

REVIEWER NOTES

1. THERE WILL BE A TEMPORARY BRIDGE CONSTRUCTED DOWNSTREAM.
2. A SIMPLIFIED PAVEMENT DESIGN HAS BEEN UNDERTAKEN FOR THIS PROJECT.
3. THE BRIDGE HAS NOT YET BEEN DESIGNED. THEREFORE, A DIFFERENT TYPICAL SECTION MAY BE PROPOSED DURING DESIGN.
4. HYDRAULIC STANDARDS WILL NOT BE MET ON THIS PROJECT.

STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT BRIDGE PROJECT

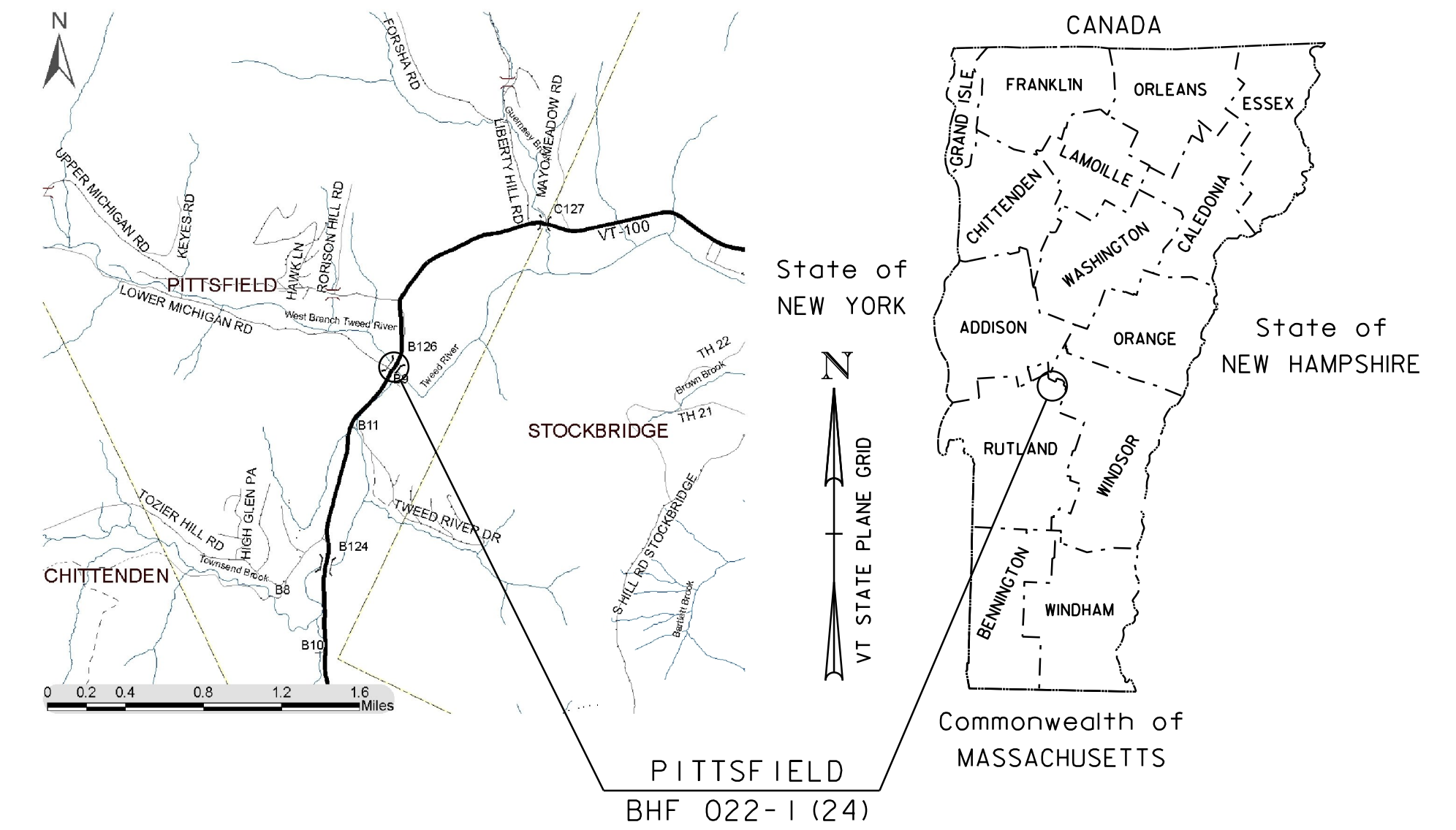
TOWN OF PITTSFIELD
COUNTY OF RUTLAND

ROUTE NO : VT RTE 100, RURAL MINOR ARTERIAL BRIDGE NO : 126

PROJECT LOCATION: 2.3 MILES SOUTH OF JUNCTION WITH VT ROUTE 107

PROJECT DESCRIPTION: DEMOLITION OF EXISTING TWO SPAN BRIDGE, AND REPLACEMENT WITH A NEW SINGLE SPAN BRIDGE OVER WEST BRANCH OF THE TWEED RIVER.

LENGTH OF STRUCTURE: 65.00 FEET
LENGTH OF ROADWAY: 235.00 FEET
LENGTH OF PROJECT: 300.00 FEET

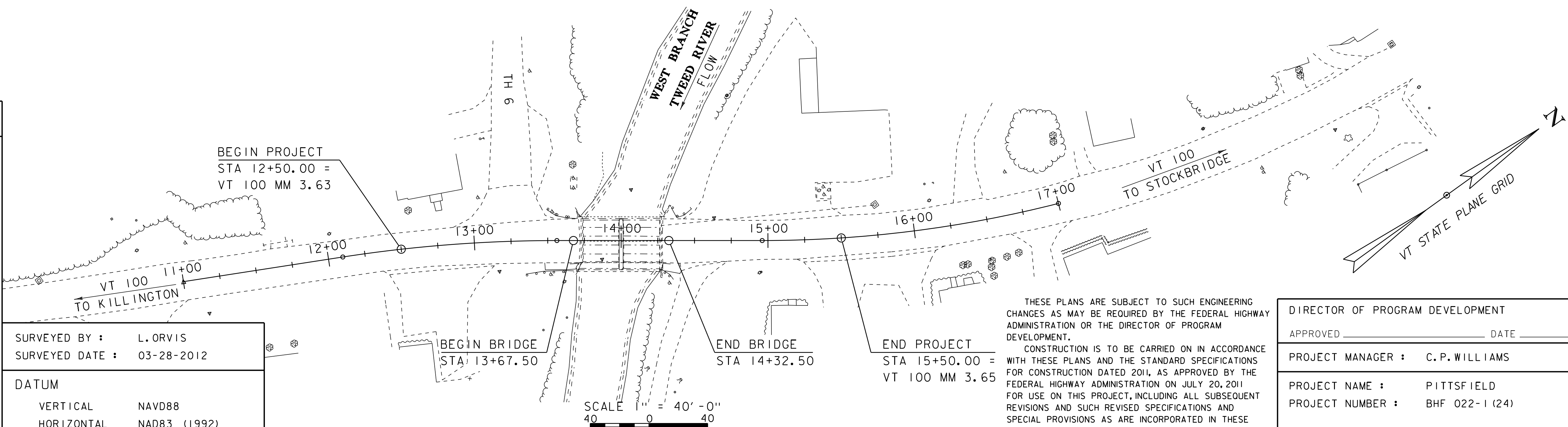


CONCEPTUAL PLANS 02-JAN-2013

QUALITY ASSURANCE PROGRAM: LEVEL 2

CONVENTIONAL SYMBOLS

COUNTY LINE	
TOWN LINE	
LIMITS OF ACCESS	
POINT OF ACCESS	
FENCE LINE	
STONE WALL	
TRAVELED WAY	
RAILROAD	
SURVEY LINE	
CULVERT	
POWER POLE	
TELEPHONE POLE	
TREES	
CONTROL OF ACCESS	
PROPERTY LINE	
R.O.W. TAKING LINE	
SLOPE RIGHTS	
TOP OF CUT	
TOE OF SLOPE	



SURVEYED BY : L. ORVIS
SURVEYED DATE : 03-28-2012
DATUM
VERTICAL NAVD88
HORIZONTAL NAD83 (1992)

SCALE 1" = 40' - 0"
0 40

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

DIRECTOR OF PROGRAM DEVELOPMENT	
APPROVED _____	DATE _____
PROJECT MANAGER : C. P. WILLIAMS	
PROJECT NAME :	PITTSFIELD
PROJECT NUMBER :	BHF 022-1 (24)
SHEET 1	OF 16 SHEETS

INDEX OF SHEETS

PLAN SHEETS

- 1 TITLE SHEET
- 2 PRELIMINARY INFORMATION SHEET
- 3 TYPICAL SECTIONS
- 4 LAYOUT SHEET
- 5 PROFILE SHEET
- 6 TEMPORARY BRIDGE LAYOUT SHEET
- 7 TEMPORARY BRIDGE PROFILE SHEET
- 8 EXSTING CONDITIONS SHEET
- 9 - 13 MAINLINE CROSS SECTIONS
- 14 - 16 CHANNEL CROSS SECTIONS

STANDARDS LIST

FINAL HYDRAULIC REPORT

TRAFFIC MAINTENANCE NOTES

1. MAINTAIN TWO-WAY TRAFFIC ON A TEMPORARY BRIDGE.
2. TRAFFIC SIGNALS ARE NOT NECESSARY.
3. SIDEWALKS ARE NOT NECESSARY
4. THE APPROACHES FOR THE TEMPORARY BRIDGE SHALL BE PAVED.

DESIGN VALUES

1. DESIGN LIVE LOAD	HL-93
2. FUTURE PAVEMENT	dp: 3.0 INCH
3. DESIGN SPAN	L: 65.00 FT
4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)	Δ: ---
5. PRESTRESSING STRAND (0.60 INCH DIAMETER - LOW RELAX)	fy: 270 KSI
6. PRESTRESSED CONCRETE STRENGTH	f'c: 6.0 KSI
7. PRESTRESSED CONCRETE RELEASE STRENGTH	f'cr: 5.0 KSI
8. CONCRETE, HIGH PERFORMANCE CLASS AA	f'c: 4.0 KSI
9. CONCRETE, HIGH PERFORMANCE CLASS A	f'c: 4.0 KSI
10. CONCRETE, HIGH PERFORMANCE CLASS B	f'c: 3.5 KSI
11. CONCRETE, CLASS C	f'c: 3.0 KSI
12. REINFORCING STEEL	fy: 60 KSI
13. STRUCTURAL STEEL AASHTO M270 (WEATHERING)	fy: 50 KSI
14. SOIL UNIT WEIGHT	γ: 0.140 KCF
15. NOMINAL BEARING RESISTANCE OF SOIL	qn: 4.0 KSF
16. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	φ: ---
17. NOMINAL BEARING RESISTANCE OF ROCK	qn: 10.0 KSF
18. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	φ: ---
19. NOMINAL AXIAL PILE RESISTANCE	qp: ---
20. PILE YIELD STRENGTH ASTM A572	fy: ---
21. PILE SIZE	---
22. EST. PILE LENGTH	Lp: ---
23. PILE RESISTANCE FACTOR	φ: ---
24. LATERAL PILE DEFLECTION	Δ: ---
25. BASIC WIND SPEED	V3s: ---
26. MINIMUM GROUND SNOW LOAD	pg: ---
27. SEISMIC DATA	PGA: --- Ss: --- S1: ---

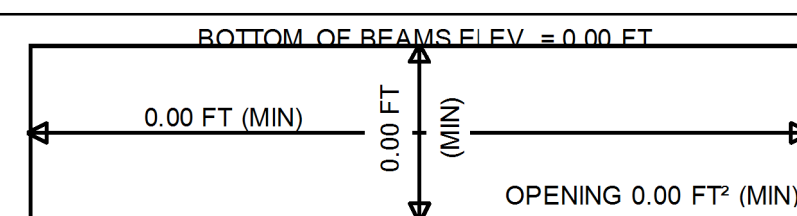
LRFR LOAD RATING FACTORS

LOADING LEVELS	TRUCK						
	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:							

AS BUILT "REBAR" DETAIL

LEVEL I	LEVEL II	LEVEL III
TYPE:	TYPE:	TYPE:
GRADE:	GRADE:	GRADE:

TEMPORARY BRIDGE PROFILE ALONG TEMP CL

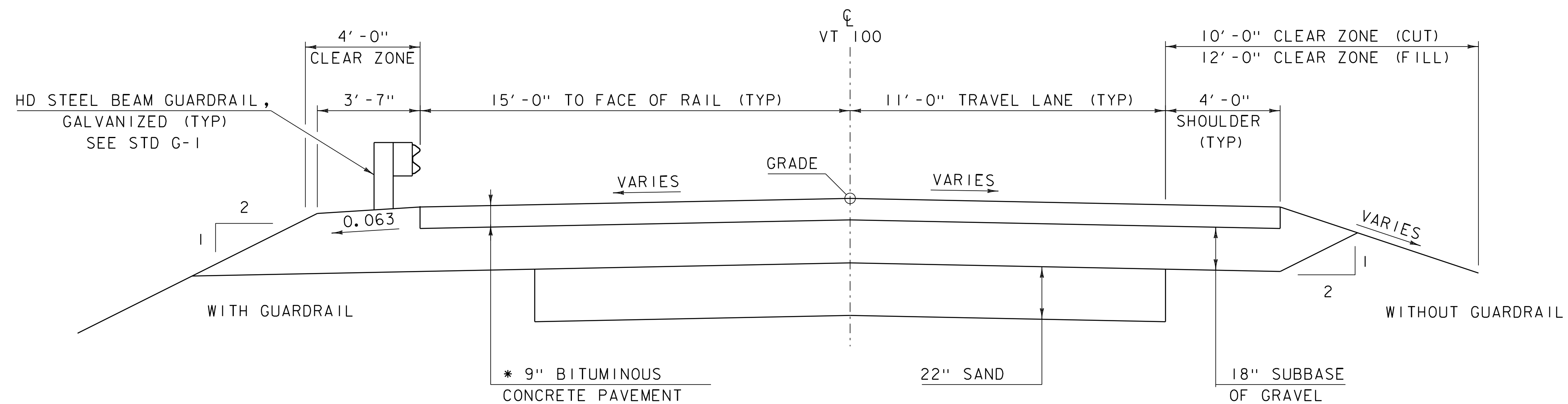


TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT	20 year ESAL for flexible pavement from 2014 to 2034 : 2650000	40 year ESAL for flexible pavement from 2014 to 2054 : 5954000	Design Speed : 35 mph
2014	3300	370	57	8.3	360			
2034	3500	390	57	11.9	550			

PROJECT NAME: **PITTSFIELD**
PROJECT NUMBER: **BHF 022-1(24)**

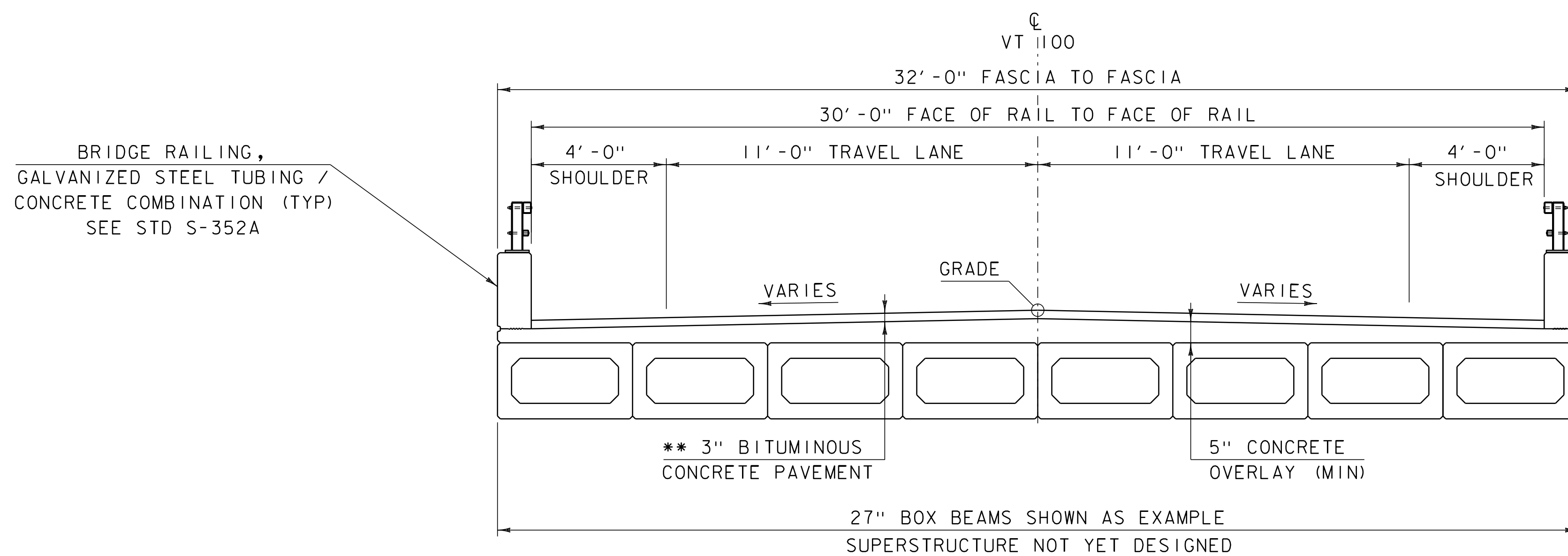
FILE NAME: **10b416s10b416excel.dgn** PLOT DATE: 12/14/2012
PROJECT LEADER: **C.P.WILLIAMS** DRAWN BY: **D.D.BEARD**
DESIGNED BY: CHECKED BY:
PRELIMINARY INFORMATION SHEET 1 SHEET 2 OF 16



