

F.R.A. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	F-030-1(23)	21	143

SPECIFICATIONS

Design: AASHTO, Standard Specifications for Highway Bridges 1983 and Interims 1984, 1985

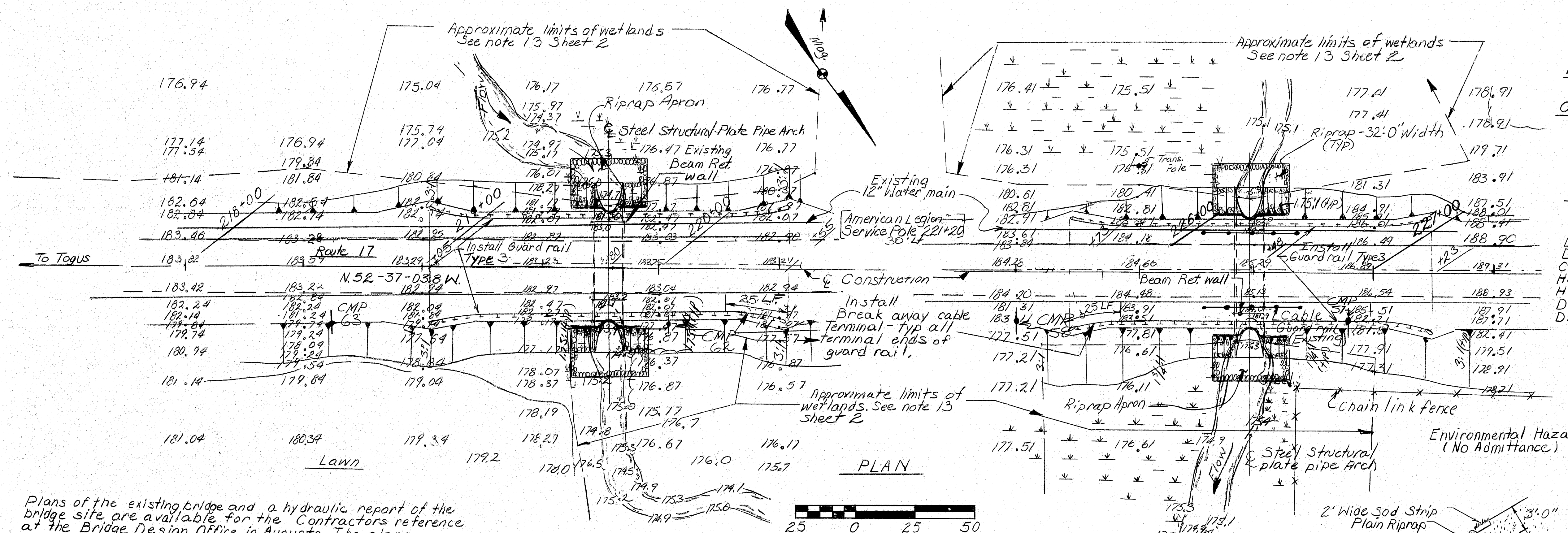
Contract: State of Maine Department of Transportation, Standard Specifications, Highway and Bridges Revision of January, 1984.

DESIGN LOADING

Live load: HS 25

HYDROLOGIC DATA

	Spaulding	Thorne	(Sq. Mi.)
Drainage area	1.11	1.11	
Design discharge (Q ₅₀)	250	175	(c.f.s.)
Check discharge (Q ₁₀₀)	300	210	(c.f.s.)
Head water El. (Q ₅₀)	179.2	179.6	(ft.)
Head water El. (Q ₁₀₀)	179.7	179.8	(ft.)
Discharge velocity (Q ₅₀)	4.4	3.5	(fps)
Discharge velocity (Q ₁₀₀)	5.0	4.0	(fps)



