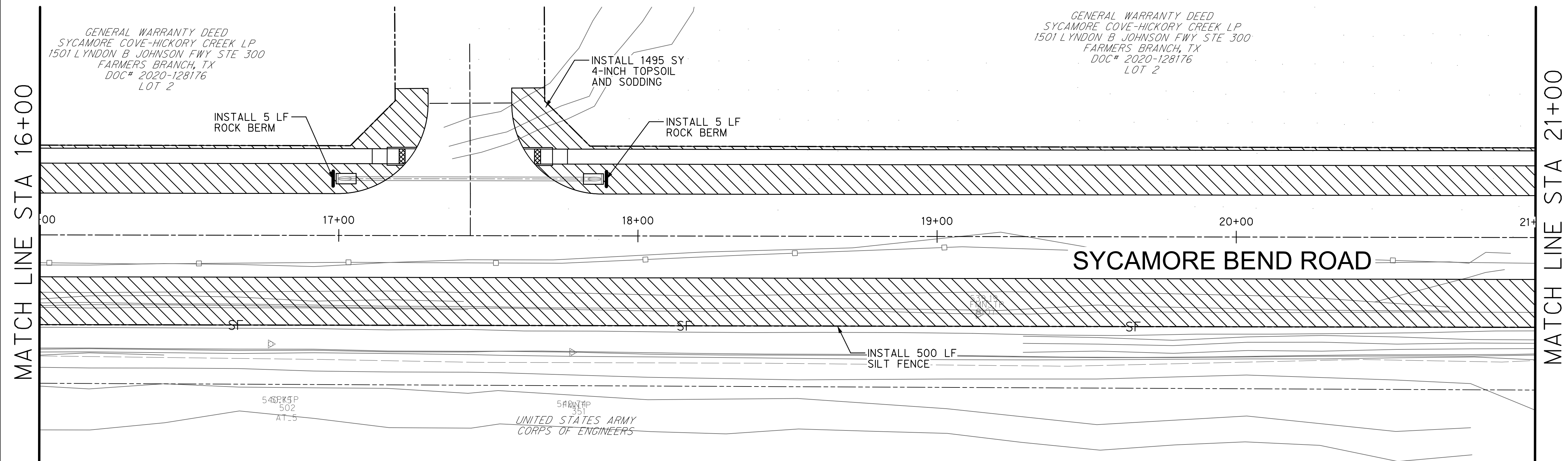


MATCH LINE STA 11+00

MATCH LINE STA 16+00

MATCH LINE STA 16+00

MATCH LINE STA 21+00



PUBLIC WORKS
 TOWN OF HICKORY CREEK

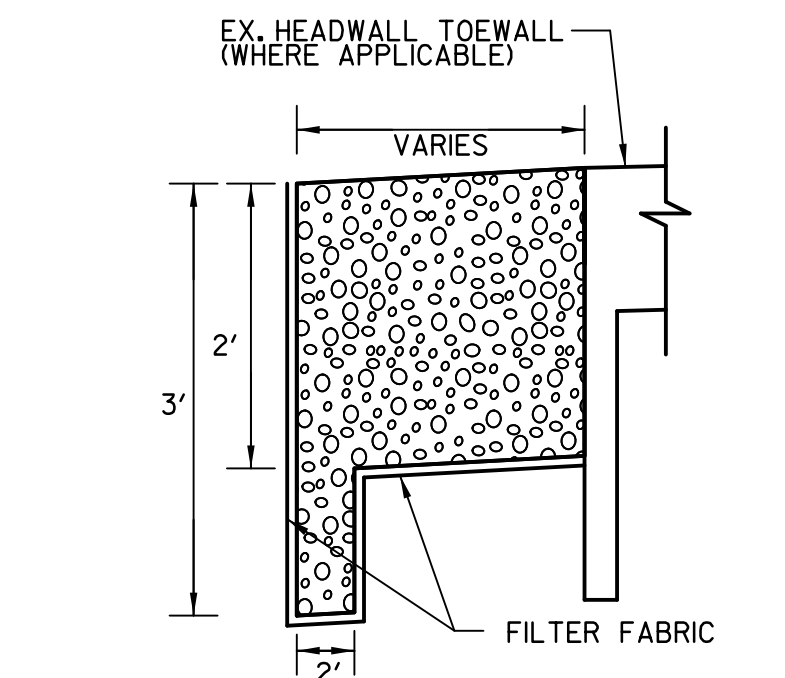
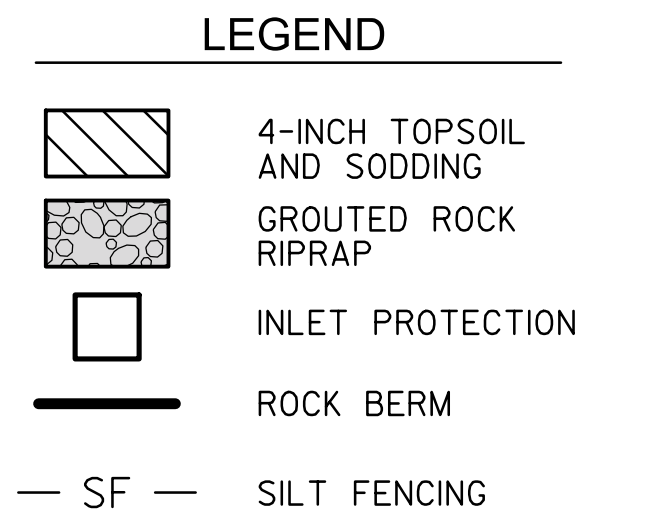
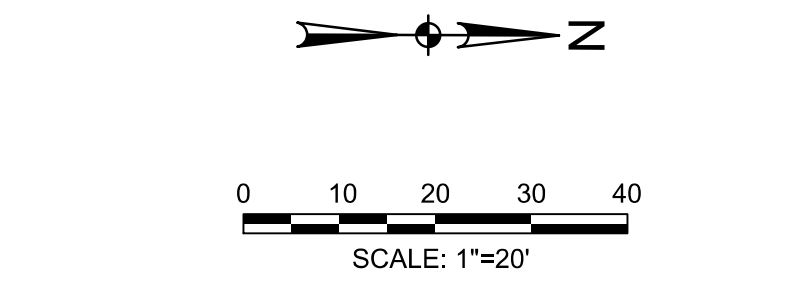
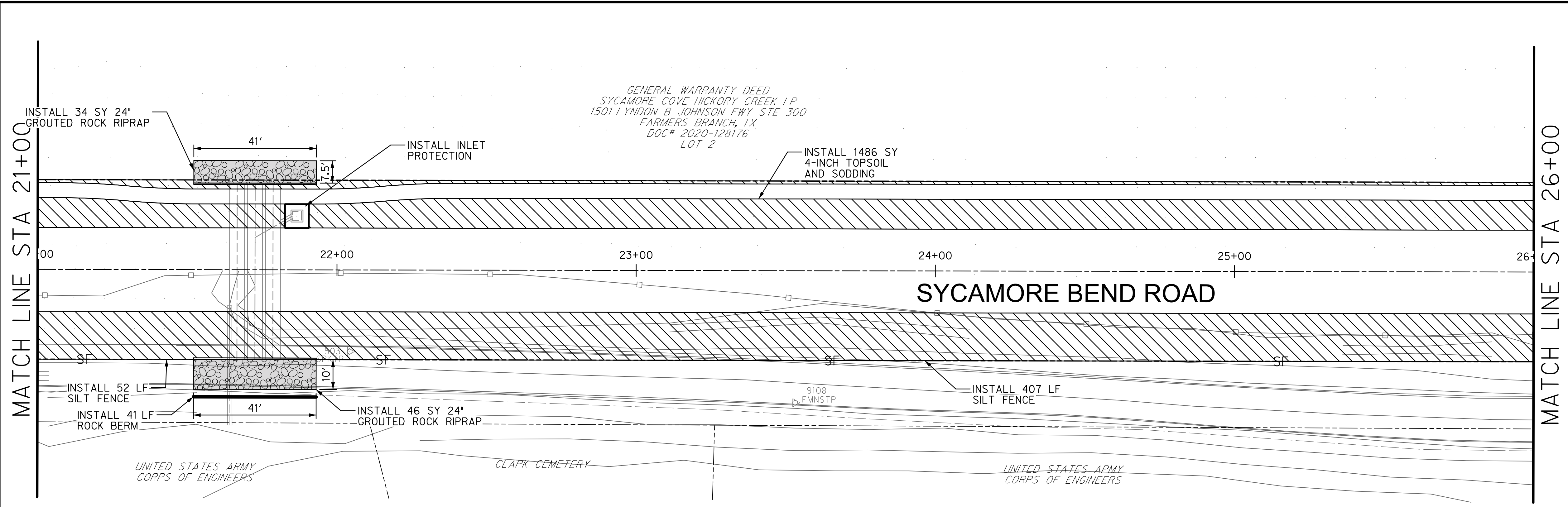
SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

EROSION CONTROL PLAN
 STA 11+00 TO STA 21+00



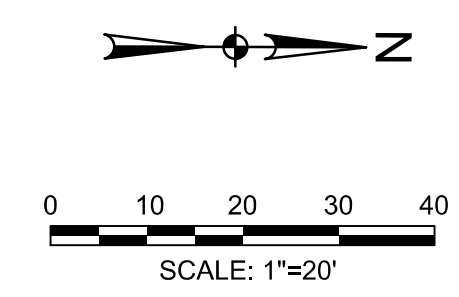
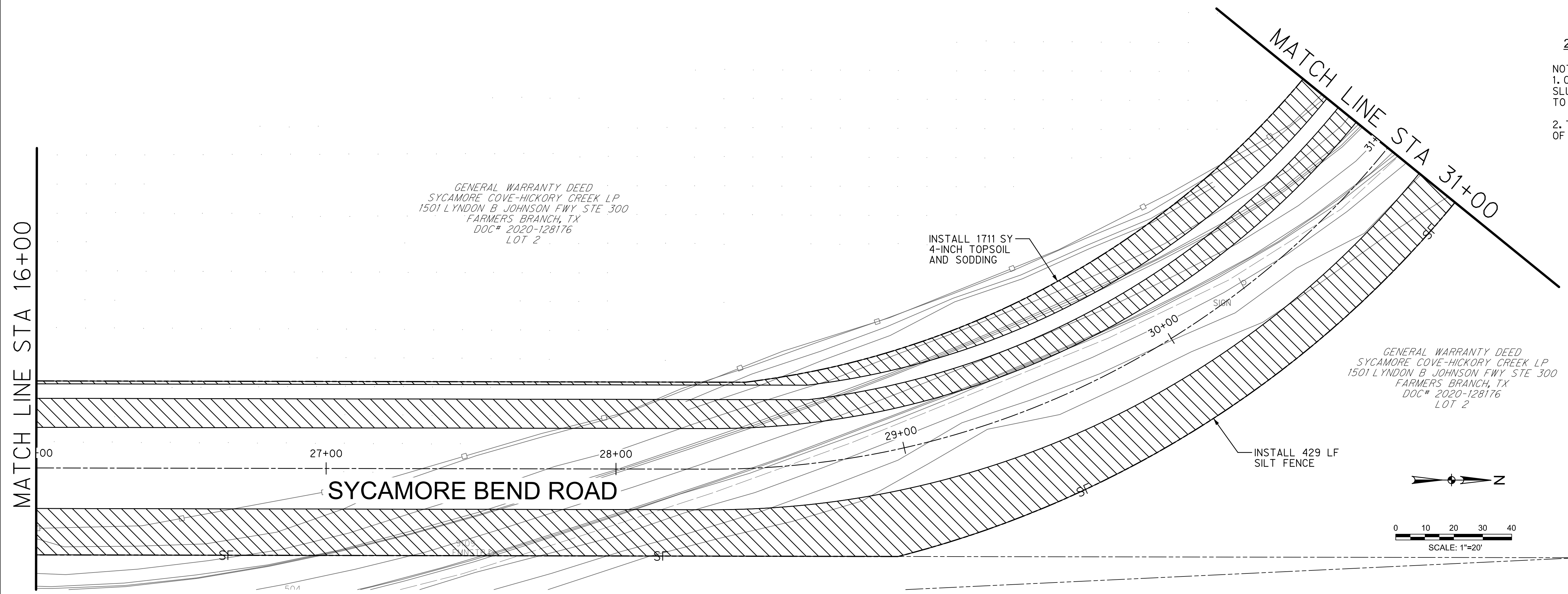
JANUARY
 2021

SHEET
 46



24" GROUTED ROCK RIPRAP DETAIL

- NOTES**
1. CONTRACTOR TO PLACE FILTER FABRIC AND SLURRY MATERIALS PRIOR TO PLACING ROCK TO PROVIDE A SOLID BASE.
 2. TOE WALL SHALL EXTEND ALONG PERIMETER OF INSTALLATION.



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 Name PE# Date



PUBLIC WORKS
TOWN OF HICKORY CREEK

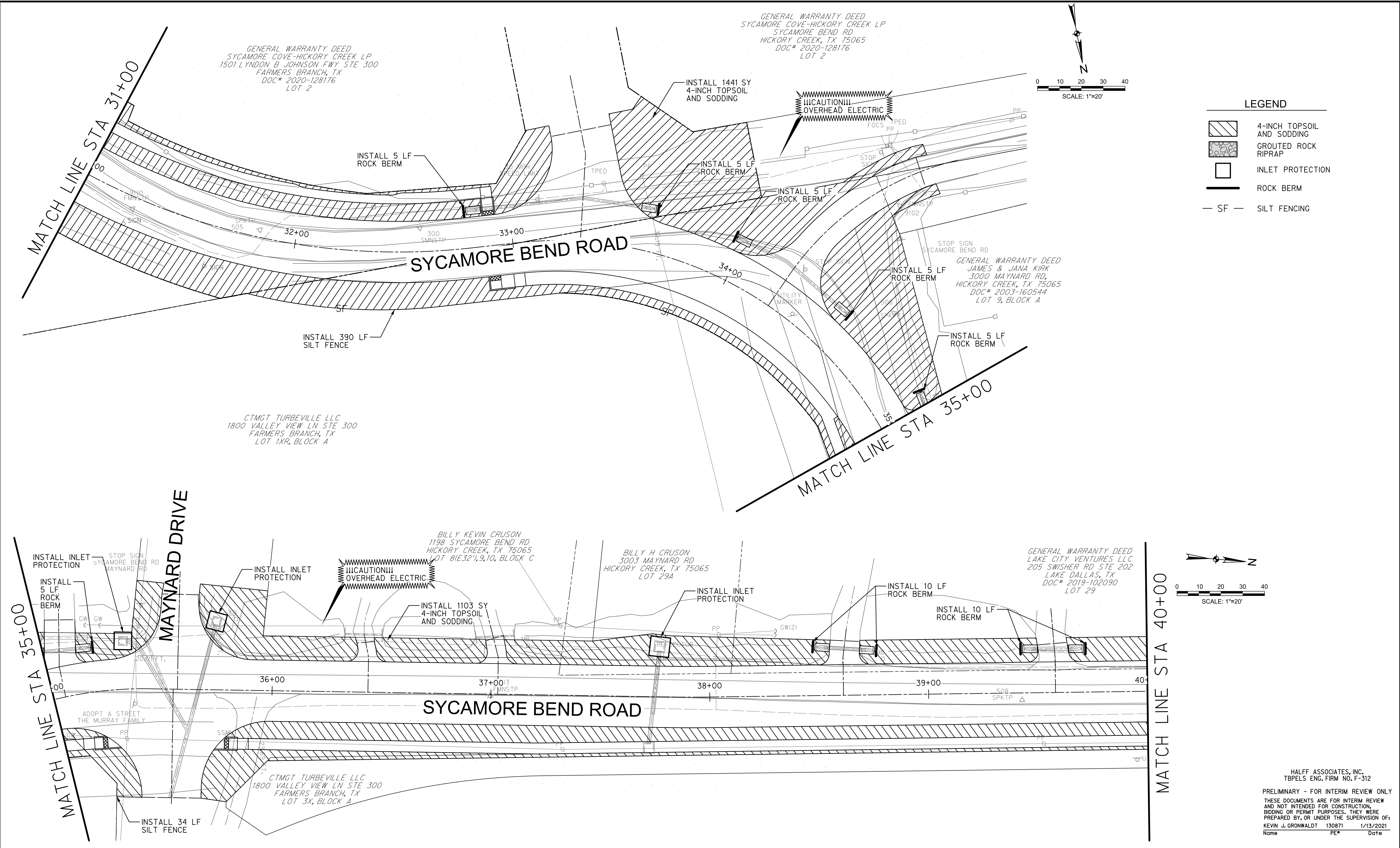
SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

EROSION CONTROL PLAN
 STA 21+00 TO STA 31+00



JANUARY
2021

SHEET
47



- LEGEND**
- 4-INCH TOPSOIL AND SODDING
 - GROUDED ROCK RIPRAP
 - INLET PROTECTION
 - ROCK BERM
 - SILT FENCING

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PUBLIC WORKS
TOWN OF HICKORY CREEK

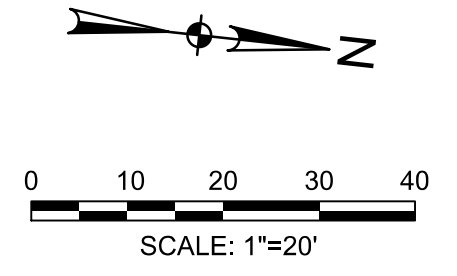
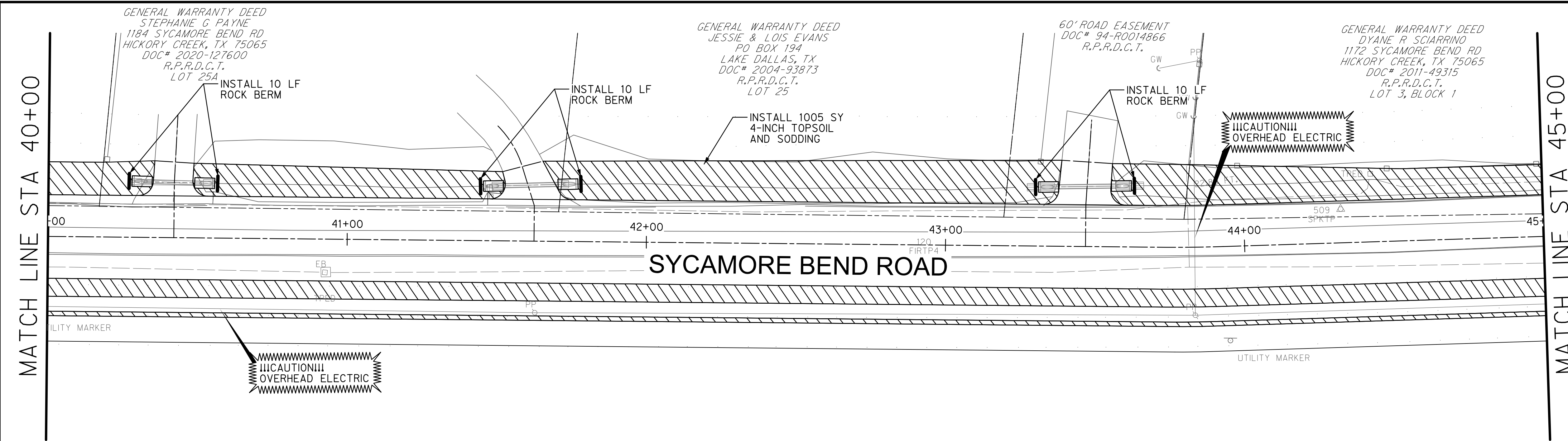
SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

EROSION CONTROL PLAN
 STA 31+00 TO STA 40+00

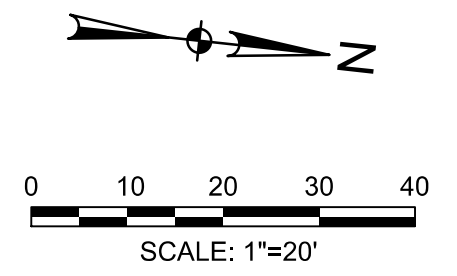
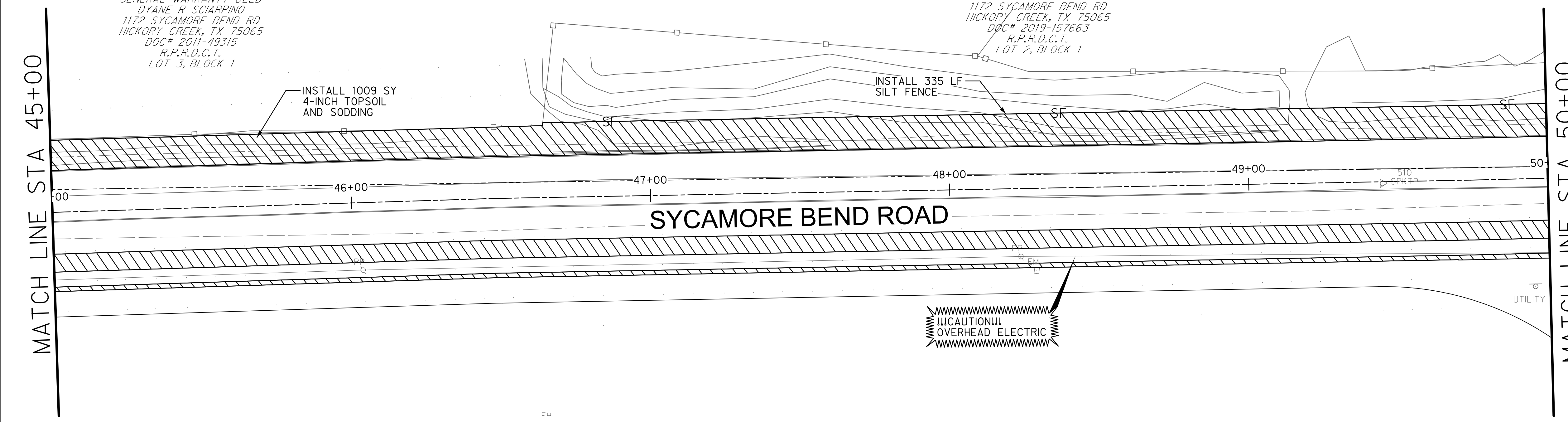


JANUARY
2021

SHEET
48



- LEGEND**
- 4-INCH TOPSOIL AND SODDING
 - GROUDED ROCK RIPRAP
 - INLET PROTECTION
 - ROCK BERM
 - SILT FENCING



HALFF ASSOCIATES, INC.
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Name PE# Date



PUBLIC WORKS
TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

SHEET TITLE

EROSION CONTROL PLAN
STA 40+00 TO STA 50+00

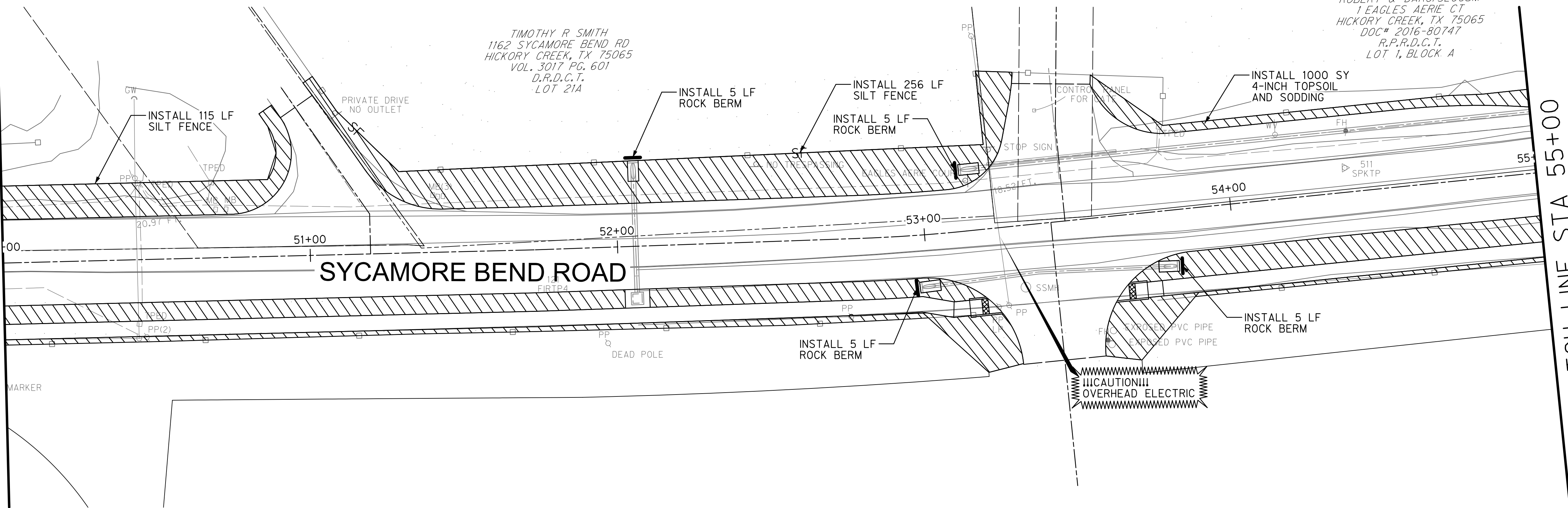


JANUARY
2021

DATE

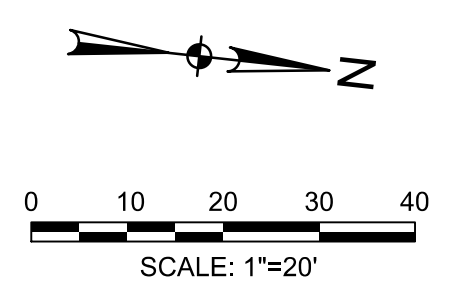
SHEET
49

MATCH LINE STA 50+00

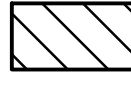
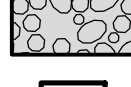





GENERAL WARRANTY DEED
 ROBERT & DARCI SLOCUM
 1 EAGLES AERIE CT
 HICKORY CREEK, TX 75065
 DOC# 2016-80747
 R.P.R.D.C.T.
 LOT 1, BLOCK A

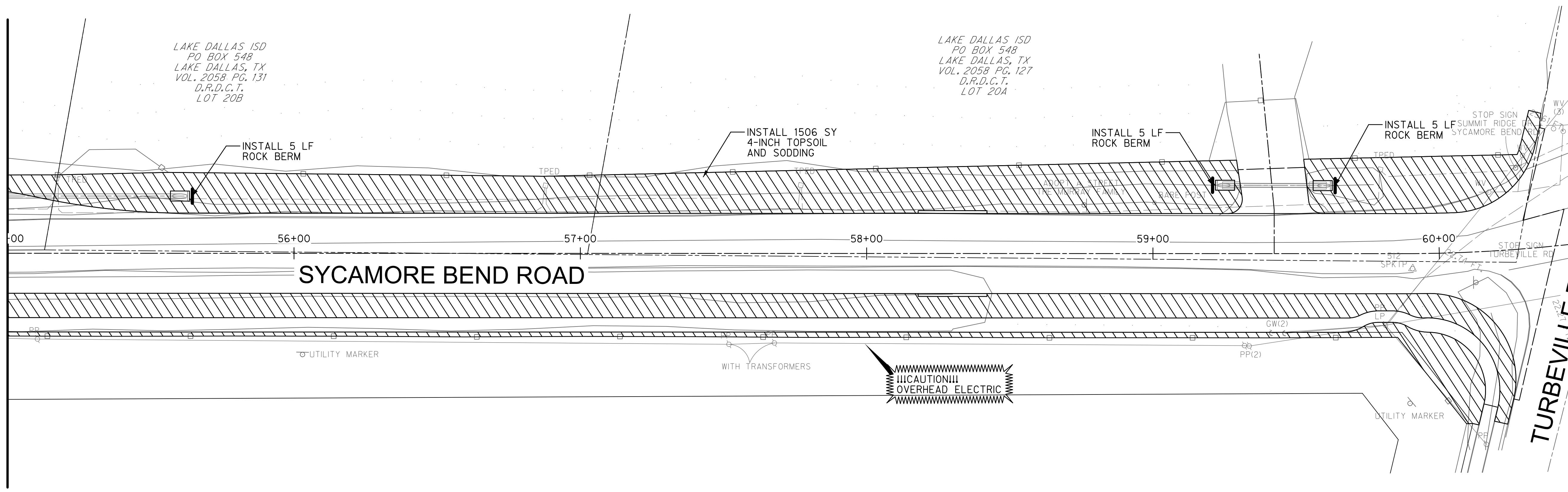
TIMOTHY R SMITH
 1162 SYCAMORE BEND RD
 HICKORY CREEK, TX 75065
 VOL. 3017 PG. 601
 D.R.D.C.T.
 LOT 21A



LEGEND

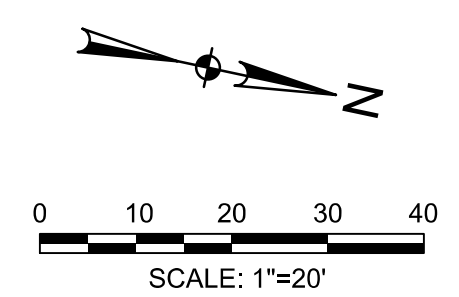
-  4-INCH TOPSOIL AND SODDING
-  GROUTED ROCK RIPRAP
-  INLET PROTECTION
-  ROCK BERM
-  SILT FENCING

MATCH LINE STA 55+00



LAKE DALLAS ISD
 PO BOX 548
 LAKE DALLAS, TX
 VOL. 2058 PG. 131
 D.R.D.C.T.
 LOT 20B

LAKE DALLAS ISD
 PO BOX 548
 LAKE DALLAS, TX
 VOL. 2058 PG. 127
 D.R.D.C.T.
 LOT 20A



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 Name PE# Date



PUBLIC WORKS
 TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

SHEET TITLE

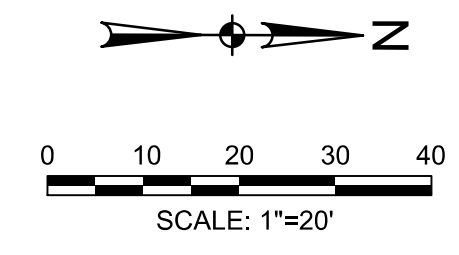
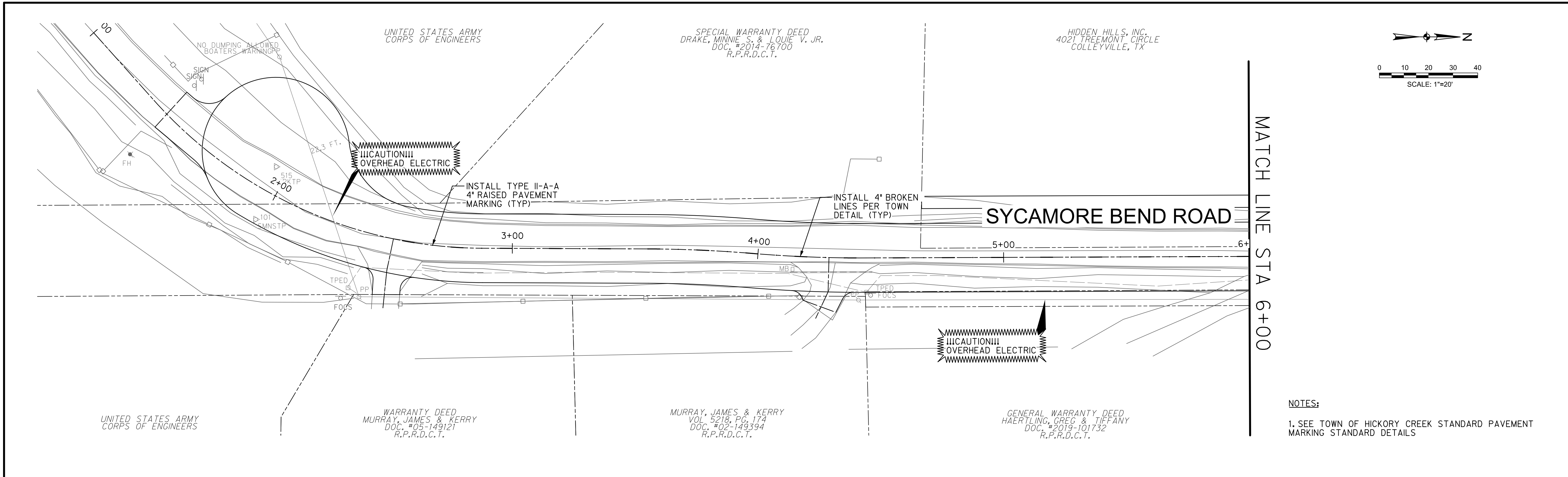
EROSION CONTROL PLAN
 STA 50+00 TO END



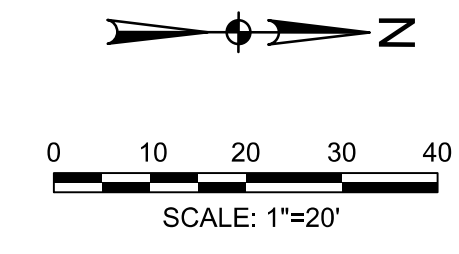
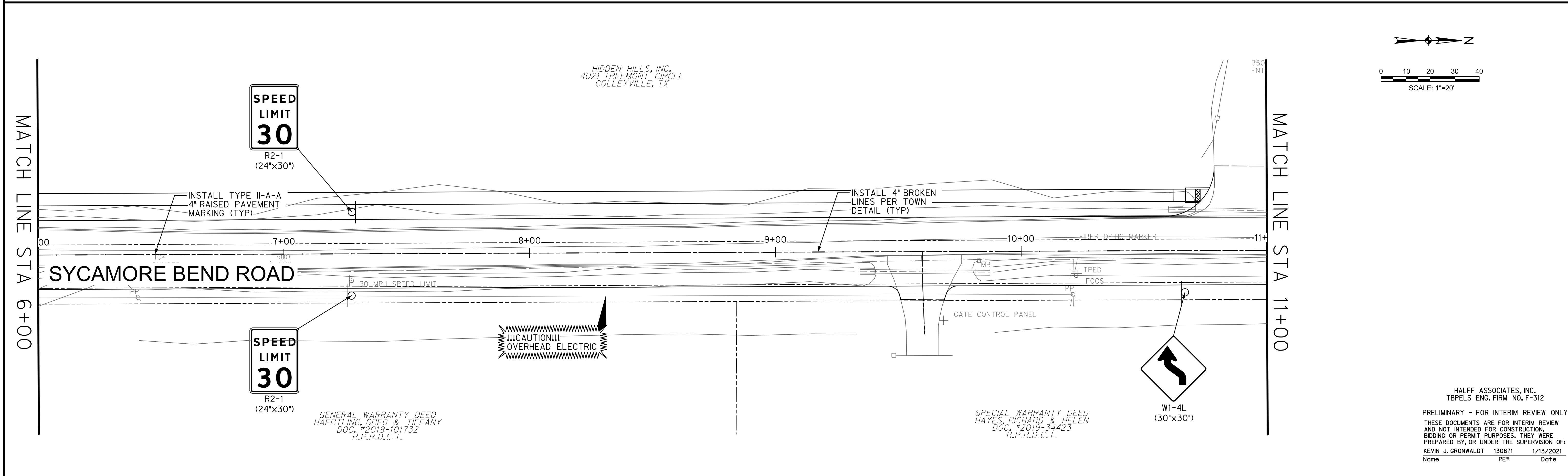
JANUARY
 2021

DATE

SHEET
 50



NOTES:
 1. SEE TOWN OF HICKORY CREEK STANDARD PAVEMENT MARKING STANDARD DETAILS



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PUBLIC WORKS
TOWN OF HICKORY CREEK

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

PAVEMENT MARKING
AND SIGNAGE PLAN
 BEGIN TO STA 11+00



JANUARY
2021

SHEET
51

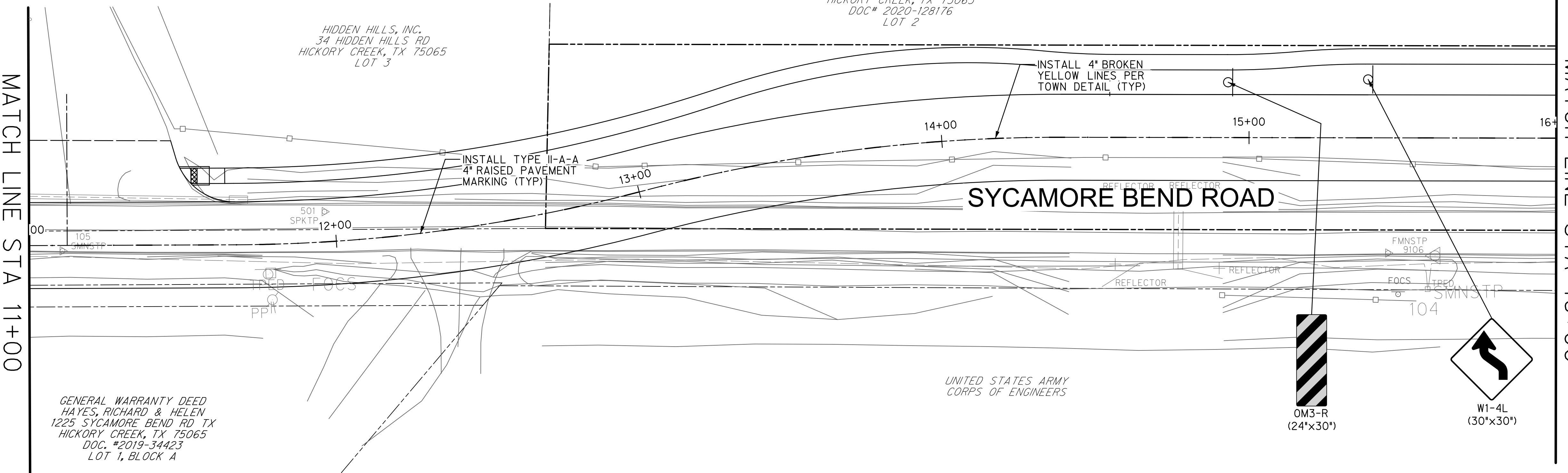
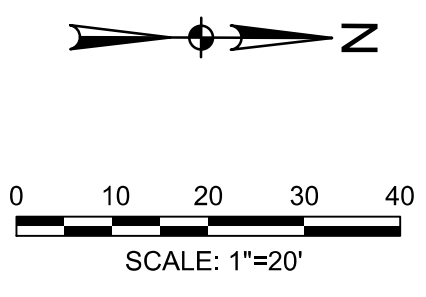
GENERAL WARRANTY DEED
 SYCAMORE COVE-HICKORY CREEK LP
 SYCAMORE BEND RD
 HICKORY CREEK, TX 75065
 DOC# 2020-128176
 LOT 2

HIDDEN HILLS, INC.
 34 HIDDEN HILLS RD
 HICKORY CREEK, TX 75065
 LOT 3

GENERAL WARRANTY DEED
 HAYES, RICHARD & HELEN
 1225 SYCAMORE BEND RD TX
 HICKORY CREEK, TX 75065
 DOC. #2019-34423
 LOT 1, BLOCK A

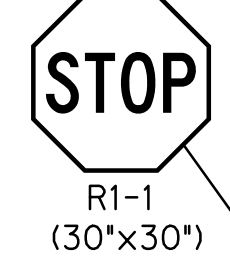
MATCH LINE STA 11+00

MATCH LINE STA 16+00



NOTES:
 1. SEE TOWN OF HICKORY CREEK STANDARD PAVEMENT MARKING STANDARD DETAILS

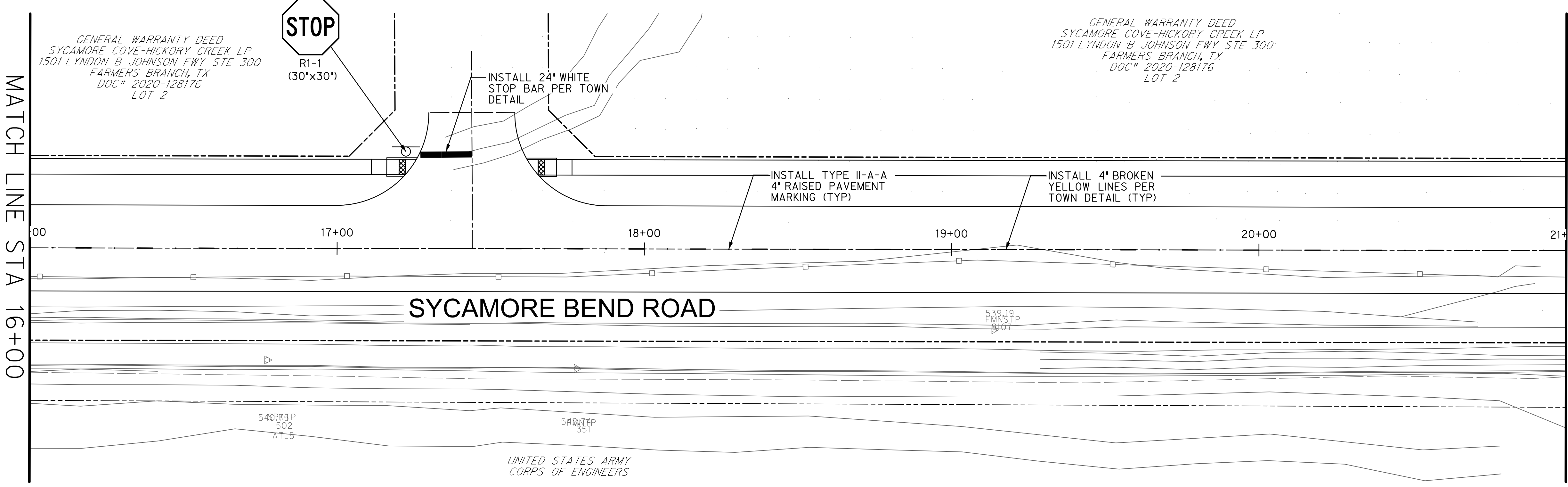
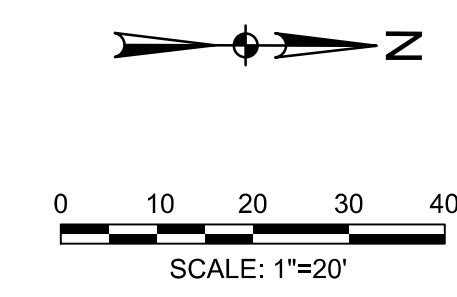
BURROW DR.
 SYCAMORE BEND RD.



GENERAL WARRANTY DEED
 SYCAMORE COVE-HICKORY CREEK LP
 1501 LYNDON B JOHNSON FWY STE 300
 FARMERS BRANCH, TX
 DOC# 2020-128176
 LOT 2

MATCH LINE STA 16+00

MATCH LINE STA 21+00



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 Name PE# Date



PUBLIC WORKS
 TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

SHEET TITLE

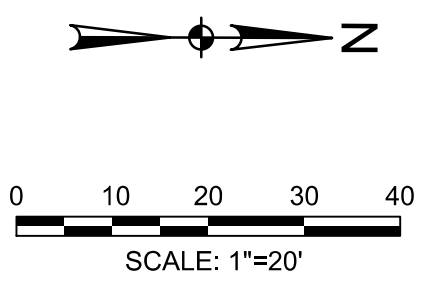
PAVEMENT MARKING
 AND SIGNAGE PLAN
 STA 11+00 TO STA 21+00



JANUARY
 2021

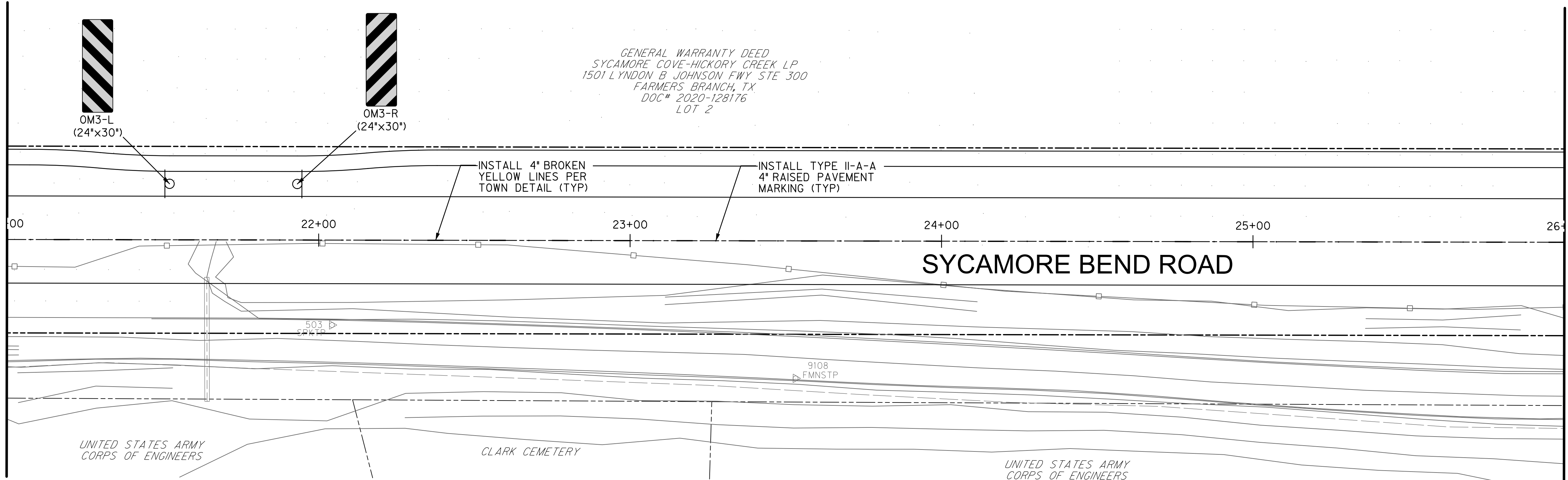
DATE

SHEET
 52



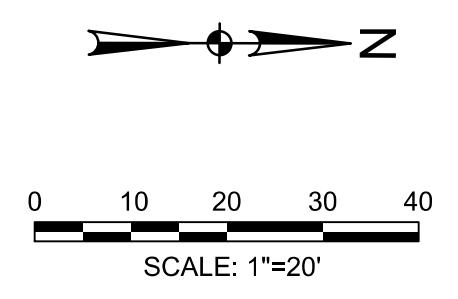
MATCH LINE STA 21+00

MATCH LINE STA 16+00



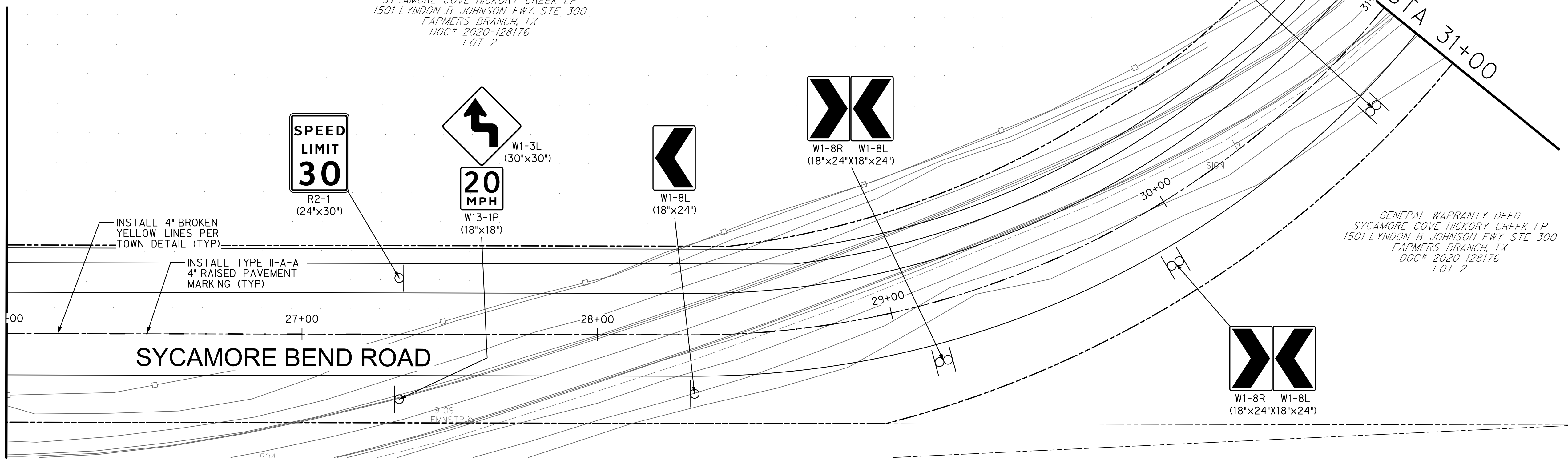
GENERAL WARRANTY DEED
 SYCAMORE COVE-HICKORY CREEK LP
 1501 LYNDON B JOHNSON FWY STE 300
 FARMERS BRANCH, TX
 DOC# 2020-128176
 LOT 2

NOTES:
 1. SEE TOWN OF HICKORY CREEK STANDARD PAVEMENT MARKING STANDARD DETAILS



MATCH LINE STA 16+00

MATCH LINE STA 31+00



GENERAL WARRANTY DEED
 SYCAMORE COVE-HICKORY CREEK LP
 1501 LYNDON B JOHNSON FWY STE 300
 FARMERS BRANCH, TX
 DOC# 2020-128176
 LOT 2

GENERAL WARRANTY DEED
 SYCAMORE COVE-HICKORY CREEK LP
 1501 LYNDON B JOHNSON FWY STE 300
 FARMERS BRANCH, TX
 DOC# 2020-128176
 LOT 2

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 TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

SHEET TITLE

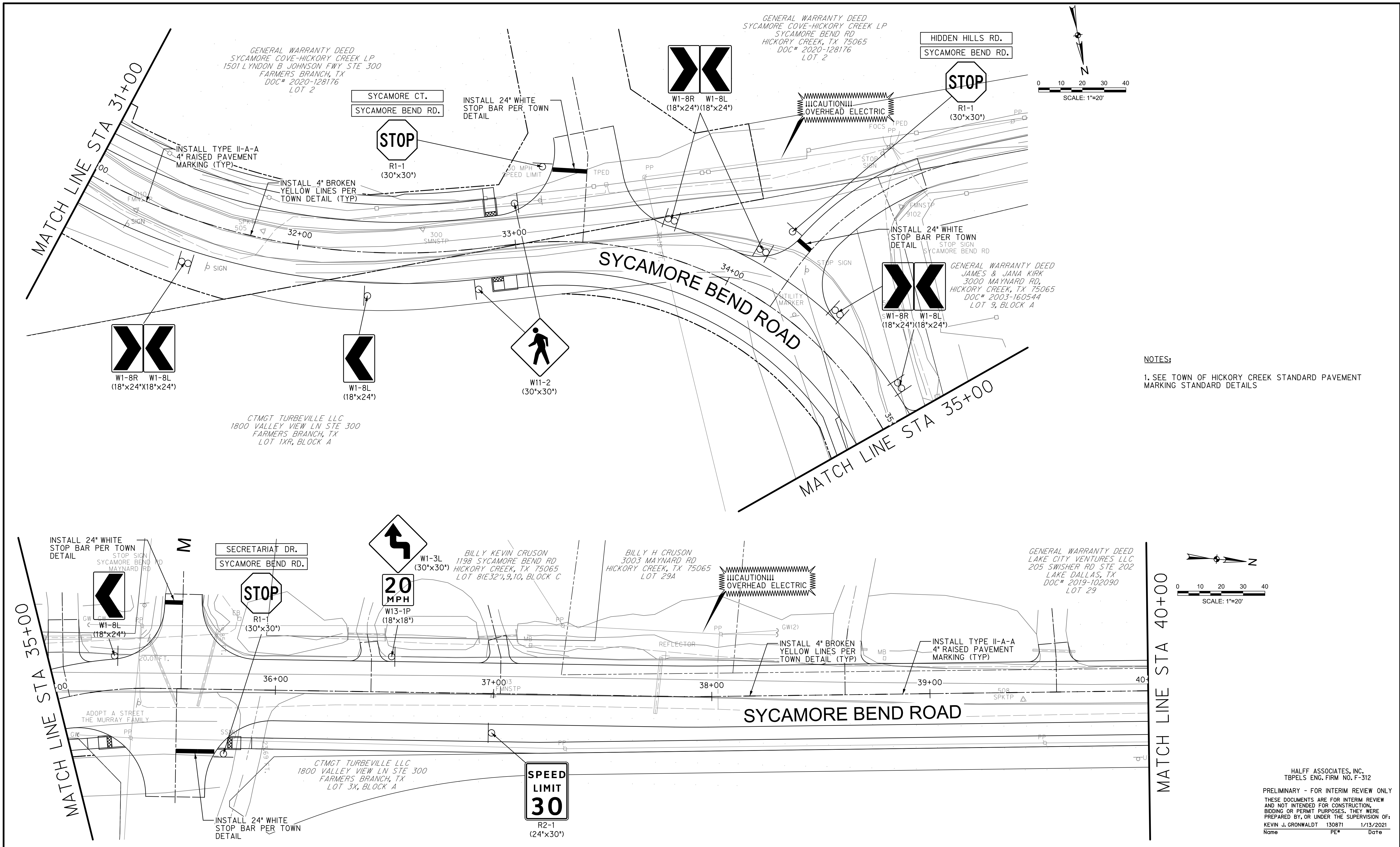
PAVEMENT MARKING
 AND SIGNAGE PLAN
 STA 21+00 TO STA 31+00



JANUARY
 2021

DATE

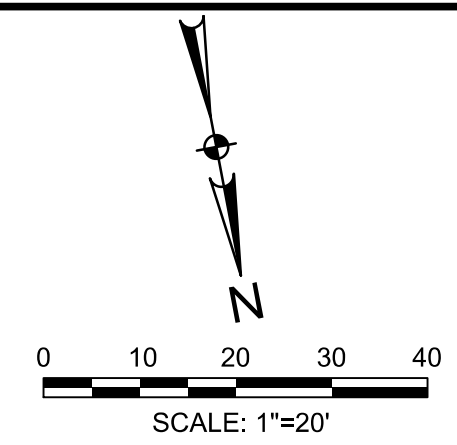
SHEET
 53



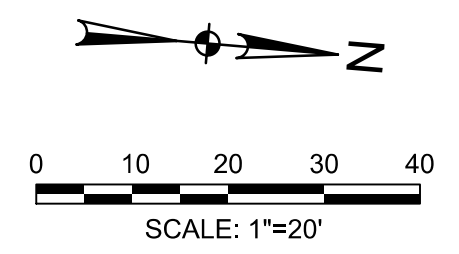
GENERAL WARRANTY DEED
 SYCAMORE COVE-HICKORY CREEK LP
 1501 LYNDON B JOHNSON FWY STE 300
 FARMERS BRANCH, TX
 DOC# 2020-128176
 LOT 2

GENERAL WARRANTY DEED
 SYCAMORE COVE-HICKORY CREEK LP
 SYCAMORE BEND RD
 HICKORY CREEK, TX 75065
 DOC# 2020-128176
 LOT 2

HIDDEN HILLS RD.
 SYCAMORE BEND RD.



NOTES:
 1. SEE TOWN OF HICKORY CREEK STANDARD PAVEMENT MARKING STANDARD DETAILS



HALFF ASSOCIATES, INC.
 TBPELS ENG. FIRM NO. F-312
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 KEVIN J. GRONWALDT 130871 1/13/2021
 Name PE# Date

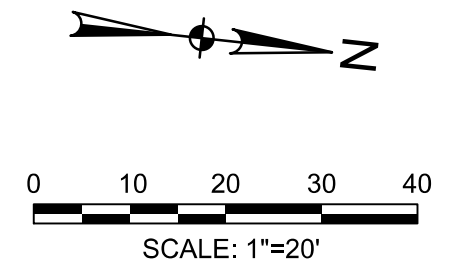
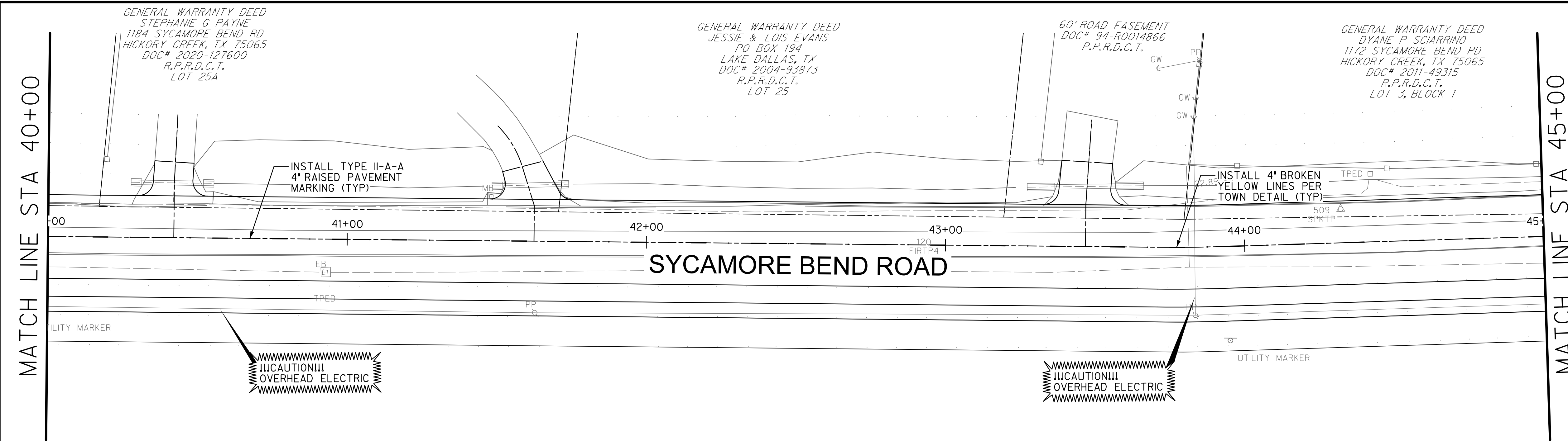


PUBLIC WORKS
 TOWN OF HICKORY CREEK

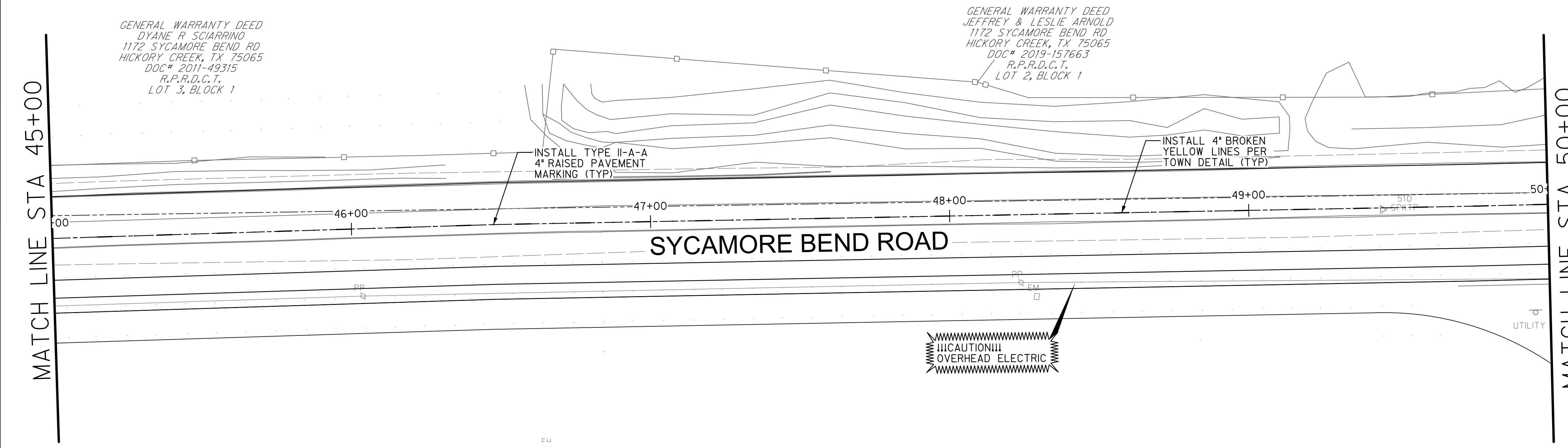
PROJECT TITLE
 SYCAMORE BEND ROAD FROM TURBEVILLE ROAD TO SYCAMORE BEND PARK

SHEET TITLE
 PAVEMENT MARKING AND SIGNAGE PLAN
 STA 31+00 TO STA 40+00

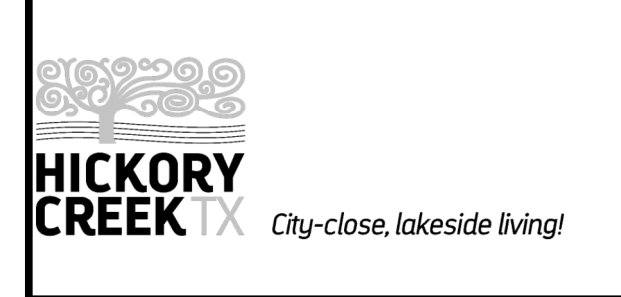
DATE
 JANUARY 2021
 SHEET 54



NOTES:
 1. SEE TOWN OF HICKORY CREEK STANDARD PAVEMENT MARKING STANDARD DETAILS



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PUBLIC WORKS
 TOWN OF HICKORY CREEK

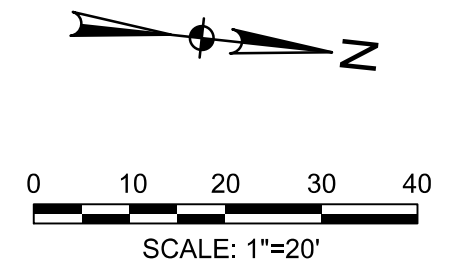
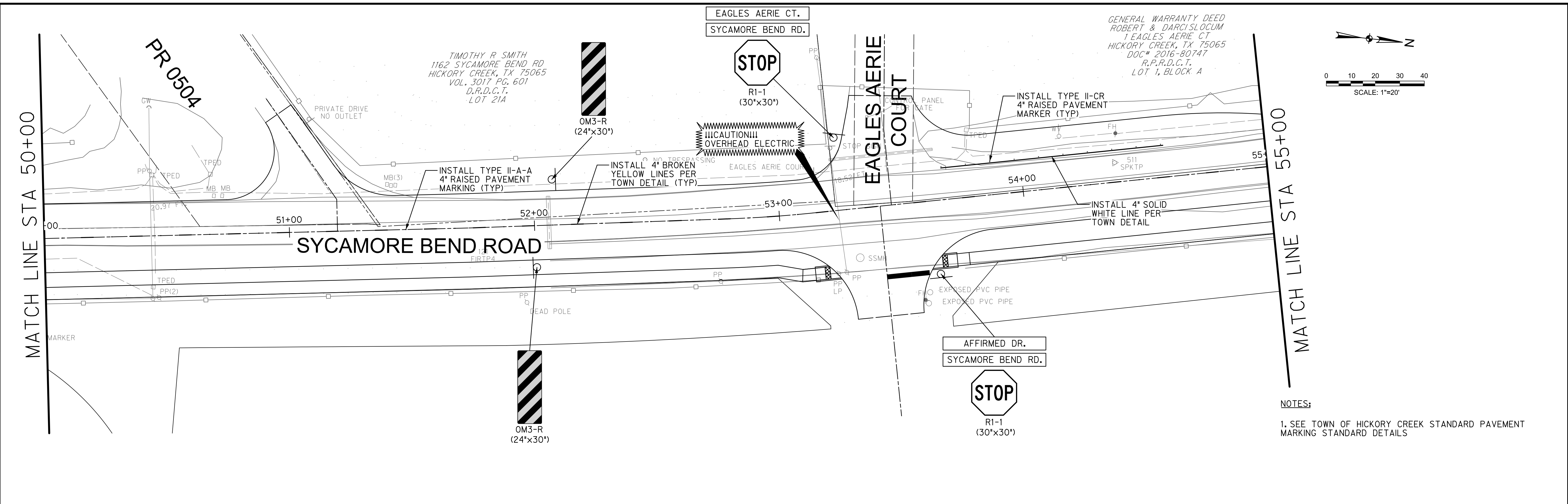
SYCAMORE BEND ROAD
 FROM TURBEVILLE ROAD TO
 SYCAMORE BEND PARK

PAVEMENT MARKING
 AND SIGNAGE PLAN
 STA 40+00 TO STA 50+00

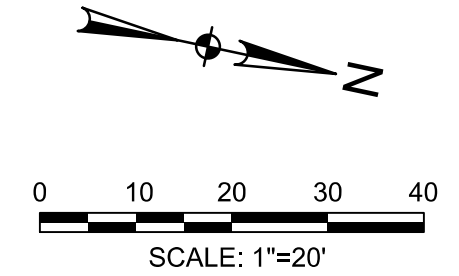
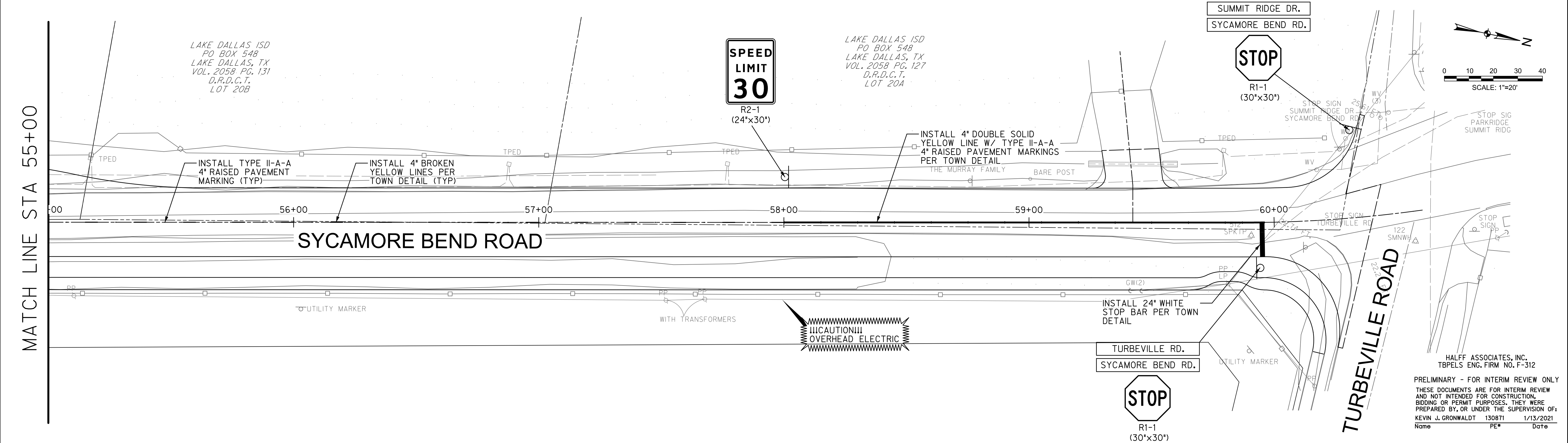


JANUARY
 2021

SHEET
 55



NOTES:
1. SEE TOWN OF HICKORY CREEK STANDARD PAVEMENT MARKING STANDARD DETAILS



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KEVIN J. GRONWALDT 130871 1/13/2021
Name PE# Date



PUBLIC WORKS
TOWN OF HICKORY CREEK

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

PAVEMENT MARKING
AND SIGNAGE PLAN
STA 50+00 TO END



JANUARY
2021

SHEET
56

PAVING GENERAL NOTES

1. All construction shall be in accordance with the standard specifications and details of the Town of Hickory Creek and the Fifth Edition of the "Standard Specifications for Public Works Construction - North Central Texas" herein referred to as "COG". Copies may be obtained from the North Central Texas Council of Governments, 616 Six Flags Drive, Suite 200, Arlington, Texas 76005-5888.
2. Subgrade preparation shall be in accordance with COG Item 301.
3. Lime Stabilized subgrade shall be installed in accordance with COG Item 301.2. Lime shall be placed using the slurry method, to be mixed on-site and not trucked in. Refer to COG Item 301.2.1.1.
4. The Contractor shall install supporting chairs for reinforcing steel on a one per square yard spacing in all concrete pavements. The chairs are to be plastic and installed as per COG Item 303.2.1.1.
5. 20% (by weight) of the cement content may be replaced with Type C fly ash. Refer to COG Item 303.2.4.
6. Concrete for all paving and curbs within Town of Hickory Creek shall have a minimum strength of 4,000 psi at 28 days for machine paved and 4,500 psi at 28 days for hand poured. The Town shall approve the concrete mix design in writing prior to use.
7. Slump requirements for slip form paving shall be an average of three inches with a maximum of four inches; for hand formed paving it shall be an average of four inches with a maximum of five inches; and for sidewalk & other it shall be specified by the owner. Refer to COG Item 303.3.4.4.
8. Curbs for concrete pavement shall be poured monolithically. Refer to COG Item 303.5.9.
9. The Contractor shall use a liquid membrane-forming compound as per COG Item 303.2.13.1.1.
10. Construction joints shall be used in all back-outs for driveways and inlets.
11. Transverse joints shall be sawed on 15 foot centers for all pavement thicknesses. The concrete saw must be stationed on the job-site prior to placing the pavements. All joints shall be sawed within an eighteen (18) hour period from the time of the pour.
12. Construction and longitudinal joints shall be placed in accordance with details. Saw joints to be 1/4 inch for each inch of pavement thickness.
13. The Contractor shall submit a Jointing Plan, for review by the Town, prior to placing.
14. Parkway, roadway ditches and adjacent disturbed areas for paving of roadways in undeveloped areas shall be seeded with Bermuda grass. Parkway and adjacent disturbed areas for paving of roadways in developed areas shall be block sodded with either Bermuda or St. Augustine to match the adjacent private property. Medians shall be block sodded. All sodding and seeding will be placed on four inches of topsoil. The Contractor is responsible for maintenance, including mowing and watering until vegetation is established at not less than 20 plants per square foot area, and until accepted by the Town.
15. Unless stated otherwise in the Contract Documents, the Contractor is responsible for all testing. All final reports shall be turned in to the Town Inspector within five (5) working days. Failed samples must be reported to the Town Inspector immediately.
 - a. The CONTRACTOR shall be responsible for notifying the Town Inspector at least 24 hours prior to any required testing.
 - b. Soil testing technicians shall provide written proof of having minimum of two (2) years of related field experience.
 - c. The CONTRACTOR shall coordinate all testing activities with the Town Inspector and shall facilitate required testing throughout the construction period. The Inspector shall be present during all testing.
 - d. The Town shall make final decision as to the validity of all testing results.
 - e. The CONTRACTOR shall be responsible for ensuring that materials to be tested are in compliance with all plans and specifications prior to testing. All materials found not to be in compliance with the plans and specifications before and after testing shall be removed and replaced at the CONTRACTOR'S expense.
 - f. All costs associated with the retesting of work that fails to meet the specifications required in the contract documents shall be borne by the CONTRACTOR. For Town projects retesting cost shall be withheld from pay requests submitted by the CONTRACTOR, this cost will be based on the Town's cost with no additional mark-up. A letter of acceptance will not be issued until all testing deficiencies are addressed and all related cost paid.
 - g. The Town Inspector shall be notified of concrete placement 24 hours in advance for steel and form inspection.

h. Subgrade Testing


- 1) Samples shall be taken for all classifications of soils on site. Testing for sulfate presence and lime series tests shall be conducted for all samples prior to any stabilization. If sulfate content is greater than 2,000 ppm (parts per million), specific recommendation shall be made by geotechnical engineer for subgrade preparation and thicker pavement section to be approved by the Town. The use of lime or cement and the percent content shall comply with the Geotech Engineer recommendations. Additional geotechnical testing and recommendations may be required by Town as field conditions dictate. Atterberg Limits shall be determined on all Proctor samples.
- 2) Gradations for lime treated subgrade shall be taken at intervals not exceeding 300 feet along road and must pass 100% through a 1 3/4" sieve and 60% through a No. 4 sieve according to NCTCOG Item 301.2.3.5.1.
- 3) Gradations for Portland cement treated subgrade shall be taken at intervals not exceeding 100 feet along road and must pass 100% through a 1" sieve and 80% through a No. 4 sieve according to NCTCOG Item 301.3.3.2.
- 4) Lime subgrade shall be tested in accordance with NCTCOG Item 301.2.1.3. Tests will be performed by excavating deeper than lime treatment and administering a phenolphthalein indicator.
- 5) Densities shall be taken on subgrade in accordance with the Wastewater General Notes 15.1.3 Mechanical Tamping and in accordance with NCTCOG Item 301.2.3.6 unless otherwise stated on the plans or in the specifications.
- 6) All subgrade shall be visually "proof rolled" after it is trimmed and prior to placement of steel.
- 7) Densities shall be taken at least 72 hours before concrete placement (NCTCOG Item 303.5.1). If more than 72 hours elapse, densities must be retaken unless an approved emulsion sealant is used in accordance with NCTCOG Item 302.3.5.
- 8) Locations for densities, gradations, and depth checks shall be at the discretion of the Inspector and shall be representative of the entire cross section of the subgrade.
- 9) Subgrade failures shall be defined by Inspector or ENGINEER. Repair method will be discussed with Inspector or ENGINEER and approved prior to beginning repair work.
- 10) Multiple tests may be required across width of right-of-way.
- 11) For emulsion placement over subgrade refer to NCTCOG Item 302.3.5.2.

i. Concrete Testing for Pavements, Curbs, Sidewalks and Driveways.

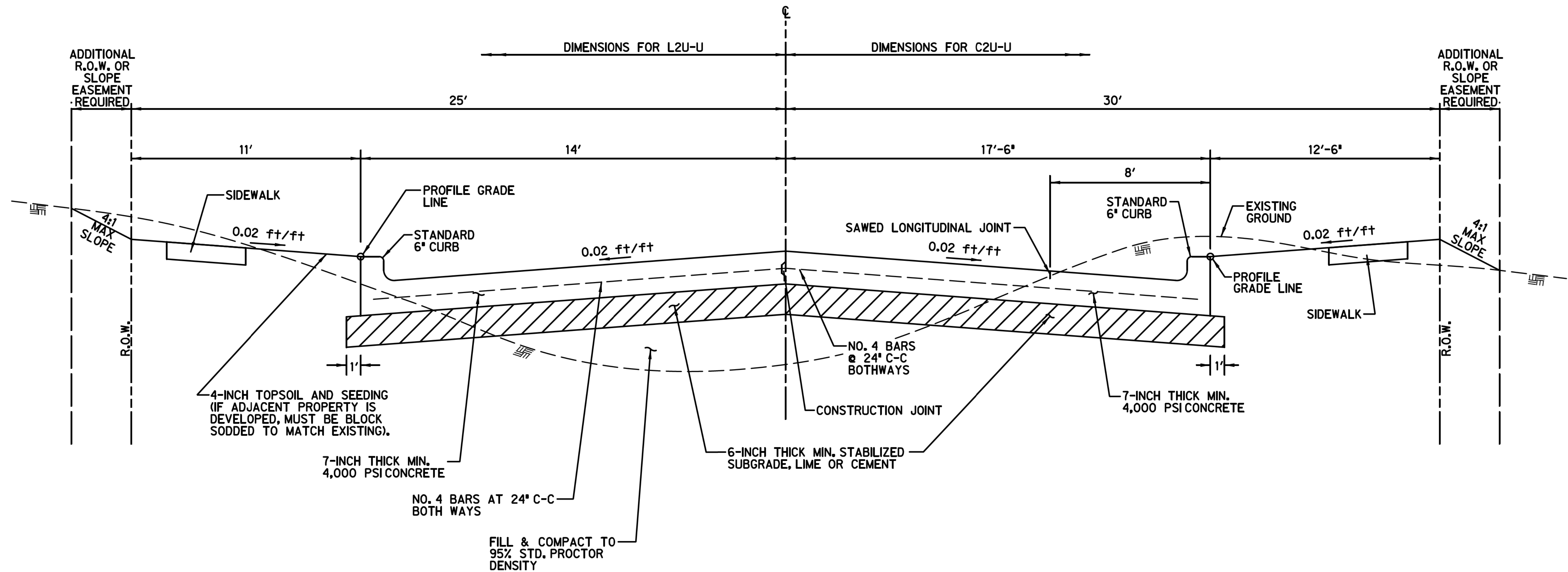
- 1) A concrete mix design must be submitted and approved by the Town prior to any placement of concrete. A minimum of four (4) test cylinders shall be obtained per one hundred cubic yard (100 cy) of concrete placed with a minimum of four cylinders per placement. Tests shall also include slump, air contents and temperature of concrete mixture; each mix design of concrete placed each day shall also be tested. Concrete strength shall be tested at 7 days (2 cylinders) and 28 days (2 cylinders). Additional cylinders and or tests may be requested at the Town Inspector's discretion.
- 2) Concrete with a temperature of 85 degrees or higher will require a retarding agent admixture.
- 3) The maximum temperature of concrete at the time of placement shall not exceed 95 degrees. It shall be the CONTRACTOR and/or his supplier's responsibility to take steps to control the temperature of concrete. All concrete that exceeds the temperature limit of 95 degrees will be rejected.
- 4) Forms shall not be removed from pavement, sidewalks, ramps, or retaining walls for 24 hours minimum, and shall not be backfilled less than 72 hours after concrete placement. Pavement shall have a minimum cure time of 7 days, but may be opened to traffic earlier at the discretion of the Inspector or ENGINEER only after review of compressive strength data. Temporary perpendicular crossings may be made after 72 hours by ramping soil over the new pavement at a depth of not less than 18-inches and a width of not less than 10-feet. Prior to grout wiping any concrete, CONTRACTOR shall demonstrate method of surface preparation to ensure adhesion of grout.
- 5) All street pavement shall be cored to verify proper pavement thickness and strength prior to acceptance. Cores for strength and depth shall be 4-inches diameter and taken at intervals not exceeding 600 feet; cores for depth only shall be 2-inches diameter and shall be taken at intermediate intervals not exceeding 300-feet. Locations will be approved by the Town. Multiple cores may be required at each interval to represent entire cross section. All cores shall be taken at 28 days and results shall be correlated with the cylinder test results. Evaluation of cores will be in accordance with NCTCOG Item 303.8.2. All required pavement replacement shall be in full panel increments.

j. Hot-Mix Asphalt Concrete Pavement Testing

- 1) Specifications shall follow COG Item 302 and conform to the TxDOT Standard for Hot-Mix Asphaltic Concrete.
- 2) The asphaltic mixture shall be tested for oven burn off/gradation and stability.
- 3) A relative density of not less than 92% will be required after final compaction of the in-place pavement section. The CONTRACTOR shall schedule the CMT Laboratory to come out in the field and establish a rolling pattern. The use of nuclear field density determinations shall not be accepted as the basis for acceptance with respect to density. The CONTRACTOR shall be responsible for assuring that the compaction of the asphaltic concrete in place will attain between 5% and 9% (five and nine percent) air voids. The CONTRACTOR's responsibility for the required compaction includes the selection of rolling equipment and selection of rolling patterns to achieve the required compaction.
- 4) HMAC mix temperature range at time of placement shall be between 260 degrees and 325 degrees. The asphaltic mixture shall not be placed when the air temperature is below 50 degrees but may be placed when the air temperature is above 40 degrees and rising, the temperature being taken in the shade and away from artificial heat.
- 5) In-place compaction control is required for all mixtures. Asphaltic concrete should be placed and compacted to contain not more than 9% (nine percent) nor less than 5% (five percent) air void unless otherwise indicated. The percent air voids will be calibrated using the maximum theoretical specific gravity of the mixture determined according to TxDOT Test Method Tex-227-F Roadway Specimen, which shall either be cores or sections of pavement, will be tested according to TxDOT Test Method Tex-207-F. The same specimen shall be used in determining both the theoretical density and field density.
- 6) Prime coat will follow COG Items 302.7 and 302.9.6.1.
- 7) Tack coat will follow COG Specifications Item 302.9.6.2.
- 8) HMAC mix designs shall follow COG Item 302.9.3 and the grading tables included in this section. These mixtures will be in accordance with TxDOT Test Method Tex-204-F, design of Bituminous Mixtures.

PAVEMENT DETAILS						
PAVING GENERAL NOTES						
 <p style="text-align: center;">TOWN OF HICKORY CREEK DENTON COUNTY, TEXAS</p>						
DESIGN	DRAWN	CHECK	DATE	SCALE	FILE	NO.
HALFF	HALFF	HALFF	OCT 2012	N.T.S.	P-1	57

CERTIFICATION:
 THIS TOWN OF HICKORY CREEK STANDARD DETAIL SHEET IS AUTHORIZED FOR USE IN THIS PROJECT BY THE ENGINEER WHOSE SEAL APPEARS ON THIS SHEET. MODIFICATIONS TO THE STANDARD DETAILS SHALL BE NOTED ON THIS SHEET AND SHALL COMPLY WITH THE TOWN'S ORDINANCES, STATE, AND FEDERAL REGULATIONS.



REINFORCED CONCRETE PAVING STANDARDS
LOCAL RESIDENTIAL & COLLECTOR STREETS - URBAN
L2U-U & C2U-U

N.T.S.

- NOTES:**
- L2U-U IS SHOWN ON LEFT SIDE OF DRAWING AND C2U-U IS SHOWN ON RIGHT SIDE OF DRAWING.
 - ALL DIMENSIONS TO CURB ARE SHOWN TO THE BACK OF CURB.
 - SEE SIDEWALK DETAILS FOR SIDEWALK LOCATIONS.

