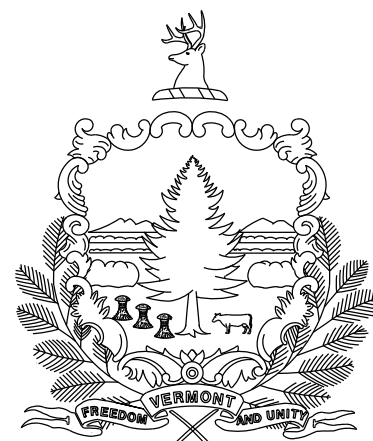


REVIEWER NOTES:

1. CONSTRUCTION OF THE NEW BRIDGE DECKS WILL OCCUR DURING 5-6 WEEK BRIDGE CLOSURE PERIODS. INTERSTATE TRAFFIC WILL BE MAINTAINED ON CROSSOVERS.
2. CONSTRUCTION OF THE CROSSOVERS IS ANTICIPATED TO OCCUR DURING THE FALL PRIOR TO THE BRIDGE CLOSURE PERIODS.
3. THE SOUTHBOUND BRIDGE DECK IS PROPOSED TO BE REPLACED FIRST. ONE LANE OF SOUTHBOUND AND ONE LANE OF NORTHBOUND WILL BE MAINTAINED ON THE EXISTING NORTHBOUND BRIDGE. THE SOUTHBOUND BRIDGE DECK IS PROPOSED TO BE COMPLETED AND REOPENED PRIOR TO MEMORIAL DAY WEEKEND.
4. THE NORTHBOUND BRIDGE DECK IS PROPOSED TO BE REPLACED SECOND, DURING THE SAME CONSTRUCTION SEASON. ONE LANE OF NORTHBOUND AND TWO LANES OF SOUTHBOUND TRAFFIC WILL BE MAINTAINED ON THE NEWLY REHABILITATED SOUTHBOUND BRIDGE. CONSTRUCTION OF THE NORTHBOUND BRIDGE DECK IS PROPOSED TO START AFTER THE 4TH OF JULY AND BE COMPLETED AND REOPENED PRIOR TO LABOR DAY WEEKEND.
5. THE EXISTING BRIDGES ARE COMPRISED OF TWO SIMPLE SPANS WITH A JOINT OVER THE PIER. ULTRA-HIGH PERFORMANCE CONCRETE (UHPC) WILL BE USED TO CREATE A LINK SLAB AT THE PIER TO ELIMINATE THE DECK JOINT.
6. THIS PROJECT WILL NOT REQUIRE PROPERTY EASEMENTS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

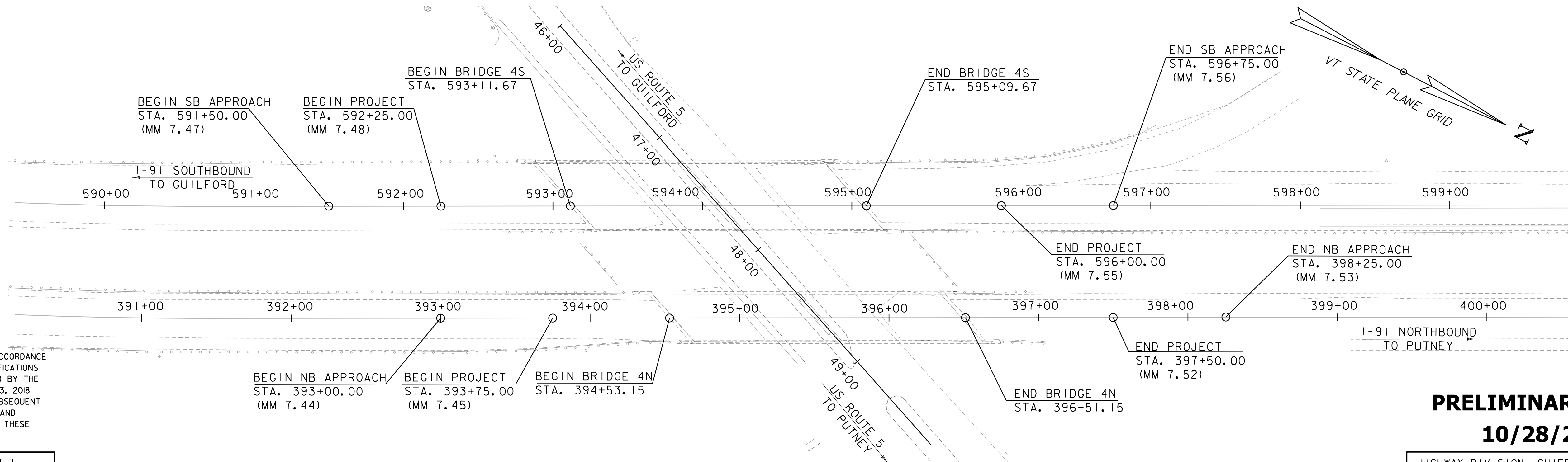


PROPOSED IMPROVEMENT
BRIDGE PROJECT
TOWN OF BRATTLEBORO
COUNTY OF WINDHAM

ROUTE NO: I-91 BRIDGES 4N & 4S OVER US ROUTE 5
(I-91 URBAN PRINCIPAL ARTERIAL - INTERSTATE)
(US ROUTE 5 MINOR ARTERIAL)

PROJECT LOCATION: ON I-91 (M.M. 7.48) OVER US ROUTE 5 IN THE TOWN OF BRATTLEBORO.
PROJECT DESCRIPTION: REMOVAL AND REPLACEMENT OF EXISTING CONCRETE BRIDGE DECKS, BRIDGE RAILINGS, BRIDGE BEARINGS, APPROACH SLABS, AND APPROACH GUARDRAILS; CONSTRUCTION OF UHPC LINK SLABS, CONSTRUCTION OF TEMPORARY CROSSOVERS, ALONG WITH RELATED APPROACH WORK.

BR 4S		BR 4N	
LENGTH OF STRUCTURE:	198.00 FEET	LENGTH OF STRUCTURE:	198.00 FEET
LENGTH OF ROADWAY:	177.00 FEET	LENGTH OF ROADWAY:	177.00 FEET
LENGTH OF PROJECT:	375.00 FEET	LENGTH OF PROJECT:	375.00 FEET



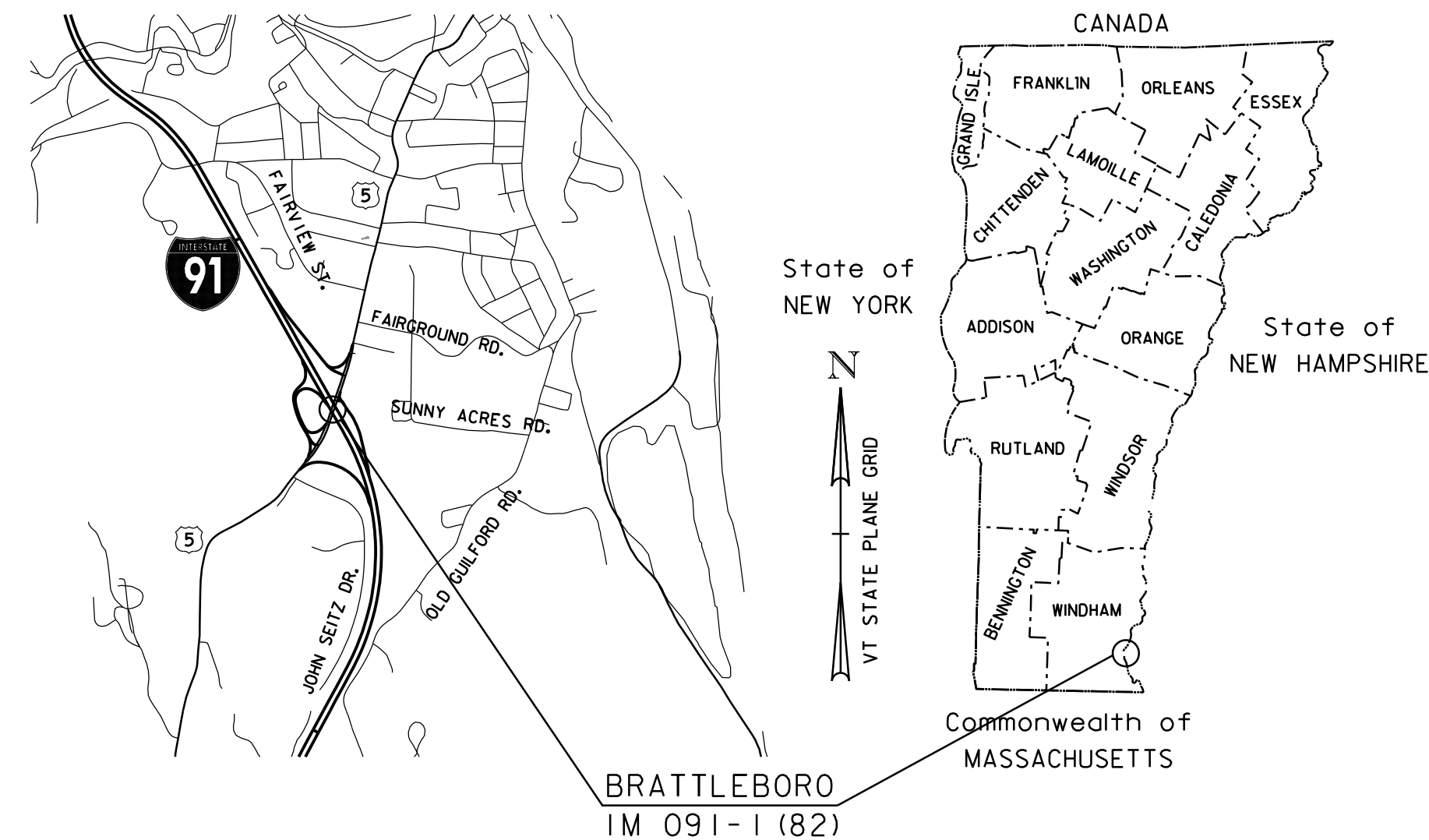
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2018, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON APRIL 13, 2018 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

QUALITY ASSURANCE PROGRAM : LEVEL I

SURVEYED BY : VTrans
SURVEYED DATE : 05/17/2022

DATUM
VERTICAL : NAVD 88 FT
HORIZONTAL : NAD 83 (2011)

SCALE: 1" = 40' - 0"
0 40 80
SCALE IN FEET



LOCATION MAP
NOT TO SCALE

PRELIMINARY PLANS
10/28/2022

HIGHWAY DIVISION, CHIEF ENGINEER

APPROVED _____ DATE _____

PROJECT MANAGER : ROBERT KLINEFELTER, PE

PROJECT NAME : BRATTLEBORO
PROJECT NUMBER : IM 091-1 (82)

SHEET 1 OF 66 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET (BRIDGE) - I-91 SOUTHBOUND (BR 4S)

LRFD

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04-07-2020

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08-06-2012

T-12

TRAFFIC CONTROL DIVIDED HIGHWAY ONE WAY CLOSED

08-06-2012

T-13

TRAFFIC CONTROL DIVIDED HIGHWAY ONE LANE CLOSED

08-06-2012

T-14

TRAFFIC CONTROL DIVIDED HIGHWAY ONE ROADWAY CLOSED

08-06-2012

T-15

TRAFFIC CONTROL DIVIDED HIGHWAY ONE ROADWAY CLOSED

08-06-2012

T-22

TRAFFIC CONTROL FOR PAVEMENT MARKING ON DIVIDED HIGHWAY

08-06-2012

T-28

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08-06-2012

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08-06-2012

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CONSTRUCTION SIGN DETAILS

08-06-2012

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04-09-2014

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04-09-2014

T-45

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01-02-2013

T-55

SIGN PLACEMENT EXPRESSWAY & FREEWAY

10-26-2015

E-10

ROLLED EROSION CONTROL PRODUCT, TYPE I

04-07-2020

E-12

STABILIZED CONSTRUCTION ENTRANCE

04-07-2020

E-13

INLET PROTECTION DEVICE, TYPE I

04-07-2020

E-14

INLET PROTECTION DEVICE, TYPE III

04-07-2020

E-15

SILT FENCE

04-07-2020

E-121

STANDARD SIGN PLACEMENT - CONVENTIONAL ROAD

08-08-1995

E-193

PAVEMENT MARKING DETAILS

08-18-1995

S-391

SNOW BARRIER

04-07-2020

S-400

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04-07-2020

S-500

CONCRETE DETAILS AND NOTES

04-07-2020

S-501

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04-07-2020

S-600

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04-07-2020

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SD-361.00A

BRIDGE RAILING, GALVANIZED 3 RAIL BOX BEAM

4/4/2022

SD-361.00B

BRIDGE RAILING, GALVANIZED 3 RAIL BOX BEAM

4/4/2022

SD-361.00C

GUARDRAIL APPROACH SECTION, GALVANIZED 3 RAIL BOX BEAM

4/4/2022

HSD-213.01

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2/27/2017

HSD-400.01

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1/5/2018

HSD-621.06

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2/27/2017

HSD-621.07A

MIDWEST GUARDRAIL SYSTEM (MGS)

1/4/2021

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W-BEAM GUARDRAIL COMPONENTS

1/4/2021

HSD-621.07C

MIDWEST GUARDRAIL SYSTEM (MGS) ANCHOR

1/4/2021

HSD-621.07D

MIDWEST GUARDRAIL SYSTEM (MGS) ANCHOR COMPONENTS

1/4/2021

BITUMINOUS CONCRETE PAVEMENT
SUPERPAVE MIXTURE DESIGN CRITERIA

DESIGN LANE/ DESIGN LIFE ESAL

15,757,000

DESIGN NUMBER OF GYRATIONS

80

PERFORMANCE GRADE ASPHALT BINDER

SEE TABLE 406.03F

RAP Content

Binder Grade

RAP ≤ 20.0%

PG 70-28

20.0% < RAP ≤ 25.0%

PG 70-34

25.0% < RAP ≤ 50.0%

TBD¹

FINAL HYDRAULIC REPORT

TRAFFIC MAINTENANCE NOTES

1. MAINTAIN TRAFFIC ON EXISTING BRIDGES WITH CROSS OVERS.
2. INSTALL AND MAINTAIN TEMPORARY TRAFFIC SIGNALS ON ROUTE 5.
3. SIDEWALKS ARE NOT NECESSARY

DESIGN VALUES

1. DESIGN LIVE LOAD

HL-93

2. FUTURE PAVEMENT

d_p : 0.0 IN

3. DESIGN SPAN - CL BRG. ABUTMENT TO CL. BRG ABUTMENT

L : 195.33 FT

(96'-4" SPAN 1, 2'-8" @ PIER BEARINGS, 96'-4" SPAN 2)

4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)

Δ : ---

5. PRESTRESSING STRAND

f_y : 270 KSI

6. PRESTRESSED CONCRETE STRENGTH

$f'c$: 6.0 KSI

7. PRESTRESSED CONCRETE RELEASE STRENGTH

$f'cr$: 4.0 KSI

8. HIGH PERFORMANCE CONCRETE, CLASS A

$f'c$: 4.0 KSI

9. ULTRA-HIGH PERFORMANCE CONCRETE

$f'c$: 18.0 KSI

10. CONCRETE HIGH PERFORMANCE, CLASS AA

$f'c$: 4.0 KSI

11. CONCRETE, CLASS C

$f'c$: ---

12. REINFORCING STEEL

f_y : 60 KSI

13. STRUCTURAL STEEL AASHTO M270

f_y : ---

14. NOMINAL BEARING RESISTANCE OF SOIL

q_n : ---

15. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)

ϕ : ---

16. NOMINAL BEARING RESISTANCE OF ROCK

q_n : ---

17. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)

ϕ : ---

18. PILE RESISTANCE FACTOR

ϕ : ---

19. LATERAL PILE DEFLECTION

Δ : ---

20. BASIC WIND SPEED

V_{3s} : ---

21. MINIMUM GROUND SNOW LOAD

pg : ---

22. SEISMIC DATA

PGA : ---
 S : ---
 S_T : ---

23.

24.

25.

26.

LRFR LOAD RATING FACTORS

LOADING LEVELS

H-20

HL-93

3S2

6 AXLE

3A. STR.

4A. STR.

5A. SEMI

TONNAGE

20

36

36

66

30

34.5

38

INVENTORY

POSTING

OPERATING

COMMENTS:

TRAFFIC DATA

YEAR

ADT

DHV

%D

%T

ADTT

20 year ESAL for flexible pavement from 2023 to 2043 : 15,757,000

2023

9500

1700

100

10.0

1100

40 year ESAL for flexible pavement from 2023 to 2063 : 38,953,000

2043

10400

1900

100

16.6

2000

Design Speed: 65 mph

AS BUILT "REBAR" DETAIL

LEVEL I

LEVEL II

LEVEL III

TYPE:

TYPE:

TYPE:

GRADE:

GRADE:

GRADE:

PROJECT NAME: BRATTLEBORO

PROJECT NUMBER: IM 091-I(82)

FILE NAME: z19a220forms.dgn

PLOT DATE: 10/28/2022

PROJECT LEADER: A. STOCKIN

DRAWN BY: E. CARON

DESIGNED BY: T. POLSON

CHECKED BY: K. JAMES

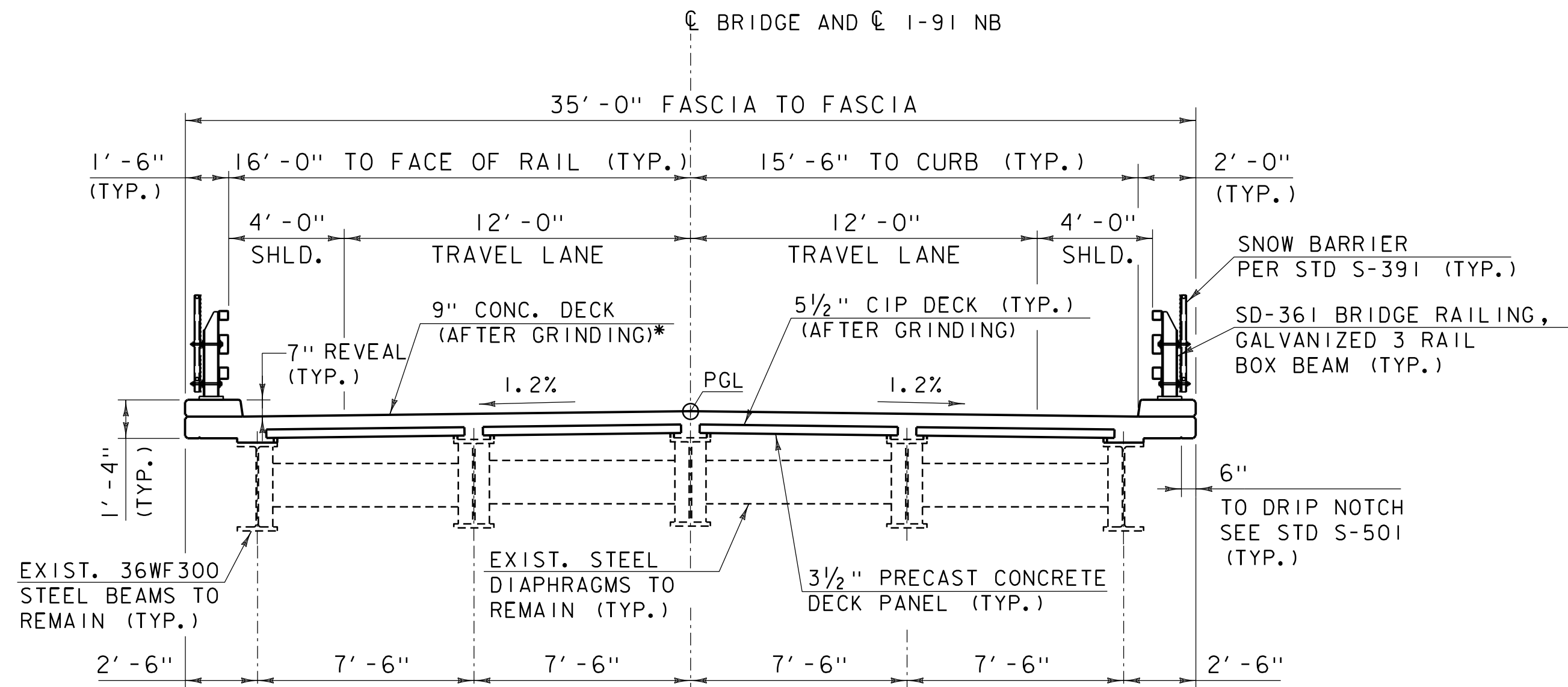
PRELIMINARY INFORMATION SHEET I

SHEET 2 OF 66

PRELIMINARY INFORMATION SHEET (BRIDGE) - I-91 NORTHBOUND (BR 4N)

RFD

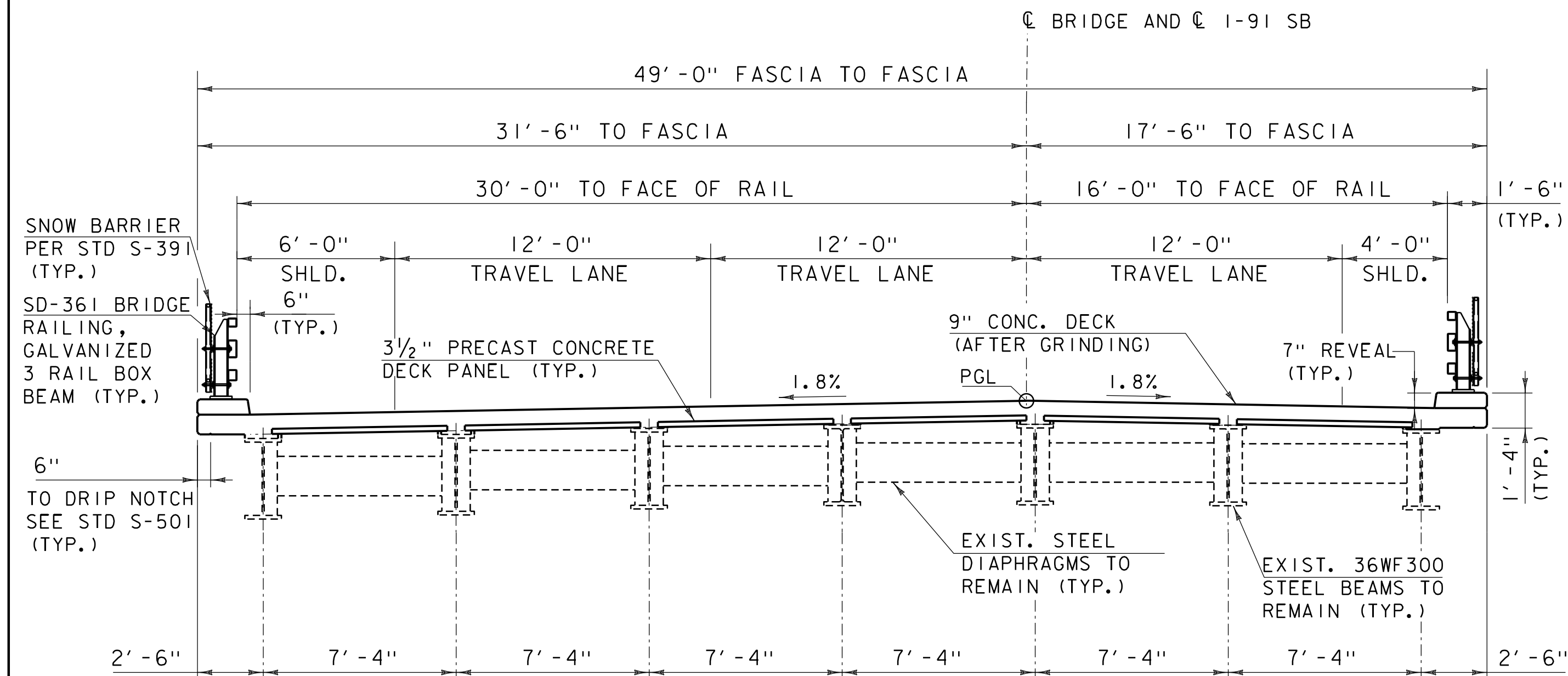
[illegible]



*5 1/2" HIGH PERFORMANCE CONCRETE, CLASS PCD OVER 3 1/2" SPECIAL PROVISION (PRECAST PRESTRESSED CONCRETE DECK PANEL). THE ABOVE DIMENSIONS REPRESENT THE FINISHED CONDITON AND DO NOT INCLUDE THE 1/2" OVERPOUR FOR DECK SURFACE TREATMENT

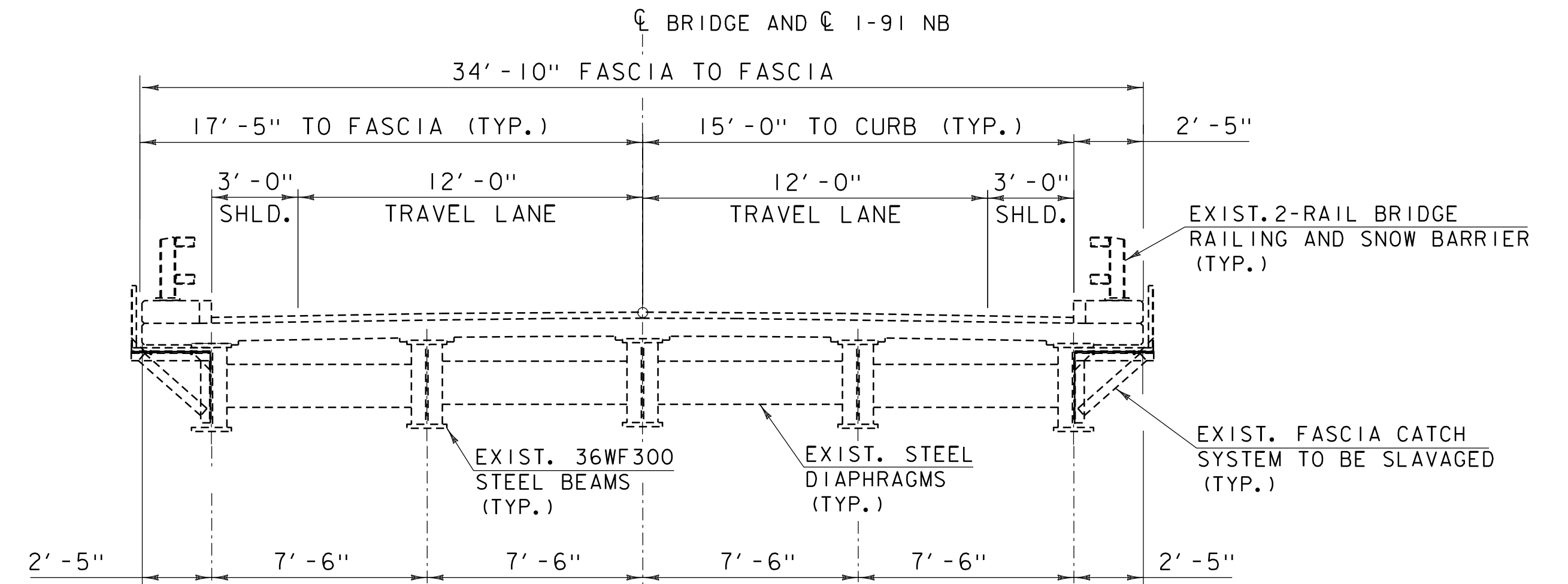
PROPOSED I-91 NB BRIDGE TYPICAL SECTION

SCALE: 1/4" = 1'-0"



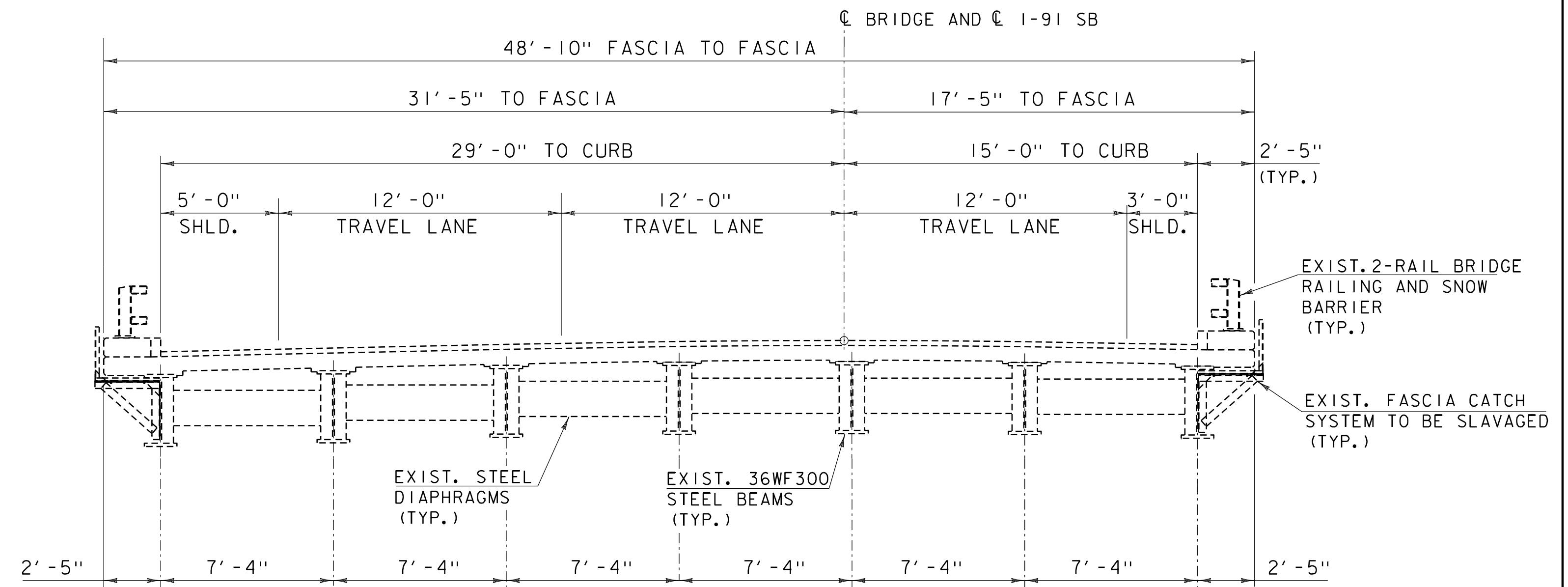
PROPOSED I-91 SB BRIDGE TYPICAL SECTION

SCALE: 1/4" = 1'-0"



EXISTING I-91 NB BRIDGE TYPICAL SECTION

SCALE: 1/4" = 1'-0"



EXISTING I-91 SB BRIDGE TYPICAL SECTION

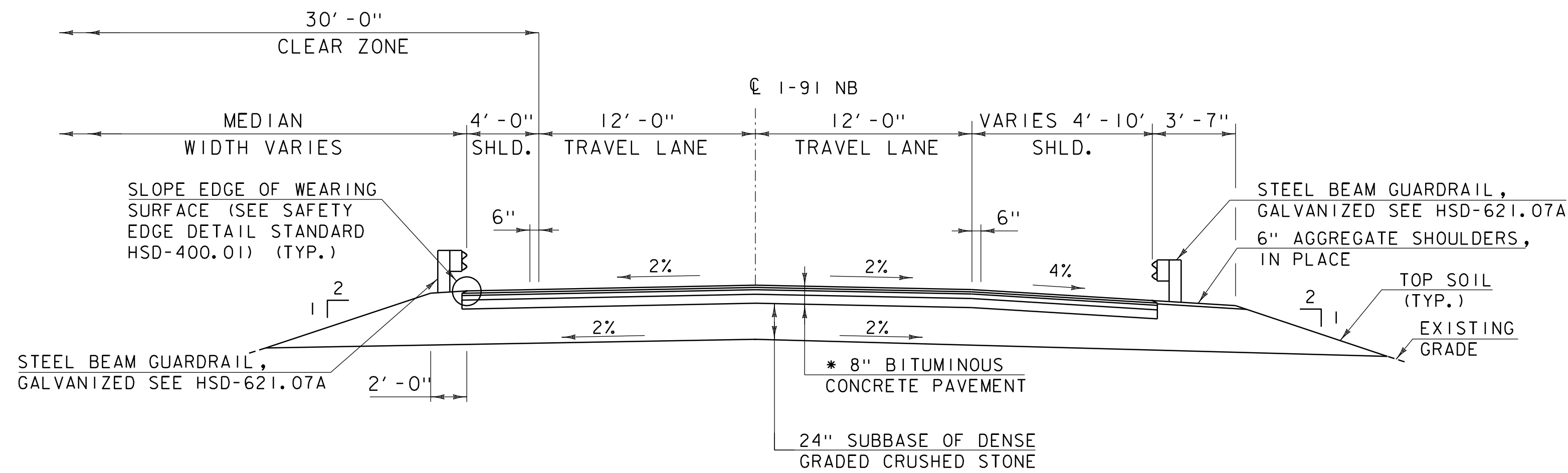
SCALE: 1/4" = 1'-0"



PROJECT NAME: BRATTLEBORO
PROJECT NUMBER: IM 091-I(82)

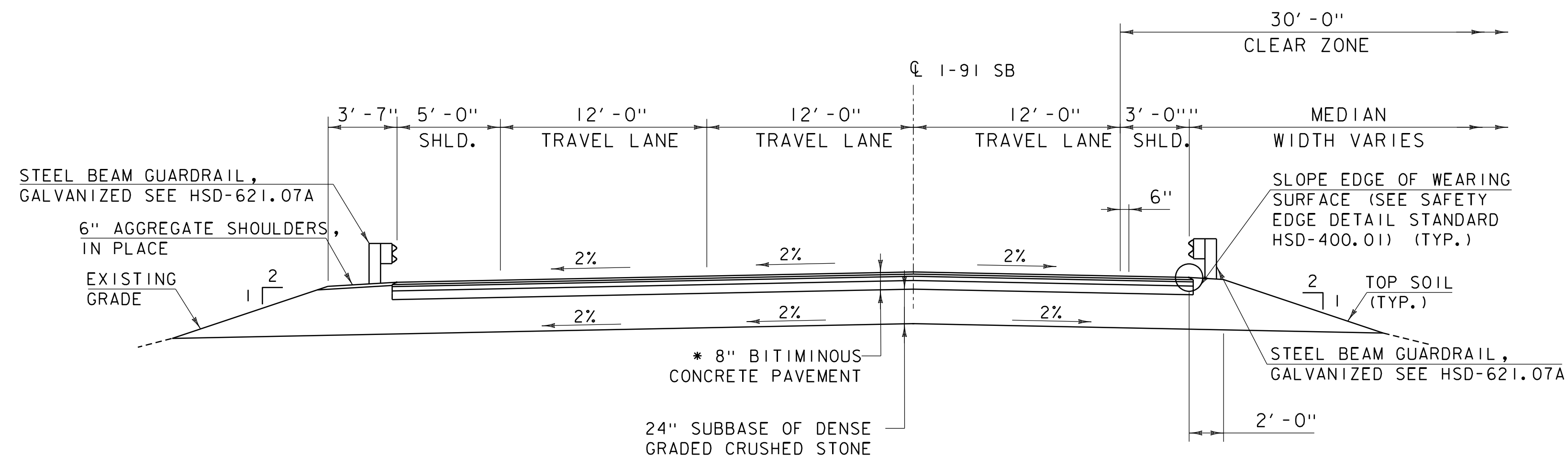
FILE NAME: z19a220sup.typ.dgn
PROJECT LEADER: A. STOCKIN
DESIGNED BY: T. POLSON
TYPICAL SECTIONS - TYP 1

PLOT DATE: 10/28/2022
DRAWN BY: W. GERHOLD
CHECKED BY: K. JAMES
SHEET 4 OF 66



I-91 NORTHBOUND FULL DEPTH CONSTRUCTION

SCALE: $\frac{3}{16}$ " = 1' - 0"



I-91 SOUTHBOUND FULL DEPTH CONSTRUCTION

SCALE: $\frac{3}{16}$ " = 1' - 0"

*TRAVELWAY AND SHOULDER PAVEMENT
 1 1/2" TYPE IVS OVER
 1 1/2" TYPE IVS OVER
 2 1/2" TYPE IIS OVER
 2 1/2" TYPE IIS

NOTES:

- EMULSIFIED ASPHALT TO BE APPLIED ON COURSE MILLED SURFACES AS SPECIFIED IN TABLE 406.12A.

MATERIAL TOLERANCES

(IF USED ON THIS PROJECT)

SURFACE	
- PAVEMENT (TOTAL THICKNESS)	+/- 1/4"
- SUBBASE	+/- 1"

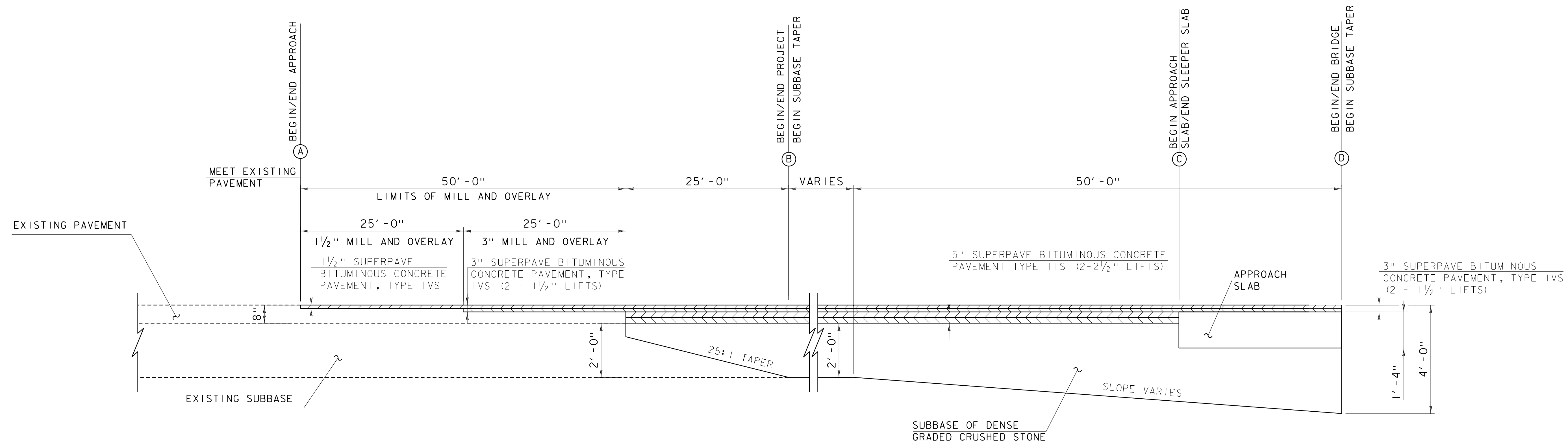
BITUMINOUS CONCRETE PAVEMENT SUPERPAVE MIXTURE DESIGN CRITERIA	
DESIGN LANE/ DESIGN LIFE ESAL	15,757,000
DESIGN NUMBER OF GYRATIONS	80
PERFORMANCE GRADE ASPHALT BINDER	SEE TABLE 406.03F



PROJECT NAME: BRATTLEBORO
 PROJECT NUMBER: IM 091-1(82)

FILE NAME: z19a220typ.dgn
 PROJECT LEADER: A. STOCKIN
 DESIGNED BY: T. POLSON
 TYPICAL SECTIONS -TYP 2

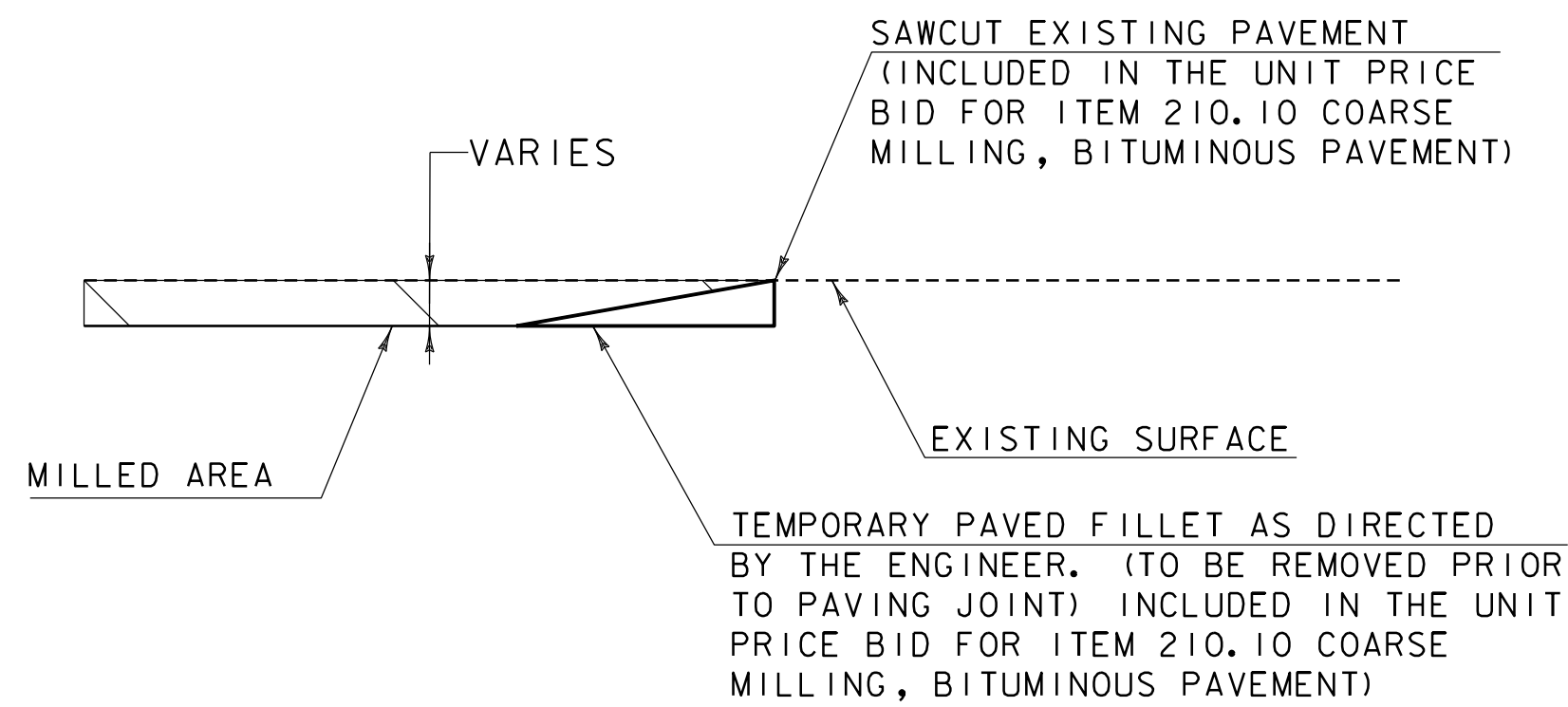
PLOT DATE: 10/28/2022
 DRAWN BY: W. GERHOLD
 CHECKED BY: L. SFINTESCU
 SHEET 5 OF 66



	(A)	(B)	(C)	(D)
NORTHBOUND				
SOUTH APPROACH	393+00.00	393+75.00	394+28.15	394+53.15
NORTH APPROACH	398+25.00	397+50.00	396+78.82	396+51.15
SOUTHBOUND				
SOUTH APPROACH	591+50.00	592+25.00	592+86.67	593+11.67
NORTH APPROACH	596+75.00	596+00.00	595+37.34	595+09.67

MATERIAL TRANSITION DIAGRAM

NOT TO SCALE



DETAIL OF VERTICAL MILLED JOINTS

NOTE: THIS DETAIL SHALL BE USED AT THE LOCATIONS SHOWN ABOVE AS DIRECTED BY THE ENGINEER.

PROJECT NAME: BRATTLEBORO
PROJECT NUMBER: IM 091-I(82)

FILE NAME: z19a220typ2.dgn
PROJECT LEADER: A. STOCKIN
DESIGNED BY: T. POLSON
TYPICAL SECTIONS -TYP 3

PLOT DATE: 10/28/2022
DRAWN BY: W. GERHOLD
CHECKED BY: L. SFINTESCU
SHEET 6 OF 66



GENERAL INFORMATION

SYMBOLOLOGY LEGEND NOTE

THE SYMBOLOLOGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLOLOGY. THE SYMBOLOLOGY IS USED FOR EXISTING & PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROJECT ANNOTATION, AS NOTED ON PROJECT PLAN SHEETS. THIS LEGEND SHEET COVERS THE BASICS. SYMBOLOLOGY ON PLANS MAY VARY, PLAN ANNOTATIONS AND NOTES SHOULD BE USED TO CLARIFY AS NEEDED.

R.O.W. ABBREVIATIONS (CODES) & SYMBOLS

POINT	CODE	DESCRIPTION
	CH	CHANNEL EASEMENT
	CONST	CONSTRUCTION EASEMENT
	CUL	CULVERT EASEMENT
	D&C	DISCONNECT & CONNECT
	DIT	DITCH EASEMENT
	DR	DRAINAGE EASEMENT
	DRIVE	DRIVEWAY EASEMENT
	EC	EROSION CONTROL
	HWY	HIGHWAY EASEMENT
	I&M	INSTALL & MAINTAIN EASEMENT
	LAND	LANDSCAPE EASEMENT
	R&RES	REMOVE & RESET
	R&REP	REMOVE & REPLACE
	SR	SLOPE RIGHT
	UE	UTILITY EASEMENT
	(P)	PERMANENT EASEMENT
	(T)	TEMPORARY EASEMENT
■	BNDNS	BOUND SET
▣	BNDNS	BOUND TO BE SET
●	IPNS	IRON PIN SET
⊙	IPNS	IRON PIN TO BE SET
⊠	CALC	EXISTING ROW POINT
○	PROW	PROPOSED ROW POINT
[LENGTH]		LENGTH CARRIED ON NEXT SHEET

COMMON TOPOGRAPHIC POINT SYMBOLS

POINT	CODE	DESCRIPTION
⌘	APL	BOUND APPARENT LOCATION
▣	BM	BENCHMARK
▣	BND	BOUND
▣	CB	CATCH BASIN
⊕	COMB	COMBINATION POLE
▣	DITHR	DROP INLET THROATED DNC
⊕	EL	ELECTRIC POWER POLE
⊙	FPOLE	FLAGPOLE
○	GASFIL	GAS FILLER
○	GP	GUIDE POST
⌘	GSO	GAS SHUT OFF
⊙	GUY	GUY POLE
⊙	GUYW	GUY WIRE
⌘	GV	GATE VALVE
⊕	H	TREE HARDWOOD
△	HCTRL	CONTROL HORIZONTAL
△	HVCTRL	CONTROL HORIZ. & VERTICAL
◇	HYD	HYDRANT
⊙	IP	IRON PIN
⊙	IPIPE	IRON PIPE
⊕	LI	LIGHT - STREET OR YARD
⊕	MB	MAILBOX
○	MH	MANHOLE (MH)
▣	MM	MILE MARKER
⊙	PM	PARKING METER
▣	PMK	PROJECT MARKER
⊙	POST	POST STONE/WOOD
⌘	RRSIG	RAILROAD SIGNAL
⌘	RRSL	RAILROAD SWITCH LEVER
⊕	S	TREE SOFTWOOD
⊕	SAT	SATELLITE DISH
⊕	SHRUB	SHRUB
⊕	SIGN	SIGN
⊕	STUMP	STUMP
⊕	TEL	TELEPHONE POLE
⊙	TIE	TIE
⊕	TSIGN	SIGN W/DOUBLE POST
⊕	VCTRL	CONTROL VERTICAL
⊙	WELL	WELL
⌘	WSO	WATER SHUT OFF

THESE ARE COMMON VAOT SURVEY POINT SYMBOLS FOR EXISTING FEATURES, ALSO USED FOR PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROPOSED ANNOTATION.

PROPOSED GEOMETRY CODES

CODE	DESCRIPTION
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
CC	CENTER OF CURVE
PT	POINT OF TANGENCY
PCC	POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
POB	POINT OF BEGINNING
POE	POINT OF ENDING
STA	STATION PREFIX
AH	AHEAD STATION SUFFIX
BK	BACK STATION SUFFIX
D	CURVE DEGREE OF (100FT)
R	CURVE RADUIS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE

UTILITY SYMBOLOLOGY

UNDERGROUND UTILITIES	
— UGU —	UTILITY (GENERIC-UNKNOWN)
— UT —	TELEPHONE
— UE —	ELECTRIC
— UC —	CABLE (TV)
— UEC —	ELECTRIC+CABLE
— UET —	ELECTRIC+TELEPHONE
— UCT —	CABLE+TELEPHONE
— UECT —	ELECTRIC+CABLE+TELEP.
— G —	GAS LINE
— W —	WATER LINE
— S —	SANITARY SEWER (SEPTIC)

ABOVE GROUND UTILITIES (AERIAL)	
— AGU —	UTILITY (GENERIC-UNKNOWN)
— T —	TELEPHONE
— E —	ELECTRIC
— C —	CABLE (TV)
— EC —	ELECTRIC+CABLE
— ET —	ELECTRIC+TELEPHONE
— AER E&T —	ELECTRIC+TELEPHONE
— CT —	CABLE+TELEPHONE
— ECT —	ELECTRIC+CABLE+TELEP.
— ... —	UTILITY POLE GUY WIRE

