

SE0056 Perry Co. over Apple Creek

Legend

- CL Apple Creek
- P0803
- Valley Section

The section and/or profile lines shown are intended to show location only.

Terminal points of these lines should be based on the information provided by the Bridge Survey Location Request and not on the ends of the lines shown here.



1000 ft

rrr12/19

Job No. SE0056

Replaces Bridge No. P0803

Missouri Department of Transportation
Bridge Survey Location Request

Page 1 to be completed by District staff.

Bridge over: Apple Creek Route: C
 County: Perry Section: 4 Township: 33 North Range: 13 East
 Latitude: 37°35'29.6"N Longitude: 89°36'10.85"W
 District Contact: Garrett Galyean (573-472-5221) Date: 5/4/2023

HIGH WATER ELEVATIONS AT PROPOSED BRIDGE SITE

Recorded high water elevations or elevation of high water marks

Extreme High Water (EHW) (Give date(s) of occurrence)

Elevations and date(s) of same	Location	Source of information
1.7" Below (1993)	Below North End of Bridge Floor	Flood of 1993 HW Book

Existing Bridge Overtopped ☐ Yes ☐ No ☒ UnknownExisting Roadway Overtopped ☐ Yes ☐ No ☒ Unknown

Approx. Overtopping Location(s):

LOCATION OF NEW BRIDGE

Replace in Existing Location	<input checked="" type="checkbox"/>	Provide details of any proposed changes to profile grade below or as an attachment.
Relocation (near existing Structure)	<input type="checkbox"/>	Provide details of proposed location and grade of the roadway across the floodplain, any proposed/potential channel changes or modifications, etc. below or as an attachment.
New Route	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	

Additional Information:

Note: Proposed elevations, distances, etc. are based on the best available data at the time the form was completed. Actual field conditions or recently acquired data may require deviation from the proposed values. Please contact the Bridge Division with concerns regarding the proposed values or if large deviations from these values are required.

Note: The information below supplements the survey requirements noted in the EPG, please consult EPG 238 for additional surveying requirements.

Bridge Contact: Landon Bodenschatz, 573-639-1480, Landon.Bodenschatz@modot.mo.gov

Survey Type: **1D Survey**

Stream Crossing Survey Location Details (1D)						
Item		Requirement	Standard Guidance		Specific Guidance	
Profiles* (EPG 238.3.36.1.3)	C/L Profile	Terminal Point	Limit of Longest offset Profile		Use Standard Guidance	
	Upstream Offset Profile	Terminal Point	Same as Valley Sections		Elevation =	380
		Offset Distance	On Natural Ground		Estimated Distance =	40
	Downstream Offset Profile	Terminal Point	Same as Valley Sections		Elevation =	380
		Offset Distance	On Natural Ground		Estimated Distance =	40
Special		N/A				
Streambed Profiles** (EPG 238.3.36.3.6)		Length	Natural Stream	Section limits (Min. of 1000' each side of crossing.)	Use Natural Stream Guidance	
			Drainage Ditch	500' Each Side of Crossing		
		Elevation Intervals	Within 1000' of Crossing	Nat. Stream 25'	Use Natural Stream Guidance (see EPG 238.3.36.3.6 if a significant slope change is encountered)	
				Drain. Ditch 50'		
			Beyond 1000' from Crossing	At Vertical and Horizontal Break Points (200' max.)		
Valley Sections (EPG 238.3.36.3.8), (EPG 750.3.1.1)		Terminal Point	Natural Stream	5' above EHW	Elevation =	380
			Drainage Ditch	25' Beyond Bankside Toe of Levee	Distance =	N/A

Item	Requirement	Standard Guidance		Specific Guidance
Water Surface Profile (EPG 238.3.36.3.7)	Water Surface Profile Data Needed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
	Locations with flowing water	Drainage Ditch	100' and 200' each side of Crossing	Use Water Surface Profile Standard Guidance

Item	Requirement	Standard Guidance	Specific Guidance
Typical Channel Sections (EPG 238.3.36.3.9)	Typical Channel Section Data Needed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
	Within 300' each side of Centerline	Provide when Needed (i.e., Culvert on Perennial and	

		Intermittent Stream)	
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Item	Requirement	Standard Guidance	Specific Guidance
Existing Bridge Data	Existing Bridge Data Needed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
	Description	Provide General Description	N/A

Item	Requirement	Standard Guidance	Specific Guidance
Other Bridges (EPG 238.3.36.3.10)	Other Bridge Data Needed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
	Description	Provide General Description	N/A
	Profile Location	C/L Structure	N/A
	Profile Terminal Point	5' above EHW	Elevation = N/A

* additional profiles may be needed for relocated routes

** at confluent streams provide proposed data for both streams as appropriate.

Additional Information:

Additional Documents Provided:

Image & kmz files showing Valley Section Locations.

