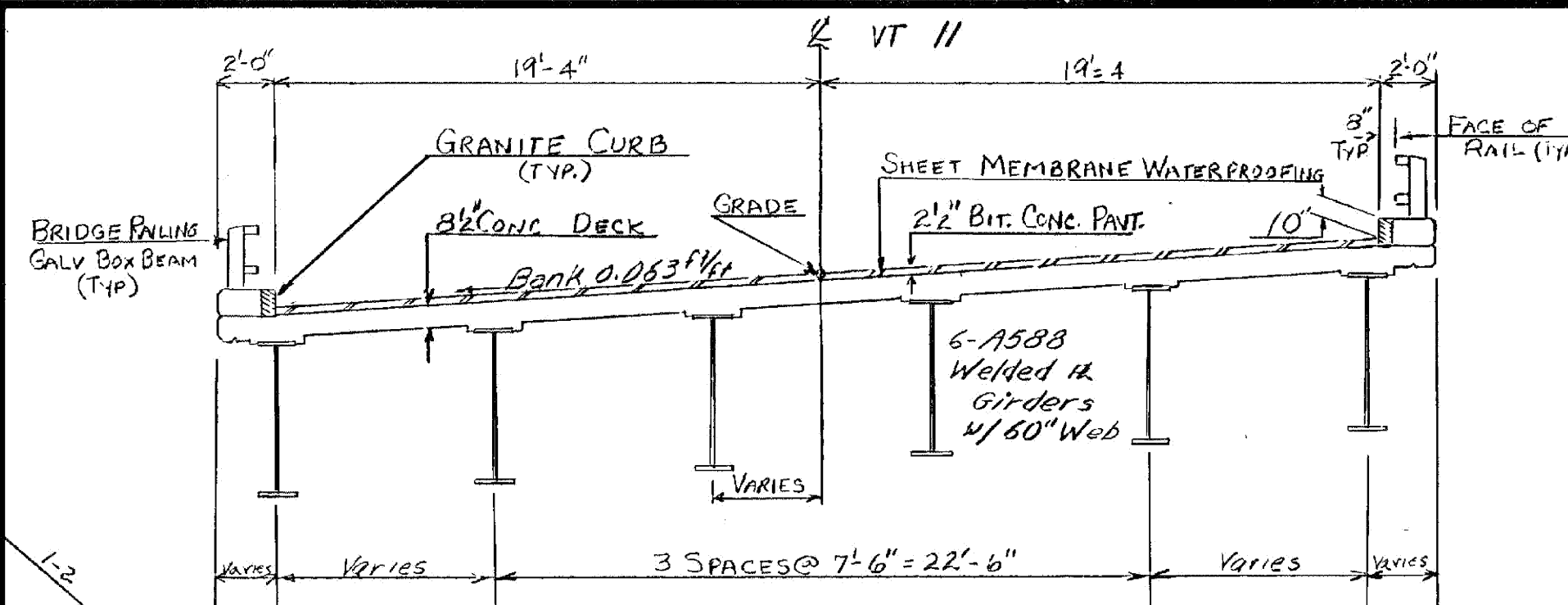


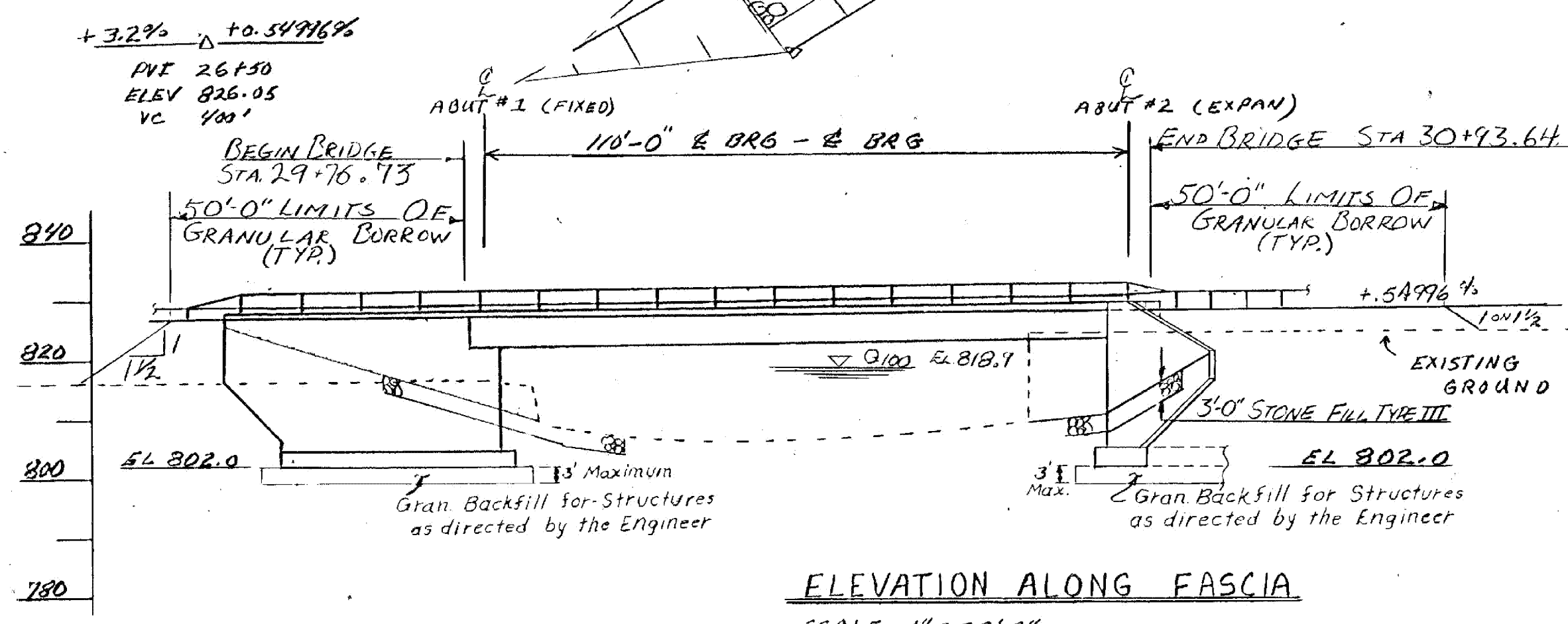