CERTIFICATION:

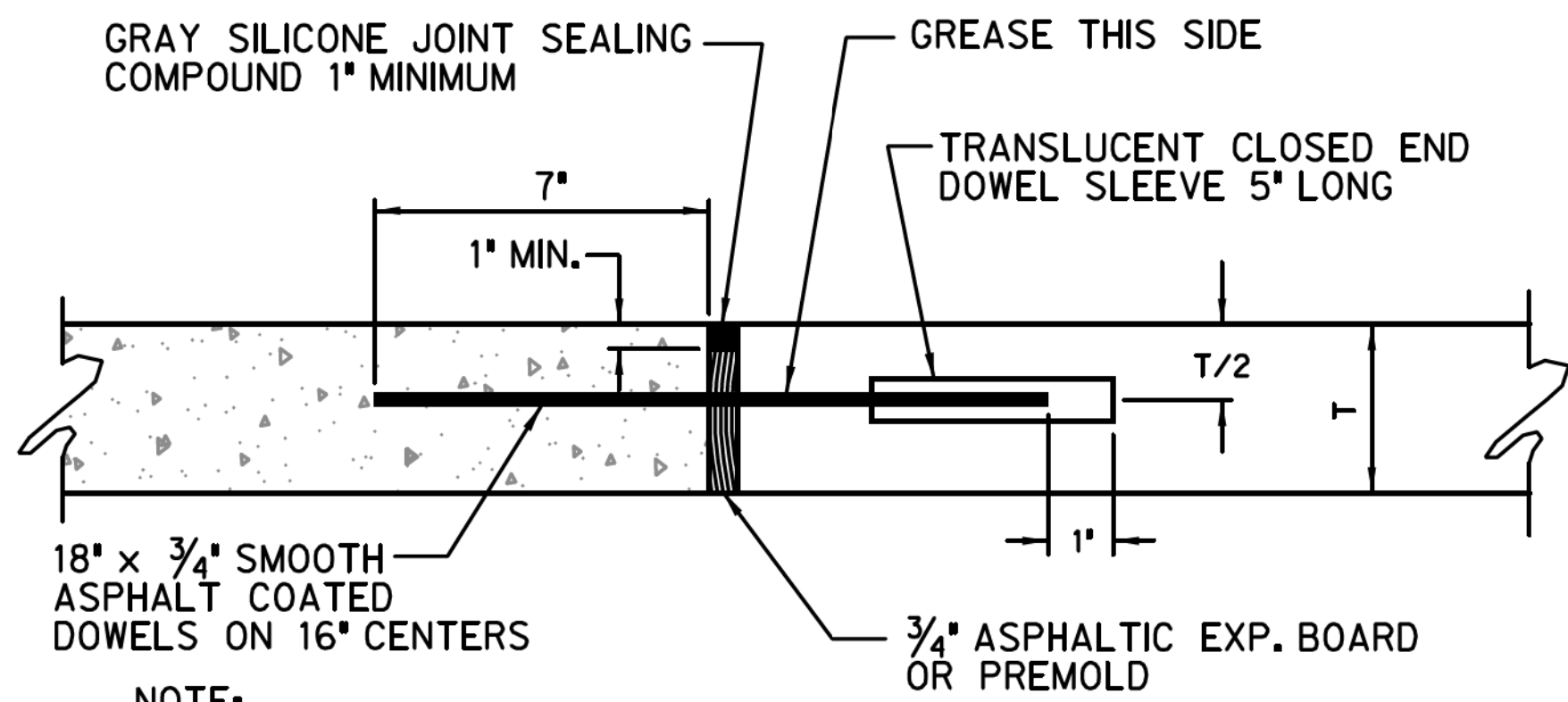
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PAVEMENT DETAILS
LOCAL RESIDENTIAL & COLLECTOR
STREETS - URBAN



TOWN OF HICKORY CREEK
DENTON COUNTY, TEXAS

DESIGN	DRAWN	CHECK	DATE	SCALE	FILE	NO.
HALFF	HALFF	HALFF	OCT 2012	N.T.S.	P-2	58



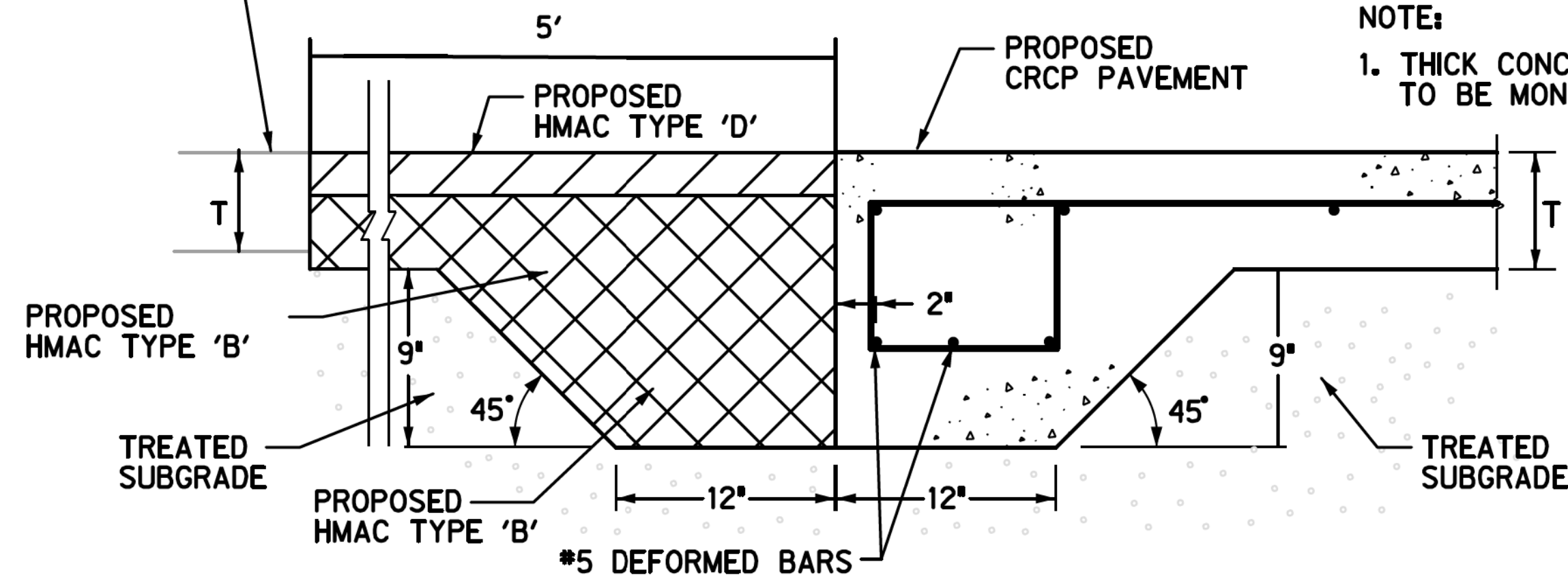
NOTE:

SLEEVES FOR DOWELS SHALL HAVE AN INSIDE DIAMETER OF 1/16" GREATER THAN THE DIAMETER OF THE DOWELS AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO USE. EXPANSION JOINTS TO BE CONSTRUCTED A MAXIMUM OF 300' APART ON STRAIGHT PAVING, AND ON ALL PCs, PTs, END OF RETURN OR OTHERWISE SPECIFIED.

EXPANSION JOINT

NOT TO SCALE

EXISTING ASPHALT PAVEMENT



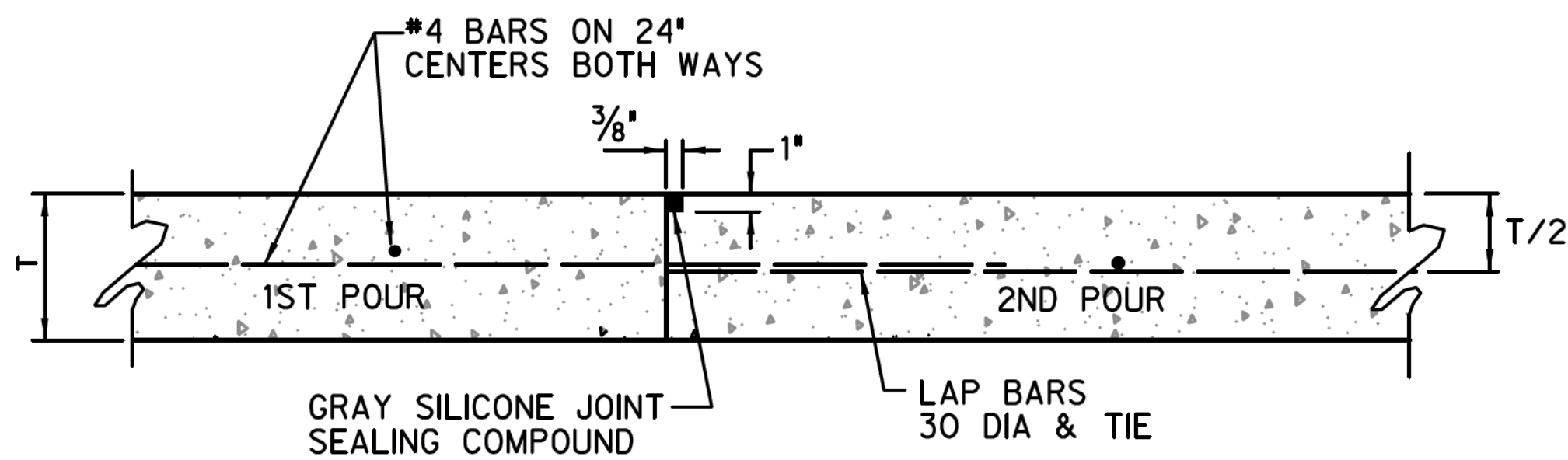
NOTE:

1. THICK CONCRETE PAVEMENT EDGE TO BE MONOLITHIC.

T = THICKNESS OF PAVEMENT

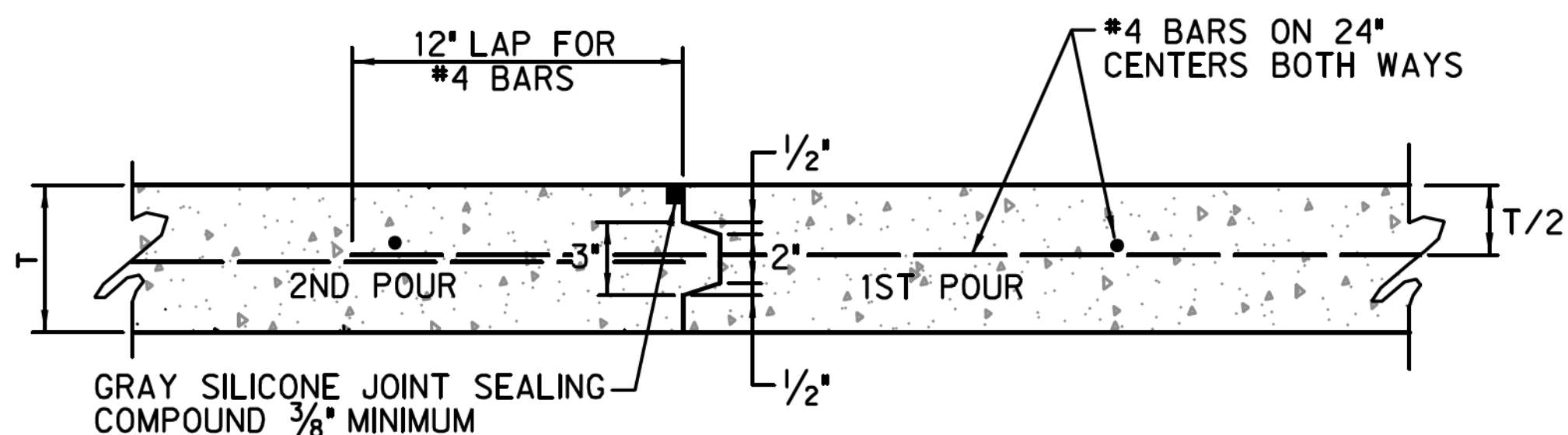
PAVEMENT TERMINUS

NOT TO SCALE



TYPE A

FOR PAVEMENT THICKNESS 6" (OR AS SPECIFIED)

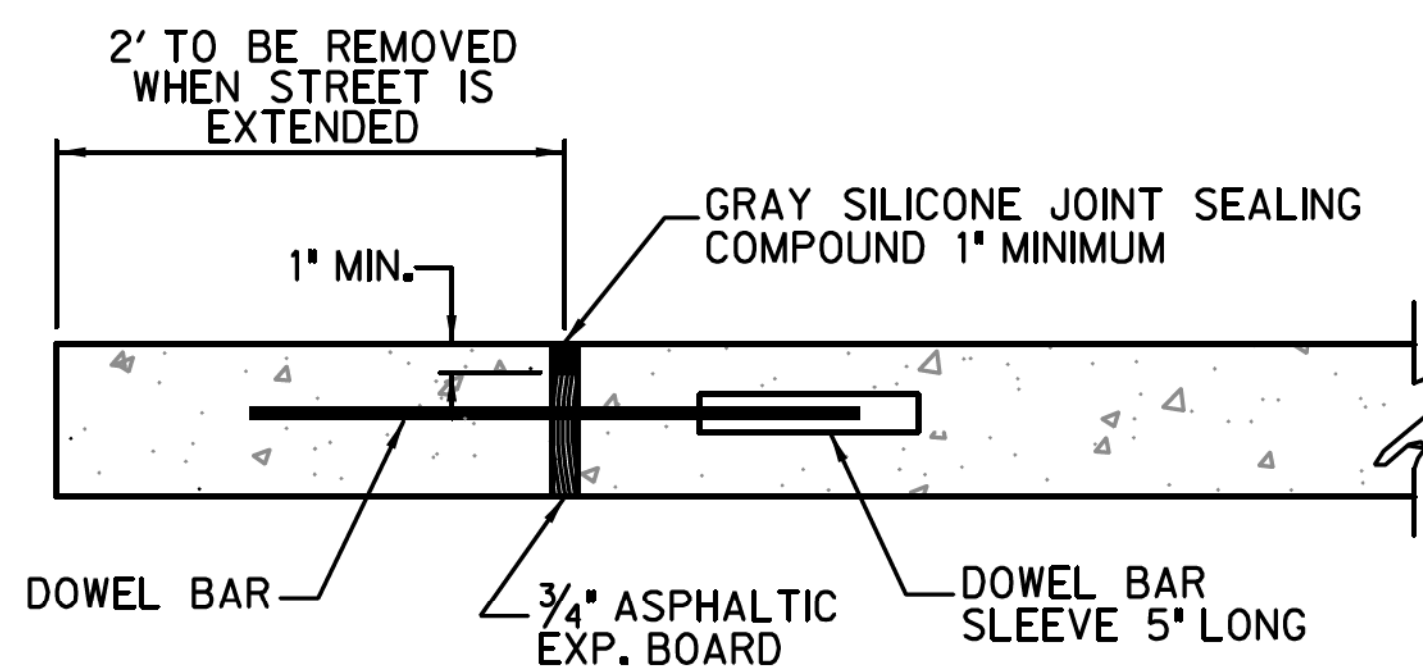


TYPE B

FOR PAVEMENT THICKNESS GREATER THAN 6" (OR AS SPECIFIED)

CONSTRUCTION JOINT

NOT TO SCALE



NOTE: TYPE-A HEADER TO BE USED FOR FUTURE STREET EXTENSION OR WHEN SPECIFIED ON PLANS TO BE USED.

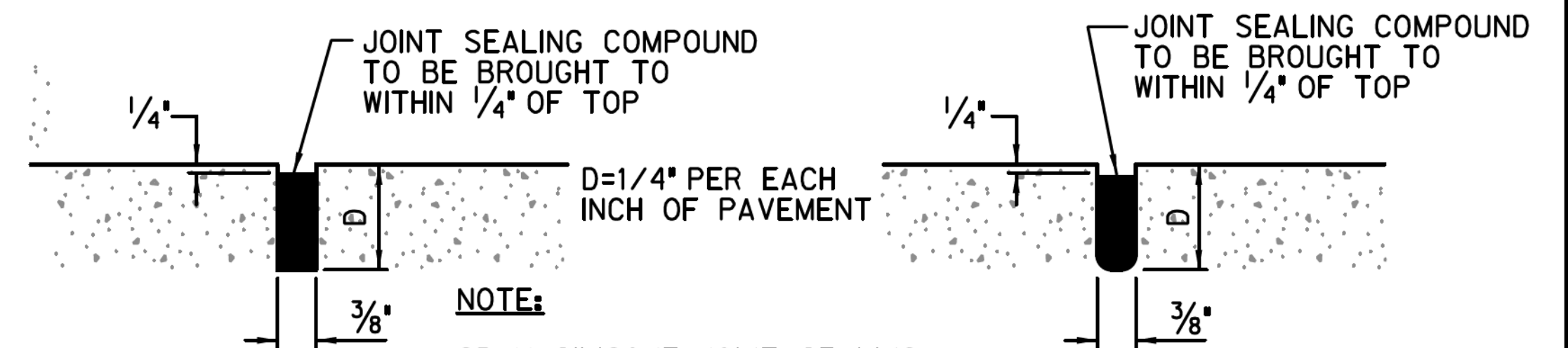
TYPE-B CONCRETE HEADER

NOT TO SCALE

NOTES:

UNLESS TYPE 'A' OR 'B' HEADERS ARE SPECIFIED, WHEN CONSTRUCTING NEW PAVEMENT, THE CONTRACTOR MUST:

- A) EXPOSE THE REINFORCING STEEL FROM THE EXISTING PAVEMENT AND TIE IT TO THE PROPOSED STEEL MAT, OR
- B) DOWEL #3 REINFORCING STEEL BARS INTO THE EXISTING PAVEMENT A MINIMUM OF (6) SIX INCHES AT 24" CENTERS AND HAVE A MINIMUM OF 15" LAP.



NOTE:

GRAY SILICONE JOINT SEALING COMPOUND TO MEET COG. ITEM 303.5.4.7

SAWED DUMMY JOINT

NOT TO SCALE

CERTIFICATION:

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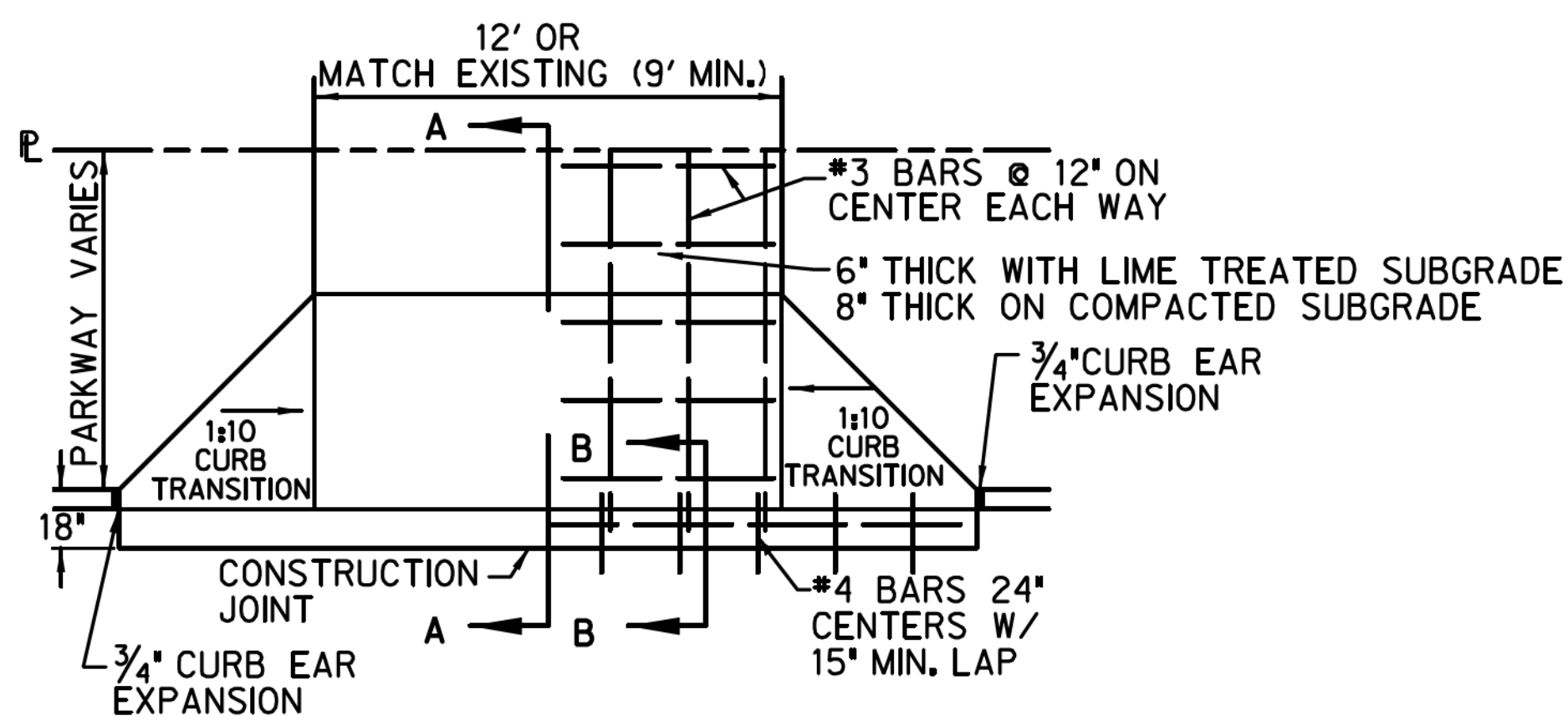
PAVEMENT STANDARD DETAILS

CONSTRUCTION JOINT DETAILS



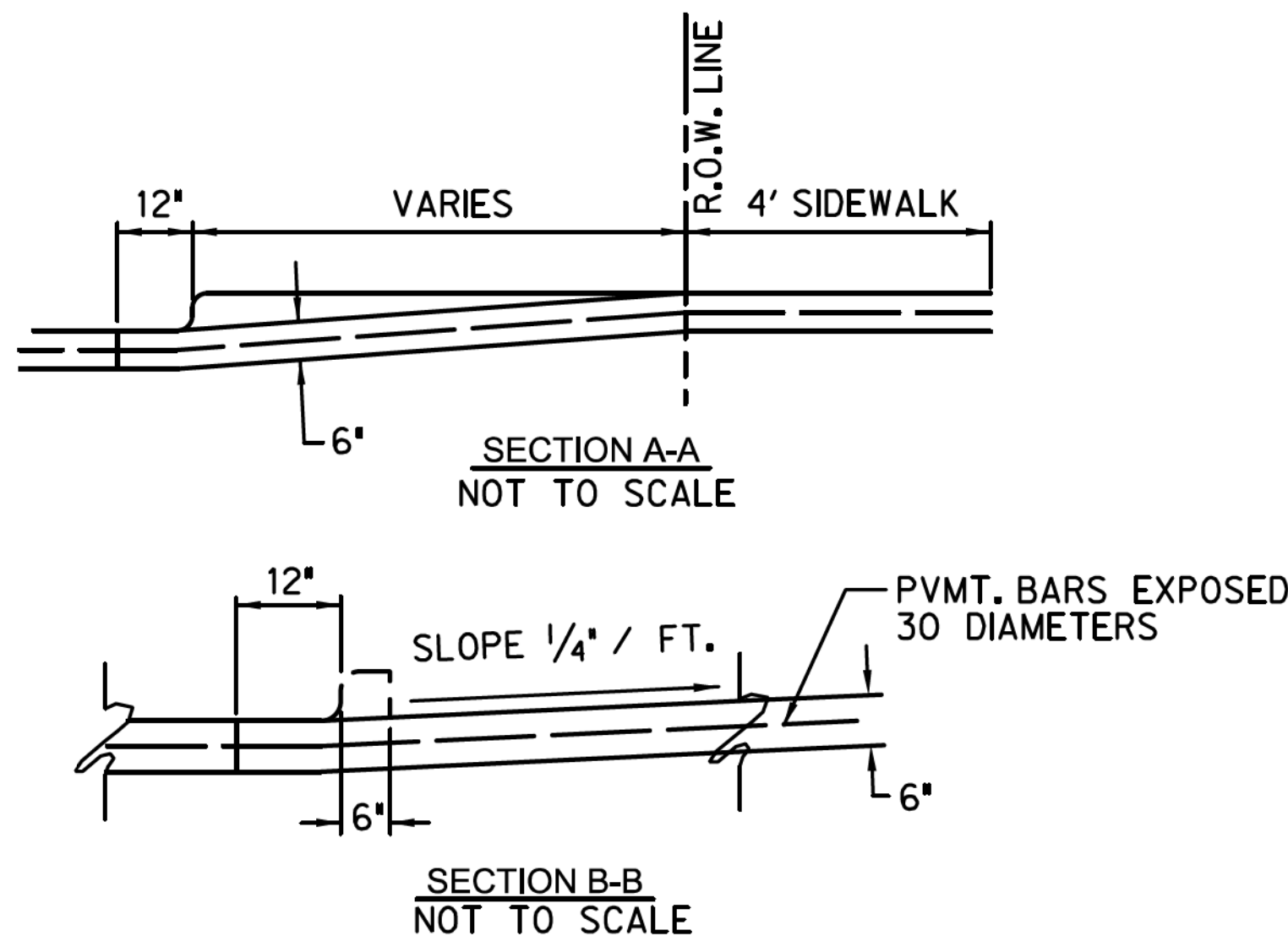
TOWN OF HICKORY CREEK
DENTON COUNTY, TEXAS

DESIGN	DRAWN	CHECK	DATE	SCALE	FILE	NO.
HALFF	HALFF	HALFF	OCT 2012	N.T.S.	P-5	59

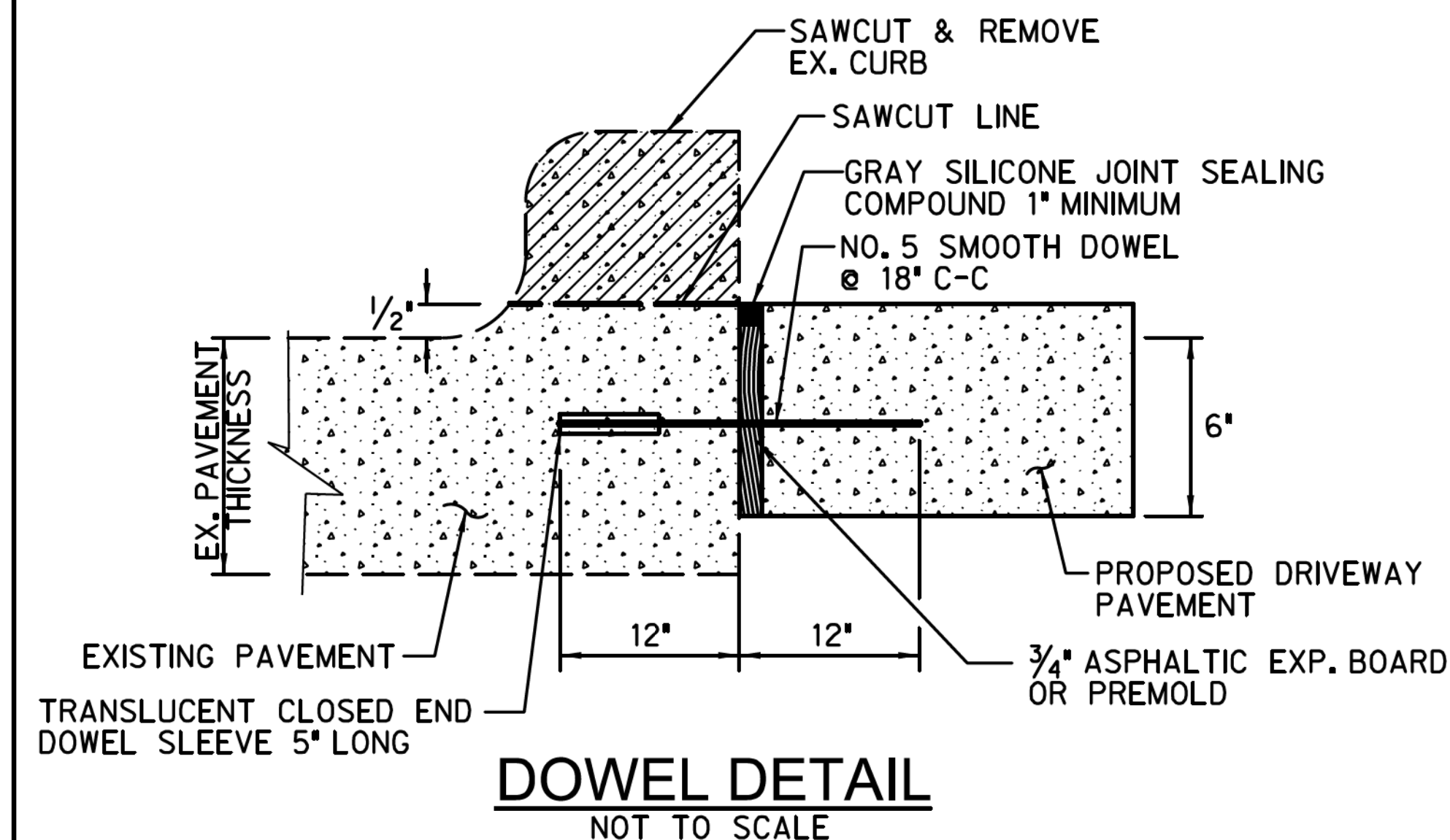


- NOTES:
- DRIVEWAYS SHALL BE 12 FOOT WIDE OR SHALL MATCH EXISTING, (9' WIDE MINIMUM) NEW DRIVES WILL BE CONSTRUCTED TO PROPERTY LINE, IN REPLACING EXISTING DRIVES, THE EXISTING DRIVE WILL BE SAWED AND REMOVED AT A DISTANCE WHICH WILL ASSURE A SMOOTH GRADE, (TO BE SPECIFIED BY THE ENGINEER) AND WILL BE REPLACED TO THAT POINT. GRADE NOT TO EXCEED 1/10 TO THE FOOT RISE.
 - FOR DRIVEWAYS BEING INSTALLED TO EXISTING PAVEMENT, SAWCUT CURB AND DOWEL INTO EXISTING PAVEMENT. SEE DOWEL DETAIL ON THIS SHEET.

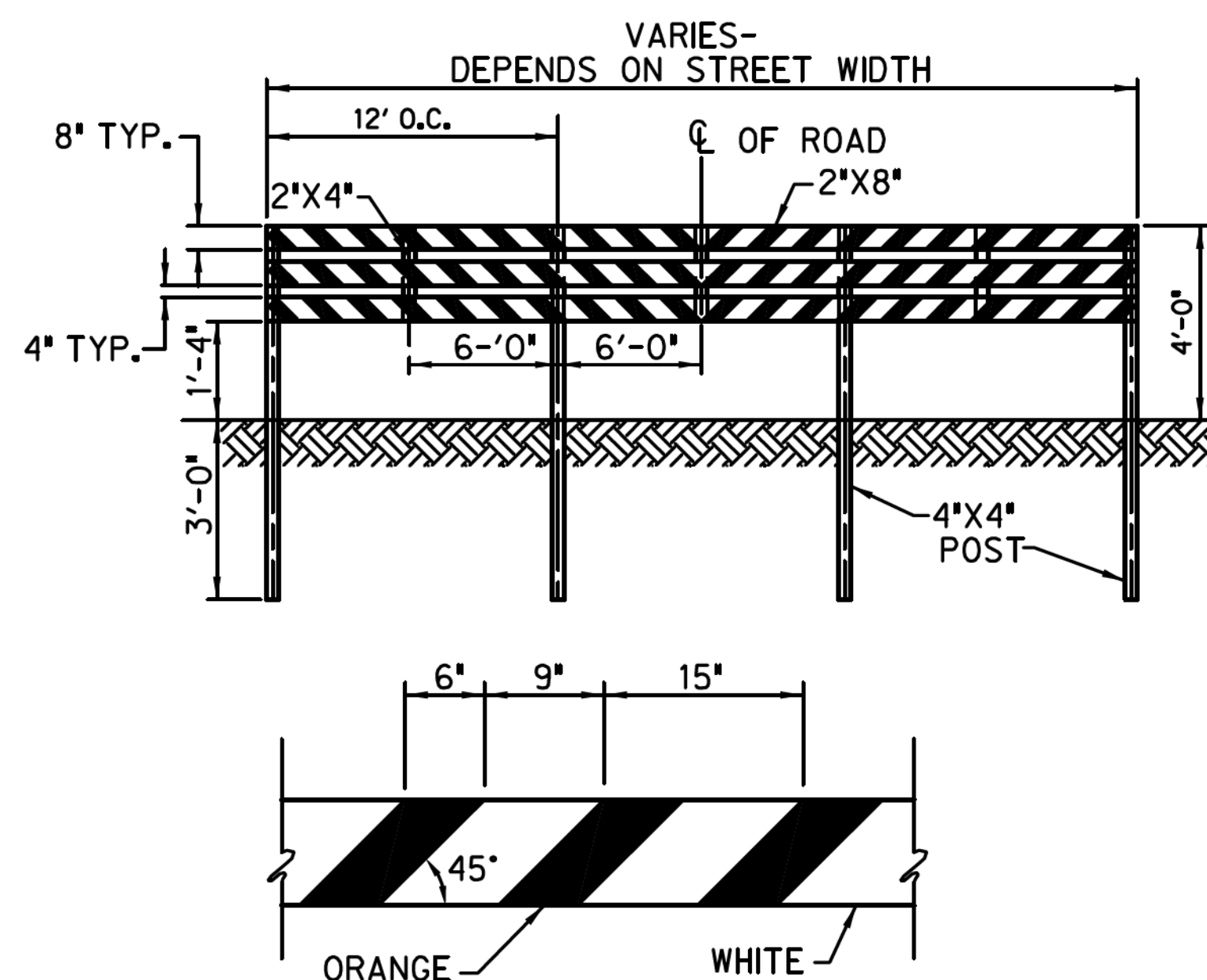
DRIVEWAY DETAIL
NOT TO SCALE



- NOTE:
- CURB, GUTTER, PAVEMENT, AND VALLEY TO BE POURED MONOLITHIC. THE REINFORCED CONCRETE VALLEY SHALL REPLACE THE CONCRETE PAVING WITH THE SUBGRADE AND BASE TREATMENT REMAINING THE SAME IN ACCORDANCE WITH THE TYPICAL PAVING SECTION. THE CONCRETE VALLEY WILL BE CONSTRUCTED ACCORDING TO THE TOWN OF HICKORY CREEK PAVING STANDARDS.

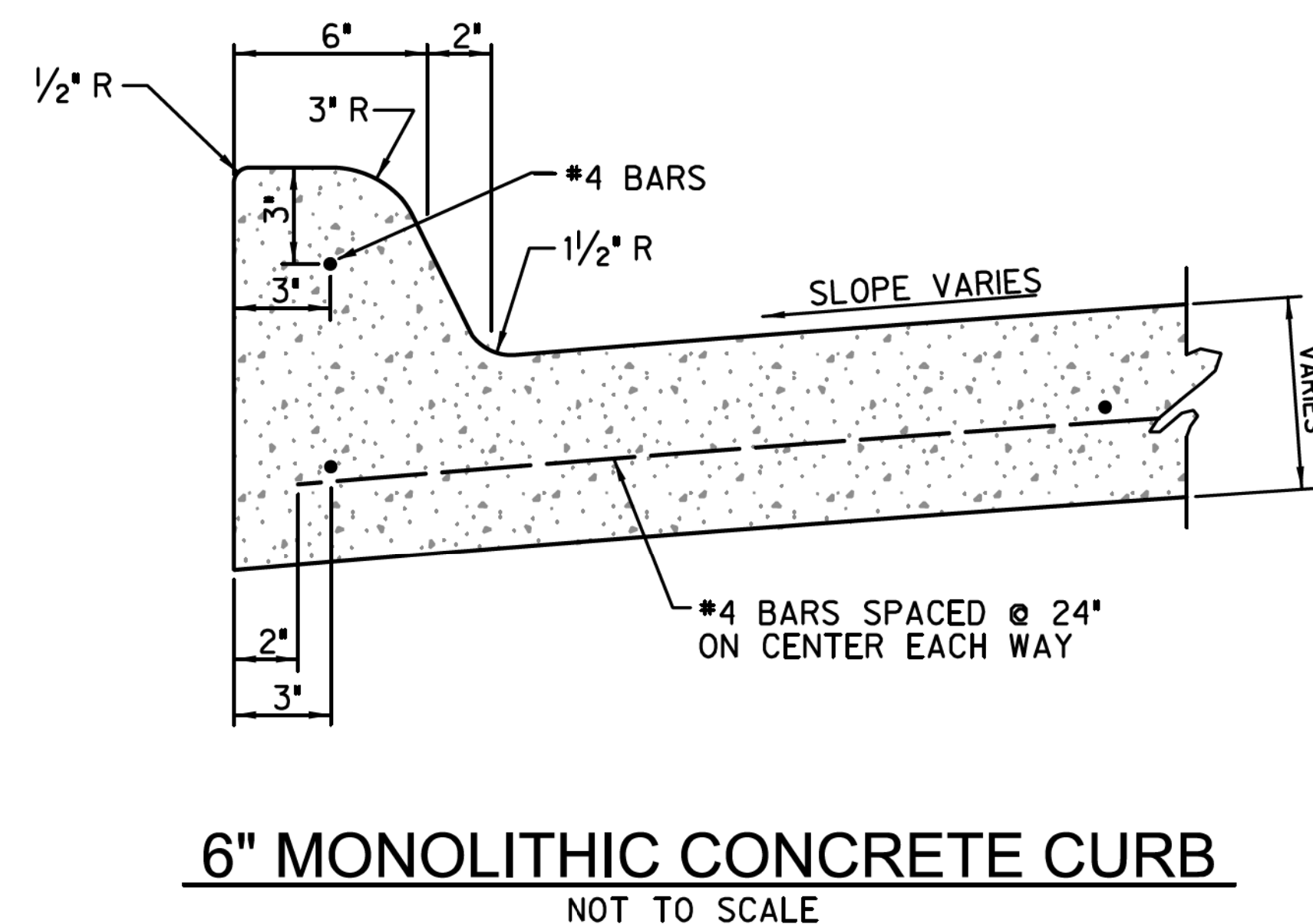


DOWEL DETAIL
NOT TO SCALE




END OF ROAD BARRICADE DETAIL
NOT TO SCALE

- NOTES:
- REFLECTIVE SHEETING FOR ALL TRAFFIC CONTROL DEVICES SHALL BE OF HIGH SPECIFIC INTENSITY (TYPE IIIA OR IIIB). ALL CHANNELIZATION DEVICES SHALL USE TYPE IIIA REBOUNDABLE SHEETING.
 - ATTACH 2" X 8" BOARDS TO 4" X 4" POST WITH LAG BOLTS.
 - ATTACH 2" X 4" BRACES TO 2" X 8" BOARDS WITH 10d-NAILS.
 - BARRICADE TO BE FULL WIDTH OF STREET BACK OF CURB TO BACK OF CURB.
 - IF BARRICADE IS USED TO DENOTE END OF ROADWAY, DIAGONAL STRIPES USED SHALL BE RED AND WHITE.



6" MONOLITHIC CONCRETE CURB
NOT TO SCALE

PAVEMENT STANDARD DETAILS						
DRIVEWAYS, CURBS, AND MISCELLANEOUS PAVEMENT DETAILS						
						
TOWN OF HICKORY CREEK DENTON COUNTY, TEXAS						
DESIGN	DRAWN	CHECK	DATE	SCALE	FILE	NO.
HALFF	HALFF	HALFF	OCT 2012	N.T.S.	P-6	60

CERTIFICATION:
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SIDEWALK AND HANDICAP / CURB RAMP NOTES:

GENERAL REQUIREMENTS:

REQUIREMENTS AND SPECIFICATIONS OF THE TEXAS ACCESSABILITY STANDARDS AND THE AMERICAN DISABILITIES ACT.

ALL SLOPES ARE MAXIMUM ALLOWABLE. THE LEAST POSSIBLE SLOPE THAT WILL DRAIN PROPERLY SHOULD BE USED. ADJUST CURB RAMP LENGTH OR GRADE OF APPROACH SIDEWALKS AS DIRECTED.

SIDEWALK WIDTH:

THE MINIMUM WIDTH OF ALL SIDEWALKS SHALL BE 4 FEET, ALONG FRONTAGE WITH RESIDENTIAL PROPERTIES AND 5 FEET ALONG COMMERCIAL FRONTAGE, AND TO BE CONSTRUCTED AS PER FIGURE 1: "SIDEWALK LOCATION DETAIL" ON THIS SHEET & SHEET 2 OF 3.

A 5'X5' LANDING SHALL BE REQUIRED EVERY 200 FEET FOR SIDEWALKS LESS THAN 5' IN WIDTH.

MINIMUM 6-FOOT SIDEWALK IS REQUIRED ADJACENT TO THE CURB, WITH THE APPROVAL OF THE TRAFFIC ENGINEER.

CURB RAMP LOCATION:

CURB RAMPS UNDER THESE PROVISIONS, SHALL BE WHEREVER AN ACCESSIBLE ROUTE CROSSES A CURB.

SLOPE:

MAXIMUM ALLOWABLE CROSS SLOPE ON SIDEWALK AND CURB RAMP SURFACES IS 2%.

SLOPES ON CURB RAMPS SHALL BE AS FOLLOWS:

- A. THE SLOPE SHALL BE MEASURED AS SHOWN IN FIGURE 3.
- B. TRANSITIONS FROM RAMPS TO WALKS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.
- C. MAXIMUM SLOPES OF ADJOINING GUTTERS, ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP, OR ACCESSIBLE ROUTE SHALL NOT EXCEED 1:50
- D. THE LEAST POSSIBLE SLOPE SHALL BE USED FOR ANY RAMP. THE MAXIMUM SLOPE OF A RAMP IN NEW CONSTRUCTION SHALL BE 1:12. THE MAXIMUM RISE FOR ANY RUN SHALL BE 30-INCHES. ANY RUN LONGER THAN 6' AT 1:12 WILL REQUIRE RAILING. CURB RAMPS AND RAMPS TO BE CONSTRUCTED ON EXISTING SITES OR IN EXISTING BUILDINGS OR FACILITIES MAY HAVE SLOPES AND RISES IF SPACE LIMITATIONS PROHIBIT THE USE OF A 1:12 SLOPE OR LESS, AS FOLLOWS:
 - 1.) A SLOPE BETWEEN 1:10 AND 1:12 IS ALLOWED FOR A MAXIMUM RISE OF 6-INCHES.
 - 2.) A SLOPE BETWEEN 1:8 AND 1:10 IS ALLOWED FOR A MAXIMUM OF 3-INCHES A SLOPE STEEPER THAN 1:8 IS NOT ALLOWED.
- E. LANDINGS SHALL BE 5'X 5' MINIMUM WITH A MAXIMUM 2% SLOPE IN ANY DIRECTION
- F. MANEUVERING SPACE AT THE BOTTOM OF CURB RAMPS SHALL BE MINIMUM OF 4'X4' WHOLLY CONTAINED WITHIN THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICULAR TRAVEL PATH.

RAMP WIDTH:

THE MINIMUM WIDTH OF A CURB RAMP SHALL BE 36 INCHES EXCLUSIVE OF FLARED SIDES.

SURFACE:

SURFACES OF CURB RAMPS, ALONG ACCESSIBLE ROUTES AND IN ACCESSIBLE ROOMS AND SPACES INCLUDING FLOORS, WALKS, RAMPS, STAIRS, AND CURB RAMPS, SHALL BE STABLE, FIRM, AND SLIP RESISTANT.

SIDES OF CURB RAMPS:

IF A CURB RAMP IS LOCATED WHERE PEDESTRIANS MUST WALK ACROSS THE RAMP, OR WHERE IT IS NOT PROTECTED BY HANDRAILS OR GUARDRAILS, IT SHALL HAVE FLARED SIDES.

THE MAXIMUM SLOPE OF THE FLARE SHALL BE 1:10 (SEE FIGURE 4 (A)) CURB RAMPS WITH RETURNED CURBS MAY BE USED WHERE PEDESTRIANS WOULD NOT WALK ACROSS THE RAMP (SEE FIGURE 4 (B)) PROVIDE 1/8-INCH TOOLED 1/4-INCH TO 3/4-INCH WIDE GROOVES AT 2-INCH CENTERS.

BUILT-UP RAMPS:

BUILT-UP CURB RAMPS SHALL BE LOCATED SO THEY DO NOT PROJECT INTO VEHICULAR TRAFFIC LANES. PROVIDE 1/8-INCH TOOLED 1/4-INCH TO 3/4-INCH WIDE GROOVES AT 2-INCH CENTERS.

OBSTRUCTIONS:

CURB RAMPS SHALL BE LOCATED OR PROTECTED TO PREVENT THEIR OBSTRUCTION BY PARKED VEHICLES.

LOCATION AT MARKED CROSSINGS:

CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES (SEE FIGURE 2).

DIAGONAL CURB RAMPS:

IF DIAGONAL (OR CORNER TYPE) CURB RAMPS HAVE RETURNED CURBS OR OTHER WELL DEFINED EDGES, SUCH EDGES SHALL BE PARALLEL TO THE DIRECTION OF PEDESTRIAN FLOW. THE BOTTOM OF THE DIAGONAL CURB RAMPS SHALL HAVE 48-INCHES MINIMUM. IF DIAGONAL CURB RAMPS ARE PROVIDED AT MARKED CROSSINGS, THE 48-INCH CLEAR SPACE SHALL BE WITHIN THE MARKINGS (SEE FIGURE 2 (C) AND (D)). IF DIAGONAL CURB RAMPS HAVE FLARED SIDES, THEY SHALL ALSO HAVE AT LEAST A 24-INCH LONG SEGMENT OF STRAIGHT CURB LOCATED ON EACH SIDE OF THE CURB RAMPS AND WITHIN THE MARKED CROSSING (SEE FIGURE 2 (C)) ISLANDS.

ANY RAISED ISLANDS IN CROSSINGS SHALL BE CUT THROUGH LEVEL WITH THE STREET OR HAVE CURB RAMPS AT BOTH SIDES AND A LEVEL AREA AT LEAST 48-INCHES LONG BETWEEN THE CURB RAMPS IN THE PART OF THE ISLAND INTERSECTED BY THE CROSSINGS (SEE FIGURE 2 (A) AND (B)).

JOINTING:

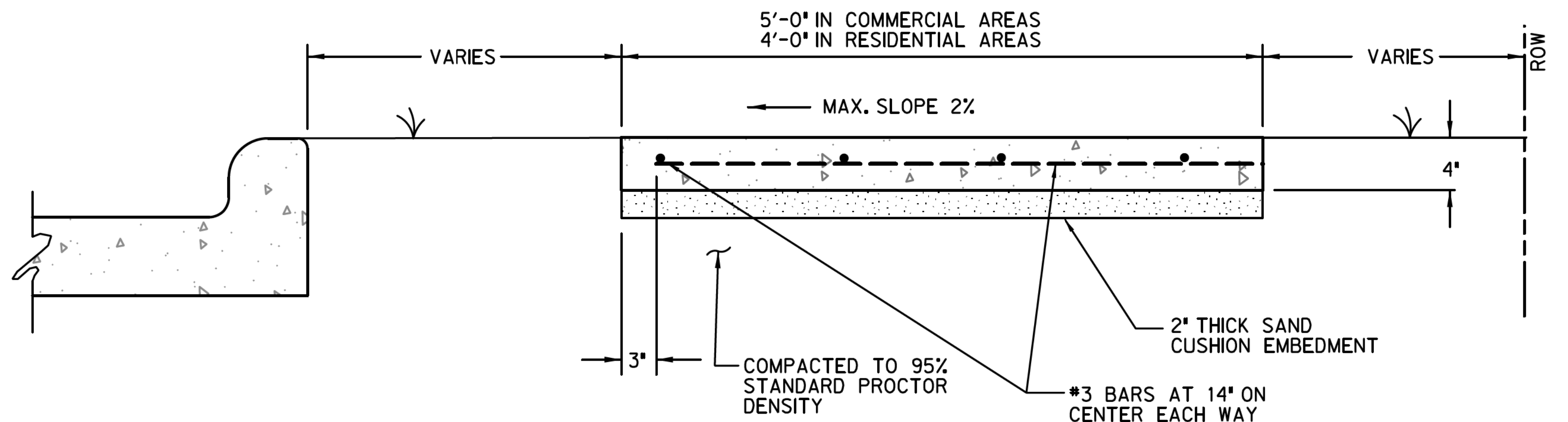
SEPARATE CURB RAMP AND LANDINGS FROM ADJACENT SIDEWALK AND ANY OTHER ELEMENTS WITH PREMOLD OR BOARD JOINT OF 3/4" UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

CONSTRUCTION:

- A. THE CONTRACTOR SHALL SAWCUT, REMOVE AND DISPOSE OFF-SITE THE REQUIRED EXISTING CONCRETE SIDEWALK, AND CURB AND GUTTER, TO CONSTRUCT THE PROPOSED RAMPS.
- B. CONCRETE SIDEWALKS AND RAMPS SHALL BE MINIMUM 4-INCH THICK, 3,600 PSI, 5 SACK CONCRETE, REINFORCED WITH #3 BARS AT 14-INCH CENTERS BOTHWAYS, PLACED OVER A 2-INCH THICK SAND CUSHION EMBEDMENT.
- C. THE CONTRACTOR SHALL USE 1-INCH PREMOLDED EXPANSION JOINT MATERIAL BETWEEN THE PROPOSED SIDEWALKS AND RAMPS AT THE BACK OF CURBS, AND AT JOINTS AT NO EXTRA PAY.
- D. DUMMY JOINT REQUIRED EVERY 4- FEET IN 4-FOOT WIDE SIDEWALKS AND EVERY 5- FEET IN 6-FOOT WIDE SIDEWALK.


PAYMENT:

CURB RAMPS AND LANDINGS SHALL BE CONSTRUCTED AND PAID FOR IN ACCORDANCE WITH NCTCOG ITEM 305.2.



(A)
OPTION 1
SIDEWALK LOCATION DETAIL
N.T.S.

FIGURE 1

PAVEMENT STANDARD DETAILS						
SIDEWALK DETAILS (SHEET 1 OF 3)						
						
TOWN OF HICKORY CREEK DENTON COUNTY, TEXAS						
DESIGN	DRAWN	CHECK	DATE	SCALE	FILE	NO.
HALFF	HALFF	HALFF	OCT 2012	N.T.S.	P-8	61

CERTIFICATION:
THIS TOWN OF HICKORY CREEK STANDARD DETAIL SHEET IS AUTHORIZED FOR USE IN THIS PROJECT BY THE ENGINEER WHOSE SEAL APPEARS ON THIS SHEET. MODIFICATIONS TO THE STANDARD DETAILS SHALL BE NOTED ON THIS SHEET AND SHALL COMPLY WITH THE TOWN'S ORDINANCES, STATE, AND FEDERAL REGULATIONS.

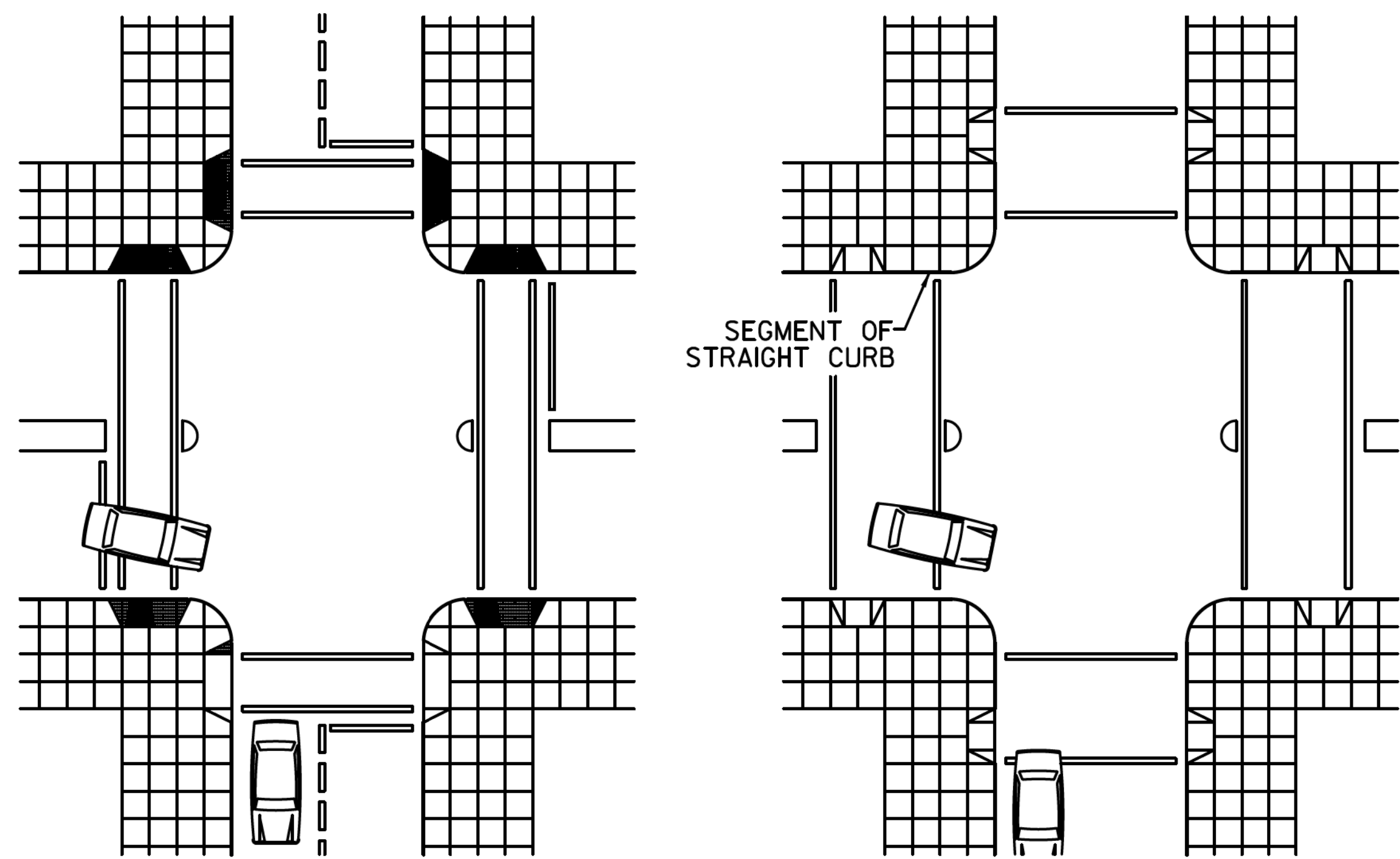
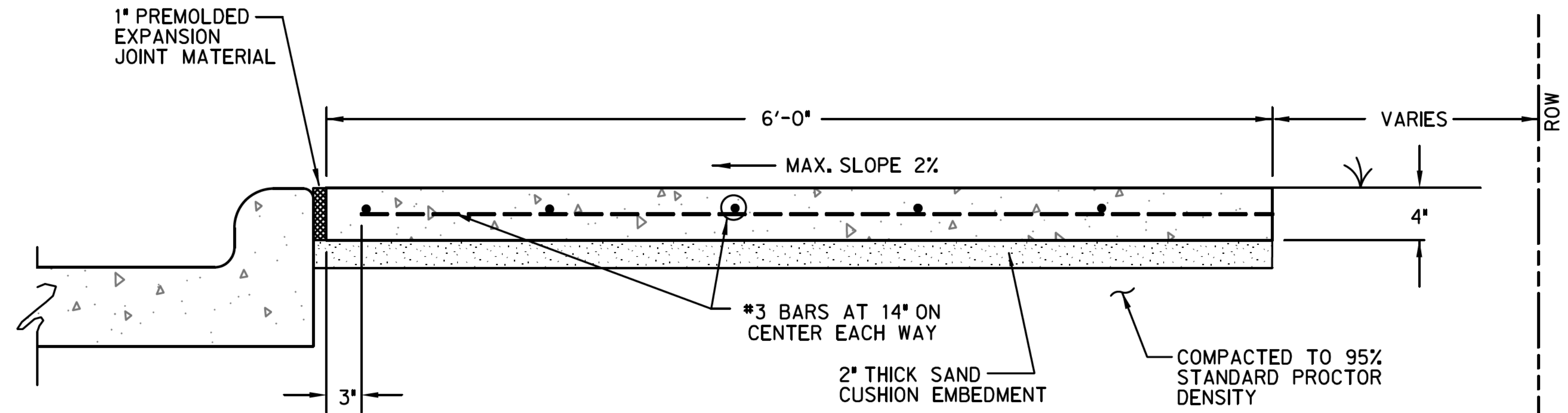
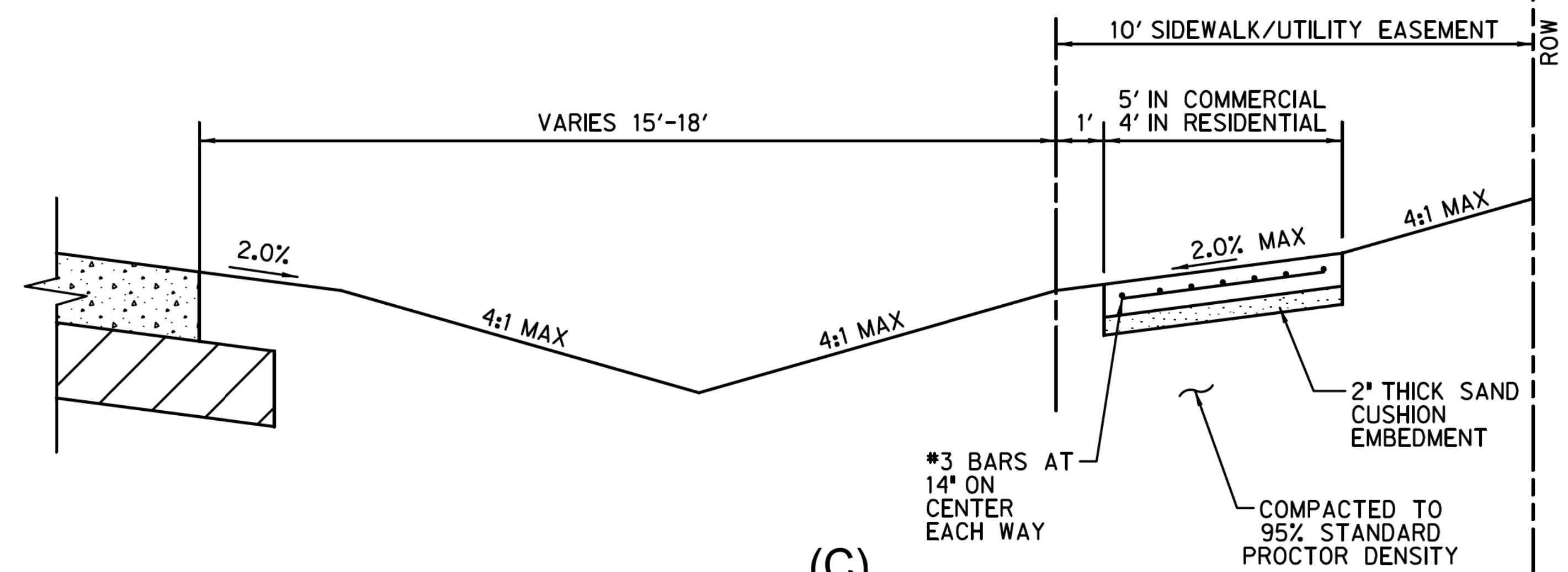


FIGURE 2
CURB RAMPS AT MARKED CROSSINGS
N.T.S.



(B)
OPTION 2
SIDEWALK LOCATION DETAIL
N.T.S.



(C)
OPTION 3
SIDEWALK LOCATION DETAIL
N.T.S.

FIGURE 1

<p>CERTIFICATION: THIS TOWN OF HICKORY CREEK STANDARD DETAIL SHEET IS AUTHORIZED FOR USE IN THIS PROJECT BY THE ENGINEER WHOSE SEAL APPEARS ON THIS SHEET. MODIFICATIONS TO THE STANDARD DETAILS SHALL BE NOTED ON THIS SHEET AND SHALL COMPLY WITH THE TOWN'S ORDINANCES, STATE, AND FEDERAL REGULATIONS.</p>						
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V:H = VERTICAL : HORIZONTAL

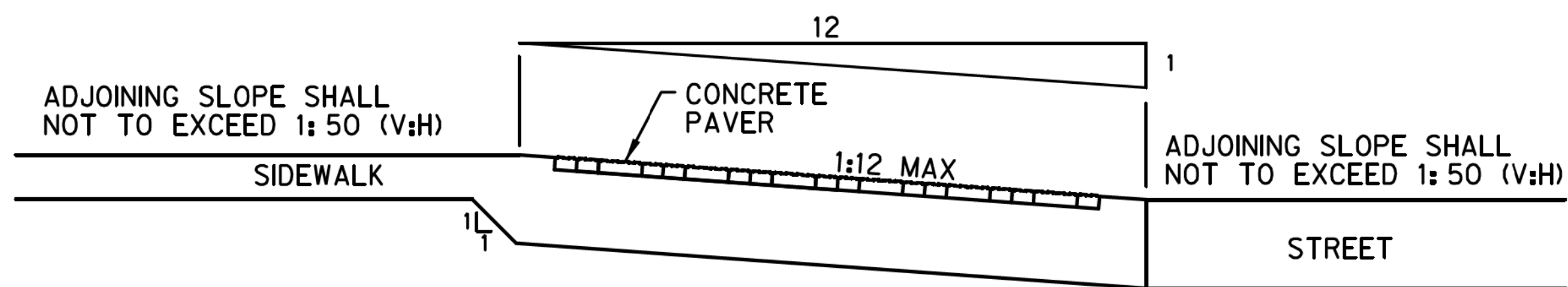
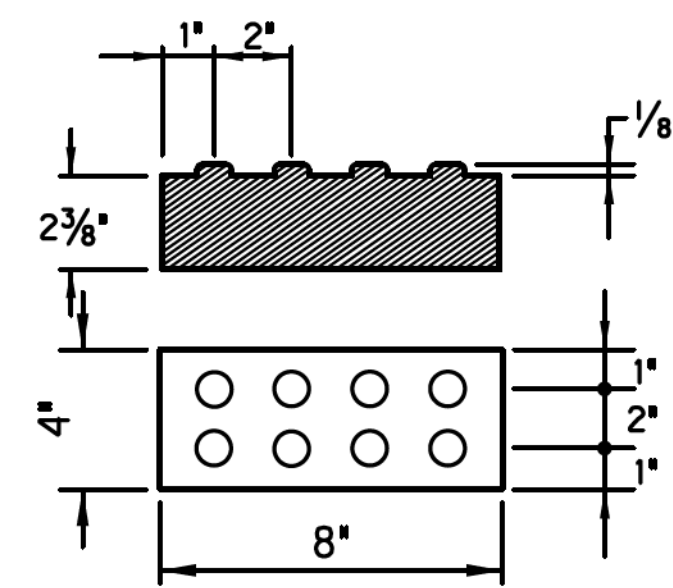


FIGURE 3
MEASUREMENT OF CURB RAMP SLOPES

N.T.S.

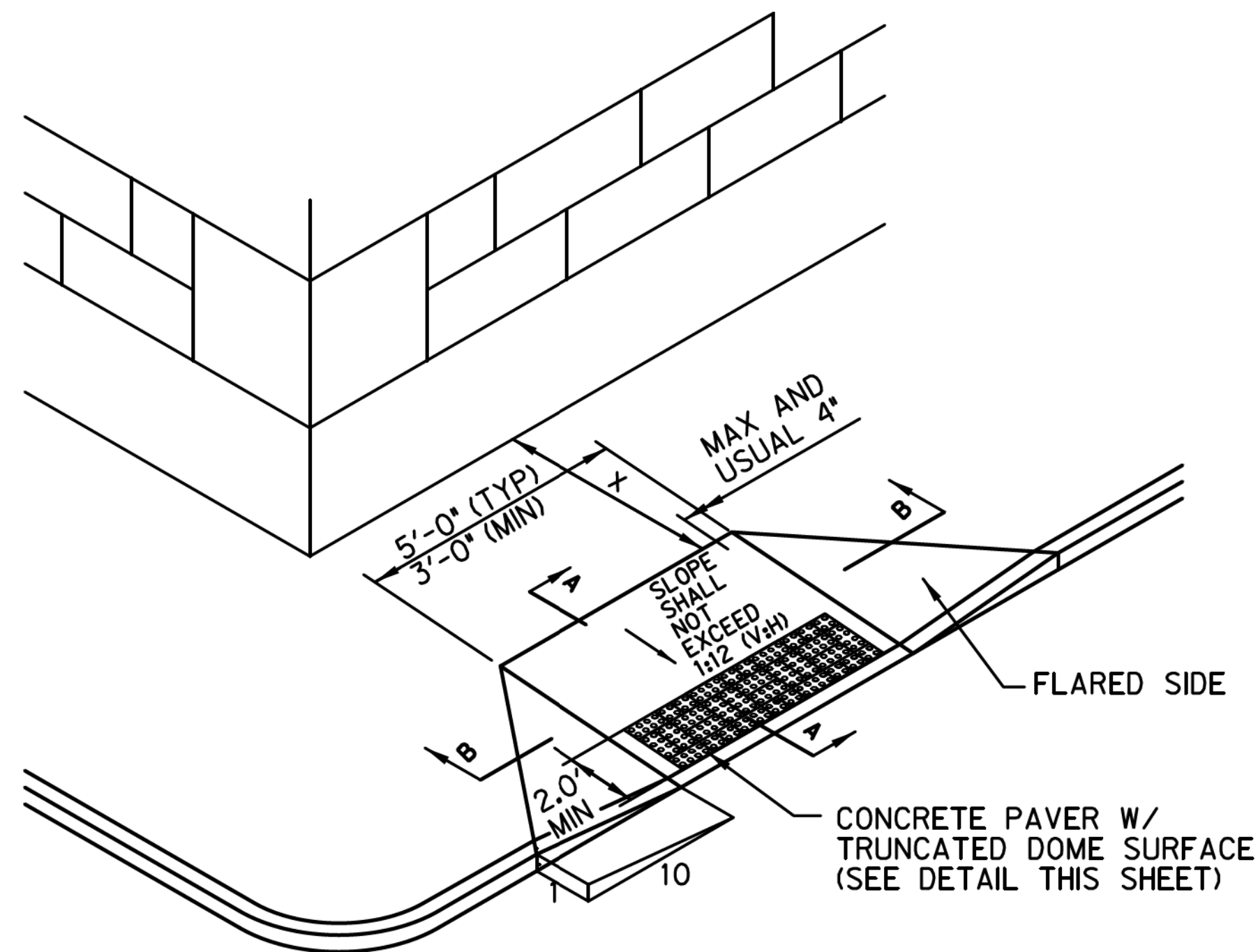


CONCRETE PAVER WITH TRUNCATED DOME SURFACE DETAIL

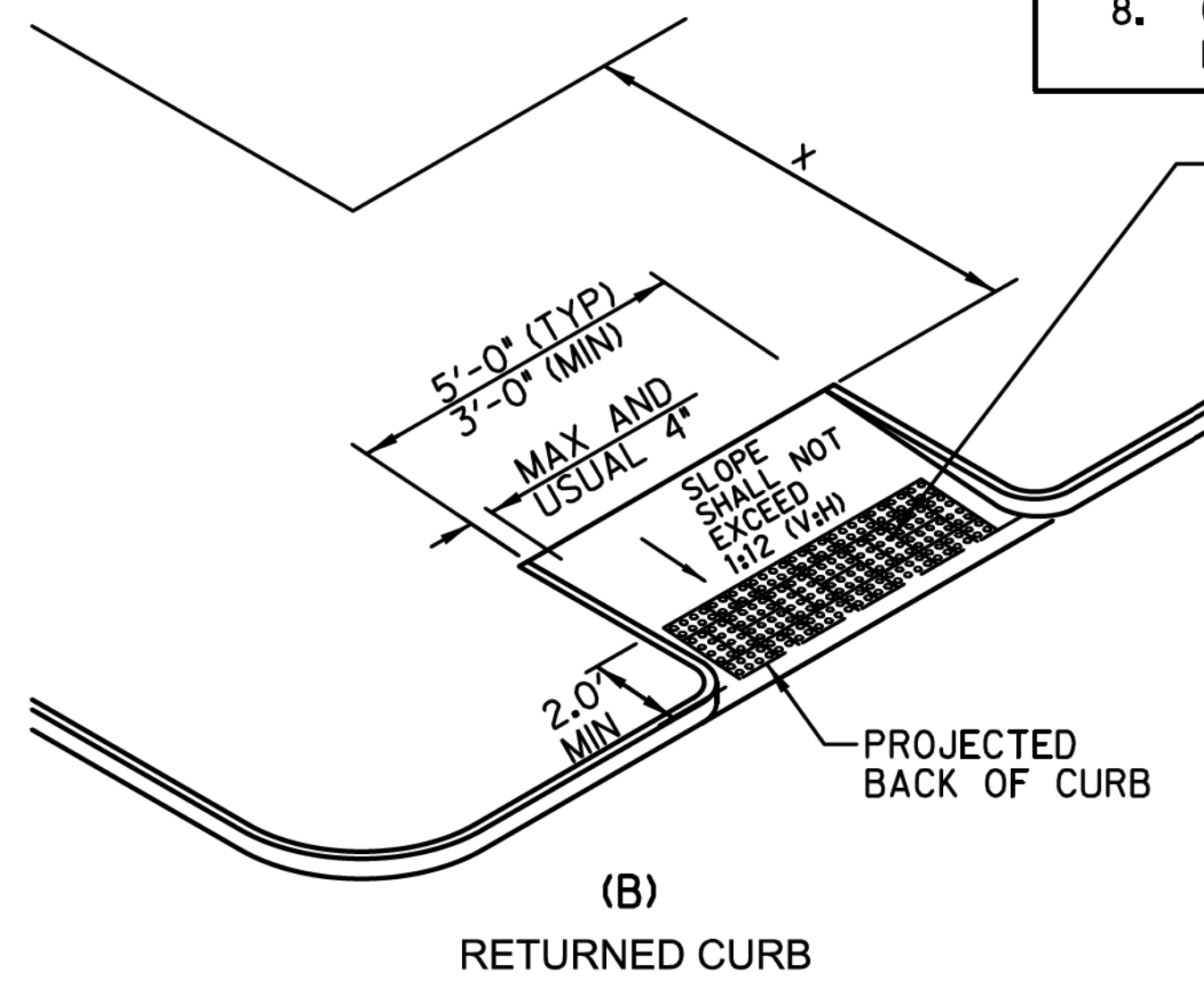
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CONCRETE PAVER NOTES:

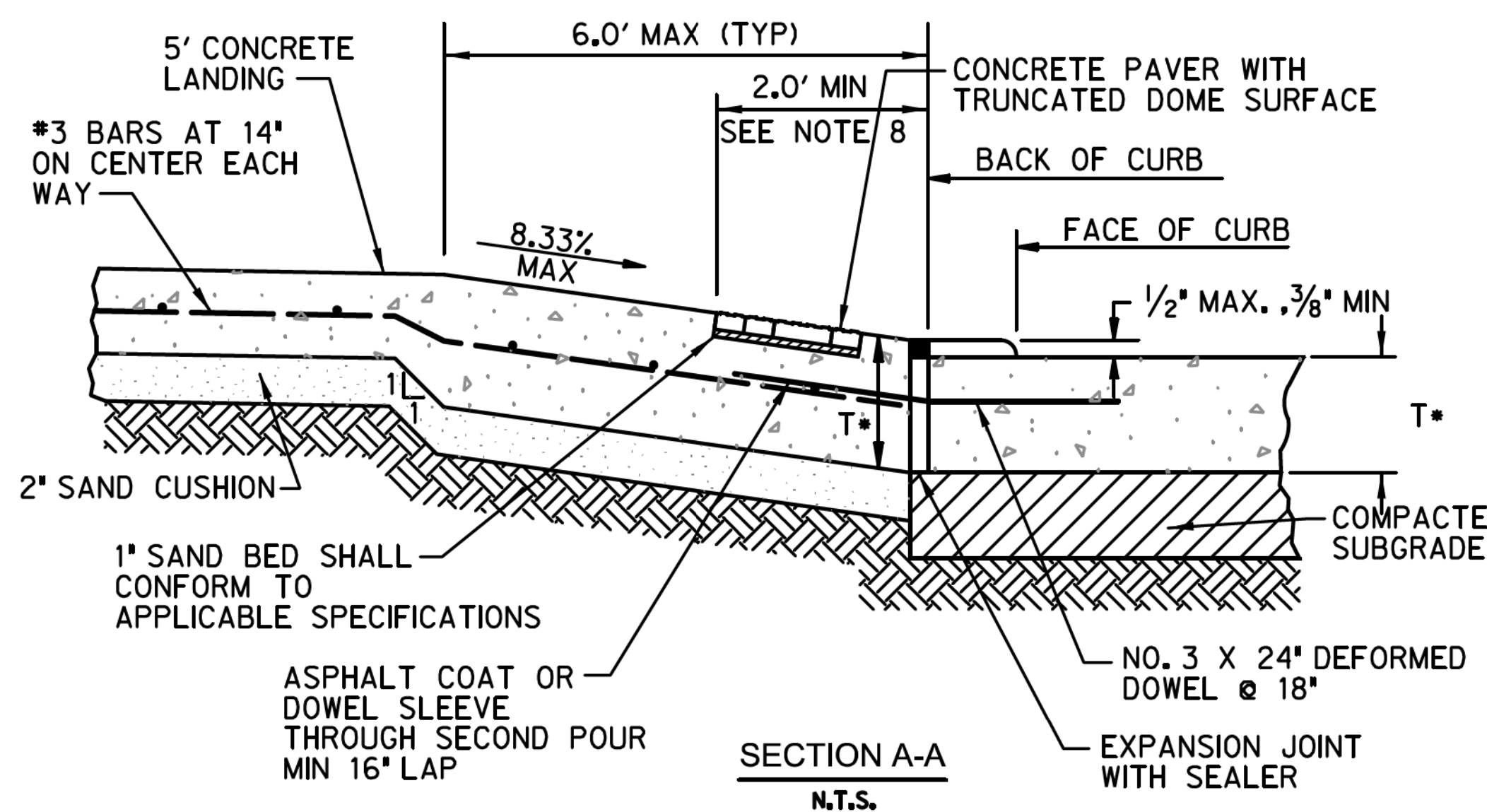
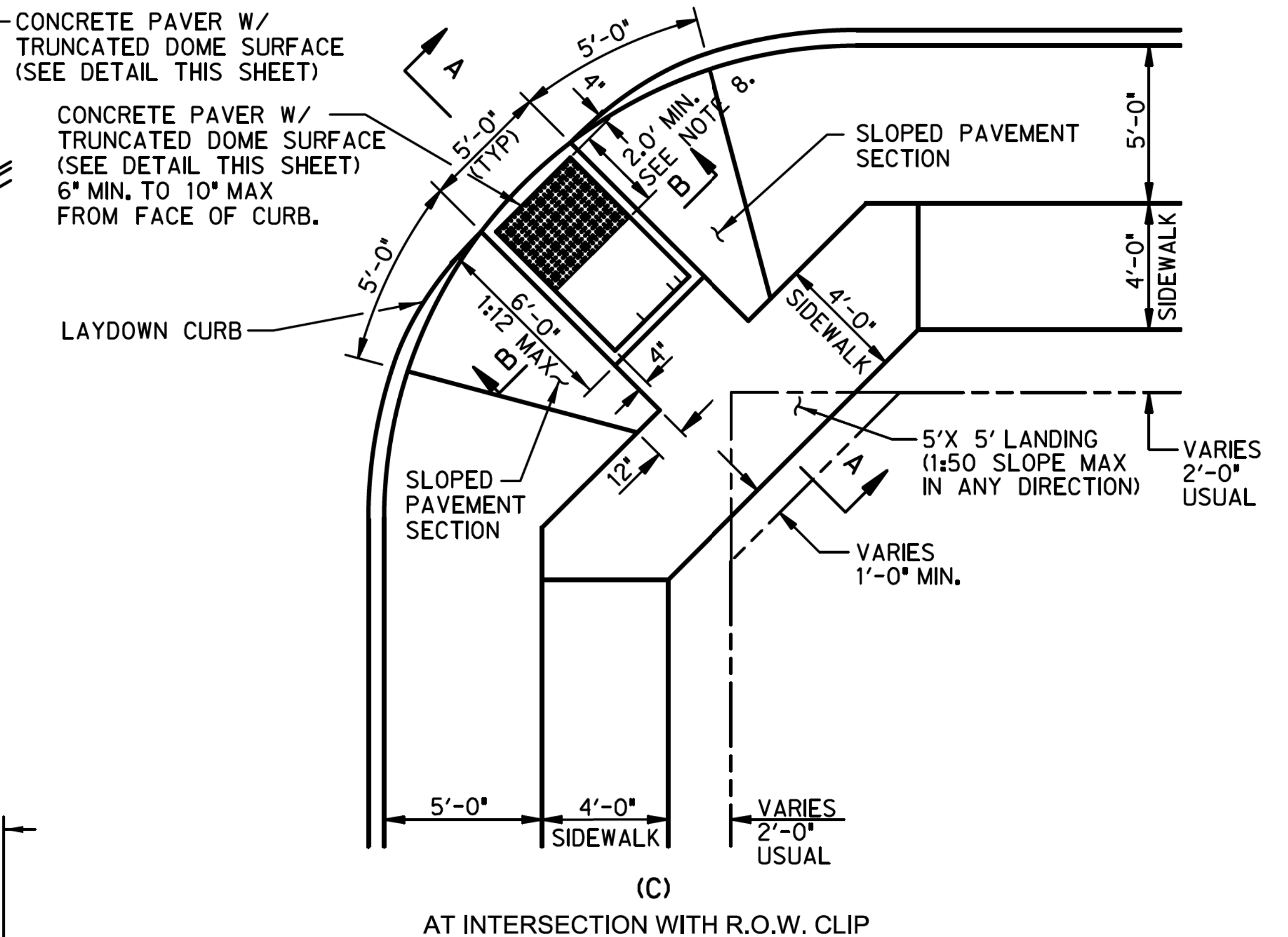
1. Concrete paver units shall meet all requirements of ASTM C-936, C-33, and shall be laid in a two by two unit basket weave pattern, unless shown otherwise in the plans.
2. Domes shall be aligned in the direction of pedestrian travel.
3. Concrete paver units shall have a truncated dome top surface for detectable warning to pedestrians.
4. Concrete paver unit color for the ramp shall be a contrasting color (red) that provides a light reflective value that significantly contrasts with the adjacent surfaces. Use red pigment in concrete at ramp. The red pigment shall be Patterned Concrete Industries, Inc. A-27 dark red. All pigment used on the project must be the same for the entire project.
5. Concrete paver units shall be saw cut only and any cut unit shall not be less than 25 percent of a full unit.
6. Other applications of truncated domes may be accepted for use as approved by Town of Hickory Creek.
7. Landings shall be provided at top and bottom of each curb ramp. Landings shall be 5' X 5' min. with a max. 2% cross slope in any direction.
8. Concrete pavers shall be installed the full length of ramp, **except** when located in public R.O.W. where it shall be a minimum of 2' wide.



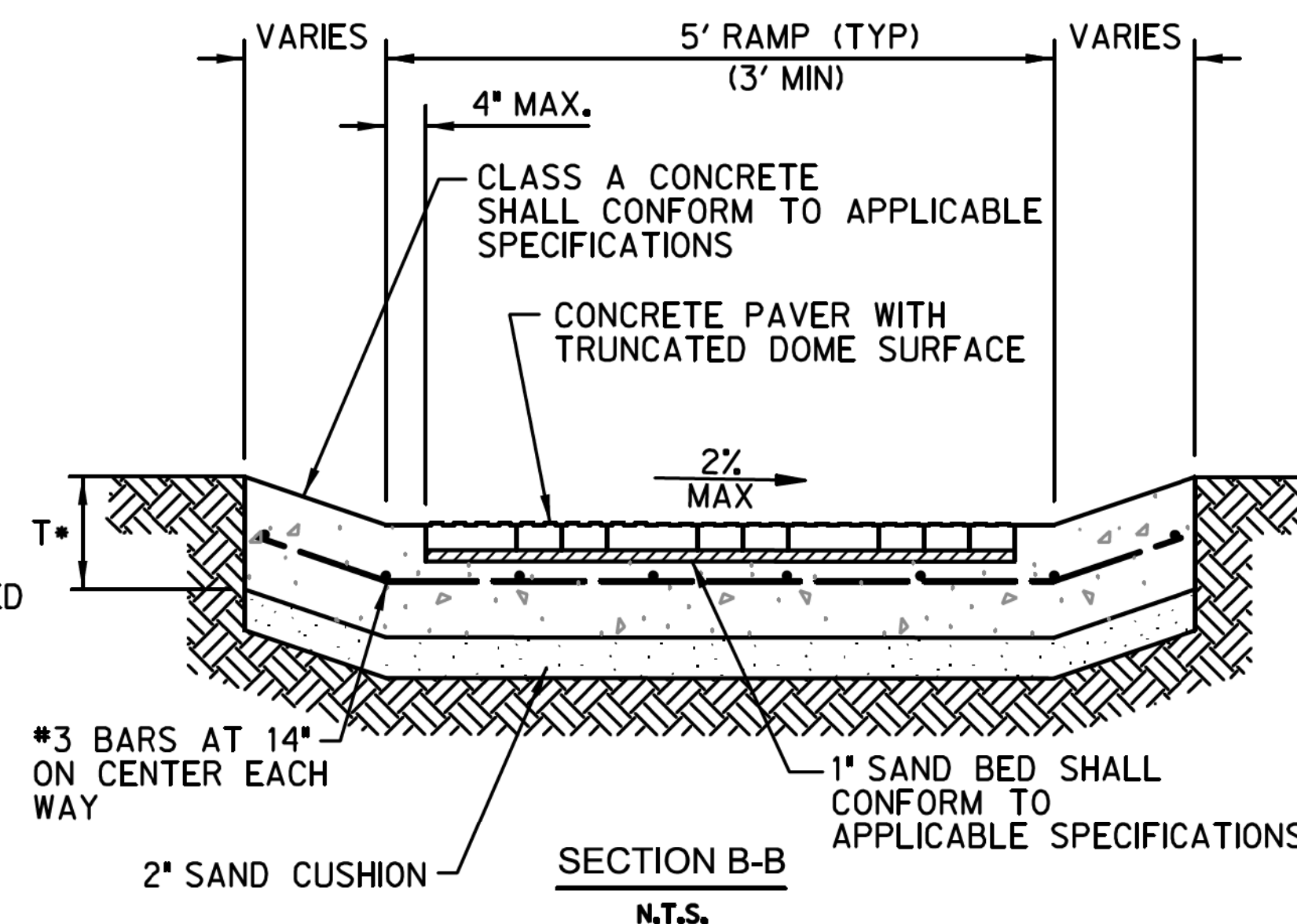
(A) FLARED SIDES
IF *X* IS LESS THAN 48' THEN THE SLOPE OF THE FLARED SIDE SHALL NOT EXCEED 1:12.
* T = PAVEMENT THICKNESS.



(B) RETURNED CURB
FIGURE 4
SIDES OF CURB RAMP



SECTION A-A
N.T.S.



SECTION B-B
N.T.S.

