

City of Columbia

701 East Broadway, Columbia, Missouri 65201



Agenda Item Number: B 332-14

Department Source: Public Works

To: City Council

From: City Manager & Staff

Council Meeting Date: November 3, 2014

Re: Bid Call and Acquisition of Easements for the Forum Boulevard Pedestrian Bridge Project

Documents Included With This Agenda Item

Council memo, Resolution/Ordinance

Supporting documentation includes: Maps, Plats and Plans

Executive Summary

Authorizing a bid call through the Purchasing division, and the acquisition of easements, for the construction of improvements to the Forum Boulevard Pedestrian Bridge project, as shown on the attached location map. The proposed project includes a 10-ft wide shared-use path from Katy Lane to a new pedestrian bridge across Hinkson Creek, providing direct connectivity to the MKT Trail and Forum Nature Area, and bicycle and pedestrian improvements south of the new bridge to Woodrail Avenue. A public hearing was held September 2, 2014.

Discussion

The Forum Pedestrian Bridge project, from Katy Lane to Woodrail Avenue, is part of the Nonmotorized Transportation Pilot Program (GetAbout Columbia). The proposed project includes a 10-ft wide shared-use path from Katy Lane to a new pedestrian bridge across Hinkson Creek, providing direct connectivity to the MKT Trail and Forum Nature Area, and bicycle and pedestrian improvements south of the new bridge to Woodrail Avenue. The existing vehicle bridge will be restriped to add a southbound left turn lane into the commercial property south of the bridge. The project includes approximately 3,550 lineal ft of shared-use facility, including a new pedestrian bridge over Hinkson Creek. The new bridge will be situated so as not to interfere with future improvements to Forum Boulevard, and will be designed to comply with current FEMA requirements.

An interested parties meeting was held in January 2014, and a public hearing was held September 2, 2014. Staff anticipates construction to begin in 2015.

Fiscal Impact

Short-Term Impact: The estimated total project cost is \$1,720,000 which includes engineering, right of way acquisition, and construction. Funds in the amount of \$1,033,499 have been transferred from the GetAbout project to the Forum Pedestrian Bridge project.

Long-Term Impact: Estimated annual cost for maintenance and repairs is \$3,000.

City of Columbia

701 East Broadway, Columbia, Missouri 65201



Vision, Strategic & Comprehensive Plan Impact

Vision Impact: Transportation

Strategic Plan Impact: Health, Safety and Wellbeing, Infrastructure

Comprehensive Plan Impact: Infrastructure, Mobility, Connectivity, and Accessibility, Livable & Sustainable Communities

Suggested Council Action

Authorizing a bid call through the Purchasing division, and the acquisition of easements, necessary to construct the Forum Boulevard Pedestrian Bridge Project.

Legislative History

09/02/14 (R 132-14) - Public Hearing for construction of a shared use path, pedestrian bridge and roadway improvements along Forum Boulevard, between Katy Lane and Woodrail Avenue.

01/23/14 – IP meeting

09/03/13 – (REP 134-13) Non-Motorized Transportation (Get About) Project Prioritization

06/17/13 - (R 115-13) authorizing engineering services agreement with Bartlett & West, for Forum Blvd Pedestrian & Bicycle Trail Project & construction of a new pedestrian bridge over Hinkson Creek

10/25/12 – Parks & Recreation Commission presentation

10/23/12 – Environment & Energy Commission presentation

10/17/12 – Bicycle & Pedestrian Commission presentation

10/11/12 – Disabilities Commission presentation

10/01/12 – (REP 152-12) Additional Federal Grant Funding for Nonmotorized Transportation Projects

04/05/10 – (REP 5-10) Wilson's Total Fitness Center-Forum GetAbout Alternate Designs

Department Approved

City Manager Approved

Introduced by _____

First Reading _____

Second Reading _____

Ordinance No. _____

Council Bill No. B 332-14

AN ORDINANCE

determining it is in the public interest to construct a shared use path, pedestrian bridge and roadway improvements along Forum Boulevard, between Katy Lane and Woodrail Avenue; approving and adopting plans and specifications; determining that the work shall be done by contract; calling for bids through the Purchasing Division; providing for payment for the improvement; authorizing the City Manager to obtain, execute and record all documents necessary for the improvement; providing for compliance with the prevailing wage law and state-mandated construction safety training; and fixing the time when this ordinance shall become effective.

WHEREAS, the City Council adopted a resolution declaring the necessity of constructing a shared use path, pedestrian bridge and roadway improvements along Forum Boulevard, between Katy Lane and Woodrail Avenue; and

WHEREAS, the notice of a public hearing on this project was published in a daily newspaper of general circulation in the city; and

WHEREAS, the City Council has held a public hearing on construction of the improvement.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF COLUMBIA, MISSOURI, AS FOLLOWS:

SECTION 1. The Council finds that the construction of a shared use path, pedestrian bridge and roadway improvements along Forum Boulevard, between Katy Lane and Woodrail Avenue, in accordance with City of Columbia Street and Storm Sewer Specifications and Standards, in the City of Columbia, Missouri, more specifically described as the Forum Boulevard Pedestrian Bridge Project, is necessary for the welfare and improvement of the city and that it is in the public interest that such improvements be made. This project includes:

- Constructing a 10-foot wide shared use path, a new pedestrian bridge across Hinkson Creek and on-street facility on the west side of Forum Boulevard, between Katy Lane and Hinkson Creek.

- Constructing bicycle and pedestrian improvements along the roadway shoulders south of the new pedestrian bridge to Woodrail Avenue.
- Constructing a connection to the east side of Forum Boulevard underneath the existing vehicle bridge.
- Restriping the existing vehicle bridge to add a southbound left turn lane into the commercial property south of the bridge.

SECTION 2. The plans and specifications for this improvement, as prepared by the Director of Public Works, are hereby approved and made a part of this ordinance by reference.

SECTION 3. The construction of the improvement shall be done by contract in accordance with the plans and specifications, the laws of the State of Missouri, and the Charter and Ordinances of the City of Columbia, Missouri.

SECTION 4. The Purchasing Agent is hereby authorized to call for bids and execute a contract for the improvement.

SECTION 5. Payment for this improvement shall be made from Non-Motorized Transportation Funds and such other funds as may be lawfully appropriated.

SECTION 6. The City Manager is authorized to obtain, execute and have recorded all licenses, easements, deeds and any other conveyances or instruments necessary for the City to complete this improvement.

SECTION 7. The contract for the improvement shall provide that not less than the prevailing hourly rate of wages, as found by the Department of Labor and Industrial Relations of Missouri, shall be paid to all workers performing work under the contract. The contractor's bond shall guarantee the faithful performance of the prevailing hourly wage clause in the contract. The City shall also cause to be inserted into the contract a stipulation that all laborers and mechanics employed by the contractor or subcontractors in the performance of work under the contract shall be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis-Bacon Act.

SECTION 8. The bid specifications and contract for the improvement shall provide that the contractor and any subcontractor shall provide a ten-hour Occupational Safety and Health Administration construction safety program (or a similar program approved by the Missouri Department of Labor and Industrial Relations) for all employees working on-site. All employees working on the site of the improvement are required to complete the safety program within 60 days of beginning work on the improvement project.

SECTION 9. This ordinance shall be in full force and effect from and after its passage.

PASSED this _____ day of _____, 2014.

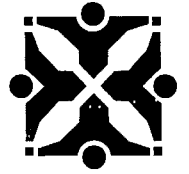
ATTEST:

City Clerk

Mayor and Presiding Officer

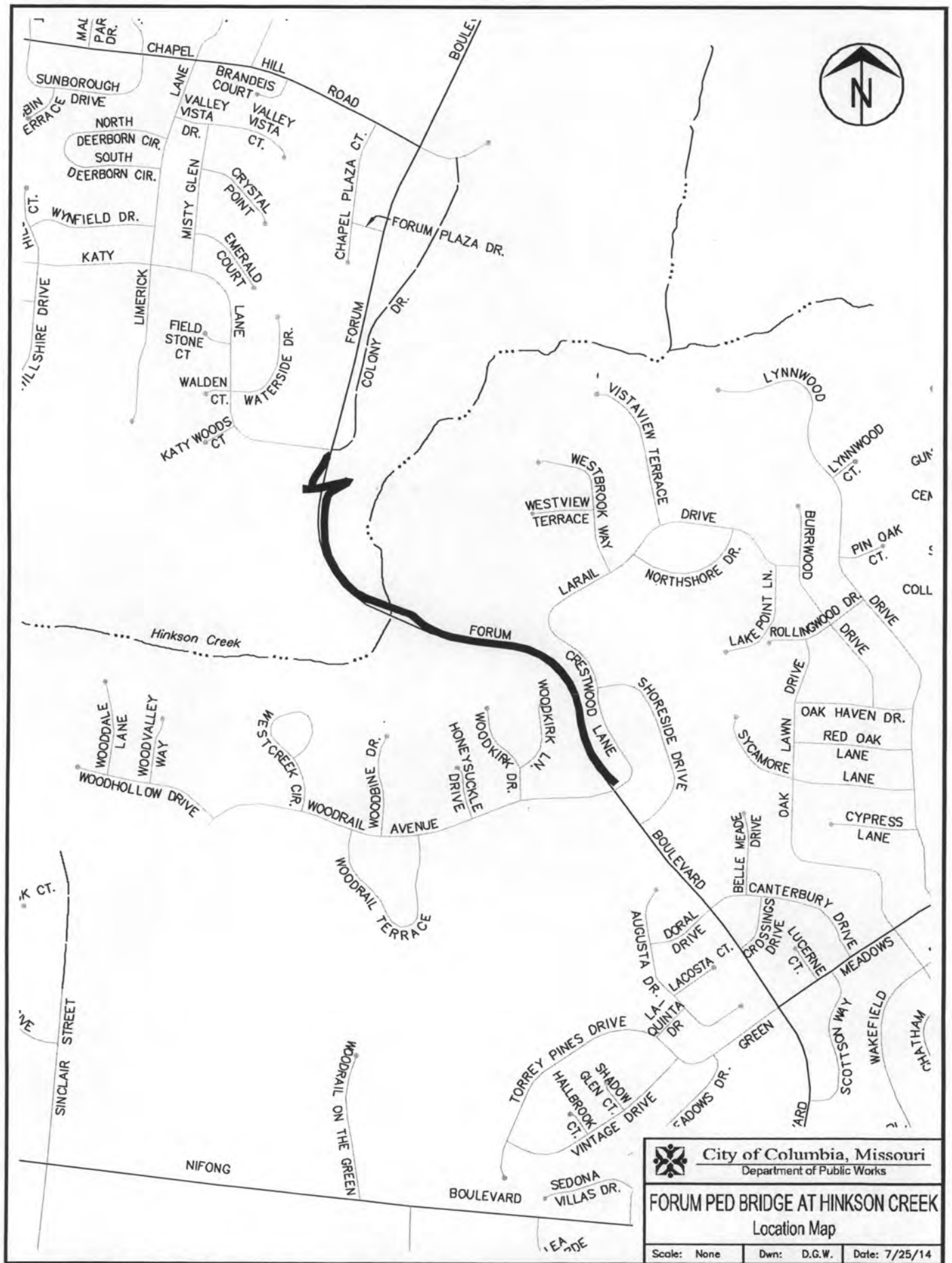
APPROVED AS TO FORM:

City Counselor



SUPPORTING DOCUMENTS INCLUDED WITH THIS AGENDA ITEM ARE AS FOLLOWS:

Maps, Plats and Plans

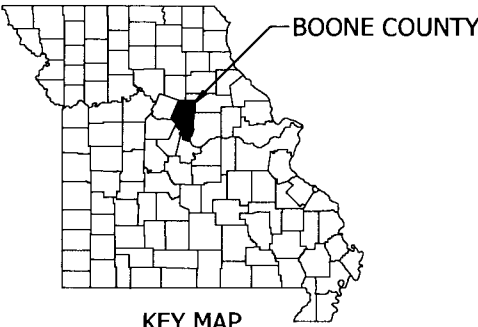


CITY OF COLUMBIA, MISSOURI
DEPARTMENT OF PUBLIC WORKS



FORUM BOULEVARD TRAIL PROJECT
MKT TRAIL TO WOODRAIL AVENUE

RIGHT OF WAY PLANS
OCTOBER 2014
PROJECT NO. CPP 9999(516)



KEY MAP

LEGEND

- ⊙

BILLBOARD

⊕

BORE HOLE or DRILL HOLE

⊕

LANDSCAPE BOULDER

⊕

WELL

⊕

FLAG POLE

⊕

SATELLITE DISH

⊕

POST

⊕

MAILBOX

⊕

TWO POLE SIGN

⊕

ONE POLE SIGN

⊕

PARKING METER

⊕

STOP SIGN

⊕

GAS REGULATOR

⊕

GAS RISER

⊕

GAS TEST STATION

⊕

GAS METER

⊕

GAS VALVE

⊕

UTILITY POLE

⊕

GUY POLE

⊕

GUY ANCHOR

⊕

TELEPHONE PEDESTAL

⊕

TELEPHONE MANHOLE

⊕

CABLE TV PEDESTAL

⊕

ELECTRIC MANHOLE

⊕

ELECTRIC METER

⊕

TRANSFORMER/ELECTRIC PAD

⊕

AIR CONDITIONER

⊕

HAND HOLE

⊕

TRAFFIC SIGNAL

⊕

TRAFFIC SIGNAL BOX

⊕

SIGNAL MANHOLE

⊕

STORM MANHOLE

⊕

AREA INLET
- ⊕

ROOF DRAIN

⊕

CURB INLET

⊕

SANITARY MANHOLE

⊕

CLEANOUT

⊕

YARD HYDRANT

⊕

WATER SPRINKLER

⊕

WATER MANHOLE

⊕

WATER METER

⊕

WATER VALVE

⊕

FIRE HYDRANT

⊕

LIGHT

⊕

FLOOD LIGHT

⊕

LUMINARY (STREET LIGHT)

⊕

MANHOLE COVER

⊕

MISCELLANEOUS TOPO ITEM

⊕

FINISH FLOOR

⊕

MIN. OPENING ELEV.

⊕

STUMP

⊕

SHRUB

⊕

DECIDUOUS TREE

⊕

EVERGREEN SHRUB

⊕

EVERGREEN TREE
- ⊕

BENCHMARK

⊕

TEMPORARY BENCHMARK

⊕

R/W MARKER

⊕

FOUND SURVEY MONUMENT

⊕

SET SURVEY MONUMENT

⊕

SET SURVEY MONUMENT IN CONCRETE

⊕

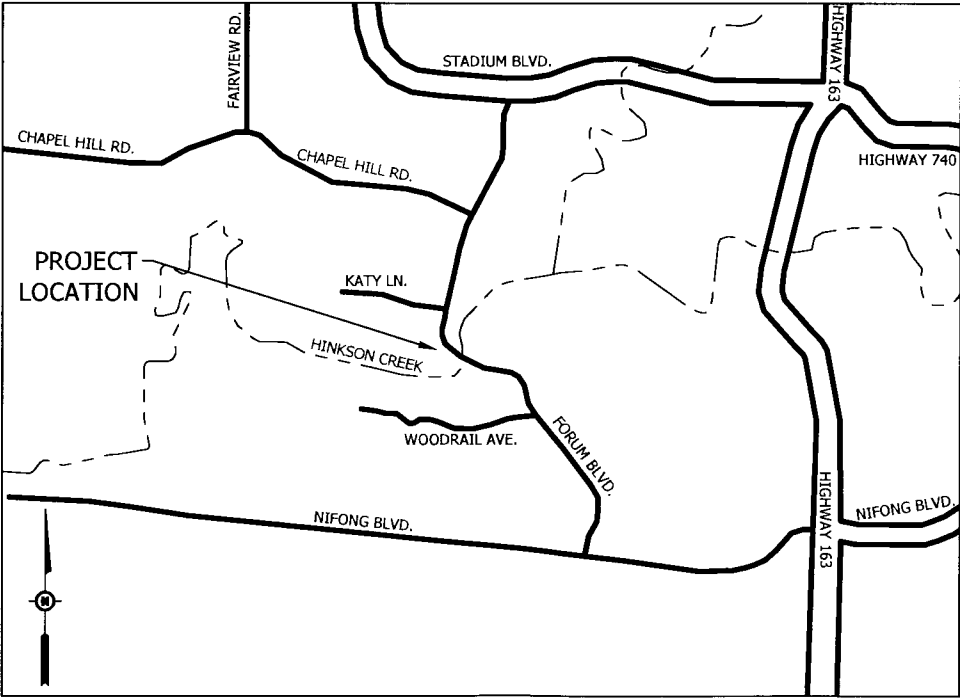
CALCULATED SURVEY POINT

⊕

CHISELED CROSS FOUND

⊕

CHISELED CROSS SET



NO SCALE
LOCATION MAP

UTILITY CONTACTS

- WATER

CITY OF COLUMBIA
P.O. BOX 6015
WATER & LIGHT DEPARTMENT
COLUMBIA, MO 65205
573-874-7325

ELECTRIC

CITY OF COLUMBIA
P.O. BOX 6015
WATER & LIGHT DEPARTMENT
COLUMBIA, MO 65205
573-874-7325

SANITARY SEWER

CITY OF COLUMBIA
P.O. BOX 6015
WATER & LIGHT DEPARTMENT
COLUMBIA, MO 65205
573-874-7325
- TELEPHONE

CENTURY LINK
625 CHERRY STREET
COLUMBIA, MO 65205
573-886-3500

NATURAL GAS

AMEREN MISSOURI
2001 MCGUIRE BLVD.
COLUMBIA, MO 65201
573-876-3030

LOCATES

MISSOURI ONE CALL, INC.
1022 B NORTHEAST DRIVE
JEFFERSON CITY, MO 65109
1-800-334-7483

SHEET INDEX

- 1

COVER SHEET
- 2

TYPICAL SECTIONS
- 3-9

PLAN/PROFILE SHEETS
- 10

PIPE PROFILES
- 11

BRIDGE DETAILS
- 12-25

CROSS SECTIONS

CALL OR CLICK 3 DAYS BEFORE YOU DIG!

MISSOURI

ONE CALL SYSTEM

1-800-DIG-RITE or 811

www.mo1call.com

APPROVED BY

DIRECTOR OF PUBLIC WORKS

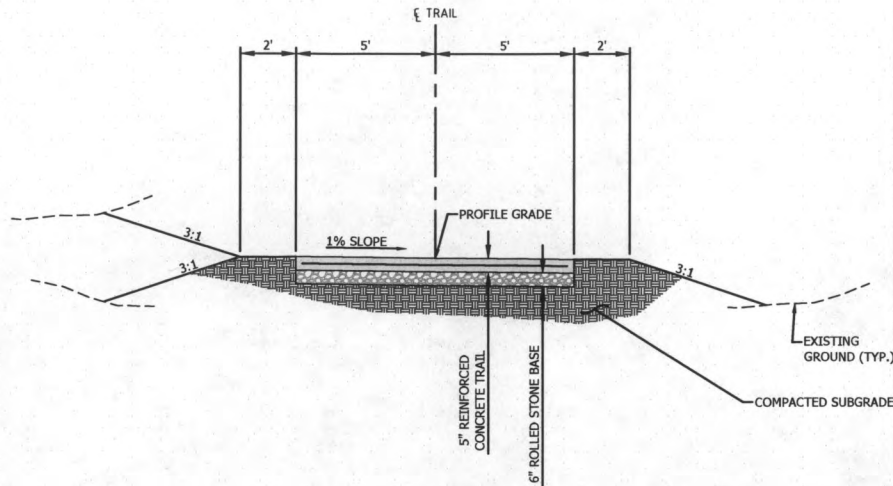
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COVER SHEET

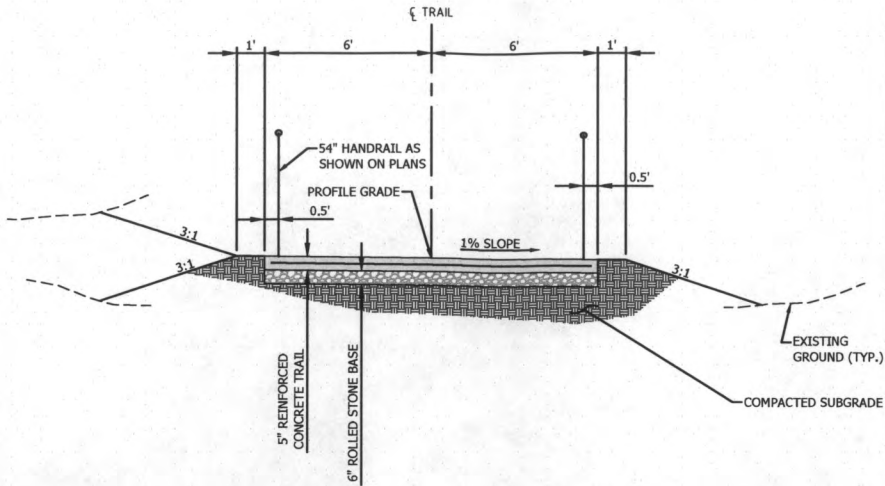
FORUM BOULEVARD TRAIL PROJECT
CITY OF COLUMBIA, BOONE COUNTY, MISSOURI

NOT FOR CONSTRUCTION

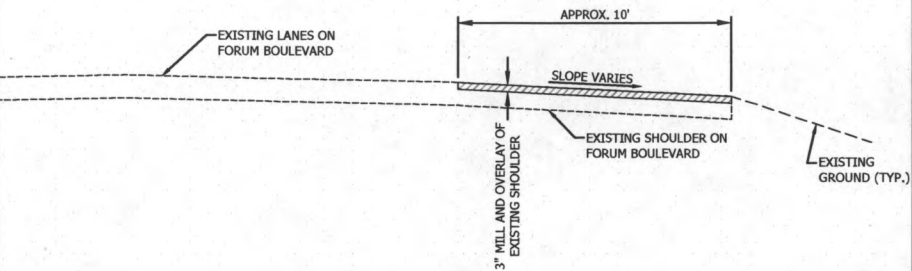
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DRAWN BY:	AKJ
APPROVED BY:	TCK
DESIGN PROJ:	18082.000
DATE:	OCTOBER 2014
DRAWING NO:	
SHEET NO:	1 of 25