PROJECT CONSTRUCTION SYMBOLOLOGY

PROJECT DESIGN & LAYOUT SYMBOLOLOGY	
— -- -- CZ — -- --	CLEAR ZONE
—————	PLAN LAYOUT MATCH LINE

PROJECT CONSTRUCTION FEATURES	
△ — △ — △ — △	TOP OF CUT SLOPE
○ — ○ — ○ — ○	TOE OF FILL SLOPE
⊗ ⊗ ⊗ ⊗ ⊗ ⊗	STONE FILL
-----	BOTTOM OF DITCH
=====	CULVERT PROPOSED
-----	STRUCTURE SUBSURFACE
PDF ——— PDF ———	PROJECT DEMARCATION FENCE
BF — x — x — x — BF — x — x —	BARRIER FENCE
xxxxxxxxxxxxxxxxxxxx	TREE PROTECTION ZONE (TPZ)
//////////	STRIPING LINE REMOVAL
~~~~~	SHEET PILES

CONVENTIONAL BOUNDARY SYMBOLOLOGY

BOUNDARY LINES	
————— TOWN LINE ———	TOWN BOUNDARY LINE
————— COUNTY LINE ———	COUNTY BOUNDARY LINE
————— STATE LINE ———	STATE BOUNDARY LINE
—— // ——	PROPOSED STATE R.O.W. (LIMITED ACCESS)
—— ———	PROPOSED STATE R.O.W.
—— // ——	STATE ROW (LIMITED ACCESS)
—— ———	STATE ROW
—— ———	TOWN ROW
— - - - -	PERMANENT EASEMENT LINE (P)
— - - - -	TEMPORARY EASEMENT LINE (T)
+ ——— +	SURVEY LINE
— P ——— P ———	PROPERTY LINE (P/L)
— L ——— L ———	
△ — SR — ○ — SR — △ — SR — ○ —	SLOPE RIGHTS
6f ——— 6f ———	6F PROPERTY BOUNDARY
4f ——— 4f ———	4F PROPERTY BOUNDARY
HAZ ——— HAZ ———	HAZARDOUS WASTE

EPSC LAYOUT PLAN SYMBOLOLOGY

EPSC MEASURES	
ONNNONNNONNNNO	FILTER CURTAIN
▣ — ▣ — ▣ — ▣ — ▣ — ▣ —	SILT FENCE
▣ — x — x — x — x — ▣ —	SILT FENCE WOVEN WIRE
▶ —▶ —▶ —	CHECK DAM
▣	DISTURBED AREAS REQUIRING RE-VEGETATION
▣	EROSION MATTING

SEE EPSC DETAIL SHEETS FOR ADDITIONAL SYMBOLOLOGY

ENVIRONMENTAL RESOURCES	
▼ ——— ▼	WETLAND BOUNDARY
-----	RIPARIAN BUFFER ZONE
-----	WETLAND BUFFER ZONE
-----	SOIL TYPE BOUNDARY
—— T&E ———	THREATENED & ENDANGERED SPECIES
HAZ ——— HAZ ———	HAZARDOUS WASTE AREA
—— AG ———	AGRICULTURAL LAND
—— HABITAT ———	FISH & WILDLIFE HABITAT
—— FLOOD PLAIN ———	FLOOD PLAIN
— OHW —	ORDINARY HIGH WATER (OHW)
— — — — —	STORM WATER
— - - - -	USDA FOREST SERVICE LANDS
— ... —	WILDLIFE HABITAT SUIT/CONN

ARCHEOLOGICAL & HISTORIC	
—— ARCH ———	ARCHEOLOGICAL BOUNDARY
—— HISTORIC DIST ———	HISTORIC DISTRICT BOUNDARY
—— HISTORIC ———	HISTORIC AREA
Ⓜ	HISTORIC STRUCTURE

CONVENTIONAL TOPOGRAPHIC SYMBOLOLOGY	
EXISTING FEATURES	
-----	ROAD EDGE PAVEMENT
-----	ROAD EDGE GRAVEL
-----	DRIVEWAY EDGE
-----	DITCH
—— ———	FOUNDATION
x ——— x ——— x ——— x ———	FENCE (EXISTING)
▣ ——— ▣ ——— ▣ ——— ▣ ———	FENCE WOOD POST
○ ——— ○ ——— ○ ——— ○ ———	FENCE STEEL POST
~~~~~	GARDEN
—— ○ ——— ○ ——— ○ ——— ○ ———	ROAD GUARDRAIL
	RAILROAD TRACKS
-----	CULVERT (EXISTING)
○○○○○○○○○○○○○○○○○○	STONE WALL
-----	WALL
~~~~~	WOOD LINE
~~~~~	BRUSH LINE
~~~~~	HEDGE
—— ——— ——— ——— ——— ———	BODY OF WATER EDGE
▣ ——— ▣ ——— ▣ ——— ▣ ———	LEDGE EXPOSED

PROJECT NAME: BRATTLEBORO	
PROJECT NUMBER: IM 091-I(82)	
FILE NAME: z19a220legend.dgn	PLOT DATE: 10/28/2022
PROJECT LEADER: A. STOCKIN	DRAWN BY: M. CARIGNAN
DESIGNED BY: E. WILLIAMS	CHECKED BY: L. SFINTESCU
CONVENTIONAL SYMBOLOLOGY SHEET	SHEET 7 OF 66



PRIMARY CONTROL

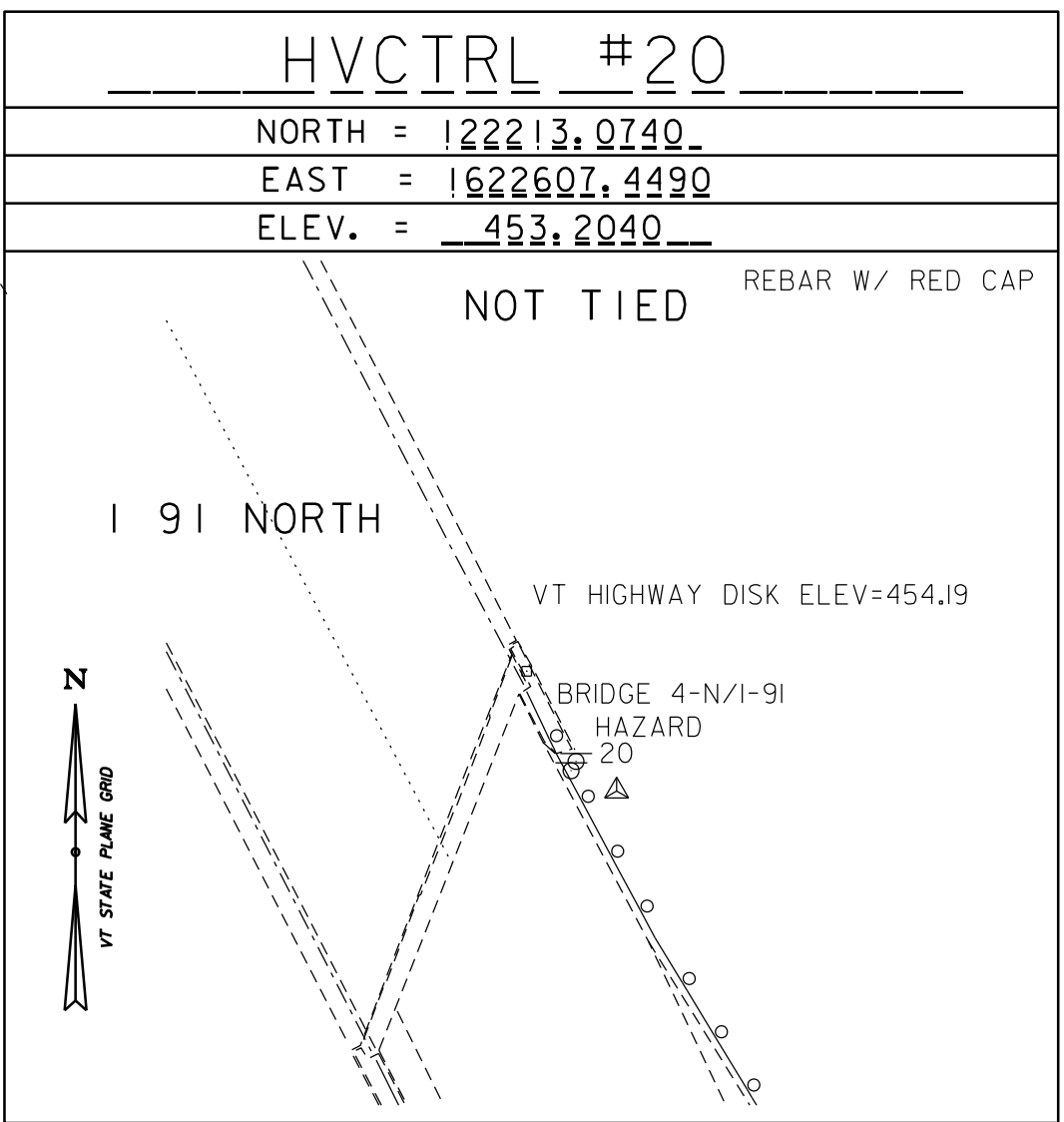
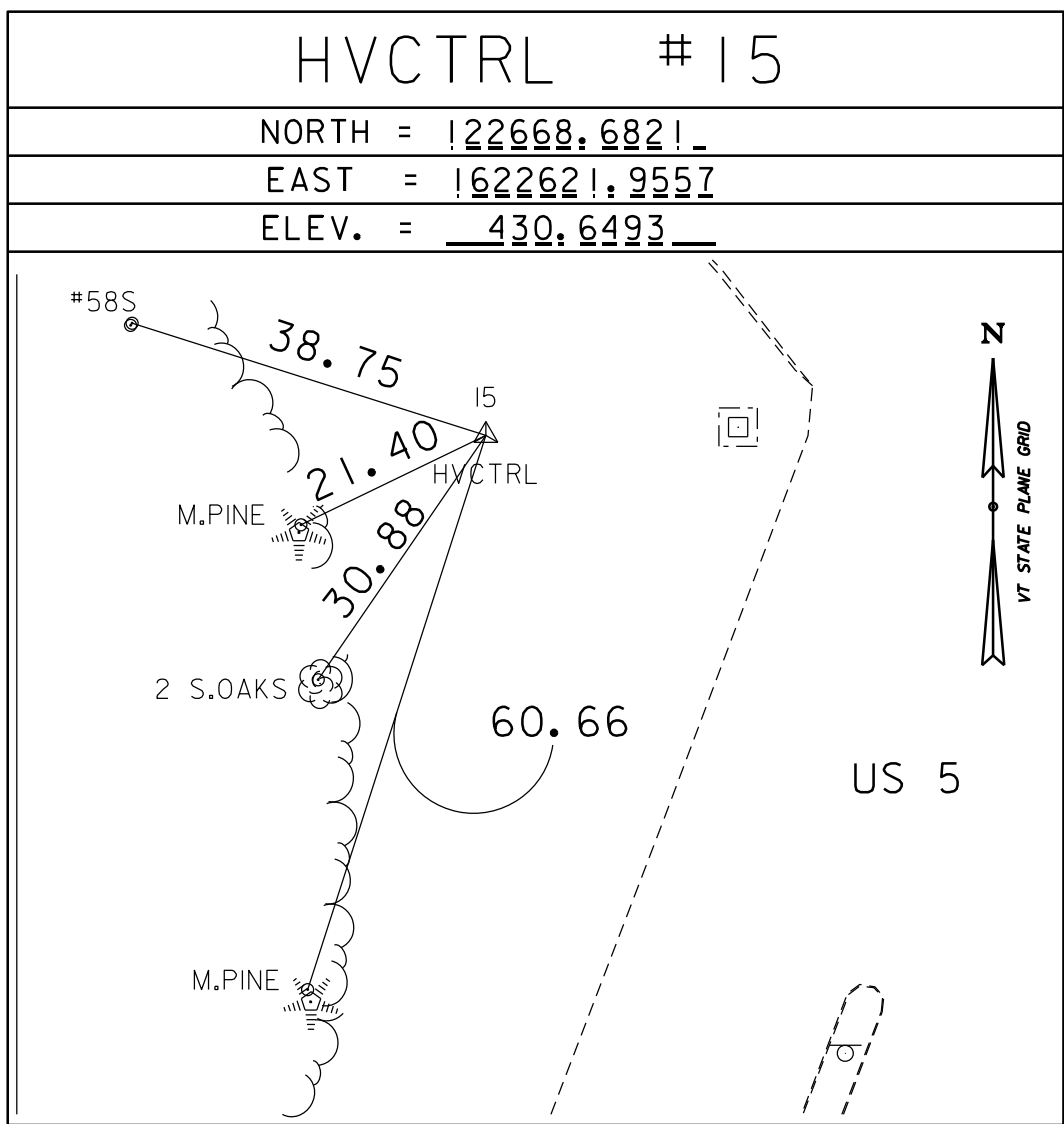
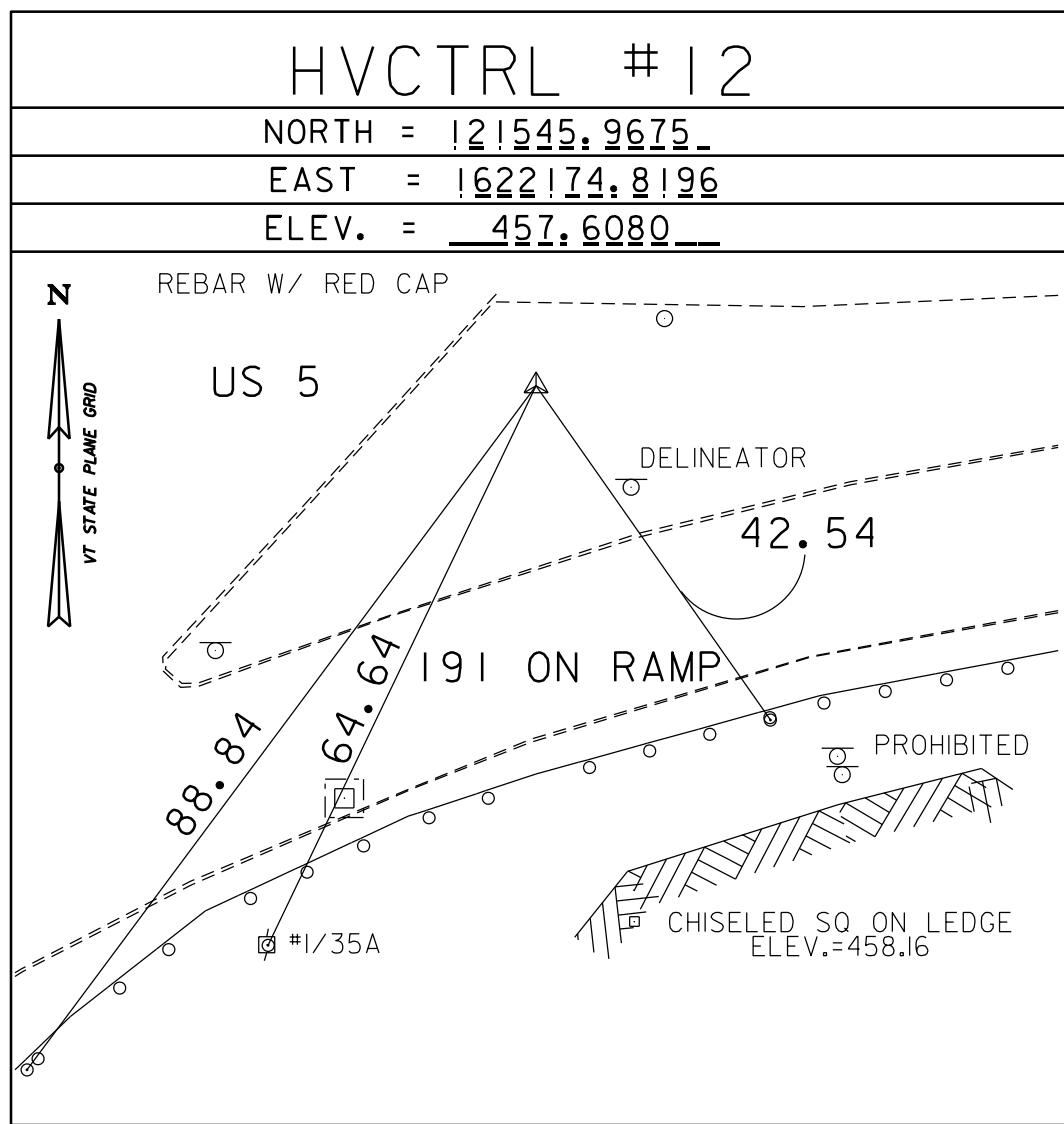
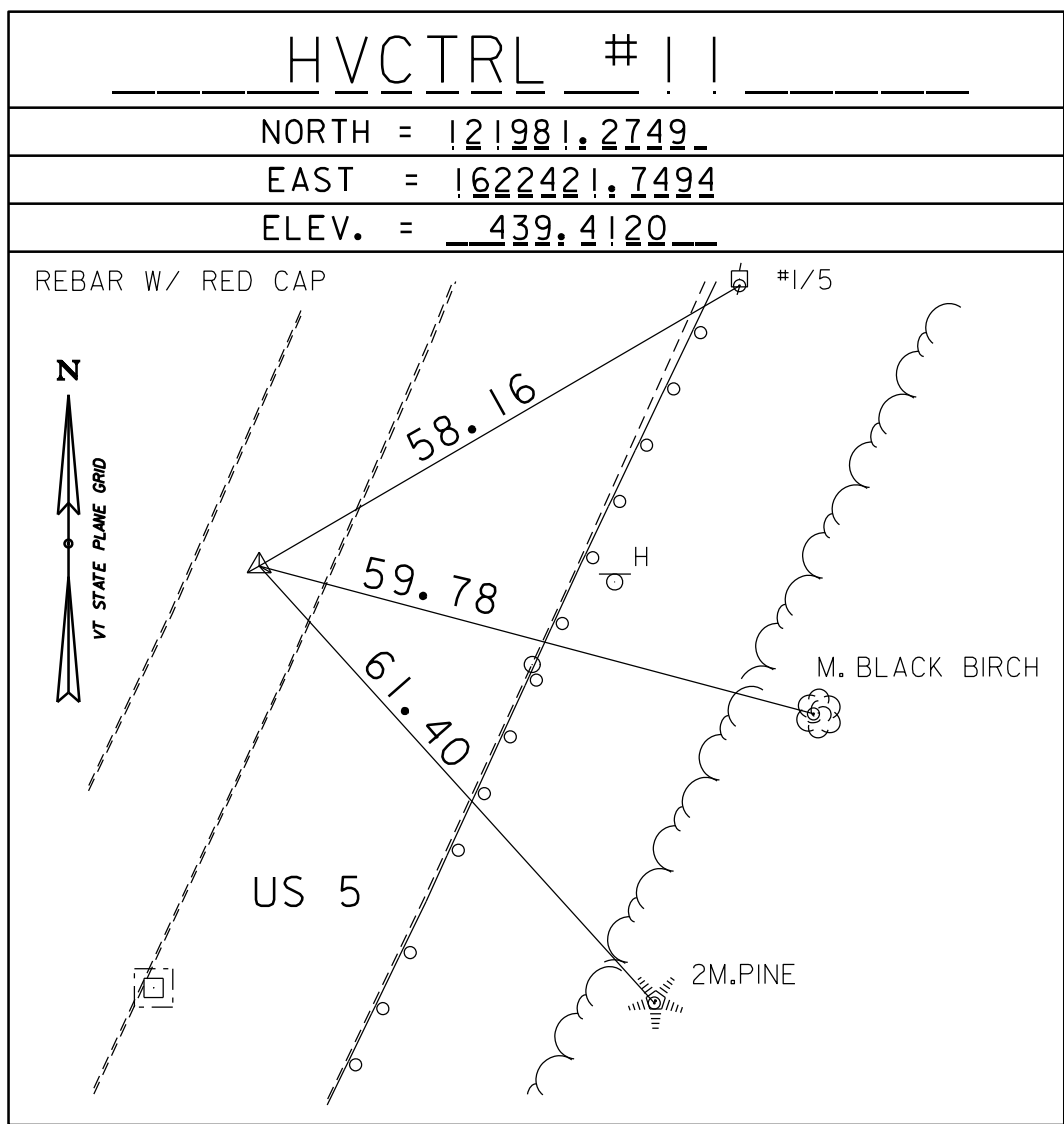
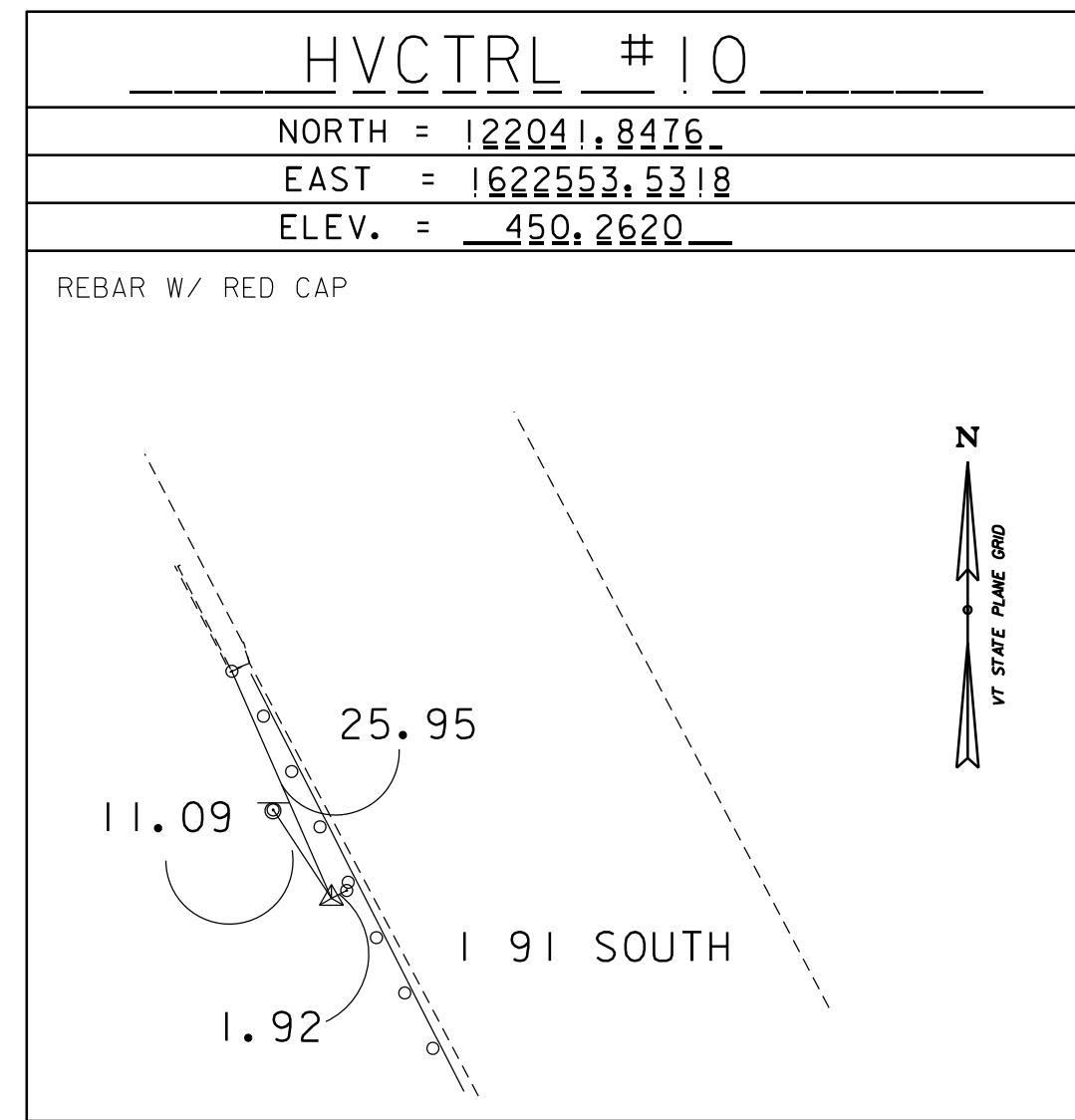
HVCTRL #1  
191 EXIT 1  
NORTH = 121729.6417  
EAST = 1622877.3446  
ELEV. = 438.5320

BRATTLEBORO, VT.  
LOCATED IN THE GRASS TRAINGLE FORMED BY THE I 91 NB LANE, THE I 91 NB OFF-RAMP, AND CANAL STREET AT MILE MARKER 7.35. IT IS 7.4 M E OF AND ABOUT 2.2 M LOWER THAN THE EAST EDGE OF PAVEMENT OF THE I 91 NB LANE, 4.1 M WNW OF THE WEST NORTHWEST EDGE OF PAVEMENT OF THE I 91 NB OFF-RAMP, 11.8 M NNE OF MILE MARKER 7.35, 56.8 M S OF THE SOUTH END OF A METAL GUARD RAIL FOR THE OFF-RAMP, 40.0 M N OF THE SOUTH END OF A METAL GUARD RAIL FOR THE NB LANE, AND 0.3 M S OF A FIBERGLASS WITNESS.

HVCTRL #2  
191 EXIT 1 AZ MK  
NORTH = 119904.2746  
EAST = 1623110.8734  
ELEV. = 497.4590

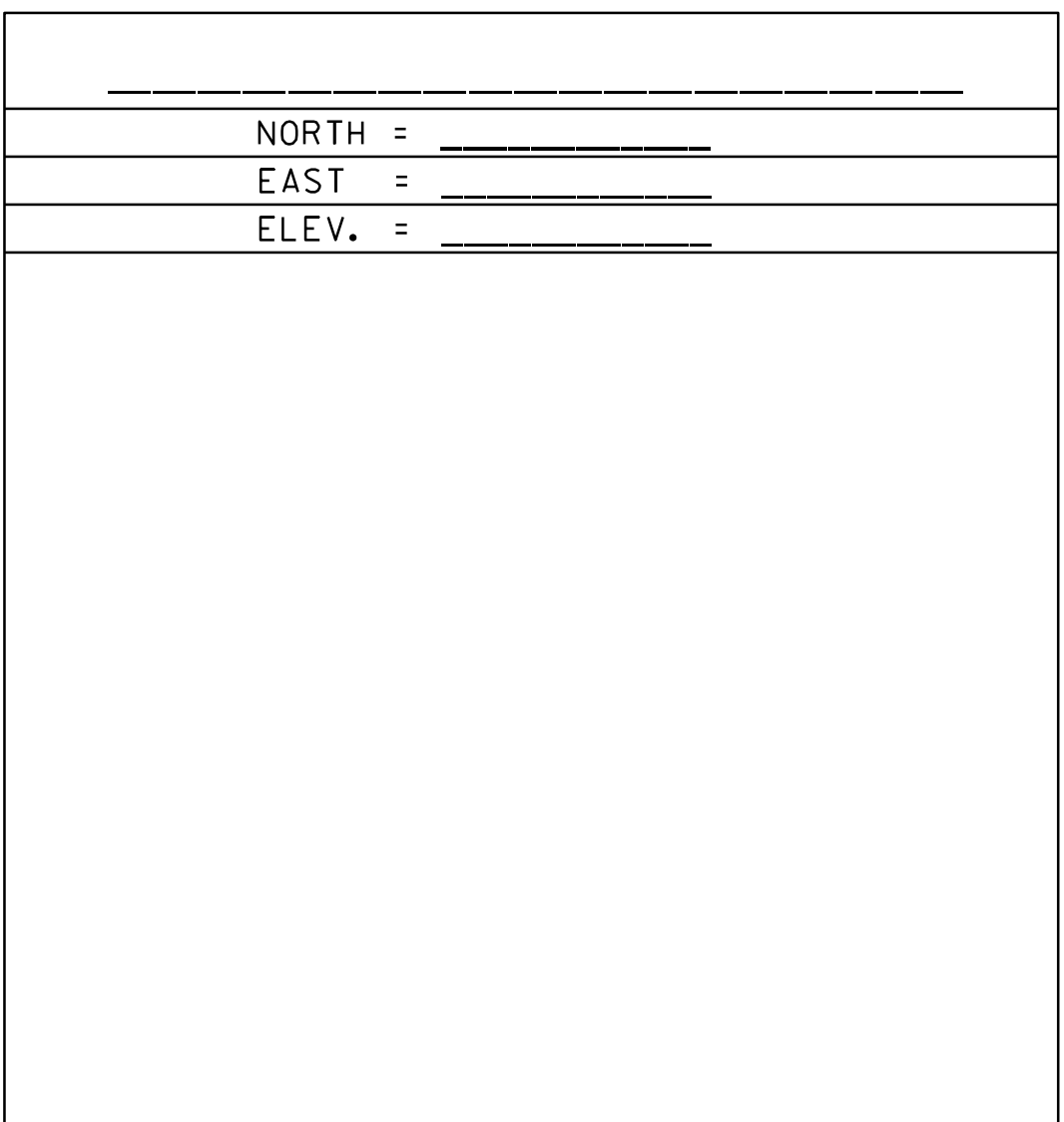
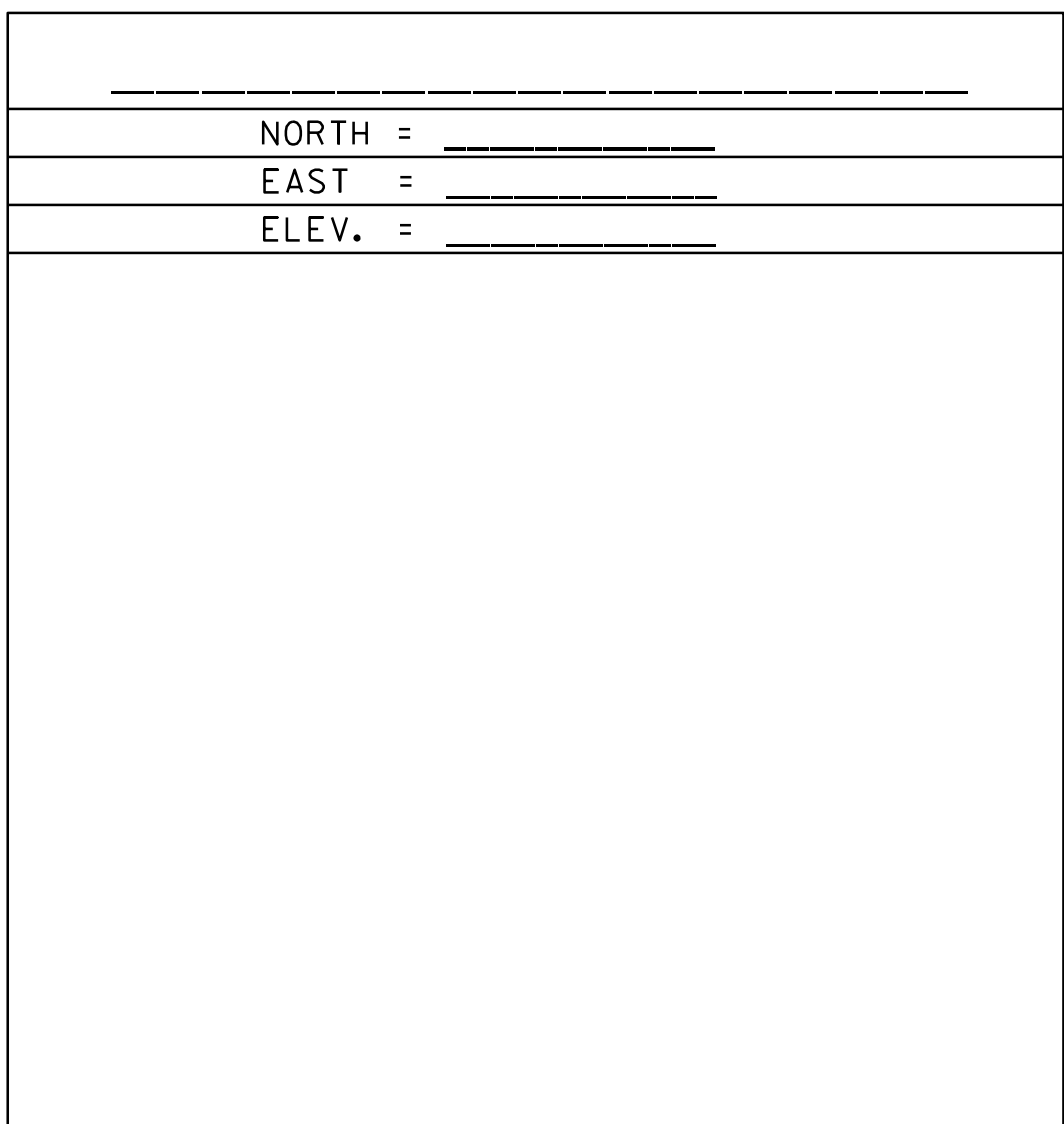
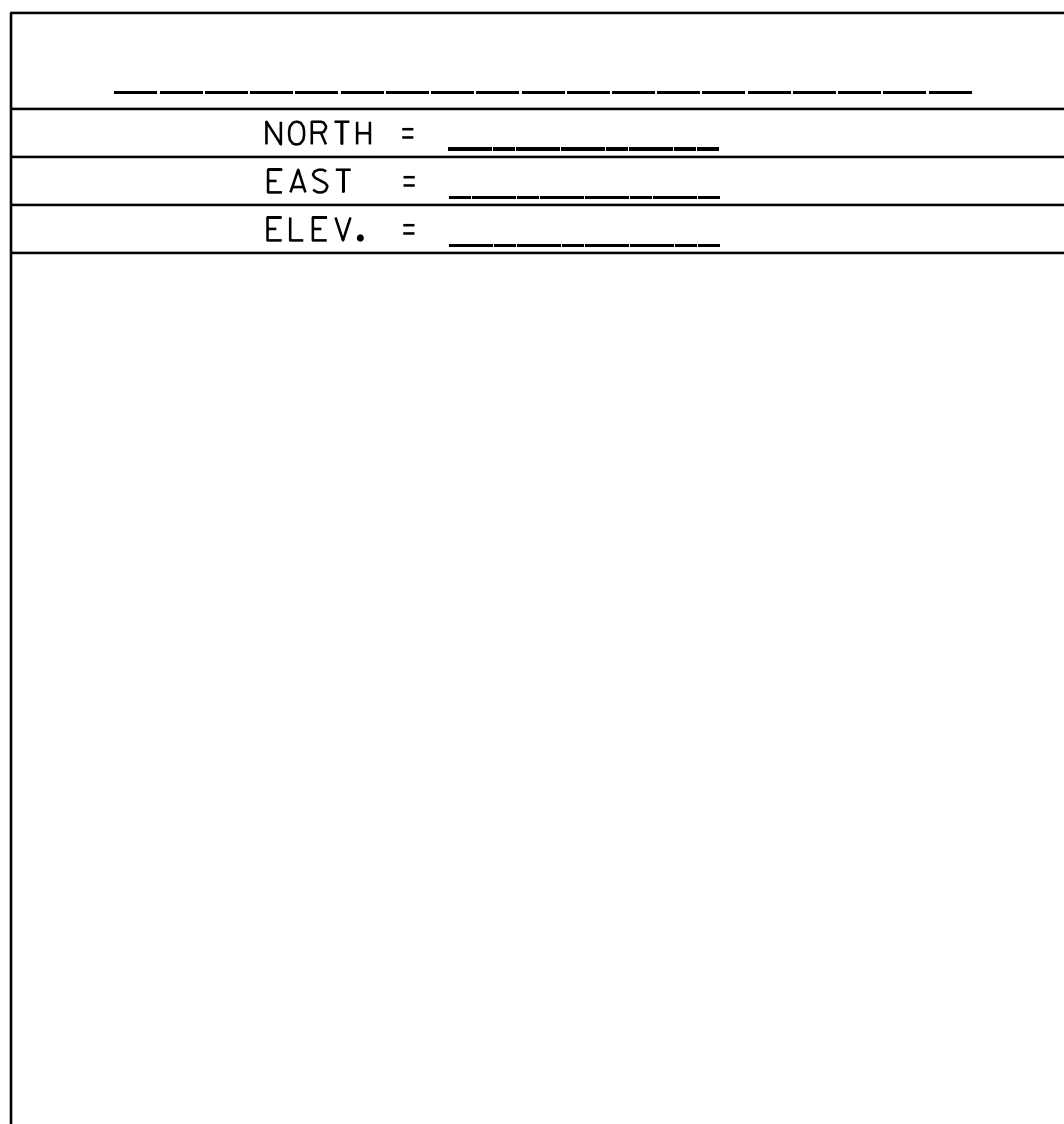
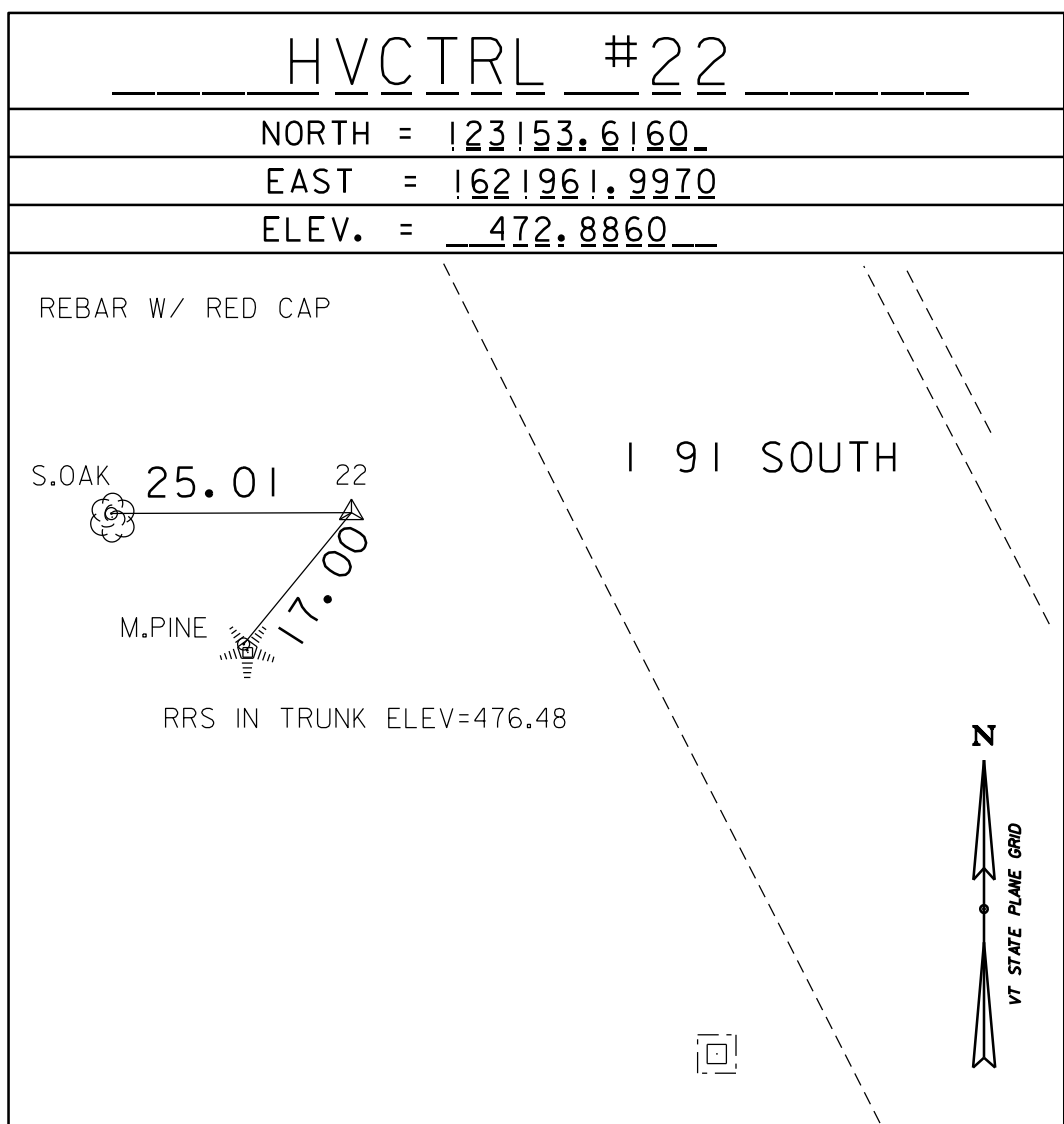
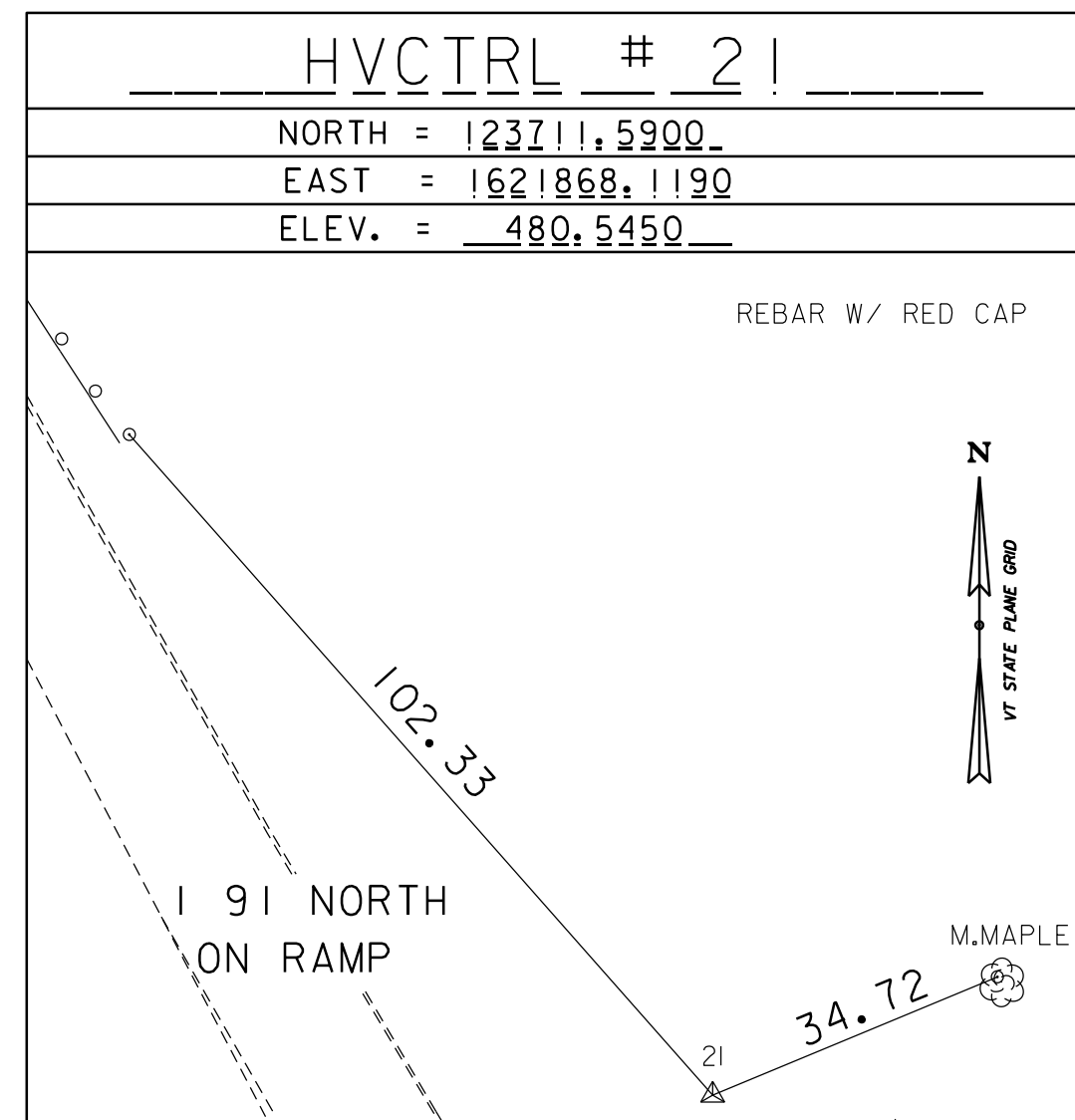
BRATTLEBORO, VT.  
THE MARK IS SET EAST OF THE INTERSTATE 91 NORTHBOUND LANE IN THE TOP OF A MASSIVE ROCK OUTCROP. IT IS 0.4 MILES SOUTH OF THE CANAL STREET BRIDGE OVER I-91, AT MILE MARKER 7.  
IT IS 7.7 M SOUTHEAST OF AND ABOUT 2.7 M HIGHER THAN THE I 91 NORTHBOUND SOUTHEAST EDGE OF PAVEMENT, 15.8 M WEST OF A 70 CM WHITE PINE WITH TRIANGULAR BLAZE, 19.6 M WEST-NORTHWEST OF A RIGHT-OF-WAY FENCE WITH TWIN DIAGONAL BRACING, AND 1.2 M SOUTHEAST OF THE NORTHWEST EDGE OF THE ROCK CUT.

SECONDARY CONTROL



*TRAVERSE COMPLETED ON 9/24/2020 BY R.GILMAN B.HERRING H.MCGOWAN *SECONDARY TRAVERSE COMPLETED 5/14/2022 BY B.HERRING & H.MCGOWAN

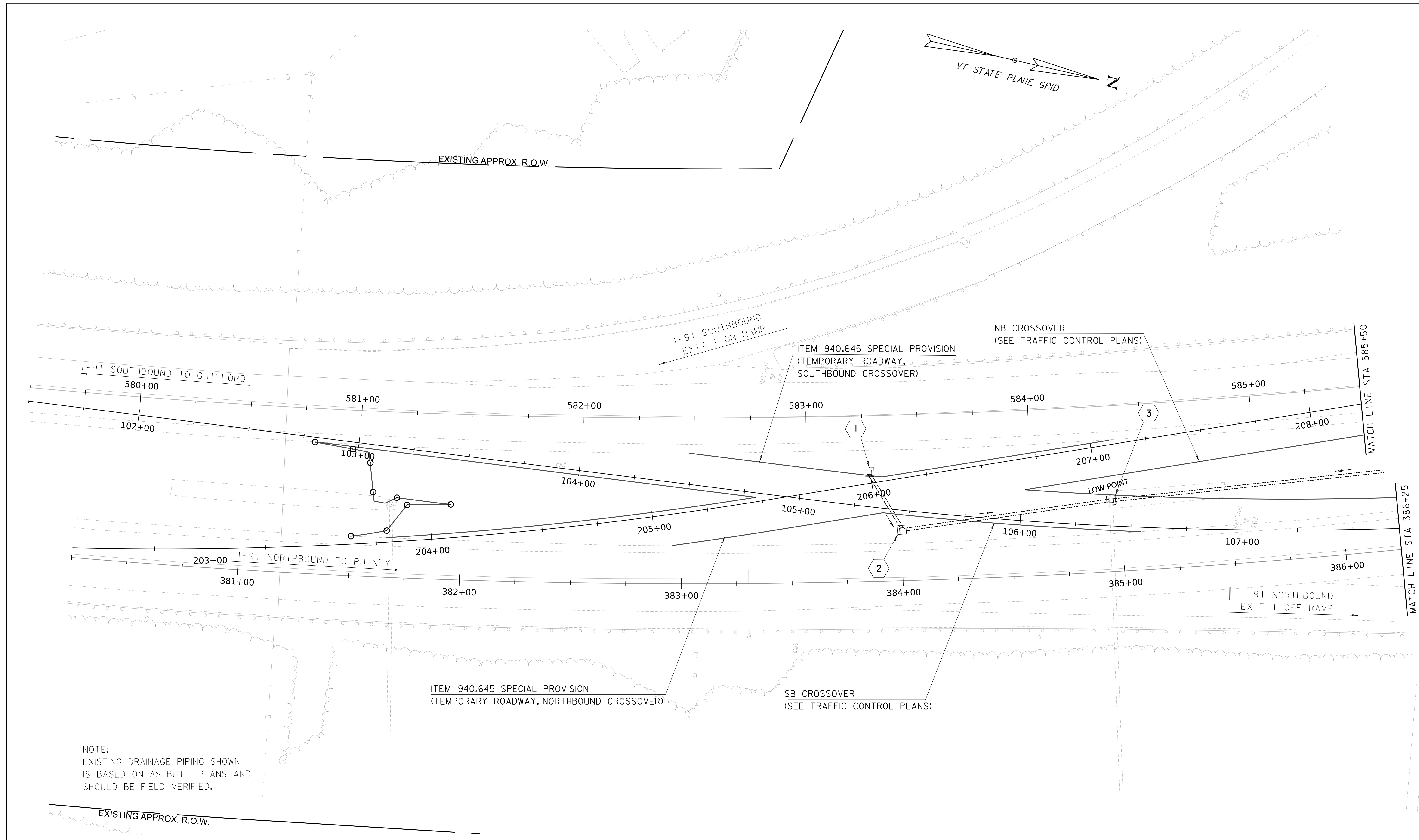
SECONDARY TIES



DATUM  
VERTICAL NAVD 88  
HORIZONTAL NAD83 (2011)  
ADJUSTMENT COMPASS

PROJECT NAME: BRATTLEBORO  
PROJECT NUMBER: IM 091-I(82)

FILE NAME: X19A220T1.DGN  
PROJECT LEADER: R.KLINEFELTER  
DESIGNED BY: VTRANS  
TIE SHEET  
PLOT DATE: 10/28/2022  
DRAWN BY: H.MCGOWAN  
CHECKED BY: R. GILMAN  
SHEET 8 OF 66



NOTE:  
EXISTING DRAINAGE PIPING SHOWN  
IS BASED ON AS-BUILT PLANS AND  
SHOULD BE FIELD VERIFIED.

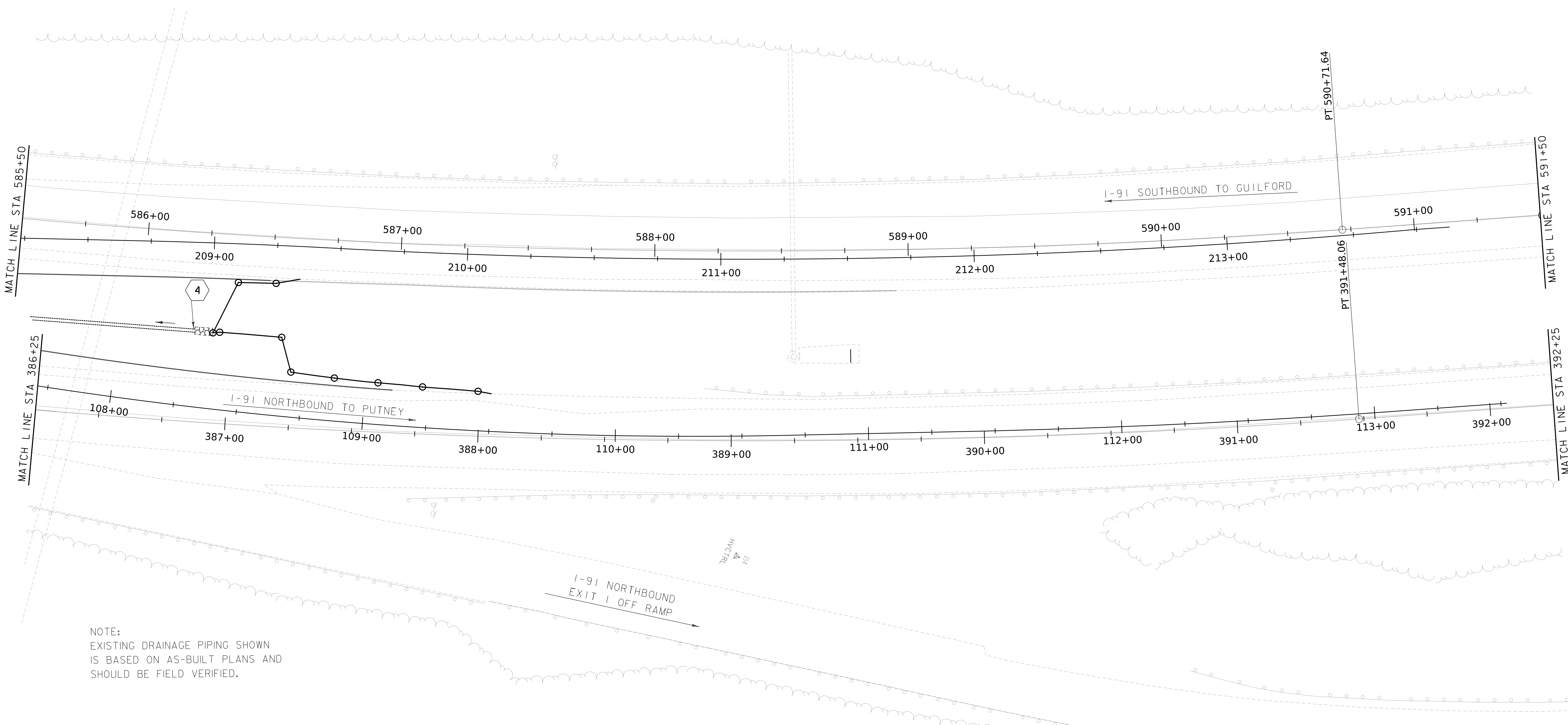
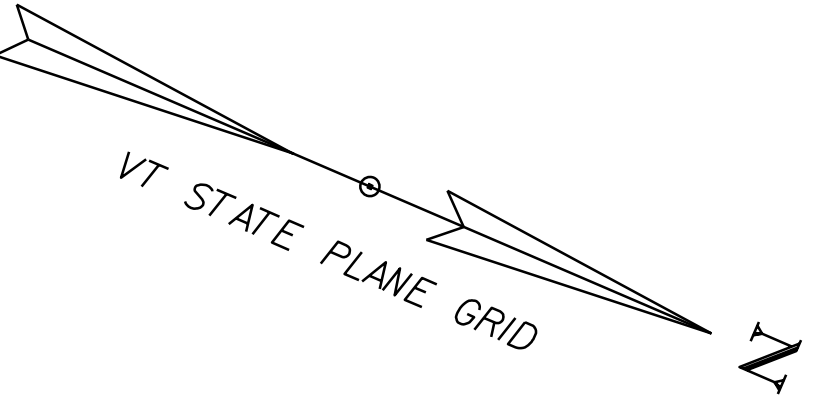
1 STA 105+30.00, LT 15.50' - STA 105+45.00 RT 9.00'  
CONSTRUCT DI WITH TYPE E GRATE  
GRATE ELEV = 438.60  
CONSTRUCT 28.0 LF 18" CPEP  
INV IN = 434.20  
INV OUT = 433.60

2 STA 105+45.00 RT 9.00' - STA 106+40.46 LT 11.54'  
CONSTRUCT DI WITH TYPE E GRATE  
GRATE ELEV = 437.55  
CONSTRUCT 94.0 LF 18" CPEP  
INV IN = 433.40  
INV OUT = 432.10

3 STA 106+40.46 LT 11.54'  
REMOVE EXISTING DI  
CONSTRUCT DI WITH TYPE E GRATE  
GRATE ELEV = 437.25  
18" Exist. INV OUT = 431.87



PROJECT NAME: BRATTLEBORO	
PROJECT NUMBER: IM 091-1(82)	
FILE NAME: z19a220bdr.dgn	PLOT DATE: 10/28/2022
PROJECT LEADER: A.STOCKIN	DRAWN BY: M.CARIGNAN
DESIGNED BY: E.WILLIAMS	CHECKED BY: B.GEIGER
LAYOUT SHEET PLAN 1	SHEET 9 OF 66



NOTE:  
EXISTING DRAINAGE PIPING SHOWN  
IS BASED ON AS-BUILT PLANS AND  
SHOULD BE FIELD VERIFIED.

4 STA 108+30.00 LT 30.00' - STA 106+40.46 LT 11.54'  
CONSTRUCT 187.0 LF 18" CPEP  
INV IN = 435.20  
INV OUT = 432.10  
3'x 7' STONE PAD TYPE II AT INLET

0 20 40  
SCALE IN FEET



PROJECT NAME: BRATTLEBORO	
PROJECT NUMBER: IM 091-I(82)	
FILE NAME: z19a220bdr.dgn	PLOT DATE: 10/28/2022
PROJECT LEADER: A.STOCKIN	DRAWN BY: M.CARIGNAN
DESIGNED BY: E.WILLIAMS	CHECKED BY: B.GEIGER
LAYOUT SHEET PLAN 2	SHEET 10 OF 66

REMOVAL AND DISPOSAL OF GUARDRAIL  
SB STA. 592+31.72 TO STA. 592+86.33, LT  
SB STA. 592+66.01 TO STA. 593+25.30, RT  
SB STA. 594+82.56 TO STA. 595+40.33, LT  
SB STA. 595+27.23 TO STA. 595+82.14, RT  
NB STA. 393+85.56 TO STA. 394+39.06, LT  
NB STA. 394+12.02 TO STA. 394+65.99, RT  
NB STA. 396+38.20 TO STA. 396+96.32, LT  
NB STA. 396+64.46 TO STA. 397+23.62, RT

GUARDRAIL APPROACH SECTION,  
GALVANIZED 3 RAIL BOX BEAM

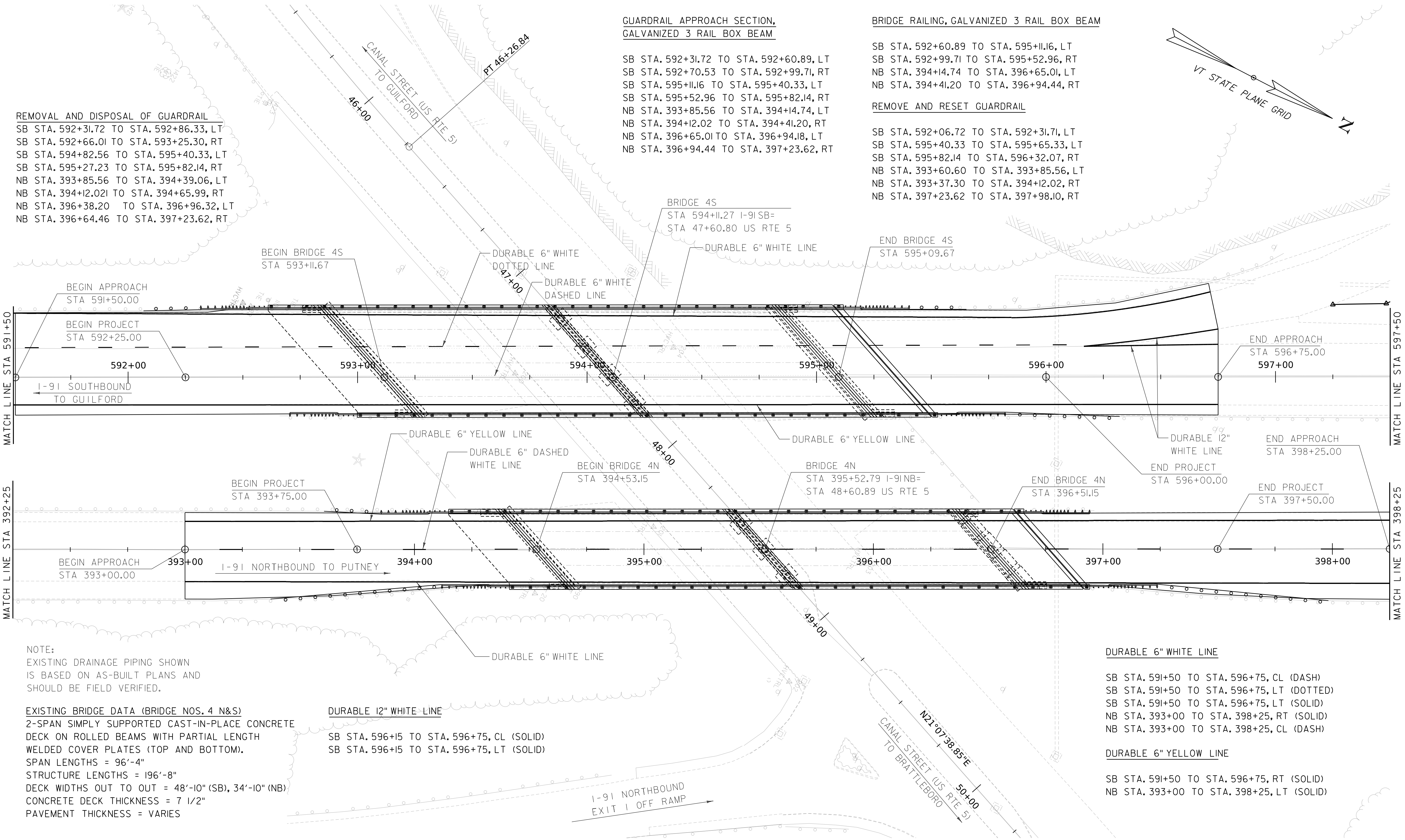
SB STA. 592+31.72 TO STA. 592+60.89, LT  
SB STA. 592+70.53 TO STA. 592+99.71, RT  
SB STA. 595+11.16 TO STA. 595+40.33, LT  
SB STA. 595+52.96 TO STA. 595+82.14, RT  
NB STA. 393+85.56 TO STA. 394+14.74, LT  
NB STA. 394+12.02 TO STA. 394+41.20, RT  
NB STA. 396+65.01 TO STA. 396+94.18, LT  
NB STA. 396+94.44 TO STA. 397+23.62, RT

BRIDGE RAILING, GALVANIZED 3 RAIL BOX BEAM

SB STA. 592+60.89 TO STA. 595+11.16, LT  
SB STA. 592+99.71 TO STA. 595+52.96, RT  
NB STA. 394+14.74 TO STA. 396+65.01, LT  
NB STA. 394+41.20 TO STA. 396+94.44, RT

REMOVE AND RESET GUARDRAIL

SB STA. 592+06.72 TO STA. 592+31.71, LT  
SB STA. 595+40.33 TO STA. 595+65.33, LT  
SB STA. 595+82.14 TO STA. 596+32.07, RT  
NB STA. 393+60.60 TO STA. 393+85.56, LT  
NB STA. 393+37.30 TO STA. 394+12.02, RT  
NB STA. 397+23.62 TO STA. 397+98.10, RT



NOTE:  
EXISTING DRAINAGE PIPING SHOWN  
IS BASED ON AS-BUILT PLANS AND  
SHOULD BE FIELD VERIFIED.