CERTIFICATION:
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PAVEMENT STANDARD DETAILS

SIDEWALK DETAILS (SHEET 3 OF 3)



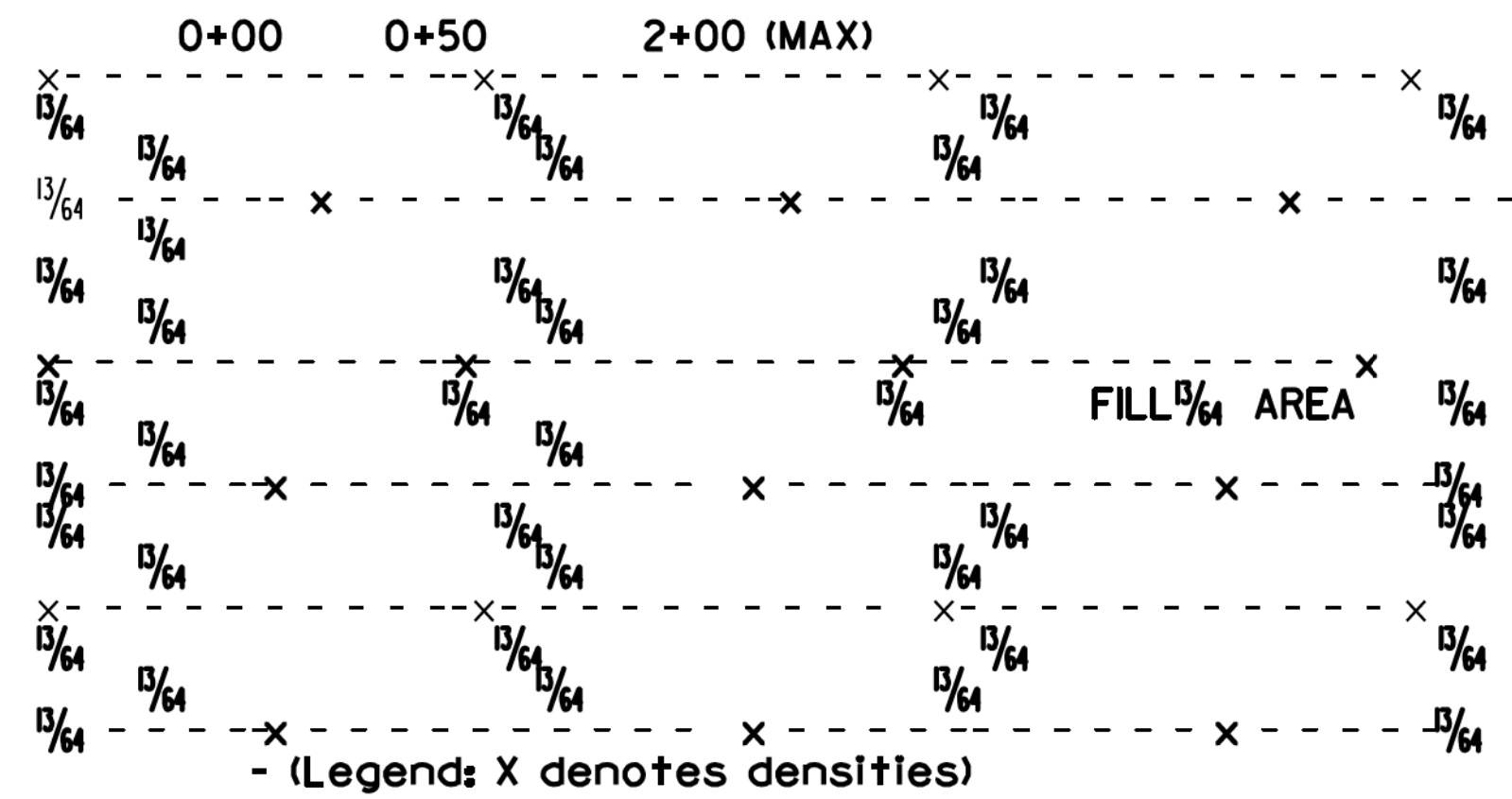
TOWN OF HICKORY CREEK
DENTON COUNTY, TEXAS


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STORM DRAIN GENERAL NOTES

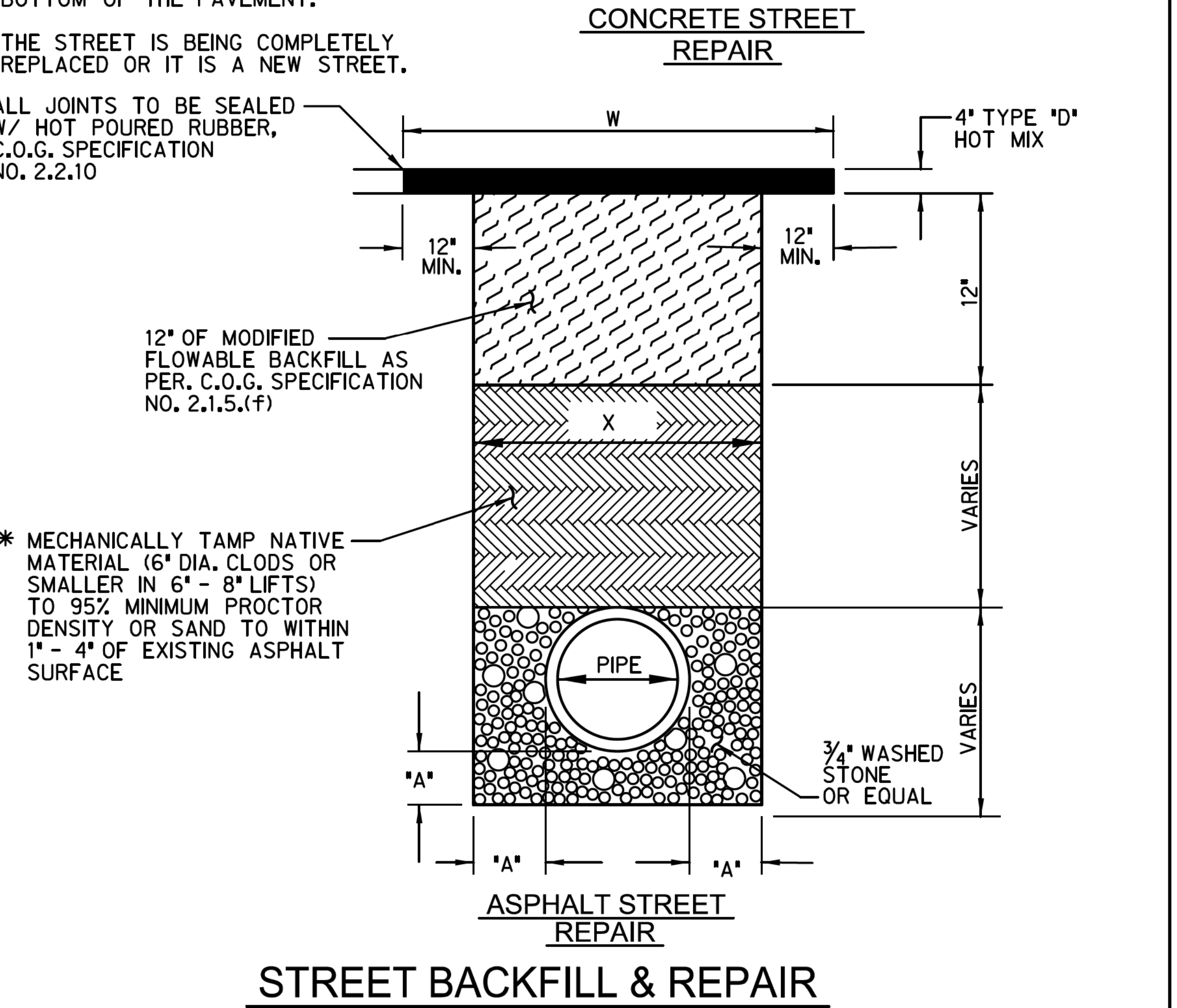
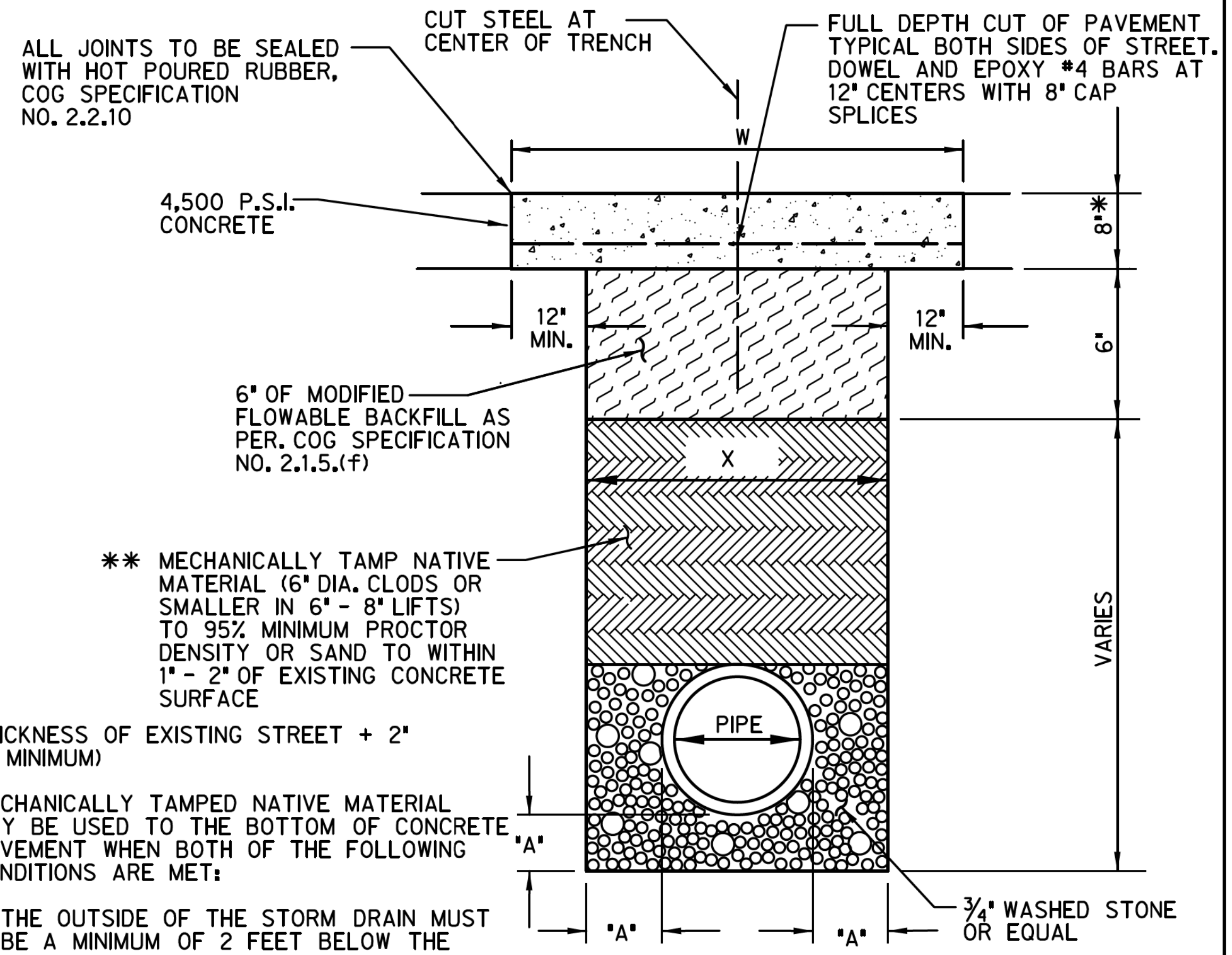
1. All construction shall be in accordance with the standard specifications of the Town of Hickory Creek and the Fourth Edition of the 'Standard Specifications for Public Works Construction - North Central Texas' herein referred to as 'COG' specifications. Copies may be obtained from the North Central Texas Council of Governments, 616 Six Flags Drive, Suite 200, Arlington, Texas 76005-5888. (817) 640- 3300.
2. Storm drain lines shall be installed per COG Item 508 specifications.
3. Only Reinforced Concrete Pipe (RCP) or Reinforced Concrete Box (RCB) is approved for use in public right-of-way or easements.
4. For pipes, embedment shall be per the Street Backfill & Repair detail on the Backfill / Embedment Standard Detail. For box culverts, embedment shall be per the Box Culvert Embedment detail on the Backfill / Embedment Standard Detail.
Note that flowable backfill is only required below areas to be paved.
5. The CONTRACTOR shall seal all joints on closed conduits with Omni-Flex joint seals, or equal; unless approved otherwise by the Town.
6. All concrete to be used in pre-cast products for reinforced concrete pipes or boxes shall come from plants certified by the National Pre-cast Concrete Association.
7. The CONTRACTOR shall use only pre-fabricated fittings on new construction projects. Field connections shall be made only to existing pipe with Town approval. The connection shall be a smooth connection and concrete wrapped on the outside and inside.
8. Concrete collars shall be constructed per the Concrete Collar Details on the Headwalls & Pipe Collars Standard Detail at all storm drain size and at grade changes or in curves where the joint is being pulled more than recommended by the manufacturer. Please refer to the details on the Headwalls & Pipe Collars Standard Detail and COG Item 508.3.4.1 specifications.
9. All inlets shall be poured in place. Precast inlets, junction boxes, manholes, and headwalls are not allowed without prior approval from Town Engineer.
10. Bottoms, tops, and variable height curb to be separate pours (3 pours) for curb inlets.
11. Curb inlet bottoms shall be poured prior to any paving.
12. Ring and cover on curb inlets to be located directly over the outlet pipe.
13. Concrete shall be made with a minimum of 5 sacks of cement and have a minimum compressive strength of 3,600 PSI at 28 days.
14. All reinforcing steel shall be new, neat, billet-steel per ASTM designation A-615, Grade 60, and shall be detailed and placed for ACI Manuals SP-88 and 318, latest additions. All reinforcing steel shall have minimum 15 inch lap splices, unless noted otherwise on the plans.
15. The CONTRACTOR shall use a liquid membrane-forming curing compound per COG Item 303.2.13.1.1.
16. All exposed surfaces shall have 3/4 -inch chamfer.
17. All closed conduits shall be television inspected.
18. The CONTRACTOR shall be responsible for notifying the Town Inspector at least 24 hours prior to any required testing.
 - a. Soil and material testing technicians shall provide written proof of having minimum of two (2) years of related field experience.
 - b. The CONTRACTOR shall coordinate all testing activities with the Town Inspector and shall facilitate required testing throughout the construction period. The inspector shall be present during all testing.
 - c. The Town shall make final decision as to the validity of all testing results.
 - d. The CONTRACTOR shall be responsible for ensuring that materials to be tested are in compliance with all plans and specifications prior to testing. All materials found not to be in compliance with the plans and specifications before and after testing shall be removed and replaced at the CONTRACTOR'S expense.
 - e. All costs associated with the retesting of work that fails to meet the specifications required in the contract documents shall be borne by the CONTRACTOR. For Town projects, retesting cost shall be withheld from pay requests submitted by the CONTRACTOR, this cost will be based on the Town's cost with no additional mark-up. A letter of acceptance will not be issued until all testing deficiencies are addressed and all related cost paid.

- f. The Town Inspector shall be notified of concrete placement 24 hours in advance for steel and form inspection.
- g. One set of four cylinders (2-7 day, 2-28 day) for cast-in-place concrete shall be made for every day that concrete is placed (ASTM C-31). Air, slump, and temperature tests shall be taken for every set of cylinders made. Concrete with a temperature above 95 degrees will be rejected. Additional cylinders and or tests may be requested at the Inspector or ENGINEER'S discretion. Exterior forms shall not be removed for a minimum of 24 hours unless approved by Inspector or ENGINEER. Sulfate resistant concrete shall be used for all manholes.
- h. Backfill and Density Testing
 - 1) All trenches shall be backfilled in accordance with standard details and mechanically compacted with approved vibratory methods in accordance with COG Item 504.5.3.2.1 and paragraph 3) below unless otherwise stated on the plans or in the specifications.
 - 2) Densities shall conform to standard trench details, COG Item 504.5.3.2.1, and Paragraph 3) below unless otherwise stated on the plans or in the specifications. Proctor samples shall be taken for all classifications of soil on site. Atterberg Limits shall be determined on all Proctor samples. No "potholing" will be allowed. Densities shall be taken on all storm drain laterals within the Right-of-Way and shall conform to Paragraph 3) below and COG Item 504.5.3.2.1, unless otherwise stated on the plans or in the specifications. Backfill adjacent to all structures shall be compacted manually and density tested on every lift.
 - 3) Mechanical Tamping of Backfill
 - a) All ditch lines and bore pits shall be mechanically tamped.
 - b) Backfill, other than select fill, may consist of onsite or offsite inorganic soils and should be placed in loose lifts 6-inches - 8-inches in thickness (not to exceed 12-inches) and should be mechanically compacted to 98 percent of the maximum dry density as defined by ASTM D-698 (Standard Proctor) procedures under existing and proposed pavement, and to 95 percent standard proctor procedures elsewhere. The moisture content of the fill at the time of compaction shall be between minus 2% of optimum to four percentage points above the proctor optimum value.
 - c) All backfill material to be select native material, 6" diameter clods and smaller, unless directed otherwise on the plans or in the specifications and to be mechanically tamped and density controlled as described in Paragraph b) above.
 - d) Water jetting is not permitted.
 - e) Densities shall be taken every one (1) lift at staggered locations not to exceed 200 feet increments. Offset fifty (50') feet every other lift.
 - f) Densities may be taken at typical locations as shown below; also, densities will be taken at random locations and at the geotechnician's discretion.

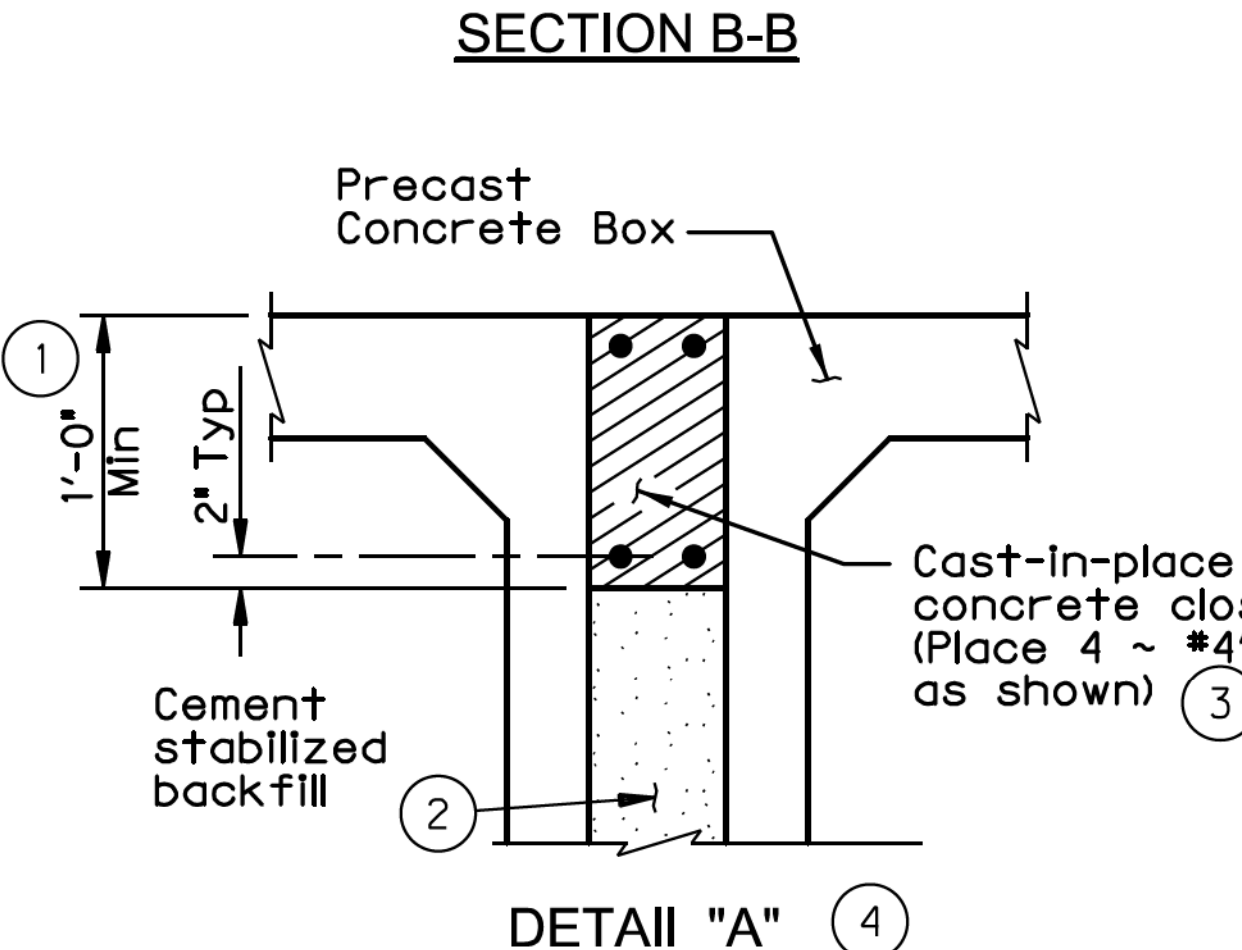
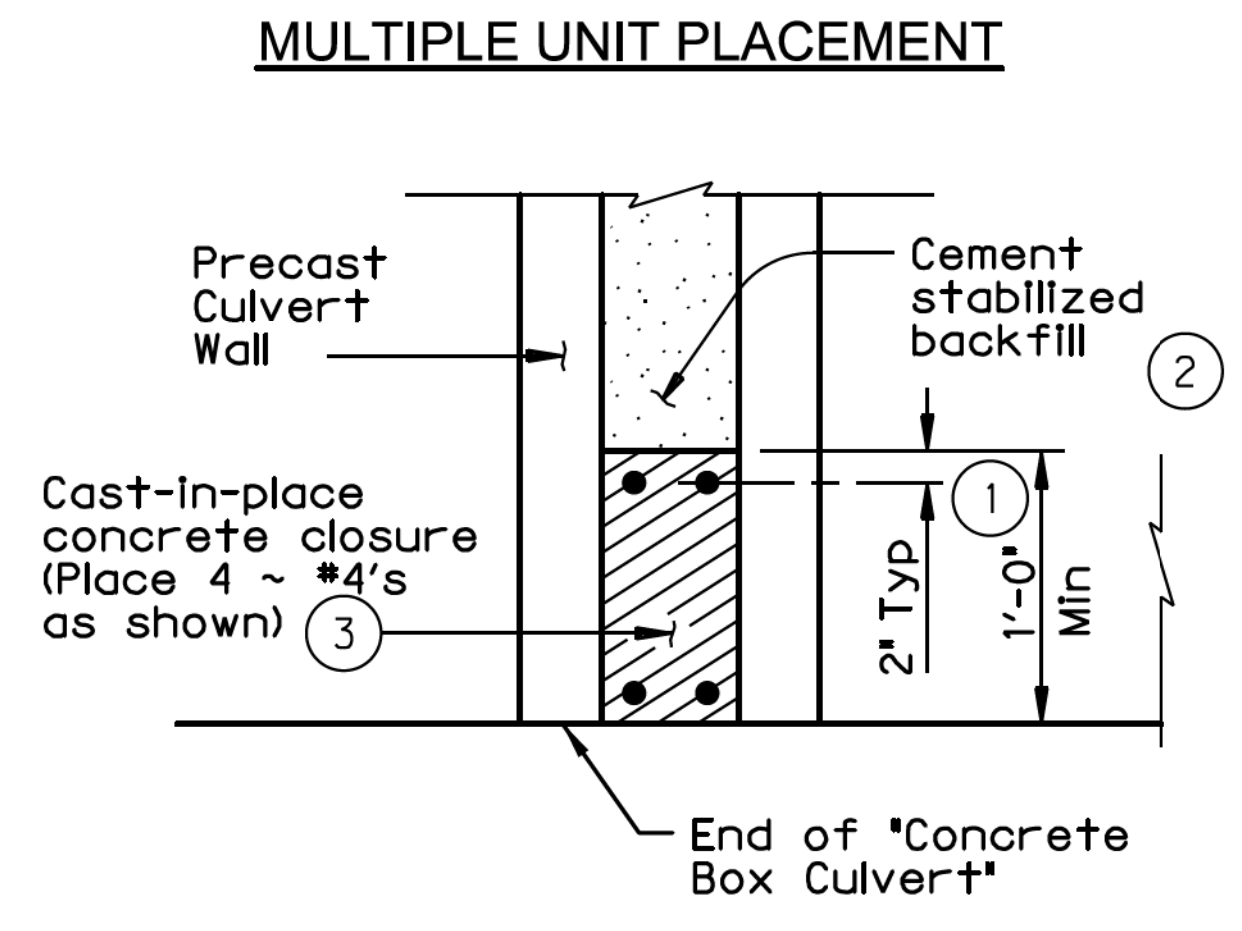
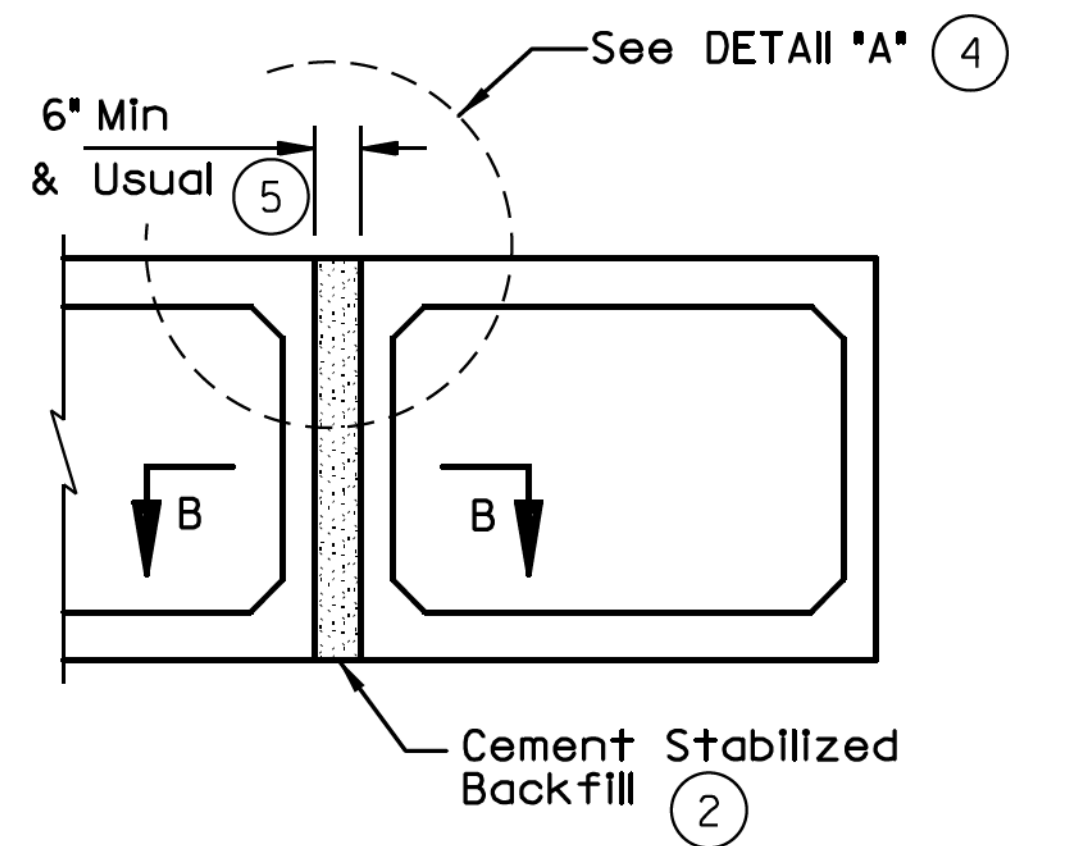


STORM DRAIN STANDARD DETAILS						
STORM DRAIN GENERAL NOTES						
 <p style="text-align: center;">TOWN OF HICKORY CREEK DENTON COUNTY, TEXAS</p>						
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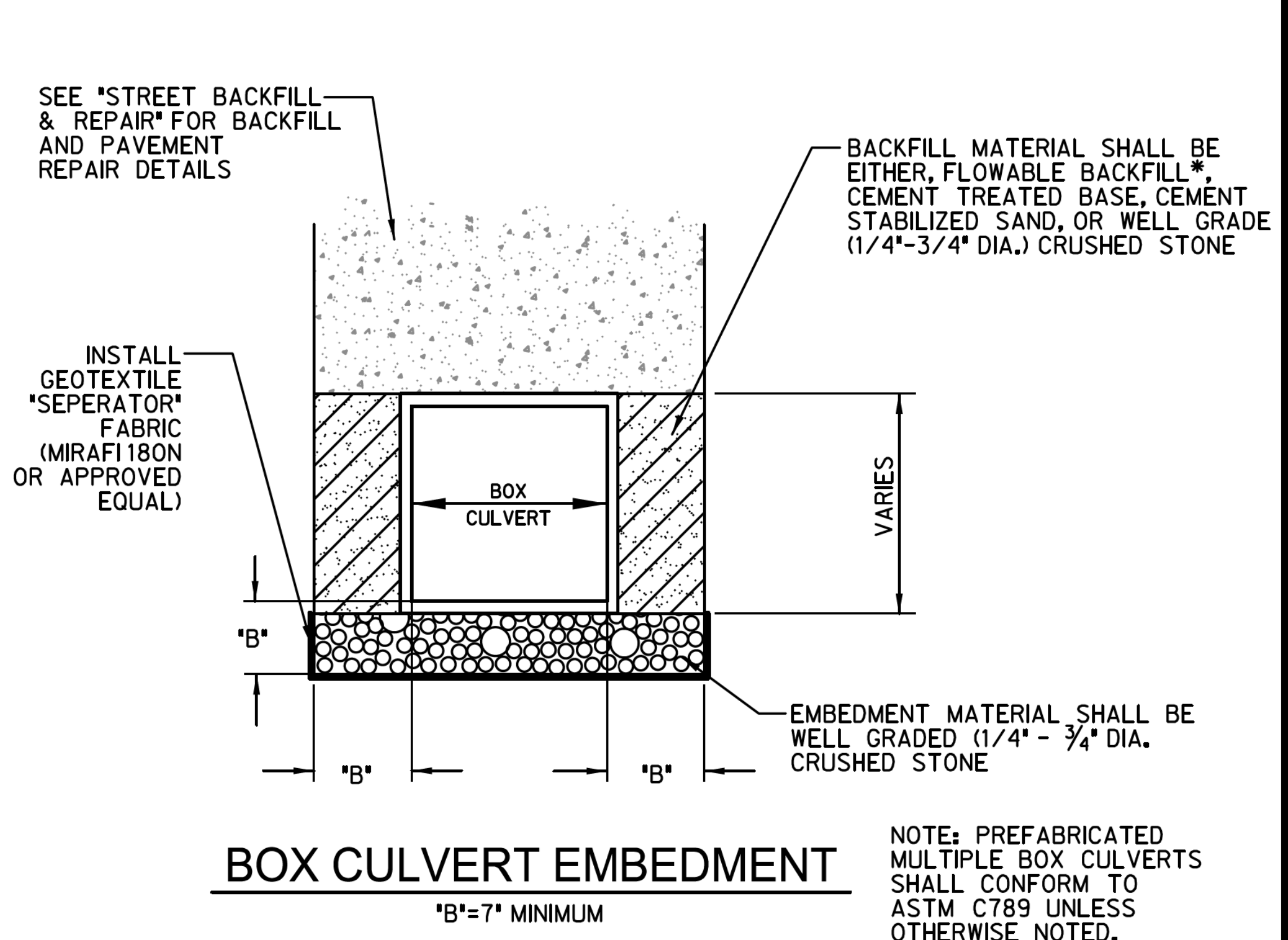
CERTIFICATION:
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N.T.S.
NOTE: SAWCUT TO REPAIR ASPHALT OR CONCRETE PAVEMENT PRIOR TO OPENING THE DITCH IN ORDER TO ENSURE A NEAT STRAIGHT EDGE.



- (1) For multiple unit placements the length of the closure for the interior walls may be adjusted as necessary. The length of the top slab, bottom slab, and exterior wall closure shall not be less than 3'-0". See Section B-B detail when interior walls are cast full length.
- (2) Cement Stabilized Backfill between boxes is considered part of the Box Culvert for payment.
- (3) Any additional concrete and reinforcing required for the closures shall be considered as subsidiary to the Concrete Box Culvert.
- (4) For multiple unit placement with the top slab as the final riding surface, provide wall closure as shown in DETAIL "A".
- (5) This dimension may be increased with approval of the Engineer to allow the precast boxes to be tunneled or jacked. No payment will be made for any additional material in the gap between adjacent boxes.



* FLOWABLE BACKFILL IS ONLY REQUIRED FOR AREAS TO BE PAVED.

NORMAL SIZE OF PIPE IN INCHES	O.D. OF PIPE BELL IN INCHES CLASS III R.C.P.	MINIMUM TRENCH WALL CLEARANCE "A" IN INCHES	WIDTH OF TRENCH ('X') IN INCHES		WIDTH OF PVMT. REPLACEMENT * ('W') CONC. & ASPHALT **
			MAXIMUM **	MINIMUM **	
18	22.5	6	48	36	60
24	29.0	6	48	42	60
30	35.5	6	52	48	72
36	42.5	6	61	55	72
42	49.75	6	68	62	86
48	56.5	8	75	69	93
54	63.25	8	82	76	100
60	70.5	8	89	83	107
66	77.5	8	96	90	114
72	84.5	8	103	97	121
72+	VARIES	8	*	*	*

NOTE: * REFER TO THE PLANS FOR SPECIFIED WIDTH OF REPLACEMENT.
** RECOMMENDED WIDTHS - VARIES BASED ON DEPTH, AND SOIL MATERIAL.

TABLE OF DIMENSIONS FOR WIDTH OF TRENCH AND PAVEMENT REPLACEMENT

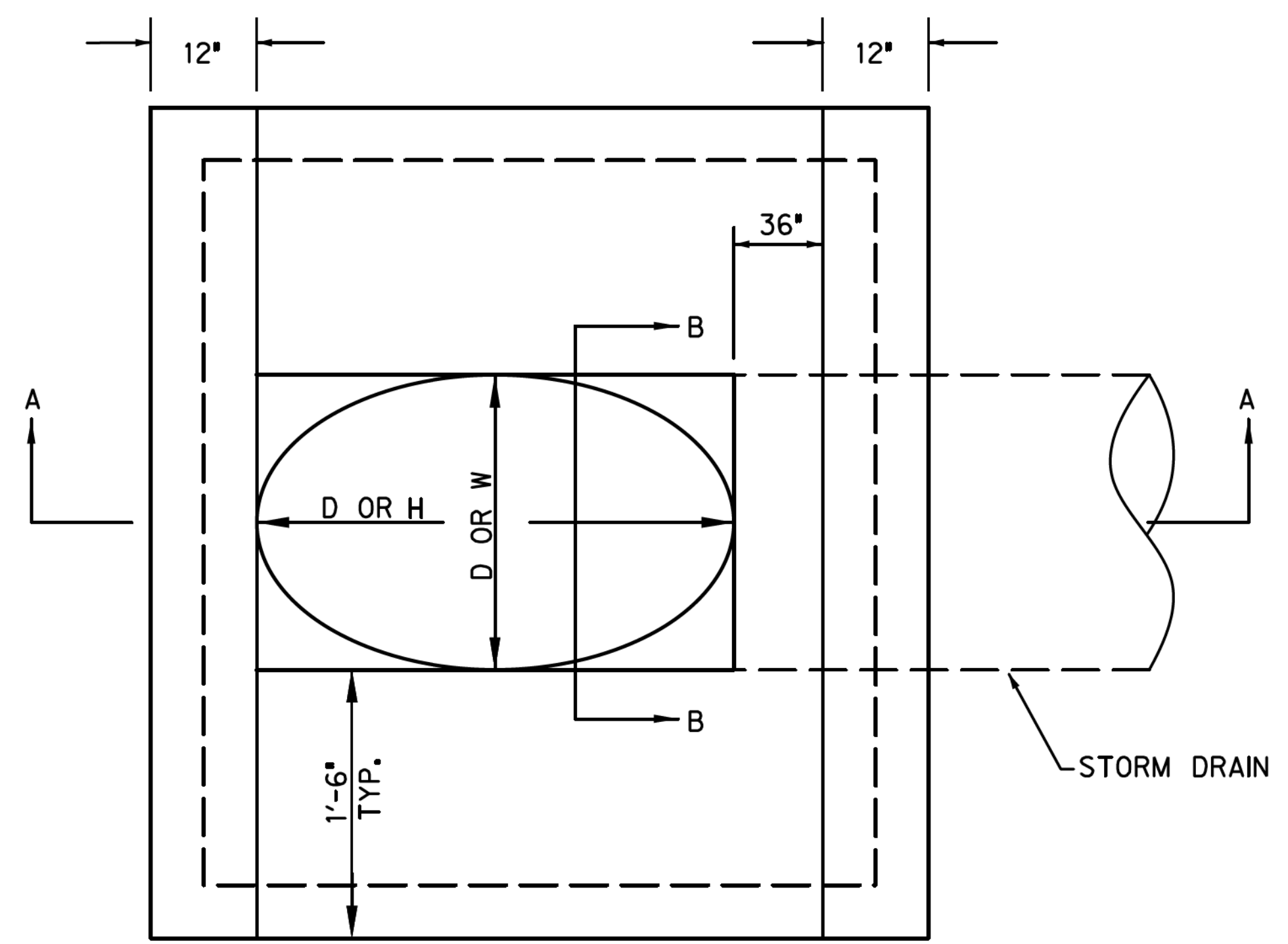
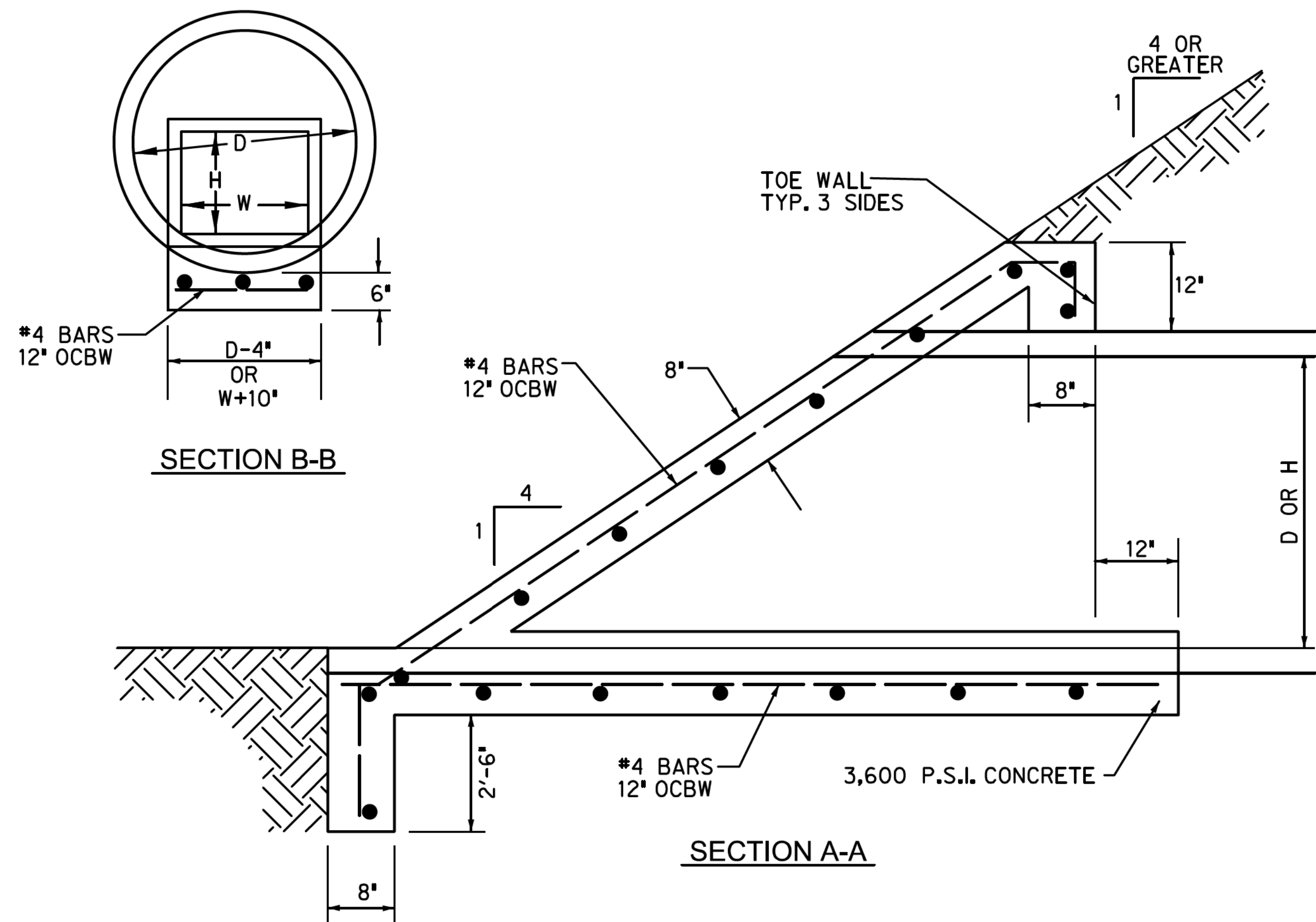
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STORM DRAIN STANDARD DETAILS

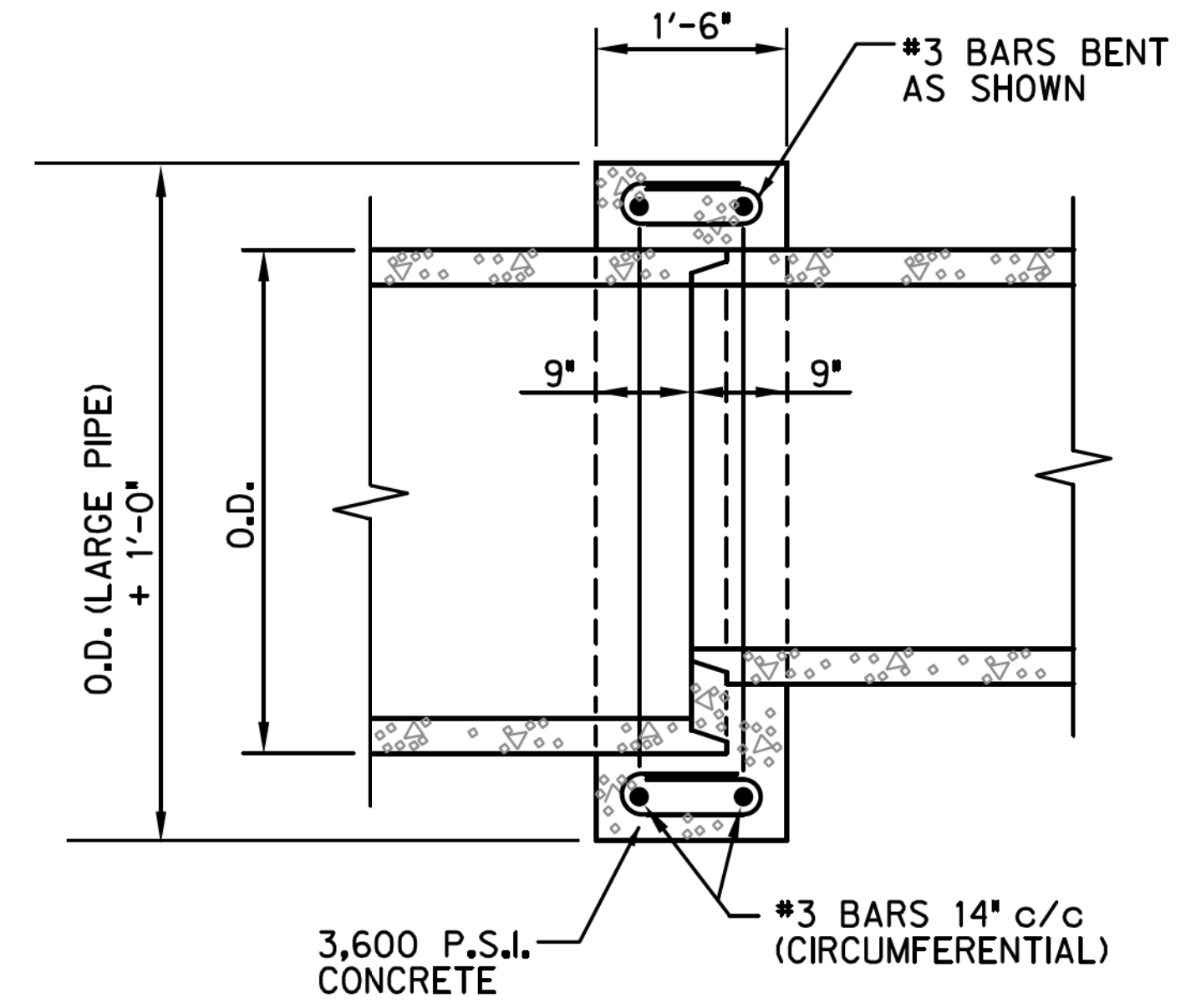
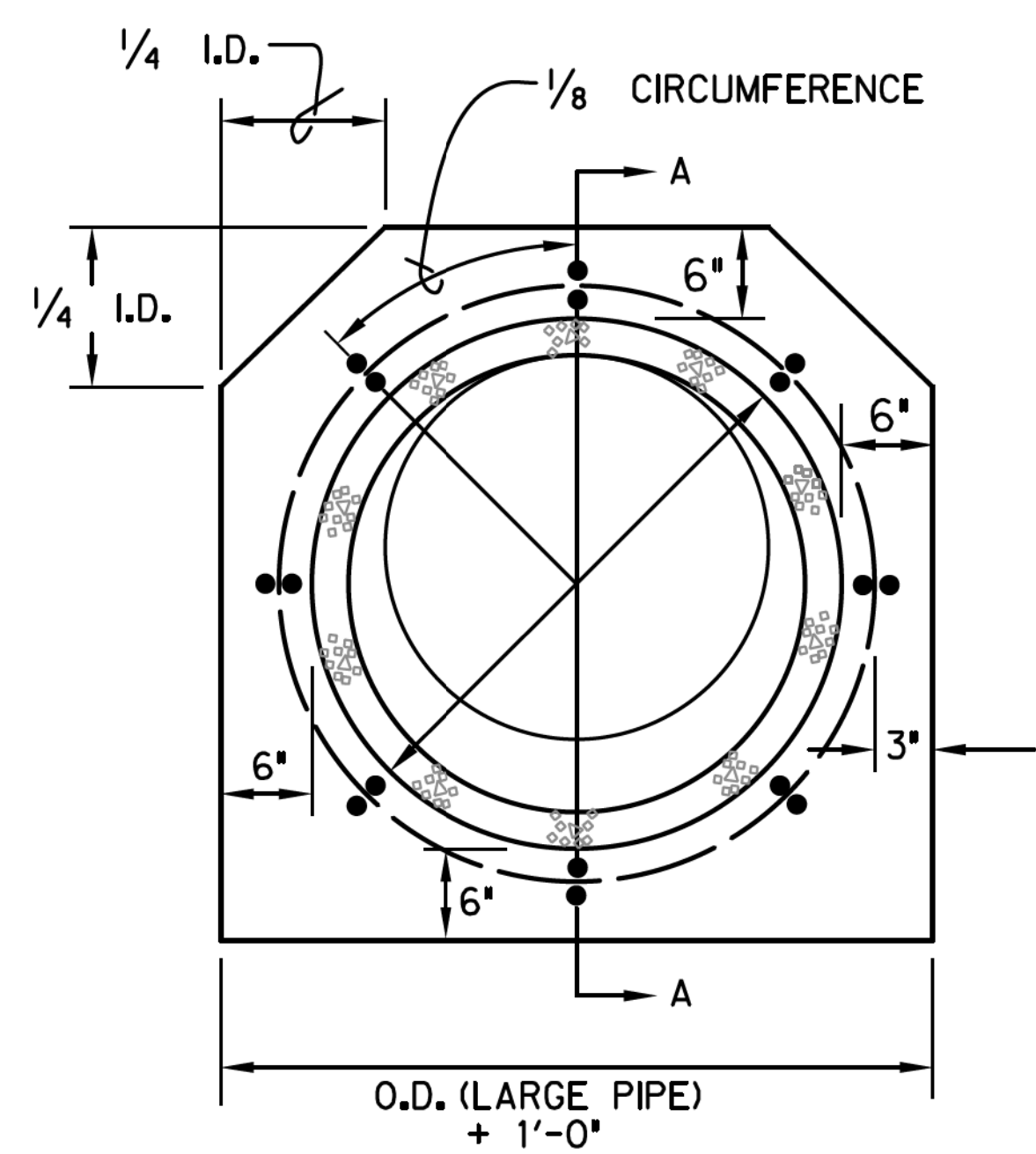
BACKFILL / EMBEDMENT

TOWN OF HICKORY CREEK
DENTON COUNTY, TEXAS

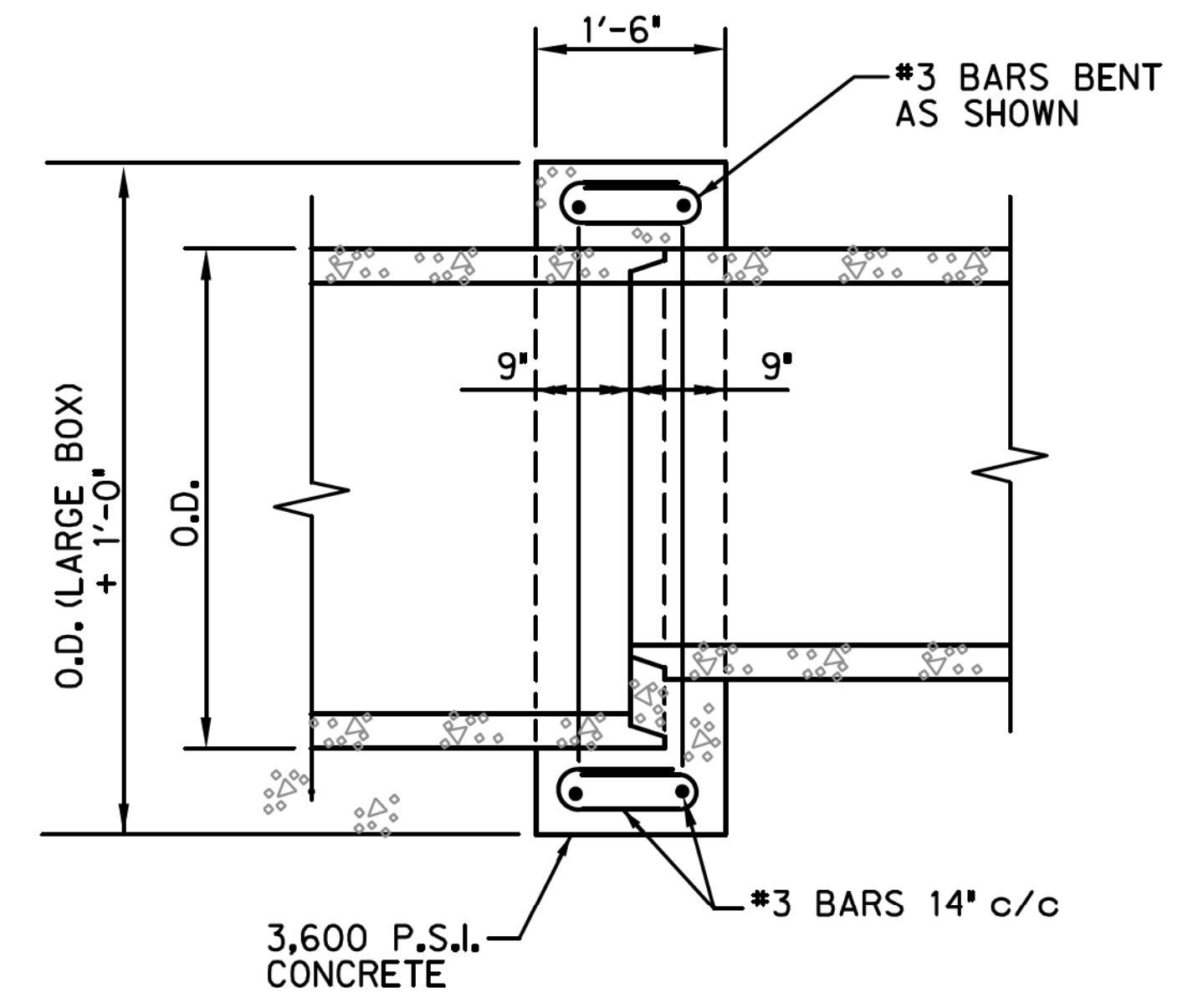
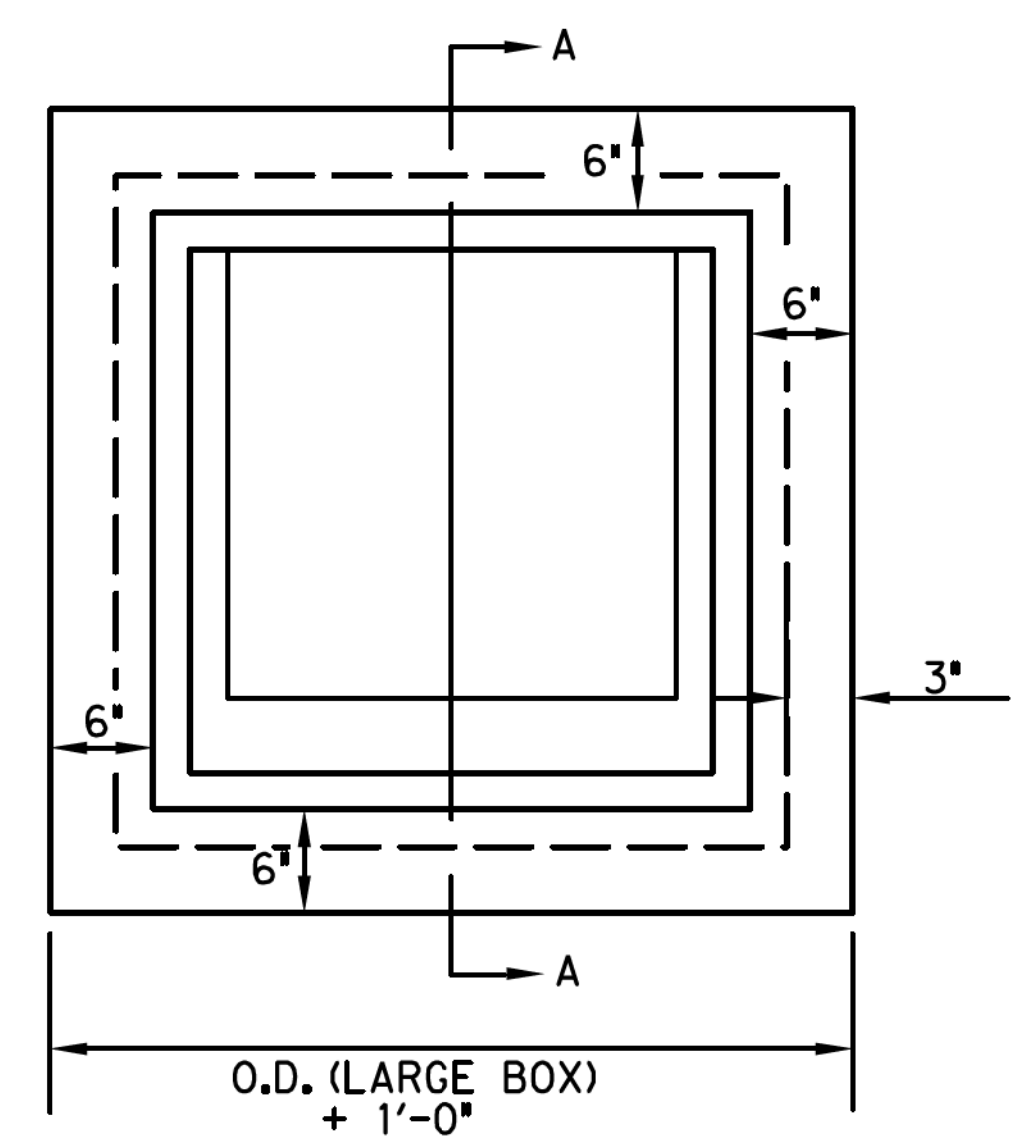
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SLOPED HEADWALL
N.T.S.



CONCRETE COLLAR DETAIL (PIPE)



CONCRETE COLLAR DETAIL (BOX)

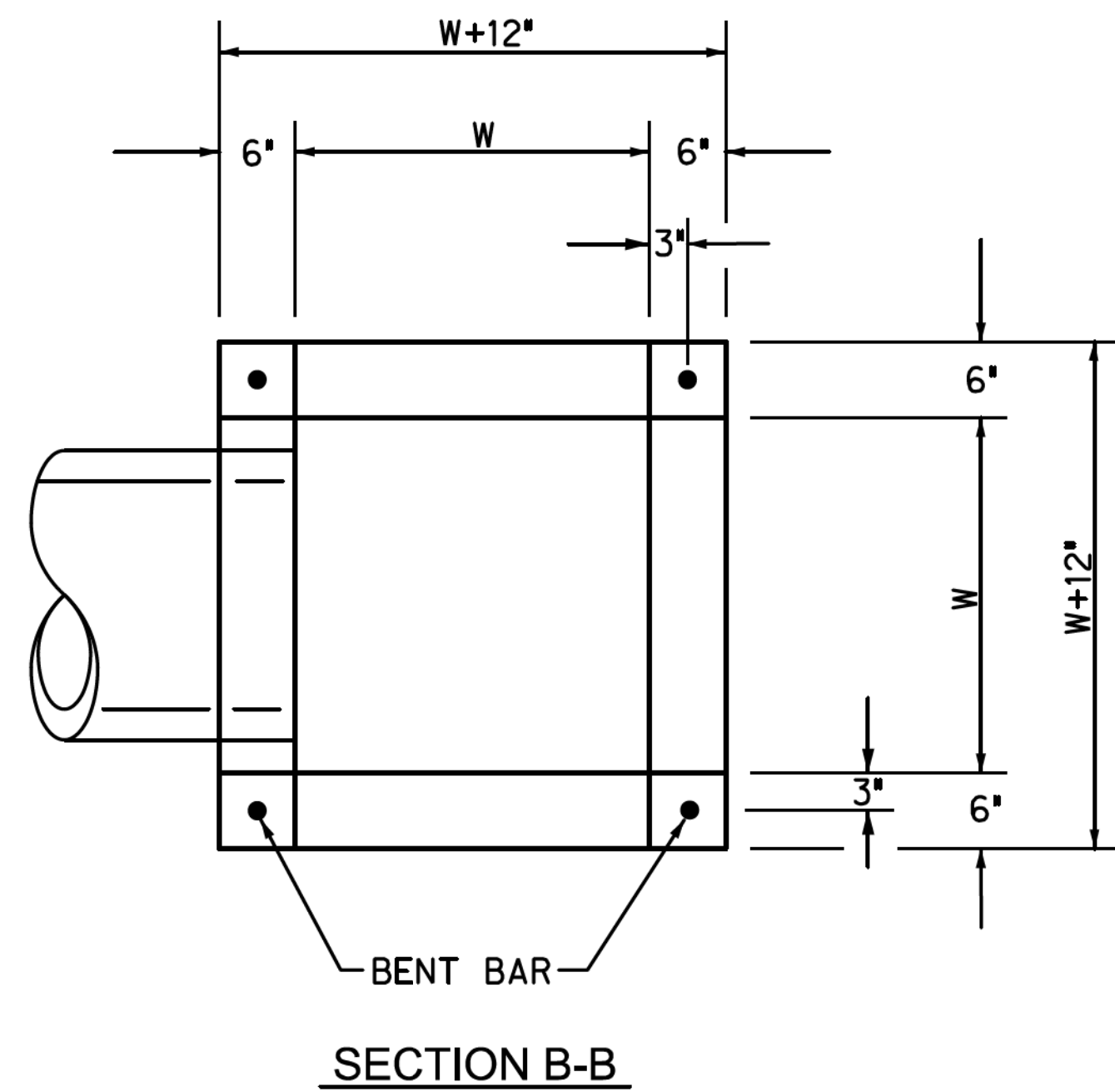
CONCRETE COLLAR
N.T.S.

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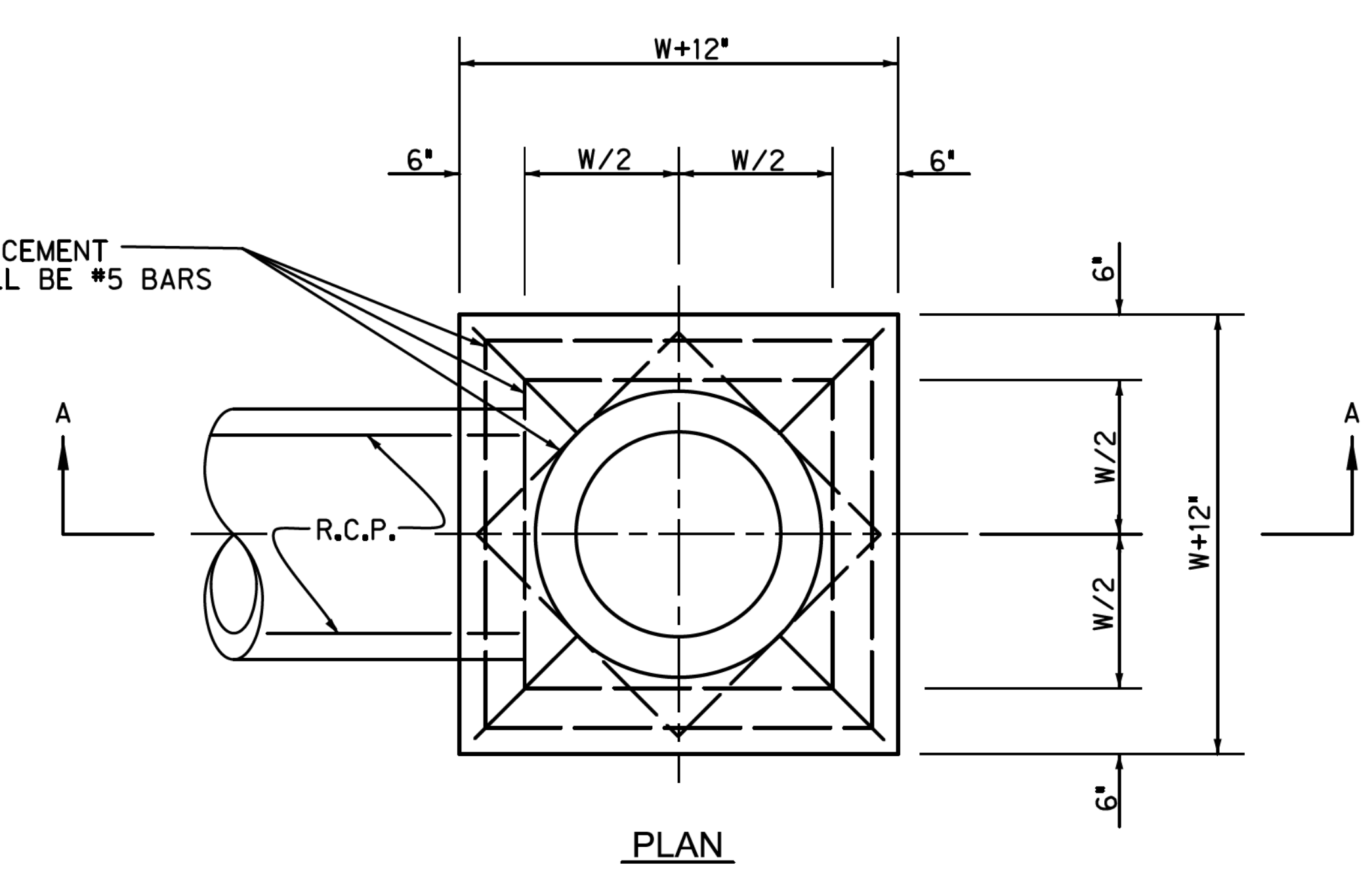
STORM DRAIN STANDARD DETAILS
HEADWALLS & PIPE COLLARS

TOWN OF HICKORY CREEK
DENTON COUNTY, TEXAS

DESIGN	DRAWN	CHECK	DATE	SCALE	FILE	NO.
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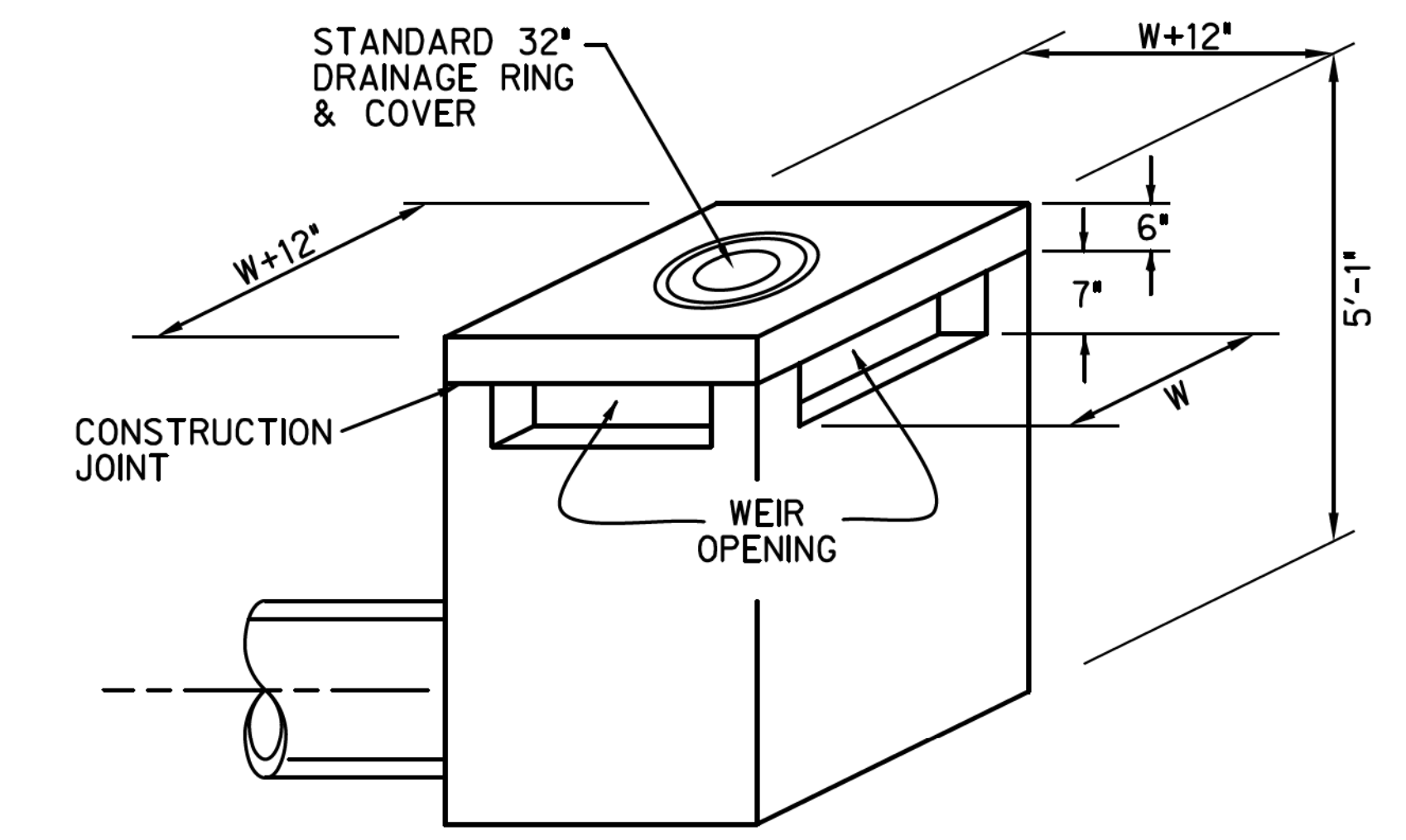
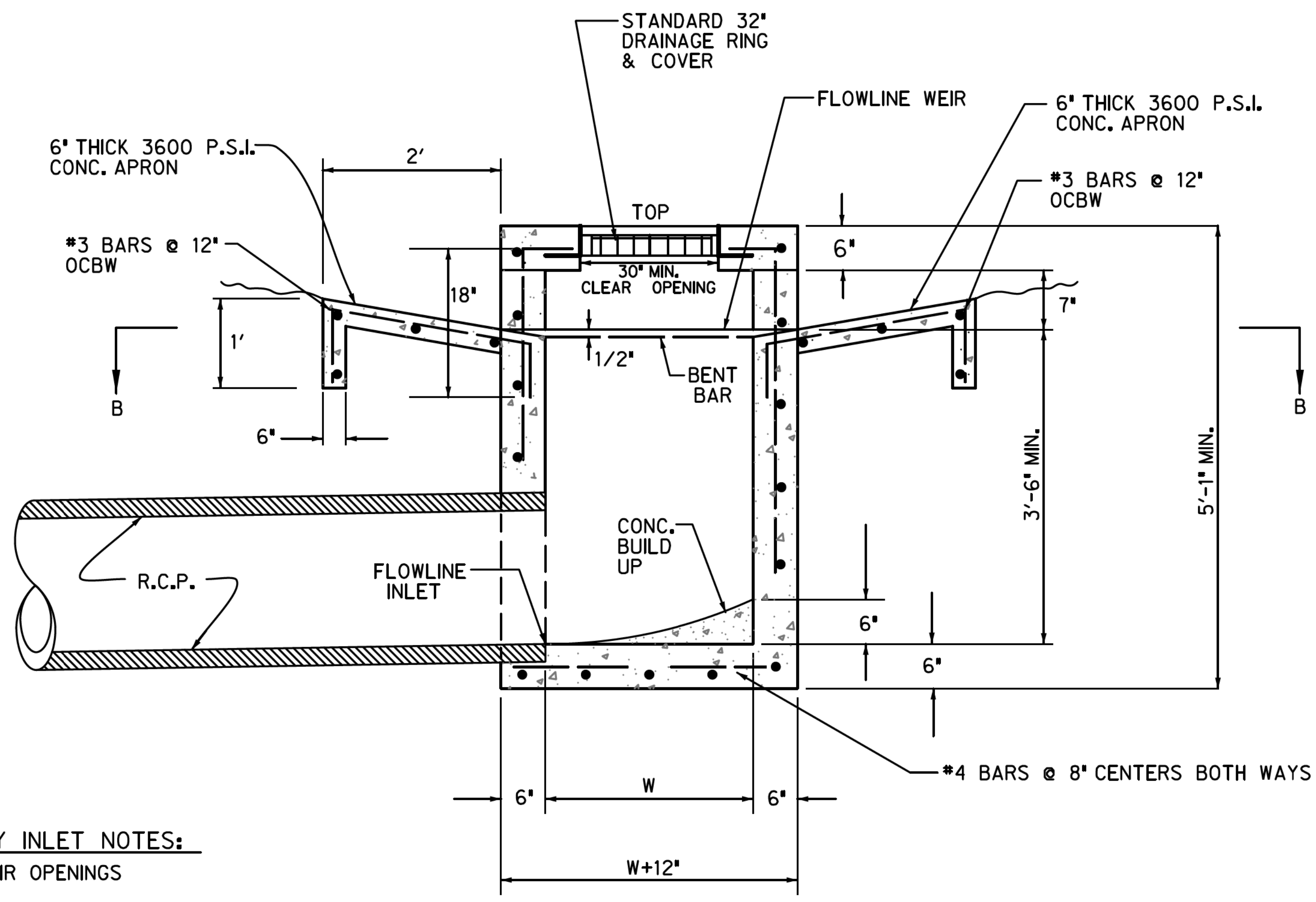


ALL REINFORCEMENT
IN TOP SHALL BE #5 BARS



SECTION B-B

PLAN



ISOMETRIC DETAIL

SECTION A-A

TYPE Y & SPECIAL TYPE Y INLET


N.T.S.

NOTE: MINIMUM DIMENSION FOR "W" = 36 INCHES

TYPE Y AND SPECIAL TYPE Y INLET NOTES:

1. SPECIAL TYPE Y INLET HAS WEIR OPENINGS REQUIRED ON TWO SIDES.
2. TYPE Y INLET HAS WEIR OPENINGS REQUIRED ON FOUR SIDES.
3. THE MINIMUM OPENINGS FOR TYPE Y AND SPECIAL TYPE Y INLETS IS W=3 FEET
4. ALL REINFORCING SHALL BE WITH #4 BARS @ 12 INCH CENTERS, EXCEPT IN TOP.

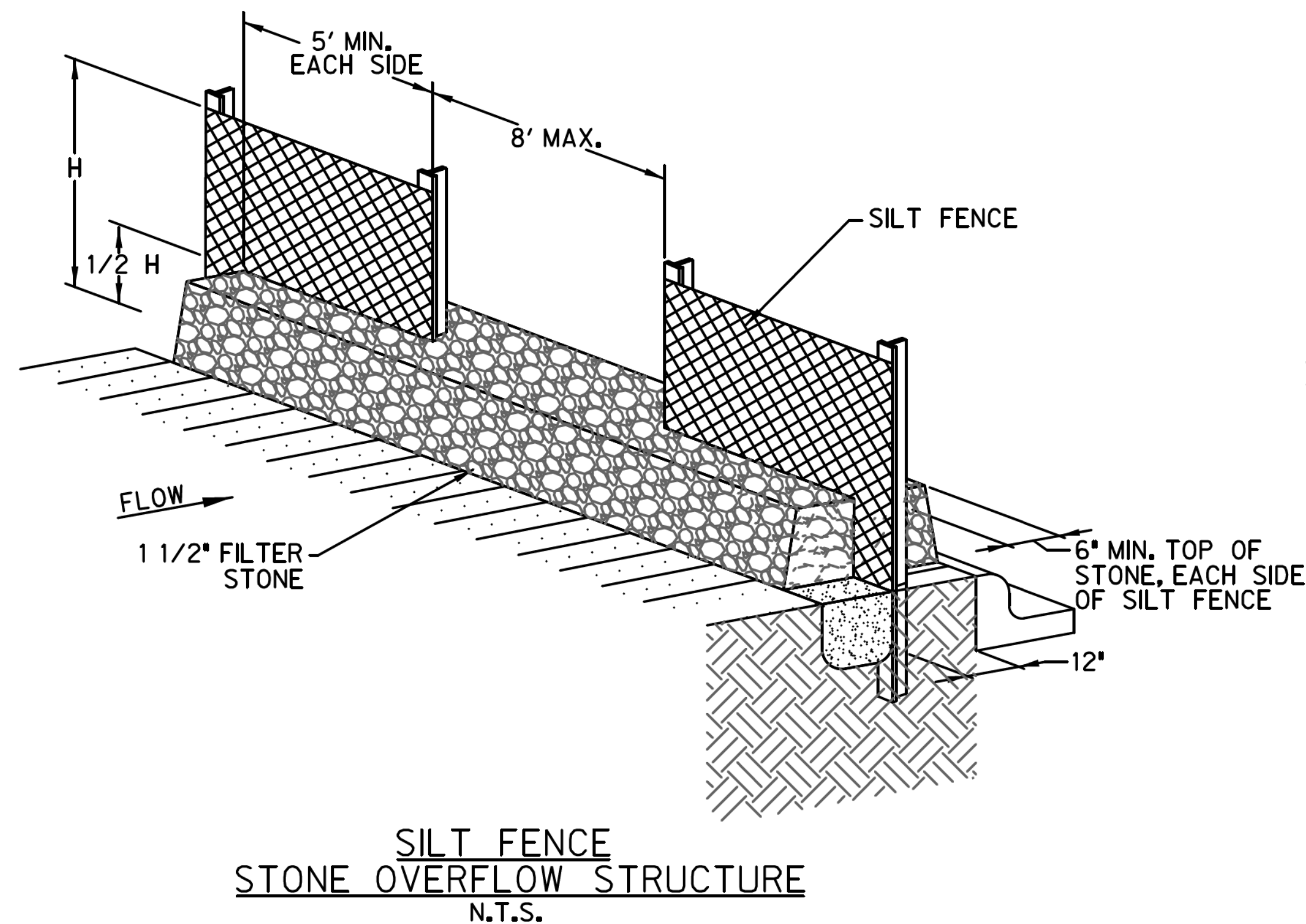
CERTIFICATION:
THIS TOWN OF HICKORY CREEK STANDARD DETAIL SHEET IS AUTHORIZED FOR USE IN THIS PROJECT BY THE ENGINEER WHOSE SEAL APPEARS ON THIS SHEET. MODIFICATIONS TO THE STANDARD DETAILS SHALL BE NOTED ON THIS SHEET AND SHALL COMPLY WITH THE TOWN'S ORDINANCES, STATE, AND FEDERAL REGULATIONS.

STORM DRAIN STANDARD DETAILS						
INLETS (SHEET 1 OF 3)						
						
TOWN OF HICKORY CREEK DENTON COUNTY, TEXAS						
DESIGN	DRAWN	CHECK	DATE	SCALE	FILE	NO.
HALFF	HALFF	HALFF	OCT 2012	N.T.S.	SD-6	67

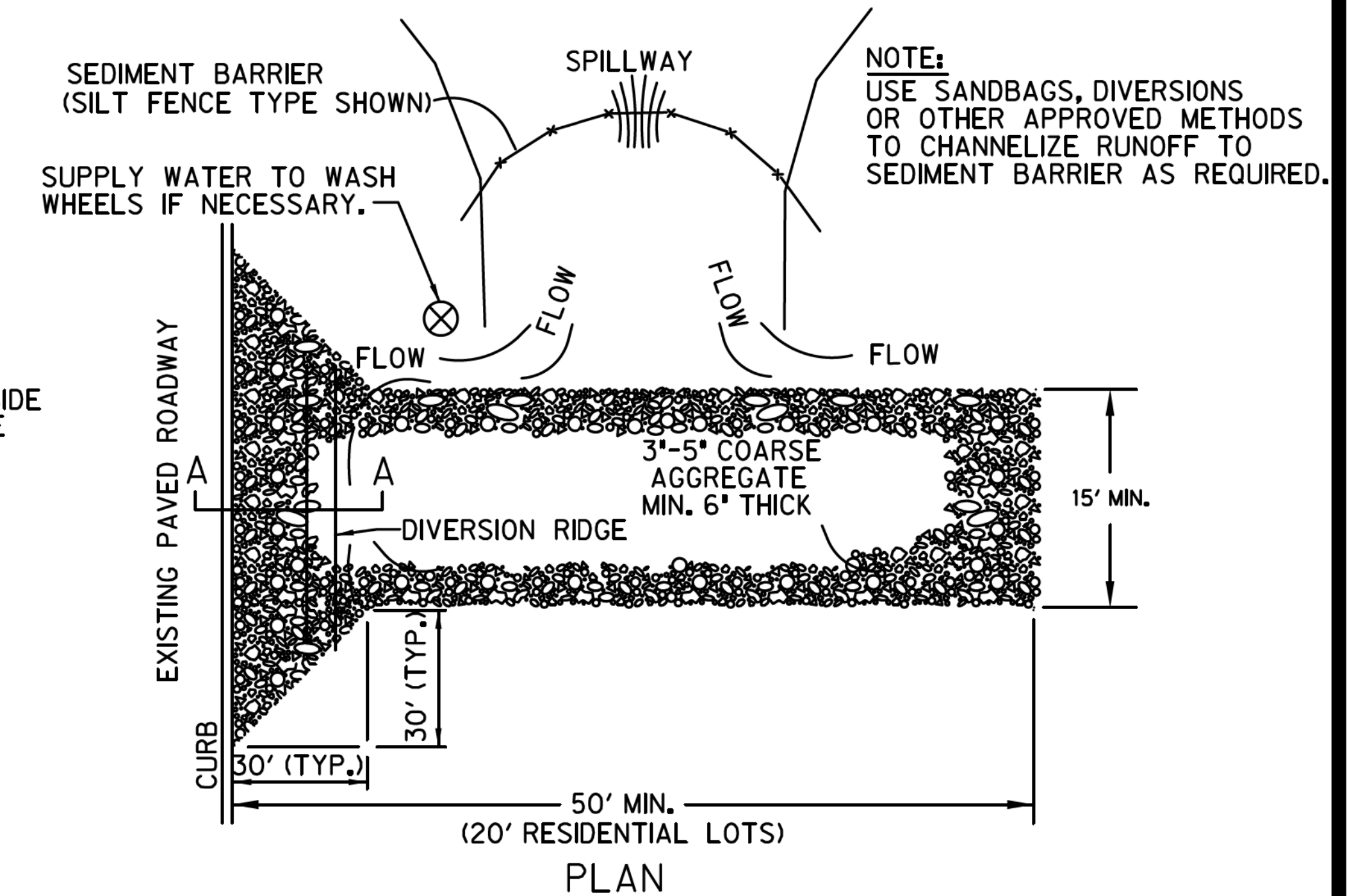
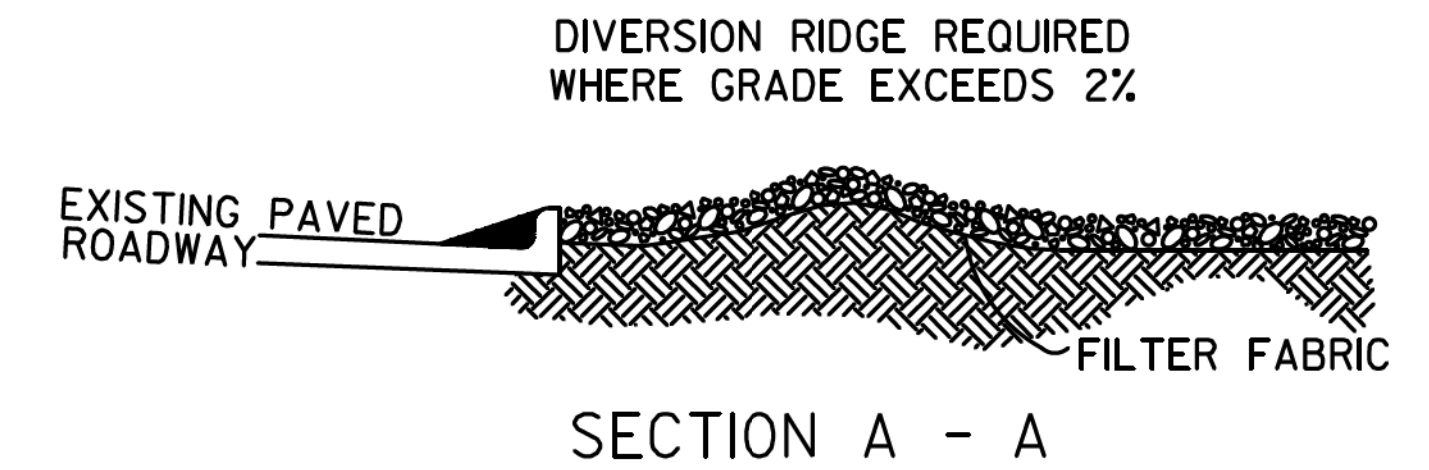
SILT FENCE GENERAL NOTES

- (1) STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.
- (2) THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (e.g. PAVEMENT), WEIGHT FABRIC FLAP WITH ROCK ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
- (3) THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
- (4) SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IN TURN IS ATTACHED TO THE STEEL FENCE POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
- (5) INSPECTION SHALL BE MADE EVERY TWO WEEKS AND AFTER EACH 1/2" RAINFALL. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- (6) SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
- (7) ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF HALF THE HEIGHT OF THE FENCE. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.