Roadway Design Notes for Bridge Survey:

The Bridge Survey should include all the pertinent items listed in [EPG 747](#) and the [Bridge Survey Checklist](#).

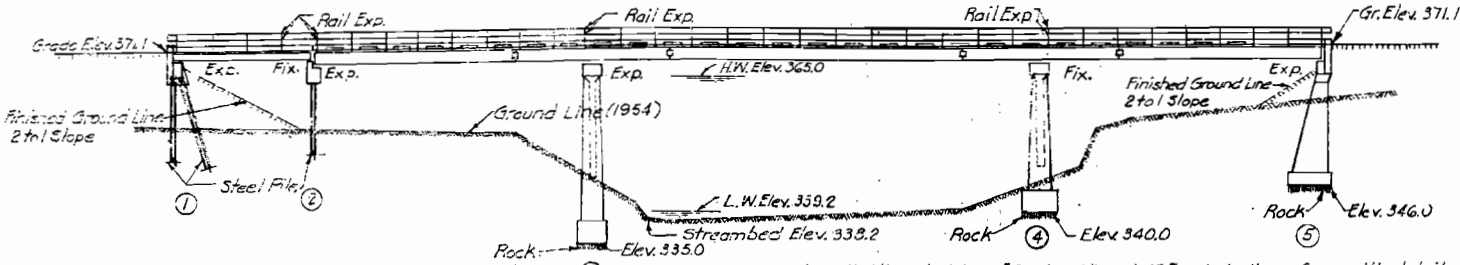
Bridge Design Notes:

According to the TMS flood report, Bridge P0803 has not been overtopped in the last 20 years.
FEMA Zone A

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	5-733(7) (SC)	19		

25' (50'-80'-50' Cont.) I-Bm. Spans



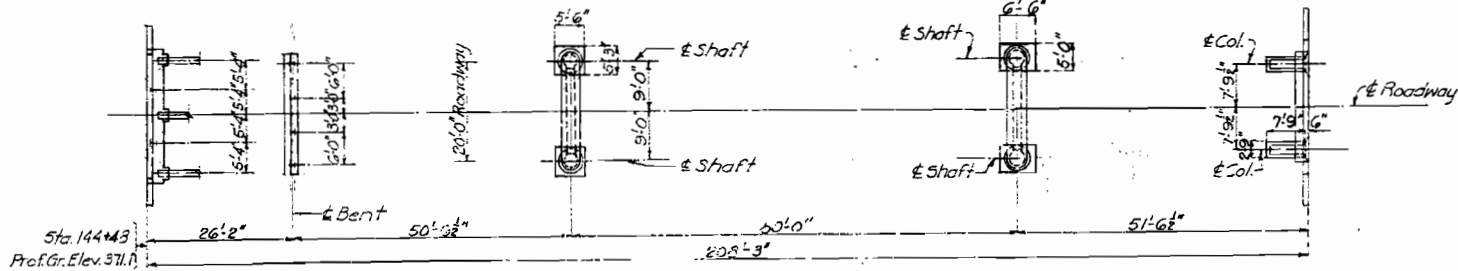
Note: All loose, shelly or disintegrated rock shall be removed and the footings placed on here, solid, undisturbed rock. If soft rock or shale is encountered, the footings shall be carried at least 18" into and cast against vertical faces of same.

Note: In no case shall footings of Piers 3 & 4 be placed higher than Elevations shown on plans.

Note: All piling shall be 10" Bearing Piles at 42" and shall conform with details and notes on sheet No. 2 of design plans. Estimated quantities shown on plans are based on the following lengths: 5@50'-0" and 4@45'-0". These indicated lengths are approximate only. Proper lengths to give required bearing and for penetration will be authorized by the Engineer.

All piles shall be driven to or into solid rock, boulders, shale, or cemented gravel; or to not less than full length authorized and sustain a load of at least 30 ton per pile.

