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" 2	TYPICAL CROSS-SECTION OF IMPROVEMENT 24' GRAVEL
" 3	PLAN AND PROFILE STA. 0+50 TO 6+00
" 4	PLAN AND PROFILE STA. 6+00 TO 10+00
" 5	S.T.B. 20'-40' SQUARE WITH GRAVEL
" 6	S.A.R. 10' SQUARE
" 7-8-9-10	CROSS SECTIONS
" 11	PLAN AND PROFILE STA. 1+90 TO 2+35
" 12	S.C.I. 8x5 15' SKEW 62' BARREL (3' FILL) BRIDGE 173
" 13-14	CROSS SECTIONS
" 15	PLAN AND PROFILE STA. 2+00 TO 5+00
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STATE OF VERMONT
STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED
STATE HIGHWAY
FEDERAL AID PROJECT

TOWNS OF RANDOLPH-BETHEL
RANDOLPH-BETHEL ROAD

BRIDGE OVER CAMP BROOK **BR 34** MP 3.842-4.022
LOCATED 3.3 MILES SOUTH OF BETHEL-RANDOLPH LINE
LENGTH 950 FEET= 0.180 MILES

BRIDGE LOCATED 4.0 MILES SOUTH OF BETHEL-RANDOLPH LINE
LENGTH 45 FEET= .009 MILES

BETHEL

BEANVILLE BRIDGE OVER BEANVILLE BROOK **BR 40** MPS 4.28-5.372
LOCATED 18 MILES SOUTH OF RANDOLPH VILLAGE ON ROUTE 12
LENGTH 300 FEET= 0.056 MILES

RANDOLPH



RIGHT-OF-WAY DIVISION
TOWN FILE

PERPETUAL
Town of **U.S.**
(To Be Returned To R.O.W. Division)

APPROVED: **6/22/20**
H.E. Sargent
CHIEF ENGINEER

SUBMITTED BY ORDER OF THE STATE HIGHWAY BOARD
W.B. Bates
COMMISSIONER OF HIGHWAYS

RECOMMENDED
DISTRICT ENGINEER BUREAU OF PUBLIC ROADS
RECOMMENDED FOR APPROVAL
CHIEF ENGINEER BUREAU OF PUBLIC ROADS
APPROVED
DIRECTOR - BUREAU OF PUBLIC ROADS

SERIES F. No. 120 FILED
SHEET 1 OF 25

CONVENTIONAL SIGNS	
COUNTY LINE.....	GROUND ELEVATION..... DATUM.....
TOWN LINE.....	GRADE ELEVATION..... DATUM.....
FENCE LINE.....	
STONE WALL.....	
UNFENCED PROPERTY.....	
GUARD RAIL.....	
TRAVELED WAY.....	
RAILROAD.....	
RETAINING WALL.....	
CENTER LINE.....	
SURVEY LINE.....	
CULVERT.....	
DROP INLET.....	
TROLLEY POLE.....	
POWER POLE.....	
TELEPHONE POLE.....	
TREES.....	
HEDGE.....	

CURVE DATA	
DEFLECTION ANGLE.....	Δ
DEGREE OF CURVE.....	D
RADIUS OF CURVE.....	R
TANGENT DISTANCE.....	T
LENGTH OF CURVE.....	L
EXTERNAL DISTANCE.....	E
POINT OF INTERSECTION.....	P.I.
POINT OF CURVE.....	P.C.
POINT OF TANGENT.....	P.T.
POINT ON TANGENT.....	P.O.T.