PROPOSED VT 100 TYPICAL SECTION

SCALE $\frac{3}{8}" = 1'-0"$

- * 1 1/2" TYPE I OR II OVER
- 1 1/2" TYPE I OR II OVER
- 3" TYPE III OR IV OVER
- 3" TYPE III OR IV



- ** 1 1/2" TYPE I OR II OVER
- 1 1/2" TYPE I OR II

PROPOSED BRIDGE TYPICAL SECTION

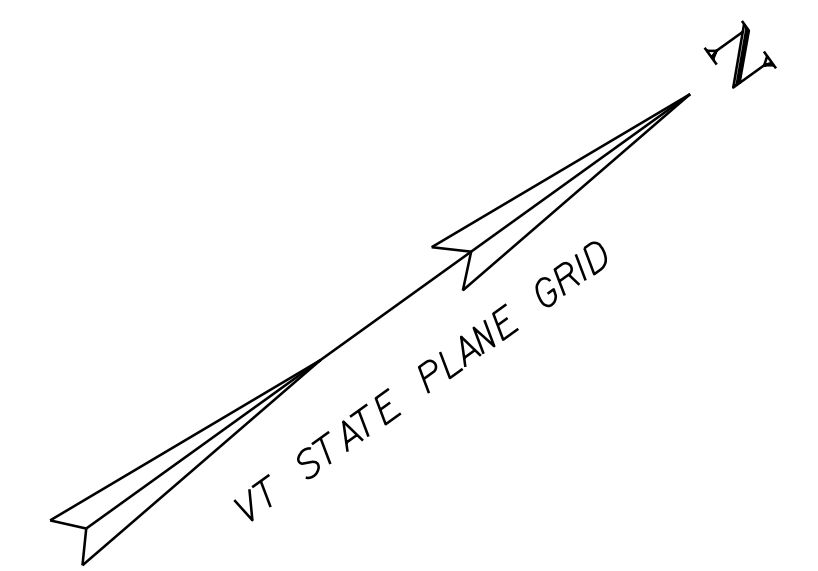
SCALE $\frac{3}{8}" = 1'-0"$

MATERIAL TOLERANCES
(IF USED ON PROJECT)

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

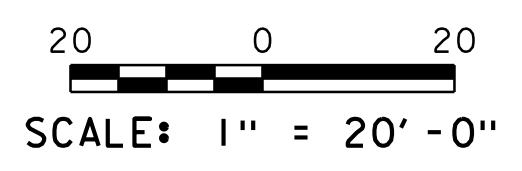
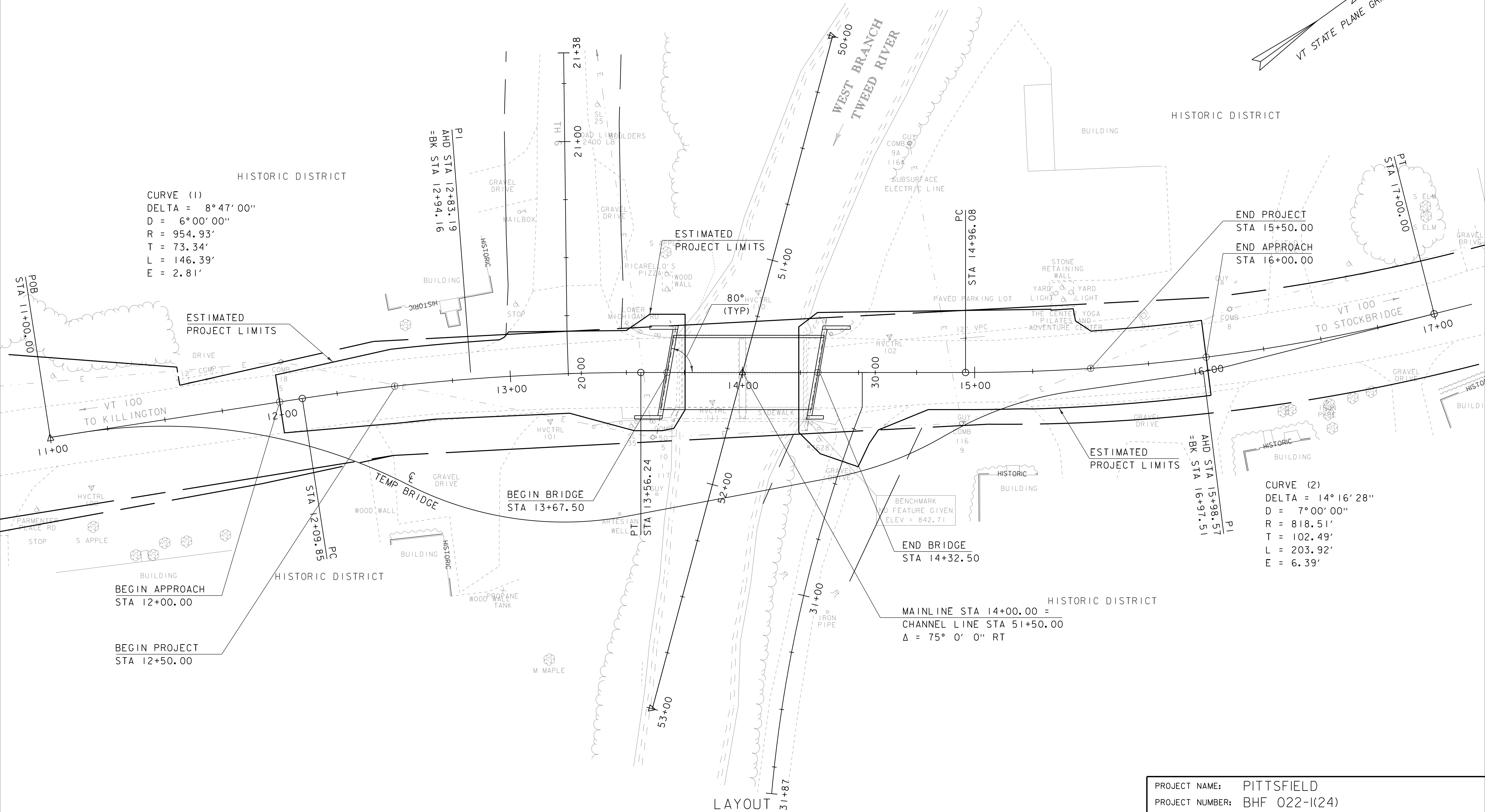
PROJECT NAME: PITTSFIELD
PROJECT NUMBER: BHF 022-1(24)

FILE NAME: I0b415\sl0b415\typical.dgn PLOT DATE: 02-JAN-2013
PROJECT LEADER: C.P.WILLIAMS DRAWN BY: D.D.BEARD
DESIGNED BY: G.SWEENEY CHECKED BY: G.SWEENEY
TYPICAL SECTIONS SHEET 3 OF 16

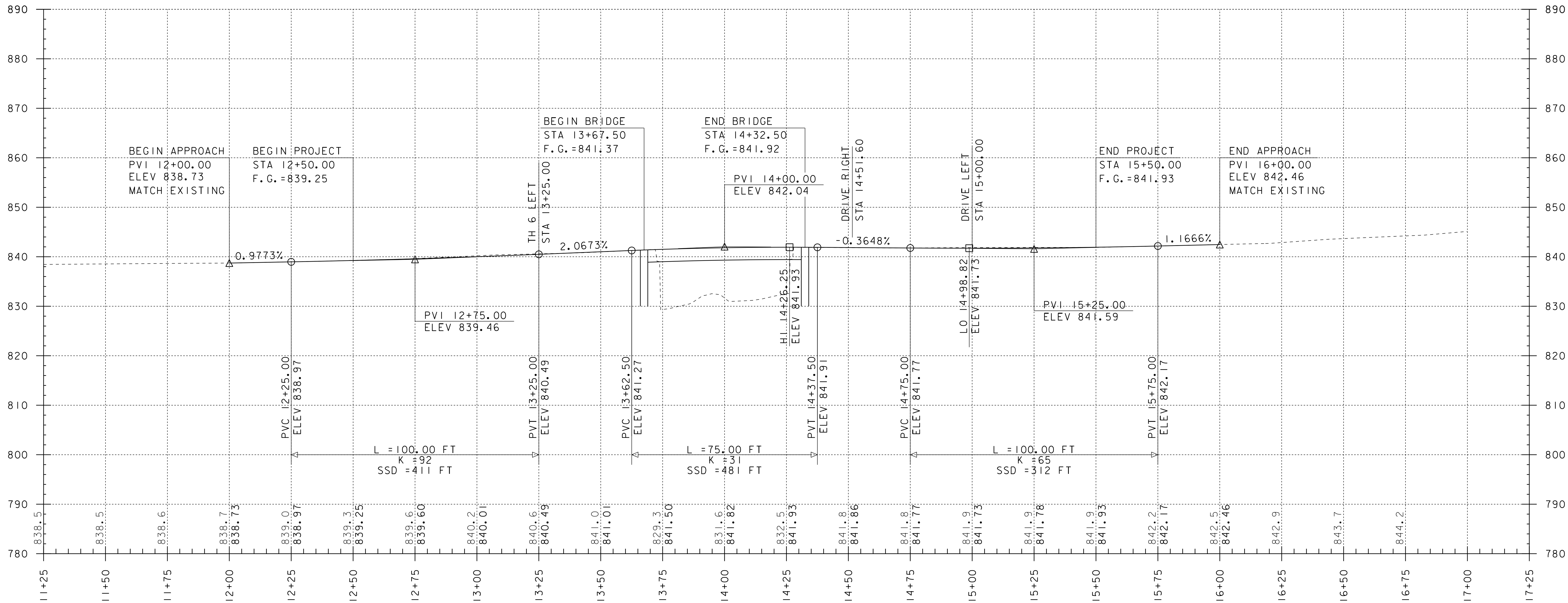


CURVE (1)
 DELTA = 8° 47' 00"
 D = 6° 00' 00"
 R = 954.93'
 T = 73.34'
 L = 146.39'
 E = 2.81'

CURVE (2)
 DELTA = 14° 16' 28"
 D = 7° 00' 00"
 R = 818.51'
 T = 102.49'
 L = 203.92'
 E = 6.39'



PROJECT NAME: PITTSFIELD	
PROJECT NUMBER: BHF 022-1(24)	
FILE NAME: s10b416bdr.dgn	PLOT DATE: 02-JAN-2013
PROJECT LEADER: C.P.WILLIAMS	DRAWN BY: D.D.BEARD
DESIGNED BY: G.SWEENEY	CHECKED BY: G.SWEENEY
LAYOUT SHEET	SHEET 4 OF 16



PROFILE ALONG VT 100

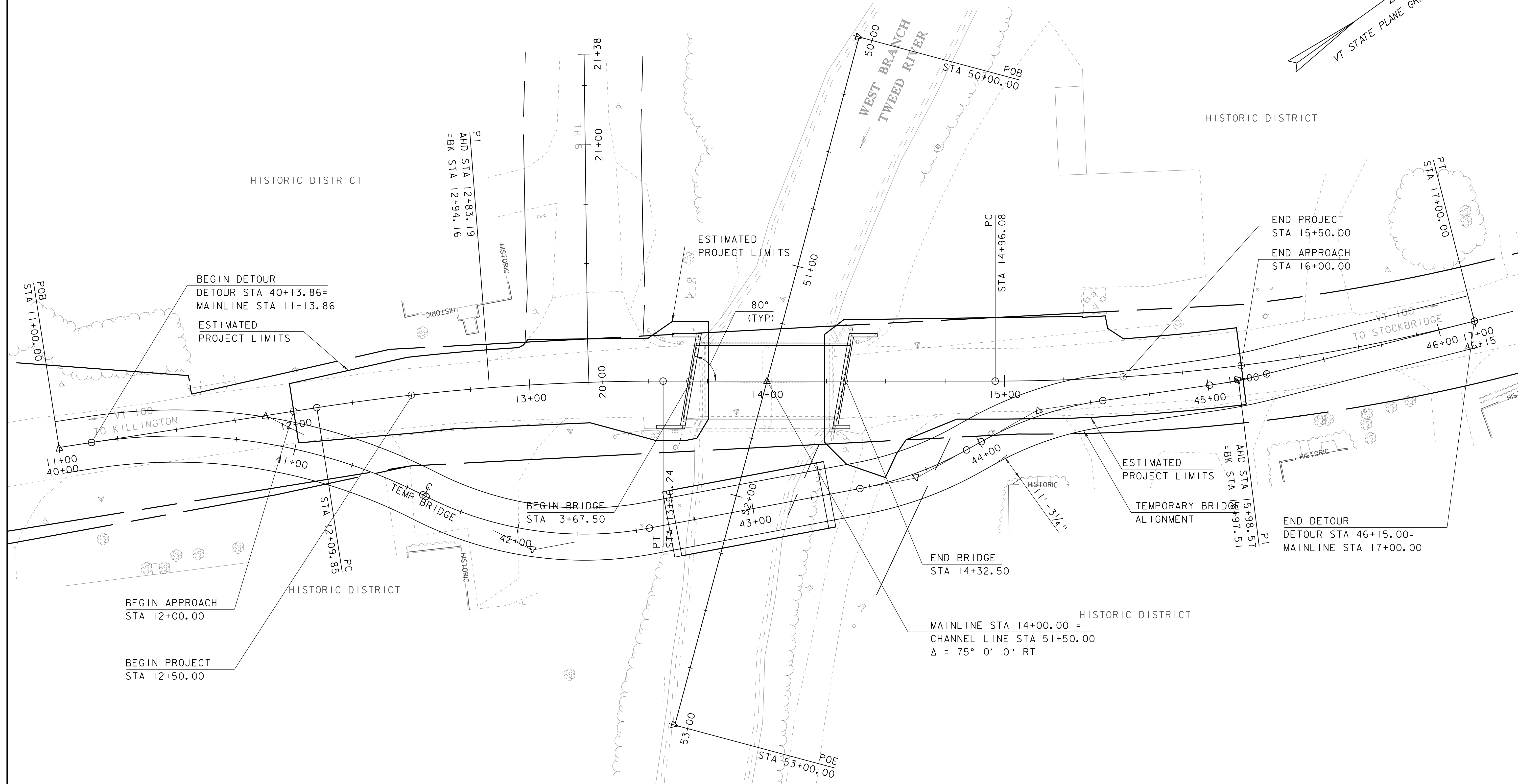
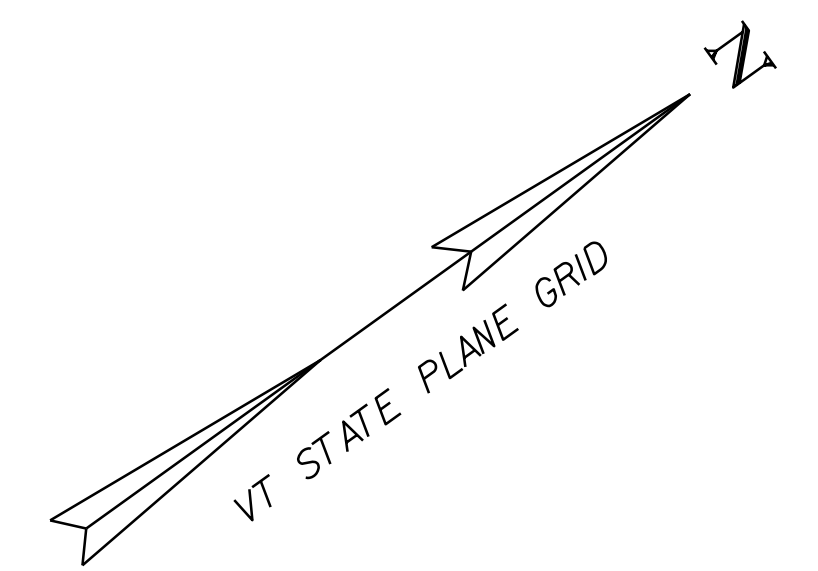
HORIZONTAL SCALE: 1" = 20'-0"
 VERTICAL SCALE: 1" = 10'-0"

NOTE:

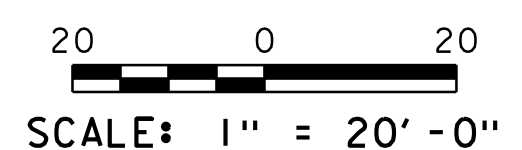
ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG PROPOSED CENTERLINE.

ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADES ALONG PROPOSED CENTERLINE.

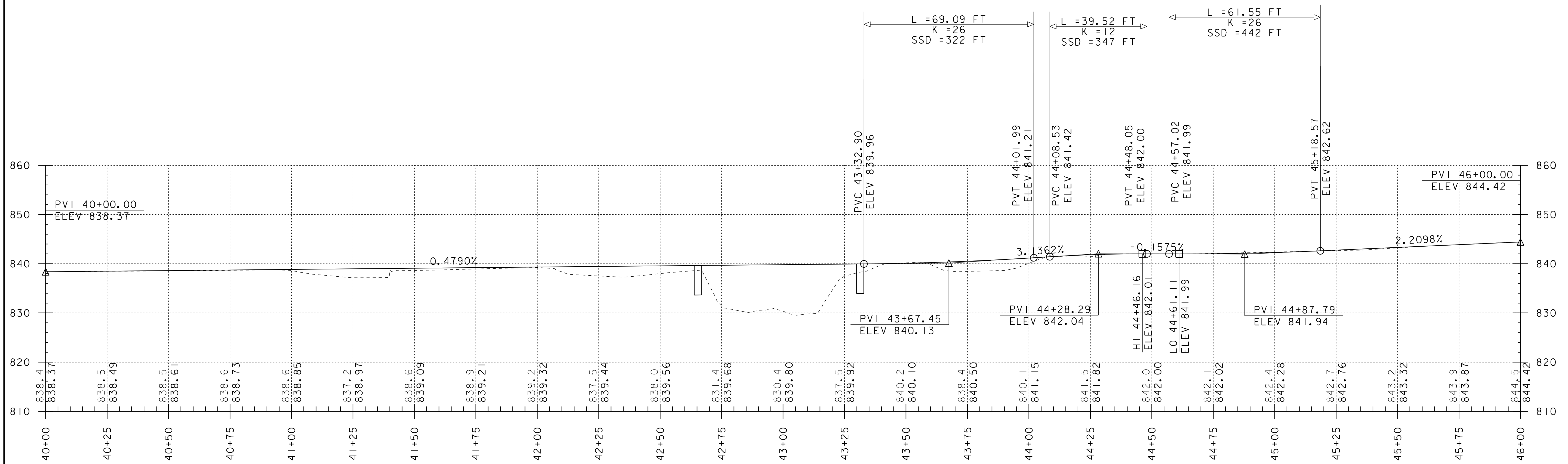
PROJECT NAME: PITTSFIELD	
PROJECT NUMBER: BHF 022-1(24)	
FILE NAME: s10b416pro.dgn	PLOT DATE: 02-JAN-2013
PROJECT LEADER: C.P. WILLIAMS	DRAWN BY: D.D.BEARD
DESIGNED BY: G.SWEENEY	CHECKED BY: G.SWEENEY
VT 100 PROFILE	SHEET 5 OF 16



