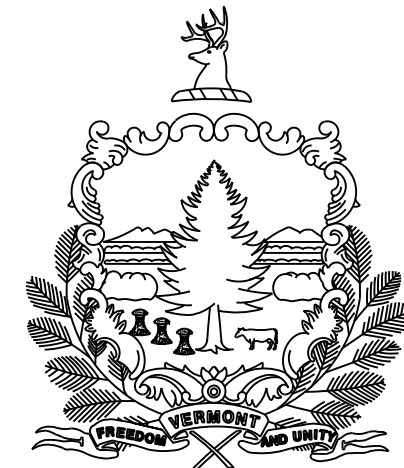


STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT BRIDGE PROJECT

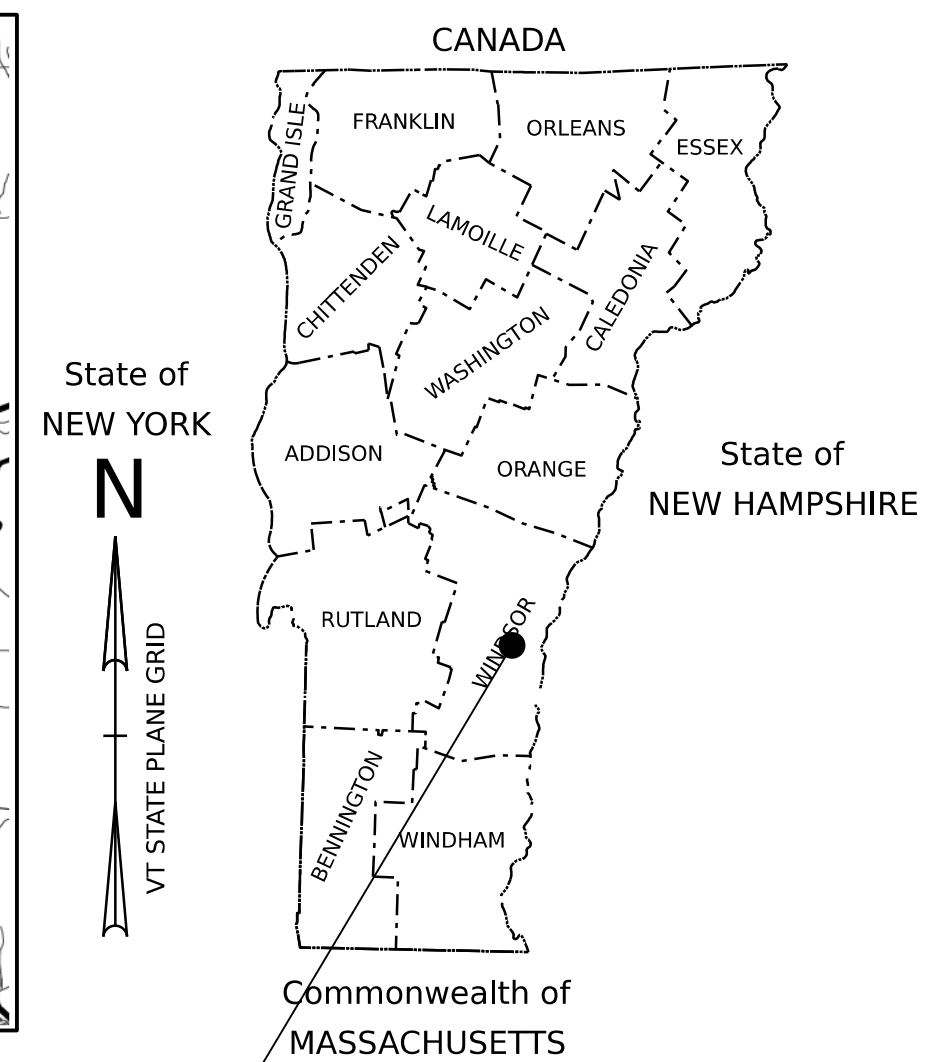
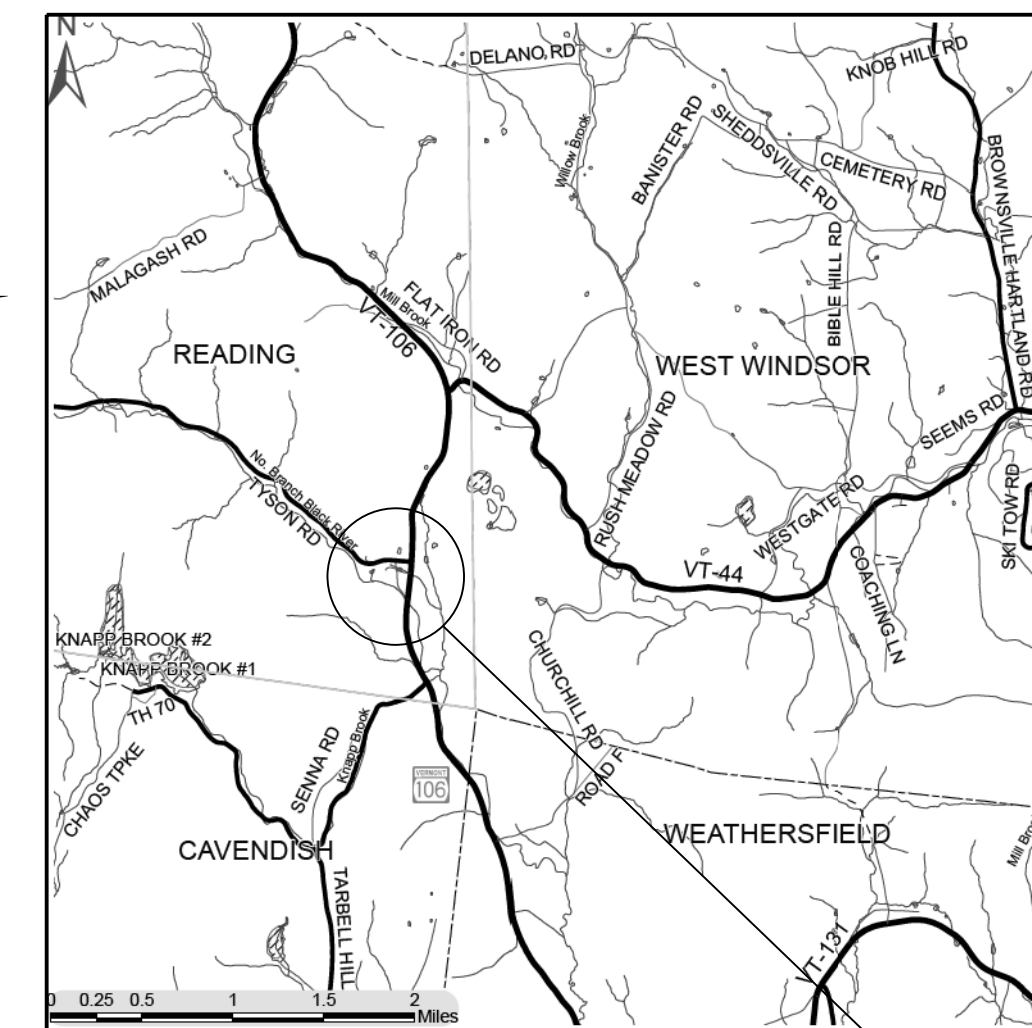
TOWN OF READING
COUNTY OF WINDSOR

ROUTE NO : VT 106; RURAL MAJOR COLLECTOR BRIDGE NO : 12

PROJECT LOCATION : IN THE TOWN OF READING ON VT 106 APPROXIMATELY 0.5 MILES
NORTH OF THE INTERSECTION WITH KNAPP BROOK ROAD AND 1.2 MILES
SOUTH OF THE INTERSECTION WITH VT 44.

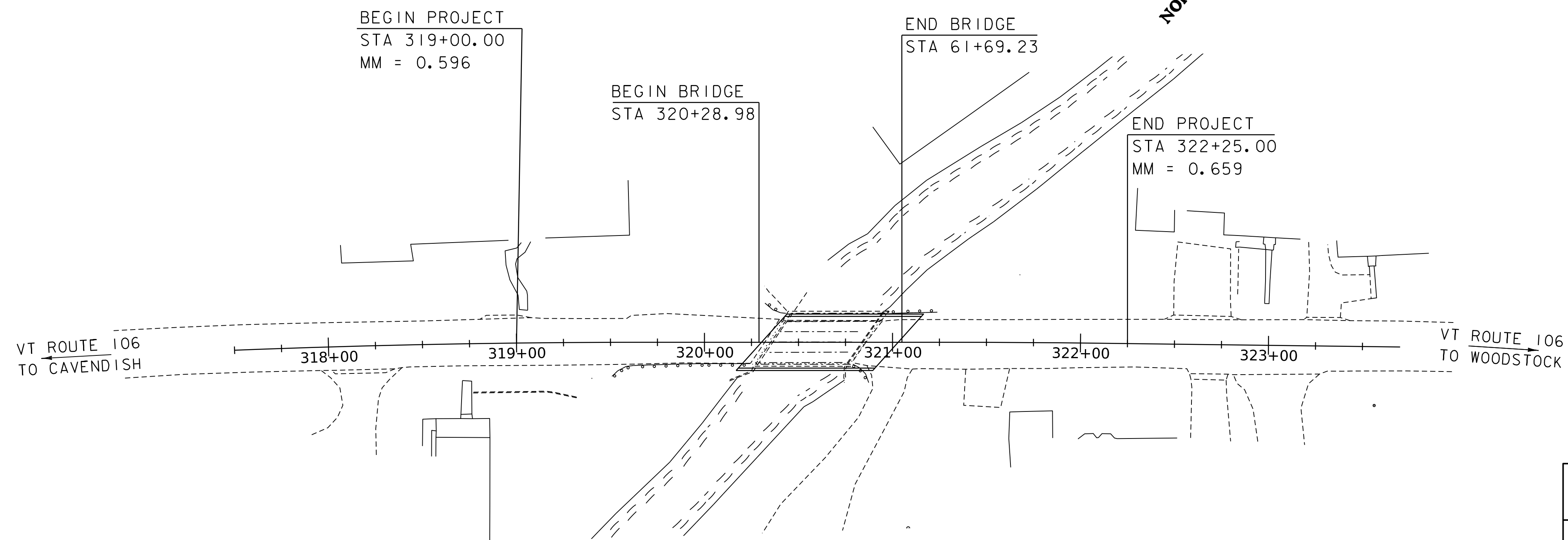
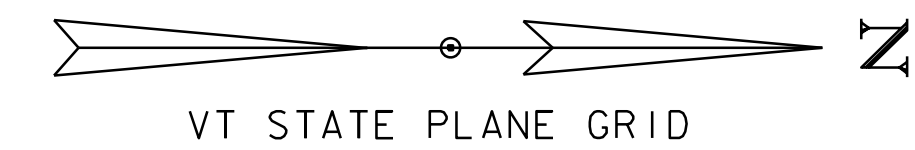
PROJECT DESCRIPTION : REPLACEMENT OF EXISTING BRIDGE ALONG WITH RELATED APPROACH ROADWAY
AND CHANNEL WORK.