THIS PROJECT TO BE CONSTRUCTED IN ACCORDANCE WITH
STANDARD SPECIFICATIONS ON FILE WITH THE U.S. BUREAU
OF PUBLIC ROADS. APPROVED 7/1/26
STRUCTURES ON THIS PROJECT TO BE CONSTRUCTED IN
ACCORDANCE WITH DETAILS GIVEN ON STANDARD STRUCTURE
SHEETS. SERIES Nos. 517-18-19

DISTRICT NO. 5-7
BRIDGE NO. 173-174
RANDOLPH-BETHEL

Project No. **F 120**

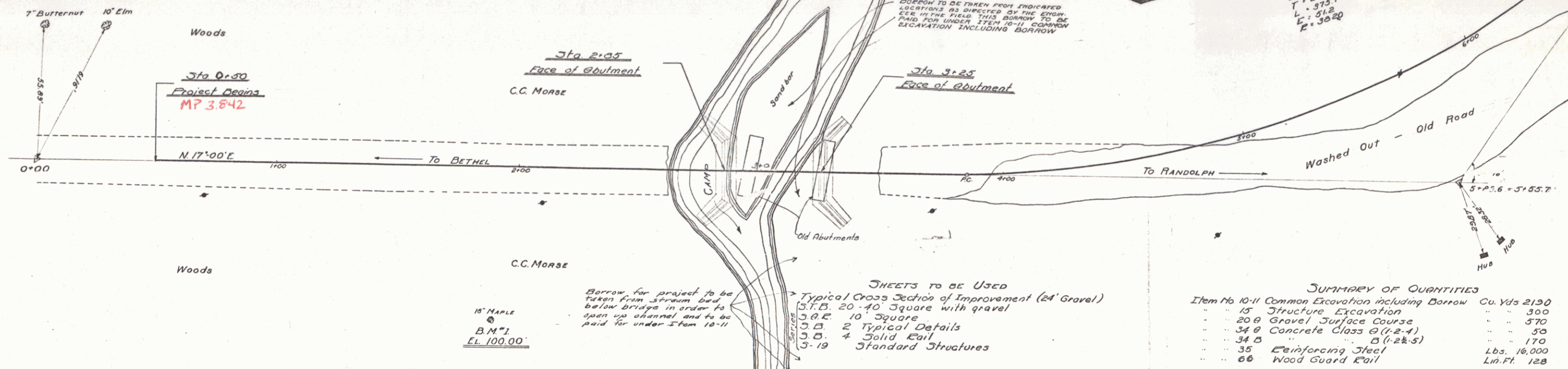
DIST. # 4 PLANS

WOOD GUARD RAIL REQUIRED

LEFT
Sta. 2+51 to 2+53 = 32 Lin. Ft.
" 3+27 " 3+59 = 32 " "
RIGHT
Sta. 2+51 to 2+53 = 32 Lin. Ft.
" 3+27 " 3+59 = 32 " "
Total - 128 Lin. Ft.

GRAVEL SURFACE COURSE REQUIRED
Estimated Quantity - - 570 Cu. Yds.