EXISTING BRIDGE DATA (BRIDGE NOS. 4 N&S)  
2-SPAN SIMPLY SUPPORTED CAST-IN-PLACE CONCRETE  
DECK ON ROLLED BEAMS WITH PARTIAL LENGTH  
WELDED COVER PLATES (TOP AND BOTTOM).  
SPAN LENGTHS = 96'-4"  
STRUCTURE LENGTHS = 196'-8"  
DECK WIDTHS OUT TO OUT = 48'-10" (SB), 34'-10" (NB)  
CONCRETE DECK THICKNESS = 7 1/2"  
PAVEMENT THICKNESS = VARIES

DURABLE 12" WHITE LINE

SB STA. 596+15 TO STA. 596+75, CL (SOLID)  
SB STA. 596+15 TO STA. 596+75, LT (SOLID)

DURABLE 6" WHITE LINE

SB STA. 591+50 TO STA. 596+75, CL (DASH)  
SB STA. 591+50 TO STA. 596+75, LT (DOTTED)  
SB STA. 591+50 TO STA. 596+75, LT (SOLID)  
NB STA. 393+00 TO STA. 398+25, RT (SOLID)  
NB STA. 393+00 TO STA. 398+25, CL (DASH)

DURABLE 6" YELLOW LINE

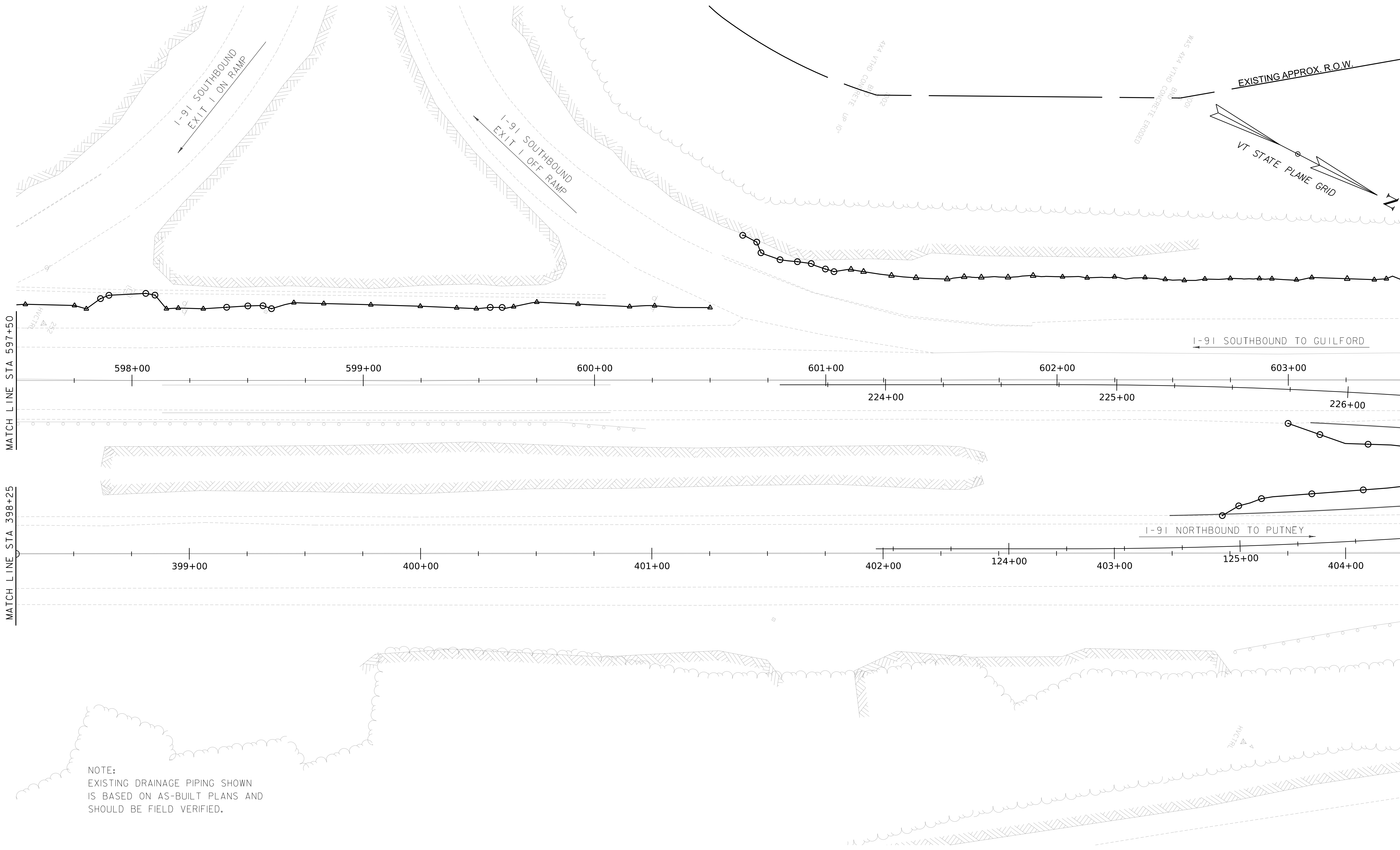
SB STA. 591+50 TO STA. 596+75, RT (SOLID)  
NB STA. 393+00 TO STA. 398+25, LT (SOLID)



PROJECT NAME: BRATTLEBORO  
PROJECT NUMBER: IM 091-1(82)

FILE NAME: z19a220bdr.dgn  
PROJECT LEADER: A.STOCKIN  
DESIGNED BY: E.WILLIAMS  
LAYOUT SHEET PLAN 3

PLOT DATE: 10/28/2022  
DRAWN BY: M.CARIGNAN  
CHECKED BY: B.GEIGER  
SHEET 11 OF 66



NOTE:  
EXISTING DRAINAGE PIPING SHOWN  
IS BASED ON AS-BUILT PLANS AND  
SHOULD BE FIELD VERIFIED.



PROJECT NAME: BRATTLEBORO	
PROJECT NUMBER: IM 091-1(82)	
FILE NAME: z19a220bdr.dgn	PLOT DATE: 10/28/2022
PROJECT LEADER: A.STOCKIN	DRAWN BY: M.CARIGNAN
DESIGNED BY: E.WILLIAMS	CHECKED BY: B.GEIGER
LAYOUT SHEET PLAN 4	SHEET 12 OF 66

EXISTING APPROX. R.O.W.

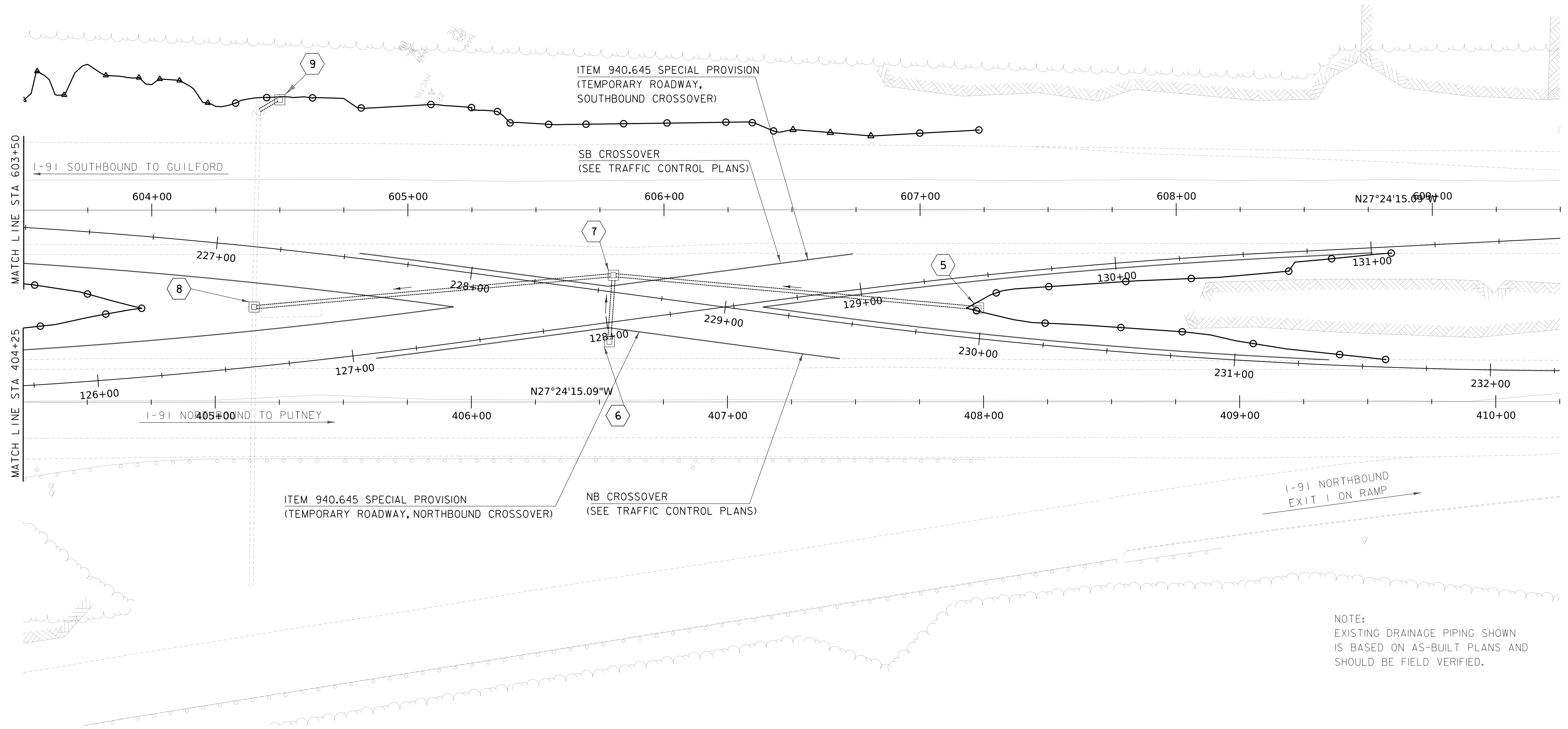
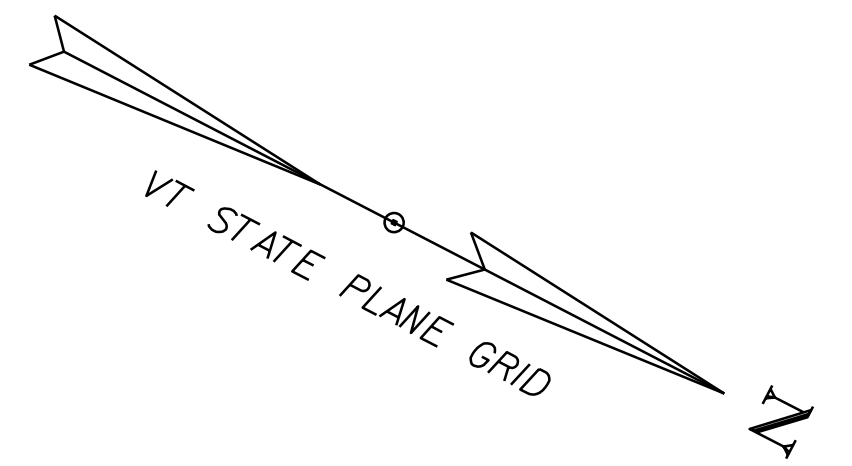
5 STA 129+45.00 RT 12.50' - STA 128+05.00 LT 18.00'  
CONSTRUCT DI WITH TYPE E GRATE  
GRATE ELEV = 474.80  
CONSTRUCT 142.0 LF 18" CPEP  
INV IN = 470.00  
INV OUT = 468.00

6 STA 128+00.00 RT 7.50' - STA 128+05.00 LT 18.00'  
CONSTRUCT DI WITH TYPE E GRATE  
GRATE ELEV = 473.00  
CONSTRUCT 23.0 LF 18" CPEP  
INV IN = 468.75  
INV OUT = 468.00

7 STA 128+05.00 LT 18.00' - STA 126+63.60 LT 23.23'  
CONSTRUCT DI WITH TYPE E GRATE  
GRATE ELEV = 473.00  
CONSTRUCT 139.0 LF 18" CPEP  
INV IN = 467.50  
INV OUT = 463.00

8 STA 126+63.60 LT 23.23'  
REMOVE EXISTING DI  
CONSTRUCT DI WITH TYPE E GRATE  
GRATE ELEV = 470.00  
18" Exist. INV IN = 461.79  
18" Exist. INV OUT = 461.76

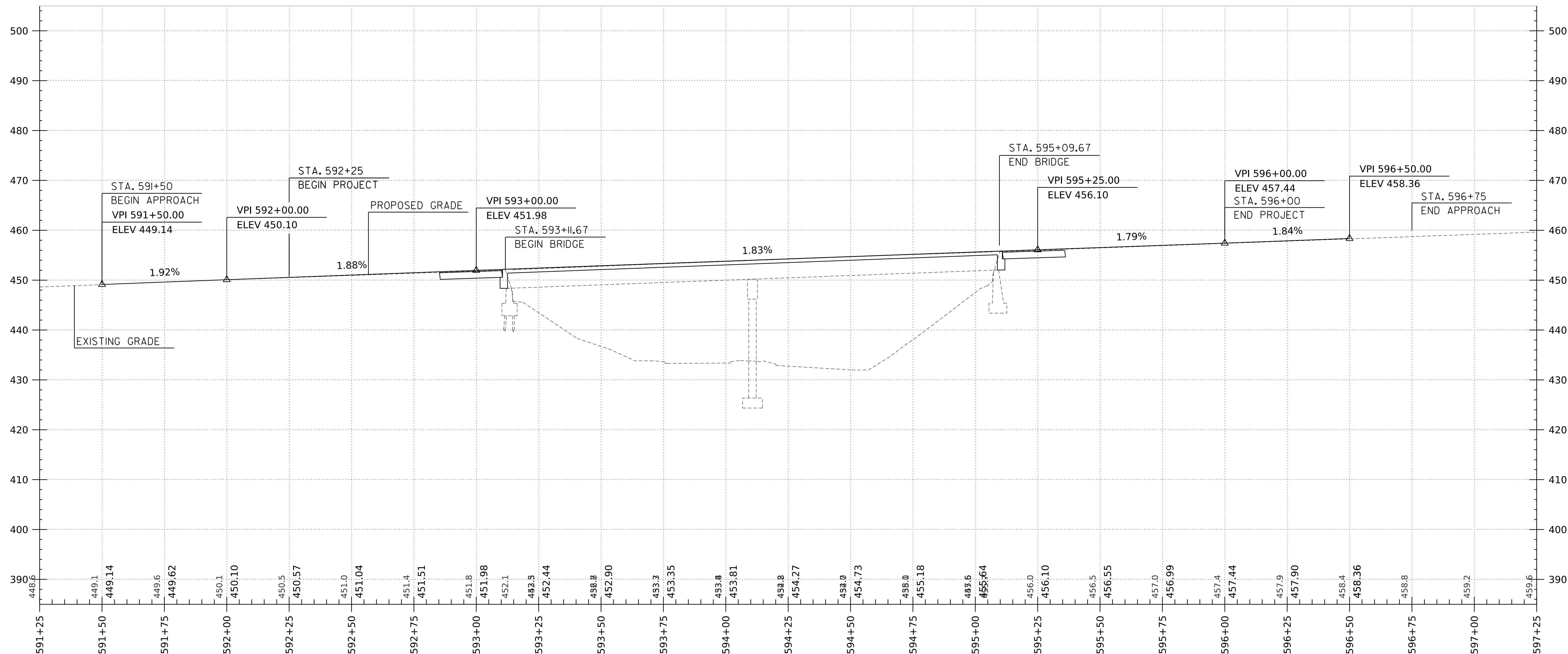
9 STA 604+50.00 LT 43.00' - STA 604+41.69 LT 38.04'  
CONSTRUCT DI WITH TYPE E GRATE  
GRATE ELEV = 470.00  
CONSTRUCT 8.0 LF 12" CPEP  
INV IN = 465.40  
INV OUT = 465.00



NOTE:  
EXISTING DRAINAGE PIPING SHOWN  
IS BASED ON AS-BUILT PLANS AND  
SHOULD BE FIELD VERIFIED.



PROJECT NAME: BRATTLEBORO	
PROJECT NUMBER: IM 091-I(82)	
FILE NAME: z19a220bdr.dgn	PLOT DATE: 10/28/2022
PROJECT LEADER: A.STOCKIN	DRAWN BY: M.CARIGNAN
DESIGNED BY: E.WILLIAMS	CHECKED BY: B.GEIGER
LAYOUT SHEET PLAN 5	SHEET 13 OF 66

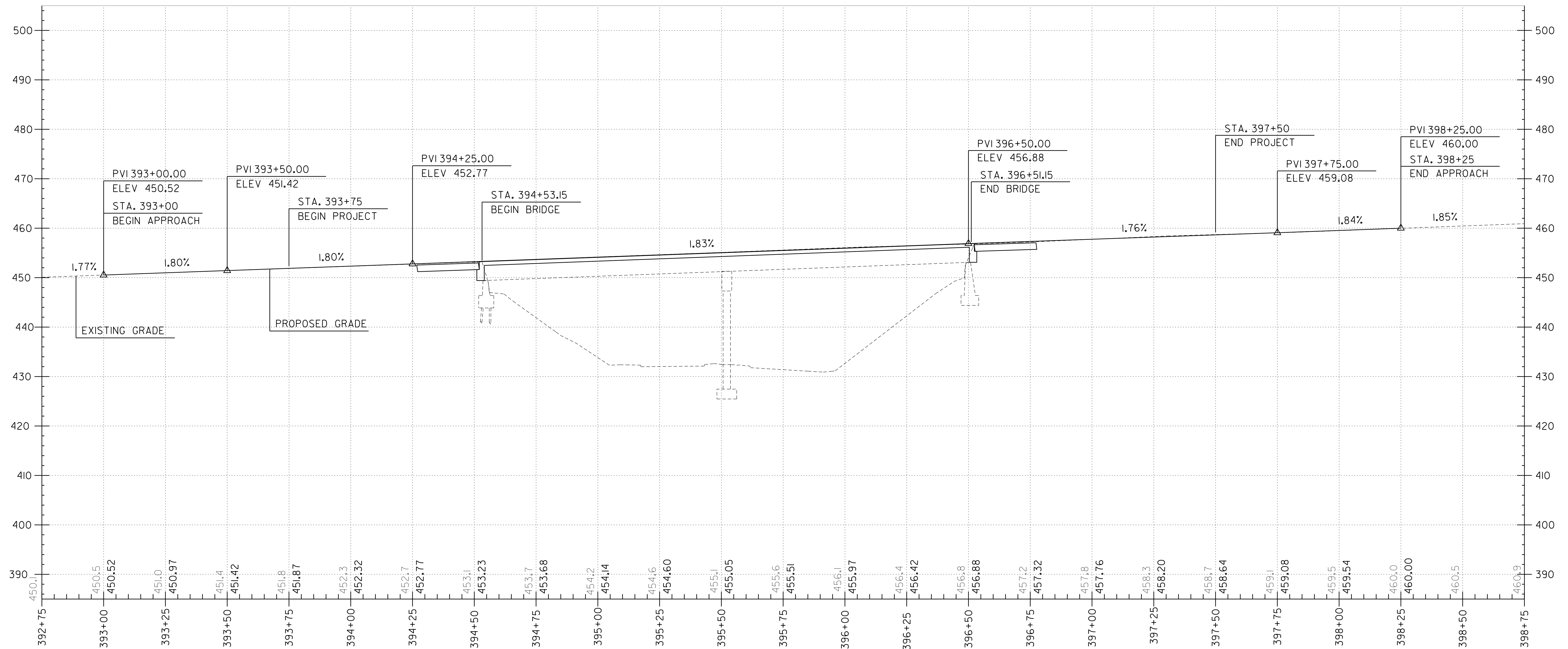


- NOTES:
- ELEVATIONS SHOWN TO THE NEAREST TENTH DEPICT THE EXISTING GROUND ELEVATION.
  - ELEVATIONS SHOWN TO THE NEAREST HUNDRETH DEPICT THE PROPOSED PROFILE GRADE ELEVATION.

I-91 SB PROFILE  
HORIZONTAL SCALE: 1" = 20'-0"  
VERTICAL SCALE: 1" = 10'-0"



PROJECT NAME: BRATTLEBORO	
PROJECT NUMBER: IM 091-I(82)	
FILE NAME: z19a220pro.I-91SB.dgn	PLOT DATE: 10/28/2022
PROJECT LEADER: A.STOCKIN	DRAWN BY: M.CARIGNAN
DESIGNED BY: E.WILLIAMS	CHECKED BY: B.GEIGER
I-91SB PROFILE AT BRIDGE	SHEET 14 OF 66

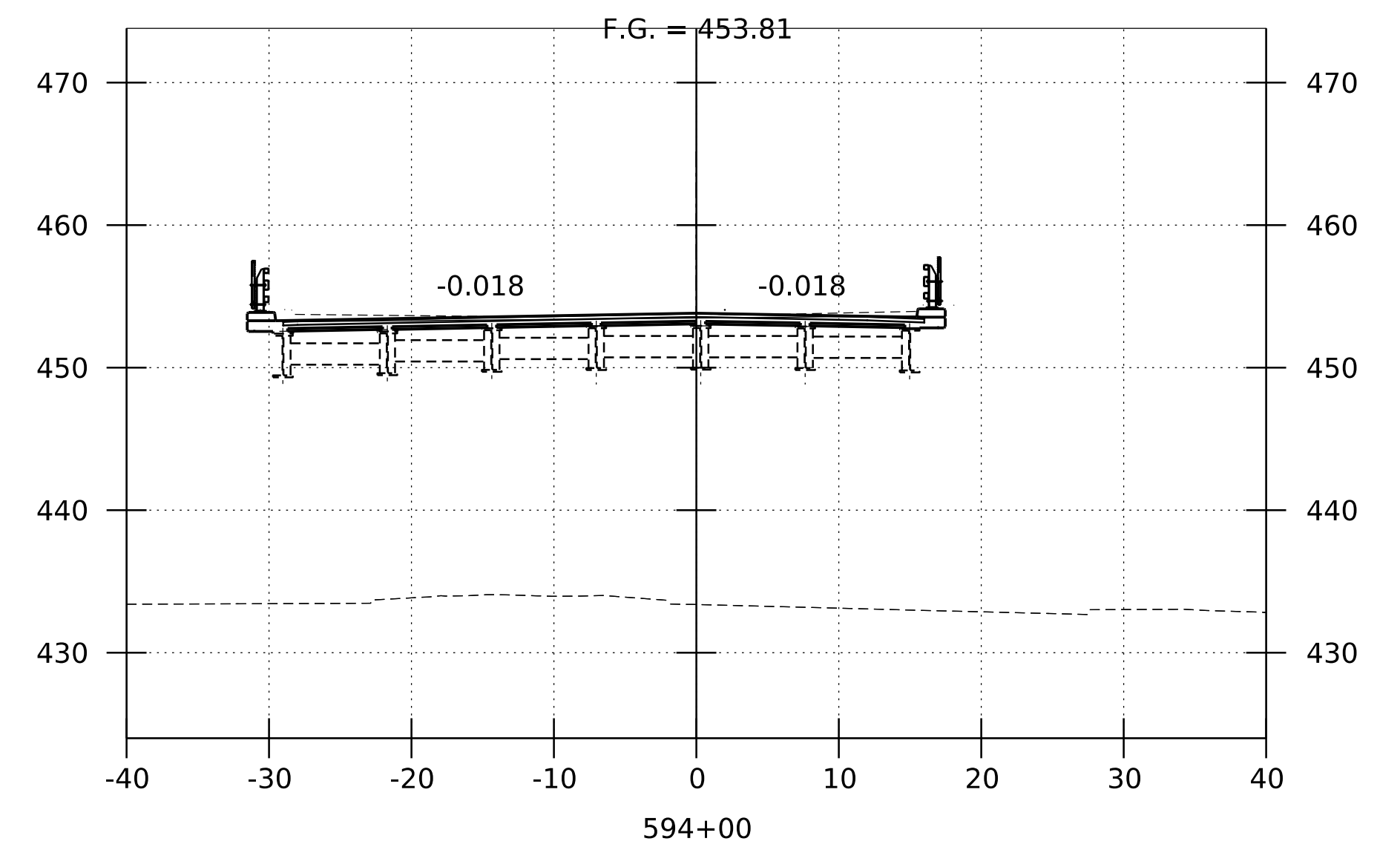
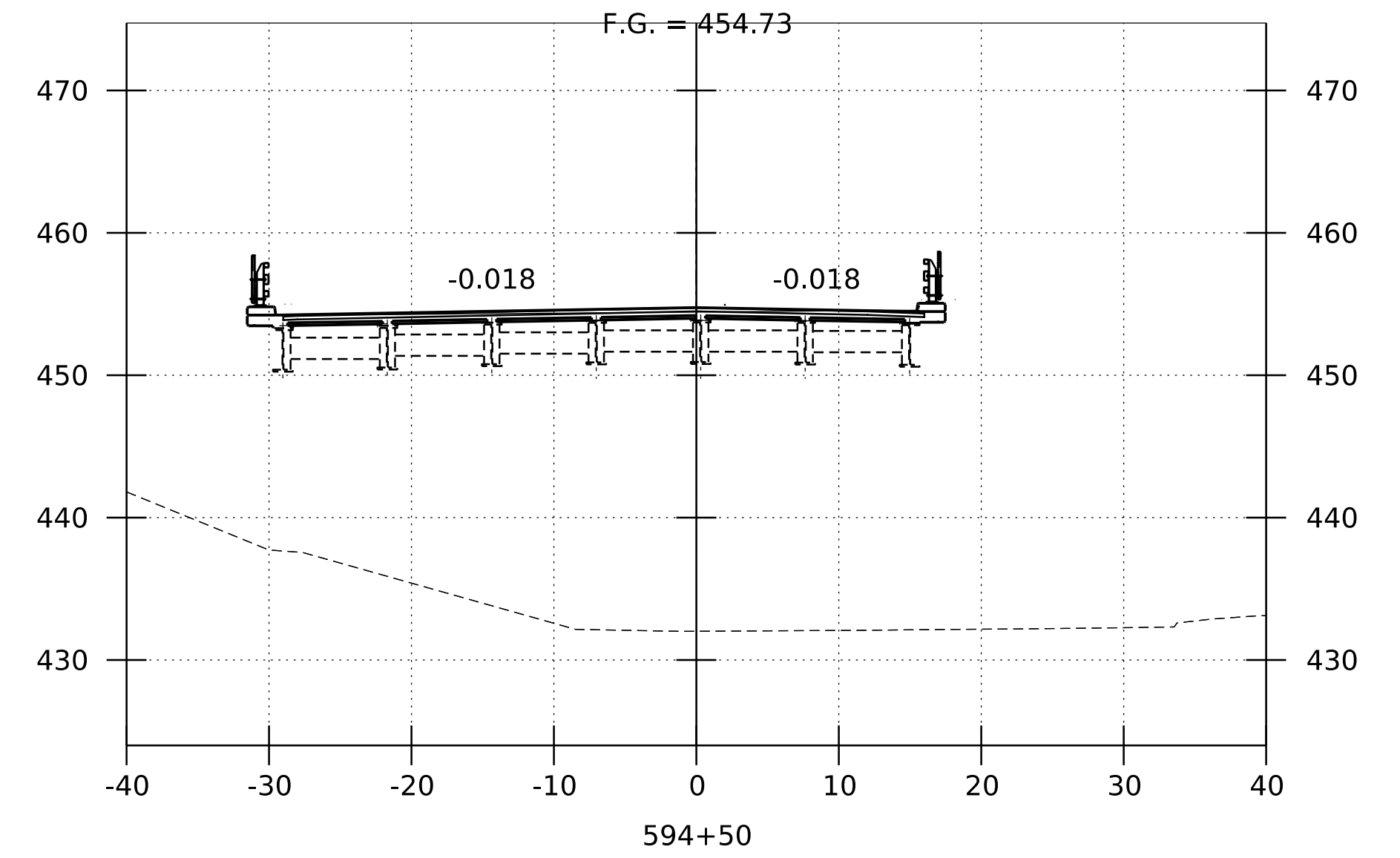
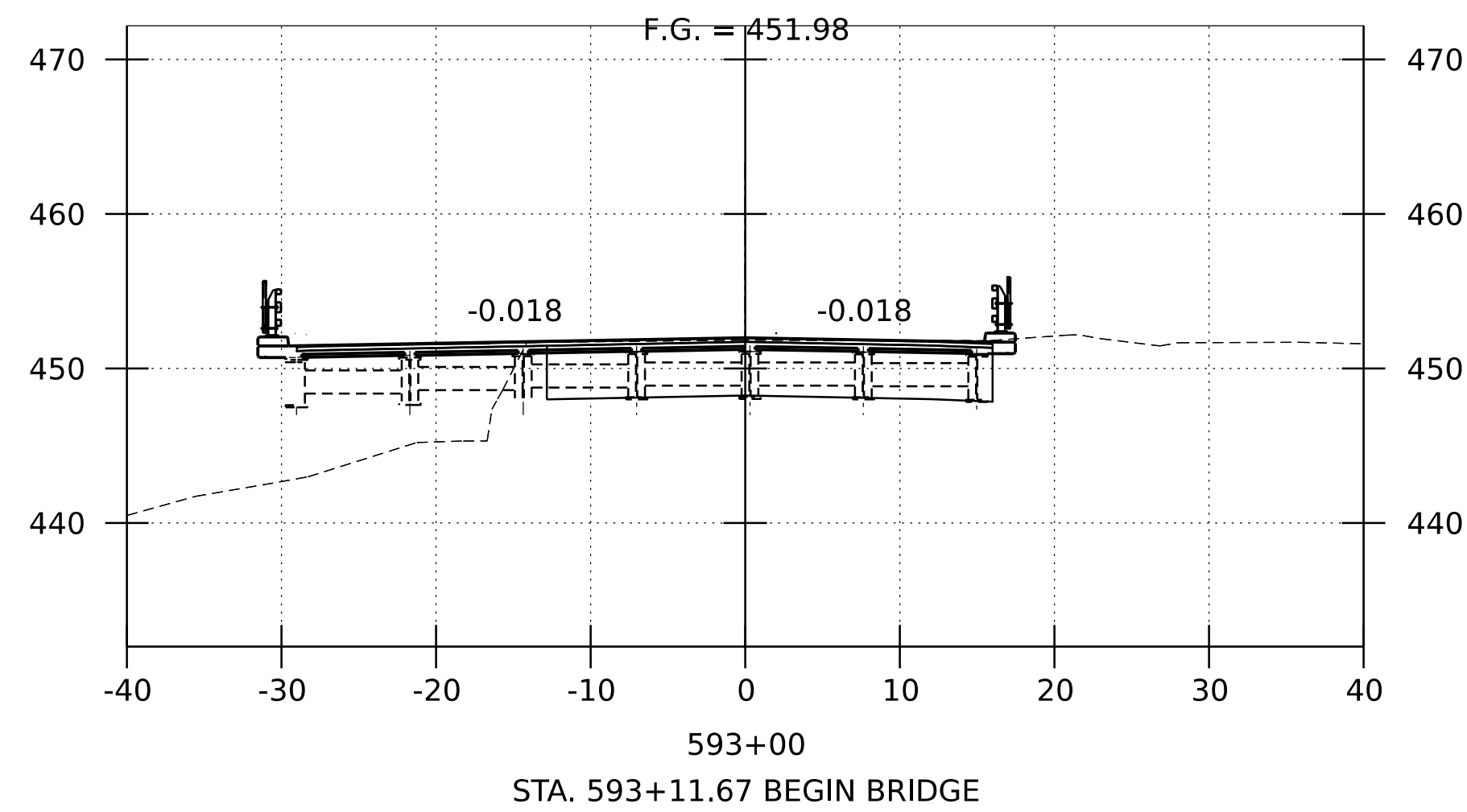
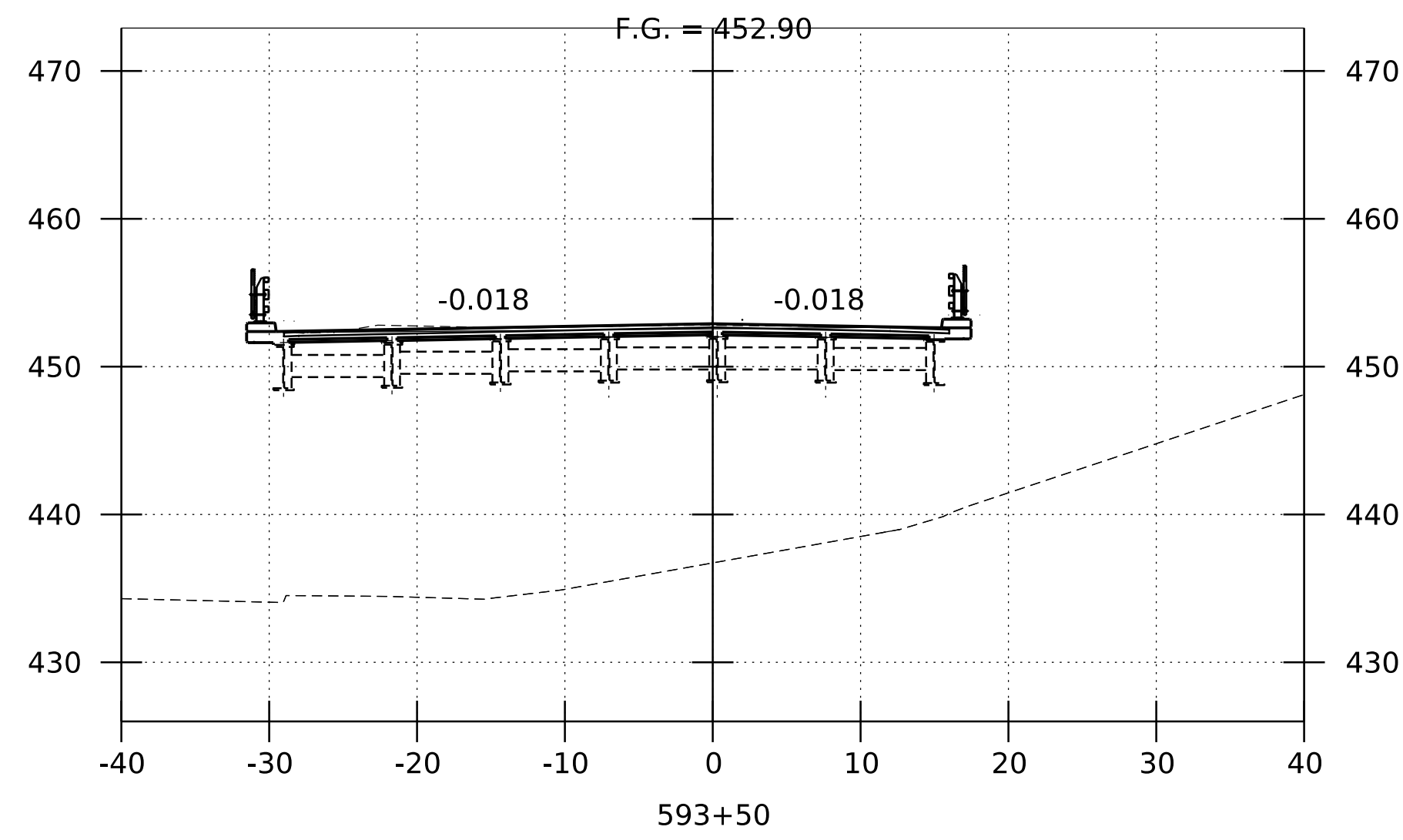
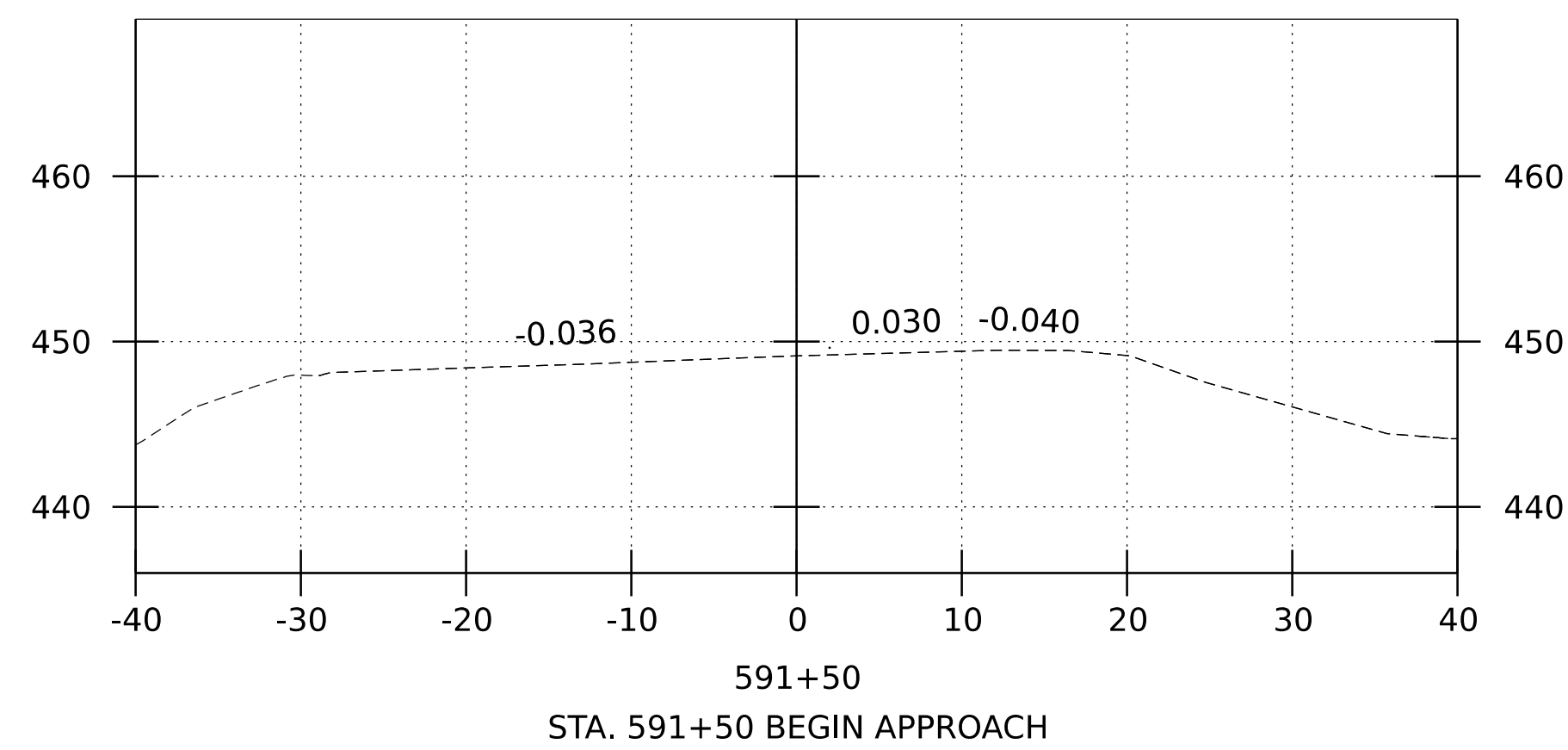
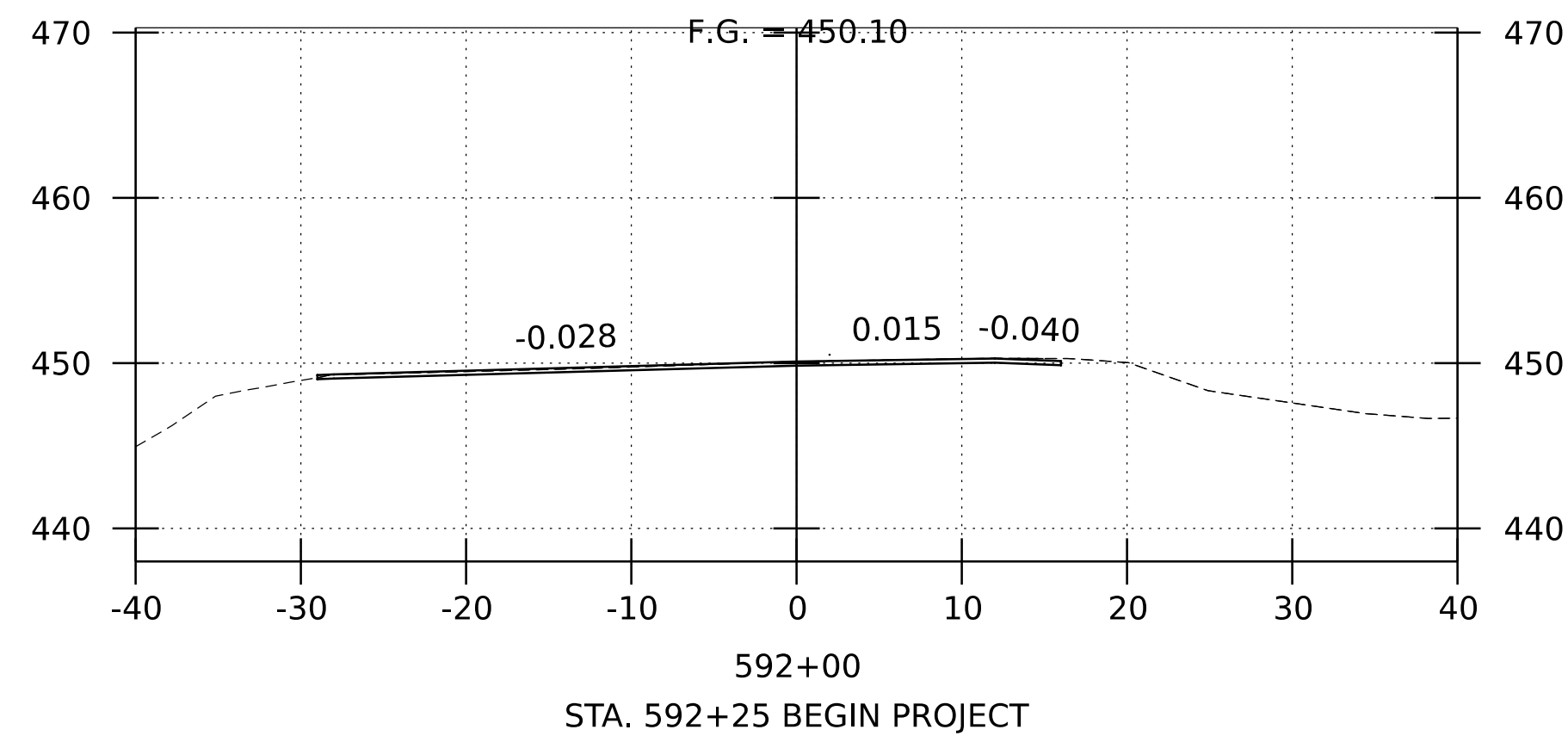
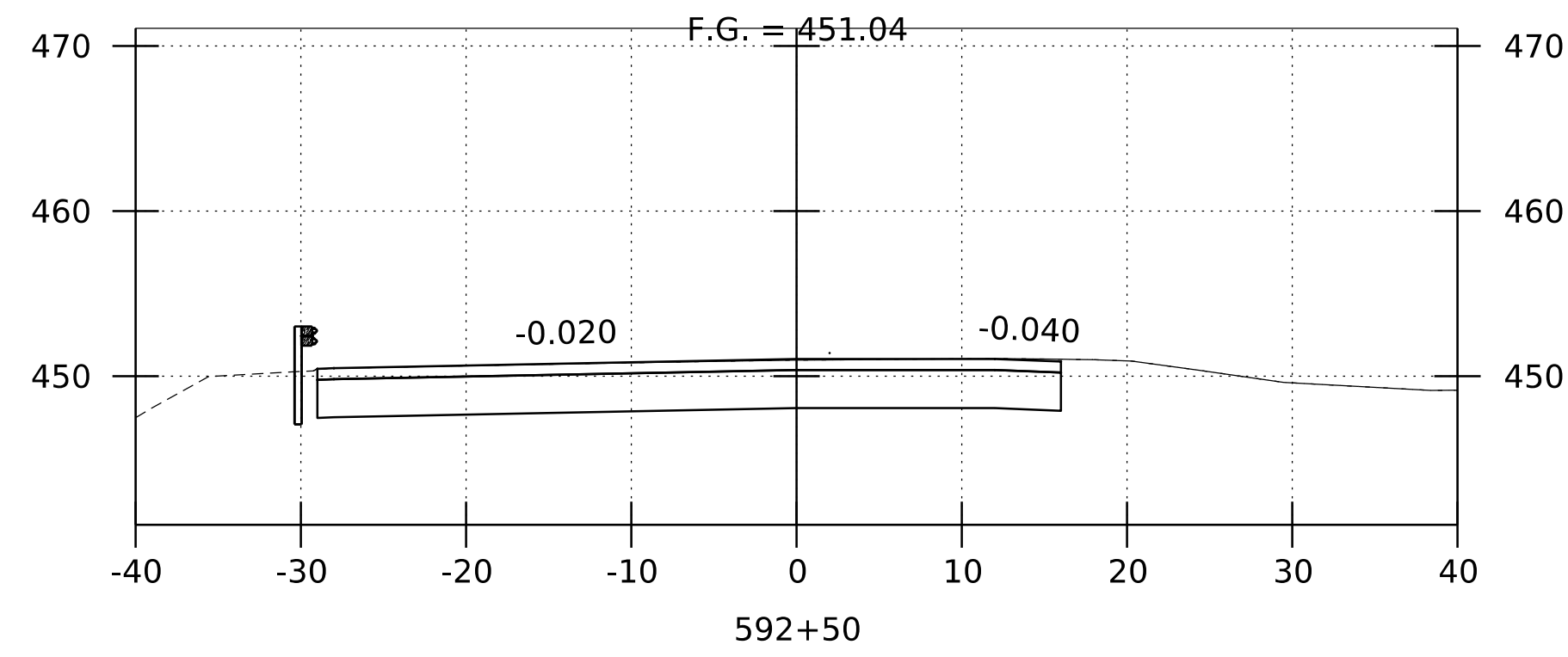


- NOTES:
- ELEVATIONS SHOWN TO THE NEAREST TENTH DEPICT THE EXISTING GROUND ELEVATION.
  - ELEVATIONS SHOWN TO THE NEAREST HUNDRETH DEPICT THE PROPOSED PROFILE GRADE ELEVATION.

I-91NB PROFILE  
HORIZONTAL SCALE: 1" = 20'-0"  
VERTICAL SCALE: 1" = 10'-0"



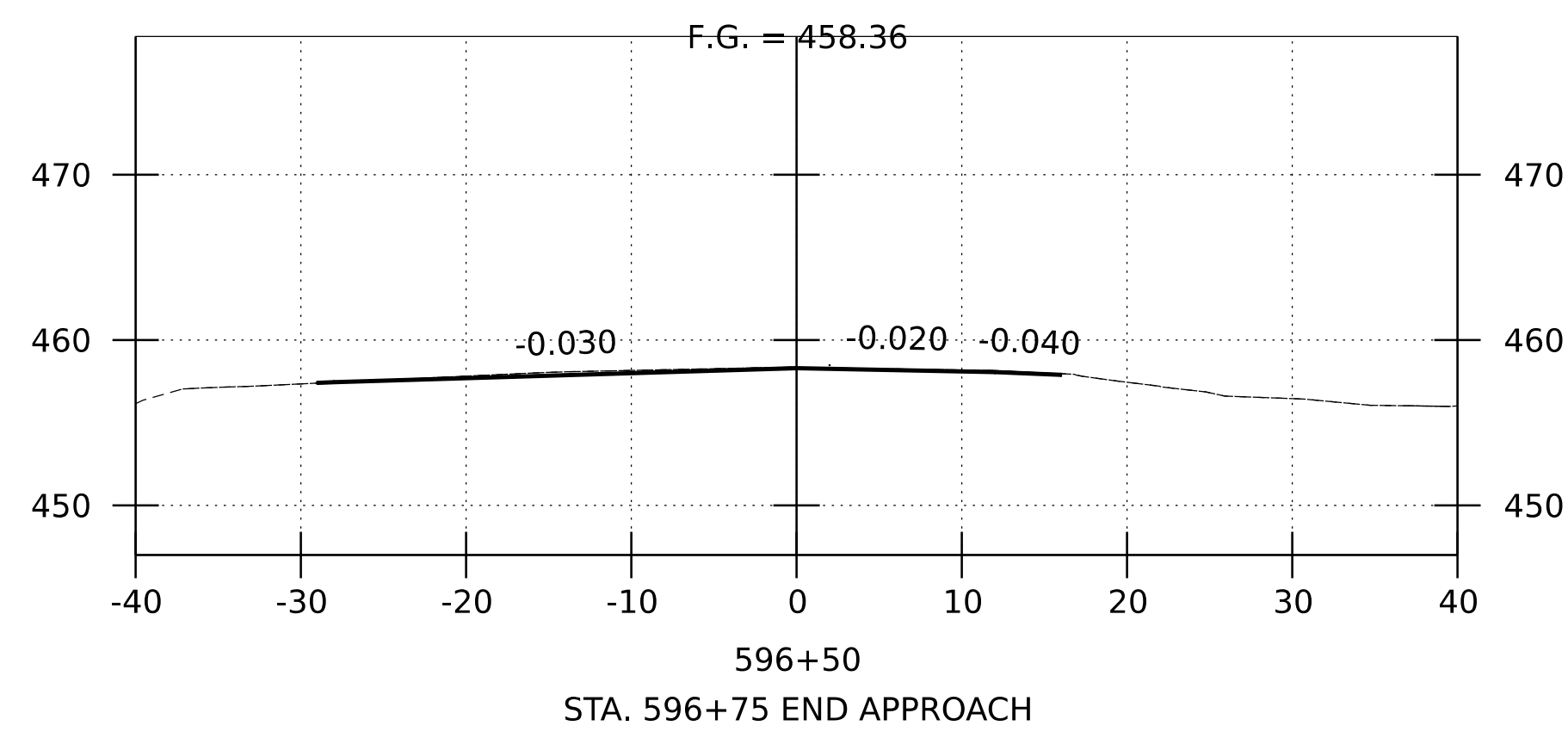
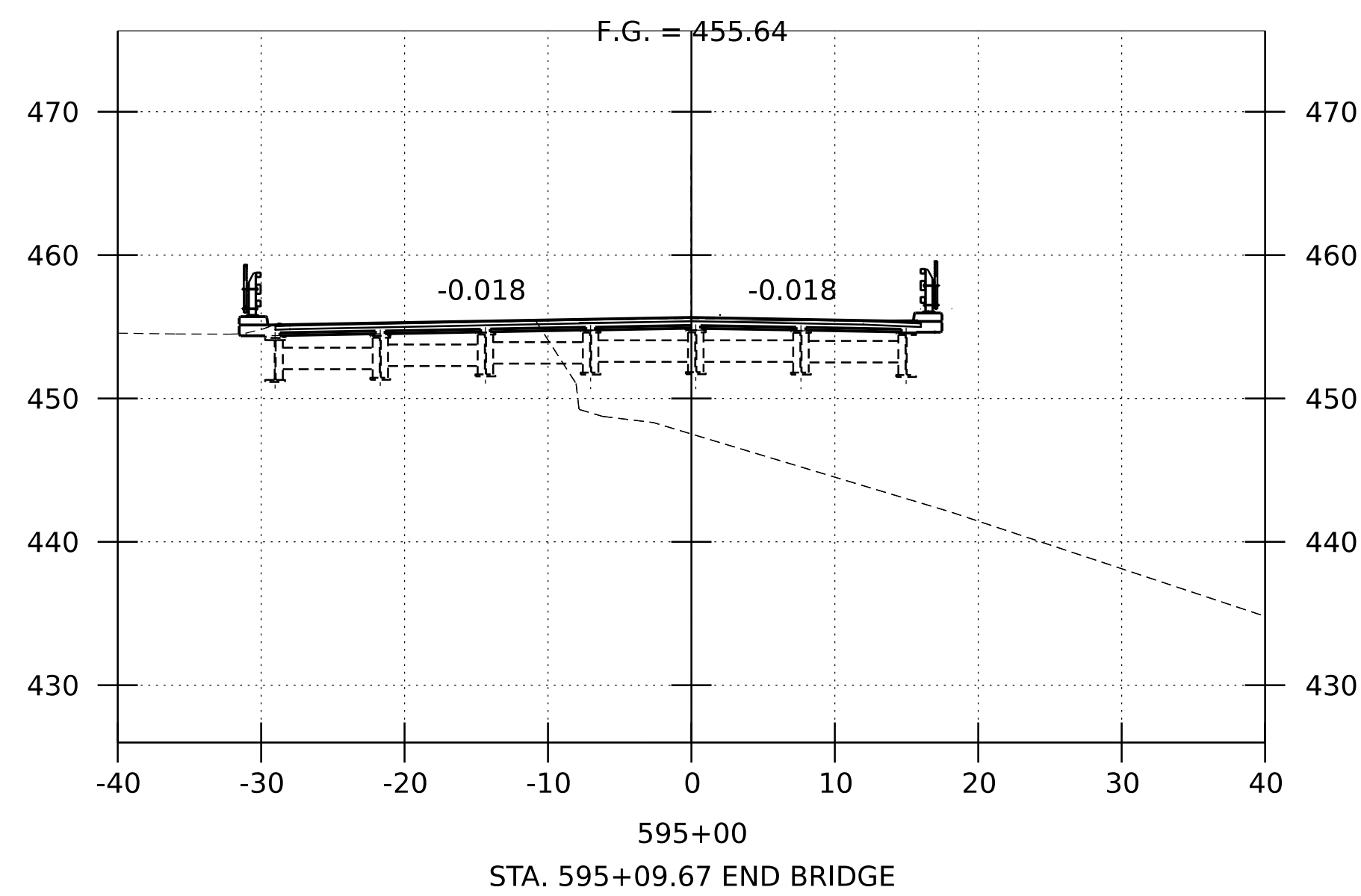
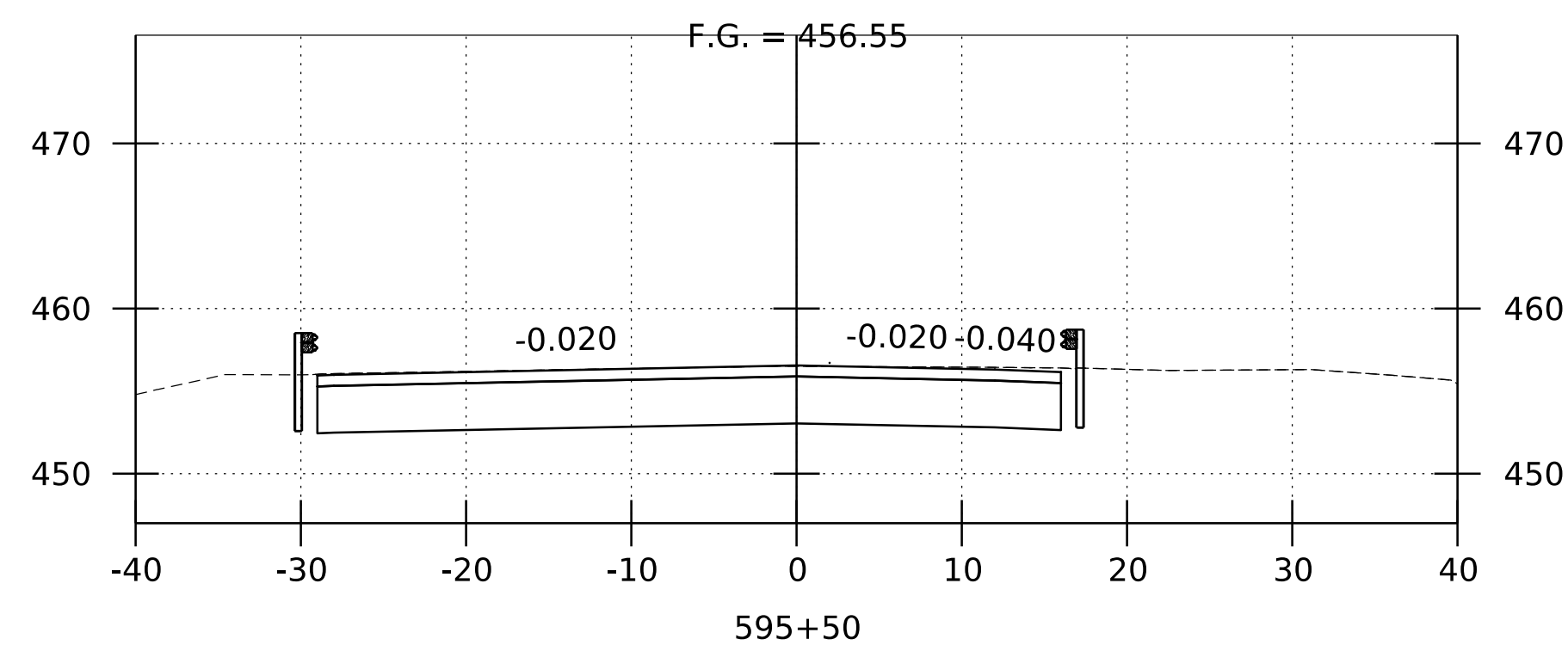
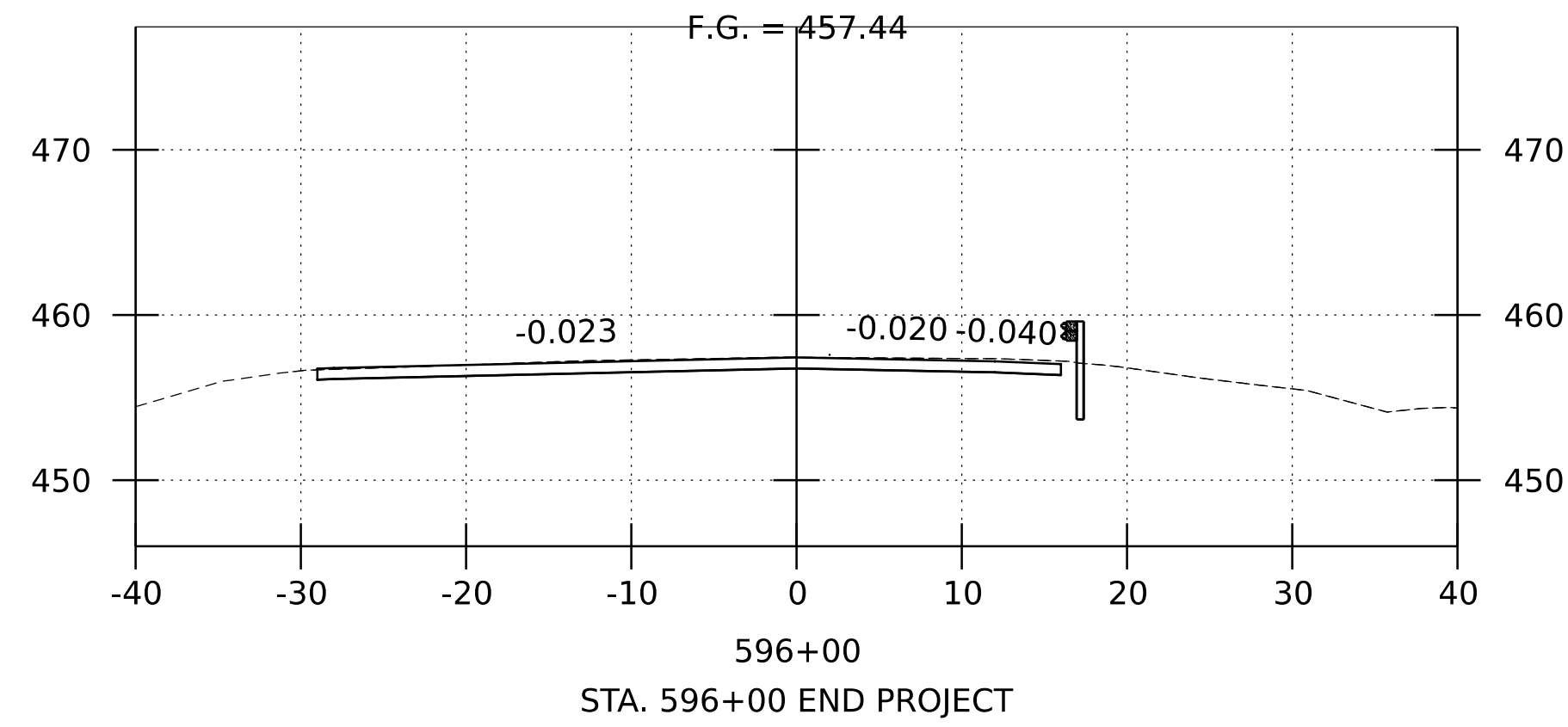
PROJECT NAME: BRATTLEBORO	
PROJECT NUMBER: IM 091-I(82)	
FILE NAME: z19a220pro_I-91NB.dgn	PLOT DATE: 10/28/2022
PROJECT LEADER: A.STOCKIN	DRAWN BY: M.CARIGNAN
DESIGNED BY: E.WILLIAMS	CHECKED BY: B.GEIGER
I-91NB PROFILE AT BRIDGE	SHEET 15 OF 66



STA. 591+50 TO STA. 594+50



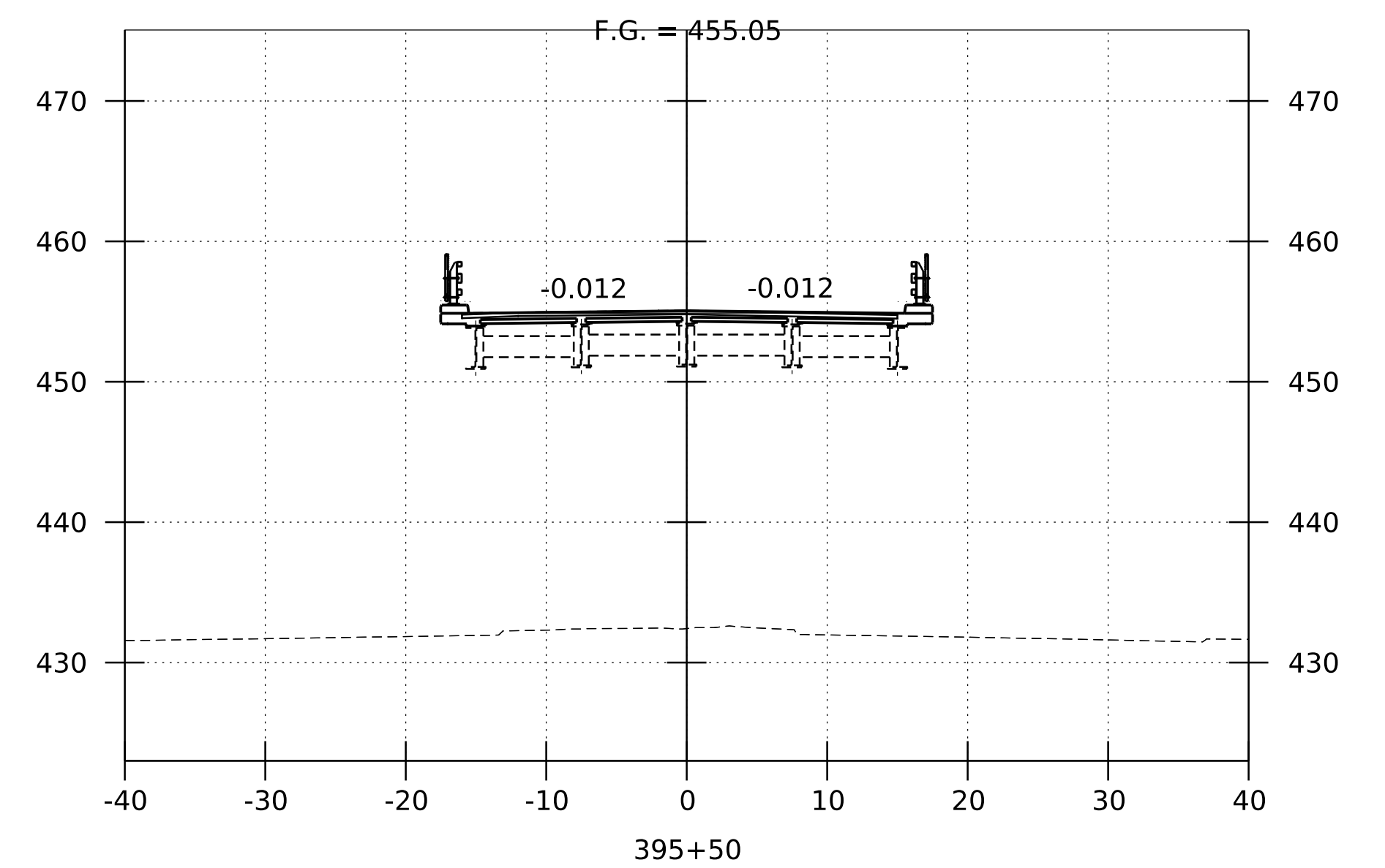
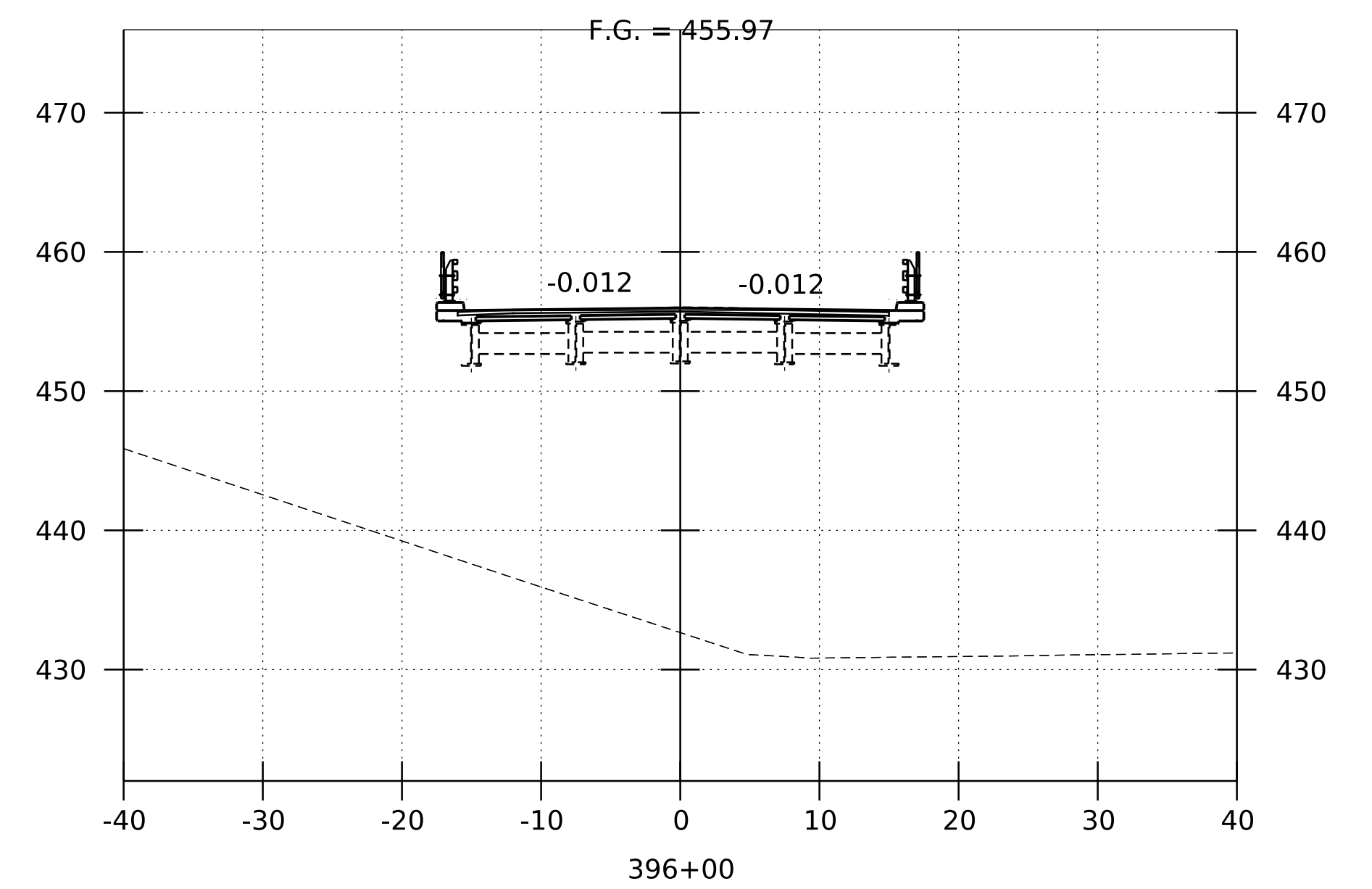
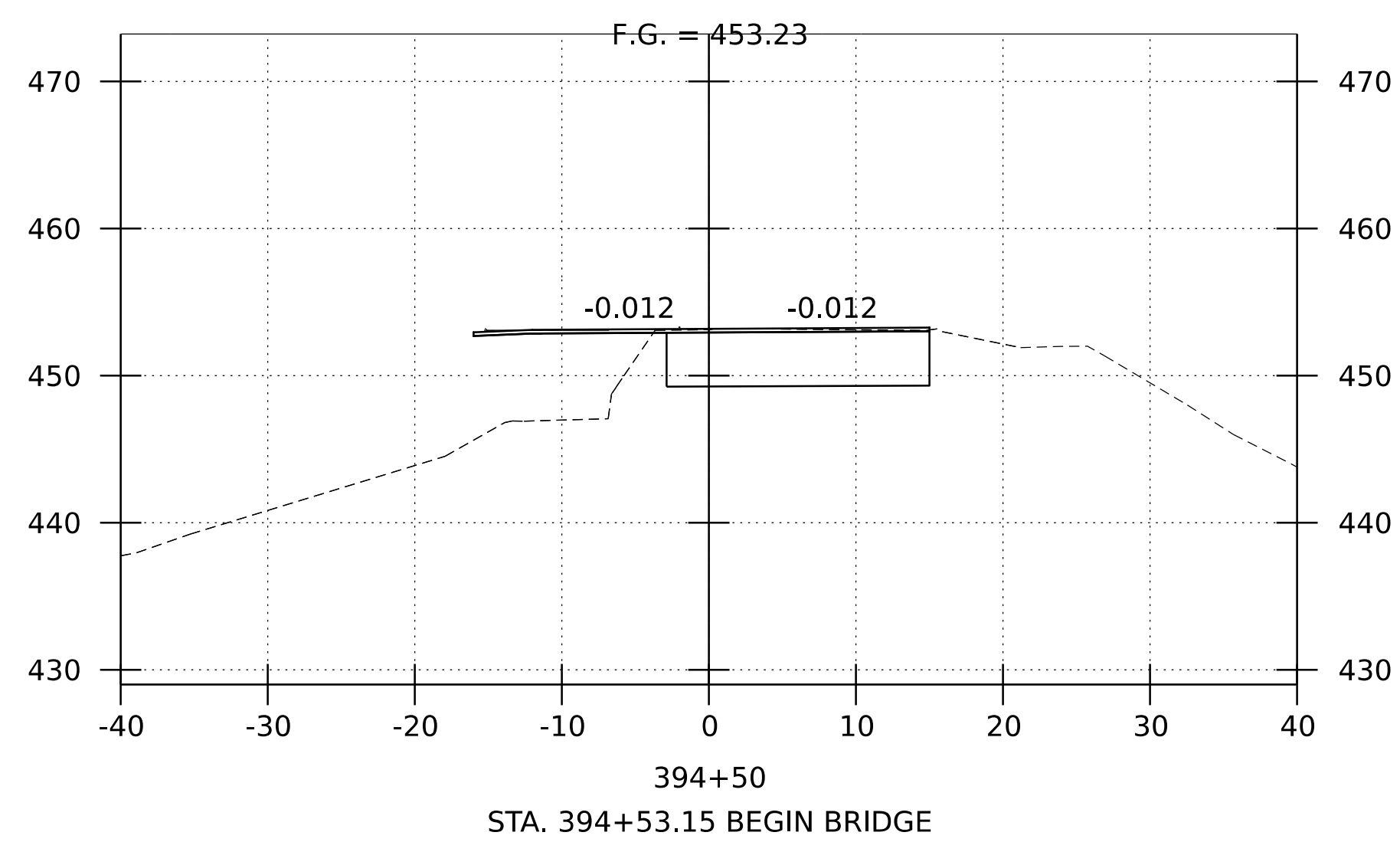
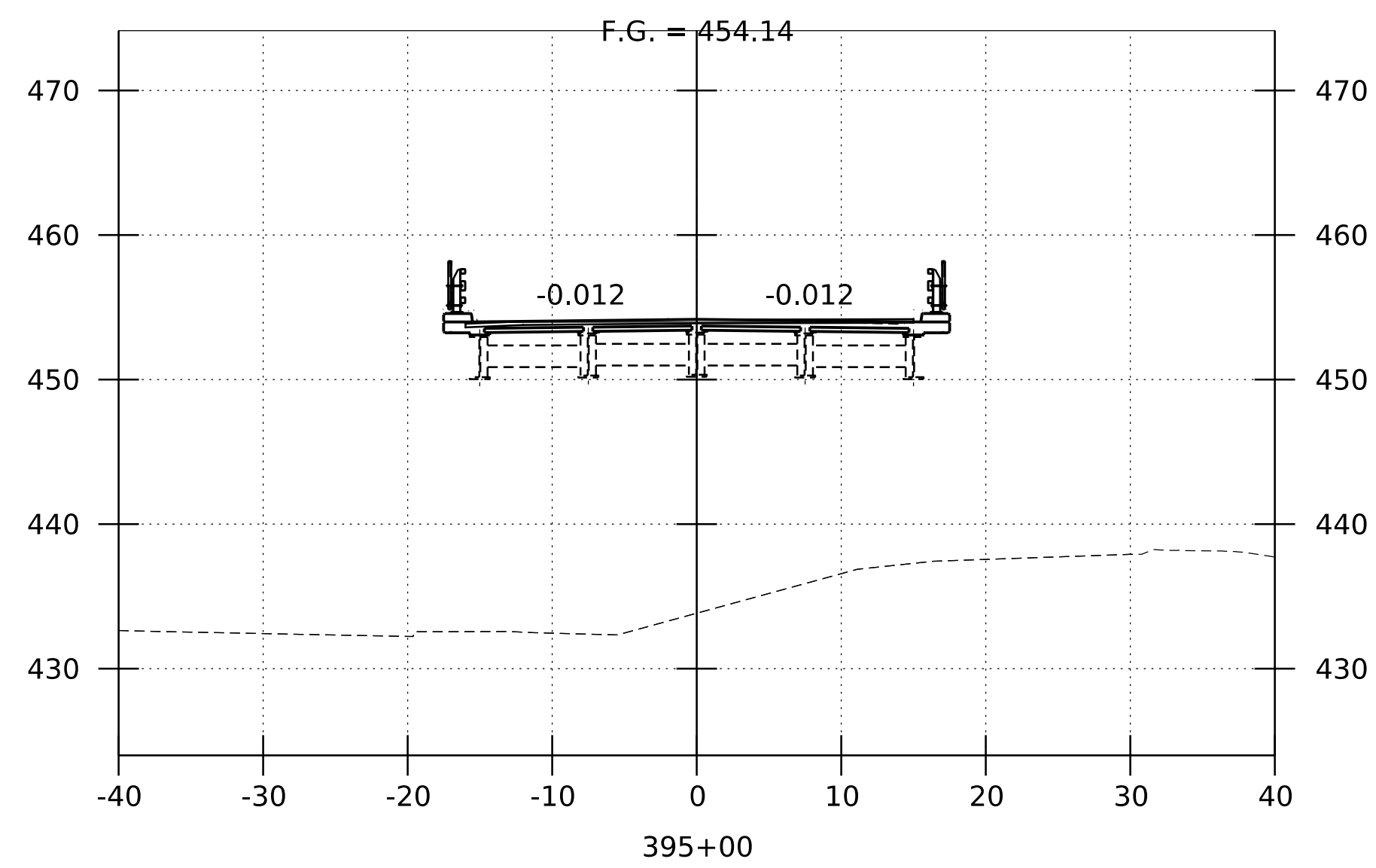
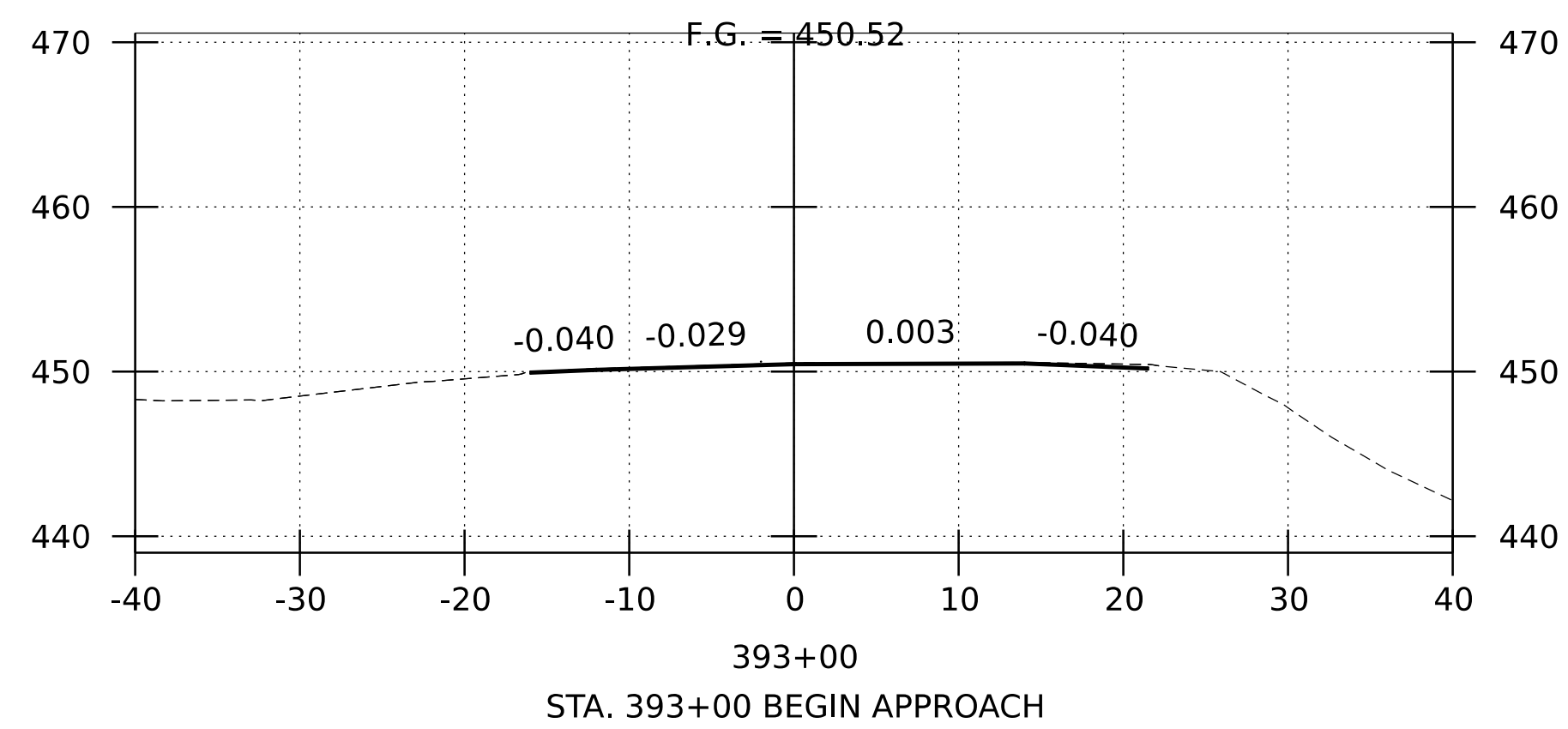
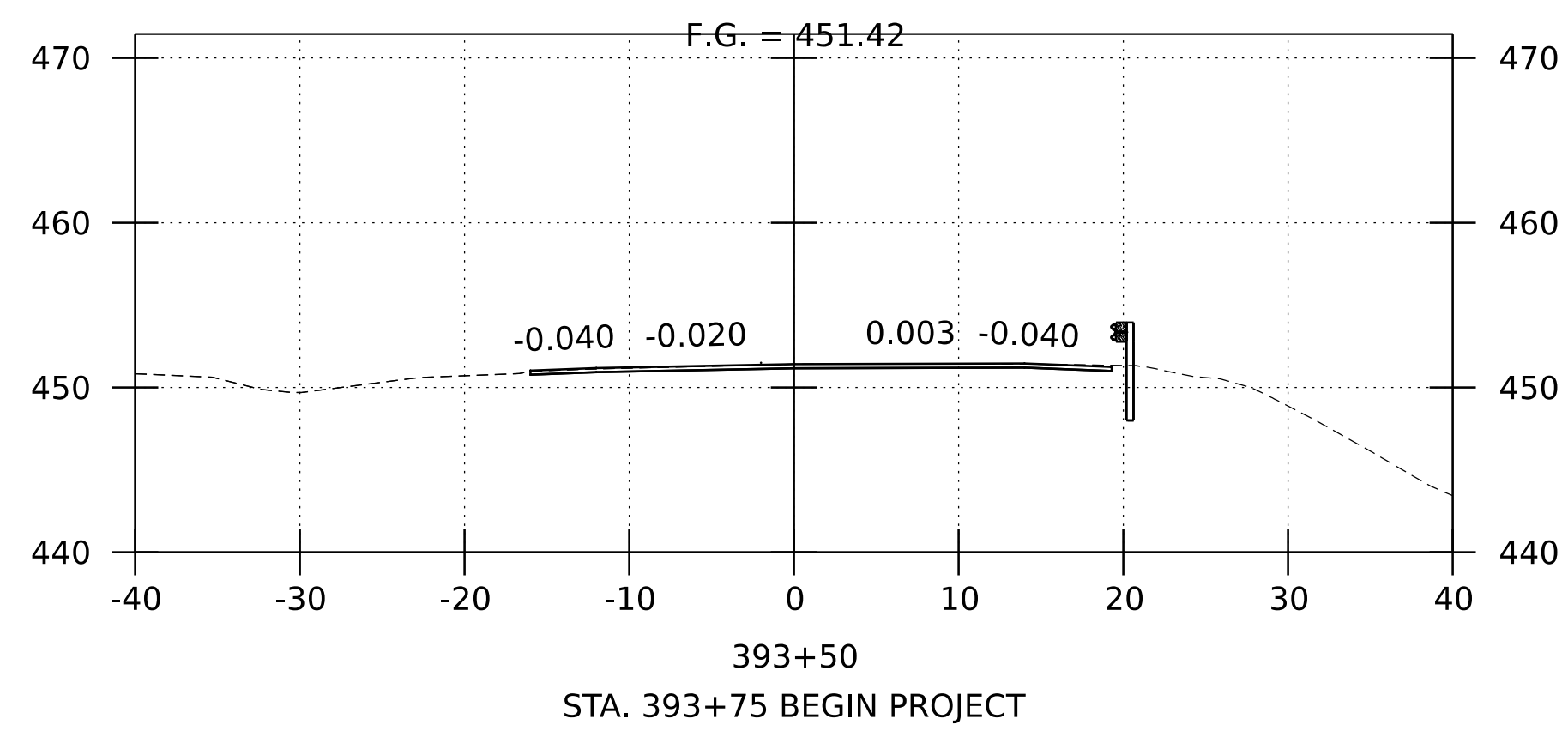
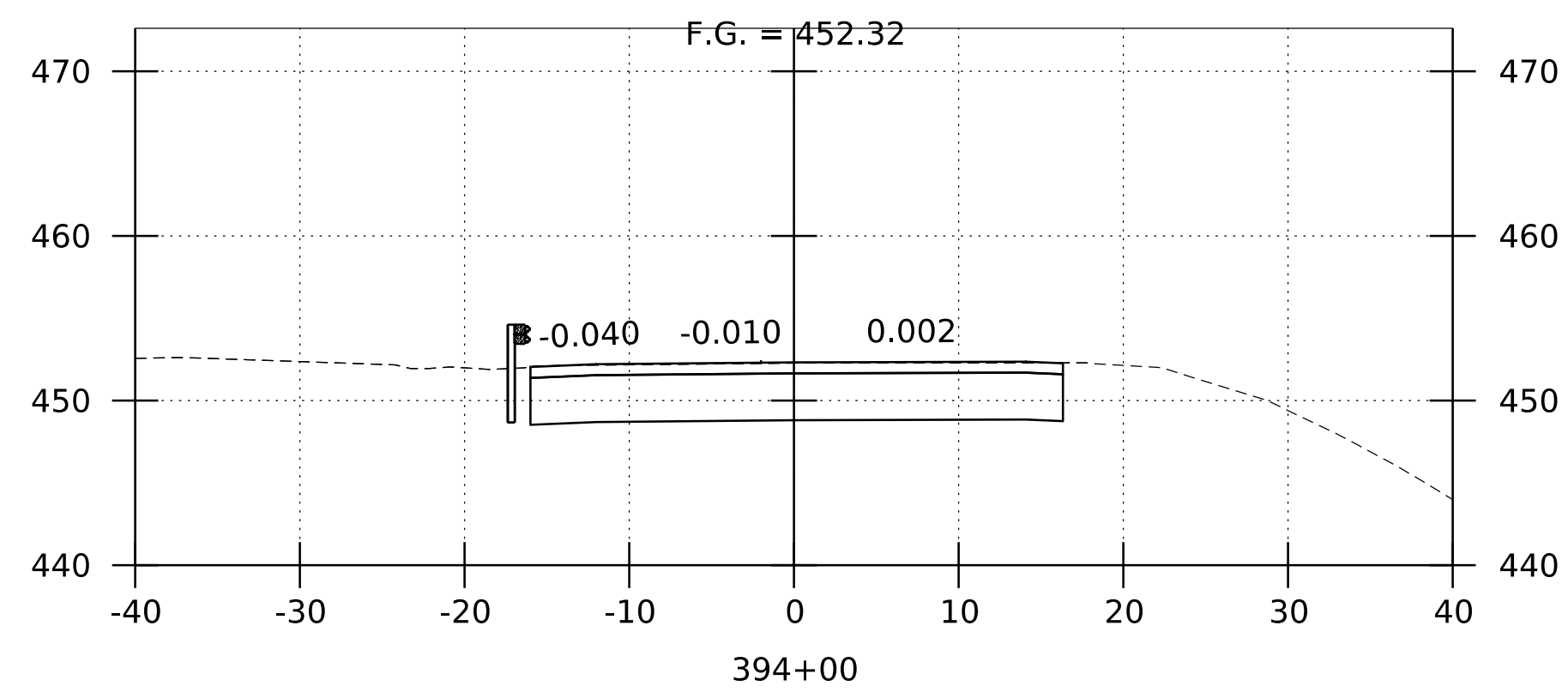
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PROJECT NUMBER:	IM 09I-I(82)	PROJECT LEADER:	A.STOCKIN	DRAWN BY:	M.CARIGNAN
		DESIGNED BY:	E.WILLIAMS	CHECKED BY:	B.GEIGER
		I-9ISB CROSS SECTION I		SHEET	16 OF 66



STA. 595+00 TO STA. 596+50



PROJECT NAME: BRATTLEBORO	
PROJECT NUMBER: IM 09I-I(82)	
FILE NAME: z19a220xs_9INB.9ISB.dgn	PLOT DATE: 10/28/2022
PROJECT LEADER: A.STOCKIN	DRAWN BY: M.CARIGNAN
DESIGNED BY: E.WILLIAMS	CHECKED BY: B.GEIGER
I-91SB CROSS SECTION 2	SHEET 17 OF 66



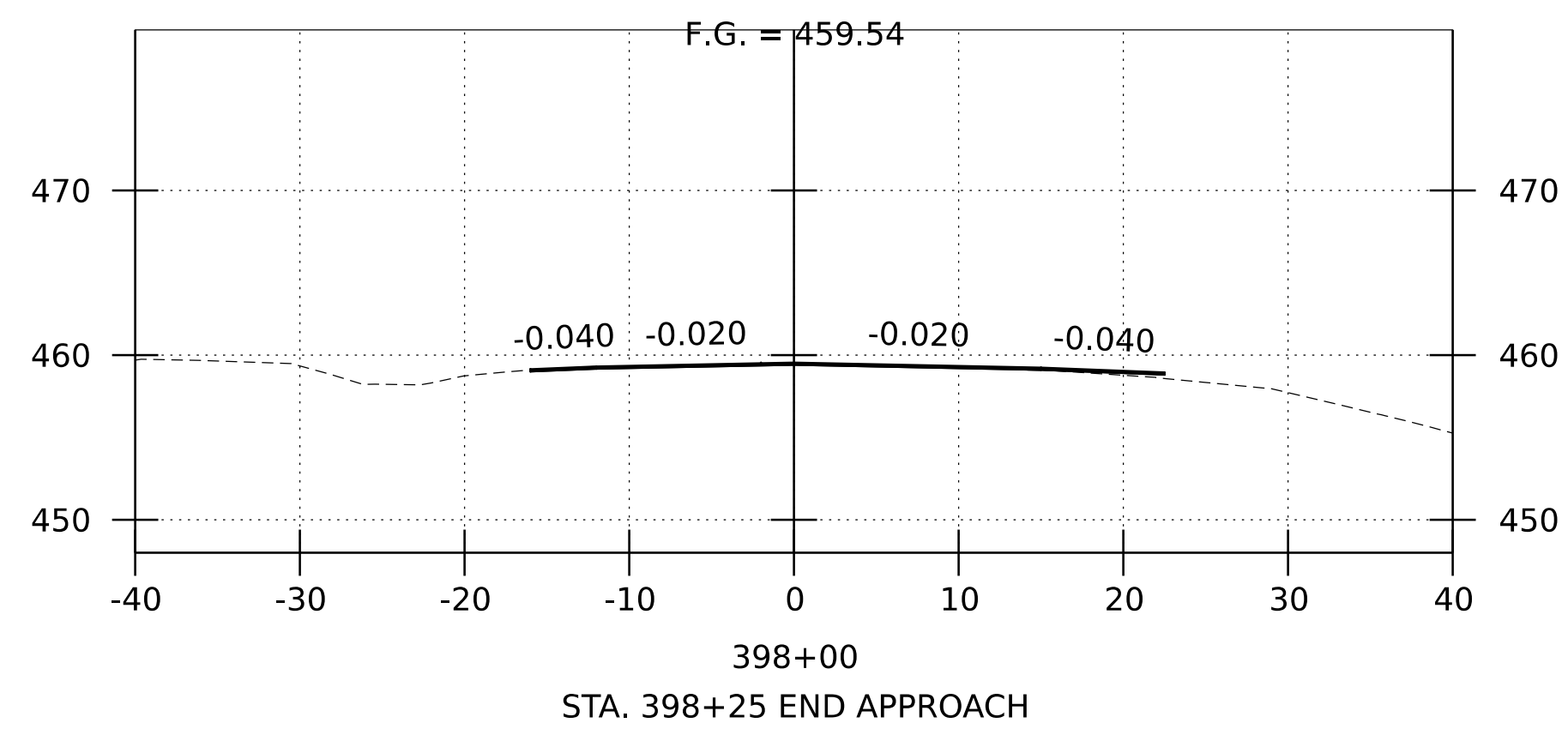
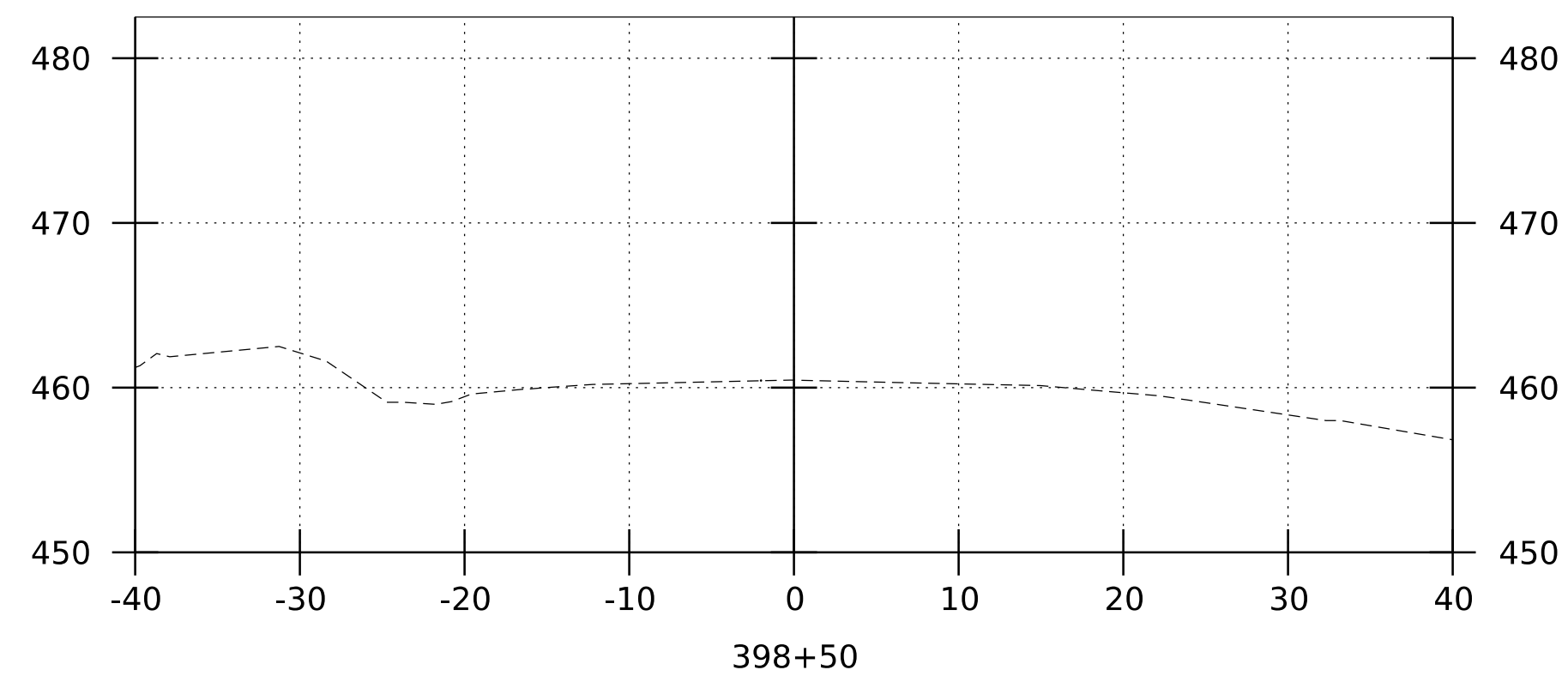
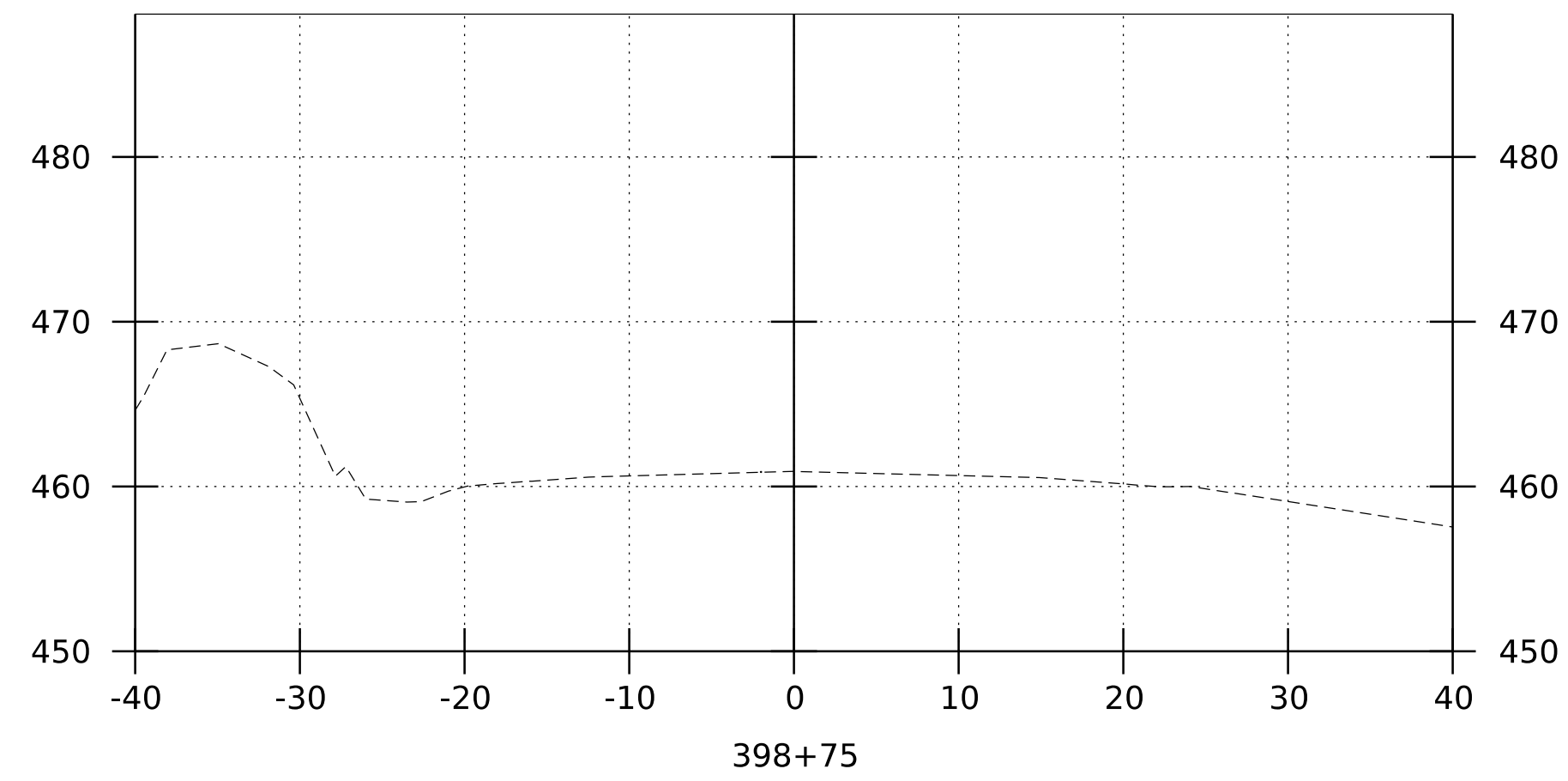
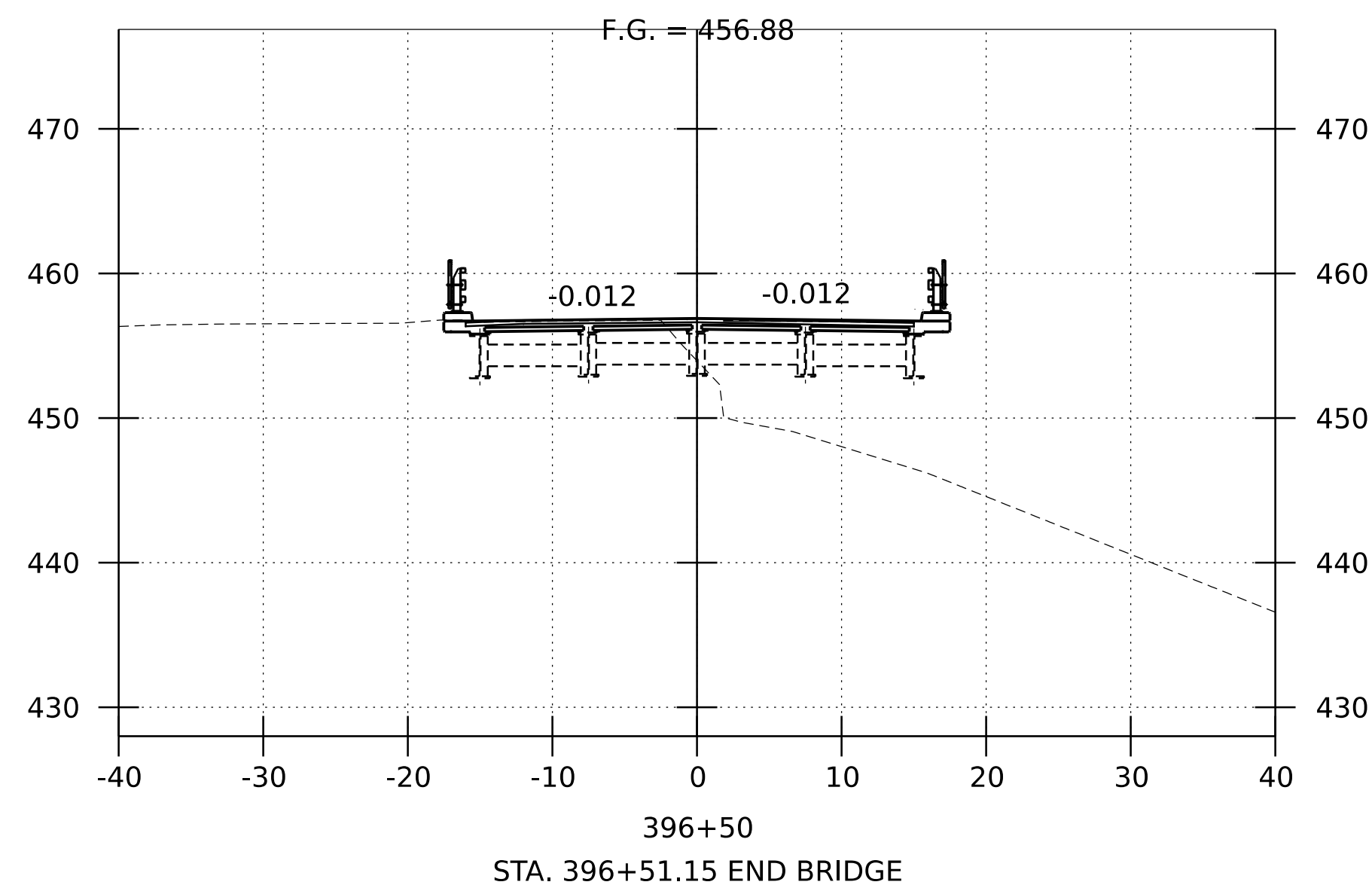
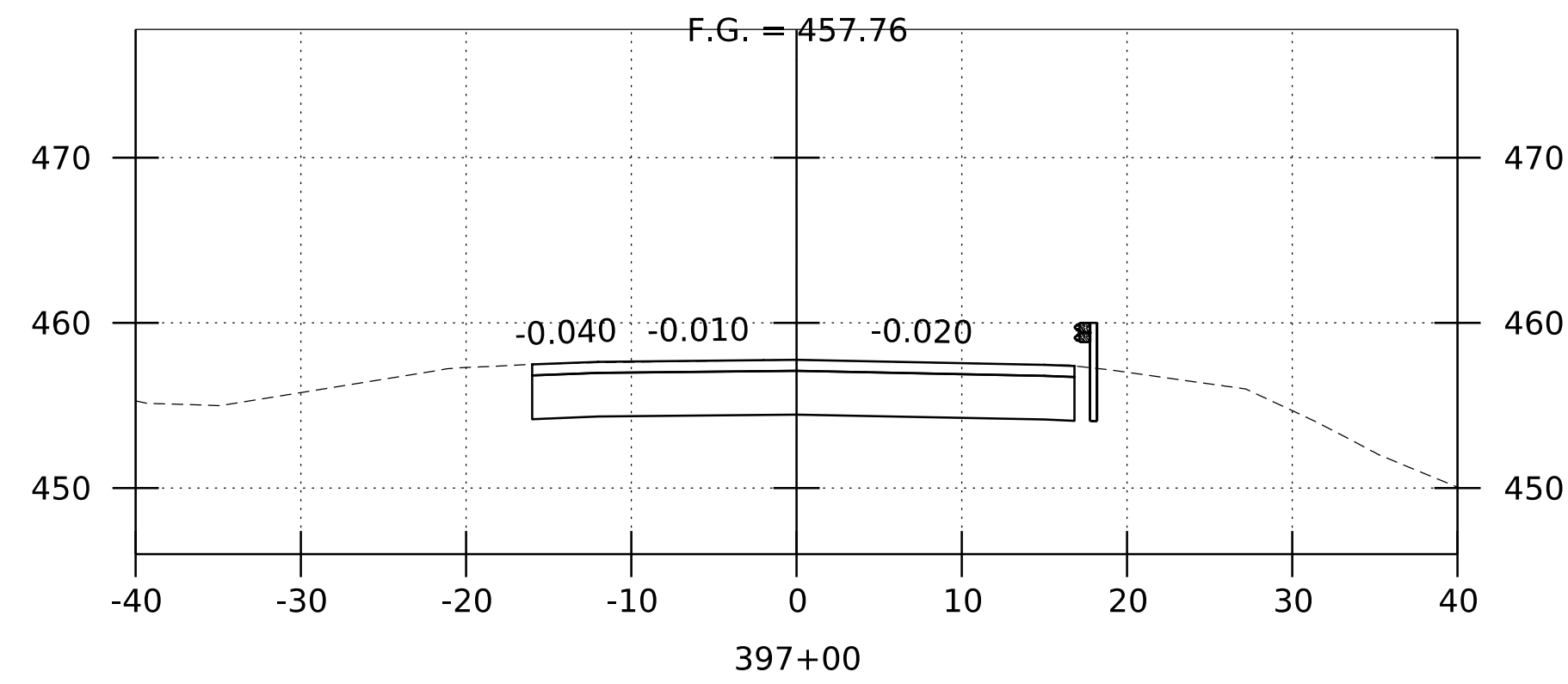
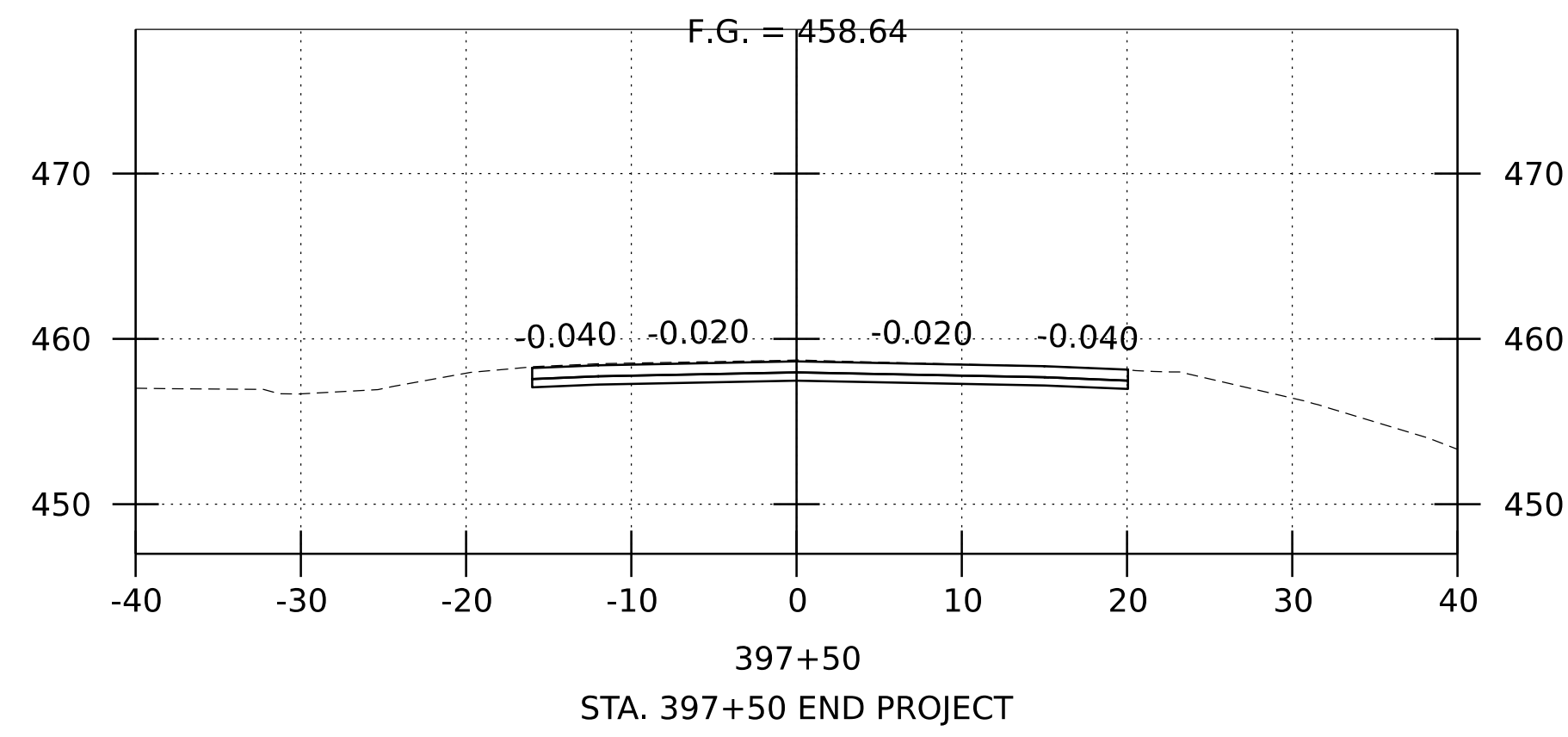
STA. 393+00 TO STA. 396+00
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PROJECT NAME:	BRATTLEBORO
PROJECT NUMBER:	IM 091-1(82)

FILE NAME: z19a220xs_9INB_9ISB.dgn  
PROJECT LEADER: A.STOCKIN  
DESIGNED BY: E.WILLIAMS  
I-9INB CROSS SECTION I

PLOT DATE: 10/28/2022  
DRAWN BY: M.CARIGNAN  
CHECKED BY: B.GEIGER  
SHEET 18 OF 66



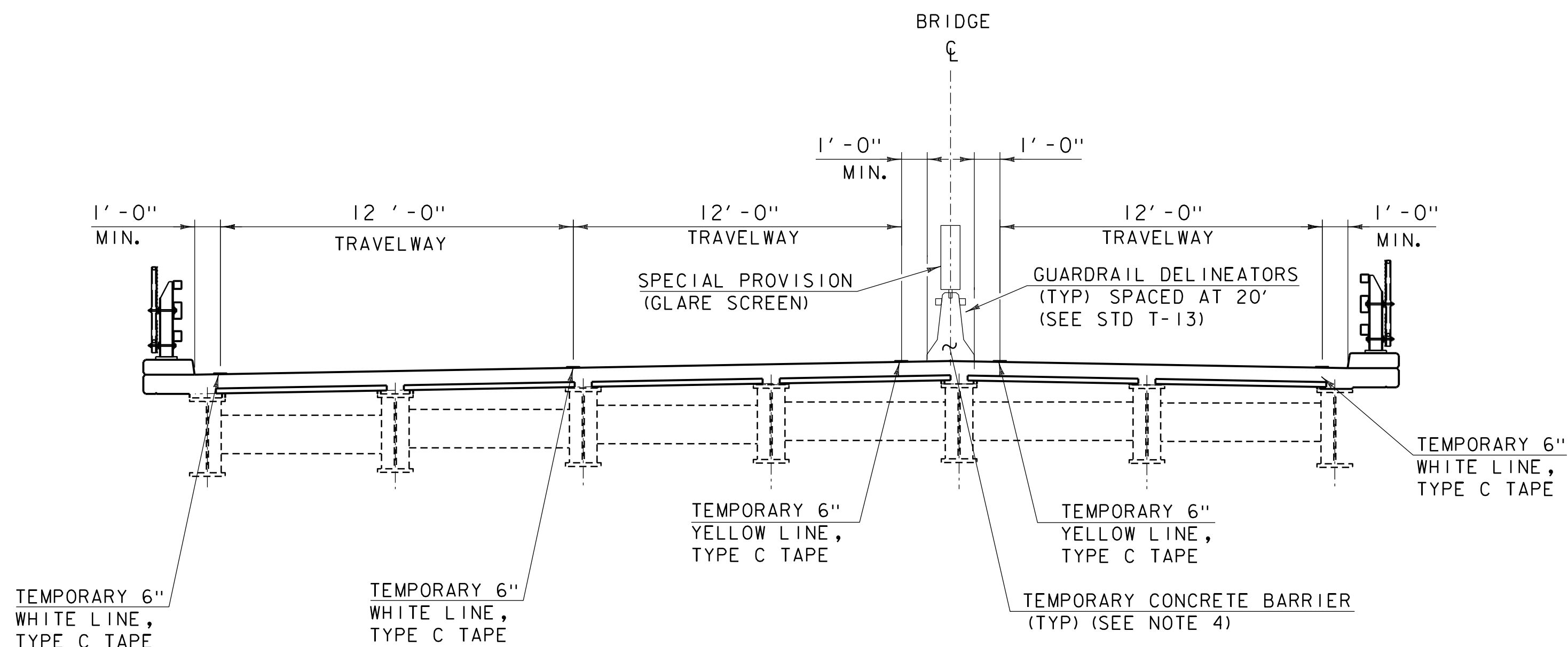
STA. 396+50 TO STA. 398+75



PROJECT NAME: BRATTLEBORO  
PROJECT NUMBER: IM 09I-I(82)

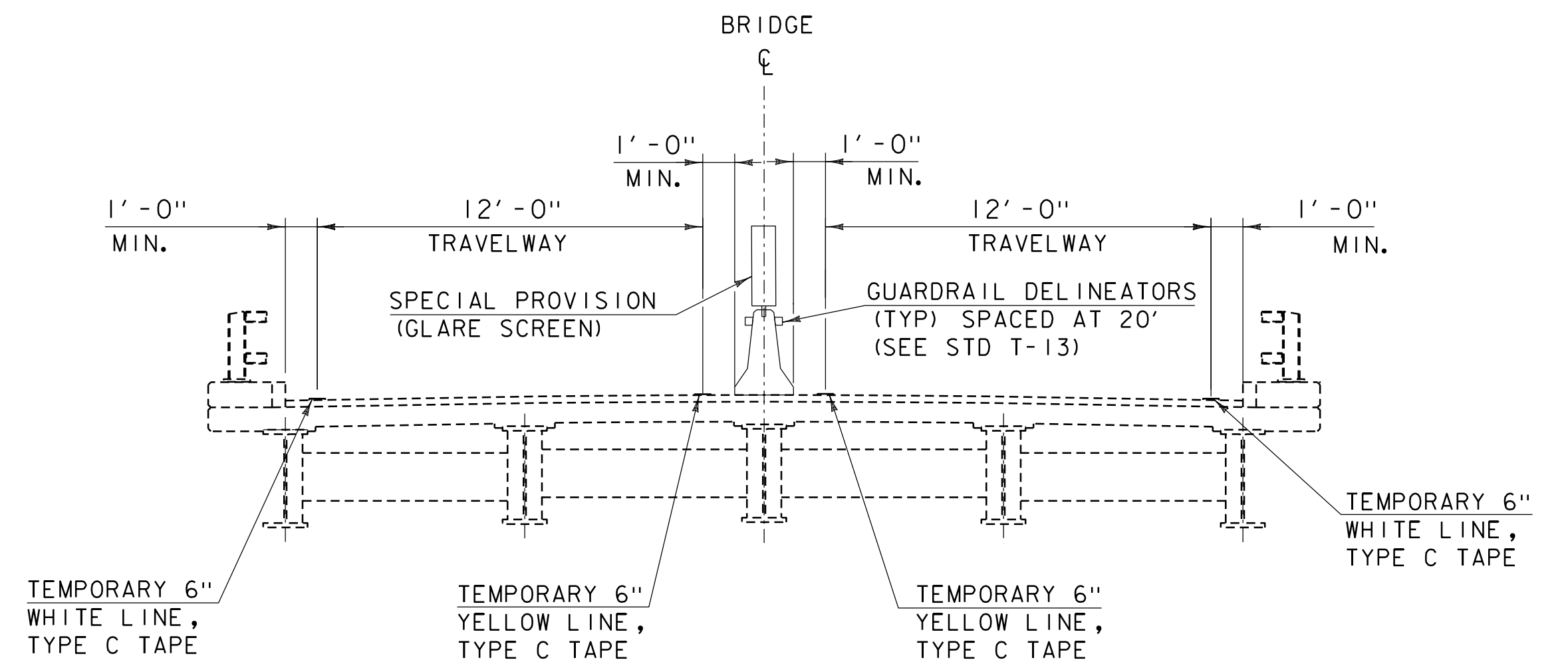
FILE NAME: z19a220xs_9INB.9ISB.dgn  
PROJECT LEADER: A.STOCKIN  
DESIGNED BY: E.WILLIAMS  
I-91NB CROSS SECTION 2

PLOT DATE: 10/28/2022  
DRAWN BY: M.CARIGNAN  
CHECKED BY: B.GEIGER  
SHEET 19 OF 66



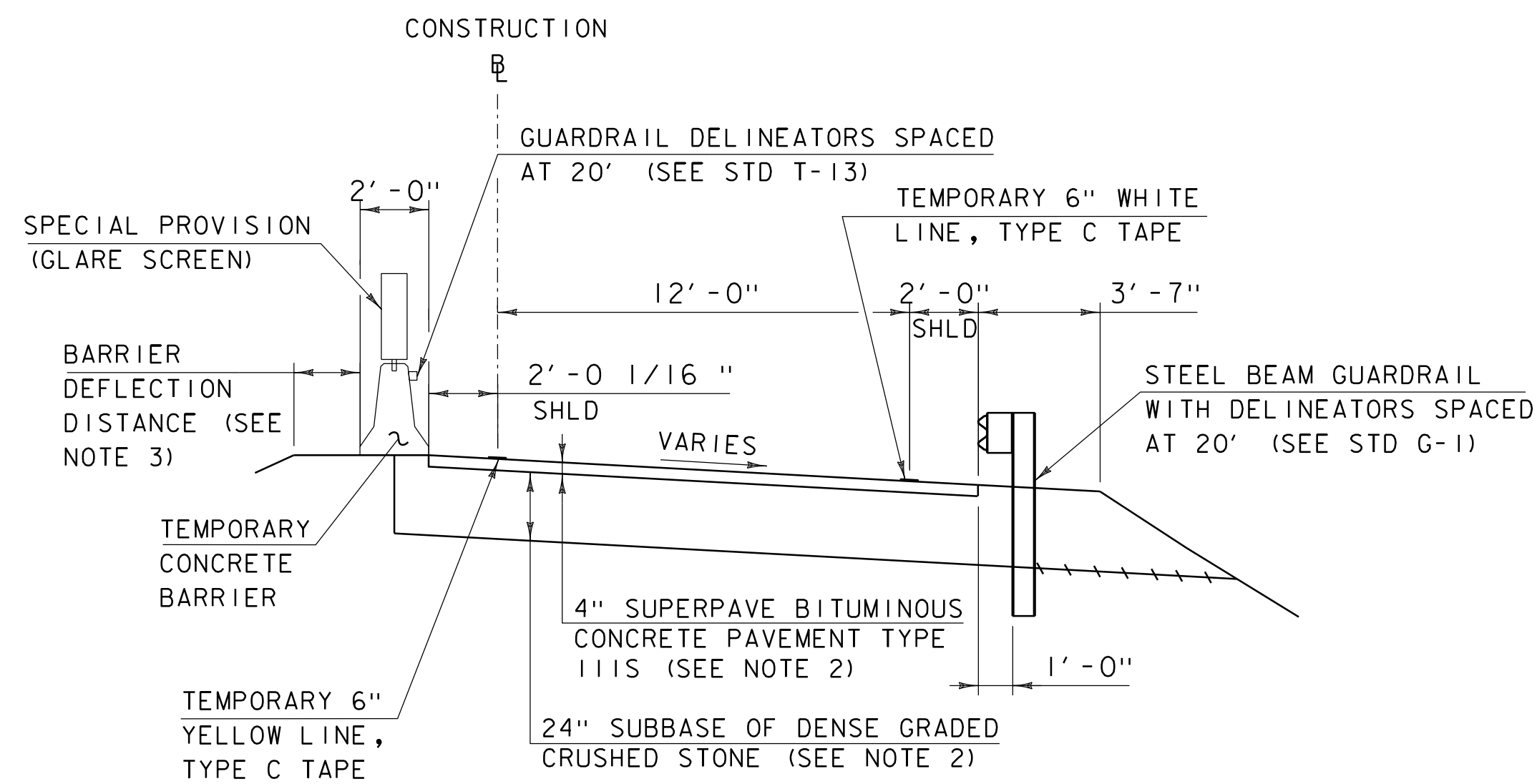
**BRIDGE CROSSOVER TYPICAL**  
**(PROPOSED BRIDGE DECK - SB)**

SCALE: NOT TO SCALE



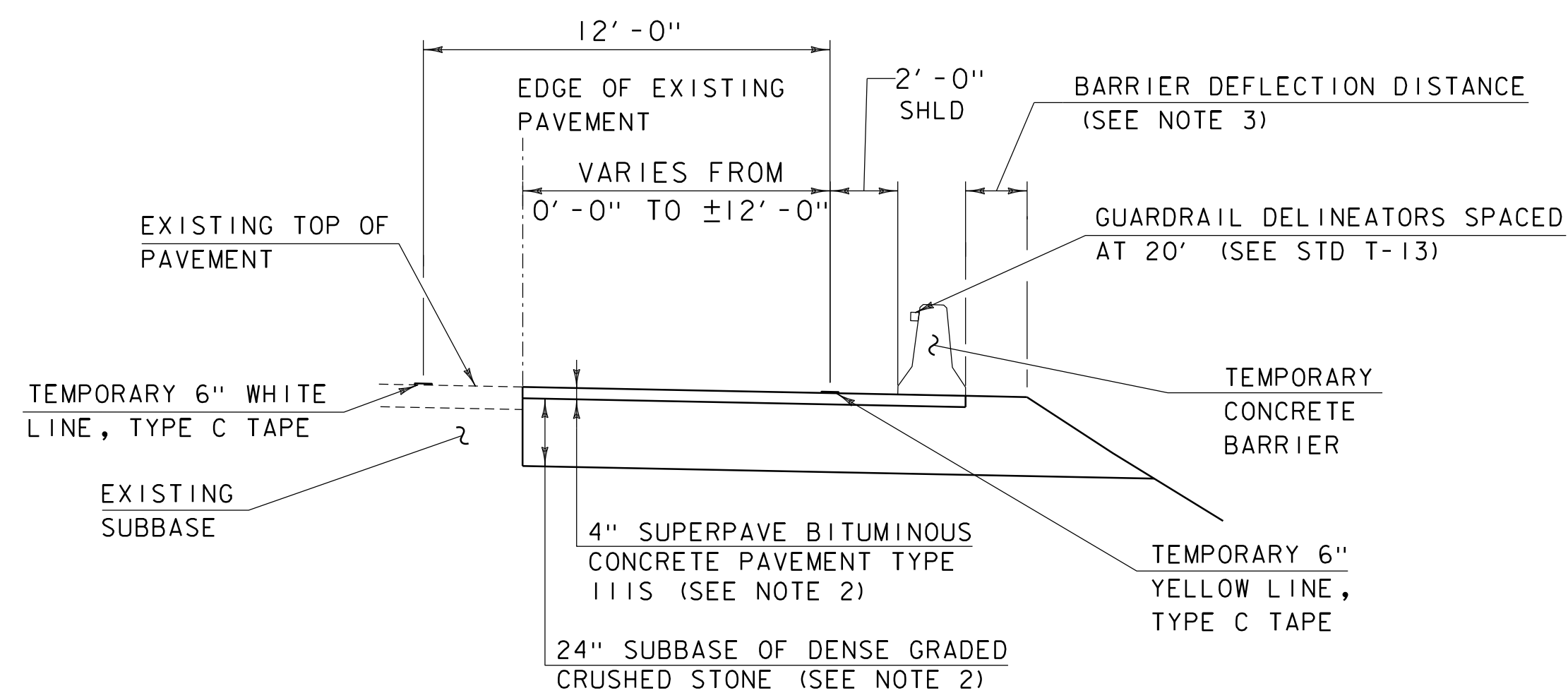
**BRIDGE CROSSOVER TYPICAL**  
**(EXISTING BRIDGE DECK - NB)**

SCALE: NOT TO SCALE



**MEDIAN CROSSOVER TYPICAL**

SCALE: NOT TO SCALE



**WIDENING TYPICAL**

SCALE: NOT TO SCALE

LEFT	RIGHT	PLEASE
	LANE	MERGE
	CLOSED	EARLY

### PCMS MESSAGES

#### PCMS NOTES:

- PORTABLE CHANGEABLE MESSAGE BOARDS TO BE LOCATED 1.5 MILES PRIOR TO MERGING TAPERS ON I-91. ADDITIONALLY TWO PORTABLE CHANGEABLE MESSAGE BOARDS SHALL BE AVAILABLE AS REQUESTED BY VERMONT STATE POLICE. THE CONTRACTOR SHALL COORDINATE WITH POLICE ON LOCATIONS AND MESSAGES.
- PORTABLE SIGNS SHALL BE PLACED ON THE EDGE OF THE ROADWAY A MINIMUM OF ONE FOOT ABOVE THE TRAVELED WAY. ALL VEGETATION THAT INTERFERES WITH VISIBILITY OF THE SIGNS SHALL BE REMOVED. THE BOTTOM OF THE SIGN FACE SHALL BE 5' ABOVE THE ROADWAY WHEN PLACED BEHIND GUARDRAIL.

#### CROSSOVER NOTES:

- REFLECTORS SHALL BE YELLOW FOR THE LEFT-HAND SIDE AND WHITE FOR THE RIGHT-HAND SIDE OF THE CROSSOVERS. REFLECTORS SHALL BE INCIDENTAL TO ITEM 621.90, "TEMPORARY TRAFFIC BARRIER". REFLECTORS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AT LOCATIONS PER VAOT STANDARD T-13.
- BITUMINOUS CONCRETE PAVEMENT, EXCAVATION, FILL MATERIALS, AND SUBBASE MATERIALS REQUIRED TO CONSTRUCT TEMPORARY MEDIAN CROSSOVER SHALL BE INCIDENTAL TO ITEM 900.645, "SPECIAL PROVISION (TEMPORARY ROADWAY, NORTHBOUND CROSSOVER)" OR ITEM 900.645, "SPECIAL PROVISION (TEMPORARY ROADWAY, SOUTHBOUND CROSSOVER)".
- LEVEL AREA BEHIND BARRIER MUST BE AT LEAST THE DEFELCTION DISTANCE OF THE BARRIER SYSTEM BASED ON NCHRP 350 OR MASH TESTING.
