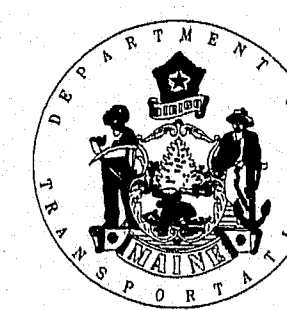
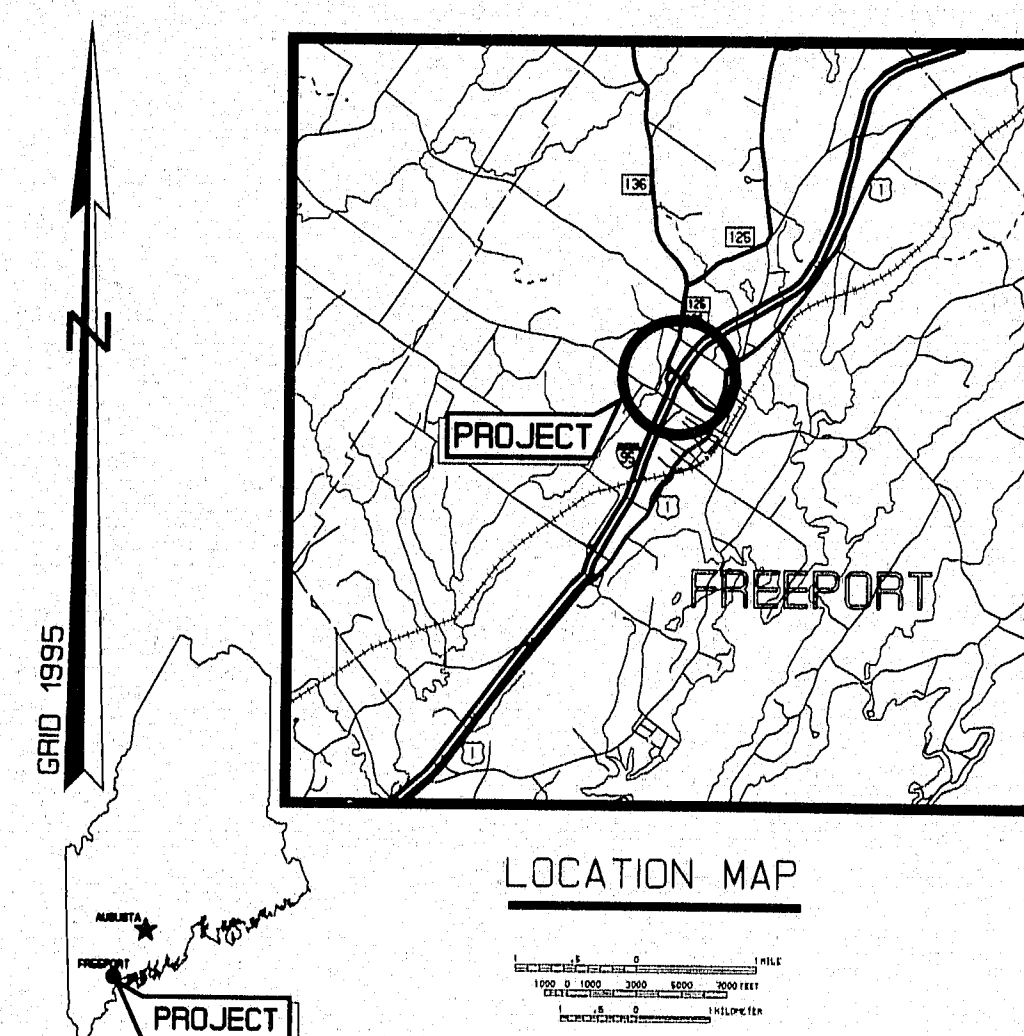


STATE OF MAINE DEPARTMENT OF TRANSPORTATION

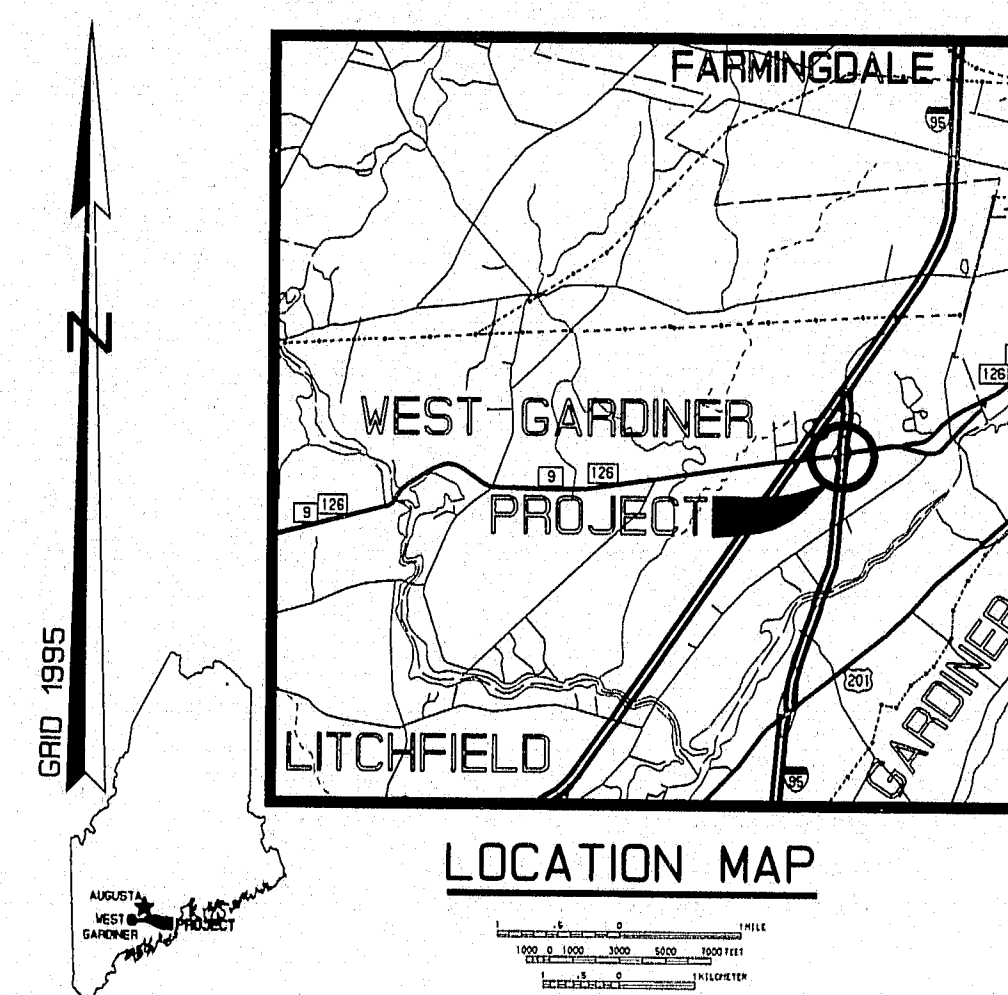


PLANS

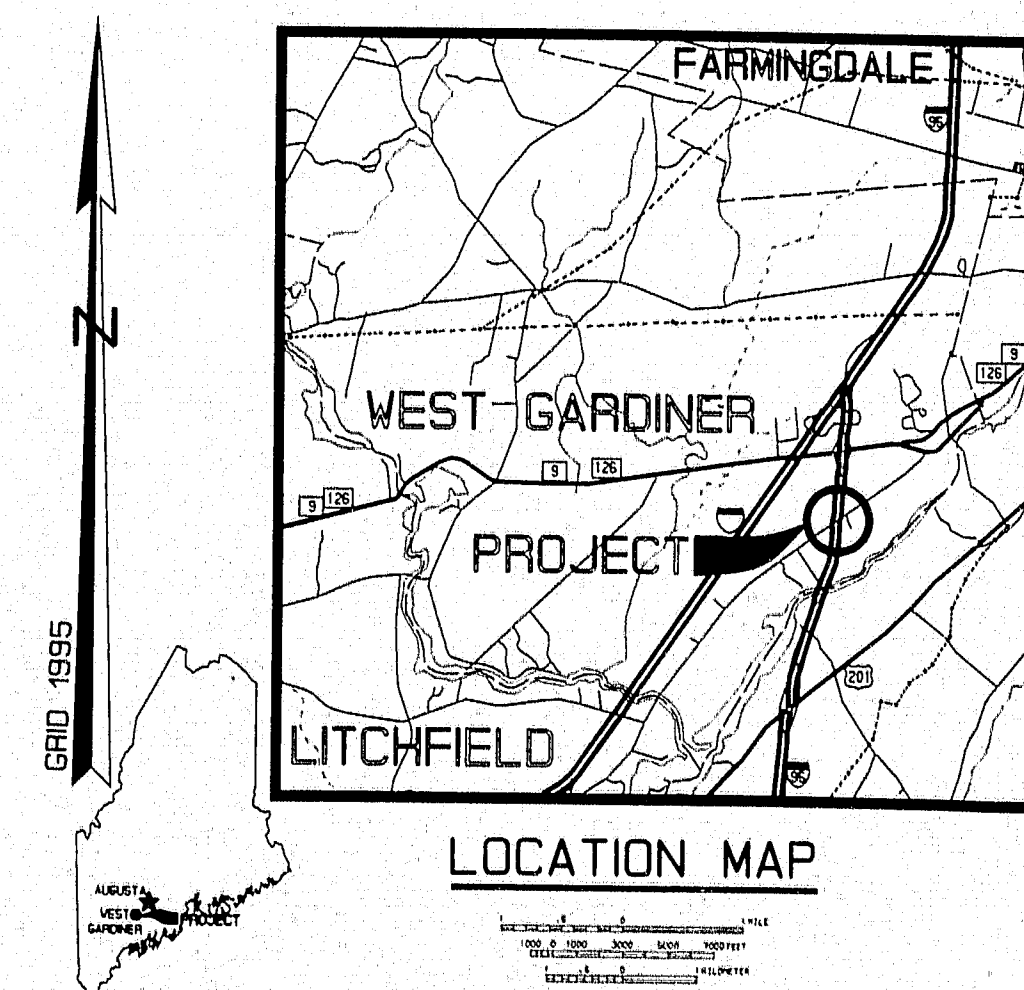
APPROACH ROAD BRIDGE over I-95
FREEPORT - CUMBERLAND COUNTY
P.I.N. 005305.00 IM-95-5305(00)E
PROJECT LENGTH 0.042 MILES



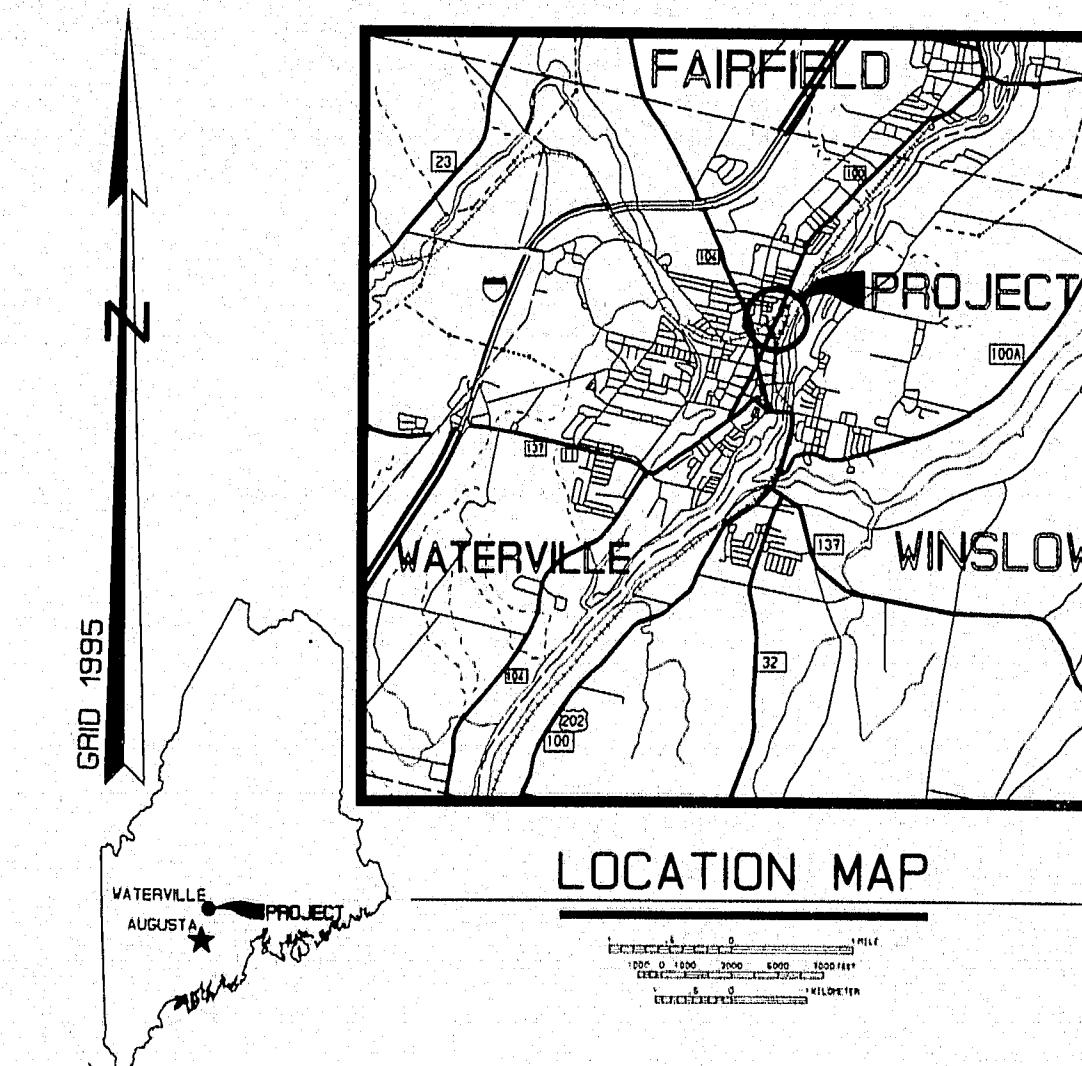
ROUTE 9 & 126 over I-95
WEST GARDINER - KENNEBEC COUNTY
P.I.N. 005309.00 IM-95-5309(00)E
PROJECT LENGTH 0.051 MILES



POND ROAD BRIDGE over I-95
WEST GARDINER - KENNEBEC COUNTY
P.I.N. 005308.00 IM-95-5308(00)E
PROJECT LENGTH 0.042 MILES



CHAMPLIN STREET BRIDGE
over COLLEGE AVENUE
WATERVILLE - KENNEBEC COUNTY
P.I.N. 005319.00 STP-7209-5319(00)X
PROJECT LENGTH 0.041 MILES

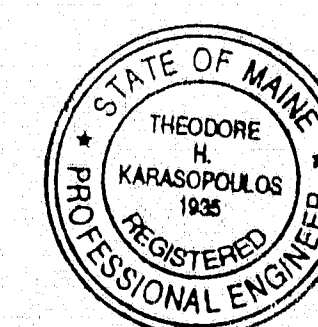


INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATE OF QUANTITIES
3.4	FREEPORT - APPROACH RD.
5	W. GARDINER - POND RD.
6	W. GARDINER - ROUTE 9 & 126
7.8	WATERVILLE - CHAMPLIN ST.