PER ROAD DIST. NO.	STATION	FOOTING	PIERCES	PIERCES	SHEET NO.	TOTAL SHEETS
3	VT.	12 D	1928	3	25	

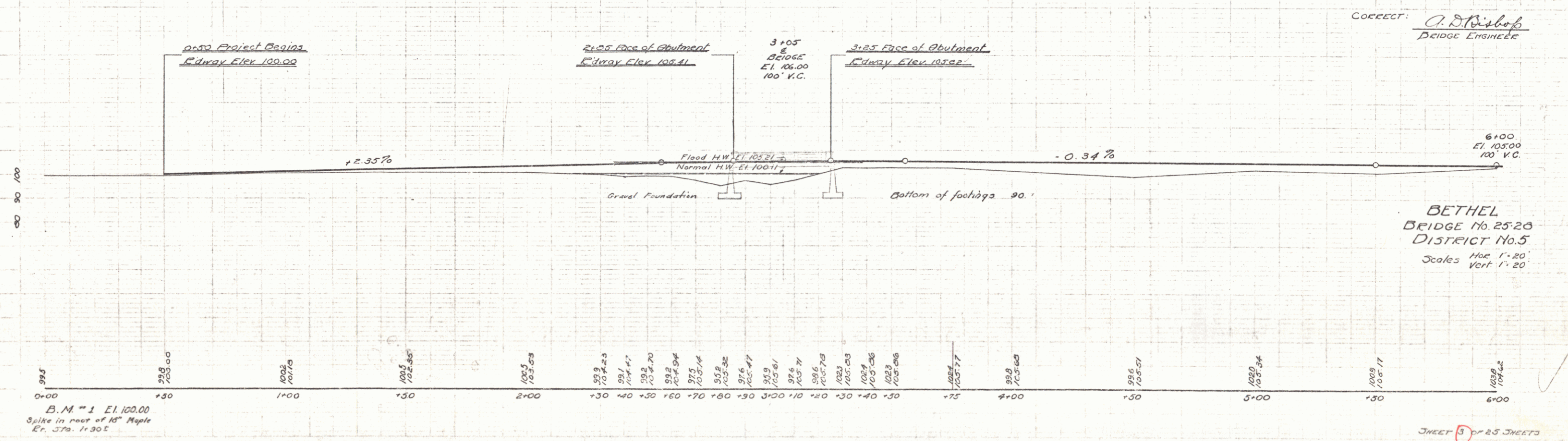


- SHEETS TO BE USED**
- Typical Cross Section of Improvement (24' Gravel)
 - S.T.B. 20-40 Square with gravel
 - S.D. 10 Square
 - S.D. 2 Typical Details
 - S-19 4 Solid Rail
 - Standard Structures

SUMMARY OF QUANTITIES

Item No. 10-11 Common Excavation including Borrow	Cu. Yds. 2150
" " 15 Structure Excavation	" " 300
" " 20 Gravel Surface Course	" " 570
" " 34 Concrete Class B (1-2-4)	" " 50
" " 34 B B (1-2-5)	" " 170
" " 35 Reinforcing Steel	Lbs. 16,000
" " 66 Wood Guard Rail	Lin. Ft. 128

Length of Bridge 43' = 0.008 Miles
Approaches 90.7' = 0.172 "
Project 950' = 0.180 "



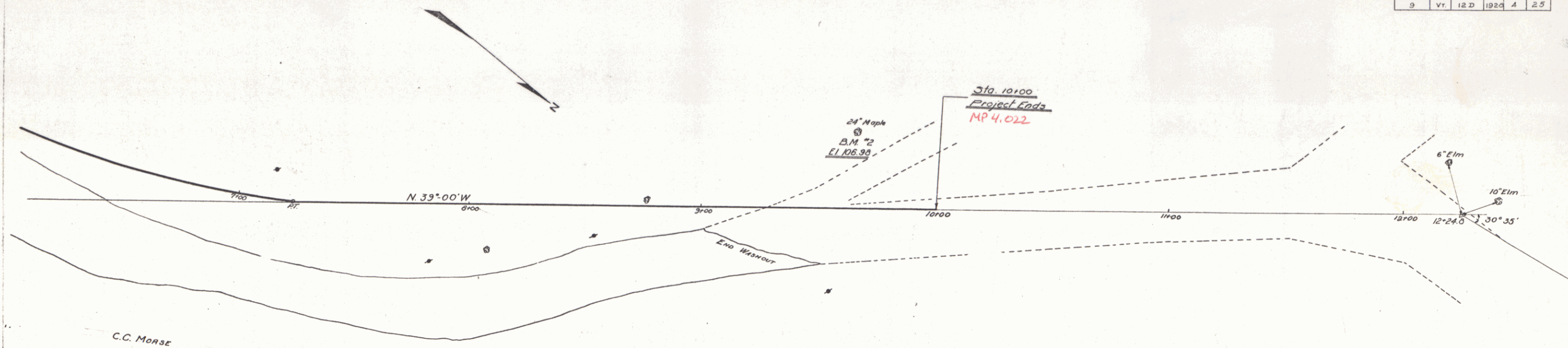
CORRECT: *C. St. Bishop*
BRIDGE ENGINEER

BETHEL
BRIDGE No. 25-28
DISTRICT No. 5
Scales Hor. 1"=20'
Vert. 1"=20'