LENGTH OF STRUCTURE : 76.04 FEET
LENGTH OF ROADWAY : 248.96 FEET
LENGTH OF PROJECT : 325.00 FEET



READING
ER P23-1 (404)

NORTH BRANCH BLACK RIVER
FLOW



CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2024, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JUNE 27, 2023 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 2

SURVEYED BY : R. GILMAN
SURVEYED DATE : 02/19/2011

DATUM
VERTICAL NAVD88
HORIZONTAL NAD 83 (96)

40 0 40
SCALE: 1" = 40' - 0"

CONCEPTUAL PLANS
8-AUG-2024

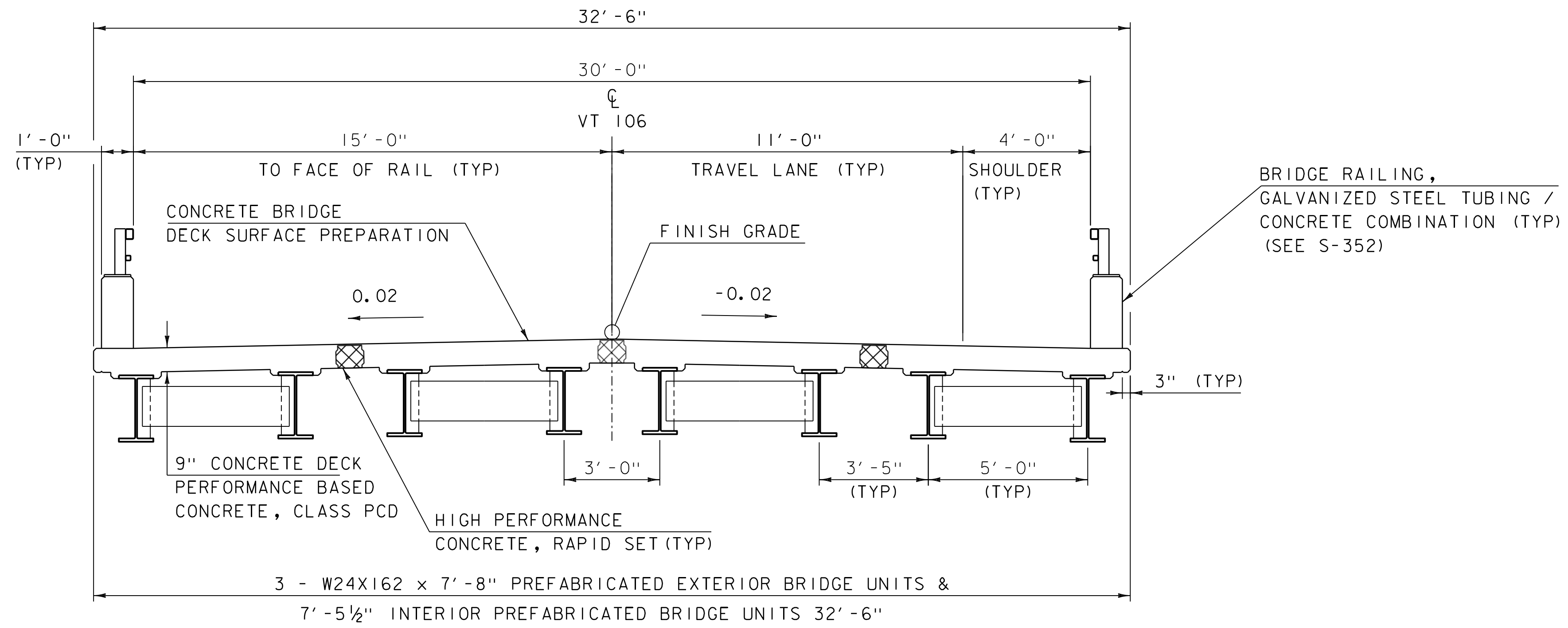
HIGHWAY DIVISION, CHIEF ENGINEER

APPROVED _____ DATE _____

PROJECT MANAGER : CORY BURRAL, PE

PROJECT NAME : READING
PROJECT NUMBER : ER P23-1 (404)

SHEET 1 OF 11 SHEETS

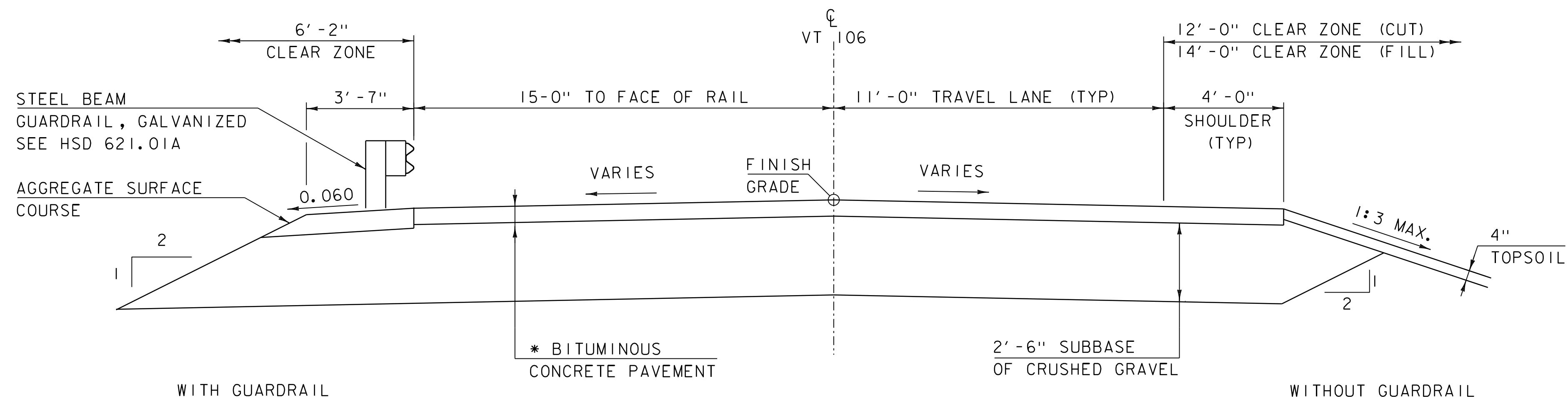


BRIDGE TYPICAL SECTION PBU ALTERNATE

SCALE 3/8" = 1'-0"

BITUMINOUS CONCRETE PAVEMENT REQUIREMENTS

DESIGN LANE/DESIGN LIFE ESALS	708,000
PERFORMANCE GRADE ASPHALT BINDER	58E-28
DESIGN NUMBER OF GYRATIONS	65



- * BITUMINOUS CONCRETE PAVEMENT
- 1 1/2" BCP TYPE IVS OVER
- 1 1/2" BCP TYPE IVS OVER
- 3 1/2" BCP TYPE IIS

PROPOSED VT ROUTE 106 TYPICAL SECTION

SCALE 3/8" = 1'-0"

MATERIAL TOLERANCES
(IF USED ON PROJECT)

SURFACE	
- PAVEMENT (TOTAL THICKNESS)	+/- 1/4"
- AGGREGATE SURFACE COURSE	+/- 1/2"
SUBBASE	+/- 1"
SAND BORROW	+/- 1"

PROJECT NAME: READING
PROJECT NUMBER: ERP23-1(404)

FILE NAME: s23b770yp.dgn
PROJECT LEADER: C. BURRALL
DESIGNED BY: J. PAQUETTE
TYPICAL SECTIONS

PLOT DATE: 8-AUG-2024
DRAWN BY: J. PAQUETTE
CHECKED BY: F. BARROWS
SHEET 3 OF 11

GENERAL INFORMATION

SYMBOLGY LEGEND NOTE

THE SYMBOLGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLGY. THE SYMBOLGY 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. SYMBOLGY ON PLANS MAY VARY, PLAN ANNOTATIONS AND NOTES SHOULD BE USED TO CLARIFY AS NEEDED.

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

POINT CODE	DESCRIPTION
BF	BARRIER FENCE
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
PDF	PROJECT DEMARCATION FENCE
R&RES	REMOVE & RESET
R&REP	REMOVE & REPLACE
R.T.& I.	RIGHT, TITLE, AND INTEREST
SR	SLOPE RIGHT
UE	UTILITY EASEMENT
(P)	PERMANENT EASEMENT
(T)	TEMPORARY EASEMENT
■	BNDNS BOUND SET
▣	BNDNS BOUND TO BE SET
⊙	IPNF IRON PIN FOUND
●	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 RADIUS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE
CB	CHORD BEARING

UTILITY SYMBOLGY

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+TELEPHONE
— 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+TELEPHONE
—	UTILITY POLE GUY WIRE