- TEMPORARY PAVEMENT MARKINGS SHALL BE TEMPORARY PAVEMENT MARKING TAPE, TYPE C AND SHALL BE PAID AS ITEM 646.6212, "TEMPORARY 6 INCH WHITE LINE, TYPE C TAPE" OR ITEM 646.6312, "TEMPORARY 6 INCH YELLOW LINE, TYPE C TAPE".

### GENERAL TRAFFIC CONTROL NOTES

- THE EXISTING SPEED LIMIT ON I-91 IS 65 MPH. THE SPEED LIMIT WILL BE REDUCED TO 55 MPH IN THE WORK ZONE FOR THIS PROJECT. ANY EXISTING SPEED LIMIT SIGNS WITH THE SPEED REDUCTION AREA SHALL BE COMPLETELY COVERED. ALL OTHER EXISTING SIGNS IN CONFLICT WITH THE TEMPORARY TRAFFIC CONTROL CONDITIONS SHALL BE REMOVED OR COMPLETELY COVERED. A RESUMED SPEED LIMIT SHALL BE POSTED AT THE END OF THE WORK ZONE.

PROJECT NAME: BRATTLEBORO

PROJECT NUMBER: IM 091-I(82)

FILE NAME: z19a220+ctyp.dgn

PROJECT LEADER: A.STOCKIN

DESIGNED BY: E.WILLIAMS

TRAFFIC CONTROL NOTES AND TYPICALS

PLOT DATE: 10/28/2022

DRAWN BY: M.CARIGNAN

CHECKED BY: B.GEIGER

SHEET 20 OF 66

**wsp**

PHASE 1

SB CROSSOVERS

- CONSTRUCT I-91 SB MEDIAN CROSSOVERS
- CONSTRUCT I-91 SB WIDENING

PHASE 2

BRIDGE 4S REPAIRS

- WITH TRAFFIC ON I-91 SB MEDIAN CROSSOVERS CONSTRUCT SB BRIDGE REPAIRS

PHASE 3

NB CROSSOVERS

- CONSTRUCT I-91 NB MEDIAN CROSSOVERS

PHASE 4

BRIDGE 4N REPAIRS

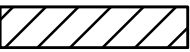
- WITH TRAFFIC ON I-91 NB MEDIAN CROSSOVERS CONSTRUCT NB BRIDGE REPAIRS

PHASE 5

CROSSOVER REMOVAL, FINAL PAVING AND PAVEMENT MARKINGS

- WITH TEMPORARY LANE CLOSURES DURING WORKING HOURS REMOVE CROSSOVERS (PAVEMENT ONLY) AND DEVELOP FINAL GRADING, TURF ESTABLISHMENT, PAVING AND PAVEMENT MARKINGS

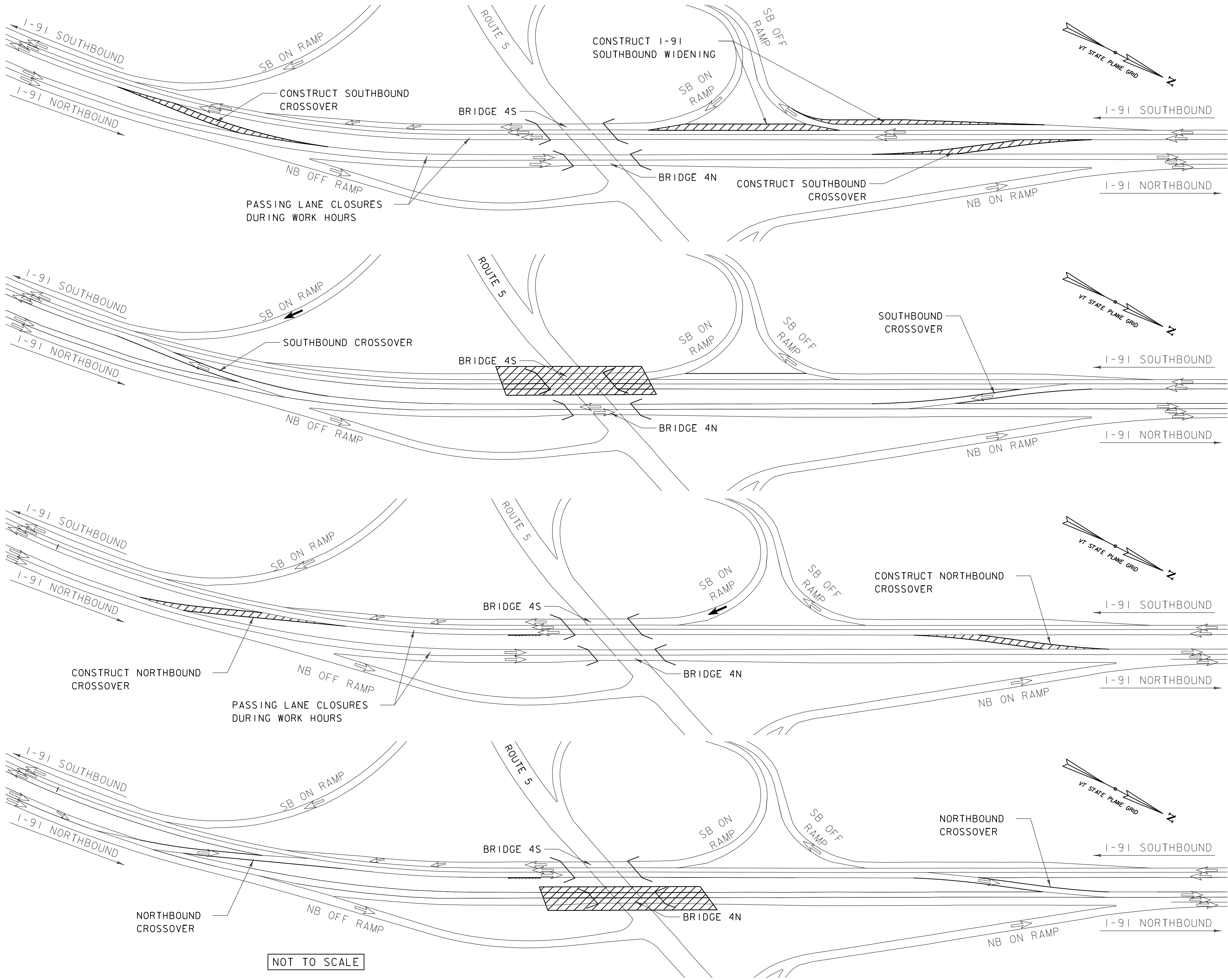
LEGEND

 AREA OF CONSTRUCTION ACTIVITY

 DIRECTION OF TRAFFIC

GENERAL PHASING NOTES

1. THIS PHASING PLAN IS SCHEMATIC ONLY AND SHOULD BE USED AS A REFERENCE. SEE TRAFFIC CONTROL PLANS FOR MORE DETAIL.



PROJECT NAME: BRATTLEBORO

PROJECT NUMBER: IM 091-I(82)

FILE NAME: z19a220bdr_tcp-phasing.dgn

PROJECT LEADER: A.STOCKIN

DESIGNED BY: E.WILLIAMS

TRAFFIC CONTROL PHASING PLAN

PLOT DATE: 10/28/2022

DRAWN BY: M.CARIGNAN

CHECKED BY: B.GEIGER

SHEET 21 OF 66



TEMPORARY 6" YELLOW LINE

STA. 102+50 - STA. 107+75, CL

PAVEMENT MARKING MASK

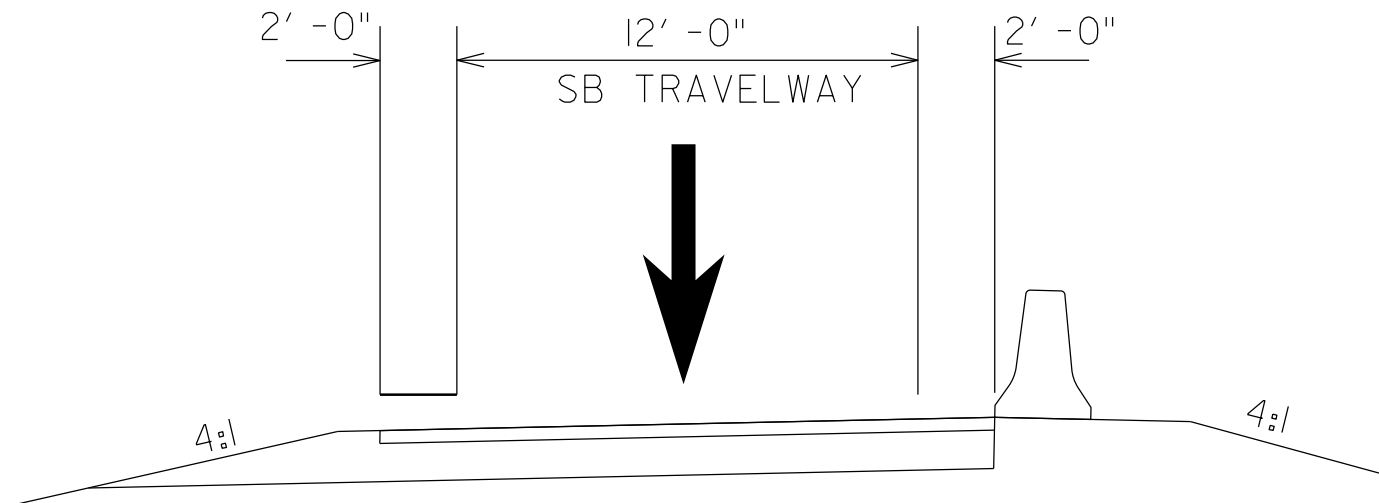
STA. 377+99 - STA. 384+56, CL (NB)

TEMPORARY 6" WHITE LINE

STA. 102+65 - STA. 107+75, LT

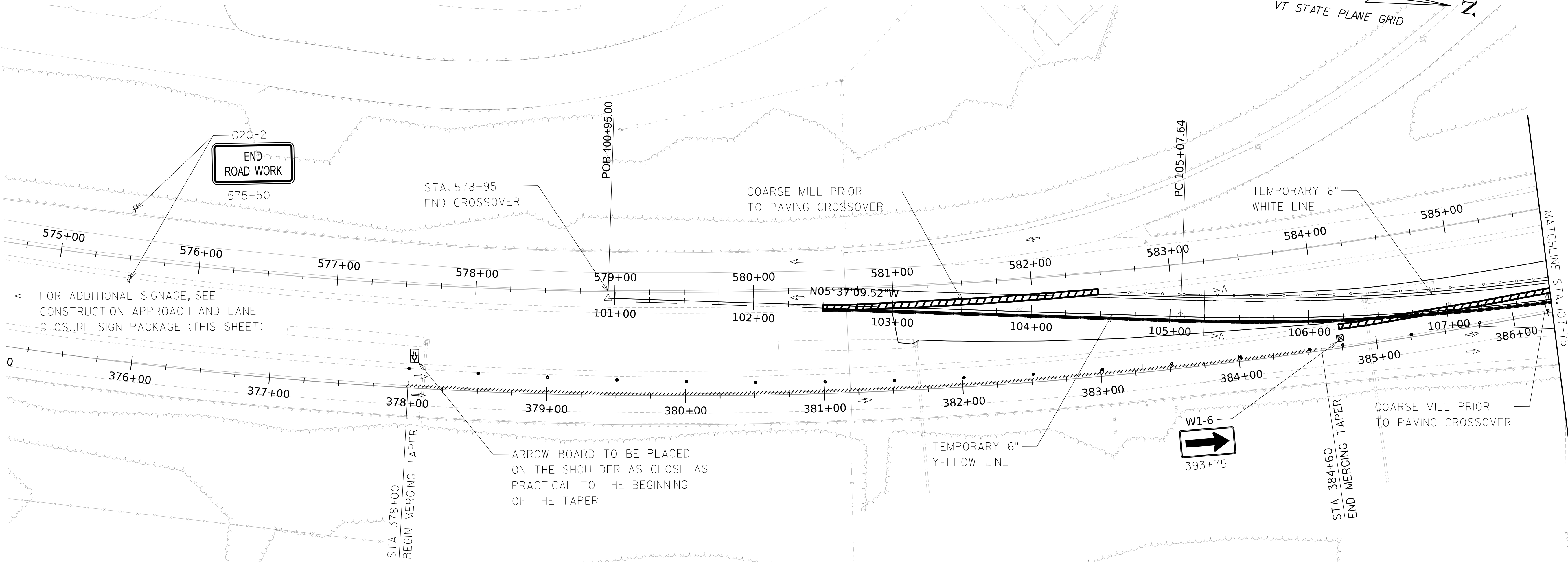
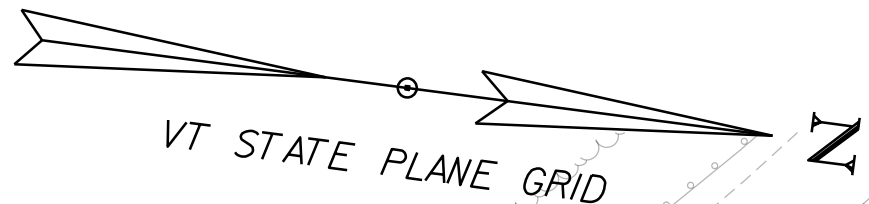
TEMPORARY CONCRETE BARRIER

STA. 102+50 - STA. 107+75, RT

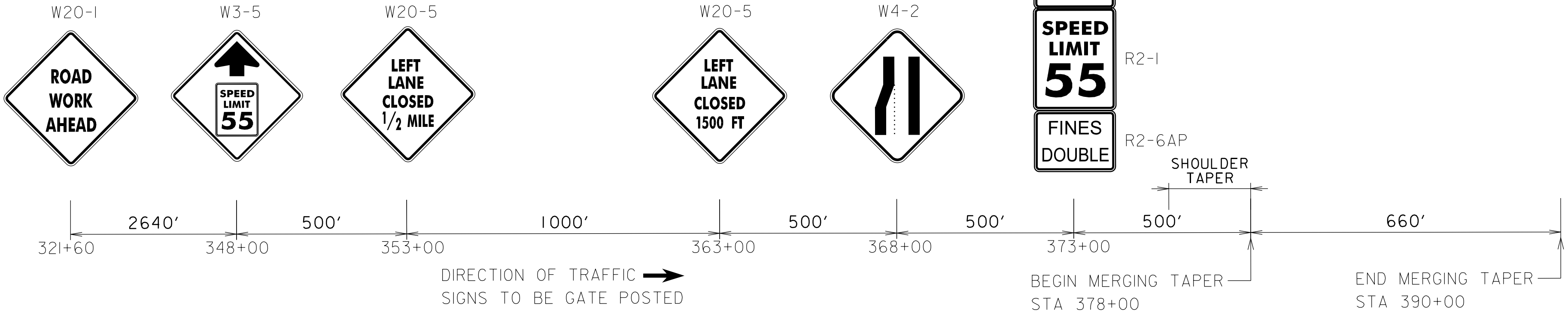


SECTION A-A  
NOT TO SCALE

NOTE: FOR MORE INFORMATION SEE TRAFFIC CONTROL NOTES AND TYPICALS SHEET



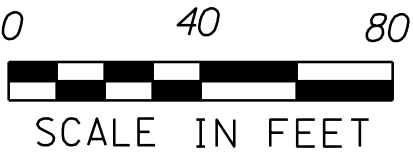
CONSTRUCTION APPROACH AND LANE CLOSURE SIGN PACKAGE



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH SIGN
- FLASHING ARROW PANEL
- TEMPORARY CONCRETE BARRIER
- PAVEMENT MARKING REMOVAL
- REFLECTORIZED PLASTIC DRUM
- TYPE I DELINEATOR (YELLOW)
- TYPE I DELINEATOR (WHITE)
- FLOW OF TRAFFIC

NOTES:  
1. ALL EXISTING PAVEMENT MARKINGS IN CONFLICT WITH TEMPORARY PAVEMENT MARKINGS WILL BE REMOVED OR MASKED.  
2. 12' TRAVEL LANES WITH MINIMUM 1' SHOULDERS.



PROJECT NAME: BRATTLEBORO  
PROJECT NUMBER: IM 091-I(82)

FILE NAME: z19a220bdr_tcp_SB.dgn  
PROJECT LEADER: A.STOCKIN  
DESIGNED BY: E.WILLIAMS  
SB CROSSOVER SHEET 1

PLOT DATE: 10/28/2022  
DRAWN BY: M.CARIGNAN  
CHECKED BY: B.GEIGER  
SHEET 22 OF 66

TEMPORARY 6" YELLOW LINE

STA. 107+75 - STA. 118+75, CL  
STA. 108+73 - STA. 118+75, RT

PAVEMENT MARKING MASK

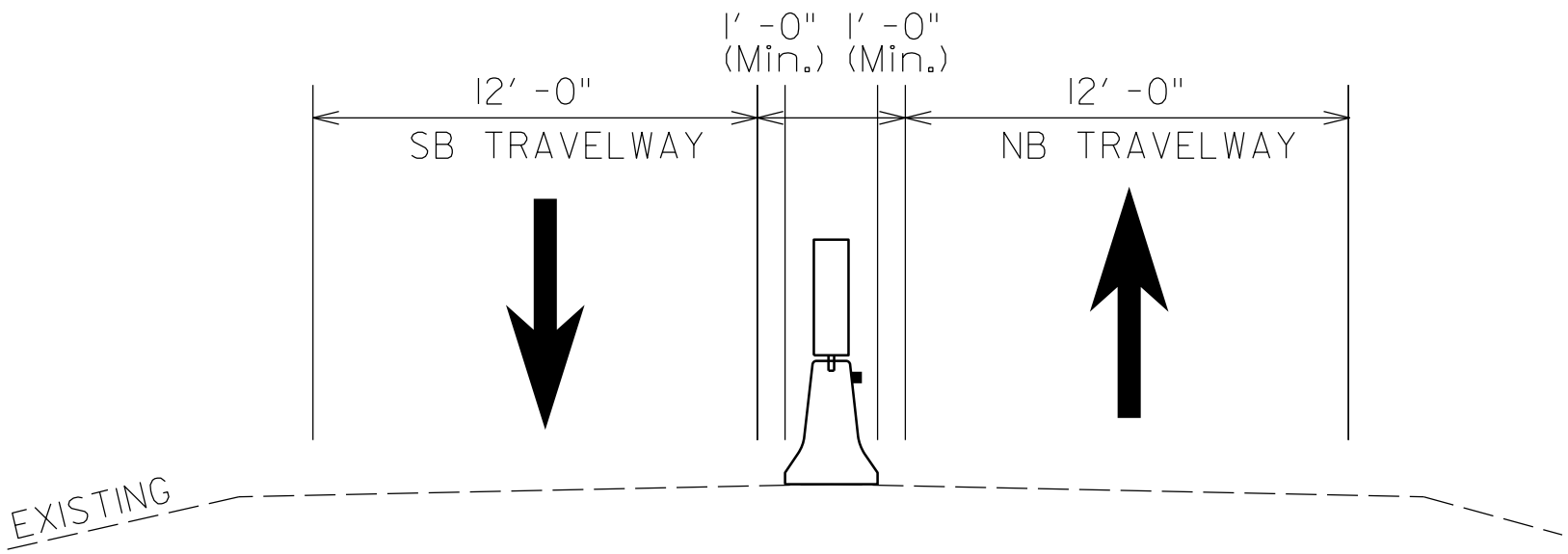
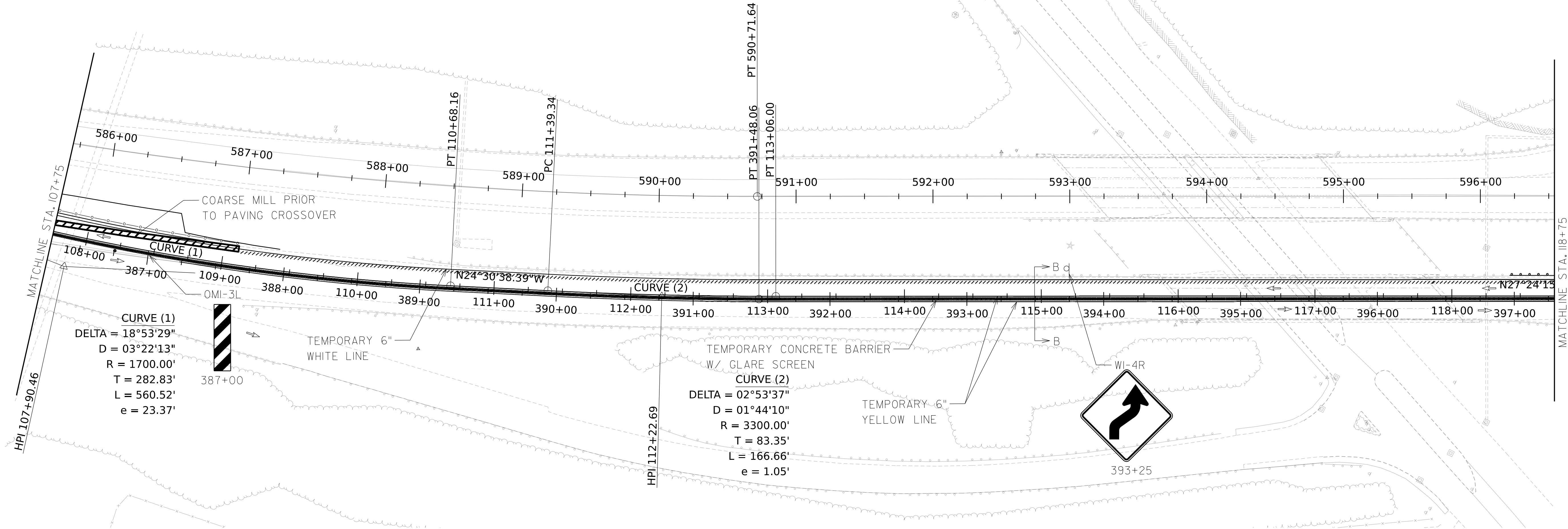
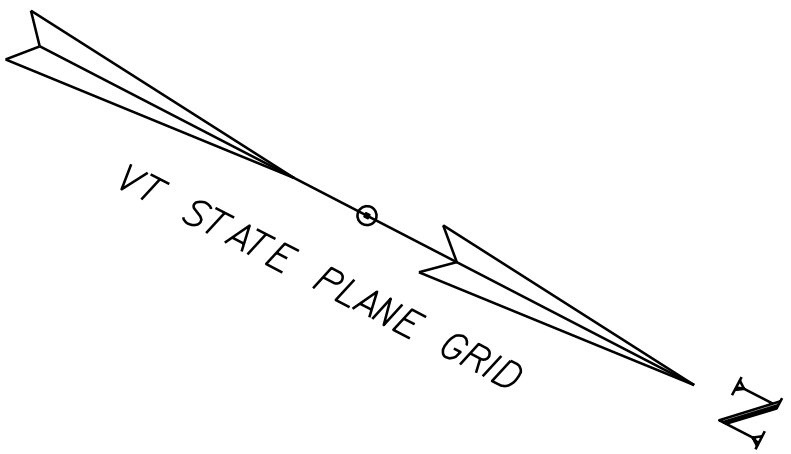
STA. 387+65 - STA. 397+29, LT (NB)

TEMPORARY 6" WHITE LINE

STA. 107+75 - STA. 118+75, LT

TEMPORARY CONCRETE BARRIER

STA. 107+75 - STA. 118+75, RT



SECTION B-B  
NOT TO SCALE  
NOTE: FOR MORE INFORMATION SEE TRAFFIC CONTROL NOTES AND TYPICALS SHEET

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH SIGN
- FLASHING ARROW PANEL
- TEMPORARY CONCRETE BARRIER
- PAVEMENT MARKING REMOVAL
- REFLECTORIZED PLASTIC DRUM
- TYPE I DELINEATOR ( YELLOW )
- TYPE I DELINEATOR ( WHITE )
- FLOW OF TRAFFIC



PROJECT NAME: BRATTLEBORO  
PROJECT NUMBER: IM 091-I(82)

FILE NAME: z19a220bdr_tcp_SB.dgn  
PROJECT LEADER: A.STOCKIN  
DESIGNED BY: E.WILLIAMS  
SB CROSSOVER SHEET 2

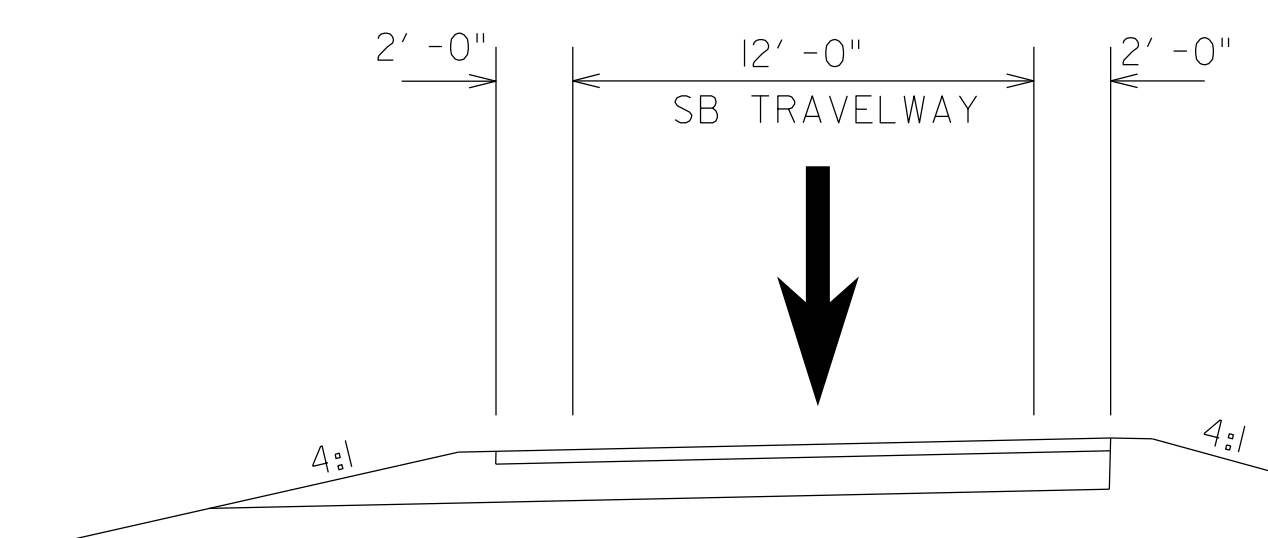
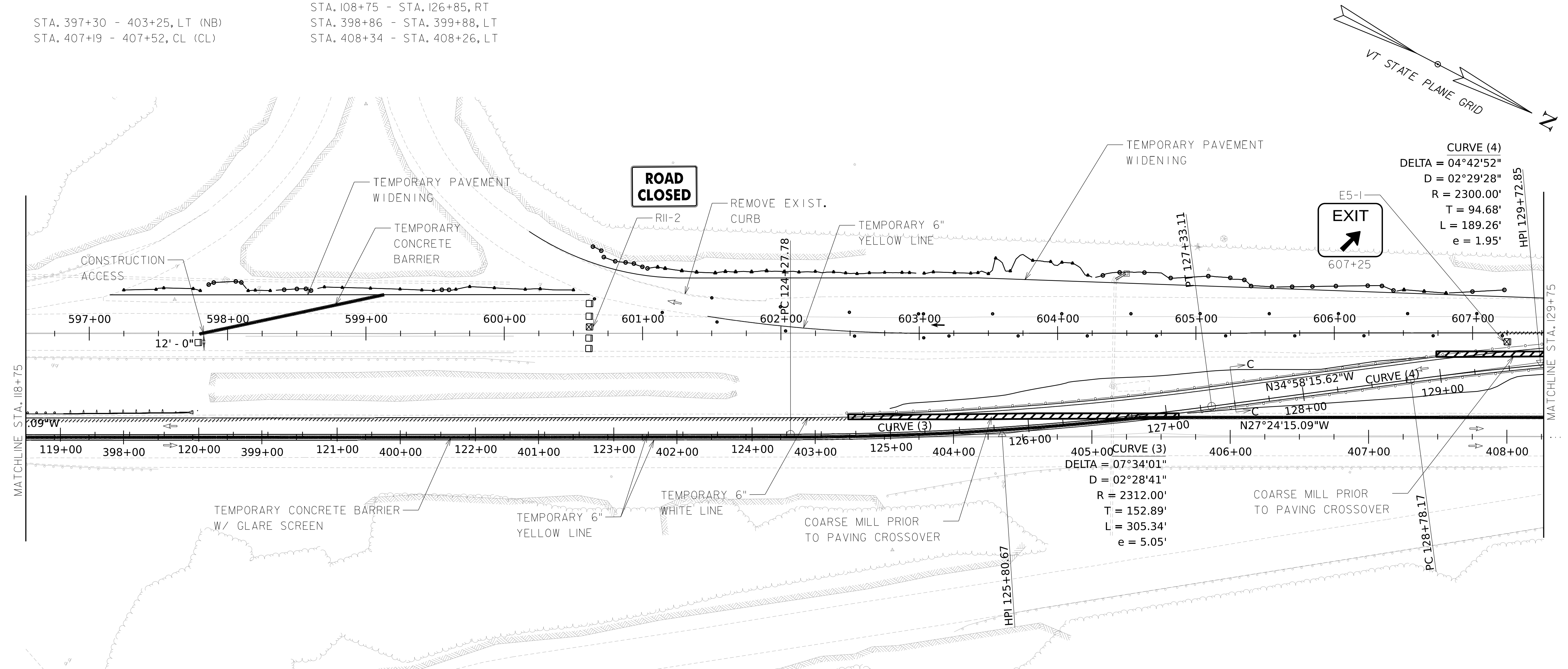
PLOT DATE: 10/28/2022  
DRAWN BY: M.CARIGNAN  
CHECKED BY: B.GEIGER  
SHEET 23 OF 66

TEMPORARY 6" WHITE LINE

STA. 118+75 - STA. 129+00, LT

TEMPORARY CONCRETE BARRIER

STA. 108+75 - STA. 126+85, RT  
STA. 398+86 - STA. 399+88, LT  
STA. 408+34 - STA. 408+26, LT



SECTION C-C  
NOT TO SCALE  
NOTE: FOR MORE INFORMATION SEE TRAFFIC CONTROL NOTES AND TYPICALS SHEET

## LEGEND

- |                                                                                       |                                |
|---------------------------------------------------------------------------------------|--------------------------------|
|  | - TYPE III BARRICADE           |
|  | - TYPE III BARRICADE WITH SIGN |
|  | - FLASHING ARROW PANEL         |
|  | - TEMPORARY CONCRETE BARRIER   |
|  | - PAVEMENT MARKING REMOVAL     |
|  | - REFLECTORIZED PLASTIC DRUM   |
|  | - TYPE I DELINEATOR ( YELLOW ) |
|  | - TYPE I DELINEATOR ( WHITE )  |
|  | - FLOW OF TRAFFIC              |

PROJECT NAME: BRATTLEBORO

PROJECT NUMBER: IM 091-1(82)

FILE NAME: z19a220bdr_tcp_SB.dgn

PROJECT LEADER: A.STOCKIN

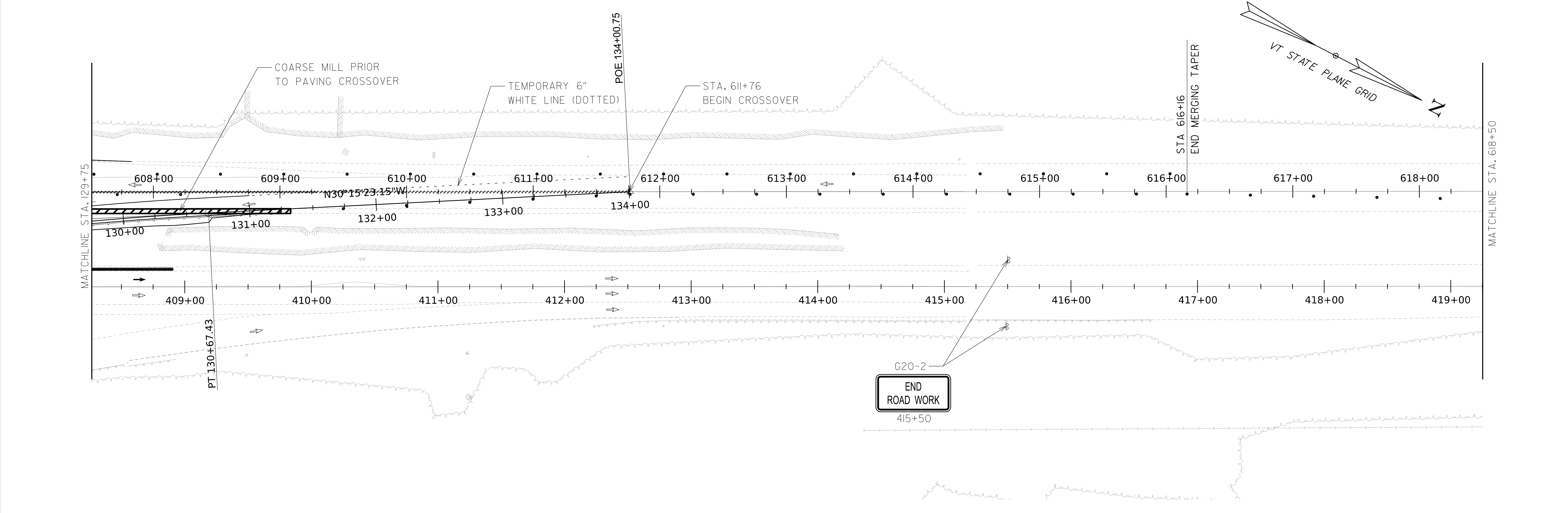
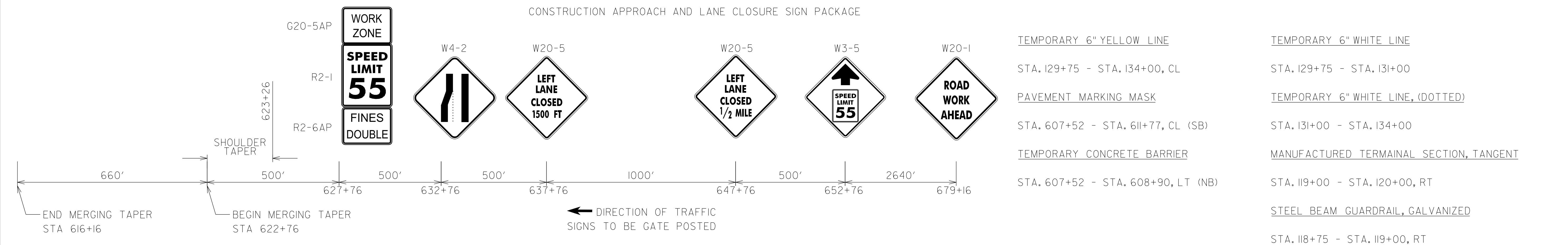
DESIGNED BY: E.WILLIA

PLOT DATE: 10/28/2022

DRAWN BY: M.CARIGNAN

CHECKED BY: B.GEIGER



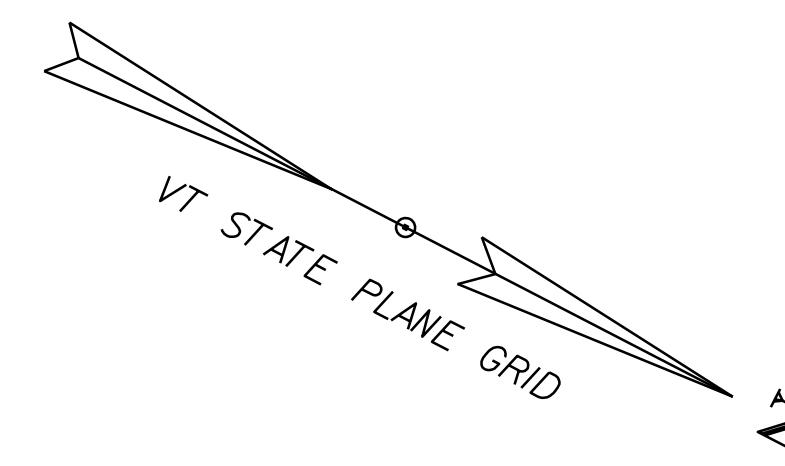


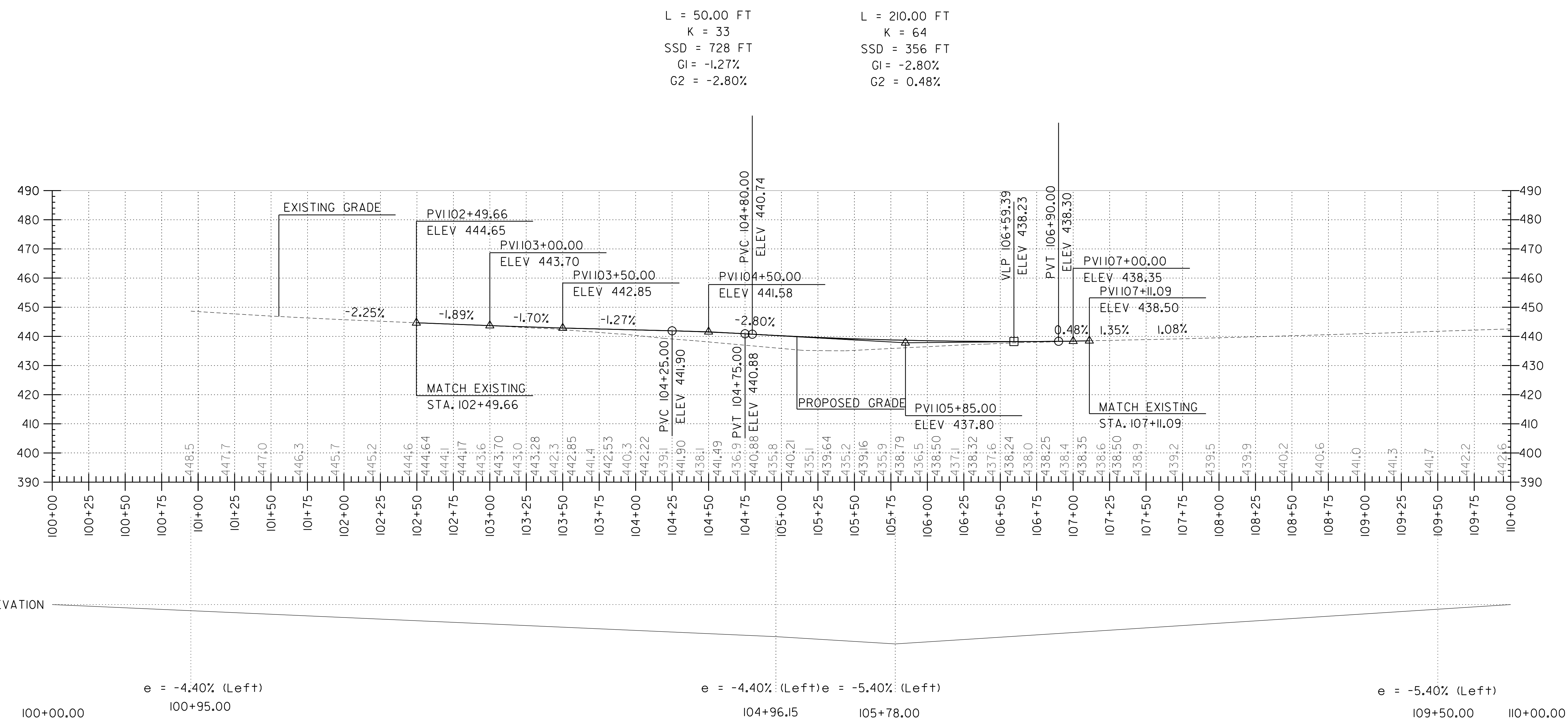
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH SIGN
- FLASHING ARROW PANEL
- TEMPORARY CONCRETE BARRIER
- PAVEMENT MARKING REMOVAL
- REFLECTORIZED PLASTIC DRUM
- TYPE I DELINEATOR ( YELLOW )
- TYPE I DELINEATOR ( WHITE )
- FLOW OF TRAFFIC



PROJECT NAME: BRATTLEBORO	PLOT DATE: 10/28/2022
PROJECT NUMBER: IM 091-I(82)	DRAWN BY: M.CARIGNAN
FILE NAME: z19a220bdr_tcp_SB.dgn	CHECKED BY: B.GEIGER
PROJECT LEADER: A.STOCKIN	SHEET 25 OF 66
DESIGNED BY: E.WILLIAMS	
SB CROSSOVER SHEET 4	





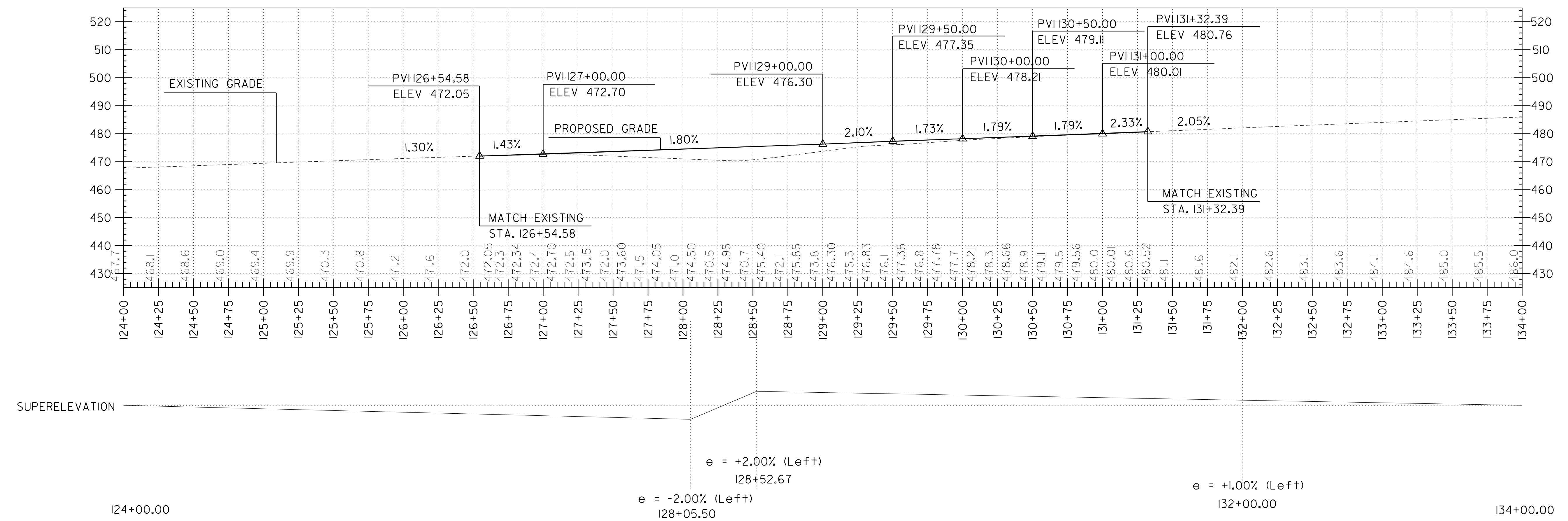
I-91 SB CROSSOVER PROFILE I

HORIZONTAL SCALE: 1" = 20'-0"  
VERTICAL SCALE: 1" = 10'-0"

- NOTES:
- ELEVATIONS SHOWN TO THE NEAREST TENTH DEPICT THE EXISTING GROUND ELEVATION.
  - ELEVATIONS SHOWN TO THE NEAREST HUNDRETH DEPICT THE PROPOSED PROFILE GRADE ELEVATION.



PROJECT NAME: BRATTLEBORO	
PROJECT NUMBER: IM 091-I(82)	
FILE NAME: z19a220pro.SB crossover.dgn	PLOT DATE: 10/28/2022
PROJECT LEADER: A.STOCKIN	DRAWN BY: M.CARIGNAN
DESIGNED BY: E.WILLIAMS	CHECKED BY: B.GEIGER
SB CROSSOVER PROFILE I	SHEET 27 OF 66

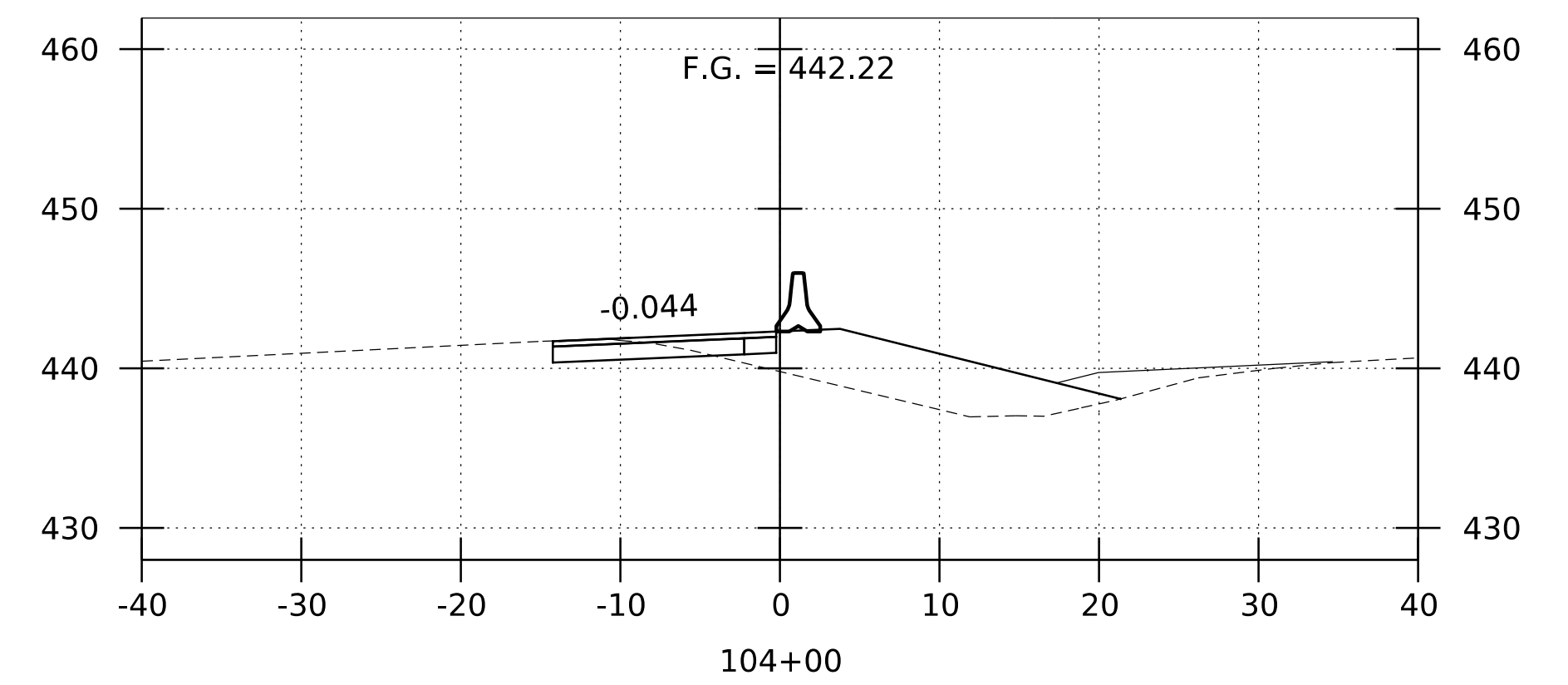
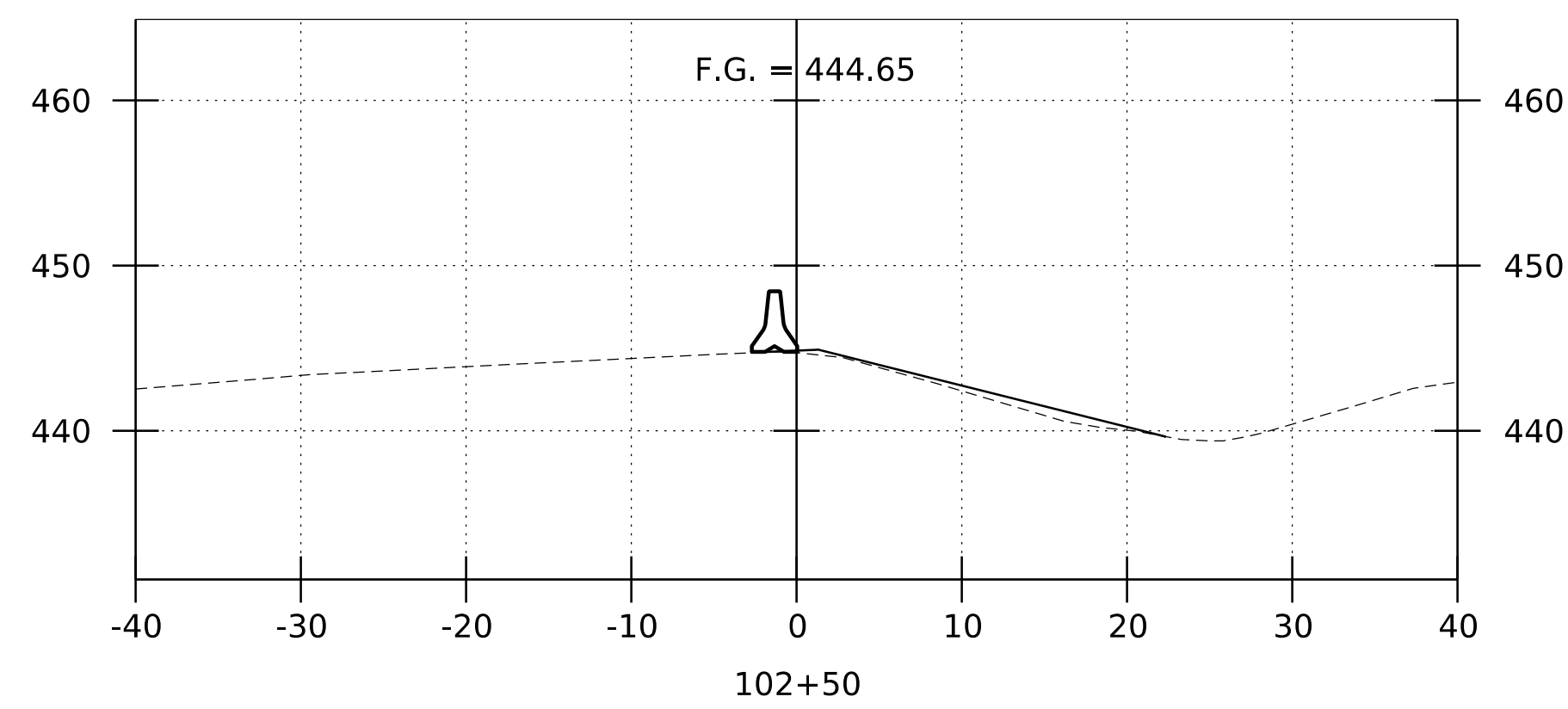
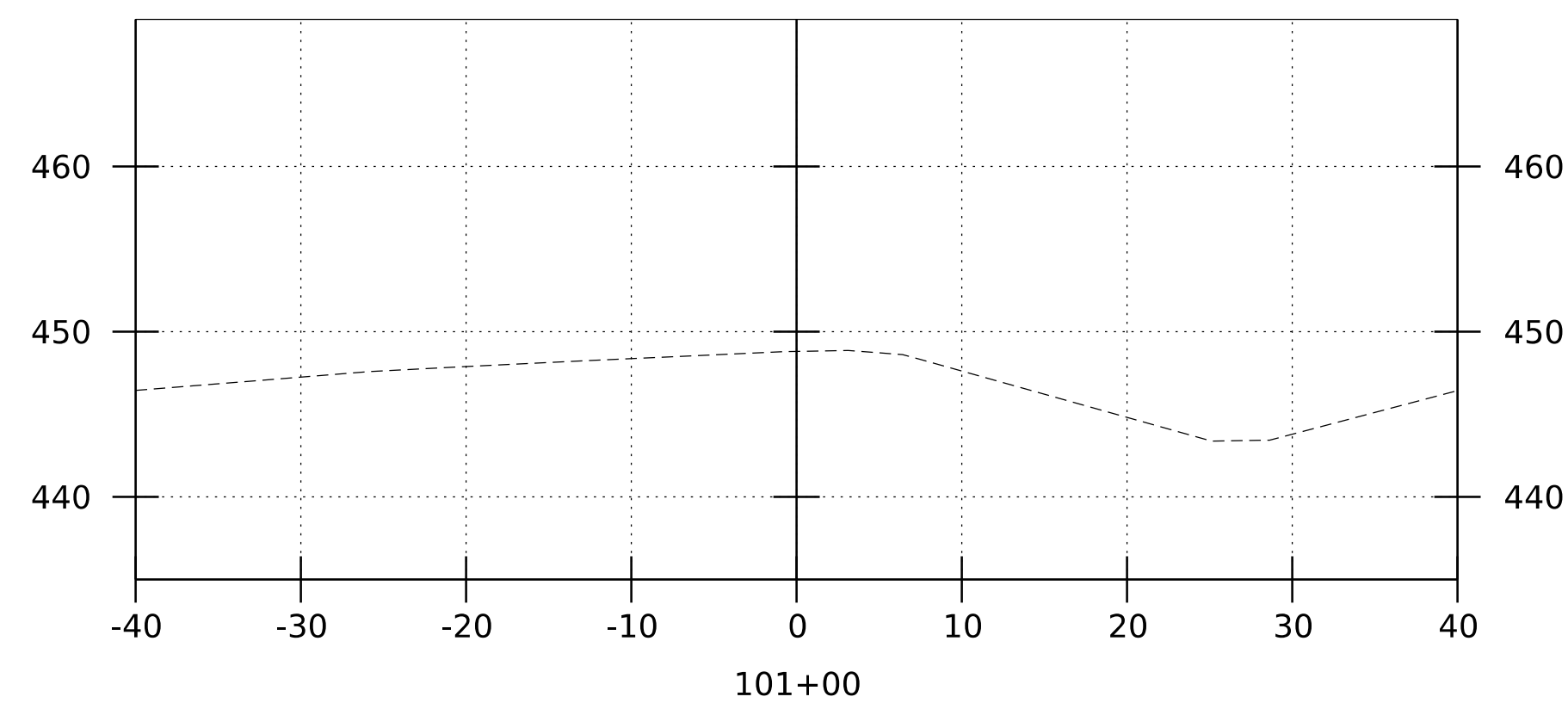
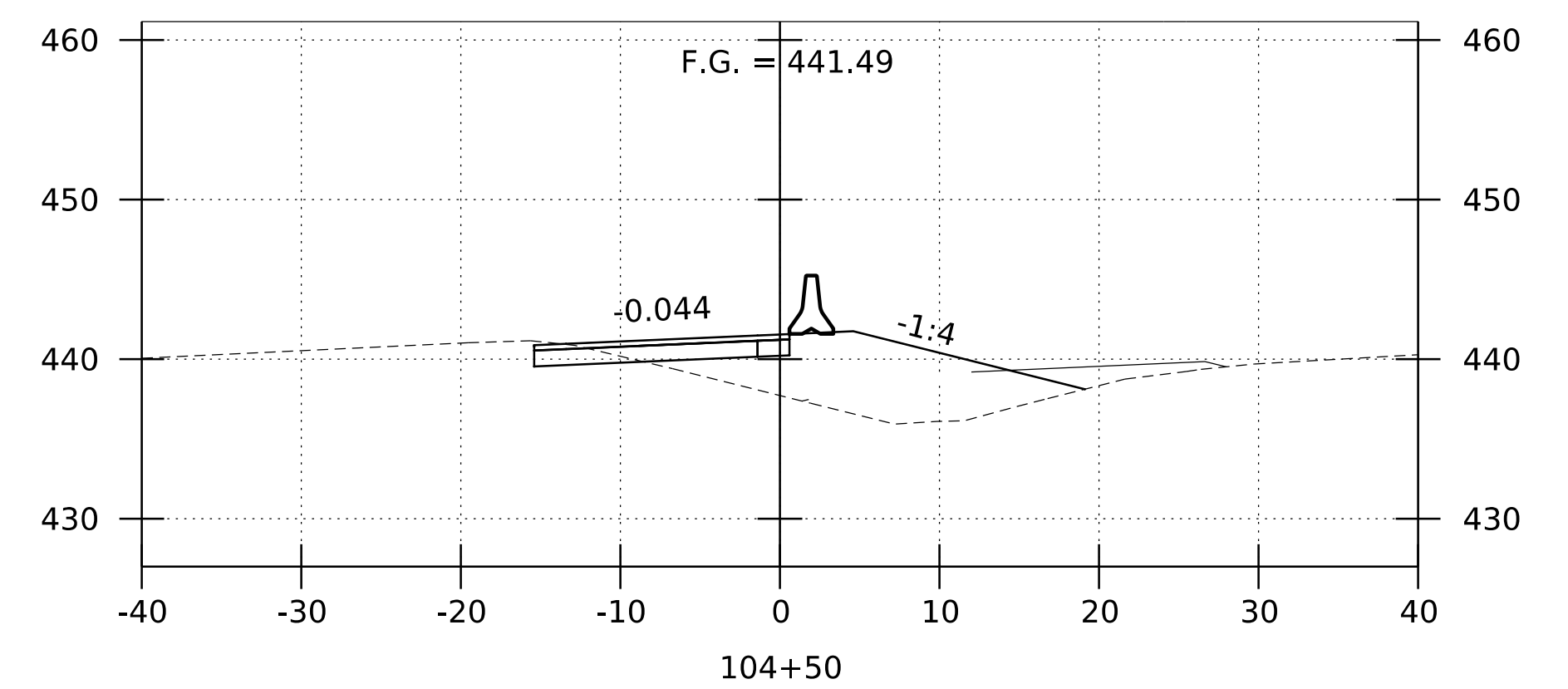
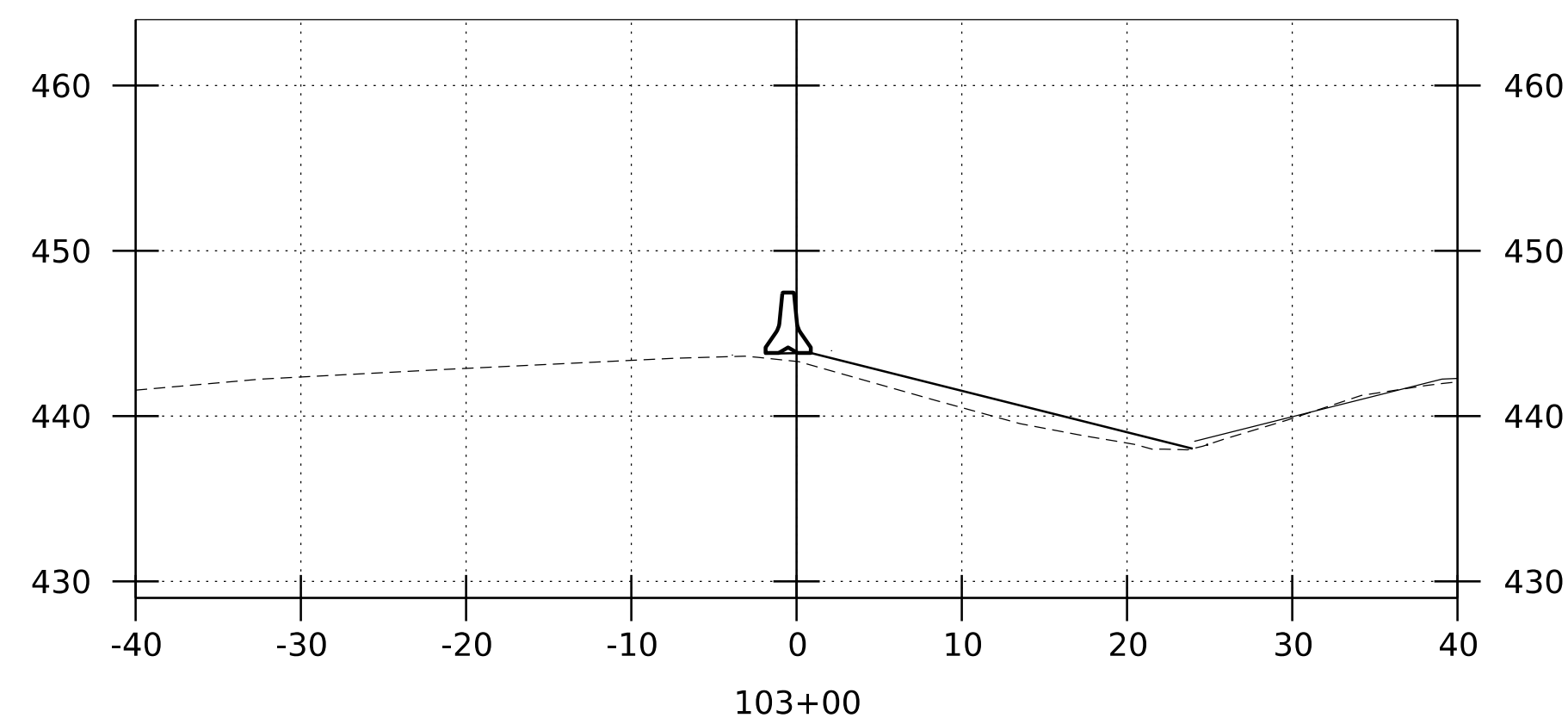
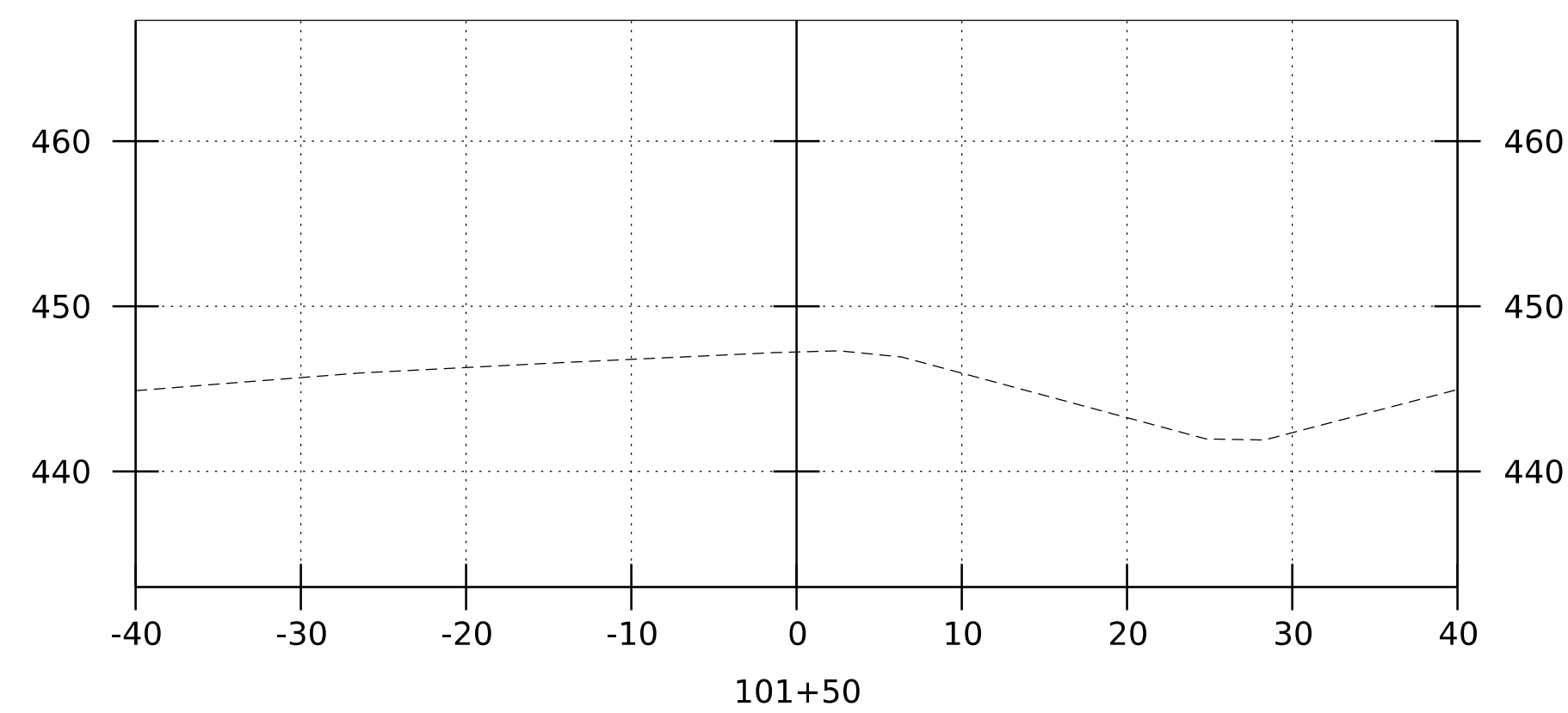
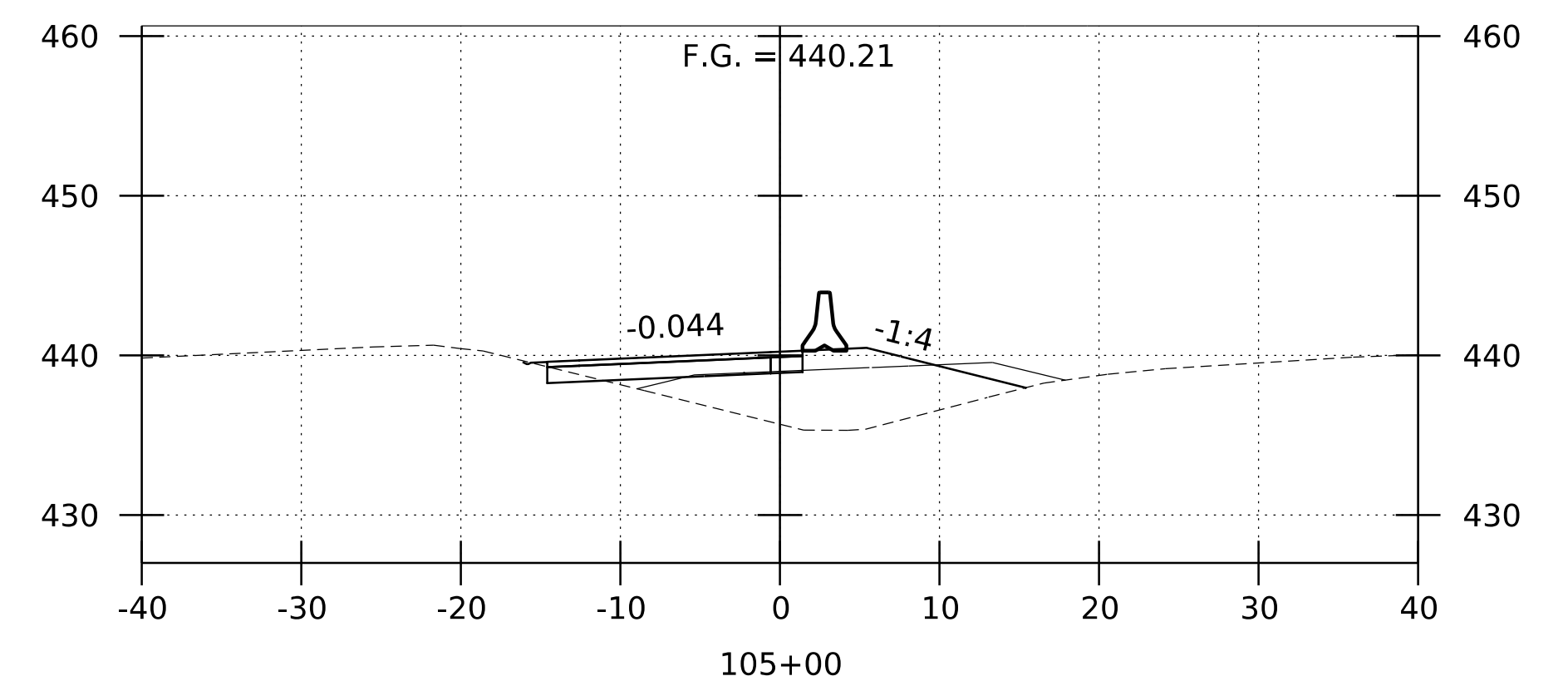
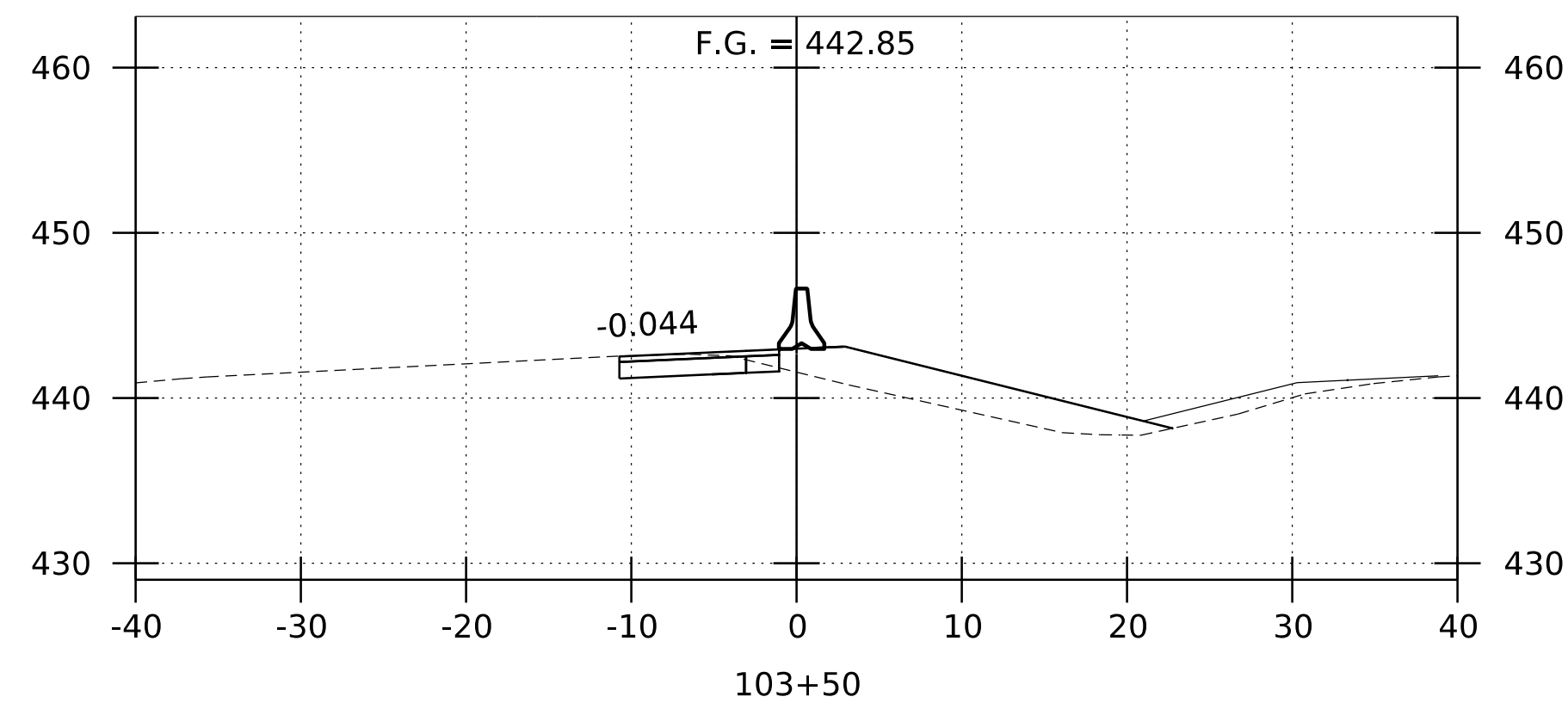
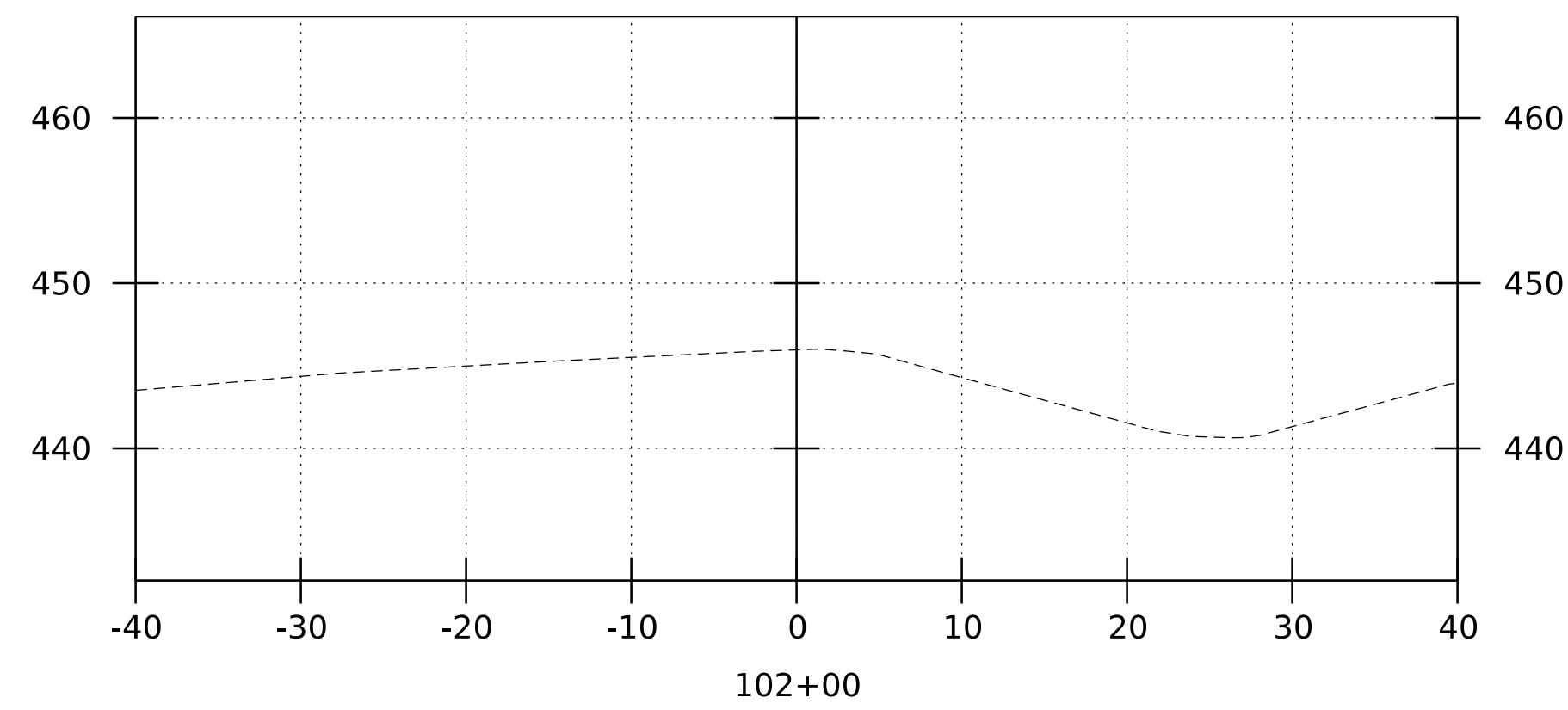


I-91 SB CROSSOVER PROFILE 2  
HORIZONTAL SCALE: 1" = 20'-0"  
VERTICAL SCALE: 1" = 10'-0"

- NOTES:
- ELEVATIONS SHOWN TO THE NEAREST TENTH DEPICT THE EXISTING GROUND ELEVATION.
  - ELEVATIONS SHOWN TO THE NEAREST HUNDRETH DEPICT THE PROPOSED PROFILE GRADE ELEVATION.



PROJECT NAME: BRATTLEBORO	
PROJECT NUMBER: IM 091-I(82)	
FILE NAME: z19a220pro.SB crossover.dgn	PLOT DATE: 10/28/2022
PROJECT LEADER: A.STOCKIN	DRAWN BY: M.CARIGNAN
DESIGNED BY: E.WILLIAMS	CHECKED BY: B.GEIGER
SB CROSSOVER PROFILE 2	SHEET 28 OF 66

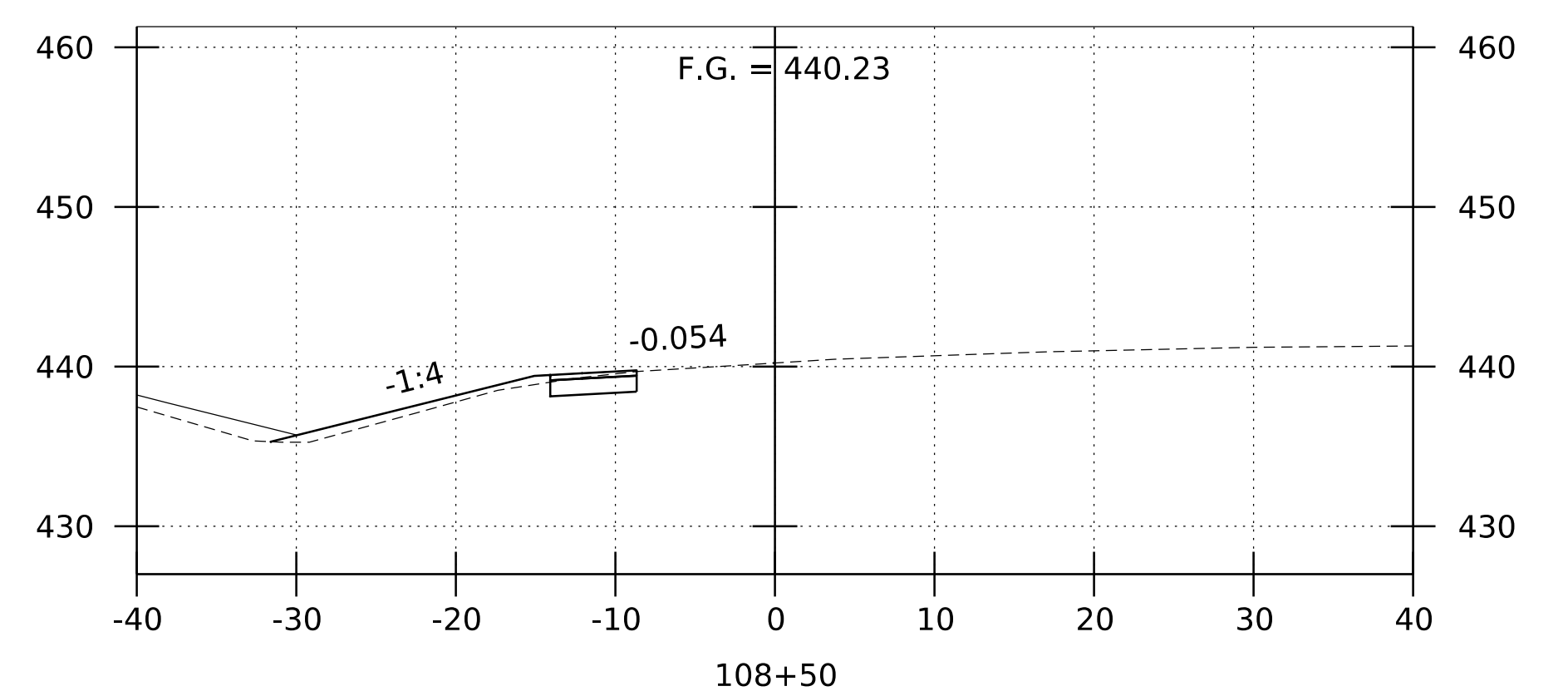
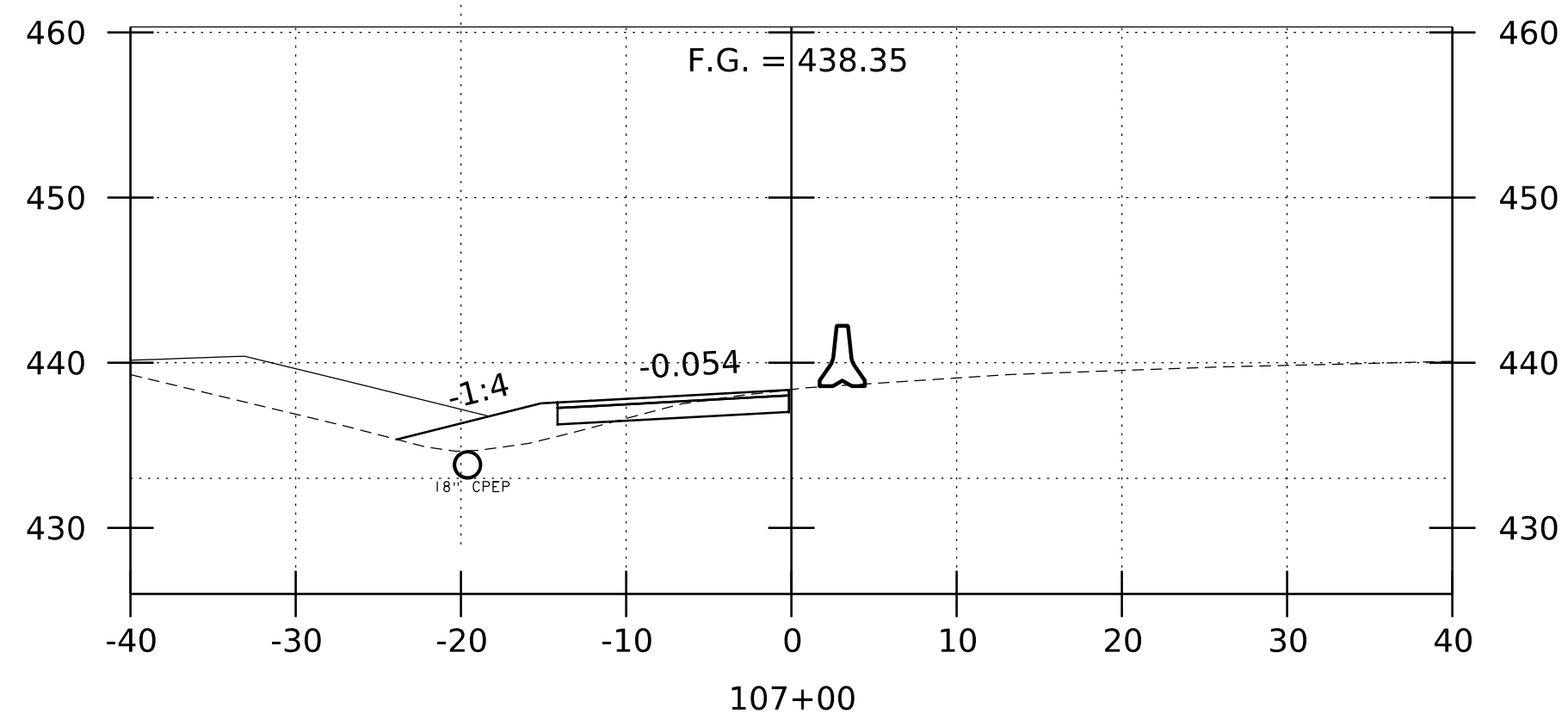
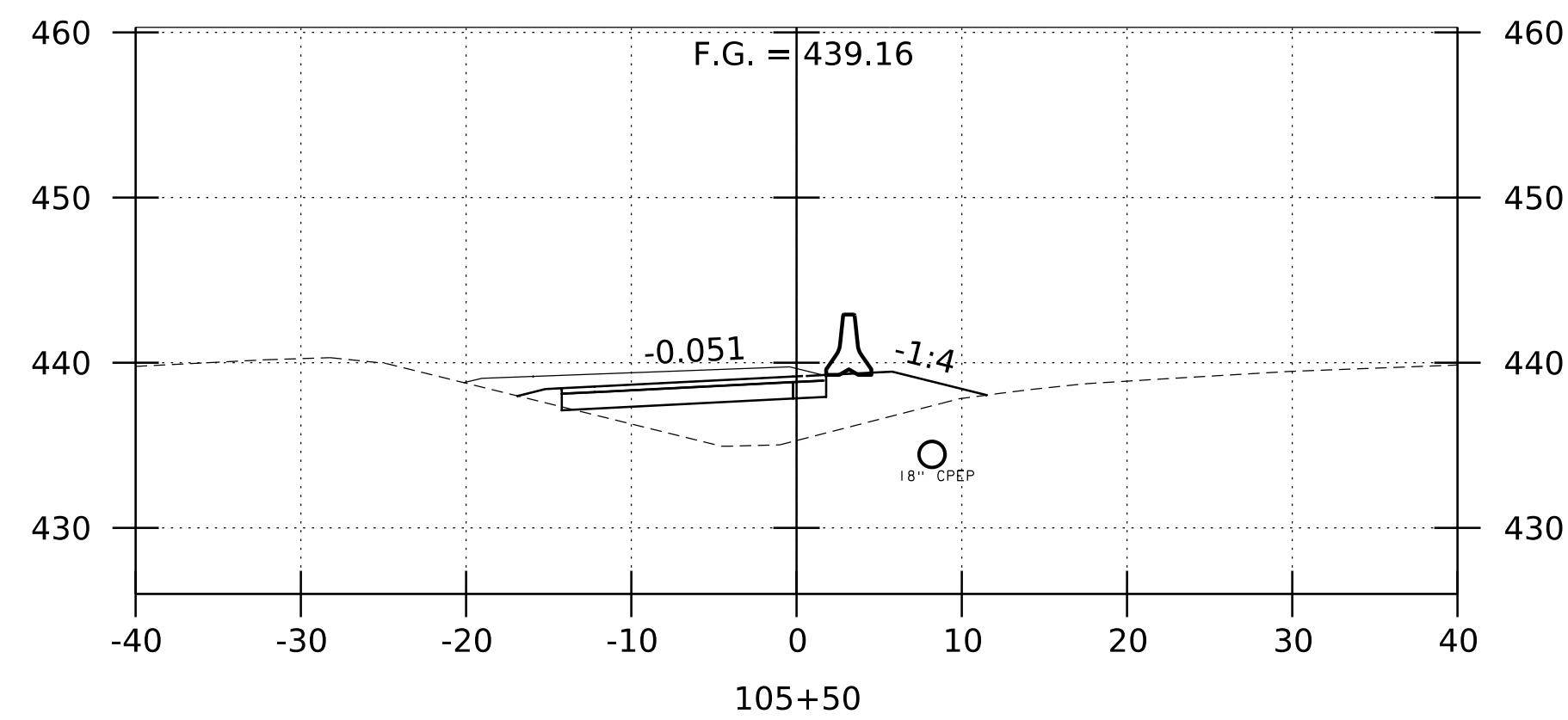
