

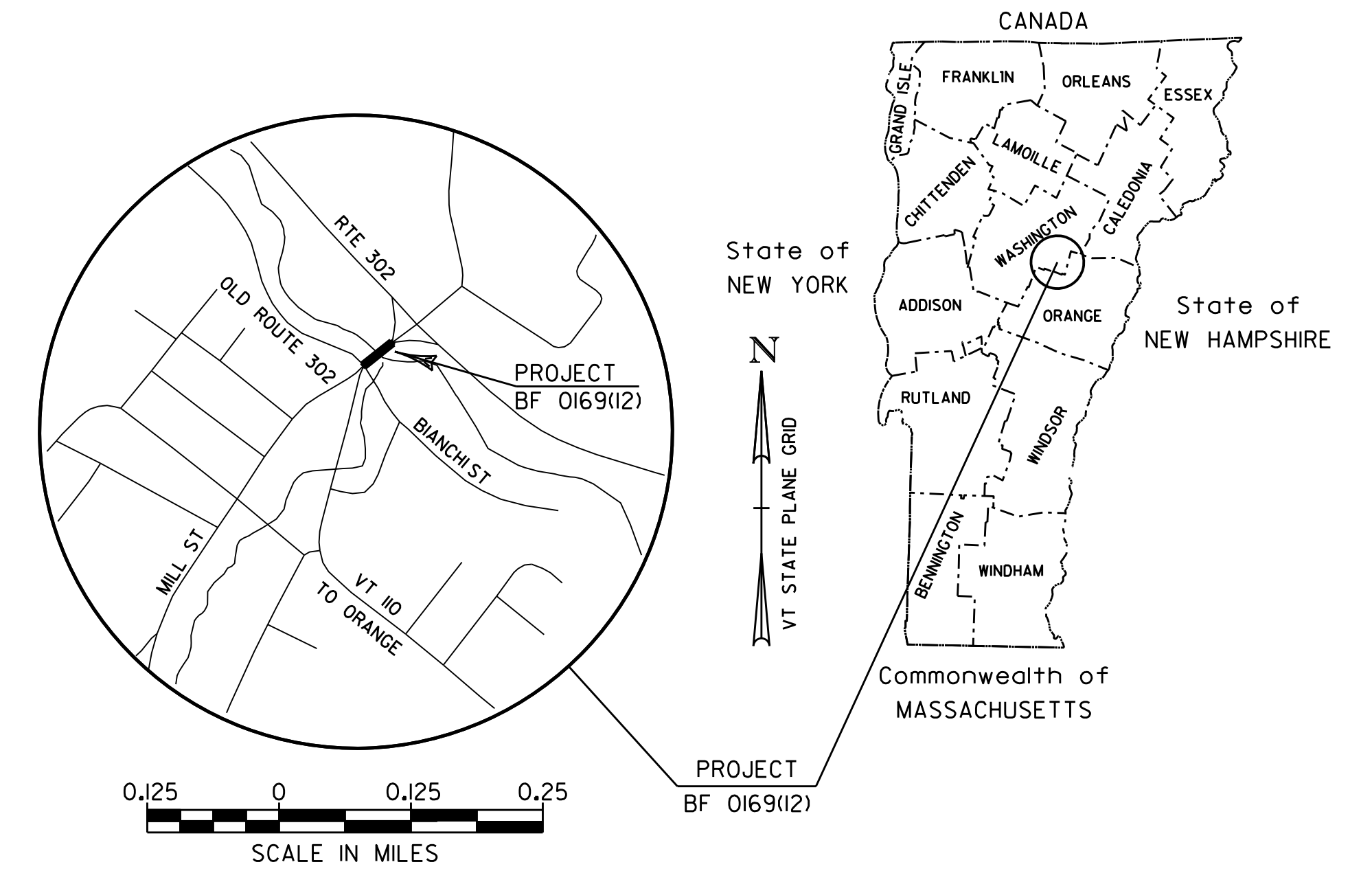
REVIEWER'S NOTES:

1. DESIGN INFORMATION FROM BARRE TOWN STP HES 0169 (8) HAS BEEN USED TO ESTABLISH EXISTING CONDITIONS
2. ROW EASEMENTS REQUIRED.
3. OVERHEAD UTILITY RELOCATION IS REQUIRED.
4. A TOWN WATERLINE IS TO BE LOCATED ON THE BRIDGE. THE LOCATION AND SIZE OF THE WATERLINE IS TO BE DETERMINED DURING PRELIMINARY PLAN DEVELOPMENT. WATERLINE IS SHOWN CONCEPTUALLY ON THE BRIDGE TYPICAL SECTION.
5. ABUTMENT LOCATIONS SHOWN ARE CONCEPTUAL, AND WILL BE FINALIZED DURING DEVELOPMENT OF THE PRELIMINARY PLANS.

STATE OF VERMONT AGENCY OF TRANSPORTATION



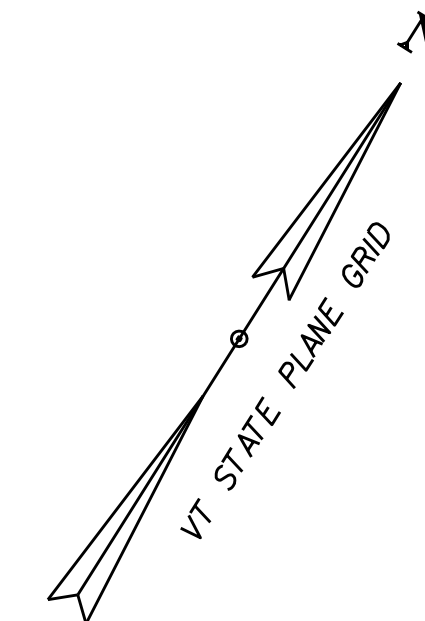
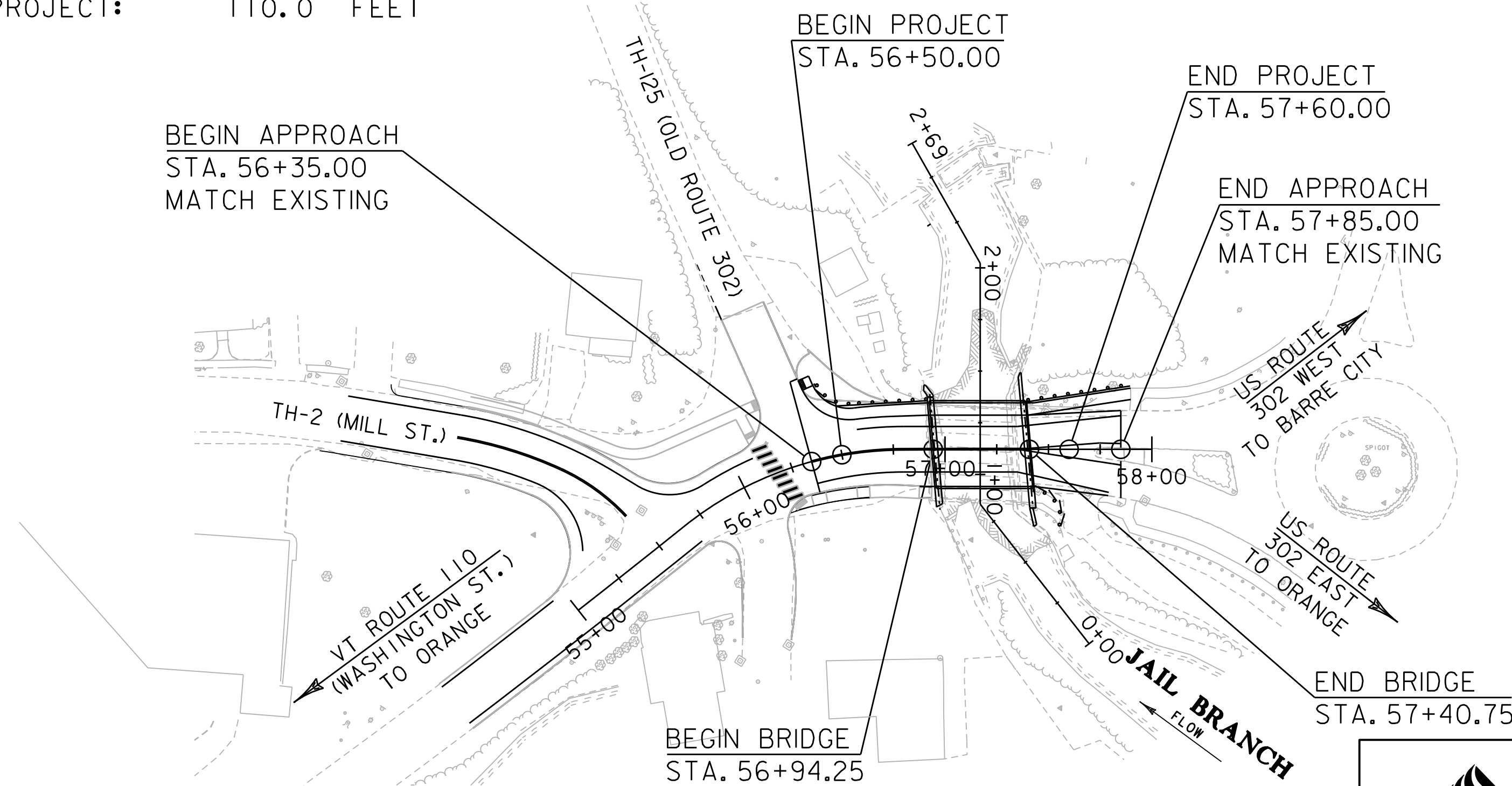
PROPOSED IMPROVEMENT BRIDGE PROJECT TOWN OF BARRE COUNTY OF WASHINGTON BRIDGE NO. 21