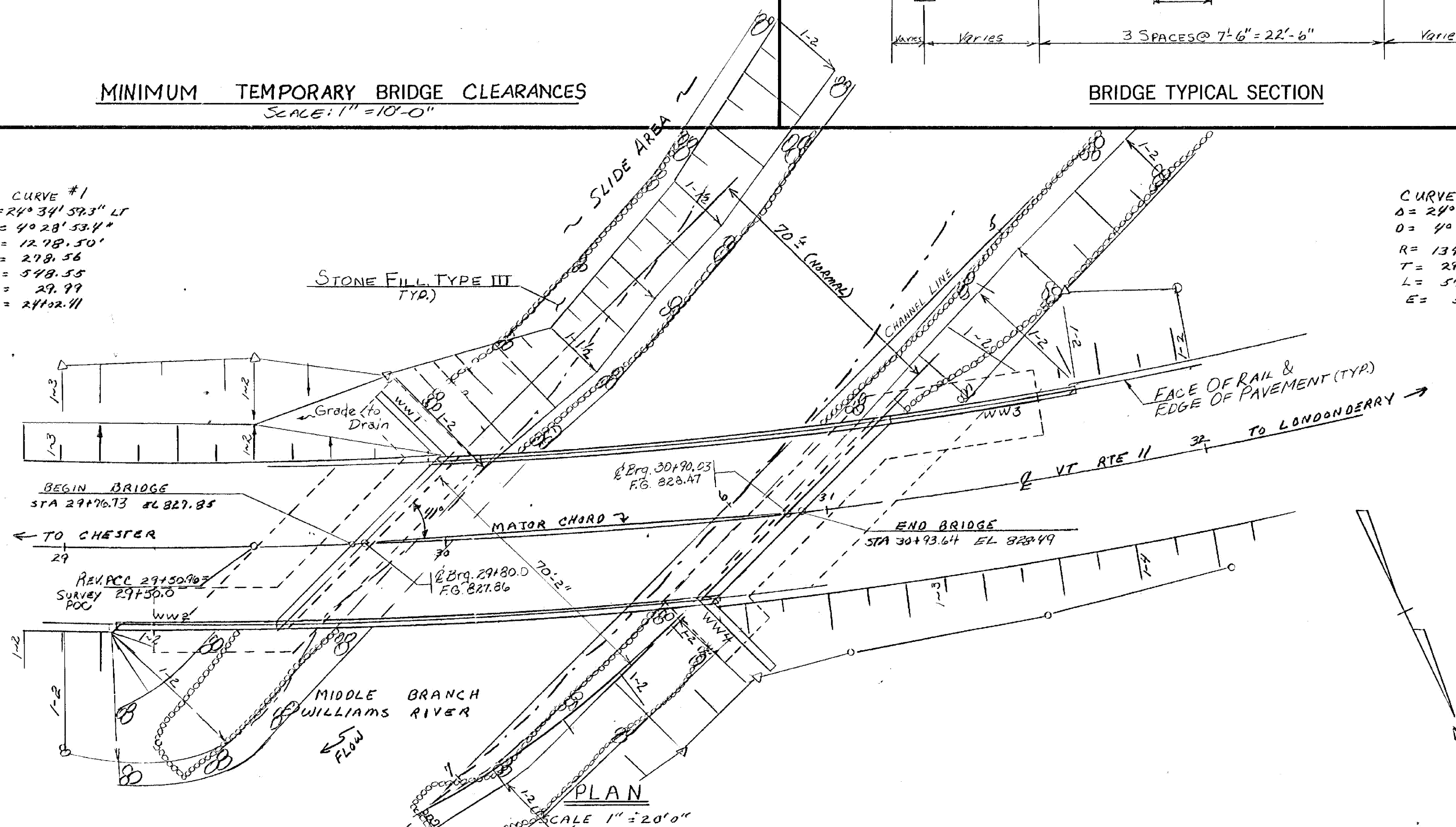
MINIMUM TEMPORARY BRIDGE CLEARANCES
SCALE: 1" = 10'-0"