PROJECT CONSTRUCTION SYMBOLGY

PROJECT DESIGN & LAYOUT SYMBOLGY

— — — CZ — — —	CLEAR ZONE
—————	PLAN LAYOUT MATCHLINE

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 — BF —	BARRIER FENCE
XXXXXXXXXXXXXXXXXXXX	TREE PROTECTION ZONE (TPZ)
//////	STRIPING LINE REMOVAL
~~~~~	SHEET PILES

**CONVENTIONAL BOUNDARY SYMBOLGY**

**BOUNDARY LINES**

—————	TOWN BOUNDARY LINE
—————	COUNTY BOUNDARY 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 —	PROPERTY LINE (P/L)
— SR — SR — SR —	SLOPE RIGHTS
6f — 6f —	6F PROPERTY BOUNDARY
4f — 4f —	4F PROPERTY BOUNDARY
HAZ — HAZ —	HAZARDOUS WASTE

**EPSC LAYOUT PLAN SYMBOLGY**

**EPSC MEASURES**

ONNOONNOONNO	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 SYMBOLGY

**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 SYMBOLGY**

**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

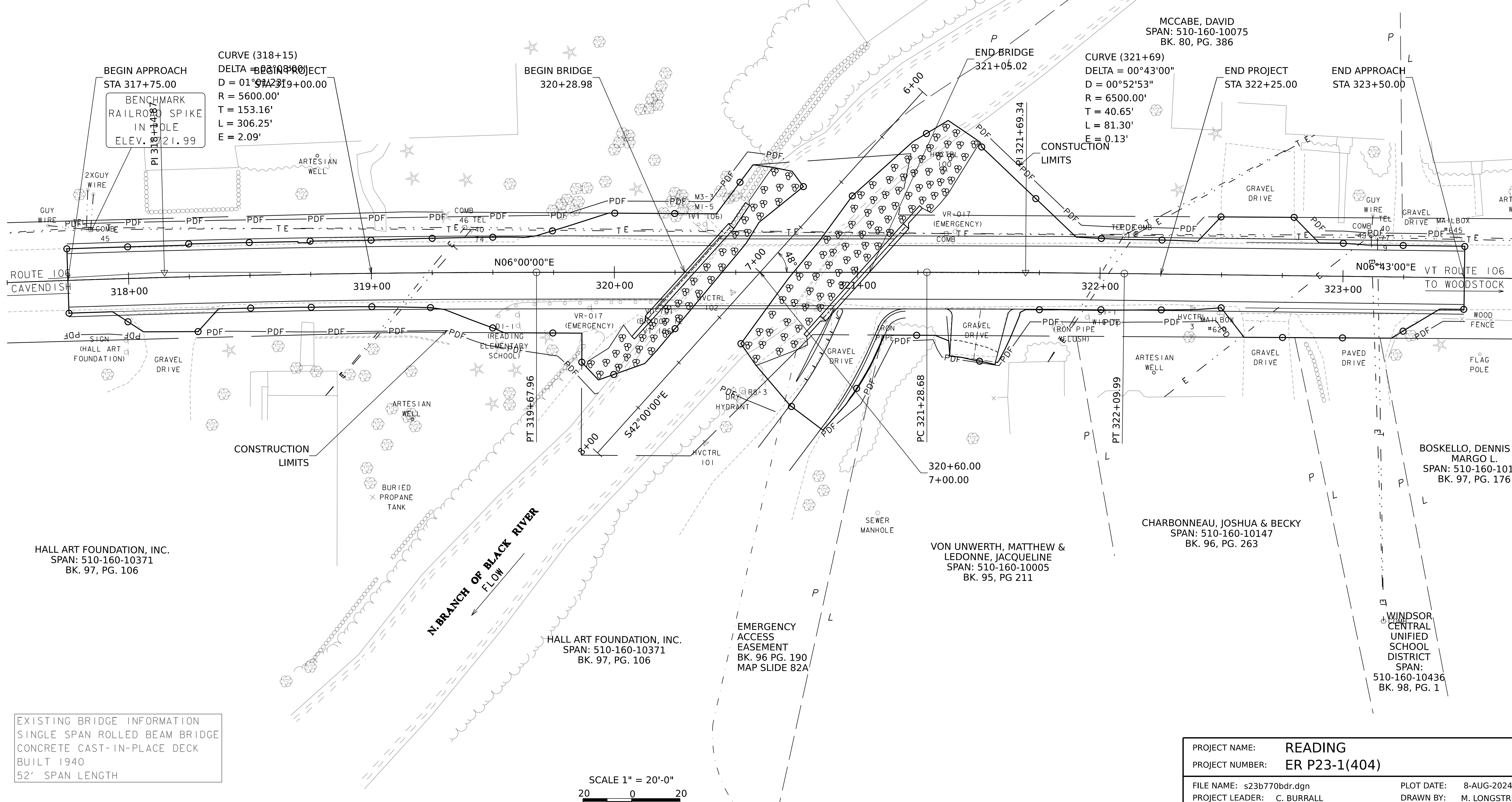
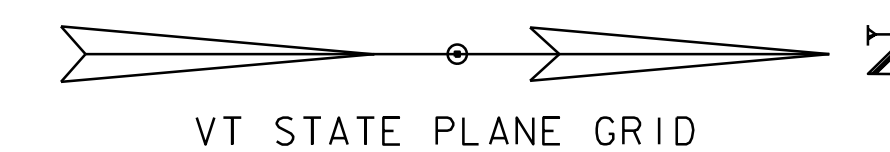