STANDARD DETAILS

9	HD-7 PAVEMENT BUTT JOINTS
10	HD-10 MAINTENANCE OF TRAFFIC
11	HD-11 MAINTENANCE OF TRAFFIC
12	HD-12 MAINTENANCE OF TRAFFIC
13	HD-17 MODIFIED ECCENTRIC LOADER TERMINAL
14	BD401-93 ALUMINUM BRIDGE RAIL SPLICES



APPROVED:
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

COMMISSIONER
CHIEF ENGINEER

DATE
3/5/96
DATE
3/5/96

UNITED STATES
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

REGION 1
APPROVED:
DIVISION ADMINISTRATOR DATE

119-304

As Built by JH Macdonald 3/26/98

F.H.W.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	ALL	2	14

ESTIMATED QUANTITIES		FREEPORT PIN 005305.00		WEST GARDINER PIN 005308.00		WEST GARDINER PIN 005309.00		WATERVILLE PIN 005319.00		TOTAL	
ITEM NO.	DESCRIPTION	QUANTITY	UNIT	QUANTITY	UNIT	QUANTITY	UNIT	QUANTITY	UNIT	QUANTITY	UNIT
202.127	REMOVE EXISTING BITUMINOUS PAVEMENT	(625 SY)	LS	(730 SY)	LS	(810 SY)	LS	(555 SY)	LS	(625 SY)	LS
202.203	PAVEMENT BUTT JOINTS	360	SY	N/A	SY	480	SY	170	SY	1010	SY
403.10	HOT BITUMINOUS PAVEMENT, GRADING 0	123	TON	81	TON	160	TON	101	TON	465	TON
409.15	BITUMINOUS TACK COAT APPLIED	8	GAL	N/A	GAL	10	GAL	4	GAL	22	GAL
507.30	ALUMINUM RAIL BAR SPLICE RETROFIT	N/A	EACH	10	EACH	8	EACH	N/A	EACH	18	EACH
508.13	MEMBRANE WATERPROOFING	(625 SY)	LS	(730 SY)	LS	(810 SY)	LS	(555 SY)	LS	(625 SY)	LS
518.30	REHAB. OF STRUCTURAL CONCRETE SLAB - TO REINFORCING STEEL	1120	SF	985	SF	400	SF	1000	SF	3505	SF
518.31	REHAB. OF STRUCTURAL CONCRETE SLAB - TO BELOW REINFORCING STEEL	560	SF	330	SF	200	SF	500	SF	1590	SF
520.241	BRIDGE JOINT MODIFICATION TYPE 1	N/A	EACH	1	EACH	2	EACH	N/A	EACH	3	EACH
520.242	BRIDGE JOINT MODIFICATION TYPE 2	1	EACH	N/A	EACH	N/A	EACH	2	EACH	3	EACH
526.301	TEMPORARY CONCRETE BARRIER, TYPE I	(670 LF)	LS	(680 LF)	LS	(910 LF)	LS	(480 LF)	LS	(670 LF)	LS
527.32	PORTABLE CRASH BARRELS	16	EACH	24	EACH	24	EACH	10	EACH	74	EACH
606.1731	BRIDGE CONNECTION TYPE 1	N/A	EACH	N/A	EACH	N/A	EACH	1	EACH	1	EACH
606.55	GUARDRAIL TYPE 3 - SINGLE RAIL	N/A	LF	N/A	LF	N/A	LF	25	LF	25	LF
606.752	WIDEN SHOULDER FOR MODIFIED ECCENTRIC LOADER TERMINAL	N/A	EACH	N/A	EACH	N/A	EACH	1	EACH	1	EACH
606.76	MODIFIED ECCENTRIC LOADER TERMINAL	N/A	EACH	N/A	EACH	N/A	EACH	1	EACH	1	EACH
627.71	4 INCH WHITE PAVEMENT MARKING LINE	440	LF	440	LF	540	LF	435	LF	1855	LF
627.73	4 INCH YELLOW PAVEMENT MARKING LINE	220	LF	220	LF	270	LF	220	LF	930	LF
627.79	TEMPORARY 4 INCH PLASTIC PAVEMENT MARKING LINE, WHITE OR YELLOW	660	LF	660	LF	810	LF	655	LF	2785	LF
643.72	TEMPORARY TRAFFIC SIGNAL	N/A	LS	1	LS	1	LS	1	LS	3	LS
652.31	TYPE I BARRICADE	6	EACH	6	EACH	6	EACH	6	EACH	24	EACH
652.312	TYPE III BARRICADE	6	EACH	6	EACH	6	EACH	6	EACH	24	EACH
652.33	DRUM	10	EACH	10	EACH	10	EACH	10	EACH	40	EACH
652.34	CONE	10	EACH	10	EACH	10	EACH	10	EACH	40	EACH
652.35	CONSTRUCTION SIGNS	280	SF	280	SF	280	SF	280	SF	1120	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	(65)	LS	(30)	LS	(56)	LS	(24)	LS	(65)	LS
652.38	FLAGGER	200	MH	200	MH	200	MH	200	MH	800	MH
659.10	MOBILIZATION	.23	LS	.24	LS	.24	LS	.29	LS	1	LS

PROJECT DESIGN ENGINEER	DATE
DESIGN-DETAILED	
REVISIONS	
FIELD CHANGES	

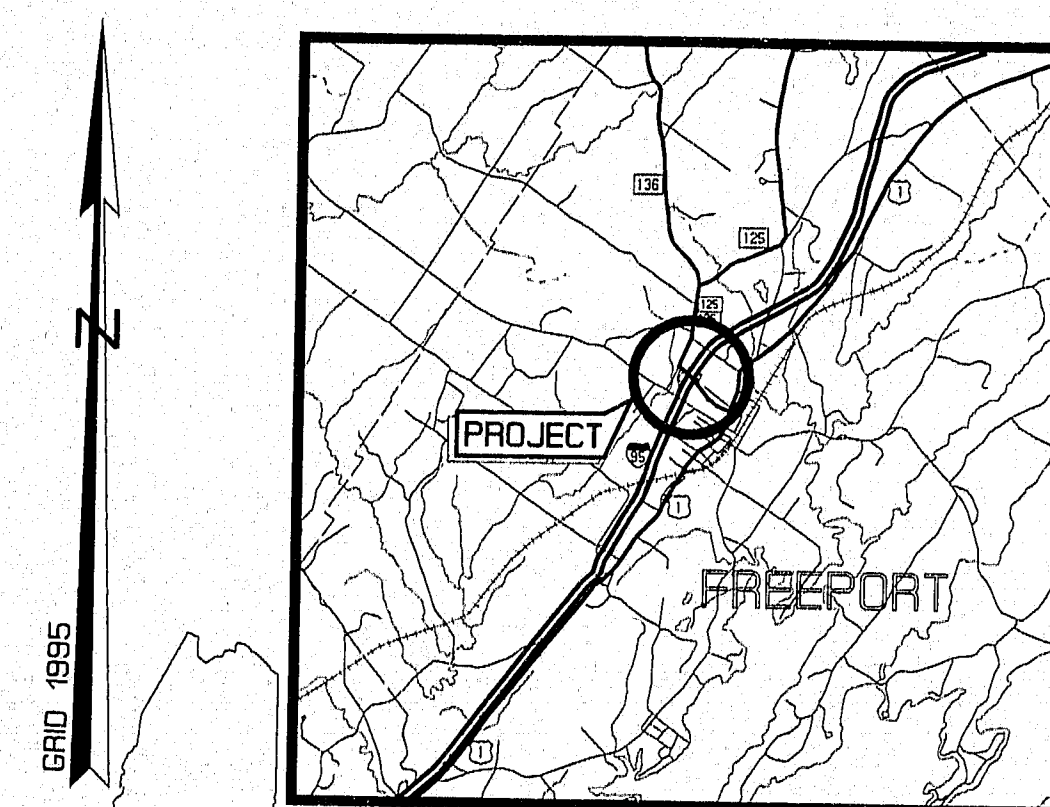
05NOV95-010030

PLANS

119-305

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
FREEPORT-PIN 005305.00
WEST GARDINER-PIN 005308.00
WEST GARDINER-PIN 005309.00
WATERVILLE-PIN 005319.00
ESTIMATE OF QUANTITIES
SHEET OF AUGUSTA, MAINE MAR., 1996

PIN 005305.00



TRAFFIC DATA

Current (1994) AADT = 20010
 Future (2014) AADT = 33620
 DHV - % of AADT = 12
 % Heavy Trucks (AADT) = 8
 % Heavy Trucks (DHV) = 5
 Directional Distribution (DHV) = 100

Plans of the existing bridge 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.

SCOPE OF WORK

Remove existing bituminous pavement and membrane waterproofing. Place new membrane waterproofing and 3" hot bituminous pavement. Modify armored joints and place 1" by 40' pavement transition overlay with pavement butt joints in each approach.

SPECIFICATIONS

DESIGN: Load Factor Design per AASHTO Standard Specifications for Highway Bridges 1992 and Interim Specifications 1993 and 1994.
 CONTRACT: State of Maine, Department of Transportation, Standard Specifications, Highways and Bridges, Revision of April 1995.

DESIGN LOADING

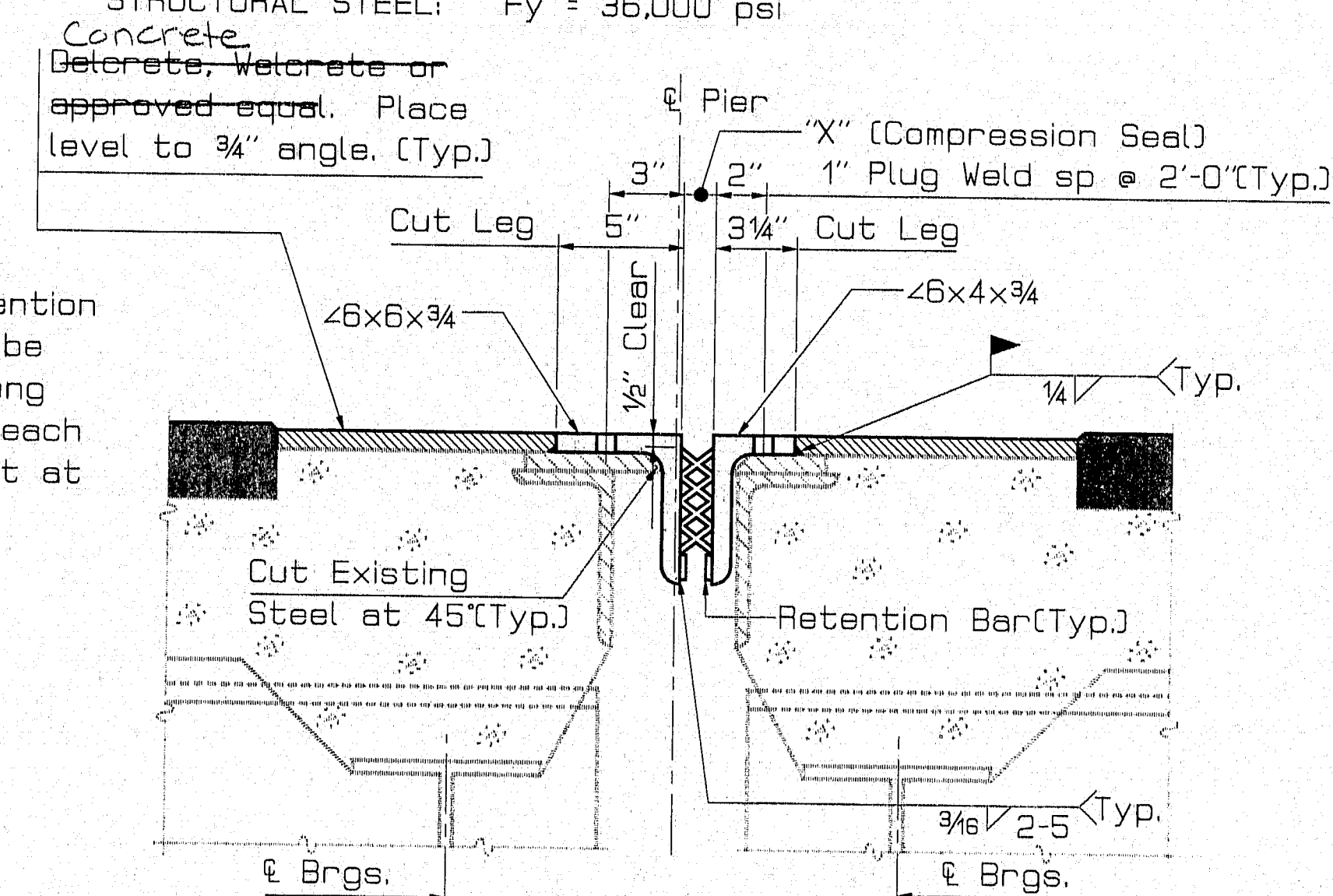
LIVE LOAD: HS-20-44 STRESS CYCLES: 500,000 (2,000,000)

