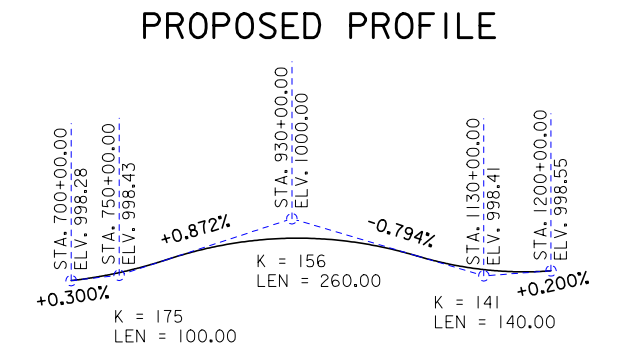
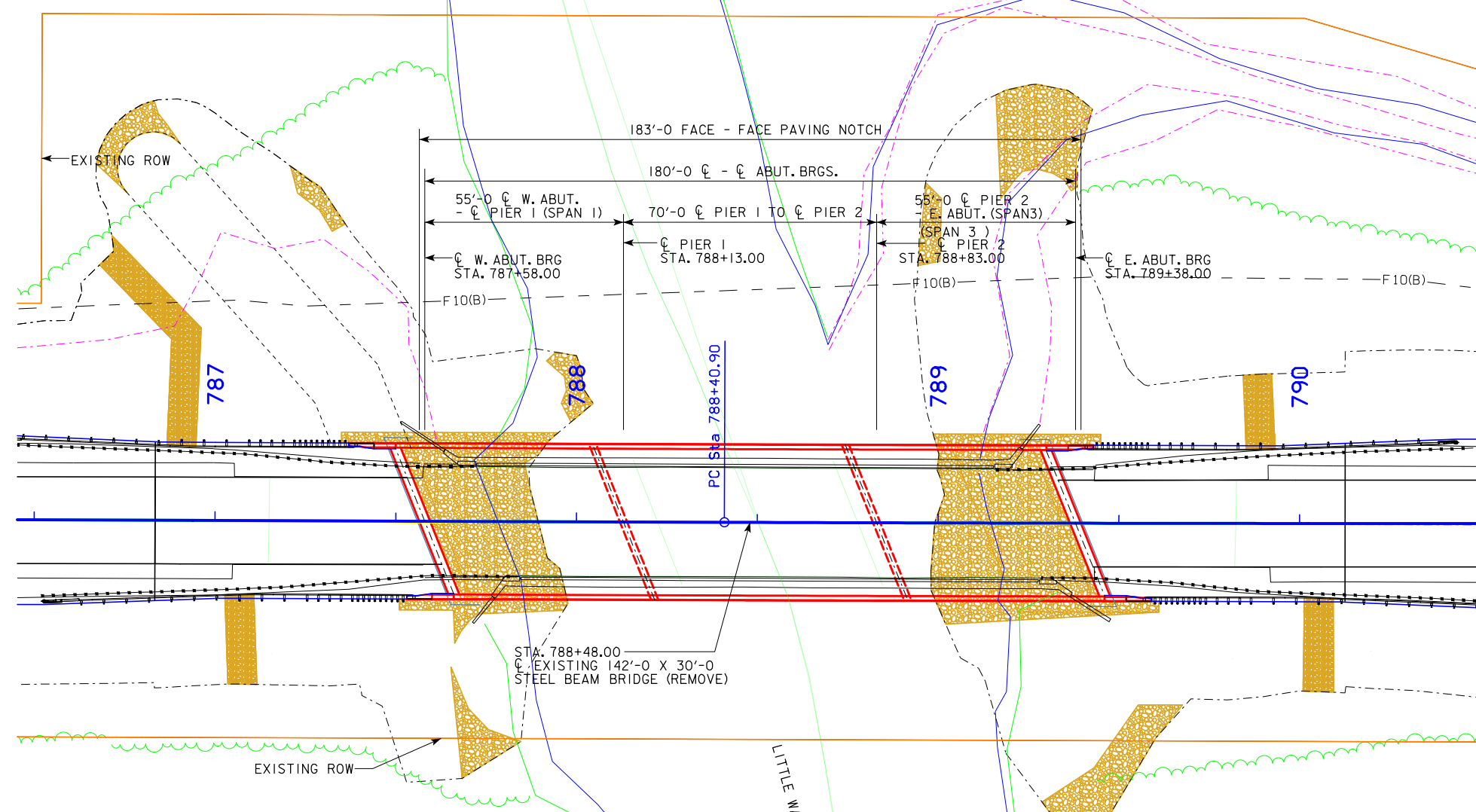
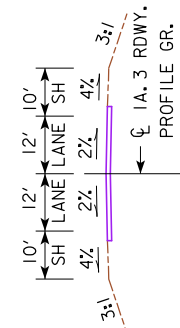


BENCH MARK NO.: I.H.C. 1" PLUG TOP OF CONC. BARRIER RAIL @ S.E. CORNER HWY. #3 BRIDGE OVER LITTLE WAPSI RIVER, EL. 1000.81



TYPICAL APPROACH SECTION



HYDRAULIC DATA

DRAINAGE AREA = 95.7 SQ. MI.  
 STREAM SLOPE = 3.63 FT./MI.  
 AVG. LOW WATER STAGE = 985.94

Q<sub>25</sub> = 9,500 CFS  
 STAGE = 995.87

Q<sub>50</sub> = 11,400 CFS  
 STAGE = 996.20  
 BACKWATER = 2.02 FT.  
 AVG. BRIDGE VELOCITY = 7.38 FPS

Q<sub>100</sub> = 13,300 CFS  
 STAGE = 996.68  
 BACKWATER = 2.06 FT.  
 AVG. BRIDGE VELOCITY = 8.62 FPS

Q<sub>200</sub> = 17,000 CFS  
 STAGE = 998.76

Q<sub>500</sub> = 18,300 CFS  
 STAGE = 1,000.19

TRAFFIC ESTIMATE

2018 AADT 1,620 V.P.D.  
 TRUCKS 18 %

UTILITIES

—F10(B)— FIBER OPTIC  
 UTILITIES SHOWN ON THIS SHEET ARE FOR INFORMATION ONLY, SEE ROAD DESIGN SHEETS FOR FINAL UTILITY INFORMATION.