PROJECT LOCATION: BRIDGE REPLACEMENT APPROXIMATELY 100 FEET SOUTHWEST OF THE JUNCTION WITH US ROUTE 302.

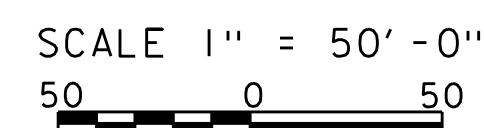
PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES REPLACEMENT OF THE EXISTING BRIDGE WITH A NEW BRIDGE WITH RELATED ROADWAY WORK.

LENGTH OF STRUCTURE: 45.5 FEET (CONCEPTUAL LAYOUT)
LENGTH OF ROADWAY: 150.0 FEET
LENGTH OF PROJECT: 110.0 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 2
SURVEYED BY :
SURVEYED DATE :
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD83 (2011)



CONCEPTUAL PLANS 7/8/2020

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATOR
APPROVED _____ DATE _____
HIGHWAY DIVISION, CHIEF ENGINEER
APPROVED _____ DATE _____
PROJECT MANAGER : MAHENDRA THILLIYAR P.E.
PROJECT NAME : BARRE TOWN
PROJECT NUMBER : BF 0169 (12)
SHEET 1 OF 10 SHEETS

**McFarland
Johnson**

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

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

**CONVENTIONAL BOUNDARY SYMBOLGY**

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

**EPSC LAYOUT PLAN SYMBOLGY**

EPSC MEASURES	
ONNOONNOONNO	FILTER CURTAIN
⊕	SILT FENCE
⊕	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 —	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**

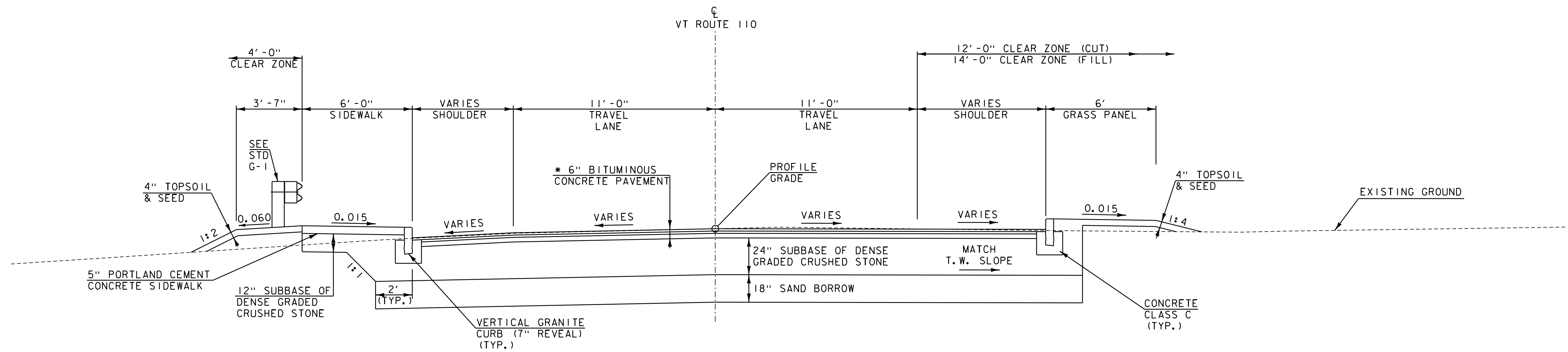
— ARCH —	ARCHEOLOGICAL BOUNDARY
— HISTORIC DIST —	HISTORIC DISTRICT BOUNDARY
— HISTORIC —	HISTORIC AREA
(H)	HISTORIC STRUCTURE

**CONVENTIONAL TOPOGRAPHIC SYMBOLGY**

EXISTING FEATURES	
—	ROAD EDGE PAVEMENT
—	ROAD EDGE GRAVEL
—	DRIVEWAY EDGE
—	DITCH
—	FOUNDATION
—	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:	BARRE TOWN
PROJECT NUMBER:	BF 0169(12)
FILE NAME:	z12c576leg.dgn
PROJECT LEADER:	D. KULL
DESIGNED BY:	S. LISTER
CONVENTIONAL SYMBOLGY - LEGEND	
PLOT DATE:	7/8/2020
DRAWN BY:	M. LOVETT
CHECKED BY:	S. IRELAND
SHEET	3 OF 10