MATERIALS

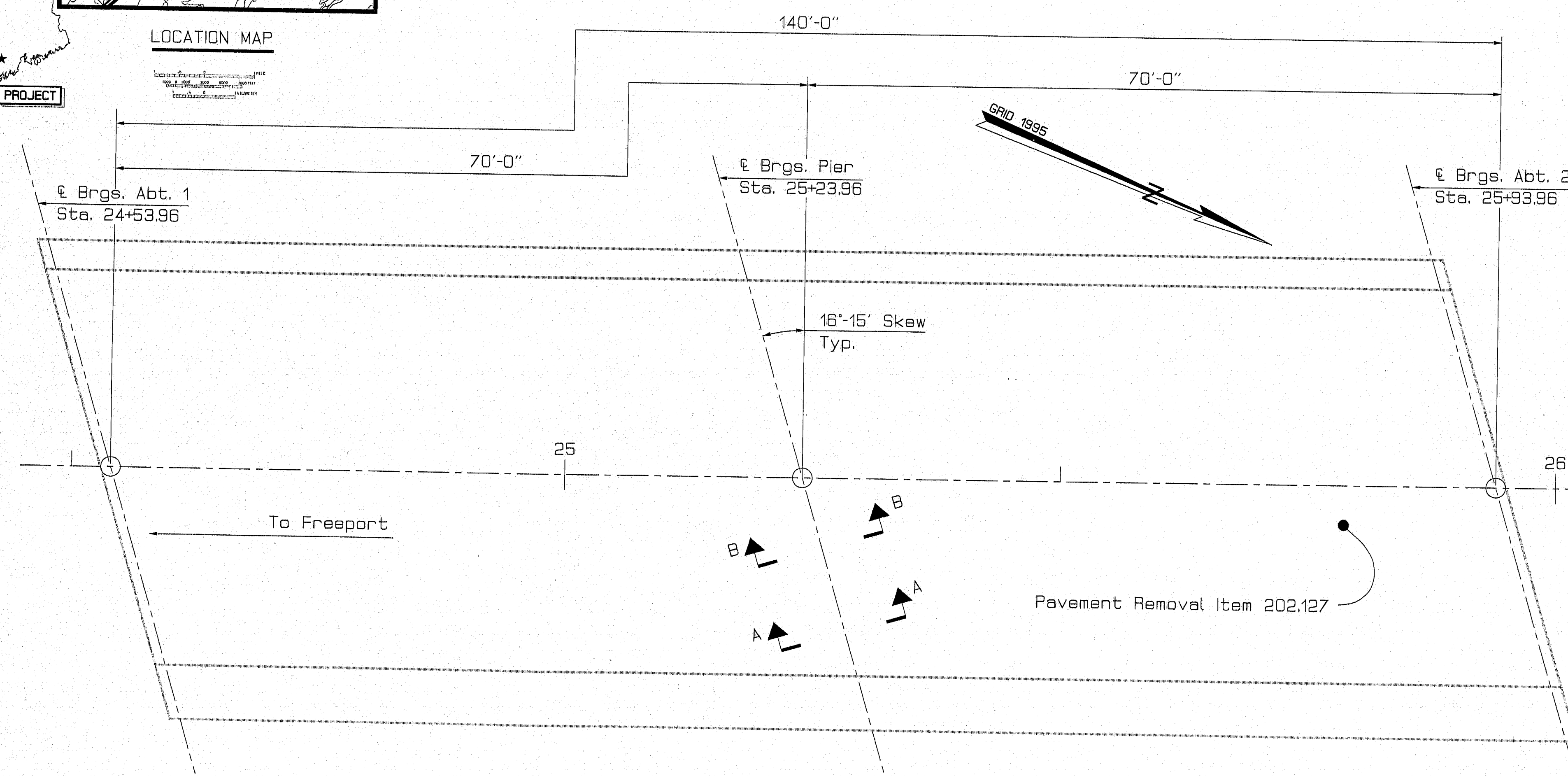
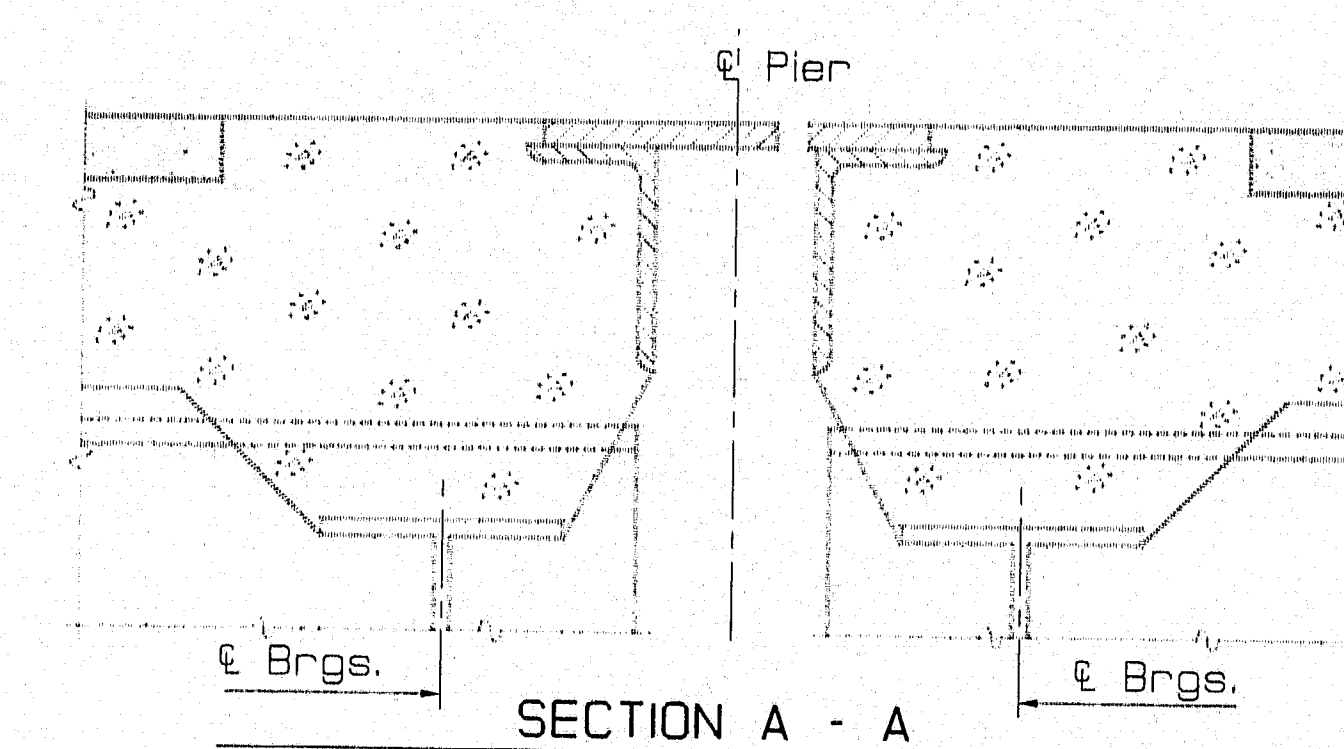
CONCRETE: Class A
 REINFORCING STEEL: ASTM A615 Grade 60
 STRUCTURAL STEEL: A36

BASIC ALLOWABLE STRESSES

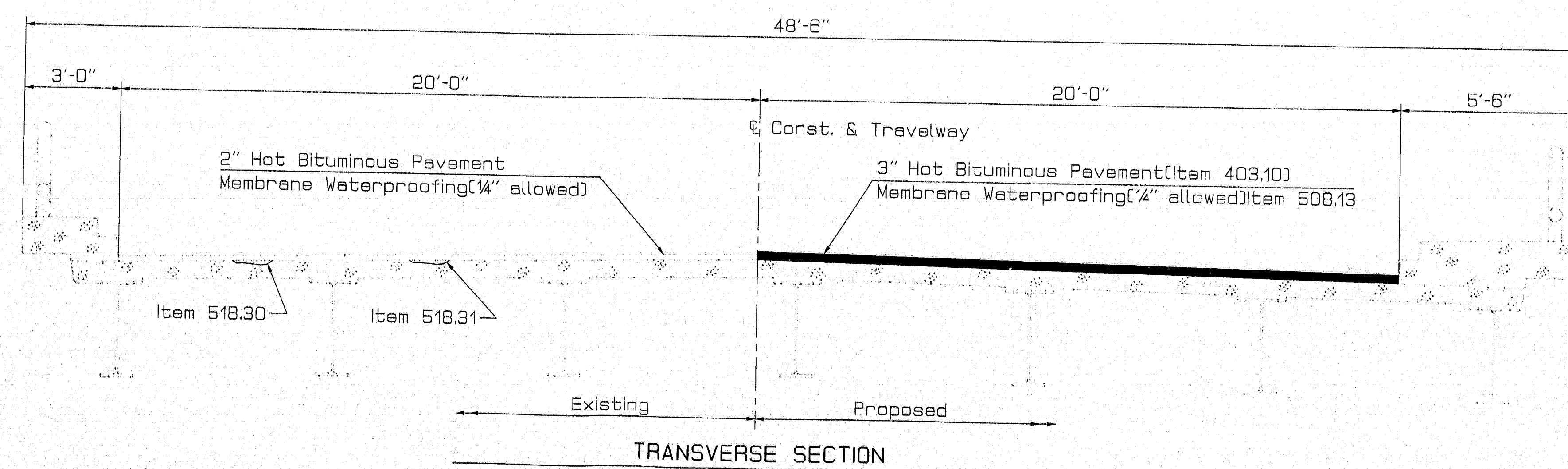
CONCRETE: $f'_c = 4,000$ psi
 REINFORCING STEEL: $f_y = 60,000$ psi
 STRUCTURAL STEEL: $F_y = 36,000$ psi



NOTE: Retention bars shall be 1x3/8x1'-0" long staggered each side of joint at 1'-3" c-c.