NOTES

CLASS 'E' REVETMENT IS EMBEDDED.  
 ALL DIMENSIONS ARE HORIZONTAL UNLESS OTHERWISE NOTED.  
 ALL UNITS ARE IN FEET UNLESS NOTED OTHERWISE.  
 USGS GAGING STATION LOCATED ON DOWNSTREAM SIDE OF BRIDGE. CONTRACTOR TO CONTACT USGS TO COORDINATE REMOVAL AND REPLACEMENT.

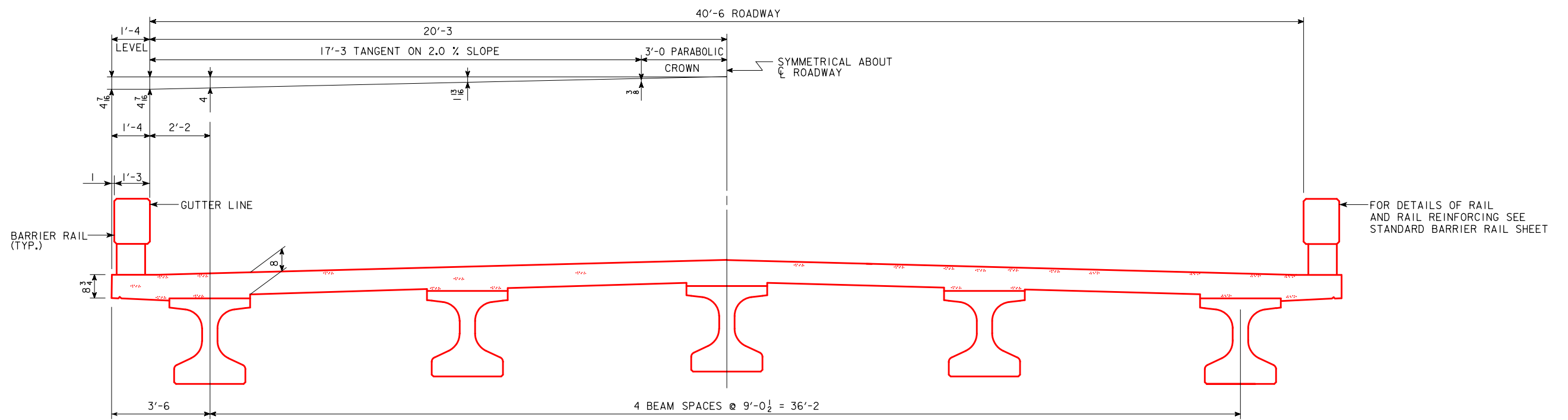
LOCATION

IA 3 OVER LITTLE WAPSI PINICON RIVER  
 T-91N R-10W  
 SECTION 5 & 8  
 ORAN TOWNSHIP  
 FAYETTE COUNTY  
 FHWA NO. 24430  
 BRIDGE MAINT. NO. 3343.4S003  
 LATITUDE 46.9783114°  
 LONGITUDE -098.2733641°



DESIGN FOR 22° SKEW (R.A.)  
**180'-0" x 40'-0" PRETENSIONED  
 PRESTRESSED CONC. BEAM BRIDGE**  
 55'-0" END SPANS 70'-0" INTERIOR SPAN  
 SITUATION PLAN  
 STA. 788+48.00 JULY, 2022  
 FAYETTE COUNTY  
 IOWA DEPARTMENT OF TRANSPORTATION  
 DESIGN SHEET NO. 2 OF 4 FILE NO. ? DESIGN NO. 225





DESIGN FOR 22° SKEW (R.A.)

**180'-0 x 40'-0 PRETENSIONED  
PRESTRESSED CONC. BEAM BRIDGE**

55'-0 END SPANS      70'-0 INTERIOR SPAN

**TRANSVERSE SECTION**

STA. 788+48.00      JULY, 2022

**FAYETTE COUNTY**

IOWA DEPARTMENT OF TRANSPORTATION

DESIGN SHEET NO. 4 OF 4      FILE NO. ?      DESIGN NO. 225

### Paved Shoulder at Guardrail

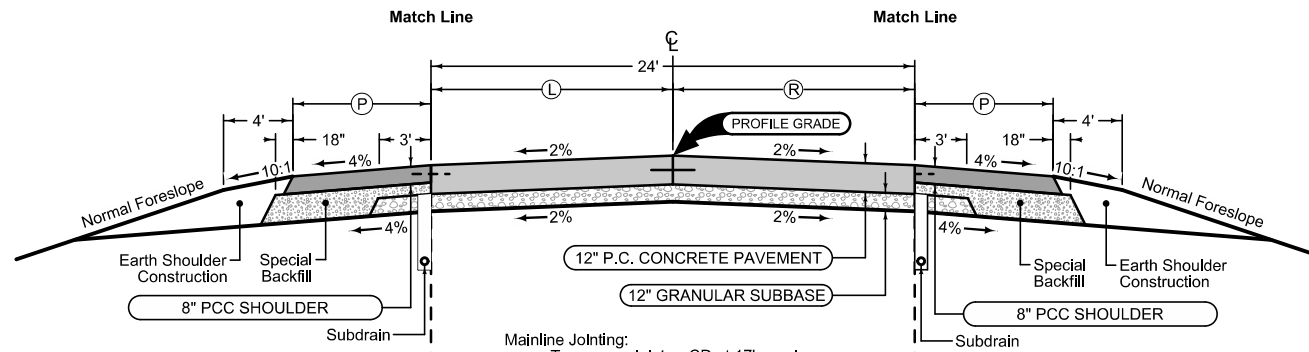
PCC Shoulder Jointing:  
 Longitudinal joint: BT-1 or BT-5  
 Transverse joints: C at mainline spacing  
 HMA Shoulder Jointing:  
 Longitudinal joint: B