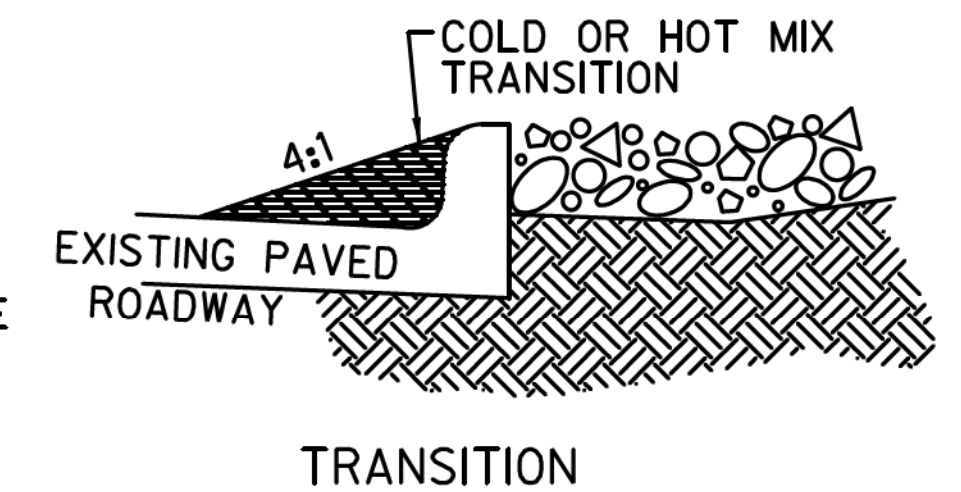
NOTE:
STONE OVERFLOW STRUCTURES OF OTHER OUTLET CONTROL DEVICES SHALL BE INSTALLED AT ALL LOW POINTS ALONG THE FENCE OR EVERY 300 FEET IF THERE IS NO APPARENT LOW POINT



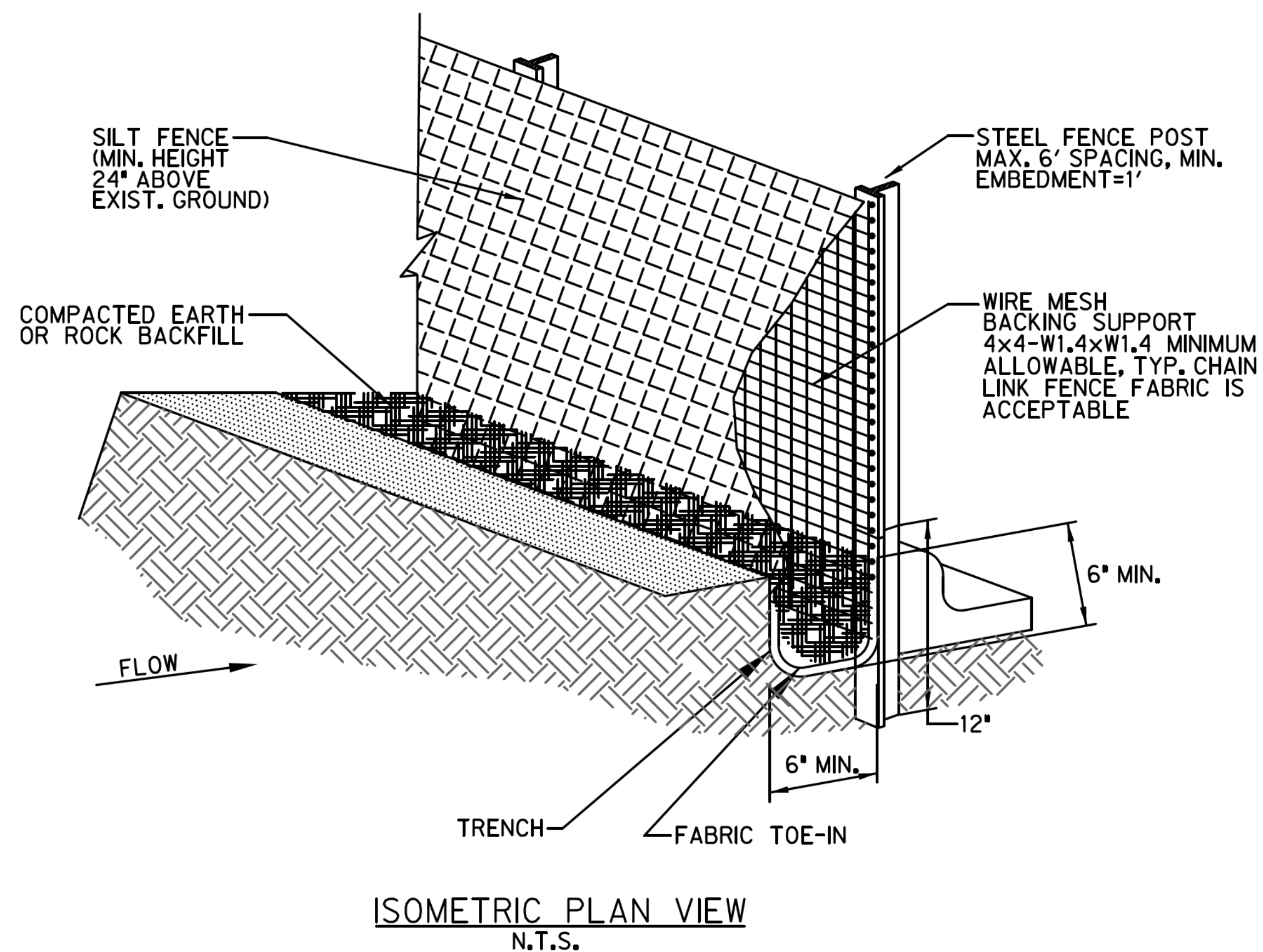
**SILT FENCE
STONE OVERFLOW STRUCTURE**
N.T.S.




NOTE:
WHEN SEDIMENT HAS SUBSTANTIALLY CLOGGED THE VOID AREA BETWEEN THE ROCKS, THE AGGREGATE MAT MUST BE WASHED DOWN OR REPLACED. PERIODIC RE-GRADING AND TOP DRESSING WITH ADDITIONAL STONE MUST BE DONE TO KEEP THE EFFICIENCY OF THE ENTRANCE FROM DIMINISHING.



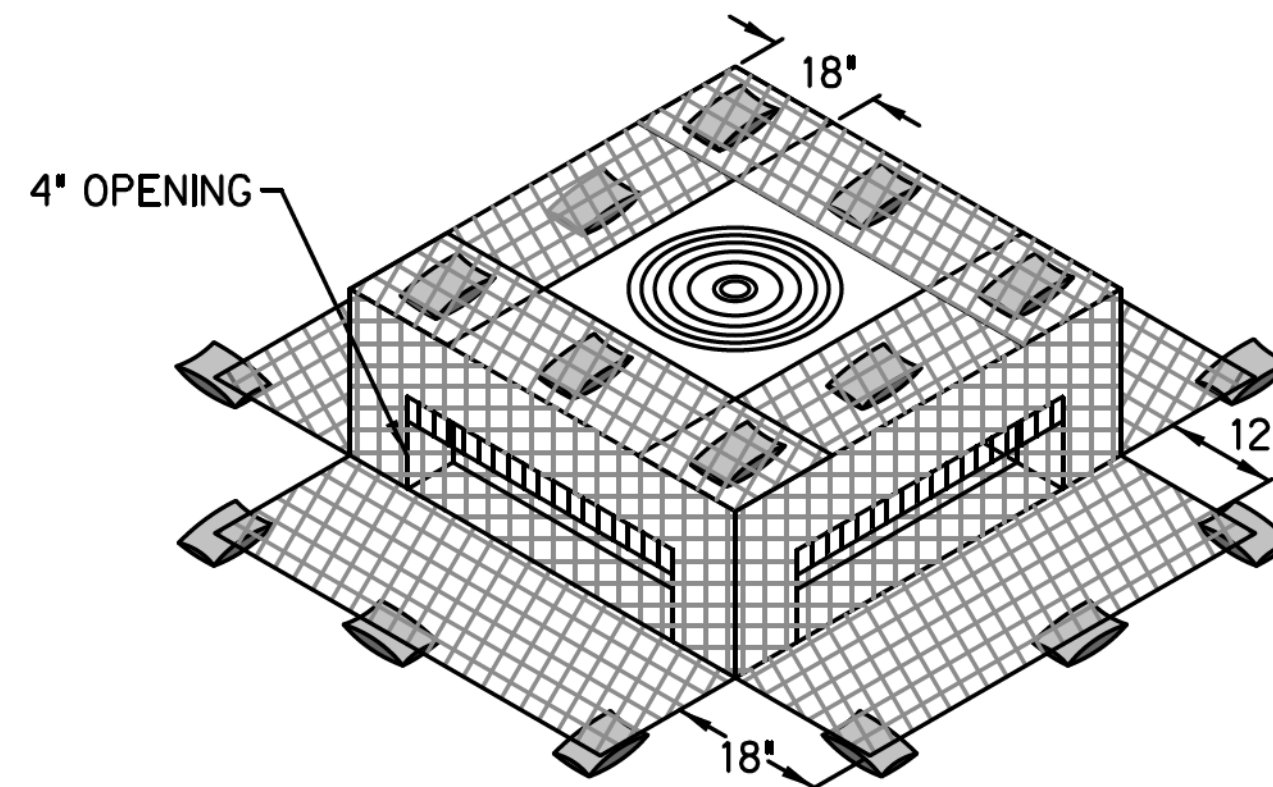
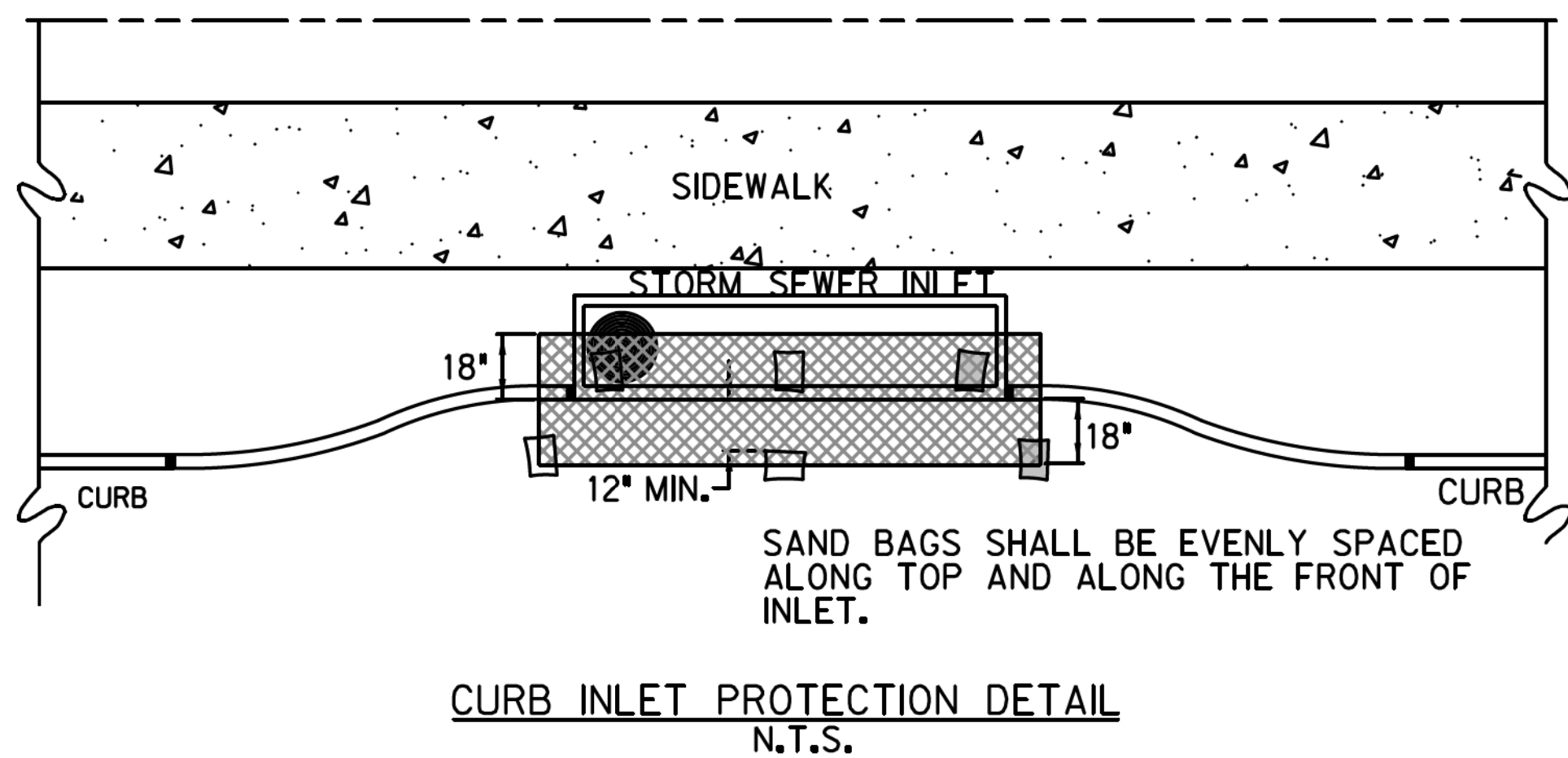
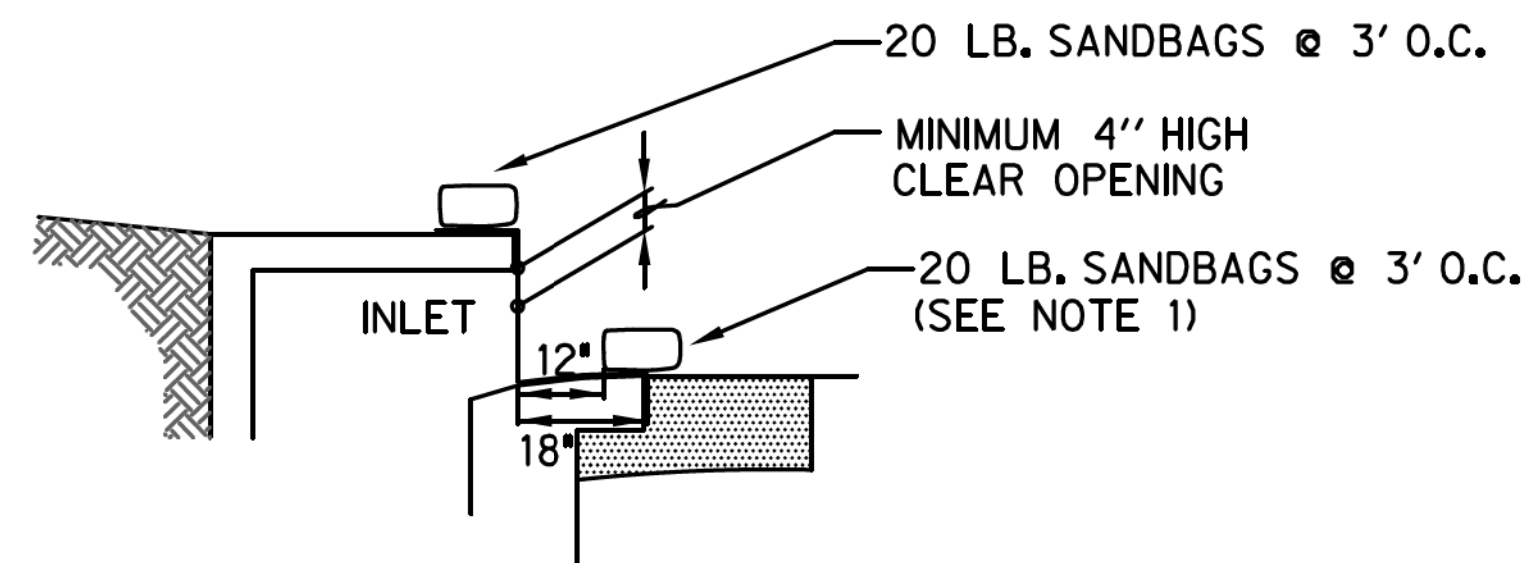
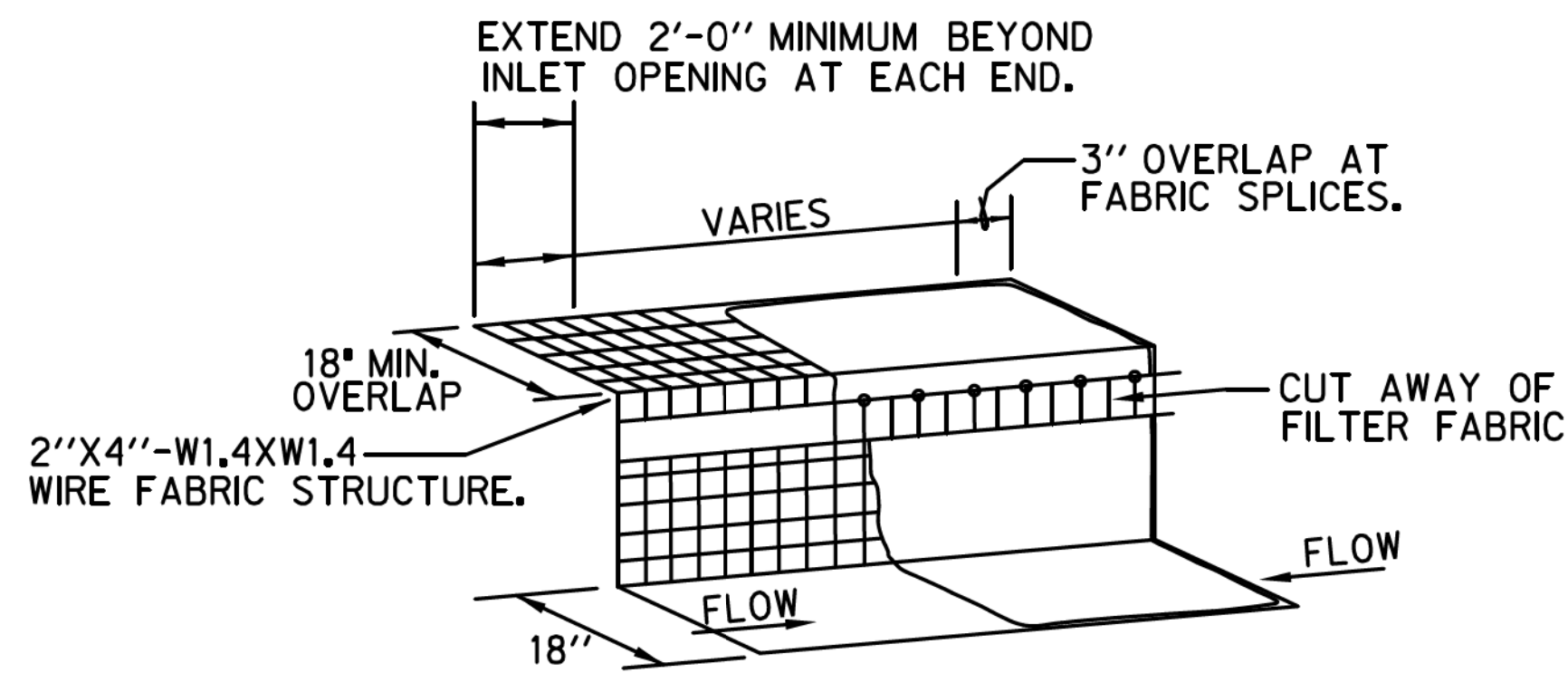
TRANSITION
**TEMPORARY STONE CONSTRUCTION
ENTRANCE/EXIT**
N.T.S.



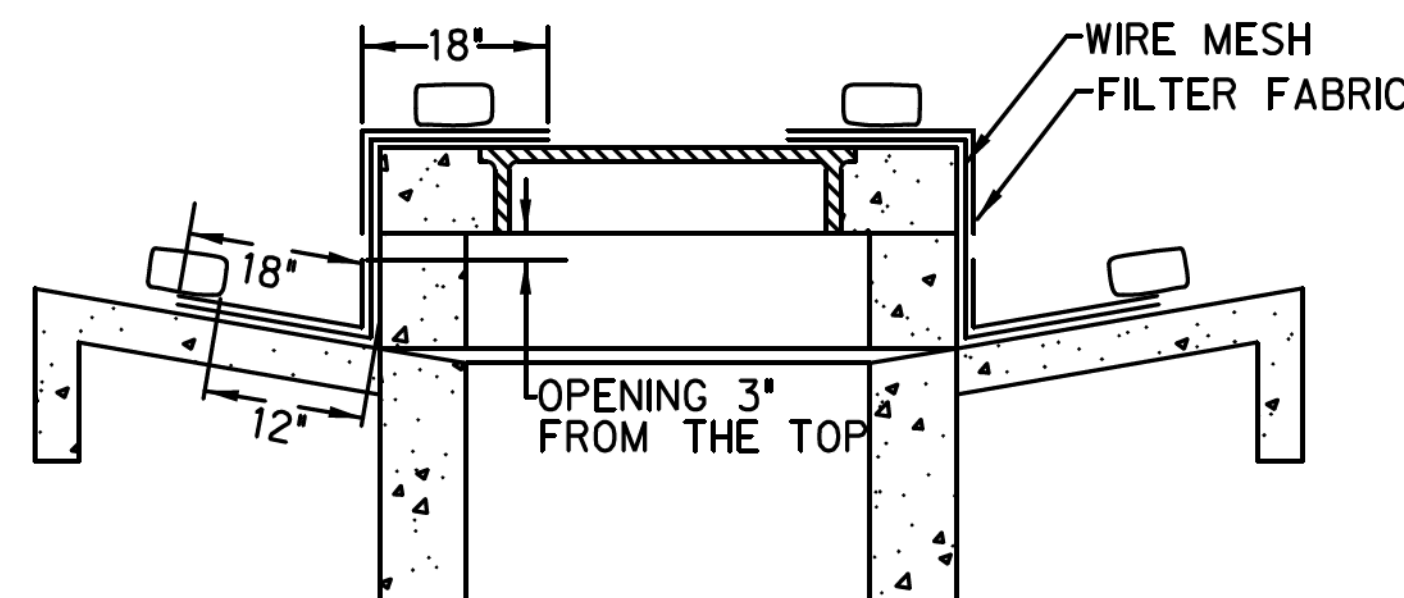
ISOMETRIC PLAN VIEW
N.T.S.

EROSION CONTROL						
EROSION CONTROL DETAILS (SHEET 1 OF 2)						
						
TOWN OF HICKORY CREEK DENTON COUNTY, TEXAS						
DESIGN	DRAWN	CHECK	DATE	SCALE	FILE	NO.
HALFF	HALFF	HALFF	OCT 2012	N.T.S.	EC-1	68

CERTIFICATION:
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ISOMETRIC VIEW



SECTION

FILTER FABRIC WYE INLET PROTECTION
N.T.S.

ESTABLISHMENT OF GROUND COVER

- (1) Eighty percent (80%) evenly distributed ground cover, without large bare areas, shall be established after the designated areas have been completed to the lines, grades and cross sections shown on the plans and prior to final acceptance by the Town.
- (2) Ground cover, for Seeding Turf Grass, shall be in accordance with the standard specifications of the Town of Hickory Creek, which has also adopted the Fourth Edition of the "Standard Specifications For Public Works Construction - North Central Texas" herein referred to as "COG" specifications. Copies may be obtained from the North Central Texas Council of Governments, 616 Six Flags Drive, Suite 200, Arlington, Texas 76005-5888. (817) 640-3300. A copy of the contract documents, plans and specifications shall be available on-site at all times by the Contractor.
- (3) Refer to COG Item 202.6 specifications.
- (4) Prior to planting, contractor shall provide the Town with the State of Texas Certificate stating analysis of purity and germination of seed.
- (5) Planting season and application rates. All planting shall be done between the dates specified in Table 1, for each grass type except when specifically authorized in writing. The seeds planted per acre shall be of a type specified with the mixture, rate and planting dates as shown in the Table 1, or as specified by the Engineer.

TYPE	PLANTING SEASON	SEED AND RATE
TYPE I	MARCH THROUGH SEPTEMBER	BERMUDA GRASS, HULLED 50-LB (22.7-KG) PLS PER ACRE
TYPE II	OCTOBER THROUGH FEBRUARY	RYE GRASS, 100-LB (45.4-KG) PLS PER ACRE COMBINED WITH BERMUDA GRASS, HULLED 20-LB (9.1-KG) PLS PER ACRE.
OTHER	AS SPECIFIED ON PLANS	AS SPECIFIED ON PLANS


¹PLS - Pure Live Seed is determined by multiplying the gross weight times purity times the germination [For example, a 100-lb bag with 85% purity and 80% germination. (PLS=pounds in bag x Purity x germination) 100 x 0.85 x 0.8 = 60.8 -lbs of pure live seed.]

- (6) Seeded areas shall be maintained, including watering and mowing, at such time and in a manner and quality to establish a minimum 80% evenly distributed ground cover, without large bare areas, until completion and final acceptance of the project by the Town.

NOTES:

- (1) A SECTION OF FILTER FABRIC SHALL BE REMOVED AS SHOWN ON THIS DETAIL TO PROVIDE A 4-INCH MINIMUM CLEAR OPENING. FABRIC MUST BE SECURED TO WIRE BACKING WITH CLIPS OR HOG RINGS AT THIS LOCATION.
- (2) INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2-INCHES.
- (3) CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL EVENT AND IMMEDIATELY REMOVE THE INLET PROTECTIONS IF THE STORM-WATER BEGINS TO OVERTOP THE CURB.
- (4) INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.

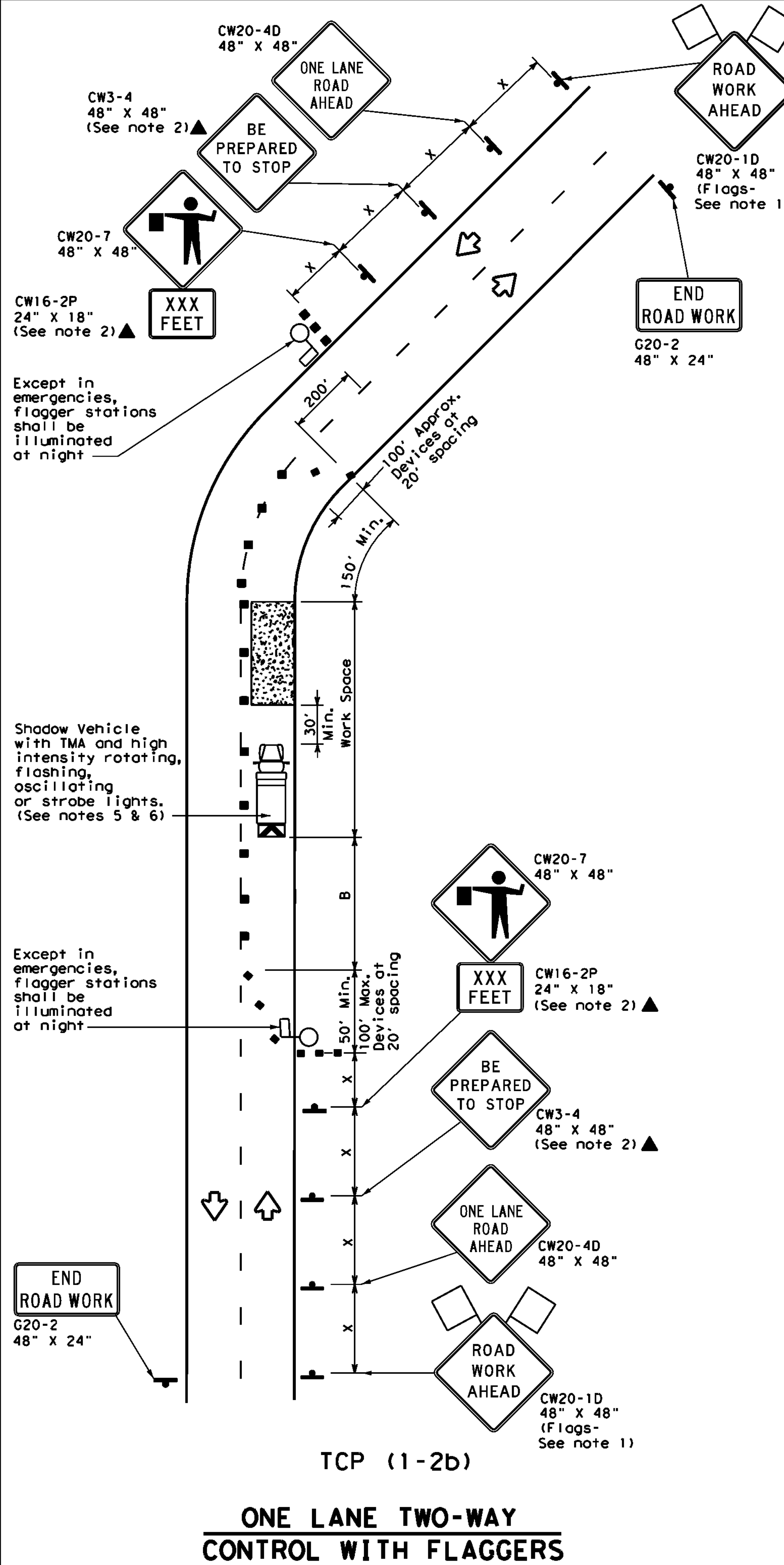
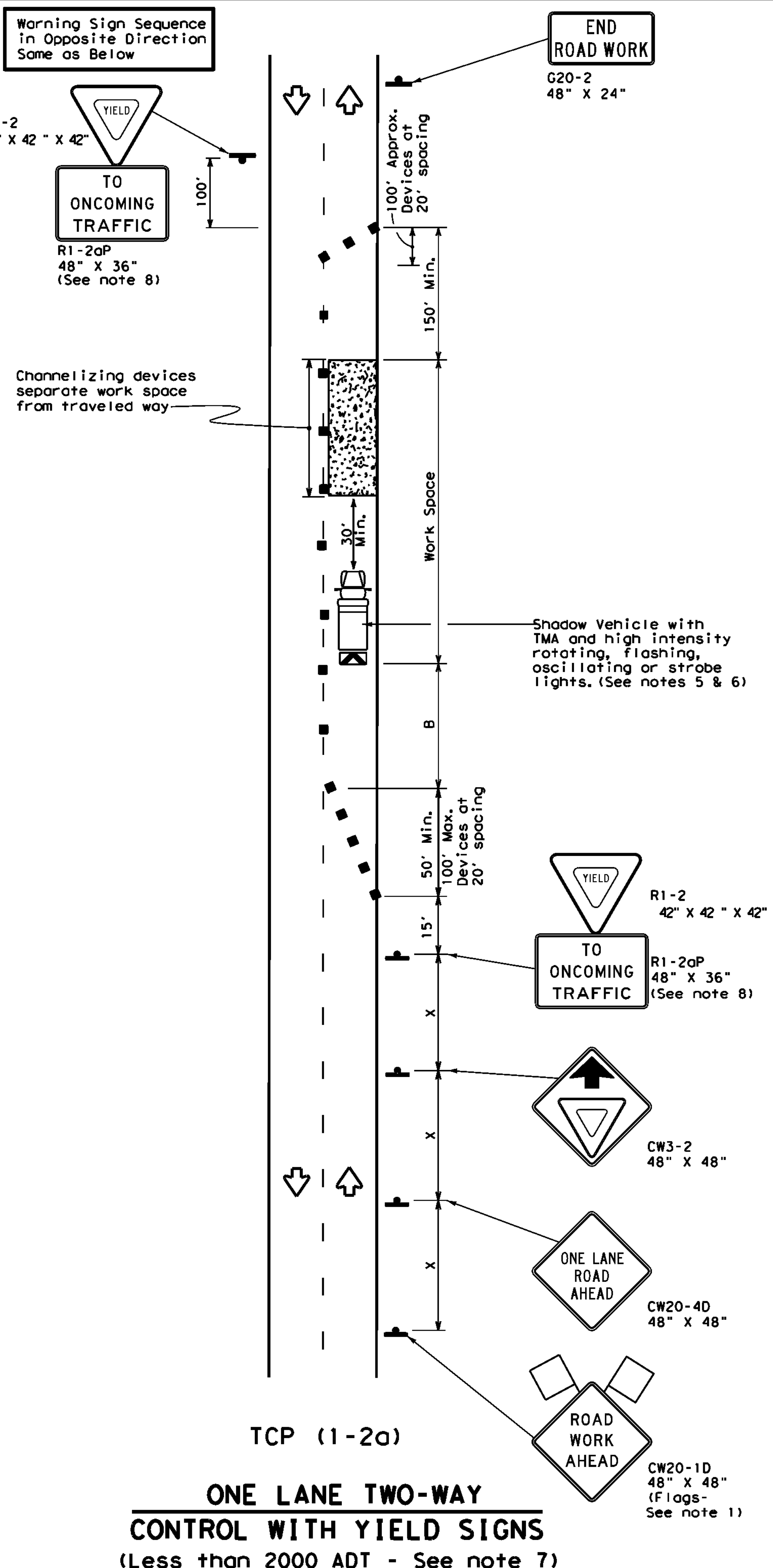
INLET OPENING	MINIMUM NUMBER OF SAND BAGS	
	TOP	FRONT
5'	2	3
10'	3	3
15'	3	4
20'	4	4

EROSION CONTROL						
EROSION CONTROL DETAILS (SHEET 2 OF 2)						
						
TOWN OF HICKORY CREEK DENTON COUNTY, TEXAS						
DESIGN	DRAWN	CHECK	DATE	SCALE	FILE	NO.
HALFF	HALFF	HALFF	OCT 2012	N.T.S.	EC-2	69

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DATE: FILE:



LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board		Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths **			Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"	Stopping Sight Distance
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent			
30	L = WS ² / 60	150'	165'	180'	30'	60'	120'	90'	200'
35		205'	225'	245'	35'	70'	160'	120'	250'
40		265'	295'	320'	40'	80'	240'	155'	305'
45	L = WS	450'	495'	540'	45'	90'	320'	195'	360'
50		500'	550'	600'	50'	100'	400'	240'	425'
55		550'	605'	660'	55'	110'	500'	295'	495'
60		600'	660'	720'	60'	120'	600'	350'	570'
65		650'	715'	780'	65'	130'	700'	410'	645'
70		700'	770'	840'	70'	140'	800'	475'	730'
75		750'	825'	900'	75'	150'	900'	540'	820'

* Conventional Roads Only
 ** Taper lengths have been rounded off.
 L=Length of Taper (FT) W=Width of Offset (FT) S=Posted Speed (MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓		

GENERAL NOTES

- Flags attached to signs where shown are REQUIRED.
 - All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
 - The CW3-4 "BE PREPARED TO STOP" sign may be installed after the CW20-4D "ONE LANE ROAD AHEAD" sign, but proper sign spacing shall be maintained.
 - Sign spacing may be increased or an additional CW20-1D "ROAD WORK AHEAD" sign may be used if advance warning ahead of the flagger or R1-2 "YIELD" sign is less than 1500 feet.
 - A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
 - Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect wider work spaces.
- TCP (1-2a)**
- R1-2 "YIELD" sign traffic control may be used on projects with approaches that have adequate sight distance. For projects in urban areas, work spaces should be no longer than one half city block. In rural areas on roadways with less than 2000 ADT, work spaces should be no longer than 400 feet.
 - R1-2 "YIELD" sign with R1-2aP "TO ONCOMING TRAFFIC" plaque shall be placed on a support at a 7 foot minimum mounting height.
- TCP (1-2b)**
- Flaggers should use two-way radios or other methods of communication to control traffic.
 - Length of work space should be based on the ability of flaggers to communicate.
 - If the work space is located near a horizontal or vertical curve, the buffer distances should be increased in order to maintain adequate stopping sight distance to the flagger and a queue of stopped vehicles (see table above).
 - Channelizing devices on the center-line may be omitted when a pilot car is leading traffic and approved by the Engineer.
 - Flaggers should use 24" STOP/SLOW paddles to control traffic. Flags should be limited to emergency situations.

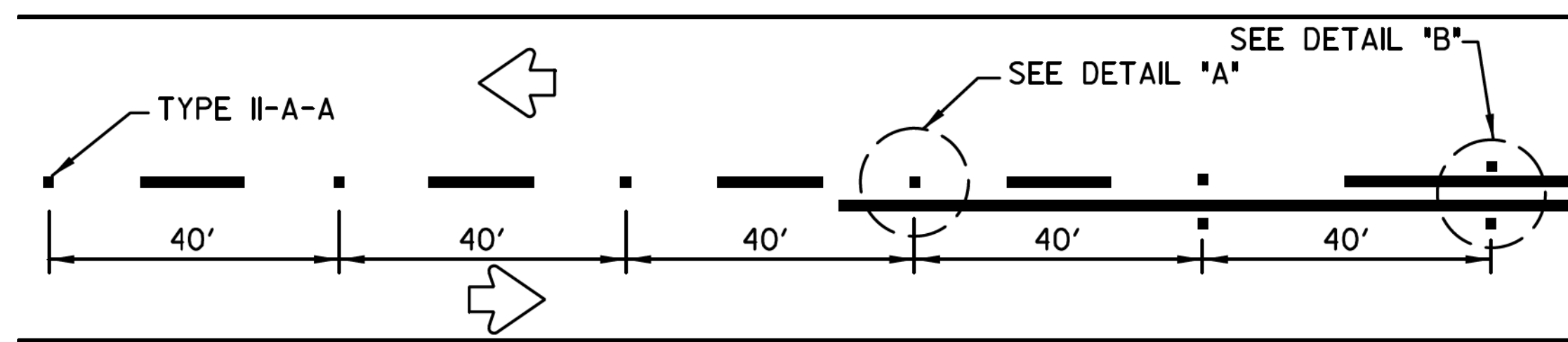
Texas Department of Transportation
 Traffic Operations Division Standard

TRAFFIC CONTROL PLAN
ONE-LANE TWO-WAY
TRAFFIC CONTROL

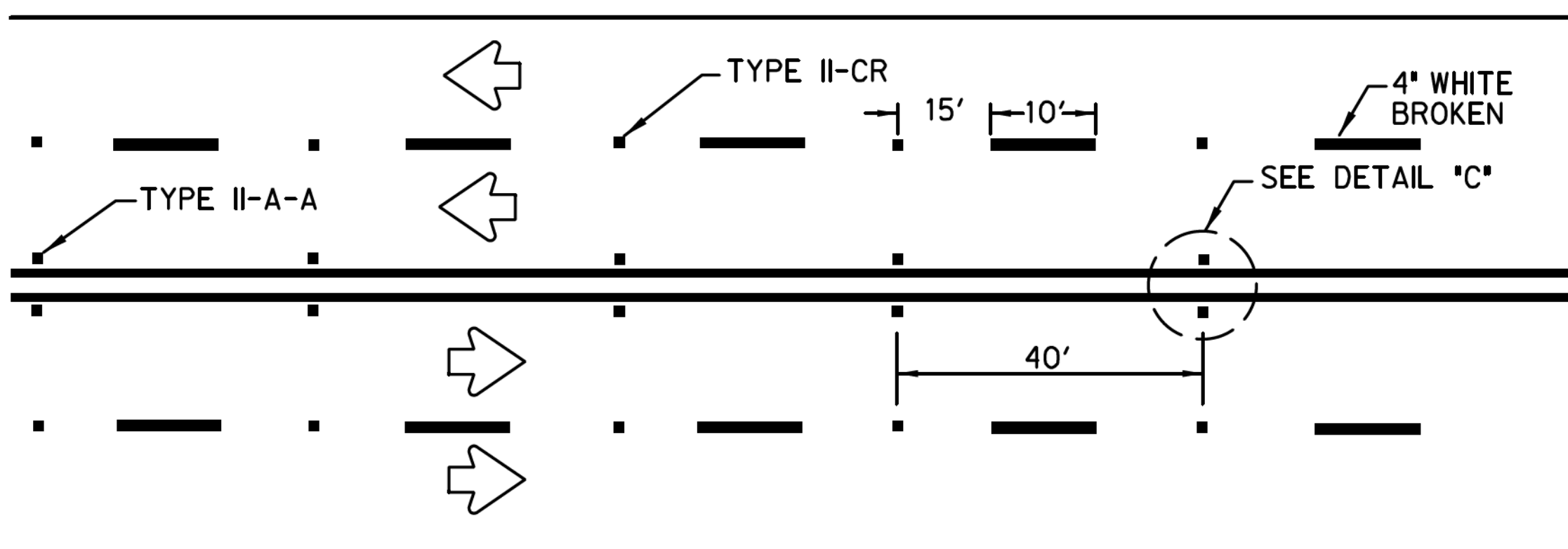
TCP (1-2) - 18

FILE: tcp1-2-18.dgn	DN:	CKI:	DW:	CKI:
© TxDOT December 1985	CONT:	SECT:	JOB:	HIGHWAY:
4-90 4-98	REVISIONS			
2-94 2-12	DIST:	COUNTY:	SHEET NO.	
1-97 2-18			70	

REFLECTIVE RAISED PAVEMENT MARKERS FOR VEHICLE POSITIONING GUIDANCE

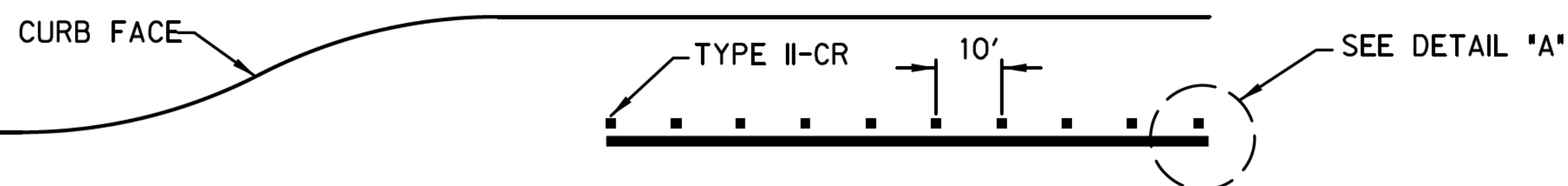
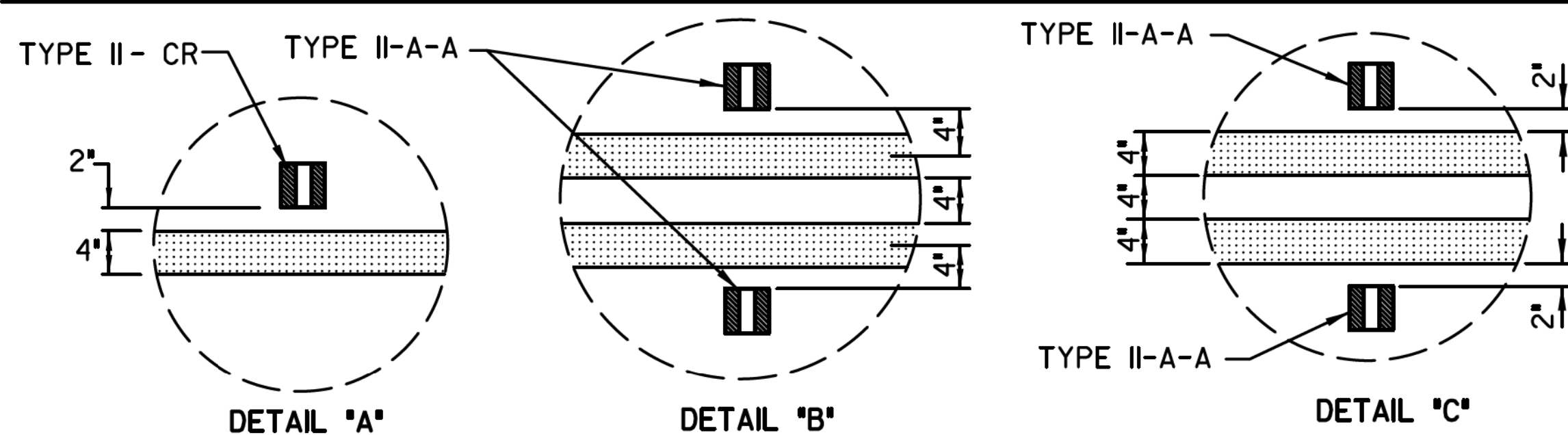


CENTERLINE FOR ALL TWO LANE ROADWAYS

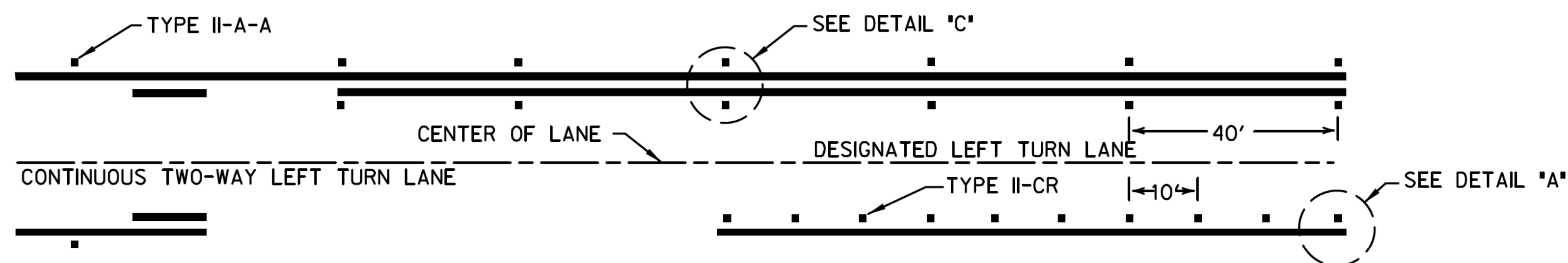


CENTERLINE & LANE LINES
FOR FOUR LANE TWO-WAY HIGHWAYS

Raised pavement marker TYPE II-CR, clear/red face toward normal traffic, shall be placed on 40-foot centers.

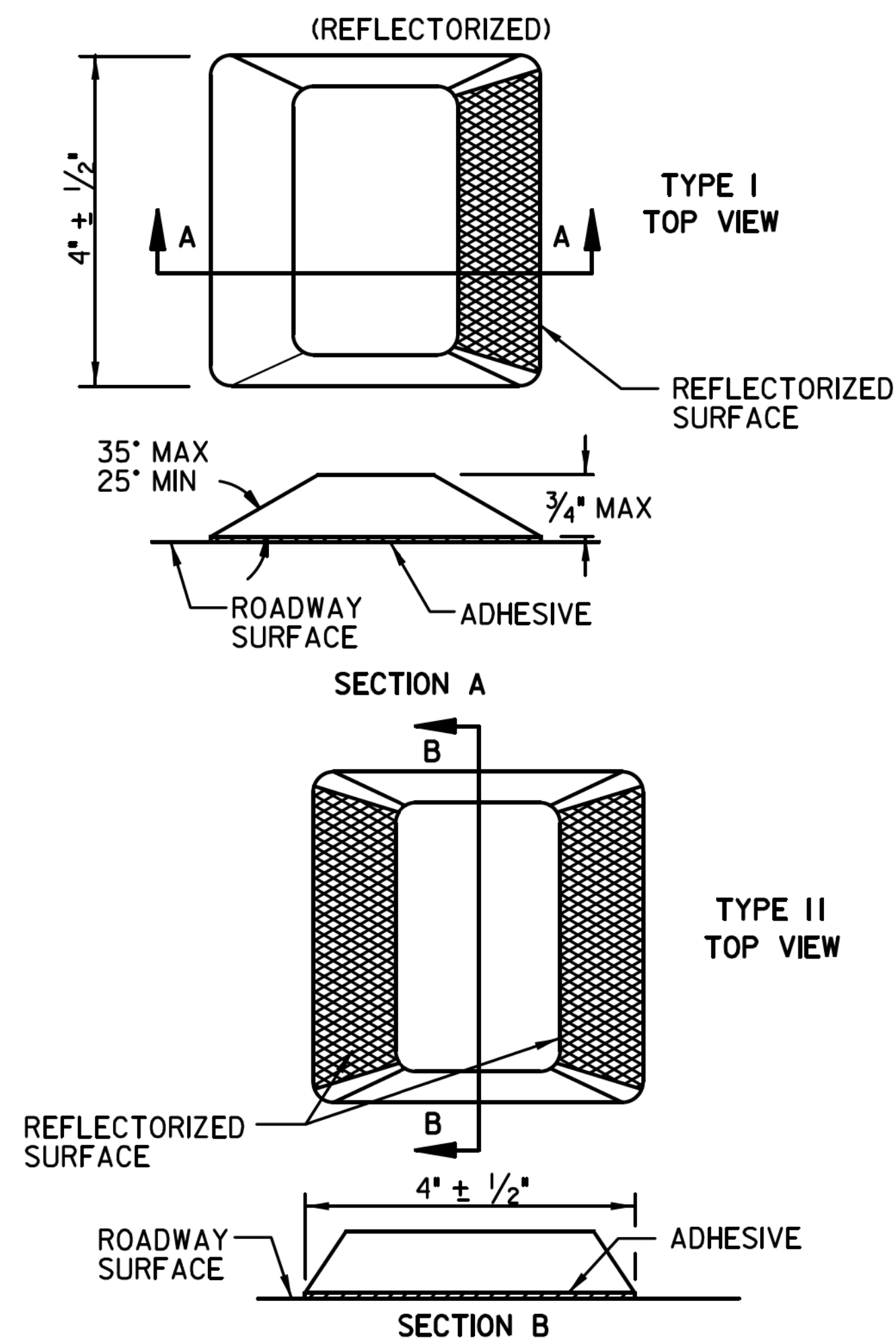


LANE LINES FOR DESIGNATED TURN LANES



LANE LINES FOR DESIGNATED TURN LANES IN A SHARED TWO-WAY TURN LANE

RAISED PAVEMENT MARKERS



GENERAL NOTES:

All raised pavement markers placed in broken lines shall be placed in line with and midway between the stripes.

On concrete pavements the raised pavement markers should be placed to the same side of the longitudinal joints as the lane line.

All pavement markers installed on concrete shall be installed using Epoxy adhesive.

All pavement markers installed on asphalt shall be installed using Bituminous adhesive.

All pavement marking materials shall meet the Texas Department of Transportation Material Specifications as specified by the plans.

SPECIFICATION REFERENCE TABLE - MATERIAL SPECIFICATIONS

PAVEMENT MARKERS (REFLECT.)	DMS-4200
EPOXY	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130

PAVEMENT MARKING STANDARD DETAILS

TURN LANE AND TRANSVERSE MARKINGS

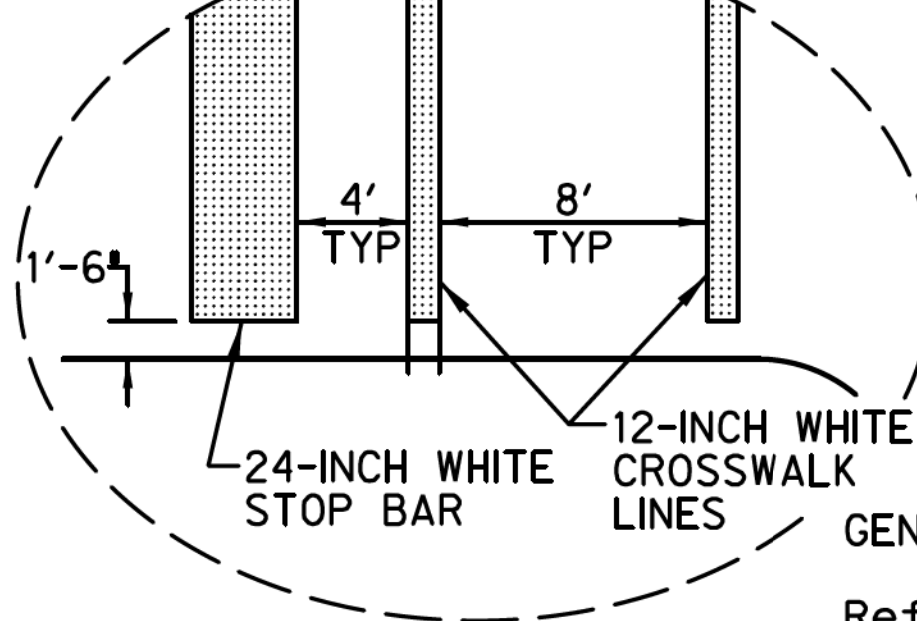
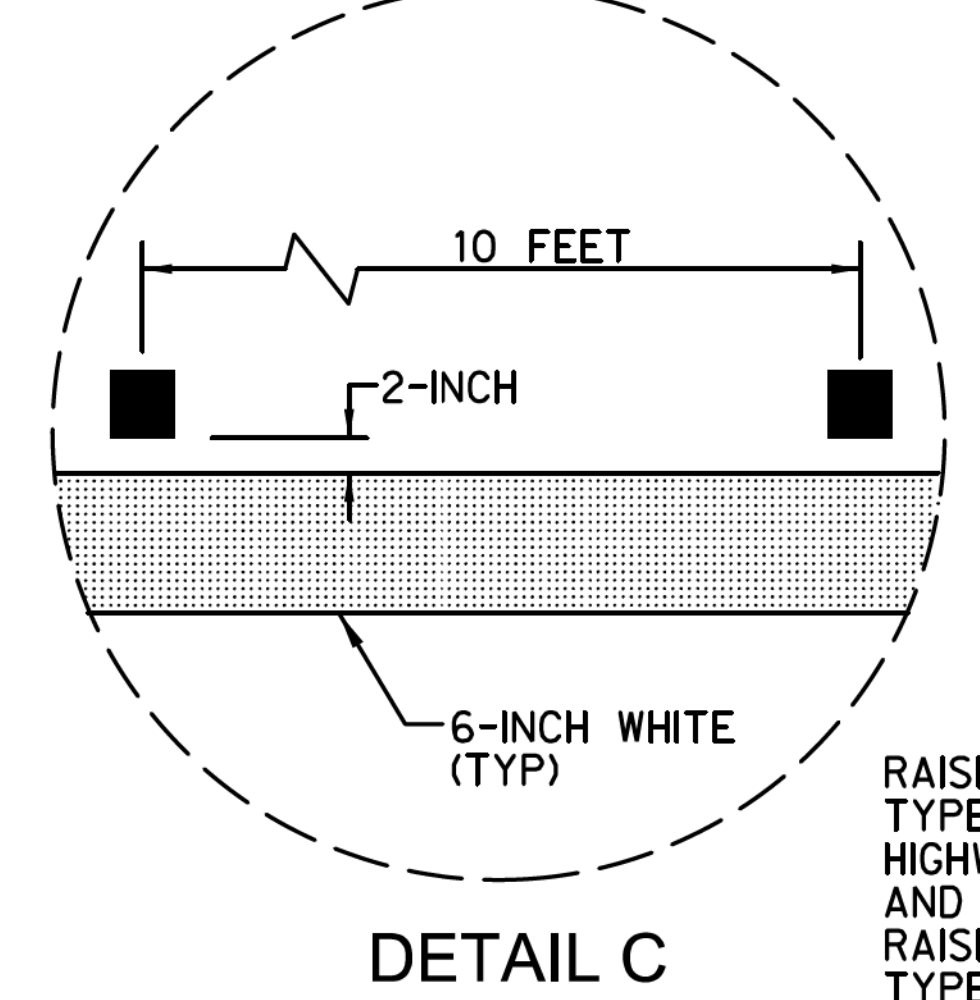
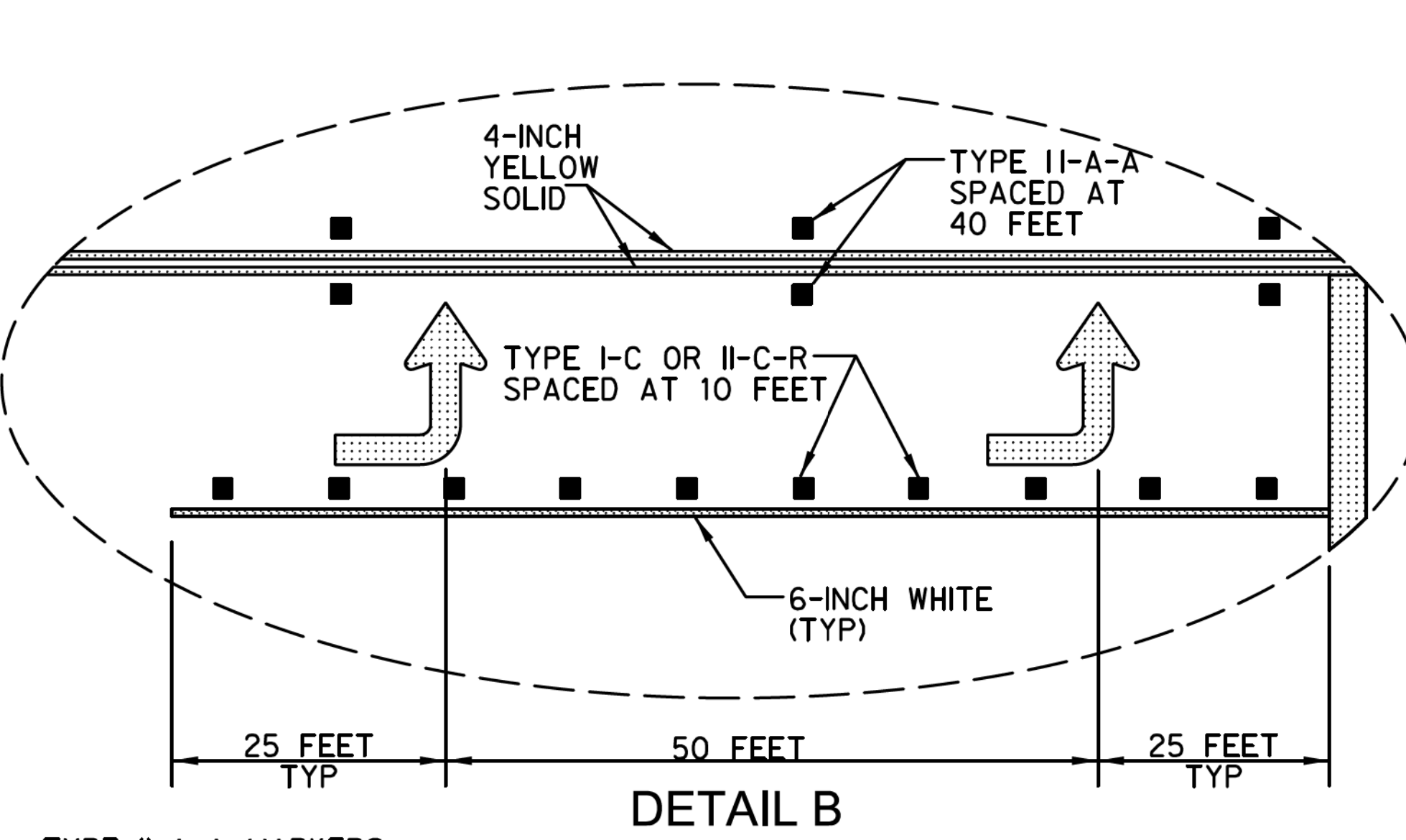
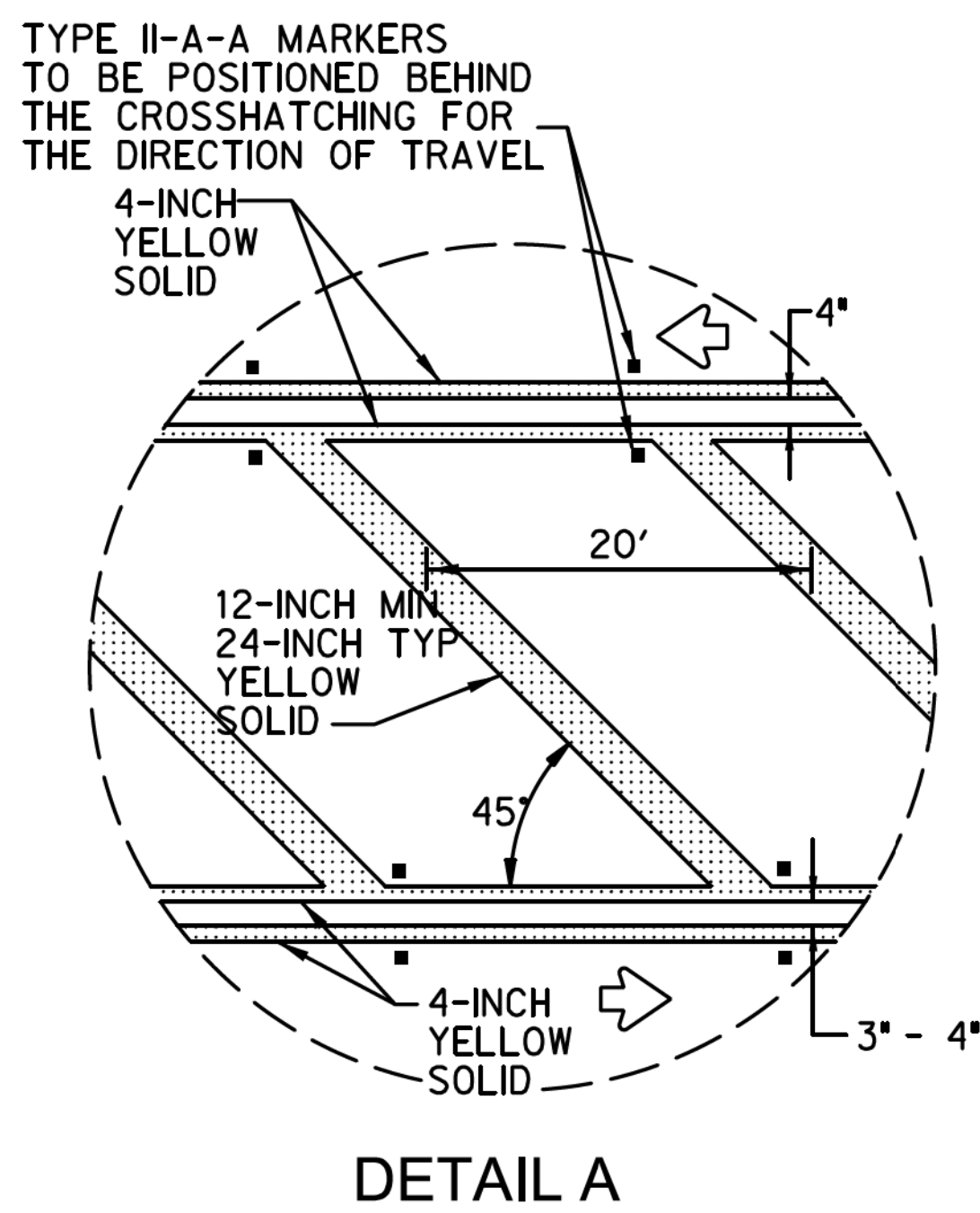
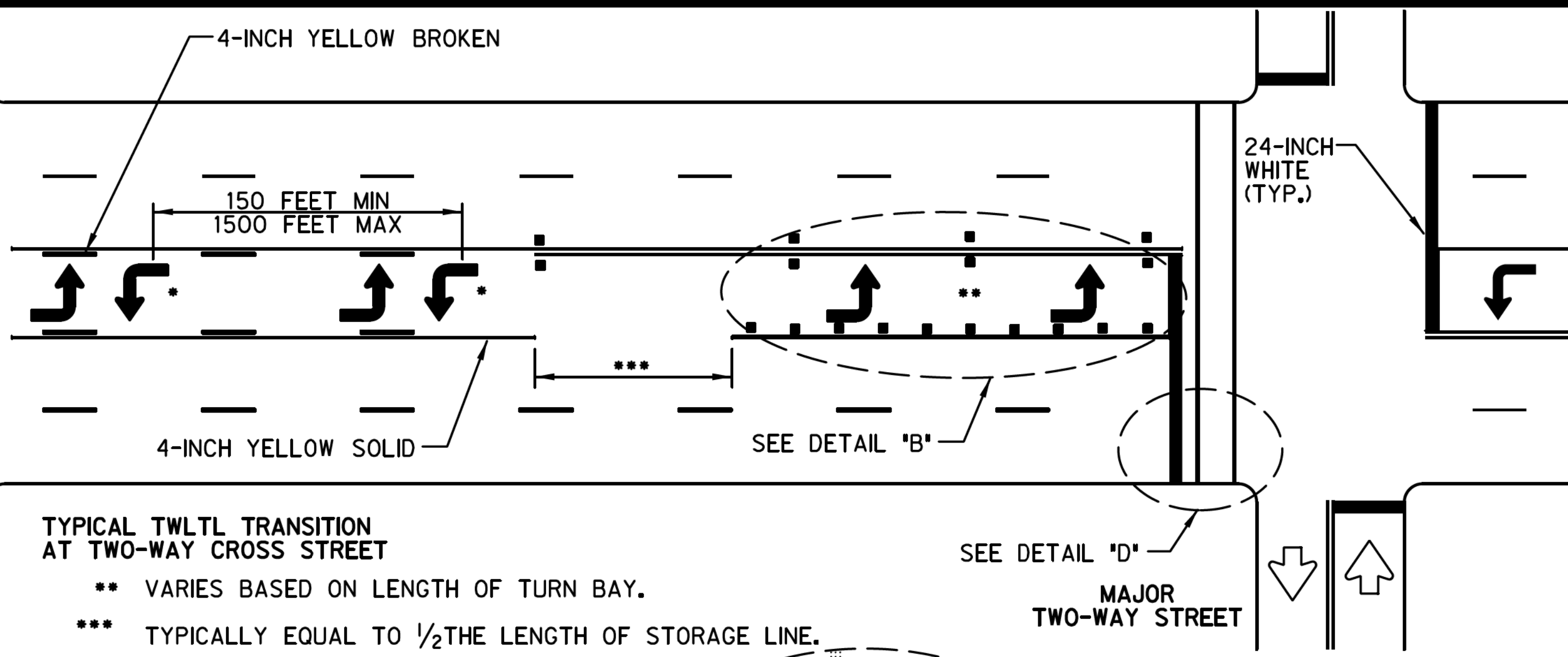
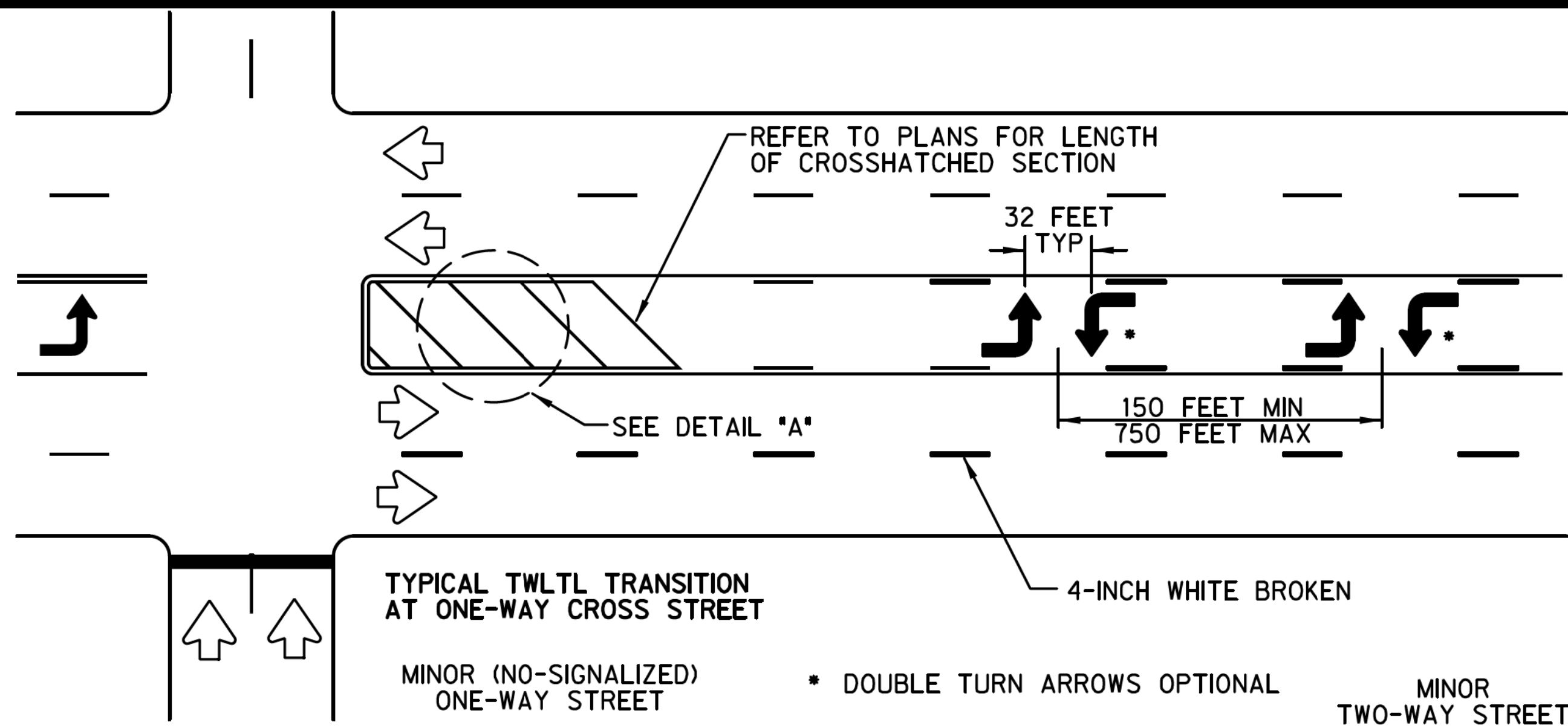


TOWN OF HICKORY CREEK
DENTON COUNTY, TEXAS

DESIGN	DRAWN	CHECK	DATE	SCALE	FILE	NO.
HALFF	HALFF	HALFF	OCT 2012	N.T.S.	P-12	71

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FINAL PLACEMENT OF STOP BAR AND CROSSWALK SHALL BE APPROVED BY THE ENGINEER IN THE FIELD.

GENERAL NOTES

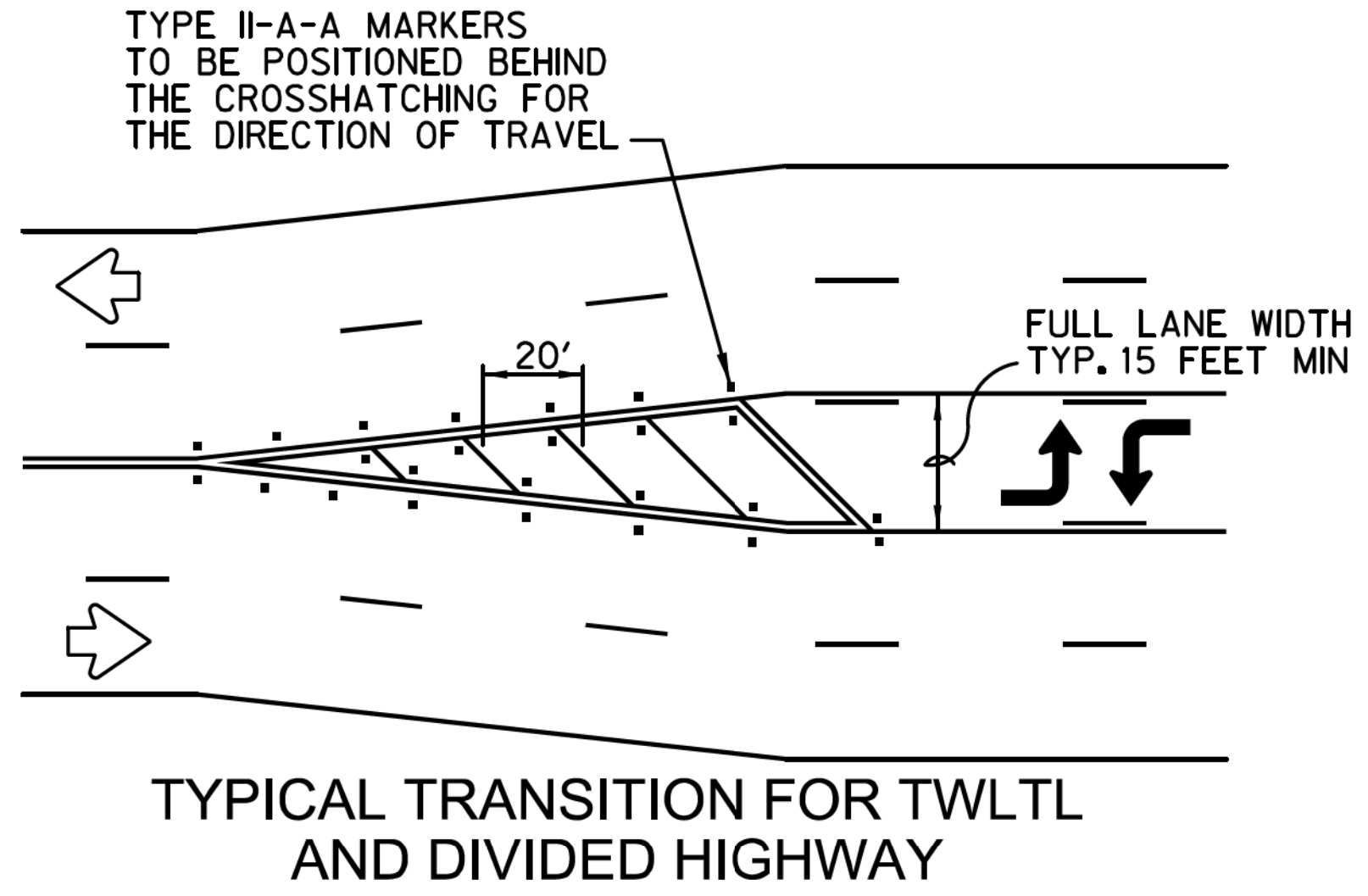
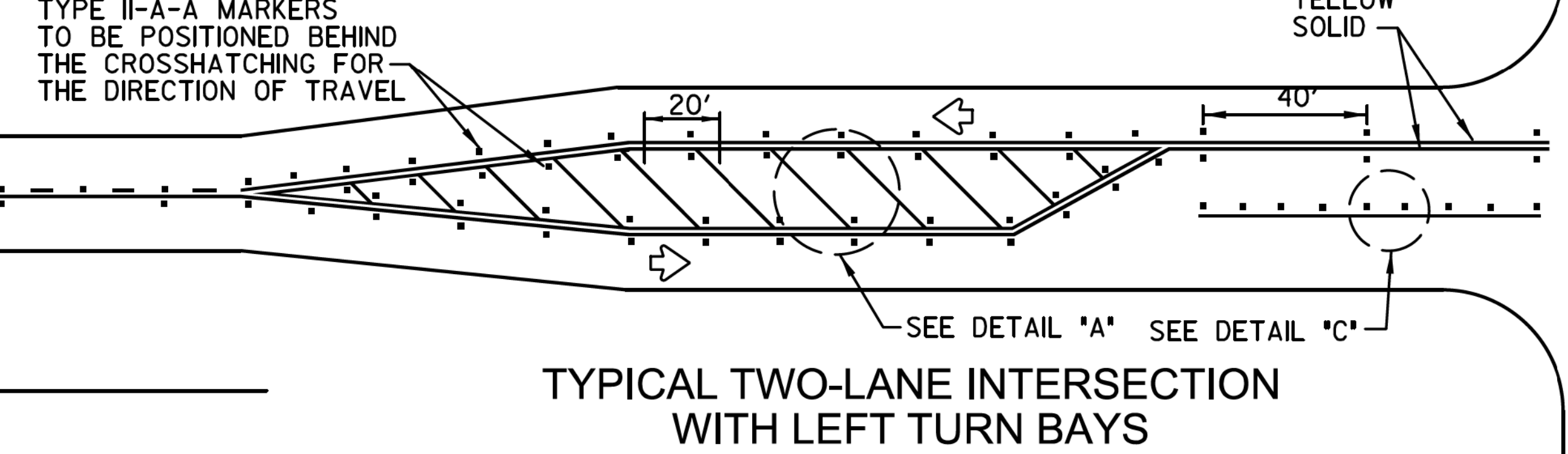
Refer elsewhere in plans for additional RPM placement and details. Details for words and arrows as shown on other sheets.

All pavement marking materials shall meet the Texas Department of Transportation Material Specifications as specified by the plans.

For a left turn bay less than 100 feet in length two arrows shall be used.

For a left turn bay greater than 100 feet in length three arrows shall be used. Spacing to be determined by Engineer.

Other crosswalk patterns as shown in the 'Texas Manual on Uniform Traffic Control Devices' may be used.



SPECIFICATION REFERENCE TABLE - MATERIAL SPECIFICATIONS

PAVEMENT MARKERS (REFLECT.)	DMS-4200
EPOXY	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130

CERTIFICATION:

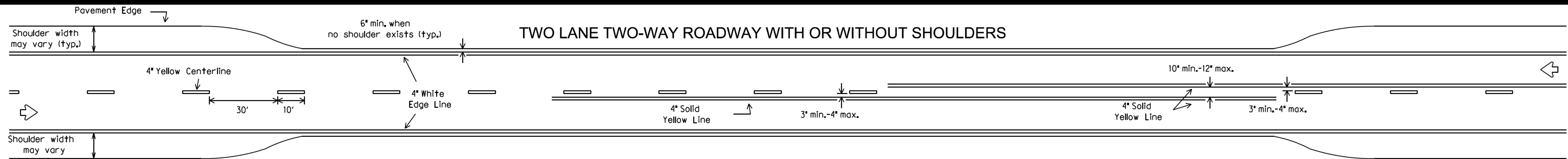
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PAVEMENT MARKING STANDARD DETAILS

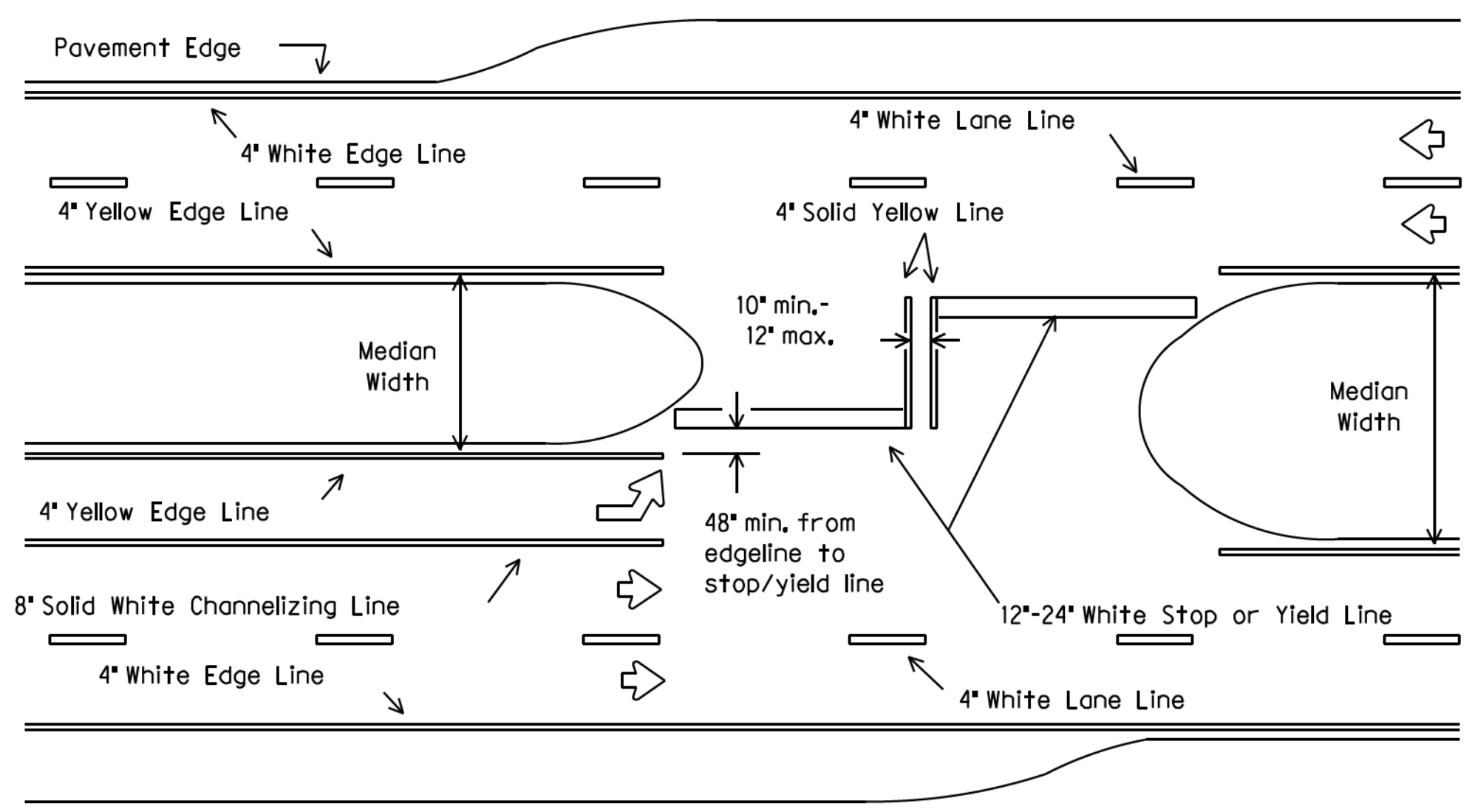
TWO-WAY LEFT TURN LANES AND LEFT TURN BAYS

TOWN OF HICKORY CREEK DENTON COUNTY, TEXAS

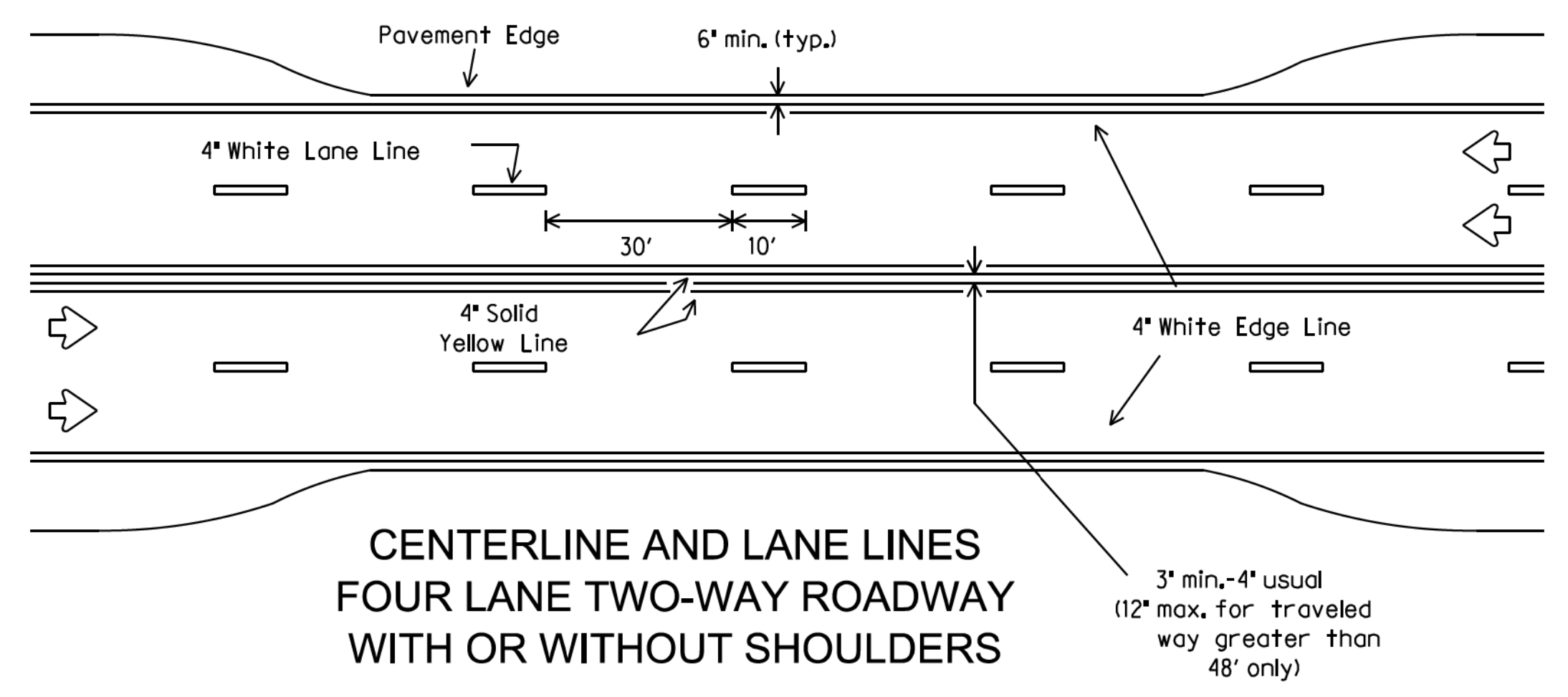
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HALFF	HALFF	HALFF	OCT 2012	N.T.S.	P-13	72



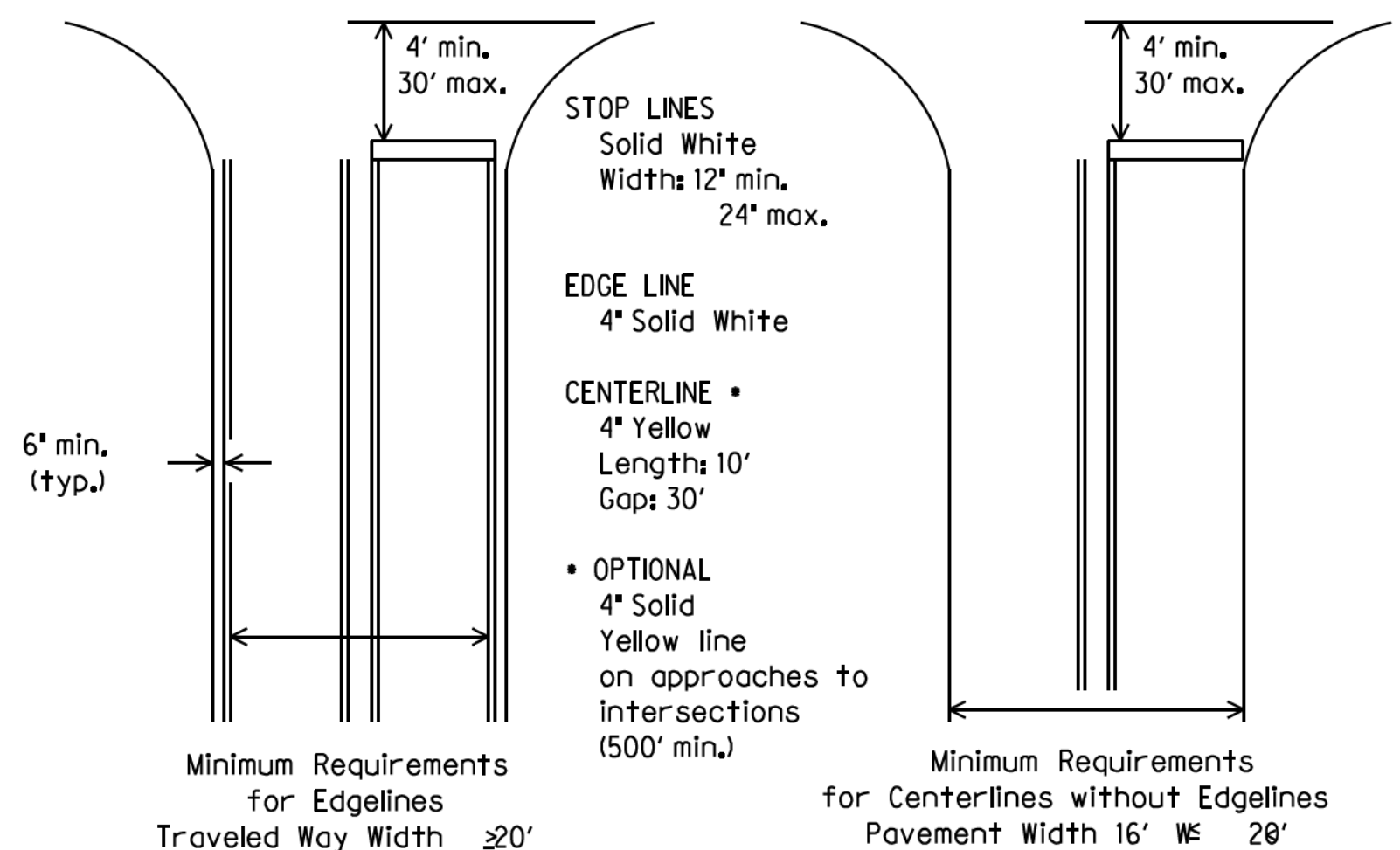
FOUR LANE DIVIDED ROADWAY INTERSECTIONS



All medians shall be field measured to determine the location of necessary striping, Stop/Yield bars and centerlines shall be placed when the median width is greater than 30 ft. The median width is defined as the area between two roadways of a divided highway measured from edge of traveled way to edge of traveled way. The median excludes turn lanes. The median width might be different between intersections, interchanges and of opposite approaches of the same intersection. The narrow median width will be the controlling width to determine if markings are required.