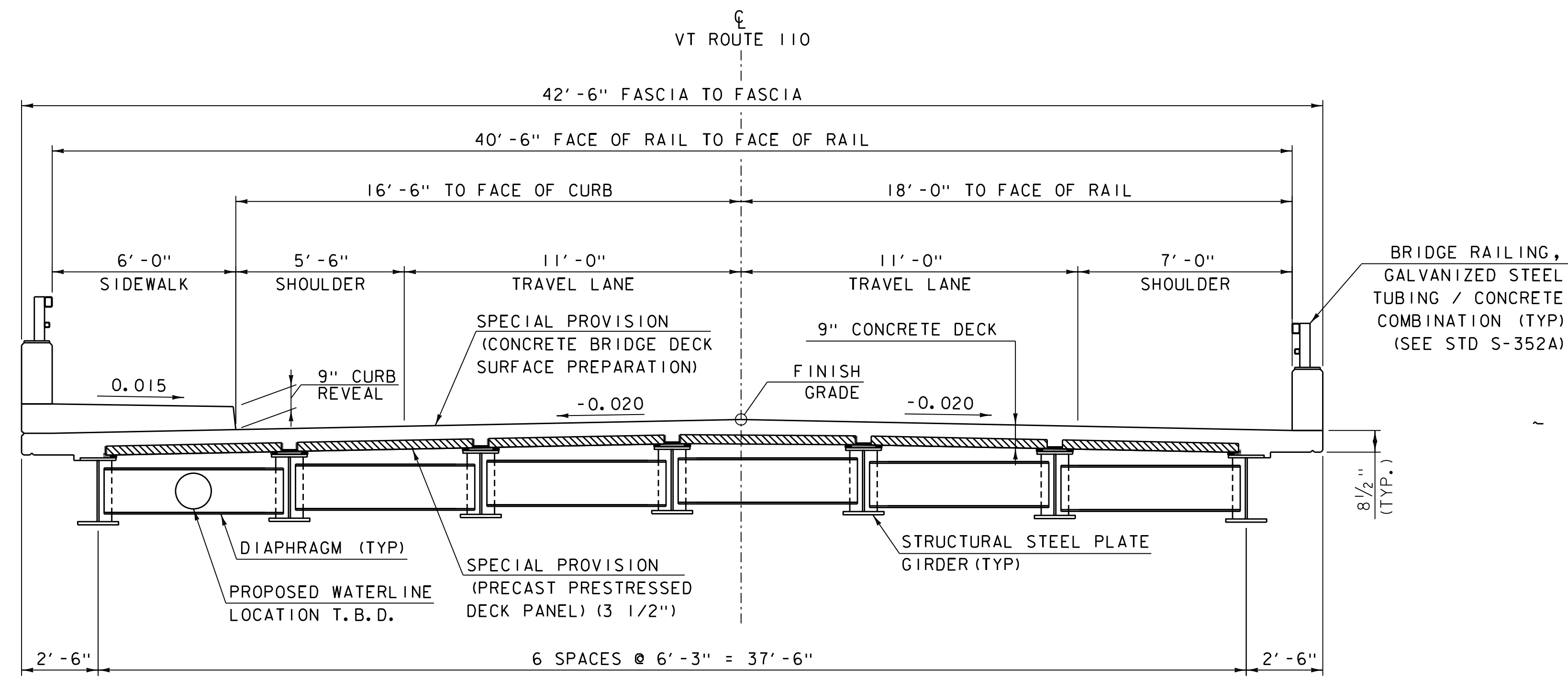




**VERMONT ROUTE 110**

NOT TO SCALE  
STA 56+45 TO STA 56+94

- * 1 1/2" TYPE IVS OVER
- 1 1/2" TYPE IVS OVER
- 3" TYPE IIS



**BRIDGE TYPICAL SECTION**

SCALE 3/8" = 1'-0"

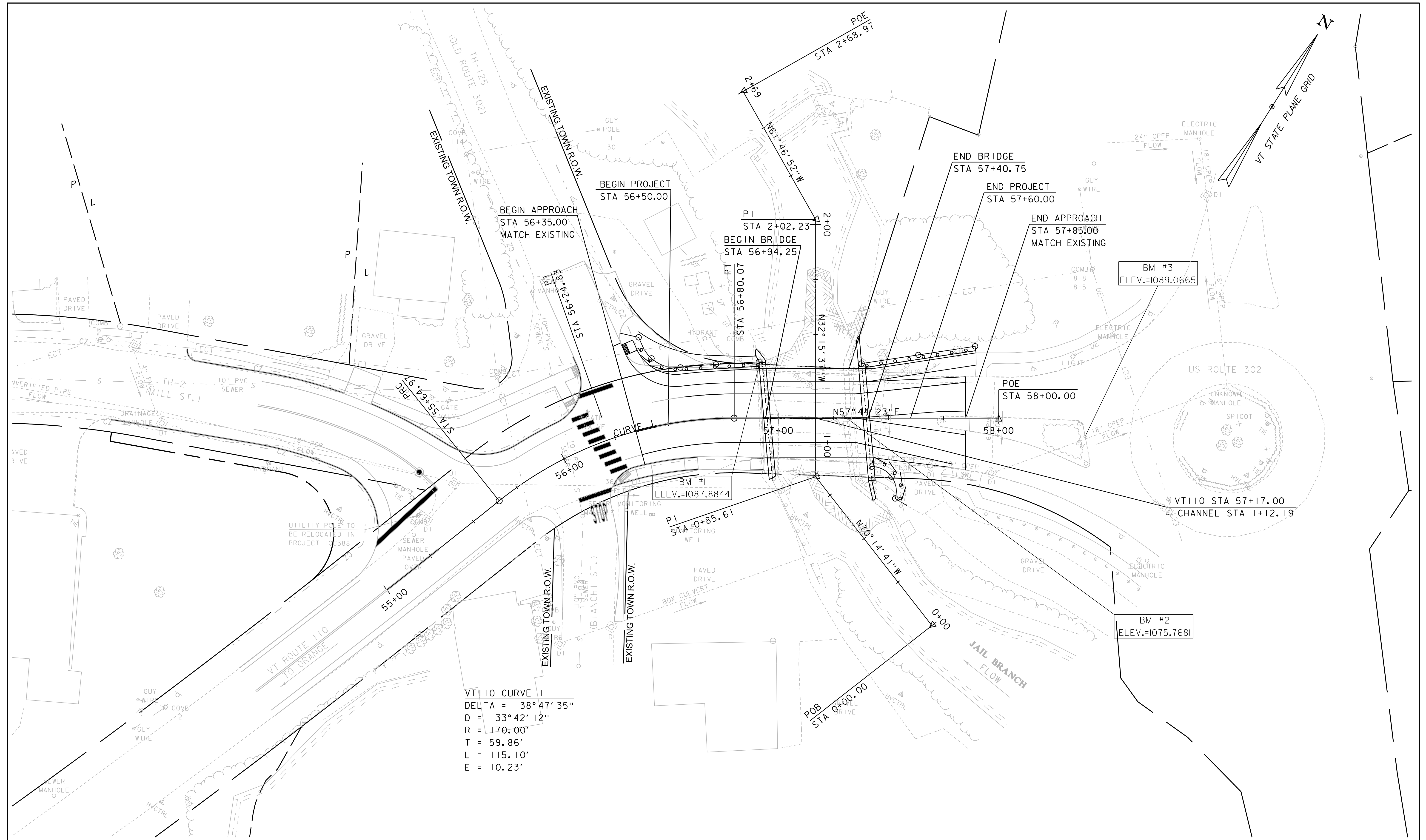
NOTE: TRAVEL WAY DIMENSIONING IS MEASURED PERPENDICULAR TO THE ALIGNMENT.

MATERIAL TOLERANCES (IF USED ON PROJECT)	
SURFACE	
- PAVEMENT (TOTAL THICKNESS)	+/- 1/4"
- AGGREGATE SURFACE COURSE	+/- 1/2"
SUBBASE	+/- 1"
SAND BORROW	+/- 1"

PROJECT NAME:	BARRE TOWN	FILE NAME:	z12c576+yp.dgn	PLOT DATE:	7/8/2020
PROJECT NUMBER:	BF 0169(12)	PROJECT LEADER:	D. KULL	DRAWN BY:	M. LOVETT
		DESIGNED BY:	S. LISTER	CHECKED BY:	S. IRELAND
		TYPICAL SECTIONS		SHEET	4 OF 10