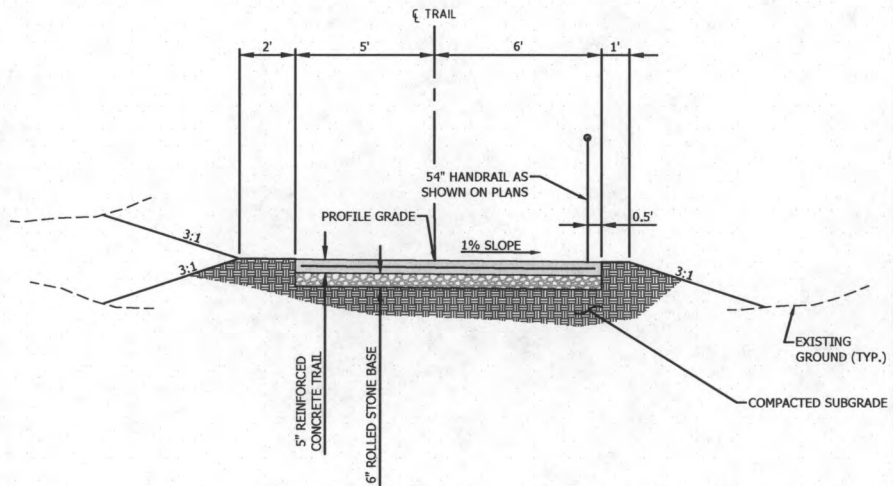
TYPICAL TRAIL SECTION



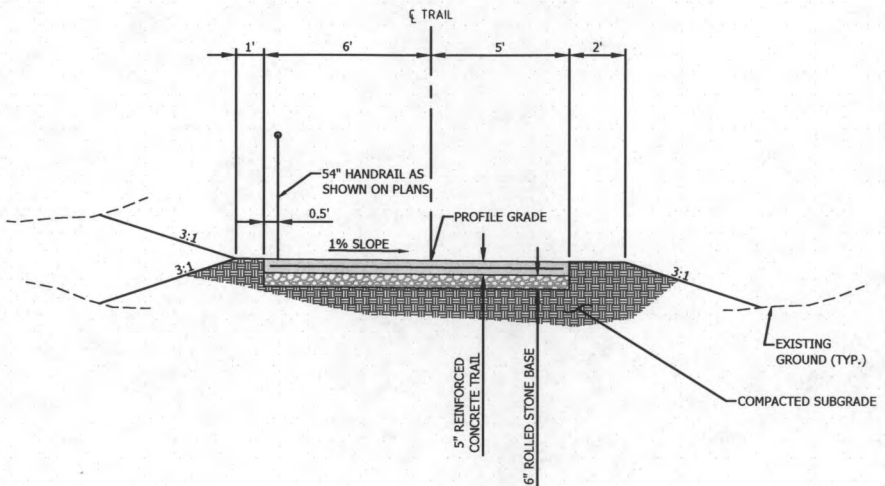
SECTION WITH HANDRAIL ON BOTH SIDES



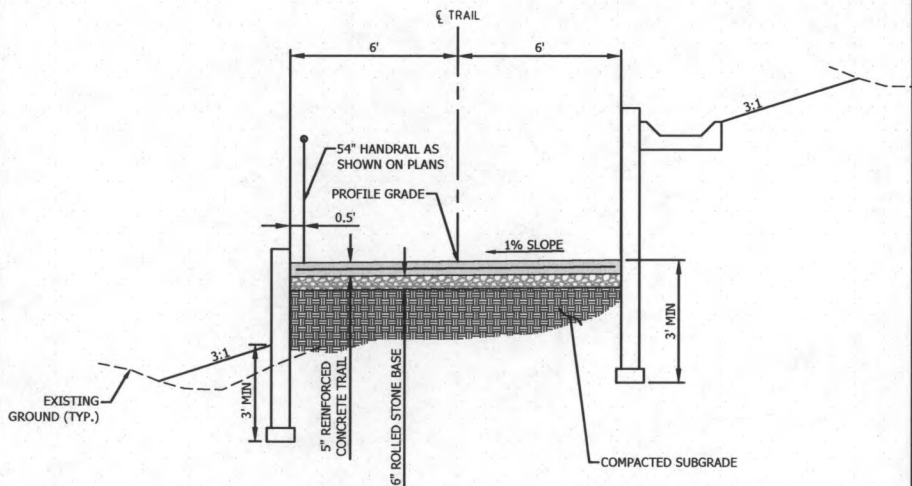
MILL AND OVERLAY SOUTH OF WILSON'S



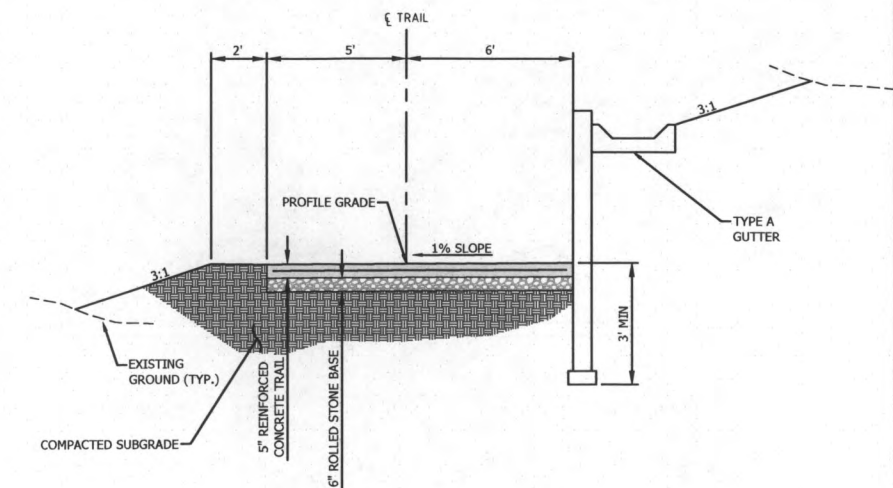
SECTION WITH HANDRAIL ON RIGHT



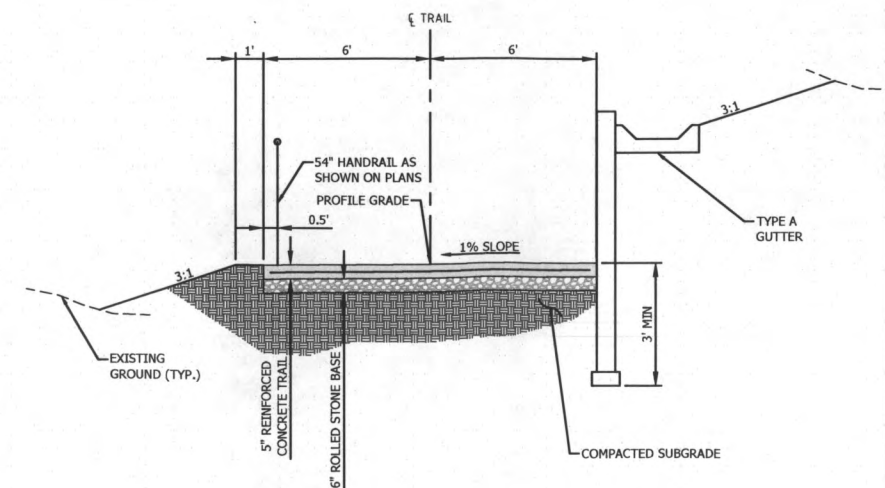
SECTION WITH HANDRAIL ON LEFT



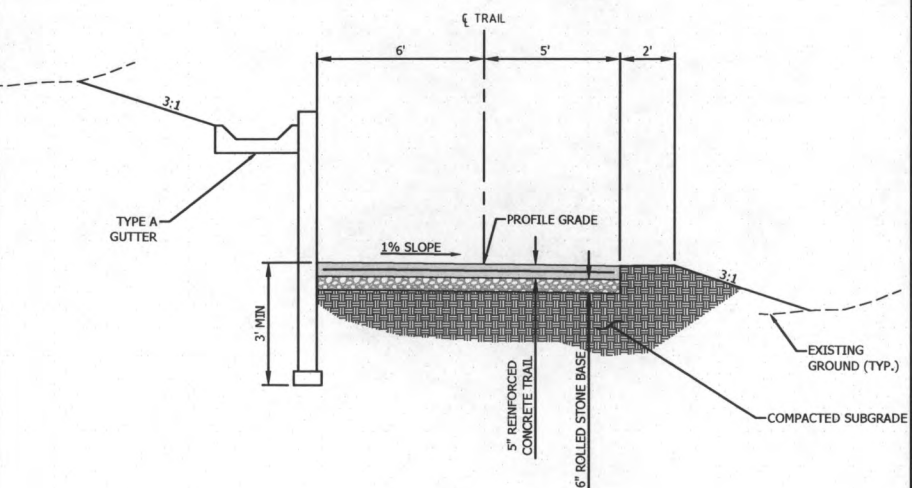
SECTION WITH WALL ON EACH SIDE



SECTION WITH WALL ON RIGHT



SECTION WITH WALL ON RIGHT AND HANDRAIL ON LEFT



SECTION WITH WALL ON LEFT

NOTE:
CROSS SLOPE OF TRAIL SHALL BE MAXIMUM SLOPE OF 2.0% IN ALL LOCATIONS. ANY CONSTRUCTION THAT DOES NOT MEET ADA REQUIREMENTS WILL BE REMOVED AND REPLACED AT CONTRACTOR'S EXPENSE.
SEE CROSS SECTIONS FOR SLOPE AS THEY MAY VARY IN MAGNITUDE OR DIRECTION.

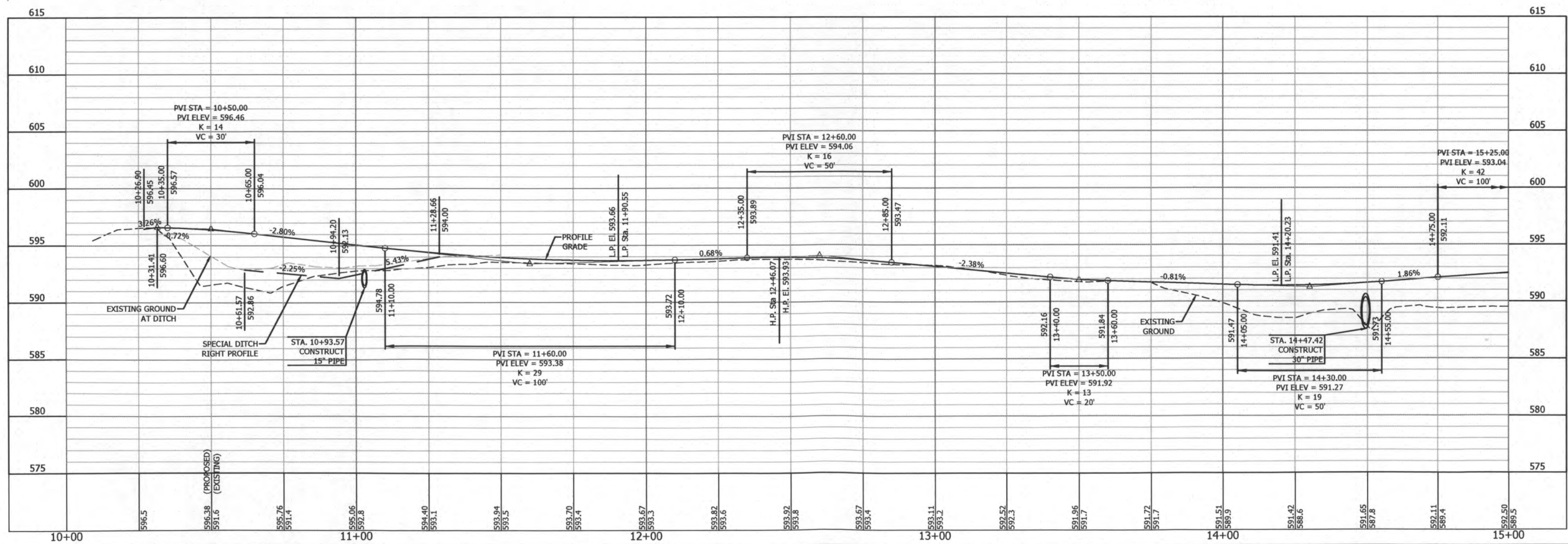
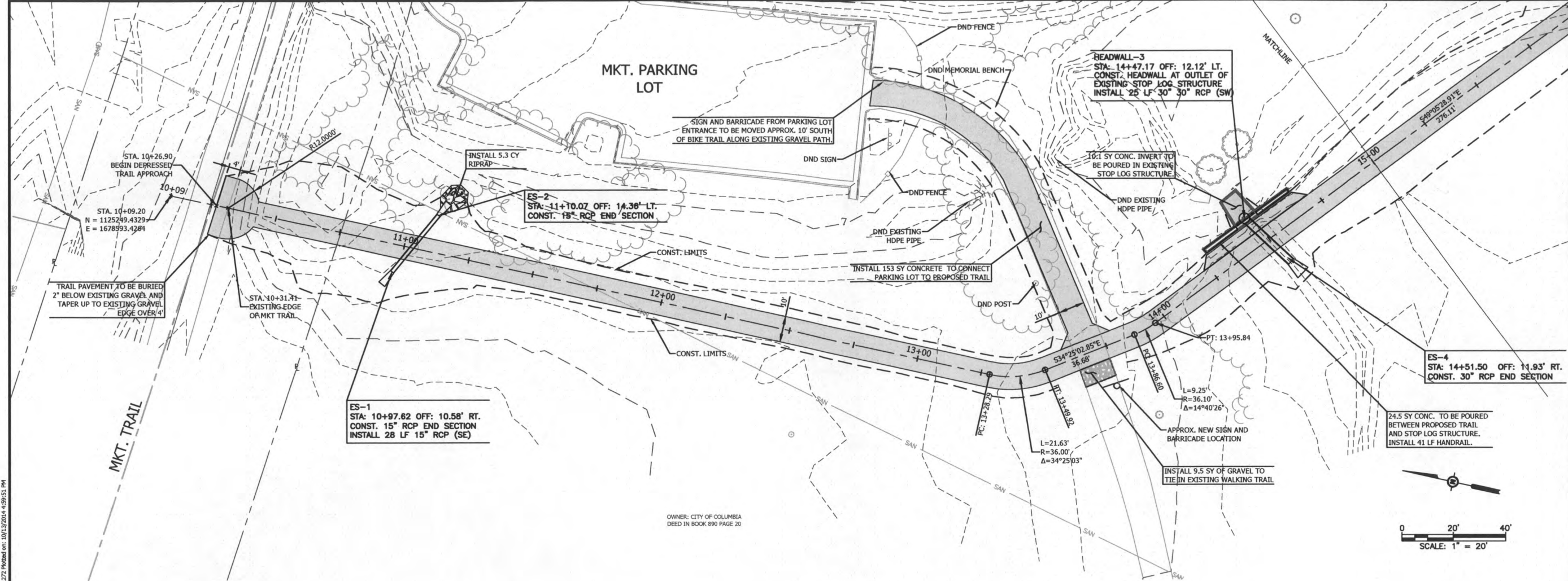
TYPICAL SECTIONS

FORUM BOULEVARD TRAIL PROJECT
CITY OF COLUMBIA, BOONE COUNTY, MISSOURI

NOT FOR CONSTRUCTION

SEALED DATE: ###
DESIGNED BY: AKJ
DRAWN BY: AKJ
APPROVED BY: TCK
DESIGN PROJ: 18082.000
DATE: OCTOBER 2014
DRAWING NO:
SHEET NO: 2 of 25

BARTLETT & WEST
1719 SOUTHBRIDGE DR., SUITE 100 - JEFFERSON CITY, MO 65109-4000
PHONE 937.634.1313 FAX 937.634.7954
MISSOURI CERTIFICATION NO. 00000167 - ENGINEERING
WWW.BARTLETTWEST.COM



BARTLETT & WEST

1719 SOUTHDRIVE DR., SUITE 100 - JEFFERSON CITY, MO 65109-4000
PHONE 573.633.1311 - FAX 573.634.7904
MISSOURI CERTIFICATE NO. 000167 - ENGINEERING
WWW.BARTLETTWEST.COM

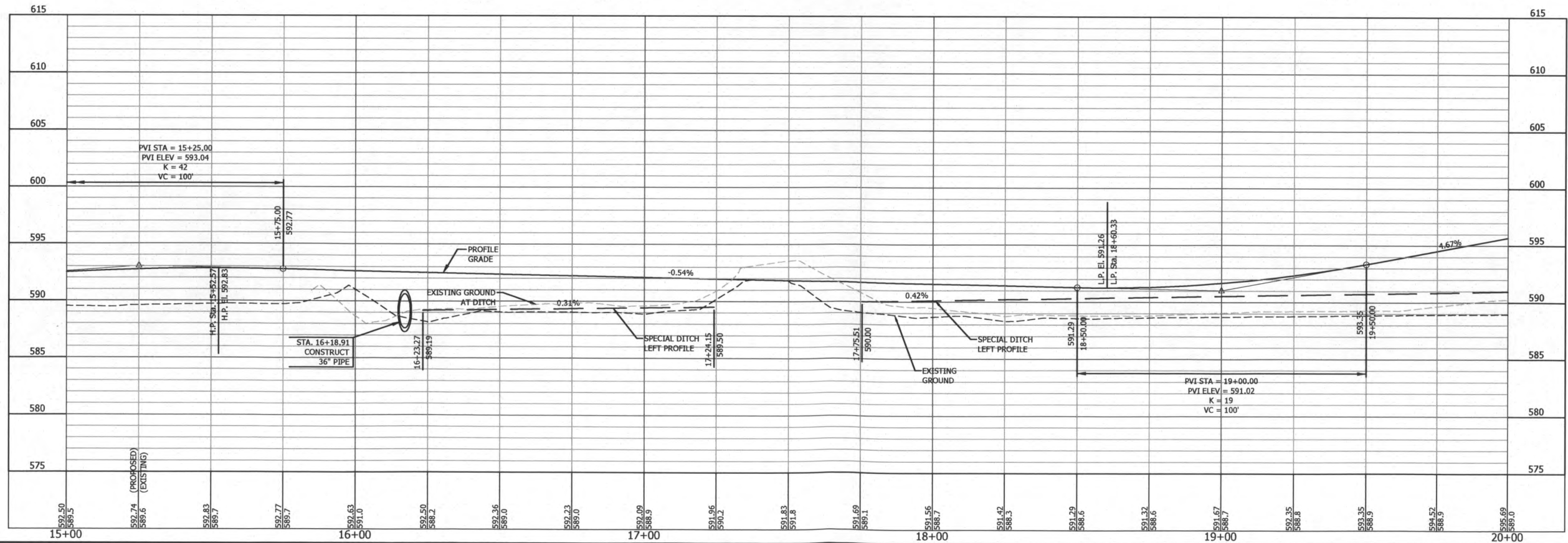
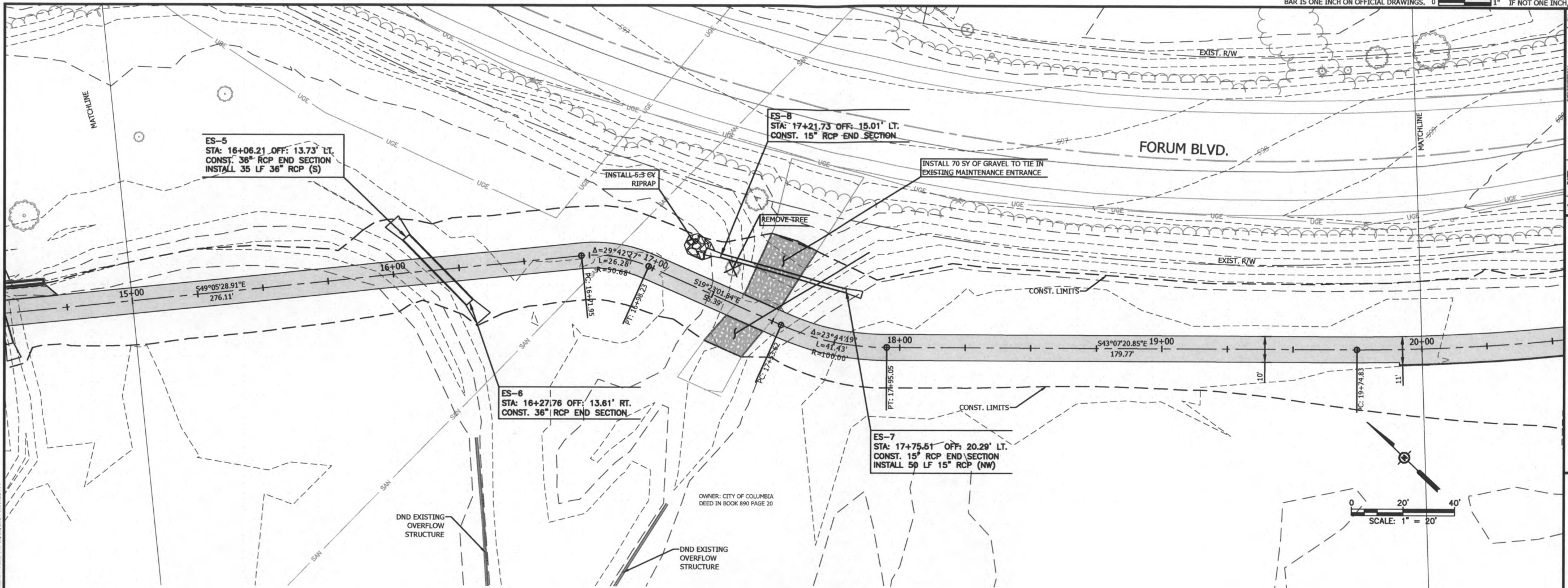
**PLAN/PROFILE SHEETS
FORUM BLVD. TRAIL**

**FORUM BOULEVARD TRAIL PROJECT
CITY OF COLUMBIA, BOONE COUNTY, MISSOURI**

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DESIGNED BY: AKJ
DRAWN BY: AKJ
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DESIGN PROJ: 18082.000
DATE: OCTOBER 2014
DRAWING NO:
SHEET NO: 3 of 25

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PLAN/PROFILE SHEETS
FORUM BLVD. TRAIL

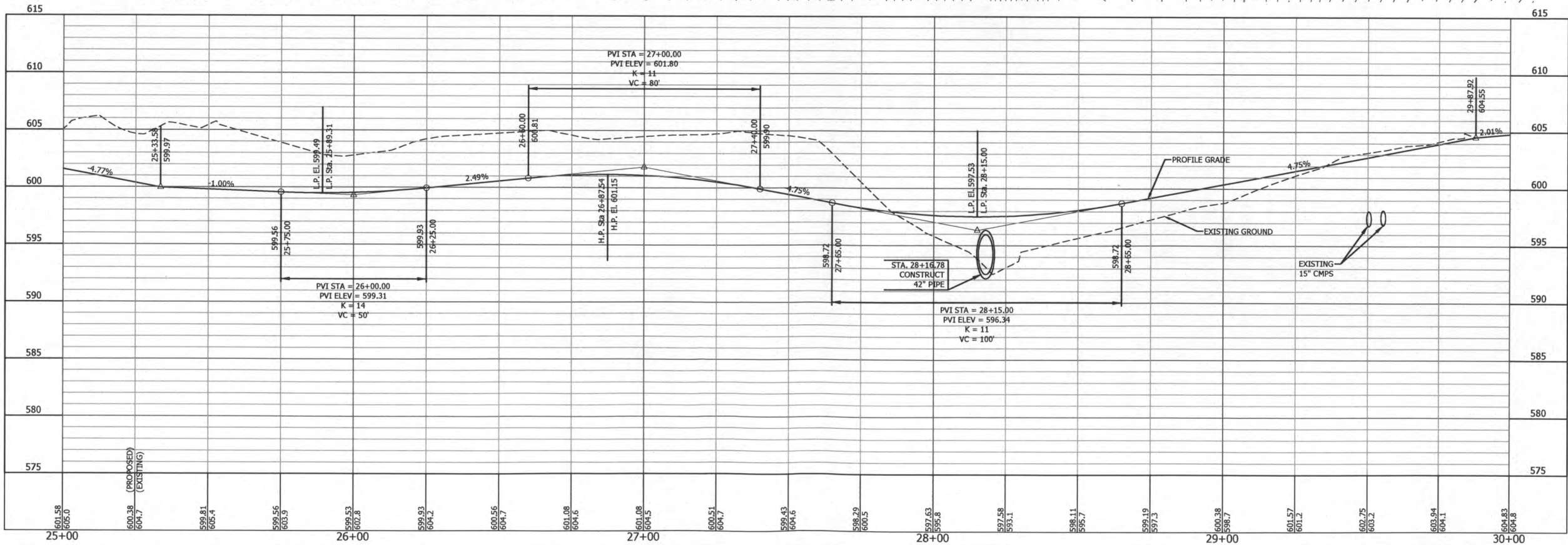
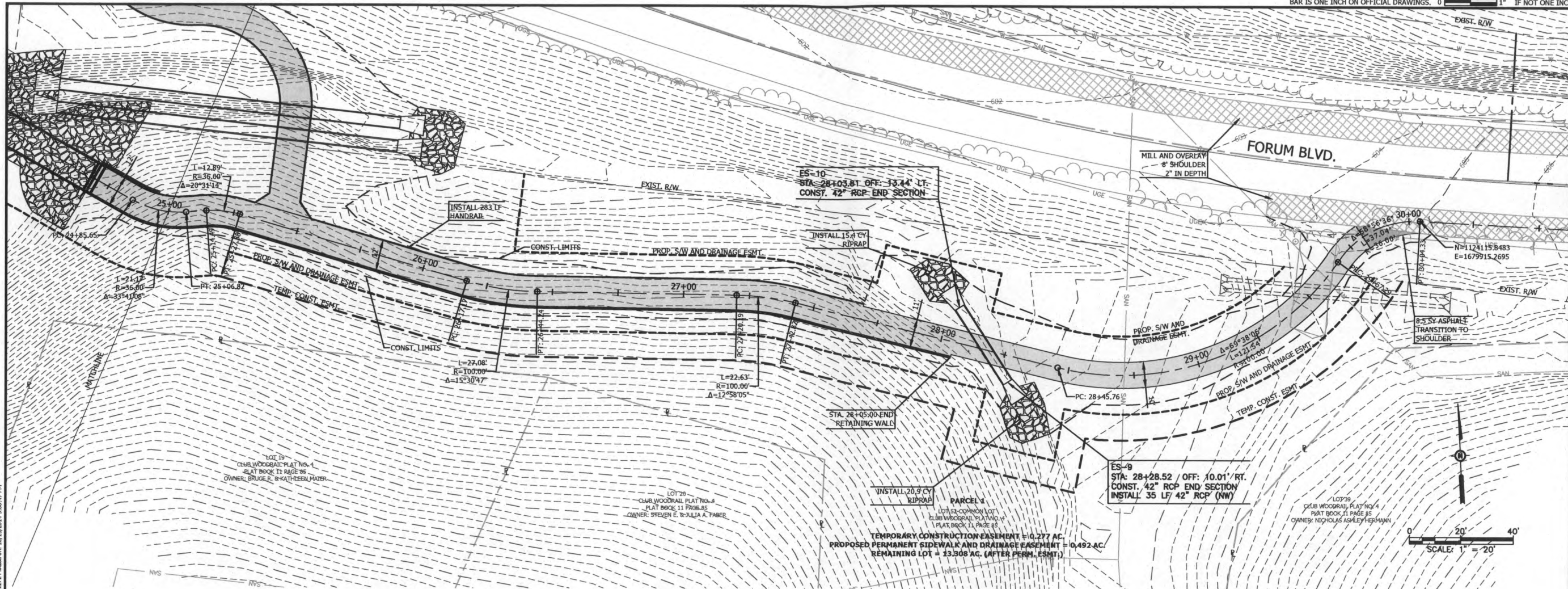
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1719 SOUTH MAIN ST., SUITE 100, JEFFERSON CITY, MO 65109-4000
PHONE: 816.251.3100 FAX: 816.251.3101
MISSOURI CERTIFICATE OF AUTHORITY NO. 000167 - ENGINEERING
WWW.BARTLETTWEST.COM





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1719 SOUTH WISCONSIN ST., SUITE 100, JEFFERSON CITY, MO 65109-4000
PHONE: (314) 524-3100, FAX: (314) 524-3700
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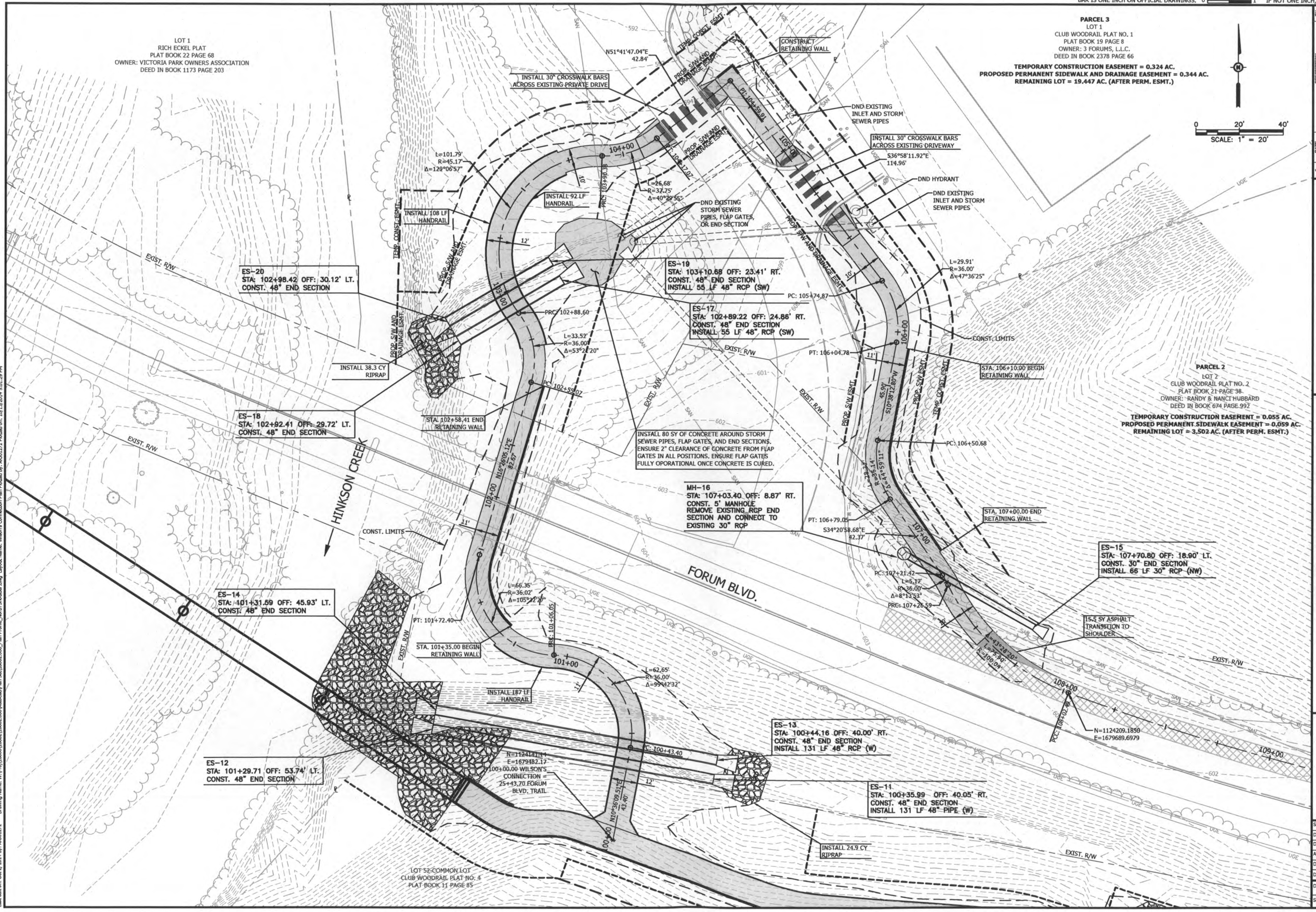
PLAN/PROFILE SHEETS
FORUM BLVD. TRAIL

FORUM BOULEVARD TRAIL PROJECT
CITY OF COLUMBIA, BOONE COUNTY, MISSOURI

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SHEET NO: 6 of 25

TEMPORARY CONSTRUCTION EASEMENT = 0.324 AC.
PROPOSED PERMANENT SIDEWALK AND DRAINAGE EASEMENT = 0.344 AC
REMAINING LOT = 19.447 AC. (AFTER PERM. ESMT.)