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PROJECT NUMBER: ER P23-1(404)

FILE NAME: s2b770legend.dgn PLOT DATE: 8-AUG-2024  
PROJECT LEADER: C. BURRALL DRAWN BY: J. PAQUETTE  
DESIGNED BY: J. PAQUETTE CHECKED BY: F. BARROWS  
CONVENTIONAL SYMBOLGY LEGEND SHEET 4 OF 11



HALL ART FOUNDATION, INC.  
SPAN: 510-160-10371  
BK. 97, PG. 106

MANION II, ROBERT A  
ERICKSON, JENNIFER  
SPAN: 510-160-1011  
BK. 97, PG. 37



BEGIN APPROACH  
STA 317+75.00

BENCHMARK  
RAILROAD SPIKE  
IN POLE  
ELEV. 721.99

PI 318+148.77

ARTESIAN WELL

2X GUY WIRE

GUY WIRE

COMB 45

TE 45

COMB 46

TE 46

COMB 47

TE 47

COMB 48

TE 48

COMB 49

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COMB 100

TE 100

CURVE (318+15)  
DELTA = 01°43'00"  
D = 01°43'00"  
R = 5600.00'  
T = 153.16'  
L = 306.25'  
E = 2.09'

BEGIN BRIDGE  
320+28.98

END BRIDGE  
321+05.02

CURVE (321+69)  
DELTA = 00°43'00"  