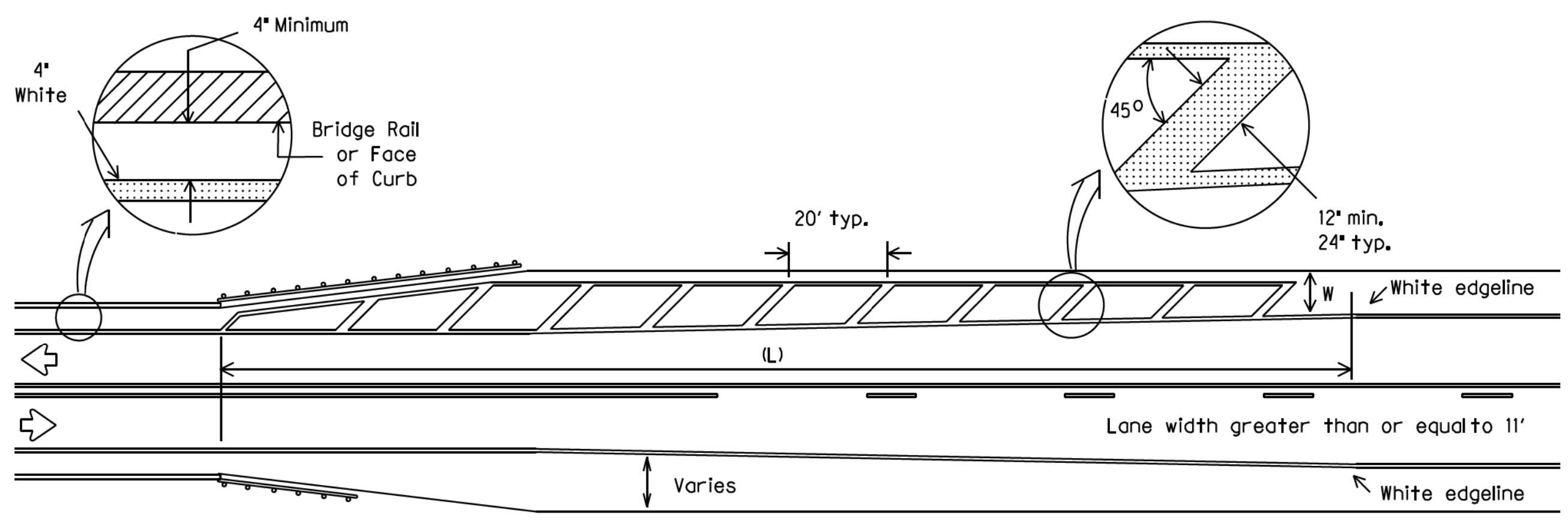


**CENTERLINE AND LANE LINES
FOUR LANE TWO-WAY ROADWAY
WITH OR WITHOUT SHOULDERS**



**GUIDE FOR PLACEMENT OF STOP LINES,
EDGE LINE & CENTERLINE**
Based on Traveled Way and Pavement Widths for Undivided Highways

**ROADWAYS WITH REDUCED SHOULDER
WIDTHS ACROSS BRIDGE OR CULVERT**



- NOTES:**
- No-passing zone on bridge approach is optional but if used, it shall be a minimum 500 feet long.
 - For crosshatching length (L) see Table 1.
 - The width of the offset (W) and the required crosshatching width is the full shoulder width in advance of the bridge.
 - The crosshatching should be required if the shoulder width in advance of the bridge is 4 foot or wider and any reduction in shoulder width across the bridge occurs.
 - For guard fence details, refer elsewhere in the plans.

TABLE 1 - TYPICAL LENGTH (L)

Posted Speed *	Formula
30, 35, 40	$L = \frac{WS^2}{60}$
45, 50, 55, 60, 65, 70	$L = WS$

85th Percentile Speed may be used on roads where traffic speeds normally exceed the posted speed limit. Crosshatching length should be rounded up to nearest 5 foot increment.

L=Length of Crosshatching (FT.) W=Width of Offset (FT.) S=Posted Speed (MPH)

EXAMPLES:

An 8 foot shoulder in advance of a bridge reduces to 4 feet on a 70 MPH roadway. The length of the cross-hatching should be:
 $L = 8 \times 70 = 560$ ft.

A 4 foot shoulder in advance of a bridge reduces to 2 feet on a 40 MPH roadway. The length of the cross-hatching should be:
 $L = 4(40) / 2 / 60 = 106.67$ ft. rounded to 110 ft.

GENERAL NOTES:

Edgeline striping shall be as shown in the plans or as directed by the Engineer. The edgeline should typically be placed a minimum of 6 inches from the edge of pavement. This distance may vary due to pavement raveling or other conditions. Edgelines are not required in curb and gutter sections of roadways.

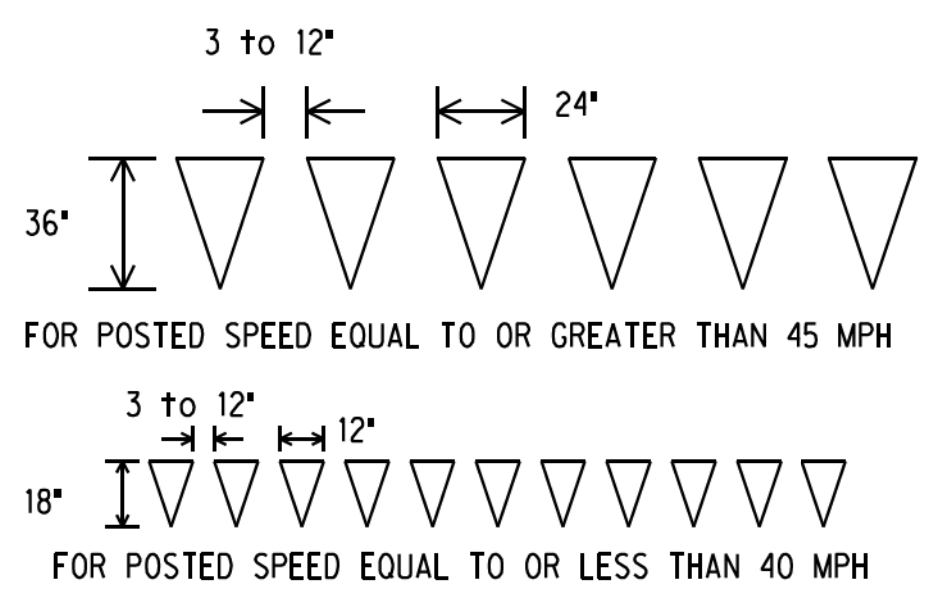
The traveled way includes only that portion of the roadway used for vehicular travel and not the parking lanes, sidewalks, berms and shoulders. The traveled ways shall be measured from the inside of edgeline to inside of edgeline of a two lane roadway.

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.

SPECIFICATION REFERENCE TABLE

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECT.)	DMS-4200
EPOXY	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130

YIELD LINES



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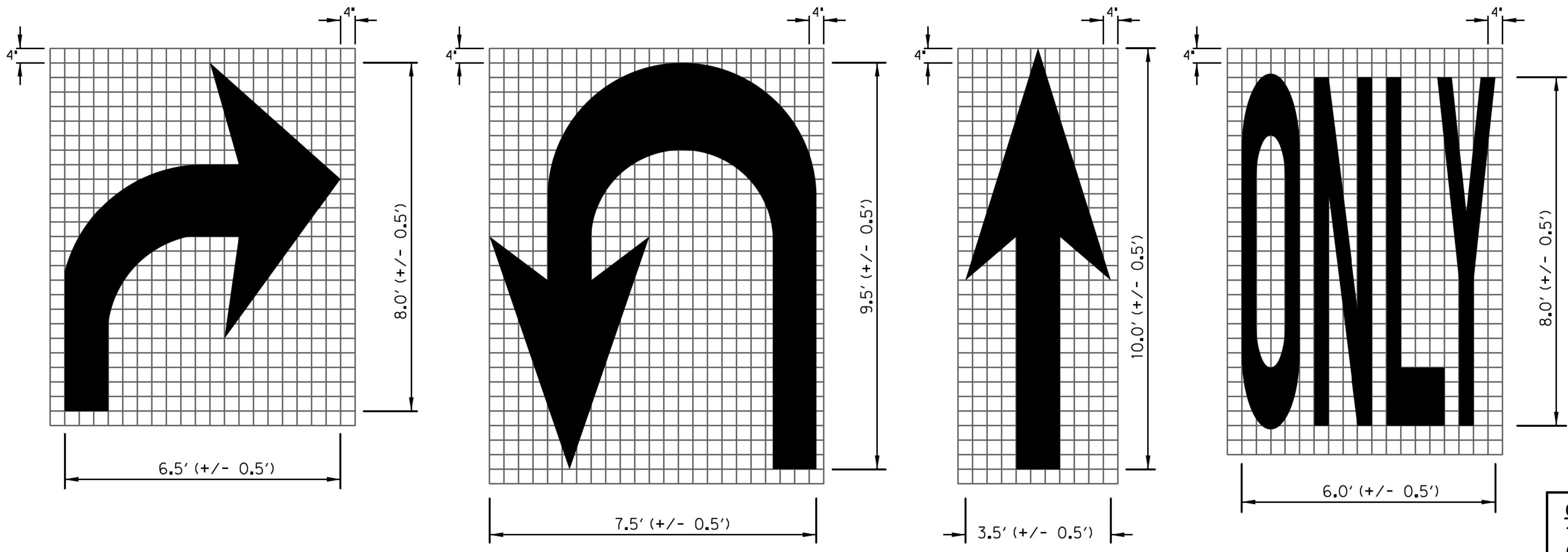
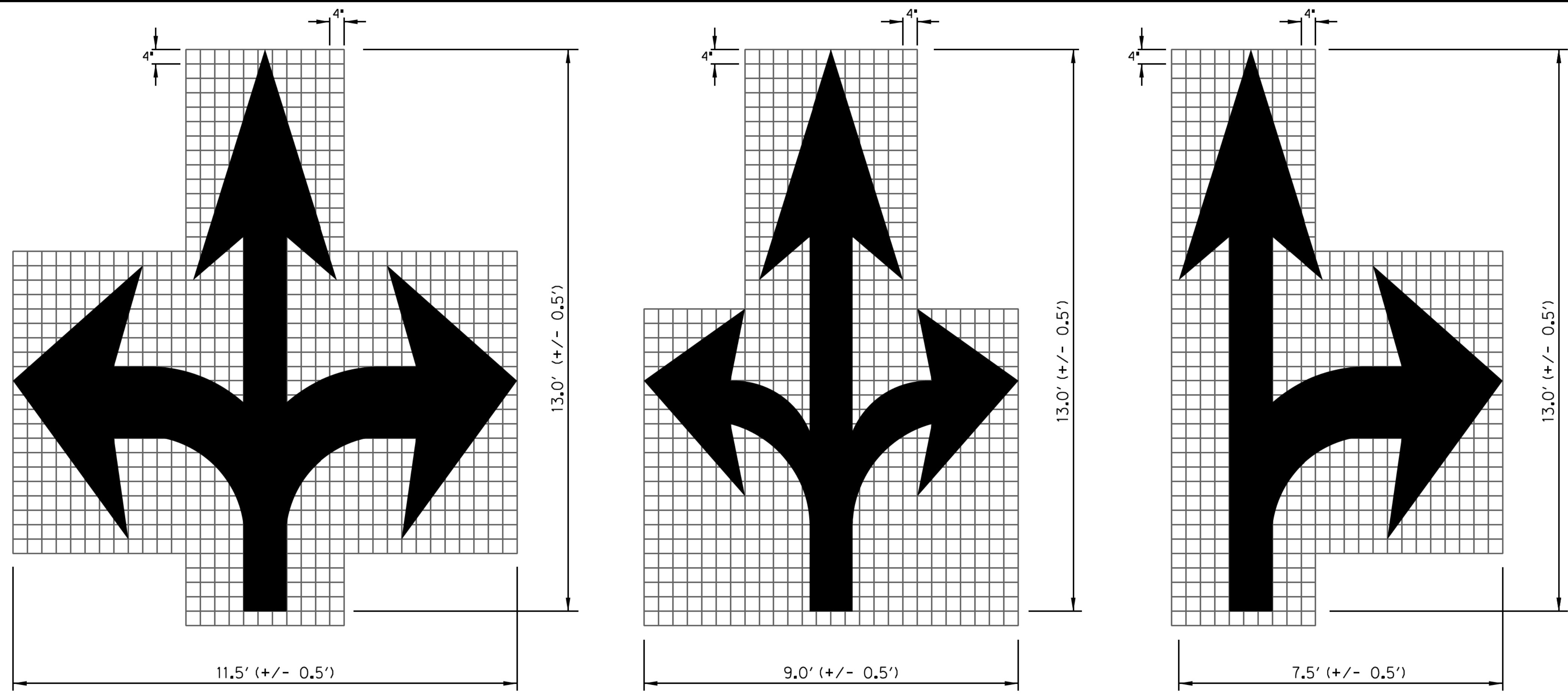
PAVEMENT MARKING STANDARD DETAILS

TYPICAL STANDARD PAVEMENT MARKINGS



**TOWN OF HICKORY CREEK
DENTON COUNTY, TEXAS**

DESIGN	DRAWN	CHECK	DATE	SCALE	FILE	NO.
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- GENERAL NOTES:**
1. Minimum 8 foot white markings should be used, unless otherwise noted. If message consists of more than one word, it should be placed with first word nearest the driver.
 2. These details are standard size for normal installation; sizes may be reduced approximately one-third for low speed urban conditions; larger sizes may be needed for freeways, above average speed conditions or other critical locations.
 3. The longitudinal space between markings should be at least four times the height of the markings, on low speed roads, but should not exceed ten times the height under any condition.
 4. Markings considered appropriate for use when warranted include the following:
 - A. Regulatory
 - STOP
 - RIGHT (LEFT) TURN ONLY
 - 25 MPH
 - SYMBOL ARROWS
 - B. Warning
 - STOP AHEAD
 - SIGNAL AHEAD
 - SCHOOL
 - SCHOOL X-ING
 - PED X-ING
 - R X R (see RCPM standard)
 - C. Guide
 - US XXX
 - ROUTE XXX
 - STATE XXX
 - Other words or symbols may be necessary under certain conditions
 5. Uncontrolled use of pavement markings can result in driver confusion. Word and symbol markings should be no more than three lines.
 6. The word 'STOP' shall not be used on the pavement unless accompanied by a Stop line and Stop sign. The word 'STOP' shall not be placed on the pavement in advance to a stop line, unless every vehicle is required to stop at all times.
 7. Pavement markings should generally be no more than one lane in width, with School messages being the exception. For details of School and School crossing pavement markings, refer to Part VII of the 'Texas Manual on Uniform Traffic Control Devices'.
 8. Spacing between letters should be approximately 4 inches. The width of letters may vary depending on the width of the travel lanes.
 9. Lane-Use arrow markings may be used to convey either guidance or mandatory messages. Arrows used to convey a mandatory movement must be accompanied by standard signs and the pavement marking word 'ONLY'.
 10. Pavement markings are to be located as specified elsewhere in the plans.

SPACING BETWEEN LINES OF PAVEMENT MARKING	
MPH	SPACING
≤ 45	MINIMUM 4 TIMES THE LETTER HEIGHT
> 45	MINIMUM - 4 TIMES THE LETTER HEIGHT MAXIMUM - 10 TIMES THE LETTER HEIGHT

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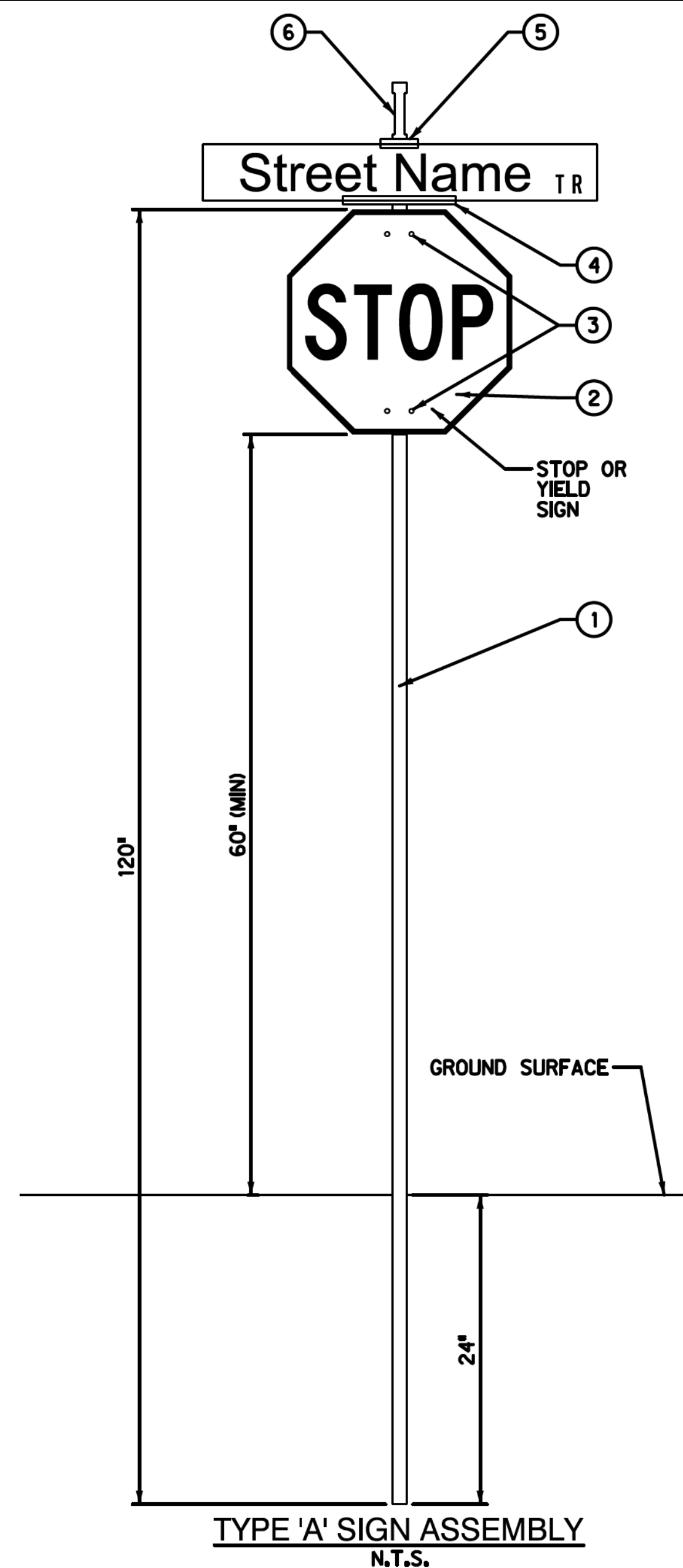
PAVEMENT MARKING STANDARD DETAILS

LEGENDS AND ARROWS

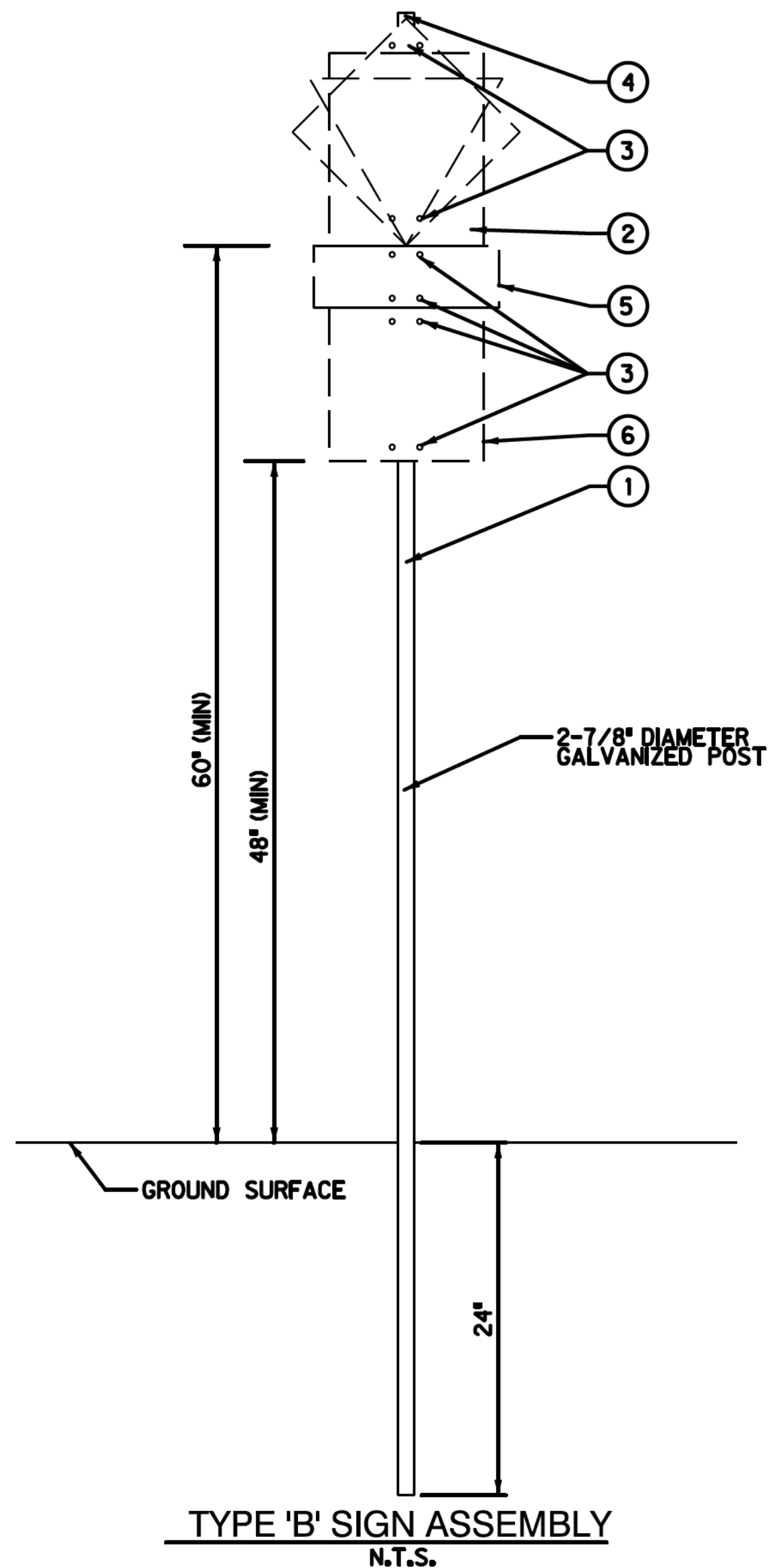


**TOWN OF HICKORY CREEK
 DENTON COUNTY, TEXAS**

DESIGN	DRAWN	CHECK	DATE	SCALE	FILE	NO.
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TYPE 'A' SIGN ASSEMBLY
N.T.S.



TYPE 'B' SIGN ASSEMBLY
N.T.S.



R1-1
30"x30"



R1-2
30"x30"x30"



R2-1
24"x30"

STOP SIGN ASSEMBLY (W/ STREET NAME SIGN ON TOP)		
MATERIALS		QUANTITY
①	10 FOOT (120 INCH) - SIGN POST - 2-7/8" DIAMETER GALVANIZED POST	1
②	24" X 24" OR 30" X 30" STOP SIGN - 0.080" THICK ALUMINUM HIGH INTENSITY PRISMATIC	1
③	3" U-CLAMP	2
④	12" CROSS EXTRUDED BLADE HOLDER	1
⑤	12" CROSS EXTRUDED BLADE HOLDER	1
⑥	9" EXTRUDED BLADE STREET NAME MARKER	1

TRAFFIC SIGN ASSEMBLY		
MATERIALS		QUANTITY
①	10 FOOT (120 INCH) - SIGN POST - 2-7/8" DIAMETER GALVANIZED POST	1
②	TOP TRAFFIC SIGN	1
③	3" U-CLAMP	2
④	2-7/8" DIA. POST CAP W/ 12" EXTRUDED BLADE HOLDER	1
⑤	MIDDLE TRAFFIC SIGN	1
⑥	BOTTOM TRAFFIC SIGN	1

TRAFFIC CONTROL NOTES

- ALL SIGNAGE, BARRICADES, AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST REVISIONS OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THE STANDARD HIGHWAY SIGN DESIGN FOR TEXAS.
- LOCATIONS SHOWN FOR SIGNAGE AND PAVEMENT MARKINGS ARE APPROXIMATE; FINAL LOCATIONS MAY CHANGE DUE TO POST CONSTRUCTION CONDITIONS AND PRESENCE OF OTHER PHYSICAL FEATURES. FINAL LOCATION OF ALL TRAFFIC CONTROL DEVICES SHALL BE FIELD VERIFIED WITH TOWN OF HICKORY CREEK PRIOR TO INSTALLATION.
- ALL PAVEMENT MARKINGS OTHER THAN BUTTONS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED.
- ALL SIGNS SHALL BE DIAMOND GRADE INTENSITY AND THE SIZES SHALL BE STANDARD UNLESS OTHERWISE NOTED.
- ALL TRAFFIC SIGNS, POSTS, AND MATERIALS SHALL BE INSTALLED PER DETAIL ON THIS SHEET.
- FOR STOP SIGNS THAT WILL ACCEPT FUTURE STREET SIGNS, EXTEND POST ABOVE STOP SIGN SO THAT 2 HOLES ARE AVAILABLE FOR MOUNTING. (FOR ALL OTHERS, POST SHALL NOT EXTEND ABOVE SIGN.)
- CHANGES TO TYPICAL SIGN POST LOCATION MADE AT ENGINEER'S DISCRETION.

LOCATION:

-9" EXTRUDED STREET NAME BLADE SHALL BE USED AT ALL INTERSECTIONS.

BLADE REQUIREMENTS:

-BLADES SHALL BE ALUMINUM.

LETTERING ALIGNMENT:

- FOR MAJOR ROADS THE TOWN LOGO SHALL APPEAR AT THE LEFT EDGE.
- STREET NAME SHALL BE LEFT JUSTIFIED & ALIGNED WITH TOWN LOGO
- BLOCK NUMBERS SHALL BE LOCATED IN UPPER RIGHT HAND CORNER AND RIGHT JUSTIFIED.
- ABBREVIATED STREET DESIGNATIONS SHALL BE LOCATED IN THE LOWER RIGHT HAND CORNER AND RIGHT JUSTIFIED.

LETTERING FOR 9" EXTRUDED BLADES:

- FONT SHALL BE CLEAR VIEW 2W
- FOR EACH WORD, THE FIRST LETTER SHALL BE UPPERCASE, 6" TALL AND ALL FOLLOWING LETTERS SHALL BE LOWERCASE.
- LETTERS IN ABBREVIATED STREET DESIGNATIONS SHALL BE 3" TALL AND WITH THE FIRST LETTER UPPERCASE (i.e. Ln, Pkwy, Ct, etc.)
- BLOCK NUMBERS SHALL BE 3" TALL

SIGN SHEETING AND COLORS:

- SHEETING SHALL BE 3M REFLECTIVE COATING.
- BACKGROUND COLOR SHALL BE GREEN WITH WHITE LEGEND TEXT.
- ALL LETTERING SHALL BE WHITE.
- EMBLEM SHALL BE ACQUIRED FROM TOWN OF HICKORY CREEK
- "NO OUTLET" PANEL BACKGROUND SHALL BE YELLOW WITH BLACK LEGEND TEXT.
- "PRIVATE" PANEL BACKGROUND SHALL BE WHITE WITH BLACK LEGEND TEXT.

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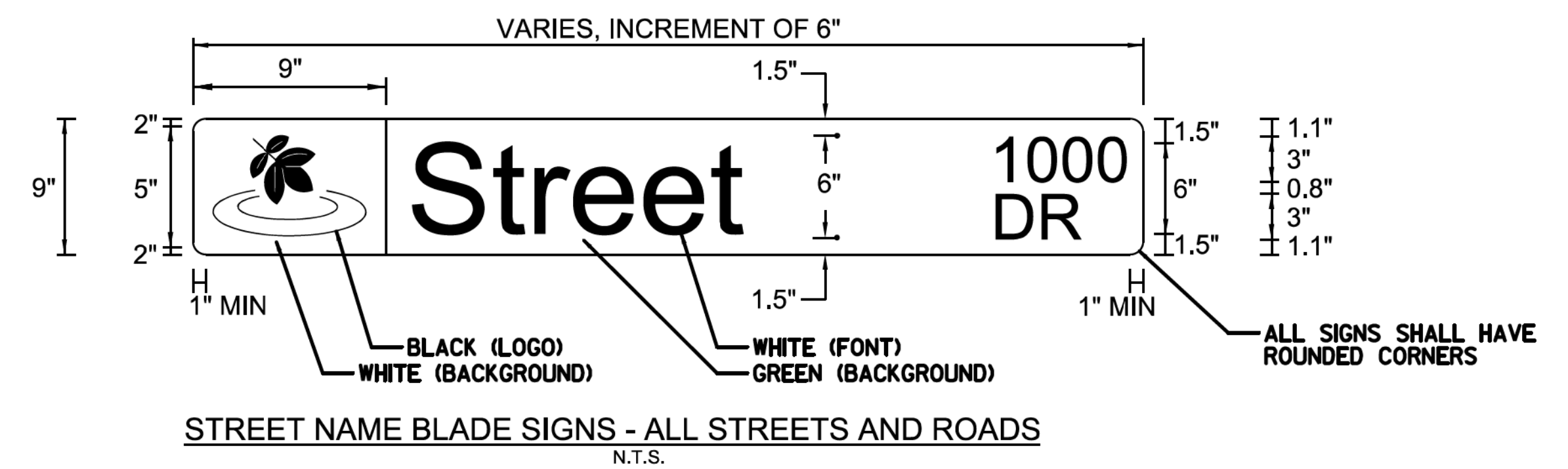
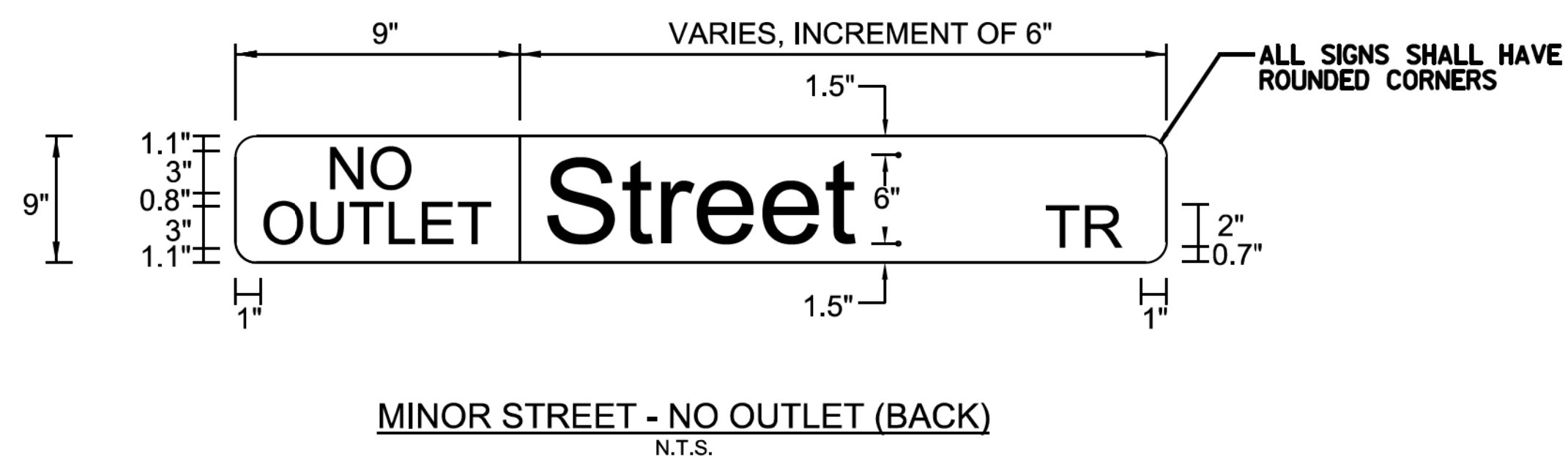
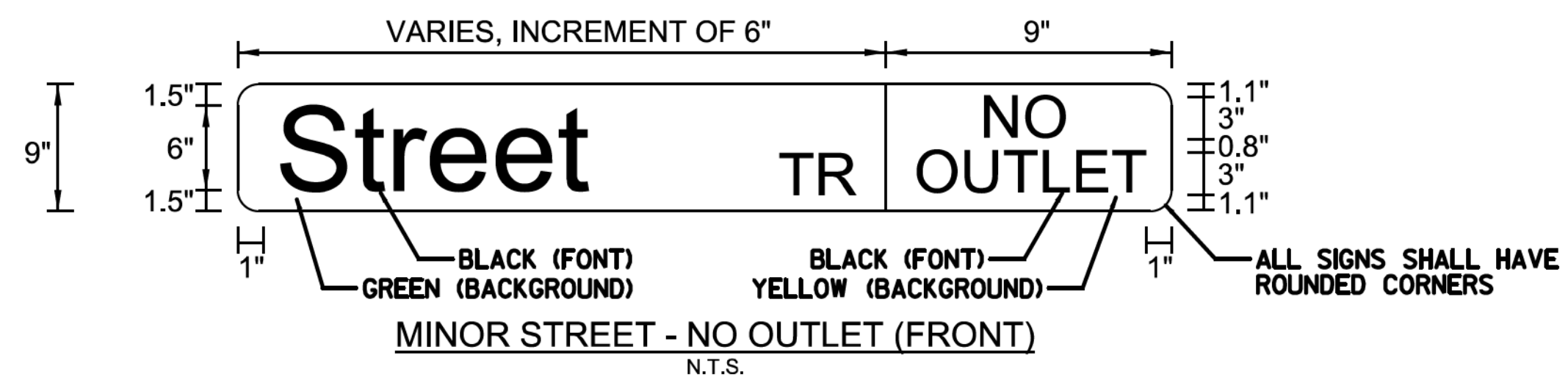
PAVEMENT STANDARD DETAILS


SIGNING DETAILS & TRAFFIC CONTROL NOTES

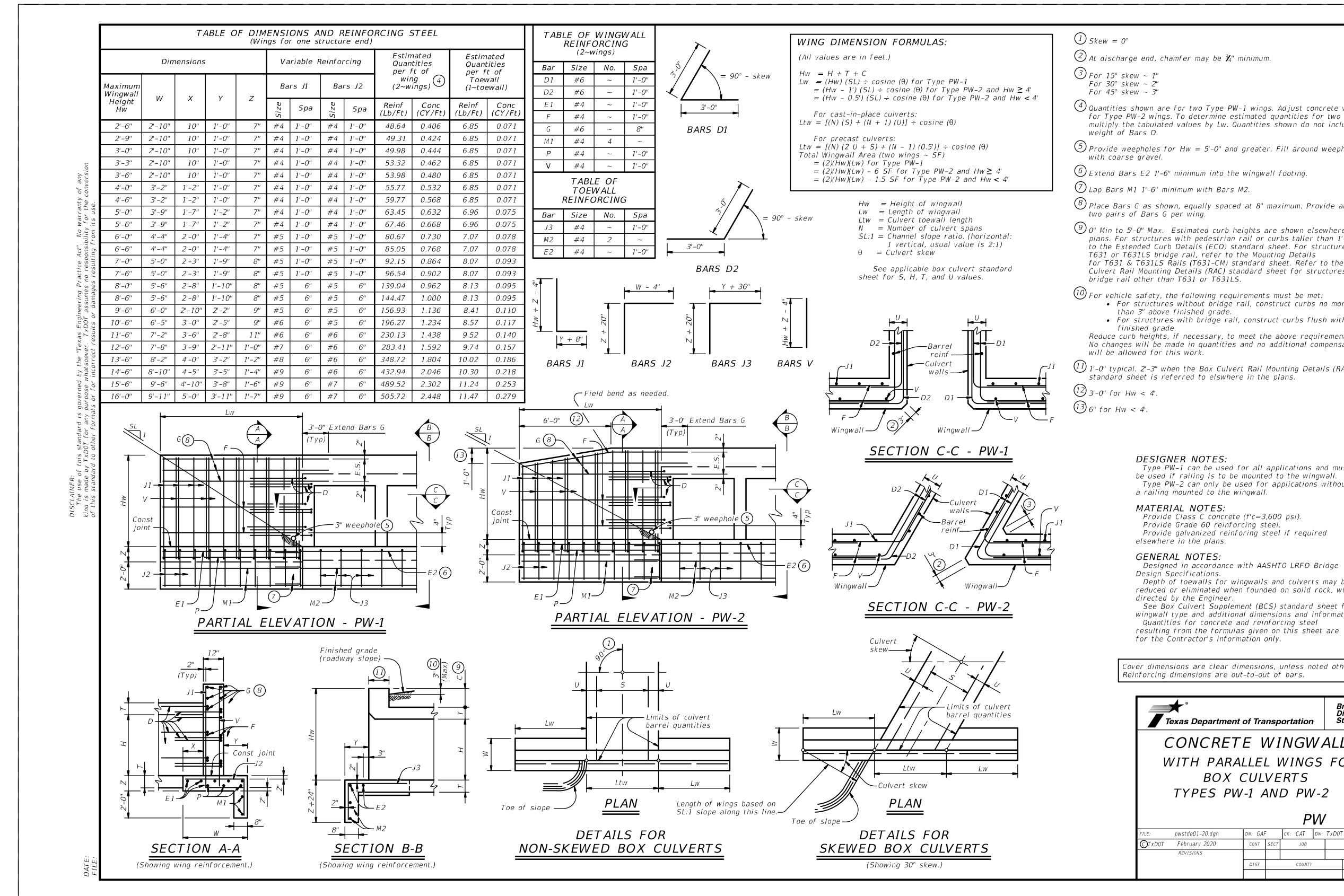
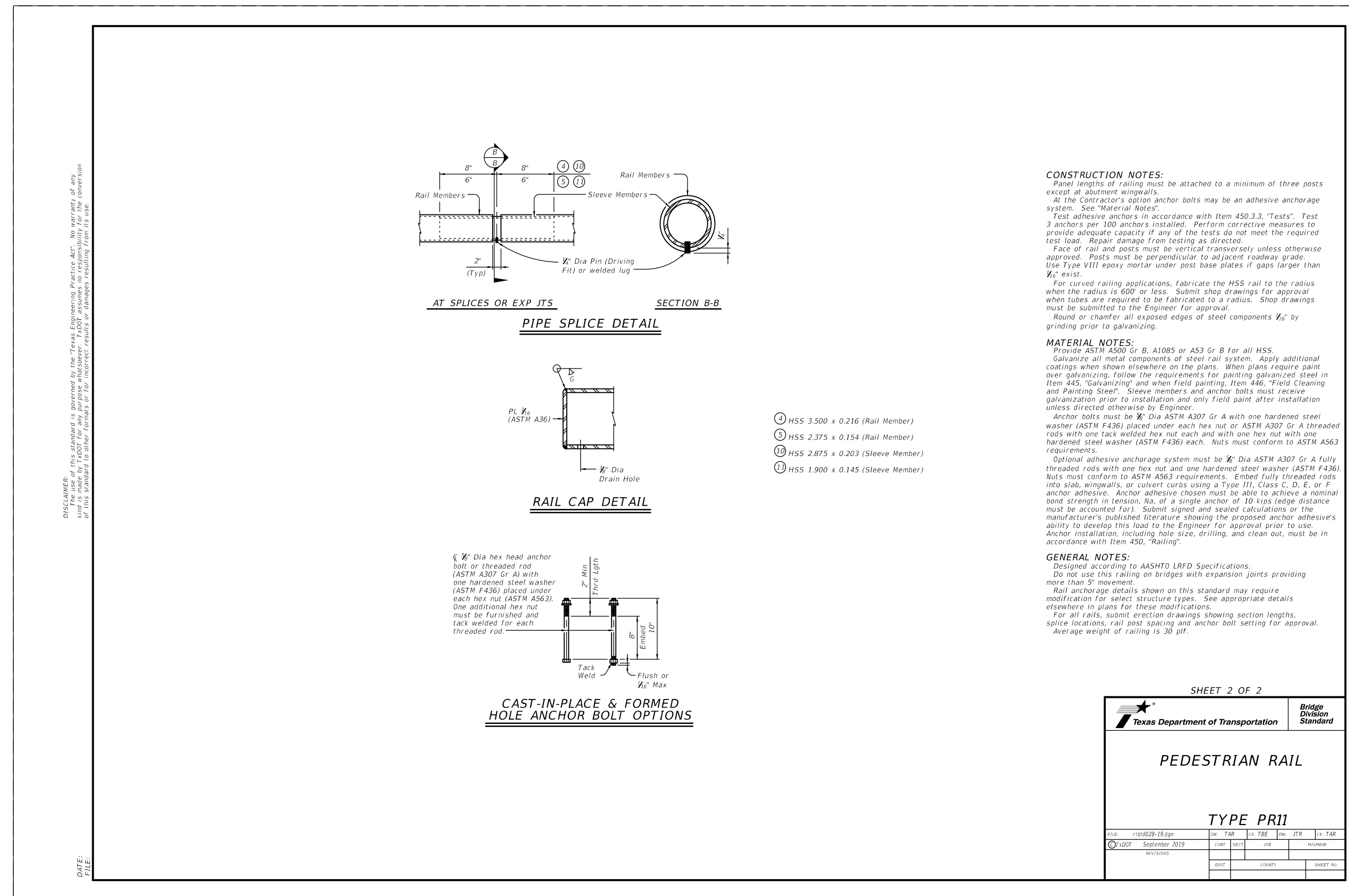
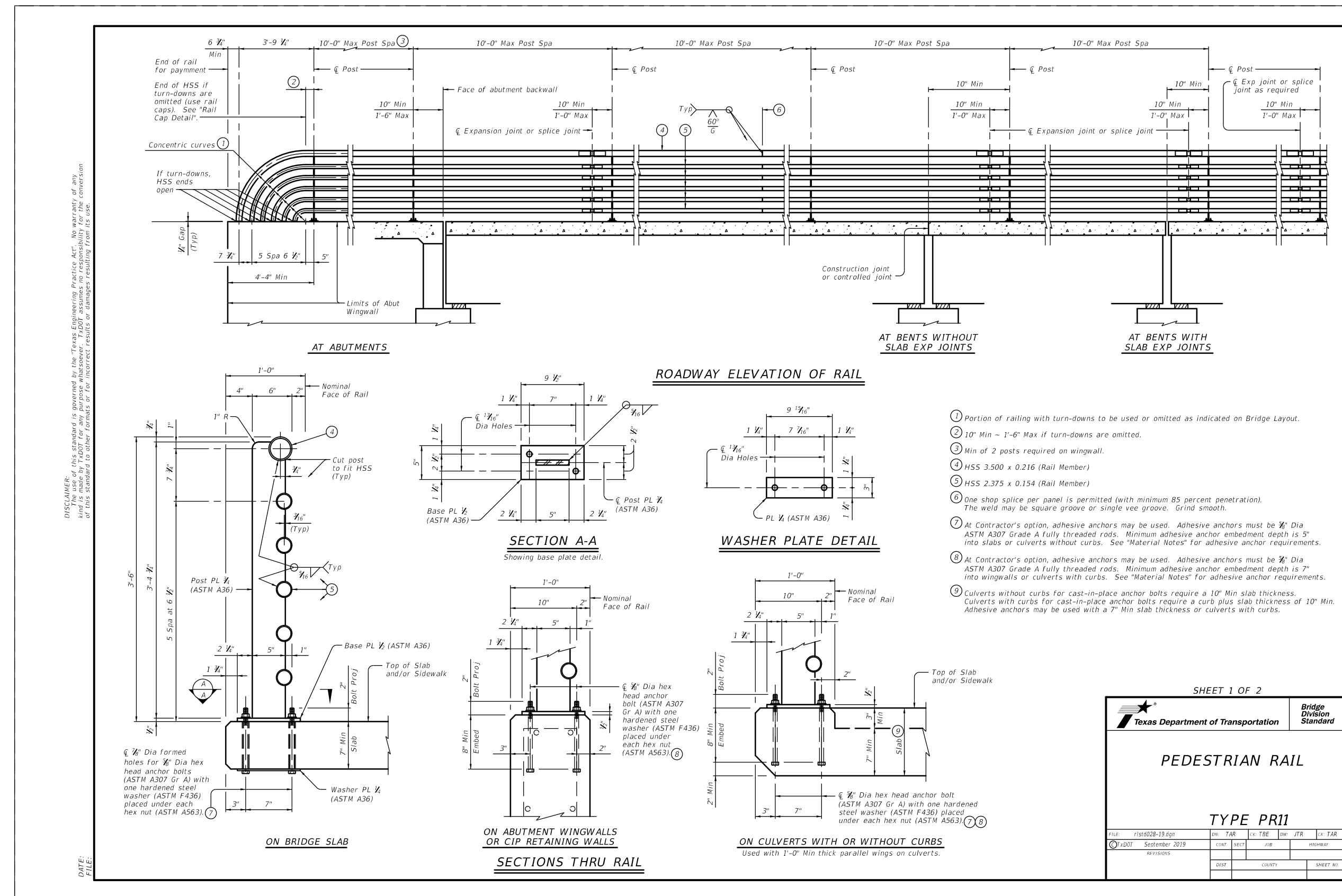


TOWN OF HICKORY CREEK
DENTON COUNTY, TEXAS

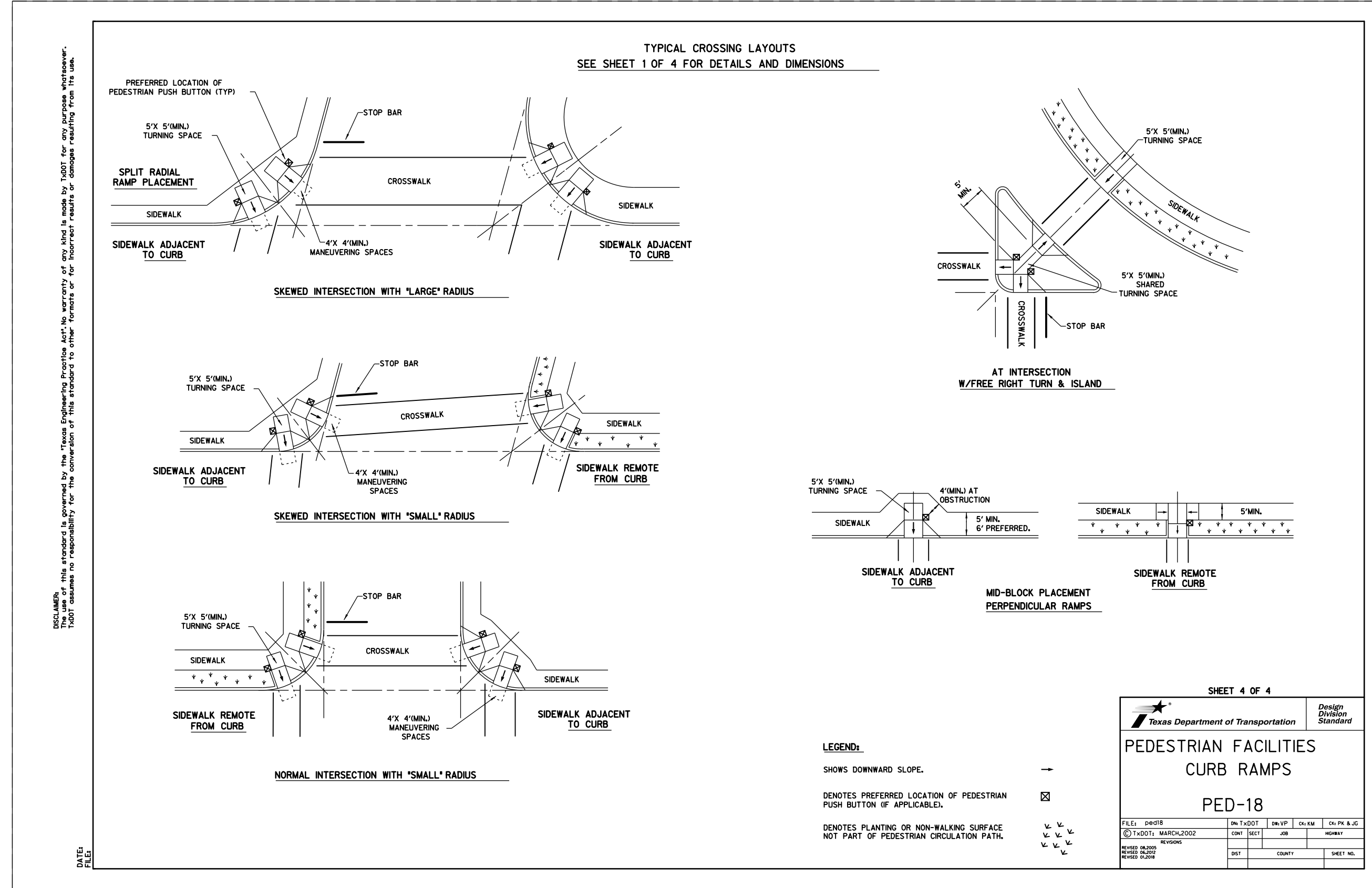
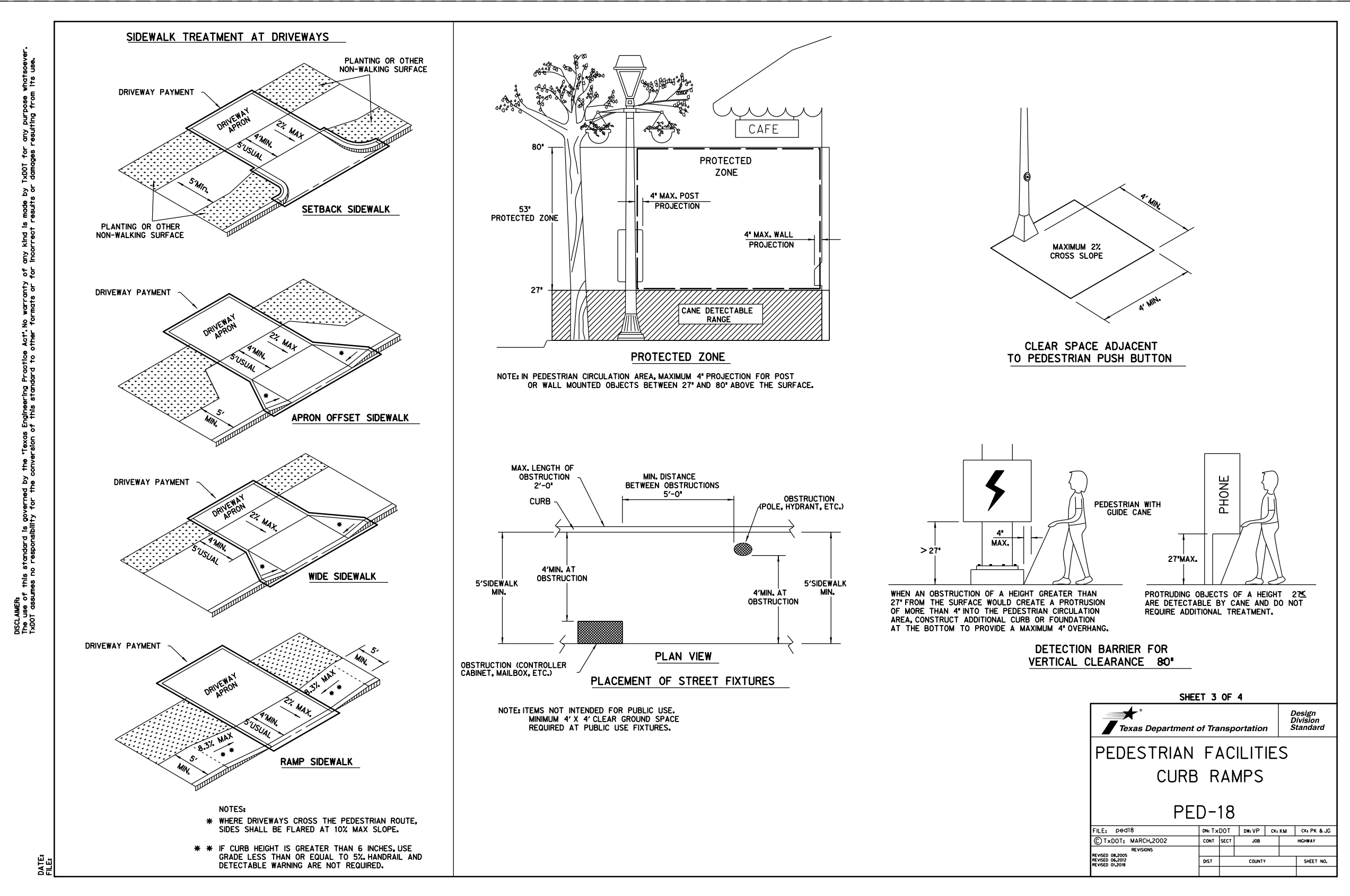
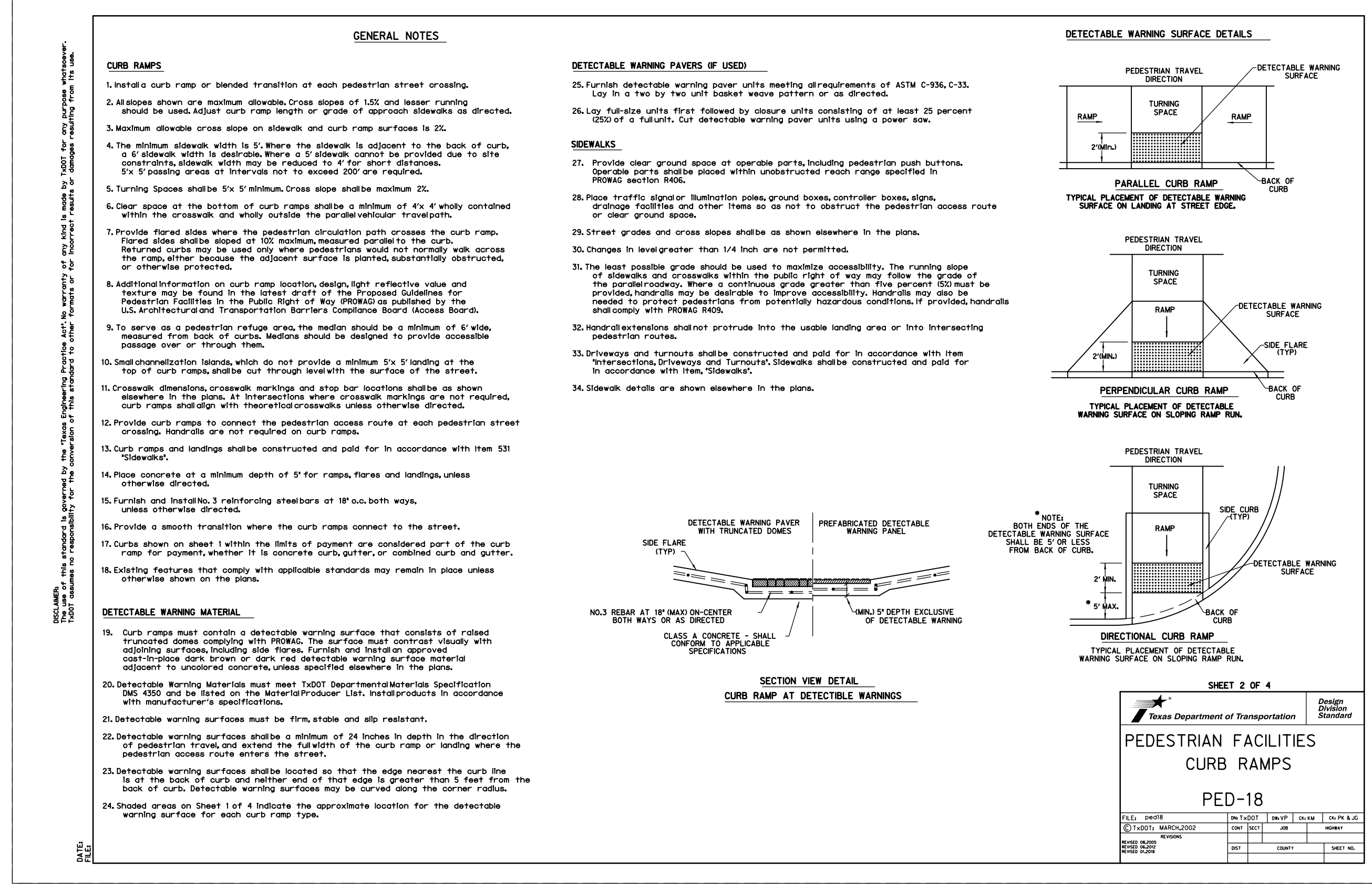
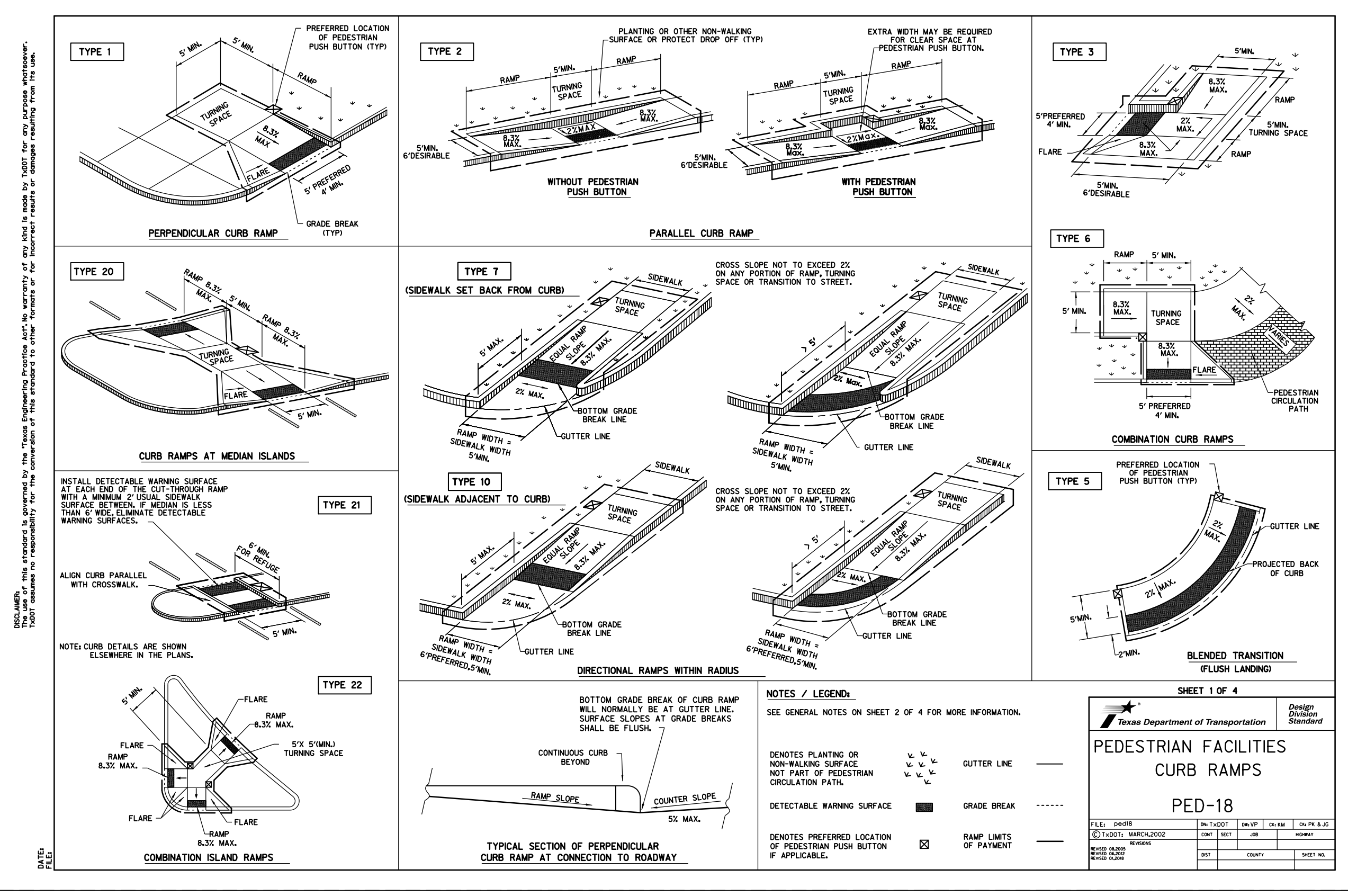
DESIGN	DRAWN	CHECK	DATE	SCALE	FILE	NO.
HALFF	HALFF	HALFF	OCT 2012	N.T.S.	P-16	75

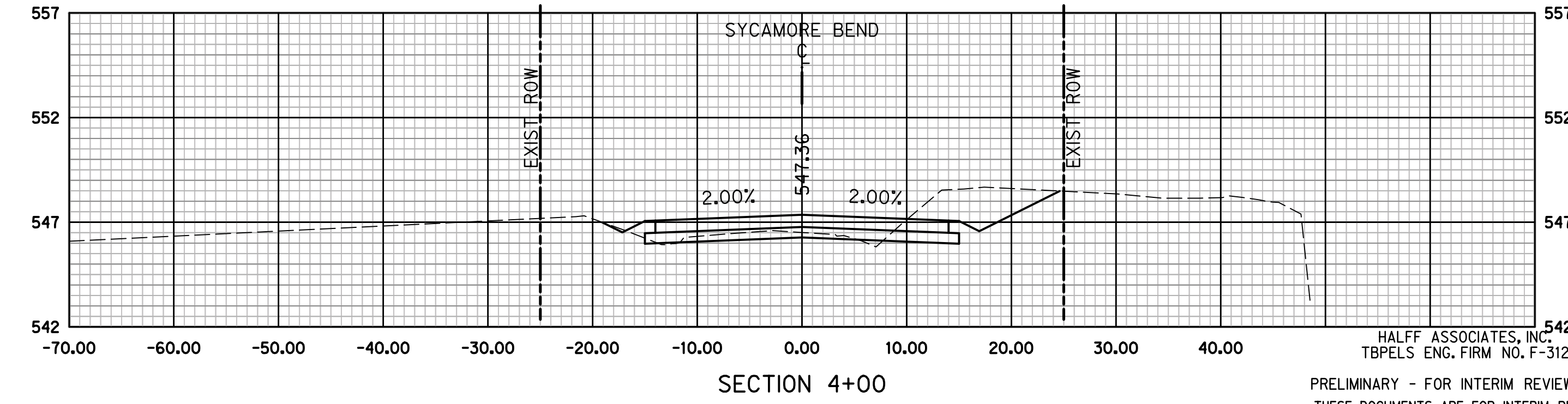
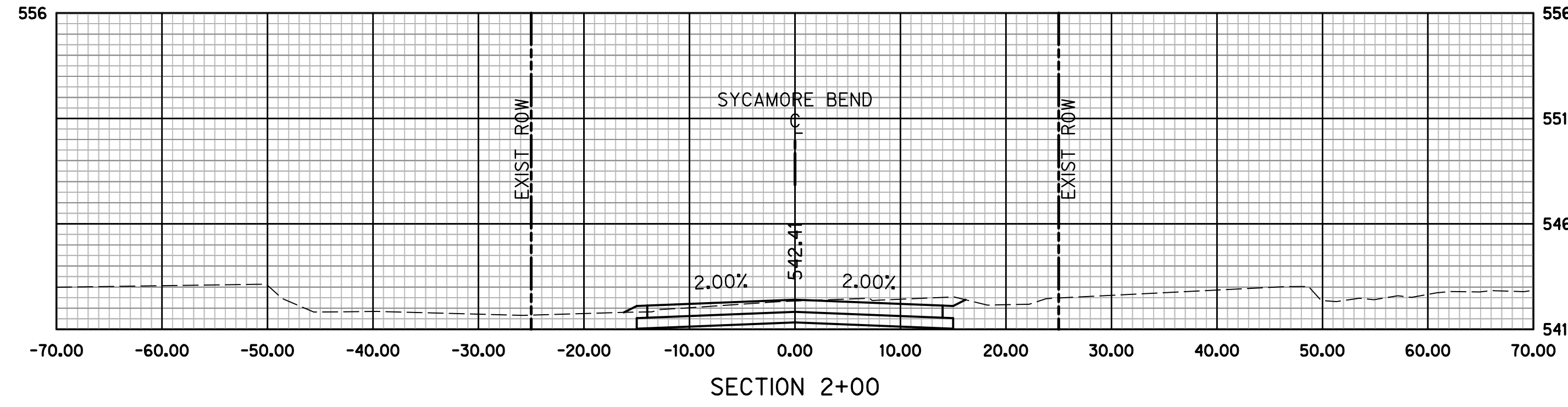
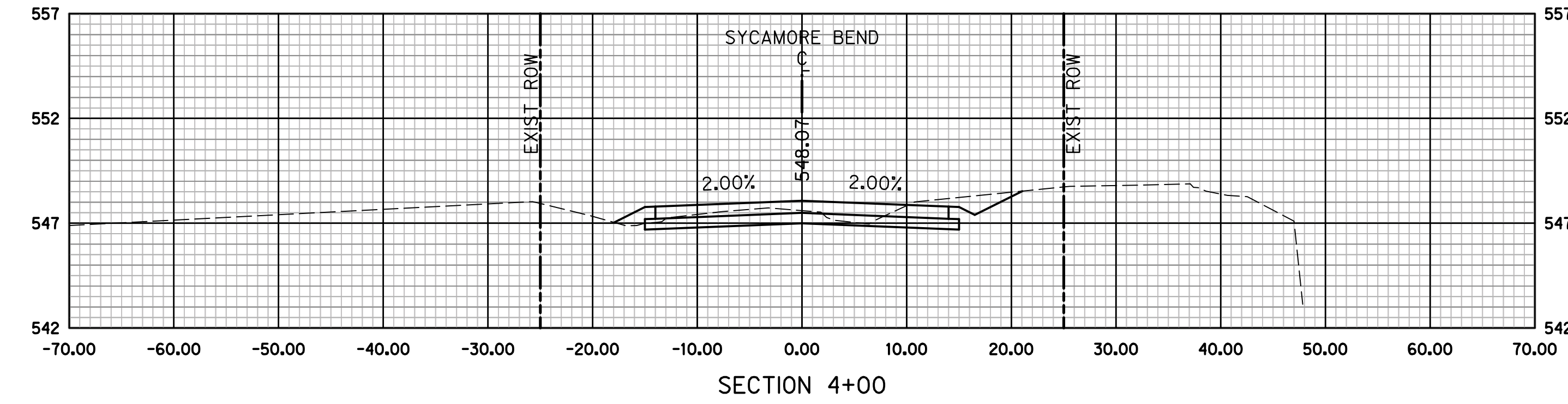
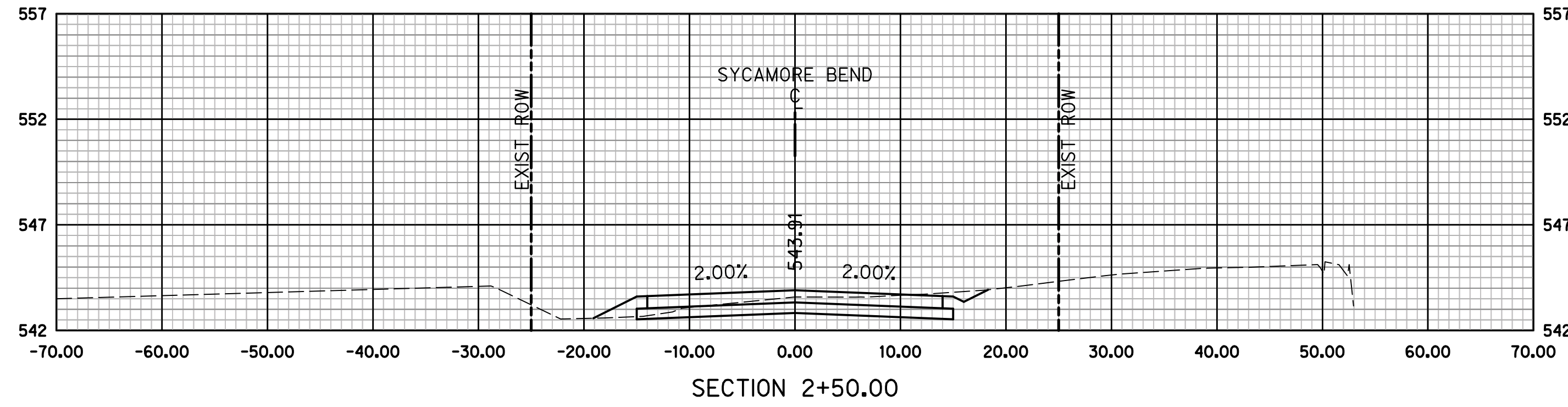
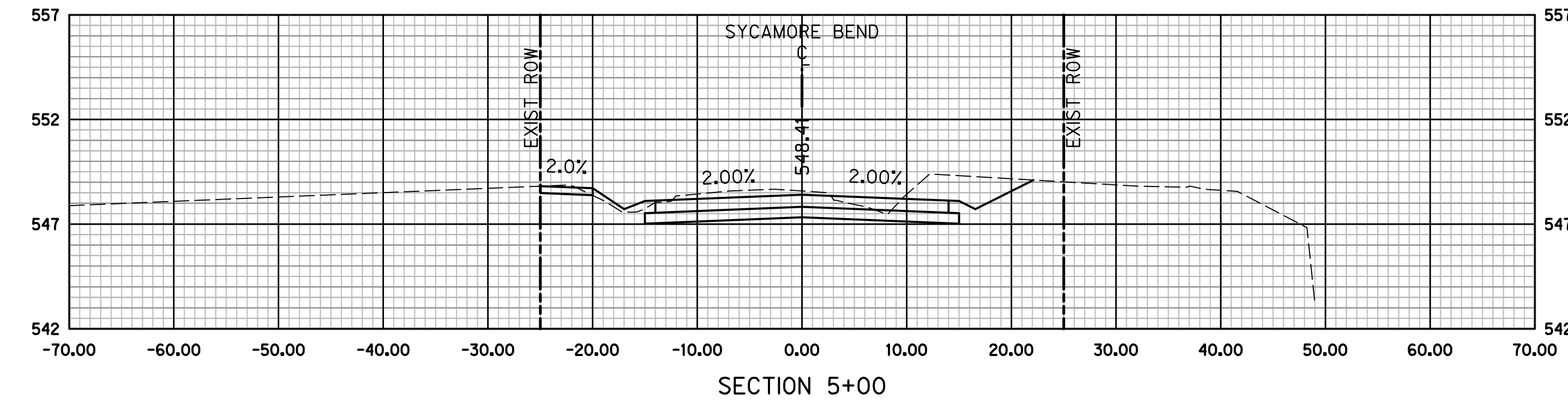
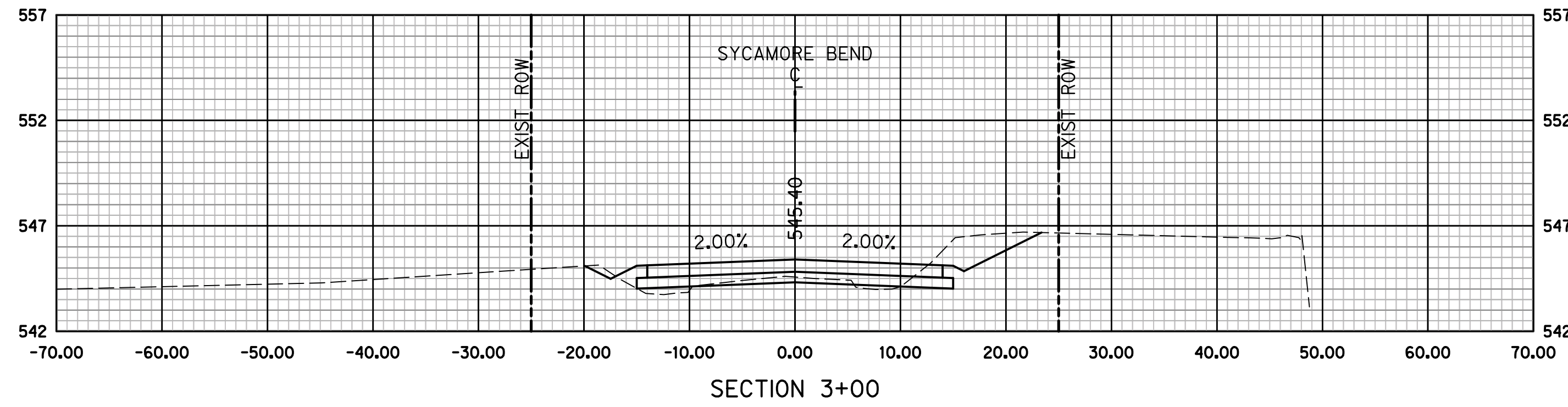
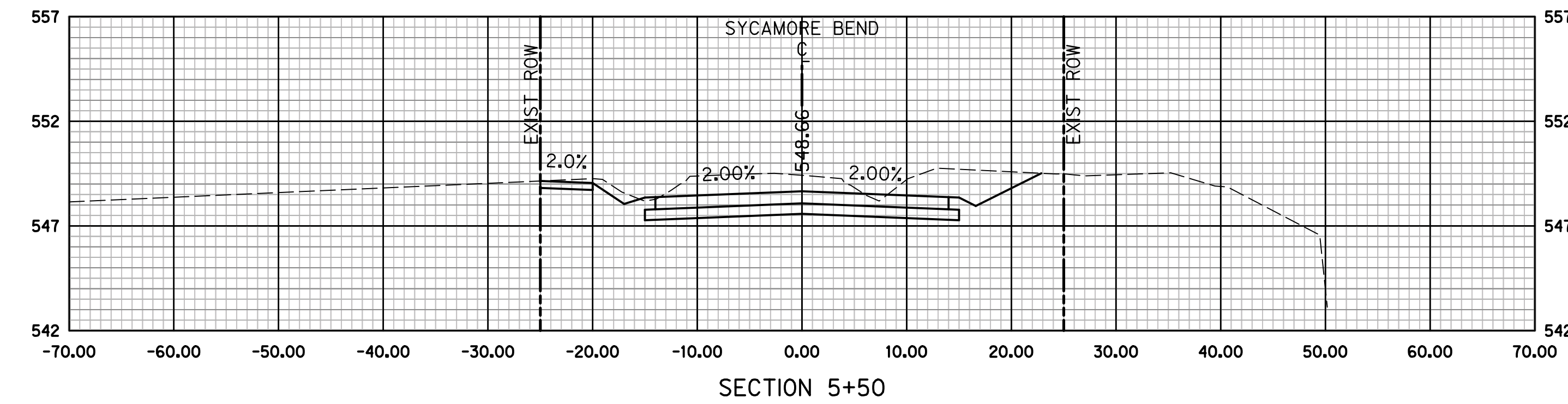
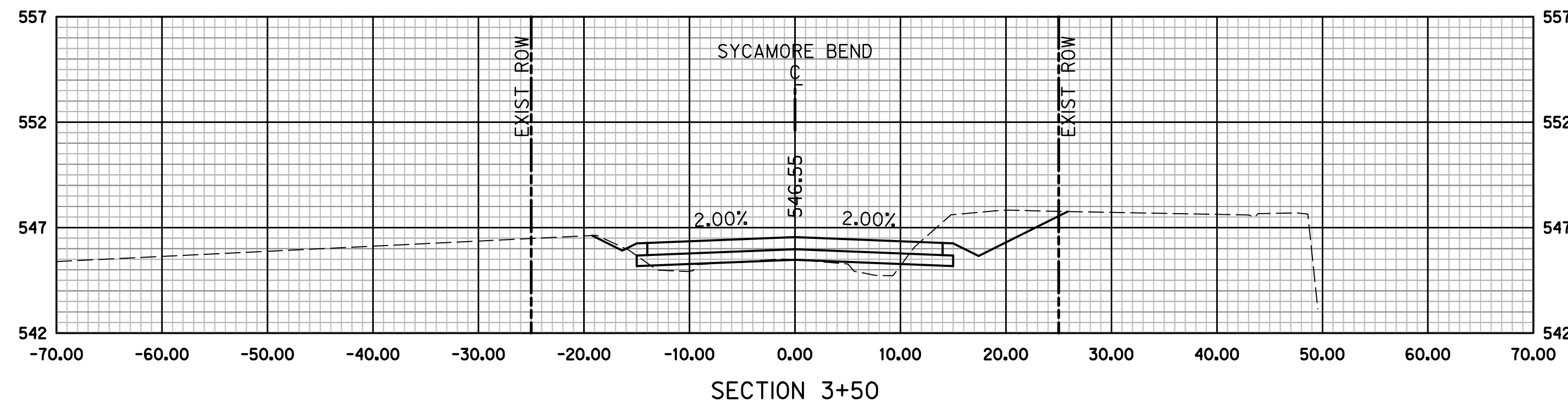


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							SIGNING DETAILS & TRAFFIC CONTROL NOTES						
 <p>TOWN OF HICKORY CREEK DENTON COUNTY, TEXAS</p>							DESIGN	DRAWN	CHECK	DATE	SCALE	FILE	NO.
							HALFF	HALFF	HALFF	OCT 2012	N.T.S.	P-17	76



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 KEVIN J. GRONWALD 130871 1/13/2021
 Name PE# Date