BARTLETT & WEST

1719 SOUTHRIDGE DR., SUITE 100 - JEFFERSON CITY MO 65109.400
PHONE 573.634.3181 - FAX 573.634.7904
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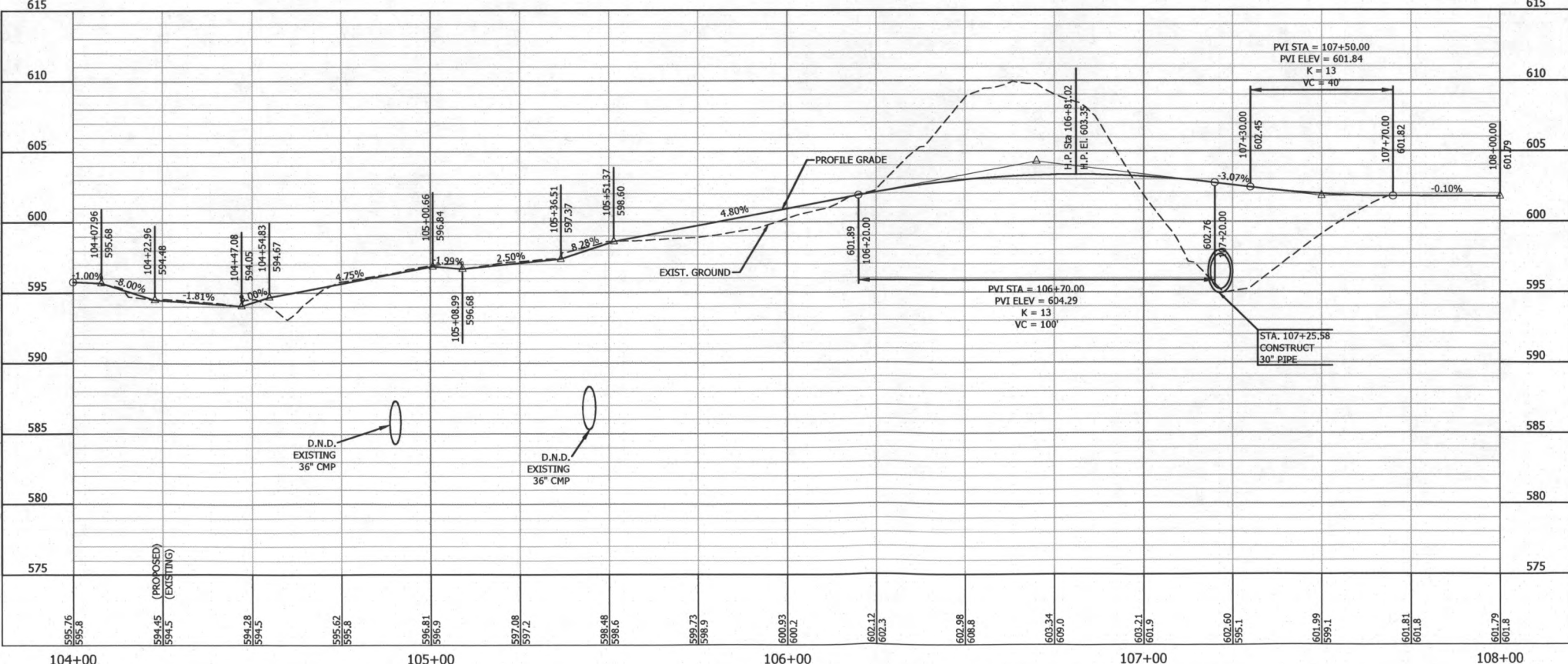
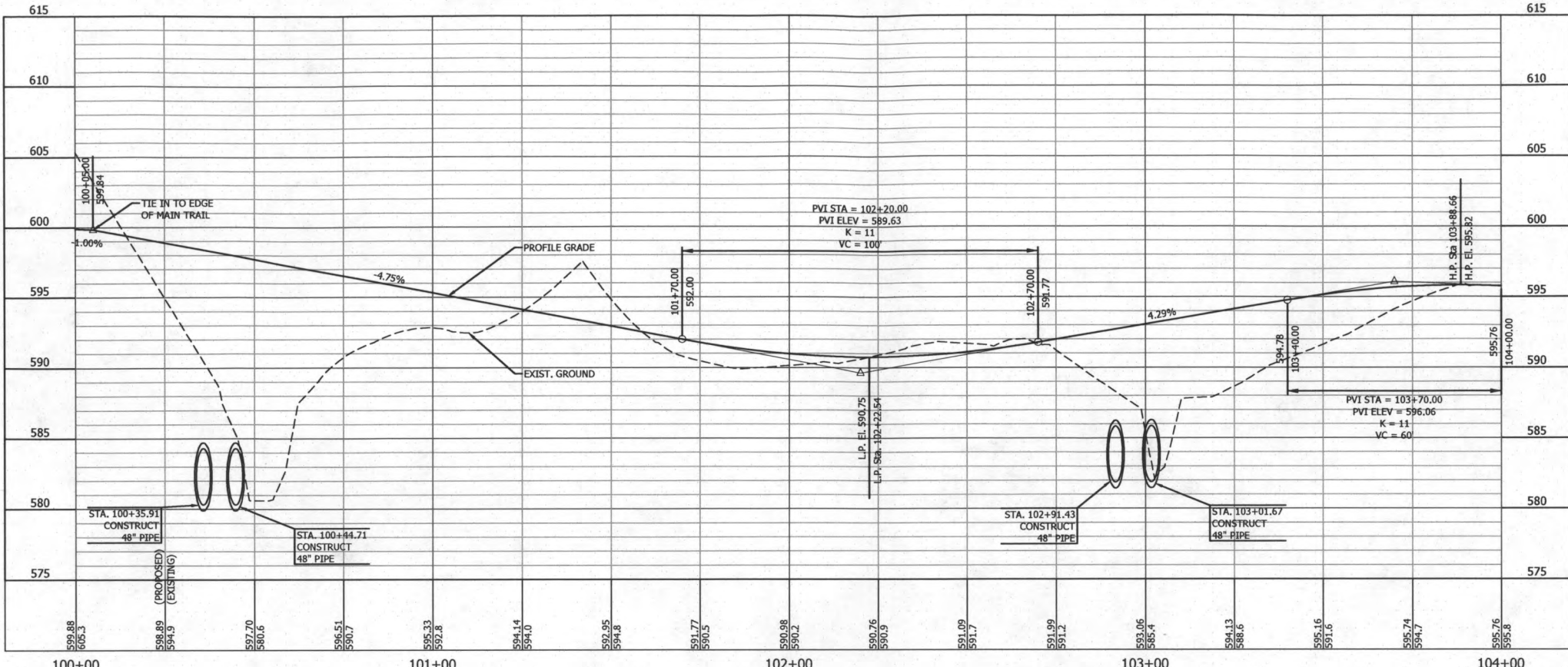
**PLAN/PROFILE SHEETS
WILSON'S CONNECTION PLAN**

**FORUM BOULEVARD TRAIL PROJECT
CITY OF COLUMBIA, BOONE COUNTY, MISSOURI**

NOT FOR CONSTRUCTION

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SHEET NO:	7 of 25

Last edit on: Oct 2, 2014 by: AKC01272
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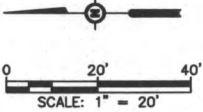
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PLAN/PROFILE SHEETS
WILSON'S CONNECTION PROFILE

FORUM BOULEVARD TRAIL PROJECT
CITY OF COLUMBIA, BOONE COUNTY, MISSOURI

NOT FOR CONSTRUCTION

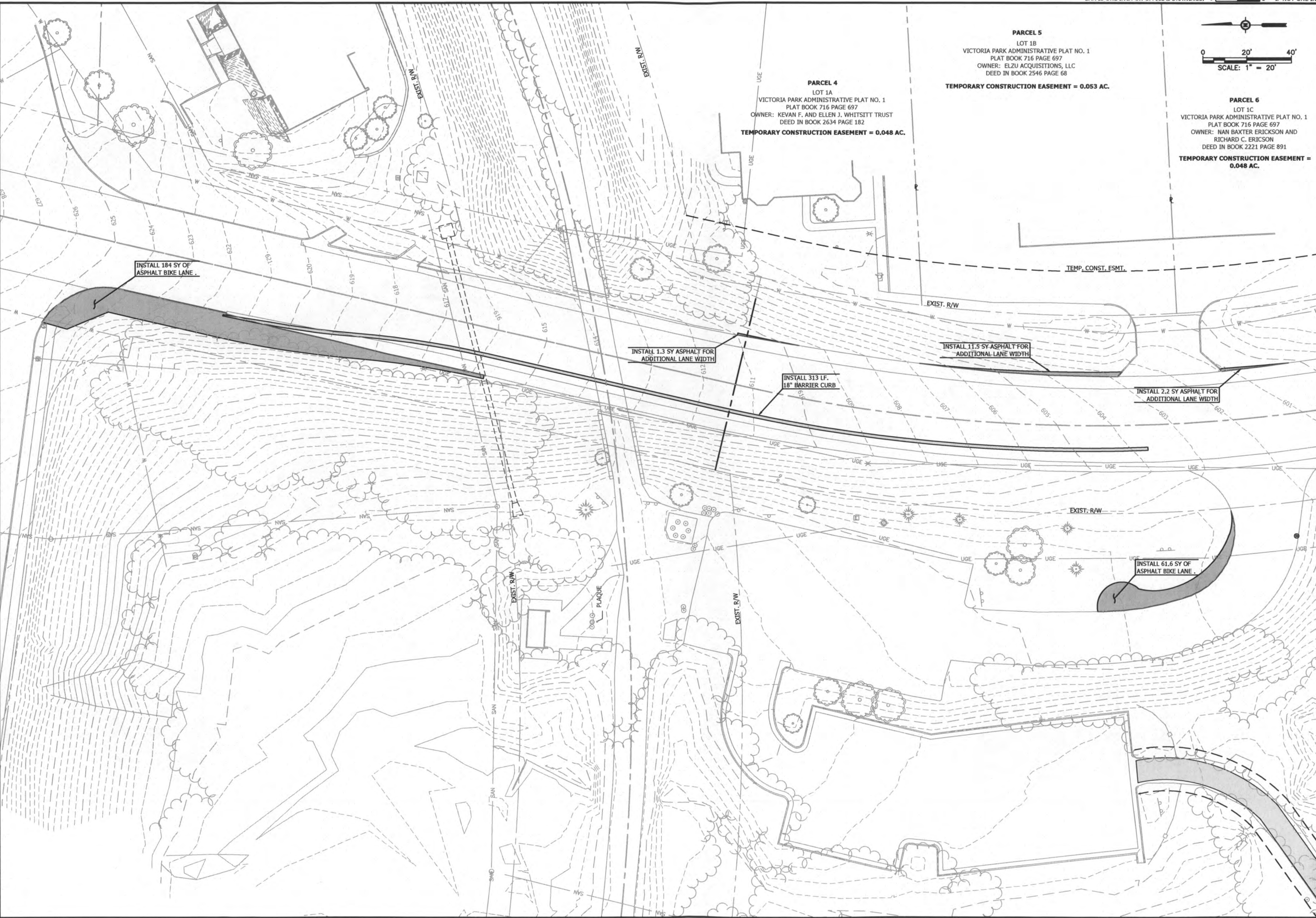
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SHEET NO:	8 of 25



PARCEL 5
LOT 1B
VICTORIA PARK ADMINISTRATIVE PLAT NO. 1
PLAT BOOK 716 PAGE 697
OWNER: ELZU ACQUISITIONS, LLC
DEED IN BOOK 2546 PAGE 68
TEMPORARY CONSTRUCTION EASEMENT = 0.053 AC.

PARCEL 4
LOT 1A
VICTORIA PARK ADMINISTRATIVE PLAT NO. 1
PLAT BOOK 716 PAGE 697
OWNER: KEVAN F. AND ELLEN J. WHITSITT TRUST
DEED IN BOOK 2634 PAGE 182
TEMPORARY CONSTRUCTION EASEMENT = 0.048 AC.

PARCEL 6
LOT 1C
VICTORIA PARK ADMINISTRATIVE PLAT NO. 1
PLAT BOOK 716 PAGE 697
OWNER: NIAN BAXTER ERICSSON AND
RICHARD C. ERICSSON
DEED IN BOOK 2221 PAGE 891
TEMPORARY CONSTRUCTION EASEMENT = 0.048 AC.



BARTLETT & WEST

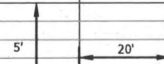
1719 SOUTHBRIDGE DR., SUITE 100 - JEFFERSON CITY, MO 65109-4000
TEL: 636-256-1100 FAX: 636-256-1101
MISSOURI CERTIFICATE OF AUTHORITY NO. 0001677 - ENGINEERING
WWW.BARTLETTWEST.COM

**PLAN PROFILE SHEETS
KATY LANE CONNECTION**

**FORUM BOULEVARD TRAIL PROJECT
CITY OF COLUMBIA, BOONE COUNTY, MISSOURI**

NOT FOR CONSTRUCTION

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SHEET NO:	9 of 25

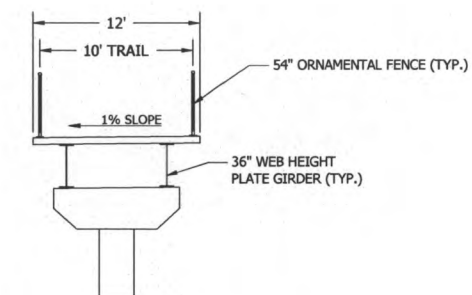


BARTLETT & WEST

1719 SOUTHRIDGE DR., SUITE 100 • JEFFERSON CITY MO 65109.400
PHONE 573.634.3181 • FAX 573.634.7904
MISSOURI CERTIFICAT OF AUTHORITY NO. 000167 • ENGINEERING
WWW.BARTWEST.COM

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ELEVATION



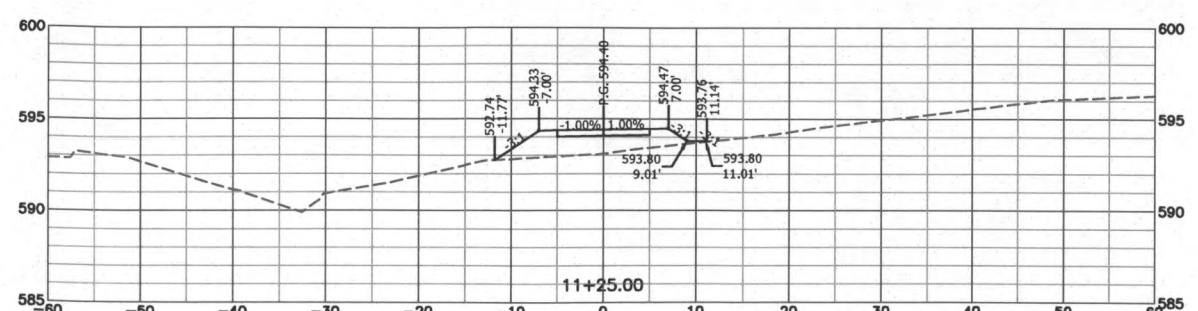
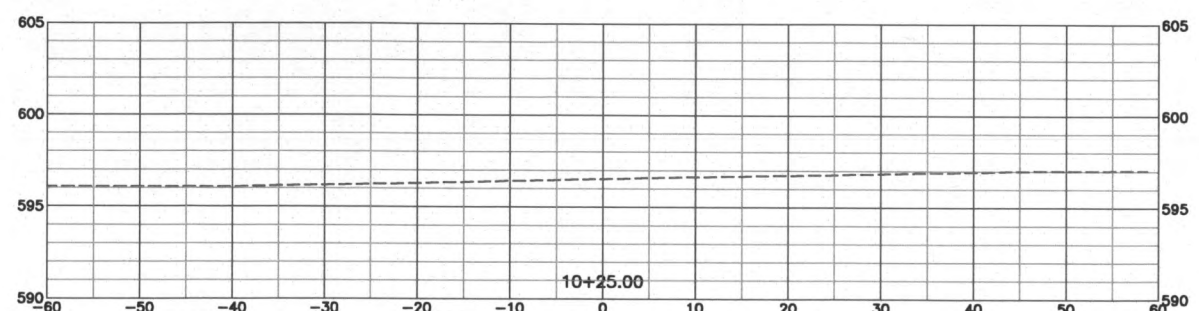
BRIDGE DETAILS BRIDGE PLAN AND ELEVATION

FORUM BOULEVARD TRAIL PROJECT
CITY OF COLUMBIA, BOONE COUNTY, MISSOURI

NOT FOR CONSTRUCTION

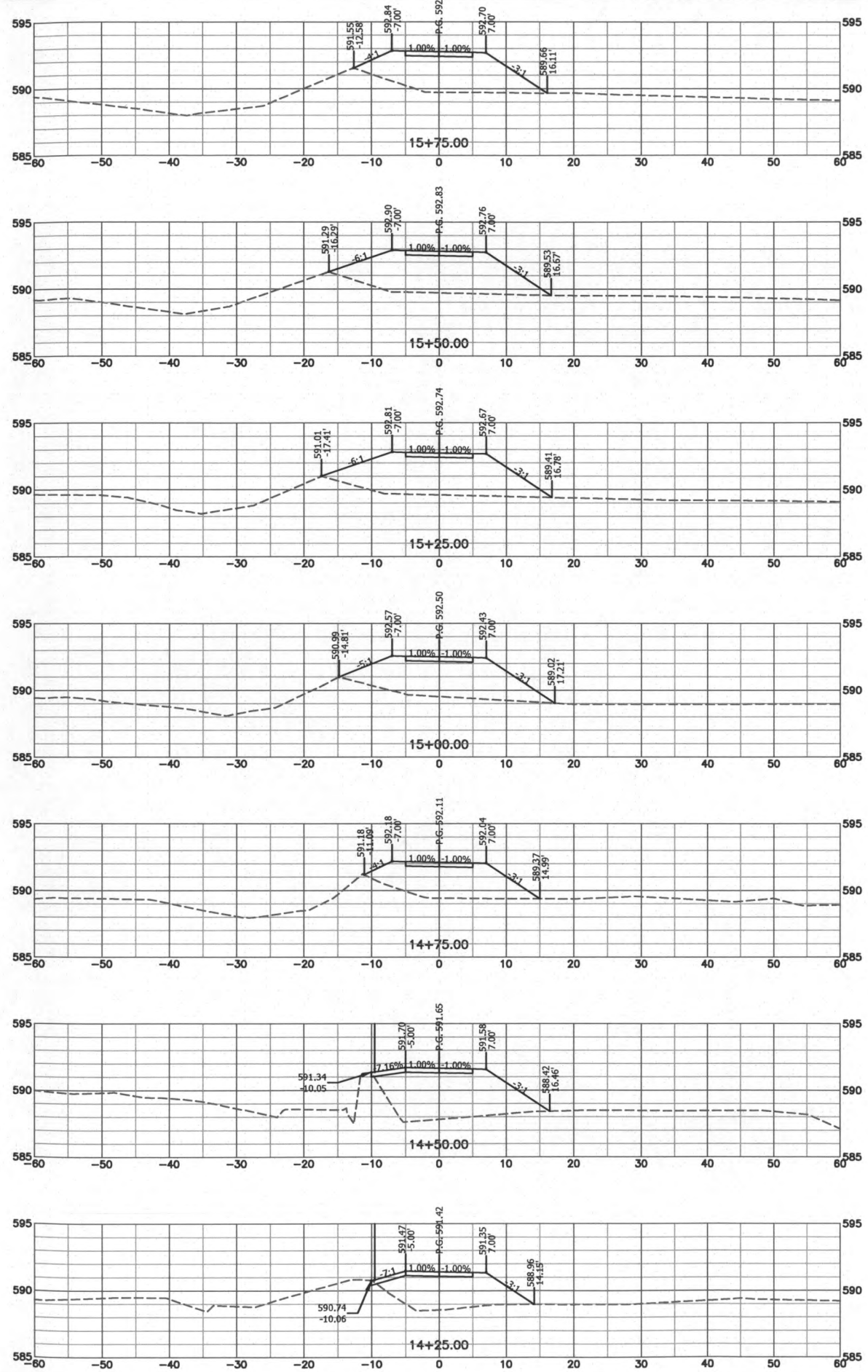
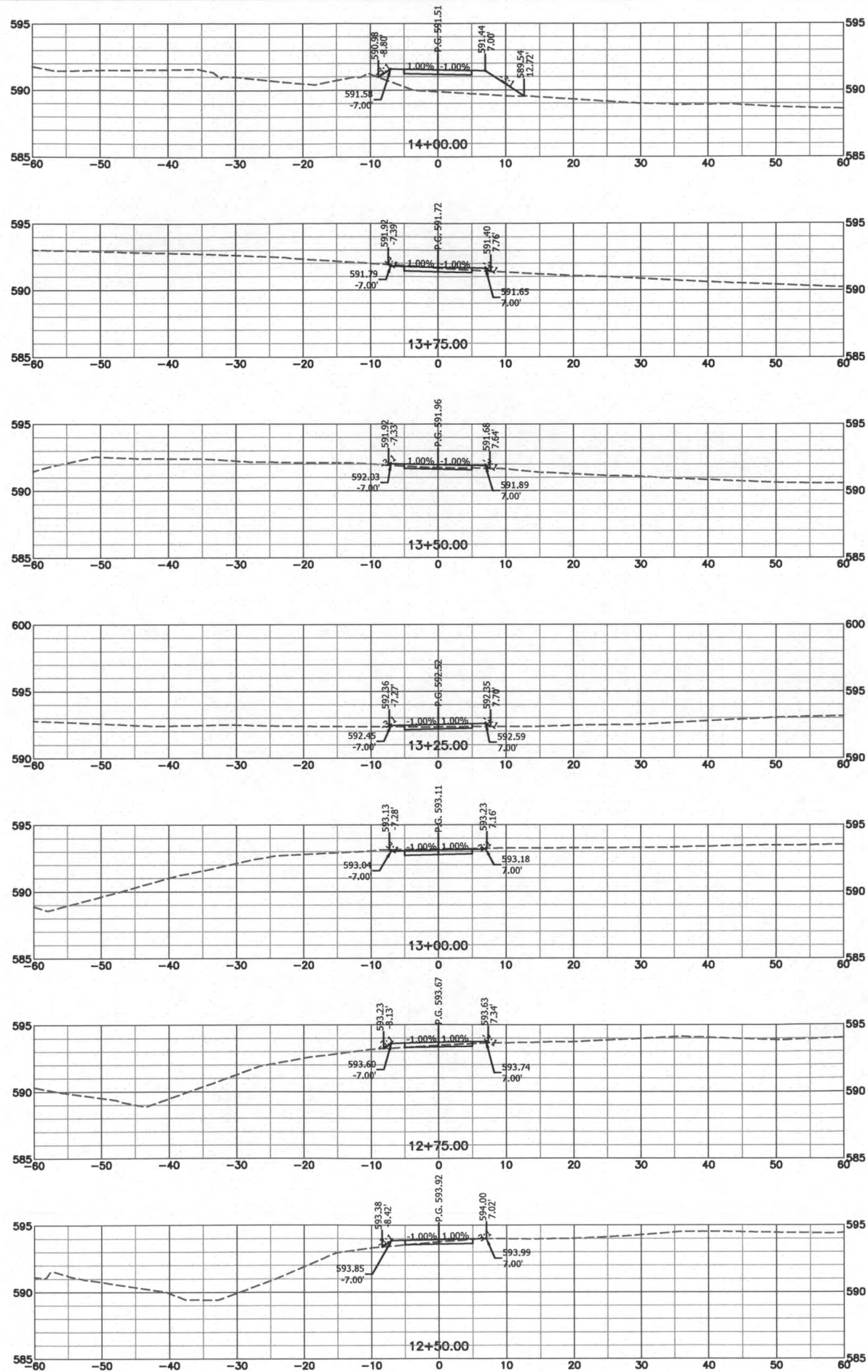
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DRAWN BY:	MAB
APPROVED BY:	TCK
DESIGN PROJ:	18082.000
DATE:	OCTOBER 2014
DRAWING NO:	
SHEET NO:	11 of 25

last edit on: Oct 2, 2014 by: AC001272
Drawing Name: W:\Proj\18000\18082\18082.000\AutoCad\Plan Set\18082.000_Plan Profile_Bridge.dwg Layout Name: Bridge Plan Profile Plotted By: AC001272 Plotted on: 10/13/2014 5:03:11 PM



SEALED DATE:	###
DESIGNED BY:	AKJ
DRAWN BY:	AKJ
APPROVED BY:	TCK
DESIGN PROJ:	18082.000
DATE:	OCTOBER 2014
DRAWING NO:	
SHEET NO:	12 of 25

Last edit on: Oct-2, 2014 by: AK001272 Drawing Name: W:\proj\18082.000\AutoCad\Plan Set\18082.000_Cross Sections_Main Trail.dwg Layout Name: Main Trail 2 Plotted on: 10/13/2014 4:51:20 PM



BAR IS ONE INCH ON OFFICIAL DRAWINGS. 0 1" IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY.