PLAN SUPERSTRUCTURE



TRANSVERSE SECTION

PAVEMENT BUTT JOINTS NOTE

Pavement Butt Joints will be located 40 feet onto the approaches from each abutment. Item 202.203 (See HD-7)

Bridge No. 5721

119-306

STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION

APPROACH ROAD BRIDGE
 OVER
 INTERSTATE 95
 IN THE TOWN OF
 FREEPORT
 CUMBERLAND COUNTY
 SUPERSTRUCTURE

SHEET 1 OF 2 AUGUSTA, MAINE MAR., 1996

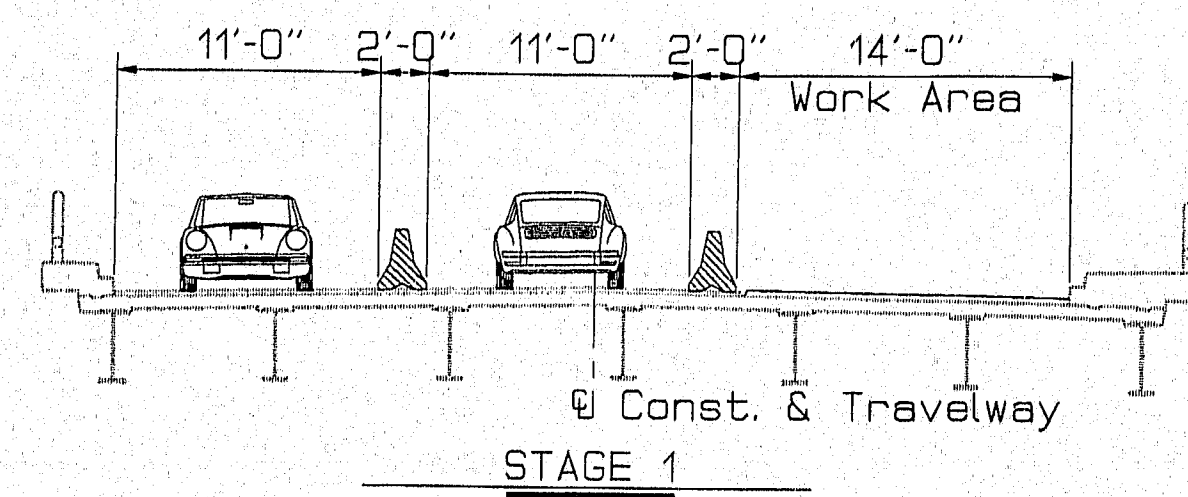
PROJECT DESIGN ENGINEER	DATE
DESIGN-DETAILED	
CHECKED	
FIELD CHANGES	

08NOV95-010030
 SP18181

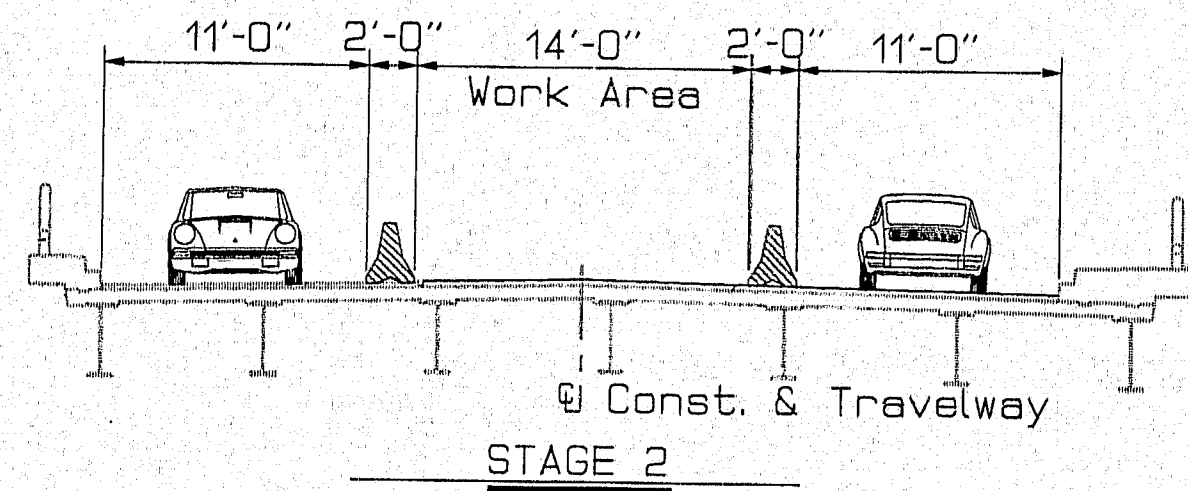
PIN 005305.00

F.D.A.A. REV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	IM-95-5305(00)E	4	14

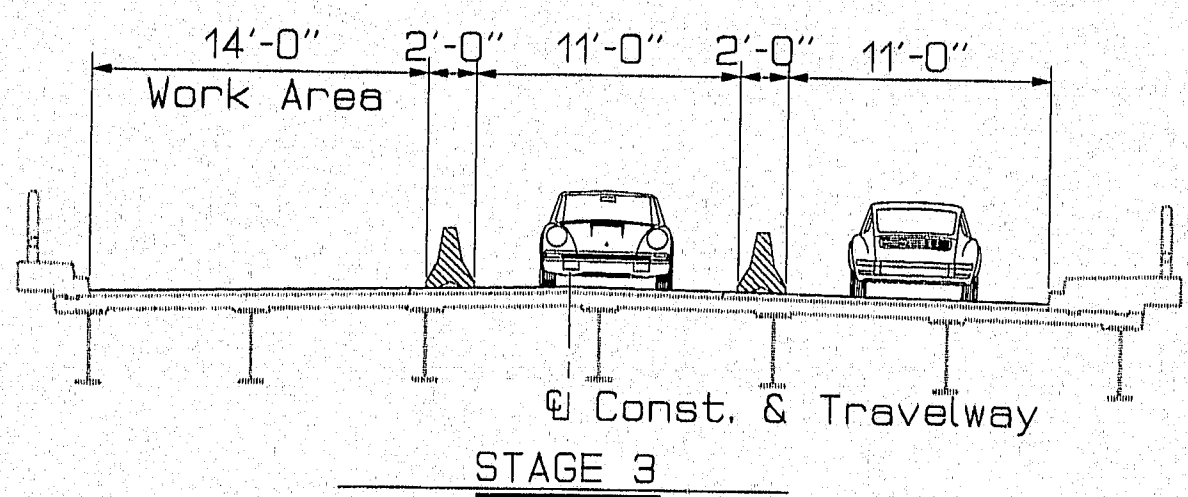
MAINTENANCE OF TRAFFIC



Place temporary concrete barriers to maintain two 11 ft. travel lanes. Remove bituminous pavement and membrane from work area. Perform all required repairs behind barriers. Install membrane and pave work area with one course of hot bituminous pavement.



Relocate temporary concrete barriers to maintain two 11ft. travel lanes. Remove bituminous pavement and membrane from work area. Perform all required repairs between barriers. Install membrane and pave work area with one course of hot bituminous pavement.

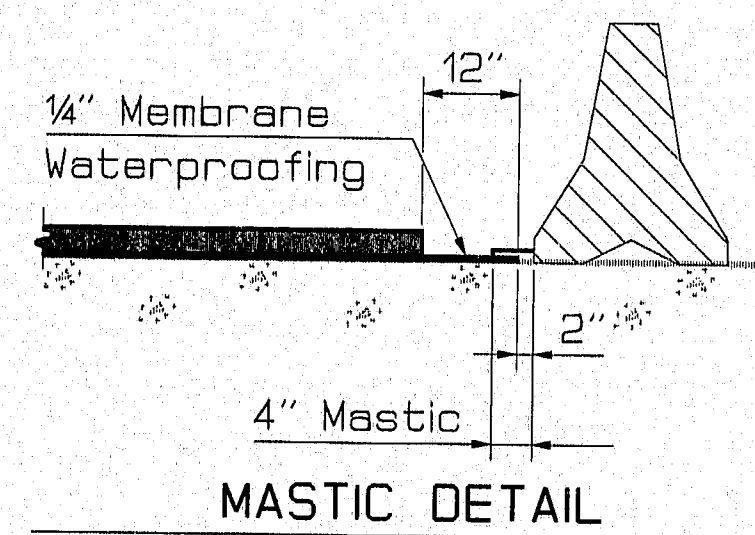


Relocate temporary concrete barriers to maintain two 11ft. travel lanes. Remove bituminous pavement and membrane from work area. Perform all required repairs behind barriers. Install membrane and pave work area with one course of hot bituminous pavement.

STAGE 4

Remove temporary concrete barriers and pave final course of hot bituminous pavement.

NOTE: The contractor may substitute other sequences as approved by the Engineer.



12" section of Waterproof Membrane to be coated with 4" strip of mastic on edge. This work and materials shall be incidental to related contract items. Mastic shall be approved by the Engineer.

PROJECT DESIGN ENGINEER	DATE
BY	
DESIGN-DETAILED	
REVISIONS	
FIELD CHANGES	

05/01/95-010030
SPR57182

Bridge No. 5721

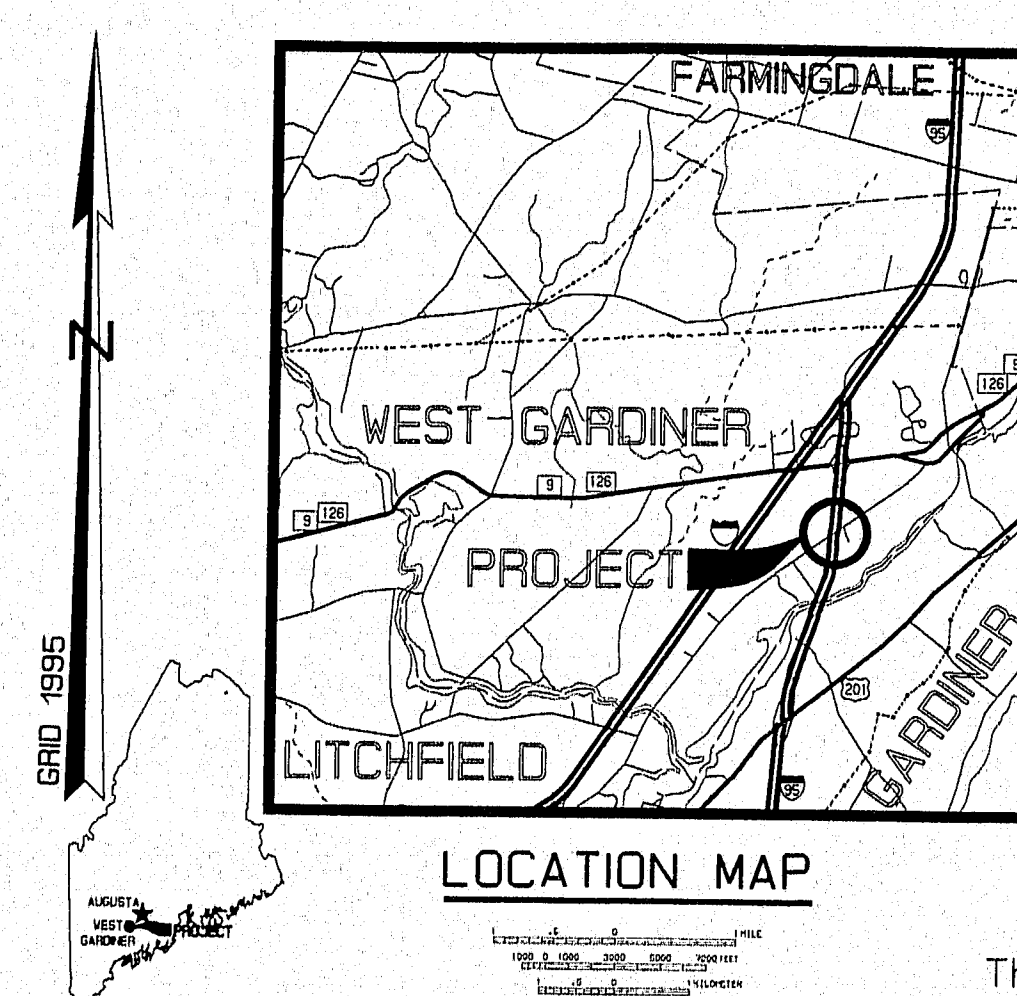
119-307

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

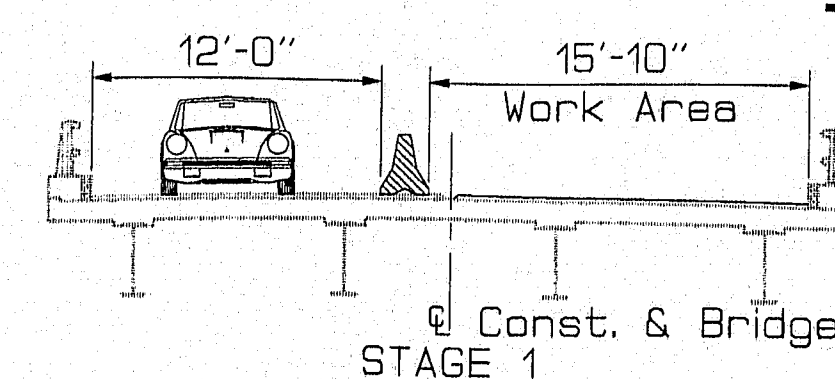
APPROACH ROAD BRIDGE
OVER
INTERSTATE 95
IN THE TOWN OF
FREEPORT
CUMBERLAND COUNTY
SUPERSTRUCTURE

SHEET 2 OF 2 AUGUSTA, MAINE MAR., 1996

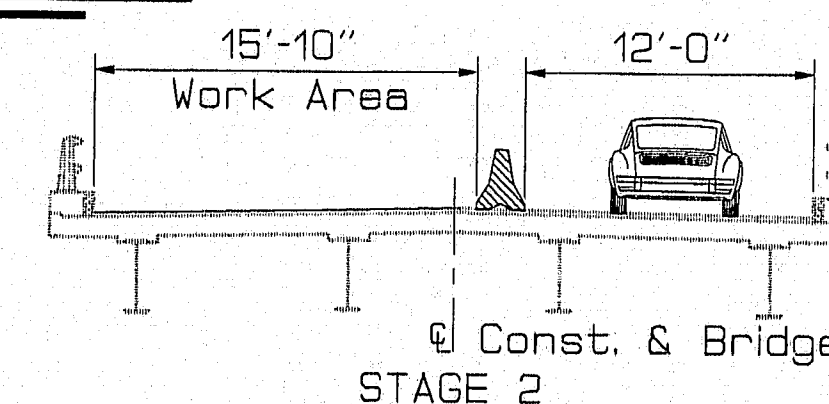
F.H.V.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TO SHE
1	MAINE	IM-95-5308(00)E	5	11



MAINTENANCE OF TRAFFIC



Place temporary concrete barriers to maintain 12 ft. travel lane. Remove bituminous pavement and membrane from work area. Perform all required repairs behind barriers. Install membrane and pave work area with one course of hot bituminous pavement.



Relocate temporary concrete barriers to maintain 12 ft. travel lane and perform remaining required repairs. Install membrane and pave remaining work area with one course of hot bituminous pavement.



Remove temporary concrete barriers and
pave final course of hot bituminous pavement.

