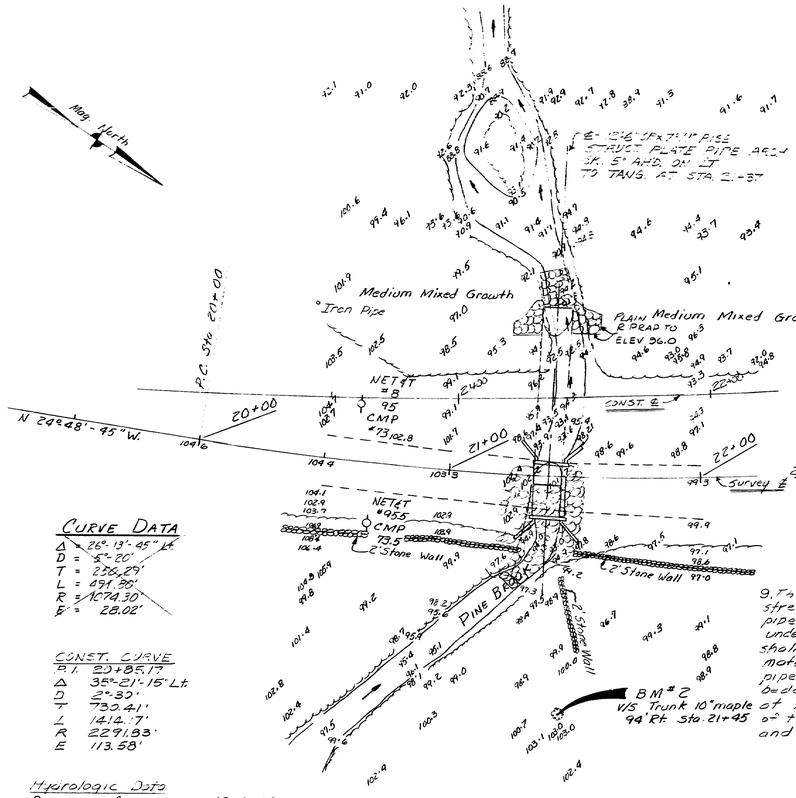
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	RS 0186(3)	4	24



PLAN

Scale of Feet

CURVE DATA

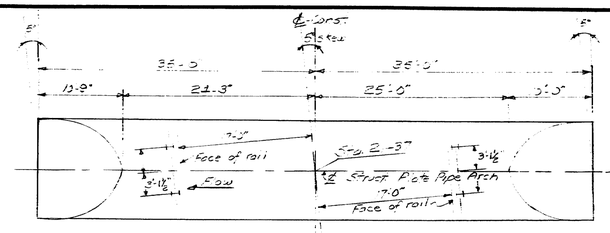
Δ = 26°-13'-45" Lt
D = 5°-20'
T = 236.29'
L = 491.80'
R = 1074.30'
E = 28.02'

CONST. CURVE

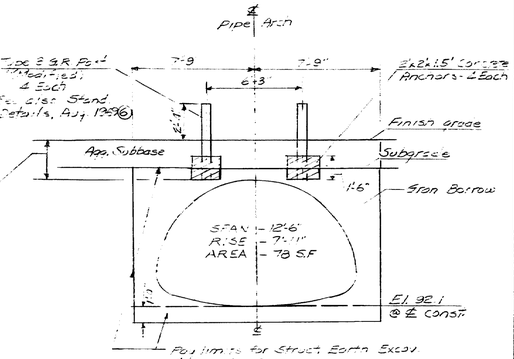
P.I. 20+85.17
Δ 35°-21'-15" Lt
D 2°-30'
T 730.41'
L 1412.7'
R 2291.83'
E 113.58'

Hydrologic Data

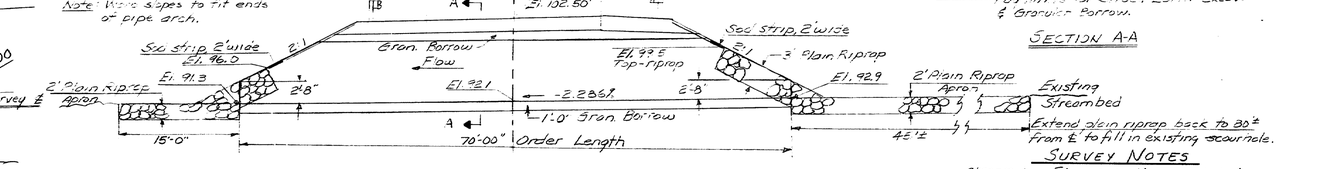
Drainage Area	13 Sq. Mi.
Design Discharge (Q50)	540 CFS
Mean Velocity (Q50)	12 fps±
High Water (Q50)	99.5±
High Water (Q100)	100.6±
Check Discharge (Q100)	650 CFS
Mean Velocity (Q100)	13 fps±



PLAN



SECTION A-A



ELEVATION

SURVEY NOTES

Stream: Flow is rapid over rock bed. Streambed is gravel and loose boulders.