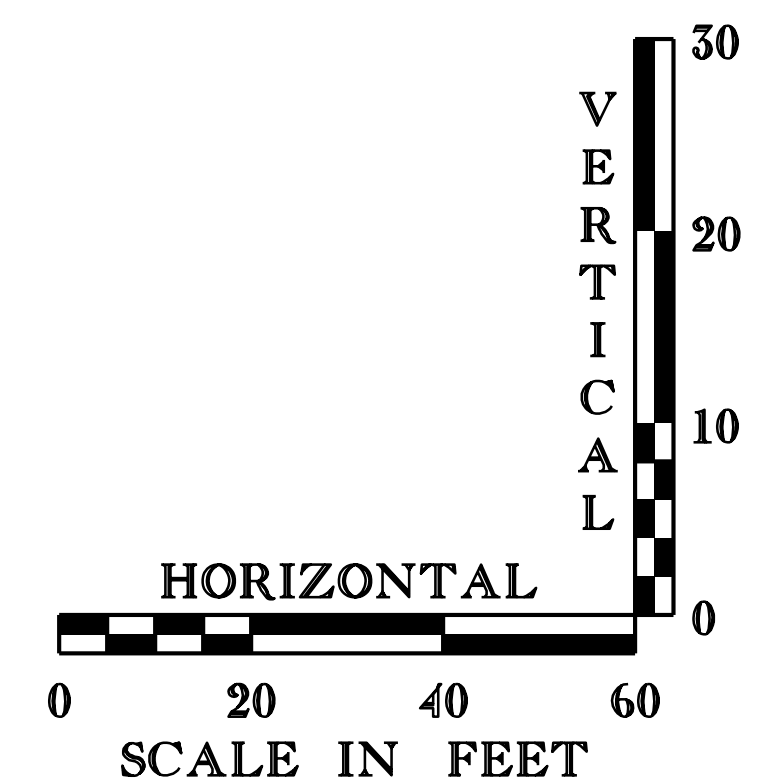
DOWNSTREAM DETOUR LAYOUT



PROJECT NAME: PITTSFIELD	
PROJECT NUMBER: BHF 022-1(24)	
FILE NAME: s10b416bdr.dgn	PLOT DATE: 02-JAN-2013
PROJECT LEADER: C. WILLIAMS	DRAWN BY: D.D.BEARD
DESIGNED BY: -----	CHECKED BY: G.SWEENEY
DOWNSTREAM DETOUR LAYOUT SHEET	SHEET 6 OF 16



DOWNSTREAM TEMPORARY BRIDGE PROFILE

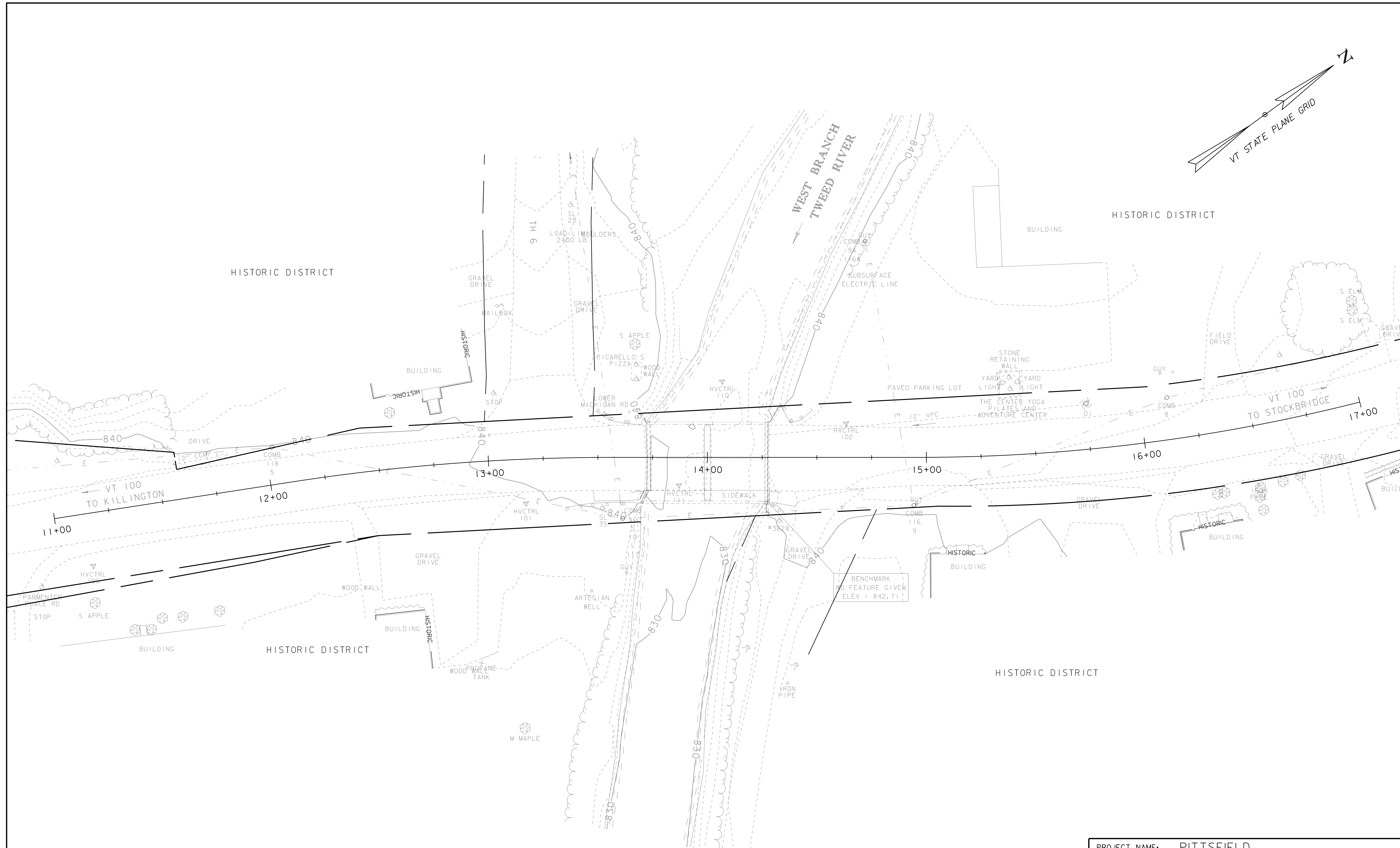
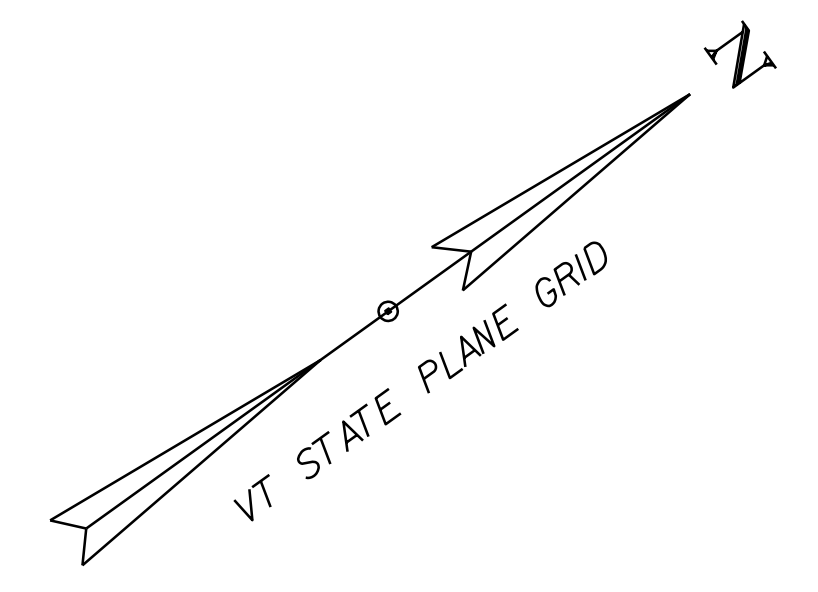


NOTE:

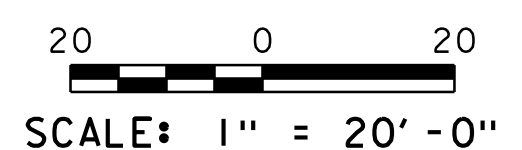
GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG ϕ

GRADES SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADE ALONG ϕ

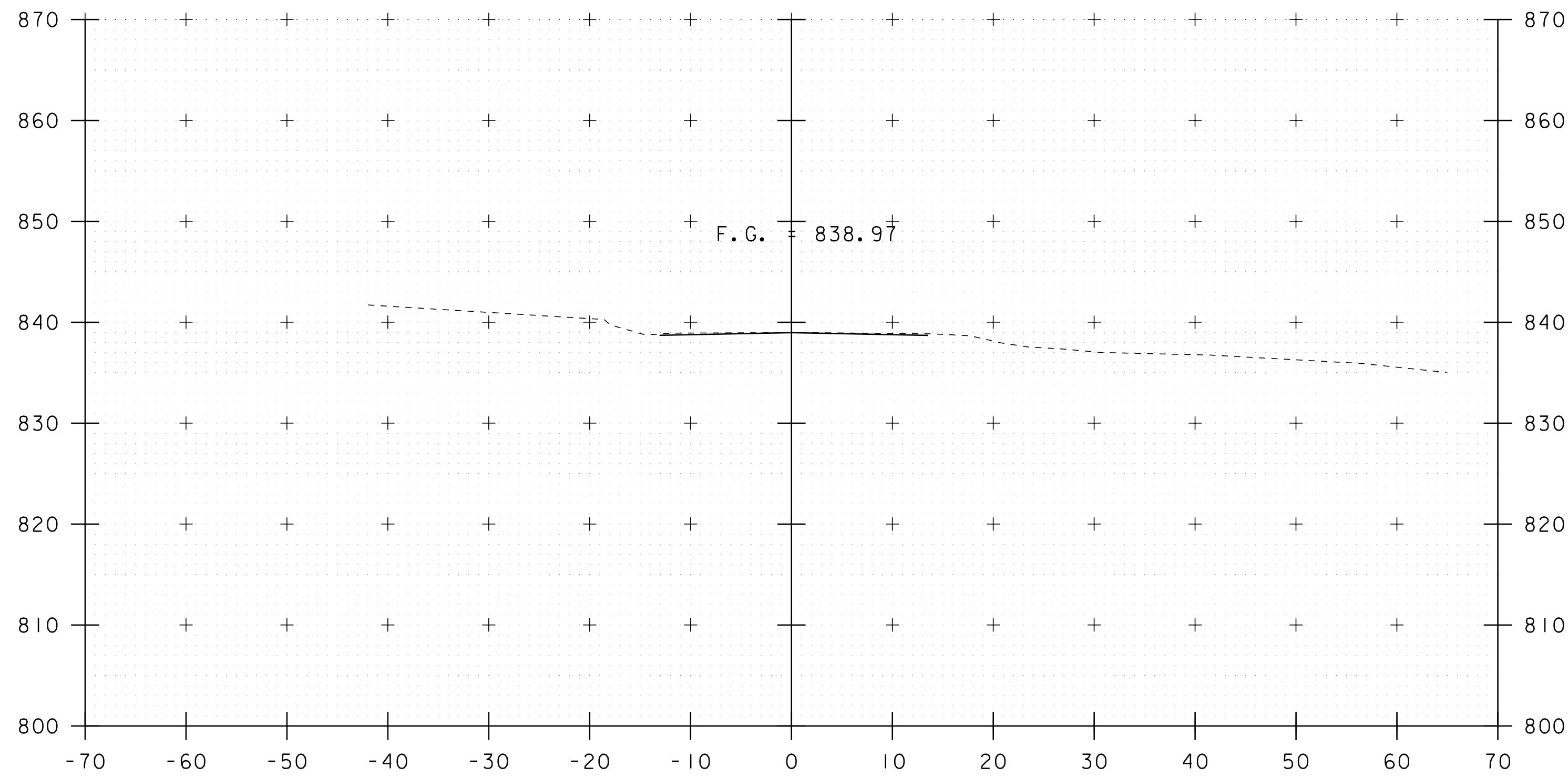
PROJECT NAME:	PITTSFIELD
PROJECT NUMBER:	BHF 022-1(24)
FILE NAME:	I0b416\si0b416tempbridge.dgn
PROJECT LEADER:	C.P.WILLIAMS
DESIGNED BY:	G.SWEENEY
DOWNSTREAM TEMPORARY BRIDGE PROFILE	
PLOT DATE:	02-JAN-2013
DRAWN BY:	D.D.BEARD
CHECKED BY:	G.SWEENEY
SHEET	7 OF 16



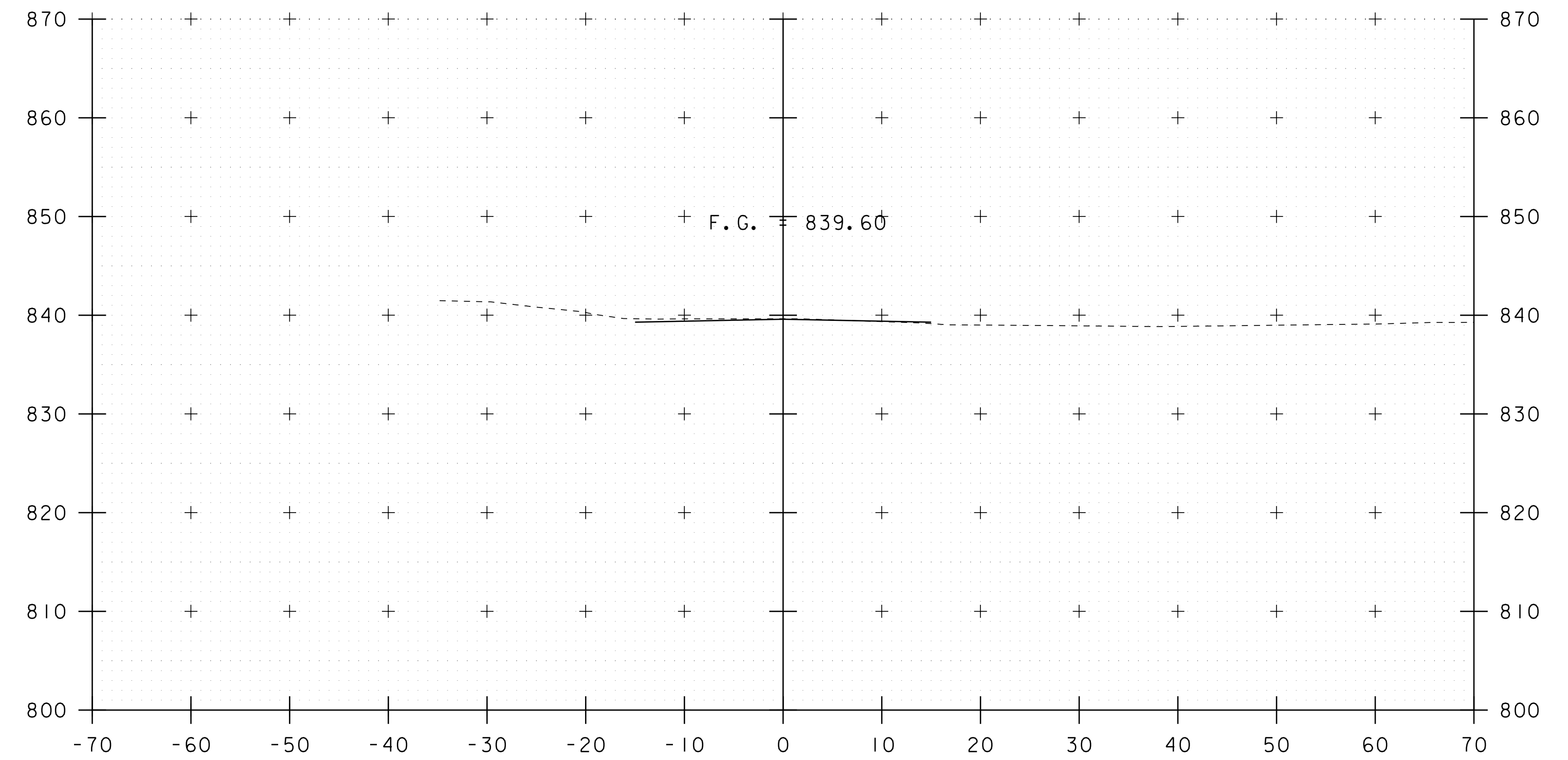
EXISTING CONDITIONS



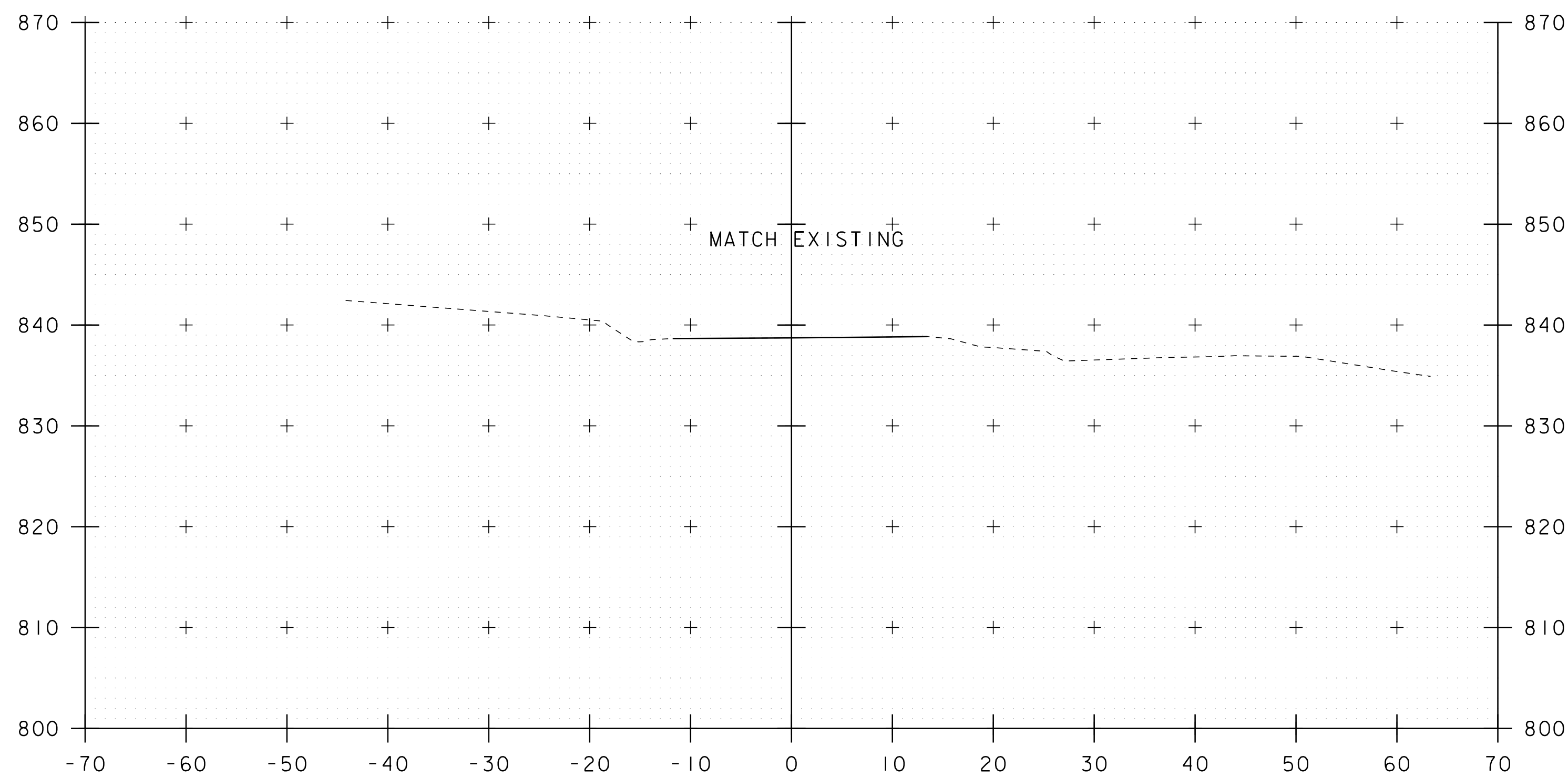
PROJECT NAME:	PITTSFIELD	FILE NAME:	10b416/s10b416bdrero.dgn	PLOT DATE:	02-JAN-2013
PROJECT NUMBER:	BHF 022-1(24)	PROJECT LEADER:	C.P.WILLIAMS	DRAWN BY:	D.D.BEARD
		DESIGNED BY:	G.SWEENEY	CHECKED BY:	G.SWEENEY
		EXISTING CONDITIONS SHEET		SHEET	8 OF 16