SCOPE OF WORK

Remove existing bituminous pavement and membrane waterproofing. Place new membrane waterproofing and 2" hot bituminous pavement. Retrofit aluminum bridge rail splices. After the existing wearing surface and membrane are removed, the deck should be inspected for any needed repairs.

SPECIFICATIONS

DESIGN: Load Factor Design per AASHTO Standard Specifications for Highway Bridges 1992 and Interim Specifications 1993 and 1994.

CONTRACT: State of Maine, Department of Transportation, Standard Specifications, Highways and Bridges, Revision of April 1995.

DESIGN LOADING

LIVE LOAD: HS-20-44

STRESS CYCLES: 500,000 (2,000,000)

MATERIALS

CONCRETE: Rehabilitate in accordance with Section 518.
Rehabilitation of Structural Concrete Bridge Decks
REINFORCING STEEL: ASTM A615 Grade 60

REINFORCING STEEL: ASTM A615 Grade 60

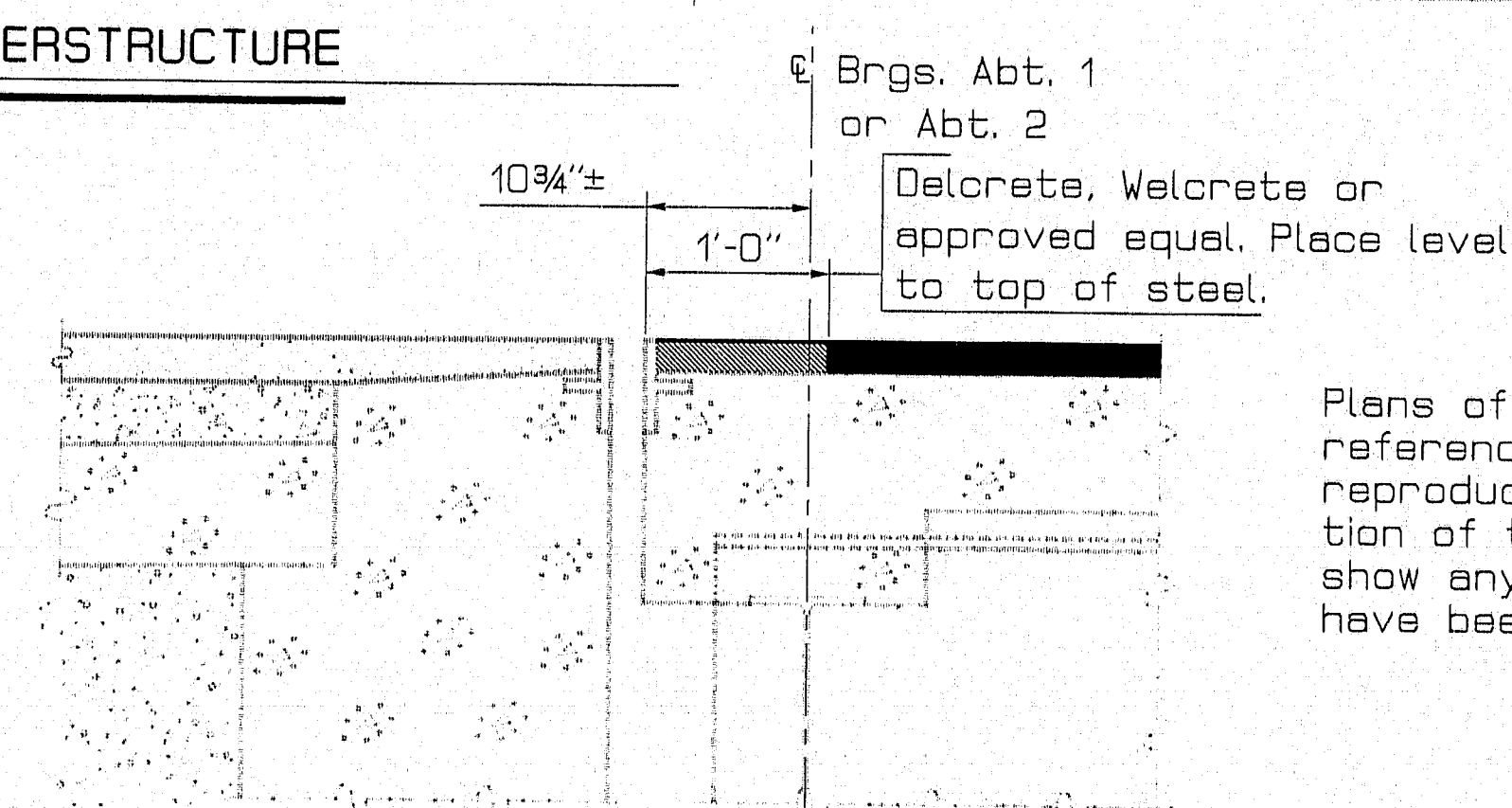
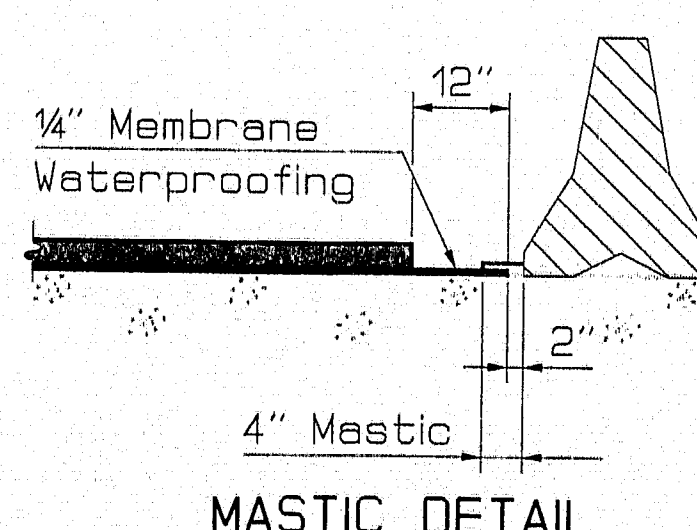
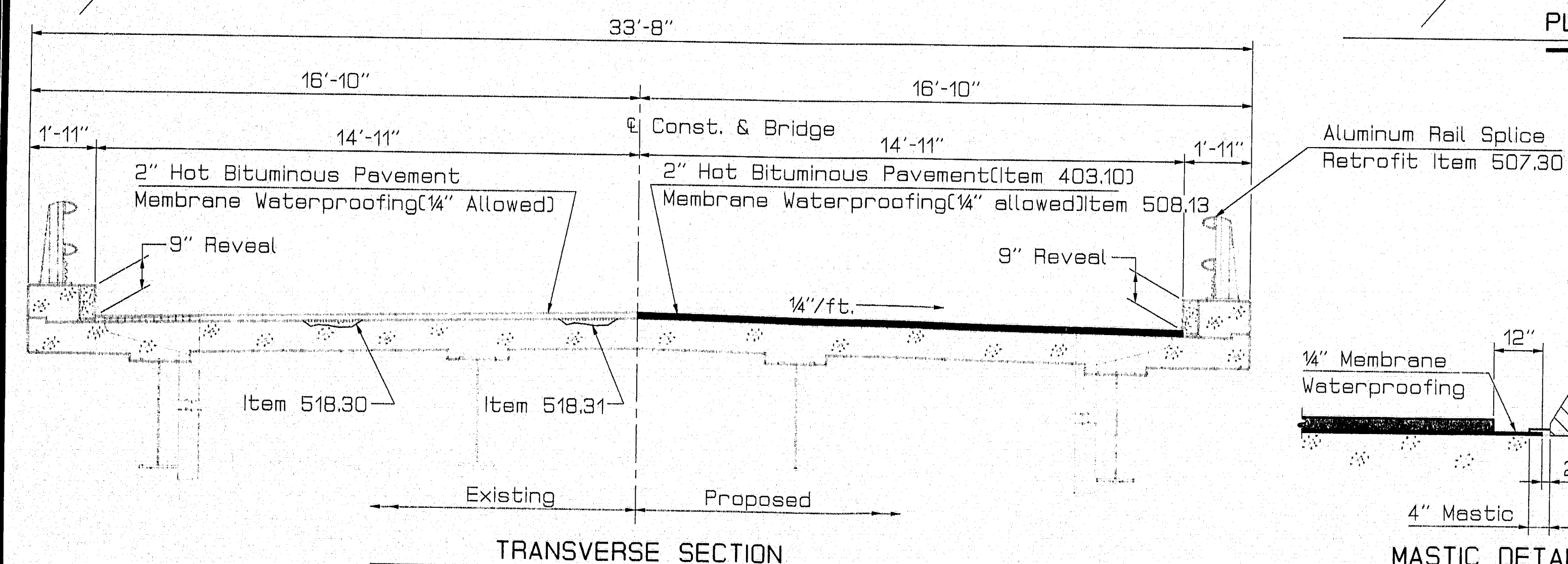
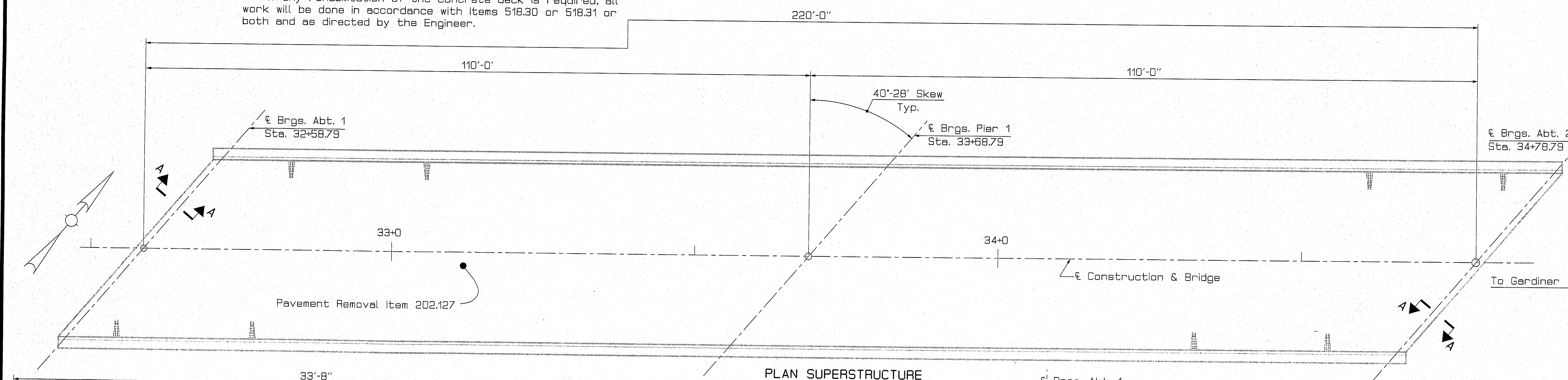
BASIC ALLOWABLE STRESSES

CONCRETE: $f'_c = 4000$ psi

REINFORCING STEEL: $f_y = 60000$ psi

The Contractor shall use care not to damage the existing granite curb. Any damaged curb shall be repaired as directed by the Engineer at no expense to the Department.

If any rehabilitation of the concrete deck is required, all work will be done in accordance with Items 518.30 or 518.31 or both and as directed by the Engineer.



Plans of the existing bridge 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.

Bridge No. 6320

pan. 119-308

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

POND ROAD
OVER
INTERSTATE 95
IN THE TOWN OF
WEST GARDINER
KENNEBEC COUNTY
SUPERSTRUCTURE DETAILS

SHEET 1 OF 1 AUGUSTA, MAINE MAR. 1996

TRAFFIC DATA

Current (1992) AADT	= 980
Future (2012) AADT	= 1370
DHV - % of AADT	= 13
Design Hour Volume	= 178
% Heavy Trucks (AADT)	= 8
% Heavy Trucks (DHV)	= 6
Directional Distribution (DHV)	= 60

DESIGN: Load Factor Design per AASHTO Standard Specifications for Highway Bridges 1992 and Interim Specifications 1993 and 1994.

CONTRACT: State of Maine, Department of Transportation, Standard Specifications, Highways and Bridges, Revision of April 1995.

LIVE LOAD: HS20-44 STRESS CYCLES: 500,000 (2,000,000)

MATERIALS

CONCRETE: Rehabilitate in accordance with Section 518,
Rehabilitation of Structural Concrete Bridge Decks

REINFORCING STEEL: ASTM A615 Grade 60

STRUCTURAL STEEL: A36

CONCRETE: $f'_c = 4,000$ psi
REINFORCING STEEL: $f_y = 60,000$ psi
STRUCTURAL STEEL: $F_y = 36,000$ psi

Diagram illustrating the dimensions for a vehicle on a bridge deck. The vehicle is positioned on the left side of the deck. The distance from the left edge of the deck to the front of the vehicle is 12'-0". The distance from the front of the vehicle to the right edge of the deck is 28'-10", labeled as the "Work Area".

Const. & Bridge

Place temporary concrete barriers to maintain 12' travel lane. Remove bituminous pavement and membrane from work area. Perform all required repairs behind barriers. Install membrane and pave work area with one course of hot bituminous pavement.

16'-10" Work Area

24'-0"

Const. & Bridge

Relocate temporary concrete barriers to maintain two 12' travel lanes and perform remaining required repairs. Install membrane and pave remaining work area with one course of hot bituminous pavement.