BRIDGE TYPICAL SECTION

CURVE #1
Δ = 24° 34' 59.3" LT
D = 4028' 53.4"
R = 1278' 50"
L = 278.56'
E = 549.55'
A = 29.97'
PC = 24112.11'

CURVE #2
Δ = 24° 28' 03.2" LT
D = 4015' 00"
R = 1348' 14"
L = 292.33'
E = 545.74'
EC = 31.33'



ELEVATION ALONG FASCIA
SCALE 1" = 20'-0"

EXISTING STRUCTURE			
1. STRUCTURE TYPE	STEEL PONY TRUSS	OVERALL LENGTH	77'
2. SPAN LENGTH(S) CENTER TO CENTER OF BEARINGS	26'	INVENTORY RATING	H-13
3. CLEAR SPAN LENGTH(S) NORMAL TO STREAM	26'		
4. WATERWAY AREA OF FULL OPENING (NORMAL TO STREAM)	1278 sq. ft.	VERTICAL CLEARANCE ABOVE STREAMBED	11.0'
5. WATER SURFACE ELEVATION @ Q 2.33	813.5	WATER SURFACE ELEVATION @ Q 50	818.8
6. WATER SURFACE ELEVATION AT FLOOD OF RECORD	Unknown	YEAR	1976
7. DOES ALL WATER PASS THROUGH EXISTING STRUCTURE?	Yes	ESTIMATED DISCHARGE	
8. TYPE OF SUBSTRUCTURE FOUNDATION MATERIAL	Silty sand w/ some gravel		
9. DISPOSITION OF STRUCTURE	Remove		

NEW STRUCTURE			
1. STRUCTURE TYPE	WELDED COMPOSITE PLATE GIRDER	OVERALL LENGTH	117'
2. SPAN LENGTH(S) CENTER TO CENTER OF BEARINGS	117'		
3. VERTICAL CLEARANCE ABOVE STREAMBED OR ROAD UNDER	12.5'		
4. CLEAR SPAN LENGTH(S) NORMAL TO STREAM	117'		
5. WATERWAY AREA OF FULL OPENING (NORMAL TO STREAM)	1006 sq. ft.		
6. ARE PROVISIONS TO BE MADE FOR PUBLIC UTILITIES?	NO		

HYDRAULIC DATA:			
1. Q 2.33	1150 cfs	WATER ELEVATION	813.1
Q 10	2650 cfs	WATER ELEVATION	815.2
Q 25	3100 cfs	WATER ELEVATION	816.6
Q 50	4700 cfs	WATER ELEVATION	817.8
Q 100	5650 cfs	WATER ELEVATION	818.4
2. DRAINAGE AREA	2713 sq. mi.	CHARACTER OF TERRAIN	Rolling to Hilly
3. ARE THERE OBJECTIONS TO A PIER IN THE STREAM?	No		
4. DOES STREAM REACH ITS MAXIMUM HIGH WATER ELEVATION RAPIDLY?	Yes	IS ORDINARY RISE RAPID?	Yes
5. NATURE OF NATURAL STREAMBED	Gravel - Boulders		
6. ESTIMATED SCOUR DEPTH	2'-4"	COMMENT ON: DRIFT	Mod.
7. WILL ALL WATER PASS THROUGH NEW STRUCTURE?	Yes	IF NOT, WHAT FREQUENCY AND ELEVATION WILL RELIEF OCCUR?	N/A
8. VERTICAL CLEARANCE ABOVE Q 100	11'		
9. ALLOWABLE WATER SURFACE ELEVATION	820.0	LIMITED BY	Low Bridge Seat
10. IS DESIGN STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS?	No	IF YES, DESCRIBE	
11. AVERAGE DAILY LOW FLOW	30 cfs	DEPTH	81.82.5
12. STREAMBANK OR CHANNEL PROTECTION REQUIRED	Stone Fill Type III		
13. DISTANCE TO EXISTING UPSTREAM STRUCTURE	2200'	SPAN	26'
14. DISTANCE TO EXISTING DOWNSTREAM STRUCTURE	1800'	SPAN	117'