2_P_Guard_04-21-20		
STATION TO STATION	(P)	Feet
786+16.61	786+36.61	11.64
786+36.61	786+85.10	Varies
786+85.10	787+49.92	9.65
789+29.92	789+94.74	9.65
789+94.74	790+43.22	Varies
790+43.22	790+63.23	11.64

### Combination Shoulder

Shoulder Jointing:  
 Longitudinal joint: B

2_C_04-21-20			
STATION TO STATION	(P)	(G)	Feet
786+00.00	786+16.61	4	5 - 7.7
790+63.23	791+00.00	4	7.3 - 5



Mainline Jointing:  
 Transverse joints: CD at 17' spacing  
 Longitudinal joint: L-2

2P_04-21-20			
STATION TO STATION	(L)	(R)	Feet
786+00.00	787+58.00	12	12
789+38.00	791+00.00	12	12

### Paved Shoulder at Guardrail

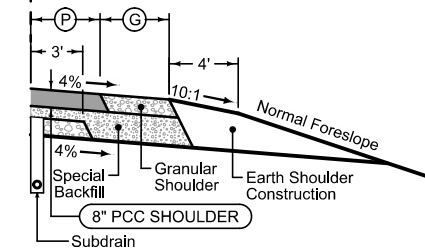
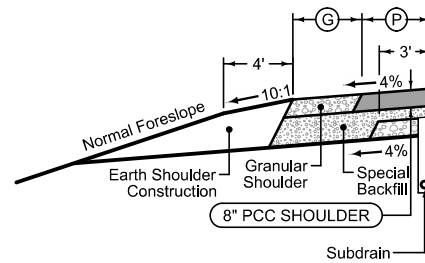
PCC Shoulder Jointing:  
 Longitudinal joint: BT-1 or BT-5  
 Transverse joints: C at mainline spacing  
 HMA Shoulder Jointing:  
 Longitudinal joint: B

2_P_Guard_04-21-20		
STATION TO STATION	(P)	Feet
786+32.82	786+52.82	11.64
786+52.82	787+01.28	Varies
787+01.28	787+66.08	9.65
789+46.08	790+10.86	9.65
790+10.86	790+59.33	Varies
790+59.33	790+79.32	11.64

### Combination Shoulder

Shoulder Jointing:  
 Longitudinal joint: B

2_C_04-21-20			
STATION TO STATION	(P)	(G)	Feet
786+00.00	786+32.82	4	5 - 7.3
790+79.32	791+00.00	4	7.7 - 7.2



### SURVEY SYMBOLS

- Interstate Highway Symbol
- U.S. Highway Symbol
- Iowa Highway Symbol
- County Road Highway Symbol
- Evergreen Tree
- Deciduous Tree
- Fruit Tree
- Shrub (Bushes)
- Timber
- Hedge
- Stump
- Swamp
- Rock Outcrop
- Broken Concrete
- Revetment (Rip Rap)
- Cemetery
- Grave
- Cave
- Sink Hole
- Board Fence
- Chain Link or Security Fence
- Wire Fence
- Terrace
- Earth Dam or Dike (Existing)
- Tile Outlet
- Edge of Water
- Existing Drainage
- Right of Way Rail or Lot Corner
- Concrete Monument
- Well
- Windmill
- Beehive Intake
- Existing Intake
- Existing Utility Access (Manhole)
- Fire Hydrant
- Water Hydrant (Rural)
- Septic Tank
- Cistern
- L.P. Gas Tank (No Footing)
- Underground Storage Tank
- Latrine
- Satellite TV Dish
- Water Hook Up
- Radio Tower
- Tower Anchor
- Guardrail (Beam or Cable)
- Guard Post (one or two)
- Guard Post (over two)
- Filler Pipe
- Gas Valve
- Water Valve
- Speed Limit Sign
- Mile Marker Post
- Sign
- Traffic Signal Control Box
- Rail Road Signal Control Box
- Telephone Switch Box
- Electric Box

### UTILITY LEGEND

### PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK		Design Color No.	
Green	(2)		Existing Topographic Features and Labels
Blue	(1)		Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)		Existing Utilities
SHADING		Design Color No.	
Lavender	(9)		Temporary Pavement Shading
Yellow	(4)		Proposed Pavement Shading
Orange	(6)		Proposed Granular Shading
Orange	(70)		Proposed Shoulder Granular Shading
Yellow	(68)		Proposed Shoulder Paved Full Depth Shading
Yellow	(132)		Proposed Shoulder Paved Partial Depth Shading
Gray, Dark	(112)		Proposed Grade and Pave Shading "In conjunction with a paving project"
Brown, Light	(236)		Grading Shading
Orange, Light	(134)		Proposed Granular Entrance Shading
Yellow	(220)		Proposed Paved Entrance Shading
Tan	(8)		Proposed Sidewalk Shading
Blue, Light	(230)		Proposed Sidewalk Landing Shading
Pink	(11)		Proposed Sidewalk Ramp Shading
Green, Light	(225)		Existing Pavement Shading
Red	(3)		Proposed Structure Shading

### PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK		Design Color No.	
Green	(2)		Existing Ground Line Profile
Blue	(1)		Proposed Profile and Annotation
Magenta	(5)		Existing Utilities
Blue, Light	(230)		Proposed Ditch Grades, Left
Black	(0)		Proposed Ditch Grades, Median
Rust	(14)		Proposed Ditch Grades, Right

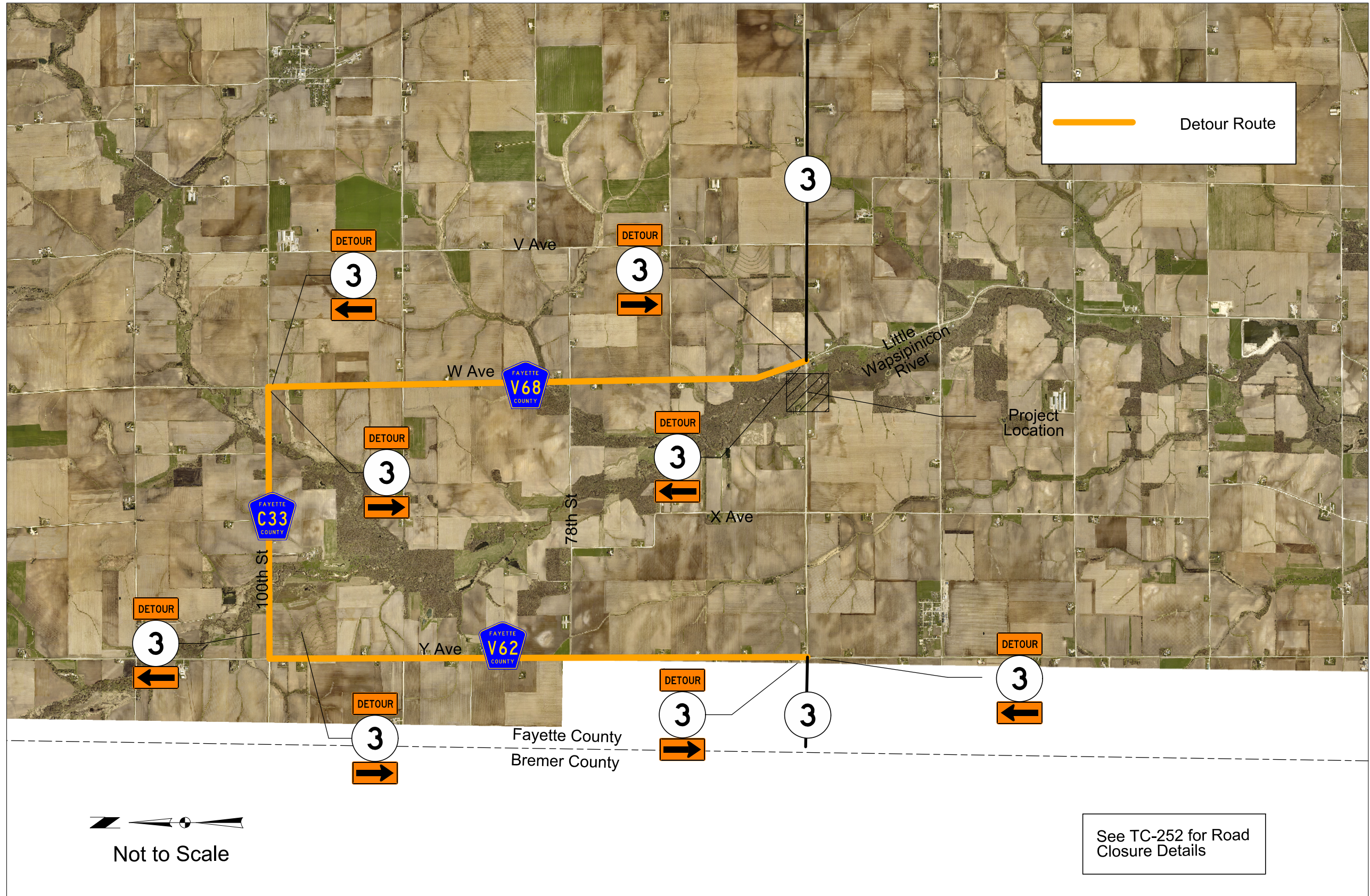
- Reference Point
- Station
- Survey Line
- Section Corner
- Ground Line Intercept
- Saw Cut
- Guardrail
- Trench Drain
- HighTension Cable Guardrail
- Sheet Pile
- Pavement Removal
- Clearing & Grubbing Area

- #### RIGHT-OF-WAY LEGEND
- Proposed Right-of-Way
  - Existing Right of Way
  - Existing and Proposed Right-of-Way
  - Easement and Existing Right-of-Way
  - Easement (Temporary)
  - Easement
  - Access Control
  - Property Line