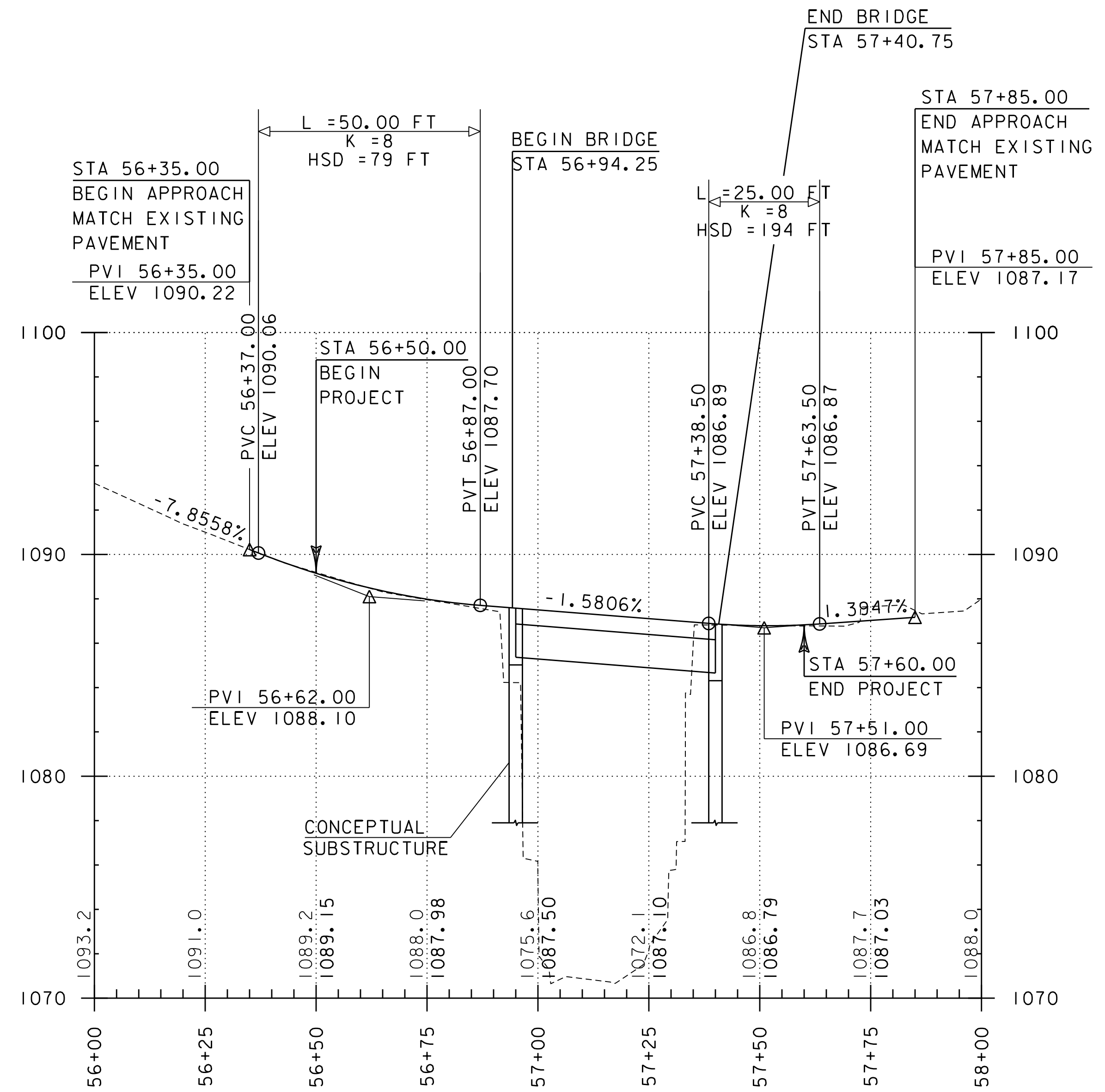


VT110 CURVE 1  
 DELTA = 38°47'35"  
 D = 33°42'12"  
 R = 170.00'  
 T = 59.86'  
 L = 115.10'  
 E = 10.23'

PROJECT NAME:	BARRE TOWN	FILE NAME:	z12c576bdr_nul.dgn	PLOT DATE:	7/8/2020
PROJECT NUMBER:	BF 0169(12)	PROJECT LEADER:	D. KULL	DRAWN BY:	M. LOVETT
		DESIGNED BY:	S. LISTER	CHECKED BY:	S. IRELAND
		LAYOUT PLAN I		SHEET	5 OF 10

SCALE 1" = 20'-0"  
 20 0 20





VT RTE 110 (MILLS ST.)

SCALE: HORIZONTAL 1"=20'-0"

VERTICAL 1"=4'-0"

PROJECT NAME: BARRE TOWN

PROJECT NUMBER: BF 0169(12)