CROSS SECTIONS
FORUM BLVD. TRAIL

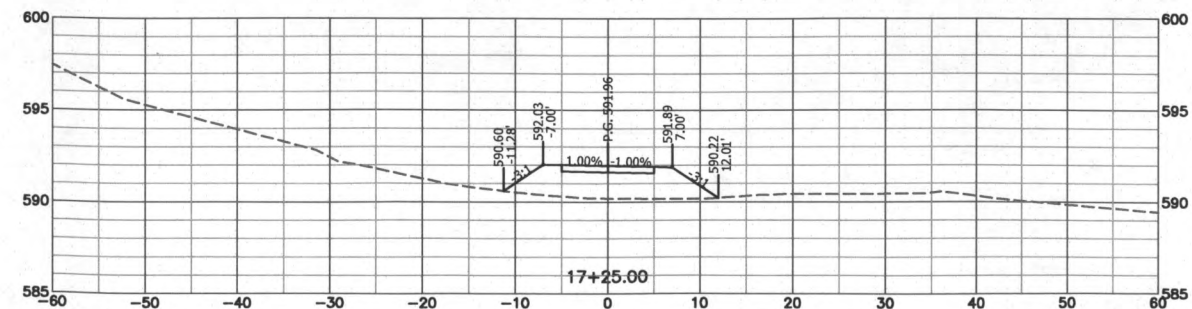
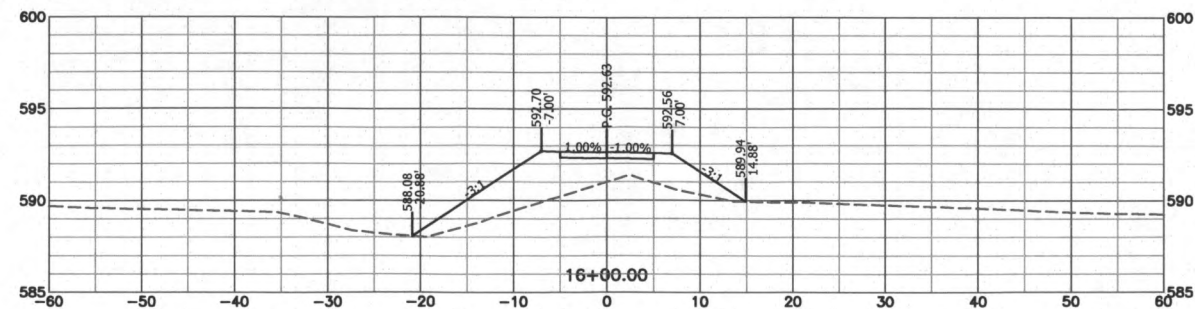
FORUM BOULEVARD TRAIL PROJECT
CITY OF COLUMBIA, BOONE COUNTY, MISSOURI

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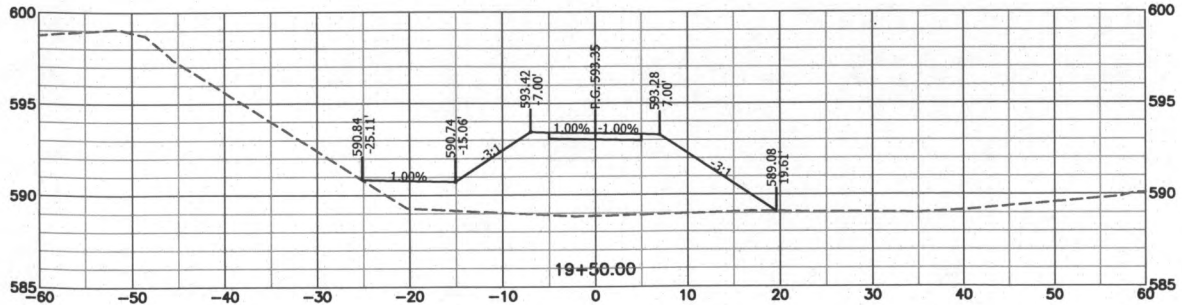
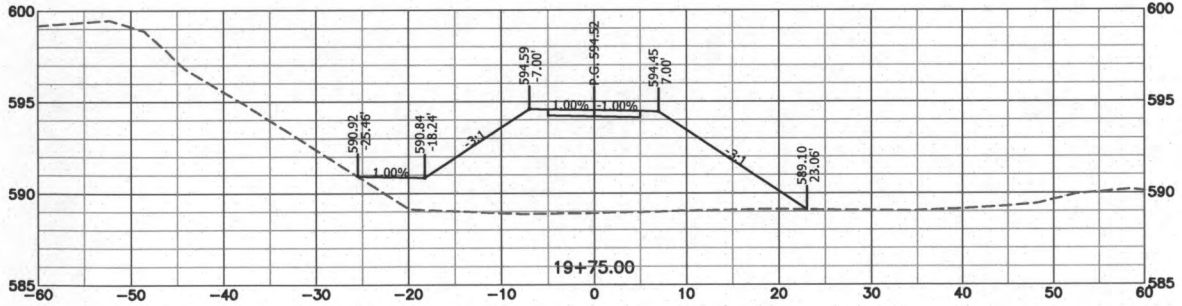
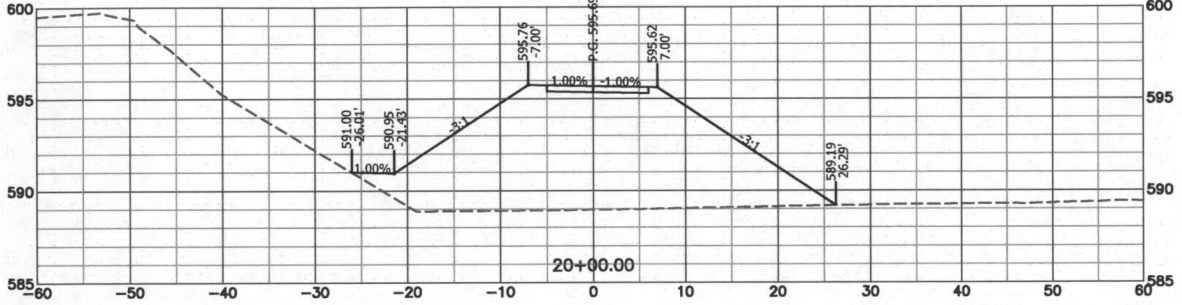
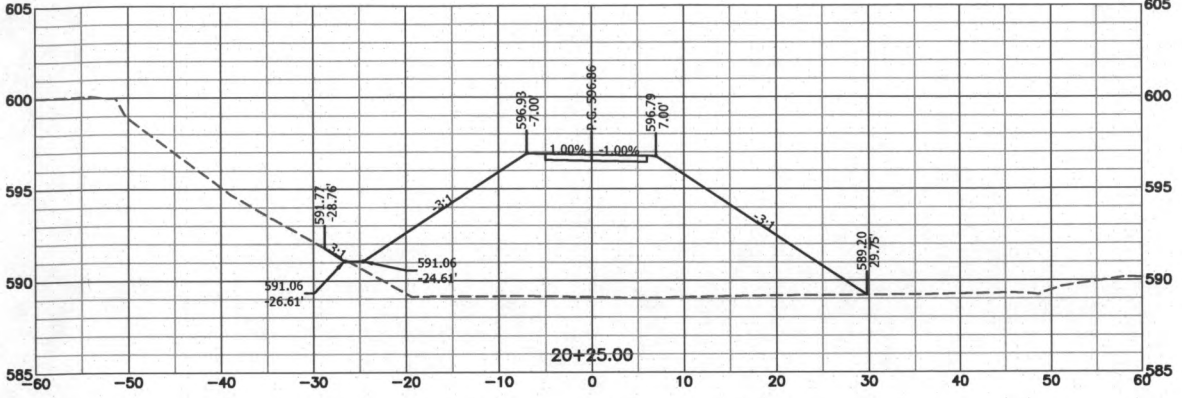
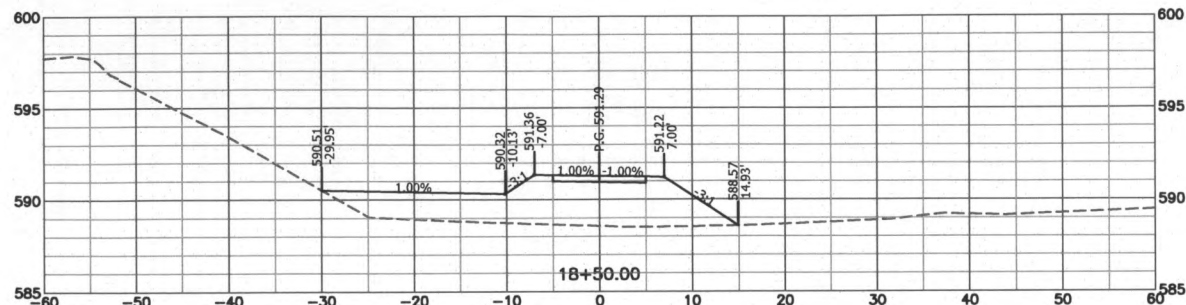
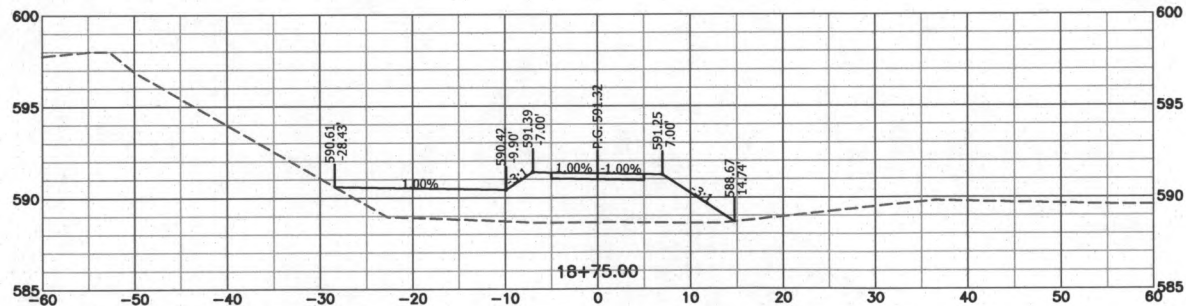
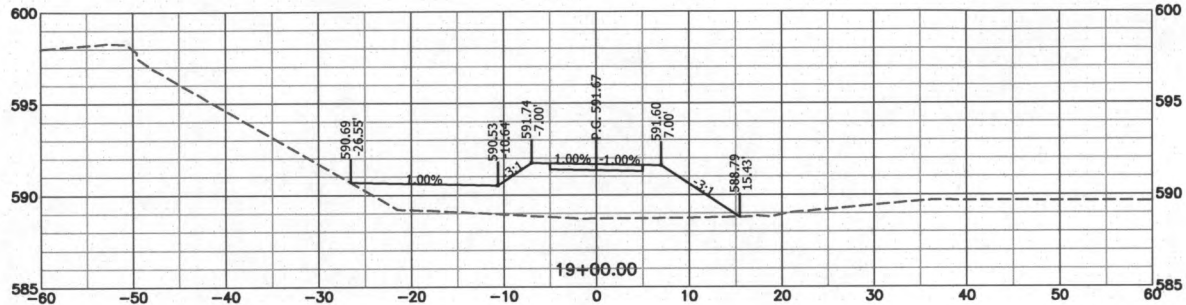
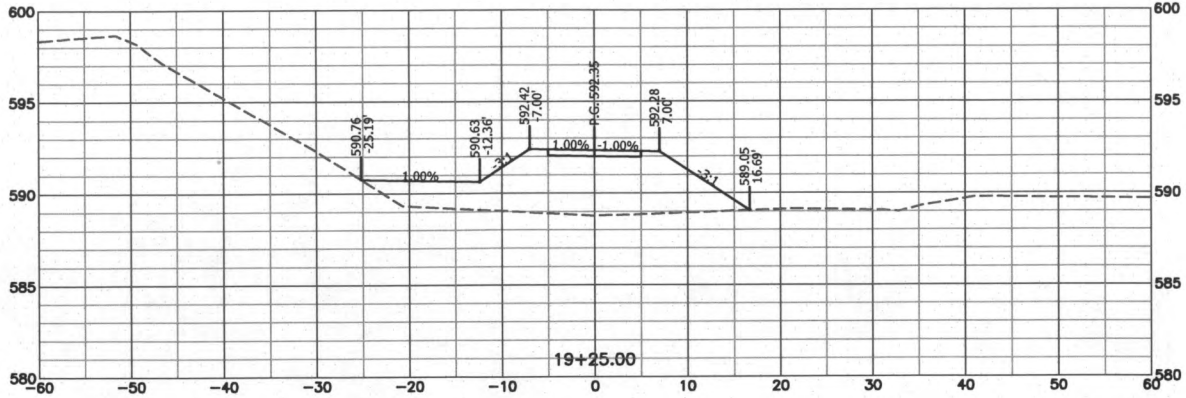
SEALED DATE: ###
DESIGNED BY: AKJ
DRAWN BY: AKJ
APPROVED BY: TCK
DESIGN PROJ: 18082.000
DATE: OCTOBER 2014
DRAWING NO:
SHEET NO: 13 of 25

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MISSOURI PROFESSIONAL SEAL NO. 000167 - ENGINEERING



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APPROVED BY:	TCK
DESIGN PROJ.:	18082.000
DATE:	OCTOBER 2014
DRAWING NO:	
SHEET NO:	11 of 25



Last edit on: Oct 2, 2014 by: AK01272 Drawing Name: W:\Proj\18082\18082.000\AutoCad\Plan Set\18082.000_Cross Sections\Main Trail.dwg Layout Name: Main Trail 4 Plotted By: AK01272 Plotted on: 10/13/2014 4:51:39 PM

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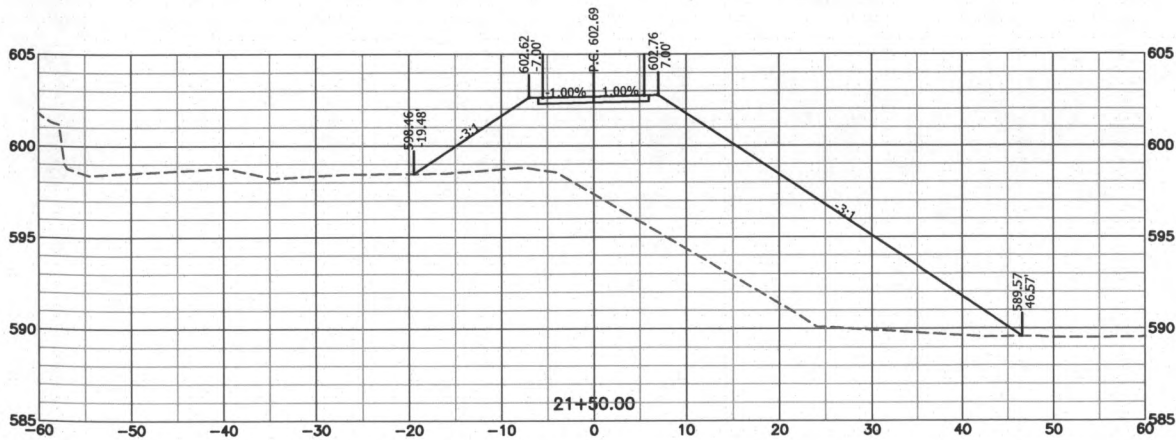
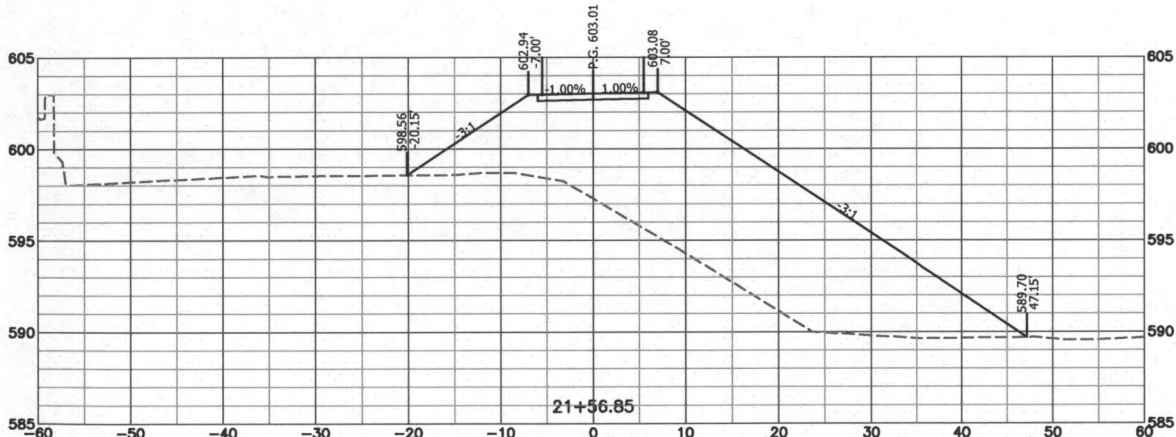
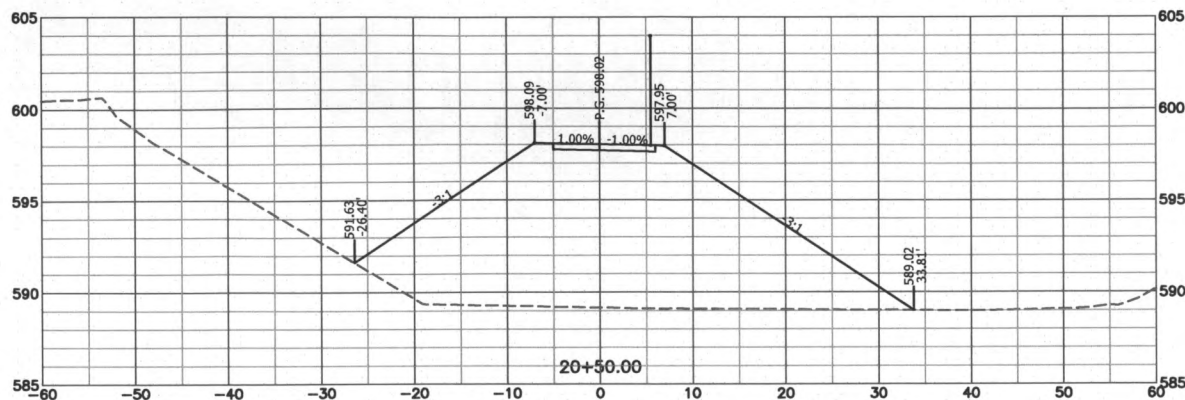
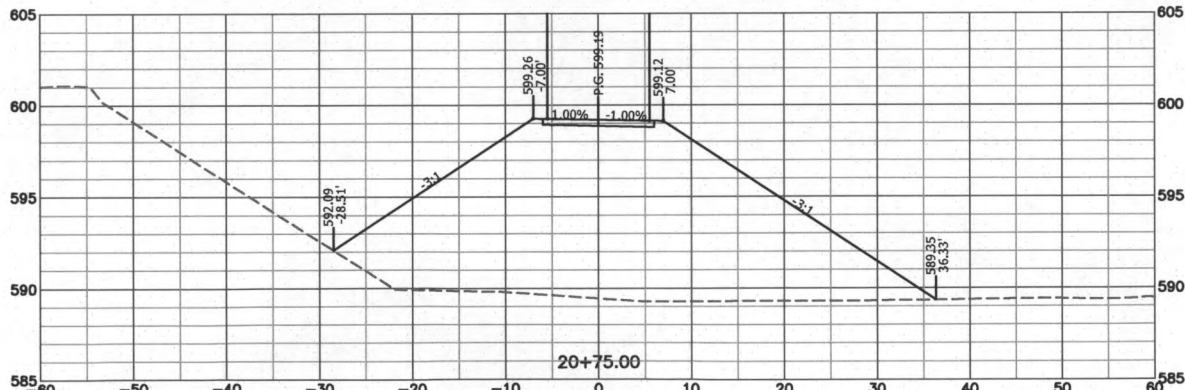
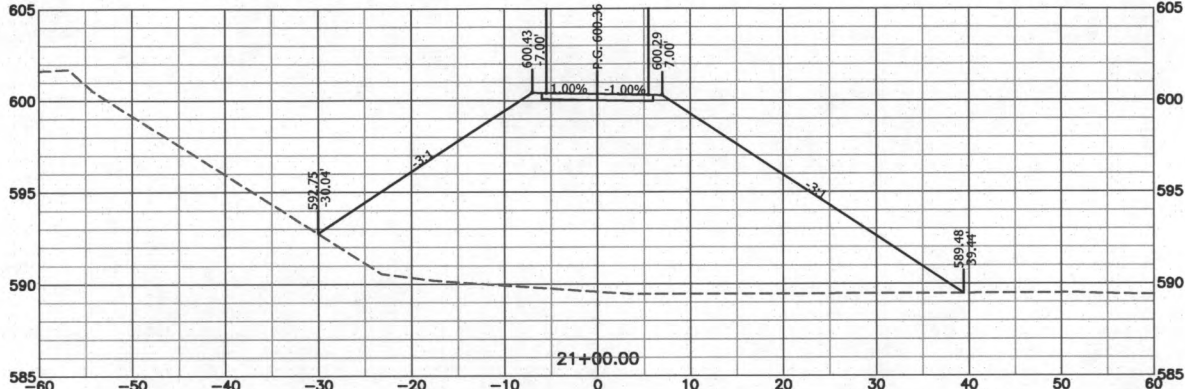
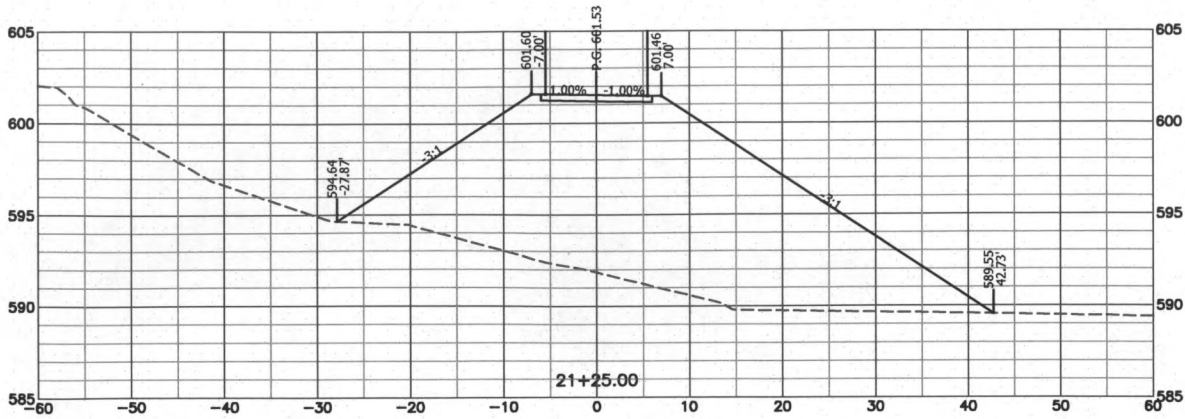
1719 SOUTHBRIDGE DR., SUITE 100 - JEFFERSON CITY, MO 65109-4000
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**CROSS SECTIONS
FORUM BLVD. TRAIL**

FORUM BOULEVARD TRAIL PROJECT
CITY OF COLUMBIA, BOONE COUNTY, MISSOURI

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SEALED DATE:	###
DESIGNED BY:	AKJ
DRAWN BY:	AKJ
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DESIGN PROJ:	18082.000
DATE:	OCTOBER 2014
DRAWING NO:	
SHEET NO:	15 of 25