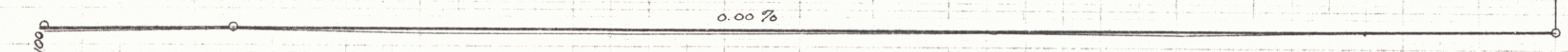
SHEET 3 OF 25 SHEETS

FED. ROAD DIST. NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
9	VT.	12 D	1920	4	25

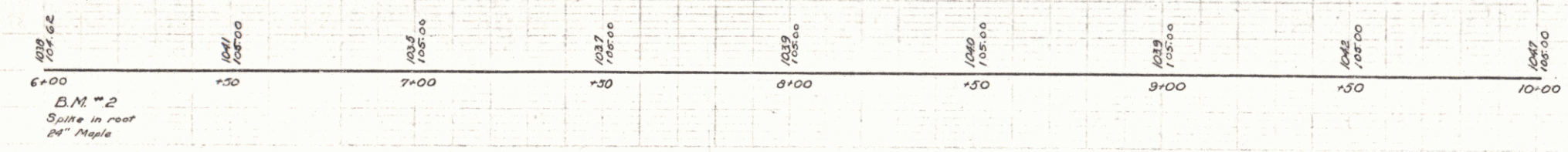
AD Wood
F.E.S.



6+00
ST. 105.00
100' V.C.



10+00 Project Ends
Roadway Elev. 105.00



B.M. "2"
Spoke in roof
24" Nape

BETHEL
BRIDGE No. 25-20
DISTRICT No. 5

SHEET 4 OF 25 SHEETS

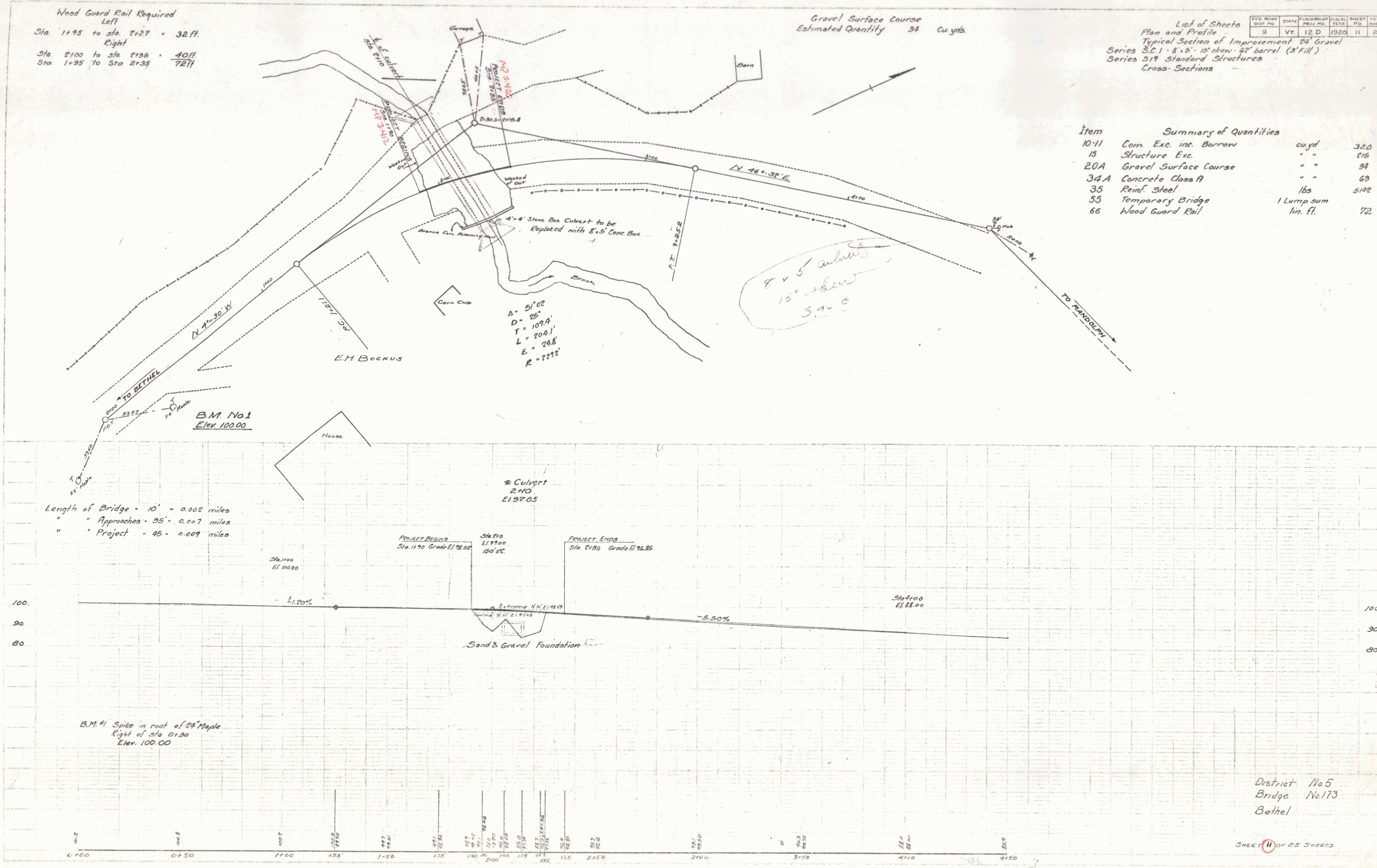
Wood Guard Rail Required
Left
Sta. 1+95 to Sta. 2+27 = 32 ft.
Right
Sta. 2+00 to Sta. 2+35 = 35 ft.
Sta. 1+95 to Sta. 2+35 = 72 ft.