PLAN

SPAULDING BRIDGE
Over Spaulding Brook

THORNE BRIDGE
Over Thorne Brook

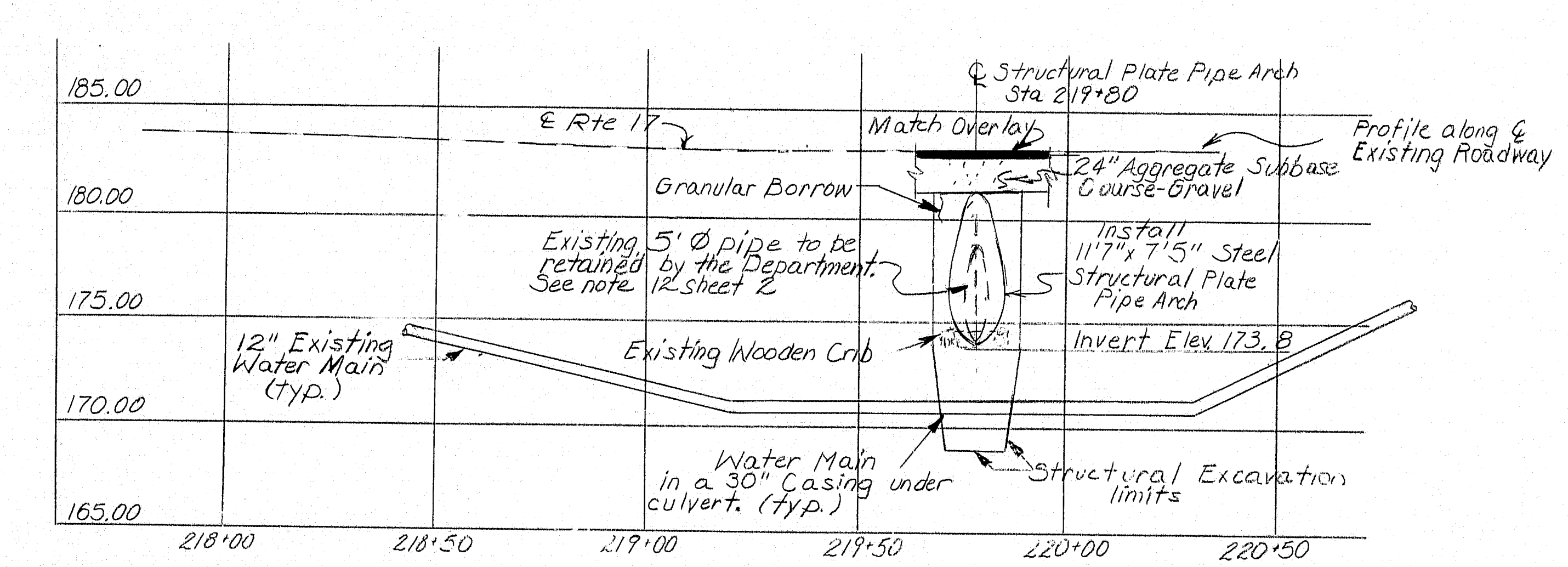
TRAFFIC DATA

1987 A.A.D.T.	8820
1997 A.A.D.T.	15880
D.H.V.	1588
T %	4
D %	55
18 k equivalent P.S.I.	109

Plans of the existing bridge and a hydraulic report of the bridge site are available for the Contractor's reference at the Bridge Design Office in Augusta. The plans are reproductions of original drawings as prepared for the construction of the bridge and it is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span. The hydraulic report is based on the interpretation by the Department of Information obtained for the subject site and no assurance is given that the information or the conclusions of the report will be representative of actual conditions at the time of construction.