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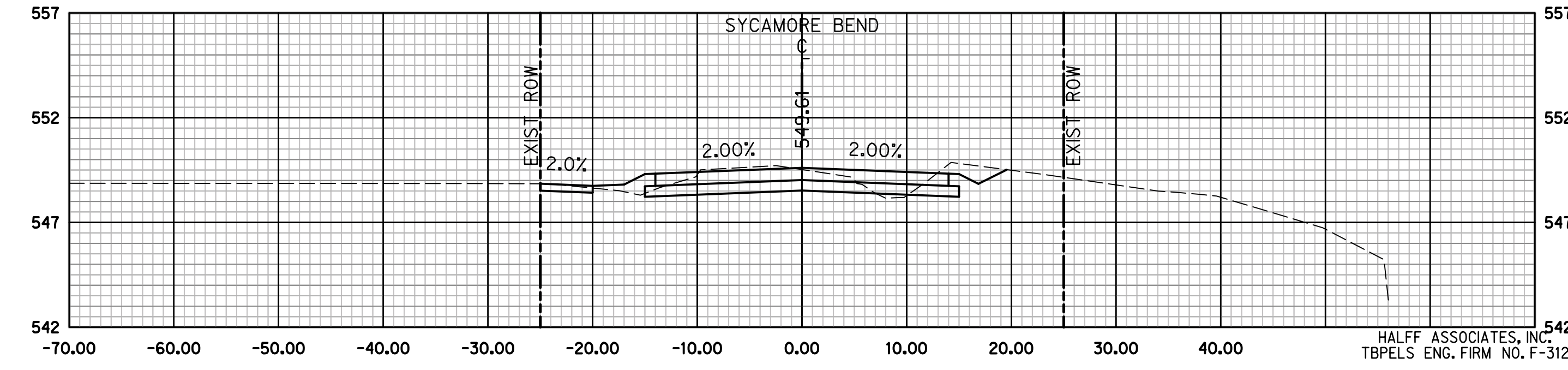
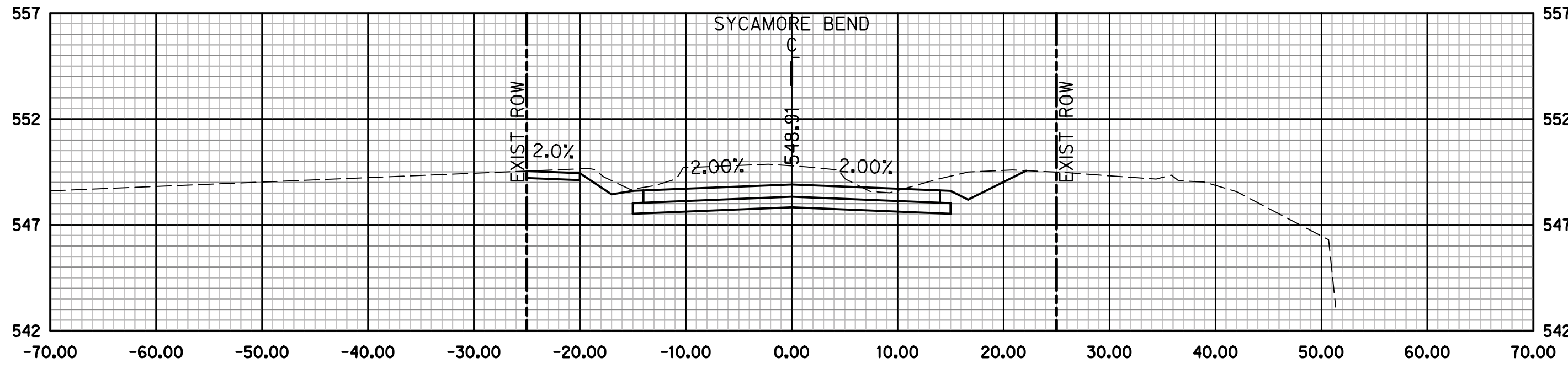
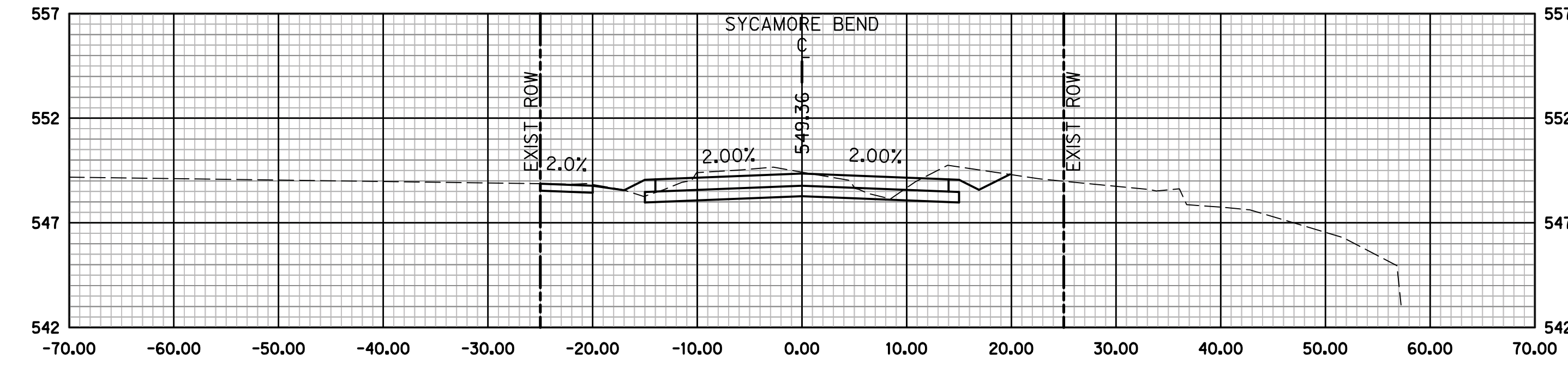
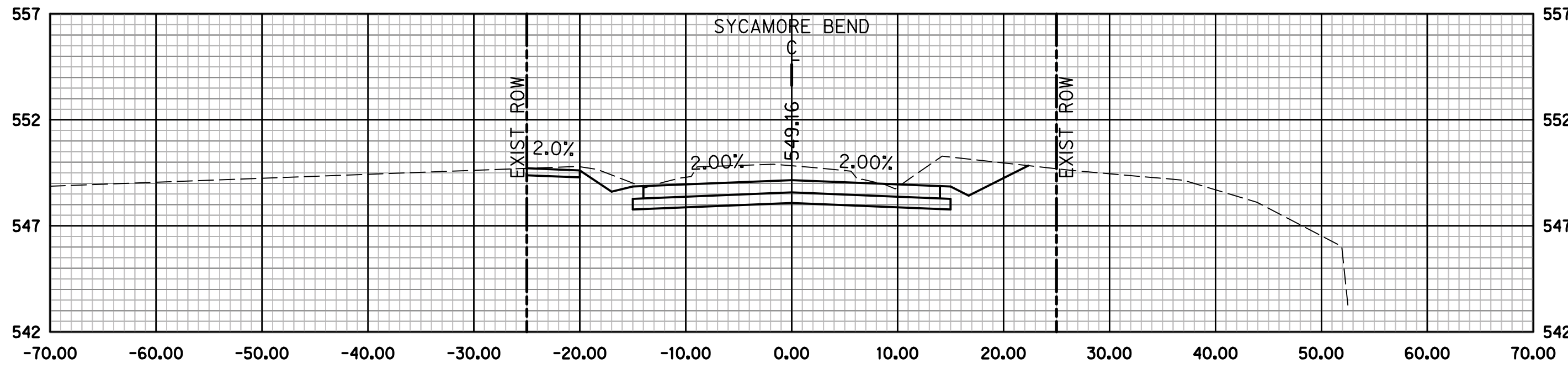
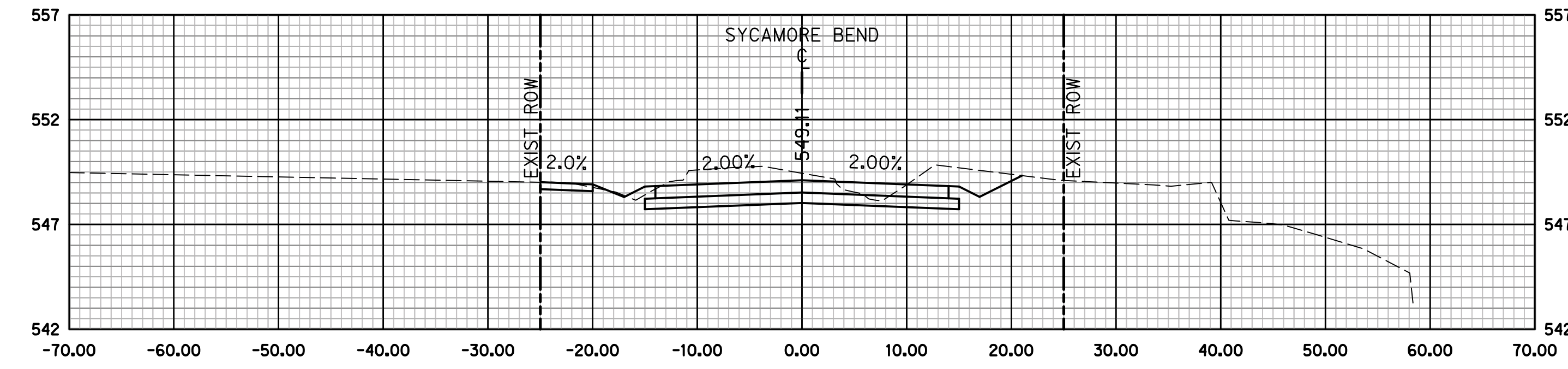
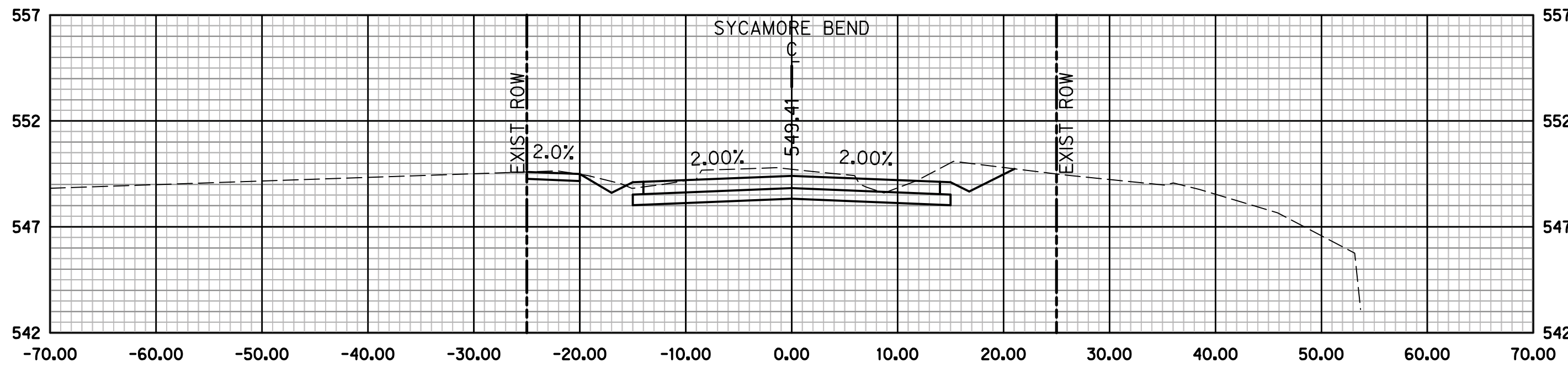
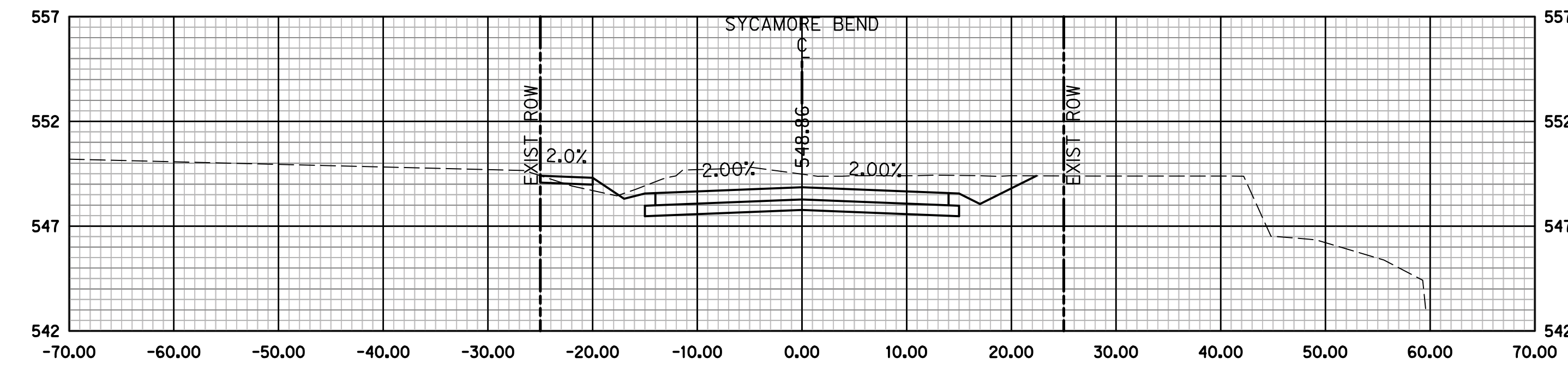
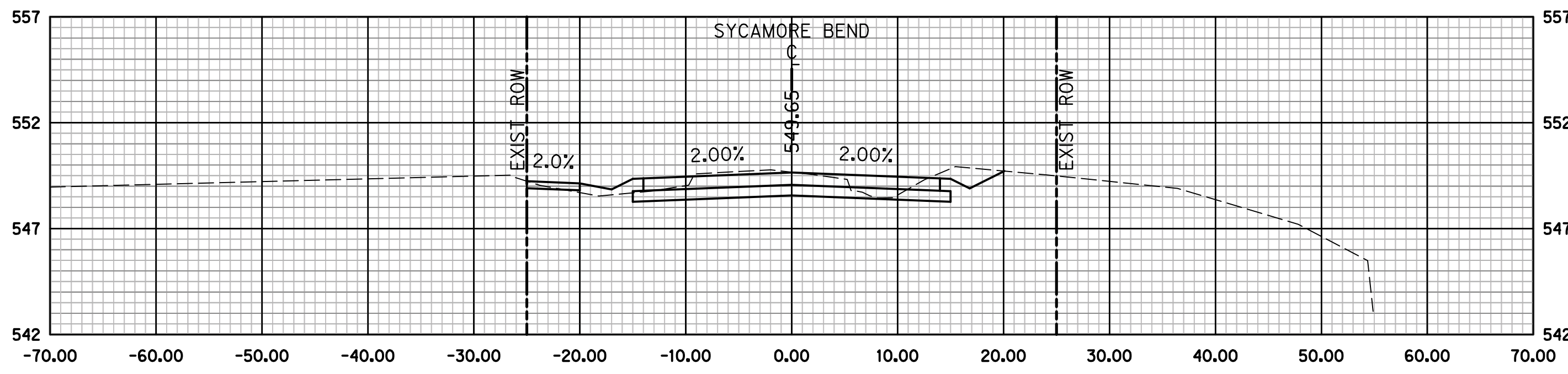
PUBLIC WORKS
TOWN OF HICKORY CREEK

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

CROSS SECTIONS
STA 2+00 TO STA 5+50



JANUARY
2021
SHEET
82



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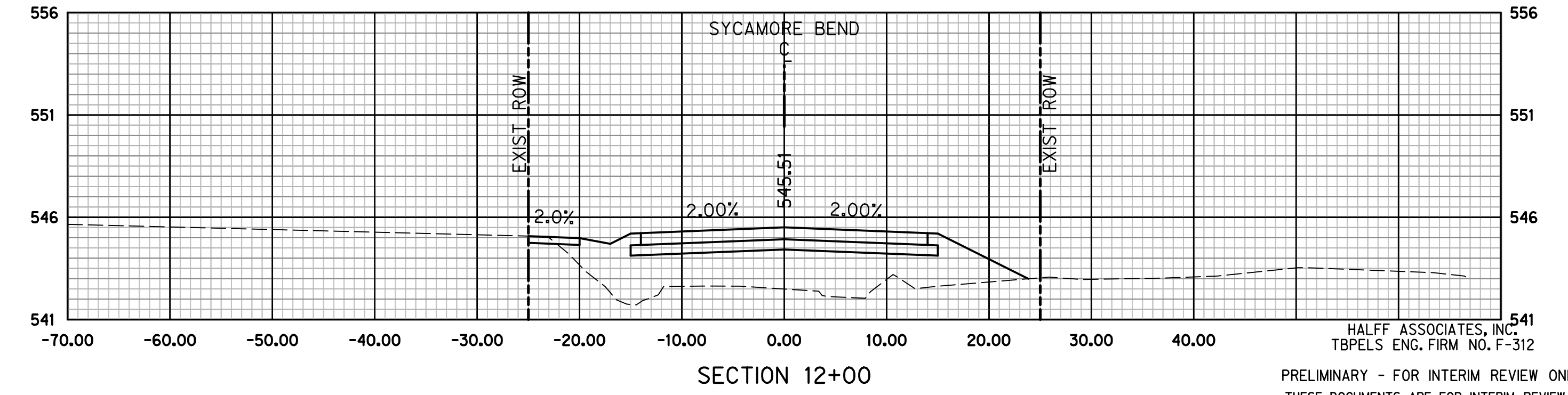
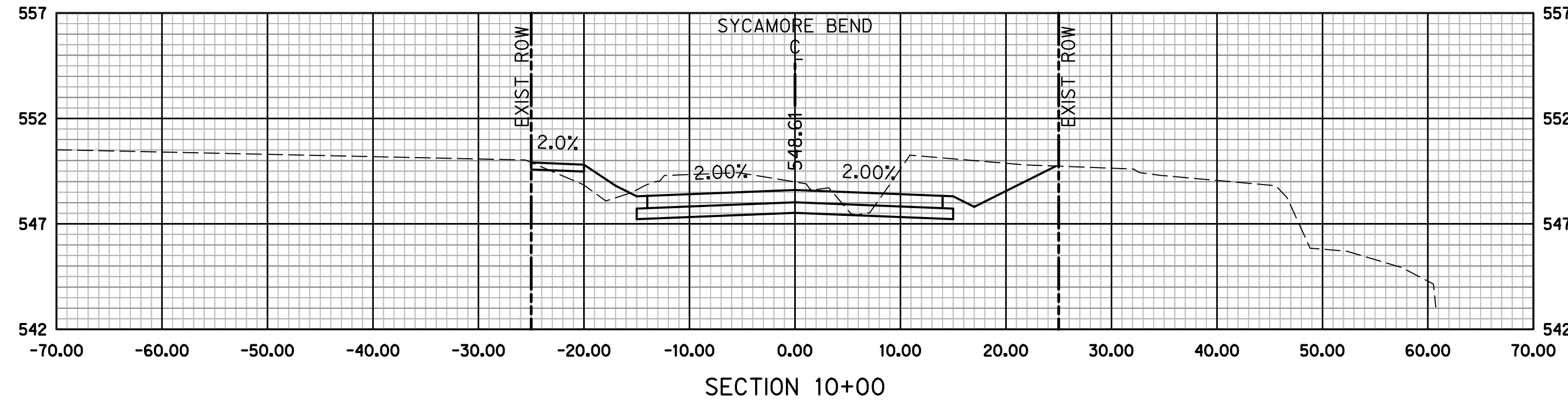
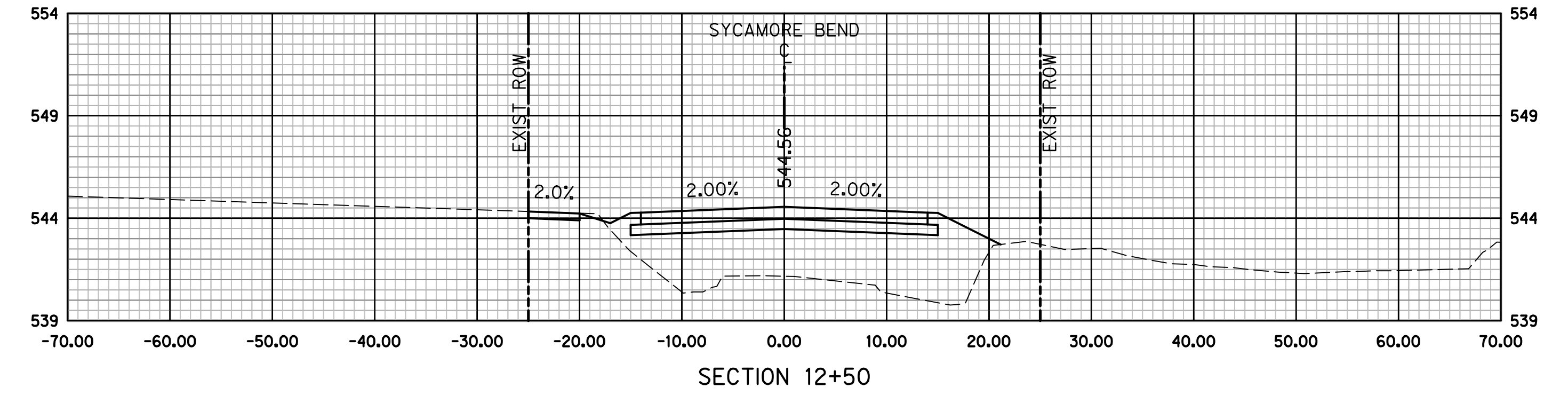
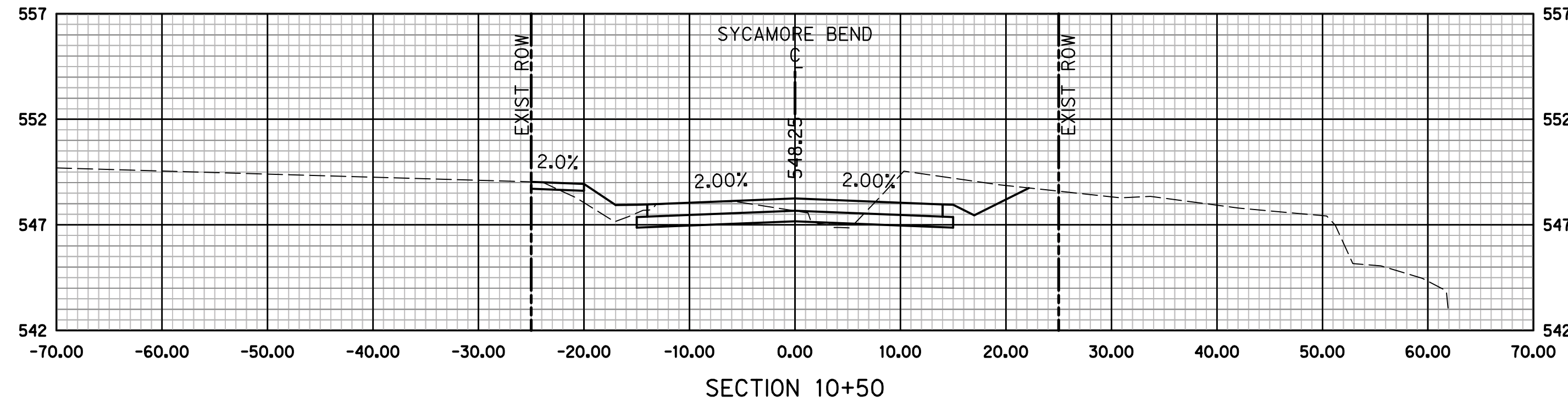
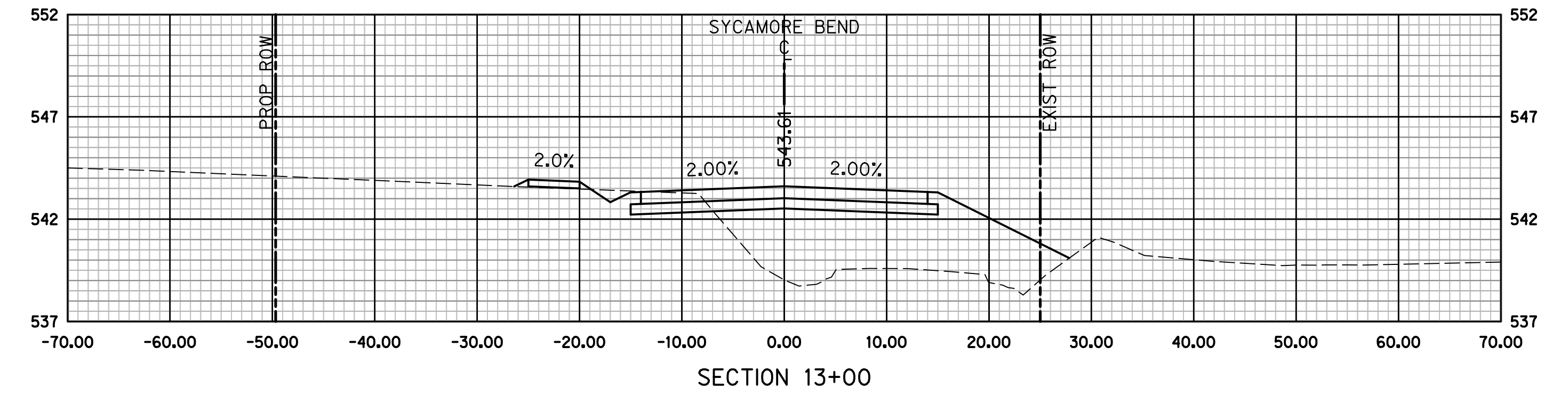
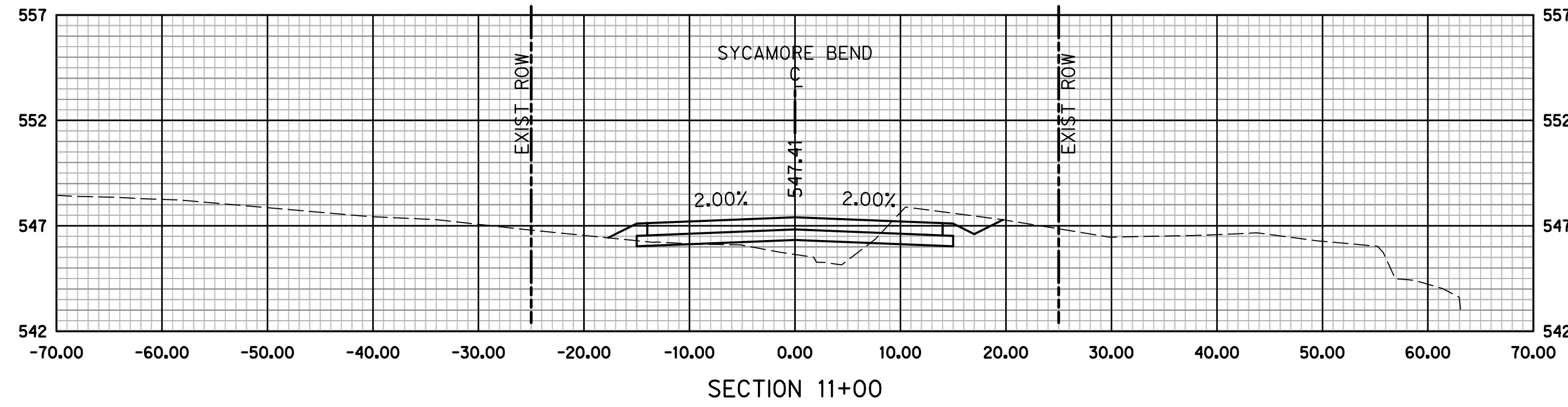
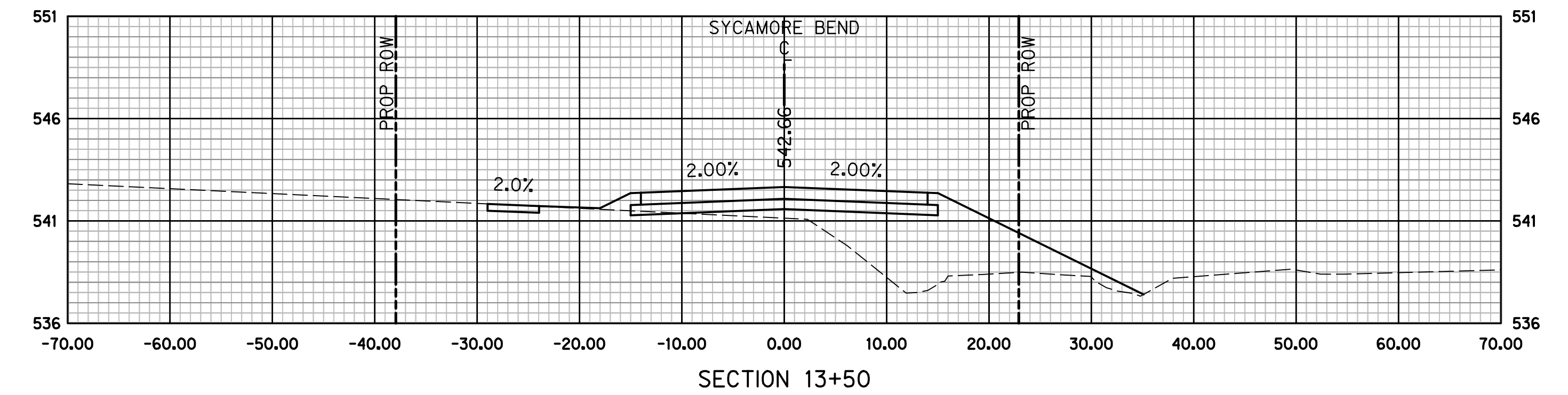
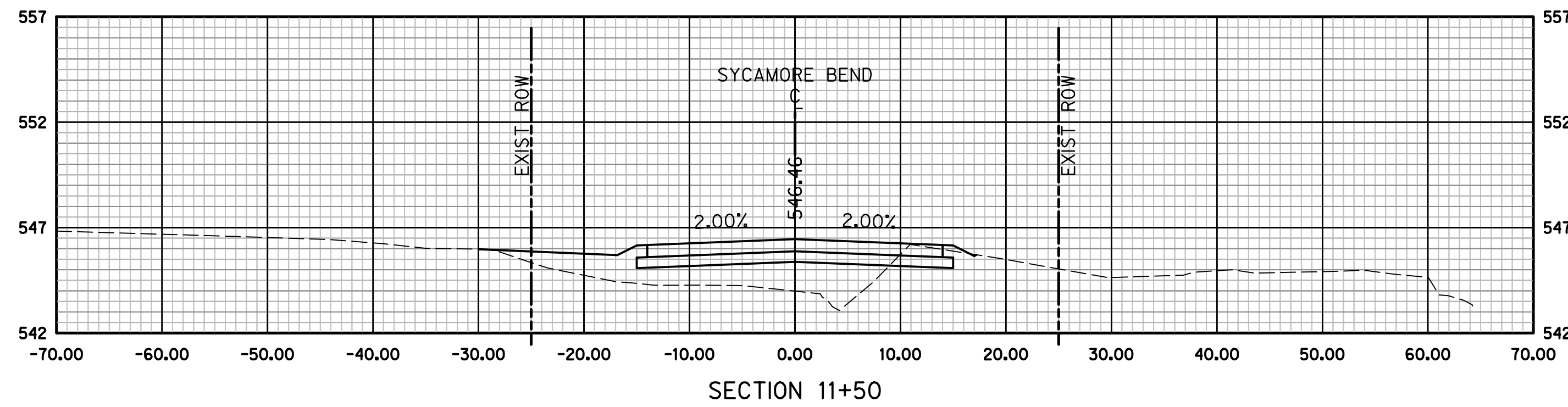
SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

CROSS SECTIONS
STA 6+00 TO STA 9+50



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PUBLIC WORKS
TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

SHEET TITLE

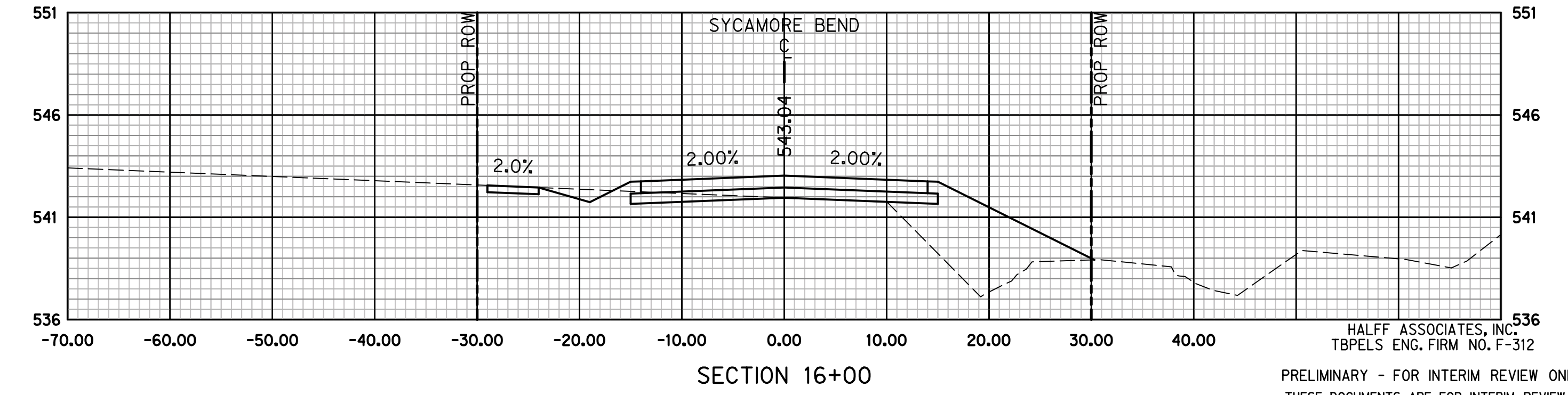
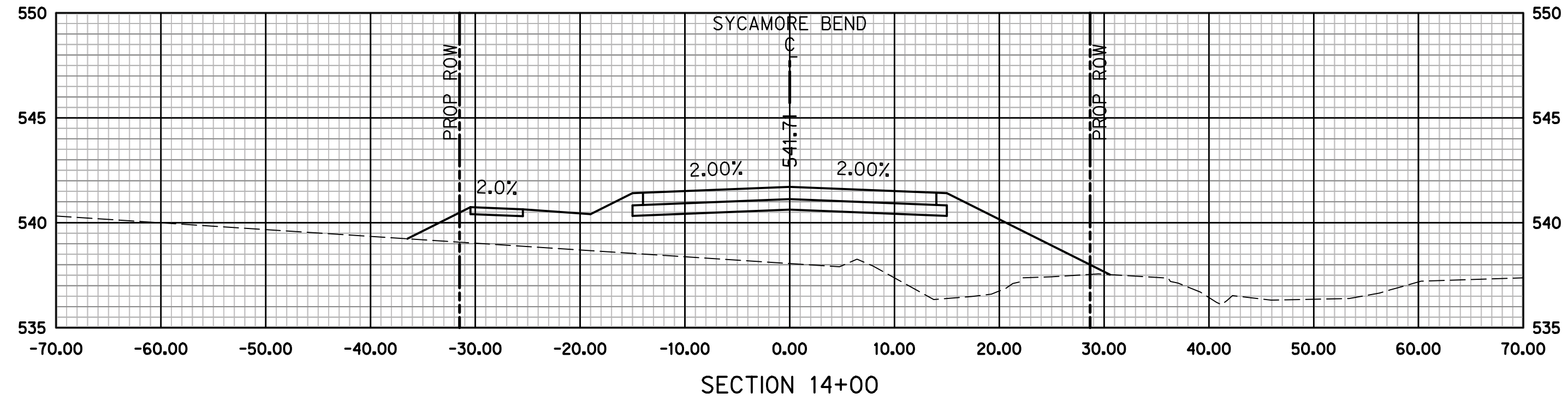
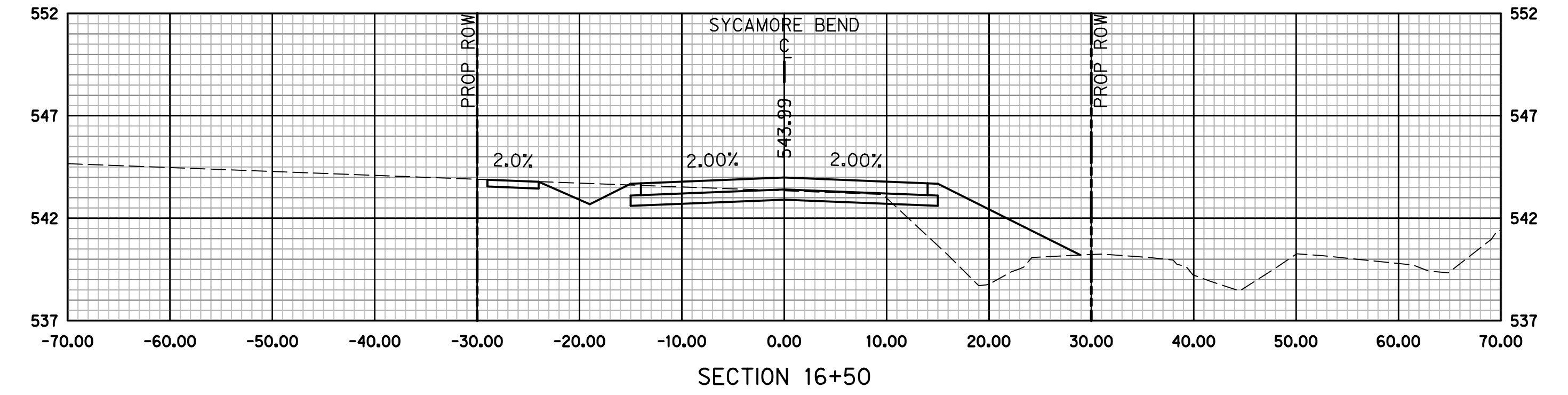
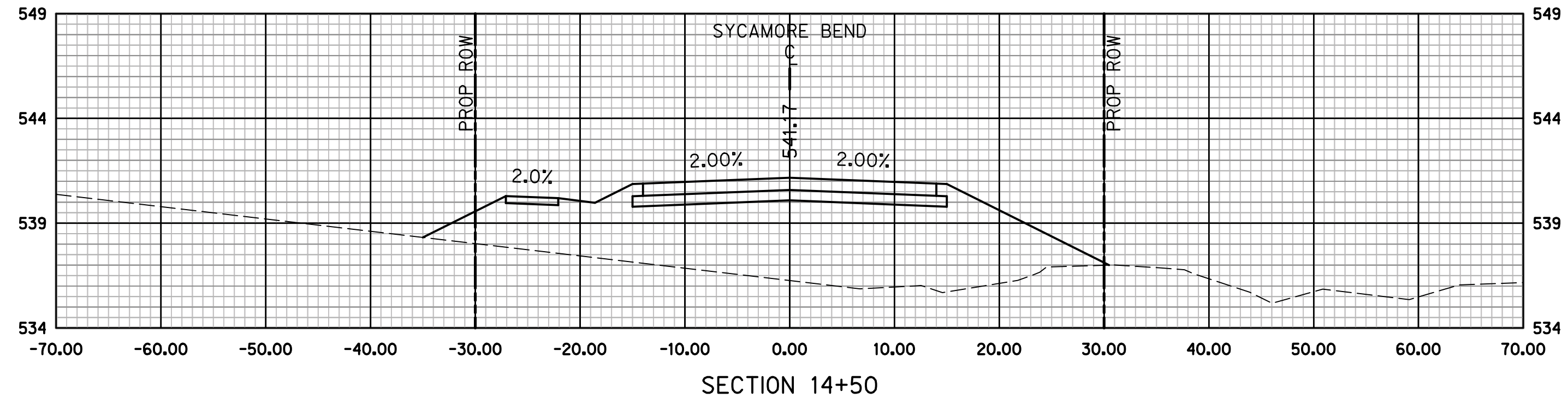
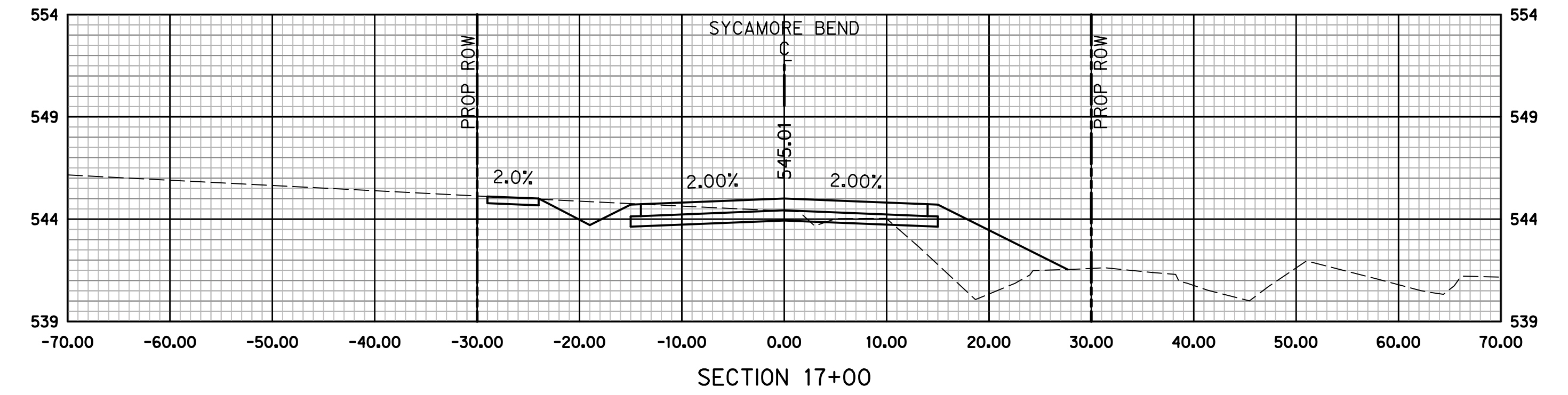
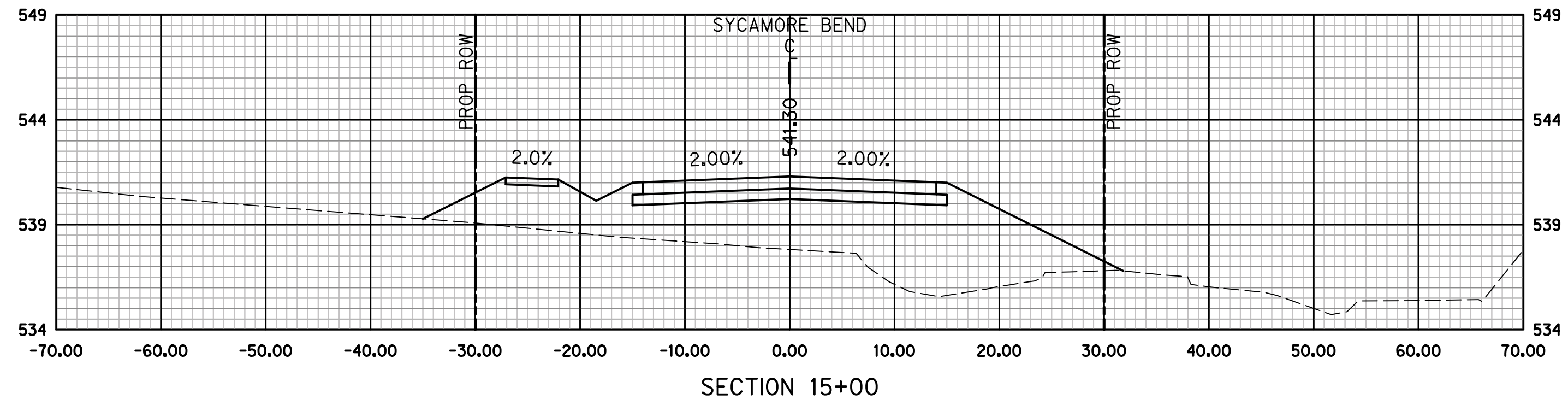
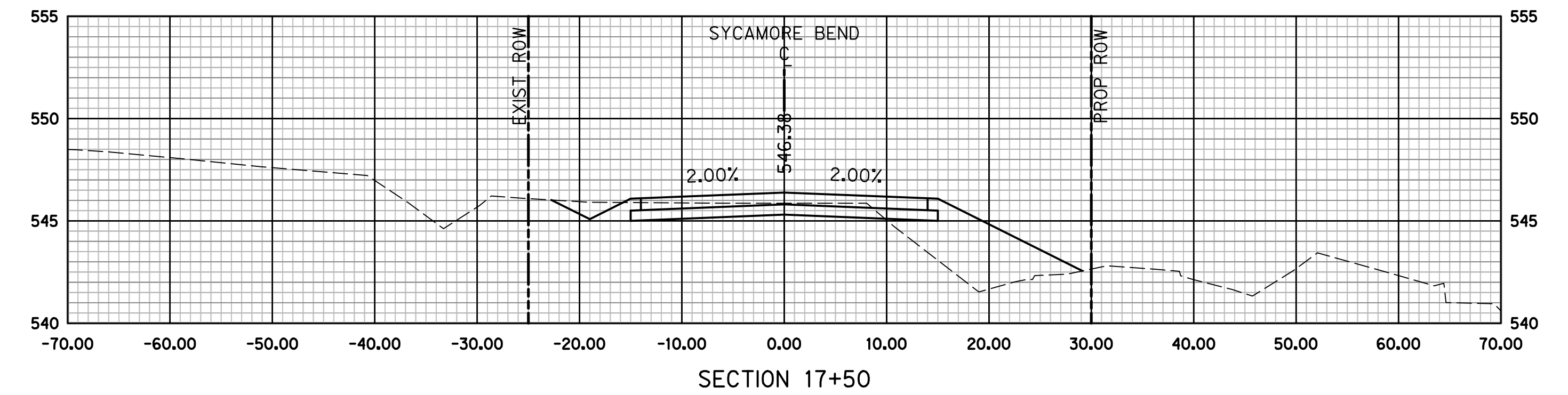
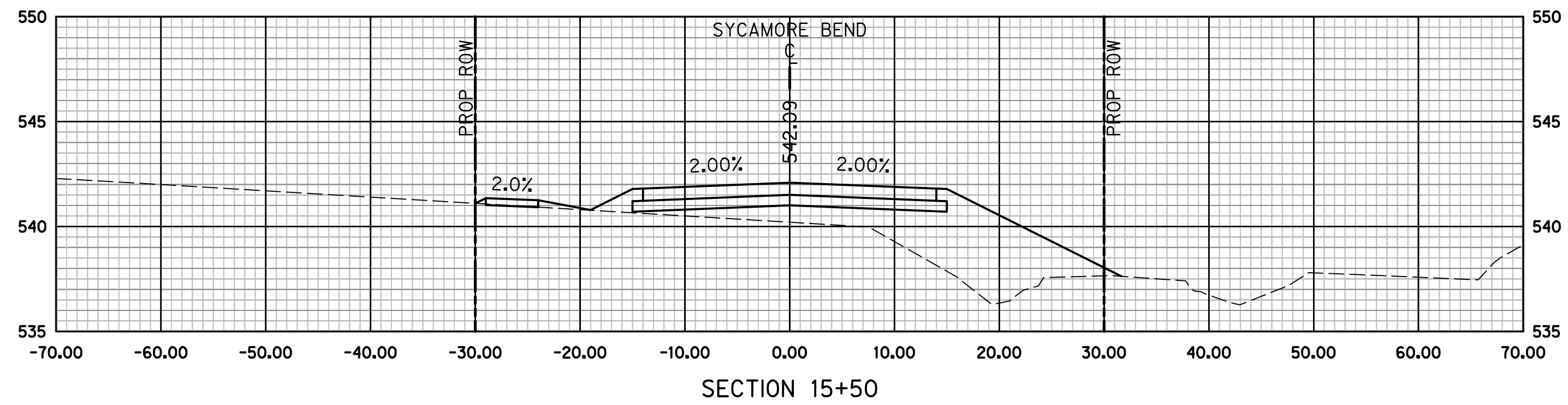
CROSS SECTIONS
STA 10+00 TO STA 13+50



JANUARY
2021

DATE

SHEET
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PUBLIC WORKS
TOWN OF HICKORY CREEK

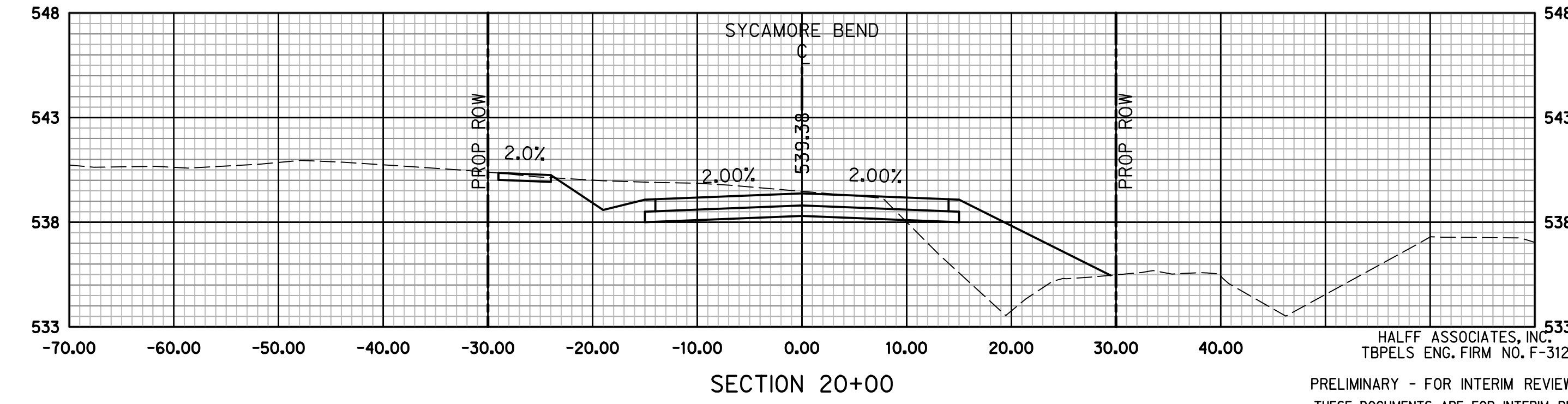
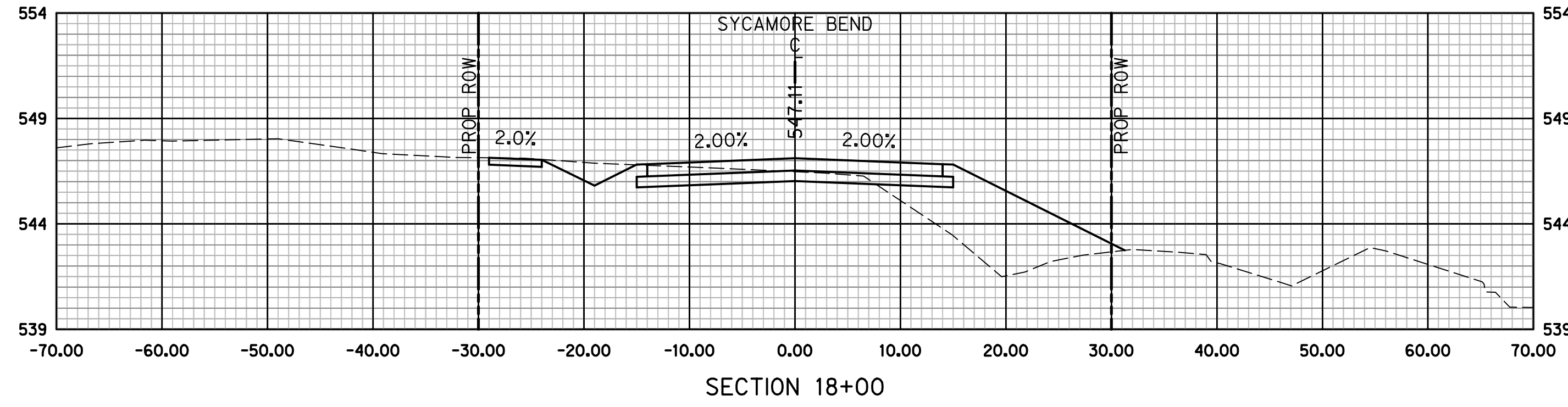
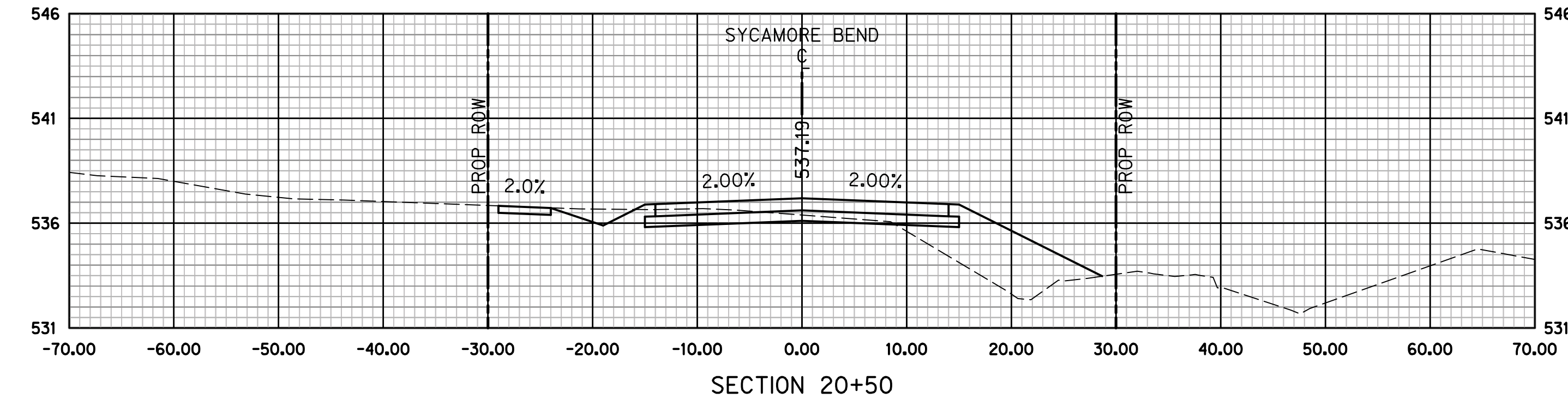
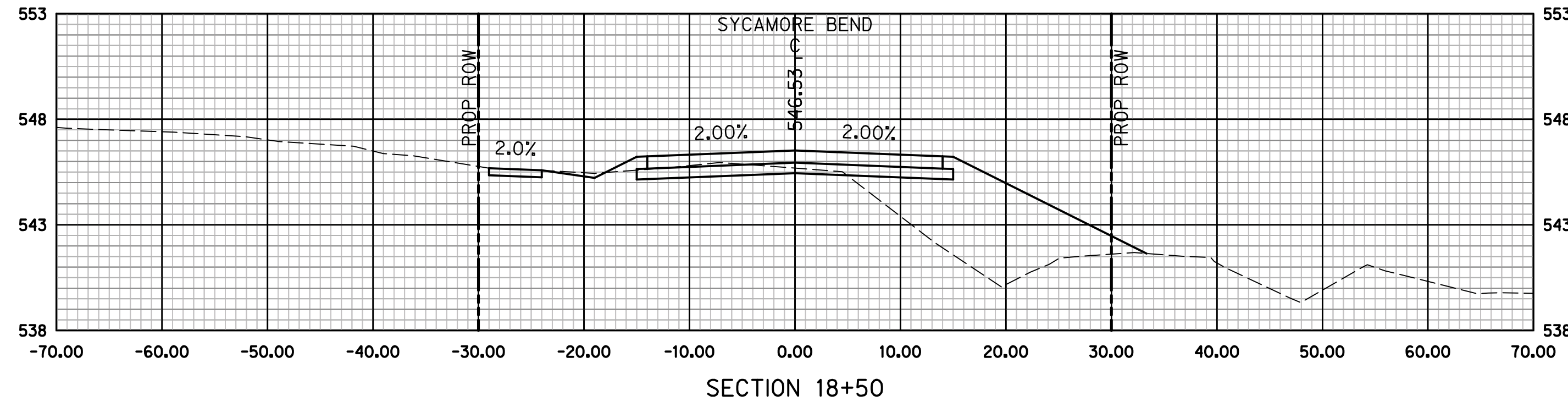
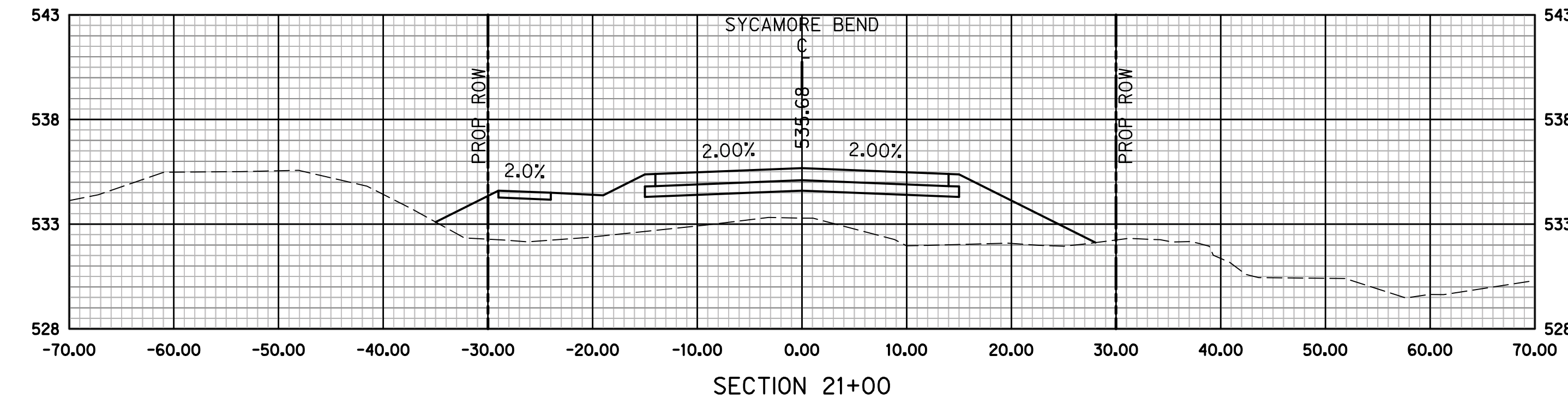
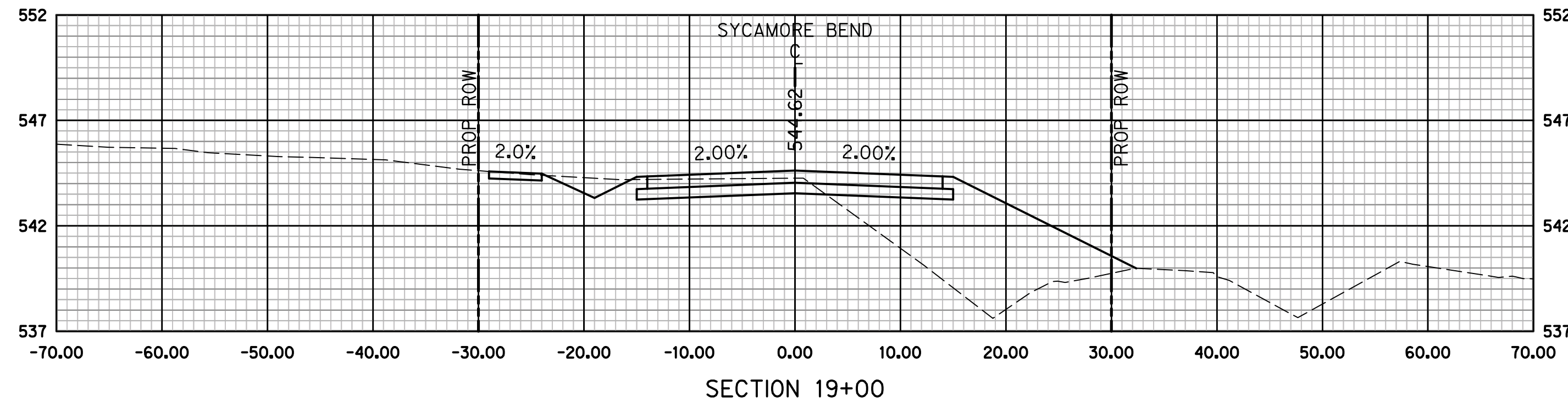
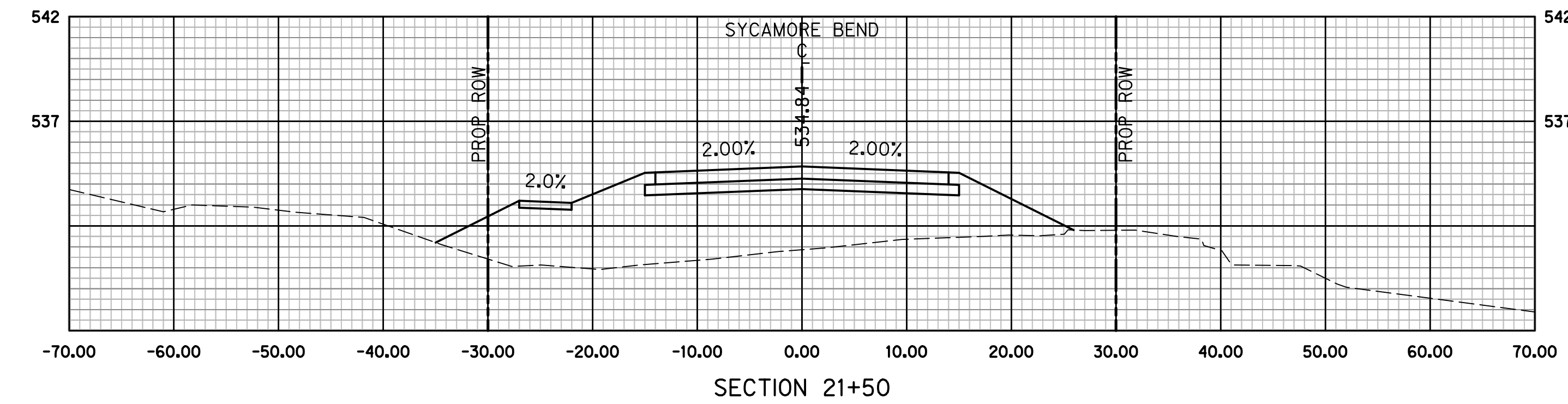
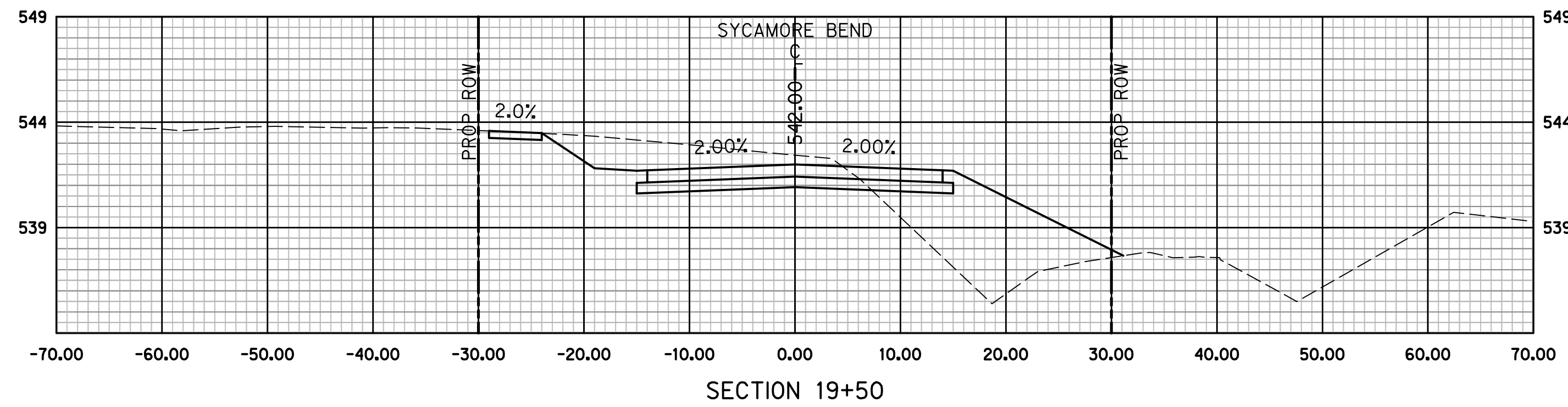
SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

CROSS SECTIONS
STA 14+00 TO STA 17+50



JANUARY
2021

SHEET
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Name PE# Date



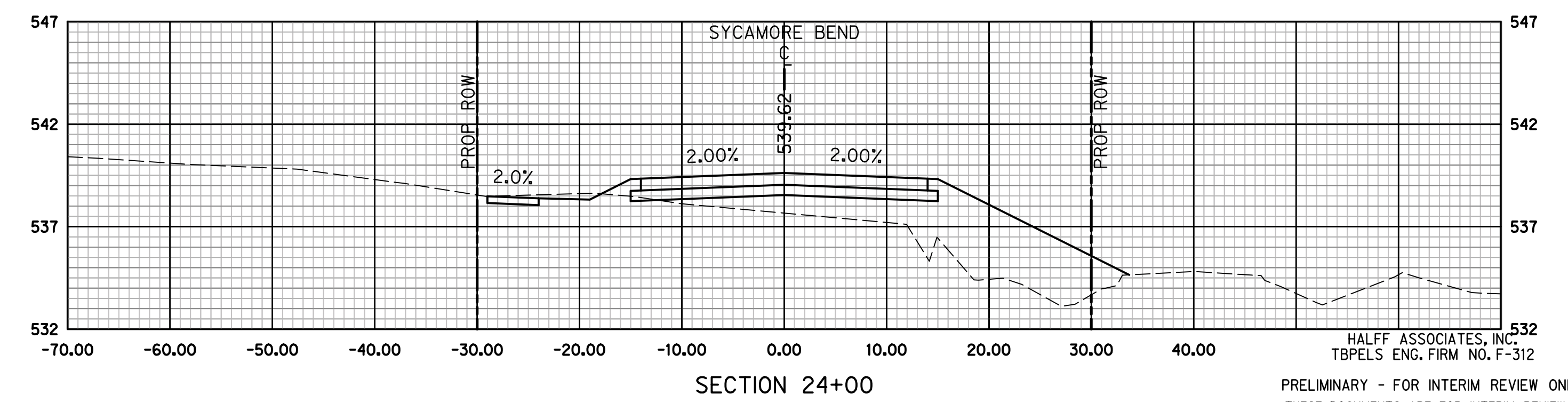
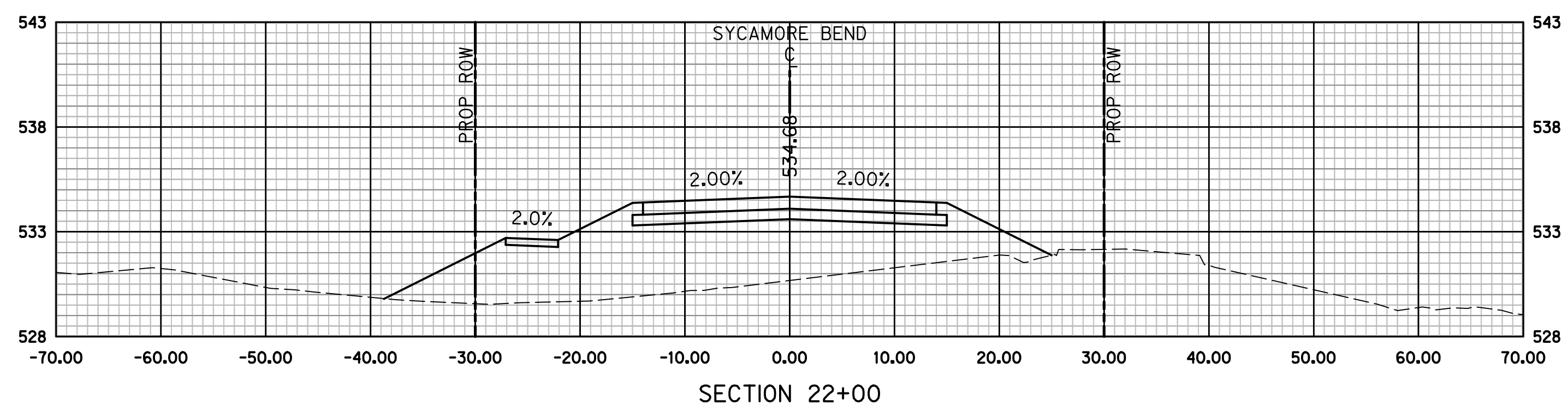
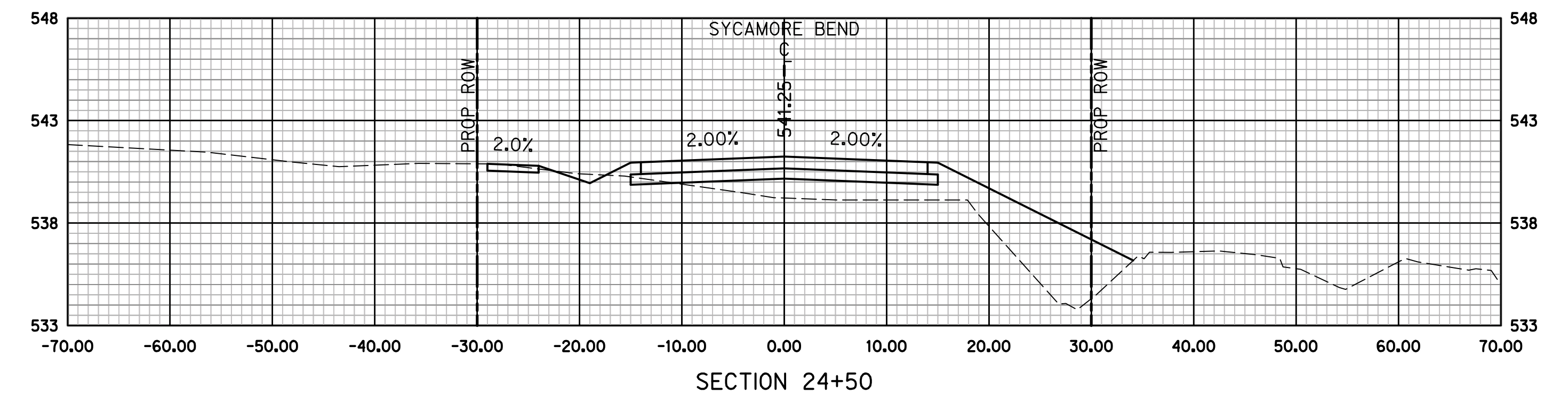
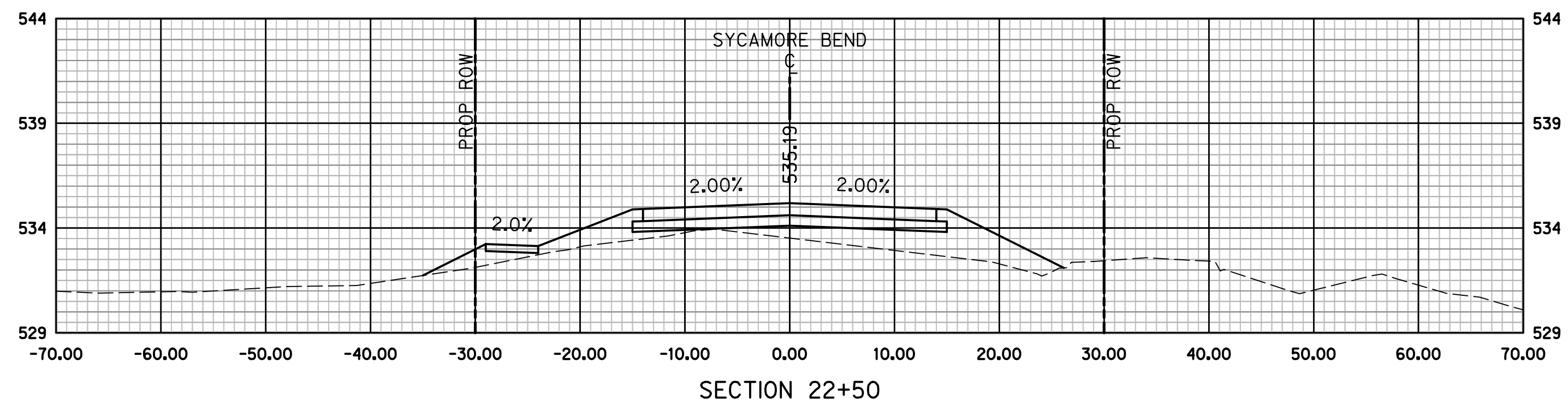
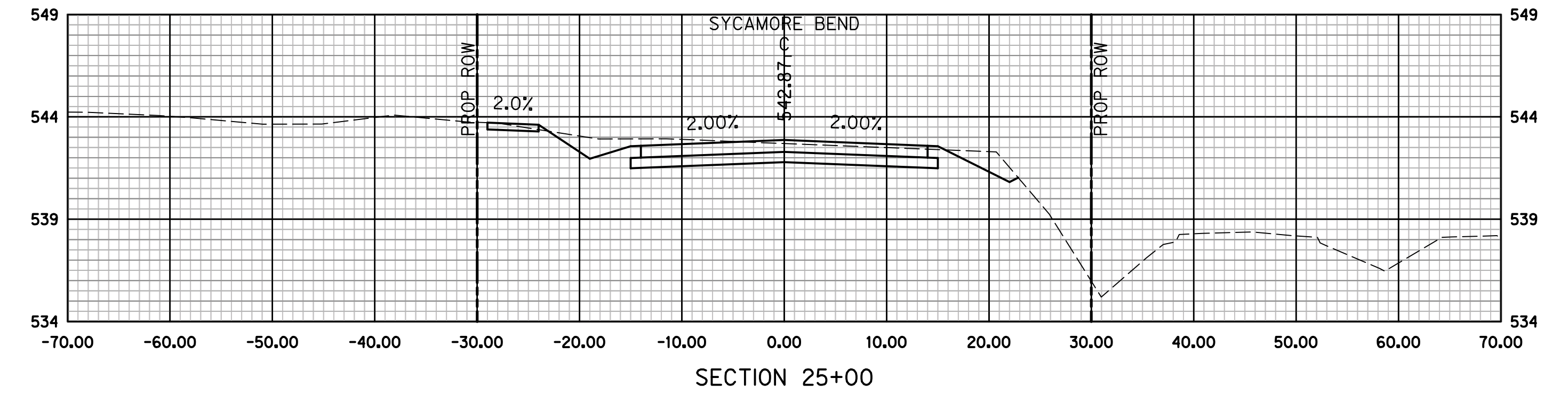
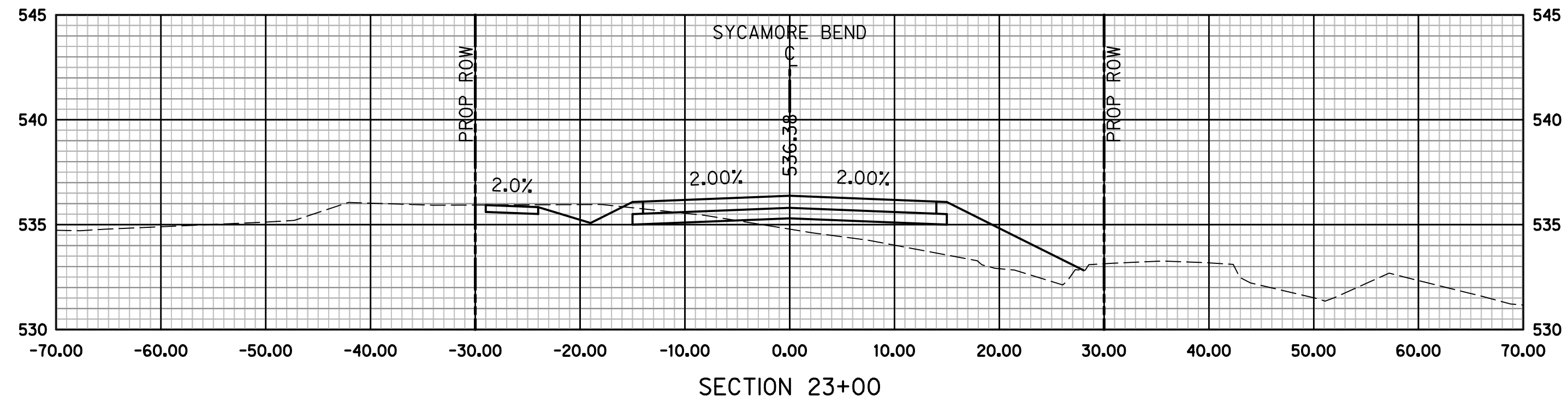
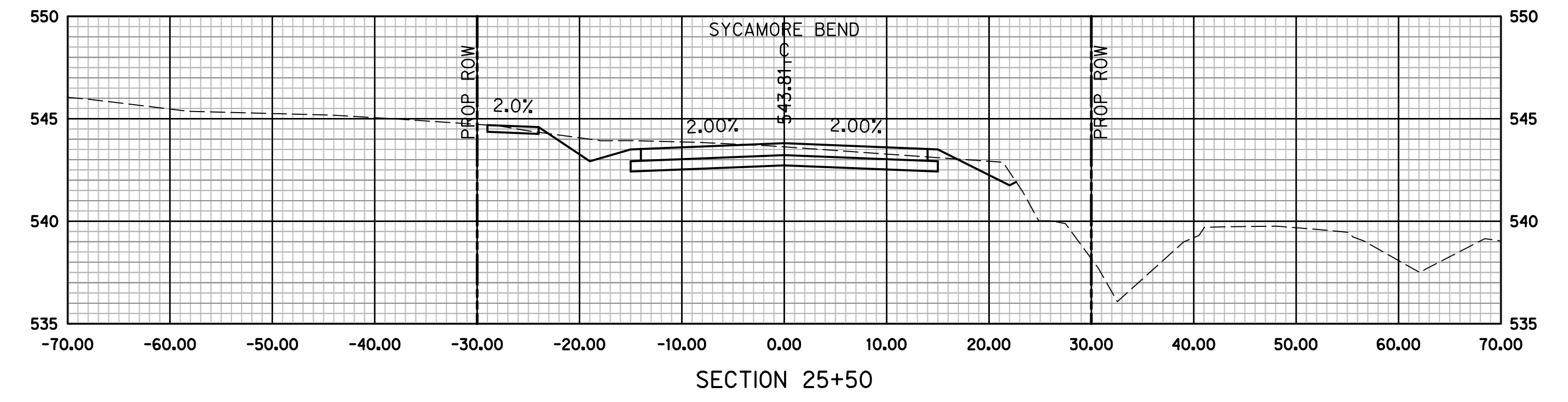
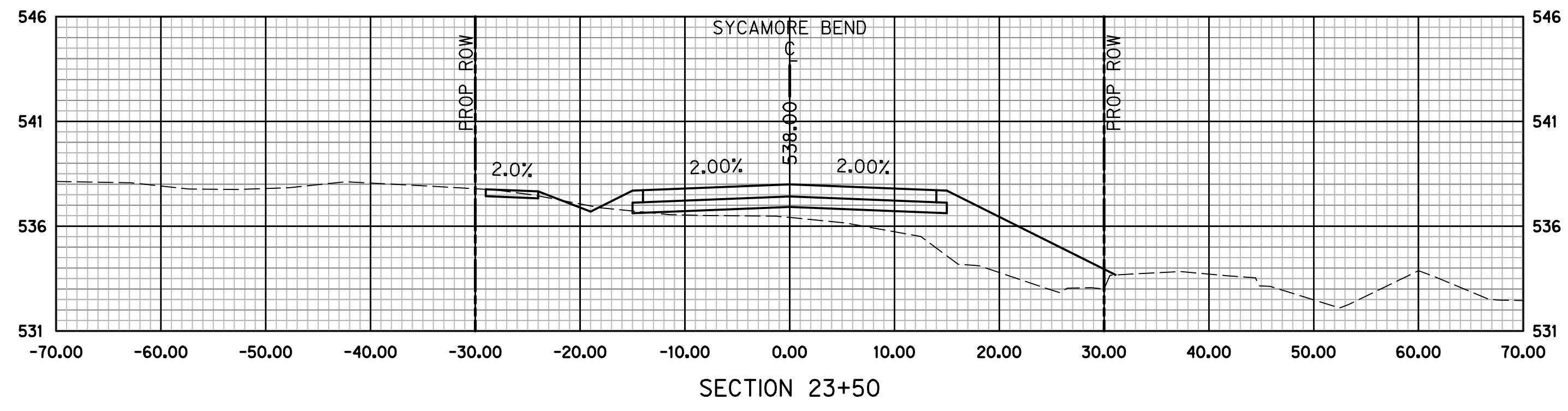
PUBLIC WORKS
TOWN OF HICKORY CREEK