A gravity hammer may be used for driving if desired.



PLAN

GENERAL NOTES

Design Specifications: A.A.S.H.O.-1953

Loading: H10-44

Structural Steel Stress 18,000#/sq. in.

Reinforcing Steel Stress 10,000#/sq. in.

Concrete Class "B" Stress 1,000#/sq. in.

All concrete shall be Class "B".

Rivets 3/4"; holes 1/2", except where otherwise noted.

Field connections shall be riveted except as noted in handrail details or if the Contractor desires to eliminate all field riveting on this project he may use high tensile steel bolts with carburized washers for the expansion device and the beam splices in the continuous spans and American Standard Regular machine bolts for other field connections except for the 3/4" button head bolts specified for handrail. See Special Provisions.

Paint: Shop, none; Field, contact surfaces of bolted field connections (except where high tensile bolts are used) one coat of red lead and surfaces inaccessible after erection three coats of red lead. No other paint to be applied by Contractor except as noted for steel piles. Red lead required shall be furnished by Contractor. Payment for cleaning and painting such surfaces will be included in unit price bid for fabricated Structural Steel.

Where joint filler is specified on the plans it shall conform with the requirements for Premoulded Material for Filler as given in Section 35-13.4.1(h) of the Standard Specifications.

All beams over 65 feet in length shall be shipped by rail to the specified shipping point.

Surfaces of piles at Bent No. 1 from bottom of concrete cap to 3'-0" below present ground line shall be painted with one coat of an approved brand of emulsified asphalt paint. Payment for excavating around piles below present ground line and backfilling same, furnishing emulsified asphalt paint and cleaning and painting steel surfaces specified will be included in the unit price bid for other items.

For requirements on welding electrodes see Special Provisions. Qualification of welding operators will be required.

COMPLETE BILL OF REINFORCING STEEL

No.	Size	Length	Mark	Location	Bending Sketches & Cutting Diagrams	No.	Size	Length	Mark	Location	Bending Sketches & Cutting Diagrams	No.	Size	Length	Mark	Location	Bending Sketches & Cutting Diagrams	
Superstructure						Intermediate Bent No. 2						End Bent No. 5 (Cont'd)						
29	#5	2'-9"	C1	Curb		4	#6	2'-3"	G1	Beam		2	#6	20'-0"	H7	Beam		
6	#5	25'-9"	C2	...		6	#6	23'-3"	G2	Bm3 Hch.		3	#9	20'-0"	H8	...		
12	#6	26'-3"	C3	...		6	#4	3'-3"	U2	Beam		2	#6	22'-3"	H9	...		
18	#6	28'-0"	C4	...		22	#5	4'-3"	U6	Hch.		3	#5	9'-0"	H10	Wing		
12	#6	26'-9"	C5	...		44	#4	6'-0"	U7	...		3	#5	16'-3"	H11	...		
416	#4	22'-0"	S1	Slab		6	#4	2'-0"	U8	...		2	#4	20'-0"	H12	Beam		
208	#4	24'-0"	S2	...		Piers No. 3 & 4						4	#6	11'-3"	T3	Wing		
32	#4	25'-9"	S3	...		16	#8	13'-6"	D2	Fig. 2-13		20	#4	9'-0"	U9	Beam		
224	#4	27'-3"	S4	...		16	#8	8'-6"	D3	...		4	#4	3'-0"	U10	...		
30	#4	16'-0"	S5	...		4	#6	20'-6"	H13	Cap		44	#4	4'-3"	V5	BA Wall		
End Bent No. 1						End Bent No. 5												
2	#6	22'-3"	H1	Bk. Wall		4	#6	4'-9"	D1	Footing								
8	#6	26'-0"	H2	Bm.		6	#6	7'-0"	F1	Col. Hch.								
4	#6	24'-0"	H3	...		6	#6	7'-0"	F2	...								
6	#6	6'-0"	H4	Wing		32	#4	19'-6"	P2	Web								
2	#6	4'-6"	H5	...		32	#3	19'-6"	P3	Shaff								
4	#6	9'-3"	T1	Wing		38	#6	6'-3"	D11	Cap								
4	#6	8'-0"	T2	...		34	#5	6'-9"	U12	...								
48	#4	7'-0"	U1	Beam		4	#6	5'-3"	U13	...								
8	#4	3'-3"	U2	...		12	#4	4'-3"	U14	...								
24	#7	7'-9"	U3	Buttress														
6	#7	7'-0"	U4	...														
6	#7	6'-9"	U5	...														
24	#4	2'-9"	V1	Bk. Wall														
2	#4	6'-5"	V2	Wing														
4	#4	8'-9"	V3	...														
12	#4	3'-9"	V4	Buttress														