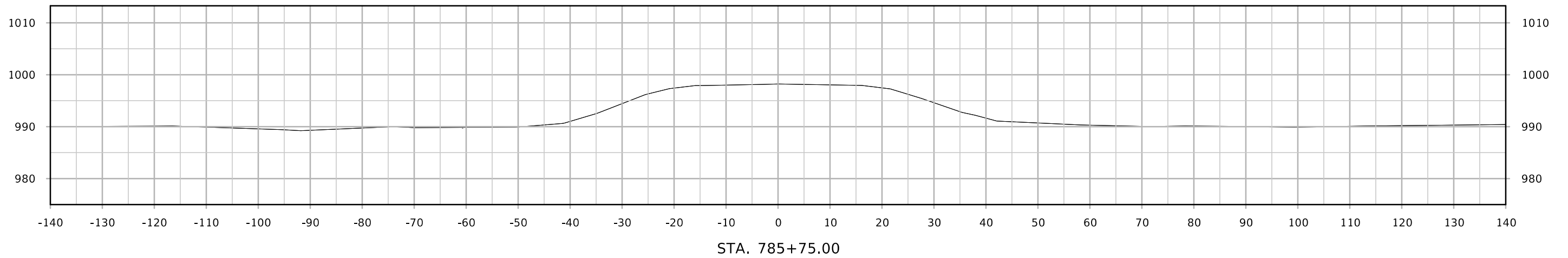
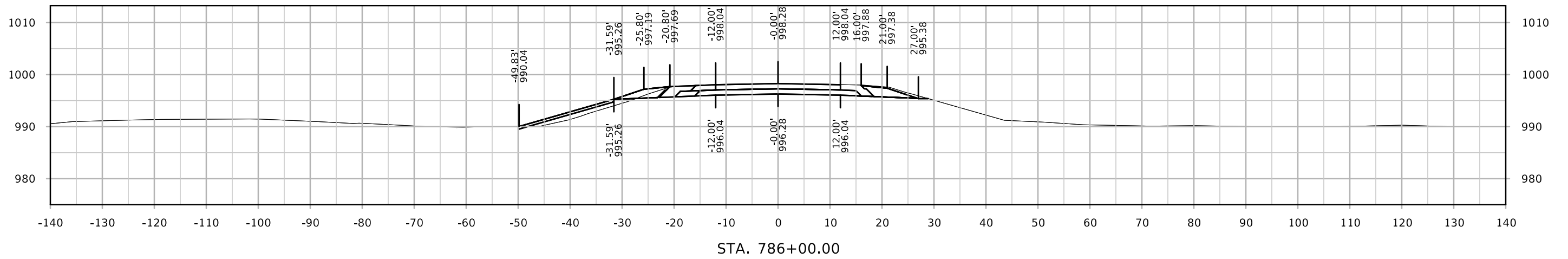
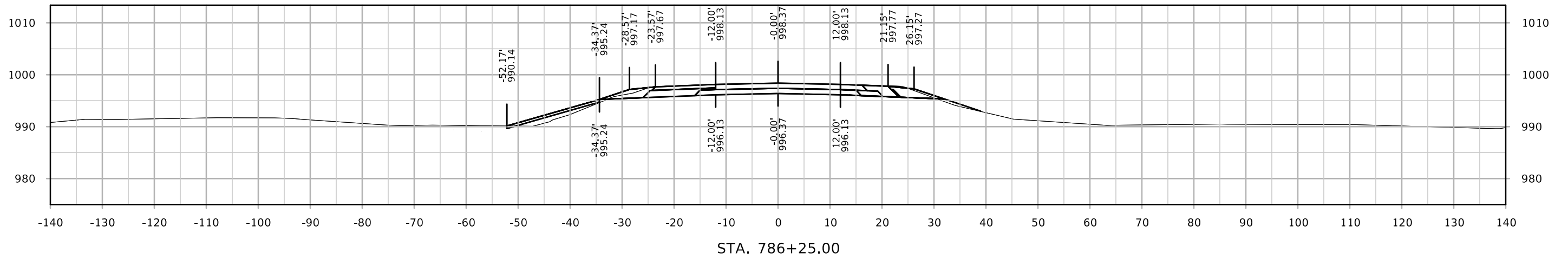
## PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

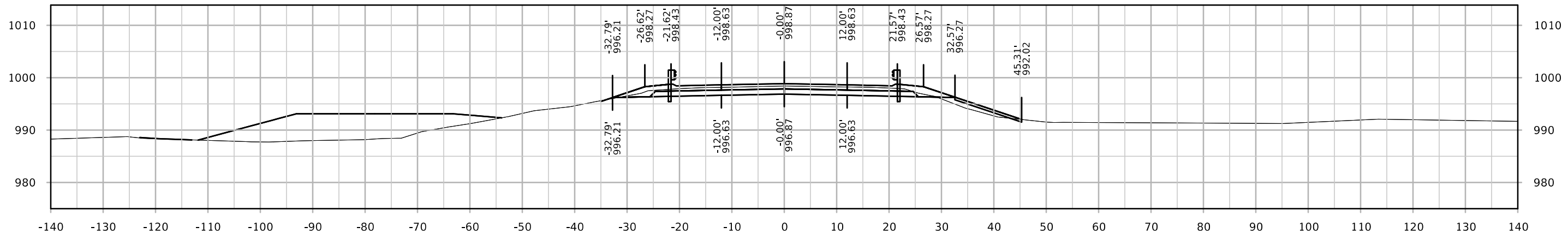
(COVERS SHEET SERIES D, E, F, & K)