ALLOWABLE STRESSES:			
1. DESIGN LIVE LOAD AASHTO	H-25-44	ON LEDGE	
2. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL	4.2 KSF		
3. ALLOWABLE LOAD FOR PILING	TYPE	TENSION	27,000 psi
4. ALLOWABLE STRESS FOR STRUCTURAL STEEL ASTM A 588		COMPRESSION	20,000 psi
5. ALLOWABLE STRESS FOR REINFORCING STEEL GRADE 60 TENSION	24,000 psi		
6. ESTIMATED STRESS FOR CONCRETE CLASS A 1c	3500 psi		
6. ALLOWABLE STRESS FOR CONCRETE CLASS B 1c	3500 psi		

TRAFFIC MAINTENANCE:			
1. IS TRAFFIC TO BE MAINTAINED?	YES	IF YES, ON EXISTING STRUCTURE	NO
2. TEMPORARY BRIDGE REQUIREMENTS: ONE OR TWO WAY	TWO WAY	TRAFFIC CONTROL SIGNALS REQUIRED	NO
MINIMUM CLEAR SPAN	40'	MINIMUM CLEAR HEIGHT	6'
ARE SIDEWALKS REQUIRED?	NO	IF SO, ON WHAT SIDE?	N/A

STANDARDS	
5B-R4A-82	6-18-82 R
5B-R4B-82	12-28-81
5CB-D1-75	9-14-81 R
5CB-D4-76	1-8-76 R
5CB-D6-73	1-3-79 R
5CB-D7-71	12-15-76 R
5CB-D9-71	1-27-75 R

INDEX OF SHEETS	
BR100	PRELIMINARY INFORMATION
BR101	BRIDGE QUANTITY SHEET
BR102	BORING SHEET
BR103	TYP BRIDGE SECT. & SLAB REINF
BR104	GIRDER ELEVATION & FRAMING PLAN
BR105	APPROACH SLABS & TYPICAL CROSS FRAME & END DIAPHRAGM DETAILS
BR106	BEARING DEVICE DETAILS
BR107	ABUTMENT #1 DETAILS
BR108	WINGWALLS 1&2 DETAILS
BR109	ABUTMENT #2 DETAILS
BR110	WINGWALLS 3&4 DETAILS
BR111	REINFORCING STEEL SCHEDULE

LOAD RATING (TONS)	
STRESS LEVELS	TRUCK
INVENTORY	41 45
0.55 Fy =	
POSTED	64 80 66 67 75
0.67 Fy =	
OPERATING	97 112 81 82 91
0.75 Fy =	

RECOMMENDED FOR APPROVAL	W.M. Smith	7/8/80
STRUCTURES ENGINEER		DATE
RECOMMENDED FOR APPROVAL	William Jones	7/8/80
CHIEF OF DESIGN		DATE
APPROVED BY	S.J. Gage, P.E.	SEP 08 1980
DIRECTOR OF ENGINEERING & CONSTRUCTION		DATE

REVISIONS		
NO.	DESCRIPTION	BY & DATE

STATE OF VERMONT AGENCY OF TRANSPORTATION			
TOWN OF	CHESTER	Bridge No.	45
Log Sta.	94+92	Log Sta.	94+92
Highway No.	VT. RTE 11	Surv. Sta.	30+0
VI RTE 11 OVER MIDDLE BRANCH WILLIAMS RIVER			
PRELIMINARY INFORMATION SHEET			
Designed by	GVS 10/12/79	Drawn by	GVS
Checked by	D.R. Landry date 10/23/79	Bridge Design Supervisor	R.S. Haupt date 11-79
PROJECT	CHESTER	PROJECT NO.	BRF 016-1(6)
Bridge Sheet No.	BR100	Sheet	13 of 75

STATEWIDE - SOUTHEAST
REGION
BHF MEMB(21)

SHEET 13 OF 34
BRIDGE 45
FOR REFERENCE ONLY