D = 00°43'00"  
R = 6500.00'  
T = 40.65'  
L = 81.30'  
E = 0.13'

END PROJECT  
STA 322+25.00

END APPROACH  
STA 323+50.00

HALL ART FOUNDATION, INC.  
SPAN: 510-160-10371  
BK. 97, PG. 106

HALL ART FOUNDATION, INC.  
SPAN: 510-160-10371  
BK. 97, PG. 106

EMERGENCY  
ACCESS  
EASEMENT  
BK. 96 PG. 190  
MAP SLIDE 82A

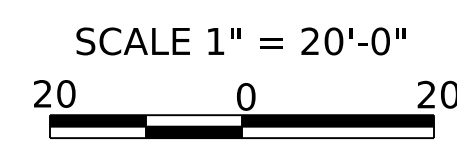
VON UNWERTH, MATTHEW &  
LEDONNE, JACQUELINE  
SPAN: 510-160-10005  
BK. 95, PG. 211

CHARBONNEAU, JOSHUA & BECKY  
SPAN: 510-160-10147  
BK. 96, PG. 263

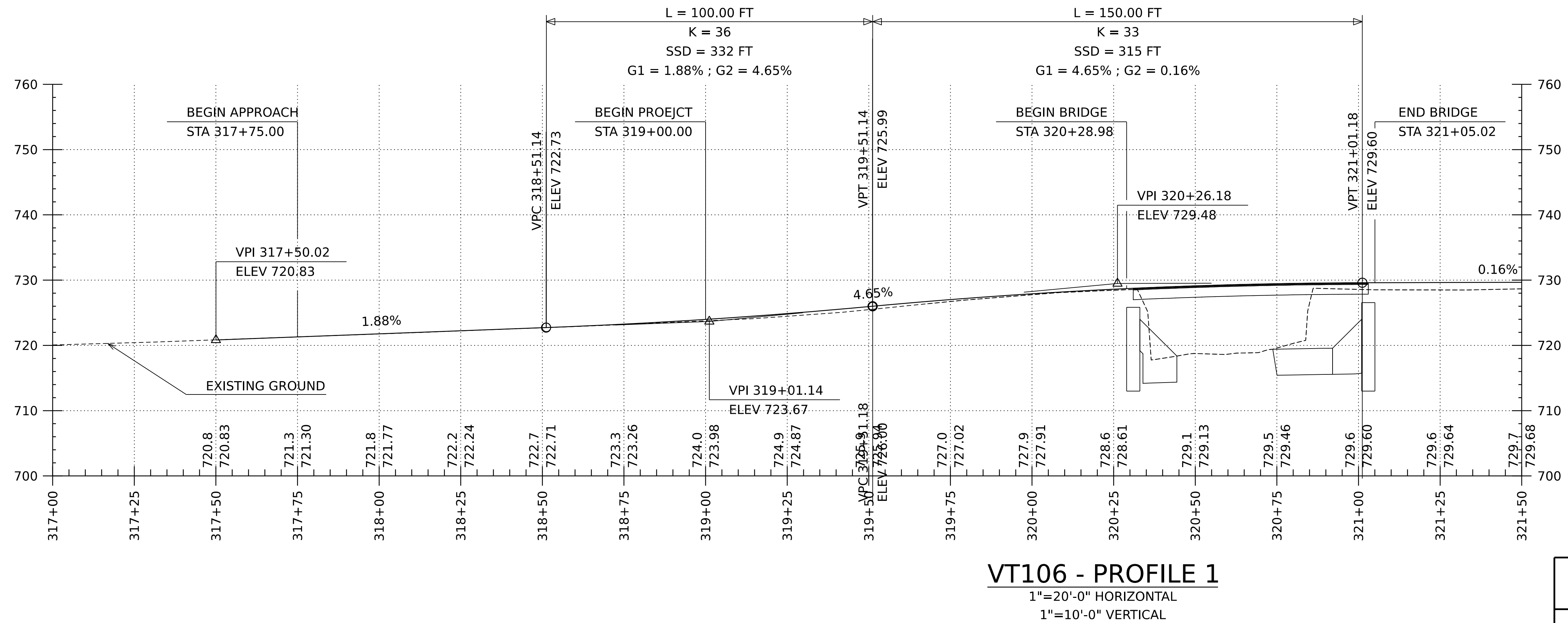
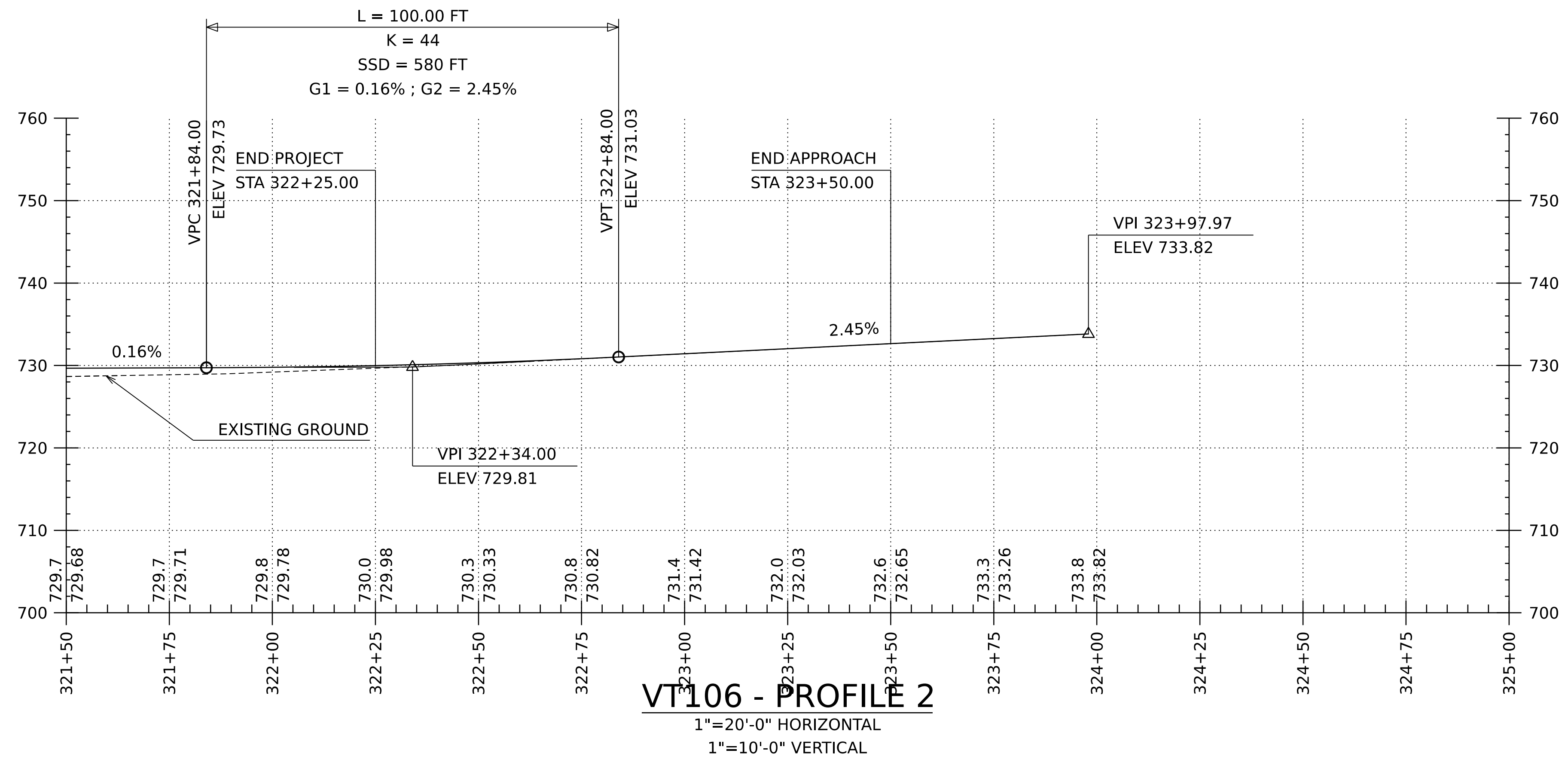
BOSKELLO, DENNIS  
MARGO L.  
SPAN: 510-160-101  
BK. 97, PG. 176

WINDSOR  
CENTRAL  
UNIFIED  
SCHOOL  
DISTRICT  
SPAN:  
510-160-10436  
BK. 98, PG. 1

EXISTING BRIDGE INFORMATION  
SINGLE SPAN ROLLED BEAM BRIDGE  
CONCRETE CAST-IN-PLACE DECK  
BUILT 1940  
52' SPAN LENGTH

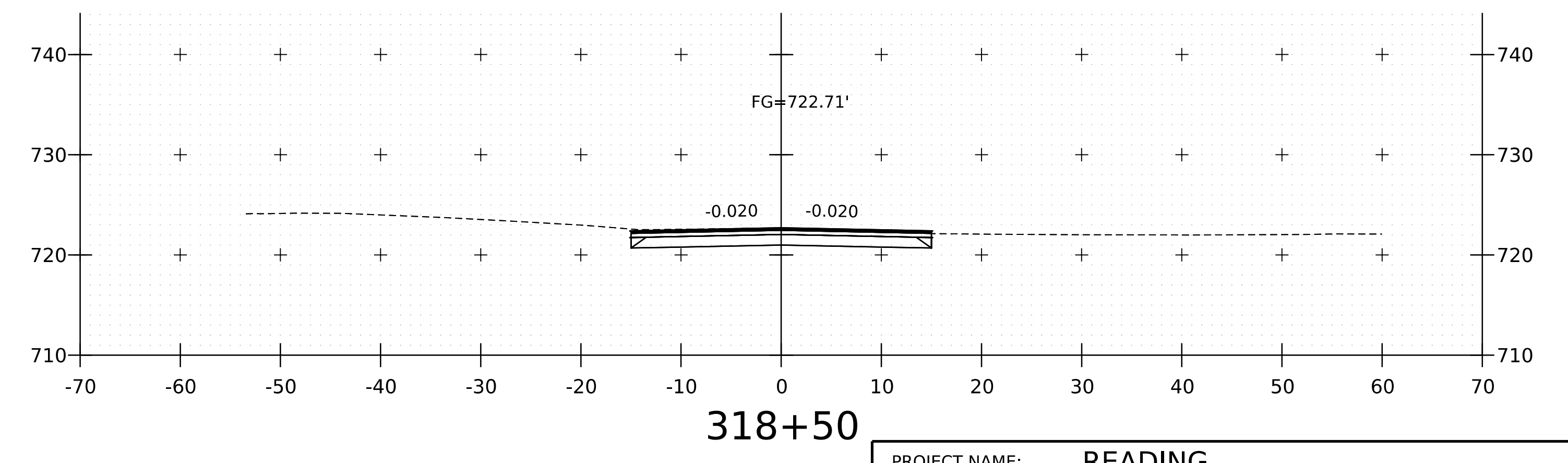