Let edit on: Oct 2, 2014 by: AK01272 Drawing Name: W:\Proj\18082\18082.000\AutoCad\Plan Set\18082.000_Cross Sections_Main Trail.dwg Layout Name: Main Trail 5 Plotted By: AK01272 Plotted on: 10/3/2014 4:51:48 PM



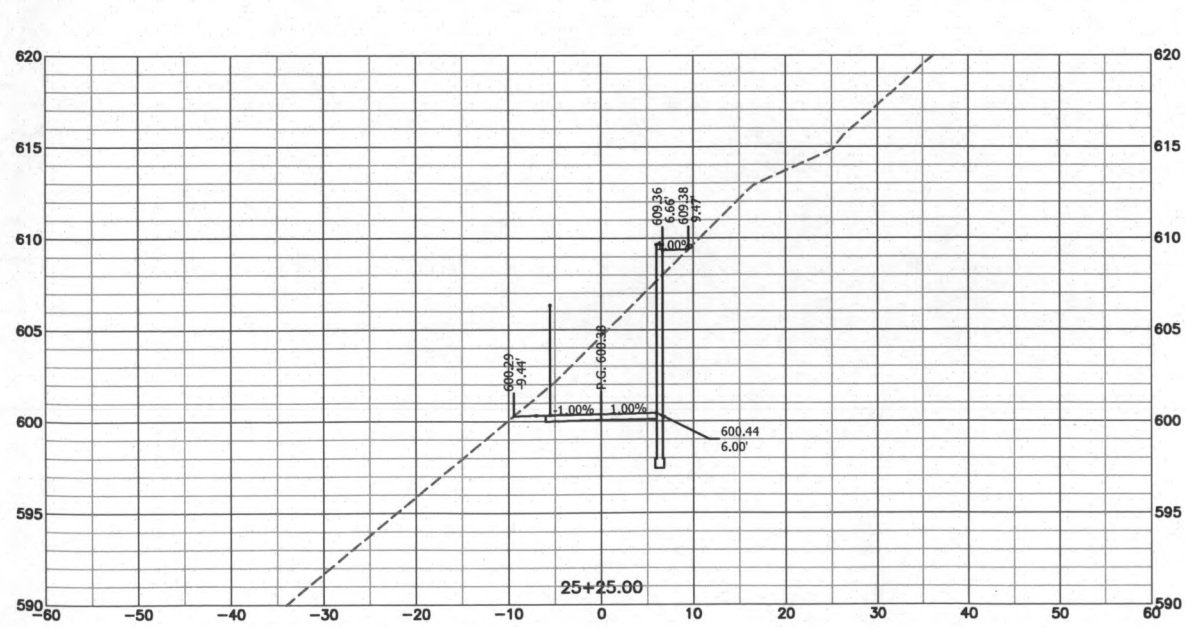
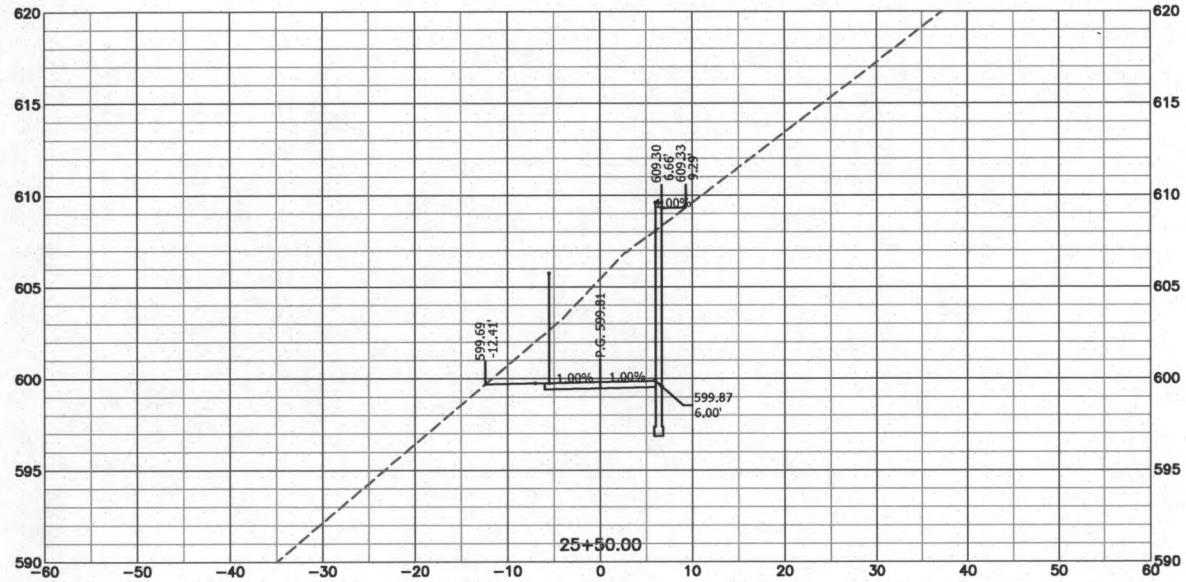
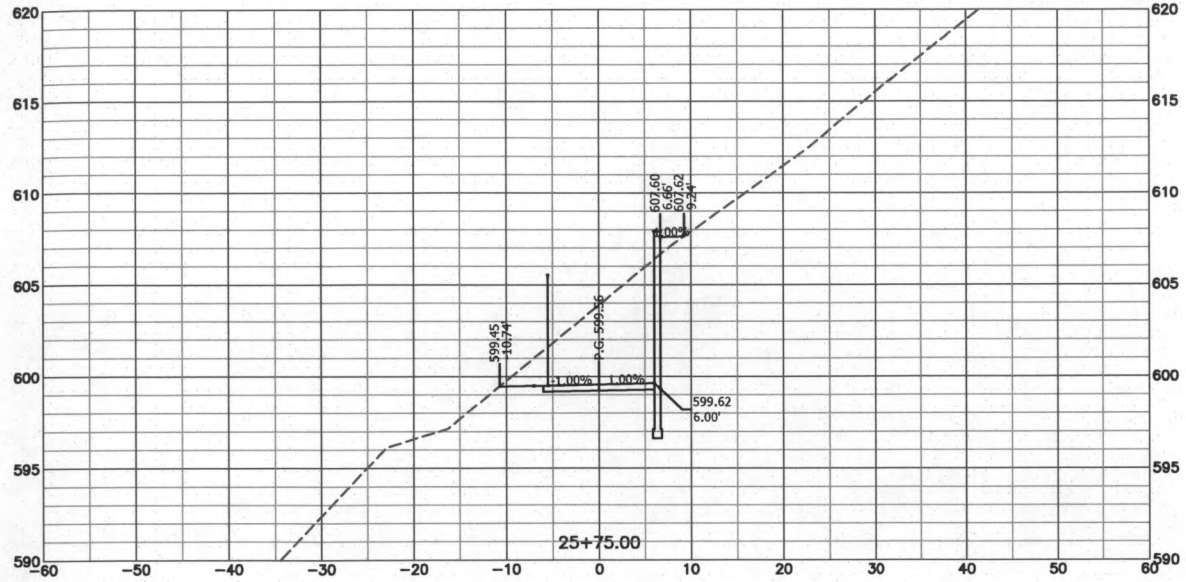
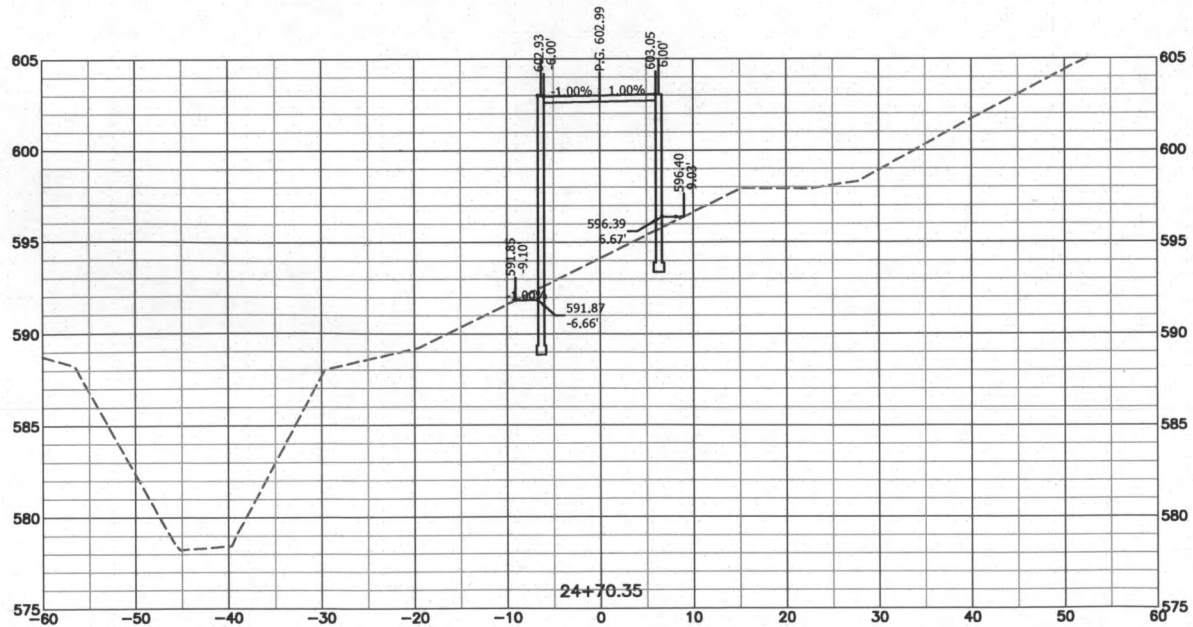
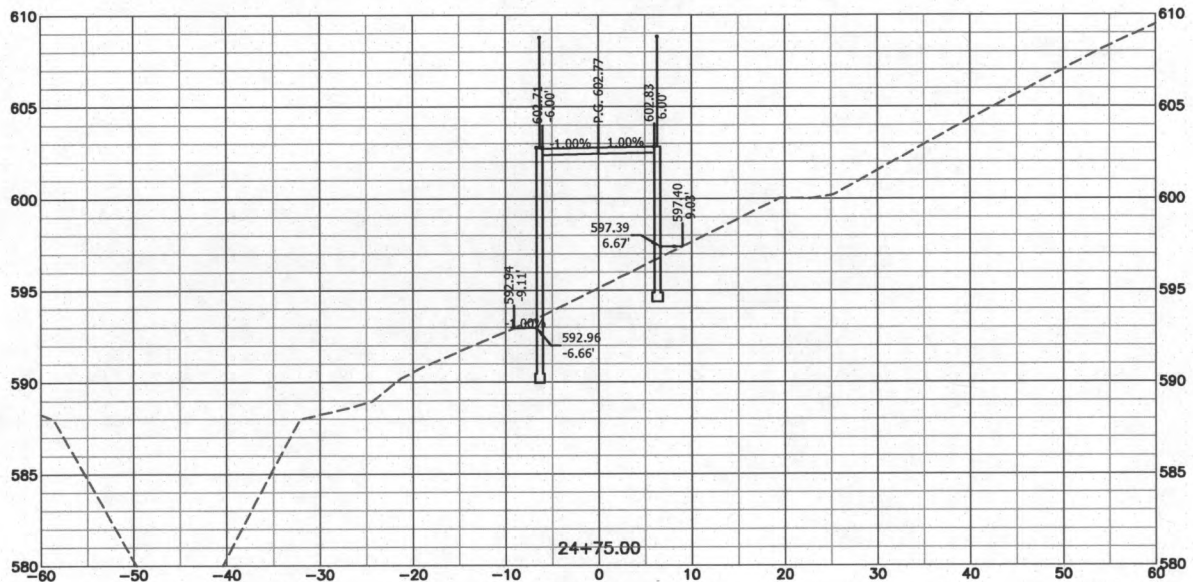
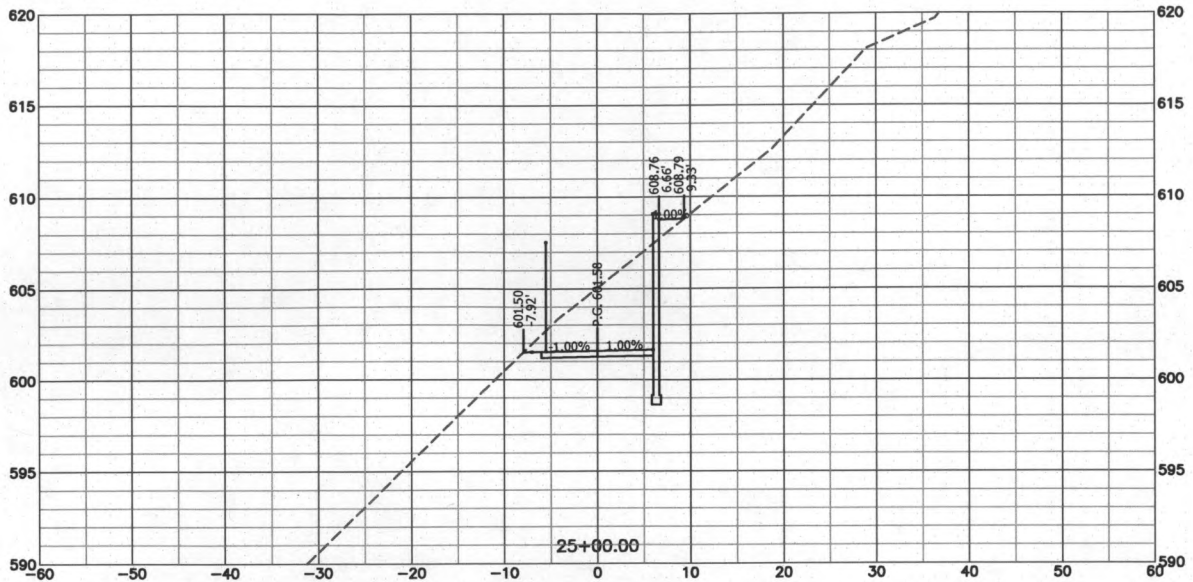
CROSS SECTIONS
FORUM BLVD. TRAIL

FORUM BOULEVARD TRAIL PROJECT
CITY OF COLUMBIA, BOONE COUNTY, MISSOURI

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SEALED DATE:	###
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DRAWN BY:	AKJ
APPROVED BY:	TCK
DESIGN PROJ:	18082.000
DATE:	OCTOBER 2014
DRAWING NO:	
SHEET NO:	16 of 25

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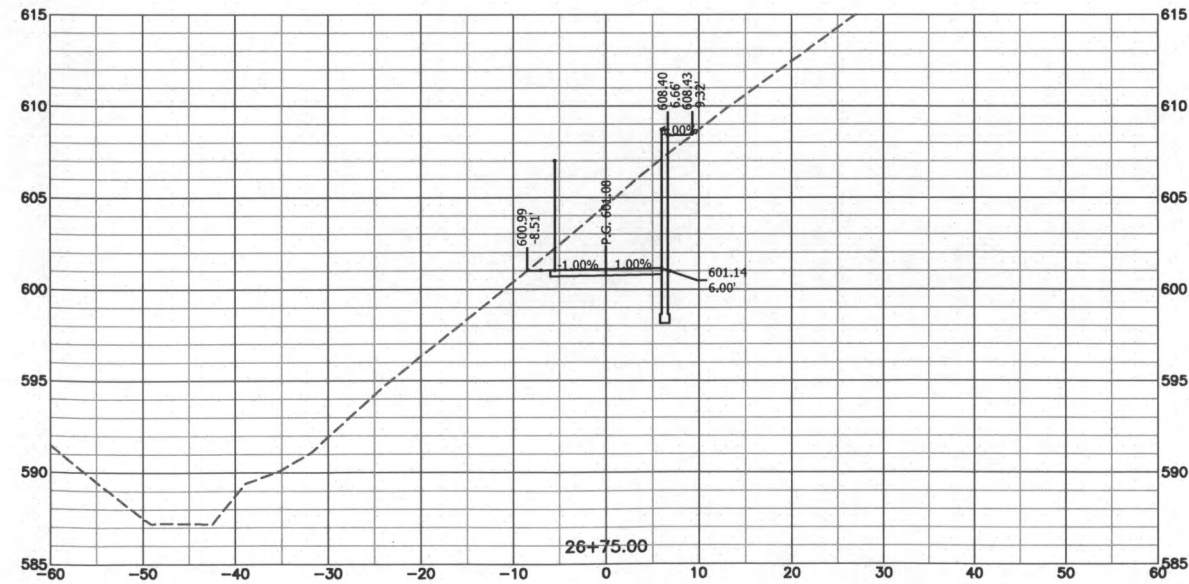
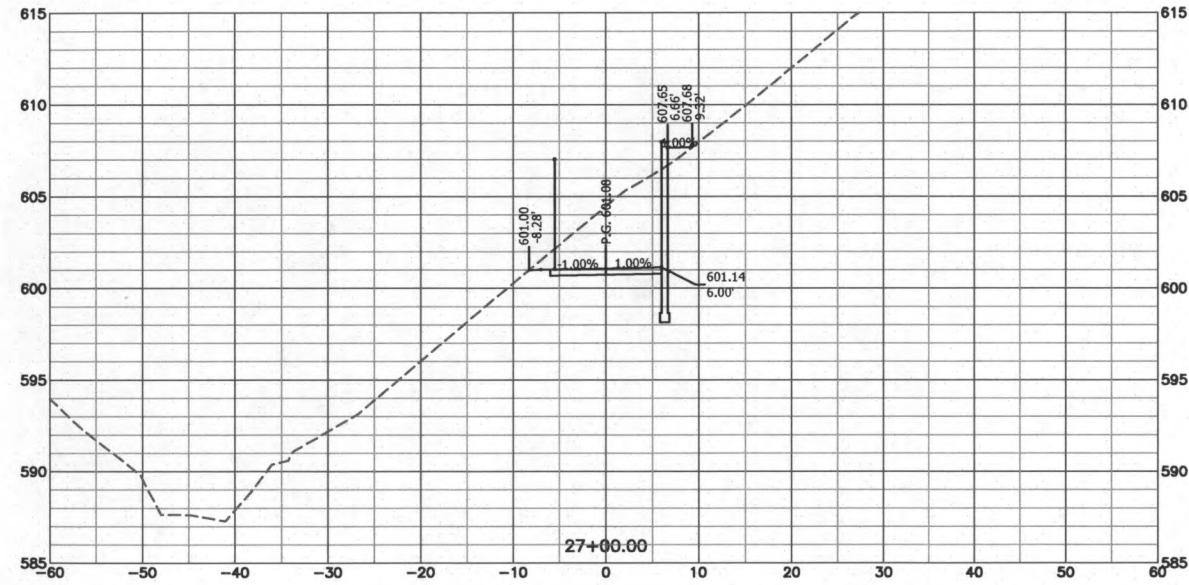
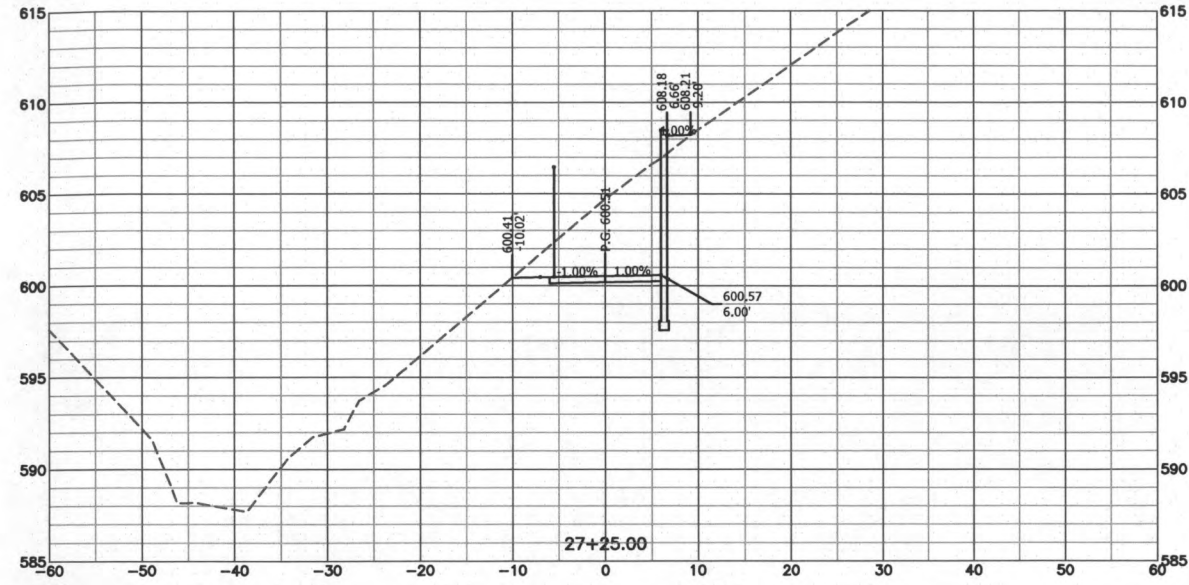
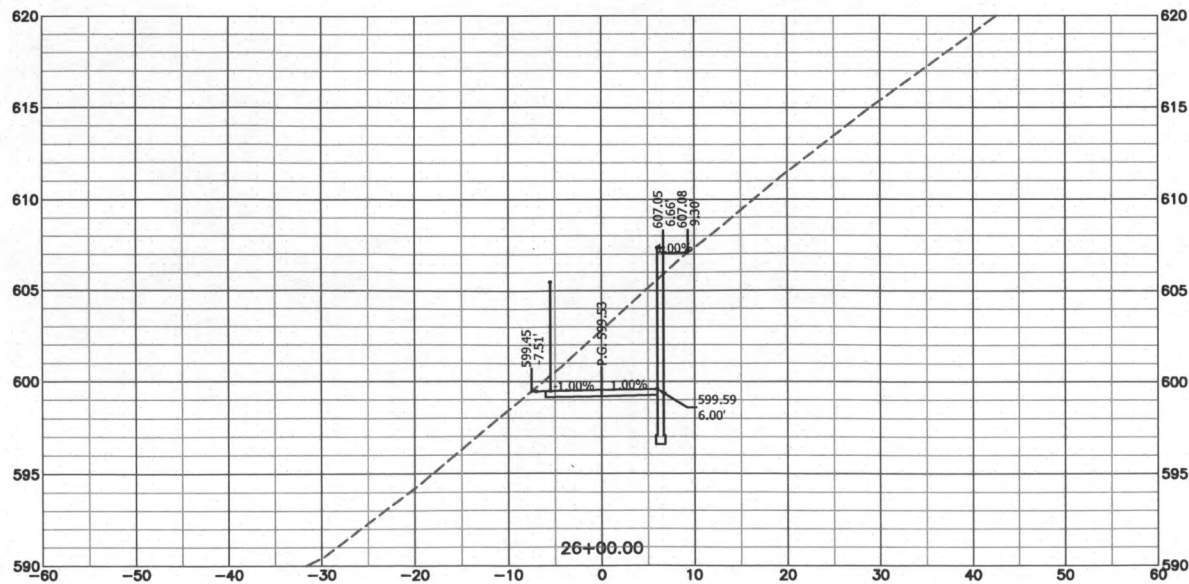
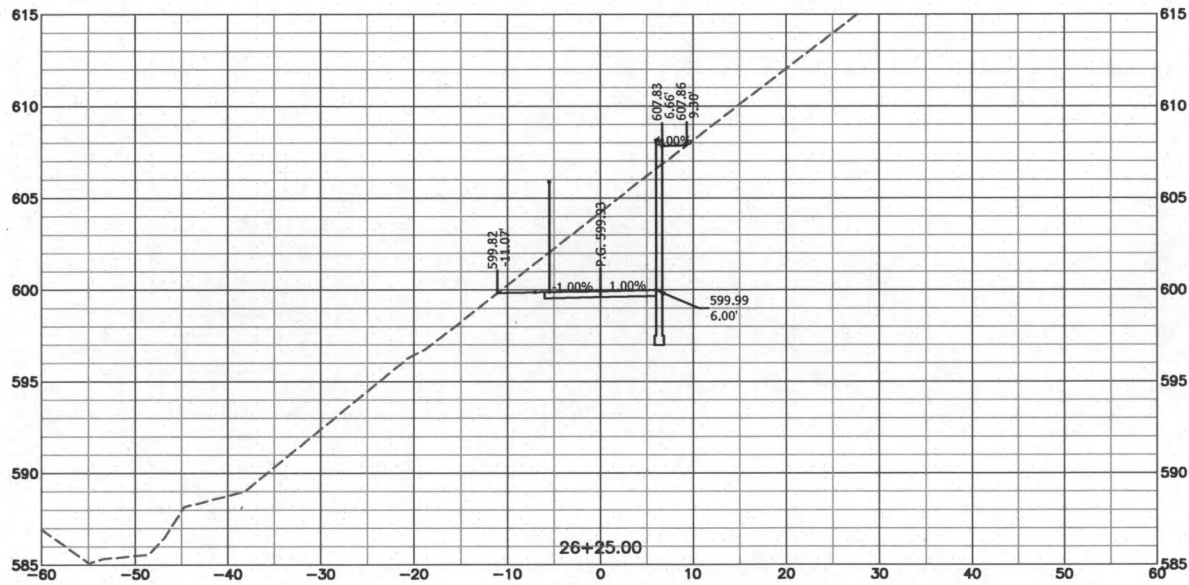
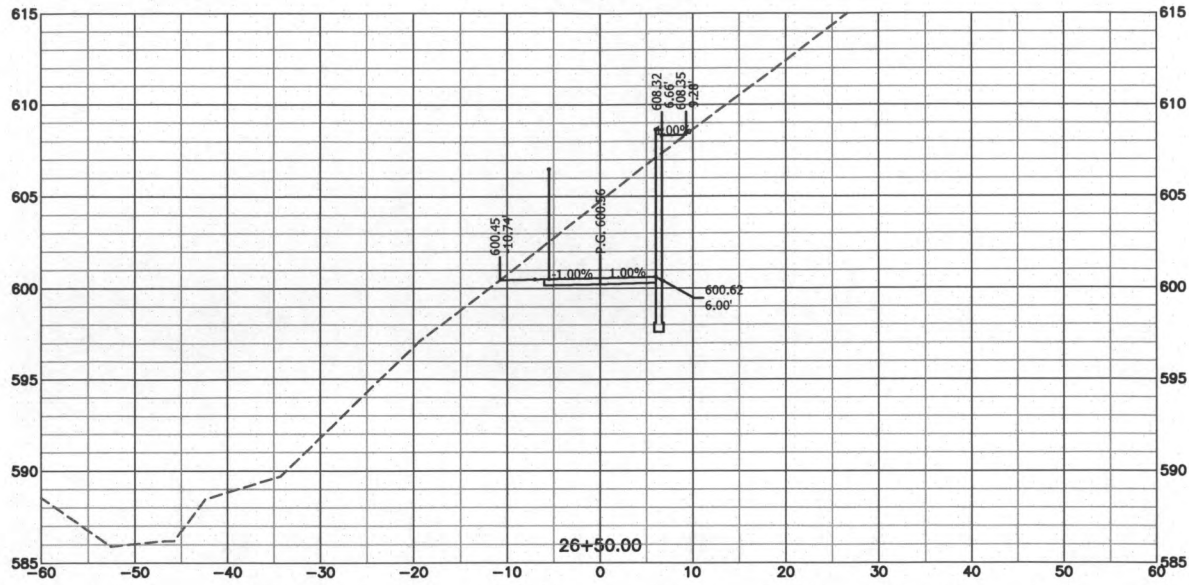
**CROSS SECTIONS
FORUM BLVD. TRAIL**