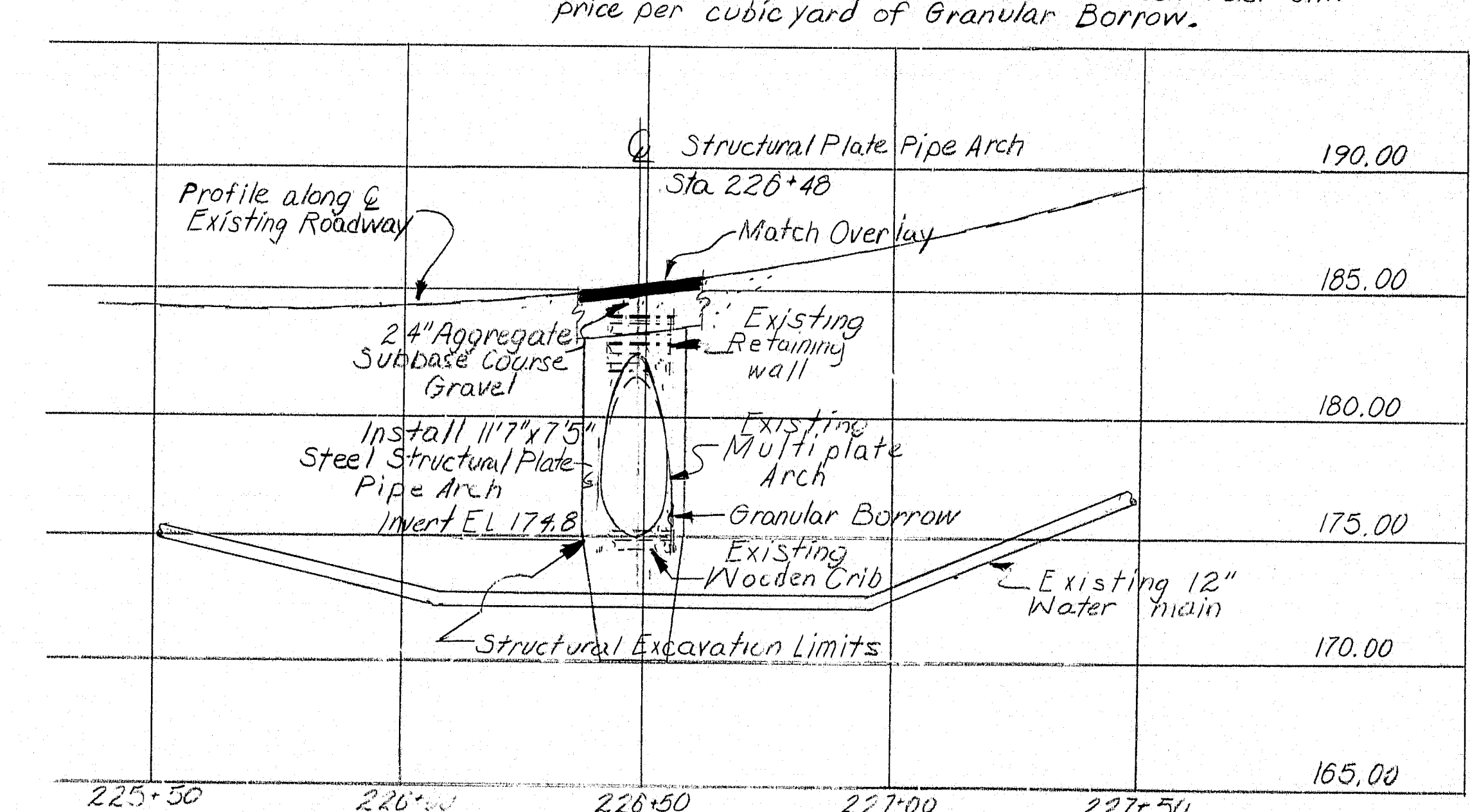
NOTE

All work contemplated under this contract to be governed by and in conformity with the Standard Specifications (Revision of 1984) and supplements thereto, except as modified on the plans and in the special provisions.