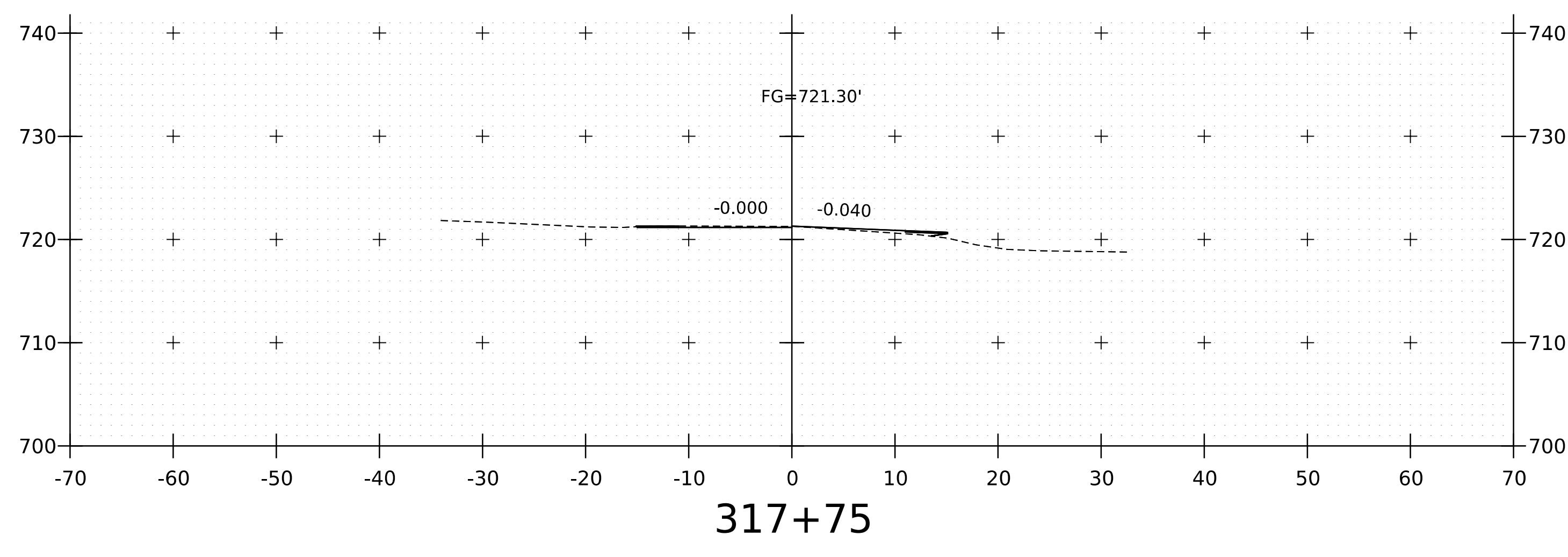
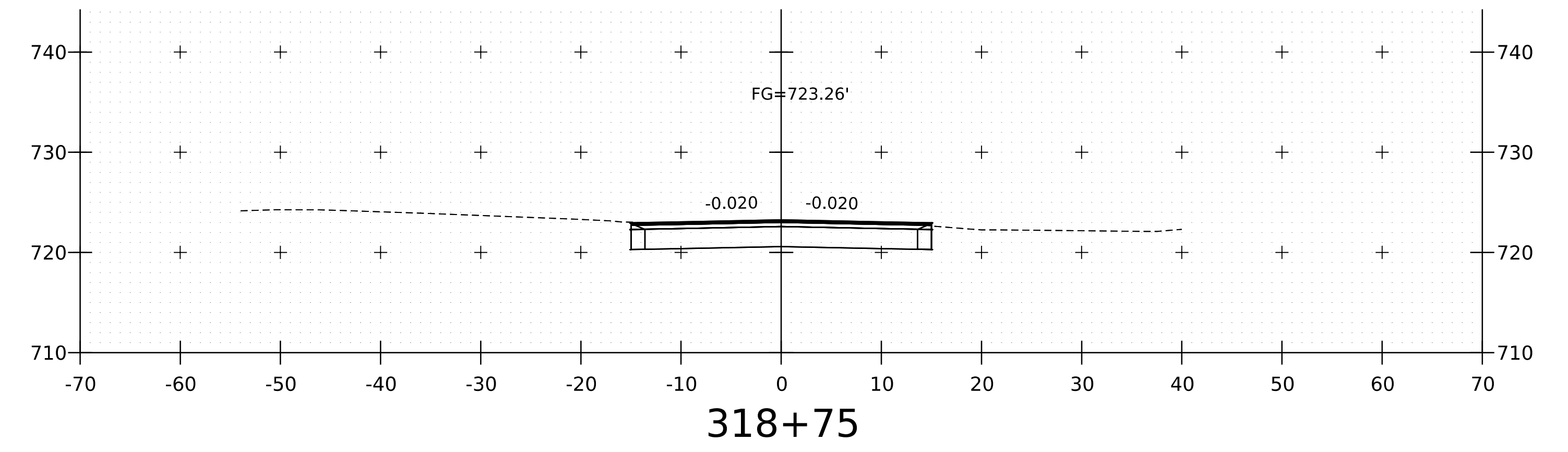
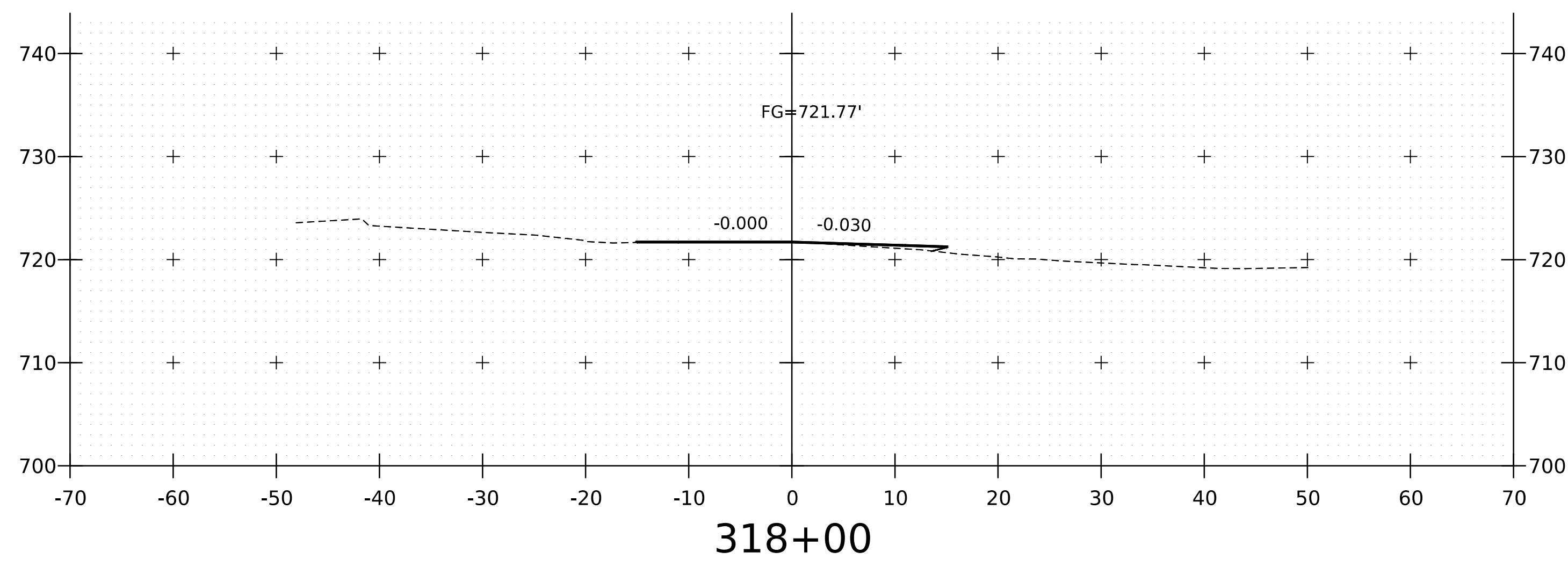
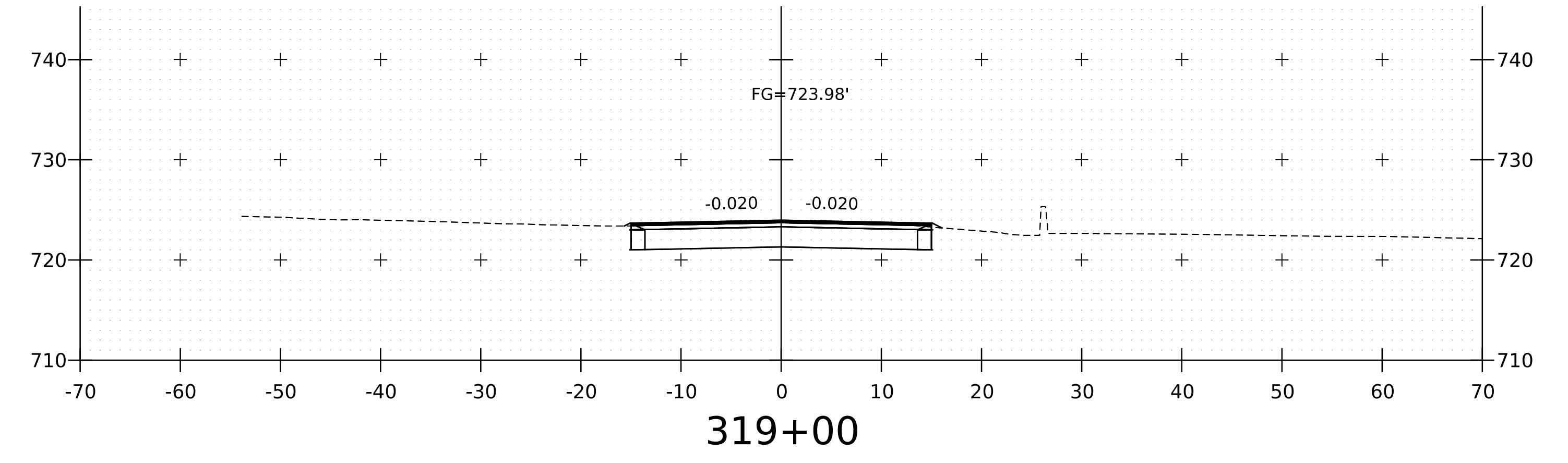
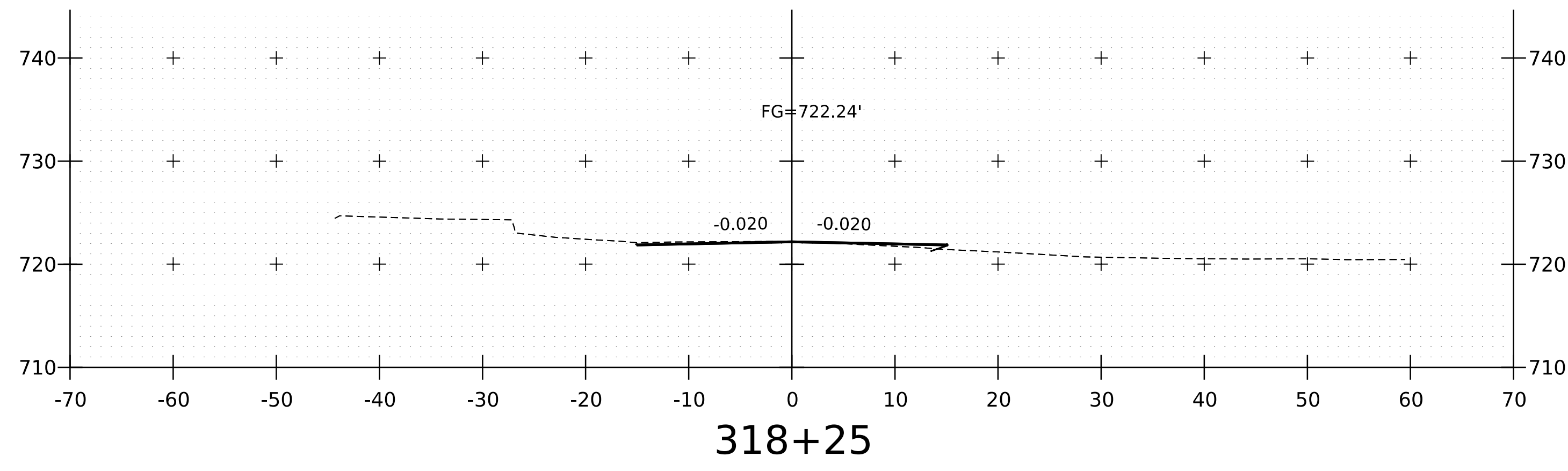


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PROJECT NUMBER:	ER P23-1(404)	PROJECT LEADER:	C. BURRALL	DRAWN BY:	M. LONGSTREET
		DESIGNED BY:	F. BARROWS	CHECKED BY:	F. BARROWS
		LAYOUT SHEET		SHEET	5 OF 11

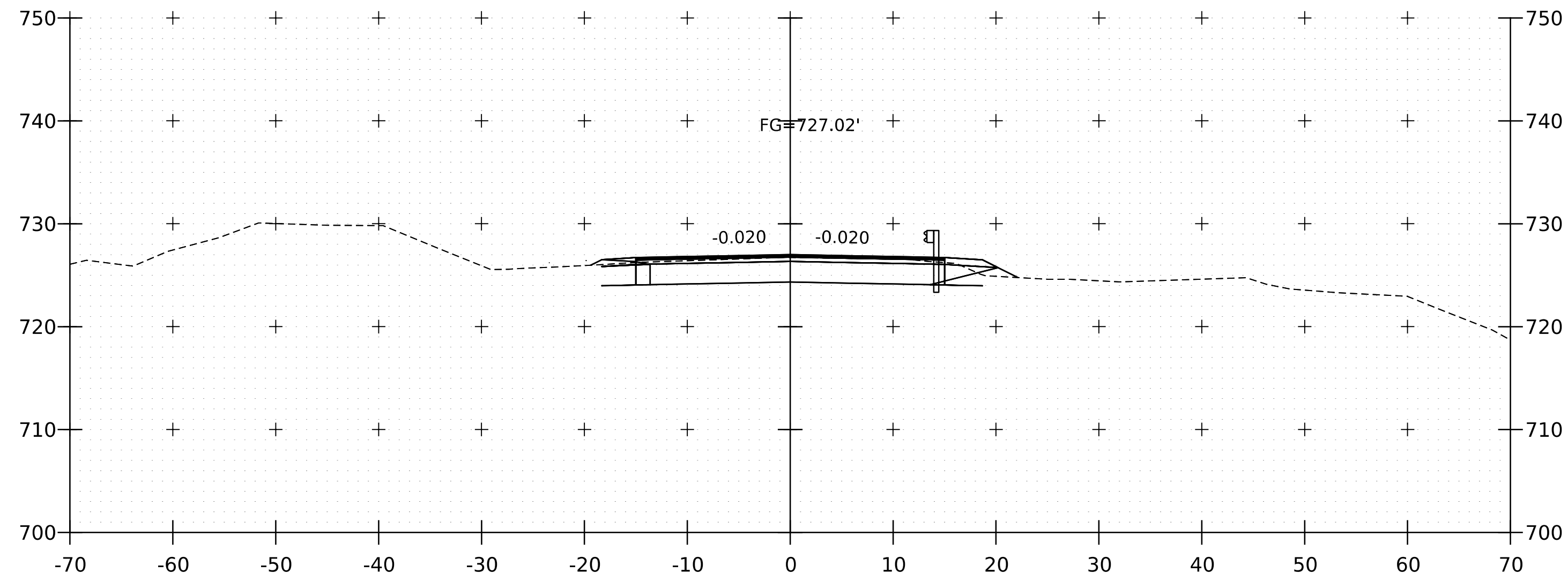


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PROJECT NUMBER: **ER P23-1(404)**

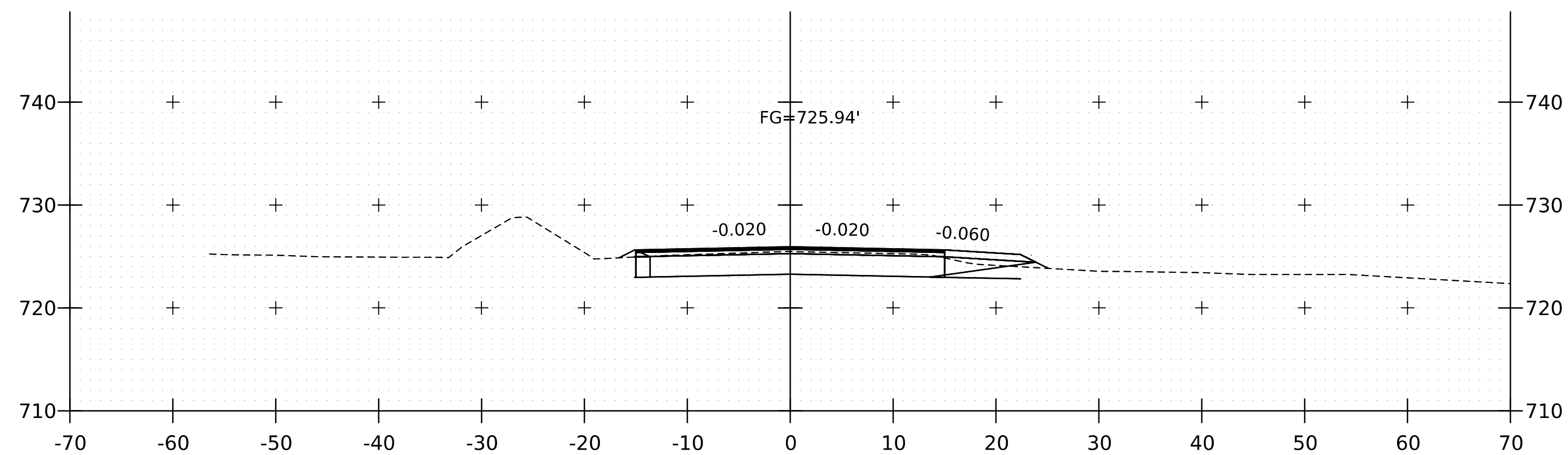
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PROJECT LEADER: C. BURRALL	DRAWN BY: M. LONGSTREET
DESIGNED BY: F. BARROWS	CHECKED BY: F. BARROWS
VT116 PROFILES	SHEET 6 OF 11



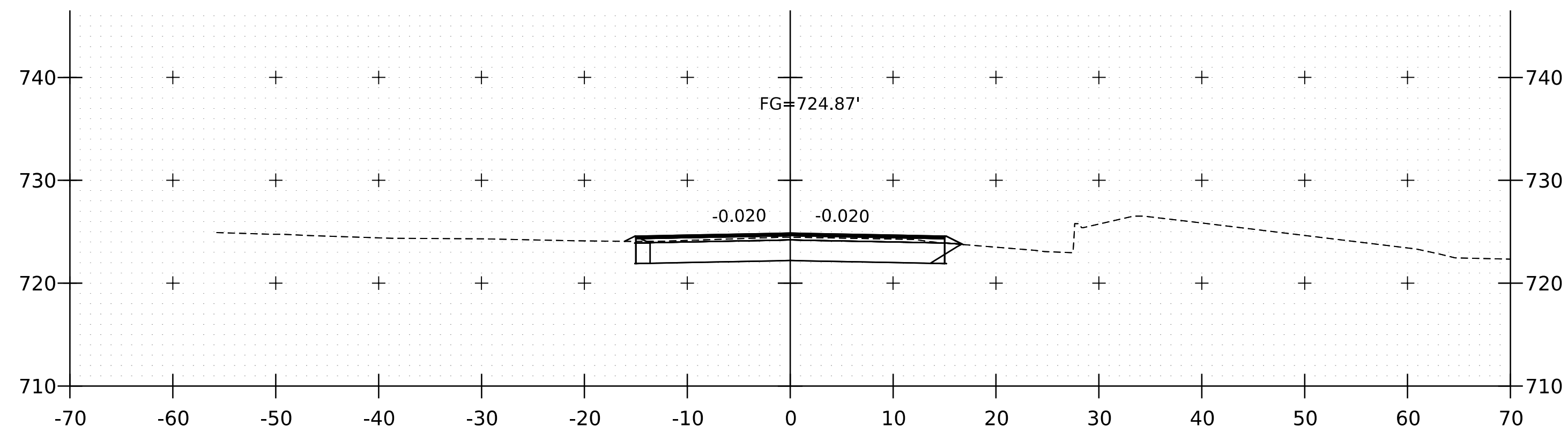
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PROJECT NUMBER:	P23-1(404)	DRAWN BY:	M. LONGSTREET