**FORUM BOULEVARD TRAIL PROJECT
CITY OF COLUMBIA, BOONE COUNTY, MISSOURI**

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SEALED DATE: ###
DESIGNED BY: AKJ
DRAWN BY: AKJ
APPROVED BY: TCK
DESIGN PROJ: 18082.000
DATE: OCTOBER 2014
DRAWING NO:
SHEET NO: 17 of 25

Last edit on: Oct 2, 2014 by: A001272 Drawing Name: W:\Proj\18002\18082.000\Main Trail.dwg Layout Name: Main Trail 7 Plotted By: A001272 Plotted on: 10/13/2014 4:52:08 PM



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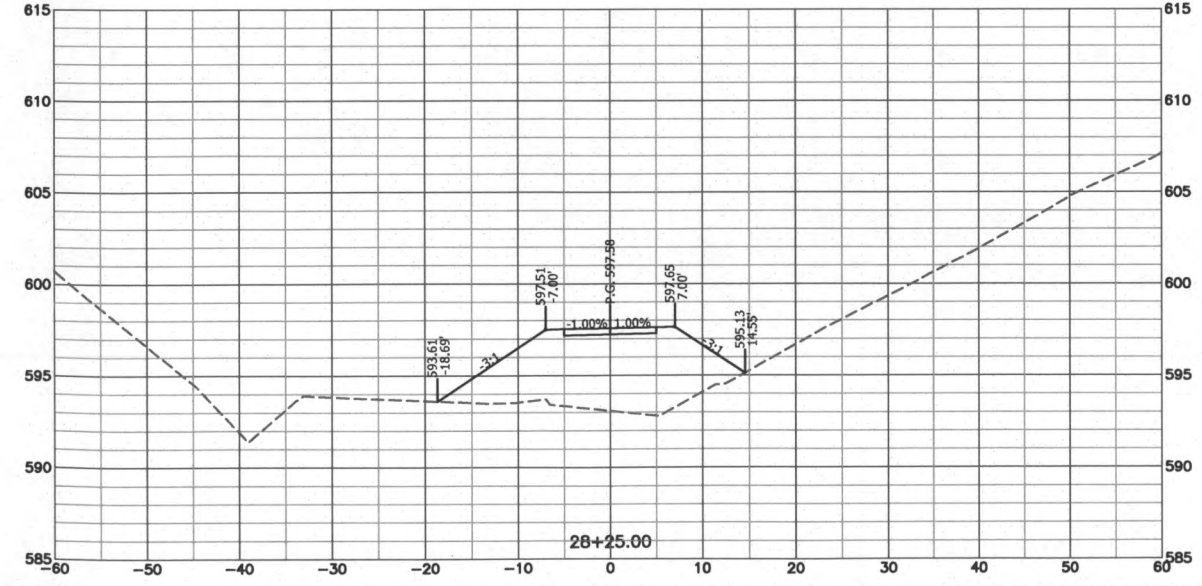
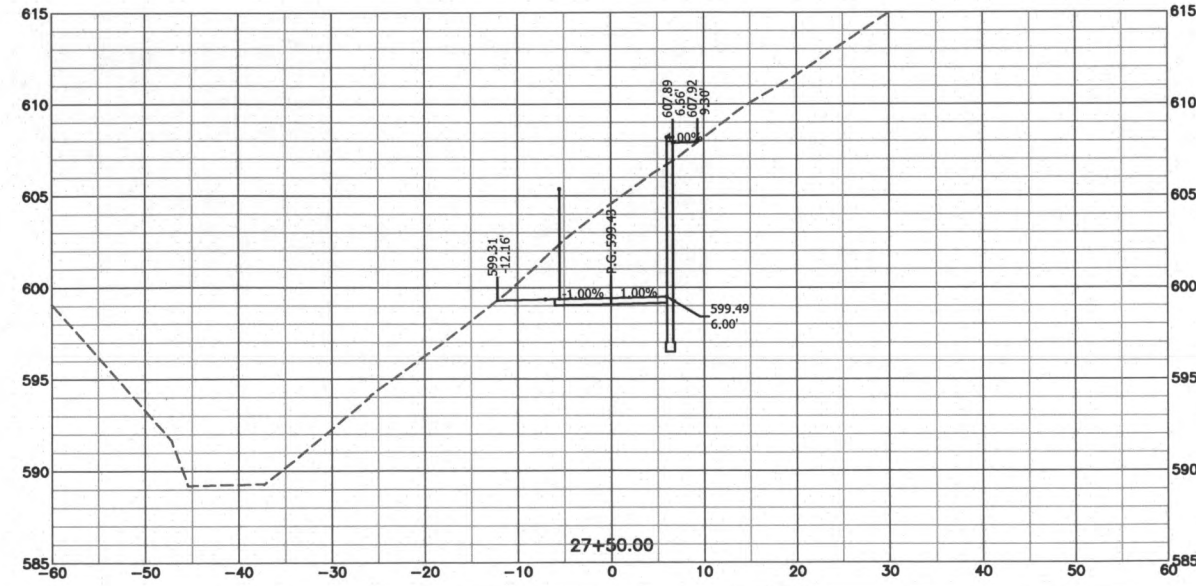
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**CROSS SECTIONS
FORUM BLVD. TRAIL**

**FORUM BOULEVARD TRAIL PROJECT
CITY OF COLUMBIA, BOONE COUNTY, MISSOURI**

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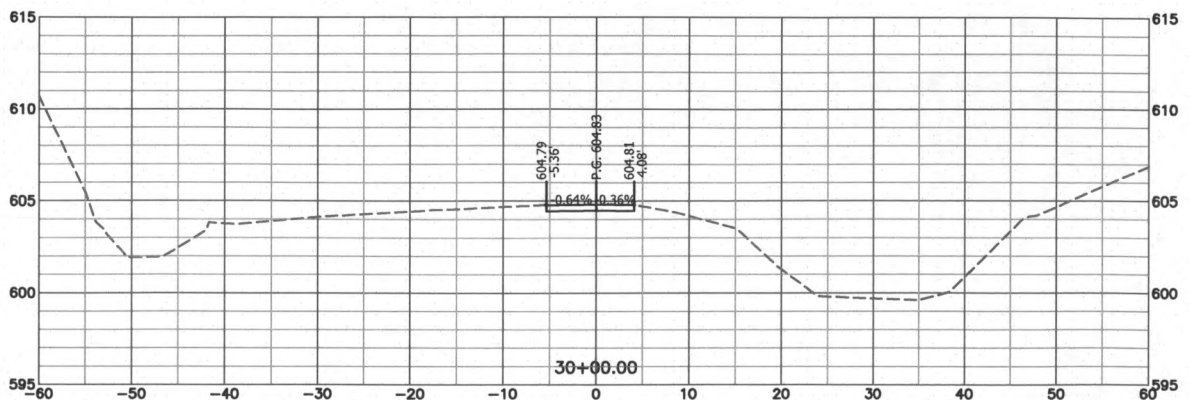
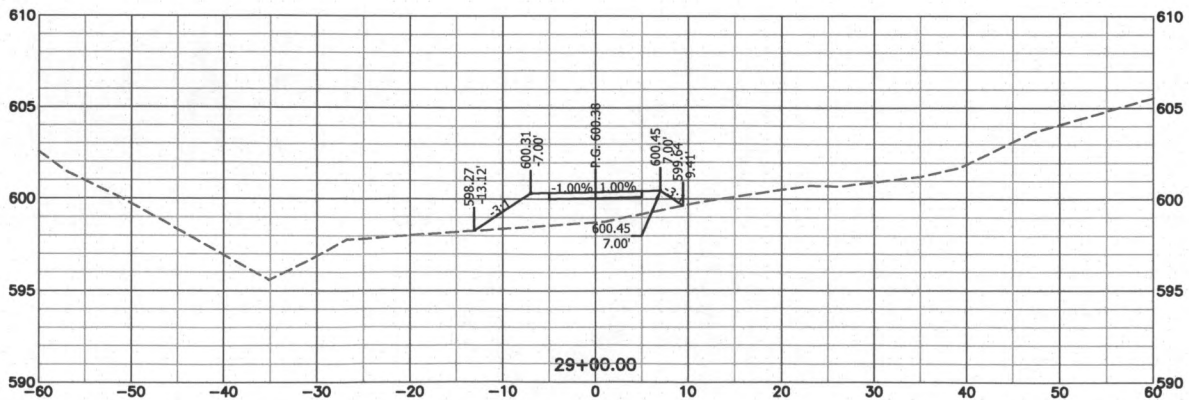
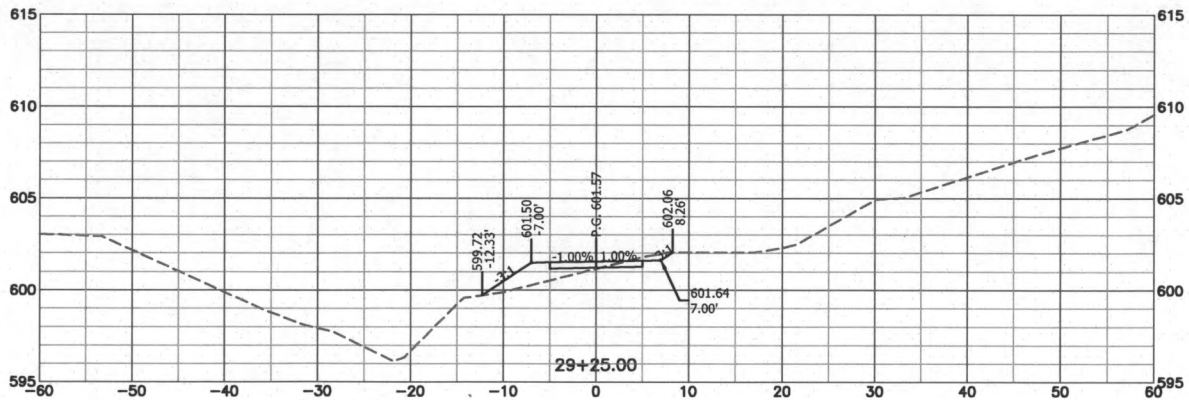
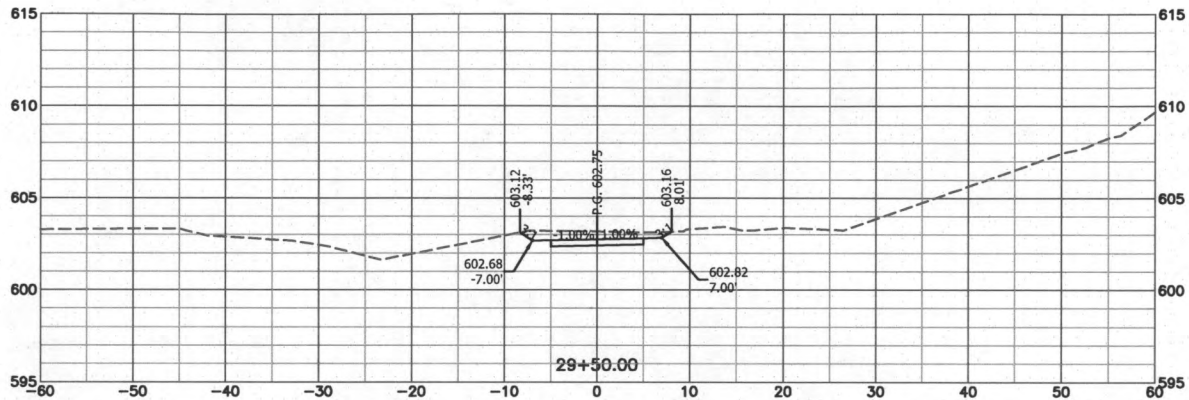
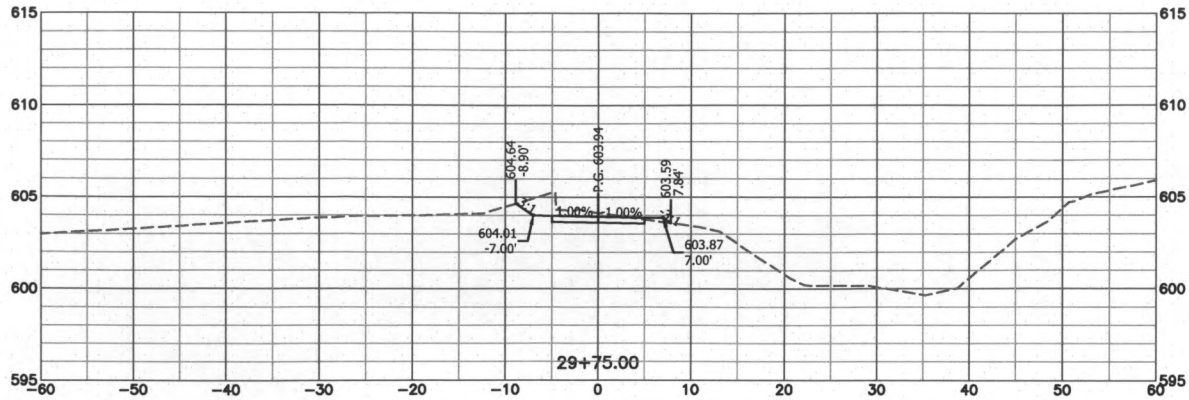
SEALED DATE: ###
DESIGNED BY: AKJ
DRAWN BY: AKJ
APPROVED BY: TCK
DESIGN PROJ: 18082.000
DATE: OCTOBER 2014
DRAWING NO:
SHEET NO: 18 of 25



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SEALED DATE:	###
DESIGNED BY:	AKJ
DRAWN BY:	AKJ
APPROVED BY:	TCK
DESIGN PROJ.:	18082.000
DATE:	OCTOBER 2014
DRAWING NO:	
SHEET NO:	19 of 25

Last edit on: Oct 2, 2014 by: AK001222 Drawing Name: W:\Proj\18082\18082.000\AutoCAD\Plan Set\18082.000_Cross Sections_Main Trail.dwg Layout Name: Forum Blvd. Trail Plotted By: AK001222 Plotted on: 10/13/2014 4:52:29 PM



CROSS SECTIONS
FORUM BLVD. TRAIL

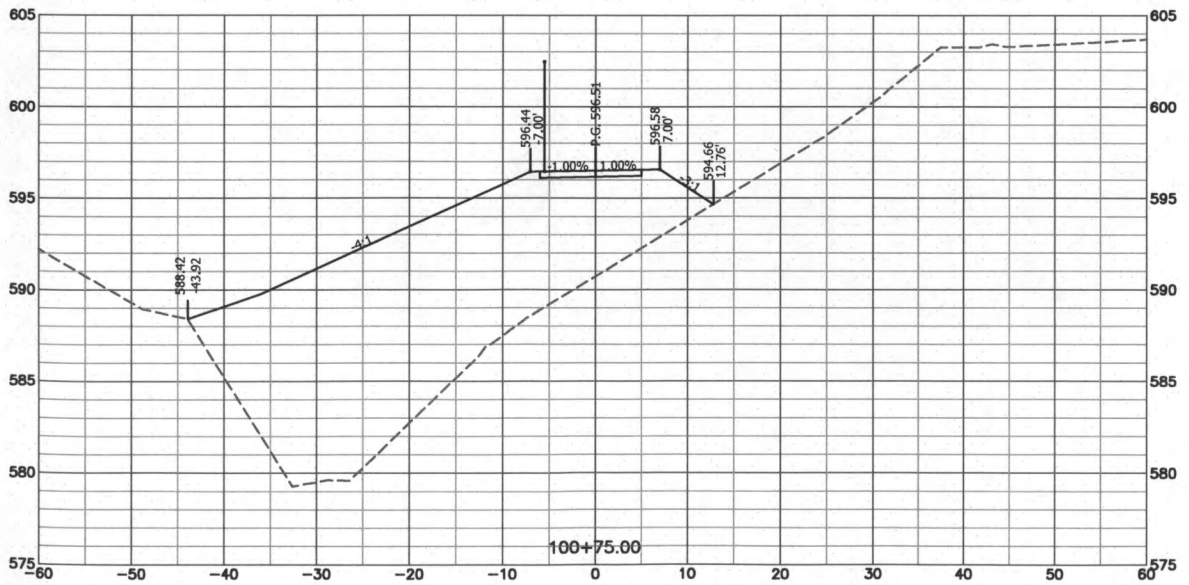
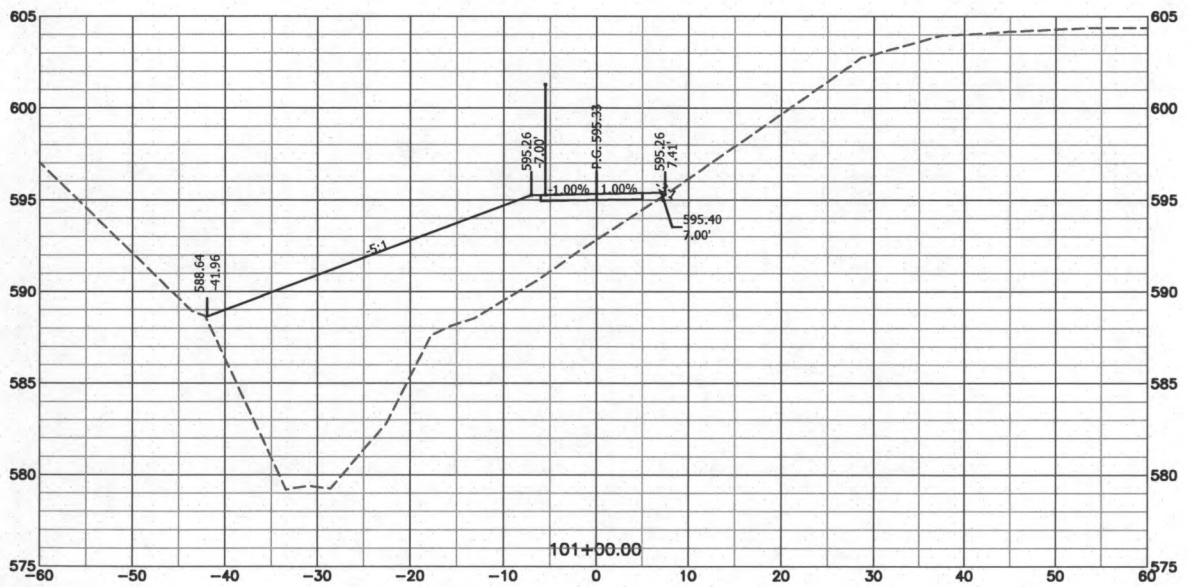
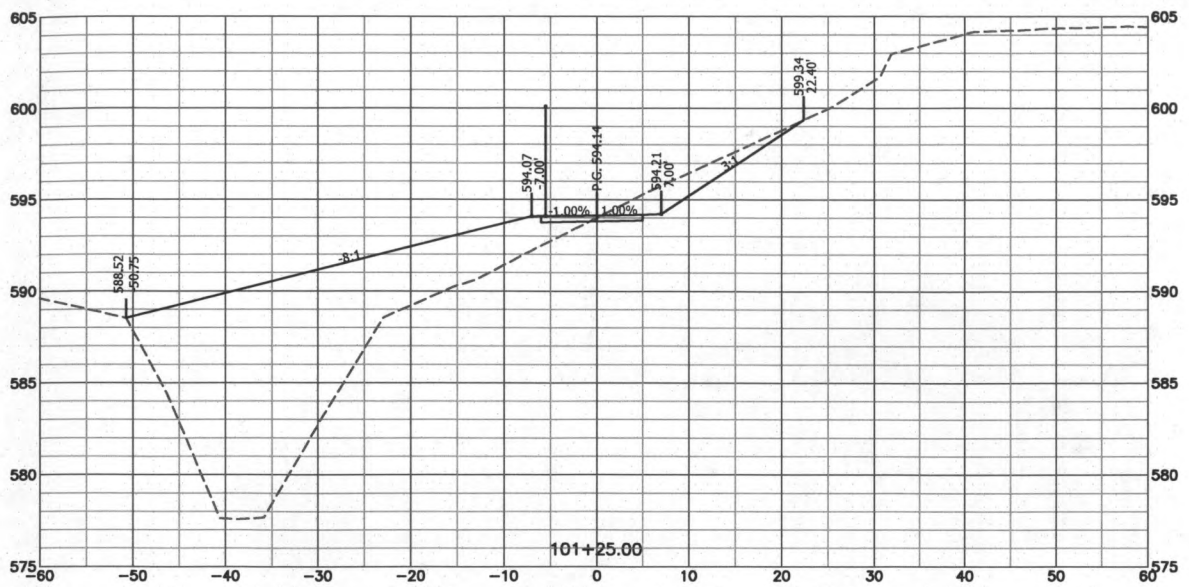
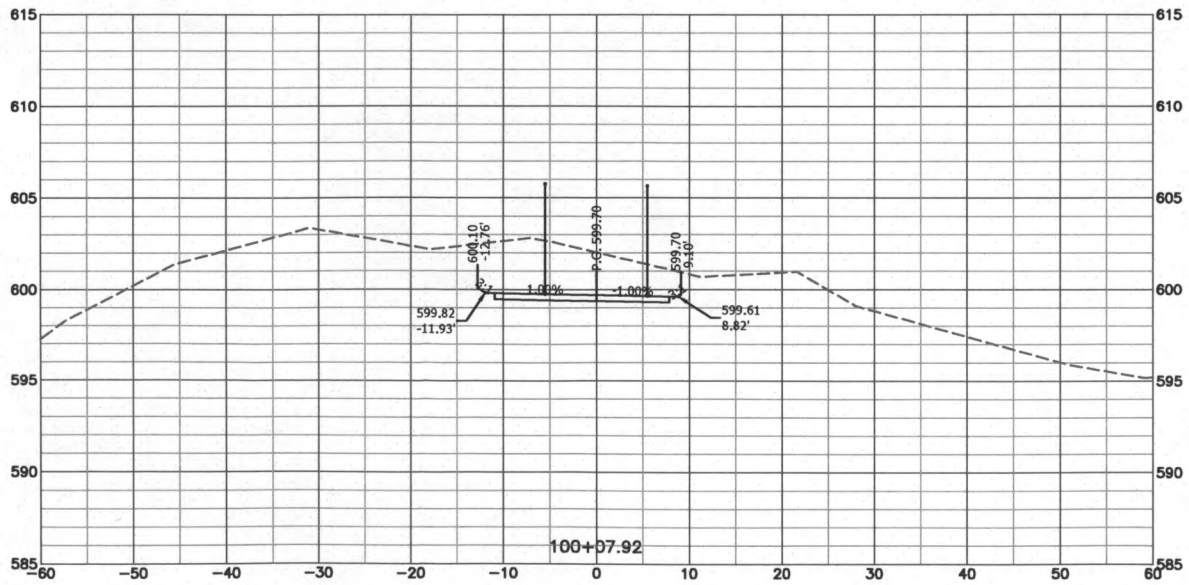
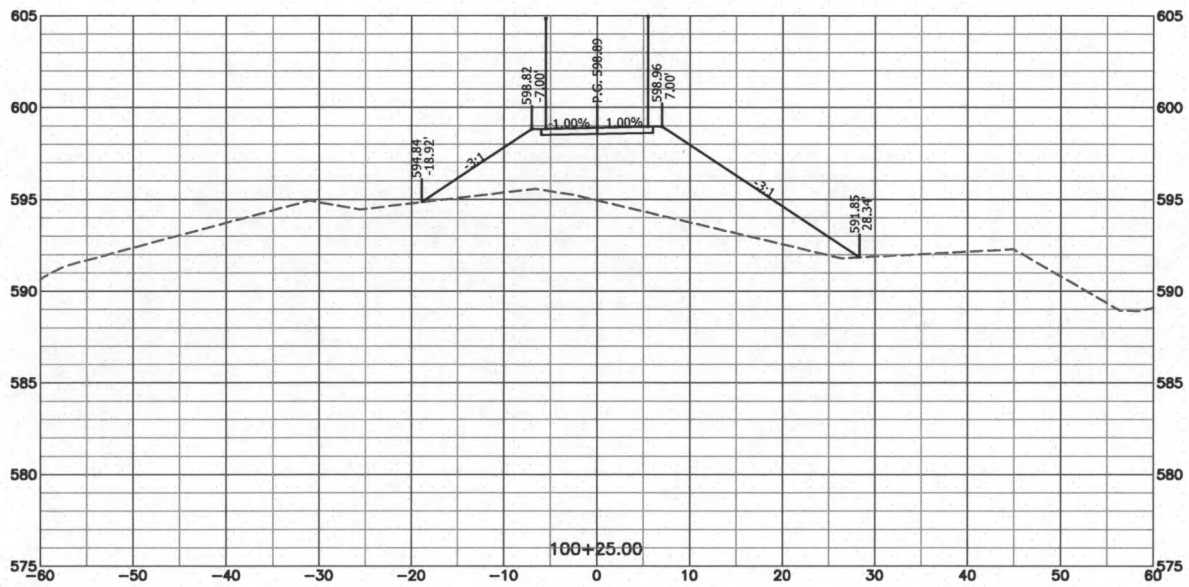
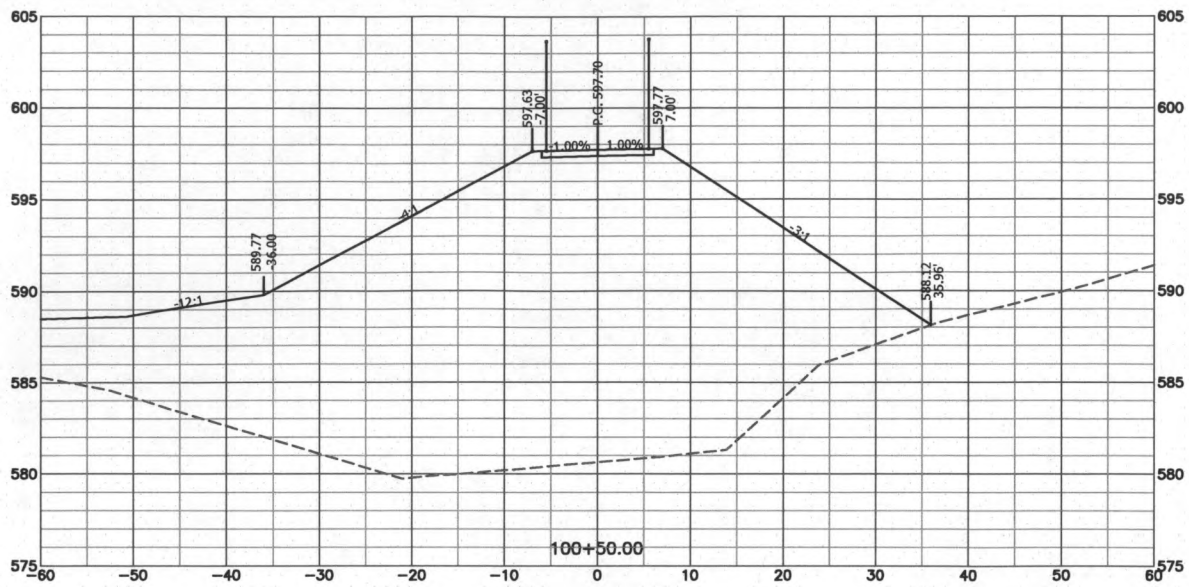
FORUM BOULEVARD TRAIL PROJECT
CITY OF COLUMBIA, BOONE COUNTY, MISSOURI