FILE NAME: z12c576prof.dgn

PROJECT LEADER: D. KULL

DESIGNED BY: S. LISTER

PROFILE

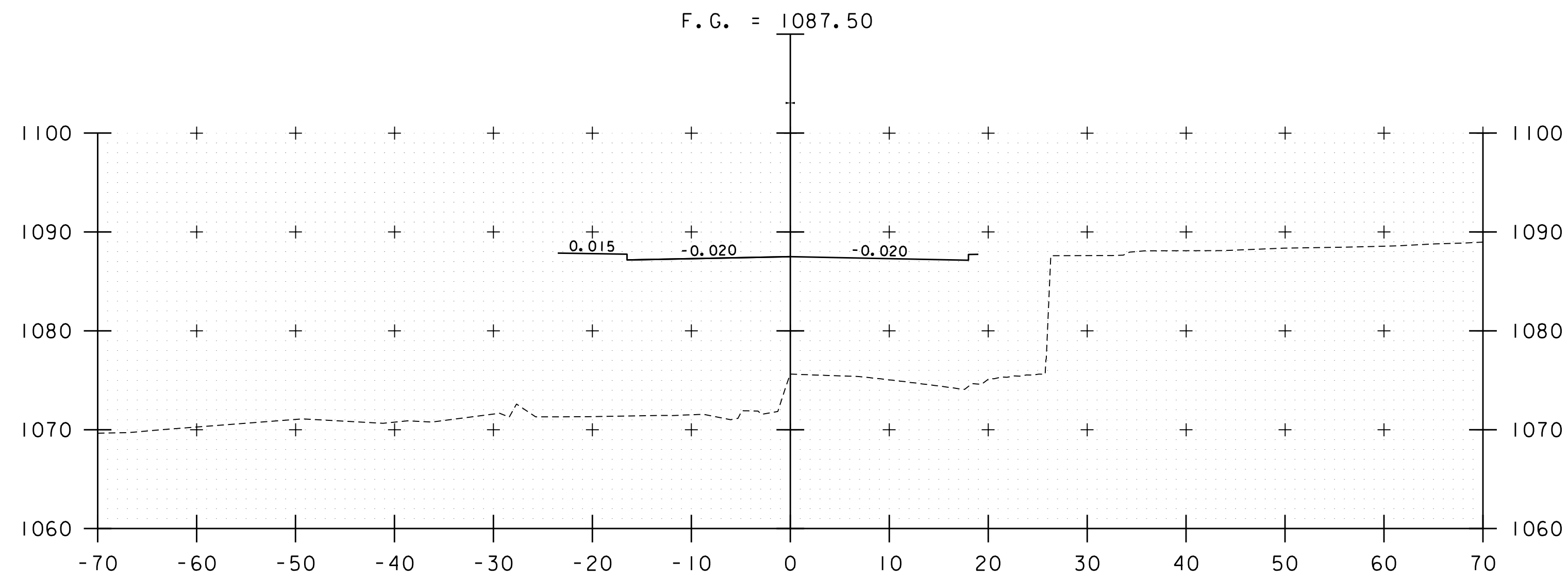
PLOT DATE: 7/8/2020

DRAWN BY: M. LOVETT

CHECKED BY: S. IRELAND

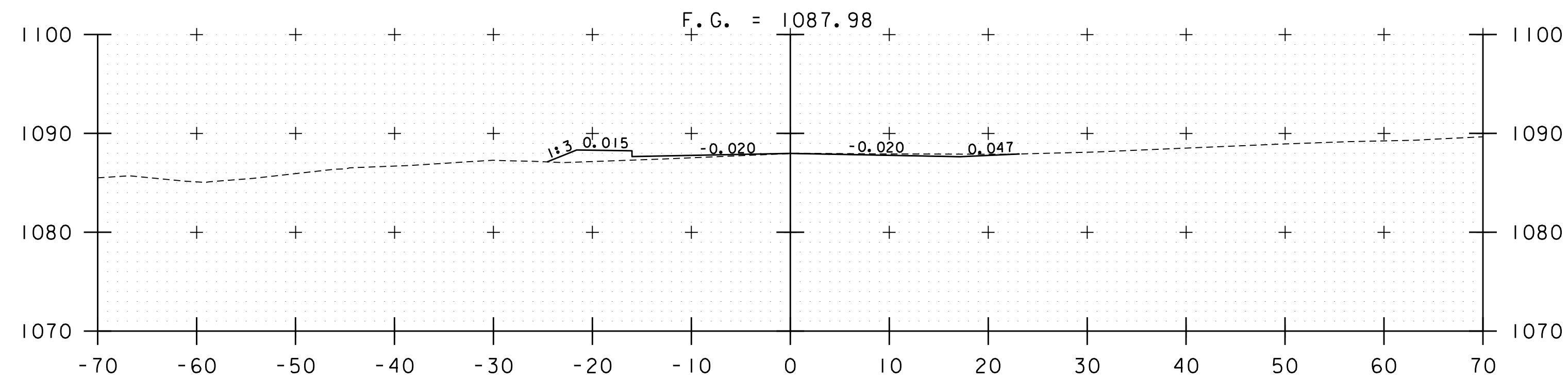
SHEET 6 OF 10



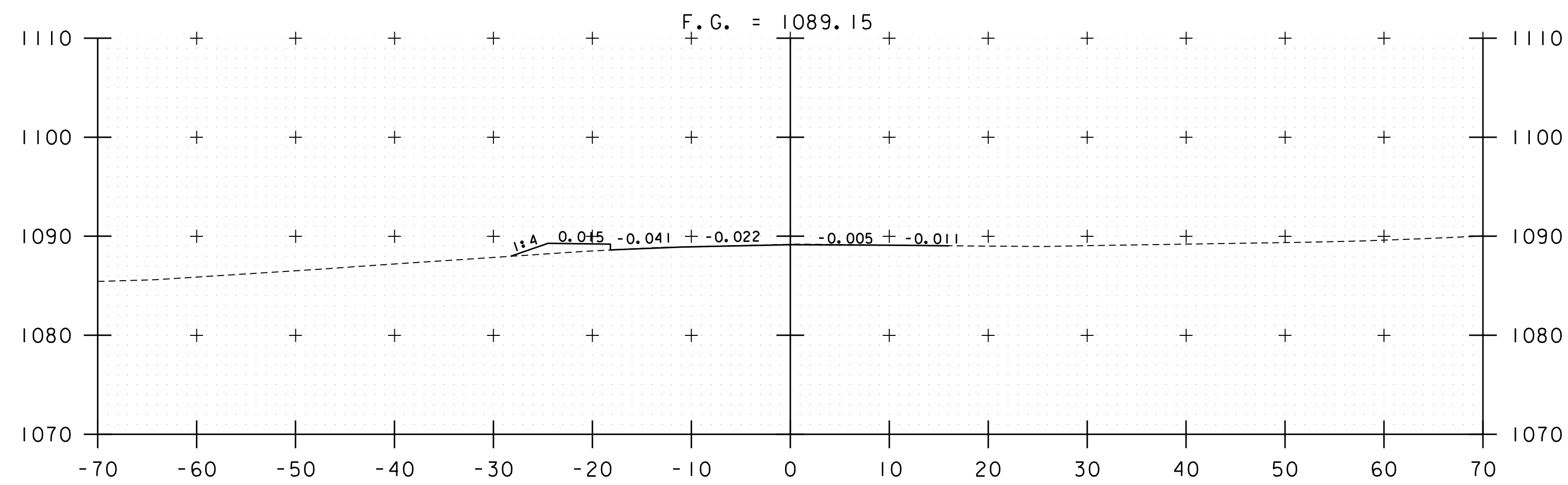


57+00

STA 56+94.25  
BEGIN BRIDGE

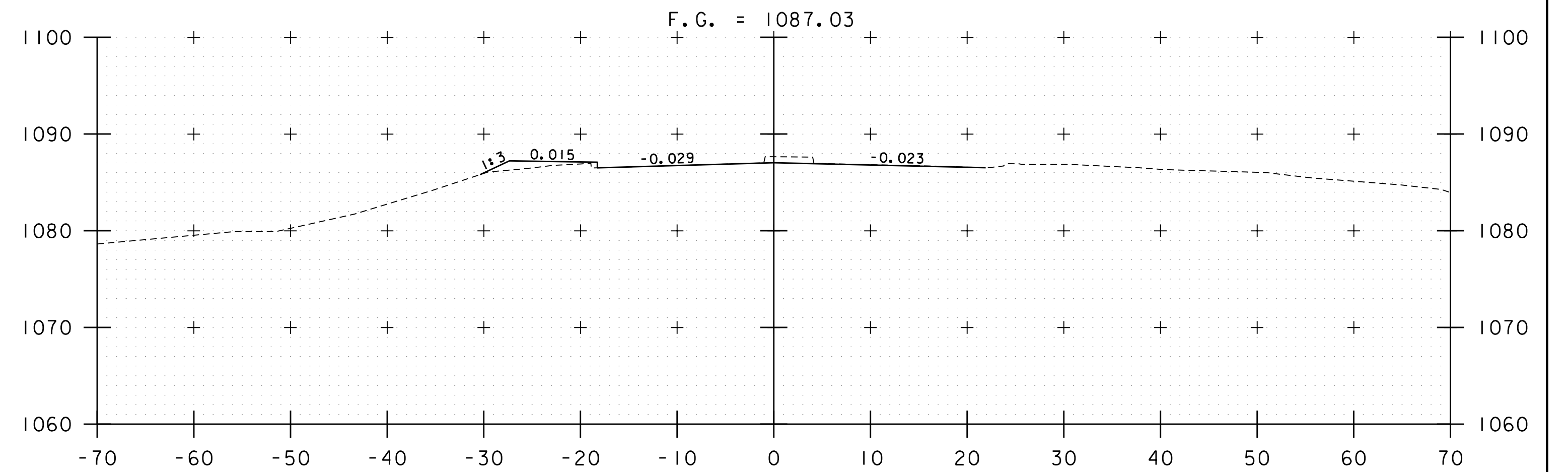


56+75



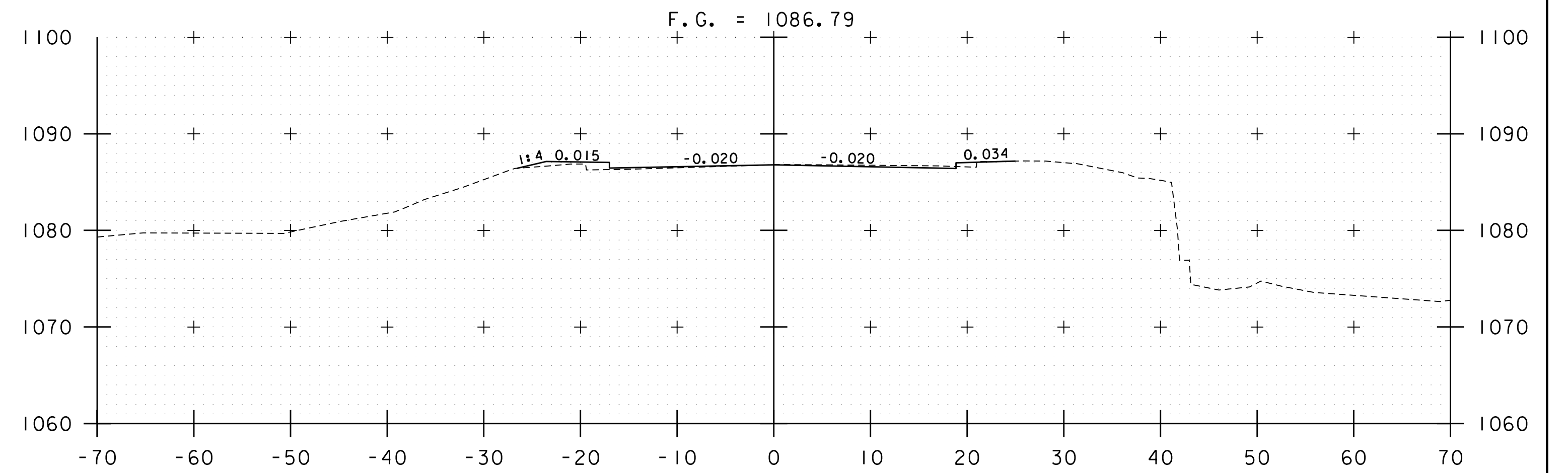
56+50

STA 56+35.00  
MATCH EXISTING BCP



57+75

STA 57+85.00  
MATCH EXISTING BCP



57+50

STA 57+40.75  
END BRIDGE

STA. 56+50 TO STA. 57+75



PROJECT NAME: BARRE TOWN

PROJECT NUMBER: BF 0169(12)