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

CROSS SECTIONS
STA 18+00 TO STA 21+50



JANUARY
2021
SHEET
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PUBLIC WORKS
TOWN OF HICKORY CREEK

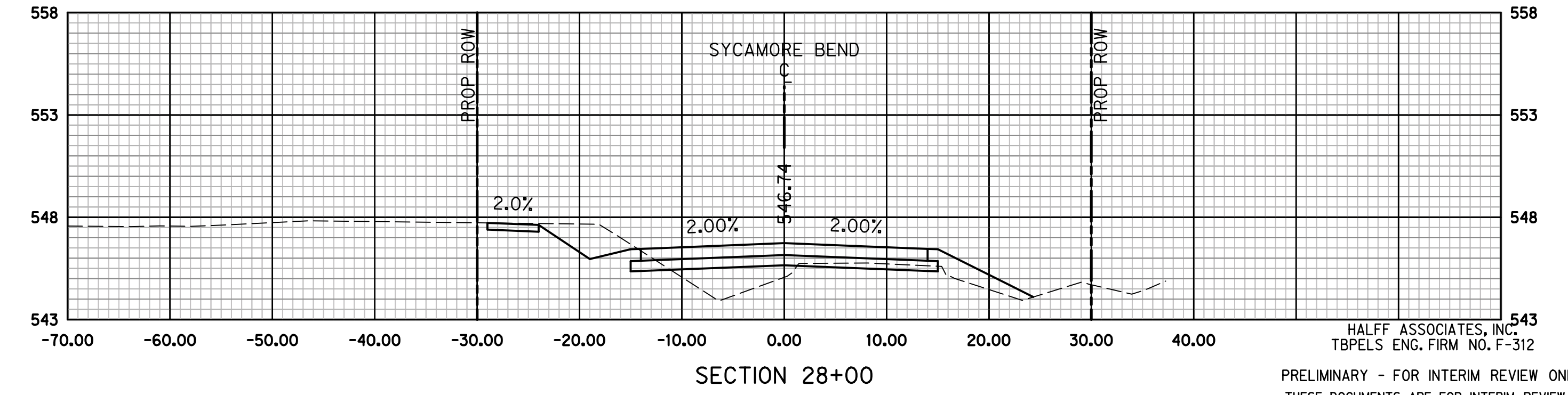
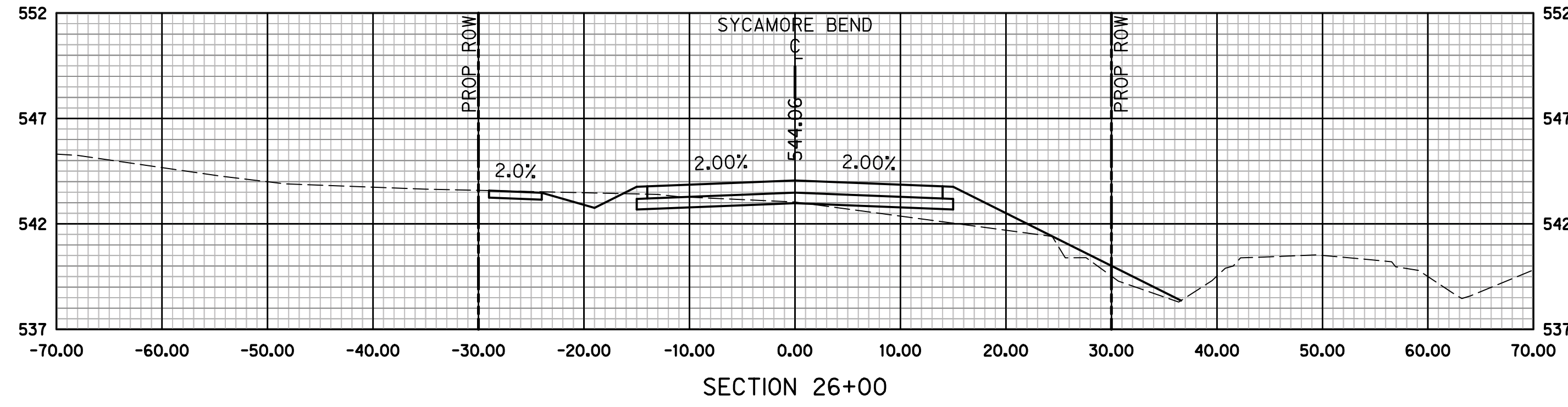
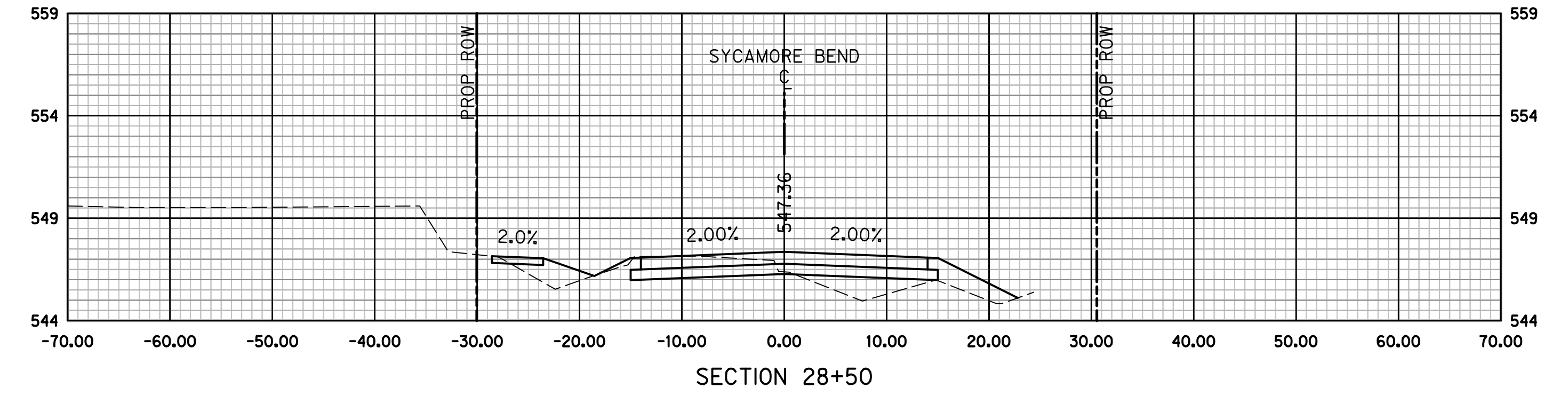
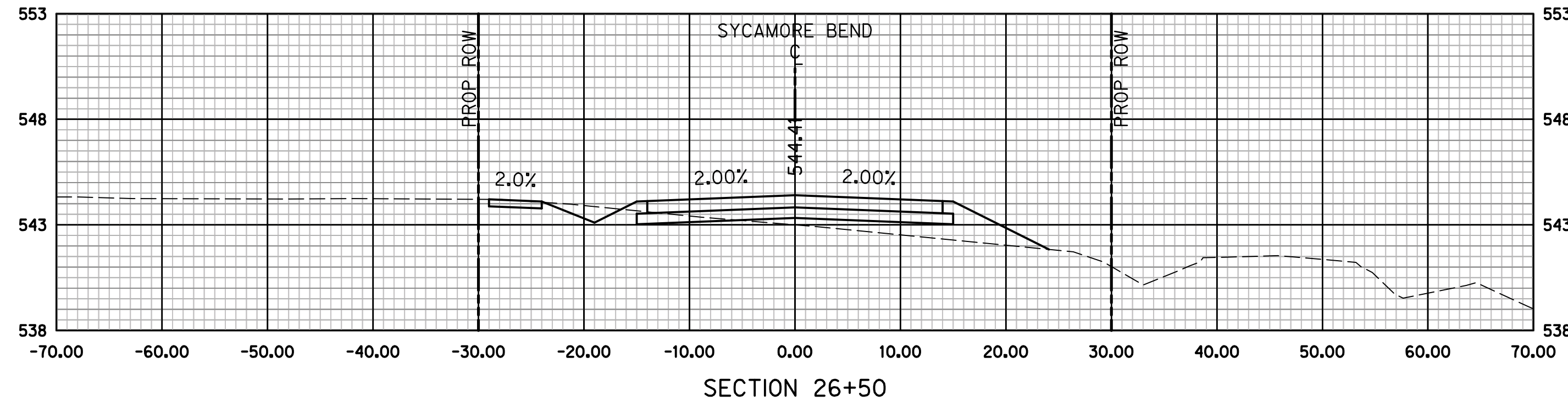
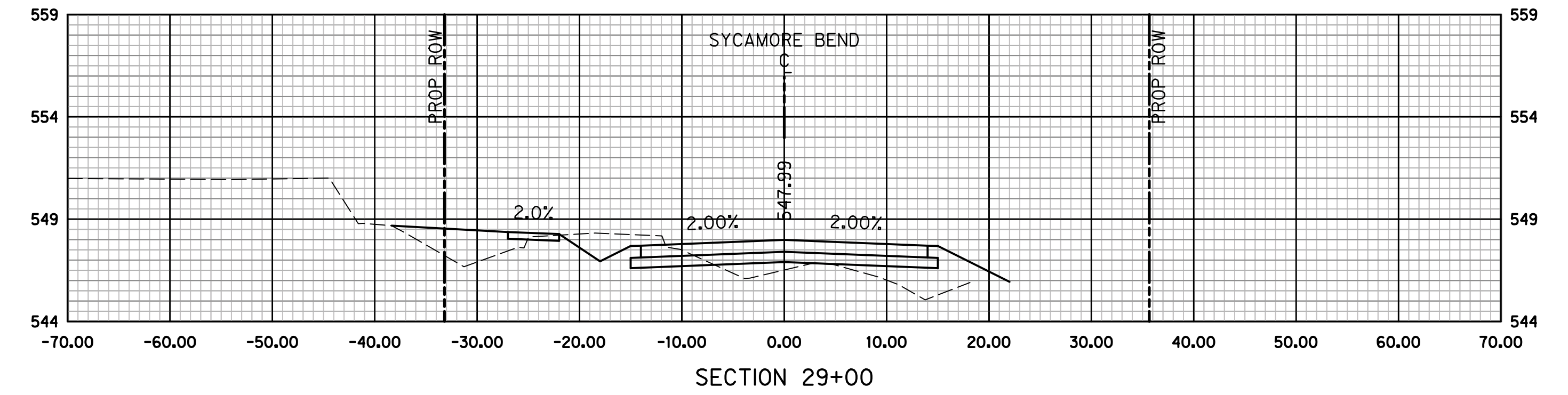
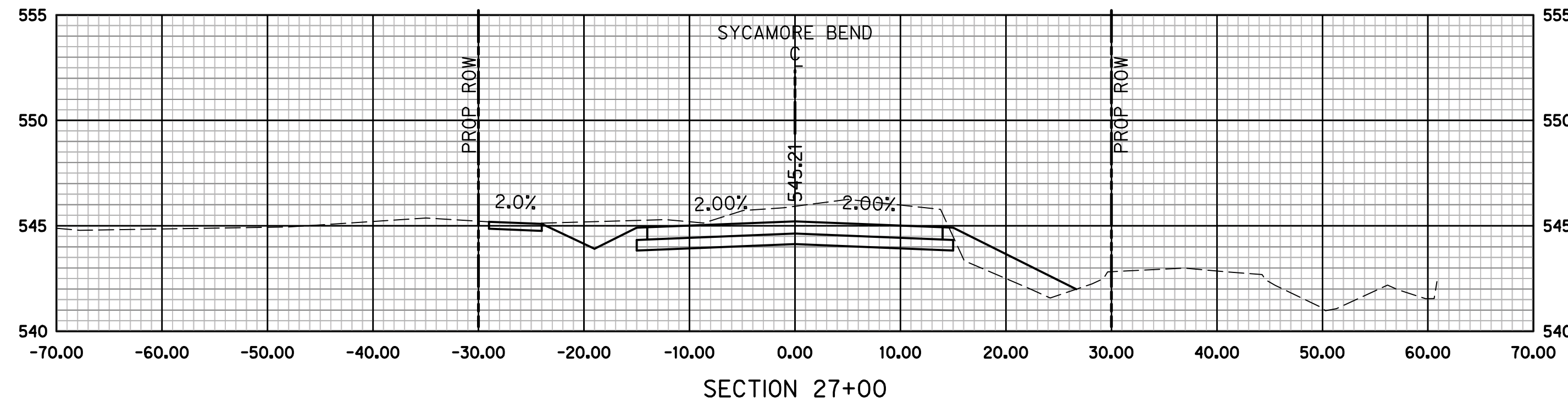
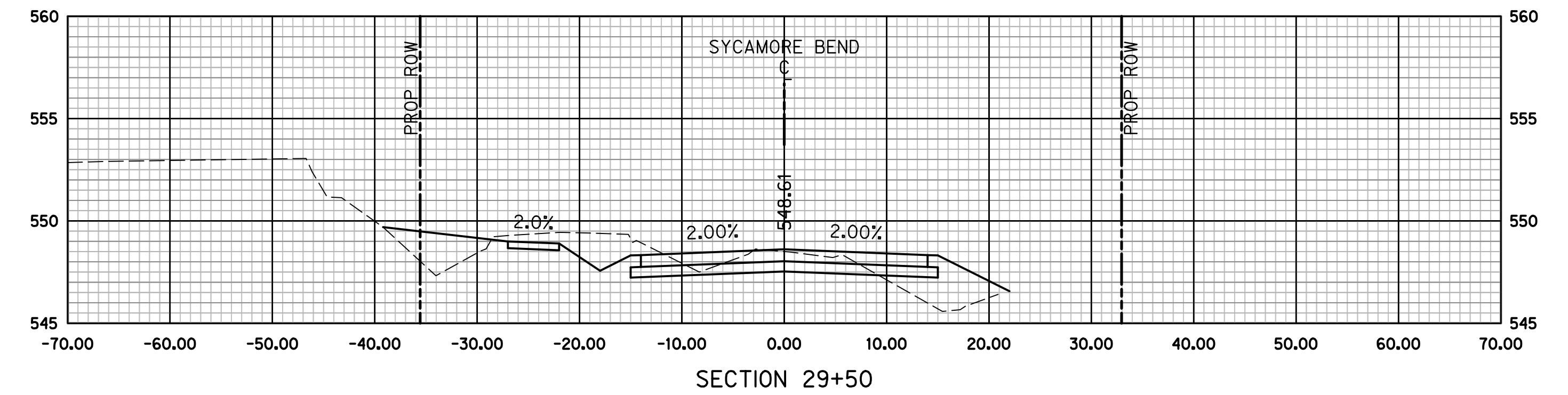
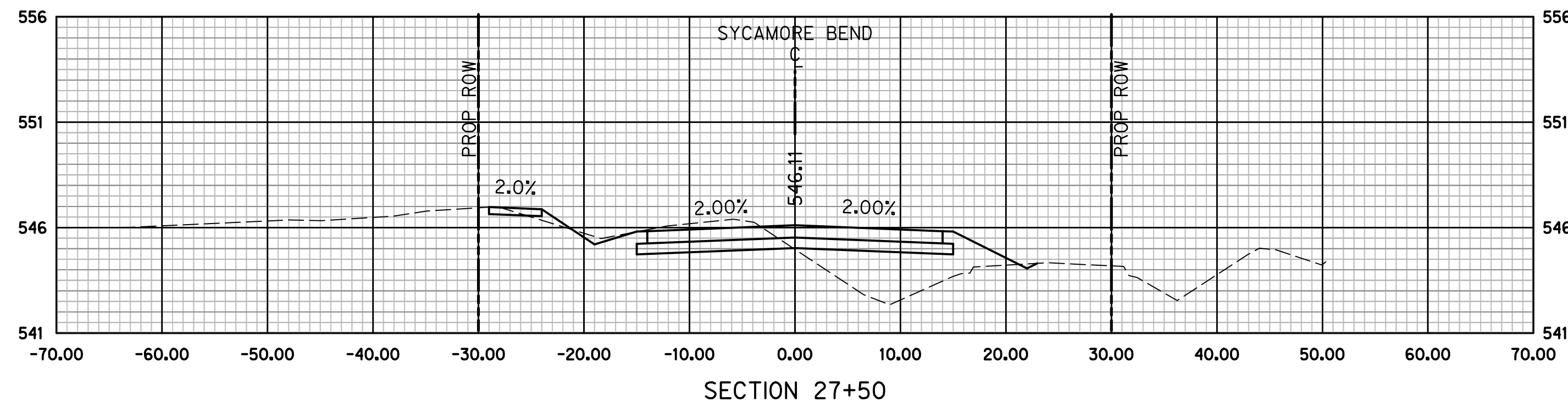
SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

CROSS SECTIONS
STA 22+00 TO STA 25+50



JANUARY
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SHEET
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PUBLIC WORKS
TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

SHEET TITLE

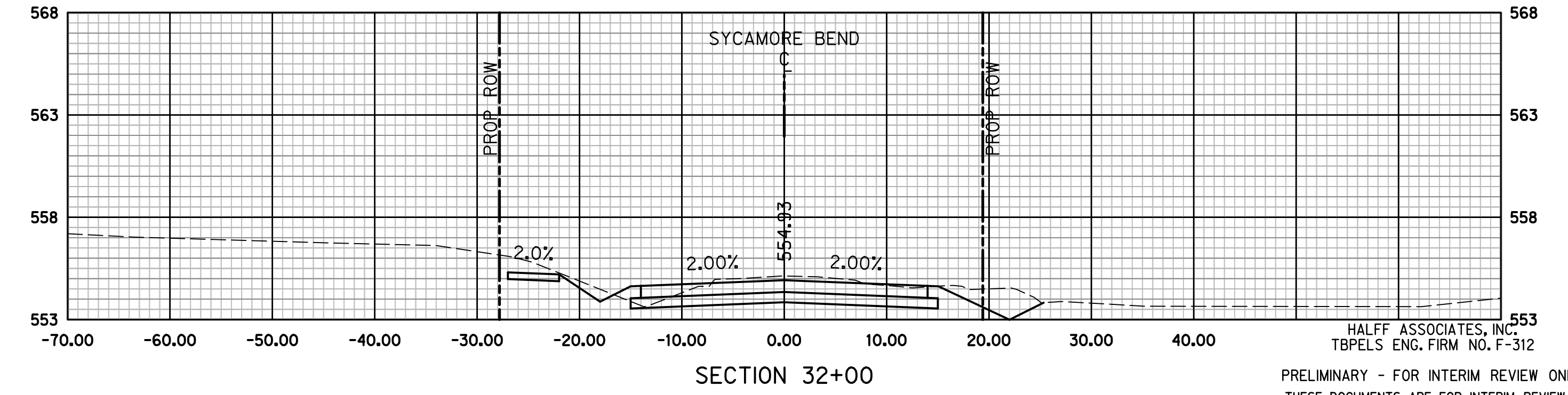
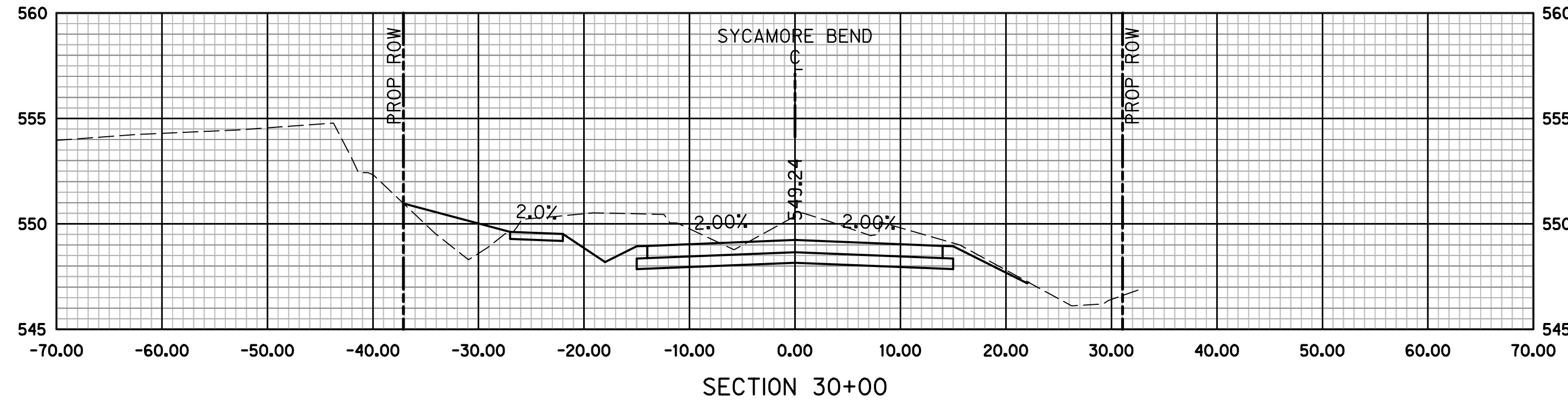
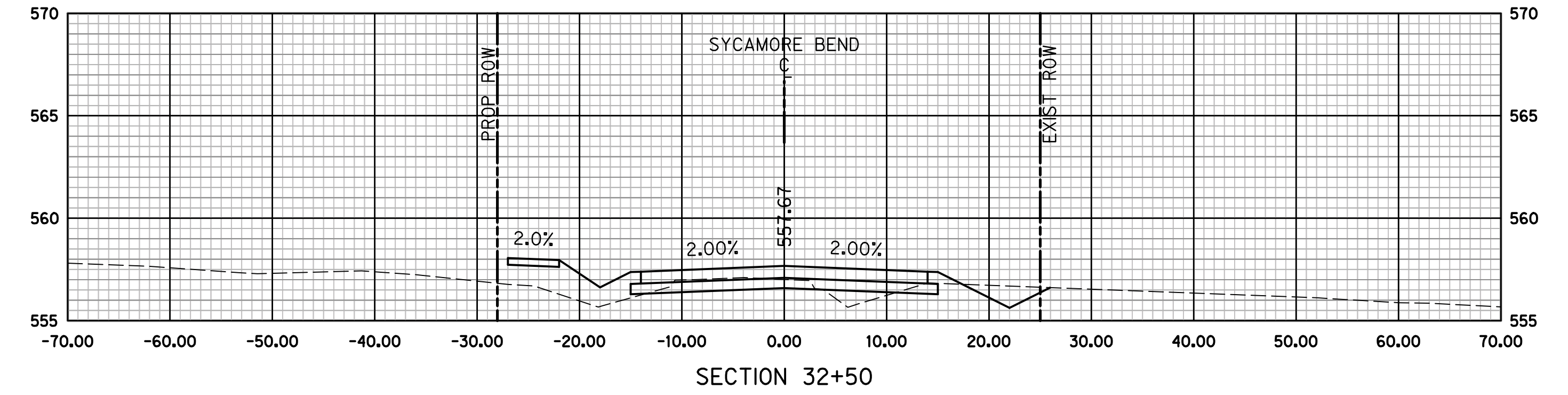
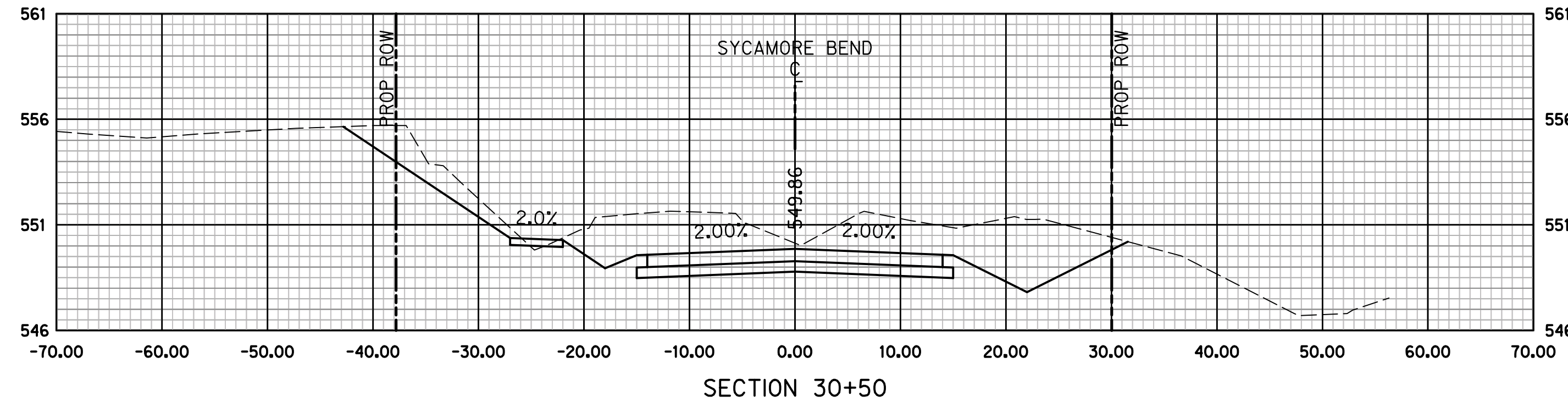
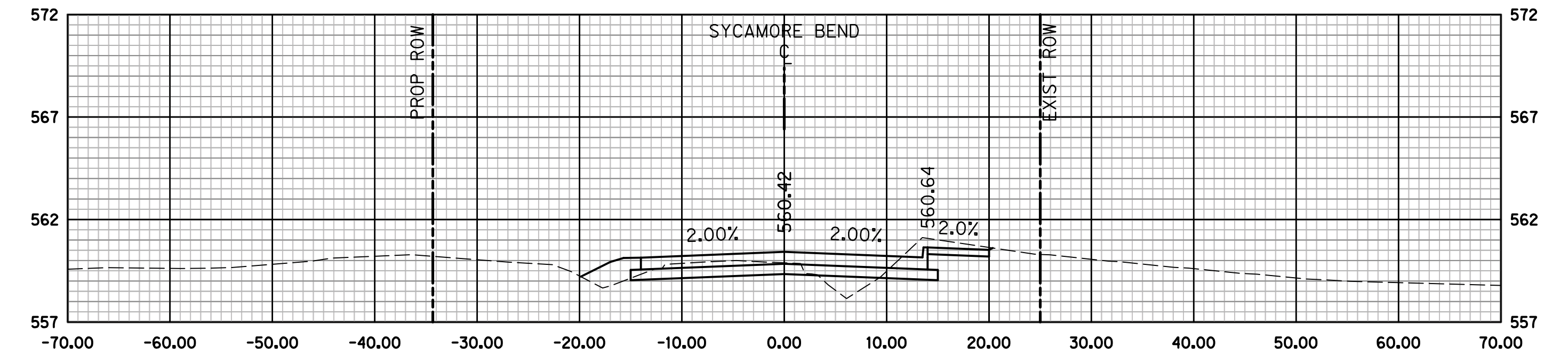
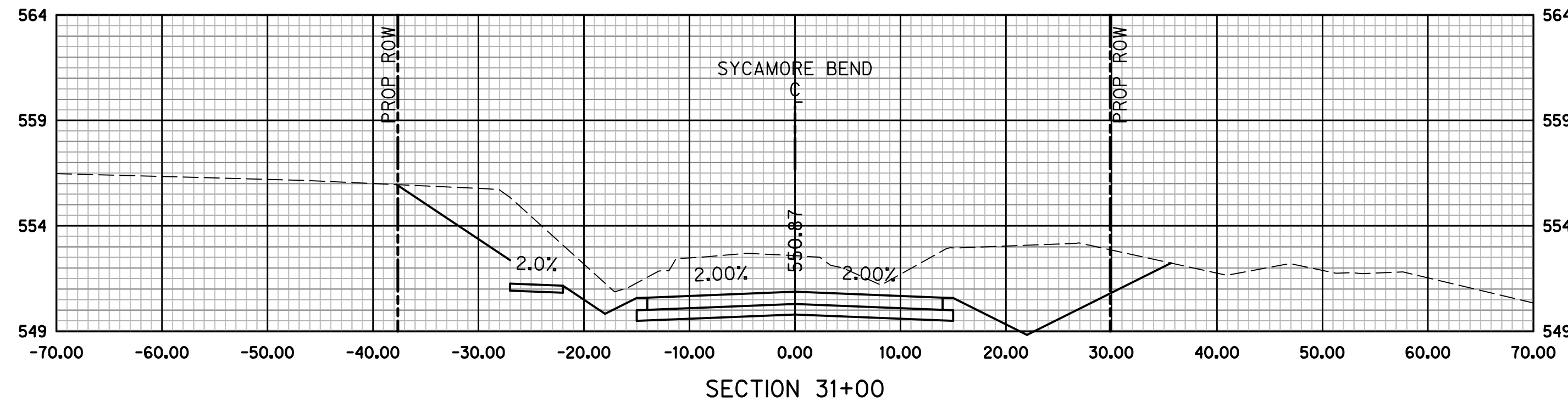
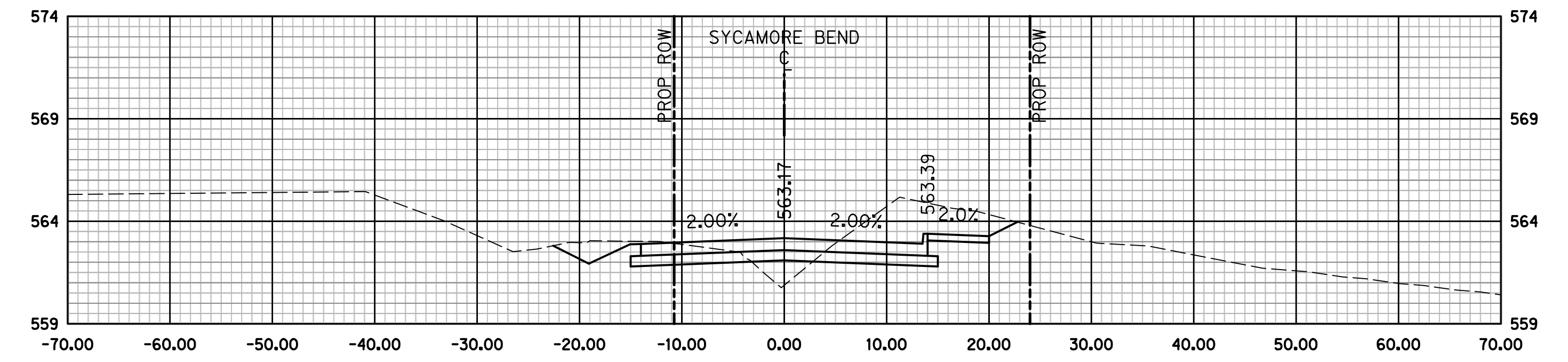
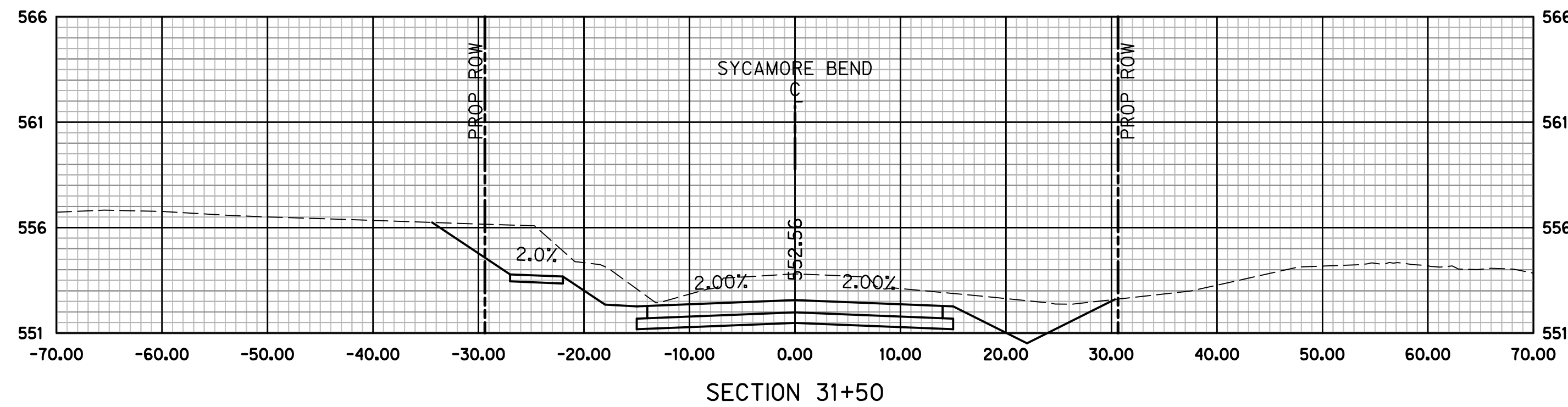
CROSS SECTIONS
STA 26+00 TO STA 29+50



JANUARY
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PUBLIC WORKS
TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

SHEET TITLE

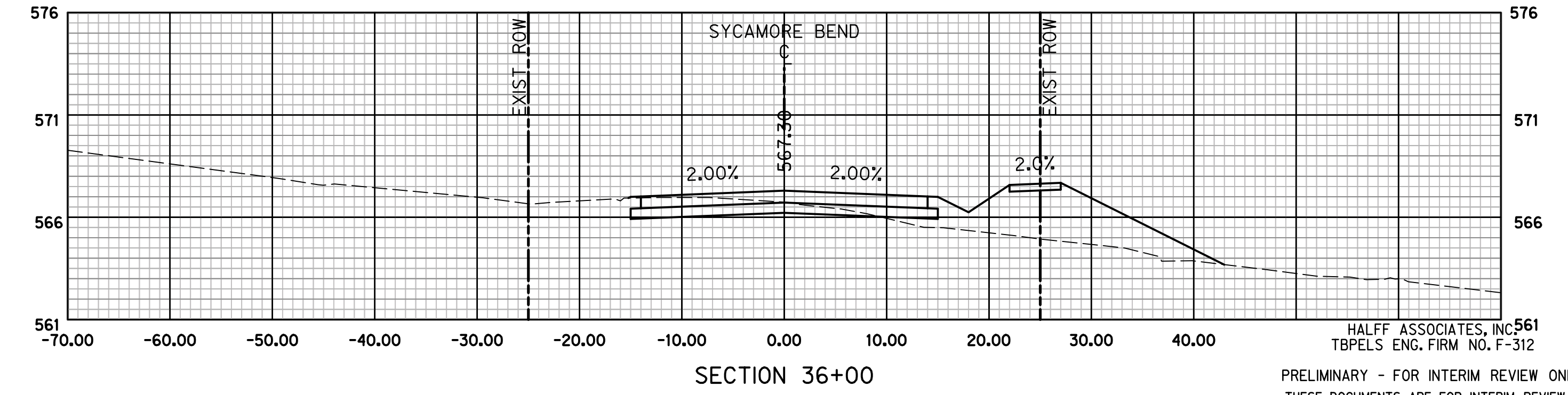
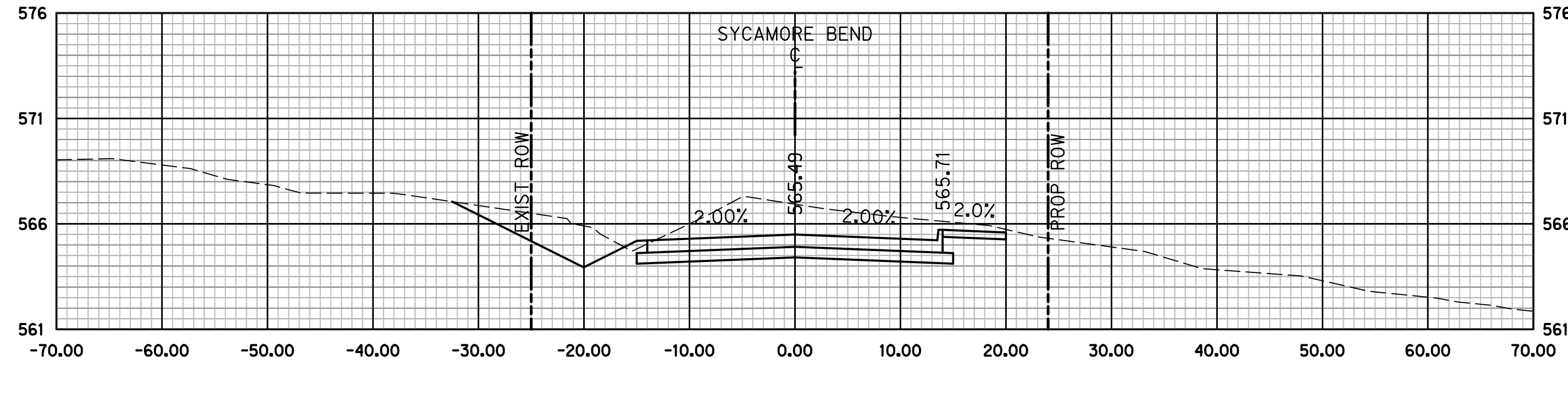
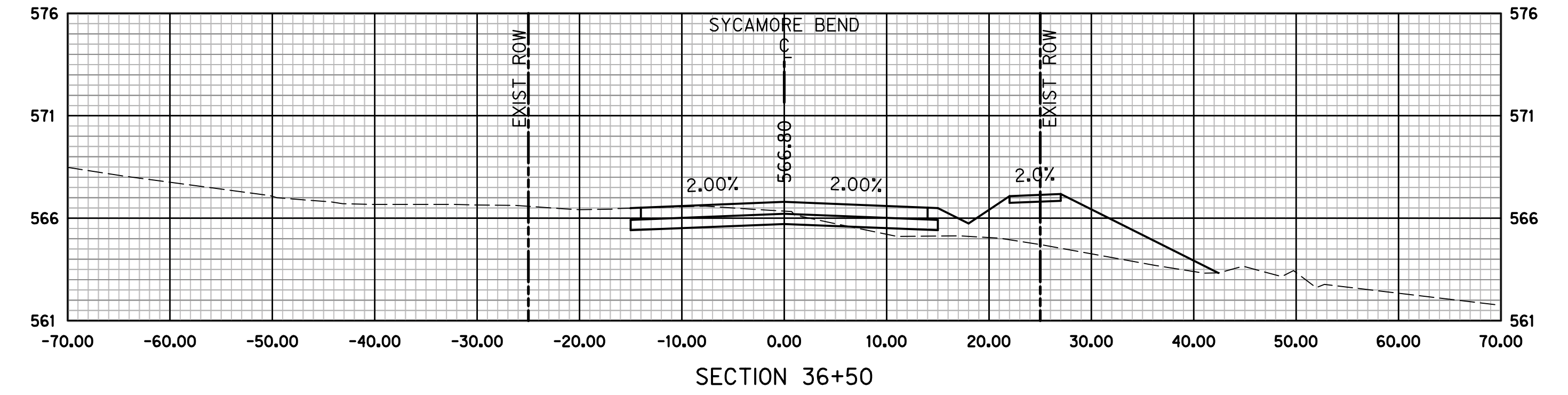
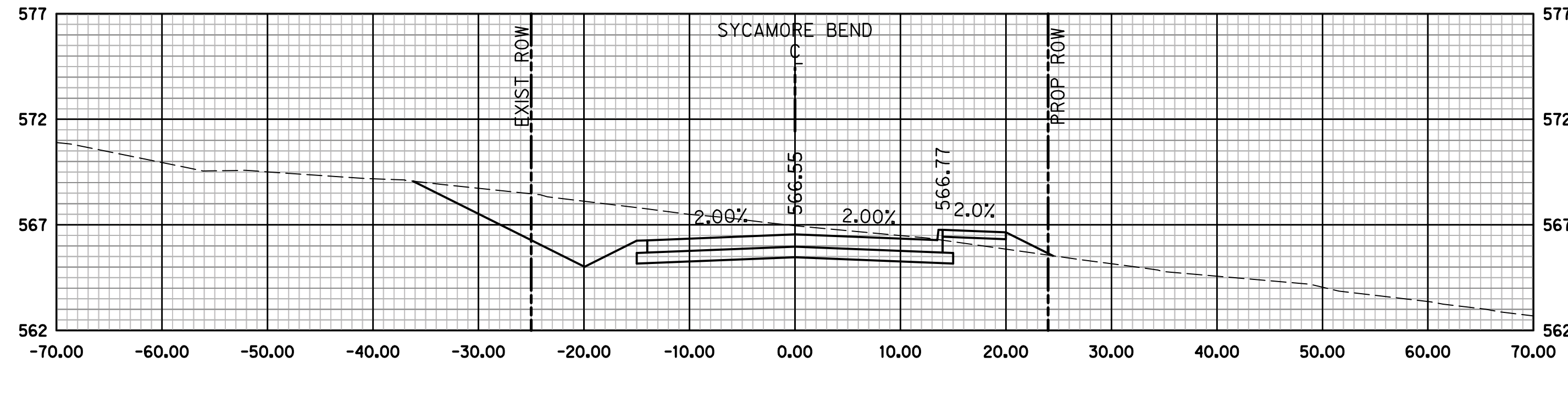
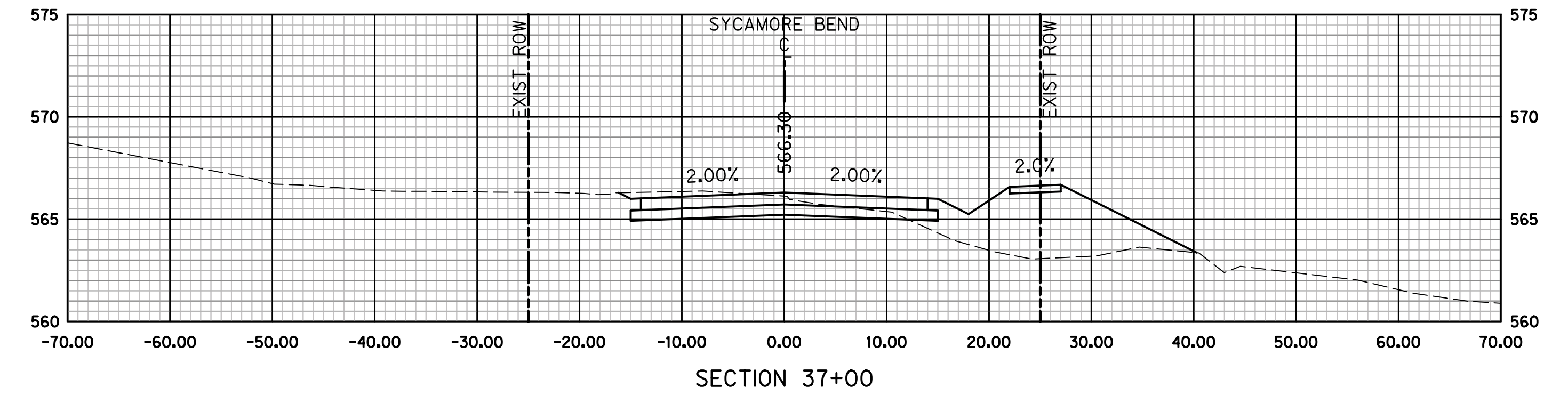
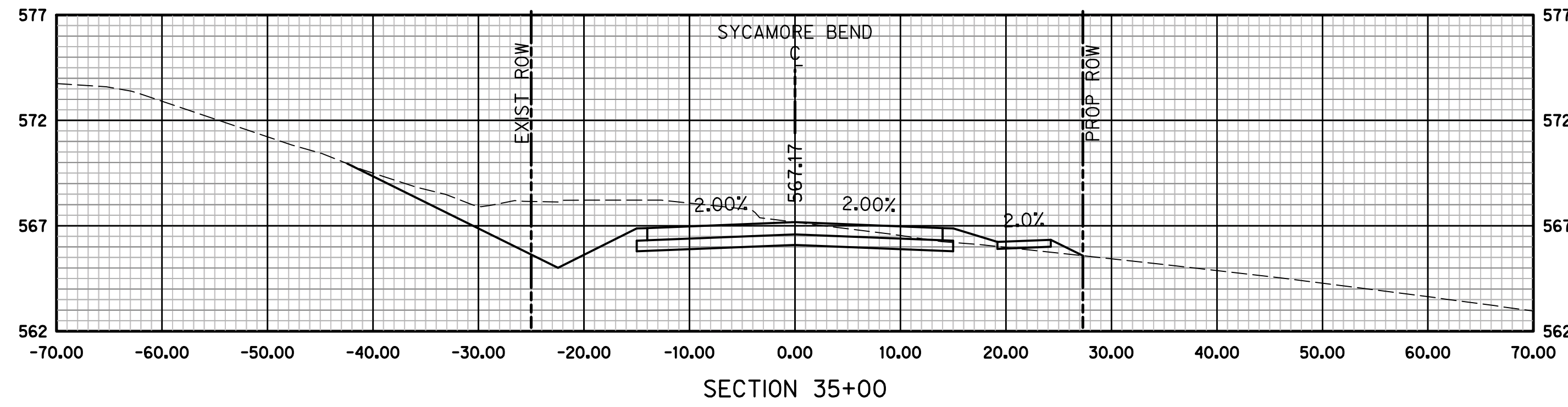
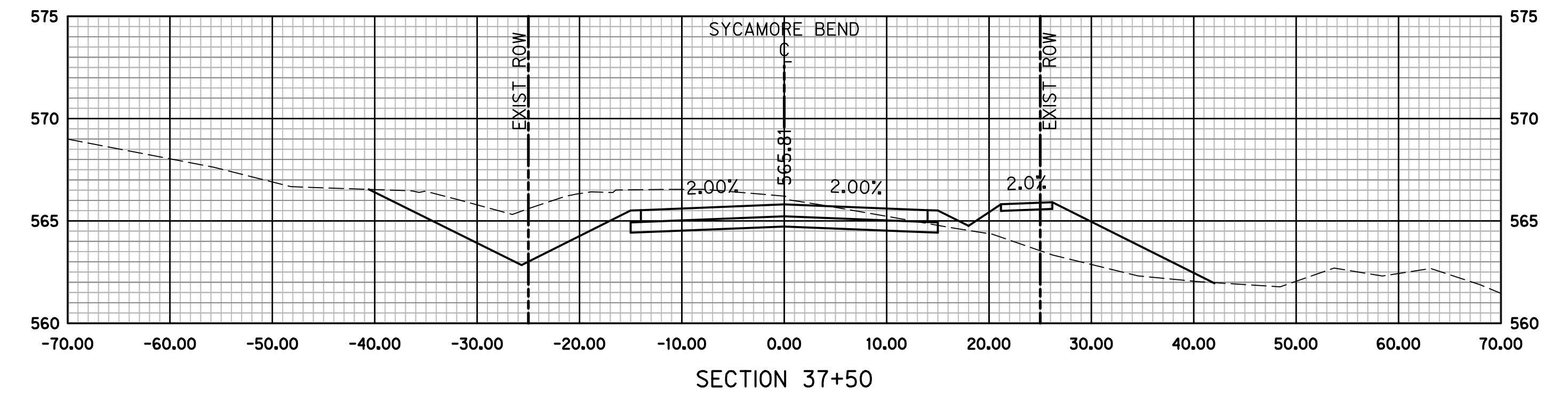
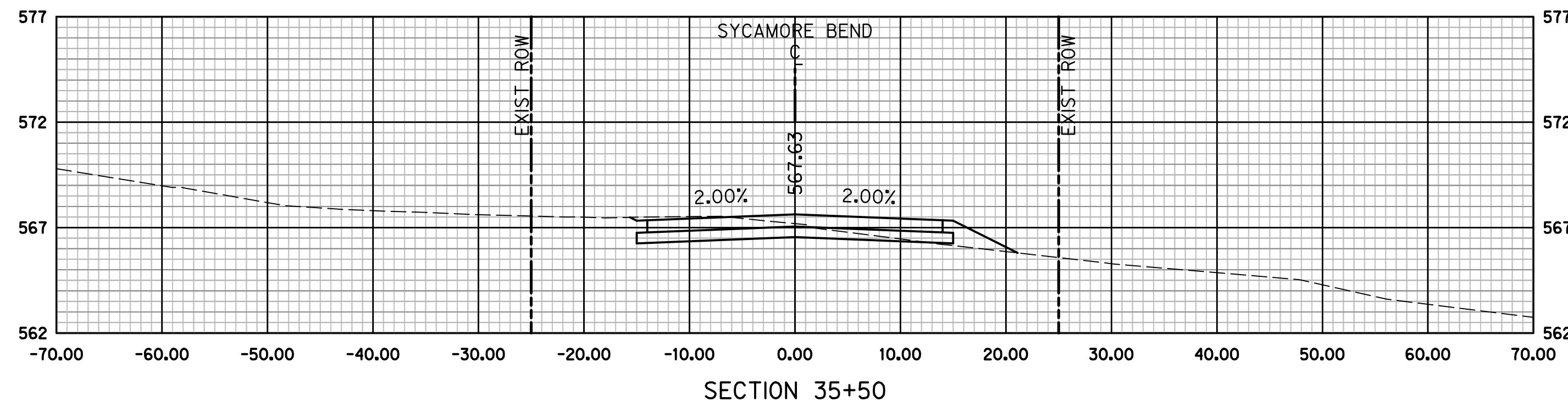
CROSS SECTIONS
STA 30+00 TO STA 33+50



JANUARY
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PUBLIC WORKS
TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

SHEET TITLE

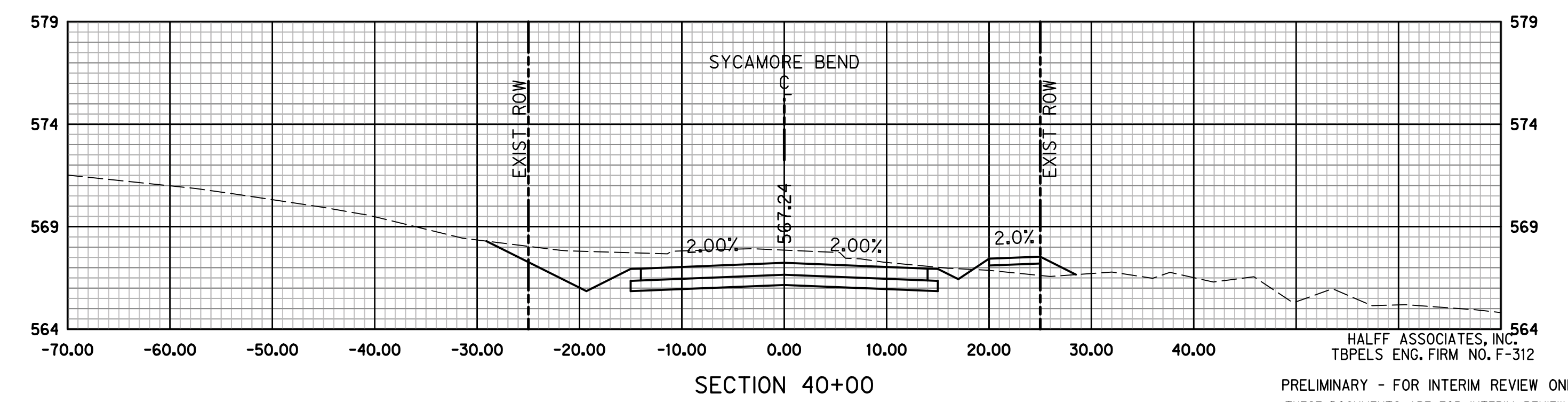
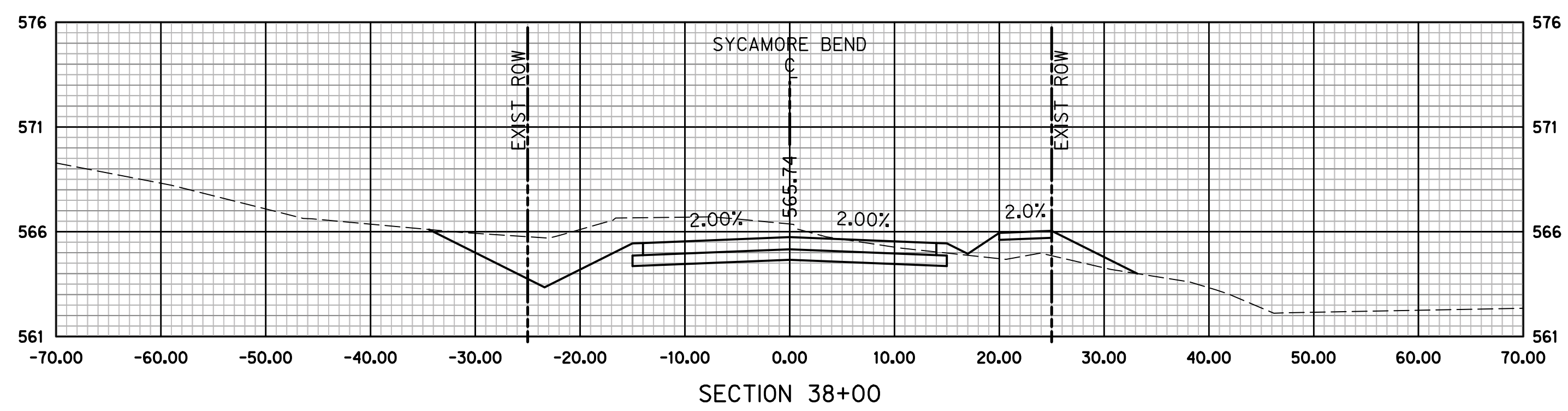
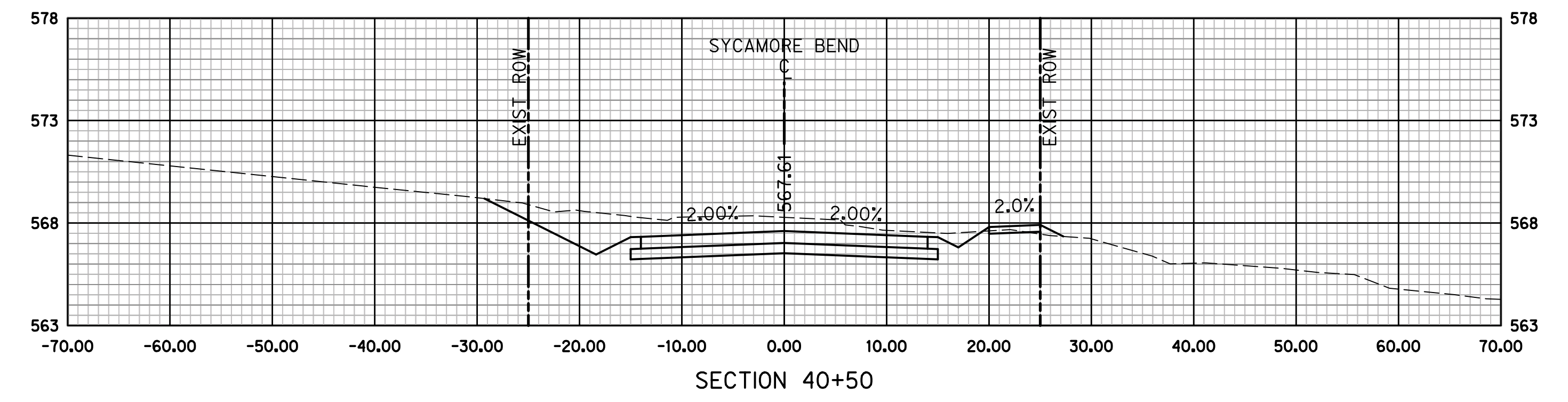
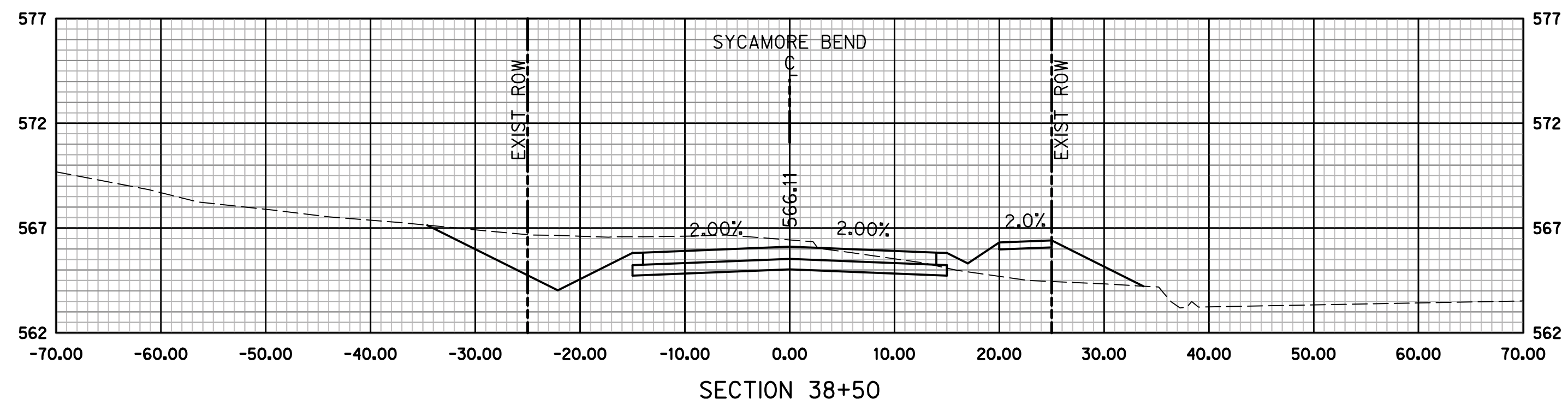
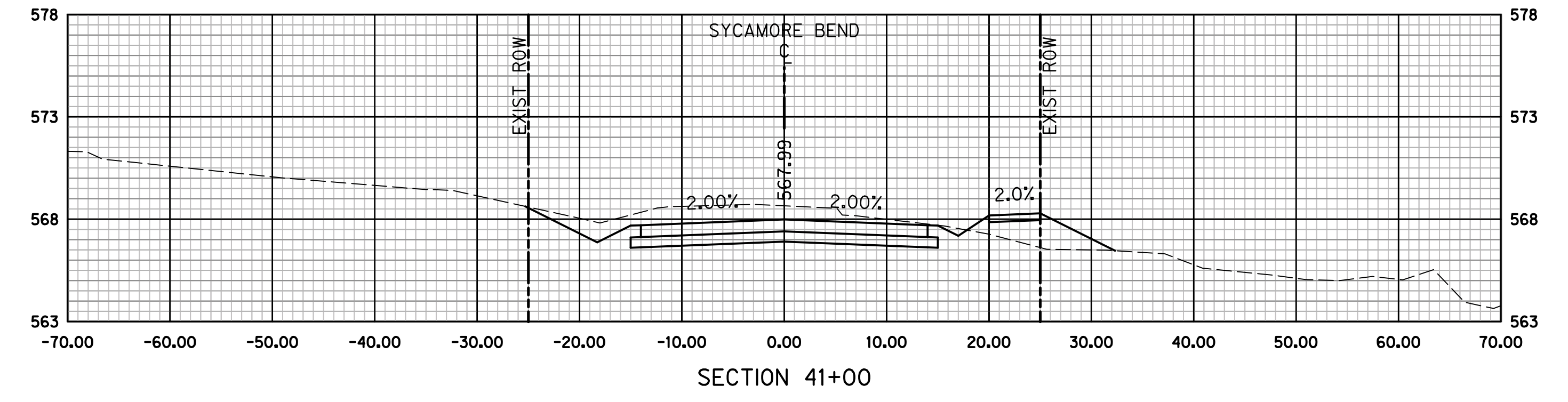
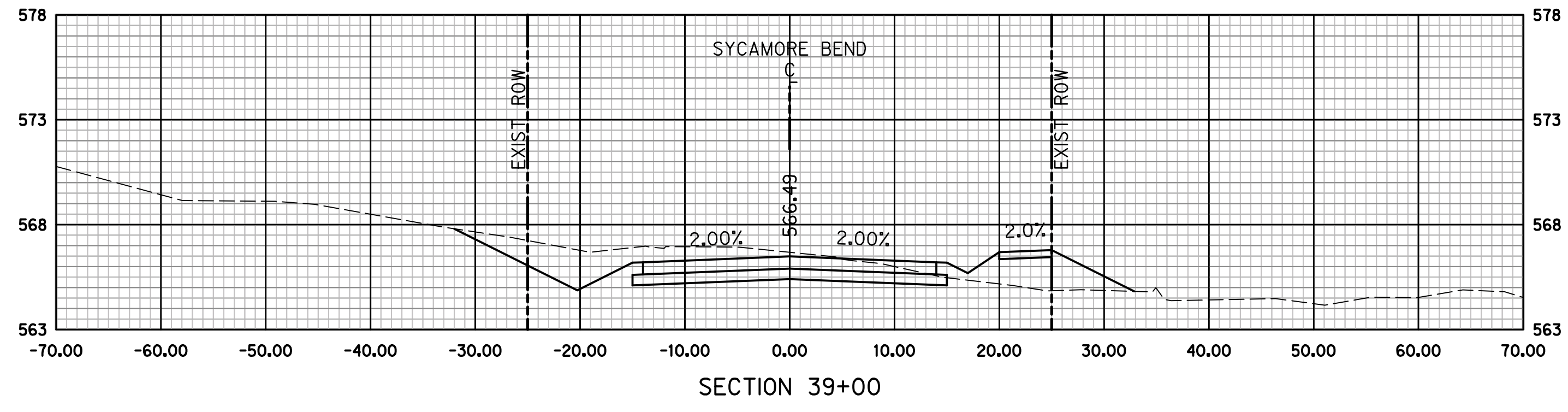
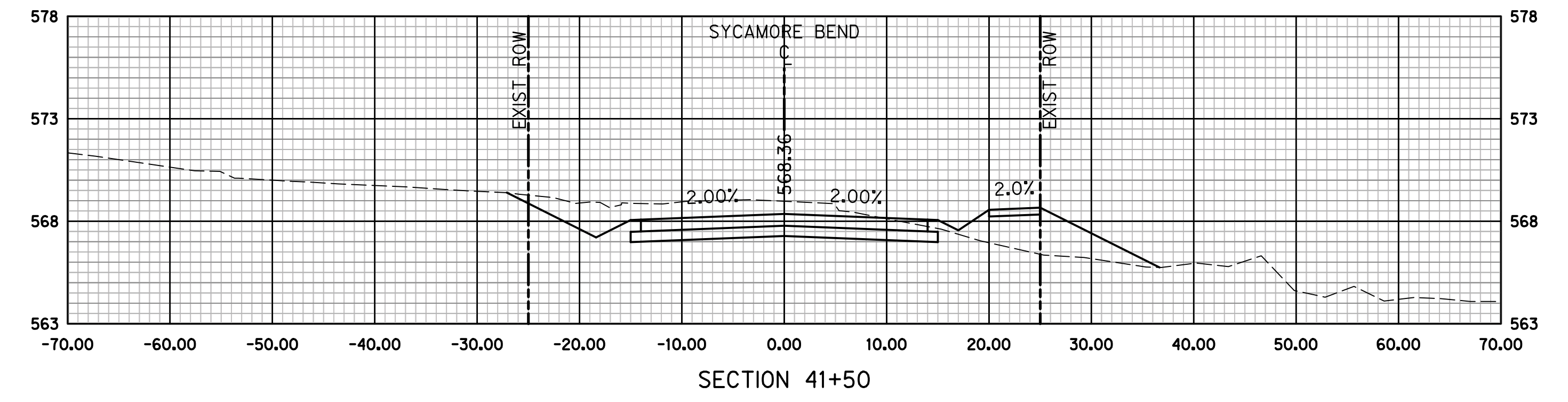
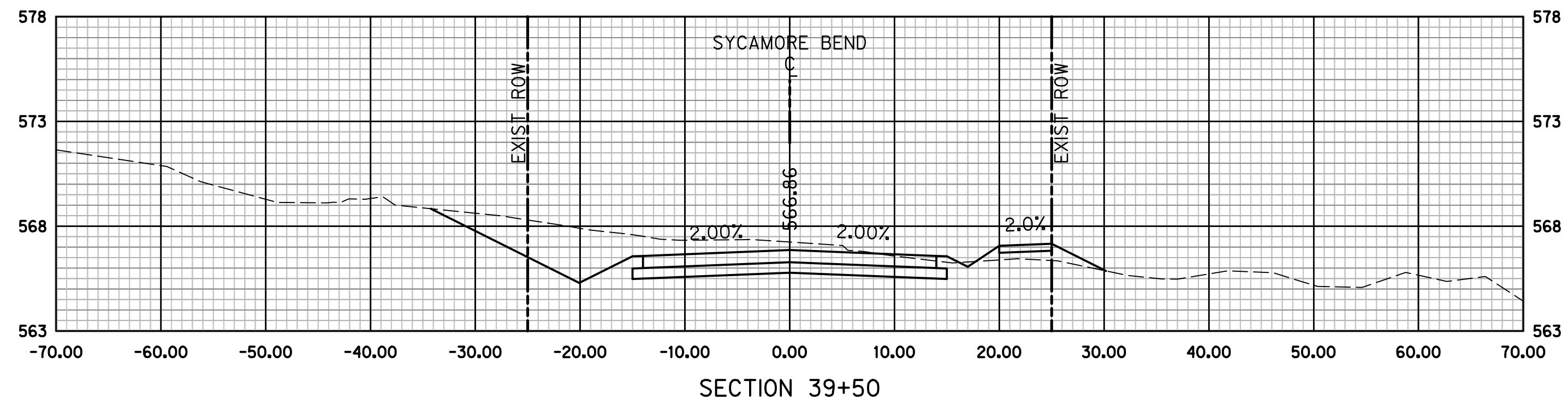
CROSS SECTIONS
STA 34+00 TO STA 37+50



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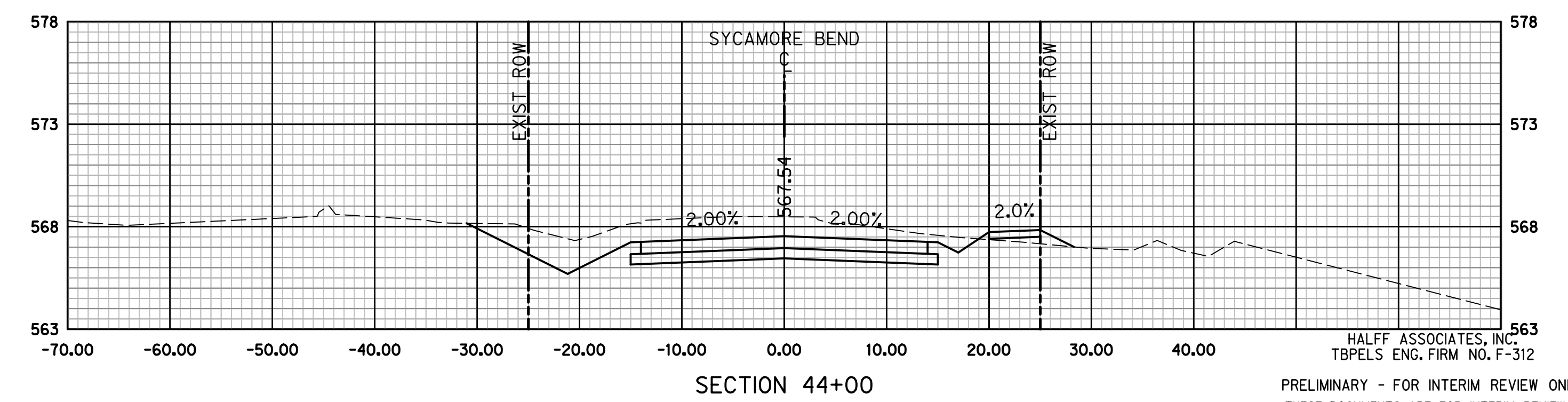
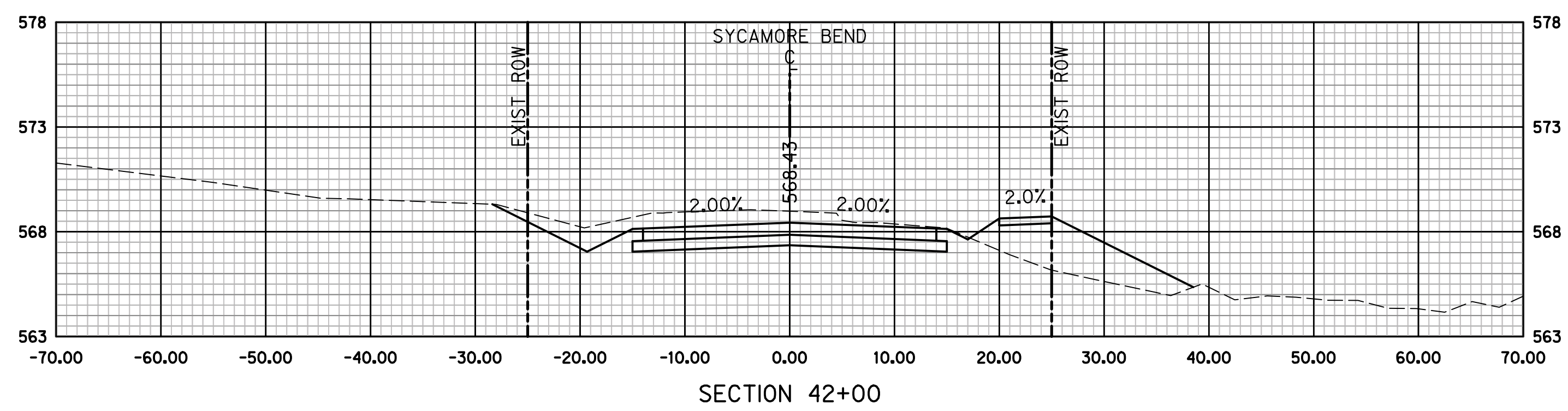
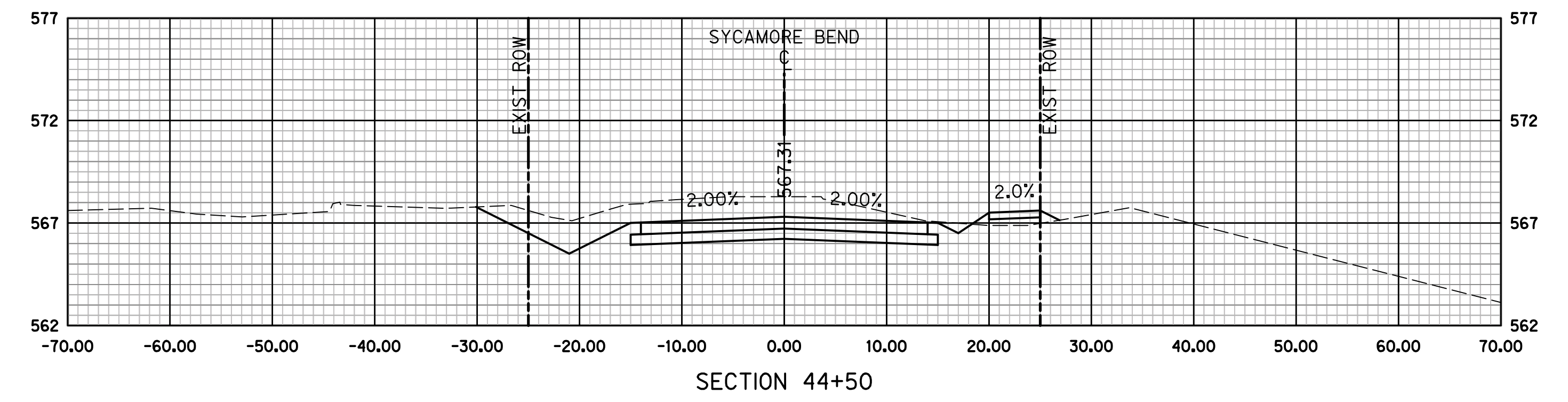
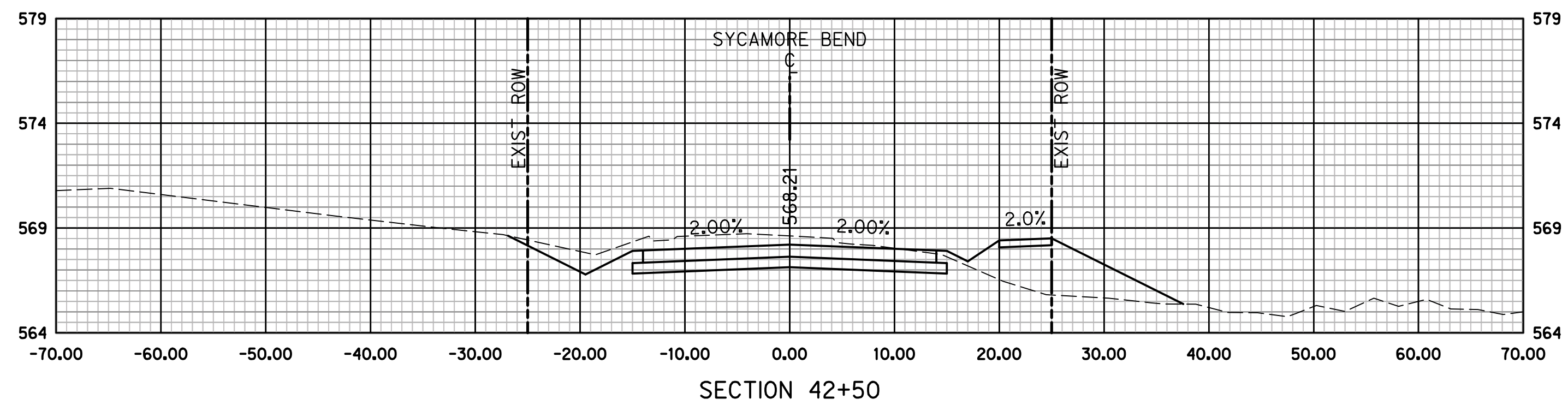
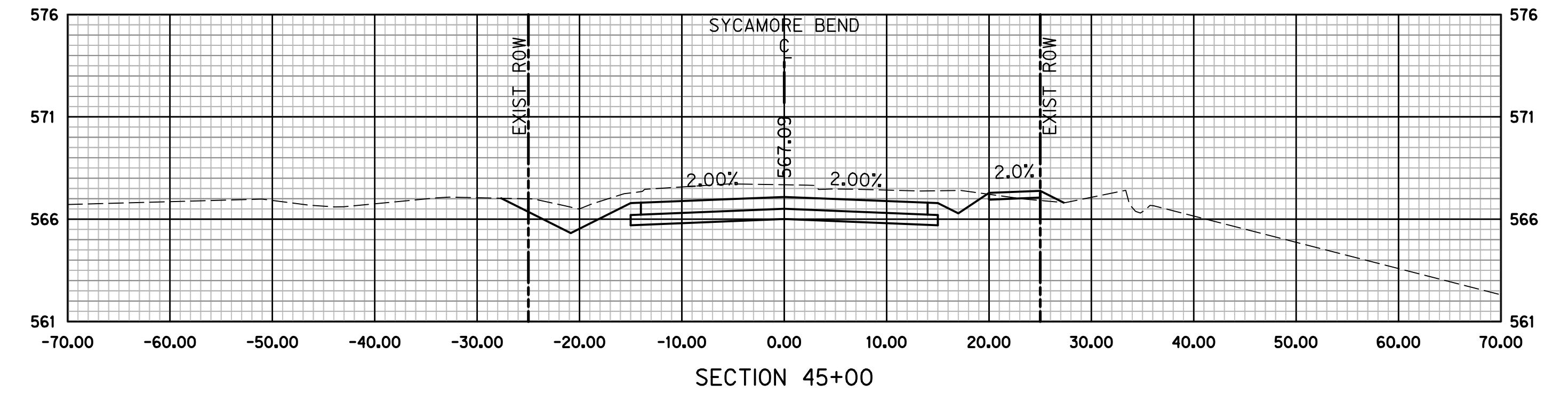
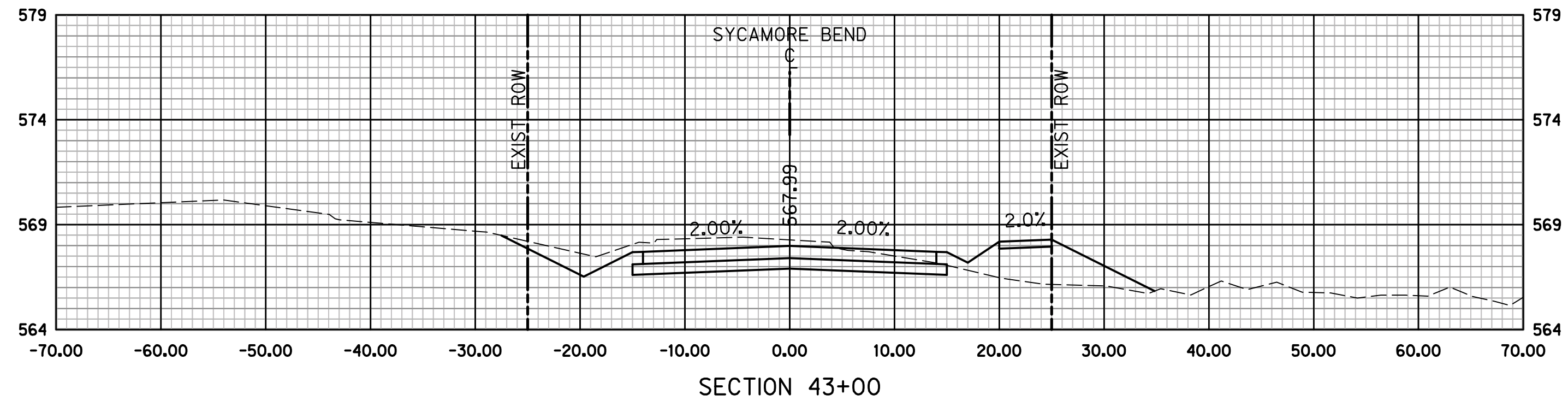
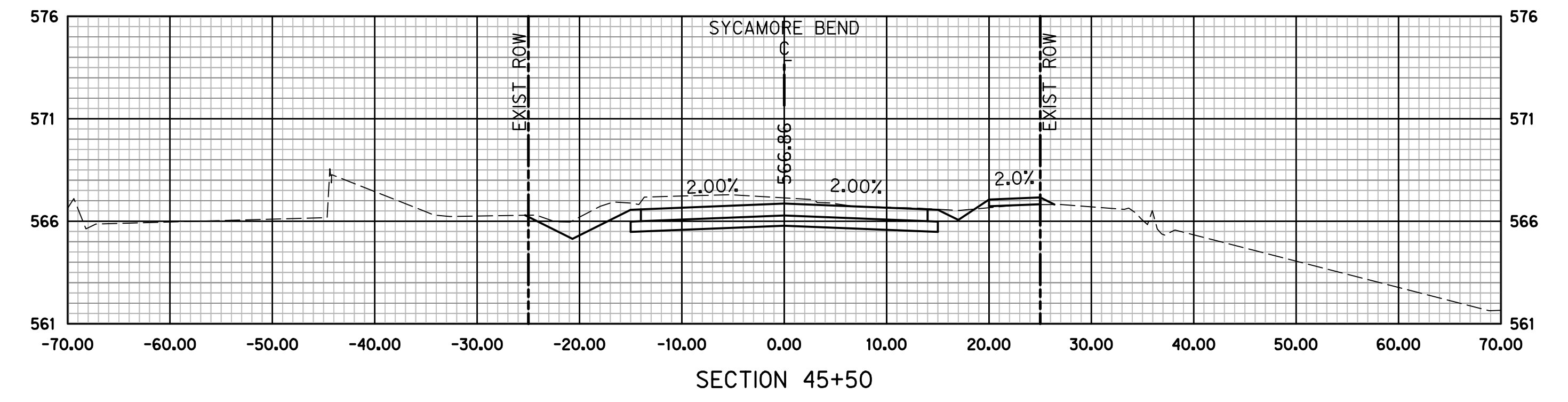
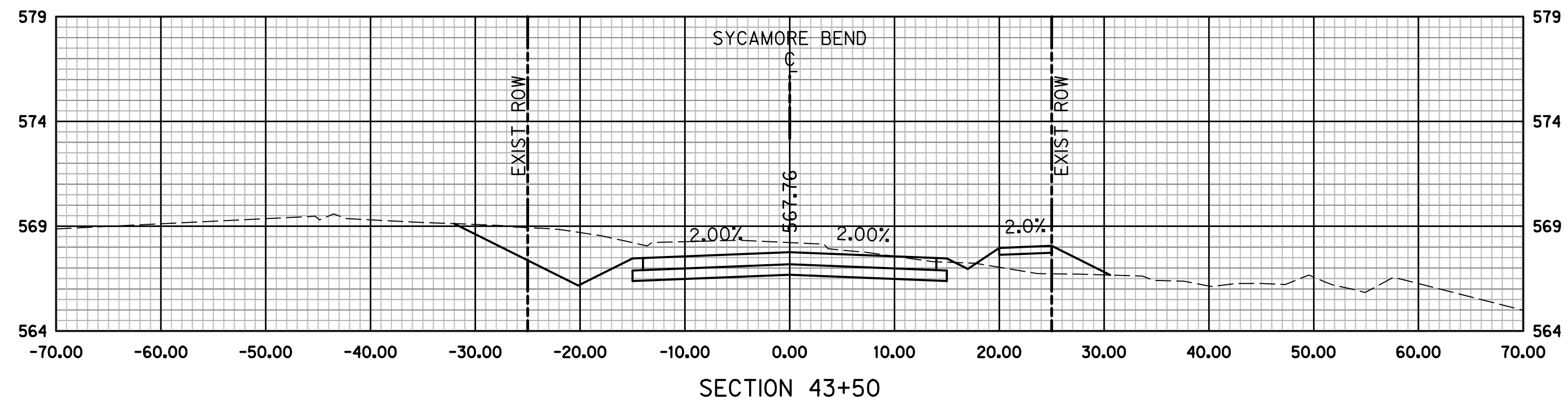
PUBLIC WORKS
TOWN OF HICKORY CREEK

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

CROSS SECTIONS
STA 38+00 TO STA 41+50



JANUARY
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SHEET
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TOWN OF HICKORY CREEK