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APPROVED BY: TCK
DESIGN PROJ: 18082.000
DATE: OCTOBER 2014
DRAWING NO:
SHEET NO: 20 of 25



Last edit on: Oct 2, 2014 by: AKD01272 Drawing Name: W:\proj\18000\18082.000\AutoCad\Plan Set\18082.000_Cross Sections_North Shoulder.dwg Layout Name: North Shoulder 1 Plotted By: AKD01272 Plotted on: 10/13/2014 4:58:23 PM

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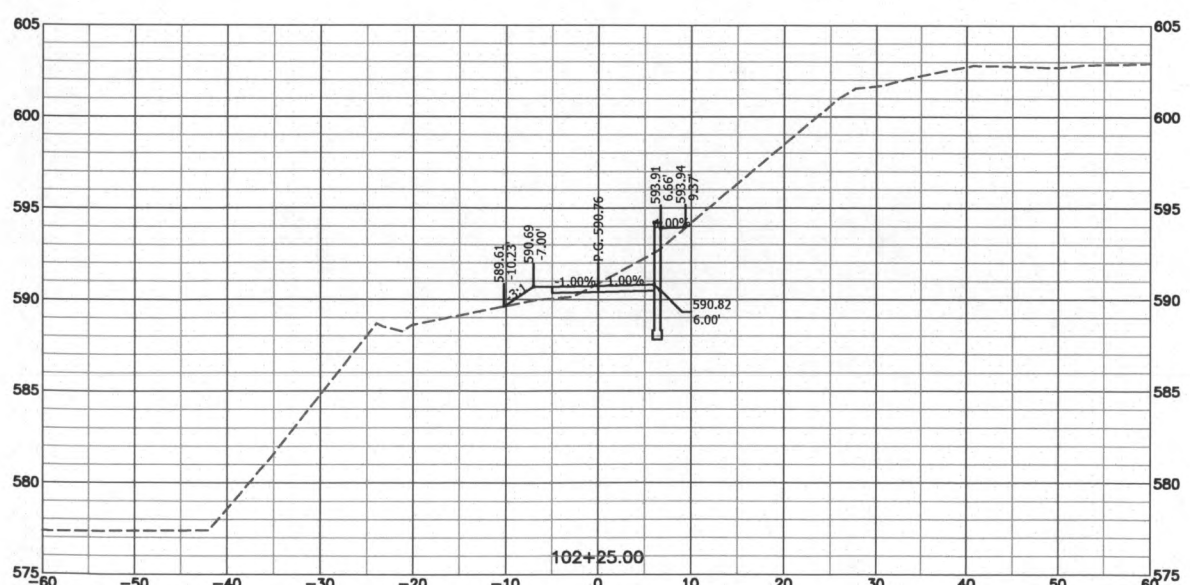
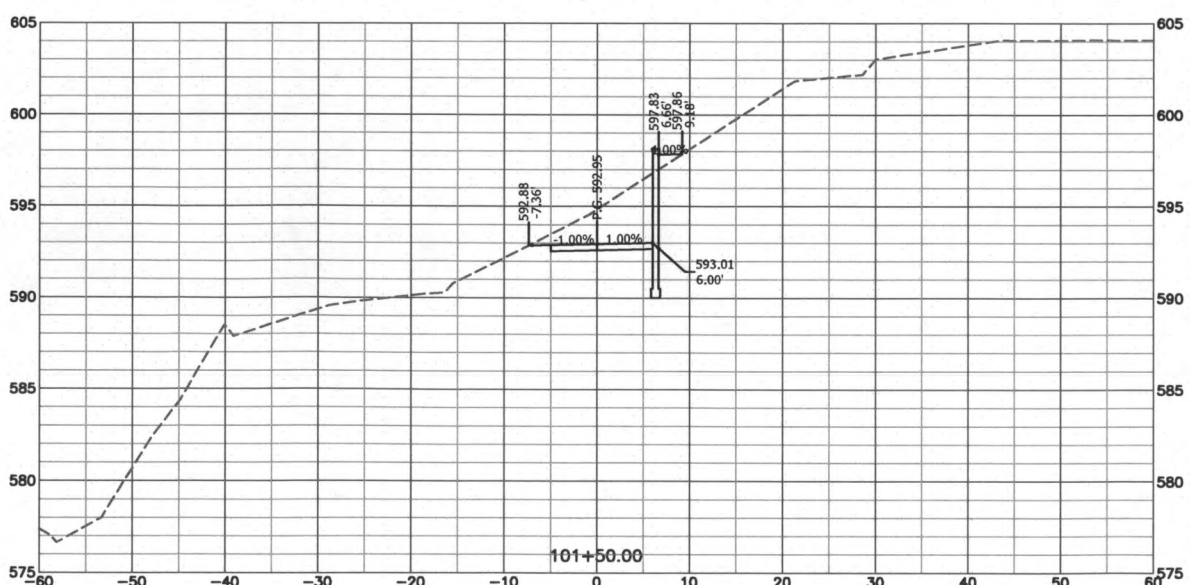
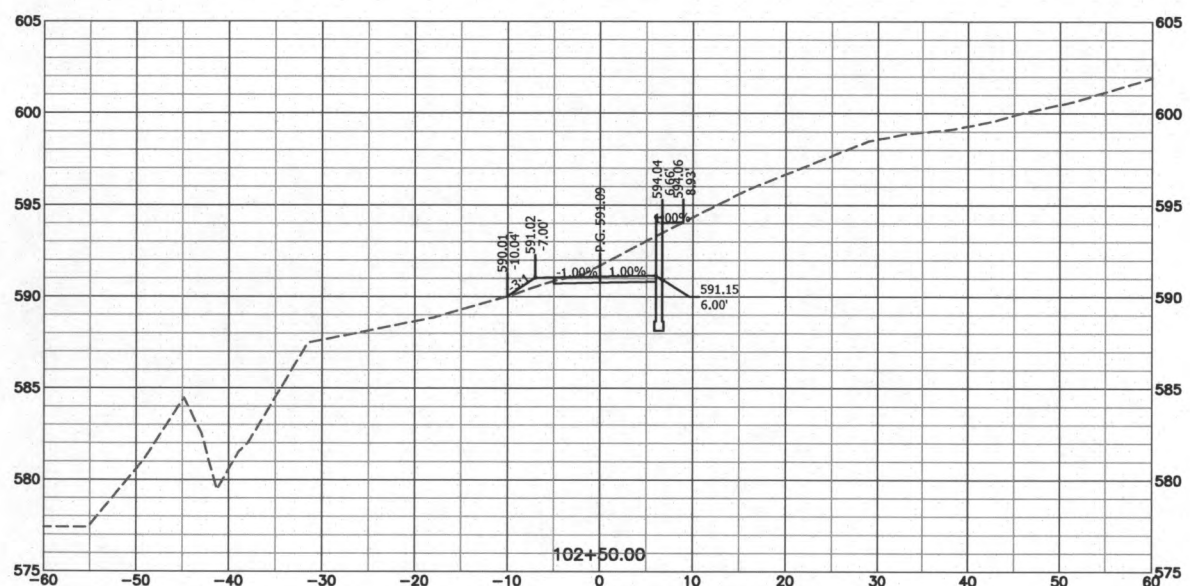
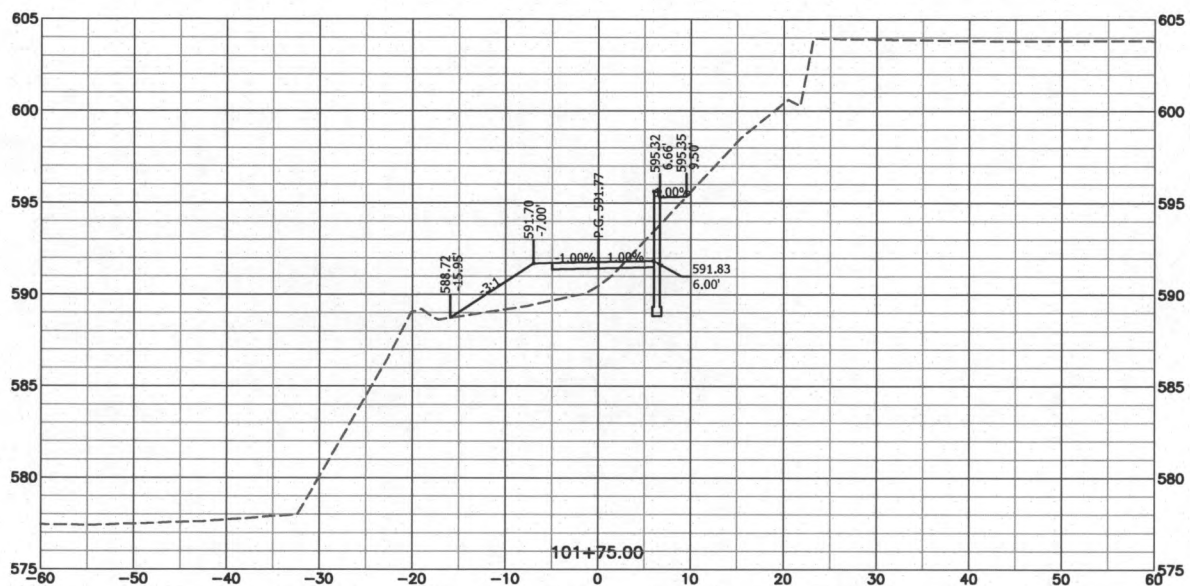
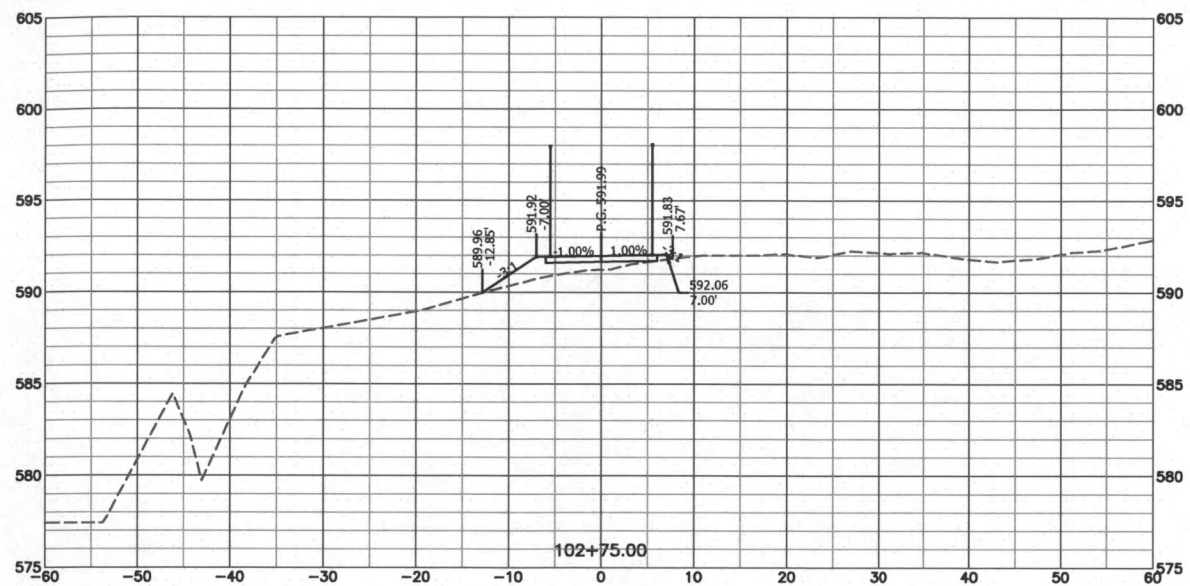
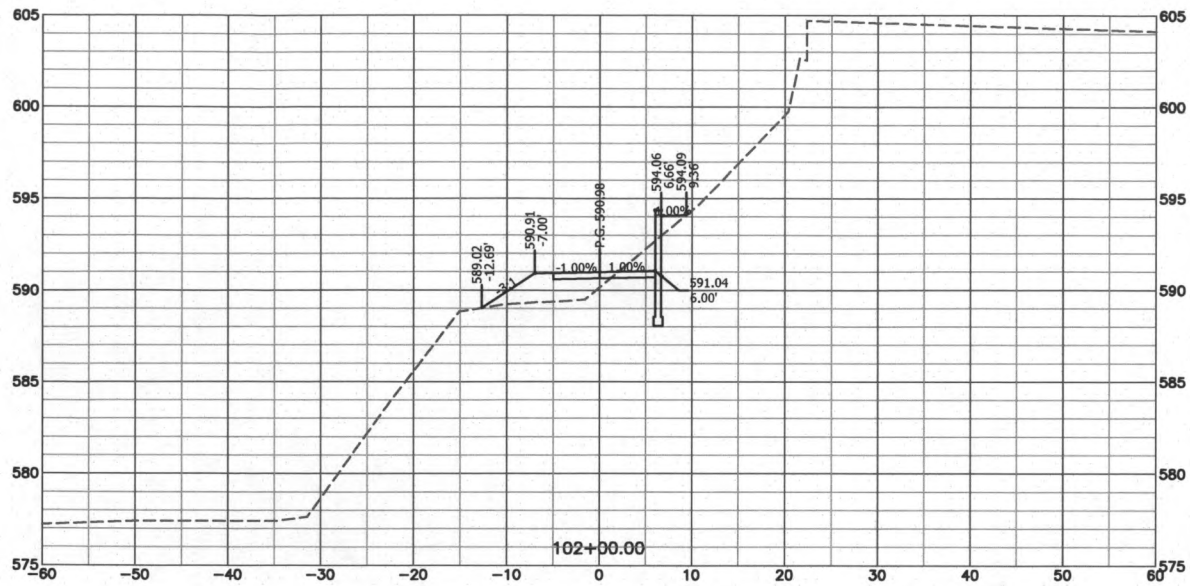
1719 BOUTHRIDGE DR., SUITE 100 - JEFFERSON CITY MO 65109-4000
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WILSON'S CONNECTION**

FORUM BOULEVARD TRAIL PROJECT
CITY OF COLUMBIA, BOONE COUNTY, MISSOURI

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SEALED DATE: ###
DESIGNED BY: AKJ
DRAWN BY: AKJ
APPROVED BY: TCK
DESIGN PROJ: 18082.000
DATE: OCTOBER 2014
DRAWING NO:
SHEET NO: 21 of 25



Last edit on: Oct 2, 2014 by: AK01272 Drawing Name: W:\Proj\18082\18082.000\AutoCad\Plan Set\18082.000_Cross Sections_North Shoulder.dwg Layout Name: North Shoulder 2 Plotted By: AK01272 Plotted on: 10/13/2014 4:58:33 PM

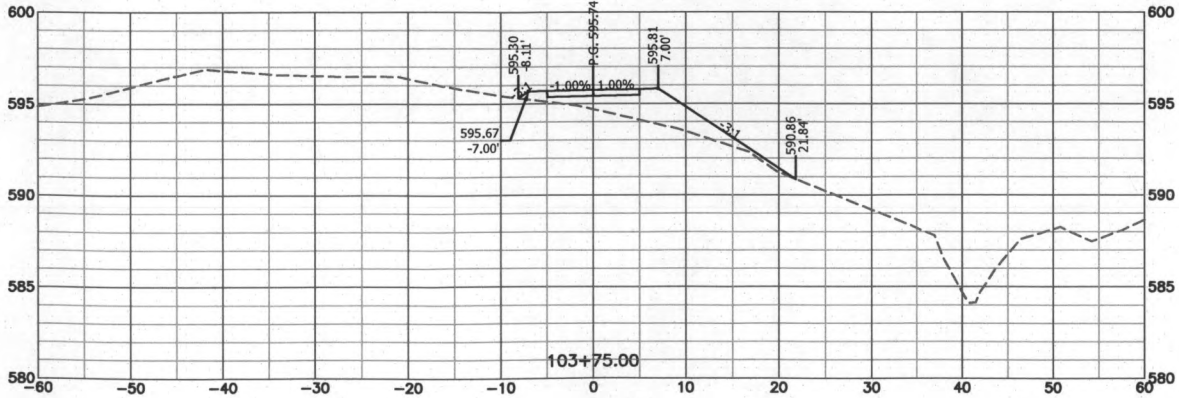
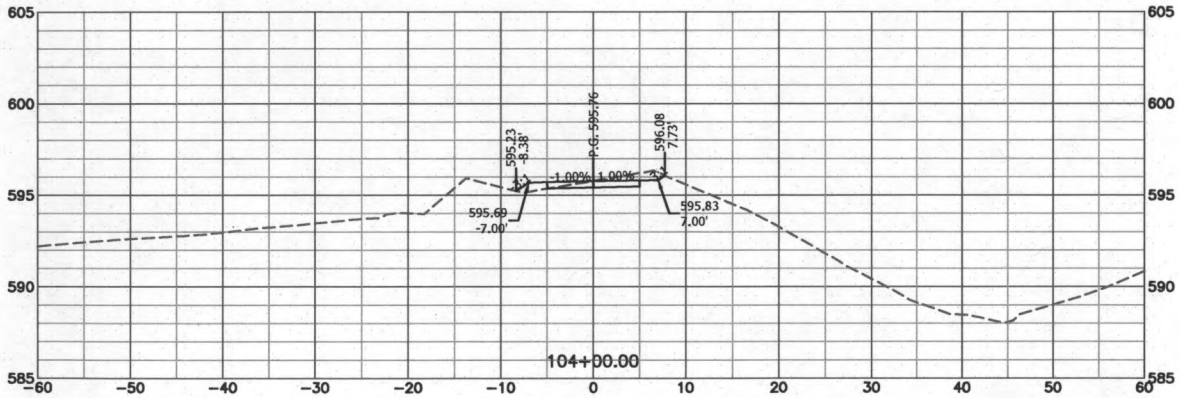
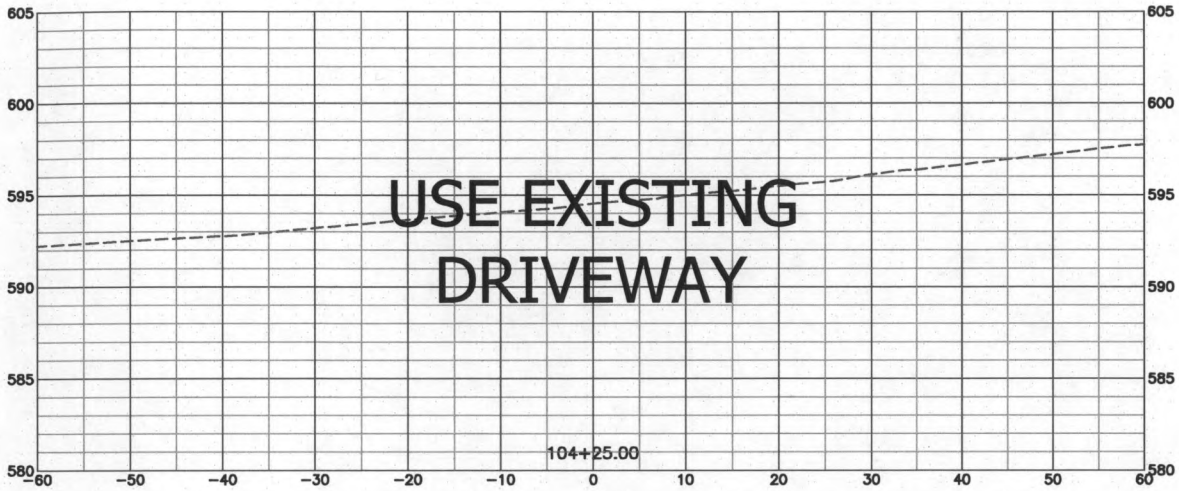
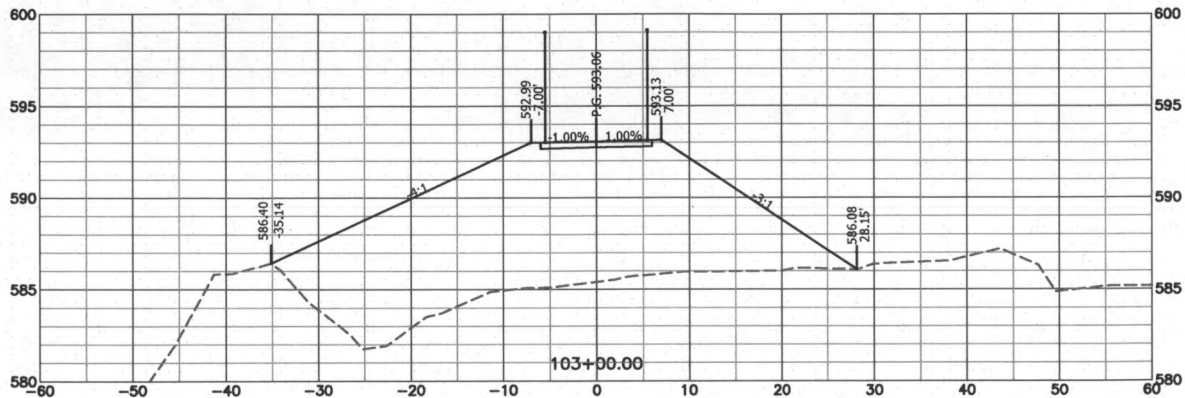
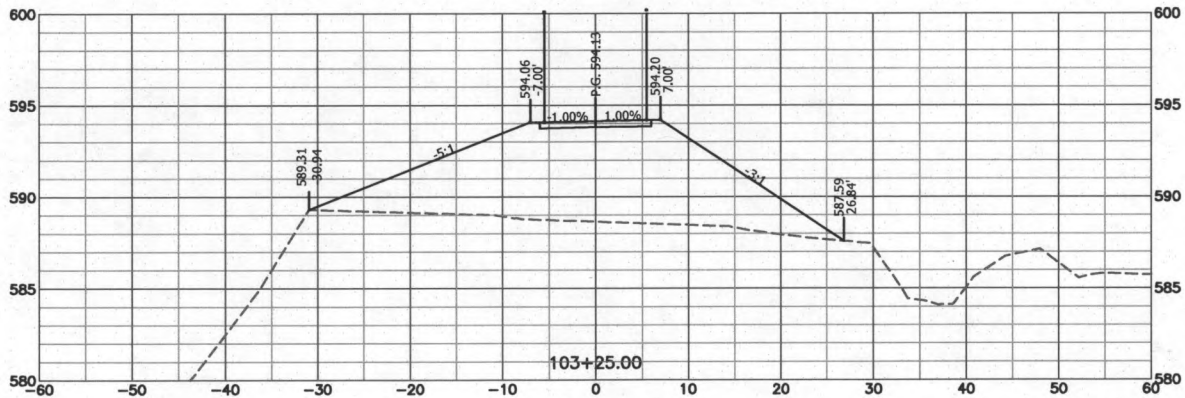
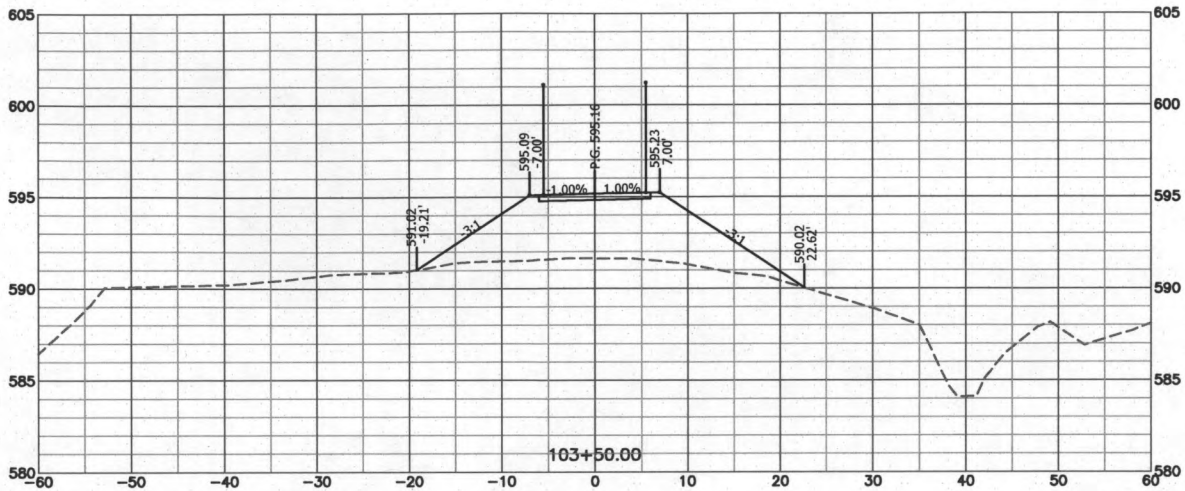
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WILSON'S CONNECTION**
FORUM BOULEVARD TRAIL PROJECT
CITY OF COLUMBIA, BOONE COUNTY, MISSOURI