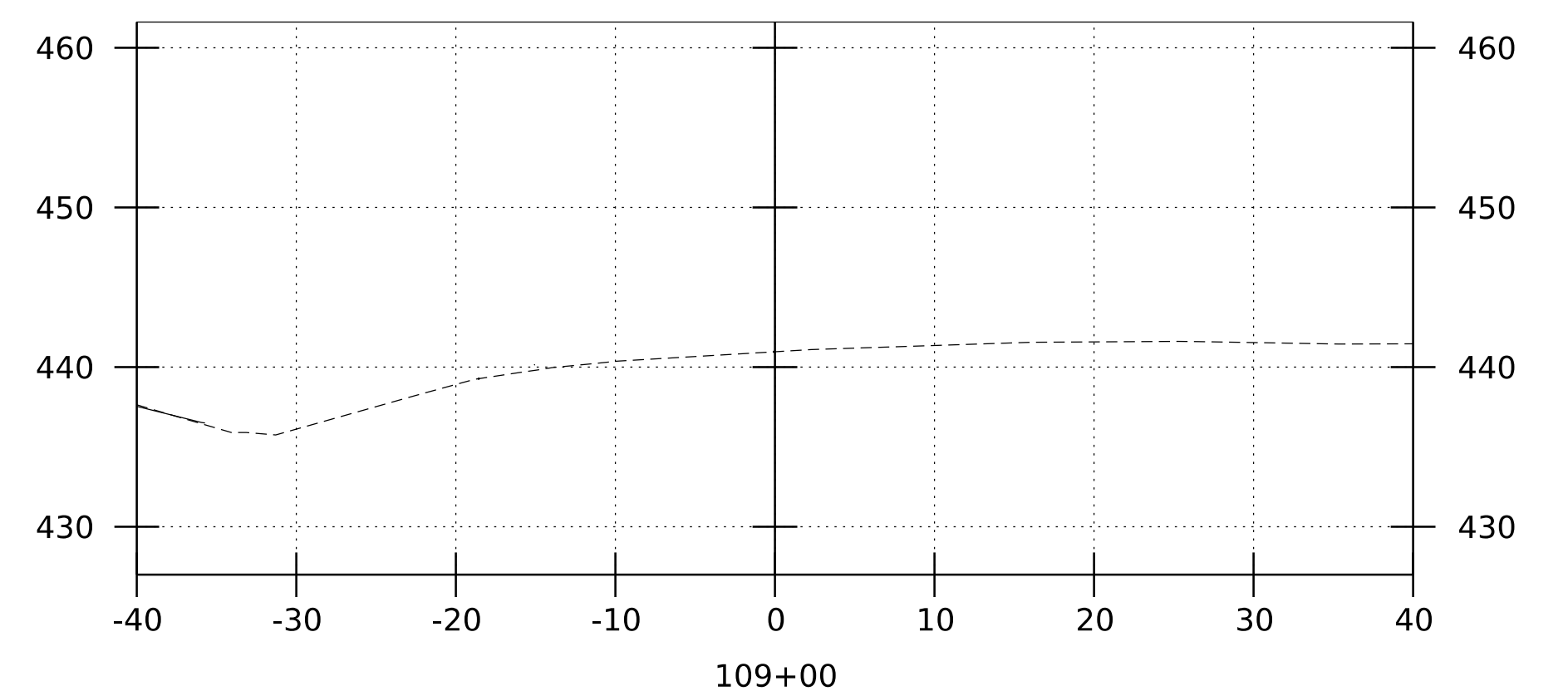
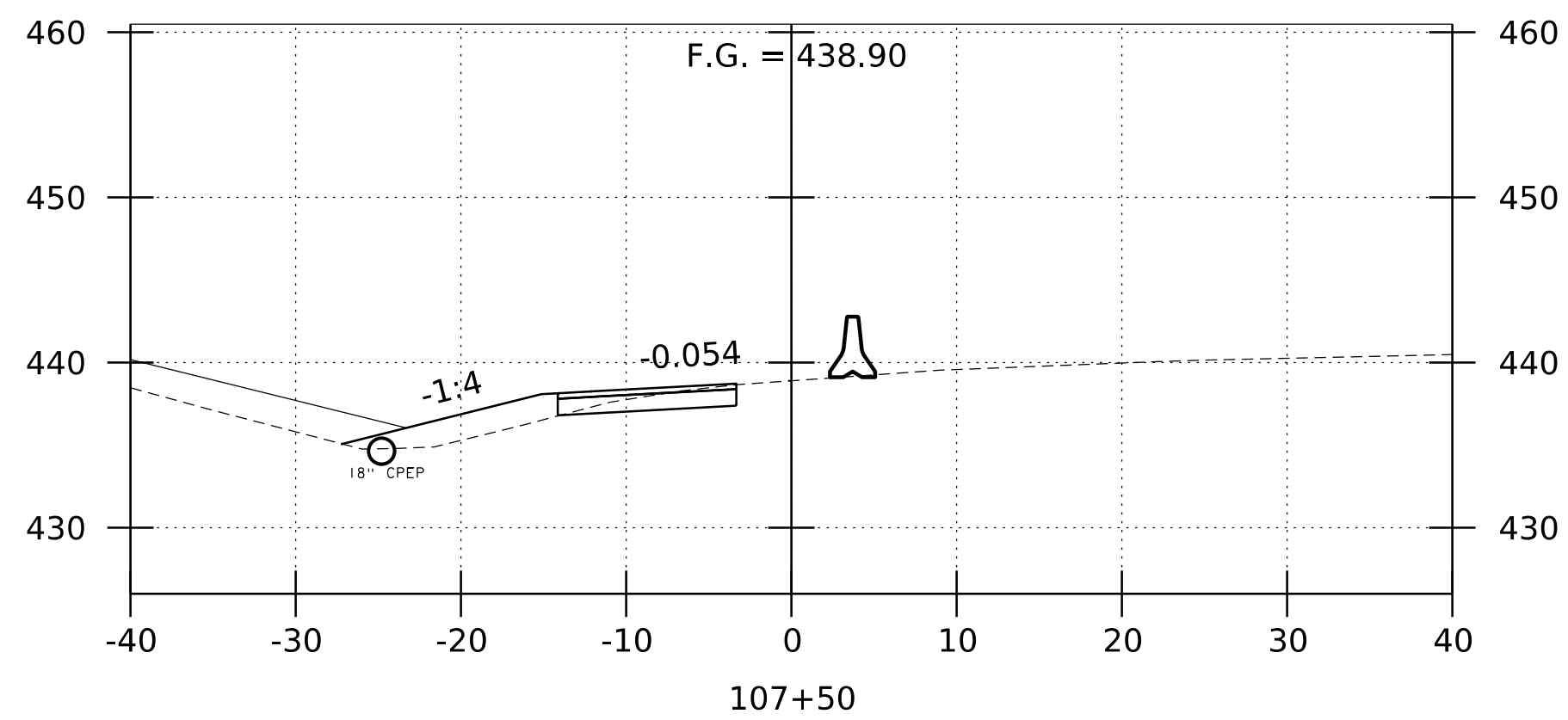
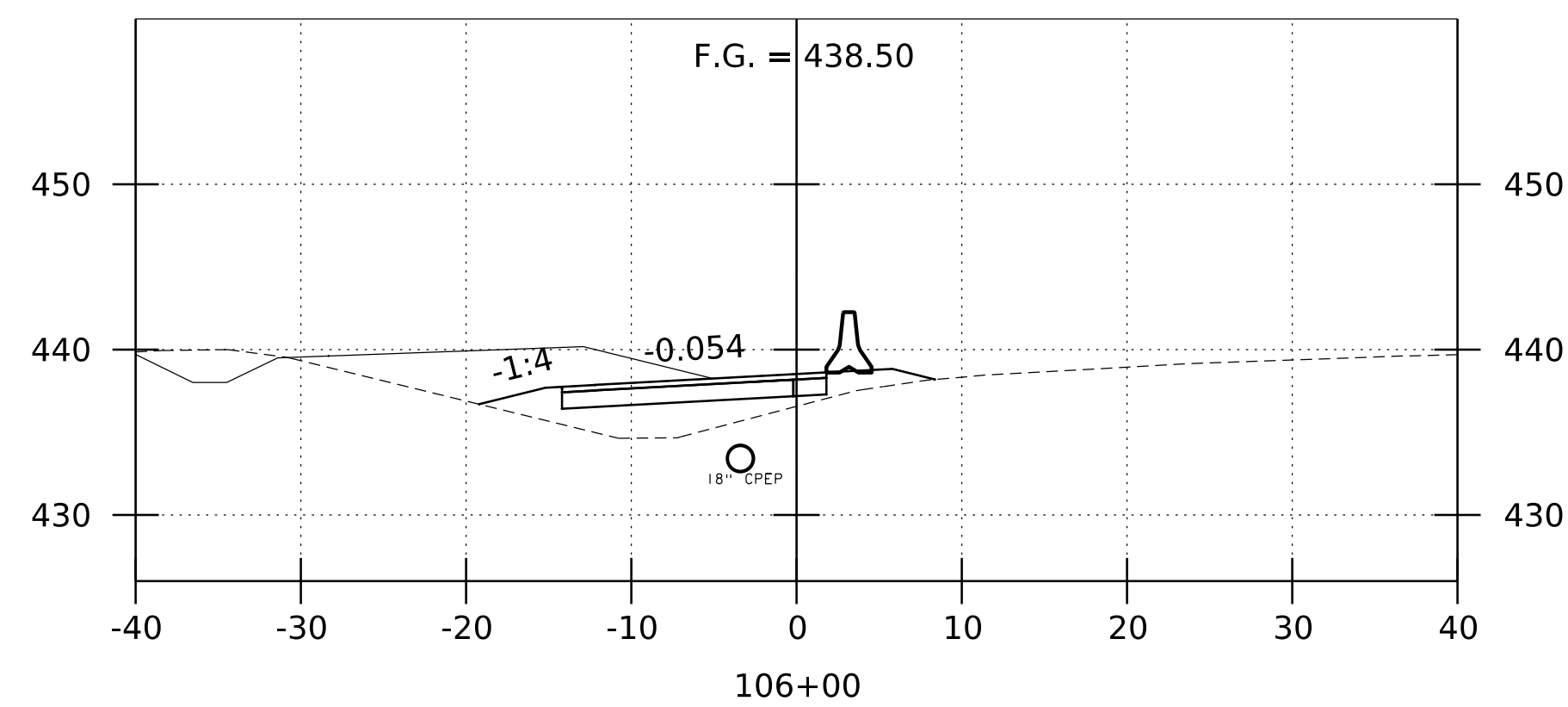
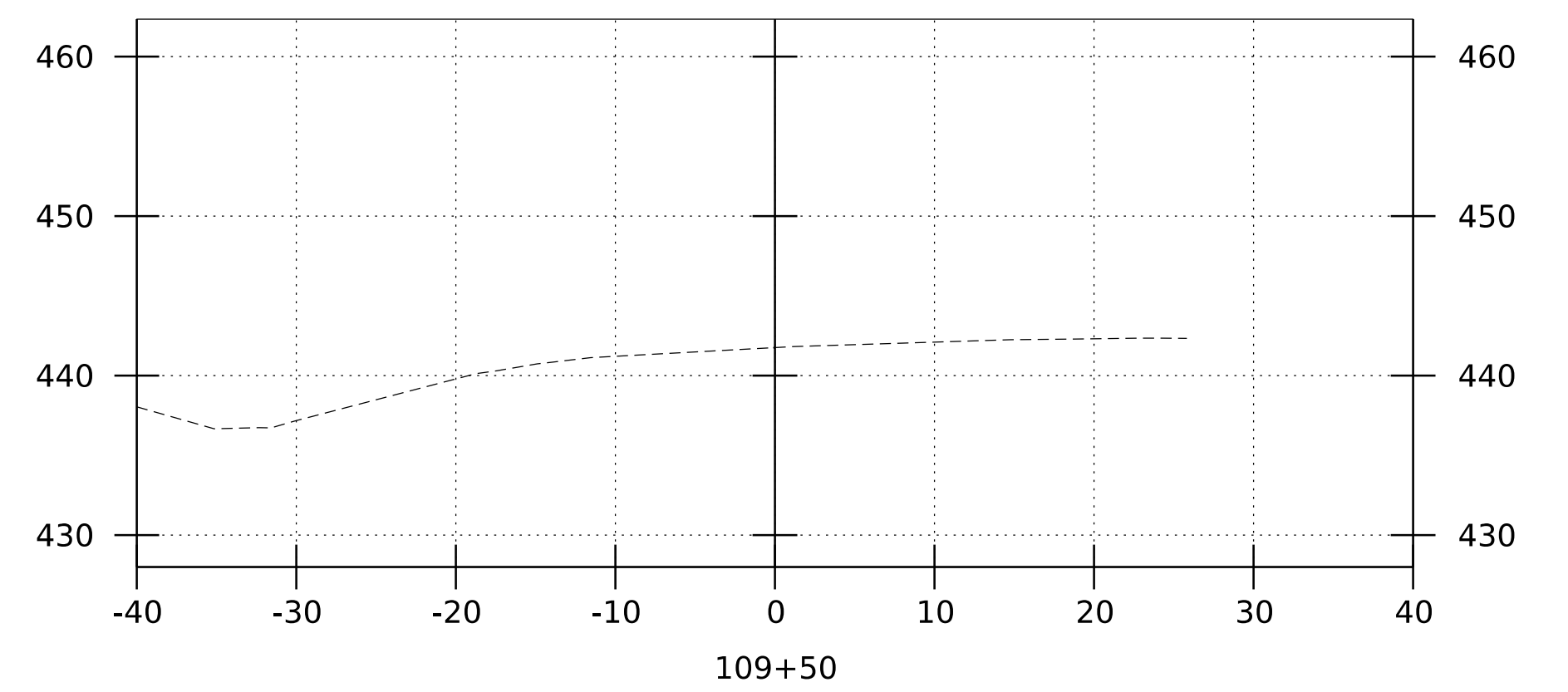
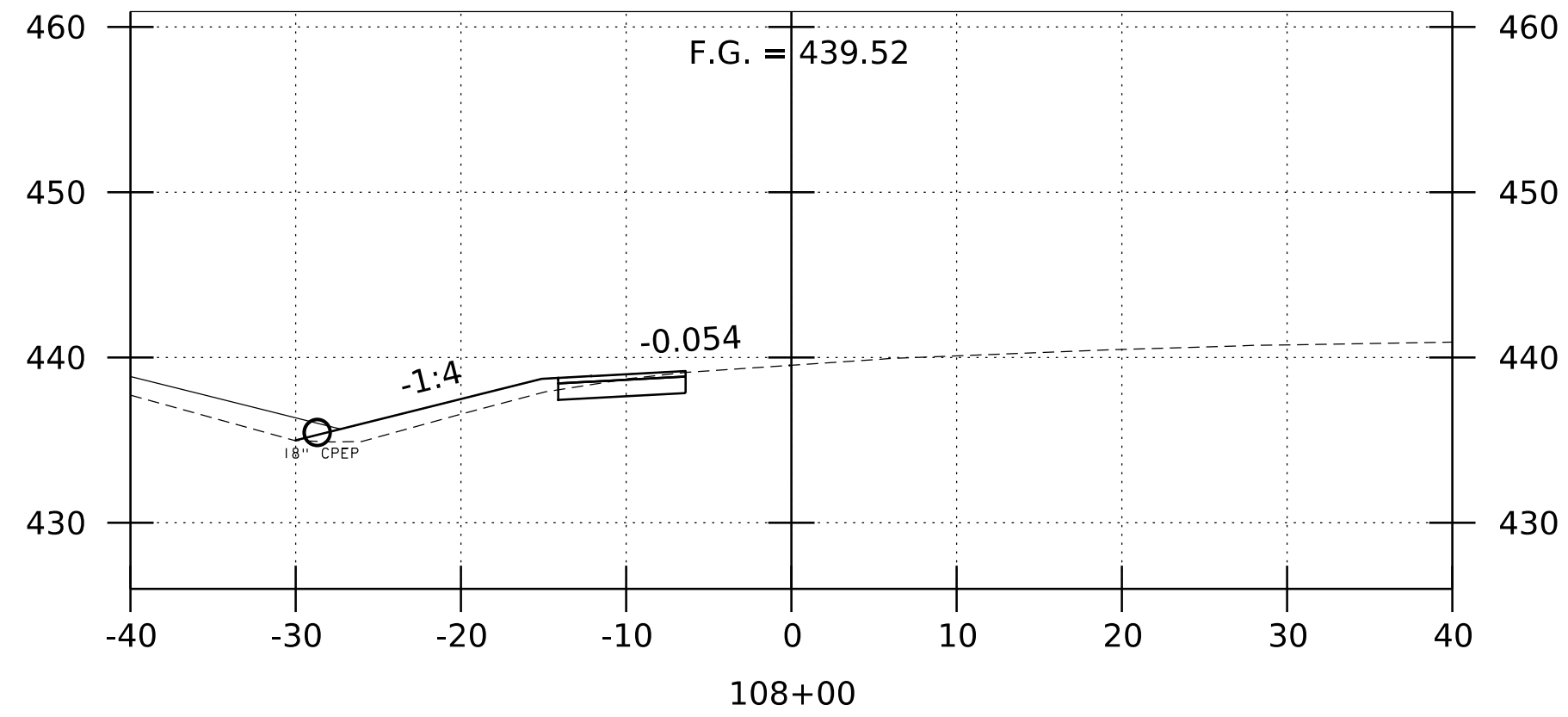
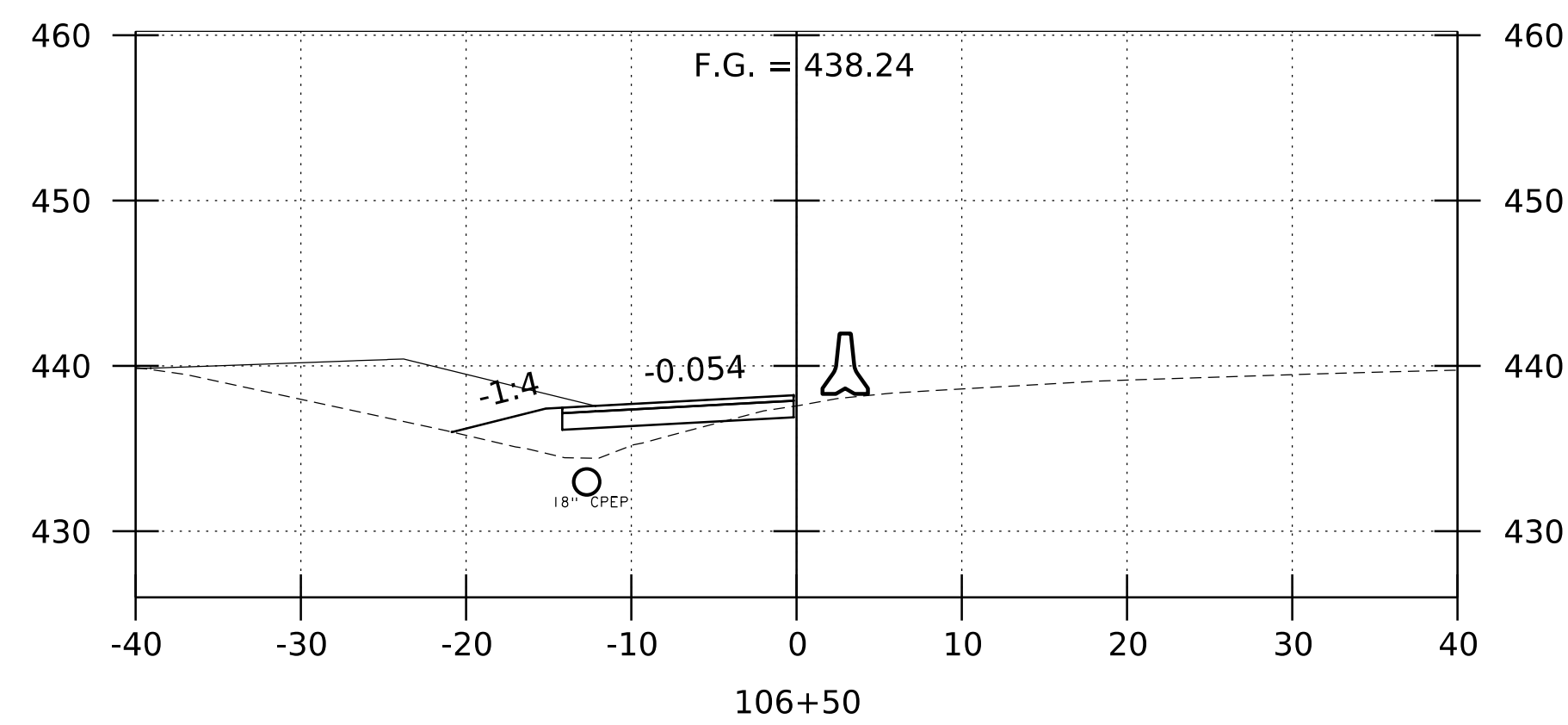


SB CROSSOVER

STA. 101+00 TO STA. 105+00



PROJECT NAME:	BRATTLEBORO
PROJECT NUMBER:	IM 09I-I(82)
FILE NAME:	z19a220xs_SBcrossover.dgn
PLOT DATE:	10/28/2022
PROJECT LEADER:	A.STOCKIN
DRAWN BY:	M.CARIGNAN
DESIGNED BY:	E.WILLIAMS
CHECKED BY:	B.GEIGER
SB CROSSOVER CROSS SECTION I	SHEET 29 OF 66

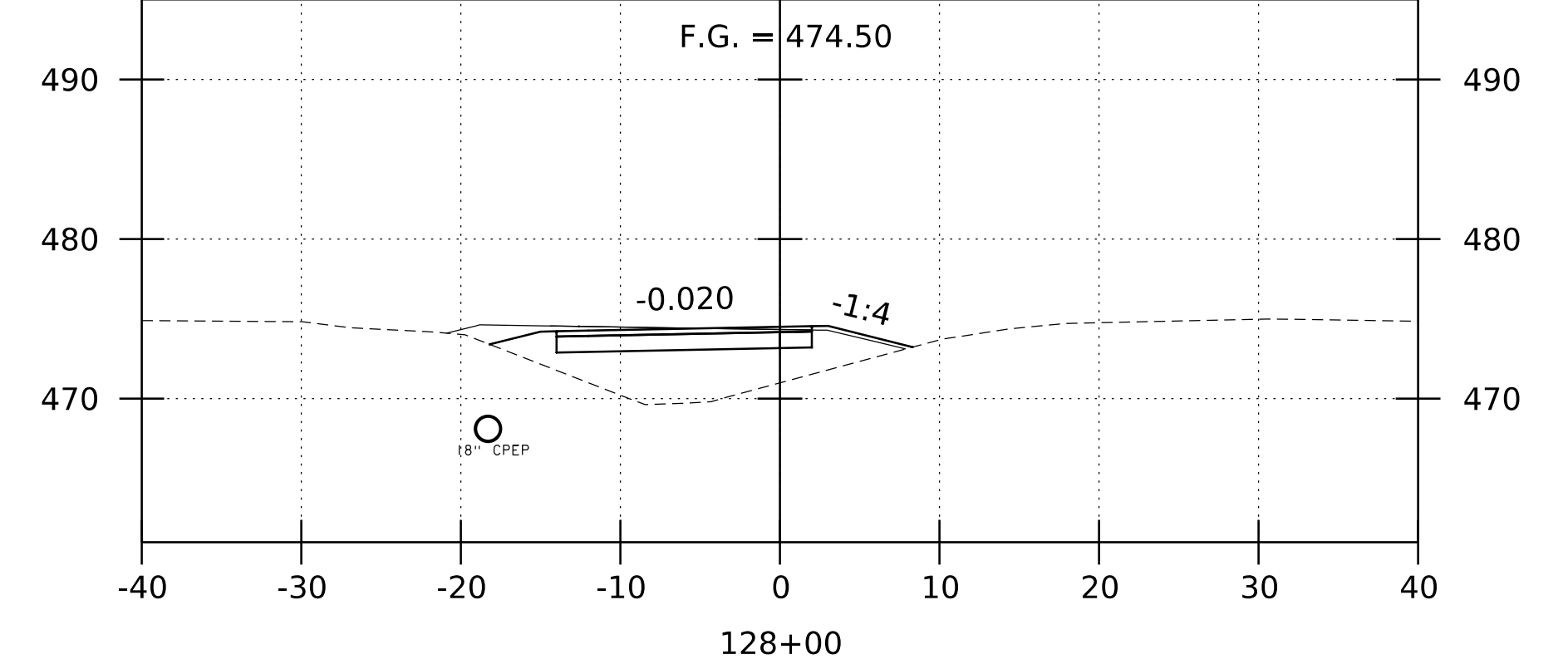
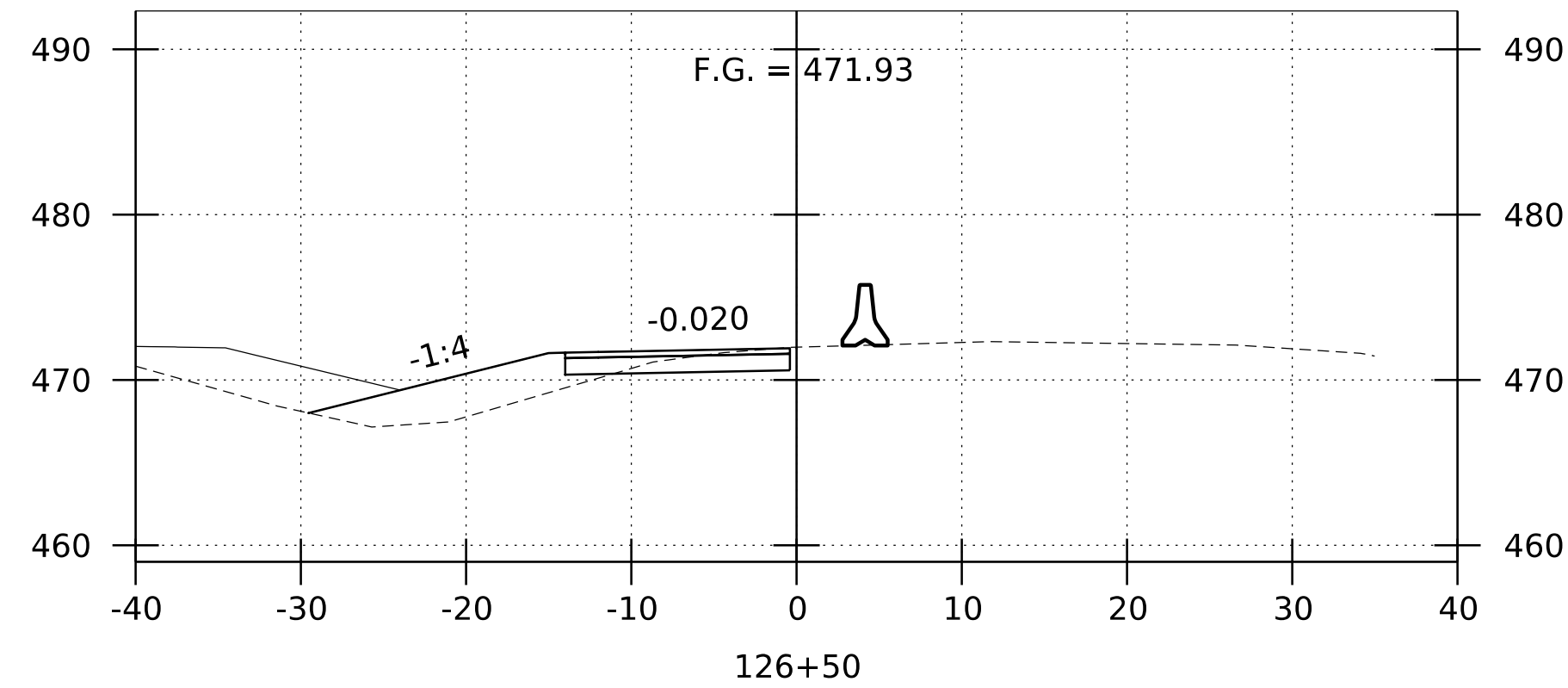
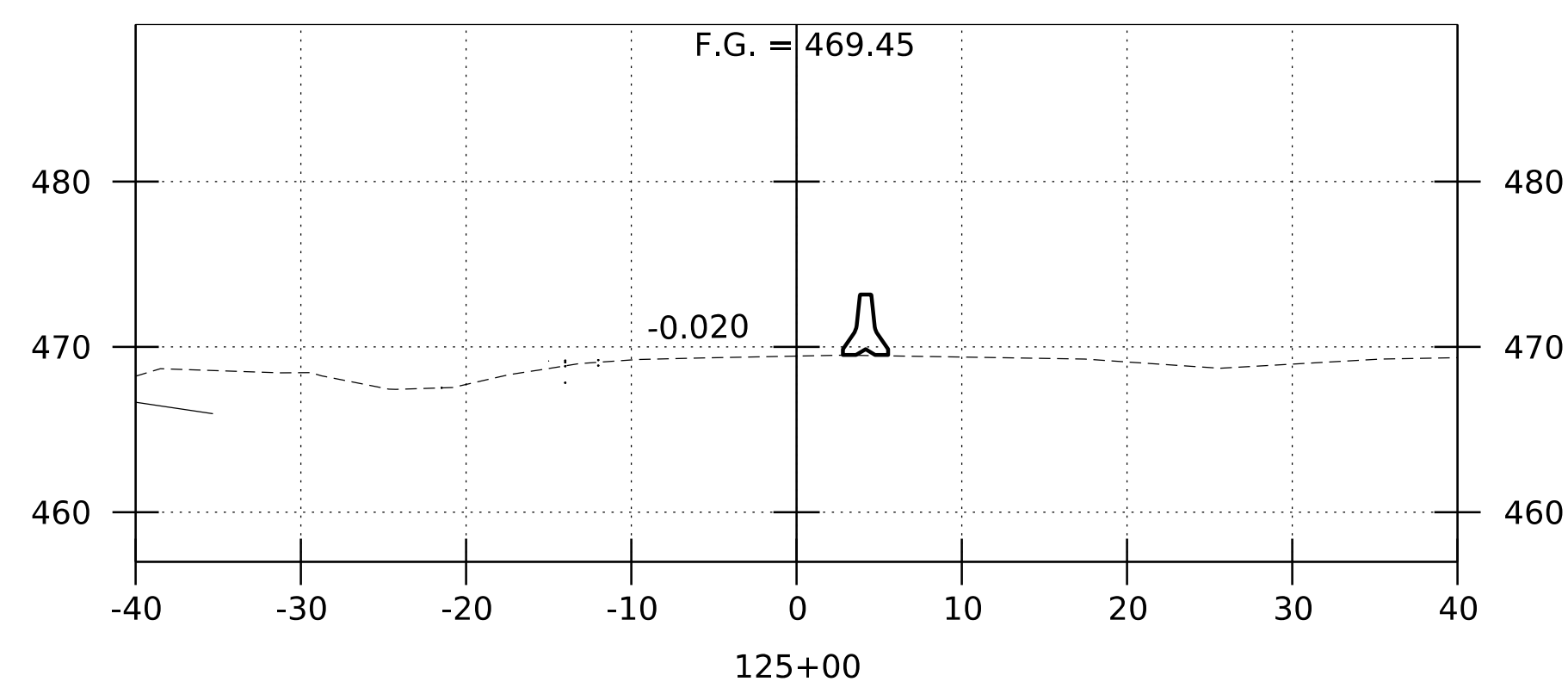
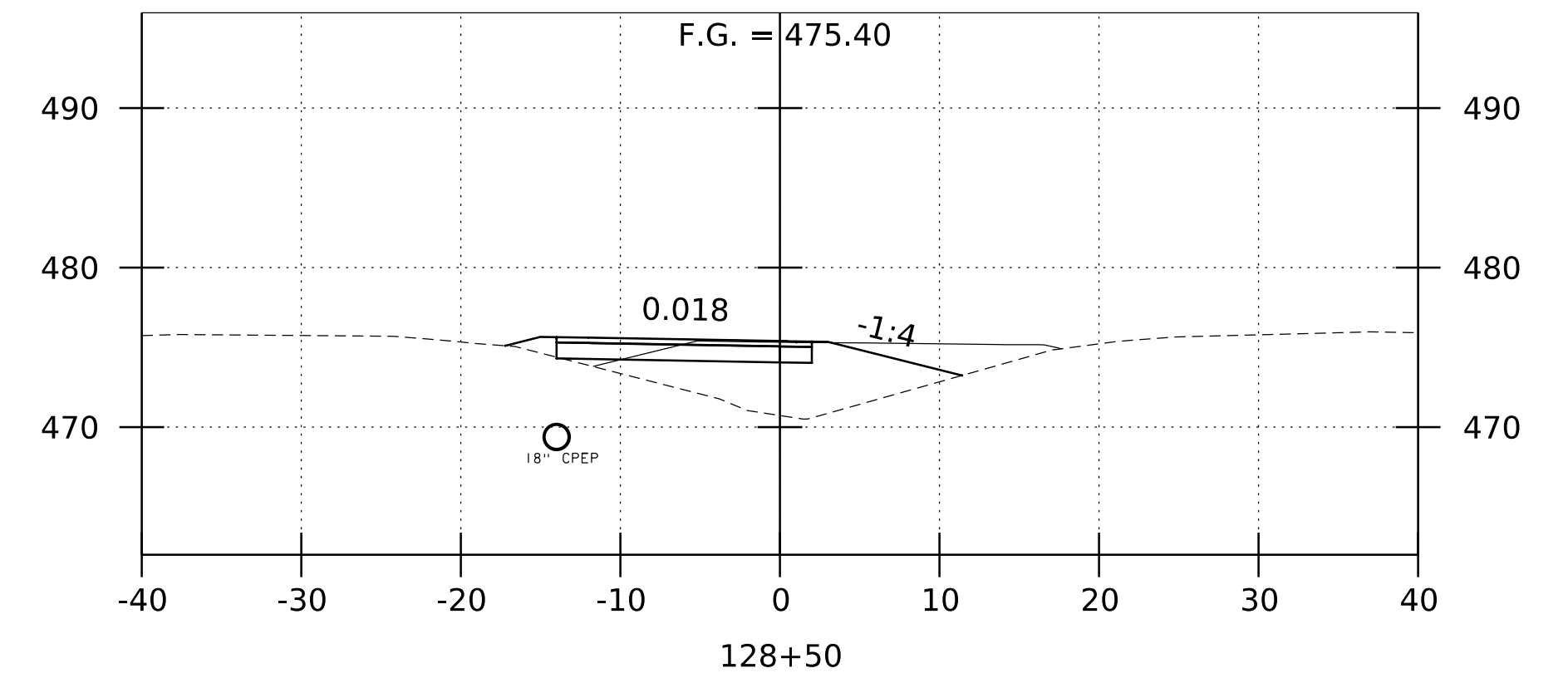
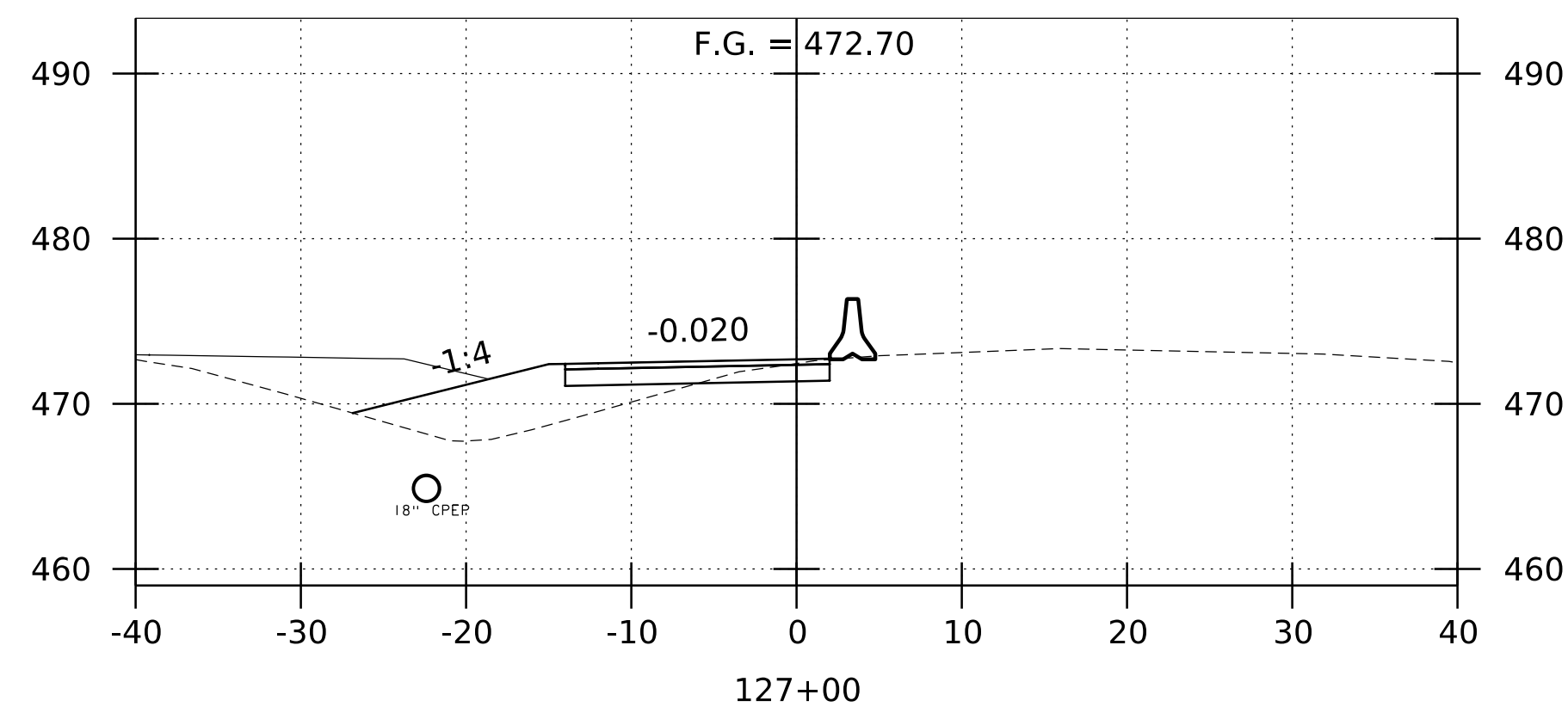
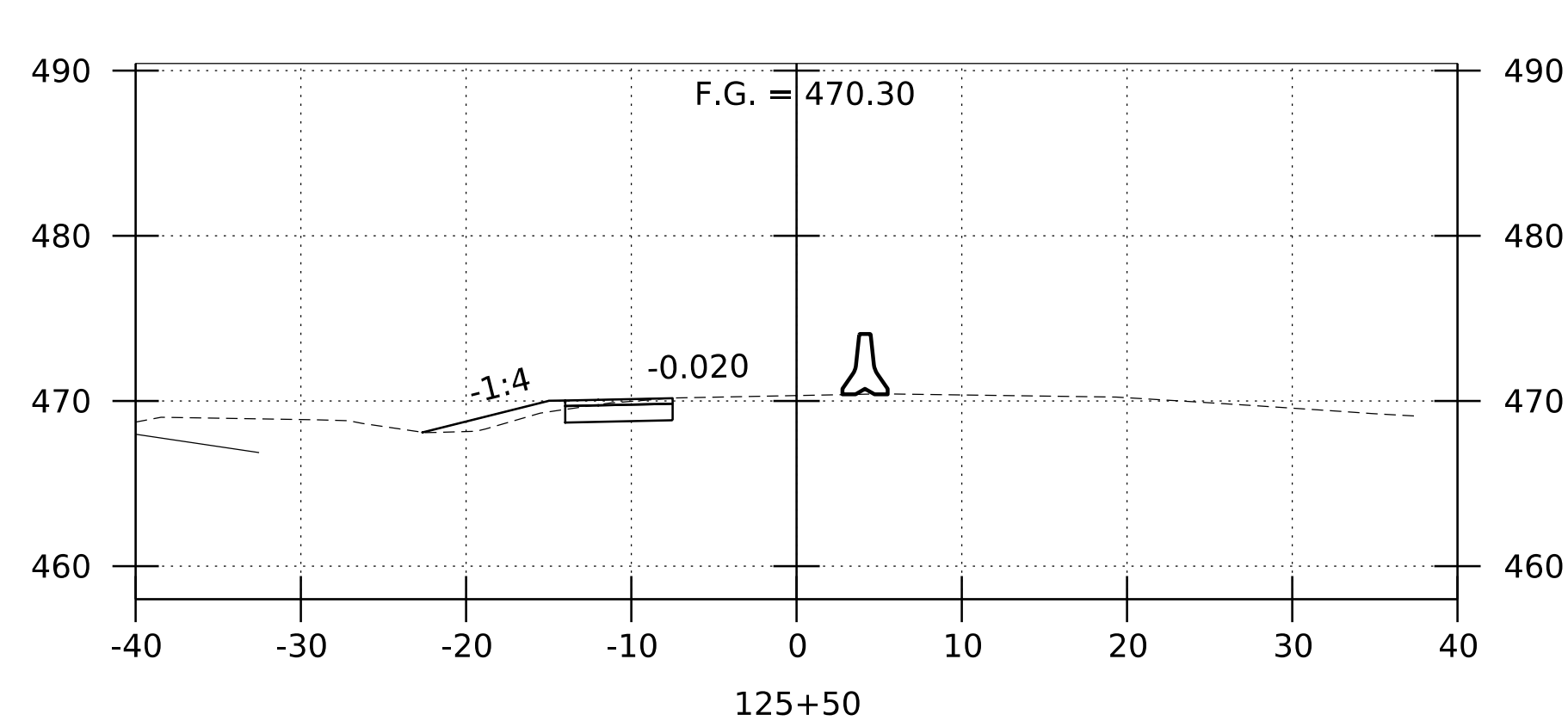
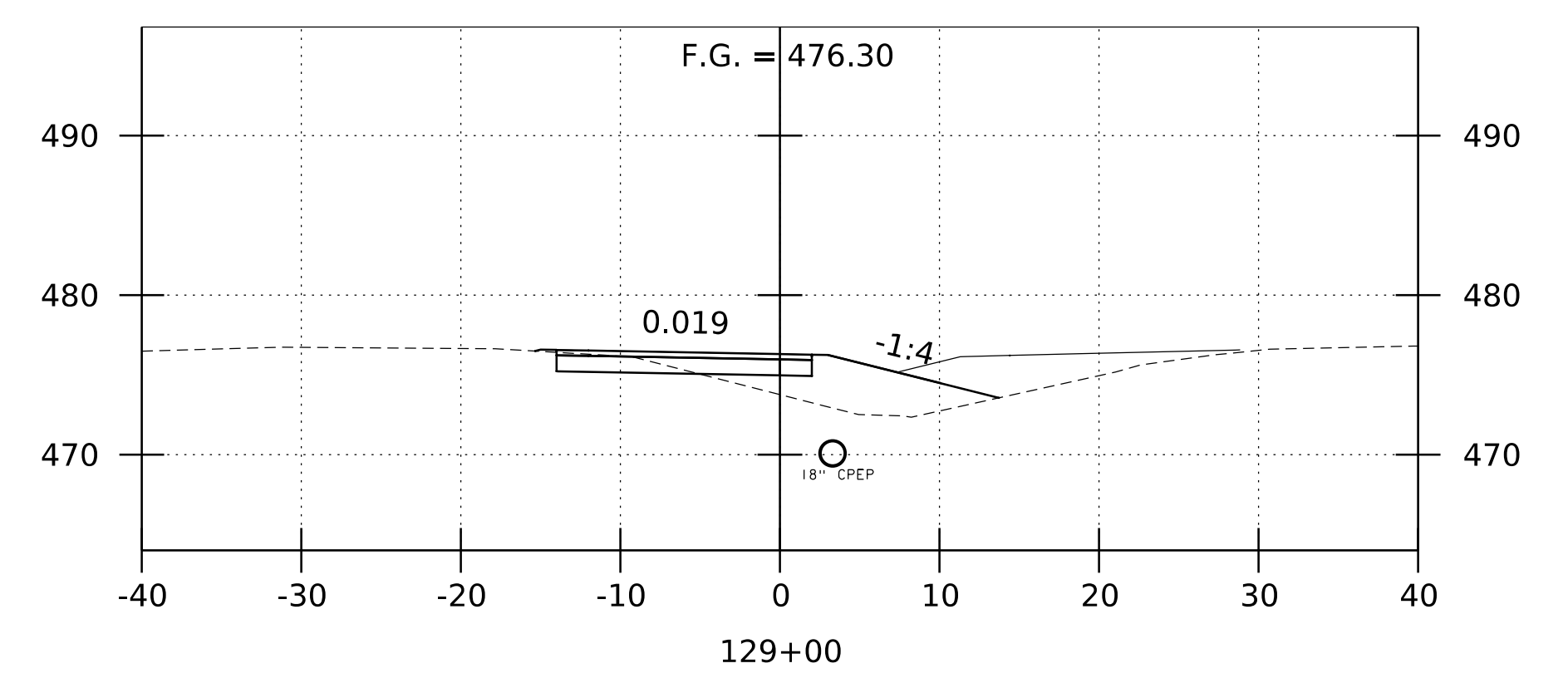
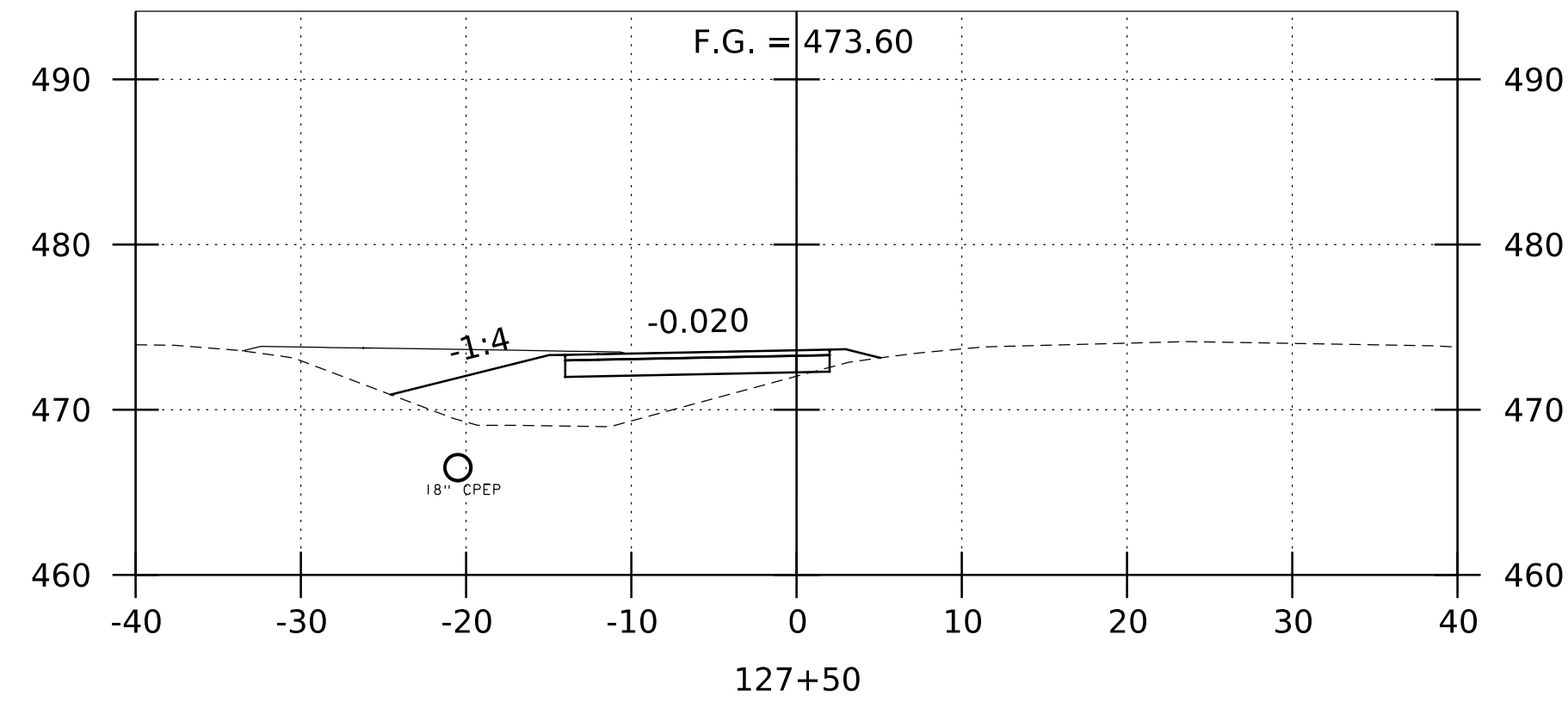
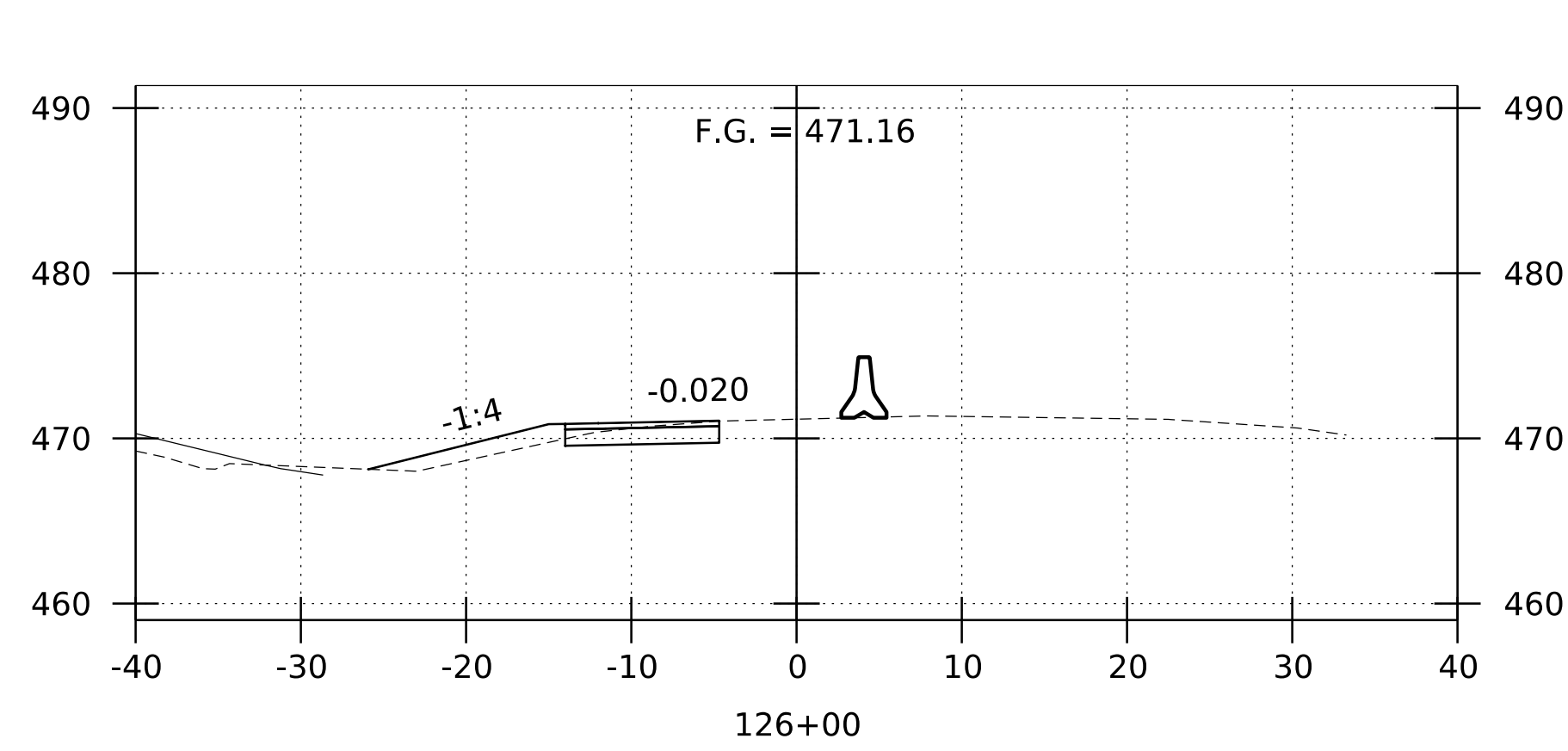


SB CROSSOVER

STA. 105+50 TO STA. 109+50



PROJECT NAME:	BRATTLEBORO
PROJECT NUMBER:	IM 09I-I(82)
FILE NAME:	z19a220xs.SBcrossover.dgn
PROJECT LEADER:	A.STOCKIN
DESIGNED BY:	E.WILLIAMS
SB CROSSOVER CROSS SECTION 2	
PLOT DATE:	10/28/2022
DRAWN BY:	M.CARIGNAN
CHECKED BY:	B.GEIGER
SHEET	30 OF 66

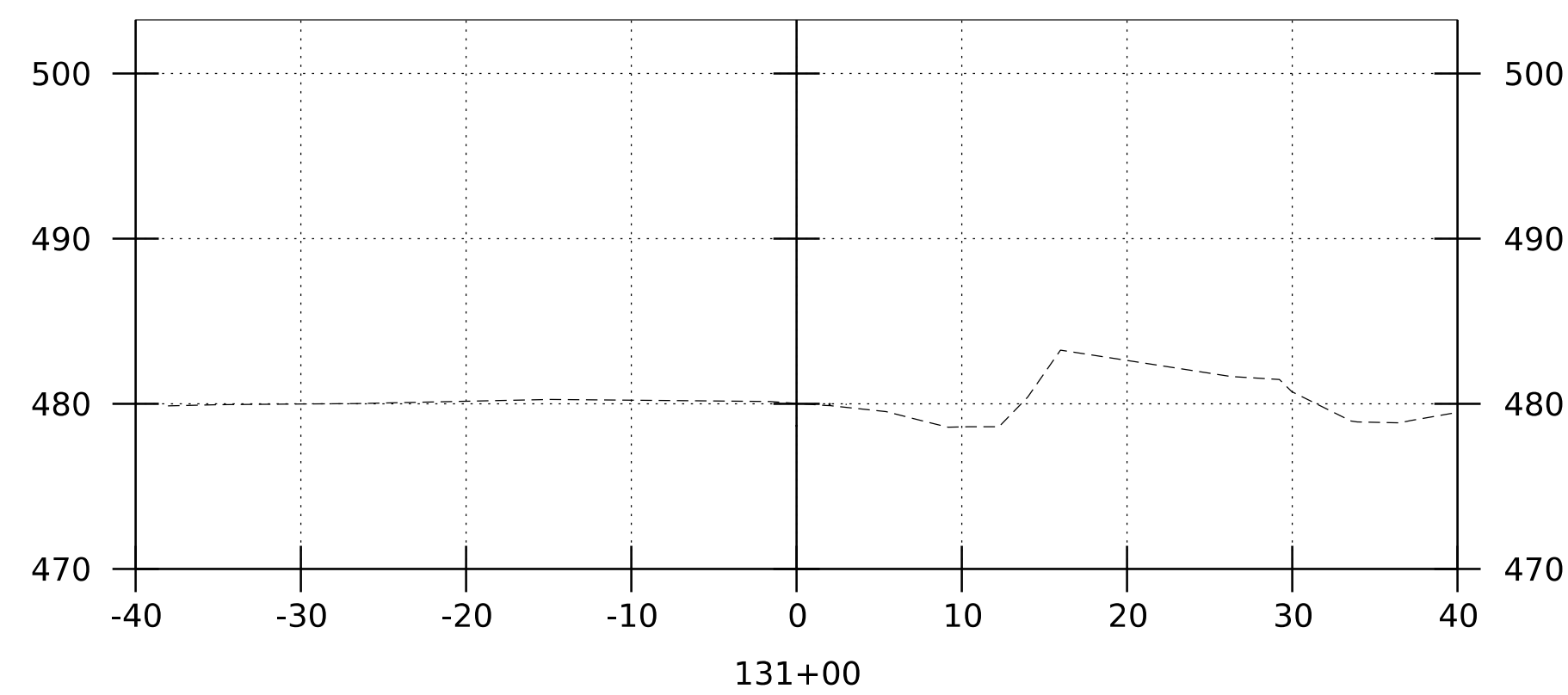
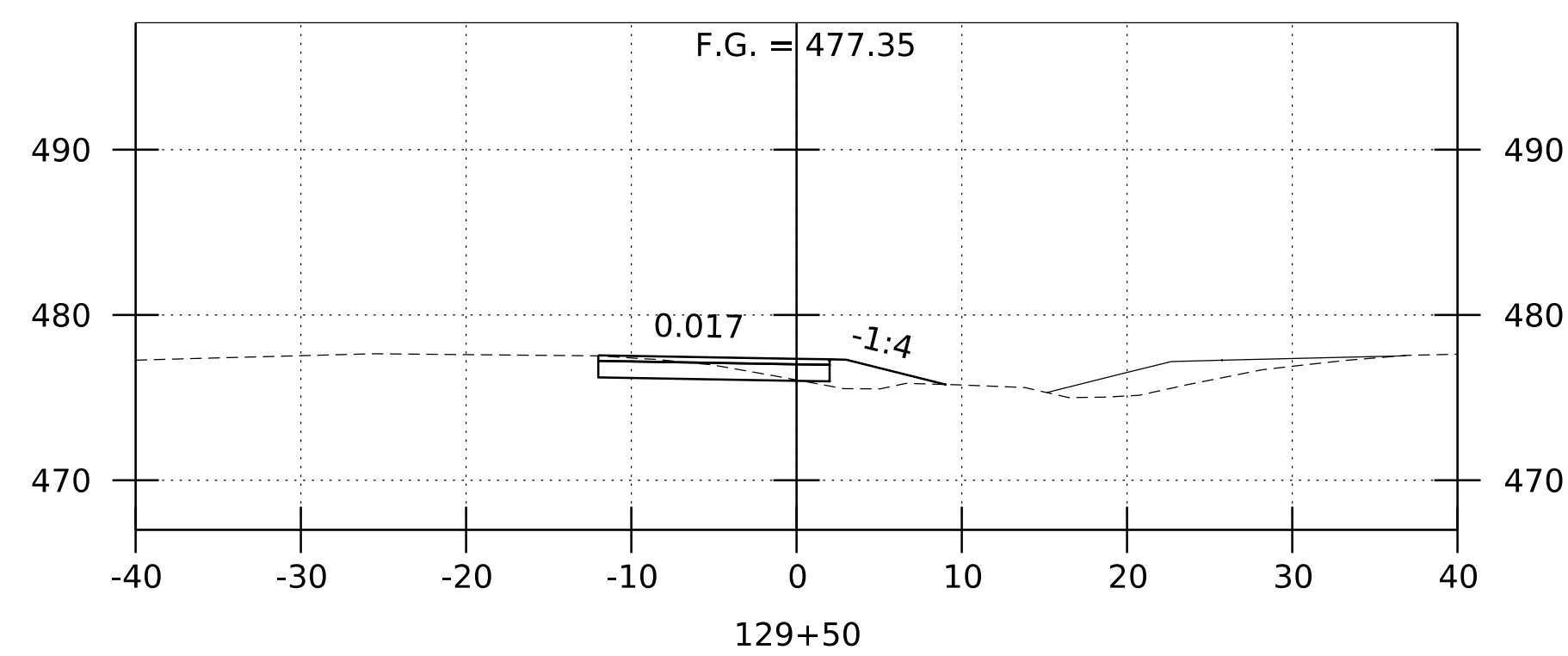
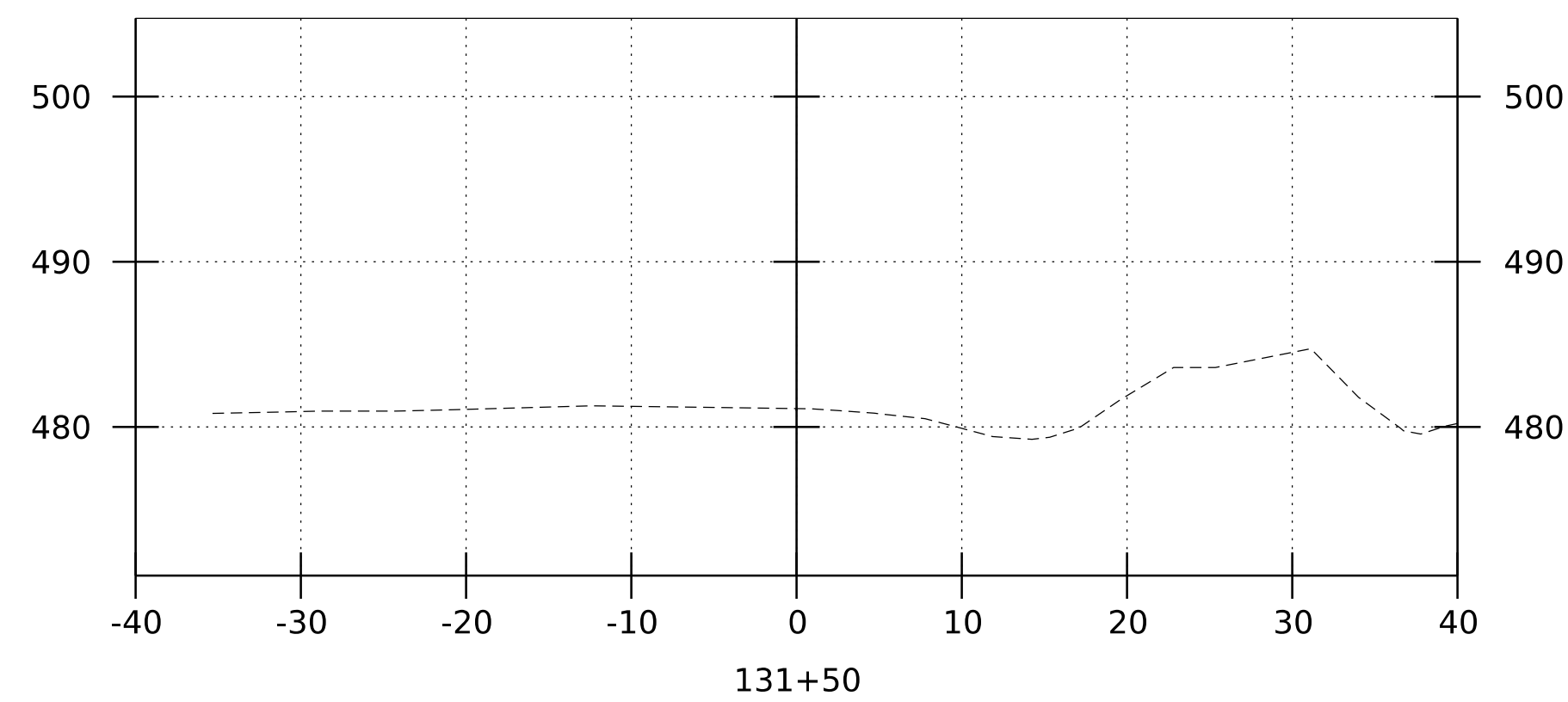
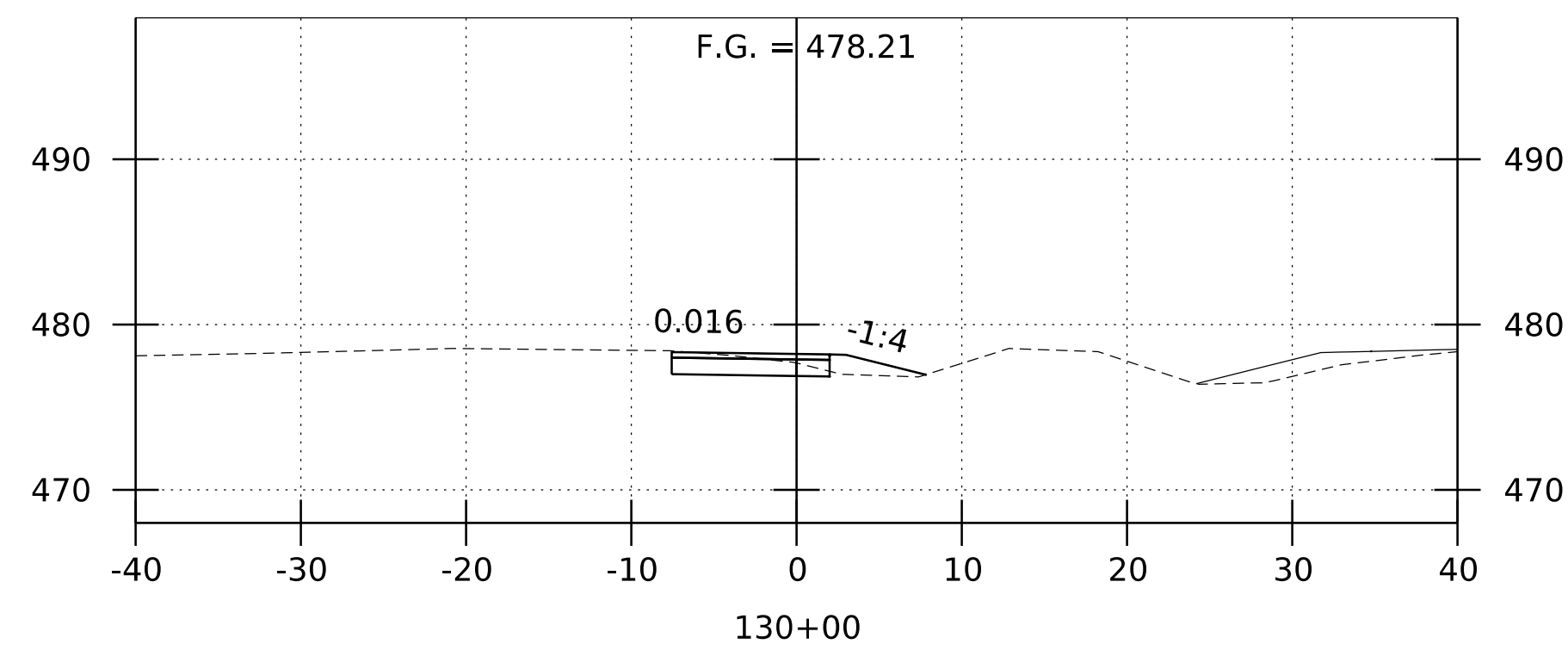
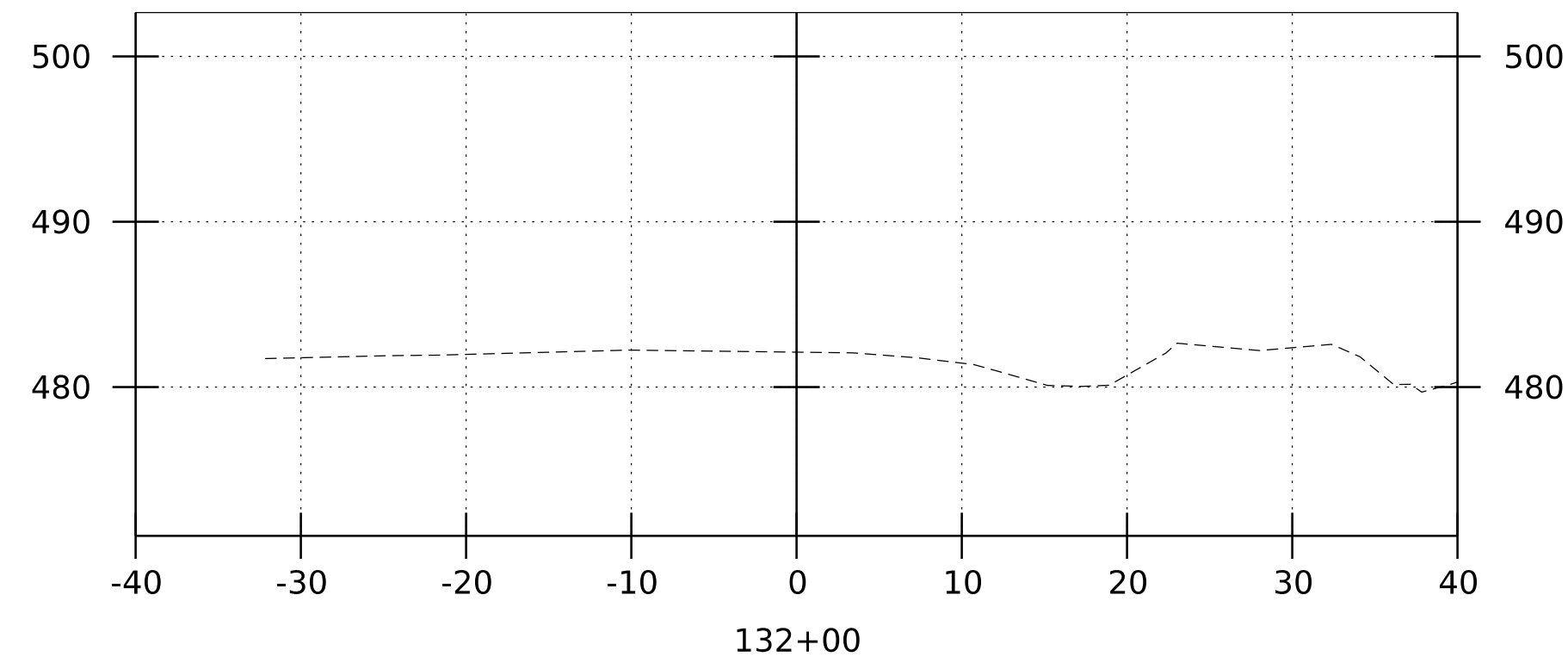
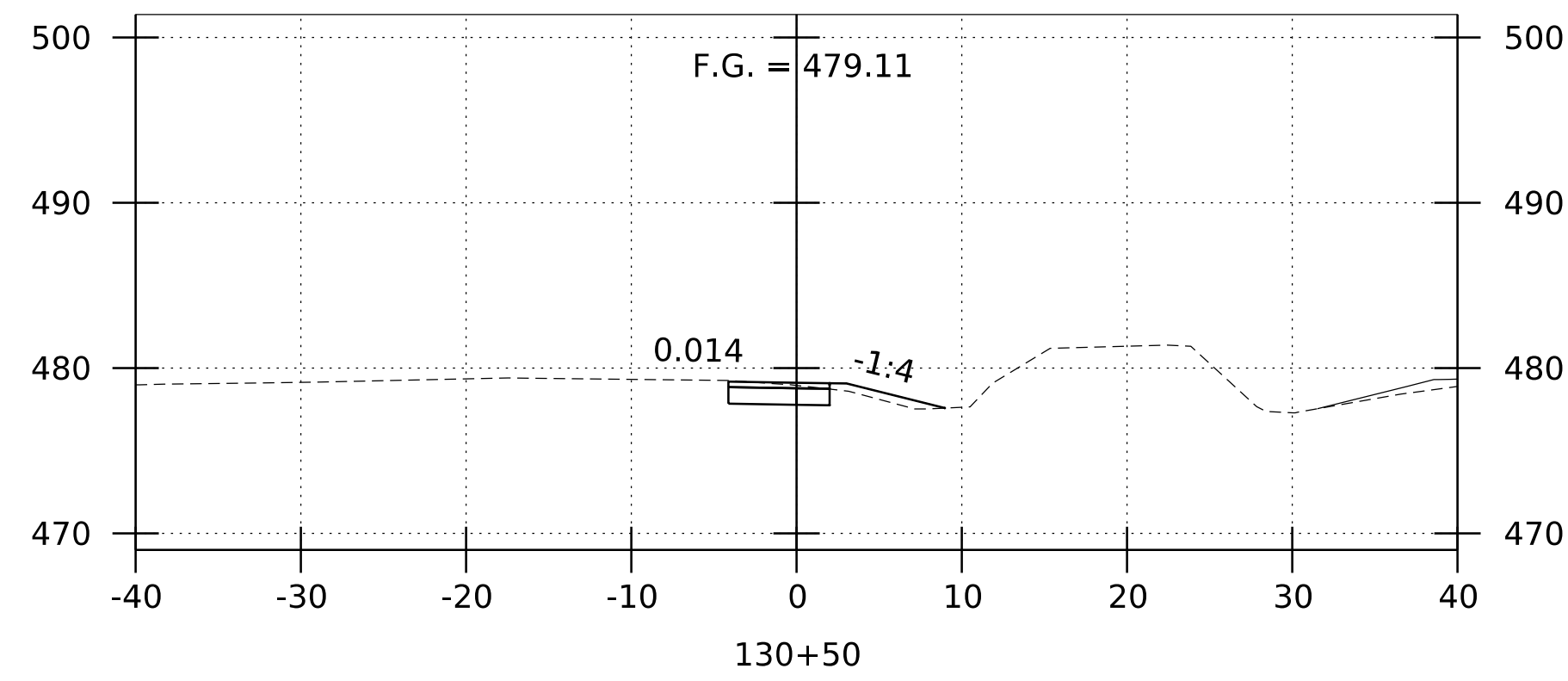


# SB CROSSOVER

STA. 125+00 TO STA. 129+00



PROJECT NAME:	BRATTLEBORO
PROJECT NUMBER:	IM 09I-I(82)
FILE NAME:	z19a220xs.SBcrossover.dgn
PROJECT LEADER:	A.STOCKIN
DESIGNED BY:	E.WILLIAMS
SB CROSSOVER CROSS SECTION 3	
PLOT DATE:	10/28/2022
DRAWN BY:	M.CARIGNAN
CHECKED BY:	B.GEIGER
SHEET	31 OF 66



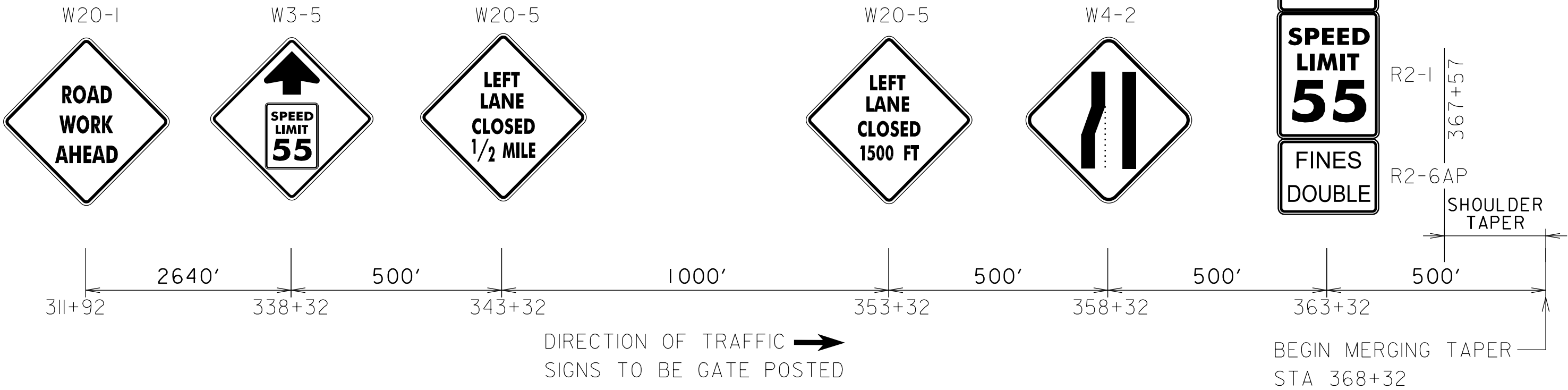
SB CROSSOVER

STA. 129+50 TO STA. 132+00



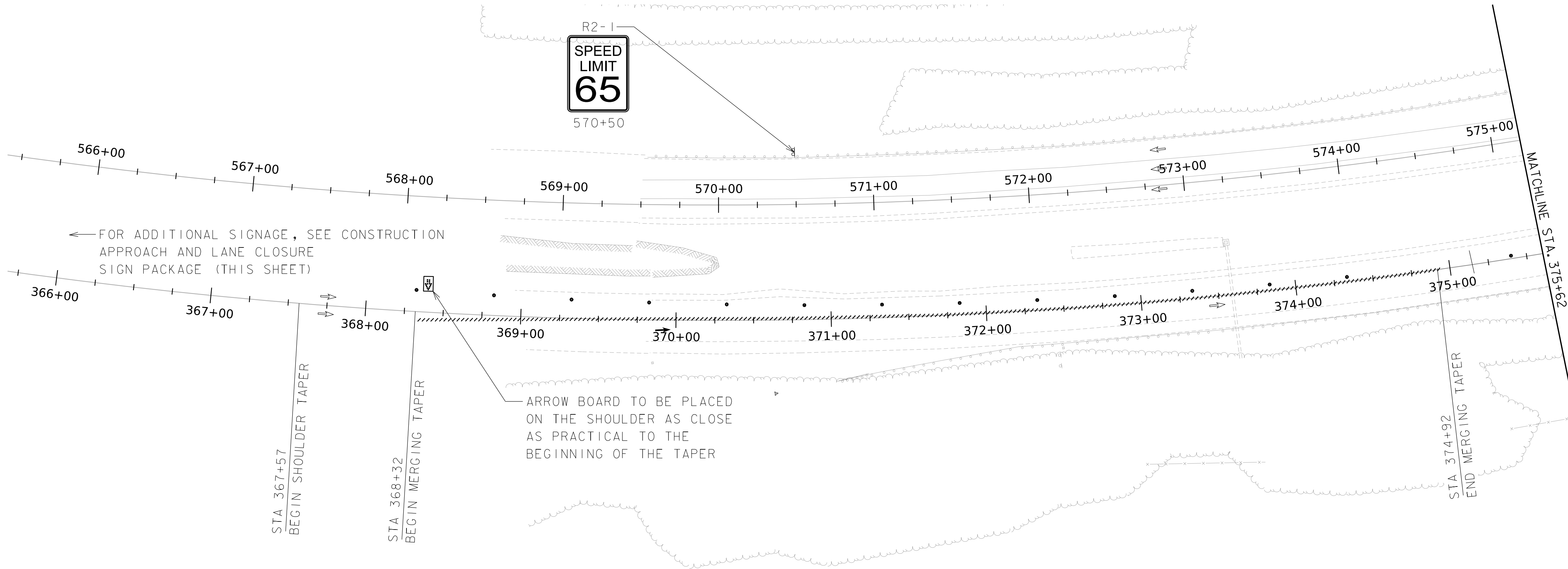
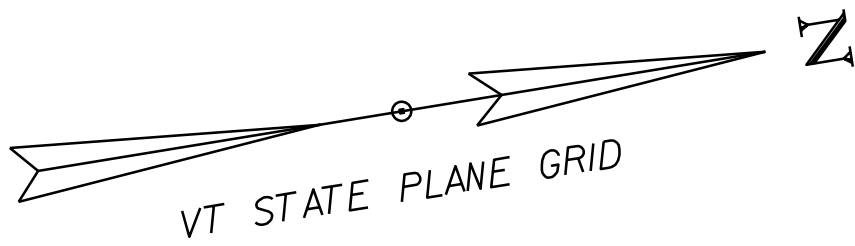
PROJECT NAME:	BRATTLEBORO	FILE NAME:	z19a220xs_SBcrossover.dgn	PLOT DATE:	10/28/2022
PROJECT NUMBER:	IM 09I-I(82)	PROJECT LEADER:	A.STOCKIN	DRAWN BY:	M.CARIGNAN
		DESIGNED BY:	E.WILLIAMS	CHECKED BY:	B.GEIGER
		SB CROSSOVER CROSS SECTION 4		SHEET	32 OF 66

CONSTRUCTION APPROACH AND LANE CLOSURE SIGN PACKAGE



PAVEMENT MARKING MASK

STA. 368+34 - STA. 374+94, CL (NB)



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH SIGN
- FLASHING ARROW PANEL
- CONCRETE MEDIAN BARRIER
- PAVEMENT MARKING REMOVAL
- REFLECTORIZED PLASTIC DRUM
- TYPE I DELINEATOR (YELLOW)
- TYPE I DELINEATOR (WHITE)
- FLOW OF TRAFFIC

NOTES:  
1. ALL EXISTING PAVEMENT MARKINGS IN  
CONFLICT WITH TEMPORARY PAVEMENT  
MARKINGS WILL BE REMOVED OR MASKED.  
2. 12' TRAVEL LANES WITH MINIMUM 1'  
SHOULDERS.

0 40 80  
SCALE IN FEET



PROJECT NAME: BRATTLEBORO  
PROJECT NUMBER: IM 091-I(82)

FILE NAME: z19a220bdr_tcp_NB.dgn  
PROJECT LEADER: A.STOCKIN  
DESIGNED BY: E.WILLIAMS  
NB CROSSOVER SHEET I

PLOT DATE: 10/28/2022  
DRAWN BY: M.CARIGNAN  
CHECKED BY: B.GEIGER  
SHEET 33 OF 66

TEMPORARY 6" YELLOW LINE

STA. 201+45 - STA. 208+75, CL  
STA. 207+29 - STA. 208+75, LT  
STA. 381+39- STA. 386+67, LT (NB)

PAVEMENT MARKING MASK

STA. 379+28 - STA. 384+75, CL (NB)  
STA. 582+00 - STA. 586+00, CL (SB)  
STA. 582+00 - STA. 586+00, LT (SB)

TEMPORARY 6" WHITE LINE

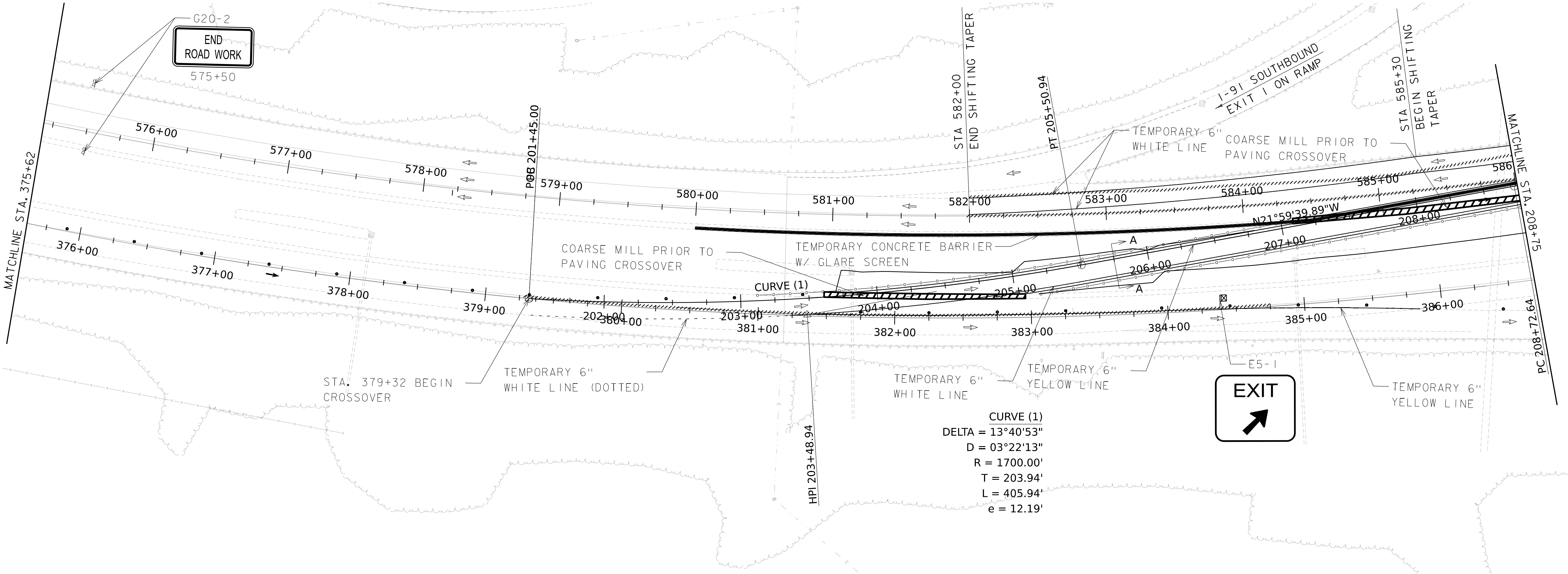
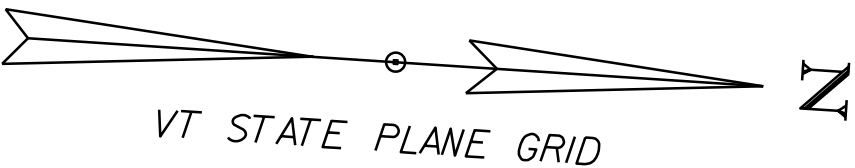
STA. 203+36 - STA. 208+75, RT  
STA. 580+66 - STA. 607+31, RT

TEMPORARY 6" WHITE LINE, (DOTTED)

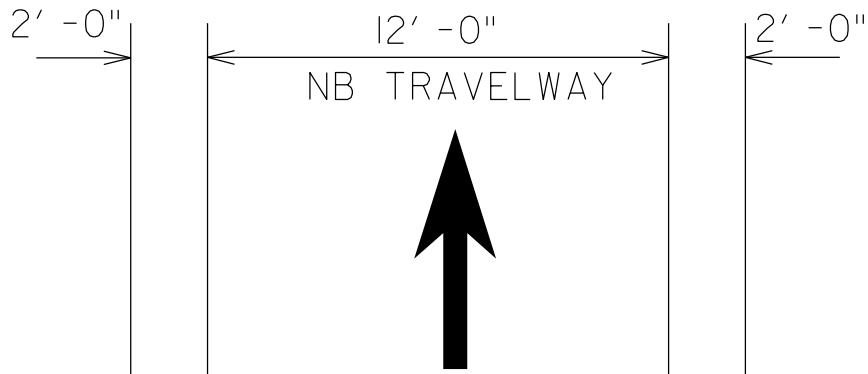
STA. 201+47 - STA. 203+36, RT

TEMPORARY CONCRETE BARRIER

STA. 580+00 - STA. 586+00, RT (SB)



CURVE (1)  
DELTA = 13°40'53"  
D = 03°22'13"  
R = 1700.00'  
T = 203.94'  
L = 405.94'  
e = 12.19'



SECTION A-A  
NOT TO SCALE

NOTE: FOR MORE INFORMATION SEE TRAFFIC CONTROL NOTES AND TYPICALS SHEET



PROJECT NAME: BRATTLEBORO  
PROJECT NUMBER: IM 091-I(82)  
FILE NAME: z19a220bdr_tcp_NB.dgn  
PROJECT LEADER: A.STOCKIN  
DESIGNED BY: E.WILLIAMS  
NB CROSSOVER SHEET 2

PLOT DATE: 10/28/2022  
DRAWN BY: M.CARIGNAN  
CHECKED BY: B.GEIGER  
SHEET 34 OF 66

TEMPORARY 6" YELLOW LINE

STA. 208+75 - STA. 219+75, CL  
STA. 208+75 - STA. 219+75, RT

TEMPORARY 6" WHITE LINE

STA. 203+36 - STA. 232+41  
STA. 580+66 - STA. 607+31  
STA. 586+72 - STA. 607+31

TEMPORARY CONCRETE BARRIER

STA. 208+75 - STA. 219+75, RT  
STA. 387+82 - STA. 388+86, RT (NB)  
STA. 595+94 - STA. 597+00, LT (SB)

PAVEMENT MARKING MASK

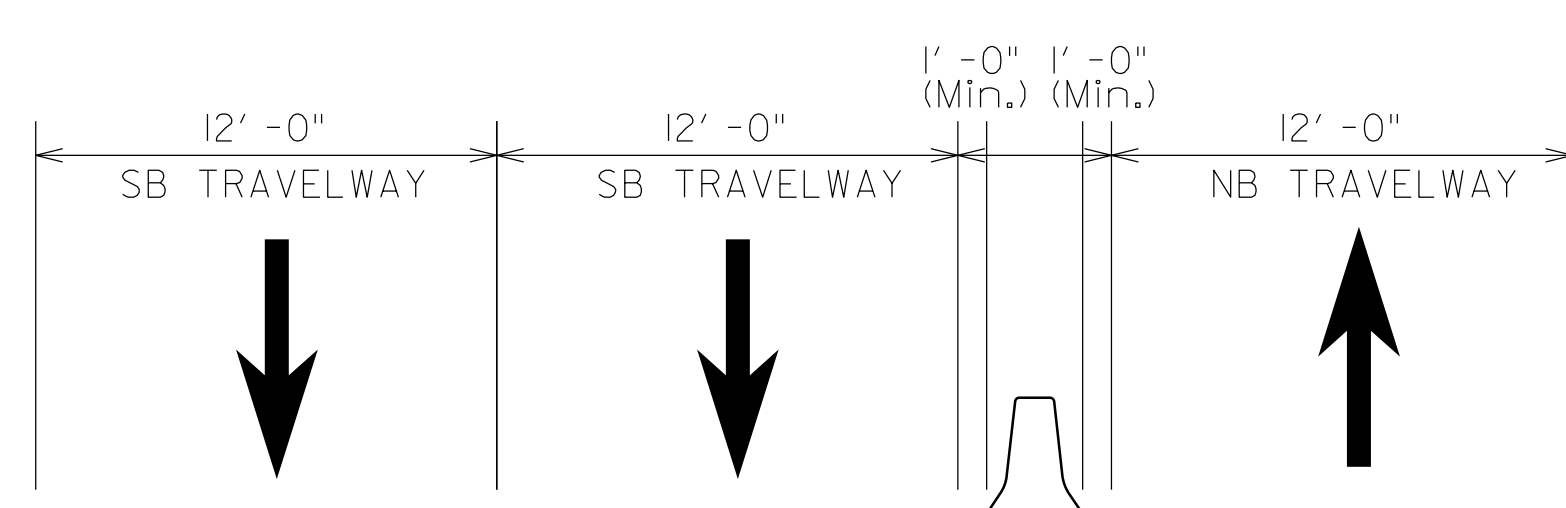
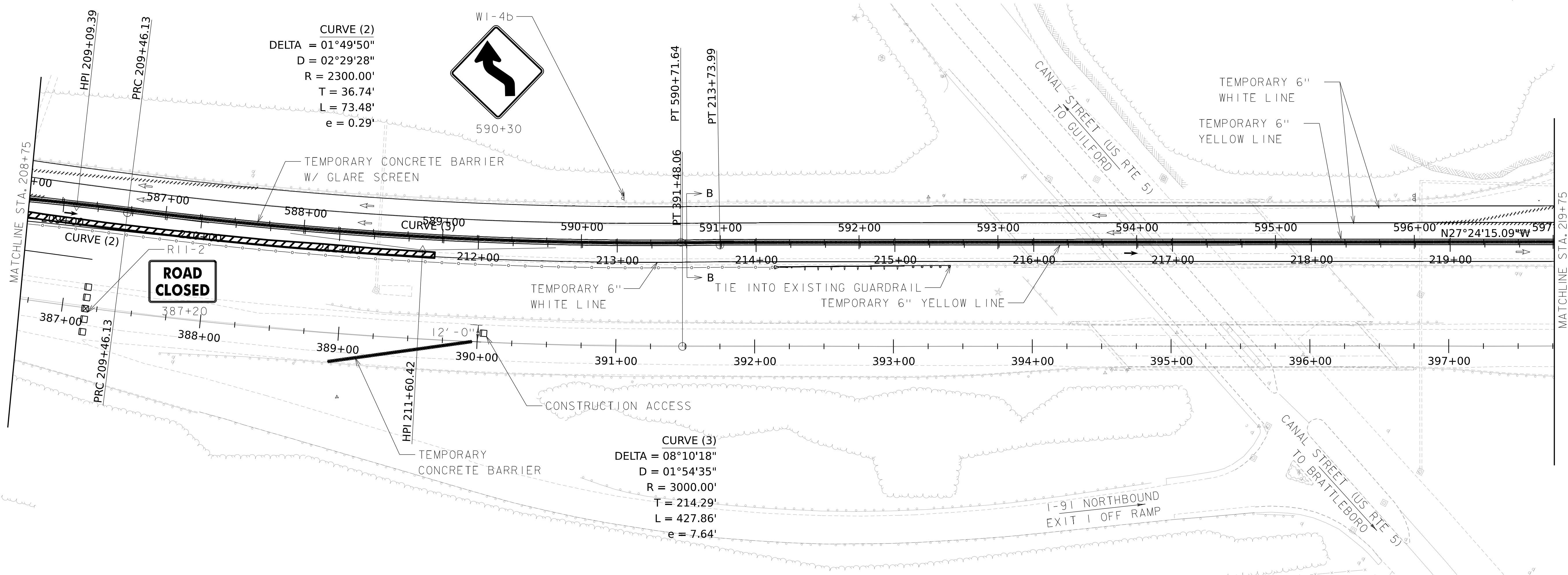
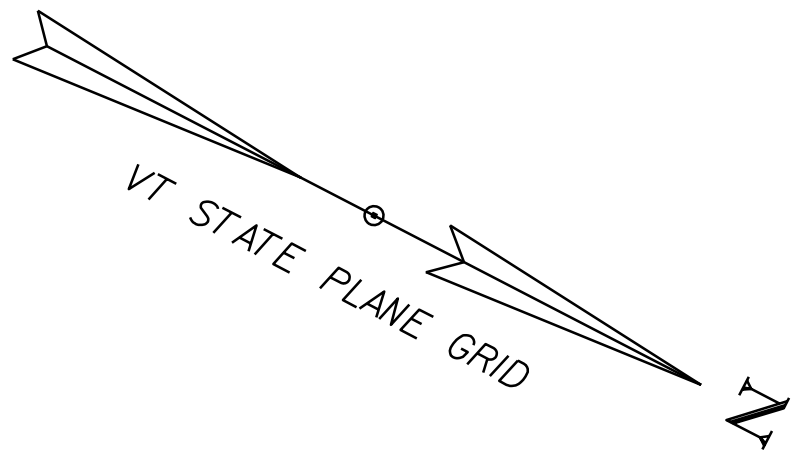
STA. 586+00 - STA. 587+63, LT (SB)  
STA. 586+00 - STA. 586+10, CL (SB)  
STA. 596+14 - STA. 597+00, LT (SB)

MANUFACTURED TERMINAL SECTION, TANGENT

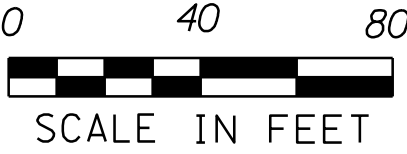
STA. 214+10 - STA. 215+10, RT

STEEL BEAM GUARDRAIL, GALVANIZED

STA. 215+10 - STA. 215+40, RT



NOTE: FOR MORE INFORMATION SEE TRAFFIC CONTROL NOTES AND TYPICALS SHEET

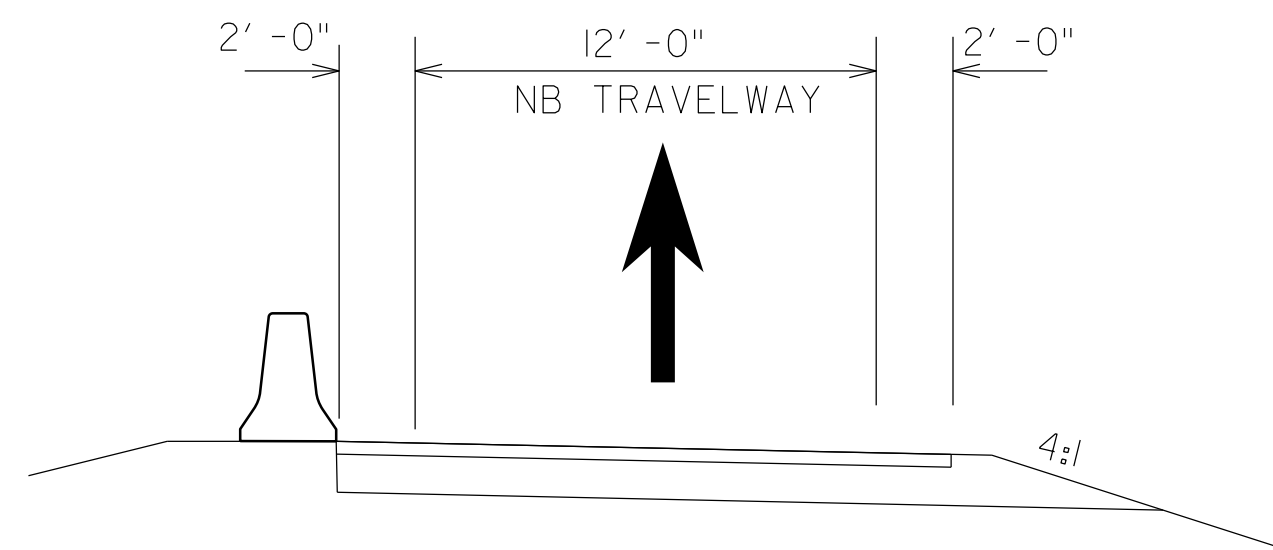


PROJECT NAME:	BRATTLEBORO	PLOT DATE:	10/28/2022
PROJECT NUMBER:	IM 091-I(82)	DRAWN BY:	M.CARIGNAN
FILE NAME:	z19a220bdr_tcp_NB.dgn	CHECKED BY:	B.GEIGER
PROJECT LEADER:	A.STOCKIN	SHEET	35 OF 66
DESIGNED BY:	E.WILLIAMS		
NB CROSSOVER SHEET 3			

TEMPORARY CONCRETE BARRIER

STA. 396+00 - STA. 400+35, LT (SB)  
STA. 219+75 - STA. 229+37, LT

STA. 397+00 - STA. 407+30, LT (SB)  
STA. 400+60 - STA. 401+45, LT (SB GORE)  
STA. 400+50 - STA. 407+30, LT (SB)



NOTE: FOR MORE INFORMATION SEE TRAFFIC CONTROL NOTES AND TYPICALS SHEET



WSP |

PLOT DATE: 10/28/2022  
DRAWN BY: M.CARIGNAN  
CHECKED BY: B.GEIGER  
SHEET 36 OF 66

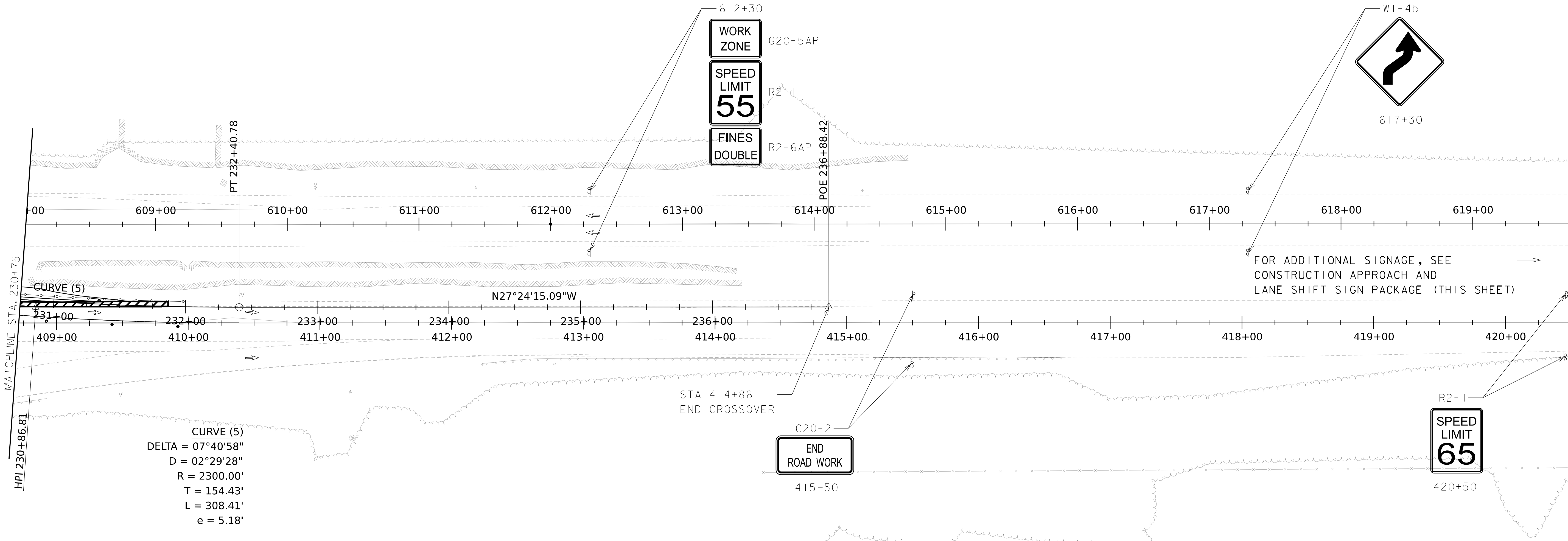
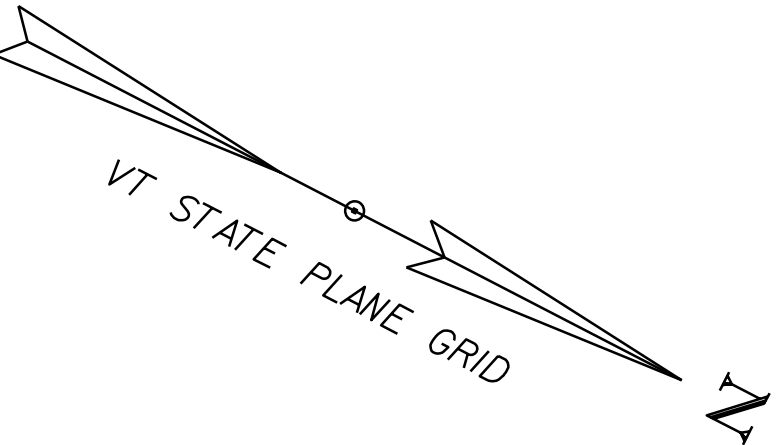
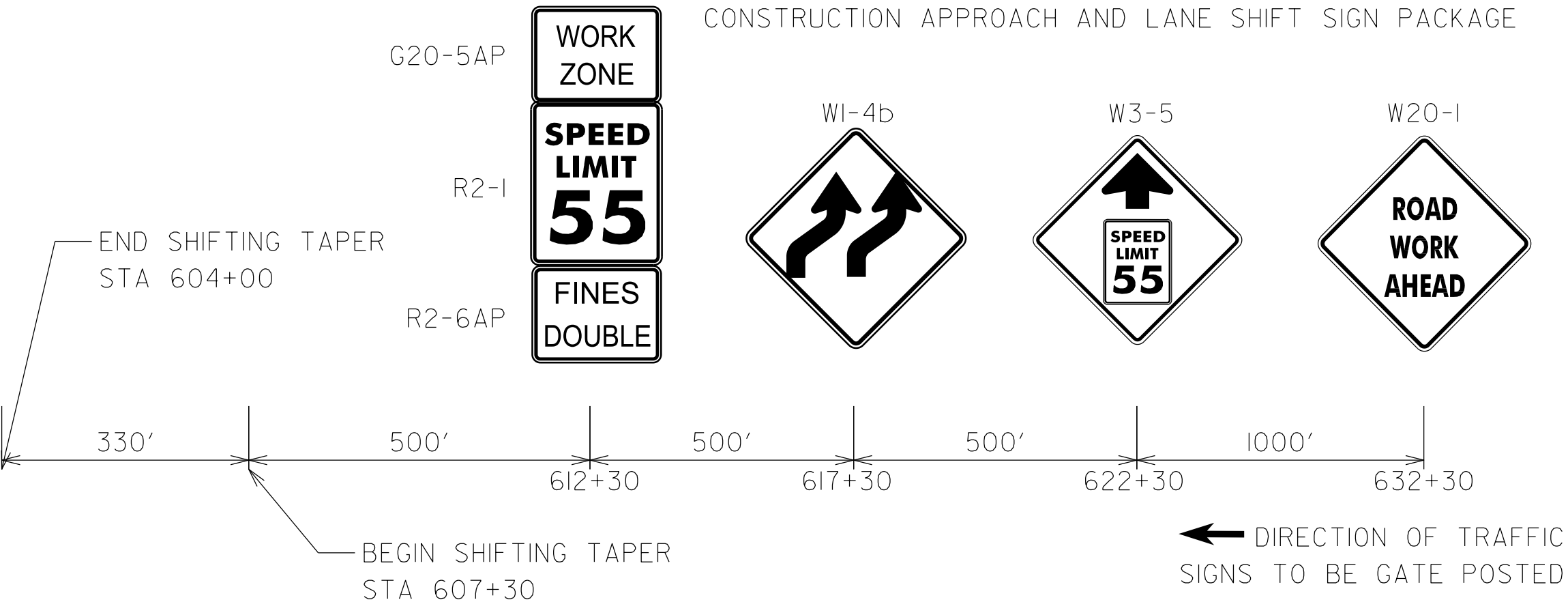
TEMPORARY 6" YELLOW LINE

STA. 230+75 - STA. 231+90, CL

TEMPORARY 6" WHITE LINE

STA. 230+75 - STA. 232+41

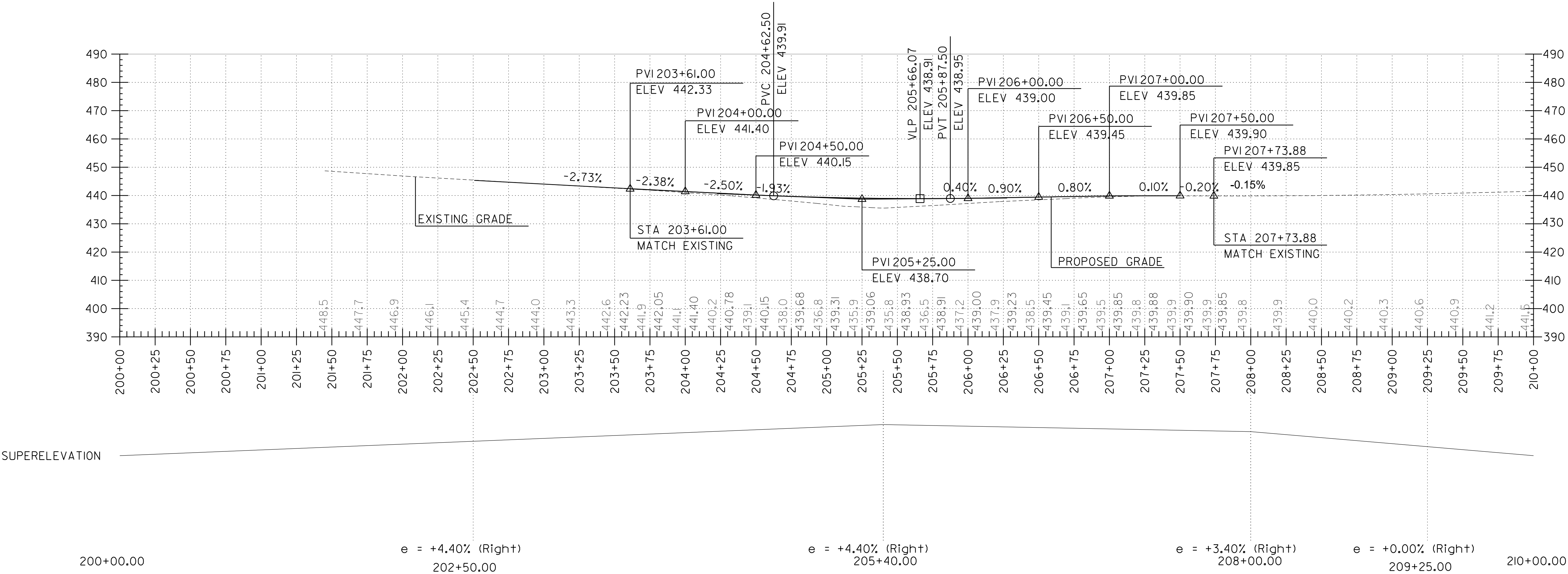
CONSTRUCTION APPROACH AND LANE SHIFT SIGN PACKAGE



PROJECT NAME:	BRATTLEBORO
PROJECT NUMBER:	IM 091-I(82)
FILE NAME:	z19a220bdr_tcp_NB.dgn
PROJECT LEADER:	A.STOCKIN
DESIGNED BY:	E.WILLIAMS
NB CROSSOVER SHEET 5	
PLOT DATE:	10/28/2022
DRAWN BY:	M.CARIGNAN
CHECKED BY:	B.GEIGER
SHEET	37 OF 66



L = 125.00 FT  
K = 54  
SSD = 593 FT  
G1 = -1.93%  
G2 = 0.40%



I-91NB CROSSOVER PROFILE I

HORIZONTAL SCALE: 1" = 20'-0"  
VERTICAL SCALE: 1" = 10'-0"

NOTES:

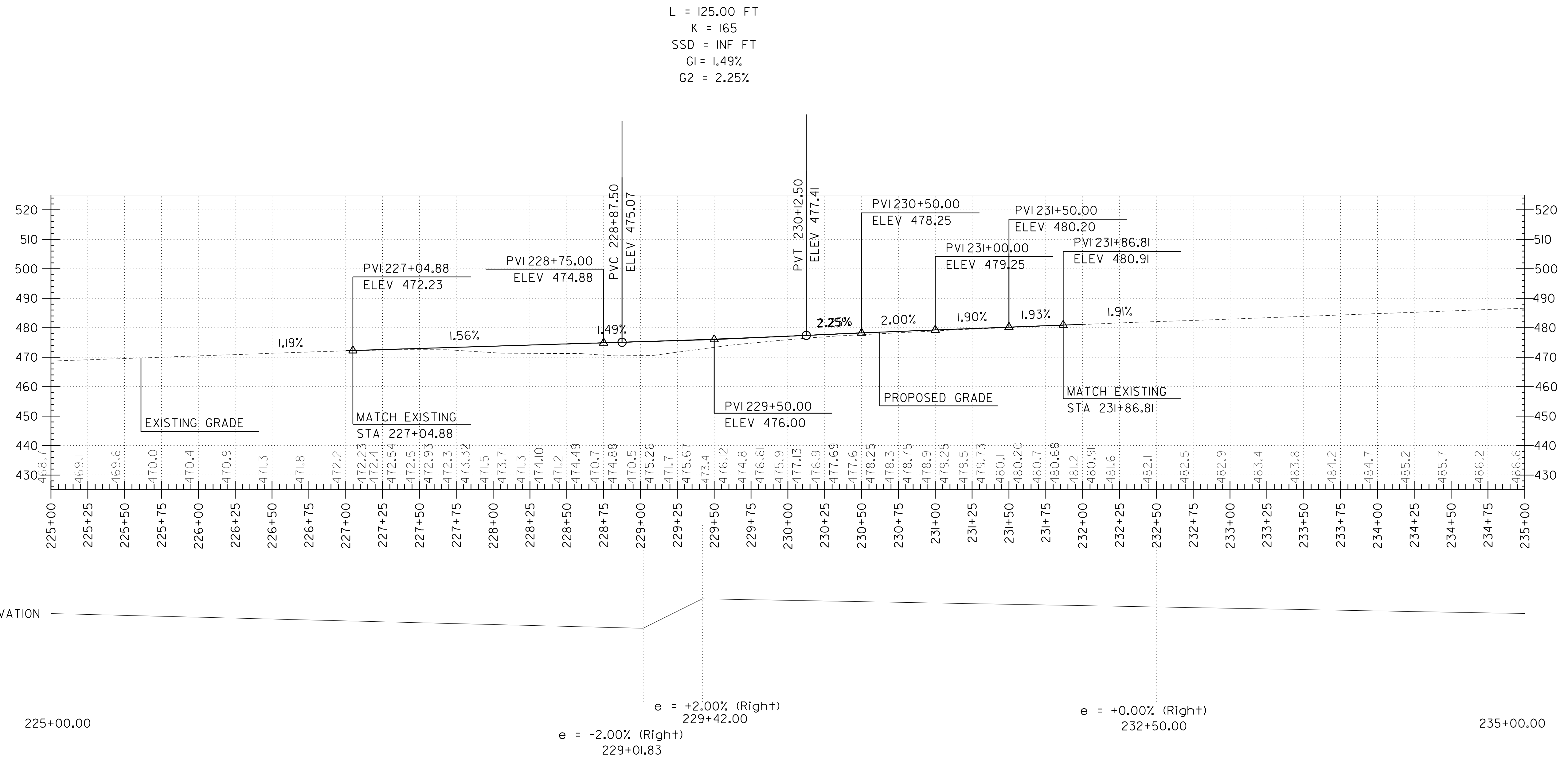
- ELEVATIONS SHOWN TO THE NEAREST TENTH DEPICT THE EXISTING GROUND ELEVATION.
- ELEVATIONS SHOWN TO THE NEAREST HUNDRETH DEPICT THE PROPOSED PROFILE GRADE ELEVATION.

PROJECT NAME: BRATTLEBORO  
PROJECT NUMBER: IM 091-I(82)

FILE NAME: z19a220pro.NB crossover.dgn  
PROJECT LEADER: A.STOCKIN  
DESIGNED BY: E.WILLIAMS  
NB CROSSOVER PROFILE I

PLOT DATE: 10/28/2022  
DRAWN BY: M.CARIGNAN  
CHECKED BY: B.GEIGER  
SHEET 38 OF 66





I-91NB CROSSOVER PROFILE 2

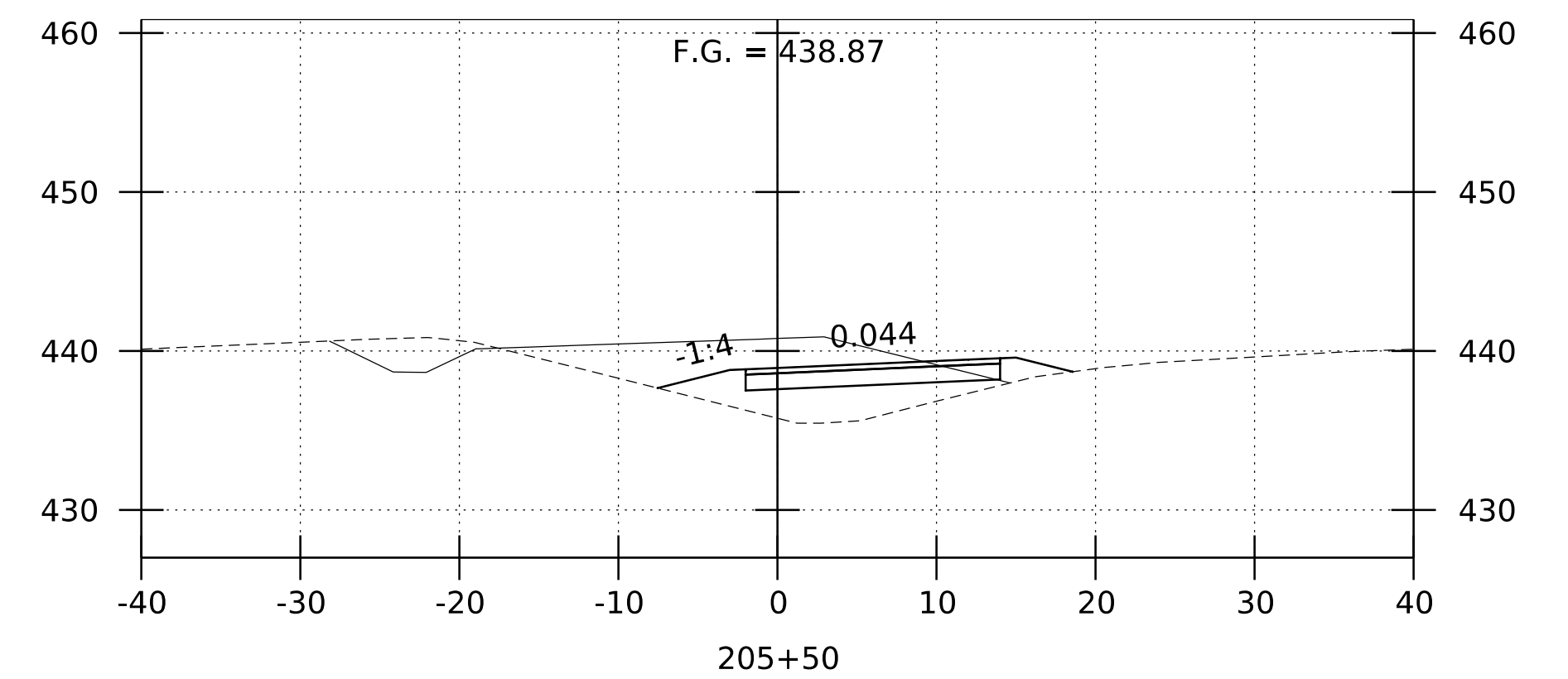
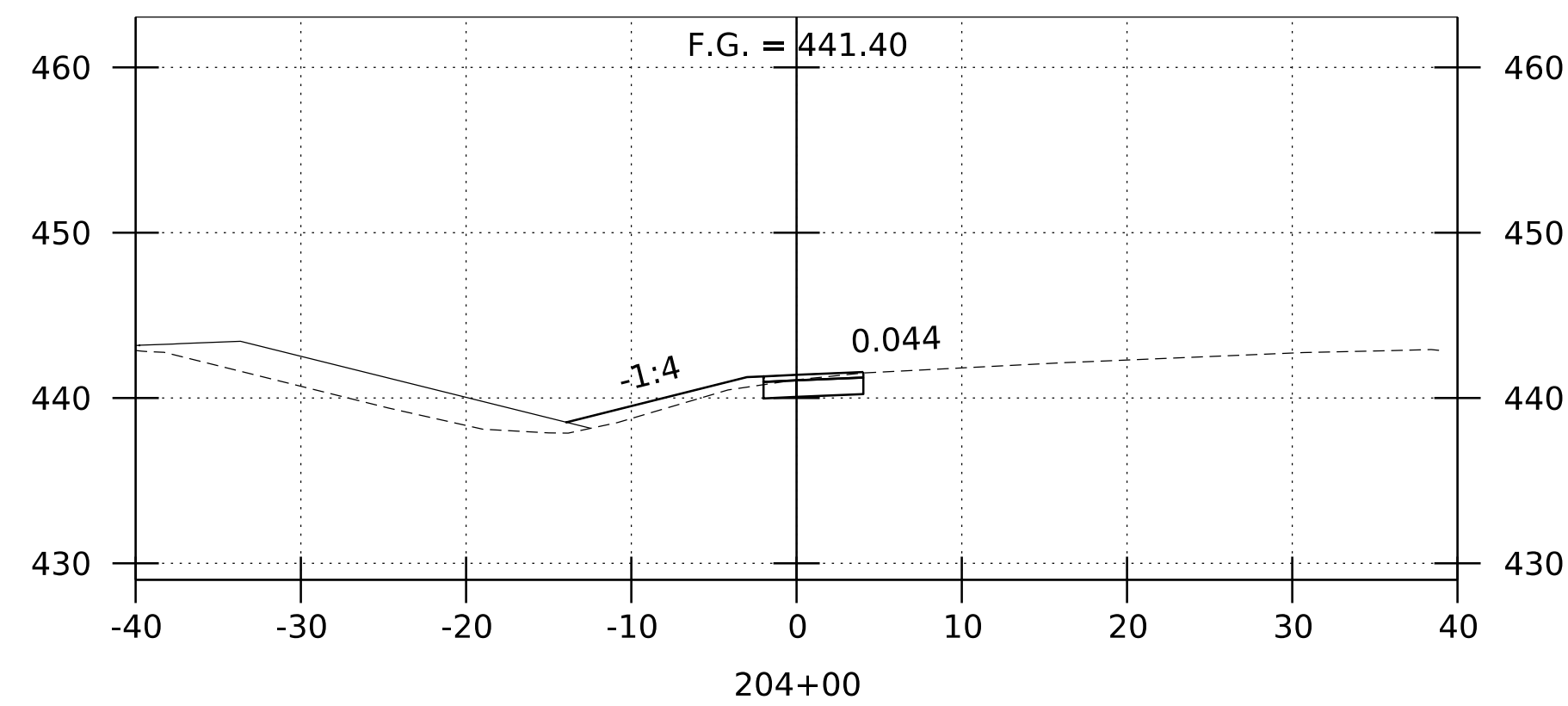
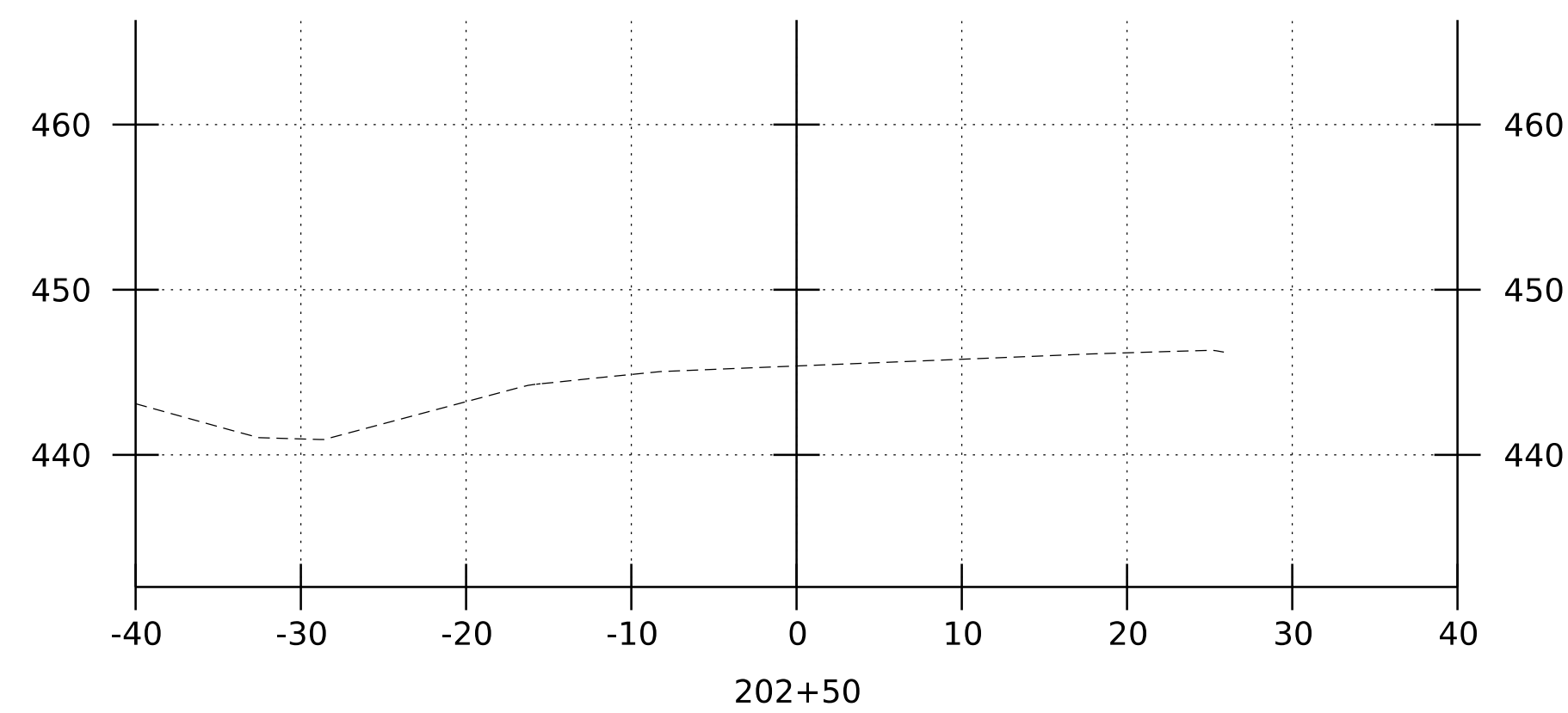
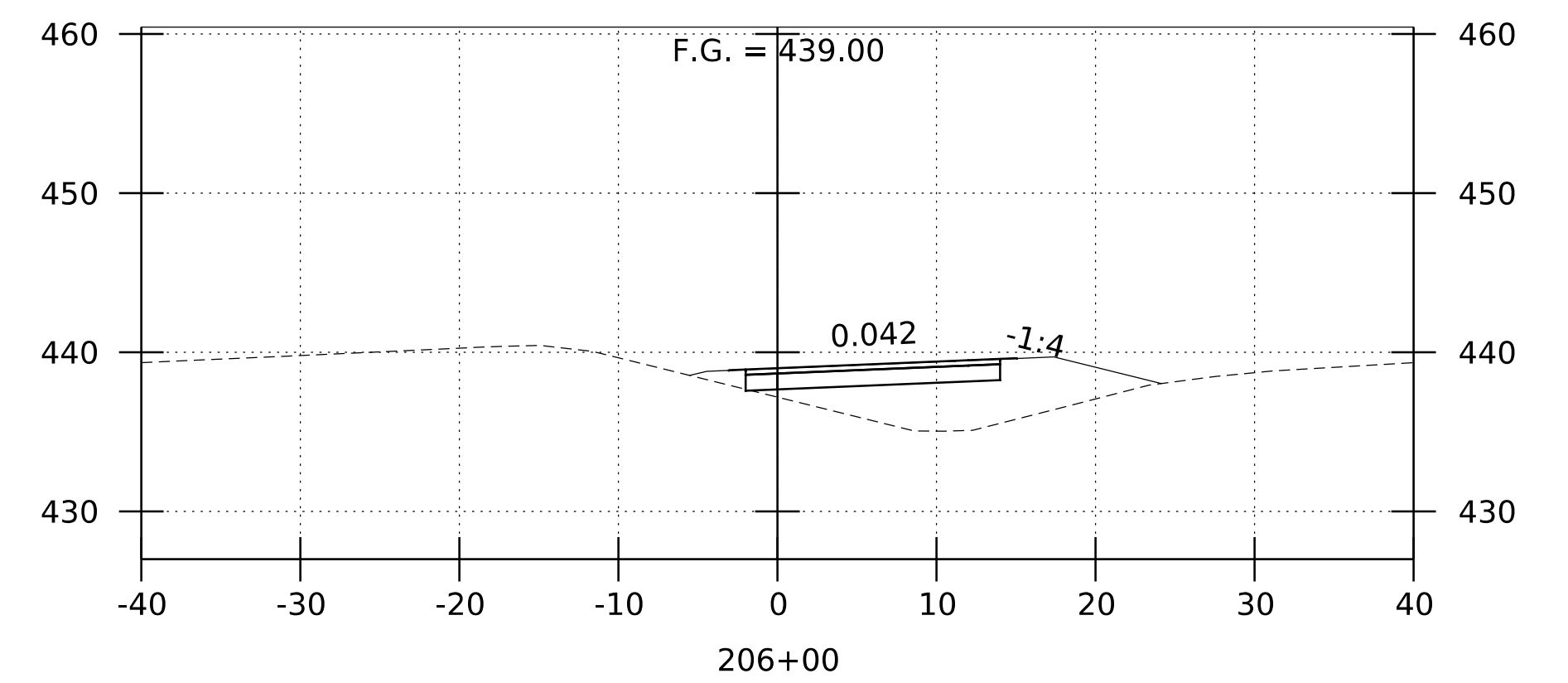
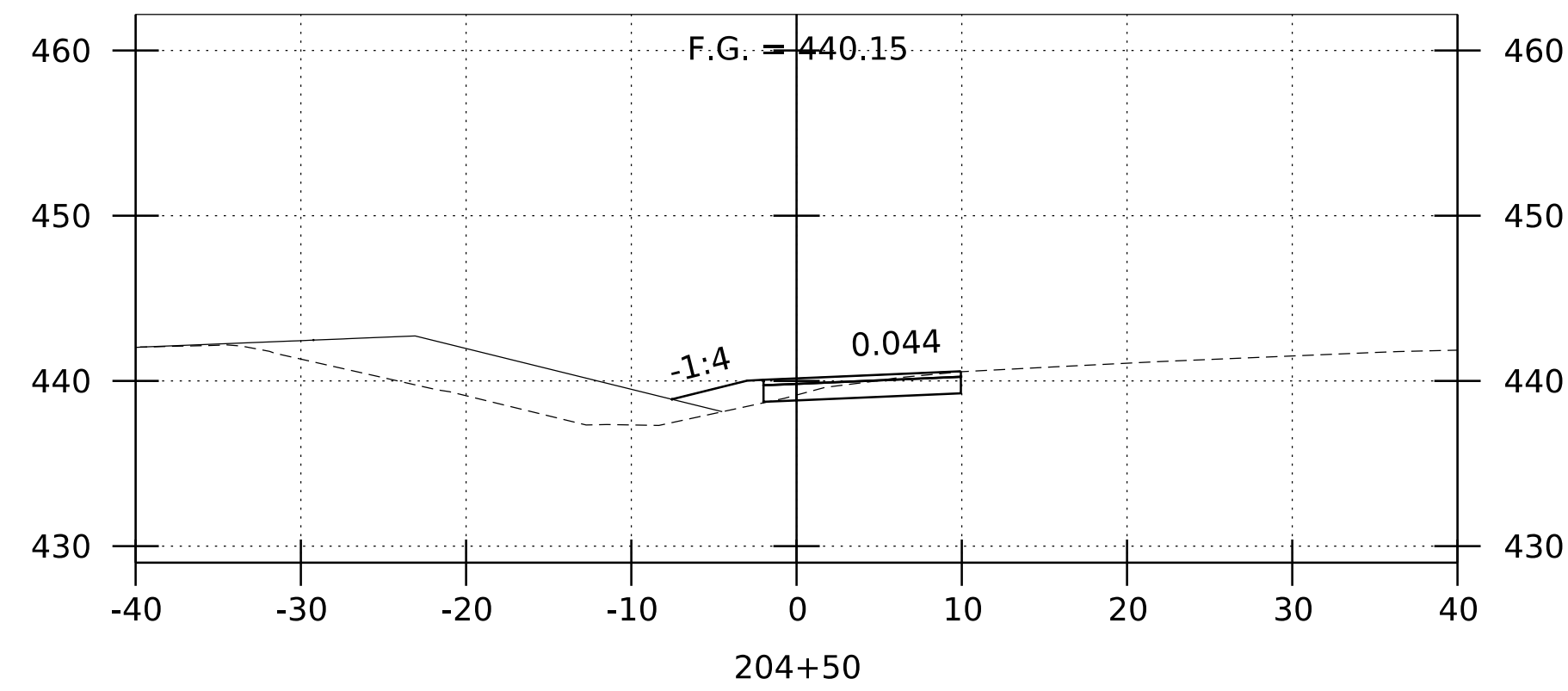
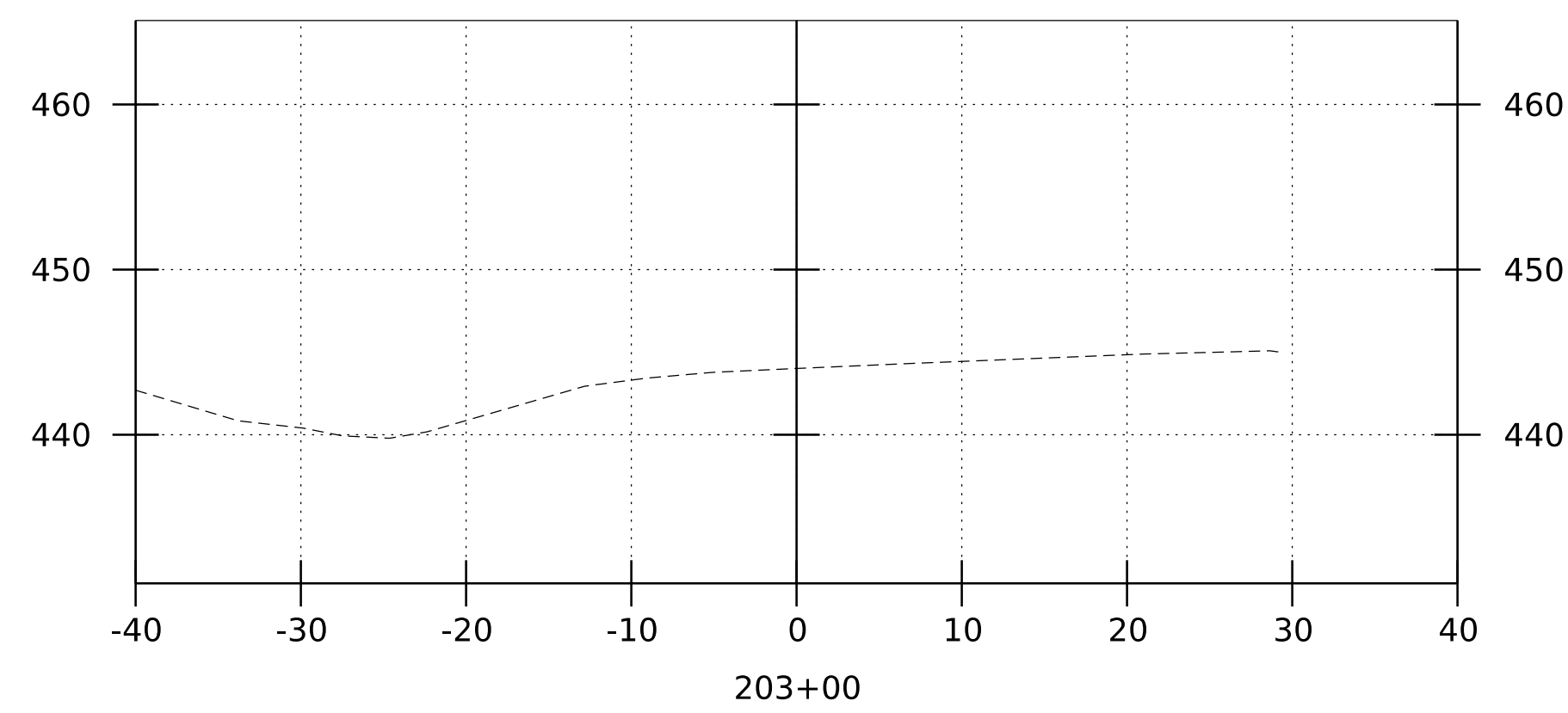
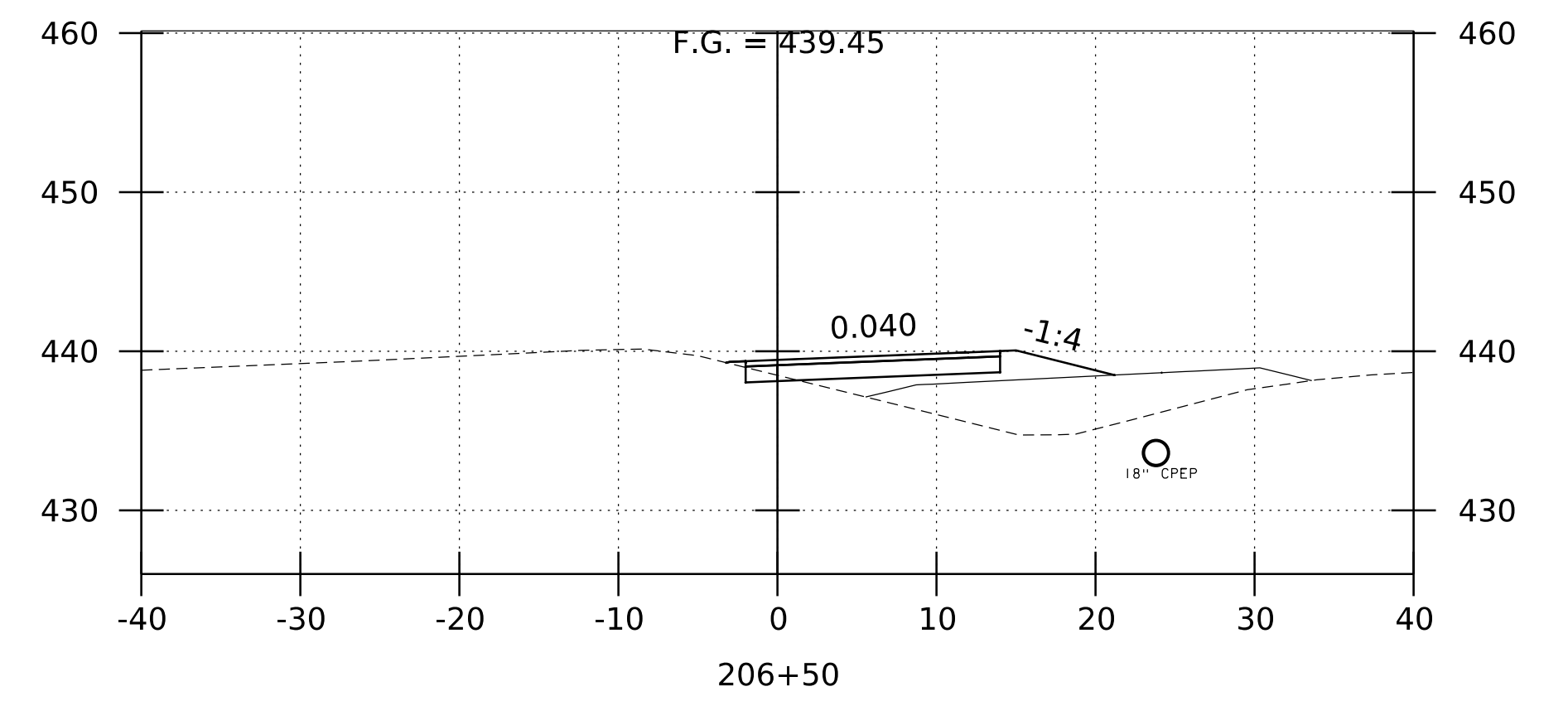
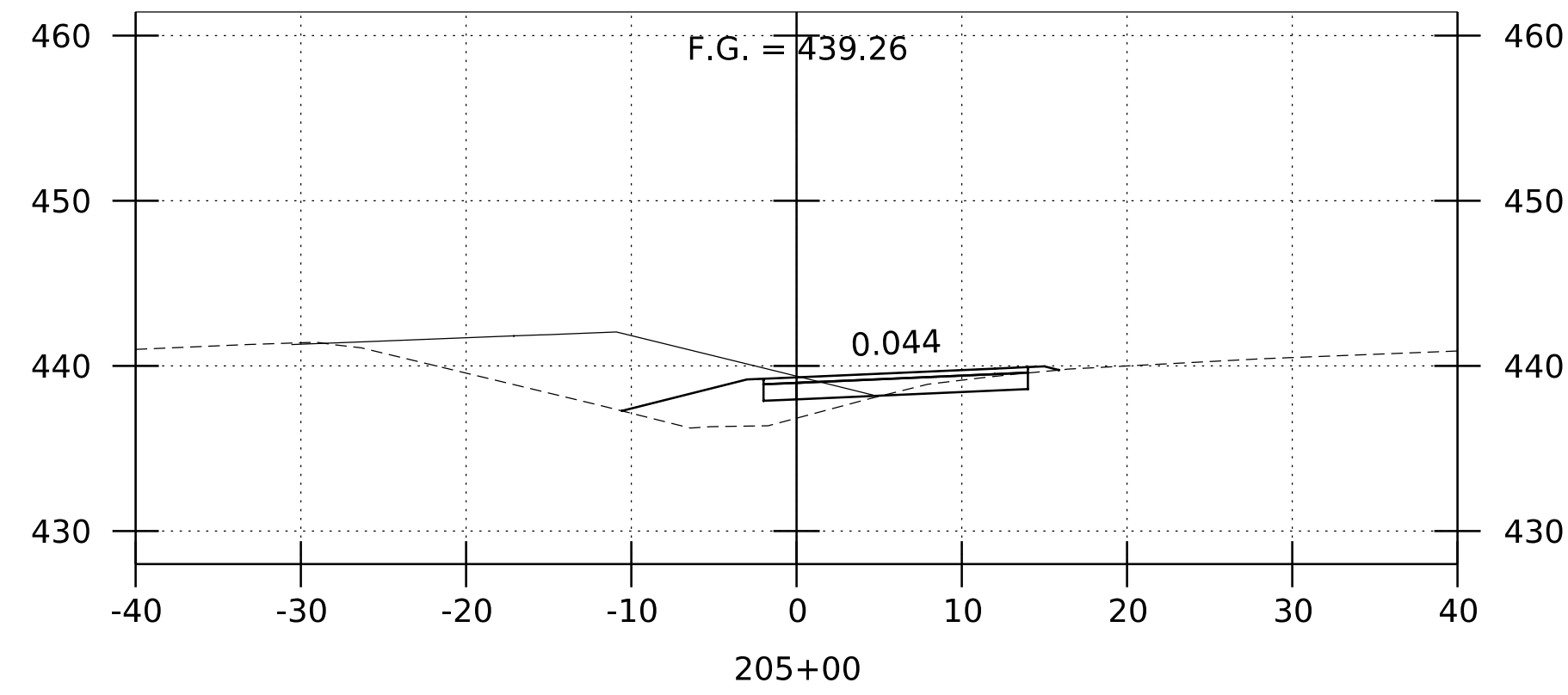
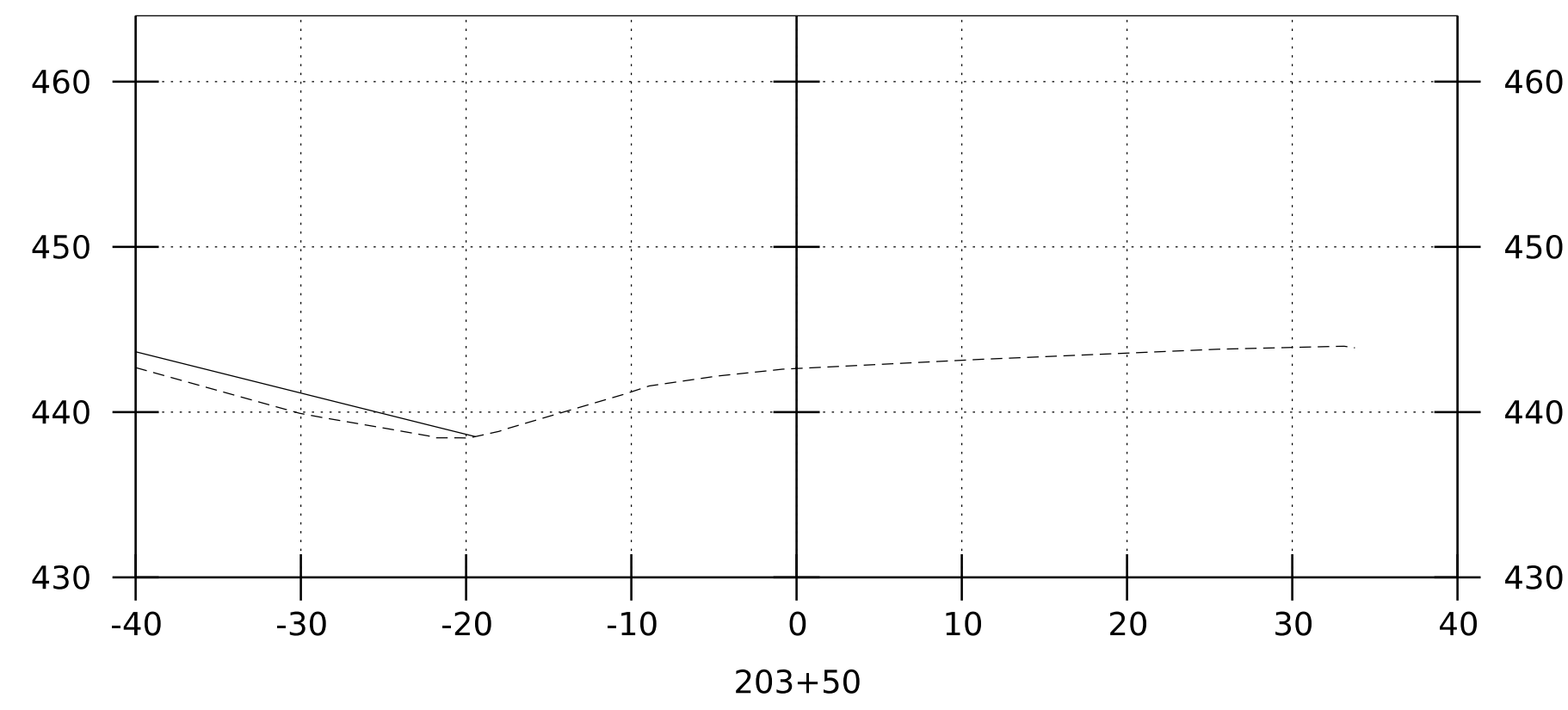
HORIZONTAL SCALE: 1" = 20'-0"  
VERTICAL SCALE: 1" = 10'-0"

NOTES:

- ELEVATIONS SHOWN TO THE NEAREST TENTH DEPICT THE EXISTING GROUND ELEVATION.
- ELEVATIONS SHOWN TO THE NEAREST HUNDRETH DEPICT THE PROPOSED PROFILE GRADE ELEVATION.



PROJECT NAME: BRATTLEBORO	
PROJECT NUMBER: IM 091-I(82)	
FILE NAME: z19a220pro.NB crossover.dgn	PLOT DATE: 10/28/2022
PROJECT LEADER: A.STOCKIN	DRAWN BY: M.CARIGNAN
DESIGNED BY: E.WILLIAMS	CHECKED BY: B.GEIGER
NB CROSSOVER PROFILE 2	SHEET 39 OF 66

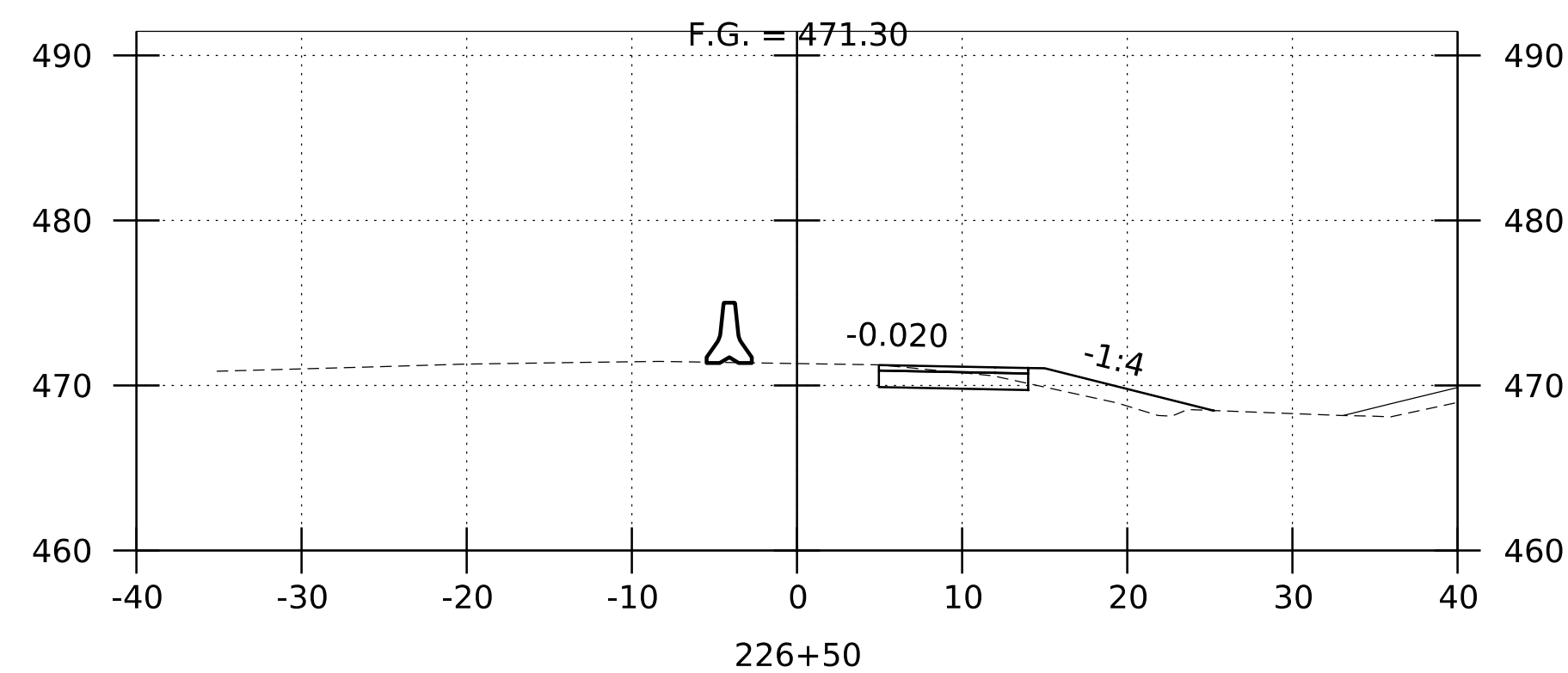
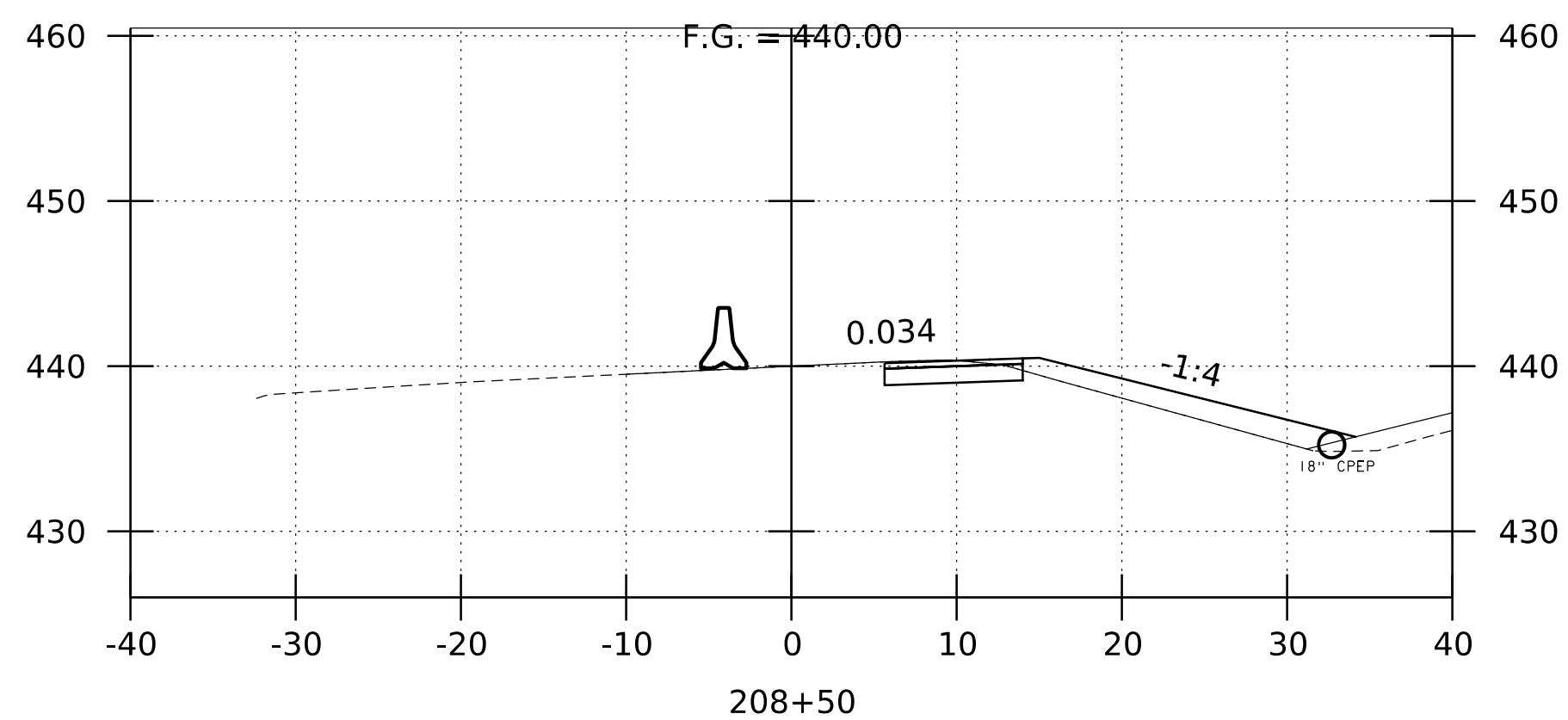