FILE NAME: z12c576xs.dgn

PROJECT LEADER: D. KULL

DESIGNED BY: S. LISTER

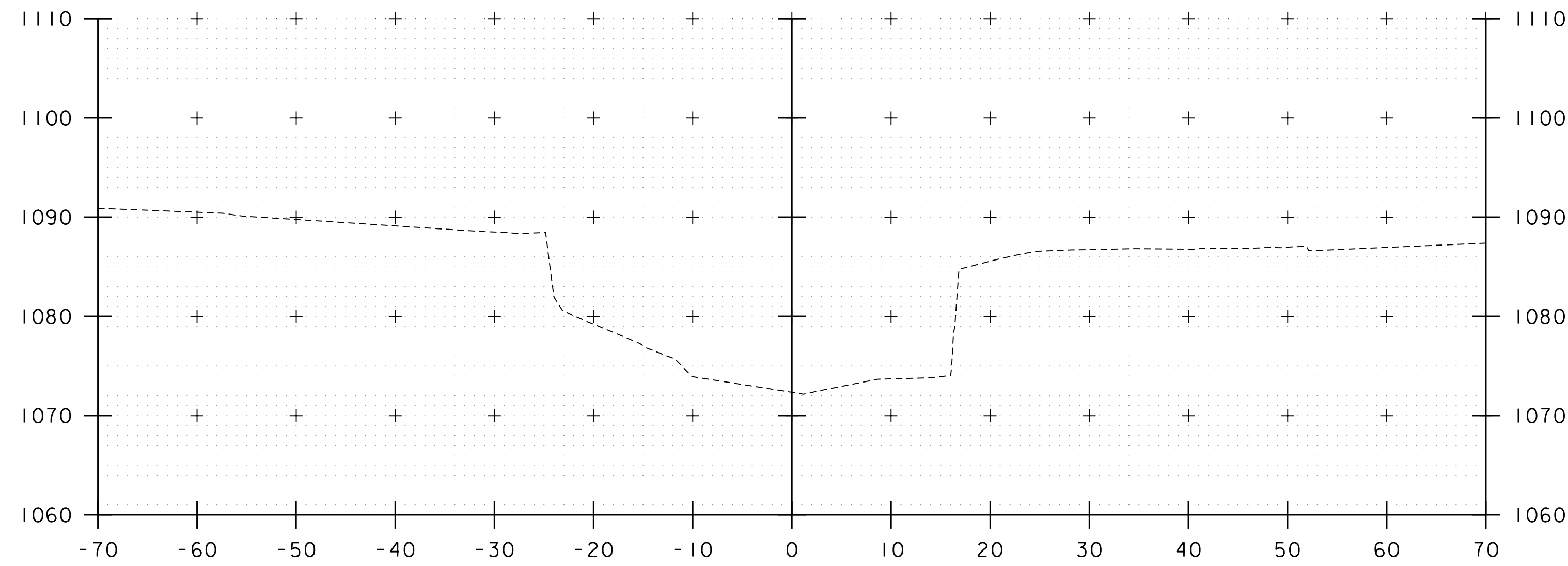
CROSS SECTION

PLOT DATE: 7/8/2020

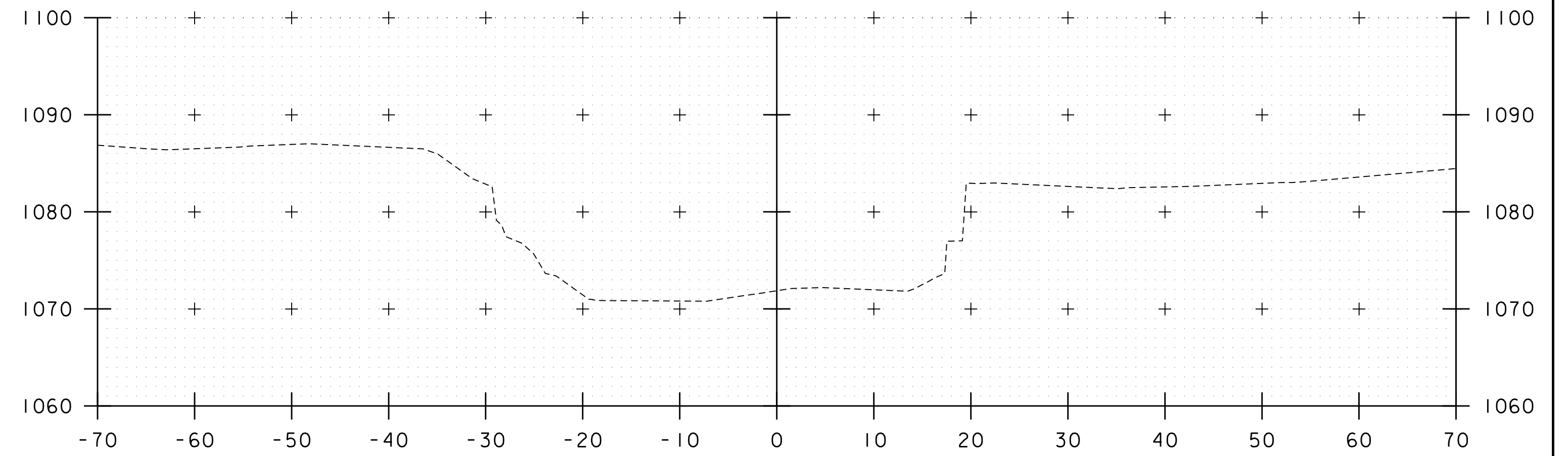
DRAWN BY: M. LOVETT

CHECKED BY: S. IRELAND

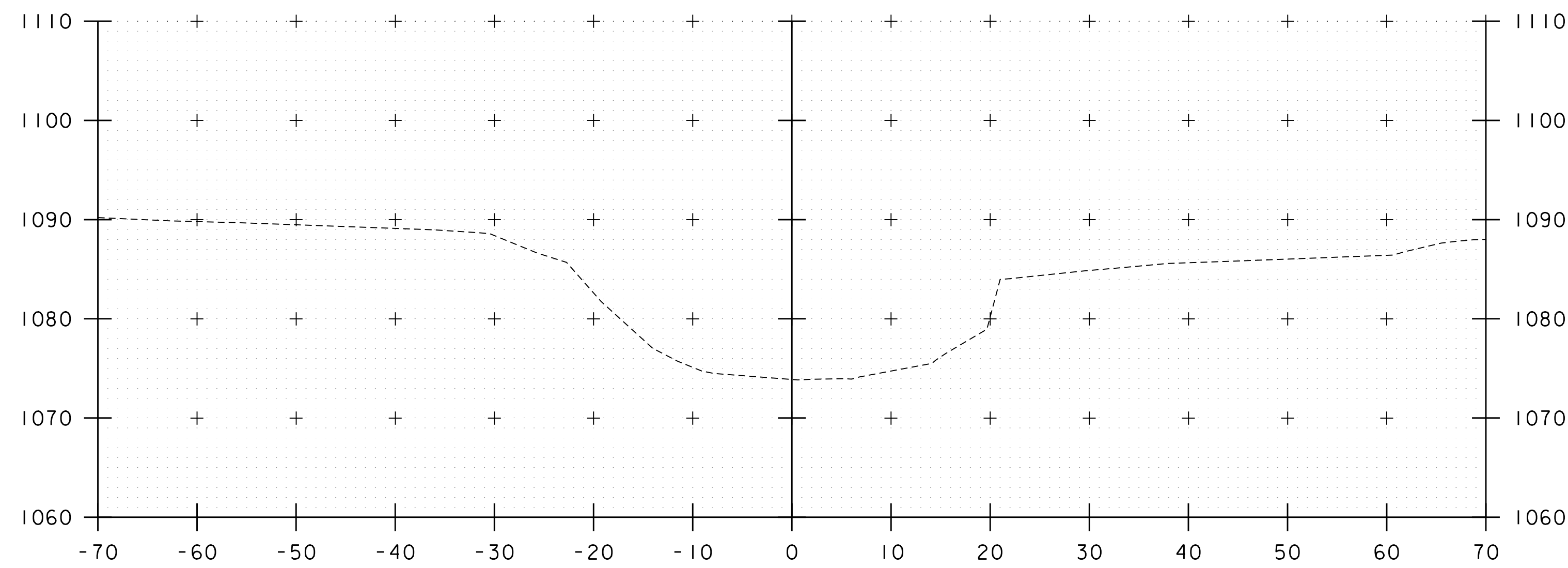
SHEET 7 OF 10



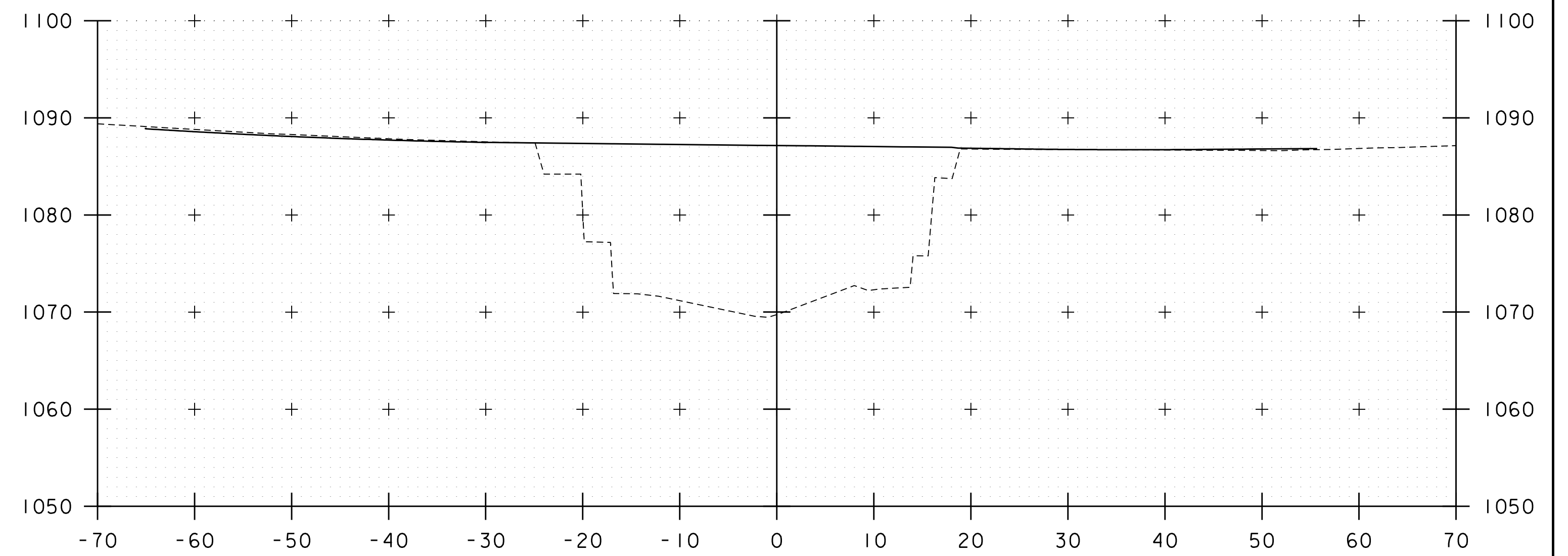
0+50



1+50



0+00



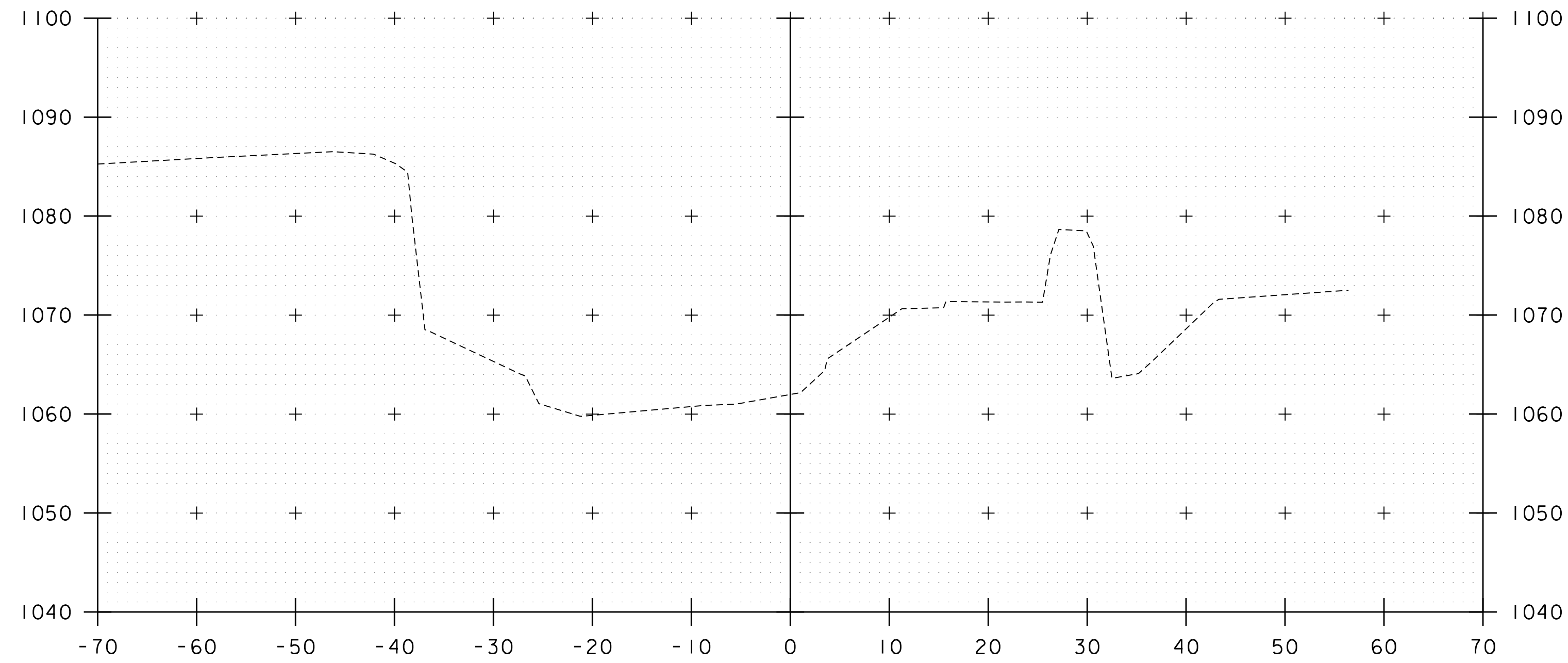
1+00

STA. 0+00 TO STA. 1+50