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DESIGNED BY: AKJ
DRAWN BY: AKJ
APPROVED BY: TCK
DESIGN PROJ: 18082.000
DATE: OCTOBER 2014
DRAWING NO:
SHEET NO: 22 of 25

Last edit on: Oct 2, 2014 by: AK01272 Drawing Name: W:\Proj\18082\18082.000\AutoCad\Plan Set\18082.000_Cross Sections_North Shoulder.dwg Layout Name: North Shoulder 3 Plotted By: AK01272 Plotted on: 10/13/2014 4:58:43 PM



CROSS SECTIONS
WILSON'S CONNECTION

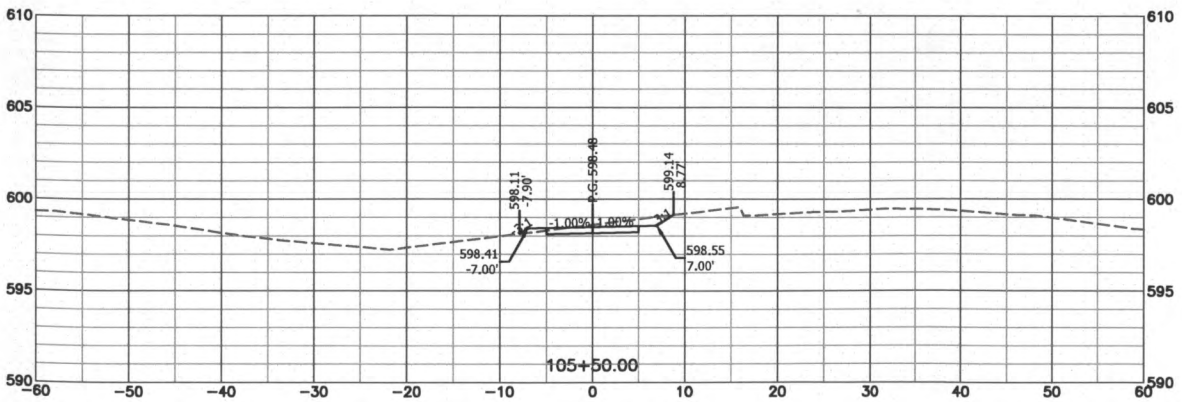
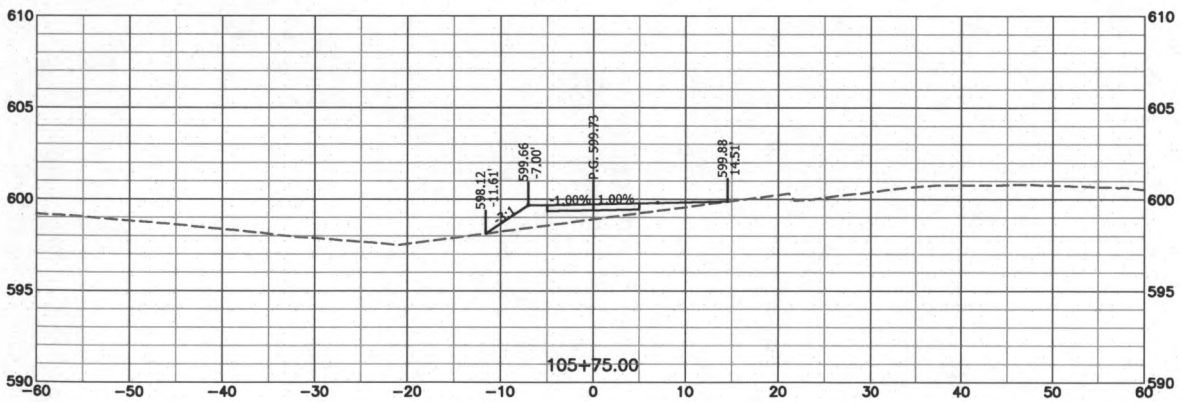
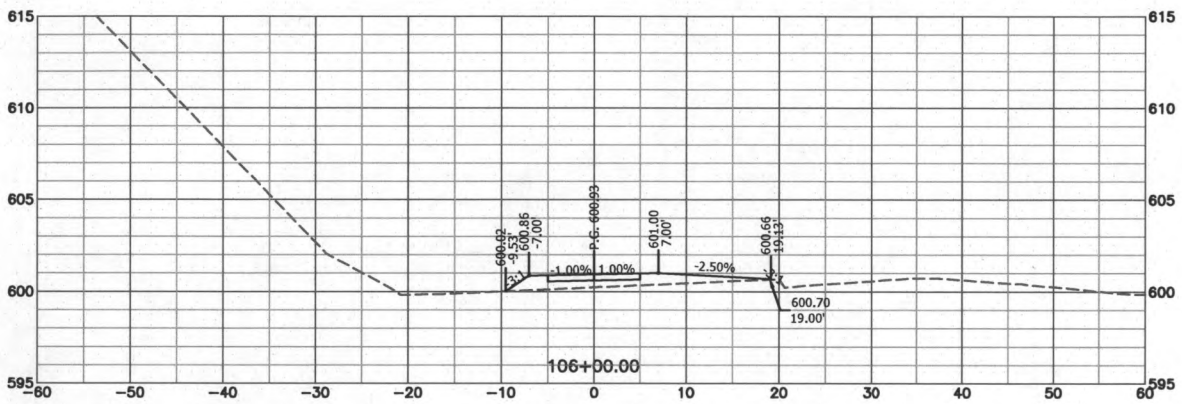
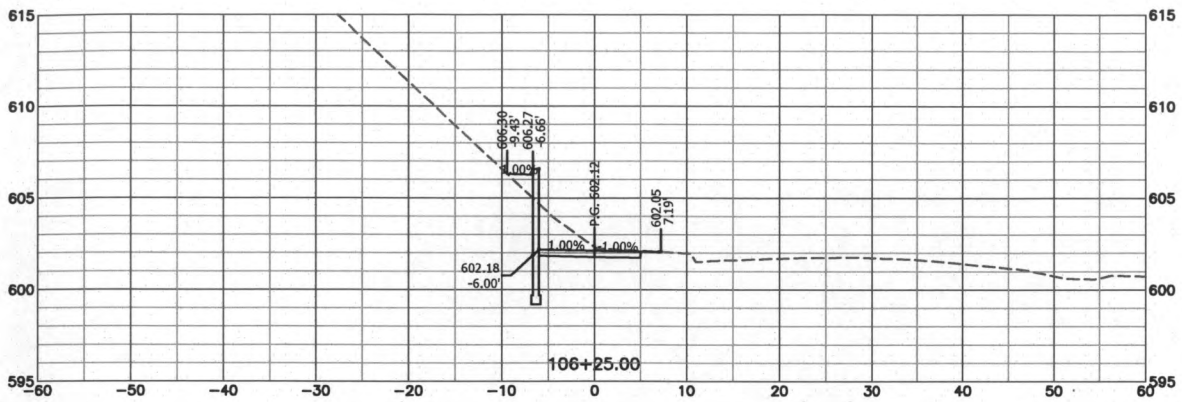
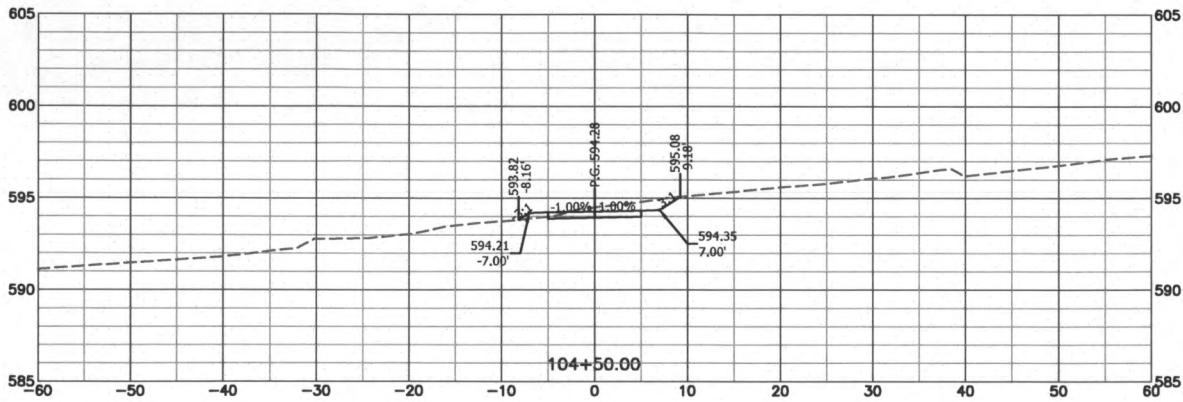
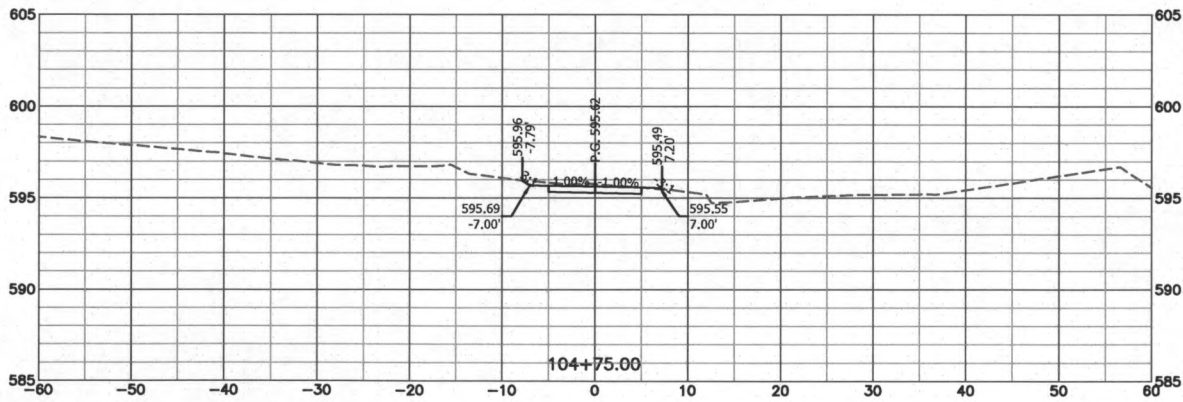
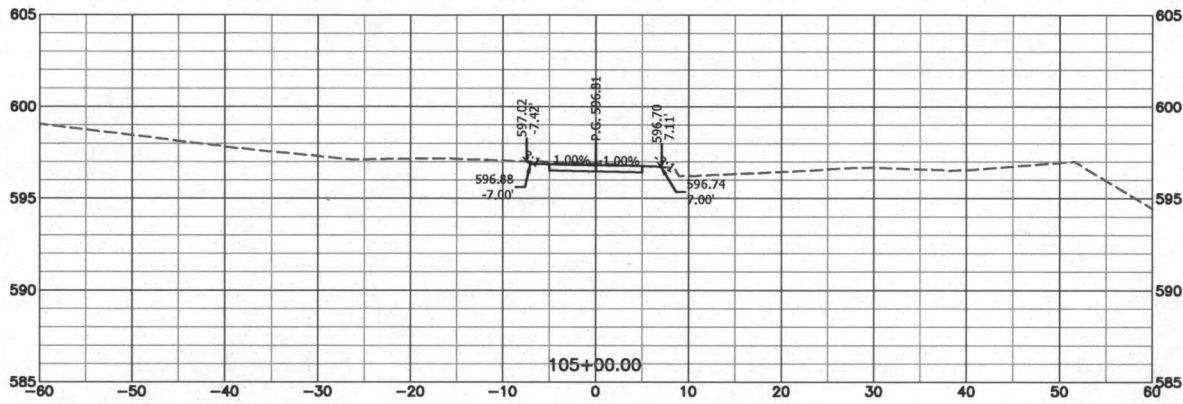
FORUM BOULEVARD TRAIL PROJECT
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DRAWN BY: AKJ
APPROVED BY: TCK
DESIGN PROJ: 18082.000
DATE: OCTOBER 2014
DRAWING NO:
SHEET NO: 23 of 25



Last edit on: Oct 2, 2014 by: A001272 Drawing Name: W:\Proj\18082\18082.000\Main Set\18082.000_Cross Sections_North Shoulder.dwg Layout Name: North Shoulder 4 Plotted By: A001272 Plotted on: 10/13/2014 4:38:53 PM

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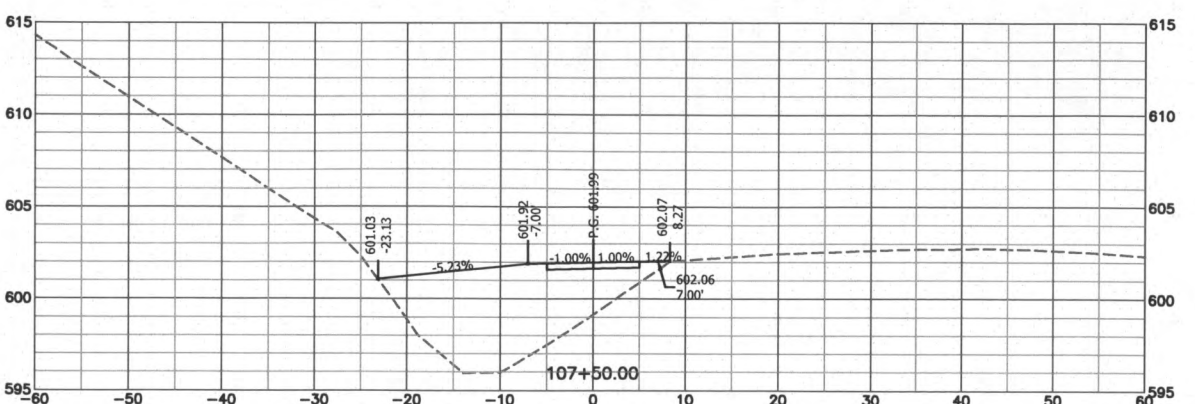
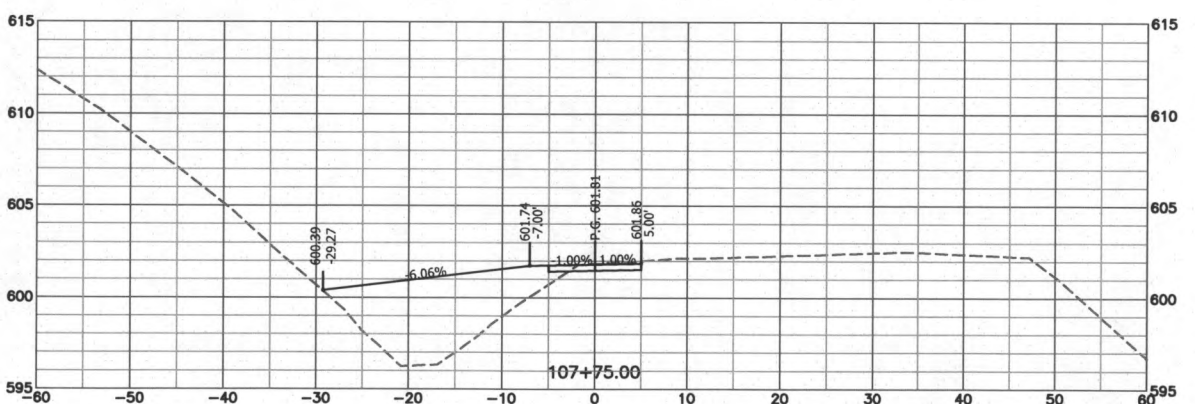
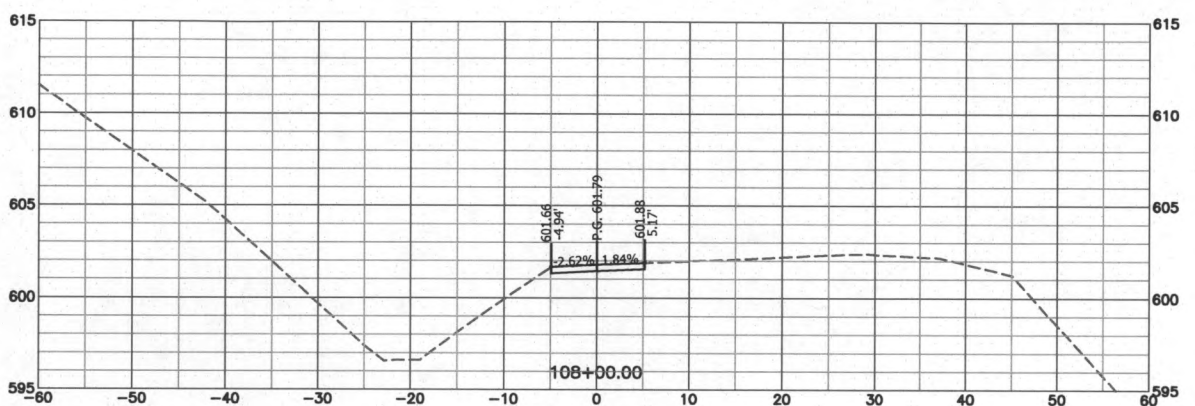
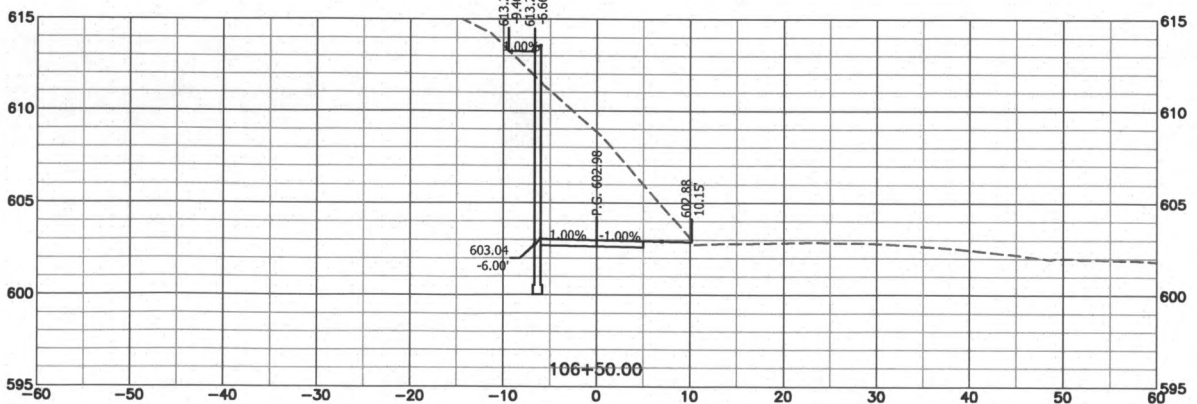
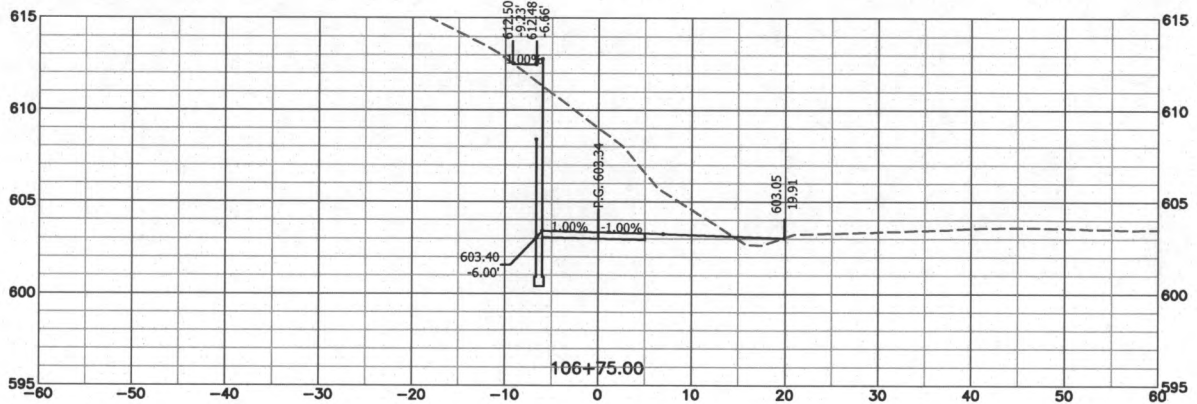
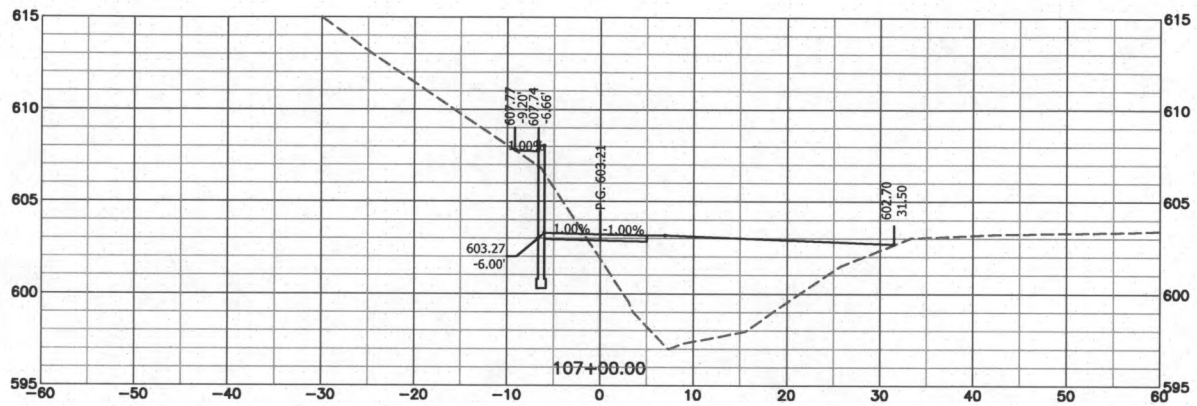
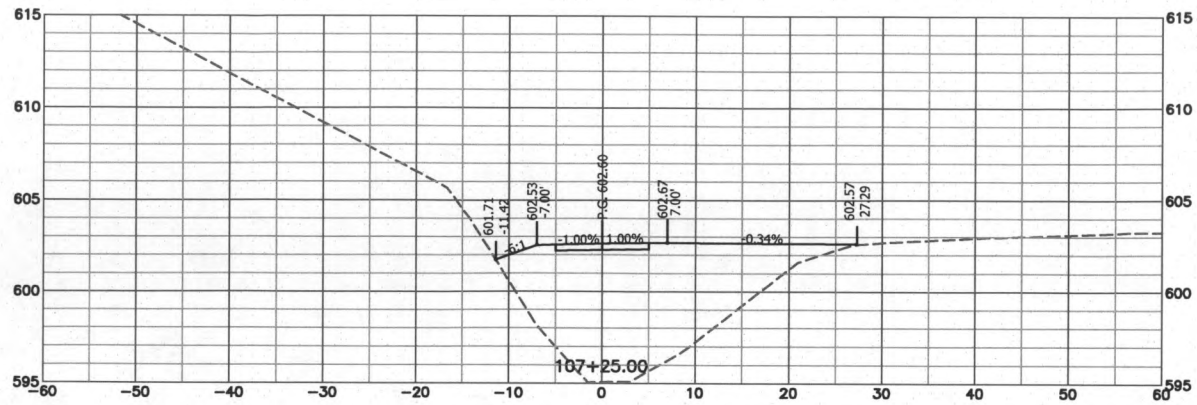
1719 SOUTHRIDGE DR., SUITE 100 - JEFFERSON CITY, MO 65109-4000
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**CROSS SECTIONS
WILSON'S CONNECTION**

**FORUM BOULEVARD TRAIL PROJECT
CITY OF COLUMBIA, BOONE COUNTY, MISSOURI**

NOT FOR CONSTRUCTION

SEALED DATE: ###
DESIGNED BY: AKJ
DRAWN BY: AKJ
APPROVED BY: TCK
DESIGN PROJ: 18082.000
DATE: OCTOBER 2014
DRAWING NO:
SHEET NO: 24 of 25



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