Typ. 119-309

Bridge No. 6321

119-309

ROUTES 9 & 126

INTERSTATE 95

IN THE TOWN OF

WEST GARDINER

WEST GARDINER
KENNEBEC COUNTY

SUPERSTRUCTURE DETAILS

SHEET 1 OF 1 AUGUSTA, MAINE MAR. , 1996

The Contractor shall use care not to damage the existing granite curb. Any damaged curb shall be repaired as directed by the Engineer at no expense to the Department.

If any rehabilitation of the concrete deck is required, all work will be done in accordance with Items 518.30 or 518.31 or both and as directed by the Engineer.

Remove existing bituminous pavement and membrane waterproofing. Place new membrane waterproofing and 3" hot bituminous pavement. Modify armored joints, place 1" by 50' pavement transition overlay with pavement butt joints in each approach and retrofit aluminum bridge rail splices. After the existing wearing surface and membrane are removed, the deck should be inspected for any needed repairs.

Current (1992) AADT	= 4570
Future (2012) AADT	= 7310
DHV - % of AADT	= 11
% Heavy Trucks (AADT)	= 8
% Heavy Trucks (DHV)	= 6
Directional Distribution (DHV)	= 60

12" section of Waterproof Membrane to be coated with 4" strip of mastic on edge. This work and materials shall be incidental to related contract items. Mastic shall be approved by the Engineer.

29'-4"

46'-8"

23'-4"

1'-11"

21'-5"

Const. & Bridge

21'-5"

23'-4"

1'-11"

1'-1"

2" Hot Bituminous Pavement Membrane Waterproofing (1/4" allowed)

9" Reveal

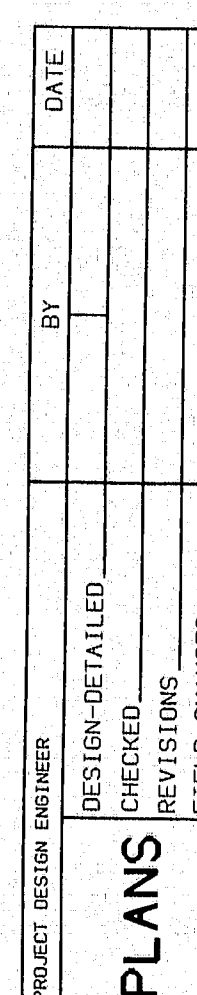
3" Hot Bituminous Pavement Membrane Waterproofing (1/4" allowed)

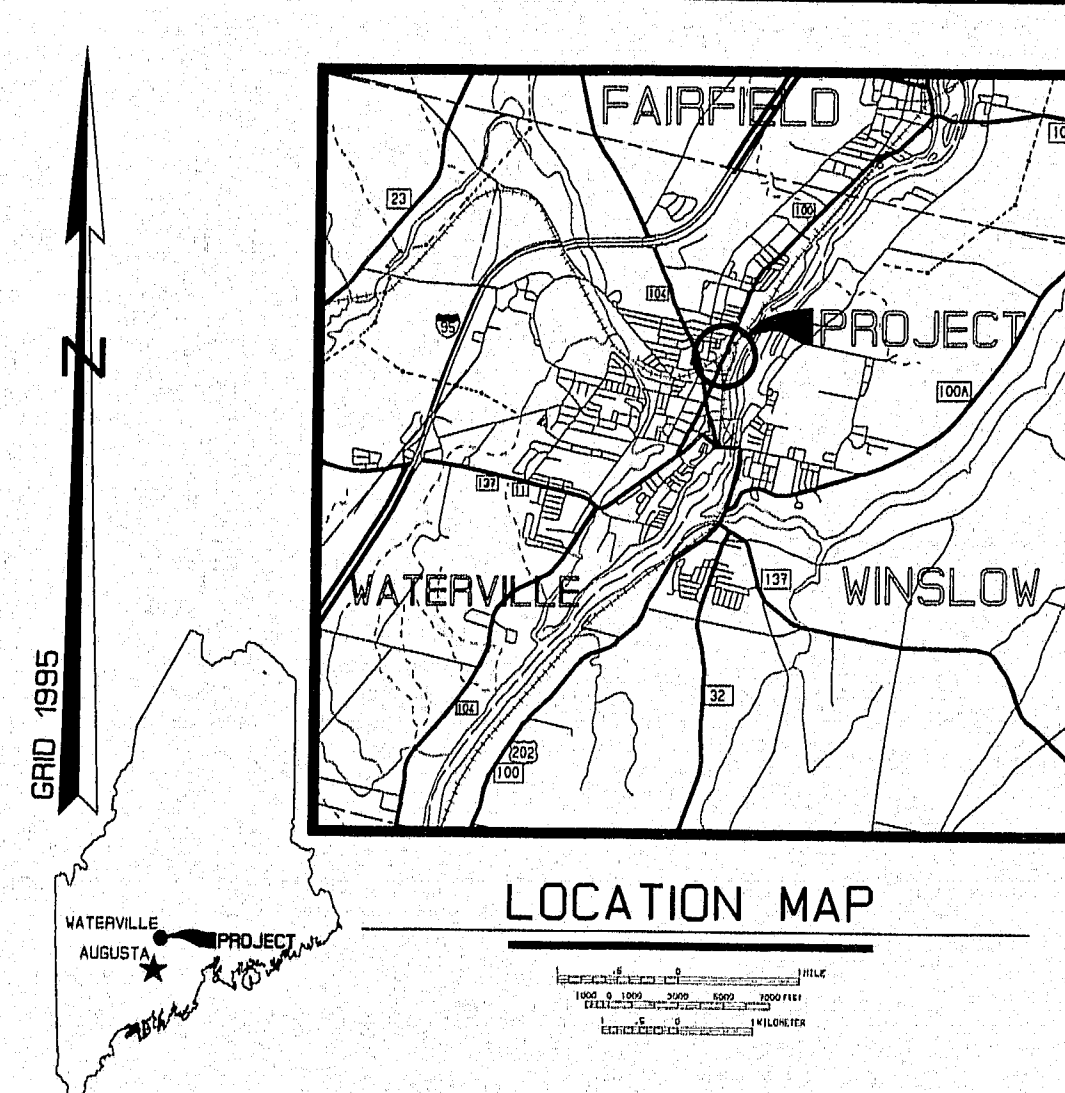
8" Reveal

1/4"/ft.

Retrofit Item

(Joint Modification Item 520,241)

05NOV95-01:00:30
SPRSTR1



TRAFFIC DATA

Current (1992) AADT = 1810
 Future (2012) AADT = 1880
 DHV - % of AADT = 10
 Design Hour Volume = 178
 % Heavy Trucks (AADT) = 10
 % Heavy Trucks (DHV) = 3
 Directional Distribution (DDHV) = 55

SPECIFICATIONS

DESIGN: Load Factor Design per AASHTO Standard Specifications for Highway Bridges 1992 and Interim Specifications 1993 and 1994.
 CONTRACT: State of Maine, Department of Transportation, Standard Specifications, Highways and Bridges, Revision of April 1995.

DESIGN LOADING

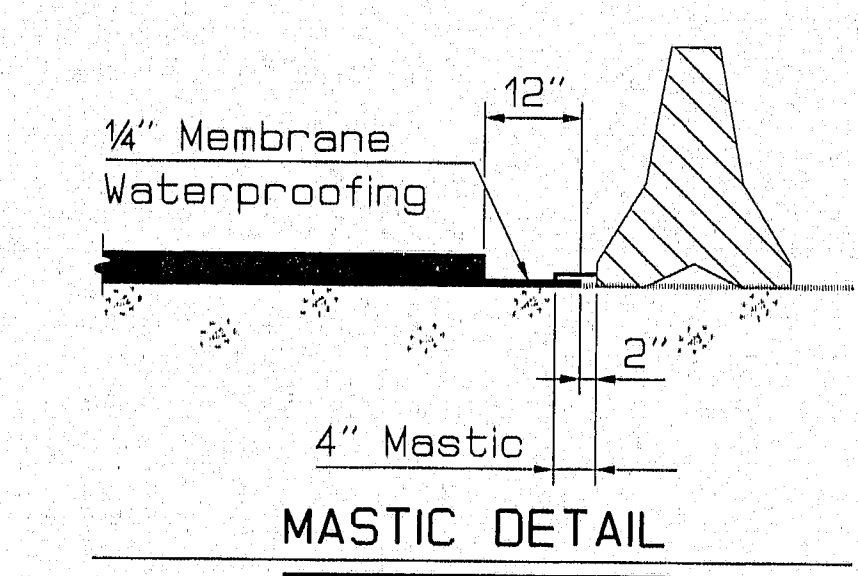
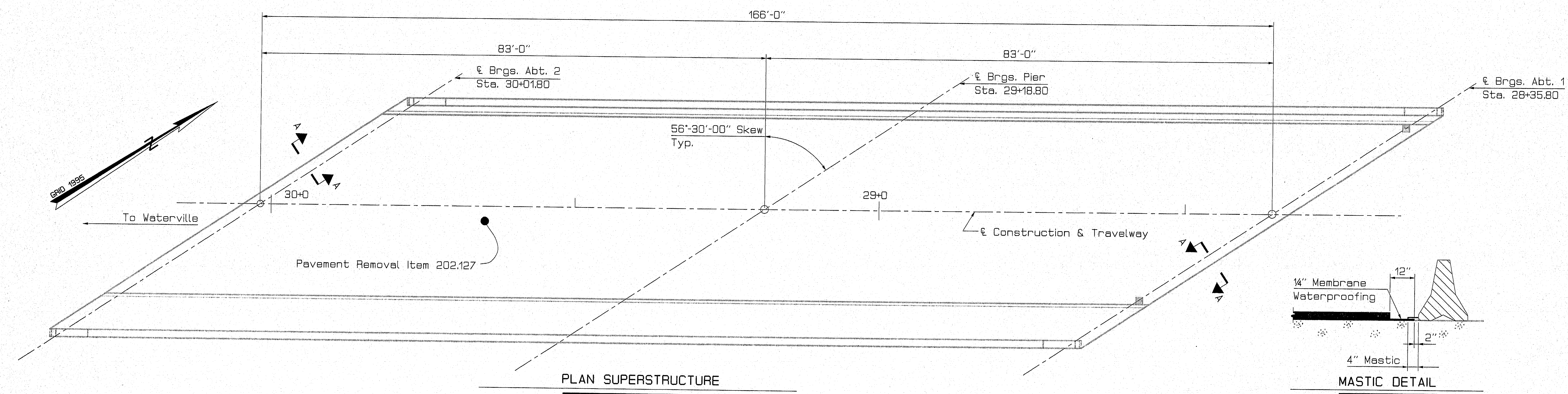
LIVE LOAD: H20-S16-44 STRESS CYCLES: 500,000 (2,000,000)

MATERIALS

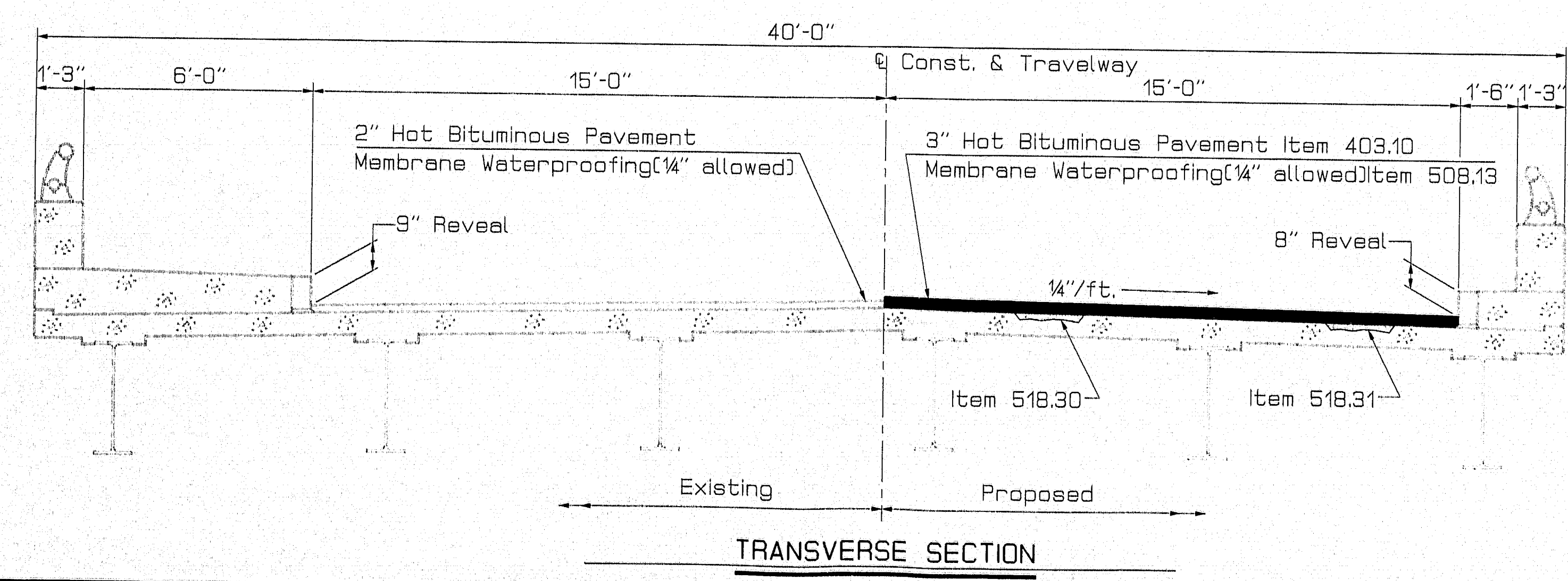
CONCRETE: Rehabilitate in accordance with Section 518, Rehabilitation of Structural Concrete Bridge Decks
 REINFORCING STEEL: ASTM A615 Grade 60
 STRUCTURAL STEEL: A36

BASIC ALLOWABLE STRESSES

CONCRETE: $f'_c = 4,000$ psi
 REINFORCING STEEL: $f_y = 60,000$ psi
 STRUCTURAL STEEL: $F_y = 36,000$ psi



12" section of Waterproof Membrane to be coated with 4" strip of mastic on edge. This work and materials shall be incidental to related contract items. Mastic shall be approved by the Engineer.