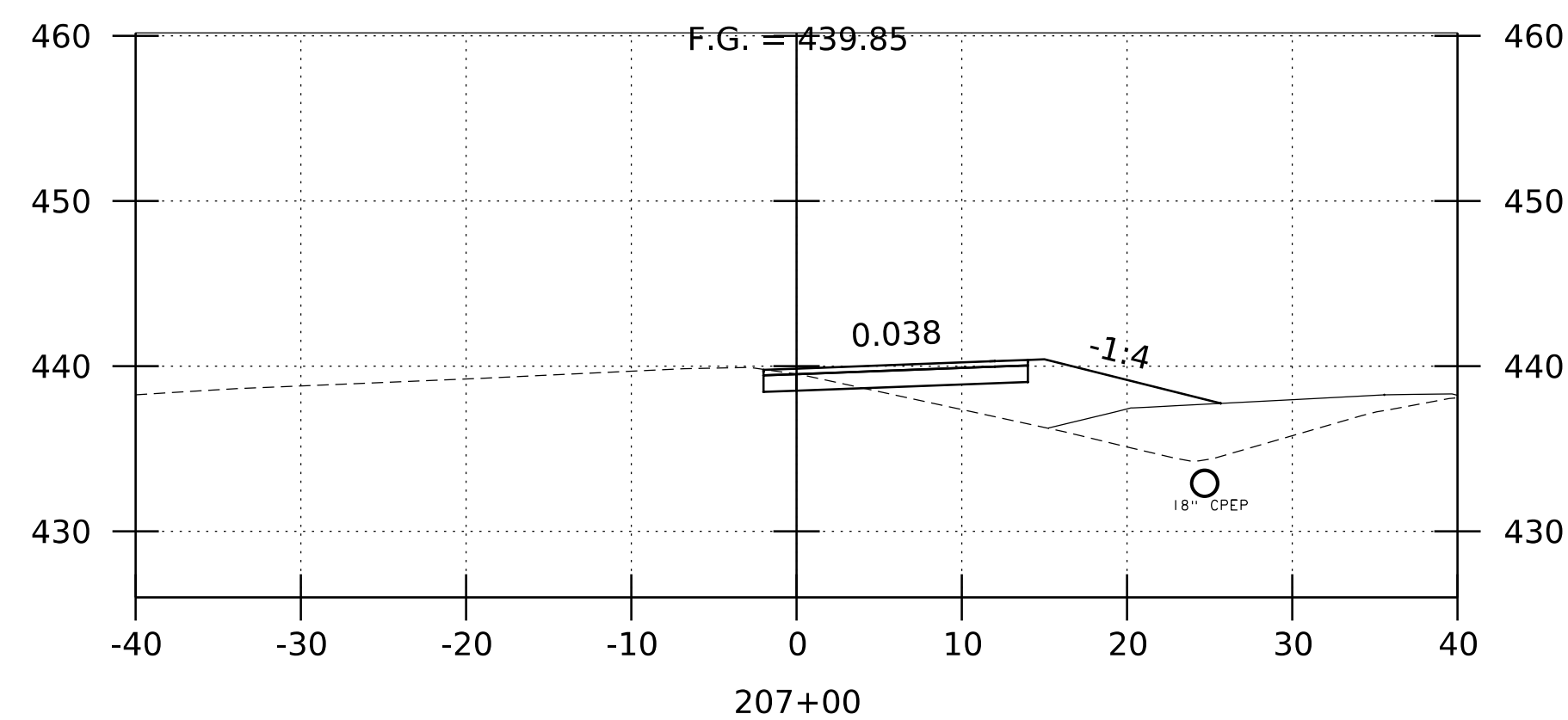
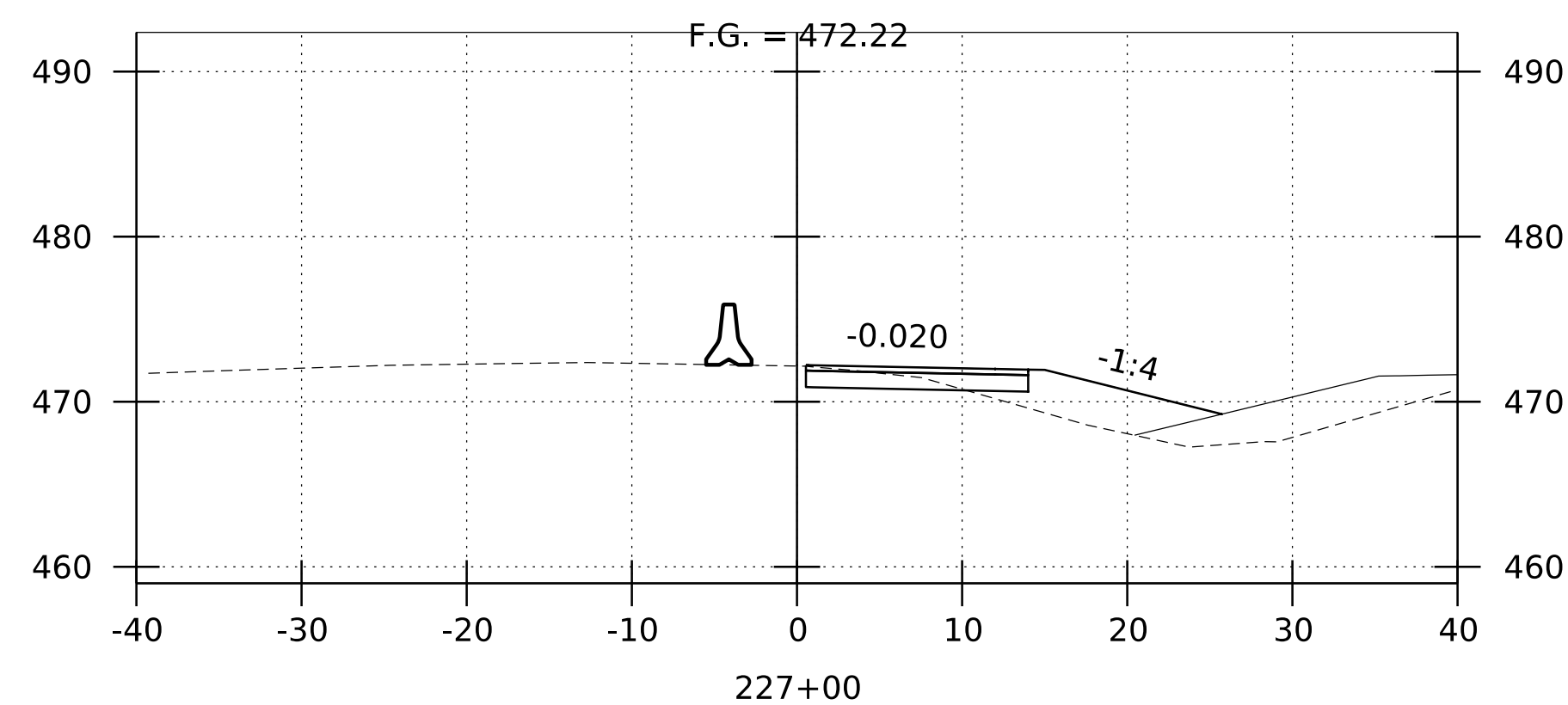
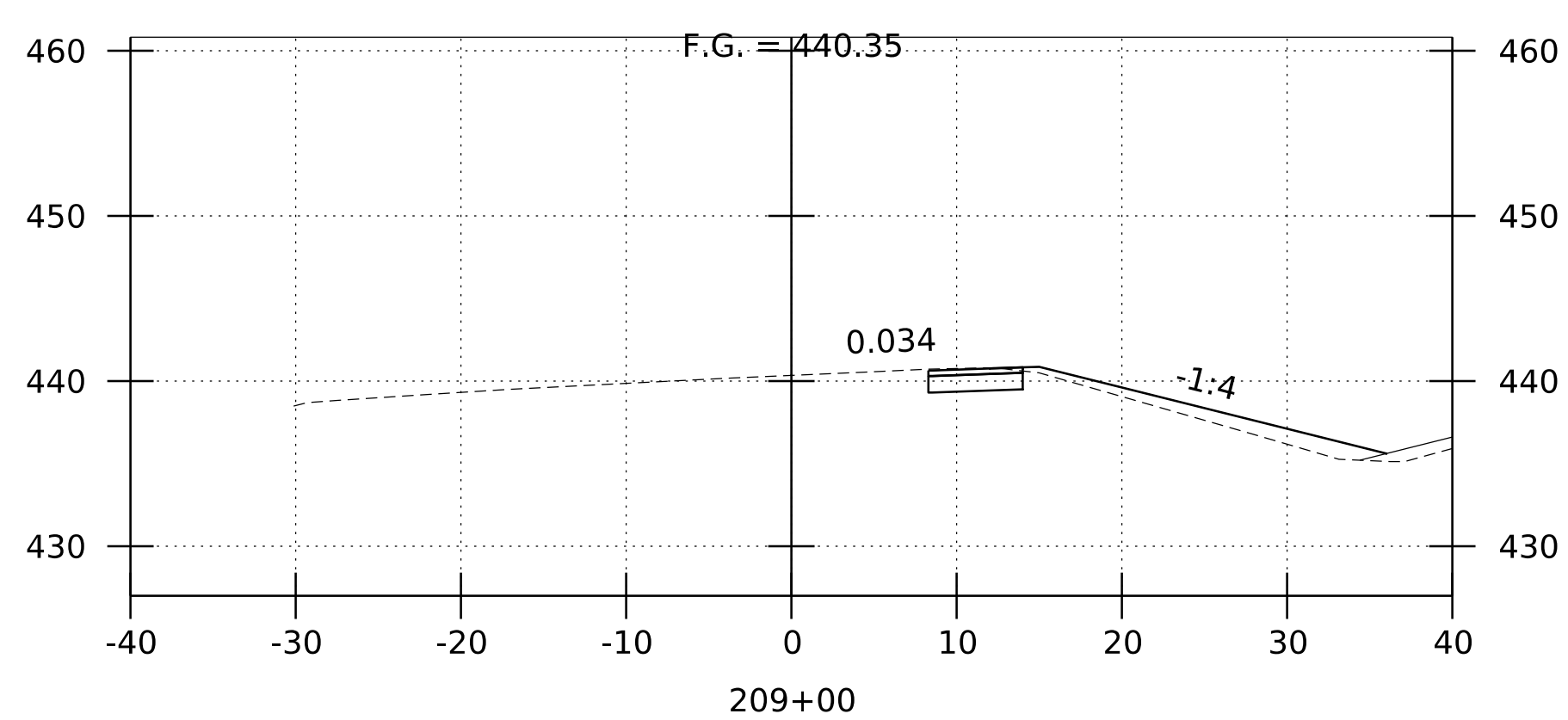
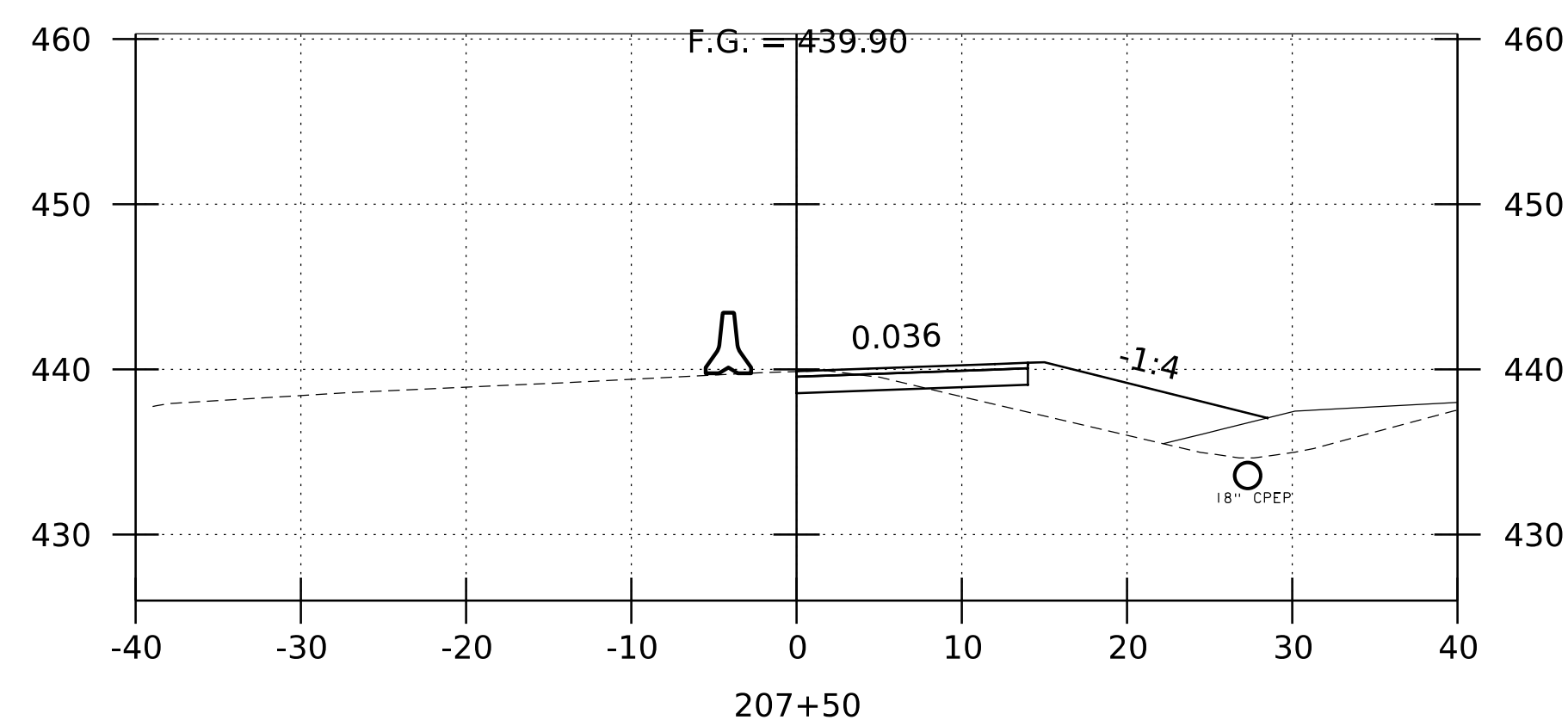
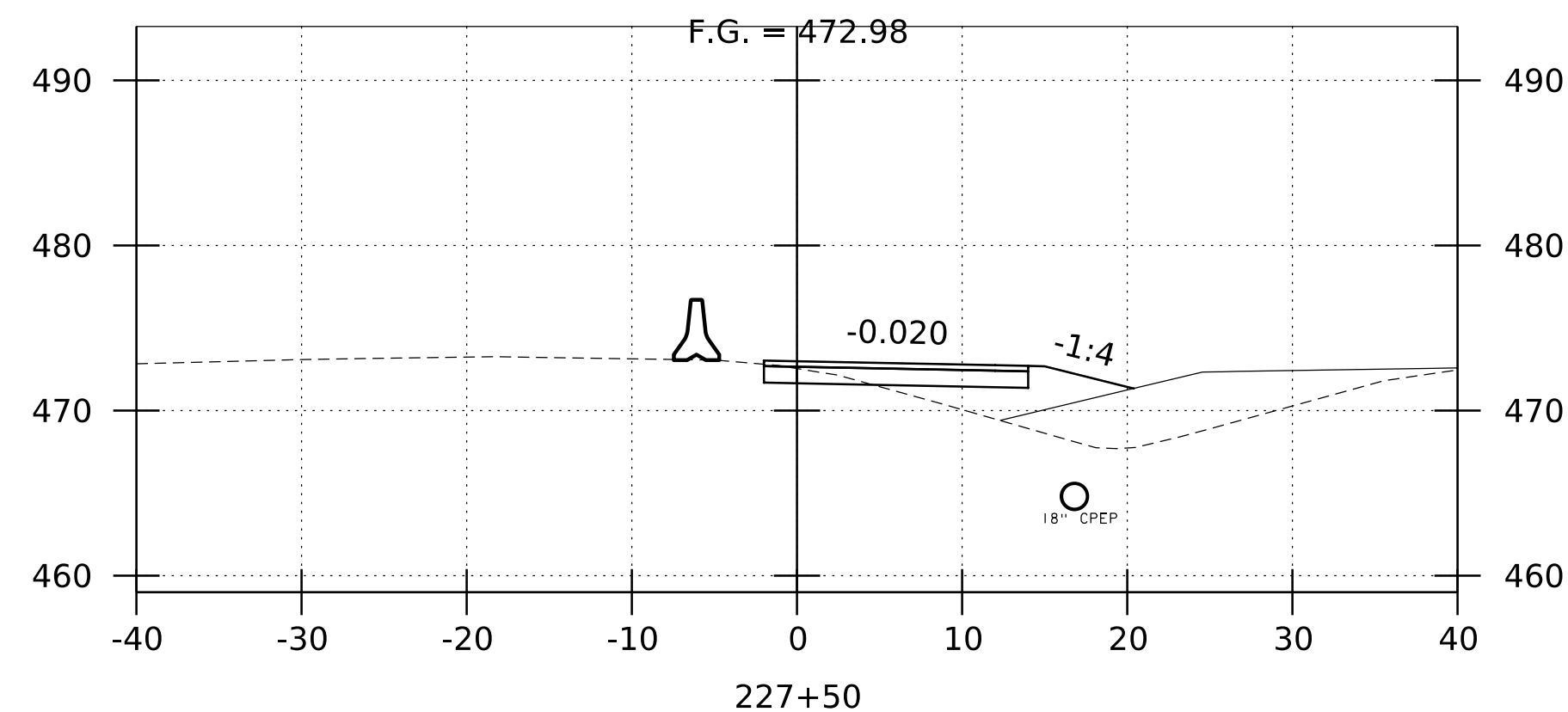
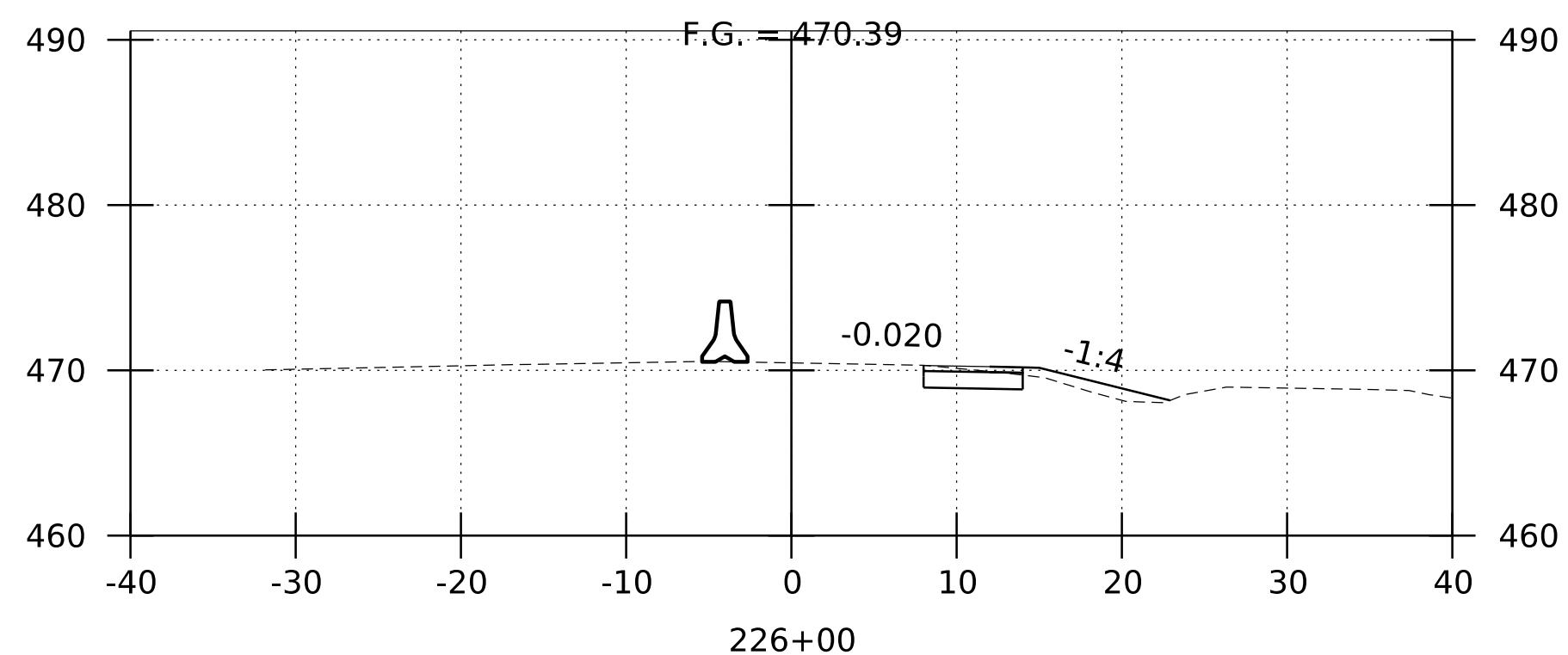
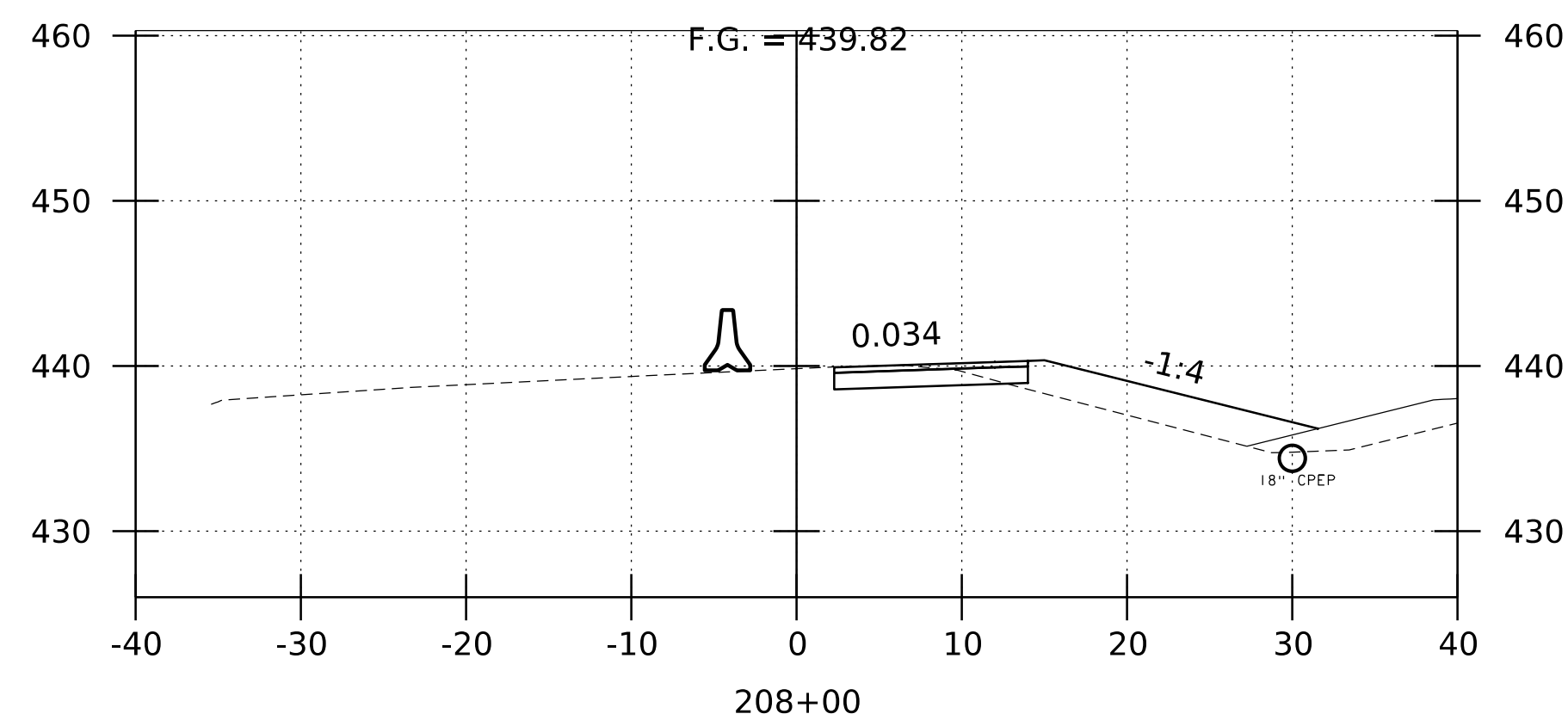


NB CROSSOVER

STA. 202+50 TO STA. 206+50



PROJECT NAME:	BRATTLEBORO
PROJECT NUMBER:	IM 09I-I(82)
FILE NAME:	z19a220xs_NBcrossover.dgn
PLOT DATE:	10/28/2022
PROJECT LEADER:	A.STOCKIN
DRAWN BY:	M.CARIGNAN
DESIGNED BY:	E.WILLIAMS
CHECKED BY:	B.GEIGER
NB CROSSOVER CROSS SECTION I	SHEET 40 OF 66

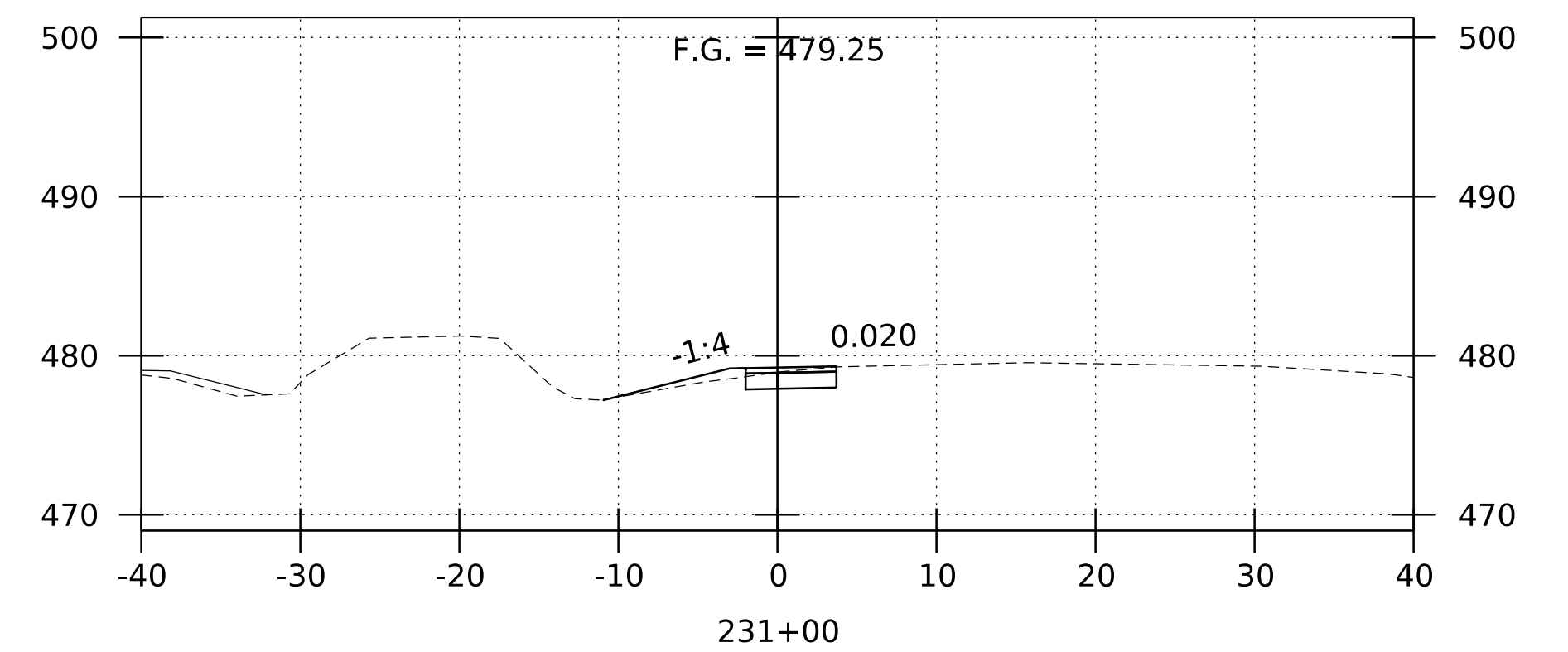
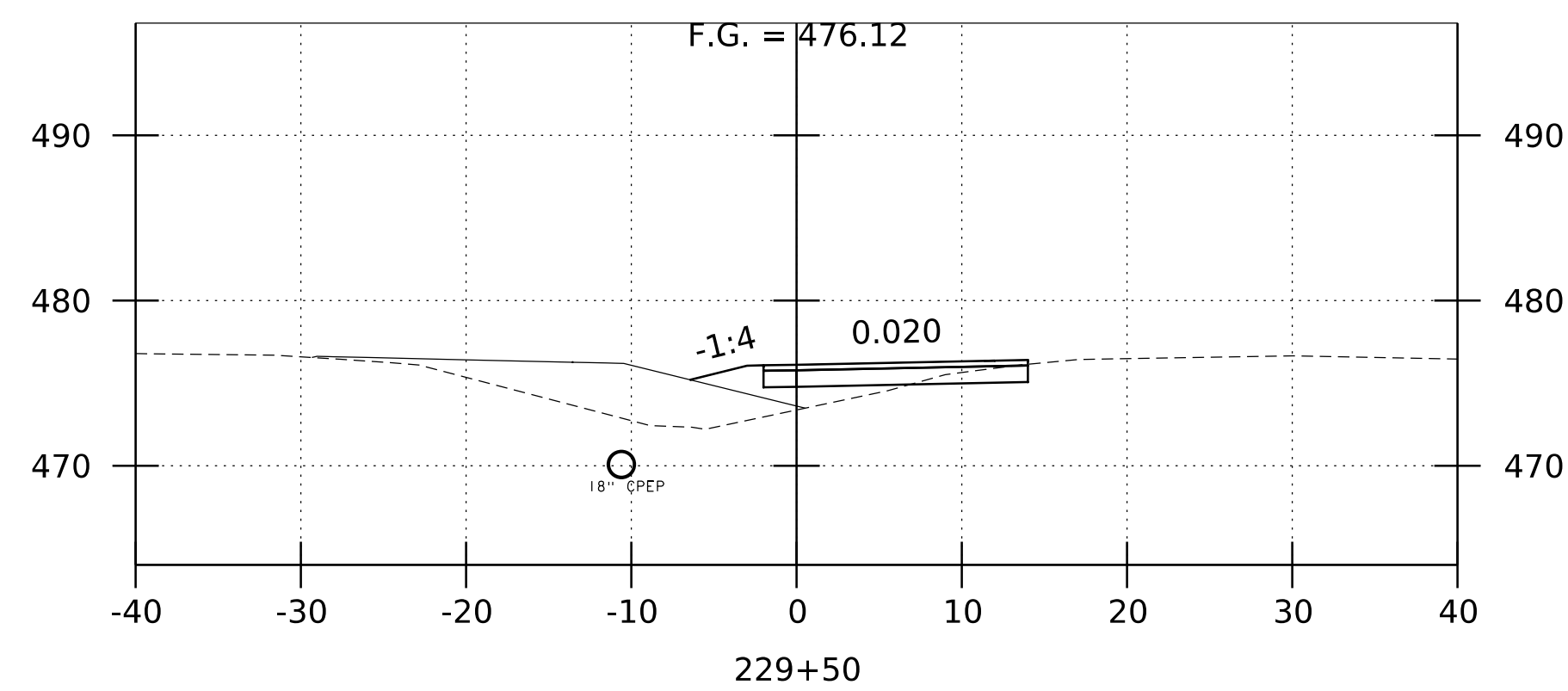
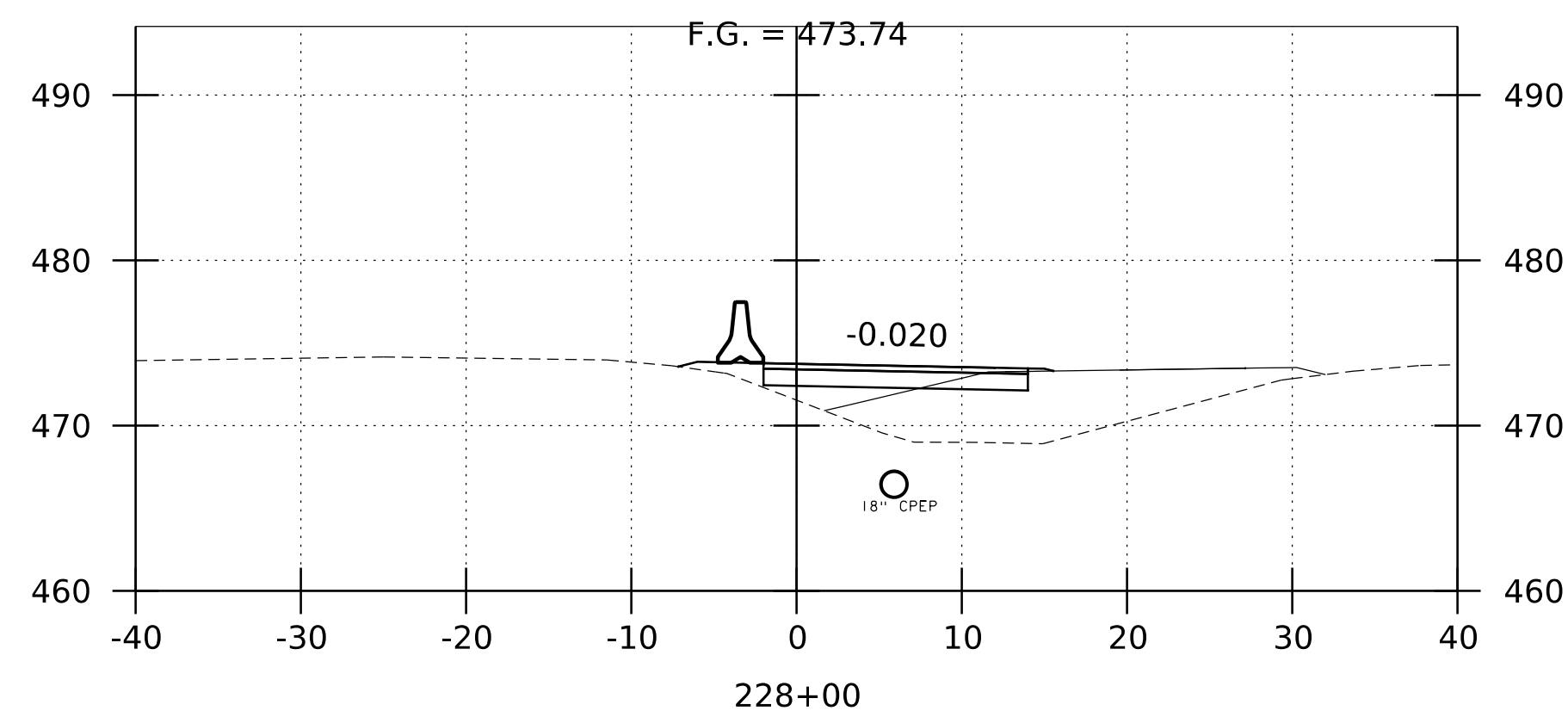
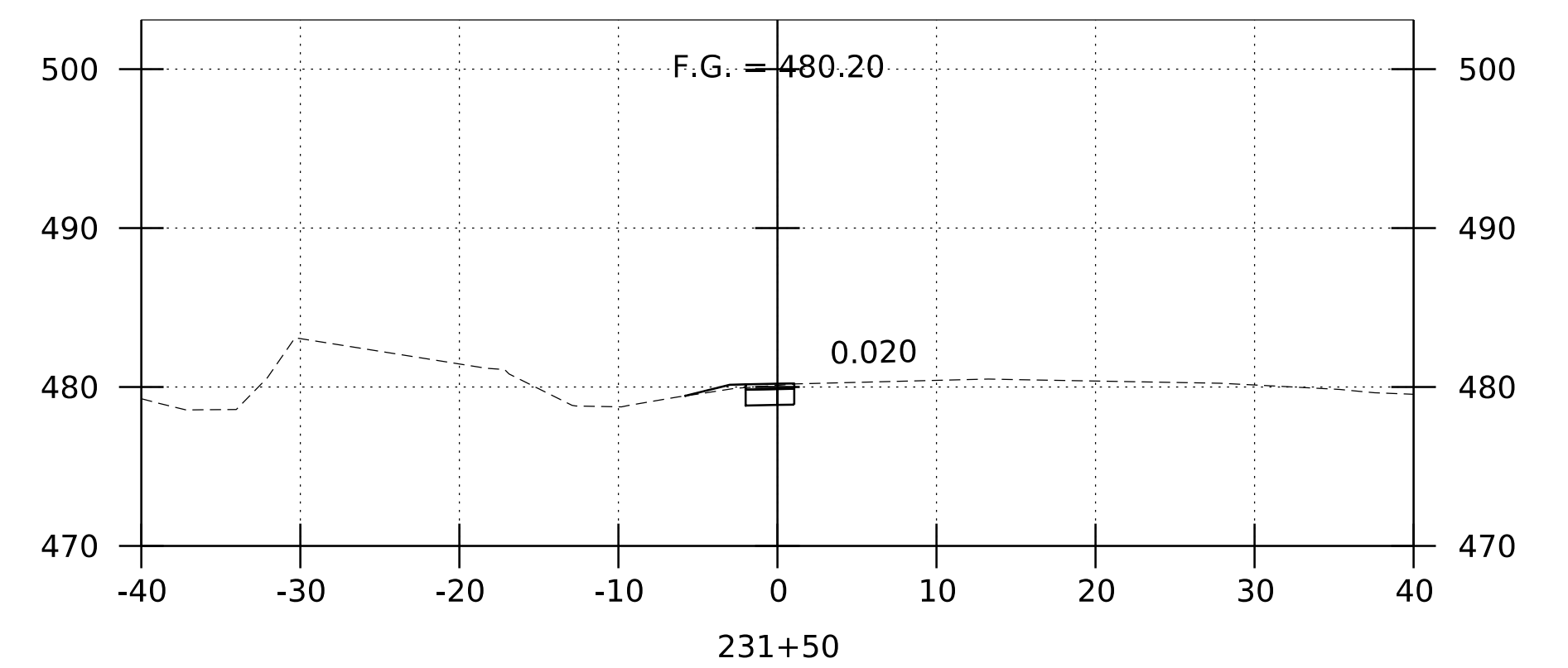
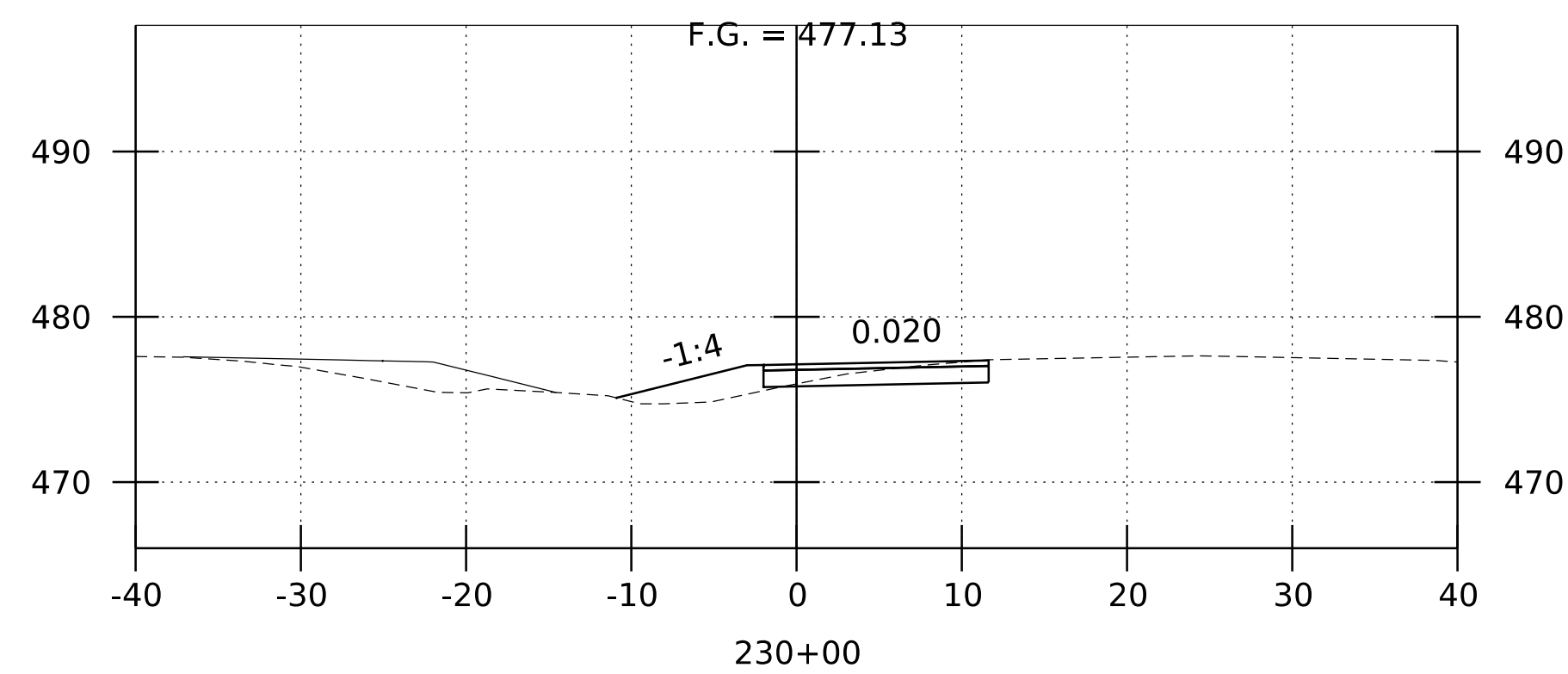
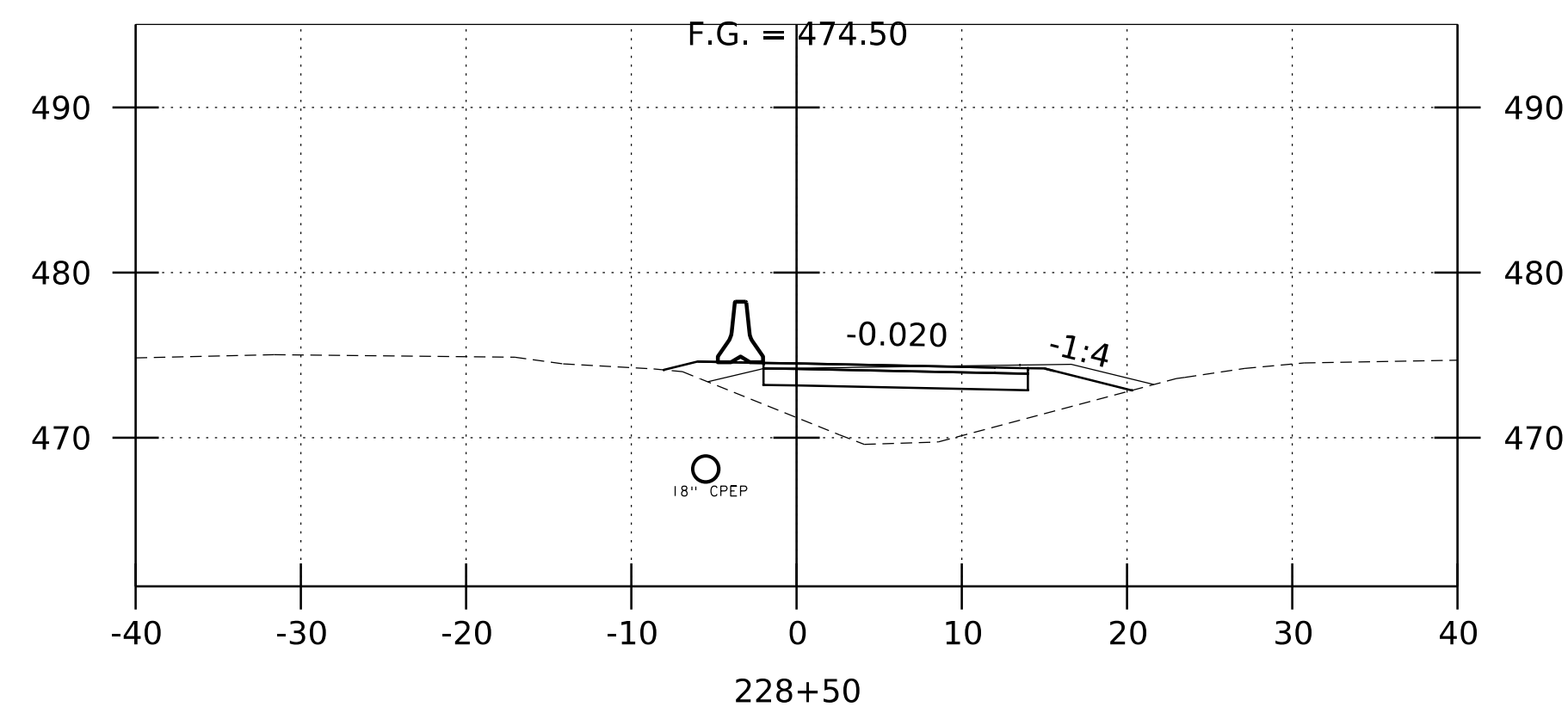
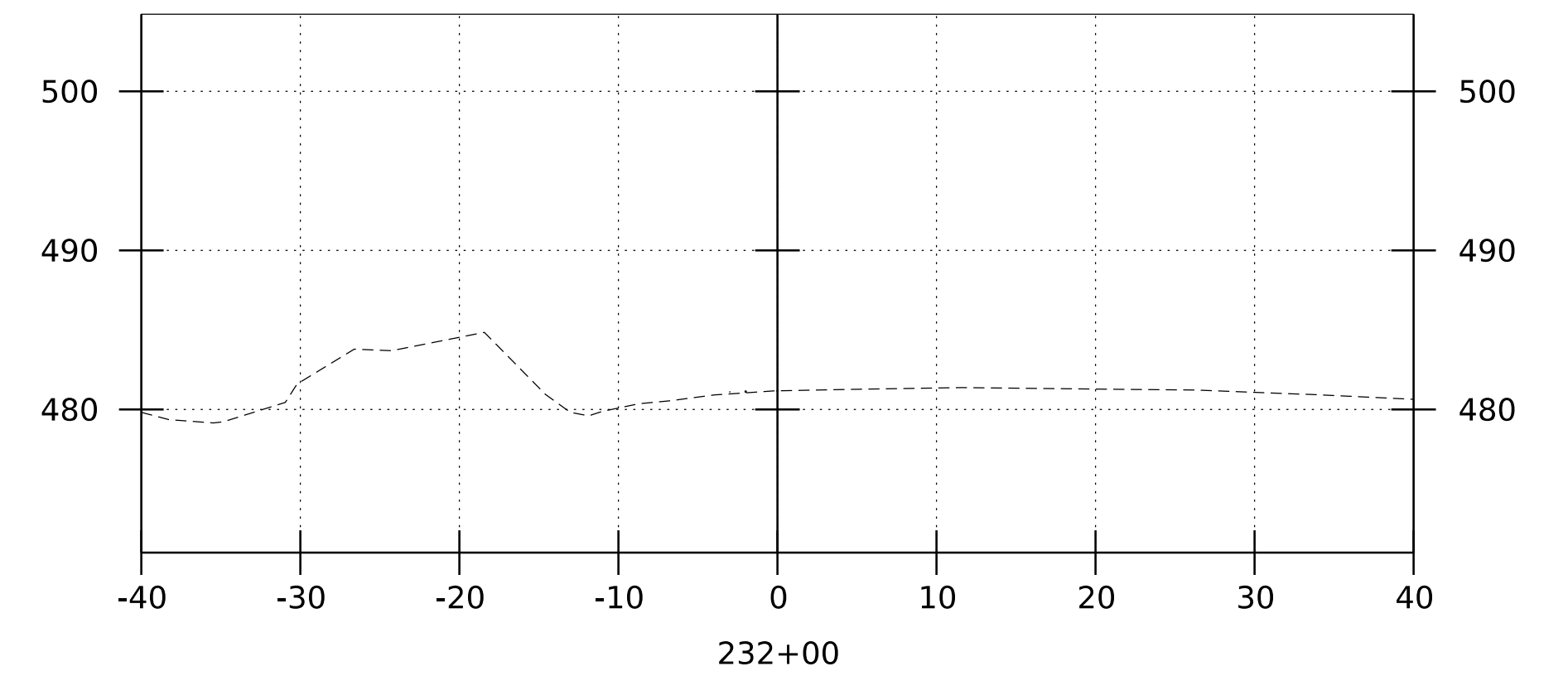
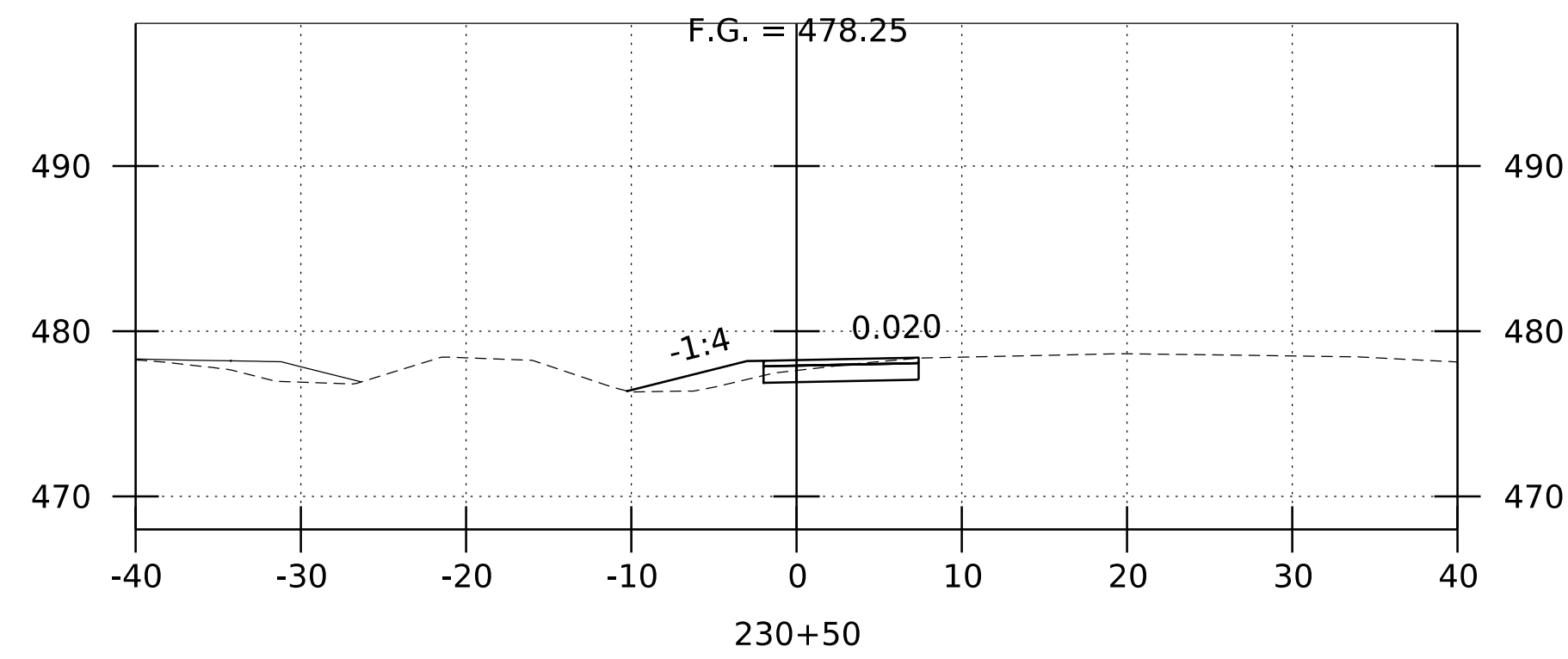
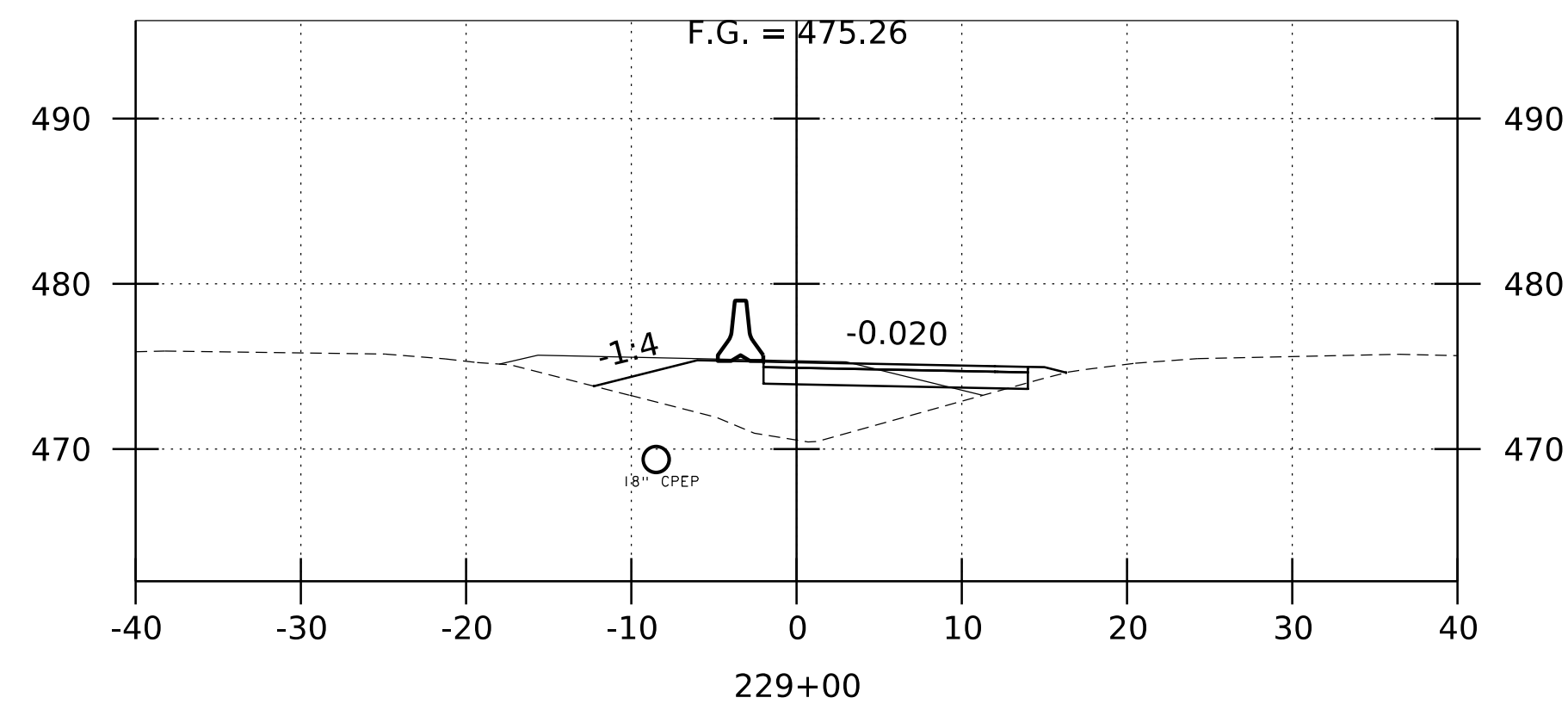


NB CROSSOVER

STA. 207+00 TO STA. 209+00  
STA. 226+00 TO STA. 227+50



PROJECT NAME:	BRATTLEBORO	FILE NAME:	z19a220xs_NBcrossover.dgn	PLOT DATE:	10/28/2022
PROJECT NUMBER:	IM 091-I(82)	PROJECT LEADER:	A.STOCKIN	DRAWN BY:	M.CARIGNAN
		DESIGNED BY:	E.WILLIAMS	CHECKED BY:	B.GEIGER
		NB CROSSOVER CROSS SECTION 2		SHEET	41 OF 66

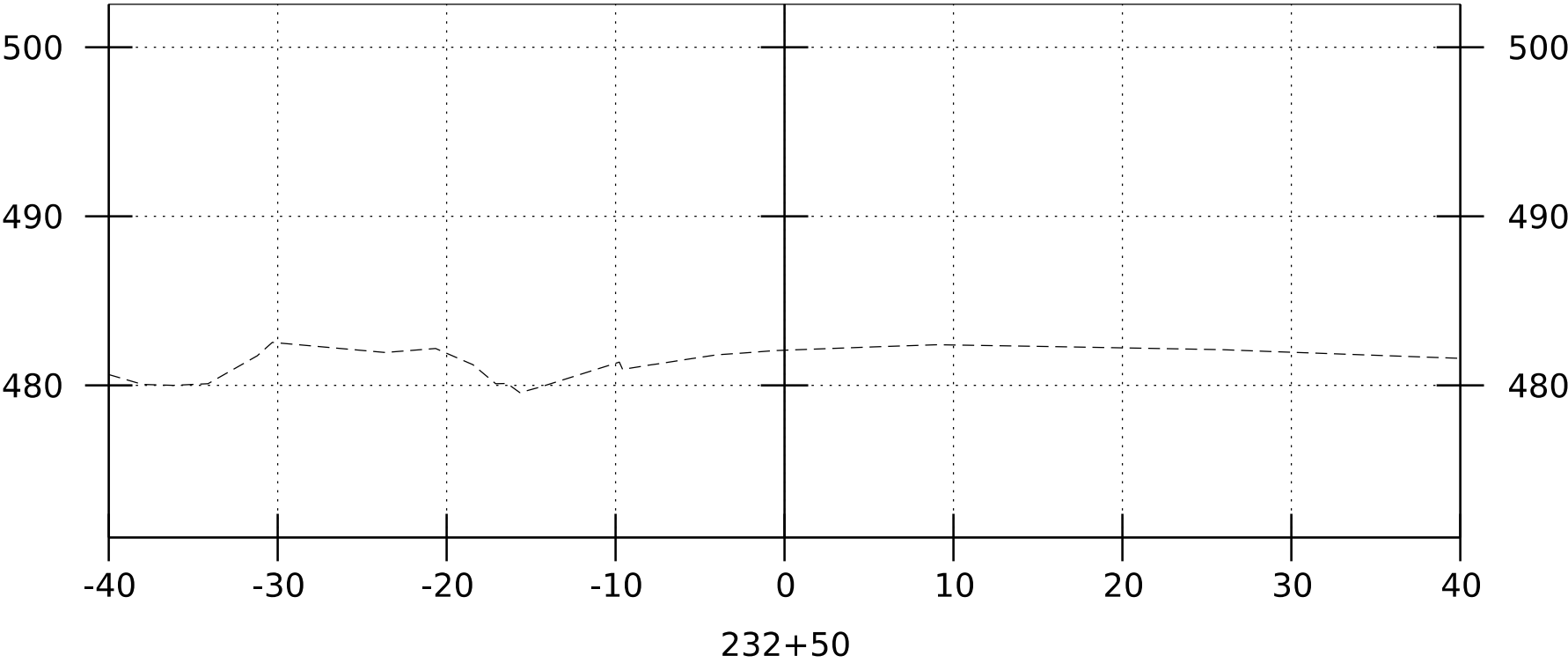


NB CROSSOVER

STA. 228+00 TO STA. 232+00



PROJECT NAME:	BRATTLEBORO
PROJECT NUMBER:	IM 09I-I(82)
FILE NAME:	z19a220xs_NBcrossover.dgn
PROJECT LEADER:	A.STOCKIN
DESIGNED BY:	E.WILLIAMS
NB CROSSOVER CROSS SECTION 3	
PLOT DATE:	10/28/2022
DRAWN BY:	M.CARIGNAN
CHECKED BY:	B.GEIGER
SHEET	42 OF 66

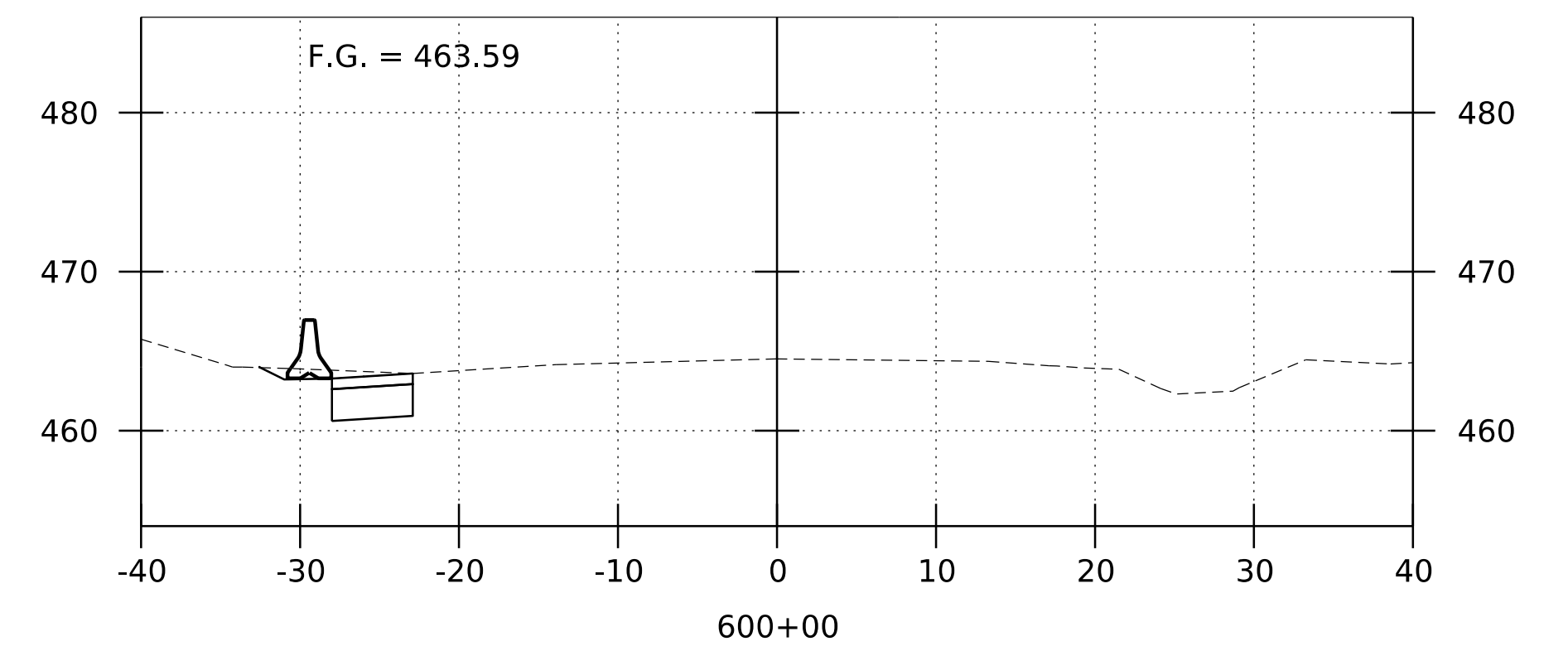
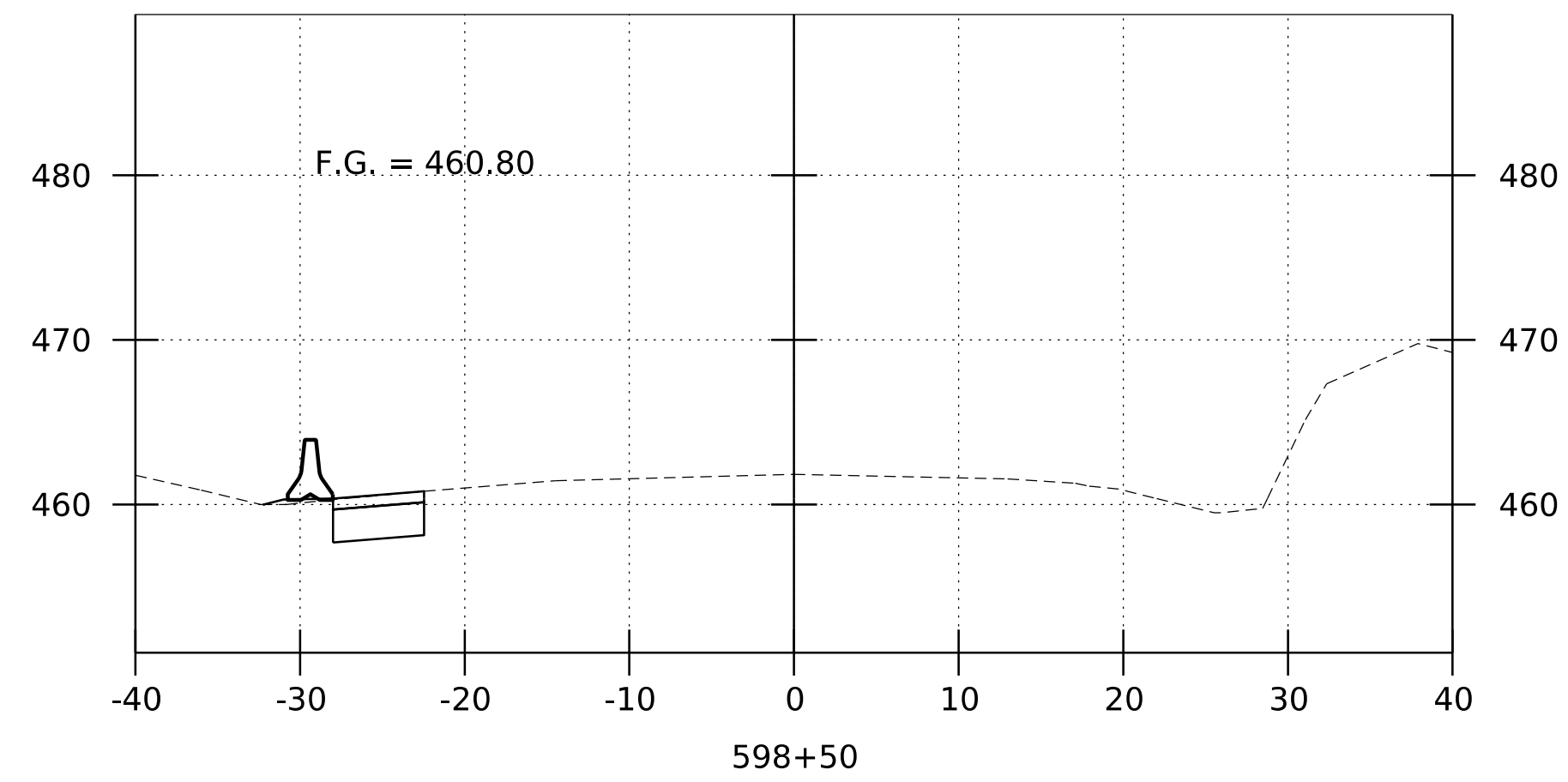
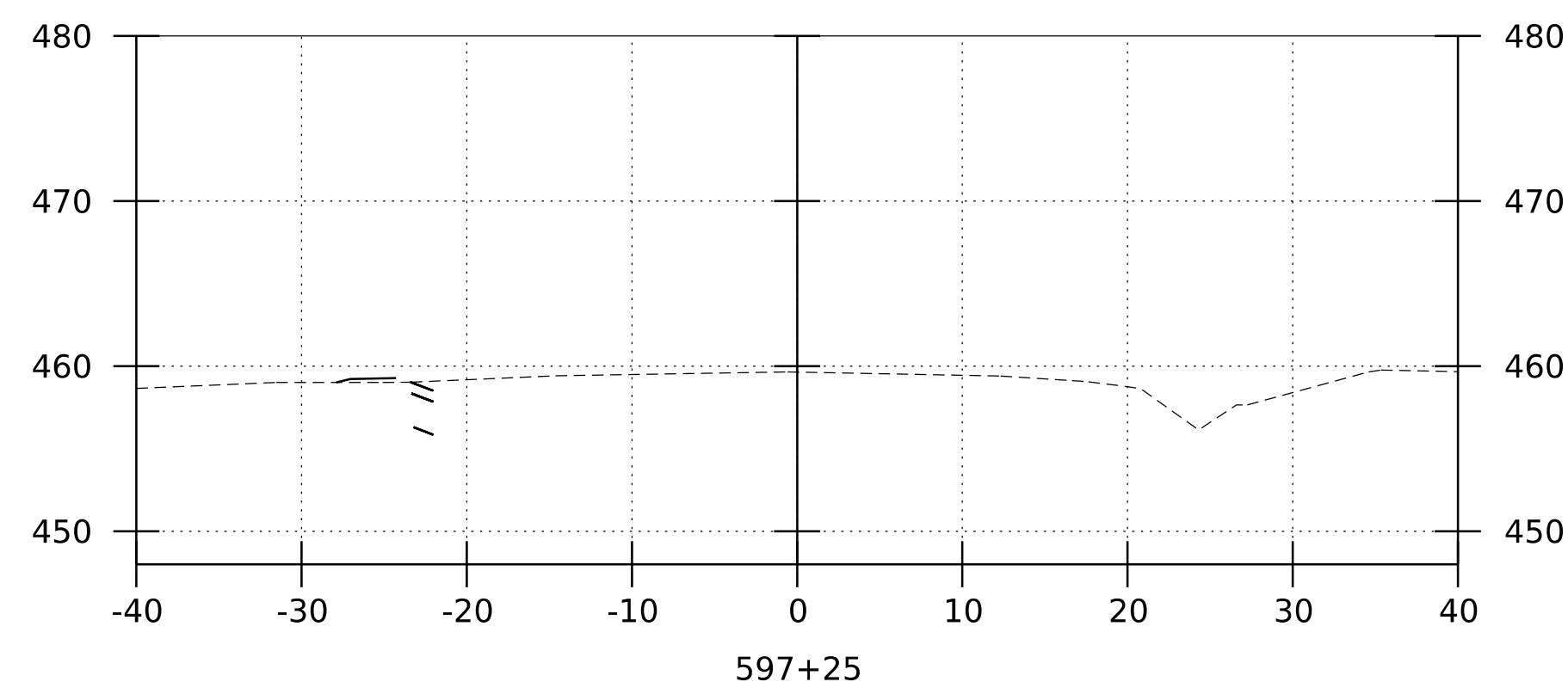
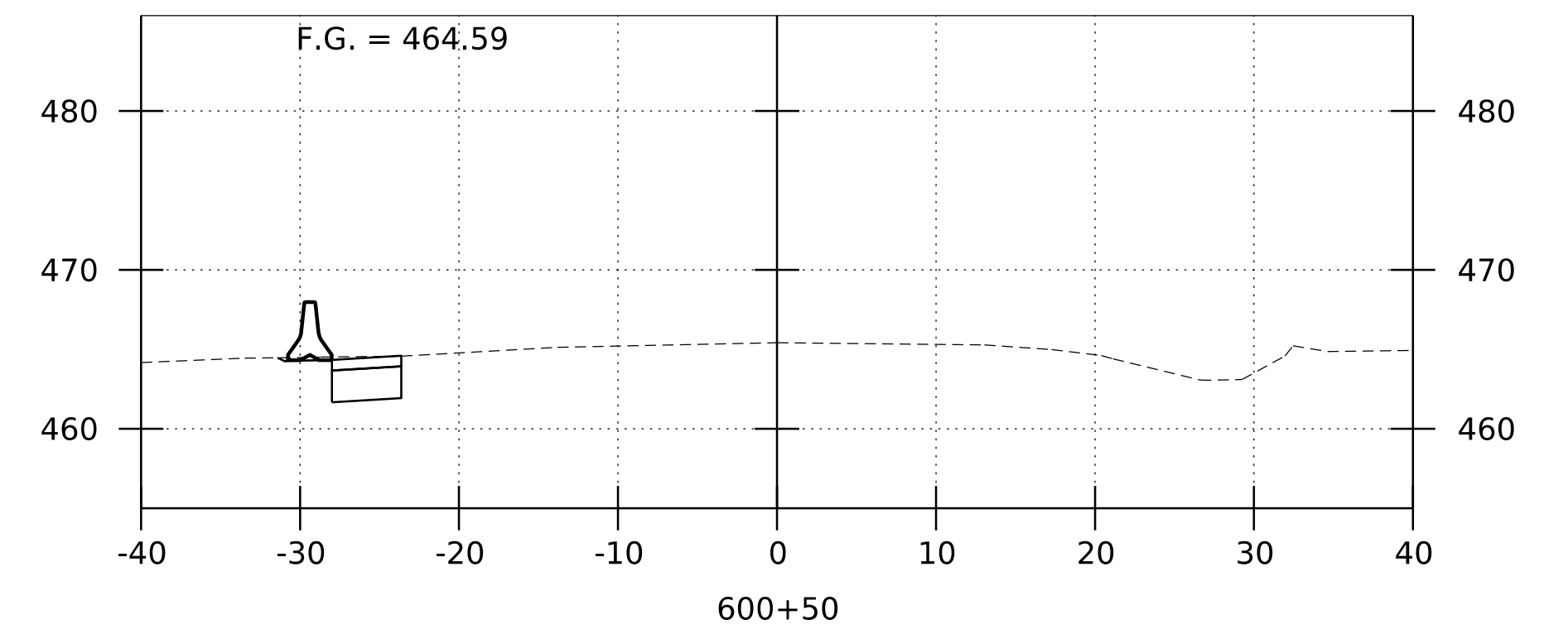
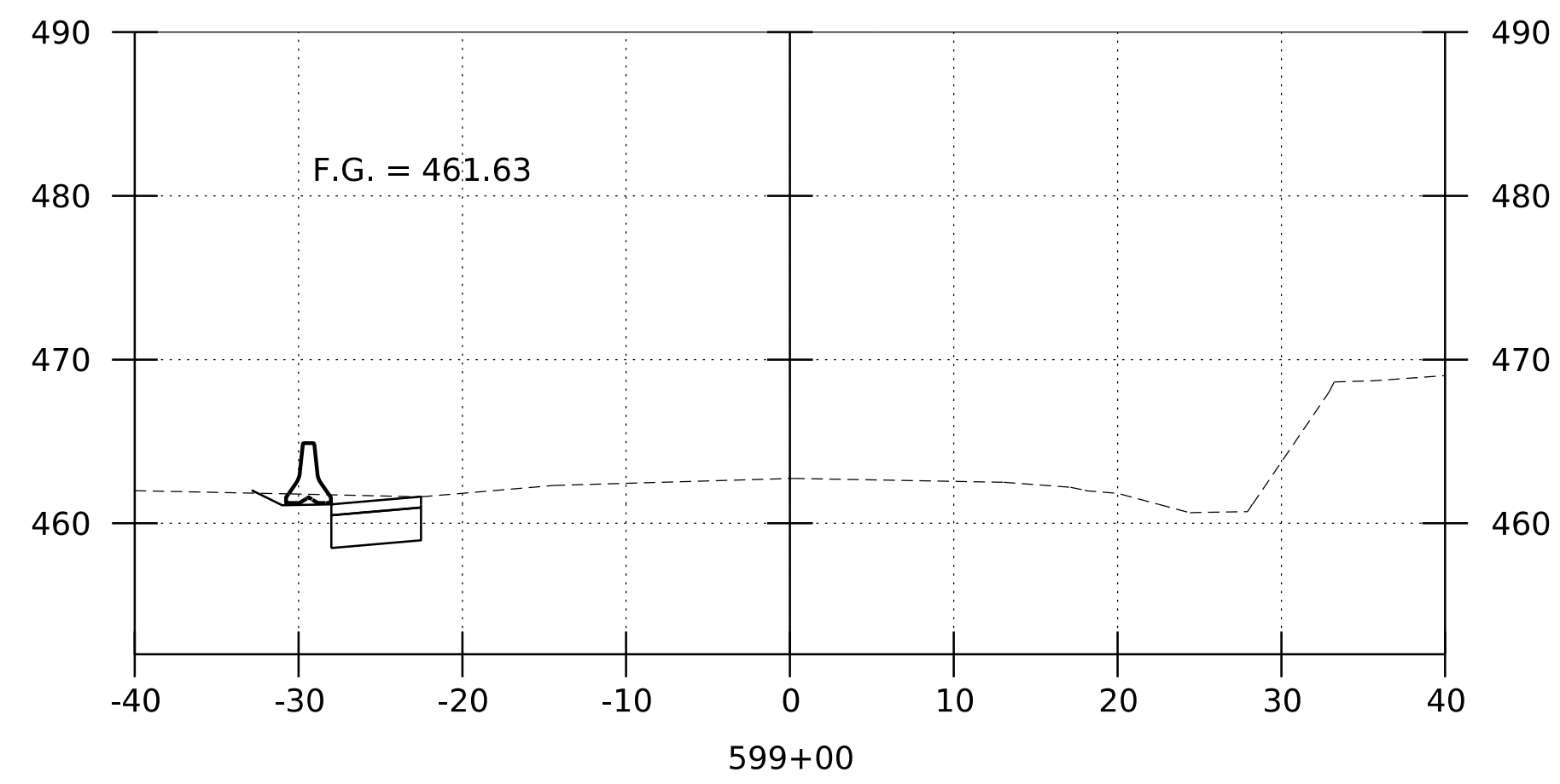
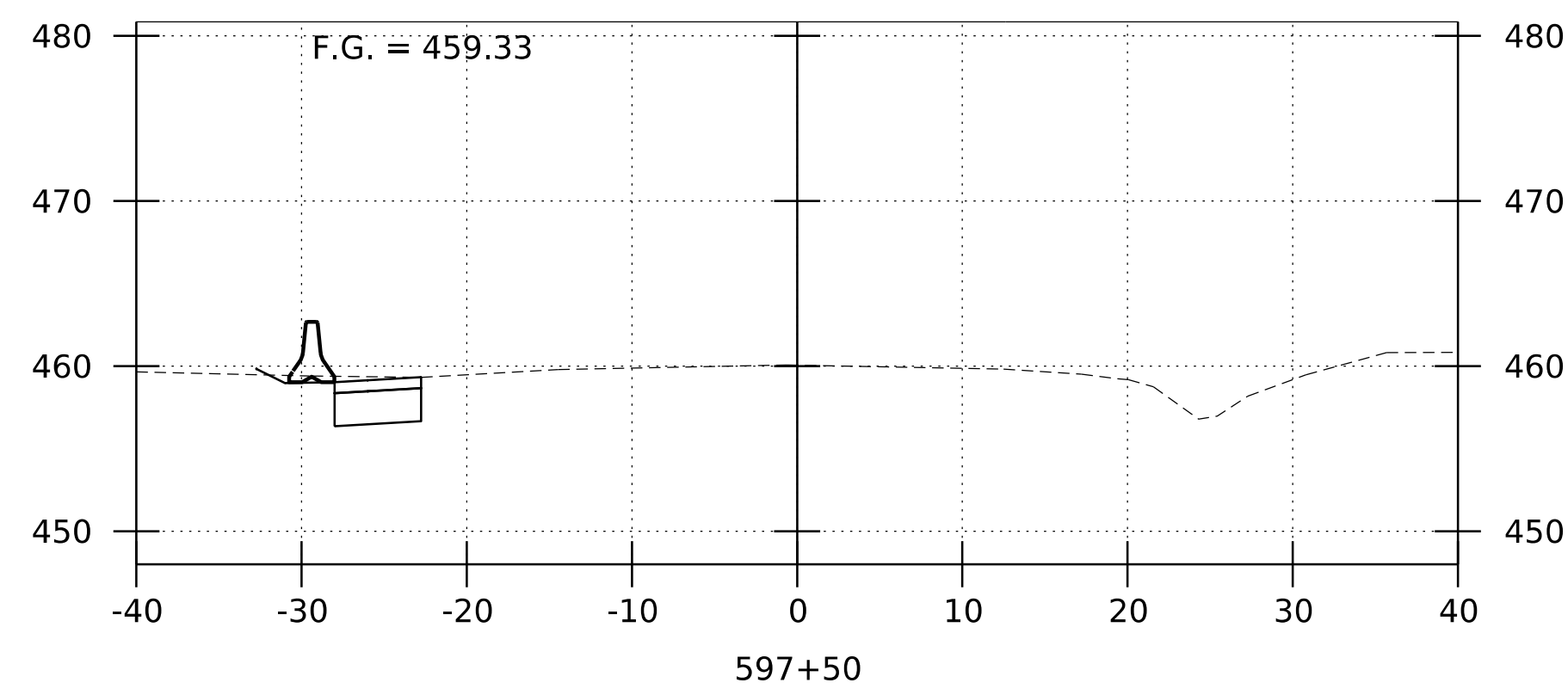
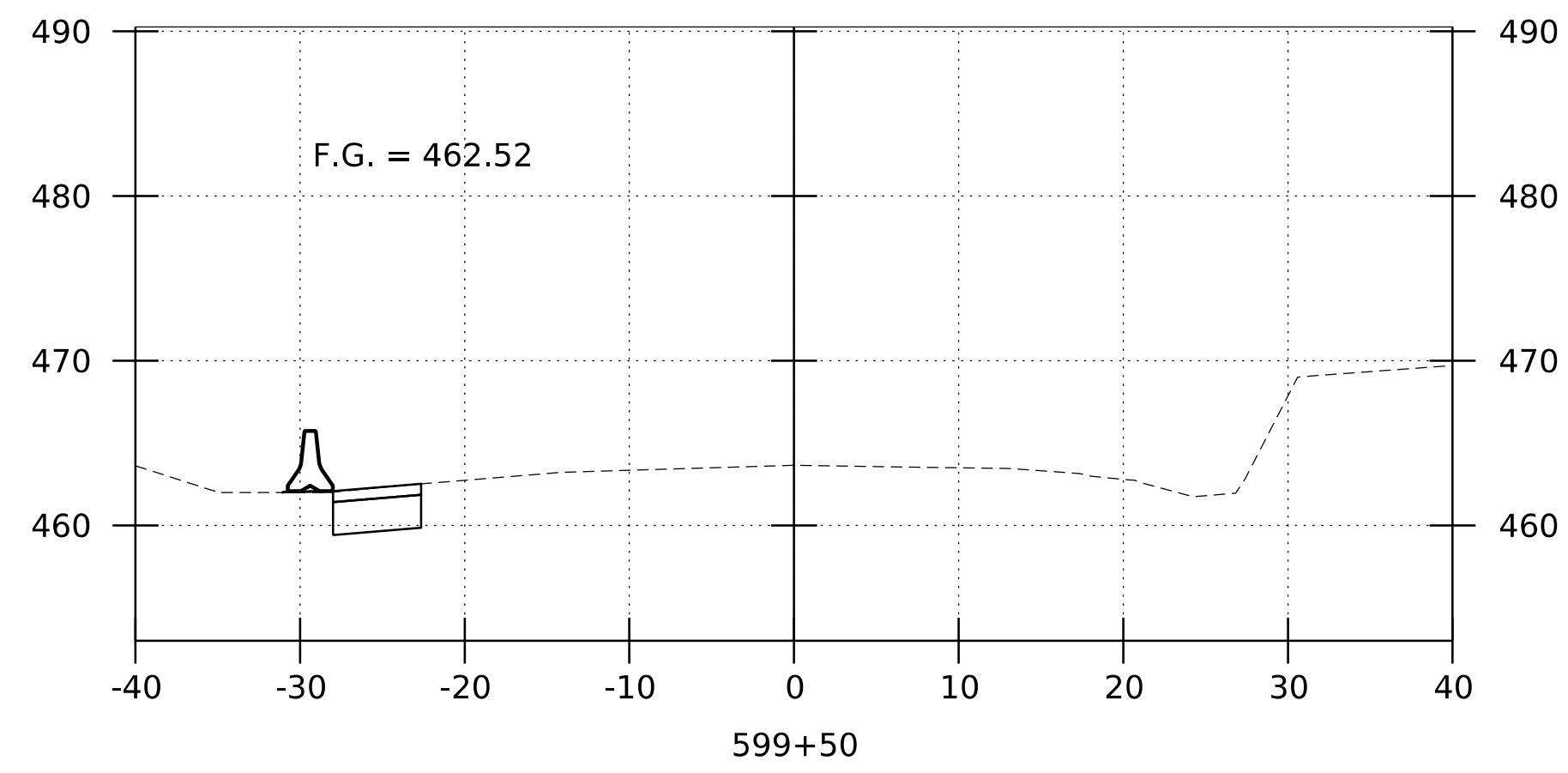
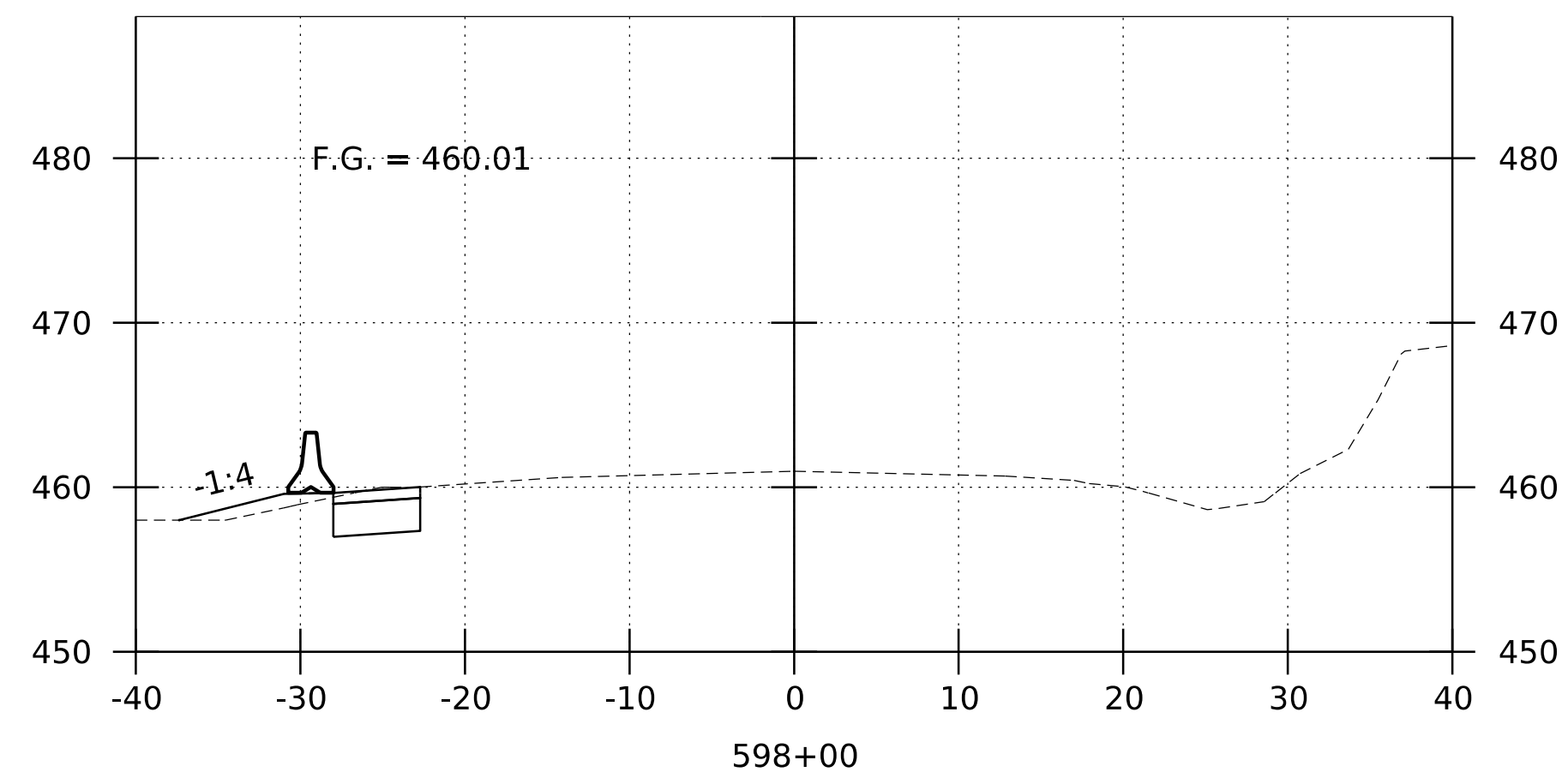


NB CROSSOVER

STA. 232+50



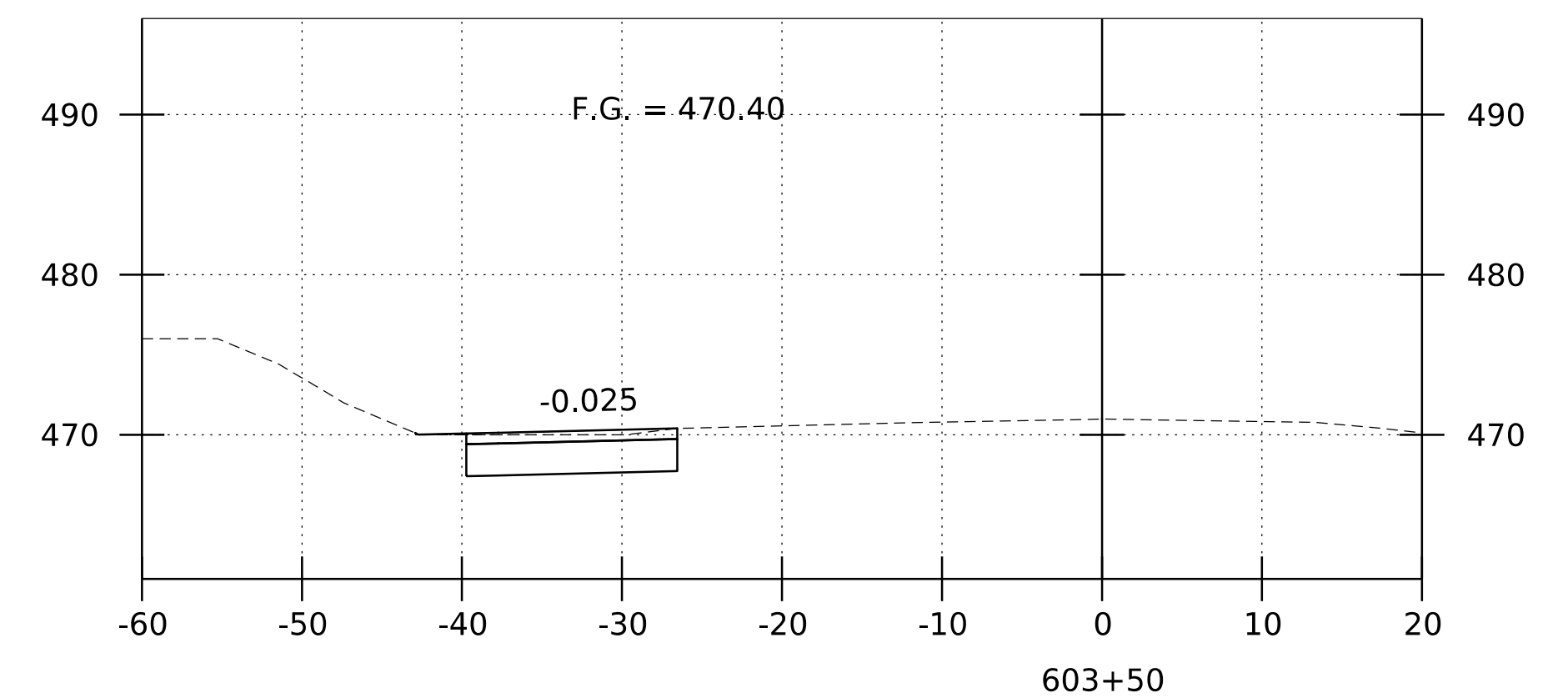
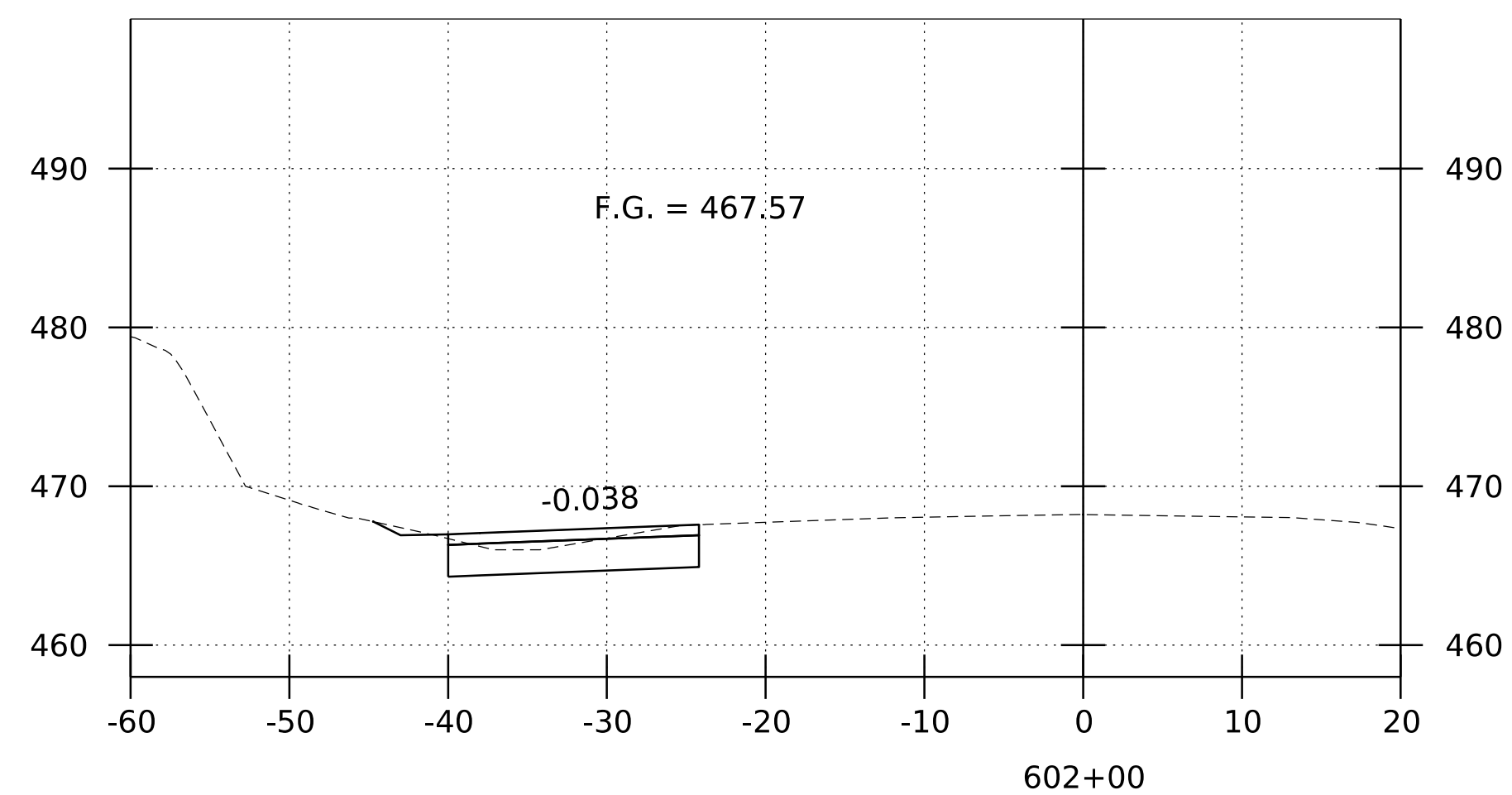
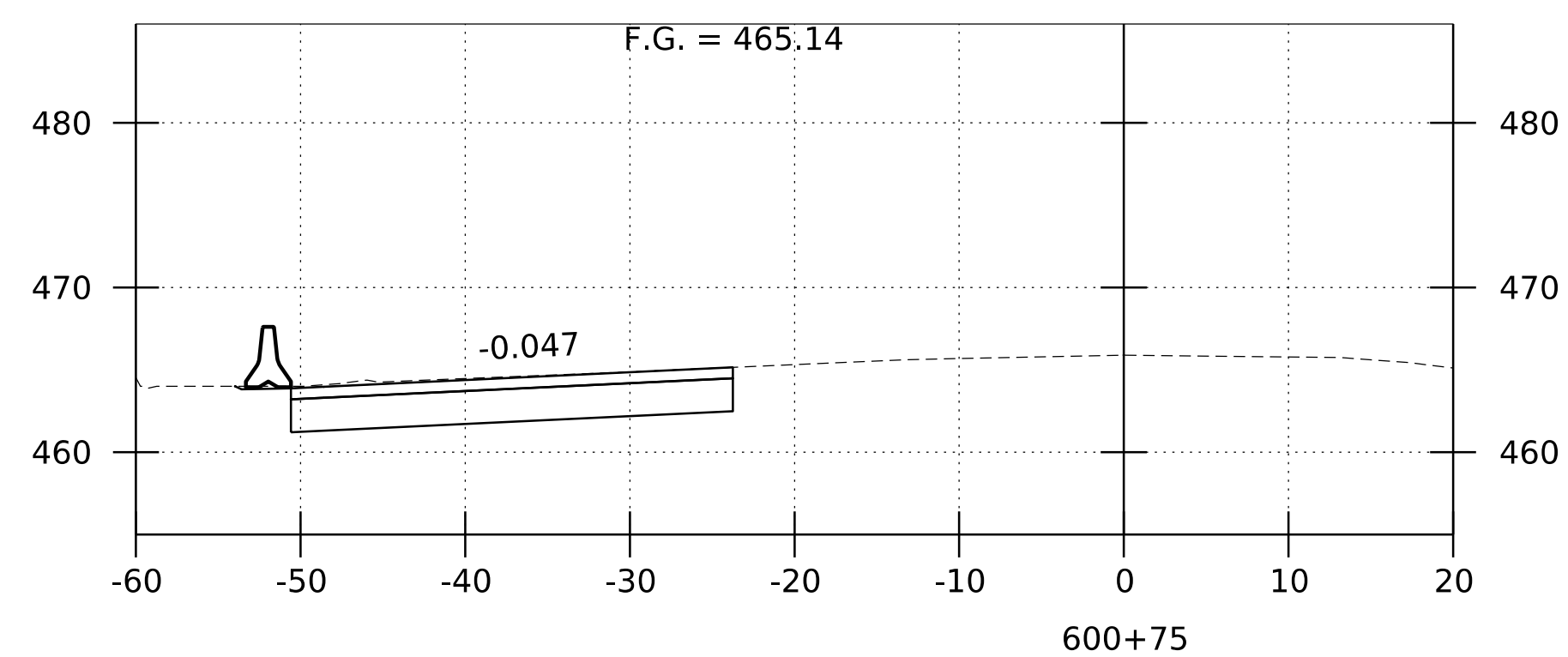
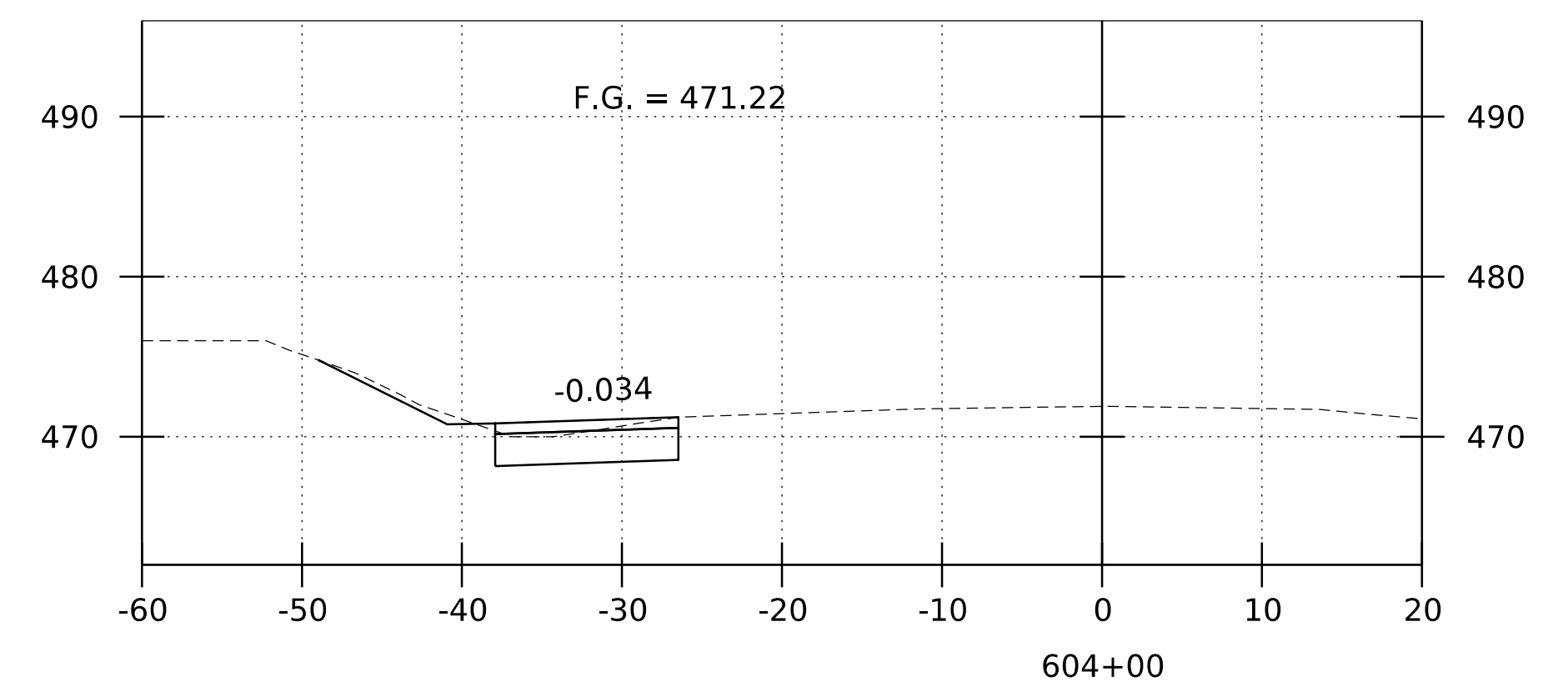
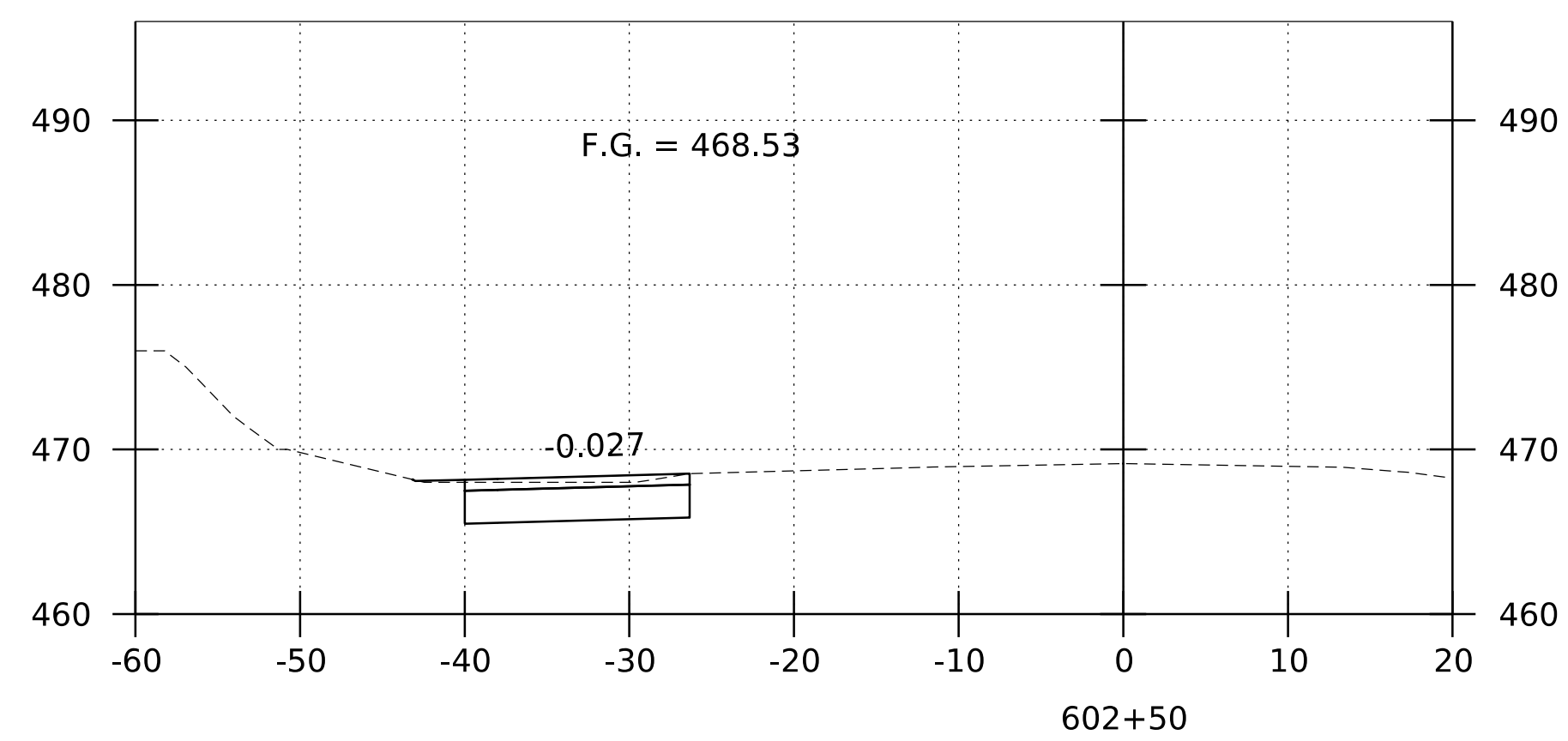
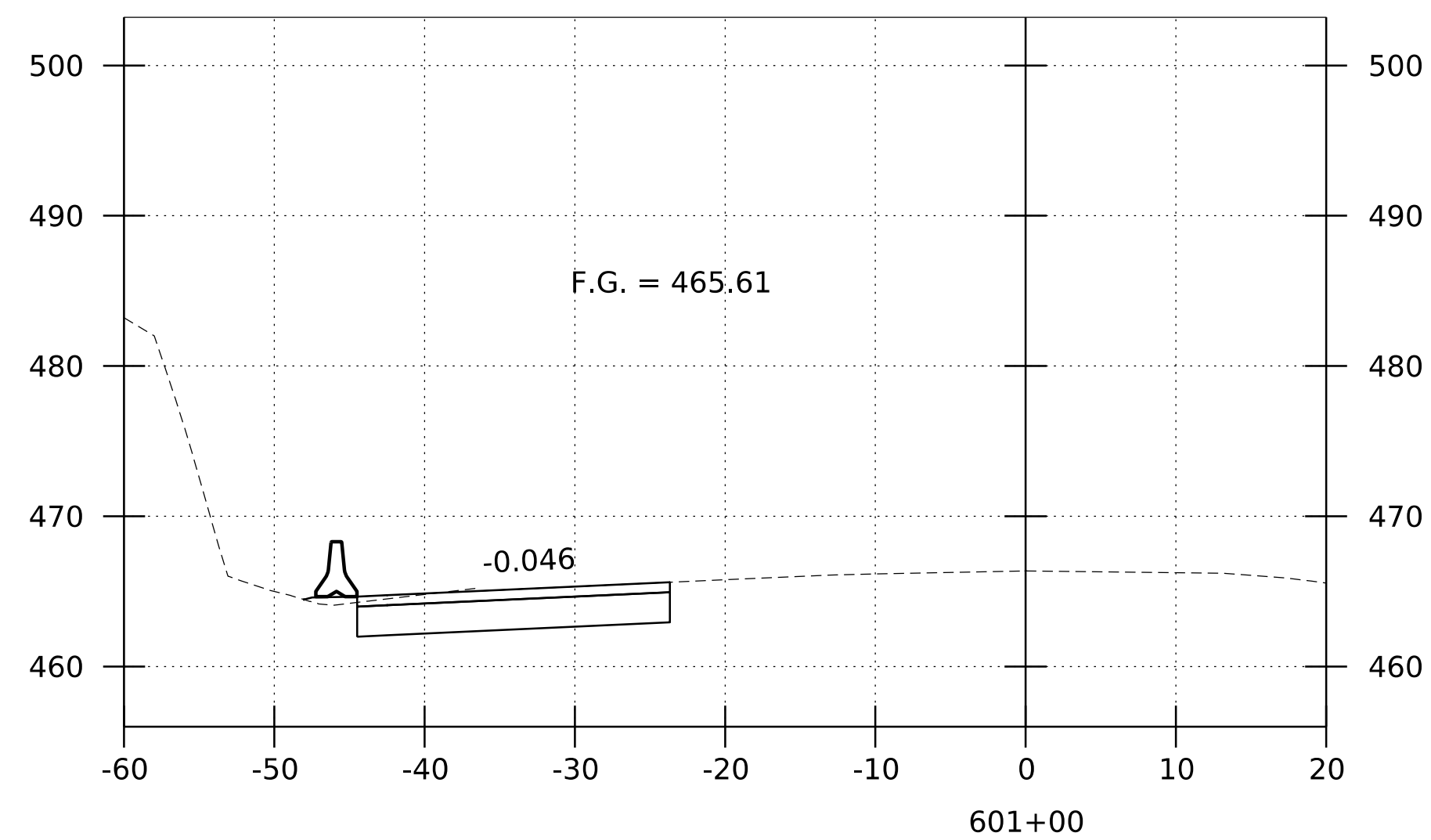
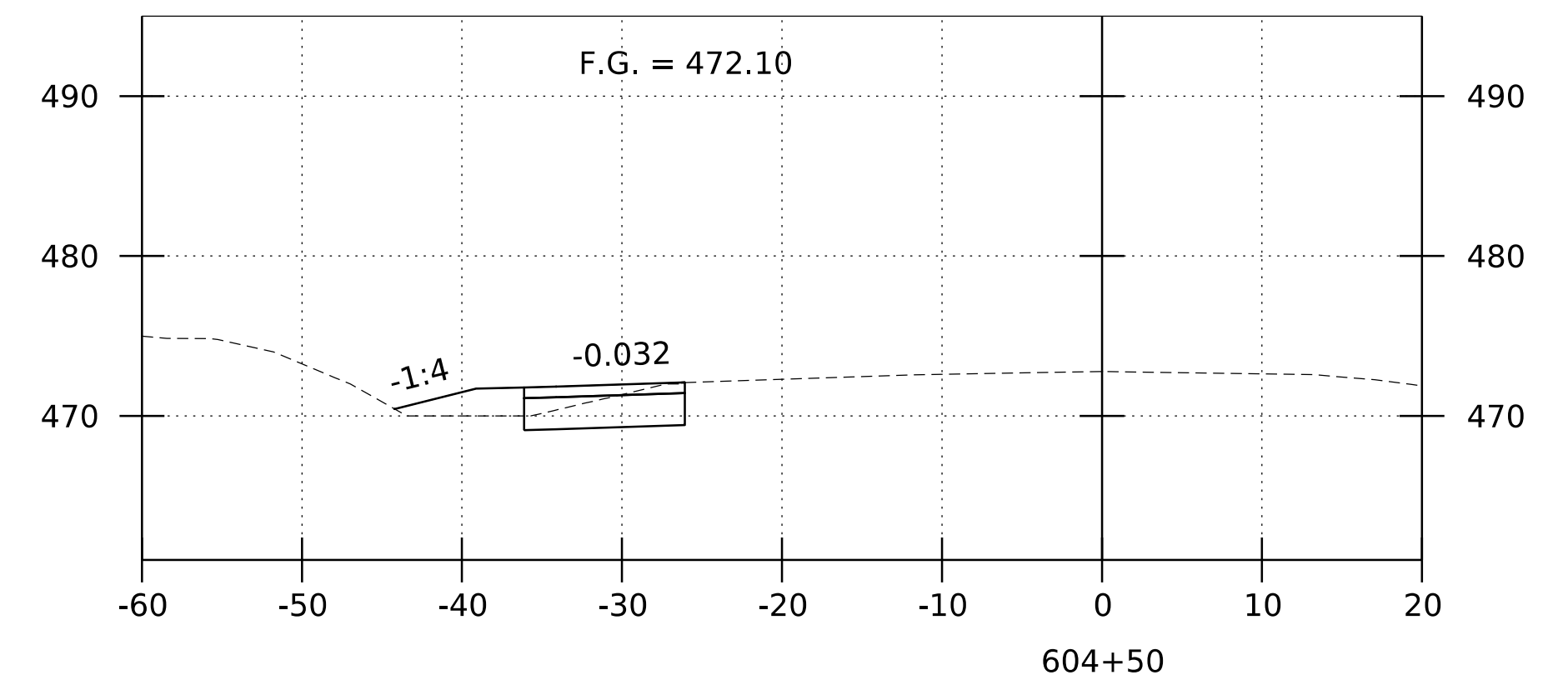
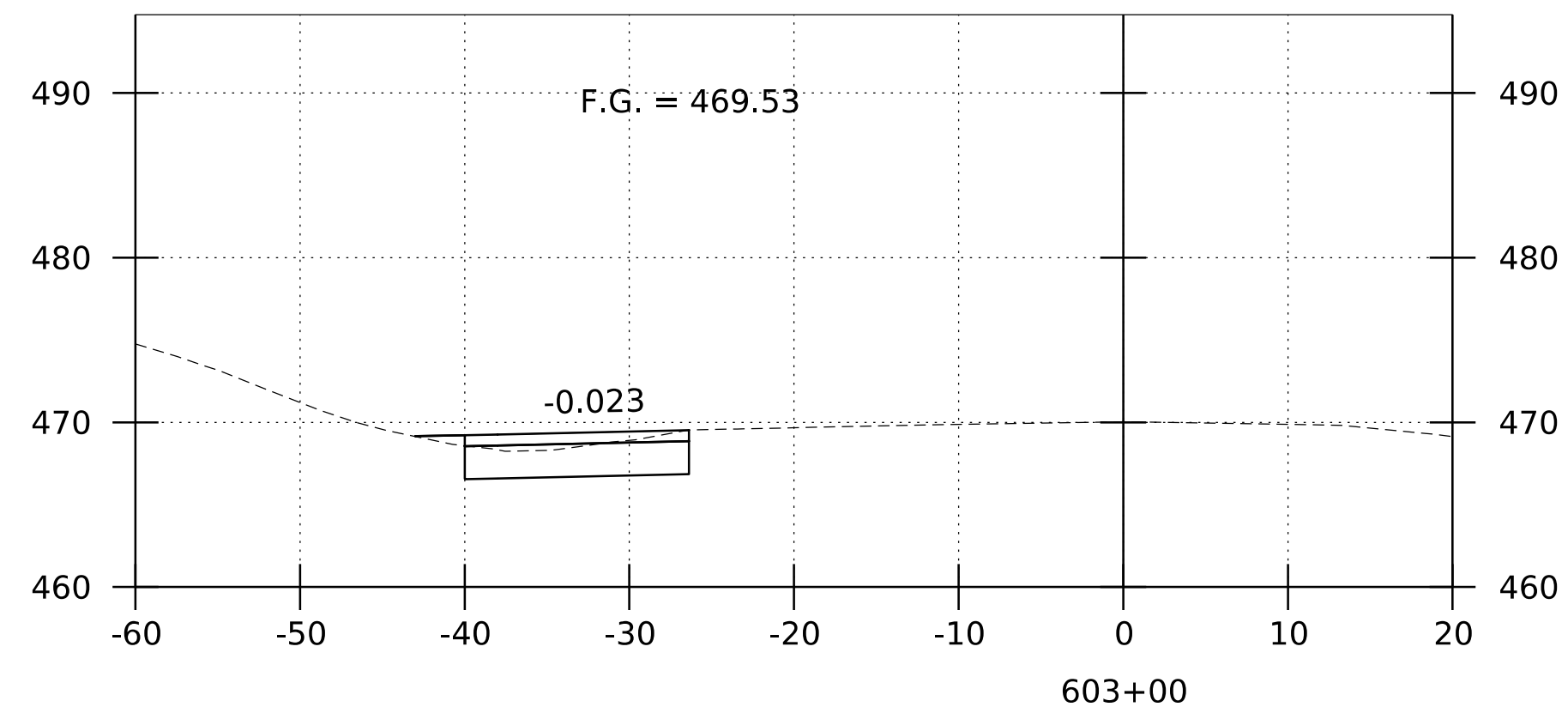
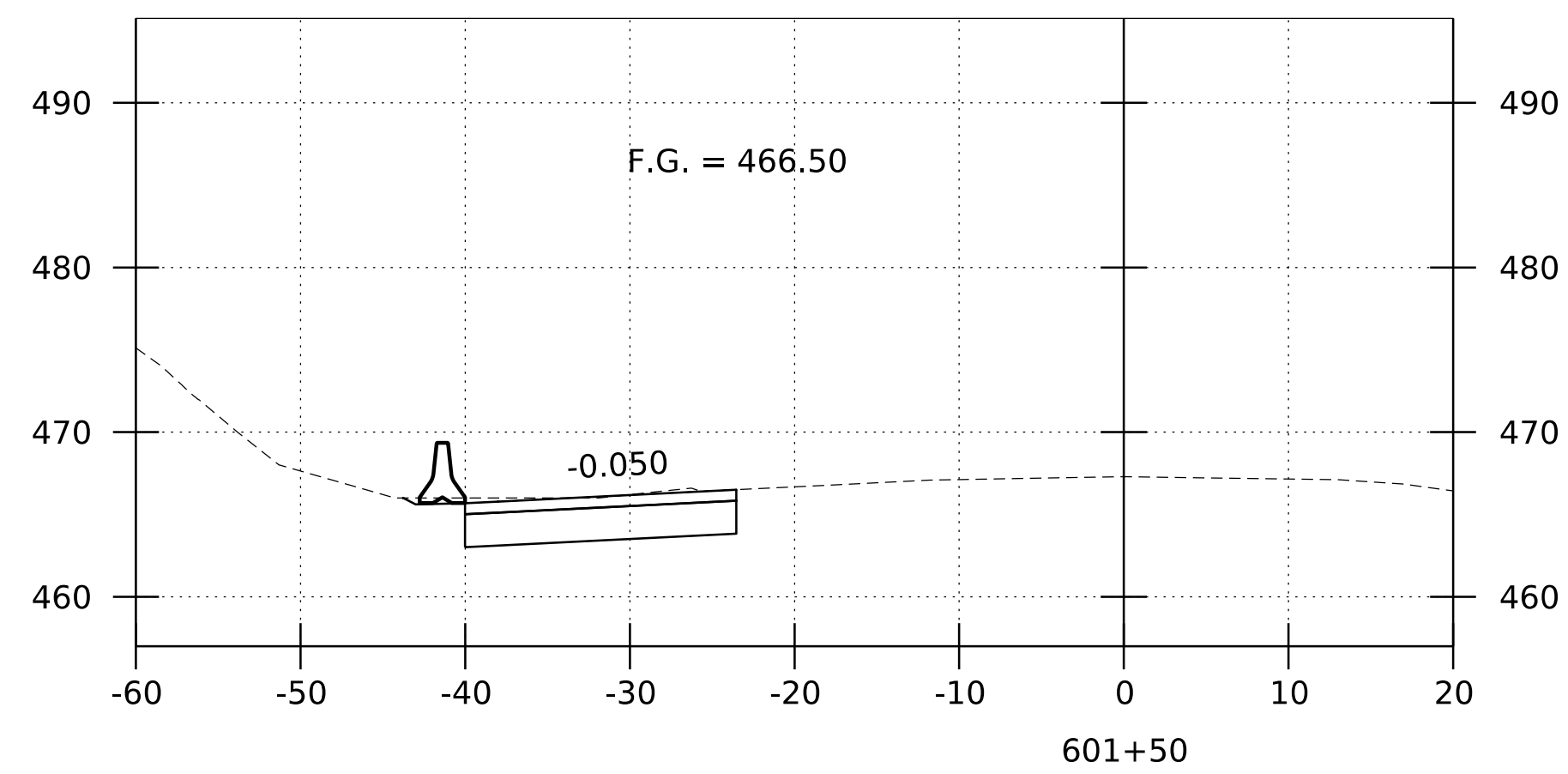
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PROJECT NUMBER: IM 09I-I(82)	
FILE NAME: z19a220xs_NBcrossover.dgn	PLOT DATE: 10/28/2022
PROJECT LEADER: A.STOCKIN	DRAWN BY: M.CARIGNAN
DESIGNED BY: E.WILLIAMS	CHECKED BY: B.GEIGER
NB CROSSOVER CROSS SECTION 4	SHEET 43 OF 66



STA. 597+25 TO STA. 600+50



PROJECT NAME:	BRATTLEBORO	FILE NAME:	z19a220xs.SB Widening.dgn	PLOT DATE:	10/28/2022
PROJECT NUMBER:	IM 091-I(82)	PROJECT LEADER:	A.STOCKIN	DRAWN BY:	M.CARIGNAN
		DESIGNED BY:	E.WILLIAMS	CHECKED BY:	B.GEIGER
		I-91SB WIDENING CROSS SECTION I		SHEET	44 OF 66

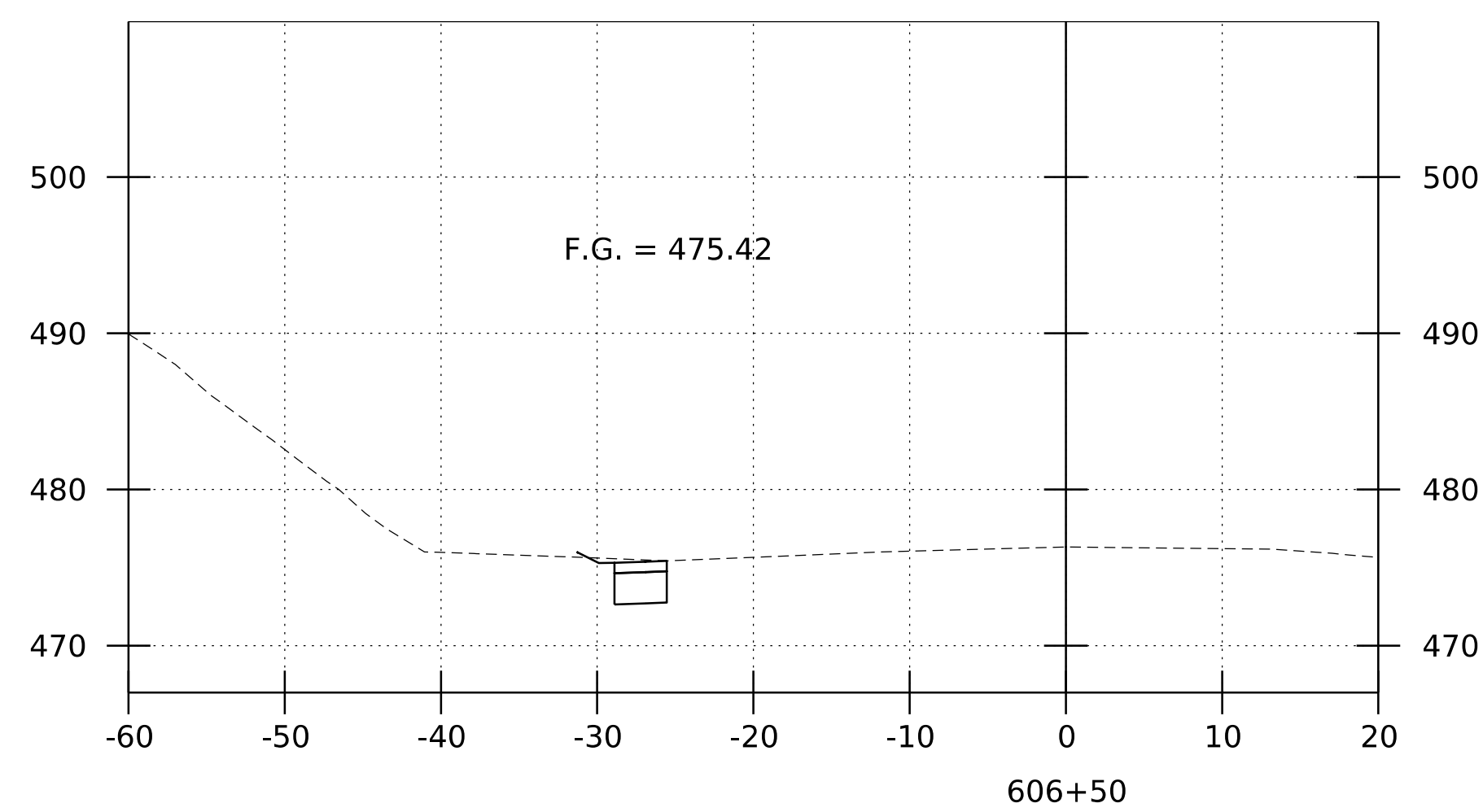
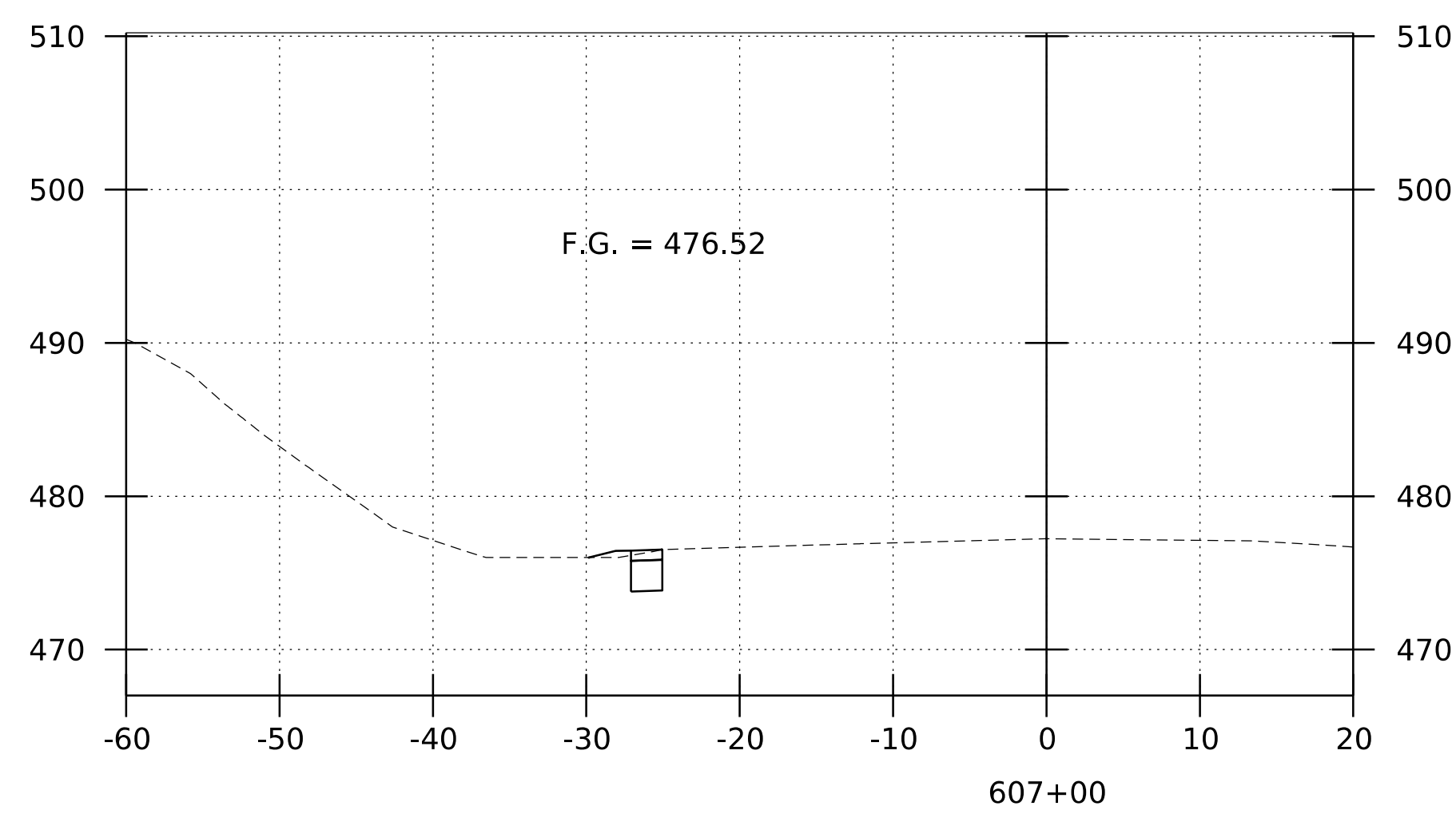
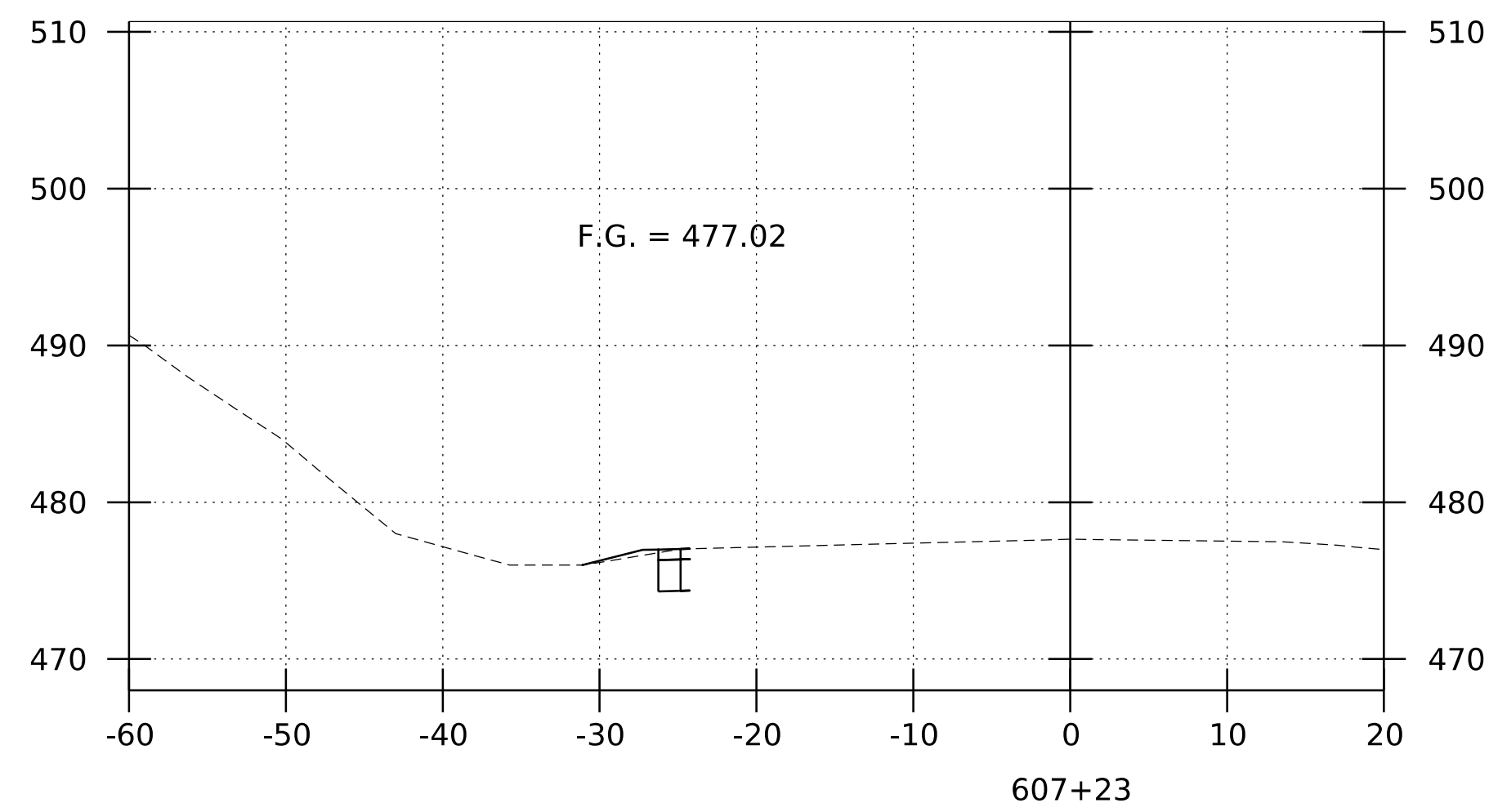
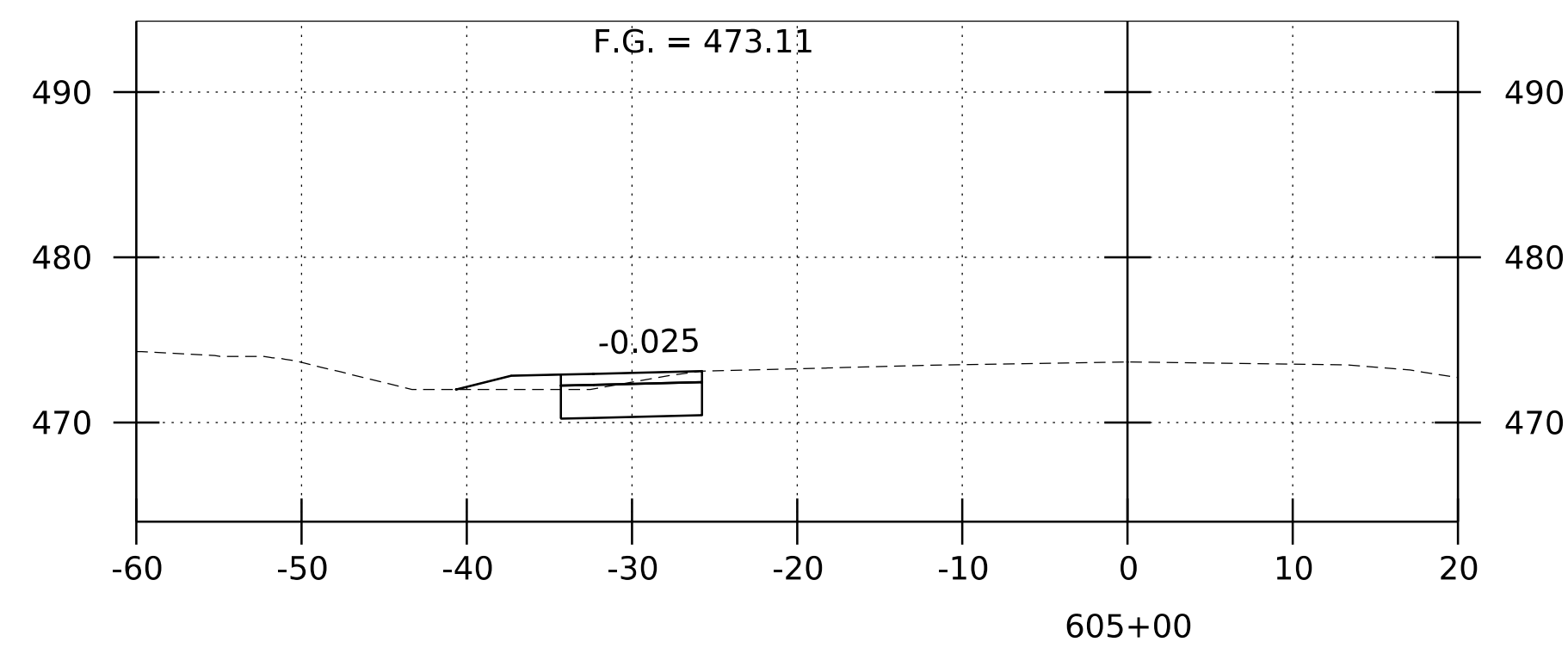
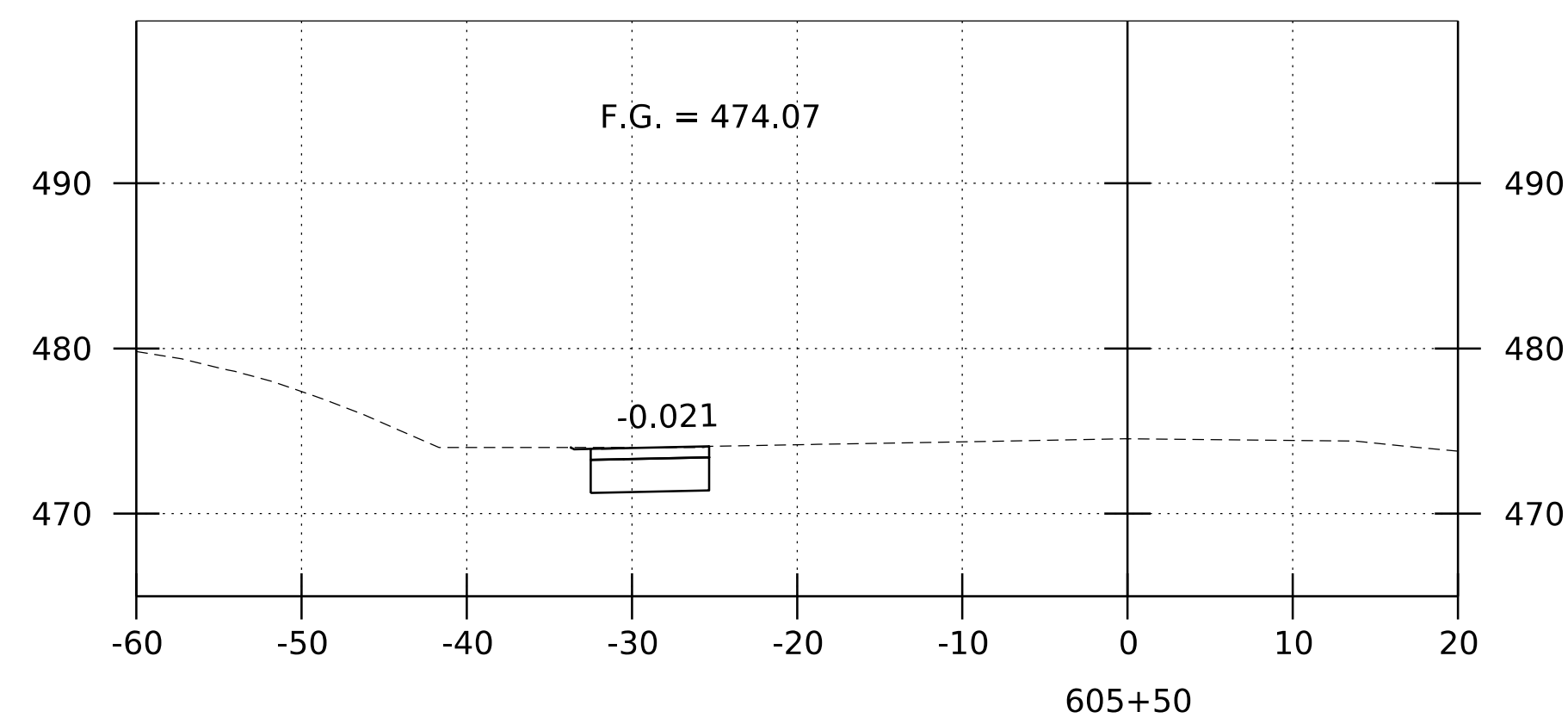
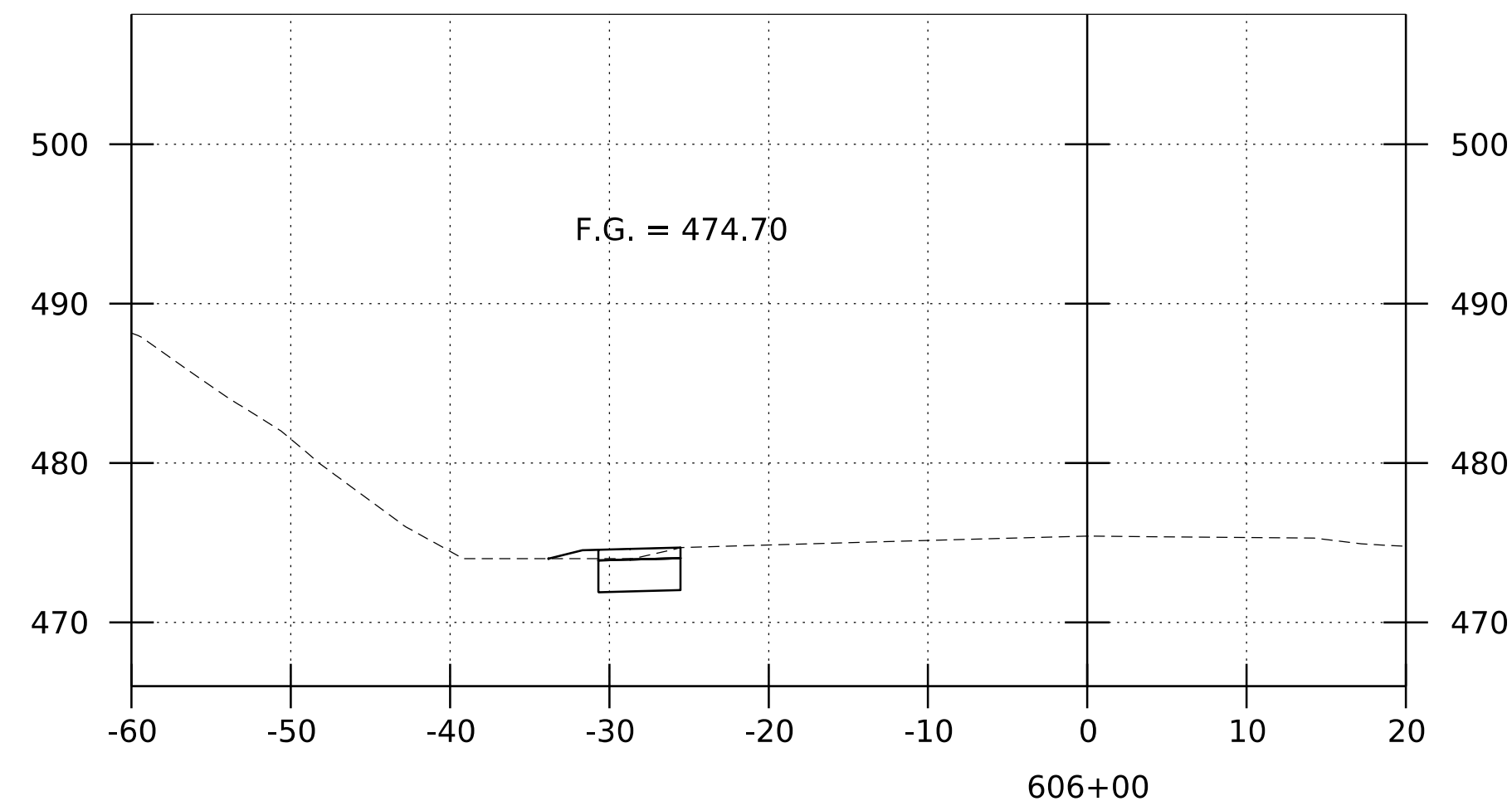


I-91 SB TEMPORARY WIDENING

STA. 600+75 TO STA. 604+50



PROJECT NAME:	BRATTLEBORO
PROJECT NUMBER:	IM 091-I(82)
FILE NAME:	z19a220xs.SB Widening.dgn
PROJECT LEADER:	A.STOCKIN
DESIGNED BY:	E.WILLIAMS
I-91 SB WIDENING CROSS SECTION 2	
PLOT DATE:	10/28/2022
DRAWN BY:	M.CARIGNAN
CHECKED BY:	B.GEIGER
SHEET	45 OF 66

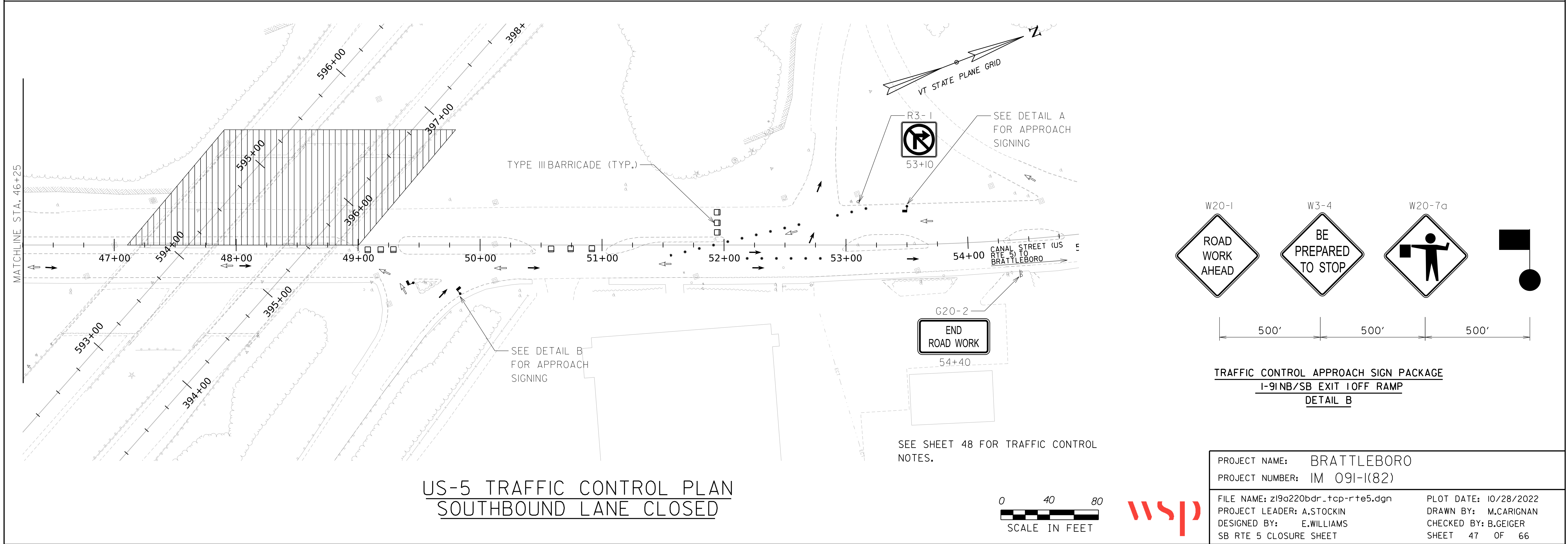
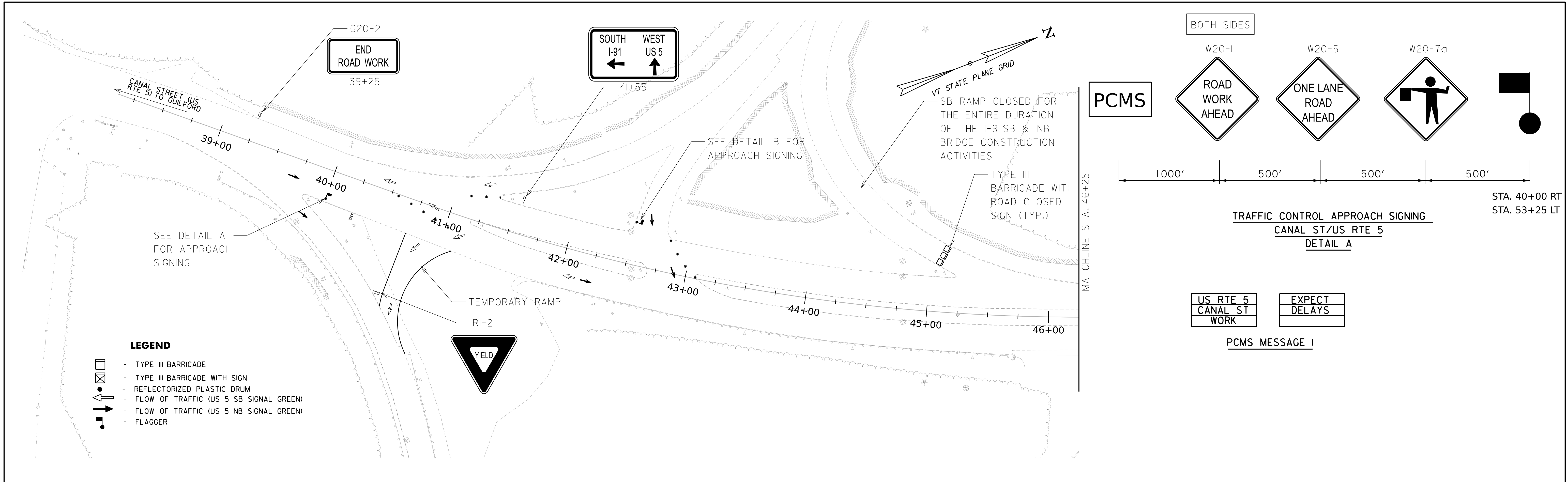


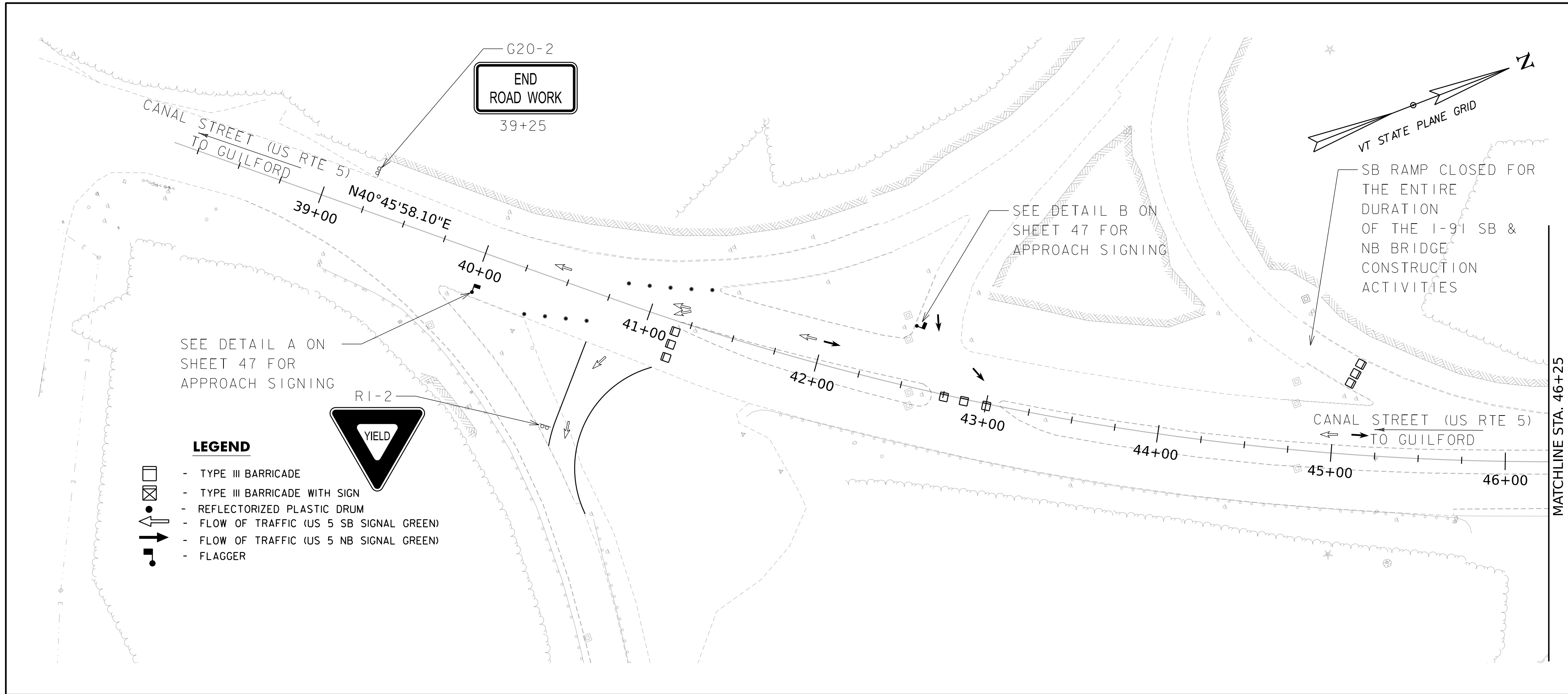
I-91 SB TEMPORARY WIDENING

STA. 605+00 TO STA. 607+23



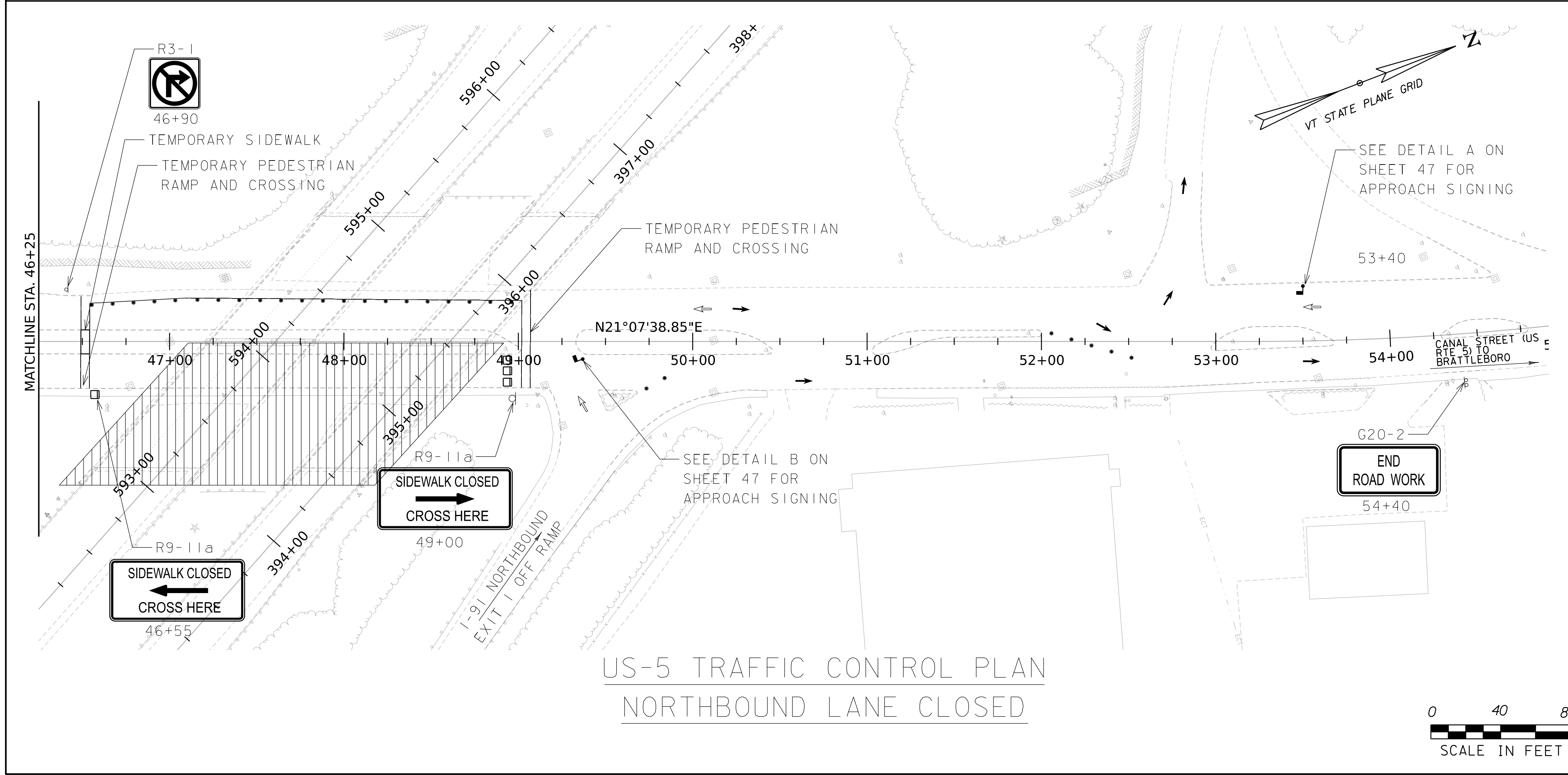
PROJECT NAME:	BRATTLEBORO	FILE NAME:	z19a220xs.SB Widening.dgn	PLOT DATE:	10/28/2022
PROJECT NUMBER:	IM 091-I(82)	PROJECT LEADER:	A.STOCKIN	DRAWN BY:	M.CARIGNAN
		DESIGNED BY:	E.WILLIAMS	CHECKED BY:	B.GEIGER
		I-91 SB WIDENING CROSS SECTION 3		SHEET	46 OF 66





## US-RTE 5 TRAFFIC CONTROL NOTES

1. TWO-WAY TRAFFIC SHALL BE MAINTAINED ON US-5 WHENEVER POSSIBLE AND FOR THE MAJORITY OF THE CONSTRUCTION PERIOD. HOWEVER, IT IS ANTICIPATED THAT US-5 WILL NEED TO BE REDUCED TO ONE LANE DURING SOME CONSTRUCTION ACTIVITIES. TRAFFIC CONTROL SHOWN ON THIS PLAN MAY BE USED TO SAFELY CONVEY TRAFFIC THROUGH THE WORK ZONE WHEN EXTENDED PERIODS OF ONE-WAY TRAFFIC ARE NECESSARY.
2. ALL SIGNS, PAVEMENT MARKINGS, MASKING, BARRELS, BARRICADES, AND OTHER INCIDENTALS REQUIRED FOR TRAFFIC CONTROL SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER ITEM 641.00 TRAFFIC CONTROL.
3. PEDESTRIAN PASSAGE THROUGH THE CONSTRUCTION AREA SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
4. FOR BICYCLE ACCOMMODATION ENSURE THAT OBSTACLES, EQUIPMENT, CONSTRUCTION MATERIALS, AND TRAFFIC CONTROL DEVICES DO NOT ENCROACH ONTO THE BICYCLE PATH OF TRAVEL. MAINTAIN BICYCLE ROUTES FREE OF RUTS, SAND AND MUD.



EPSC PLAN NARRATIVE

1. PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REMOVAL AND REPLACEMENT OF EXISTING CONCRETE BRIDGE DECKS, BRIDGE RAILINGS, BRIDGE BEARINGS, APPROACH SLABS, AND APPROACH GUARDRAILS; CONSTRUCTION OF UHPC LINK SLABS, CONSTRUCTION OF TEMPORARY CROSSTOPS, AND RELATED APPROACH WORK.

IT IS ANTICIPATED THAT CONSTRUCTION OF THE CROSSTOPS WILL OCCUR IN THE FALL OF 2023 AND EARLY SPRING OF 2024 WITH THE BRIDGE CONSTRUCTION OCCURING IN THE LATE SPRING AND SUMMER OF 2024.

2. AMOUNT OF DISTURBANCE & RISK EVALUATION

TOTAL AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLAN IS APPROXIMATELY 3.06 ACRES.

THIS PROJECT REQUIRES COVERAGE UNDER GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES FOR LOW RISK PROJECTS.

ANY MODIFICATIONS TO THE PROJECT THAT INCREASE THE RISK TO ENVIRONMENTAL RESOURCES SHALL BE EVALUATED IN ACCORDANCE WITH THE PERMIT REQUIREMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

3. MAJOR COMPONENTS & SEQUENCING

THE CONTRACTOR SHALL SEQUENCE CONSTRUCTION ACTIVITIES TO MINIMIZE THE EXTENT OF DISTURBED SOILS LEFT OPEN TO EROSION AT ANY GIVEN TIME. THE CONSTRUCTION OF THE NEW BRIDGE DECKS WILL OCCUR DURING 5-6 WEEK BRIDGE CLOSURE PERIODS. INTERSTATE TRAFFIC WILL BE MAINTAINED ON CROSSTOPS. CONSTRUCTION OF THE CROSSTOPS IS ANTICIPATED TO OCCUR DURING THE FALL PRIOR TO THE BRIDGE CLOSURE PERIODS. THE SOUTHBOUND BRIDGE DECK IS PROPOSED TO BE REPLACED FIRST. ONE LANE OF SOUTHBOUND AND ONE LANE OF NORTHBOUND WILL BE MAINTAINED ON THE EXISTING NORTHBOUND BRIDGE. THE SOUTHBOUND BRIDGE DECK IS PROPOSED TO BE COMPLETED AND REOPENED PRIOR TO MEMORIAL DAY WEEKEND. THE NORTHBOUND BRIDGE DECK IS PROPOSED TO BE REPLACED SECOND, DURING THE SAME CONSTRUCTION SEASON. ONE LANE OF NORTHBOUND AND TWO LANES OF SOUTHBOUND TRAFFIC WILL BE MAINTAINED ON THE NEWLY REHABILITATED SOUTHBOUND BRIDGE. CONSTRUCTION OF THE NORTHBOUND BRIDGE DECK IS PROPOSED TO START AFTER THE 4TH OF JULY AND BE COMPLETED AND REOPENEND PRIOR TO LABOR DAY WEEKEND.

4. SITE DESCRIPTION

4.1 VEGETATED BUFFERS

MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE IMPLEMENTED WHEREVER POSSIBLE.

THIS PROJECT DOES NOT RELY ON VEGETATED BUFFERS AS A MITIGATING RISK FACTOR.

4.2 STREAM CROSSINGS

THIS PROJECT DOES NOT INCLUDE ANY PROPOSED STREAM CROSSINGS.

4.3 WETLANDS

THERE ARE NO WETLANDS OR WETLAND BUFFERS BEING IMPACTED WITHIN THE PROJECT LIMITS.

4.4 TOPOGRAPHY

THE TOPOGRAPHY OF THE PROJECT SITE IS ROLLING HILLS AND MOSTTLY GRASSLANDS. THE APPROACHES TO THE BRIDGES ARE AT A 1.8% GRADE. THERE ARE LEDGE OUTCROPPING AREAS VISABLE WITHIN THE MEDIAN AREA NORTH OF THE TWO BRIDGES. US ROUTE 5 (CANAL STREET) IS LOCATED UNDERNEATH THE BRIDGES. TEMPORARY TRAFFIC CONTROL WILL BE PERFORMED ON US ROUTE 5, BUT NO PERMANENT WORK IS PROPOSED.