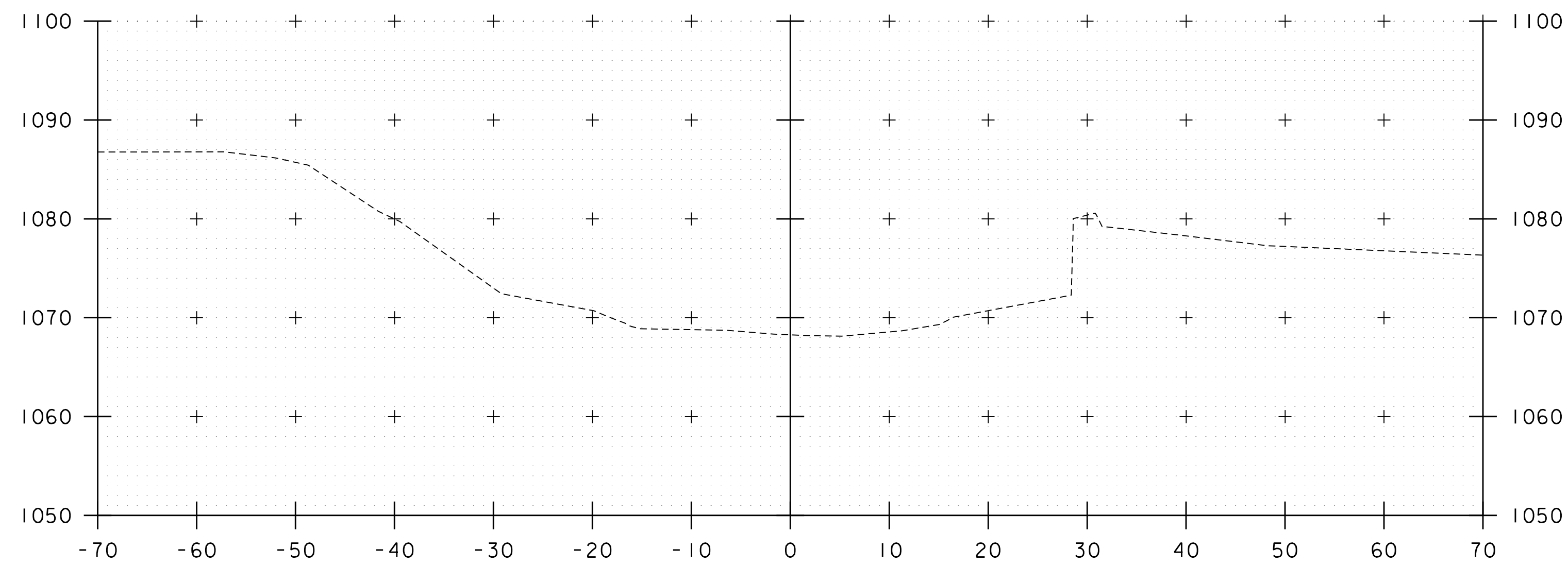


PROJECT NAME:	BARRE TOWN	FILE NAME:	z12c576xs1.dgn	PLOT DATE:	7/8/2020
PROJECT NUMBER:	BF 0169(12)	PROJECT LEADER:	D. KULL	DRAWN BY:	M. LOVETT
		DESIGNED BY:	S. LISTER	CHECKED BY:	S. IRELAND
		CROSS SECTION - CHANNEL		SHEET	8 OF 10





2+50

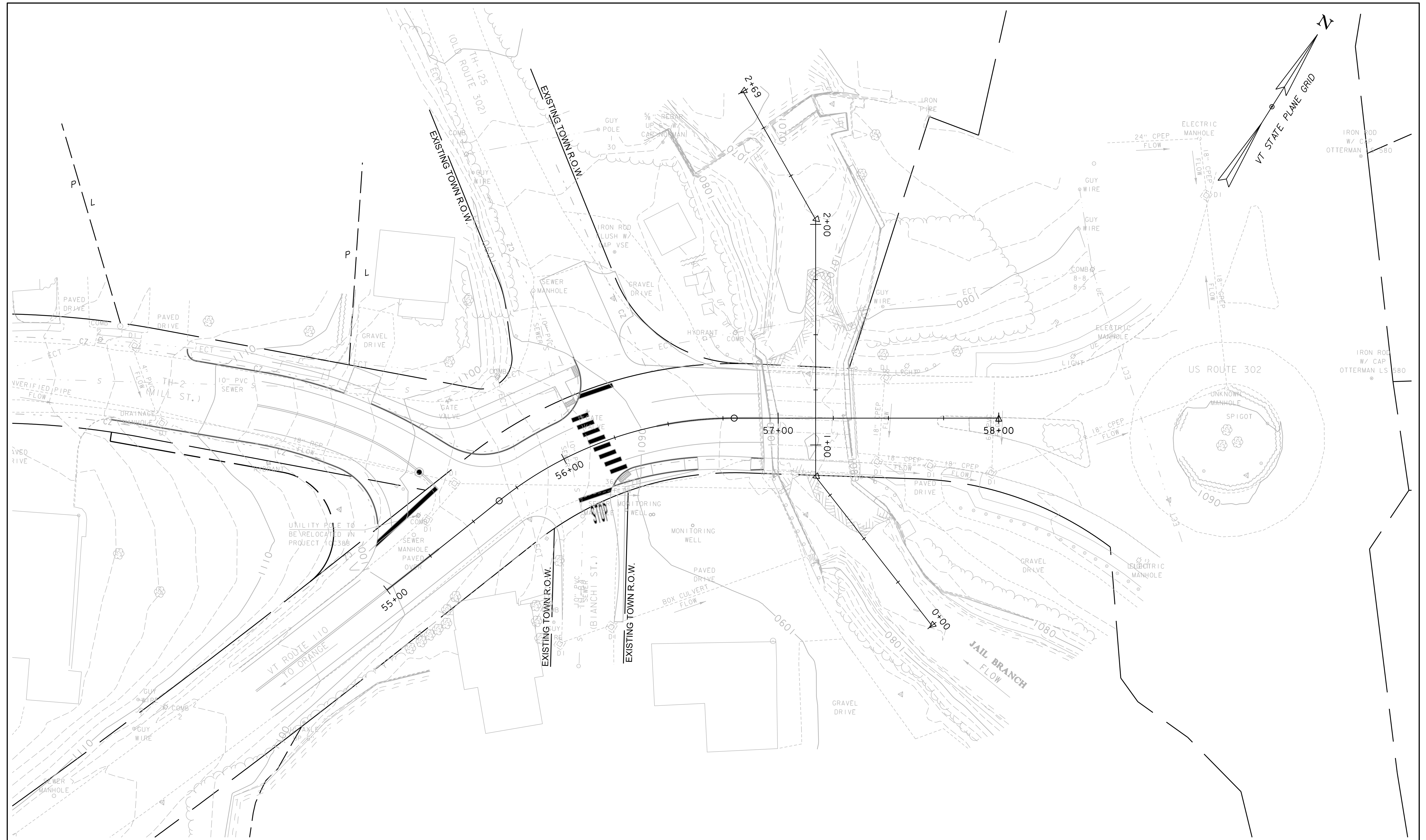


2+00

STA. 2+00 TO STA. 2+50



PROJECT NAME: BARRE TOWN	PLOT DATE: 7/8/2020
PROJECT NUMBER: BF 0169(12)	DRAWN BY: M. LOVETT
FILE NAME: z12c576xs1.dgn	CHECKED BY: S. IRELAND
PROJECT LEADER: D. KULL	SHEET 9 OF 10
DESIGNED BY: S. LISTER	
CROSS SECTION - CHANNEL	



PROJECT NAME:	BARRE TOWN	PLOT DATE:	7/8/2020
PROJECT NUMBER:	BF 0169(12)	DRAWN BY:	M. LOVETT
FILE NAME:	z12c576bdr_exc.dgn	CHECKED BY:	S. IRELAND
PROJECT LEADER:	D. KULL	DESIGNED BY:	S. LISTER
EXISTING CONDITIONS PLAN		SHEET	10 OF 10

SCALE 1" = 20' - 0"  
 20 0 20