ESTIMATED QUANTITIES

Item	Substr.	Superstr.	Total
Class 1 Excavation for Structures	Cu Yds. 180		180
Class 2 Excavation for Structures	Cu Yds. 25		25
Class "B" Concrete	Cu Yds. 188.2	1	228.5
Fabricated Structural Steel	Lbs. 9,10	106,320	107,230
Steel Castings	Lbs.	2740	2740
Gray Iron Alloy Castings	Lbs.	480	480
Reinforcing Steel	Lbs. 9,709	17,120	26,820
Steel Piles in Place	Lin. Ft. 403		403
Steel Piles Cut-offs	Lin. Ft. 27		27

Note: Excavation for bridge made above Elev. 340.0 will be paid for as Class 1 Excavation for Structures. Excavation for bridge made below Elev. 340.0 will be paid for as Class 2 Excavation for Structures. Estimated weight of fabricated Structural Steel in substructure consists of weight of angles required for steel pile bents.

B.M. 15 Elev. 363.12 Spike in Telephone Pole 98' E. of Sta. 144+25.

BRIDGE OVER APPLE CREEK

STATE ROAD FROM ALTENBURG SOUTH TO CAPE GIRARDEAU ABOUT 6.7 MILES S.W. OF WITTENBURG CO. LINE

PROJECT NO. S-733(7) (SC) STA. 144+48

PERRY COUNTY

DESIGNED BY J. A. Williams DATE 2/23/55
APPROVED BY M. Whitton DATE 2/23/55

FINISHED

FINISHED

STD. CH. 103

P-303

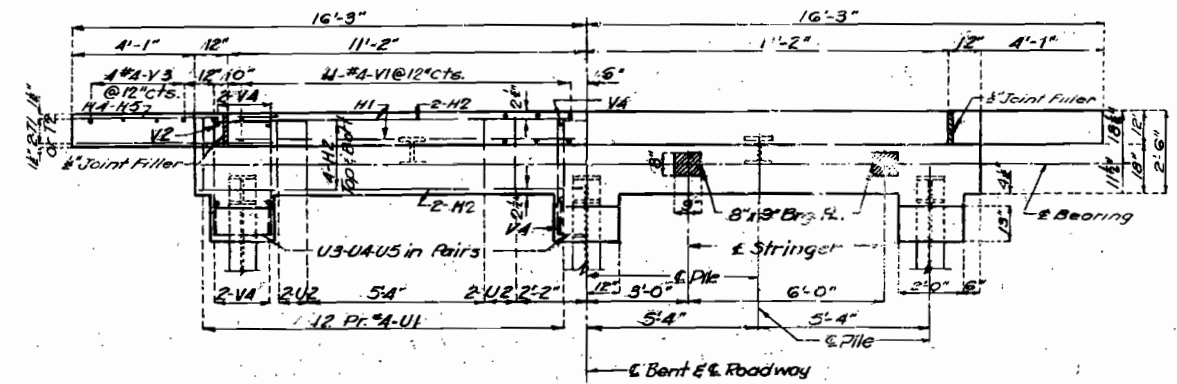
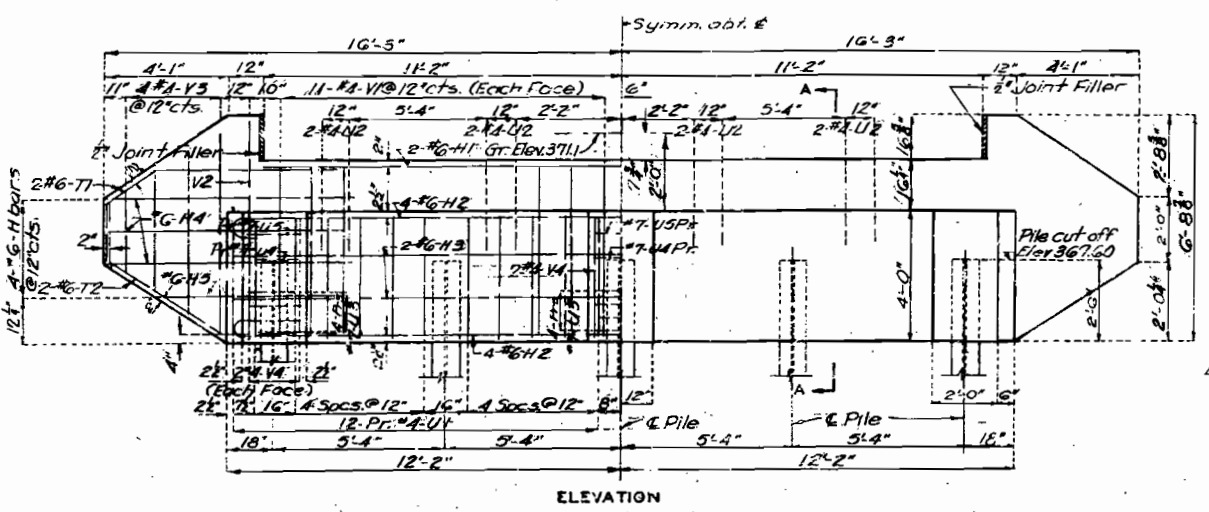
Drawn Feb. 1955 by B.R.G.
Checked Feb. 1955 by C.S.A. & R.M.L.