Plans of the existing bridge 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.

Bridge No. 6039 **119-310**

STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION

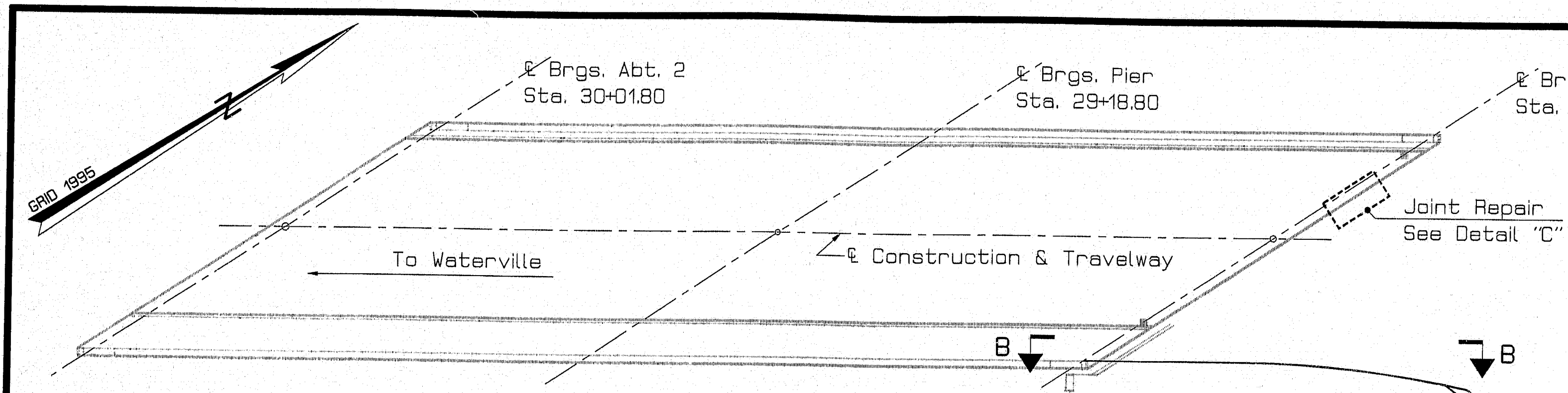
CHAMPLIN SREET
 OVER
 COLLEGE AVENUE
 IN THE CITY OF
 WATERVILLE
 KENNEBEC COUNTY
 SUPERSTRUCTURE

SHEET 1 OF 2 AUGUSTA, MAINE MAR., 1996

PROJECT DESIGN ENGINEER: SPRSTRI
 DATE: 05/01/95 01:00:30
 PLANS
 DESIGN-DETAILED
 CHECKED: SPRSTRI
 REVISIONS: SPRSTRI
 FIELD CHANGES: SPRSTRI

PIN 005319.00

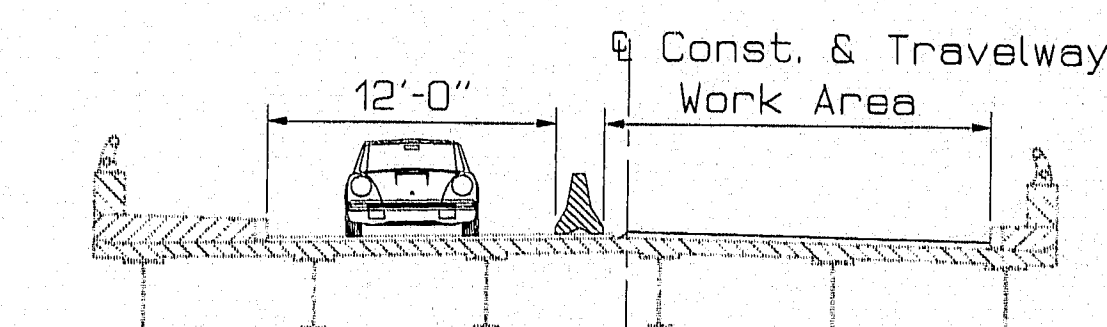
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	STP-7208-5319(00)X	8	14



SCOPE OF WORK

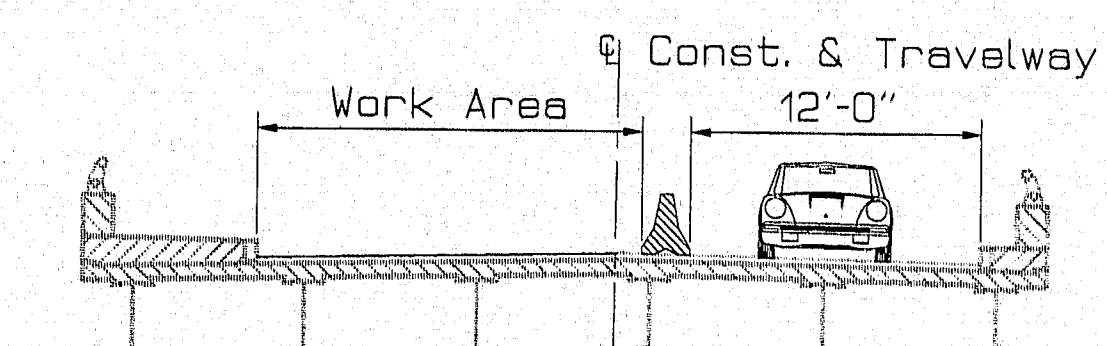
Remove existing bituminous pavement and membrane waterproofing. Place new membrane waterproofing and 3" hot bituminous pavement. Repair easterly expansion dam and modify both dams to accommodate new pavement. Place 1" by 25' pavement transition overlay with pavement butt joints in each approach and install guard rail connection on southeasterly corner. After the existing wearing surface and membrane are removed, the deck should be inspected for any needed repairs.

MAINTENANCE OF TRAFFIC



STAGE ONE

Place temporary concrete barriers to maintain 12 foot travel lane. Remove bituminous pavement and membrane from work area. Perform all required repairs behind barriers. Install membrane and pave work area with one course of hot bituminous pavement.



STAGE TWO

Relocate temporary concrete barriers to maintain 12 foot travel lane and perform remaining required repairs. Install membrane and pave remaining work area with one course of hot bituminous pavement.

STAGE THREE

Remove temporary concrete barriers, pave final course of bituminous pavement and approach transitions in one operation.
NOTE: The Contractor may substitute other sequences as approved by the Engineer and must provide for pedestrian traffic at all times.

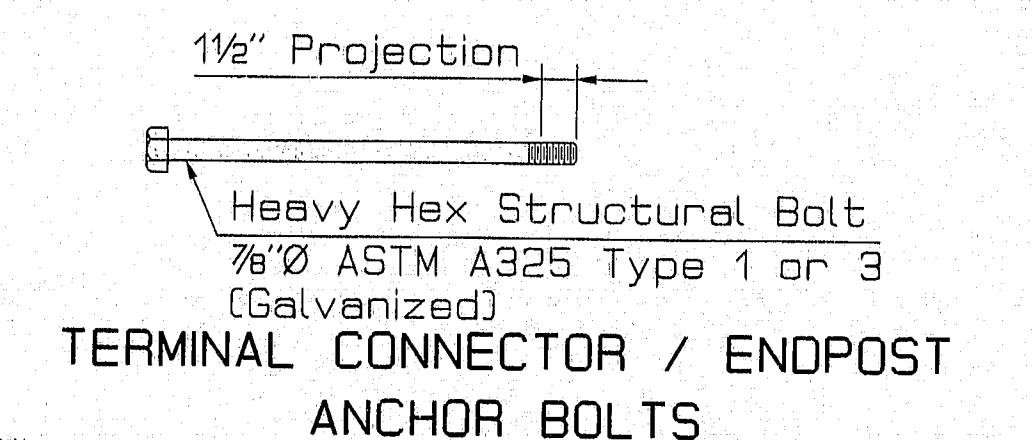
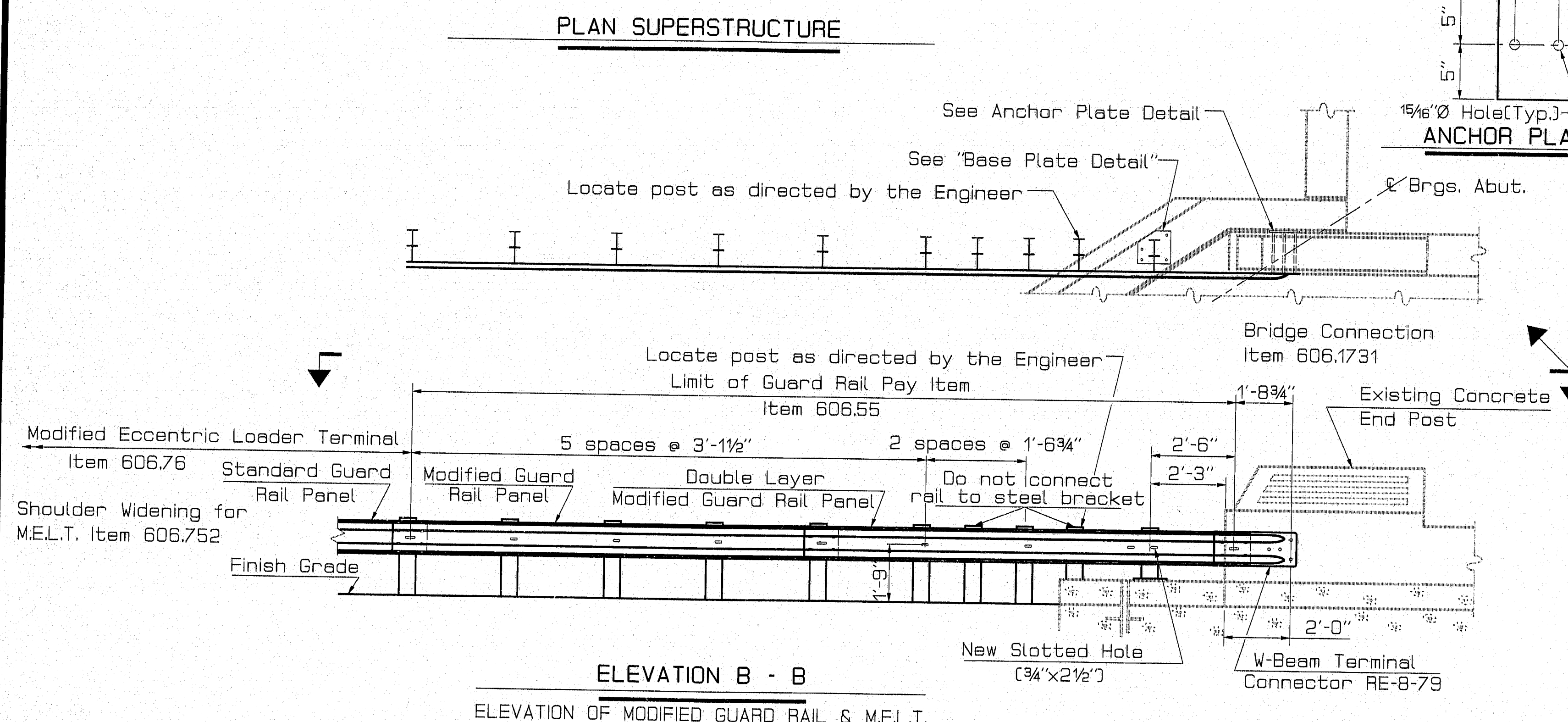
CONSTRUCTION NOTES

The Contractor shall use care not to damage the existing granite curb. Any damaged curb shall be repaired as directed by the Engineer at no expense to the Department.