12+25

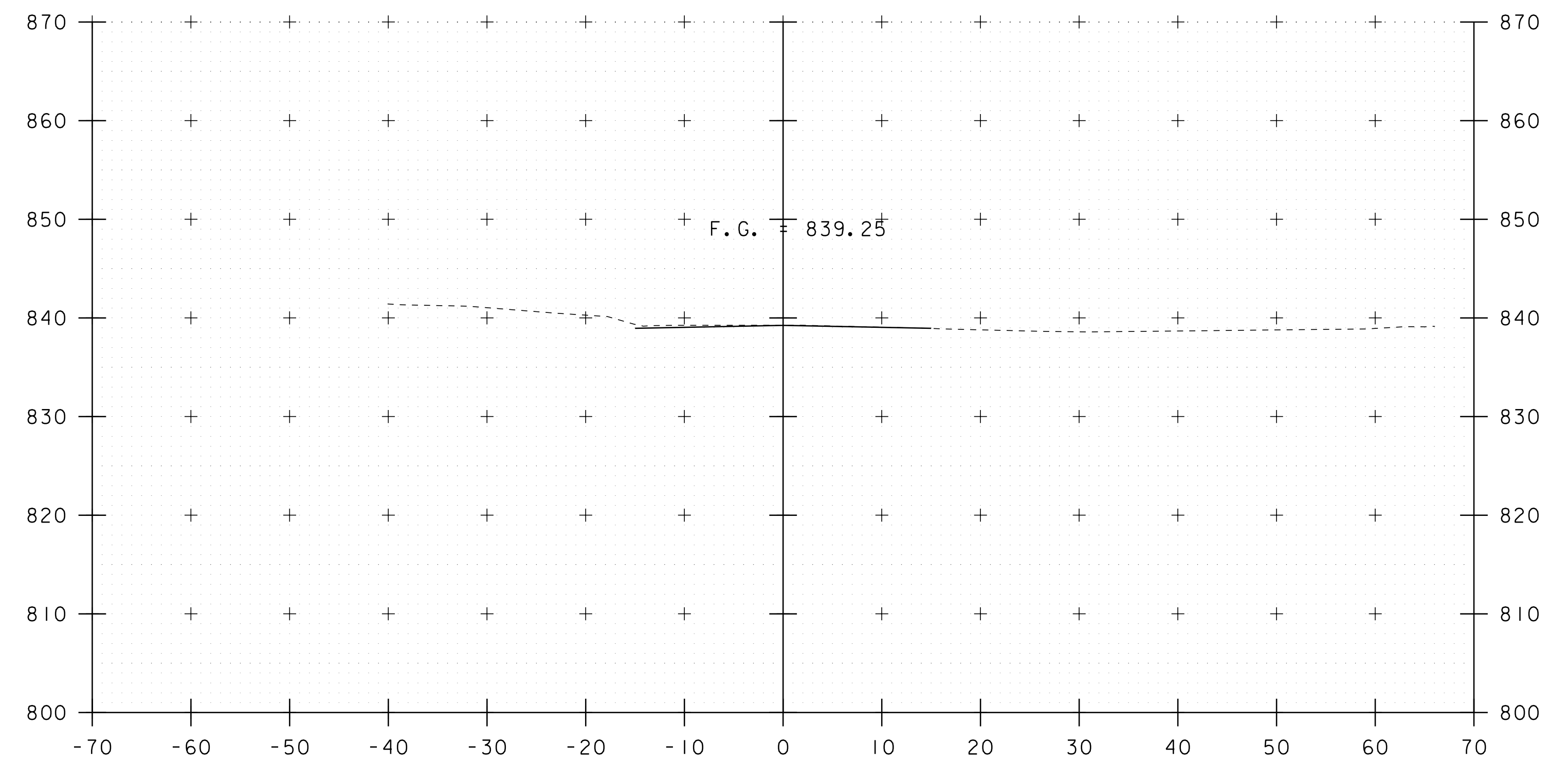


12+75



12+00

STA 12+00.00
BEGIN APPROACH

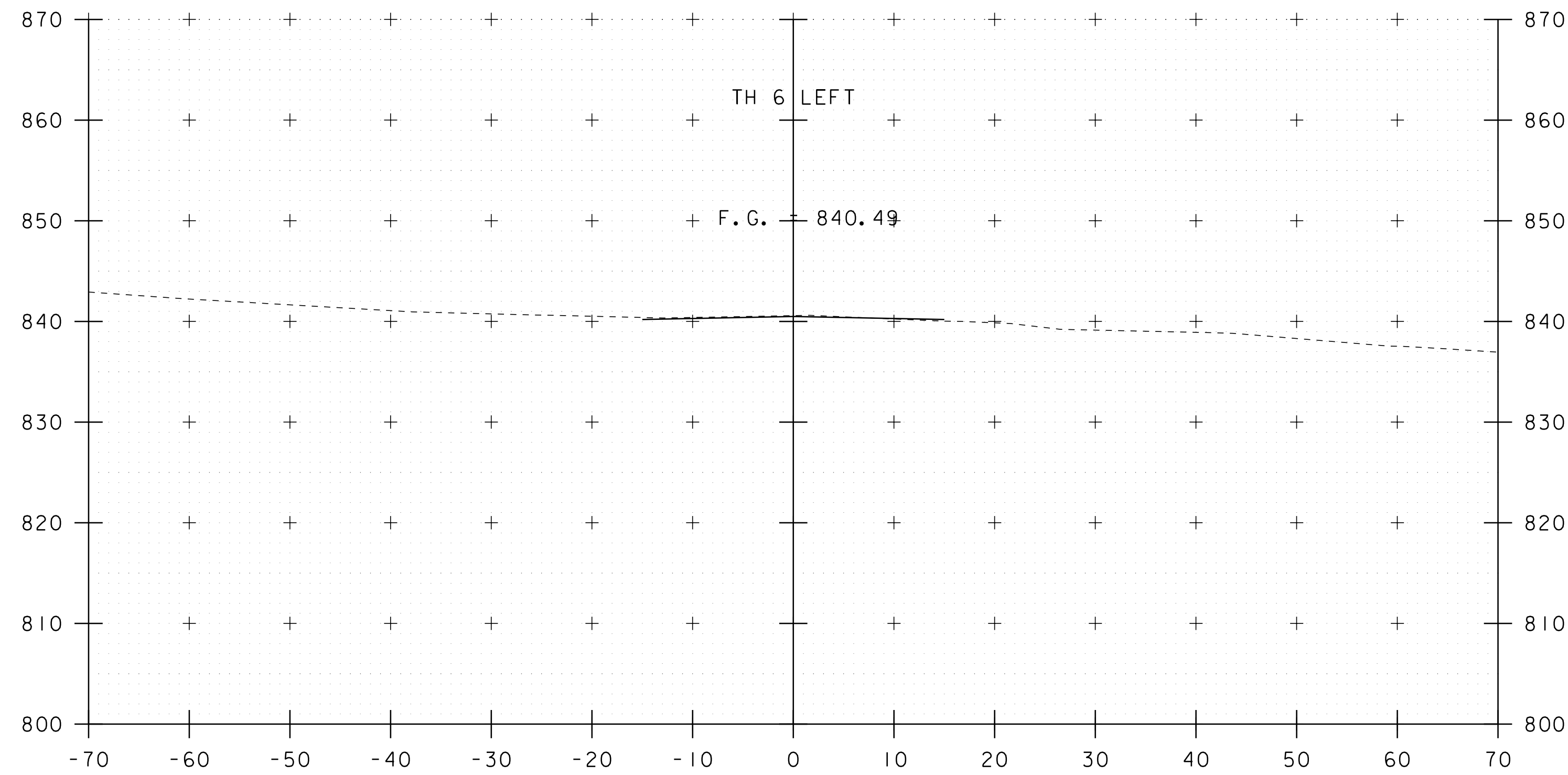


12+50

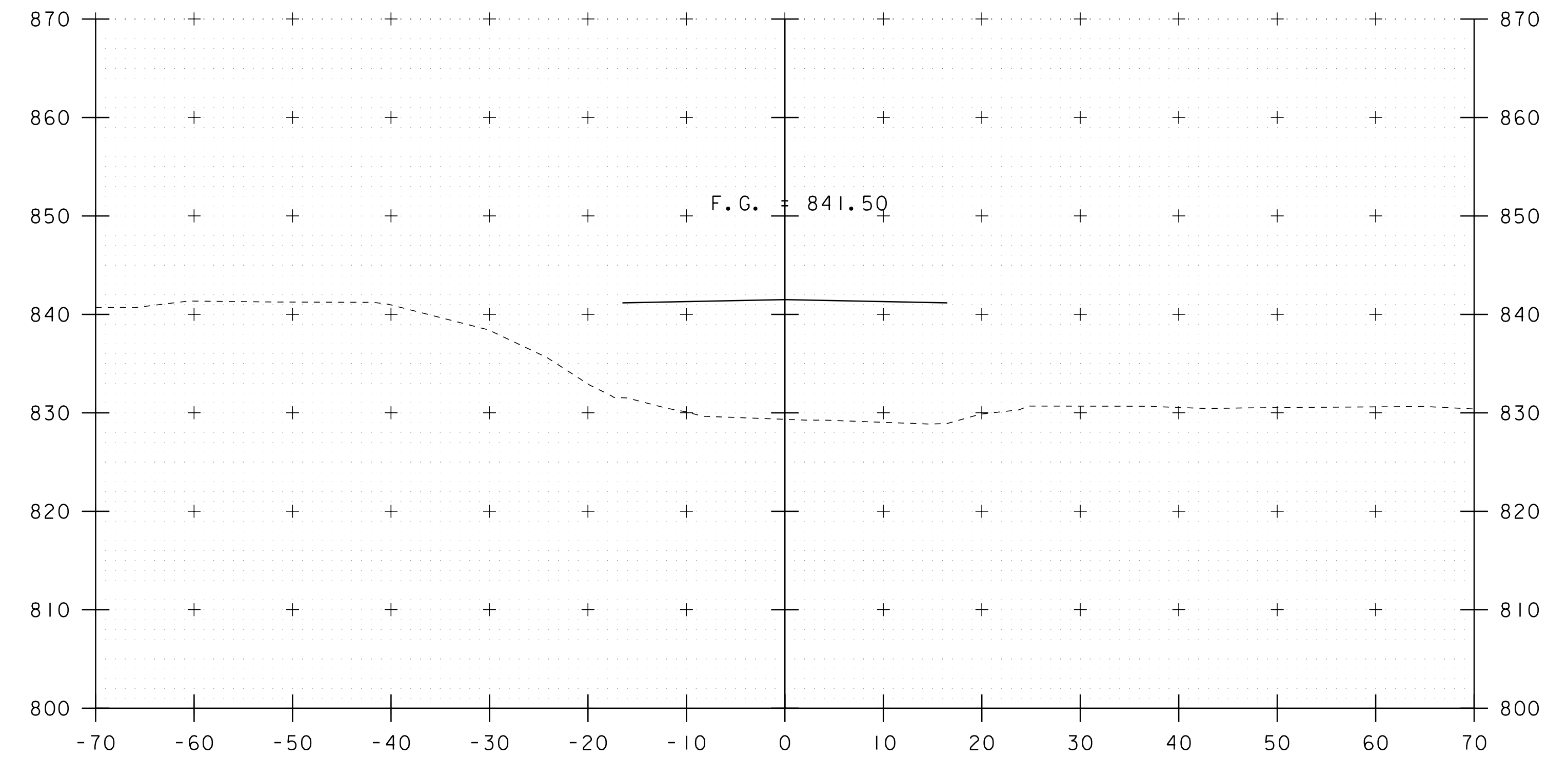
STA 12+50.00
BEGIN PROJECT

STA. 12+00 TO STA. 12+75

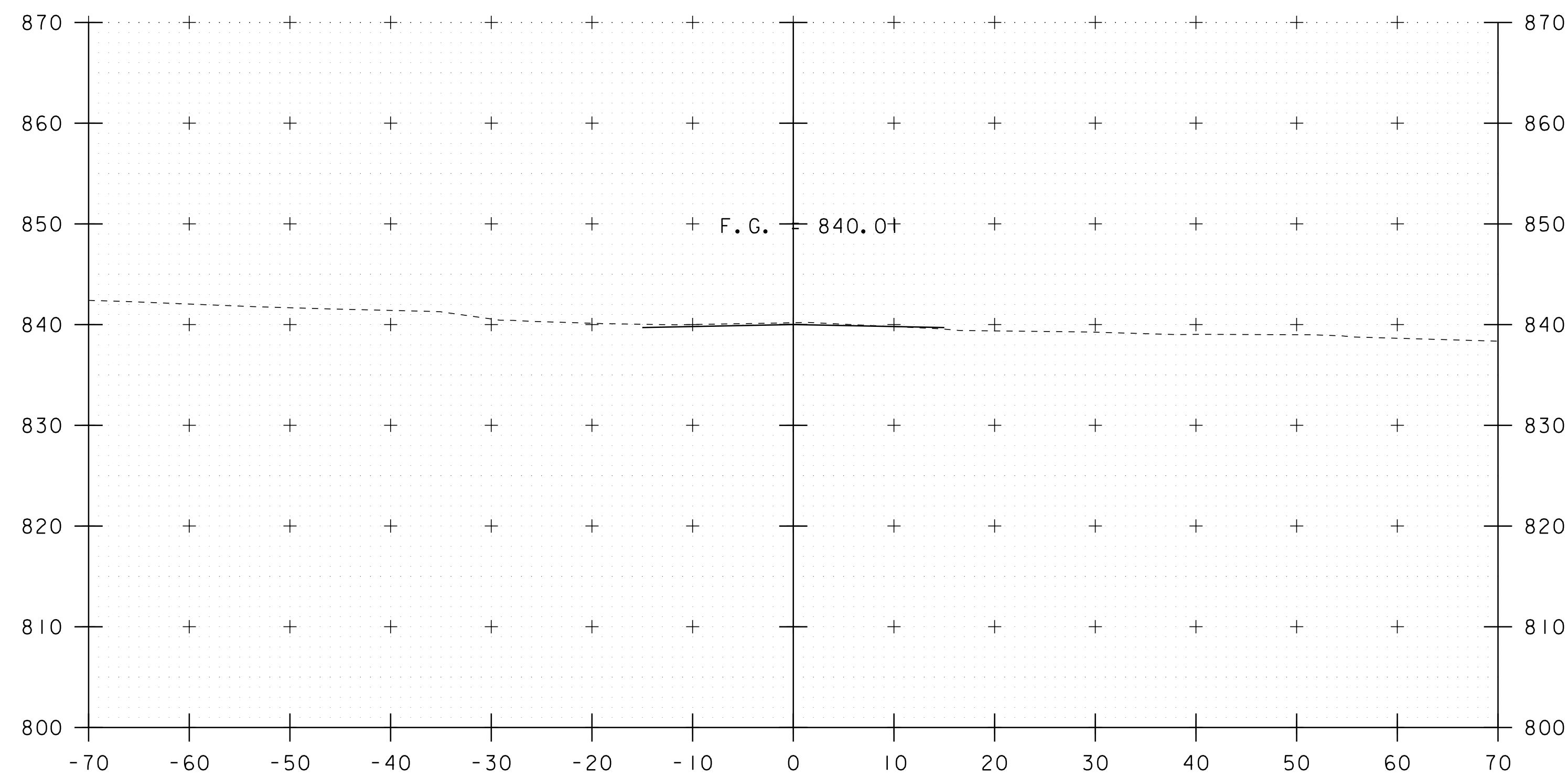
PROJECT NAME: PITTSFIELD	
PROJECT NUMBER: BHF 022-1(24)	
FILE NAME: s10b416xsl.dgn	PLOT DATE: 02-JAN-2013
PROJECT LEADER: C.P.WILLIAMS	DRAWN BY: D.D.BEARD
DESIGNED BY: G.SWEENEY	CHECKED BY: G.SWEENEY
VT 100 CROSS SECTIONS (1)	SHEET 9 OF 16