Note: This drawing is not to scale. Follow dimensions.

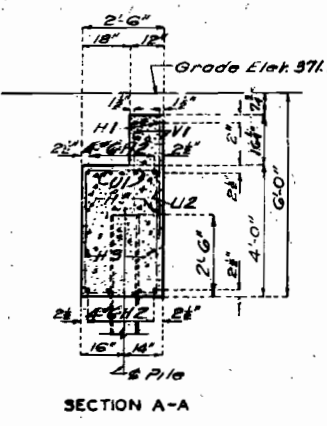
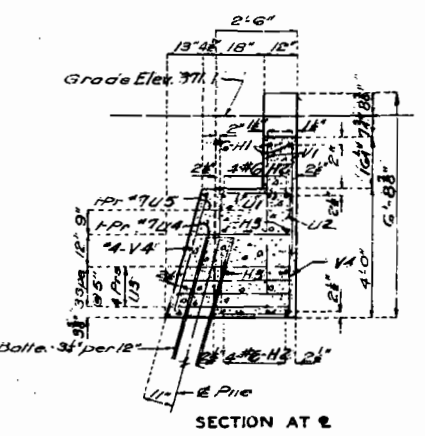
Sheet No. 1 of 3.

MISSOURI STATE HIGHWAY DEPARTMENT

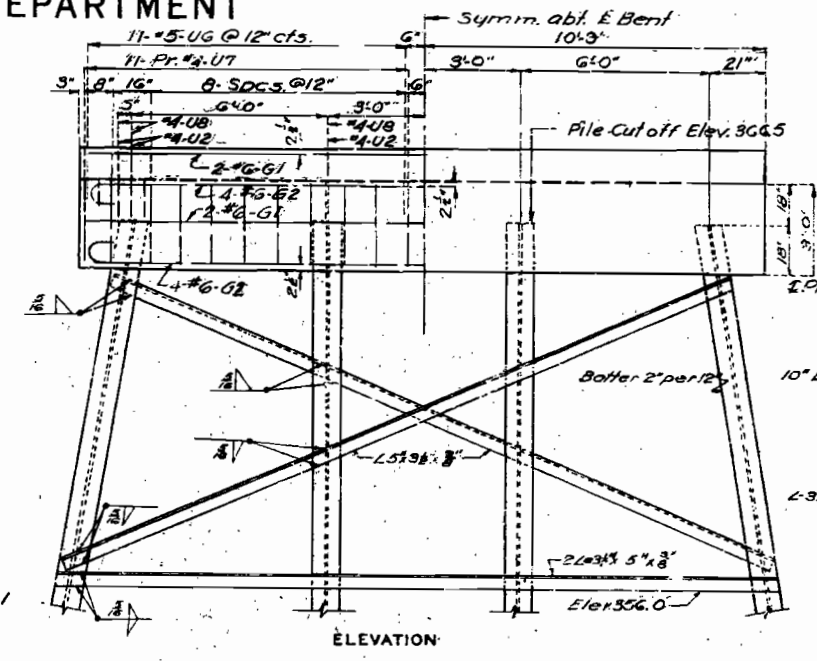
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5	MO	5-733(2)	1952	19	