Gravel Surface Course
Estimated Quantity 34 cu. yds.

Light of Sheets
Plan and Profile
Typical Section of Improvement 20' Gravel
Series S.C.1 - 8' x 5' - 15' skew - 60' barrel (3' fill)
Series S.19 Standard Structures
Cross Sections

FEED ROAD	STATE	PROJECT NO.	LOCAL	SHEET	TOTAL
9	VT	12 D	1920	11	25

Item	Summary of Quantities	cu. yd.	
10-11	Com. Exc. int. Borrow	" "	320
15	Structure Exc.	" "	216
20A	Gravel Surface Course	" "	34
34A	Concrete Class A	" "	63
35	Reinf. Steel	lbs	5142
35	Temporary Bridge	1 Lump sum	
66	Wood Guard Rail	lin. ft.	72



District No. 5
Bridge No. 173
Bethel

SHEET 11 OF 25 SHEETS

WOOD GUARD RAIL REQUIRED

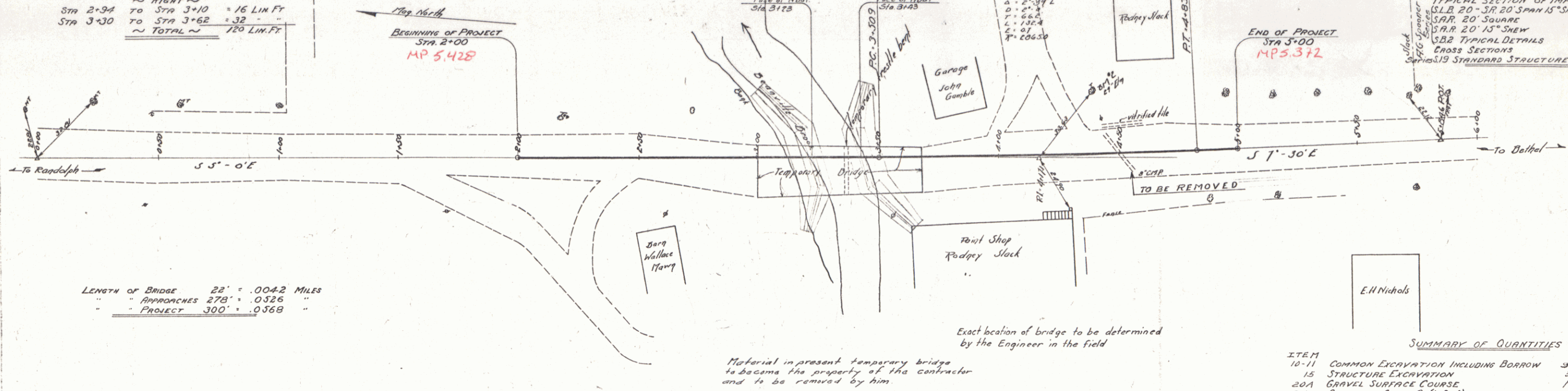
~ LEFT ~
 STA 2+78 TO STA 3+10 = 32 LIN. FT.
 STA 3+30 TO STA 3+70 = 40 " "
 ~ RIGHT ~
 STA 2+94 TO STA 3+10 = 16 LIN. FT.
 STA 3+30 TO STA 3+62 = 32 " "
 ~ TOTAL ~ 120 LIN. FT.