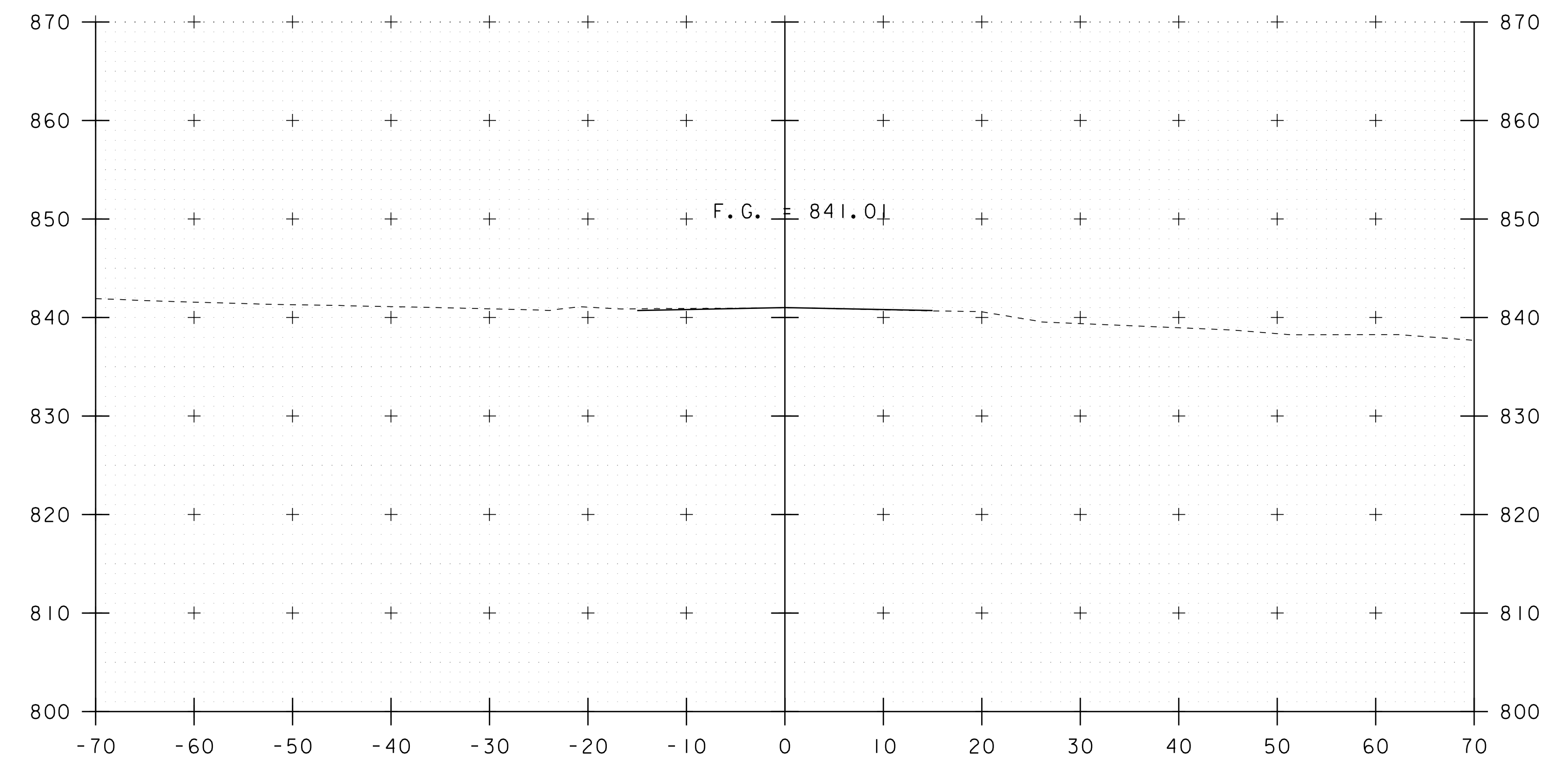
13+25



13+75



13+00

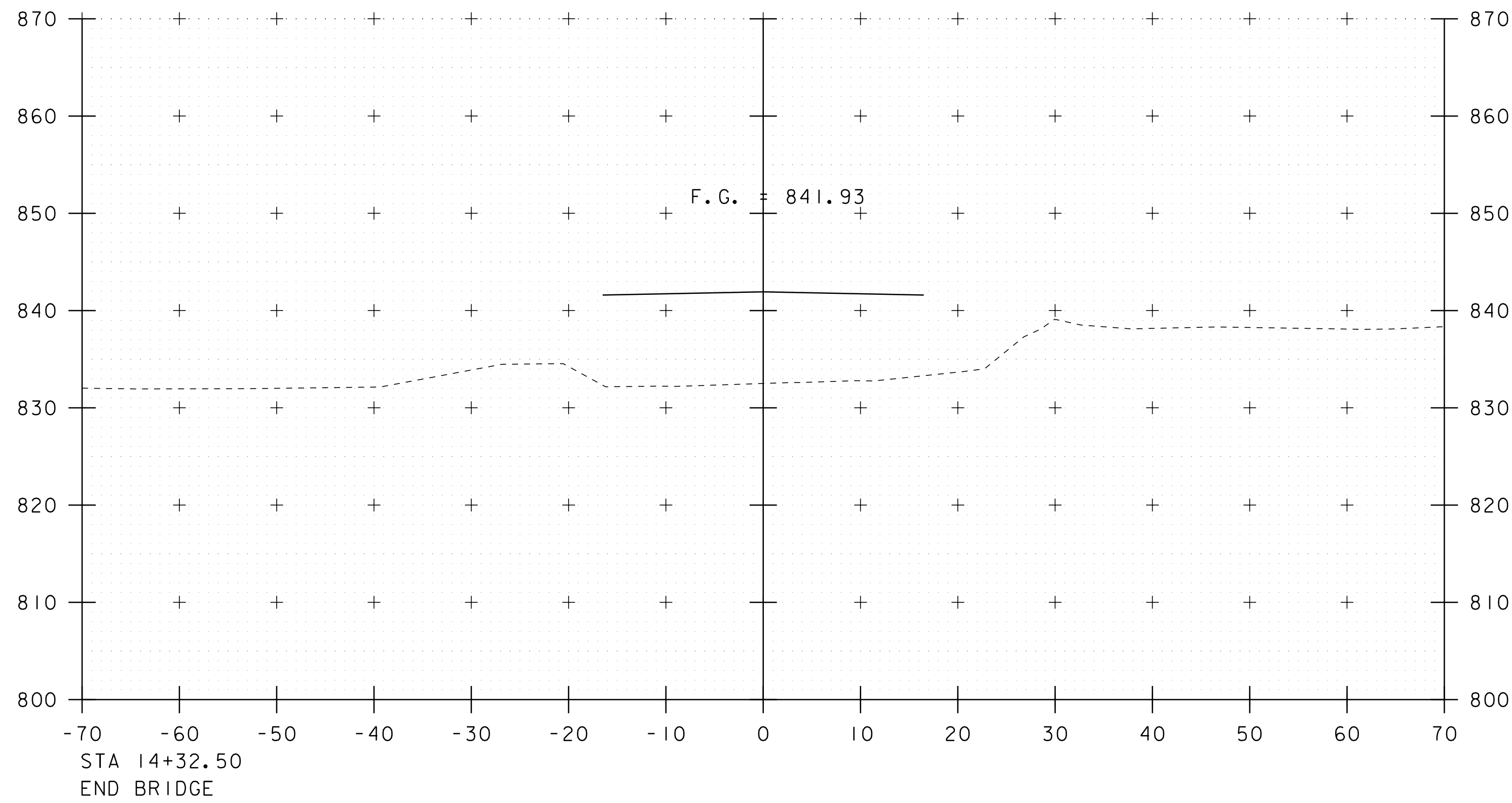


13+50

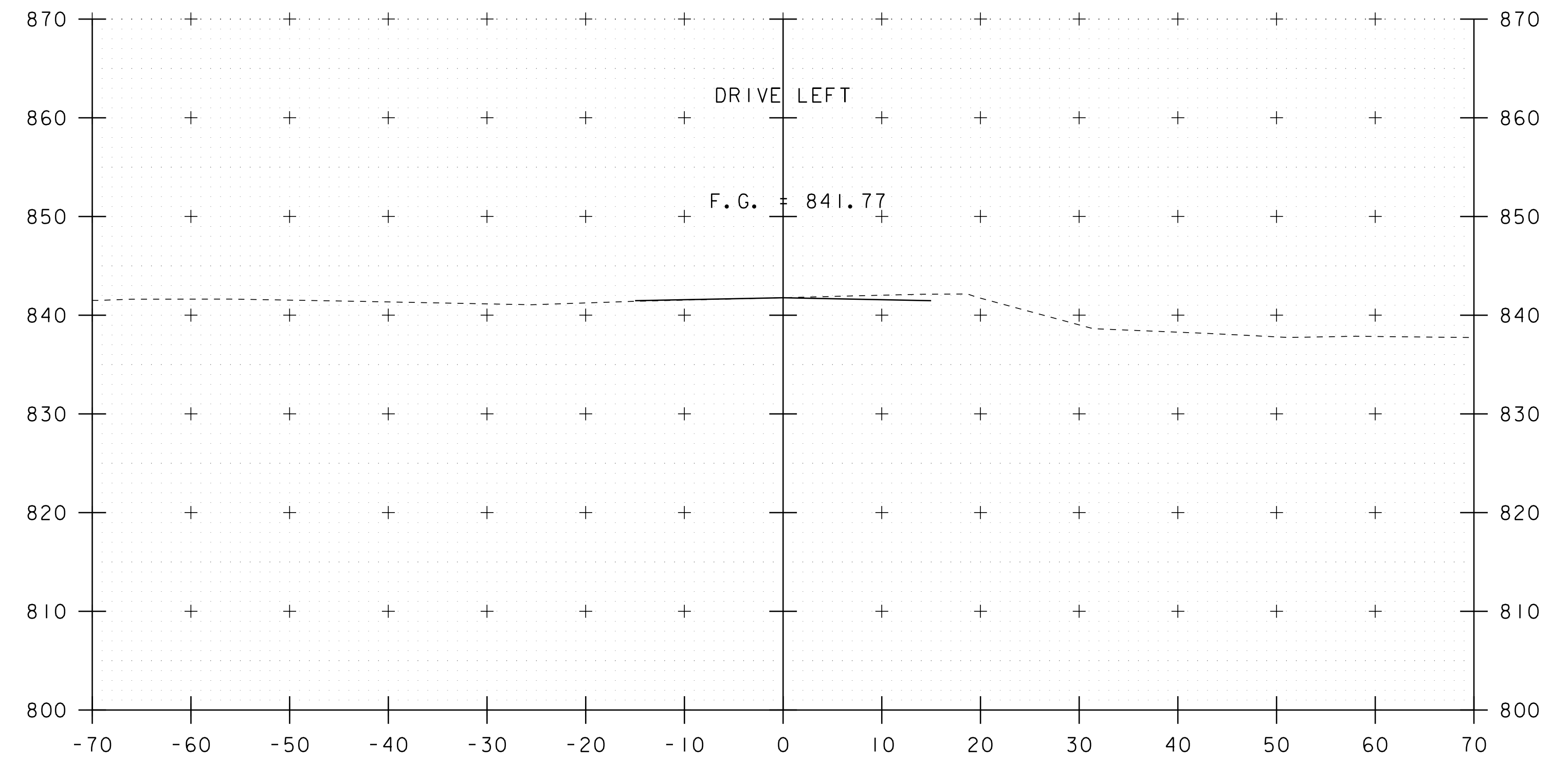
STA. 13+67.50
BEGIN BRIDGE

STA. 13+00 TO STA. 13+75

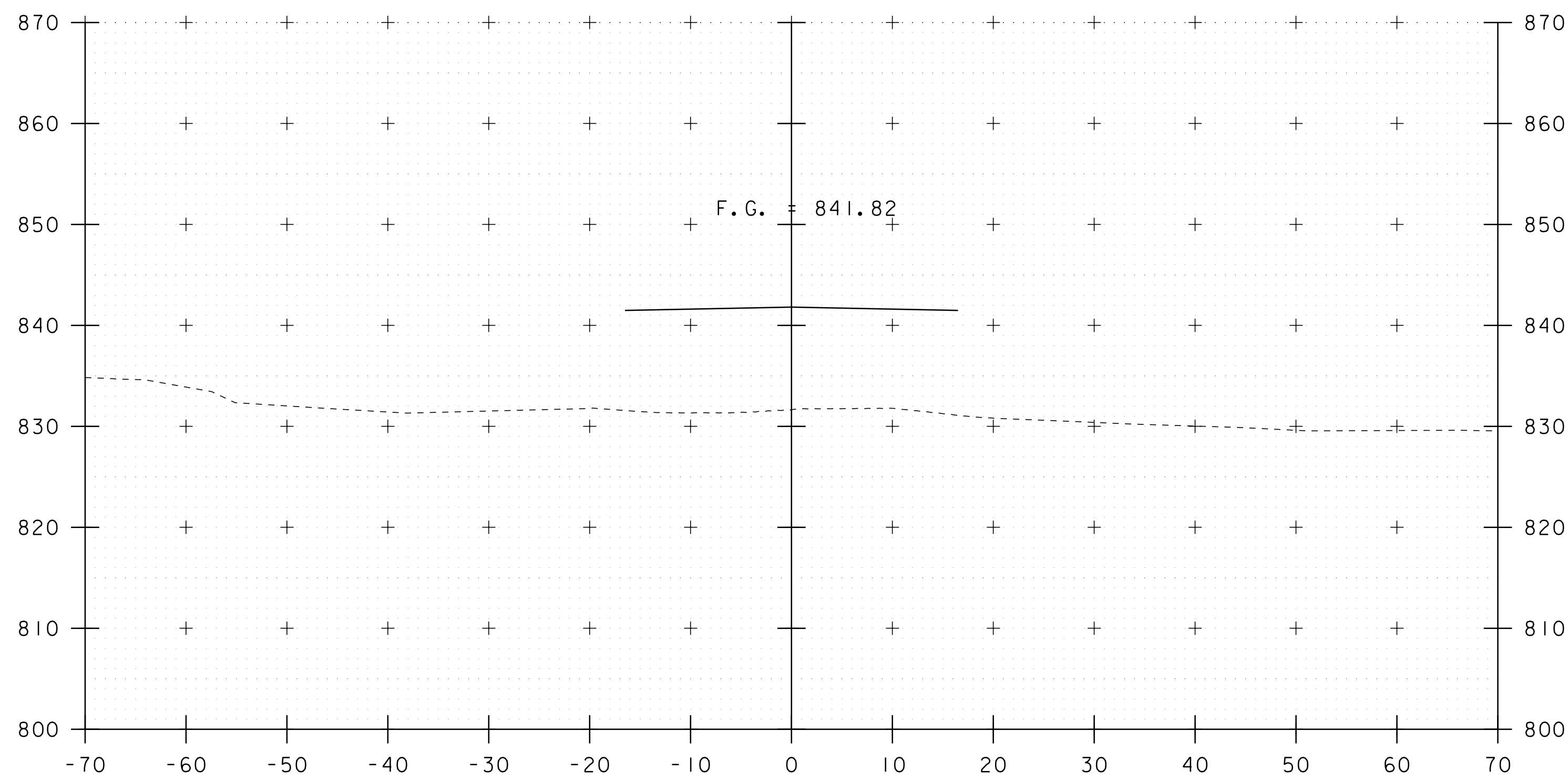
PROJECT NAME: PITTSFIELD	
PROJECT NUMBER: BHF 022-1(24)	
FILE NAME: s10b416xsl.dgn	PLOT DATE: 02-JAN-2013
PROJECT LEADER: C.P.WILLIAMS	DRAWN BY: D.D.BEARD
DESIGNED BY: G.SWEENEY	CHECKED BY: G.SWEENEY
VT 100 CROSS SECTIONS (2)	SHEET 10 OF 16