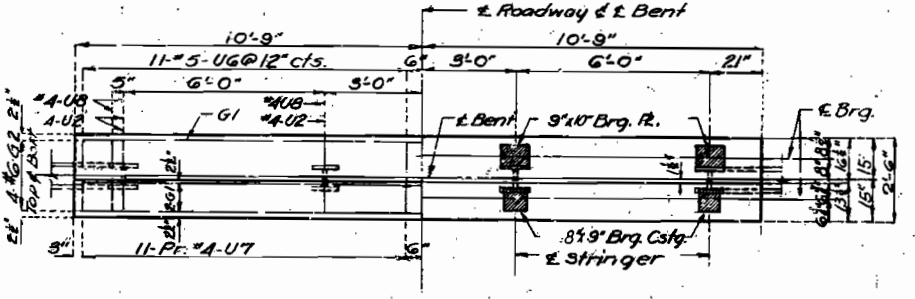
DETAILS OF END BENT NO. 1



SECTION A-A

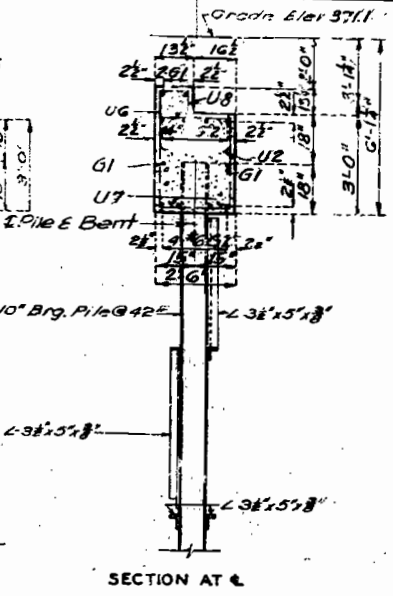


ELEVATION

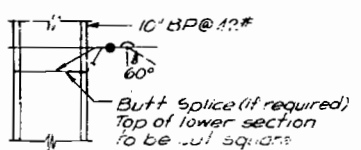


PLAN

DETAILS OF INTERMEDIATE BENT NO. 2



SECTION AT E



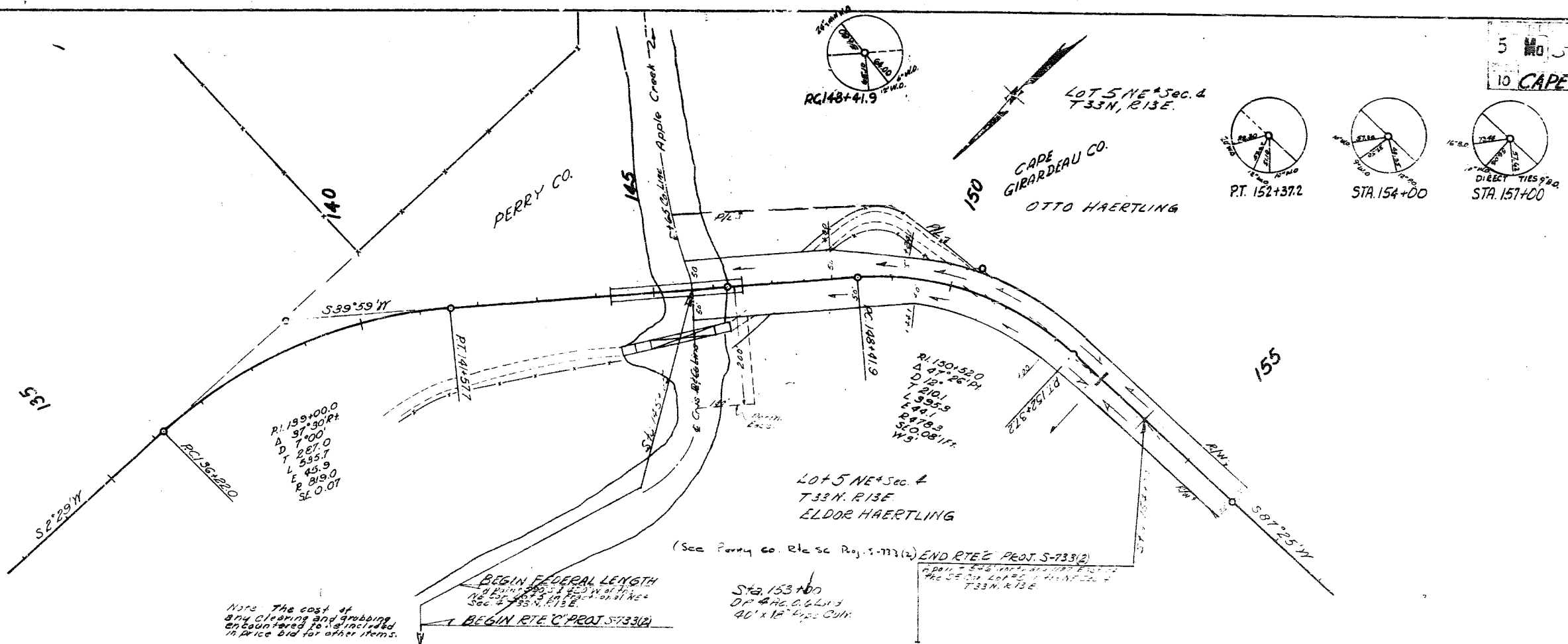
BRIDGE OVER ALLEN CREEK
STATE ROAD FROM ALLENBURG SOUTH TO CAPE GIRARDEAU CO. LINE
ABOUT 6.7 MILES S.W. OF WITTENBURG
PROJECT NO. 5-733(2) STA. 144+48
PERRY COUNTY