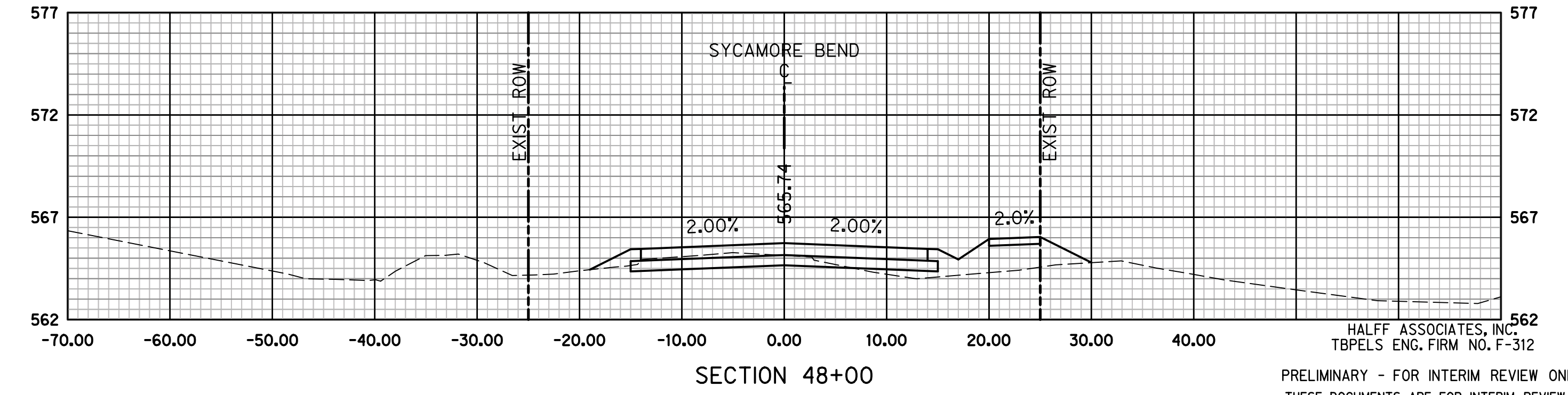
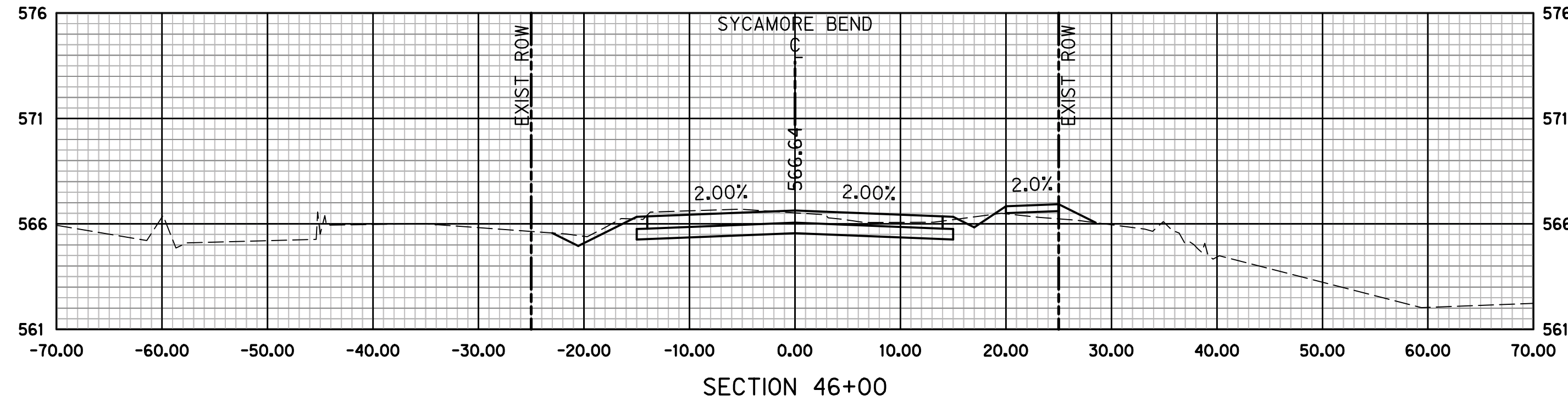
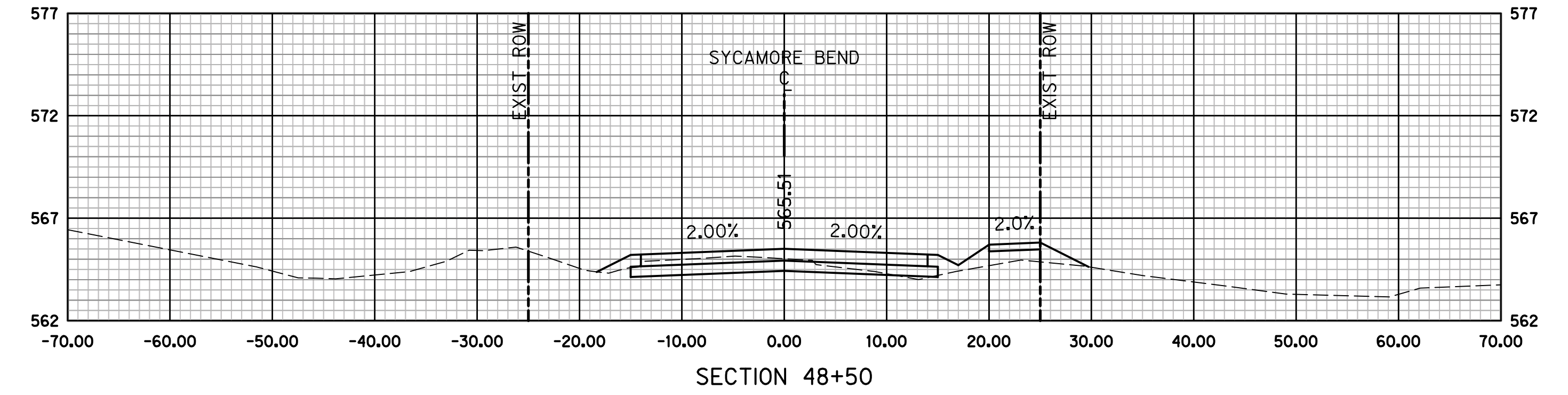
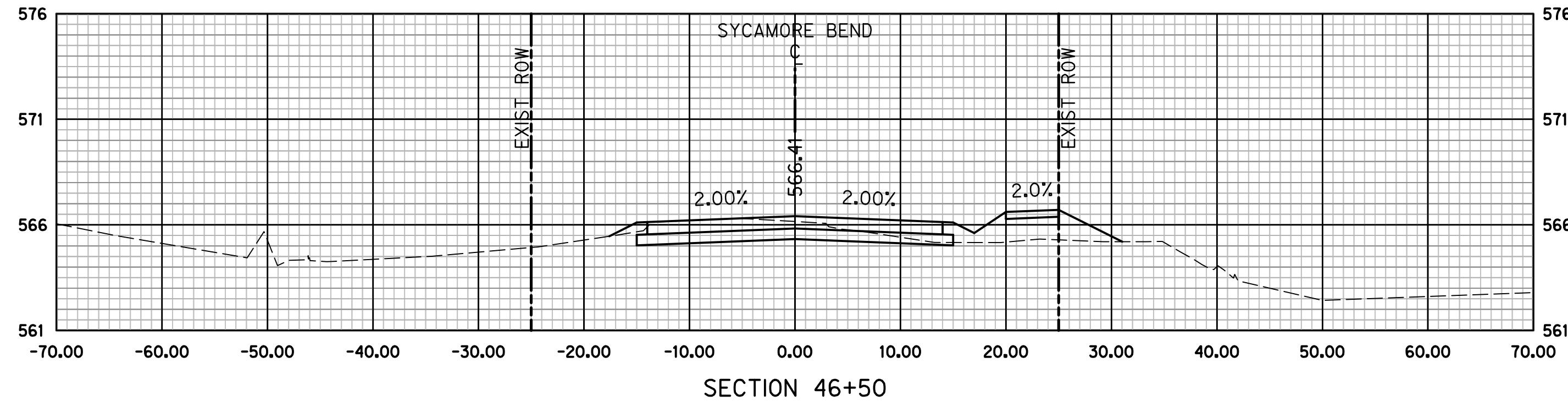
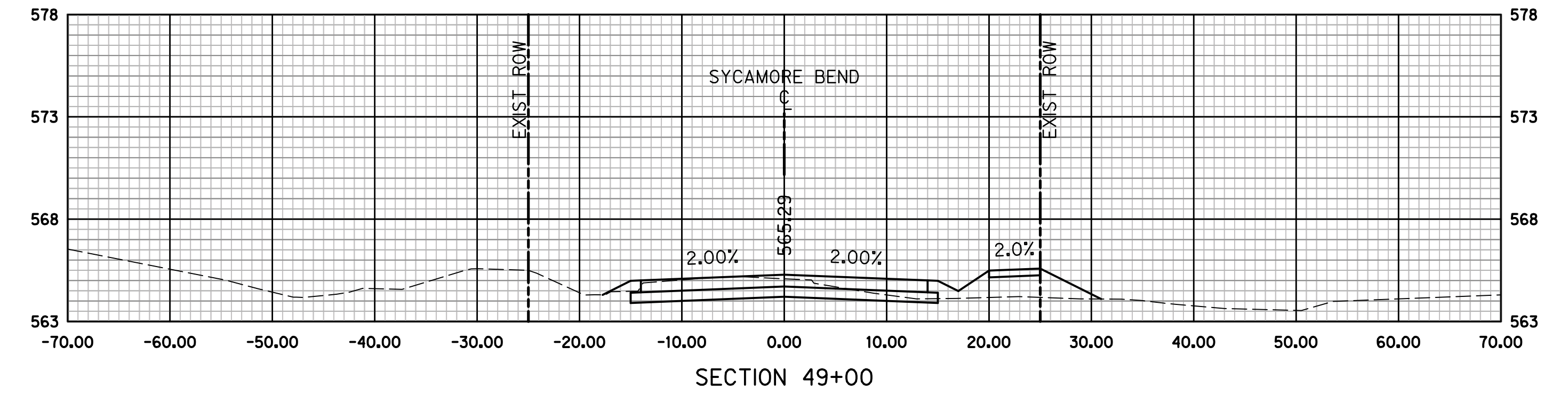
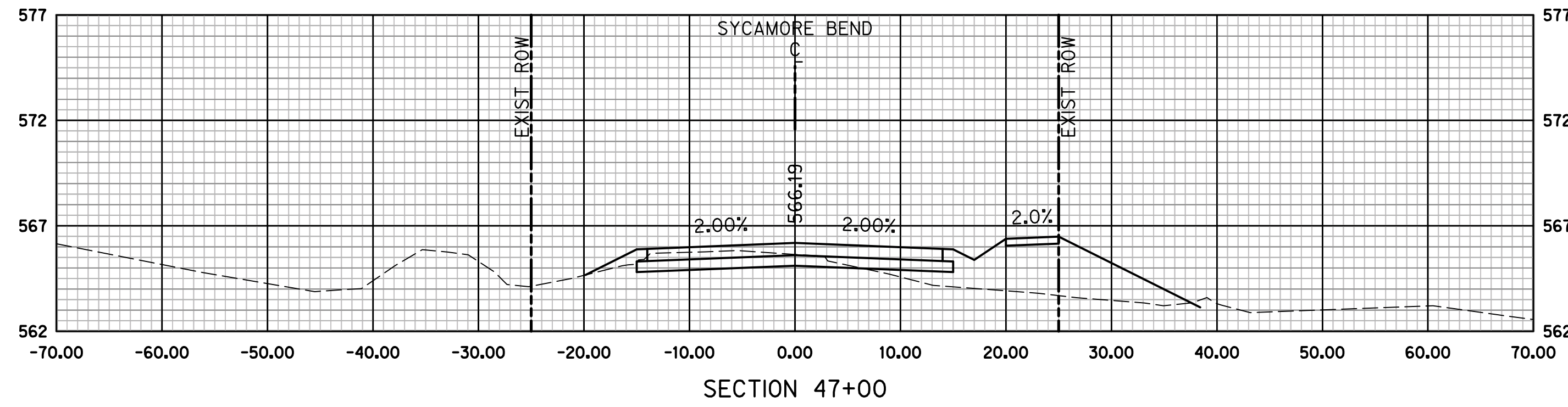
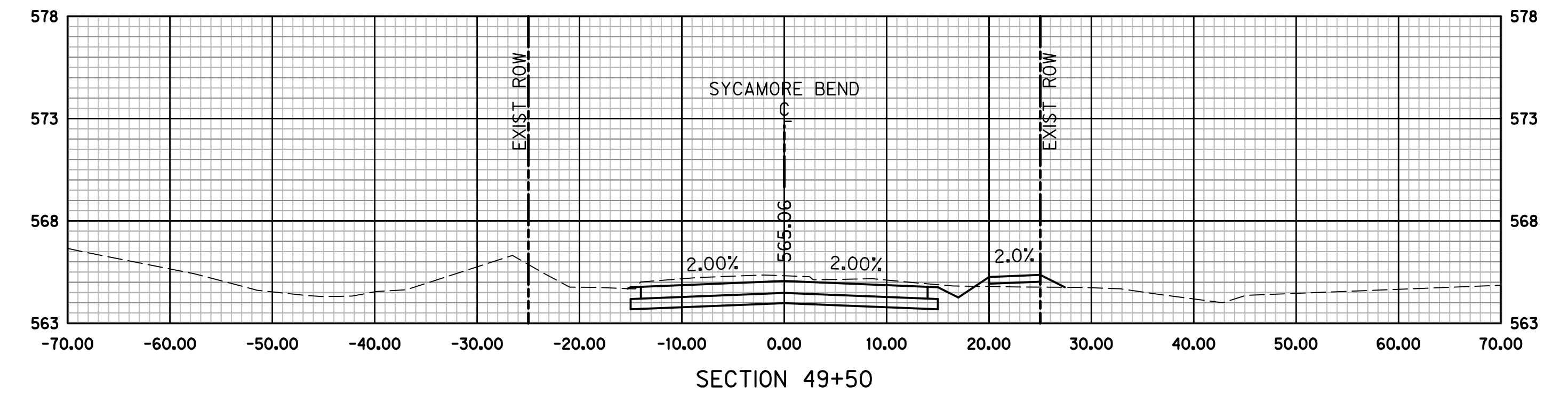
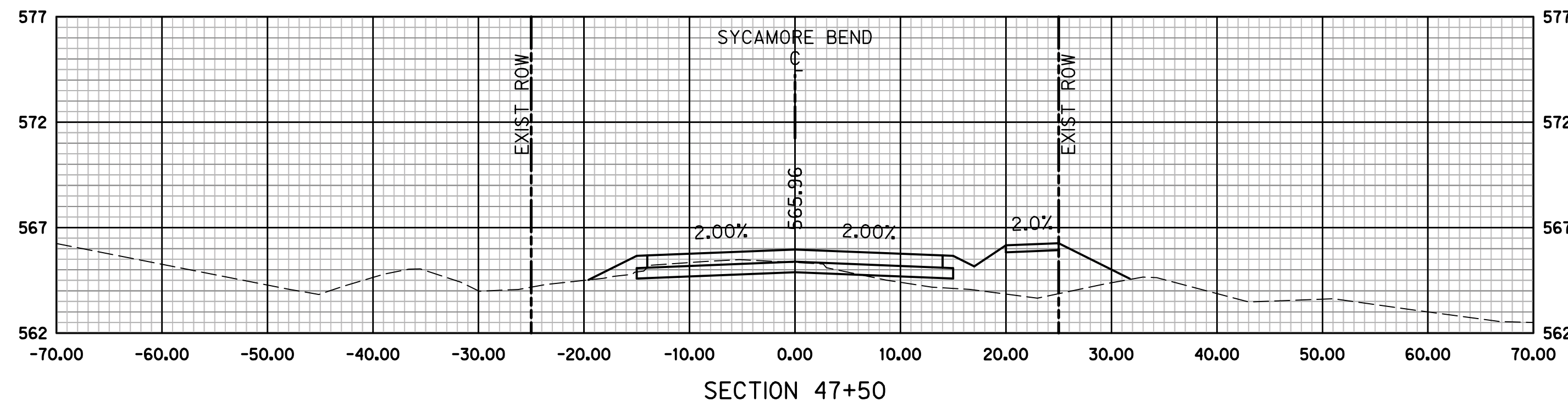
SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

CROSS SECTIONS
STA 42+00 TO STA 45+50



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TOWN OF HICKORY CREEK

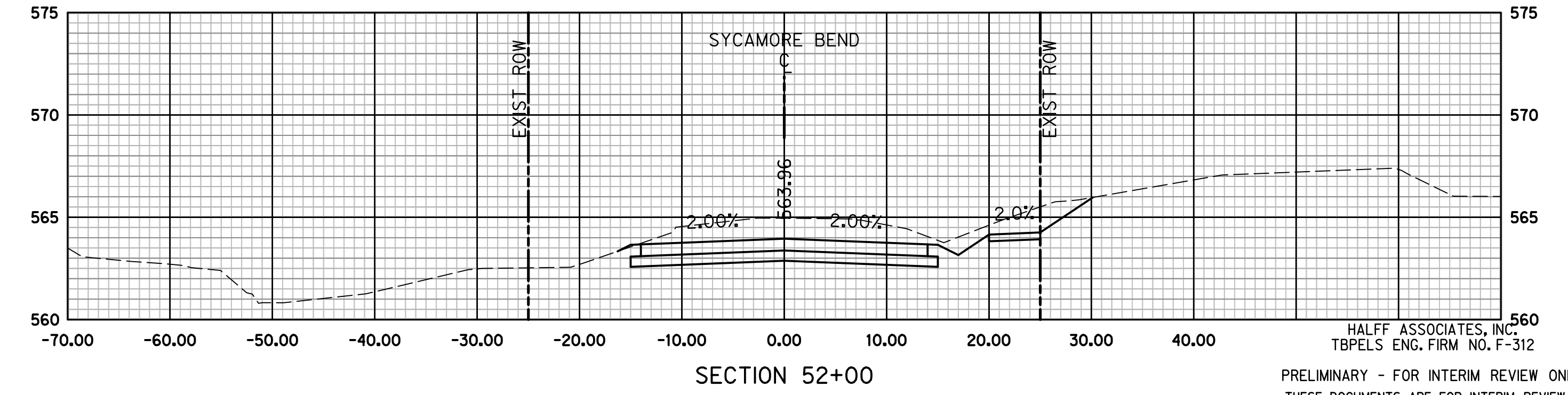
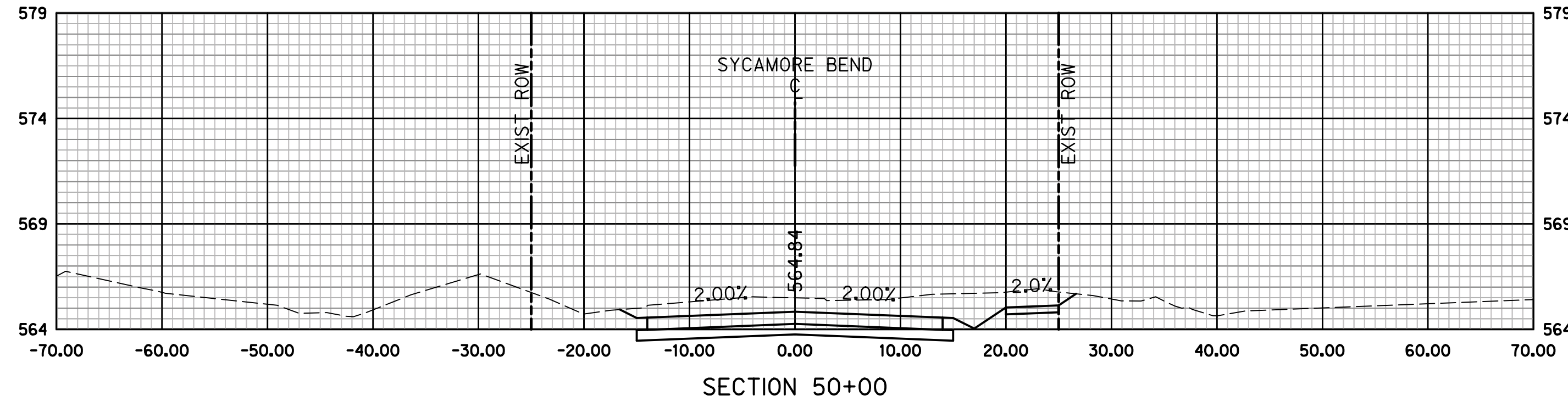
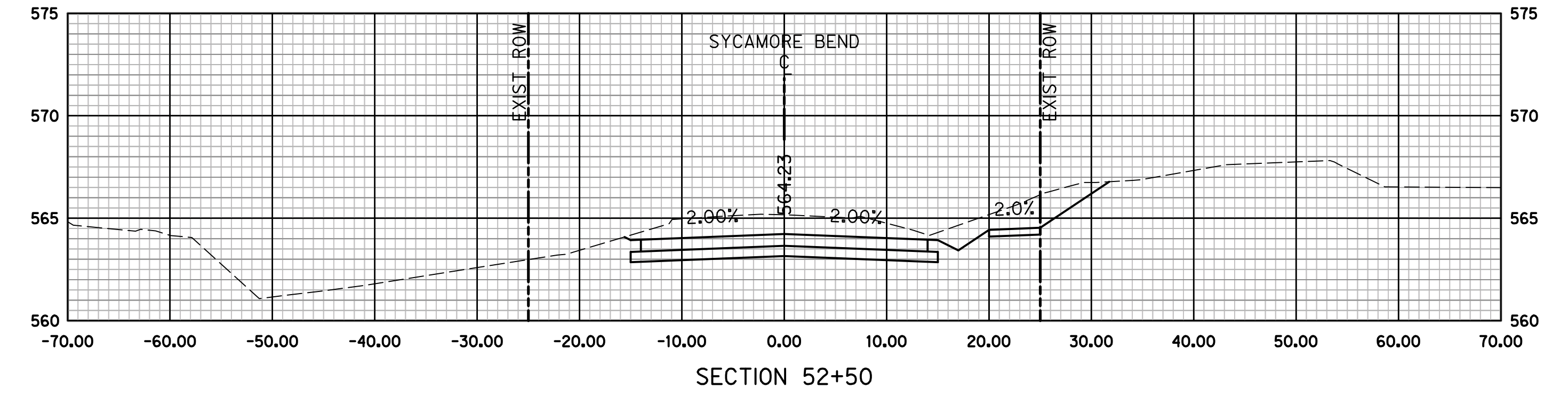
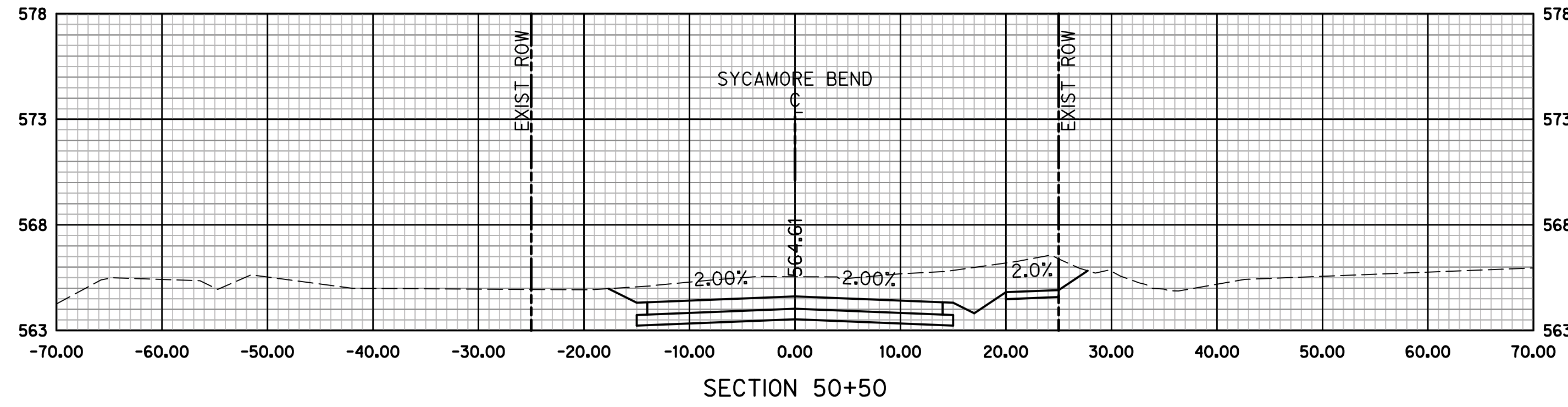
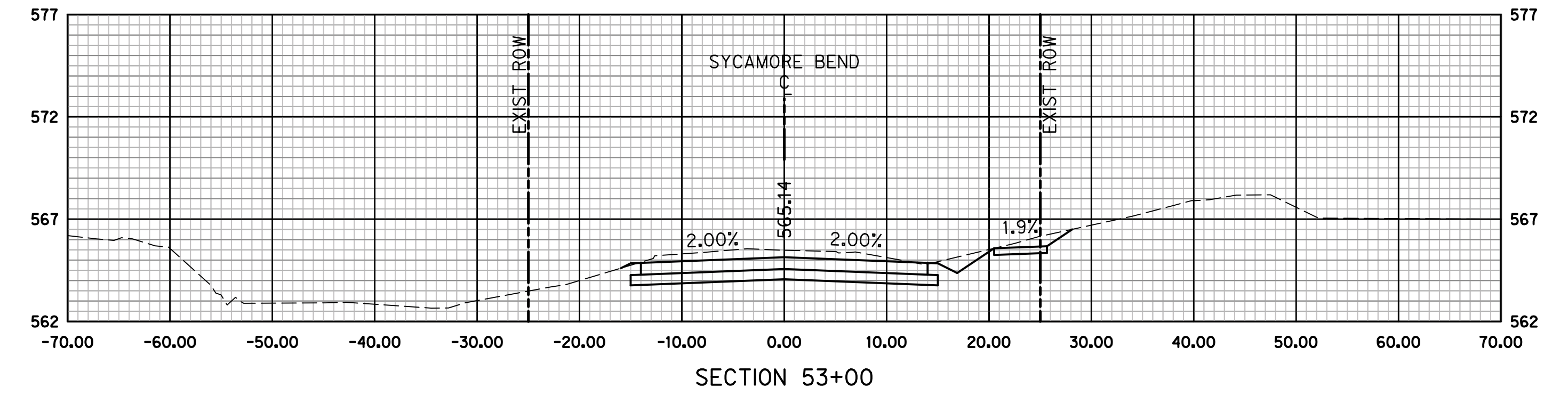
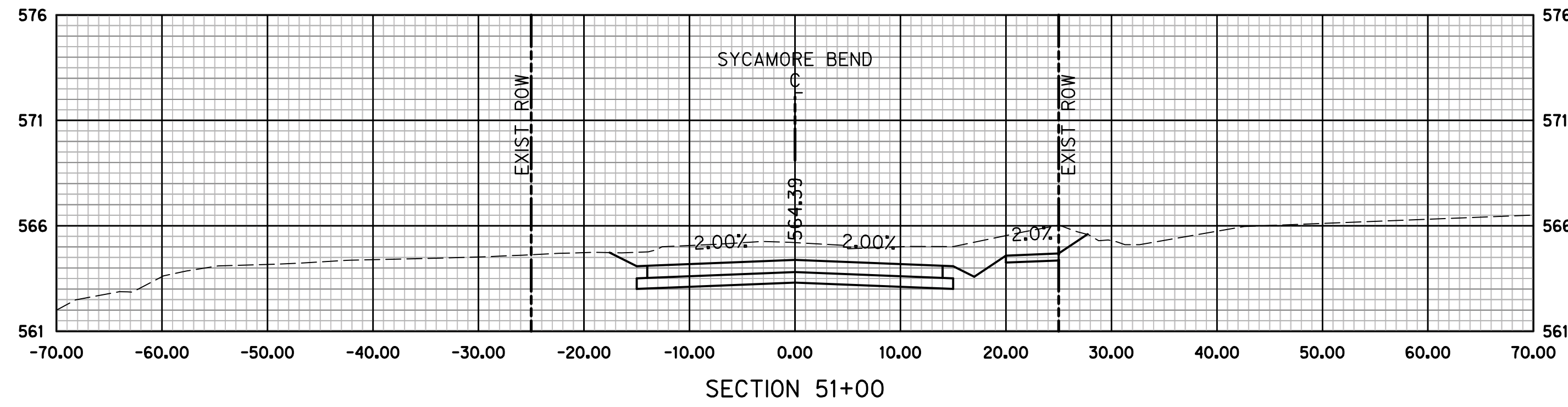
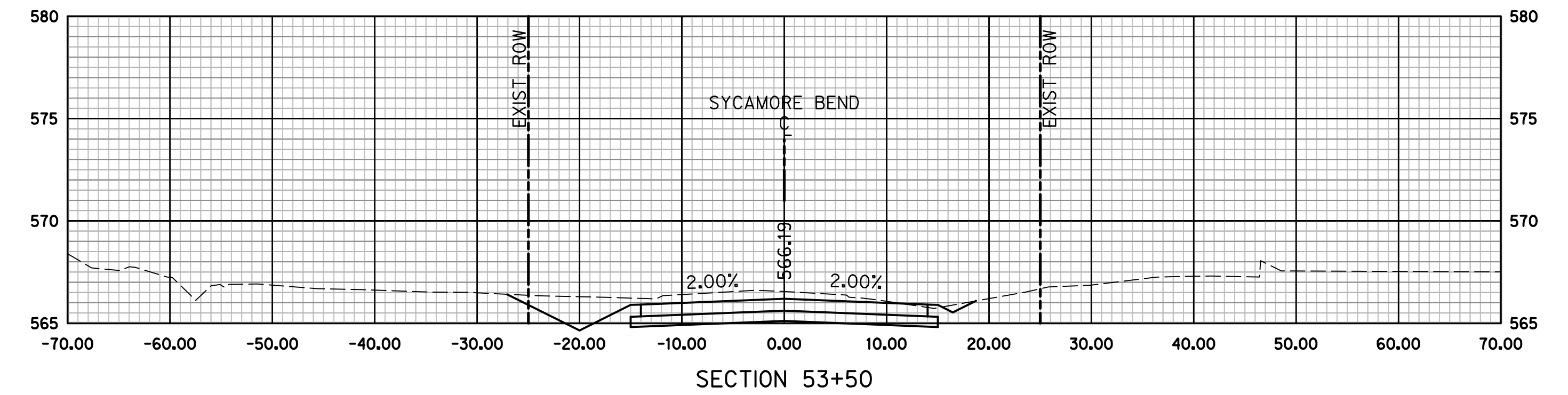
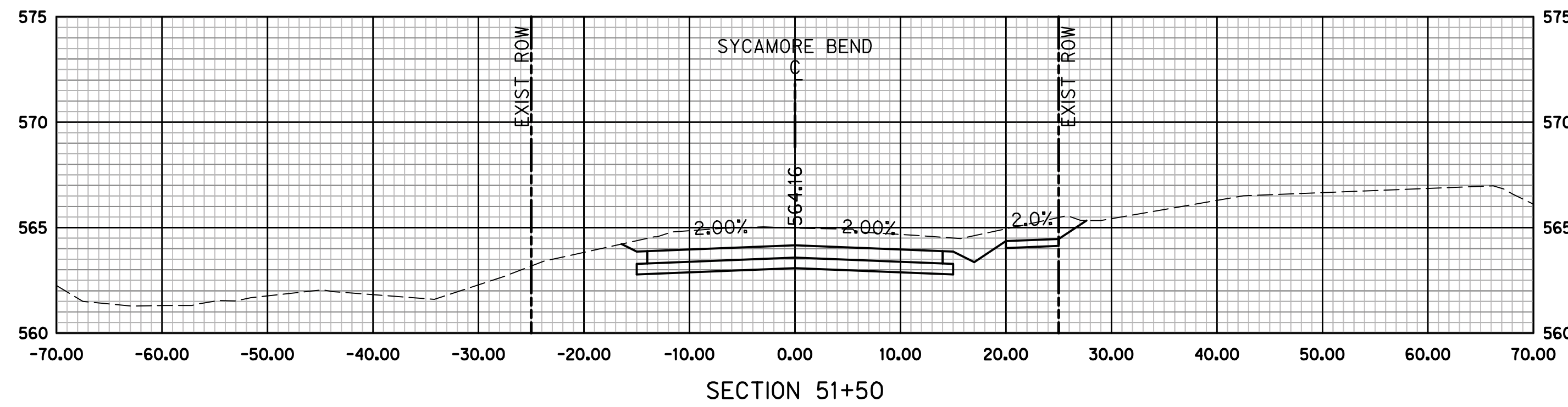
SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

CROSS SECTIONS
STA 46+00 TO STA 49+50



JANUARY
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SHEET
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PUBLIC WORKS
TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

SHEET TITLE

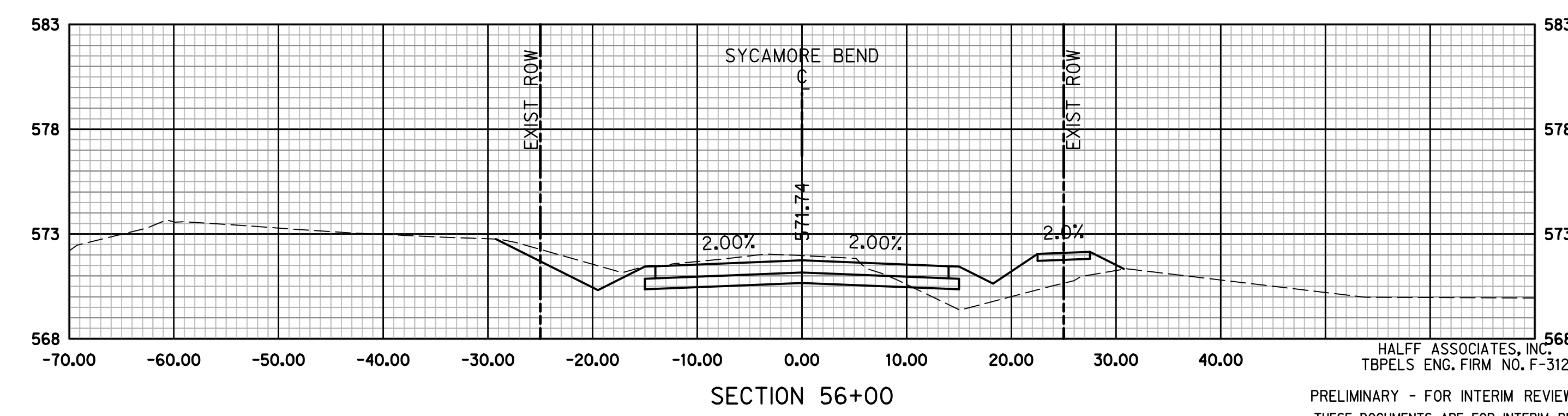
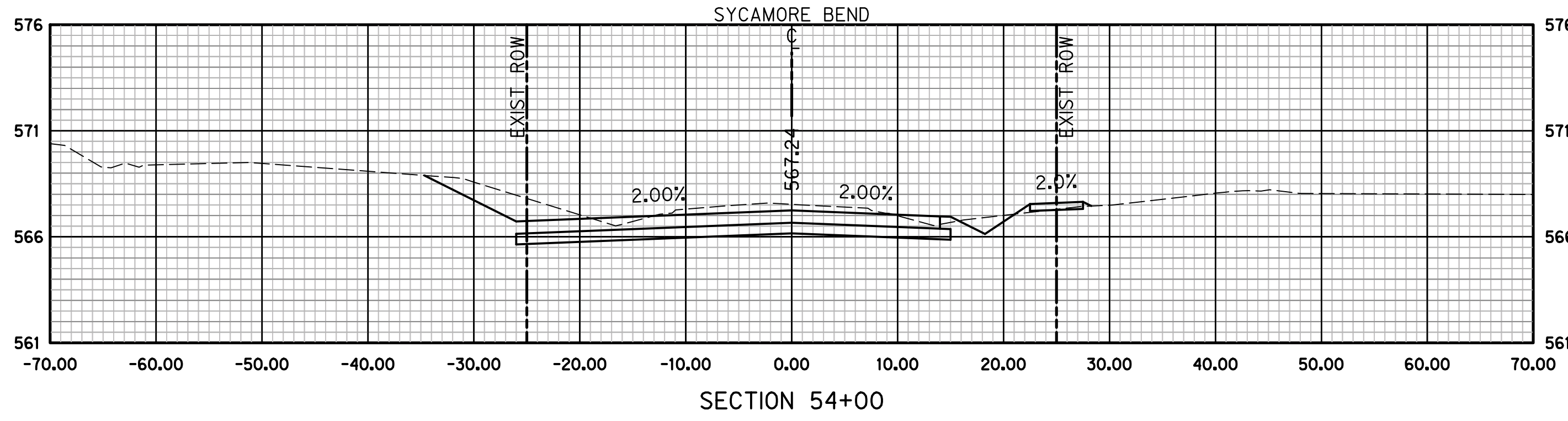
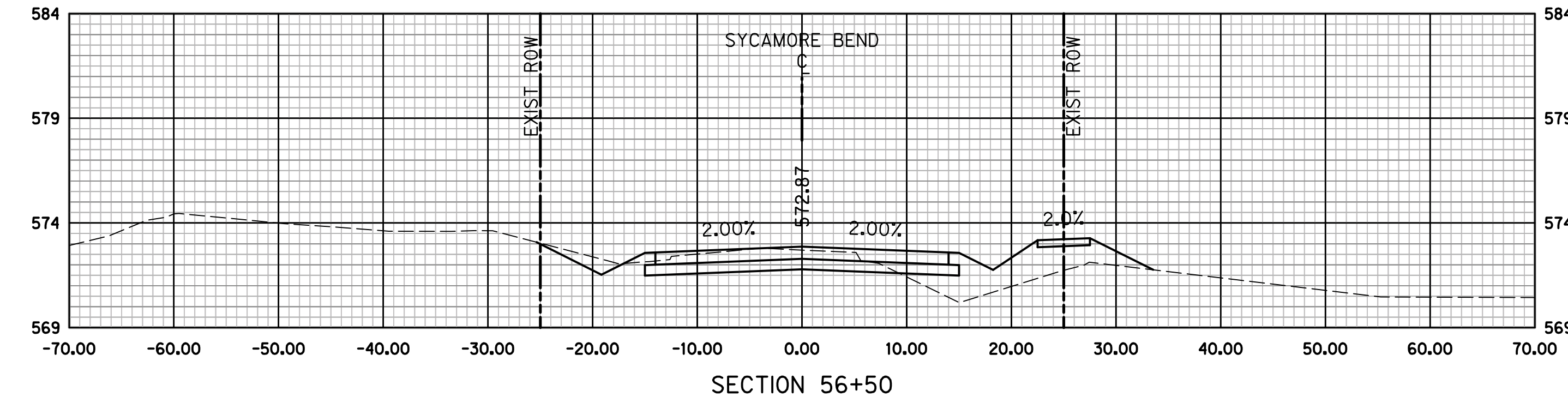
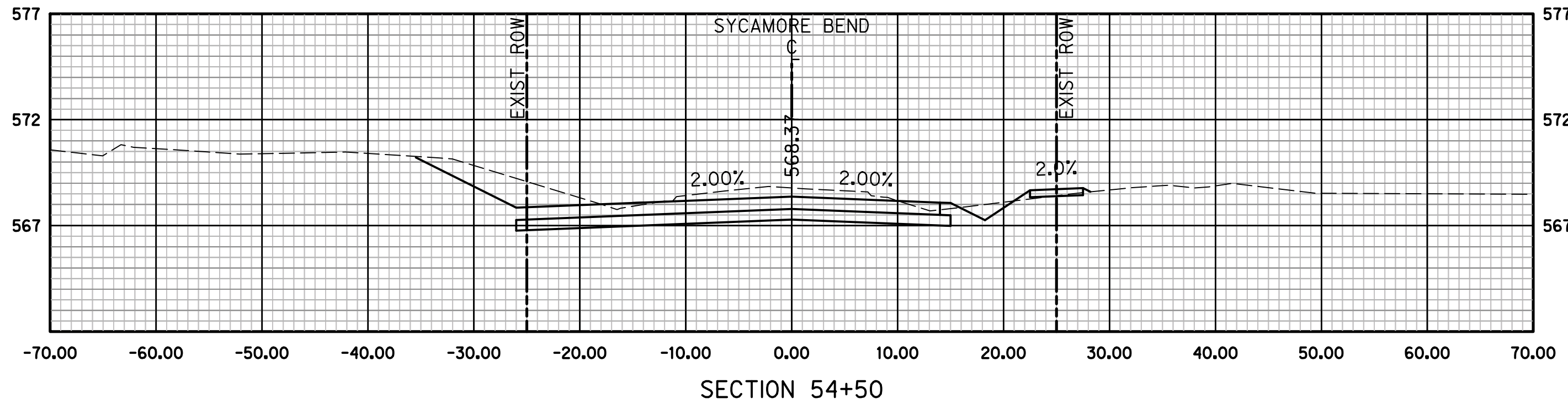
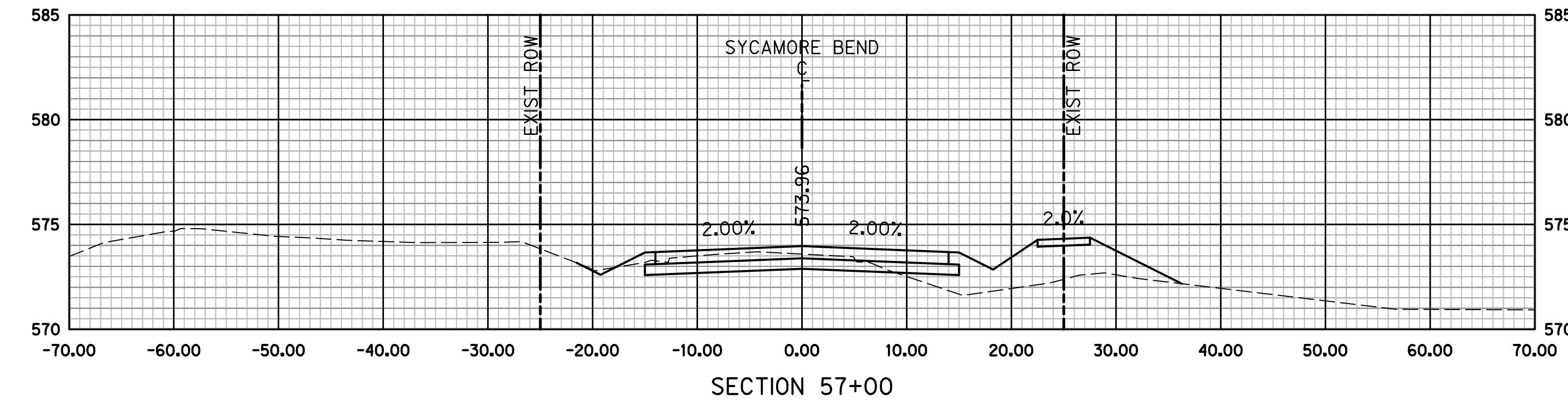
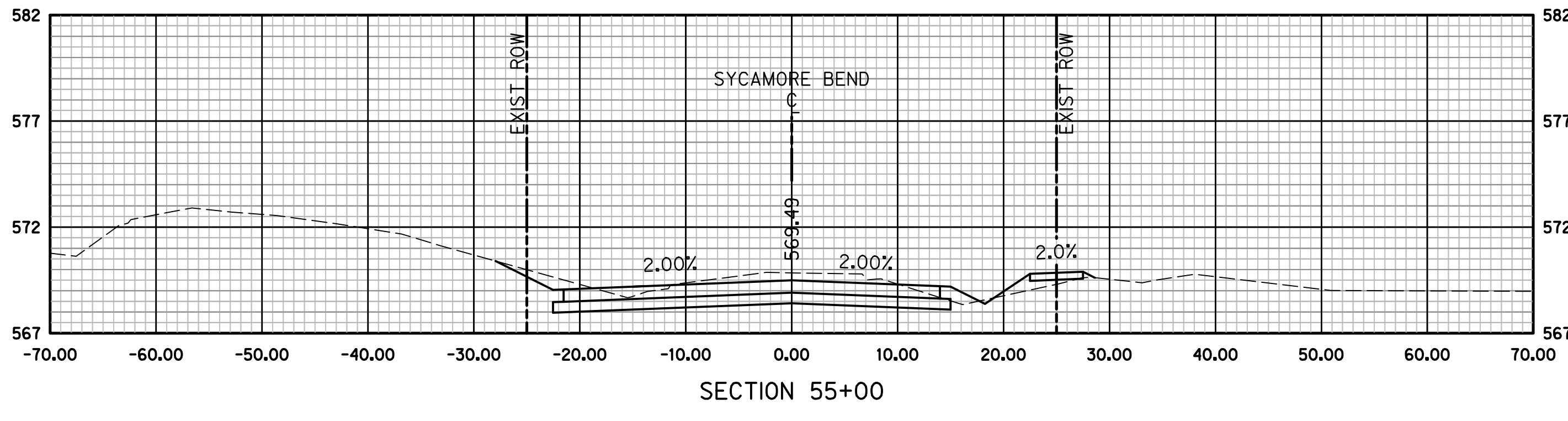
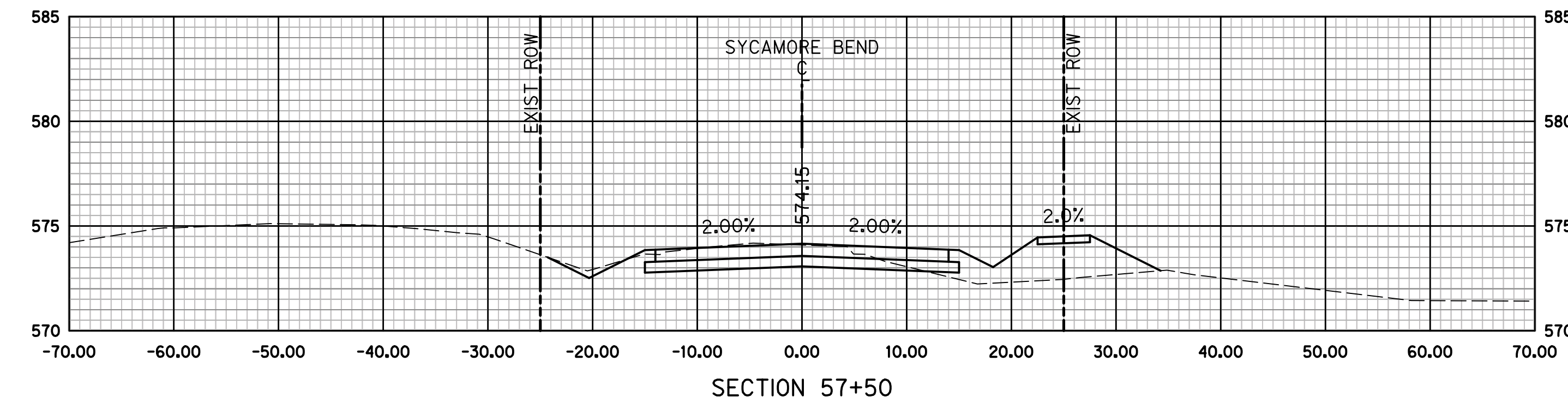
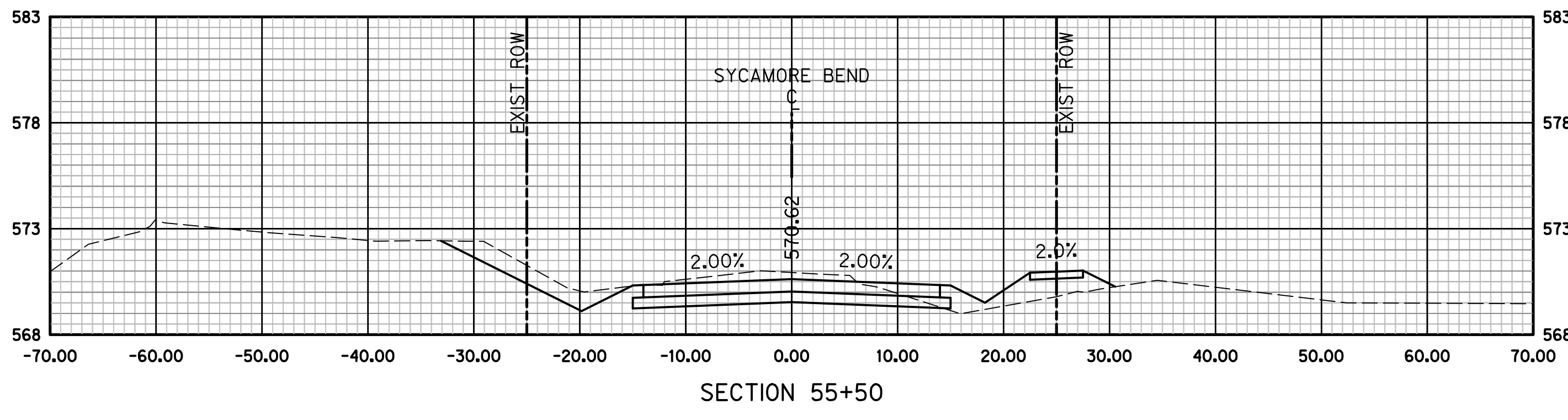
CROSS SECTIONS
STA 50+00 TO STA 53+50



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PUBLIC WORKS
TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

SHEET TITLE

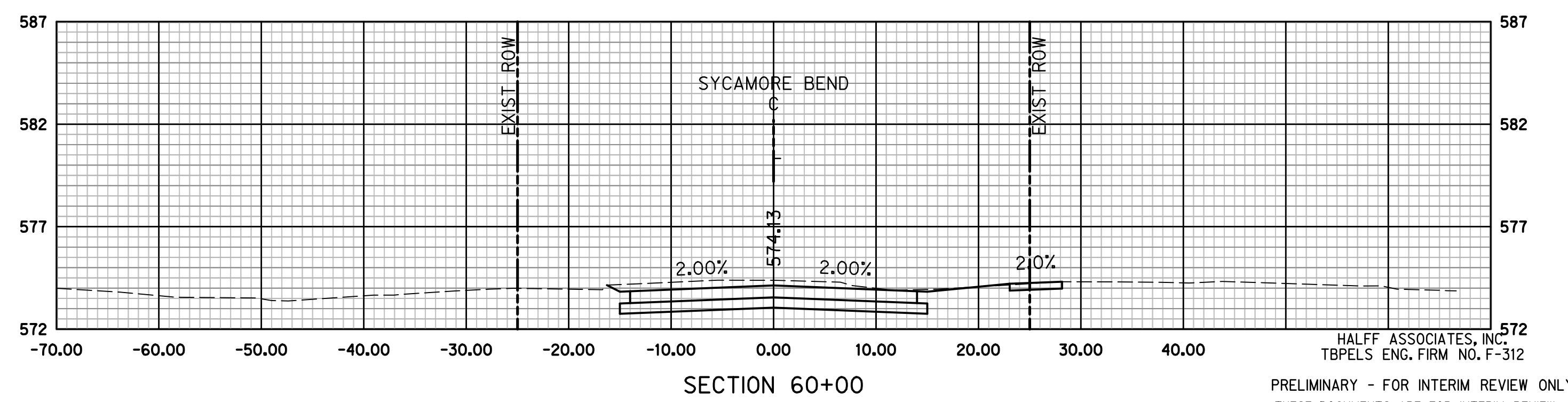
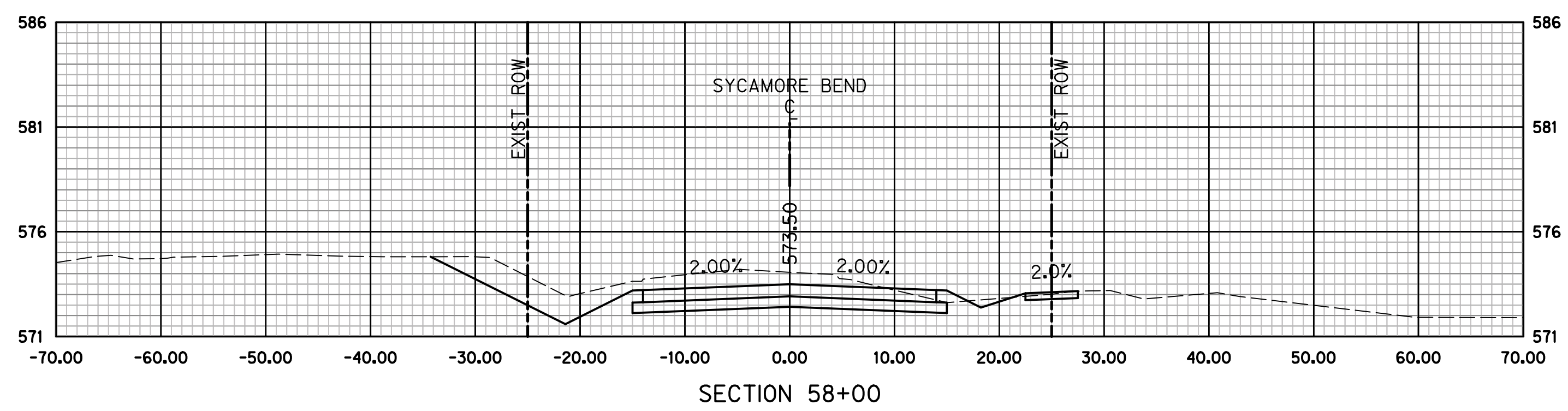
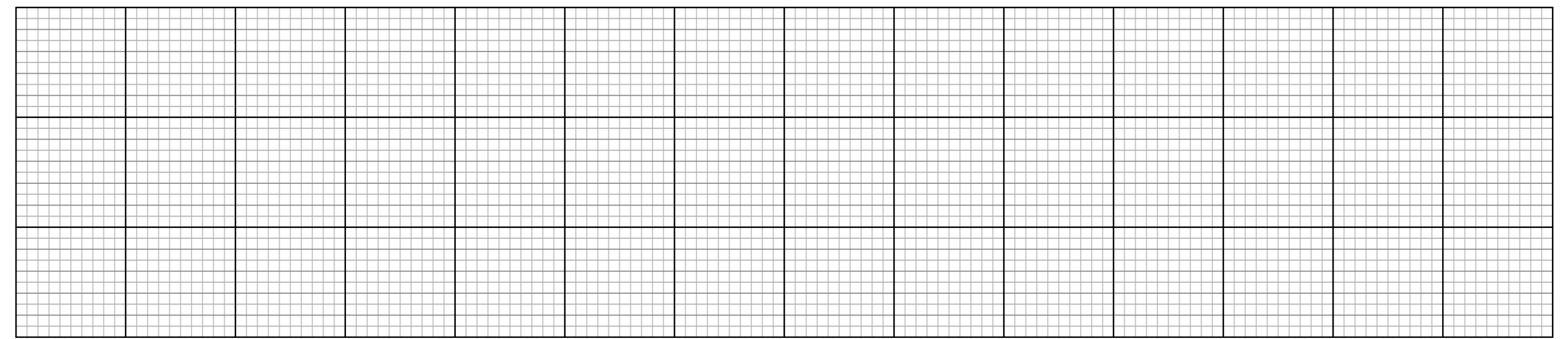
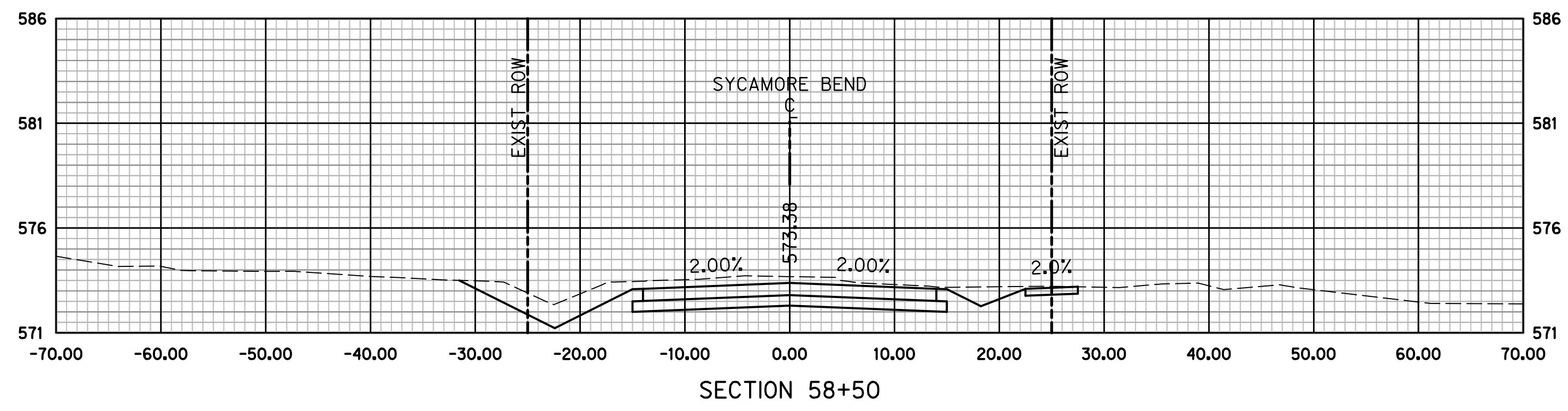
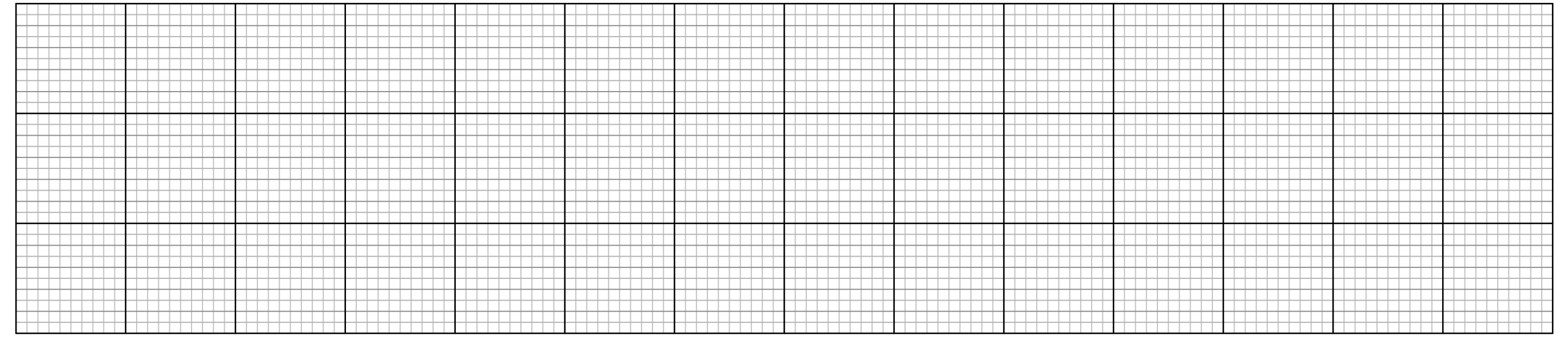
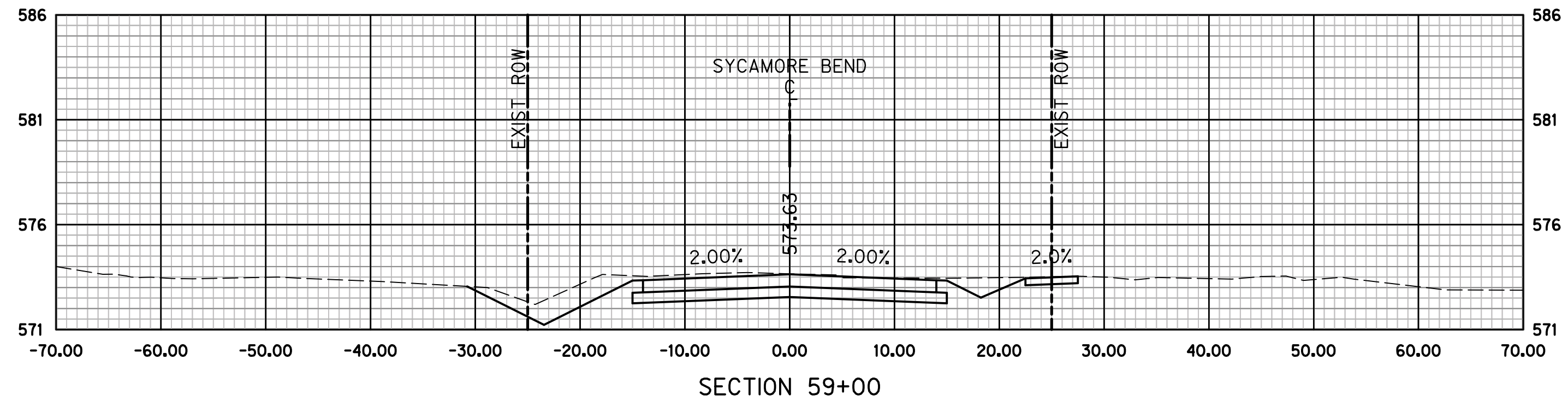
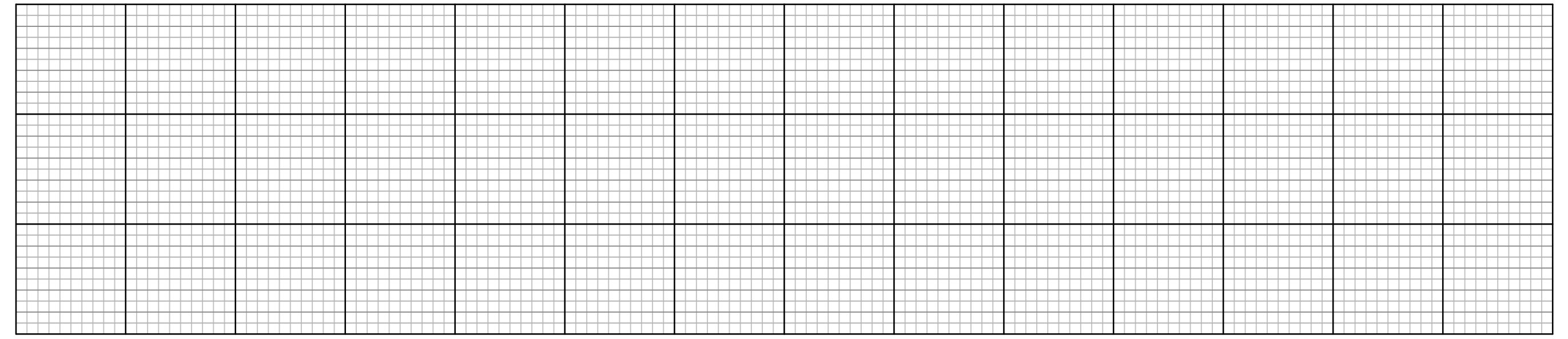
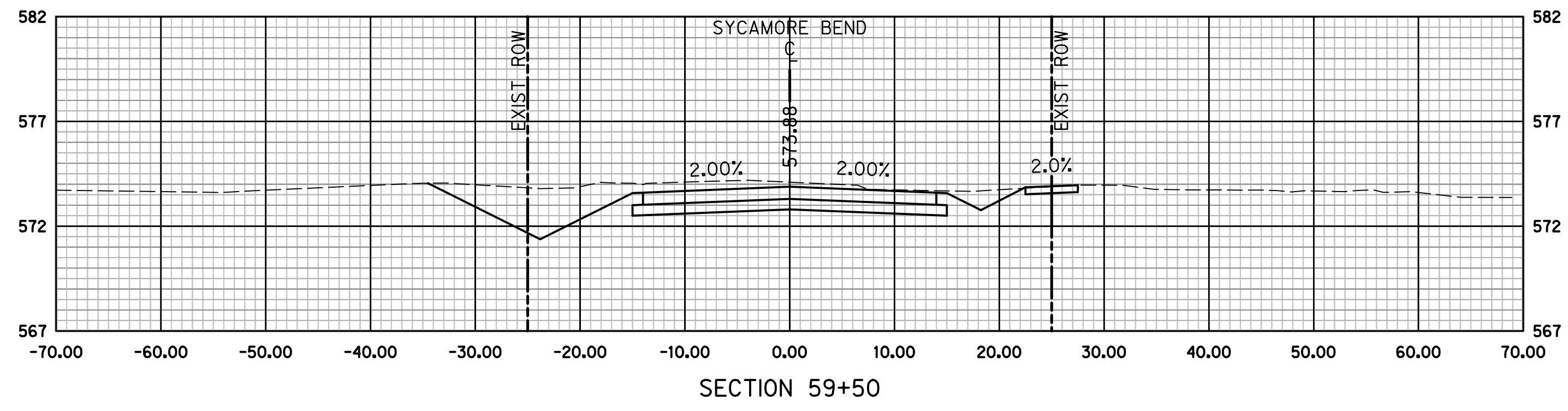
CROSS SECTIONS
STA 54+00 TO STA 57+50



JANUARY
2021

DATE

SHEET
95



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KEVIN J. GRONWALDT 130871 1/13/2021
Name PE# Date



PUBLIC WORKS
TOWN OF HICKORY CREEK

PROJECT TITLE

SYCAMORE BEND ROAD
FROM TURBEVILLE ROAD TO
SYCAMORE BEND PARK

SHEET TITLE

CROSS SECTIONS
STA 58+00 TO END



JANUARY
2021

DATE

SHEET
96

Denton County Paddle Trail - Launch Sites

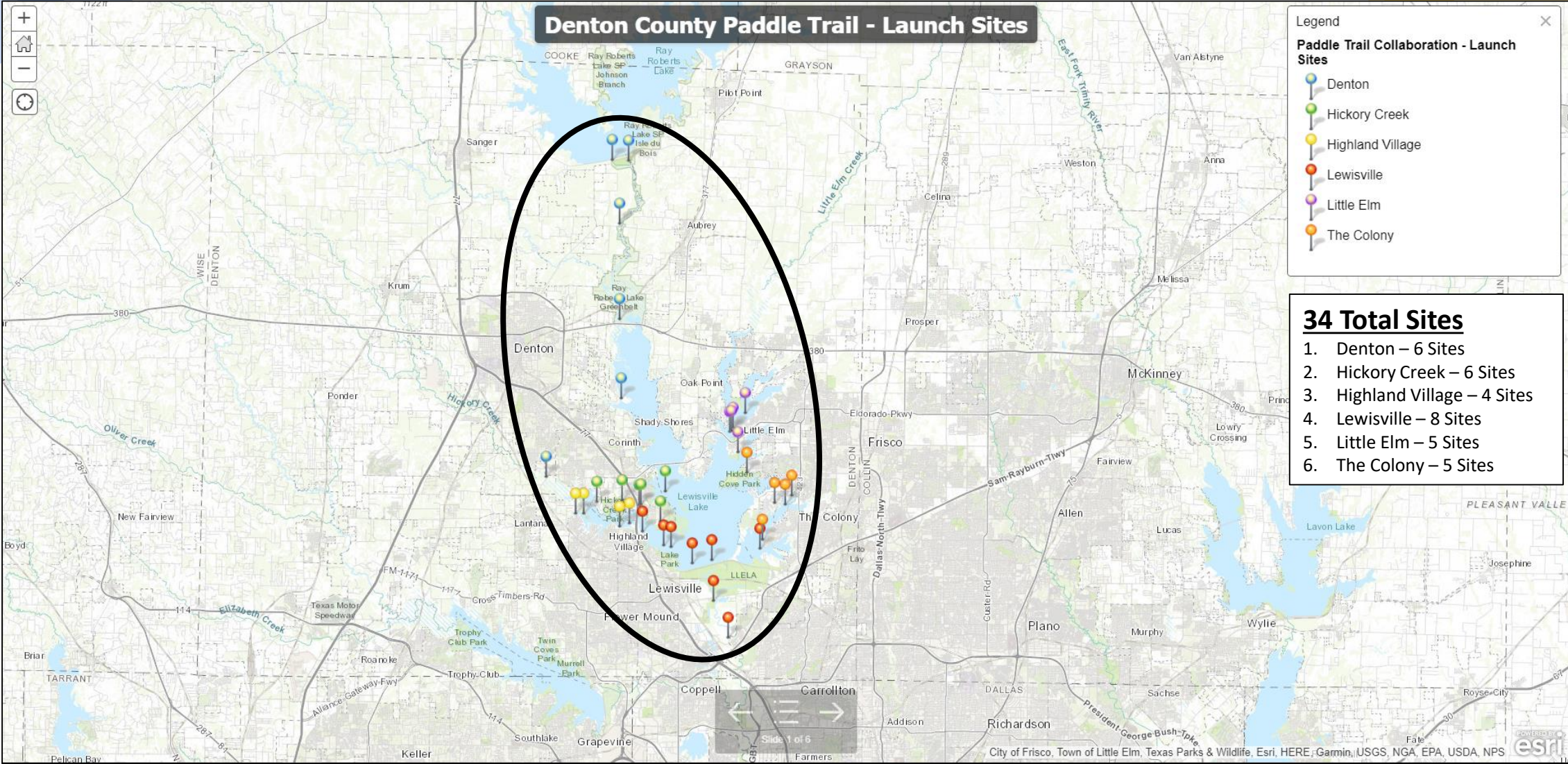
Legend

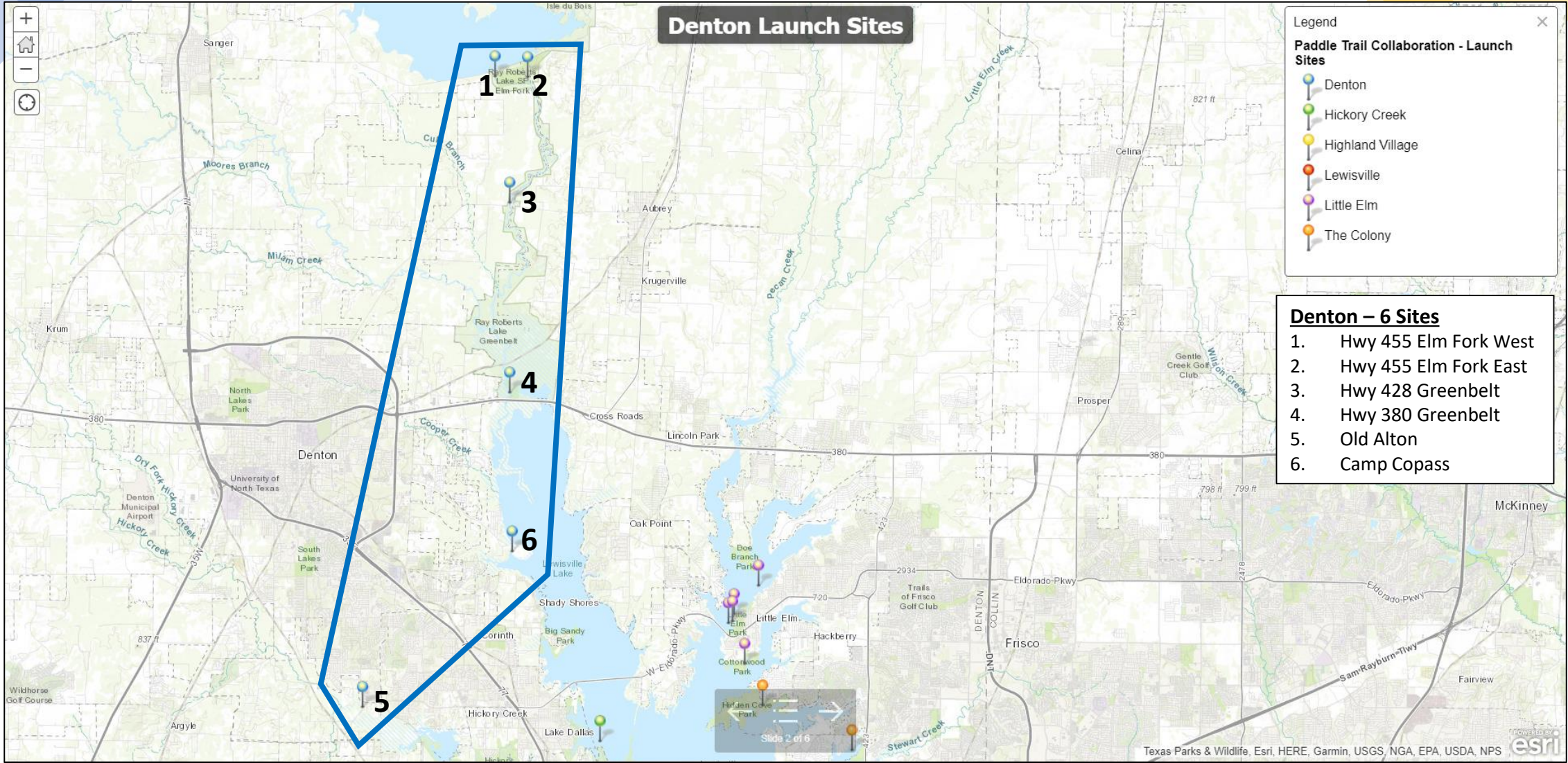
Paddle Trail Collaboration - Launch Sites

- Denton
- Hickory Creek
- Highland Village
- Lewisville
- Little Elm
- The Colony

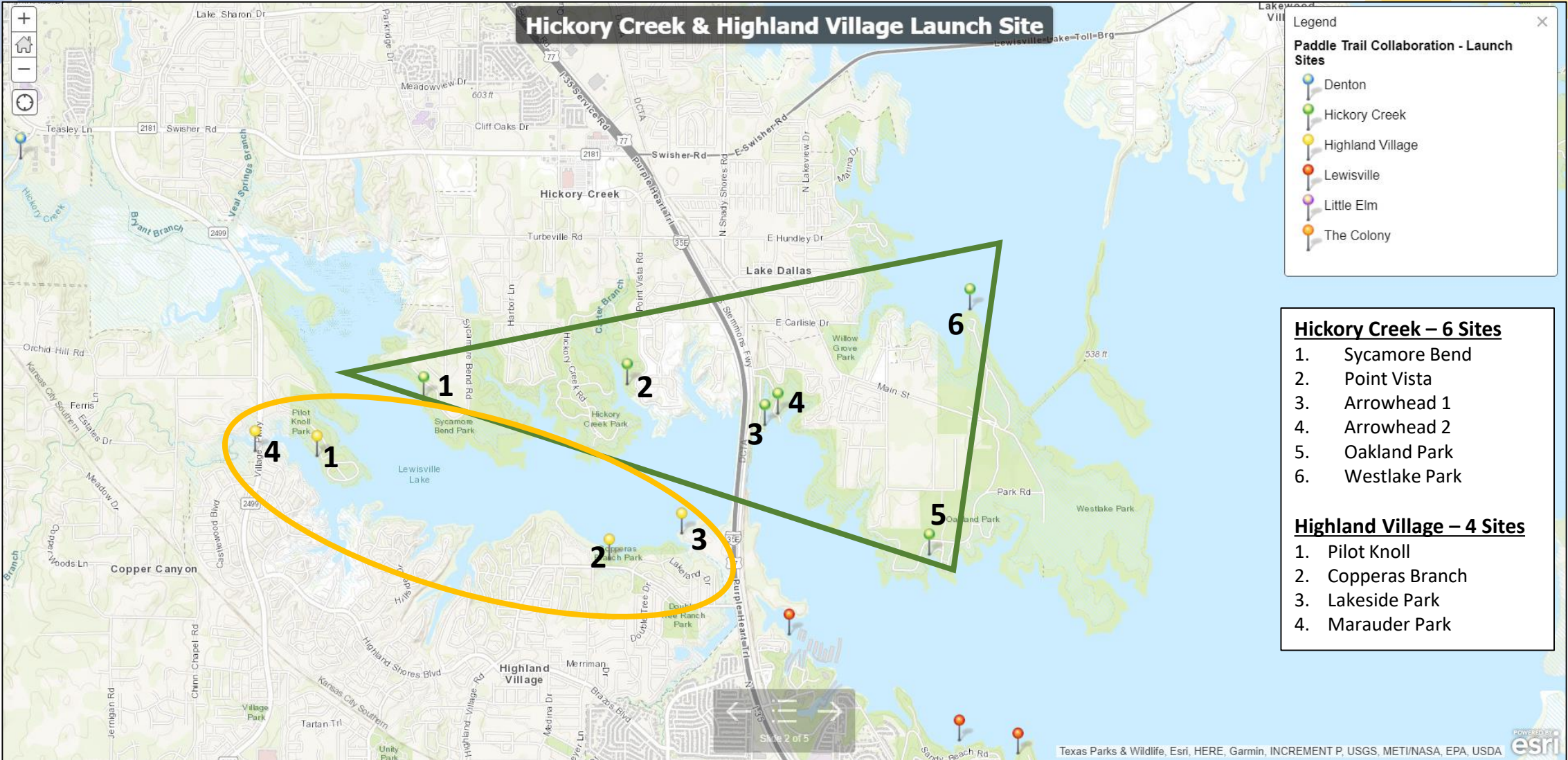
34 Total Sites

1. Denton – 6 Sites
2. Hickory Creek – 6 Sites
3. Highland Village – 4 Sites
4. Lewisville – 8 Sites
5. Little Elm – 5 Sites
6. The Colony – 5 Sites





Hickory Creek & Highland Village Launch Site



Legend

Paddle Trail Collaboration - Launch Sites

- Denton
- Hickory Creek
- Highland Village
- Lewisville
- Little Elm
- The Colony

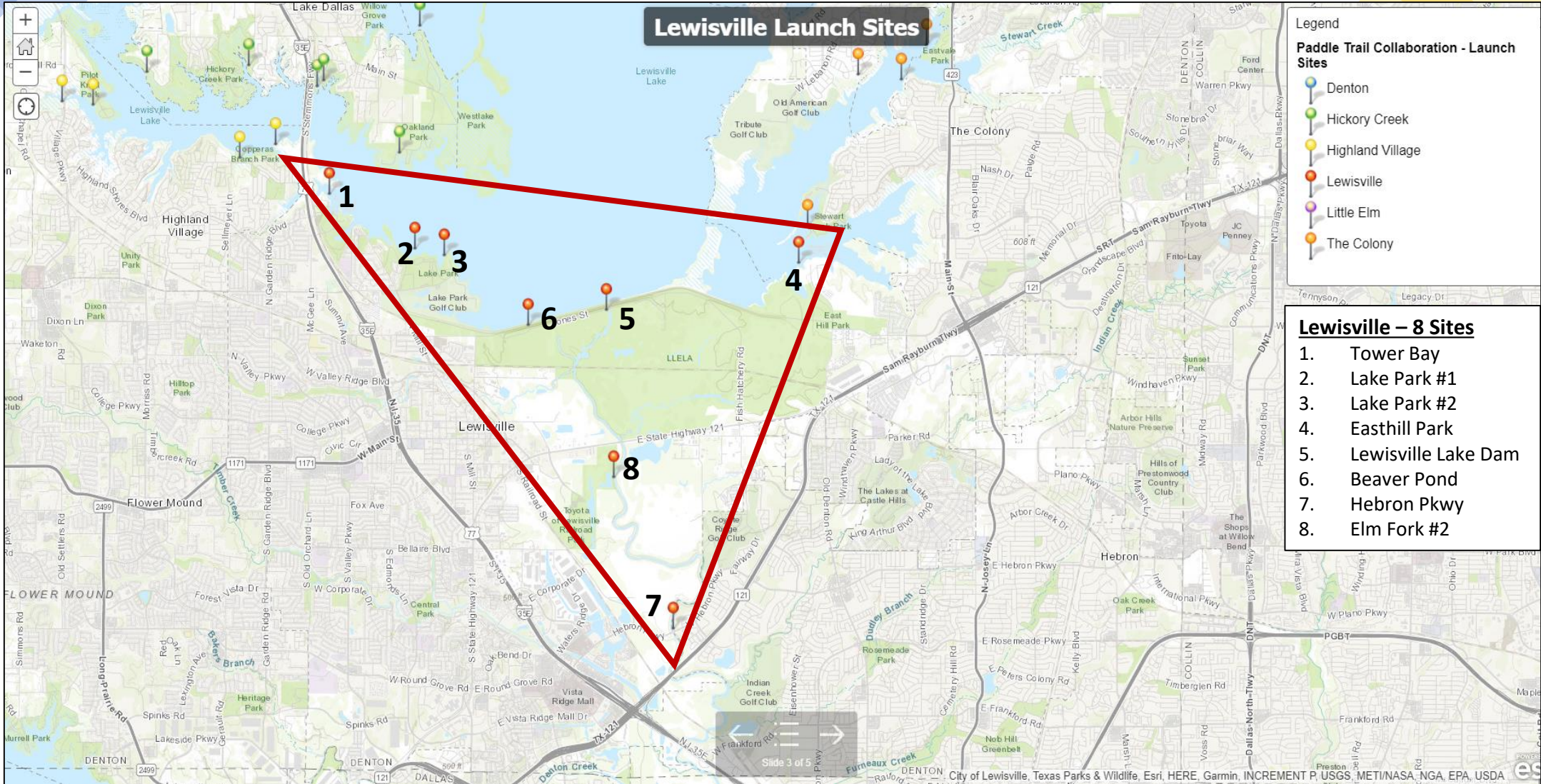
Hickory Creek – 6 Sites

1. Sycamore Bend
2. Point Vista
3. Arrowhead 1
4. Arrowhead 2
5. Oakland Park
6. Westlake Park

Highland Village – 4 Sites

1. Pilot Knoll
2. Copperas Branch
3. Lakeside Park
4. Marauder Park

Lewisville Launch Sites



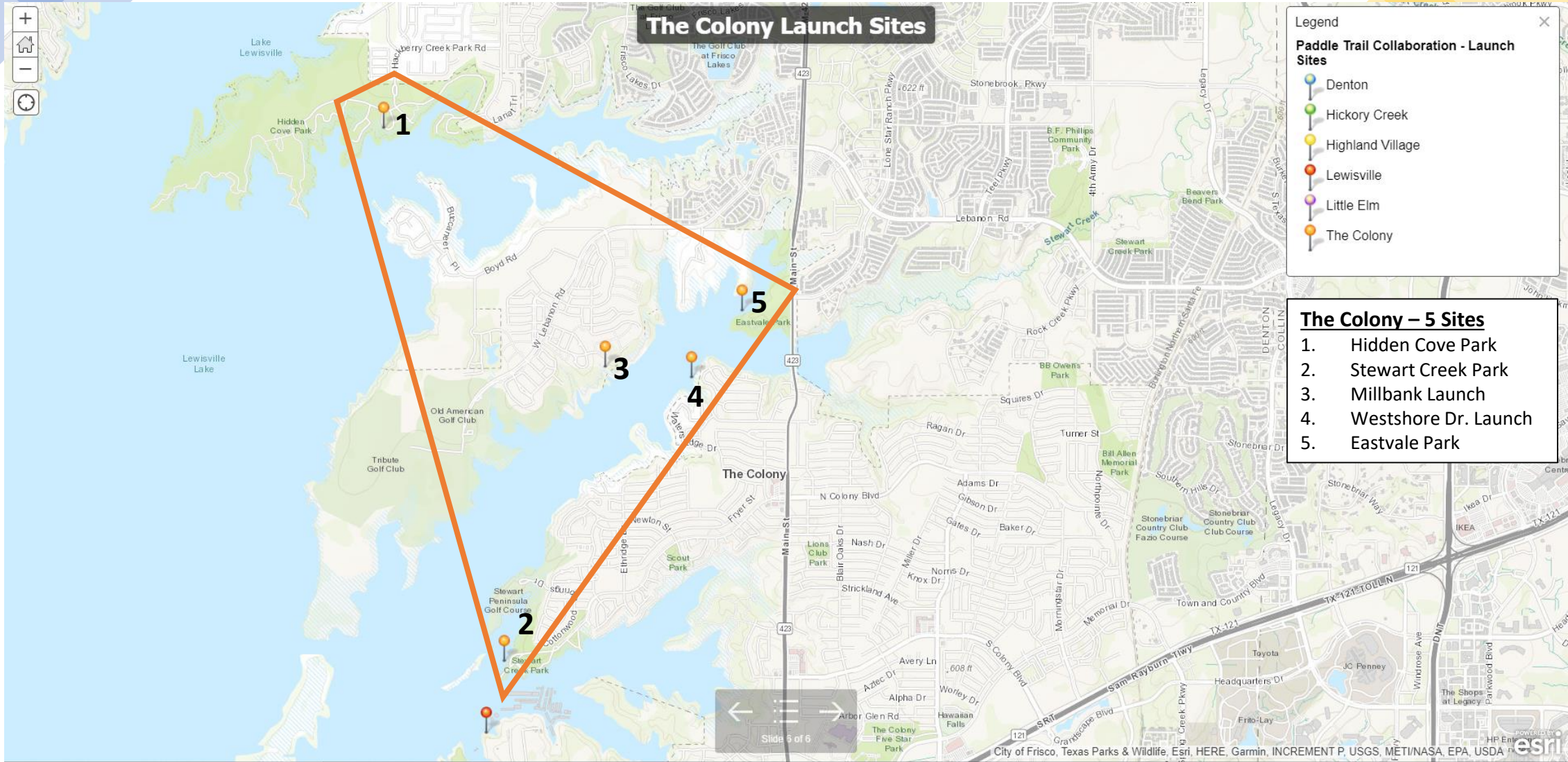
Legend

Paddle Trail Collaboration - Launch Sites

- Denton
- Hickory Creek
- Highland Village
- Lewisville
- Little Elm
- The Colony

- Lewisville – 8 Sites**
1. Tower Bay
 2. Lake Park #1
 3. Lake Park #2
 4. Easthill Park
 5. Lewisville Lake Dam
 6. Beaver Pond
 7. Hebron Pkwy
 8. Elm Fork #2





BOULDER POINT

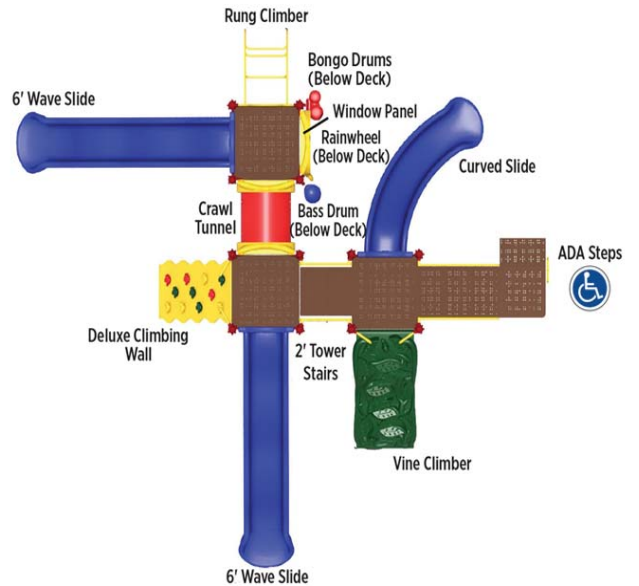
SKU: UP-079

Ages: 5-12 years
 Child Capacity: 20-30 kids
 Total # Activities: 10

Structure Size: 22'7" x 24'7"
 Use Zone: 34' 7" x 36'7"
 Fall Height: 72"



ADA	Elevated	Accessible by Transfer	Ground	Type
	7	4	3	2







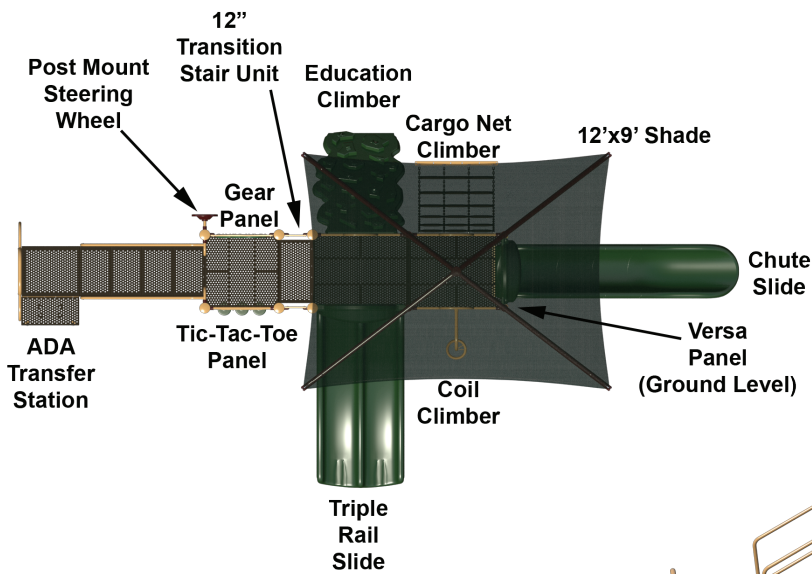
COOPER LAKE

SKU: SRP-0005

- Ages: 2-5 years
- Capacity: 15-25 kids
- Total # Activities: 8
- Structure Size: 15' x 30'
- Use Zone: 27' x 42'
- Fall Height: 60"



ADA	Elevated	Accessible by Transfer	Ground	Type
	5	1	3	3





SHADE STRUCTURES

COOL
FLORIDA



SHADE FABRIC COLORS



POWDER COAT



HEAT RESISTANT SHADE COLORS



Note: Colors may vary depending on: different types of lighting, computer monitor settings, type of impression or manufacture process.