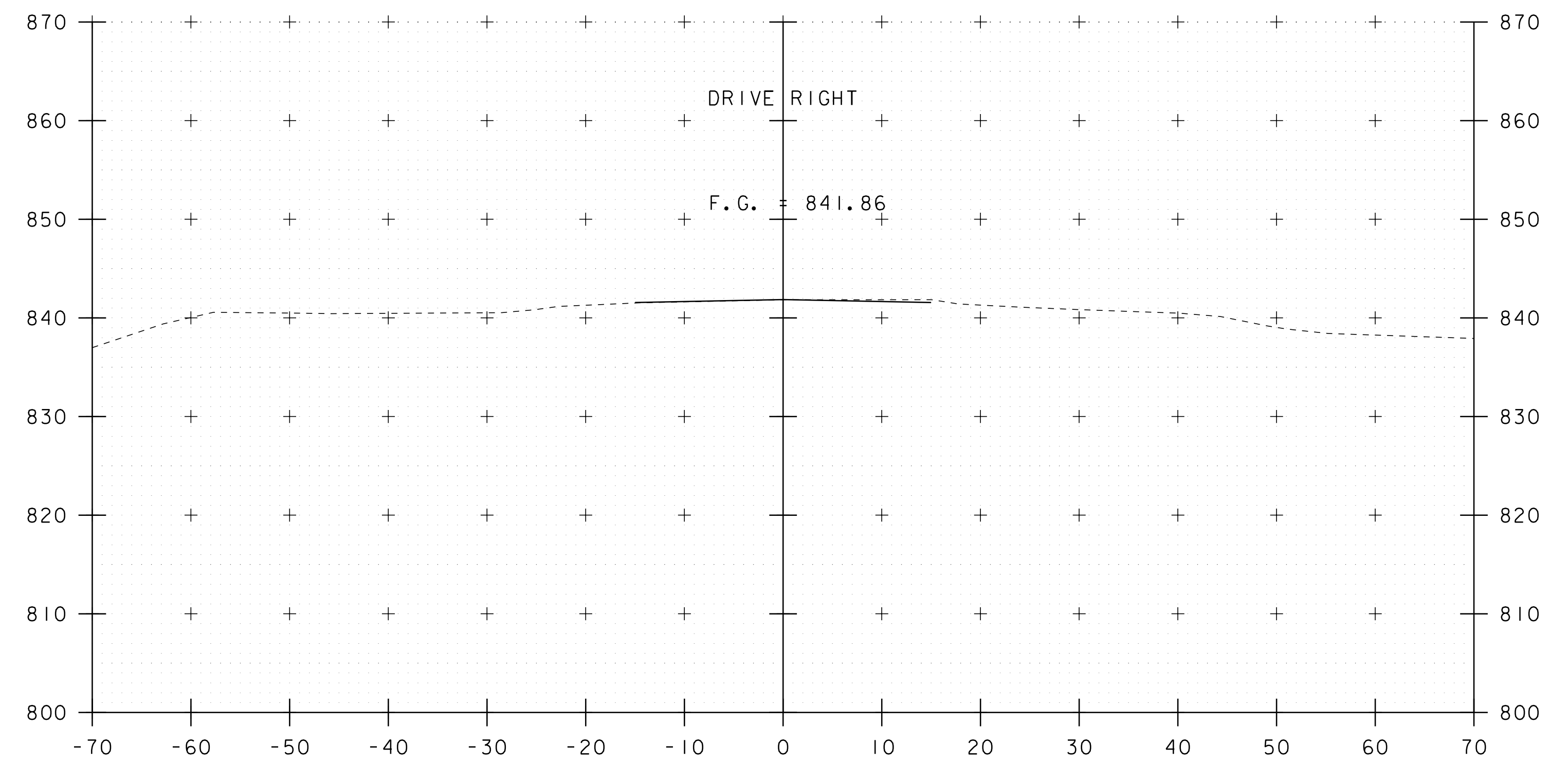
14+25



14+75



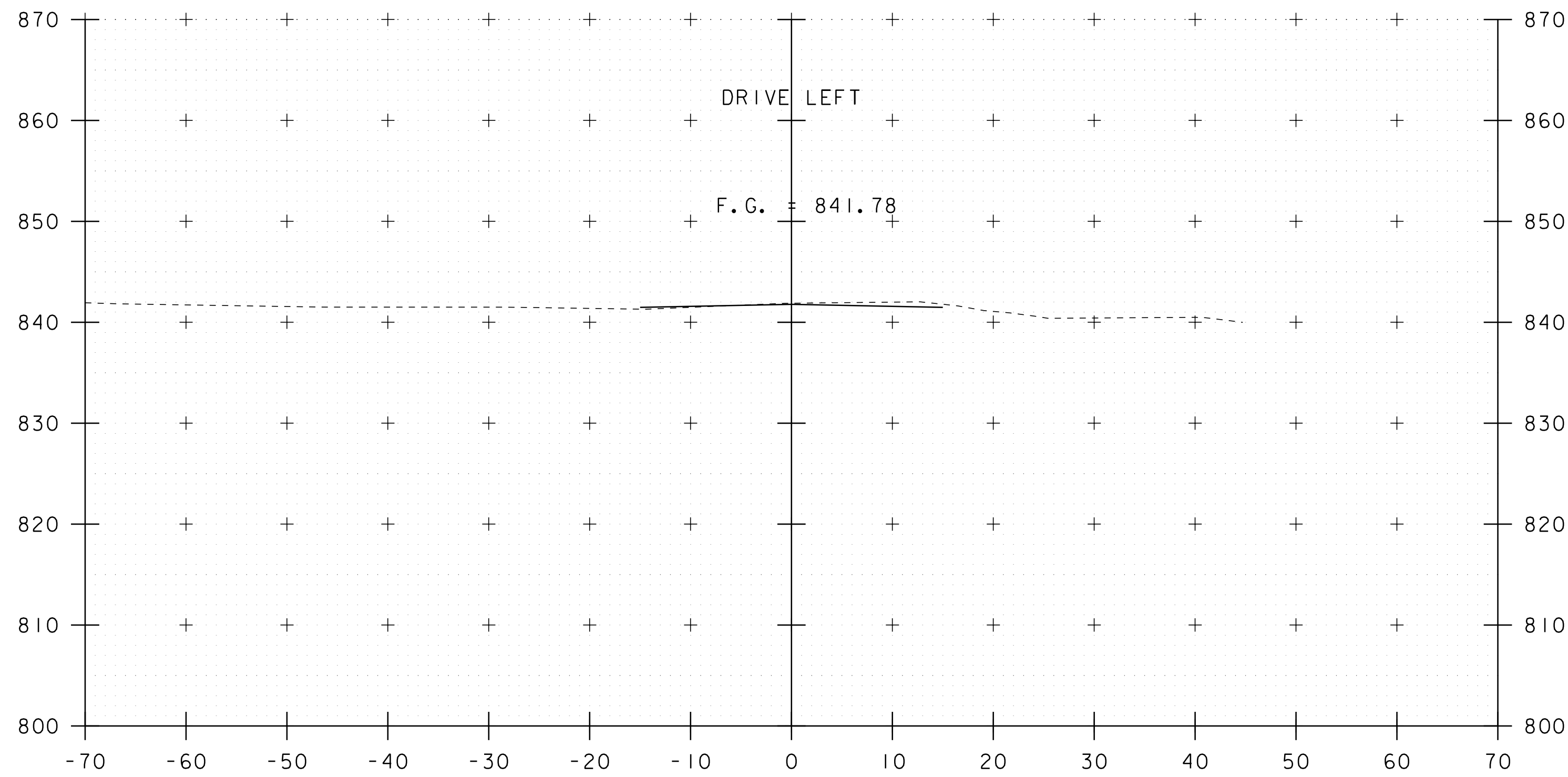
14+00



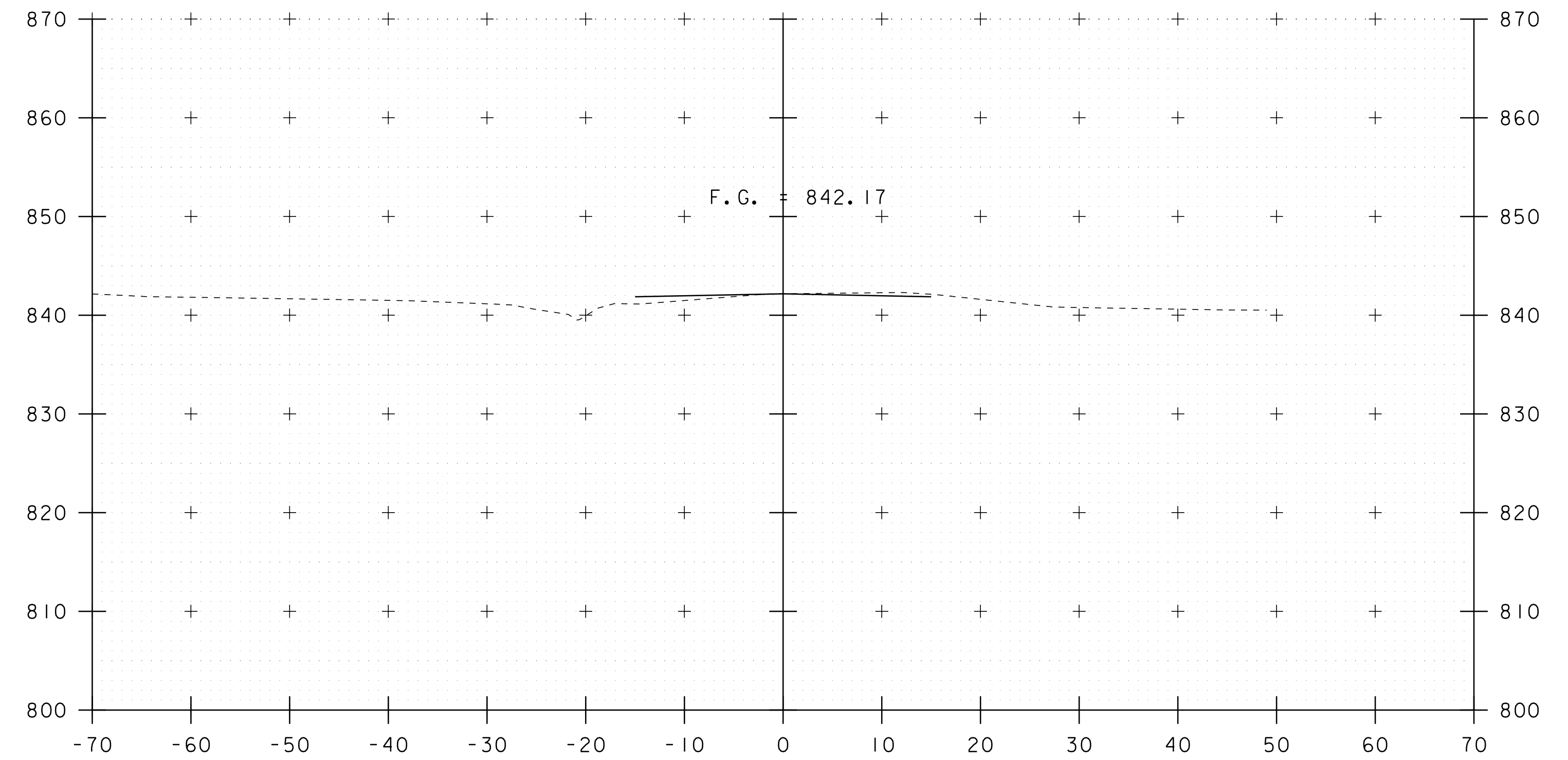
14+50

STA. 14+00 TO STA. 14+75

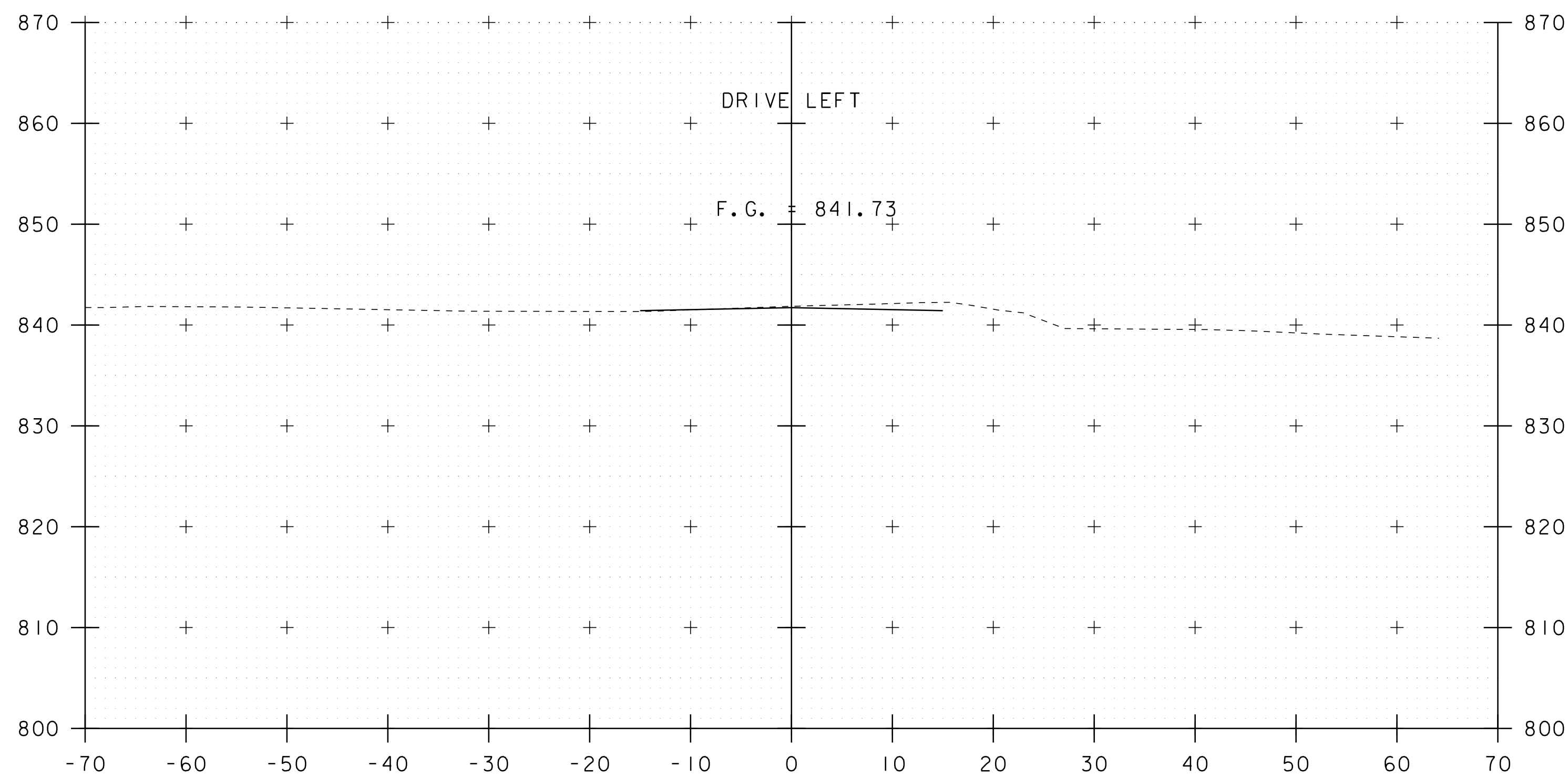
PROJECT NAME: PITTSFIELD	
PROJECT NUMBER: BHF 022-1(24)	
FILE NAME: s10b416xsl.dgn	PLOT DATE: 02-JAN-2013
PROJECT LEADER: C.P.WILLIAMS	DRAWN BY: D.D.BEARD
DESIGNED BY: G.SWEENEY	CHECKED BY: G.SWEENEY
VT 100 CROSS SECTIONS (3)	SHEET 11 OF 16