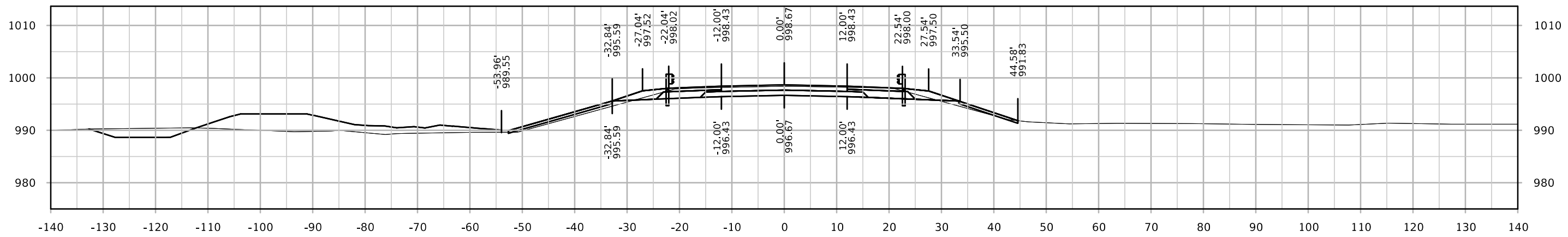




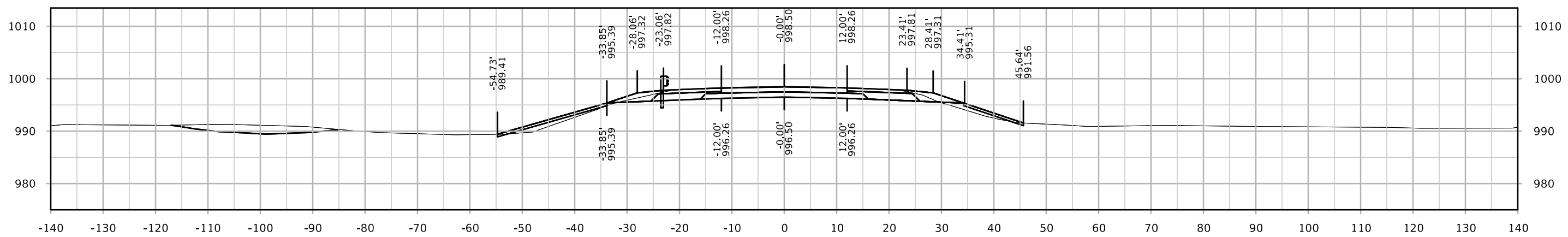




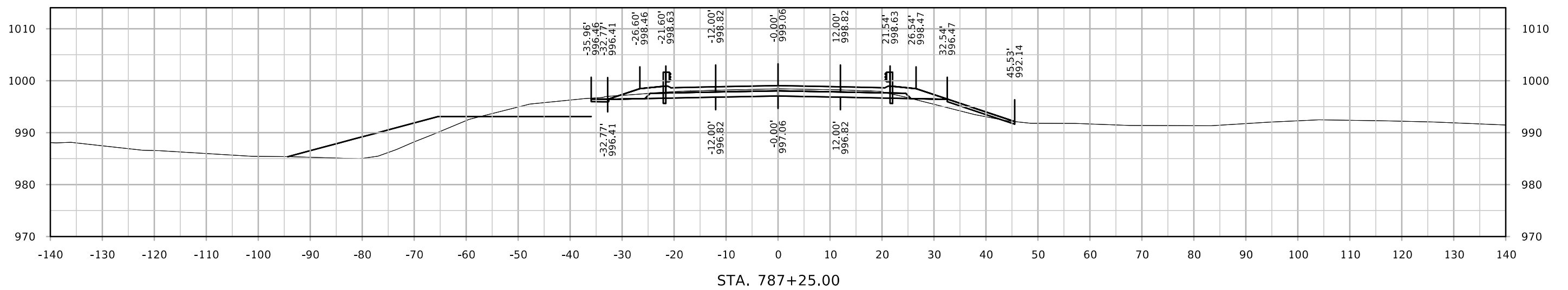
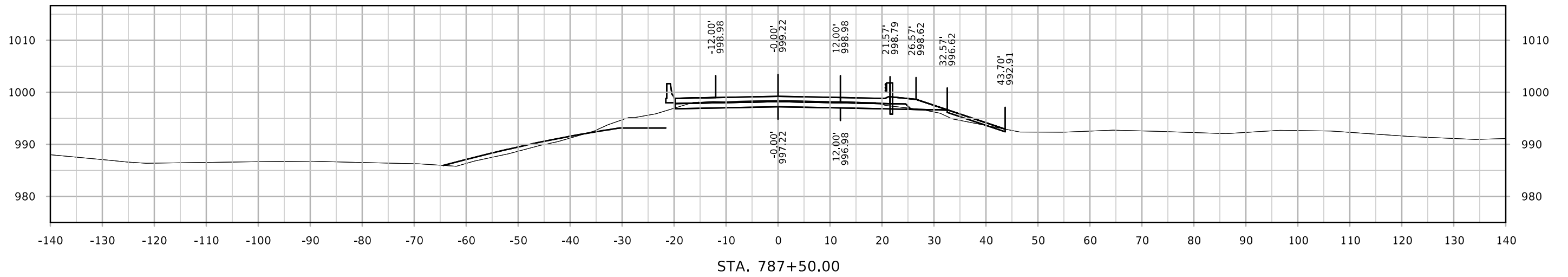
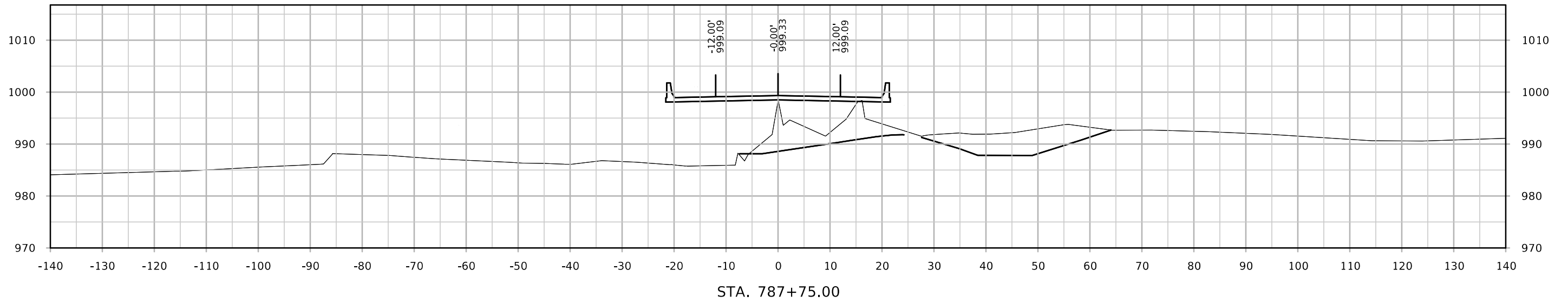
STA. 787+00.00