FILE NAME:	s23b770xsVT106.dgn	DESIGNED BY:	F. BARROWS
PROJECT LEADER:	C. BURRALL	CHECKED BY:	F. BARROWS
VT106 CROSS SECTIONS - 1		SHEET 7 OF 11	



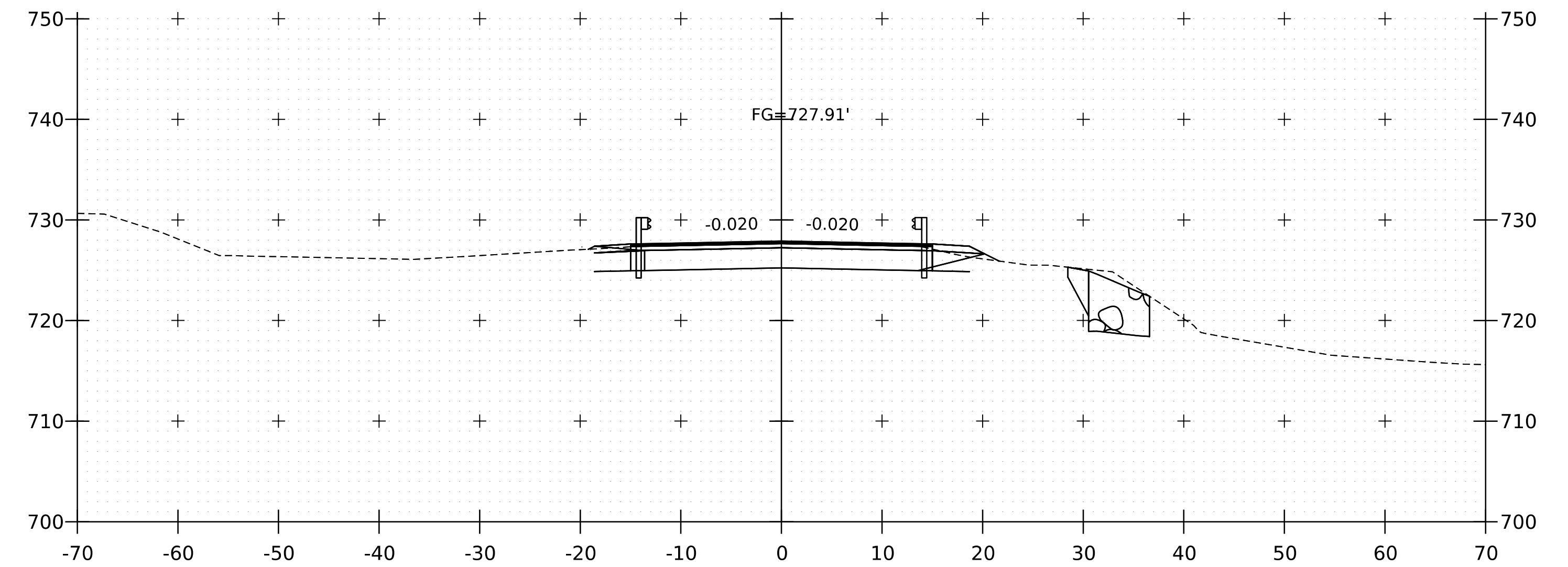
319+75



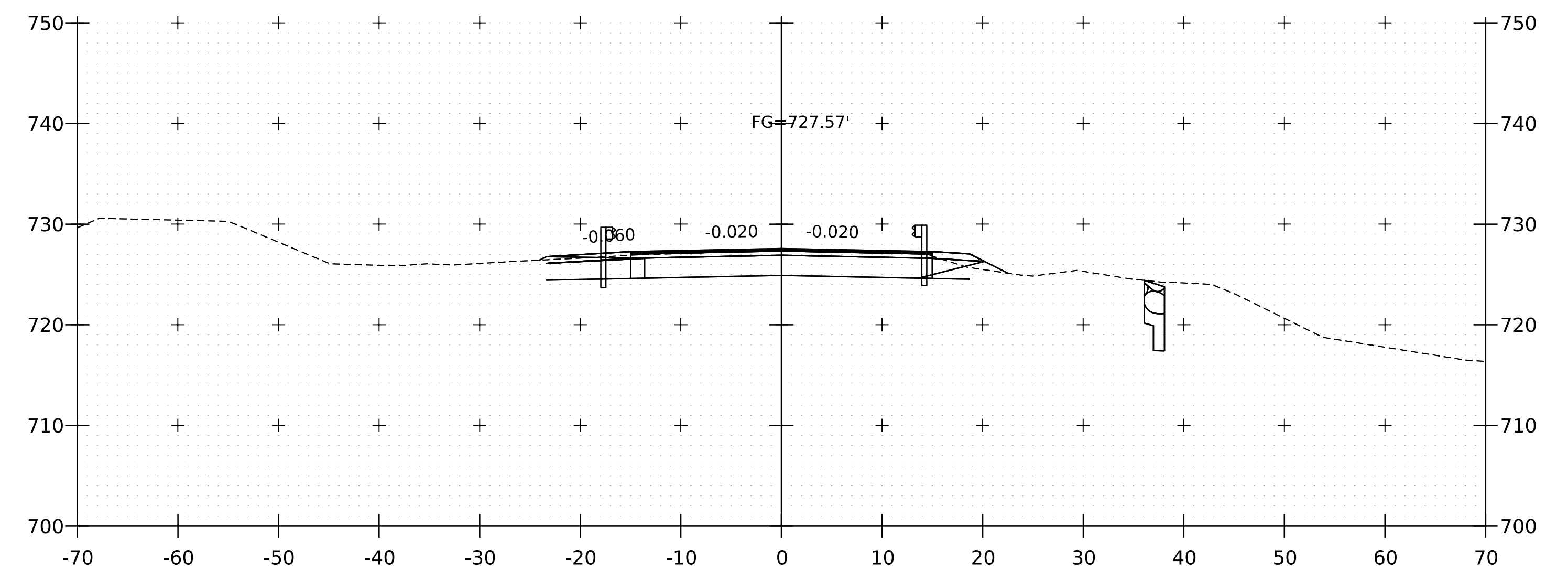
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319+25



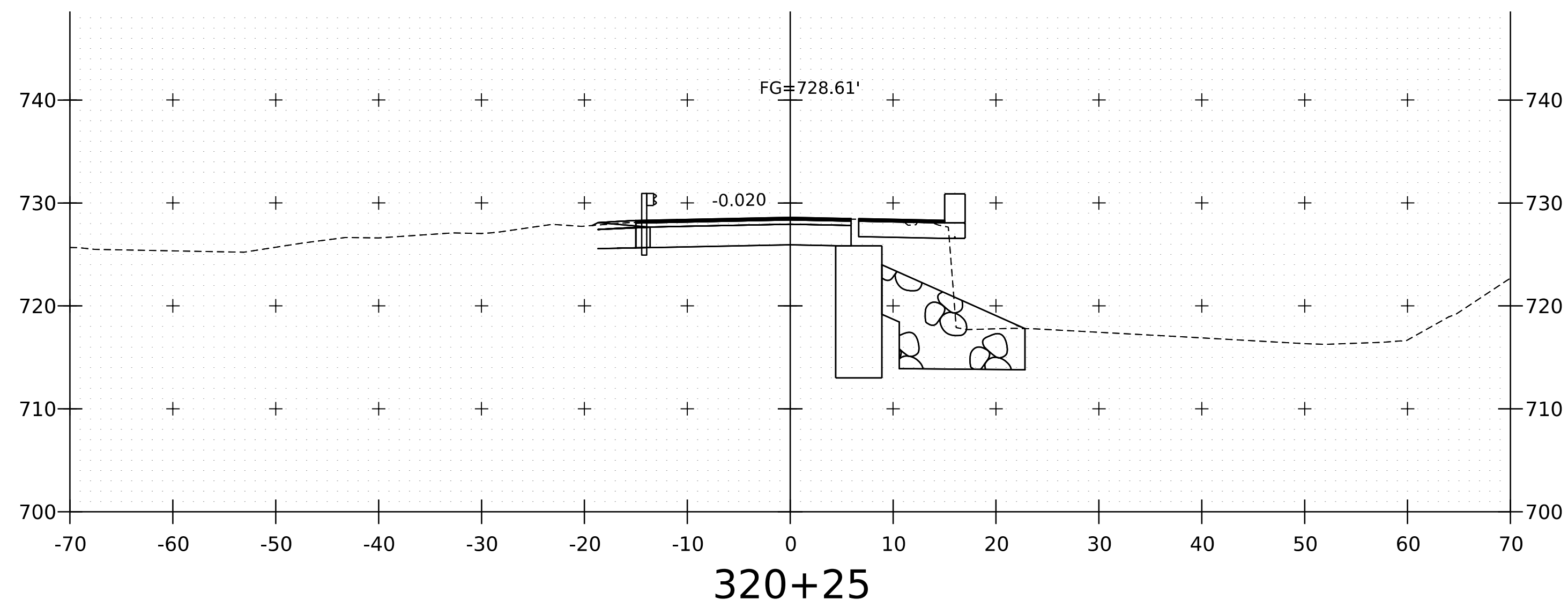
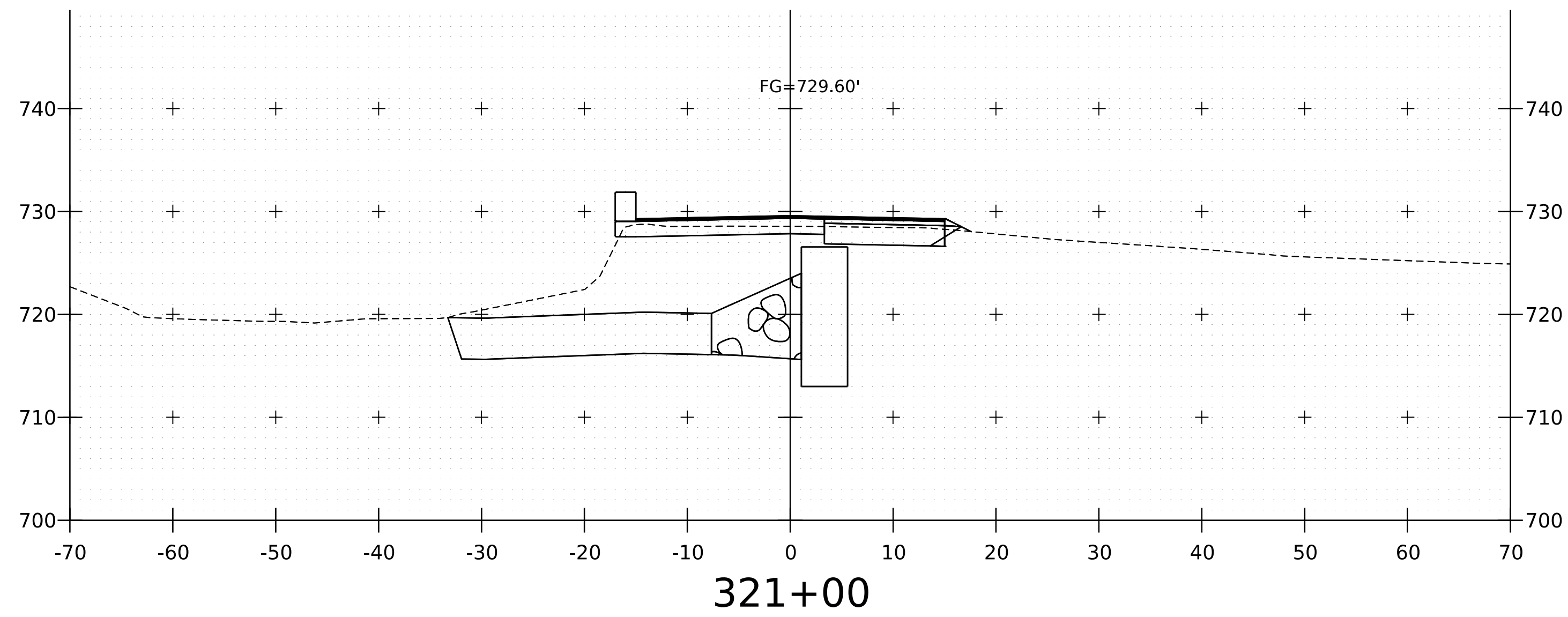
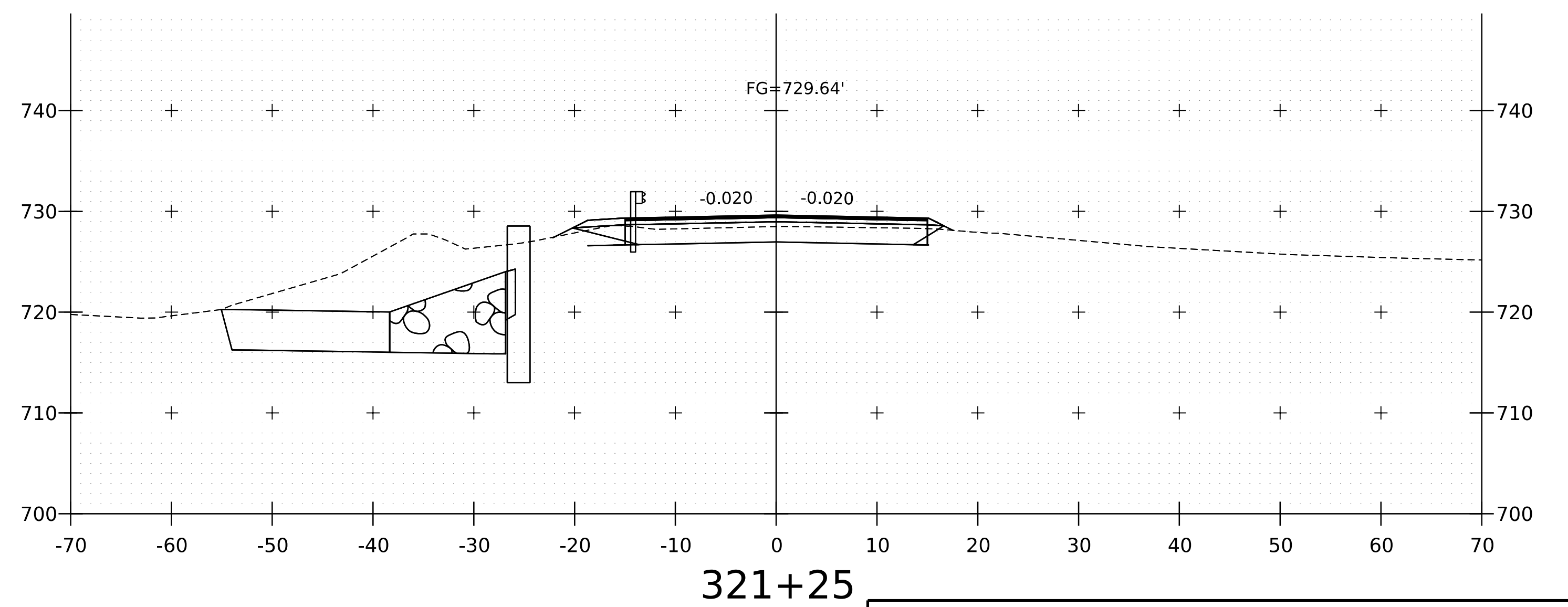
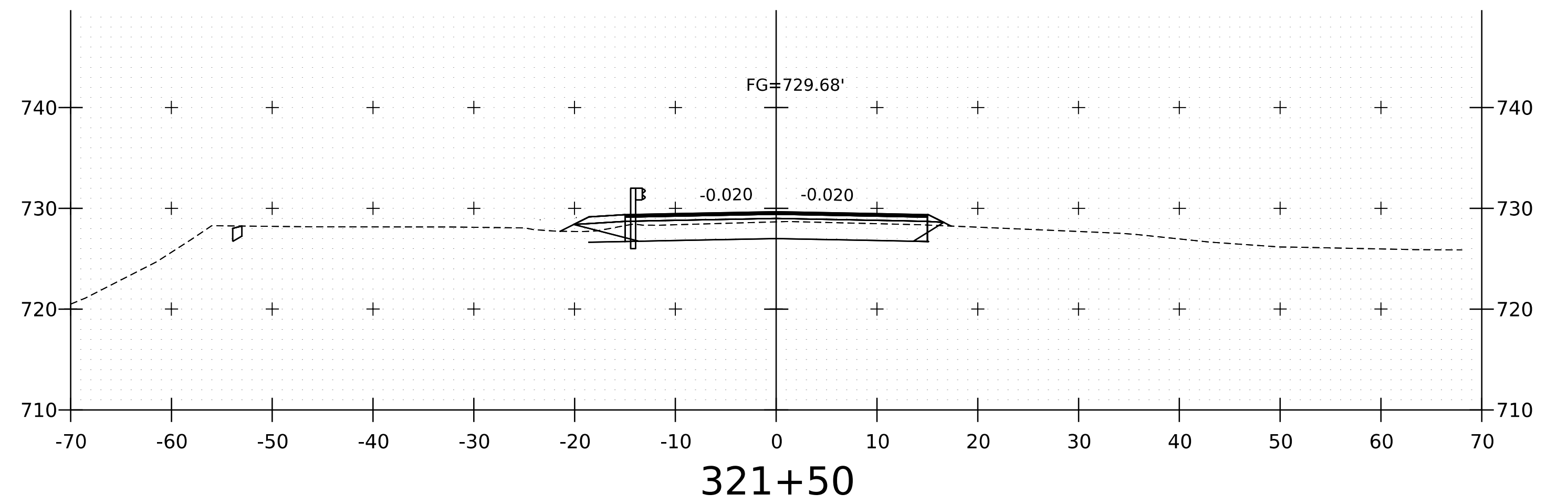
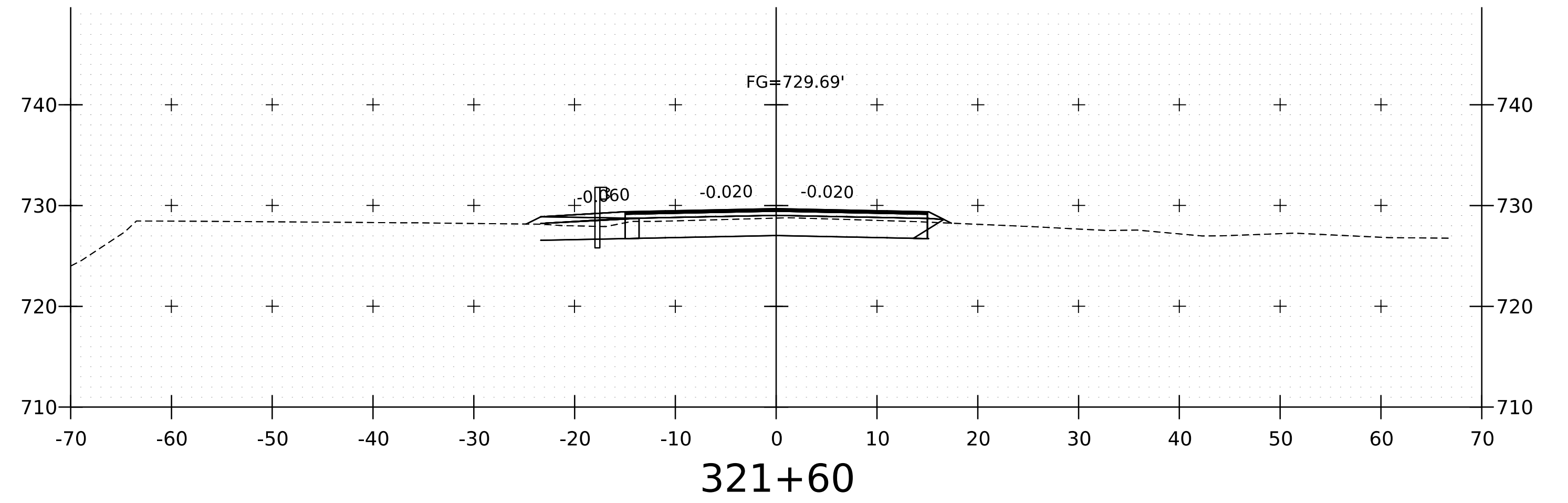
320+00



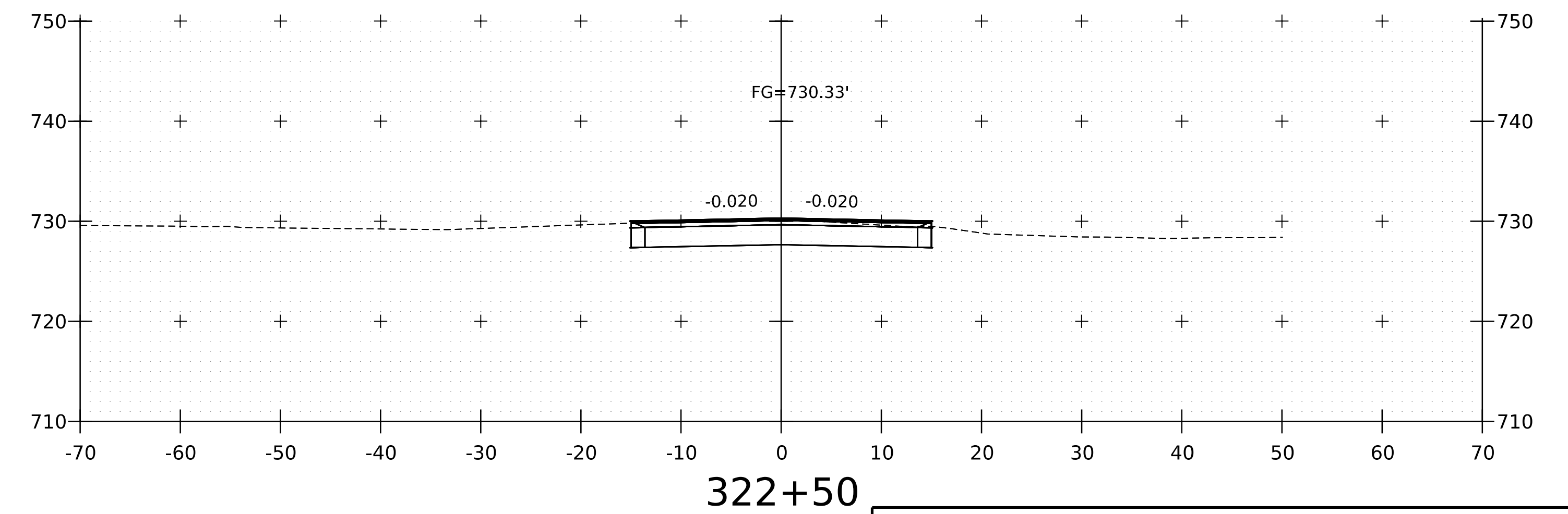
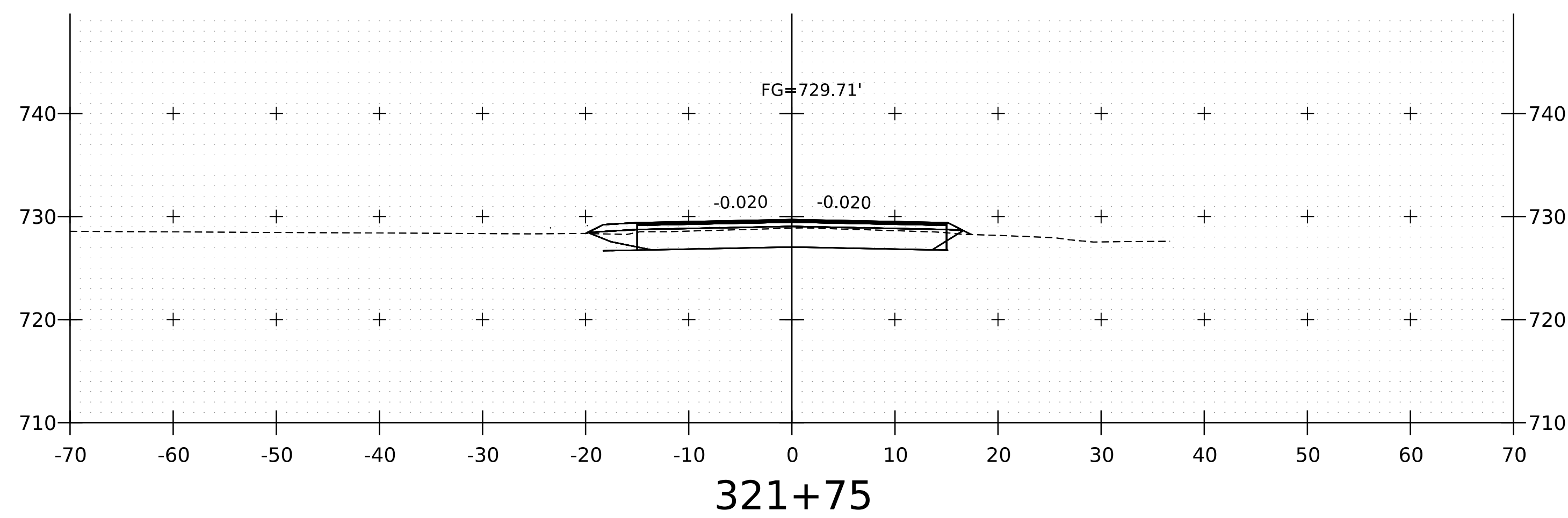
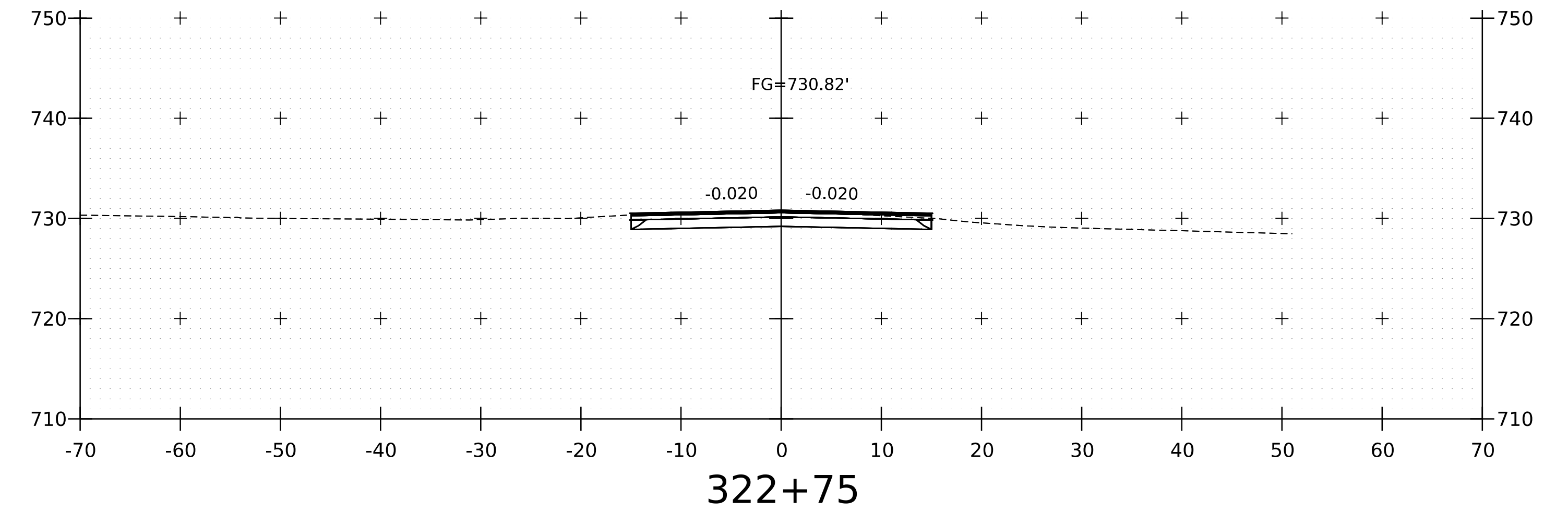
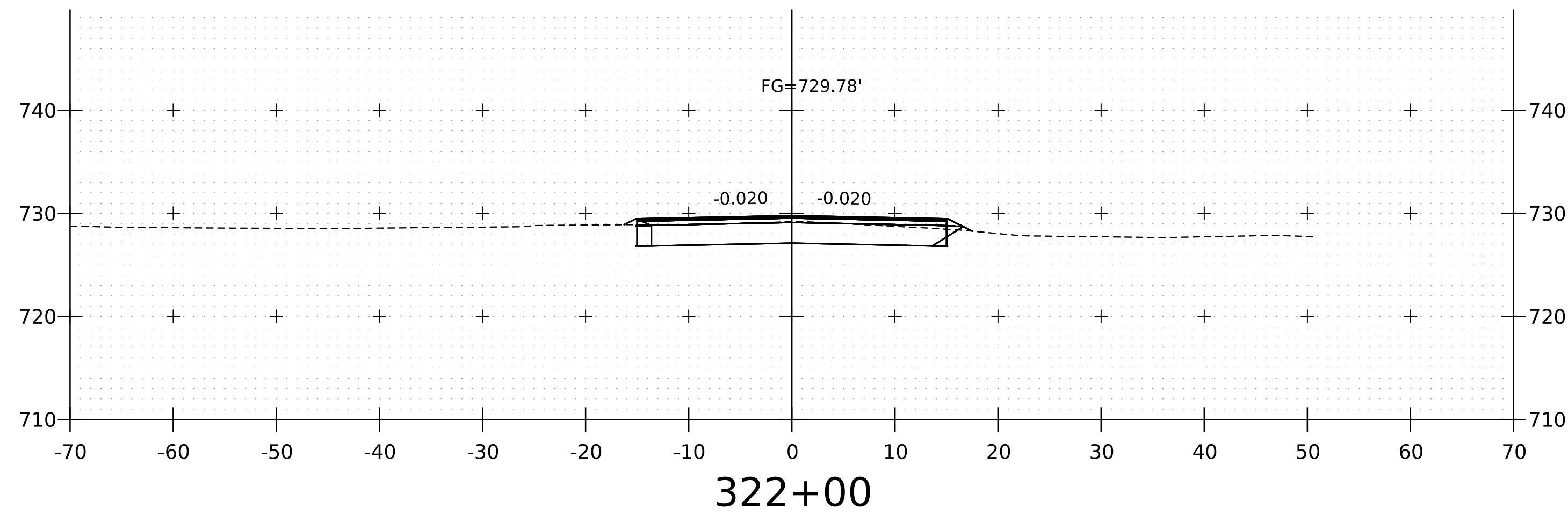
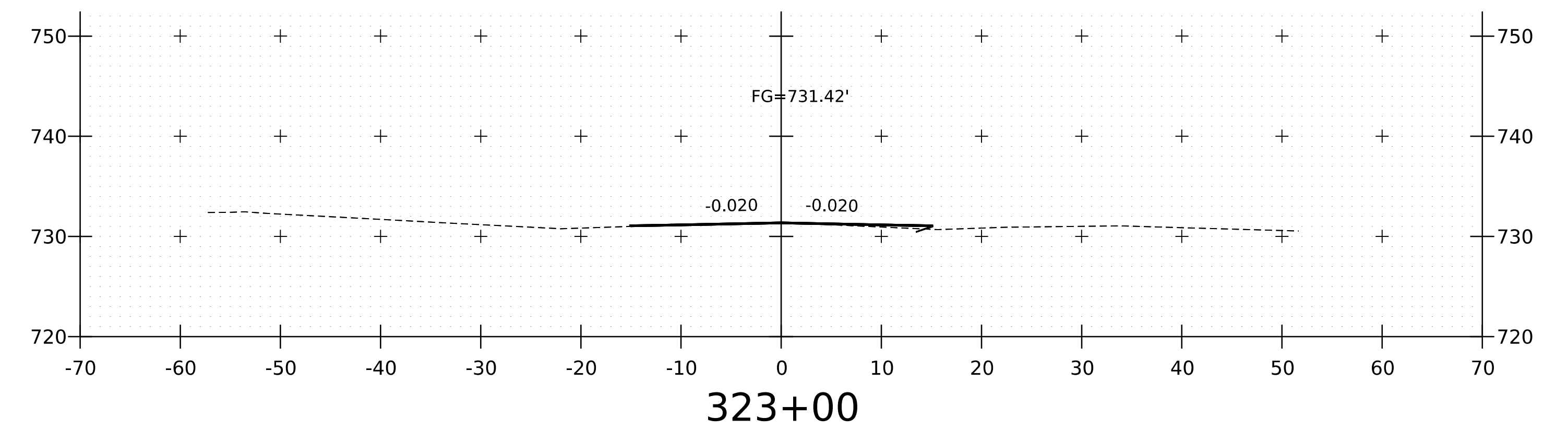
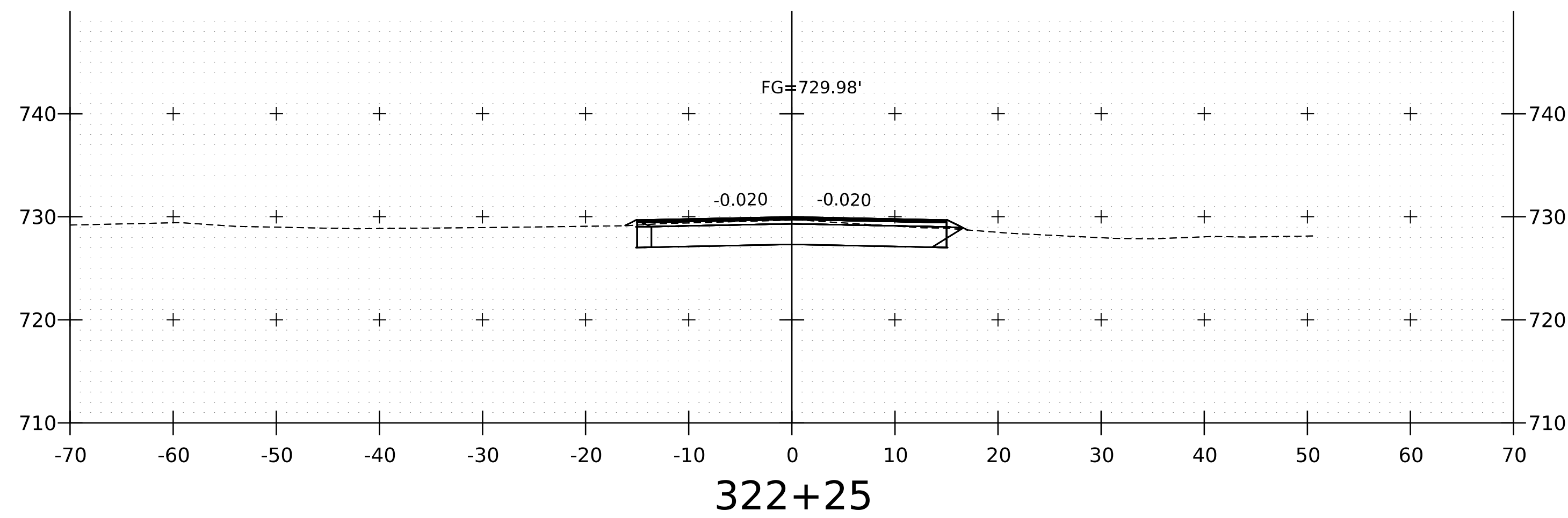
319+90

PROJECT NAME:	READING	PLOT DATE:	8-AUG-2024
PROJECT NUMBER:	P23-1(404)	DRAWN BY:	M. LONGSTREET
FILE NAME:	s23b770xsVT106.dgn	DESIGNED BY:	F. BARROWS