Assembled Jan. 1955 by W.E.S. & J.H.K.
Checked Feb. 1955 by C.S.A.

Note: This drawing is not to scale, Follow Dimensions

Sheet No. 2 of 8

P-803



5	Mo	J-733(2)	2	5
10	CAPE GIRARDEAU	C		

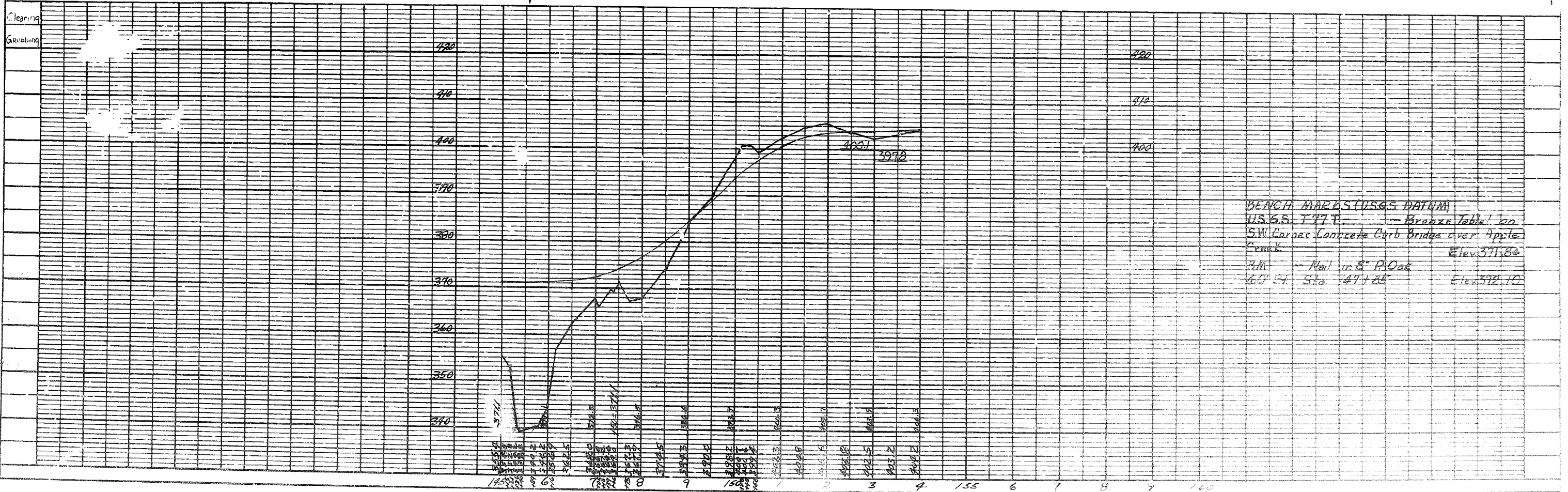


PLATE 1 - PLAN-PROFILE OF PROJECT