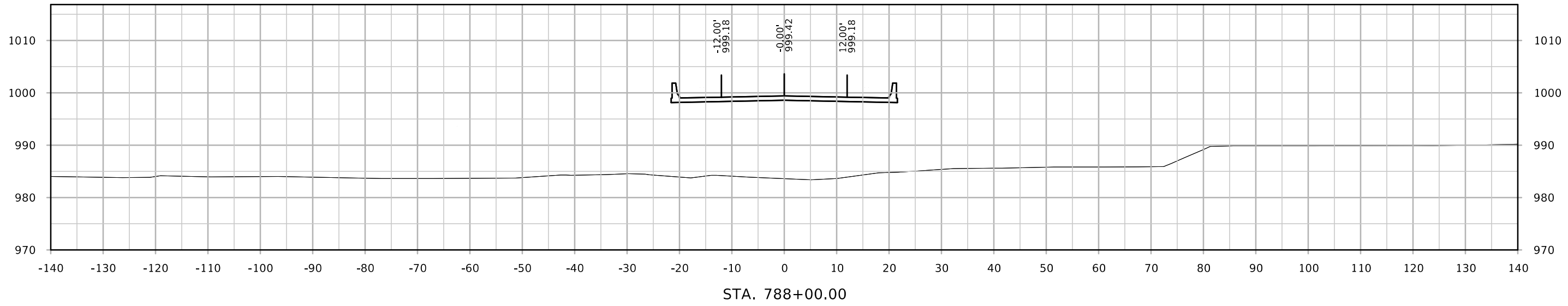
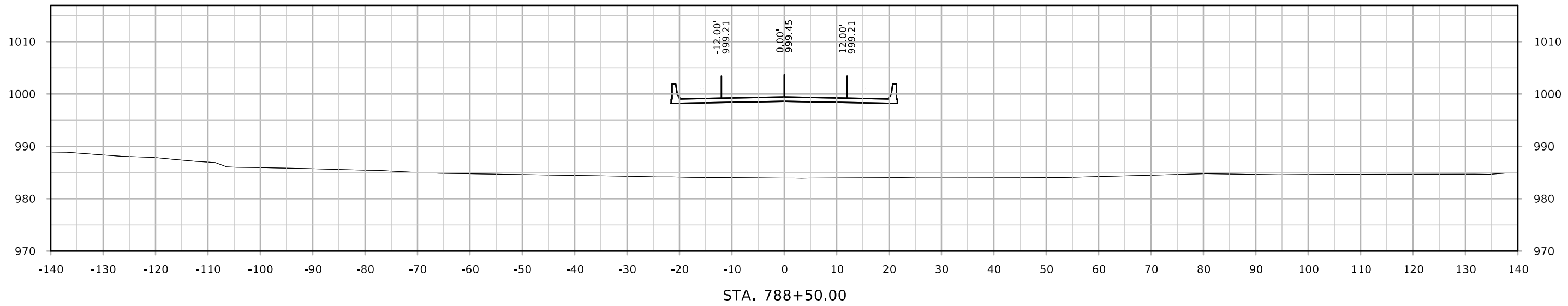


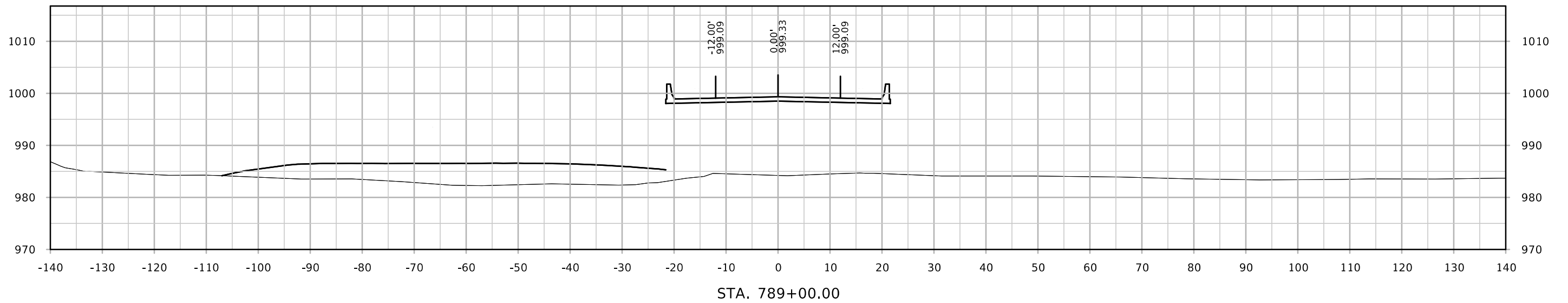
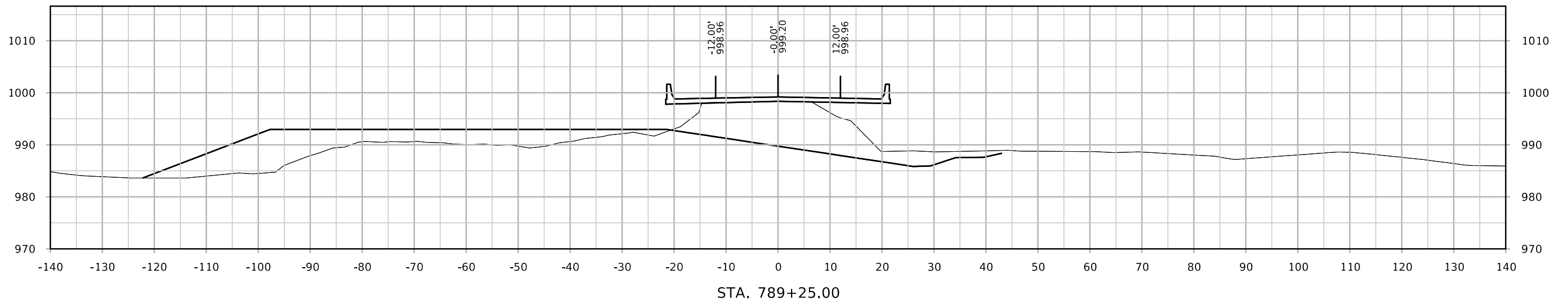
STA. 786+75.00