PROJECT LEADER:	C. BURRALL	CHECKED BY:	F. BARROWS
VT106 CROSS SECTIONS - 2		SHEET	8 OF 11

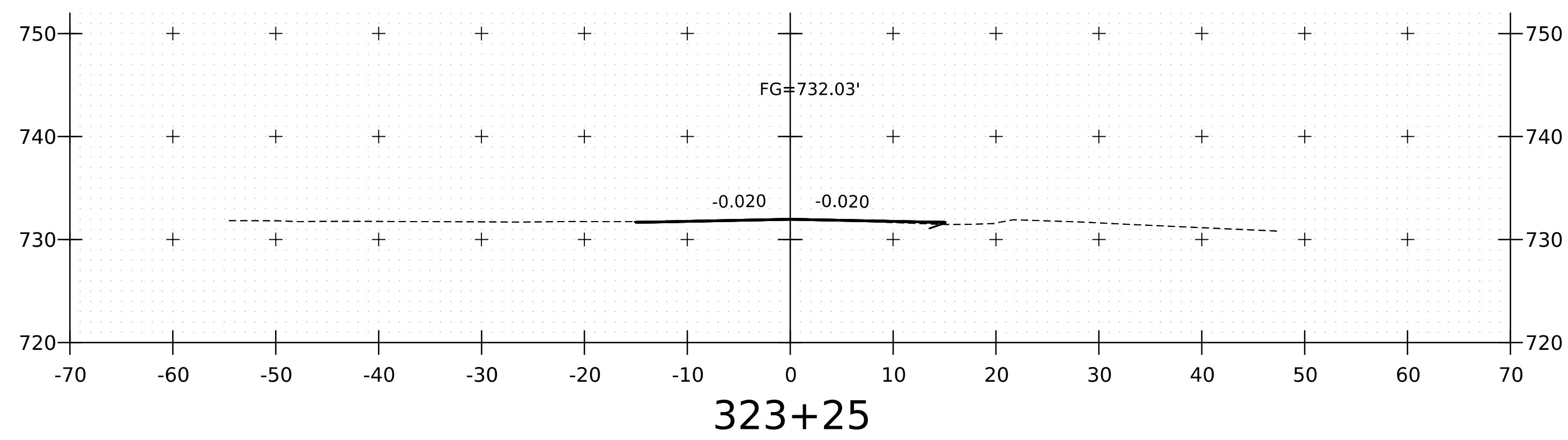
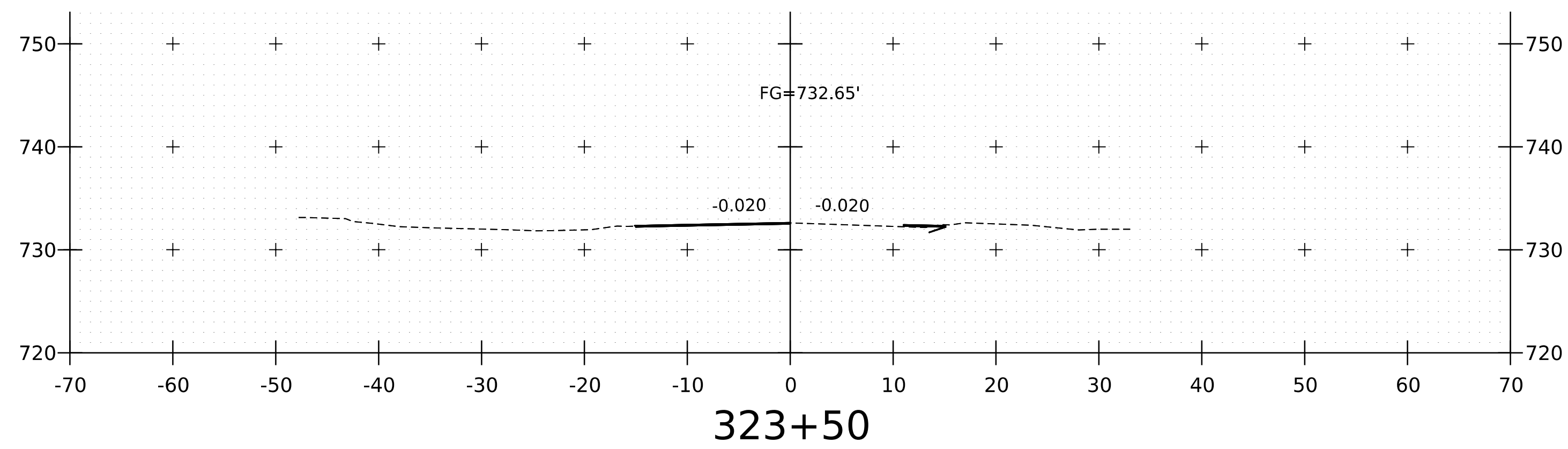




PROJECT NAME:	READING	PLOT DATE:	8-AUG-2024
PROJECT NUMBER:	P23-1(404)	DRAWN BY:	M. LONGSTREET
FILE NAME:	s23b770xsVT106.dgn	CHECKED BY:	F. BARROWS
PROJECT LEADER:	C. BURRALL	SHEET	9 OF 11
DESIGNED BY:	F. BARROWS	VT106 CROSS SECTIONS - 3	



PROJECT NAME:	READING	PLOT DATE:	8-AUG-2024
PROJECT NUMBER:	P23-1(404)	DRAWN BY:	M. LONGSTREET
FILE NAME:	s23b770xsVT106.dgn	CHECKED BY:	F. BARROWS
PROJECT LEADER:	C. BURRALL	SHEET	10 OF 11
DESIGNED BY:	F. BARROWS	VT106 CROSS SECTIONS - 4	



PROJECT NAME:	READING	FILE NAME:	s23b770xsVT106.dgn	PLOT DATE:	8-AUG-2024
PROJECT NUMBER:	P23-1(404)	PROJECT LEADER:	R. YOUNG	DRAWN BY:	M. LONGSTREET
		DESIGNED BY:	F. BARROWS	CHECKED BY:	F. BARROWS
		VT106 CROSS SECTIONS - 5		SHEET	11 OF 11