Abutments: Abutments and wing walls are Class Concrete, The top of the downstream wing walls are partly spalled

Curb: The upstream concrete curb is spalled exposing reinforcing steel. The downstream concrete curb and fascia are spalled exposing reinforcing steel on the curb and Fascia.

Superstructure and Abutments: Face of concrete Abutments and concrete deck are in good condition (Not spalled).

9. The use of cofferdams and the unwatering of the stream will not be a requirement for the installation of the pipe arch. Bedding and backfill material to be placed under water shall be placed uniformly and the pipe arch shall be moved back and forth longitudinally on the bedding material to shape and compact it prior to releasing the pipe arch in its final position as shown on the plans. The bedding material and the pipe arches shall not be placed at times of high water. The contractor shall obtain approval of the Engineer prior to placing the bedding material and the pipe arch.

CONSTRUCTION NOTES

1. One 150" span, 95" rise Struct. Plate Pipe Arch required. Top plates shall be 0.138" thick, bottom and corner plates shall be 0.168" thick. Assemble with ¾" diam. hot dipped galvanized bolts (ASTM A449), nuts (ASTM A563)
2. Ends shall be cut to the slope shown on the details.
3. Granular Borrow shall meet the requirements of Subsection 703.19, Material for Underwater Backfill.
4. Granular Borrow may be omitted under the pipe arch if the existing material is suitable.
5. Place a 2' wide strip of sod along the top of the riprap and over the pipe arch typical both ends.
6. Riprap shall be carefully placed around ends of pipe so that no damage to the pipe will result and in such a manner that the finished slope will match the ends of the pipe. No separate payment will be made for extra work required to place riprap adjacent to the ends of the pipe. Payment for all labor, materials and equipment necessary to place riprap will be made under Item 610.08, Plain Riprap.
7. Payment for modifying the 2 Type 3 Gd. Rail Posts and for the 4 concrete anchors is to be considered incidental to Item 606.55
8. 2" of loam shall be placed on the slopes above the riprap and under sodded areas and 10' beyond each end of the riprap limits.

NOTES: EXISTING STRUCTURE

Existing abutments to be removed and paid for under Item 206.07-Struct Pack Excav.-Drainage and Minor Struct

Existing superstructure to be removed and paid for under Item 202.15-Removal of Existing Superstructure (Property of Contractor)

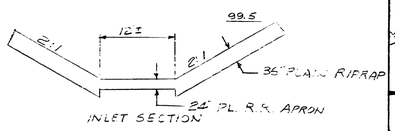
SPECIFICATIONS

DESIGN: AASHO Specifications for Highways & Bridges 1973 and interim specification 1974, 1975 and 1976.

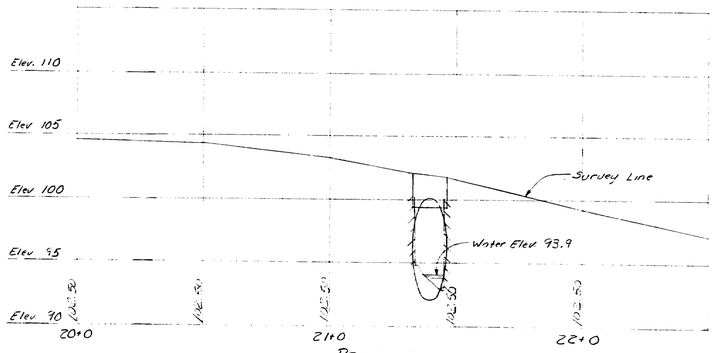
CONTRACT: State of Maine, Department of Transportation, Standard Specifications Highways and Bridges Revision of June, 1968.

DESIGN LOADING

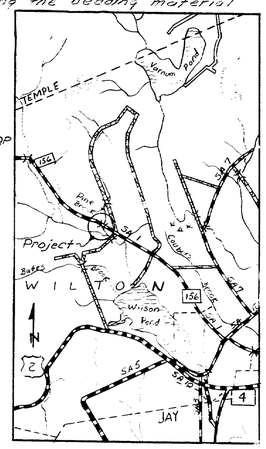
Live Load HS 20-44



INLET SECTION



PROFILE



LOCATION MAP

Scale of Miles

Reference 186 (3)
Book No 7651

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PINE BROOK BRIDGE

IN THE TOWN OF

WILTON

FRANKLIN COUNTY

SURVEY & PROFILE
STRUCTURAL PL. PIPE ARCH
BRIDGE NO. 1374
SHEET 11 OF 24 AUGUSTA, MAINE

PROJECT DESIGN ENGINEER	BY		DATE
PLANS — DESIGN - DETAILED	L.A.K.	J.A.	11/76
CHECKED			
REVISIONS			
FIELD CHANGES			

Checked by F.J.T. 5-76
Survey Plotted K.W.N. 1-7-76

RS-0186(3) 170 of 99 Ex. 156