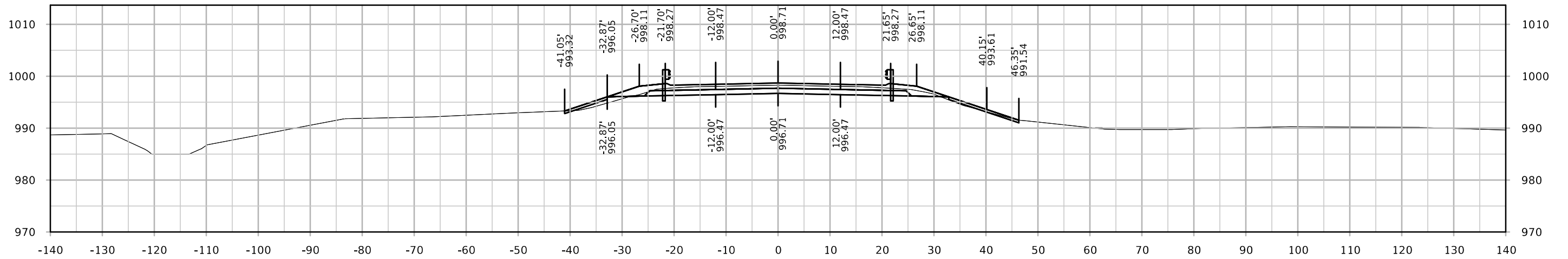


STA. 786+50.00

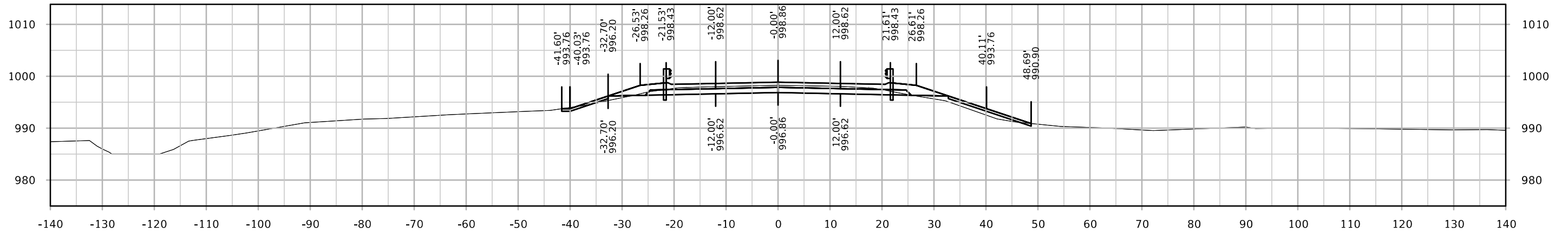




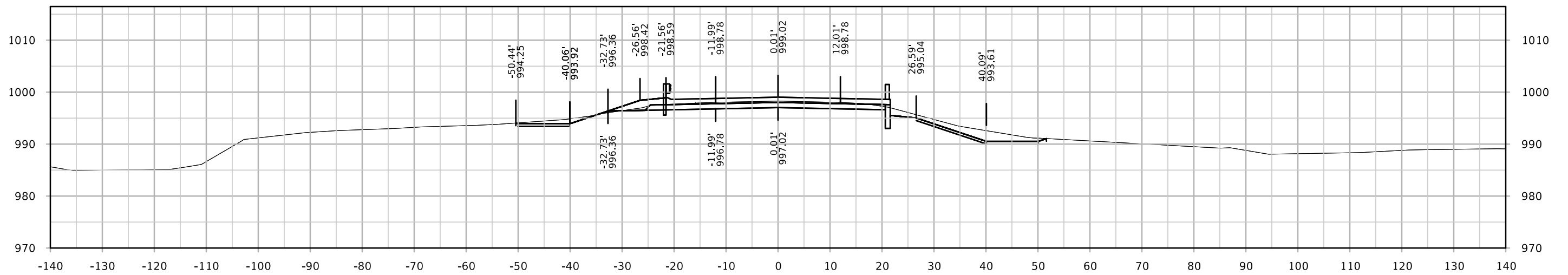




STA. 790+00.00



STA. 789+75.00



STA. 789+50.00