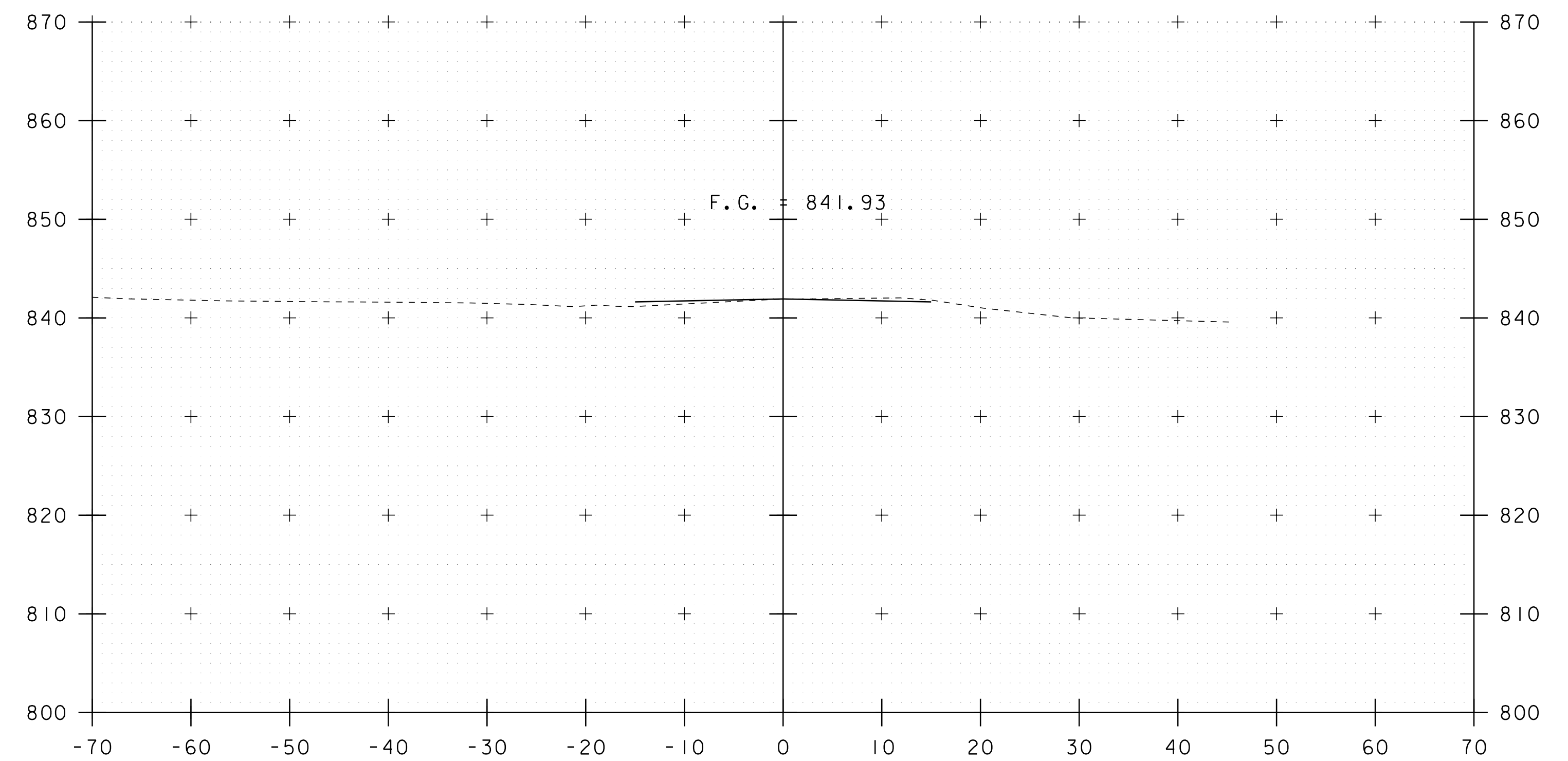
15+25



15+75



15+00

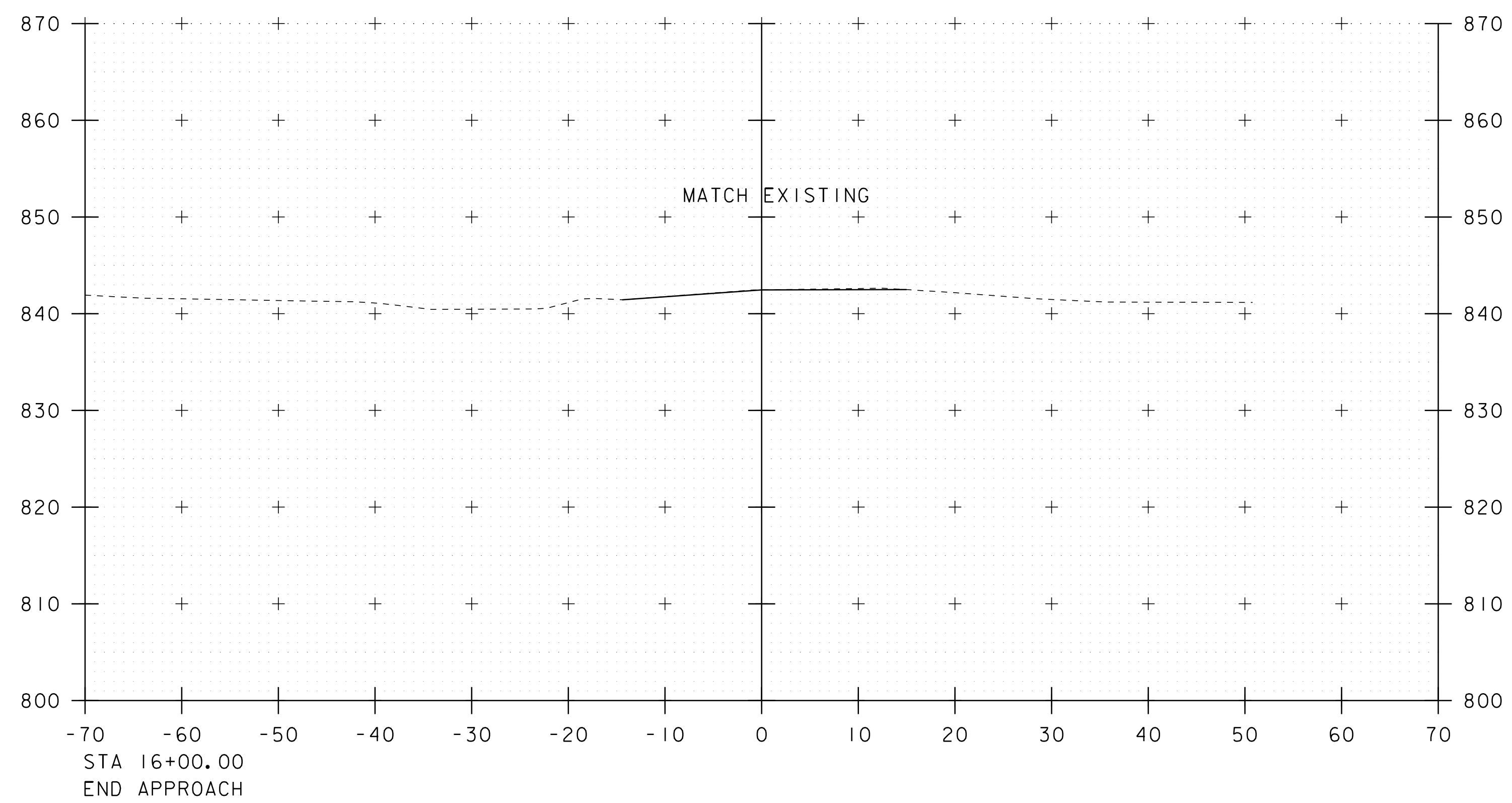


15+50

STA. 15+50.00
END PROJECT

STA. 15+00 TO STA. 15+75

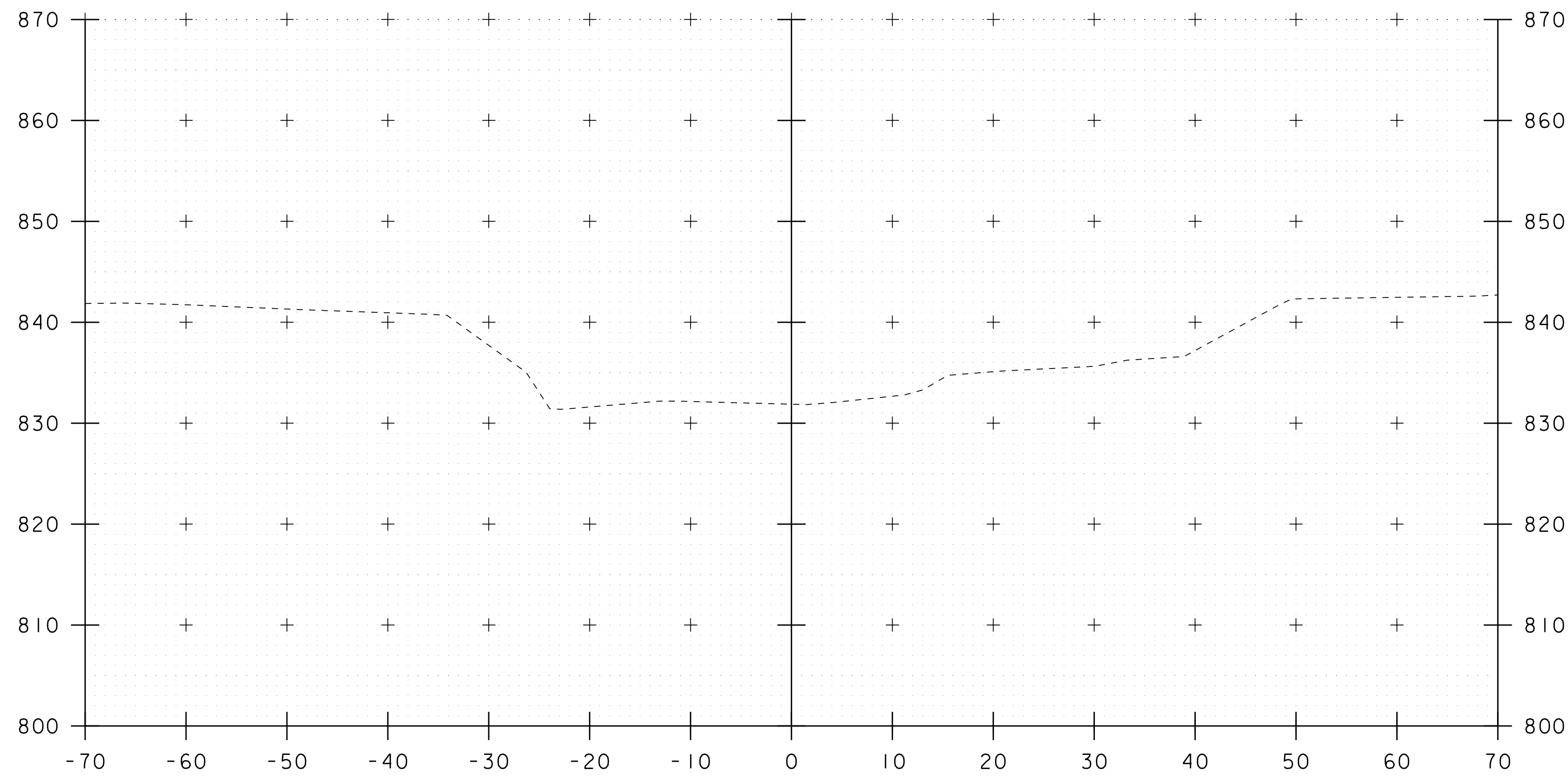
PROJECT NAME: PITTSFIELD	
PROJECT NUMBER: BHF 022-1(24)	
FILE NAME: s10b416xsl.dgn	PLOT DATE: 02-JAN-2013
PROJECT LEADER: C.P.WILLIAMS	DRAWN BY: D.D.BEARD
DESIGNED BY: G.SWEENEY	CHECKED BY: G.SWEENEY
VT 100 CROSS SECTIONS (4)	SHEET 12 OF 16



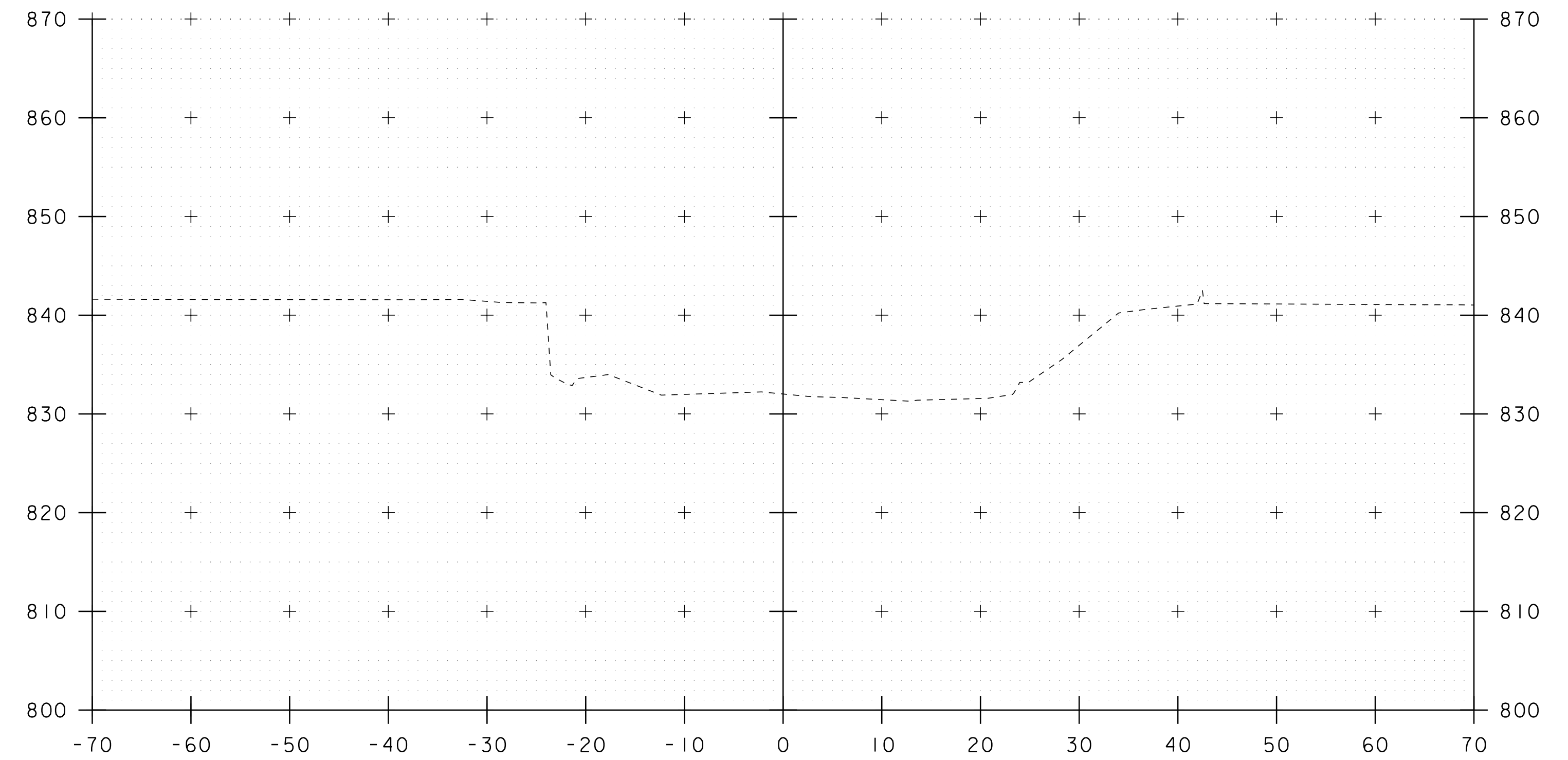
16+00

STA. 16+00 TO STA. 16+00

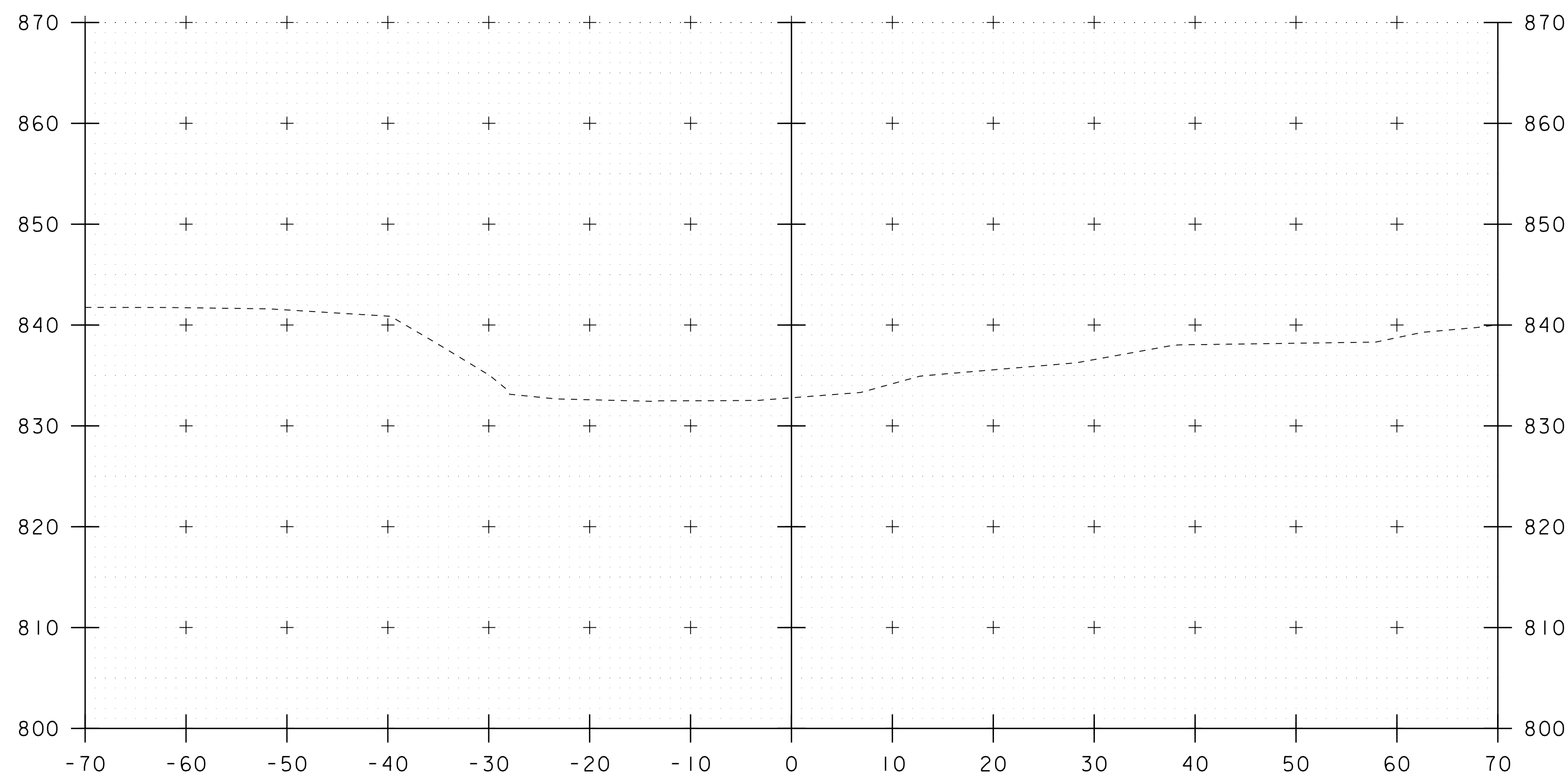
PROJECT NAME: PITTSFIELD	
PROJECT NUMBER: BHF 022-1(24)	
FILE NAME: s10b416xsl.dgn	PLOT DATE: 02-JAN-2013
PROJECT LEADER: C.P.WILLIAMS	DRAWN BY: D.D.BEARD
DESIGNED BY: G.SWEENEY	CHECKED BY: G.SWEENEY
VT 100 CROSS SECTIONS (5)	SHEET 13 OF 16