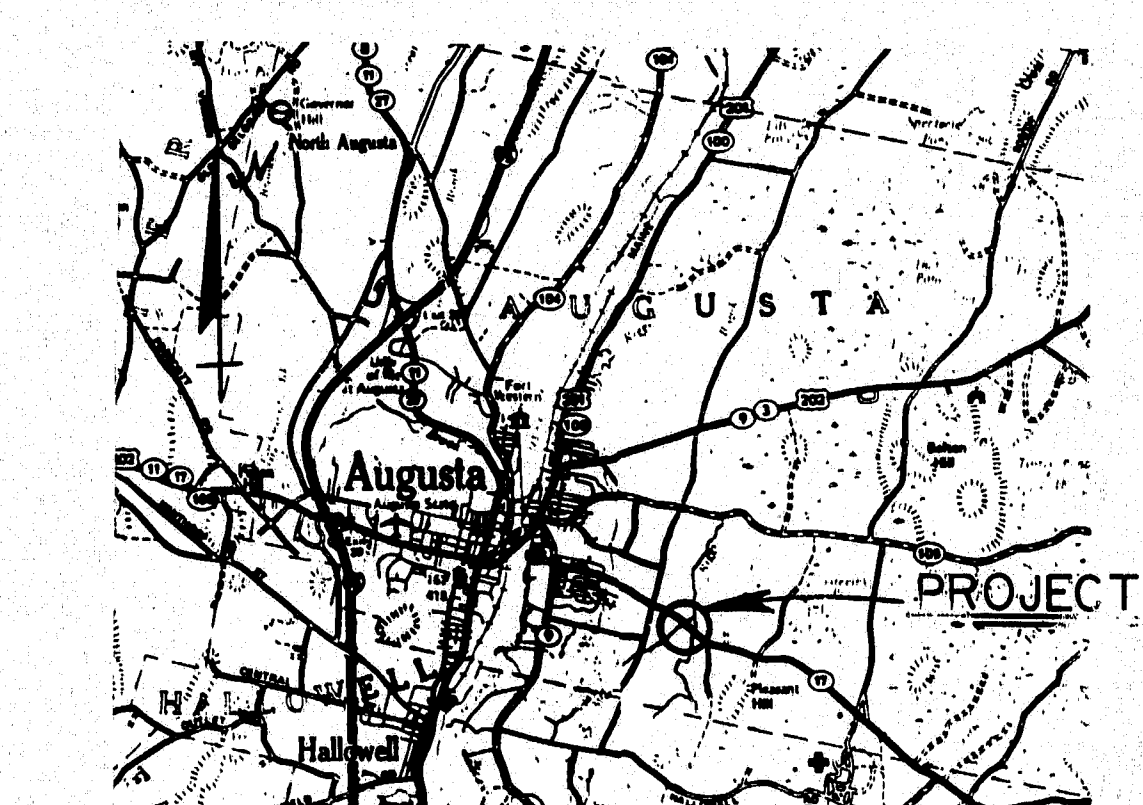


SPAULDING BRIDGE

PROFILE



THORNE BRIDGE



Location Map

Scale
1/40 1 2 3 4 5 MILES

Survey Books Numbers

30/150
30/151
30/152

Bridge Numbers:

Thorne - 2850
Spaulding - 2790

STATE OF MAINE DEPARTMENT OF TRANSPORTATION

Thorne Bridge
&
Spaulding Bridge
in the city of
Augusta

Kennebec County
General Plan

Sheet 1 of 2 AUGUSTA, MAINE JAN. 1988

362
100-361
AS-BUILT-1985
J. F. Vanman

PROJECT DESIGN ENGINEER	DATE
DESIGN - DETAILED	11-88
REVISIONS	1-88
FIELD CHANGES	1-88

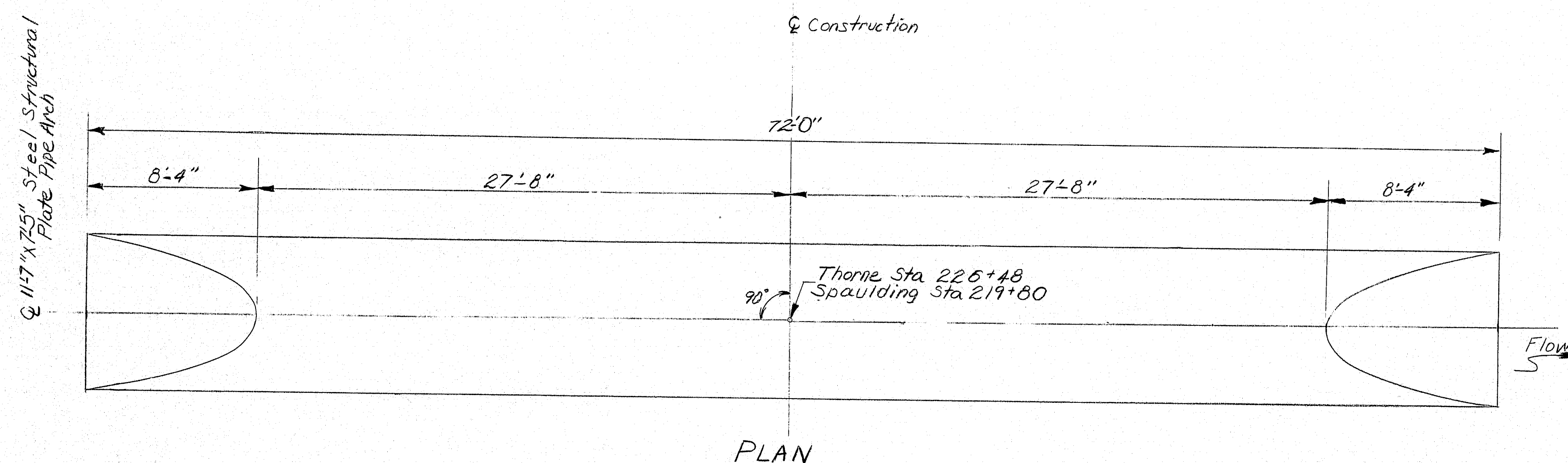
BRUNING 44-132-45710-1

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	F-030-1(23)	22	163

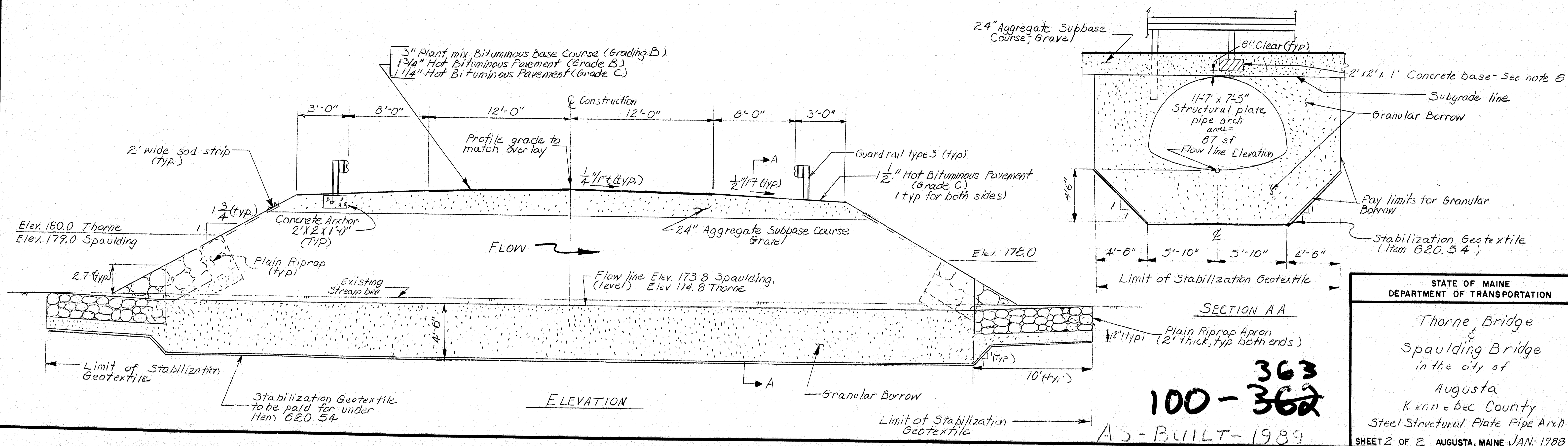
Construction Notes

- 1) Two 139 inch span, 89 inch rise Steel Structural Plate Pipe Arches required. Plate thickness shall be 138 inches except the thickness of the bottom and corner plates shall be 188 inches thick. One to be installed at Spaulding brook and one to be installed at Thorne brook.
- 2) Ends shall be cut on a 1 1/4:1 bevel normal to the ends as shown on the details.
- 3) Granular borrow shall meet the requirements of Subsection 703.19, Material for Underwater Backfill.
- 4) Riprap adjacent to the pipe arch shall be carefully placed so as not to damage the pipe arch and so that the finished slope will match the ends of the pipe arch. Any extra labor material or equipment used will be considered incidental to Item 610.08, Plain Riprap.
- 5) Place a 2' wide strip of sod along the top of the riprap and over the pipe arch, typical at both ends of pipe arch.
- 6) Guard rail posts within the limits of the structural plate structure shall be cut to length in the field as required to clear the structure by a minimum of 6 inches. Cut posts shall be imbedded 9 inches in a concrete base 2'0" square by 1'0" thick. The concrete mix shall be approved by the engineer. Any costs for cutting posts and constructing concrete bases will be considered incidental to guard rail items.
- 7) For easements, construction limits, and right of way lines refer to highway construction plans.
- 8) Maintain two way traffic on minimum 22 foot wide temporary detours upstream of Thorne and Spaulding Brooks. Stabilization geotextile shall be placed under the temporary embankment in the wet land areas as shown on the plans. The Stabilization geotextile placed under the temporary embankments will not be paid for directly but will be considered incidental to Item 510.1001 at Spaulding Brook and Item 510.1002 at Thorne Brook.
- 9) Sodded gutters shall be constructed after paving and shoulder work is completed, where it is apparent that runoff will cause continual erosion.
- 10) All hardware used on cable guard rail which is to be removed shall be carefully salvaged by the contractor and will remain the property of the Department. Associated guard rail cable and posts shall become the property of the contractor.

11) Unless the travel way of the temporary detour is a minimum of 15' from the transmission pole located at Sta. 226+00, 45' the Contractor shall protect the pole as directed by the Engineer. Payment shall be considered incidental to Item 510.1002, Special Detour - 22' Rdwy width (Thorne).



- 12) The existing 5' diameter pipe culvert at Spaulding Brook shall remain the property of the Department. It shall be carefully removed and loaded on trucks supplied by the Department or carefully stored within the right-of-way, as approved by the Engineer. No separate payment will be made for this work, it shall be considered incidental to related contract items.
- 13) The limit of wetlands as shown on the plans is approximate. The exact limits will be as determined in the field by the Engineer.



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Thorne Bridge
Spaulding Bridge
in the city of
Augusta
Kennebec County
Steel Structural Plate Pipe Arch

SHEET 2 OF 2 AUGUSTA, MAINE JAN 1988

363
100-362
AS-BUILT-1989
John F. DeL...

PROJECT DESIGN ENGINEER	DATE
BY G. Macdonald	7-88
DESIGN - DETAILED	7-88
CHECKED	1-89
FIELD CHANGES	

BREUNING 44-132-45710.1