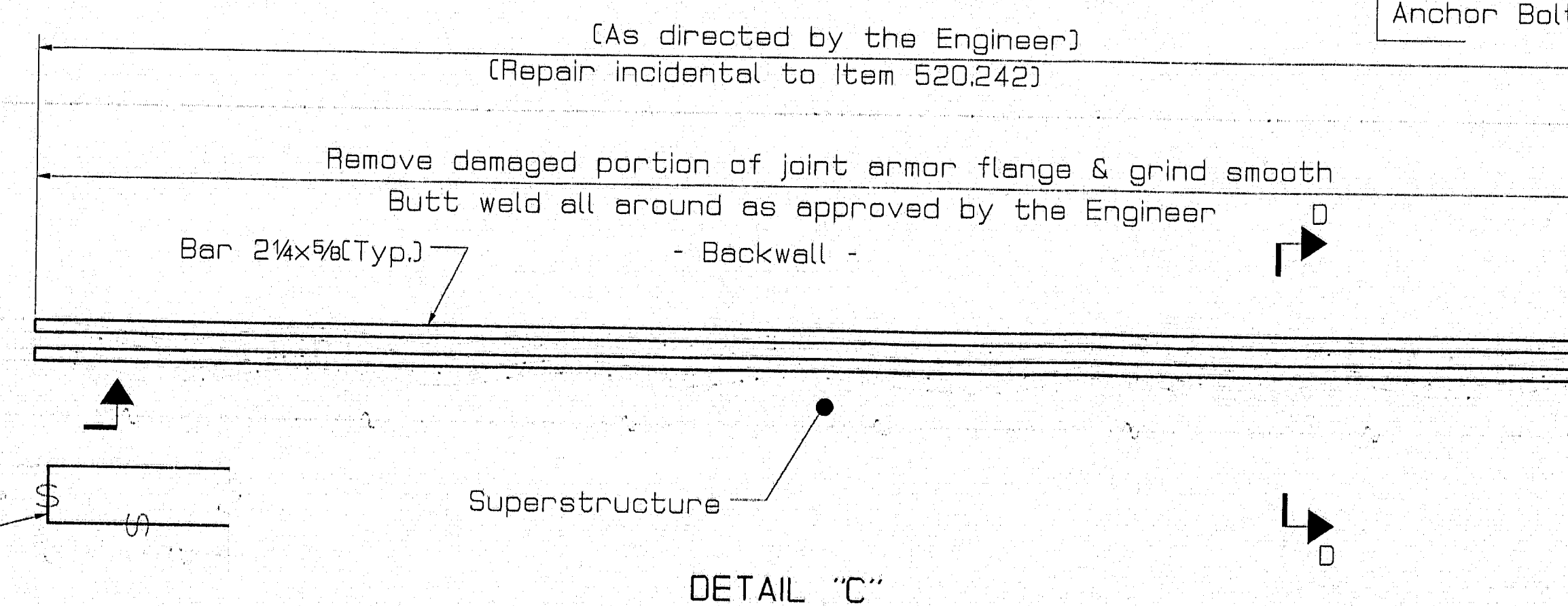
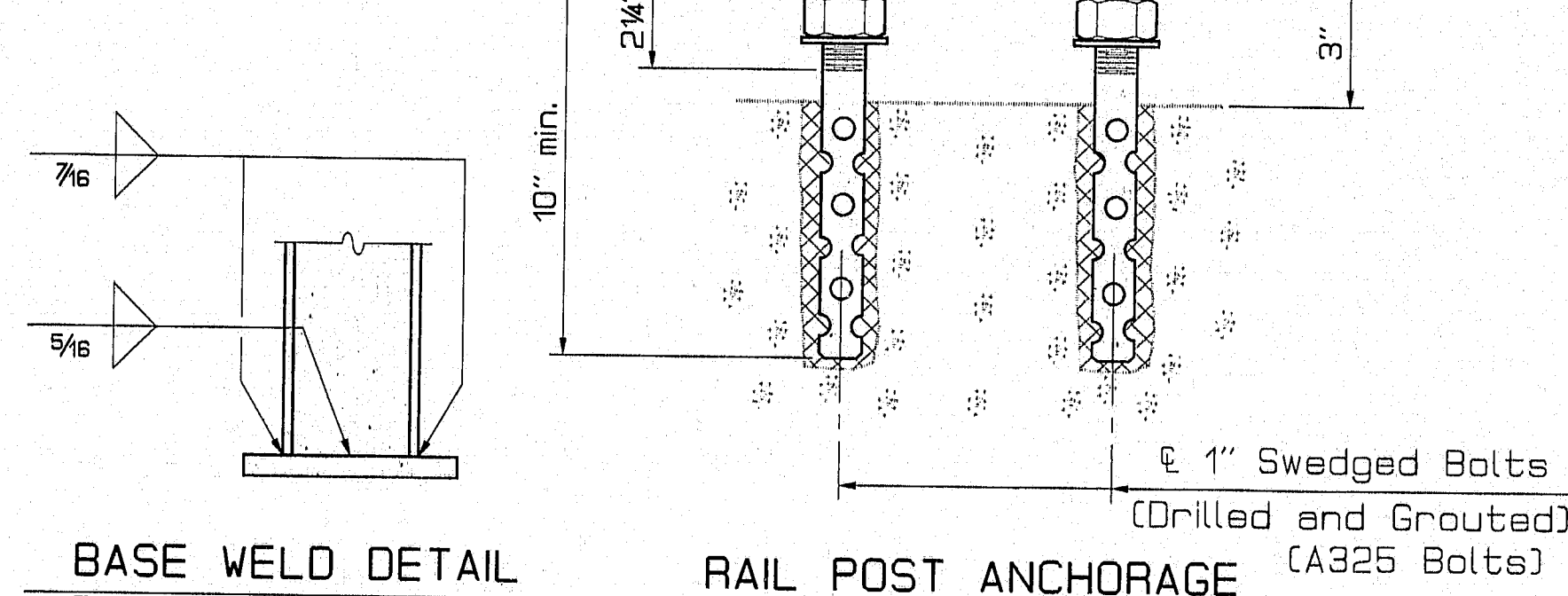
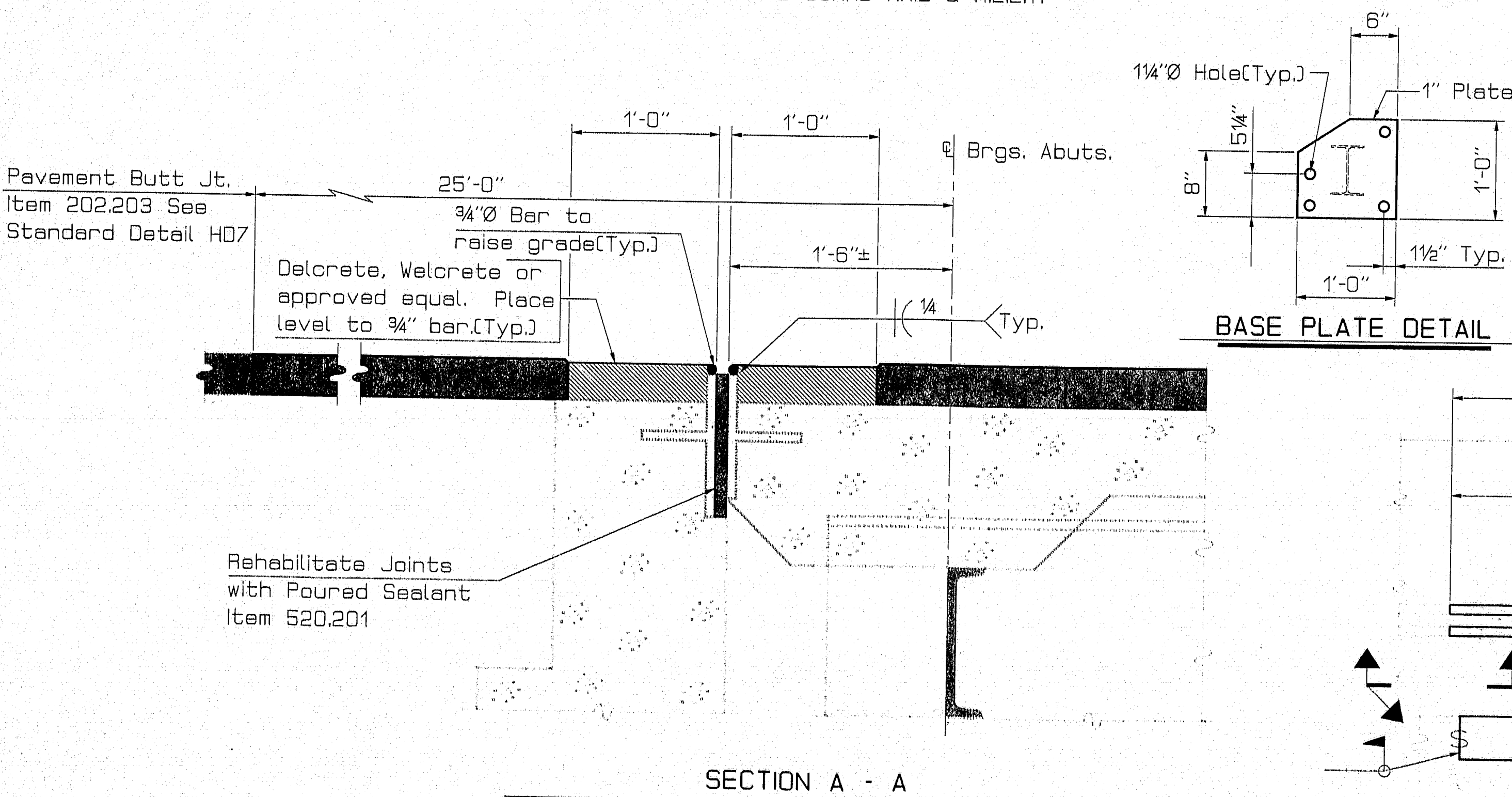
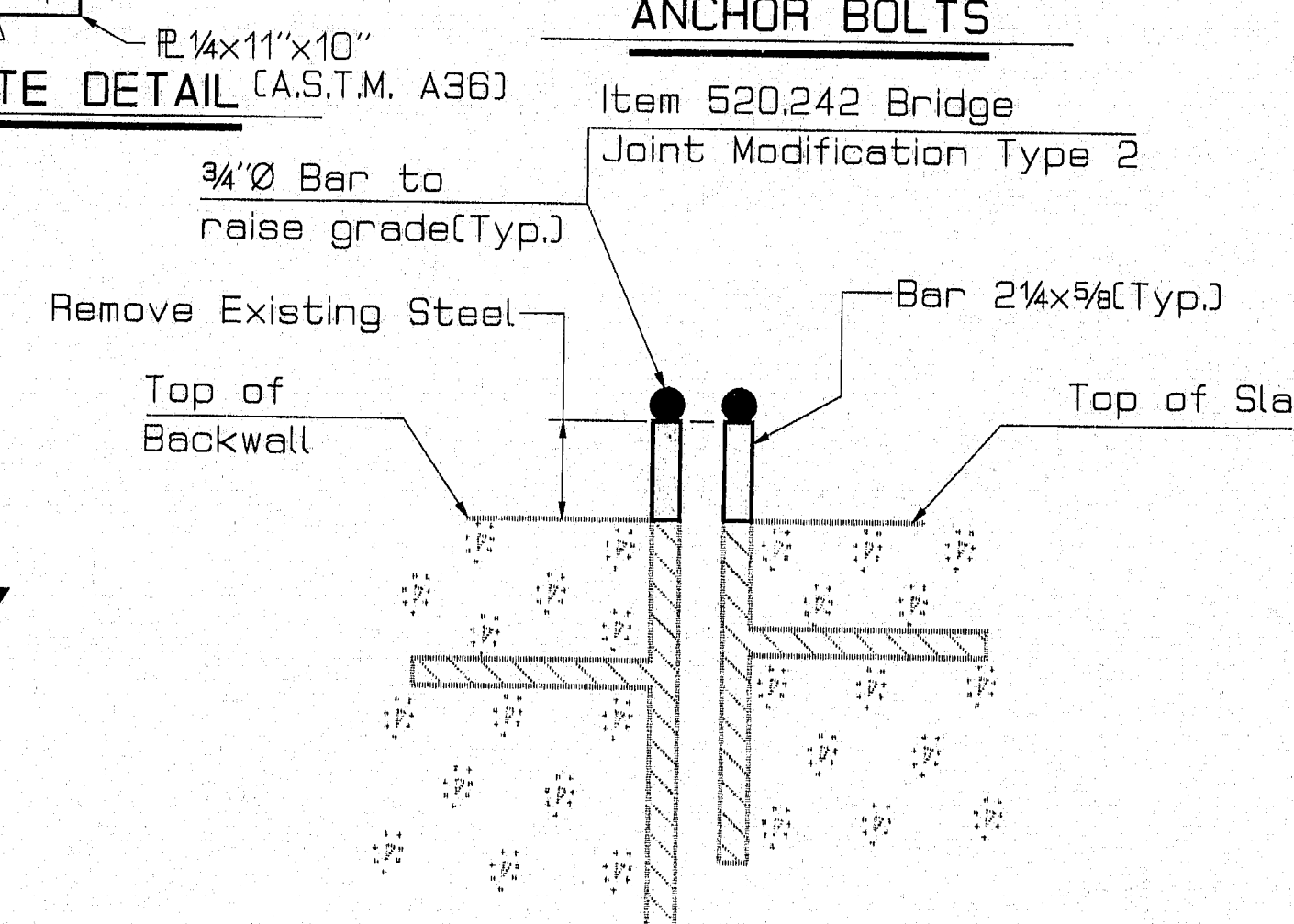
If any rehabilitation of the concrete deck is required, all work will be done in accordance with Items 518.30 or 518.31 or both and as directed by the Engineer.

The anchoring material shall be one of the products listed on the Maine Department of Transportation List of Prequalified Type 1 Anchoring Materials. Installation shall be in conformance with the Manufacturer's recommendations.

For drilling and anchoring bolts 1" diameter or greater, the anchor material chosen from the prequalified list shall be submitted to the Engineer for approval.
Anchor Bolt Yield Strength = 51 kips



ANCHOR PLATE DETAIL (A.S.T.M. A36)



PROJECT DESIGN ENGINEER	DATE
BY	
DESIGN-DETAILED	
CHECKED	
REVISIONS	
FIELD CHANGES	

05NOV95-0-00030
SPRSTR2

Bridge No. 6039 119-311

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CHAMPLIN SREET
OVER
COLLEGE AVENUE
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
SUPERSTRUCTURE DETAILS

SHEET 2 OF 2 AUGUSTA, MAINE MAR. 1996