GRAVEL SURFACE COURSE REQUIRED
 ESTIMATED QUANTITY 175 CUB YDS

ED. ROAD DIST. NO.	STATE	FLOOD RELIEF PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9	VT	12 D	1926	18	25

SHEETS TO BE USED

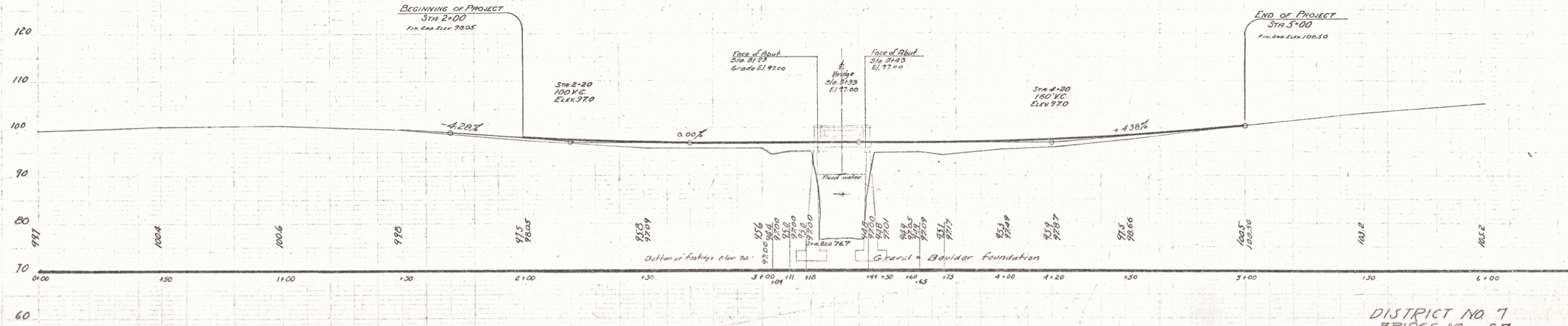
PLAN AND PROFILE
 TYPICAL SECTION OF IMPROVEMENT
 S.L.B. 20'-3R 20' SPAN 15' SKEW WITH GRAD
 S.A.R. 20' SQUARE
 S.A.R. 20' 15' SKEW
 S.B.2 TYPICAL DETAILS
 CROSS SECTIONS
 S.B.19 STANDARD STRUCTURES



LENGTH OF BRIDGE 22' = .0042 MILES
 " " APPROACHES 278' = .0326 "
 " " PROJECT 300' = .0368 "

SUMMARY OF QUANTITIES

ITEM	QUANTITY
10-11 COMMON EXCAVATION INCLUDING BORROW	330 CUB YDS
15 STRUCTURE EXCAVATION	325 " "
20A GRAVEL SURFACE COURSE	175 " "
34A CONCRETE CLASS A (1-2-4)	43 " "
34B CONCRETE CLASS B (1-2-5)	388 " "
35 REINFORCING STEEL	32,065 LBS.
55 TEMPORARY BRIDGE	1 LUMP SUM
66 WOOD GUARD RAIL	120 LIN. FT.



DISTRICT NO. 7
 BRIDGE NO. 97
 RANDOLPH
 Scale - 1"=20'-0"