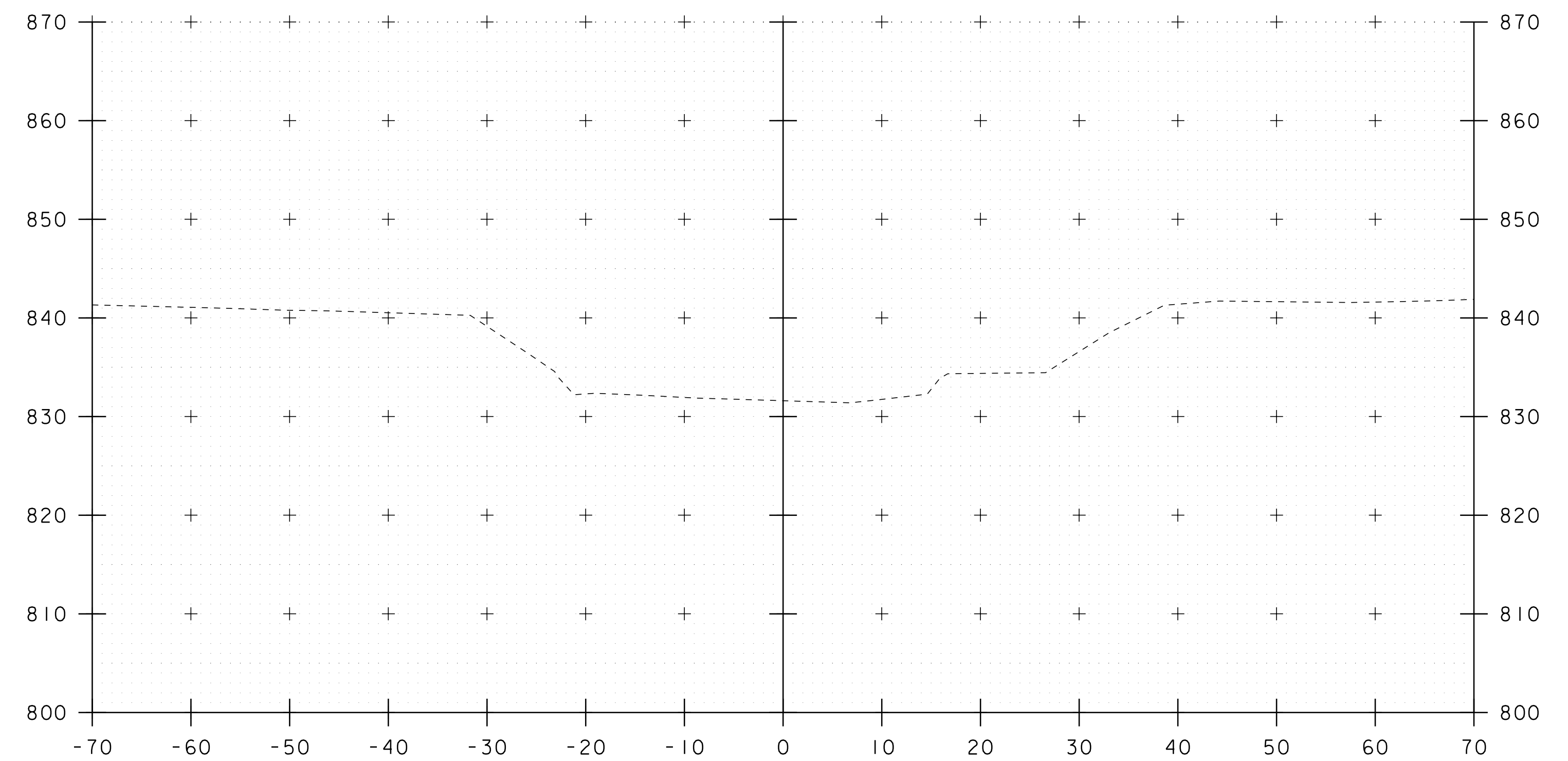
50+75



51+25



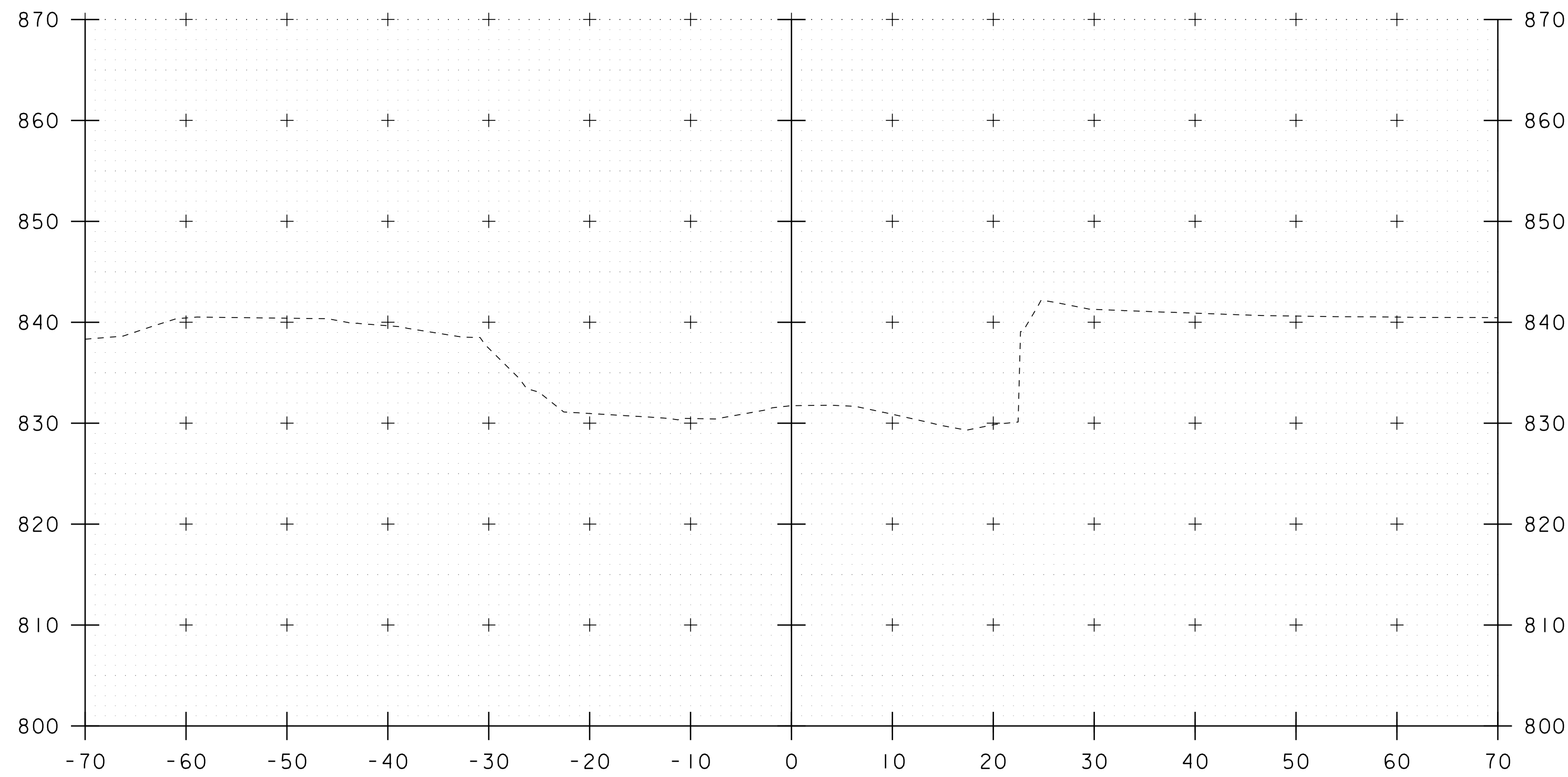
50+50



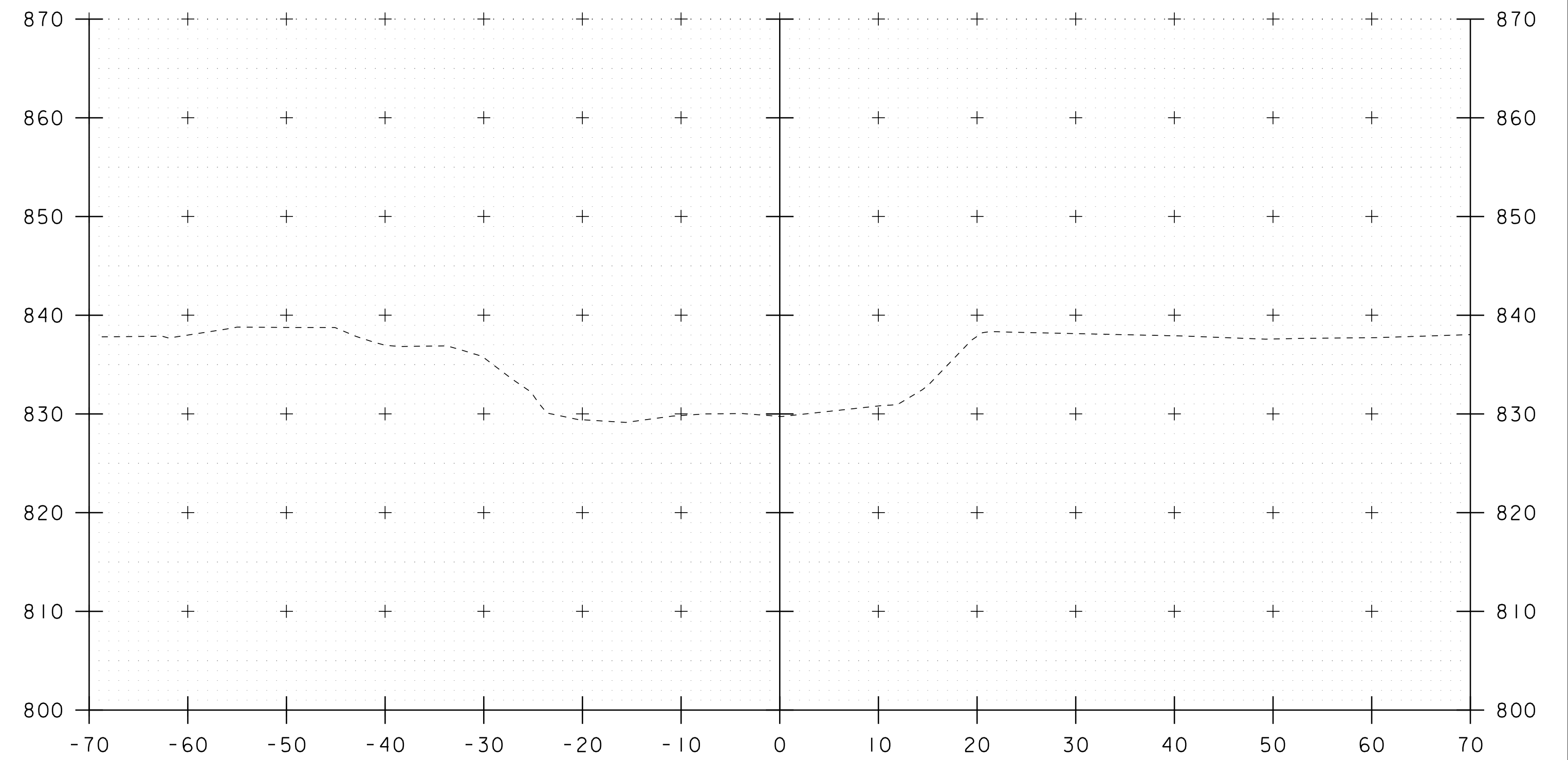
51+00

STA. 50+50 TO STA. 51+25

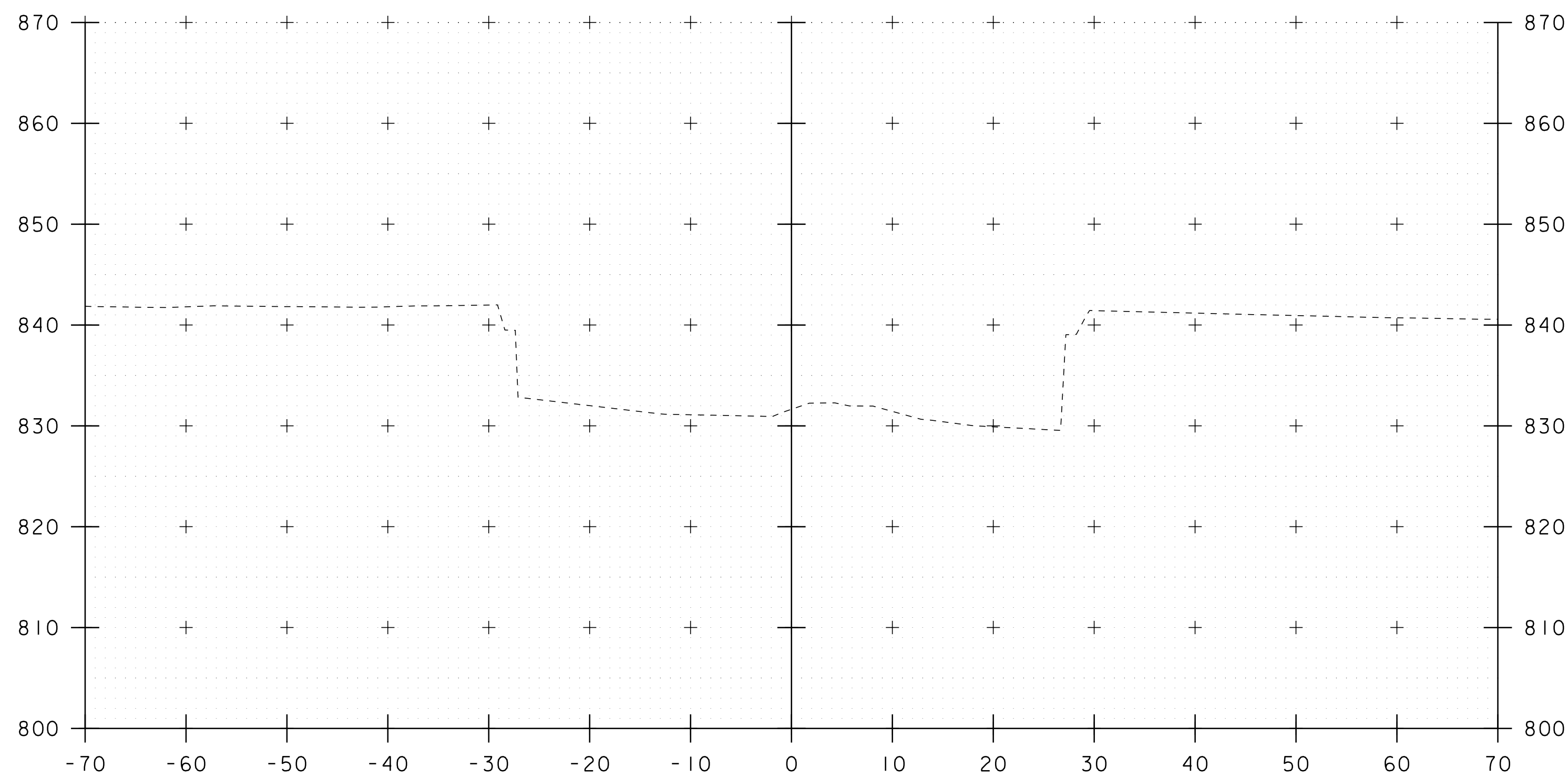
PROJECT NAME: PITTSFIELD	
PROJECT NUMBER: BHF 022-1(24)	
FILE NAME: I0b416/s10b416xsl.dgn	PLOT DATE: 02-JAN-2013
PROJECT LEADER: C.P.WILLIAMS	DRAWN BY: D.D.BEARD
DESIGNED BY: G.SWEENEY	CHECKED BY: G.SWEENEY
CHANNEL CROSS SECTIONS (I)	SHEET 14 OF 16



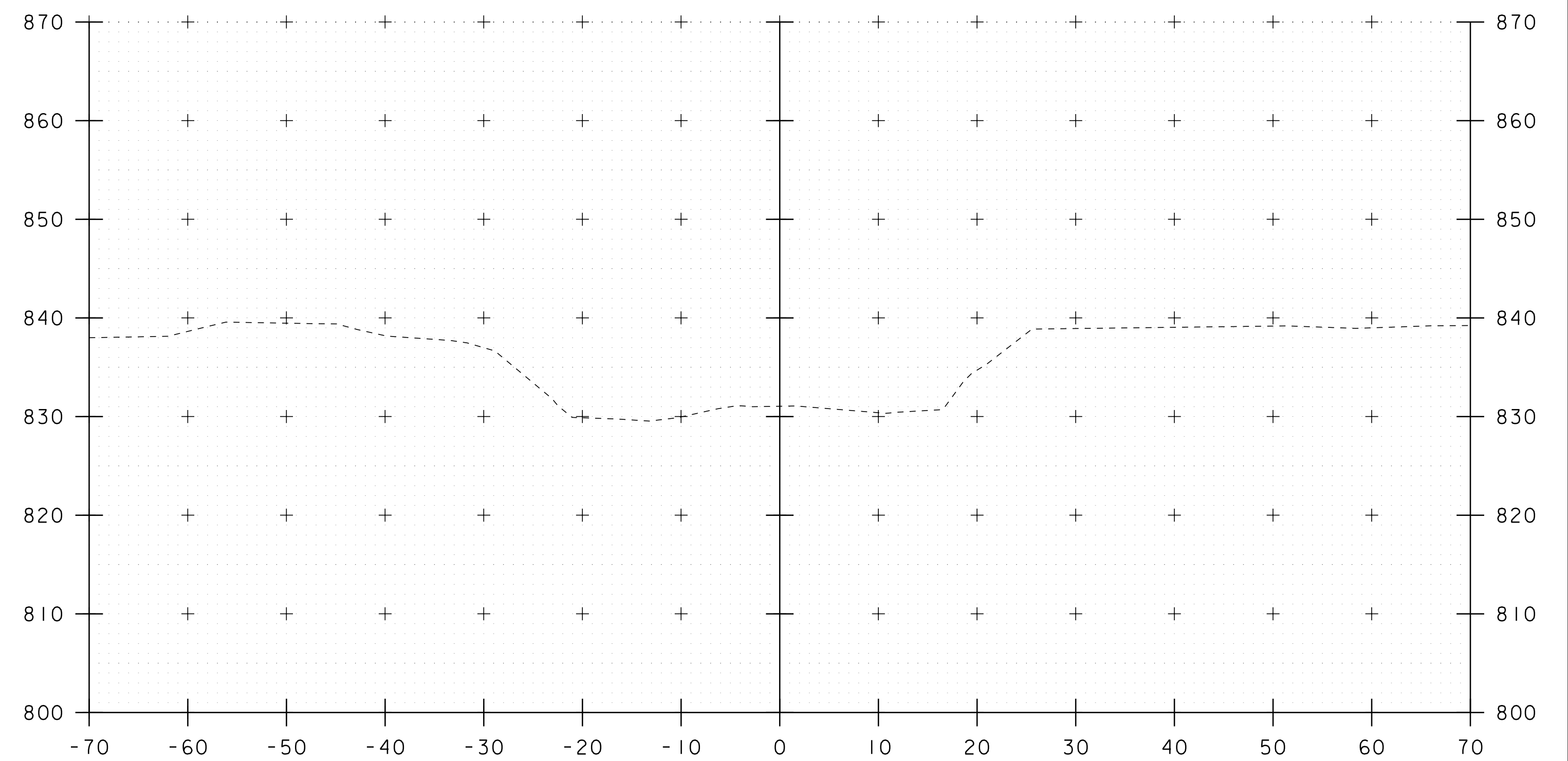
51+75



52+25



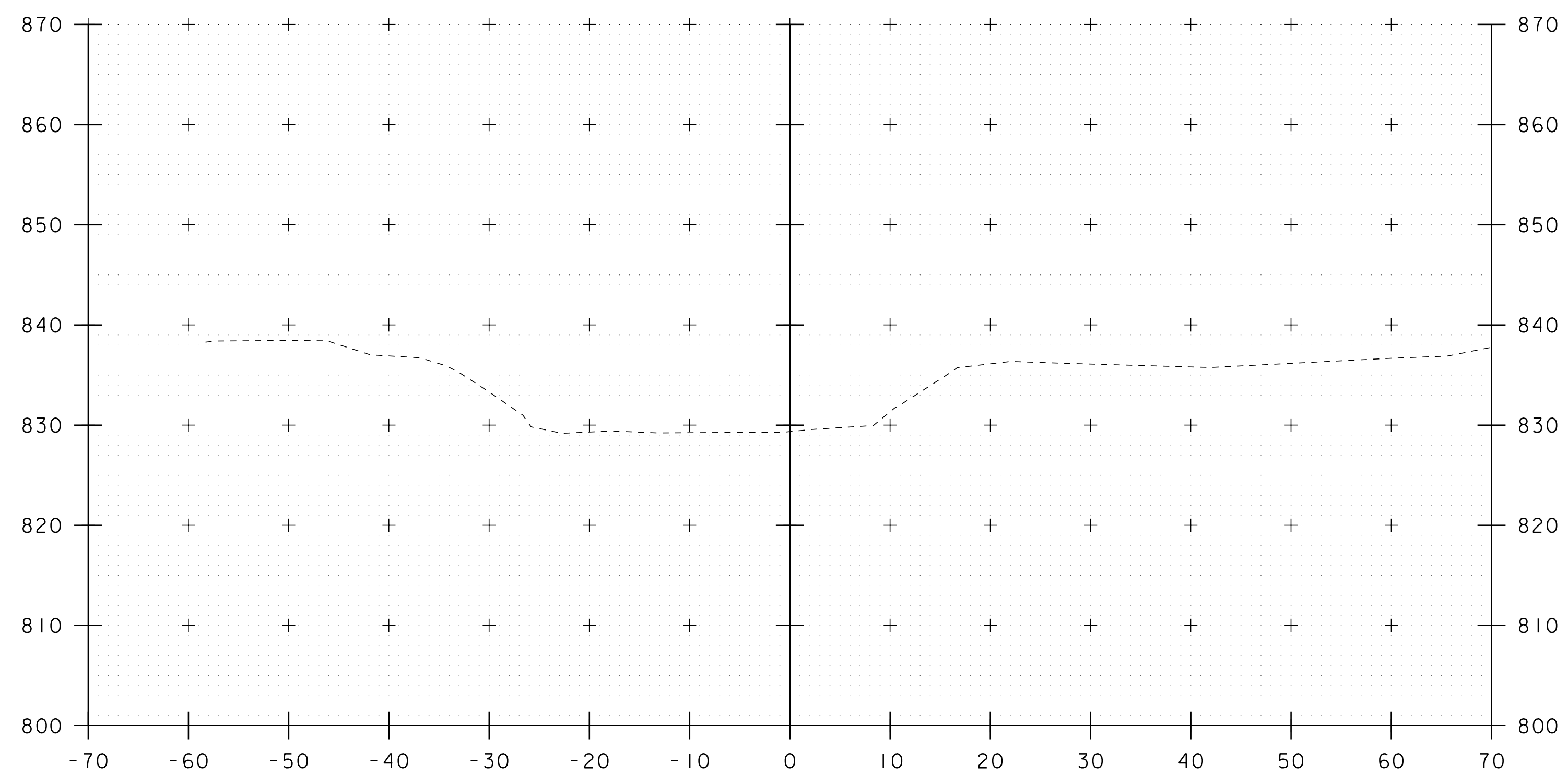
51+50



52+00

STA. 51+50 TO STA. 52+25

PROJECT NAME: PITTSFIELD	
PROJECT NUMBER: BHF 022-1(24)	
FILE NAME: I0b416/s10b416xsl.dgn	PLOT DATE: 02-JAN-2013
PROJECT LEADER: C.P.WILLIAMS	DRAWN BY: D.D.BEARD
DESIGNED BY: G.SWEENEY	CHECKED BY: G.SWEENEY
CHANNEL CROSS SECTIONS (2)	SHEET 15 OF 16



52+50

STA. 52+50 TO STA. 52+50

PROJECT NAME: PITTSFIELD	
PROJECT NUMBER: BHF 022-1(24)	
FILE NAME: I0b416/s10b416xsl.dgn	PLOT DATE: 02-JAN-2013
PROJECT LEADER: C.P.WILLIAMS	DRAWN BY: D.D.BEARD
DESIGNED BY: G.SWEENEY	CHECKED BY: G.SWEENEY
CHANNEL CROSS SECTIONS (3)	SHEET 16 OF 16