4.5 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF MAINLY GRASSES WITH BORDERING WOODLANDS. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY THE PROJECT. UPON COMPLETION, THE DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES AS DESCRIBED IN THE TURF ESTABLISHMENT DETAIL, UNLESS NOTED OTHERWISE.

4.6 SOILS

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE. SOILS ON THE PROJECT SITE INCLUDE:

DUMMERSTON-MACOMBER COMPLEX, 8% TO 15% SLOPES, “K FACTOR” = 0.43  
DEERFIELD LOAMY FINE SAND, 3% TO 8% SLOPES, “K FACTOR” = 0.20

WINDSOR LOAMY SAND, 3% TO 8% SLOPES, “K FACTOR” = N/A  
MACOMBER-TACONIC COMPLEX, 8% TO 15% SLOPES, “K FACTOR” = 0.20

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING:  
0.0-0.23 = LOW EROSION POTENTIAL  
0.24-0.36 = MODERATE EROSION POTENTIAL  
0.37 AND HIGHER = HIGH EROSION POTENTIAL

4.7 OTHER SENSITIVE RESOURCES

THERE ARE NO ARCHEOLOGICAL, HISTORIC, OR OTHER SENSITIVE AREAS THAT HAVE BEEN IDENTIFIED WITHIN THE PROJECT LIMITS.

5. DRAINAGE

5.1 RECEIVING WATERS

THERE ARE NO WATER SOURCES ON THE PROJECT SITE. DRAINAGE STRUCTURES ARE CONNECTED TO STORM SEWER.

5.2 DISCHARGE POINTS

THERE ARE SEVERAL STORMWATER COLLECTION STRUCTURES ALONG THE HIGHWAY MEDIAN AND RAMPS AT THE PROJECT SITE. THE ADDITION OF THE CROSSTOP RAMPS WILL INCLUDE CULVERTS TO CONVEY WATER FROM HIGHER ELEVATIONS, THROUGH THE CROSSTOPS, TO STORMWATER STRUCTURES LOCATED AT LOWER ELEVATIONS. THE STORMWATER STRUCTURES DISCHARGE TO THE STORM SEWER SYSTEM.

5.3 CONVEYANCE/FLOW PATH FROM PROJECT TO WATERS

STORMWATER AT THE PROJECT SITE GENERALLY FLOWS OVER EITHER PAVEMENT, GRASS, OR OTHER VEGETATED AREAS TO STORMWATER STRUCTURES THAT DISCHARGE INTO THE STORM SEWER.

6. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES

THE MEASURES INCLUDED IN THIS PLAN ARE PROVIDED AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. IT IS EXPECTED THAT THE CONTRACTOR MAY USE THIS PLAN, WITH ADJUSTMENTS AS NECESSARY, BASED ON THEIR SPECIFIC MEANS AND METHODS OF CONSTRUCTION.

APPLYING THESE MEASURES THROUGHOUT CONSTRUCTION IS CRITICAL TO THEIR SUCCESS IN MINIMIZING SEDIMENT TRANSPORT TO THE RECEIVING WATERS. REFER TO THE DETAILS INCLUDED IN THESE PLANS AND THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION’S VERMONT STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION AND SEDIMENT CONTROL FOR SPECIFIC GUIDANCE.

6.1 IDENTIFY LIMITS OF DISTURBANCE

SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED.

PROJECT DEMARCATION FENCING (PDF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES. BARRIER FENCE SHALL BE USED INSTEAD OF PROJECT DEMARCATION FENCE WITHIN 100 FEET OF A WATER RESOURCE (STREAM, BROOK, LAKE, POND, WETLAND, ETC).

6.2 LIMIT CONCURRENT DISTURBANCE

LIMITING THE AMOUNT OF SOIL EXPOSED AT ONE TIME REDUCES THE POTENTIAL EROSION ON SITE. CONCURRENT EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY AND EMPLOYING STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE. CONCURRENT EARTH DISTURBANCE SHALL NOT EXCEED TWO ACRES.

6.3 STABILIZE DISTURBED AREAS

6.3.1 ACCESS POINTS/ENTRANCE/EXITS

TRACKING OF SEDIMENT ONTO PUBLIC HIGHWAYS SHALL BE MINIMIZED TO REDUCE THE POTENTIAL FOR RUNOFF ENTERING RECEIVING WATERS. INSTALLATION SHALL COINCIDE WITH THE CONTRACTORS PROGRESS SCHEDULE.

STABILIZED CONSTRUCTION ENTRANCES ARE ANTICIPATED ON THIS PROJECT AND SHALL BE LOCATED AS SHOWN ON THIS EPSC PLAN AND ANYWHERE EQUIPMENT WILL BE GOING FROM AREAS OF EXPOSED SOILS TO PAVED SURFACES.

6.3.2 TEMPORARY MEASURES FOR EXPOSED AREAS DURING CONSTRUCTION

ALL AREAS OF EARTH DISTURBANCE MUST HAVE STABILIZATION IN PLACE WITHIN 14 DAYS OF INITIAL DISTURBANCE. AFTER THIS TIME, DISTURBED AREAS MUST BE STABILIZED IN ADVANCE OF ANY RUNOFF PRODUCING EVENT.

THE EARTHWORK FOR THE CROSSTOP RAMPS WILL REMAIN IN THE PROJECTS FINAL CONDITON. CROSSTOP PAVEMENT WILL BE REMOVE IN THE FINAL CONDITION. SLOPES SHALL BE STABILIZED THROUGH THE USE OF SURFACE ROUGHENING, SEEDING OF TEMPORARY SLOPES AND STOCKPILES, AND STANDARD MULCHING PRACTICES DESCRIBED IN SPECIFICATION SECTION 653.07 SHALL BE UTILIZED TO TEMPORARILY STABILIZE DISTURBED AREAS.

6.3.3 PERMANENT STABILIZATION AT FINAL GRADE

EXPOSED SOIL MUST BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

SEED, MULCH, FERTILIZER AND LIME SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES STEEPER THAN 1:3, ROLLED EROSION CONTROL PRODUCT, TYPE I SHALL BE USED INSTEAD OF MULCH.

6.4 DIVERT UPLAND RUNOFF

DIVERSIONARY MEASURES SHALL BE USED TO INTERCEPT RUNOFF FROM ABOVE THE CONSTRUCTION AND DIRECT IT AROUND THE DISTURBED AREA SO THAT CLEAN WATER DOES NOT BECOME MUDDIED WHILE TRAVELING OVER EXPOSED SOILS ON THE CONSTRUCTION SITE.

STORMWATER FROM ABOVE THE PROPOSED CROSSTOP RAMP LOCATIONS WILL BE DIVERTED THROUGH THE PROJECT SITE THROUGH CULVERTS LOCATED AT THE BOTTOM OF THE RAMPS.

6.5 INSTALL SEDIMENT BARRIERS

SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHALL BE INSTALLED ON THE DOWNHILL SIDE OF CONSTRUCTION ACTIVITIES, PRIOR TO ANY UP-SLOPE WORK.

SILT FENCE WILL BE INSTALLED ALONG THE CONTOURS AND AS PROPOSED ON THE EPSC PLAN. APPROPRIATE STORMWATER INLET PROTECTION SHOULD BE USED ON ALL STORMWATER STRUCTURES AFFECTED BY THE PROJECT.

6.6 SLOW DOWN CHANNELIZED RUNOFF

CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSION POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS.

STONE CHECK DAMS ARE NOT ANTICIPATED TO BE NEEDED.

7. CONSTRUCT PERMANENT CONTROLS

PERMANENT STORMWATER TREATMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH PERMIT CONDITIONS.

PERMANENT STORMWATER TREATMENT DEVICES ARE NOT ANTICIPATED TO BE NEEDED AS DESIGNED.

8. DEWATERING

DISCHARGE FROM DEWATERING ACTIVITIES THAT FLOWS OFF OF THE CONSTRUCTION SITE MUST NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE VERMONT WATER QUALITY STANDARDS. DEWATERED STORMWATER OR GROUNDWATER MUST BE FILTERED AND ROUTED IN A MANNER THAT DOES NOT RESULT IN VISIBLY TURBID DISCHARGES TO WATERS.

DEWATERING IS NOT ANTICIPATED.

9. OFF-SITE AREAS

OFF-SITE WASTE AND BORROW AREAS HAVE NOT BEEN IDENTIFIED FOR THIS PROJECT. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND PERMIT, AS NECESSARY, ANY OFF-SITE AREAS THAT ARE NEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 105.25 - 105.28. ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES NECESSARY FOR WASTE, BORROW, AND STAGING AREAS OUTSIDE THE PROJECT LIMITS SHALL BE PAID FOR PER 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

VEHICLE AND EQUIPMENT STORAGE AREAS OR AREAS ADJACENT TO CONSTRUCTION TRAILERS OR OTHER HIGH TRAFFIC AREAS SHALL BE COVERED WITH GEOTEXTILE FABRIC AND 12” OF GRAVEL. FOLLOWING COMPLETION OF CONSTRUCTION, ALL NON-NATIVE MATERIALS SHALL BE REMOVED FROM THE STAGING AREA. COMPACTED, RUTTED, OR OTHERWISE DISTURBED SOILS SHALL BE TILLED, RAKED, SEEDDED AND MULCHED.

ERODIBLE MATERIALS STOCKPILED WITHIN THE MATERIAL STORAGE AREAS SHALL BE ISOLATED WITH SILT FENCE OR OTHER ACCEPTABLE SEDIMENT BARRIER. SOIL STOCKPILED ON THE SITE SHALL BE SEEDDED AND MULCHED.



PROJECT NAME: BRATTLEBORO	
PROJECT NUMBER: IM 091-I(82)	
FILE NAME: z19a220ero.narrative.dgn	PLOT DATE: 10/28/2022
PROJECT LEADER: A.STOCKIN	DRAWN BY: M.CARIGNAN
DESIGNED BY: E.WILLIAMS	CHECKED BY: B.GEIGER
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10. WINTER CONSTRUCTION

CONSTRUCTION ACTIVITIES MAY CONTINUE INTO THE WINTER CONSTRUCTION SEASON, DEPENDING ON ACTUAL FIELD AND WEATHER CONDITIONS. IF ACTIVITIES ARE ON-GOING BETWEEN OCTOBER 15 AND APRIL 15, THE CONTRACTOR SHALL FOLLOW REQUIREMENTS FOR WINTER CONSTRUCTION, AS DEFINED IN SPECIFIC PERMIT CONDITIONS AND AS FOLLOWS:

- ENLARGED ACCESS POINTS, STABILIZED TO PROVIDE FOR SNOW STOCKPILING.
- LIMITS OF DISTURBANCE MOVED OR REPLACED TO REFLECT BOUNDARY OF WINTER WORK.
- DEVELOPMENT OF A SNOW MANAGEMENT PLAN THAT INCLUDES:
  - ADEQUATE STORAGE AND CONTROL OF MELT-WATER
  - STORAGE OF CLEARED SNOW TO BE PLACED DOWN SLOPE OF DISTURBED AREAS AND OUT OF STORMWATER TREATMENT STRUCTURES
- AREAS OF DISTURBANCE WITHIN 100 FT OF A WATERBODY MUST HAVE REINFORCED (WOVEN WIRE) SILT FENCE INSTALLED ACROSS THE SLOPE, DOWNGRADIENT OF THE EARTH DISTURBANCE. ALTERNATIVELY, REGULAR, NON-WOVEN WIRE SILT FENCE MAY BE USED IF COMBINED WITH EROSION CONTROL BERM, EROSION LOG, OR STRAW WATTLE.
- DRAINAGE STRUCTURES MUST BE KEPT OPEN AND FREE OF SNOW AND ICE DAMS.
- SILT FENCE AND OTHER PRACTICES REQUIRING EARTH DISTURBANCE MUST BE INSTALLED AHEAD OF FROZEN GROUND.
- MULCH TO BE APPLIED AT A MINIMUM OF 2 INCHES DEPTH WITH 80-90% COVERAGE.
- AREAS OF DISTURBED SOILS MUST BE STABILIZED PRIOR TO ANY RUNOFF-PRODUCING EVENT, WITH THE FOLLOWING EXCEPTION:
  - STABILIZATION IS NOT REQUIRED IF THE WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION WITH NO OUTLET AND A DEPTH OF 2 FT OR GREATER (OPEN UTILITY TRENCHES), PROVIDED THAT ANY DEWATERING, IF NECESSARY, IS CONDUCTED AS REQUIRED.
- PRIOR TO STABILIZATION, SNOW OR ICE MUST BE REMOVED TO LESS THAN 1" THICKNESS.
- USE STONE TO STABILIZE AREAS WHERE CONSTRUCTION VEHICLE TRAFFIC IS ANTICIPATED.

11. INSPECTION & MAINTENANCE

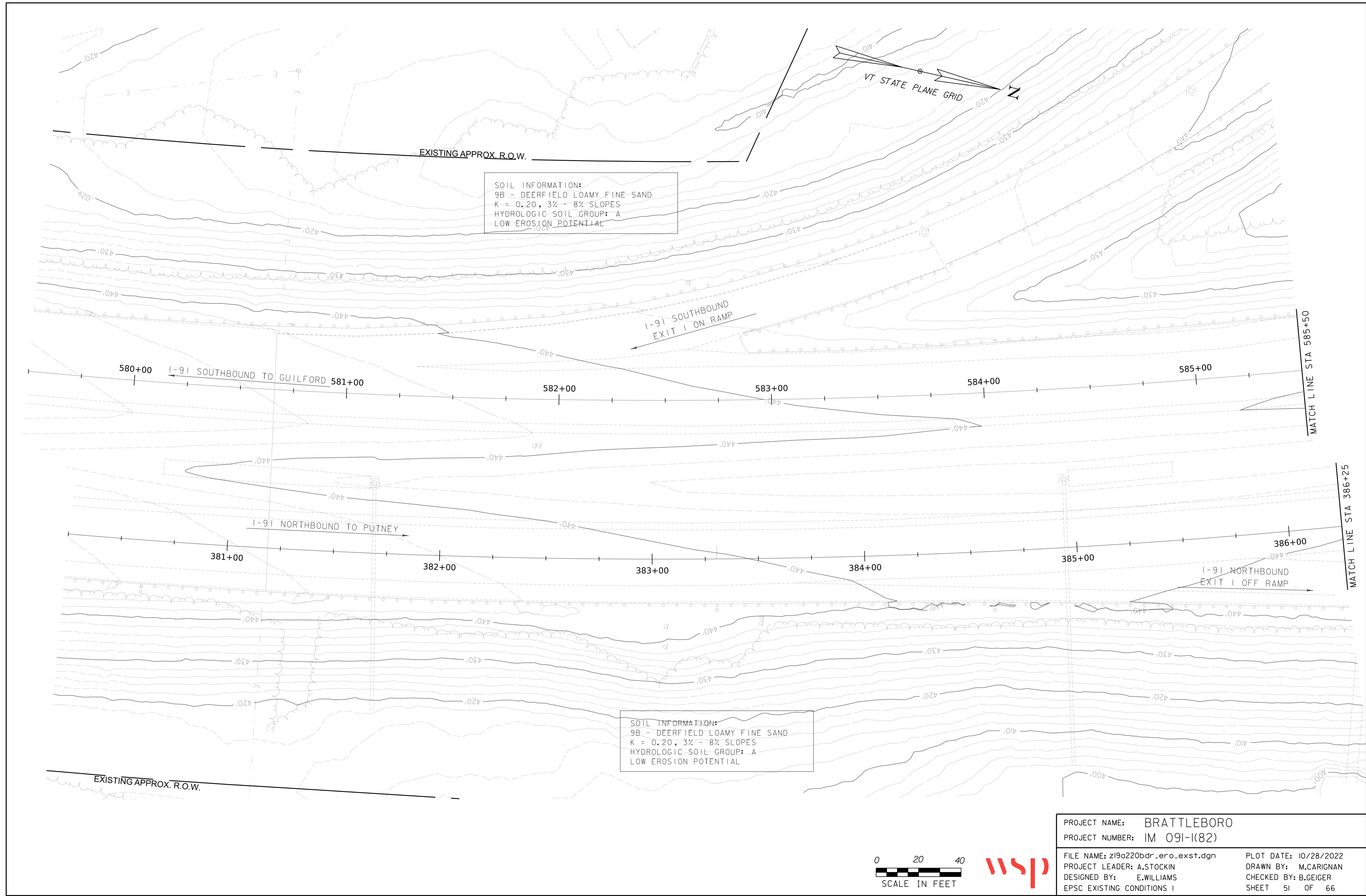
INSPECTION AND MONITORING OF THE PROJECT’S EPSC MEASURES SHALL BE CONDUCTED IN ACCORDANCE WITH STANDARD SPECIFICATION 653.04 MONITORING EROSION PREVENTION AND SEDIMENT CONTROL PLAN, ALONG WITH PERMIT SPECIFIC INSPECTION REQUIREMENTS.

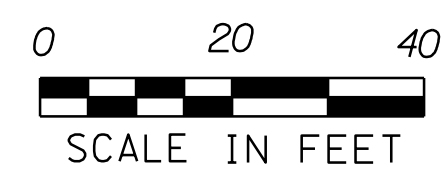
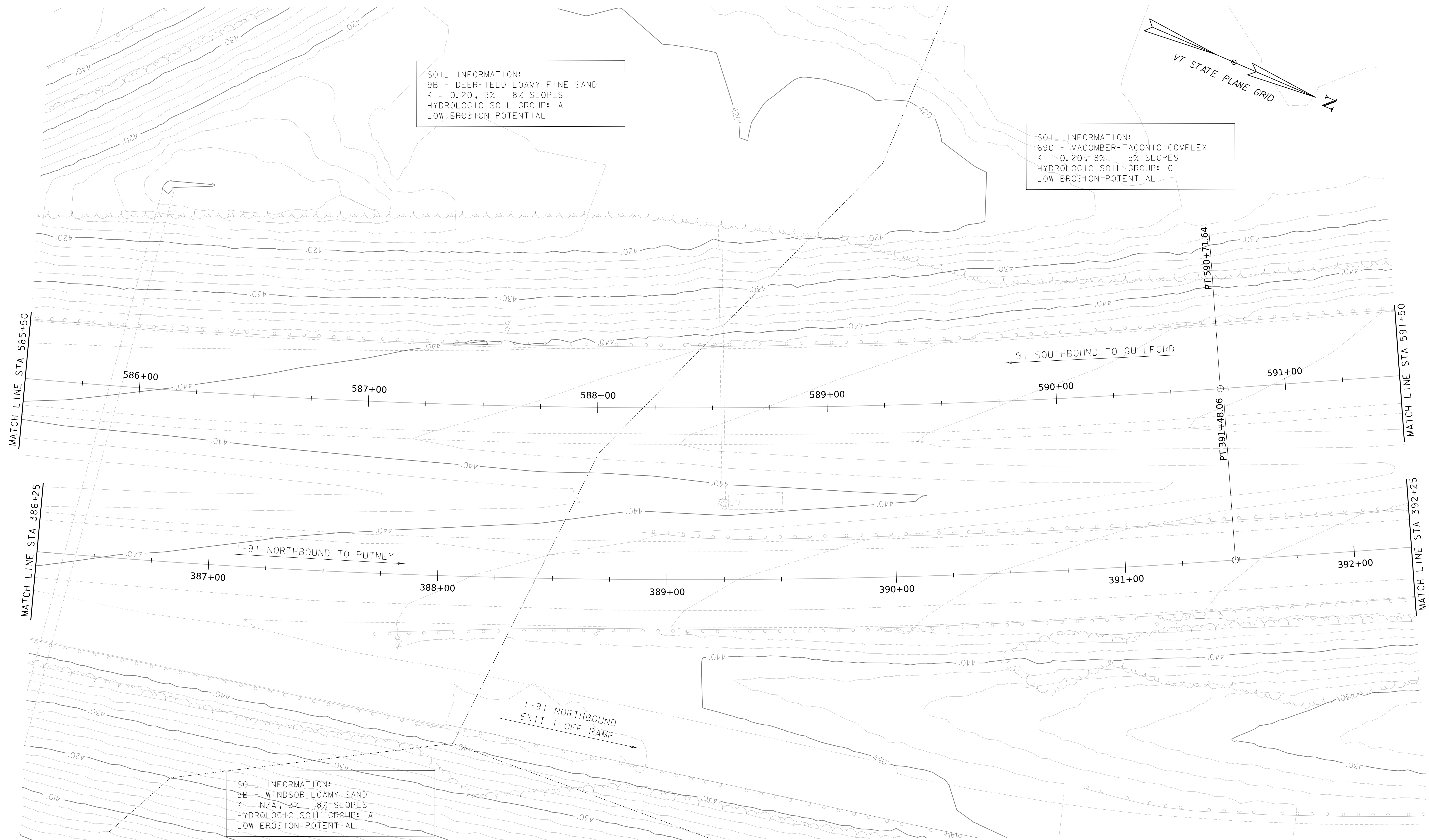
THE CONTRACTOR SHALL PROVIDE A COPY OF THEIR INSPECTION FORM AS PART OF THEIR EPSC PLAN.

ALL EPSC MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED OF AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

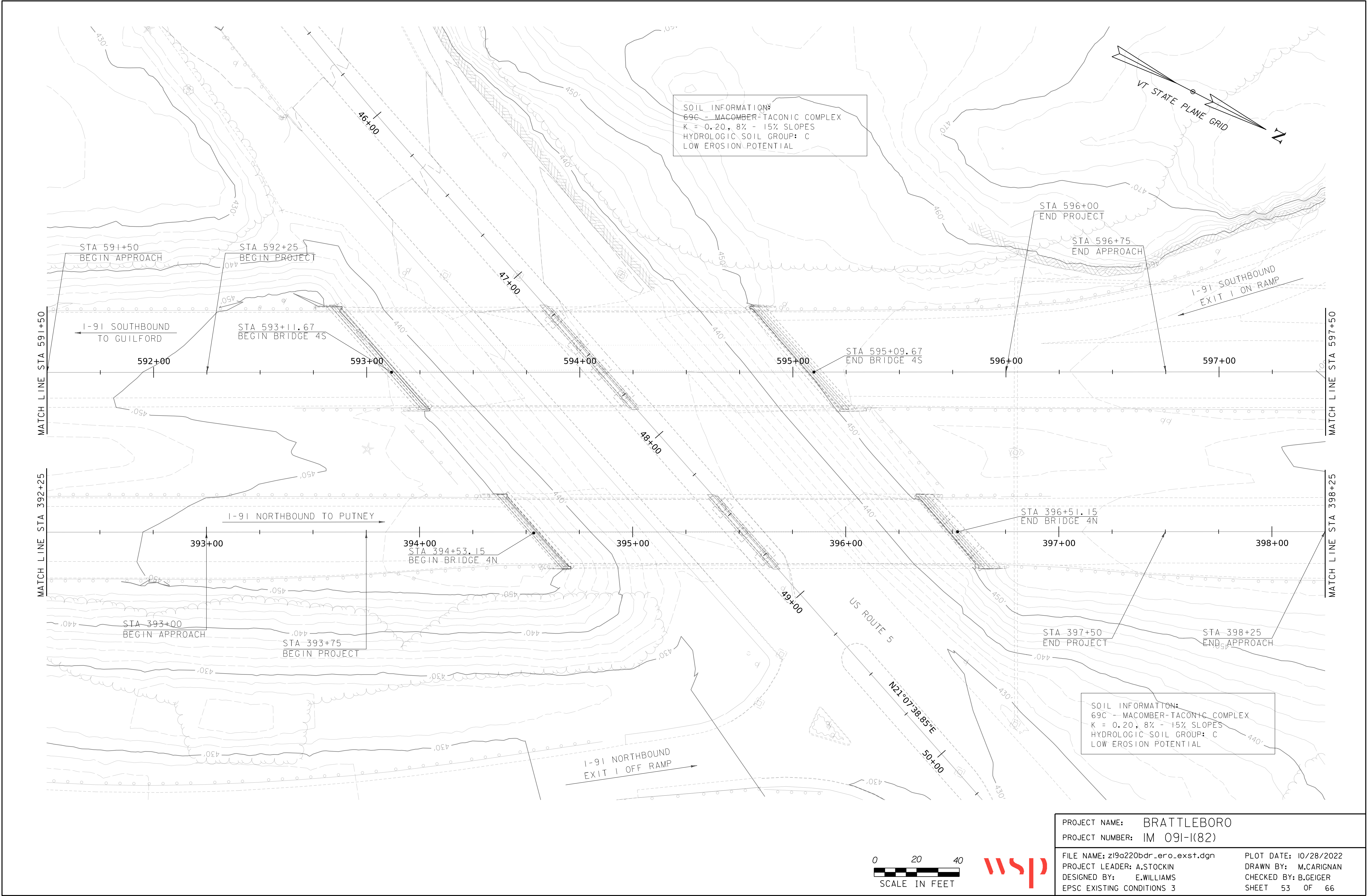


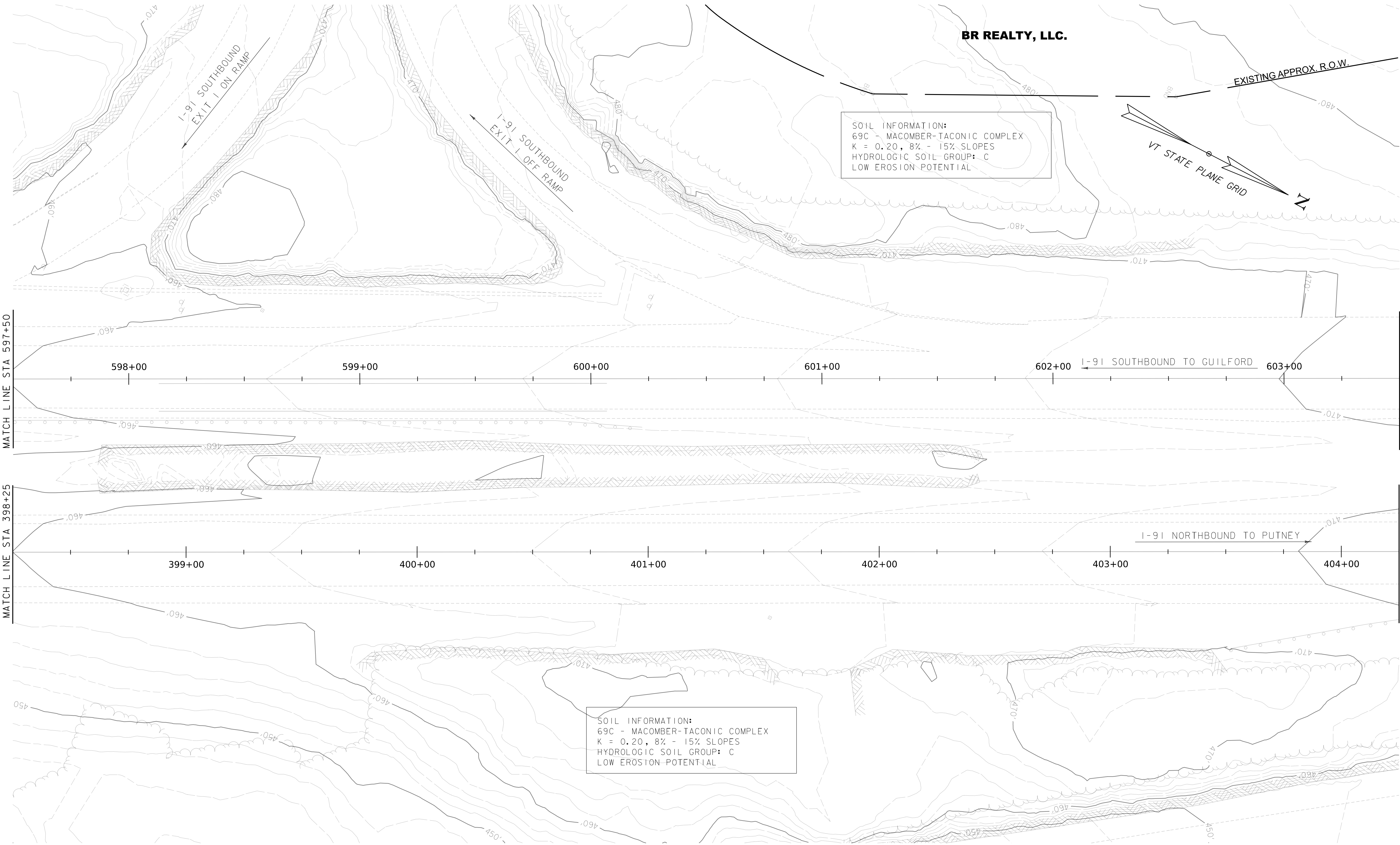
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PROJECT NUMBER: IM 09I-I(82)	
FILE NAME: z19a220ero_narrative.dgn	PLOT DATE: 10/28/2022
PROJECT LEADER: A.STOCKIN	DRAWN BY: M.CARIGNAN
DESIGNED BY: E.WILLIAMS	CHECKED BY: B.GEIGER
EPSC NARRATIVE 2	SHEET 50 OF 66





PROJECT NAME:	BRATTLEBORO	FILE NAME:	z19a220bdr_ero_exst.dgn	PLOT DATE:	10/28/2022
PROJECT NUMBER:	IM 091-I(82)	PROJECT LEADER:	A.STOCKIN	DRAWN BY:	M.CARIGNAN
		DESIGNED BY:	E.WILLIAMS	CHECKED BY:	B.GEIGER
		EPSC EXISTING CONDITIONS 2		SHEET	52 OF 66





PROJECT NAME: BRATTLEBORO

PROJECT NUMBER: IM 091-I(82)

FILE NAME: z19a220bdr_ero_exst.dgn

PROJECT LEADER: A.STOCKIN

DESIGNED BY: E.WILLIAMS

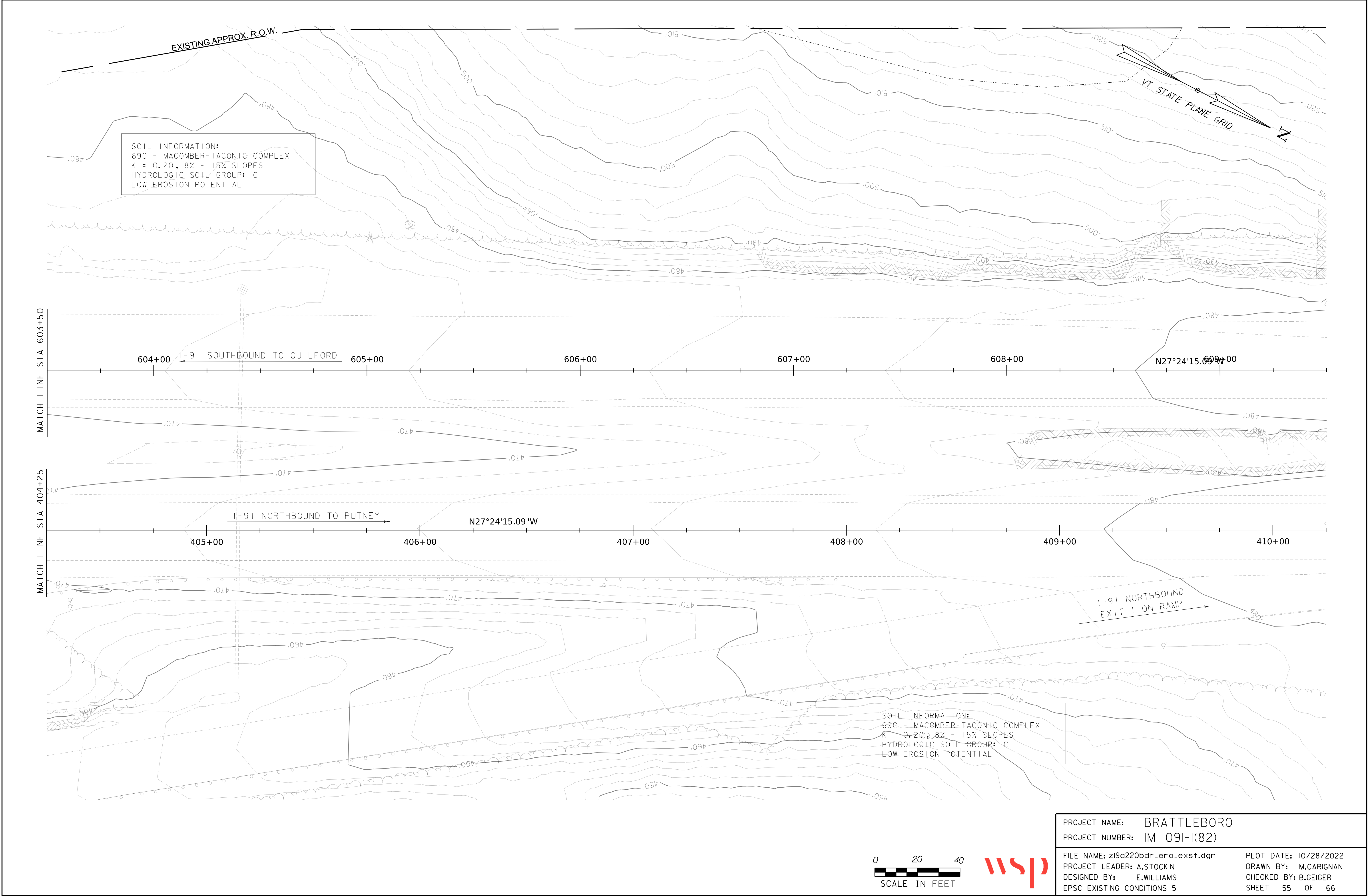
EPSC EXISTING CONDITIONS 4

PLOT DATE: 10/28/2022

DRAWN BY: M.CARIGNAN

CHECKED BY: B.GEIGER

SHEET 54 OF 66



PROJECT NAME: BRATTLEBORO

PROJECT NUMBER: IM 091-I(82)

FILE NAME: z19a220bdr_ero.exst.dgn

PROJECT LEADER: A.STOCKIN

DESIGNED BY: E.WILLIAMS

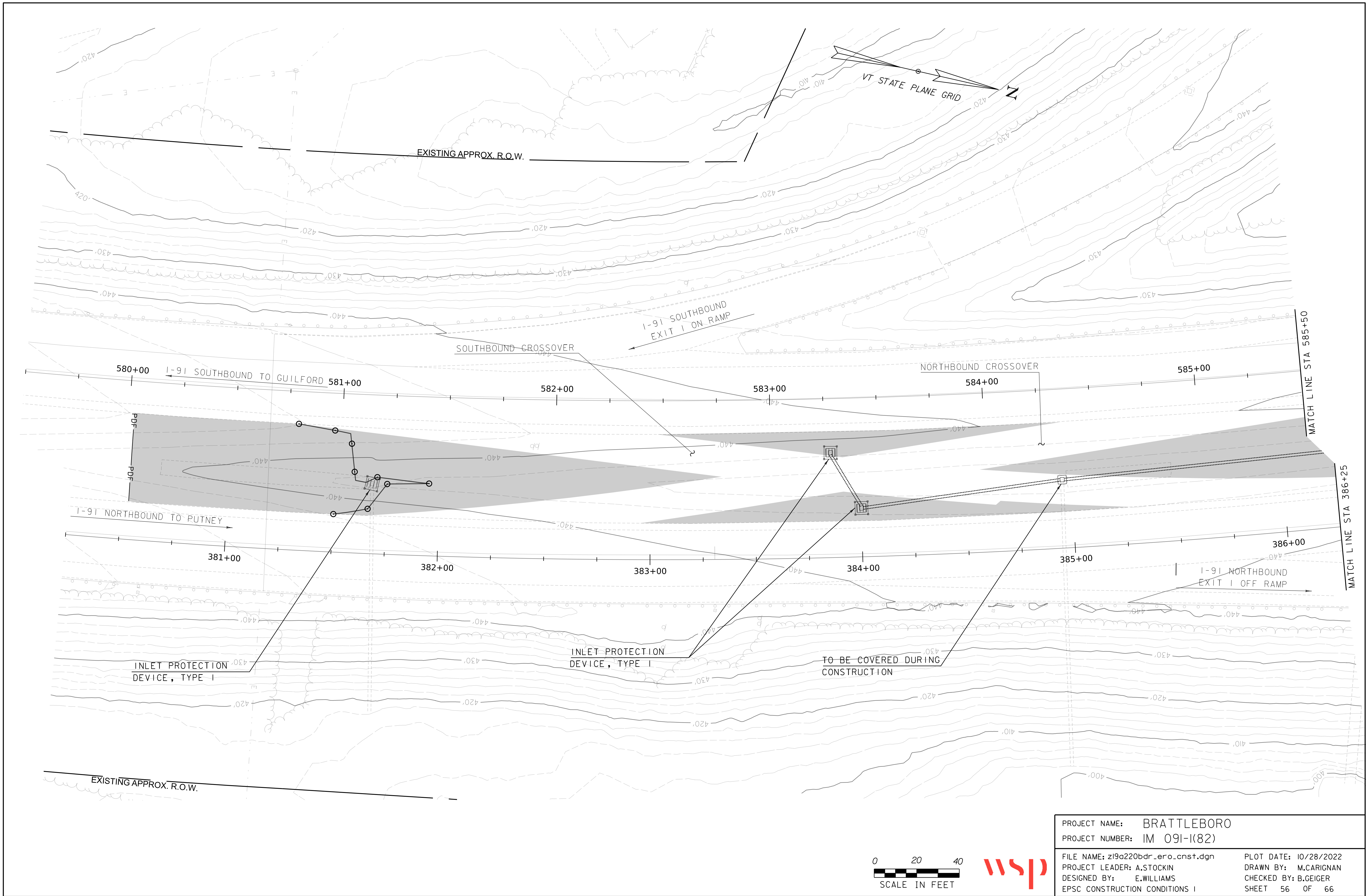
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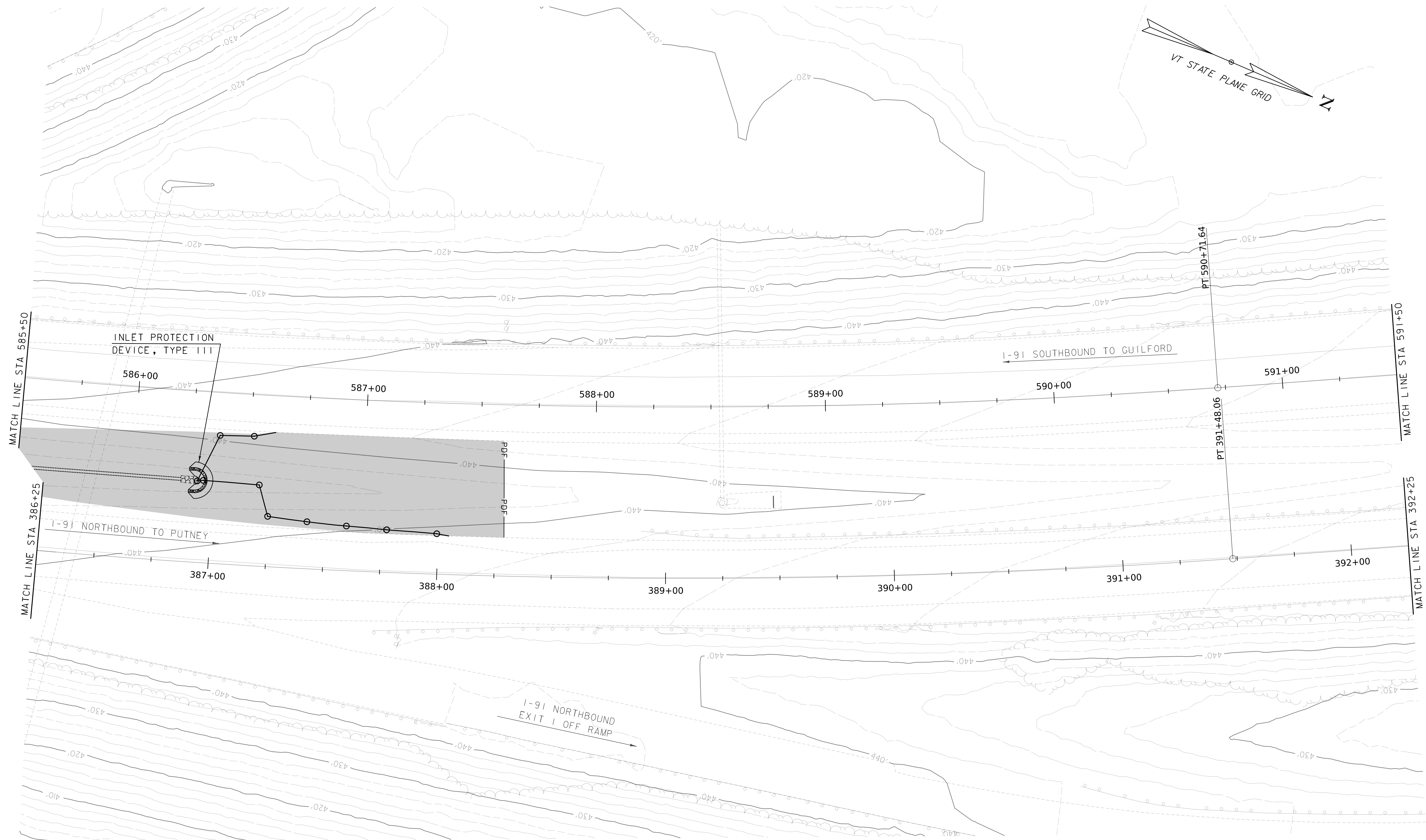
PLOT DATE: 10/28/2022

DRAWN BY: M.CARIGNAN

CHECKED BY: B.GEIGER

SHEET 55 OF 66





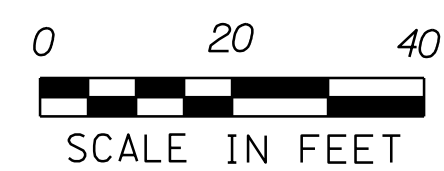
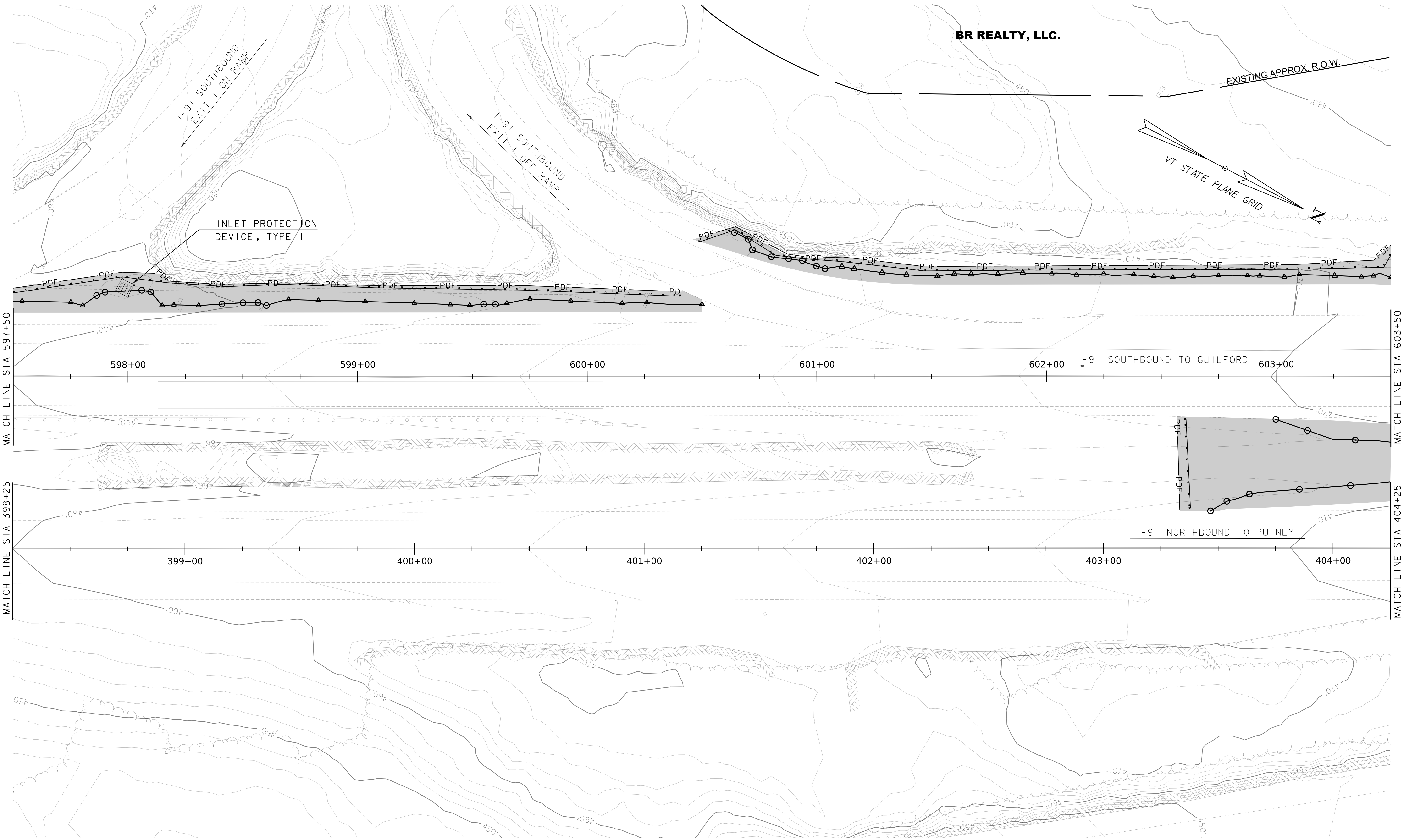
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PROJECT NUMBER:	IM 091-I(82)	PROJECT LEADER:	A.STOCKIN	DRAWN BY:	M.CARIGNAN
		DESIGNED BY:	E.WILLIAMS	CHECKED BY:	B.GEIGER
		EPSC CONSTRUCTION CONDITIONS	2	SHEET	57 OF 66



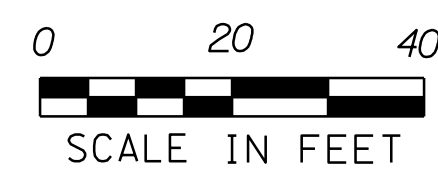
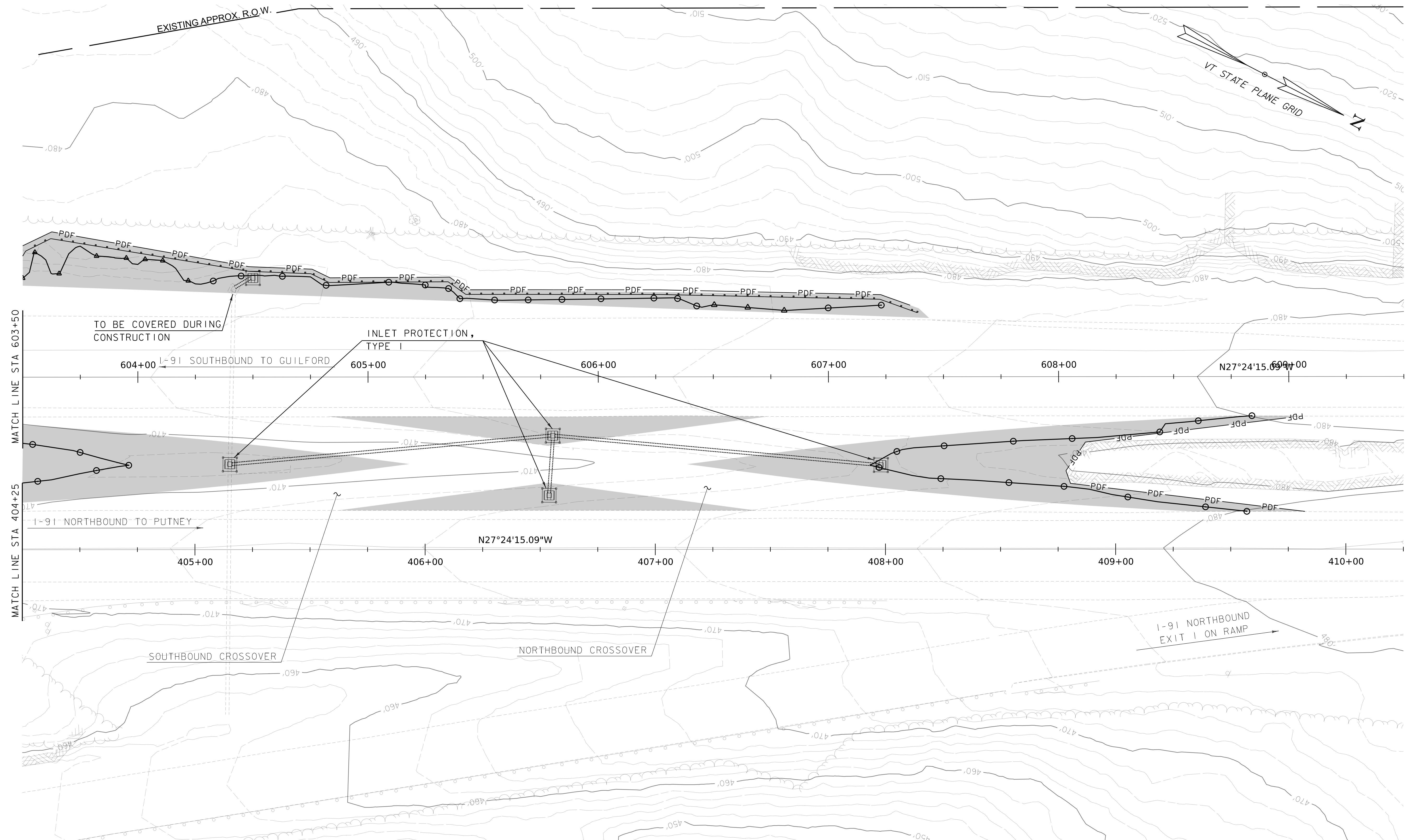


PROJECT NAME:	BRATTLEBORO	PLOT DATE:	10/28/2022
PROJECT NUMBER:	IM 091-I(82)	DRAWN BY:	M.CARIGNAN
FILE NAME:	z19a220bdr_ero_cnst.dgn	CHECKED BY:	B.GEIGER
PROJECT LEADER:	A.STOCKIN	SHEET	58 OF 66
DESIGNED BY:	E.WILLIAMS		
EPSC CONSTRUCTION CONDITIONS	3		

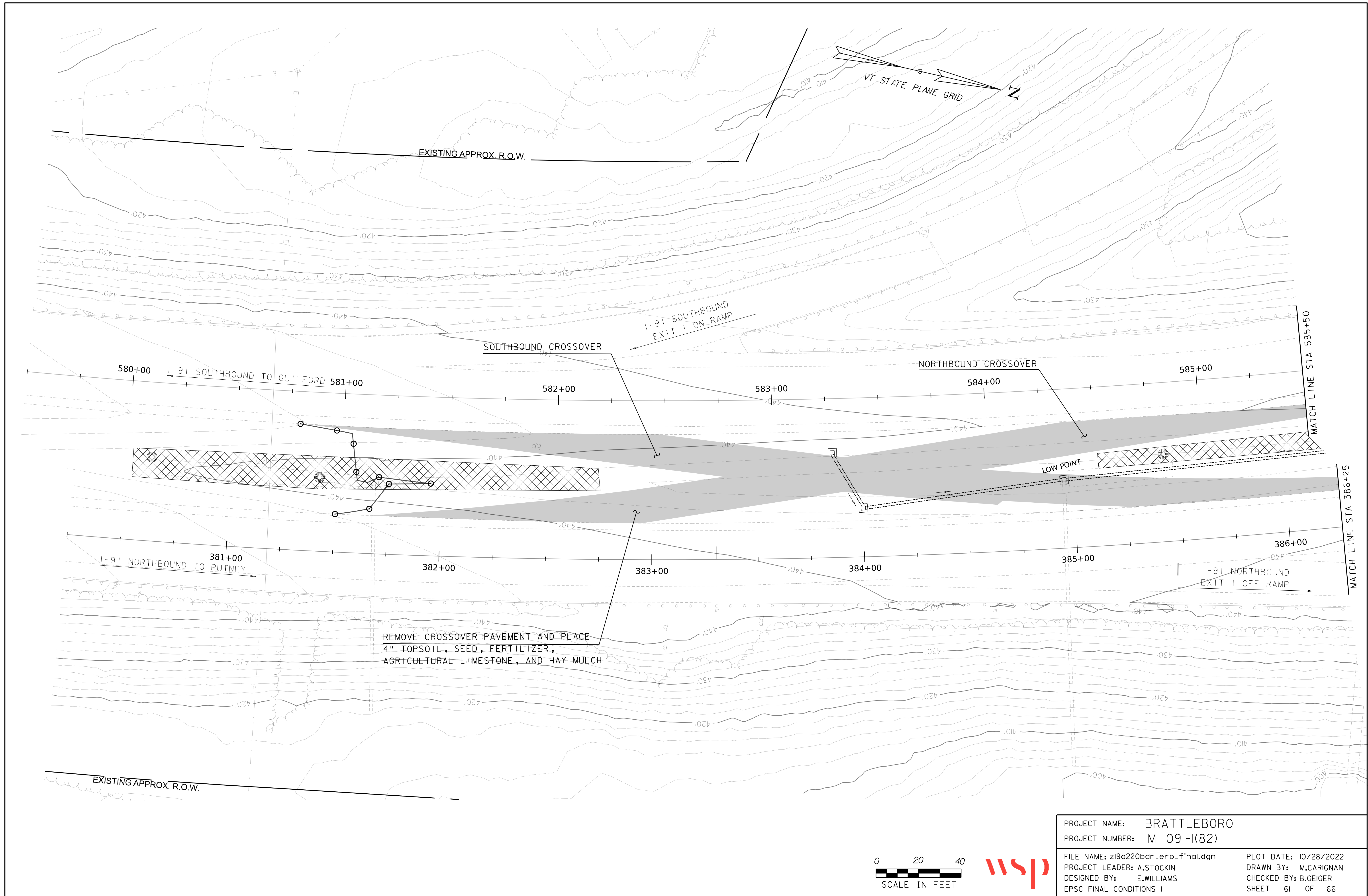




PROJECT NAME: BRATTLEBORO	
PROJECT NUMBER: IM 09I-I(82)	
FILE NAME: z19a220bdr_ero.cnst.dgn	PLOT DATE: 10/28/2022
PROJECT LEADER: A.STOCKIN	DRAWN BY: M.CARIGNAN
DESIGNED BY: E.WILLIAMS	CHECKED BY: B.GEIGER
EPSC CONSTRUCTION CONDITIONS 4	SHEET 59 OF 66



PROJECT NAME:	BRATTLEBORO	PLOT DATE:	10/28/2022
PROJECT NUMBER:	IM 091-I(82)	DRAWN BY:	M.CARIGNAN
FILE NAME:	z19a220bdr_ero.cnst.dgn	CHECKED BY:	B.GEIGER
PROJECT LEADER:	A.STOCKIN	SHEET	60 OF 66
DESIGNED BY:	E.WILLIAMS		
EPSC CONSTRUCTION CONDITIONS	5		



PROJECT NAME: BRATTLEBORO

PROJECT NUMBER: IM 091-I(82)

FILE NAME: z19a220bdr_ero_final.dgn

PROJECT LEADER: A.STOCKIN

DESIGNED BY: E.WILLIAMS

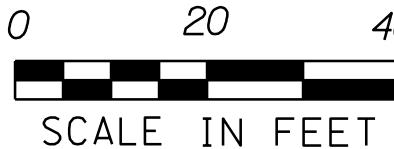
EPSC FINAL CONDITIONS I

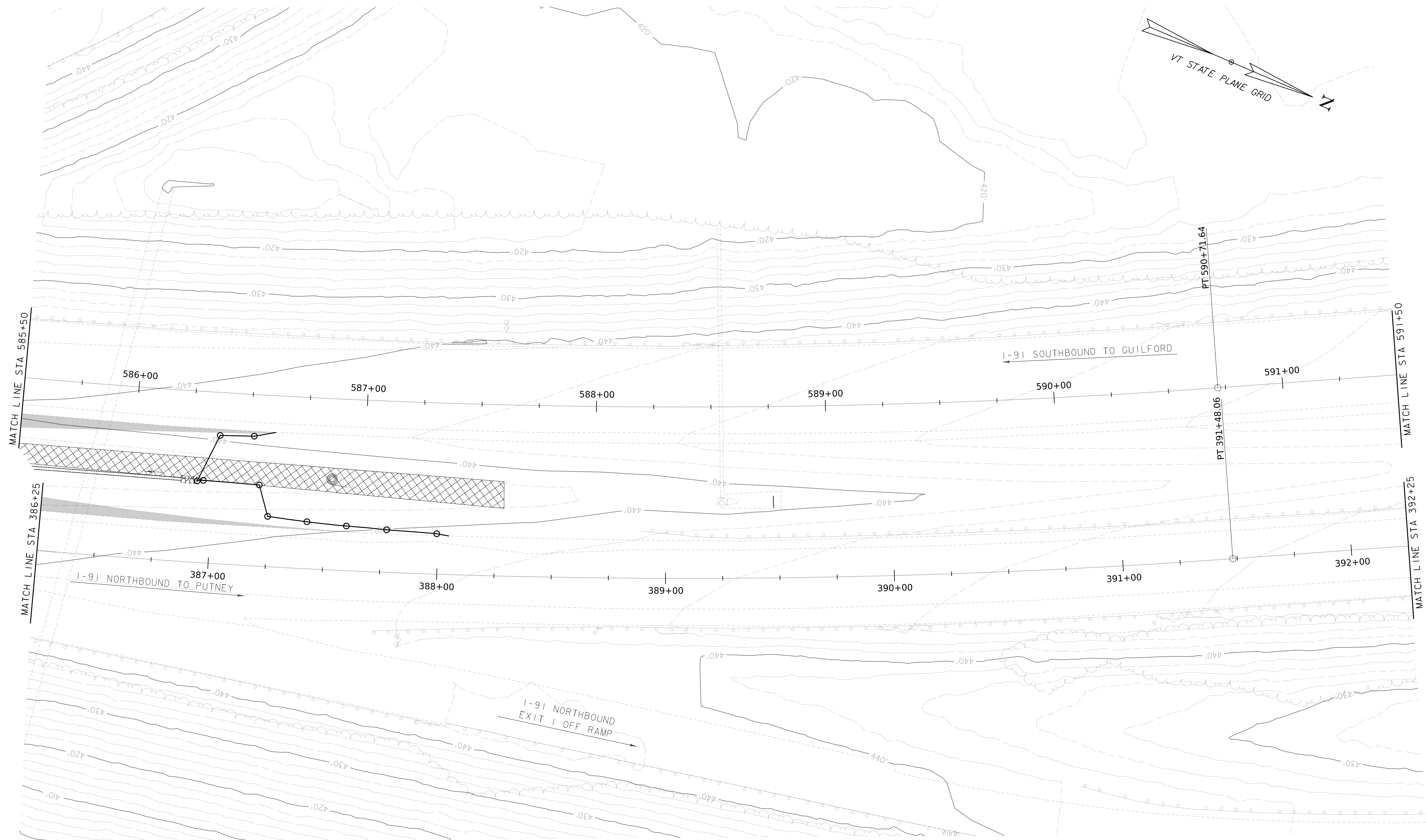
PLOT DATE: 10/28/2022

DRAWN BY: M.CARIGNAN

CHECKED BY: B.GEIGER

SHEET 61 OF 66

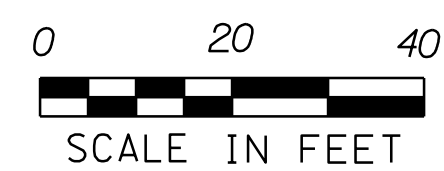
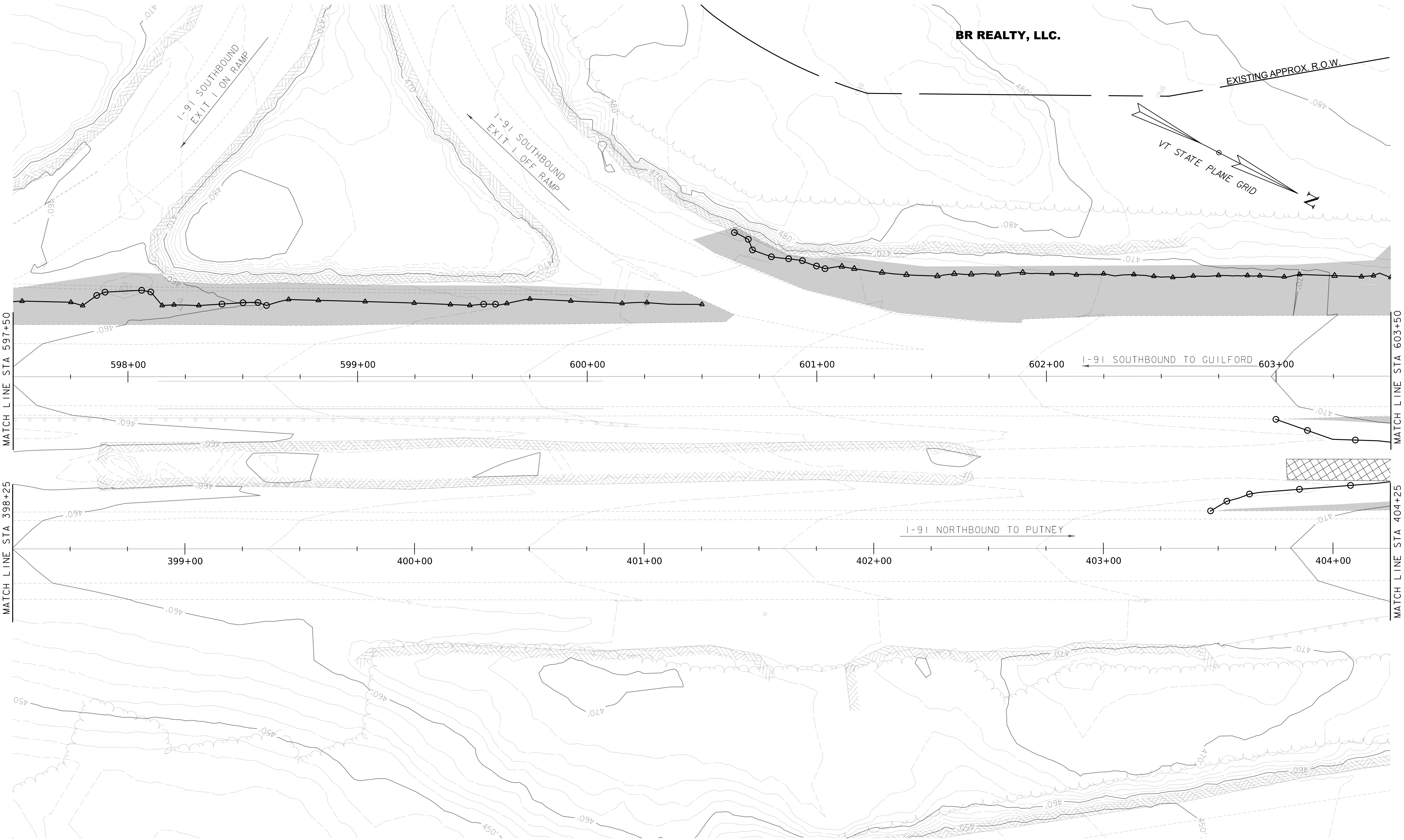




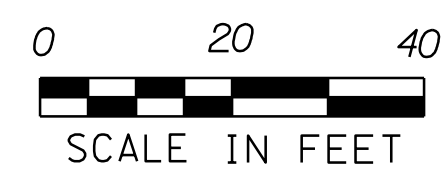
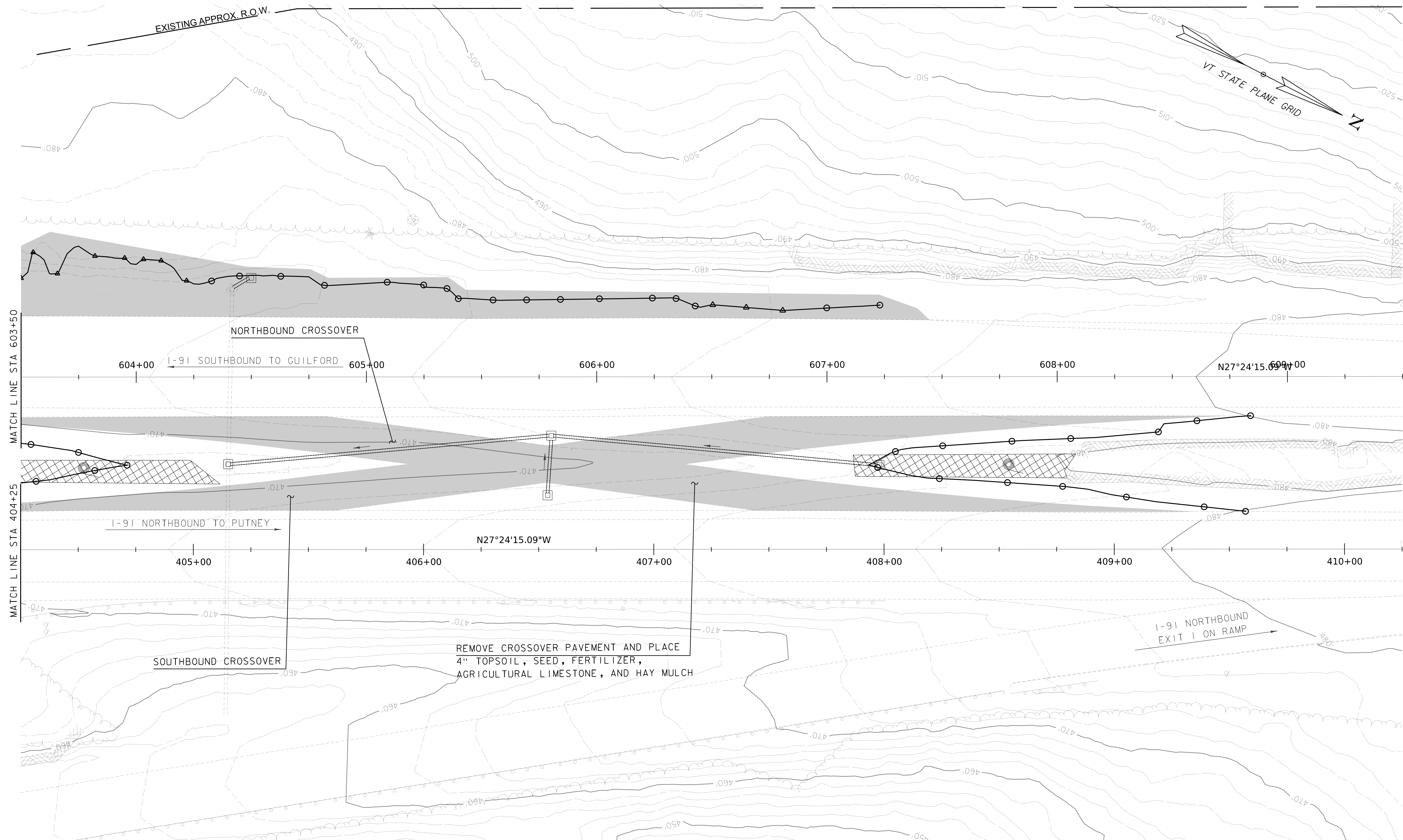
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PROJECT NUMBER:	IM 091-I(82)	PROJECT LEADER:	A.STOCKIN	DRAWN BY:	M.CARIGNAN
		DESIGNED BY:	E.WILLIAMS	CHECKED BY:	B.GEIGER
		EPSC FINAL CONDITIONS	2	SHEET	62 OF 66



PROJECT NAME: BRATTLEBORO	
PROJECT NUMBER: IM 091-I(82)	
FILE NAME: z19a220bdr_ero_final.dgn	PLOT DATE: 10/28/2022
PROJECT LEADER: A.STOCKIN	DRAWN BY: M.CARIGNAN
DESIGNED BY: E.WILLIAMS	CHECKED BY: B.GEIGER
EPSC FINAL CONDITIONS 3	SHEET 63 OF 66



PROJECT NAME:	BRATTLEBORO	FILE NAME:	z19a220bdr_ero_final.dgn	PLOT DATE:	10/28/2022
PROJECT NUMBER:	IM 091-I(82)	PROJECT LEADER:	A.STOCKIN	DRAWN BY:	M.CARIGNAN
		DESIGNED BY:	E.WILLIAMS	CHECKED BY:	B.GEIGER
		EPSC FINAL CONDITIONS	4	SHEET	64 OF 66



PROJECT NAME:	BRATTLEBORO	PLOT DATE:	10/28/2022
PROJECT NUMBER:	IM 091-I(82)	DRAWN BY:	M.CARIGNAN
FILE NAME:	z19a220bdr_ero_final.dgn	CHECKED BY:	B.GEIGER
PROJECT LEADER:	A.STOCKIN	SHEET	65 OF 66
DESIGNED BY:	E.WILLIAMS		
EPSC FINAL CONDITIONS	5		

VAOT LOW GROW/FINE FESCUE MIX						
		LBS /AC				
WEIGHT	BROADCAST	HYDROSEED	NAME	LATIN NAME	GERM	PURITY
38%	57	95	CREEPING RED FESCUE	FESTUCA RUBRA VAR. RUBRA	90%	98%
29%	43.5	72.5	HARD FESCUE	FESTUCA LONGIFOLIA	85%	95%
15%	22.5	37.5	CHEWINGS FESCUE	FESTUCA RUBRA VAR. COMMUTATA	87%	95%
15%	22.5	37.5	ANNUAL RYEGRASS	LOLIUM MULTIFLORUM	90%	95%
3%	4.5	7.5	INERTS			
100%	150	250				

VAOT RURAL AREA MIX						
		LBS /AC				
WEIGHT	BROADCAST	HYDROSEED	NAME	LATIN NAME	GERM	PURITY
37.5%	22.5	45	CREEPING RED FESCUE	FESTUCA RUBRA VAR. RUBRA	85%	98%
37.5%	22.5	45	TALL FESCUE	FESTUCA ARUNDINACEA	90%	95%
5.0%	3	6	RED TOP	AGROSTIS GIGANTEA	90%	95%
15.0%	9	18	WHITE FIELD CLOVER	TRIFOLIUM REPENS	85%	98%
5.0%	3	6	ANNUAL RYE GRASS	LOLIUM MULTIFLORUM	85%	95%
100%	60	120				

GENERAL AMENDMENT GUIDANCE		
FERTILIZER	LIME	
10/20/10	AG LIME	PELLITIZED
500 LBS/AC	2 TONS/AC	1 TONS/AC

CONSTRUCTION GUIDANCE

- 1.SEED MIX: THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT ENGINEER ON WHICH SEED MIX TO USE.
- 2.SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
- 3.ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
- 4.FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER.
- 5.HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE , ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
- 6.HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED PROPOSED FOR USE WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED.
- 7.TURF ESTABLISHMENT: PLACING SEED , FERTILIZER , LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MANUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES	TURF ESTABLISHMENT
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 651FOR SEED (PAY ITEM 651J5)	REVISIONS
	JANUARY 12, 2015    WHF

PROJECT NAME: BRATTLEBORO	
PROJECT NUMBER: IM 091-I(82)	
FILE NAME: z19a220ero.dgn	PLOT DATE: 10/28/2022
PROJECT LEADER: A. STOCKIN	DRAWN BY: E. CARON
DESIGNED BY: E. CARON	CHECKED BY:
EPSC DETAILS	SHEET 66 OF 66

